SDMS Document
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VOLUME II

FINAL REPORT
REMEDIAL INVESTIGATION
SCP SITE
CARLSTADT, NEW JERSEY

MARCH 1, 1990
JOB NO. 14485-002-010

DAMES & MOORE
CRANFORD, NEW JERSEY

001332

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VOLUME II

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APPENDIX A

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APPENDIX A

BORING LOGS AND MONITOR WELL AND PIEZOMETER CONSTRUCTION DETAILS

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND-SILT MIXTURES
				SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

UNIFIED SOIL CLASSIFICATION SYSTEM

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BORING B-1

SURFACE ELEVATION 8.2'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0					FILL (BROWN ORGANIC RICH SILT)
	50		■		FILL (BLACK GREASE-LIKE SLUDGE, TRACE SAND)
	200		■		
5					
	200		■		
10				SW	GRAY FINE TO MEDIUM SAND, MOIST, STRONG ODOR
15					

1. BORING COMPLETED AT 8 FEET ON 7/7/87 USING STAINLESS STEEL HAND AUGER.
2. WATER NOT ENCOUNTERED.
3. BASE OF SLUDGE WAS DETERMINED BY PUSHING A 2-INCH STEEL POLE UNTIL REFUSAL.

BORING B-2

SURFACE ELEVATION 7.4'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	68		■		FILL (BROWN FINE TO MEDIUM SAND GRADING WITH PIECES OF BRICK, WOOD, AND FOAM, STRONG SOLVENT-LIKE ODOR)
	28		■		
5					

1. BORING COMPLETED AT 4 FEET ON 7/8/87.
2. WATER ENCOUNTERED AT 2.5 FEET ON 7/8/87.
3. BORING BACKFILLED WITH CUTTINGS ON 7/8/87.

BORING B-3

SURFACE ELEVATION 8.5'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	75		■		FILL (SANDY GRAVEL WITH PIECES OF CONCRETE AND BRICK, SOME PURPLE-STAINING ON GRAVEL)
	16 4/2"		■		
5					

1. BORING COMPLETED AT 3.2 FEET ON 7/8/87.
2. WATER ENCOUNTERED AT 2.5 FEET ON 7/8/87.
3. BORING BACKFILLED WITH CUTTINGS ON 7/8/87.

BORING B-4

SURFACE ELEVATION 8.0'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	81		■		FILL (GRAY AND BROWN FINE TO MEDIUM SAND, SOME GRAVEL, GRADING TO COARSE GRAVEL WITH SOME SAND)
	46		■		FILL (REDDISH BROWN FINE TO MEDIUM SAND, SOME GRAVEL, TRACE SILT)
5					

1. BORING COMPLETED AT 4 FEET ON 7/8/87.
2. WATER ENCOUNTERED AT 2.5 FEET ON 7/8/87.
3. BORING BACKFILLED WITH CUTTINGS ON 7/8/87.

LOG OF BORINGS

NOTES:

1) THE FIGURES IN THE COLUMN LABELED "N VALUE" REFER TO THE EQUIVALANT NUMBER OF BLOWS REQUIRED TO DRIVE A STANDARD "SPLIT-SPOON" SAMPLER A DISTANCE OF ONE FOOT USING A 140 POUND DRIVE WEIGHT FALLING 30 INCHES. THE STANDARD SPLIT-SPOON SAMPLER IS 2" O.D. AND 1-3/8" I.D.

   THE LETTER "P" IN THE "N VALUE" COLUMN INDICATES THAT THE SAMPLER WAS ADVANCED BY THE WEIGHT OF THE DRILL ROD AND DRIVE WEIGHT WITHOUT DRIVING

2) ELEVATIONS REFER TO MEAN SEA LEVEL DATUM.
3) THE DISCUSSION IN THE TEXT OF THE REPORT IS NECESSARY FOR A PROPER UNDERSTANDING OF THE NATURE OF THE SUBSURFACE MATERIALS.
4) ■ - SPLIT-SPOON SAMPLE
   ■ - SHELBY TUBE
   □ - NO RECOVERY
   IF BLOW COUNTS ARE SHOWN, SAMPLE WAS SPLIT SPOON; IF BLOW COUNTS ARE BLANK, THEN SAMPLE WAS SHELBY TUBE)

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BORING B-5

SURFACE ELEVATION 7.8'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	28		■		FILL (SANDY GRAVEL WITH PIECES OF BRICK, ROCK FRAGMENTS AND WOOD, OILY RESIDUE THROUGHOUT MATERIAL, STRONG SOLVENT-LIKE ODOR)
	10		■		
5					

1. BORING COMPLETED AT 4 FEET ON 7/8/87.
2. WATER ENCOUNTERED AT 3 FEET ON 7/8/87.
3. BORING BACKFILLED WITH CUTTINGS ON 7/8/87.

BORING B-6

SURFACE ELEVATION 8.4'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	32		■		FILL (PIECES OF BRICK AND DECAYED WOOD WITH OILY RESIDUE, GRADING TO DARK BROWN SILT AND COARSE GRAVEL WITH PIECES OF RUBBER)
	30		■		
5					

1. BORING COMPLETED AT 4.00 FEET ON 7/8/87.
2. WATER ENCOUNTERED AT 2.75 FEET ON 7/8/87.
3. BORING BACKFILLED WITH CUTTINGS ON 7/8/87.

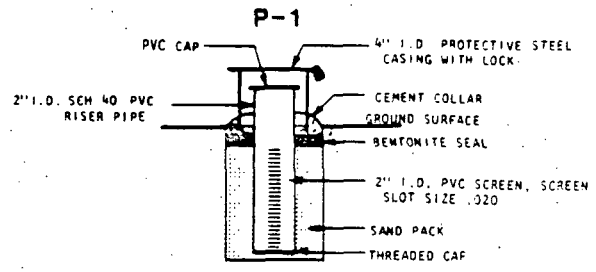
LOG OF BORINGS

BORING P-1

SURFACE ELEVATION 8.29

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	174/2"	12	■		FILL (BROWN FINE SAND, TRACE GRAVEL AND BRICK)
	214	40	■		FILL (REDDISH BROWN SHALE FRAGMENTS, LITTLE SILT AND CLAY, TRACE WOOD, OIL-LIKE SHEEN, WET)
	14		■		
5					
10					

1. BORING COMPLETED AT 6.5 FEET ON 6/2/87.
2. 2- INCH PIEZOMETER INSTALLED ON 6/2/87.
3. WATER ENCOUNTERED AT 2.2 FEET ON 6/2/87.

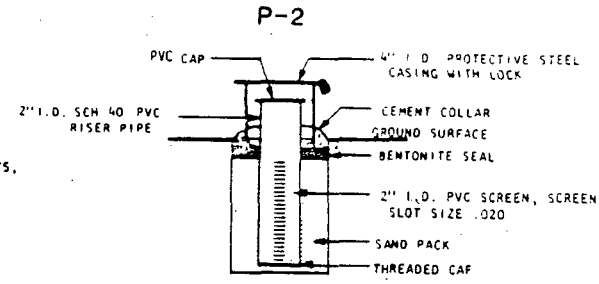


BORING P-2

SURFACE ELEVATION 8.24

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	101	13	■		FILL (DARK GRAY FINE SAND WITH OCCASIONAL CLUMPS OF GREEN CLAY, BRICK AND GLASS FRAGMENTS, DRY)
	108	18	■		FILL (BLACK SANDY SILT AND GRAVEL, WITH WOOD, BRICK, GLASS AND PLASTIC DEBRIS, OIL-LIKE SHEEN, WET)
	170/2"	1.6	■		
5					
10					

1. BORING COMPLETED AT 6.5 FEET ON 6/4/87.
2. 2-INCH PIEZOMETER INSTALLLED ON 6/4/87.
3. WATER ENCOUNTERED AT 3.2 FEET ON 6/4/87.



LOG OF BORINGS AND MONITORING WELL DETAILS

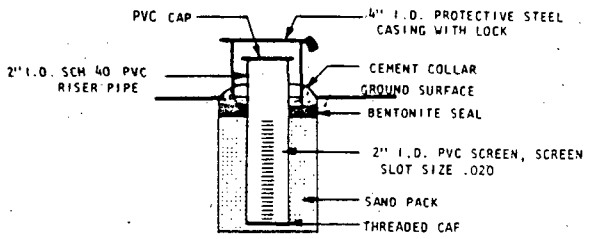
BORING P-3

SURFACE ELEVATION 7.80

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	97	40	■		FILL (BROWN AND BLACK SILTY SAND AND GRAVEL WITH CONCRETE DEBRIS)
	200/4"	3	■		
5					
10					

1. BORING COMPLETED AT 6.5 FEET ON 6/4/87.
2. 2-INCH PIEZOMETER INSTALLED ON 6/4/87.
3. WATER ENCOUNTERED AT 2.1 FEET ON 6/4/87.

P-3



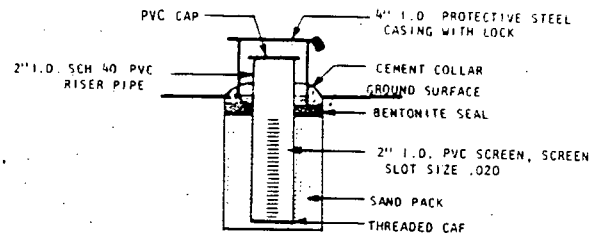
BORING P-4

SURFACE ELEVATION 7.89

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	47	0	■		FILL (BROWN SANDY SILT WITH ROOTS AND BRICK FRAGMENTS, DRY)
	48	0	■		FILL (BLACK ORGANIC RICH SILTY CLAY WITH PIECES OF DECOMPOSED WOOD AND BRICK FRAGMENTS, MOIST TO WET)
	19	0	■		
5					
10					

1. BORING COMPLETED AT 6.5 FEET ON 6/3/87.
2. 2-INCH PIEZOMETER INSTALLED ON 6/3/87.
3. WATER ENCOUNTERED AT 1.75 FEET ON 6/3/87.

P-4



LOG OF BORINGS AND MONITORING WELL DETAILS

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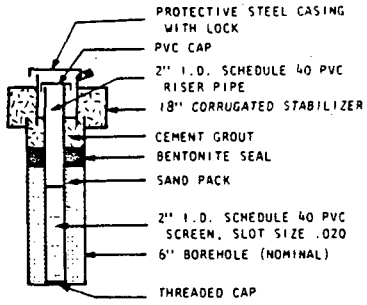
BORING P-5

SURFACE ELEVATION 7.5'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		57		FILL (BROWN, MEDIUM SAND, TRACE GRAVEL WITH PIECES OF WOOD AND DEBRIS)
		141		
5		10	SP	REDDISH BROWN MEDIUM TO COARSE SAND, TRACE GRAVEL, MOIST
10				

1. BORING BOMPLETED AT 8.5 FEET ON 3/2/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/2/88.
3. WATER ENCOUNTERED AT 4.5 FEET ON 3/2/88.

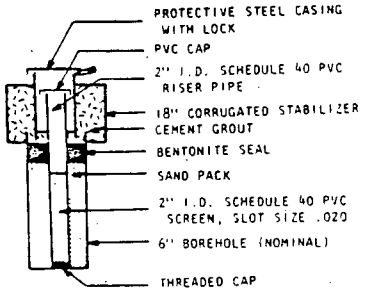


BORING P-6

SURFACE ELEVATION 7.4'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		97	GW	BROWN-GRAY SAND AND GRAVEL, WET
5				
10				

1. BORING COMPLETED AT 7 FEET ON 3/2/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/2/88.
3. WATER ENCOUNTERED AT 1.25 FEET ON 3/2/88.

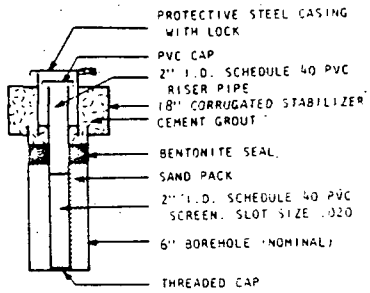


BORING P-7

SURFACE ELEVATION 7.3'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		50		FILL (GRAY MEDIUM TO COARSE SAND, WITH ROOTS), SOME GRAVEL BRICK FRAGMENTS
		40		GRADING
5			PT	BLACK PEAT, TRACE SILT AND SAND
10				

1. BORING COMPLETED AT 7.5 FEET ON 3/2/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/2/88.
3. WATER ENCOUNTERED AT 3.78 FEET ON 3/2/88.

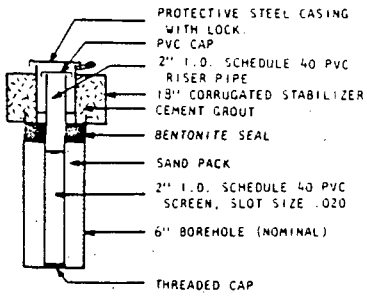


BORING P-8

SURFACE ELEVATION 8.1'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		108		FILL (DARK BROWN GRAY MEDIUM SAND WITH ROOTS, DRY)
		30		DENSE REDDISH BROWN FINE SAND AND SILT
5		18	SM	
10				

1. BORING COMPLETED AT 8 FEET ON 3/3/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/3/88.
3. WATER ENCOUNTERED AT 3.72 FEET ON 3/3/88.



LOG OF BORINGS AND MONITORING WELL DETAILS

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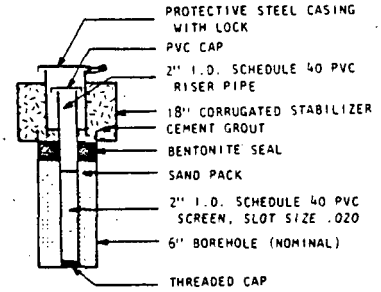
BORING P-9

SURFACE ELEVATION 7.9'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		86	SP	DARK BROWN MEDIUM SAND, SOME ROOTS, GRADING FILL(REDDISH BROWN CRUSHED ROCK, ASSORTED CONSTRUCTION DEBRIS)
5				
10				

1. BORING COMPLETED AT 7 FEET ON 3/3/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/3/88.
3. WATER ENCOUNTERED AT 1.7 FEET ON 3/3/88.

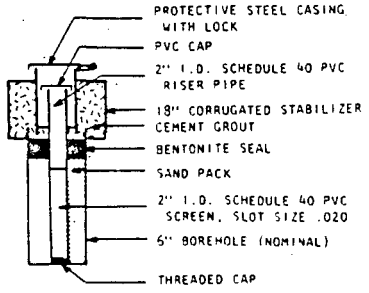


BORING P-10

SURFACE ELEVATION 7.8'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		35 104		FILL(MEDIUM TO COARSE SAND AND GRAVEL WITH CONSTRUCTION DEBRIS)
5				
10				

1. BORING COMPLETED AT 7 FEET ON 3/3/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/3/88.
3. WATER ENCOUNTERED AT 2 FEET ON 3/3/88.

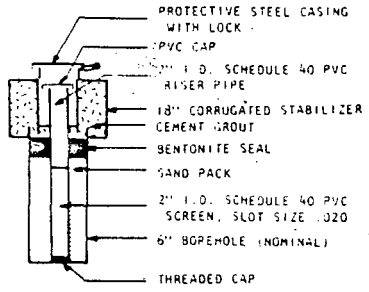


BORING P-11

SURFACE ELEVATION 7.5'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		16		FILL (BROWN FINE TO MEDIUM SAND, TRACE SILT WITH CONSTRUCTION DEBRIS, WET)
5				
10				

1. BORING COMPLETED AT 7 FEET ON 3/3/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/3/88.
3. WATER ENCOUNTERED AT 1.22 FEET ON 3/3/88.

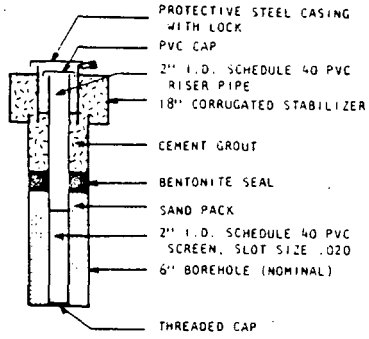


BORING P-12

SURFACE ELEVATION 7.1'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		56 111		FILL(BROWN FINE TO MEDIUM SAND AND SILT WITH CONSTRUCTION DEBRIS, MOIST)
5		45 31		BLACK COLORATION
10				

1. BORING COMPLETED AT 10 FEET ON 3/4/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/4/88.
3. WATER ENCOUNTERED AT 6 FEET ON 3/4/88.



LOG OF BORINGS AND MONITORING WELL DETAILS

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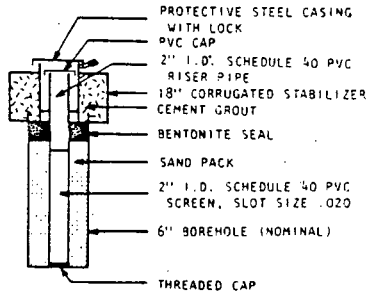
BORING P-13

SURFACE ELEVATION 7.1'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		26		FILL:BROWN FINE TO COARSE SAND AND GRAVEL WITH CONSTRUCTION DEBRIS)
		63		
5		14		
10				

1. BORING COMPLETED AT 8 FEET ON 3/4/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/4/88.
3. WATER ENCOUNTERED AT 4.4 FEET ON 3/4/88.

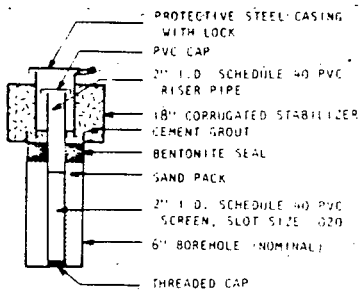


BORING P-14

SURFACE ELEVATION 6.9'

DEPTH IN FEET	SAMPLES	BLOW COUNT	SYMBOLS	DESCRIPTIONS
0		180		FILL:BROWNISH GRAY FINE TO MEDIUM SAND, LITTLE COARSE SAND TO GRAVEL WITH CONSTRUCTION DEBRIS, MOIST)
5				
10				

1. BORING COMPLETED AT 7 FEET ON 3/4/88.
2. 2-INCH PIEZOMETER INSTALLED ON 3/4/88.
3. WATER ENCOUNTERED AT 1.08 FEET ON 3/4/88.



LOG OF BORINGS AND MONITORING WELL DETAILS

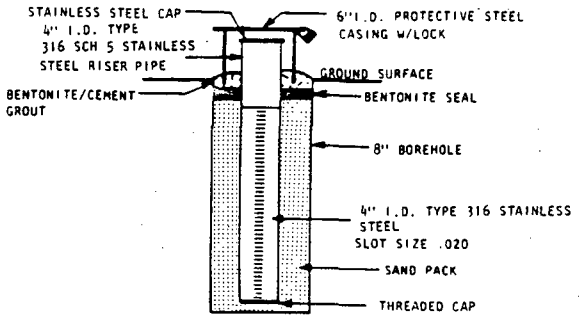
BORING MW-1S

SURFACE ELEVATION 7.65

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	75	0	■		FILL (BROWN SILTY SAND, DRY)
	64		■		FILL (REDDISH BROWN TO BROWN SILTY SAND AND GRAVEL WITH PIECES OF WOOD, BRICK AND ASPHALT SHINGLES, MOIST TO WET)
5	20	0	■		
	10	0	■	PT	BLACK ORGANIC PEAT, WET
10	24		■	CL	DARK GRAY CLAY, TRACE SILT, MOIST
				SM	GREEN GRAY SILTY SAND, TRACE CLAY, WET
15					

1. BORING COMPLETED AT 12 FEET ON 6/9/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/9/87.
3. WATER ENCOUNTERED AT 1.8 FEET ON 6/9/87.

MW-1S



1. NO DRILLING MUD USED

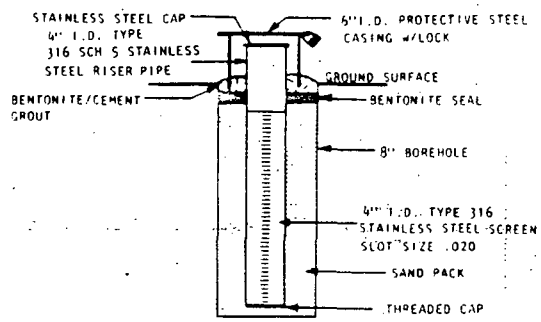
BORING MW-2S

SURFACE ELEVATION 8.43

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0					FILL (BROWN SAND AND GRAVEL WITH CONCRETE, BRICK, WOOD AND ASPHALT, DRY)
					FILL (DARK BROWN AND GRAY SILTY SAND, TRACE CLAY, WITH CONCRETE, ASPHALT AND BRICK FRAGMENTS, STRONG ODOR)
					OILY SHEEN IN DRILLING FLUID
5	16	110	■		
	6	6	■	PT	BLACK ORGANIC PEAT, WET
10	8	1.8	■	ML	MOTTLED GRAY CLAYEY SILT, TRACE MICA, MOIST
15					

1. BORING COMPLETED AT 12 FEET ON 6/8/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL ON 6/9/87.
3. WATER ENCOUNTERED AT 4.3 FEET ON 6/8/87.

MW-2S



1. NO DRILLING MUD USED

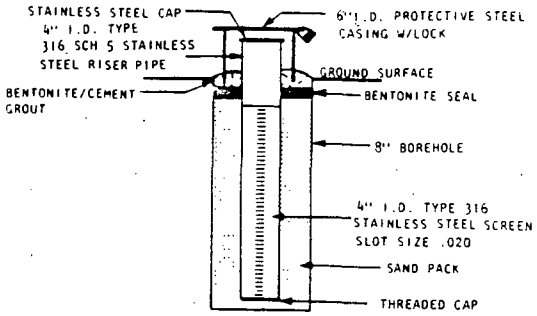
BORING MW-3S

SURFACE ELEVATION 6.04

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	59		■		FILL (DARK BROWN SANDY GRAVEL, GRADING WITH PIECES OF CONCRETE AND BRICK, DRY TO MOIST)
	31	300	■		FILL (DARK BROWN AND REDDISH BROWN FINE SAND AND SILT WITH BRICK AND WOOD, DISTINCT LAYERS OF BLACK ASPHALT, WET, STRONG ODOR)
	28		■		
5	14		■		FILL (DARK REDDISH BROWN AND BLACK SAND AND GRAVEL WITH BRICK AND WOOD DEBRIS, WET, OIL-LIKE SHEEN, STRONG ODOR)
	11	100	■		
10	13		■		
15					

1. BORING COMPLETED AT 12 FEET ON 6/22/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/22/87.
3. WATER ENCOUNTERED AT 1.5 FEET ON 6/22/87.

MW-3S



1. NO DRILLING MUD USED

LOG OF BORINGS AND MONITORING WELL DETAILS

001344

Dames & Moore

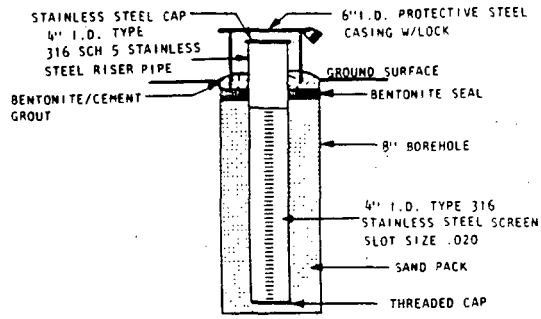
BORING MW-4S

SURFACE ELEVATION 7.82

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	47	200	■		FILL (DARK BROWN SILTY SAND WITH BRICK, CONCRETE AND WOOD DEBRIS, OCCASIONAL CERAMIC LIKE DEBRIS)
	46	100	■		
5	10	10	■		FILL (BLACK ASPHALT SHINGLES AND BRICK FRAGMENTS, WET)
	2	2	■		
	14	14	■	PT	BLACK ORGANIC PEAT, WET
10				CL	DARK GRAY SILTY CLAY GRADING TO GREEN GRAY CLAY, TRACE SILT, MOIST TO WET
15					

1. BORING COMPLETED AT 12 FEET ON 6/9/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/9/87.
3. WATER ENCOUNTERED AT 3.0 FEET ON 6/9/87.

MW-4S



1. NO DRILLING MUD USED

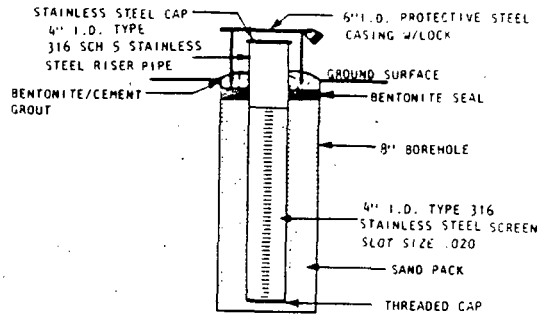
BORING MW-5S

SURFACE ELEVATION 6.44

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0					FILL (BROWN AND BLACK SANDY GRAVEL WITH BRICK, WOOD, AND CONCRETE DEBRIS)
5				PT	BLACK ORGANIC PEAT, WET
10				CL/ML	MOTTLED GREEN AND GRAY SILTY CLAY GRADING TO GRAY SILT, TRACE FINE SAND
15					

1. BORING COMPLETED TO 11.5 FEET ON 6/24/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL ON 6/24/87.

MW-5S



1. NO DRILLING MUD USED

LOG OF BORINGS AND MONITORING WELL DETAILS

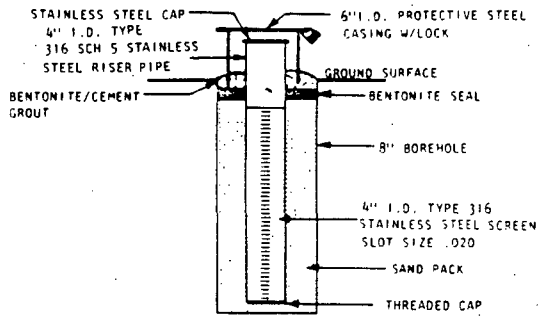
BORING MW-6S

SURFACE ELEVATION 5.62

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	103	1.2			FILL (DARK BROWN TO GRAY SILTY SAND GRADING WITH CONCRETE, BRICK, WOOD, AND ASPHALT, DRY TO MOIST)
	103	0			
5					OILY SHEEN IN DRILLING FLUID
	6	0		PT	BLACK ORGANIC PEAT, WET
				ML CL	DARK GRAY CLAYEY SILT GRADING TO MOTTLED GREEN AND GRAY VARVED SILTY CLAY, MOIST
10	12	0			
15					

1. BORING COMPLETED AT 12 FEET ON 6/10/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/10/87.
3. WATER ENCOUNTERED AT 2.6 FEET ON 6/10/87

MW-6S



1. NO DRILLING MUD USED

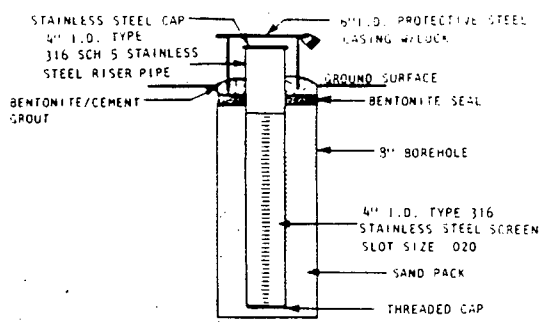
BORING MW-7S

SURFACE ELEVATION 7.6'

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0					FILL (FLY ASH GRADING TO BLACK SILT AND CLAY WITH WOOD, GLASS, AND ROOT DEBRIS)
5					FILL (BLACK TO BROWN FINE TO MEDIUM SAND, SOME SILT, TRACE CLAY WITH GLASS FRAGMENTS)
10				SM	GRAY FINE SILTY SAND, TRACE CLAY, MOIST TO WET
15					

1. BORING COMPLETED AT 12 FEET ON 7/1/87.
2. 4-INCH STAINLESS STEEL MONITROING WELL INSTALLED ON 7/1/87.

MW-7S



1. NO DRILLING MUD USED

LOG OF BORINGS AND MONITORING WELL DETAILS

001346

Dames & Moore

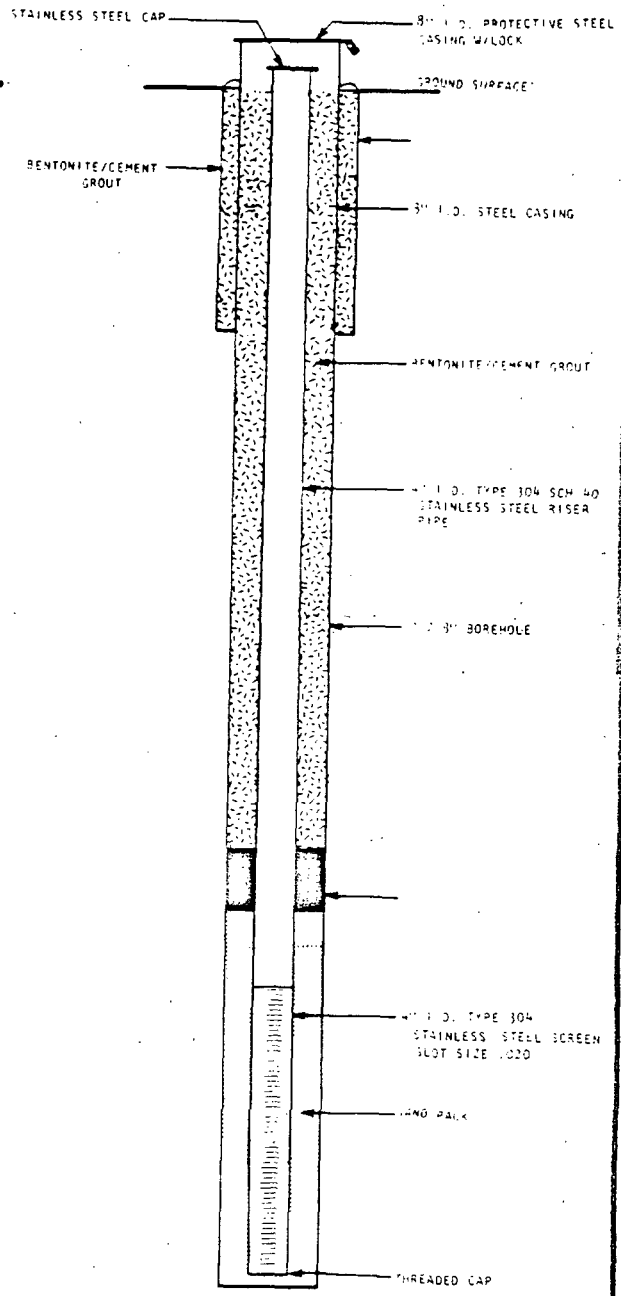
BORING MW-2D

SURFACE ELEVATION 8.48

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0		10			FILL (DARK BROWN FINE SILTY SAND, TRACE GRAVEL, DRY)
	146	50			FILL (DARK BROWN AND GRAY SILTY SAND, TRACE CLAY WITH CONCRETE, ASPHALT AND BRICK FRAGMENTS, STRONG ODOR)
	30	400			SATURATED WITH OILY SUBSTANCE 4.5 TO 5 FEET
5	30	300			
	6			PT	BLACK ORGANIC PEAT, WET
10	13	20		ML	MOTTLED GRAY CLAYEY SILT, TRACE MICA, MOIST GRADING TRACE GRAVEL
15	20	20		CL	BROWN AND ORANGE VARVED CLAY, TRACE SILT, SLIGHTLY MOIST
	11	30			
	6	4			
20	34	11			
	16	18		SM	REDDISH BROWN SILTY SAND, TRACE FINE GRAVEL AND CLAY, MOIST TO WET, (FILL)
	16				
25	5	12			
	6	0		CL	REDDISH BROWN CLAY, TRACE FINE SAND AND GRAVEL, MOIST, (FILL) GRADING TO REDDISH BROWN CLAY
30	86	0			
	39	1.2		SM	REDDISH BROWN FINE TO MEDIUM SAND, SOME SILT, TRACE CLAY AND FINE TO MEDIUM GRAVEL, WET GRADING WITH FINE GRAVEL
	83	14			
35	36			SW	REDDISH BROWN FINE TO MEDIUM SAND, TRACE SILT AND MICA GRADING WITH SILT AND CLAY
	69	0			
	64	1		ML	REDDISH BROWN CLAYEY SILT, TRACE FINE GRAVEL, MOIST
40	40	0			
	104	1		CL ML	REDDISH BROWN SILTY CLAY, TRACE FINE GRAVEL, SLIGHTLY MOIST GRADING WITH SILT
45	164/4"	0			REDDISH BROWN CLAYEY SILT, TRACE FINE GRAVEL AND ANGULAR SHALE FRAGMENTS, WET GRADING WITH SHALE FRAGMENTS
	200/2"	1			
50				ML	
	200/2"	1			
55					
	100/1"				
	150/2"				
60					REDDISH BROWN SHALE

1. BORING COMPLETED AT 62 FEET ON 6/18/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/18/87.
3. WATER ENCOUNTERED AT 3.5 FEET ON 6/11/87.
4. BENTONITE DRILLING MUD USED.

MW-2D



LOG OF BORINGS AND MONITORING WELL DETAILS

Dames & Moore

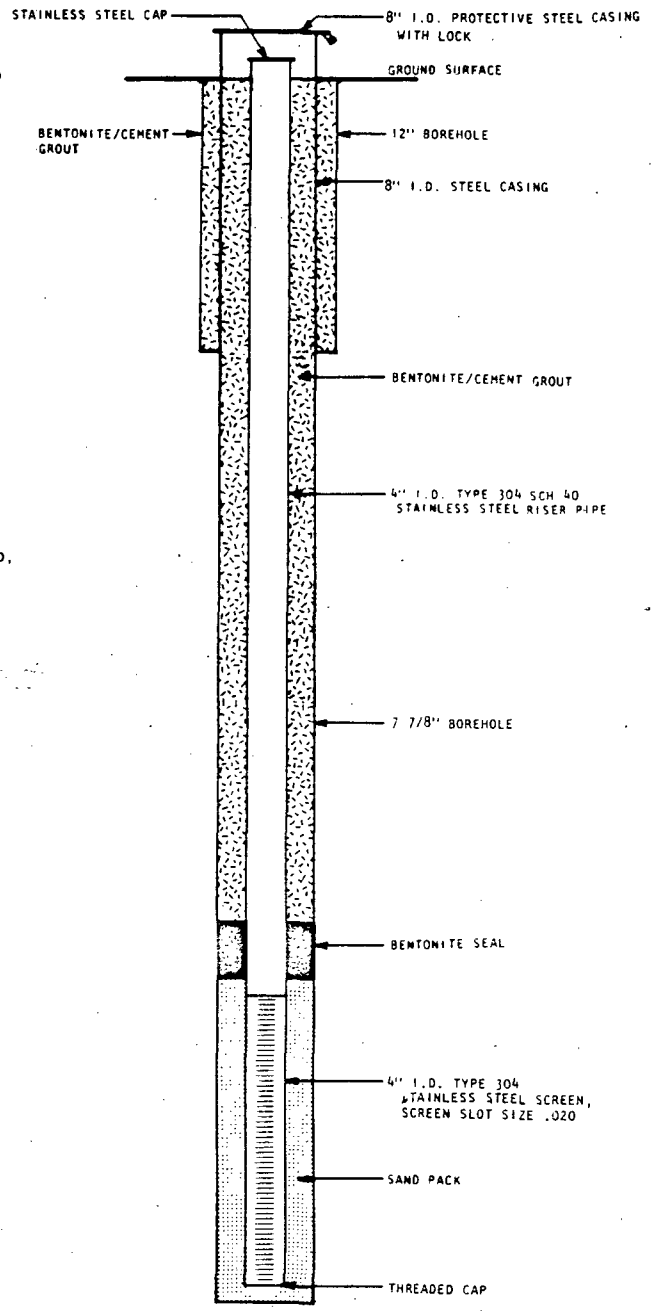
BORING MW-5D

SURFACE ELEVATION 6.44

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	70/.5"				FILL (BROWN AND BLACK SANDY GRAVEL WITH BRICK, CONCRETE AND WOOD DEBRIS, DRY TO MOIST, SOME PURPLE STAINING)
	13				
	7				
5	2				
	10	.8		PT	BLACK ORGANIC PEAT, TRACE CLAY, WET, STRONG PETROLEUM-LIKE ODOR
10				CL/ML	MOTTLED GRAY AND GREEN SILTY CLAY GRADING TO GRAY SILT, TRACE FINE SAND, MOIST, STRONG CHEMICAL ODOR
15	2	200		CL	BROWN CLAY, MOIST
		0			GRADING WITH REDDISH COLOR
	4				
20	4	100			
	0	22			
	20	300			
25	4	20		CL	REDDISH BROWN SILTY CLAY, TRACE GRAVEL AND SAND, MOIST, (TILL)
30				ML	REDDISH BROWN SILT, SOME CLAY, TRACE FINE SAND AND GRAVEL, MOIST
35	89			GW	REDDISH BROWN FINE TO COARSE GRAVEL, LITTLE SAND, TRACE SILT AND CLAY, MOIST TO WET
40	390	.8			REDDISH BROWN SILTY GRAVEL, TRACE SAND, AND SHALE FRAGMENTS
45	214/5"	14			GRADING WITH SHALE FRAGMENTS
	214/2"	22			
50	100/2"	.2		GM	GRADING WITH CLAY
55	200/3"	0			
60	200/2.5"				REDDISH BROWN SHALE, WET

1. BORING COMPLETED AT 63 FEET ON 6/26/87.
2. WATER ENCOUNTERED AT 3.0 FEET ON 6/23/87.
3. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 6/26/87.
4. BENTONITE DRILLING MUD USED.

MW-5D



LOG OF BORINGS AND MONITORING WELL DETAILS

Dames & Moore

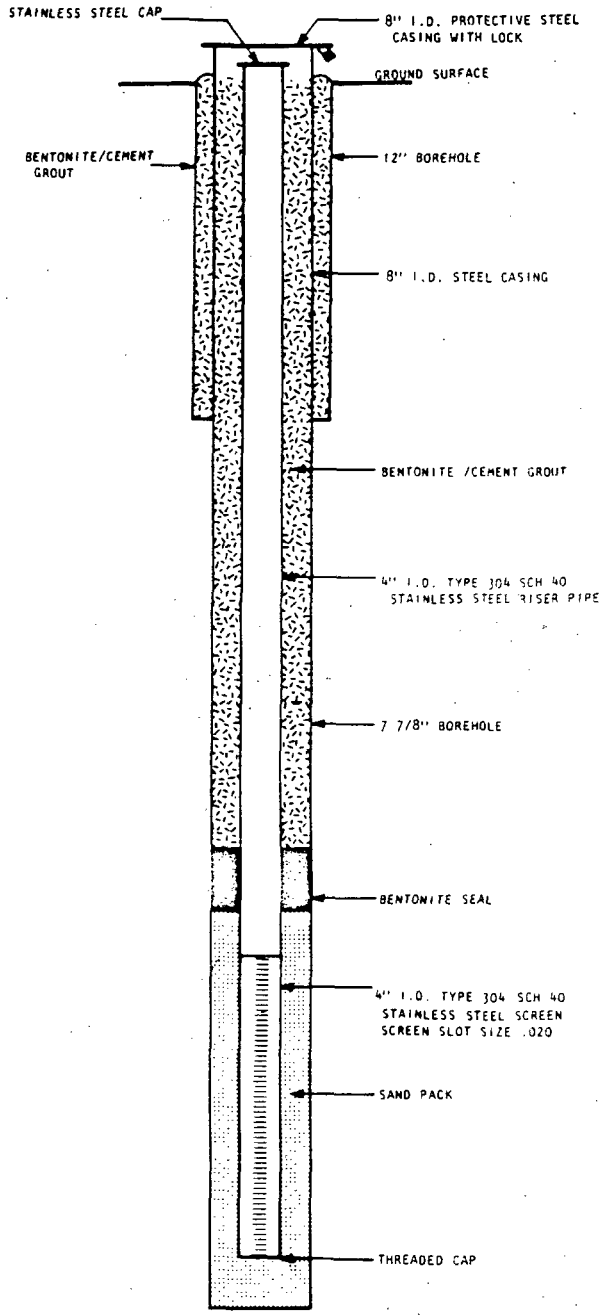
BORING MW-7D

SURFACE ELEVATION 7.58

DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
0	8	200			FILL (FLY ASH GRADING TO BLACK SILT AND CLAY WITH WOOD, GLASS, AND ROOTS, STRONG ODOR)
	7	200			
5	8	300			
	8	100			FILL (BLACK TO BROWN FINE TO MEDIUM SAND, SOME SILT, TRACE CLAY, GLASS FRAGMENTS, WET)
	11	150			
10	6	200		SM	GRAY SILTY FINE SAND, TRACE CLAY, MOIST TO WET
	10	300		CL	BROWN AND ORANGE VARVED SILTY CLAY, MOIST
15	24	300			
20				ML	GRAY CLAYEY SILT, MOIST
	2			CL	GRAY CLAY, TRACE GRAVEL, MOIST
25	2				
	0				
	1				MOTTLED GRAY AND REDDISH BROWN CLAY, MOIST
30	1				
	0				
35	0				
				ML	REDDISH BROWN CLAYEY SILT, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL, MOIST, (TILL)
40					GRADING WITH SILT
45	46				
50		310		GP	REDDISH BROWN SHALE AND SILTSTONE FRAGMENTS, TRACE SILT AND CLAY, WET
55		205		ML	REDDISH BROWN SILT, SOME ANGULAR SHALE AND SILTSTONE FRAGMENTS, TRACE FINE SAND, AND CLAY, MOIST
60		214/.5"			REDDISH BROWN BRUNSWICK SHALE

1. BORING COMPLETED AT 64 FEET ON 7/6/87.
2. 4-INCH STAINLESS STEEL MONITORING WELL INSTALLED ON 7/6/87.
3. WATER ENCOUNTERED AT 2.75 FEET ON 6/10/87.
4. BENTONITE DRILLING MUD USED.

MW-7D



LOG OF BORINGS AND MONITORING WELL DETAILS

001349

Dames & Moore

BORING RB-1

SURFACE ELEVATION 8.2'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					
RB-1-1	BC8109			1000+			BROWN SAND WITH ORGANIC DEBRIS BLACK SLUDGE, STRONG ODOR
RB-1-2	BC8110	5		1000+			
			5				
		10	18			PT	BROWN PEAT AND CLAY, TRACE FINE TO COARSE SAND, MOIST
RB-1-3	BC8111		32	700		CL-ML	LIGHT GRAY CLAY AND SILT, MOIST
		15					

1. BORING COMPLETED AT 14 FEET ON 12/11/87.
2. WATER NOT ENCOUNTERED ON 12/11/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/11/87.
4. TOP OF CL-ML SAMPLE COLLECTED FROM OFFSET BORING 20 FEET FROM RB-1

BORING RB-2

SURFACE ELEVATION 7.4'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					
RB-2-1	BC8100		43	1000+			BROWN SAND, LITTLE GRAVEL WITH BRICK FRAGMENTS AND WOOD DEBRIS, MOIST TO WET, (FILL)
RB-2-2	BC8101	5	4	1000+			
RB-2-3	BC8102	10	6	1000+		CL-ML	MOTTLED LIGHT GRAY AND OLIVE SILT AND CLAY
			22				GRADING WITH CLAY
		15					

1. BORING COMPLETED AT 13 FEET ON 12/11/87.
2. WATER ENCOUNTERED AT 3 FEET ON 12/11/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/11/87.

BORING RB-3

SURFACE ELEVATION 8.5'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					
RB-3-1	BC8088		80				CRUSHED STONE, GRAVEL AND SAND, (FILL)
RB-3-2	BC8089	5	19	600			GRADING BLACK SAND AND GRAVEL WITH BRICK FRAGMENTS, WET, (FILL)
RB-3-3	BC8090	10	9	720		ML-CL	LIGHT GRAY SILT AND CLAY, MOIST
		15					

1. BORING COMPLETED AT 11 FEET ON 12/10/87.
2. WATER ENCOUNTERED AT 2.5 FEET ON 12/10/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/10/87.

LOG OF BORINGS

BORING RB-4

SURFACE ELEVATION 8.0'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RB-4-1	BC8094	0	36	110			SILT, FINE TO COARSE SAND, FINE TO COARSE GRAVEL, TRACE CLAY, CONSTRUCTION DEBRIS, ASPHALT, MOIST, (FILL)
RB-4-2	BC8095	5	6	560			RED BROWN GRAVEL (SHALE FRAGMENTS AND QUARTZ), LITTLE SILT AND SAND, TRACE CLAY, SLIGHTLY MOIST, (FILL)
			1			PT	DARK BROWN PEAT, TRACE CLAY, SLIGHTLY MOIST
RB-4-3	BC8096	10	9	760		CL-ML	LIGHT GRAY CLAY, TRACE SILT, MOTTLE OLIVE GREEN, OCCASIONALLY IN BANDS, SLIGHTLY MOIST
		15					

1. BORING COMPLETED AT 12 FEET ON 12/10/87.
2. WATER NOT ENCOUNTERED ON 12/10/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/10/87.

BORING RB-5

SURFACE ELEVATION 7.8'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RB-5-1	BC8074	0	20	300			BLACK SAND AND GRAVEL WITH CONSTRUCTION DEBRIS (BRICK, WOOD, GLASS), (FILL)
RB-5-2	BC8075	5	2	2000			DARK BROWN PEAT, WET, ODOR
			2	350		PT	
RB-5-3	BC8076	10	4	800		ML	LIGHT GRAY MOTTLED OLIVE GREEN SILT, TRACE CLAY, TRACE FINE SAND, MOIST, ODOR
		15					

1. BORING COMPLETED AT 11 FEET ON 12/9/87.
2. WATER ENCOUNTERED AT .5 FEET ON 12/9/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/9/87.

BORING RB-6

SURFACE ELEVATION 8.4'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RB-6-1	BC8070	0	26	600			DARK GRAY FINE TO COARSE SAND AND CONSTRUCTION DEBRIS, MOIST, STRONG ODOR, (FILL)
RB-6-2	BC8071	5	11	200			
			1	-		PT	PEAT, FINE SAND AND SILT, TRACE CLAY, BLACK SHEEN, WET, ODOR CONTACT IRREGULAR
RB-6-3	BC8072	10	4	250		ML	LIGHT GRAY SILT, TRACE CLAY, TRACE FINE SAND, VERY MOIST
		15					

1. BORING COMPLETED AT 11 FEET ON 12/9/87.
2. WATER ENOCUNTERED AT .5 FEET ON 12/9/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/9/87.

LOG OF BORINGS

001351

Dames & Moore

BORING RP-1

SURFACE ELEVATION 8.3'

D&M SAMPLE I.D.	E1C SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RP-1-1	BC8077	0	50	100	■		CONSTRUCTION DEBRIS, (FILL)
							REDDISH BROWN FINE SAND TO COARSE GRAVEL AND CONSTRUCTION DEBRIS, WET, (FILL)
RP-1-2	BC8078	5	9	80	■		
						PT	PEAT, TRACE CLAY AND SILT, WET
RP-1-3	BC8079	10	5	1600	■	ML	LIGHT GRAY SILT, MOTTLED OLIVE GREEN TRACE CLAY, SLIGHTLY MOIST
		15					

1. BORING COMPLETED AT 11 FEET ON 12/9/87.
2. WATER ENCOUNTERED AT 1.2 FEET ON 12/9/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/9/87.

BORING RP-2

SURFACE ELEVATION 8.2'

D&M SAMPLE I.D.	E1C SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RP-2-1	BC7194	0	41	20	■		CONSTRUCTION DEBRIS, (FILL)
RP-2-2	BC7195	5	8	100	■		
		10	3	80	■		
RP-2-3	BC7187		9	10	■	ML	LIGHT GRAY MOTTLED LIGHT BROWN SILT, OCCASIONAL TRACE TO LITTLE CLAY, SATURATED
RP-2-3-DU	BC7188						
		15					

1. BORING COMPLETED AT 13 FEET ON 12/3/87.
2. WATER ENCOUNTERED AT 2 FEET ON 12/3/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/3/87.

LOG OF BORINGS

BORING RP-3

SURFACE ELEVATION 7.8'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RP-3-1	BC8103	0	77	140			BROWN AND BLACK SAND AND GRAVEL WITH BLUE, GREEN, PURPLE AND PINK PEBBLES. (FILL)
RP-3-2	BC8104	5	21	1000			
						PT	BROWN PEAT, MOIST
RP-3-3	BC8105	10	5	700		CL-ML	DARK GRAY CLAY AND SILT
		15					

1. BORING COMPLETED AT 11 FEET ON 12/11/87.
2. WATER ENCOUNTERED AT 4 FEET ON 12/11/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/11/87.

BORING RP-4

SURFACE ELEVATION 7.9'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RP-4-1	BC8085	0	17	320			FINE TO COARSE SAND AND COARSE GRAVEL, BRICK AND CONSTRUCTION DEBRIS. (FILL)
							GRADING WITH WOOD FRAGMENTS, WET, BLACK SHEEN. (FILL)
RP-4-2	BC8086	5	11	50			
		10					
RP-4-3	BC8087		10	1000+		ML	LIGHT GRAY SILT, TRACE CLAY, MOTTLED OLIVE GREEN OCCASIONALLY IN BANDS. MOIST
		15					

1. BORING COMPLETED AT 13 FEET ON 12/10/87.
2. WATER ENCOUNTERED AT .7 FEET ON 12/10/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/10/87.

LOG OF BORINGS

BORING RMW-1S

SURFACE ELEVATION 7.7'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
	RMW-1S-1	BC7148	35	.2			CONSTRUCTION DEBRIS (FILL)
							(SEE LOG FOR 1SA)
		5	20				
			3	15		SP	REDDISH BROWN FINE SAND, TRACE GRAVEL, TRACE CLAY, SATURATED
						PT	PEAT, PLANT MEMBERS IDENTIFIABLE
	RMW-1S-3	BC7149	4	2		ML-CL	DARK GRAY SILT AND CLAY, MOIST
		10				ML	GREENISH SILT AND CLAY
			16	1		CL	GRADING TRACE ORGANIC MATERIAL, MOIST
			59	ND		SM	REDDISH BROWN FINE SAND TO FINE GRAVEL, TRACE SILT, SATURATED
		15	82	.8			
						CL-ML	REDDISH BROWN CLAY AND SILT, VERY MOIST GRADING
			54	2		ML	REDDISH BROWN SILT, TRACE CLAY, OCCASIONAL STRINGS OF FINE TO COARSE SAND AND FINE GRAVEL
			58	4		GW	REDDISH BROWN FINE TO COARSE ROUNDED GRAVEL, TRACE FINE TO COARSE SAND, TRACE CLAY, SILT, SATURATED
		20					
		25					

1. BORING COMPLETED AT 21 FEET ON 12/3/87.
2. WATER ENCOUNTERED AT 3 FEET ON 11/30/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/3/87.

BORING RMW-1SA

SURFACE ELEVATION 7.7'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					REDDISH BROWN FINE SAND TO FINE GRAVEL, TRACE SILT AND CLAY, MOIST, (FILL)
		5					
	RMW-1S-2	BC7157	11	18		PT	PEAT
		10					

1. BORING COMPLETED AT 7 FEET ON 12/1/87.
2. WATER ENCOUNTERED AT 3 FEET ON 12/1/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/1/87.
4. OFFSET FROM RMW-1S BY 5'

BORING RMW-2D

SURFACE ELEVATION 8.5'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
	RMW-2D-1	BC7158	101	500			BROWN FINE SAND AND GRAVEL, (FILL)
		5					FINE TO COARSE SAND, ORGANIC DEBRIS, PAVING DEBRIS, CONSTRUCTION DEBRIS, VERY MOIST, (FILL)
	RMW-2D-2	BC7159	17	400			
						PT	BROWN PEAT
		10	2	100			
	RMW-2D-3	BC7160	6	100		CL	LIGHT GRAY SILT AND CLAY, MOTTLED OLIVE GREEN, OCCASIONAL LENSES OF FINE SAND, MOIST
			21	50			
	RMW-2D-4	BC8064	11	60		CH	REDDISH BROWN CLAY (PLASTIC), RHYTHMICALLY BEDDED WITH LAYERS OF DARK BROWN SILT GRADING TO MILLIMETER THICK LAYERS OF FINE SAND ON WHICH PARTING OCCURS, DRY
		15		50		CL	REDDISH BROWN SILT AND CLAY, MOIST
	RMW-2D-5	BC8065	15	100			
		20	6	80		SP	REDDISH BROWN FINE SAND, TRACE SILT AND CLAY, TRACE FINE GRAVEL, OCCASIONAL LENSES OF CLAY, SATURATED
		25					

1. BORING COMPLETED AT 23 FEET ON 12/8/87.
2. WATER ENCOUNTERED AT 5 FEET ON 12/1/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/8/87.

BORING RMW-3S

SURFACE ELEVATION 6.0'

D&M SAMPLE I.D.	E1C SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RMW-3S-1	BC7178	0	14	300			GRAY SAND AND GRAVEL, MOIST, (FILL)
RMW-3S-1-DU	BC7179						
RMW-3S-2	BC7180	5	25	150			
						PT	BROWN PEAT, LITTLE CLAY, SATURATED
						ML-CL	LIGHT GRAY SILT AND CLAY, MOTTLED OLIVE GREEN, OCCASIONAL LENSES OF FINE SAND
RMW-3S-3	BC7193	10	9	230		CL-ML	LIGHT BROWN CLAY AND SILT
		15					

1. BORING COMPLETED AT 11 FEET ON 12/3/87.
2. WATER ENCOUNTERED AT 1.2 FEET ON 12/3/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/3/37.

BORING RMW-4S

SURFACE ELEVATION 7.8'

D&M SAMPLE I.D.	E1C SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RMW-4S-1	BC8091	0	36	780			SAND AND GRAVEL AND CONSTRUCTION DEBRIS, (FILL)
RMW-4S-2	BC8092	5	18	1000+			CONSTRUCTION DEBRIS, WET, (FILL)
RMW-4S-3	BC8093	10	3	1000+			
			13	1000+		ML CL	LIGHT GRAY SILT, SOME CLAY, MOTTLED OLIVE GREEN, OCCASIONAL DEBRIS AND BRICKS, MOIST
		15					

1. BORING COMPLETED AT 13 FEET ON 12/10/87.
2. WATER ENCOUNTERED AT 1.2 FEET ON 12/10/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/10/87.

BORING RMW-5D

SURFACE ELEVATION 6.4'

D&M SAMPLE I.D.	E1C SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
RMW-5D-1	BC7174	0	33	250			BRICK, CONCRETE AND GRAVEL, (FILL)
RMW-5D-1-DU	BC7175						
RMW-5D-2	BC7176	5	1	50			BROWN PEAT, LITTLE CLAY, MOIST
						PT	
		10	5	-		ML	LIGHT GRAY SILT, TRACE CLAY, TRACE FINE SAND, MOIST
RMW-5D-3	BC7177		15	160		CL-ML	LIGHT BROWN CLAY AND SILT, MOTTLED DARK BROWN LAMINATED, MOIST
RMW-5D-4	BC8066		7	600		CL	RHYTHMICALLY LAYERED DARK BROWN CLAY AND REDDISH BROWN CLAY AND SILT, UPWARD FINING WITH VERY FINE SAND, BEDDING PARALLEL PARTING, MOIST, STRONG ODOR
RMW-5D-5	BC8067	15	4	500		CH	DARK BROWN PLASTIC CLAY, MOIST, STRONG ODOR
RMW-5D-6	BC8068		3	500		CL CH	RHYTHMICALLY LAYERED DARK BROWN CLAY AND REDDISH BROWN CLAY AND SILT, UPWARD FINING WITH VERY FINE SAND, BEDDING PARALLED PARTING, MOIST, STRONG ODOR
		20		-			
RMW-5D-7	BC8069		1	ND			
			6	400		SP SW	REDDISH BROWN FINE TO MEDIUM SAND, TRACE SILT AND CLAY, TRACE FINE GRAVEL, OCCASIONAL LENSES AND INTERBEDS OF CLAY OR FINE GRAVEL, SATURATED, ODOR
		25					
		30					

1. BORING COMPLETED AT 25 FEET ON 12/8/87.
2. WATER ENCOUNTERED AT 5 FEET ON 12/2/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/8/87.

LOG OF BORINGS

Dames & Moore

BORING RMW-6S

SURFACE ELEVATION 5.6'

D&M SAMPLE I.D.	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					
RMW-6S-1	BC8097		21	360			SAND, GRAVEL, BRICK, MISCELLANEOUS DEBRIS. (FILL)
							FINE CRUSHED STONE AND CLAY, BLACK SHEEN, ODOR, WET
		5					
RMW-6S-2	BC8098		1	1000+		PT	PEAT AND DARK BROWN PLASTIC CLAY
RMW-6S-3	BC8099		5	840		ML	LIGHT GRAY SILT, TRACE CLAY, TRACE ORGANIC MATERIAL, OCCASIONAL MOTTLED OLIVE GREEN, OCCASIOAL LENSES OF BROWN CLAY
		10					

1. BORING COMPLETED AT 9 FEET ON 12/10/87.
2. WATER ENCOUNTERED AT 2.5 FEET ON 12/10/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/10/87.

BORING RMW-7D

SURFACE ELEVATION 7.6'

D&M SAMPLE I.D	ETC SAMPLE I.D.	DEPTH IN FEET	N VALUE	PID READING	SAMPLES	SYMBOLS	DESCRIPTIONS
		0					
RMW-7D-1	BC7161		15	600			FINE SAND AND SILT, BROKEN GLASS, MIXED DEBRIS, (FILL)
							BLACK AND BROWN PEAT, STRONG ODOR, MOIST
		5					
RMW-7D-2	BC7172		3	400			
			1	300		PT	
		10					
RMW-7D-3	BC7173		2	300		ML	LIGHT GRAY AND MOTTLED DARK GREEN SILT AND CLAY, OCCASIONAL LENSES OF FINE SILT
RMW-7D-4	BC7199		7	400		CL	RYTHMICALLY BEDDED LIGHT GRAY CLAY, TRACE SILT AND LIGHT BROWN TO GRAY SILT, SATURATED, STRONG ODOR
RMW-7D-4DU	BC7200						
RMW-7D-5	BC7201		12	350			
		15		450		CL	GRADING TO RYTHMICALLY BEDDED REDDISH BROWN CLAY AND GRAY CLAY AND SILT, OCCASIONAL REDUCTION SPOTS IN THE BEDDING PLANE, MOIST TO DRY, STRONG ODOR
RMW-7D-6	BC7205		3	200			RYTHMICALLY INTERBEDDED REDDISH PURPLE PLASTIC CLAY AND BROWN CLAY AND SILT COARSENING TO MEDIUM THICK LAYER OF FINE SAND. BEDDING PARALLEL PARTING VERY MOIST, STRONG ODOR
RMW-7D-7	BC206	20	3	10			
RMW-7D-8	BC7207		P	1			
RMW-7D-9	BC7208		P	15		CL	
		25					
RMW-7D-10	BC7209		P	4			
RMW-7D-11	BC7210		P	150			GRADING REDDISH BROWN PLASTIC CLAY, MASSIVELY BEDDED, MOIST
		30					
RMW-7D-12	BC7202		P	1			
		35				CL CH	
RMW-7D-13	BC7203		P	140			
RMW-7D-14	BC7204		P	100			GRADING REDDISH BROWN CLAY, LITTLE FINE TO MEDIUM SAND, LITTLE SUBANGULAR TO ROUNDED GRAVEL, VERY MOIST, STRONG ODOR
						CL-SC	
		40	3	20		GM	REDDISH BROWN FINE TO COARSE GRAVEL, LITTLE FINE TO COARSE SAND, TRACE SILT AND CLAY, VERY MOIST, STRONG ODOR
		45					

1. BORING COMPLETED AT 41 FEET ON 12/7/87.
2. WATER ENCOUNTERED AT .5 FEET ON 12/2/87.
3. BORING BACKFILLED WITH CEMENT GROUT ON 12/7/87.

LOG OF BORINGS

APPENDIX B

APPENDIX B

LATORATORY CHEMICAL DATA SUMMARIES

DAMES & MOORE A PROFESSIONAL LIMITED PARTNERSHIP
12 COMMERCE DRIVE, CRANFORD, NEW JERSEY 07016-1101 (201) 272-8300

February 17, 1989

Ms. Janet Feldstein
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Re: Laboratory Data Discrepancies
SCP Carlstadt RI/FS

Dear Janet:

We have completed our review and evaluation of the laboratory analytical raw data versus the data summary tables used in the RI Report. The major discrepancy identified was for sample RB-5-1, where the data summary table did not match the raw data. The raw data quantified detections for 13 volatile organic compounds (VOCs), while the data summary reported data for only five VOCs. Since the data excluded from the summary table had substantially lower values than those included, and since four of the five values in the summary table were reported much higher than the raw data values, we believe that the summary table provided a conservative overestimation of the total VOCs in the sample. The attached tables and figure from the RI Report have been marked up to include the raw data from sample RB-5-1 instead of the summary table data, and this substantiates our observation. Therefore, we conclude that the interpretations provided in the RI Report are valid even if the raw data are considered.

Furthermore, we have discussed this matter with our risk assessment consultant, Terra Inc. Terra has informed us that their selection of indicator chemicals would not be altered if the raw data were used, particularly since ground water drives the selection of indicator chemicals.

Minor discrepancies identified include the reporting of values below the method detection limit (MDL) in the raw data, while the corresponding summary tables simply list BMDL. Since our data interpretations are based on detections above the MDL, this has no impact on the RI Report.

A complete discussion of the discrepancies is contained in the attached ETC letter. Please call if you have any questions or require additional information.

Very truly yours,

DAMES & MOORE

Gerard M. Coscia

Gerard M. Coscia, P.E.
Project Manager

GMC/jhm

cc: Mr. David Thompson (Allied)
Mr. Gil Weil

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TABLE 6

SOIL SAMPLES
OCCURRENCE OF CHEMICALS DETECTED AT THE SCP SITE
BASED ON SAMPLES COLLECTED BY DAMES & MOORE, DECEMBER 1987
(Values are in mg/kg)

CHEMICAL	NO. OF OCCURRENCES	MINIMUM	MAXIMUM	MEAN	STANDARD DEVIATION
Volatile Compounds (68 samples)					
Benzene	~~13~~ 14	0.009	53.9	~~12.49~~ 11.62	~~21.274~~
Chlorobenzene	14	0.012	336	67.961	112.079
Chloroform	16	0.004	379	~~82.394~~ 80.55	~~126.16~~
1,1-Dichloroethane	8	0.005	179	37.358	62.155
1,2-Dichloroethane	15	0.015	290	~~43.649~~ 42.78	~~79.308~~
1,1-Dichloroethylene	~~1~~ 2	~~80.3~~ 0.182	80.3	~~80.3~~ 40.24	—
Ethylbenzene	~~30~~ 31	0.019	652	~~79.466~~ 76.93	~~157.849~~
Methylene chloride	~~42~~ 43	0.009	124	~~12.158~~ 11.91	~~26.215~~
1,1,2,2-Tetrachloroethane	3	0.032	0.7	0.341	0.338
Tetrachloroethylene	46	0.005	4290	~~396.64~~ 396.02	~~802.482~~
Toluene	51	0.009	3380	300.57	649.247
1,2-Trans-dichloroethylene	~~18~~ 19	0.003	512	~~56.151~~ 53.21	~~137.679~~
1,1,1-Trichloroethane	12	0.023	1770	191.722	504.432
1,1,2-Trichloroethane	~~2~~ 3	0.113	15.7	~~7.906~~ 5.87	~~11.021~~
Trichloroethylene	~~42~~ 43	0.029	2060	~~227.76~~ 222.48	~~484.487~~
Vinyl chloride	1	0.028	0.028	0.028	--
Methyl ethyl ketone	27	0.018	795	38.322	154.99
Styrene	1	212	212	212	--
m-Xylene	42	0.012	2000	~~221.81~~ 221.25	~~435.758~~
o + p-Xylenes	~~37~~ 38	0.017	1450	~~167.42~~ 163.10	~~301.467~~
Acid Compound (58 samples)					
2-Chlorphenol	1	0.238	0.238	0.238	--
2,4-Dichlorophenol	1	5.06	5.06	5.06	--
2,4-Dimethylphenol	6	0.146	10.8	3.812	4.651
Phenol	12	0.11	790	76.319	225.452
Base/Neutral Compounds (58 samples)					
Acenaphthene	18	0.072	21.2	2.177	4.875
Acenaphthylene	2	0.546	21	10.773	14.463
Anthracene	19	0.090	86.3	5.467	19.601
Benzidine	1	244	244	244	--
Benzo(a)anthracene	11	0.545	84.2	9.491	24.83
Benzo(a)pyrene	25	0.101	108	6.533	21.259
Benzo(b)fluoranthene	13	0.576	164	17.065	44.422
Benzo(ghi)perylene	13	0.227	73.3	7.57	19.861

TABLE 7

SOIL SAMPLES

VERTICAL DISTRIBUTION OF VOLATILE ORGANIC COMPOUNDS DETECTED AT THE SCP SITE BASED ON 68 SAMPLES COLLECTED BY DAMES & MOORE DECEMBER 1987 (VALUES ARE IN MG/KG)

VOLATILE ORGANIC COMPOUNDS(2)

Stratum	Occurrence/Total Samples	Mean	Range
Unsaturated Fill	17/17	1,068 ~~1,092~~	0.024 - 12,167
Saturated Fill	16/17	2,069	0.335 - 9,890
Top of Clay	15/17	153	0.042 - 1,822
Within Clay	17/17	126(1)	0.048 - 439(1)

NOTE:

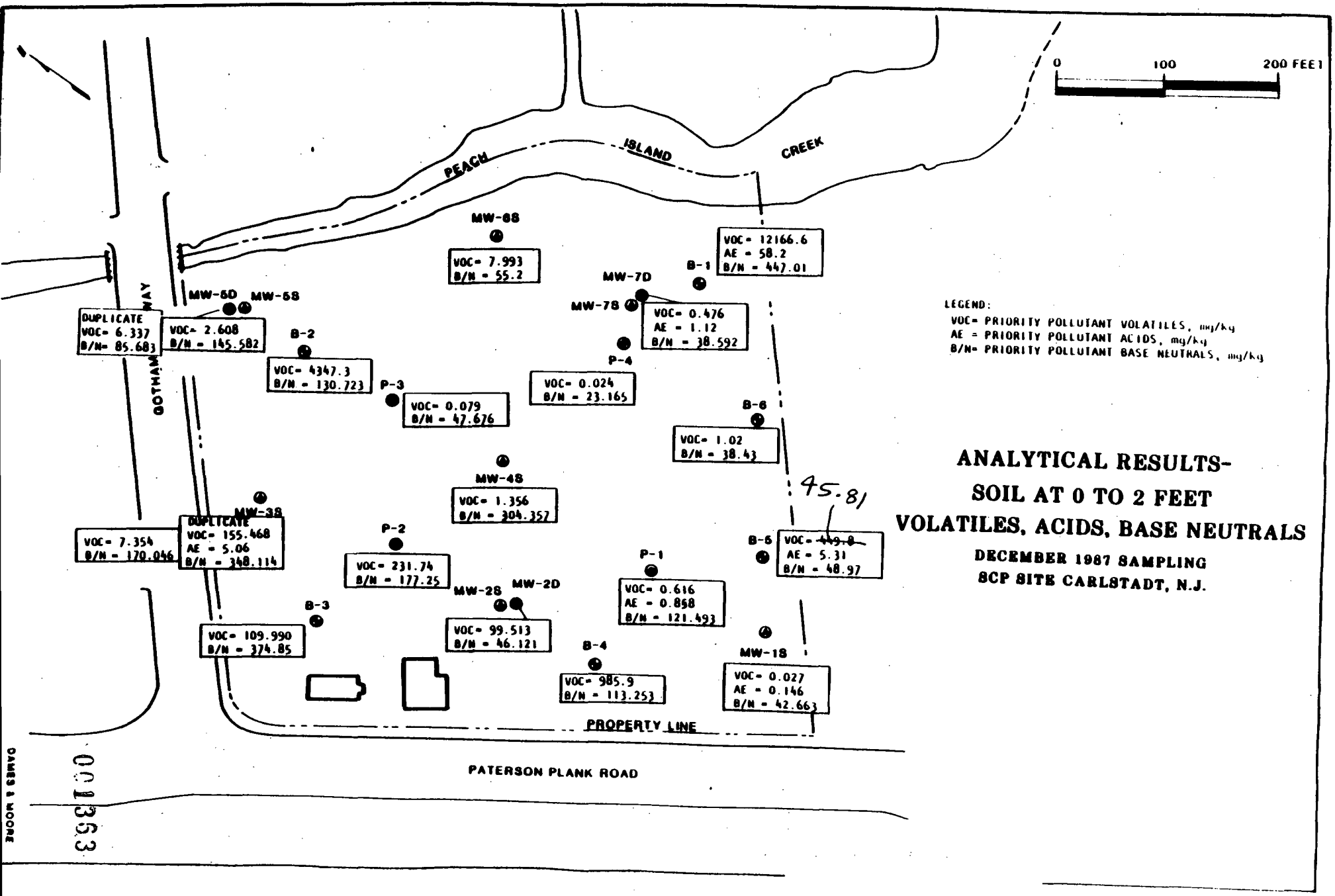
(1) The mean and range exclude the sample from RMW-7D, which had a total VOC concentration of 4,124 mg/kg. This value was more than 32 times greater than the next highest VOC concentration within the clay, and therefore, substantially distorts the mean value. This value occurred near the top of the clay, and the concentration decreased by an order of magnitude in the next sample down. With this value included, the mean concentration is 361 mg/kg.

(2) For breakdown by compound in each stratum, see Tables 7A through 7D.

TABLE 7A

SOIL SAMPLES
VOLATILE ORGANIC COMPOUNDS IN THE UNSATURATED FILL
(Values are in Mg/Kg)

Compound	Occurrence/ Total Samples	Mean	Range
Benzene	4~~3~~/17	17.109 ~~22.690~~	0.319 - 53.900
Chlorobenzene	4/17	113.538	0.282 - 336.000
Chloroform	4/17	10.348 ~~17.773~~	0.004 - ~~47.300~~ 17.800
1,1-Dichloroethane	2/17	37.900	11.100 - 64.700
1,2-Dichloroethane	4/17	4.845 ~~8.095~~	0.016 - ~~23.200~~ 10.200
1,1-Dichloroethylene	2 ~~1~~/17	0.131 ~~0.080~~	0.080 - ~~0.080~~ 0.182
Ethylbenzene	7 ~~6~~/17	168.223 ~~196.096~~	0.038 - 652.000
Methylene chloride	11 ~~10~~/17	0.607 ~~0.533~~	0.009 - 2.390
1,1,2,2-Tetrachloroethane	1/17	0.288	0.288 - 0.288
Tetrachloroethylene	12/17	783.199 ~~785.586~~	0.059 - 4290.000
Toluene	8/17	737.859	0.013 - 3380.000
1,2-Trans-dichloroethylene	5 ~~4~~/17	0.079 ~~0.037~~	0.004 - ~~0.073~~ 0.241
1,1,1-Trichloroethane	1/17	2.490	2.490 - 2.490
1,1,2-Trichloroethane	2 ~~1~~/17	0.962 ~~0.113~~	0.113 - ~~0.113~~ ~~0.113~~ 1.810
Trichloroethylene	12 ~~11~~/17	296.426 ~~323.321~~	0.051 - 2060.000
Methyl ethyl ketone	2/17	8.576	0.019 - 8.560
m-Xylene	7/17	499.674 ~~503.055~~	0.148 - 2000.000
o+p Xylenes	9 ~~8~~/17	291.224 327.206	0.024 - 1450.000



DAMES & MOORE

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Environmental Testing and Certification Corp.
284 Raritan Center Parkway
P.O. Box 7808
Edison, New Jersey 08818-7808
201-225-5600

ETC

February 17, 1989

Gerard Coscia
Dames and Moore
12 Commerce Drive
Cranford, N.J. 07016

Re: SCP - Carlstadt Site

Dear Gerry:

Pursuant to your request on February 7, 1989, ETC, with the help of your office, has compared the quantitative analytical results reported in two hundred and fifty six (256) reports to the quantitative analytical results reported on the Data Management Summary reports. The following anomalies were discovered:

Volatile Organic Analysis for Sample BC8074:

The discrepancy listed below exists between the volatile analysis values stated in the report and those values reported on the Data Management Summary listed in the Remediation Investigation Report.

Parameter	Report Table Quantitative Results	Report Table Method Detection Limit	Data Management Summary Results
Benzene	364 ug/kg	270 ug/kg	ND
Chlorobenzene	BMDL	370 ug/kg	ND
Chloroform	17800 ug/kg	98 ug/kg	47300 ug/kg
1,2-Dichloroethane	10200 ug/kg	170 ug/kg	23200 ug/kg
1,1-Dichloroethylene	182 ug/kg	170 ug/kg	ND
Ethylbenzene	987 ug/kg	440 ug/kg	ND
Methylene Chloride	1350 ug/kg	170 ug/kg	ND
Tetrachloroethylene	4890 ug/kg	250 ug/kg	33600 ug/kg
1,2-Trans-dichloroethylene	241 ug/kg	98 ug/kg	ND
1,1,2-Trichloroethane	1810 ug/kg	300 ug/kg	ND
Trichloroethylene	586 ug/kg	120 ug/kg	ND
Trans-1,3-dichloropropylene	BMDL	610 ug/kg	ND
m-Xylene	4030 ug/kg	610 ug/kg	27700 ug/kg
o,p-Xylenes	3370 ug/kg	610 ug/kg	BMDL

A Subsidiary of Environmental Treatment and Technologies Corp.
The Environmental Services Company

In this case, both sets of values represent compounds found in the sample BC8074. The sample was originally analyzed at a dilution factor of 1:50. Toluene required an additional dilution of 1:2000 in order to be able to accurately quantitate the value. This dilution was performed within hold time, two days later.

In order to expediate this project, one analyst reviewed both analytical runs for this sample. The Table results represent the values determined from the 1:50 dilution for all parameters with the exception of toluene. The toluene value was calculated from 1:2000 dilution. The data was entered into the ETC database and the quantitative results table was created.

A different analyst reviewed the batch which contained the 1:2000 dilution run for sample BC8074. This analyst re-entered the results of this sample's dilution run into the ETC database. The volatile compound results printed on the "Report Table" were overwritten by the second data entry. The database represented the values for sample BC8074 from the 1:2000 dilution analytical run only. The "Report Table" results represent a more accurate portrait of the compound levels detected in this sample aliquot.

Report Qualifiers:

Several inconsistencies in report qualifiers were noted between the "Report Table" results and the Data Management summary reports. ETC was requested by you to provide summary reports in a ND/BMDL (Not Detected/Below Method Detection Limit) format. The reports would automatically report a compound level below the method detction limit as BMDL.

Various methods and protocols require compound levels detected below the method detection limit to be reported differently. The State of New Jersey, for example, requires all analysis performed under a NJDEP Contract to report any values below the detection limit as ND. For this program, when a compound or element is not present at any detectable concentrations it is reported as ND. If a compound or element is present below its published Method Detection Limit, then it is to be reported as BMDL. Please note that compound values detected below the MDL are considered estimated concentrations.

Listed below are the samples and compounds for which this inconsistency occurred:

ETC Sample ID	D&M Sample ID	Parameter	Report Table Quant. Result	MDL	Summary Report Result
BC9328	GW-6S	2,4-Dimethylphenol	1.63 ug/l	2.7 ug/l	BMDL
BC8122	RSS-1-2	Arclor 1254	5500 ug/kg	16000 ug/kg	BMDL
BC8094	RB-4-1	2,4-Dinitrophenol	ND	210 ug/kg	BMDL
BC7180	RMW-35-2	Benzene	2300 ug/kg	6027 ug/kg	BMDL
		Chlorobenzene	4600 ug/kg	8219 ug/kg	BMDL
		Diethyl phthalate	28500 ug/kg	45259 ug/kg	BMDL
		1,2,4-Trichloro-benzene	4930 ug/kg	8597 ug/kg	BMDL
		2-Chloronaphthalene	3010 ug/kg	8597 ug/kg	BMDL
BC7175	RMW-5D-1	Acrolein	ND	6100 ug/kg	BMDL
BC9352	TB-13	MEK	6.71 ug/l	10.0 ug/l	BMDL
		Styrene	1.93 ug/l	10.0 ug/l	BMDL

Metals Analysis:

Six samples have a discrepancy between the elements represented on the "Report Table" and those reported on the Data Management Summary reports. In all cases, as listed below, one element is missing on the "Report Table".

ETC Sample ID	Dames & Moore Sample ID	Element	Quantitative Results
BC9340	GW-5S	Zinc	110 ppb
BC9515	GW-7D	Thallium	ND
BC9527	GW-7D	Thallium	ND
BC9349	GW-2D	Thallium	ND
BC9348	GW-2D	Thallium	ND
BC9350	GW-5D	Thallium	ND

In summary, ETC is very concerned in preserving the integrity of the ETC database. Several corrective action items have been taken in order to address these database concerns.

A database audit system has been employed to monitor all data input into the system. This audit function records all modifications to data entries and stores previous input. Previously, ETC only employed this system on samples which had been invoiced. ETC has recently modified this system to monitor any sample which is linked into the database.

Additionally, ETC is in the process of developing programs which will compare the client's analytical request to the produced report. ETC is exploring the possibility of being able to have ETC clients as well as ETC Quality Assurance personnel obtain access to this data.

These programs will maximize the integrity of the ETC database. The database will mirror the results reported in hard copy. This will minimize the possibility of the database being overwritten or a compound being deleted

from a "Report Table".

The misuse of data qualifiers appears to be a result of inconsistent data entry in the laboratory. ETC is in the process of heightening the analysts' product/project awareness thereby minimizing the misuse of data qualifiers.

It is ETC's goal to provide the best practical analytical services in a timely manner on this and any future projects. If you have any questions, please do not hesitate to contact me at 201/225-6774.

Sincerely,

Leslie Clarke
Project Manager

LC/dab

cc: Michael Prisco
Jack Farrel

SAMPLE KEY

SOIL SAMPLES

Designated by three alphanumeric groupings:

R a = b - c

Where:

R	=	Replacement Boring
a	=	P, MW or B, for piezometer borings, monitor well borings, or other soil borings, respectively.
b	=	1 through 4 for piezometer borings, 1S, 3S, 4S or 6S for shallow monitoir well borings 2D, 5D or 7D for till monitor well borings, 1 through 6 for other soil borings.
c	=	1 for 0-2 foot sample, 2 for 5-6 foot sample, 3 for top of clay sample, 4 or higher for intermediate clay samples to the bottom of clay.

GROUND WATER SAMPLES

Designated by two alphanumeric groupings:

GW = a

Where:

a	=	1S through 7S for shallow ground water samples,
	=	2D, 5D or 5D for deep (till) ground water samples.

Shallow ground water samples GW-3S-S, GW-6S-S and GW-7S-S are split samples on which cleanup procedures were used prior to duplicate PCB analyses.

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SURFACE WATER SAMPLES

Designated by two alphanumeric groupings:

SW - a

Where: a = 1 through 4, corresponding to the appropriate stream stations.

SEDIMENT SAMPLES

Designated by three alphanumeric groupings:

RSS - a - b

Where: R = Replacement sediment sample,
a = 1 through 4, corresponding to the appropriate stream stations,
b = 1 for 0-6 inch sample,
2 for 12-18 inch sample.

FIELD AND TRIP BLANKS

Soil and sediment sampling: RFB-1 through RFB-10
RTB-1 through RTB-10

Ground and surface water sampling: FB-11 through FB-13
TB-11 through TB-13

NOTES:

The first line on the heading for each sample on the summary reports is the Dames & Moore sample number. The second line is the date the sample was collected (year-month-day). The third line is the ETC internal sample number.

Duplicate samples are indicated by identical Dames & Moore sample numbers and sample dates, but different ETC sample numbers (see, for example, RP-2-3).

Each ground and surface water sample occupies two adjacent columns on the summary reports. Total metals are listed in one column, and dissolved metals are listed in the other. Duplicate samples therefore occupy four columns, each with the same Dames & Moore sample number and collection date, but with differing ETC sample numbers.

Nomenclature used in the tables is as follows:

ND	=	parameter not detected
BMDL	=	parameter detected but at a concentration below the method detection limit
IND	=	parameter detected but quantification is indeterminate because of interference.
-	=	parameter not tested.

PIEZOMETER BORING SAMPLES

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/19/88
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-1-2 871209 BC8078	S RP-1-3 871209 BC8079	S RP-2-1 871203 BC7194	S RP-2-2 871203 BC7195	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Priority Poll. Volatiles GC/MS								
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	BMDL	ND	5010	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	BMDL	ND	8320	ND	ND	ND
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	4.14	ND	ND	10300	39600	159000	234000
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	11100	ND	ND	ND
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	37.5	2210	ND	18000	20400	ND	ND
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	13.9	1220	BMDL	2390	4950	16800	20800
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	186	7350	ND	35300	5820	ND	ND
Toluene	ug/kg	60.3	3060	ND	71900	43900	ND	ND
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	1910
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	51.4	4740	ND	9320	ND	ND	ND
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001372

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/19/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-1-2 871209 BC8078	S RP-1-3 871209 BC8079	S RP-2-1 871203 BC7194	S RP-2-2 871203 BC7195	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Priority Poll. Acids GC/MS								
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/kg	858	ND	ND	ND	5790	ND	930
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Priority Poll. B/Ns GC/MS								
Acenaphthene	ug/kg	2700	ND	ND	BMDL	ND	ND	ND
Acenaphthylene	ug/kg	546	ND	ND	ND	ND	ND	ND
Anthracene	ug/kg	3910	BMDL	ND	ND	ND	ND	ND
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	2580	ND	ND	BMDL	BMDL	ND	ND
Benzo(a)pyrene	ug/kg	9390	ND	4350	BMDL	BMDL	ND	ND
Benzo(b)fluoranthene	ug/kg	17700	ND	ND	BMDL	BMDL	ND	ND
Benzo(ghi)perylene	ug/kg	5330	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/kg	8930	989	488	135000	6140	ND	ND
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/kg	654	ND	ND	4730	BMDL	ND	ND
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/kg	3470	ND	ND	1330	BMDL	ND	ND
Dibenzo(a,h)anthracene	ug/kg	731	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	1730	BMDL	ND	2360	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

0013573

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-1-2 871209 BC8078	S RP-1-3 871209 BC8079	S RP-2-1 871203 BC7194	S RP-2-2 871203 BC7195	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188
		Sample Points, Sampling Dates, and ETC Sample No.'s						
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	462	BMDL	ND	14000	ND	ND	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	1590	ND	ND	BMDL	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	15300	113	ND	1620	1090	ND	ND
Fluorene	ug/kg	3360	ND	ND	BMDL	ND	ND	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	12100	ND	ND	ND	ND	ND	ND
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	3010	BMDL	ND	10500	1850	ND	ND
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	2980	ND	ND	ND
Phenanthrene	ug/kg	15300	BMDL	ND	3460	BMDL	ND	ND
Pyrene	ug/kg	12700	92.4	ND	1270	911	ND	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Metals Analysis Data								
Antimony	ug/kg	BMDL	BMDL	BMDL	BMDL	ND	ND	ND
Arsenic	ug/kg	22000	1200	1100	10000	7500	4200	3100
Beryllium	ug/kg	400	1300	300	230	300	490	480
Cadmium	ug/kg	1600	BMDL	BMDL	6500	8500	BMDL	BMDL
Chromium	ug/kg	19000	22000	12000	79000	51000	16000	18000
Copper	ug/kg	10800000	88000	28000	460000	163000	27000	20000
Lead	ug/kg	420000	18000	BMDL	300000	290000	10000	7600
Mercury	ug/kg	1100	250	BMDL	1000	420	ND	BMDL

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001374

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s						
Parameters	*Units*	S RP-1-1 871209 BC8077	S RP-1-2 871209 BC8078	S RP-1-3 871209 BC8079	S RP-2-1 871203 BC7194	S RP-2-2 871203 BC7195	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188
Nickel	ug/kg	12000	17000	5800	13000	40000	20000	18000
Selenium	ug/kg	BMDL	ND	BMDL	BMDL	BMDL	ND	ND
Silver	ug/kg	1600	ND	ND	BMDL	BMDL	BMDL	ND
Thallium	ug/kg	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	227000	46000	22000	180000	350000	56000	47000
roclors by GC								
Aroclor 1242	ug/kg	1200	85	ND	96000	5200	40	44
Aroclor 1254	ug/kg	ND	ND	ND	ND	3500	ND	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND
esticides by GC								
Aldrin	ug/kg	280	BMDL	ND	ND	ND	ND	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	IND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	2300	51	25	IND	IND	ND	ND
Endosulfan I	ug/kg	ND	ND	ND	IND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND

Notes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001375

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-0C) - All Parameters Tested, Selected Samples

DATE: 02/19/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-1-2 871209 BC8078	S RP-1-3 871209 BC8079	S RP-2-1 871203 BC7194	S RP-2-2 871203 BC7195	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Miscellaneous Parameters								
Cyanide, Total	mg/kg	.7	< .6	< .7	1.7	< .7	< .6	< .6
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	ND	ND	ND	BMDL	46200	7650	7880
Petroleum Hydrocarbons (IR)	mg/kg	4160	360	< 34	2600	278	< 29	< 29
Phenolics, Total	mg/kg	2.4	4.4	< .1	11	11	1.6	1.0
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	148	5040	ND	38200	93200	ND	ND
o+p-Xylenes	ug/kg	115	5040	ND	21900	57600	ND	ND

001376

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/19/88
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RP-3-1 871211 BC8103	S RP-3-2 871211 BC8104	S RP-3-3 871211 BC8105	S RP-4-1 871210 BC8085	S RP-4-2 871210 BC8086	S RP-4-3 871210 BC8087		
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	ND	ND	52.1	ND	26.8	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	ND	ND	ND	ND	43.2	BMDL		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	31.2	ND		
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	ND	7470	229	ND	192	45600		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	79.6	ND	36.6	24.8	30.0	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	ND	849	ND	ND	5.40	917000		
Toluene	ug/kg	BMDL	33100	1140	ND	254	216000		
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	22.8	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	57600		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	ND	1030	44.6	ND	ND	363000		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	28.9	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RP-3-1 871211 BC8103	S RP-3-2 871211 BC8104	S RP-3-3 871211 BC8105	S RP-4-1 871210 BC8085	S RP-4-2 871210 BC8086	S RP-4-3 871210 BC8087		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	290	8580		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	ND	110	ND	ND	ND	14400		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	324	100	386	379	BMDL		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	ND	531	164	672	440	ND		
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	ND	1000	564	1270	545	BMDL		
Benzo(a)pyrene	ug/kg	ND	915	382	1330	492	101		
Benzo(b)fluoranthene	ug/kg	BMDL	1240	576	2070	871	BMDL		
Benzo(ghi)perylene	ug/kg	ND	635	227	972	331	BMDL		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	35200	18700	23600	4570	10100	21600		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	524	6070	4650	BMDL	1020	714		
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	ND	1220	423	1300	567	ND		
Dibenzo(a,h)anthracene	ug/kg	ND	BMDL	ND	BMDL	BMDL	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND	123	137	1270	10800		

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected "-" = Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RP-3-1 871211 BC8103	S RP-3-2 871211 BC8104	S RP-3-3 871211 BC8105	S RP-4-1 871210 BC8085	S RP-4-2 871210 BC8086	S RP-4-3 871210 BC8087		
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	BMDL		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Diethyl phthalate	ug/kg	ND	BMDL	ND	ND	ND	BMDL		
Dimethyl phthalate	ug/kg	ND	BMDL	BMDL	ND	ND	BMDL		
Di-n-butyl phthalate	ug/kg	3290	1910	2420	BMDL	635	2440		
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-octyl phthalate	ug/kg	7660	557	1090	ND	BMDL	986		
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND		
Fluoranthene	ug/kg	245	2090	866	3190	2370	285		
Fluorene	ug/kg	ND	379	186	373	532	BMDL		
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	586	213	1140	396	BMDL		
Isophorone	ug/kg	ND	ND	220	ND	ND	725		
Naphthalene	ug/kg	141	669	974	355	1260	1040		
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	135000		
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	157	200		
Phenanthrene	ug/kg	224	2930	943	2690	3010	235		
Pyrene	ug/kg	392	1760	750	2710	1690	217		
1,2,4-Trichlorobenzene	ug/kg	BMDL	ND	ND	ND	ND	ND		
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	29000	ND	7600	ND		
Arsenic	ug/kg	5700	29000	18000	3800	3500	3500		
Beryllium	ug/kg	400	900	500	420	370	670		
Cadmium	ug/kg	9500	4500	26000	1000	1800	520		
Chromium	ug/kg	87000	43000	56000	59000	19000	19000		
Copper	ug/kg	545000	384000	448000	315000	522000	37000		
Lead	ug/kg	372000	2810000	916000	520000	610000	26000		
Mercury	ug/kg	1700	140	13600	830	620	BMDL		

001379

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RP-3-1 871211 BC8103	S RP-3-2 871211 BC8104	S RP-3-3 871211 BC8105	S RP-4-1 871210 BC8085	S RP-4-2 871210 BC8086	S RP-4-3 871210 BC8087		
Nickel	ug/kg	19000	50000	44000	10000	11000	21000		
Selenium	ug/kg	BMDL	1000	BMDL	BMDL	BMDL	ND		
Silver	ug/kg	BMDL	BMDL	ND	BMDL	BMDL	ND		
Thallium	ug/kg	ND	ND	ND	ND	ND	ND		
Zinc	ug/kg	442000	1400000	44400000	349000	411000	120000		
Aroclors by GC									
Aroclor 1242	ug/kg	ND	ND	2800	330	580	2100		
Aroclor 1254	ug/kg	ND	ND	2200	ND	ND	ND		
Aroclor 1260	ug/kg	ND	ND	IND	ND	ND	ND		
Aroclor 1248	ug/kg	BMDL	ND	ND	ND	ND	ND		
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
Pesticides by GC									
Aldrin	ug/kg	ND	ND	IND	140	ND	ND		
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Beta-BHC	ug/kg	ND	ND	IND	ND	ND	ND		
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDD	ug/kg	IND	ND	ND	IND	IND	ND		
Dieldrin	ug/kg	400	ND	ND	460	940	ND		
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan II	ug/kg	IND	ND	ND	IND	IND	ND		
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin	ug/kg	IND	ND	ND	ND	IND	IND		
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
Heptachlor	ug/kg	ND	ND	IND	IND	IND	IND		
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

001380

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-3-1 871211 BC8103	S RP-3-2 871211 BC8104	S RP-3-3 871211 BC8105	S RP-4-1 871210 BC8085	S RP-4-2 871210 BC8086	S RP-4-3 871210 BC8087		
Miscellaneous Parameters									
Cyanide, Total	mg/kg	2.8	3.2	<.6	1.0	3.2	3.5		
Methoxychlor	ug/kg	ND	ND	ND	ND	150000	ND		
Methyl ethyl ketone	ug/kg	ND	ND	BMDL	ND	21.1	ND		
Petroleum Hydrocarbons (IR)	mg/kg	2680	1080	3780	679	950	823		
Phenolics, Total	mg/kg	<.1	14	<.1	.6	7.5	65		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	BMDL	21000	414	ND	70.2	135000		
o+p-Xylenes	ug/kg	BMDL	21600	256	ND	116	87900		

001381

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected "-" = Parameter not tested

MONITOR WELL BORING SAMPLES

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-1S-2 871201 BC7157	S RMW-1S-3 871130 BC7149	S RMW-2D-1 871201 BC7158	S RMW-2D-2 871201 BC7159	S RMW-2D-3 871201 BC7160	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	ND	ND	319	189	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	ND	ND	346	12.0	BMDL	ND	ND
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	ND	ND	ND	566	333000	165000
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	574	69900	52700
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	ND	ND	15200	BMDL	BMDL	ND	ND
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	9.69	BMDL	BMDL	33.0	20.4	319	10100	2210
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	ND	ND	ND	922	ND	ND	ND	ND
Toluene	ug/kg	ND	ND	13.1	28400	221	10.0	BMDL	BMDL
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	19.5	ND	21.6	ND	ND
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	ND	ND	ND	114	ND	52.5	26200	22000
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001383

Footnotes: BMDL = Below Method Detection Limit ND=Parameter not detected * =Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-1S-2 871201 BC7157	S RMW-1S-3 871130 BC7149	S RMW-2D-1 871201 BC7158	S RMW-2D-2 871201 BC7159	S RMW-2D-3 871201 BC7160	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ug/kg	146	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	461	72.8	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ug/kg	1060	205	ND	ND	1360	ND	ND	ND
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	2260	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/kg	2420	ND	2390	ND	2790	ND	ND	ND
Benzo(b)fluoranthene	ug/kg	4040	ND	ND	ND	3870	ND	ND	ND
Benzo(ghi)perylene	ug/kg	1760	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/kg	11800	2050	ND	38600	381000	999	ND	ND
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/kg	ND	ND	ND	ND	3510	ND	ND	ND
2-Chloronaphthalene	ug/kg	ND	ND	ND	BMDL	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/kg	2600	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/kg	499	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	BMDL	ND	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected ---=Parameter not tested

001384

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-1S-1 871130 BC7148	S RMW-1S-2 871201 BC7157	S RMW-1S-3 871130 BC7149	S RMW-2D-1 871201 BC7158	S RMW-2D-2 871201 BC7159	S RMW-2D-3 871201 BC7160	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	ND	ND	BMDL	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	535	BMDL	ND	5230	2700	ND	ND	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	ND	ND	ND	BMDL	19500	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	4110	558	ND	521	4730	ND	ND	ND
Fluorene	ug/kg	733	127	ND	ND	803	ND	ND	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	1900	ND	ND	ND	ND	ND	ND	ND
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	945	127	ND	1140	1500	ND	ND	ND
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/kg	4320	576	ND	ND	4030	ND	ND	ND
Pyrene	ug/kg	3220	450	ND	630	4490	ND	ND	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	ND	BMDL	BMDL	BMDL	ND	ND
Arsenic	ug/kg	11000	1200	BMDL	7700	8900	ND	BMDL	BMDL
Beryllium	ug/kg	360	400	360	350	370	410	1200	590
Cadmium	ug/kg	1300	460	ND	2600	9000	BMDL	280	ND
Chromium	ug/kg	27000	12000	13000	38000	28000	13000	33000	17000
Copper	ug/kg	16500000	806000	59000	1970000	5670000	47000	39000	15000
Lead	ug/kg	290000	45000	9000	140000	230000	9500	11000	BMDL
Mercury	ug/kg	490	BMDL	84	400	520	BMDL	ND	ND

001385

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-1S-2 871201 BC7157	S RMW-1S-3 871130 BC7149	S RMW-2D-1 871201 BC7158	S RMW-2D-2 871201 BC7159	S RMW-2D-3 871201 BC7160	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065
		Sample Points, Sampling Dates, and ETC Sample No's							
Nickel	ug/kg	19000	8500	6400	14000	25000	17000	35000	18000
Selenium	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	BMDL	ND	ND
Silver	ug/kg	1300	ND	ND	BMDL	ND	ND	ND	ND
Thallium	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	637000	83000	26000	130000	376000	47000	86000	42000
Aroclors by GC									
Aroclor 1242	ug/kg	ND	ND	ND	39000	350000	ND	ND	ND
Aroclor 1254	ug/kg	4100	180	ND	7400	ND	ND	ND	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ug/kg	4100	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides by GC									
Aldrin	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	IND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	ND	ND	ND	IND	IND	ND	ND	ND
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001386

Footnote: MDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RMW-1S-1 871130 BC7148	S RMW-1S-2 871201 BC7157	S RMW-1S-3 871130 BC7149	S RMW-2D-1 871201 BC7158	S RMW-2D-2 871201 BC7159	S RMW-2D-3 871201 BC7160	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065
Miscellaneous Parameters									
Cyanide, Total	mg/kg	.8	< .6	< .7	2.1	< .8	< .6	< .6	< .6
Methoxychlor	ug/kg	ND	ND	ND	IND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	18.5	BMDL	29.0	8560	119	602	ND	ND
Petroleum Hydrocarbons (IR)	mg/kg	605	36	191	7680	8290	61	102	52
Phenolics, Total	mg/kg	6.1	< .1	2.0	4.5	7.8	.1	< .1	< .1
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	ND	BMDL	24100	22.6	BMDL	ND	ND
o+p-Xylenes	ug/kg	ND	ND	BMDL	21500	24.8	BMDL	ND	ND

001387

Footnotes: BMDL - Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s						
		S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-3S-2 871202 BC7180	S RMW-3S-3 871203 BC7193	S RMW-4S-1 871210 BC8091	S RMW-4S-2 871210 BC8092	S RMW-4S-3 871210 BC8093
Priority Poll. Volatiles GC/MS								
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	BMDL	BMDL	BMDL	ND	BMDL	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	282	BMDL	ND	ND	BMDL	BMDL
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	798	1730	379000	10300	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	BMDL	ND	ND	5.92
1,2-Dichloroethane	ug/kg	ND	39.0	146000	6500	ND	ND	ND
1,1-Dichloroethylene	ug/kg	ND	80.3	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	BMDL	71100	BMDL	ND	13100	BMDL
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	ND	261	11600	7260	ND	14900	24.7
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	4420	137000	241000	3340	58.6	ND	ND
Toluene	ug/kg	ND	ND	384000	8020	ND	118000	18.2
1,2-Trans-dichloroethylene	ug/kg	ND	73.3	ND	12200	47.6	ND	ND
1,1,1-Trichloroethane	ug/kg	606	2490	144000	3860	ND	ND	ND
1,1,2-Trichloroethane	ug/kg	ND	113	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	1530	13400	421000	9780	1250	20200	ND
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND

000388

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-3S-2 871202 BC7180	S RMW-3S-3 871203 BC7193	S RMW-4S-1 871210 BC8091	S RMW-4S-2 871210 BC8092	S RMW-4S-3 871210 BC8093
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Priority Poll. Acids GC/MS								
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/kg	ND	5060	ND	BMDL	ND	ND	ND
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Priority Poll. B/Ns GC/MS								
Acenaphthene	ug/kg	ND	320	21200	BMDL	353	ND	ND
Acenaphthylene	ug/kg	ND	ND	21000	BMDL	ND	ND	ND
Anthracene	ug/kg	ND	ND	86300	90.7	408	ND	ND
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	ND	BMDL	84200	BMDL	1320	ND	ND
Benzo(a)pyrene	ug/kg	801	1090	108000	BMDL	2150	ND	ND
Benzo(b)fluoranthene	ug/kg	BMDL	ND	164000	BMDL	4040	ND	ND
Benzo(ghi)perylene	ug/kg	ND	891	73300	ND	2300	ND	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/kg	39700	46100	119000	1800	276000	193000	4810
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/kg	27100	86100	73600	1080	ND	BMDL	BMDL
2-Chloronaphthalene	ug/kg	ND	BMDL	BMDL	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/kg	732	1400	106000	116	1500	ND	ND
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	23100	46500	385000	1170	1180	ND	BMDL

001389

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-3S-2 871202 BC7180	S RMW-3S-3 871203 BC7193	S RMW-4S-1 871210 BC8091	S RMW-4S-2 871210 BC8092	S RMW-4S-3 871210 BC8093
		Sample Points, Sampling Dates, and ETC Sample No.'s						
1,3-Dichlorobenzene	ug/kg	397	962	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	793	1830	ND	ND	BMDL	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	5090	4900	BMDL	BMDL	ND	ND	BMDL
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	12200	22400	98200	887	629	ND	BMDL
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	ND	BMDL	ND	ND	3020	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	1740	3300	176000	271	2640	ND	ND
Fluorene	ug/kg	ND	661	94100	87.3	327	BMDL	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	1360	86900	ND	2560	ND	ND
Isophorone	ug/kg	ND	ND	ND	203	ND	ND	ND
Naphthalene	ug/kg	2490	6900	480000	527	1360	34800	77.2
Nitrobenzene	ug/kg	52400	117000	1350000	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	1070	2280	ND	ND	ND	ND	ND
Phenanthrene	ug/kg	ND	ND	268000	438	2260	BMDL	ND
Pyrene	ug/kg	1540	2430	118000	195	2310	ND	ND
1,2,4-Trichlorobenzene	ug/kg	893	1690	BMDL	ND	ND	ND	ND
Metals Analysis Data								
Antimony	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	ND	BMDL
Arsenic	ug/kg	BMDL	BMDL	ND	4000	3800	62000	3400
Beryllium	ug/kg	BMDL	310	420	660	420	440	550
Cadmium	ug/kg	12000	10000	11000	BMDL	1700	6600	BMDL
Chromium	ug/kg	100000	59000	255000	24000	79000	61000	16000
Copper	ug/kg	379000	519000	561000	28000	1670000	747000	39000
Lead	ug/kg	400000	310000	1490000	31000	140000	87000	8600
Mercury	ug/kg	1700	1300	1600	BMDL	1100	770	ND

01390

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-3S-2 871202 BC7180	S RMW-3S-3 871203 BC7193	S RMW-4S-1 871210 BC8091	S RMW-4S-2 871210 BC8092	S RMW-4S-3 871210 BC8093
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Nickel	ug/kg	33000	21000	16000	23000	14000	116000	18000
Selenium	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	1600	ND
Silver	ug/kg	BMDL	BMDL	BMDL	ND	1400	BMDL	ND
Thallium	ug/kg	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	542000	396000	485000	69000	229000	130000	53000
Aroclors by GC								
Aroclor 1242	ug/kg	160000	400000	290000	5400	5400	1400	17
Aroclor 1254	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pesticides by GC								
Aldrin	ug/kg	ND	ND	ND	IND	IND	ND	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	IND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	ND	ND	ND	IND	IND	ND	ND
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	ND	ND	IND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	ND	IND	IND	IND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND

001391

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s						
Parameters	*Units*	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-3S-2 871202 BC7180	S RMW-3S-3 871203 BC7193	S RMW-4S-1 871210 BC8091	S RMW-4S-2 871210 BC8092	S RMW-4S-3 871210 BC8093
Miscellaneous Parameters								
Cyanide, Total	mg/kg	1.9	13.3	32	< .6	< .9	2.1	< 1.2
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	ND	ND	16000	2700	ND	ND	ND
Petroleum Hydrocarbons (IR)	mg/kg	11800	2430	16500	126	290	14000	4650
Phenolics, Total	mg/kg	.4	9.5	123	1.4	19	20	.5
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	BMDL	195000	1850	ND	41900	12.6
o+p-Xylenes	ug/kg	ND	BMDL	93200	BMDL	ND	29200	ND

001392

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-5D-1 871202 BC7174	S RMW-5D-1 871202 BC7175	S RMW-5D-2 871202 BC7176	S RMW-5D-3 871202 BC7177	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	BMDL	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	ND	148	ND	ND	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	ND	648	ND	ND	ND	ND	6720
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	ND	ND	5530	5410	ND	4360
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	BMDL	ND	ND	ND	ND	698
1,2-Dichloroethane	ug/kg	ND	ND	179	ND	ND	ND	ND	3700
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	ND	358	ND	BMDL	BMDL	BMDL	BMDL
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	ND	ND	147	ND	29100	44400	11600	3860
1,1,2,2-Tetrachloroethane	ug/kg	288	787	703	32.4	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	2000	4790	502	133	37800	27400	8760	16300
Toluene	ug/kg	ND	ND	5680	ND	24500	19600	4610	6270
1,2-Trans-dichloroethylene	ug/kg	ND	ND	125	ND	6580	ND	ND	ND
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	5520
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	320	760	96.9	ND	107000	142000	47500	30900
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001393

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected "-" = Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-5D-1 871202 BC7174	S RMW-5D-1 871202 BC7175	S RMW-5D-2 871202 BC7176	S RMW-5D-3 871202 BC7177	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	-	ND	-	238
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Phenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	3780	ND	ND	ND	-	ND	-	ND
Acenaphthylene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Anthracene	ug/kg	522	ND	ND	ND	-	ND	-	ND
Benzidine	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Benzo(a)anthracene	ug/kg	BMDL	521	ND	BMDL	-	ND	-	ND
Benzo(a)pyrene	ug/kg	1000	326	ND	BMDL	-	ND	-	ND
Benzo(b)fluoranthene	ug/kg	ND	ND	ND	BMDL	-	ND	-	ND
Benzo(ghi)perylene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	-	ND	-	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	-	ND	-	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	-	ND	-	ND
bis(2-Ethylhexyl)phthalate	ug/kg	66900	45000	BMDL	918	-	ND	-	BMDL
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Butyl benzyl phthalate	ug/kg	7990	6140	ND	BMDL	-	ND	-	ND
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Chrysene	ug/kg	1420	716	ND	BMDL	-	ND	-	ND
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
1,2-Dichlorobenzene	ug/kg	ND	ND	ND	85.1	-	107	-	465

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-5D-1 871202 BC7174	S RMW-5D-1 871202 BC7175	S RMW-5D-2 871202 BC7176	S RMW-5D-3 871202 BC7177	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Diethyl phthalate	ug/kg	ND	ND	ND	ND	-	BMDL	-	BMDL
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Di-n-butyl phthalate	ug/kg	10200	5700	ND	BMDL	-	ND	-	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Di-n-octyl phthalate	ug/kg	ND	1100	ND	ND	-	ND	-	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Fluoranthene	ug/kg	4590	2100	ND	86.4	-	ND	-	ND
Fluorene	ug/kg	11000	4340	ND	ND	-	ND	-	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Isophorone	ug/kg	ND	ND	ND	ND	-	151	-	ND
Naphthalene	ug/kg	6830	4410	ND	BMDL	-	BMDL	-	BMDL
Nitrobenzene	ug/kg	ND	ND	ND	ND	-	253	-	718
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	-	ND	-	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	-	ND	-	ND
N-Nitrosodiphenylamine	ug/kg	ND	2480	ND	ND	-	ND	-	ND
Phenanthrene	ug/kg	23600	9520	ND	BMDL	-	ND	-	ND
Pyrene	ug/kg	7750	3330	ND	91.4	-	ND	-	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Metals Analysis Data									
Antimony	ug/kg	9200	5900	BMDL	ND	-	BMDL	-	BMDL
Arsenic	ug/kg	ND	ND	9600	ND	-	2000	-	3100
Beryllium	ug/kg	57600	12000	760	660	-	1200	-	1100
Cadmium	ug/kg	2900	2300	480	560	-	BMDL	-	BMDL
Chromium	ug/kg	98000	74000	26000	19000	-	33000	-	29000
Copper	ug/kg	399000	265000	32000	31000	-	35000	-	30000
Lead	ug/kg	959000	778000	20000	32000	-	10000	-	11000
Mercury	ug/kg	720	790	140	200	-	BMDL	-	BMDL

001395

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-5D-1 871202 BC7174	S RMW-5D-1 871202 BC7175	S RMW-5D-2 871202 BC7176	S RMW-5D-3 871202 BC7177	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	12000	8200	27000	22000	-	36000	-	32000
Selenium	ug/kg	BMDL	ND	BMDL	BMDL	-	ND	-	ND
Silver	ug/kg	ND	ND	ND	ND	-	BMDL	-	BMDL
Thallium	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Zinc	ug/kg	418000	306000	79000	78000	-	83000	-	74000
Aroclors by GC									
Aroclor 1242	ug/kg	ND	ND	80	180	-	ND	-	ND
Aroclor 1254	ug/kg	7500	8300	ND	64	-	ND	-	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Aroclor 1248	ug/kg	15000	14000	ND	ND	-	ND	-	ND
Aroclor 1232	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Pesticides by GC									
Aldrin	ug/kg	IND	ND	ND	ND	-	ND	-	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Chlordane	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	-	ND	-	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Dieldrin	ug/kg	IND	ND	ND	ND	-	ND	-	ND
Endosulfan I	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Endrin	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Heptachlor	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Toxaphene	ug/kg	ND	ND	ND	ND	-	ND	-	ND

001396

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	Company	Facility	Sample Point Date

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-5D-1 871202 BC7174	S RMW-5D-1 871202 BC7175	S RMW-5D-2 871202 BC7176	S RMW-5D-3 871202 BC7177	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069
Miscellaneous Parameters									
Cyanide, Total	mg/kg	2.0	34	<.9	<.6	-	<.7	-	<.7
Methoxychlor	ug/kg	ND	ND	ND	ND	-	ND	-	ND
Methyl ethyl ketone	ug/kg	ND	ND	ND	190	ND	ND	ND	7770
Petroleum Hydrocarbons (IR)	mg/kg	18000	78000	1110	80	-	94	-	82
Phenolics, Total	mg/kg	7.5	75	7.2	.1	-	1.4	-	1.6
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	ND	1100	BMDL	11300	9610	3850	2070
o+p-Xylenes	ug/kg	ND	ND	1280	BMDL	7470	BMDL	ND	1450

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected - = Parameter not tested

001397

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-6S-1 871210 BC8097	S RMW-6S-2 871210 BC8098	S RMW-6S-3 871210 BC8099					
		Sample Points, Sampling Dates, and ETC Sample No.'s							
riority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND					
Acrylonitrile	ug/kg	ND	ND	ND					
Benzene	ug/kg	ND	9.25	1010					
bis(Chloromethyl)ether	ug/kg	ND	ND	ND					
Bromoform	ug/kg	ND	ND	ND					
Carbon tetrachloride	ug/kg	ND	ND	ND					
Chlorobenzene	ug/kg	ND	ND	ND					
Chlorodibromomethane	ug/kg	ND	ND	ND					
Chloroethane	ug/kg	ND	ND	ND					
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND					
Chloroform	ug/kg	ND	ND	ND					
Dichlorobromomethane	ug/kg	ND	ND	ND					
Dichlorodifluoromethane	ug/kg	ND	ND	ND					
1,1-Dichloroethane	ug/kg	ND	ND	ND					
1,2-Dichloroethane	ug/kg	ND	ND	ND					
1,1-Dichloroethylene	ug/kg	ND	ND	ND					
1,2-Dichloropropane	ug/kg	ND	ND	ND					
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND					
Ethylbenzene	ug/kg	ND	28.3	2130					
Methyl bromide	ug/kg	ND	ND	ND					
Methyl chloride	ug/kg	ND	ND	ND					
Methylene chloride	ug/kg	491	44.9	ND					
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND					
Tetrachloroethylene	ug/kg	434	33.7	450					
Toluene	ug/kg	BMDL	16.0	2440					
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND					
1,1,1-Trichloroethane	ug/kg	ND	ND	ND					
1,1,2-Trichloroethane	ug/kg	ND	ND	ND					
Trichloroethylene	ug/kg	368	ND	ND					
Trichlorofluoromethane	ug/kg	ND	ND	ND					
Vinyl chloride	ug/kg	ND	ND	ND					
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND					

001398

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-6S-1 871210 BC8097	S RMW-6S-2 871210 BC8098	S RMW-6S-3 871210 BC8099					
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND					
2,4-Dichlorophenol	ug/kg	ND	ND	ND					
2,4-Dimethylphenol	ug/kg	ND	ND	ND					
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND					
2,4-Dinitrophenol	ug/kg	ND	ND	ND					
2-Nitrophenol	ug/kg	ND	ND	ND					
4-Nitrophenol	ug/kg	ND	ND	ND					
p-Chloro-m-cresol	ug/kg	ND	ND	ND					
Pentachlorophenol	ug/kg	ND	ND	ND					
Phenol	ug/kg	ND	ND	ND					
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND					
Priority Poll. B/Ns GC/MS									
Acenapnthene	ug/kg	ND	ND	ND					
Acenaphthylene	ug/kg	ND	ND	ND					
Anthracene	ug/kg	ND	ND	ND					
Benzidine	ug/kg	ND	ND	ND					
Benzo(a)anthracene	ug/kg	ND	ND	ND					
Benzo(a)pyrene	ug/kg	ND	ND	4740					
Benzo(b)fluoranthene	ug/kg	ND	ND	ND					
Benzo(ghi)perylene	ug/kg	ND	ND	ND					
Benzo(k)fluoranthene	ug/kg	ND	ND	ND					
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND					
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND					
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND					
bis(2-Ethylhexyl)phthalate	ug/kg	55200	6310	1450					
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND					
Butyl benzyl phthalate	ug/kg	BMDL	ND	ND					
2-Chloronaphthalene	ug/kg	ND	ND	ND					
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND					
Chrysene	ug/kg	ND	ND	ND					
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND					
1,2-Dichlorobenzene	ug/kg	BMDL	244	BMDL					

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001399

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-6S-1 871210 BC8097	S RMW-6S-2 871210 BC8098	S RMW-6S-3 871210 BC8099					
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND					
1,4-Dichlorobenzene	ug/kg	ND	ND	ND					
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND					
Diethyl phthalate	ug/kg	ND	ND	ND					
Dimethyl phthalate	ug/kg	ND	ND	ND					
Di-n-butyl phthalate	ug/kg	BMDL	BMDL	BMDL					
2,4-Dinitrotoluene	ug/kg	ND	ND	ND					
2,6-Dinitrotoluene	ug/kg	ND	ND	ND					
Di-n-octyl phthalate	ug/kg	ND	ND	ND					
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND					
Fluoranthene	ug/kg	BMDL	275	BMDL					
Fluorene	ug/kg	ND	ND	ND					
Hexachlorobenzene	ug/kg	ND	ND	ND					
Hexachlorobutadiene	ug/kg	ND	ND	ND					
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND					
Hexachloroethane	ug/kg	ND	ND	ND					
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND					
Isophorone	ug/kg	ND	ND	ND					
Naphthalene	ug/kg	BMDL	ND	ND					
Nitrobenzene	ug/kg	ND	ND	ND					
N-Nitrosodimethylamine	ug/kg	ND	ND	ND					
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND					
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND					
Phenanthrene	ug/kg	BMDL	BMDL	ND					
Pyrene	ug/kg	BMDL	249	ND					
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND					
etals Analysis Data									
Antimony	ug/kg	BMDL	ND	ND					
Arsenic	ug/kg	13000	19000	BMDL					
Beryllium	ug/kg	440	770	610					
Cadmium	ug/kg	16000	740	BMDL					
Chromium	ug/kg	244000	66000	21000					
Copper	ug/kg	2980000	85000	17000					
Lead	ug/kg	782000	110000	12000					
Mercury	ug/kg	6300	3400	250					

001400

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RMW-6S-1 871210 BC8097	S RMW-6S-2 871210 BC8098	S RMW-6S-3 871210 BC8099					
Nickel	ug/kg	28000	24000	9900					
Selenium	ug/kg	1200	BMDL	BMDL					
Silver	ug/kg	BMDL	BMDL	ND					
Thallium	ug/kg	ND	ND	ND					
Zinc	ug/kg	715000	170000	45000					
Aroclors by GC									
Aroclor 1242	ug/kg	4400	1500	39					
Aroclor 1254	ug/kg	ND	ND	ND					
Aroclor 1260	ug/kg	48000	2100	43					
Aroclor 1248	ug/kg	ND	ND	ND					
Aroclor 1232	ug/kg	ND	ND	ND					
Aroclor 1221	ug/kg	ND	ND	ND					
Aroclor 1016	ug/kg	ND	ND	ND					
Pesticides by GC									
Aldrin	ug/kg	IND	ND	ND					
Alpha-BHC	ug/kg	ND	ND	ND					
Beta-BHC	ug/kg	ND	ND	ND					
Gamma-BHC	ug/kg	ND	ND	ND					
Delta-BHC	ug/kg	ND	ND	ND					
Chlordane	ug/kg	ND	ND	ND					
4,4'-DDT	ug/kg	ND	ND	ND					
4,4'-DDE	ug/kg	ND	ND	ND					
4,4'-DDD	ug/kg	ND	ND	ND					
Dieldrin	ug/kg	ND	ND	ND					
Endosulfan I	ug/kg	ND	ND	ND					
Endosulfan II	ug/kg	ND	ND	ND					
Endosulfan sulfate	ug/kg	ND	ND	ND					
Endrin	ug/kg	ND	ND	ND					
Endrin aldehyde	ug/kg	ND	ND	ND					
Heptachlor	ug/kg	IND	IND	ND					
Heptachlor epoxide	ug/kg	ND	ND	ND					
Toxaphene	ug/kg	ND	ND	ND					

001401

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected '-' = Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-6S-1 871210 BC8097	S RMW-6S-2 871210 BC8098	S RMW-6S-3 871210 BC8099					
Miscellaneous Parameters									
Cyanide, Total	mg/kg	1.7	< 1.0	< 1.1					
Methoxychlor	ug/kg	ND	ND	ND					
Methyl ethyl ketone	ug/kg	ND	ND	ND					
Petroleum Hydrocarbons (IR)	mg/kg	5010	390	120					
Phenolics, Total	mg/kg	1.9	< .2	.7					
Styrene	ug/kg	ND	ND	ND					
m-Xylene	ug/kg	ND	54.5	2100					
o+p-Xylenes	ug/kg	6700	149	20400					

001402

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected ---=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	RMW-7D-1 871201 BC7161	RMW-7D-2 871202 BC7172	RMW-7D-3 871202 BC7173	RMW-7D-4 871207 BC7200	RMW-7D-4 871207 BC7199	RMW-7D-5 871207 BC7201	RMW-7D-6 871207 BC7205	RMW-7D-7 871207 BC7206
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	52300	BMDL	ND	ND	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	258000	103	BMDL	52300	ND	ND	ND
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	43100	234	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/kg	15.8	ND	110	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	BMDL	529000	142	47500	102000	BMDL	BMDL	ND
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	23.8	ND	ND	79200	124000	18100	84800	45800
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	339	1440000	239	366000	785000	131000	19100	3310
Toluene	ug/kg	12.5	2270000	1490	308000	715000	27800	13200	6370
1,2-Trans-dichloroethylene	ug/kg	3.65	512000	282	ND	38200	ND	ND	ND
1,1,1-Trichloroethane	ug/kg	BMDL	30400	BMDL	140000	287000	ND	ND	ND
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	57.9	1670000	72.5	736000	1560000	38800	107000	51700
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	BMDL	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001403

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-7D-1 871201 BC7161	S RMW-7D-2 871202 BC7172	S RMW-7D-3 871202 BC7173	S RMW-7D-4 871207 BC7200	S RMW-7D-4 871207 BC7199	S RMW-7D-5 871207 BC7201	S RMW-7D-6 871207 BC7205	S RMW-7D-7 871207 BC7206
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
2,4-Dichlorophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
2,4-Dimethylphenol	ug/kg	1120	1940	ND	-	-	-	-	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	-	-	-	-	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
2-Nitrophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
4-Nitrophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	-	-	-	-	ND
Pentachlorophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
Phenol	ug/kg	ND	35200	ND	-	-	-	-	434
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	-	-	-	-	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	85.6	ND	ND	-	-	-	-	ND
Acenaphthylene	ug/kg	ND	ND	ND	-	-	-	-	ND
Anthracene	ug/kg	117	ND	ND	-	-	-	-	ND
Benzidine	ug/kg	ND	ND	ND	-	-	-	-	ND
Benzo(a)anthracene	ug/kg	ND	ND	ND	-	-	-	-	ND
Benzo(a)pyrene	ug/kg	2980	ND	ND	-	-	-	-	ND
Benzo(b)fluoranthene	ug/kg	2960	ND	ND	-	-	-	-	ND
Benzo(ghi)perylene	ug/kg	1340	ND	ND	-	-	-	-	ND
Benzo(k)fluoranthene	ug/kg	3790	ND	ND	-	-	-	-	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	-	-	-	-	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	-	-	-	-	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	-	-	-	-	ND
bis(2-Ethylhexyl)phthalate	ug/kg	12600	37100	5350	-	-	-	-	ND
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	-	-	-	-	ND
Butyl benzyl phthalate	ug/kg	BMDL	BMDL	ND	-	-	-	-	ND
2-Chloronaphthalene	ug/kg	131	1160	ND	-	-	-	-	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	-	-	-	-	ND
Chrysene	ug/kg	ND	ND	ND	-	-	-	-	ND
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	-	-	-	-	ND
1,2-Dichlorobenzene	ug/kg	ND	1440	BMDL	-	-	-	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-7D-1 871201 BC7161	S RMW-7D-2 871202 BC7172	S RMW-7D-3 871202 BC7173	S RMW-7D-4 871207 BC7200	S RMW-7D-4 871207 BC7199	S RMW-7D-5 871207 BC7201	S RMW-7D-6 871207 BC7205	S RMW-7D-7 871207 BC7206
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	-	-	-	-	ND
1,4-Dichlorobenzene	ug/kg	BMDL	ND	ND	-	-	-	-	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	-	-	-	-	ND
Diethyl phthalate	ug/kg	ND	ND	ND	-	-	-	-	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	-	-	-	-	ND
Di-n-butyl phthalate	ug/kg	1840	BMDL	BMDL	-	-	-	-	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	-	-	-	-	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	-	-	-	-	ND
Di-n-octyl phthalate	ug/kg	7590	ND	ND	-	-	-	-	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	-	-	-	-	ND
Fluoranthene	ug/kg	745	386	ND	-	-	-	-	ND
Fluorene	ug/kg	111	ND	ND	-	-	-	-	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	-	-	-	-	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	-	-	-	-	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	-	-	-	-	ND
Hexachloroethane	ug/kg	ND	ND	ND	-	-	-	-	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	1680	ND	ND	-	-	-	-	ND
Isophorone	ug/kg	ND	ND	ND	-	-	-	-	BMDL
Naphthalene	ug/kg	597	976	ND	-	-	-	-	ND
Nitrobenzene	ug/kg	ND	ND	ND	-	-	-	-	170
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	-	-	-	-	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	-	-	-	-	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	-	-	-	-	ND
Phenanthrene	ug/kg	925	ND	ND	-	-	-	-	ND
Pyrene	ug/kg	758	BMDL	ND	-	-	-	-	ND
1,2,4-Trichlorobenzene	ug/kg	343	ND	ND	-	-	-	-	ND
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	BMDL	-	-	-	-	ND
Arsenic	ug/kg	BMDL	51000	ND	-	-	-	-	5500
Beryllium	ug/kg	870	580	460	-	-	-	-	1060
Cadmium	ug/kg	5500	6900	1100	-	-	-	-	BMDL
Chromium	ug/kg	39000	72000	17000	-	-	-	-	32000
Copper	ug/kg	1420000	100000	120000	-	-	-	-	38000
Lead	ug/kg	648000	100000	40000	-	-	-	-	15000
Mercury	ug/kg	550	350	350	-	-	-	-	BMDL

00140S

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-7D-1 871201 BC7161	S RMW-7D-2 871202 BC7172	S RMW-7D-3 871202 BC7173	S RMW-7D-4 871207 BC7200	S RMW-7D-4 871207 BC7199	S RMW-7D-5 871207 BC7201	S RMW-7D-6 871207 BC7205	S RMW-7D-7 871207 BC7206
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	24000	46000	7900	-	-	-	-	37000
Selenium	ug/kg	880	ND	BMDL	-	-	-	-	ND
Silver	ug/kg	BMDL	ND	ND	-	-	-	-	BMDL
Thallium	ug/kg	ND	BMDL	ND	-	-	-	-	ND
Zinc	ug/kg	713000	683000	45000	-	-	-	-	87000
Aroclors by GC									
Aroclor 1242	ug/kg	ND	23000	760	-	-	-	-	370
Aroclor 1254	ug/kg	12000	ND	ND	-	-	-	-	ND
Aroclor 1260	ug/kg	ND	ND	ND	-	-	-	-	ND
Aroclor 1248	ug/kg	12000	ND	ND	-	-	-	-	ND
Aroclor 1232	ug/kg	ND	ND	ND	-	-	-	-	ND
Aroclor 1221	ug/kg	ND	ND	ND	-	-	-	-	ND
Aroclor 1016	ug/kg	ND	ND	ND	-	-	-	-	ND
Pesticides by GC									
Aldrin	ug/kg	ND	ND	ND	-	-	-	-	ND
Alpha-BHC	ug/kg	ND	ND	ND	-	-	-	-	ND
Beta-BHC	ug/kg	ND	ND	ND	-	-	-	-	ND
Gamma-BHC	ug/kg	ND	ND	ND	-	-	-	-	ND
Delta-BHC	ug/kg	ND	ND	ND	-	-	-	-	ND
Chlordane	ug/kg	ND	ND	ND	-	-	-	-	ND
4,4'-DDT	ug/kg	ND	ND	ND	-	-	-	-	ND
4,4'-DDE	ug/kg	ND	ND	ND	-	-	-	-	ND
4,4'-DDD	ug/kg	ND	ND	ND	-	-	-	-	ND
Dieldrin	ug/kg	IND	ND	IND	-	-	-	-	ND
Endosulfan I	ug/kg	ND	ND	ND	-	-	-	-	ND
Endosulfan II	ug/kg	ND	ND	ND	-	-	-	-	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	-	-	-	-	ND
Endrin	ug/kg	ND	ND	ND	-	-	-	-	ND
Endrin aldehyde	ug/kg	ND	ND	ND	-	-	-	-	ND
Heptachlor	ug/kg	ND	ND	ND	-	-	-	-	IND
Heptachlor epoxide	ug/kg	ND	ND	ND	-	-	-	-	ND
Toxaphene	ug/kg	ND	ND	ND	-	-	-	-	ND

001406

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-7D-1 871201 BC7161	S RMW-7D-2 871202 BC7172	S RMW-7D-3 871202 BC7173	S RMW-7D-4 871207 BC7200	S RMW-7D-4 871207 BC7199	S RMW-7D-5 871207 BC7201	S RMW-7D-6 871207 BC7205	S RMW-7D-7 871207 BC7206
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Miscellaneous Parameters									
Cyanide, Total	mg/kg	1.8	17.7	<.7	-	-	-	-	<.7
Methoxychlor	ug/kg	ND	ND	ND	-	-	-	-	ND
Methyl ethyl ketone	ug/kg	ND	795000	31500	ND	BMDL	69000	25300	BMDL
Petroleum Hydrocarbons (IR)	mg/kg	1870	8360	154	-	-	-	-	<35
Phenolics, Total	mg/kg	7.7	55	1.2	-	-	-	-	1.4
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	BMDL	1580000	442	128000	287000	26300	7690	ND
o+p-Xylenes	ug/kg	24.2	710000	328	79200	173000	16800	BMDL	ND

001407

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	RMW-7D-8 871207 BC7207	RMW-7D-9 871207 BC7208	RMW-7D-10 871207 BC7209	RMW-7D-11 871207 BC7210	RMW-7D-12 871207 BC7202	RMW-7D-13 871207 BC7203	RMW-7D-14 871207 BC7204
		Sample Points, Sampling Dates, and ETC Sample No.'s						
riority Poll. Volatiles GC/MS								
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	ND	ND	BMDL	ND	ND	ND
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	ND	10.9	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	ND	ND	19.8	ND	ND	ND
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	238	49.8	89.4	206	ND	428	48.3
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/kg	59.8	24.2	55.7	623	19.5	570	37.7
Toluene	ug/kg	27.6	9.95	14.6	145	BMDL	164	14.2
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/kg	23.9	ND	32.9	189	ND	158	ND
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	192	73.0	99.1	866	28.9	1030	49.4
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND

001408

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*						
		S RMW-7D-8 871207 BC7207	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204
riority Poll. Acids GC/MS								
2-Chlorophenol	ug/kg	-	-	-	ND	-	-	ND
2,4-Dichlorophenol	ug/kg	-	-	-	ND	-	-	ND
2,4-Dimethylphenol	ug/kg	-	-	-	ND	-	-	ND
4,6-Dinitro-o-cresol	ug/kg	-	-	-	ND	-	-	ND
2,4-Dinitrophenol	ug/kg	-	-	-	ND	-	-	ND
2-Nitrophenol	ug/kg	-	-	-	ND	-	-	ND
4-Nitrophenol	ug/kg	-	-	-	ND	-	-	ND
p-Chloro-m-cresol	ug/kg	-	-	-	ND	-	-	ND
Pentachlorophenol	ug/kg	-	-	-	ND	-	-	ND
Phenol	ug/kg	-	-	-	ND	-	-	ND
2,4,6-Trichlorophenol	ug/kg	-	-	-	ND	-	-	ND
riority Poll. B/Ns GC/MS								
Acenaphthene	ug/kg	-	-	-	ND	-	-	ND
Acenaphthylene	ug/kg	-	-	-	ND	-	-	ND
Anthracene	ug/kg	-	-	-	ND	-	-	ND
Benzidine	ug/kg	-	-	-	ND	-	-	ND
Benzo(a)anthracene	ug/kg	-	-	-	ND	-	-	ND
Benzo(a)pyrene	ug/kg	-	-	-	ND	-	-	ND
Benzo(b)fluoranthene	ug/kg	-	-	-	ND	-	-	ND
Benzo(ghi)perylene	ug/kg	-	-	-	ND	-	-	ND
Benzo(k)fluoranthene	ug/kg	-	-	-	ND	-	-	ND
bis(2-Chloroethoxy)methane	ug/kg	-	-	-	ND	-	-	ND
bis(2-Chloroethyl) ether	ug/kg	-	-	-	ND	-	-	ND
bis(2-Chloroisopropyl)ether	ug/kg	-	-	-	ND	-	-	ND
bis(2-Ethylhexyl)phthalate	ug/kg	-	-	-	ND	-	-	ND
4-Bromophenyl phenyl ether	ug/kg	-	-	-	ND	-	-	ND
Butyl benzyl phthalate	ug/kg	-	-	-	ND	-	-	ND
2-Chloronaphthalene	ug/kg	-	-	-	ND	-	-	ND
4-Chlorophenyl phenyl ether	ug/kg	-	-	-	ND	-	-	ND
Chrysene	ug/kg	-	-	-	ND	-	-	ND
Dibenzo(a,h)anthracene	ug/kg	-	-	-	ND	-	-	ND
1,2-Dichlorobenzene	ug/kg	-	-	-	ND	-	-	ND

001409

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s						
		S RMW-7D-8 871207 BC7207	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204
arameters	*Units*							
,3-Dichlorobenzene	ug/kg	-	-	-	ND	-	-	ND
,4-Dichlorobenzene	ug/kg	-	-	-	ND	-	-	ND
,3'-Dichlorobenzidine	ug/kg	-	-	-	ND	-	-	ND
iethyl phthalate	ug/kg	-	-	-	ND	-	-	ND
imethyl phthalate	ug/kg	-	-	-	ND	-	-	ND
i-n-butyl phthalate	ug/kg	-	-	-	ND	-	-	ND
,4-Dinitrotoluene	ug/kg	-	-	-	ND	-	-	ND
,6-Dinitrotoluene	ug/kg	-	-	-	ND	-	-	ND
i-n-octyl phthalate	ug/kg	-	-	-	ND	-	-	ND
,2-Diphenylhydrazine	ug/kg	-	-	-	ND	-	-	ND
luoranthene	ug/kg	-	-	-	ND	-	-	ND
luorene	ug/kg	-	-	-	ND	-	-	ND
exachlorobenzene	ug/kg	-	-	-	ND	-	-	ND
exachlorobutadiene	ug/kg	-	-	-	ND	-	-	ND
exachlorocyclopentadiene	ug/kg	-	-	-	ND	-	-	ND
exachloroethane	ug/kg	-	-	-	ND	-	-	ND
ndeno(1,2,3-c,d)pyrene	ug/kg	-	-	-	ND	-	-	ND
sophorone	ug/kg	-	-	-	ND	-	-	ND
aphthalene	ug/kg	-	-	-	ND	-	-	ND
itrobenzene	ug/kg	-	-	-	313	-	-	146
-Nitrosodimethylamine	ug/kg	-	-	-	ND	-	-	ND
-Nitrosodi-n-propylamine	ug/kg	-	-	-	ND	-	-	ND
-Nitrosodiphenylamine	ug/kg	-	-	-	ND	-	-	ND
henanthrene	ug/kg	-	-	-	ND	-	-	ND
yrene	ug/kg	-	-	-	ND	-	-	ND
,2,4-Trichlorobenzene	ug/kg	-	-	-	ND	-	-	ND
etals Analysis Data								
ntimony	ug/kg	-	-	-	BMDL	-	-	ND
rsenic	ug/kg	-	-	-	3800	-	-	1100
eryllium	ug/kg	-	-	-	1150	-	-	730
admium	ug/kg	-	-	-	BMDL	-	-	BMDL
hromium	ug/kg	-	-	-	33000	-	-	22000
opper	ug/kg	-	-	-	36000	-	-	16000
ead	ug/kg	-	-	-	17000	-	-	9600
ercury	ug/kg	-	-	-	BMDL	-	-	BMDL

001410

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below ETC Sample No.	DAMES & MOORE Company	DMSCPRIFS Facility	See Below Sample Point	Date

Parameters	Units	S RMW-7D-8 871207 BC7207	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Nickel	ug/kg	-	-	-	37000	-	-	22000
Selenium	ug/kg	-	-	-	ND	-	-	ND
Silver	ug/kg	-	-	-	ND	-	-	ND
Thallium	ug/kg	-	-	-	ND	-	-	ND
Zinc	ug/kg	-	-	-	87000	-	-	53000
Aroclors by GC								
Aroclor 1242	ug/kg	-	-	-	110	-	-	82
Aroclor 1254	ug/kg	-	-	-	ND	-	-	ND
Aroclor 1260	ug/kg	-	-	-	ND	-	-	ND
Aroclor 1248	ug/kg	-	-	-	ND	-	-	ND
Aroclor 1232	ug/kg	-	-	-	ND	-	-	ND
Aroclor 1221	ug/kg	-	-	-	ND	-	-	ND
Aroclor 1016	ug/kg	-	-	-	ND	-	-	ND
Pesticides by GC								
Aldrin	ug/kg	-	-	-	ND	-	-	ND
Alpha-BHC	ug/kg	-	-	-	ND	-	-	ND
Beta-BHC	ug/kg	-	-	-	ND	-	-	ND
Gamma-BHC	ug/kg	-	-	-	ND	-	-	ND
Delta-BHC	ug/kg	-	-	-	ND	-	-	ND
Chlordane	ug/kg	-	-	-	ND	-	-	ND
4,4'-DDT	ug/kg	-	-	-	ND	-	-	ND
4,4'-DDE	ug/kg	-	-	-	ND	-	-	ND
4,4'-DDD	ug/kg	-	-	-	ND	-	-	ND
Dieldrin	ug/kg	-	-	-	ND	-	-	ND
Endosulfan I	ug/kg	-	-	-	ND	-	-	ND
Endosulfan II	ug/kg	-	-	-	ND	-	-	ND
Endosulfan sulfate	ug/kg	-	-	-	ND	-	-	ND
Endrin	ug/kg	-	-	-	ND	-	-	ND
Endrin aldehyde	ug/kg	-	-	-	ND	-	-	ND
Heptachlor	ug/kg	-	-	-	ND	-	-	IND
Heptachlor epoxide	ug/kg	-	-	-	ND	-	-	ND
Toxaphene	ug/kg	-	-	-	ND	-	-	ND

001411

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s						
Parameters	*Units*	S RMW-7D-8 871207 BC7207	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204
Miscellaneous Parameters								
Cyanide, Total	mg/kg	-	-	-	< .76	-	-	< .58
Methoxychlor	ug/kg	-	-	-	ND	-	-	ND
Methyl ethyl ketone	ug/kg	292	120	29.8	224	BMDL	'494	52.5
Petroleum Hydrocarbons (IR)	mg/kg	-	-	-	< 38	-	-	< 29
Phenolics, Total	mg/kg	-	-	-	< .15	-	-	< .12
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	ND	ND	50.1	BMDL	BMDL	14.9
o+p-Xylenes	ug/kg	ND	ND	ND	17.4	ND	BMDL	ND

001412

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

SOIL BORING SAMPLES

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-1-2 871211 BC8110	S RB-1-3 871211 BC8111	S RB-2-1 871211 BC8100	S RB-2-2 871211 BC8101	S RB-2-3 871211 BC8102		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	53900	39700	118	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	336000	178000	115	ND	ND	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	64700	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	652000	312000	386	ND	127000	BMDL		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	ND	ND	ND	ND	ND	2840		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	2170000	1360000	1910	4290000	1560000	10700		
Toluene	ug/kg	3380000	1800000	1200	ND	385000	2970		
1,2-Trans-dichloroethylene	ug/kg	ND	ND	50.0	ND	113000	5510		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	2060000	1140000	423	57300	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	BMDL	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

001414

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RB-1-1 871211 BC8109	S RB-1-2 871211 BC8110	S RB-1-3 871211 BC8111	S RB-2-1 871211 BC8100	S RB-2-2 871211 BC8101	S RB-2-3 871211 BC8102		
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	ND	10800	ND	ND	ND	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	58200	790000	ND	ND	ND	ND		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	ND	ND	857	ND		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	ND	ND	ND	ND	ND	181		
Benzidine	ug/kg	ND	244000	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	ND	ND	ND	ND	749	ND		
Benzo(a)pyrene	ug/kg	ND	ND	ND	ND	589	ND		
Benzo(b)fluoranthene	ug/kg	ND	ND	ND	ND	1080	ND		
Benzo(ghi)perylene	ug/kg	ND	ND	ND	ND	301	ND		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	162000	BMDL	4920	118000	97400	2870		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	ND	ND	ND	2930	4710	ND		
2-Chloronaphthalene	ug/kg	122000	18200	ND	ND	289	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	1880	ND	ND	ND	881	BMDL		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichlorobenzene	ug/kg	47300	ND	BMDL	ND	1600	242		

001415

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-1-2 871211 BC8110	S RB-1-3 871211 BC8111	S RB-2-1 871211 BC8100	S RB-2-2 871211 BC8101	S RB-2-3 871211 BC8102		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-butyl phthalate	ug/kg	ND	ND	BMDL	5610	3940	BMDL		
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-octyl phthalate	ug/kg	ND	ND	771	1220	4470	BMDL		
1,2-Diphenylhydrazine	ug/kg	BMDL	ND	ND	ND	ND	ND		
Fluoranthene	ug/kg	2420	BMDL	476	359	1860	288		
Fluorene	ug/kg	ND	ND	ND	ND	925	ND		
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND	BMDL	ND		
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND		
Naphthalene	ug/kg	102000	14900	586	1290	6450	525		
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND		
Phenanthrene	ug/kg	9410	ND	BMDL	396	2270	BMDL		
Pyrene	ug/kg	ND	BMDL	449	918	1640	267		
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	350	ND		
Metals Analysis Data									
Antimony	ug/kg	16000	BMDL	ND	11000	BMDL	BMDL		
Arsenic	ug/kg	15000	8800	14000	2700	BMDL	4300		
Beryllium	ug/kg	350	230	430	820	490	740		
Cadmium	ug/kg	95100	25000	132000	36900	26000	3300		
Chromium	ug/kg	721000	542000	39000	211000	120000	27000		
Copper	ug/kg	15800000	8600000	11900000	840000	425000	45000		
Lead	ug/kg	2750000	2110000	170000	1080000	891000	53000		
Mercury	ug/kg	4700	3500	360	11800	13600	440		

001416

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-1-2 871211 BC8110	S RB-1-3 871211 BC8111	S RB-2-1 871211 BC8100	S RB-2-2 871211 BC8101	S RB-2-3 871211 BC8102		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	39000	46000	13000	37000	27000	23000		
Selenium	ug/kg	1000	BMDL	1300	4900	2100	BMDL		
Silver	ug/kg	19000	40000	1200	1200	BMDL	BMDL		
Thallium	ug/kg	ND	ND	ND	ND	ND	ND		
Zinc	ug/kg	4170000	1110000	140000	295000	761000	140000		
roclors by GC									
Aroclor 1242	ug/kg	15000000	210000	4600	ND	8900	1600		
Aroclor 1254	ug/kg	ND	IND	ND	IND	IND	IND		
Aroclor 1260	ug/kg	ND	ND	ND	9900	10000	1000		
Aroclor 1248	ug/kg	ND	ND	ND	23000	ND	ND		
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
esticides by GC									
Aldrin	ug/kg	IND	IND	IND	ND	IND	ND		
Alpha-BHC	ug/kg	ND	ND	IND	ND	ND	ND		
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Gamma-BHC	ug/kg	ND	IND	ND	ND	ND	ND		
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	IND		
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND		
Dieldrin	ug/kg	IND	IND	210	ND	ND	ND		
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin	ug/kg	IND	ND	ND	ND	ND	IND		
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
Heptachlor	ug/kg	IND	IND	IND	IND	IND	IND		
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

00141

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/19/88
PAGE: 5

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-1-2 871211 BC8110	S RB-1-3 871211 BC8111	S RB-2-1 871211 BC8100	S RB-2-2 871211 BC8101	S RB-2-3 871211 BC8102		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Miscellaneous Parameters									
Cyanide, Total	mg/kg	4.8	6.5	< .7	1.4	.9	< .6		
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl ethyl ketone	ug/kg	ND	ND	760	ND	ND	3680		
Petroleum Hydrocarbons (IR)	mg/kg	81600	27500	440	13700	10400	1010		
Phenolics, Total	mg/kg	600	683	3.5	.2	1.5	3.2		
Styrene	ug/kg	ND	ND	212	ND	ND	ND		
m-Xylene	ug/kg	2000000	1000000	1480	ND	693000	3510		
o+p-Xylenes	ug/kg	1450000	572000	634	ND	516000	2350		

001418

Notes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/19/88
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RB-3-1 871210 BC8088	S RB-3-2 871210 BC8089	S RB-3-3 871210 BC8090	S RB-4-1 871210 BC8094	S RB-4-2 871210 BC8095	S RB-4-3 871210 BC8096		
riority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	179000	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	2100	290000	5620	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	7790	210000	ND	86900	1060	ND		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	665	ND	396	ND	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	38300	1690000	ND	ND	ND	ND		
Toluene	ug/kg	25200	2410000	446	175000	2180	ND		
1,2-Trans-dichloroethylene	ug/kg	ND	320000	675	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	1770000	ND	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	935	65100	ND	ND	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

00149

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RB-3-1 871210 BC8088	S RB-3-2 871210 BC8089	S RB-3-3 871210 BC8090	S RB-4-1 871210 BC8094	S RB-4-2 871210 BC8095	S RB-4-3 871210 BC8096		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	BMDL	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	ND	ND	3580	ND	ND	ND		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	1920	BMDL	1390	123	ND		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	ND	ND	ND	1280	213	ND		
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	ND	ND	ND	4540	BMDL	ND		
Benzo(a)pyrene	ug/kg	BMDL	ND	549	6270	130	1730		
Benzo(b)fluoranthene	ug/kg	BMDL	ND	ND	11200	BMDL	ND		
Benzo(ghi)perylene	ug/kg	ND	ND	ND	6950	ND	ND		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	BMDL	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	281000	121000	3090	34900	BMDL	ND		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	7140	8140	ND	1660	ND	ND		
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	BMDL	ND	ND	5500	179	ND		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	2400	ND	ND		
1,2-Dichlorobenzene	ug/kg	1770	ND	ND	2280	ND	ND		

001420

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	RB-3-1 871210 BC8088	RB-3-2 871210 BC8089	RB-3-3 871210 BC8090	RB-4-1 871210 BC8094	RB-4-2 871210 BC8095	RB-4-3 871210 BC8096
		Sample Points, Sampling Dates, and ETC Sample No.'s					
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	381	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	71000	5230	BMDL	1240	BMDL	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	9050	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	1150	BMDL	ND	6980	628	ND
Fluorene	ug/kg	ND	1450	BMDL	1120	140	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	BMDL	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	BMDL	ND	ND	7660	ND	ND
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	1680	18600	629	5070	169	ND
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	BMDL	ND	ND	162	ND	ND
Phenanthrene	ug/kg	BMDL	4240	BMDL	6310	640	ND
Pyrene	ug/kg	2060	BMDL	ND	5960	453	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND
Metals Analysis Data							
Antimony	ug/kg	BMDL	6900	BMDL	BMDL	ND	ND
Arsenic	ug/kg	5400	5600	2500	9500	3000	1600
Beryllium	ug/kg	660	400	410	780	750	410
Cadmium	ug/kg	58200	22000	970	1900	320	BMDL
Chromium	ug/kg	73000	80000	21000	47000	21000	14000
Copper	ug/kg	484000	158000	13000	3240000	218000	11000
Lead	ug/kg	410000	520000	43000	180000	34000	BMDL
Mercury	ug/kg	1000	1300	BMDL	410	780	BMDL

001421

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RB-3-1 871210 BC8088	S RB-3-2 871210 BC8089	S RB-3-3 871210 BC8090	S RB-4-1 871210 BC8094	S RB-4-2 871210 BC8095	S RB-4-3 871210 BC8096		
Nickel	ug/kg	23000	19000	11000	19000	21000	11000		
Selenium	ug/kg	3500	BMDL	BMDL	BMDL	ND	BMDL		
Silver	ug/kg	BMDL	BMDL	ND	BMDL	ND	ND		
Thallium	ug/kg	ND	ND	ND	ND	ND	ND		
Zinc	ug/kg	292000	517000	43000	150000	67000	29000		
roclors by GC									
Aroclor 1242	ug/kg	2200	1600	32	2200	ND	ND		
Aroclor 1254	ug/kg	ND	2400	ND	ND	ND	ND		
Aroclor 1260	ug/kg	ND	ND	BMDL	ND	ND	ND		
Aroclor 1248	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
esticides by GC									
Aldrin	ug/kg	IND	ND	ND	IND	ND	ND		
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Delta-BHC	ug/kg	ND	ND	IND	ND	IND	ND		
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDD	ug/kg	ND	ND	ND	ND	BMDL	ND		
Dieldrin	ug/kg	590	ND	ND	ND	ND	ND		
Endosulfan I	ug/kg	ND	ND	ND	IND	ND	ND		
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin	ug/kg	IND	ND	ND	ND	ND	ND		
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
Heptachlor	ug/kg	IND	ND	IND	IND	ND	ND		
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

001422

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-0C) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RB-3-1 871210 BC8088	S RB-3-2 871210 BC8089	S RB-3-3 871210 BC8090	S RB-4-1 871210 BC8094	S RB-4-2 871210 BC8095	S RB-4-3 871210 BC8096		
Parameters	*Units*								
Miscellaneous Parameters									
Cyanide, Total	mg/kg	3.3	9.1	< 1.2	1.1	< 1.2	< 1.1		
Methoxychlor	ug/kg	ND	ND	ND	IND	ND	ND		
Methyl ethyl ketone	ug/kg	ND	ND	9610	ND	ND	ND		
Petroleum Hydrocarbons (IR)	mg/kg	4650	13600	5780	430	1270	51		
Phenolics, Total	mg/kg	4.0	28	12	12	6.1	< .2		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	22200	835000	ND	415000	5170	ND		
o+p-Xylenes	ug/kg	12800	649000	ND	309000	4260	ND		

001423

Footnotes: BMDL - Below Method Detection Limit ND - Parameter not detected * - Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

ETC Sample No.	Company	Facility	Sample Point	Date
See Below	DAMES & MOORE	DMSCPRIFS	See Below	

Parameters	Units	S RB-5-1* 871209 BC8074	S RB-5-2 871209 BC8075	S RB-5-3 871209 BC8076	S RB-6-1 871209 BC8070	S RB-6-2 871209 BC8071	S RB-6-3 871209 BC8072		
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	ND	BMDL	ND	ND	709	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	ND	BMDL	ND	ND	1550	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	47300	82200	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	23200	54100	ND	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	ND	152000	937	ND	6680	27.4		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	ND	ND	ND	ND	ND	14.6		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	33600	46700	ND	ND	ND	ND		
Toluene	ug/kg	318000	749000	7560	ND	9600	36.1		
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	15700	ND	ND	ND	ND		
Trichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

Sample Points, Sampling Dates, and ETC Sample No.'s

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

*Please refer to Dames & Moore's letter to the USEPA dated February 17, 1989, and attached ETC letter dated February 17, 1989 presented at the beginning of this Appendix for amendments to the data management summary.

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RB-5-1 871209 BC8074	S RB-5-2 871209 BC8075	S RB-5-3 871209 BC8076	S RB-6-1 871209 BC8070	S RB-6-2 871209 BC8071	S RB-6-3 871209 BC8072		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	5310	ND	ND	1020	ND	ND		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	2380	ND	ND	BMDL	2370	BMDL		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	2120	BMDL	ND	1360	2950	BMDL		
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	BMDL	BMDL	ND	ND	5380	BMDL		
Benzo(a)pyrene	ug/kg	1310	BMDL	1140	BMDL	5980	1120		
Benzo(b)fluoranthene	ug/kg	BMDL	BMDL	ND	BMDL	8210	BMDL		
Benzo(ghi)perylene	ug/kg	BMDL	ND	ND	BMDL	4080	ND		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	12400	37100	33600	11200	54200	BMDL		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	BMDL	ND	BMDL	ND	BMDL	ND		
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	2530	1840	ND	1560	5370	1340		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	BMDL	ND		
1,2-Dichlorobenzene	ug/kg	BMDL	BMDL	ND	ND	915	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

004425

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RB-5-1 871209 BC8074	S RB-5-2 871209 BC8075	S RB-5-3 871209 BC8076	S RB-6-1 871209 BC8070	S RB-6-2 871209 BC8071	S RB-6-3 871209 BC8072		
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	BMDL	ND		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-butyl phthalate	ug/kg	ND	ND	ND	13700	BMDL	ND		
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-octyl phthalate	ug/kg	BMDL	10400	5610	ND	7370	ND		
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND		
Fluoranthene	ug/kg	5670	3350	BMDL	2780	12900	2320		
Fluorene	ug/kg	1930	ND	ND	BMDL	2340	BMDL		
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	BMDL	ND	ND	BMDL	4990	BMDL		
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND		
Naphthalene	ug/kg	6310	5570	2120	1920	10700	2270		
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND		
Phenanthrene	ug/kg	9650	BMDL	BMDL	3760	15000	3250		
Pyrene	ug/kg	4670	2770	BMDL	2150	9750	1840		
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Metals Analysis Data									
Antimony	ug/kg	BMDL	38000	BMDL	BMDL	8000	BMDL		
Arsenic	ug/kg	60000	20000	BMDL	26000	9300	BMDL		
Beryllium	ug/kg	410	390	450	550	320	390		
Cadmium	ug/kg	5400	21000	2200	6900	17000	1400		
Chromium	ug/kg	57000	166000	28000	140000	60000	19000		
Copper	ug/kg	71600000	284000	225000	19300000	4880000	290000		
Lead	ug/kg	470000	1340000	180000	380000	1680000	120000		
Mercury	ug/kg	640	2700	630	21300	1400	410		

001426

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s					
		S RB-5-1 871209 BC8074	S RB-5-2 871209 BC8075	S RB-5-3 871209 BC8076	S RB-6-1 871209 BC8070	S RB-6-2 871209 BC8071	S RB-6-3 871209 BC8072
Nickel	ug/kg	ND	27000	12000	ND	11000	10000
Selenium	ug/kg	BMDL	BMDL	BMDL	BMDL	BMDL	BMDL
Silver	ug/kg	6400	BMDL	ND	3900	BMDL	ND
Thallium	ug/kg	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	440000	1050000	100000	667000	1870000	231000
Aroclors by GC							
Aroclor 1242	ug/kg	20000	ND	ND	ND	ND	ND
Aroclor 1254	ug/kg	ND	ND	ND	ND	ND	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	ND
Aroclor 1248	ug/kg	ND	9700	2600	ND	7600	260
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND
Pesticides by GC							
Aldrin	ug/kg	ND	IND	ND	57000	1200	IND
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	ND	IND	ND	57000	840	IND
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	IND	ND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001427

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RB-5-1 871209 BC8074	S RB-5-2 871209 BC8075	S RB-5-3 871209 BC8076	S RB-6-1 871209 BC8070	S RB-6-2 871209 BC8071	S RB-6-3 871209 BC8072		
Miscellaneous Parameters									
Cyanide, Total	mg/kg	2.7	< 1.0	< .7	1.7	1.6	< .6		
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl ethyl ketone	ug/kg	ND	ND	887	ND	ND	ND		
Petroleum Hydrocarbons (IR)	mg/kg	7410	10900	130	680	29600	61		
Phenolics, Total	mg/kg	30	12	.4	22	6.7	< .1		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	27700	593000	3500	ND	25300	120		
o+p-Xylenes	ug/kg	BMDL	359000	2370	ND	19700	78.7		

001428

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

SAMPLES IN THE UNSATURATED FILL

(REORGANIZATION OF PRIOR
SOIL SAMPLE DATA SUMMARIES)

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/22/8
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-2D-1 871201 BC7158	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-4S-1 871210 BC8091	S RMW-5D-1 871202 BC7174	S RMW-6S-1 871210 BC8097	S RMW-7D-1 871201 BC7161
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	319	ND	BMDL	ND	ND	ND	ND
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	346	ND	282	ND	ND	ND	ND
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	798	1730	ND	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/kg	ND	ND	ND	39.0	ND	ND	ND	15.8
1,1-Dichloroethylene	ug/kg	ND	ND	ND	80.3	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	15200	ND	BMDL	ND	ND	ND	BMDL
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	9.49	33.0	ND	261	ND	ND	491	23.8
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	288	ND	ND
Tetrachloroethylene	ug/kg	ND	922	4420	137000	58.6	2000	434	339
Toluene	ug/kg	ND	28400	ND	ND	ND	ND	BMDL	12.5
1,2-Trans-dichloroethylene	ug/kg	ND	19.5	ND	73.3	47.6	ND	ND	3.65
1,1,1-Trichloroethane	ug/kg	ND	ND	606	2490	ND	ND	ND	BMDL
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	113	ND	ND	ND	ND
Trichloroethylene	ug/kg	ND	114	1530	13400	1250	320	368	57.9
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001430

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/22/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-2D-1 871201 BC7158	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-4S-1 871210 BC8091	S RMW-5D-1 871202 BC7174	S RMW-6S-1 871210 BC8097	S RMW-7D-1 871201 BC7161
		Sample Points, Sampling Dates, and ETC Sample No.'s							
riority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/kg	ND	ND	ND	5060	ND	ND	ND	ND
2,4-Dimethylphenol	ug/kg	146	ND	ND	ND	ND	ND	ND	1120
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
riority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	461	ND	ND	320	353	3780	ND	85.6
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ug/kg	1060	ND	ND	ND	408	522	ND	117
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	2260	ND	ND	BMDL	1320	BMDL	ND	ND
Benzo(a)pyrene	ug/kg	2420	ND	801	1090	2150	1000	ND	2980
Benzo(b)fluoranthene	ug/kg	4040	ND	BMDL	ND	4040	ND	ND	2960
Benzo(ghi)perylene	ug/kg	1760	ND	ND	891	2300	ND	ND	1340
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	3790
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/kg	11800	38600	39700	46100	276000	66900	55200	12600
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/kg	ND	ND	27100	86100	ND	7990	BMDL	BMDL
2-Chloronaphthalene	ug/kg	ND	BMDL	ND	BMDL	ND	ND	ND	131
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/kg	2600	ND	732	1400	1500	1420	ND	ND
Dibenzo(a,h)anthracene	ug/kg	499	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	BMDL	ND	23100	46500	1180	ND	BMDL	ND

001431

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-2D-1 871201 BC7158	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-4S-1 871210 BCB091	S RMW-5D-1 871202 BC7174	S RMW-6S-1 871210 BCB097	S RMW-7D-1 871201 BC7161
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	397	962	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	793	1830	BMDL	ND	ND	BMDL
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	BMDL	5090	4900	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	535	5230	12200	22400	629	10200	BMDL	1840
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	ND	BMDL	ND	BMDL	3020	ND	ND	7590
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	4110	521	1740	3300	2640	4590	BMDL	745
Fluorene	ug/kg	733	ND	ND	661	327	11000	ND	111
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	1900	ND	ND	1360	2560	ND	ND	1680
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	945	1140	2490	6900	1360	6830	BMDL	597
Nitrobenzene	ug/kg	ND	ND	52400	117000	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	1070	2280	ND	ND	ND	ND
Phenanthrene	ug/kg	4320	ND	ND	ND	2260	23600	BMDL	925
Pyrene	ug/kg	3220	630	1540	2430	2310	7750	BMDL	758
1,2,4-Trichlorobenzene	ug/kg	ND	ND	893	1690	ND	ND	ND	343
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	BMDL	BMDL	BMDL	9200	BMDL	BMDL
Arsenic	ug/kg	11000	7700	BMDL	BMDL	3800	ND	13000	BMDL
Beryllium	ug/kg	360	350	BMDL	310	420	57600	440	870
Cadmium	ug/kg	1300	2600	12000	10000	1700	2900	16000	5500
Chromium	ug/kg	27000	38000	100000	59000	79000	98000	244000	39000
Copper	ug/kg	16500000	1970000	979000	619000	1670000	399000	2980000	1420000
Lead	ug/kg	290000	140000	400000	310000	140000	959000	782000	648000
Mercury	ug/kg	490	400	1700	1300	1100	720	6300	550

001432

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	S RMW-1S-1 871130 BC7148	S RMW-2D-1 871201 BC7158	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-4S-1 871210 BC8091	S RMW-5D-1 871202 BC7174	S RMW-6S-1 871210 BC8097	S RMW-7D-1 871201 BC7161
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	19000	14000	33000	21000	14000	12000	28000	24000
Selenium	ug/kg	BMDL	ND	BMDL	BMDL	BMDL	BMDL	1200	880
Silver	ug/kg	1300	BMDL	BMDL	BMDL	1400	ND	BMDL	BMDL
Thallium	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	637000	130000	542000	396000	229000	418000	715000	713000
Aroclors by GC									
Aroclor 1242	ug/kg	ND	39000	160000	400000	5400	ND	4400	ND
Aroclor 1254	ug/kg	4100	7400	ND	ND	ND	7500	ND	12000
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	ND	48000	ND
Aroclor 1248	ug/kg	4100	ND	ND	ND	ND	15000	ND	12000
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides by GC									
Aldrin	ug/kg	ND	ND	ND	ND	IND	IND	IND	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	IND	ND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	ND	IND	ND	ND	IND	IND	ND	IND
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	ND	ND	IND	ND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	ND	IND	ND	IND	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND

001433

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RMW-1S-1 871130 BC7148	S RMW-2D-1 871201 BC7158	S RMW-3S-1 871202 BC7178	S RMW-3S-1 871202 BC7179	S RMW-4S-1 871210 BC8091	S RMW-5D-1 871202 BC7174	S RMW-6S-1 871210 BC8097	S RMW-7D-1 871201 BC7161
Miscellaneous Parameters									
Cyanide, Total	mg/kg	.8	2.1	1.9	13.3	.9	2.0	1.7	1.8
Methoxychlor	ug/kg	ND	IND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	18.5	8560	ND	ND	ND	ND	ND	ND
Petroleum Hydrocarbons (IR)	mg/kg	605	7680	11800	2430	290	18000	5010	1870
Phenolics, Total	mg/kg	6.1	4.5	.4	9.5	19	7.5	1.9	7.7
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	24100	ND	BMDL	ND	ND	ND	BMDL
o+p-Xylenes	ug/kg	ND	21500	ND	BMDL	ND	ND	6700	24.2

001434

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-2-1 871203 BC7194	S RP-3-1 871211 BC8103	S RP-4-1 871210 BC8085				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND				
Acrylonitrile	ug/kg	ND	ND	ND	ND				
Benzene	ug/kg	ND	5010	ND	ND				
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND				
Bromoform	ug/kg	ND	ND	ND	ND				
Carbon tetrachloride	ug/kg	ND	ND	ND	ND				
Chlorobenzene	ug/kg	ND	8320	ND	ND				
Chlorodibromomethane	ug/kg	ND	ND	ND	ND				
Chloroethane	ug/kg	ND	ND	ND	ND				
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND				
Chloroform	ug/kg	4.14	10300	ND	ND				
Dichlorobromomethane	ug/kg	ND	ND	ND	ND				
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND				
1,1-Dichloroethane	ug/kg	ND	11100	ND	ND				
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND				
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND				
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND				
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				
Ethylbenzene	ug/kg	37.5	18000	ND	ND				
Methyl bromide	ug/kg	ND	ND	ND	ND				
Methyl chloride	ug/kg	ND	ND	ND	ND				
Methylene chloride	ug/kg	13.9	2390	79.6	24.8				
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND				
Tetrachloroethylene	ug/kg	186	35300	ND	ND				
Toluene	ug/kg	60.3	71900	BMDL	ND				
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND				
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND				
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND				
Trichloroethylene	ug/kg	51.4	9320	ND	ND				
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND				
Vinyl chloride	ug/kg	ND	ND	ND	ND				
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				

001435

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-1 871209 BC8077	S RP-2-1 871203 BC7194	S RP-3-1 871211 BC8103	S RP-4-1 871210 BC8085				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND				
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND				
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND				
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND				
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND				
2-Nitrophenol	ug/kg	ND	ND	ND	ND				
4-Nitrophenol	ug/kg	ND	ND	ND	ND				
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND				
Pentachlorophenol	ug/kg	ND	ND	ND	ND				
Phenol	ug/kg	858	ND	ND	ND				
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND				
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	2700	BMDL	ND	386				
Acenaphthylene	ug/kg	546	ND	ND	ND				
Anthracene	ug/kg	3910	ND	ND	672				
Benzidine	ug/kg	ND	ND	ND	ND				
Benzo(a)anthracene	ug/kg	2580	BMDL	ND	1270				
Benzo(a)pyrene	ug/kg	9390	BMDL	ND	1330				
Benzo(b)fluoranthene	ug/kg	17700	BMDL	BMDL	2070				
Benzo(ghi)perylene	ug/kg	5330	ND	ND	972				
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND				
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND				
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND				
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND				
bis(2-Ethylhexyl)phthalate	ug/kg	8930	135000	35200	4570				
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
Butyl benzyl phthalate	ug/kg	654	4730	524	BMDL				
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND				
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
Chrysene	ug/kg	3470	1330	ND	1300				
Dibenzo(a,h)anthracene	ug/kg	731	ND	ND	BMDL				
1,2-Dichlorobenzene	ug/kg	1730	2360	ND	137				

001436

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RP-1-1 871209 BC8077	S RP-2-1 871203 BC7194	S RP-3-1 871211 BC8103	S RP-4-1 871210 BC8085				
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND				
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND				
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND				
Diethyl phthalate	ug/kg	ND	ND	ND	ND				
Dimethyl phthalate	ug/kg	ND	ND	ND	ND				
Di-n-butyl phthalate	ug/kg	462	14000	3290	BMDL				
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
Di-n-octyl phthalate	ug/kg	1590	BMDL	7660	ND				
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND				
Fluoranthene	ug/kg	15300	1620	245	3190				
Fluorene	ug/kg	3360	BMDL	ND	373				
Hexachlorobenzene	ug/kg	ND	ND	ND	ND				
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND				
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND				
Hexachloroethane	ug/kg	ND	ND	ND	ND				
Indeno(1,2,3-c,d)pyrene	ug/kg	12100	ND	ND	1140				
Isophorone	ug/kg	ND	ND	ND	ND				
Naphthalene	ug/kg	3010	10500	141	355				
Nitrobenzene	ug/kg	ND	ND	ND	ND				
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodiphenylamine	ug/kg	ND	2980	ND	ND				
Phenanthrene	ug/kg	15300	3460	224	2690				
Pyrene	ug/kg	12700	1270	392	2710				
1,2,4-Trichlorobenzene	ug/kg	ND	ND	BMDL	ND				
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	BMDL	ND				
Arsenic	ug/kg	22000	10000	5700	3800				
Beryllium	ug/kg	400	230	400	420				
Cadmium	ug/kg	1600	6500	9500	1000				
Chromium	ug/kg	19000	79000	87000	59000				
Copper	ug/kg	1080000	460000	645000	315000				
Lead	ug/kg	420000	300000	372000	520000				
Mercury	ug/kg	1100	1000	1700	830				

001437

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RP-1-1 871209 BC8077	S RP-2-1 871203 BC7194	S RP-3-1 871211 BC8103	S RP-4-1 871210 BC8085				
Nickel	ug/kg	12000	13000	19000	10000				
Selenium	ug/kg	BMDL	BMDL	BMDL	BMDL				
Silver	ug/kg	1600	BMDL	BMDL	BMDL				
Thallium	ug/kg	ND	ND	ND	ND				
Zinc	ug/kg	227000	180000	142000	349000				
Aroclors by GC									
Aroclor 1242	ug/kg	1200	96000	ND	330				
Aroclor 1254	ug/kg	ND	ND	ND	ND				
Aroclor 1260	ug/kg	ND	ND	ND	ND				
Aroclor 1248	ug/kg	ND	ND	BMDL	ND				
Aroclor 1232	ug/kg	ND	ND	ND	ND				
Aroclor 1221	ug/kg	ND	ND	ND	ND				
Aroclor 1016	ug/kg	ND	ND	ND	ND				
Pesticides by GC									
Aldrin	ug/kg	280	ND	ND	140				
Alpha-BHC	ug/kg	ND	ND	ND	ND				
Beta-BHC	ug/kg	ND	ND	ND	ND				
Gamma-BHC	ug/kg	ND	ND	ND	ND				
Delta-BHC	ug/kg	ND	IND	ND	ND				
Chlordane	ug/kg	ND	ND	ND	ND				
4,4'-DDT	ug/kg	ND	ND	ND	ND				
4,4'-DDE	ug/kg	ND	ND	ND	ND				
4,4'-DDD	ug/kg	ND	ND	IND	IND				
Dieldrin	ug/kg	2300	IND	400	460				
Endosulfan I	ug/kg	ND	IND	ND	ND				
Endosulfan II	ug/kg	ND	ND	IND	IND				
Endosulfan sulfate	ug/kg	ND	ND	ND	ND				
Endrin	ug/kg	ND	ND	IND	ND				
Endrin aldehyde	ug/kg	ND	ND	ND	ND				
Heptachlor	ug/kg	ND	ND	ND	IND				
Heptachlor epoxide	ug/kg	ND	ND	ND	ND				
Toxaphene	ug/kg	ND	ND	ND	ND				

00438

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RP-1-1 871209 BC8077	S RP-2-1 871203 BC7194	S RP-3-1 871211 BC8103	S RP-4-1 871210 BC8085				
Miscellaneous Parameters									
Cyanide, Total	mg/kg	.7	1.7	2.8	1.0				
Methoxychlor	ug/kg	ND	ND	ND	ND				
Methyl ethyl ketone	ug/kg	ND	BMDL	ND	ND				
Petroleum Hydrocarbons (IR)	mg/kg	4160	2600	2680	679				
Phenolics, Total	mg/kg	2.4	11	.1	.6				
Styrene	ug/kg	ND	ND	ND	ND				
m-Xylene	ug/kg	148	38200	BMDL	ND				
o+p-Xylenes	ug/kg	115	21900	BMDL	ND				

001439

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-2-1 871211 BC8100	S RB-3-1 871210 BC8088	S RB-4-1 871210 BC8094	S RB-5-1* 871209 BC8074	S RB-6-1 871209 BC8070		
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	53900	ND	ND	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	336000	ND	ND	ND	ND	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	47300	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	64700	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND	2100	ND	23200	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	652000	ND	7790	86900	ND	ND		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	ND	ND	665	ND	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	2170000	4290000	38300	ND	33600	ND		
Toluene	ug/kg	3380000	ND	25200	175000	318000	ND		
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	2060000	57300	935	ND	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

001440

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

* Please refer to Dames & Moores letter to the USEPA, dated February 17, 1989, and attached ETC letter, dated February 17, 1989, presented at the beginning of this Appendix for ammendments to the data management summary.

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	RB-1-1 871211 BC8109	RB-2-1 871211 BC8100	RB-3-1 871210 BC8088	RB-4-1 871210 BC8094	RB-5-1 871209 BC8074	RB-6-1 871209 BC8070		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	BMDL	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	58200	ND	ND	ND	5310	1020		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	ND	1390	2380	BMDL		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	ND	ND	ND	1280	2120	1360		
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	ND	ND	ND	4540	BMDL	ND		
Benzo(a)pyrene	ug/kg	ND	ND	BMDL	6270	1310	BMDL		
Benzo(b)fluoranthene	ug/kg	ND	ND	BMDL	11200	BMDL	BMDL		
Benzo(ghi)perylene	ug/kg	ND	ND	ND	6950	BMDL	BMDL		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	162000	118000	281000	34900	12400	11200		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	ND	2930	7140	1660	BMDL	ND		
2-Chloronaphthalene	ug/kg	122000	ND	ND	ND	ND	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	1880	ND	BMDL	5500	2530	1560		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	2400	ND	ND		
1,2-Dichlorobenzene	ug/kg	47300	ND	1770	2280	BMDL	ND		

001441

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RB-1-1 871211 BC8109	S RB-2-1 871211 BC8100	S RB-3-1 871210 BC8088	S RB-4-1 871210 BC8094	S RB-5-1 871209 BC8074	S RB-6-1 871209 BC8070		
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	381	ND	ND		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-butyl phthalate	ug/kg	ND	5610	71000	1240	ND	13700		
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-octyl phthalate	ug/kg	ND	1220	9050	ND	BMDL	ND		
1,2-Diphenylhydrazine	ug/kg	BMDL	ND	ND	ND	ND	ND		
Fluoranthene	ug/kg	2420	359	1150	6980	5670	2780		
Fluorene	ug/kg	ND	ND	ND	1120	1930	BMDL		
Hexachlorobenzene	ug/kg	ND	ND	ND	BMDL	ND	ND		
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	BMDL	7660	BMDL	BMDL		
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND		
Naphthalene	ug/kg	102000	1290	1680	5070	6310	1920		
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	BMDL	162	ND	ND		
Phenanthrene	ug/kg	9410	396	BMDL	6310	9650	3760		
Pyrene	ug/kg	ND	918	2060	5960	4670	2150		
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Metals Analysis Data									
Antimony	ug/kg	16000	11000	BMDL	BMDL	BMDL	BMDL		
Arsenic	ug/kg	15000	2700	5400	9500	60000	26000		
Beryllium	ug/kg	350	820	660	780	410	550		
Cadmium	ug/kg	95100	36900	58200	1900	5400	6900		
Chromium	ug/kg	721000	211000	73000	47000	57000	140000		
Copper	ug/kg	15800000	340000	484000	3240000	71600000	19300000		
Lead	ug/kg	2750000	1080000	410000	180000	470000	880000		
Mercury	ug/kg	4700	11800	1000	410	640	21300		

001442

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
arameters	*Units*	S RB-1-1 871211 BC8109	S RB-2-1 871211 BC8100	S RB-3-1 871210 BC8088	S RB-4-1 871210 BC8094	S RB-5-1 871209 BC8074	S RB-6-1 871209 BC8070		
ickel	ug/kg	39000	37000	23000	19000	ND	ND		
elenium	ug/kg	1000	4900	3500	BMDL	BMDL	BMDL		
ilver	ug/kg	19000	1200	BMDL	BMDL	6400	3900		
hallium	ug/kg	ND	ND	ND	ND	ND	ND		
inc	ug/kg	4170000	295000	292000	150000	440000	667000		
oclors by GC									
roclor 1242	ug/kg	15000000	ND	2200	2200	20000	ND		
roclor 1254	ug/kg	ND	IND	ND	ND	ND	ND		
roclor 1260	ug/kg	ND	9900	ND	ND	ND	ND		
roclor 1248	ug/kg	ND	23000	ND	ND	ND	ND		
roclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
roclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
roclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
sticides by GC									
ldrin	ug/kg	IND	ND	IND	IND	ND	57000		
lpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
eta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
amma-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
elta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
hlordane	ug/kg	ND	ND	ND	ND	ND	ND		
.4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
.4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND		
.4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND		
ieldrin	ug/kg	IND	ND	590	ND	ND	57000		
ndosulfan I	ug/kg	ND	ND	ND	IND	ND	ND		
ndosulfan II	ug/kg	ND	ND	ND	ND	ND	ND		
ndosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
ndrin	ug/kg	IND	ND	IND	ND	ND	ND		
ndrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
eptachlor	ug/kg	IND	IND	IND	IND	ND	ND		
eptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
oxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

001443

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RB-1-1 871211 BC8109	S RB-2-1 871211 BC8100	S RB-3-1 871210 BC8088	S RB-4-1 871210 BC8094	S RB-5-1 871209 BC8074	S RB-6-1 871209 BC8070		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Miscellaneous Parameters									
Cyanide, Total	mg/kg	4.8	1.4	3.3	1.1	2.7	1.7		
Methoxychlor	ug/kg	ND	ND	ND	IND	ND	ND		
Methyl ethyl ketone	ug/kg	ND	ND	ND	ND	ND	ND		
Petroleum Hydrocarbons (IR)	mg/kg	81600	13700	4650	430	7410	680		
Phenolics, Total	mg/kg	600	.2	4.0	12	30	22		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	2000000	ND	22200	415000	27700	ND		
o+p-Xylenes	ug/kg	1450000	ND	12800	309000	BMDL	ND		

001444

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

SAMPLES IN THE SATURATED FILL

(REORGANIZATION OF PRIOR
SOIL SAMPLE DATA SUMMARIES)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RMW-1S-2 871201 BC7157	S RMW-2D-2 871201 BC7159	S RMW-3S-2 871202 BC7180	S RMW-4S-2 871210 BC8092	S RMW-5D-2 871202 BC7176	S RMW-6S-2 871210 BC8098	S RMW-7D-2 871202 BC7172
riority Poll. Volatiles GC/MS								
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	189	BMDL	BMDL	148	9.25	52300
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	12.0	BMDL	BMDL	648	ND	258000
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	ND	379000	ND	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	BMDL	ND	43100
1,2-Dichloroethane	ug/kg	ND	ND	146000	ND	179	ND	ND
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	BMDL	71100	13100	358	28.3	529000
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	BMDL	20.4	11600	14900	147	44.9	ND
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	703	ND	ND
Tetrachloroethylene	ug/kg	ND	ND	241000	ND	502	33.7	1440000
Toluene	ug/kg	ND	221	384000	118000	5680	16.0	2270000
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	125	ND	512000
1,1,1-Trichloroethane	ug/kg	ND	ND	144000	ND	ND	ND	30400
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	ND	ND	421000	20200	96.9	ND	1670000
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND

001446

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

arameters	Units	S RMW-1S-2 871201 BC7157	S RMW-2D-2 871201 BC7159	S RMW-3S-2 871202 BC7180	S RMW-4S-2 871210 BC8092	S RMW-5D-2 871202 BC7176	S RMW-6S-2 871210 BC8098	S RMW-7D-2 871202 BC7172
		Sample Points, Sampling Dates, and ETC Sample No.'s						
iority Poll. Acids GC/MS								
-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND	1940
,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
entachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
henol	ug/kg	ND	ND	ND	ND	ND	ND	35200
,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
iority Poll. B/Ns GC/MS								
cenaphthene	ug/kg	72.8	ND	21200	ND	ND	ND	ND
cenaphthylene	ug/kg	ND	ND	21000	ND	ND	ND	ND
nthracene	ug/kg	205	1360	86300	ND	ND	ND	ND
enzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
enzo(a)anthracene	ug/kg	ND	ND	84200	ND	ND	ND	ND
enzo(a)pyrene	ug/kg	ND	2790	108000	ND	ND	ND	ND
enzo(b)fluoranthene	ug/kg	ND	3870	164000	ND	ND	ND	ND
enzo(ghi)perylene	ug/kg	ND	ND	73300	ND	ND	ND	ND
enzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND
is(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND
is(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
is(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
is(2-Ethylhexyl)phthalate	ug/kg	2050	381000	119000	193000	BMDL	6310	37100
-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
utyl benzyl phthalate	ug/kg	ND	3510	73600	BMDL	ND	ND	BMDL
-Chloronaphthalene	ug/kg	ND	ND	BMDL	ND	ND	ND	1160
-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
hrysene	ug/kg	ND	ND	106000	ND	ND	ND	ND
ibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND
,2-Dichlorobenzene	ug/kg	ND	ND	385000	ND	ND	244	1440

001447

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-1S-2 871201 BC7157	S RMW-2D-2 871201 BC7159	S RMW-3S-2 871202 BC7180	S RMW-4S-2 871210 BC8092	S RMW-5D-2 871202 BC7176	S RMW-6S-2 871210 BC8098	S RMW-7D-2 871202 BC7172
		Sample Points, Sampling Dates, and ETC Sample No.'s						
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	ND	BMDL	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	BMDL	2700	98200	ND	ND	BMDL	BMDL
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	ND	19500	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	558	4730	176000	ND	ND	275	386
Fluorene	ug/kg	127	803	94100	BMDL	ND	ND	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	86900	ND	ND	ND	ND
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/kg	127	1500	480000	34800	ND	ND	976
Nitrobenzene	ug/kg	ND	ND	1350000	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/kg	576	4030	268000	BMDL	ND	BMDL	ND
Pyrene	ug/kg	450	4490	118000	ND	ND	249	BMDL
1,2,4-Trichlorobenzene	ug/kg	ND	ND	BMDL	ND	ND	ND	ND
Metals Analysis Data								
Antimony	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	ND	BMDL
Arsenic	ug/kg	1200	8900	ND	62000	9600	19000	51000
Beryllium	ug/kg	400	370	420	440	760	770	580
Cadmium	ug/kg	460	9000	11000	6600	480	740	6900
Chromium	ug/kg	12000	28000	255000	61000	26000	66000	72000
Copper	ug/kg	806000	5670000	561000	747000	32000	85000	100000
Lead	ug/kg	45000	230000	1490000	87000	20000	110000	100000
Mercury	ug/kg	BMDL	520	1600	770	140	3400	350

001448

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

arameters	Units	S RMW-1S-2 871201 BC7157	S RMW-2D-2 871201 BC7159	S RMW-3S-2 871202 BC7180	S RMW-4S-2 871210 BC8092	S RMW-5D-2 871202 BC7176	S RMW-6S-2 871210 BC8098	S RMW-7D-2 871202 BC7172
		Sample Points, Sampling Dates, and ETC Sample No.'s						
ickel	ug/kg	8500	25000	16000	116000	27000	24000	46000
elenium	ug/kg	BMDL	BMDL	BMDL	1600	BMDL	BMDL	ND
ilver	ug/kg	ND	ND	BMDL	BMDL	ND	BMDL	ND
hallium	ug/kg	ND	ND	ND	ND	ND	ND	BMDL
inc	ug/kg	83000	376000	485000	130000	79000	170000	683000
oclors by GC								
roclor 1242	ug/kg	ND	350000	290000	1400	80	1500	23000
roclor 1254	ug/kg	180	ND	ND	ND	ND	ND	ND
roclor 1260	ug/kg	ND	ND	ND	ND	ND	2100	ND
roclor 1248	ug/kg	ND	ND	ND	ND	ND	ND	ND
roclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND
roclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND
roclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND
sticides by GC								
ldrin	ug/kg	ND	ND	ND	ND	ND	ND	ND
lpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
eta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
amma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
elta-BHC	ug/kg	ND	IND	ND	ND	ND	ND	ND
hlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND
,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND
ieldrin	ug/kg	ND	IND	ND	ND	ND	ND	ND
ndosulfan I	ug/kg	ND	ND	ND	ND	ND	ND	ND
ndosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND
ndosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND
ndrin	ug/kg	ND	ND	ND	ND	ND	ND	ND
ndrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND
eptachlor	ug/kg	ND	ND	ND	IND	ND	IND	ND
eptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND
oxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001449

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RMW-1S-2 871201 BC7157	S RMW-2D-2 871201 BC7159	S RMW-3S-2 871202 BC7180	S RMW-4S-2 871210 BC8092	S RMW-5D-2 871202 BC7176	S RMW-6S-2 871210 BC8098	S RMW-7D-2 871202 BC7172
Sample Points, Sampling Dates, and ETC Sample No.'s								
iscellaneous Parameters								
Cyanide, Total	mg/kg	< .6	< .8	32	2.1	< .9	< 1.0	17.7
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	BMDL	119	16000	ND	ND	ND	795000
Petroleum Hydrocarbons (IR)	mg/kg	36	8290	16500	14000	1110	390	8360
Phenolics, Total	mg/kg	< .1	7.8	123	20	7.2	< .2	55
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	ND	22.6	195000	41900	1100	54.5	1580000
o+p-Xylenes	ug/kg	ND	24.8	93200	29200	1280	149	710000

001450

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/22/8
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
arameters	*Units*	S RP-1-2 871209 BC8078	S RP-2-2 871203 BC7195	S RP-3-2 871211 BC8104	S RP-4-2 871210 BC8086				
iority Poll. Volatiles GC/MS'									
crolein	ug/kg	ND	ND	ND	ND				
crylonitrile	ug/kg	ND	ND	ND	ND				
enzene	ug/kg	BMDL	ND	ND	26.8				
is(Chloromethyl)ether	ug/kg	ND	ND	ND	ND				
romoform	ug/kg	ND	ND	ND	ND				
arbon tetrachloride	ug/kg	ND	ND	ND	ND				
hlorobenzene	ug/kg	BMDL	ND	ND	43.2				
hlorodibromomethane	ug/kg	ND	ND	ND	ND				
hloroethane	ug/kg	ND	ND	ND	ND				
-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND				
hloroform	ug/kg	ND	39600	ND	ND				
ichlorobromomethane	ug/kg	ND	ND	ND	ND				
ichlorodifluoromethane	ug/kg	ND	ND	ND	ND				
,1-Dichloroethane	ug/kg	ND	ND	ND	31.2				
,2-Dichloroethane	ug/kg	ND	ND	ND	ND				
,1-Dichloroethylene	ug/kg	ND	ND	ND	ND				
,2-Dichloropropane	ug/kg	ND	ND	ND	ND				
is-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				
thylbenzene	ug/kg	2210	20400	7470	192				
ethyl bromide	ug/kg	ND	ND	ND	ND				
ethyl chloride	ug/kg	ND	ND	ND	ND				
ethylene chloride	ug/kg	1220	4950	ND	30.0				
,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND				
etrachloroethylene	ug/kg	7350	5820	849	5.40				
oluene	ug/kg	3060	43900	33100	254				
,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	22.8				
,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND				
,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND				
richloroethylene	ug/kg	4740	ND	1030	ND				
richlorofluoromethane	ug/kg	ND	ND	ND	ND				
inyl chloride	ug/kg	ND	ND	ND	28.9				
rans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				

001451

Notes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/22/88
PAGE: 2

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
arameters	*Units*	S RP-1-2 871209 BC8078	S RP-2-2 871203 BC7195	S RP-3-2 871211 BC8104	S RP-4-2 871210 BC8086				
iority Poll. Acids GC/MS									
-Chlorophenol	ug/kg	ND	ND	ND	ND				
.4-Dichlorophenol	ug/kg	ND	ND	ND	ND				
.4-Dimethylphenol	ug/kg	ND	ND	ND	290				
.6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND				
.4-Dinitrophenol	ug/kg	ND	ND	ND	ND				
-Nitrophenol	ug/kg	ND	ND	ND	ND				
-Nitrophenol	ug/kg	ND	ND	ND	ND				
-Chloro-m-cresol	ug/kg	ND	ND	ND	ND				
entachlorophenol	ug/kg	ND	ND	ND	ND				
henol	ug/kg	ND	5790	110	ND				
.4.6-Trichlorophenol	ug/kg	ND	ND	ND	ND				
iority Poll. B/Ns GC/MS									
cenaphthene	ug/kg	ND	ND	324	379				
cenaphthylene	ug/kg	ND	ND	ND	ND				
nthracene	ug/kg	BMDL	ND	531	440				
enzidine	ug/kg	ND	ND	ND	ND				
enzo(a)anthracene	ug/kg	ND	BMDL	1000	545				
enzo(a)pyrene	ug/kg	ND	BMDL	915	492				
enzo(b)fluoranthene	ug/kg	ND	BMDL	1240	871				
enzo(ghi)perylene	ug/kg	ND	ND	635	331				
enzo(k)fluoranthene	ug/kg	ND	ND	ND	ND				
is(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND				
is(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND				
is(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND				
is(2-Ethylhexyl)phthalate	ug/kg	989	6140	18700	10100				
-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
utyl benzyl phthalate	ug/kg	ND	BMDL	6070	1020				
-Chloronaphthalene	ug/kg	ND	ND	ND	ND				
-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
hrysene	ug/kg	ND	BMDL	1220	567				
ibenzo(a,h)anthracene	ug/kg	ND	ND	BMDL	BMDL				
.2-Dichlorobenzene	ug/kg	BMDL	ND	ND	1270				

001452

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RP-1-2 871209 BC8078	S RP-2-2 871203 BC7195	S RP-3-2 871211 BC8104	S RP-4-2 871210 BC8086				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND				
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND				
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND				
Diethyl phthalate	ug/kg	ND	ND	BMDL	ND				
Dimethyl phthalate	ug/kg	ND	ND	BMDL	ND				
Di-n-butyl phthalate	ug/kg	BMDL	ND	1910	635				
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
Di-n-octyl phthalate	ug/kg	ND	ND	557	BMDL				
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND				
Fluoranthene	ug/kg	113	1090	2090	2370				
Fluorene	ug/kg	ND	ND	379	532				
Hexachlorobenzene	ug/kg	ND	ND	ND	ND				
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND				
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND				
Hexachloroethane	ug/kg	ND	ND	ND	ND				
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	586	396				
Isophorone	ug/kg	ND	ND	ND	ND				
Naphthalene	ug/kg	BMDL	1850	669	1260				
Nitrobenzene	ug/kg	ND	ND	ND	ND				
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	157				
Phenanthrene	ug/kg	BMDL	BMDL	2930	3010				
Pyrene	ug/kg	92.4	911	1760	1690				
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND				
Metals Analysis Data									
Antimony	ug/kg	BMDL	ND	BMDL	7600				
Arsenic	ug/kg	1200	7500	29000	3500				
Beryllium	ug/kg	1300	300	900	370				
Cadmium	ug/kg	BMDL	8500	4500	1800				
Chromium	ug/kg	22000	51000	43000	19000				
Copper	ug/kg	88000	163000	884000	522000				
Lead	ug/kg	18000	290000	2810000	510000				
Mercury	ug/kg	250	420	140	620				

001453

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	S RP-1-2 871209 BC8078	S RP-2-2 871203 BC7195	S RP-3-2 871211 BC8104	S RP-4-2 871210 BC8086				
Nickel	ug/kg	17000	40000	50000	11000				
Selenium	ug/kg	ND	BMDL	1000	BMDL				
Silver	ug/kg	ND	BMDL	BMDL	BMDL				
Thallium	ug/kg	ND	ND	ND	ND				
Zinc	ug/kg	46000	350000	1400000	411000				
Aroclors by GC									
Aroclor 1242	ug/kg	85	5200	ND	580				
Aroclor 1254	ug/kg	ND	3500	ND	ND				
Aroclor 1260	ug/kg	ND	ND	ND	ND				
Aroclor 1248	ug/kg	ND	ND	ND	ND				
Aroclor 1232	ug/kg	ND	ND	ND	ND				
Aroclor 1221	ug/kg	ND	ND	ND	ND				
Aroclor 1016	ug/kg	ND	ND	ND	ND				
Pesticides by GC									
Aldrin	ug/kg	BMDL	ND	ND	ND				
Alpha-BHC	ug/kg	ND	ND	ND	ND				
Beta-BHC	ug/kg	ND	ND	ND	ND				
Gamma-BHC	ug/kg	ND	ND	ND	ND				
Delta-BHC	ug/kg	ND	ND	ND	ND				
Chlordane	ug/kg	ND	ND	ND	ND				
4,4'-DDT	ug/kg	ND	ND	ND	ND				
4,4'-DDE	ug/kg	ND	ND	ND	ND				
4,4'-DDD	ug/kg	ND	ND	ND	IND				
Dieldrin	ug/kg	51	IND	ND	940				
Endosulfan I	ug/kg	ND	ND	ND	ND				
Endosulfan II	ug/kg	ND	ND	ND	IND				
Endosulfan sulfate	ug/kg	ND	ND	ND	ND				
Endrin	ug/kg	ND	ND	ND	IND				
Endrin aldehyde	ug/kg	ND	ND	ND	ND				
Heptachlor	ug/kg	ND	ND	ND	IND				
Heptachlor epoxide	ug/kg	ND	ND	ND	ND				
Toxaphene	ug/kg	ND	ND	ND	ND				

001454

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-3 871130 BC7149	S RMW-2D-3 871201 BC7160	S RMW-3S-3 871203 BC7193	S RMW-4S-3 871210 BC8093	S RMW-5D-3 871202 BC7177	S RMW-6S-3 871210 BC8099	S RMW-7D-3 871202 BC7173
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Priority Poll. Acids GC/MS								
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/kg	ND	ND	BMDL	ND	ND	ND	ND
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Priority Poll. B/Ns GC/MS								
Acenaphthene	ug/kg	ND	ND	BMDL	ND	ND	ND	ND
Acenaphthylene	ug/kg	ND	ND	BMDL	ND	ND	ND	ND
Anthracene	ug/kg	ND	ND	90.7	ND	ND	ND	ND
Benzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	ND	ND	BMDL	ND	BMDL	ND	ND
Benzo(a)pyrene	ug/kg	2390	ND	BMDL	ND	BMDL	4740	ND
Benzo(b)fluoranthene	ug/kg	ND	ND	BMDL	ND	BMDL	ND	ND
Benzo(ghi)perylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/kg	ND	999	1800	4810	918	1450	5350
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/kg	ND	ND	1080	BMDL	BMDL	ND	ND
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/kg	ND	ND	116	ND	BMDL	ND	ND
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/kg	ND	ND	1170	BMDL	85.1	BMDL	BMDL

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-3 871130 BC7149	S RMW-2D-3 871201 BC7160	S RMW-3S-3 871203 BC7193	S RMW-4S-3 871210 BC8093	S RMW-5D-3 871202 BC7177	S RMW-6S-3 871210 BC8099	S RMW-7D-3 871202 BC7173
		Sample Points, Sampling Dates, and ETC Sample No.'s						
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/kg	ND	ND	BMDL	BMDL	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	ND	ND	887	BMDL	BMDL	BMDL	BMDL
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	ND	ND	271	ND	86.4	BMDL	ND
Fluorene	ug/kg	ND	ND	87.3	ND	ND	ND	ND
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Isophorone	ug/kg	ND	ND	203	ND	ND	ND	ND
Naphthalene	ug/kg	ND	ND	527	77.2	BMDL	ND	ND
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/kg	ND	ND	438	ND	BMDL	ND	ND
Pyrene	ug/kg	ND	ND	195	ND	91.4	ND	ND
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Metals Analysis Data								
Antimony	ug/kg	ND	BMDL	ND	BMDL	ND	ND	BMDL
Arsenic	ug/kg	BMDL	ND	4000	3400	ND	BMDL	ND
Beryllium	ug/kg	360	410	660	550	660	610	460
Cadmium	ug/kg	ND	BMDL	BMDL	BMDL	560	BMDL	1100
Chromium	ug/kg	13000	13000	24000	16000	19000	21000	17000
Copper	ug/kg	59000	47000	28000	39000	31000	17000	120000
Lead	ug/kg	9000	9500	31000	8600	32000	12000	40000
Mercury	ug/kg	84	BMDL	BMDL	ND	200	250	350

001456

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-1S-3 871130 BC7149	S RMW-2D-3 871201 BC7160	S RMW-3S-3 871203 BC7193	S RMW-4S-3 871210 BC8093	S RMW-5D-3 871202 BC7177	S RMW-6S-3 871210 BC8099	S RMW-7D-3 871202 BC7173
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Nickel	ug/kg	6400	17000	23000	18000	22000	9900	7900
Selenium	ug/kg	BMDL	BMDL	ND	ND	BMDL	BMDL	BMDL
Silver	ug/kg	ND	ND	ND	ND	ND	ND	ND
Thallium	ug/kg	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/kg	26000	47000	69000	53000	78000	45000	45000
Aroclors by GC								
Aroclor 1242	ug/kg	ND	ND	5400	17	180	39	760
Aroclor 1254	ug/kg	ND	ND	ND	ND	64	ND	ND
Aroclor 1260	ug/kg	ND	ND	ND	ND	ND	43	ND
Aroclor 1248	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pesticides by GC								
Aldrin	ug/kg	ND	ND	IND	ND	ND	ND	ND
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/kg	ND	ND	IND	ND	ND	ND	IND
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/kg	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/kg	ND	ND	ND	IND	ND	ND	ND
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND	ND

001457

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-1S-3 871130 BC7149	S RMW-2D-3 871201 BC7160	S RMW-3S-3 871203 BC7193	S RMW-4S-3 871210 BC8093	S RMW-5D-3 871202 BC7177	S RMW-6S-3 871210 BC8099	S RMW-7D-3 871202 BC7173
		Sample Points, Sampling Dates, and ETC Sample No.'s						
Miscellaneous Parameters								
Cyanide, Total	mg/kg	<.7	<.6	<.6	<1.2	<.6	<1.1	<.7
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl ethyl ketone	ug/kg	29.0	602	2700	ND	190	ND	31500
Petroleum Hydrocarbons (IR)	mg/kg	191	61	126	4650	80	120	154
Phenolics, Total	mg/kg	2.0	.1	1.4	.5	.1	.7	1.2
Styrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/kg	BMDL	BMDL	1850	12.6	BMDL	2100	442
o+p-Xylenes	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	20400	328

001458

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-3 871209 BC8079	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188	S RP-3-3 871211 BC8105	S RP-4-3 871210 BC8087			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
riority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND			
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND			
Benzene	ug/kg	ND	ND	ND	52.1	ND			
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND			
Bromoform	ug/kg	ND	ND	ND	ND	ND			
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND			
Chlorobenzene	ug/kg	ND	ND	ND	ND	BMDL			
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND			
Chloroethane	ug/kg	ND	ND	ND	ND	ND			
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND			
Chloroform	ug/kg	ND	159000	234000	ND	ND			
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND			
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND			
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND			
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND			
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND			
Ethylbenzene	ug/kg	ND	ND	ND	229	45600			
Methyl bromide	ug/kg	ND	ND	ND	ND	ND			
Methyl chloride	ug/kg	ND	ND	ND	ND	ND			
Methylene chloride	ug/kg	BMDL	16800	20800	36.6	ND			
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND			
Tetrachloroethylene	ug/kg	ND	ND	ND	ND	917000			
Toluene	ug/kg	ND	ND	ND	1140	216000			
1,2-Trans-dichloroethylene	ug/kg	ND	ND	1910	ND	ND			
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	57600			
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND			
Trichloroethylene	ug/kg	ND	ND	ND	44.6	363000			
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND			
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND			
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND			

001459

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
arameters	*Units*	S RP-1-3 871209 BC8079	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188	S RP-3-3 871211 BC8105	S RP-4-3 871210 BC8087			
iority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	8580			
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND			
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND			
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND			
4-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND			
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND			
Phenol	ug/kg	ND	ND	930	ND	14400			
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND			
iority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	ND	100	BMDL			
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND			
Anthracene	ug/kg	ND	ND	ND	164	ND			
Benzidine	ug/kg	ND	ND	ND	ND	ND			
Benzo(a)anthracene	ug/kg	ND	ND	ND	564	BMDL			
Benzo(a)pyrene	ug/kg	4350	ND	ND	382	101			
Benzo(b)fluoranthene	ug/kg	ND	ND	ND	576	BMDL			
Benzo(ghi)perylene	ug/kg	ND	ND	ND	227	BMDL			
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND			
bis(2-Ethylhexyl)phthalate	ug/kg	488	ND	ND	23600	21600			
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND			
Butyl benzyl phthalate	ug/kg	ND	ND	ND	4690	714			
2-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND			
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND			
Chrysene	ug/kg	ND	ND	ND	423	ND			
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichlorobenzene	ug/kg	ND	ND	ND	123	10800			

00460

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-3 871209 BC8079	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188	S RP-3-3 871211 BC8105	S RP-4-3 871210 BC8087			
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND			
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	BMDL			
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND			
Diethyl phthalate	ug/kg	ND	ND	ND	ND	BMDL			
Dimethyl phthalate	ug/kg	ND	ND	ND	BMDL	BMDL			
Di-n-butyl phthalate	ug/kg	ND	ND	ND	2420	2440			
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND			
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND			
Di-n-octyl phthalate	ug/kg	ND	ND	ND	1090	986			
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND			
Fluoranthene	ug/kg	ND	ND	ND	866	285			
Fluorene	ug/kg	ND	ND	ND	186	BMDL			
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND			
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND			
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND			
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND			
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	213	BMDL			
Isophorone	ug/kg	ND	ND	ND	220	725			
Naphthalene	ug/kg	ND	ND	ND	974	1040			
Nitrobenzene	ug/kg	ND	ND	ND	ND	135000			
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND			
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND			
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	200			
Phenanthrene	ug/kg	ND	ND	ND	943	235			
Pyrene	ug/kg	ND	ND	ND	750	217			
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND			
etals Analysis Data									
Antimony	ug/kg	BMDL	ND	ND	29000	ND			
Arsenic	ug/kg	1100	4200	3100	18000	3500			
Beryllium	ug/kg	300	490	480	500	670			
Cadmium	ug/kg	BMDL	BMDL	BMDL	26000	520			
Chromium	ug/kg	12000	16000	18000	56000	19000			
Copper	ug/kg	28000	27000	20000	448000	37000			
Lead	ug/kg	BMDL	10000	7600	916000	26000			
Mercury	ug/kg	BMDL	ND	BMDL	13600	BMDL			

001461

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

arameters	Units	S RP-1-3 871209 BC8079	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188	S RP-3-3 871211 BC8105	S RP-4-3 871210 BC8087			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
ickel	ug/kg	5800	20000	18000	44000	21000			
elenium	ug/kg	BMDL	ND	ND	BMDL	ND			
ilver	ug/kg	ND	BMDL	ND	ND	ND			
hallium	ug/kg	ND	ND	ND	ND	ND			
inc	ug/kg	22000	56000	47000	44400000	120000			
oclors by GC									
roclor 1242	ug/kg	ND	40	44	2800	2100			
roclor 1254	ug/kg	ND	ND	ND	2200	ND			
roclor 1260	ug/kg	ND	ND	ND	IND	ND			
roclor 1248	ug/kg	ND	ND	ND	ND	ND			
roclor 1232	ug/kg	ND	ND	ND	ND	ND			
roclor 1221	ug/kg	ND	ND	ND	ND	ND			
roclor 1016	ug/kg	ND	ND	ND	ND	ND			
sticides by GC									
ldrin	ug/kg	ND	ND	ND	IND	ND			
lpha-BHC	ug/kg	ND	ND	ND	ND	ND			
eta-BHC	ug/kg	ND	ND	ND	IND	ND			
amma-BHC	ug/kg	ND	ND	ND	ND	ND			
elta-BHC	ug/kg	ND	ND	ND	ND	ND			
hlordane	ug/kg	ND	ND	ND	ND	ND			
,4'-DDT	ug/kg	ND	ND	ND	ND	ND			
,4'-DDE	ug/kg	ND	ND	ND	ND	ND			
,4'-DDD	ug/kg	ND	ND	ND	ND	ND			
ieldrin	ug/kg	25	ND	ND	ND	ND			
ndosulfan I	ug/kg	ND	ND	ND	ND	ND			
ndosulfan II	ug/kg	ND	ND	ND	ND	ND			
ndosulfan sulfate	ug/kg	ND	ND	ND	ND	ND			
ndrin	ug/kg	ND	ND	ND	ND	IND			
ndrin aldehyde	ug/kg	ND	ND	ND	ND	ND			
eptachlor	ug/kg	ND	ND	ND	IND	IND			
eptachlor epoxide	ug/kg	ND	ND	ND	ND	ND			
oxaphene	ug/kg	ND	ND	ND	ND	ND			

001462

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RP-1-3 871209 BC8079	S RP-2-3 871203 BC7187	S RP-2-3 871203 BC7188	S RP-3-3 871211 BC8105	S RP-4-3 871210 BC8087			
Sample Points, Sampling Dates, and ETC Sample No.'s									
iscellaneous Parameters									
Cyanide, Total	mg/kg	< .7	< .6	< .6	< .6	3.5			
Methoxychlor	ug/kg	ND	ND	ND	ND	ND			
Methyl ethyl ketone	ug/kg	ND	7650	7880	BMDL	ND			
Petroleum Hydrocarbons (IR)	mg/kg	< 34	< 29	< 29	3780	823			
Phenolics, Total	mg/kg	< .1	1.6	1.0	< .1	65			
Styrene	ug/kg	ND	ND	ND	ND	ND			
m-Xylene	ug/kg	ND	ND	ND	414	135000			
o+p-Xylenes	ug/kg	ND	ND	ND	256	87900			

001463

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RB-1-3 871211 BC8111	S RB-2-3 871211 BC8102	S RB-3-3 871210 BC8090	S RB-4-3 871210 BC8096	S RB-5-3 871209 BC8076	S RB-6-3 871209 BC8072		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
riority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	118	ND	ND	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	115	ND	ND	ND	ND	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND	5620	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	386	BMDL	ND	ND	937	27.4		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	ND	2840	396	ND	ND	14.6		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	1910	10700	ND	ND	ND	ND		
Toluene	ug/kg	1200	2970	446	ND	7560	36.1		
1,2-Trans-dichloroethylene	ug/kg	50.0	5510	675	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	423	ND	ND	ND	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

001464

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
arameters	*Units*	S RB-1-3 871211 BC8111	S RB-2-3 871211 BC8102	S RB-3-3 871210 BC8090	S RB-4-3 871210 BC8096	S RB-5-3 871209 BC8076	S RB-6-3 871209 BC8072		
iority Poll. Acids GC/MS									
-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND	ND		
,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
entachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
henol	ug/kg	ND	ND	3580	ND	ND	ND		
,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
iority Poll. B/Ns GC/MS									
cenaphthene	ug/kg	ND	ND	BMDL	ND	ND	BMDL		
cenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
nthracene	ug/kg	ND	181	ND	ND	ND	BMDL		
enzidine	ug/kg	ND	ND	ND	ND	ND	ND		
enzo(a)anthracene	ug/kg	ND	ND	ND	ND	ND	BMDL		
enzo(a)pyrene	ug/kg	ND	ND	549	1730	1140	1120		
enzo(b)fluoranthene	ug/kg	ND	ND	ND	ND	ND	BMDL		
enzo(ghi)perylene	ug/kg	ND	ND	ND	ND	ND	ND		
enzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
is(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
is(2-Chloroethyl) ether	ug/kg	ND	ND	BMDL	ND	ND	ND		
is(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
is(2-Ethylhexyl)phthalate	ug/kg	4920	2870	3090	ND	33600	BMDL		
-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
utyl benzyl phthalate	ug/kg	ND	ND	ND	ND	BMDL	ND		
-Chloronaphthalene	ug/kg	ND	ND	ND	ND	ND	ND		
-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
hrysene	ug/kg	ND	BMDL	ND	ND	ND	1340		
ibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	ND		
,2-Dichlorobenzene	ug/kg	BMDL	242	ND	ND	ND	ND		

001465

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

arameters	Units	S RB-1-3 871211 BC8111	S RB-2-3 871211 BC8102	S RB-3-3 871210 BC8090	S RB-4-3 871210 BC8096	S RB-5-3 871209 BC8076	S RB-6-3 871209 BC8072		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
iethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
imethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
i-n-butyl phthalate	ug/kg	BMDL	BMDL	BMDL	ND	ND	ND		
,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
i-n-octyl phthalate	ug/kg	771	BMDL	ND	ND	5610	ND		
,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND		
luoranthene	ug/kg	476	288	ND	ND	BMDL	2320		
luorene	ug/kg	ND	ND	BMDL	ND	ND	BMDL		
exachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
exachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
exachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
exachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
ndeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND	ND	BMDL		
sophorone	ug/kg	ND	ND	ND	ND	ND	ND		
aphthalene	ug/kg	586	525	629	ND	2120	2270		
itrobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND		
henanthrene	ug/kg	BMDL	BMDL	BMDL	ND	BMDL	3250		
yrene	ug/kg	449	267	ND	ND	BMDL	1840		
,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
tals Analysis Data									
ntimony	ug/kg	ND	BMDL	BMDL	ND	BMDL	BMDL		
rsenic	ug/kg	14000	4300	2500	1600	BMDL	BMDL		
eryllium	ug/kg	430	740	410	410	450	390		
admium	ug/kg	132000	3300	970	BMDL	2200	1400		
hromium	ug/kg	39000	27000	21000	14000	28000	19000		
opper	ug/kg	11900000	45000	13000	11000	225000	290000		
ead	ug/kg	170000	53000	43000	BMDL	180000	120000		
ercury	ug/kg	360	440	BMDL	BMDL	630	410		

001466

otnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-3 871211 BC8111	S RB-2-3 871211 BC8102	S RB-3-3 871210 BC8090	S RB-4-3 871210 BC8096	S RB-5-3 871209 BC8076	S RB-6-3 871209 BC8072		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	13000	23000	11000	11000	12000	10000		
Selenium	ug/kg	1300	BMDL	BMDL	BMDL	BMDL	BMDL		
Silver	ug/kg	1200	BMDL	ND	ND	ND	ND		
Thallium	ug/kg	ND	ND	ND	ND	ND	ND		
Zinc	ug/kg	140000	140000	43000	29000	100000	231000		
Aroclors by GC									
Aroclor 1242	ug/kg	4600	1600	32	ND	ND	ND		
Aroclor 1254	ug/kg	ND	IND	ND	ND	ND	ND		
Aroclor 1260	ug/kg	ND	1000	BMDL	ND	ND	ND		
Aroclor 1248	ug/kg	ND	ND	ND	ND	2600	260		
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
Pesticides by GC									
Aldrin	ug/kg	IND	ND	ND	ND	ND	IND		
Alpha-BHC	ug/kg	IND	ND	ND	ND	ND	ND		
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Delta-BHC	ug/kg	ND	ND	IND	ND	ND	ND		
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDE	ug/kg	ND	IND	ND	ND	ND	ND		
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND	ND		
Dieldrin	ug/kg	210	ND	ND	ND	ND	IND		
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin	ug/kg	ND	IND	ND	ND	IND	ND		
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
Heptachlor	ug/kg	IND	IND	IND	ND	ND	ND		
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

001467

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		S RB-1-3 871211 BC8111	S RB-2-3 871211 BC8102	S RB-3-3 871210 BC8090	S RB-4-3 871210 BC8096	S RB-5-3 871209 BC8076	S RB-6-3 871209 BC8072		
iscellaneous Parameters									
Cyanide, Total	mg/kg	< .7	< .6	< 1.2	< 1.1	< .7	< .6		
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl ethyl ketone	ug/kg	760	3680	9610	ND	887	ND		
Petroleum Hydrocarbons (IR)	mg/kg	440	1010	5780	51	130	61		
Phenolics, Total	mg/kg	3.5	3.2	12	< .2	.4	< .1		
Styrene	ug/kg	212	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	1480	3510	ND	ND	3500	120		
o+p-Xylenes	ug/kg	634	2350	ND	ND	2370	78.7		

001468

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

SAMPLES WITHIN THE CLAY

(REORGANIZATION OF PRIOR
SOIL SAMPLE DATA SUMMARIES)

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
riority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	ND	ND	ND	ND	ND	6720		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	333000	165000	5530	5410	ND	4360		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	698		
1,2-Dichloroethane	ug/kg	69900	52700	ND	ND	ND	3700		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	ND	ND	BMDL	BMDL	BMDL	BMDL		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	10100	2210	29100	44400	11600	3860		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	ND	ND	37800	27400	8760	16300		
Toluene	ug/kg	BMDL	BMDL	24500	19600	4610	6270		
1,2-Trans-dichloroethylene	ug/kg	ND	ND	6580	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	5520		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	26200	22000	107000	142000	47500	30900		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

001470

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069		
riority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	-	ND	-	238		
2,4-Dichlorophenol	ug/kg	ND	ND	-	ND	-	ND		
2,4-Dimethylphenol	ug/kg	ND	ND	-	ND	-	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	-	ND	-	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	-	ND	-	ND		
2-Nitrophenol	ug/kg	ND	ND	-	ND	-	ND		
4-Nitrophenol	ug/kg	ND	ND	-	ND	-	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	-	ND	-	ND		
Pentachlorophenol	ug/kg	ND	ND	-	ND	-	ND		
Phenol	ug/kg	ND	ND	-	ND	-	ND		
2,4,6-Trichlorophenol	ug/kg	ND	ND	-	ND	-	ND		
riority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	-	ND	-	ND		
Acenaphthylene	ug/kg	ND	ND	-	ND	-	ND		
Anthracene	ug/kg	ND	ND	-	ND	-	ND		
Benzidine	ug/kg	ND	ND	-	ND	-	ND		
Benzo(a)anthracene	ug/kg	ND	ND	-	ND	-	ND		
Benzo(a)pyrene	ug/kg	ND	ND	-	ND	-	ND		
Benzo(b)fluoranthene	ug/kg	ND	ND	-	ND	-	ND		
Benzo(ghi)perylene	ug/kg	ND	ND	-	ND	-	ND		
Benzo(k)fluoranthene	ug/kg	ND	ND	-	ND	-	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	-	ND	-	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	-	ND	-	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	-	ND	-	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	-	ND	-	BMDL		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	-	ND	-	ND		
Butyl benzyl phthalate	ug/kg	ND	ND	-	ND	-	ND		
2-Chloronaphthalene	ug/kg	ND	ND	-	ND	-	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	-	ND	-	ND		
Chrysene	ug/kg	ND	ND	-	ND	-	ND		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	-	ND	-	ND		
1,2-Dichlorobenzene	ug/kg	ND	ND	-	107	-	465		

001471

ootnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	RMW-2D-4 871208 BC8064	RMW-2D-5 871208 BC8065	RMW-5D-4 871208 BC8066	RMW-5D-5 871208 BC8067	RMW-5D-6 871208 BC8068	RMW-5D-7 871208 BC8069		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	-	ND	-	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	-	ND	-	ND		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	-	ND	-	ND		
Diethyl phthalate	ug/kg	ND	ND	-	BMDL	-	BMDL		
Dimethyl phthalate	ug/kg	ND	ND	-	ND	-	ND		
Di-n-butyl phthalate	ug/kg	ND	ND	-	ND	-	ND		
2,4-Dinitrotoluene	ug/kg	ND	ND	-	ND	-	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	-	ND	-	ND		
Di-n-octyl phthalate	ug/kg	ND	ND	-	ND	-	ND		
1,2-Diphenylhydrazine	ug/kg	ND	ND	-	ND	-	ND		
Fluoranthene	ug/kg	ND	ND	-	ND	-	ND		
Fluorene	ug/kg	ND	ND	-	ND	-	ND		
Hexachlorobenzene	ug/kg	ND	ND	-	ND	-	ND		
Hexachlorobutadiene	ug/kg	ND	ND	-	ND	-	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	-	ND	-	ND		
Hexachloroethane	ug/kg	ND	ND	-	ND	-	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	-	ND	-	ND		
Isophorone	ug/kg	ND	ND	-	151	-	ND		
Naphthalene	ug/kg	ND	ND	-	BMDL	-	BMDL		
Nitrobenzene	ug/kg	ND	ND	-	253	-	718		
N-Nitrosodimethylamine	ug/kg	ND	ND	-	ND	-	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	-	ND	-	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	-	ND	-	ND		
Phenanthrene	ug/kg	ND	ND	-	ND	-	ND		
Pyrene	ug/kg	ND	ND	-	ND	-	ND		
1,2,4-Trichlorobenzene	ug/kg	ND	ND	-	ND	-	ND		
Metals Analysis Data									
Antimony	ug/kg	ND	ND	-	BMDL	-	BMDL		
Arsenic	ug/kg	BMDL	BMDL	-	2000	-	3100		
Beryllium	ug/kg	1200	590	-	1200	-	1100		
Cadmium	ug/kg	280	ND	-	BMDL	-	BMDL		
Chromium	ug/kg	33000	17000	-	33000	-	29000		
Copper	ug/kg	39000	15000	-	35000	-	30000		
Lead	ug/kg	11000	BMDL	-	10000	-	11000		
Mercury	ug/kg	ND	ND	-	BMDL	-	BMDL		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001472

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

ETC Sample No.	Company	Facility	Sample Point	Date
See Below	DAMES & MOORE	DMSCPRIFS	See Below	

Parameters	Units	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	35000	18000	-	36000	-	32000		
Selenium	ug/kg	ND	ND	-	ND	-	ND		
Silver	ug/kg	ND	ND	-	BMDL	-	BMDL		
Thallium	ug/kg	ND	ND	-	ND	-	ND		
Zinc	ug/kg	86000	42000	-	83000	-	74000		
roclors by GC									
Aroclor 1242	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1254	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1260	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1248	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1232	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1221	ug/kg	ND	ND	-	ND	-	ND		
Aroclor 1016	ug/kg	ND	ND	-	ND	-	ND		
esticides by GC									
Aldrin	ug/kg	ND	ND	-	ND	-	ND		
Alpha-BHC	ug/kg	ND	ND	-	ND	-	ND		
Beta-BHC	ug/kg	ND	ND	-	ND	-	ND		
Gamma-BHC	ug/kg	ND	ND	-	ND	-	ND		
Delta-BHC	ug/kg	ND	ND	-	ND	-	ND		
Chlordane	ug/kg	ND	ND	-	ND	-	ND		
4,4'-DDT	ug/kg	ND	ND	-	ND	-	ND		
4,4'-DDE	ug/kg	ND	ND	-	ND	-	ND		
4,4'-DDD	ug/kg	ND	ND	-	ND	-	ND		
Dieldrin	ug/kg	ND	ND	-	ND	-	ND		
Endosulfan I	ug/kg	ND	ND	-	ND	-	ND		
Endosulfan II	ug/kg	ND	ND	-	ND	-	ND		
Endosulfan sulfate	ug/kg	ND	ND	-	ND	-	ND		
Endrin	ug/kg	ND	ND	-	ND	-	ND		
Endrin aldehyde	ug/kg	ND	ND	-	ND	-	ND		
Heptachlor	ug/kg	ND	ND	-	ND	-	ND		
Heptachlor epoxide	ug/kg	ND	ND	-	ND	-	ND		
Toxaphene	ug/kg	ND	ND	-	ND	-	ND		

001473

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RMW-2D-4 871208 BC8064	S RMW-2D-5 871208 BC8065	S RMW-5D-4 871208 BC8066	S RMW-5D-5 871208 BC8067	S RMW-5D-6 871208 BC8068	S RMW-5D-7 871208 BC8069		
Sample Points, Sampling Dates, and ETC Sample No.'s									
Miscellaneous Parameters									
Cyanide, Total	mg/kg	< .6	< .6	-	< .7	-	< .7		
Methoxychlor	ug/kg	ND	ND	-	ND	-	ND		
Methyl ethyl ketone	ug/kg	ND	ND	ND	ND	ND	7770		
Petroleum Hydrocarbons (IR)	mg/kg	102	52	-	94	-	82		
Phenolics, Total	mg/kg	< .1	< .1	-	1.4	-	1.6		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	ND	ND	11300	9610	3850	2070		
o+p-Xylenes	ug/kg	ND	ND	7470	BMDL	ND	1450		

001474

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-7D-4 871207 BC7200	S RMW-7D-4 871207 BC7199	S RMW-7D-5 871207 BC7201	S RMW-7D-6 871207 BC7205	S RMW-7D-7 871207 BC7206	S RMW-7D-8 871207 BC7207		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	BMDL	52300	ND	ND	ND	ND		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	47500	102000	BMDL	BMDL	ND	ND		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	79200	124000	18100	84800	45800	238		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	366000	785000	131000	19100	3310	59.8		
Toluene	ug/kg	308000	715000	27800	13200	6370	27.6		
1,2-Trans-dichloroethylene	ug/kg	ND	38200	ND	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	140000	287000	ND	ND	ND	23.9		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Trichloroethylene	ug/kg	736000	1560000	38800	107000	51700	192		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

001475

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204		
Nickel	ug/kg	-	-	37000	-	-	22000		
Selenium	ug/kg	-	-	ND	-	-	ND		
Silver	ug/kg	-	-	ND	-	-	ND		
Thallium	ug/kg	-	-	ND	-	-	ND		
Zinc	ug/kg	-	-	87000	-	-	53000		
Aroclors by GC									
Aroclor 1242	ug/kg	-	-	110	-	-	82		
Aroclor 1254	ug/kg	-	-	ND	-	-	ND		
Aroclor 1260	ug/kg	-	-	ND	-	-	ND		
Aroclor 1248	ug/kg	-	-	ND	-	-	ND		
Aroclor 1232	ug/kg	-	-	ND	-	-	ND		
Aroclor 1221	ug/kg	-	-	ND	-	-	ND		
Aroclor 1016	ug/kg	-	-	ND	-	-	ND		
Pesticides by GC									
Aldrin	ug/kg	-	-	ND	-	-	ND		
Alpha-BHC	ug/kg	-	-	ND	-	-	ND		
Beta-BHC	ug/kg	-	-	ND	-	-	ND		
Gamma-BHC	ug/kg	-	-	ND	-	-	ND		
Delta-BHC	ug/kg	-	-	ND	-	-	ND		
Chlordane	ug/kg	-	-	ND	-	-	ND		
4,4'-DDT	ug/kg	-	-	ND	-	-	ND		
4,4'-DDE	ug/kg	-	-	ND	-	-	ND		
4,4'-DDD	ug/kg	-	-	ND	-	-	ND		
Dieldrin	ug/kg	-	-	ND	-	-	ND		
Endosulfan I	ug/kg	-	-	ND	-	-	ND		
Endosulfan II	ug/kg	-	-	ND	-	-	ND		
Endosulfan sulfate	ug/kg	-	-	ND	-	-	ND		
Endrin	ug/kg	-	-	ND	-	-	ND		
Endrin aldehyde	ug/kg	-	-	ND	-	-	ND		
Heptachlor	ug/kg	-	-	ND	-	-	IND		
Heptachlor epoxide	ug/kg	-	-	ND	-	-	ND		
Toxaphene	ug/kg	-	-	ND	-	-	ND		

001476

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Miscellaneous Parameters									
Cyanide, Total	mg/kg	-	-	< .76	-	-	< .58		
Methoxychlor	ug/kg	-	-	ND	-	-	ND		
Methyl ethyl ketone	ug/kg	120	29.8	224	BMDL	494	52.5		
Petroleum Hydrocarbons (IR)	mg/kg	-	-	< 38	-	-	< 29		
Phenolics, Total	mg/kg	-	-	< .15	-	-	< .12		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	ND	ND	50.1	BMDL	BMDL	14.9		
o+p-Xylenes	ug/kg	ND	ND	17.4	ND	BMDL	ND		

001477

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

GROUND WATER SAMPLES
FROM SHALLOW (WATER TABLE) AQUIFER

JULY 1987 AND DECEMBER 1987

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	GW-1S 870723 BA8182	GW-1S 870723 BA8192	GW-1S 871221 BC9319	GW-1S 871221 BC9337	GW-2S 870723 BA8183	GW-2S 870723 BA8193	GW-2S 871221 BC9320	GW-2S 871221 BC9338
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	-	ND	-	ND	-	ND	-
Acrylonitrile	ug/l	ND	-	ND	-	ND	-	ND	-
Benzene	ug/l	5060	-	5630	-	6830	-	5450	-
bis(Chloromethyl)ether	ug/l	ND	-	ND	-	ND	-	ND	-
Bromoform	ug/l	ND	-	ND	-	ND	-	ND	-
Carbon tetrachloride	ug/l	ND	-	ND	-	ND	-	ND	-
Chlorobenzene	ug/l	ND	-	BMDL	-	6560	-	BMDL	-
Chlorodibromomethane	ug/l	ND	-	ND	-	ND	-	ND	-
Chloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
2-Chloroethylvinyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Chloroform	ug/l	ND	-	ND	-	605	-	ND	-
Dichlorobromomethane	ug/l	ND	-	ND	-	ND	-	ND	-
Dichlorodifluoromethane	ug/l	ND	-	ND	-	ND	-	ND	-
1,1-Dichloroethane	ug/l	ND	-	BMDL	-	7510	-	ND	-
1,2-Dichloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
1,1-Dichloroethylene	ug/l	ND	-	ND	-	ND	-	400	-
1,2-Dichloropropane	ug/l	ND	-	ND	-	ND	-	ND	-
cis-1,3-Dichloropropylene	ug/l	ND	-	ND	-	ND	-	ND	-
Ethylbenzene	ug/l	3900	-	3570	-	BMDL	-	3340	-
Methyl bromide	ug/l	ND	-	ND	-	ND	-	ND	-
Methyl chloride	ug/l	ND	-	ND	-	ND	-	ND	-
Methylene chloride	ug/l	ND	-	ND	-	3260	-	ND	-
1,1,2,2-Tetrachloroethane	ug/l	3050	-	7350	-	ND	-	7080	-
Tetrachloroethylene	ug/l	ND	-	ND	-	ND	-	ND	-
Toluene	ug/l	15000	-	12100	-	26500	-	11700	-
1,2-Trans-dichloroethylene	ug/l	32500	-	31100	-	21700	-	30000	-
1,1,1-Trichloroethane	ug/l	ND	-	ND	-	12300	-	ND	-
1,1,2-Trichloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
Trichloroethylene	ug/l	ND	-	433	-	15600	-	ND	-
Trichlorofluoromethane	ug/l	ND	-	ND	-	ND	-	ND	-
Vinyl chloride	ug/l	6810	-	7290	-	2240	-	6800	-
trans-1,3-Dichloropropylene	ug/l	ND	-	ND	-	ND	-	ND	-

001479

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	W GW-1S 870723 BA8182	W GW-1S 870723 BA8192	W GW-1S 871221 BC9319	W GW-1S 871221 BC9337	W GW-2S 870723 BA8183	W GW-2S 870723 BA8193	W GW-2S 871221 BC9320	W GW-2S 871221 BC9338
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	-	ND	-	ND	-	14.3	-
2,4-Dichlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dimethylphenol	ug/l	189	-	4.05	-	ND	-	191	-
4,6-Dinitro-o-cresol	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dinitrophenol	ug/l	ND	-	ND	-	ND	-	ND	-
2-Nitrophenol	ug/l	ND	-	4.73	-	ND	-	ND	-
4-Nitrophenol	ug/l	ND	-	ND	-	ND	-	ND	-
p-Chloro-m-cresol	ug/l	ND	-	ND	-	ND	-	ND	-
Pentachlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
Phenol	ug/l	182	-	15.2	-	3150	-	6770	-
2,4,6-Trichlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	BMDL	-	ND	-	ND	-	ND	-
Acenaphthylene	ug/l	ND	-	ND	-	ND	-	ND	-
Anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzidine	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(a)anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(a)pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(b)fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(ghi)perylene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(k)fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Chloroethoxy)methane	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Chloroethyl) ether	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Chloroisopropyl)ether	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Ethylhexyl)phthalate	ug/l	ND	-	BMDL	-	ND	-	BMDL	-
4-Bromophenyl phenyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Butyl benzyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
2-Chloronaphthalene	ug/l	ND	-	ND	-	ND	-	ND	-
4-Chlorophenyl phenyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Chrysene	ug/l	ND	-	ND	-	ND	-	ND	-
Dibenzo(a,h)anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
1,2-Dichlorobenzene	ug/l	57.4	-	50.1	-	ND	-	ND	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/23/88
PAGE: 3

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	W GW-1S 870723 BA8182	W GW-1S 870723 BA8192	W GW-1S 871221 BC9319	W GW-1S 871221 BC9337	W GW-2S 870723 BA8183	W GW-2S 870723 BA8193	W GW-2S 871221 BC9320	W GW-2S 871221 BC9338
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
1,4-Dichlorobenzene	ug/l	BMDL	-	BMDL	-	ND	-	ND	-
3,3'-Dichlorobenzidine	ug/l	ND	-	ND	-	ND	-	ND	-
Diethyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
Dimethyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
Di-n-butyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dinitrotoluene	ug/l	ND	-	ND	-	ND	-	ND	-
2,6-Dinitrotoluene	ug/l	ND	-	ND	-	ND	-	ND	-
Di-n-octyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
1,2-Diphenylhydrazine	ug/l	ND	-	ND	-	ND	-	ND	-
Fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
Fluorene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorobutadiene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorocyclopentadiene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
Indeno(1,2,3-c,d)pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
Isophorone	ug/l	ND	-	ND	-	ND	-	115	-
Naphthalene	ug/l	8.46	-	5.10	-	23.9	-	24.6	-
Nitrobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodimethylamine	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodi-n-propylamine	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodiphenylamine	ug/l	ND	-	ND	-	ND	-	ND	-
Phenanthrene	ug/l	BMDL	-	ND	-	ND	-	ND	-
Pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
1,2,4-Trichlorobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
Metals Analysis Data									
Antimony	ug/l	-	ND	ND	-	-	ND	ND	-
Arsenic	ug/l	-	21	1600	-	-	190	120	-
Beryllium	ug/l	-	ND	1.3	-	-	ND	.75	-
Cadmium	ug/l	-	BMDL	BMDL	-	-	ND	ND	-
Chromium	ug/l	-	BMDL	BMDL	-	-	ND	BMDL	-
Copper	ug/l	-	25	35	-	-	BMDL	24	-
Lead	ug/l	-	ND	BMDL	-	-	ND	BMDL	-
Mercury	ug/l	-	ND	ND	-	-	ND	ND	-

Footnotes: BMDL = Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001481

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	W GW-1S 870723 BA8182	W GW-1S 870723 BA8192	W GW-1S 871221 BC9319	W GW-1S 871221 BC9337	W GW-2S 870723 BA8183	W GW-2S 870723 BA8193	W GW-2S 871221 BC9320	W GW-2S 871221 BC9338
		Sample Points, Sampling Dates, and ETC Sample No's							
Nickel	ug/l	-	150	80	-	-	45	54	-
Selenium	ug/l	-	ND	ND	-	-	ND	BMDL	-
Silver	ug/l	-	ND	ND	-	-	110	ND	-
Thallium	ug/l	-	ND	ND	-	-	ND	ND	-
Zinc	ug/l	-	150	54	-	-	BMDL	27	-
Field Parameters									
pH (Field)	std	6.92	-	6.23	-	8.93	-	6.93	-
Specific Conductance (Field)	um/cm	-	-	3620	-	-	-	5620	-
Aroclors by GC									
Aroclor 1242	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1254	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1260	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1248	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1232	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1221	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1016	ug/l	ND	-	ND	-	ND	-	ND	-
Pesticides by GC									
Aldrin	ug/l	ND	-	ND	-	ND	-	ND	-
Alpha-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Beta-BHC	ug/l	ND	-	.56	-	ND	-	ND	-
Gamma-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Delta-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Chlordane	ug/l	ND	-	ND	-	ND	-	ND	-
4,4'-DDT	ug/l	.369	-	ND	-	ND	-	ND	-
4,4'-DDE	ug/l	ND	-	ND	-	ND	-	ND	-
4,4'-DDD	ug/l	ND	-	ND	-	ND	-	ND	-
Dieldrin	ug/l	ND	-	ND	-	ND	-	ND	-
Endosulfan I	ug/l	ND	-	ND	-	ND	-	.25	-
Endosulfan II	ug/l	ND	-	ND	-	ND	-	ND	-
Endosulfan sulfate	ug/l	ND	-	ND	-	ND	-	ND	-
Endrin	ug/l	ND	-	ND	-	ND	-	ND	-

001482

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	W GW-1S 870723 BA8182	W GW-1S 870723 BA8192	W GW-1S 871221 BC9319	W GW-1S 871221 BC9337	W GW-2S 870723 BA8183	W GW-2S 870723 BA8193	W GW-2S 871221 BC9320	W GW-2S 871221 BC9338
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Endrin aldehyde	ug/l	ND	-	ND	-	1.02	-	ND	-
Heptachlor	ug/l	ND	-	ND	-	ND	-	ND	-
Heptachlor epoxide	ug/l	ND	-	ND	-	ND	-	ND	-
Toxaphene	ug/l	ND	-	ND	-	ND	-	ND	-
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	< 5	-	< 5	-	< 5	-	< 5	-
Alkalinity as CaCO3	mg/l	490	-	430	-	930	-	320	-
Antimony, Total	ug/l	ND	-	-	ND	BMDL	-	-	ND
Arsenic, Total	ug/l	22	-	-	BMDL	170	-	-	160
Beryllium, Total	ug/l	ND	-	-	BMDL	ND	-	-	BMDL
Cadmium, Total	ug/l	BMDL	-	-	ND	5.0	-	-	16
Carbazole	ug/l	-	-	-	-	ND	-	-	-
Chromium	ug/l	-	-	-	-	-	-	BMDL	-
Chromium, Total	ug/l	BMDL	-	-	BMDL	BMDL	-	-	BMDL
Copper, Total	ug/l	1350	-	-	1580	680	-	-	1280
Cyanide, Total	mg/l	< .025	-	< .025	-	.054	-	< .025	-
Lead, Total	ug/l	ND	-	-	ND	BMDL	-	-	ND
Mercury, Total	ug/l	.23	-	-	BMDL	ND	-	-	BMDL
Methyl ethyl ketone	ug/l	ND	-	BMDL	-	8860	-	BMDL	-
Nickel, Total	ug/l	150	-	-	83	71	-	-	56
Petroleum Hydrocarbons (IR)	mg/l	6.6	-	8.6	-	5.6	-	7.1	-
Phenolics, Total	mg/l	.925	-	.950	-	15.4	-	12.0	-
Selenium, Total	ug/l	ND	-	-	ND	ND	-	-	ND
Silver, Total	ug/l	ND	-	-	ND	ND	-	-	BMDL
Styrene	ug/l	ND	-	ND	-	ND	-	ND	-
Thallium, Total	ug/l	ND	-	-	ND	ND	-	-	ND
Zinc, Total	ug/l	150	-	-	400	160	-	-	270
m-Xylene	ug/l	20400	-	16800	-	BMDL	-	16000	-
o+p-Xylenes	ug/l	15200	-	13500	-	BMDL	-	12700	-

001483

Footnotes: BMDL = Below Method Detection Limit ND = Parameter not detected "-" = Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 02/23/8
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	W GW-3S 870724 BAB202	W GW-3S 870724 BAB205	W GW-3S 871222 BC9329	W GW-3S 871222 BC9347	W GW-3S-S 871222 BC9580			
		Sample Points, Sampling Dates, and ETC Sample No's							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	-	ND	-	-			
Acrylonitrile	ug/l	ND	-	ND	-	-			
Benzene	ug/l	ND	-	ND	-	-			
bis(Chloromethyl)ether	ug/l	ND	-	ND	-	-			
Bromoform	ug/l	ND	-	ND	-	-			
Carbon tetrachloride	ug/l	ND	-	ND	-	-			
Chlorobenzene	ug/l	ND	-	ND	-	-			
Chlorodibromomethane	ug/l	ND	-	ND	-	-			
Chloroethane	ug/l	ND	-	ND	-	-			
2-Chloroethylvinyl ether	ug/l	ND	-	ND	-	-			
Chloroform	ug/l	614000	-	595000	-	-			
Dichlorobromomethane	ug/l	ND	-	ND	-	-			
Dichlorodifluoromethane	ug/l	ND	-	ND	-	-			
1,1-Dichloroethane	ug/l	ND	-	ND	-	-			
1,2-Dichloroethane	ug/l	396000	-	473000	-	-			
1,1-Dichloroethylene	ug/l	ND	-	ND	-	-			
1,2-Dichloropropane	ug/l	ND	-	ND	-	-			
cis-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			
Ethylbenzene	ug/l	ND	-	BMDL	-	-			
Methyl bromide	ug/l	ND	-	ND	-	-			
Methyl chloride	ug/l	ND	-	ND	-	-			
Methylene chloride	ug/l	164000	-	52900	-	-			
1,1,2,2-Tetrachloroethane	ug/l	ND	-	ND	-	-			
Tetrachloroethylene	ug/l	BMDL	-	8240	-	-			
Toluene	ug/l	60000	-	90900	-	-			
1,2-Trans-dichloroethylene	ug/l	ND	-	4870	-	-			
1,1,1-Trichloroethane	ug/l	45600	-	81200	-	-			
1,1,2-Trichloroethane	ug/l	ND	-	ND	-	-			
Trichloroethylene	ug/l	135000	-	120000	-	-			
Trichlorofluoromethane	ug/l	ND	-	ND	-	-			
Vinyl chloride	ug/l	ND	-	ND	-	-			
trans-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			

001484

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	GW-3S 870724 BA8202	GW-3S 870724 BA8205	GW-3S 871222 BC9329	GW-3S 871222 BC9347	GW-3S-S 871222 BC9580			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	-	17.8	-	-			
2,4-Dichlorophenol	ug/l	235	-	463	-	-			
2,4-Dimethylphenol	ug/l	401	-	181	-	-			
4,6-Dinitro-o-cresol	ug/l	ND	-	ND	-	-			
2,4-Dinitrophenol	ug/l	ND	-	ND	-	-			
2-Nitrophenol	ug/l	ND	-	ND	-	-			
4-Nitrophenol	ug/l	ND	-	ND	-	-			
p-Chloro-m-cresol	ug/l	ND	-	ND	-	-			
Pentachlorophenol	ug/l	ND	-	ND	-	-			
Phenol	ug/l	3430	-	3320	-	-			
2,4,6-Trichlorophenol	ug/l	ND	-	ND	-	-			
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	2.89	-	40.2	-	-			
Acenaphthylene	ug/l	6.33	-	73.7	-	-			
Anthracene	ug/l	ND	-	126	-	-			
Benzidine	ug/l	ND	-	ND	-	-			
Benzo(a)anthracene	ug/l	ND	-	BMDL	-	-			
Benzo(a)pyrene	ug/l	ND	-	90.4	-	-			
Benzo(b)fluoranthene	ug/l	ND	-	141	-	-			
Benzo(ghi)perylene	ug/l	ND	-	BMDL	-	-			
Benzo(k)fluoranthene	ug/l	ND	-	ND	-	-			
bis(2-Chloroethoxy)methane	ug/l	ND	-	ND	-	-			
bis(2-Chloroethyl) ether	ug/l	1260	-	1390	-	-			
bis(2-Chloroisopropyl)ether	ug/l	ND	-	ND	-	-			
bis(2-Ethylhexyl)phthalate	ug/l	BMDL	-	174	-	-			
4-Bromophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Butyl benzyl phthalate	ug/l	ND	-	ND	-	-			
2-Chloronaphthalene	ug/l	BMDL	-	BMDL	-	-			
4-Chlorophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Chrysene	ug/l	ND	-	87.9	-	-			
Dibenzo(a,h)anthracene	ug/l	ND	-	ND	-	-			
1,2-Dichlorobenzene	ug/l	23.9	-	165	-	-			

001485

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	W GW-3S 870724 BAB202	W GW-3S 870724 BAB205	W GW-3S 871222 BC9329	W GW-3S 871222 BC9347	W GW-3S-S 871222 BC9580			
1,3-Dichlorobenzene	ug/l	ND	-	ND	-	-			
1,4-Dichlorobenzene	ug/l	ND	-	ND	-	-			
3,3'-Dichlorobenzidine	ug/l	ND	-	ND	-	-			
Diethyl phthalate	ug/l	15.2	-	ND	-	-			
Dimethyl phthalate	ug/l	ND	-	ND	-	-			
Di-n-butyl phthalate	ug/l	BMDL	-	318	-	-			
2,4-Dinitrotoluene	ug/l	ND	-	ND	-	-			
2,6-Dinitrotoluene	ug/l	ND	-	ND	-	-			
Di-n-octyl phthalate	ug/l	ND	-	ND	-	-			
1,2-Diphenylhydrazine	ug/l	ND	-	ND	-	-			
Fluoranthene	ug/l	3.72	-	266	-	-			
Fluorene	ug/l	6.49	-	133	-	-			
Hexachlorobenzene	ug/l	ND	-	ND	-	-			
Hexachlorobutadiene	ug/l	ND	-	ND	-	-			
Hexachlorocyclopentadiene	ug/l	ND	-	ND	-	-			
Hexachloroethane	ug/l	ND	-	ND	-	-			
Indeno(1,2,3-c,d)pyrene	ug/l	ND	-	60.2	-	-			
Isophorone	ug/l	8450	-	4000	-	-			
Naphthalene	ug/l	248	-	1220	-	-			
Nitrobenzene	ug/l	57900	-	57900	-	-			
N-Nitrosodimethylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodi-n-propylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodiphenylamine	ug/l	ND	-	ND	-	-			
Phenanthrene	ug/l	11.2	-	620	-	-			
Pyrene	ug/l	ND	-	228	-	-			
1,2,4-Trichlorobenzene	ug/l	ND	-	ND	-	-			
Metals Analysis Data									
Antimony	ug/l	-	ND	ND	-	-			
Arsenic	ug/l	-	BMDL	BMDL	-	-			
Beryllium	ug/l	-	ND	BMDL	-	-			
Cadmium	ug/l	-	ND	ND	-	-			
Chromium	ug/l	-	BMDL	BMDL	-	-			
Copper	ug/l	-	15	50	-	-			
Lead	ug/l	-	ND	ND	-	-			
Mercury	ug/l	-	BMDL	BMDL	-	-			

OC1486

Footnotes: BMDL-Below Method Detection Limit ND-Parameter not detected "-"-Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-3S 870724 BA8202	W GW-3S 870724 BA8205	W GW-3S 871222 BC9329	W GW-3S 871222 BC9347	W GW-3S-S 871222 BC9580			
Nickel	ug/l	-	22	BMDL	-	-			
Selenium	ug/l	-	BMDL	BMDL	-	-			
Silver	ug/l	-	ND	ND	-	-			
Thallium	ug/l	-	ND	ND	-	-			
Zinc	ug/l	-	690	140	-	-			
Field Parameters									
pH (Field)	std	6.26	-	6.28	-	-			
Specific Conductance (Field)	um/cm	-	-	1839	-	-			
Aroclors by GC									
Aroclor 1242	ug/l	116	-	17000	-	8800			
Aroclor 1254	ug/l	ND	-	ND	-	ND			
Aroclor 1260	ug/l	ND	-	ND	-	ND			
Aroclor 1248	ug/l	ND	-	ND	-	ND			
Aroclor 1232	ug/l	ND	-	ND	-	ND			
Aroclor 1221	ug/l	ND	-	ND	-	ND			
Aroclor 1016	ug/l	ND	-	ND	-	ND			
Pesticides by GC									
Aldrin	ug/l	ND	-	ND	-	-			
Alpha-BHC	ug/l	ND	-	ND	-	-			
Beta-BHC	ug/l	ND	-	ND	-	-			
Gamma-BHC	ug/l	ND	-	ND	-	-			
Delta-BHC	ug/l	ND	-	ND	-	-			
Chlordane	ug/l	ND	-	ND	-	-			
4,4'-DDT	ug/l	ND	-	ND	-	-			
4,4'-DDE	ug/l	ND	-	ND	-	-			
4,4'-DDD	ug/l	ND	-	ND	-	-			
Dieldrin	ug/l	ND	-	ND	-	-			
Endosulfan I	ug/l	ND	-	ND	-	-			
Endosulfan II	ug/l	ND	-	ND	-	-			
Endosulfan sulfate	ug/l	ND	-	ND	-	-			
Endrin	ug/l	ND	-	ND	-	-			

001487

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below ETC Sample No.	DAMES & MOORE Company	DMSCPRIFS Facility	See Below Sample Point	Date

Parameters	Units	W GW-3S 870724 BA8202	W GW-3S 870724 BA8205	W GW-3S 871222 BC9329	W GW-3S 871222 BC9347	W GW-3S-S 871222 BC9580			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Endrin aldehyde	ug/l	ND	-	ND	-	-			
Heptachlor	ug/l	ND	-	ND	-	-			
Heptachlor epoxide	ug/l	ND	-	ND	-	-			
Toxaphene	ug/l	ND	-	ND	-	-			
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	<5	-	<5	-	-			
Alkalinity as CaCO3	mg/l	470	-	370	-	-			
Antimony, Total	ug/l	ND	-	-	BMDL	-			
Arsenic, Total	ug/l	24	-	-	43	-			
Beryllium, Total	ug/l	.74	-	-	4.3	-			
Cadmium, Total	ug/l	BMDL	-	-	14	-			
Chromium, Total	ug/l	120	-	-	350	-			
Copper, Total	ug/l	210	-	-	1370	-			
Cyanide, Total	mg/l	.380	-	.314	-	-			
Lead, Total	ug/l	470	-	-	1500	-			
Mercury, Total	ug/l	1.3	-	-	1.8	-			
Methyl ethyl ketone	ug/l	76000	-	ND	-	-			
Nickel, Total	ug/l	71	-	-	180	-			
Petroleum Hydrocarbons (IR)	mg/l	2270	-	40.3	-	-			
Phenolics, Total	mg/l	8.1	-	7.2	-	-			
Selenium, Total	ug/l	BMDL	-	-	ND	-			
Silver, Total	ug/l	ND	-	-	ND	-			
Styrene	ug/l	BMDL	-	ND	-	-			
Thallium, Total	ug/l	ND	-	-	ND	-			
Zinc, Total	ug/l	2080	-	-	2970	-			
m-Xylene	ug/l	ND	-	BMDL	-	-			
o+p-Xylenes	ug/l	ND	-	BMDL	-	-			

001488

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No's*							
		W GW-4S 870724 BA8184	W GW-4S 870724 BA8194	W GW-4S 871221 BC9321	W GW-4S 871221 BC9339	W GW-5S 870724 BA8189	W GW-5S 870724 BA8199	W GW-5S 871221 BC9322	W GW-5S 871221 BC9340
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	-	ND	-	ND	-	ND	-
Acrylonitrile	ug/l	ND	-	ND	-	ND	-	ND	-
Benzene	ug/l	985	-	7270	-	673	-	568	-
bis(Chloromethyl)ether	ug/l	ND	-	ND	-	ND	-	ND	-
Bromoform	ug/l	ND	-	ND	-	ND	-	ND	-
Carbon tetrachloride	ug/l	ND	-	ND	-	ND	-	ND	-
Chlorobenzene	ug/l	BMDL	-	4020	-	BMDL	-	121	-
Chlorodibromomethane	ug/l	ND	-	ND	-	ND	-	ND	-
Chloroethane	ug/l	2420	-	ND	-	ND	-	ND	-
2-Chloroethylvinyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Chloroform	ug/l	ND	-	ND	-	ND	-	ND	-
Dichlorobromomethane	ug/l	ND	-	ND	-	ND	-	ND	-
Dichlorodifluoromethane	ug/l	ND	-	ND	-	ND	-	ND	-
1,1-Dichloroethane	ug/l	1860	-	1840	-	707	-	347	-
1,2-Dichloroethane	ug/l	ND	-	ND	-	ND	-	89 8	-
1,1-Dichloroethylene	ug/l	ND	-	ND	-	ND	-	ND	-
1,2-Dichloropropane	ug/l	ND	-	ND	-	ND	-	ND	-
cis-1,3-Dichloropropylene	ug/l	ND	-	ND	-	ND	-	ND	-
Ethylbenzene	ug/l	450	-	BMDL	-	BMDL	-	471	-
Methyl bromide	ug/l	ND	-	ND	-	ND	-	ND	-
Methyl chloride	ug/l	ND	-	ND	-	ND	-	ND	-
Methylene chloride	ug/l	5080	-	1460	-	447	-	ND	-
1,1,2,2-Tetrachloroethane	ug/l	ND	-	BMDL	-	ND	-	116	-
Tetrachloroethylene	ug/l	ND	-	BMDL	-	ND	-	ND	-
Toluene	ug/l	18100	-	26300	-	8610	-	5020	-
1,2-Trans-dichloroethylene	ug/l	1370	-	7010	-	8330	-	2440	-
1,1,1-Trichloroethane	ug/l	ND	-	931	-	ND	-	ND	-
1,1,2-Trichloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
Trichloroethylene	ug/l	ND	-	3830	-	ND	-	ND	-
Trichlorofluoromethane	ug/l	ND	-	ND	-	ND	-	ND	-
Vinyl chloride	ug/l	6060	-	ND	-	3510	-	1540	-
trans-1,3-Dichloropropylene	ug/l	ND	-	ND	-	ND	-	ND	-

001489

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No's*							
		W GW-4S 870724 BA8184	W GW-4S 870724 BA8194	W GW-4S 871221 BC9321	W GW-4S 871221 BC9339	W GW-5S 870724 BA8189	W GW-5S 870724 BA8199	W GW-5S 871221 BC9322	W GW-5S 871221 BC9340
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dichlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dimethylphenol	ug/l	97.9	-	102	-	ND	-	24.5	-
4,6-Dinitro-o-cresol	ug/l	ND	-	ND	-	ND	-	ND	-
2,4-Dinitrophenol	ug/l	ND	-	ND	-	ND	-	ND	-
2-Nitrophenol	ug/l	ND	-	ND	-	ND	-	ND	-
4-Nitrophenol	ug/l	ND	-	ND	-	ND	-	ND	-
p-Chloro-m-cresol	ug/l	ND	-	ND	-	ND	-	ND	-
Pentachlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
Phenol	ug/l	829	-	910	-	113	-	28.0	-
2,4,6-Trichlorophenol	ug/l	ND	-	ND	-	ND	-	ND	-
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	ND	-	ND	-	BMDL	-	ND	-
Acenaphthylene	ug/l	ND	-	ND	-	ND	-	ND	-
Anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzidine	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(a)anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(a)pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(b)fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(ghi)perylene	ug/l	ND	-	ND	-	ND	-	ND	-
Benzo(k)fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Chloroethoxy)methane	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Chloroethyl) ether	ug/l	ND	-	ND	-	BMDL	-	ND	-
bis(2-Chloroisopropyl)ether	ug/l	ND	-	ND	-	ND	-	ND	-
bis(2-Ethylhexyl)phthalate	ug/l	25.5	-	81.5	-	BMDL	-	BMDL	-
4-Bromophenyl phenyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Butyl benzyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
2-Chloronaphthalene	ug/l	ND	-	ND	-	ND	-	ND	-
4-Chlorophenyl phenyl ether	ug/l	ND	-	ND	-	ND	-	ND	-
Chrysene	ug/l	ND	-	ND	-	ND	-	ND	-
Dibenzo(a,h)anthracene	ug/l	ND	-	ND	-	ND	-	ND	-
1,2-Dichlorobenzene	ug/l	44.8	-	75.1	-	68.8	-	31.7	-

001490

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-4S 870724 BA8184	W GW-4S 870724 BA8194	W GW-4S 871221 BC9321	W GW-4S 871221 BC9339	W GW-5S 870724 BA8189	W GW-5S 870724 BA8199	W GW-5S 871221 BC9322	W GW-5S 871221 BC9340
1,3-Dichlorobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
1,4-Dichlorobenzene	ug/l	ND	-	ND	-	BMDL	-	ND	-
3,3'-Dichlorobenzidine	ug/l	ND	-	ND	-	ND	-	ND	-
Diethyl phthalate	ug/l	ND	-	416	-	ND	-	ND	-
Dimethyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
Di-n-butyl phthalate	ug/l	ND	-	ND	-	BMDL	-	ND	-
2,4-Dinitrotoluene	ug/l	ND	-	ND	-	ND	-	ND	-
2,6-Dinitrotoluene	ug/l	ND	-	ND	-	ND	-	ND	-
Di-n-octyl phthalate	ug/l	ND	-	ND	-	ND	-	ND	-
1,2-Diphenylhydrazine	ug/l	ND	-	ND	-	ND	-	ND	-
Fluoranthene	ug/l	ND	-	ND	-	ND	-	ND	-
Fluorene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorobutadiene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachlorocyclopentadiene	ug/l	ND	-	ND	-	ND	-	ND	-
Hexachloroethane	ug/l	ND	-	ND	-	ND	-	ND	-
Indeno(1,2,3-c,d)pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
Isophorone	ug/l	ND	-	22.2	-	ND	-	ND	-
Naphthalene	ug/l	60.7	-	65.6	-	15.6	-	7.48	-
Nitrobenzene	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodimethylamine	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodi-n-propylamine	ug/l	ND	-	ND	-	ND	-	ND	-
N-Nitrosodiphenylamine	ug/l	ND	-	ND	-	ND	-	ND	-
Phenanthrene	ug/l	ND	-	ND	-	BMDL	-	BMDL	-
Pyrene	ug/l	ND	-	ND	-	ND	-	ND	-
1,2,4-Trichlorobenzene	ug/l	ND	-	ND	-	BMDL	-	ND	-
Metals Analysis Data									
Antimony	ug/l	-	ND	ND	-	-	ND	ND	-
Arsenic	ug/l	-	37	BMDL	-	-	BMDL	BMDL	-
Beryllium	ug/l	-	ND	BMDL	-	-	ND	ND	-
Cadmium	ug/l	-	ND	ND	-	-	ND	ND	-
Chromium	ug/l	-	BMDL	BMDL	-	-	ND	BMDL	-
Copper	ug/l	-	14	19	-	-	ND	16	-
Lead	ug/l	-	ND	ND	-	-	ND	ND	-
Mercury	ug/l	-	BMDL	ND	-	-	BMDL	BMDL	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001491

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-4S 870724 BA8184	W GW-4S 870724 BA8194	W GW-4S 871221 BC9321	W GW-4S 871221 BC9339	W GW-5S 870724 BA8189	W GW-5S 870724 BA8199	W GW-5S 871221 BC9322	W GW-5S 871221 BC9340
Nickel	ug/l	-	38	43	-	-	ND	BMDL	-
Selenium	ug/l	-	ND	ND	-	-	ND	ND	-
Silver	ug/l	-	ND	BMDL	-	-	ND	ND	-
Thallium	ug/l	-	ND	ND	-	-	ND	ND	-
Zinc	ug/l	-	34	21	-	-	BMDL	29	-
Field Parameters									
pH (Field)	std	6.57	-	6.32	-	6.62	-	6.48	-
Specific Conductance (Field)	um/cm	-	-	7330	-	-	-	1621	-
Aroclors by GC									
Aroclor 1242	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1254	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1260	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1248	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1232	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1221	ug/l	ND	-	ND	-	ND	-	ND	-
Aroclor 1016	ug/l	ND	-	ND	-	ND	-	ND	-
Pesticides by GC									
Aldrin	ug/l	ND	-	ND	-	ND	-	ND	-
Alpha-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Beta-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Gamma-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Delta-BHC	ug/l	ND	-	ND	-	ND	-	ND	-
Chlordane	ug/l	ND	-	ND	-	ND	-	ND	-
4,4'-DDT	ug/l	ND	-	1.7	-	ND	-	ND	-
4,4'-DDE	ug/l	.59	-	ND	-	ND	-	ND	-
4,4'-DDD	ug/l	ND	-	ND	-	ND	-	ND	-
Dieldrin	ug/l	ND	-	ND	-	ND	-	ND	-
Endosulfan I	ug/l	ND	-	ND	-	ND	-	ND	-
Endosulfan II	ug/l	ND	-	ND	-	ND	-	ND	-
Endosulfan sulfate	ug/l	ND	-	ND	-	ND	-	ND	-
Endrin	ug/l	ND	-	.65	-	ND	-	ND	-

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001492

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	GW-4S 870724 BA8184	GW-4S 870724 BA8194	GW-4S 871221 BC9321	GW-4S 871221 BC9339	GW-5S 870724 BA8189	GW-5S 870724 BA8199	GW-5S 871221 BC9322	GW-5S 871221 BC9340
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Endrin aldehyde	ug/l	15	-	ND	-	ND	-	ND	-
Heptachlor	ug/l	ND	-	ND	-	ND	-	ND	-
Heptachlor epoxide	ug/l	ND	-	ND	-	ND	-	ND	-
Toxaphene	ug/l	ND	-	ND	-	ND	-	ND	-
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	< 5	-	< 5	-	< 5	-	< 5	-
Alkalinity as CaCO3	mg/l	760	-	700	-	400	-	420	-
Antimony	ug/l	-	-	-	-	-	-	ND	-
Antimony, Total	ug/l	ND	-	-	ND	ND	-	-	ND
Arsenic, Total	ug/l	40	-	-	3100	19	-	-	BMDL
Beryllium, Total	ug/l	ND	-	-	BMDL	1.1	-	-	BMDL
Cadmium, Total	ug/l	BMDL	-	-	ND	BMDL	-	-	BMDL
Chromium, Total	ug/l	BMDL	-	-	BMDL	90	-	-	43
Copper, Total	ug/l	650	-	-	200	130	-	-	71
Cyanide, Total	mg/l	.030	-	.032	-	.063	-	.029	-
Lead, Total	ug/l	ND	-	-	ND	140	-	-	BMDL
Mercury, Total	ug/l	.28	-	-	BMDL	4.4	-	-	.91
Methyl ethyl ketone	ug/l	ND	-	4770	-	ND	-	BMDL	-
Nickel, Total	ug/l	48	-	-	38	42	-	-	24
Petroleum Hydrocarbons (IR)	mg/l	6.4	-	6.6	-	4.3	-	3.6	-
Phenolics, Total	mg/l	2.700	-	2.28	-	.445	-	.212	-
Selenium, Total	ug/l	ND	-	-	ND	BMDL	-	-	ND
Silver, Total	ug/l	ND	-	-	ND	ND	-	-	ND
Styrene	ug/l	ND	-	ND	-	ND	-	ND	-
Thallium, Total	ug/l	ND	-	-	ND	ND	-	-	ND
Zinc, Total	ug/l	66	-	-	42	210	-	-	110
m-Xylene	ug/l	1550	-	BMDL	-	2070	-	1840	-
o+p-Xylenes	ug/l	1110	-	BMDL	-	1810	-	1750	-

001493

Footnotes: BMDL = Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	W GW-6S 870724 BA8186	W GW-6S 870724 BA8196	W GW-6S 871222 BC9328	W GW-6S 871222 BC9346	W GW-6S-S 871222 BC9579			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	-	ND	-	-			
Acrylonitrile	ug/l	ND	-	ND	-	-			
Benzene	ug/l	1190	-	777	-	-			
bis(Chloromethyl)ether	ug/l	ND	-	ND	-	-			
Bromoform	ug/l	ND	-	ND	-	-			
Carbon tetrachloride	ug/l	ND	-	ND	-	-			
Chlorobenzene	ug/l	BMDL	-	BMDL	-	-			
Chlorodibromomethane	ug/l	ND	-	ND	-	-			
Chloroethane	ug/l	ND	-	ND	-	-			
2-Chloroethylvinyl ether	ug/l	ND	-	ND	-	-			
Chloroform	ug/l	ND	-	ND	-	-			
Dichlorobromomethane	ug/l	ND	-	ND	-	-			
Dichlorodifluoromethane	ug/l	ND	-	ND	-	-			
1,1-Dichloroethane	ug/l	528	-	138	-	-			
1,2-Dichloroethane	ug/l	ND	-	ND	-	-			
1,1-Dichloroethylene	ug/l	ND	-	ND	-	-			
1,2-Dichloropropane	ug/l	ND	-	ND	-	-			
cis-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			
Ethylbenzene	ug/l	ND	-	404	-	-			
Methyl bromide	ug/l	ND	-	ND	-	-			
Methyl chloride	ug/l	ND	-	ND	-	-			
Methylene chloride	ug/l	33.5	-	34.9	-	-			
1,1,2,2-Tetrachloroethane	ug/l	ND	-	ND	-	-			
Tetrachloroethylene	ug/l	ND	-	BMDL	-	-			
Toluene	ug/l	120	-	97.2	-	-			
1,2-Trans-dichloroethylene	ug/l	326	-	1140	-	-			
1,1,1-Trichloroethane	ug/l	ND	-	ND	-	-			
1,1,2-Trichloroethane	ug/l	ND	-	ND	-	-			
Trichloroethylene	ug/l	ND	-	31.8	-	-			
Trichlorofluoromethane	ug/l	ND	-	ND	-	-			
Vinyl chloride	ug/l	248	-	245	-	-			
trans-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			

001494

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		W GW-6S 870724 BA8186	W GW-6S 870724 BA8196	W GW-6S 871222 BC9328	W GW-6S 871222 BC9346	W GW-6S-S 871222 BC9579			
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	-	ND	-	-			
2,4-Dichlorophenol	ug/l	ND	-	ND	-	-			
2,4-Dimethylphenol	ug/l	6.79	-	BMDL	-	-			
4,6-Dinitro-o-cresol	ug/l	ND	-	ND	-	-			
2,4-Dinitrophenol	ug/l	ND	-	ND	-	-			
2-Nitrophenol	ug/l	ND	-	ND	-	-			
4-Nitrophenol	ug/l	ND	-	ND	-	-			
p-Chloro-m-cresol	ug/l	ND	-	ND	-	-			
Pentachlorophenol	ug/l	ND	-	ND	-	-			
Phenol	ug/l	39.2	-	6.06	-	-			
2,4,6-Trichlorophenol	ug/l	ND	-	ND	-	-			
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	6.37	-	3.98	-	-			
Acenaphthylene	ug/l	ND	-	ND	-	-			
Anthracene	ug/l	ND	-	ND	-	-			
Benzidine	ug/l	ND	-	ND	-	-			
Benzo(a)anthracene	ug/l	ND	-	ND	-	-			
Benzo(a)pyrene	ug/l	ND	-	ND	-	-			
Benzo(b)fluoranthene	ug/l	ND	-	ND	-	-			
Benzo(ghi)perylene	ug/l	ND	-	ND	-	-			
Benzo(k)fluoranthene	ug/l	ND	-	ND	-	-			
bis(2-Chloroethoxy)methane	ug/l	ND	-	ND	-	-			
bis(2-Chloroethyl) ether	ug/l	ND	-	ND	-	-			
bis(2-Chloroisopropyl)ether	ug/l	ND	-	ND	-	-			
bis(2-Ethylhexyl)phthalate	ug/l	ND	-	BMDL	-	-			
4-Bromophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Butyl benzyl phthalate	ug/l	ND	-	ND	-	-			
2-Chloronaphthalene	ug/l	ND	-	ND	-	-			
4-Chlorophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Chrysene	ug/l	ND	-	ND	-	-			
Dibenzo(a,h)anthracene	ug/l	ND	-	ND	-	-			
1,2-Dichlorobenzene	ug/l	9.33	-	5.52	-	-			

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001495

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No's							
		W GW-6S 870724 BA8186	W GW-6S 870724 BA8196	W GW-6S 871222 BC9328	W GW-6S 871222 BC9346	W GW-6S-S 871222 BC9579			
1,3-Dichlorobenzene	ug/l	ND	-	ND	-	-			
1,4-Dichlorobenzene	ug/l	BMDL	-	BMDL	-	-			
3,3'-Dichlorobenzidine	ug/l	ND	-	ND	-	-			
Diethyl phthalate	ug/l	ND	-	ND	-	-			
Dimethyl phthalate	ug/l	ND	-	ND	-	-			
Di-n-butyl phthalate	ug/l	ND	-	ND	-	-			
2,4-Dinitrotoluene	ug/l	ND	-	ND	-	-			
2,6-Dinitrotoluene	ug/l	ND	-	ND	-	-			
Di-n-octyl phthalate	ug/l	ND	-	ND	-	-			
1,2-Diphenylhydrazine	ug/l	ND	-	ND	-	-			
Fluoranthene	ug/l	BMDL	-	BMDL	-	-			
Fluorene	ug/l	BMDL	-	BMDL	-	-			
Hexachlorobenzene	ug/l	ND	-	ND	-	-			
Hexachlorobutadiene	ug/l	ND	-	ND	-	-			
Hexachlorocyclopentadiene	ug/l	ND	-	ND	-	-			
Hexachloroethane	ug/l	ND	-	ND	-	-			
Indeno(1,2,3-c,d)pyrene	ug/l	ND	-	ND	-	-			
Isophorone	ug/l	ND	-	ND	-	-			
Naphthalene	ug/l	17.9	-	8.52	-	-			
Nitrobenzene	ug/l	ND	-	ND	-	-			
N-Nitrosodimethylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodi-n-propylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodiphenylamine	ug/l	ND	-	ND	-	-			
Phenanthrene	ug/l	BMDL	-	BMDL	-	-			
Pyrene	ug/l	ND	-	BMDL	-	-			
1,2,4-Trichlorobenzene	ug/l	ND	-	ND	-	-			
Metals Analysis Data									
Antimony	ug/l	-	ND	ND	-	-			
Arsenic	ug/l	-	BMDL	BMDL	-	-			
Beryllium	ug/l	-	ND	BMDL	-	-			
Cadmium	ug/l	-	ND	ND	-	-			
Chromium	ug/l	-	ND	ND	-	-			
Copper	ug/l	-	ND	BMDL	-	-			
Lead	ug/l	-	ND	ND	-	-			
Mercury	ug/l	-	BMDL	ND	-	-			

001496

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	W GW-6S 870724 BA8186	W GW-6S 870724 BA8196	W GW-6S 871222 BC9328	W GW-6S 871222 BC9346	W GW-6S-S 871222 BC9579			
Nickel	ug/l	-	ND	BMDL	-	-			
Selenium	ug/l	-	ND	ND	-	-			
Silver	ug/l	-	ND	ND	-	-			
Thallium	ug/l	-	ND	ND	-	-			
Zinc	ug/l	-	BMDL	22	-	-			
Field Parameters									
pH (Field)	std	6.88	-	6.67	-	-			
Specific Conductance (Field)	um/cm	-	-	1602	-	-			
Aroclors by GC									
Aroclor 1242	ug/l	1.8	-	ND	-	ND			
Aroclor 1254	ug/l	ND	-	ND	-	ND			
Aroclor 1260	ug/l	ND	-	ND	-	ND			
Aroclor 1248	ug/l	ND	-	ND	-	ND			
Aroclor 1232	ug/l	ND	-	ND	-	ND			
Aroclor 1221	ug/l	ND	-	ND	-	ND			
Aroclor 1016	ug/l	ND	-	ND	-	ND			
Pesticides by GC									
Aldrin	ug/l	ND	-	ND	-	-			
Alpha-BHC	ug/l	ND	-	ND	-	-			
Beta-BHC	ug/l	ND	-	ND	-	-			
Gamma-BHC	ug/l	ND	-	ND	-	-			
Delta-BHC	ug/l	ND	-	ND	-	-			
Chlordane	ug/l	ND	-	ND	-	-			
4,4'-DDT	ug/l	ND	-	ND	-	-			
4,4'-DDE	ug/l	ND	-	ND	-	-			
4,4'-DDD	ug/l	ND	-	ND	-	-			
Dieldrin	ug/l	ND	-	ND	-	-			
Endosulfan I	ug/l	ND	-	ND	-	-			
Endosulfan II	ug/l	ND	-	ND	-	-			
Endosulfan sulfate	ug/l	ND	-	ND	-	-			
Endrin	ug/l	ND	-	ND	-	-			

001497

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-6S 870724 BA8186	W GW-6S 870724 BA8196	W GW-6S 871222 BC9328	W GW-6S 871222 BC9346	W GW-6S-S 871222 BC9579			
Endrin aldehyde	ug/l	ND	-	ND	-	-			
Heptachlor	ug/l	ND	-	ND	-	-			
Heptachlor epoxide	ug/l	ND	-	ND	-	-			
Toxaphene	ug/l	ND	-	ND	-	-			
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	< 5	-	< 5	-	-			
Alkalinity as CaCO3	mg/l	650	-	410	-	-			
Antimony, Total	ug/l	ND	-	-	ND	-			
Arsenic, Total	ug/l	13	-	-	BMDL	-			
Beryllium, Total	ug/l	ND	-	-	ND	-			
Cadmium, Total	ug/l	BMDL	-	-	ND	-			
Chromium, Total	ug/l	39	-	-	BMDL	-			
Copper, Total	ug/l	42	-	-	15	-			
Cyanide, Total	mg/l	< .025	-	.027	-	-			
Lead, Total	ug/l	BMDL	-	-	BMDL	-			
Mercury, Total	ug/l	2.2	-	-	.36	-			
Methyl ethyl ketone	ug/l	ND	-	ND	-	-			
Nickel, Total	ug/l	BMDL	-	-	BMDL	-			
Petroleum Hydrocarbons (IR)	mg/l	< 1.0	-	< 1.0	-	-			
Phenolics, Total	mg/l	.062	-	.099	-	-			
Selenium, Total	ug/l	ND	-	-	ND	-			
Silver, Total	ug/l	ND	-	-	ND	-			
Styrene	ug/l	ND	-	ND	-	-			
Thallium, Total	ug/l	ND	-	-	ND	-			
Zinc, Total	ug/l	88	-	-	38	-			
m-Xylene	ug/l	ND	-	BMDL	-	-			
o+p-Xylenes	ug/l	257	-	304	-	-			

001498

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	*Units*	*Sample Points Sampling Dates, and ETC Sample No.'s*							
		W GW-7S 870724 BA8187	W GW-7S 870724 BA8197	W GW-7S 871223 BC9333	W GW-7S 871223 BC9351	W GW-7S-S 871223 BC9581			
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	-	ND	-	-			
Acrylonitrile	ug/l	ND	-	ND	-	-			
Benzene	ug/l	BMDL	-	ND	-	-			
bis(Chloromethyl)ether	ug/l	ND	-	ND	-	-			
Bromoform	ug/l	ND	-	ND	-	-			
Carbon tetrachloride	ug/l	ND	-	ND	-	-			
Chlorobenzene	ug/l	ND	-	ND	-	-			
Chlorodibromomethane	ug/l	ND	-	ND	-	-			
Chloroethane	ug/l	ND	-	ND	-	-			
2-Chloroethylvinyl ether	ug/l	ND	-	ND	-	-			
Chloroform	ug/l	6460	-	ND	-	-			
Dichlorobromomethane	ug/l	ND	-	ND	-	-			
Dichlorodifluoromethane	ug/l	ND	-	ND	-	-			
1,1-Dichloroethane	ug/l	11700	-	ND	-	-			
1,2-Dichloroethane	ug/l	16300	-	ND	-	-			
1,1-Dichloroethylene	ug/l	ND	-	ND	-	-			
1,2-Dichloropropane	ug/l	ND	-	ND	-	-			
cis-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			
Ethylbenzene	ug/l	BMDL	-	ND	-	-			
Methyl bromide	ug/l	ND	-	ND	-	-			
Methyl chloride	ug/l	ND	-	ND	-	-			
Methylene chloride	ug/l	200000	-	132000	-	-			
1,1,2,2-Tetrachloroethane	ug/l	ND	-	ND	-	-			
Tetrachloroethylene	ug/l	17900	-	24500	-	-			
Toluene	ug/l	48600	-	52500	-	-			
1,2-Trans-dichloroethylene	ug/l	64700	-	ND	-	-			
1,1,1-Trichloroethane	ug/l	37200	-	ND	-	-			
1,1,2-Trichloroethane	ug/l	ND	-	ND	-	-			
Trichloroethylene	ug/l	161000	-	142000	-	-			
Trichlorofluoromethane	ug/l	ND	-	ND	-	-			
Vinyl chloride	ug/l	BMDL	-	ND	-	-			
trans-1,3-Dichloropropylene	ug/l	ND	-	ND	-	-			

001499

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No's*							
		W GW-7S 870724 BA8187	W GW-7S 870724 BA8197	W GW-7S 871223 BC9333	W GW-7S 871223 BC9351	W GW-7S-S 871223 BC9581			
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	-	ND	-	-			
2,4-Dichlorophenol	ug/l	ND	-	ND	-	-			
2,4-Dimethylphenol	ug/l	736	-	1090	-	-			
4,6-Dinitro-o-cresol	ug/l	ND	-	ND	-	-			
2,4-Dinitrophenol	ug/l	ND	-	ND	-	-			
2-Nitrophenol	ug/l	ND	-	ND	-	-			
4-Nitrophenol	ug/l	ND	-	ND	-	-			
p-Chloro-m-cresol	ug/l	ND	-	ND	-	-			
Pentachlorophenol	ug/l	ND	-	ND	-	-			
Phenol	ug/l	17100	-	12500	-	-			
2,4,6-Trichlorophenol	ug/l	ND	-	ND	-	-			
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	ND	-	ND	-	-			
Acenaphthylene	ug/l	ND	-	ND	-	-			
Anthracene	ug/l	ND	-	ND	-	-			
Benzidine	ug/l	ND	-	ND	-	-			
Benzo(a)anthracene	ug/l	ND	-	ND	-	-			
Benzo(a)pyrene	ug/l	ND	-	ND	-	-			
Benzo(b)fluoranthene	ug/l	ND	-	ND	-	-			
Benzo(ghi)perylene	ug/l	ND	-	ND	-	-			
Benzo(k)fluoranthene	ug/l	ND	-	ND	-	-			
bis(2-Chloroethoxy)methane	ug/l	ND	-	ND	-	-			
bis(2-Chloroethyl) ether	ug/l	ND	-	ND	-	-			
bis(2-Chloroisopropyl)ether	ug/l	ND	-	ND	-	-			
bis(2-Ethylhexyl)phthalate	ug/l	654	-	408	-	-			
4-Bromophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Butyl benzyl phthalate	ug/l	10.4	-	ND	-	-			
2-Chloronaphthalene	ug/l	18.9	-	ND	-	-			
4-Chlorophenyl phenyl ether	ug/l	ND	-	ND	-	-			
Chrysene	ug/l	ND	-	ND	-	-			
Dibenzo(a,h)anthracene	ug/l	ND	-	ND	-	-			
1,2-Dichlorobenzene	ug/l	192	-	184	-	-			

001500

Footnotes: 1 Mil =Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	W GW-7S 870724 BA8187	W GW-7S 870724 BA8197	W GW-7S 871223 BC9333	W GW-7S 871223 BC9351	W GW-7S-S 871223 BC9581			
1,3-Dichlorobenzene	ug/l	ND	-	ND	-	-			
1,4-Dichlorobenzene	ug/l	ND	-	ND	-	-			
3,3'-Dichlorobenzidine	ug/l	ND	-	ND	-	-			
Diethyl phthalate	ug/l	ND	-	ND	-	-			
Dimethyl phthalate	ug/l	316	-	ND	-	-			
Di-n-butyl phthalate	ug/l	12.9	-	ND	-	-			
2,4-Dinitrotoluene	ug/l	ND	-	ND	-	-			
2,6-Dinitrotoluene	ug/l	ND	-	ND	-	-			
Di-n-octyl phthalate	ug/l	ND	-	ND	-	-			
1,2-Diphenylhydrazine	ug/l	ND	-	ND	-	-			
Fluoranthene	ug/l	2.53	-	ND	-	-			
Fluorene	ug/l	BMDL	-	ND	-	-			
Hexachlorobenzene	ug/l	ND	-	ND	-	-			
Hexachlorobutadiene	ug/l	ND	-	ND	-	-			
Hexachlorocyclopentadiene	ug/l	ND	-	ND	-	-			
Hexachloroethane	ug/l	ND	-	ND	-	-			
Indeno(1,2,3-c,d)pyrene	ug/l	ND	-	ND	-	-			
Isophorone	ug/l	463	-	ND	-	-			
Naphthalene	ug/l	53.0	-	ND	-	-			
Nitrobenzene	ug/l	29400	-	24900	-	-			
N-Nitrosodimethylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodi-n-propylamine	ug/l	ND	-	ND	-	-			
N-Nitrosodiphenylamine	ug/l	ND	-	ND	-	-			
Phenanthrene	ug/l	BMDL	-	ND	-	-			
Pyrene	ug/l	ND	-	ND	-	-			
1,2,4-Trichlorobenzene	ug/l	ND	-	ND	-	-			
Metals Analysis Data									
Antimony	ug/l	-	ND	ND	-	-			
Arsenic	ug/l	-	51	45	-	-			
Beryllium	ug/l	-	ND	.54	-	-			
Cadmium	ug/l	-	ND	ND	-	-			
Chromium	ug/l	-	320	420	-	-			
Copper	ug/l	-	60	BMDL	-	-			
Lead	ug/l	-	ND	ND	-	-			
Mercury	ug/l	-	.21	BMDL	-	-			

001501

Footnotes: BMDL - Below Method Detection Limit ND - Parameter not detected - - Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below ETC Sample No.	DAMES & MOORE Company	CMSCPRIFS Facility	See Below Sample Point	Date

Parameters	Units	W GW-7S 870724 BA8187	W GW-7S 870724 BA8197	W GW-7S 871223 BC9333	W GW-7S 871223 BC9351	W GW-7S-S 871223 BC9581			
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/l	-	59	73	-	-			
Selenium	ug/l	-	BMDL	BMDL	-	-			
Silver	ug/l	-	ND	ND	-	-			
Thallium	ug/l	-	ND	ND	-	-			
Zinc	ug/l	-	100	36	-	-			
Field Parameters									
pH (Field)	std	6.74	-	7.45	-	-			
Specific Conductance (Field)	um/cm	-	-	13790	-	-			
Aroclors by GC									
Aroclor 1242	ug/l	233	-	ND	-	ND			
Aroclor 1254	ug/l	ND	-	ND	-	ND			
Aroclor 1260	ug/l	ND	-	ND	-	ND			
Aroclor 1248	ug/l	ND	-	ND	-	ND			
Aroclor 1232	ug/l	ND	-	ND	-	ND			
Aroclor 1221	ug/l	ND	-	ND	-	ND			
Aroclor 1016	ug/l	ND	-	ND	-	ND			
Pesticides by GC									
Aldrin	ug/l	ND	-	ND	-	-			
Alpha-BHC	ug/l	ND	-	ND	-	-			
Beta-BHC	ug/l	ND	-	ND	-	-			
Gamma-BHC	ug/l	ND	-	ND	-	-			
Delta-BHC	ug/l	ND	-	ND	-	-			
Chlordane	ug/l	ND	-	ND	-	-			
4,4'-DDT	ug/l	ND	-	ND	-	-			
4,4'-DDE	ug/l	ND	-	ND	-	-			
4,4'-DDD	ug/l	ND	-	ND	-	-			
Dieldrin	ug/l	ND	-	BMDL	-	-			
Endosulfan I	ug/l	ND	-	ND	-	-			
Endosulfan II	ug/l	ND	-	ND	-	-			
Endosulfan sulfate	ug/l	ND	-	ND	-	-			
Endrin	ug/l	ND	-	ND	-	-			

001502

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	W GW-7S 870724 BA8187	W GW-7S 870724 BA8197	W GW-7S 871223 BC9333	W GW-7S 871223 BC9351	W GW-7S-S 871223 BC9581			
Endrin aldehyde	ug/l	ND	-	ND	-	-			
Heptachlor	ug/l	ND	-	ND	-	-			
Heptachlor epoxide	ug/l	ND	-	ND	-	-			
Toxaphene	ug/l	ND	-	ND	-	-			
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	< 5	-	< 5	-	-			
Alkalinity as CaCO3	mg/l	2390	-	3080	-	-			
Antimony, Total	ug/l	BMDL	-	-	BMDL	-			
Arsenic, Total	ug/l	55	-	-	BMDL	-			
Beryllium, Total	ug/l	ND	-	-	.85	-			
Cadmium, Total	ug/l	4.7	-	-	ND	-			
Chromium, Total	ug/l	330	-	-	450	-			
Copper, Total	ug/l	920	-	-	800	-			
Cyanide, Total	mg/l	3.64	-	4.52	-	-			
Lead, Total	ug/l	220	-	-	190	-			
Mercury, Total	ug/l	1.1	-	-	.99	-			
Methyl ethyl ketone	ug/l	2000000	-	1150000	-	-			
Nickel, Total	ug/l	72	-	-	92	-			
Petroleum Hydrocarbons (IR)	mg/l	240.0	-	45.4	-	-			
Phenolics, Total	mg/l	42.5	-	31.0	-	-			
Selenium, Total	ug/l	BMDL	-	-	ND	-			
Silver, Total	ug/l	ND	-	-	ND	-			
Styrene	ug/l	ND	-	ND	-	-			
Thallium, Total	ug/l	ND	-	-	-	-			
Zinc, Total	ug/l	330	-	-	280	-			
m-Xylene	ug/l	BMDL	-	ND	-	-			
o+p-Xylenes	ug/l	ND	-	ND	-	-			

001503

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

GROUND WATER SAMPLES
FROM TILL AQUIFER

JULY 1987 AND DECEMBER 1987

001504

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		W GW-2D 870724 BA8195	W GW-2D 870724 BA8185	W GW-2D 871223 BC9348	W GW-2D 871223 BC9349	W GW-2D 871223 BC9331	W GW-2D 871223 BC9330		
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	-	ND	-	-	ND	ND		
Acrylonitrile	ug/l	-	ND	-	-	ND	ND		
Benzene	ug/l	-	ND	-	-	ND	ND		
bis(Chloromethyl)ether	ug/l	-	ND	-	-	ND	ND		
Bromoform	ug/l	-	ND	-	-	ND	ND		
Carbon tetrachloride	ug/l	-	ND	-	-	ND	ND		
Chlorobenzene	ug/l	-	6.35	-	-	630	ND		
Chlorodibromomethane	ug/l	-	ND	-	-	ND	ND		
Chloroethane	ug/l	-	ND	-	-	ND	ND		
2-Chloroethylvinyl ether	ug/l	-	ND	-	-	ND	ND		
Chloroform	ug/l	-	28600	-	-	1240	8380		
Dichlorobromomethane	ug/l	-	ND	-	-	ND	ND		
Dichlorodifluoromethane	ug/l	-	ND	-	-	ND	ND		
1,1-Dichloroethane	ug/l	-	27.0	-	-	ND	ND		
1,2-Dichloroethane	ug/l	-	9230	-	-	ND	11200		
1,1-Dichloroethylene	ug/l	-	97.5	-	-	1220	ND		
1,2-Dichloropropane	ug/l	-	ND	-	-	ND	ND		
cis-1,3-Dichloropropylene	ug/l	-	ND	-	-	ND	ND		
Ethylbenzene	ug/l	-	ND	-	-	BMDL	ND		
Methyl bromide	ug/l	-	ND	-	-	ND	ND		
Methyl chloride	ug/l	-	ND	-	-	ND	ND		
Methylene chloride	ug/l	-	206	-	-	2140	688		
1,1,2,2-Tetrachloroethane	ug/l	-	ND	-	-	ND	ND		
Tetrachloroethylene	ug/l	-	17.7	-	-	10600	ND		
Toluene	ug/l	-	10.1	-	-	BMDL	ND		
1,2-Trans-dichloroethylene	ug/l	-	14.7	-	-	1220	ND		
1,1,1-Trichloroethane	ug/l	-	218	-	-	3450	ND		
1,1,2-Trichloroethane	ug/l	-	ND	-	-	ND	ND		
Trichloroethylene	ug/l	-	6260	-	-	34500	7810		
Trichlorofluoromethane	ug/l	-	ND	-	-	ND	ND		
Vinyl chloride	ug/l	-	54.3	-	-	ND	ND		
trans-1,3-Dichloropropylene	ug/l	-	ND	-	-	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001005

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No's*							
		W GW-2D 870724 BA8195	W GW-2D 870724 BA8185	W GW-2D 871223 BC9348	W GW-2D 871223 BC9349	W GW-2D 871223 BC9331	W GW-2D 871223 BC9330		
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	-	ND	-	-	ND	ND		
2,4-Dichlorophenol	ug/l	-	ND	-	-	ND	ND		
2,4-Dimethylphenol	ug/l	-	ND	-	-	ND	ND		
4,6-Dinitro-o-cresol	ug/l	-	ND	-	-	ND	ND		
2,4-Dinitrophenol	ug/l	-	ND	-	-	ND	ND		
2-Nitrophenol	ug/l	-	ND	-	-	ND	ND		
4-Nitrophenol	ug/l	-	ND	-	-	ND	ND		
p-Chloro-m-cresol	ug/l	-	ND	-	-	ND	ND		
Pentachlorophenol	ug/l	-	ND	-	-	ND	ND		
Phenol	ug/l	-	ND	-	-	BMDL	2.16		
2,4,6-Trichlorophenol	ug/l	-	ND	-	-	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	-	ND	-	-	ND	ND		
Acenaphthylene	ug/l	-	ND	-	-	ND	ND		
Anthracene	ug/l	-	ND	-	-	ND	ND		
Benzidine	ug/l	-	ND	-	-	ND	ND		
Benzo(a)anthracene	ug/l	-	ND	-	-	ND	ND		
Benzo(a)pyrene	ug/l	-	ND	-	-	ND	ND		
Benzo(b)fluoranthene	ug/l	-	ND	-	-	ND	ND		
Benzo(ghi)perylene	ug/l	-	ND	-	-	ND	ND		
Benzo(k)fluoranthene	ug/l	-	ND	-	-	ND	ND		
bis(2-Chloroethoxy)methane	ug/l	-	ND	-	-	ND	ND		
bis(2-Chloroethyl) ether	ug/l	-	ND	-	-	ND	ND		
bis(2-Chloroisopropyl)ether	ug/l	-	ND	-	-	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/l	-	ND	-	-	BMDL	ND		
4-Bromophenyl phenyl ether	ug/l	-	ND	-	-	ND	ND		
Butyl benzyl phthalate	ug/l	-	ND	-	-	ND	ND		
2-Chloronaphthalene	ug/l	-	ND	-	-	ND	ND		
4-Chlorophenyl phenyl ether	ug/l	-	ND	-	-	ND	ND		
Chrysene	ug/l	-	ND	-	-	ND	ND		
Dibenzo(a,h)anthracene	ug/l	-	ND	-	-	ND	ND		
1,2-Dichlorobenzene	ug/l	-	ND	-	-	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001506

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-2D 870724 BA8195	W GW-2D 870724 BA8185	W GW-2D 871223 BC9348	W GW-2D 871223 BC9349	W GW-2D 871223 BC9331	W GW-2D 871223 BC9330		
1,3-Dichlorobenzene	ug/l	-	ND	-	-	ND	ND		
1,4-Dichlorobenzene	ug/l	-	ND	-	-	ND	ND		
3,3'-Dichlorobenzidine	ug/l	-	ND	-	-	ND	ND		
Diethyl phthalate	ug/l	-	ND	-	-	ND	ND		
Dimethyl phthalate	ug/l	-	ND	-	-	ND	ND		
Di-n-butyl phthalate	ug/l	-	ND	-	-	ND	ND		
2,4-Dinitrotoluene	ug/l	-	ND	-	-	ND	ND		
2,6-Dinitrotoluene	ug/l	-	ND	-	-	ND	ND		
Di-n-octyl phthalate	ug/l	-	ND	-	-	ND	ND		
1,2-Diphenylhydrazine	ug/l	-	ND	-	-	ND	ND		
Fluoranthene	ug/l	-	ND	-	-	ND	ND		
Fluorene	ug/l	-	ND	-	-	ND	ND		
Hexachlorobenzene	ug/l	-	ND	-	-	ND	ND		
Hexachlorobutadiene	ug/l	-	ND	-	-	ND	ND		
Hexachlorocyclopentadiene	ug/l	-	ND	-	-	ND	ND		
Hexachloroethane	ug/l	-	ND	-	-	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/l	-	ND	-	-	ND	ND		
Isophorone	ug/l	-	ND	-	-	ND	ND		
Naphthalene	ug/l	-	ND	-	-	ND	ND		
Nitrobenzene	ug/l	-	ND	-	-	ND	ND		
N-Nitrosodimethylamine	ug/l	-	ND	-	-	ND	ND		
N-Nitrosodi-n-propylamine	ug/l	-	ND	-	-	ND	ND		
N-Nitrosodiphenylamine	ug/l	-	ND	-	-	ND	ND		
Phenanthrene	ug/l	-	ND	-	-	ND	ND		
Pyrene	ug/l	-	ND	-	-	ND	ND		
1,2,4-Trichlorobenzene	ug/l	-	ND	-	-	ND	ND		
Metals Analysis Data									
Antimony	ug/l	ND	-	-	-	BMDL	ND		
Arsenic	ug/l	ND	-	-	-	ND	ND		
Beryllium	ug/l	ND	-	-	-	ND	ND		
Cadmium	ug/l	ND	-	-	-	ND	ND		
Chromium	ug/l	ND	-	-	-	BMDL	ND		
Copper	ug/l	ND	-	-	-	ND	ND		
Lead	ug/l	ND	-	-	-	ND	ND		
Mercury	ug/l	BMDL	-	-	-	ND	ND		

Footnotes: BMDL = Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001502

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No's							
Parameters	*Units*	W GW-2D 870724 BA8195	W GW-2D 870724 BA8185	W GW-2D 871223 BC9348	W GW-2D 871223 BC9349	W GW-2D 871223 BC9331	W GW-2D 871223 BC9330		
Nickel	ug/l	ND	-	-	-	ND	ND		
Selenium	ug/l	ND	-	-	-	ND	ND		
Silver	ug/l	ND	-	-	-	ND	ND		
Thallium	ug/l	ND	-	-	-	ND	ND		
Zinc	ug/l	ND	-	-	-	BMDL	BMDL		
Field Parameters									
pH (Field)	std	-	10.85	-	-	11.33	11.33		
Specific Conductance (Field)	um/cm	-	-	-	-	2901	2901		
Aroclors by GC									
Aroclor 1242	ug/l	-	ND	-	-	ND	ND		
Aroclor 1254	ug/l	-	ND	-	-	ND	ND		
Aroclor 1260	ug/l	-	ND	-	-	ND	ND		
Aroclor 1248	ug/l	-	ND	-	-	ND	ND		
Aroclor 1232	ug/l	-	ND	-	-	ND	ND		
Aroclor 1221	ug/l	-	ND	-	-	ND	ND		
Aroclor 1016	ug/l	-	ND	-	-	ND	ND		
Pesticides by GC									
Aldrin	ug/l	-	ND	-	-	ND	ND		
Alpha-BHC	ug/l	-	ND	-	-	ND	ND		
Beta-BHC	ug/l	-	ND	-	-	ND	ND		
Gamma-BHC	ug/l	-	ND	-	-	ND	ND		
Delta-BHC	ug/l	-	ND	-	-	ND	ND		
Chlordane	ug/l	-	ND	-	-	ND	ND		
4,4'-DDT	ug/l	-	ND	-	-	ND	ND		
4,4'-DDE	ug/l	-	ND	-	-	ND	ND		
4,4'-DDD	ug/l	-	ND	-	-	ND	ND		
Dieldrin	ug/l	-	ND	-	-	ND	ND		
Endosulfan I	ug/l	-	ND	-	-	ND	ND		
Endosulfan II	ug/l	-	ND	-	-	ND	ND		
Endosulfan sulfate	ug/l	-	ND	-	-	ND	ND		
Endrin	ug/l	-	ND	-	-	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001508

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

ETC Sample No.	Company	Facility	Sample Point	Date
See Below	DAMES & MOORE	DMSCPRIFS	See Below	

Parameters	Units	W GW-2D 870724 BA8195	W GW-2D 870724 BA8185	W GW-2D 871223 BC9348	W GW-2D 871223 BC9349	W GW-2D 871223 BC9331	W GW-2D 871223 BC9330		
Endrin aldehyde	ug/l	-	ND	-	-	ND	ND		
Heptachlor	ug/l	-	ND	-	-	ND	ND		
Heptachlor epoxide	ug/l	-	ND	-	-	ND	ND		
Toxaphene	ug/l	-	ND	-	-	ND	ND		
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	-	< 5	-	-	< 5	< 5		
Alkalinity as CaCO3	mg/l	-	170	-	-	200	190		
Antimony, Total	ug/l	-	ND	ND	ND	-	-		
Arsenic, Total	ug/l	-	ND	ND	ND	-	-		
Beryllium, Total	ug/l	-	ND	ND	ND	-	-		
Cadmium, Total	ug/l	-	ND	ND	ND	-	-		
Chromium, Total	ug/l	-	BMDL	BMDL	BMDL	-	-		
Copper, Total	ug/l	-	19	BMDL	BMDL	-	-		
Cyanide, Total	mg/l	-	< .025	-	-	< .025	< .025		
Lead, Total	ug/l	-	ND	ND	ND	-	-		
Mercury, Total	ug/l	-	BMDL	ND	ND	-	-		
Methyl ethyl ketone	ug/l	-	ND	-	-	ND	ND		
Nickel, Total	ug/l	-	BMDL	ND	ND	-	-		
Petroleum Hydrocarbons (IR)	mg/l	-	< 1.0	-	-	< 1.0	< 1.0		
Phenolics, Total	mg/l	-	< .050	-	-	< .050	< .050		
Selenium, Total	ug/l	-	ND	ND	ND	-	-		
Silver, Total	ug/l	-	ND	ND	ND	-	-		
Styrene	ug/l	-	ND	-	-	ND	ND		
Thallium, Total	ug/l	-	ND	-	-	-	-		
Zinc, Total	ug/l	-	45	25	36	-	-		
m-Xylene	ug/l	-	ND	-	-	BMDL	ND		
o+p-Xylenes	ug/l	-	ND	-	-	BMDL	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001509

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		W GW-5D 870724 BA8201	W GW-5D 870724 BA8191	W GW-5D 871223 BC9350	W GW-5D 871223 BC9332	W GW-7D 870724 BA8198	W GW-7D 870724 BA8188	W GW-7D 871223 BC9527	W GW-7D 871223 BC9515
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	-	ND	-	ND	-	ND	-	ND
Acrylonitrile	ug/l	-	ND	-	ND	-	ND	-	ND
Benzene	ug/l	-	ND	-	ND	-	ND	-	ND
bis(Chloromethyl)ether	ug/l	-	ND	-	ND	-	ND	-	ND
Bromoform	ug/l	-	ND	-	ND	-	ND	-	ND
Carbon tetrachloride	ug/l	-	ND	-	ND	-	ND	-	ND
Chlorobenzene	ug/l	-	BMDL	-	ND	-	ND	-	ND
Chlorodibromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
2-Chloroethylvinyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroform	ug/l	-	214	-	1670	-	13.9	-	ND
Dichlorobromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Dichlorodifluoromethane	ug/l	-	ND	-	ND	-	ND	-	ND
1,1-Dichloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Dichloroethane	ug/l	-	114	-	2330	-	8.96	-	ND
1,1-Dichloroethylene	ug/l	-	313	-	ND	-	ND	-	ND
1,2-Dichloropropane	ug/l	-	ND	-	ND	-	ND	-	ND
cis-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND
Ethylbenzene	ug/l	-	BMDL	-	ND	-	ND	-	ND
Methyl bromide	ug/l	-	ND	-	ND	-	ND	-	ND
Methyl chloride	ug/l	-	ND	-	ND	-	ND	-	ND
Methylene chloride	ug/l	-	139	-	137	-	33.0	-	6.91
1,1,2,2-Tetrachloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Tetrachloroethylene	ug/l	-	996	-	ND	-	20.2	-	BMDL
Toluene	ug/l	-	ND	-	ND	-	BMDL	-	6.01
1,2-Trans-dichloroethylene	ug/l	-	190	-	ND	-	ND	-	ND
1,1,1-Trichloroethane	ug/l	-	417	-	ND	-	12.7	-	ND
1,1,2-Trichloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Trichloroethylene	ug/l	-	4520	-	1620	-	73.8	-	13.1
Trichlorofluoromethane	ug/l	-	ND	-	ND	-	BMDL	-	ND
Vinyl chloride	ug/l	-	ND	-	ND	-	ND	-	ND
trans-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND

Footnotes: BMDL=below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

001510

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	W GW-5D 870724 BA8201	W GW-5D 870724 BA8191	W GW-5D 871223 BC9350	W GW-5D 871223 BC9332	W GW-7D 870724 BA8198	W GW-7D 870724 BA8188	W GW-7D 871223 BC9527	W GW-7D 871223 BC9515
		Sample Points, Sampling Dates, and ETC Sample No's							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dichlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dimethylphenol	ug/l	-	ND	-	ND	-	ND	-	ND
4,6-Dinitro-o-cresol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dinitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2-Nitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
4-Nitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
p-Chloro-m-cresol	ug/l	-	ND	-	ND	-	ND	-	ND
Pentachlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
Phenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4,6-Trichlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	-	ND	-	ND	-	ND	-	ND
Acenaphthylene	ug/l	-	ND	-	ND	-	ND	-	ND
Anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzidine	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(a)anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(a)pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(b)fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(ghi)perylene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(k)fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroethoxy)methane	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroethyl) ether	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroisopropyl)ether	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Ethylhexyl)phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
4-Bromophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Butyl benzyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
2-Chloronaphthalene	ug/l	-	ND	-	ND	-	ND	-	ND
4-Chlorophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Chrysene	ug/l	-	ND	-	ND	-	ND	-	ND
Dibenzo(a,h)anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Dichlorobenzene	ug/l	-	5.27	-	7.46	-	ND	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	W GW-5D 870724 BA8201	W GW-5D 870724 BA8191	W GW-5D 871223 BC9350	W GW-5D 871223 BC9332	W GW-7D 870724 BA8198	W GW-7D 870724 BA8188	W GW-7D 871223 BC9527	W GW-7D 871223 BC9515
		Sample Points, Sampling Dates, and ETC Sample No's							
1,3-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
1,4-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
3,3'-Dichlorobenzidine	ug/l	-	ND	-	ND	-	ND	-	ND
Diethyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
Dimethyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
Di-n-butyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND	-	ND
2,6-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND	-	ND
Di-n-octyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Diphenylhydrazine	ug/l	-	ND	-	ND	-	ND	-	ND
Fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
Fluorene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorobutadiene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorocyclopentadiene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Indeno(1,2,3-c,d)pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
Isophorone	ug/l	-	ND	-	ND	-	ND	-	ND
Naphthalene	ug/l	-	BMDL	-	ND	-	ND	-	ND
Nitrobenzene	ug/l	-	20.9	-	23.3	-	3.31	-	ND
N-Nitrosodimethylamine	ug/l	-	ND	-	ND	-	ND	-	ND
N-Nitrosodi-n-propylamine	ug/l	-	ND	-	ND	-	ND	-	ND
N-Nitrosodiphenylamine	ug/l	-	ND	-	ND	-	ND	-	ND
Phenanthrene	ug/l	-	ND	-	ND	-	ND	-	ND
Pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
Metals Analysis Data									
Antimony	ug/l	ND	-	-	ND	ND	-	-	ND
Arsenic	ug/l	BMDL	-	-	ND	ND	-	-	ND
Beryllium	ug/l	ND	-	-	ND	ND	-	-	ND
Cadmium	ug/l	ND	-	-	ND	BMDL	-	-	ND
Chromium	ug/l	ND	-	-	ND	ND	-	-	ND
Copper	ug/l	BMDL	-	-	ND	ND	-	-	ND
Lead	ug/l	ND	-	-	ND	ND	-	-	ND
Mercury	ug/l	BMDL	-	-	BMDL	BMDL	-	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	W GW-5D 870724 BA8201	W GW-5D 870724 BA8191	W GW-5D 871223 BC9350	W GW-5D 871223 BC9332	W GW-7D 870724 BA8198	W GW-7D 870724 BA8188	W GW-7D 871223 BC9527	W GW-7D 871223 BC9515
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/l	ND	-	-	ND	ND	-	-	ND
Selenium	ug/l	ND	-	-	ND	ND	-	-	ND
Silver	ug/l	ND	-	-	ND	ND	-	-	ND
Thallium	ug/l	ND	-	-	ND	ND	-	-	-
Zinc	ug/l	BMDL	-	-	21	30	-	-	20
Field Parameters									
pH (Field)	std	-	7.88	-	8.41	-	8.49	-	6.67
Specific Conductance (Field)	um/cm	-	-	-	1423	-	-	-	737
Aroclors by GC									
Aroclor 1242	ug/l	-	BMDL	-	ND	-	ND	-	ND
Aroclor 1254	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1260	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1248	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1232	ug/l	-	ND	-	1.8	-	ND	-	ND
Aroclor 1221	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1016	ug/l	-	ND	-	ND	-	ND	-	ND
Pesticides by GC									
Aldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Alpha-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Beta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Gamma-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Delta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Chlordane	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDT	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDE	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDD	ug/l	-	ND	-	ND	-	ND	-	ND
Dieldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan I	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan II	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan sulfate	ug/l	-	ND	-	ND	-	ND	-	ND
Endrin	ug/l	-	ND	-	ND	-	ND	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

013

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	W GW-5D 870724 BA8201	W GW-5D 870724 BA8191	W GW-5D 871223 BC9350	W GW-5D 871223 BC9332	W GW-7D 870724 BA8198	W GW-7D 870724 BA8188	W GW-7D 871223 BC9527	W GW-7D 871223 BC9515
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Endrin aldehyde	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor epoxide	ug/l	-	ND	-	ND	-	ND	-	ND
Toxaphene	ug/l	-	ND	-	ND	-	ND	-	ND
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	-	< 5	-	< 5	-	< 5	-	< 5
Alkalinity as CaCO3	mg/l	-	27	-	29	-	29	-	35
Antimony, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Arsenic, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Beryllium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Cadmium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Chromium, Total	ug/l	-	ND	BMDL	-	-	BMDL	BMDL	-
Copper, Total	ug/l	-	BMDL	ND	-	-	BMDL	BMDL	-
Cyanide, Total	mg/l	-	< .025	-	< .025	-	< .025	-	< .025
Lead, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Mercury, Total	ug/l	-	BMDL	ND	-	-	BMDL	ND	-
Methyl ethyl ketone	ug/l	-	ND	-	ND	-	ND	-	ND
Nickel, Total	ug/l	-	ND	ND	-	-	BMDL	BMDL	-
Petroleum Hydrocarbons (IR)	mg/l	-	< 1.0	-	< 1.0	-	< 1.0	-	1.3
Phenolics, Total	mg/l	-	< .050	-	< .050	-	< .050	-	< .050
Selenium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Silver, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Styrene	ug/l	-	ND	-	ND	-	ND	-	ND
Thallium, Total	ug/l	-	ND	-	-	-	ND	-	-
Zinc, Total	ug/l	-	BMDL	22	-	-	39	57	-
m-Xylene	ug/l	-	ND	-	ND	-	ND	-	ND
o+p-Xylenes	ug/l	-	ND	-	ND	-	ND	-	ND

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Footnotes: BMDL - Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

SURFACE WATER SAMPLES

JULY 1987 AND DECEMBER 1987

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-1 870720 BA8096	R SW-1 870720 BA8092	R SW-1 871222 BC9342	R SW-1 871222 BC9324	R SW-2 870720 BA8097	R SW-2 870720 BA8093	R SW-2 871222 BC9343	R SW-2 871222 BC9325
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	-	ND	-	ND	-	ND	-	ND
Acrylonitrile	ug/l	-	ND	-	ND	-	ND	-	ND
Benzene	ug/l	-	ND	-	ND	-	ND	-	ND
bis(Chloromethyl)ether	ug/l	-	ND	-	ND	-	ND	-	ND
Bromoform	ug/l	-	ND	-	ND	-	ND	-	ND
Carbon tetrachloride	ug/l	-	ND	-	ND	-	ND	-	ND
Chlorobenzene	ug/l	-	ND	-	ND	-	ND	-	12.2
Chlorodibromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
2-Chloroethylvinyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroform	ug/l	-	BMDL	-	ND	-	BMDL	-	3.56
Dichlorobromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Dichlorodifluoromethane	ug/l	-	ND	-	ND	-	ND	-	ND
1,1-Dichloroethane	ug/l	-	ND	-	ND	-	BMDL	-	BMDL
1,2-Dichloroethane	ug/l	-	ND	-	ND	-	5.27	-	15.3
1,1-Dichloroethylene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Dichloropropane	ug/l	-	ND	-	ND	-	ND	-	ND
cis-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND
Ethylbenzene	ug/l	-	ND	-	ND	-	ND	-	BMDL
Methyl bromide	ug/l	-	ND	-	ND	-	ND	-	ND
Methyl chloride	ug/l	-	ND	-	ND	-	ND	-	ND
Methylene chloride	ug/l	-	17.0	-	14.9	-	ND	-	12.9
1,1,2,2-Tetrachloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Tetrachloroethylene	ug/l	-	BMDL	-	ND	-	ND	-	ND
Toluene	ug/l	-	ND	-	ND	-	ND	-	48.1
1,2-Trans-dichloroethylene	ug/l	-	3.78	-	3.91	-	6.69	-	33.3
1,1,1-Trichloroethane	ug/l	-	ND	-	ND	-	BMDL	-	5.54
1,1,2-Trichloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Trichloroethylene	ug/l	-	ND	-	ND	-	ND	-	ND
Trichlorofluoromethane	ug/l	-	BMDL	-	BMDL	-	ND	-	ND
Vinyl chloride	ug/l	-	ND	-	ND	-	ND	-	BMDL
trans-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND

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Footnotes: BMDL = Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-1 870720 BA8096	R SW-1 870720 BA8092	R SW-1 871222 BC9342	R SW-1 871222 BC9324	R SW-2 870720 BA8097	R SW-2 870720 BA8093	R SW-2 871222 BC9343	R SW-2 871222 BC9325
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	-	ND	-	ND	-	-	-	ND
2,4-Dichlorophenol	ug/l	-	ND	-	ND	-	-	-	ND
2,4-Dimethylphenol	ug/l	-	ND	-	ND	-	-	-	ND
4,6-Dinitro-o-cresol	ug/l	-	ND	-	ND	-	-	-	ND
2,4-Dinitrophenol	ug/l	-	ND	-	ND	-	-	-	ND
2-Nitrophenol	ug/l	-	ND	-	ND	-	-	-	ND
4-Nitrophenol	ug/l	-	ND	-	ND	-	-	-	ND
p-Chloro-m-cresol	ug/l	-	ND	-	ND	-	-	-	ND
Pentachlorophenol	ug/l	-	ND	-	ND	-	-	-	ND
Phenol	ug/l	-	ND	-	ND	-	-	-	ND
2,4,6-Trichlorophenol	ug/l	-	ND	-	ND	-	-	-	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	-	ND	-	ND	-	-	-	ND
Acenaphthylene	ug/l	-	ND	-	ND	-	-	-	ND
Anthracene	ug/l	-	ND	-	ND	-	-	-	ND
Benzidine	ug/l	-	ND	-	ND	-	-	-	ND
Benzo(a)anthracene	ug/l	-	ND	-	ND	-	-	-	ND
Benzo(a)pyrene	ug/l	-	ND	-	ND	-	-	-	ND
Benzo(b)fluoranthene	ug/l	-	ND	-	ND	-	-	-	ND
Benzo(ghi)perylene	ug/l	-	ND	-	ND	-	-	-	ND
Benzo(k)fluoranthene	ug/l	-	ND	-	ND	-	-	-	ND
bis(2-Chloroethoxy)methane	ug/l	-	ND	-	ND	-	-	-	ND
bis(2-Chloroethyl) ether	ug/l	-	ND	-	ND	-	-	-	ND
bis(2-Chloroisopropyl)ether	ug/l	-	ND	-	ND	-	-	-	ND
bis(2-Ethylhexyl)phthalate	ug/l	-	ND	-	ND	-	-	-	BMDL
4-Bromophenyl phenyl ether	ug/l	-	ND	-	ND	-	-	-	ND
Butyl benzyl phthalate	ug/l	-	ND	-	ND	-	-	-	ND
2-Chloronaphthalene	ug/l	-	ND	-	ND	-	-	-	ND
4-Chlorophenyl phenyl ether	ug/l	-	ND	-	ND	-	-	-	ND
Chrysene	ug/l	-	ND	-	ND	-	-	-	ND
Dibenzo(a,h)anthracene	ug/l	-	ND	-	ND	-	-	-	ND
1,2-Dichlorobenzene	ug/l	-	ND	-	BMDL	-	-	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		R SW-1 870720 BA8096	R SW-1 870720 BA8092	R SW-1 871222 BC9342	R SW-1 871222 BC9324	R SW-2 870720 BA8097	R SW-2 870720 BA8093	R SW-2 871222 BC9343	R SW-2 871222 BC9325
1,3-Dichlorobenzene	ug/l	-	ND	-	ND	-	-	-	ND
1,4-Dichlorobenzene	ug/l	-	ND	-	ND	-	-	-	ND
3,3'-Dichlorobenzidine	ug/l	-	ND	-	ND	-	-	-	ND
Diethyl phthalate	ug/l	-	ND	-	ND	-	-	-	ND
Dimethyl phthalate	ug/l	-	ND	-	ND	-	-	-	ND
Di-n-butyl phthalate	ug/l	-	ND	-	BMDL	-	-	-	ND
2,4-Dinitrotoluene	ug/l	-	ND	-	ND	-	-	-	ND
2,6-Dinitrotoluene	ug/l	-	ND	-	ND	-	-	-	ND
Di-n-octyl phthalate	ug/l	-	ND	-	ND	-	-	-	ND
1,2-Diphenylhydrazine	ug/l	-	ND	-	ND	-	-	-	ND
Fluoranthene	ug/l	-	ND	-	ND	-	-	-	ND
Fluorene	ug/l	-	ND	-	ND	-	-	-	ND
Hexachlorobenzene	ug/l	-	ND	-	ND	-	-	-	ND
Hexachlorobutadiene	ug/l	-	ND	-	ND	-	-	-	ND
Hexachlorocyclopentadiene	ug/l	-	ND	-	ND	-	-	-	ND
Hexachloroethane	ug/l	-	ND	-	ND	-	-	-	ND
Indeno(1,2,3-c,d)pyrene	ug/l	-	ND	-	ND	-	-	-	ND
Isophorone	ug/l	-	ND	-	ND	-	-	-	ND
Naphthalene	ug/l	-	ND	-	BMDL	-	-	-	ND
Nitrobenzene	ug/l	-	ND	-	ND	-	-	-	ND
N-Nitrosodimethylamine	ug/l	-	ND	-	ND	-	-	-	ND
N-Nitrosodi-n-propylamine	ug/l	-	ND	-	ND	-	-	-	ND
N-Nitrosodiphenylamine	ug/l	-	ND	-	ND	-	-	-	ND
Phenanthrene	ug/l	-	ND	-	ND	-	-	-	ND
Pyrene	ug/l	-	ND	-	ND	-	-	-	ND
1,2,4-Trichlorobenzene	ug/l	-	ND	-	ND	-	-	-	ND
Metals Analysis Data									
Antimony	ug/l	ND	-	-	ND	ND	-	-	ND
Arsenic	ug/l	ND	-	-	BMDL	ND	-	-	ND
Beryllium	ug/l	ND	-	-	ND	ND	-	-	ND
Cadmium	ug/l	BMDL	-	-	ND	ND	-	-	ND
Chromium	ug/l	ND	-	-	ND	BMDL	-	-	BMDL
Copper	ug/l	BMDL	-	-	ND	BMDL	-	-	16
Lead	ug/l	ND	-	-	ND	ND	-	-	ND
Mercury	ug/l	BMDL	-	-	.63	BMDL	-	-	BMDL

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-1 870720 BA8096	R SW-1 870720 BA8092	R SW-1 871222 BC9342	R SW-1 871222 BC9324	R SW-2 870720 BA8097	R SW-2 870720 BA8093	R SW-2 871222 BC9343	R SW-2 871222 BC9325
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/l	10	-	-	ND	11	-	-	31
Selenium	ug/l	ND	-	-	ND	ND	-	-	ND
Silver	ug/l	ND	-	-	ND	ND	-	-	ND
Thallium	ug/l	BMDL	-	-	ND	BMDL	-	-	ND
Zinc	ug/l	39	-	-	ND	63	-	-	90
Field Parameters									
pH (Field)	std	-	6.63	-	6.18	-	6.98	-	6.25
Specific Conductance (Field)	um/cm	-	-	-	4620	-	-	-	1242
Aroclors by GC									
Aroclor 1242	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1254	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1260	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1248	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1232	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1221	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1016	ug/l	-	ND	-	ND	-	ND	-	ND
Pesticides by GC									
Aldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Alpha-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Beta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Gamma-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Delta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Chlordane	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDT	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDE	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDD	ug/l	-	ND	-	ND	-	ND	-	ND
Dieldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan I	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan II	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan sulfate	ug/l	-	ND	-	ND	-	ND	-	ND
Endrin	ug/l	-	ND	-	ND	-	ND	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	R SW-1 870720 BA8096	R SW-1 870720 BA8092	R SW-1 871222 BC9342	R SW-1 871222 BC9324	R SW-2 870720 BA8097	R SW-2 870720 BA8093	R SW-2 871222 BC9343	R SW-2 871222 BC9325
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Endrin aldehyde	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor epoxide	ug/l	-	ND	-	ND	-	ND	-	ND
Toxaphene	ug/l	-	ND	-	ND	-	ND	-	ND
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	-	< 5	-	< 5	-	< 5	-	< 5
Alkalinity as CaCO3	mg/l	-	100	-	120	-	98	-	99
Antimony, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Arsenic, Total	ug/l	-	BMDL	ND	-	-	BMDL	ND	-
Beryllium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Cadmium, Total	ug/l	-	ND	ND	-	-	ND	BMDL	-
Chromium, Total	ug/l	-	BMDL	BMDL	-	-	BMDL	28	-
Copper, Total	ug/l	-	BMDL	12	-	-	BMDL	27	-
Cyanide, Total	mg/l	-	< .025	-	< .025	< .025	< .025	-	< .025
Lead, Total	ug/l	-	ND	ND	-	-	ND	BMDL	-
Mercury, Total	ug/l	-	.23	2.1	-	-	BMDL	1.1	-
Methyl ethyl ketone	ug/l	-	ND	-	ND	-	ND	-	49.2
Nickel, Total	ug/l	-	31	BMDL	-	-	10	27	-
Petroleum Hydrocarbons (IR)	mg/l	-	< 1.0	-	< 1.0	< 2.0	< 1.0	-	< 1.0
Phenolics, Total	mg/l	-	.061	-	< .050	-	< .050	-	.133
Selenium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Silver, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Styrene	ug/l	-	ND	-	ND	-	ND	-	ND
Thallium, Total	ug/l	-	BMDL	ND	-	-	ND	ND	-
Zinc, Total	ug/l	-	53	87	-	-	49	150	-
m-Xylene	ug/l	-	ND	-	ND	-	ND	-	10.7
o+p-Xylenes	ug/l	-	ND	-	BMDL	-	ND	-	10.0

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Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-3 870720 BA8098	R SW-3 870720 BA8094	R SW-3 871222 BC9344	R SW-3 871222 BC9326	R SW-4 870720 BA8099	R SW-4 870720 BA8095	R SW-4 871222 BC9345	R SW-4 871222 BC9327
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	-	ND	-	ND	-	ND	-	ND
Acrylonitrile	ug/l	-	ND	-	ND	-	ND	-	ND
Benzene	ug/l	-	ND	-	ND	-	ND	-	ND
bis(Chloromethyl)ether	ug/l	-	ND	-	ND	-	ND	-	ND
Bromoform	ug/l	-	ND	-	ND	-	ND	-	ND
Carbon tetrachloride	ug/l	-	ND	-	ND	-	ND	-	ND
Chlorobenzene	ug/l	-	ND	-	8.34	-	ND	-	ND
Chlorodibromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
2-Chloroethylvinyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Chloroform	ug/l	-	1.84	-	3.58	-	ND	-	ND
Dichlorobromomethane	ug/l	-	ND	-	ND	-	ND	-	ND
Dichlorodifluoromethane	ug/l	-	ND	-	ND	-	ND	-	ND
1,1-Dichloroethane	ug/l	-	BMDL	-	BMDL	-	BMDL	-	ND
1,2-Dichloroethane	ug/l	-	ND	-	13.7	-	ND	-	ND
1,1-Dichloroethylene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Dichloropropane	ug/l	-	ND	-	ND	-	ND	-	ND
cis-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND
Ethylbenzene	ug/l	-	ND	-	ND	-	ND	-	ND
Methyl bromide	ug/l	-	ND	-	ND	-	ND	-	ND
Methyl chloride	ug/l	-	ND	-	ND	-	ND	-	ND
Methylene chloride	ug/l	-	12.1	-	6.12	-	10.6	-	4.63
1,1,2,2-Tetrachloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Tetrachloroethylene	ug/l	-	ND	-	ND	-	ND	-	ND
Toluene	ug/l	-	ND	-	20.6	-	ND	-	BMDL
1,2-Trans-dichloroethylene	ug/l	-	9.56	-	35.2	-	8.46	-	ND
1,1,1-Trichloroethane	ug/l	-	12.9	-	6.32	-	5.42	-	ND
1,1,2-Trichloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Trichloroethylene	ug/l	-	BMDL	-	3.83	-	ND	-	ND
Trichlorofluoromethane	ug/l	-	BMDL	-	ND	-	ND	-	ND
Vinyl chloride	ug/l	-	ND	-	BMDL	-	ND	-	ND
trans-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	R SW-3 870720 BA8098	R SW-3 870720 BA8094	R SW-3 871222 BC9344	R SW-3 871222 BC9326	R SW-4 870720 BA8099	R SW-4 870720 BA8095	R SW-4 871222 BC9345	R SW-4 871222 BC9327
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dichlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dimethylphenol	ug/l	-	ND	-	ND	-	ND	-	ND
4,6-Dinitro-o-cresol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dinitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
2-Nitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
4-Nitrophenol	ug/l	-	ND	-	ND	-	ND	-	ND
p-Chloro-m-cresol	ug/l	-	ND	-	ND	-	ND	-	ND
Pentachlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
Phenol	ug/l	-	ND	-	ND	-	ND	-	ND
2,4,6-Trichlorophenol	ug/l	-	ND	-	ND	-	ND	-	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	-	ND	-	ND	-	ND	-	ND
Acenaphthylene	ug/l	-	ND	-	ND	-	ND	-	ND
Anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzidine	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(a)anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(a)pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(b)fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(ghi)perylene	ug/l	-	ND	-	ND	-	ND	-	ND
Benzo(k)fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroethoxy)methane	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroethyl) ether	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Chloroisopropyl)ether	ug/l	-	ND	-	ND	-	ND	-	ND
bis(2-Ethylhexyl)phthalate	ug/l	-	BMDL	-	BMDL	-	ND	-	BMDL
4-Bromophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Butyl benzyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
2-Chloronaphthalene	ug/l	-	ND	-	ND	-	ND	-	ND
4-Chlorophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND	-	ND
Chrysene	ug/l	-	ND	-	ND	-	ND	-	ND
Dibenzo(a,h)anthracene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Dichlorobenzene	ug/l	-	BMDL	-	BMDL	-	BMDL	-	ND

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(Estimated) BMDL-Below Method Detection Limit ND-Parameter not detected "-"-Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		R SW-3 870720 BA8098	R SW-3 870720 BA8094	R SW-3 871222 BC9344	R SW-3 871222 BC9326	R SW-4 870720 BA8099	R SW-4 870720 BA8095	R SW-4 871222 BC9345	R SW-4 871222 BC9327
1,3-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
1,4-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
3,3'-Dichlorobenzidine	ug/l	-	ND	-	ND	-	ND	-	ND
Diethyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
Dimethyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
Di-n-butyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
2,4-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND	-	ND
2,6-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND	-	ND
Di-n-octyl phthalate	ug/l	-	ND	-	ND	-	ND	-	ND
1,2-Diphenylhydrazine	ug/l	-	ND	-	ND	-	ND	-	ND
Fluoranthene	ug/l	-	ND	-	ND	-	ND	-	ND
Fluorene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorobutadiene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachlorocyclopentadiene	ug/l	-	ND	-	ND	-	ND	-	ND
Hexachloroethane	ug/l	-	ND	-	ND	-	ND	-	ND
Indeno(1,2,3-c,d)pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
Isophorone	ug/l	-	ND	-	ND	-	ND	-	ND
Naphthalene	ug/l	-	ND	-	ND	-	ND	-	ND
Nitrobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
N-Nitrosodimethylamine	ug/l	-	ND	-	ND	-	ND	-	ND
N-Nitrosodi-n-propylamine	ug/l	-	ND	-	ND	-	ND	-	ND
N-Nitrosodiphenylamine	ug/l	-	ND	-	ND	-	ND	-	ND
Phenanthrene	ug/l	-	ND	-	ND	-	ND	-	ND
Pyrene	ug/l	-	ND	-	ND	-	ND	-	ND
1,2,4-Trichlorobenzene	ug/l	-	ND	-	ND	-	ND	-	ND
Metals Analysis Data									
Antimony	ug/l	ND	-	-	ND	ND	-	-	ND
Arsenic	ug/l	ND	-	-	ND	ND	-	-	ND
Beryllium	ug/l	ND	-	-	BMDL	ND	-	-	ND
Cadmium	ug/l	ND	-	-	ND	BMDL	-	-	ND
Chromium	ug/l	ND	-	-	BMDL	BMDL	-	-	BMDL
Copper	ug/l	BMDL	-	-	13	BMDL	-	-	13
Lead	ug/l	BMDL	-	-	ND	ND	-	-	ND
Mercury	ug/l	BMDL	-	-	BMDL	BMDL	-	-	BMDL

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Footnotes: BMDL - below Method Detection Limit ND-Parameter not detected "-"-Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-3 870720 BA8098	R SW-3 870720 BA8094	R SW-3 871222 BC9344	R SW-3 871222 BC9326	R SW-4 870720 BA8099	R SW-4 870720 BA8095	R SW-4 871222 BC9345	R SW-4 871222 BC9327
		Sample Points, Sampling Dates, and ETC Sample No's							
Nickel	ug/l	11	-	-	35	11	-	-	49
Selenium	ug/l	ND	-	-	ND	ND	-	-	ND
Silver	ug/l	ND	-	-	ND	ND	-	-	ND
Thallium	ug/l	ND	-	-	ND	BMDL	-	-	ND
Zinc	ug/l	150	-	-	82	94	-	-	130
Field Parameters									
pH (Field)	std	-	6.96	-	6.35	-	7.18	-	6.00
Specific Conductance (Field)	um/cm	-	-	-	632	-	-	-	394
Aroclors by GC									
Aroclor 1242	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1254	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1260	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1248	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1232	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1221	ug/l	-	ND	-	ND	-	ND	-	ND
Aroclor 1016	ug/l	-	ND	-	ND	-	ND	-	ND
Pesticides by GC									
Aldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Alpha-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Beta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Gamma-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Delta-BHC	ug/l	-	ND	-	ND	-	ND	-	ND
Chlordane	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDT	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDE	ug/l	-	ND	-	ND	-	ND	-	ND
4,4'-DDD	ug/l	-	ND	-	ND	-	ND	-	ND
Dieldrin	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan I	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan II	ug/l	-	ND	-	ND	-	ND	-	ND
Endosulfan sulfate	ug/l	-	ND	-	ND	-	ND	-	ND
Endrin	ug/l	-	ND	-	ND	-	ND	-	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected -=Parameter not tested

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	R SW-3 870720 BA8098	R SW-3 870720 BA8094	R SW-3 871222 BC9344	R SW-3 871222 BC9326	R SW-4 870720 BA8099	R SW-4 870720 BA8095	R SW-4 871222 BC9345	R SW-4 871222 BC9327
		Sample Points, Sampling Dates, and ETC Sample No's							
Endrin aldehyde	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor	ug/l	-	ND	-	ND	-	ND	-	ND
Heptachlor epoxide	ug/l	-	ND	-	ND	-	ND	-	ND
Toxaphene	ug/l	-	ND	-	ND	-	ND	-	ND
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	-	< 5	-	< 5	-	< 5	-	< 5
Alkalinity as CaCO3	mg/l	-	69	-	130	-	< 5	-	72
Antimony, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Arsenic, Total	ug/l	-	ND	ND	-	-	ND	BMDL	-
Beryllium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Cadmium, Total	ug/l	-	BMDL	BMDL	-	-	BMDL	BMDL	-
Chromium, Total	ug/l	-	BMDL	BMDL	-	-	BMDL	56	-
Copper, Total	ug/l	-	26	29	-	-	40	100	-
Cyanide, Total	mg/l	-	< .025	-	< .025	-	< .025	-	< .025
Lead, Total	ug/l	-	BMDL	BMDL	-	-	BMDL	ND	-
Mercury, Total	ug/l	-	BMDL	.96	-	-	BMDL	4.8	-
Methyl ethyl ketone	ug/l	-	ND	-	45.4	-	ND	-	75.0
Nickel, Total	ug/l	-	9.3	33	-	-	18	57	-
Petroleum Hydrocarbons (IR)	mg/l	-	< 2.0	-	< 1.0	-	< 2.0	-	< 1.0
Phenolics, Total	mg/l	-	< .050	-	.063	-	< .050	-	< .050
Selenium, Total	ug/l	-	ND	ND	-	-	ND	ND	-
Silver, Total	ug/l	-	ND	ND	-	-	BMDL	ND	-
Styrene	ug/l	-	ND	-	ND	-	ND	-	ND
Thallium, Total	ug/l	-	BMDL	ND	-	-	BMDL	ND	-
Zinc, Total	ug/l	-	150	160	-	-	160	370	-
m-Xylene	ug/l	-	ND	-	BMDL	-	ND	-	ND
o+p-Xylenes	ug/l	-	ND	-	BMDL	-	ND	-	ND

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[illegible] ND=Parameter not detected -=Parameter not tested

SEDIMENT SAMPLES

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		B RSS-1-1 871214 BC8121	B RSS-1-2 871214 BC8122	B RSS-2-1 871214 BC8123	B RSS-2-2 871214 BC8124	B RSS-2-2 871214 BC8125			
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND			
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND			
Benzene	ug/kg	82.5	33.4	ND	ND	ND			
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND			
Bromoform	ug/kg	ND	BMDL	ND	ND	ND			
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND			
Chlorobenzene	ug/kg	200	47.3	17100	9590	3490			
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND			
Chloroethane	ug/kg	ND	ND	ND	ND	ND			
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND			
Chloroform	ug/kg	ND	ND	3690	ND	ND			
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND			
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND			
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichloroethane	ug/kg	ND	ND	ND	ND	ND			
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND			
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND			
Ethylbenzene	ug/kg	BMDL	29.7	35100	10900	415			
Methyl bromide	ug/kg	ND	ND	ND	ND	ND			
Methyl chloride	ug/kg	ND	ND	ND	ND	ND			
Methylene chloride	ug/kg	42.3	ND	ND	ND	ND			
1,1,2,2-Tetrachloroethane	ug/kg	ND	46.0	ND	ND	ND			
Tetrachloroethylene	ug/kg	ND	ND	ND	ND	ND			
Toluene	ug/kg	ND	BMDL	322000	4510	117			
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	ND	ND			
1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND			
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND			
Trichloroethylene	ug/kg	ND	ND	ND	ND	ND			
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND			
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND			
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND			

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		B RSS-1-1 871214 BC8121	B RSS-1-2 871214 BC8122	B RSS-2-1 871214 BC8123	B RSS-2-2 871214 BC8124	B RSS-2-2 871214 BC8125			
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dimethylphenol	ug/kg	ND	ND	ND	ND	ND			
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND			
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND			
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND			
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND			
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND			
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND			
Phenol	ug/kg	ND	ND	ND	ND	ND			
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND			
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	166	BMDL	358			
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND			
Anthracene	ug/kg	ND	ND	ND	ND	321			
Benzidine	ug/kg	ND	ND	ND	ND	ND			
Benzo(a)anthracene	ug/kg	ND	ND	ND	ND	878			
Benzo(a)pyrene	ug/kg	ND	ND	148	ND	757			
Benzo(b)fluoranthene	ug/kg	ND	ND	BMDL	ND	1530			
Benzo(ghi)perylene	ug/kg	ND	ND	ND	ND	636			
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND			
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND			
bis(2-Ethylhexyl)phthalate	ug/kg	2920	5700	32000	356000	25700			
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND			
Butyl benzyl phthalate	ug/kg	ND	ND	736	BMDL	ND			
2-Chloronaphthalene	ug/kg	ND	ND	115	ND	226			
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND			
Chrysene	ug/kg	ND	ND	332	ND	1010			
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND			
1,2-Dichlorobenzene	ug/kg	ND	ND	424	BMDL	852			

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		B RSS-1-1 871214 BC8121	B RSS-1-2 871214 BC8122	B RSS-2-1 871214 BC8123	B RSS-2-2 871214 BC8124	B RSS-2-2 871214 BC8125			
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND			
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND			
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND			
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND			
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND			
Di-n-butyl phthalate	ug/kg	ND	ND	BMDL	11000	708			
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND			
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND			
Di-n-octyl phthalate	ug/kg	ND	ND	600	BMDL	938			
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND			
Fluoranthene	ug/kg	ND	534	374	BMDL	2260			
Fluorene	ug/kg	ND	ND	202	ND	486			
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND			
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND			
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND			
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND			
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND	683			
Isophorone	ug/kg	ND	ND	ND	ND	ND			
Naphthalene	ug/kg	ND	ND	1230	ND	1470			
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND			
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND			
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND			
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND			
Phenanthrene	ug/kg	ND	BMDL	712	BMDL	2750			
Pyrene	ug/kg	ND	ND	339	BMDL	1850			
1,2,4-Trichlorobenzene	ug/kg	ND	ND	ND	ND	BMDL			
Metals Analysis Data									
Antimony	ug/kg	ND	ND	ND	BMDL	ND			
Arsenic	ug/kg	34000	31000	BMDL	17000	BMDL			
Beryllium	ug/kg	700	630	390	760	510			
Cadmium	ug/kg	32000	28000	12000	53000	17000			
Chromium	ug/kg	1060000	1170000	156000	325000	205000			
Copper	ug/kg	861000	835000	1240000	2070000	711000			
Lead	ug/kg	360000	370000	340000	450000	120000			
Mercury	ug/kg	139000	139000	340	140	26600			

001529

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	B RSS-1-1 871214 BC8121	B RSS-1-2 871214 BC8122	B RSS-2-1 871214 BC8123	B RSS-2-2 871214 BC8124	B RSS-2-2 871214 BC8125			
Nickel	ug/kg	100000	140000	96000	436000	120000			
Selenium	ug/kg	890	BMDL	BMDL	BMDL	BMDL			
Silver	ug/kg	8600	7600	BMDL	BMDL	BMDL			
Thallium	ug/kg	1100	1200	ND	BMDL	ND			
Zinc	ug/kg	2880000	3680000	411000	1580000	565000			
Aroclors by GC									
Aroclor 1242	ug/kg	ND	ND	35000	87000	5400			
Aroclor 1254	ug/kg	5200	BMDL	ND	ND	ND			
Aroclor 1260	ug/kg	ND	ND	6000	22000	5600			
Aroclor 1248	ug/kg	19000	42000	ND	ND	ND			
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND			
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND			
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND			
Pesticides by GC									
Aldrin	ug/kg	ND	ND	ND	ND	ND			
Alpha-BHC	ug/kg	ND	ND	ND	ND	IND			
Beta-BHC	ug/kg	ND	ND	ND	ND	ND			
Gamma-BHC	ug/kg	ND	ND	ND	ND	ND			
Delta-BHC	ug/kg	ND	ND	ND	IND	ND			
Chlordane	ug/kg	ND	ND	ND	ND	ND			
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND			
4,4'-DDE	ug/kg	ND	ND	ND	ND	IND			
4,4'-DDD	ug/kg	ND	ND	ND	ND	ND			
Dieldrin	ug/kg	ND	ND	ND	ND	ND			
Endosulfan I	ug/kg	ND	ND	ND	ND	ND			
Endosulfan II	ug/kg	ND	ND	ND	ND	ND			
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND			
Endrin	ug/kg	ND	ND	ND	ND	ND			
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND			
Heptachlor	ug/kg	ND	ND	IND	IND	IND			
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND			
Toxaphene	ug/kg	ND	ND	ND	ND	ND			

001530

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	-	-	ND	-	-	ND		
2,4-Dichlorophenol	ug/kg	-	-	ND	-	-	ND		
2,4-Dimethylphenol	ug/kg	-	-	ND	-	-	ND		
4,6-Dinitro-o-cresol	ug/kg	-	-	ND	-	-	ND		
2,4-Dinitrophenol	ug/kg	-	-	ND	-	-	ND		
2-Nitrophenol	ug/kg	-	-	ND	-	-	ND		
4-Nitrophenol	ug/kg	-	-	ND	-	-	ND		
p-Chloro-m-cresol	ug/kg	-	-	ND	-	-	ND		
Pentachlorophenol	ug/kg	-	-	ND	-	-	ND		
Phenol	ug/kg	-	-	ND	-	-	ND		
2,4,6-Trichlorophenol	ug/kg	-	-	ND	-	-	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	-	-	ND	-	-	ND		
Acenaphthylene	ug/kg	-	-	ND	-	-	ND		
Anthracene	ug/kg	-	-	ND	-	-	ND		
Benzidine	ug/kg	-	-	ND	-	-	ND		
Benzo(a)anthracene	ug/kg	-	-	ND	-	-	ND		
Benzo(a)pyrene	ug/kg	-	-	ND	-	-	ND		
Benzo(b)fluoranthene	ug/kg	-	-	ND	-	-	ND		
Benzo(ghi)perylene	ug/kg	-	-	ND	-	-	ND		
Benzo(k)fluoranthene	ug/kg	-	-	ND	-	-	ND		
bis(2-Chloroethoxy)methane	ug/kg	-	-	ND	-	-	ND		
bis(2-Chloroethyl) ether	ug/kg	-	-	ND	-	-	ND		
bis(2-Chloroisopropyl)ether	ug/kg	-	-	ND	-	-	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	-	-	ND	-	-	ND		
4-Bromophenyl phenyl ether	ug/kg	-	-	ND	-	-	ND		
Butyl benzyl phthalate	ug/kg	-	-	ND	-	-	ND		
2-Chloronaphthalene	ug/kg	-	-	ND	-	-	ND		
4-Chlorophenyl phenyl ether	ug/kg	-	-	ND	-	-	ND		
Chrysene	ug/kg	-	-	ND	-	-	ND		
Dibenzo(a,h)anthracene	ug/kg	-	-	ND	-	-	ND		
1,2-Dichlorobenzene	ug/kg	-	-	ND	-	-	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		S RMW-7D-9 871207 BC7208	S RMW-7D-10 871207 BC7209	S RMW-7D-11 871207 BC7210	S RMW-7D-12 871207 BC7202	S RMW-7D-13 871207 BC7203	S RMW-7D-14 871207 BC7204		
1,3-Dichlorobenzene	ug/kg	-	-	ND	-	-	ND		
1,4-Dichlorobenzene	ug/kg	-	-	ND	-	-	ND		
3,3'-Dichlorobenzidine	ug/kg	-	-	ND	-	-	ND		
Diethyl phthalate	ug/kg	-	-	ND	-	-	ND		
Dimethyl phthalate	ug/kg	-	-	ND	-	-	ND		
Di-n-butyl phthalate	ug/kg	-	-	ND	-	-	ND		
2,4-Dinitrotoluene	ug/kg	-	-	ND	-	-	ND		
2,6-Dinitrotoluene	ug/kg	-	-	ND	-	-	ND		
Di-n-octyl phthalate	ug/kg	-	-	ND	-	-	ND		
1,2-Diphenylhydrazine	ug/kg	-	-	ND	-	-	ND		
Fluoranthene	ug/kg	-	-	ND	-	-	ND		
Fluorene	ug/kg	-	-	ND	-	-	ND		
Hexachlorobenzene	ug/kg	-	-	ND	-	-	ND		
Hexachlorobutadiene	ug/kg	-	-	ND	-	-	ND		
Hexachlorocyclopentadiene	ug/kg	-	-	ND	-	-	ND		
Hexachloroethane	ug/kg	-	-	ND	-	-	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	-	-	ND	-	-	ND		
Isophorone	ug/kg	-	-	ND	-	-	ND		
Naphthalene	ug/kg	-	-	ND	-	-	ND		
Nitrobenzene	ug/kg	-	-	313	-	-	146		
N-Nitrosodimethylamine	ug/kg	-	-	ND	-	-	ND		
N-Nitrosodi-n-propylamine	ug/kg	-	-	ND	-	-	ND		
N-Nitrosodiphenylamine	ug/kg	-	-	ND	-	-	ND		
Phenanthrene	ug/kg	-	-	ND	-	-	ND		
Pyrene	ug/kg	-	-	ND	-	-	ND		
1,2,4-Trichlorobenzene	ug/kg	-	-	ND	-	-	ND		
Metals Analysis Data									
Antimony	ug/kg	-	-	BMDL	-	-	ND		
Arsenic	ug/kg	-	-	3800	-	-	1100		
Beryllium	ug/kg	-	-	1150	-	-	730		
Cadmium	ug/kg	-	-	BMDL	-	-	BMDL		
Chromium	ug/kg	-	-	33000	-	-	22000		
Copper	ug/kg	-	-	36000	-	-	16000		
Lead	ug/kg	-	-	17000	-	-	9600		
Mercury	ug/kg	-	-	BMDL	-	-	BMDL		

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Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		B RSS-1-1 871214 BC8121	B RSS-1-2 871214 BC8122	B RSS-2-1 871214 BC8123	B RSS-2-2 871214 BC8124	S RSS-2-2 871214 BC8125			
Miscellaneous Parameters									
Cyanide, Total	mg/kg	5.0	2.3	1.2	5.7	36			
Methoxychlor	ug/kg	ND	ND	ND	ND	ND			
Methyl ethyl ketone	ug/kg	65.2	ND	18300	ND	ND			
Petroleum Hydrocarbons (IR)	mg/kg	8560	8980	4400	5960	1800			
Phenolics, Total	mg/kg	23	36	15	16	1.1			
Styrene	ug/kg	ND	ND	ND	ND	ND			
m-Xylene	ug/kg	168	93.8	72000	9330	3600			
o+p-Xylenes	ug/kg	467	141	74200	20200	4450			

011533

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

DM-OC
Summary of results for all parameters tested, selected sample points.

REPORT 2: RSS-3, RSS-4

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below ETC Sample No.	DAMES & MOORE Company	DMSCPRIFS Facility	See Below Sample Point	Date

Parameters	Units	B RSS-3-1 871214 BC8126	B RSS-3-2 871214 BC8118	B RSS-4-1 871214 BC8119	B RSS-4-2 871214 BC8120				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND				
Acrylonitrile	ug/kg	ND	ND	ND	ND				
Benzene	ug/kg	ND	ND	ND	1990				
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND				
Bromoform	ug/kg	ND	ND	ND	ND				
Carbon tetrachloride	ug/kg	ND	ND	ND	ND				
Chlorobenzene	ug/kg	BMDL	BMDL	3990	4930				
Chlorodibromomethane	ug/kg	ND	ND	ND	ND				
Chloroethane	ug/kg	ND	ND	ND	ND				
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND				
Chloroform	ug/kg	ND	ND	ND	3790				
Dichlorobromomethane	ug/kg	ND	ND	ND	ND				
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND				
1,1-Dichloroethane	ug/kg	ND	ND	ND	ND				
1,2-Dichloroethane	ug/kg	ND	ND	ND	1960				
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND				
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND				
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				
Ethylbenzene	ug/kg	439000	174000	4610	7420				
Methyl bromide	ug/kg	ND	ND	ND	ND				
Methyl chloride	ug/kg	ND	ND	ND	ND				
Methylene chloride	ug/kg	ND	ND	ND	3690				
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND				
Tetrachloroethylene	ug/kg	953000	304000	ND	ND				
Toluene	ug/kg	2970000	1700000	41500	74500				
1,2-Trans-dichloroethylene	ug/kg	ND	ND	ND	1610				
1,1,1-Trichloroethane	ug/kg	222000	75500	ND	ND				
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND				
Trichloroethylene	ug/kg	9950000	3260000	ND	1890				
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND				
Vinyl chloride	ug/kg	ND	ND	ND	ND				
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND				

001535

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		B RSS-3-1 871214 BC8126	B RSS-3-2 871214 BC8118	B RSS-4-1 871214 BC8119	B RSS-4-2 871214 BC8120				
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND				
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND				
2,4-Dimethylphenol	ug/kg	ND	ND	1360	ND				
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND				
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND				
2-Nitrophenol	ug/kg	ND	ND	ND	ND				
4-Nitrophenol	ug/kg	ND	ND	ND	ND				
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND				
Pentachlorophenol	ug/kg	ND	ND	ND	ND				
Phenol	ug/kg	10200	44700	24900	6560				
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND				
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	ND	ND	ND				
Acenaphthylene	ug/kg	ND	ND	ND	ND				
Anthracene	ug/kg	ND	ND	ND	ND				
Benzidine	ug/kg	ND	BMDL	BMDL	ND				
Benzo(a)anthracene	ug/kg	ND	ND	ND	BMDL				
Benzo(a)pyrene	ug/kg	ND	ND	ND	ND				
Benzo(b)fluoranthene	ug/kg	ND	ND	BMDL	ND				
Benzo(ghi)perylene	ug/kg	ND	ND	BMDL	ND				
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND				
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND				
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND				
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND				
bis(2-Ethylhexyl)phthalate	ug/kg	32600	240000	108000	32600				
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
Butyl benzyl phthalate	ug/kg	BMDL	9700	BMDL	ND				
2-Chloronaphthalene	ug/kg	ND	ND	BMDL	ND				
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND				
Chrysene	ug/kg	ND	ND	BMDL	BMDL				
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND				
1,2-Dichlorobenzene	ug/kg	3670	261000	1850	445				

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	B RSS-3-1 871214 BC8126	B RSS-3-2 871214 BC8118	B RSS-4-1 871214 BC8119	B RSS-4-2 871214 BC8120				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND				
1,4-Dichlorobenzene	ug/kg	ND	7840	ND	ND				
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND				
Diethyl phthalate	ug/kg	ND	BMDL	ND	ND				
Dimethyl phthalate	ug/kg	ND	ND	ND	ND				
Di-n-butyl phthalate	ug/kg	BMDL	24800	2350	884				
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND				
Di-n-octyl phthalate	ug/kg	BMDL	12200	BMDL	BMDL				
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND				
Fluoranthene	ug/kg	ND	BMDL	928	381				
Fluorene	ug/kg	ND	ND	536	ND				
Hexachlorobenzene	ug/kg	ND	ND	ND	ND				
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND				
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND				
Hexachloroethane	ug/kg	ND	ND	ND	ND				
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	ND	ND	ND				
Isophorone	ug/kg	ND	ND	ND	ND				
Naphthalene	ug/kg	816	20300	1330	379				
Nitrobenzene	ug/kg	ND	ND	ND	ND				
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND				
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND				
Phenanthrene	ug/kg	BMDL	BMDL	1820	556				
Pyrene	ug/kg	ND	BMDL	916	343				
1,2,4-Trichlorobenzene	ug/kg	ND	2330	525	177				
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	ND	ND				
Arsenic	ug/kg	BMDL	22000	37000	15000				
Beryllium	ug/kg	1000	2000	2400	1400				
Cadmium	ug/kg	43400	73900	83700	29000				
Chromium	ug/kg	345000	504000	819000	257000				
Copper	ug/kg	2000000	2590000	9510000	2230000				
Lead	ug/kg	520000	230000	320000	96000				
Mercury	ug/kg	25400	40600	40600	17500				

001537

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	B RSS-3-1 871214 BC8126	B RSS-3-2 871214 BC8118	B RSS-4-1 871214 BC8119	B RSS-4-2 871214 BC8120				
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	110000	413000	467000	203000				
Selenium	ug/kg	BMDL	BMDL	BMDL	BMDL				
Silver	ug/kg	2700	BMDL	2400	BMDL				
Thallium	ug/kg	ND	1100	1000	BMDL				
Zinc	ug/kg	2320000	2540000	3110000	1060000				
Aroclors by GC									
Aroclor 1242	ug/kg	55000	770000	21000	8800				
Aroclor 1254	ug/kg	ND	IND	ND	ND				
Aroclor 1260	ug/kg	ND	ND	10000	2800				
Aroclor 1248	ug/kg	ND	ND	ND	ND				
Aroclor 1232	ug/kg	ND	ND	ND	ND				
Aroclor 1221	ug/kg	ND	ND	ND	ND				
Aroclor 1016	ug/kg	ND	ND	ND	ND				
Pesticides by GC									
Aldrin	ug/kg	ND	ND	ND	ND				
Alpha-BHC	ug/kg	ND	ND	ND	ND				
Beta-BHC	ug/kg	ND	ND	ND	ND				
Gamma-BHC	ug/kg	ND	ND	ND	ND				
Delta-BHC	ug/kg	ND	ND	ND	ND				
Chlordane	ug/kg	ND	ND	ND	ND				
4,4'-DDT	ug/kg	IND	ND	ND	ND				
4,4'-DDE	ug/kg	ND	ND	ND	ND				
4,4'-DDD	ug/kg	IND	ND	ND	ND				
Dieldrin	ug/kg	11000	ND	ND	ND				
Endosulfan I	ug/kg	ND	ND	ND	ND				
Endosulfan II	ug/kg	IND	ND	ND	ND				
Endosulfan sulfate	ug/kg	ND	ND	ND	ND				
Endrin	ug/kg	ND	IND	ND	ND				
Endrin aldehyde	ug/kg	ND	ND	ND	ND				
Heptachlor	ug/kg	IND	IND	IND	IND				
Heptachlor epoxide	ug/kg	ND	ND	ND	ND				
Toxaphene	ug/kg	ND	ND	ND	ND				

001538

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		B RSS-3-1 871214 BC8126	B RSS-3-2 871214 BC8118	B RSS-4-1 871214 BC8119	B RSS-4-2 871214 BC8120				
Miscellaneous Parameters									
Cyanide, Total	mg/kg	205	10	120	23				
Methoxychlor	ug/kg	ND	ND	ND	ND				
Methyl ethyl ketone	ug/kg	ND	ND	ND	31900				
Petroleum Hydrocarbons (IR)	mg/kg	20200	10900	25900	9450				
Phenolics, Total	mg/kg	315	126	94	12				
Styrene	ug/kg	ND	ND	ND	ND				
m-Xylene	ug/kg	1060000	486000	13300	17200				
o+p-Xylenes	ug/kg	647000	348000	11000	16000				

001539

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

TRIP AND FIELD BLANKS

COMPOUNDS DETECTED IN TRIP AND FIELD BLANKS FOR AQUEOUS SAMPLES

A. SAMPLES COLLECTED 12/21/87

Field Blank 11: 5.75 ug/l - Chloroform

- Associated aqueous samples:
  GW-1S, GW-2S, GW-4S, GW-5S
  No chloroform detected

B. SAMPLES COLLECTED 12/22/87

Trip Blank 12: 5.4 ug/l - Methylene Chloride
Field Blank 12: 5.81 ug/l - Methylene Chloride

- Associated aqueous samples, with methylene chloride concentrations:

GW-3S: 52,900 ug/l	SW-2: 12.9 ug/l
GW-6S: 34.9 ug/l	SW-3: 6.12 ug/l
SW-1: 14.9 ug/l	SW-4: 4.63 ug/l

C. SAMPLES COLLECTED 12/23/87

Trip Blank 13: 11.8 ug/l - 1,1,2,2-Tetrachloroethane

- Associated aqueous samples: GW-7S, GW-2D, GW-5D, GW-7D
  No 1,1,2,2-Tetrachloroethane detected

Field Blank 13: 3.39 ug/l methylene chloride
0.06 mg/l total phenolics
21 ug/l total zinc

- Associated aqueous samples, with methylene chloride concentrations:

  GW-7S: 13,200 ug/l

  GW-2D: 2,140 ug/l (688 ug/l in duplicate)

  GW-5D: 137 ug/l

  GW-7D: 6.91 ug/l

- Associated aqueous samples, with total phenolics concentrations:

  GW-7S: 31 mg/l

  GW-2D, -5D, -7D: less than MDL (0.05 mg/l)

- Associated aqueous samples, with total zinc concentrations:

  GW-7S: 280 ug/l

  GW-2D: 36 ug/l (25 ug/l in duplicate)

  GW-5D: 22 ug/l

  GW-7D: 57 ug/l

D. DISCUSSION

The presence of methylene chloride in the 12/22/87 and the 12/23/87 blanks may indicate laboratory or field contamination, although the comparatively high concentrations of methylene chloride detected in several aqueous samples (GW-3S, GW-7S and GW-2D) indicates that atmospheric or cross-contamination of the blanks with these samples is also possible. The zinc detected in the 12/23/87 field blank may be the result of incomplete equipment cleaning.

The analytical results of blanks associated with soil and sediment samples identified several compounds at trace levels, indicating that field cleaning procedures were performed well.

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/11/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point Date*

Parameters	Units	RTB-1 871130 BC7238	RTB-2 871201 BC7239	RTB-3 871202 BC7240	RTB-4 871203 BC7241	RTB-5 871207 BC7242	RTB-6 871208 BC7243	RTB-7 871209 BC7244	RTB-8 871210 BC7245
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
bis(Chloromethyl)ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chlorodibromomethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorobromomethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ug/l	ND	2.91	ND	ND	ND	ND	ND	ND
1,1-Dichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methyl bromide	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/l	5.44	4.15	16.7	BMDL	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Trans-dichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

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ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-0C) - All Parameters Tested, Selected Samples

DATE: 03/11/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X RTB-1 871130 BC7238	X RTB-2 871201 BC7239	X RTB-3 871202 BC7240	X RTB-4 871203 BC7241	X RTB-5 871207 BC7242	X RTB-6 871208 BC7243	RTB-7 871209 BC7244	X RTB-8 871210 BC7245
Miscellaneous Parameters									
Methyl ethyl ketone	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
o+p-Xylenes	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001544

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/11/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	X RTB-9 871211 BC7246	X RTB-10 871214 BC7247						
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	ND						
Acrylonitrile	ug/l	ND	ND						
Benzene	ug/l	ND	ND						
bis(Chloromethyl)ether	ug/l	ND	ND						
Bromoform	ug/l	ND	ND						
Carbon tetrachloride	ug/l	ND	ND						
Chlorobenzene	ug/l	ND	ND						
Chlorodibromomethane	ug/l	ND	ND						
Chloroethane	ug/l	ND	ND						
2-Chloroethylvinyl ether	ug/l	ND	ND						
Chloroform	ug/l	ND	ND						
Dichlorobromomethane	ug/l	ND	ND						
Dichlorodifluoromethane	ug/l	ND	ND						
1,1-Dichloroethane	ug/l	ND	ND						
1,2-Dichloroethane	ug/l	ND	ND						
1,1-Dichloroethylene	ug/l	ND	ND						
1,2-Dichloropropane	ug/l	ND	ND						
cis-1,3-Dichloropropylene	ug/l	ND	ND						
Ethylbenzene	ug/l	ND	ND						
Methyl bromide	ug/l	ND	ND						
Methyl chloride	ug/l	ND	ND						
Methylene chloride	ug/l	ND	ND						
1,1,2,2-Tetrachloroethane	ug/l	ND	ND						
Tetrachloroethylene	ug/l	ND	ND						
Toluene	ug/l	ND	ND						
1,2-Trans-dichloroethylene	ug/l	ND	ND						
1,1,1-Trichloroethane	ug/l	ND	ND						
1,1,2-Trichloroethane	ug/l	ND	ND						
Trichloroethylene	ug/l	ND	ND						
Trichlorofluoromethane	ug/l	ND	ND						
Vinyl chloride	ug/l	ND	ND						
trans-1,3-Dichloropropylene	ug/l	ND	ND						

00154

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/11/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X RTB-9 871211 BC7246	X RTB-10 871214 BC7247						
Miscellaneous Parameters									
Methyl ethyl ketone	ug/l	ND	ND						
Styrene	ug/l	ND	ND						
m-Xylene	ug/l	ND	ND						
o+p-Xylenes	ug/l	ND	ND						

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001549

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/17/88
PAGE: 1

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X TB-11 871221 BC9360	X TB-12 871222 BC9361	X TB-13 871223 BC9362					
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	ND	ND					
Acrylonitrile	ug/l	ND	ND	ND					
Benzene	ug/l	ND	ND	ND					
bis(Chloromethyl)ether	ug/l	ND	ND	ND					
Bromoform	ug/l	ND	ND	ND					
Carbon tetrachloride	ug/l	ND	ND	ND					
Chlorobenzene	ug/l	ND	ND	ND					
Chlorodibromomethane	ug/l	ND	ND	ND					
Chloroethane	ug/l	ND	ND	ND					
2-Chloroethylvinyl ether	ug/l	ND	ND	ND					
Chloroform	ug/l	ND	ND	ND					
Dichlorobromomethane	ug/l	ND	ND	ND					
Dichlorodifluoromethane	ug/l	ND	ND	ND					
1,1-Dichloroethane	ug/l	ND	ND	ND					
1,2-Dichloroethane	ug/l	ND	ND	ND					
1,1-Dichloroethylene	ug/l	ND	ND	ND					
1,2-Dichloropropane	ug/l	ND	ND	ND					
cis-1,3-Dichloropropylene	ug/l	ND	ND	ND					
Ethylbenzene	ug/l	ND	ND	ND					
Methyl bromide	ug/l	ND	ND	ND					
Methyl chloride	ug/l	ND	ND	ND					
Methylene chloride	ug/l	ND	5.40	ND					
1,1,2,2-Tetrachloroethane	ug/l	BMDL	ND	11.8					
Tetrachloroethylene	ug/l	ND	BMDL	ND					
Toluene	ug/l	ND	ND	ND					
1,2-Trans-dichloroethylene	ug/l	ND	ND	ND					
1,1,1-Trichloroethane	ug/l	ND	ND	ND					
1,1,2-Trichloroethane	ug/l	ND	ND	ND					
Trichloroethylene	ug/l	ND	ND	ND					
Trichlorofluoromethane	ug/l	ND	ND	ND					
Vinyl chloride	ug/l	ND	ND	ND					
trans-1,3-Dichloropropylene	ug/l	ND	ND	ND					

001541

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/17/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X TB-11 871221 BC9360	X TB-12 871222 BC9361	X TB-13 871223 BC9362					
Miscellaneous Parameters									
Methyl ethyl ketone	ug/l	ND	ND	BMDL					
Styrene	ug/l	BMDL	ND	BMDL					
m-Xylene	ug/l	ND	ND	ND					
o+p-Xylenes	ug/l	ND	ND	ND					

001548

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RB-1-2 871211 BC8110	S RB-2-2 871211 BC8101	S RB-3-2 871210 BC8089	S RB-4-2 871210 BC8095	S RB-5-2 871209 BC8075	S RB-6-2 871209 BC8071		
Priority Poll. Volatiles GC/MS									
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND		
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND		
Benzene	ug/kg	39700	ND	ND	ND	BMDL	709		
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND		
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND		
Chlorobenzene	ug/kg	178000	ND	ND	ND	BMDL	1550		
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chloroform	ug/kg	ND	ND	ND	ND	82200	ND		
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND		
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethane	ug/kg	ND	ND	179000	ND	ND	ND		
1,2-Dichloroethane	ug/kg	ND	ND	290000	ND	54100	ND		
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND		
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		
Ethylbenzene	ug/kg	312000	127000	210000	1060	152000	6680		
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND		
Methylene chloride	ug/kg	ND	ND	ND	ND	ND	ND		
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Tetrachloroethylene	ug/kg	1360000	1560000	1690000	ND	46700	ND		
Toluene	ug/kg	1800000	385000	2410000	2180	749000	9600		
1,2-Trans-dichloroethylene	ug/kg	ND	113000	320000	ND	ND	ND		
1,1,1-Trichloroethane	ug/kg	ND	ND	1770000	ND	ND	ND		
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	15700	ND		
Trichloroethylene	ug/kg	1140000	ND	65100	ND	ND	ND		
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ug/kg	BMDL	ND	ND	ND	ND	ND		
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001519

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	S RB-1-2 871211 BC8110	S RB-2-2 871211 BC8101	S RB-3-2 871210 BC8089	S RB-4-2 871210 BC8095	S RB-5-2 871209 BC8075	S RB-6-2 871209 BC8071		
Sample Points, Sampling Dates, and ETC Sample No.'s									
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ug/kg	10800	ND	ND	ND	ND	ND		
4,6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
2,4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
2-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ug/kg	ND	ND	ND	ND	ND	ND		
p-Chloro-m-cresol	ug/kg	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Phenol	ug/kg	790000	ND	ND	ND	ND	ND		
2,4,6-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/kg	ND	857	1920	123	ND	2370		
Acenaphthylene	ug/kg	ND	ND	ND	ND	ND	ND		
Anthracene	ug/kg	ND	ND	ND	213	BMDL	2950		
Benzidine	ug/kg	244000	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ug/kg	ND	749	ND	BMDL	BMDL	5380		
Benzo(a)pyrene	ug/kg	ND	589	ND	130	BMDL	5980		
Benzo(b)fluoranthene	ug/kg	ND	1080	ND	BMDL	BMDL	8210		
Benzo(ghi)perylene	ug/kg	ND	301	ND	ND	ND	4080		
Benzo(k)fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroethyl) ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Chloroisopropyl)ether	ug/kg	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	ug/kg	BMDL	97400	121000	BMDL	37100	54200		
4-Bromophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Butyl benzyl phthalate	ug/kg	ND	4710	8140	ND	ND	BMDL		
2-Chloronaphthalene	ug/kg	18200	289	ND	ND	ND	ND		
4-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	ND	ND		
Chrysene	ug/kg	ND	881	ND	179	1840	5370		
Dibenzo(a,h)anthracene	ug/kg	ND	ND	ND	ND	ND	BMDL		
1,2-Dichlorobenzene	ug/kg	ND	1600	ND	ND	BMDL	915		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

021550

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	RB-1-2 871211 BC8110	RB-2-2 871211 BC8101	RB-3-2 871210 BC8089	RB-4-2 871210 BC8095	RB-5-2 871209 BC8075	RB-6-2 871209 BC8071		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	BMDL		
3,3'-Dichlorobenzidine	ug/kg	ND	ND	ND	ND	ND	ND		
Diethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-butyl phthalate	ug/kg	ND	3940	5230	BMDL	ND	BMDL		
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
2,6-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND	ND		
Di-n-octyl phthalate	ug/kg	ND	4470	ND	ND	10400	7370		
1,2-Diphenylhydrazine	ug/kg	ND	ND	ND	ND	ND	ND		
Fluoranthene	ug/kg	BMDL	1860	BMDL	628	3350	12900		
Fluorene	ug/kg	ND	925	1450	140	ND	2340		
Hexachlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachlorocyclopentadiene	ug/kg	ND	ND	ND	ND	ND	ND		
Hexachloroethane	ug/kg	ND	ND	ND	ND	ND	ND		
Indeno(1,2,3-c,d)pyrene	ug/kg	ND	BMDL	ND	ND	ND	4990		
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND		
Naphthalene	ug/kg	14900	6450	18600	169	5570	10700		
Nitrobenzene	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodimethylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodi-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	ug/kg	ND	ND	ND	ND	ND	ND		
Phenanthrene	ug/kg	ND	2270	4240	640	BMDL	15000		
Pyrene	ug/kg	BMDL	1640	BMDL	453	2770	9750		
1,2,4-Trichlorobenzene	ug/kg	ND	350	ND	ND	ND	ND		
Metals Analysis Data									
Antimony	ug/kg	BMDL	BMDL	6900	ND	38000	8000		
Arsenic	ug/kg	8800	BMDL	5600	3000	20000	9300		
Beryllium	ug/kg	230	490	400	750	390	320		
Cadmium	ug/kg	25000	26000	22000	320	21000	17000		
Chromium	ug/kg	542000	120000	80000	21000	166000	60000		
Copper	ug/kg	8600000	425000	158000	218000	284000	4880000		
Lead	ug/kg	2110000	391000	620000	34000	1340000	1680000		
Mercury	ug/kg	3500	13600	1300	780	2700	1400		

001551

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	S RB-1-2 871211 BC8110	S RB-2-2 871211 BC8101	S RB-3-2 871210 BC8089	S RB-4-2 871210 BC8095	S RB-5-2 871209 BC8075	S RB-6-2 871209 BC8071		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/kg	46000	27000	19000	21000	27000	11000		
Selenium	ug/kg	BMDL	2100	BMDL	ND	BMDL	BMDL		
Silver	ug/kg	40000	BMDL	BMDL	ND	BMDL	BMDL		
Thallium	ug/kg	ND	ND	ND	ND	ND	ND		
Zinc	ug/kg	1110000	761000	517000	67000	1050000	1870000		
Aroclors by GC									
Aroclor 1242	ug/kg	210000	8900	1600	ND	ND	ND		
Aroclor 1254	ug/kg	IND	IND	2400	ND	ND	ND		
Aroclor 1260	ug/kg	ND	10000	ND	ND	ND	ND		
Aroclor 1248	ug/kg	ND	ND	ND	ND	9700	7600		
Aroclor 1232	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1221	ug/kg	ND	ND	ND	ND	ND	ND		
Aroclor 1016	ug/kg	ND	ND	ND	ND	ND	ND		
Pesticides by GC									
Aldrin	ug/kg	IND	IND	ND	ND	IND	1200		
Alpha-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Beta-BHC	ug/kg	ND	ND	ND	ND	ND	ND		
Gamma-BHC	ug/kg	IND	ND	ND	ND	ND	ND		
Delta-BHC	ug/kg	ND	ND	ND	IND	ND	ND		
Chlordane	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDT	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDE	ug/kg	ND	ND	ND	ND	ND	ND		
4,4'-DDD	ug/kg	ND	ND	ND	BMDL	ND	ND		
Dieldrin	ug/kg	IND	ND	ND	ND	IND	840		
Endosulfan I	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan II	ug/kg	ND	ND	ND	ND	ND	ND		
Endosulfan sulfate	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin	ug/kg	ND	ND	ND	ND	ND	ND		
Endrin aldehyde	ug/kg	ND	ND	ND	ND	ND	ND		
Heptachlor	ug/kg	IND	IND	ND	ND	ND	ND		
Heptachlor epoxide	ug/kg	ND	ND	ND	ND	ND	ND		
Toxaphene	ug/kg	ND	ND	ND	ND	ND	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001552

ETC

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	RB-1-2 871211 BC8110	RB-2-2 871211 BC8101	RB-3-2 871210 BC8089	RB-4-2 871210 BC8095	RB-5-2 871209 BC8075	RB-6-2 871209 BC8071		
Miscellaneous Parameters									
Cyanide, Total	mg/kg	6.5	.9	9.1	< 1.2	< 1.0	1.6		
Methoxychlor	ug/kg	ND	ND	ND	ND	ND	ND		
Methyl ethyl ketone	ug/kg	ND	ND	ND	ND	ND	ND		
Petroleum Hydrocarbons (IR)	mg/kg	27500	10400	13600	1270	10900	29600		
Phenolics, Total	mg/kg	683	1.5	28	6.1	12	6.7		
Styrene	ug/kg	ND	ND	ND	ND	ND	ND		
m-Xylene	ug/kg	1000000	593000	835000	5170	593000	25300		
o+p-Xylenes	ug/kg	672000	516000	649000	4260	359000	19700		

001553

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

SAMPLES IN THE TOP FOOT OF CLAY

(REORGANIZATION OF PRIOR
SOIL SAMPLE DATA SUMMARIES)

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*						
		S RMW-1S-3 871130 BC7149	S RMW-2D-3 871201 BC7160	S RMW-3S-3 871203 BC7193	S RMW-4S-3 871210 BC8093	S RMW-5D-3 871202 BC7177	S RMW-6S-3 871210 BC8099	S RMW-7D-3 871202 BC7173
Priority Poll. Volatiles GC/MS								
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	ug/kg	ND	ND	ND	ND	ND	ND	ND
Benzene	ug/kg	ND	ND	BMDL	ND	ND	1010	BMDL
bis(Chloromethyl)ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ug/kg	ND	BMDL	ND	BMDL	ND	ND	103
Chlorodibromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	ug/kg	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/kg	ND	566	10300	ND	ND	ND	ND
Dichlorobromomethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	ND	BMDL	5.92	ND	ND	234
1,2-Dichloroethane	ug/kg	ND	574	6500	ND	ND	ND	110
1,1-Dichloroethylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ug/kg	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ug/kg	ND	BMDL	BMDL	BMDL	ND	2130	142
Methyl bromide	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ug/kg	BMDL	319	7260	24.7	ND	ND	ND
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	ND	ND	32.4	ND	ND
Tetrachloroethylene	ug/kg	ND	ND	3340	ND	133	450	239
Toluene	ug/kg	13.1	10.0	8020	18.2	ND	2440	1490
1,2-Trans-dichloroethylene	ug/kg	ND	21.6	12200	ND	ND	ND	282
1,1,1-Trichloroethane	ug/kg	ND	ND	3860	ND	ND	ND	BMDL
1,1,2-Trichloroethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Trichloroethylene	ug/kg	ND	52.5	9780	ND	ND	ND	72.5
Trichlorofluoromethane	ug/kg	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ug/kg	ND	ND	ND	ND	ND	ND	BMDL
trans-1,3-Dichloropropylene	ug/kg	ND	ND	ND	ND	ND	ND	ND

CH 1555

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected "-"=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X RFB-1 871130 BC7223	X RFB-2 871201 BC7224	X RFB-3 871202 BC7225	X RFB-4 871203 BC7227	X RFB-5 871207 BC7226	X RFB-6 871208 BC7228	X RFB-7 871209 BC7229	X RFB-8 871210 BC7230
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
p-Chloro-m-cresol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzidine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	BMDL
4-Bromophenyl phenyl ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/10/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

		Sample Points, Sampling Dates, and ETC Sample No.'s							
Parameters	*Units*	X RFB-1 871130 BC7223	X RFB-2 871201 BC7224	X RFB-3 871202 BC7225	X RFB-4 871203 BC7227	X RFB-5 871207 BC7226	X RFB-6 871208 BC7228	X RFB-7 871209 BC7229	X RFB-8 871210 BC7230
1,3-Dichlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-c,d)pyrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Metals Analysis Data									
Antimony	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	ug/l	ND	ND	BMDL	ND	ND	ND	ND	ND
Beryllium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Copper	ug/l	ND	ND	ND	BMDL	ND	ND	ND	BMDL
Lead	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Mercury	ug/l	ND	ND	ND	BMDL	ND	ND	ND	ND

001557

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/10/88
PAGE: 4

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* *Date*

Parameters	Units	X RFB-1 871130 BC7223	X RFB-2 871201 BC7224	X RFB-3 871202 BC7225	X RFB-4 871203 BC7227	X RFB-5 871207 BC7226	X RFB-6 871208 BC7228	X RFB-7 871209 BC7229	X RFB-8 871210 BC7230
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ug/l	ND	ND	BMDL	ND	ND	ND	ND	ND
Silver	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ug/l	BMDL	BMDL	BMDL	BMDL	17	8.9	16	BMDL
Aroclors by GC									
Aroclor 1242	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1016	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides by GC									
Aldrin	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Beta-BHC	ug/l	ND	ND	ND	ND	ND	ND	ND	.079
Gamma-BHC	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Delta-BHC	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDD	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan sulfate	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Endrin aldehyde	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor epoxide	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND

001558

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	RFB-1 871130 BC7223	RFB-2 871201 BC7224	RFB-3 871202 BC7225	RFB-4 871203 BC7227	RFB-5 871207 BC7226	RFB-6 871208 BC7228	RFB-7 871209 BC7229	RFB-8 871210 BC7230
Sample Points, Sampling Dates, and ETC Sample No.'s									
Miscellaneous Parameters									
Cyanide, Total	mg/l	< .025	< .025	< .025	< .025	< .025	< .025	< .025	< .025
Methoxychlor	ug/l	ND	ND	ND	ND	ND	ND	ND	-
Methyl ethyl ketone	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
Petroleum Hydrocarbons (IR)	mg/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Phenolics, Total	mg/l	< .050	< .050	< .050	.068	< .050	< .050	< .050	< .050
Styrene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
m-Xylene	ug/l	ND	ND	ND	ND	ND	ND	ND	ND
o+p-Xylenes	ug/l	ND	ND	BMDL	ND	ND	ND	ND	ND

001559

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X RFB-9 871211 BC7231	X RFB-10 871214 BC7232						
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	ND	ND						
Acrylonitrile	ug/l	ND	ND						
Benzene	ug/l	ND	ND						
bis(Chloromethyl)ether	ug/l	ND	ND						
Bromoform	ug/l	ND	ND						
Carbon tetrachloride	ug/l	ND	ND						
Chlorobenzene	ug/l	ND	BMDL						
Chlorodibromomethane	ug/l	ND	ND						
Chloroethane	ug/l	ND	ND						
2-Chloroethylvinyl ether	ug/l	ND	ND						
Chloroform	ug/l	ND	ND						
Dichlorobromomethane	ug/l	ND	ND						
Dichlorodifluoromethane	ug/l	ND	ND						
1,1-Dichloroethane	ug/l	ND	ND						
1,2-Dichloroethane	ug/l	ND	ND						
1,1-Dichloroethylene	ug/l	ND	ND						
1,2-Dichloropropane	ug/l	ND	ND						
cis-1,3-Dichloropropylene	ug/l	ND	ND						
Ethylbenzene	ug/l	ND	BMDL						
Methyl bromide	ug/l	ND	ND						
Methyl chloride	ug/l	ND	ND						
Methylene chloride	ug/l	ND	ND						
1,1,2,2-Tetrachloroethane	ug/l	ND	ND						
Tetrachloroethylene	ug/l	ND	23.2						
Toluene	ug/l	ND	15.1						
1,2-Trans-dichloroethylene	ug/l	ND	ND						
1,1,1-Trichloroethane	ug/l	ND	ND						
1,1,2-Trichloroethane	ug/l	ND	ND						
Trichloroethylene	ug/l	ND	85.8						
Trichlorofluoromethane	ug/l	ND	ND						
Vinyl chloride	ug/l	ND	ND						
trans-1,3-Dichloropropylene	ug/l	ND	ND						

1560

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	RFB-9 871211 BC7231	RFB-10 871214 BC7232						
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	ND	ND						
2,4-Dichlorophenol	ug/l	ND	ND						
2,4-Dimethylphenol	ug/l	ND	ND						
4,6-Dinitro-o-cresol	ug/l	ND	ND						
2,4-Dinitrophenol	ug/l	ND	ND						
2-Nitrophenol	ug/l	ND	ND						
4-Nitrophenol	ug/l	ND	ND						
p-Chloro-m-cresol	ug/l	ND	ND						
Pentachlorophenol	ug/l	ND	ND						
Phenol	ug/l	ND	ND						
2,4,6-Trichlorophenol	ug/l	ND	ND						
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	ND	ND						
Acenaphthylene	ug/l	ND	ND						
Anthracene	ug/l	ND	ND						
Benzidine	ug/l	ND	ND						
Benzo(a)anthracene	ug/l	ND	ND						
Benzo(a)pyrene	ug/l	ND	ND						
Benzo(b)fluoranthene	ug/l	ND	ND						
Benzo(ghi)perylene	ug/l	ND	ND						
Benzo(k)fluoranthene	ug/l	ND	ND						
bis(2-Chloroethoxy)methane	ug/l	ND	ND						
bis(2-Chloroethyl) ether	ug/l	ND	ND						
bis(2-Chloroisopropyl)ether	ug/l	ND	ND						
bis(2-Ethylhexyl)phthalate	ug/l	ND	BMDL						
4-Bromophenyl phenyl ether	ug/l	ND	ND						
Butyl benzyl phthalate	ug/l	ND	ND						
2-Chloronaphthalene	ug/l	ND	ND						
4-Chlorophenyl phenyl ether	ug/l	ND	ND						
Chrysene	ug/l	ND	ND						
Dibenzo(a,h)anthracene	ug/l	ND	ND						
1,2-Dichlorobenzene	ug/l	ND	BMDL						

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

DATE: 03/10/88
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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	X RFB-9 871211 BC7231	X RFB-10 871214 BC7232						
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/l	ND	ND						
1,4-Dichlorobenzene	ug/l	ND	ND						
3,3'-Dichlorobenzidine	ug/l	ND	ND						
Diethyl phthalate	ug/l	ND	ND						
Dimethyl phthalate	ug/l	ND	ND						
Di-n-butyl phthalate	ug/l	ND	ND						
2,4-Dinitrotoluene	ug/l	ND	ND						
2,6-Dinitrotoluene	ug/l	ND	ND						
Di-n-octyl phthalate	ug/l	ND	ND						
1,2-Diphenylhydrazine	ug/l	ND	ND						
Fluoranthene	ug/l	ND	ND						
Fluorene	ug/l	ND	ND						
Hexachlorobenzene	ug/l	ND	ND						
Hexachlorobutadiene	ug/l	ND	ND						
Hexachlorocyclopentadiene	ug/l	ND	ND						
Hexachloroethane	ug/l	ND	ND						
Indeno(1,2,3-c,d)pyrene	ug/l	ND	ND						
Isophorone	ug/l	ND	ND						
Naphthalene	ug/l	ND	ND						
Nitrobenzene	ug/l	ND	ND						
N-Nitrosodimethylamine	ug/l	ND	ND						
N-Nitrosodi-n-propylamine	ug/l	ND	ND						
N-Nitrosodiphenylamine	ug/l	ND	ND						
Phenanthrene	ug/l	ND	ND						
Pyrene	ug/l	ND	ND						
1,2,4-Trichlorobenzene	ug/l	ND	ND						
Metals Analysis Data									
Antimony	ug/l	ND	ND						
Arsenic	ug/l	ND	ND						
Beryllium	ug/l	BMDL	BMDL						
Cadmium	ug/l	ND	BMDL						
Chromium	ug/l	BMDL	24						
Copper	ug/l	ND	140						
Lead	ug/l	ND	ND						
Mercury	ug/l	ND	1.1						

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	X RFB-9 871211 BC7231	X RFB-10 871214 BC7232						
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Nickel	ug/l	BMDL	BMDL						
Selenium	ug/l	ND	ND						
Silver	ug/l	ND	BMDL						
Thallium	ug/l	ND	ND						
Zinc	ug/l	BMDL	130						
Aroclors by GC									
Aroclor 1242	ug/l	ND	ND						
Aroclor 1254	ug/l	ND	ND						
Aroclor 1260	ug/l	ND	ND						
Aroclor 1248	ug/l	ND	ND						
Aroclor 1232	ug/l	ND	ND						
Aroclor 1221	ug/l	ND	ND						
Aroclor 1016	ug/l	ND	ND						
Pesticides by GC									
Aldrin	ug/l	ND	ND						
Alpha-BHC	ug/l	ND	ND						
Beta-BHC	ug/l	.11	ND						
Gamma-BHC	ug/l	ND	ND						
Delta-BHC	ug/l	ND	ND						
Chlordane	ug/l	ND	ND						
4,4'-DDT	ug/l	ND	ND						
4,4'-DDE	ug/l	ND	ND						
4,4'-DDD	ug/l	ND	ND						
Dieldrin	ug/l	ND	ND						
Endosulfan I	ug/l	ND	ND						
Endosulfan II	ug/l	ND	ND						
Endosulfan sulfate	ug/l	ND	ND						
Endrin	ug/l	ND	ND						
Endrin aldehyde	ug/l	ND	ND						
Heptachlor	ug/l	ND	ND						
Heptachlor epoxide	ug/l	ND	ND						
Toxaphene	ug/l	ND	ND						

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001563

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	*Units*	*Sample Points, Sampling Dates, and ETC Sample No.'s*							
		X RFB-9 871211 BC7231	X RFB-10 871214 BC7232						
Miscellaneous Parameters									
Cyanide, Total	mg/l	< .025	< .025						
Methoxychlor	ug/l	-	-						
Methyl ethyl ketone	ug/l	ND	ND						
Petroleum Hydrocarbons (IR)	mg/l	< 1.0	< 1.0						
Phenolics, Total	mg/l	< .050	< .050						
Styrene	ug/l	ND	ND						
m-Xylene	ug/l	ND	14.2						
o+p-Xylenes	ug/l	ND	BMDL						

001564

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	FB-11 871221 BC9352	FB-11 871221 BC9334	FB-12 871222 BC9353	FB-12 871222 BC9335	FB-13 871223 BC9354	FB-13 871223 BC9336		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Priority Poll. Volatiles GC/MS									
Acrolein	ug/l	-	ND	-	ND	-	ND		
Acrylonitrile	ug/l	-	ND	-	ND	-	ND		
Benzene	ug/l	-	ND	-	ND	-	ND		
bis(Chloromethyl)ether	ug/l	-	ND	-	ND	-	ND		
Bromoform	ug/l	-	ND	-	ND	-	ND		
Carbon tetrachloride	ug/l	-	ND	-	ND	-	ND		
Chlorobenzene	ug/l	-	ND	-	ND	-	ND		
Chlorodibromomethane	ug/l	-	ND	-	ND	-	ND		
Chloroethane	ug/l	-	ND	-	ND	-	ND		
2-Chloroethylvinyl ether	ug/l	-	ND	-	ND	-	ND		
Chloroform	ug/l	-	5.75	-	ND	-	ND		
Dichlorobromomethane	ug/l	-	ND	-	ND	-	ND		
Dichlorodifluoromethane	ug/l	-	ND	-	ND	-	ND		
1,1-Dichloroethane	ug/l	-	ND	-	ND	-	ND		
1,2-Dichloroethane	ug/l	-	ND	-	ND	-	ND		
1,1-Dichloroethylene	ug/l	-	ND	-	ND	-	ND		
1,2-Dichloropropane	ug/l	-	ND	-	ND	-	ND		
cis-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND		
Ethylbenzene	ug/l	-	ND	-	ND	-	ND		
Methyl bromide	ug/l	-	ND	-	ND	-	ND		
Methyl chloride	ug/l	-	ND	-	ND	-	ND		
Methylene chloride	ug/l	-	ND	-	5.81	-	3.39		
1,1,2,2-Tetrachloroethane	ug/l	-	ND	-	ND	-	ND		
Tetrachloroethylene	ug/l	-	BMDL	-	ND	-	ND		
Toluene	ug/l	-	ND	-	ND	-	ND		
1,2-Trans-dichloroetnylene	ug/l	-	ND	-	ND	-	ND		
1,1,1-Trichloroethane	ug/l	-	ND	-	ND	-	ND		
1,1,2-Trichloroethane	ug/l	-	ND	-	ND	-	ND		
Trichloroethylene	ug/l	-	ND	-	ND	-	ND		
Trichlorofluoromethane	ug/l	-	ND	-	ND	-	ND		
Vinyl chloride	ug/l	-	ND	-	ND	-	ND		
trans-1,3-Dichloropropylene	ug/l	-	ND	-	ND	-	ND		

For Notes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001595

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		X FB-11 871221 BC9352	X FB-11 871221 BC9334	X FB-12 871222 BC9353	X FB-12 871222 BC9335	X FB-13 871223 BC9354	X FB-13 871223 BC9336		
Priority Poll. Acids GC/MS									
2-Chlorophenol	ug/l	-	ND	-	ND	-	ND		
2,4-Dichlorophenol	ug/l	-	ND	-	ND	-	ND		
2,4-Dimethylphenol	ug/l	-	ND	-	ND	-	ND		
4,6-Dinitro-o-cresol	ug/l	-	ND	-	ND	-	ND		
2,4-Dinitrophenol	ug/l	-	ND	-	ND	-	ND		
2-Nitrophenol	ug/l	-	ND	-	ND	-	ND		
4-Nitrophenol	ug/l	-	ND	-	ND	-	ND		
p-Chloro-m-cresol	ug/l	-	ND	-	ND	-	ND		
Pentachlorophenol	ug/l	-	ND	-	ND	-	ND		
Phenol	ug/l	-	ND	-	ND	-	ND		
2,4,6-Trichlorophenol	ug/l	-	ND	-	ND	-	ND		
Priority Poll. B/Ns GC/MS									
Acenaphthene	ug/l	-	ND	-	ND	-	ND		
Acenaphthylene	ug/l	-	ND	-	ND	-	ND		
Anthracene	ug/l	-	ND	-	ND	-	ND		
Benzidine	ug/l	-	ND	-	ND	-	ND		
Benzo(a)anthracene	ug/l	-	ND	-	ND	-	ND		
Benzo(a)pyrene	ug/l	-	ND	-	ND	-	ND		
Benzo(b)fluoranthene	ug/l	-	ND	-	ND	-	ND		
Benzo(ghi)perylene	ug/l	-	ND	-	ND	-	ND		
Benzo(k)fluoranthene	ug/l	-	ND	-	ND	-	ND		
bis(2-Chloroethoxy)methane	ug/l	-	ND	-	ND	-	ND		
bis(2-Chloroethyl) ether	ug/l	-	ND	-	ND	-	ND		
bis(2-Chloroisopropyl)ether	ug/l	-	ND	-	ND	-	ND		
bis(2-Ethylhexyl)phthalate	ug/l	-	ND	-	ND	-	ND		
4-Bromophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND		
Butyl benzyl phthalate	ug/l	-	ND	-	ND	-	ND		
2-Chloronaphthalene	ug/l	-	ND	-	ND	-	ND		
4-Chlorophenyl phenyl ether	ug/l	-	ND	-	ND	-	ND		
Chrysene	ug/l	-	ND	-	ND	-	ND		
Dibenzo(a,h)anthracene	ug/l	-	ND	-	ND	-	ND		
1,2-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND		

001566

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	X FB-11 871221 BC9352	X FB-11 871221 BC9334	X FB-12 871222 BC9353	X FB-12 871222 BC9335	X FB-13 871223 BC9354	X FB-13 871223 BC9336		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
1,3-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND		
1,4-Dichlorobenzene	ug/l	-	ND	-	ND	-	ND		
3,3'-Dichlorobenzidine	ug/l	-	ND	-	ND	-	ND		
Diethyl phthalate	ug/l	-	ND	-	ND	-	ND		
Dimethyl phthalate	ug/l	-	ND	-	ND	-	ND		
Di-n-butyl phthalate	ug/l	-	ND	-	ND	-	ND		
2,4-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND		
2,6-Dinitrotoluene	ug/l	-	ND	-	ND	-	ND		
Di-n-octyl phthalate	ug/l	-	ND	-	ND	-	ND		
1,2-Diphenylhydrazine	ug/l	-	ND	-	ND	-	ND		
Fluoranthene	ug/l	-	ND	-	ND	-	ND		
Fluorene	ug/l	-	ND	-	ND	-	ND		
Hexachlorobenzene	ug/l	-	ND	-	ND	-	ND		
Hexachlorobutadiene	ug/l	-	ND	-	ND	-	ND		
Hexachlorocyclopentadiene	ug/l	-	ND	-	ND	-	ND		
Hexachloroethane	ug/l	-	ND	-	ND	-	ND		
Indeno(1,2,3-c,d)pyrene	ug/l	-	ND	-	ND	-	ND		
Isophorone	ug/l	-	ND	-	ND	-	ND		
Naphthalene	ug/l	-	ND	-	ND	-	ND		
Nitrobenzene	ug/l	-	ND	-	ND	-	ND		
N-Nitrosodimethylamine	ug/l	-	ND	-	ND	-	ND		
N-Nitrosodi-n-propylamine	ug/l	-	ND	-	ND	-	ND		
N-Nitrosodiphenylamine	ug/l	-	ND	-	ND	-	ND		
Phenanthrene	ug/l	-	ND	-	ND	-	ND		
Pyrene	ug/l	-	ND	-	ND	-	ND		
1,2,4-Trichlorobenzene	ug/l	-	ND	-	ND	-	ND		
Metals Analysis Data									
Antimony	ug/l	-	ND	-	ND	-	ND		
Arsenic	ug/l	-	ND	-	ND	-	ND		
Beryllium	ug/l	-	BMDL	-	ND	-	ND		
Cadmium	ug/l	-	BMDL	-	ND	-	ND		
Chromium	ug/l	-	BMDL	-	ND	-	ND		
Copper	ug/l	-	BMDL	-	BMDL	-	ND		
Lead	ug/l	-	ND	-	ND	-	ND		
Mercury	ug/l	-	ND	-	ND	-	ND		

001562

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

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Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below	
ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*

Parameters	Units	Sample Points, Sampling Dates, and ETC Sample No.'s							
		X FB-11 871221 BC9352	X FB-11 871221 BC9334	X FB-12 871222 BC9353	X FB-12 871222 BC9335	X FB-13 871223 BC9354	X FB-13 871223 BC9336		
Nickel	ug/l	-	ND	-	ND	-	ND		
Selenium	ug/l	-	ND	-	ND	-	ND		
Silver	ug/l	-	ND	-	ND	-	ND		
Thallium	ug/l	-	ND	-	ND	-	ND		
Zinc	ug/l	-	22	-	23	-	BMDL		
Aroclors by GC									
Aroclor 1242	ug/l	-	ND	-	ND	-	ND		
Aroclor 1254	ug/l	-	ND	-	ND	-	ND		
Aroclor 1260	ug/l	-	ND	-	ND	-	ND		
Aroclor 1248	ug/l	-	ND	-	ND	-	ND		
Aroclor 1232	ug/l	-	ND	-	ND	-	ND		
Aroclor 1221	ug/l	-	ND	-	ND	-	ND		
Aroclor 1016	ug/l	-	ND	-	ND	-	ND		
Pesticides by GC									
Aldrin	ug/l	-	ND	-	ND	-	ND		
Alpha-BHC	ug/l	-	ND	-	ND	-	ND		
Beta-BHC	ug/l	-	ND	-	ND	-	ND		
Gamma-BHC	ug/l	-	ND	-	ND	-	ND		
Delta-BHC	ug/l	-	ND	-	ND	-	ND		
Chlordane	ug/l	-	ND	-	ND	-	ND		
4,4'-DDT	ug/l	-	ND	-	ND	-	ND		
4,4'-DDE	ug/l	-	ND	-	ND	-	ND		
4,4'-DDD	ug/l	-	ND	-	ND	-	ND		
Dieldrin	ug/l	-	ND	-	ND	-	ND		
Endosulfan I	ug/l	-	ND	-	ND	-	ND		
Endosulfan II	ug/l	-	ND	-	ND	-	ND		
Endosulfan sulfate	ug/l	-	ND	-	ND	-	ND		
Endrin	ug/l	-	ND	-	ND	-	ND		
Endrin aldehyde	ug/l	-	ND	-	ND	-	ND		
Heptachlor	ug/l	-	ND	-	ND	-	ND		
Heptachlor epoxide	ug/l	-	ND	-	ND	-	ND		
Toxaphene	ug/l	-	ND	-	ND	-	ND		

Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

001568

ETC ENVIRONMENTAL TESTING and CERTIFICATION

DATA MANAGEMENT SUMMARY REPORT
(DM-OC) - All Parameters Tested, Selected Samples

Chain of Custody Data Required for ETC Data Management Summary Report

See Below	DAMES & MOORE	DMSCPRIFS	See Below
ETC Sample No.	*Company*	*Facility*	*Sample Point* / *Date*

Parameters	Units	FB-11 871221 BC9352	FB-11 871221 BC9334	FB-12 871222 BC9353	FB-12 871222 BC9335	FB-13 871223 BC9354	FB-13 871223 BC9336		
		Sample Points, Sampling Dates, and ETC Sample No.'s							
Miscellaneous Parameters									
Acidity as CaCO3	mg/l	-	< 5	-	< 5	-	< 5		
Alkalinity as CaCO3	mg/l	-	< 5	-	< 5	-	< 5		
Antimony, Total	ug/l	ND	-	ND	-	ND	-		
Arsenic, Total	ug/l	ND	-	ND	-	ND	-		
Beryllium, Total	ug/l	ND	-	ND	-	ND	-		
Cadmium, Total	ug/l	ND	-	ND	-	ND	-		
Chromium, Total	ug/l	ND	-	ND	-	ND	-		
Copper, Total	ug/l	BMDL	-	ND	-	ND	-		
Cyanide, Total	mg/l	-	< .025	-	< .025	-	< .025		
Lead, Total	ug/l	ND	-	ND	-	ND	-		
Mercury, Total	ug/l	ND	-	ND	-	ND	-		
Methyl ethyl ketone	ug/l	-	ND	-	ND	-	ND		
Nickel, Total	ug/l	ND	-	ND	-	ND	-		
Petroleum Hydrocarbons (IR)	mg/l	-	< 1.0	-	< 1.0	-	< 1.0		
Phenolics, Total	mg/l	-	< .050	-	< .050	-	.061		
Selenium, Total	ug/l	ND	-	ND	-	ND	-		
Silver, Total	ug/l	ND	-	ND	-	ND	-		
Styrene	ug/l	-	ND	-	ND	-	ND		
Thallium, Total	ug/l	ND	-	ND	-	ND	-		
Zinc, Total	ug/l	BMDL	-	BMDL	-	21	-		
m-Xylene	ug/l	-	ND	-	ND	-	ND		
o+p-Xylenes	ug/l	-	ND	-	ND	-	ND		

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Footnotes: BMDL=Below Method Detection Limit ND=Parameter not detected '-'=Parameter not tested

USEPA SPLIT SAMPLE RESULTS
(SUMMER, 1987 SAMPLES)

DISCUSSION - SUMMER, 1987 SAMPLES

The soil and sediment results from the Ebasco split samples were not evaluated by Dames & Moore. As discussed in Section 4.2.1 of this report, the original soil and sediment data were rejected by Dames & Moore. Those data are not included in Appendix B; only the resampling data are included.

The major discrepancies between the ETC water sample data and the Ebasco split-water sample data occurred for samples GW-1S and GW-3S. In most cases where discrepancies occurred for these two samples, the ETC concentrations are higher than the Ebasco concentrations.

The ETC analytical results for the 15 water samples (7 shallow well samples, 3 till well samples, 4 surface water samples, and 1 duplicate sample) were independently reviewed by Metatrace, Inc. The Metatrace report follows this discussion. The conclusion of the report is that "the data quality is acceptable for all intended use."

metaTRACE, Inc.

October 27, 1987

rec'd 11/4/87 GMC

cc: JAF 11/5/87

Mr. Gerald M. Coscia, P.E.
Project Manager
Dames & Moore
6 Commerce Drive
Cranford, New Jersey 07016-1101

Dear Gerry:

I have completed my review of 15 ETC data packages on the SCP Superfund site in Carlstadt, New Jersey. Overall, the data quality is acceptable for all intended use. There are a few discrepancies that you should be made aware of that may impact how you use this data.

1. ETC states that the method detection limits (MDLs) are those published in the October, 1984 Federal Register. There is no indication that ETC has demonstrated that the laboratory can in fact meet those published detection limits, based on the concentrations of the calibration standards that were analyzed (60, 100, 300 ug/L). In my judgement, several of the acid compounds (pentachlorophenol, 4-nitrophenol) would be very difficult to quantify at less than 10 ug/L, based on the 1000 ml to 1 ml extraction that was used. I would like to see the raw data from the calibrations associated with these samples to verify ETC's reported MDLs.

2. Data users should review the surrogate recoveries for each sample and make MDL adjustments for those samples which have surrogate recoveries at or below 50%. Typically, laboratories do not adjust MDLs based on surrogate recoveries. This could be important if the State of New Jersey has any action limits at or near the claimed MDLs.

3. An additional way to verify ETCs ability to achieve the reported detection limits would be to submit blind QC check samples prepared from U.S. EPA EMSL-Cincinnati, QC materials. These QC samples come with statistical recovery windows based on numerous analyses over several years. Also, many laboratories receive these QC samples free from EPA on request. Enclosed is a copy of a data

sheet from one of the samples that we have here at metaTRACE. I would be happy to discuss how this type of QC check can be integrated into your program and how to interpret the results.

4. When you are ready to begin your next phase of sampling at this site, consider requiring the additional raw data that is necessary to perform a comprehensive data validation. This would include the raw data for method blanks, and all of the raw and processed initial and continuing calibration data.

Please contact me if you have any questions concerning this review or any others concerning analytical methods, validation, etc. If you attend the Superfund conference November 16-18, 1987, come by the metaTRACE booth and say "Hello".

Sincerely,

Ken

Kenneth J. Baughman
Assistant Vice President
Manager, Project Administration

KJB:bcb

EBASCO SERVICES INCORPORATED

EBASCO

160 Chubb Avenue, Lyndhurst, NJ 07071 (201) 460-1900

February 4, 1988

Ms. Janet Feldstein
Remedial Project Manager
U S Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

SUBJECT: SCIENTIFIC CHEMICAL PROCESSING SITE
PHASE I AND II SPLIT SAMPLE COMPARATIVE ANALYSIS
EPA WORK ASSIGNMENT NO. 11-2665.0
EPA CONTRACT NO. 68-01-7250

Dear Ms. Feldstein:

Attached please find results of the comparative analysis of twenty-nine (29) split samples analyzed by CLP laboratories and Dames & Moore's contracted laboratory (i.e., Environmental Testing and Certification). These split samples were collected during Phases I and II field investigation. The results were tabulated according to sample types as follows:

Table	Number and Type of Sample
1-1 through 1-6	6 surface soil samples
2-1 through 2-4	4 piezometer soil samples
3-1 through 3-10	10 monitoring well soil samples
4-1 through 4-3	3 sediment samples
5-1 and 5-2	2 surface water samples
6-1 through 6-4	4 groundwater samples

Relative Percent Difference (RPD) was calculated to show whether split sample results were significantly different from each other. Its definition was given in Table 1-1. Generally, when evaluating split (or duplicate) sample results, data would be rejected if the RPD exceeded 100 percent. When RPD approaches 200 percent, it indicates that the difference between the split sample results is two or more order-of-magnitude different.

As demonstrated in the attached tables, great differences exist in the concentrations of compounds measured in most soil and sediment samples. Some differences also exist in the concentrations of compounds measured in the surface water and groundwater samples, but the magnitude of these differences is generally smaller than that of the differences between the split soil or sediment samples. The fact that the magnitude of the discrepancies is greater for soil or sediment samples than for water samples is probably a function of the heterogeneous soil or sediment profile at sample points.

The major discrepancies in the data are generally delimited to results of the volatile organic analyses. The split samples which have major discrepancies in results are listed below:

1)	B-4-1	(soil):	Volatile organics,
2)	B-5-1	(soil):	Volatile organics,
3)	P-2-1	(soil):	Volatile organics and PCB's,
4)	MW-5D-3	(soil):	Pesticides,
5)	MW-7D-3	(soil):	Volatile organics,
6)	SS-2-1	(sediment):	Volatile organics,
7)	SS-3-1	(sediment):	Inorganics,
8)	GW-1-I	(groundwater):	Volatile organics, and
9)	GW-3-I	(groundwater):	Semi-volatiles.

Some split sample results can not be compared due to the fact that the detection limits used for certain compounds were too high. These results include P-1-1 (pesticides), P-4-1 (semi-volatiles), MW-2D-3 (Semi-volatiles), and MW-5D-3 (volatile organics and semi-volatiles).

In accordance with your request, we also enclose a set of tables summarizing only the Ebasco (or CLP Laboratories) split sample results.

If you have any questions, please feel free to call me at (201) 460-6502.

Very truly yours,

Hsin H Yeh

Hsin H Yeh, Ph.D. P.E.
Site Manager

cc: D Sachdev
S Kamp
R Riggi

HHY/ew.
File.

TABLE 1-1

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-1-1 (0-1')

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)			
Benzene	<42	4.6	-
Chlorobenzene	<42	20.5	-
Ethyl Benzene	72	93.4	25
Methylene Chloride	<42	7.0	-
Tetrachloroethylene	850	527	46
Toluene	240	173	32
Trichloroethylene	100	101	1.0

DEFINITIONS:

RPD--Relative Percent Difference. RPD = [(S-D)/((S+D)/2)] x 100. In general, when evaluating split or duplicate sample results, data would be qualified and/or rejected if the RPD exceeded 100 percent. Some allowance is required for evaluation of soil sample results, however, due to the nature of the matrix.

"-": Non-calculable RPD due to value(s) less than or approaching instrument detection limit. However, RPDs <u>are</u> calculated if a concentration measured by one of the contracted laboratories greatly exceeds the detection limit value of the other.

J--Indicates an estimated value.

B--Indicates that the analyte was found in the blank as well as in the sample.

R--Indicates that the value was rejected.

*--Indicates that the reported value was illegible.

TABLE 1-2

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-2-1 (0-1')

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Benzene	<680	251	92
Methylene Chloride	740	921	22
Tetrachloroethylene	<680	1950	97
Toluene	240000	775	199
Trans-1,2-Dichloroethylene	<680	4990	152
1,1,1-Trichloroethane	<680	6750	163
Trichloroethylene	<680	6360	161
Total Xylenes	1100	<500	75
Semivolatiles (ppm)			
Bis(2-ethylhexyl)phthalate	63 B	235	115
Butylbenzylphthalate	4.5	<12	-
1,2-Dichlorobenzene	0.66 J	<2.2	-
Diethylphthalate	0.87 J	<12	-
Di-n-octylphthalate	1.8 J	<12	-
Fluoranthene	0.67 J	<2.5	-
Fluorene	<2.0	<2.2	-
Isophorone	0.67 J	<2.5	-
Napthalene	1.4 J	<1.8	-
Phenanthrene	0.60 J	<6.2	-
Pyrene	0.73 J	<2.2	-
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppm)			
Arsenic	2.5	8.0	105
Beryllium	0.5	0.44	13
Cadmium	0.5	12	184
Chromium	51	130	87
Copper	263	419	46
Lead	164	667	121
Mercury	2.7	19	150
Nickel	34	19	57
Zinc	90	200	76

TABLE 1-3

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-3-1 (0-1')

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chloroform	750	474	45
Tetrachloroethylene	21000	19700	6.4
Trichloroethylene	2400	2590	7.6
Semivolatiles (ppm)			
Bis(2-ethylhexyl)phthalate	22	66.9	101
Di-n-octylphthalate	0.22	<11	-
Hexachloroethane	0.09	<1.8	-
1,2,4-Trichlorobenzene	0.11	<2.1	-
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppm)			
Arsenic	2.6	7.3	95
Beryllium	0.3	0.69	79
Cadmium	48	15	105
Chromium	23	26	12
Copper	51	169	107
Lead	113	110	2.7
Mercury	0.4	2.3	140
Nickel	9.9	9.6	3.1
Selenium	9.6	<1.0	-
Zinc	78	180	79

TABLE 1-4

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-4-1 (0-1')

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Ethylbenzene	<720	17.3	-
Methylene chloride	<720	19.4	-
Tetrachloroethylene	2600	8.3	199
Toluene	790	<6.0	198
Trans-1,2-dichloroethylene	<720	6.7	-
Total Xylenes	3400	85	190
Semivolatiles (ppm)			
Acenaphthene	0.52 J	<2.2	-
Anthracene	1.3 J	<2.2	-
Benzo(a)anthracene	7.0	<8.9	-
Benzo(a)pyrene	6.0	3.4	55
Benzo(b)fluoranthene	9.6	<11	-
Benzo(g,h,i)perylene	4.4	<4.7	-
Benzo(k)fluoranthene	5.5	*	-
Bis(2-ethylhexyl)phthalate	11.0	*	-
Chrysene	6.9	3.5	65
Di-n-butylphthalate	4.0	<11	-
Fluoranthene	12.0	4.1	98
Fluorene	0.65 J	<2.2	-
Indeno(1,2,3-cd)pyrene	4.2	<5.4	-
Napthalene	0.57 J	<1.8	-
Phenanthrene	5.4	<6.2	-
Pyrene	7.6	3.2	81
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppm)			
Antimony	11	<6.5	-
Arsenic	20	13	42
Beryllium	0.2	0.2	0.0
Cadmium	18	<3.0	-
Chromium	17	27	45
Copper	33900	1120	187
Lead	531	240	75
Mercury	0.7	0.3	80
Nickel	19	19	0.0
Zinc	223	210	6.0

* = Reported value illegible.

TABLE 1-5

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-5-1 (0-1')

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)				
Chlorobenzene	1700		<0.002	200
1,2-Dichloroethane	290		<0.003	200
Ethyl Benzene	88		<0.007	200
Tetrachloroethylene	440		0.12	200
Toluene	290		<0.006	200
Trichloroethylene	59		<0.001	200
Total Xylenes	440		<0.01	200
Semivolatiles (ppm)				
Acenaphthene	3.0		<2.6	-
Bis(2-ethylhexyl)phthalate	48	B	136	96
Fluoranthene	3.8	J	3.4	11
Hexachloroethane	<19		21.5	-
Isophorone	62		35.3	55
Napthalene	34		114	108
Phenanthrene	10.0	J	<7.4	-
Phenol	7.6	J	4.9	43
Pyrene	2.6	J	2.7	3.8
Pesticides/PCBs (ppm)				
Aroclor 1232	210		<6.4	188
Inorganics (ppm)				
Antimony	34		7.1	131
Arsenic	98		36	93
Beryllium	0.3		0.2	40
Cadmium	12		13	8.0
Chromium	29		179	144
Copper	95600		21900	125
Lead	151		973	146
Mercury	1.2		2.6	74
Nickel	11		14	24
Selenium	5.9		0.6	163
Zinc	139		345	85

TABLE 1-6

COMPARATIVE ANALYSIS OF SPLIT SURFACE SOIL SAMPLE RESULTS
LOCATION B-6-1 (0-1')

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Methylene Chloride	870	35.8	184
Semivolatiles (ppm)			
Benzo(a)pyrene	<16	6.6	-
Benzo(k)fluoranthene	<16	14.1	-
Bis(2-ethylhexyl)phthalate	4.9 J,B	22	127
Chrysene	<16	6.4	-
Fluoranthene	<16	9.5	-
Pyrene	<16	7.9	-
Pesticides/PCBs (ppb)			
Aldrin	1900	Not Analyzed	-
Dieldrin	1600	Not Analyzed	-
Inorganics (ppm)			
Arsenic	14	29	70
Beryllium	0.3	0.36	15
Cadmium	6.3	3.7	52
Chromium	13	38	98
Copper	18800	23400	22
Lead	53	370	150
Mercury	0.7	5.3	153
Nickel	10	18	57
Zinc	143	700	132

TABLE 2-1

COMPARATIVE ANALYSIS OF PIEZOMETER SOIL SAMPLES
LOCATION P-1-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)			
Benzene	0.51 J	<4.4	-
1,2-Dichloroethane	58	262	128
Ethyl Benzene	8.1	19.1	81
Tetrachloroethylene	84	237	95
1,1,1-Trichloroethane	0.17 J	<3.8	-
Trichloroethylene	7.5	49.9	148
Total Xylenes	0.03	46.4	200
Semivolatiles (ppm)			
Anthracene	0.52 J	0.41	24
Bis(2-ethylhexyl)phthalate	36	12.5	97
Butylbenzylphthalate	1.0	1.65	49
2-Chloronapthalene	2.5		-
1,2-Dichlorobenzene	9.0	2.59	1.1
Di-n-butylphthalate	1.1	0.5	75
Fluoranthene	0.47 J	1.0	72
Napthalene	2.1	2.8	29
Phenanthrene	1.0	1.3	26
Pesticides/PCBs (ppb)			
Aldrin	672	<3500	-
Dieldrin	1688	<3500	-
Endosulfan II	18.7 J,B	<7100	-
Endrin	78 J	<7100	-
Inorganics (ppm)			
Arsenic	39.8	12	107
Beryllium	0.4	0.39	2.5
Cadmium	<1.0	2.5	-
Copper	1718	7790	128
Lead	R	140	-
Mercury	R	1.4	-
Nickel	20.8	23	10
Zinc	237	371	44

TABLE 2-2

COMPARATIVE ANALYSIS OF PIEZOMETER SOIL SAMPLES
LOCATION P-2-1

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Benzene	1400		<22	194
Chlorobenzene	3600		1260	96
Chloroform	2600		<8.0	199
1,1-Dichloroethane	2200		31.9	194
1,2-Dichloroethane	R		128	-
Ethyl Benzene	6900		2250	102
Methylene Chloride	R		45.4	-
Tetrachloroethylene	14000		16600	17
Toluene	33000		2810	169
Trans-1,2-Dichloroethylene	380	J	90.1	123
1,1,1-Trichloroethane	1500		<19	195
Trichloroethylene	3500		1100	104
Vinyl chloride	85	J	<50	-
Total Xylenes	29000		21780	28
Semivolatiles (ppm)				
Bis(2-ethylhexyl)phthalate	82		186	78
Butylbenzylphthalate	<19.8		28.9	-
1,2-Dichlorobenzene	<19.8		2.7	-
Di-n-butylphthalate	11.0	J	38.1	110
Fluoranthene	<19.8		4.0	-
Napthalene	4.4	J	11.0	86
Pyrene	<19.8		3.7	-
Pesticides/PCBs (ppm)				
Aroclor 1242	<1.2		96	195
Aroclor 1248	69.2		<0.48	197
4,4-DDT	<0.24		0.31	-
Dieldrin	<0.24		2.02	-
Endosulfan II	<0.24		1.67	-
Gamma-BHC	<0.12		1.58	-
Heptachlor	<0.12		5.12	-
Inorganics (ppm)				
Arsenic	39.8		5.0	155
Beryllium	0.4		0.57	35
Cadmium	<1.0		0.94	-
Chromium	<2.1		26	-
Copper	1718		3490	68
Lead	R		99	-
Mercury	R		0.17	-
Nickel	20.8		9.4	76
Zinc	237		56	124

TABLE 2-3

COMPARATIVE ANALYSIS OF PIEZOMETER SOIL SAMPLES
LOCATION P-3-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Benzene	4.3 J	<4.4	-
Chloroform	2.5 J	<1.6	-
Methylene Chloride	3.4 J	8.4	85
Tetrachloroethylene	9.9	<4.1	-
Toluene	49	7.3	148
1,1,1-Trichloroethane	1.1 J	<3.8	-
Trichloroethylene	4.7 J	<1.9	-
Total Xylenes	32	<10	-
Semivolatiles (ppm)			
Bis(2-ethylhexyl)phthalate	15	102	149
Pesticides/PCBs (ppb)			
Aroclor 1242	<1200	7560	145
Delta BHC	16.0 J	<770	-
Dieldrin	15.0 J	<770	-
Inorganics (ppm)			
Arsenic	<5.6	5.3	-
Beryllium	<0.4	0.23	-
Cadmium	15.3 J	12	24
Chromium	110	81	30
Copper	685	384	56
Lead	566	420	30
Mercury	R	2.3	-
Nickel	17.3	21	19
Zinc	298	248	18

TABLE 2-4

COMPARATIVE ANALYSIS OF PIEZOMETER SOIL SAMPLES
LOCATION P-4-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Methylene Chloride	R	69.9	-
Semivolatiles (ppm)			
Acenaphthene	<19800	126	-
Anthracene	"	282	-
Benzo(a)anthracene	"	828	-
Benzo(a)pyrene	"	715	-
Benzo(k)fluoranthene	"	2620	-
Bis(2-ethylhexyl)phthalate	"	5130	-
Butylbenzylphthalate	"	1290	-
Chrysene	"	1100	-
Fluoranthene	"	1120	-
Fluorene	"	96.3	-
Napthalene	"	140	-
Phenanthrene	"	1130	-
Pyrene	"	846	-
Pesticides/PCBs (ppb)			
Aroclor 1248	<1200	4400	114
Aldrin	24.4	3130	197
Delta BHC	96 J	<720	-
Inorganics (ppm)			
Arsenic	<5.4	5.7	-
Beryllium	<0.4	0.41	-
Cadmium	<1.1	1.8	-
Chromium	25.2 J	17	39
Copper	1622 J	977	50
Lead	791 J	410	63
Mercury	R	2.1	-
Nickel	16.5	9.9	50
Zinc	706 J	180	119

TABLE 3-1

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-1S-1

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Ethyl Benzene	20	J	<7.2	-
Methylene Chloride	R		122	-
Tetrachloroethylene	15	J	<4.1	-
Toluene	44		<6.0	152
Total Xylenes	200		<10	181
Semivolatiles (ppb)				
Anthracene	1700	J	2320	31
Benzo(a)anthracene	950		<8900	-
Benzo(a)pyrene	<3300		5280	-
Benzo(k)fluoranthene	<3300		4100	-
Bis(2-ethylhexyl)phthalate	190,000		19500	163
Butylbenzylphthalate	6200		<11000	-
Chrysene	1800		6610	114
Fluoranthene	1600	J	13300	157
Isophorone	1100	J	<2500	-
Phenanthrene	870	J	8870	164
Phenol	940	J	2520	91
Pyrene	1500	J	9660	146
Pesticides/PCBs (ppb)				
Aroclor 1242	980	J		-
Dieldrin	<1200		74	-
Gamma-BHC	<620		72.2	-
Heptachlor	<620		149	-
Inorganics (ppm)				
Arsenic	18		57	104
Beryllium	0.3		0.3	0.0
Cadmium	11		4.9	77
Chromium	10		40	120
Copper	13100		57300	126
Lead	404		446	9.9
Mercury	R		0.79	-
Nickel	14		23	49
Silver	2.0		3.7	60
Zinc	701		903	25

TABLE 3-2

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-3S-1

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Benzene	110	J	<220	-
Chlorobenzene	71		<300	-
Chloroform	770		<80	162
Ethyl Benzene	180		<360	-
Methylene Chloride	R		383	-
1,1,2,2-Tetrachloroethane	<25		363	174
Tetrachloroethylene	7300		7260	0.5
1,1,1-Trichloroethane	500		<190	-
Trichloroethylene	2100		1490	34
Total Xylenes	1100		<500	-
Semivolatiles (ppm)				
Acenapthene	0.37	J	<2.1	-
Anthracene	0.48	J	<2.1	-
Benzo(a)anthracene	2.6		<8.6	162
Benzo(b)fluoranthene	2.5		<14.0	-
Benzo(g,h,i)perylene	2.2		<5.8	-
Benzo(k)fluoranthene	1.9		<3.9	-
Bis(2-ethylhexyl)phthalate	14.0		31	76
Butylbenzylphthalate	0.95		<11	-
Chrysene	2.7		<3.6	-
1,2-Dichlorobenzene	<0.66		5.6	-
Di-n-butylphthalate	5.2		<11	-
Di-n-octylphthalate	0.17	J	<11	-
Fluoranthene	4.1		<2.4	-
Fluorene	0.6	J	<2.1	-
Indeno(1,2,3-cd)pyrene	2.3		<5.2	-
Isophorone	0.8		<2.4	-
Napthalene	2.8		<1.8	-
Nitrobenzene	42		<2.1	-
Phenanthrene	2.8		<6.0	-
Phenol	1.3		<1.7	-
Pyrene	3.2		<2.1	-
1,2,4-Trichlorobenzene	0.55	J	<2.1	-

NOTE: Pesticides and inorganic parameters were not analyzed by Dames & Moore for this sample.

TABLE 3-3

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-4S-1

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Semivolatiles (ppm)				
Acenaphthene	1.6	J	<2.1	-
Anthracene	1.7	J	<2.1	-
Benzo(a)pyrene	7.7		<2.8	-
Benzo(b)fluoranthene	11		<11	-
Bis(2-ethylhexyl)phthalate	200		84.2	82
Butylbenzylphthalate	6.0		<11	-
Chrysene	5.3	J	<2.8	-
1,2-Dichlorobenzene	3.4	J	<2.1	-
Di-n-butylphthalate	5.3	J	<11	-
Diethylphthalate	15		<11	-
Fluoranthene	9.1		<2.5	-
Napthalene	6.2	J	<1.8	-
Phenanthrene	4.9	J	<6.1	-
Pyrene	10		<2.1	-
Pesticides/PCBs (ppb)				
Aroclor 1242	550	J	12000	182
Aldrin	<280		20	-
Dieldrin	<550		2830	135
Gamma-BHC	<280		595	-
Inorganics (ppm)				
Arsenic	1.8		4.9	93
Beryllium	<0.2		0.43	-
Cadmium	2.6		2.6	0.0
Chromium	116		75.6	42
Copper	1760		1510	15
Lead	318		280	13
Mercury	R		0.88	-
Nickel	14		17	19
Zinc	195		159	20

NOTE: All values for volatile organics reported by Ebasco's contracted laboratory were rejected due to violation of holding times.

TABLE 3-4

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-6S-1

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Methylene Chloride	R		127	-
Tetrachloroethylene	290		75.1	118
Toluene	16	J	<6.0	-
Trans-1,2-Dichloroethylene	84		13.2	146
Trichloroethylene	42	J	9.5	126
Semivolatiles (ppm)				
Bis(2-ethylhexyl)phthalate	190		7.2	185
Butylbenzylphthalate	1.4	J	<1.2	-
1,2-Dichlorobenzene	25		0.3	195
Di-n-butylphthalate	0.2	J	<1.2	-
Pyrene	1.3	J	<2.2	-
Pesticides/PCBs (ppm)				
Aroclor 1242	9.9		<5.5	-
Aroclor 1260	<54		944	178
Inorganics (ppm)				
Arsenic	1.4		7.7	138
Beryllium	0.3		0.4	29
Cadmium	7.6		10	29
Chromium	49		152	102
Copper	1240		2190	55
Lead	189		690	114
Nickel	8.5		24	95
Zinc	354		353	0.3

TABLE 3-5

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-2D-3

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Benzene	6.0 J	<4.4	-
Methylene Chloride	R	8.1	-
Tetrachloroethylene	21 J	<4.1	-
Trichloroethylene	58	<1.9	-
Total Xylenes	78	<10	-
Semivolatiles (ppb)			
Acenaphthene	260 J	<2300	-
Bis(2-ethylhexyl)phthalate	18000	<12000	-
Butylbenzylphthalate	2000	<12000	-
Di-n-butylphthalate	2800	<12000	-
Napthalene	850 J	<1900	-
Phenanthrene	440 J	<6500	-
Phenol	4200	<1800	-
Pesticides/PCBs (ppb)			
Aroclor 1242	142 J	<6300	-
Inorganics (ppm)			
Antimony	14	<6.1	-
Arsenic	5.8	2.8	70
Beryllium	0.3	0.6	67
Chromium	12	16	29
Copper	240	61	119
Lead	78	15	135
Nickel	7.1	18	87
Zinc	79	49	47

TABLE 3-6

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-2D-4

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chloroform	150000	148000	1.3
1,2-Dichloroethane	45000	48900	8.3
Methylene Chloride	7600	1050	151
Trichloroethylene	20000	24900	21.8
Semivolatiles	None Detected	None Detected	
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppm)			
Arsenic	R	5.6	-
Beryllium	<0.6	1.0	-
Cadmium	2.5	<0.25	-
Chromium	3.1	24	1.5
Copper	32	32	0.0
Lead	R	16	-
Nickel	49	34	36
Zinc	77	60	25

TABLE 3-7

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-5D-3

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Benzene	2.0 J	<440	-
Chlorobenzene	21	<600	-
1,2-Dichloroethane	14	<280	-
Ethyl Benzene	33	<720	-
Methylene Chloride	11.0	<280	-
Tetrachloroethylene	130	<690	-
Toluene	150	<600	-
Trans-1,2-Dichloroethane	16.0	<160	-
Trichloroethylene	7.0	<190	-
Total Xylenes	250	<1000	-
Semivolatiles (ppb)			
Anthracene	140 J	<2400	-
Benzo(a)anthracene	690	<9800	-
Benzo(b)fluoranthene	1800	<13000	-
Benzo(g,h,i)perylene	780	<5100	-
Benzo(k)fluoranthene	1900	<4400	-
Bis(2-ethylhexyl)phthalate	19000	*	-
Butylbenzylphthalate	620 J	<1300	-
Chrysene	890	<3100	-
Di-n-butylphthalate	2300	<13000	-
Di-n-octylphthalate	1300	<13000	-
Fluoranthene	1200	<2800	-
Indeno(1,2,3-cd)pyrene	920	<5900	-
Napthalene	960	<200	-
Nitrobenzene	630 J	<2400	-
Phenanthrene	1100	<680	-
Pyrene	1700	<2400	-
Pesticides/PCBs (ppb)			
Aldrin	7946	<60	197
Endrin	1528	<60	197
Heptachlor	714	<60	170
Inorganics (ppm)			
Arsenic	76.5	3.4	182
Beryllium	1.1	0.76	37
Chromium	23.2	22	5.3
Copper	20.5	56	93
Lead	38.1	14	93
Mercury	0.2	0.42	71
Nickel	20	22	9.5
Zinc	94.6	60	45

* = Reported value not legible.

TABLE 3-8

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-5D-4

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Benzene	R		9.8	-
Chlorobenzene	<500		16.9	-
Chloroform	R		150	-
1,1-Dichloroethane	<500		84.7	-
1,2-Dichloroethane	<500		132	-
1,1-Dichloroethylene	<500		164	-
Ethylbenzene	1000		299	108
Methylene Chloride	9700	B	344	186
Tetrachloroethylene	16000		7950	67
Toluene	3900		3580	8.6
Trans-1,2-Dichloroethylene	<500		79.3	-
1,1,1-Trichloroethane	R		198	-
Trichloroethylene	12000		21800	58
Total Xylenes	7200		1547	129
Semivolatiles	None Detected		None Detected	
Pesticides/PCBs (ppb)				
Endrin	1.7	J	<55	-
Heptachlor	1.4	J	<55	-
Inorganics (ppm)				
Arsenic	<14.7		3.2	-
Beryllium	<0.6		0.8	-
Chromium	28.5		22	26
Copper	22.1		42	62
Lead	10.1		14	32
Nickel	26.2		21	22
Zinc	62.6		53	17

TABLE 3-9

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-7D-3

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chlorobenzene	<6.0	1400	198
Ethylbenzene	<6.0	4560	199
Methylene Chloride	5.0 J	637	197
Tetrachloroethylene	6.0	16400	200
Toluene	6.0	4790	199
Trichloroethylene	<6.0	2970	199
Total Xylenes	18	23720	200
Semivolatiles (ppb)			
Phenol	<16000	15600	-
Pesticides/PCBs (ppb)			
Aroclor 1242	<1100	11400	151
Aroclor 1254	25000	<520	192
Inorganics (ppm)			
Arsenic	3.8	8.6	77
Beryllium	0.76	0.9	17
Cadmium	173	0.2	199
Chromium	45	29	43
Copper	1240	60	182
Lead	1410	24	193
Mercury	3.8	<0.1	-
Nickel	8.7	33	117
Zinc	406	79	135

TABLE 3-10

COMPARATIVE ANALYSIS OF MONITORING WELL SOIL SAMPLES
LOCATION MW-7D-4

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Methylene Chloride	24	13	59.5
Tetrachloroethylene	<7.0	4.9	-
Trichloroethylene	<7.0	10.1	-
Inorganics (ppm)			
Arsenic	9.9	6.2	46
Beryllium	0.8	1.3	43
Cadmium	3.0	<3.0	-
Chromium	24	34	34
Copper	32	33	3.1
Lead	23	22	4.4
Nickel	32	36	11.7
Zinc	84	88	4.7

NOTE: All values for semivolatiles and pesticides/PCBs reported by Ebasco's contracted laboratory were rejected due to violation of holding times.

TABLE 4-1

COMPARATIVE ANALYSIS OF SEDIMENT SAMPLE RESULTS
LOCATION SS-1-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Benzene	170	<44	118
Chlorobenzene	210	<60	111
Toluene	R	166	-
Trichloroethylene	1300	19.0	194
Total Xylenes	1320 B	121	166
Semivolatiles (ppm)			
Benzo(a)pyrene	120	123	2.5
Bis(2-ethylhexyl)phthalate	19.0 J	<9.5	-
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppm)			
Arsenic	29	7.1	121
Beryllium	<4.6	0.43	-
Cadmium	37	6.6	139
Chromium	1310	266	132
Copper	865	165	136
Lead	418	100	123
Mercury	82	62	28
Nickel	104	35	99
Silver	<15	2.4	-
Zinc	2760	693	120

TABLE 4-2

COMPARATIVE ANALYSIS OF SEDIMENT SAMPLE RESULTS
LOCATION SS-2-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)			
Benzene	0.23 J	<0.04	-
Chlorobenzene	13	1.6	156
Chloroform	130 B	<0.02	200
1,2-Dichloroethane	2.2	<0.03	195
Ethyl Benzene	17	1.4	170
Methylene Chloride	R	0.6	-
Tetrachloroethylene	3.0	<0.04	195
Toluene	16	0.48	190
Total Xylenes	33	4.2	150
Semivolatiles (ppm)			
Bis(2-ethylhexyl)phthalate	390	140	94
Napthalene	3.1 J	<4.4	-
Phenanthrene	3.5	<14	-
Pesticides/PCBs (ppm)			
Aroclor 1242	<1.2	40.2	188
Aroclor 1260	21.0	13.2	46
Inorganics (ppm)			
Arsenic	12	12	0.0
Beryllium	<3.2	0.9	-
Cadmium	59	36.6	46
Chromium	402	264	41
Copper	2010	2210	9.5
Lead	440	380	146
Mercury	34	12.6	92
Nickel	423	340	22
Silver	<11	1.3	-
Zinc	1370	1760	25

TABLE 4-3

COMPARATIVE ANALYSIS OF SEDIMENT SAMPLE RESULTS
LOCATION SS-3-1

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)			
Benzene	6.4	<4.4	-
Chlorobenzene	17	7.7	75
Chloroform	260	<1.6	198
1,1-Dichloroethane	5.8	<4.7	-
1,2-Dichloroethane	4.4	<2.8	-
Ethylbenzene	80	23.2	110
Tetrachloroethylene	33	27.8	17
Toluene	880	221	120
Trans-1,2-Dichloroethylene	14	6.3	76
Trichloroethylene	107 B	142	28
Vinyl chloride	2.7	<10.0	-
Semivolatiles (ppm)			
Benzo(a)pyrene	19	<22	-
Bis(2-ethylhexyl)phthalate	57	<88	-
1,2-Dichlorobenzene	5.2 J	<17	-
Di-n-butylphthalate	24 J	<88	-
Napthalene	3.8 J	<14	-
Pesticides/PCBs (ppm)			
Aldrin	1.1	Not Analyzed	-
Dieldrin	3.3	Not Analyzed	-
Aroclor 1242	<1.2	268	198
Inorganics (ppm)			
Arsenic	27	5.1	136
Beryllium	<6.1	0.55	-
Cadmium	100	20	133
Chromium	1130	170	148
Copper	8860	1250	151
Lead	779	130	143
Mercury	74	<0.1	199
Nickel	482	119	121
Zinc	4880	815	143

TABLE 5-1

COMPARATIVE ANALYSIS OF SURFACE WATER SAMPLE RESULTS
LOCATION SW-3

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chloroform	<5.0	1.8	-
Methylene Chloride	R	12.1	-
Trans-1,2-Dichloroethylene	8.6	9.6	11
1,1,1-Trichloroethane	9.3	12.9	32
Semivolatiles	None Detected	None Detected	
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppb)			
Copper	35	26	30
Lead	18	<78	-
Mercury	0.2	<0.22	-
Nickel	<24	9.3	-
Zinc	245	150	98

TABLE 5-2

COMPARATIVE ANALYSIS OF SURFACE WATER SAMPLE RESULTS
LOCATION SW-4

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Methylene Chloride	R	10.6	-
Trans-1,2-Dichloroethylene	4.2 J	8.5	68
1,1,1-Trichloroethane	R	5.4	-
Semivolatiles	None Detected	None Detected	
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppb)			
Cadmium	6.0	<3.3	-
Copper	89	40	76
Lead	19	<78	-
Mercury	0.3	<0.22	-
Nickel	<24	18	-
Zinc	181	160	12

TABLE 6-1

COMPARATIVE ANALYSIS OF GROUNDWATER SAMPLE RESULTS
LOCATION GW-1-I

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppm)			
Benzene	<0.5	5.1	164
Ethylbenzene	<0.5	3.9	154
1,1,2,2-tetrachloroethane	<0.5	3.1	144
Toluene	<0.5	15	187
Trans-1,2-Dichloroethylene	<0.5	32.5	194
Trichloroethylene	<1.0	6.8	140
Vinyl chloride	R	35.6	-
Semivolatiles (ppb)			
1,2-Dichlorobenzene	<10.0	57.4	140
Isophorone	4.7 J	<2.2	-
Napthalene	7.9 J	8.5	7.3
Pesticides/PCBs (ppb)			
4,4-DDT	<0.1	0.37	-
Inorganics (ppb)			
Arsenic	25	22	13
Copper	1330	1350	1.5
Lead	9.0	<100	-
Mercury	0.4	0.2	67
Nickel	174	150	15
Zinc	180	150	18

TABLE 6-2

COMPARATIVE ANALYSIS OF GROUNDWATER SAMPLE RESULTS
LOCATION GW-7D-I

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chloroform	R	13.9	-
1,2-Dichloroethane	<5.0	9.0	-
Methylene Chloride	R	33	-
Tetrachloroethylene	15	20.2	30
1,1,1-Trichloroethane	R	12.7	-
Trichloroethylene	38	73.8	64
Semivolatiles (ppb)			
Nitrobenzene	<10.0	3.3	-
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppb)			
Zinc	39	49	23

TABLE 6-3

COMPARATIVE ANALYSIS OF GROUNDWATER SAMPLE RESULTS
LOCATION GW-5D-I

Parameter	Ebasco (CLP) Concentration	Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)			
Chlorobenzene	32	<60	-
Chloroform	R	214	-
1,1-Dichloroethane	6.1	<47	-
1,2-Dichloroethane	54	114	71
1,1-Dichloroethylene	<5.0	313	194
Methylene Chloride	R	139	-
Tetrachloroethylene	310 B	996	105
Trans-1,2-Dichloroethylene	62	190	102
1,1,1-Trichloroethane	92	417	128
Trichloroethylene	1300	4520	111
Semivolatiles (ppb)			
Nitrobenzene	8.2 J	20.9	87
Pesticides/PCBs	None Detected	None Detected	
Inorganics (ppb)			
Lead	6.0	<88	-

TABLE 6-4

COMPARATIVE ANALYSIS OF GROUNDWATER SAMPLE RESULTS
LOCATION GW-3-I

Parameter	Ebasco (CLP) Concentration		Dames & Moore Concentration	RPD (%)
Volatile Organics (ppb)				
Chloroform	870	B	614	34.5
1,2-Dichloroethane	507		396	25
Methylene Chloride	R		164	-
Tetrachloroethylene	11.0	B	<21	-
Toluene	R		60	-
Trans-1,2-Dichloroethylene	4.3	J	<8.0	-
1,1,1-Trichloroethane	49		45.6	7.2
Trichloroethylene	175		135	25.8
Semivolatiles (ppm)				
Acenaphthene	<50		2.9	-
Acenaphthalene	<50		6.3	-
Bis(2-chloroethyl)ether	<50		1260	185
1,2-Dichlorobenzene	120		23.9	134
Diethylphthalate	<50		15.2	-
Di-n-butylphthalate	44	J	<10.0	126
Fluoranthene	25	J	3.7	148
Fluorene	16	J	6.5	84
Isophorone	<50		8450	198
Napthalene	620		248	86
Nitrobenzene	<50		57900	200
Phenanthrene	46	J	11.2	122
Pyrene	65		<2.0	188
Pesticides/PCBs (ppb)				
Aroclor 1242	<0.5		116	198
Inorganics (ppb)				
Arsenic	28		24	15
Beryllium	<3.0		0.74	-
Chromium	R		<4.6	-
Copper	433		210	69
Lead	1080		470	79
Mercury	1.5		1.3	14
Nickel	110		71	43
Zinc	3180		2080	42

USEPA SPLIT SAMPLE RESULTS

(WINTER, 1987 SAMPLES)

DISCUSSION - WINTER, 1987 SAMPLES

The soil and sediment sample analytical results from the Ebasco split samples do not agree in many cases with the ETC soil and sediment sample analytical results (the relative percent difference, or RPD, exceeds 100 percent). Where the Ebasco data have no qualifiers, a comparison of these data with the ETC data shows that, in most cases, the ETC concentrations are higher. In most cases where the Ebasco concentrations are higher than the ETC concentrations, the Ebasco data are qualified. The differences between the two data sets again points out the wide variability in the soil and sediment chemistry discussed in the RI Report.

With respect to water samples, the Ebasco analytical results generally agree with the ETC analytical results, with the exception of water sample GW-3S (from monitoring well MW-3S). The large number of discrepancies may be related to the nature of the sample, which contained both aqueous and non-aqueous material. The non-aqueous material may have influenced the split sample analysis results. The sulfur reported in one Ebasco field blank split sample is an estimated value, and the spike sample recovery for this analysis was outside control limits. Therefore, this data must be used with caution.

The ETC analytical results for all samples were independently reviewed by Metatrace, Inc. The Metatrace report follows this discussion. The conclusion of the report is that "all submitted data are acceptable for release to the EPA."

metaTRACE, Inc.

February 29, 1988

Mr. Gerard M. Coscia, P.E.
Associate
Dames & Moore
6 Commerce Drive
Cranford, New Jersey 07016-1101

Dear Gerry:

Attached is the summary of the data review performed on the data packages submitted by ETTC. If you have any questions, please contact me.

Sincerely,

Kenneth J. Baughman

Kenneth J. Baughman
Vice President
Project Administration

KJB:bcb

Encls.

metaTRACE, Inc. ▪ 13715 Rider Trail North ▪ Earth City, MO 63045 ▪ (314) 298-8566

Data Review Summary for SCP Carlstadt RI/FS

The review of ETTC organic and inorganic data followed the criteria established by individual methods specified in the revised Project Operations Plan and the accompanying parameter table and specific items addressed in the laboratory audits performed at ETTC on 12-7-87 and 1-6-88. The data was reviewed for the following:

- o Completeness
- o Holding time evaluation (extraction and analysis)
- o Tuning criteria (BFB and DFTPP)
- o Method blank data
- o Surrogate recoveries
- o Evaluation of duplicate and spike data
- o Evaluation of field duplicates
- o Evaluation of sample specific detection limits

The data packages submitted by ETTC did not require CLP type deliverables. Therefore, detailed evaluations of instrument calibration criteria or recalculations were not performed.

1. Except for a few minor inconsistencies in actual dilutions performed, the laboratory conformance summaries document the history of each sample.

2. Holding times for extractions and analysis were met for all samples.

3. Method blanks were acceptable. Methylene chloride was a consistent contaminant in the volatile organic analysis. However, the concentration was below the 5 times D.L. used by EPA. One blank had Chloroform reported above the detection limit. No sample results were effected.

4. Surrogate recoveries for VOA, BNA and pesticide/PCB blanks were within established EPA limits. Some samples had individual surrogates outside those limits, but were flagged on the conformance summaries.

5. Spiked blank and laboratory duplicate data had recovery and RPD values consistent with the advisory values set by EPA.

6. Review of the GC chromatograms and reconstructed ion chromatograms (GC/MS) indicates that the laboratory chose the appropriate dilutions. Detection limits are consistent with these dilutions, sample weights or volumes, and percent moisture. The laboratory should finalize the organic residue procedure and submit it to Dames & Moore.

7. Review of the field duplicate data (water and soil) indicates a large amount of variability. The duplicate soil data showed the largest number of inconsistences. These inconsistences cannot be directly traced to any laboratory errors or problems associated with the analyses. The variations could be a result of the sampling protocol or the sample matrix itself. Additional review of the sampling procedures is warranted prior to any additional sampling.

8. All submitted data is acceptable for release to the EPA. Depending on the extent of the Agencies review, additional data (calibration) may be required to complete their review.

Rec'd 8/22/88
GMC

EBASCO SERVICES INCORPORATED

160 Chubb Avenue, Lyndhurst, NJ 07071 (201) 460-1900

EBASCO

July 21, 1988

Ms. Janet Feldstein
Remedial Project Manager
U S Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

SUBJECT: REM III PROGRAM - EPA CONTRACT NO. 68-01-7250
WORK ASSIGNMENT NO. 11-2665.0
SCIENTIFIC CHEMICAL PROCESSING SITE
COMPARATIVE ANALYSIS OF SPLIT SAMPLES COLLECTED
IN DECEMBER 1987

Dear Ms. Feldstein:

Enclosed please find results of the comparative analysis of twenty-seven (27) split samples analyzed by CLP laboratories and Dames & Moore's contracted laboratory (i.e., Environmental Testing and Certification). These split samples were collected during soil and sediment re-sampling efforts and Phase III field investigation conducted in December, 1987. The results were tabulated according to sample types as follows:

Table	Number and Type of Sample
1 through 10	10 monitoring well soil samples
11 through 16	6 boring soil samples
17 through 19	3 piezometer soil samples
20 through 23	4 sediment samples
24 through 27	4 groundwater samples
28 through 37	10 trip blanks
38 through 44	7 field blanks

Relative Percent Difference (RPD) was calculated to show whether split sample results were significantly different from each other. Its definition was given in the enclosed report. Generally, when evaluating split (or duplicate) sample results, data would be rejected if the RPD exceed 100 percent. When RPD approaches 200 percent, it indicates that the difference between the split sample results is two or more order-of-magnitude different.

The analytical results of the split samples and the calculated RPD's are summarized in Tables 1 through 44 of the enclosed report. The number of analytes whose RPD exceeded 100% were tabulated against the number of analytes compared for each sample, broken out by the type of analysis. These results are summarized in Table A, grouping by matrix and analysis type. Table A indicates that the fewest number of divergent RPD's, with respect to the number of comparisons, was seen in the groundwater samples; soil and sediment comparisons were about equivalent with a greater number of divergent RPD's. The volatile analyses in the groundwater and the inorganic analyses in the sediments produced the fewest divergent RPD's. All of the remaining comparisons were approximately equivalent with respect to the relative number of divergent RPD's. Generally, the Ebasco split samples yield high concentrations than the dames & Moore split samples.

One area of concern is the presence of atypical contaminants in the field and trip blanks. Sulfur was detected in a field blank (FB-12, Table 39). Aroclor 1232 was also noted in a field blank (FB-11, Table 38). Sulfur is generally associated with soils from reduced environments and its presence in an aqueous blank suggests incomplete cleaning (and, hence, decontamination) of the sampling equipment.

If you have any questions, please feel free to call me at (201) 460-6502.

Very truly yours,

Hsin H Yeh

Hsin H Yeh, Ph.D., P.E.
Site Manager

HHY/ew

cc: D Sachdev
J Samuelian
S Riggi

TABLE A. SUMMARY OF DIVERGENT COMPARISONS BY MATRIX AND ANLYSIS TYPE.*

Matrix	VOA	BNA	P/Pest	Inorg.
Water+	14/15/4	1/1/1	1/1/1	1/1/1
Groundwater	8/22/3	25/35/3	3/3/3	13/15/3
Soil	132/164/18	173/203/17	21/27/17	71/150/19
Sediment	16/27/4	24/29/4	9/10/4	16/42/4

* Values shown are "total analytes whose RPD exceeded 100%/total analytes compared/totalsamples compared".

\+ Field and trip blanks.

EPA WORK ASSIGNMENT NO. 11-2665.0

EPA CONTRACT NO. 68-01-7250

EBASCO SERVICES INCORPORATED

COMPARATIVE ANALYSIS
OF
SPLIT SAMPLES COLLECTED IN DECEMBER 1987

JULY 1988

DEFINITIONS

RPD -- Relative Percent Difference.
RPD = [(S-D)/((S+D)/2)] x 100. In general, when evaluating split or duplicate sample results, data would be qualified and/or rejected if the RPD exceeded 100 percent. Some allowance is required for evaluation of soil sample results, however, due to the nature of the matrix.

RO -- Test data rejected.

--- -- Parameter not tested.

0 -- Parameter not detected or below minimum detection limit.

ORGANIC ANALYSIS QUALIFIERS

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 indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration of 3 ug/L is calculated, 3J is reported. The sample quantitation limit is adjusted for both dilution and percent moisture.

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

B -- This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

D -- This flag identifies compounds whose concentrations are outside the calibration range of the analysis. If one or more compounds have a response greater than full scale, the extract must be diluted and reanalyzed. Compounds whose concentrations are above the calibration range of the first analysis shall be flagged with "D". Compounds identified in that first analysis but below the calibration range of the second analysis shall be flagged "D".

INORGANIC ANALYSIS QUALIFIERS

E -- Indicates a value estimated or not reported due to the presence of interference.

S -- Indicates value determined by Method of Standard Addition.

N -- Indicates spike sample recovery is not within control limits.

* -- Indicates duplicate analysis is not within control limits.

+ -- Indicates the correlation coefficient for method of standard addition is less than 0.995.

M -- Indicates duplicate injection results exceeded control limits.

P -- Indicates ICP method used.

A -- Indicates Flame AA method used.

F -- Indicates Furnace method used.

TABLE 1

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-1S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETIC ACID, ETHYL ESTER	760	9	195.32
ACETONITRILE (DOT) (8CI9CI)	190	---	
ETHYL ETHER (8CI)	50	---	
FURAN, TETRAHYDRO- (8CI9CI)	12	---	
XYLENE (TOTAL)	42	0	200.00
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	RO	72.8	
ANTHRACENE	RO	205	
BIS(2-ETHYLHEXYL) PHTHALATE	150 J	2050	172.73
FLUORANTHENE	RO	558	
FLUORENE	RO	127	
NAPHTHALENE	RO	127	
PHENANTHRENE	RO	576	
PYRENE	RO	450	
PESTICIDE/PCB (PPB)			
AROCLOR-1254	0	180	200.00
INORGANICS (PPM)			
ALUMINUM	2180 P	---	
ARSENIC	0	1.2	200.00
BARIUM	26.6 BP	---	
BERYLLIUM	0	0.4	200.00
CADMIUM	0	0.46	200.00
CALCIUM	1210 P	---	
CHROMIUM	2.7 P	12	126.53
COPPER	15.7 P	806	192.36
CYANIDE	---	<.6	
IRON	6380 *P	---	
MAGNESIUM	607 BP	---	
MANGANESE	123 P	---	
NICKEL	26.6 *EP	8.5	103.13
POTASSIUM	327 BEP	---	
VANADIUM	4.8 BP	---	
ZINC	19.1 NP	83	125.17
PETROLEUM HYDROCARBONS (PPM)	13	36	93.88
MISCELLANEOUS			

TABLE 1 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-1S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PHENOLICS (TOTAL) (PPM)	---	<.1	

TABLE 2

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-2D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETIC ACID, ETHYLESTER	130 J	---	
ACETONITRILE	210 J	---	
BENZENE	33	189	140.54
2-BUTANONE	6 J	119	180.80
CHLOROBENZENE	7	12	52.63
1,2-DICHLOROETHANE	8	0	200.00
ETHYL ETHER (8CI)	13 J	---	
FURAN, TETRAHYDRO- (8CI9CI)	63 J	---	
2-HEXANONE, 5-METHYL-(8CI9CI)	8 J	---	
METHYLENE CHLORIDE	RO	20.4	
4-METHYL-2-PENTANONE	15	---	
2-PROPANOL (ACN) (9CI)	4 J	---	
TETRACHLOROETHENE	4 J	0	200.00
TOLUENE	RO	221	
XYLENE	64	47.4	29.80
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	66 J	0	200.00
ANTHRACENE	270 J	1360	133.74
BENZENE 1,1-OXYBIS-	300000 J	---	
BENZO(A)PYRENE	0	2790	200.00
BENZO(B)FLUORANTHENE	0	3870	200.00
BIS(2-CHLOROETHYL)ETHER	140 J	0	200.00
BIS(2-ETHYLHEXYL) PHTHALATE	18000 JE	381000	181.95
BUTYLBENZYLPHTHALATE	450 J	3510	154.55
CHRYSENE	560	0	200.00
DIBENZOFURAN	140 J	---	
2,4-DIMETHYLPHENOL	230 J	0	200.00
DIMETHYL PHTHALATE	36 J	0	200.00
DI-N-BUTYLPHTHALATE	240 J	2700	167.35
2,6-DINITROTOLUENE	7900	0	200.00
DI-N-OCTYLPHTHALATE	1400 J	19500	173.21
FLUORANTHENE	170	4730	186.12
FLUORENE	33 J	803	184.21
FORMAMIDE, N,N-DIMETHYL	6000 J	---	
2-METHYLNAPHTHALENE	210 J	---	
4-METHYLPHENOL	620 J	---	
NAPTHALENE	350 J	1500	124.32
2-NITROANILINE	1200 E	---	
NITROBENZENE	450 J	0	200.00

TABLE 2 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-2D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
4-NITROPHENOL	830 J	0	200.00
PHENANTHRENE	260 J	4030	175.76
PHENOL	2800 J	0	200.00
PYRENE	320	4490	173.39
UNKNOWN	600 J	---	
UNKNOWN	5000 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	350000	200.00
AROCLOR-1248	5400 J	0	200.00
INORGANICS (PPM)			
ALUMINUM	3360 P	---	
ARSENIC	0	8.9	200.00
BARIUM	370 P	---	
BERYLLIUM	0	0.37	200.00
CADMIUM	5.8	9	43.24
CALCIUM	27600 P	---	
CHROMIUM	36.1 P	28	25.27
COBALT	12.2 BP	---	
COPPER	183 P	5670	187.49
CYANIDE	---	<.9	
IRON	99200 *P	---	
LEAD	910 EP	230	119.30
MAGNESIUM	9550 P	---	
MANGANESE	1230	---	
MERCURY	99 W	0.52	197.91
NICKEL	142 *EP	17	157.23
POTASSIUM	499 BEP	---	
VANADIUM	43 P	---	
ZINC	11200 NP	376	187.01
PETROLEUM HYDROCARBONS (PPM)	17000	8290	68.88
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	4.5	

TABLE 3

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-2D (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONITRILE (DOT) (8CI9CI)	160	---	
2-BUTANONE	1100 JD	602	58.52
CHLOROFORM	230 D	566	84.42
1,2-DICHLOROETHANE	320 D	0	200.00
1,2-DICHLOROETHENE	0	21.6	200.00
FURAN, TETRAHYDRO- (8CI9CI)	71	---	
METHYLENE CHLORIDE	RO	319	
TOLUENE	RO	10	
TRICHLOROETHENE	0	52.5	200.00
ACIDS/BASE NEUTRALS (PPB)			
BIS(2-ETHYLHEXYL)PHTHALATE	RO	999	
UNKNOWN ALDOL COND.	20000 J	---	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NONE DETECTED	
INORGANICS (PPM)			
ALUMINUM	11100 P	---	
ARSENIC	3.8 NF	0	200.00
BARIUM	61.5 P	---	
BERYLLIUM	0.89 BP	0.4	75.97
CALCIUM	2240 P	---	
CHROMIUM	14.6 P	13	11.59
COBALT	20.7 P	---	
COPPER	31.3 P	47	40.10
CYANIDE	---	<.6	
IRON	33400 *P	---	
LEAD	12.7 S*F	9.5	28.83
MAGNESIUM	4520 P	---	
MANGANESE	179 P	---	
NICKEL	25.6 *E	17	40.38
POTASSIUM	705 BEP	---	
SODIUM	464 BEP	---	
VANADIUM	33.2 P	---	
ZINC	63.3 NP	47	29.56
PETROLEUM HYDROCARBONS (PPM)	220	61	113.17
MISCELLANEOUS			

TABLE 3 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-2D (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PHENOLICS (PPM)	---	0.1	

TABLE 4
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-3S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	7600 ED	---	
BENZENE	2700 ED	0	200.00
2-BUTANONE	15000 JDE	16000	6.45
CARBON TETRACHLORIDE	2200 ED	0	200.00
CHLOROBENZENE	3600 ED	0	200.00
CHLOROFORM	8100 ED	379000	191.63
CYCLOBUTANE, ETHYL-	32 JD	---	
CYCLOPROPANE, BUTYL- (9CI)	33 JD	---	
CYCLOPROPANE, 1,1,2,2-TETRAM	32 JD	---	
1,1-DICHLOROETHANE	430 D	0	200.00
1,2-DICHLOROETHANE	1000000 JD	146000	149.04
1,1-DICHLOROETHENE	470 D	0	200.00
1,2-DICHLOROETHENE	800 D	0	200.00
ETHANE, 1-BROMO-2-CHLORO	54 JD	---	
ETHANE, 1,1,2-TRICHLORO-1,2,	66 JD	---	
ETHYLBENZENE	13000 ED	71100	138.17
2-HEXANONE	25 JD	---	
METHANE, DICHLOROFLUORO-	82 JD	---	
METHYLENE CHLORIDE	7800 EBD	11600	39.18
4-METHYL-2-PENTANONE	13000 ED	---	
3-OCTANONE (8CI9CI)	6 JD	---	
PENTANE,3-ETHYL (8CI9CI)	150 JD	---	
PENTANE, 3-METHYL- (8CI9CI)	80 JD	---	
PROPANE, 2-CHLORO (8CI9CI)	32 JD	---	
2-PROPANOL (8CN) (9CI)	150 JD	---	
TETRACHLOROETHENE	39000 ED	241000	144.29
TOLUENE	43000 JDE	384000	159.72
1,1,1-TRICHLOROETHANE	36000 ED	144000	120.00
1,1,2-TRICHLOROETHANE	510 D	0	200.00
TRICHLOROETHENE	23000 ED	421000	179.28
UNKNOWN	6 JD	---	
UNKNOWN	64 JD	---	
VINYL CHLORIDE	32 JD	0	200.00
XYLENE (TOTAL)	75000 ED	288200	117.40
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	2000	21200	165.52
ACENAPTHYLENE	1800	21000	168.42
ANTHRACENE	2600	86300	188.30
BENZENE, 1,4-DIMETHYL-	1000000 J	---	
BENZENE, 1-ETHYL-3-METHYL	300000 J	---	

TABLE 4 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-3S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
BENZENE, METHYL(1-METHYLETHY	100000 J	---	
BENZENE, 1,2,3,4-TETRAMETHYL	100000 J	---	
BENZENE, 1,3,5-TRIMETHYL-	100000 J	---	
BENZO(A)ANTHRACENE	7300	84200	168.09
BENZO(A)PYRENE	3200	108000	188.49
BENZO(B)FLUORANTHENE	2900	164000	193.05
BENZO(GHI)PERYLENE	0	73300	200.00
BENZOIC ACID	1000 J	---	
BENZO(K)FLUORANTHENE	2900	0	200.00
BIS(2-CHLOROETHYL)ETHER	32000 J	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	180000 E	119000	40.80
BUTYLBENZYLPHTHALATE	170000 E	73600	79.15
4-CHLORO-3-METHYLPHENOL	2800	---	
2-CHLORONAPHTHALENE	310 J	0	200.00
CHRYSENE	7700 J	106000	172.91
DIBENZOFURAN	4900	---	
1,2-DICHLOROBENZENE	250000 E	385000	42.52
1,3-DICHLOROBENZENE	380000 E	0	200.00
1,4-DICHLOROBENZENE	130000 E	0	200.00
2,4-DICHLOROPHENOL	13000 J	0	200.00
DIETHYL PHTHALATE	1200	0	200.00
2,4-DIMETHYLPHENOL	4500 J	0	200.00
DIMETHYL PHTHALATE	1800	0	200.00
DI-N-BUTYLPHTHALATE	48000	98200	68.67
2,6-DINITROTOLUENE	8900	0	200.00
DI-N-OCTYLPHTHALATE	1000	0	200.00
FLUORANTHENE	8200	176000	182.19
FLUORENE	5900	94100	176.40
INDENO(1,2,3-CD)PYRENE	0	86900	200.00
ISOPHORONE	35000	0	200.00
2-METHYLNAPHTHALENE	10000	---	
2-METHYLPHENOL	1200	---	
4-METHYLPHENOL	3000	---	
NAPTHALENE	46000	480000	165.02
2-NITROANILINE	4900 J	---	
NITROBENZENE	970000 E	1350000	32.76
2-NITROPHENOL	790	0	200.00
N-NITROSODIPHENYLAMINE (1)	1500 J	0	200.00
3-PENTANONE, 2,2,4,4-TETRAME	100000 J	---	
PHENOL, 4-92,2,3,3-TETRAMETH	200000 J	---	
PHENANTHRENE	11000	268000	184.23
PHENOL	12000	0	200.00

TABLE 4 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-3S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
1,2,4-TRICHLOROBENZENE	4100	0	200.00
UNKNOWN HYDROCARBON	300000 J	---	
UNKNOWN	300000 J	---	
UNKNOWN	300000 J	---	
UNKNOWN	90000 J	---	
UNKNOWN	100000 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	1800000	290000	144.50
INORGANICS (PPM)			
ALUMINUM	7890 P	---	
BARIUM	180 P	---	
BERYLLIUM	0	0.42	200.00
CADMIUM	15.3 P	11	32.70
CALCIUM	30200 P	---	
CHROMIUM	886 P	255	110.60
COBALT	13.8 P	---	
COPPER	426 P	561	27.36
CYANIDE	---	32	
IRON	18000 *P	---	
LEAD	4150 EP	1490	94.33
MAGNESIUM	4090 P	---	
MANGANESE	310 P	---	
MERCURY	1.93 W	1.6	18.70
NICKEL	9.4 B*EP	16	51.97
POTASSIUM	1110 EP	---	
VANADIUM	32.2 P	---	
ZINC	816 NP	485	50.88
PETROLEUM HYDROCARBONS (PPM)	17000	16500	2.99
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	123	

TABLE 5 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-4S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PYRENE	1000	0	200.00
UNKNOWN	25000 J	---	
UNKNOWN	19000 J	---	
UNKNOWN	44000 J	---	
UNKNOWN	26000 J	---	
UNKNOWN	160000 J	---	
UNKNOWN	18000 J	---	
UNKNOWN	18000 J	---	
UNKNOWN	21000 J	---	
PESTICIDES/PCB (PPB)			
AROCLOR-1242	0	1400	200.00
INORGANICS (PPM)			
ALUMINUM	13600 P	---	
ARSENIC	9 *F	62	149.30
BARIUM	102 P	---	
BERYLLIUM	0.3 P	0.44	37.84
CADMIUM	7.7 P	0	200.00
CALCIUM	109000 P	---	
CHROMIUM	49 *P	61	21.82
COBALT	10 P	---	
COPPER	RO	747	
CYANIDE	---	<1.2	
IRON	17100 P	---	
LEAD	167 *SF	87	62.99
MAGNESIUM	14500 P	---	
MANGANESE	341 EP	---	
MERCURY	0.53 *NCV	0.77	36.92
NICKEL	59 P	116	65.14
POTASSIUM	100 P	---	
SODIUM	1290 P	---	
VANADIUM	34 P	---	
ZINC	188 *P	130	36.48
PETROLEUM HYDROCARBONS (PPM)	34000	14000	83.33
MISCELLANEOUS			
PHENOLICS (PPM)	---	20	

TABLE 6

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-5D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ACETIC ACID, ETHYL ESTER	140 JD	---	
ACETONE	4500 D	---	
BENZENE	150 D	148	1.34
BICYCLO[2.2.1]HEPTANE, 2,2-D	43 JD	---	
2-BUTANOL (R)-(9CI)	99 JD	---	
2-BUTANONE	11000 D	0	200.00
CHLOROBENZENE	490 J	648	27.77
CHLOROFORM	3000 D	0	200.00
1,2-DICHLOROETHANE	2700 D	179	175.13
1,2-DICHLOROETHENE	130 D	125	3.92
ETHYLBENZENE	400 J	358	11.08
FURAN, TETRAHYDRO (8CI9CI)	2000 J	---	
METHYLENE CHLORIDE	RO	147	
4-METHYL-2-PENTANONE	1700 D	---	
1,1,2,2-TETRACHLOROETHANE	180 D	703	118.46
TETRACHLOROETHENE	520 D	502	3.52
TOLUENE	7200 J	5680	23.60
1,1,1-TRICHLOROETHANE	2300 D	0	200.00
TRICHLOROETHENE	2000 D	96.9	181.52
UNKNOWN	19 JD	---	
UNKNOWN	80 JD	---	
XYLENE	2900 J	2380	19.70
ACIDS/BASE NEUTRALS (PPB)			
BENZENE, 1,4-DIMETHYL-	2000 J	---	
BENZOIC ACID	390 J	---	
BENZO(K)FLUORANTHENE	100 J	0	200.00
CHRYSENE	100 J	0	200.00
DI-N-BUTYLPHTHALATE	45 J	0	200.00
FLUORANTHENE	150 J	0	200.00
2-METHYLNAPHTHALENE	100 J	---	
4-METHYLPHENOL	320 J	---	
NAPHTHALENE	57 J	0	200.00
PHENANTHRENE	74 J	0	200.00
PYRENE	150 J	0	200.00
UNKNOWN HYDROCARBON	700 J	---	
UNKNOWN HYDROCARBON	800 J	---	
UNKNOWN HYDROCARBON	700 J	---	
UNKNOWN HYDROCARBON	700 J	---	
UNKNOWN	2000 J	---	
UNKNOWN	2000 J	---	

TABLE 6 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-5D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
UNKNOWN	1000 J	---	
UNKNOWN	3000 J	---	
UNKNOWN HYDROCARBON	1000 J	---	
UNKNOWN HYDROCARBON	900 J	---	
UNKNOWN HYDROCARBON	5000 J	---	
UNKNOWN HYDROCARBON	2000 J	---	
UNKNOWN	1000 J	---	
UNKNOWN HYDROCARBON	1000 J	---	
UNKNOWN HYDROCARBON	2000 J	---	
UNKNOWN	1000 J	---	
UNKNOWN HYDROCARBON	2000 J	---	
PESTICIDES/PCB (PPB)			
AROCLOR-1242	220 J	80	93.33
AROCLOR-1248	200 J	0	200.00
INORGANICS (PPM)			
ALUMINUM	14400 P	---	
ARSENIC	115 NF	9.6	169.18
BARIUM	83 P	---	
BERYLLIUM	0	0.76	200.00
CADMIUM	3.7 P	0.48	154.07
CALCIUM	4620 P	---	
CHROMIUM	103 P	26	119.38
COBALT	35.8 P	---	
COPPER	189 P	32	142.08
CYANIDE	---	<.9	
IRON	53400 *P	---	
LEAD	231 EP	20	168.13
MAGNESIUM	7220 P	---	
MANGANESE	373 P	---	
MERCURY	1.73	0.14	170.05
NICKEL	103 *EP	27	116.92
POTASSIUM	2060 BEP	---	
SODIUM	3040 EP	---	
VANADIUM	43.1 P	---	
ZINC	941 NP	79	169.02
PETROLEUM HYDROCARBONS (PPM)	1100	1110	0.90

TABLE 6 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-5D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	7.2	

TABLE 7 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-5D (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ALUMINUM	94200 P	---	
BARIUM	48.6 P	---	
BERYLLIUM	0	0.66	200.00
CADMIUM	0	0.56	200.00
CALCIUM	37900 P	---	
CHROMIUM	16.1 P	19	16.52
COBALT	13.2 P	---	
COPPER	41.9 P	31	29.90
CYANIDE	---	<.6	
IRON	30100 *P	---	
LEAD	11.5 S*F	32	94.25
MAGNESIUM	8890 P	---	
MANGANESE	623 P	---	
MERCURY	0	0.2	200.00
NICKEL	38.2 *EP	22	53.82
POTASSIUM	643 BEP	---	
SODIUM	960 BEP	---	
VANADIUM	15.1 P	---	
ZINC	94.3 NP	78	18.92
PETROLEUM HYDROCARBONS (PPM)	44	80	58.06
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	0.1	

TABLE 8
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-6S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ALCOHOL	27 J	---	
BENZENE	2 J	9.25	128.89
ETHYLBENZENE	9	28.3	103.49
FURAN, TETRAHYDRO	72 JN	---	
TETRACHLOROETHENE	0	33.7	200.00
TOLUENE	0	16	200.00
TRICHLOROFLUOROMETHANE	18 JN	---	
XYLENES (TOTAL)	46	2035	191.16
ACIDS/BASE NEUTRALS			
BENZO(A)ANTHRACENE	63 J	0	200.00
BENZO(A)PYRENE	58 J	0	200.00
BENZO(B)FLUORANTHENE	110 J	0	200.00
BENZO(K)FLUORANTHENE	110 J	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	2700	6310	80.13
CHRYSENE	61 J	0	200.00
1,2-DICHLOROBENZENE	92 J	244	90.48
DI-N-BUTYLPHTHALATE	65 J	0	200.00
FLUORANTHENE	110 J	275	85.71
HYDROCARBON	720 J	---	
ISOMER	1600 J	---	
PHENANTHRENE	81 J	0	200.00
PYRENE	120 J	249	69.92
UNKNOWN	360 J	---	
UNKNOWN	590 J	---	
UNKNOWN	510 J	---	
UNKNOWN	1400 J	---	
UNKNOWN	770 J	---	
UNKNOWN	560 J	---	
UNKNOWN	550 J	---	
UNKNOWN	2800 J	---	
UNKNOWN	850 J	---	
UNKNOWN	660 J	---	
UNKNOWN	890 J	---	
UNKNOWN	1600 J	---	
UNKNOWN	5200 J	---	
UNKNOWN	3300 J	---	
UNKNOWN	1100 J	---	
UNKNOWN	850 J	---	
UNKNOWN	1600 J	---	

TABLE 8 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION MW-6S (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	1500	200.00
AROCLOR-1260	1300	2100	47.06
INORGANICS			
ALUMINUM	19600 P	---	
ARSENIC	5.6 *F	19	108.94
BARIUM	93 P	---	
BERYLLIUM	0.7 P	0.77	9.52
CALCIUM	3390 P	---	
CHROMIUM	35 *P	66	61.39
COBALT	15 P	---	
COPPER	RO	85	
CYANIDE	---	<1	
IRON	26600 P	---	
LEAD	15 *SF	110	152.00
MAGNESIUM	6480 P	---	
MANGANESE	393 EP	---	
MERCURY	1.3 *NCV	3.4	89.36
NICKEL	23 P	24	4.26
POTASSIUM	2610 P	---	
SODIUM	3110 P	---	
VANADIUM	34 P	---	
ZINC	102 *P	170	50.00
PETROLEUM HYDROCARBONS (PPM)	830	390	72.13
MISCELLANEOUS			
PHENOLICS (PPM)	---	<.2	

TABLE 9

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-7D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	36000 D	---	
BENZENE	1200 E	52300	191.03
BENZENE, METHYL (9CI)	710 J	---	
BUTANE, 2-(ETHYLTHIO)- (9CI)	32 J	---	
2-BUTANOL (ACN) (9CI)	65 J	---	
2-BUTANONE	290000 JD	795000	93.09
CHLOROBENZENE	2600 E	258000	196.01
CHLOROFORM	38 D	0	200.00
CYCLOHEXANONE, 3,3,5-TRIMETH	13 J	---	
1,1-DICHLOROETHANE	1400	43100	187.42
1,1-DICHLOROETHENE	670 D	0	200.00
1,2-DICHLOROETHENE	480 D	512000	199.63
ETHYLBENZENE	3100 J	529000	197.67
4-METHYL-2-PENTANONE	22000 E	---	
2-PENTANOL, 4-METHYL-(8CI9C	8 J	---	
1,1,2,2-TETRACHLOROETHANE	10000 J	0	200.00
TETRACHLOROETHENE	7600 D	1440000	197.90
TOLUENE	32000 J	2270000	194.44
1,1,1-TRICHLOROETHANE	110	30400	198.56
TRICHLOROETHENE	2700 D	1670000	199.35
UNKNOWN	48 JD	---	
VINYL CHLORIDE	300	0	200.00
XYLENE	26000 D	2290000	195.51
ACIDS/BASE NEUTRALS (PPB)			
ACENAPTHYLENE	81 J	0	200.00
ANTHRACENE	750 J	0	200.00
BENZO(A)ANTHRACENE	420 J	0	200.00
BENZO(A)PYRENE	430 J	0	200.00
BENZO(B)FLUORANTHENE	660 J	0	200.00
BENZIDINE	---	0	
BENZOIC ACID	3400 J	---	
BENZO(K)FLUORANTHENE	660 J	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	47000 JE	37100	23.54
BUTYLBENZYLPHTHALATE	490 J	0	200.00
2-CHLORONAPHTHALENE	RO	1160	
CHRYSENE	490 J	0	200.00
DIBENZOFURAN	140 J	---	
1,2-DICHLOROBENZENE	520 J	1440	93.88
2,4-DIMETHYLPHENOL	1800 J	1940	7.49

TABLE 9 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-7D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
DI-N-BUTYLPHTHALATE	390 J	0	200.00
DI-N-OCTYLPHTHALATE	570 J	0	200.00
DISULFIDE, BIS(1-METHYLPROPY	10000 J	---	
FLUORANTHENE	1700 J	386	125.98
FLUORENE	130 J	0	200.00
2-METHYLNAPHTHALENE	190 J	---	
2-METHYLPHENOL	440 J	---	
4-METHYLPHENOL	4400 J	---	
NAPTHALENE	680 J	976	35.75
PHENANTHRENE	710 J	0	200.00
PHENOL	6000 J	35200	141.75
PYRENE	960 J	0	200.00
SULFUR, MOL. (S8)	300000 J	---	
UNKNOWN	8000 J	---	
UNKNOWN	10000 J	---	
UNKNOWN HYDROCARBON	20000 J	---	
UNKNOWN HYDROCARBON	9000 J	---	
UNKNOWN HYDROCARBON	10000 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1248	27000 J	0	200.00
INORGANICS (PPM)			
ALUMINUM	19700 P	---	
ARSENIC	25.4 NF	51	67.02
BARIUM	277	---	
BERYLLIUM	0	0.58	200.00
CADMIUM	11.8 P	6.9	52.41
CALCIUM	24200 P	---	
CHROMIUM	214 P	72	99.30
COPPER	580 P	100	141.18
CYANIDE	---	<.7	
IRON	23600 *P	---	
LEAD	532 EP	100	136.71
MAGNESIUM	9920 P	---	
MANGANESE	823 P	---	
MERCURY	4.32	0.35	170.02
NICKEL	86.4 *EP	46	61.03
POTASSIUM	2780 EP	---	
SODIUM	13100 EP	---	
VANADIUM	45.2 P	---	

TABLE 9 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-7D (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ZINC	642 NP	583	9.63
PETROLEUM HYDROCARBONS (PPM)	1600	8360	135.74
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	55	

TABLE 10

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-7D (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	5300 D	---	
BENZENE	23	0	200.00
BENZENE, 1-ETHYL-2-METHYL-	4600 JD	---	
2-BUTANOL (ACN) (9CI)	480 JD	---	
2-BUTANONE	78000 J	31500	84.93
CHLOROBENZENE	110	103	6.57
CHLOROFORM	59 D	0	200.00
1,1-DICHLOROETHANE	160 D	234	37.56
1,2-DICHLOROETHANE	RO	110	
1,2-DICHLOROETHENE	7	282	190.31
ETHYLBENZENE	140 J	142	1.42
FURAN,TETRAHYDRO- (8CI9CI)	11 JD	---	
4-METHYL-2-PENTANONE	1200	---	
PENTANOL, 4-METHYL (8CI9C	13 J	---	
TETRACHLOROETHENE	240	239	0.42
TOLUENE	2000	1490	29.23
TRICHLOROETHENE	80	72.5	9.84
UNKNOWN	8 J	---	
UNKNOWN	12 JD	---	
UNKNOWN	120 JD	---	
VINYL CHLORIDE	80	0	200.00
XYLENE	650	770	16.90
ACIDS/BASE NEUTRALS (PPB)			
BENZENEACETIC ACID	200 J	---	
BENZOIC ACID	1000 J	---	
BIS(2-ETHYLHEXYL)PHTHALATE	1500	5350	112.41
PHENOL	180 J	0	200.00
UNKNOWN	400 J	---	
UNKNOWN	300 J	---	
UNKNOWN	200 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	760	200.00
INORGANICS (PPM)			
ALUMINUM	7020 P	---	
BARIUM	78.2 P	---	
BERYLLIUM	0	0.46	200.00
CADMIUM	0	1.1	200.00

TABLE 10 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION MW-7D (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
CALCIUM	3390 P	---	
CHROMIUM	15.5 P	17	9.23
COPPER	135 P	120	11.76
CYANIDE	---	<.7	
IRON	9640 *P	---	
LEAD	88.7 EP	40	75.68
MAGNESIUM	1480 P	---	
MANGANESE	68.2 P	---	
MERCURY	0.6	0.35	52.63
NICKEL	0	7.9	200.00
POTASSIUM	465 BEP	---	
SODIUM	2510 EP	---	
VANADIUM	9.4 BP	---	
ZINC	44.9 NP	45	0.22
PETROLEUM HYDROCARBONS (PPM)	54	154	96.15
MISCELLANEOUS			
PHENOLICS (TOTAL) (PPM)	---	1.2	

TABLE 11

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-1 (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
BENZENE	10000 J	39700	119.52
CHLOROBENZENE	61000	178000	97.91
2-BUTANONE	28000 R	0	200.00
ETHYLBENZENE	92000	312000	108.91
4-METHYL-2-PENTANONE	28000 J	---	
TETRACHLOROETHENE	570000	1360000	81.87
TOLUENE	620000	1800000	97.52
TRICHLOROETHENE	410000	1140000	94.19
VINYL CHLORIDE	12000 J	0	200.00
XYLENES (TOTAL)	490000	1672000	109.34
ACIDS/BASE NEUTRALS (PPB)			
BENZIDINE	---	244000	
BENZO(A)ANTHRACENE	480 J	0	200.00
BENZO(B)FLUORANTHENE	1400 J	0	200.00
BENZO(K)FLUORANTHENE	1400 J	0	200.00
BIS(2-ETHYLHEXYL) PHTHALATE	120000 BDJ	0	200.00
2-CHLORONAPHTHALENE	56000 J	18200	101.89
CHRYSENE	880 J	0	200.00
DIBENZOFURAN	3200 J	---	
1,4-DICHLOROBENZENE	880 J	0	200.00
1,2-DICHLOROBENZENE	44000 J	0	200.00
FLUORANTHENE	2400 J	0	200.00
FLUORENE	1200 J	0	200.00
HYDROCARBON	100000 J	---	
HYDROCARBON	81000 J	---	
HYDROCARBON	200000 J	---	
HYDROCARBON	94000 J	---	
HYDROCARBON	92000 J	---	
HYDROCARBON	130000 J	---	
ISOMER	170000 J	---	
ISOMER	220000 J	---	
ISOMER	140000 J	---	
ISOMER	160000 J	---	
ISOMER	130000 J	---	
ISOMER	230000 J	---	
ISOMER	1400000 J	---	
2-METHYLNAPHTHALENE	8600	---	
4-METHYLPHENOL	6900 J	---	
NAPHTHALENE	42000 J	14900	95.25
PHENANTHRENE	5400 J	0	200.00
PHENOL	390000 D	790000	67.80
PYRENE	1700 J	0	200.00
1,2,4-TRICHLOROBENZENE	1700 J	0	200.00
UNKNOWN	77000 J	---	

TABLE 11 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-1 (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
UNKNOWN	210000 J	---	
UNKNOWN	480000 J	---	
UNKNOWN	120000 J	---	
UNKNOWN	110000 J	---	
UNKNOWN	160000 J	---	
UNKNOWN	88000 J	---	
PESTICIDE/PCB (PPB)			
ALDRIN	5700 C	0	200.00
AROCLOR-1242	270000 C	210000	25.00
INORGANICS (PPM)			
ALUMINUM	9640 P	---	
ARSENIC	13 *SF	8.8	38.53
BARIUM	405 P	---	
BERYLLIUM	0	0.23	200.00
CADMIUM	41 P	25	48.48
CALCIUM	140000 P	---	
CHROMIUM	464 *P	542	15.51
COPPER	RO	8600	
CYANIDE	---	6.5	
IRON	167000 P	---	
LEAD	1750 *SF	2110	18.65
MAGNESIUM	14800 P	---	
MANGANESE	430 EP	---	
MERCURY	4.7 *NCV	3.5	29.27
NICKEL	37 P	46	21.69
POTASSIUM	1110 P	---	
SILVER	10 P	40	120.00
SODIUM	92300 P	---	
VANADIUM	25 P	---	
ZINC	1470 *P	1110	27.91
PETROLEUM HYDROCARBONS (PPM)	35000	27500	24.00
MISCELLANEOUS			
PHENOLICS (PPM)	---	683	

TABLE 12

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-2 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	3200 BE	---	
BENZENE	12 B	0	200.00
2-BUTANONE	320 E	3680	168.00
CHLOROBENZENE	120	0	200.00
1,1-DICHLOROETHANE	10 J	0	200.00
1,2-DICHLOROETHANE	14	0	200.00
1,2-DICHLOROETHENE	1800 E	5510	101.50
1,2-DICHLOROPROPANE	1 J	0	200.00
ETHYLBENZENE	3400 E	0	200.00
ISOMER	8.4 J	---	
ISOMER	4.8 J	---	
METHYLENE CHLORIDE	0	2840	200.00
4-METHYL-2-PENTANONE	310 E	---	
TETRACHLOROETHENE	3800 E	10700	95.17
1,1,1-TRICHLOROETHANE	39	0	200.00
1,1,2-TRICHLOROETHANE	18	0	200.00
TRICHLOROETHENE	3700 E	0	200.00
TOLUENE	15000 DJ	2970	133.89
UNKNOWN	11 J	---	
UNKNOWN	9.6 J	---	
UNKNOWN	20 J	---	
UNKNOWN	6500 J	---	
UNKNOWN	5500 J	---	
XYLENES (TOTAL)	67000 D	5860	167.83
ACIDS/BASE NEUTRALS			
ACENAPHTHENE	120 J	0	200.00
ALKYL ACID	3200 J	---	
ANTHRACENE	0	181	200.00
BENZO(A)ANTHRACENE	1300	0	200.00
BENZO(A)PYRENE	53 J	0	200.00
BENZO(B)FLUORANTHENE	220 J	0	200.00
BENZO(G,H,I)PERYLENE	62 J	0	200.00
BENZO(K)FLUORANTHENE	220 J	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	4900	2870	52.25
BUTYLBENZYLPHTHALATE	210 J	0	200.00
2-CHLORONAPHTHALENE	79 J	0	200.00
CHRYSENE	170 J	0	200.00
DIBENZOFURAN	110 J	---	
1,2-DICHLOROBENZENE	280 J	242	14.56
DI-N-BUTYLPHTHALATE	480	0	200.00
2,4-DINITROTOLUENE	190 J	0	200.00
DI-N-OCTYL PHTHALATE	790	0	200.00
FLUORANTHENE	370 J	288	24.92
FLUORENE	170 J	0	200.00

TABLE 12 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-2 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
INDENO(1,2,3-CD)PYRENE	47 J	0	200.00
HYDROCARBON	3100 J	---	
HYDROCARBON	3200 J	---	
HYDROCARBON	2800 J	---	
HYDROCARBON	4400 J	---	
ISOMER	18000 J	---	
ISOMER	7400 J	---	
ISOMER	6200 J	---	
ISOMER	3400 J	---	
ISOMER	5800 J	---	
ISOMER	3900 J	---	
ISOMER	5100 J	---	
2-METHYLNAPHTHALENE	1200	---	
4-METHYLPHENOL	340 J	---	
NAPHTHALENE	1300	525	84.93
N-NITROSODIPHENYLAMINE (1)	370 J	0	200.00
PHENANTHRENE	490	0	200.00
PYRENE	320 J	267	18.06
UNKNOWN	5100 J	---	
UNKNOWN	5200 J	---	
UNKNOWN	9200 J	---	
UNKNOWN	3900 J	---	
UNKNOWN	4400 J	---	
UNKNOWN	2700 J	---	
UNKNOWN	2600 J	---	
UNKNOWN	2900 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	690	1600	79.48
AROCLOR-1260	620	1000	46.91
INORGANICS (PPM)			
ALUMINUM	14200 P	---	
ARSENIC	5.3 *F	4.3	20.83
BARIUM	75 P	---	
BERYLLIUM	0.5 P	0.74	38.71
CADMIUM	0	3.3	200.00
CALCIUM	20400 P	---	
CHROMIUM	20 *P	27	29.79
COBALT	13 P	---	
COPPER	0	45	200.00
CYANIDE	---	<.6	
IRON	27800 P	---	
LEAD	20 *SF	53	90.41
MAGNESIUM	6960 P	---	
MANGANESE	1080 EP	---	

TABLE 12 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-2 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
MERCURY	0	0.44	200.00
NICKEL	21 P	23	9.09
POTASSIUM	1410 P	---	
SODIUM	1150 P	---	
VANADIUM	24 P	---	
ZINC	100 *P	140	33.33
PETROLEUM HYDROCARBONS (PPM)	640	1010	44.85
MISCELLANEOUS			
PHENOLICS (PPM)	---	3.2	

TABLE 13

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-3 (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	3100	---	
2-BUTANONE	7000 J	9610	31.43
CHLOROBENZENE	20000	0	200.00
CHLOROFORM	12000	0	200.00
1,2-DICHLOROETHANE	RO	290000	
1,1-DICHLOROETHENE	3400	0	200.00
1,2-DICHLOROETHENE (TOTAL)	RO E	675	
ETHYLBENZENE	120000 D	210000	54.55
TETRACHLOROETHENE	900000 E	1690000	61.00
TOLUENE	1300000 D	2410000	59.84
1,1,1-TRICHLOROETHANE	610000 E	1770000	97.48
TRICHLOROETHENE	RO	65100	
VINYL CHLORIDE	1900	0	200.00
XYLENES (TOTAL)	600000 E	1484000	84.84
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	2000	1920	4.08
ANTHRACENE	260 J	0	200.00
BENZO(A)ANTHRACENE	320 J	0	200.00
BENZO(A)PYRENE	RO	549	
BENZO(G,H,I)PERYLENE	500 J	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	110000 D	121000	9.52
BUTYLBENZYLPHTHALATE	13000 J	8140	45.98
CHRYSENE	790 J	0	200.00
DIBENZOFURAN	2600	0	200.00
1,2-DICHLOROBENZENE	2400	0	200.00
DI-N-BUTYLPHTHALATE	10000	5230	62.64
DI-N-OCTYL PHTHALATE	16000	0	200.00
FLUORANTHENE	1200 J	0	200.00
FLUORENE	2600	1450	56.79
2-METHYLNAPHTHALENE	30000	---	
2-METHYLPHENOL	1400 J	---	
4-METHYLPHENOL	5400	---	
NAPHTHALENE	31000	18600	50.00
PHENANTHRENE	5900	4240	32.74
PHENOL	7000	0	200.00
PYRENE	1600 J	0	200.00
1,2,4-TRICHLOROBENZENE	610 J	0	200.00
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	1600	200.00
AROCLOR-1248	28000	0	200.00
AROCLOR-1254	14000	2400	141.46
INORGANICS (PPM)			

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TABLE 13 (continued)

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION B-3 (5'-6')

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ALUMINUM	14400 P	---	
ANTIMONY	RO	6.9	
ARSENIC	6.5 *F	5.6	14.88
BARIUM	402 P	---	
BERYLLIUM	0.2 P	0.4	66.67
CADMIUM	44 P	22	66.67
CALCIUM	32800 P	---	
CHROMIUM	240 *P	80	100.00
COBALT	14 P	---	
COPPER	RO	158	
CYANIDE	---	9.1	
IRON	20900 PP	---	
LEAD	1220 *F	620	65.22
MAGNESIUM	5600 P	---	
MANGANESE	312 EP	---	
MERCURY	1.1 *NCV	1.3	16.67
NICKEL	22 P	19	14.63
POTASSIUM	1380 P	---	
SODIUM	678 P	---	
VANADIUM	29 P	---	
ZINC	605 *P	517	15.69
PETROLEUM HYDROCARBONS	5400	13600	86.32
MISCELLANEOUS			
PHENOLICS (PPM)	---	28	

TABLE 14
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION B-4 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
UNKNOWN	210 J	---	
XYLENES (TOTAL)	1 J	0	200.00
ACIDS/BASE NEUTRALS (PPB)			
BENZO(A)PYRENE	0	1730	200.00
ISOMER	4900 J	---	
ISOMER	7900 J	---	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NONE DETECTED	
INORGANICS (PPM)			
ALUMINUM	10600 P	---	
ARSENIC	3.3 *F	1.6	69.39
BARIUM	59 P	---	
BERYLLIUM	0.5 P	0.41	19.78
CALCIUM	2160 P	---	
CHROMIUM	16 *P	14	13.33
COBALT	8.8 P	---	
COPPER	RO	11	
CYANIDE	---	<1.1	
IRON	24800 P	---	
LEAD	9.8 *F	0	200.00
MAGNESIUM	4120 P	---	
MANGANESE	376 EP	---	
NICKEL	17 P	11	42.86
POTASSIUM	936 P	---	
SODIUM	581 P	---	
VANADIUM	19 P	---	
ZINC	52 *P	29	56.79
PETROLEUM HYDROCARBONS (PPM)	44	51	14.74
MISCELLANEOUS (PPM)			
PHENOLICS	---	<.2	

TABLE 15
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION B-5 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
BENZENE	4 J	0	200.00
2-BUTANONE	7 J	887	196.87
CHLOROBENZENE	3 J	0	200.00
CHLOROFORM	6	0	200.00
1,2-DICHLOROETHANE	9	0	200.00
ETHYLBENZENE	61	937	175.55
4-METHYL-2-PENTANONE	12	---	
1,1,2-TRICHLOROETHANE	4 J	0	200.00
TETRACHLOROETHENE	2 J	0	200.00
TOLUENE	0	7560	200.00
XYLENES (TOTAL)	0	5870	200.00
ACIDS/BASE NEUTRALS (PPB)			
BENZO(A)PYRENE	0	1140	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	1100	33600	187.32
DI-N-OCTYL PHTHALATE	97 J	5610	193.20
ISOMER	820 J	---	
ISOMER	240 J	---	
ISOMER	350 J	---	
ISOMER	710 J	---	
ISOMER	470 J	---	
ISOMER	6700 J	---	
NAPHTHALENE	70 J	2120	187.21
UNKNOWN	470 J	---	
UNKNOWN	240 J	---	
UNKNOWN	470 J	---	
UNKNOWN	200 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1248	0	2600	200.00
INORGANICS (PPM)			
ALUMINUM	7950 P	---	
ARSENIC	5.3 *F	0	200.00
BARIUM	38 P	---	
BERYLLIUM	0.2 P	0.45	76.92
CADMIUM	0	2.2	200.00
CALCIUM	1450 P	---	
CHROMIUM	13 *P	28	73.17
COBALT	8.9 P	---	
CYANIDE	---	<.7	

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TABLE 15 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION B-5 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
IRON	13100 P	---	
LEAD	12 *SF	180	175.00
MAGNESIUM	2750 P	---	
MANGANESE	110 EP	---	
MERCURY	0	0.63	200.00
NICKEL	9.9 P	12	19.18
POTASSIUM	773 P	---	
VANADIUM	17 P	---	
ZINC	35 *P	100	96.30
PETROLEUM HYDROCARBONS	140	130	7.41
MISCELLANEOUS			
PHENOLICS	---	0.4	

TABLE 16
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION B-6 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ETHYLBENZENE	12	27.4	78.17
ISOMER	32 J	---	
ISOMER	12 J	---	
ISOMER	27 J	---	
METHYLENE CHLORIDE	0	14.6	200.00
TOLUENE	20	36.1	57.40
UNKNOWN	50 J	---	
XYLENES(TOTAL)	88	198.7	77.22
ACIDS/BASE NEUTRALS (PPB)			
BENZO(A)PYRENE	0	1120	200.00
CHRYSENE	0	1340	200.00
FLUORANTHENE	0	2320	200.00
NAPHTHALENE	0	2270	200.00
PHENANTHRENE	0	3250	200.00
PYRENE	0	1840	200.00
UNKNOWN	400 J	---	
UNKNOWN	160 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1248	0	260	200.00
INORGANICS (PPM)			
ALUMINUM	9620 P	---	
ARSENIC	5.5 *F	0	200.00
BARIUM	52 P	---	
BERYLLIUM	0.5 P	0.39	24.72
CADMIUM	0	1.4	200.00
CALCIUM	1540 P	---	
CHROMIUM	14 *P	19	30.30
COBALT	10 P	---	
COPPER	RO	290	
CYANIDE	---	<.6	
IRON	14600 P	---	
LEAD	6.9 *SF	120	178.25
MAGNESIUM	2830 P	---	
MANGANESE	110 EP	---	
MERCURY	0	0.41	200.00
NICKEL	12 P	10	18.18
POTASSIUM	964 P	---	
VANADIUM	20 P	---	

TABLE 16 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION B-6 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ZINC	38 *P	231	143.49
PETROLEUM HYDROCARBONS (PPM)	90	61	38.41
MISCELLANEOUS			
PHENOLICS (PPM)	---	<.1	

TABLE 17
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION P-1 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
CARBON DISULFIDE	2 J	---	
1,2-DICHLOROETHENE	17	0	200.00
ISOMER	16 J	---	
ISOMER	21 J	---	
ISOMER	48 J	---	
UNKNOWN	300 J	---	
ACIDS/BASE NEUTRALS (PPB)			
BENZO(A)PYRENE	0	4350	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	45 J	488	166.23
ISOMER	1000 J	---	
PESTICIDE/PCB			
DIELDRIN	0	25	200.00
INORGANICS (PPM)			
ALUMINUM	11800 P	---	
ARSENIC	0	1.1	200.00
BARIUM	93 P	---	
BERYLLIUM	0.5 P	0.3	50.00
CALCIUM	1430 P	---	
CHROMIUM	14 *P	12	15.38
COBALT	3.8 P	---	
COPPER	---	28	
CYANIDE	---	<.7	
IRON	13600 P	---	
LEAD	7.2 *F	0	200.00
MAGNESIUM	2550 P	---	
MANGANESE	75 EP	---	
NICKEL	10 P	5.8	53.16
POTASSIUM	568 P	---	
SODIUM	925 P	---	
VANADIUM	18 P	---	
ZINC	35 *P	22	45.61
PETROLEUM HYDROCARBONS	59	<34	
MISCELLANEOUS			
PHENOLICS	---	<.1	

TABLE 18

COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLE RESULTS
LOCATION P-3 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
BENZENE	1 BJ	52.1	192.47
ETHYLBENZENE	0	229	200.00
ISOMER	8.9 J	---	
METHYLENE CHLORIDE	0	36.6	200.00
TRICHLOROETHENE	0	44.6	200.00
TOLUENE	7	1140	197.56
XYLENES (TOTAL)	8	670	195.28
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	---	100	
ANTHRACENE	---	164	
BENZO(A)ANTHRACENE	---	564	
BENZO(A)PYRENE	---	382	
BENZO(B)FLUORANTHENE	---	576	
BENZO(GHI)PERYLENE	---	227	
BIS(2-ETHYLHEXYL)PHTHALATE	---	23600	
BUTYLBENZYLPHTHALATE	---	4690	
CHRYSENE	---	423	
1,2-DICHLOROBENZENE	---	123	
DI-N-BUTYL PHTHALATE	---	2420	
DI-N-OCTYL PHTHALATE	---	1090	
FLUORANTHENE	---	866	
FLUORENE	---	186	
INDENO(1,2,3-C,D)PYRENE	---	213	
ISOPHORONE	---	220	
NAPHTHALENE	---	974	
PHENANTHRENE	---	943	
PYRENE	---	750	
PESTICIDES/PCB (PPB)			
AROCLOR-1242	0	2800	200.00
AROCLOR-1254	0	2200	200.00
INORGANICS (PPM)			
ALUMINUM	18500 P	---	
ANTIMONY	0	29	200.00
ARSENIC	3.4 *F	18	136.45
BARIUM	110 P	---	
BERYLLIUM	1 P	0.5	66.67
CADMIUM	0	26	200.00
CALCIUM	1740 P	---	
CHROMIUM	25 *P	56	76.54
COBALT	15 P	---	
COPPER	RO	448	
IRON	29400 P	---	

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TABLE 19
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION P-4 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	25000 B	---	
2-BUTANONE	18000 J	0	200.00
CHLOROBENZENE	980	0	200.00
ETHYLBENZENE	2000	45600	183.19
4-METHYL-2-PENTANONE	7000	---	
TETRACHLOROETHENE	23000	917000	190.21
TOLUENE	3200	216000	194.16
1,1,1-TRICHLOROETHANE	330 J	57600	197.72
TRICHLOROETHENE	3400 B	363000	196.29
XYLENES (TOTAL)	7700 B	222900	186.64
ACIDS/BASE NEUTRALS (PPB)			
BENZO(A)ANTHRACENE	83 J	0	200.00
BENZO(A)PYRENE	41 J	101	84.51
BENZO(B)FLUORANTHENE	85	0	200.00
BENZO(K)FLUORANTHENE	85	0	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	25000 D	21600	14.59
BUTYLBENZYLPHTHALATE	600 J	714	17.35
2-CHLORONAPHTHALENE	140 J	0	200.00
CHRYSENE	56 J	0	200.00
DIBENZOFURAN	52 J	---	
1,2-DICHLOROBENZENE	3400	10800	104.23
2,4-DICHLOROPHENOL	130 J	0	200.00
DIETHYLPHTHALATE	170 J	0	200.00
2,4-DIMETHYLPHENOL	6300	8580	30.65
DIMETHYL PHTHALATE	180 J	0	200.00
DI-N-BUTYLPHTHALATE	870 J	2440	94.86
DI-N-OCTYL PHTHALATE	670	986	38.16
FLUORANTHENE	110 J	285	88.61
ISOMER	11000 J	---	
ISOMER	5200 J	---	
ISOMER	2000 J	---	
ISOMER	14000 J	---	
ISOMER	3000 J	---	
ISOPHORONE	380 J	725	62.44
2-METHYLNAPHTHALENE	140 J	---	
2-METHYLPHENOL	250 J	---	
4-METHYLPHENOL	2800	---	
NAPHTHALENE	510 D	1040	68.39
NITROBENZENE	35000	135000	117.65
N-NITROSODIPHENYLAMINE	RO	200	

TABLE 19 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION P-4 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PHENANTHRENE	RO	235	
PHENOL	7900 D	14400	58.30
PYRENE	92 J	217	80.91
1,2,4-TRICHLOROBENZENE	66 J	0	200.00
UNKNOWN	12000 J	---	
UNKNOWN	18000 J	---	
UNKNOWN	2300 J	---	
UNKNOWN	10000 J	---	
UNKNOWN	2000 J	---	
UNKNOWN	22000 J	---	
UNKNOWN	2600 J	---	
UNKNOWN	36000 J	---	
UNKNOWN	18000 J	---	
UNKNOWN	7200 J	---	
UNKNOWN	2100 J	---	
UNKNOWN	5600 J	---	
UNKNOWN	1800 J	---	
UNKNOWN	4000 J	---	
UNKNOWN	4400 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	13000 C	2100	144.37
INORGANICS (PPM)			
ALUMINUM	13300 P	---	
ARSENIC	8.8 *F	3.5	86.18
BARIUM	76 P	---	
BERYLLIUM	0.5 P	0.67	29.06
CADMIUM	1.2 P	0.52	79.07
CALCIUM	2880 P	---	
CHROMIUM	17 *P	19	11.11
COBALT	10 P	---	
COPPER	RO	37	
CYANIDE	---	3.5	
IRON	26100 P	---	
LEAD	13 *SF	26	66.67
MAGNESIUM	4830 P	---	
MANGANESE	1380 EP	---	
NICKEL	20 P	21	4.88
POTASSIUM	1250 P	---	
SODIUM	10000 P	---	
VANADIUM	20 P	---	

TABLE 19 (continued)
COMPARATIVE ANALYSIS OF SPLIT SOIL SAMPLES
LOCATION P-4 (TOP OF CLAY)

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ZINC	96 *P	120	22.22
PETROLEUM HYDROCARBONS	1100	823	28.81
MISCELLANEOUS			
PHENOLICS PPM)	---	65	

TABLE 20

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-1 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	71 B	---	
BENZENE	51	82.5	47.19
2-BUTANONE	31 J	65.2	71.10
CARBON DISULFIDE	7 J	---	
CHLOROBENZENE	100	200	66.67
CYCLOHEXANE	49 J	---	
C11 H16 ISOMER	130 J	---	
ETHYLBENZENE	21	0	200.00
HEXANE	29 J	---	
METHYLENE CHLORIDE	RO	42.3	
2-METHYL-HEPTANE	27 J	---	
3-METHYL HEXANE	25 J	---	
TOLUENE	53	0	200.00
TETRACHLOROETHENE	61	0	200.00
TETRAHYDROFURAN	40 J	---	
1,2-DICHLOROETHENE	5 J	0	200.00
TRICHLOROETHENE	63	0	200.00
3,3,5-TRIMETHYL-CYCLOHEXANON	110 J	---	
UNKNOWN	67 J	---	
UNKNOWN	31 J	---	
XYLENES (TOTAL)	290	635	74.59
ACIDS/BASE NEUTRALS (PPB)			
BIS(2-ETHYLHEXYL)PHTHALATE	30000	2920	164.52
DIMETHYL UNDECANE ISOMER	6000 J	---	
N-NITROSO-DI-N-PROPYLAMINE	700 J	0	200.00
PYRENE	1400 J	0	200.00
MOLECULAR SULFUR	9400 J	---	
2,6,10,15 TETRAMETHYLHEPTADE	4600 J	---	
UNKNOWN ALKANE	4000 J	---	
UNKNOWN	17000 J	---	
UNKNOWN	4000 J	---	
UNKNOWN	3800 J	---	
UNKNOWN	11000 J	---	
UNKNOWN	5100 J	---	
UNKNOWN	3600 J	---	
UNKNOWN	4300 J	---	
UNKNOWN	3800 J	---	
UNKNOWN	10000 J	---	
UNKNOWN	3600 J	---	
UNKNOWN	9200 J	---	
UNKNOWN	16000 J	---	
UNKNOWN	3700 J	---	
UNKNOWN	6900 J	---	
UNKNOWN	3700 J	---	

TABLE 20 (continued)

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-1 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PESTICIDE/PCB (PPB)			
AROCLOR-1248	7764	19000	83.96
AROCLOR-1254	0	5200	200.00
INORGANICS (PPM)			
ALUMINUM	14300 P	---	
ARSENIC	30 NF	34	12.50
BARIUM	301 P	---	
BERYLLIUM	2.2 P	0.7	103.45
CADMIUM	21 EN*P	32	41.51
CALCIUM	5390 P	---	
CHROMIUM	892 EN*PJ	1060	17.21
COPPER	571 P	861	40.50
CYANIDE	---	5	
IRON	30000 P	---	
LEAD	339 E*P	360	6.01
MAGNESIUM	6330 EP	---	
MANGANESE	618 EP	---	
MERCURY	110 *CV	139	23.29
NICKEL	109 P	100	8.61
SILVER	6.9 P	8.6	21.94
SODIUM	5050 P	---	
THALLIUM	0	1.1	200.00
VANADIUM	48 EP	---	
ZINC	2010 P	2880	35.58
PETROLEUM HYDROCARBONS	---	8560	
MISCELLANEOUS			
PHENOLICS (PPM)	---	23	

TABLE 21

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-2 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
2-BUTANONE	0	18300	200.00
CHLOROBENZENE	3700	17100	128.85
CHLOROFORM	0	3690	200.00
ETHYLBENZENE	5300	35100	147.52
HEXANE	670	---	
PROPYL BENZENE	1200	---	
TOLUENE	32000	322000	163.84
UNKNOWN	3700	---	
XYLENES (TOTAL)	26000	146200	139.61
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	0	166	200.00
BENZO(A)PYRENE	0	148	200.00
BIS(2-ETHYLHEXYL) PHTHALATE	83000	32000	88.70
2,6-BIS(1,1 DIMETHYLETHYL)4-	30000 J	---	
BUTYLBENZYLPHTHALATE	920 J	736	22.22
C10 H14 ISOMER	6300 J	---	
C13 H28 ISOMER	7000 J	---	
C14 H22O ISOMER	4200 J	---	
2-CHLORONAPHTHALENE	0	115	200.00
CHRYSENE	0	332	200.00
1,2-DICHLOROBENZENE	0	424	200.00
5,5 DIMETHYL UNDECANE	9700 J	---	
DIMETHYL BENZENE ISOMER	8400 J	---	
DI-N-OCTYLPHTHALATE	1600 J	600	90.91
FLUORANTHENE	0	374	200.00
FLUORENE	0	202	200.00
ETHYL METHLY BENZENE ISOMER	8200 J	---	
2-METHYL-1-(1-1-DIMETHYLETHYL)-2METHYL- 1,3-PROPANE-PROPANOIC ACID	3400 J	---	
MOLECULAR SULFUR	5900 J	---	
NAPTHALENE	2300 J	1230	60.62
2,6,10,15 TETRAMETHYLHEPTADE	6800 J	---	
TRIMETHYL BENZENE ISOMER	15000 J	---	
UNKNOWN ALKANE	13000 J	---	
UNKNOWN ALKANE	11000 J	---	
UNKNOWN ALKANE	7600 J	---	
UNKNOWN ALKANE	3700 J	---	
UNKNOWN ALKANE	20000 J	---	
UNKNOWN	5000 J	---	
UNKNOWN	6500 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	35000	200.00

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TABLE 21 (continued)

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-2 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
AROCLOR-1248	10235	0	200.00
AROCLOR-1260	0	6000	200.00
INORGANICS (PPM)			
ALUMINUM	8070 P	---	
ARSENIC	11 NF	0	200.00
BARIUM	128 P	---	
BERYLLIUM	2.3 P	0.39	142.01
CADMIUM	26 EN*P	12	73.68
CALCIUM	5820 P	---	
CHROMIUM	321 EN*P	156	69.18
COBALT	8.9 P	---	
COPPER	753 P	1240	48.87
CYANIDE	---	1.2	
IRON	17400 P	---	
LEAD	1120 E*P	340	106.85
MAGNESIUM	3730 EP	---	
MANGANESE	303 EP	---	
MERCURY	13 *CV	0.34	189.81
NICKEL	92 P	96	4.26
SODIUM	2910 P	---	
VANADIUM	32 EP	---	
ZINC	879 P	411	72.56
PETROLEUM HYDROCARBONS		4400	
MISCELLANEOUS			
PHENOLICS (PPM)	---	15	

TABLE 22

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-3 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	360000 J	---	
2-BUTANONE	480000 JB	0	200.00
ETHYLBENZENE	180000 J	439000	83.68
METHYLENE CHLORIDE	56000 JB	0	200.00
TETRACHLOROETHENE	150000 J	953000	145.60
1,1,1-TRICHLOROETHANE	RO	222000	
TRICHLOROETHENE	36000 J	9950000	198.56
TOLUENE	3200000 J	2970000	7.46
XYLENES (TOTAL)	780000 J	1607000	69.29
ACIDS/BASE NEUTRALS (PPB)			
BIS(2-ETHYLHEXYL)PHTHALATE	660000	32600	181.17
DECANE	69000 J	---	
1,2-DICHLOROBENZENE	40000 J	3670	166.38
DIMETHYL ALKANE ISOMER	51000 J	---	
DIMETHYLBENZENE ISOMER	97000 J	---	
HEPTADECANE	110000 J	---	
HEXADECANE	91000 J	---	
HEXADECANOIC ACID	45000 J	---	
2-METHYL-1-(1,1-DIMETHYLETHYL)-2METHYL-1,3 PROPANE, PROPANOIC ACID	52000 J	---	
4-METHYLPHENOL	12000	---	
NAPHTHALENE	0	816	200.00
1,1'-OXYBIS-BENZENE	230000 J	---	
PHENOL	120000	10200	168.66
2,6,10,14 TETRAMETHYL PENTAD	87000 J	---	
TRIMETHYLBENZENE ISOMER	53000 J	---	
UNKNOWN ALKANE	65000 J	---	
UNKNOWN ALKANE	70000 J	---	
UNKNOWN ALKANE	73000 J	---	
UNKNOWN ALKANE	87000 J	---	
UNKNOWN ALKANE	73000 J	---	
UNKNOWN	41000 J	---	
UNKNOWN	90000 J	---	
UNKNOWN	64000 J	---	
UNKNOWN	43000 J	---	
UNKNOWN	50000 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	0	55000	200.00
AROCLOR-1248	79658 J	0	200.00
INORGANICS (PPM)			
ALUMINUM	21400 P	---	

TABLE 23

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-4 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
CHLOROBENZENE	1900 J	3990	70.97
ETHYLBENZENE	3600 J	4610	24.60
TOLUENE	17000 J	41500	83.76
TRICHLOROETHENE	1000 J	0	200.00
XYLENES (TOTAL)	16000 J	24300	41.19
ACIDS/BASE NEUTRALS			
BIS(2-ETHYLHEXYL)PHTHALATE	110000	108000	1.83
1,2-DICHLOROBENZENE	0	1850	200.00
2,4-DIMETHYLPHENOL	0	1360	200.00
DIMETHYL UNDECANE ISOMER	14000 J	---	
DI-N-BUTYLPHTHALATE	0	2350	200.00
FLUORANTHENE	0	928	200.00
FLUORENE	0	536	200.00
METHYLNITROBENZENE ISOMER	12000 J	---	
MOLECULAR SULFUR	14000 J	---	
NAPHTHALENE	0	1330	200.00
1,1-OXYBISBENZENE	79000 J	---	
PHENANTHRENE	0	1820	200.00
PHENOL	0	24900	200.00
PYRENE	0	916	200.00
1,2,4-TRICHLOROBENZENE	0	525	200.00
UNKNOWN ALKANE	14000 J	---	
UNKNOWN ALKANE	10000 J	---	
UNKNOWN ALKANE	22000 J	---	
UNKNOWN ALKANE	6600 J	---	
UNKNOWN ALKANE	8100 J	---	
UNKNOWN ALKANE	8500 J	---	
UNKNOWN ALKANE	8400 J	---	
UNKNOWN	58000 J	---	
UNKNOWN	35000 J	---	
UNKNOWN	7800 J	---	
UNKNOWN	7200 J	---	
UNKNOWN	8300 J	---	
UNKNOWN	11000 J	---	
UNKNOWN	8400 J	---	
UNKNOWN	14000 J	---	
UNKNOWN	8300 J	---	
PESTICIDES/PCB			
AROCLOR-1242	0	21000	200.00
AROCLOR-1254	6919	0	200.00
AROCLOR-1260	0	10000	200.00
INORGANICS (PPM)			

TABLE 23 (continued)

COMPARATIVE ANALYSIS OF SPLIT SEDIMENT SAMPLE RESULTS
LOCATION SD-4 (0"-6")

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
ALUMINUM	12600 P	---	
ARSENIC	40 NF	37	7.79
BARIUM	264 P	---	
BERYLLIUM	6.7 P	2.4	94.51
CADMIUM	71 ENP	83.7	16.42
CALCIUM	46500 P	---	
CHROMIUM	413 EN*PJ	819	65.91
COPPER	16700 P	9510	54.86
CYANIDE	---	120	
IRON	32100 P	---	
LEAD	744 E*P	320	79.70
MAGNESIUM	11500 EP	---	
MANGANESE	1440 EP	---	
MERCURY	1.6 *CV	40.6	184.83
NICKEL	137 P	467	109.27
SILVER	0	2.4	200.00
SODIUM	45800 P	---	
THALLIUM	0	1	200.00
VANADIUM	43 EP	---	
ZINC	8830	3110	95.81
PETROLEUM HYDROCARBONS (PPM)		25900	
MISCELLANEOUS			
PHENOLICS (PPM)	---	94	

TABLE 24

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-1S

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
BENZENE	4600	5630	20.14
C2H6S ISOMER	800 J	---	
1,1-DICHLOROETHENE	210 J	0	200.00
1,2-DICHLOROETHENE	24000	31100	25.77
ETHENE, 1-BROMO-2-CHLORO	2000 J	---	
ETHYLBENZENE	3300	3570	7.86
4-METHYL-2-PENTANONE	440 J	---	
1,1,2,2-TETRACHLOROETHANE	5100	7350	36.14
TOLUENE	11000	12100	9.52
TRICHLOROETHENE	450 J	433	3.85
VINYL CHLORIDE	4500	7290	47.33
XYLENE (TOTAL)	29000	30300	4.38
ACIDS/BASE NEUTRALS (PPB)			
BENZENE, DIMETHYL	2000 J	---	
BENZENE, DIMETHYL	100 J	---	
BENZENE, ETHYL-(8CI9CI)	1000 J	---	
BENZENE, ETHYL-METHYL	100 J	---	
BENZENE, ETHYL-METHYL	200 J	---	
BENZENE, 1,1-OXYBIS-(9CI)	700 J	---	
BICYCLO[2.2.1]HEPTANONE	70 J	---	
C10H10 ISOMER	200 J	---	
C13H18O2 ISOMER	200 J	---	
CYCLOHEXANONE, 3,3,5-TRIMETH	200 J	---	
1,2-DICHLOROBENZENE	55	50.1	9.32
2,4-DIMETHYLPHENOL	100	4.05	184.43
DI-N-BUTYLPHTHALATE	6 J	0	200.00
ETHANE,1,1,2,2-TETRACHLORO-	600 J	---	
2-METHYLPHENOL	54	---	
4-METHYLPHENOL	300	---	
NAPHTHALENE	6 J	5.1	16.22
2-NITROPHENOL	0	4.73	
PHENOL	310	15.2	181.30
TRISULFIDE, DIMETHYL	200 J	---	
UNKNOWN	200 J		
UNKNOWN	500 J		
UNKNOWN	80 J		
UNKNOWN	300 J		
UNKNOWN	100 J		
UNKNOWN	200 J		
UNKNOWN	100 J		
UNKNOWN	100 J		
UNKNOWN	200 J		
UNKNOWN	200 J		
UNKNOWN	100 J		

TABLE 24 (continued)

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-1S

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
UNKNOWN	300 J		
PESTICIDE/PCB (PPB)			
BETA-BHC	0	0.56	200.00
INORGANICS (PPB)			
ALUMINUM	371 *P	---	
ARSENIC	14.3 SF	1600	196.46
BARIUM	754 P	---	
BERYLLIUM	0.9 BP	1.3	36.36
CALCIUM	339000 EP	---	
COPPER	893 P	35	184.91
CYANIDE	---	<.025	
IRON	13500 *EP	---	
MAGNESIUM	52000 EP	---	
MANGANESE	9030 P	---	
MERCURY	0.2 CV	0	200.00
NICKEL	70.9 P	80	12.06
POTASSIUM	16000 P	---	
SODIUM	70800 EP	---	
VANADIUM	15.6 B	---	
ZINC	RO	54	
PETROLEUM HYDROCARBONS (PPM)	---	8.6	
MISCELLANEOUS			
ACIDITY (AS CACO3 MG/L)	---	<5	
ALKALINITY (AS CACO3 MG/L)	---	430	
PHENOLICS (PPM)	---	0.95	

TABLE 25

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-3S

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
BENZENE	2100	0	200.00
CHLOROFORM	1300000 D	595000	74.41
1,1-DICHLOROETHANE	2000	0	200.00
1,2-DICHLOROETHANE	1000000 D	473000	71.55
1,1-DICHLOROETHENE	820	0	200.00
1,2-DICHLOROETHENE	4800	4870	1.45
ETHYLBENZENE	2300 J	0	200.00
METHYLENE CHLORIDE	RO	52900	
4-METHYL-2-PENTANONE	120000 D	---	
TETRACHLOROETHENE	8000	8240	2.96
TOLUENE	RO	90900	
1,1,1-TRICHLOROETHANE	140000 D	81200	53.16
TRICHLOROETHENE	220000 D	120000	58.82
VINYL CHLORIDE	540 J	0	200.00
XYLENE	9400 J	0	200.00
ACIDS/BASE NEUTRALS (PPB)			
ACENAPHTHENE	9 J	40.2	126.83
ACENAPHTHYLENE	22	73.7	108.05
ANTHRACENE	22	126	140.54
BENZENE	5400	0	200.00
BENZENE, DIMETHYL	2400	---	
BENZO(A)ANTHRACENE	15	0	200.00
BENZO(A)PYRENE	10	90.4	160.16
BENZO(B)FLUORANTHENE	10 J	141	173.51
BENZO(GHI)PERYLENE	5 J	0	200.00
BENZO(K)FLUORANTHENE	9 J	0	200.00
BIS(2-CHLOROETHYL)ETHER	0	1390	200.00
BIS(2-ETHYLHEXYL)PHTHALATE	30	174	141.18
BENZYL ALCOHOL	2200 JD	---	
CHRYSENE	12	87.9	151.95
DIBENZOFURAN	29	---	
1,2-DICHLOROBENZENE	44	165	115.79
2-CHLOROPHENOL	0	17.8	200.00
2,4-DICHLOROPHENOL	340 D	463	30.64
DIETHYLPHTHALATE	100 D	0	200.00
2,4-DIMETHYLPHENOL	350 D	181	63.65
DIMETHYLPHTHALATE	140 D	0	200.00
DI-N-BUTYLPHTHALATE	71 JD	318	126.99
FLUORANTHENE	43	266	144.34
FLUORENE	29	133	128.40
INDENO(1,2,3-CD)PYRENE	6 J	60.2	163.75
ISOPHORONE	4600 D	4000	13.95
2-METHYLNAPHTHALENE	66 JD	---	
NAPHTHALENE	470	1220	88.76

TABLE 25 (continued)

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-3S

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
PHENANTHRENE	88 JD	620	150.28
PHENOL	3600 D	3320	8.09
PYRENE	30	228	153.49
UNKNOWN ALKANE	14400 J	---	
PESTICIDE/PCB (PPB)			
AROCLOR-1242	3200 C	17000	136.63
INORGANICS (PPB)			
ALUMINUM	48600 *P	---	
ANTIMONY	27.4 B*P	0	200.00
ARSENIC	26.2 SF	0	200.00
BARIUM	541 P	---	
BERYLLIUM	2.6 BP	0	200.00
CADMIUM	10.9 P	0	200.00
CALCIUM	326000 EP	---	
CHROMIUM	167 P	0	200.00
COBALT	46.8 BP	---	
COPPER	660 P	50	171.83
CYANIDE	---	314	
IRON	87400 *EP	---	
LEAD	139 NJF	0	200.00
MAGNESIUM	45900 EP	---	
MANGANESE	2470 P	---	
MERCURY	8.6 JCV	0	200.00
NICKEL	94.2 P	0	200.00
POTASSIUM	34900 P	---	
SODIUM	87200 EP	---	
VANADIUM	149 P	---	
ZINC	RO	140	
PETROLEUM HYDROCARBONS (PPM)	---	40.3	
MISCELLANEOUS			
ACIDITY (CACO3 MG/L)	---	<5	
ALKALINITY	---	370	
PHENOLICS (PPM)	---	7.2	

TABLE 26

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-5D

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
CHLOROFORM	RO	1670	
1,2-DICHLOROETHANE	RO	2330	
METHYLENE CHLORIDE	RO	137	
TRICHLOROETHENE	RO	1620	
ACIDS/NEUTRAL BASES (PPB)			
BENZENE,CHLORO-(8CI9CI)	40 J	---	
BENZENE, DIMETHYL	60 J	---	
BENZENE, DIMETHYL	30 J	---	
BENZENE, DIMETHYL-NITRO	90 J	---	
BENZENE, ETHYL-(8CI9CI)	20 J	---	
1,2-DICHLOROBENZENE	7 J	7.46	6.36
NITROBENZENE	38	23.3	47.96
PESTICIDE/PCB (PPB)			
AROCLOR-1232	0	1.8	200.00
INORGANICS (PPB)			
ALUMINUM	643 *P	---	
CALCIUM	213000 EP	---	
CYANIDE	---	<25	
IRON	821 *EP	---	
MAGNESIUM	14100 EP	---	
MANGANESE	73.9 P	---	
SODIUM	42200 EP	---	
VANADIUM	8.1 BP	---	
ZINC	RO	21	
PETROLEUM HYDROCARBONS (PPM)		<1	
MISCELLANEOUS			
ACIDITY (CACO3 MG/L)	---	<5	
ALKALINITY (AS CACO3 MG/L)	---	29	
PHENOLICS (PPM)	---	<.05	

TABLE 27

COMPARATIVE ANALYSIS OF SPLIT GROUNDWATER SAMPLE RESULTS
LOCATION GW-7D

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
METHYLENE CHLORIDE	RO	6.91	
TETRACHLOROETHENE	4 J	0	
TOLUENE	RO	6.01	
TRICHLOROETHENE	15	13.1	13.52
UNKNOWN CYCLOALKANE	3 J	---	
ACIDS/BASE NEUTRALS (PPB)			
	NONE DETECTED	NONE DETECTED	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NONE DETECTED	
INORGANICS (PPB)			
ALUMINUM	1070 *P	---	
BARIUM	38.5 B	---	
CALCIUM	87400 EP	---	
CYANIDE	---	<25	
IRON	1650 *EP	---	
MAGNESIUM	11200 EP	---	
MANGANESE	98.9 P	---	
NICKEL	6.6 BP	0	200.00
SODIUM	44400 EP	---	
VANADIUM	12.4 BP	---	
ZINC	RO	20	
PETROLEUM HYDROCARBONS (PPM)	---	<.050	
MISCELLANEOUS			
ACIDITY (AS CACO3 MG/L)	---	<5	
ALKALINITY (AS CACO3 MG/L)	---	35	
PHENOLICS (PPM)	---	<.050	

TABLE 28

COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLE RESULTS
LOCATION TR-11

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
UNKNOWN	5 J	---	

TABLE 29
COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLES
LOCATION TR-12

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETIC ACID, ETHYL ESTER	36 J	---	
ETHANE-1,1,2-TRICHLORO-1,2,2-	5 J	---	
METHYLENE CHLORIDE	RO	5.4	
UNKNOWN	20 J	---	

TABLE 30

COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLE RESULTS
LOCATION TR-13

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
2-BUTANONE	10 R	0	200.00
METHYLENE CHLORIDE	1 J	0	200.00
1,1,2,2-TETRACHLOROETHANE	0	11.8	200.00

TABLE 32

COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLE RESULTS
LOCATION TR-15

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	9 BJ	NA	
BENZENE	1 J		

TABLE 33

COMPARATIVE ANALYSIS OF SPLIT FIELD BLANK RESULTS
LOCATION TR-16

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	8 J	NA	

TABLE 34

COMPARATIVE ANALYSIS OF SPLIT TRIP BLANK RESULTS
LOCATION TR-17

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
TOLUENE	5 J	NA	

TABLE 35

COMPARATIVE ANALYSIS OF SPLIT TRIP BLANK RESULTS
LOCATION TR-18

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	10	NA	

TABLE 36

COMPARATIVE ANALYSIS OF SPLIT TRIP BLANK RESULTS
LOCATION TR-19

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
	NONE DETECTED	NA	

TABLE 37

COMPARATIVE ANALYSIS OF SPLIT TRIP BLANK RESULTS
LOCATION TR-20

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	17	NA	
2-BUTANONE	7 J		

TABLE 38
COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLES
LOCATION FB-11

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	61	---	
CHLOROFORM	3 J	5.75	62.86
1,1,1-TRICHLOROETHANE	3 J	0	200.00
TRICHLOROETHENE	2 J	0	200.00
ACIDS/BASE NEUTRALS (PPB)	NONE DETECTED	NONE DETECTED	
PESTICIDE/PCB (PPB)			
AROCLOR-1232	3	0	200.00
INORGANICS (PPM)			
CYANIDE	---	<.25	
IRON	40 BNP	---	
LEAD	5.2 SNF	0	
SODIUM	590 BP	---	
ZINC	0	0.022	200.00
PETROLEUM HYDROCARBONS	1	<1	
MISCELLANEOUS			
ACIDITY (MG/L CACO3)	<10	<5	
ALKALINITY (MG/L CACO3)	<1	<5	
PHENOLICS (TOTAL)	---	<.05	

TABLE 39

COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLE RESULTS
LOCATION FB-12

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	27 B	---	
2-BUTANONE	10 R	0	200.00
CHLOROFORM	5	0	200.00
METHYLENE CHLORIDE	42 B	5.81	151.39
4-METHYL-2-PENTANONE	1	---	
TETRACHLOROETHENE	4 J	0	200.00
TOLUENE	2 J	0	200.00
TRICHLOROETHENE	2 J	0	200.00
ACID/NEUTRAL BASES (PPB)			
BIS(2-ETHYLHEXYL)PHTHALATE	82 J	0	200.00
SULFUR	200 JN	---	
UNKNOWN	4600 J	---	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NONE DETECTED	
INORGANICS (PPM)			
CALCIUM	494 P	---	
CYANIDE	---	<.025	
IRON	355 P	---	
MANGANESE	6 P	---	
PETROLEUM HYDROCARBONS (PPM)	---	<1	
MISCELLANEOUS			
ACIDITY (AS CACO3)	<1	<5	
ALKALINITY (AS CACO3)	<10	<5	
PHENOLICS (PPM)	---	<.05	

TABLE 40

COMPARATIVE ANALYSIS OF SPLIT WATER SAMPLE RESULTS
LOCATION FB-13

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	39 B	---	
2-BUTANONE	10 R	0	200.00
CHLOROFORM	2 J	0	200.00
METHYLENE CHLORIDE	46 B	3.39	172.55
SILOXANE	40 J	---	
SILOXANE	260 J	---	
ACIDS/BASE NEUTRALS (PPB)			
UNKNOWN	980 J	---	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NONE DETECTED	
INORGANICS (PPM)			
CYANIDE	---	<.025	
IRON	456 P	---	
MANGANESE	7 P	---	
MISCELLANEOUS			
ACIDITY (AS CACO2)	<1	<5	
ALKALINITY (AS CACO3	<10	<5	
PETROLEUM HYDROCARBONS (PPM)	---	<1	
PHENOLICS (PPM)	---	0.061	

TABLE 41

COMPARATIVE ANALYSIS OF SPLIT TRIP BLANK RESULTS
LOCATION FB-14

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	12	NA	
CYCLOPENTANE, METHYL	29 J		
PENTANE,3-METHYL	130 J		
UNKNOWN HYDROCARBON	3 J		
ACIDS/BASE NEUTRALS (PPB)			
	NONE DETECTED	NA	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NA	
INORGANICS (PPB)			
CADMIUM	5.2 P	NA	
CALCIUM	492 P		
LEAD	4 NF		

TABLE 42

COMPARATIVE ANALYSIS OF SPLIT FIELD BLANK RESULTS
LOCATION FB-15

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
	NONE DETECTED	NA	
ACIDS/NEUTRAL BASES (PPB)			
	NONE DETECTED	NA	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NA	
INORGANICS (PPB)			
BERYLLIUM	1.3 BP	NA	
CALCIUM	439 BEP		
LEAD	2 BNJF		
THALLIUM	2.1 BNJF		

TABLE 43

COMPARATIVE ANALYSIS OF SPLIT FIELD BLANK RESULTS
LOCATION FB-16

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
	NONE DETECTED	NA	
ACIDS/BASE NEUTRALS (PPB)			
	NONE DETECTED	NA	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NA	
INORGANICS (PPB)			
CALCIUM	598 BEP		
LEAD	1.7 BNJF		
MANGANESE	4.6 BP		

TABLE 44

COMPARATIVE ANALYSIS OF SPLIT FIELD BLANK RESULTS
LOCATION FB-17

PARAMETER	EBASCO (CLP) CONCENTRATION	DAMES & MOORE CONCENTRATION	RPD (%)
VOLATILE ORGANICS (PPB)			
ACETONE	5 J	NA	
ACIDS/BASE NEUTRALS (PPB)			
	NONE DETECTED	NA	
PESTICIDE/PCB (PPB)			
	NONE DETECTED	NA	
INORGANICS (PPB)			
BARIUM	10.1 BP	NA	
CALCIUM	384 BEP		
IRON	21.8 B*EP		
LEAD	2 BNJF		

APPENDIX C

APPENDIX C

GEOPHYSICAL SURVEY REPORT

GEOPHYSICAL SITE INVESTIGATION

SCP SITE

CARLSTADT, NEW JERSEY

FOR

DAMES & MOORE

CRANFORD, NEW JERSEY

DELTA

GEOPHYSICAL SERVICES

001685

May 15, 1987

DELTA
GEOPHYSICAL SERVICES
A GEONICS COMPANY

Mr. Gerry Coscia
Dames & Moore
6 Commerce Drive
Cranford, NJ 07016

Dear Mr. Coscia:

We have completed the proton magnetometer and electromagnetic (terrain conductivity) surveys at the SCP site located in Carlstadt, New Jersey.

PROGRAM

Electromagnetic and proton magnetometer techniques were used to detect the possible presence of buried ferrous material and contamination beneath the 5-acre site.

An EG&G 856 proton magnetometer was used to measure the total intensity of the earth's magnetic field (gammas). The total magnetic field is related to known and unknown external interferences (buried ferrous material, etc.). Readings were recorded at 10-foot stations. This survey utilized Base Station Filtering to correct for diurnal effects.

A Geonics EM-31 terrain conductivity meter was used to measure subsurface conductivity (mmhos/m). Readings were recorded at 10-foot stations along a row. Distance between the rows was 20-feet. The terrain conductivity equipment functions by generating a electromagnetic field which induces a secondary electromagnetic field in the earth. The ratio of these two fields are proportional to the conductivity (measured in millimhos/meter) of the soil. The EM-31 conductivity meter has an effective depth of penetration to about 20 feet.

Results from both geophysical surveys were integrated for the final interpretation (see geophysical survey map). This approach provided the most accurate location of ferrous material and or possible contamination.

INTERPRETATION

Thirteen high and twenty-six low magnetic anomalies were interpreted from the magnetometer data. These anomalous zones are shown on the geophysical survey map (in the Appendix). The high magnetic anomalous zones reflect the areas where a concentration of ferrous material is most likely to be found. The low magnetic

116 WEST MAIN ST., CLINTON, NEW JERSEY 08809, TELEPHONE 201·735·9390

anomalous zones also reflect the possible presence of ferrous material but in decreasing concentrations.

Nine conductivity anomalous zones were interpreted and shown on the site map. These anomalous zones may indicate soil contamination.

Final interpretation of both the electromagnetic and magnetometer data utilized existing reference information (field notes, historical information, etc.). All known influences (surface metal, concrete pads, etc.) were subjectively filtered and not shown on the survey map. Good correlation exists between the magnetometer and electromagnetic data in areas of possible ferrous metals.

We have not overlapped the correlatable magnetometer and electromagnetic anomalous zones. By presenting only the magnetometer anomalous zones indicative of possible buried ferrous metal, we simplified the geophysical survey map. Areas where we interpreted possible soil contamination are indicated by the electromagnetic (conductivity) anomalies.

The geophysical survey lines were located with reference to the 50-foot grid established by Dames and Moore's surveyors. The Appendix contains the geophysical field data and its "X" and "Y" coordinates. The origin of the coordinate system is at Dames and Moore surveyed location "C 00". The "X" coordinate indicates the footage in an easterly direction (parallel to Patterson Plank Road, toward the Carolina Trucking Facility). The "Y" coordinate indicates the footage in a northerly direction (perpendicular to Patterson Plank Road, toward the Gotham Industrial Park)

Geophysical measurements were attempted outside the site fence. The electromagnetic and magnetometer measurements along Patterson Plank Road and Gotham Parkway were inaccurate due to electric lines, and motor vehicle interferences. No attempt was made to enter Carolina Trucking's fenced yard, since the location and quantity of trailers would have greatly influenced our measurements.

If there are any questions concerning this report or should you develop other data that will aid in our interpretation, please contact us. Thank you for your confidence in Delta.

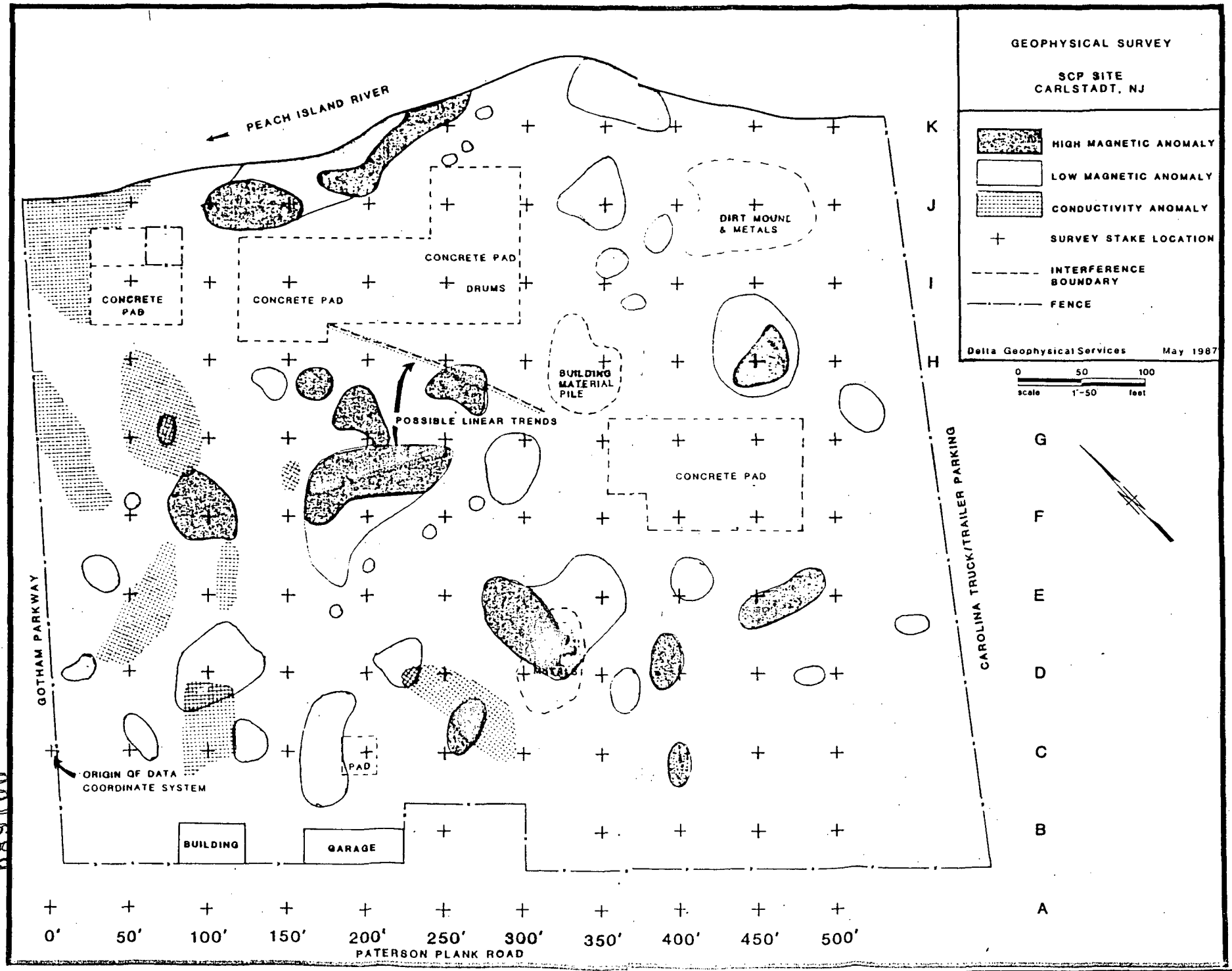
Very truly yours,
Delta Geophysical Services

Michael Menkus

Michael Menkus
Geophysical Engineer

MM/hp

APPENDIX


GEOPHYSICAL SURVEY
SCP SITE
CARLSTADT, NJ
HIGH MAGNETIC ANOMALY
LOW MAGNETIC ANOMALY
CONDUCTIVITY ANOMALY
SURVEY STAKE LOCATION
INTERFERENCE BOUNDARY
FENCE
Delta Geophysical Services
May 1987
0 50 100
scale 1"=50' feet
PEACH ISLAND RIVER
CONCRETE PAD
CONCRETE PAD
CONCRETE PAD
DRUMS
DIRT MOUND & METALS
BUILDING MATERIAL PILE
POSSIBLE LINEAR TRENDS
CONCRETE PAD
METALS
PAD
ORIGIN OF DATA COORDINATE SYSTEM
BUILDING
GARAGE
GOTHAM PARKWAY
CAROLINA TRUCK/TRAILER PARKING
PATERSON PLANK ROAD
K
J
I
H
G
F
E
D
C
B
A
0'
50'
100'
150'
200'
250'
300'
350'
400'
450'
500'

001689

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
10	-50	9311
10	-40	19518
10	-30	53744
10	-20	52858
10	-10	52924
10	0	53296
10	10	53803
10	20	53830
10	30	53956
10	40	53957
10	50	53966
10	60	54230
10	70	54173
10	80	53952
10	90	54313
10	100	54555
10	110	54889
10	120	54556
10	130	54753
10	140	55040
10	150	55109
10	160	55123
10	170	54905
10	180	55076
10	190	55028
10	200	55182
10	210	55199
10	220	55125
10	230	55175
10	250	55030
10	260	55296
10	270	56291
10	280	55637
10	290	55517
10	300	54986
10	310	55305
10	320	55720
10	330	55370
0	330	55405
0	320	55508
0	310	55398
0	300	55102
0	290	58636
0	280	58623
0	270	56293
0	260	54921
0	250	54972
0	240	54889
0	230	54813
0	220	54690
0	210	55134
0	200	55226
0	190	54935
0	180	55116
0	170	54493
0	160	55079
0	150	54882
0	140	54561
0	130	54489
0	120	54145
0	110	54401
0	100	54411
0	90	54293
0	80	54076
0	70	54037
0	60	53871
0	50	8705
-10	100	5090
-10	110	5131
-10	120	7042
-10	130	18316
-10	140	46812
-10	150	54495
-10	160	54295
-10	170	53949
-10	180	54382
-10	190	54456
-10	200	54683
-10	210	54772
-10	220	54821
-10	230	54914
-10	240	54586
-10	250	54422
-10	260	56041
-10	270	55348
-10	280	57759
-10	290	52205
-10	300	36580
-10	310	54966
-10	320	54773
-10	330	54855
-10	340	55293
-10	350	55662
20	340	55379
20	330	55568
20	320	55352
20	310	54760
20	300	54447
20	290	54769
20	280	54958
20	270	54735
20	260	54805
20	250	55158
20	240	55145
20	230	55164
20	220	55254
20	210	55428
20	200	55222
20	190	55557
20	180	54985
20	170	55948
20	160	55203
20	150	55067
20	140	55494
20	130	54375
20	120	53646
20	110	54334
20	100	54549
20	90	55335
20	80	54855
20	70	54406
20	60	54597
20	50	58624
20	40	55981
20	30	54731
20	20	54470
20	10	55113
20	0	54403
20	-10	54744
20	-20	55166
20	-30	54917
20	-40	54459
20	-50	53584
30	-50	5902
30	-40	54016
30	-30	54546
30	-20	55001
30	-10	55062
30	0	54432
30	10	55001
30	20	55516
30	30	54642
30	40	55416
30	50	35645
30	60	52178
30	70	54377
30	80	54712
30	90	55240
30	100	55696
30	110	55926
30	120	54814
30	130	54317
30	140	54755
30	150	54781
30	160	54457
30	170	54892
30	180	54962
30	190	55231
30	200	55141
30	210	55366
30	220	55199
30	230	55215
30	240	55129
30	250	55613
30	260	55241
30	270	55817
30	280	55216
30	290	55291
30	300	55312
30	310	54014
30	320	55925
30	330	58568
30	340	55902
30	350	55413
40	350	55597
40	340	56996
40	330	55589
40	320	54738
40	310	54613
40	300	58586

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
40	290	58636
40	280	54928
40	270	55072
40	260	55419
40	250	55509
40	240	55401
40	230	55151
40	220	55164
40	210	55178
40	200	54973
40	190	55155
40	180	54913
40	170	54923
40	160	54974
40	150	55223
40	140	54907
40	130	54035
40	120	55311
40	110	55829
40	100	55509
40	90	54919
40	80	54834
40	70	54684
40	60	54596
40	50	55686
40	40	54217
40	30	54796
40	20	54957
40	10	54726
40	0	55234
40	-10	55346
40	-20	55613
40	-30	55124
40	-40	54646
40	-50	53891
50	-50	49287
50	-40	54085
50	-30	54687
50	-20	55232
50	-10	55179
50	0	55926
50	10	53117
50	20	53894
50	30	55611
50	40	54127
50	50	55015
50	60	54482
50	70	53306
50	80	55129
50	90	55119
50	100	55334
50	110	55256
50	120	55402
50	130	55110
50	140	55016
50	150	55132
50	160	56633
50	170	55793
50	180	54556
50	190	55049
50	200	55072
50	210	55106
50	220	55415
50	230	55340
50	240	55151
50	250	55261
50	260	55070
50	270	55010
50	280	54221
50	290	58662
50	300	56467
50	310	55822
50	320	54977
50	330	55152
50	340	55985
50	350	55906
60	360	55530
60	350	55250
60	340	55363
60	320	52231
60	310	58732
60	300	56408
60	290	55742
60	280	55136
60	270	55286
60	260	55233
60	250	55359
60	240	55699
60	230	55232
60	220	55171
60	210	55233
60	200	55101
60	190	55381
60	180	55145
60	170	55287
60	160	55077
60	150	55053
60	140	55127
60	130	55322
60	120	55426
60	110	55541
60	100	55800
60	90	55687
60	80	55522
60	70	55638
60	60	55226
60	50	55481
60	40	55336
60	30	55419
60	20	55646
60	10	56452
60	0	57561
60	-10	55299
60	-20	54821
60	-30	54906
60	-40	54303
60	-50	54423
70	-50	9734
70	-40	52270
70	-30	53969
70	-20	54916
70	0	55080
70	10	55451
70	20	55744
70	30	55567
70	40	55550
70	50	55223
70	60	55802
70	70	55654
70	80	54480
70	90	55234
70	100	55483
70	110	55663
70	120	55588
70	130	55719
70	140	55354
70	150	55433
70	160	54649
70	170	55042
70	180	55266
70	190	55443
70	200	55946
70	210	55741
70	220	55272
70	230	54827
70	240	55161
70	250	55255
70	260	55187
70	270	54354
70	280	53325
70	290	54854
70	300	55344
70	310	58641
70	320	58677
70	340	54899
70	350	55102
70	360	55981
80	360	55024
80	350	53674
80	340	54486
80	330	55596
80	320	55655
80	310	55680
80	300	54545
80	290	54272
80	280	54307
80	270	54604
80	260	54946
80	250	55329
80	240	54962
80	230	55080
80	220	54836
80	210	54625
80	200	54882
80	190	54754
80	180	54623
80	170	53364
80	160	54843
80	150	56271
80	140	56210

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
80	130	55608	110	150	57626	100	370	54385
80	120	55734	110	160	56495	100	360	53719
80	110	54226	110	170	55510	100	350	53823
80	100	54431	110	180	54878	100	340	53702
80	90	55020	110	190	55556	100	330	54552
80	80	55103	110	200	55190	100	320	54627
80	70	55632	110	210	55204	100	310	54567
80	60	56936	110	220	55161	100	300	54134
80	50	55141	110	230	54997	100	290	54511
80	40	54345	110	240	55259	100	280	53333
80	30	56014	110	250	55277	100	270	53435
80	20	55465	110	260	55815	100	260	55605
80	10	54545	110	270	55497	100	250	55537
80	0	54437	110	280	53815	100	240	55349
80	-10	56237	110	290	52140	100	230	55206
80	-20	54919	110	300	52211	100	220	55261
80	-30	52557	110	310	54044	100	210	54998
80	-40	49372	110	320	55421	100	200	54875
90	-40	53209	110	330	54635	100	190	54807
90	-30	53020	110	340	56218	100	180	54697
90	-20	54094	110	350	55169	100	170	53482
90	-10	54636	110	360	53972	100	160	55545
90	0	53771	110	370	53865	100	150	57396
90	10	54778	120	370	54389	100	140	58667
90	20	55122	120	360	53926	100	130	55627
90	30	56750	120	350	58619	100	120	55881
90	40	56401	120	340	57339	100	110	55644
90	50	54541	120	330	54110	100	100	55197
90	60	58662	120	320	57119	100	90	54541
90	70	56046	120	310	58610	100	80	54746
90	80	55057	120	300	52077	100	70	54130
90	90	54989	120	290	56623	100	60	52226
90	100	54863	120	280	53261	100	50	52093
90	110	55173	120	270	53276	100	40	55416
90	120	55330	120	260	55118	100	30	54949
90	130	55457	120	250	55198	100	20	54970
90	140	56796	120	240	55520	100	10	55767
90	150	57159	120	230	55364	100	0	55769
90	160	54799	120	220	55690	100	-10	54575
90	170	53204	120	210	55553	100	-20	54333
90	180	54056	120	200	55281	100	-30	55059
90	190	54685	120	190	55315	100	-40	55499
90	200	54877	120	180	55607	110	-30	54189
90	210	54669	120	170	55098	110	-20	55058
90	220	55026	120	160	55294	110	-10	55584
90	230	55449	120	150	55660	110	0	55218
90	240	54820	120	140	55677	110	10	55392
90	250	55047	120	130	55093	110	20	55321
90	260	55894	120	120	54779	110	30	55383
90	270	55419	120	110	55106	110	40	54414
90	280	54285	120	100	54536	110	50	56152
90	290	56739	120	90	54864	110	60	54723
90	300	55249	120	80	56269	110	70	58626
90	310	55093	120	70	56063	110	80	53832
90	320	55688	120	60	58117	110	90	54832
90	330	55210	120	50	52041	110	100	54447
90	340	54352	120	40	56459	110	110	54689
90	350	53404	120	30	55409	110	120	55614
90	360	53997	120	20	55080	110	130	54849
90	370	54802	120	10	55406	110	140	56872

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
120	0	56000
120	-10	55582
120	-20	55182
120	-30	55086
120	-40	54948
130	-40	54728
130	-30	54897
130	-20	54985
130	-10	55236
130	0	56245
130	10	56088
130	20	55598
130	30	55457
130	40	55609
130	50	57085
130	60	56087
130	70	55162
130	80	54792
130	90	54560
130	100	54736
130	110	55180
130	120	55333
130	130	55329
130	140	55549
130	150	55328
130	160	55048
130	170	54963
130	180	55534
130	190	55460
130	200	55503
130	210	55436
130	220	55623
130	230	55842
130	240	56050
130	250	55247
130	260	55070
130	270	55707
130	280	55828
130	290	55350
130	300	56205
130	300	56063
130	310	56080
130	320	56767
130	330	55747
130	340	56467
130	350	58246
130	360	56886
130	370	54831
140	380	55471
140	370	55574
140	360	56892
140	350	57849
140	340	52131
140	330	55099
140	320	56137
140	310	57432
140	280	53881
140	270	56052
140	260	55293
140	250	53315

X	Y	DATA
140	240	56719
140	230	56135
140	220	55722
140	210	55566
140	200	55460
140	190	55515
140	180	55501
140	170	55261
140	160	55352
140	150	55304
140	140	55425
140	130	55232
140	120	55163
140	110	55031
140	100	54964
140	90	55382
140	80	55146
140	70	55245
140	60	55229
140	50	54491
140	40	54402
140	30	54289
140	20	55284
140	10	55204
140	0	54228
140	-10	54289
140	-20	54019
140	-30	53971
140	-40	54451
140	-50	54101
140	-60	52236
150	-60	5216
150	-50	53948
150	-40	54632
150	-30	54599
150	-20	53860
150	-10	53307
150	0	54214
150	10	54315
150	20	55968
150	30	55784
150	40	55038
150	50	54493
150	60	54495
150	70	55373
150	80	55204
150	90	55484
150	100	55661
150	110	55268
150	120	55404
150	130	55448
150	140	55564
150	150	55913
150	160	55781
150	170	55294
150	180	55471
150	190	55289
150	200	54087
150	210	55939
150	220	55184

X	Y	DATA
150	230	55933
150	240	55891
150	250	54583
150	260	53914
150	270	53304
150	280	54397
150	310	58049
150	320	56539
150	330	56206
150	340	55425
150	350	58625
150	360	55303
150	370	55394
150	380	55259
160	380	54228
160	370	54477
160	360	55132
160	350	54220
160	340	55241
160	330	55288
160	320	58905
160	310	55921
160	300	55219
160	280	52146
160	270	52316
160	260	53172
160	250	53377
160	240	55435
160	230	58625
160	220	56418
160	210	55744
160	200	53948
160	190	55055
160	180	54211
160	170	54293
160	160	55034
160	150	54455
160	140	55019
160	120	55147
160	110	55236
160	100	55430
160	90	55137
160	80	55105
160	70	55305
160	60	54956
160	50	54988
160	40	56953
160	30	58716
160	20	58016
160	10	57617
160	0	52155
160	-10	52138
160	-20	52238
160	-30	54690
160	-40	52115
160	-50	52220
160	-60	53611
170	-40	40833
170	-30	56731
170	-20	55776

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
170	-10	57369	180	170	52174	190	340	53114
170	0	58328	180	160	52244	190	350	54493
170	10	52170	180	150	54139	190	360	58139
170	20	56806	180	140	53927	190	370	57869
170	30	57655	180	130	52694	190	380	56557
170	40	57997	180	120	54935	190	390	55008
170	50	55260	180	110	56825	200	390	55711
170	60	54838	180	100	55573	200	380	56730
170	70	55071	180	90	56194	200	370	56434
170	80	55242	180	80	55175	200	360	56535
170	90	55249	180	70	55236	200	350	53505
170	100	55310	180	60	55221	200	340	52121
170	110	55910	180	50	56359	200	330	54296
170	120	56275	180	40	58560	200	320	53701
170	130	54663	180	30	57349	200	310	53752
170	140	54145	180	20	54773	200	300	54451
170	150	52508	180	10	54999	200	290	58689
170	160	53496	180	0	56316	200	280	58646
170	170	51221	180	-10	57480	200	270	57810
170	180	52208	180	-20	56686	200	260	52207
170	190	54830	180	-30	55404	200	250	56913
170	200	55972	180	-40	55971	200	240	56651
170	210	57070	190	-40	5368	200	230	52182
170	220	56767	190	-30	10998	200	220	52154
170	230	57347	190	-20	54466	200	210	51668
170	240	52074	190	-10	55123	200	200	52122
170	250	55302	190	0	55291	200	190	55411
170	260	56642	190	10	54526	200	180	58427
170	270	56504	190	20	55222	200	170	57103
170	280	51442	190	30	56932	200	160	57094
170	290	52106	190	40	56004	200	150	54427
170	310	53981	190	50	56334	200	140	55372
170	320	54605	190	60	55694	200	130	55823
170	330	55774	190	70	55346	200	120	56369
170	340	55684	190	80	55198	200	110	55686
170	350	54754	190	90	55659	200	100	55564
170	360	55325	190	100	55569	200	90	55492
170	370	56611	190	110	55967	200	80	55520
170	380	54633	190	120	55753	200	70	55492
180	380	55557	190	130	55513	200	60	55109
180	370	57316	190	140	55718	200	50	54971
180	360	58352	190	150	55824	200	40	55078
180	350	55349	190	160	58452	200	30	57030
180	340	55109	190	170	52179	200	20	55738
180	330	53519	190	180	58695	200	10	53649
180	320	54468	190	190	58261	200	0	58635
180	310	55078	190	200	55520	200	-10	55623
180	300	56565	190	210	57085	200	-20	52147
180	290	54407	190	220	54625	200	-30	58654
180	280	58630	190	230	51983	200	-40	27558
180	270	58665	190	240	56097	210	-40	5609
180	260	58319	190	250	53460	210	-30	54350
180	250	58668	190	260	58766	210	-20	52718
180	240	57097	190	270	58449	210	-10	52202
180	230	53253	190	280	57316	210	0	53594
180	220	55044	190	290	55674	210	10	54793
180	210	52240	190	300	56129	210	20	55319
180	200	56438	190	310	53633	210	30	57018
180	190	57247	190	320	54399	210	40	55411
180	180	58628	190	330	52466	210	50	54771

MAGNETOMETER DATA
SCP SITE
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X	Y	DATA
210	60	53980
210	70	54380
210	80	55308
210	90	55201
210	100	55376
210	110	55631
210	120	55941
210	130	55697
210	140	55760
210	150	55543
210	160	55127
210	170	52160
210	180	56598
210	190	54798
210	200	53360
210	210	53854
210	220	53469
210	230	52380
210	240	54231
210	250	52988
210	260	57053
210	270	56334
210	280	58023
210	290	53997
210	300	55276
210	310	55371
210	320	52199
210	330	53547
210	340	53771
210	350	54083
210	360	53376
210	370	55371
210	380	56742
210	390	56395
210	400	55836
220	400	57329
220	390	56466
220	380	55939
220	370	55574
220	360	53814
220	350	54863
220	340	55592
220	330	56246
220	320	52435
220	310	52428
160	130	55147
220	300	52169
220	290	52131
220	280	58616
220	270	57451
220	260	55466
220	250	53610
220	240	54771
220	230	54662
220	220	55344
220	210	55600
220	200	55352
220	190	55973
220	180	56391
220	170	55626
220	160	51884
220	150	54562
220	140	55310
220	130	55413
220	120	55407
220	110	55479
220	100	54111
220	90	54924
220	80	54051
220	70	55469
220	60	53760
220	50	52165
220	40	54079
220	30	56513
220	20	56290
220	10	54179
220	0	54367
220	-10	55411
220	-20	58720
220	-30	55938
220	-40	52127
230	-40	7071
230	-30	55050
230	-20	56641
230	-10	55885
230	0	54814
230	10	53056
230	20	55435
230	30	56480
230	40	53828
230	50	53249
230	60	53478
230	70	56418
230	80	54479
230	90	55321
230	100	55225
230	110	55506
230	120	55467
230	130	55528
230	140	55093
230	150	54605
230	160	52446
230	170	58300
230	180	57922
230	190	56703
230	200	53546
230	210	55677
230	220	55788
230	230	55534
230	240	54197
230	250	52211
230	260	55975
230	270	56218
230	280	58743
230	290	52205
230	300	58628
230	310	52245
230	320	52427
230	330	56080
230	340	53826
230	360	54368
230	370	54657
230	380	55671
230	390	55818
230	400	56553
230	410	57849
240	410	55628
240	400	55742
240	390	55423
240	380	55358
240	370	54846
240	360	54925
240	350	52269
240	340	55562
240	330	54673
240	320	52166
240	310	52141
240	300	58676
240	290	52161
240	280	56327
240	270	58602
240	260	56396
240	250	55416
240	240	54221
240	230	53473
240	220	55064
240	210	55667
240	200	54391
240	190	54842
240	180	58486
240	170	57188
240	160	55949
240	150	55071
240	140	56115
240	130	55576
240	120	55197
240	110	55435
240	100	54931
240	90	52220
240	80	55533
240	70	55678
240	60	54816
240	50	55011
240	40	54393
240	30	56906
240	20	56260
240	10	54254
240	0	55410
240	-10	55916
240	-20	55388
240	-30	58659
240	-40	12254
250	-40	52076
250	-30	52718
250	-20	55026
250	-10	56322
250	0	57022
250	10	56475
250	20	56246
250	30	56405

MAGNETOMETER DATA
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X	Y	DATA	X	Y	DATA	X	Y	DATA
250	40	57138	260	210	55346	270	330	56834
250	50	55148	260	200	55493	270	340	56137
250	60	54828	260	190	56829	270	350	54132
250	70	53210	260	180	56203	270	360	52202
250	80	54788	260	170	55552	270	370	52647
250	90	54222	260	160	55522	270	380	54534
250	100	56226	260	150	55389	270	390	55346
250	110	55482	260	140	55238	270	400	55674
250	120	55028	260	130	55052	270	410	56385
250	130	55686	260	120	55161	270	420	55442
250	140	55563	260	110	54748	230	350	54247
250	150	55332	260	100	54800	270	290	55313
250	160	55344	260	90	55000	280	-40	5615
250	170	55456	260	80	53659	280	-30	54329
250	180	54430	260	70	53769	280	-20	54124
250	190	58728	260	60	55648	280	-10	54718
250	200	52229	260	50	54502	280	0	55352
250	210	55144	260	40	57439	280	10	56077
250	220	55245	260	30	56682	280	20	55489
250	230	52574	260	20	58639	280	30	54632
250	240	53557	260	10	58626	280	40	55121
250	250	55531	260	0	55926	280	50	55098
250	260	58181	260	-10	56223	280	60	55057
250	270	58576	260	-20	55996	280	70	54763
250	280	55899	260	-30	55026	280	80	55897
250	290	55549	270	-30	52133	280	90	52191
250	300	52174	270	-20	55106	280	100	50373
250	310	52117	270	-10	55846	280	110	52497
250	320	55734	270	0	55052	280	120	53887
250	330	53295	270	10	55739	280	130	54417
250	340	54039	270	20	52192	280	140	53740
250	350	54491	270	30	57580	280	150	54771
250	360	54486	270	40	56585	280	160	55994
250	370	54872	270	50	56969	280	170	55321
250	380	56267	270	60	55630	280	180	56130
250	390	55928	270	70	55035	280	190	54930
250	400	55743	270	80	53618	280	200	55094
250	410	56081	270	90	53306	280	210	55084
250	420	57871	270	100	54172	280	220	55154
260	420	55991	270	110	54139	280	230	55232
260	410	55750	270	120	55027	280	240	55291
260	400	55904	270	130	54630	280	250	55755
260	390	56403	270	140	54646	280	260	54955
260	380	55578	270	150	55187	280	270	54889
260	370	55250	270	160	56163	280	280	55189
260	360	53187	270	170	55279	280	290	54692
260	350	52320	270	180	55360	280	300	52187
260	340	54692	270	190	55661	280	310	48410
260	330	53268	270	200	55768	280	320	49422
260	320	52201	270	210	55067	280	330	52064
260	310	55385	270	220	56168	280	340	56413
260	300	56845	270	230	57210	280	350	55154
260	290	54784	270	240	56255	280	360	53909
260	280	55496	270	250	55312	280	370	49547
260	270	54658	270	260	55329	280	380	53592
260	260	54907	270	270	55299	280	390	55074
260	250	55461	270	280	55356	280	400	55438
260	240	56532	270	300	55255	280	410	55599
260	230	58673	270	310	53316	280	420	55886
260	220	55397	270	320	55757	280	430	55952

MAGNETOMETER DATA
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X	Y	DATA	X	Y	DATA	X	Y	DATA
290	430	52094	300	50	55447	310	210	45621
290	420	55951	300	60	56519	310	200	52116
290	410	55214	300	70	52059	310	190	49310
290	400	45661	300	80	57175	310	180	56772
290	390	55768	300	90	57217	310	170	56756
290	380	54552	300	100	55695	310	160	55775
290	370	51162	300	110	54099	310	150	54411
290	360	55321	300	120	55014	310	140	54963
290	350	55199	300	130	55558	310	130	54862
290	340	57291	300	140	55132	310	120	55377
290	330	55757	300	150	54366	310	110	55020
290	320	45724	300	160	55961	310	100	56969
290	310	45608	300	170	56358	310	90	57754
290	300	45666	300	180	55622	310	80	58689
290	290	55010	300	190	55483	310	70	56839
290	280	55137	300	200	56091	310	60	57910
290	270	55211	300	210	51504	310	50	56921
290	260	55035	300	220	55492	310	40	56186
290	250	55767	300	230	54855	310	30	45670
290	240	55012	300	240	54974	310	20	55502
290	230	54685	300	250	52034	310	10	45655
290	220	54841	300	260	55208	310	0	45620
290	210	54713	300	270	55180	310	-10	55308
290	200	53904	300	280	55608	310	-20	45029
290	190	54496	300	290	56030	310	-30	54864
290	180	55093	300	300	52066	310	-40	54800
290	170	56411	300	310	45688	310	-50	29877
290	160	52181	300	320	52126	310	-60	26372
290	150	55684	300	330	55085	310	-70	8962
290	140	55371	300	340	56769	320	-70	5159
290	130	55481	300	350	56113	320	-60	6289
290	120	54592	300	360	56102	320	-50	55056
290	110	53395	300	370	51015	320	-40	55106
290	100	50228	300	380	54049	320	-30	55230
290	90	53338	300	390	54676	320	-20	55453
290	80	45636	300	400	54787	320	-10	55643
290	70	53874	300	410	54696	320	0	55369
290	60	55605	300	420	54816	320	10	55475
290	50	55157	300	430	55495	320	20	55468
290	40	55361	300	440	55548	320	30	55494
290	30	54830	310	440	49074	320	40	55784
290	20	54816	310	430	54671	320	50	56214
290	10	56103	310	420	54761	320	60	56901
290	0	55638	310	410	52173	320	70	57633
290	-10	54970	310	400	55316	320	80	58539
290	-20	55332	310	390	45665	320	90	56491
290	-30	53482	310	380	54278	320	100	55880
290	-40	28951	310	370	54461	320	110	55471
300	-70	5743	310	360	55863	320	120	54508
300	-60	5258	310	350	56599	320	130	55294
300	-50	5488	310	340	56578	320	140	54941
300	-40	48122	310	330	56231	320	150	55543
300	-30	52086	310	320	56789	320	160	55386
300	-20	55038	310	310	56511	320	170	52144
300	-10	55125	310	300	49417	320	180	55472
300	0	55503	310	290	52120	320	190	56441
300	10	55824	310	280	55375	320	200	56600
300	20	55353	310	270	54842	320	210	55953
300	30	55178	310	260	54251	320	260	53984
300	40	55755	310	250	52789	320	270	55031

MAGNETOMETER DATA
SCP SITE
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X	Y	DATA	X	Y	DATA	X	Y	DATA
320	280	55487	330	410	55806	350	10	55243
320	290	56157	330	420	52145	350	20	55346
320	300	55319	330	430	55432	350	30	52172
320	310	55761	330	440	52141	350	40	55652
320	320	55629	340	430	54992	350	50	55526
320	330	55655	340	420	54149	350	60	55425
320	340	56010	340	410	55227	350	70	52139
320	350	52097	340	400	55534	350	80	52072
320	360	54211	340	390	54698	350	90	52135
320	370	54010	340	380	55750	350	100	56618
320	380	54407	340	370	56167	350	110	52146
320	390	54946	340	360	55738	350	120	54273
320	400	55489	340	350	54772	350	130	52150
320	410	55428	340	340	56205	350	140	52154
320	420	55679	340	330	55559	350	150	52110
320	430	54798	340	320	55343	350	160	52203
320	440	55015	340	310	55425	350	170	52147
330	-70	5180	340	300	55038	350	180	55710
330	-60	15936	340	290	55190	350	210	54198
330	-50	6878	340	280	55539	350	220	52093
330	-40	33607	340	270	54846	350	260	52061
330	-30	55151	340	260	53824	350	270	53393
330	-20	55283	340	220	55546	350	280	52180
330	-10	55542	340	210	56610	350	290	55616
330	0	55374	340	200	56218	350	300	55452
330	10	55216	340	190	56177	350	310	52167
330	20	55412	340	180	55128	350	320	52146
330	30	52197	340	170	52180	350	330	55676
330	40	55513	340	160	52152	350	340	57465
330	50	52145	340	150	55980	350	350	52124
330	60	52142	340	140	54915	350	360	52125
330	70	52169	340	130	54310	350	370	52160
330	80	56523	340	120	52151	350	380	52143
330	90	56089	340	110	52013	350	390	55845
330	100	55722	340	100	56395	350	400	55664
330	110	54975	340	90	56517	350	410	53926
330	120	53728	340	80	56579	350	420	52194
330	130	54712	340	70	56147	350	430	54172
330	140	52176	340	60	55757	360	430	54840
330	150	55424	340	50	55594	360	420	55797
330	160	52170	340	40	55467	360	410	56122
330	170	55512	340	30	55556	360	400	55240
330	180	52176	340	20	55559	360	390	55185
330	190	56037	340	10	55363	360	380	55571
330	200	55955	340	0	55476	360	370	55018
330	210	52080	340	-10	55384	360	360	54877
330	270	53697	340	-20	55318	360	350	56393
330	280	55139	340	-30	42616	360	340	56451
330	290	55159	340	-40	55198	360	330	55333
330	300	55241	340	-50	26820	360	320	56036
330	310	55588	340	-60	26098	360	310	55542
330	320	55552	340	-70	5327	360	300	54842
330	330	55581	350	-70	5157	360	290	54416
330	340	55584	350	-60	53119	360	280	54405
330	350	52137	350	-50	52131	360	270	54788
330	360	54345	350	-40	52158	360	260	55030
330	370	54142	350	-30	55277	360	220	52139
330	380	54265	350	-20	55344	360	210	56749
330	390	54526	350	-10	52149	360	200	55934
330	400	54707	350	0	55385	360	180	55378

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
360	170	52041	370	300	54522	390	-60	5184
360	160	52895	370	310	55367	390	-50	53816
360	150	55060	370	320	55761	390	-40	54893
360	140	53829	370	330	55344	390	-30	55172
360	130	53388	370	340	55745	390	-20	55316
360	120	54559	370	350	55616	390	-10	55348
360	110	55579	370	360	54963	390	0	55469
360	100	55393	370	370	55031	390	10	55309
360	90	52174	370	380	55347	390	20	55338
360	80	53634	370	390	55074	390	30	55264
360	70	55568	370	400	55517	390	40	54933
360	60	55166	370	410	56386	390	50	56382
360	50	55368	370	420	52076	390	60	58678
360	40	56084	380	420	55540	390	70	57155
360	30	55884	380	410	54891	390	80	55327
360	20	54386	380	400	55980	390	90	52198
360	10	54416	380	390	55572	390	100	54591
360	0	55029	380	380	55726	390	110	55986
360	-10	55865	380	370	54970	390	120	55929
360	-20	55884	380	360	55024	390	130	55628
360	-30	55335	380	350	54930	390	140	54678
360	-40	55366	380	340	55467	390	150	45531
360	-50	54993	380	330	56012	390	160	26070
360	-60	54046	380	320	55497	390	170	23823
370	-70	5696	380	310	55045	390	180	52056
370	-60	53386	380	300	55043	390	190	55682
370	-50	38280	380	290	55231	390	200	54045
370	-40	55222	380	280	54241	390	210	55234
370	-30	55402	380	270	55293	390	220	54849
370	-20	55587	380	260	55490	390	230	55088
370	-10	52038	380	250	55015	390	240	54652
370	0	55385	380	240	54937	390	250	55092
370	10	54973	380	230	54541	390	260	55318
370	20	52155	380	220	54057	390	270	55505
370	30	52175	380	210	55488	390	280	54889
370	40	56034	380	180	41162	390	290	54277
370	50	52202	380	170	52081	390	300	54275
370	60	55283	380	160	39479	390	310	54855
370	70	54869	380	150	45632	390	320	55306
370	80	54705	380	140	18149	390	330	56070
370	90	52085	380	130	52033	390	340	57531
370	100	55247	380	120	53974	390	350	54847
370	110	55324	380	110	55590	390	360	55168
370	120	53793	380	100	55475	390	370	55145
370	130	53763	380	90	55676	390	380	55653
370	140	50191	380	80	55145	390	390	55610
370	150	52170	380	70	55070	390	400	56762
370	160	48144	380	60	54953	390	410	55861
370	170	45658	380	50	54903	390	420	55523
370	180	45639	380	40	55336	400	410	55664
370	190	16075	380	30	53438	400	400	55628
370	210	55488	380	20	55209	400	390	55434
370	220	55351	380	10	55047	400	380	55243
370	230	55817	380	0	55505	400	370	54949
370	240	55753	380	-10	55363	400	360	54874
370	250	55322	380	-20	55520	400	350	55745
370	260	55669	380	-30	55407	400	340	55643
370	270	55365	380	-40	55043	400	330	55393
370	280	54543	380	-50	54013	400	320	54983
370	290	53796	380	-60	5195	400	310	54820

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
400	300	54204	560	-40	54875	540	270	54402
400	290	54100	560	-30	54798	540	260	54521
400	280	54672	560	-20	54755	540	250	54176
400	270	54278	560	-10	53828	540	240	54804
400	260	55032	560	0	55602	540	230	54599
400	250	55574	560	10	55076	540	220	54731
400	240	55440	560	20	55186	540	210	54928
400	230	52170	560	30	54868	540	200	55484
400	220	54797	560	40	54601	540	190	54748
400	210	54809	560	50	54053	540	180	53411
400	190	52107	560	60	54368	540	170	55300
400	180	52115	560	70	53893	540	160	55262
400	170	46284	560	80	58644	540	150	55211
400	160	52145	560	90	54872	540	140	55165
400	150	52071	560	100	54464	540	130	55113
400	140	51455	560	110	54625	540	120	55216
400	130	55598	560	120	53891	540	110	55199
400	120	53649	560	130	53704	540	100	54757
400	110	52135	560	140	53580	540	90	54603
400	100	56290	560	150	53454	540	80	55594
400	90	55515	560	160	53493	540	70	55329
400	80	52146	560	170	58694	540	60	54884
400	70	52103	550	-60	54059	540	50	54847
400	60	56254	550	-50	54770	540	40	54699
400	50	52112	550	-40	54897	540	30	54924
400	40	52210	550	-30	54924	540	20	54847
400	30	52143	550	-20	54956	540	10	55245
400	20	55188	550	-10	54839	540	0	55116
400	10	55197	550	0	55033	540	-10	55154
400	0	52162	550	10	55080	540	-20	55156
400	-10	52143	550	20	55076	540	-30	55146
400	-20	52198	550	30	54894	540	-40	55101
400	-30	55226	550	40	55451	540	-50	54949
400	-40	55170	550	50	55001	540	-60	53862
400	-50	47842	550	60	54647	530	-60	52786
400	-60	53950	550	70	54706	530	-50	54796
400	-70	5391	550	80	52887	530	-40	55055
580	-60	51923	550	90	55380	530	-30	55161
580	-50	53111	550	100	54583	530	-20	55206
580	-40	53289	550	110	55119	530	-10	55232
580	-30	53949	550	120	54981	530	0	55264
570	-60	51520	550	130	54973	530	10	55184
570	-50	54269	550	140	54885	530	20	55160
570	-40	54597	550	150	54907	530	30	55077
570	-30	54589	550	160	54952	530	40	54996
570	-20	54558	550	170	54527	530	50	55177
570	-10	54768	550	180	52986	530	60	55092
570	0	54946	550	190	54002	530	70	55430
570	10	54865	550	200	54523	530	80	55144
570	20	54835	550	210	54608	530	90	54493
570	30	54573	550	220	54443	530	100	54828
570	40	53683	550	230	53826	530	110	55093
570	50	52924	550	240	53960	530	120	55164
570	60	52811	550	250	53606	530	130	55520
570	70	53355	550	260	54117	530	140	55424
570	80	54541	550	270	53623	530	150	55406
570	90	55088	550	280	52188	530	160	55625
570	100	58656	540	300	54266	530	170	55700
560	-60	54037	540	290	54211	530	180	55764
560	-50	54739	540	280	54277	530	190	56516

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
530	200	56016	520	10	55221	500	350	55122
530	210	56414	520	0	55345	500	340	54780
530	220	56058	520	-10	55249	500	330	54662
530	230	55521	520	-20	55183	500	320	54906
530	240	55409	520	-30	55234	500	310	55095
530	250	55454	520	-40	55116	500	300	54877
530	260	55680	520	-50	55000	500	290	54693
530	270	55148	520	-60	54542	500	280	55382
530	280	54973	510	-60	54169	500	270	55337
530	290	54809	510	-50	55011	500	260	55280
530	300	54910	510	-40	55165	500	250	54959
530	310	54871	510	-30	55262	500	240	55148
530	320	54857	510	-20	55243	500	230	55473
530	330	54945	510	-10	55286	500	220	55619
530	340	54984	510	0	55307	500	210	55642
530	350	55097	510	10	55288	500	200	55842
530	360	55247	510	20	55323	500	190	55877
530	370	55383	510	30	55239	500	180	56253
530	380	54589	510	40	55286	500	170	56797
530	390	54258	510	50	55145	500	160	57071
530	400	53201	510	60	55193	500	150	57127
520	400	55031	510	70	55272	500	140	57464
520	390	54394	510	80	55303	500	130	56419
520	380	54446	510	90	55423	500	120	56003
520	370	53977	510	100	55354	500	110	55966
520	360	55583	510	110	55422	500	100	55769
520	350	55742	510	120	55509	500	90	55725
520	340	55126	510	130	55692	500	80	55536
520	330	55300	510	140	56136	500	70	55295
520	320	55416	510	150	56390	500	60	55273
520	310	55468	510	160	56324	500	50	55291
520	300	55353	510	170	55824	500	40	55233
520	290	55622	510	180	55362	500	30	55300
520	280	54873	510	190	55258	500	20	55206
520	270	55438	510	200	55783	500	10	55224
520	260	55639	510	210	55450	500	0	55308
520	250	54743	510	220	55169	500	-10	55289
520	240	55502	510	230	55201	500	-20	55286
520	230	55468	510	240	55457	500	-30	55242
520	220	56198	510	250	55276	500	-40	55217
520	210	56176	510	260	55386	500	-50	55055
520	200	55721	510	270	55648	500	-60	54326
520	190	55940	510	280	55662	490	-60	53799
520	180	55937	510	290	55730	490	-50	54929
520	170	55422	510	300	55430	490	-40	55168
520	160	56028	510	310	55645	490	-30	55249
520	150	55492	510	320	55907	490	-20	55284
520	140	55410	510	330	55524	490	-10	55342
520	130	55460	510	340	55144	490	0	55394
520	120	55355	510	350	55509	490	10	55312
520	110	55175	510	360	54982	490	20	55237
520	100	55116	510	370	54599	490	30	55429
520	90	55003	510	380	55379	490	40	55243
520	80	55195	510	390	55282	490	50	54456
520	70	55183	510	400	55561	490	60	55232
520	60	55014	500	400	56313	490	70	55367
520	50	55308	500	390	55426	490	80	55449
520	40	55224	500	380	55964	490	90	55482
520	30	55192	500	370	54944	490	100	56031
520	20	55233	500	360	54556	490	110	58571

MAGNETOMETER DATA
SCP SITE
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X	Y	DATA
490	120	55966
490	130	55865
490	140	55930
490	150	56955
490	160	57120
490	170	56973
490	180	56717
490	190	57536
490	200	56779
490	210	57075
490	220	56523
490	230	55570
490	240	55289
490	250	55214
490	260	55279
490	270	55008
490	280	54488
490	290	54612
490	300	54925
490	310	54873
490	320	55050
490	330	55232
490	340	55176
490	350	55086
490	360	54880
490	370	55112
490	380	55287
490	390	55636
490	400	56083
480	400	55575
480	390	55509
480	380	55354
480	370	55341
480	360	55546
480	350	55685
480	340	55267
480	330	55271
480	320	55065
480	310	54977
480	300	54945
480	290	55214
480	280	54566
480	270	55021
480	260	55371
480	250	55159
480	240	55435
480	230	56200
480	220	58112
480	210	57232
480	200	57543
480	150	57598
480	140	55850
480	130	55326
480	120	54729
480	110	55659
480	100	56641
480	90	55848
480	80	55662
480	70	55447
480	60	55012

X	Y	DATA
480	50	56292
480	40	55323
480	30	55321
480	20	55146
480	10	55233
480	0	55243
480	-10	55282
480	-20	55234
480	-30	55251
480	-40	55167
480	-50	54988
480	-60	54022
470	-60	53242
470	-50	54856
470	-40	55220
470	-30	55308
470	-20	55325
470	-10	55322
470	0	55266
470	10	55356
470	20	55342
470	30	55393
470	40	55445
470	50	55319
470	60	55537
470	70	56006
470	80	57029
470	90	56188
470	100	54433
470	110	54410
470	120	55314
470	130	55781
470	140	56538
470	210	55752
470	220	56571
470	230	56939
470	240	58639
470	250	57474
470	260	56547
470	270	56223
470	280	55894
470	290	55466
470	300	55159
470	310	55091
470	320	54949
470	330	55353
470	340	55307
470	350	56116
470	360	55642
470	370	55066
470	380	55548
470	390	55782
470	400	55842
460	400	55503
460	390	55777
460	380	55724
460	370	55864
460	360	58646
460	350	54429
460	340	55061

X	Y	DATA
460	330	55357
460	320	55102
460	310	54948
460	300	55205
460	290	55665
460	280	56985
460	270	58235
460	260	58585
460	250	58644
460	240	57660
460	230	56424
460	220	55717
460	150	58642
460	140	58638
460	130	56301
460	120	55712
460	110	54934
460	100	54551
460	90	55806
460	80	57182
460	70	56196
460	60	55369
460	50	55291
460	40	55295
460	30	55304
460	20	55310
460	10	55326
460	0	55311
460	-10	55289
460	-20	55281
460	-30	55393
460	-40	55233
460	-50	54884
460	-60	53465
450	-60	53238
450	-50	54859
450	-40	55078
450	-30	55174
450	-20	55273
450	-10	55253
450	0	55223
450	10	55292
450	20	55308
450	30	55342
450	40	55319
450	50	55346
450	60	55289
450	70	55627
450	80	56430
450	90	54672
450	100	54737
450	110	55094
450	120	55628
450	130	56343
450	140	58135
450	150	58606
450	160	58666
450	170	58596
450	180	58669
450	200	58666

MAGNETOMETER DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
450	210	57729	440	-20	55143	420	290	54269
450	220	56470	440	-30	55186	420	280	55553
450	230	56844	440	-40	55105	420	270	55279
450	240	57710	440	-50	54809	420	260	54845
450	250	57550	440	-60	53638	420	250	54232
450	260	56645	430	-60	54031	420	240	55032
450	270	56361	430	-50	54860	420	230	55815
450	280	57310	430	-40	55129	420	220	55506
450	290	56524	430	-30	55233	420	190	52148
450	300	55287	430	-20	55237	420	180	58675
450	310	55041	430	-10	55325	420	170	58650
450	320	55435	430	0	55290	420	160	52201
450	330	56364	430	10	55349	420	150	52144
450	340	55031	430	20	55333	420	140	58607
450	350	55129	430	30	55303	420	130	55687
450	360	55047	430	40	55328	420	120	54523
450	370	54617	430	50	55324	420	110	56045
450	380	54865	430	60	55347	420	100	55433
450	390	55717	430	70	55579	420	90	55412
450	400	55094	430	80	55325	420	80	55419
440	400	55409	430	90	55306	420	70	55360
440	390	55917	430	100	55533	420	60	55275
440	380	55528	430	110	54487	420	50	55338
440	370	54918	430	120	54849	420	40	55317
440	360	55539	430	130	55279	420	30	55306
440	350	56616	430	140	58649	420	20	55382
440	340	55388	430	150	58613	420	10	55314
440	330	55930	430	160	58674	420	0	55523
440	320	55188	430	170	58633	420	-10	55288
440	310	54561	430	180	58635	420	-20	55211
440	300	54426	430	220	55829	420	-30	55312
440	290	56213	430	230	56999	420	-40	55253
440	280	56653	430	240	55415	420	-50	55146
440	270	55675	430	250	54968	420	-60	54720
440	260	55171	430	260	53908	410	-60	53977
440	250	55624	430	270	55239	410	-50	54747
440	240	58539	430	280	55213	410	-40	55136
440	230	56719	430	290	54396	410	-30	55282
440	220	56894	430	300	53647	410	-20	55268
440	210	56732	430	310	54772	410	-10	55453
440	180	58625	430	320	54928	410	0	55369
440	170	52152	430	330	54768	410	10	55266
440	160	58631	430	340	58626	410	20	55256
440	150	58642	430	350	56201	410	30	55242
440	140	58658	430	360	54940	410	40	55161
440	130	54928	430	370	55057	410	50	55275
440	120	54968	430	380	55483	410	60	55310
440	110	55458	430	390	55174	410	70	55393
440	100	55316	430	400	55262	410	80	55585
440	90	55090	420	400	55742	410	90	55756
440	80	55047	420	390	55605	410	100	54842
440	70	55260	420	380	55409	410	110	54946
440	60	55239	420	370	55645	410	120	53391
440	50	55319	420	360	54921	410	130	54307
440	40	55323	420	350	55596	410	140	58602
440	30	55338	420	340	58628	410	150	58648
440	20	55317	420	330	55257	410	160	58610
440	10	55334	420	320	55057	410	170	58594
440	0	55288	420	310	55094	410	180	52233
440	-10	55270	420	300	54090	410	190	52164

MAGNETOMETER DATA
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X	Y	DATA
410	200	58622
410	210	54320
410	220	54865
410	230	54855
410	240	54544
410	250	55831
410	260	54622
410	270	53962
410	280	53981
410	290	53338
410	300	53839
410	310	54820
410	320	55217
410	330	55256
410	340	55412
410	350	58647
410	360	54605
410	370	55262
410	380	55315
410	390	55845
410	400	56492
410	410	55530

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
10	-40	120
10	-30	110
10	-20	120
10	-10	130
10	0	120
10	10	115
10	20	120
10	30	120
10	40	120
10	50	115
10	60	115
10	70	110
10	80	100
10	90	110
10	100	110
10	110	110
10	120	92
10	130	113
10	140	100
10	150	105
10	160	64
10	170	92
10	180	80
10	190	78
10	200	90
10	210	88
10	220	94
10	230	96
10	240	96
10	250	98
10	260	120
10	270	115
10	280	60
10	290	56
10	300	76
10	310	62
10	320	76
10	330	66
10	340	60
10	350	55
30	-40	80
30	-30	82
30	-20	76
30	-10	74
30	0	80
30	10	80
30	20	120
30	30	130
30	40	150
30	50	60
30	60	170
30	70	150
30	80	140
30	90	130
30	100	105
30	110	120
30	120	100
30	130	110
30	140	110
30	150	120

X	Y	DATA
30	160	80
30	170	130
30	180	120
30	190	110
30	200	110
30	210	110
30	220	120
30	230	120
30	240	125
30	250	100
30	260	130
30	270	75
30	280	40
30	290	62
30	300	56
30	310	94
30	320	92
30	330	90
30	340	70
30	350	60
50	-50	115
50	-40	75
50	-30	72
50	-20	75
50	-10	76
50	0	90
50	10	88
50	20	120
50	30	100
50	40	110
50	50	140
50	60	170
50	70	160
50	80	170
50	90	120
50	100	170
50	110	165
50	120	150
50	130	150
50	140	140
50	150	120
50	160	170
50	170	140
50	180	150
50	190	170
50	200	175
50	210	210
50	220	170
50	230	230
50	240	220
50	250	200
50	260	180
50	270	165
50	280	150
50	290	150
50	300	180
50	310	150
50	320	190
50	330	220
50	340	100

X	Y	DATA
50	350	80
50	360	70
70	50	110
70	-40	80
70	-30	90
70	-20	95
70	10	100
70	0	95
70	10	100
70	20	100
70	30	130
70	40	120
70	50	140
70	60	145
70	70	150
70	80	180
70	90	195
70	100	200
70	110	190
70	120	190
70	130	170
70	140	160
70	150	145
70	160	150
70	170	180
70	180	160
70	190	190
70	200	200
70	210	290
70	220	250
70	230	290
70	240	250
70	250	180
70	260	180
70	270	230
70	280	235
70	290	150
70	300	150
70	310	210
70	320	0
70	330	0
70	340	150
70	350	95
90	-40	170
90	-30	80
90	-20	125
90	-10	220
90	0	220
90	10	220
90	20	210
90	30	220
90	40	230
90	50	150
90	60	160
90	70	140
90	80	160
90	90	150
90	100	150
90	110	140
90	120	120

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
90	130	140	110	310	145	150	50	110
90	140	140	110	320	160	150	60	130
90	150	130	110	330	280	150	70	130
90	160	110	110	340	190	150	80	130
90	170	115	110	350	160	150	90	130
90	180	205	110	360	180	150	100	125
90	190	210	110	370	115	150	110	135
90	200	150	130	-50	125	150	120	130
90	210	80	130	40	120	150	130	155
90	220	225	130	-30	110	150	140	150
90	230	170	130	-20	170	150	150	140
90	240	175	130	-10	160	150	160	150
90	250	185	130	0	140	150	170	175
90	260	175	130	10	100	150	180	66
90	270	265	130	20	150	150	190	140
90	280	250	130	30	200	150	200	115
90	290	80	130	40	180	150	210	105
90	300	230	130	50	150	150	220	85
90	310	170	130	60	150	150	230	90
90	320	175	130	70	150	150	240	90
90	330	190	130	80	170	150	250	100
90	340	175	130	90	135	150	260	110
90	350	130	130	100	140	150	270	120
90	360	105	130	110	135	150	280	0
90	370	90	130	120	130	150	290	0
110	-40	230	130	130	130	150	300	0
110	-30	220	130	140	135	150	310	0
110	-20	75	130	150	140	150	320	85
110	-10	150	130	160	135	150	330	90
110	0	250	130	170	135	150	340	85
110	10	200	130	180	85	150	350	85
110	20	180	130	190	115	150	360	80
110	30	170	130	200	105	150	370	75
110	40	170	130	210	105	170	-40	80
110	50	145	130	220	110	170	-30	65
110	60	165	130	230	100	170	-20	90
110	70	180	130	240	105	170	-10	70
110	80	150	130	250	110	170	0	70
110	90	38	130	260	130	170	10	75
110	100	12	130	270	0	170	20	72
110	110	18	130	280	0	170	30	74
110	120	52	130	290	0	170	40	89
110	130	8	130	300	0	170	50	96
110	140	130	130	310	0	170	60	100
110	150	165	130	320	120	170	70	130
110	160	160	130	330	150	170	80	132
110	170	125	130	340	130	170	90	140
110	180	65	130	350	120	170	100	150
110	190	75	130	360	95	170	110	150
110	200	175	130	370	85	170	120	150
110	210	150	150	-50	90	170	130	160
110	220	170	150	-40	70	170	140	170
110	230	120	150	-30	90	170	150	170
110	240	120	150	-20	70	170	160	150
110	250	140	150	-10	100	170	170	135
110	260	170	150	0	95	170	180	150
110	270	190	150	10	95	170	190	140
110	280	120	150	20	100	170	200	130
110	290	190	150	30	110	170	210	100
110	300	210	150	40	120	170	220	105

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
170	230	90
170	240	85
170	250	90
170	260	115
170	270	50
170	280	0
170	290	0
170	300	0
170	310	0
170	320	110
170	330	85
170	340	80
170	350	90
170	360	85
170	370	80
170	380	85
190	-10	80
190	0	60
190	10	65
190	20	70
190	30	75
190	40	95
190	50	90
190	60	95
190	70	110
190	80	123
190	90	140
190	100	130
190	110	130
190	120	130
190	130	135
190	140	140
190	150	150
190	160	150
190	170	175
190	180	130
190	190	160
190	200	140
190	210	135
190	220	100
190	230	100
190	240	100
190	250	110
190	260	105
190	270	105
190	280	20
190	290	10
190	300	10
190	310	200
190	320	35
190	330	64
190	340	82
190	350	95
190	360	100
190	370	85
190	380	85
210	-40	30
210	-30	82
210	-20	82
210	-10	87

X	Y	DATA
210	0	94
210	10	110
210	20	110
210	30	110
210	40	135
210	50	140
210	60	135
210	70	150
210	80	135
210	90	135
210	100	130
210	110	125
210	120	130
210	130	120
210	140	110
210	150	130
210	160	135
210	170	160
210	180	100
210	190	135
210	200	150
210	210	125
210	220	115
210	230	110
210	240	110
210	250	140
210	260	90
210	270	190
210	280	200
210	290	0
210	300	300
210	310	60
210	320	110
210	330	100
210	340	90
210	350	90
210	360	110
210	370	110
210	380	110
210	390	100
210	400	100
230	-40	3000
230	-30	100
230	-20	85
230	-10	90
230	0	110
230	10	120
230	20	130
230	30	160
230	40	170
230	50	170
230	60	135
230	70	145
230	80	130
230	90	125
230	100	115
230	110	125
230	120	120
230	130	110
230	140	120

X	Y	DATA
230	150	120
230	160	115
230	170	135
230	180	140
230	190	48
230	200	145
230	210	120
230	220	120
230	230	110
230	240	130
230	250	90
230	260	30
230	270	62
230	280	70
230	290	70
230	300	0
230	310	0
230	320	0
230	330	110
230	340	120
230	350	130
230	360	130
230	370	120
230	380	115
230	390	100
230	400	110
250	-30	110
250	-20	120
250	-10	125
250	0	140
250	10	150
250	20	140
250	30	180
250	40	32
250	50	180
250	60	150
250	70	130
250	80	115
250	90	120
250	100	110
250	110	110
250	120	115
250	130	120
250	140	120
250	150	115
250	160	110
250	170	125
250	180	150
250	190	60
250	200	140
250	210	130
250	220	130
250	230	135
250	240	200
250	250	80
250	260	185
250	270	170
250	280	130
250	290	170
250	300	34

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
250	310	0
250	320	0
250	330	300
250	340	280
250	350	290
250	360	220
250	370	0
250	380	150
250	390	90
250	400	110
250	410	120
270	-30	130
270	-20	110
270	-10	135
270	0	150
270	10	175
270	20	190
270	30	200
270	40	280
270	50	95
270	60	125
270	70	135
270	80	100
270	90	185
270	100	40
270	110	100
270	120	150
270	130	120
270	140	125
270	150	110
270	160	100
270	170	110
270	180	140
270	190	180
270	200	80
270	210	170
270	220	200
270	230	200
270	240	70
270	250	200
270	260	195
270	270	180
270	280	150
270	290	95
270	300	45
270	310	300
270	320	300
270	330	0
270	340	0
270	350	0
270	360	0
270	370	36
270	380	125
270	390	135
270	400	115
270	410	120
270	420	125
290	-30	175
290	-20	145
290	-10	150

X	Y	DATA
290	0	160
290	10	150
290	20	140
290	30	165
290	40	140
290	50	130
290	60	155
290	70	26
290	80	300
290	90	210
290	100	0
290	110	150
290	120	130
290	130	110
290	140	90
290	150	120
290	160	115
290	170	140
290	180	170
290	190	220
290	200	150
290	210	250
290	220	200
290	230	62
290	240	210
290	250	175
290	260	150
290	270	160
290	280	190
290	290	0
290	300	0
290	310	0
290	320	0
290	330	0
290	340	0
290	350	60
290	360	300
290	370	55
290	380	190
290	390	135
290	400	150
290	410	100
290	420	125
290	430	120
310	-70	300
310	-60	190
310	-50	150
310	-40	130
310	-30	150
310	-20	140
310	-10	130
310	0	140
310	10	130
310	20	130
310	30	125
310	40	120
310	50	85
310	60	100
310	70	85
310	80	40

X	Y	DATA
310	90	120
310	100	200
310	110	150
310	120	130
310	130	130
310	140	110
310	150	120
310	160	110
310	170	115
310	180	135
310	190	150
310	200	160
310	210	75
310	220	100
310	230	200
310	240	150
310	250	150
310	260	140
310	270	160
310	280	170
310	290	120
310	300	240
310	310	50
310	320	0
310	330	150
310	340	50
310	350	210
310	360	185
310	370	75
310	380	150
310	390	125
310	400	130
310	410	140
310	420	110
310	430	120
330	-60	200
330	-50	135
330	-40	120
330	30	112
330	-20	110
330	-10	115
330	0	115
330	10	110
330	20	110
330	30	115
330	40	90
330	50	100
330	60	120
330	70	90
330	80	140
330	90	130
330	100	135
330	110	150
330	120	135
330	130	130
330	140	130
330	150	130
330	160	110
330	170	105
330	180	120

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA	X	Y	DATA	X	Y	DATA
330	190	165	350	280	175	370	380	160
330	200	200	350	290	210	370	390	90
330	210	270	350	300	200	370	400	160
330	220	0	350	310	230	370	410	100
330	230	0	350	320	200	370	420	130
330	240	0	350	330	300	390	-60	200
330	250	0	350	340	300	390	-50	105
330	260	0	350	350	0	390	-40	105
330	270	0	350	360	295	390	-30	105
330	280	140	350	370	280	390	-20	100
330	290	170	350	380	150	390	-10	120
330	300	200	350	390	150	390	0	130
330	310	190	350	400	140	390	10	110
330	320	220	350	410	130	390	20	120
330	330	240	350	420	100	390	30	130
330	340	270	350	430	110	390	40	130
330	350	270	370	-60	300	390	50	150
330	360	210	370	-50	120	390	60	160
330	370	175	370	-40	110	390	70	140
330	380	160	370	-30	110	390	80	150
330	390	140	370	-20	110	390	90	150
330	400	135	370	-10	115	390	100	150
330	410	110	370	0	120	390	110	145
330	420	100	370	10	135	390	120	150
330	430	110	370	20	120	390	130	170
330	440	130	370	30	130	390	140	190
350	-60	200	370	40	130	390	150	0
350	-50	120	370	50	125	390	160	0
350	-40	110	370	60	145	390	170	0
350	-30	110	370	70	150	390	180	300
350	-20	100	370	80	150	390	190	0
350	-10	100	370	90	140	390	200	0
350	0	110	370	100	155	390	210	250
350	10	120	370	110	170	390	220	160
350	20	115	370	120	175	390	230	160
350	30	120	370	130	210	390	240	180
350	40	120	370	140	220	390	250	200
350	50	140	370	150	235	390	260	190
350	60	135	370	160	270	390	270	290
350	70	130	370	170	350	390	280	170
350	80	120	370	180	110	390	290	230
350	90	130	370	190	0	390	300	230
350	100	150	370	200	200	390	310	240
350	110	150	370	210	190	390	320	220
350	120	190	370	220	190	390	330	250
350	130	200	370	230	150	390	340	250
350	140	220	370	240	170	390	350	250
350	150	220	370	250	150	390	360	250
350	160	170	370	260	175	390	370	200
350	170	150	370	270	200	390	380	125
350	180	70	370	280	220	390	390	155
350	190	140	370	290	200	390	400	110
350	200	60	370	300	180	390	410	110
350	210	280	370	310	200	390	420	0
350	220	0	370	320	210	410	-70	300
350	230	0	370	330	270	410	-60	110
350	240	0	370	340	200	410	-50	100
350	250	0	370	350	250	410	-40	100
350	260	150	370	360	230	410	-30	100
350	270	175	370	370	200	410	-20	100

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
410	-10	110
410	0	115
410	10	140
410	20	120
410	30	150
410	40	110
410	50	150
410	60	135
410	70	140
410	80	140
410	90	150
410	100	160
410	110	150
410	120	160
410	130	170
410	140	230
410	150	0
410	160	300
410	170	0
410	180	70
410	190	130
410	200	0
410	210	0
410	220	290
410	230	120
410	240	160
410	250	290
410	260	300
410	270	280
410	280	290
410	290	290
410	300	34
410	310	24
410	320	28
410	330	27
410	340	19
410	350	170
410	360	250
410	370	220
410	380	140
410	390	140
410	400	135
410	410	115
430	-60	200
430	-50	115
430	-40	105
430	-30	125
430	-20	135
430	-10	140
430	0	150
430	10	135
430	20	145
430	30	150
430	40	140
430	50	135
430	60	115
430	70	120
430	80	130
430	90	135
430	100	125
430	110	135
430	120	140
430	130	230
430	140	0
430	150	0
430	160	0
430	170	0
430	180	0
430	190	0
430	200	0
430	210	0
430	220	220
430	230	250
430	240	270
430	250	28
430	260	200
430	270	20
430	280	39
430	290	39
430	300	190
430	310	280
430	320	300
430	330	280
430	340	300
430	350	300
430	360	235
430	370	175
430	380	175
430	390	190
430	400	160
430	410	130
450	-60	180
450	-50	115
450	-40	115
450	-30	130
450	-20	140
450	-10	140
450	0	150
450	10	150
450	20	140
450	30	135
450	40	130
450	50	120
450	60	115
450	70	120
450	80	95
450	90	130
450	100	160
450	110	140
450	120	130
450	130	170
450	140	250
450	150	0
450	160	0
450	170	0
450	180	0
450	190	0
450	200	0
450	210	0
450	220	260
450	230	280
450	240	170
450	250	180
450	260	180
450	270	190
450	280	39
450	290	44
450	300	39
450	310	36
450	320	27
450	330	40
450	340	50
450	350	44
450	360	40
450	370	32
450	380	20
450	390	220
450	400	170
470	-60	250
470	-50	110
470	-40	105
470	-30	105
470	-20	110
470	-10	115
470	0	120
470	10	120
470	20	110
470	30	130
470	40	110
470	50	105
470	60	100
470	70	105
470	80	110
470	90	120
470	100	140
470	110	150
470	120	140
470	130	140
470	140	200
470	150	0
470	160	0
470	170	0
470	180	0
470	190	0
470	200	0
470	210	250
470	220	50
470	230	26
470	240	42
470	250	36
470	260	32
470	270	36
470	280	135
470	290	29
470	300	200
470	310	50
470	320	150
470	330	34
470	340	28
470	350	29

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
470	360	42
470	370	36
470	380	140
470	390	250
470	400	160
490	-60	140
490	50	100
490	-40	100
490	-30	90
490	-20	100
490	-10	100
490	0	95
490	10	100
490	20	105
490	30	100
490	40	100
490	50	100
490	60	100
490	70	100
490	80	105
490	90	100
490	100	160
490	110	150
490	120	100
490	130	120
490	140	160
490	150	250
490	160	220
490	170	200
490	180	150
490	190	150
490	200	240
490	210	250
490	220	260
490	230	300
490	240	200
490	250	190
490	260	150
490	270	180
490	280	230
490	290	250
490	300	120
490	310	250
490	320	39
490	330	32
490	340	36
490	350	36
490	360	36
490	370	28
490	380	24
490	390	160
490	400	125
510	-60	150
510	-50	90
510	-40	85
510	-30	80
510	-20	85
510	-10	90
510	0	90
510	10	90

X	Y	DATA
510	20	95
510	30	90
510	40	85
510	50	85
510	60	90
510	70	100
510	80	100
510	90	100
510	100	130
510	110	115
510	120	135
510	130	140
510	140	145
510	150	170
510	160	170
510	170	210
510	180	170
510	190	220
510	200	250
510	210	235
510	220	240
510	230	200
510	240	150
510	250	145
510	260	140
510	270	135
510	280	130
510	290	180
510	300	230
510	310	200
510	320	130
510	330	150
510	340	160
510	350	220
510	360	50
510	370	0
510	380	150
510	390	230
510	400	140
530	-60	150
530	-50	85
530	-40	80
530	-30	90
530	-20	85
530	-10	90
530	0	95
530	10	105
530	20	100
530	30	100
530	40	100
530	50	105
530	60	110
530	70	120
530	80	110
530	90	130
530	100	140
530	110	130
530	120	140
530	130	140
530	140	140

X	Y	DATA
530	150	140
530	160	170
530	170	170
530	180	150
530	190	200
530	200	175
530	210	220
530	220	190
530	230	160
530	240	150
530	250	150
530	260	140
530	270	120
530	280	125
530	290	125
530	300	135
530	310	140
530	320	150
530	330	260
530	340	70
530	350	170
530	360	300
530	370	20
530	380	160
530	390	90
550	-70	250
550	-60	90
550	-50	75
550	-40	70
550	-30	80
550	-20	100
550	-10	100
550	0	50
550	10	120
550	20	120
550	30	130
550	40	150
550	50	150
550	60	150
550	70	140
550	80	230
550	90	150
550	100	180
550	110	160
550	120	165
550	130	150
550	140	150
550	150	150
550	160	150
550	170	150
550	180	150
550	190	160
550	200	150
570	-70	250
570	-60	110
570	-50	100
570	-40	90
570	-30	100
570	-20	80
570	-10	100

CONDUCTIVITY DATA
SCP SITE
CARLSTADT, NJ

X	Y	DATA
570	0	130
		140
570	10	
570		
	20	140
570	30	160
570	40	155
570	50	150
570	60	180
570	70	200
570	80	200
570	90	200
570	100	240

001713

DELTA GEOPHYSICAL SERVICES
116 WEST MAIN ST., CLINTON, NEW JERSEY 08809, TELEPHONE 201·735·9390

APPENDIX D

APPENDIX D

SLUG TEST DATA AND CALCULATIONS

WELL NO.: MW-1S

DATE OF TEST: 7/9/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Grill

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 8.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 5.20 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 6.70 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 2.80 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 28

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
10.00	2.000	.800
22.00	2.580	.220
24.00	2.620	.180
28.00	2.660	.140
30.00	2.700	.100
33.00	2.720	.080
36.00	2.700	.100
42.00	2.730	.070
54.00	2.730	.070
60.00	2.740	.060
67.00	2.740	.060
72.00	2.740	.060
91.00	2.740	.060
107.00	2.750	.050
114.00	2.750	.050
120.00	2.750	.050
156.00	2.750	.050
181.00	2.750	.050
209.00	2.760	.040
240.00	2.760	.040
256.00	2.770	.030
277.00	2.770	.030
308.00	2.770	.030
358.00	2.780	.020
449.00	2.780	.020
507.00	2.780	.020
570.00	2.780	.020
627.00	2.780	.020

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED
VALUES FOR H0
(FEET)

001716

.1087
.1141

001717

WELL NO: MW-1S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .81 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.374E-03	2.051E-04	2.184590	131.75
1.000E-02	1.000E-02	1.860E-03	2.777E-04	2.250741	151.49
1.000E-03	1.000E-03	2.324E-03	3.469E-04	2.291083	162.89
1.000E-04	1.000E-04	2.774E-03	4.140E-04	2.331356	168.11
1.000E-05	1.000E-05	3.100E-03	4.627E-04	2.454061	165.83
1.000E-06	1.000E-06	3.353E-03	5.004E-04	2.527153	164.11
1.000E-07	1.000E-07	3.727E-03	5.562E-04	2.429038	165.53
1.000E-08	1.000E-08	4.236E-03	6.323E-04	2.216509	167.03
1.000E-09	1.000E-09	4.841E-03	7.226E-04	2.112533	168.60
1.000E-10	1.000E-10	5.465E-03	8.157E-04	2.181869	169.92

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.51E-05 FT/Second = 1.07E-03 CM/Second

TRANSMISSIVITY = 2.35E-04 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.41E-05 FT/Second = 7.34E-04 CM/Second

TRANSMISSIVITY = 1.61E-04 FT**2/Second

001718

WELL NO.: MW-1S

DATE OF TEST: 7/9/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Grill

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 8.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 5.20 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 6.70 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 2.80 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 18

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
7.00	3.140	.340
10.00	3.000	.200
14.00	2.920	.120
19.00	2.900	.100
23.00	2.870	.070
25.00	2.850	.050
33.00	2.830	.030
36.00	2.830	.030
48.00	2.820	.020
57.00	2.820	.020
62.00	2.820	.020
70.00	2.820	.020
78.00	2.810	.010
82.00	2.810	.010
88.00	2.810	.010
96.00	2.810	.010
105.00	2.810	.010
117.00	2.810	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.1470
.1638
.1787
.1920
.2024
.2105

00119

WELL NO: MW-1S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .34 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.488E-03	3.713E-04	1.473255	15.62
1.000E-02	1.000E-02	3.185E-03	4.754E-04	1.440642	10.30
1.000E-03	1.000E-03	3.878E-03	5.788E-04	1.488950	12.52
1.000E-04	1.000E-04	4.584E-03	6.842E-04	1.517685	13.76
1.000E-05	1.000E-05	5.220E-03	7.791E-04	1.559562	13.81
1.000E-06	1.000E-06	5.928E-03	8.848E-04	1.550858	12.15
1.000E-07	1.000E-07	6.597E-03	9.846E-04	1.583532	12.66
1.000E-08	1.000E-08	7.445E-03	1.111E-03	1.468798	14.13
1.000E-09	1.000E-09	8.457E-03	1.262E-03	1.400077	14.42
1.000E-10	1.000E-10	9.404E-03	1.404E-03	1.389341	14.06

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.84E-04 FT/Second = 1.17E-02 CM/Second

TRANSMISSIVITY = 2.57E-03 FT**2/Second

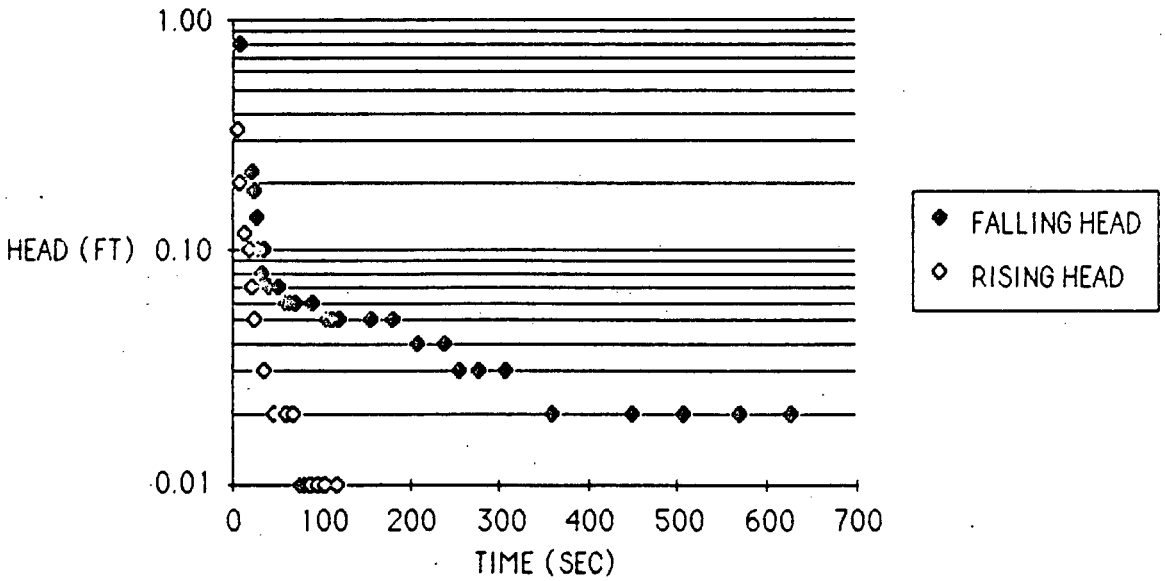
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.64E-04 FT/Second = 8.05E-03 CM/Second

TRANSMISSIVITY = 1.77E-03 FT**2/Second

001720

PLOT OF SLUG-TEST DATA
MW-1S



WELL NO.: MW-2S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.71 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.21 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.79 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 42

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
13.00	4.640	.150
17.00	4.650	.140
22.00	4.660	.130
29.00	4.660	.130
33.00	4.670	.120
37.00	4.670	.120
40.00	4.680	.110
43.00	4.680	.110
48.00	4.680	.110
52.00	4.690	.100
65.00	4.700	.090
73.00	4.700	.090
84.00	4.700	.090
101.00	4.710	.080
120.00	4.710	.080
135.00	4.720	.070
150.00	4.720	.070
165.00	4.730	.060
180.00	4.730	.060
195.00	4.730	.060
210.00	4.730	.060
225.00	4.740	.050
240.00	4.740	.050
255.00	4.750	.040
270.00	4.750	.040
285.00	4.750	.040
300.00	4.750	.040
330.00	4.750	.040
360.00	4.750	.040
390.00	4.750	.040
420.00	4.750	.040
450.00	4.750	.040

480.00	[illegible]	[illegible]
510.00	4.750	.040
540.00	4.750	.040
570.00	4.760	.030
600.00	4.760	.030
660.00	4.760	.030
720.00	4.760	.030
780.00	4.760	.030
840.00	4.760	.030
900.00	4.760	.030

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.0993
.1018

3 of 6/26

001723

WELL NO: MW-2S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .15 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	8.202E-05	1.948E-05	1.626150	90.74
1.000E-02	1.000E-02	1.602E-04	3.805E-05	1.531821	120.39
1.000E-03	1.000E-03	2.432E-04	5.777E-05	1.568220	138.98
1.000E-04	1.000E-04	3.250E-04	7.720E-05	1.567010	148.89
1.000E-05	1.000E-05	4.056E-04	9.634E-05	1.566319	154.75
1.000E-06	1.000E-06	4.850E-04	1.152E-04	1.567121	158.52
1.000E-07	1.000E-07	5.637E-04	1.339E-04	1.565626	161.16
1.000E-08	1.000E-08	6.418E-04	1.525E-04	1.565115	163.11
1.000E-09	1.000E-09	7.195E-04	1.709E-04	1.565135	164.66
1.000E-10	1.000E-10	7.940E-04	1.886E-04	1.570521	170.47

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METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.41E-05 FT/Second = 7.36E-04 CM/Second

TRANSMISSIVITY = 1.02E-04 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.79E-05 FT/Second = 5.45E-04 CM/Second

TRANSMISSIVITY = 7.52E-05 FT**2/Second

001724

WELL NO.: MW-2S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.71 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.21 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.79 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 38

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
11.00	4.940	.150
13.00	4.920	.130
18.00	4.890	.100
22.00	4.880	.090
26.00	4.870	.080
31.00	4.860	.070
35.00	4.860	.070
38.00	4.850	.060
43.00	4.850	.060
48.00	4.840	.050
58.00	4.840	.050
69.00	4.830	.040
75.00	4.830	.040
90.00	4.830	.040
105.00	4.830	.040
120.00	4.830	.040
135.00	4.830	.040
150.00	4.820	.030
165.00	4.820	.030
180.00	4.820	.030
195.00	4.820	.030
210.00	4.820	.030
225.00	4.820	.030
240.00	4.820	.030
255.00	4.820	.030
270.00	4.820	.030
285.00	4.810	.020
300.00	4.810	.020
330.00	4.810	.020
360.00	4.810	.020
390.00	4.810	.020
420.00	4.810	.020
450.00	4.810	.020

450.00	4.810	.020
480.00	4.800	.010
510.00	4.800	.010
540.00	4.800	.010
570.00	4.800	.010
600.00	4.800	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.0727
.0735

WELL NO: MW-2S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .15 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	2.899E-04	6.885E-05	1.826625	63.82
1.000E-02	1.000E-02	4.925E-04	1.170E-04	1.891851	95.31
1.000E-03	1.000E-03	6.971E-04	1.656E-04	1.935387	112.46
1.000E-04	1.000E-04	8.990E-04	2.135E-04	1.955995	121.60
1.000E-05	1.000E-05	1.083E-03	2.572E-04	2.001661	141.01
1.000E-06	1.000E-06	1.271E-03	3.019E-04	2.022114	150.35
1.000E-07	1.000E-07	1.468E-03	3.487E-04	2.026902	148.66
1.000E-08	1.000E-08	1.651E-03	3.922E-04	2.047070	147.88
1.000E-09	1.000E-09	1.844E-03	4.380E-04	2.050312	145.63
1.000E-10	1.000E-10	2.030E-03	4.823E-04	2.059170	142.81

6.885 x 10^-5 ft/sec x 30.48 cm/ft = 2.09 x 10^-3

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 4.78E-05 FT/Second = 1.46E-03 CM/Second

TRANSMISSIVITY = 2.01E-04 FT**2/Second

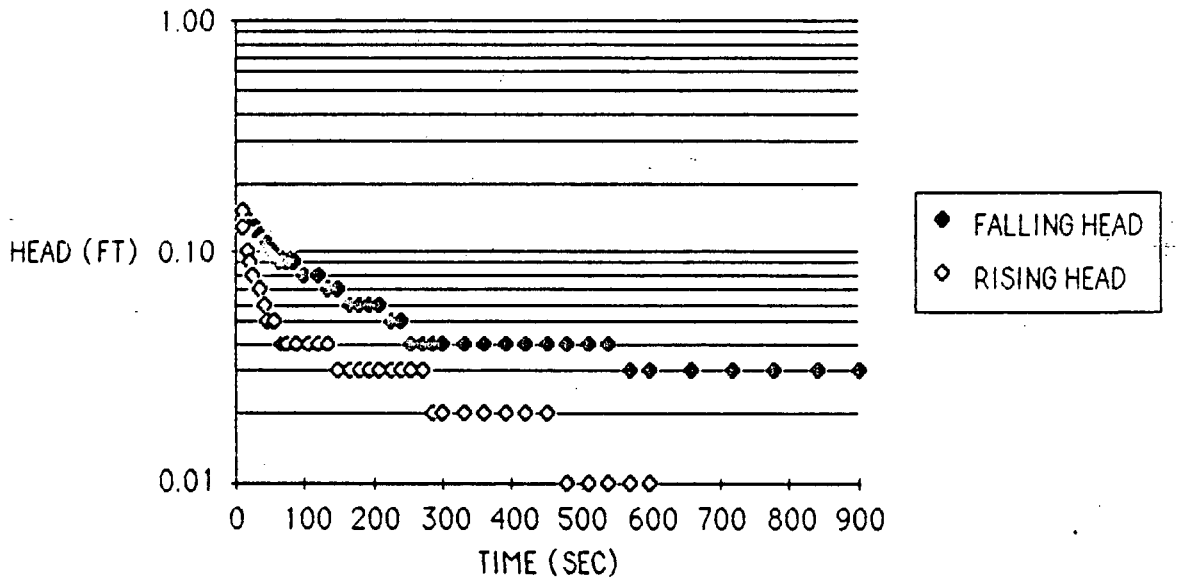
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 3.55E-05 FT/Second = 1.08E-03 CM/Second

TRANSMISSIVITY = 1.50E-04 FT**2/Second

001227

PLOT OF SLUG-TEST DATA
MW-2S



WELL NO.: MW-3S

DATE OF TEST: 7/27/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 11.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 7.56 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 12.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 30

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
10.00	2.750	1.190
15.00	2.820	1.120
18.00	2.860	1.080
24.00	2.920	1.020
28.00	2.950	.990
30.00	2.980	.960
36.00	3.020	.920
40.00	3.040	.900
45.00	3.070	.870
48.00	3.090	.850
53.00	3.110	.830
60.00	3.130	.810
66.00	3.150	.790
90.00	3.180	.760
105.00	3.180	.760
120.00	3.190	.750
150.00	3.200	.740
180.00	3.210	.730
210.00	3.220	.720
240.00	3.230	.710
300.00	3.240	.700
360.00	3.260	.680
480.00	3.280	.660
600.00	3.300	.640
720.00	3.320	.620
900.00	3.340	.600
1200.00	3.380	.560
1500.00	3.420	.520
1800.00	3.440	.500
1980.00	3.460	.480

HO WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR HO (FEET)
.8732
.8784

WELL NO: MW-3S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.20 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	3.924E-05	3.270E-06	1.945856	477.96
1.000E-02	1.000E-02	9.925E-05	8.271E-06	1.911092	519.53
1.000E-03	1.000E-03	1.684E-04	1.403E-05	1.833933	535.63
1.000E-04	1.000E-04	2.373E-04	1.978E-05	1.773249	542.77
1.000E-05	1.000E-05	3.048E-04	2.540E-05	1.766889	546.48
1.000E-06	1.000E-06	3.712E-04	3.094E-05	1.773490	548.86
1.000E-07	1.000E-07	4.369E-04	3.641E-05	1.778787	550.44
1.000E-08	1.000E-08	5.019E-04	4.183E-05	1.782531	551.59
1.000E-09	1.000E-09	5.666E-04	4.721E-05	1.785543	552.46
1.000E-10	1.000E-10	6.309E-04	5.257E-05	1.788384	553.14

3.27×10^{-6} ft/sec • 30.48 cm/ft = $10. \times 10^{-5}$

****

3.94 - 2.00 = 1.94 below screen

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.62E-06 FT/Second = 7.98E-05 CM/Second

TRANSMISSIVITY = 3.14E-05 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.74E-06 FT/Second = 5.30E-05 CM/Second

TRANSMISSIVITY = 2.08E-05 FT**2/Second

001231

WELL NO.: MW-3S

DATE OF TEST: 7/27/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 11.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 7.56 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 12.00 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 16

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
18.00	4.580	.640
22.00	4.500	.560
27.00	4.470	.530
36.00	4.450	.510
40.00	4.430	.490
43.00	4.420	.480
50.00	4.410	.470
60.00	4.390	.450
70.00	4.380	.440
90.00	4.350	.410
120.00	4.340	.400
150.00	4.320	.380
180.00	4.310	.370
240.00	4.300	.360
300.00	4.290	.350
480.00	4.270	.330

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.5107
.5336

001732

WELL NO: MW-3S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .65 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.808E-05	4.007E-06	1.365094	70.52
1.000E-02	1.000E-02	1.216E-04	1.013E-05	1.427616	84.65
1.000E-03	1.000E-03	2.054E-04	1.712E-05	1.424549	91.14
1.000E-04	1.000E-04	2.885E-04	2.405E-05	1.411739	93.95
1.000E-05	1.000E-05	3.701E-04	3.084E-05	1.424236	95.40
1.000E-06	1.000E-06	4.503E-04	3.752E-05	1.431644	96.37
1.000E-07	1.000E-07	5.295E-04	4.412E-05	1.436707	96.99
1.000E-08	1.000E-08	6.080E-04	5.067E-05	1.440304	97.45
1.000E-09	1.000E-09	6.861E-04	5.718E-05	1.442818	97.80
1.000E-10	1.000E-10	7.638E-04	6.365E-05	1.445091	98.08

4.007×10^{-6} ft/sec · 30.48 cm/ft = 1.2×10^{-4} cm/sec.

****

3.94 - 2.00 = 1.94 below screen

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.32E-05 FT/Second = 4.02E-04 CM/Second

TRANSMISSIVITY = 1.58E-04 FT**2/Second

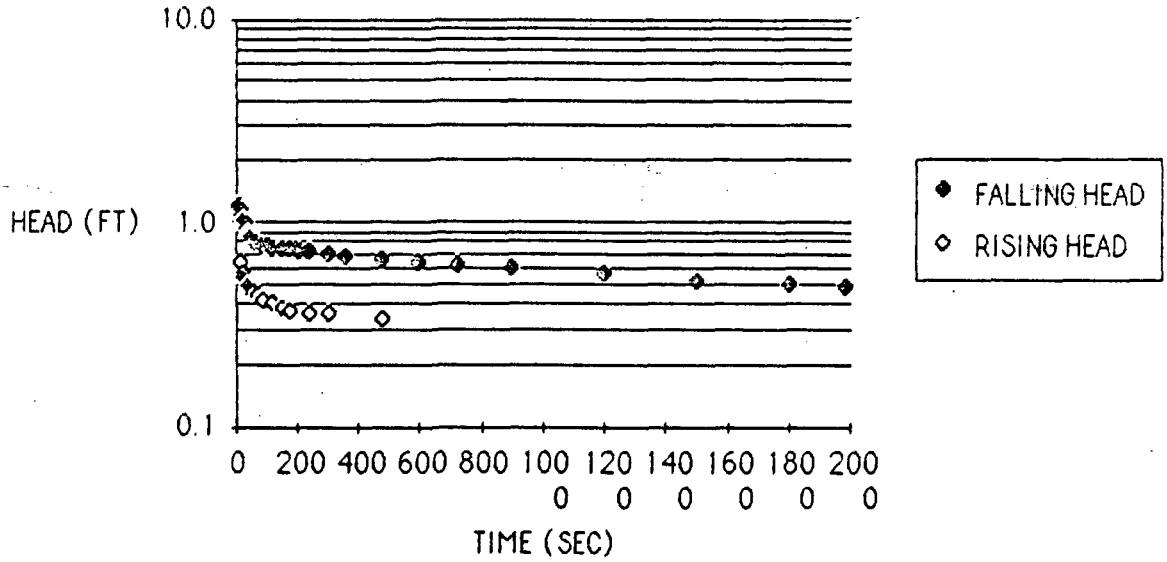
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 8.81E-06 FT/Second = 2.68E-04 CM/Second

TRANSMISSIVITY = 1.06E-04 FT**2/Second

001733

PLOT OF SLUG-TEST DATA
MW- 3S



WELL NO.: MW-4S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.08 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 5.58 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.42 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 35

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
13.00	3.610	.190
17.00	3.550	.130
21.00	3.540	.120
24.00	3.530	.110
27.00	3.520	.100
31.00	3.510	.090
33.00	3.500	.080
35.00	3.490	.070
37.00	3.490	.070
42.00	3.490	.070
46.00	3.480	.060
50.00	3.480	.060
55.00	3.480	.060
61.00	3.470	.050
71.00	3.470	.050
90.00	3.460	.040
105.00	3.460	.040
120.00	3.460	.040
135.00	3.450	.030
150.00	3.450	.030
165.00	3.450	.030
180.00	3.440	.020
195.00	3.440	.020
210.00	3.440	.020
225.00	3.440	.020
240.00	3.440	.020
255.00	3.440	.020
270.00	3.440	.020
285.00	3.440	.020
300.00	3.440	.020
330.00	3.440	.020
360.00	3.430	.010
390.00	3.430	.010
420.00	3.430	.010
450.00	3.430	.010

001235

H[illegible] COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.0906
.0928

LL NO: MW-4S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .19 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.271E-04	7.655E-05	1.450410	32.15
1.000E-02	1.000E-02	6.947E-04	1.245E-04	1.609701	51.85
1.000E-03	1.000E-03	9.647E-04	1.729E-04	1.693951	66.02
1.000E-04	1.000E-04	1.218E-03	2.182E-04	1.744821	82.32
1.000E-05	1.000E-05	1.466E-03	2.628E-04	1.778746	94.37
1.000E-06	1.000E-06	1.720E-03	3.082E-04	1.795781	95.46
1.000E-07	1.000E-07	1.929E-03	3.457E-04	1.845995	97.03
1.000E-08	1.000E-08	2.174E-03	3.896E-04	1.854501	95.42
1.000E-09	1.000E-09	2.434E-03	4.362E-04	1.849129	92.21
1.000E-10	1.000E-10	2.687E-03	4.815E-04	1.848577	94.68

1.655×10^{-5} ft/sec × 30.48 cm/ft = 2.3×10^{-3}

****

3.42 - 2.00 = 1.42 Above [illegible]

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 6.33E-05 FT/Second = 1.93E-03 CM/Second

TRANSMISSIVITY = 3.53E-04 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.46E-05 FT/Second = 1.36E-03 CM/Second

TRANSMISSIVITY = 2.49E-04 FT**2/Second

001737

WELL NO.: MW-4S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.08 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 5.58 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.42 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 26

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
14.00	3.280	.140
17.00	3.320	.100
21.00	3.330	.090
24.00	3.340	.080
30.00	3.350	.070
35.00	3.350	.070
40.00	3.360	.060
44.00	3.370	.050
48.00	3.370	.050
52.00	3.380	.040
87.00	3.380	.040
101.00	3.390	.030
121.00	3.390	.030
135.00	3.390	.030
150.00	3.400	.020
165.00	3.400	.020
180.00	3.400	.020
195.00	3.400	.020
210.00	3.400	.020
220.00	3.410	.010
240.00	3.410	.010
255.00	3.410	.010
270.00	3.410	.010
285.00	3.410	.010
300.00	3.410	.010
330.00	3.410	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED
VALUES FOR H0
(FEET)

001238

(FEET)

.0859
.0890

001739

WELL NO: MW-4S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .14 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	4.076E-04	7.305E-05	1.495976	37.55
1.000E-02	1.000E-02	6.591E-04	1.181E-04	1.583712	24.44
1.000E-03	1.000E-03	9.126E-04	1.635E-04	1.601473	30.97
1.000E-04	1.000E-04	1.163E-03	2.085E-04	1.608552	36.78
1.000E-05	1.000E-05	1.367E-03	2.450E-04	1.664851	50.49
1.000E-06	1.000E-06	1.563E-03	2.802E-04	1.711960	63.25
1.000E-07	1.000E-07	1.809E-03	3.242E-04	1.698842	62.36
1.000E-08	1.000E-08	2.052E-03	3.677E-04	1.690211	57.59
1.000E-09	1.000E-09	2.301E-03	4.124E-04	1.677730	54.08
1.000E-10	1.000E-10	2.562E-03	4.591E-04	1.660166	51.54

1.181×10^{-4} ft/sec · 30.48 cm/ft 3.6×10^{-3} cm/sec

****

3.42 - 2.00 = 1.42 above pressure

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 8.51E-05 FT/Second = 2.59E-03 CM/Second

TRANSMISSIVITY = 4.75E-04 FT**2/Second

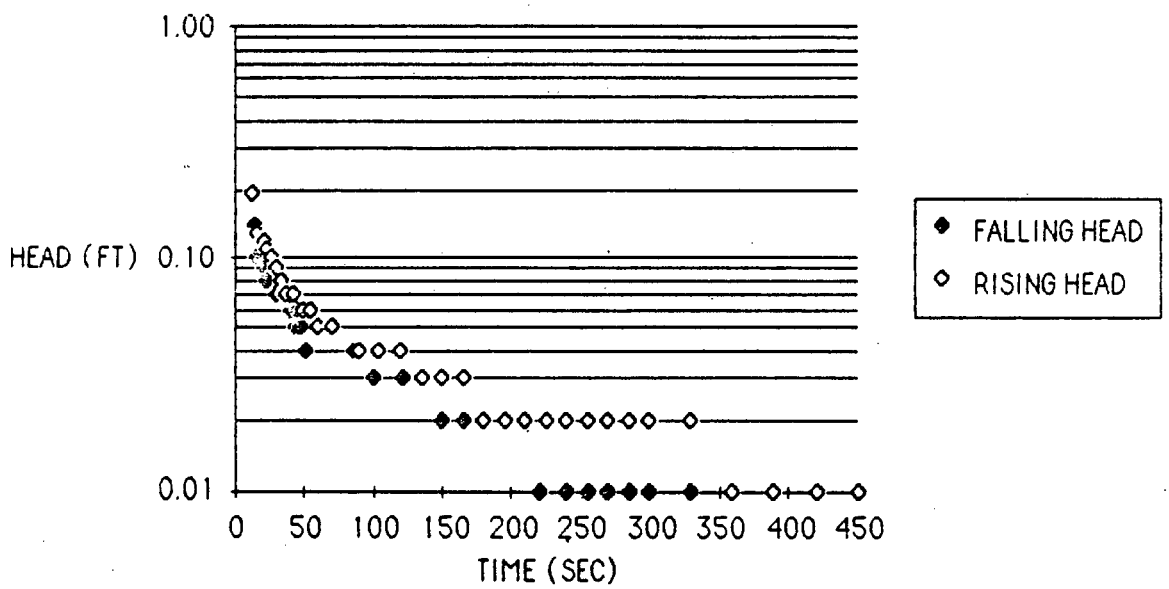
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 5.99E-05 FT/Second = 1.82E-03 CM/Second

TRANSMISSIVITY = 3.34E-04 FT**2/Second

001740

PLOT OF SLUG-TEST DATA
MW-4S



PROGRAM SLUGT, VERSION 4.1, NOV. 1986

THIS PROGRAM CALCULATES MEAN TRANSMISSIVITIES FROM
SLUG-TEST DATA BASED ON TWO ANALYTICAL APPROACHES:

(1) METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS, 1967 (ARTICLE IN VOL.3, NO.1 OF WRR ENTITLED "RESPONSE OF A FINITE DIAMETER WELL TO AN INSTANTANEOUS CHARGE OF WATER")

(2) METHOD OF BOUWER AND RICE, 1976 (ARTICLE IN VOL. 12, NO.3 OF WRR ENTITLED "A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS") → provides correction for change in water stored in gravel pack

WELL NO.: MW-5S DATE OF TEST: 7/9/87

PROJECT NO.: 14485-002-6403 CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Grill

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.56 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.06 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 12

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
11.00	4.860	.080
16.00	4.860	.080
19.00	4.870	.070
27.00	4.880	.060
32.00	4.910	.030
37.00	4.910	.030
42.00	4.910	.030
49.00	4.920	.020
57.00	4.930	.010
65.00	4.930	.010
71.00	4.930	.010
82.00	4.930	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)

.1222
.1403
.1510
.1564

001743

WELL NO: MW-5S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .16 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.472E-03	3.626E-04	1.281139	19.53
1.000E-02	1.000E-02	2.213E-03	5.450E-04	.896251	12.09
1.000E-03	1.000E-03	2.948E-03	7.260E-04	.706769	8.75
1.000E-04	1.000E-04	3.682E-03	9.070E-04	.606815	7.26
1.000E-05	1.000E-05	4.066E-03	1.001E-03	.551424	7.60
1.000E-06	1.000E-06	4.630E-03	1.140E-03	.677941	9.58
1.000E-07	1.000E-07	5.409E-03	1.332E-03	.639348	8.27
1.000E-08	1.000E-08	6.225E-03	1.533E-03	.569707	6.88
1.000E-09	1.000E-09	7.074E-03	1.742E-03	.535954	6.50
1.000E-10	1.000E-10	7.803E-03	1.922E-03	.540382	6.26

1.92×10^{-3} ft/sec · 30.48 cm/ft = 5.8×10^{-2}

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 5.55E-04 FT/Second = 1.69E-02 CM/Second

TRANSMISSIVITY = 2.25E-03 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.15E-04 FT/Second = 1.27E-02 CM/Second

TRANSMISSIVITY = 1.69E-03 FT**2/Second

001744

WELL NO.: MW-5S

DATE OF TEST: 7/9/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Grill

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.56 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.06 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.94 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 14

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
18.00	4.990	.050
22.00	4.970	.030
23.00	4.960	.020
28.00	4.960	.020
36.00	4.960	.020
40.00	4.950	.010
45.00	4.950	.010
54.00	4.950	.010
59.00	4.950	.010
66.00	4.950	.010
82.00	4.950	.010
90.00	4.950	.010
102.00	4.950	.010
119.00	4.950	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.0270
.0305
.0345
.0400
.0510
.0600
.0713
.0922
.0990
.0770
[illegible]

001745

WELL NO: MW-5S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .22 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	3.244E-03	7.989E-04	1.027307	22.51
1.000E-02	1.000E-02	4.227E-03	1.041E-03	1.046676	23.86
1.000E-03	1.000E-03	5.052E-03	1.244E-03	1.163180	25.47
1.000E-04	1.000E-04	5.413E-03	1.333E-03	1.428365	29.28
1.000E-05	1.000E-05	6.155E-03	1.516E-03	1.504077	30.63
1.000E-06	1.000E-06	7.001E-03	1.724E-03	1.183713	27.71
1.000E-07	1.000E-07	8.121E-03	2.000E-03	1.095480	25.58
1.000E-08	1.000E-08	9.376E-03	2.309E-03	.951336	24.70
1.000E-09	1.000E-09	1.011E-02	2.491E-03	1.129872	26.17
1.000E-10	1.000E-10	1.111E-02	2.735E-03	1.253369	27.37

7.989 x 10⁻⁴ ft/sec = 30.48 cm/ft = 2.4 x 10⁻² cm/sec

****

4.94 · 2.00 = 2.74

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 1.17E-03 FT/Second = 3.56E-02 CM/Second

TRANSMISSIVITY = 4.74E-03 FT**2/Second

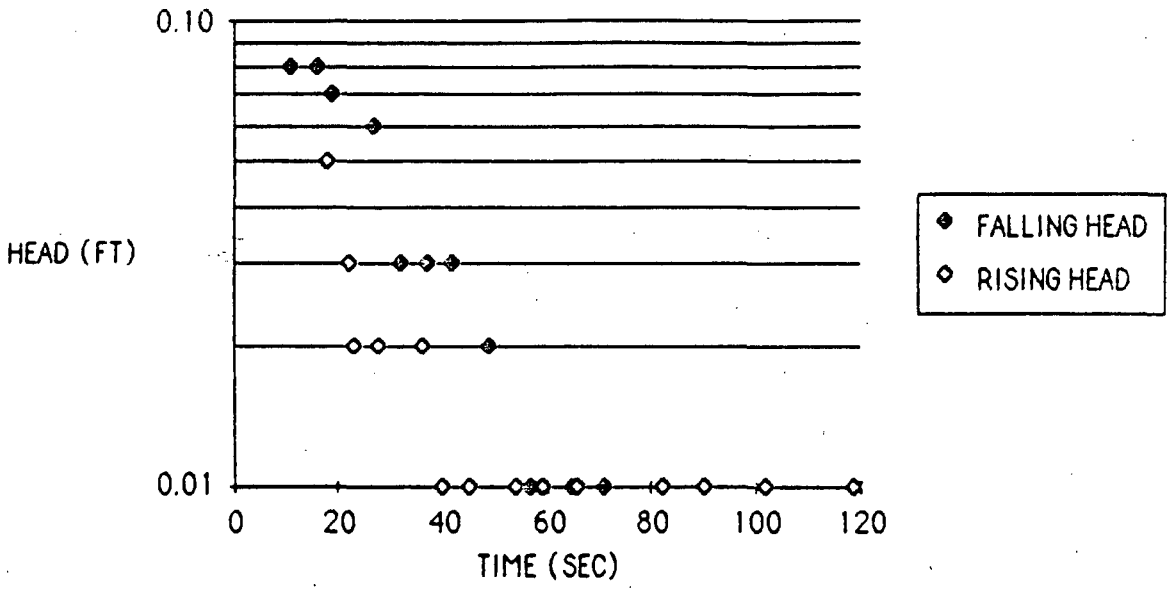
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 8.76E-04 FT/Second = 2.67E-02 CM/Second

TRANSMISSIVITY = 3.56E-03 FT**2/Second

001746

PLOT OF SLUG-TEST DATA
MW-5S



WELL NO.: MW-6S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.59 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.09 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.91 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 44

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
14.00	4.640	.270
15.00	4.650	.260
18.00	4.660	.250
21.00	4.660	.250
24.00	4.670	.240
27.00	4.670	.240
30.00	4.680	.230
33.00	4.680	.230
39.00	4.690	.220
44.00	4.690	.220
52.00	4.690	.220
58.00	4.700	.210
72.00	4.710	.200
80.00	4.720	.190
105.00	4.730	.180
120.00	4.740	.170
135.00	4.740	.170
150.00	4.750	.160
165.00	4.760	.150
180.00	4.770	.140
195.00	4.770	.140
210.00	4.780	.130
225.00	4.780	.130
240.00	4.780	.130
255.00	4.790	.120
270.00	4.800	.110
285.00	4.810	.100
300.00	4.820	.090
330.00	4.820	.090
360.00	4.820	.090
390.00	4.830	.080
420.00	4.830	.080

450.00	4.840	.070
480.00	4.840	.070
510.00	4.850	.060
540.00	4.850	.060
570.00	4.860	.050
600.00	4.860	.050
660.00	4.870	.040
720.00	4.880	.030
780.00	4.880	.030
840.00	4.890	.020
900.00	4.890	.020
960.00	4.900	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.2544
.2495

WELL NO: MW-6S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .27 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	6.635E-05	1.622E-05	3.717809	483.47
1.000E-02	1.000E-02	1.239E-04	3.030E-05	2.333899	236.29
1.000E-03	1.000E-03	1.865E-04	4.560E-05	1.508674	106.84
1.000E-04	1.000E-04	2.493E-04	6.095E-05	1.198779	50.74
1.000E-05	1.000E-05	3.102E-04	7.585E-05	1.240711	32.55
1.000E-06	1.000E-06	3.700E-04	9.046E-05	1.272162	56.97
1.000E-07	1.000E-07	4.292E-04	1.049E-04	1.294239	68.68
1.000E-08	1.000E-08	4.884E-04	1.194E-04	1.309343	62.13
1.000E-09	1.000E-09	5.488E-04	1.342E-04	1.317046	56.92
1.000E-10	1.000E-10	6.098E-04	1.491E-04	1.321679	55.59

1.585×10^{-5} ft/sec × 30.48 cm/ft = 2.3×10^{-3}

****

4.91 − 2.00 = 2.91 below screen

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 3.45E-05 FT/Second = 1.05E-03 CM/Second

TRANSMISSIVITY = 1.41E-04 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 2.57E-05 FT/Second = 7.83E-04 CM/Second

TRANSMISSIVITY = 1.05E-04 FT**2/Second

001750

WELL NO.: MW-6S

DATE OF TEST: 7/10/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/ Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 7.50 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 2.59 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 4.09 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 4.91 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 38

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
15.00	5.240	.330
18.00	5.230	.320
20.00	5.220	.310
23.00	5.210	.300
26.00	5.200	.290
33.00	5.180	.270
38.00	5.170	.260
42.00	5.160	.250
48.00	5.150	.240
54.00	5.140	.230
62.00	5.130	.220
75.00	5.120	.210
90.00	5.100	.190
105.00	5.090	.180
120.00	5.070	.160
135.00	5.060	.150
150.00	5.040	.130
165.00	5.030	.120
180.00	5.020	.110
195.00	5.010	.100
210.00	5.000	.090
225.00	4.990	.080
240.00	4.980	.070
255.00	4.980	.070
270.00	4.980	.070
285.00	4.970	.060
300.00	4.960	.050
330.00	4.950	.040
360.00	4.940	.030
390.00	4.930	.020
420.00	4.930	.020
450.00	4.930	.020

480.00	4.930	.020
510.00	4.920	.010
540.00	4.920	.010
600.00	4.920	.010
660.00	4.920	.010
720.00	4.920	.010

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.3132
.3286

WELL NO: MW-6S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .33 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	1.873E-04	4.580E-05	2.940224	353.76
1.000E-02	1.000E-02	2.753E-04	6.731E-05	2.122147	203.96
1.000E-03	1.000E-03	3.673E-04	8.980E-05	1.663469	124.01
1.000E-04	1.000E-04	4.614E-04	1.128E-04	1.474757	87.90
1.000E-05	1.000E-05	5.478E-04	1.339E-04	1.462008	75.13
1.000E-06	1.000E-06	6.454E-04	1.578E-04	1.490312	78.07
1.000E-07	1.000E-07	7.381E-04	1.805E-04	1.360610	58.01
1.000E-08	1.000E-08	8.336E-04	2.038E-04	1.247058	47.40
1.000E-09	1.000E-09	9.391E-04	2.296E-04	1.269125	50.41
1.000E-10	1.000E-10	1.043E-03	2.551E-04	1.267510	52.80

2.038×10^{-4} ft/sec · 30.48 cm/ft = 6.2×10^{-3} cm/sec

491 - 2.00 = 2.91 below screen

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 8.11E-05 FT/Second = 2.47E-03 CM/Second

TRANSMISSIVITY = 3.32E-04 FT**2/Second

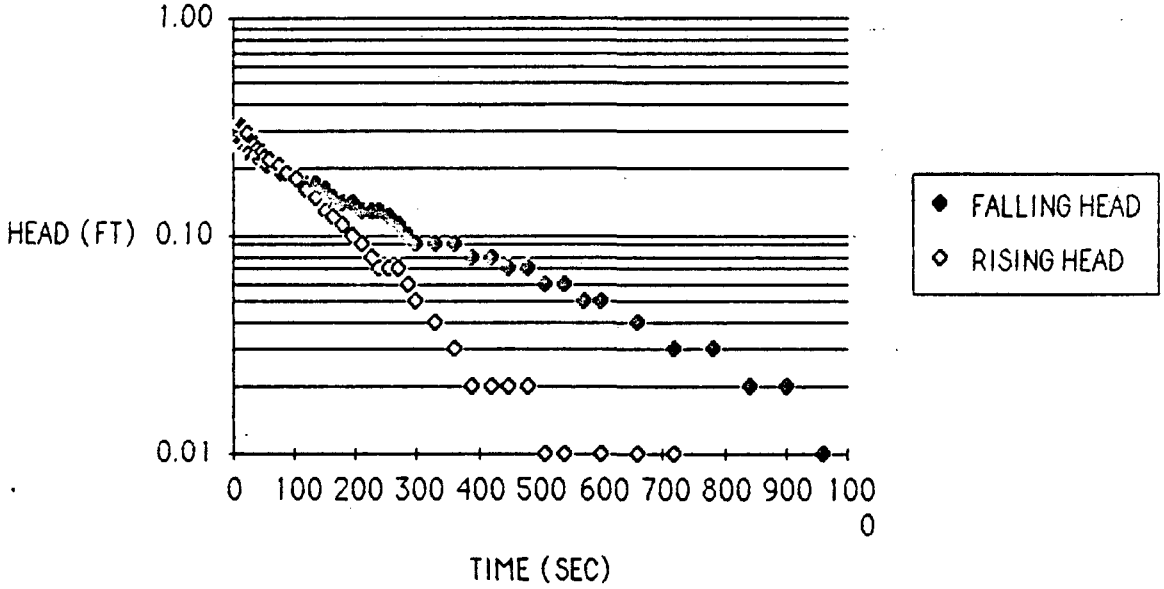
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 6.10E-05 FT/Second = 1.86E-03 CM/Second

TRANSMISSIVITY = 2.50E-04 FT**2/Second

001753

PLOT OF SLUG-TEST DATA
MW-6S



WELL NO.: MW-7S

DATE OF TEST: 7/27/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 8.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.21 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 5.71 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.79 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 1 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 46

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
5.00	2.350	1.440
8.00	2.350	1.440
12.00	2.350	1.440
15.00	2.350	1.440
20.00	2.350	1.440
45.00	2.360	1.430
50.00	2.370	1.420
60.00	2.370	1.420
66.00	2.380	1.410
75.00	2.380	1.410
80.00	2.390	1.400
105.00	2.400	1.390
120.00	2.420	1.370
135.00	2.430	1.360
150.00	2.440	1.350
165.00	2.450	1.340
180.00	2.460	1.330
210.00	2.480	1.310
240.00	2.490	1.300
270.00	2.510	1.280
300.00	2.530	1.260
360.00	2.560	1.230
420.00	2.590	1.200
480.00	2.610	1.180
540.00	2.640	1.150
600.00	2.670	1.120
660.00	2.690	1.100
720.00	2.710	1.080
840.00	2.750	1.040
990.00	2.790	1.000
1020.00	2.820	.970

001755

1320.00	2.880	.910
1440.00	2.920	.870
1560.00	2.940	.850
1860.00	3.000	.790
2160.00	3.070	.720
2460.00	3.100	.690
2760.00	3.140	.650
3060.00	3.160	.630
3360.00	3.190	.600
3600.00	3.220	.570
4200.00	3.250	.540
4800.00	3.280	.510
5400.00	3.300	.490
5760.00	3.320	.470

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
1.3403
1.3508

WELL NO: MW-7S FALLING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = 1.45 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	3.069E-06	5.375E-07	1.649161	1156.52
1.000E-02	1.000E-02	8.038E-06	1.408E-06	1.144165	364.90
1.000E-03	1.000E-03	1.542E-05	2.701E-06	1.582104	340.01
1.000E-04	1.000E-04	2.366E-05	4.143E-06	2.216321	527.55
1.000E-05	1.000E-05	3.186E-05	5.580E-06	2.648306	634.15
1.000E-06	1.000E-06	3.992E-05	6.992E-06	2.919623	696.88
1.000E-07	1.000E-07	4.785E-05	8.381E-06	3.092215	737.41
1.000E-08	1.000E-08	5.569E-05	9.753E-06	3.210997	765.74
1.000E-09	1.000E-09	6.349E-05	1.112E-05	3.303199	787.17
1.000E-10	1.000E-10	7.119E-05	1.247E-05	3.362521	802.75

2.701 x10^-6 ft/sec · 30.48 cm/ft = 8.2 x10^-5 cm/sec

****

3.79 - 2.00 = 1.79 below [illegible]

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 2.08E-06 FT/Second = 6.35E-05 CM/Second

TRANSMISSIVITY = 1.19E-05 FT**2/Second

COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 1.45E-06 FT/Second = 4.41E-05 CM/Second

TRANSMISSIVITY = 8.28E-06 FT**2/Second

001757

WELL NO.: MW-7S

DATE OF TEST: 7/27/87

PROJECT NO.: 14485-002-6403

CLIENT: Scientific Chemical Proce

SITE LOCATION: SCP Carlstadt, N.J.

FIELD INVESTIGATOR: Anil/Bruce

INPUT DATA ARE:

INNER CASING DIAMETER = 4.00 INCHES
INNER SCREEN OR OPEN-HOLE DIAMETER = 4.00 INCHES
DIAMETER OF DRILLED HOLE = 8.00 INCHES
LENGTH OF SCREEN OR INTAKE PORTION = 8.00 FEET
DEPTH FROM STATIC LEVEL TO BOTTOM OF SCREEN = 4.21 FEET
THICKNESS OF SATURATED AQUIFER ZONE = 5.71 FEET
DEPTH TO STATIC WATER LEVEL BELOW REF. POINT = 3.79 FEET
ESTIMATED POROSITY OF GRAVEL PACK = .30
FALLING-HEAD INDEX = 0 ("1" IF FALLING,"0" IF RISING)
NUMBER OF DEPTH-TIME DATA POINTS = 35

TIME (Second)	DEPTH TO WATER (FEET)	HEAD (FEET)
6.00	4.520	.730
9.00	4.460	.670
12.00	4.450	.660
16.00	4.410	.620
20.00	4.400	.610
23.00	4.390	.600
28.00	4.380	.590
30.00	4.370	.580
36.00	4.370	.580
43.00	4.370	.580
49.00	4.360	.570
53.00	4.350	.560
60.00	4.340	.550
90.00	4.330	.540
120.00	4.310	.520
150.00	4.290	.500
180.00	4.280	.490
210.00	4.270	.480
240.00	4.270	.480
300.00	4.250	.460
360.00	4.230	.440
420.00	4.220	.430
480.00	4.210	.420
540.00	4.200	.410
600.00	4.180	.390
720.00	4.170	.380
840.00	4.140	.350
990.00	4.110	.320
1080.00	4.100	.310
1200.00	4.080	.290
1500.00	4.050	.260
[illegible]	[illegible]	[illegible]

2100.00	4.000	.210
2400.00	3.980	.190
2700.00	3.970	.180

H0 WAS COMPUTED FROM INTERCEPT OF PLOT OF LOG(H) VS. TIME

SUCCESSIVE COMPUTED VALUES FOR H0 (FEET)
.5722
.5772

001759

WELL NO: MW-7S RISING-HEAD CASE

METHOD OF COOPER, BREDEHOEFT AND PAPADOPULOS

COMPUTED RESULTS:

COMPUTED VALUE OF H0 = .74 FEET

(NOTE: TRANSMISSIVITY UNITS ARE IN FT**2/Second AND PERMEABILITY UNITS ARE FT/Second)

ALPHA	STORATIVITY	MEAN TRANSMIS-SIVITY	MEAN PERMEA-BILITY	RATIO OF "T" RANGE TO TBAR	ROOT MEAN SQUARE OF TIME DEVIATIONS
1.000E-01	1.000E-01	3.109E-05	5.446E-06	2.201335	473.77
1.000E-02	1.000E-02	8.380E-05	1.468E-05	2.594181	624.07
1.000E-03	1.000E-03	1.473E-04	2.580E-05	2.660475	676.81
1.000E-04	1.000E-04	2.112E-04	3.698E-05	2.711432	699.16
1.000E-05	1.000E-05	2.737E-04	4.793E-05	2.759420	710.69
1.000E-06	1.000E-06	3.351E-04	5.868E-05	2.787976	717.66
1.000E-07	1.000E-07	3.957E-04	6.930E-05	2.806787	722.31
1.000E-08	1.000E-08	4.558E-04	7.982E-05	2.820338	725.62
1.000E-09	1.000E-09	5.155E-04	9.028E-05	2.830410	728.11
1.000E-10	1.000E-10	5.748E-04	1.007E-04	2.838570	730.05

5.446 x 10^-6 ft/sec x 30.7 ft/m = 1.7 x 10^-4 cm/sec

3.79 x 200 = 1.79 [illegible]

****

METHOD OF BOUWER AND RICE

COMPUTED RESULTS USING DIAMETER OF DRILLED HOLE:

PERMEABILITY = 5.70E-06 FT/Second = 1.74E-04 CM/Second

TRANSMISSIVITY = 3.26E-05 FT**2/Second

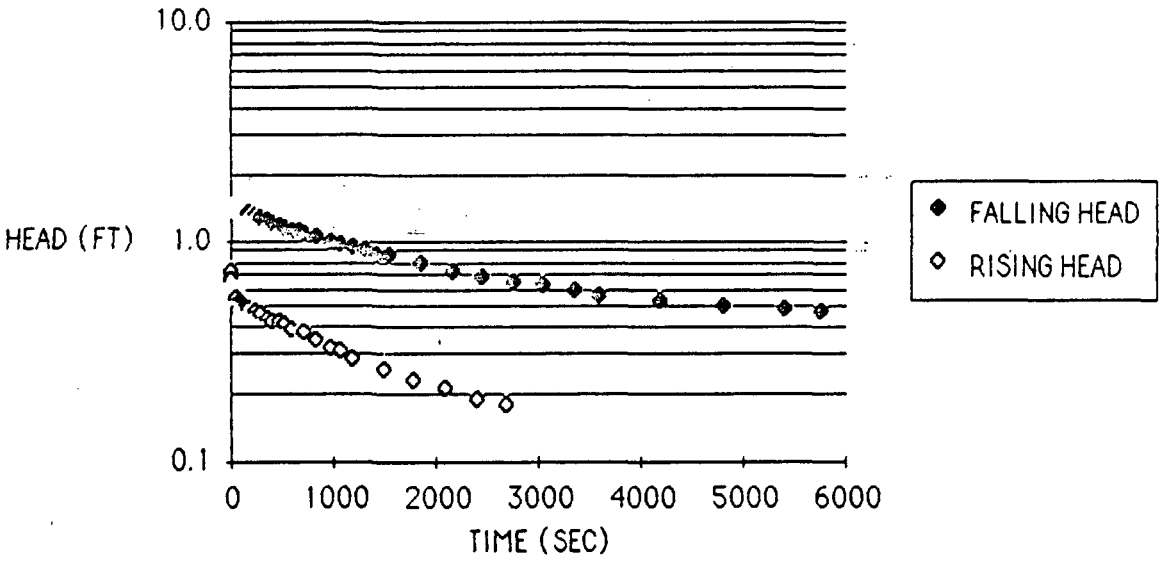
COMPUTED RESULTS USING DIAMETER OF CASING AND SCREEN:

PERMEABILITY = 4.02E-06 FT/Second = 1.23E-04 CM/Second

TRANSMISSIVITY = 2.30E-05 FT**2/Second

001760

PLOT OF SLUG-TEST DATA
MW-7S

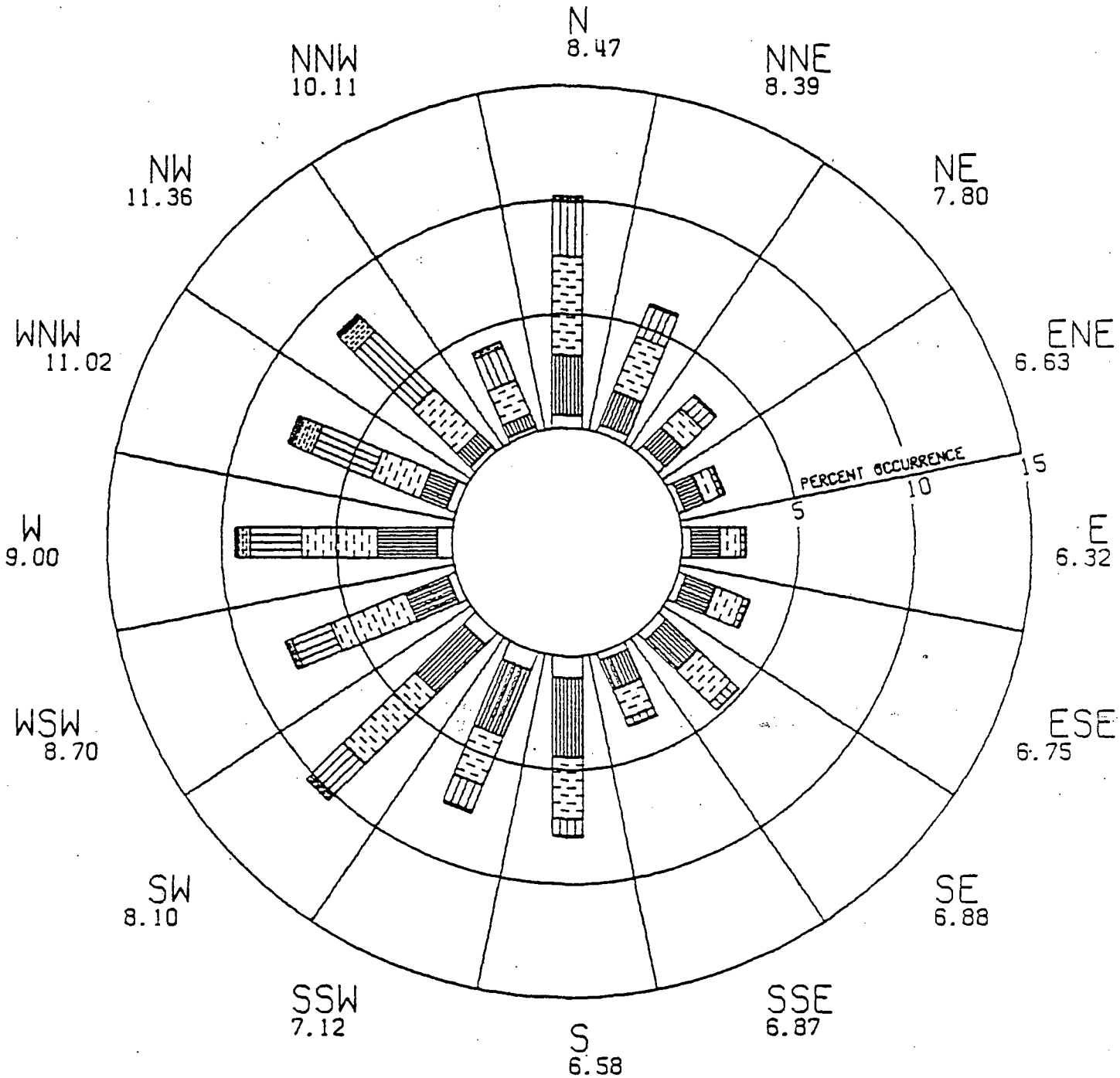


APPENDIX E

001762

APPENDIX E

WIND ROSE DIAGRAMS



SECTOR MEAN WIND SPEED (KNOTS)

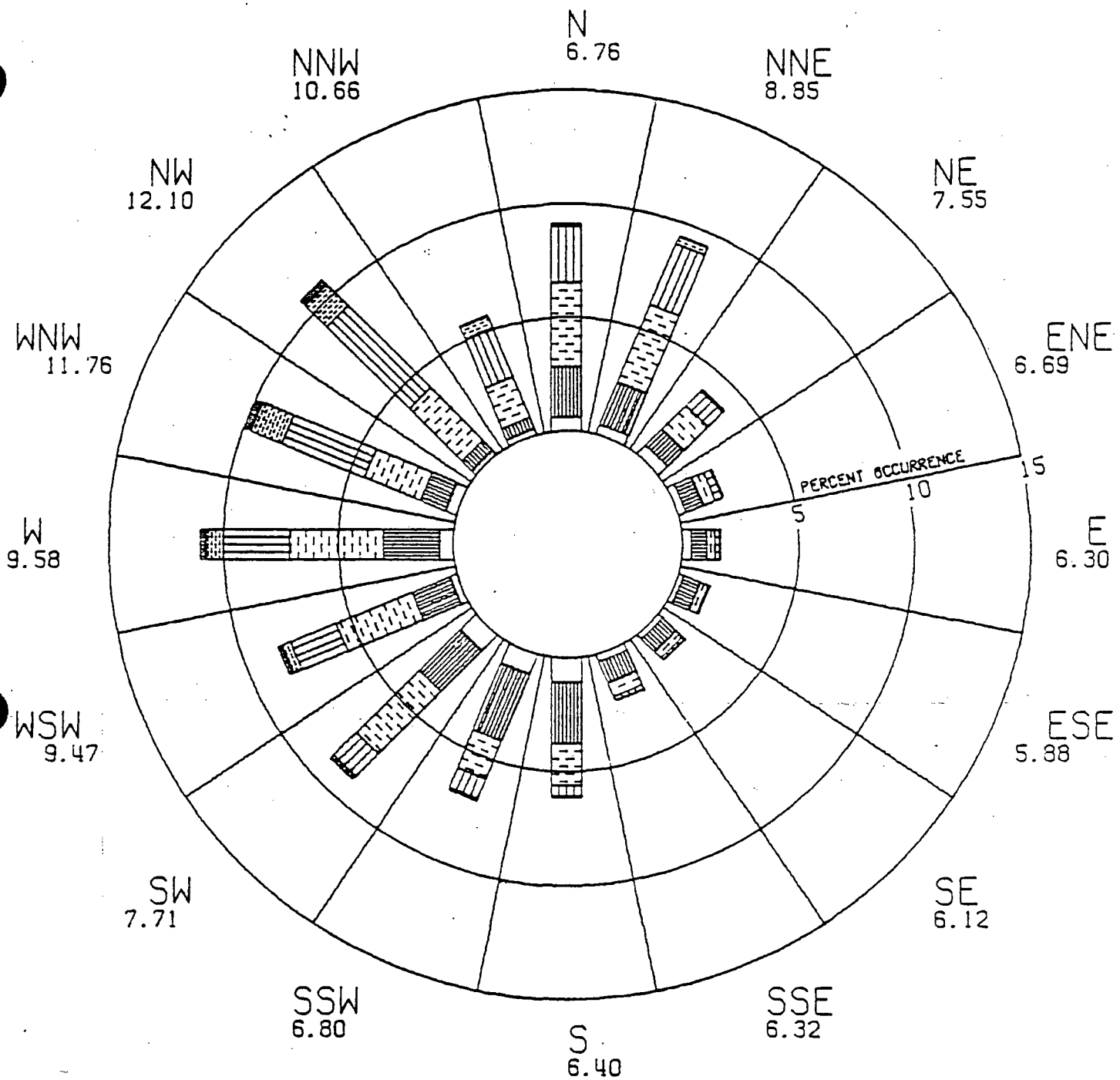
WIND SPEED RANGE

	0- 3	KNOTS
	4- 6	
	7-10	
	11-16	
	17-21	
	> 21	

NEWARK, NEW JERSEY

ANNUAL WIND ROSE (1972-1976)

001764



SECTOR MEAN WIND SPEED (KNOTS)

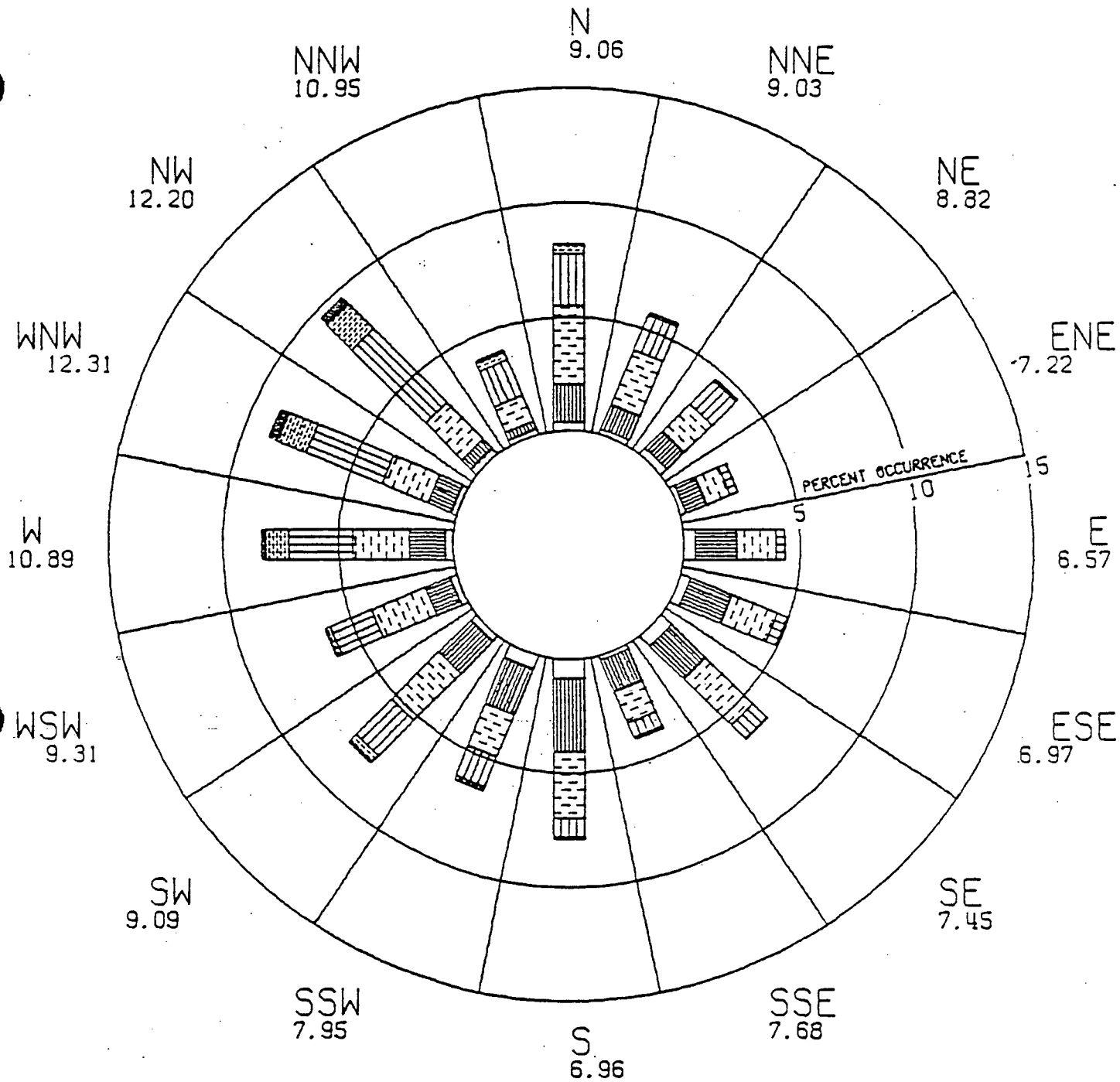
WIND SPEED RANGE

	0- 3	KNOTS
	4- 6	
	7-10	
	11-16	
	17-21	
	> 21	

NEWARK, NEW JERSEY

SEASONAL WIND ROSE (DEC-JAN)

001765



SECTOR MEAN WIND SPEED (KNOTS)

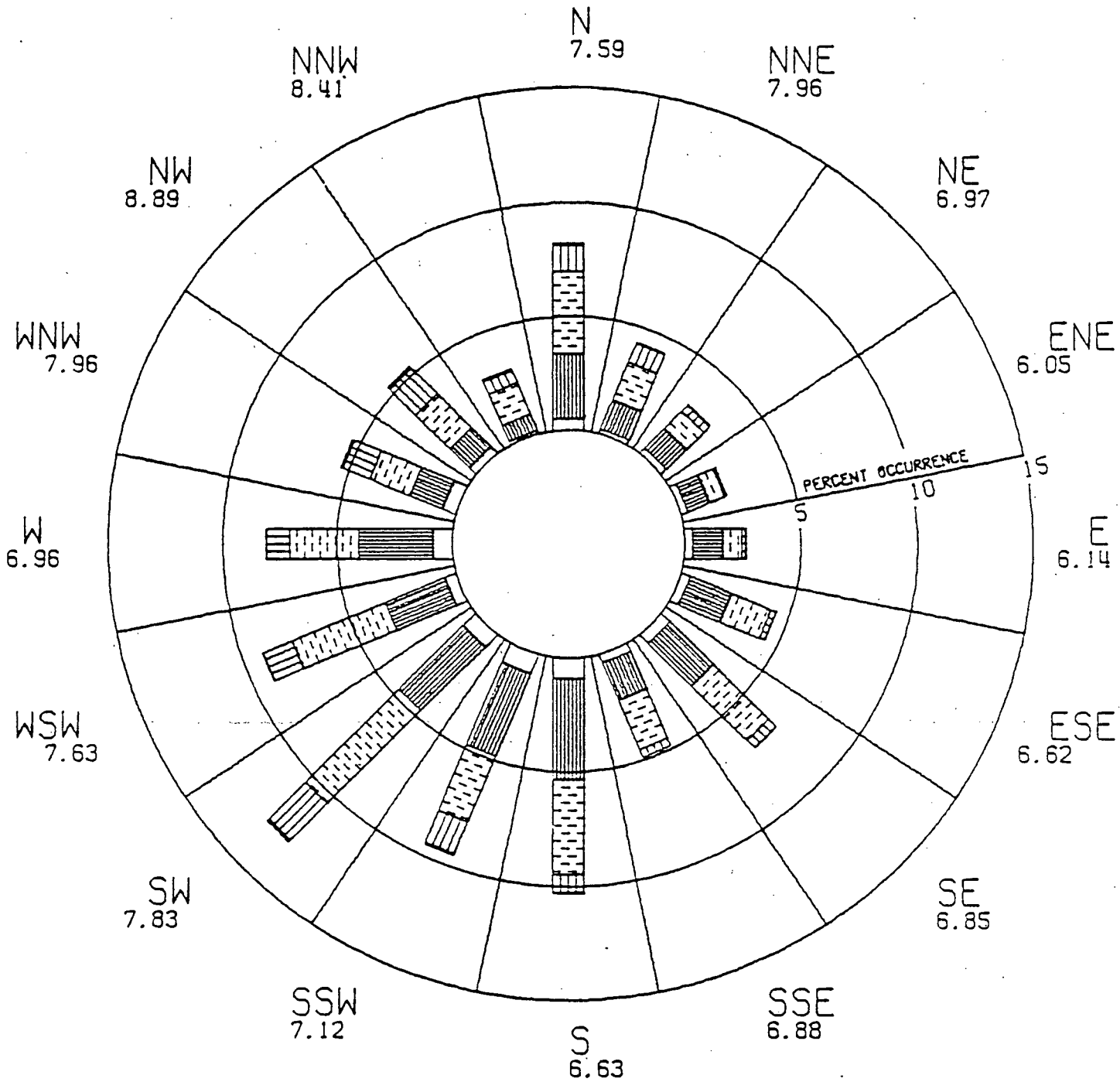
WIND SPEED RANGE

	0- 3	KNOTS
	4- 6	
	7-10	
	11-16	
	17-21	
	> 21	

NEWARK, NEW JERSEY

SEASONAL WIND ROSE (MAR-MAY)

001766



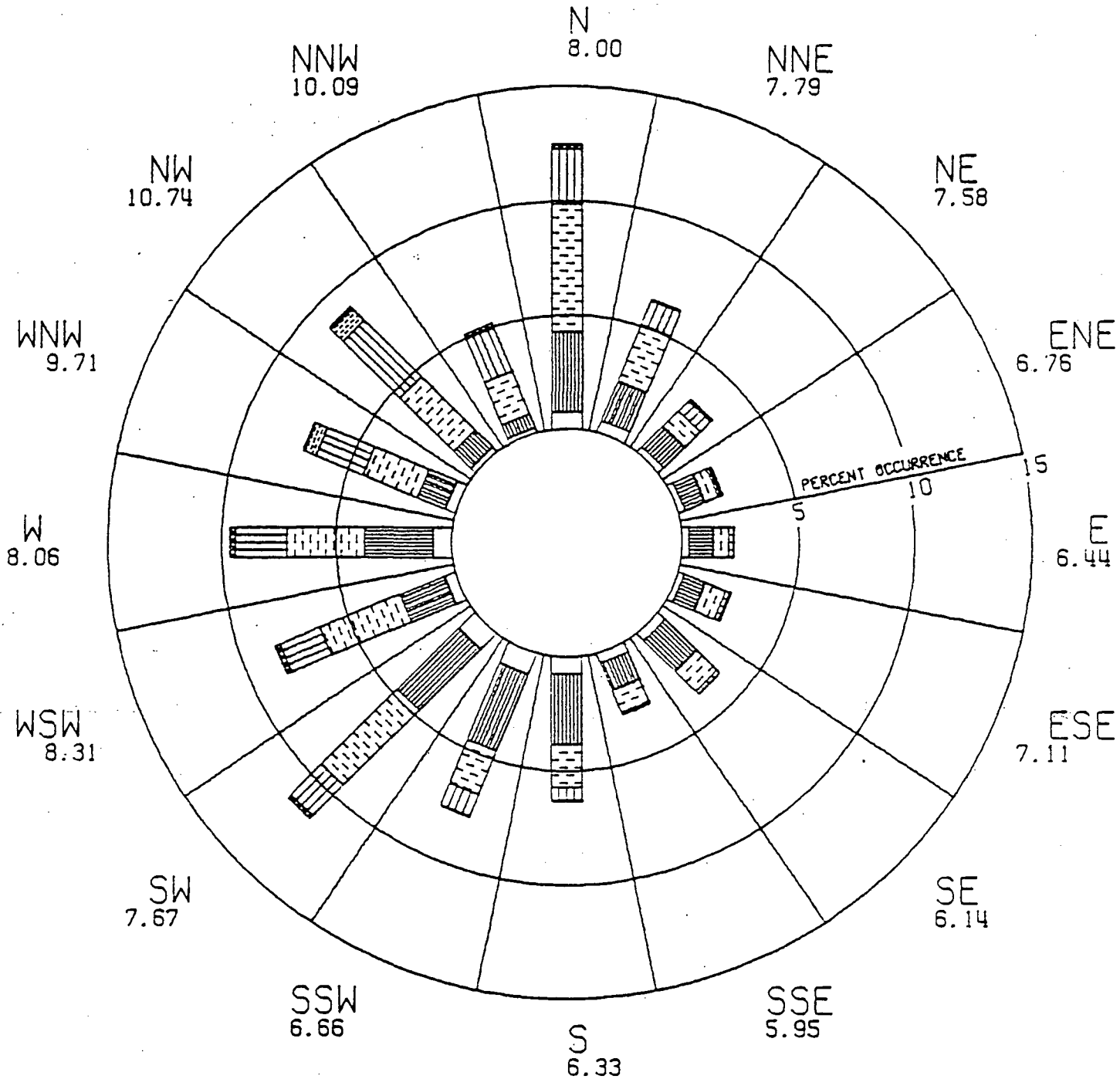
SECTOR MEAN WIND SPEED (KNOTS)

WIND SPEED RANGE

	0- 3	KNOTS
	4- 6	
	7-10	
	11-16	
	17-21	
	> 21	

NEWARK, NEW JERSEY

SEASONAL WIND ROSE (JUN-AUG) 001767



SECTOR MEAN WIND SPEED (KNOTS)

WIND SPEED RANGE

	0- 3	KNOTS
	4- 6	
	7-10	
	11-16	
	17-21	
	> 21	

NEWARK, NEW JERSEY

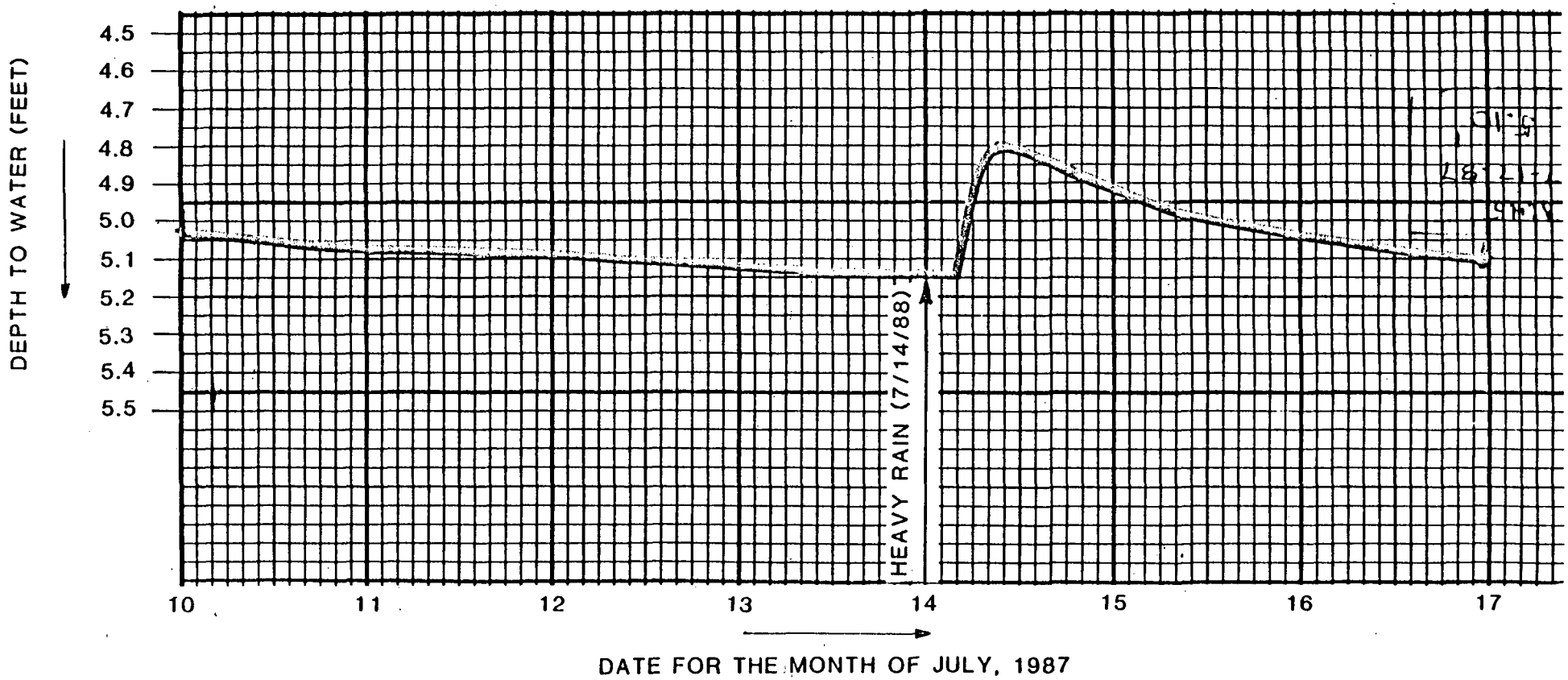
SEASONAL WIND ROSE (SEP-NOV)

001768

APPENDIX F

APPENDIX F

HYDROGRAPHS AND PRECIPITATION RECORDS

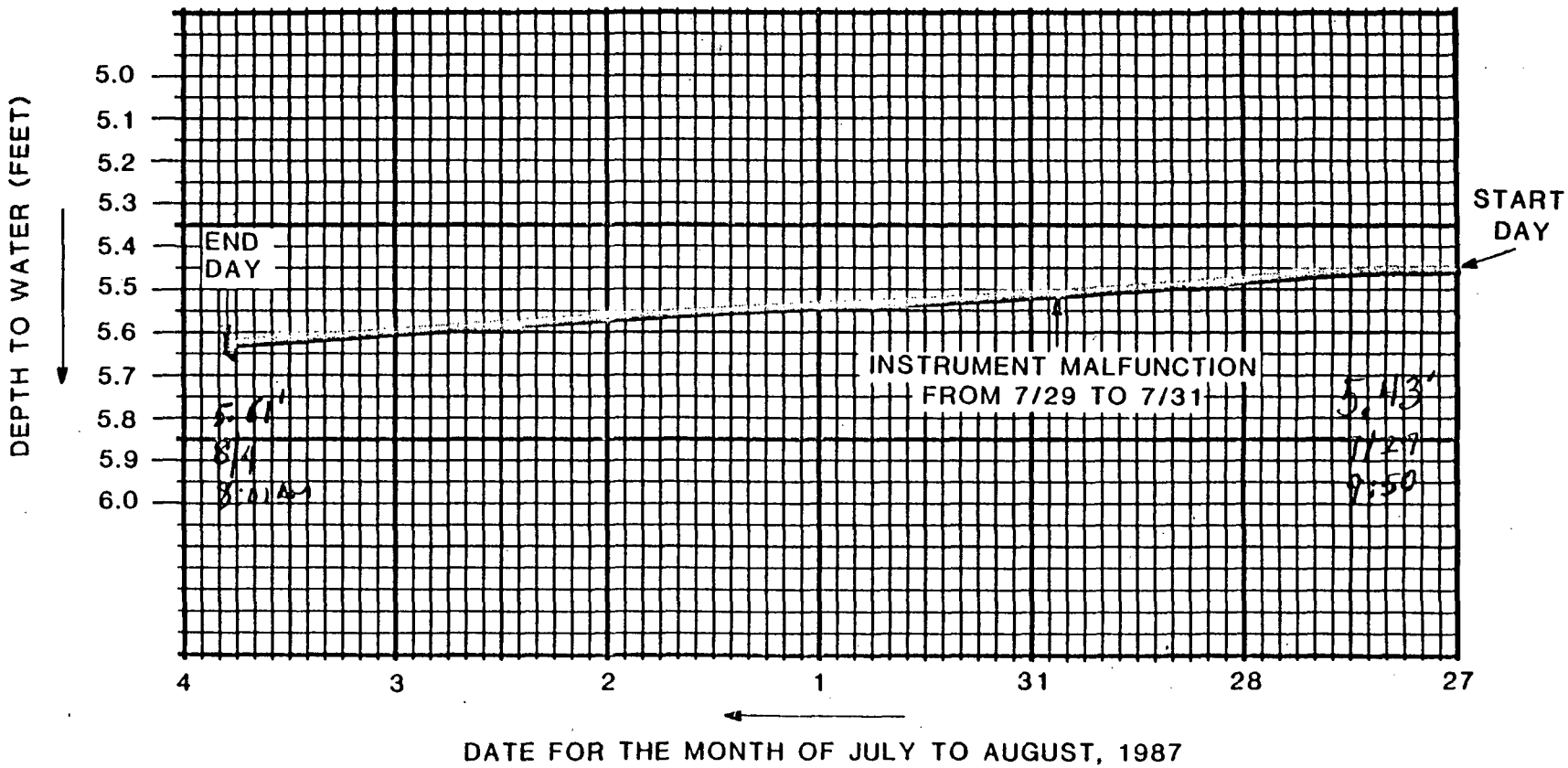


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001771

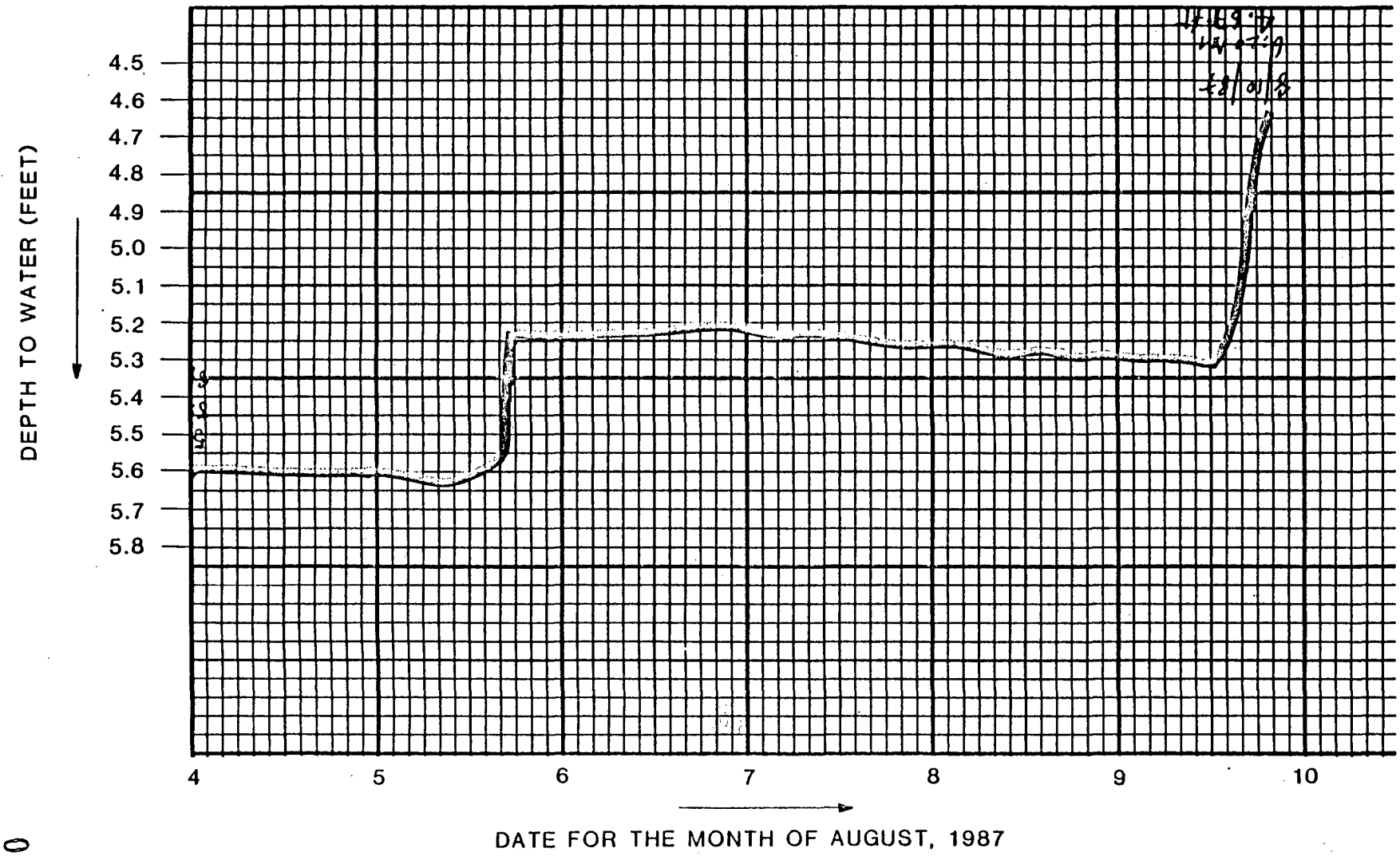


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001772

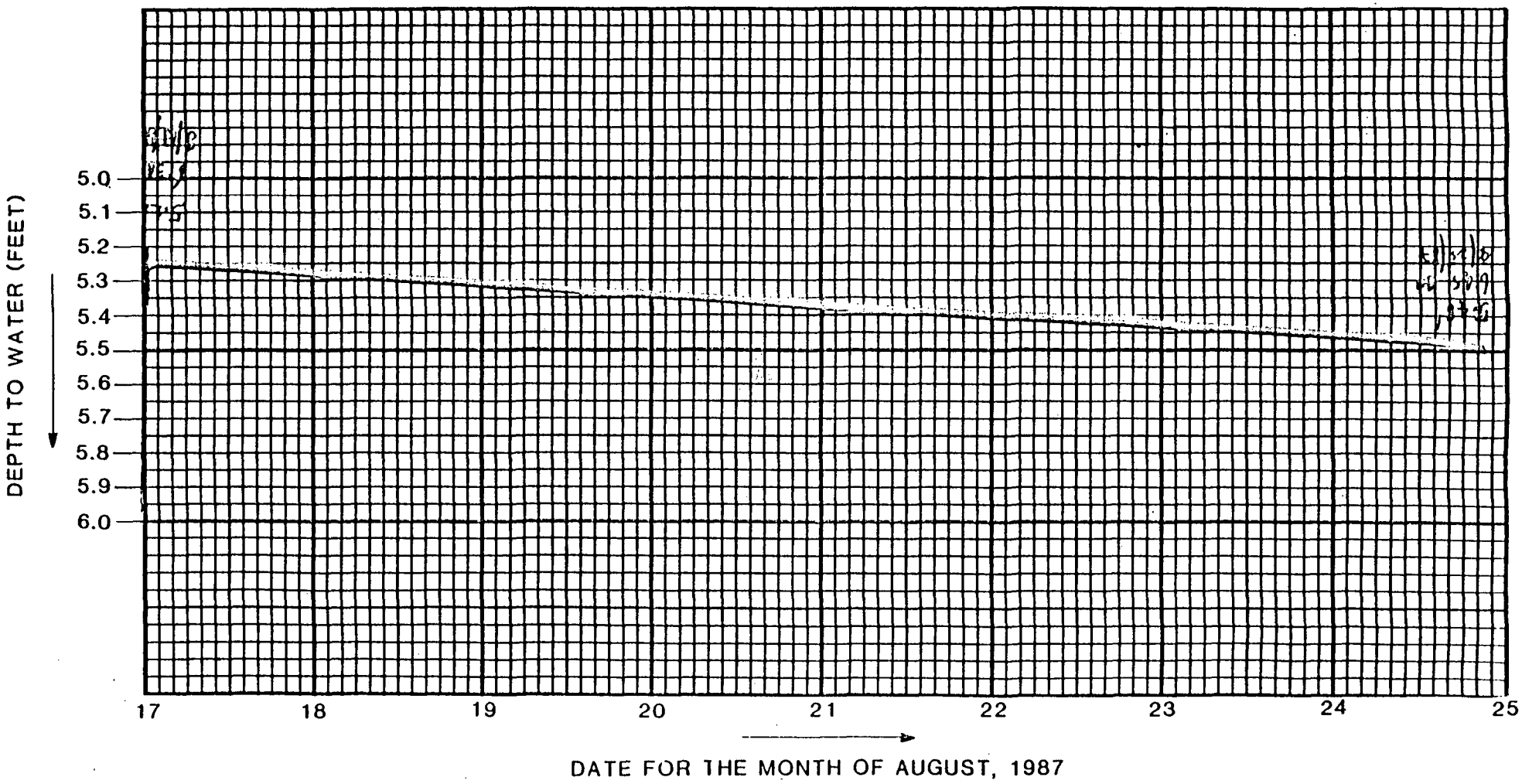


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001273

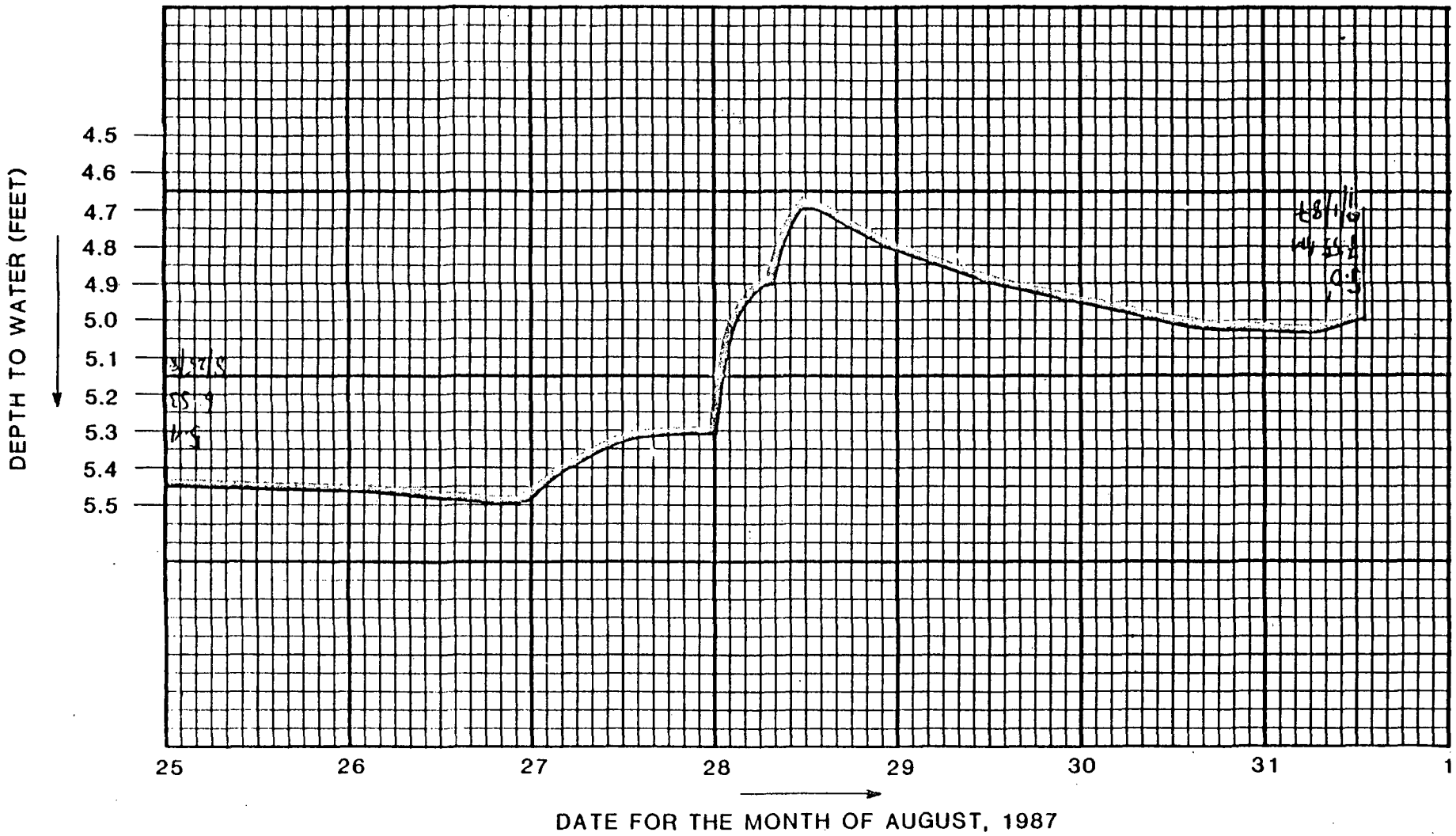


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001774

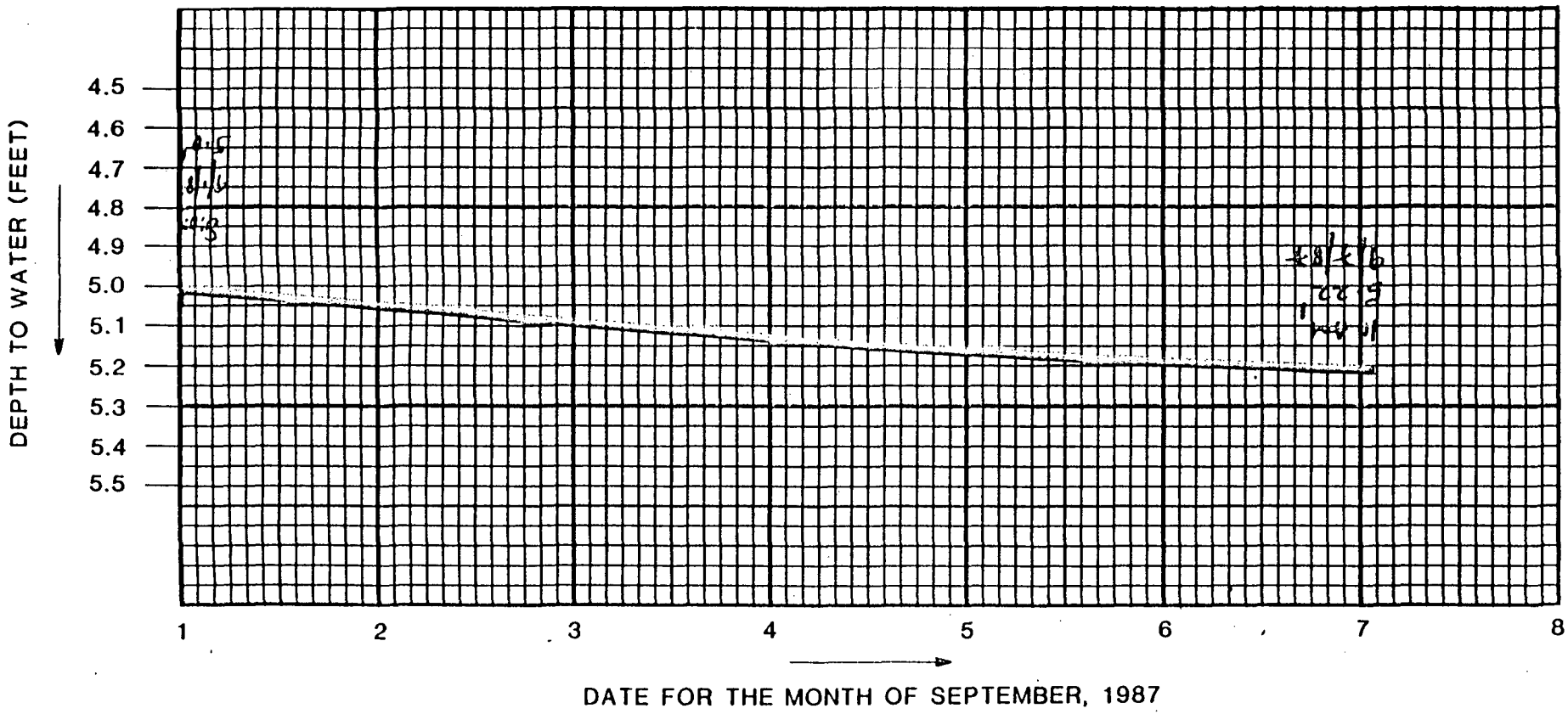


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001275

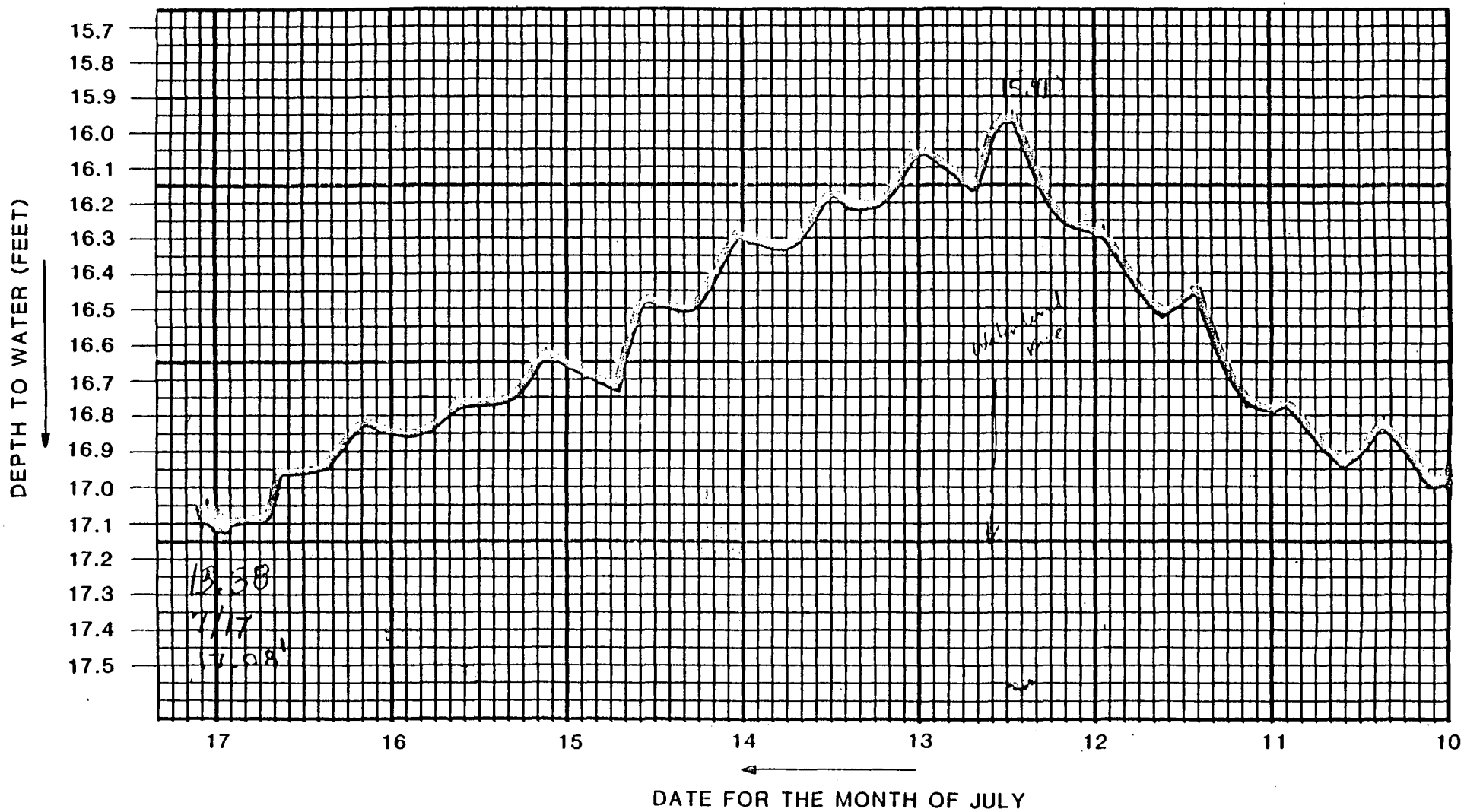


TYPICAL HYDROGRAPH OF WATER TABLE AQUIFER (MW-5S)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001776

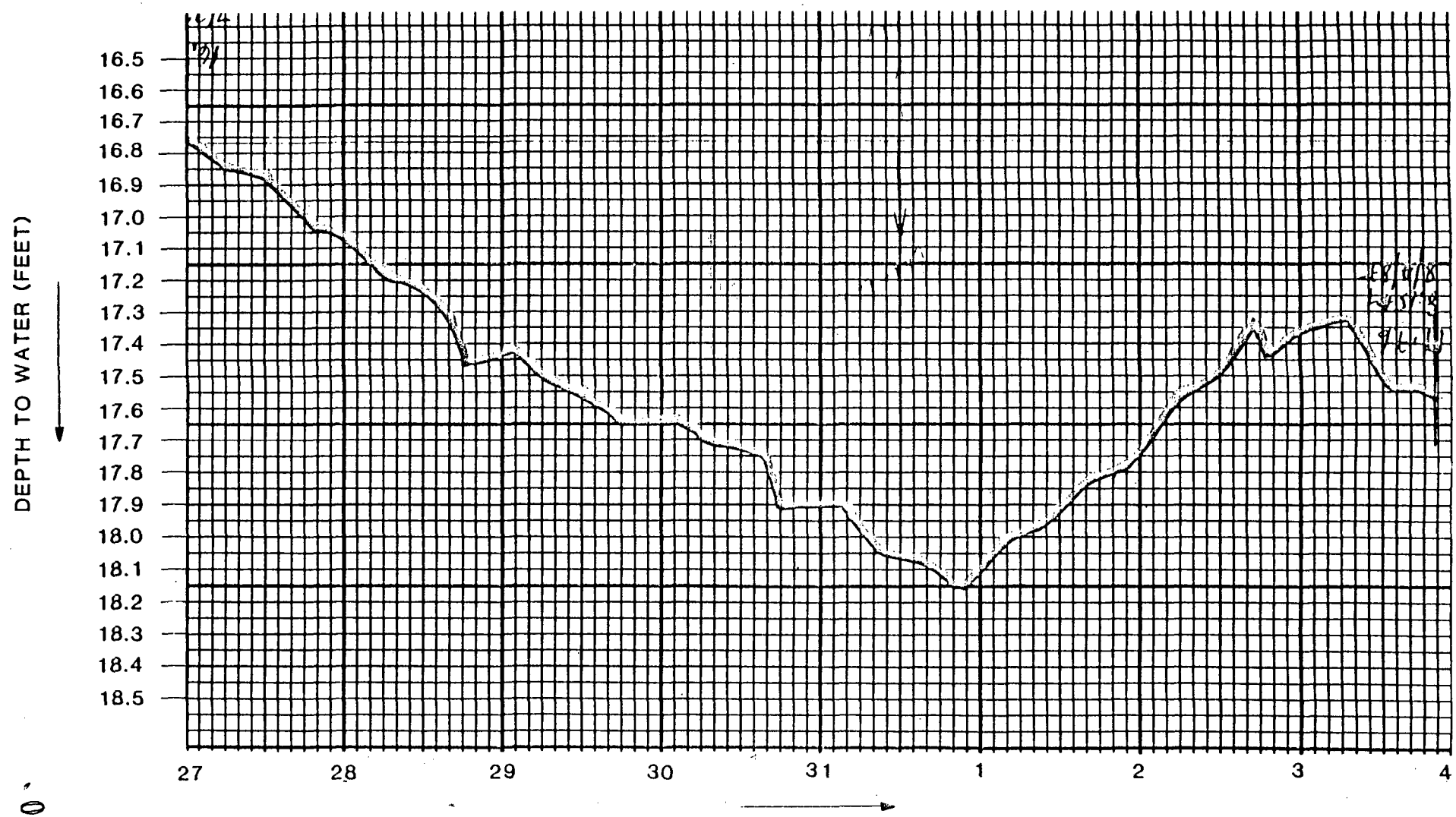


TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001277



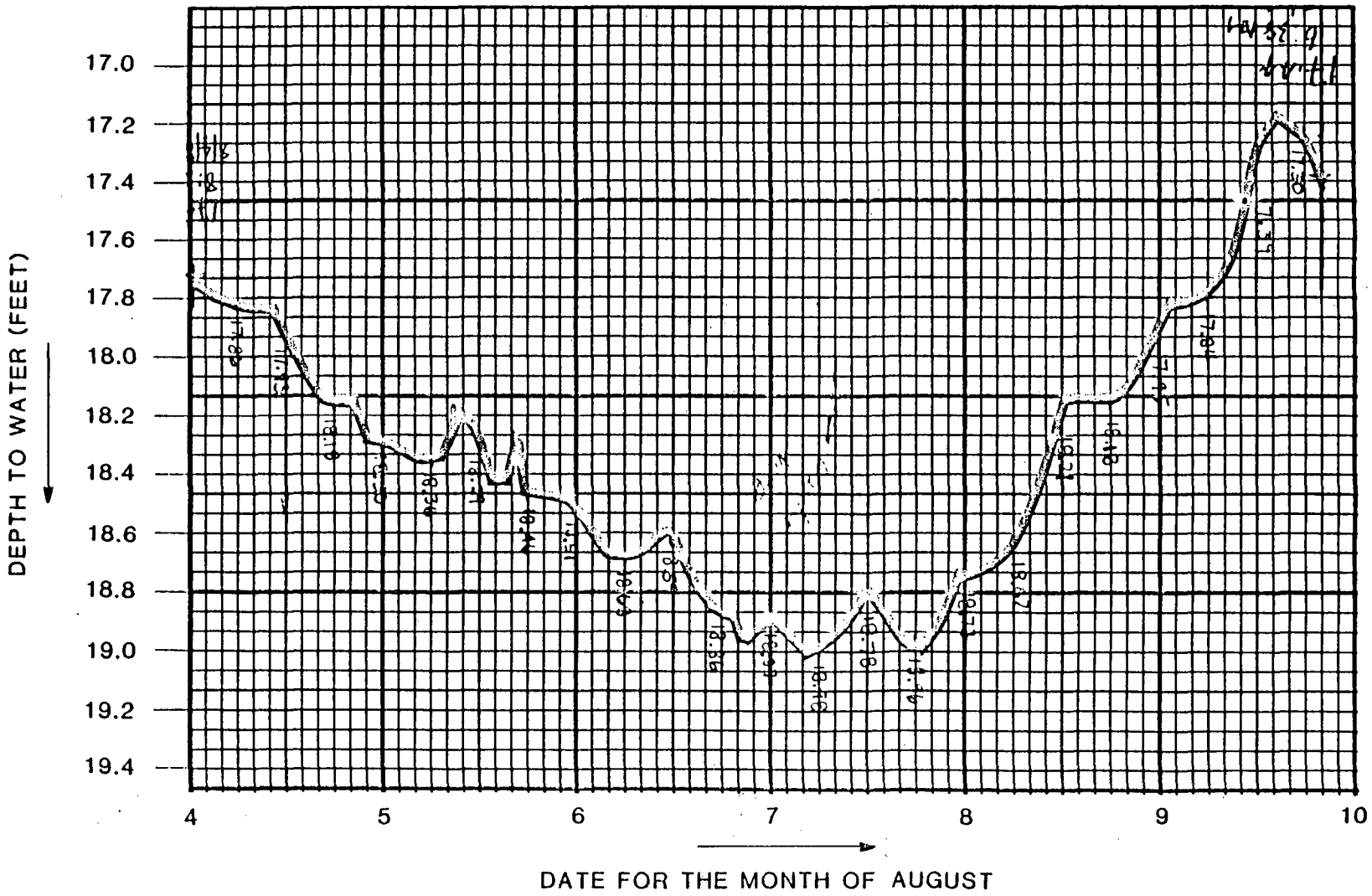
DATE FOR THE MONTH OF JULY TO AUGUST, 1987

TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001778

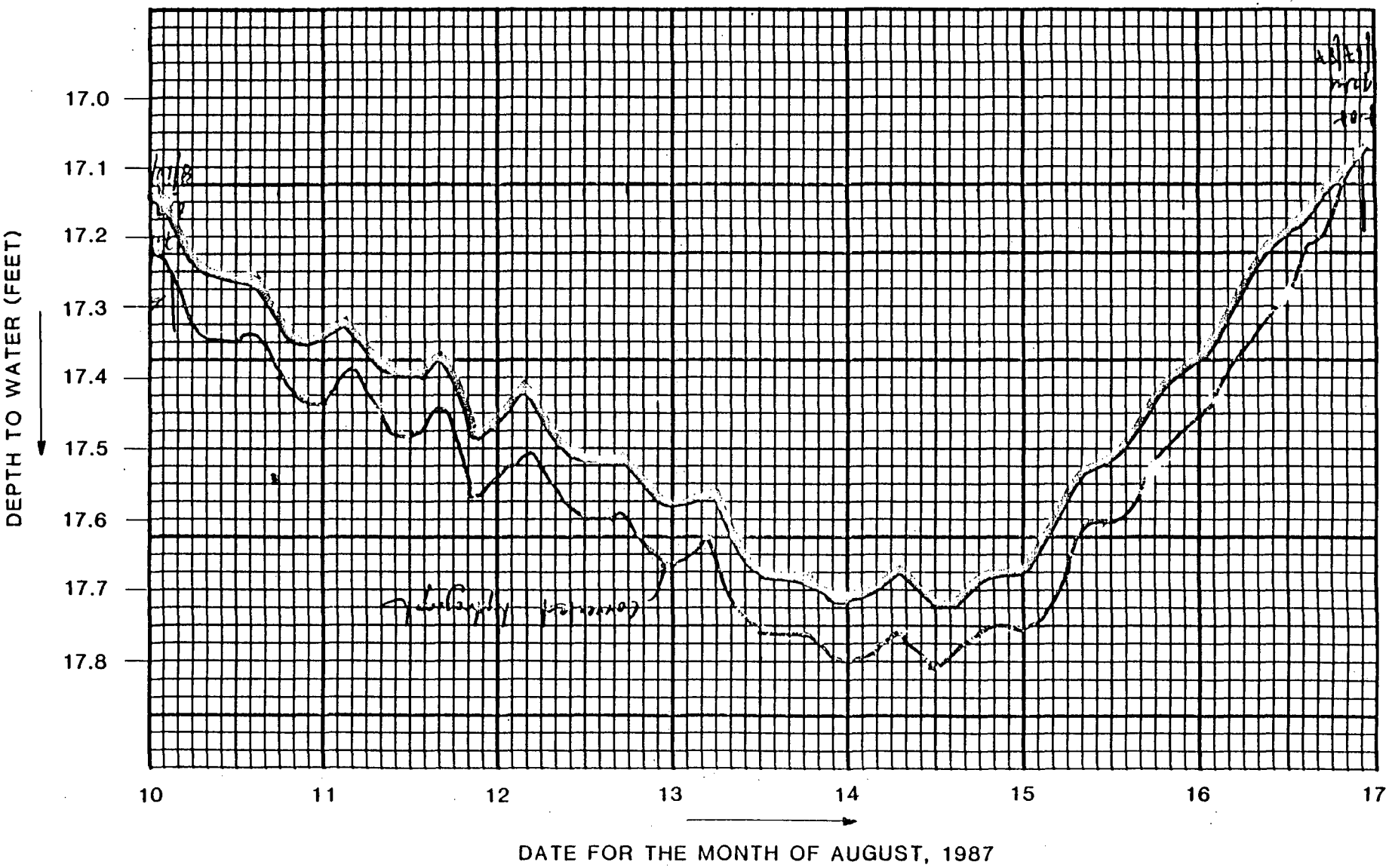


TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001279

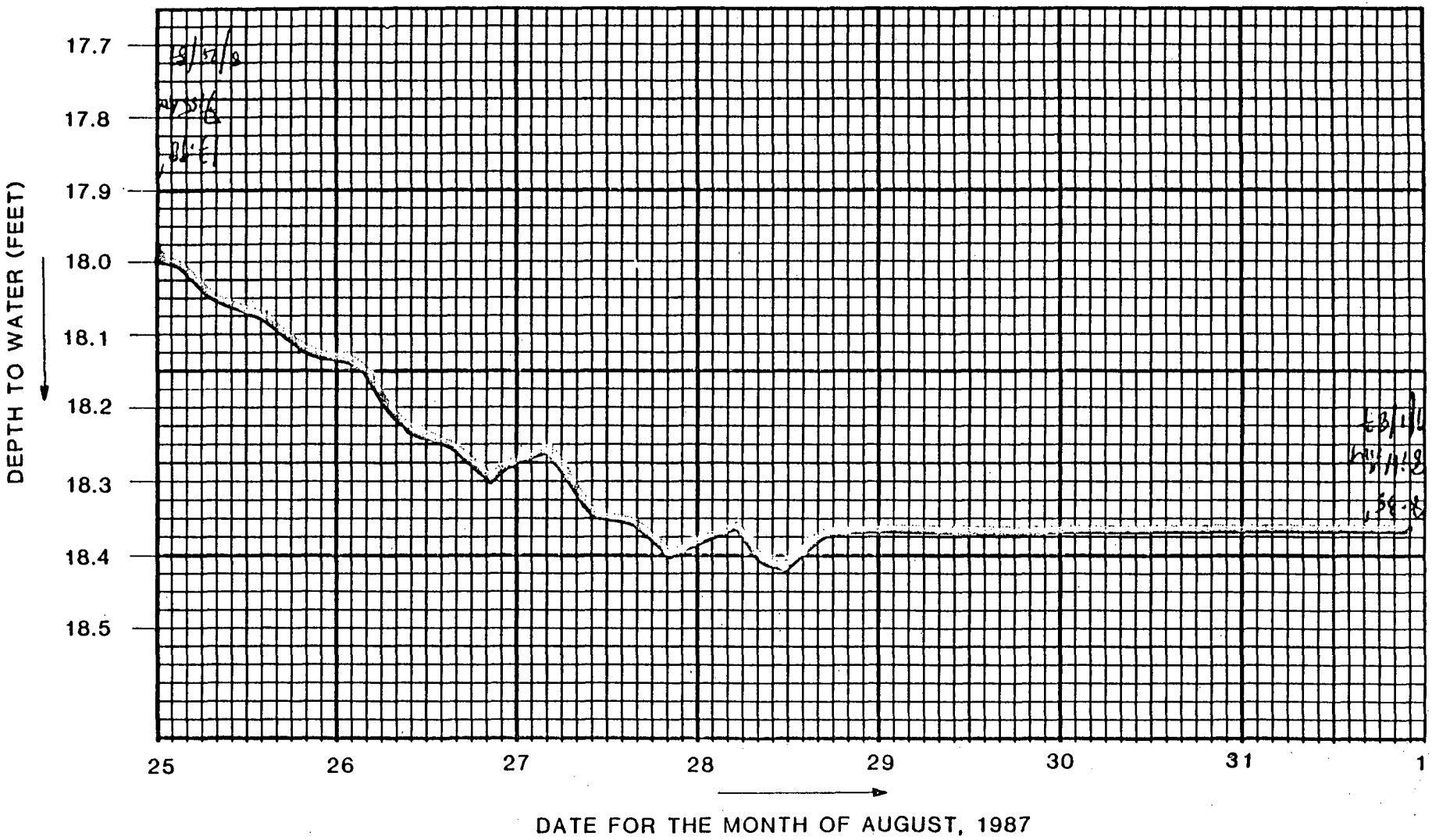


TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001280

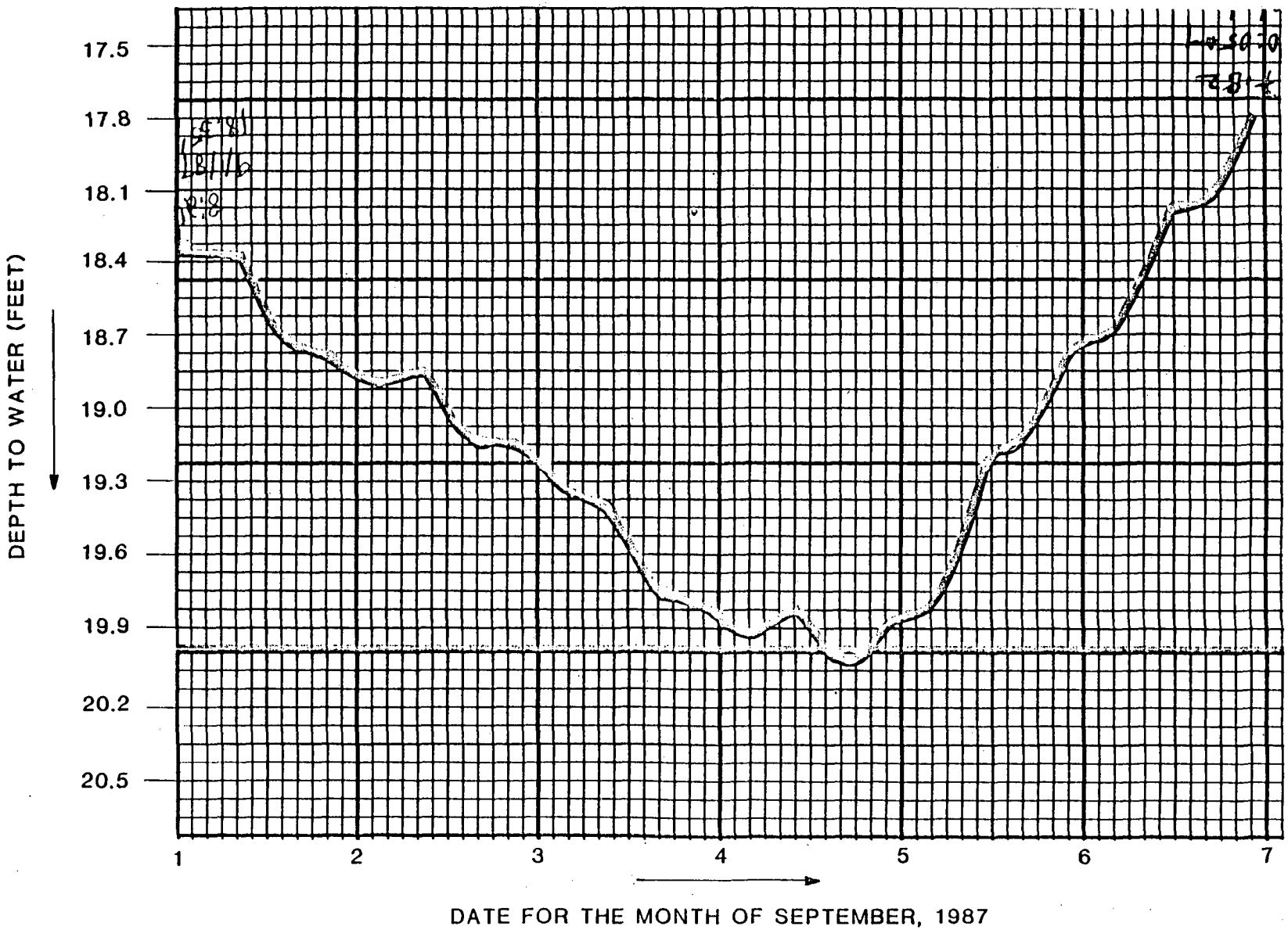


TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001781

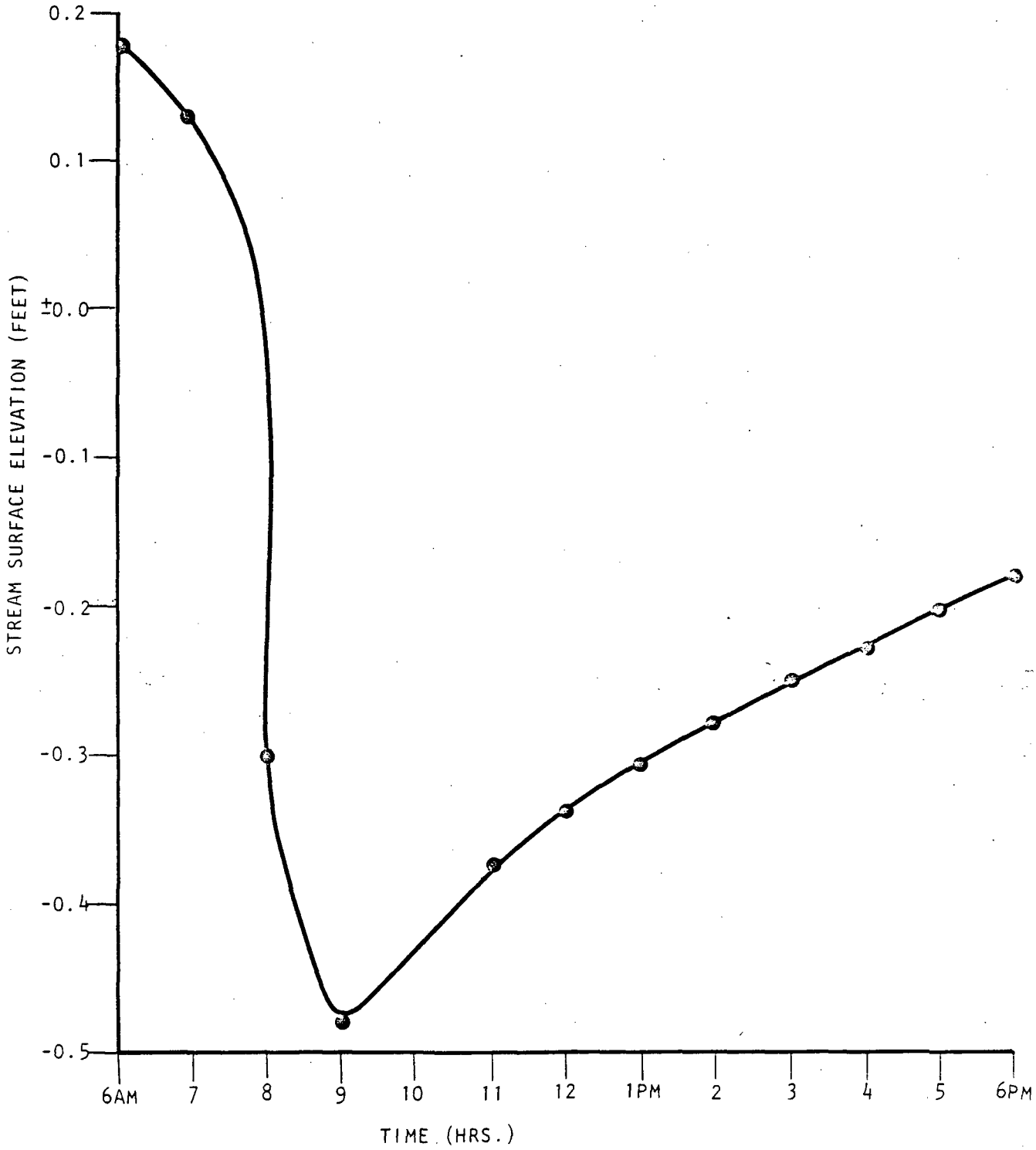


TYPICAL HYDROGRAPH OF TILL AQUIFER (MW-5D)

SCP SITE, CARLSTADT, N.J.

Dames & Moore

001782

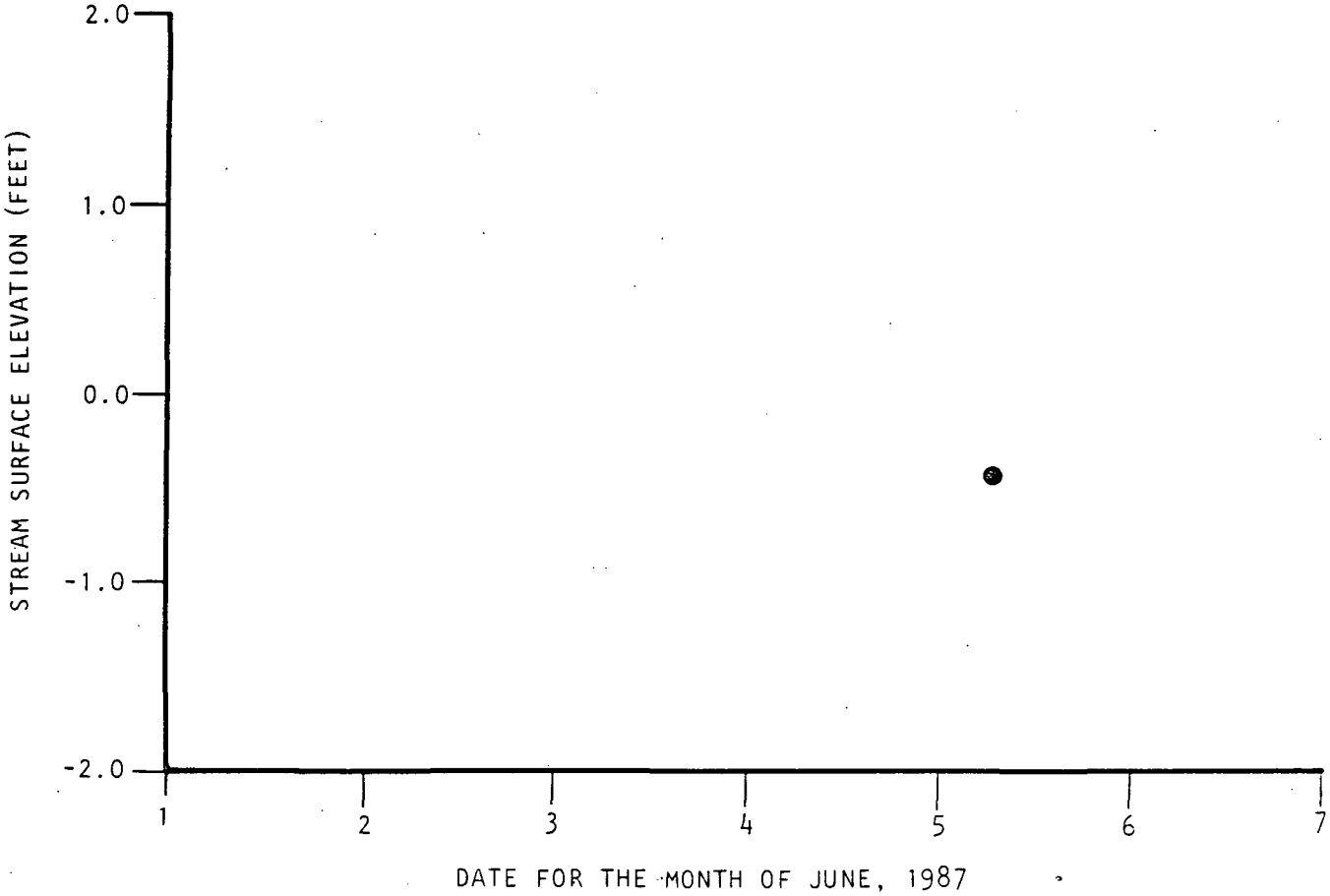


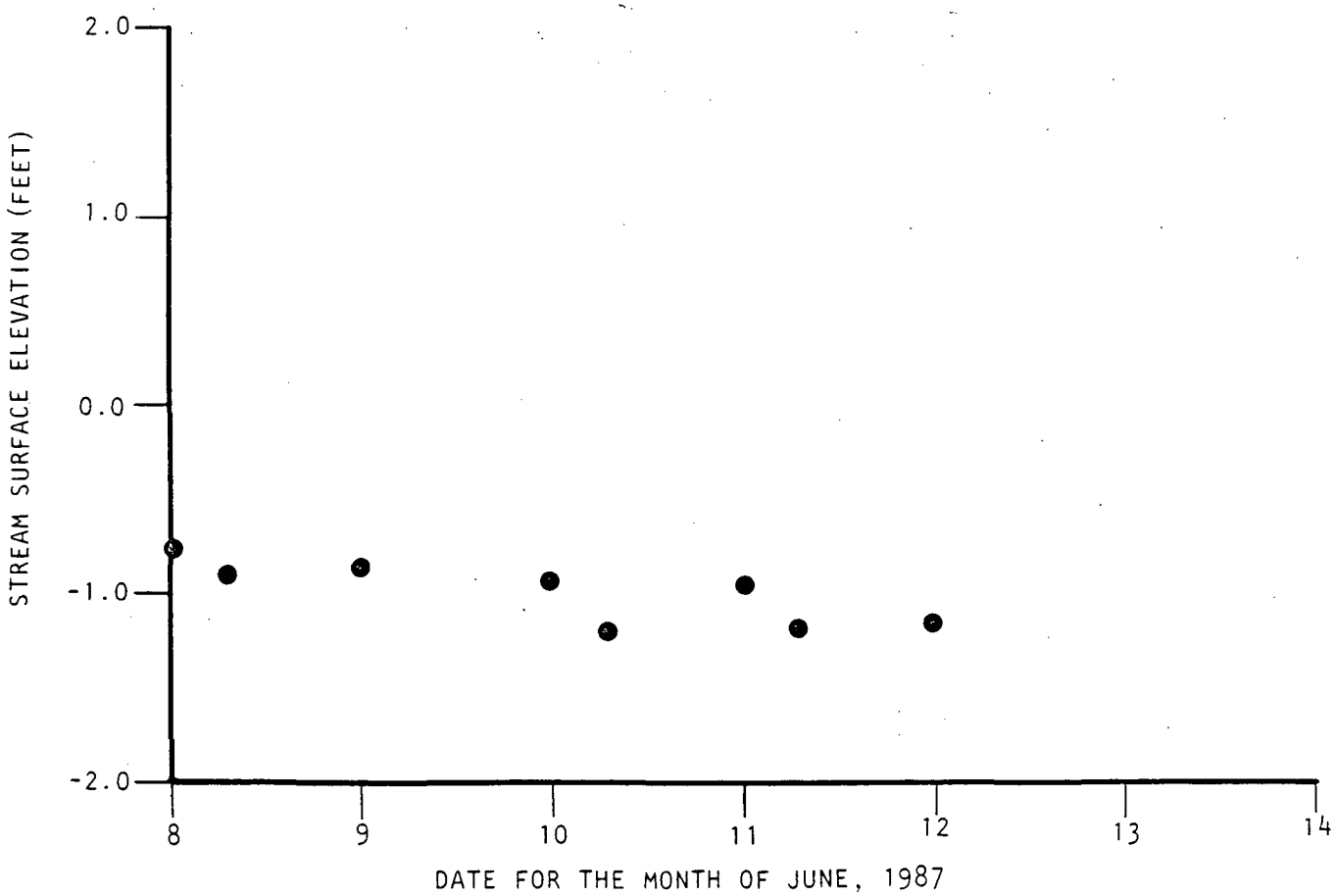
TYPICAL WATER LEVEL IN PEACH ISLAND CREEK

SCP SITE, CARLSTADT, N.J.

001783

DAMES & MOORE



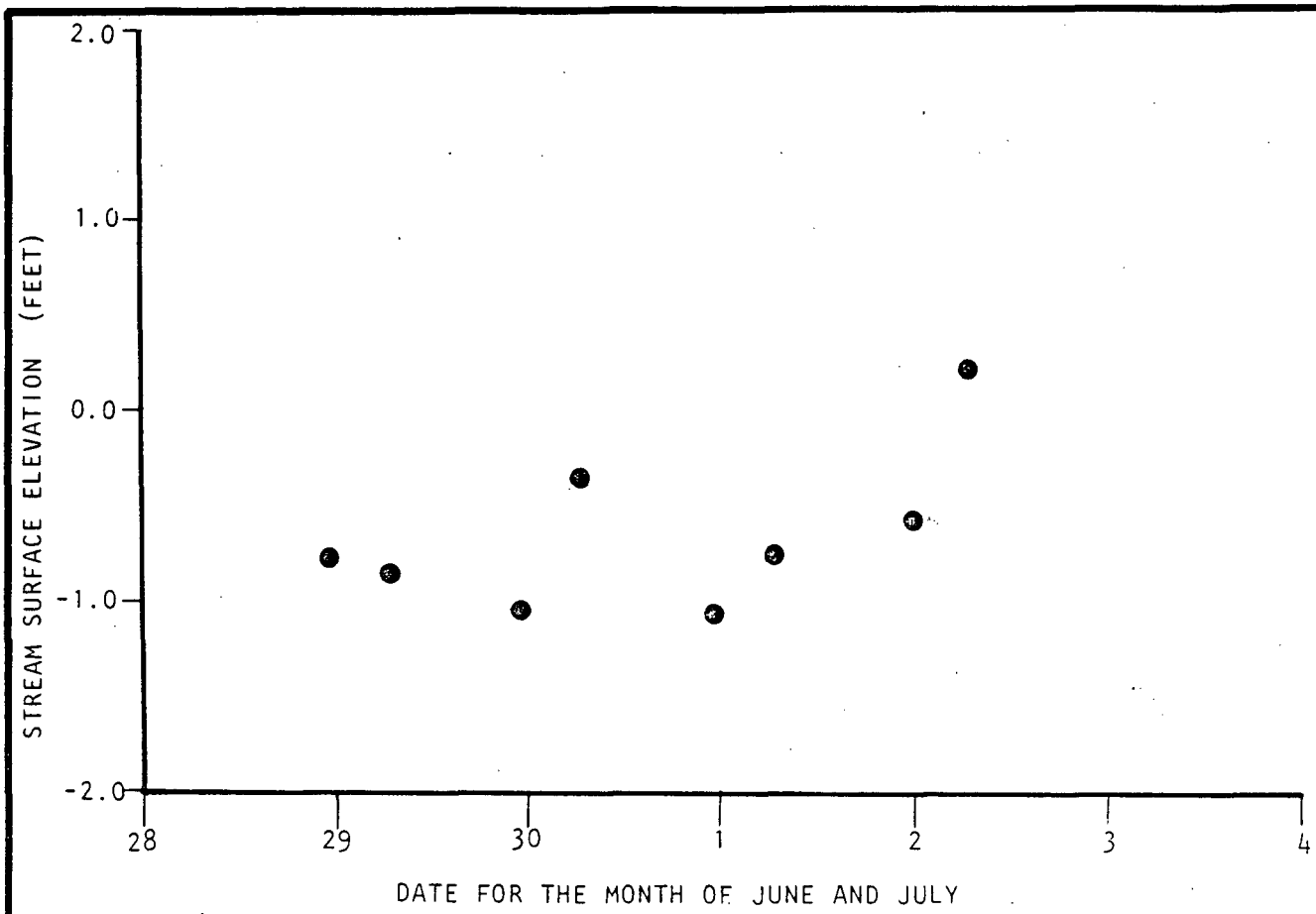


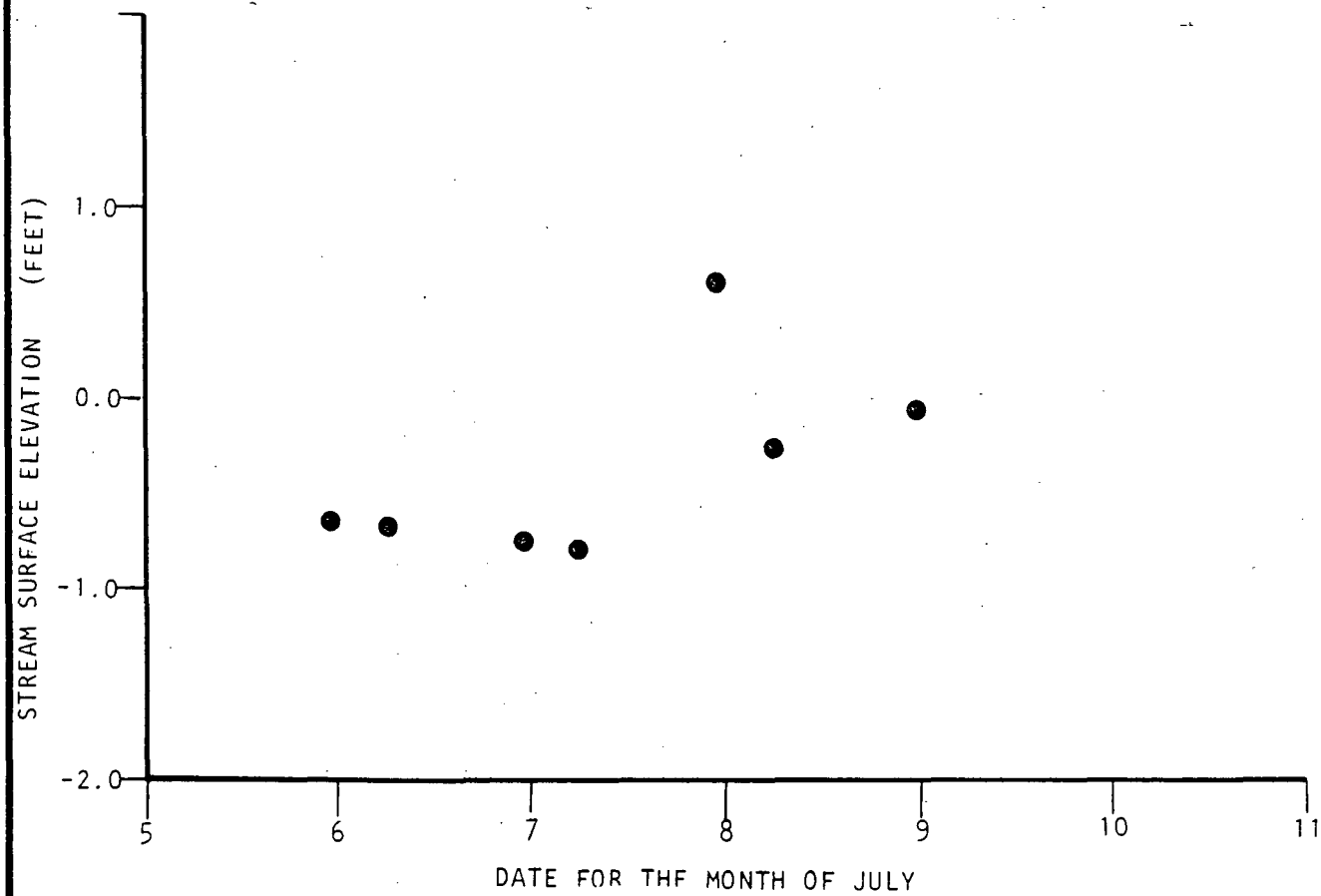
TYPICAL HYDROGRAPH OF PEACH ISLAND CREEK

SCP SITE, CARLSTADT, N.J.

001784

DAMES & MOORE



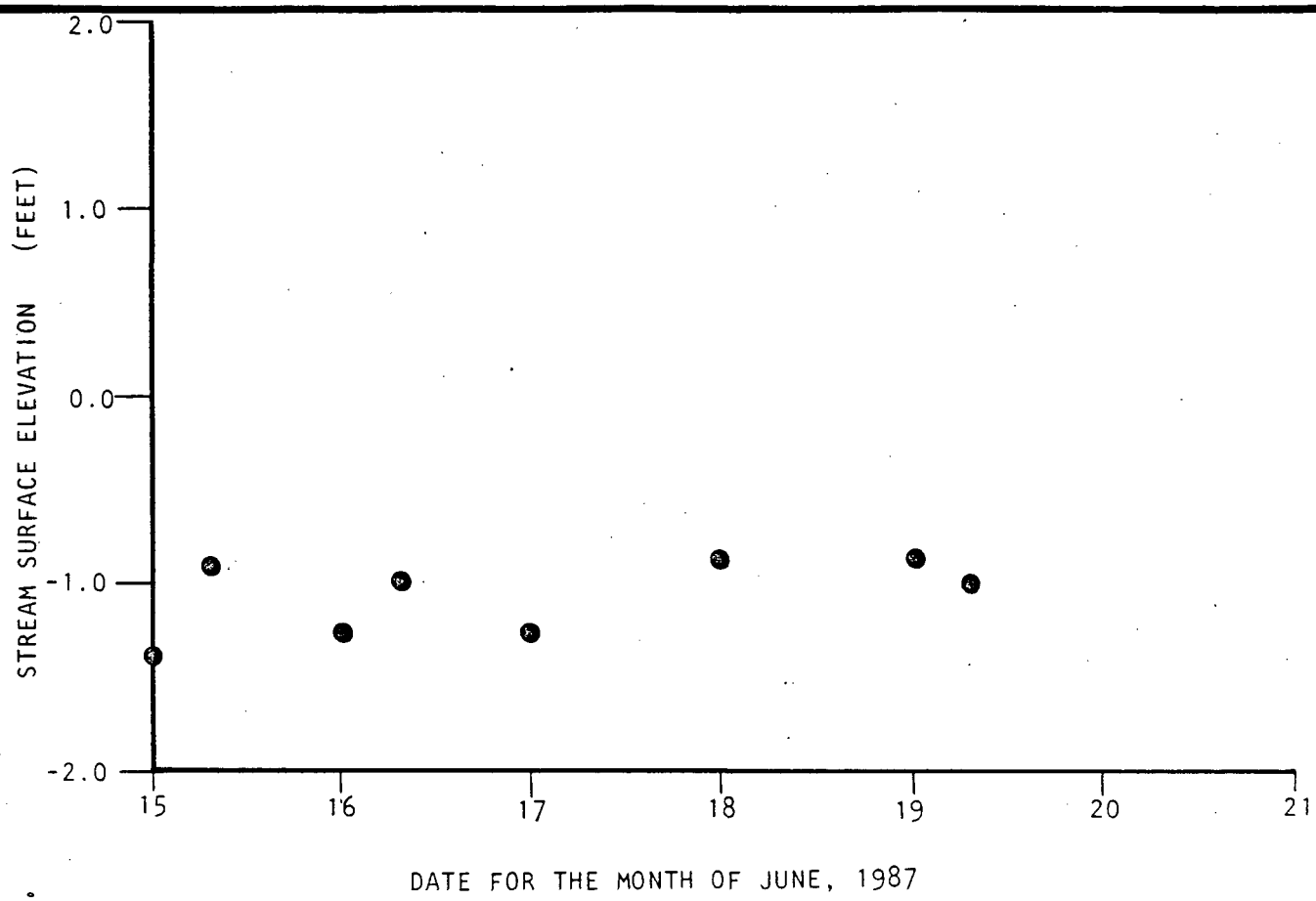


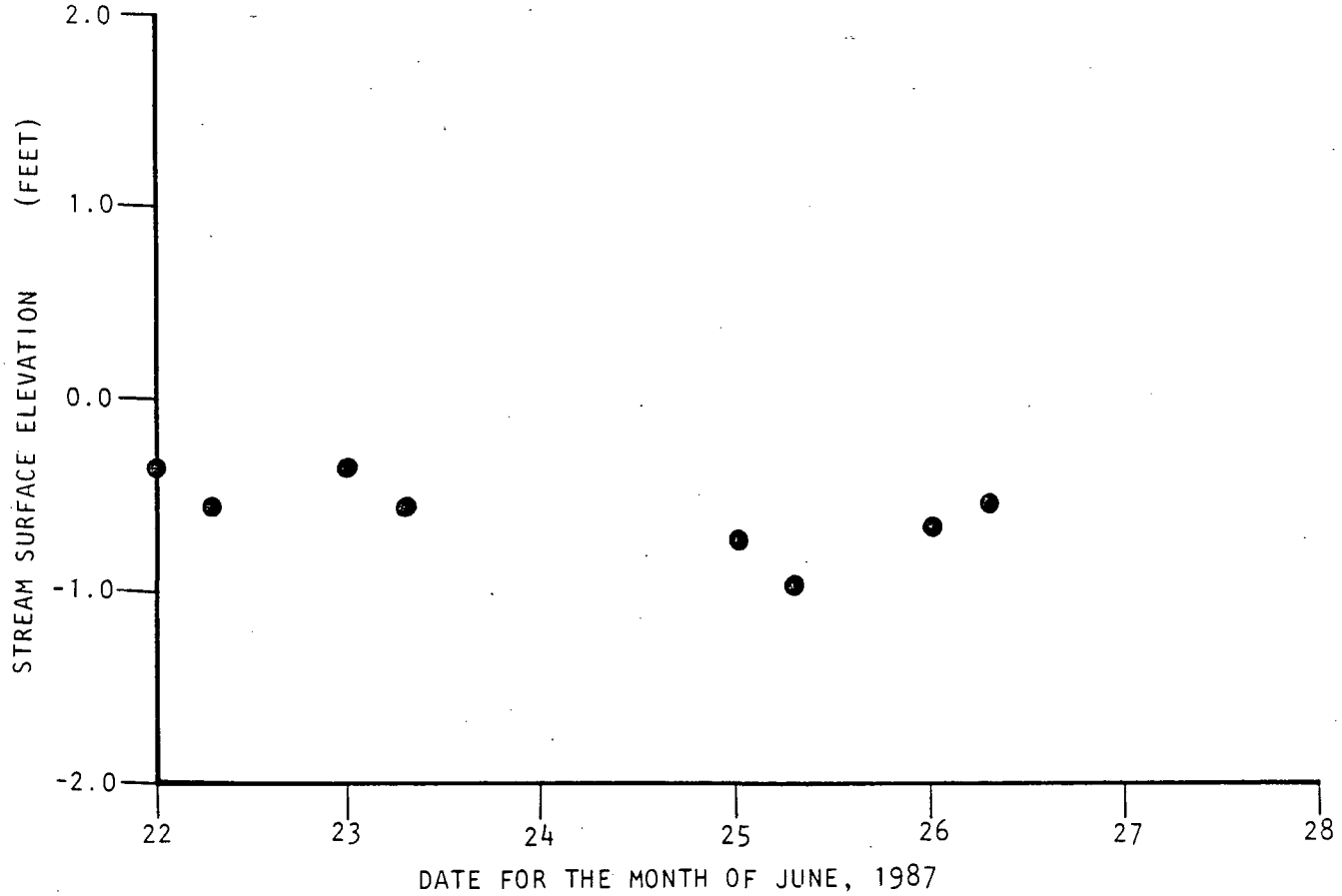
TYPICAL HYDROGRAPH OF PEACH ISLAND CREEK

SCP SITE, CARLSTADT, N.J.

001785

DAMES & MOORE

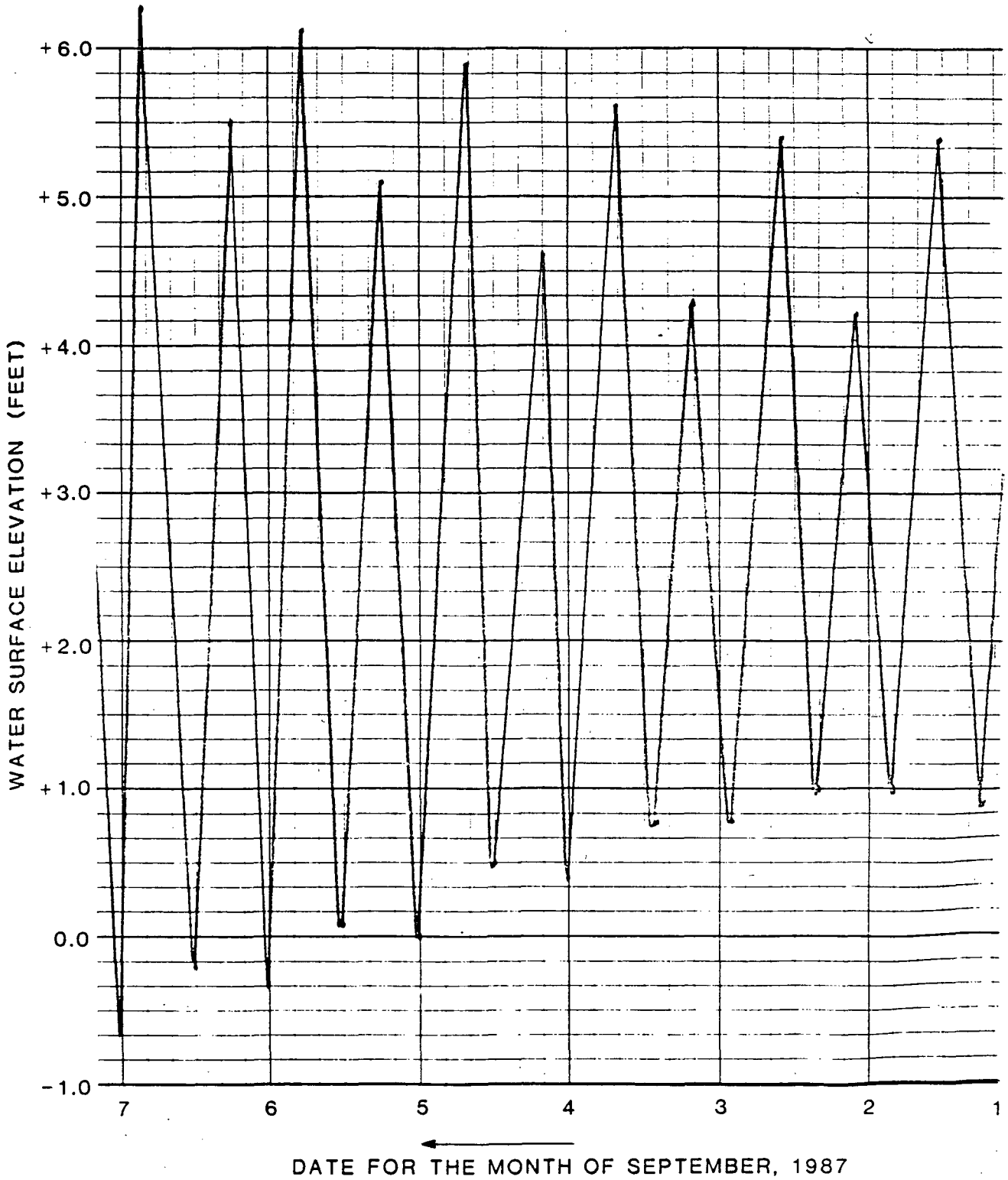




TYPICAL HYDROGRAPH OF PEACH ISLAND CREEK

SCP SITE, CARLSTADT, N.J.

DAMES & MOORE

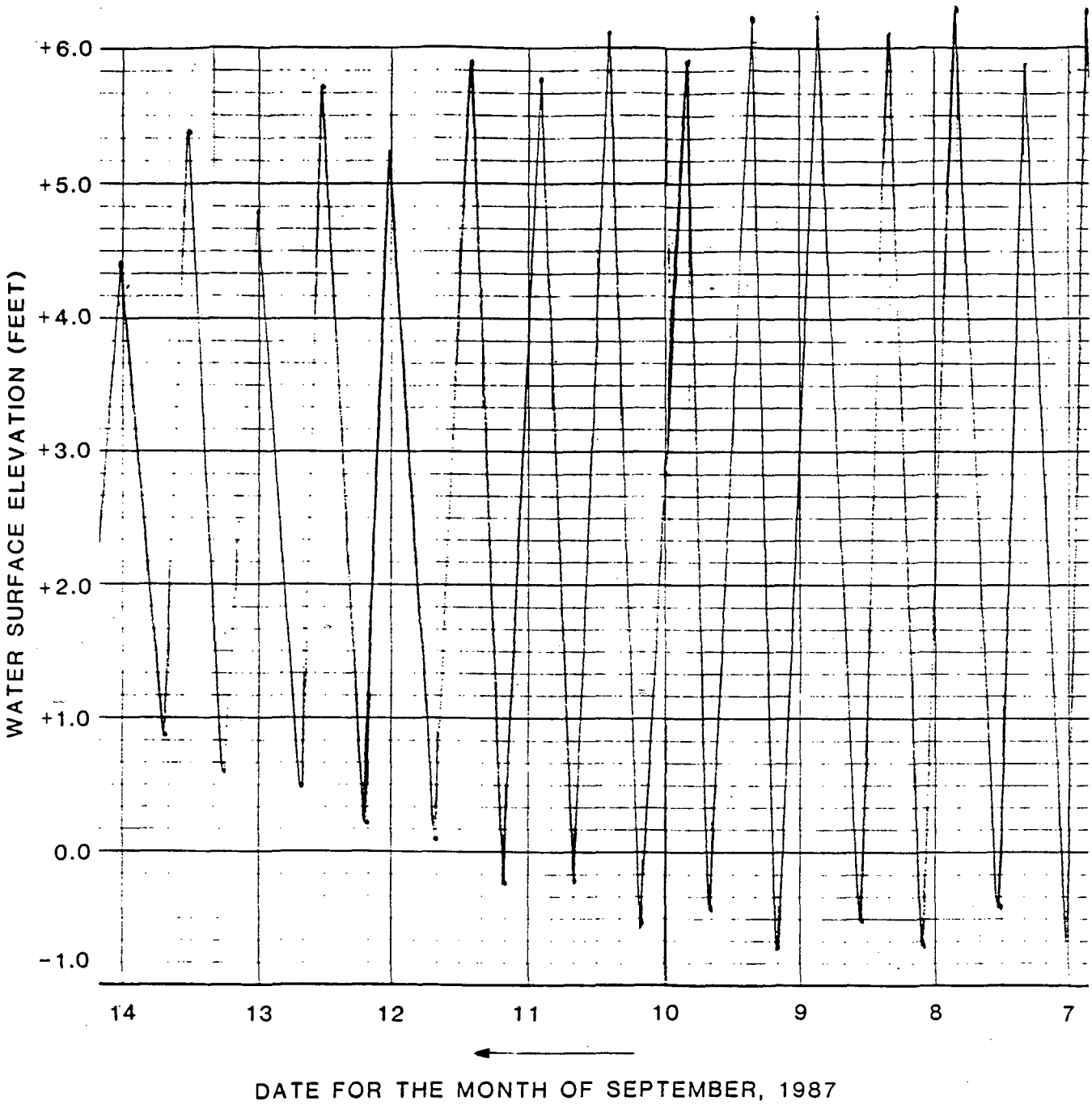


TYPICAL HYDROGRAPH OF HACKENSACK RIVER, N.J.

SCP SITE, CARLSTADT, N.J.

001787

Dames & Moore



TYPICAL HYDROGRAPH OF HACKENSACK RIVER, N.J.

SCP SITE, CARLSTADT, N.J.

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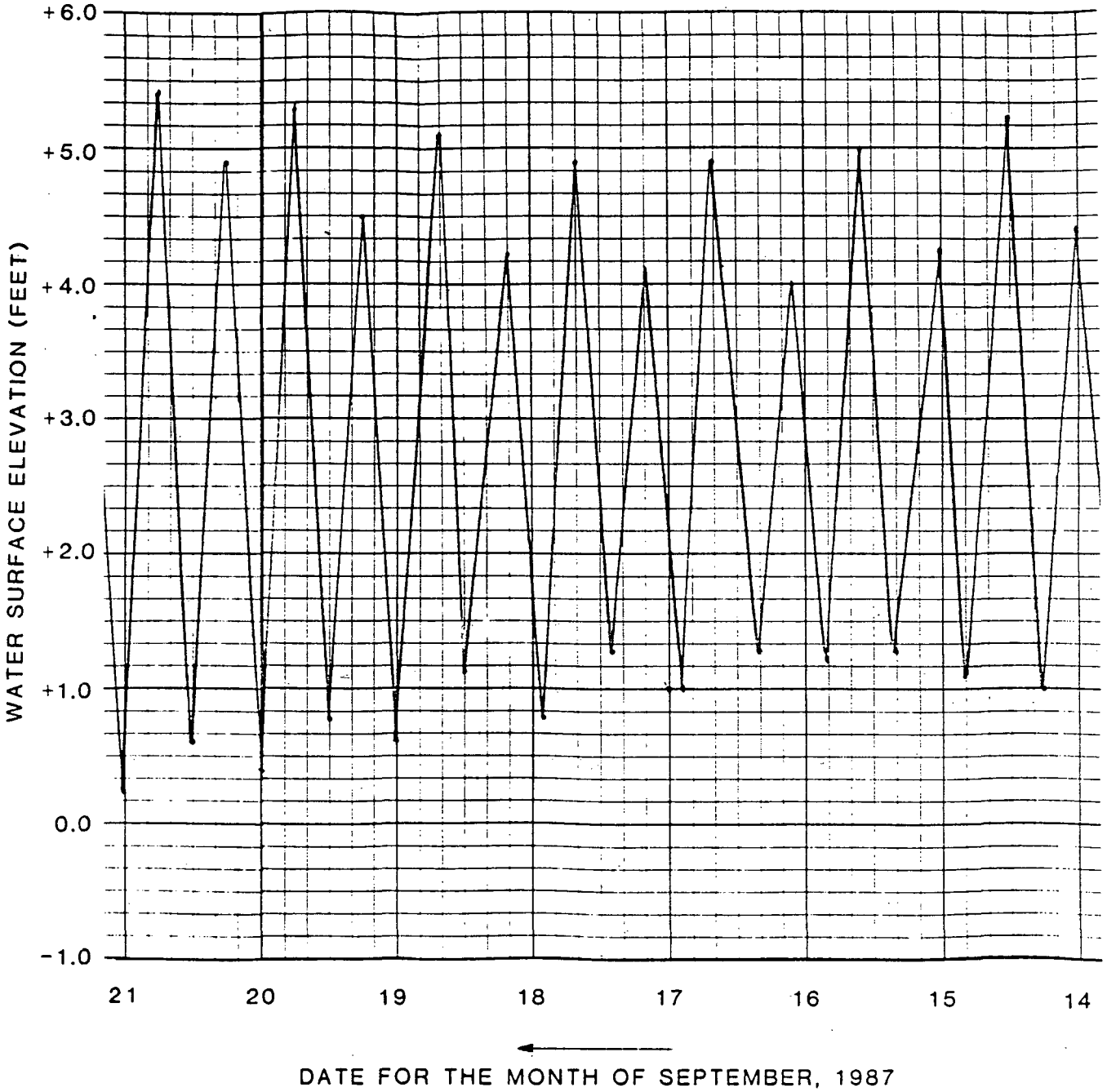

TYPICAL HYDROGRAPH OF HACKENSACK RIVER, N.J.

SCP SITE, CARLSTADT, N.J.

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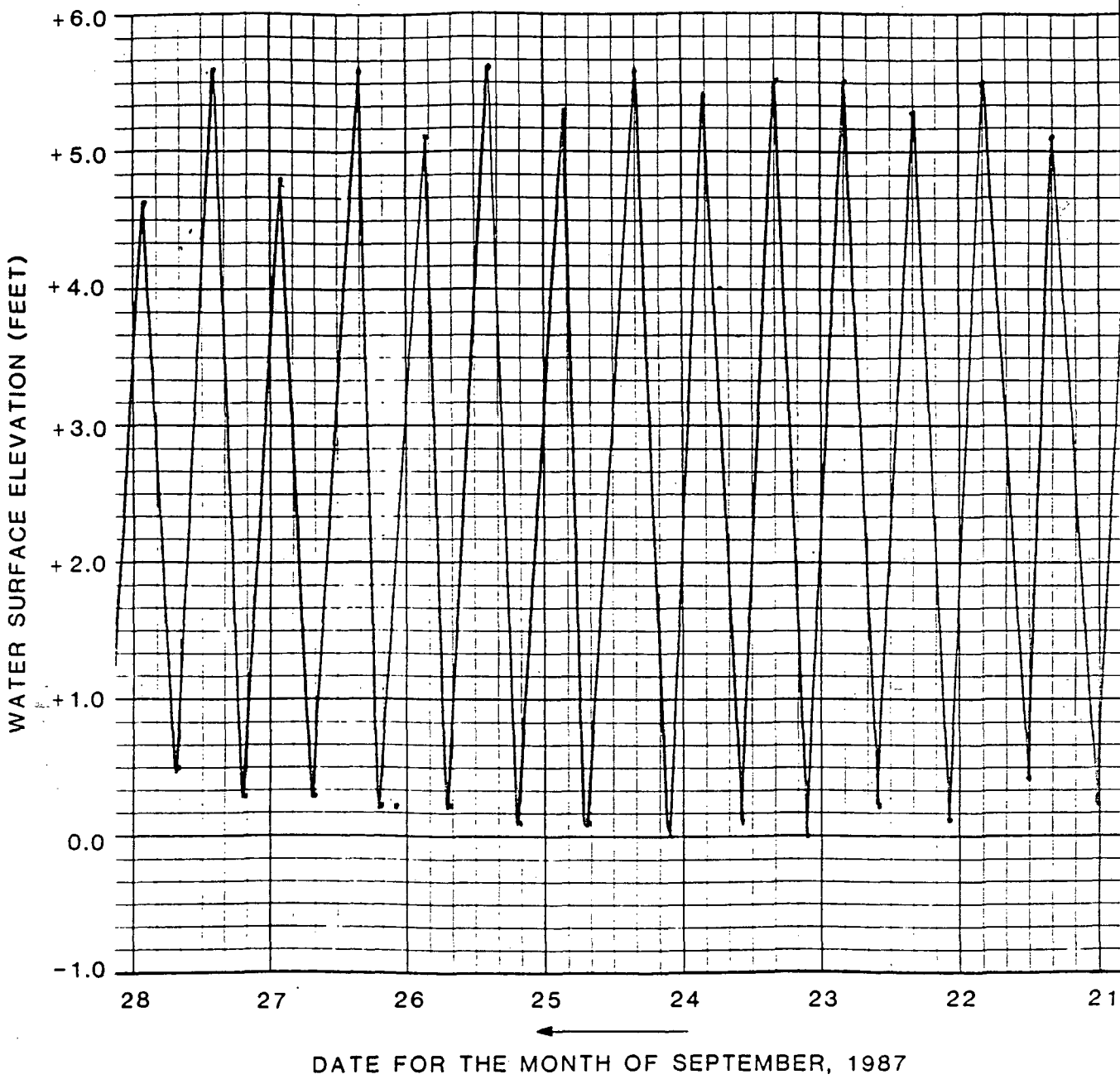

TYPICAL HYDROGRAPH OF HACKENSACK RIVER, N.J.

SCP SITE, CARLSTADT, N.J.

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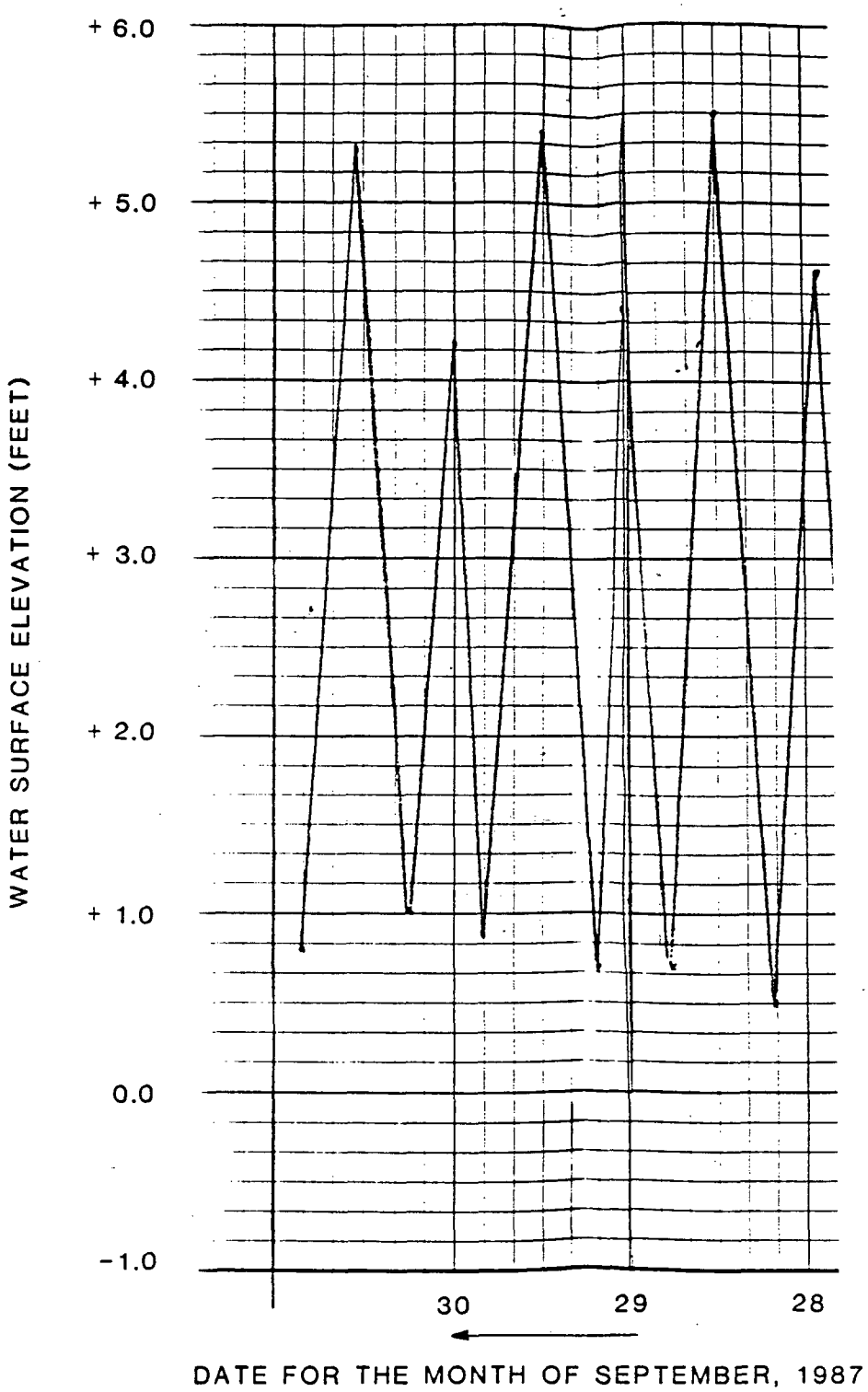

TYPICAL HYDROGRAPH OF HACKENSACK RIVER, N.J.

SCP SITE, CARLSTADT, N.J.

001791

Dames & Moore

JUL 1987
NEWARK, NJ
NAT'L WEA SER OFC
BLDG. 51, RM 241

ISSN 0198-344X

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

INTERNATIONAL AIRPORT

LATITUDE 40° 42'N LONGITUDE 74° 10'W ELEVATION (GROUND) 7 FEET TIME ZONE EASTERN 14734

DATE 1	TEMPERATURE °F MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEPARTURE FROM NORMAL 5	AVERAGE DEW POINT 6	DEGREE DAYS BASE 65°F HEATING (SEASON BEGINS WITH JUL) 7A	COOLING (SEASON BEGINS WITH JAN) 7B	WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW 8	SNOW ICE PELLETS OR ICE ON GROUND AT 0700 INCHES 9	PRECIPITATION WATER (EQUIVALENT INCHES) 10	SNOW, ICE PELLETS (INCHES) 11	AVERAGE STATION PRESSURE IN INCHES ELEV 30 FEET ABOVE M.S.L. 12	WIND (M.P.H.) RESULTANT DIR 13	RESULTANT SPEED 14	AVERAGE SPEED 15	PEAK GUST SPEED 16	PEAK GUST DIRECTION 17	FASTEST 1-MIN SPEED 18	FASTEST 1-MIN DIRECTION 19	SUNSHINE MINUTES 20	PERCENT OF TOTAL POSSIBLE 21	SKY COVER (TENTHS) SUNRISE TO SUNSET 22	MIDNIGHT TO MIDNIGHT 23
01	89	71	80	5	68	0	15	1 8	0	0.49	0.0	30.000	11	3.1	6.8			12	02			9	9
02	72	66	69*	-6	67	0	4	1 3 8	0	0.77	0.0	29.955	05	5.8	7.0			12	03			10	10
03	89	67	78	3	67	0	13	1 3 8	0	0.15	0.0	29.870	26	5.5	8.3			20	27			1	1
04	90	73	82	6	69	0	17	8	0	0.00	0.0	29.830	25	8.7	10.4			16	26			3	1
05	89	70	80	4	60	0	15		0	0.00	0.0	29.980	05	4.6	8.1			14	03			2	1
06	80	67	74	-2	61	0	9		0	0.00	0.0	30.120	13	6.8	7.8			15	14			3	1
07	74	67	71	-5	64	0	6		0	T	0.0	30.050	15	6.3	7.1			12	14			2	1
08	88	69	79	3	70	0	14	1 3 8	0	T	0.0	29.975	17	4.3	6.3			10	36			1	1
09	96	72	84	8	72	0	19	1 2 8	0	0.00	0.0	29.930	24	4.3	4.9			12	25			1	1
10	95	75	85	9	70	0	20	8	0	0.00	0.0	29.865	31	4.7	6.9			12	33			3	1
11	95	77	86	4	73	0	21	1 3 8	0	0.01	0.0	29.900	02	1.7	6.1			17	24			4	1
12	91	75	83	1	73	0	18	2 8	0	0.00	0.0	29.995	16	2.4	5.9			13	15			3	1
13	93	72	82	0	71	0	17	8	0	0.00	0.0	29.820	17	6.2	7.1			13	15			3	1
14	87	67	77	-5	71	0	12	1 3 8	0	0.35	0.0	29.705	20	3.3	8.1	46	SW	12	33			1	1
15	81	64	73	-9	64	0	5		0	0.00	0.0	29.860	32	10.0	10.5			17	33			1	1
16	79	65	72	-6	43	0	7		0	0.00	0.0	30.070	02	7.3	8.2			13	35			3	1
17	66	63*	65	-3	53	0	10		0	0.00	0.0	30.230	33	4.0	7.2			12	01			3	1
18	82	66	74	2	61	0	14	8	0	0.00	0.0	30.090	25	8.3	9.0			15	25			2	1
19	84	74	84	7	68	0	19	3 8	0	0.30	0.0	30.050	28	1.5	7.2	67	NW	35	32			3	1
20	92	73	83	6	72	0	18	1 8	0	0.01	0.0	30.030	20	4.6	6.5			14	24			1	1
21	92	75	86	9	66	0	21	8	0	0.00	0.0	30.000	32	8.4	8.9			15	29				
22	94	75	85	8	70	0	20		0	0.00	0.0	30.030	13	2.7	5.7			9	36			4	2
23	90	76	83	6	72	0	18	8	0	0.00	0.0	30.030	10	3.6	6.3			9	17			2	1
24	97*	75	86	8	73	0	21	1 3 8	0	0.10	0.0	30.050	23	7.1	8.1	35	W	26	33			4	2
25	96	76	86*	8	72	0	21	8	0	0.00	0.0	29.995	24	7.5	8.0			13	25			6	1
26	85	68	77	-1	70	0	12	1 3 8	0	0.39	0.0	29.850	24	6.7	8.4	54	NW	35	33			7	6
27	87	71	79	1	61	0	14		0	0.00	0.0	29.860	26	6.9	6.9			15	23			4	3
28	88	70	79	2	55	0	14		0	0.00	0.0	29.970	36	5.3	7.7			14	31			3	2
29	84	65	75	-2	52	0	10		0	0.00	0.0	29.990	04	4.6	8.4			15	01			3	3
30	86	66	76	-1	63	0	11	8	0	T	0.0	29.960	19	5.1	6.7			13	15			4	3
31	85	73	79	2	65	0	14	8	0	T	0.0	29.950	05	3.3	7.2			15	32			6	3
	SUM	SUM				TOTAL	TOTAL	NUMBER OF DAYS		TOTAL	TOTAL	FOR THE MONTH:								TOTAL	% FOR MONTH	SUM	SUM
	2746	2182				0	453			4.66	0.0	29.960	25	1.0	7.5			25	33			173	161
	AVG	AVG	AVG	DEP	AVG	DEP	DEP	PRECIPITATION		DEP						DATE:		DATE: 26*		POSSIBLE		AVG	AVG
	88.4	70.4	79.4	2.6	65.4	0	87	≥ .01 INCH	10	0.81												5.5	5.2

NUMBER OF DAYS				SEASON TO DATE TOTAL	TOTAL	SNOW, ICE PELLETS ≥ 1.0 INCH 0	GREATEST IN 24 HOURS AND DATES			GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE
MAXIMUM TEMP		MINIMUM TEMP		0	868	THUNDERSTORMS 9	PRECIPITATION	SNOW, ICE PELLETS		
≥ 90°	≤ 32°	≤ 32°	≤ 0°	DEP	DEP	HEAVY FOG 1	1.15 14	0.0		0
4	0	0	0	0	247	CLEAR 7 PARTLY CLOUDY 15 CLOUDY 9				

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON EARLIER DATE(S).
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 24 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. COLS 16 & 17: PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED ONE OF TWO WIND SPEEDS IS GIVEN UNDER COLS 18 & 19: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS) FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES) ERRORS WILL BE CORRECTED IN SUBSEQUENT PUBLICATIONS.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER

Kenneth D. Hadeen
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

NEWARK, NJ 1987

.001792

OBSERVATIONS AT 3-HOUR INTERVALS

JUL 1987
NEWARK, NJ

14734

HOUR (LST)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
JUL 1st											
01	10	110	9			76	70	67	74	22	6
04	8	250	7			73	70	68	84	27	7
07	9	UNL	4		H	78	70	66	67	04	6
10	9	120	7			84	72	66	55	15	3
13	6	UNL	7			86	73	66	51	11	8
16	9	250	7			82	72	67	61	12	6
19	10	35	4		RWH	76	71	68	76	09	5
22	10	75	2	8	RWF	71	70	70	97	02	10
JUL 2nd											
01	10	41	4		RH	72	69	68	87	07	5
04	10	39	8		R	68	64	62	81	02	10
07	10	17	5		RF	68	66	64	87	05	7
10	10	6	1	6	RF	68	67	67	97	05	5
13	10	6	2		RF	71	69	68	90	07	6
16	10	5	2	8	F	71	70	69	93	09	7
19	10	3	0	12	RWF	71	70	70	97	03	4
22	10	5	2		RF	68	68	68	100	02	7
JUL 3rd											
01	10	7	2	8	F	68	67	67	97	02	6
04	10	6	1	8	F	69	68	68	97	00	0
07	10	6	1	8	F	70	69	68	93	03	3
10	7	20	8			82	75	71	69	24	7
13	6	39	10			85	72	66	53	27	17
16	3	UNL	12			87	72	65	48	25	12
19	10	UNL	15			84	71	64	51	27	7
22	8	UNL	15			78	70	65	64	21	6
JUL 4th											
01	2	UNL	9			74	69	66	76	21	4
04	2	UNL	5		H	73	70	68	84	19	5
07	10	90	6		H	76	73	72	88	23	9
10	4	UNL	7			85	76	72	65	23	11
13	10	36	7			88	76	71	57	27	13
16	10	85	5		H	88	76	70	55	26	11
19	8	UNL	5		H	85	74	69	59	25	8
22	9	UNL	7			80	73	70	72	29	7
JUL 5th											
01	0	UNL	12			75	66	61	62	36	6
04	3	UNL	15			71	63	58	64	34	9
07	6	UNL	12			73	65	59	62	03	8
10	6	UNL	15			79	67	60	52	01	7
13	7	220	15			86	68	57	37	07	7
16	5	UNL	20			84	69	61	46	13	9
19	9	UNL	20			77	67	61	58	14	7
22	8	UNL	15			73	67	63	71	12	5
JUL 6th											
01	5	UNL	15			71	66	63	76	09	4
04	8	250	10			70	66	64	81	12	4
07	10	250	9			71	67	64	79	08	7
10	9	250	12			77	64	56	48	11	8
13	8	250	12			78	66	58	50	12	9
16	8	UNL	15			76	66	60	58	14	8
19	7	85	20			70	64	60	71	16	7
22	6	21	15			68	63	59	73	14	6
JUL 7th											
01	7	100	15			67	63	60	78	15	5
04	6	90	15			67	64	62	84	13	6
07	10	21	12			71	66	63	76	12	4
10	10	28	12			71	66	63	76	14	8
13	10	20	12			73	67	64	74	12	9
16	10	22	12			73	67	64	74	15	8
19	10	19	12			72	68	65	79	14	6
22	10	13	10			72	69	66	82	13	5
JUL 8th											
01	10	19	10			72	69	67	84	17	6
04	10	7	3		TRWF	70	69	69	97	17	4
07	10	13	3		RF	70	69	69	97	21	6
10	10	10	5		F	74	71	70	87	22	7
13	10	25	5		H	80	74	71	74	24	7
16	4	UNL	5		H	86	76	72	63	13	9
19	2	UNL	5		H	78	74	72	82	15	6
22	4	UNL	4		H	77	74	72	85	10	3
JUL 9th											
01	10	85	5		F	74	73	72	94	11	3
04	5	UNL	2		F	73	72	72	97	25	3
07	0	UNL	3		F	76	73	71	79	00	0
10	1	UNL	6		H	89	78	74	61	00	0
13	4	UNL	8			94	79	72	49	24	6
16	10	90	7			86	77	73	65	25	5
19	7	UNL	6		H	83	76	73	72	22	3
22	6	300	6		H	79	73	68	63	25	3
JUL 10th											
01	6	UNL	6		H	77	73	71	82	25	6
04	3	UNL	5		H	76	73	71	85	19	4
07	6	UNL	4		H	80	74	71	74	35	6
10	10	250	5		H	88	76	71	57	36	4
13	9	100	7			93	76	68	44	29	3
16	7	120	9			95	76	68	41	27	9
19	9	140	8			87	76	71	59	31	9
22	6	300	10			82	74	70	65	30	5
JUL 11th											
01	4	UNL	8			80	75	72	77	00	0
04	1	UNL	7			79	74	72	79	02	4
07	3	UNL	4		H	82	75	72	72	01	9
10	0	UNL	6		H	90	77	71	54	03	8
13	9	30	1		TRWH	80	75	73	79	24	15
16	5	UNL	7			86	76	71	61	21	7
19	4	UNL	4		H	83	77	74	74	12	5
22	4	UNL	1	8	F	78	77	76	94	13	4
JUL 12th											
01	10	3	0	4	F	77	76	76	97	11	3
04	6	4	0	12	F	75	75	75	100	00	0
07	9	5	0	12	F	78	75	74	88	11	4
10	3	UNL	2	8	FH	87	76	74	65	16	5
13	3	UNL	3	8	H	90	79	75	61	15	10
16	5	UNL	8			86	73	67	53	09	4
19	7	UNL	6		H	78	73	71	79	33	5
22	4	UNL	6		H	78	73	70	77	30	4
JUL 13th											
01	0	UNL	7			74	71	70	87	20	4
04	0	UNL	7			72	70	69	90	20	4
07	0	UNL	4		H	77	73	71	82	18	4
10	0	UNL	7			86	75	70	59	20	5
13	5	UNL	7			91	77	71	52	18	9
16	2	UNL	6		H	90	79	74	59	13	10
19	0	UNL	3		H	84	77	74	72	15	7
22	0	UNL	3		H	79	75	73	82	16	6
JUL 14th											
01	6	45	5		H	78	74	72	82	21	8
04	10	9	4		F	76	74	73	91	16	5
07	10	10	2		F	78	75	73	85	18	5
10	10	13	2		H	82	76	73	74	15	5
13	8	20	3		TH	85	77	74	70	14	11
16	10	9	2		TRWF	71	70	70	97	25	9
19	10	7	5		RWF	72	71	71	97	24	6
22	8	41	15			68	64	62	81	31	9
JUL 15th											
01	8	55	15			67	62	58	73	32	10
04	3	UNL	15			65	59	55	70	33	10
07	1	UNL	20			57	60	54	63	33	12
10	8	250	20			74	62	54	50	32	7
13	5	UNL	20			86	64	54	41	29	12
16	5	UNL	20			81	65	54	39	33	13
19	3	UNL	20			75	67	52	45	31	7
22	6	60	20			73	68	53	53	32	6
JUL 16th											
01	10	60	25			68	58	50	53	01	6
04	6	55	20			66	57	50	57	01	5
07	4	UNL	15			69	59	51	53	02	10
10	10	UNL	15			72	59	49	44	02	7
13	10	UNL	15			77	60	47	35	03	7
16	6	75	15			79	61	48	34	36	6
19	0	UNL	20			76	59	45	33	02	10
22	0	UNL	20			71	59	49	46	01	6
JUL 17th											
01	0	UNL	25			67	58	51	57	02	5
04	0	UNL	25			64	57	51	63	02	5
07	0	UNL	10			69	59	51	53	03	5
10	0	UNL	15			79	61	47	33	01	10
13	0	UNL	15			83	63	48	30	31	8
16	0	UNL	15			85	64	50	30	36	5
19	1	UNL	15			81	63	49	33	26	7
22	0	UNL	15			74	62	53	48	23	6
JUL 18th											
01	0	UNL	20			69	61	56	63	22	5
04	0	UNL	20			66	60	56	70	22	6
07	3	UNL	9			72	64	58	62	26	6
10	2	UNL	10			86	70	61	43	29	8
13	4	UNL	10			91	71	59	34	23	11
16	0	UNL	8			91	73	64	41	26	10
19	0	UNL	8			87	72	65	48	25	9
22	0	UNL	6		H	81	71	65	58	26	7

WEATHER CODES

*	TORNADO	ZL	FREEZING DRIZZLE	IPW	ICE PELLET SHOWERS	BN	BLOWING SAND
T	THUNDERSTORM	S	SNOW	A	HAIL	BS	BLOWING SNOW
G	SQUALL	SW	SNOW SHOWERS	F	FOG	BY	BLOWING SPRAY
R	RAIN	SG	SNOW GRAINS	IF	ICE FOG	K	SMOKE
RW	RAIN SHOWERS	SP	SNOW PELLETS	GF	GROUND FOG	H	HAZE
ZR	FREEZING RAIN	IC	ICE CRYSTALS	BD	BLOWING DUST	D	DUST
L	DRIZZLE	IP	ICE PELLETS				

CEILING: UNL INDICATES UNLIMITED
WIND DIRECTION: DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS, INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST AN ENTRY OF 00 INDICATES CALM
SPEED: THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH=KNOTS X 1.15)

001793

OBSERVATIONS AT 3-HOUR INTERVALS

JUL 1987
NEWARK, NJ

14734

HOUR L.S.T.	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
JUL 19th											
01	7	200	5		H	78	69	64	62	25	4
04	4	UNL	4		H	75	69	65	71	20	5
07	10	UNL	5		H	79	71	66	65	27	4
10	8	UNL	9			89	75	69	52	33	7
13	8	UNL	9			92	76	68	46	02	11
16	10	55	5		TRW	77	73	71	82	32	11
19	10	UNL	5		H	79	75	73	82	21	7
22	7	UNL	4		H	77	72	70	79	18	4
JUL 20th											
01	10	6	3		F	73	72	71	94	14	4
04	8	8	3		F	73	71	70	90	16	4
07	10	12	3		H	75	72	70	85	18	6
10	10	12	2	8	H	78	73	71	79	17	6
13	9	70	2		H	84	76	73	70	29	3
16	7	80	2		H	92	79	73	54	23	9
19	7	UNL	4		H	90	79	74	59	16	5
22	5	UNL	4		H	84	77	74	72	25	8
JUL 21st											
01	0	UNL	10			79	71	67	67	29	6
04	0	UNL	20			75	67	62	64	31	5
07	0	UNL	20			90	70	64	56	32	7
10	0	UNL	20			89	74	67	48	32	7
13	0	UNL	20			94	75	66	40	35	7
16	1	UNL	20			96	76	66	37	29	13
19	7	UNL	20			90	74	66	45	31	6
22	5	UNL	20			86	74	68	55	32	4
JUL 22nd											
01	0	UNL	20			83	74	69	63	03	5
04	0	UNL	10			76	72	70	82	12	5
07	4	UNL	7			77	71	68	74	21	3
10	3	UNL	7			84	73	68	59	00	0
13	5	UNL	9			91	76	70	50	18	6
16	5	UNL	7			92	77	71	50	08	6
19	4	UNL	8			85	75	71	63	13	5
22	3	UNL	10			83	76	73	72	18	4
JUL 23rd											
01	0	UNL	12			82	73	69	65	36	4
04	0	UNL	5		H	78	73	71	79	02	5
07	0	UNL	4		H	79	74	72	79	03	7
10	0	UNL	4		H	85	75	71	63	13	3
13	3	UNL	5		H	88	76	71	57	13	7
16	3	UNL	5		H	88	78	73	61	13	6
19	2	UNL	6		H	82	76	74	77	10	7
22	0	UNL	6		H	79	78	77	94	18	5
JUL 24th											
01	0	UNL	5		H	77	74	73	88	21	5
04	0	UNL	5		H	76	74	73	91	19	6
07	10	7	3		H	77	74	73	88	21	7
10	0	UNL	5		H	88	78	73	61	23	8
13	3	UNL	7			96	80	74	49	25	8
16	4	UNL	8			96	78	71	45	22	9
19	5	UNL	6		H	87	77	73	63	21	5
22	10	43	5		F	91	78	76	85	23	7
JUL 25th											
01	8	100	4		H	76	73	72	88	22	4
04	6	100	4		H	77	75	74	91	20	6
07	1	UNL	3		H	80	76	74	82	25	5
10	2	UNL	4		H	91	77	71	52	27	8
13	6	UNL	4		H	96	78	71	45	27	9
16	10	UNL	4		H	94	78	71	47	23	10
19	10	300	3		H	90	76	70	52	25	6
22	10	300	3		H	85	75	71	63	26	6
JUL 26th											
01	10	70	3		TRWH	82	75	71	69	25	18
04	2	UNL	7			74	71	70	87	21	5
07	7	UNL	5		H	76	73	72	88	26	5
10	9	100	7			83	75	71	67	27	10
13	9	90	10			74	71	69	85	22	7
16	8	90	12			77	71	67	71	25	12
19	4	UNL	12			80	74	71	74	25	7
22	0	UNL	10			76	73	71	85	22	7
JUL 27th											
01	1	UNL	9			74	71	70	87	27	4
04	0	UNL	10			72	68	65	79	36	4
07	2	UNL	15			74	64	58	59	03	7
10	5	UNL	15			81	66	56	42	06	5
13	7	250	15			85	70	61	45	18	6
16	5	UNL	15			66	68	57	37	29	13
19	3	UNL	20			91	70	64	56	16	5
22	0	UNL	30			75	69	66	74	20	4
JUL 28th											
01	0	UNL	15			73	69	66	79	22	5
04	6	250	15			72	66	62	71	01	5
07	3	UNL	15			74	63	56	54	02	7
10	3	UNL	15			83	65	52	34	02	4
13	4	UNL	15			87	66	51	29	35	4
16	4	UNL	15			86	69	59	40	10	4
19	1	UNL	20			81	63	50	34	33	7
22	0	UNL	35			77	62	52	42	35	9
JUL 29th											
01	0	UNL	25			71	61	53	53	02	10
04	0	UNL	25			66	57	49	55	01	8
07	0	UNL	25			67	56	47	49	03	12
10	0	UNL	25			74	60	50	43	01	13
13	0	UNL	25			82	61	45	27	01	13
16	11	UNL	20			82	65	53	37	15	7
19	0	UNL	20			75	64	57	54	13	4
22	0	UNL	20			71	65	61	71	15	4
JUL 30th											
01	0	UNL	10			69	66	64	84	21	4
04	0	UNL	5			67	62	59	76	21	4
07	0	UNL	8			71	64	53	66	22	4
10	6	100	8			80	66	56	47	23	5
13	10	250	10			85	71	63	48	24	6
16	8	90	12		RW	79	71	66	65	11	5
19	10	120	10			78	71	67	69	18	7
22	8	300	10			74	69	66	76	25	7
JUL 31st											
01	5	UNL	7			74	69	66	76	01	4
04	10	85	5		H	73	70	68	84	21	4
07	10	100	4		H	73	69	66	79	02	13
10	6	250	8			77	68	63	62	36	12
13	8	30	10			82	70	64	55	03	7
16	4	UNL	10			83	72	66	57	14	8
19	7	43	10			76	68	64	67	12	5
22	8	55	12			74	68	65	74	06	4

SUMMARY BY HOURS

HOUR L.S.T.	AVERAGES: SKY COVER (TENTHS)	AVERAGES: STATION PRESSURE (INCHES)	AVERAGES: TEMPERATURE AIR TEMP °F	AVERAGES: TEMPERATURE WET BULB °F	AVERAGES: TEMPERATURE DEW POINT °F	AVERAGES: REL HUMIDITY %	AVERAGES: WIND SPEED (MPH)	AVERAGES: WIND DIRECTION	RESULTANT WIND: DIRECTION	RESULTANT WIND: SPEED (MPH)
01	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

001794

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

JUL 1987 NEWARK, NJ 14734

DATE	A.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
01		T																	T	0.12	0.35	0.02	T		01
02	0.01	T	T	T	T	0.02	0.02	0.06	0.08	0.10	0.01		T	0.03	0.01			T	0.06	0.16	0.06	0.04	0.11	T	02
03	0.04	0.11																							03
04																									04
05																									05
06																									06
07								T	T																07
08			0.15	0.30	0.17	0.02	0.01	T	T														0.01	0.43	08
09																									09
10																									10
11													0.01	T											11
12																									12
13																									13
14												T	T	T	T	0.97	0.20	0.15	0.01	0.02	T				14
15																									15
16																									16
17																									17
18																									18
19															0.25	0.01	0.04								19
20												0.01	T												20
21																									21
22																									22
23																									23
24																	T			T	0.10				24
25																									25
26	0.09	T									T	0.29	0.01												26
27																									27
28																									28
29																									29
30																T									30
31		T	T																						31

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.16	0.31	0.43	0.59	0.77	0.85	0.97	1.00	1.03	1.17	1.25	1.32
ENDED: DATE	14	14	14	14	14	14	14	14	14	14	14	14
ENDED: TIME	1538	1527	1538	1537	1542	1554	1559	1620	1652	1659	1729	1750

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

VALIDATED BY:
DON GRISINGER

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AUG 1987
NEWARK, NJ
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BLDG. 51, RM 241

ISSN 0198-344X

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

INTERNATIONAL AIRPORT

LATITUDE 40° 42'N LONGITUDE 74° 10'W ELEVATION (GROUND) 7 FEET TIME ZONE EASTERN 14734

DATE 1	TEMPERATURE °F MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEPARTURE FROM NORMAL 5	AVERAGE DEW POINT 6	DEGREE DAYS BASE 65°F HEATING (SEASON BEGINS WITH JUL) 7A	COOLING (SEASON BEGINS WITH JAN) 7B	WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW 8	SNOW ICE PELLETS OR ICE ON GROUND AT 0700 INCHES 9	PRECIPITATION WATER EQUIVALENT (INCHES) 10	SNOW, ICE PELLETS (INCHES) 11	AVERAGE STATION PRESSURE IN INCHES ELEV. 30 FEET ABOVE M.S.L. 12	WIND (M.P.H.) RESULTANT DIR 13	RESULTANT SPEED 14	AVERAGE SPEED 15	PEAK GUST SPEED 16	PEAK GUST DIRECTION 17	FASTEST 1-MIN SPEED 18	FASTEST 1-MIN DIRECTION 19	SUNSHINE MINUTES 20	PERCENT OF TOTAL POSSIBLE 21	SKY COVER (TENTHS) SUNRISE TO SUNSET 22	MIDNIGHT TO MIDNIGHT 23
01	84	67	76	-1	60	0	11		0	0.00	0.0	29.960	13	2.7	8.0			13	03			4	4
02	80	71	76	-1	67	0	11		0	0.01	0.0	29.920	17	6.9	7.5			14	16			10	9
03	94	75	85	8	72	0	20	1	0	0.05	0.0	29.740	27	4.8	9.0			16	29			5	5
04	95	75	85	8	68	0	20		0	0.00	0.0	29.730	25	3.8	6.9			14	28			3	2
05	89	68	79	2	70	0	14	1 8	0	1.07	0.0	29.900	03	7.5	8.8			16	03			10	8
06	79	67	73	-4	63	0	8	1	0	0.14	0.0	30.020	07	4.8	7.7			14	01			9	[illegible]
07	82	69	76	-1	64	0	11		0	0.00	0.0	30.070	15	5.6	6.9			12	13			7	5
08	91	69	80	3	67	0	15	8	0	T	0.0	29.940	25	5.9	8.7			14	24			9	[illegible]
09	83	69	76	-1	63	0	11	1 3	0	1.21	0.0	29.860	06	4.4	8.3			16	02			10	9
10	84	67	76	-1	65	0	11	1 8	0	0.60	0.0	29.780	33	8.5	9.7			21	30			9	8
11	87	63	75	-1	59	0	10		0	0.00	0.0	29.970	36	5.8	8.6			16	31			4	3
12	83	65	74	-2	54	0	9		0	0.00	0.0	30.080	06	5.4	8.1			12	12			3	3
13	80	65	73	-3	59	0	9		0	0.00	0.0	30.170	11	4.2	6.1			9	15			2	3
14	82	64	73	-3	62	0	8		0	0.00	0.0	30.180	14	3.8	5.8			9	15			5	4
15	90	72	81	5	67	0	16		0	0.00	0.0	30.100	21	5.4	7.3	18	W	13	20			6	6
16	90	70	80	4	69	0	15		0	0.00	0.0	29.990	20	6.5	8.0	23	W	12	14			1	1
17	97*	77	87*	11	74	0	22	8	0	0.00	0.0	29.850	23	7.6	9.4	18	SW	15	24			3	3
18	94	78	86	11	64	0	21	8	0	0.00	0.0	29.870	32	8.6	10.2	23	NW	16	30			2	2
19	91	71	81	6	61	0	16		0	0.00	0.0	29.950	21	2.1	6.8	18	SW	12	17			6	4
20	88	71	80	5	55	0	15		0	0.00	0.0	30.040	33	9.4	10.2	23	NW	17	30			4	3
21	86	65	76	1	53	0	11		0	0.00	0.0	30.170	28	4.5	7.9	23	W	12	26			1	1
22	95	69	77	2	67	0	12	1 8	0	0.01	0.0	29.900	22	13.8	14.4	33	SW	23	25			10	9
23	78	62	70	-5	46	0	5		0	0.00	0.0	29.970	31	14.4	14.7	32	NW	20	29			5	4
24	77	58	68	-6	41	0	3		0	0.00	0.0	30.150	31	9.4	10.1	26	NW	17	31			2	2
25	77	55*	66	-8	46	0	1		0	0.00	0.0	30.210	27	5.3	6.5	23	W	12	25			8	7
26	82	60	71	-3	49	0	6		0	0.00	0.0	30.170	16	2.4	6.1	16	SE	10	16			9	9
27	71	60	66	-8	61	0	1	1	0	1.19	0.0	30.050	07	5.7	8.1	17	E	13	13			10	10
28	65	62	64*	-9	62	1	0	1 8	0	0.62	0.0	30.030	06	6.9	7.2	14	NE	10	03			10	10
29	81	62	72	-1	59	0	7	1	0	0.13	0.0	29.980	32	9.8	12.0	35	NW	21	31			8	8
30	82	57	70	-3	52	0	5		0	0.00	0.0	30.170	19	1.5	6.9	16	SE	12	15			1	1
31	79	59	69	-4	59	0	4	1 3	0	0.23	0.0	30.060	17	5.6	7.8	19	N	13	16			8	7
	SUM 2606	SUM 2062				TOTAL 1	TOTAL 327	NUMBER OF DAYS		TOTAL 5.36	TOTAL 0.0	30.000	FOR THE MONTH: 29	1.4	8.5			23	25	TOTAL	% FOR MONTH	SUM 134	SUM 170
	AVG 84.1	AVG 66.5	AVG 75.3	DEP -0.3	AVG 60.5	DEP 1	DEP 1	PRECIPITATION ≥ .01 INCH 11		DEP								DATE:	DATE: 22	POSSIBLE		AVG 5.9	AVG 5.5

NUMBER OF DAYS				SEASON TO DATE TOTAL	TOTAL
MAXIMUM TEMP ≥ 90°	MAXIMUM TEMP ≤ 32°	MINIMUM TEMP ≤ 32°	MINIMUM TEMP ≤ 0°	1	1195
8	2	0	0	DEP 1	DEP 248

SNOW, ICE PELLETS	
≥ 1.0 INCH	0
THUNDERSTORMS	2
HEAVY FOG	0
CLEAR 9	PARTLY CLOUDY 9

GREATEST IN 24 HOURS AND DATES		
PRECIPITATION	1.91	09-10
SNOW, ICE PELLETS	2.0	

GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE
0

CLOUDY 13

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT.
+ ALSO ON EARLIER DATE(S)
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. COLS 16 & 17: PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED. ONE OF TWO WIND SPEEDS IS GIVEN UNDER COLS 18 & 19: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES). ERRORS WILL BE CORRECTED IN SUBSEQUENT PUBLICATIONS.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER

Kenneth D. Wadleen
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

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NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

AUG 1987
NEWARK, NJ

001796

OBSERVATIONS AT 3-HOUR INTERVALS

AUG 1987 NEWARK, NJ 14734

HOUR (LST)	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
					AUG 1st						
01	8	55	9			74	65	60	62	02	4
04	2	UNL	15			71	60	52	51	01	5
07	3	UNL	20			70	60	53	55	02	9
10	6	100	15			79	67	59	51	10	6
13	9	35	12			79	68	61	54	16	8
16	6	45	15			81	71	66	60	16	6
19	0	UNL	15			77	68	63	62	18	10
22	5	UNL	15			74	68	65	74	20	7
					AUG 2nd						
01	8	55	20			73	68	65	76	22	6
04	7	UNL	15			71	67	65	81	20	3
07	10	100	12			74	70	67	79	12	5
10	10	50	15			75	70	68	79	19	6
13	10	80	12			79	71	66	65	14	9
16	10	85	10		RW	77	71	68	74	17	9
19	10	85	12			74	68	65	74	17	7
22	10	85	12			75	71	69	82	17	5
					AUG 3rd						
01	10	14	8			76	73	71	85	18	6
04	10	17	7		RW	75	74	73	94	18	9
07	10	12	4		RWF	76	74	73	91	18	5
10	8	120	7			81	78	76	85	23	10
13	8	35	10			91	78	72	54	30	10
16	5	UNL	12			94	78	71	47	34	10
19	0	UNL	15			88	75	69	53	30	12
22	0	UNL	15			83	74	69	63	32	5
					AUG 4th						
01	0	UNL	12			78	72	69	74	33	7
04	0	UNL	10			76	71	68	76	00	0
07	0	UNL	9			79	72	68	69	03	4
10	1	UNL	11			88	73	66	48	10	3
13	5	UNL	12			92	75	67	44	22	9
16	3	UNL	10			94	75	67	41	22	11
19	4	UNL	10			89	74	67	48	28	5
22	5	UNL	12			82	75	72	72	21	6
					AUG 5th						
01	4	UNL	10			79	75	73	82	22	4
04	4	UNL	7			79	74	72	79	04	4
07	8	UNL	9			80	72	68	67	03	14
10	10	120	9			84	74	69	61	04	7
13	10	37	10			86	73	66	51	03	9
16	10	32	7		R	76	73	72	88	02	10
19	10	7	2		RF	73	72	72	97	03	7
22	10	18	2	8	RF	73	72	71	94	05	8
					AUG 6th						
01	10	41	2	8	RF	68	67	67	97	04	6
04	10	43	9			68	65	63	84	07	8
07	10	18	10			69	66	64	84	06	6
10	10	15	9			70	66	64	81	02	11
13	5	UNL	12			78	69	64	62	05	5
16	10	31	10			78	69	64	62	03	7
19	8	50	20			74	65	60	62	16	9
22	10	50	20			73	66	61	66	14	5
					AUG 7th						
01	10	55	20			71	66	62	73	25	4
04	7	55	15			70	66	63	79	29	4
07	10	60	15			73	67	64	74	11	4
10	9	UNL	15			79	68	62	56	18	5
13	6	250	15			82	70	63	53	15	9
16	7	80	10			79	70	65	62	12	6
19	0	UNL	8			75	69	65	71	16	7
22	0	UNL	15			72	68	66	82	17	7
					AUG 8th						
01	1	UNL	10			70	68	67	90	20	5
04	4	UNL	7			69	67	66	90	22	4
07	1	UNL	6		H	73	70	68	84	22	7
10	10	UNL	7			80	73	70	72	24	10
13	10	UNL	7			87	75	70	57	23	9
16	8	UNL	8			89	75	68	50	26	8
19	10	120	7			85	74	69	59	27	4
22	10	120	8			82	69	62	51	01	7
					AUG 9th						
01	10	120	15			78	66	58	50	34	6
04	8	85	15			75	65	58	56	02	9
07	10	120	12			75	66	60	60	02	7
10	10	120	15			76	67	61	60	01	7
13	10	120	15			83	70	62	49	14	7
16	10	85	12			78	68	63	60	12	9
19	10	18	8			76	71	68	76	14	7
22	10	7	0	8	IRWF	70	69	69	97	10	10
					AUG 10th						
01	10	15	2		RWF	68	68	68	100	01	8
04	10	5	2		F	70	69	69	97	33	4
07	10	4	2		F	70	69	68	93	00	0
10	10	10	5		H	77	72	70	79	30	4
13	9	29	9			81	72	67	63	32	11
16	6	41	12			79	68	61	54	30	18
19	8	55	15			73	65	60	64	32	11
22	0	UNL	20			71	64	59	66	02	8
					AUG 11th						
01	0	UNL	25			66	61	58	76	36	8
04	0	UNL	25			64	60	57	78	01	8
07	0	UNL	25			67	61	57	70	36	6
10	1	UNL	20			78	65	57	49	05	6
13	7	UNL	15			84	68	58	41	24	7
16	7	UNL	15			87	71	62	43	33	13
19	7	UNL	15			79	67	60	52	33	6
22	8	UNL	15			77	68	62	60	02	4
					AUG 12th						
01	4	UNL	15			72	62	54	53	06	5
04	6	UNL	15			66	58	51	59	03	9
07	7	UNL	15			67	59	52	53	02	10
10	6	UNL	15			76	63	53	45	02	10
13	3	UNL	15			82	63	48	31	04	6
16	1	UNL	20			80	66	57	45	13	6
19	0	UNL	20			73	63	56	55	14	7
22	0	UNL	20			71	63	57	61	15	5
					AUG 13th						
01	0	UNL	20			70	63	58	66	12	4
04	0	UNL	20			69	62	57	66	05	3
07	1	UNL	10			69	64	60	73	02	6
10	4	UNL	10			78	66	58	50	05	4
13	2	UNL	15			79	67	60	52	16	7
16	3	UNL	15			77	67	60	56	14	5
19	7	UNL	15			71	64	60	68	14	6
22	8	UNL	15			68	64	61	78	12	4
					AUG 14th						
01	2	UNL	15			67	63	60	78	12	3
04	1	UNL	11			67	63	61	81	03	3
07	4	UNL	7			67	63	61	81	01	6
10	3	UNL	8			76	65	58	54	14	4
13	7	UNL	15			81	66	57	44	12	3
16	8	UNL	15			82	70	64	55	14	7
19	4	UNL	15			75	70	67	76	16	7
22	3	UNL	12			72	69	68	87	18	5
					AUG 15th						
01	10	16	8			72	69	68	97	21	4
04	10	17	8			72	69	67	94	24	8
07	10	50	10			74	70	67	79	26	4
10	8	70	9			82	72	66	59	23	6
13	4	UNL	10			87	71	63	45	26	9
16	4	UNL	12			86	75	70	59	15	7
19	3	UNL	15			81	72	68	65	16	8
22	4	UNL	15			77	71	67	71	13	11
					AUG 16th						
01	1	UNL	15			73	69	66	79	24	8
04	0	UNL	15			70	68	66	87	24	5
07	0	UNL	12			74	70	67	79	23	7
10	0	UNL	15			84	73	67	57	21	7
13	2	UNL	15			88	73	66	48	17	9
16	3	UNL	20			90	76	70	52	13	7
19	0	UNL	20			84	77	74	72	14	6
22	0	UNL	20			81	76	74	79	18	5
					AUG 17th						
01	0	UNL	11			78	75	74	88	23	6
04	3	UNL	7			77	75	74	91	23	6
07	3	UNL	5		H	80	76	74	82	25	7
10	0	UNL	8			90	79	74	59	21	6
13	5	UNL	10			94	78	72	49	25	10
16	4	UNL	8			95	79	72	48	25	6
19	2	UNL	8			88	81	78	72	17	8
22	0	UNL	9			85	79	77	77	19	6
					AUG 18th						
01	3	UNL	8			82	77	75	79	23	5
04	4	UNL	6		H	80	76	74	82	26	6
07	5	UNL	8			82	73	68	63	34	10
10	1	UNL	10			88	74	68	52	34	11
13	2	UNL	10			92	73	64	40	30	14
16	2	UNL	15			92	69	56	30	32	12
19	1	UNL	20			85	68	58	40	31	10
22	0	UNL	20			80	65	56	44	35	6

WEATHER CODES

*	TORNADO	ZL	FREEZING DRIZZLE	IPW	ICE PELLET SHOWERS	BN	BLOWING SAND
T	THUNDERSTORM	S	SNOW	A	HAIL	BS	BLOWING SNOW
Q	SQUALL	SW	SNOW SHOWERS	F	FOG	BY	BLOWING SPRAY
R	RAIN	SG	SNOW GRAINS	IF	ICE FOG	K	SMOKE
RW	RAIN SHOWERS	SP	SNOW PELLETS	GF	GROUND FOG	H	HAZE
ZR	FREEZING RAIN	IC	ICE CRYSTALS	BD	BLOWING DUST	D	DUST
L	DRIZZLE	IP	ICE PELLETS				

CEILING: UNL INDICATES UNLIMITED
WIND DIRECTION: DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS, INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. AN ENTRY OF 00 INDICATES CALM
SPEED: THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH=KNOTS X 1.15).

001797

OBSERVATIONS AT 3-HOUR INTERVALS

AUG 1987
NEWARK, NJ

14734

HOUR L.S.T.	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
					AUG 19th						
01	0	UNL	20			76	65	57	52	01	6
04	3	UNL	20			72	64	58	62	26	4
07	8	UNL	12			75	65	58	56	34	3
10	8	UNL	9			83	68	59	44	16	4
13	8	UNL	12			89	68	56	33	25	9
16	3	UNL	12			89	71	62	41	23	7
19	0	UNL	15			82	73	68	63	17	10
22	5	UNL	15			78	71	67	69	26	4
					AUG 20th						
01	4	UNL	15			75	67	63	66	02	4
04	0	UNL	15			72	66	62	71	34	4
07	2	UNL	10			74	66	61	64	35	8
10	8	UNL	15			83	65	53	36	35	12
13	5	UNL	15			88	67	54	31	29	12
16	1	UNL	20			87	65	50	28	31	12
19	0	UNL	25			79	62	50	36	32	10
22	0	UNL	20			75	61	50	42	33	8
					AUG 21st						
01	0	UNL	20			70	60	52	53	32	6
04	0	UNL	20			65	57	51	61	31	7
07	0	UNL	12			70	60	52	53	02	9
10	0	UNL	15			80	63	51	37	34	9
13	2	UNL	15			84	64	49	30	27	6
16	0	UNL	15			85	66	53	33	25	9
19	1	UNL	15			80	64	52	38	24	9
22	2	UNL	15			76	65	57	52	21	7
					AUG 22nd						
01	0	UNL	15			71	64	59	66	23	11
04	7	120	12			69	65	62	79	21	7
07	10	120	12			75	69	65	71	19	9
10	10	90	6		RWF	73	71	70	90	21	16
13	8	95	7			80	73	69	69	25	20
16	10	32	8			83	74	69	63	23	14
19	10	49	7			81	73	69	67	23	14
22	10	39	7			78	73	71	79	23	13
					AUG 23rd						
01	9	45	12			76	66	60	58	32	16
04	6	150	15			69	58	49	49	31	14
07	1	UNL	25			67	58	50	55	32	13
10	7	35	25			74	60	49	41	30	16
13	7	55	25			78	60	45	31	29	17
16	4	UNL	25			77	59	43	30	31	14
19	2	UNL	25			71	56	42	35	32	13
22	0	UNL	20			66	52	38	36	34	5
					AUG 24th						
01	0	UNL	20			60	51	42	52	29	5
04	2	UNL	20			59	51	43	56	30	6
07	0	UNL	25			62	53	44	52	32	13
10	1	UNL	30			71	55	39	31	30	14
13	3	UNL	30			75	56	37	25	27	11
16	3	UNL	30			76	55	35	23	26	9
19	2	UNL	25			71	56	42	35	28	7
22	2	UNL	20			64	55	46	52	27	5
					AUG 25th						
01	0	UNL	20			61	51	41	48	00	0
04	0	UNL	20			59	51	43	56	00	0
07	8	UNL	12			64	54	44	48	33	3
10	8	210	15			70	56	43	38	29	5
13	10	210	20			70	57	45	41	26	8
16	4	UNL	20			76	59	44	32	27	7
19	9	UNL	20			71	59	49	46	25	8
22	8	UNL	20			66	57	50	57	27	4
					AUG 26th						
01	6	UNL	20			62	54	46	56	24	3
04	10	UNL	20			62	54	47	58	01	4
07	6	UNL	12			65	56	48	54	36	4
10	10	UNL	12			77	60	47	35	07	5
13	9	270	15			80	61	46	30	17	9
16	10	200	15			78	62	51	39	16	7
19	10	85	12			74	61	51	45	19	8
22	10	75	12			72	62	54	53	21	7
					AUG 27th						
01	10	70	10			71	64	59	66	19	5
04	10	50	10		RW	69	65	62	79	14	5
07	10	25	2	8	RWF	60	59	59	97	11	7
10	10	23	9			65	61	58	78	07	6
13	10	12	4		RF	64	63	62	93	05	6
16	10	7	1	8	LF	63	62	62	97	03	3
19	10	9	3		LF	63	62	62	97	03	[illegible]
22	10	19	9		RW	64	62	59	84	05	5
					AUG 28th						
01	10	10	5		H	64	61	59	84	08	6
04	10	9	5		F	64	62	60	87	08	7
07	10	9	5		RF	63	62	61	93	06	6
10	10	6	4		RWF	64	63	62	93	07	7
13	10	4	1		RLF	64	64	64	100	05	7
16	10	7	2		RF	64	63	63	97	06	7
19	10	5	1	8	LF	63	62	62	97	05	6
22	10	5	1	8	LF	62	62	62	100	03	5
					AUG 29th						
01	10	5	2		LF	63	62	62	97	05	7
04	10	2	1	8	LF	63	63	63	100	03	4
07	10	7	7			63	62	61	93	01	6
10	7	16	9			74	67	63	69	31	10
13	8	40	20			77	65	58	52	31	17
16	5	UNL	20			76	65	57	52	30	16
19	5	UNL	20			70	61	54	57	31	15
22	9	75	20			68	61	55	63	02	10
					AUG 30th						
01	4	UNL	20			63	59	55	75	34	6
04	0	UNL	20			58	56	54	87	33	[illegible]
07	0	UNL	20			63	57	53	70	35	[illegible]
10	0	UNL	20			74	60	50	43	36	[illegible]
13	1	UNL	20			80	62	49	33	13	[illegible]
16	1	UNL	20			80	63	50	35	16	[illegible]
19	0	UNL	20			73	61	53	51	17	[illegible]
22	0	UNL	20			66	60	55	68	21	[illegible]
					AUG 31st						
01	0	UNL	20			62	59	54	75	21	4
04	0	UNL	20			60	57	54	81	19	3
07	3	UNL	12			64	59	56	75	14	4
10	10	UNL	12			74	63	56	54	17	7
13	10	UNL	15			78	67	60	54	15	9
16	4	UNL	20			76	67	62	62	15	9
19	10	70	15			72	66	63	73	15	6
22	8	55	15		RW	70	66	63	79	20	7

SUMMARY BY HOURS

HOUR L.S.T.	AVERAGES: SKY COVER (TENTHS)	AVERAGES: STATION PRESSURE (INCHES)	AVERAGES: TEMPERATURE AIR TEMP °F	AVERAGES: TEMPERATURE WET BULB °F	AVERAGES: TEMPERATURE DEW POINT °F	AVERAGES: REL HUMIDITY %	AVERAGES: WIND SPEED (MPH)	RESULTANT WIND: DIRECTION	RESULTANT WIND: SPEED (MPH)
01	5	30.000	71	65	61	72	6.6	30	1.7
04	5	30.000	69	64	60	75	6.2	32	1.7
07	5	30.020	70	64	60	72	7.6	36	3.4
10	6	30.020	78	67	60	58	9.9	32	2.0
13	7	29.990	82	68	59	49	10.8	25	3.9
16	6	29.970	81	68	61	52	10.6	26	2.3
19	5	29.970	76	67	61	62	9.6	23	2.6
22	5	30.000	73	66	62	69	7.5	20	1.3

001798

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES) AUG 1987 NEWARK, NJ 14734

DATE	A.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
01																									01
02														T	T	T	T	T	0.01		T			T	02
03				0.04	T		T	0.01	T				T	T											03
04																									04
05														T	0.08	0.02	0.01	0.05	0.03	0.02	0.02	0.01	0.30	0.53	05
06	0.08	0.06	T	T																					06
07																									07
08																		T							08
09										T	T							T	T		0.09	0.91	0.01	0.20	09
10	0.37	0.19	0.04																						10
11																									11
12																									12
13																									13
14																									14
15																									15
16																									16
17																									17
18																									18
19																									19
20																									20
21																									21
22								T	T	0.01	T														22
23																									23
24																									24
25																									25
26																									26
27		T	T	T	0.37	0.25	0.24	0.03	T		T	0.19	0.04	0.01	T	0.02	0.02	0.01	T	0.01	T	T	T	T	27
28		T	T		0.16	0.14	0.04	T	T	T	T	0.02	0.02	0.15	0.01	0.03	0.02	T	T	0.01	0.01	0.01	T	T	28
29	T	T	T	0.05	0.08	T																			29
30																									30
31																						T	0.01	0.22	31

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.27	0.51	0.68	0.70	0.75	0.80	0.91	0.92	0.93	1.00	1.00	1.12
ENDED: DATE	09	09	09	09	09	09	09	09	09	09	09	09
ENDED: TIME	2137	2141	2141	2145	2155	2200	2159	2200	2227	2159	2159	2359

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

VALIDATED BY:
DICK WOLF

SUBSCRIPTION PRICE AND ORDERING INFORMATION AVAILABLE FROM:
THE NATIONAL CLIMATIC DATA CENTER, FEDERAL BUILDING
ASHEVILLE, NORTH CAROLINA 28801
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U.S. MAIL

FIRST CLASS

001799

SEP 1987
NEWARK, NJ
NAT'L WEA SER OFC
BLDG. 51, RM 241

ISSN 0198-344X

LOCAL CLIMATOLOGICAL DATA

Monthly Summary

INTERNATIONAL AIRPORT

LATITUDE 40° 42'N LONGITUDE 74° 10'W ELEVATION (GROUND) 7 FEET TIME ZONE EASTERN 14734

DATE 1	TEMPERATURE °F MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEPARTURE FROM NORMAL 5	AVERAGE DEW POINT 6	DEGREE DAYS BASE 65°F HEATING (SEASON BEGINS WITH JUL) 7A	COOLING (SEASON BEGINS WITH JAN) 7B	WEATHER TYPES 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW 8	SNOW ICE PELLETS OR ICE ON GROUND AT 0700 INCHES 9	PRECIPITATION WATER EQUIVALENT (INCHES) 10	SNOW, ICE PELLETS (INCHES) 11	AVERAGE STATION PRESSURE IN INCHES ELEV. 30 FEET ABOVE M.S.L. 12	WIND (M.P.H.) RESULTANT DIR 13	RESULTANT SPEED 14	AVERAGE SPEED 15	PEAK GUST SPEED 16	PEAK GUST DIRECTION 17	FASTEST 1-MIN SPEED 18	FASTEST 1-MIN DIRECTION 19	SUNSHINE MINUTES 20	PERCENT OF TOTAL POSSIBLE 21	SKY COVER (TENTHS) SUNRISE TO SUNSET 22	MIDNIGHT TO MIDNIGHT 23
01	77	60	69	-4	54	0	4	1 3	0	0.08	0.0	29.940	30	7.8	8.6	26	NW	17	29			6	6
02	80	55	68	-4	51	0	3		0	T	0.0	30.020	24	5.4	9.6	28	SW	16	23			4	5
03	78	60	69	-3	48	0	4		0	T	0.0	30.180	36	7.8	8.9	23	NE	14	02				2
04	77	58	68	-4	50	0	3		0	0.00	0.0	30.330	06	2.5	7.0	16	N	12	03			3	4
05	75	59	67	-4	54	0	2		0	0.00	0.0	30.310	12	3.3	6.1	17	S	10	14			10	9
06	76	65	71	0	62	0	6	1	0	0.09	0.0	30.180	11	2.8	4.7	12	NE	8	02			10	10
07	83	69	76	5	70	0	11	1	0	0.28	0.0	30.050	16	4.3	5.3	14	S	9	19			10	10
08	77	71	74	3	71	0	9	1	0	0.55	0.0	29.900	11	5.7	7.2	21	SE	14	12			10	10
09	86	71	79	9	68	0	14	1	0	T	0.0	29.790	28	6.9	8.8	23	W	14	30			5	5
10	87*	70	79*	9	60	0	14	8	0	0.00	0.0	30.000	33	4.6	6.4	17	W	9	29			4	3
11	82	68	75	5	63	0	10	8	0	0.00	0.0	30.110	10	6.6	9.1	20	SE	14	11			6	8
12	71	68	70	1	64	0	5	1	0	0.59	0.0	30.120	10	9.4	9.6	31	E	15	10			10	10
13	76	70	73	4	71	0	8	1	0	0.65	0.0	29.910	15	5.6	8.6	22	SE	14	13			10	9
14	83	65	74	5	58	0	9	1	0	0.00	0.0	29.960	33	7.8	8.4	29	NW	16	28			3	3
15	81	58	70	1	55	0	5		0	0.03	0.0	30.040	22	3.2	6.2	17	SW	13	27			5	5
16	83	64	74	6	61	0	9	8	0	T	0.0	29.950	19	1.8	6.0	16	S	10	16			6	7
17	77	68	73	5	67	0	8	1 3 8	0	0.81	0.0	29.800	22	2.0	6.0	16	W	12	06			10	10
18	71	57	64	-4	61	1	0	1	0	0.45	0.0	29.740	05	9.6	10.3	25	N	16	03			10	10
19	62	56	59	-8	54	5	0		0	0.03	0.0	29.940	03	10.6	10.7	23	N	15	04			10	10
20	65	57	61	-6	54	4	0		0	0.01	0.0	29.910	01	9.4	9.4	18	N	14	01			10	9
21	74	56	65	-2	56	0	0	1	0	0.00	0.0	29.920	27	4.1	6.4	14	W	12	27			6	6
22	78	57	68	2	56	0	3	1 3 8	0	0.12	0.0	29.900	23	1.9	5.4	23	NE	9	22			5	6
23	74	54	64	-2	53	1	0		0	0.00	0.0	29.800	27	6.5	8.3	25	NW	14	27			3	2
24	77	56	67	2	53	0	2	8	0	0.10	0.0	29.770	26	7.9	10.0	24	SW	16	31			4	4
25	66	50	58*	-7	40	7	0		0	0.00	0.0	29.915	30	9.3	9.6	36	NW	18	31			3	1
26	73	46*	60	-5	42	5	0		0	0.00	0.0	30.050	25	8.9	9.5	28	W	16	25			0	2
27	74	53	64	0	51	1	0	8	0	0.00	0.0	30.220	16	3.3	5.9	14	SE	10	17			0	0
28	84	58	71	7	59	0	6	1 8	0	0.00	0.0	30.230	22	6.3	7.0	17	SW	10	22			2	2
29	81	61	71	7	61	0	6	1 8	0	0.00	0.0	30.030	18	6.7	8.0	21	SE	12	15			1	3
30	73	60	67	4	60	0	2	1 8	0	0.08	0.0	29.600	24	7.0	8.6	21	NW	15	29			9	8
	SUM 2301	SUM 1820				TOTAL 25	TOTAL 143	NUMBER OF DAYS		TOTAL 3.87	TOTAL 0.0	FOR THE MONTH: 29.990	29	0.9	7.9	36	NW	18	31	TOTAL	% POSSIBLE FOR MONTH	SUM 177	SUM 179
	AVG 76.7	AVG 60.7	AVG 68.7	DEP 0.5	AVG 57.5	DEP -11	DEP 11	PRECIPITATION ≥ .01 INCH 14		DEP 0.21						DATE: 25		DATE: 25				AVG. 5.9	AVG. 6.0

NUMBER OF DAYS				SEASON TO DATE	
MAXIMUM TEMP		MINIMUM TEMP		TOTAL	TOTAL
≥ 90°	≤ 32°	≤ 32°	≤ 0°	26	1338
0	0	0	0	DEP -10	DEP 259

SNOW, ICE PELLETS	
≥ 1.0 INCH	0
THUNDERSTORMS	3
HEAVY FOG	0
CLEAR 9 PARTLY CLOUDY 9 CLOUDY 12	

GREATEST IN 24 HOURS AND DATES		
PRECIPITATION	SNOW, ICE PELLETS	
1.16	17-18	0.0

GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE
0

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON EARLIER DATE(S).
HEAVY FOG: VISIBILITY 1/4 MILE OR LESS.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

DATA IN COLS 6 AND 12-15 ARE BASED ON 21 OR MORE OBSERVATIONS AT HOURLY INTERVALS. RESULTANT WIND IS THE VECTOR SUM OF WIND SPEEDS AND DIRECTIONS DIVIDED BY THE NUMBER OF OBSERVATIONS. COLS 16 & 17: PEAK GUST - HIGHEST INSTANTANEOUS WIND SPEED. ONE OF TWO WIND SPEEDS IS GIVEN UNDER COLS 18 & 19: FASTEST MILE - HIGHEST RECORDED SPEED FOR WHICH A MILE OF WIND PASSES STATION (DIRECTION IN COMPASS POINTS). FASTEST OBSERVED ONE MINUTE WIND - HIGHEST ONE MINUTE SPEED (DIRECTION IN TENS OF DEGREES). ERRORS WILL BE CORRECTED IN SUBSEQUENT PUBLICATIONS.

I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER

Kenneth D. Wadden
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE NORTH CAROLINA

SEP 1987
NEWARK, NJ

001800

OBSERVATIONS AT 3-HOUR INTERVALS

SEP 1987 NEWARK, NJ 14734

HOUR L.S.T.	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
					SEP 1st						
01	10	39	6		RWF	65	63	62	90	34	9
04	8	300	10			63	62	61	93	26	4
07	4	UNL	7			63	61	59	87	29	5
10	4	UNL	12			73	62	55	53	33	6
13	9	39	15			74	62	53	48	30	12
16	8	46	15			74	60	50	43	30	12
19	2	UNL	20			66	56	47	51	32	7
22	0	UNL	20			63	55	48	58	29	4
					SEP 2nd						
01	2	UNL	20			59	55	51	75	21	4
04	3	UNL	20			55	53	51	87	25	4
07	0	UNL	10			59	54	50	72	23	6
10	0	UNL	15			73	60	49	43	22	12
13	7	43	15			79	62	49	35	22	12
16	9	75	15			78	61	48	35	23	12
19	10	85	10			70	60	52	53	01	10
22	10	85	12		RW	69	60	54	59	01	5
					SEP 3rd						
01	10	85	12			65	59	55	70	34	5
04	7	85	15			63	59	55	75	02	5
07	2	UNL	15			61	56	52	72	02	12
10	1	UNL	15			69	57	46	44	02	10
13	2	UNL	15			74	58	44	34	04	5
16	0	UNL	20			76	58	42	30	33	8
19	0	UNL	20			70	56	44	39	28	4
22	1	UNL	20			66	56	47	51	34	8
					SEP 4th						
01	0	UNL	20			61	55	50	67	34	6
04	0	UNL	20			59	54	50	72	02	7
07	1	UNL	15			60	54	48	65	01	10
10	1	UNL	15			70	58	49	47	01	6
13	2	UNL	15			76	60	47	36	10	4
16	5	UNL	15			74	60	50	43	14	7
19	7	UNL	15			68	60	53	59	15	6
22	10	UNL	15			65	59	55	70	17	3
					SEP 5th						
01	7	UNL	15			62	58	54	75	31	3
04	9	UNL	15			60	57	55	84	02	5
07	10	UNL	9			61	57	54	78	03	6
10	10	UNL	15			72	61	53	51	10	7
13	10	120	15			74	61	52	46	15	7
16	10	250	15			72	61	52	50	17	5
19	10	250	15			67	61	56	68	15	7
22	10	250	15			66	60	56	70	15	4
					SEP 6th						
01	10	140	15			66	61	57	73	15	5
04	10	120	15		R	66	62	59	78	24	4
07	10	85	10		R	65	62	59	81	02	4
10	10	70	10			71	64	60	68	07	5
13	10	60	10			75	65	59	58	14	5
16	10	37	7		R	70	66	63	79	15	4
19	10	49	8			69	68	67	93	10	4
22	10	41	10			70	68	67	90	12	4
					SEP 7th						
01	10	30	3		RF	70	69	69	97	14	4
04	10	27	8			70	69	69	97	16	5
07	10	19	8			71	70	69	93	17	5
10	10	26	12			76	73	71	85	20	6
13	10	26	12			83	75	71	67	23	7
16	10	37	12			78	73	70	77	09	5
19	10	37	12			76	71	68	76	17	5
22	9	120	15			73	69	67	82	12	3
					SEP 8th						
01	7	120	15			71	70	69	93	08	3
04	10	5	5		RWF	71	70	70	97	36	4
07	10	50	5		F	72	71	70	94	04	5
10	10	28	8			76	73	72	88	10	6
13	10	8	1	4	RWF	73	71	70	90	11	5
16	10	6	5		F	73	72	71	94	12	8
19	10	4	1	8	RWF	73	73	73	100	10	5
22	10	7	4		LF	74	73	73	97	15	6
					SEP 9th						
01	10	11	7			74	73	73	97	16	5
04	6	21	6		F	74	73	73	97	23	5
07	1	UNL	12			73	70	69	87	25	9
10	8	24	15			81	73	69	67	25	10
13	10	28	15			80	71	67	65	30	12
16	5	UNL	15			85	72	65	51	30	8
19	0	UNL	15			79	70	65	62	33	5
22	0	UNL	15			75	69	65	71	22	4
					SEP 10th						
01	0	UNL	7			72	67	64	76	31	6
04	4	UNL	7			70	65	62	76	33	6
07	8	UNL	5		H	71	65	62	73	36	6
10	3	UNL	10			81	67	58	46	36	7
13	2	UNL	10			86	68	57	37	03	5
16	7	140	10			84	68	58	41	27	6
19	4	UNL	12			79	67	60	52	33	5
22	4	UNL	12			77	66	59	54	04	4
					SEP 11th						
01	2	UNL	9			72	65	61	69	01	5
04	0	UNL	8			69	64	61	76	01	4
07	0	UNL	6		H	69	64	60	73	02	6
10	5	UNL	3		H	78	69	64	62	07	4
13	9	UNL	9			82	71	65	57	13	10
16	10	55	8			76	70	66	71	11	11
19	10	15	10			71	67	65	81	11	10
22	10	15	12			69	65	63	81	12	10
					SEP 12th						
01	10	26	12		R	69	65	62	79	10	10
04	10	14	11			68	65	63	84	09	5
07	10	13	10			68	65	63	84	09	7
10	10	18	12			70	65	62	76	09	12
13	10	15	10			70	66	63	79	11	12
16	10	14	10			70	66	64	81	10	5
19	10	10	4		RF	68	67	66	93	11	8
22	10	7	4		RF	69	68	67	93	11	8
					SEP 13th						
01	10	8	7		R	70	69	68	93	13	8
04	10	7	6		RF	70	69	69	97	12	6
07	10	6	3		RF	71	70	70	97	13	10
10	10	7	4		RF	73	72	72	97	15	8
13	10	9	4		RF	74	73	73	97	18	9
16	10	17	10			76	74	73	91	20	7
19	10	120	7			75	73	72	90	19	5
22	9	12	5		F	73	72	72	97	01	6
					SEP 14th						
01	10	6	7			70	69	68	93	01	5
04	8	250	6		F	69	68	67	93	01	3
07	4	UNL	5		F	69	67	66	90	34	4
10	2	UNL	12			78	65	57	49	34	10
13	2	UNL	15			83	66	54	37	30	14
16	3	UNL	20			82	64	51	34	34	12
19	0	UNL	20			74	61	52	46	34	6
22	0	UNL	20			69	59	51	53	35	5
					SEP 15th						
01	0	UNL	20			63	56	50	63	34	4
04	0	UNL	15			60	56	53	78	23	3
07	0	UNL	9			63	58	54	73	00	0
10	3	UNL	9			73	59	48	41	11	4
13	9	UNL	15			79	62	50	36	22	6
16	8	UNL	15			76	65	57	52	16	9
19	10	85	15		RW	73	65	60	64	19	7
22	10	85	15		RW	72	66	63	73	24	8
					SEP 16th						
01	10	41	12			67	64	62	84	05	3
04	3	UNL	12			66	62	59	78	05	4
07	3	UNL	12			66	60	56	70	01	5
10	0	UNL	12			74	63	56	54	21	3
13	7	UNL	12			81	67	59	47	23	8
16	9	UNL	8			81	69	62	53	18	3
19	10	250	8			77	69	65	67	19	5
22	10	85	7		RW	75	70	68	79	20	7
					SEP 17th						
01	10	70	3		RWF	71	70	69	93	26	5
04	10	70	3		RF	71	69	68	90	26	5
07	10	85	2		F	72	69	68	87	30	4
10	10	80	3		RF	71	68	66	84	00	0
13	10	110	4		H	73	69	66	79	21	4
16	8	18	3		H	77	71	67	71	18	5
19	7	300	4		H	72	69	67	84	12	5
22	10	20	5		RWF	68	67	66	93	03	4
					SEP 18th						
01	10	7	4		RF	68	67	67	97	04	4
04	10	11	4		RWF	68	67	66	93	09	4
07	10	26	4		F	69	67	66	90	08	4
10	10	10	2		RF	66	65	65	97	06	11
13	10	10	2		RF	62	61	60	93	06	10
16	10	11	10		R	62	60	58	87	07	11
19	10	9	6		LF	58	56	55	90	03	13
22	10	12	10		L	58	56	55	90	02	12

WEATHER CODES

*	TORNADO	ZL	FREEZING DRIZZLE	IPW	ICE PELLET SHOWERS	BN	BLOWING SAND
T	THUNDERSTORM	S	SNOW	A	HAIL	BS	BLOWING SNOW
Q	SQUALL	SW	SNOW SHOWERS	F	FOG	BY	BLOWING SPRAY
R	RAIN	SG	SNOW GRAINS	IF	ICE FOG	K	SMOKE
RW	RAIN SHOWERS	SP	SNOW PELLETS	GF	GROUND FOG	H	HAZE
ZR	FREEZING RAIN	IC	ICE CRYSTALS	BD	BLOWING DUST	D	DUST
L	DRIZZLE	IP	ICE PELLETS				

CEILING: UNL INDICATES UNLIMITED
WIND DIRECTION: DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS, INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. AN ENTRY OF 00 INDICATES CALM
SPEED: THE OBSERVED AVERAGE ONE-MINUTE VALUE, EXPRESSED IN KNOTS (MPH=KNOTS X 1.151).

001801

OBSERVATIONS AT 3-HOUR INTERVALS

SEP 1987 NEWARK, NJ 14734

HOUR L.S.T.	SKY COVER (TENTHS)	CEILING IN HUNDREDS OF FEET	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW POINT °F	REL HUMIDITY %	WIND DIRECTION	WIND SPEED (KNOTS)
					SEP 19th						
01	10	14	15			58	55	52	81	04	10
04	10	14	5		RL	57	55	53	87	03	10
07	10	14	10			57	55	54	90	02	11
10	10	14	12			59	56	54	84	04	9
13	10	18	9		L	61	57	54	78	03	8
16	10	17	10			62	58	55	78	04	8
19	10	18	15			61	57	54	78	04	10
22	10	18	15			60	56	53	78	03	8
					SEP 20th						
01	10	17	12			58	55	53	84	01	8
04	10	14	10		R	57	56	55	93	01	8
07	10	13	15			58	56	54	87	02	12
10	10	13	12			60	57	54	81	01	9
13	10	18	12			64	58	54	70	02	9
16	10	21	15			65	59	54	68	02	9
19	10	25	15			63	59	55	75	01	8
22	10	28	15			62	58	54	75	02	8
					SEP 21st						
01	0	UNL	20			58	56	54	87	33	5
04	10	41	20			59	56	54	84	32	4
07	10	37	15			60	57	54	81	33	5
10	10	25	15			65	59	54	68	29	3
13	10	28	12			69	61	56	63	27	9
16	4	UNL	8			73	62	55	53	26	8
19	9	UNL	9			66	62	59	78	14	5
22	9	UNL	9			63	61	60	90	20	4
					SEP 22nd						
01	10	85	9		RW	64	61	58	81	00	0
04	10	120	8			62	60	58	87	23	4
07	0	UNL	5		FH	62	59	57	84	29	4
10	4	UNL	10			72	61	53	51	09	4
13	7	100	10			76	62	52	43	23	6
16	9	39	9		RW	71	60	51	49	02	8
19	10	85	10		RW	62	60	59	90	15	4
22	5	UNL	10			59	58	57	93	27	5
					SEP 23rd						
01	0	UNL	10			56	55	54	93	27	3
04	0	UNL	8			54	54	53	96	30	4
07	0	UNL	7			58	55	53	84	01	5
10	0	UNL	8			67	59	52	59	31	8
13	4	UNL	15			73	60	51	46	27	12
16	4	UNL	15			72	61	52	50	26	9
19	3	UNL	15			66	58	52	61	23	9
22	0	UNL	15			62	57	53	73	22	6
					SEP 24th						
01	0	UNL	11			59	56	53	81	23	8
04	0	UNL	8			58	55	52	81	24	9
07	0	UNL	7			59	55	52	78	23	8
10	0	UNL	12			70	61	54	57	25	9
13	6	35	12			77	64	56	48	26	11
16	5	UNL	12			76	64	55	48	25	13
19	10	110	15			64	61	59	84	34	5
22	10	50	20			61	55	49	65	33	6
					SEP 25th						
01	0	UNL	20			56	50	43	62	32	6
04	0	UNL	25			50	46	42	74	29	4
07	0	UNL	25			53	48	43	69	29	11
10	1	UNL	25			62	52	42	48	29	10
13	4	UNL	25			65	52	40	40	30	11
16	3	UNL	25			63	50	35	35	31	16
19	0	UNL	25			58	48	36	44	31	6
22	0	UNL	25			55	47	37	51	27	4
					SEP 26th						
01	0	UNL	25			49	45	41	74	23	5
04	0	UNL	25			47	44	41	80	22	4
07	0	UNL	15			48	45	41	77	21	5
10	0	UNL	20			65	53	41	42	23	10
13	0	UNL	20			71	55	41	34	26	13
16	0	UNL	20			72	56	41	33	24	13
19	6	75	20			66	54	43	43	24	9
22	8	85	20			62	53	44	52	28	7
					SEP 27th						
01	1	UNL	20			58	52	46	65	24	5
04	0	UNL	20			54	50	47	77	21	4
07	0	UNL	15			57	52	48	72	05	2
10	0	UNL	15			67	57	46	51	03	7
13	0	UNL	15			74	60	49	41	11	8
16	0	UNL	20			71	60	51	49	13	7
19	0	UNL	15			64	59	56	75	16	6
22	0	UNL	15			63	60	58	84	31	3
					SEP 28th						
01	1	UNL	5		H	60	58	57	90	20	4
04	9	120	3		FH	60	59	58	93	19	4
07	1	UNL	2	5	FH	59	58	58	97	23	5
10	7	120	5		H	72	64	58	62	23	7
13	0	UNL	9			80	68	60	51	22	9
16	0	UNL	9			83	69	60	46	24	6
19	0	UNL	6		H	76	67	61	60	19	5
22	0	UNL	9			70	65	61	73	20	6
					SEP 29th						
01	0	UNL	6		H	65	63	61	87	23	6
04	0	UNL	4		F	62	61	60	93	21	4
07	0	UNL	2		F	62	61	60	93	23	5
10	0	UNL	5		H	75	66	61	62	23	8
13	2	UNL	7			81	68	61	51	16	7
16	3	UNL	9			78	67	60	54	15	10
19	7	UNL	12			69	63	59	71	17	8
22	8	140	12			67	63	61	81	23	4
					SEP 30th						
01	9	12	10			67	65	63	87	19	9
04	10	50	8			63	62	61	93	21	5
07	10	50	7			65	62	60	84	16	6
10	10	8	3	F		65	64	64	97	21	7
13	10	15	3	F		67	65	64	90	23	7
16	9	70	12			71	64	59	66	30	7
19	10	85	12			68	62	58	71	25	7
22	3	UNL	15			63	57	53	73	33	13

SUMMARY BY HOURS

HOUR L.S.T.	AVERAGES: SKY COVER (TENTHS)	AVERAGES: STATION PRESSURE (INCHES)	AVERAGES: TEMPERATURE AIR TEMP °F	AVERAGES: TEMPERATURE WET BULB °F	AVERAGES: TEMPERATURE DEW POINT °F	AVERAGES: REL HUMIDITY %	AVERAGES: WIND SPEED (MPH)	RESULTANT WIND: DIRECTION	RESULTANT WIND: SPEED (MPH)
01	6	29.990	64	61	58	82	6.2	33	0.8
04	6	29.980	63	60	58	86	5.6	30	1.1
07	5	30.010	63	60	58	82	7.3	35	2.2
10	5	30.020	71	63	57	64	8.4	34	0.8
13	7	29.980	75	64	57	57	9.9	34	2.7
16	7	29.960	74	64	57	57	9.7	35	1.6
19	7	29.970	69	63	58	70	7.6	14	0.8
22	7	29.990	67	62	58	75	6.9	33	1.0

001802

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

SEP 1987 NEWARK, NJ 14734

DATE	A.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P.M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
01	0.02	0.06	T																						01
02																				T		T	T	T	02
03	T																								03
04																									04
05																									05
06				T	T		T	T	T	T			T	T	T	T	T	0.03			T	T	0.02	0.04	06
07	0.08	0.01	T	T		T	T	T	T						0.18		T	0.01							07
08			T	T					T	T		T	0.15	0.09	0.04	T	T	T	0.12	0.14	T	T	T	0.01	08
09	T	T	T																						09
10																									10
11																									11
12	T												T				0.12	0.12	0.06	0.03	0.17	0.06	0.02	0.01	12
13	0.01	T	T	T	T	0.01	0.12	0.12	0.03	0.01	0.05	0.08	0.03	T	0.04	0.01					0.10	0.04			13
14																									14
15																			T	T	T	T	0.02	0.01	15
16																						T	T	T	16
17	0.07	T	T	0.01	T			T	T	0.01	0.01	T									0.65	0.05	T	0.01	17
18	0.01	T	T	T	T		T			0.05	0.02	0.05	0.16	0.15	T	T	T	0.01	T	T	T	T	T		18
19				T	0.02	0.01	T					T	T	T	T	T									19
20		T	T	0.01	T																				20
21																									21
22	T	T														T	0.08	0.03	0.01						22
23																									23
24																		0.10							24
25																									25
26																									26
27																									27
28																									28
29																									29
30								T	0.02	0.05	0.01	T													30

MAXIMUM SHORT DURATION PRECIPITATION

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)	0.17	0.33	0.48	0.55	0.59	0.65	0.68	0.69	0.70	0.70	0.71	0.72
ENDED: DATE	17	17	17	17	17	17	17	17	17	17	17	17
ENDED: TIME	2053	2054	2058	2101	2109	2109	2109	2109	2109	2203	2203	2203

THE PRECIPITATION AMOUNTS FOR THE INDICATED TIME INTERVALS MAY OCCUR AT ANY TIME DURING THE MONTH. THE TIME INDICATED IS THE ENDING TIME OF THE INTERVAL. DATE AND TIME ARE NOT ENTERED FOR TRACE AMOUNTS.

VALIDATED BY:
GEORGE STATLER

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APPENDIX G

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-16-87
Time:
Project: SCP CARESDART
Job No: 19485-002
Estimated Wind Direction: E
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: SUNNY HIGH 80'S Breezy

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.0	Alarm Trigger-%O2<	19.6
Calibration Gas:	57ppm BEADS	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Installation MW 2D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
9:42	in borehole & breathing zone 0ppm				
11:00	0ppm in breathing zone & borehole				
1:30	0ppm in hole & breathing zone				

001805

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-17-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Estimated Wind Direction: N
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MOD.
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: Sunny
breezy
MID-50'S

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	9.0	Alarm Trigger-%O2<	19.6
Calibration Gas:	Reads 57 ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW-2D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
12:30	in borehole & breathing zone 0ppm				
10:25	in borehole & breathing zone 0ppm				

001806

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-23-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Estimated Wind Direction: WEST
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: Humid
Low 80's
Sunny CLEAR

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.0	Alarm Trigger-%O2<	
Calibration Gas:	READS 57ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW5D

TIME	HNU equivalent units	EXPLOSIMETER %LEL	%O2	DRAGER TUBE ppm-constituent	RADIATION METER
10:28	0-2' SSpoon .2ppm In borehole .2ppm In breathing zone 0ppm			2:40 0ppm in breathing zone	
11:05	6'-8' SSpoon 4ppm in borehole .4ppm in breathing zone .2ppm				
1:17	in borehole 0ppm in breathing zone 0ppm in mud tub 0ppm				
46	in borehole .2ppm in breathing zone 0ppm				

001807

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-24-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002

Background Level:
Weather Conditions: SUNNY
LOW 80'S

Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	8.0	Alarm Trigger-%O2<	
Calibration Gas:	READS	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of 5S

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

1 12 ~~in borehole~~
in breathing zone 0ppm
in mud tub 1.8 ppm

1 23 in mud tub 4ppm
in breathing zone 0ppm

001808

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-25-87
Time:
Project: 14485-002
Job No: CARLSTADT

Background Level:
Weather Conditions: sunny high 80's humid

Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	7.0	Alarm Trigger-%O2<	—
Calibration Gas:	RCADS-65	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW5D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
11 00	SSpoon 16-28 3ppm in breathing zone 0ppm				
1 40	in breathing zone 0 ppm				
2 30	in breathing zone 0 ppm				
3 10	in breathing zone 0 ppm mud lab 0 ppm				

001809

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-26-87
Time:
Project: SCP CARLSTADT
Job No: 14455-002
Background Level:
Weather Conditions: CLOUDY RAINY
Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	8.20	Alarm Trigger-%O2<	—
Calibration Gas:	READS 65 ppm	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW5D

TIME	HNU	EXPLOSIMETER %LEL	%O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
11:00	mud tube 4ppm in breathing zone 0ppm				
11:20	cuttings 1ppm from 57'-60'				
11:54	mud tub 4ppm breathing zone 0ppm				

001810

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-29-87
Time:
Project: CARLSTADT
Job No: 14485-002

Background Level:
Weather Conditions: SUNNY HOT

Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	8.60	Alarm Trigger-%U2<	
Calibration Gas:	READS 65 ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 5D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %U2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

9:37 mud pan 2 ppm
breathing zone 0 ppm

11:30 mud pan ~2 ppm
breathing zone 0 ppm

001811

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-30-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Background Level:
Weather Conditions: SUNNY HOT High 80's humid
Estimated Wind Direction: W
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM-MOD.
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	8.4	Alarm Trigger-%O2<	
Calibration Gas:	READS 65 ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 7D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
2:15	breathing zone 0 ppm				
3:00	breathing zone 0 ppm mud pan 5-10 ppm				
3:40	breathing zone 0 ppm				

1001812

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 7-1-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM-MOD.
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: Partly Cloudy MID 80's

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	8.4	Alarm Trigger-%U2<	
Calibration Gas:	RCADS 65ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 7D

TIME	HNU	EXPLOSIMETER %LEL	%U2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

9:42 breathing zone 0ppm
mud tub 40-50 ppm

9:50 breathing 5-10 ppm
mud tub 50-100

10:00 Level C

10:25 mud tub 5ppm
breathing 4ppm

11:00 out of Level C

11:27 breathing zone 0ppm

* MW 7S

*2:38 breathing zone 0ppm
mud tub 0ppm

2:44 mud tub 15ppm
breathing zone 1ppm

001813

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 7-6-87
Time:
Project: SCP CARLSTADT
Job No: C4485-002
Background Level:
Weather Conditions: Sunny PARTLY cloudy Breezy
Estimated Wind Direction: EAST
Estimated Wind Speed (i.e., calm, moderate, strong, etc):
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	8.6	Alarm Trigger-%O2<	
Calibration Gas:	REMS 65 ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW7D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
10:10	in breathing zone 0ppm in mud tub 0ppm				1.5 breathing zone 0ppm
10:42	in breathing zone 0ppm in mud tub 1.4ppm				
12:49	breathing zone 0ppm mud tub 0ppm				
1:28	breathing zone 0ppm mud tub 0ppm				

001814

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 7-7-87 / 7-8-87
Time:
Project: SEP CARSTADT
Job No: 14485-002

Background Level:
Weather Conditions: CLOUDY
SLIGHT DRIZZLE

Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:		Alarm Trigger-%LEL>	
Span Pot:		Alarm Trigger-%O2<	
Calibration Gas:		Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW7D

TIME	HNU	EXPLOSIMETER %LEL	%O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

9:10 breathing zone

9:46 SSpoon B-2 0-2'
2ppm

10:54 SSpoon B-3 0-2'
4ppm

SSpoon B-3 2'-4'

001815

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/AP/BES

Date: 11/30

Time:

Project: 14485-003

Job No: SCR

Background Level: 0

Weather Conditions: clear cold

Estimated Wind Direction: E

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm.

Estimated Air Temperature and % Relative Humidity: 40s

Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	420	Alarm Trigger-%02 :	
Calibration GAs:	63 ppm	Calibration GAs:	

FIELD ACTIVITIES

Field Activities Conducted:

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
1400	1-3	@ 2f			
1430	1-3	@ 5			
	17	w/ oxygen +		17 strokes benzine NO Tetra	

001816

FIELD ACTIVITIES

Field Activities Conducted: _____

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
1445	0	9-11			
1500	1	11-13			

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/APB/BES

Date: 12/01

Time:

Project: SCP

Job No: 14485-003

Background Level: N/D

Weather Conditions: Cold/Clear

Estimated Wind Direction:

Estimated Wind Speed (i.e., calm, moderate, strong, etc): Calm

Estimated Air Temperature and % Relative Humidity: 30-40

Location Where Background Level Was Obtained: office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	920	Alarm Trigger-%02 :	
Calibration GAs:	62 ppm [illegible]	Calibration GAs:	2% methane

FIELD ACTIVITIES

Field Activities Conducted: RMWISA.

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
8:00	.2 ambient/background at hole				
8:15	.2 ambient hole.				
8:15	15+ down hole				

001818

FIELD ACTIVITIES

Field Activities Conducted: _____

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
11[illegible]	.2 ambient				
	15 hole				
	1 opened room				
11[illegible]	.2 ambient				
	5 hole				
	1 open room				
12[illegible]	ND ambient			Benzene ND	
				Tetra ND	
				Vinylchloride ND	
16[illegible]	5-6 ambient			Benzene over 10 (1st stick)	
				Vinyl chloride 0.3	

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/APB/BES

Date: 12/02

Time:

Project: SCP Carlstadt

Job No: 14485-003

Background Level: ND

Weather Conditions: Cold Clear

Estimated Wind Direction: E

Estimated Wind Speed (i.e., calm, moderate, strong, etc): Moderate

Estimated Air Temperature and % Relative Humidity: 30s, low

Location Where Background Level Was Obtained: office.

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	9.08	Alarm Trigger-%02 :	
Calibration GAs:	Benz Green	Calibration GAs:	2% Meth

FIELD ACTIVITIES

Field Activities Conducted: PMW7D.

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
730	.2 ambient.				
845	.2 ambient..				
8	ND ambient				

FIELD ACTIVITIES

Field Activities Conducted: _____

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
810	.2 ambient				
825	ND ambient.				
830	1 ambient.				
845				Benzine 10 ccm.	
				Vinyl Chloride 1 ccm	in headspace
				Benzine ND	
				CH_3Cl ND	
				Carbon Tet ND	

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/APB/BEJ

Date: 12/02/87

Time:

Project: SCP

Job No: 14485-003

Background Level: ND

Weather Conditions: Cool Clear

Estimated Wind Direction: W

Estimated Wind Speed (i.e., calm, moderate, strong, etc): moderate

Estimated Air Temperature and % Relative Humidity: 30s

Location Where Background Level Was Obtained: Office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	9.08	Alarm Trigger-%02 :	
Calibration GAs:	Benz 63 ppm	Calibration GAs:	20% Methy

FIELD ACTIVITIES

Field Activities Conducted: DMWSD

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
1010	ND ambient				
1040	ND				
1052	ND				

001822

FIELD ACTIVITIES

Field Activities Conducted: _____

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
11:10	1 ambient, sampling @ 5				
11:20	1 ambient			benzene ND	
11:30	.6 ambient 6 down hole @ 9				
		0% LEL			
15	0-1 ambient				
15:20	1-5 ppm constant ambient @ 5 ft sample excursion to 100 ~~ppm~~ oxygen for 2.5 sec.				
				Benzene tube in ~~[illegible]~~ T.T. hole	pcg
		0% LEL		Benzene tube ambient ND	
				Carbon Tet ND	
				Vinyl Chloride pcg in 2	
				CH_3Br 20 ppm	
				Phenol false positive	

001823

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/DR/APD

Date: 12/03/87

Time:

Project: SCP Carlstadt

Job No: 14475-003

Background Level: ND

Weather Conditions: clear

cool

Estimated Wind Direction: E

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 30-40

Location Where Background Level Was Obtained: office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-10	Alarm Trigger-%LEL :	
Span Pot:	9.08	Alarm Trigger-%02 :	
Calibration GAs:	67 ppm Benzene	Calibration GAs:	

FIELD ACTIVITIES

Field Activities Conducted: RMW35

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	

7:30 2-3 ppm ambient Put Respirator

cont monitoring at 8:30 ND to 3 ppm all the time.

Chloroform from the hole ND

001824

FIELD ACTIVITIES

Field Activities Conducted: _____

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
RP2					
9:00					
10:00	40			0-4' 40ppm - in hole 5-10 - 1' over hole	
	1ppm atmiat			Benzine 5-7 ppm (7 strokes Chloroform ND	
				Benzine peg Vinyl Chlorid peg Chloroform peg Carbon tet ND Phenol interference CH_3Br ND	

11:10 .4 at the van about 40ft from rig during grouting

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/APD/BES

Date: 12/07/01

Time:

Project: SCP

Job No: 14485-003

Background Level: .2

Weather Conditions: Cold / Clear

Estimated Wind Direction: South

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 40s

Location Where Background Level Was Obtained: ~~[illegible]~~ office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	8.34	Alarm Trigger-%02 :	
Calibration GAs:	63 ppm benzine	Calibration GAs:	

FIELD ACTIVITIES

Field Activities Conducted: RMWTP

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
10:30	.2	ambient	11 ft		
10:40	.2		11 ft		
10:50	.2		13 ft		

Benzine 4 stocks on sample 11 ft

001826

FIELD ACTIVITIES

Field Activities Conducted: [illegible]

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
11^{30}	.2 ambient	0 LEL		Benzene ND CCl_4 ND Chloroform ND Vinyl Chl ND	
~~[illegible]~~					
13	.2 ambient				
~~[illegible]~~ 10/15 min intervals .2 oxygen					
15^{30}	.2 ambient			Benzene trace Benzene NB Vinyl Chl ND CCl_4 ND Chloro ND	
16	.2 with 5 second peak to 3-5 oxygen				

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/BES

Date: 12/08/87

Time:

Project: SCP - Resembly

Job No: 1-1485-003

Background Level: 0.0

Weather Conditions: mild hazy

Estimated Wind Direction: (+)

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 40 s

Location Where Background Level Was Obtained: office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	80
Span Pot:	6.51	Alarm Trigger-%02 :	
Calibration GAs:	63 ppm Benzine	Calibration GAs:	2% CH_4 60% LEL

FIELD ACTIVITIES

Field Activities Conducted: PMW2D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
9:50	ND 13 ft				
10	ND				

Ambient reading at 10 min intervals all ND

10:55 21 ft ND

001828

FIELD ACTIVITIES

Field Activities Conducted: RMW 5D

TIME	HNU	EXPLOSIMETER %LEL	%02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
13^30	ND ambient				
to 14^45	ND ambient				

AIR MONITORING

GENERAL INFORMATION

Name(s): TT | APD | BES

Date: 12/09

Time:

Project: SLP

Job No: 14465-003

Background Level: 1.0

Weather Conditions: Cold
Clear

Estimated Wind Direction: Ø

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 40s

Location Where Background Level Was Obtained: office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	651	Alarm Trigger-%02 :	
Calibration GAs:	63 ppm benzene	Calibration GAs:	

FIELD ACTIVITIES

Field Activities Conducted: RB6

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
8:30	2-3 ambient respirators! 5-6 augers			TUBE ND	

cont monitoring no changes excursions persisted during augering

9:30 ND ambient

10 EOB

001830

RB5

13^{30} 1 cgen, 2 to 3 pink don Respirator
constant surveyance. Steady till
15^{00} when abandoned.
1-2 constant all the time.

Tubes: Benzine,
Chloroform
Carbon tet } ND

RP1

15^{30} ND ambient
at 10 minute intervals ND
16^{00} off

AIR MONITORING

GENERAL INFORMATION

Name(s): TT/APD

Date: 12/10/07

Time:

Project: SCP Resumption

Job No: 14485-003

Background Level: ND

Weather Conditions: Cool
Cloudy

Estimated Wind Direction: South

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 40s

Location Where Background Level Was Obtained: beyond concrete pads

EQUIPMENT SETTINGS

~~HNU~~ OVA

Range: 1X

Span Pot: 300

Calibration GAs: CH4

EXPLOSIMETER

Alarm Trigger-%LEL :

Alarm Trigger-%02 :

Calibration GAs:

FIELD ACTIVITIES

Field Activities Conducted: RAWGS

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
13:40	2-3 ppm				
	20 second excursions to 10+			No time for tubes	
	Don Respirators w/ GMA-4s				
	Continuous monitoring 1-3 ppm				
15:30	end of hole				

001832

RB3

15:00 @ 2ft 10+ eyes. STOP work 8 to 10 eyes up to 20-30 ft downwind from the rig. Upwind ND under continuous monitoring vent to ND, drill, stop etc. work completed at 17:00

AIR MONITORING

GENERAL INFORMATION

Name(s): TY/APD/BES

Date: 12/20/87

Time:

Project: SCP

Job No: 14445-003

Background Level: ND

Weather Conditions: Calm

Warm

Estimated Wind Direction:

Estimated Wind Speed (i.e., calm, moderate, strong, etc): calm

Estimated Air Temperature and % Relative Humidity: 50s

Location Where Background Level Was Obtained: office

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-20	Alarm Trigger-%LEL :	
Span Pot:	651	Alarm Trigger-%02 :	
Calibration GAs:	Hexane Benzene	Calibration GAs:	

FIELD ACTIVITIES

Field Activities Conducted: BPH

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %02	DRAGER TUBE	RADIATION METER
	Equivalent			ppm-constituent	
800	ND.				
805	ND				
810	ND				
815	ND				
820	ND				
825	ND				

8^{10} PID ND (5-7 samples)
8^{20} PID oscillating and drifting. Respirator

Chloroform 1ppm
Carbon Tet ND
Benzene 16 strokes 2-3 ppm
Vinyl Chl ND

End tubes 9^{00}

RB4

10^{10} @5ft No PID Tubes Chloroform, Benzene, Carbon Tet, Vinyl Chl } ND

10^{20} Tubes all ND

10^{45} 10-12 ft Chloroform 1ppm

RMW45

11^{40} @5ft ambient Tubes Chloroform, Carbon Tet, Vinyl Chl } ND
Benzene ?

12^{00} @5ft down hole Benzene ppm

APPENDIX G

AIR QUALITY MONITORING RESULTS

APPENDIX G

DISCUSSION OF RESULTS

Air quality monitoring was performed during the Remedial Investigation for worker health and safety. The air monitoring records are included in this Appendix. A review of these records indicates that measurements of the background air quality, as measured with a photoionization detector (PID), ranged from 0 to 0.2 ppm. However, on exception occurred on December 9, 1987, when background was measured at 1.0 ppm. This measurement was taken in the office on site, and may be related to a faulty gas-fired hot water heater.

Ambient air quality measurements in the breathing zone around boreholes during drilling operations ranged from 0 to 10 ppm, and the use of Level C personnel protection was respirators with organic vapor cartridges was frequently necessary. Respiratory usage was more frequent during drilling activities in the winter than in the summer. During the winter, drilling was occasionally halted while the borehole vented to acceptable levels. One possible explanation for the apparently higher levels of volatiles in the winter is the lower ambient air temperature versus the summer, which could tend to decrease the dispersion of volatile compounds. A second explanation could be the drilling methods used. In the summer drilling, rotary wash was utilized for shallow borings, which minimized soil disturbance. In the winter drilling, hollow-stem augers were used, which disturbed a larger volume of soil.

AIR MONITORING

GENERAL INFORMATION

Name(s): JENNIFER SULLIVAN
Date: 4/22/87
Time: 7.45
Project: CARLSTADT
Job No: 14435-002
Estimated Wind Direction: SW
Estimated Wind Speed (i.e., calm, moderate, strong, etc): STRONG
Location Where Background Level Was Obtained: OUTSIDE GATE

Background Level: 0 PPM
Weather Conditions: 50°F SUNNY W/CLOUDS

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:		Alarm Trigger-%O2<	19.5
Calibration Gas:	57PPM	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: SURVEYING 50' GRID

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE		RADIATION METER
8:30	0 PPM	-0.09	20.6			
	equivalent units			ppm-constituent		
8:45	~~0 PPM~~	-0.004	20.6		CHLOROFORM	
9:30	0 PPM	0.09	20.4	CCL_4	$CHCL_3$	
10:30	0 PPM	0.06	20.6	NO CHANGE 0 PPM	COLOR CHANGE TO GREEN DO AGAIN	—
11:30	0 PPM	0.07	20.3		SAME	—
12:30	0 PPM			—	—	

AIR MONITORING

GENERAL INFORMATION

Name(s): BRUCE SCARBROUGH, J. SULLIVAN
Background Level: 0 PPM
Date: 4/27/87
Weather Conditions: SUNNY
Time: 9:00
COOL
Project: SLP CARLSTADT.
BREEZY
Job No: 14385-002
Estimated Wind Direction: SOUTH.
Estimated Wind Speed (i.e., calm, moderate, strong, etc): [illegible] MODERATE
Location Where Background Level Was Obtained: OUTSIDE GATE

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200 PPM	Alarm Trigger-%LEL>	
Span Pot:	89	Alarm Trigger-%O2<	19.5
Calibration Gas:	57 PPM	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: SUPERVISE GRID LAYOUT FOR GEOPHYSICAL WORK.

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE		RADIATION METER
	equivalent units			ppm-constituent		—
		%LEL	%O2	$CHCl_3$	CCl_4	
9:00	0 PPM	-000	20.6	—	—	—
10:00	0 PPM.			0 PPM	—	
10:45	0 PPM	-010	20.8	—	0 PPM	
12:00	0 PPM	-008	20.4			
1:30	0 PPM	-009	20.7			
2:00				0 PPM	—	
300	0 PPM	-010	20.4			

001839

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS [illegible]
Date: 4-29-87 WED.
Time: 8:40
Project: CARLSTADT, SCP
Job No: [illegible]-002
Estimated Wind Direction: S West
Estimated Wind Speed (i.e., calm, moderate, strong, etc): [illegible]
Location Where Background Level Was Obtained:

Background Level: 0-.2 [illegible]
Weather Conditions: Sunny 50's

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	9.8	Alarm Trigger-%O2<	19.6
Calibration Gas:	Read 57 ppm	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Air Monitoring for Geophysical Survey

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
8:50	0ppm	-005	20.7	[illegible]	[illegible]
9:50	0ppm	-008	20.6	—	—
10:50	.2ppm	-008	20.8	0ppm [illegible]	—
1:00	0-.2ppm	-008	20.3	—	[illegible] change
2:00	0-.2ppm	—	—	—	—
3:00	0-.2ppm	—	—	—	—

001840

AIR MONITORING

GENERAL INFORMATION

Name(s): [illegible]
Date: 4-30-87 [illegible]
Time: 8:45
Project: [illegible]
Job No:
Estimated Wind Direction: [illegible]
Estimated Wind Speed (i.e., calm, moderate, strong, etc): [illegible]
Location Where Background Level Was Obtained:

Background Level: 0 ppm
Weather Conditions: [illegible]

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%O2<	19.6
Calibration Gas:	[illegible] ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Geophysical survey → magnetometer

TIME	HNU equivalent units	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE ppm-constituent	RADIATION METER
				* Took [illegible]	
8:50	0ppm	-009	20.3	CHLOROFORM [illegible]	[illegible] —
9:35	—	—	—	* A.A. but NOT AS DARK	—
10:45	0ppm	—	—	—	0ppm [illegible]
12:50	0ppm	—	—	—	—
3:50	0-.2ppm	—	—	—	—

* Did Not [illegible] color until 3rd or 4th pump stroke

001841

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 5-1-57 FRI
Time: 8:15
Project: CARLSTADT
Job No: 14485-002
Estimated Wind Direction: W
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM-MODERATE
Location Where Background Level Was Obtained: _____

Background Level: 0 PPm
Weather Conditions: Sunny 50's
Slightly [illegible]

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%O2<	
Calibration Gas:	READS 57ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Geophysical Survey → Magnetometer

TIME	HNU equivalent units	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE ppm-constituent	RADIATION METER
8:20	0ppm	-009	20.2	Chloroform * 0ppm ▲ changed color [illegible]	Carbon Tet —
9:39	—	—	—	▲ took reading off-site upwind, traces of dime green color change	—
10 35 (OVA)	0ppm	—	—	—	—
12 50	0ppm	—	—	—	—
3:15	0ppm	—	—	—	—

001842

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 5-7-87 THUR.
Time: 8:55
Project: CARlstadt SCP
Job No: 14485-002
Estimated Wind Direction: South
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

Background Level: 0ppm
Weather Conditions: Sunny
Slight breeze

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	9.8	Alarm Trigger-%O2<	19.6
Calibration Gas:	READS 57ppm	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Geophysical Survey-magnetometer

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
8:55	0ppm	[illegible]	[illegible]	CHLOROFORM Slight color change to the lime green	CARbon Tet. —
11:20	0ppm	—	—	CHLORINE NO COLOR change	—
2:00	0ppm	—	—	—	—

001843

AIR MONITORING

GENERAL INFORMATION

Name(s): Cris Grill
Date: 6-2-87
Time:
Project: SCP CARLSTADT
Job No: 14785-002
Background Level:
Weather Conditions: CLOUDY 72° RAINY
Estimated Wind Direction: WEST
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MODERATE
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU	EXPLOSIMETER
Range: 0-200	Alarm Trigger-%LEL>
Span Pot: 9.8	Alarm Trigger-%O2<
* Calibration Gas: 57ppm	Calibration Gas:

PID Reads only 42ppm

FIELD ACTIVITIES

Field Activities Conducted: Drilling Piezometers P1

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
2:15pm	0ppm			Phenol 0ppm	Methyl Chloride no color change	Chlorofo no color c
SAMPLES	VARIED 12-40ppm				

1844

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-3-87
Time:
Project: CARLSTADT
Job No: 14485-002
Background Level:
Weather Conditions: CLOUDY

Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%O2<	
Calibration Gas:	REPDS 57	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Piezometer installation

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
				Methanol	
8:34	in borehole 0 ppm			9:18 no color Δ	
8:58	water in Tube .4ppm	LEL -.009		Chloroform & Meth. Chloride no color change	
9:21	breathing zone 0ppm Tube .4ppm + 1ppm			phenol + carbon tet no color change	
10:10	aboveholo 0ppm				
2:10	aboveholo 0ppm				
2:20	0ppm				
2:30	0 ppm				
2:57	0 ppm				

p-1

001845

AIR MONITORING

GENERAL INFORMATION

Name(s): GRILL
Date: 6-4-87
Time:
Project: SCP CARLSTADT
Job No:

Background Level:
Weather Conditions: CLOUDY
Misty
humid

Estimated Wind Direction: NORTH
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM-MOD.
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%O2<	
Calibration Gas:	READS 57ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Drilling of install. of Piezometers

TIME	HNU	EXPLOSIMETER %LEL	%O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

001846

AIR MONITORING

GENERAL INFORMATION

Name(s): JRIS GRILL
Date: 6-5-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc):
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions:

EQUIPMENT SETTINGS

HNU	EXPLOSIMETER
Range:	Alarm Trigger-%LEL>
Span Pot:	Alarm Trigger-%O2<
Calibration Gas:	Calibration Gas:

FIELD ACTIVITIES

Field Activities Conducted: Installation of Piezometer 2

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

10:30 Changing into Level C

1:49 above hole 0ppm
SS Sample ≈ 4ppm

2:13 above hole 0ppm
SS sample ≈ 20ppm
Slight odor

001847

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-8-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Background Level:
Weather Conditions: Sunny 70's
Estimated Wind Direction: SW
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM -MOD
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%U2<	19.6
Calibration Gas:	READS 57	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW-2S

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %U2	DRAGER TUBE		RADIATION METER
	equivalent units			ppm-constituent		
	Above hole			2' → faint odor ~~on vapor~~ + film in mud tub water		
9:14	0ppm			4' → Strong odor + heavy film "	"	
	MUD tube					
9.30	.6ppm - 1.6ppm Smell from tub			Chloroform D.T. NO COLOR Δ	phenol D.T. NO COLOR Δ	METHANOL D. No Color Δ
9:40	AS ABOVE					
10:20	In bore hole ≈.16 to 12ppm					
10:40-11:08	BREAK					
11:28	IN Bore hole 0ppm					
1:14	MUD Tub Breathing Zone 0ppm					
1:25	in borehole 0ppm					

'001843

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-9-87
Time:
Project: SPC CARLSTADT
Job No: 14455-002
Estimated Wind Direction:
Estimated Wind Speed (i.e., calm, moderate, strong, etc): CALM
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: PARTLY CLOUDY

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.8	Alarm Trigger-%U2<	>19.6
Calibration Gas:	Repos 57 ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 1S

TIME	HNU	EXPLOSIMETER %LEL	%U2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
9:00	IW bore hole 0ppm in SSpoon 0-1'6" 0ppm			10:30 in mud tub ≈ 1ppm in mud tub breathing zone 0ppm	
9:18	in SSpoon 0-18" 0ppm				
9:53	in borehole ≈.4ppm in breathing z. (driller) 0ppm 4'-6' SSpoon Sample ≈ 1ppm				
1:14	in borehole 0ppm In breathing zone 0ppm 8'-10' SSpoon Sample ≅ 0ppm				

001849

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-9-87
Time:
Project: CARESTADT
Job No: 14485-002
Estimated Wind Direction: SOUTH
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MOD
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: PARTLY CLOUDY BREEZY

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	9.8	Alarm Trigger-%U2<	19.6
Calibration Gas:	REPOS 57ppm	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 4S

TIME	HNU	EXPLOSIMETER %LEL	%U2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
1:29	in borehole 4ppm in breathing zone 0ppm				
0'-18"	in Spoon ≈ 2ppm				
1:44	in borehole 2ppm in breathing zone 0ppm				
0-18"	in Spoon ≈ 20-40ppm				
2:16	in hole 0ppm In breathing zone 0ppm				
3:31	MUD PAN in Breathing zone 0ppm mud Pan 4ppm				

C001850

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-10-87
Time:
Project: SCP CARLSTADT
Job No: 14455-002
Background Level:
Weather Conditions: Sunny, Breezy, 70's
Estimated Wind Direction: WEST
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MOD.-Strong
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	—
Span Pot:	9.5	Alarm Trigger-%O2<	19.6
Calibration Gas:	READS 57	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW 6S

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
10.35	0-18" SSpoon ≈2ppm in ~~breathing~~ zone 0ppm			2:26 phenol D.T. no color change	
10:58	in breathing zone 0ppm in bore hole 4 ppm				
11:24	in breathing zone 0ppm in SSpoon 0ppm benzene D.T. no color change				
2:09	in borehole ≈2ppm in breathing zone 0ppm				
2:16	in breathing zone 0ppm				

CC1851

AIR MONITORING

GENERAL INFORMATION

Name(s): C. GRILL
Date: 6-11-87
Time:
Project: CARLSTADT SCP
Job No: 14485-002
Estimated Wind Direction: South WEST
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MODERATE
Location Where Background Level Was Obtained:

Background Level: 0 PPM
Weather Conditions: Sunny
SLIGHT BREEZE ≈ CLOUDY
70'S

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200 ppm	Alarm Trigger-%LEL>	—
Span Pot:	97	Alarm Trigger-%U2<	19.6
Calibration Gas:	READS 57PPM	Calibration Gas:	—

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW-2D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %U2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	

9:57 0-18" in SSpoon 2.6ppm
In breathing zone 0ppm
10:20 in breathing zone 0 ppm
in bore hole 1ppm
0-18" in SSpoon ≈ 4ppm
11:10 in breathing zone 0ppm
in borehole 6ppm
1½-3½ SSpoon 4ppm-6ppm
3½-5½ " " 5-7ppm
5½-7½ " "
11:32 H_2O BREAK
1:23 in mud Tube 0ppm
in breathing zone 0ppm

2:20 in hole 1ppm
in breathing zone 0ppm
Carbon Tet. 0ppm
2:53 in breathing zone 0ppm
In mud Tube ≈ 4ppm

001852

AIR MONITORING

GENERAL INFORMATION

Name(s): CRIS GRILL
Date: 6-12-87
Time:
Project: SCP CARLSTADT
Job No: 14485-002
Background Level:
Weather Conditions: CLOUDY COOL
Estimated Wind Direction: South
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MOD.
Location Where Background Level Was Obtained:

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0 - 200	Alarm Trigger-%LEL>	—
Span Pot:	9.8	Alarm Trigger-%O2<	21.6
Calibration Gas:	KEADS 57ppm	Calibration Gas:	~~AO~~

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW-2D

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
9:42	in breathing zone 0ppm in mud tube 0ppm				
11:04	in bore hole 1ppm in breathing zone 0				

001853

AIR MONITORING

GENERAL INFORMATION

Name(s): Cris Grill
Date: 6-15-87
Time:
Project: CARLSTADT
Job No: 14455-002
Estimated Wind Direction: South west
Estimated Wind Speed (i.e., calm, moderate, strong, etc): MOD-
Location Where Background Level Was Obtained:

Background Level:
Weather Conditions: Sunny
high-80s
Slightly breezy

EQUIPMENT SETTINGS

HNU		EXPLOSIMETER	
Range:	0-200	Alarm Trigger-%LEL>	
Span Pot:	9.0	Alarm Trigger-%O2<	19.6
Calibration Gas:	RCDOS 5.3ppm	Calibration Gas:	

FIELD ACTIVITIES

Field Activities Conducted: Installation of MW-20

TIME	HNU	EXPLOSIMETER %LEL	EXPLOSIMETER %O2	DRAGER TUBE	RADIATION METER
	equivalent units			ppm-constituent	
9:12	in borehole & breathing zone 0ppm				
10:06	in borehole 0ppm in breathing zone 0ppm 13½-14'-0ppm SSpoon				
10:19	breathing zone & hole 18-20 & 20-22 0ppm				
10:48	in borehole & breathing zone 0ppm				
	30-32 SSpoon 0ppm in bore hole & breathing zone 0ppm				

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