FINAL REPORT

REMOVAL ACTION
FORMER NORTH END DISPOSAL AREA

UNION WIRE ROPE PLANT SITE
KANSAS CITY, MISSOURI

VOLUME III
APPENDICES G THROUGH K

PREPARED FOR

ARMCO INC.
KANSAS CITY, MISSOURI

JULY 30, 1991

PROJECT NO. 90247

REMCOR, INC.
PITTSBURGH, PENNSYLVANIA

900073484

FINAL REPORT
REMOVAL ACTION
FORMER NORTH END DISPOSAL AREA

UNION WIRE ROPE PLANT SITE
KANSAS CITY, MISSOURI
VOLUME III
APPENDICES G THROUGH K

APPENDIX G

BORING LOGS AND WELL CONSTRUCTION DIAGRAMS

TABLE G-1

WELL ELEVATION SUMMARY

WELL NUMBER[1]	ELEVATION (feet-mean sea level) MEASURING POINT (MP)	GROUND SURFACE	BOTTOM OF WELL SCREEN[2]
MW-1	751.08	749.0	726.0
MW-1D	750.96	748.6	684.6
MW-2	751.18	749.2	726.2
MW-2A	751.72	749.6	725.1
MW-3	751.42	749.4	726.4
MW-3A	753.20	750.1	725.1
MW-3D	751.38	749.6	686.6
MW-4	749.46	749.5	727.0
MW-5	750.29	750.3	724.8
MW-6	750.55	750.6	729.6
MW-7	751.53	750.5	727.5
MW-8	753.31	750.3	728.3
MW-9	753.41	750.1	728.1
MW-10	740.87	739.2	726.4
MW-11	741.13	739.2	726.4
MW-12	740.24	737.7	724.7

[1]For well locations, see Figure 2.

[2]All wells construction with 5.0 feet of 0.010 inch slot screen.

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423	PROJECT NAME: AMERICAN UNION WIRE ROPE	
BORING NUMBER: RAU-MW1	COORDINATES: NORTH AREA	DATE: 12/16/87
ELEVATION: 719.0	GWL: Depth 16.85 Date/Time 12/18/87	DATE STARTED: 12/16/87
ENGINEER/GEOLOGIST: OAK	Depth (TOC) Date/Time (8:00)	DATE COMPLETED: 12/16/87
DRILLING METHODS: HOLLOW STEM AUGER		PAGE 1 OF 1

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER 6-INCH	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				BROWN SILTY CLAY, SOME FINE TO COARSE SAND			
5.0	SS A	2-3 3-6	24		CL		
				CONCRETE			
				BROWN SILTY CLAY, SOME FINE SAND.			
10.0	SS B	4-4 5-7	24		CL		
	SS C	3-5 5-6	24		CL		
	SS D	4-3 5-6	0				
15.0	SS E	2-3 3-3	24	BROWN CLAYEY SILT, SOME FINE SAND	ML		DAMP SAMPLE
	SS F	2-2 2-2	6		ML		DAMP SAMPLE
20.0	SS G	2-2 2-3	0				
	SS H	4-3 3-3	24		ML		WET SAMPLE
25.0				BOTTOM OF BORING AT 24.0 FT.			

NOTES:

1. UPON COMPLETION, BORING CONVERTED INTO 2-INCH PVC PIEZOMETER. FOR DETAILS, SEE PIEZOMETER DETAILS PE-1.

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PAGE 1 OF 3

PROJECT NUMBER: 90247.18	PROJECT NAME: UNION WIRE ROPE - ARMCO	
BORING NUMBER: MW-1D	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED:
GEOLOGIST/ENGINEER: [illegible]	DEPTH DATE/TIME	DATE COMPLETED:
DRILLING METHODS: 4 [illegible]		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY (%)	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
5	CS-1		100	FILL, LT BROWN, SOFT, SILT - [illegible] SOFT DAMP MEDIUM TO DARK BROWN, SILT [illegible]	[illegible]	HNU SCAN = [illegible]	
10	[illegible]	NA	[illegible]	[illegible] DARK BROWN		[illegible]	
15	CS		100	SOFT, COHESIVE, DAMP MEDIUM TO DARK BROWN [illegible] SATURATED AT 18 FT.	CL	HNU SCAN = [illegible]	
20	[illegible]		100	SOFT COHESIVE, [illegible]		[illegible]	
25	CS-5		100	SOFT COHESIVE, [illegible] MEDIUM TO DARK BROWN SILT AND CLAY.		[illegible]	
					[illegible]		

BORING No. _____

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PROJECT NUMBER: 90247.18	PROJECT NAME: UNION WIRE ROPE - ARMCO	
BORING NUMBER: MW-1D	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED:
GEOLOGIST/ENGINEER: [illegible]	DEPTH DATE/TIME	DATE COMPLETED:
DRILLING METHODS: [illegible]		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
30	CS / CS-6	▲	100	SOFT, DAMP, MEDIUM TO DARK BROWN, MOIST. [illegible] CLAY [illegible]	[illegible]		
35	CS / CS-7		98	SOFT, MOIST, MEDIUM TO DARK BROWN CLAY WITH GRAY, FINE TO MED. GRAINED SAND AND SILT	SM	Hnu SCAN = 0.0	
40	CS / CS-8	NA	100	WET, MEDIUM BROWN TO OLIVE GREEN, FINE TO COARSE SAND AND GRAVEL (SUBANGULAR, [illegible]), SOME SILT, SOME CLAY. MOIST, MEDIUM GREENISH BROWN CLAY + SILT, TRACE PLANT MATERIAL.	SP / CL	Hnu SCAN = [illegible] ENVIROPLUG GROUT	
45	CS / CS-9		90%	SOFT, WET, OLIVE-GREEN, FINE TO MEDIUM GRAINED SAND SOME CLAY. CLAY CONTENT INCREASES WITH DEPTH.	SM	Hnu SCAN = [illegible]	
50	CS / CS-10		50%	SOFT, WET, GRAVEL SUB-ANGULAR, [illegible] AND SILT AND FINE-GRAINED SAND, SILT AND SAND LAYERS EXIST BETWEEN THE GRAVEL LAYERS.	GP	[illegible] DIAMETER SCL. 40 PVC RISER, FLUSH [illegible] Hnu SCAN = [illegible] BENTONITE SLURRY	50
55	CS / CS-11	▼	40%	SOFT [illegible], SATURATED, FINE GRAINED SAND AND [illegible] SOME OLIVE GREEN TO GRAY, SOFT SILT SOME CLAY, GRAVEL [illegible] ZONES [illegible] SATURATED.	SP	Hnu SCAN = 0.0 SAND	55 58 59

BORING No. _____

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PROJECT NUMBER: 90247.18	PROJECT NAME: Union Wire Rope - Armco	
BORING NUMBER: MW-1D	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED:
GEOLOGIST/ENGINEER: LJC	DEPTH DATE/TIME	DATE COMPLETED:
DRILLING METHODS: 4¼" Hollow Stem Auger		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
60	CS CS-12	NA	60%	POORLY-SORTED SUBANGULAR GRAVEL AND SILT, SOME SAND (FINE), TRACE CLAY, AROUND GRAVEL BLOCKS, SOME CLASTS ARE WEATHERED, WET	SP	2" PVC, SCH. 40, 0.010" SLOTTED; THV = 0.0; SAND	
	CS CS-13		100%	LIMESTONE (BEDROCK) MEDIUM TO DARK GRAY, SOME LAMINATIONS, TRACE SAND - SILT, DAMP, SOFT		HNu ICOM = 0.0	64
65							
70							

BORING No. _____

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423	PROJECT NAME: ARMCO, UNION WIRE PIPE	
BORING NUMBER: PAU-MW2	COORDINATES: NORTH AREA	DATE: 12/17/87
ELEVATION: 749.2	GWL: Depth 17.74 Date/Time 12/18/87	DATE STARTED: 12/17/87
ENGINEER/GEOLOGIST: DAK	Depth (TOC) Date/Time (8:00)	DATE COMPLETED: 12/17/87
DRILLING METHODS: HOLLOW STEM AUGER		PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6-INCH)	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				FILL BROWN SILTY CLAY, SOME CONCRETE CHIPS, SOME BITS OF WIRE.			
5.0	SS A	6-10 4-2	6		CL		
10.0	SS B	3-3 7-10	24	BROWN SILTY CLAY	CL		
15.0	SS C	3-2 3-4	24	BROWN CLAYEY SILT	ML		
20.0	SS D	2-2 1-2	24		ML		DAMP SAMPLE
	SS E	2-2 2-2	24		ML		WET SAMPLE
25.0				BOTTOM OF BORING AT 24.0FT			

NOTES:

1. UPON COMPLETION, BORING CONVERTED INTO 2-INCH PVC PIEZOMETER. FOR DETAILS, SEE PIEZOMETER DETAILS PZ-2.

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PAGE 1 OF 1

PROJECT NUMBER: 90247.18	PROJECT NAME: Union Wire Rope - Armco	
BORING NUMBER: MW-2A	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED: 5-2-91
GEOLOGIST/ENGINEER: DPC	DEPTH DATE/TIME	DATE COMPLETED: 5-2-91
DRILLING METHODS: 4 1/4" ID Hollow Stem Auger		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
				Fill: Lt orange, brown silt and clay, dry.		Portland cement	
5						Fine [illegible]	
10				Soft, plastic, damp, dark brown to gray clay	CL		
15				Dense, plastic, damp, black clay, moist @ 19 feet. Cutting lost @ 22' probably because of water.	CL	2 inch dia. SCH 40 PVC riser, flush joint	
20						Sand	19.5
				TD @ 25'		2 inch dia. SCH. 40, 0.010" slot	24.5
25						Bottom cap	25.5

BORING No. _____

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 77423	PROJECT NAME: [illegible] UNION WIRE [illegible]	
BORING NUMBER: RAU-MW3	COORDINATES: NORTH AREA	DATE: 12/17/87
ELEVATION: 746.4	GWL: Depth 17.08 Date/Time 12/18/87	DATE STARTED: 12/17/87
ENGINEER/GEOLOGIST:	Depth [illegible] Date/Time [illegible]	DATE COMPLETED: 12/17/87
DRILLING METHODS: HOLLOW STEM AUGER		PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6-INCH)	RECOVERY (INCH)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
5.0	SS A	3-2 2-3	12	BROWN SILTY CLAY, TRACE FINE SAND	CL		
10.0	SS B	2-2 2-3	24		CL		
15.0	SS C	3-2 3-4	18		CL		
20.0	SS D	2-1 2-3	24	BROWN CLAYEY SILT, SOME FINE SAND,	ML		
	SS E	3-3 3-4	24		ML		WET SAMPLE
25.0				BOTTOM OF BORING AT 24.0 FT,			

NOTES:

1. UPON COMPLETION, BORING CONVERTED INTO 2-INCH PVC PIEZOMETER, FOR DETAILS, SEE PIEZOMETER DETAILS PE-3.

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 88630	PROJECT NAME: Union Wire Rope GW Monitoring	
BORING NUMBER: MW-3A	COORDINATES:	DATE: 12/19/88
ELEVATION: 750.1	GWL: Depth 15.3 Date/Time 11/18/88	DATE STARTED: 11/17/88
ENGINEER/GEOLOGIST: D. Crowley	Depth Date/Time	DATE COMPLETED: 11/17/88
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (6 inch)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				TAN, Dry, Medium Sand and Gravel Fill			
5	S-1	8	40	Dark Gray, Damp, Medium Stiff, silt w/ clay, some Fe staining and plant fragments	ML		
10	S-2	9	80	- Dark gray/Brown, Damp, Medium Stiff Silt and Clay with some plant fragments	ML/CL		
15	S-3	7	90	- Dark Gray/Brown, Moist Medium Stiff silt and clay, trace very fine sand (wet sandy lenses)			← Water level 15.3 (24 hr after installing well)
20	S-4	6	100				
25				Bottom of Boring @ 25'			

NOTES:

2" PVC monitoring well constructed.

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PAGE 1 OF

PROJECT NUMBER: 90247	PROJECT NAME: UNION WIRE ROPE - ARMCO	
BORING NUMBER: MW-3D	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED: 2-25-9[illegible]
GEOLOGIST/ENGINEER: DCS	DEPTH DATE/TIME	DATE COMPLETED: 2-26-9[illegible]
DRILLING METHODS: 4 1/4" HSA w/ 140 lb HAMMER		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY (%)	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
0							
5							
10	S S-1	2 3 4 5	100	STIFF DAMP MEDIUM TO DARK BROWN CLAY SOME SILT	CL	HNU SCAN = 0.0	
15							
20	S S-2	2 2 3 3	100	MEDIUM STIFF MOIST, MEDIUM TO DARK BROWN CLAY w/ SOME STREAKS OF FINE SAND		HNU SCAN = 0.0	
25	S S-3	2 4 6 7	100	MEDIUM STIFF WET, MED. TO DARK BROWN CLAY w/ SOME STREAKS OF FINE SAND		HNU SCAN = 0.0	
30	S S-4	4 3 4 4	100	STIFF, LIGHT BROWN, SATURATED CLAY + FINE TO BROWN SAND		HNU SCAN = 0.0	

BORING No. _____

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

		PAGE 2 OF
PROJECT NUMBER: 902[illegible]	PROJECT NAME: Union Wire Rope - Armco	
BORING NUMBER: MW - 3D	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED:
GEOLOGIST/ENGINEER: [illegible]	DEPTH DATE/TIME	DATE COMPLETED:
DRILLING METHODS: [illegible]		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
30							
	S S-5	3 3 4	100	STIFF, MOIST, MEDIUM GRAY TO LT. BROWN, CLAY W/ A TRACE OF SILT.	CL	Hnu SCAN = 0.0	
35							
	S S-6	[illegible]	100	MEDIUM STIFF, MOTTLED ORANGE BROWN W/ GRAY STREAKS, DAMP TO MOIST. STIFF, MEDIUM TO DARK BROWN, DAMP TO MOIST [illegible] TRACE OF SILT + SAND.		[illegible] = 0.0	
40					ML		
	S S-7	[illegible]	100	MEDIUM STIFF, DAMP TO MOIST, MEDIUM GRAY, SILT + CLAY. VERY LOOSE, SATURATED MEDIUM GRAINED, OLIVE GRAY SAND + WATER @ 31' [illegible]	SP		
45							
	S S-8	6 7 [illegible] 9	100	VERY STIFF, MOIST TO DAMP, SILT + CLAY, SOME GRAVEL, TRACE SAND (FINE).	ML	BENTONITE PELLETS	50
50							51
	S S-9	13 15 9	90	HARD, SATURATED, MEDIUM TO LIGHT GRAY TO BROWN, CLAY SOME SILT.	CL	CAVE IN	
				SATURATED, OLIVE GRAY, FINE TO MEDIUM GRAINED SAND + GRAVEL	SP	BENTONITE PELLETS	54
55							56
	S S-10	10 18 19 13	100	DENSE, WET, SUBANGULAR [illegible] GRAVEL AND MED TO COARSE LT BROWN SAND TRACE SILT + CLAY.	CL	SAND	58
60							

BORING No. _____

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

		PAGE 3 OF 3
PROJECT NUMBER: [illegible]	PROJECT NAME: Union Wire Rope - Armco	
BORING NUMBER: MW - 32	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED:
GEOLOGIST/ENGINEER:	DEPTH DATE/TIME	DATE COMPLETED:
DRILLING METHODS:		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
60					GP	2" DIAMETER SCHEDULE 40 PVC SLOTTED 0.010"	
	S 5-11	25 58/6"	90	CLAYSTONE (BEDROCK), MASSIVE, MEDIUM TO DARK GRAY		SAND	63
65				BOTTOM OF BORING @ 64 FT			

BORING No. _____

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423.13	PROJECT NAME: ARMCO UNION WIRE ROPE		
BORING NUMBER: MW-4	COORDINATES:		DATE: 1/20/88
ELEVATION: 749.5	GWL: Depth	Date/Time	DATE STARTED: 1/9/88
ENGINEER/GEOLOGIST: D. Crowley	Depth	Date/Time	DATE COMPLETED: 1/9/88
DRILLING METHODS: Hollow Stem Auger w/ CONCRETE CORING			PAGE 1 OF 1

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (FOOT)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				CONCRETE (3" THICK)			
	SS 4A	NA	100	STIFF, DRY TO DAMP, DARK GRAY, SILTY CLAY, WITH SOME WHITE COLOR IN PORE SPACES	CL		RAU-MS-004-1A SAMPLE 1.0-1.5
5	SS 4B	NA	90	DRY TO DAMP, DARK GRAY, SILTY CLAY			RAU-MS-004-1B SAMPLE 4.0-4.5
10							
15	SS 4C	NA	100	MOIST MEDIUM GRAY, CLAYEY SILT WITH TRACE PLANT FRAGMENTS -WET 1/2" BAND OF SILT	ML		
20	SS 4D	NA	80	DAMP-MOIST, MEDIUM GRAY, CLAYEY SILT WITH ABUNDANT PLANT FRAGMENTS			
25				Total Depth of Boring = 24.0 ft			

NOTES:

MONITORING WELL CONSTRUCTED IN BORING, SEE MONITORING WELL CONSTRUCTION SCHEMATIC (MW-4)

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423.13	PROJECT NAME: ARMCO UNION WIRE ROPE		
BORING NUMBER: MW-5	COORDINATES:	DATE: 1/20/88	
ELEVATION: 750.3	GWL: Depth 19.9 Date/Time UPON COMPLETION OF WELL	DATE STARTED: 1/18/88	
ENGINEER/GEOLOGIST: D. Crowley	Depth Date/Time	DATE COMPLETED: 1/18/88	
DRILLING METHODS: hollow stem Augers w/ concrete [illegible]		PAGE 1 OF 1	

DEPTH (FT)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (FOOT)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				CONCRETE (6" THICK)			
	SS 5A	NA	75	STIFF, DAMP, DARK GRAY SILTY CLAY	CL		RAU-MS-005-1A SAMPLE 1.0-1.5
5	SS 5B	NA	80	STIFF, DAMP, DARK GRAY, SILT CLAY W/ SOME FE STAINING			RAU-MS-005-1B SAMPLE 4.0-4.5
10							
15	SS 5C	NA	90	SOFT, MOIST, BROWN/GRAY, CLAYEY SILT WITH SOME PLANT REMAINS	ML		RAU-MS-005-1C SAMPLE 15.0-15.5
20							
				Total Depth of Boring 22.0'			
25							

NOTES:

MONITORING WELL CONSTRUCTED IN BORING, SEE MONITORING WELL CONSTRUCTION SUMMARY [illegible]

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 874 23.13	PROJECT NAME: REMCO UNION WIRE ROPE		
BORING NUMBER: MW-6	COORDINATES:	DATE: 1/20/88	
ELEVATION: 750.6	GWL: Depth [illegible] Date/Time [illegible]	DATE STARTED: 1/8/88	
ENGINEER/GEOLOGIST: D. Crowley	Depth Date/Time	DATE COMPLETED: 1/8/88	
DRILLING METHODS: Hollow Stem Auger w/ Concrete coring		PAGE 1 OF 1	

DEPTH (Ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (FOOT)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				CONCRETE (5" Thick)			
	SS 6A	NA	80	STIFF, DARK GRAY, DAMP CLAYEY SILT with trace sand			RAU-MS-006-1A and RAU-MS-006A-1A (REPLICATE) sample 1.0-1.5 ft
5	SS 6B	NA	100	STIFF, Damp, DARK Gray clayey silt	ML		RAU-MS-006-1B sample 4.0-4.5 ft
10				STIFF, DAMP, DARK GRAY, SILTY CLAY	CL		
15	SS 6C	NA	80	sharp contact; SOFT, MOIST, light Gray/Brown silt with clay			WATER @ 15.0 ft; RAU-MS-006-1C SAMPLE 15.0-15.5
20					ML		
25				Total Depth of Boring = 25.0'			

NOTES:

MONITORING WELL CONSTRUCTED IN BORING, SEE MONITORING WELL CONSTRUCTION SCHEMATIC (MW-6)

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423.3	PROJECT NAME: ARMCO UNION WIRE ROPE		
BORING NUMBER: MW-7	COORDINATES:	DATE: 1/18/88	
ELEVATION: 750.5	GWL: Depth 8.0 Date/Time 1/7/88	DATE STARTED: 1/7/88	
ENGINEER/GEOLOGIST: D Crowley	Depth Date/Time	DATE COMPLETED: 1/7/88	
DRILLING METHODS: Hollow stem Auger		PAGE 1 OF 1	

DEPTH (ft)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (foot)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				COARSE LIMESTONE GRAVEL to FINE LIMESTONE GRAVEL w/ LIMESTONE SAND	GP GW		
5	SS 7A	42	75	GRAY, MOIST TO WET, SILTY SAND AND GRAVEL OF LIMESTONE ORIGINS (FILL)	SW		
10	SS 7B	8	80	Medium stiff, dry-damp, Mottled Dark Gray, silty clay with Plant Remains			
15	SS 7C	8	100	MOIST, Gray/Black, moist SILTY CLAY			RAU-MS-007-1C COLLECTED @ 15.0-15.5
20	SS 7D	6	90	Med. stiff, MOIST TO WET, DARK GRAY, SILT W/ CLAY AND TRACE VERY FINE SAND -OCCASSIONAL SAND LENSES WITH WATER			← WATER @ APPROX 17'
25				Total Depth of Boring = 23.5'			

NOTES:

MONITORING WELL CONSTRUCTED IN BORING, SEE MONITORING WELL CONSTRUCTION SCHEMATIC (MW-7)

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 87423.13	PROJECT NAME: LAMCO UNION WIRE ROPE		
BORING NUMBER: MW-8	COORDINATES:	DATE: 1/18/88	
ELEVATION: 750.3	GWL: Depth 12.8 Date/Time 1/7/88	DATE STARTED: 1/7/88	
ENGINEER/GEOLOGIST: D. Crowley	Depth Date/Time	DATE COMPLETED: 1/7/88	
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1	

DEPTH (FT.)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (Foot)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				Asphaltic Pavement (2")			
				Loose SANDY GRAVEL FILL (Asphalt odor)			
	SS 8A	7	80	SOFT, DAMP, BROWN to GRAY Fe stain MOTTLED, CLAY/SILT MIX			RAU-MS-008-1A collected @ 1.3'-1.8'
5	SS 8B	6	70	Med Stiff, Damp, Dark Gray/Red Brown MOTTLED silt with clay, trace SAND (odorless)			
10	SS 8C	7	10	Medium soft, Brown silt with medium SAND AND TRACE SANDSTONE chips			
15	SS 8D	10	80	Loose to Dense, Red-Brown/Gray, Wet fine SAND, with silt - to some silt			Water @ 14.5'
20	SS 8E	4	75	Loose, wet, Green Glauc. SD w/ clay Lenses			
				Loose, moist, SILTY, SAND with PLANT FRAGMENTS			
				Total Depth of Boring: 22.5'			
25							

NOTES:

Monitoring well constructed in Boring, SEE MONITORING WELL CONSTRUCTION SCHEMATIC (MW-8)

REMCOR

VISUAL CLASSIFICATION OF SOILS

PROJECT NUMBER: 88630	PROJECT NAME: Union Wire Rope G.W. Monitoring		
BORING NUMBER: MW-9	COORDINATES:	DATE: 12/22/88	
ELEVATION: 750.7	GWL: Depth 10.3 Date/Time 11/18/88	DATE STARTED: 11/17/88	
ENGINEER/GEOLOGIST: D. Crowley	Depth Date/Time	DATE COMPLETED: 11/17/88	
DRILLING METHODS: Hollow Stem Auger		PAGE 1 OF 1	

DEPTH (Feet)	SAMPLE TYPE & NO.	BLOWS ON SAMPLER PER (Foot)	RECOVERY (%)	DESCRIPTION	USCS SYMBOL	MEASURED CONSISTENCY (TSF)	REMARKS
				TAN SAND AND GRAVEL FILL			
5	S-1	13	30	Dark Gray/Brown, stiff silt and clay with trace sand, some plant fragments, damp	ML/CL		
10	S-2	13	60	Gray/Brown, damp to moist, stiff, silt and clay, trace sand some plant fragments			← Water level 10.3 (24 hr after installing well)
15	S-3	5	100	Gray/Brown, moist to wet, soft silt and sand, trace to some clay, plant fragments, some mottling	ML		
20	S-4	8	100	Gray/Brown, wet, silt and sand with trace clay, some plant fragments			
25				Total Depth of Boring = 24.5'			

NOTES:
2" Monitoring well constructed

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PAGE 1 OF 1		
PROJECT NUMBER: 90247.18	PROJECT NAME: UNION WIREROPE - ARMCO	
BORING NUMBER: MW-10	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED: 2/27/91
GEOLOGIST/ENGINEER: D. Crowley	DEPTH DATE/TIME	DATE COMPLETED: 2/28/91
DRILLING METHODS: Hollow Stem Auger		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY (%)	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION (-2.15')
	S / S-1	2 3 3 3	60	Medium stiff Dry-Damp Brown Clayey Silt; trace plant fragments		HNuScan = 0.0	Bentonite Grout; Bentonite Pellets
5	S / S-2	2 4 3 5	85	Medium stiff Damp Brown Clayey Silt; Trace SAND, Trace plant fragments	ML	HNuScan = 0.0	FINE SAND; 2" dia Sch 40 PVC Riser (Flush Joint)
10	S / S-3	1 1 1 1	80	Soft Wet Brown Clayey Silt; trace plant fragment		HNuScan = 0.0	SAND; schedule 40 PVC 0.010" SLOTTED
15				Bottom of Boring @ 13.5'			
20							

4.0
5.0
6.0
7.85
12.85

BORING No.

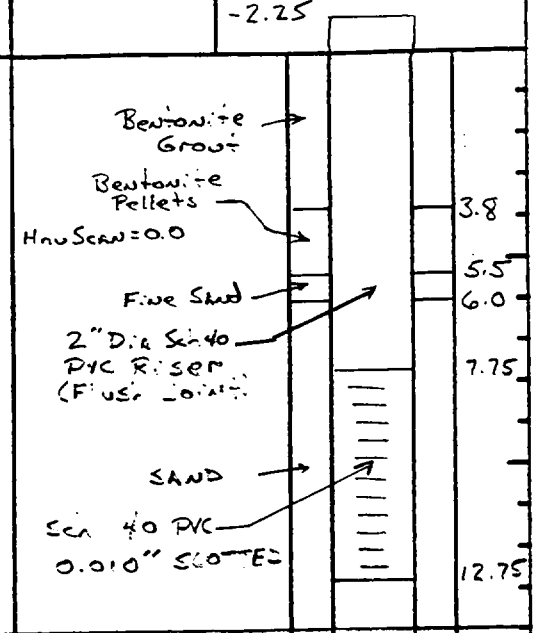
REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

		PAGE 1 OF 1
PROJECT NUMBER: 90247.18	PROJECT NAME: UNION WIRE ROPE - ARMCO	
BORING NUMBER: MW-11	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED: 2/27/91
GEOLOGIST/ENGINEER: D. Crowley	DEPTH DATE/TIME	DATE COMPLETED: 2/28/91
DRILLING METHODS: Hollow Stem Auger		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY (%)	DESCRIPTION	SOIL/ROCK TYPE	REMARKS
5	S / S-1	3 3 3 4	95	Medium Stiff Damp-Moist Olive gray clayey silt; some plant fragments	ML	
10	S / S-2	1 1 1 1	100	Soft Moist-Wet Olive gray with Brown mottling clayey silt; trace fine sand		
15				Bottom of Boring @ 14.0'		

MONITORING WELL CONSTRUCTION



BORING No.

REMCOR

TEST BORING AND MONITORING WELL CONSTRUCTION LOG

PAGE 1 OF

PROJECT NUMBER: 90247	PROJECT NAME: Union Wire Rope - Armco	
BORING NUMBER: MW-12	COORDINATES:	DATE:
ELEVATION:	GWL: DEPTH DATE/TIME	DATE STARTED: [illegible]
GEOLOGIST/ENGINEER: DCS	DEPTH DATE/TIME	DATE COMPLETED: [illegible]
DRILLING METHODS: [illegible] Hollow Stem Auger w/ Core Sampler		

DEPTH FEET	SAMPLE TYPE & NO.	BLOWS PER 6"	RECOVERY ( )	DESCRIPTION	SOIL/ROCK TYPE	REMARKS	MONITORING WELL CONSTRUCTION
	CS CS-1		80%	SOFT, DAMP, MEDIUM TO LIGHT BROWN SILT - FINE GRAINED SAND, TRACE CLAY		Hnu SCAN=0.0 ENVIROPLUG GROUT BENTONITE PELLETS	3.0
5	CS CS-2	N/A	80%	SOFT, MEDIUM TO DARK BROWN SILT AND CLAY SOME FINE-GRAINED SAND	ML	Hnu SCAN=0.0 2" PVC RISER SCH. 40 FLUSH JOINT	5.5
10	CS CS-3		80%	SOFT, MEDIUM TO DARK BROWN SILT AND CLAY, SOME FINE-GRAINED SAND. SOFT, SATURATED, FINE GRAINED SAND, SOME SILT	SM	SAND Hnu SCAN=0.0 2" DIAMETER SLOTTED PVC SCH. 40 0.010"	8.0 13.0
				BOTTOM OF BORING @ 13'			
15							

BORING No. _____

REMCOR

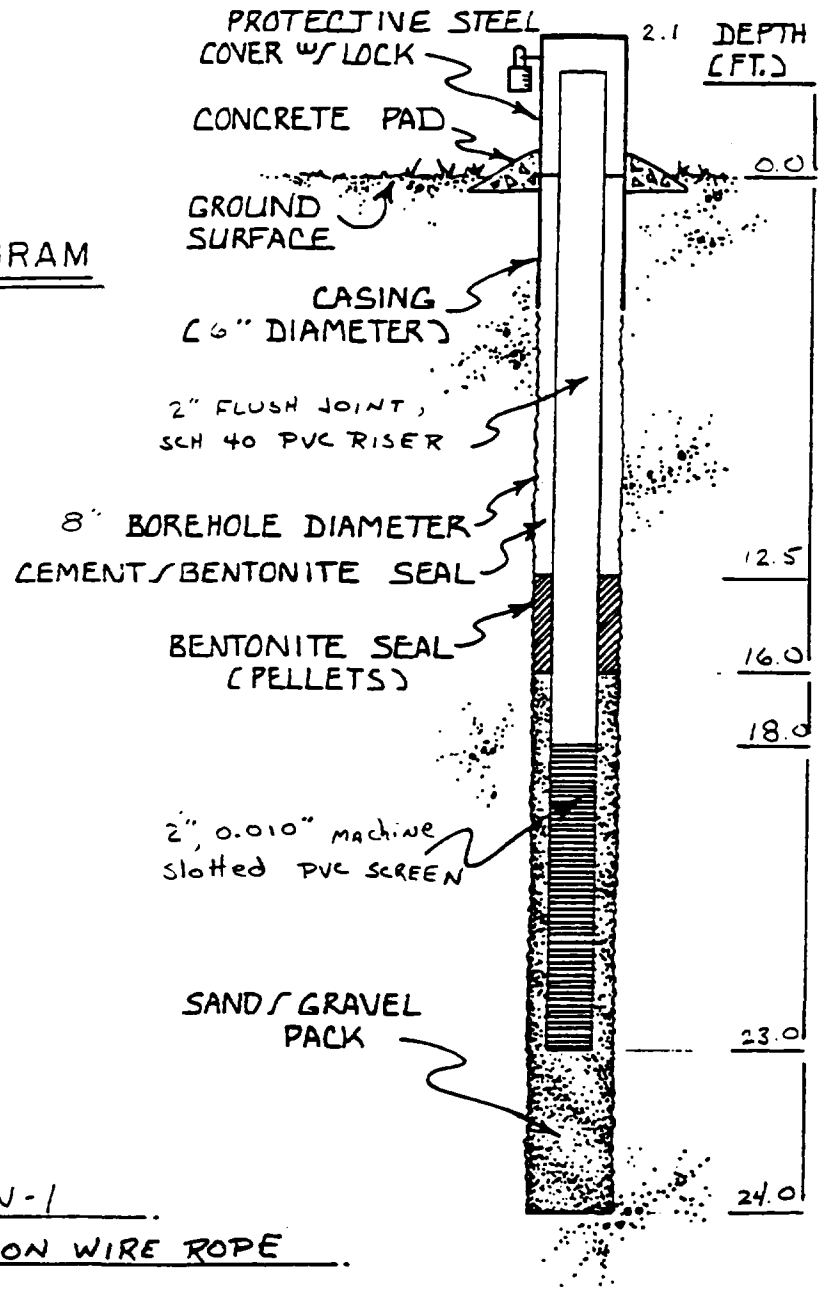
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well drilled near North END Former Disposal Area, downgradient of Plant

Well Lock # 3358



MONITORING WELL NO. MW-1.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION Down Gradient of Plant near North End Former Disposal Area
GEOLOGIST D. Kochendorfer.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 12/17/87.
GROUND ELEVATION 749.0.
TOP ELEVATION 751.08.
STATIC WATER DEPTH 16.85.
WATER ELEVATION 734.23.
DATE 12/18/87.

REMCOR

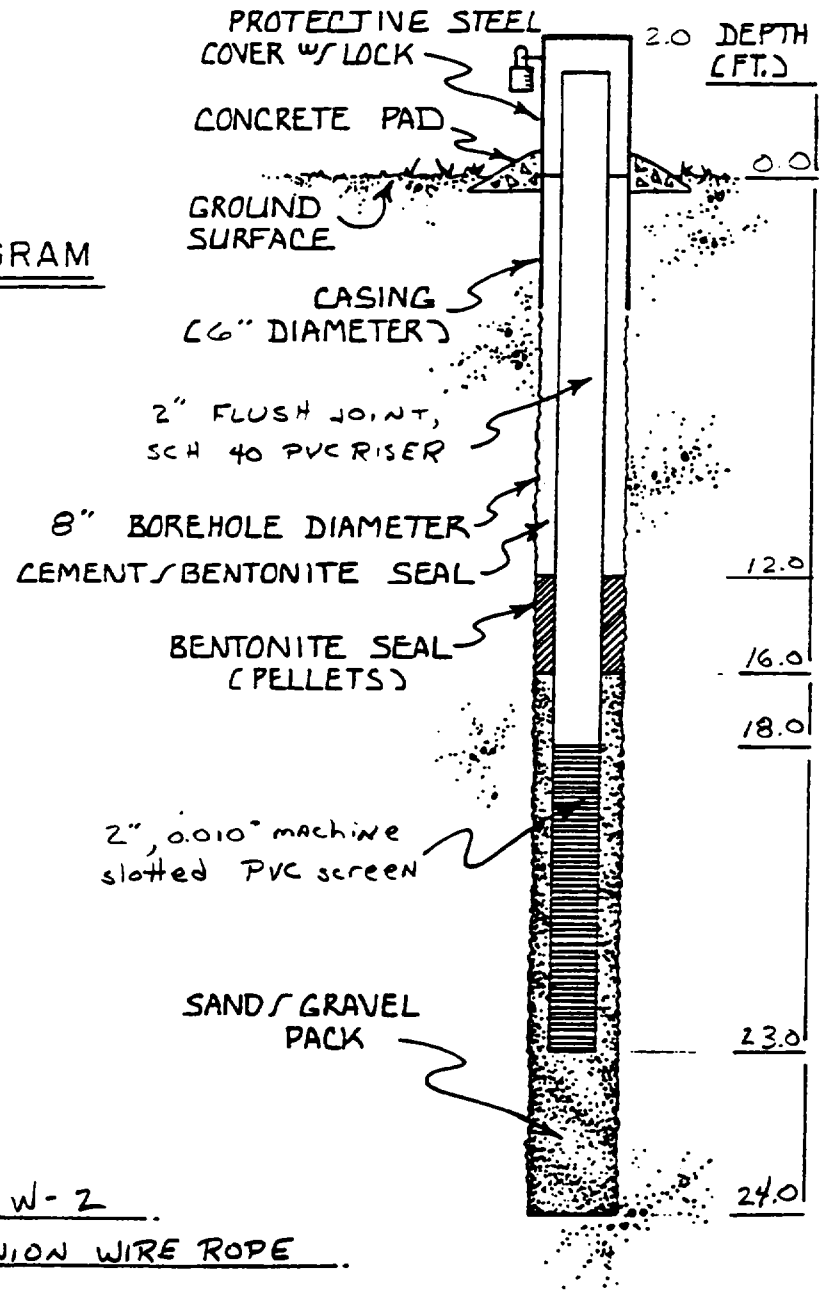
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well constructed down gradient of plant in south central portion of North End Former Disposal Area

Well Lock # 3358



MONITORING WELL NO. MW-2.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION Down gradient of Plant at south central portion of Former Disposal Area.
GEOLOGIST D Kochendorfer.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 12/17/87.
GROUND ELEVATION 749.2.
TOP ELEVATION 751.18.
STATIC WATER DEPTH 17.74.
WATER ELEVATION 733.44.
DATE 12/18/87.

REMCOR

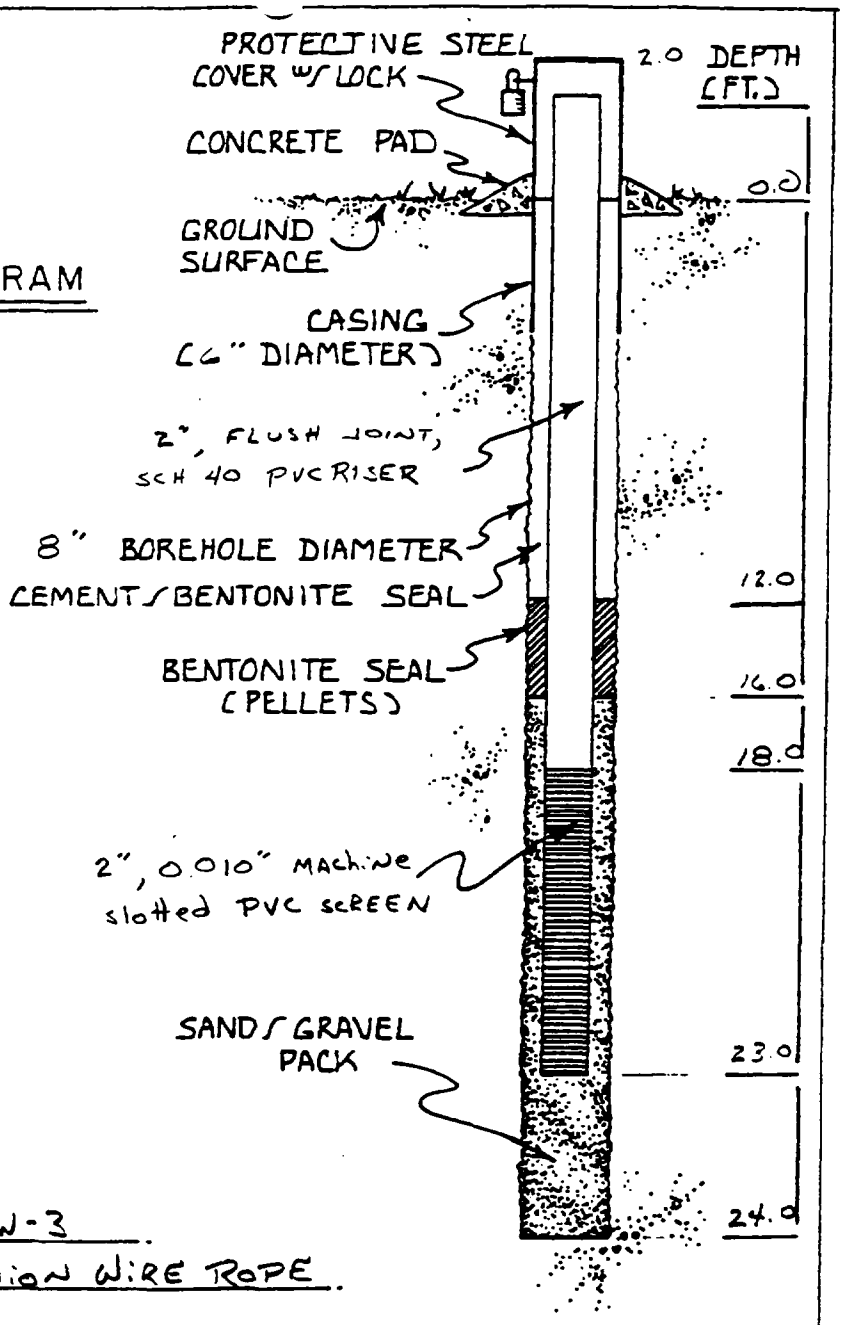
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well located at North West corner of ARMCO property, apparently cross-gradient of plant

Lock #3358



MONITORING WELL NO. MW-3.
PROJECT NAME ARMCO, Union Wire Rope.
PROJECT NO. 87423.13.
LOCATION At North West corner of plant property.
GEOLOGIST D. Kochendorfer.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 12/17/87.
GROUND ELEVATION 749.4.
TOP ELEVATION 751.42.
STATIC WATER DEPTH 17.08.
WATER ELEVATION 734.34.
DATE 12/18/87.

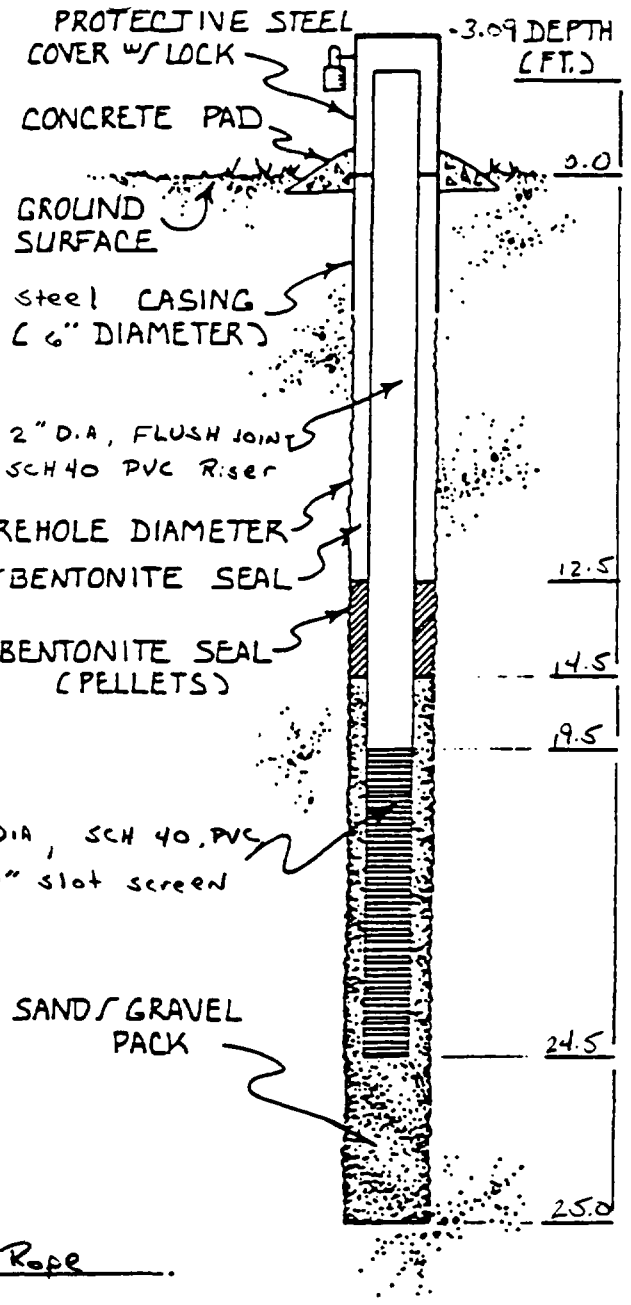
REMCOR

WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well drilled to be Replacement for MW-3 when COE begins Rechannelization of Blue River and most likely Removes MW-3.



MONITORING WELL NO. MW-3A.
PROJECT NAME ARMCO, Union Wire Rope.
PROJECT NO. 88630.
LOCATION Approx 70 ft south of MW-3, outside Blue R. Rechannelization limits.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 11/17/88.
GROUND ELEVATION 750.1.
TOP ELEVATION 753.20.
STATIC WATER DEPTH 15.3 (G.S.).
WATER ELEVATION 734.79.
DATE 11/18/88.

REMCOR

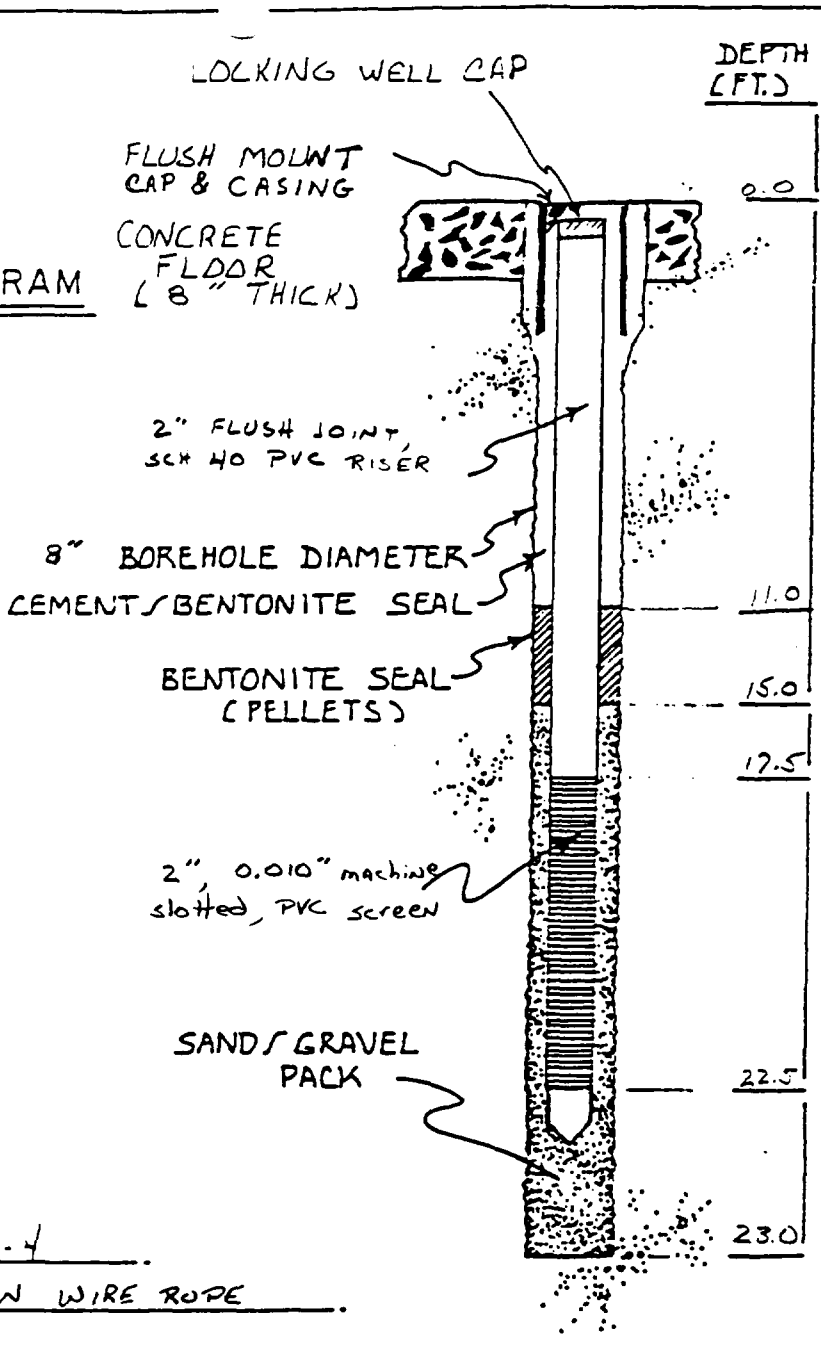
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Flush mount construction well with locking cap.
- Lock # 3358

Well Drilled inside building #45 after coring through CONCRETE FLOOR.



MONITORING WELL NO. MW-4.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION Building 45, ~10 ft East of #7 Galvanizing Furnace.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 1/9/88.
GROUND ELEVATION 749.5.
TOP ELEVATION 749.46.
STATIC WATER DEPTH 10.77.
WATER ELEVATION 738.69.
DATE 1/10/88.

REMCOR

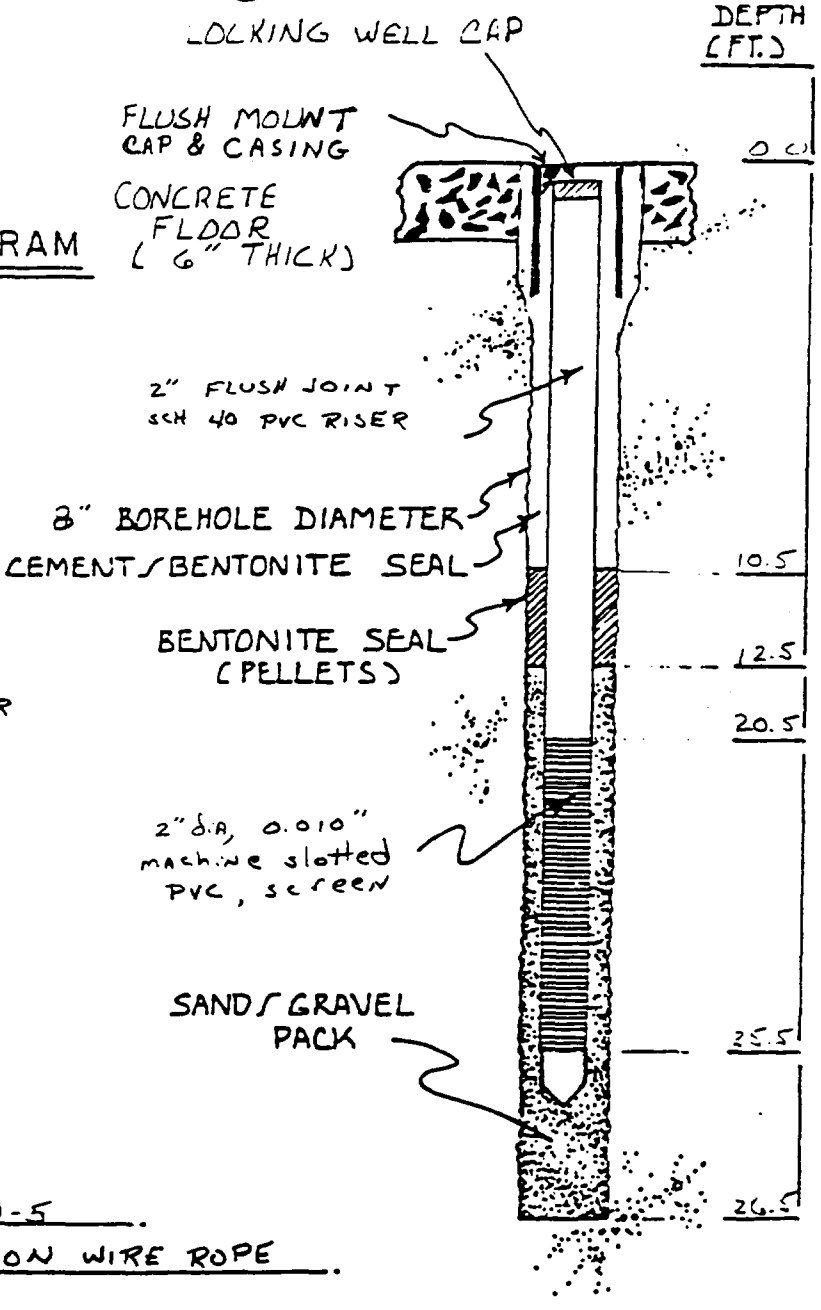
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Flush mount construction well with locking cap
- lock # 3358

Well Drilled inside Wire storage Building near cleaning house after coring through concrete floor



MONITORING WELL NO. MW-5.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION Building 1, ~10 ft North of Cleaning house building.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 1/8/88.
GROUND ELEVATION 750.3.
TOP ELEVATION 750.29.
STATIC WATER DEPTH 7.05.
WATER ELEVATION 743.24.
DATE 1/10/88.

REMCOR

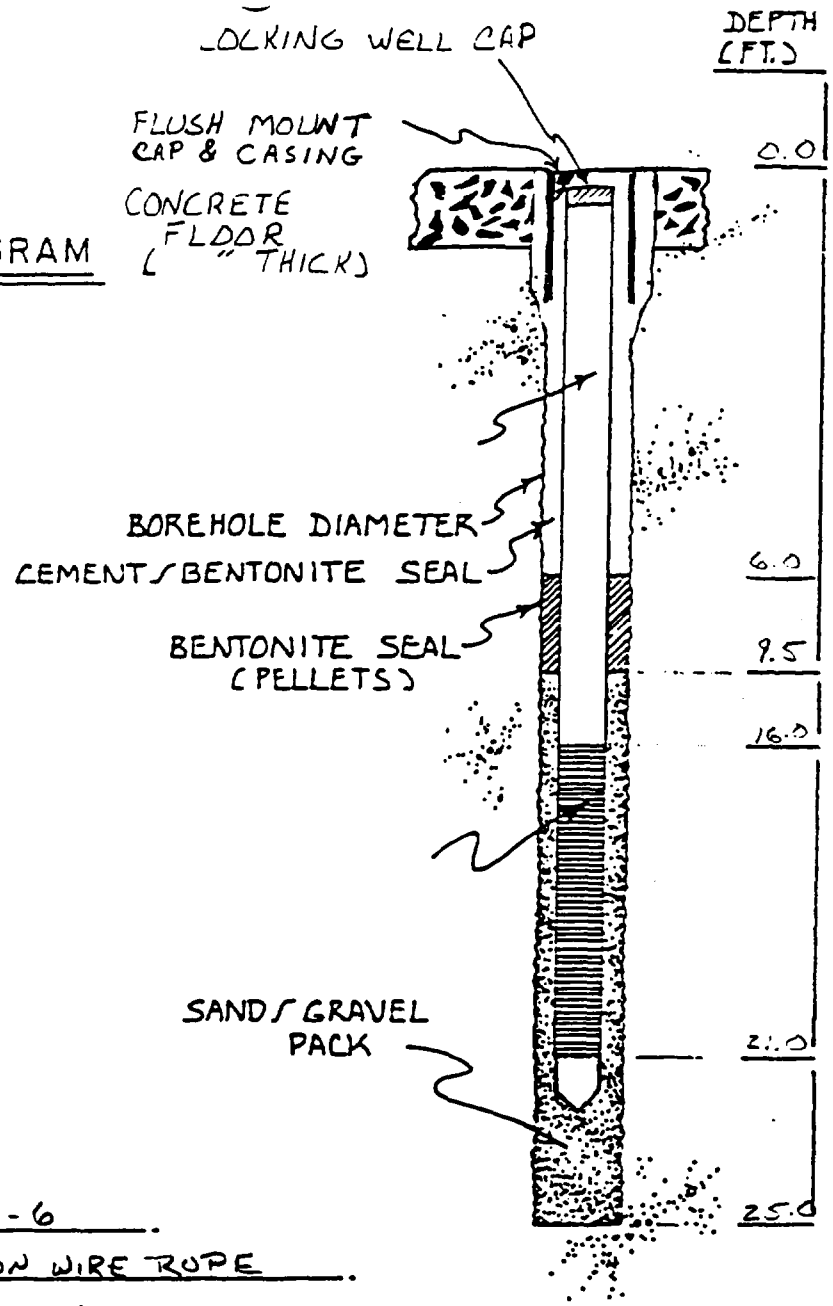
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Flush mount construction well with Locking Cap
- Lock #3358

Well Drilled inside building # 41/42 after casing through concrete



MONITORING WELL NO. MW-6.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION Buildings 41/42 at North End approx 100 ft north of Patenting.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow stem Auger.
DRILLING DATE 1/9/88.
GROUND ELEVATION 750.55.
TOP ELEVATION 750.6.
STATIC WATER DEPTH 7.08.
WATER ELEVATION 743.47.
DATE 1/10/88.

REMCOR

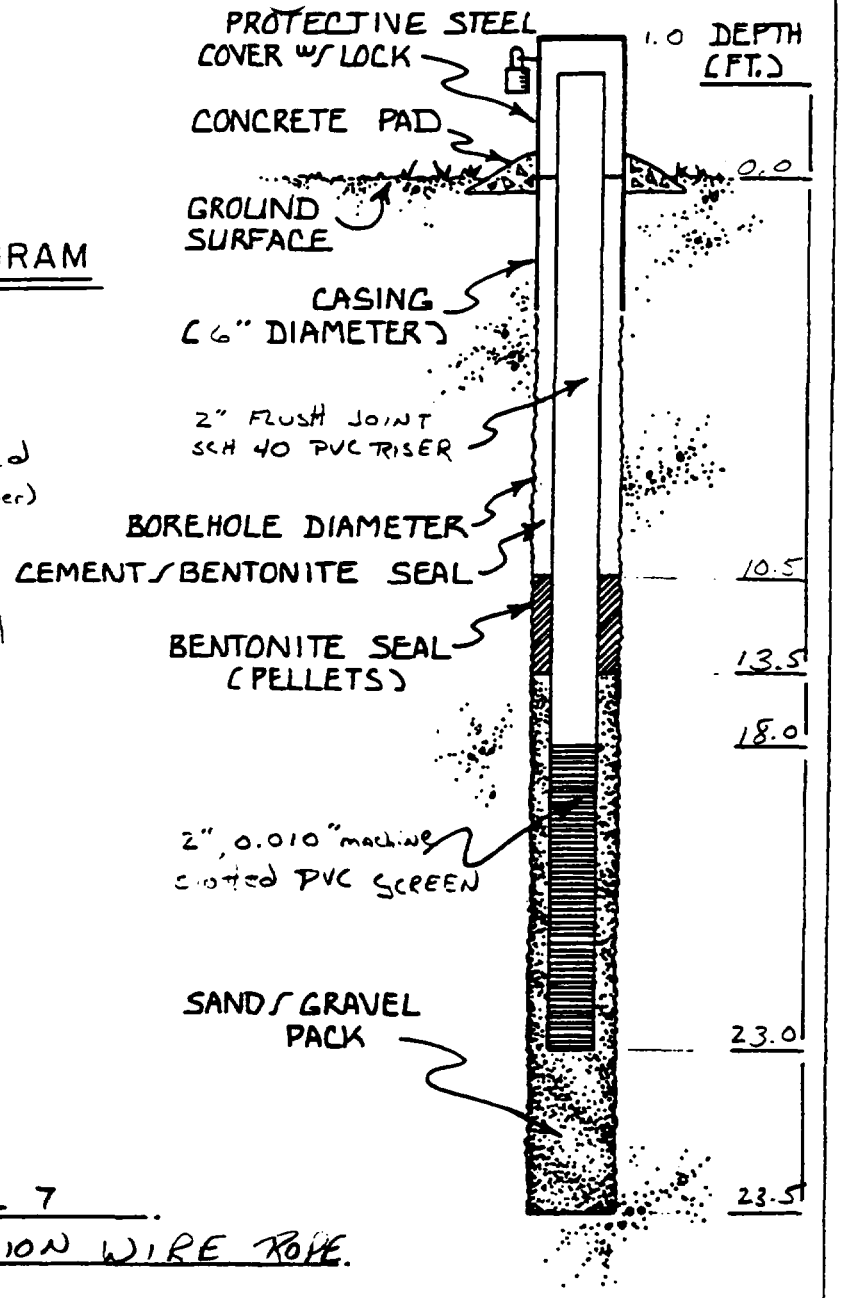
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well was originally constructed with a 2.5' stick-up (pro cover) but interferred w/ plant operations. Stick up was modified by plant personnel by cutting off 1.50'. The stick up is now 1.0' above ground surface.

Well Lock #3358



MONITORING WELL NO. MW-7.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION At spent Pickle liquor Area near Propane Filling station.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 1/7/88.
GROUND ELEVATION 750.5.
TOP ELEVATION 751.53.
STATIC WATER DEPTH 4.67.
WATER ELEVATION 746.86.
DATE 1/10/88.

REMCOR

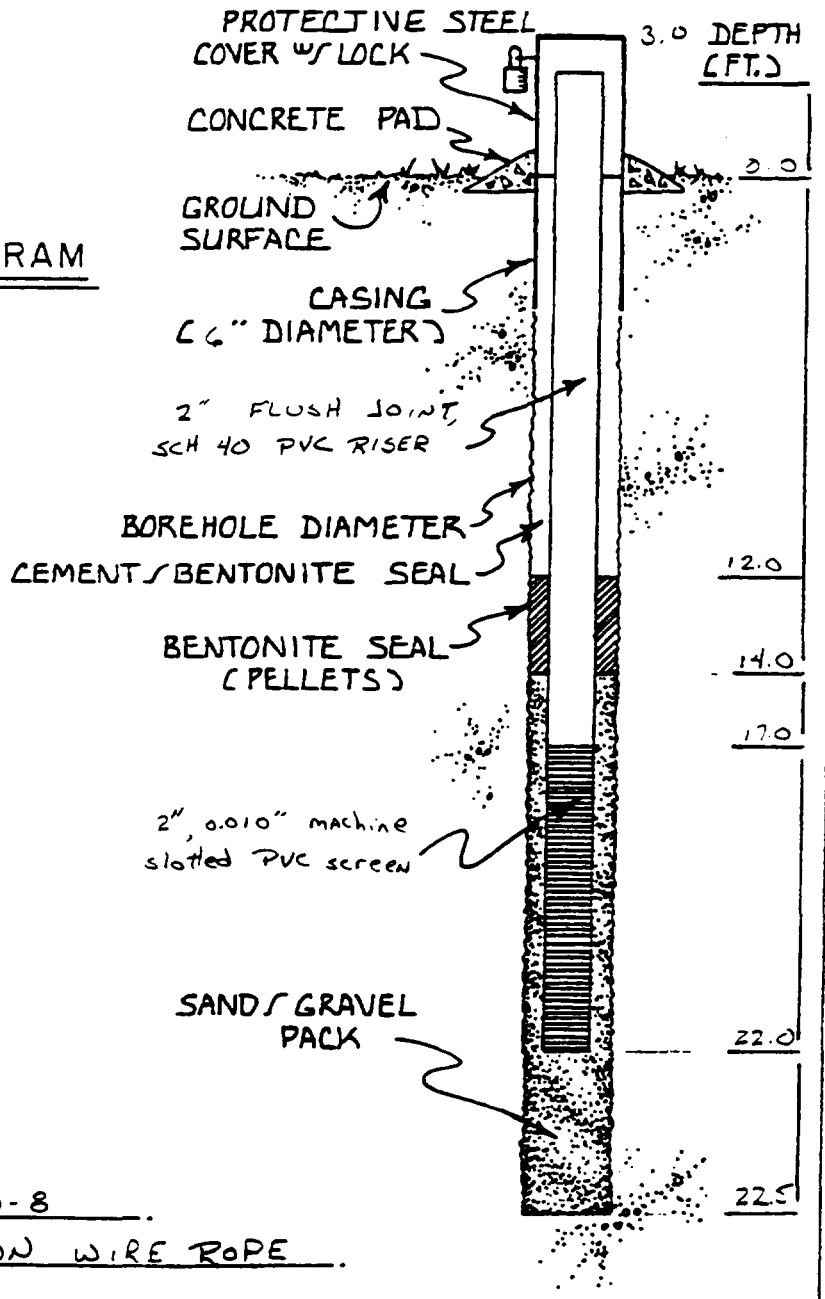
WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well drilled behind office as background well.

Well Lock #3358



MONITORING WELL NO. MW-8.
PROJECT NAME ARMCO UNION WIRE ROPE.
PROJECT NO. 87423.13.
LOCATION IN SOUTH EAST CORNER OF OFFICE PARKING LOT.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow Stem Auger.
DRILLING DATE 1/7/88.
GROUND ELEVATION 750.3.
TOP ELEVATION 753.31.
STATIC WATER DEPTH 14.03.
WATER ELEVATION 739.28.
DATE 1/10/88.

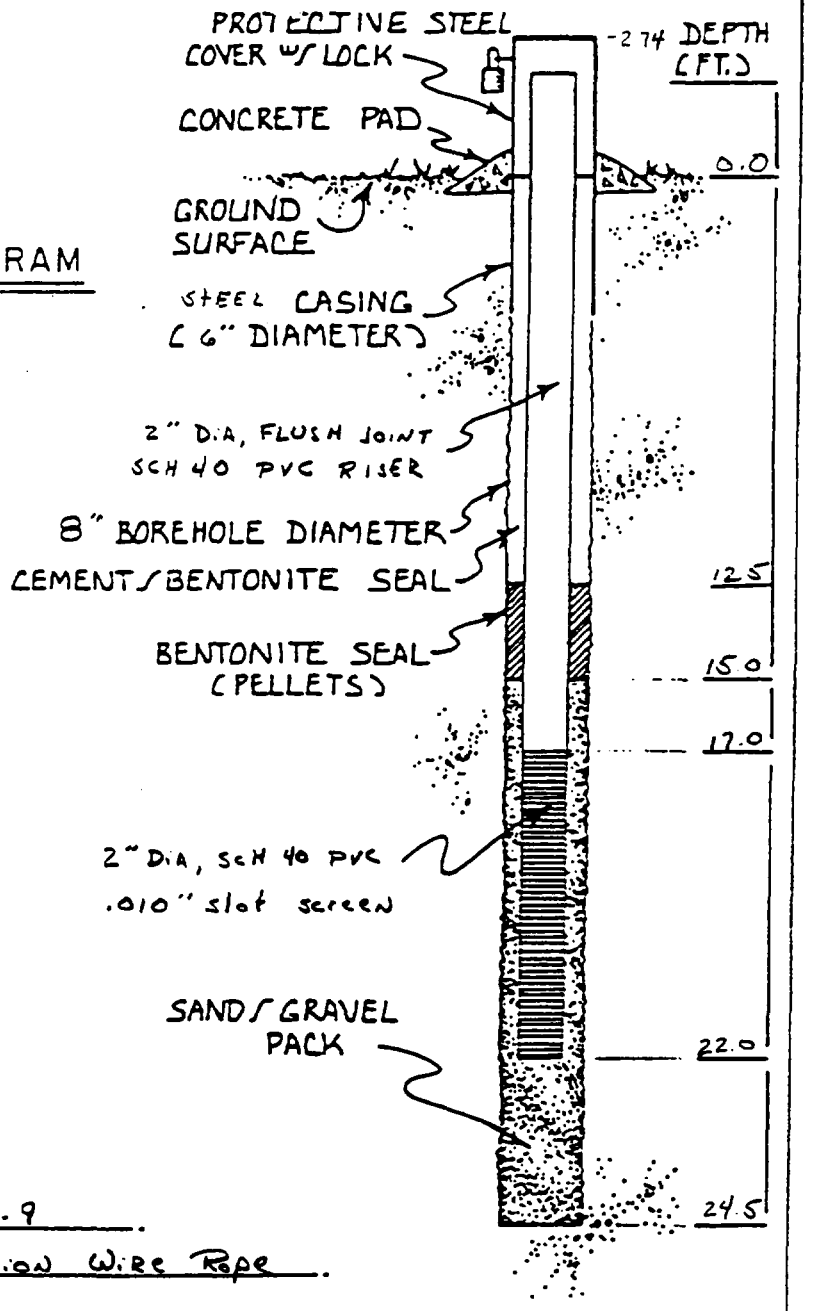
REMCOR

WELL CONSTRUCTION DIAGRAM

DRAWING NOT TO SCALE

NOTES:

Well located up gradient of Building 35, shipping.



MONITORING WELL NO. MW-9.
PROJECT NAME ARMCO Union Wire Rope.
PROJECT NO. 88630.
LOCATION South West Corner of Building 35.
GEOLOGIST D. Crowley.
DRILLING CONTRACTOR Layne Western.
DRILLER Buck Blank.
DRILLING METHOD Hollow stem Auger.
DRILLING DATE 11/17/88.
GROUND ELEVATION 750.1.
TOP ELEVATION 753.41.
STATIC WATER DEPTH 7.0 (GS).
WATER ELEVATION 743.09.
DATE 11/18/88.

APPENDIX H

RISING HEAD PERMEABILITY TEST CALCULATIONS

DRAWING NUMBER	DCFORM-A1
CHECKED	
APPROVED	
C.E.B. 4*23*91	
DRAWN BY	

REMCOR

DETERMINATION OF HYDRAULIC CONDUCTIVITY THROUGH USE OF THE BOUWER AND RICE METHOD.

REFERENCE:

"A SLUG TEST FOR DETERMINING HYDRAULIC CONDUCTIVITY OF UNCONFINED AQUIFERS WITH COMPLETELY OR PARTIALLY PENETRATING WELLS." WATER RESOURCE RESEARCH, VOL.12, NO.3, JUNE 1976, P.423.

$$K = r_C^2 \frac{\ln (Re/r_W)}{2\ L_e} \frac{1}{t} \ln \frac{Y_o}{Y_t}$$

WHERE:

- K = HYDRAULIC CONDUCTIVITY.
- Re = EFFECTIVE RADIAL DISTANCE OVER WHICH HEAD DIFFERENCE Y IS DISSIPATED.
- r_w = RADIAL DISTANCE BETWEEN WELL CENTER AND UNDISTURBED AQUIFER.
- Y_o = Y (HEAD LEVEL) AT TIME o.
- Y_t = Y AT TIME t.
- t = TIME SINCE TIME Yo.
- r_c = RADIUS OF WELL CASING.
- L_w = DISTANCE FROM BASE OF WELL TO WATER TABLE.
- L_e = SCREENED INTERVAL OF WELL.
- H = THICKNESS OF AQUIFER.

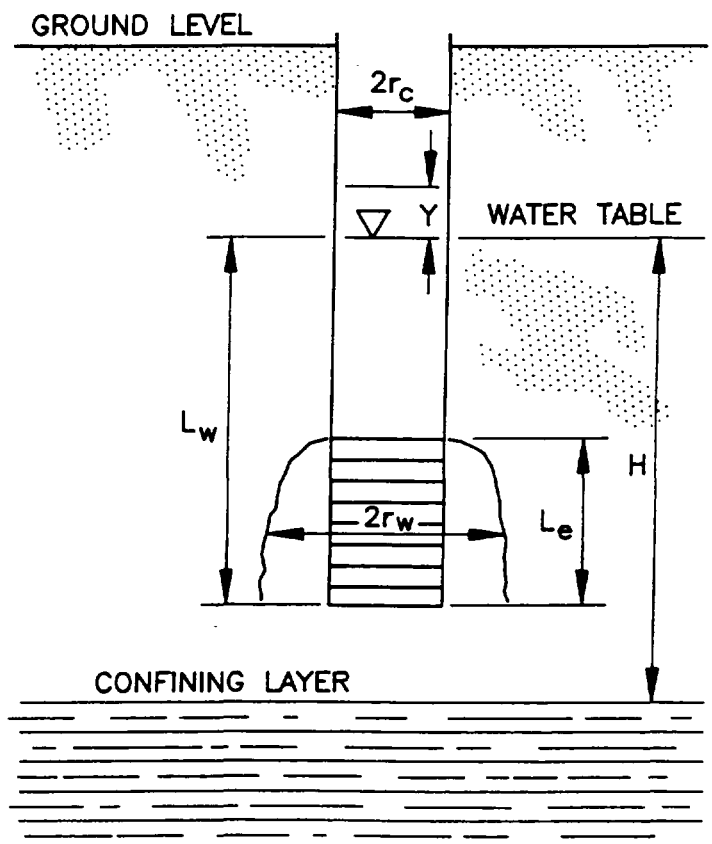


TABLE H-1

SUMMARY OF SLUG TEST RESULTS

TESTED ZONE	WELL NUMBER	TEST NUMBER	MEASURED (1) HYDRAULIC CONDUCTIVITY (cm/sec)	AVERAGE (2) HYDRAULIC CONDUCTIVITY (cm/sec)
Shallow Zone	MW-1	1	1.16E-03	
		2	1.08E-03	1.12E-03
	MW-3	1	2.79E-04	
		2	2.76E-04	2.77E-04
	MW-3A	1	8.88E-05	8.88E-05
	MW-10	1	2.43E-03	
		2	2.34E-03	2.38E-03
	MW-11	1	1.72E-03	
		1	1.59E-03	1.65E-03
	MW-12	1	1.33E-03	1.33E-03
	AVERAGE IN SHALLOW ZONE			7.25E-04
Deeper Zone	MW-1D	1	5.73E-03	5.73E-03
	MW-3D	1	5.73E-04	5.73E-04
	AVERAGE IN DEEPER ZONE			1.81E-03

(1) Rising head permeability tests were conducted at each well and hydraulic conductivities were determined using the method described in Bouwer, H. and R.C. Rice, 1976, " A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells," Water Resource Research, Vol 12, No. 3, June 1976, p. 423.

(2) Average values are calculated as geometric means.

REMCOR

DRAWING NUMBER DCFORM-A2

CHECKED APPROVED

C.E.B. 4*23*91

DRAWN BY

FOR D > H:

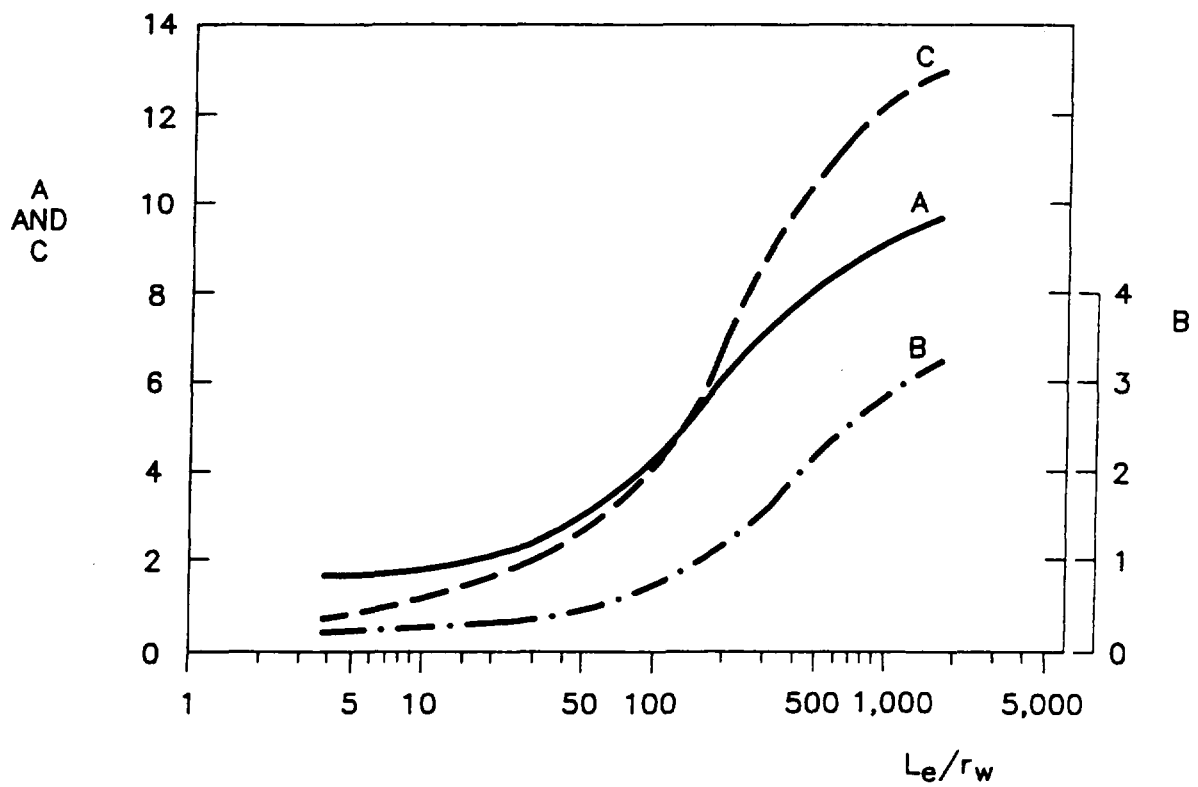
$$\ln (Re/r_w) = \frac{1}{\dfrac{1.1}{\ln (L_w/r_w)} + \dfrac{A+B \ \ln [(H-L_w)/r_w]}{(L_e/r_w)}}$$

WHERE A AND B ARE DIMENSIONLESS PARAMETERS SHOWN GRAPH IN RELATION TO L/r_w.

FOR D = H:

$$\ln (Re/r_w) = \frac{1}{\dfrac{1.1}{\ln (L_w/r_w)} + \dfrac{C}{(L_e/r_w)}}$$

WHERE C IS A DIMENSIONLESS PARAMETER SHOWN ON GRAPH IN RELATION TO L/r_w.



PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW - 1 TEST No. 1

DATE: MAY 2, 1991

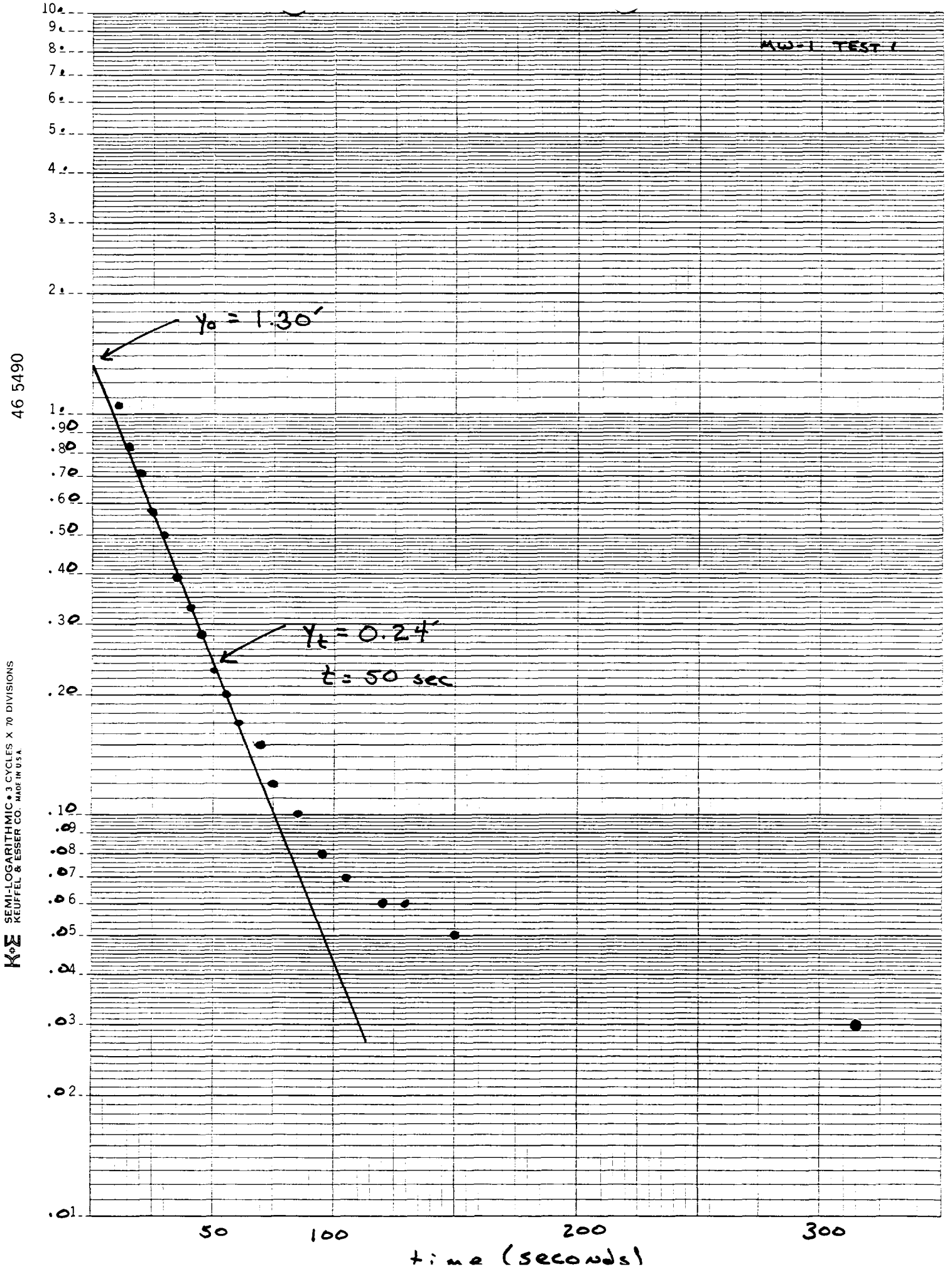
STATIC WATER LEVEL 16.07

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW -1.
Removed 2 - 1 liter bails from well in approx 13 seconds.
Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		16.07			static water level
	0 0		0		
	0 11	17.12	11	1.05	
	0 15	16.90	15	0.83	
	0 20	16.78	20	0.71	
	0 25	16.64	25	0.57	
	0 30	16.57	30	0.50	
	0 35	16.46	35	0.39	
	0 40	16.40	40	0.33	
	0 45	16.35	45	0.28	
	0 50	16.30	50	0.23	
	0 55	16.27	55	0.20	
	1 0	16.24	60	0.17	
	1 10	16.22	70	0.15	
	1 15	16.19	75	0.12	
	1 25	16.17	85	0.10	
	1 35	16.15	95	0.08	
	1 45	16.14	105	0.07	
	2 0	16.13	120	0.06	
	2 10	16.13	130	0.06	
	2 30	16.12	150	0.05	
	2 45	16.12	165	0.05	
	5 15	16.10	315	0.03	
	6 0	16.08	360	0.01	end of test


MW-1 TEST 1
$y_o = 1.30'$
$y_t = 0.24'$
$t = 50$ sec
10
9
8
7
6
5
4
3
2
1
.90
.80
.70
.60
.50
.40
.30
.20
.10
.09
.08
.07
.06
.05
.04
.03
.02
.01
50
100
200
300
time (seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: [illegible]

WELL MW - 1 Test #1

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	8.07
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	49.1
yo	Calculated drawdown in feet at time 0	=	1.3
yt	Drawdown in feet at time t	=	0.24
t	Time t in seconds	=	50
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

$$\ln(Re/rw) = 1.649$$

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

$$K = 1.16E-03 \text{ cm/s}$$

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW - 1 TEST No. 2

DATE: MAY 2, 1991

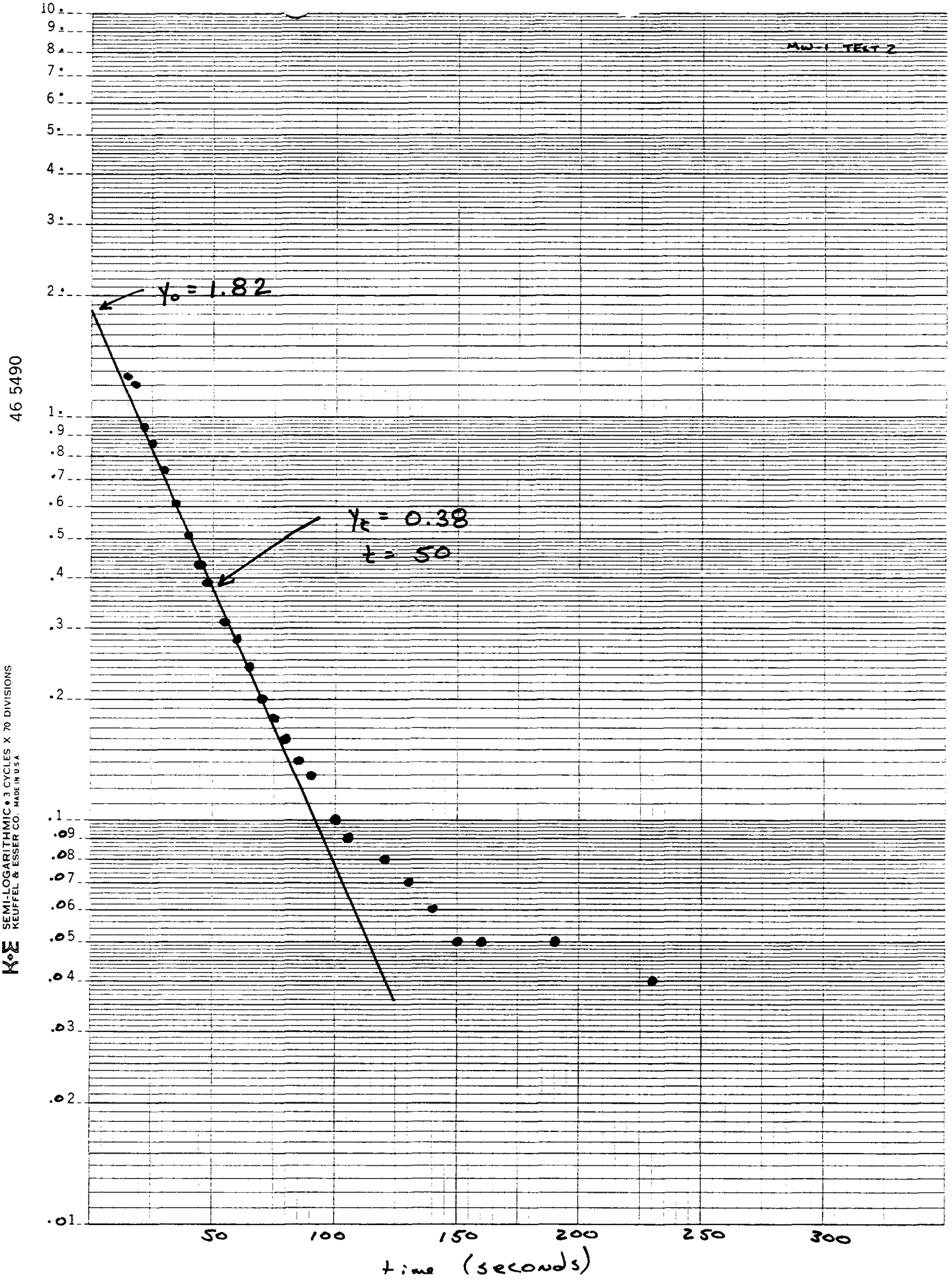
STATIC WATER LEVEL 16.08

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW -1.
Removed 2 - 1 liter bails from well in approx 14 seconds.
Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		16.08			static water level
	0 0		0		
	0 15	17.35	15	1.27	
	0 18	17.18	18	1.10	
	0 22	17.03	22	0.95	
	0 25	16.94	25	0.86	
	0 30	16.82	30	0.74	
	0 35	16.69	35	0.61	
	0 40	16.59	40	0.51	
	0 45	16.51	45	0.43	
	0 48	16.47	48	0.39	
	0 55	16.39	55	0.31	
	1 0	16.36	60	0.28	
	1 5	16.32	65	0.24	
	1 10	16.28	70	0.20	
	1 15	16.26	75	0.18	
	1 20	16.24	80	0.16	
	1 25	16.22	85	0.14	
	1 30	16.21	90	0.13	
	1 40	16.18	100	0.10	
	1 45	16.17	105	0.09	
	2 0	16.16	120	0.08	
	2 10	16.15	130	0.07	
	2 20	16.14	140	0.06	
	2 30	16.13	150	0.05	
	2 40	16.13	160	0.05	
	2 50	16.13	170	0.05	
	3 0	16.13	180	0.05	
	3 50	16.12	230	0.04	end of test


MW-1 TEST 2
$Y_0 = 1.82$
$Y_t = 0.38$
$t = 50$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
50
100
150
200
250
300
time (seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MEP

WELL MW - 1 Test #2

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	8.07
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	49.1
yo	Calculated drawdown in feet at time 0	=	1.82
yt	Drawdown in feet at time t	=	0.38
t	Time t in seconds	=	50
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.649

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 1.08E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-3 TEST No. 1

DATE: MAY 2, 1991

STATIC WATER LEVEL 15.78

TIME: 18:45

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-3. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H	m	s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
				15.78			static water level
18:58	0	0			0		
	0	14		17.30	14	1.52	
	0	20		17.20	20	1.42	
	0	25		17.15	25	1.37	
	0	30		17.08	30	1.30	
	0	35		17.00	35	1.22	
	0	40		16.92	40	1.14	
	0	50		16.82	50	1.04	
	0	55		16.78	55	1.00	
	1	0		16.73	60	0.95	
	1	5		16.70	65	0.92	
	1	10		16.65	70	0.87	
	1	15		16.61	75	0.83	
	1	20		16.58	80	0.80	
	1	25		16.54	85	0.76	
	1	30		16.51	90	0.73	
	1	40		16.45	100	0.67	
	1	50		16.40	110	0.62	
	2	0		16.35	120	0.57	
	2	10		16.31	130	0.53	
	2	15		16.28	135	0.50	
	2	30		16.24	150	0.46	
	2	40		16.20	160	0.42	
	2	50		16.18	170	0.40	
	2	55		16.16	175	0.38	
	3	0		16.15	180	0.37	
	3	15		16.11	195	0.33	
	3	30		16.08	210	0.30	
	3	45		16.07	225	0.29	
	4	0		16.04	240	0.26	

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

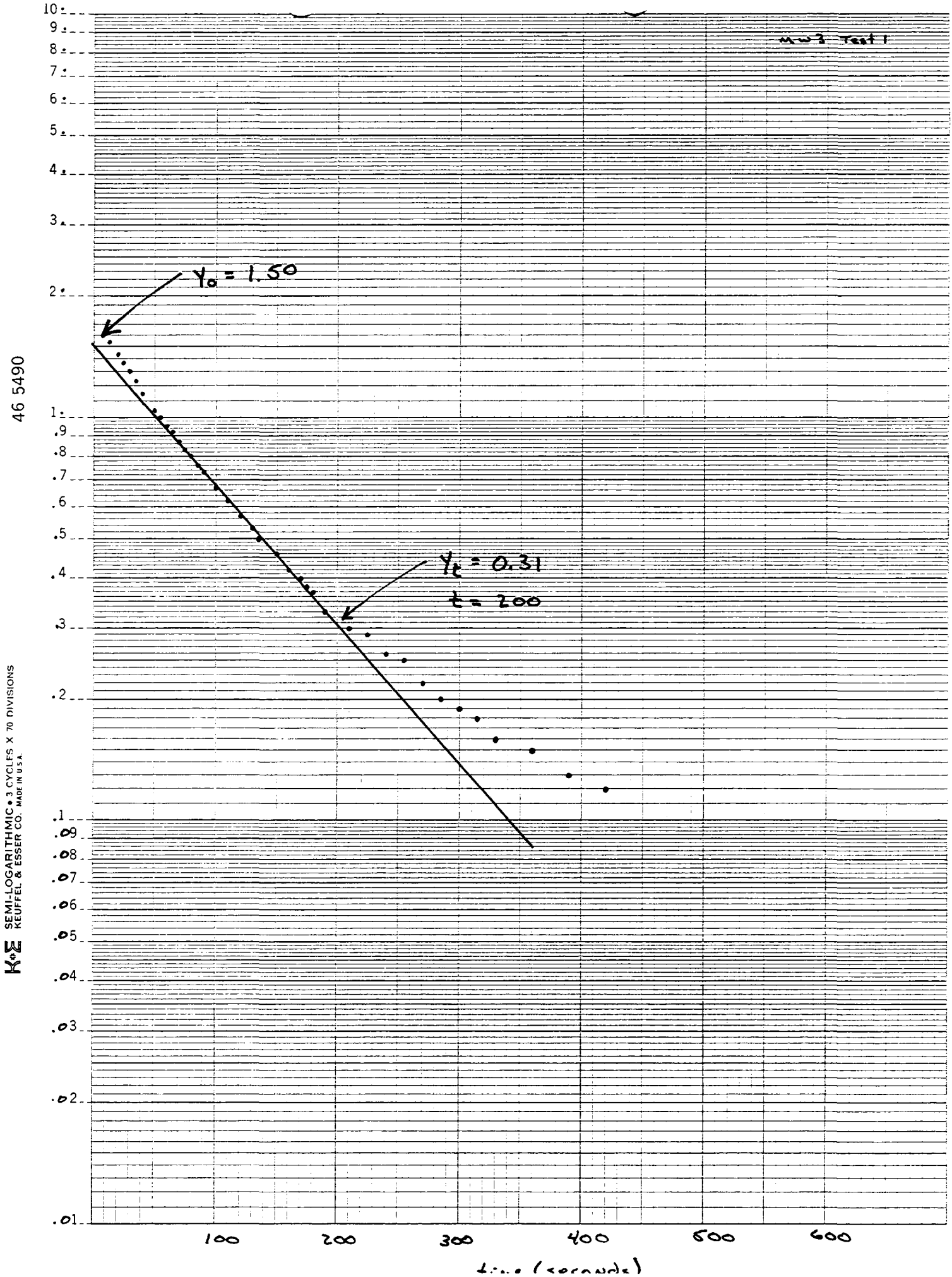
WELL NO. MW-3 TEST No. 1

DATE: MAY 2, 1991

STATIC WATER LEVEL 15.78

TIME: 18:45

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
	4 15	16.03	255	0.25	
	4 30	16.00	270	0.22	
	4 45	15.98	285	0.20	
	5 0	15.97	300	0.19	
	5 15	15.96	315	0.18	
	5 30	15.94	330	0.16	
	6 0	15.93	360	0.15	
	6 30	15.91	390	0.13	
	7 0	15.90	420	0.12	end of test


MW3 Test 1
$Y_0 = 1.50$
$Y_t = 0.31$
$t = 200$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
100
200
300
400
500
600
time (seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MSF

WELL MW - 3 Test 1

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	9.22
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	46.22
yo	Calculated drawdown in feet at time 0	=	1.5
yt	Drawdown in feet at time t	=	0.31
t	Time t in seconds	=	200
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.695

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 2.79E-04 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-3 TEST No. 2

DATE: MAY 2, 1991

STATIC WATER LEVEL 15.78 (start of test 15.83)

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW - 3 .
Removed 2 - 1 liter bails from well in approx 12 seconds.
Removed total of 1.75 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		15.78			static water level
	0 0		0		
	0 18	17.43	18	1.65	
	0 25	17.28	25	1.50	
	0 30	17.19	30	1.41	
	0 35	17.10	35	1.32	
	0 40	17.04	40	1.26	
	0 45	16.98	45	1.20	
	0 50	16.90	50	1.12	
	0 55	16.85	55	1.07	
	1 0	16.81	60	1.03	
	1 5	16.78	65	1.00	
	1 10	16.72	70	0.94	
	1 15	16.68	75	0.90	
	1 20	16.64	80	0.86	
	1 25	16.60	85	0.82	
	1 30	16.58	90	0.80	
	1 35	16.54	95	0.76	
	1 40	16.50	100	0.72	
	1 50	16.45	110	0.67	
	2 0	16.40	120	0.62	
	2 10	16.35	130	0.57	
	2 20	16.32	140	0.54	
	2 30	16.28	150	0.50	
	2 40	16.24	160	0.46	
	2 50	16.20	170	0.42	
	3 0	16.18	180	0.40	
	3 15	16.14	195	0.36	
	3 30	16.12	210	0.34	
	3 45	16.08	225	0.30	
	4 0	16.06	240	0.28	

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

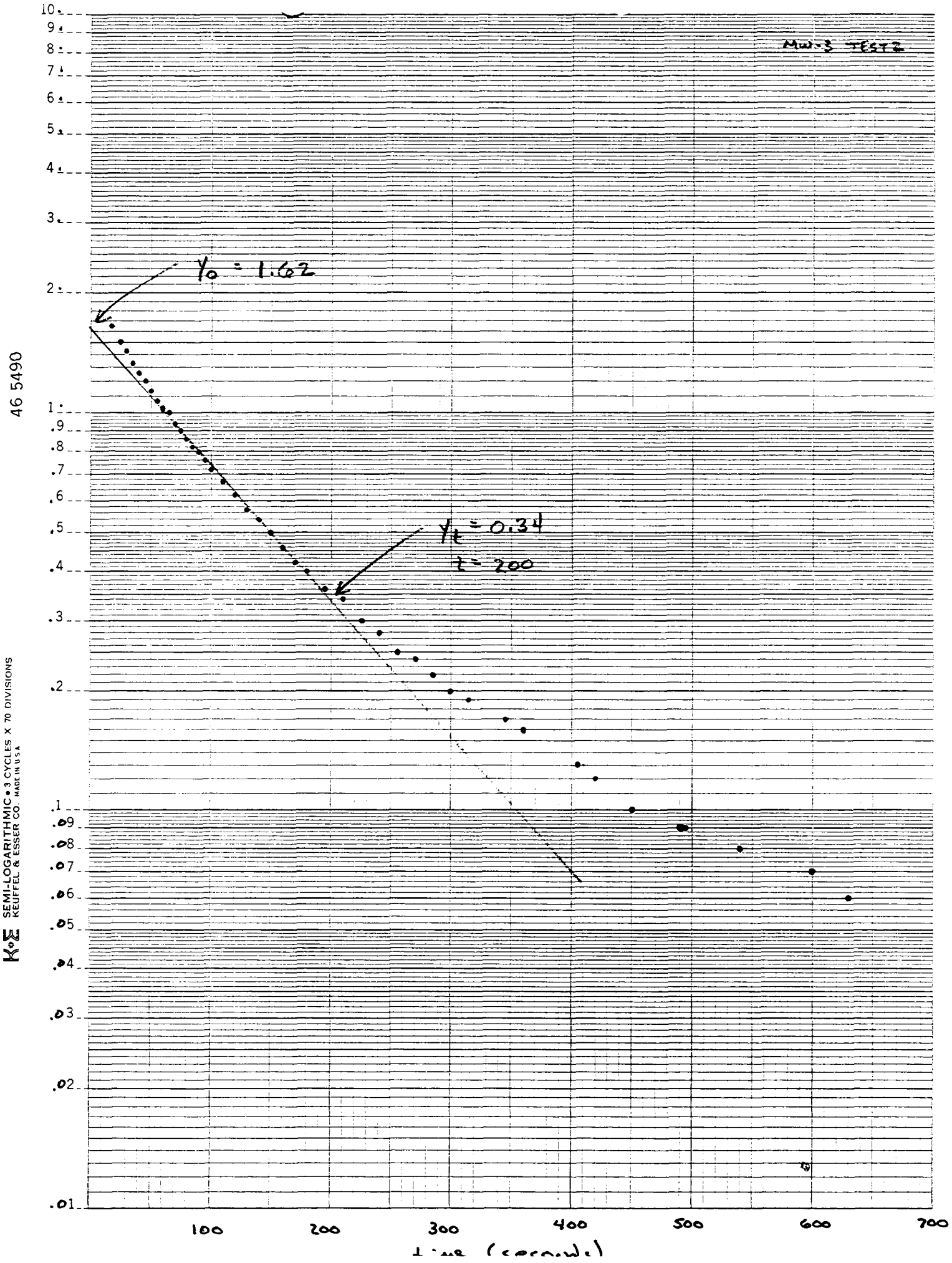
WELL NO. MW-3 TEST No. 2

DATE: MAY 2, 1991

STATIC WATER LEVEL 15.78 (start of test 15.83)

TIME:

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
	4 15	16.03	255	0.25	
	4 30	16.02	270	0.24	
	4 45	16.00	285	0.22	
	5 0	15.98	300	0.20	
	5 15	15.97	315	0.19	
	5 45	15.95	345	0.17	
	6 0	15.94	360	0.16	
	6 45	15.91	405	0.13	
	7 0	15.90	420	0.12	
	7 30	15.88	450	0.10	
	8 10	15.87	490	0.09	
	9 0	15.86	540	0.08	
	10 0	15.85	600	0.07	
	10 30	15.84	630	0.06	
	12 0	15.84	720	0.06	
	14 0	15.83	840	0.05	
	17 0	15.82	1020	0.04	end of test


MW-3 TEST 2
$Y_0 = 1.62$
$Y_t = 0.34$
$t = 200$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
100
200
300
400
500
600
700
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MEP

WELL MW - 3 Test 2

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	9.22
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	46.22
yo	Calculated drawdown in feet at time 0	=	1.62
yt	Drawdown in feet at time t	=	0.34
t	Time t in seconds	=	200
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.695

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 2.76E-04 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW - 3A TEST No. 1

DATE: MAY 1, 1991

STATIC WATER LEVEL 15.85

TIME: 18:40

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-3A.
Removed 2 - 1 liter bails from well in approx 10 seconds.
Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		15.85			static water level
	0 0		0		
	0 15	17.80	15	1.95	
	0 20	17.71	20	1.86	
	0 25	17.68	25	1.83	
	0 30	17.61	30	1.76	
	0 35	17.58	35	1.73	
	0 40	17.54	40	1.69	
	0 45	17.51	45	1.66	
	0 50	17.48	50	1.63	
	0 55	17.45	55	1.60	
	1 0	17.43	60	1.58	
	1 5	17.39	65	1.54	
	1 10	17.37	70	1.52	
	1 15	17.35	75	1.50	
	1 20	17.31	80	1.46	
	1 25	17.29	85	1.44	
	1 30	17.27	90	1.42	
	1 40	17.23	100	1.38	
	1 50	17.19	110	1.34	
	2 0	17.16	120	1.31	
	2 10	17.11	130	1.26	
	2 20	17.08	140	1.23	
	2 30	17.05	150	1.20	
	2 40	17.02	160	1.17	
	2 50	16.98	170	1.13	
	3 0	16.95	180	1.10	
	3 10	16.92	190	1.07	
	3 30	16.88	210	1.03	
	3 45	16.83	225	0.98	
	4 0	16.80	240	0.95	

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

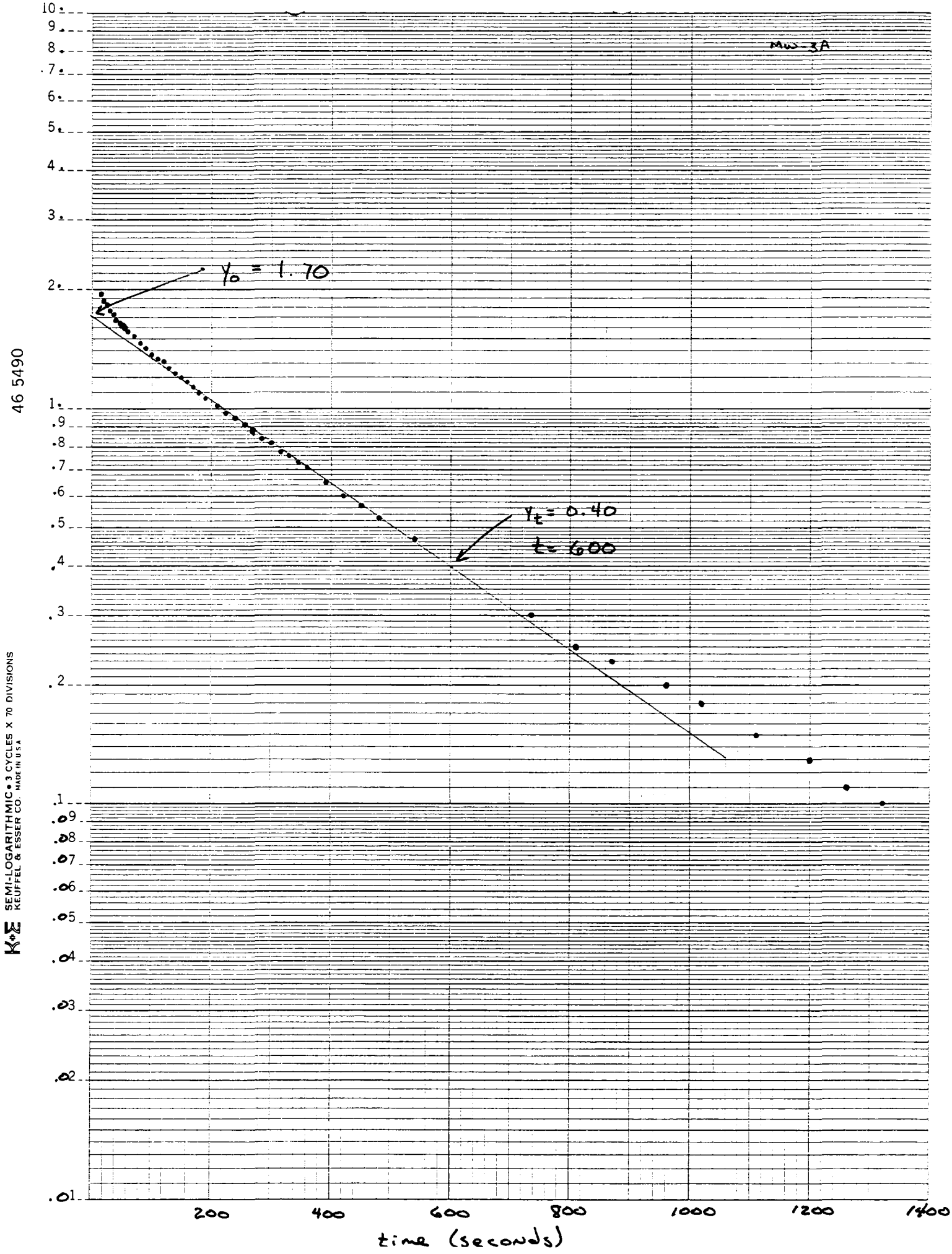
WELL NO. MW - 3A TEST No. 1

DATE: MAY 1, 1991

STATIC WATER LEVEL 15.85

TIME: 18:40

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
	4 15	16.76	255	0.91	
	4 30	16.73	270	0.88	
	4 45	16.69	285	0.84	
	5 0	16.67	300	0.82	
	5 15	16.63	315	0.78	
	5 30	16.61	330	0.76	
	5 45	16.58	345	0.73	
	6 0	16.56	360	0.71	
	6 30	16.50	390	0.65	
	7 0	16.45	420	0.60	
	7 30	16.42	450	0.57	
	8 0	16.38	480	0.53	
	9 0	16.32	540	0.47	
	12 15	16.15	735	0.30	
	13 30	16.10	810	0.25	
	14 30	16.08	870	0.23	
	16 0	16.05	960	0.20	light rain begins
	17 0	16.03	1020	0.18	
	18 30	16.00	1110	0.15	
	20 0	15.98	1200	0.13	rain ends
	21 0	15.96	1260	0.11	
	22 0	15.95	1320	0.10	end of test


MW-3A
$Y_o = 1.70$
$Y_t = 0.40$
$t = 600$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
200
400
600
800
1000
1200
1400
time (seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: [illegible]

WELL MW - 3A

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	11.75
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	47.25
yo	Calculated drawdown in feet at time 0	=	1.7
yt	Drawdown in feet at time t	=	0.4
t	Time t in seconds	=	600
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.766

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 8.88E-05 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-10 TEST No. 1

DATE: MAY 2, 1991

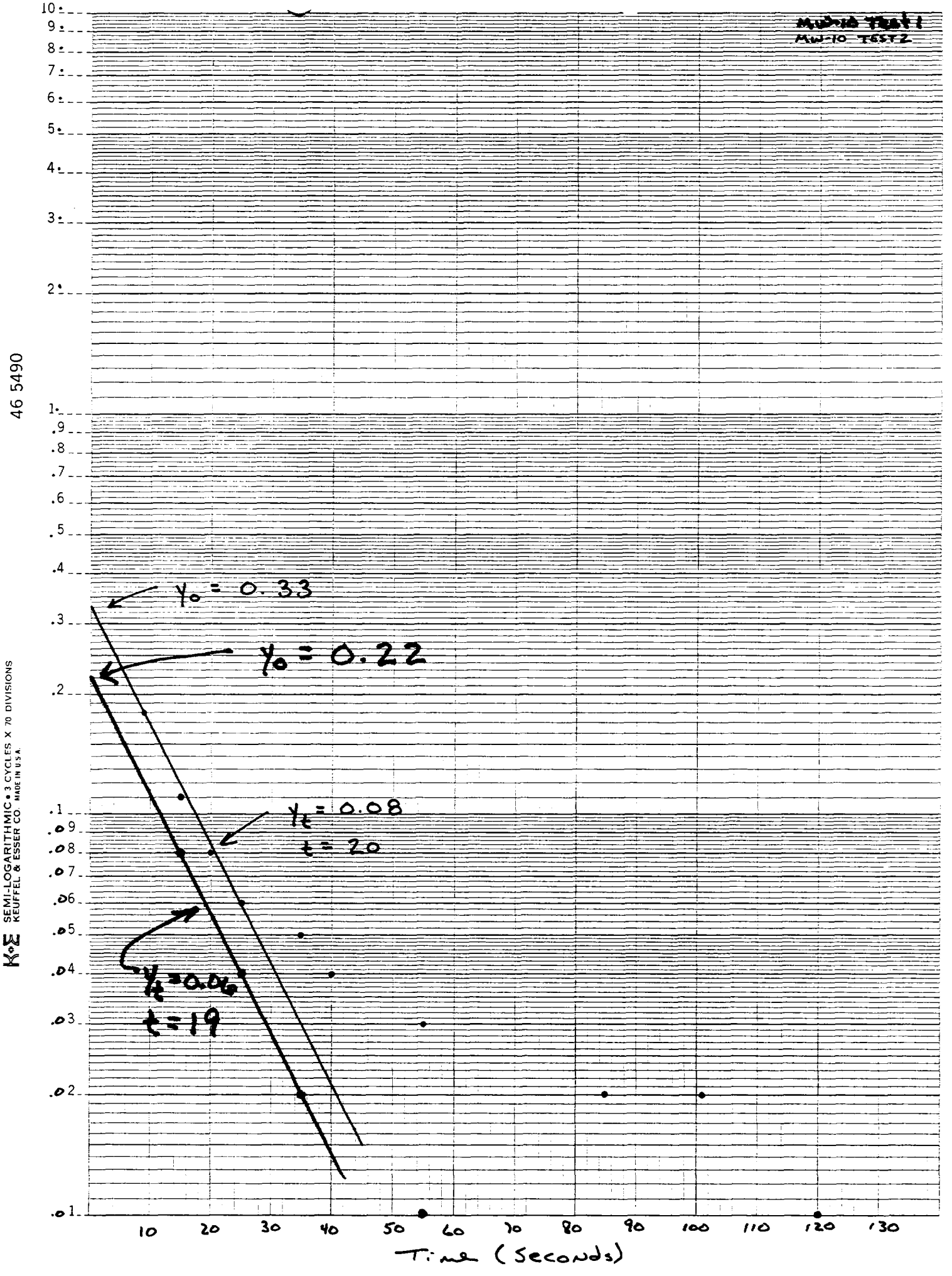
STATIC WATER LEVEL 7.32

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-10. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		7.32			static water level
	0 0		0		
	0 15	7.40	15	0.08	
	0 25	7.36	25	0.04	
	0 35	7.34	35	0.02	
	0 40	7.34	40	0.02	
	0 45	7.34	45	0.02	
	0 55	7.33	55	0.01	
	1 0	7.33	60	0.01	
	1 15	7.33	75	0.01	
	1 30	7.33	90	0.01	end of test


MW-10 TEST 1
MW-10 TEST 2
$y_o = 0.33$
$y_o = 0.22$
$y_t = 0.08$
$t = 20$
$y_t = 0.06$
$t = 19$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
10
20
30
40
50
60
70
80
90
100
110
120
130
Time (Seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MEP

WELL MW - 10 Test 1

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	7.68
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	44.83
yo	Calculated drawdown in feet at time 0	=	0.33
yt	Drawdown in feet at time t	=	0.08
t	Time t in seconds	=	20
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\frac{1.1}{\ln(Lw/rw)} + \frac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.641

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 2.43E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-10 TEST No. 2

DATE: MAY 2, 1991

STATIC WATER LEVEL 7.32

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-10. Removed 4 - 1 liter bails from well in approx 20 seconds. Removed total of 4 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		7.32			static water level
	0 0		0		
	0 9	7.50	9	0.18	
	0 15	7.43	15	0.11	
	0 20	7.40	20	0.08	
	0 25	7.38	25	0.06	
	0 35	7.37	35	0.05	
	0 40	7.36	40	0.04	
	0 55	7.35	55	0.03	
	1 25	7.34	85	0.02	
	1 45	7.34	105	0.02	
	2 0	7.33	120	0.01	end of test

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MEP

WELL MW - 10 Test 2

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	7.68
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	44.83
yo	Calculated drawdown in feet at time 0	=	0.22
yt	Drawdown in feet at time t	=	0.06
t	Time t in seconds	=	19
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.641

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 2.34E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-11 TEST No. 1

DATE: MAY 2, 1991

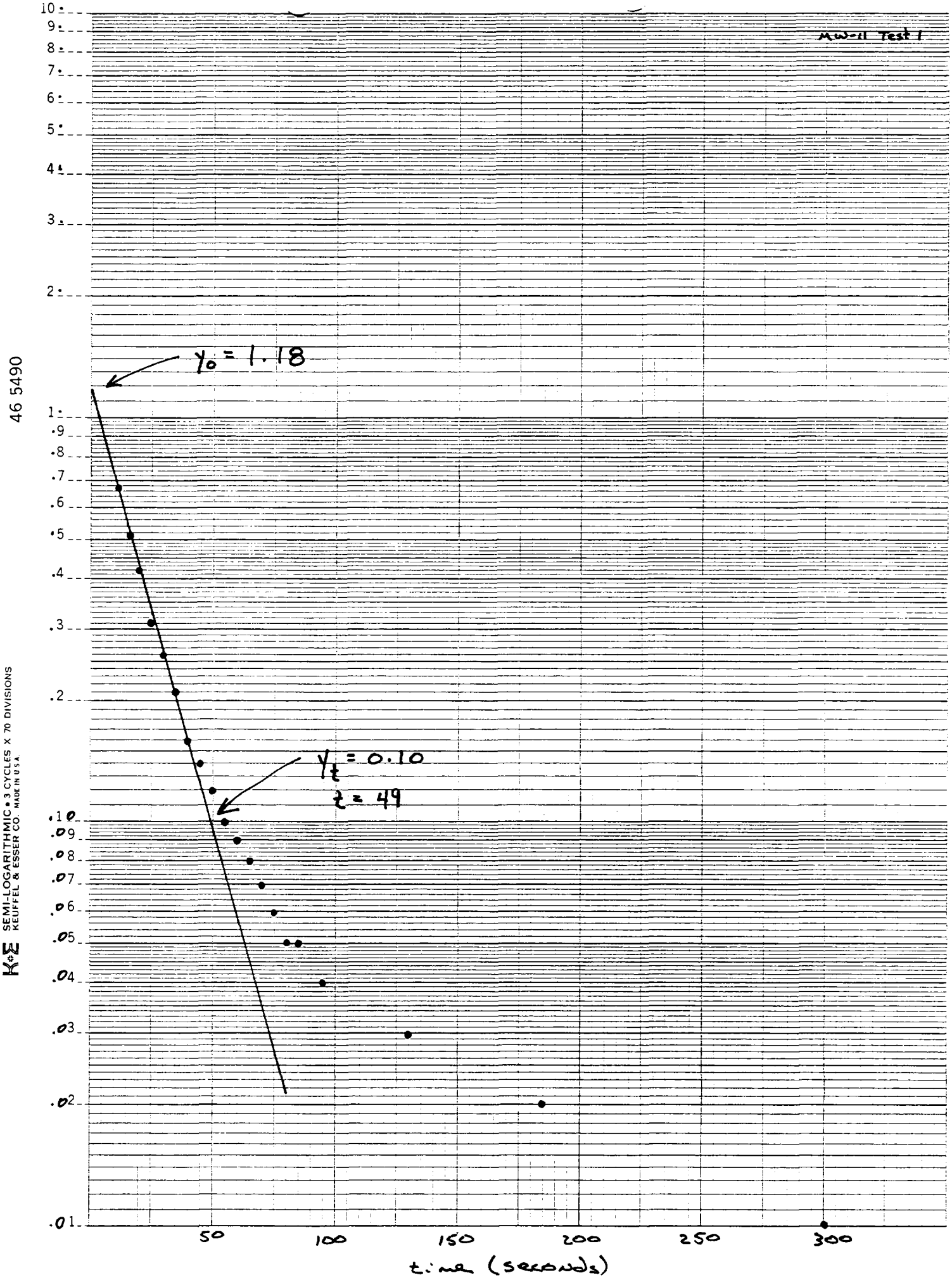
STATIC WATER LEVEL 7.38

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-11. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		7.38			static water level
	0 0		0		
	0 12	8.05	12	0.67	
	0 16	7.89	16	0.51	
	0 20	7.80	20	0.42	
	0 25	7.69	25	0.31	
	0 30	7.64	30	0.26	
	0 35	7.59	35	0.21	
	0 40	7.54	40	0.16	
	0 45	7.52	45	0.14	
	0 50	7.50	50	0.12	
	0 55	7.48	55	0.10	
	1 0	7.47	60	0.09	
	1 5	7.46	65	0.08	
	1 10	7.45	70	0.07	
	1 15	7.44	75	0.06	
	1 20	7.43	80	0.05	
	1 25	7.43	85	0.05	
	1 35	7.42	95	0.04	
	2 10	7.41	130	0.03	
	2 25	7.40	145	0.02	
	3 0	7.40	180	0.02	
	5 0	7.39	300	0.01	end of test


MW-11 Test 1
$y_o = 1.18$
$y_t = 0.10$
$t = 49$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.10
.09
.08
.07
.06
.05
.04
.03
.02
.01
50
100
150
200
250
300
time (seconds)
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MJ

WELL MW - 11 Test 1

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	7.62
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	44.87
yo	Calculated drawdown in feet at time 0	=	1.18
yt	Drawdown in feet at time t	=	0.1
t	Time t in seconds	=	49
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.639

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 1.72E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-11 TEST No. 2

DATE: MAY 2, 1991

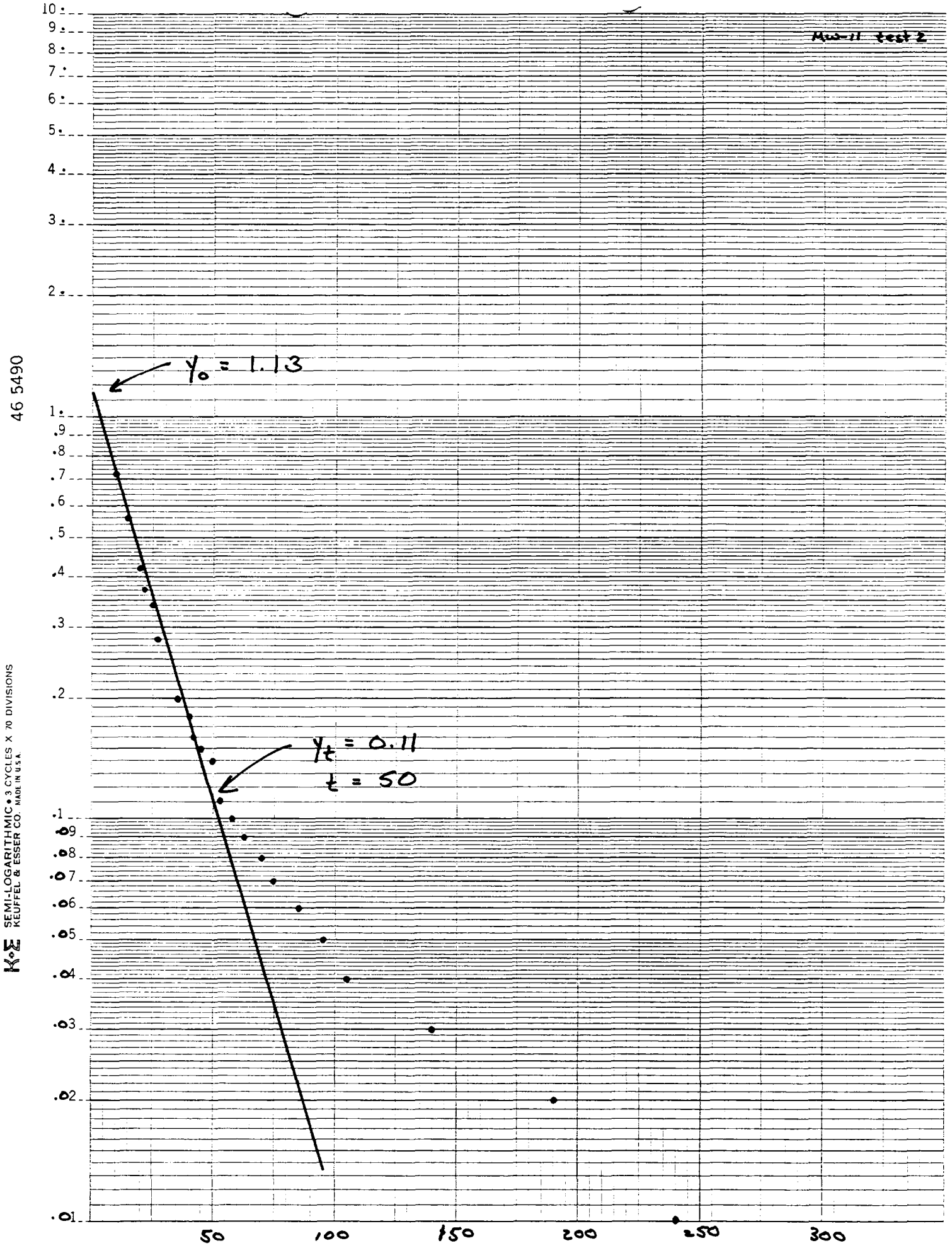
STATIC WATER LEVEL 7.38

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-11. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
		7.38			static water level
	0 0		0		
	0 10	8.10	10	0.72	
	0 15	7.94	15	0.56	
	0 20	7.80	20	0.42	
	0 22	7.75	22	0.37	
	0 25	7.72	25	0.34	
	0 28	7.66	28	0.28	
	0 35	7.58	35	0.20	
	0 40	7.56	40	0.18	
	0 42	7.54	42	0.16	
	0 45	7.53	45	0.15	
	0 50	7.52	50	0.14	
	0 53	7.49	53	0.11	
	0 57	7.48	57	0.10	
	1 3	7.47	63	0.09	
	1 10	7.46	70	0.08	
	1 15	7.45	75	0.07	
	1 25	7.44	85	0.06	
	1 35	7.43	95	0.05	
	1 45	7.42	105	0.04	
	2 0	7.42	120	0.04	
	2 20	7.41	140	0.03	
	3 10	7.40	190	0.02	
	4 0	7.39	240	0.01	end of test


Mw-11 test 2
$y_o = 1.13$
$y_t = 0.11$
$t = 50$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
50
100
150
200
250
300
46 5490
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: MEP

WELL MW - 11 Test 2

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	7.62
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	44.87
yo	Calculated drawdown in feet at time 0	=	1.13
yt	Drawdown in feet at time t	=	0.11
t	Time t in seconds	=	50
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.639

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 1.59E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW-12 TEST No.

DATE: MAY 2, 1991

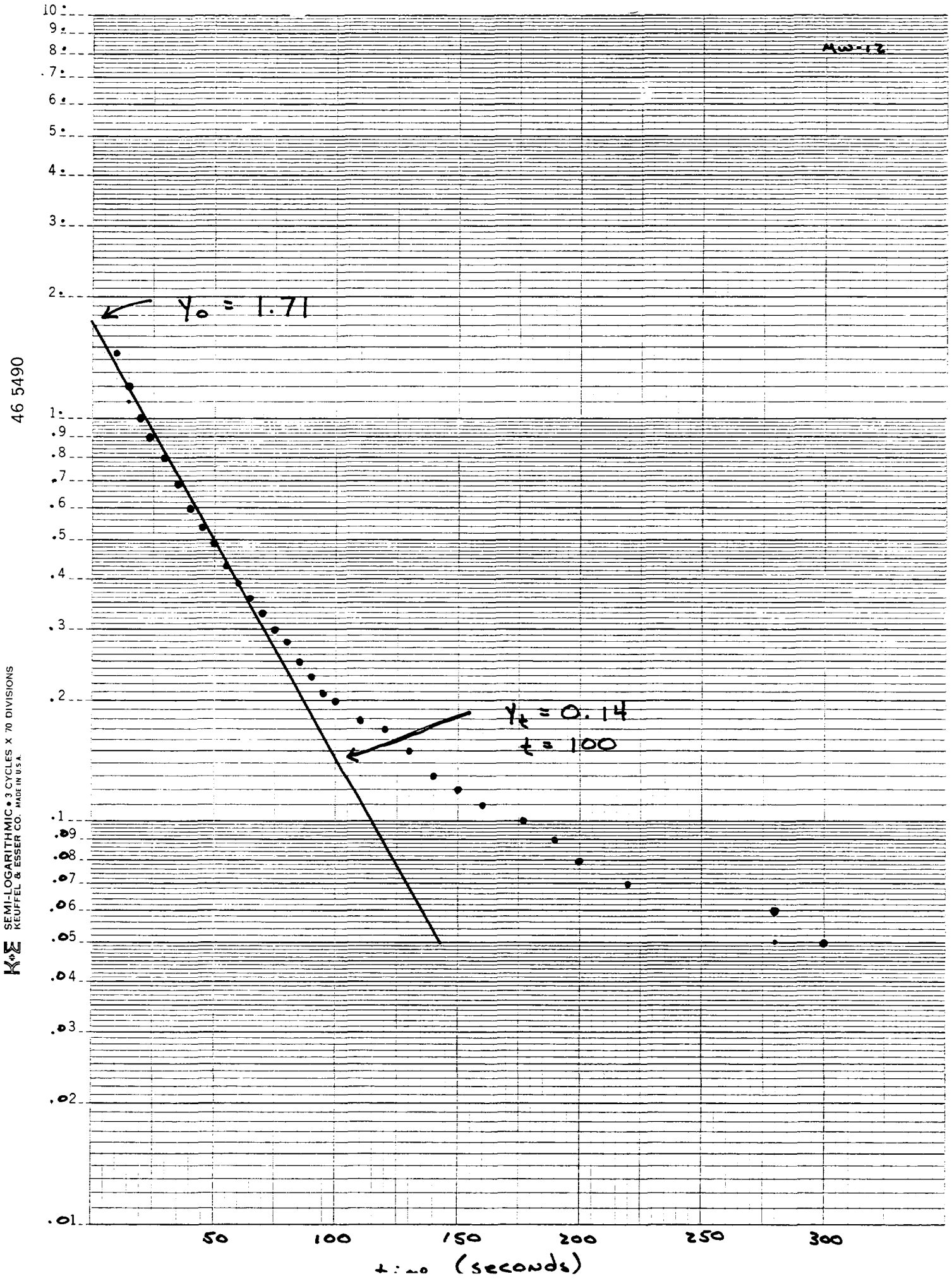
STATIC WATER LEVEL 5.55

TIME: 11:15

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW-12. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H m s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
11:15		5.55			static water level
	0 0		0		
	0 10	7.00	10	1.45	
	0 15	6.75	15	1.20	
	0 20	6.55	20	1.00	
	0 24	6.45	24	0.90	
	0 30	6.35	30	0.80	
	0 35	6.24	35	0.69	
	0 40	6.15	40	0.60	
	0 45	6.09	45	0.54	
	0 50	6.04	50	0.49	
	0 55	5.98	55	0.43	
	1 0	5.94	60	0.39	
	1 5	5.91	65	0.36	
	1 10	5.88	70	0.33	
	1 15	5.85	75	0.30	
	1 20	5.83	80	0.28	
	1 25	5.80	85	0.25	
	1 30	5.78	90	0.23	
	1 35	5.76	95	0.21	
	1 40	5.75	100	0.20	
	1 50	5.73	110	0.18	
	2 0	5.72	120	0.17	
	2 10	5.70	130	0.15	
	2 20	5.68	140	0.13	
	2 30	5.67	150	0.12	
	2 40	5.66	160	0.11	
	2 57	5.65	177	0.10	
	3 10	5.64	190	0.09	
	3 20	5.63	200	0.08	
	3 40	5.62	220	0.07	
	4 15	5.62	255	0.07	
	4 40	5.61	280	0.06	
	5 0	5.60	300	0.05	
	6 0	5.60	360	0.05	end of test


MW-12
$Y_o = 1.71$
$Y_t = 0.14$
$t = 100$
10
9
8
7
6
5
4
3
2
1
.9
.8
.7
.6
.5
.4
.3
.2
.1
.09
.08
.07
.06
.05
.04
.03
.02
.01
50
100
150
200
250
300
time (seconds)
46 5490
K&E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri

By : D Crowley

Checked: [illegible]

WELL MW - 12

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.333
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	9.5
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	46.5
yo	Calculated drawdown in feet at time 0	=	1.71
yt	Drawdown in feet at time t	=	0.04
t	Time t in seconds	=	100
Le/rw	Ratio screen length to bore hole radius	=	15.0
		=	
A	Dimensionless coefficient A	=	2
B	Dimensionless coefficient B	=	0.4
C	Dimensionless coefficient C	=	

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\dfrac{1.1}{\ln(Lw/rw)} + \dfrac{A+B*\ln[(H-Lw)/rw]}{Le/rw}}$$

ln(Re/rw)= 1.704

CALCULATION OF K

$$K = \frac{rc^2*\ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} *30.48$$

K = 1.33E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

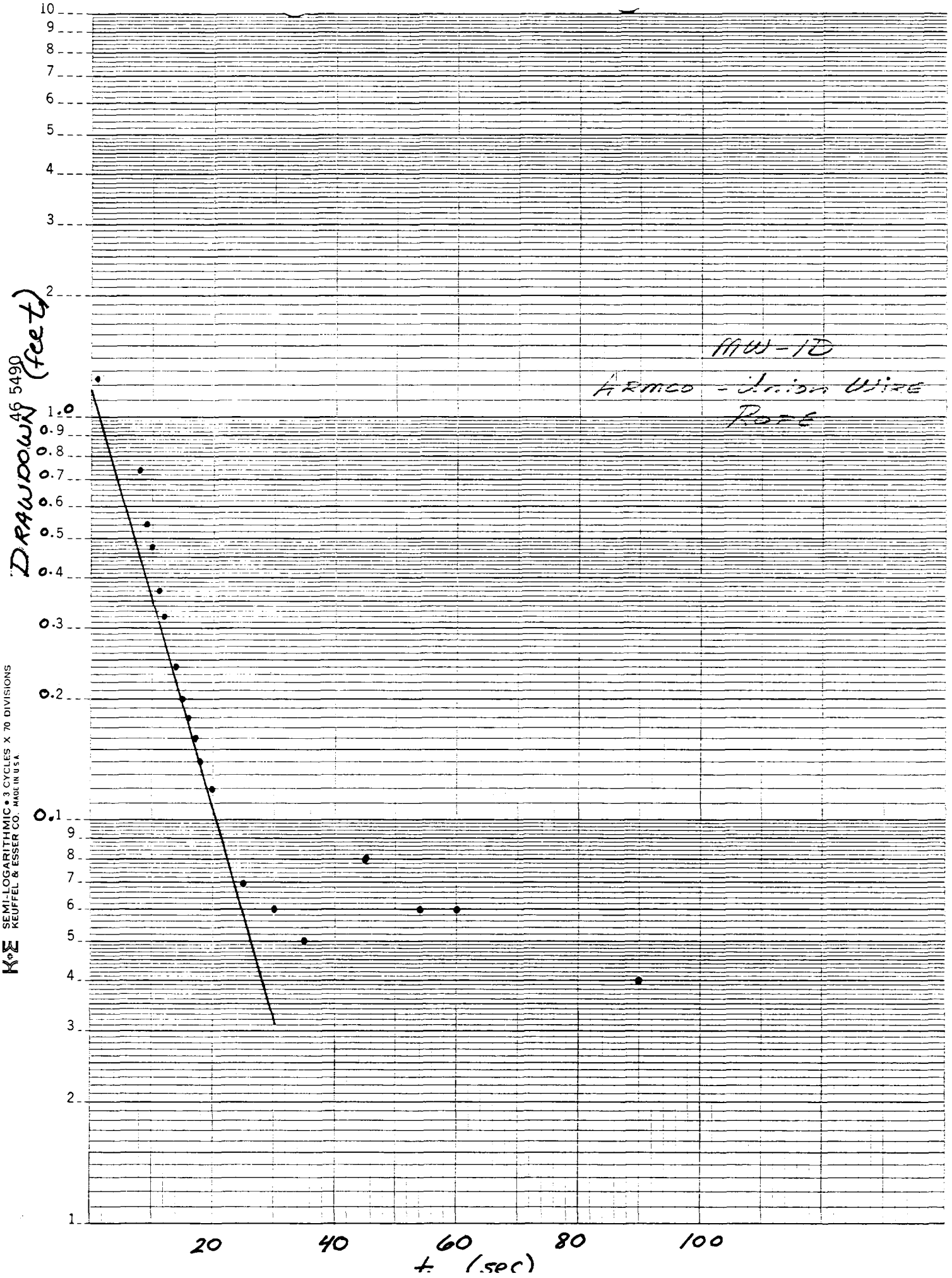
WELL NO. MW - 1D TEST No.
STATIC WATER LEVEL = 13.06'

DATE: MAY 2, 1991
TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW - 1D.
Removed one liter of water to start slug test.
Removed total of one liter of water.

WATCH TIME	TEST TIME H	m	s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
				13.06			static water level
	0	0	0		0		
	0	0	1	14.30	1	1.24	
	0	0	8	13.80	8	0.74	
	0	0	9	13.60	9	0.54	
	0	0	10	13.52	10	0.46	
	0	0	11	13.43	11	0.37	
	0	0	12	13.38	12	0.32	
	0	0	14	13.30	14	0.24	
	0	0	15	13.26	15	0.20	
	0	0	16	13.24	16	0.18	
	0	0	17	13.22	17	0.16	
	0	0	18	13.20	18	0.14	
	0	0	20	13.18	20	0.12	
	0	0	25	13.13	25	0.07	
	0	0	30	13.12	30	0.06	
	0	0	35	13.11	35	0.05	
	0	0	40	13.14	40	0.08	
	0	0	45	13.14	45	0.08	
	0	0	50	13.12	50	0.06	
	0	0	54	13.12	54	0.06	
	0	0	60	13.12	60	0.06	
	0	0	90	13.10	90	0.04	


DRAWDOWN (feet)
t (sec)
MW-1D
Armco - Union Wire Rope
K+E SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 5490

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri
MW-1D

By : DPC

Checked: MEP

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.666
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	54
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	54
yo	Calculated drawdown in feet at time 0	=	1.15
yt	Drawdown in feet at time t	=	0.14
t	Time t in seconds	=	20
Le/rw	Ratio screen length to bore hole radius	=	7.5
		=	
A	Dimensionless coefficient A	=	
B	Dimensionless coefficient B	=	
C	Dimensionless coefficient C	=	1

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\frac{1.1}{\ln(Lw/rw)} + \frac{C}{Le/rw}}$$

ln(Re/rw)= 2.608

CALCULATION OF K

$$K = \frac{rc^2 * \ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} * 30.48$$

K = 5.73E-03 cm/s

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

WELL NO. MW - 3D TEST No.

DATE: MAY 2, 1991

STATIC WATER LEVEL 13.78

TIME:

TEAM : DAYNE CROWLEY

TEST TYPE / DESCRIPTION: Rising head slug test at Well MW - 3D. Removed 2 - 1 liter bails from well in approx 10 seconds. Removed total of 2 liters of water.

WATCH TIME	TEST TIME H	m	s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
				13.78			static water level
	0	0	0		0		
	0	0	3	17.07	3	3.29	
	0	0	4	16.95	4	3.17	
	0	0	5	16.88	5	3.10	
	0	0	8	16.70	8	2.92	
	0	0	11	16.56	11	2.78	
	0	0	14	16.47	14	2.69	
	0	0	16	16.37	16	2.59	
	0	0	17	16.34	17	2.56	
	0	0	18	16.31	18	2.53	
	0	0	19	16.29	19	2.51	
	0	0	23	16.16	23	2.38	
	0	0	29	16.00	29	2.22	
	0	0	44	15.64	44	1.86	
	0	0	53	15.44	53	1.66	
	0	0	59	15.33	59	1.55	
	0	1	4	15.26	64	1.48	
	0	1	8	15.20	68	1.42	
	0	1	14	15.11	74	1.33	
	0	1	19	15.04	79	1.26	
	0	1	23	14.95	83	1.17	
	0	1	29	14.90	89	1.12	
	0	1	34	14.84	94	1.06	
	0	1	38	14.78	98	1.00	
	0	1	36	14.74	104	0.96	
	0	1	49	14.70	109	0.92	
	0	1	53	14.65	113	0.87	
	0	1	59	14.59	119	0.81	
	0	2	29	14.39	149	0.61	
	0	2	59	14.24	179	0.46	

PERMEABILITY TEST DATA SHEET

PROJECT: ARMCO - UNION WIRE ROPE

PROJECT NO. 90247

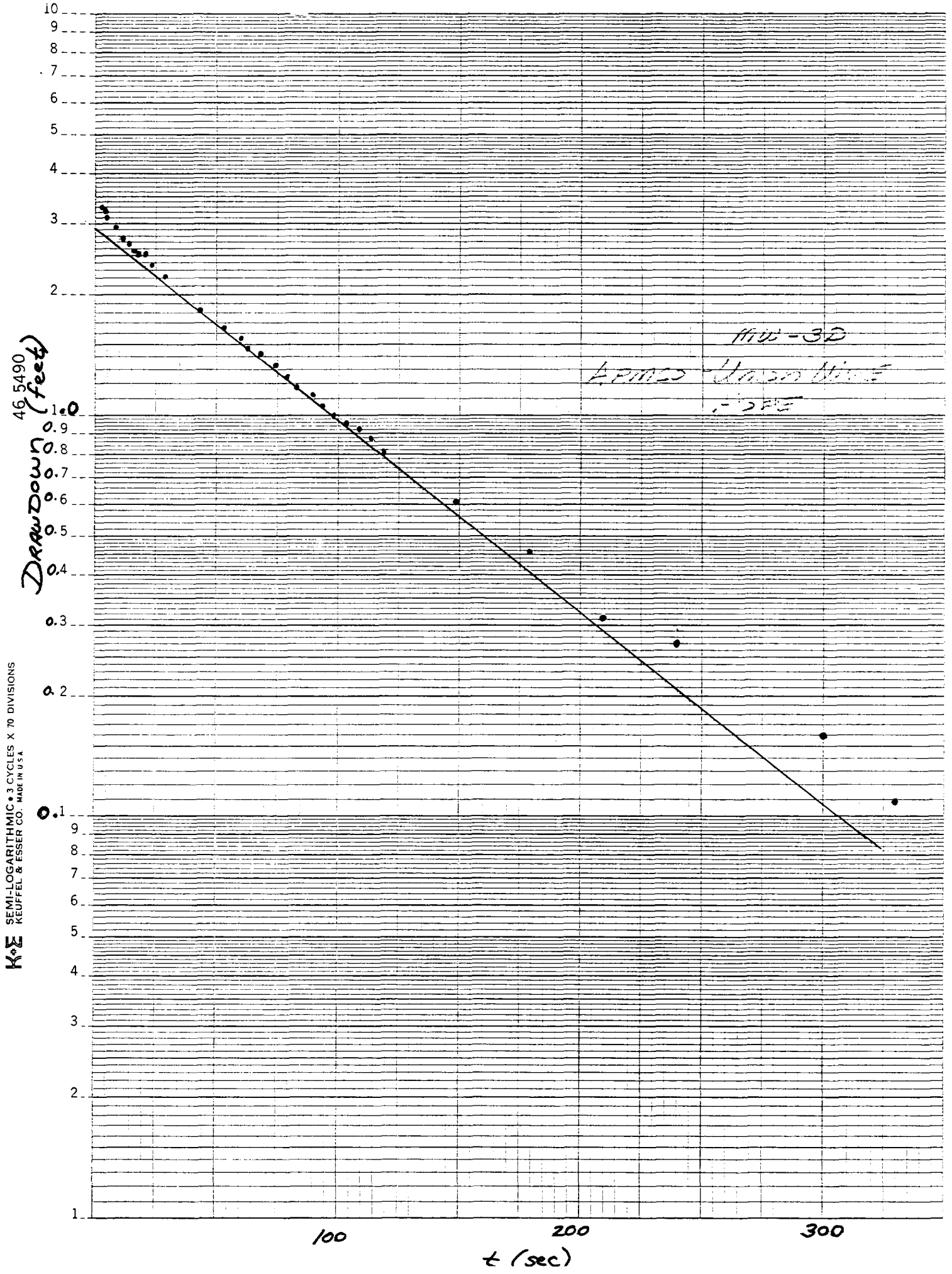
WELL NO. MW - 3D TEST No.

DATE: MAY 2, 1991

STATIC WATER LEVEL 13.78

TIME:

WATCH TIME	TEST TIME H	m	s	WATER LEVEL	TIME (sec)	DRAWDOWN FEET	REMARKS
	0	3	29	14.09	209	0.31	
	0	3	59	14.05	239	0.27	
	0	4	29	13.97	269	0.19	
	0	4	59	13.94	299	0.16	
	0	5	29	13.89	329	0.11	
	0	5	59	13.86	359	0.08	
	0	6	29	13.85	389	0.07	
	0	6	59	13.83	419	0.05	
	0	7	29	13.79	449	0.01	
	0	7	59	13.80	479	0.02	


MW-3D
Drawdown (feet)
t (sec)
100
200
300
10
9
8
7
6
5
4
3
2
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
SEMI-LOGARITHMIC • 3 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 5490

SLUG TEST CALCULATIONS AT
Union Wire Rope North End
Kansas City, Missouri
MW-3D

By : DPC

Checked: MEF

Rising Head slug test calculated by the Bouwer and Rice (1976) method for estimating hydraulic conductivity of an Unconfined Aquifer with partially penetrating wells.

LIST OF VARIABLES

rw	Radius of bore hole in feet	=	0.666
rc	Radius of casing in feet	=	0.083
Lw	Length water above bottom of well in ft	=	51
Le	Staurated length of screen in feet	=	5
H	Saturated thickness of aquifer in feet	=	51
yo	Calculated drawdown in feet at time 0	=	3
yt	Drawdown in feet at time t	=	0.61
t	Time t in seconds	=	150
Le/rw	Ratio screen length to bore hole radius	=	7.5
		=	
A	Dimensionless coefficient A	=	
B	Dimensionless coefficient B	=	
C	Dimensionless coefficient C	=	1

CALCULATION OF ln(Re/rw)

$$\ln(Re/rw) = \frac{1}{\frac{1.1}{\ln(Lw/rw)} + \frac{C}{Le/rw}}$$

ln(Re/rw)= 2.586

CALCULATION OF K

$$K = \frac{rc^2 * \ln(Re/rw)}{2Le} * \frac{1}{t} * \ln\frac{yo}{yt} * 30.48$$

K = 5.73E-04 cm/s

APPENDIX I

GROUND WATER ELEVATION DATA

TABLE I-1

GROUND WATER ELEVATION DATA
JANUARY 1988 THROUGH MAY 1991

WELL NUMBER	MEASURING POINT ELEVATION (ft-msl)	GROUND WATER ELEVATION (ft-msl)							
		1/9/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89	5/3/89
MW-1	751.08	734.61	734.02	NR(1)	735.53	733.86	735.07	734.55	734.08
MW-1D	750.96	NA(2)	NA	NA	NA	NA	NA	NA	NA
MW-2	751.18	733.76	733.22	NR	734.52	732.94	733.95	733.25	732.98
MW-3	751.42	733.96	733.44	NR	734.87	732.98	734.27	733.44	733.02
MW-3A	753.20	NA	NA	NA	NA	NA	734.79	733.70	733.50
MW-3D	751.38	NA	NA	NA	NA	NA	NA	NA	NA
MW-4	749.46	738.69	741.85	738.01	738.88	737.65	738.06	737.80	738.06
MW-5	750.29	743.24	742.37	NR	743.01	742.59	742.64	742.84	743.29
MW-6	750.66	743.47	742.47	NR	742.65	741.07	742.29	741.96	742.36
MW-7	751.53	746.86	745.50	NR	747.91	743.39	746.26	745.01	745.53
MW-8	753.31	739.28	738.81	NR	739.61	738.10	738.28	737.94	738.51
MW-9	753.41	NA	NA	NA	NA	NA	743.09	742.11	742.71
MW-10	740.87	NA	NA	NA	NA	NA	NA	NA	NA
MW-11	741.08	NA	NA	NA	NA	NA	NA	NA	NA
MW-12	740.24	NA	NA	NA	NA	NA	NA	NA	NA
RP-1(3)	763.52	Frozen(4)	NR	NR	731.83	NR	731.42	731.52	NR
RP-2	762.86	Frozen	NR	NR	731.85	NR	731.46	731.51	NR

See footnotes at end of table.

TABLE I-1
(CONTINUED)

WELL NUMBER	MEASURING POINT ELEVATION (ft-msl)	GROUND WATER ELEVATION (ft-msl)							
		9/21/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90	3/13/91	5/2/91
MW-1	751.08	735.90	734.03	734.50	736.58	734.54	733.07	733.85	734.68
MW-1D	750.93	NA	NA	NA	NA	NA	NA	736.69	737.61
MW-2	751.18	734.75	732.39	733.55	735.68	733.35	NR	733.16	NR
MW-3	751.42	735.13	731.98	733.68	735.77	734.43	732.22	733.86	734.92
MW-3A	753.20	735.90	732.52	734.69	736.97	735.64	733.40	734.69	736.38
MW-3D	751.38	NA	NA	NA	NA	NA	NA	736.64	737.21
MW-4	749.46	740.11	737.51	738.03	742.16	739.25	738.08	739.36	738.91
MW-5	750.29	744.07	742.74	742.69	745.72	744.71	742.94	743.69	743.64
MW-6	750.66	744.79	741.43	743.26	746.25	745.29	744.26	743.91	744.65
MW-7	751.53	747.99	744.33	745.15	749.01	747.71	743.96	746.43	746.69
MW-8	753.31	739.77	738.44	738.76	741.07	739.01	738.33	738.31	738.98
MW-9	753.41	745.75	741.48	743.56	745.67	744.76	741.22	743.91	745.46
MW-10	740.83	NA	NA	NA	NA	NA	NA	732.87	733.17
MW-11	741.08	NA	NA	NA	NA	NA	NA	733.08	733.23
MW-12	740.12	NA	NA	NA	NA	NA	NA	733.59	734.39
RP-1	763.52	730.74	726.85	NR	730.77	726.79	727.29	731.51	731.42
RP-2	762.86	730.73	726.86	NR	730.79	726.35	727.31	731.51	731.66

(1) "NR" indicates not recorded.
(2) "NA" indicates data not available.
(3) RP-1 and RP-2 are reference points for measuring the stage of the Blue River.
(4) The river was frozen on date of measurement.

APPENDIX J

ANALYTICAL REPORTS GROUND WATER DATA

Since 1938

WADSWORTH/ALERT
LABORATORIES, INC.
Sampling, testing, mobile labs
450 William Pitt Way
Pittsburgh, PA 15238

ANALYTICAL REPORT

PROJECT NO. 90247

WADSWORTH/ALERT PROJECT # 2765 2772 2782

Presented to :

Dayne Crowley

REMCOR, INC.

WADSWORTH/ALERT LABORATORIES, INC.

Thomas Tomayko
Project Manager

Renee' Gigliotti
Quality Assessment Group Leader - Pittsburgh

May 23, 1991

CORPORATE AND LABORATORY: North Canton, Ohio (216) 497-9396
LABORATORY: Cleveland, Ohio (216) 642-9151
LABORATORY: Pittsburgh, Pennsylvania (412) 826-5477
LABORATORY: Bartow, Florida (813) 533-2150
SOUTHEAST REGIONAL OFFICE: Lexington, South Carolina (803) 957-6590
24-HOUR ALERT LINE (216) 497-9338

WADSWORTH/ALERT
LABORATORIES, INC.

NARRATIVE

The following report contains the analytical results for samples submitted to Wadsworth/ALERT Laboratories, Inc. The samples were received into the laboratory in accordance with documented sample acceptance procedures.

Wadsworth/ALERT Laboratories, Inc. utilizes USEPA approved methods and instrumentation in all analytical work. The methods used for the analyses presented in this study can be found on the following pages. A summary of QC data for these analyses is included at the rear of the report.

WADSWORTH/ALERT
LABORATORIES, INC.

ANALYTICAL METHODS

Wadsworth/ALERT Laboratories, Inc. utilizes only USEPA approved analytical methods and instrumentation. The analytical methods used in the analyses of these samples are listed below.

Parameters	Methods
Organics:	
Volatile Organic Compounds	EPA 624
Polychlorinated Biphenyls	EPA 608
Metals:	
Lead (Total/Dissolved)	EPA 239.2
Inorganics:	
Alkalinity	EPA 310.1
Nitrate Nitrogen	EPA 352.1
pH	EPA 150.1
Specific Conductance	EPA 120.1
Total Recoverable Phenolics	EPA 420.2

EPA: Methods for Chemical Analysis of Water and Wastes EPA 600/4-79-020, March 1983.

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26783
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 8/91

SAMPLE ID : RAU-MWO-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	98	(76-114)	(70-121)
Toluene-d8	98	(88-110)	(81-117)
Bromofluorobenzene	95	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26861
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW0-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.54 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.1 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	71	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26783
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MWO-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	12	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26783
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MWO-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26783
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MWO-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	15	1.0	mg/l
Specific Conductance	5/ 2/91	57	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	ND	0.10	mg/l
Total Recoverable Phenolics	5/15/91	0.010	0.006	mg/l
pH - Water	5/ 2/91	7.0		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26784
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW1-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	180	1,1,1-Trichloroethane	85
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	317		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	86		

NOTE: ND (None Detected, lower detectable limit = 25 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 50 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 250 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	103	(76-114)	(70-121)
Toluene-d8	100	(88-110)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY:	REMCOR, INC.	DATE RECEIVED:	5/02/91
LAB #:	2765-26784	DATE EXTRACTED:	5/08/91
MATRIX:	WATER	DATE ANALYZED:	5/10/91

SAMPLE ID: RAU-MW1-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	39	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26784
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	130	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26784
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26784
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	460	1.0	mg/l
Specific Conductance	5/ 2/91	1500	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.32	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.4		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26785
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 8/91

SAMPLE ID : RAU-MW1D-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	92	(76-114)	(70-121)
Toluene-d8	94	(88-110)	(81-117)
Bromofluorobenzene	93	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26785
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW1D-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	49	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26785
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1D-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	29	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26785
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1D-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26785
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW1D-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	410	1.0	mg/l
Specific Conductance	5/ 2/91	700	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.20	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.8		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2782-26942
MATRIX : WATER

DATE RECEIVED: 5/ 4/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/16/91

SAMPLE ID : RAU-MW2A-016 5-3-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	4.8 J
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	103	(88-110)	(81-117)
Bromofluorobenzene	101	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2782-26942
MATRIX: WATER

DATE RECEIVED: 5/04/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW2A-016 5-3-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	38	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2782-26942
MATRIX : WATER

DATE RECEIVED: 5/ 4/91

SAMPLE ID : RAU-MW2A-016 5-3-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8- 5/13/91	120	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2782-26942
MATRIX : WATER

DATE RECEIVED: 5/ 4/91

SAMPLE ID : RAU-MW2A-016 5-3-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/15/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2782-26942
MATRIX : WATER

DATE RECEIVED: 5/ 4/91

SAMPLE ID : RAU-MW2A-016 5-3-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	290	1.0	mg/l
Specific Conductance	5/ 4/91	2900	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.40	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 4/91	6.0		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26786
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW3-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	98
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	44		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	410		

NOTE:
ND (None Detected, lower detectable limit = 25 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 50 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 250 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	103	(76-114)	(70-121)
Toluene-d8	104	(88-110)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26786
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW3-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	25	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26786
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	130	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26786
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26786
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	330	1.0	mg/l
Specific Conductance	5/ 2/91	780	1.0	umhso/cm
Nitrate Nitrogen	5/ 6/91	0.40	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26787
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 8/91

SAMPLE ID : RAU-MW3A-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	30
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	36
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	3.0 J
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	9.1		
1,1-Dichloroethene	74		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	%	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	96	(76-114)	(70-121)
Toluene-d8	92	(88-110)	(81-117)
Bromofluorobenzene	91	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26787
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW3A-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	35	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26787
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3A-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	14	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26787
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3A-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26787
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3A-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	120	1.0	mg/l
Specific Conductance	5/ 2/91	500	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.78	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.1		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26788
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 8/91

SAMPLE ID : RAU-MW3D-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	92	(76-114)	(70-121)
Toluene-d8	94	(88-110)	(81-117)
Bromofluorobenzene	93	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26788
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW3D-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	29	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26788
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3D-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	130	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26788
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3D-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26788
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW3D-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	330	1.0	mg/l
Specific Conductance	5/ 2/91	580	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.14	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.9		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26862
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW4-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	13
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	4.5 J		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	7.6		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	95	(76-114)	(70-121)
Toluene-d8	103	(88-110)	(81-117)
Bromofluorobenzene	98	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26862
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW4-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	27	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26862
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW4-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/13/91	400	30	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26862
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW4-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	13	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26862
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW4-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	440	1.0	mg/l
Specific Conductance	5/ 3/91	2800	1000	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.26	0.10	mg/l
Total Recoverable Phenolics	5/20/91	0.008	0.005	mg/l
pH - Water	5/ 3/91	6.3		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26863
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW5-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	92	(76-114)	(70-121)
Toluene-d8	98	(88-110)	(81-117)
Bromofluorobenzene	99	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26863
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW5-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.51 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	54	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26863
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW5-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	37	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26863
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW5-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26863
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW5-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	100	2.0	mg/l
Specific Conductance	5/ 3/91	1600	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.16	0.10	mg/l
pH - Water	5/ 3/91	5.9		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26864
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW6-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	94	(76-114)	(70-121)
Toluene-d8	103	(88-110)	(81-117)
Bromofluorobenzene	98	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26864
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW6-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	39	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26864
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	40	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26864
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26864
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	110	1.0	mg/l
Specific Conductance	5/ 3/91	970	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.20	0.10	mg/l
Total Recoverable Phenolics	5/20/91	0.006	0.005	mg/l
pH - Water	5/ 3/91	6.2		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26865
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW6R-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	96	(76-114)	(70-121)
Toluene-d8	99	(88-110)	(81-117)
Bromofluorobenzene	95	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26865
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW6R-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.53 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.1 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	32	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26865
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6R-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	86	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26865
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6R-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26865
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW6R-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	120	1.0	mg/l
Specific Conductance	5/ 3/91	980	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.44	0.10	mg/l
Total Recoverable Phenolics	5/20/91	ND	0.005	mg/l
pH - Water	5/ 3/91	6.1		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26866
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW7-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	91	(76-114)	(70-121)
Toluene-d8	100	(88-110)	(81-117)
Bromofluorobenzene	95	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26866
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW7-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	34	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26866
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW7-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	9.7	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26866
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW7-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26866
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW7-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	77	1.0	mg/l
Specific Conductance	5/ 3/91	920	1.0	umhos/cm
Nitrate Nitrogen	5/ 7/91	0.78	0.10	mg/l
Total Recoverable Phenolics	5/20/91	0.007	0.005	mg/l
pH - Water	5/ 3/91	6.1		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26867
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW8-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	93	(76-114)	(70-121)
Toluene-d8	100	(88-110)	(81-117)
Bromofluorobenzene	99	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26867
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW8-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	24	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26867
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW8-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	33	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26867
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW8-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26867
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW8-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	450	1.0	mg/l
Specific Conductance	5/ 3/91	960	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.26	0.10	mg/l
Total Recoverable Phenolics	5/20/91	0.006	0.005	mg/l
pH - Water	5/ 3/91	6.8		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26868
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : RAU-MW9-16 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	12
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	94	(76-114)	(70-121)
Toluene-d8	100	(88-110)	(81-117)
Bromofluorobenzene	99	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR. INC.
LAB #: 2772-26868
MATRIX: WATER

DATE RECEIVED: 5/03/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/11/91

SAMPLE ID: RAU-MW9-16 5-02-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.57 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.1 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	44	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26868
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW9-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 7- 5/10/91	13	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26868
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW9-16 5-02-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26868
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW9-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/13/91	68	1.0	mg/l
Specific Conductance	5/ 3/91	520	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.21	0.10	mg/l
Total Recoverable Phenolics	5/20/91	ND	0.005	mg/l
pH - Water	5/ 3/91	6.0		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26789
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW10-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	230
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	35 J
1,1-Dichloroethane	640		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	64		

NOTE:
ND (None Detected, lower detectable limit = 25 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 50 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 250 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	106	(88-110)	(81-117)
Bromofluorobenzene	109	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26789
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW10-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	35	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26789
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW10-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	54	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26789
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW10-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26789
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW10-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	190	1.0	mg/l
Specific Conductance	5/ 2/91	25000	1000	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.20	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	5.9		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26790
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW11-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	13		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	106	(76-114)	(70-121)
Toluene-d8	105	(88-110)	(81-117)
Bromofluorobenzene	102	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26790
MATRIX: WATER

DATE RECEIVED: 5/02/91
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: RAU-MW11-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	23	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26790
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW11-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	8.5	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26790
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW11-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26790
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW11-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	300	1.0	mg/l
Specific Conductance	5/ 2/91	970	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.22	0.10	mg/l
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
pH - Water	5/ 2/91	6.8		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26791
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW12-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	37		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	104	(88-110)	(81-117)
Bromofluorobenzene	107	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY:	REMCOR, INC.	DATE RECEIVED:	5/02/91
LAB #:	2765-26791	DATE EXTRACTED:	5/08/91
MATRIX:	WATER	DATE ANALYZED:	5/10/91

SAMPLE ID: RAU-MW12-16 5-01-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd
-- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
Dibutylchlorendate	29	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26791
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW12-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 6- 5/ 8/91	38	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26791
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW12-16 5-01-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	5/ 8/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2765-26791
MATRIX : WATER

DATE RECEIVED: 5/ 2/91

SAMPLE ID : RAU-MW12-16 5-01-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity (CaCO3 to pH 4.5)	5/ 6/91	740	1.0	mg/l
Specific Conductance	5/ 2/91	1600	1.0	umhos/cm
Nitrate Nitrogen	5/ 6/91	0.10	0.10	mg/l
pH - Water	5/ 2/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2772-26869
MATRIX : WATER

DATE RECEIVED: 5/ 3/91

SAMPLE ID : RAU-MW12-16 5-02-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Total Recoverable Phenolics	5/20/91	ND	0.005	mg/l

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2765-26792
MATRIX : WATER

DATE RECEIVED: 5/ 2/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/ 9/91

SAMPLE ID : RAU-MW12R-16 5-01-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	33		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE: ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	101	(76-114)	(70-121)
Toluene-d8	104	(88-110)	(81-117)
Bromofluorobenzene	106	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2772-26870
MATRIX : WATER

DATE RECEIVED: 5/ 3/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/13/91

SAMPLE ID : TRIP BLANK 5-02-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	ND
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	95	(76-114)	(70-121)
Toluene-d8	100	(88-110)	(81-117)
Bromofluorobenzene	95	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2782-26943
MATRIX : WATER

DATE RECEIVED: 5/ 4/91
DATE EXTRACTED: NA
DATE ANALYZED: 5/16/91

SAMPLE ID : TRIP BLANK 5-3-91

VOLATILE ORGANICS
PRIORITY POLLUTANT LIST - GC/MS

Acrolein	ND**	1,2-Dichloroethene (Total)	ND
Acrylonitrile	ND**	1,2-Dichloropropane	ND
Benzene	ND	cis-1,3-Dichloropropene	ND
		trans-1,3-Dichloropropene	ND
Bromodichloromethane	ND	Ethylbenzene	ND
Bromoform	ND	Methylene chloride	ND*
Bromomethane	ND*	1,1,2,2-Tetrachloroethane	ND
Carbon tetrachloride	ND	Tetrachloroethene	ND
Chlorobenzene	ND	Toluene	4.0 J
Chloroethane	ND*	1,1,1-Trichloroethane	ND
2-Chloroethylvinyl ether	ND*	1,1,2-Trichloroethane	ND
Chloroform	ND	Trichloroethene	ND
Chloromethane	ND*		
Dibromochloromethane	ND	Vinyl chloride	ND*
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		
1,1-Dichloroethene	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	106	(76-114)	(70-121)
Toluene-d8	101	(88-110)	(81-117)
Bromofluorobenzene	100	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

QUALITY CONTROL SECTION

WADSWORTH/ALERT
LABORATORIES, INC.

CASE NARRATIVE

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. The PCB surrogate recovery for dibutylchlorendate in sample 26790 did not meet recovery limits.

The matrix spike recovery for total lead in sample 26940 did not meet recovery limits.

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS				
26859	1,1-Dichloroethene	91	93	WATER	(61-145)
	Trichloroethene	88	91		(71-120)
	Chlorobenzene	97	100		(75-130)
	Toluene	98	103		(76-125)
	Benzene	103	103		(76-127)

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS				
26940	1,1-Dichloroethene	106	112	WATER	(61-145)
	Trichloroethene	94	104		(71-120)
	Chlorobenzene	99	107		(75-130)
	Toluene	101	105		(76-125)
	Benzene	104	112		(76-127)
	POLYCHLORINATED BIPHENYLS				
26940	Arochlor - 1254	114	93	WATER	(55-140)

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	TOTAL METALS				
26781	Lead	95	94	WATER	(75-125)
26859	Lead	102	106	WATER	(75-125)
26940	Lead	70	96	WATER	(75-125)
	DISSOLVED METALS				
26781	Lead	91	86	WATER	(75-125)
26859	Lead	91	86	WATER	(75-125)
26940	Lead	101	96	WATER	(75-125)

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
26781	Alkalinity	98	97	WATER	(80-120)
26859	Alkalinity	98	98	WATER	(80-120)
26781	Nitrate Nitrogen	109	104	WATER	(80-120)
26781	Total Recoverable Phenolics	98	98	WATER	(80-120)
26859	Total Recoverable Phenolics	93	92	WATER	(80-120)

WADSWORTH/ALERT
LABORATORIES, INC.

DUPLICATE ANALYSIS SECTION

LAB ID	PARAMETER	SAMPLE RESULT	DUPLICATE RESULT	UNITS
26783	pH	7.0	7.0	su
26848	pH	3.0	3.0	su
26921	pH	7.6	7.6	su
26783	Specific Conductance	58	58	umhos/cm
26848	Specific Conductance	2100	2100	umhos/cm
26921	Specific Conductance	670	670	umhos/cm

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS			
26939	1,1-Dichloroethene	132	WATER	(61-145)
	Trichloroethene	111		(71-120)
	Chlorobenzene	116		(75-130)
	Toluene	118		(76-125)
	Benzene	119		(76-127)
	POLYCHLORINATED BIPHENYLS			
26939	Arochlor - 1254	99	WATER	(55-140)

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS			
26858	1,1-Dichloroethene	80	WATER	(61-145)
	Trichloroethene	82		(71-120)
	Chlorobenzene	90		(75-130)
	Toluene	90		(76-125)
	Benzene	92		(76-127)

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	TOTAL METALS			
26780	Lead	103	WATER	(75-125)
26858	Lead	111	WATER	(75-125)
26939	Lead	106	WATER	(75-125)
	DISSOLVED METALS			
26780	Lead	103	WATER	(75-125)
26858	Lead	103	WATER	(75-125)
26939	Lead	99	WATER	(75-125)

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
26780	Alkalinity	97	WATER	(80-120)
26858	Alkalinity	100	WATER	(80-120)
26780	Nitrate Nitrogen	102	WATER	(80-120)
26780	pH	102	WATER	(80-120)
26858	pH	102	WATER	(80-120)
26939	pH	100	WATER	(80-120)
26780	Specific Conductance	101	WATER	(80-120)
26858	Specific Conductance	99	WATER	(80-120)
26939	Specific Conductance	104	WATER	(80-120)
26780	Total Recoverable Phenolics	87	WATER	(80-120)
26858	Total Recoverable Phenolics	103	WATER	(80-120)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY:	Wadsworth/Alert Laboratories	DATE RECEIVED:	NA
LAB #:	9091-90513	DATE EXTRACTED:	NA
MATRIX:	WATER	DATE ANALYZED:	5/13/91

SAMPLE ID: INTRA-LAB BLANK, 5/13/91

NDPES VOLATILE ORGANIC COMPOUNDS BLANK REPORT
USEPA METHOD 624 LIST-GC/MS

Acrolein	ND**	1,2-Dichloroethane	ND
Acrylonitrile	ND**	1,1-Dichloroethene	ND
Benzene	ND	1,2-Dichloroethene (Total)	ND
Bromodichloromethane	ND	1,2-Dichloroporpane	ND
Bromoform	ND	cis-1,3-Dichloropropene	ND
Bromomethane	ND*	trans-1,3-Dichloropropene	ND
Carbon tetrachloride	ND	Ethylbenzene	ND
Chlorobenzene	ND	Methylene Chloride	ND*
Chloroethane	ND*	1,1,2,2-Tetrachloroethane	ND
2-Chloroethylvinyl ether	ND*	Tetrachloroethene	ND
Chloroform	ND	Toluene	ND
Chloromethane	ND*	1,1,1-Trichloroethane	ND
Dibromochloromethane	ND	1,1,2-Trichloroethane	ND
1,1-Dichloroethane	ND	Trichloroethene	ND
		Vinyl Chloride	ND*

NOTE:
- ND (None Detected, lower detectable limit = 5.0 ug/l)
- ND* (None Detected, lower detectable limit = 10 ug/l)
- ND** (None Detected, lower detectable limit = 50 ug/l)
- J (Detected, but below quantitation limit; estimated value)
- B (Compound detected in method blank associated with this sample)
- -- (Not Analyzed)

SURROGATE RECOVERY:	%	ACCEPTABLE LIMITS WATER	SOLID
1,2-Dichloroethane	94	(76-114)	(70-121)
Toluene-d8	98	(88-110)	(81-117)
Bromofluorobenzene	92	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90516
MATRIX: WATER

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 5/16/91

SAMPLE ID: INTRA-LAB BLANK, 5/16/91

NDPES VOLATILE ORGANIC COMPOUNDS BLANK REPORT
USEPA METHOD 624 LIST-GC/MS

Acrolein	ND**	1,2-Dichloroethane	ND
Acrylonitrile	ND**	1,1-Dichloroethene	ND
Benzene	ND	1,2-Dichloroethene (Total)	ND
Bromodichloromethane	ND	1,2-Dichloroporpane	ND
Bromoform	ND	cis-1,3-Dichloropropene	ND
Bromomethane	ND*	trans-1,3-Dichloropropene	ND
Carbon tetrachloride	ND	Ethylbenzene	ND
Chlorobenzene	ND	Methylene Chloride	ND*
Chloroethane	ND*	1,1,2,2-Tetrachloroethane	ND
2-Chloroethylvinyl ether	ND*	Tetrachloroethene	ND
Chloroform	ND	Toluene	ND
Chloromethane	ND*	1,1,1-Trichloroethane	ND
Dibromochloromethane	ND	1,1,2-Trichloroethane	ND
1,1-Dichloroethane	ND	Trichloroethene	ND
		Vinyl Chloride	ND*

NOTE:
- ND (None Detected, lower detectable limit = 5.0 ug/l)
- ND* (None Detected, lower detectable limit = 10 ug/l)
- ND** (None Detected, lower detectable limit = 50 ug/l)
- J (Detected, but below quantitation limit; estimated value)
- B (Compound detected in method blank associated with this sample)
- -- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	102	(88-110)	(81-117)
Bromofluorobenzene	102	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90508
MATRIX: WATER

DATE RECEIVED: NA
DATE EXTRACTED: 5/08/91
DATE ANALYZED: 5/10/91

SAMPLE ID: INTRA-LAB BLANK, 5/08/91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.5 ug/l)
ND* (None Detected, lower detectable limit = 1.0 ug/l)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
Dibutylchlorendate	70	(24-154)	(20-150)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90508
MATRIX : WATER

SAMPLE ID : INTRA-LAB BLANK, 5/08/91

METALS ANALYTICAL BLANK REPORT
TOTAL-LIST

ELEMENT	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Lead	5/10/91	ND	3.0 ug/l
Lead	5/08/91	ND	5.0 ug/l

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90515
MATRIX : WATER

SAMPLE ID : INTRA-LAB BLANK, 5/15/91

METALS ANALYTICAL BLANK REPORT
DISSOLVED-LIST

ELEMENT	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Lead	5/15/91	ND	3.0 ug/l
Lead	5/08/91	ND	3.0 ug/l
Lead	5/08/91	ND	5.0 ug/l

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091
MATRIX: WATER

SAMPLE ID: INTRA-LAB BLANK

GENERAL ANALYTICAL BLANK REPORT

PARAMETER	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT	
Alkalinity	5/06/91	ND	1.0	mg/l
Alkalinity	5/13/91	ND	1.0	mg/l
Nitrate Nitrogen	5/06/91	ND	0.10	mg/l
pH	5/02/91	6.3		su
pH	5/03/91	6.5		su
pH	5/04/91	5.8		su
Specific Conductance	5/02/91	4.7	1.0	umhos/cm
Specific Conductance	5/03/91	6.5	1.0	umhos/cm
Specific Conductance	5/04/91	1.7	1.0	umhos/cm
Total Recoverable Phenolics	5/15/91	ND	0.006	mg/l
Total Recoverable Phenolics	5/20/91	ND	0.005	mg/l

FORM GS-2 REV 191

REMCOR

REQUEST FOR ANALYSIS

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 112

C/C Control No.: 20v2

Project Name: Union Wire Rope (Armco)

Project No.: 90247

Project Contact: ~~DM Crowley~~ Karen Connolly

Project Manager: DM Crowley

Send Lab Report to: DM Crowley
Remcor, Inc

Laboratory Name: Wadsworth

Laboratory Contact: Tom Tomeyko

Laboratory Address: ~~475~~
Wadsworth / Alert
450 William Pitt Way
Pgh PA 15238

Laboratory Phone No.: (412) 826-5477

Special Notes:

Turnaround Time: Normal

Normal Deliverable

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: PP VOCs	NO3	pH, Cond, Alkal.	Diss Lead	Total Lead	Phenols	PCBs		REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW2A-016	Water	X	X	X	X	X	X	X		Diss. Lead
										Needs Filtered
										And Acidified

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS:

DISPOSAL: Lab X Client

REMCOR, INC.
ANALYTICAL SERVICES REQUEST FORM
(DO NOT COMPLETE SHADED AREAS)

PROJECT NAME: Remco Inc - Kansas City
DATE REQUESTED: 4-25-91
PROJECT NUMBER:
VERBAL DUE DATE:
REQUESTED BY: Michael P. McCarthy
FINAL LAB REPORT DATE:
PROJECT MANAGER: Dayne Crowley
SAMPLE SHIPPING DATE:

REPORT AND INVOICE ADDRESS

REMCOR, INC.
701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310
ATTN: Dayne Crowley

SHIPPING ADDRESS

Dave Cerrone / C.O. Remcor
Union Wire Rope
2100 Manchester Traffic Way
Kansas City MO 64126

DATE SAMPLE CONTAINERS ARE NEEDED: 4-29-91

SHIPMENT METHOD: (NEXT DAY, 2ND DAY)

Q.C. TYPE: STANDARD EPA CLP

SPECIAL Q.C. REQUIREMENTS:

NUMBER OF SAMPLES	MATRIX	ANALYSIS	METHOD	CRITICAL DETECTION LIMIT*	COMMENTS	COST PER SAMPLE
19 / 19	Aq	ph / Specific Cond.				
19		alkalinity				
19 / 19		Lead		0.005 mg/l	(Total and Dissolved)	
19		Nitrates		0.1 mg/l		
19		Phenolics		0.01 mg/l		
19		P.P. VOCs				
19	✓	PCBs		1 ug/l		

ADDITIONAL SPACE PROVIDED ON PAGE 2

COMMENTS OR SPECIAL REQUIREMENTS: plus 1 TRIP BLANK
10 Sets of Glassware

ESTIMATED TOTAL COST: $ INITIALS

CHAIN OF CUSTODY NUMBER(S)

VERBALS RECEIVED DATE: INITIALS: FINAL RECEIVED DATE: INITIALS:

* - THIS IS ANY SPECIAL DETECTION LIMIT WHICH MUST BE ACHIEVED TO MEET PROJECT REQUIREMENTS.

FORM GS-2 REV 191

REQUEST FOR ANALYSIS

REMCOR

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 104

C/C Control No.: 2010

Project Name: Union Wire Rope

Project No.: 90247.18 / 90034.1

Project Contact: D M Crowley

Project Manager: D M Crowley

Send Lab Report to: D M Crowley
Remcor

Laboratory Name: Wadsworth

Laboratory Contact: Tom Tomayko

Laboratory Address: Wadsworth Alert
450 Wm Pitt Way
Pittsburgh PA 15238

Laboratory Phone No.:

Special Notes: normal deliverable

Turnaround Time: Normal

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: PP VOC	Total Lead	Diss Lead	Nitrates	PCB	Phenolics	pH, Air, S. Cond		REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW10-16	Water	X	X	X	X	X	X	X		
RAU-MW11-16		X	X	X	X	X	X	X		
RAU-MW12-16		X	X	X	X	X	X	X		
RAU-MW12R-16		X								
RAU-MW3D-16		X	X	X	X	X	X	X		Filter & Acidify in Lab for D. Pb
RAU-MW3-16		X	X	X	X	X	X	X		
RAU-MW3A-16		X	X	X	X	X	X	X		
RAU-MW1-16		X	X	X	X	X	X	X		
RAU-MW1D-16		X	X	X	X	X	X	X		
RAU-MW0-16		X	X	X	X	X	X	X		

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS: Low VOCs (Parts per million)

DISPOSAL: Lab X Client ___

FORM GS-2 REV 191

REQUEST FOR ANALYSIS

REMCOR

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 105

C/C Control No.: 2011

Project Name: Union Wire Rope

Project No.: 90247.18 / 90034.1

Project Contact: ~~DM Crowley~~ Karen Crowley

Project Manager: DM Crowley

Send Lab Report to: DM Crowley
Remcor Inc.

Laboratory Name: Wadsworth

Laboratory Contact: Tom Tomayko

Laboratory Address: Wadsworth Alert
450 William Pitt Way
Pittsburgh PA 15238

Laboratory Phone No.:

Special Notes: Normal Deliverable

Turnaround Time: Normal

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: PP	VOC	Total Pb	Diss Pb*	Nitrates	PCB	Phenolics	pH, Alka, Scond	REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW8-16	Water	X	X	X	X	X	X	X		*Filter/Acidify in Lab for D.Pb
RAU-MW9-16		X	X	X	X	X	X	X		
RAU-MW4-16		X	X	X	X	X	X	X		
RAU-MW5-16		X	X	X	X	X	X	X		
RAU-MW6-16		X	X	X	X	X	X	X		
RAU-MW6R-16		X	X	X	X	X	X	X		
RAU-MWT-16		X	X	X	X	X	X	X	X	
RAU-MW0-16						X				
RAU-MW12-16							X			
Trip Blank		X								

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS: Low VOCs (ppm)

DISPOSAL: Lab X Client ___

104

REMCOR

CHAIN OF CUSTODY RECORD № 2010

PROJECT NO.: 90247

PROJECT NAME: Armco - Union Wire Rope

SAMPLERS: DCrowley / DCercone

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	1000 ml Amber	1000 ml Amber w/ H_2SO_4	1000 ml Plastic	500 ml Plast. w/ H_2SO_4	250 ml Plast w/ HNO_3	250 ml Plast w/ HNO_3 (Filtered)	250 ml Plast LAB FILTERED	VOA VIALS	REMARKS
RAU-MW10 -16	5/1/90	1630	Water		9	2	1	1	1	1	1	0	2	
RAU-MW11 -16		1650			9	2	1	1	1	1	1	0	2	
RAU-MW12 -16		1715			9	2	1	1	1	1	1	0	2	
RAU-MW12R -16		1715			~~2~~ 2	0	0	0	0	0	0	0	2	250 ml PLASTIC FILTER BY LAB
RAU-MW3D -16		1745			9	2	1	1	1	1	0	1	2	"
RAU-MW3 -16		1800			9	2	1	1	1	1	0	1	2	"
RAU-MW3A -16		1830			9	2	1	1	1	1	0	1	2	"
RAU-MW1 -16		1900			9	2	1	1	1	1	0	1	2	"
RAU-MW1D -16		1925			9	2	1	1	1	1	0	1	2	"
RAU-MW0 -16		1945			9	2	1	1	1	1	0	1	2	"

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	5/1/91 2015	Fed Ex Air Bill 87981 75525			
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[signature]	5/2/91 7:15 AM		

RA # 105

REMCOR

CHAIN OF CUSTODY RECORD № 2011

PROJECT NO.: 90034/90247.18

PROJECT NAME: Union Wire Rope

SAMPLERS: Dayne Crowley, Dave Cercone

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	1000 ml Amber Glass	1000 ml Amber Glass w/ H_2SO_4	1000 ml Plast.	500 ml Plast. w/ H_2SO_4	250 ml Plast. Unfiltered	250 ml Plast.	40 ml Vials w/ HCl	REMARKS
RAU-MW8-16	5/2/91	1447	Ground Water	Well MW8	9	2	1	1	1	1	1	2	
RAU-MW9-16		1520		MW9	9	2	1	1	1	1	1	2	
RAU-MW4-16		1630		MW4	9	2	1	1	1	1	1	2	
RAU-MW5-16		1650		MW5	9	2	1	1	1	1	1	2	
RAU-MW6-16		1620		MW6	9	2	1	1	1	1	1	2	
RAU-MW6R-16		1630		MW6R	9	2	1	1	1	1	1	2	
RAU-MW7-16		1555		MW7	9	2	1	1	1	1	1	2	
RAU-MW0-16		1445		MW0	2	2	0	0	0	0	0	0	
RAU-MW12-16		1405		MW12	1	0	1	0	0	0	0	0	
TRIP				—	2	0	0	0	0	0	0	2	

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	5/2/91 1845	Fed Ex Airbill 879817553 6			
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[signature]	5/3/91 9:15 AM		

REMCOR

CHAIN OF CUSTODY RECORD № 2012

PROJECT NO.: 90247

PROJECT NAME: Armco - Wire Rope

SAMPLERS: D Cercone / D Crowley

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	2 VOA VIALS	1 L PLASTIC	500 ml PLAS w/ H_2SO_4	250 ml PLASTIC	250 ml PLASTIC w/ HNO_3	1 L Amber	1 L Amber w/ H_2SO_4	REMARKS
RAU-MW2A-016	5/2/91	1000	WATER	MW 2A	9	2	1	1	1	1	2	1	Diss Pb was
TRIP 2	5/2/91					2	0	0	0	0	0	0	NOT FIELD
													FILTERED.

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
David P Cercone	5-3-91 1120	Fed Ex Airbill 0135009792			
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[illegible]	5/4/91 11:53 AM		

Since 1938

WADSWORTH/ALERT
LABORATORIES, INC.
Sampling, testing, mobile labs
450 William Pitt Way
Pittsburgh, PA 15238

ANALYTICAL REPORT

PROJECT NO. 90034

WADSWORTH/ALERT PROJECT NO. 2515

Presented to :

DAYNE M. CROWLEY

REMCOR, INC.

WADSWORTH/ALERT LABORATORIES, INC.

Thomas Tomayko

Thomas Tomayko
Project Manager

Renée Gigliotti

Renee' Gigliotti
Quality Assessment Group Leader - Pittsburgh

March 31, 1991

CORPORATE AND LABORATORY: North Canton, Ohio (216) 497-9396
LABORATORY: Cleveland, Ohio (216) 642-9151
LABORATORY: Pittsburgh, Pennsylvania (412) 826-5477
LABORATORY: Bartow, Florida (813) 533-2150
SOUTHEAST REGIONAL OFFICE: Lexington, South Carolina (803) 957-6590
24-HOUR ALERT LINE (216) 497-9338

WADSWORTH/ALERT
LABORATORIES, INC.

NARRATIVE

The following report contains the analytical results for samples submitted to Wadsworth/ALERT Laboratories, Inc. The samples were received into the laboratory in accordance with documented sample acceptance procedures.

Wadsworth/ALERT Laboratories, Inc. utilizes USEPA approved methods and instrumentation in all analytical work. The methods used for the analyses presented in this study can be found on the following pages. A summary of QC data for these analyses is included at the rear of the report.

WADSWORTH/ALERT
LABORATORIES, INC.

ANALYTICAL METHODS

Wadsworth/ALERT Laboratories, Inc. utilizes only USEPA approved analytical methods and instrumentation. The analytical methods used in the analyses of these samples are listed below.

Parameters	Methods
Organics:	
Volatile Organic Compounds	EPA 624
Polychlorinated Biphenyls	EPA 608
Metals:	
Lead (Total/Dissolved)	EPA 239.2
Inorganics:	
Total Recoverable Phenolics	EPA 420.2
pH	EPA 150.1
Specific Conductance	EPA 120.1
Alkalinity	EPA 310.1
Acidity	EPA 305.2
Nitrate Nitrogen	EPA 352.1

EPA: Methods for Chemical Analysis of Water and Wastes EPA 600/4-79-020, March 1983.

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24141
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

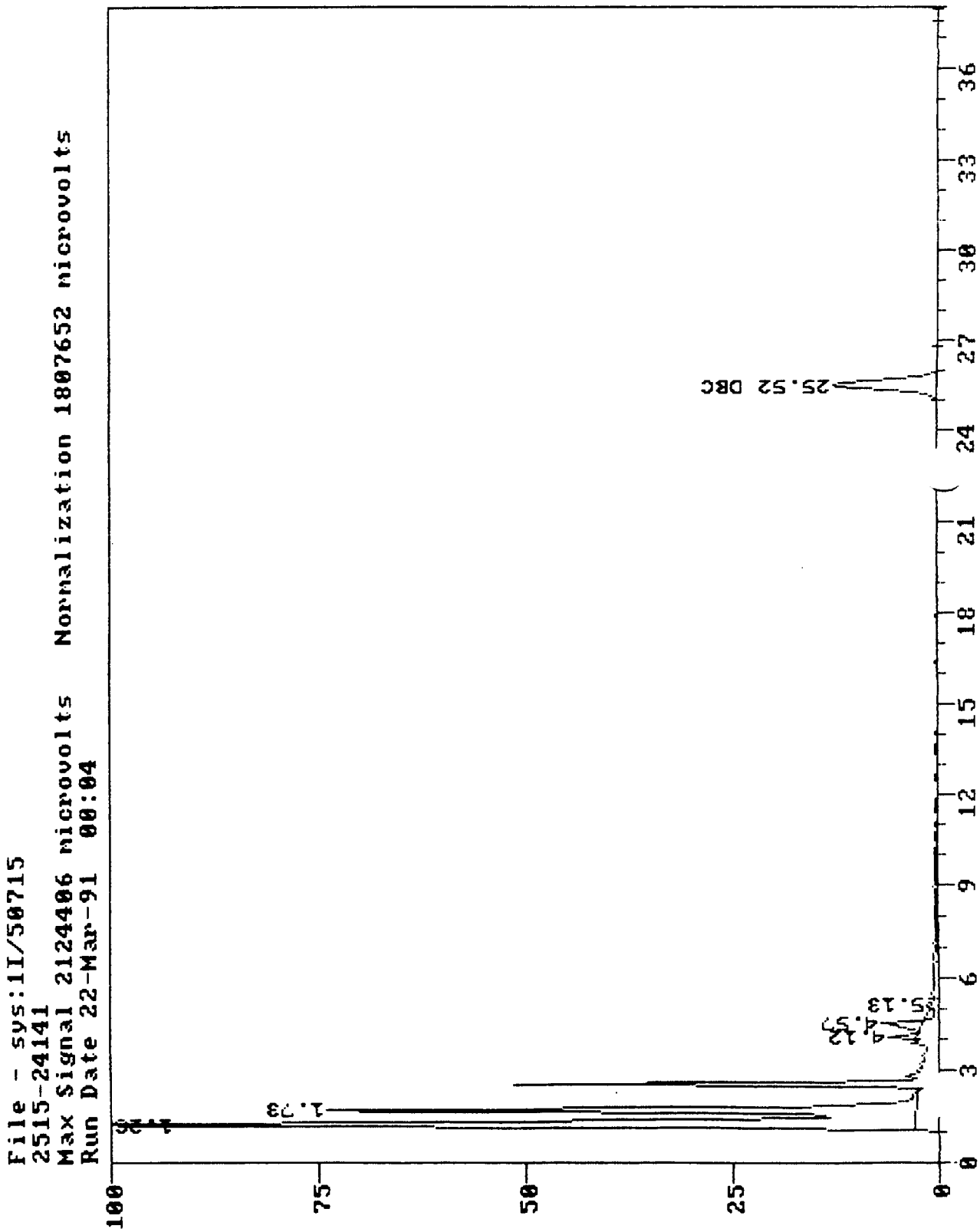
SAMPLE ID: RAU-MW00-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

22-Mar-91 00:04
date 22-Mar-91 14:56
ile - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.52	5423459	1.361e-01

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24141
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW00-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24141
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW00-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24141
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW00-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	11	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	7.8	1.0	mg/l
Specific Conductance	3/15/91	100	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.16	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24142
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01-15 3-11-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	470	1.0	mg/l
Specific Conductance	3/15/91	1500	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.29	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.4		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24142
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01-15 3-11-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	58	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24142
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01-15 3-11-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24142
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/25/91

SAMPLE ID: RAU-MW01-15 3-11-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	29
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	2.4 J
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	160	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	38
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	23
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	200		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	99	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	100	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

SY0:C6287 EXTRC 6287, 2515-24142, REM, 5.0ML
25-MAR-91 16:02:08
Total Ion Current
Quad 1 scanning mode

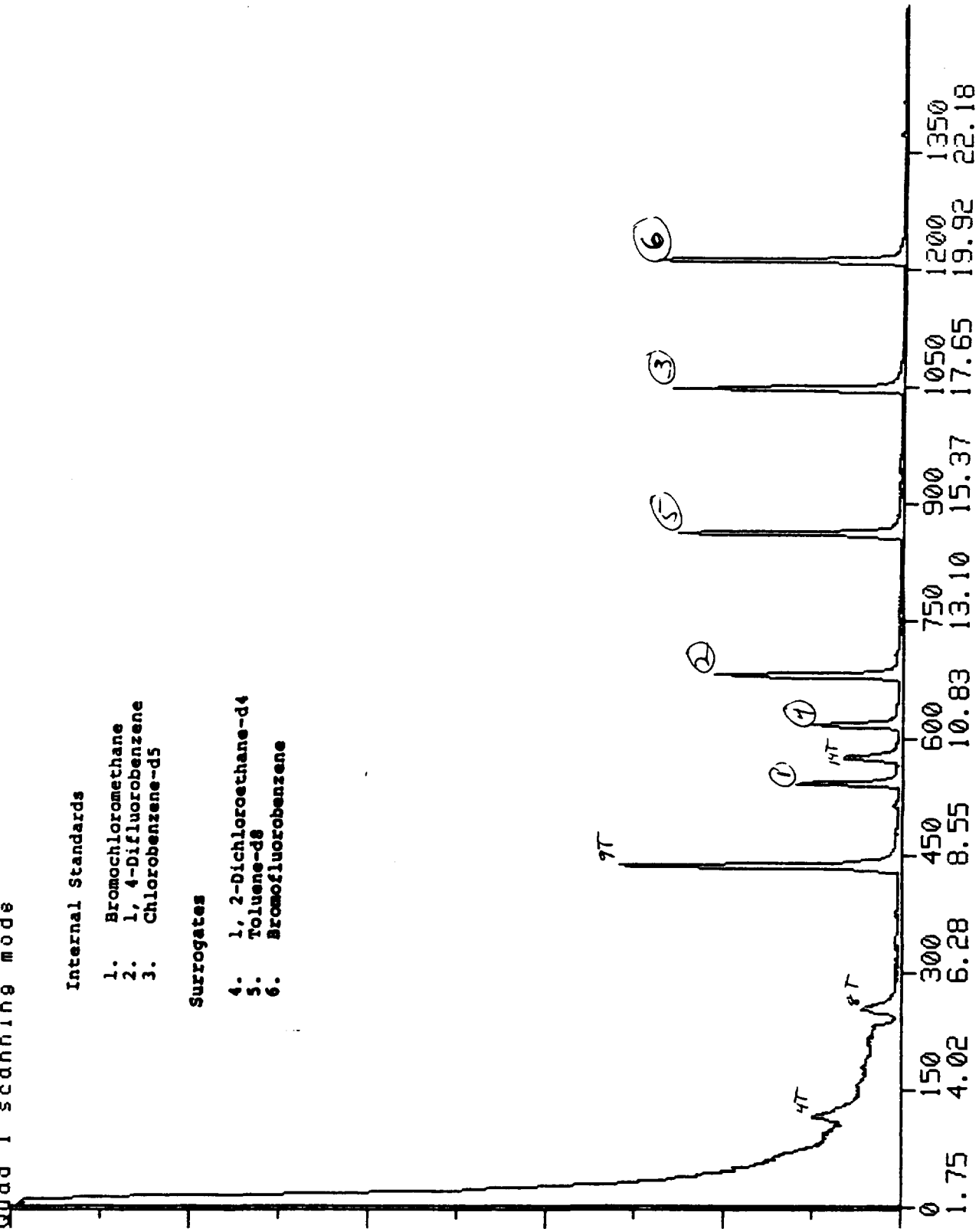
100%
562074

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6287
Injection time: 25-MAR-91 16:02:08
Comments:
EXTRC 6287, 2515-24142, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichloroflurometh ane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	9.98	544			STD	0.96	50.0	NG/UL
2S	12.07	682			STD	0.89	50.0	NG/UL
3S	17.62	1048			STD	0.71	50.0	NG/UL
1T	Was Not Found							
2T	Was Not Found							
3T	2.73	65	62. / 128.	47413. / 52384.	1	0.91	22.8	NG/UL
4T	3.48	115	64. / 128.	164147. / 52384.	1	1.00	164.6	NG/UL
5T	Is Below Specified Detection Limit							
6T	Was Not Found							
7T	Was Not Found							
8T	5.57	253	96. / 128.	54868. / 52384.	1	0.85	29.0	NG/UL
9T	8.35	436	63. / 128.	675196. / 52384.	1	0.51	200.5	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Is Below Specified Detection Limit							
13T	Was Not Found							
14T	10.47	576	97. / 114.	99954. / 311750.	2	0.84	37.6	NG/UL
15T	Was Not Found							
16T	Is Below Specified Detection Limit							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Is Below Specified Detection Limit							
23T	Is Below Specified Detection Limit							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6287. QNT

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.80	862	98. / 117.	316080. /	266112.	3	0.84	51.2	NG/UL
36T	20.08	1211	95. / 117.	193772. /	266112.	3	0.92	50.1	NG/UL
37T	11.12	619	65. / 128.	135281. /	52384.	1	0.71	49.4	NG/UL
38T	Was Not Found								
39T	9.55	516	96. / 128.	4811. /	52384.	~~1~~	~~0.67~~	~~2.4~~	~~NG/UL~~
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

OK - J

WADSWORTH/ALERT
LABORATORIES, INC.

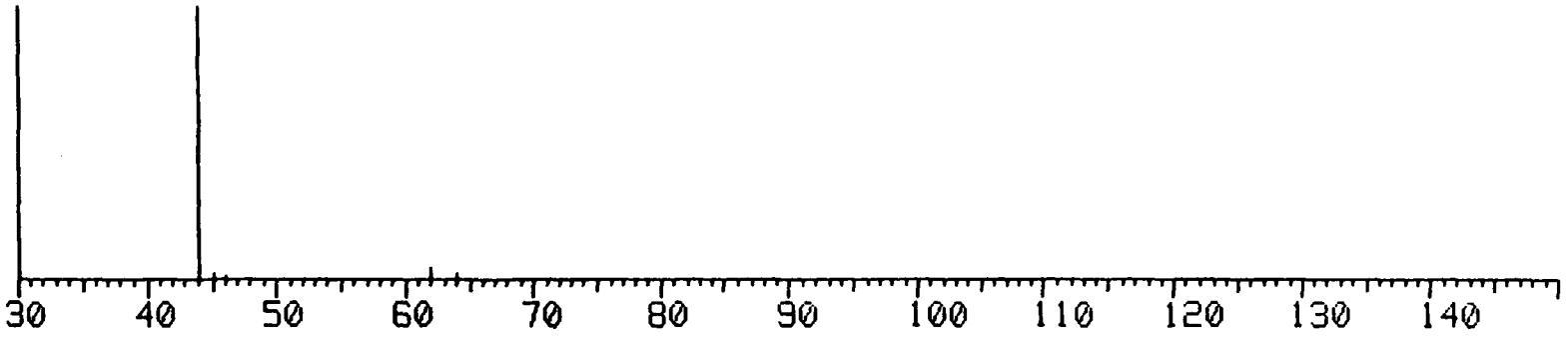
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6287
Injection time: 25-MAR-91 16:02:08

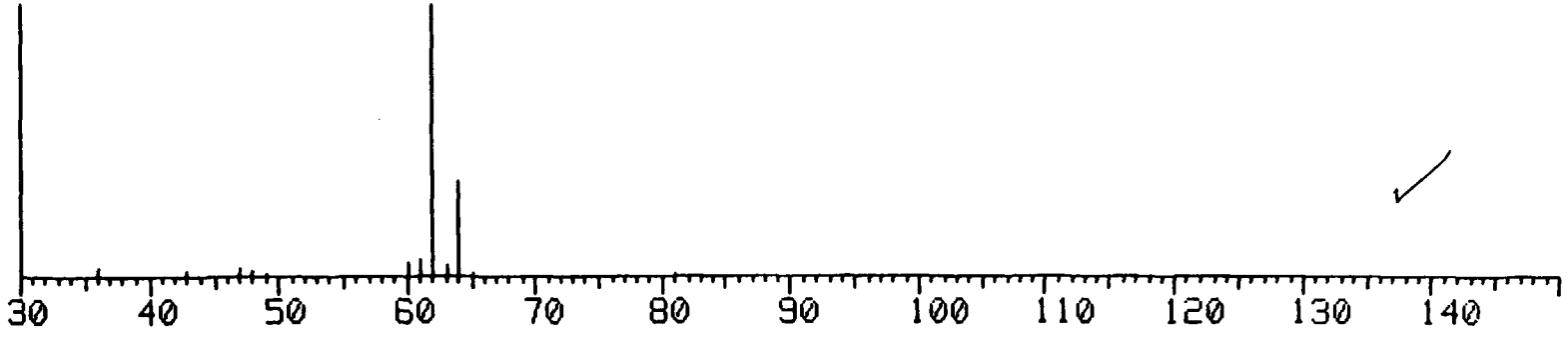
No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
3T	0.274	62. / 128.	1.982	22.8	IA BB RF			1.00
4T	0.349	64. / 128.	0.952	164.6	IA BB RF			1.00
8T	0.558	96. / 128.	1.804	29.0	IA BB RF			1.00
9T	0.837	63. / 128.	3.215	200.5	IA BB RF			1.00
14T	0.867	97. / 114.	0.426	37.6	IA BB RF			1.00
35T	0.840	98. / 117.	1.159	51.2	IA VB RF			1.00
36T	1.140	95. / 117.	0.727	50.1	IA VB RF			1.00
37T	1.114	65. / 128.	2.614	49.4	IA BB RF			1.00
39T	0.957	96. / 128.	1.877	2.4	IA BB RF			1.00

WADSWORTH/ALERT LABORATORIES, INC.

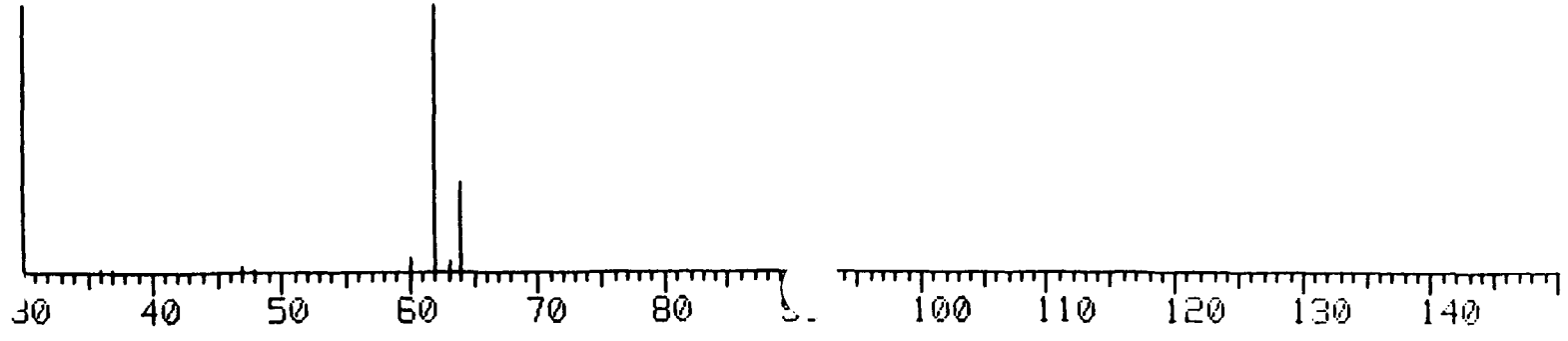
SY0:C6287 EXTRC 6287, 2515-24142, REM, 5. Total
25-MAR-91 16:02:08 Scan 65 Time 2.73 min. 78723
100 % = 2592



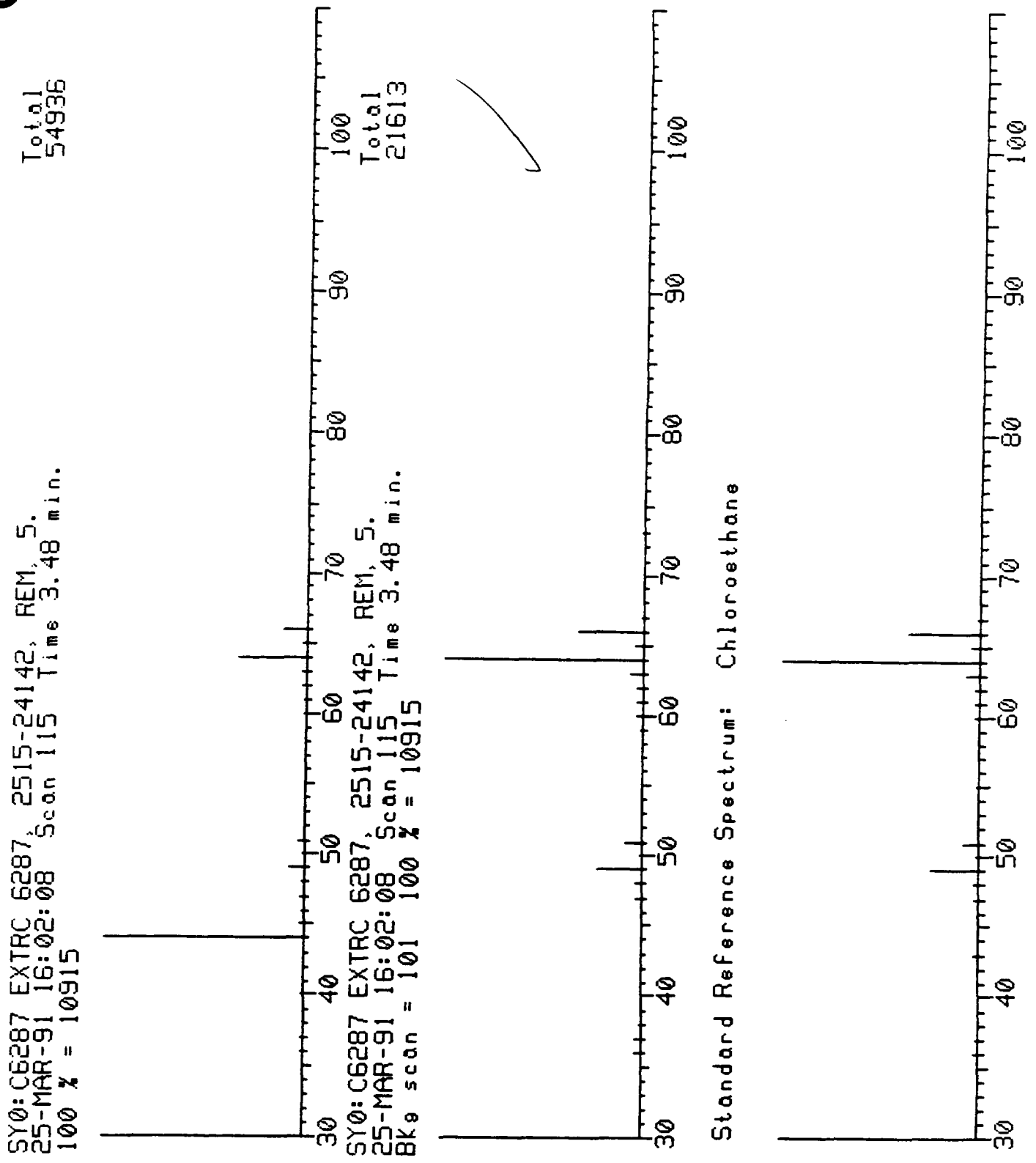
SY0:C6287 EXTRC 6287, 2515-24142, REM, 5. Total
25-MAR-91 16:02:08 Scan 65 Time 2.73 min. 4298
Bkg scan = 46 100 % = 2592



Standard Reference Spectrum: Vinyl Chloride



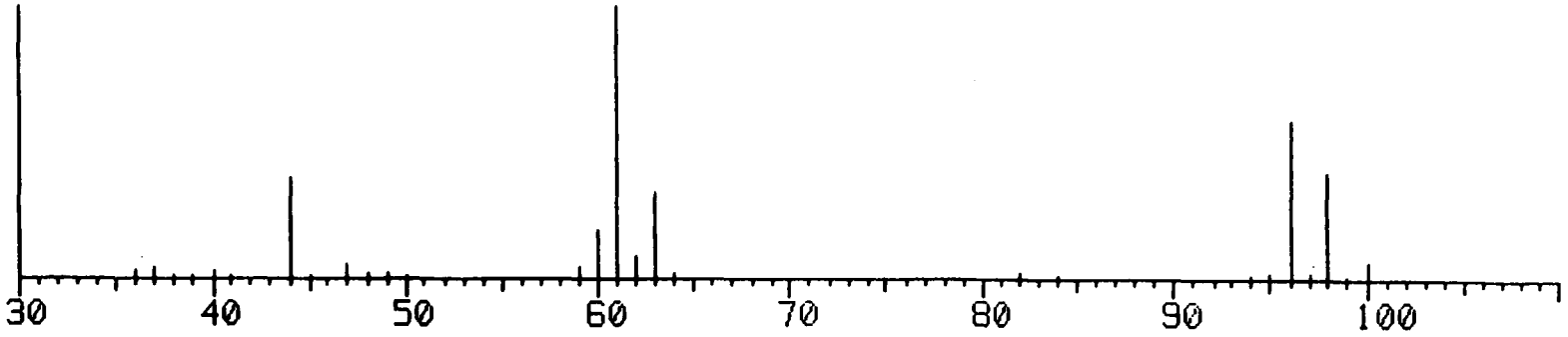
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

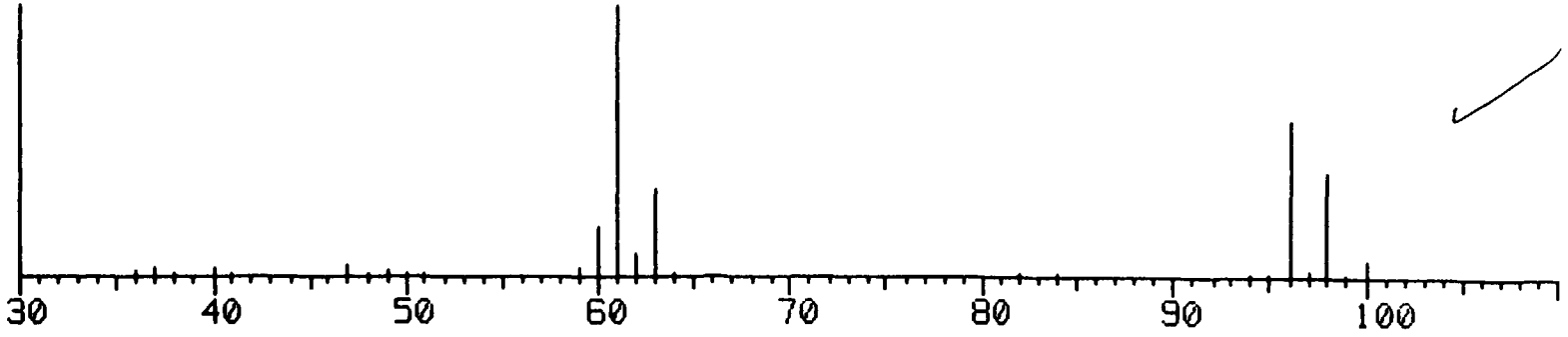
SY0: C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 253 Time 5.57 min.
100 % = 7713

Total
25725

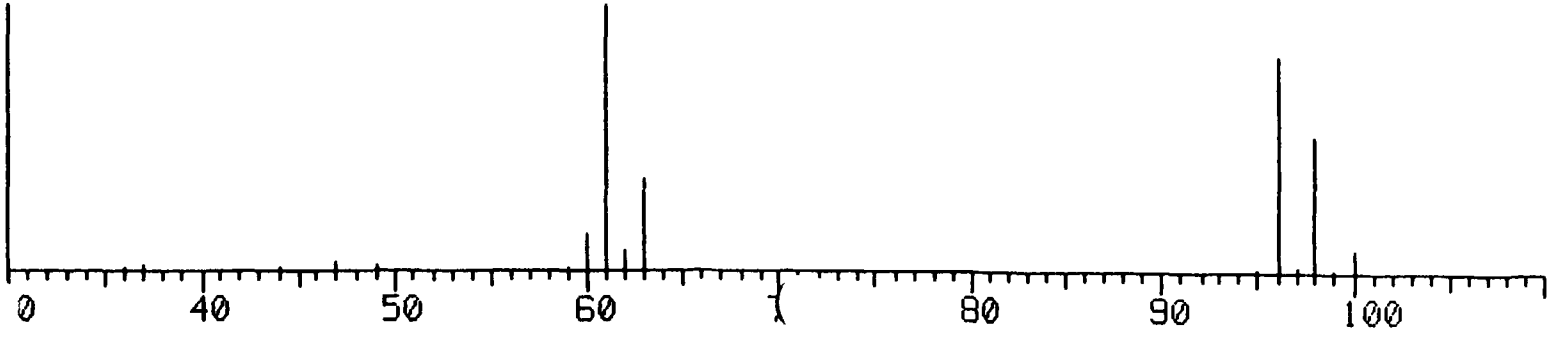


SY0: C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 253 Time 5.57 min.
Bkg scan = 243 100 % = 7713

Total
22437



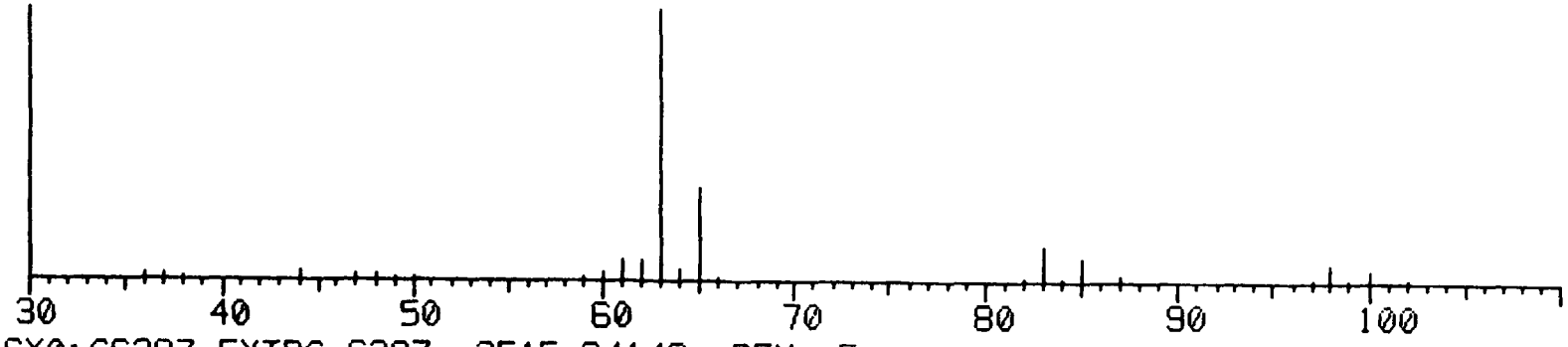
Standard Reference Spectrum: 1,1-Dichloroethene



WADSWORTH/ALERT LABORATORIES, INC.

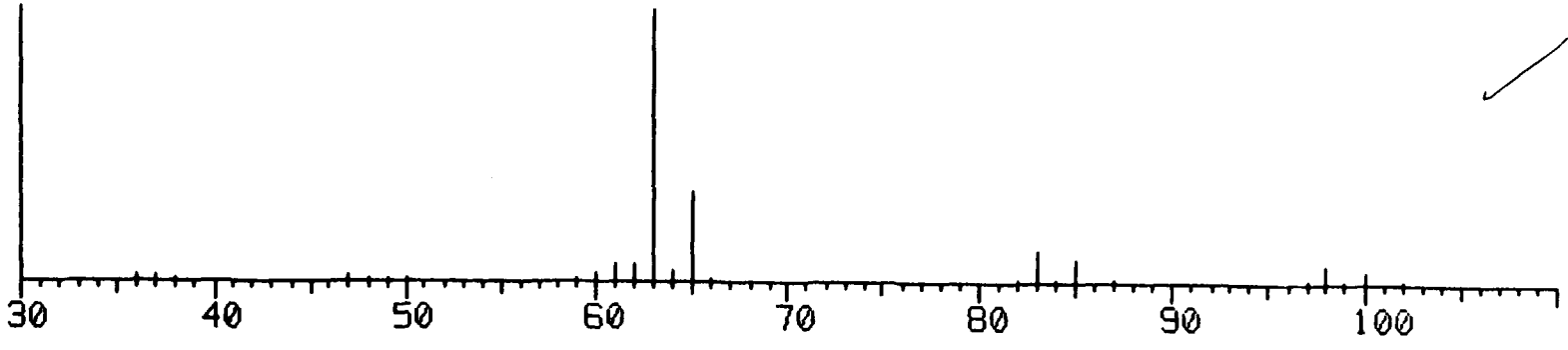
SY0:C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 436 Time 8.35 min.
100 % = 88281

Total
178701

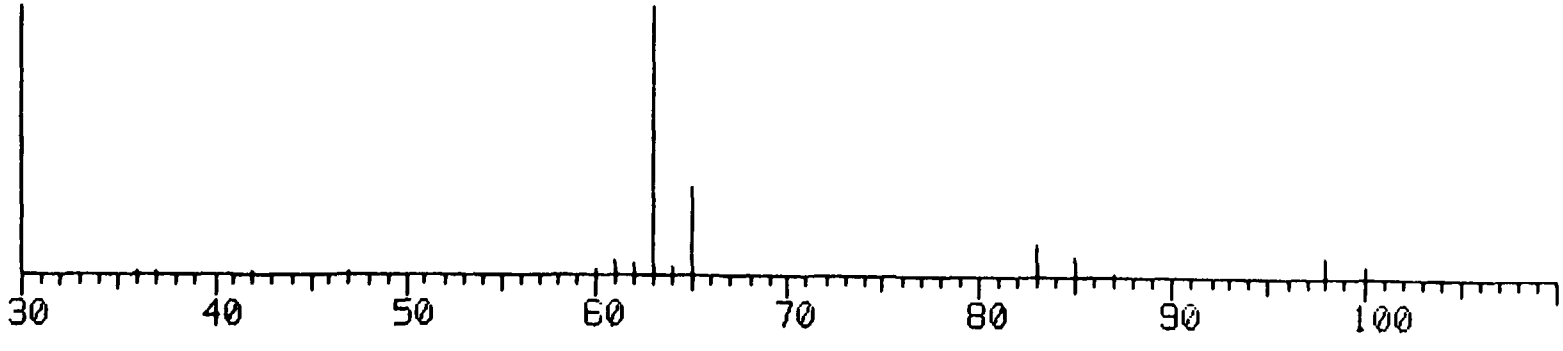


SY0:C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 436 Time 8.35 min.
Bkg scan = 425 100 % = 88281

Total
176099



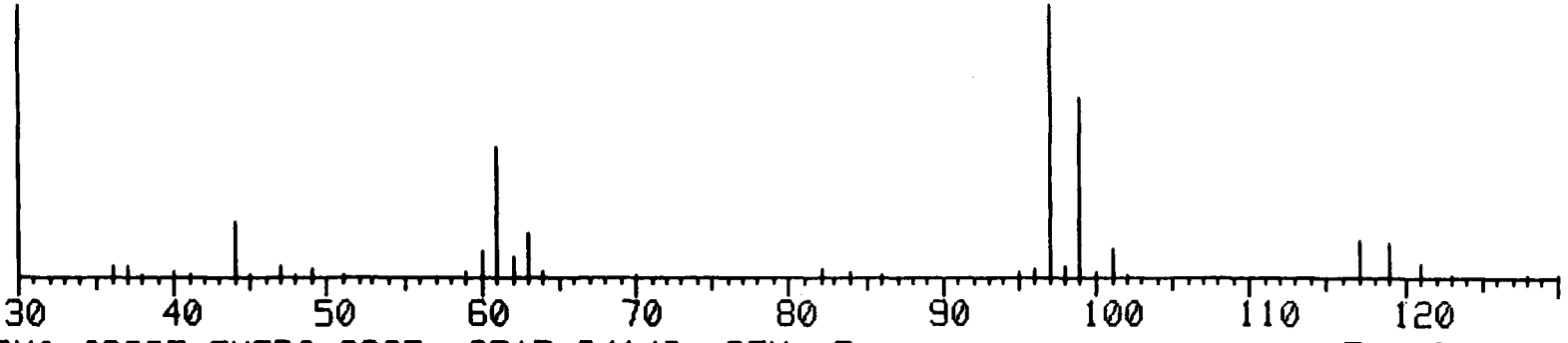
Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

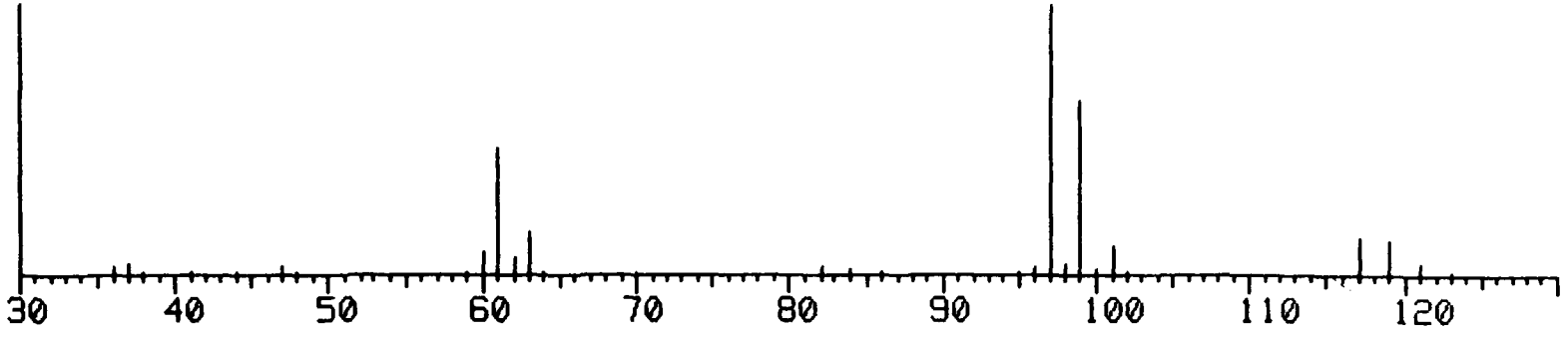
SY0:C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 576 Time 10.47 min.
100 % = 10640

Total
36454

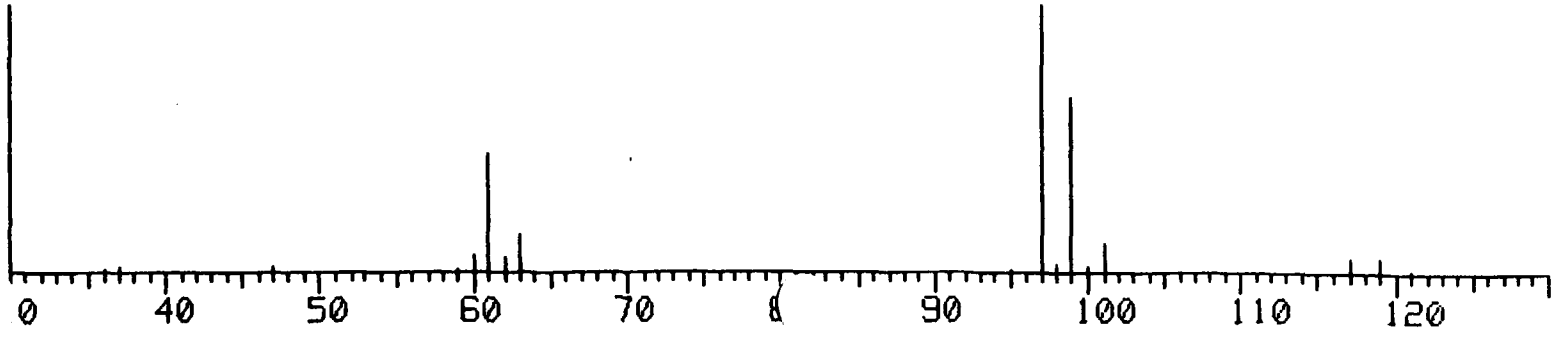


SY0:C6287 EXTRC 6287, 2515-24142, REM, 5.
25-MAR-91 16:02:08 Scan 576 Time 10.47 min.
Bkg scan = 567 100 % = 10640

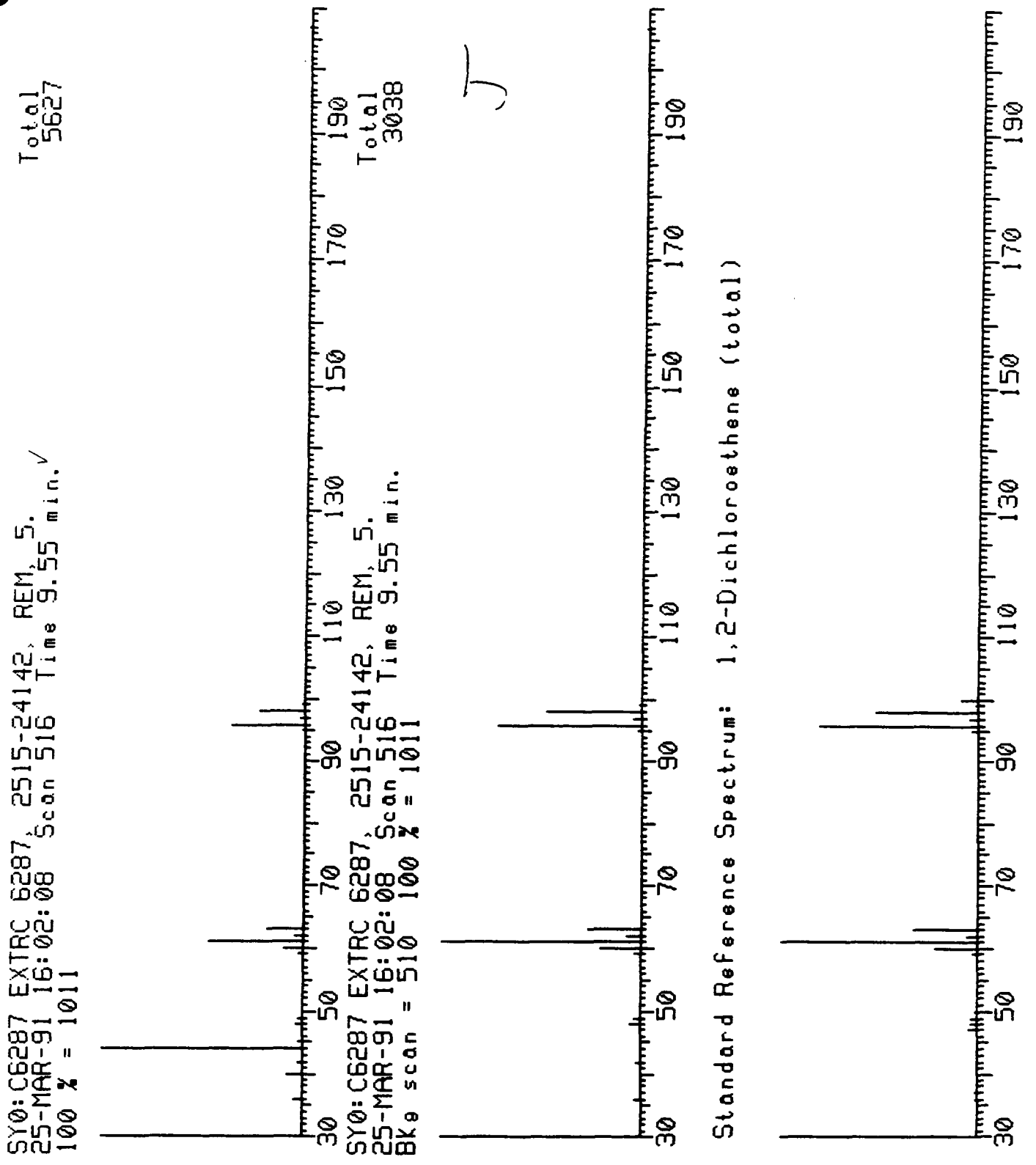
Total
33672



Standard Reference Spectrum: 1,1,1-trichloroethane



WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24142
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

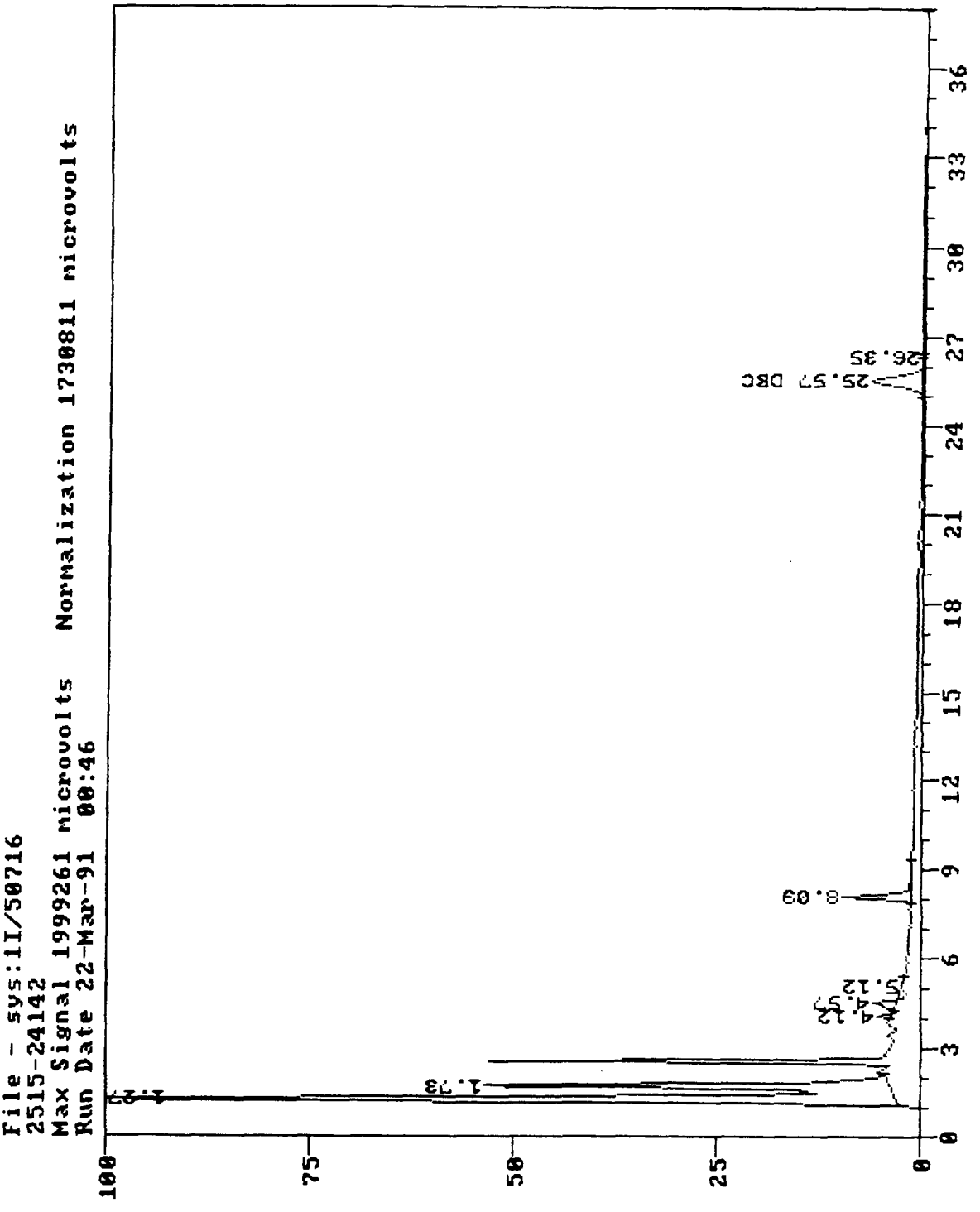
SAMPLE ID: RAU-MW01-15 3-11-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50716
15 WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 00:46
Analysis date 22-Mar-91 14:57
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.57	2454060	6.156e-02

1 target species out of 1 were found

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6309 EXTRC 6309, 2515-24143, REM, 5.0ML
26-MAR-91 13:55:37
Total Ion Current
Quad 1 scanning mode

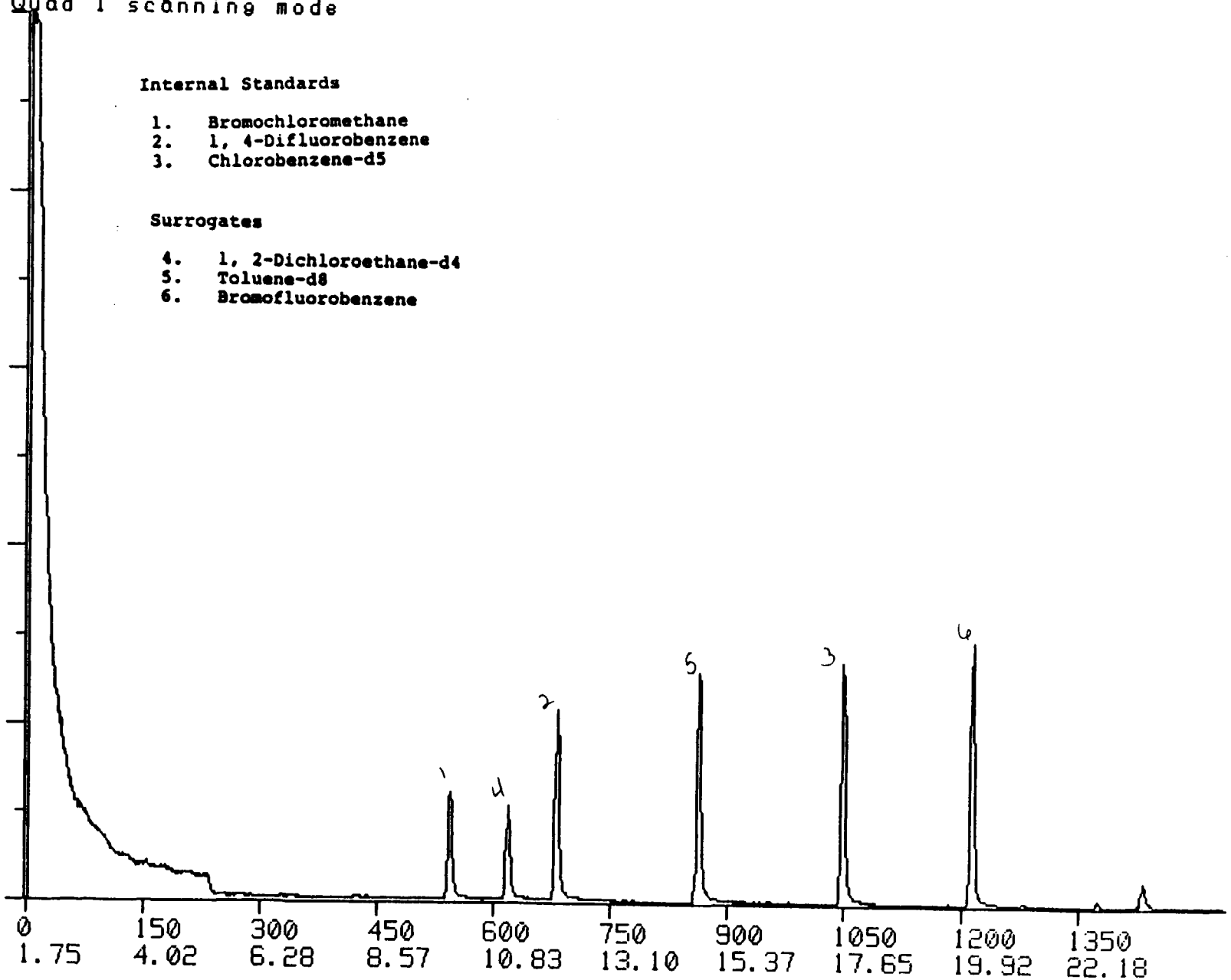
100%
558843

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6309
Injection time: 26-MAR-91 13:55:37
Comments:
EXTRC 6309, 2515-24143, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6309. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.00	545			STD	1.00	50.0	NG/UL
2S	12.07	682			STD	0.84	50.0	NG/UL
3S	17.63	1049			STD	0.71	50.0	NG/UL
1T	2.43	46	50. / 128.	10838. / 53177.	1	1.00	~~7.3~~ below	~~NG/UL~~
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	5.85	271	43. / 128.	3992. / 53177.	1	~~0.82~~ not wanted	~~9.7~~	~~NG/UL~~
7T	Was Not Found							
8T	Was Not Found							
9T	Is Below Specified Detection Limit							
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6309. GNT

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.82	863	98. / 117.	317948. /	279332.	3	0.90	50.9	NG/UL
36T	20.10	1212	95. / 117.	204424. /	279332.	3	0.92	52.8	NG/UL
37T	11.12	619	65. / 128.	134964. /	53177.	1	0.75	50.5	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Is Below Specified Detection Limit								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6309
Injection time: 26-MAR-91 13:55:37

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.243	50. / 128.	1.404	7.3	IA BB RF			1.00
6T	0.585	43. / 128.	0.387	9.7	IA BB RF			1.00
35T	0.841	98. / 117.	1.118	50.9	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	52.8	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	50.5	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24143
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

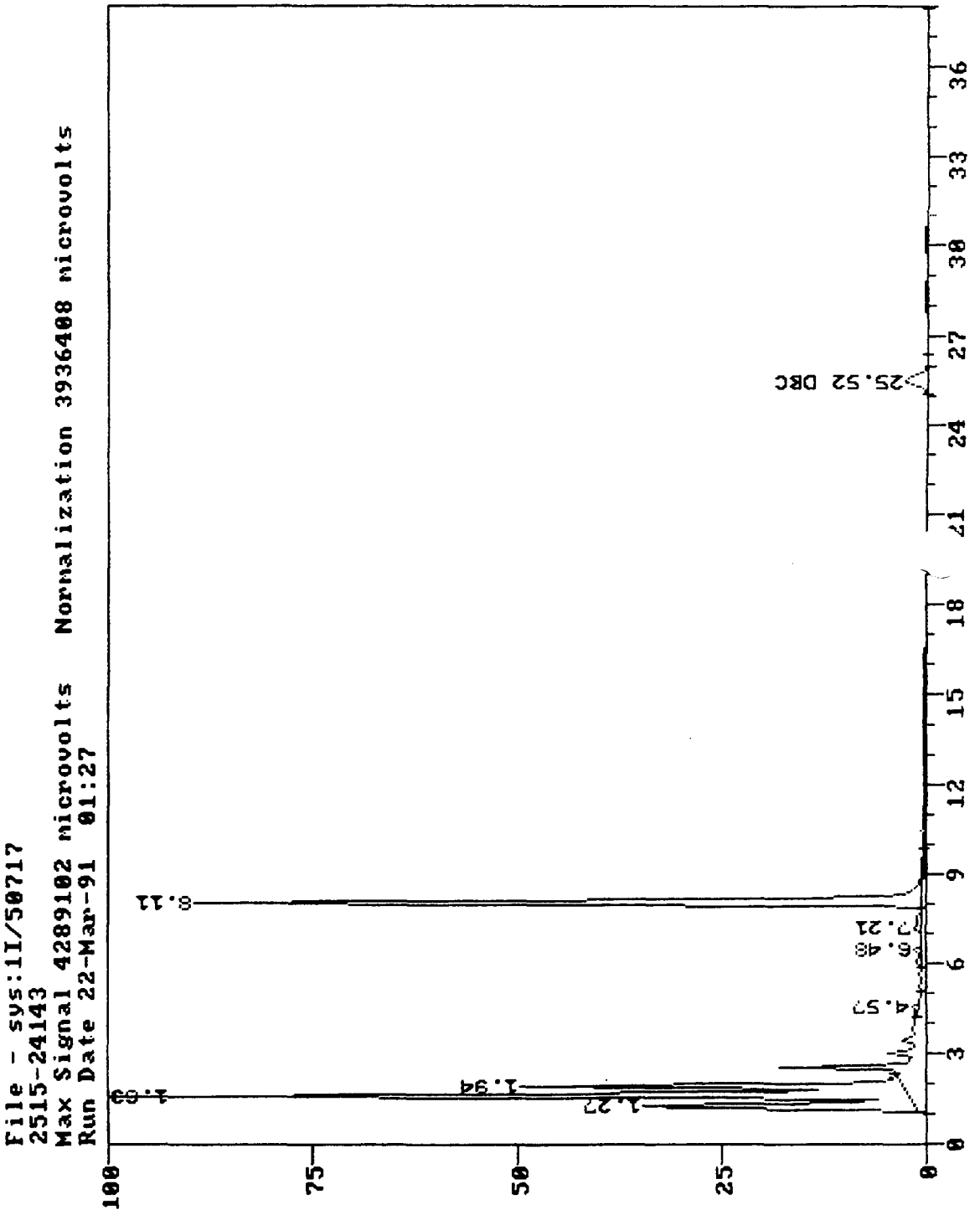
SAMPLE ID: RAU-MW01D-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50717
[illegible]
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 01:27
Analysis date 22-Mar-91 14:57
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.52	2460861	6.173e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24143
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW01D-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	101	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	106	(86-115)	(74-121)

SY0:C6309 EXTRC 6309, 2515-24143, REM, 5.0ML
26-MAR-91 13:55:37
Total Ion Current
Quad 1 scanning mode

100%
558843

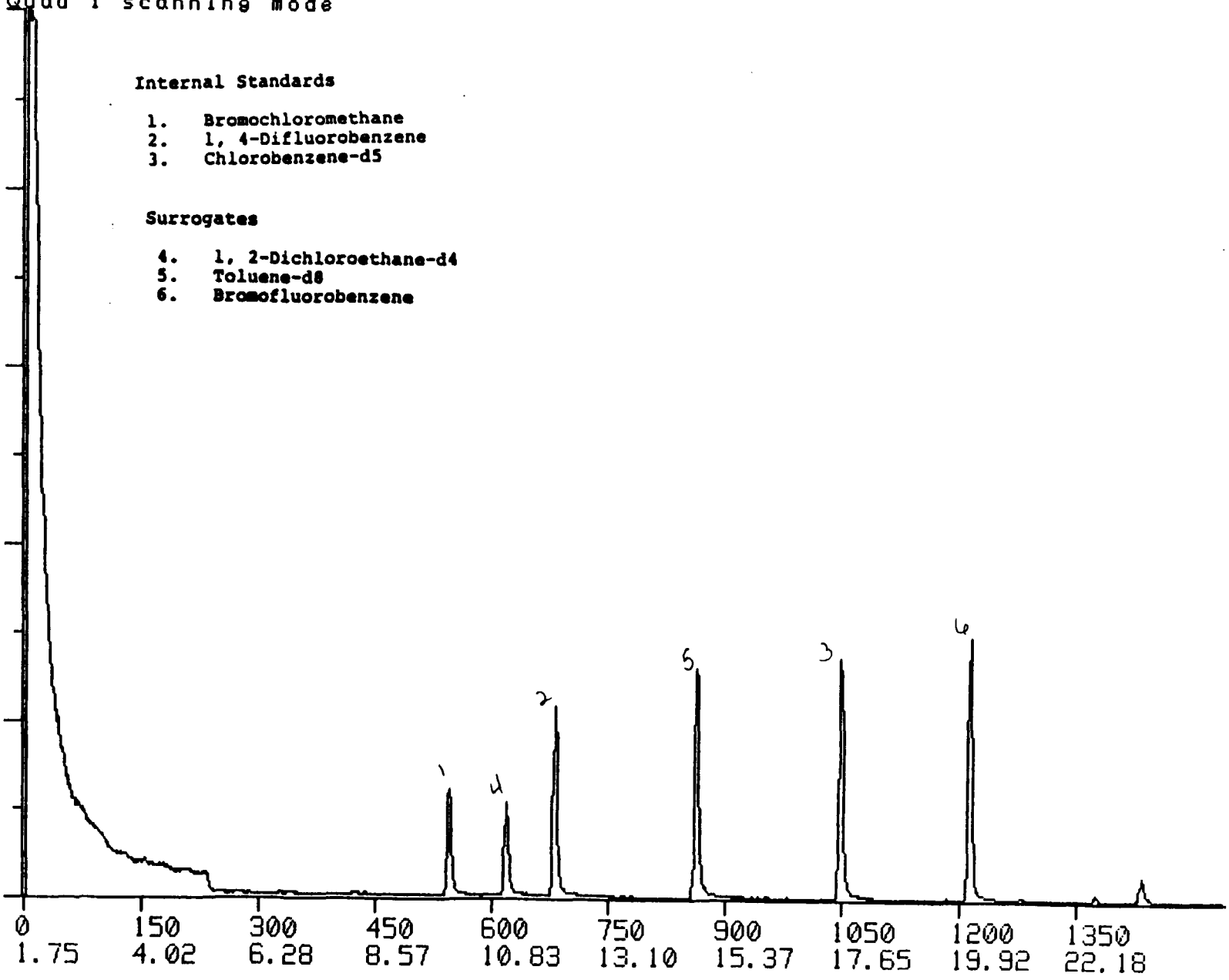
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6309
Injection time: 26-MAR-91 13:55:37
Comments:
EXTRC 6309, 2515-24143, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6309. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.00	545			STD	1.00	50.0	NG/UL
2S	12.07	682			STD	0.84	50.0	NG/UL
3S	17.63	1049			STD	0.71	50.0	NG/UL
1T	2.43	46	50. / 128.	10838. / 53177.	1	1.00	~~7.3~~ below	~~NG/UL~~
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	5.85	271	43. / 128.	3992. / 53177.	1	~~0.82~~ not wanted	~~9.7~~	~~NG/UL~~
7T	Was Not Found							
8T	Was Not Found							
9T	Is Below Specified Detection Limit							
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.82	863	98. / 117.	317948. /	279332.	3	0.90	50.9	NG/UL
36T	20.10	1212	95. / 117.	204424. /	279332.	3	0.92	52.8	NG/UL
37T	11.12	619	65. / 128.	134964. /	53177.	1	0.75	50.5	NG/UL

38T Was Not Found
39T Was Not Found
40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Is Below Specified Detection Limit
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Was Not Found
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
53T Was Not Found
54T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6309
Injection time: 26-MAR-91 13:55:37

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.243	50. / 128.	1.404	7.3	IA BB RF			1.00
6T	0.585	43. / 128.	0.387	9.7	IA BB RF			1.00
35T	0.841	98. / 117.	1.118	50.9	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	52.8	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	50.5	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24143
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01D-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	24	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24143
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01D-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24143
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW01D-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	16	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	430	1.0	mg/l
Specific Conductance	3/15/91	740	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.11	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	7.1		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24144
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW02-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

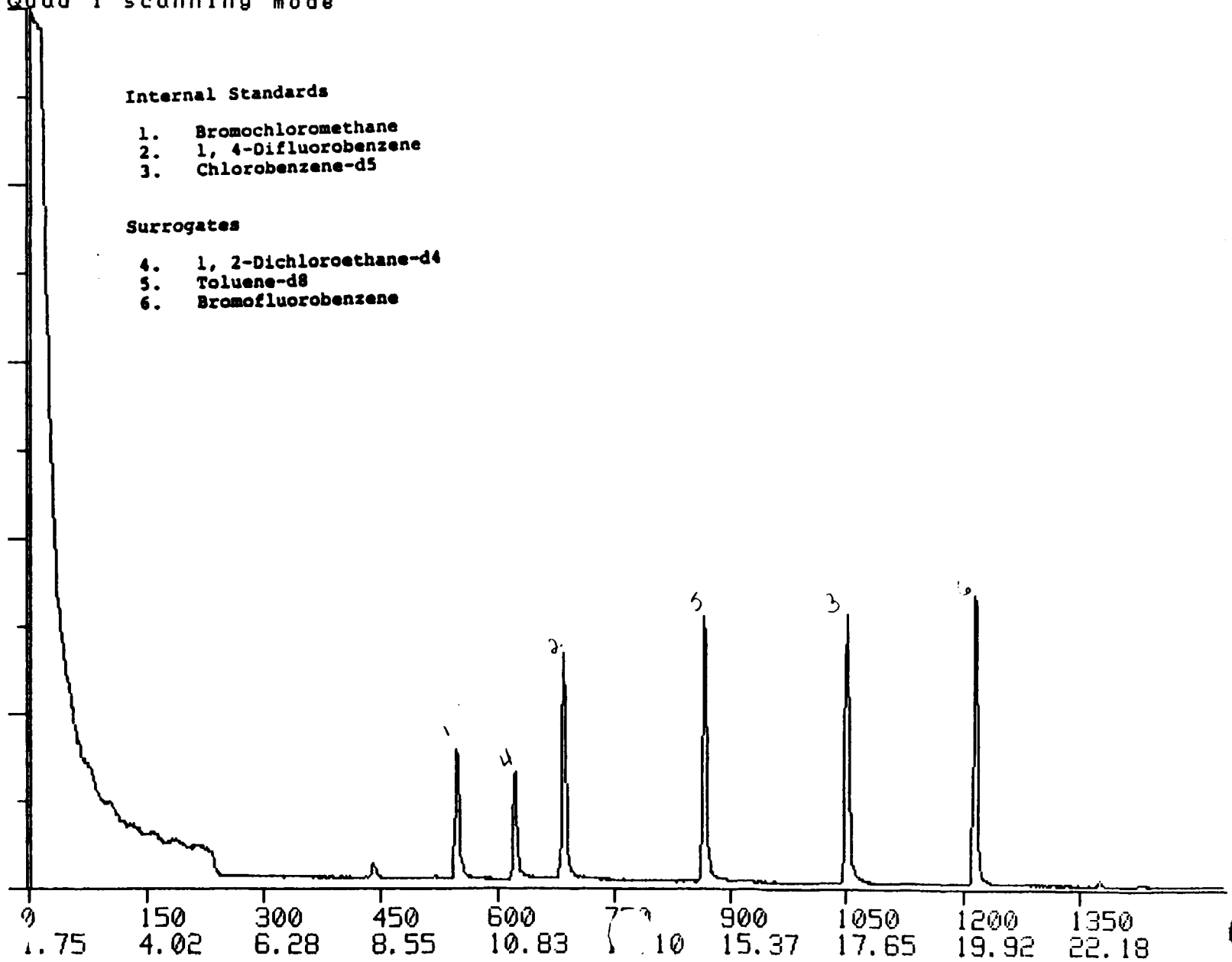
Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	7.7		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	95	(76-114)	(70-121)
Toluene-d8	107	(76-114)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6310 EXTRC 6310, 2515-24144, REM, 5.0ML 100%
26-MAR-91 14:31:24 563828
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6310
Injection time: 26-MAR-91 14:31:24
Comments:
EXTRC 6310, 2515-24144, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6310. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.05	548			STD	1.00	50.0	NG/UL
2S	12.12	685			STD	0.84	50.0	NG/UL
3S	17.67	1051			STD	0.71	50.0	NG/UL
1T	2.48	49	50. / 128.	4160. / 69502	~~1~~	~~0.57~~	~~2.1~~	~~NG/UL~~
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	Was Not Found							
9T	8.40	440	63. / 128.	33385. / 69502.	1	1.00	7.7	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

DLh

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	866	98. / 117.	378240. /	315306.	3	0.90	53.6	NG/UL
36T	20.13	1214	95. / 117.	226224. /	315306.	3	0.92	51.7	NG/UL
37T	11.18	623	65. / 128.	165252. /	69502.	1	0.73	47.3	NG/UL
38T	Was Not Found								
39T	Is Below Specified Detection Limit								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Is Below Specified Detection Limit								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

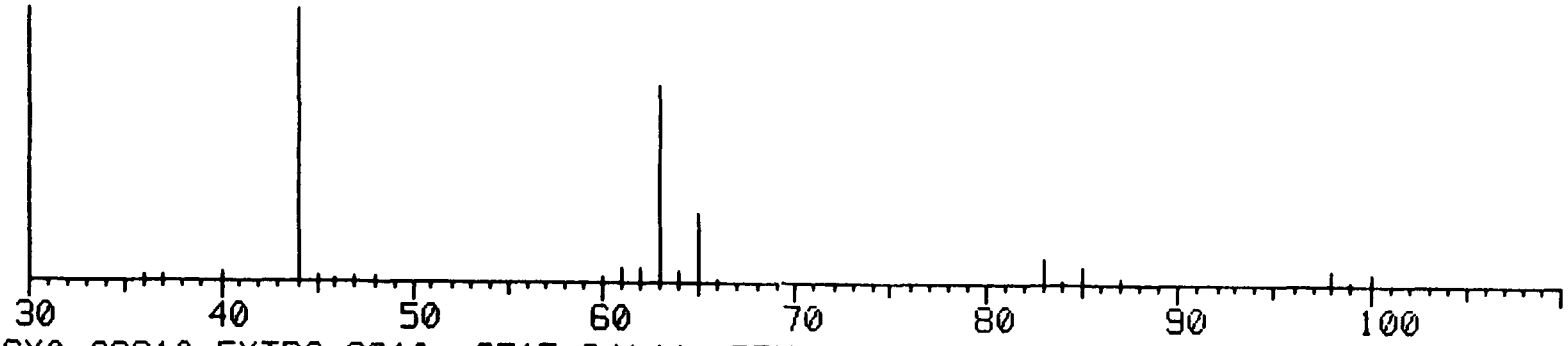
Library used: SYO:DBH20
Data file name: SYO:C6310
Injection time: 26-MAR-91 14:31:24

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.247	50. / 128.	1.404	2.1	IA BV RF			1.00
9T	0.836	63. / 128.	3.132	7.7	IA BB RF			1.00
35T	0.842	98. / 117.	1.118	53.6	IA BB RF			1.00
36T	1.139	95. / 117.	0.694	51.7	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	47.3	IA BB RF			1.00

WADSWORTH/ALERT LABORATORIES, INC.

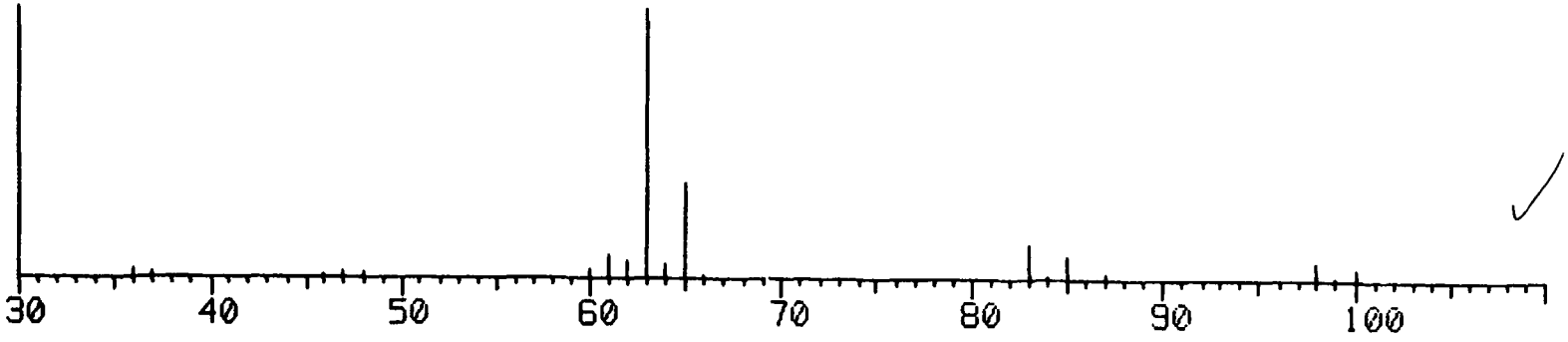
SY0:C6310 EXTRC 6310, 2515-24144, REM, 5.
26-MAR-91 14:31:24 Scan 440 Time 8.40 min.
100 % = 4589

Total
16535

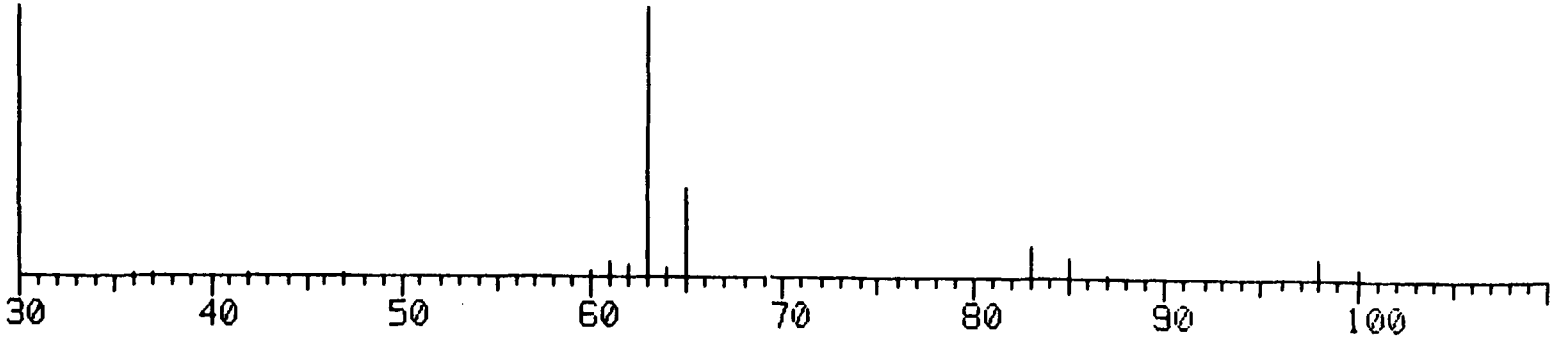


SY0:C6310 EXTRC 6310, 2515-24144, REM, 5.
26-MAR-91 14:31:24 Scan 440 Time 8.40 min.
Bkg scan = 433 100 % = 4589

Total
9409



Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24144
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

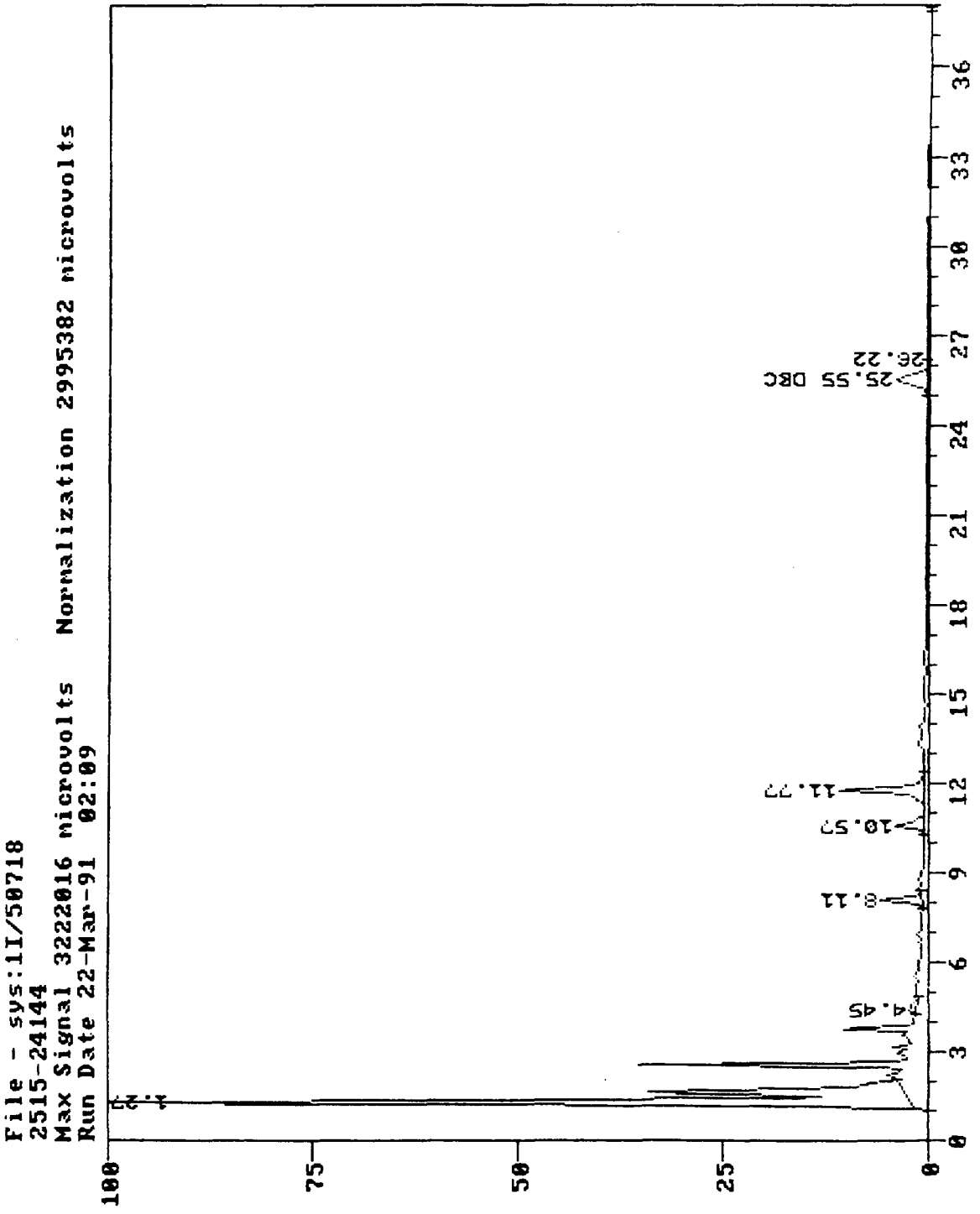
SAMPLE ID: RAU-MW02-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50718
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 02:09
Analysis date 22-Mar-91 14:57
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.55	2571378	6.450e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24144
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW02-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	49	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24144
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW02-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24144
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW02-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	1.5	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	240	1.0	mg/l
Specific Conductance	3/15/91	3100	1000	umhos/cm
Nitrate Nitrogen	3/25/91	0.24	0.10	mg/l
Total Recoverable Phenolics	3/18/91	0.009	0.005	mg/l
pH - Water	3/15/91	6.1		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24145
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW03-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

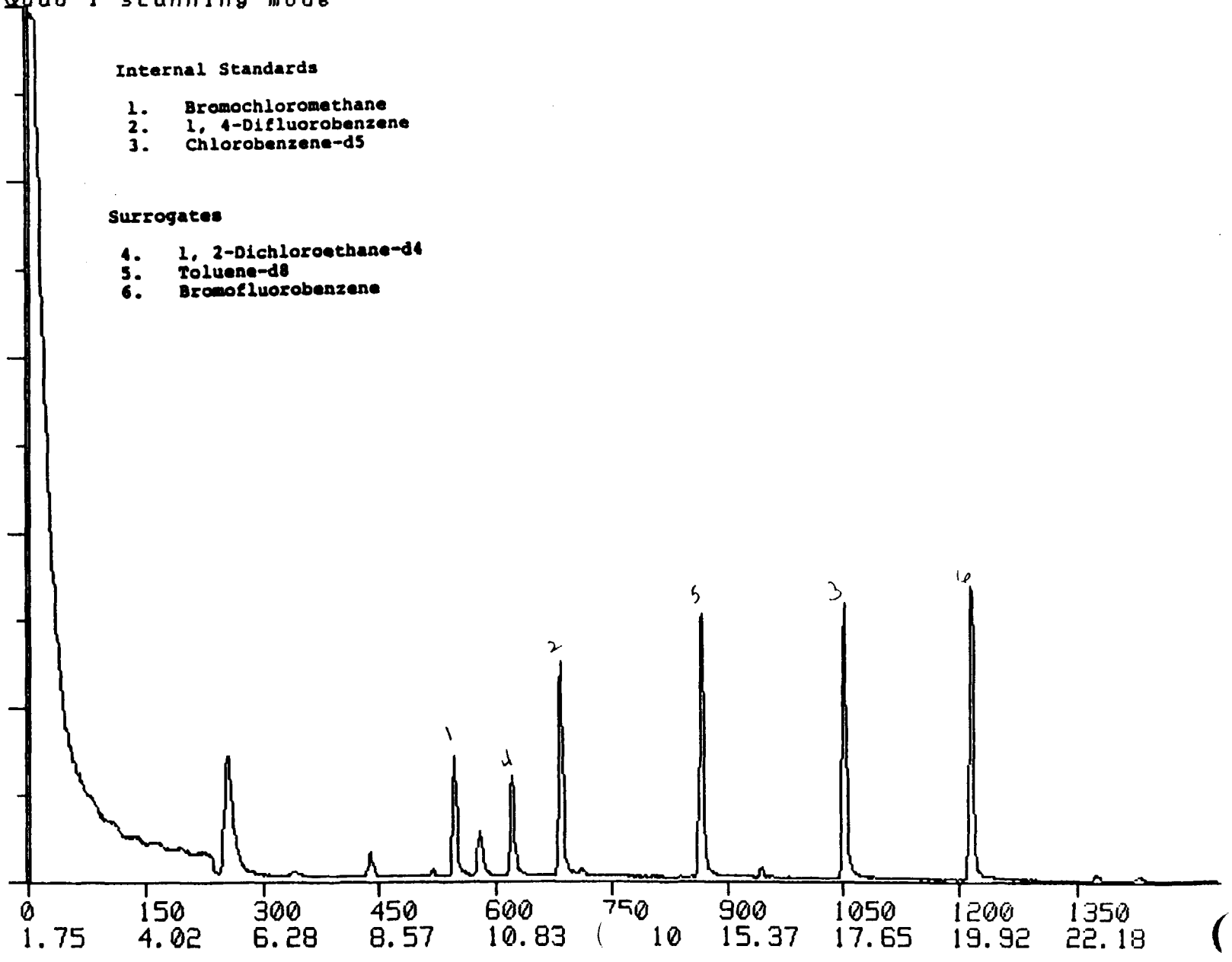
Acrolein	ND**	1,1-Dichloroethene	270
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	6.5 J
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	5.5 J
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	67
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	16 J
1,4-Dichlorobenzene	ND		
1,1-Dichloroethane	35		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 12 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 25 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 125 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.0ML 100%
26-MAR-91 15:18:40 559402
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6311
Injection time: 26-MAR-91 15:18:40
Comments:
EXTRC 6311, 2515-24145, REM, 2.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6311. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichloroflurometh ane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.10	684			STD	0.89	50.0	NG/UL
3S	17.67	1051			STD	0.77	50.0	NG/UL
1T	2.52	51	50. / 128.	9110. / 61254.	1	0.57	~~5.3~~	~~NG/UL~~
2T	Was Not Found							
3T	2.72	64	62. / 128.	12121. / 61254.	1	0.71	6.3	NG/UL J
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	Was Not Found							
7T	Was Not Found							
8T	5.60	255	96. / 128.	203043. / 61254.	1	0.85	108.3	NG/UL
9T	8.38	438	63. / 128.	52811. / 61254.	1	0.89	13.8	NG/UL
10T	Was Not Found							
11T	Is Below Specified Detection Limit							
12T	Is Below Specified Detection Limit							
13T	Was Not Found							
14T	10.52	579	97. / 114.	77165. / 370448.	2	0.87	26.8	NG/UL
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Is Below Specified Detection Limit							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	16.03	943	164. / 117.	5021. / 319102.	3	0.97	2.2	NG/UL J
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	866	98. / 117.	372012. /	319102.	3	0.90	52.1	NG/UL
36T	20.13	1214	95. / 117.	228712. /	319102.	3	0.92	51.7	NG/UL
37T	11.15	621	65. / 128.	157428. /	61254.	1	0.75	51.2	NG/UL
38T	Was Not Found								
39T	9.58	518	96. / 128.	5455. /	61254.	1	~~0.85~~	~~2.~~	~~NG/UL~~
40T	Was Not Found								
41T	Was Not Found								
42T	Is Below Specified Detection Limit								
43T	Is Below Specified Detection Limit								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	2.15	27	85. / 128.	520. /	61254.	1	~~0.40~~	~~0.2~~	~~NG/UL~~

OK J

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

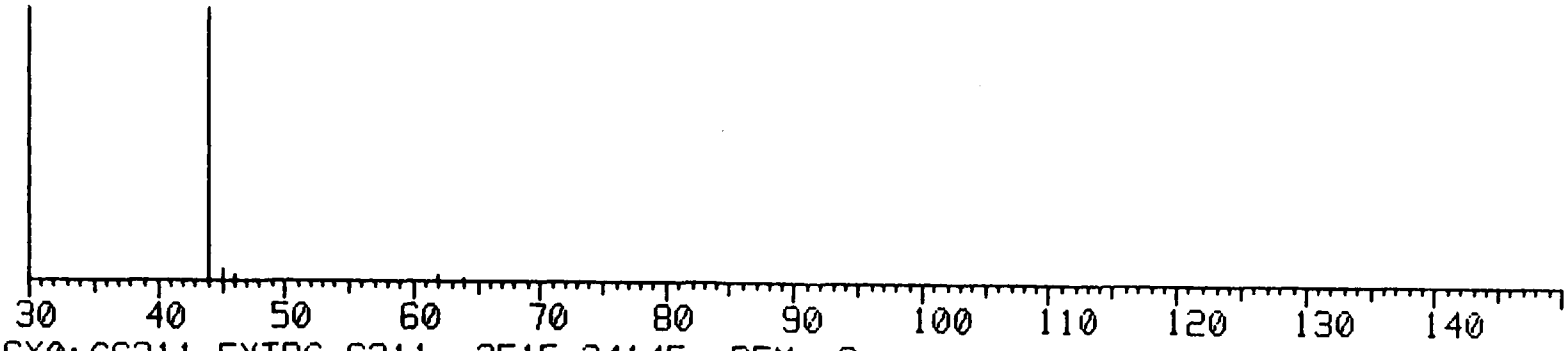
Library used: SYO:DBH20
Data file name: SYO:C6311
Injection time: 26-MAR-91 15:18:40

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.251	50. / 128.	1.404	5.3	IA BB RF			1.00
3T	0.271	62. / 128.	1.567	6.3	IA BB RF			1.00
8T	0.558	96. / 128.	1.530	108.3	IA BB RF			1.00
9T	0.835	63. / 128.	3.132	13.8	IA BB RF			1.00
14T	0.869	97. / 114.	0.389	26.8	IA BB RF			1.00
28T	0.907	164. / 117.	0.350	2.2	IA BV RF			1.00
35T	0.842	98. / 117.	1.118	52.1	IA BB RF			1.00
36T	1.139	95. / 117.	0.694	51.7	IA VB RF			1.00
37T	1.112	65. / 128.	2.512	51.2	IA BB RF			1.00
39T	0.955	96. / 128.	1.742	2.6	IA BB RF			1.00
55T	0.214	85. / 128.	1.798	0.2	IA VB RF			1.00

WADSWORTH/ALERT LABORATORIES, INC.

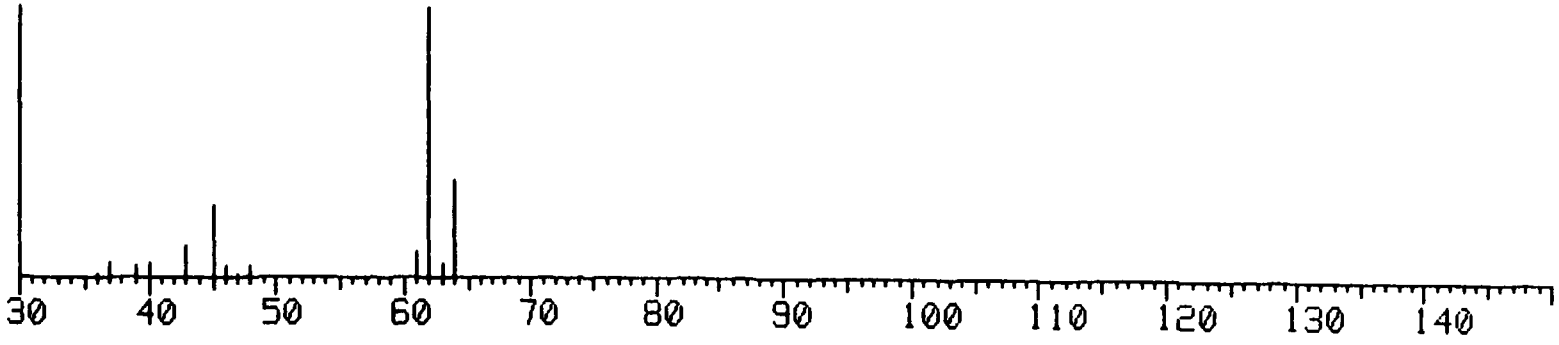
SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 64 Time 2.72 min.
100 % = 787

Total
70373

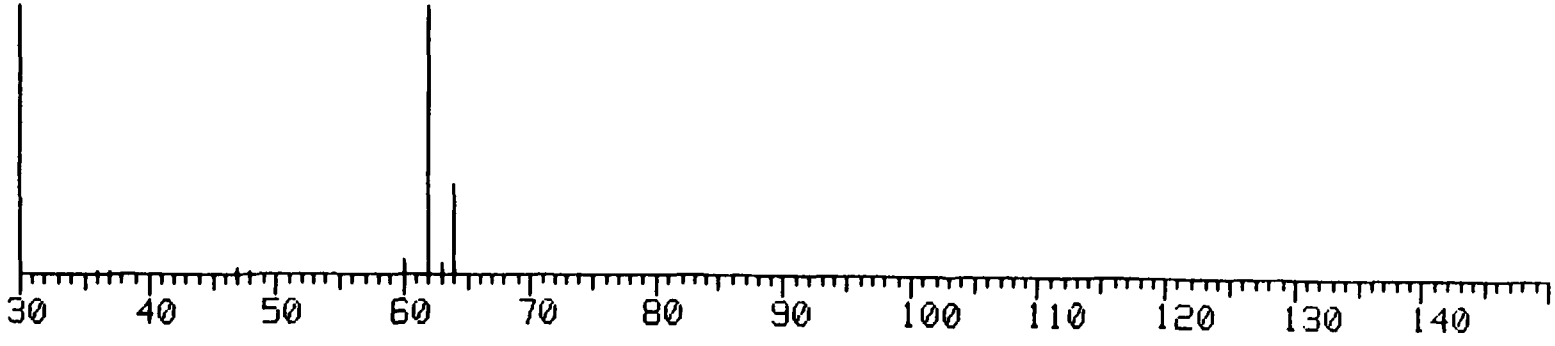


SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 64 Time 2.72 min.
Bk9 scan = 50 100 % = 787

Total
1691



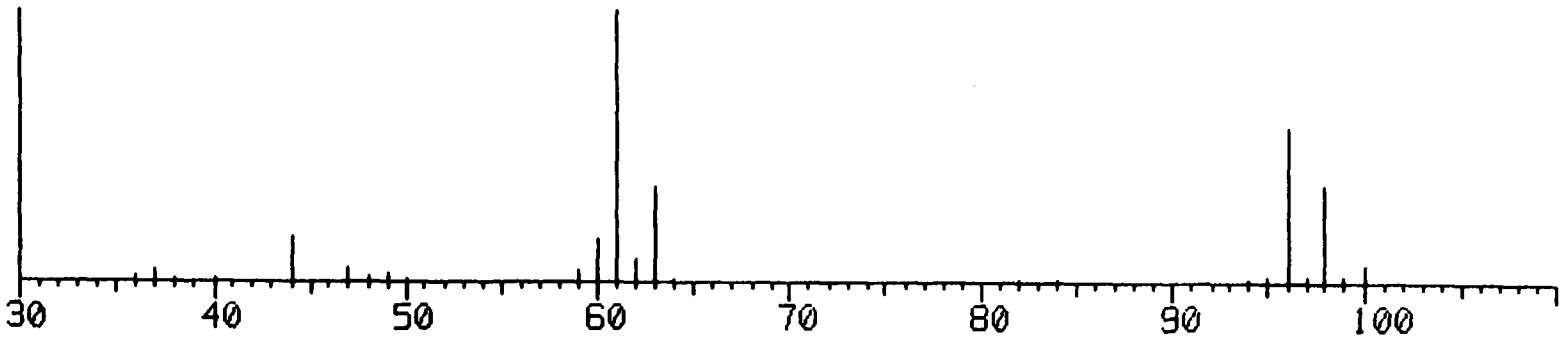
Standard Reference Spectrum: Vinyl Chloride



WADSWORTH/ALERT LABORATORIES, INC.

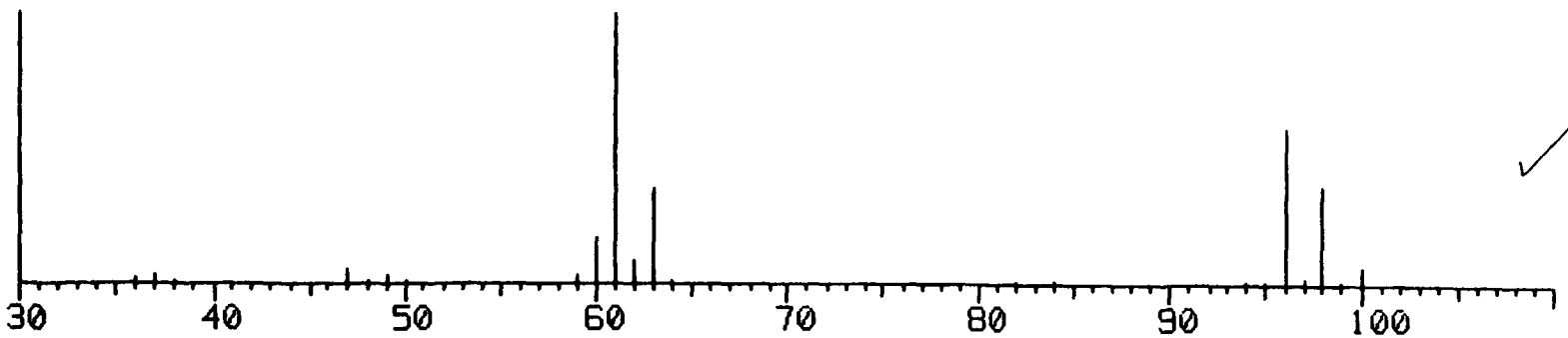
SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 255 Time 5.60 min.
100 % = 26664

Total
81319

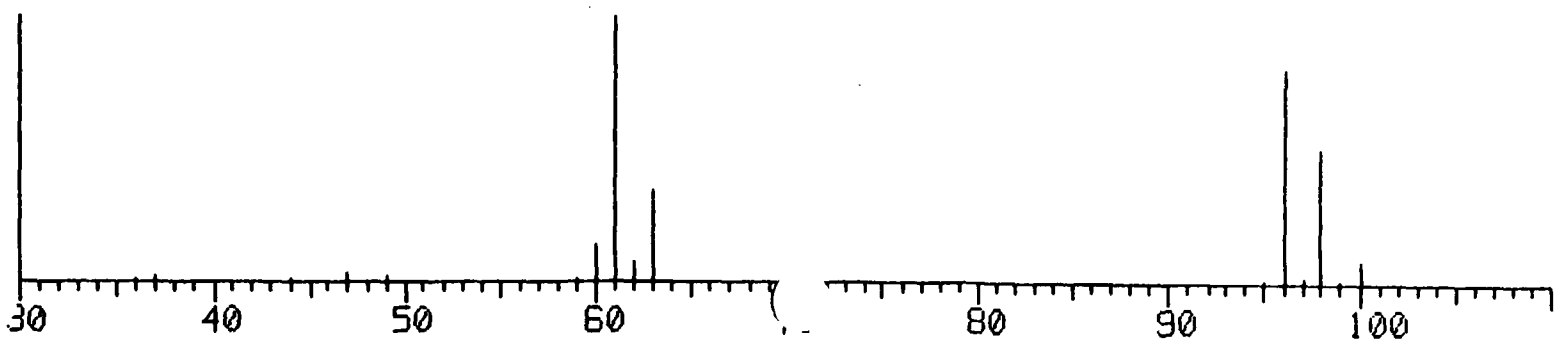


SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 255 Time 5.60 min.
BK_9 scan = 244 100 % = 26664

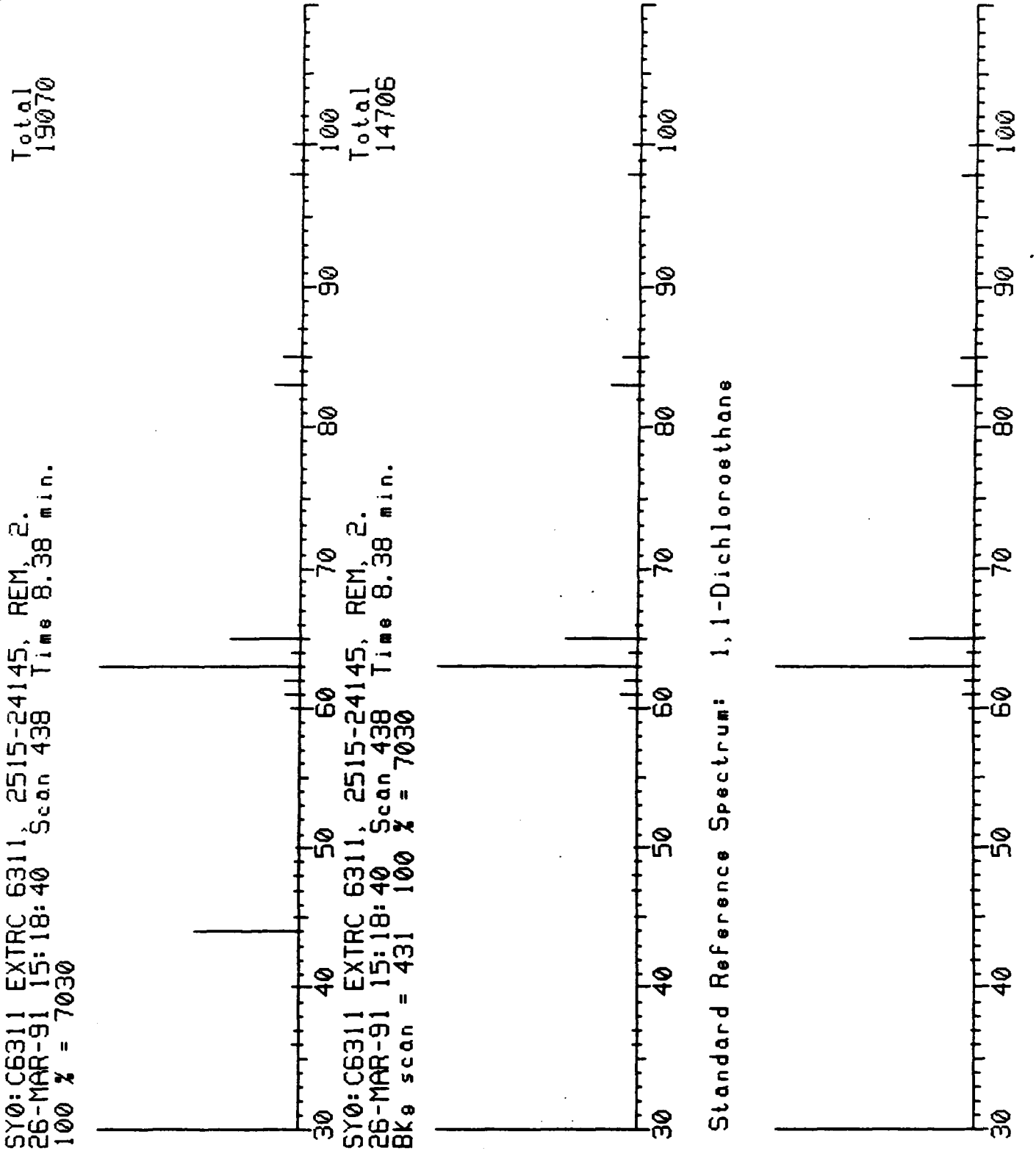
Total
76183



Standard Reference Spectrum: 1,1-Dichloroethene



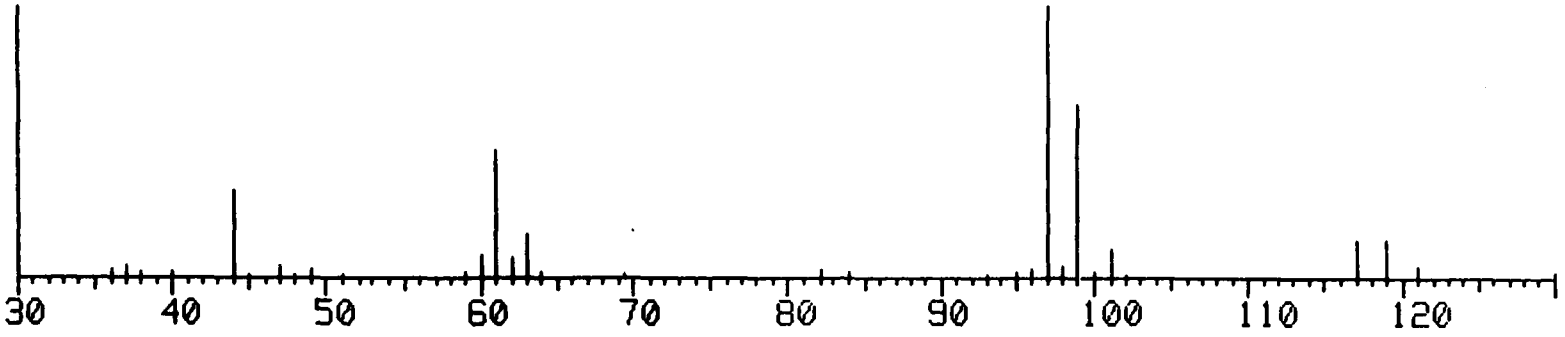
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

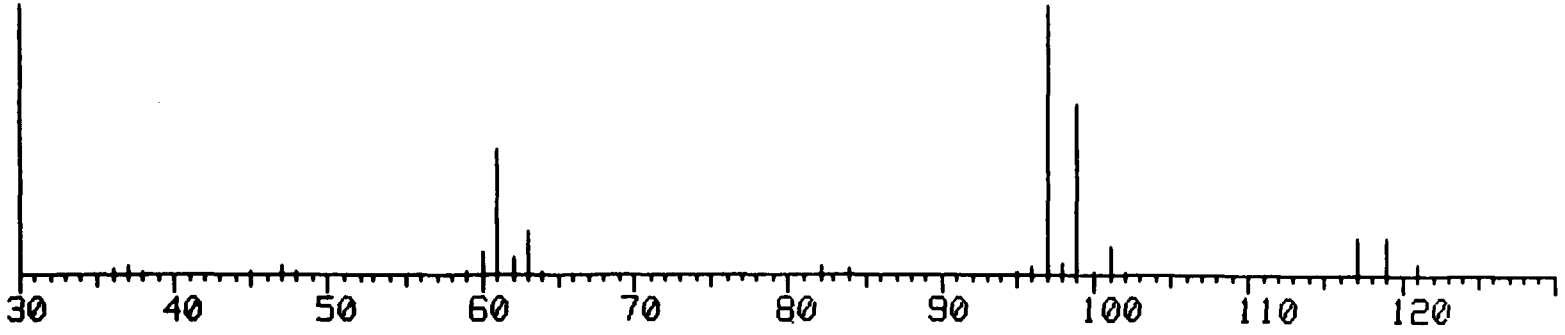
SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 579 Time 10.52 min.
100 % = 8960

Total
31795

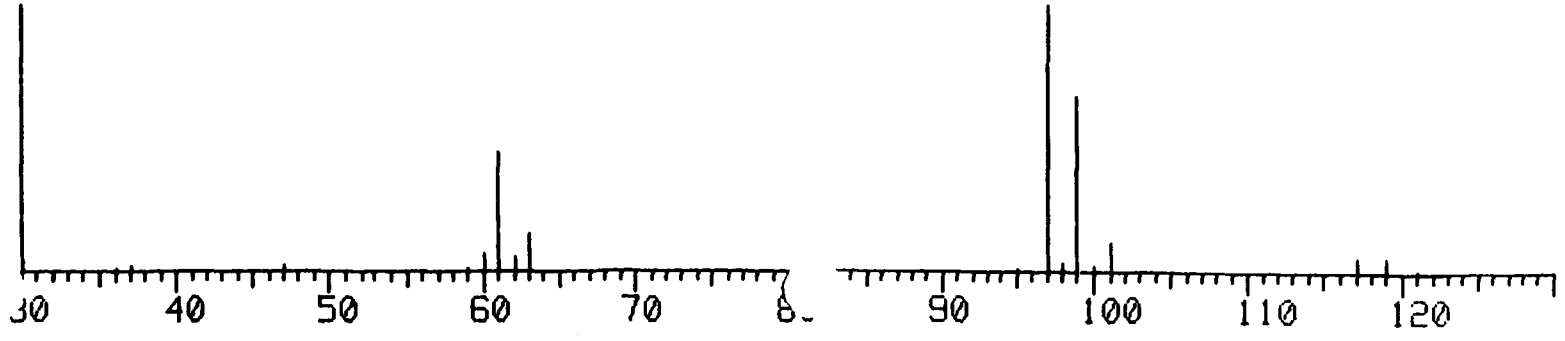


SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 579 Time 10.52 min.
Bkg scan = 570 100 % = 8960

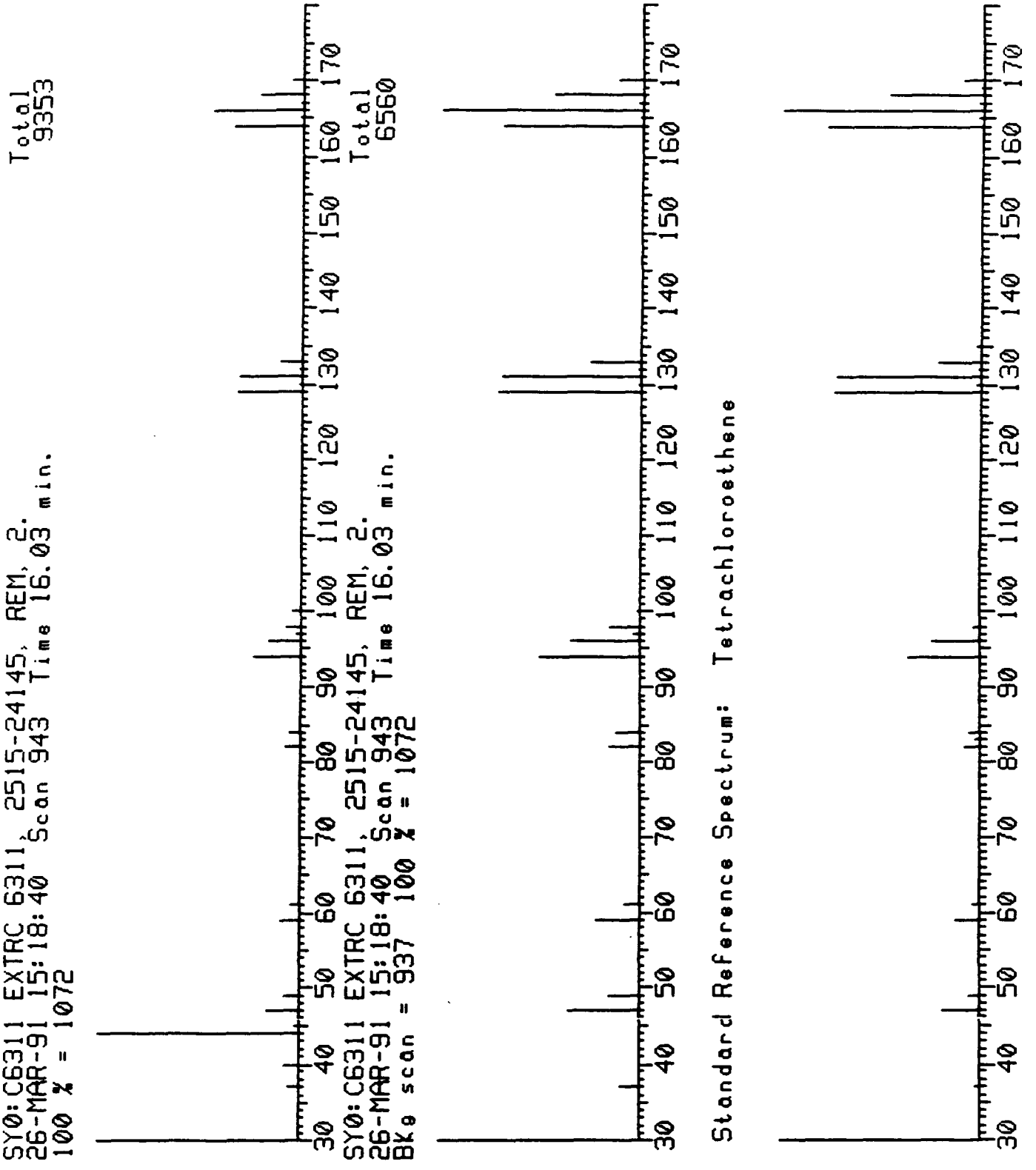
Total
28021



Standard Reference Spectrum: 1,1,1-trichloroethane



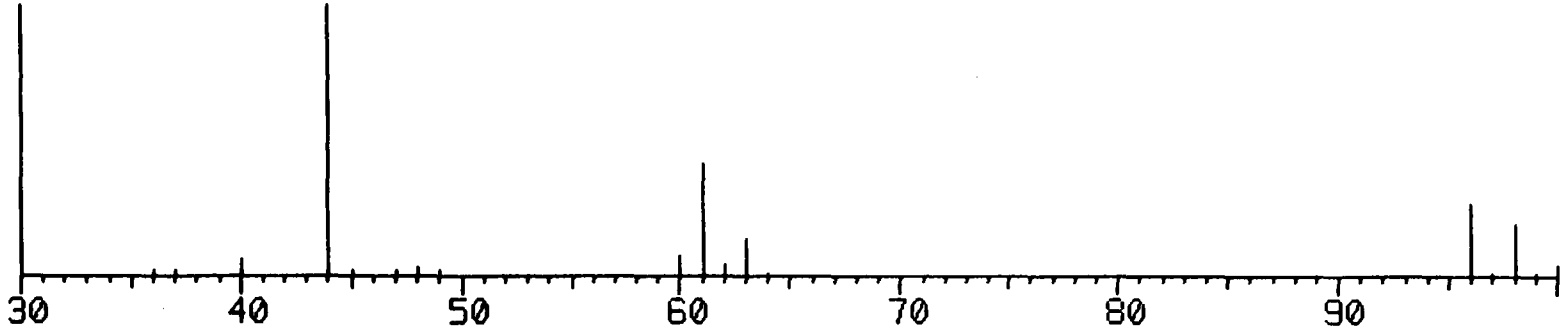
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

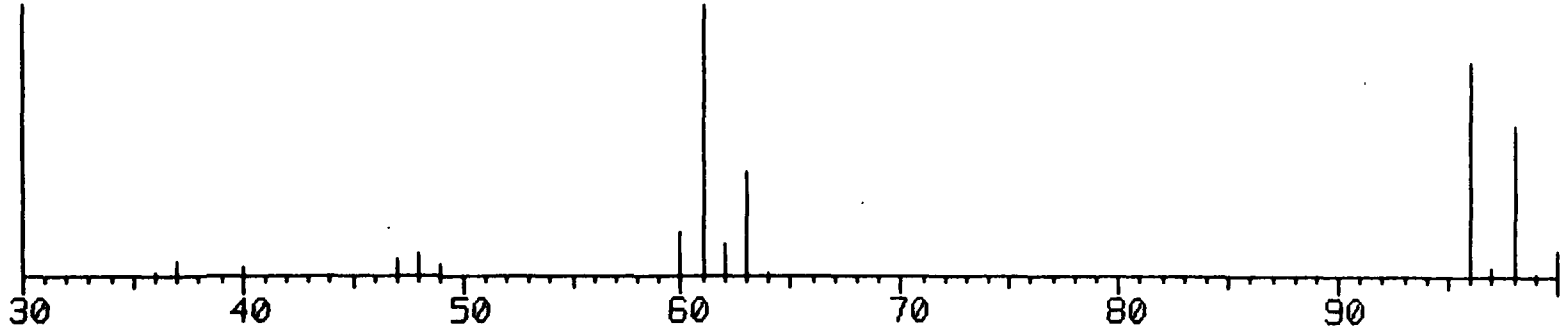
SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 518 Time 9.58 min.
100 % = 1111

Total
7726

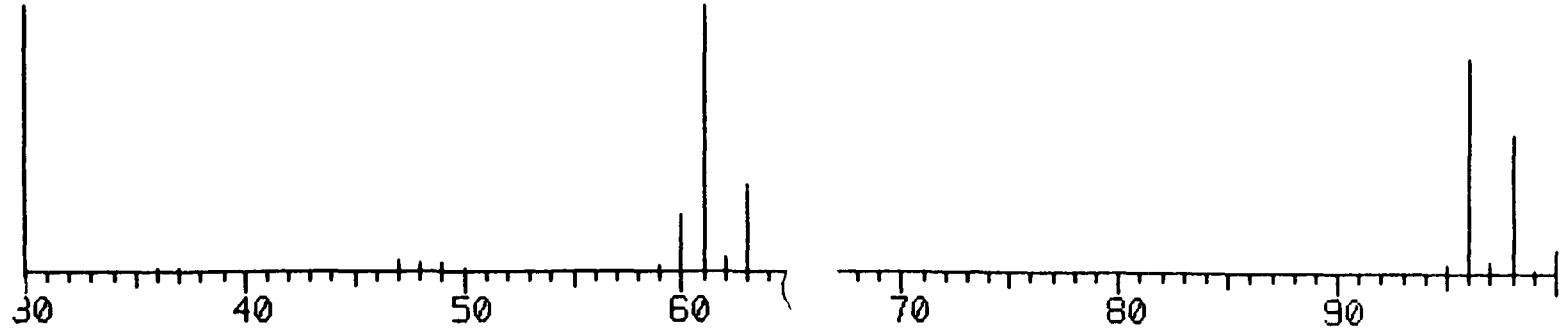


SY0:C6311 EXTRC 6311, 2515-24145, REM, 2.
26-MAR-91 15:18:40 Scan 518 Time 9.58 min.
Bkg scan = 514 100 % = 1111

Total
3826



Standard Reference Spectrum: 1,2-Dichloroethene (total)



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24145
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

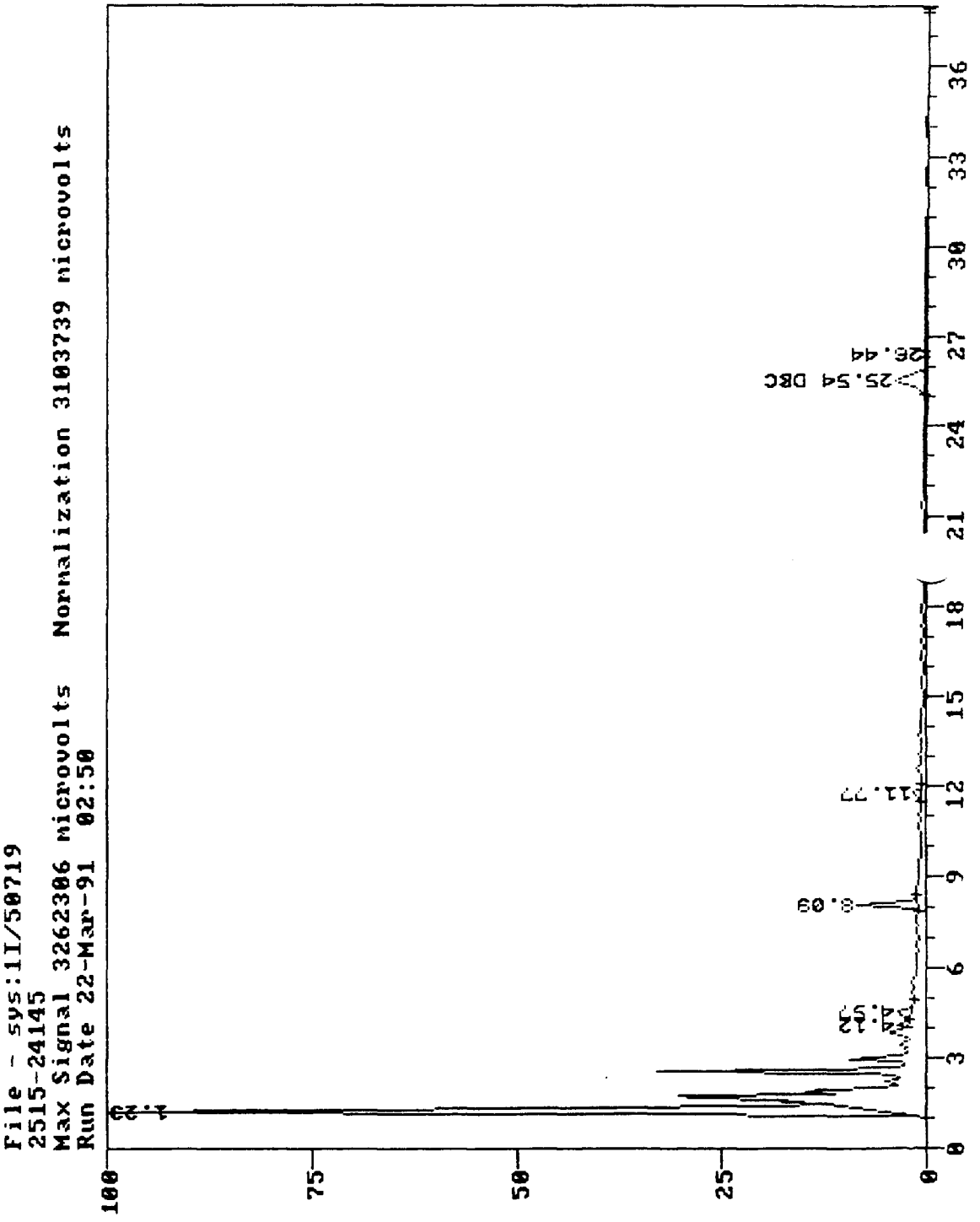
SAMPLE ID: RAU-MW03-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50719
2[illegible]
Run date 22-Mar-91 02:50
Analysis date 22-Mar-91 14:57
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.54	2594900	6.509e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24145
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	63	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24145
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24145
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	300	1.0	mg/l
Specific Conductance	3/15/91	850	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.30	0.10	mg/l
Total Recoverable Phenolics	3/18/91	0.008	0.005	mg/l
pH - Water	3/15/91	6.5		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24146
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW03A-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

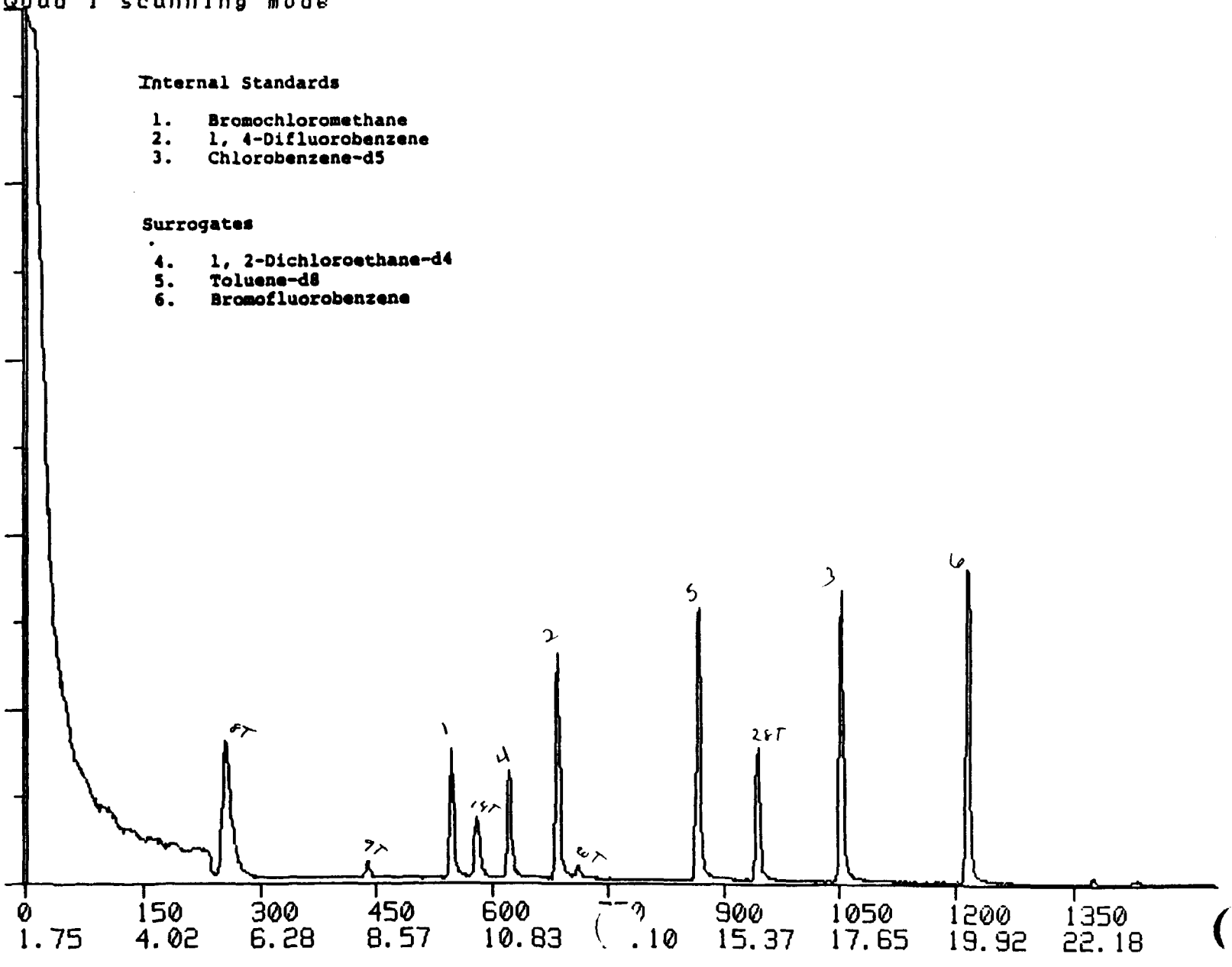
Acrolein	ND**	1,1-Dichloroethene	120
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	28
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	37
Chloromethane	20	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	2.6 J
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	9.0		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	106	(76-114)	(70-121)
Toluene-d8	101	(76-114)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.0ML 100%
26-MAR-91 15:58:52 565237
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT
LABORATORIES, INC. EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6312
Injection time: 26-MAR-91 15:58:52
Comments:
EXTRC 6312, 2515-24146, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6312. GNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.10	684			STD	0.84	50.0	NG/UL
3S	17.67	1051			STD	0.77	50.0	NG/UL
1T	2.48	49	50. / 128.	35844. / 63461.	1	0.90	20.1	NG/UL
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Was Not Found							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	5.60	255	96. / 128.	234737. / 63461.	1	0.85	120.9	NG/UL
9T	8.38	438	63. / 128.	36541. / 63461.	1	0.89	9.2	NG/UL
10T	Was Not Found							
11T	Is Below Specified Detection Limit							
12T	Is Below Specified Detection Limit							
13T	Was Not Found							
14T	10.52	579	97. / 114.	111618. / 387074.	2	0.87	37.1	NG/UL
15T	Is Below Specified Detection Limit							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	12.53	712	130. / 114.	7198. / 387074.	2	0.74	2.6	NG/UL J
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	16.03	943	164. / 117.	67771. / 343922.	3	0.97	28.1	NG/UL
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6312. QNT

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.85	865	98. / 117.	388098. /	343922.	3	0.90	50.5	NG/UL
36T	20.15	1215	95. / 117.	247486. /	343922.	3	0.92	51.9	NG/UL
37T	11.15	621	65. / 128.	168765. /	63461.	1	0.75	52.9	NG/UL
38T	Was Not Found								
39T	Is Below Specified Detection Limit								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	20.32	1226	75. / 117.	127588. /	343922.	~~3~~	~~0.40~~	~~43.4~~	~~NG/UL~~
55T	Was Not Found								

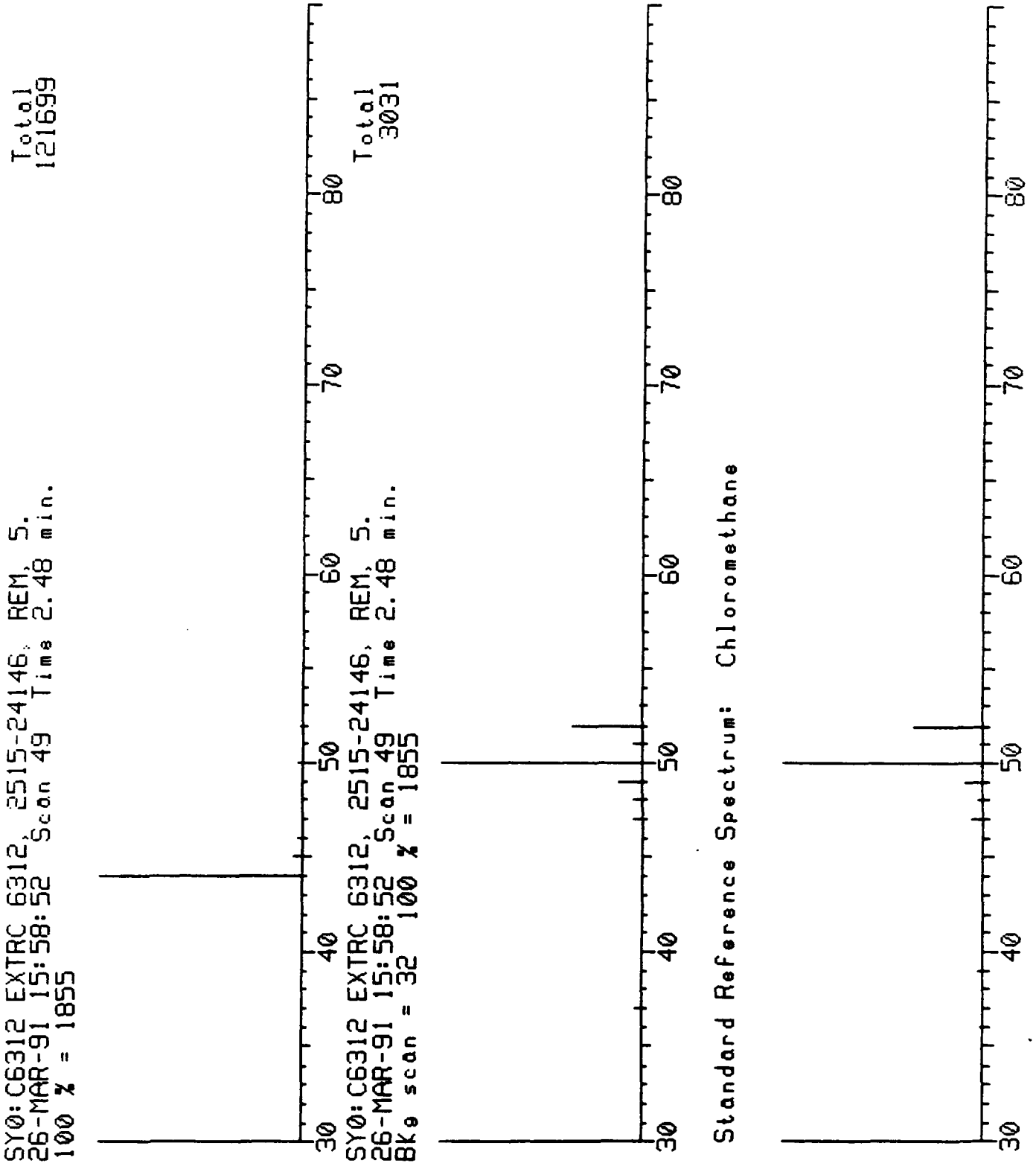
WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6312
Injection time: 26-MAR-91 15:58:52

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.247	50. / 128.	1.404	20.1	IA VB RF			1.00
8T	0.558	96. / 128.	1.530	120.9	IA BB RF			1.00
9T	0.835	63. / 128.	3.132	9.2	IA BB RF			1.00
14T	0.869	97. / 114.	0.389	37.1	IA BB RF			1.00
20T	1.036	130. / 114.	0.360	2.6	IA BB RF			1.00
28T	0.907	164. / 117.	0.350	28.1	IA BB RF			1.00
35T	0.840	98. / 117.	1.118	50.5	IA VB RF			1.00
36T	1.140	95. / 117.	0.694	51.9	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	52.9	IA BB RF			1.00
54T	1.150	75. / 117.	0.427	43.4	IA BV RF			1.00

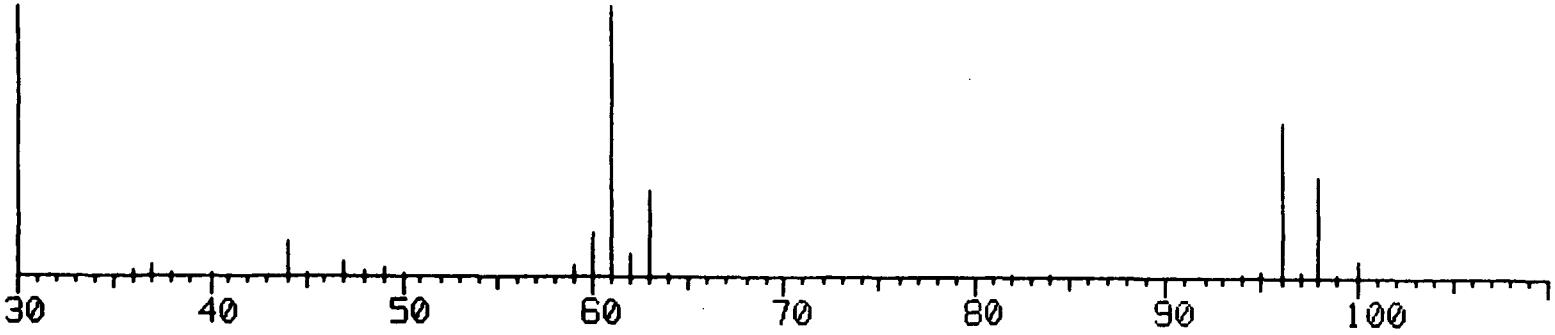
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

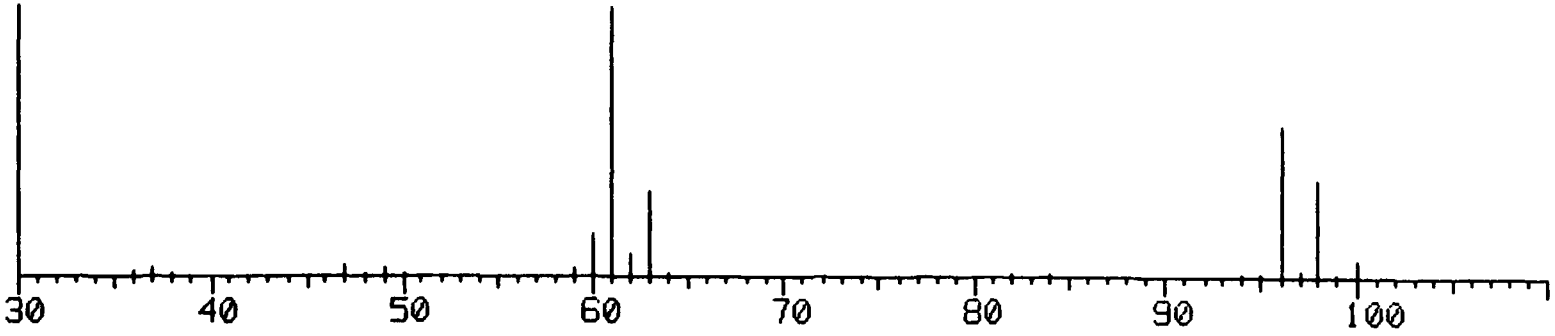
SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 255 Time 5.60 min.
100 % = 31545

Total
93544

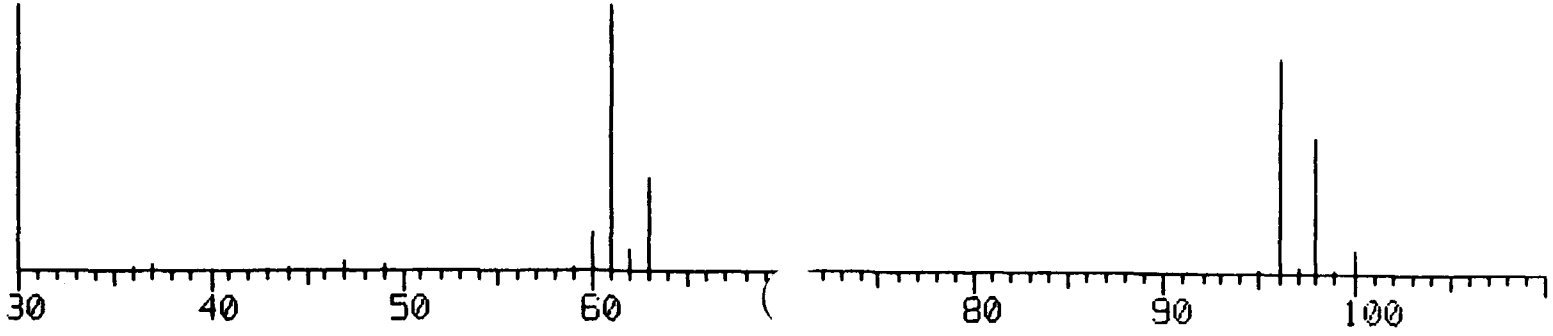


SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 255 Time 5.60 min.
Bkg scan = 244 100 % = 31545

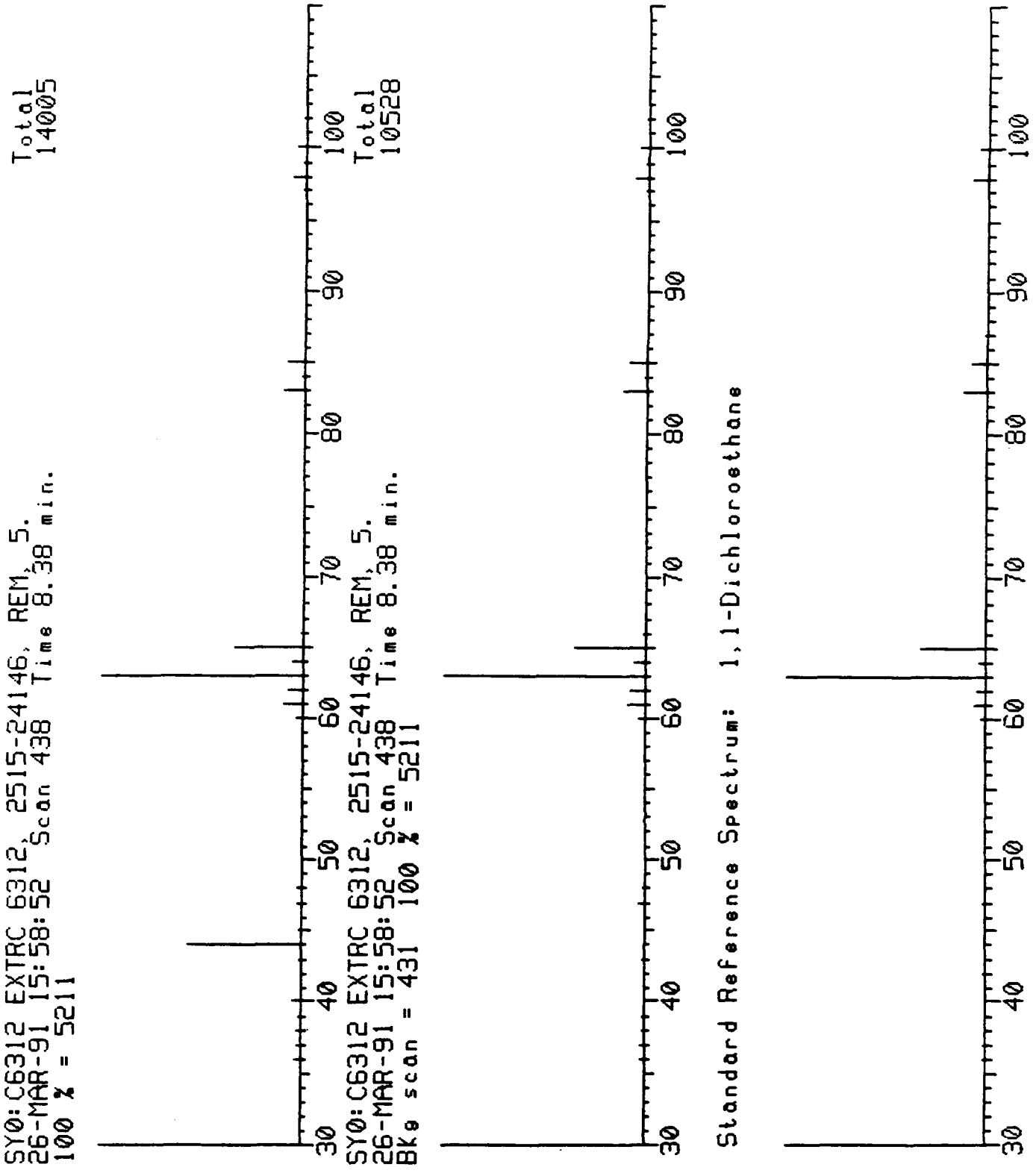
Total
88656



Standard Reference Spectrum: 1,1-Dichloroethene



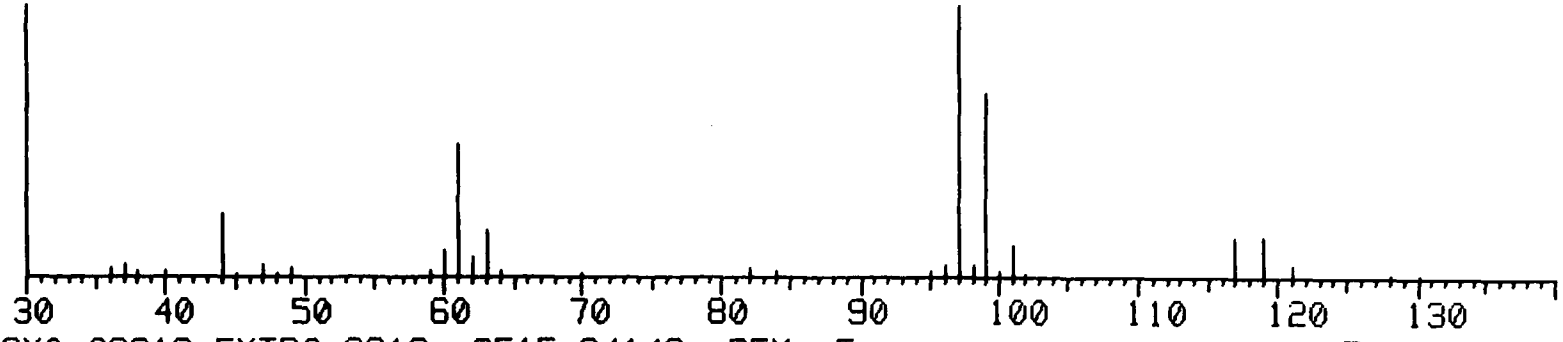
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

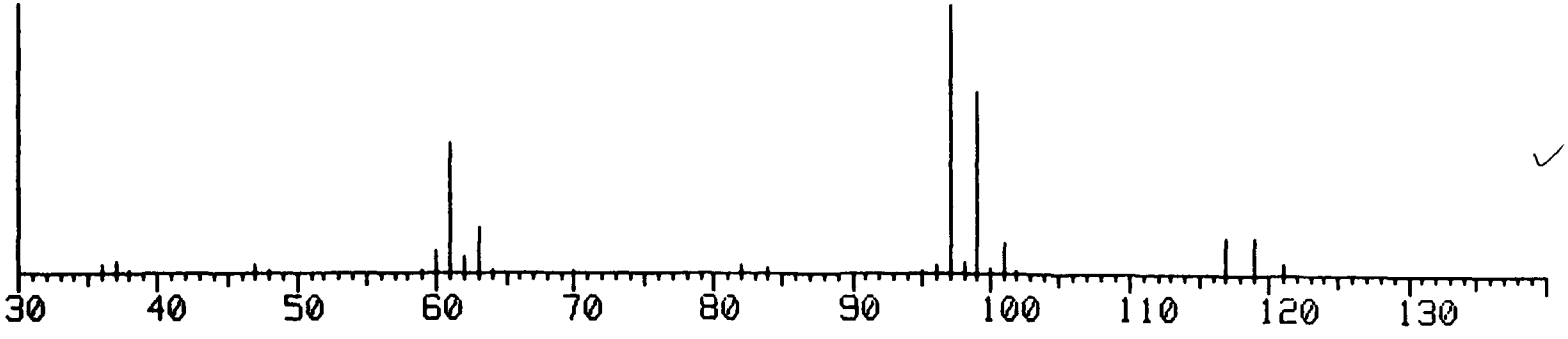
SY0: C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 579 Time 10.52 min.
100 % = 11959

Total
42785

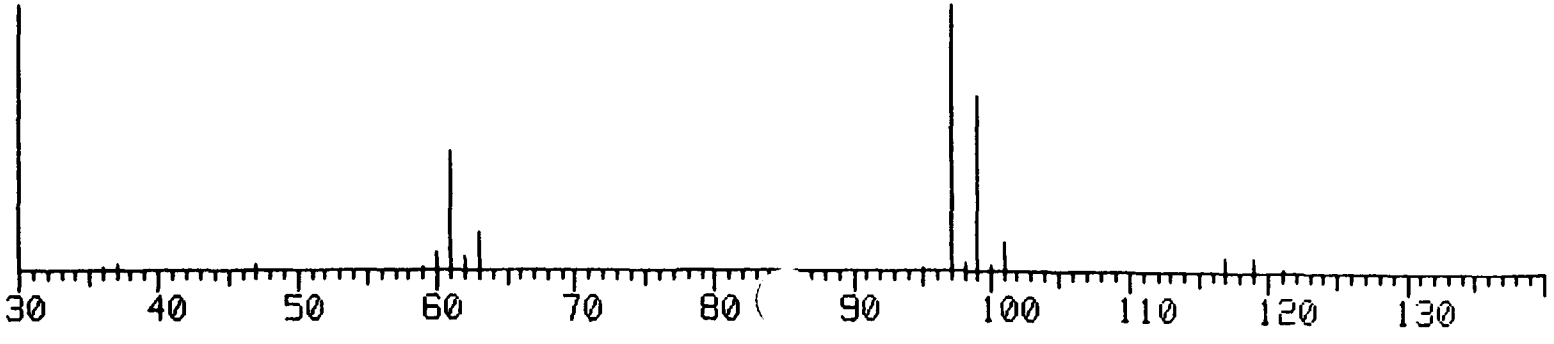


SY0: C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 579 Time 10.52 min.
Bkg scan = 570 100 % = 11959

Total
39017



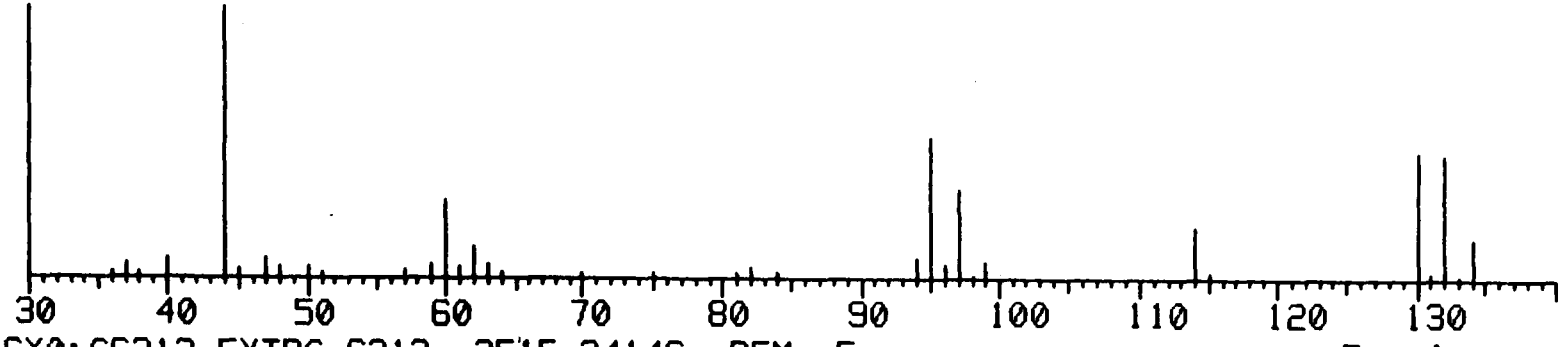
Standard Reference Spectrum: 1,1,1-trichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

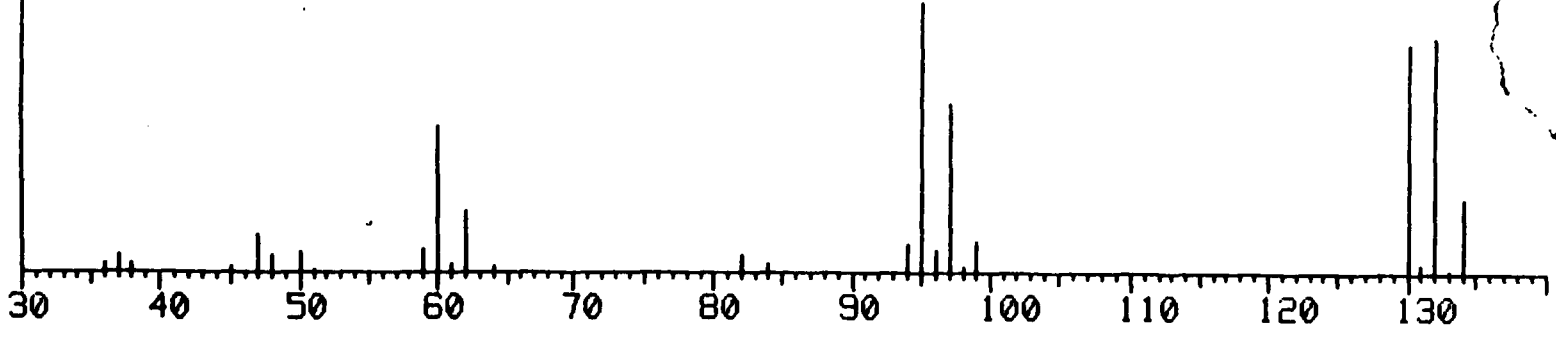
SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 712 Time 12.53 min.
100 % = 1376

Total
11419

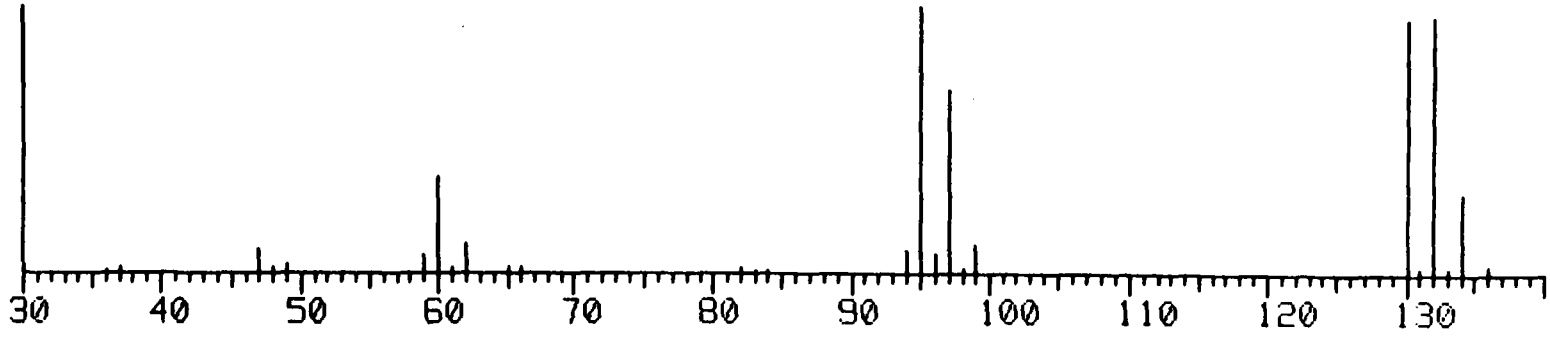


SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 712 Time 12.53 min.
Bkg scan = 705 100 % = 1376

Total
7476



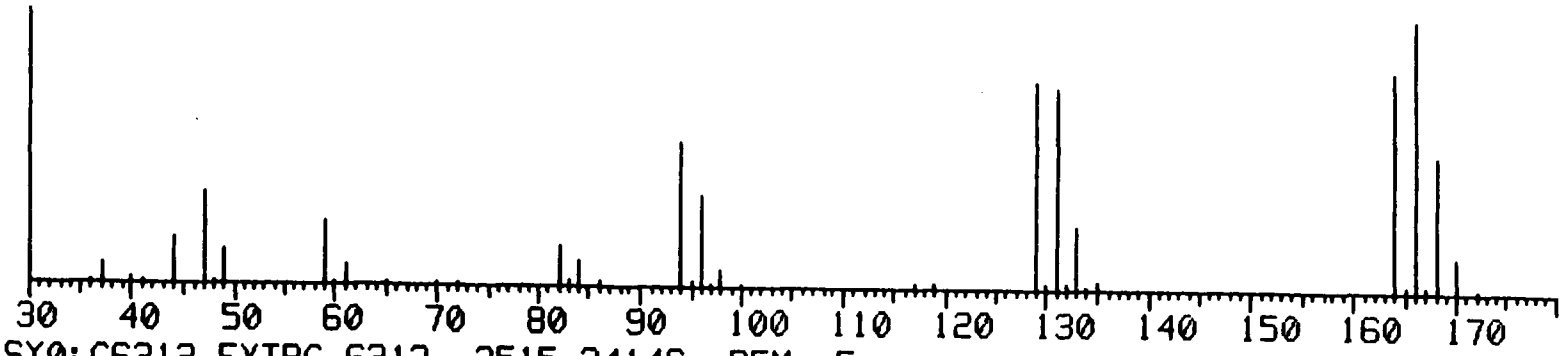
Standard Reference Spectrum: Trichloroethene



WADSWORTH/ALERT LABORATORIES, INC.

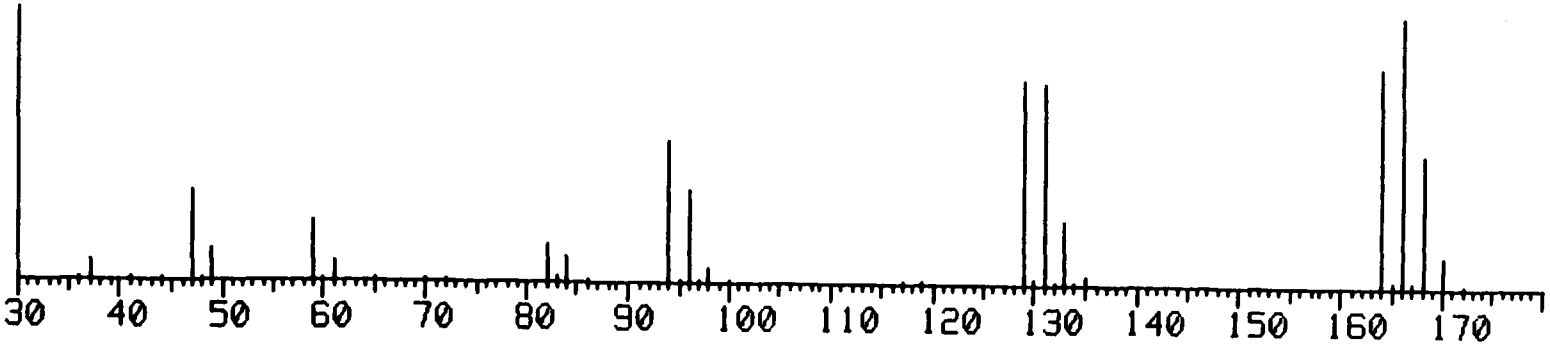
SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 943 Time 16.03 min.
100 % = 13472

Total
89115

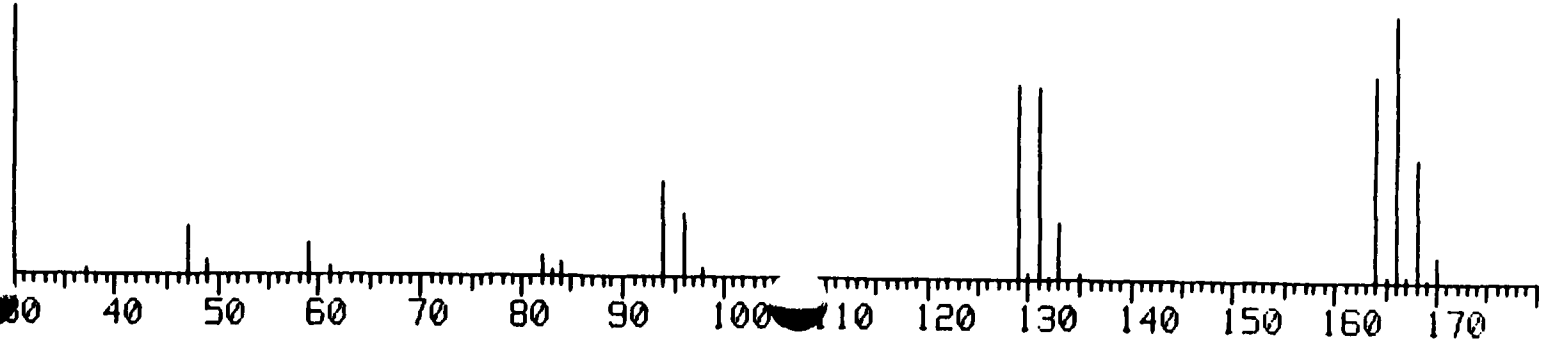


SY0:C6312 EXTRC 6312, 2515-24146, REM, 5.
26-MAR-91 15:58:52 Scan 943 Time 16.03 min.
Bkg scan = 936 100 % = 13472

Total
86223



Standard Reference Spectrum: Tetrachloroethene



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24146
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

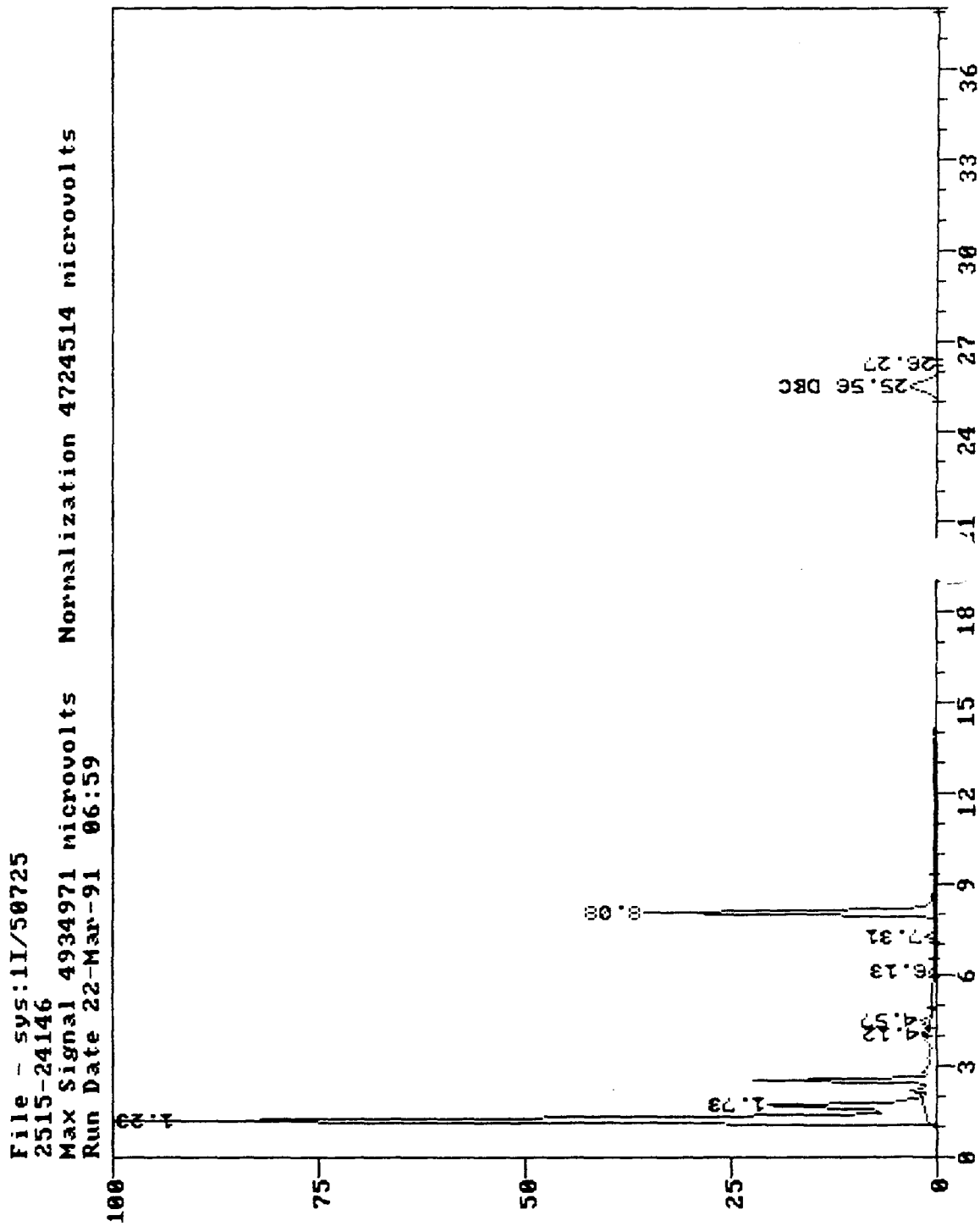
SAMPLE ID: RAU-MW03A-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50725
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 06:59
Analysis date 22-Mar-91 14:58
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.56	3662568	9.188e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24146
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03A-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	11	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24146
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03A-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24146
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03A-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	140	1.0	mg/l
Specific Conductance	3/15/91	600	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.16	0.10	mg/l
Total Recoverable Phenolics	3/18/91	0.007	0.005	mg/l
pH - Water	3/15/91	6.2		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24147
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW03D-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

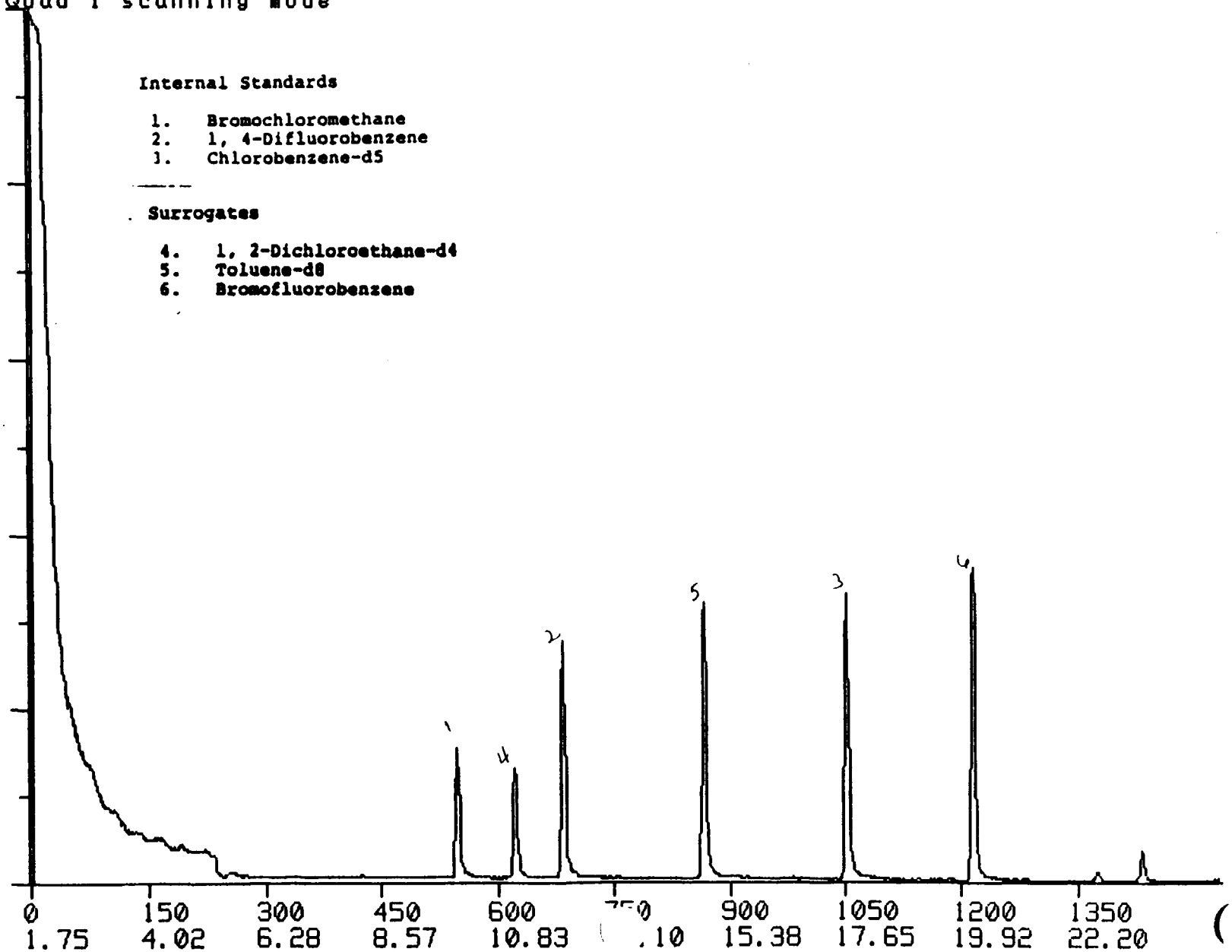
Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	101	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6313 EXTRC 6313, 2515-24147, REM, 5.0ML 100%
26-MAR-91 16:35:21 563027
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6313
Injection time: 26-MAR-91 16:35:21
Comments:
EXTRC 6313, 2515-24147, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6313. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.12	685			STD	0.84	50.0	NG/UL
3S	17.67	1051			STD	0.77	50.0	NG/UL
1T	2.45	47	50. / 128.	6670. / 68925.	1	0. ~~57~~	~~3.4~~	~~NG/UL~~
2T	Was Not Found							
3T	Was Not Found							
4T	Is Below Specified Detection Limit							
5T	Was Not Found							
6T	5.90	274	43. / 128.	6393. / 68925.	1	~~0.64~~	~~12.0~~	~~NG/UL~~
7T	Was Not Found							
8T	5.60	255	96. / 128.	8185. / 68925.	1	0.70	~~3.9~~	~~NG/UL~~
9T	Is Below Specified Detection Limit							
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Is Below Specified Detection Limit							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6313. QNT

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14. 87	866	98. / 117.	389206. /	340688.	3	0. 90	51. 1	NG/UL
36T	20. 15	1215	95. / 117.	244272. /	340688.	3	0. 92	51. 7	NG/UL
37T	11. 17	622	65. / 128.	174549. /	68925.	1	0. 75	50. 4	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Is Below Specified Detection Limit								
43T	Is Below Specified Detection Limit								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	2. 15	27	85. / 128.	824. /	68925.	1	0. 40	~~0. 3~~	~~NG/UL~~

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6313
Injection time: 26-MAR-91 16:35:21

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.244	50. / 128.	1.404	3.4	IA BV RF			1.00
6T	0.588	43. / 128.	0.387	12.0	IA VV RF			1.00
8T	0.558	96. / 128.	1.530	3.9	IA BV RF			1.00
35T	0.842	98. / 117.	1.118	51.1	IA VB RF			1.00
36T	1.140	95. / 117.	0.694	51.7	IA BB RF			1.00
37T	1.114	65. / 128.	2.512	50.4	IA BB RF			1.00
55T	0.214	85. / 128.	1.798	0.3	IA VB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24147
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

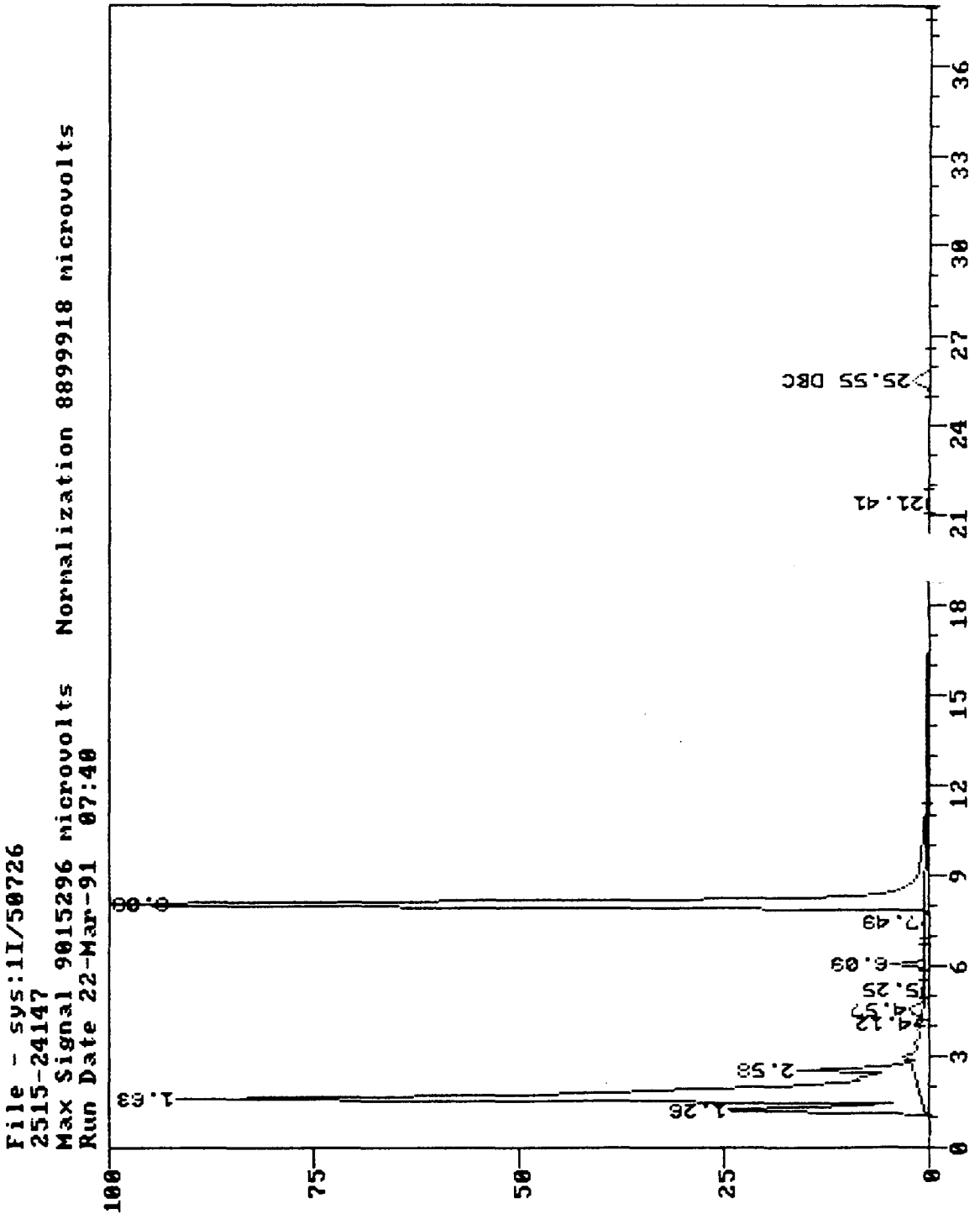
SAMPLE ID: RAU-MW03D-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50726
[illegible]
Run date 22-Mar-91 07:40
Analysis date 22-Mar-91 14:58
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.55	4441312	1.1[illegible]e-01

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24147
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03D-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	10	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24147
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03D-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24147
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW03D-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	280	1.0	mg/l
Specific Conductance	3/15/91	540	1.0	umhos/cm
Nitrate Nitrogen	3/18/91	0.13	0.10	mg/l
Total Recoverable Phenolics	3/18/91	0.006	0.005	mg/l
pH - Water	3/15/91	7.0		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24148
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW04-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

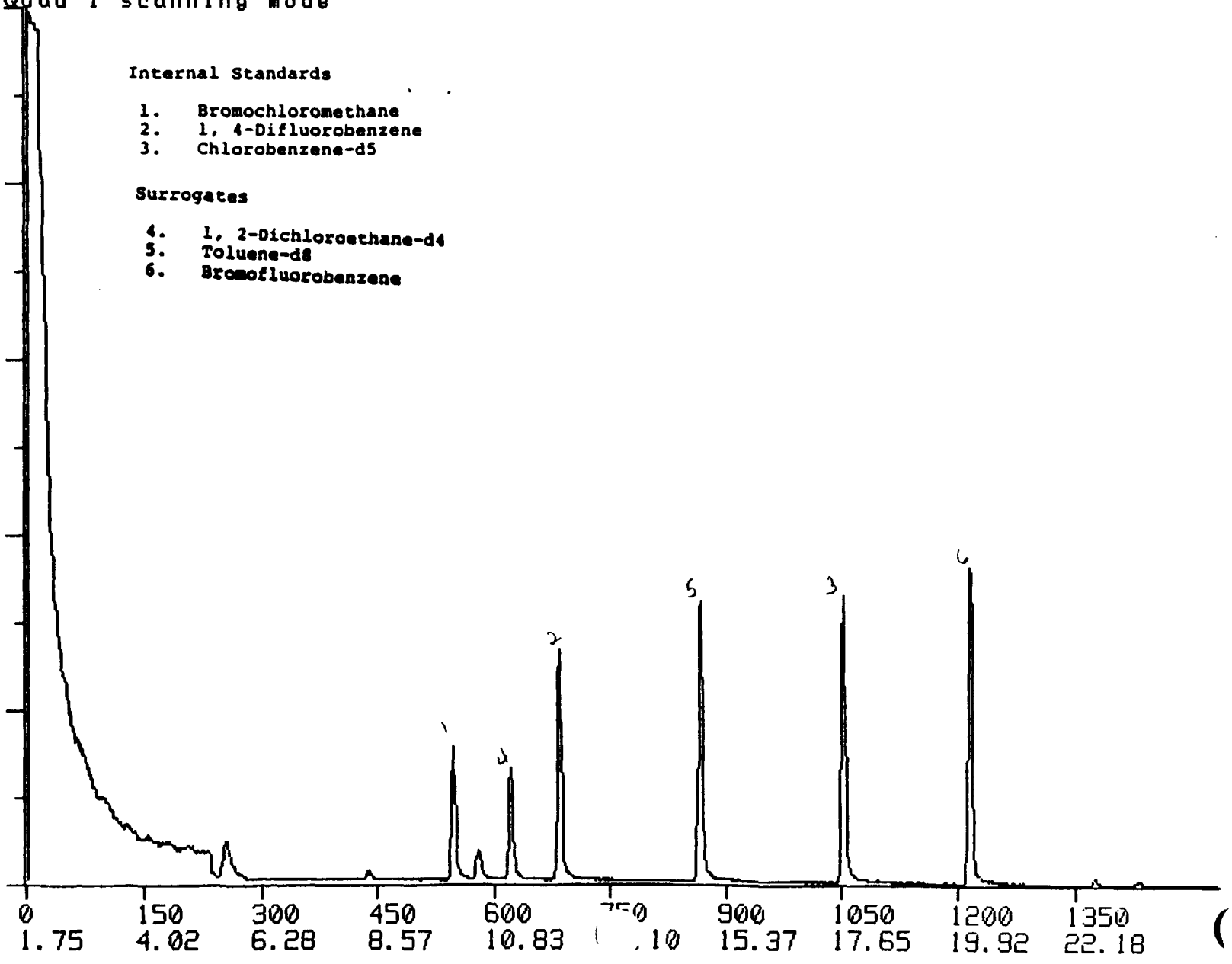
Acrolein	ND**	1,1-Dichloroethene	29
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	17
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	5.5		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	106	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6314 EXTRC 6314, 2515-24148, REM, 5.0ML 100%
26-MAR-91 17:11:49 565648
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6314
Injection time: 26-MAR-91 17:11:49
Comments:
EXTRC 6314, 2515-24148, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6314. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.10	684			STD	0.84	50.0	NG/UL
3S	17.67	1051			STD	0.77	50.0	NG/UL
1T	2.43	46	50. / 128.	20387. / 68869.	1	0.90	10.5	NG/UL
2T	Was Not Found							
3T	Is Below Specified Detection Limit							
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	5.62	256	96. / 128.	61802. / 68869.	1	0.85	29.3	NG/UL
9T	8.38	438	63. / 128.	23706. / 68869.	1	1.00	5.5	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Is Below Specified Detection Limit							
14T	10.53	580	97. / 114.	52850. / 389934.	2	0.80	17.4	NG/UL
15T	Is Below Specified Detection Limit							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6314. GNT

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	866	98. / 117.	394562. /	338388.	3	0.90	52.1	NG/UL
36T	20.13	1214	95. / 117.	249712. /	338388.	3	0.92	53.2	NG/UL
37T	11.15	621	65. / 128.	175609. /	68869.	1	0.71	50.8	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	2.15	27	85. / 128.	2055. /	68869.	1	0.52	~~0.8~~	NG/UL

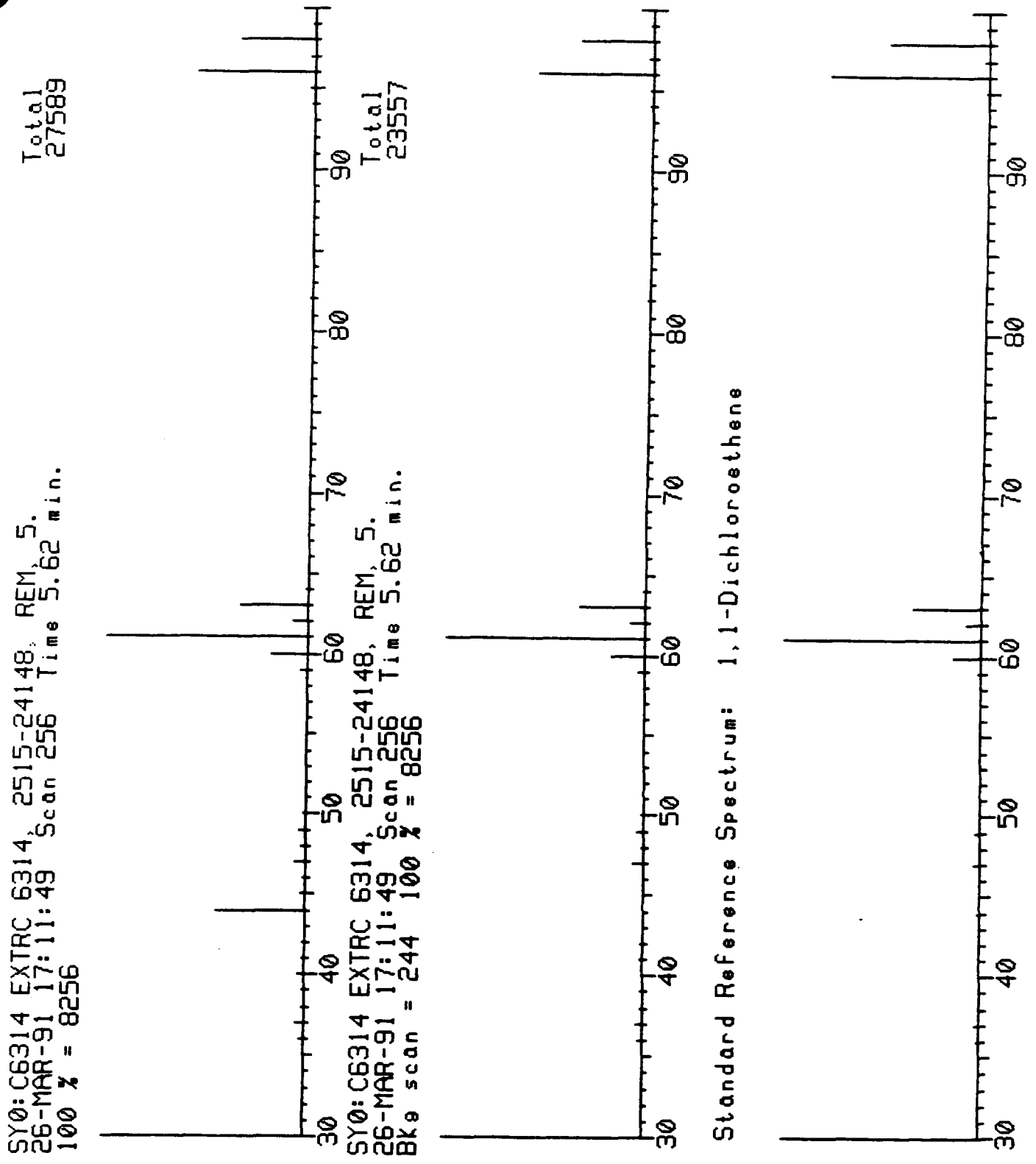
WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH2O
Data file name: SYO:C6314
Injection time: 26-MAR-91 17:11:49

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.242	50. / 128.	1.404	10.5	IA BB RF			1.00
8T	0.560	96. / 128.	1.530	29.3	IA BB RF			1.00
9T	0.835	63. / 128.	3.132	5.5	IA BB RF			1.00
14T	0.870	97. / 114.	0.389	17.4	IA BB RF			1.00
35T	0.842	98. / 117.	1.118	52.1	IA VB RF			1.00
36T	1.139	95. / 117.	0.694	53.2	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	50.8	IA BB RF			1.00
55T	0.214	85. / 128.	1.798	0.8	IA BB RF			1.00

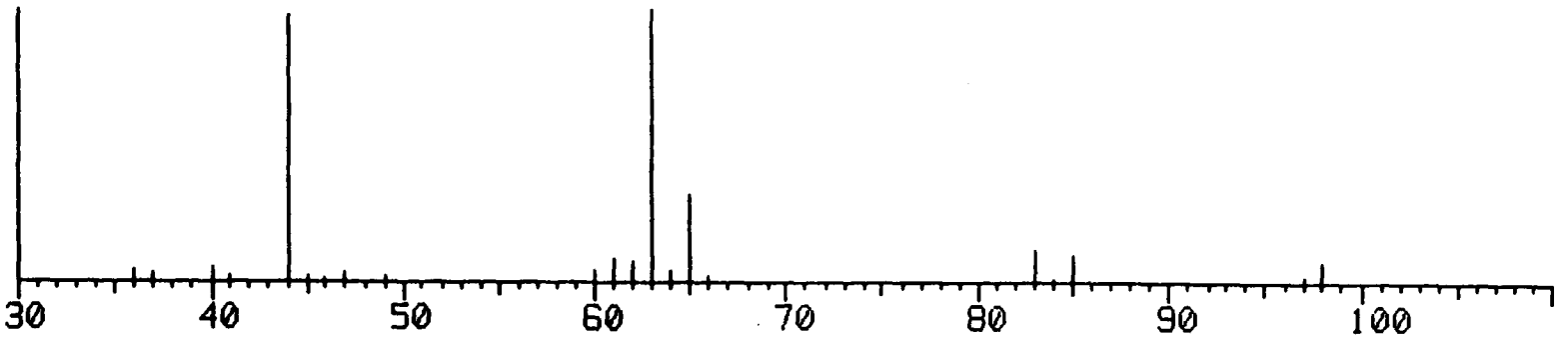
WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT LABORATORIES, INC.

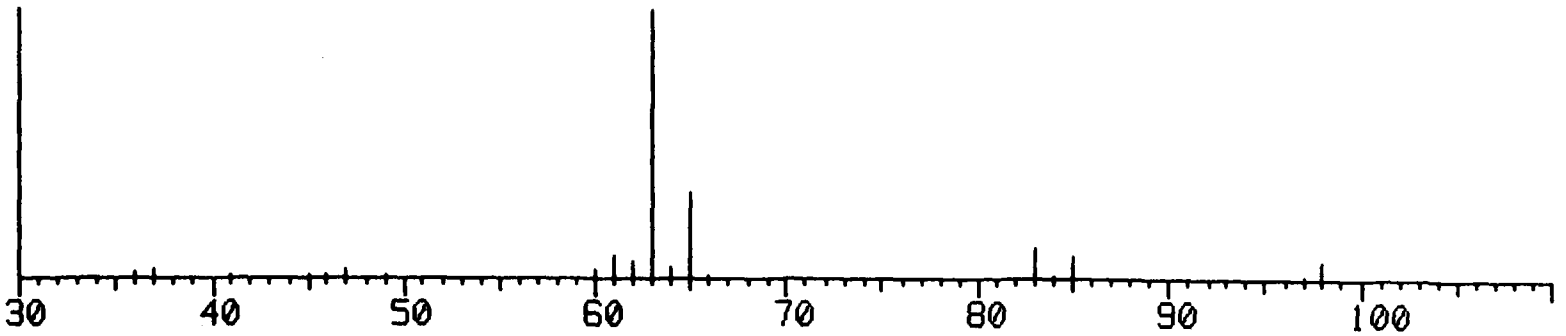
SY0:C6314 EXTRC 6314, 2515-24148, REM, 5.
26-MAR-91 17:11:49 Scan 438 Time 8.38 min.
100 % = 3182

Total
9680

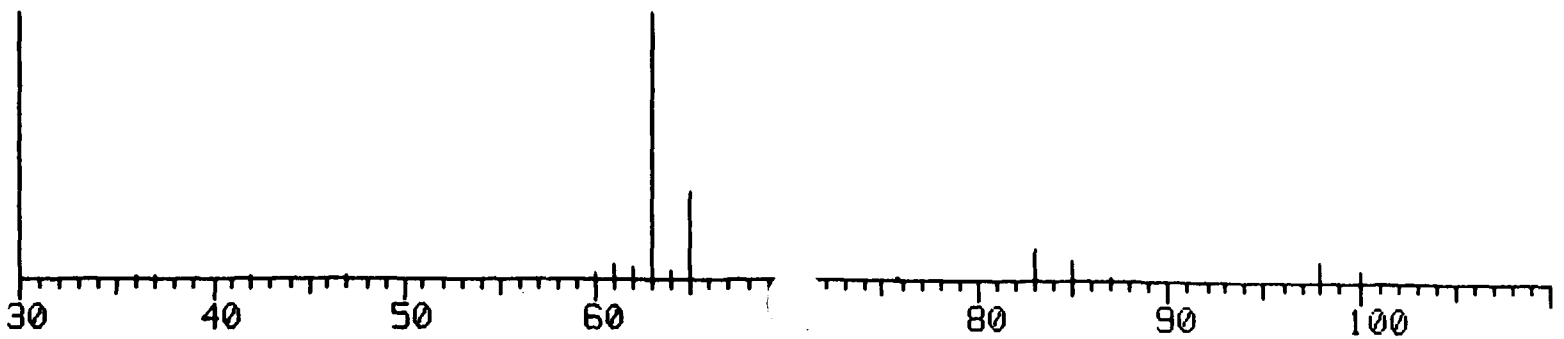


SY0:C6314 EXTRC 6314, 2515-24148, REM, 5.
26-MAR-91 17:11:49 Scan 438 Time 8.38 min.
BKg scan = 430 100 % = 3182

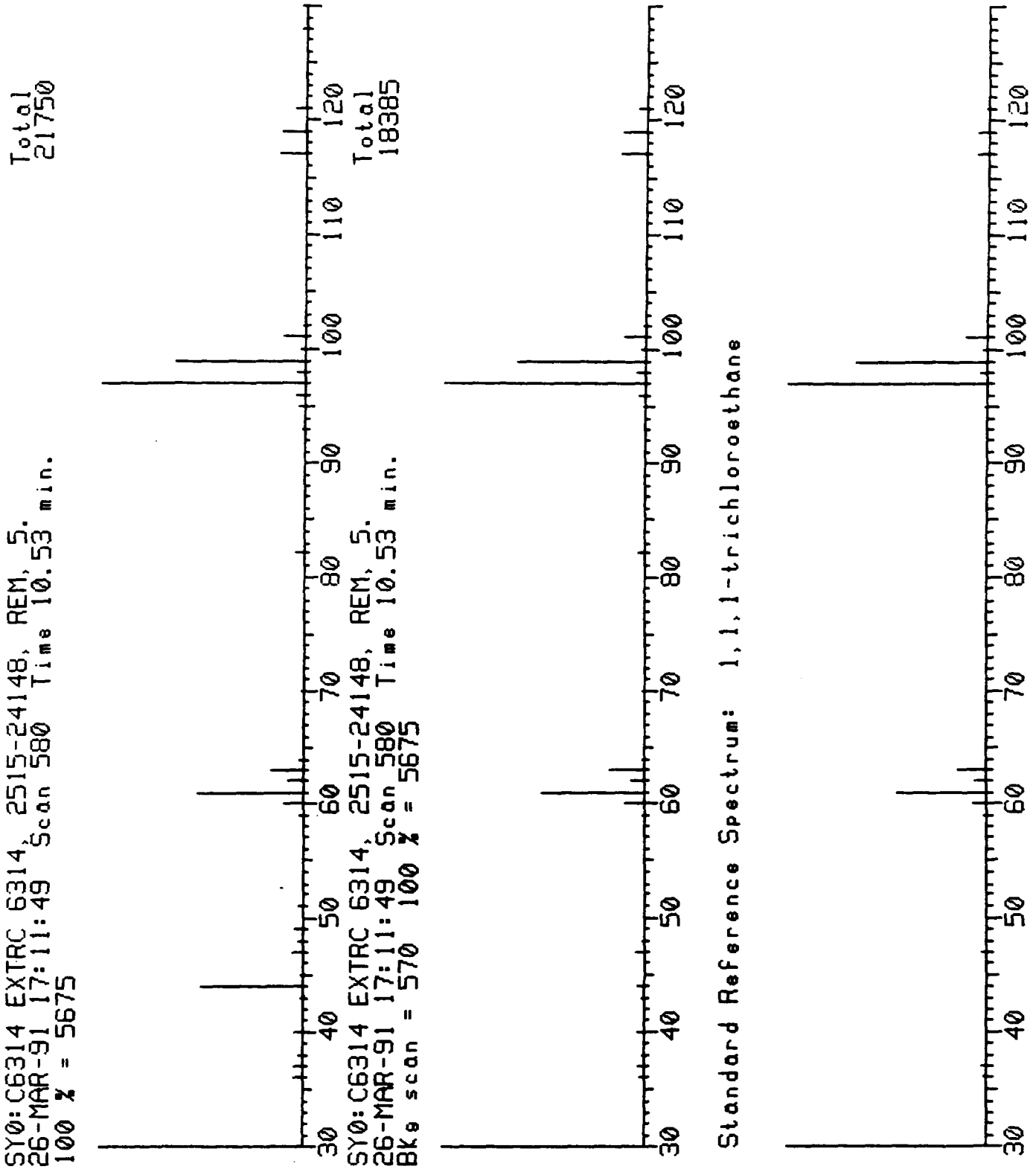
Total
6230



Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24148
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

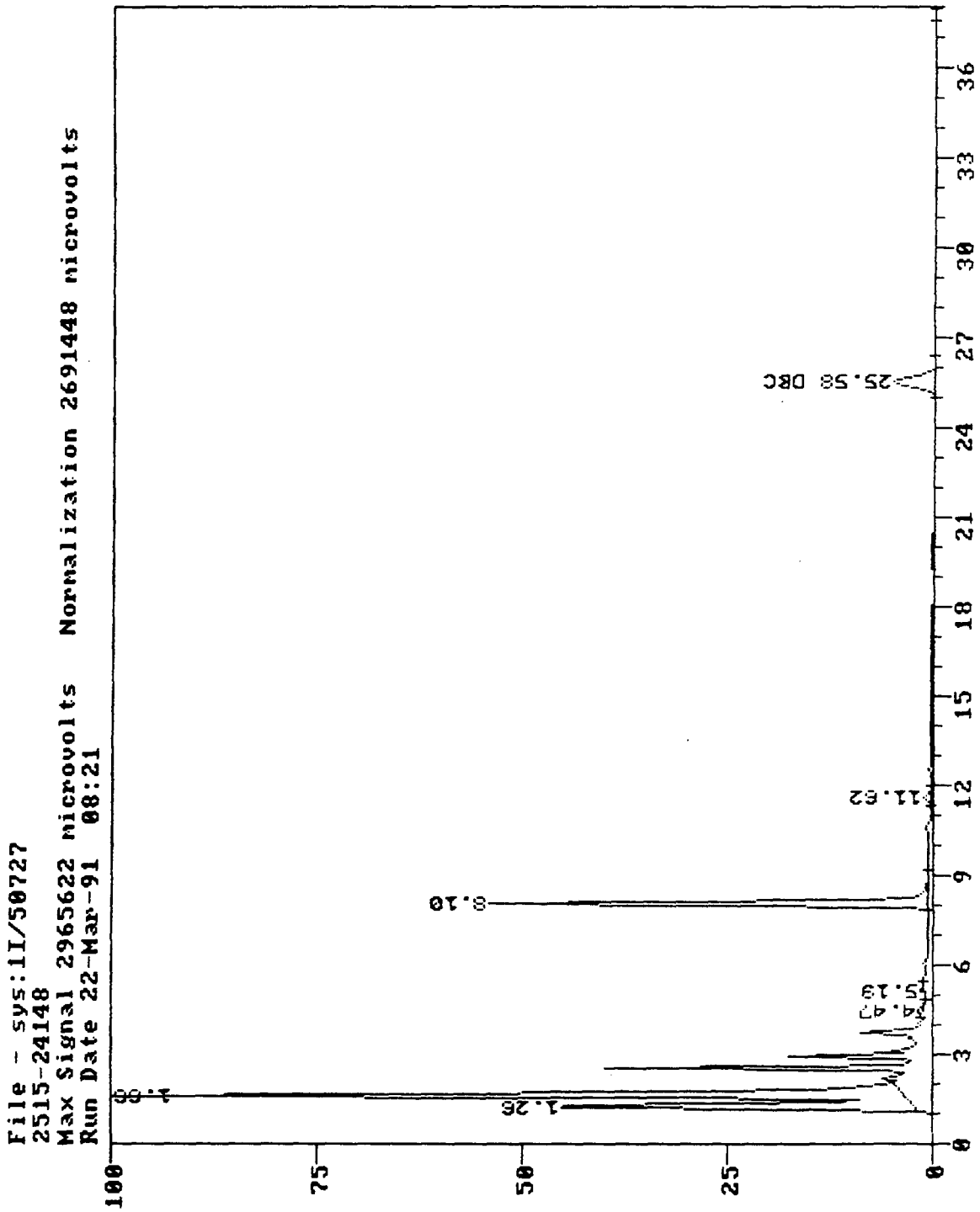
SAMPLE ID: RAU-MW04-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50727
2515-24148

WADSWORTH/ALERT
LABORATORIES, INC.

Run date 22-Mar-91 08:21
Analysis date 22-Mar-91 14:58
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.58	3121213	7.830e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24148
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW04-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	58	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24148
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW04-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	20	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24148
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW04-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	450	1.0	mg/l
Specific Conductance	3/15/91	2900	1000	umhos/cm
Nitrate Nitrogen	3/26/91	1.0	0.20	mg/l
Total Recoverable Phenolics	3/18/91	0.006	0.005	mg/l
pH - Water	3/15/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24149
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW05-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	94	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	102	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6315 EXTRC 6315, 2515-24149, REM, 5.0ML
26-MAR-91 17:48:26
Total Ion Current
Quad 1 scanning mode

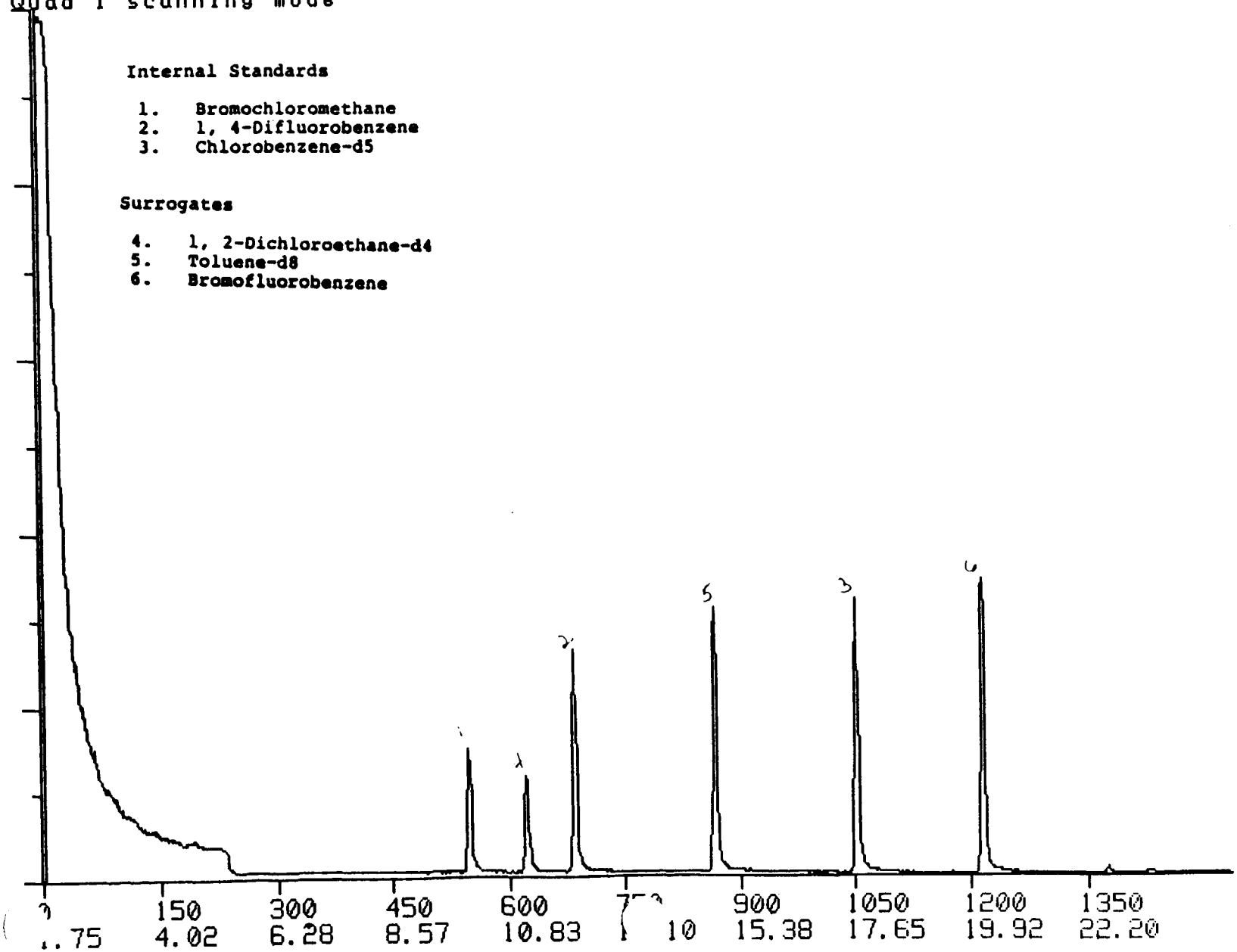
100%
560532

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6315
Injection time: 26-MAR-91 17:48:26
Comments:
EXTRC 6315, 2515-24149, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6315. GNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichloroflurometh ane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.12	685			STD	0.84	50.0	NG/UL
3S	17.68	1052			STD	0.77	50.0	NG/UL
1T	2.48	49	50. / 128.	28312. / 63928.	~~1~~	~~0.90~~	~~15.8~~	~~NG/UL~~

NO

2T Was Not Found
3T Was Not Found
4T Was Not Found
5T Is Below Specified Detection Limit
6T Was Not Found
7T Was Not Found
8T Was Not Found
9T Was Not Found
10T Was Not Found
11T Was Not Found
12T Was Not Found
13T Was Not Found
14T Was Not Found
15T Was Not Found
16T Was Not Found
17T Was Not Found
18T Was Not Found
19T Was Not Found
20T Was Not Found
21T Was Not Found
22T Was Not Found
23T Was Not Found
24T Was Not Found
25T Was Not Found
26T Was Not Found
27T Was Not Found
28T Was Not Found
29T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	866	98. / 117.	371686. /	325156.	3	0.90	51.1	NG/UL
36T	20.15	1215	95. / 117.	230510. /	325156.	3	0.92	51.1	NG/UL
37T	11.17	622	65. / 128.	150216. /	63928.	1	0.75	46.8	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6315
Injection time: 26-MAR-91 17:48:26

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.247	50. / 128.	1.404	15.8	IA VB RF			1.00
35T	0.841	98. / 117.	1.118	51.1	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	51.1	IA BB RF			1.00
37T	1.114	65. / 128.	2.512	46.8	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24149
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

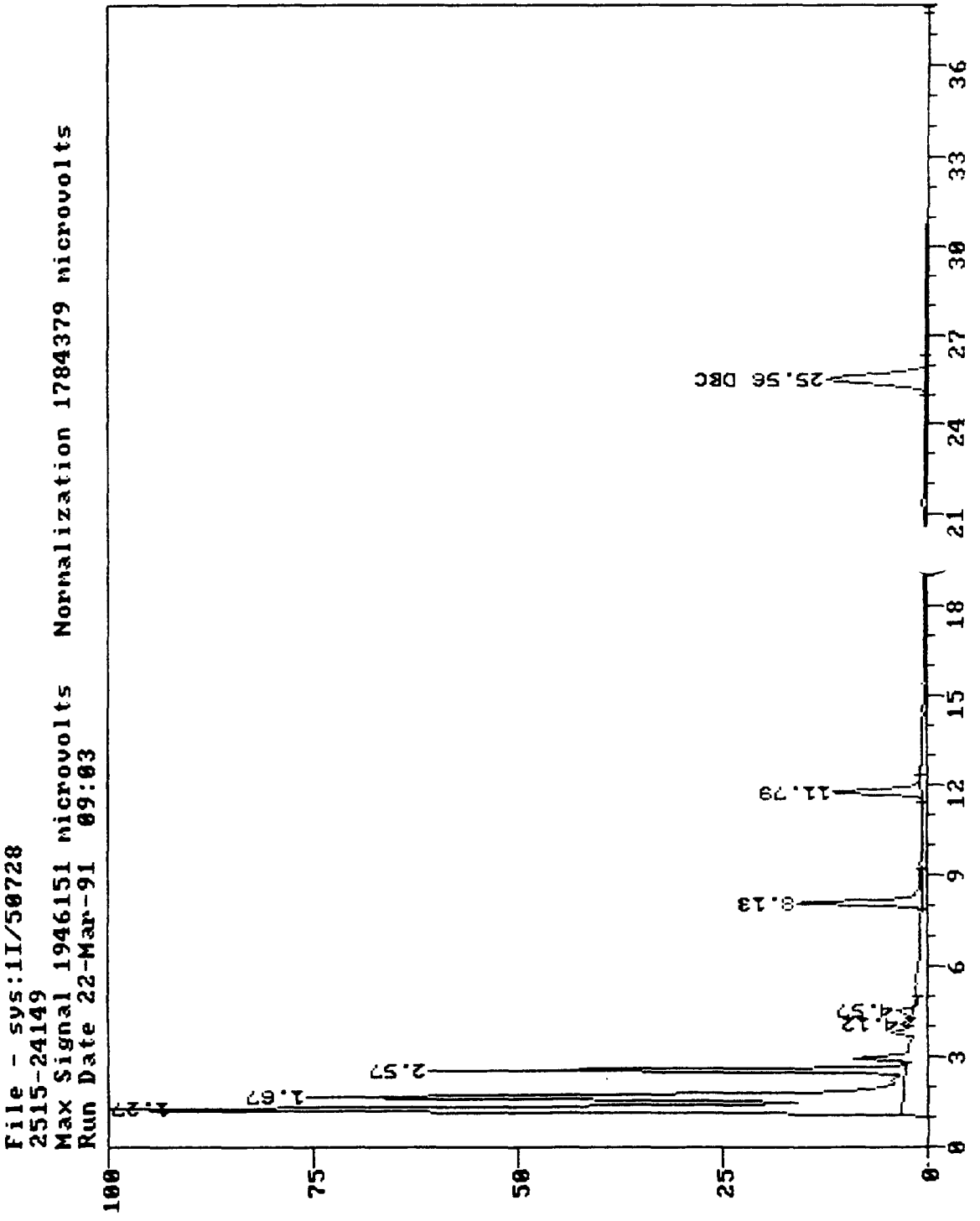
SAMPLE ID: RAU-MW05-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50728
25/E 24149
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 09:03
Analysis date 22-Mar-91 14:59
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.56	5025991	1.261e-01

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24149
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW05-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	26	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24149
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW05-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24149
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW05-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	110	1.0	mg/l
Specific Conductance	3/15/91	1600	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.18	0.10	mg/l
Total Recoverable Phenolics	3/18/91	0.006	0.005	mg/l
pH - Water	3/15/91	6.0		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24150
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW06-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	98	(76-114)	(70-121)
Toluene-d8	103	(76-114)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6321 EXTRC 6321, 2515-24150, REM, 5.0ML
26-MAR-91 21:28:42
Total Ion Current
Quad 1 scanning mode

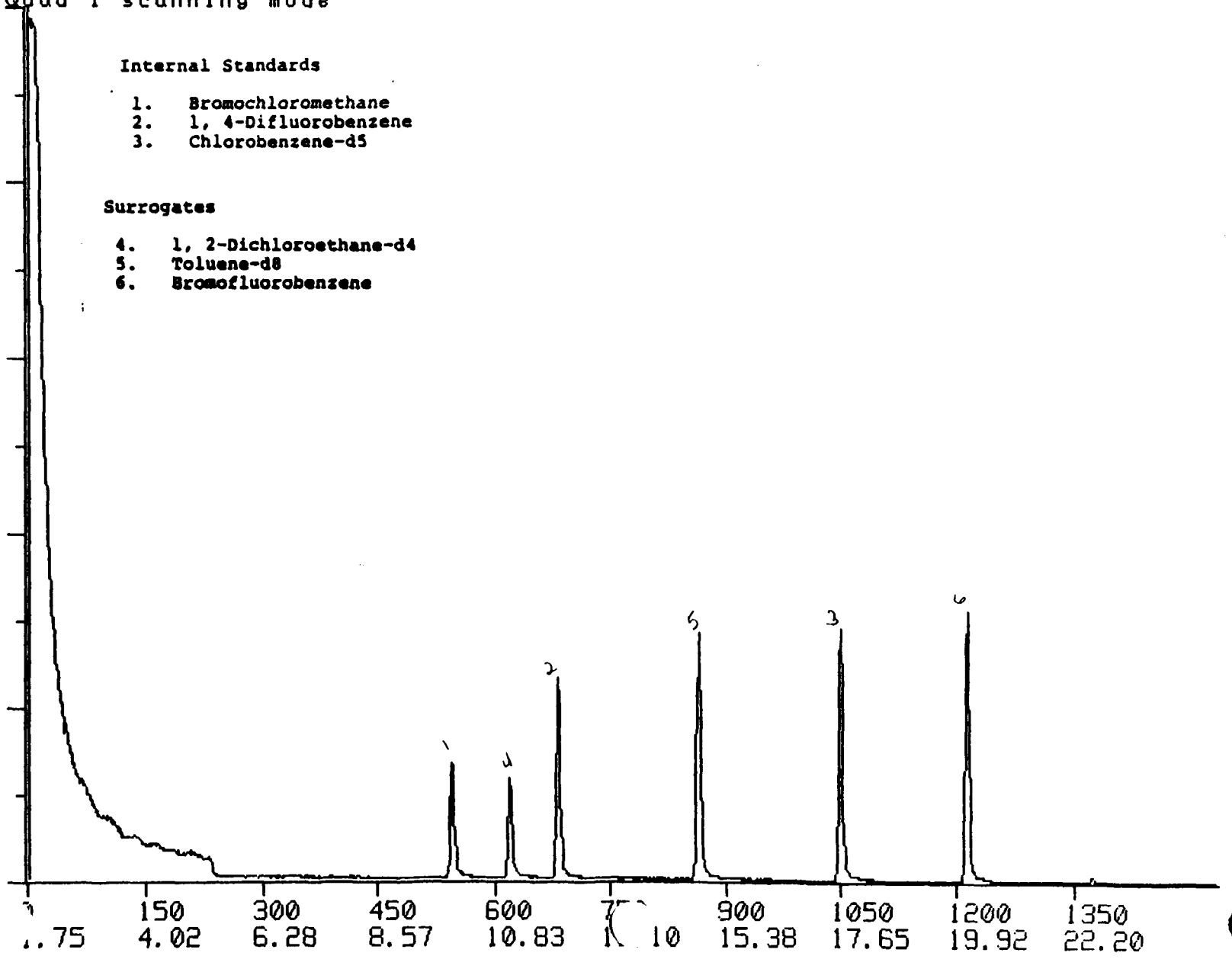
100%
564685

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6321
Injection time: 26-MAR-91 21:28:42
Comments:
EXTRC 6321, 2515-24150, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6321. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichloroflurometh ane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.02	546			STD	1.00	50.0	NG/UL
2S	12.08	683			STD	0.78	50.0	NG/UL
3S	17.63	1049			STD	0.88	50.0	NG/UL
1T	Was Not Found							
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Is Below Specified Detection Limit							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	Was Not Found							
9T	Was Not Found							
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14. 83	864	98. / 117.	339272. /	293382.	3	0. 90	51. 7	NG/UL
36T	20. 12	1213	95. / 117.	210052. /	293382.	3	0. 92	51. 6	NG/UL
37T	11. 13	620	65. / 128.	148324. /	60552.	1	0. 71	48. 8	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Is Below Specified Detection Limit								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6321
Injection time: 26-MAR-91 21:28:42

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
35T	0.841	98. / 117.	1.118	51.7	IA BB RF			1.00
36T	1.141	95. / 117.	0.694	51.6	IA BB RF			1.00
37T	1.111	65. / 128.	2.512	48.8	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24150
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

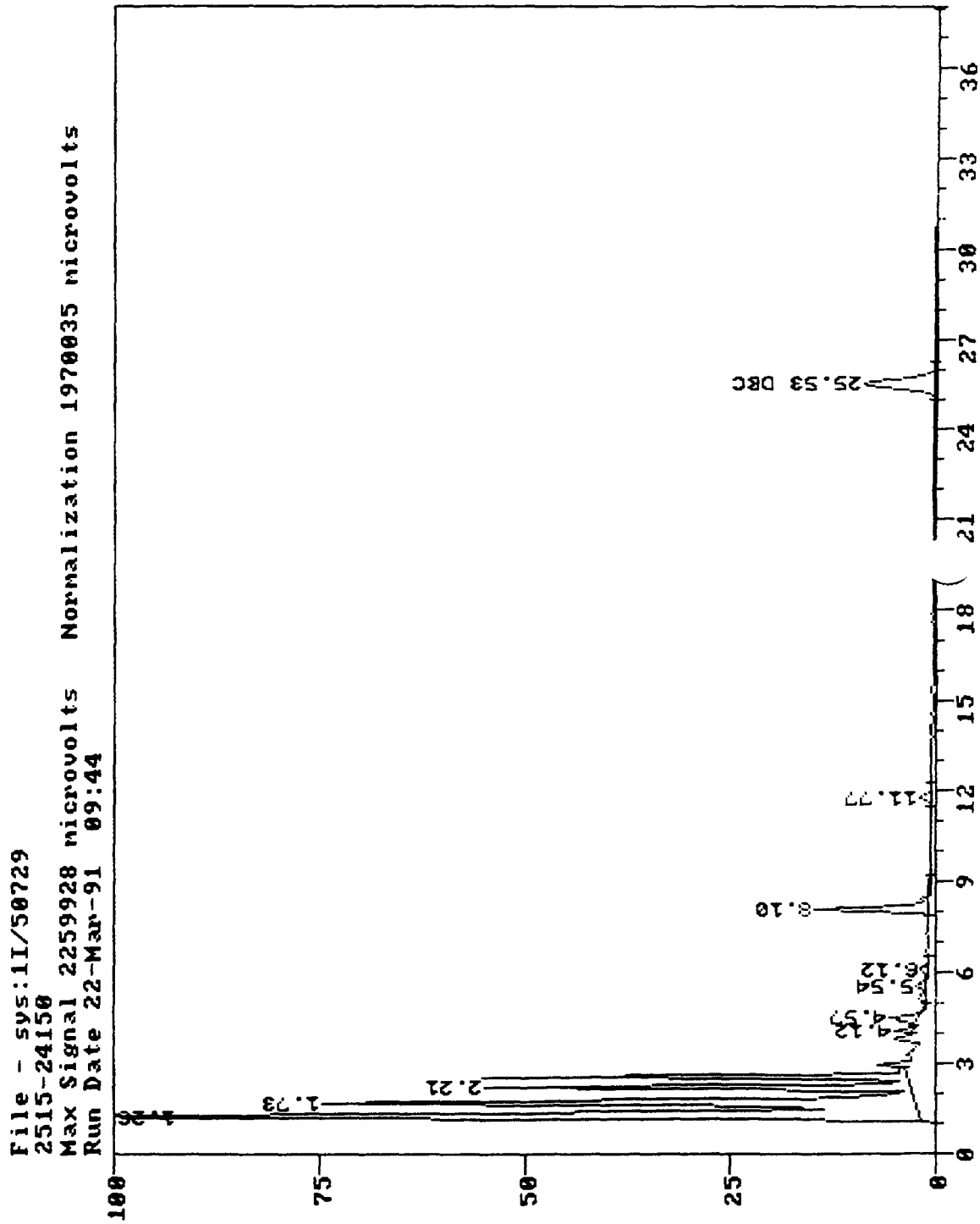
SAMPLE ID: RAU-MW06-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50729
25[illegible]
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 09:44
Analysis date 22-Mar-91 14:59
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.53	3874203	9.719e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24150
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	15	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24150
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24150
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	140	1.0	mg/l
Specific Conductance	3/15/91	960	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.19	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.3		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24151
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW06R-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	105	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

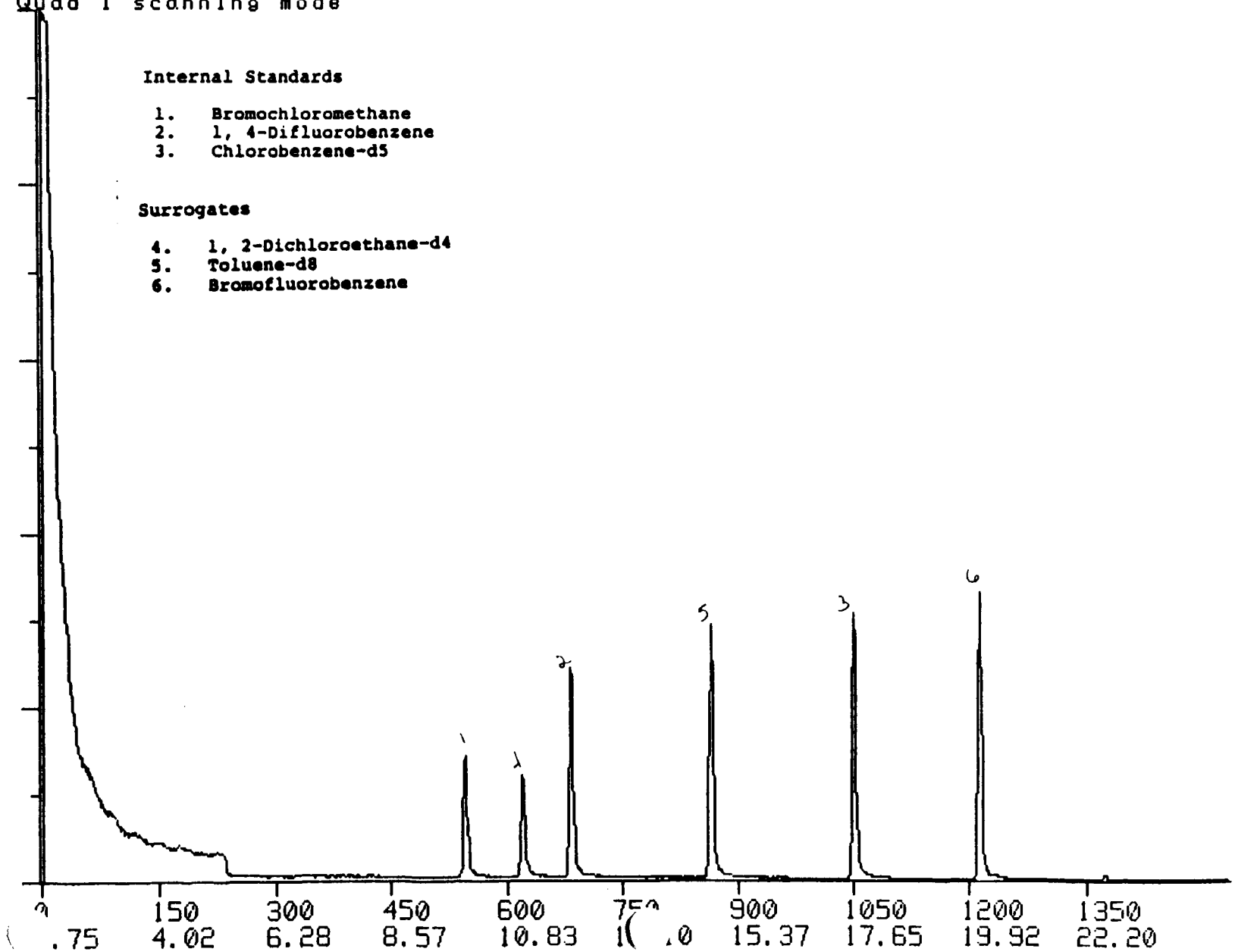
SY0:C6322 EXTRC 6322, 2515-24151, REM, 5.0ML 100%
26-MAR-91 22:04:41 558702
Total Ion Current
Quad 1 scanning mode

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6322
Injection time: 26-MAR-91 22:04:41
Comments:
EXTRC 6322, 2515-24151, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6322. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.02	546			STD	1.00	50.0	NG/UL
2S	12.08	683			STD	0.78	50.0	NG/UL
3S	17.65	1050			STD	0.65	50.0	NG/UL
1T	2.42	45	50. / 128.	4379. / 59940	1	0.57	2.6	NG/UL

2T Was Not Found
3T Was Not Found
4T Was Not Found
5T Is Below Specified Detection Limit
6T Is Below Specified Detection Limit
7T Was Not Found
8T Was Not Found
9T Was Not Found
10T Was Not Found
11T Was Not Found
12T Was Not Found
13T Was Not Found
14T Was Not Found
15T Was Not Found
16T Was Not Found
17T Was Not Found
18T Was Not Found
19T Was Not Found
20T Was Not Found
21T Was Not Found
22T Was Not Found
23T Was Not Found
24T Was Not Found
25T Was Not Found
26T Was Not Found
27T Was Not Found
28T Was Not Found
29T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.83	864	98. / 117.	352230. /	303218.	3	0.90	51.9	NG/UL
36T	20.12	1213	95. / 117.	219270. /	303218.	3	0.92	52.1	NG/UL
37T	11.13	620	65. / 128.	158438. /	59940.	1	0.75	52.6	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Is Below Specified Detection Limit								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6322
Injection time: 26-MAR-91 22:04:41

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.242	50. / 128.	1.404	2.6	IA BB RF			1.00
35T	0.840	98. / 117.	1.118	51.9	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	52.1	IA BB RF			1.00
37T	1.111	65. / 128.	2.512	52.6	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24151
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

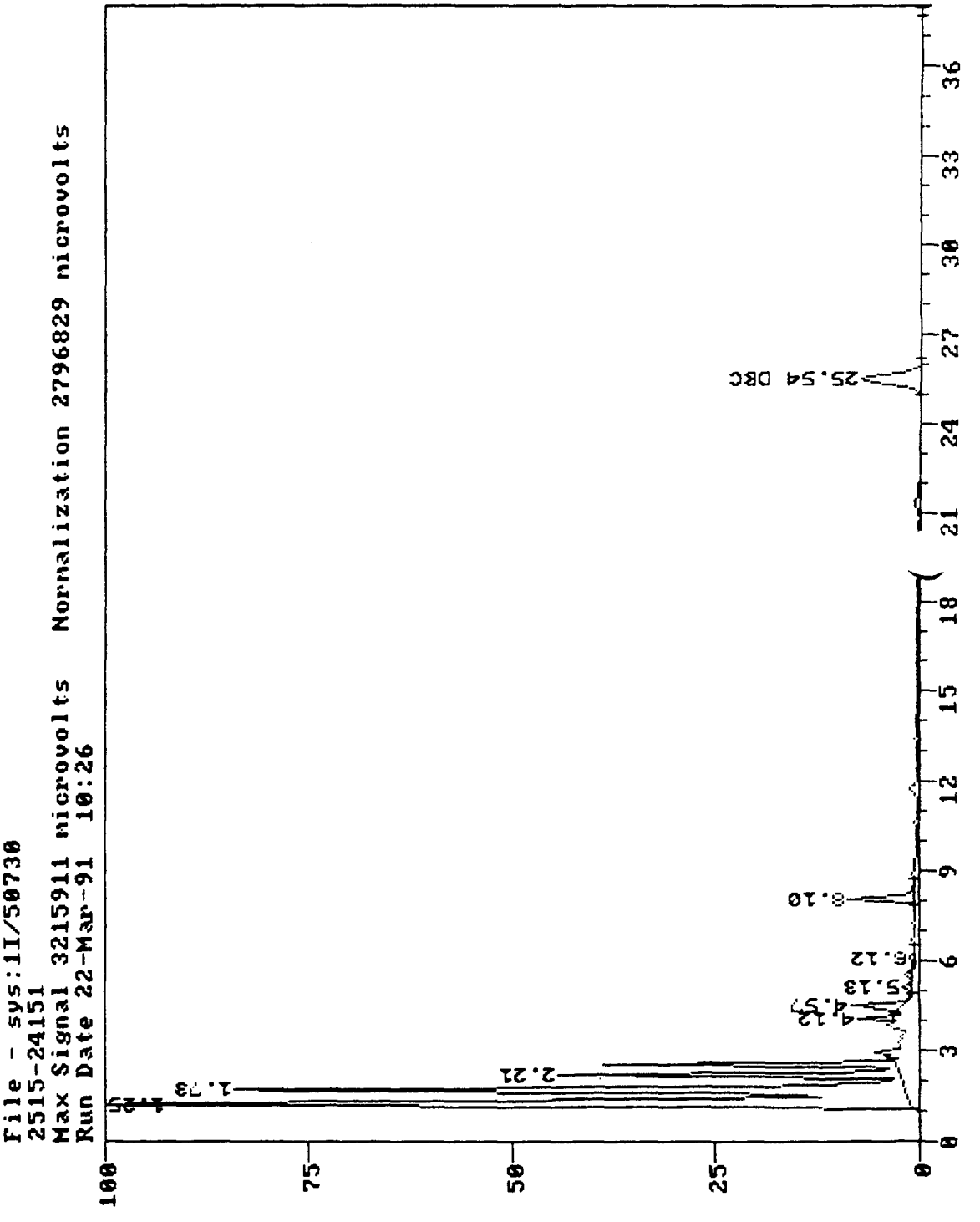
SAMPLE ID: RAU-MW06R-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50730
2[illegible]
WADSWORTH/ALERT
LABORATORIES, INC.
Run date 22-Mar-91 10:26
Analysis date 22-Mar-91 15:28
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.54	4734446	1.188e-01

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24151
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06R-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	28	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24151
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06R-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24151
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW06R-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	140	1.0	mg/l
Specific Conductance	3/15/91	950	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.21	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.4		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24152
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW07-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

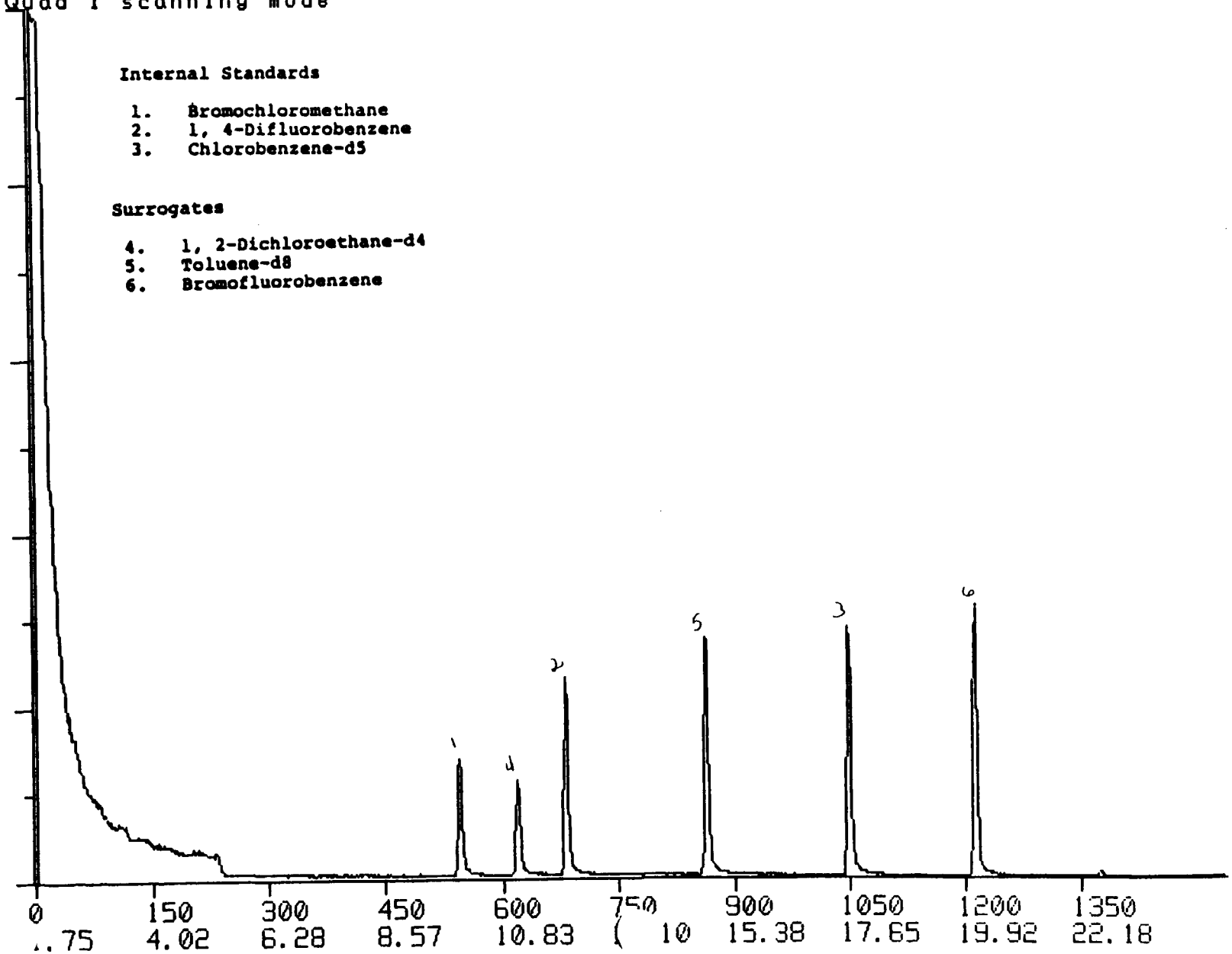
NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	102	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

WADSWORTH/ALERT LABORATORIES, INC.

SY0: C6323 EXTRC 6323, 2515-24152, REM, 5.0ML
26-MAR-91 22:40:45
Total Ion Current
Quad 1 scanning mode

100%
559937



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W.O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6323
Injection time: 26-MAR-91 22:40:45
Comments:
EXTRC 6323, 2515-24152, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

SYO: C6323. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.00	545			STD	1.00	50.0	NG/UL
2S	12.07	682			STD	0.84	50.0	NG/UL
3S	17.63	1049			STD	0.71	50.0	NG/UL

1T Was Not Found
2T Was Not Found
3T Was Not Found
4T Was Not Found
5T Is Below Specified Detection Limit
6T Was Not Found
7T Was Not Found
8T Was Not Found
9T Was Not Found
10T Was Not Found
11T Was Not Found
12T Was Not Found
13T Was Not Found
14T Was Not Found
15T Was Not Found
16T Was Not Found
17T Was Not Found
18T Was Not Found
19T Was Not Found
20T Was Not Found
21T Was Not Found
22T Was Not Found
23T Was Not Found
24T Was Not Found
25T Was Not Found
26T Was Not Found
27T Was Not Found
28T Was Not Found
29T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Was Not Found							
31T	Was Not Found							
32T	Was Not Found							
33T	Was Not Found							
34T	Was Not Found							
35T	14.82	863	98. / 117.	336568. /	289428.	3	0.90	52.0	NG/UL
36T	20.10	1212	95. / 117.	207886. /	289428.	3	0.92	51.8	NG/UL
37T	11.13	620	65. / 128.	152287. /	59431.	1	0.71	51.0	NG/UL
38T	Was Not Found							
39T	Was Not Found							
40T	Was Not Found							
41T	Was Not Found							
42T	Was Not Found							
43T	Was Not Found							
44T	Was Not Found							
45T	Was Not Found							
46T	Was Not Found							
47T	Is Below Specified Detection Limit							
48T	Was Not Found							
49T	Was Not Found							
50T	Was Not Found							
51T	Was Not Found							
52T	Was Not Found							
53T	Was Not Found							
54T	Was Not Found							
55T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6323
Injection time: 26-MAR-91 22:40:45

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
35T	0.841	98. / 117.	1.118	52.0	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	51.8	IA BB RF			1.00
37T	1.113	65. / 128.	2.512	51.0	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24152
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

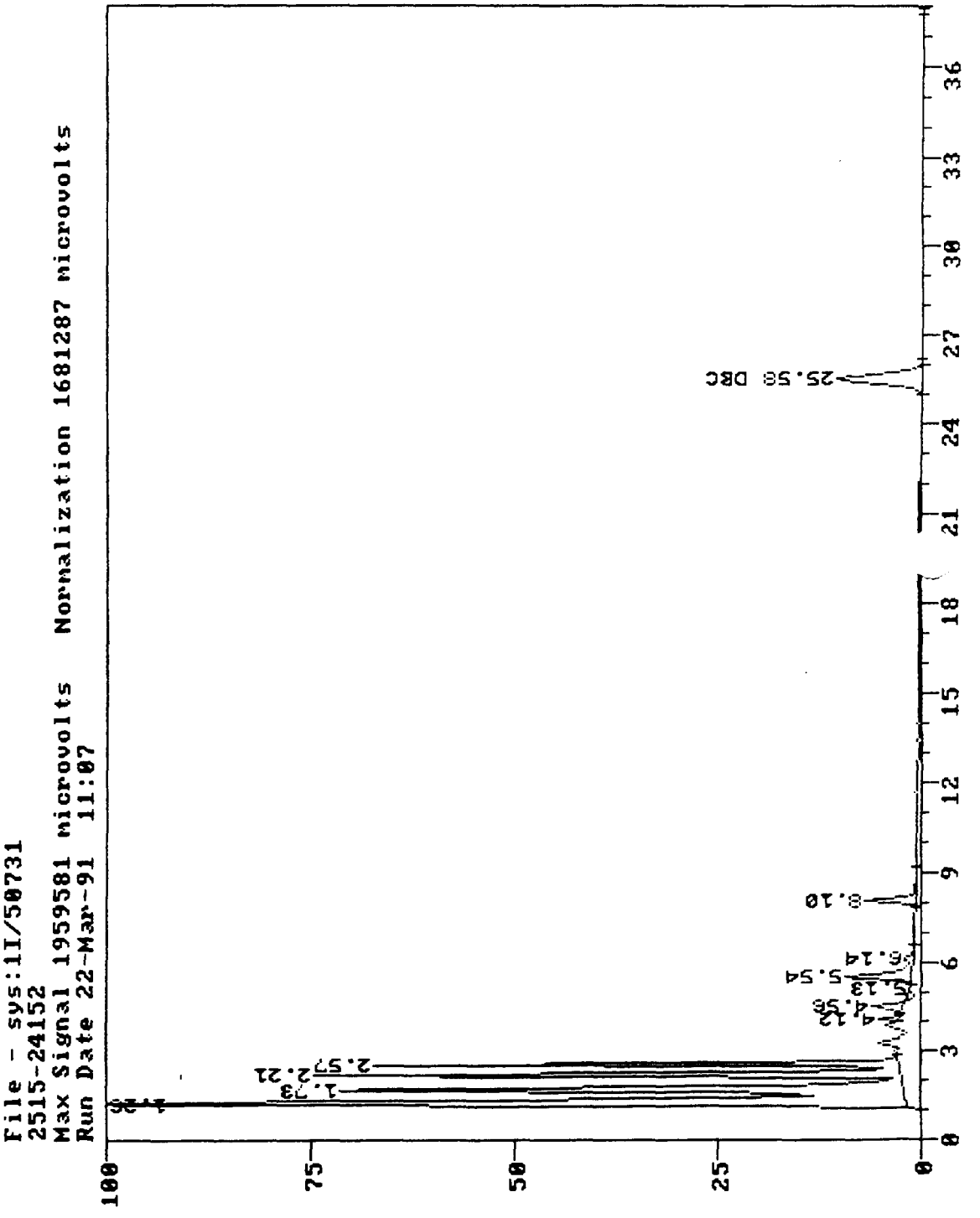
SAMPLE ID: RAU-MW07-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



File - sys:1I/50731

WADSWORTH/ALERT
LABORATORIES, INC.

Run date 22-Mar-91 11:07
Analysis date 22-Mar-91 15:28
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.58	3937205	9.877e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24152
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW07-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	9.0	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24152
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW07-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24152
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW07-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	83	1.0	mg/l
Specific Conductance	3/15/91	910	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	1.3	0.20	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.3		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24153
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW08-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	99	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

SY0:C632 EXTRC 6324, 2515-24153, REM, 5.0 100%
26-MAR-91 23:16:45 564774
Total Ion Current
Quad 1 scanning mode

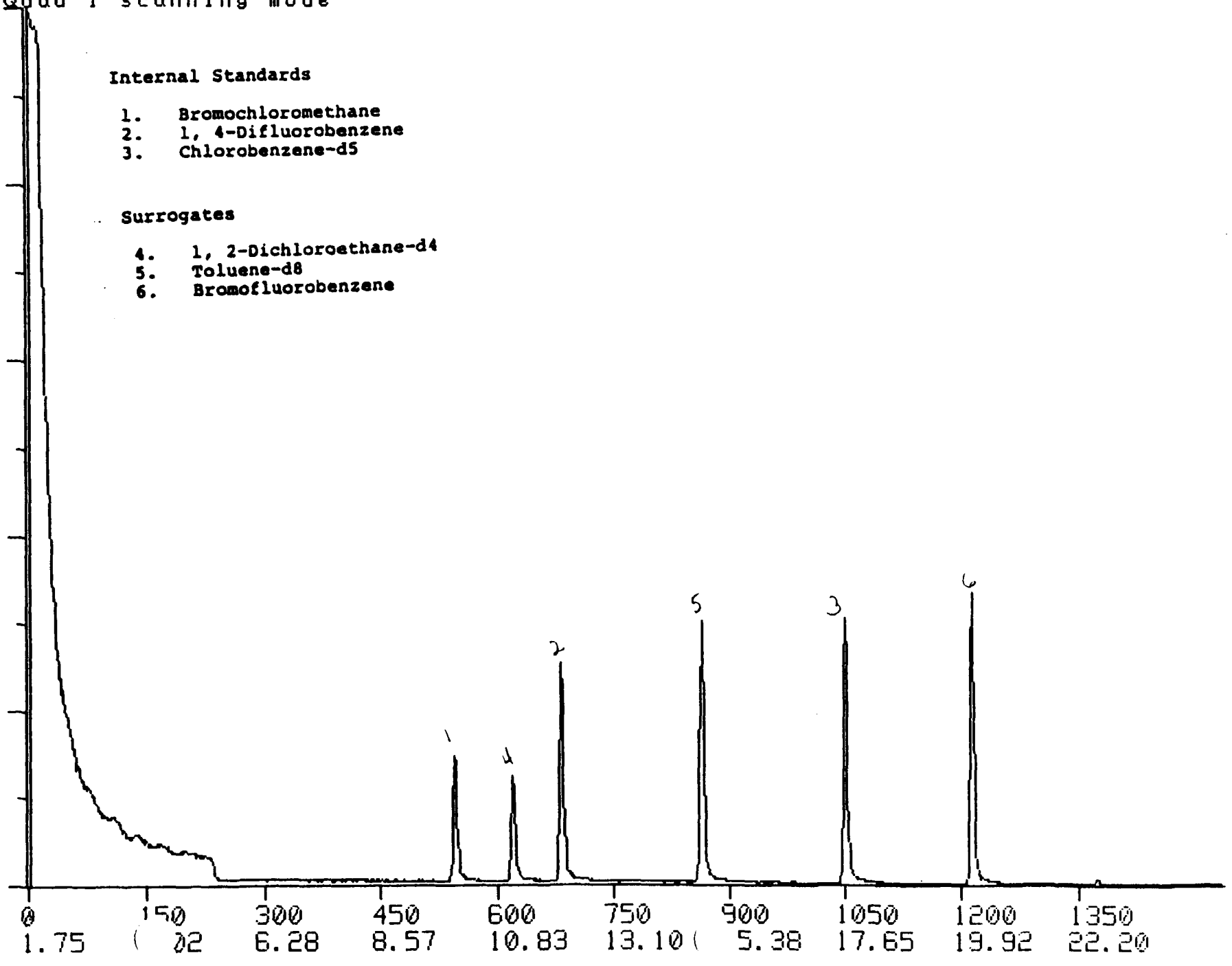
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

N[illegible] _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6324
Injection time: 26-MAR-91 23:16:45
Comments:
EXTRC 6324, 2515-24153, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

6324. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.00	545			STD	1.00	50.0	NG/UL
2S	12.08	683			STD	0.84	50.0	NG/UL
3S	17.63	1049			STD	0.65	50.0	NG/UL
1T	2.43	46	50. / 128.	17320. / ~~66042.~~	~~1~~	~~0.80~~	~~7.3~~	~~NG/UL~~

2T Was Not Found
3T Was Not Found
4T Was Not Found
5T Is Below Specified Detection Limit
6T Was Not Found
7T Was Not Found
8T Was Not Found
9T Was Not Found
10T Was Not Found
11T Was Not Found
12T Was Not Found
13T Was Not Found
14T Was Not Found
15T Was Not Found
16T Was Not Found
17T Was Not Found
18T Was Not Found
19T Was Not Found
20T Was Not Found
21T Was Not Found
22T Was Not Found
23T Was Not Found
24T Was Not Found
25T Was Not Found
26T Was Not Found
27T Was Not Found
28T Was Not Found
29T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.83	864	98. / 117.	359394. /	310448.	3	0.90	51.8	NG/UL
36T	20.10	1212	95. / 117.	224870. /	310448.	3	0.92	52.2	NG/UL
37T	11.13	620	65. / 128.	164083. /	66042.	1	0.75	49.5	NG/UL

38T Was Not Found
39T Was Not Found
40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Was Not Found
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Is Below Specified Detection Limit
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
[illegible]T Was Not Found
[illegible]4T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6324
Injection time: 26-MAR-91 23:16:45

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.243	50. / 128.	1.404	9.3	IA BB RF			1.00
35T	0.841	98. / 117.	1.118	51.8	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	52.2	IA BB RF			1.00
37T	1.113	65. / 128.	2.512	49.5	IA BB RF			1.00

WADSWORTH/ALERT
LABORATORIES, INC.

File sys:1I/50732
2515-24153

Run date 22-Mar-91 11:49
Analysis date 22-Mar-91 15:28
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.57	2954536	7.412e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24153
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW08-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	83	6.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24153
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

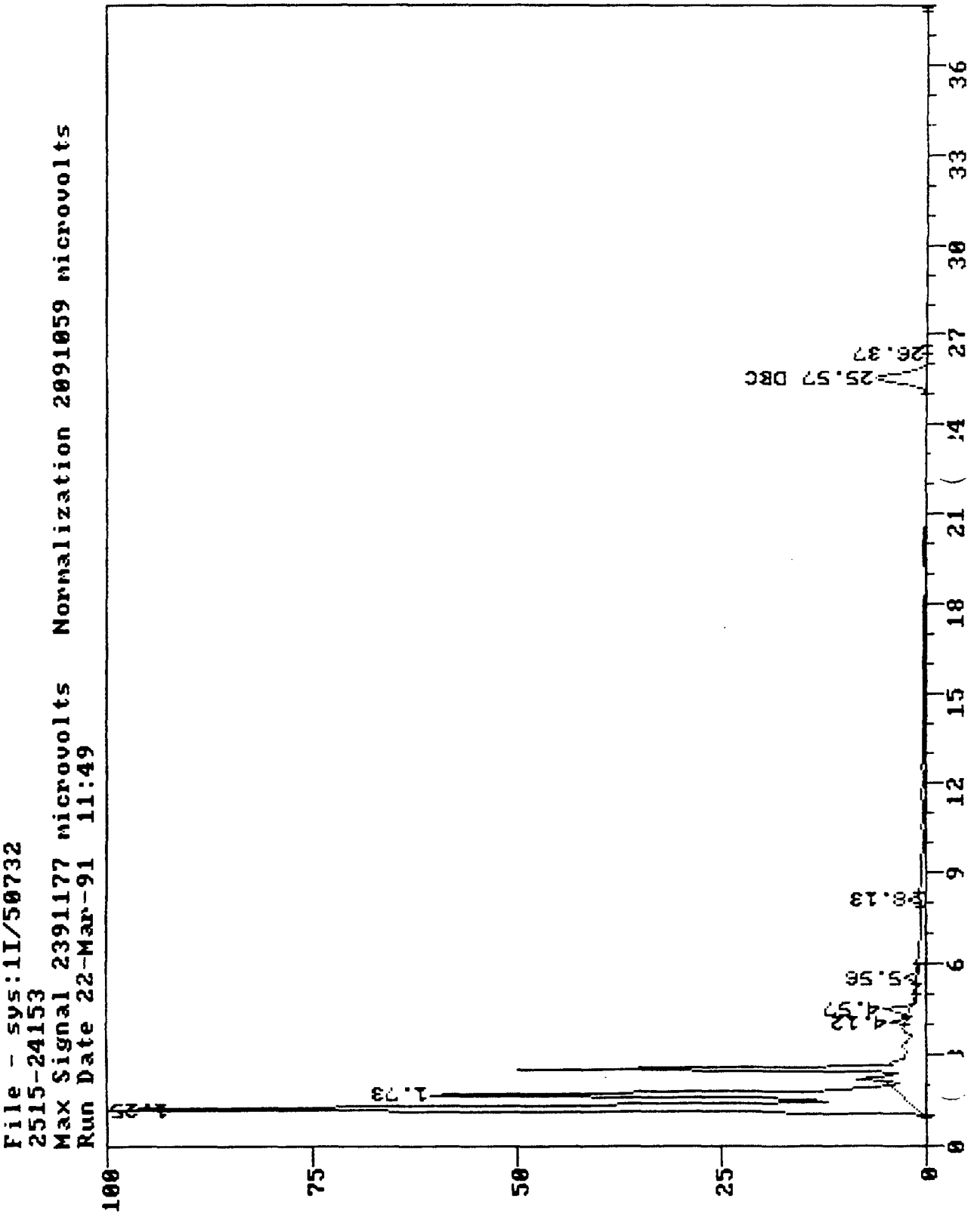
SAMPLE ID: RAU-MW08-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24153
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW08-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24153
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW08-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	460	1.0	mg/l
Specific Conductance	3/15/91	940	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.17	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.9		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24154
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW09-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	3.3 J
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	13
1,2-Dichlorobenzene	15	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	97	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	104	(86-115)	(74-121)

SY0:C63. EXTRC 6316, 2515-24154, REM, 5.0 _ 100%
26-MAR-91 18:25:07 561892
Total Ion Current
Quad 1 scanning mode

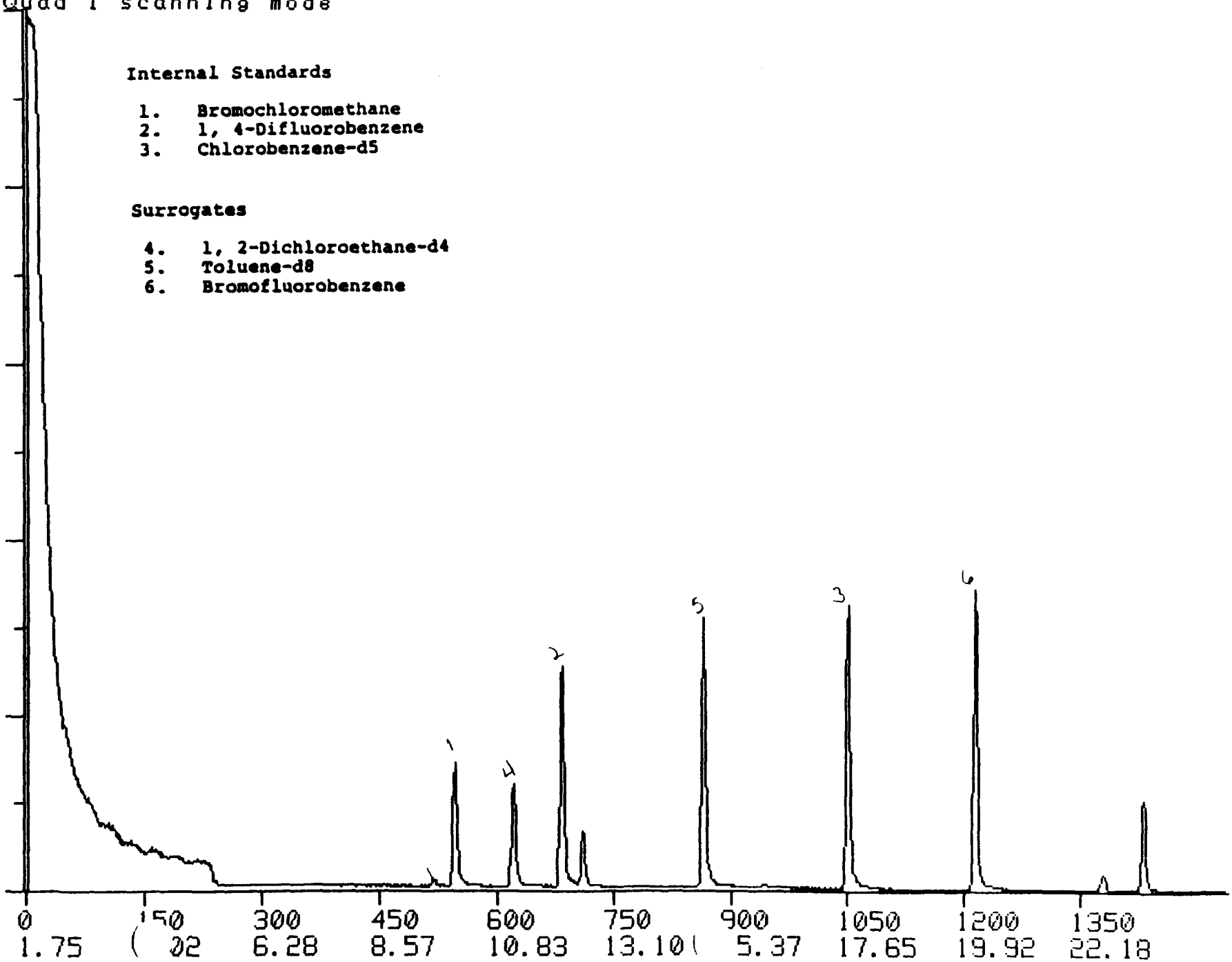
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

N[illegible] _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6316
Injection time: 26-MAR-91 18:25:07
Comments:
EXTRC 6316, 2515-24154, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea		Ref	Fit	Conc	Units
1S	10.02	546				STD	1.00	50.0	NG/UL
2S	12.10	684				STD	0.84	50.0	NG/UL
3S	17.67	1051				STD	0.77	50.0	NG/UL
1T	2.45	47	50. / 128.	21209. /	~~65115.~~	~~1~~	~~0.80~~	~~11.6~~	~~NG/UL~~
2T	Was Not Found								
3T	Was Not Found								
4T	Was Not Found								
5T	Was Not Found								
6T	Is Below Specified Detection Limit								
7T	Was Not Found								
8T	Was Not Found								
9T	Was Not Found								
10T	Was Not Found								
11T	Was Not Found								
12T	Was Not Found								
13T	Was Not Found								
14T	Was Not Found								
15T	Was Not Found								
16T	Was Not Found								
17T	Was Not Found								
18T	Was Not Found								
19T	Was Not Found								
20T	12.52	711	130. / 114.	32808. /	351260.	2	0.84	13.0	NG/UL
21T	Was Not Found								
22T	Was Not Found								
3T	Was Not Found								
24T	Was Not Found								
25T	Was Not Found								
26T	Was Not Found								
27T	Was Not Found								
28T	Is Below Specified Detection Limit								
29T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Is Below Specified Detection Limit								
35T	14.85	865	98. / 117.	375648. /	321590.	3	0.90	52.2	NG/UL
36T	20.13	1214	95. / 117.	231886. /	321590.	3	0.92	52.0	NG/UL
37T	11.15	621	65. / 128.	157955. /	65115.	1	0.75	48.3	NG/UL
38T	Was Not Found								
39T	9.58	518	96. / 128.	7426. /	65115.	1	0.80	3.3	NG/UL
40T	Was Not Found								
41T	Was Not Found								
42T	Is Below Specified Detection Limit								
43T	Is Below Specified Detection Limit								
44T	23.38	1429	146. / 117.	71846. /	321590.	3	0.80	14.9	NG/UL
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
[illegible]T	Was Not Found								
[illegible]4T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

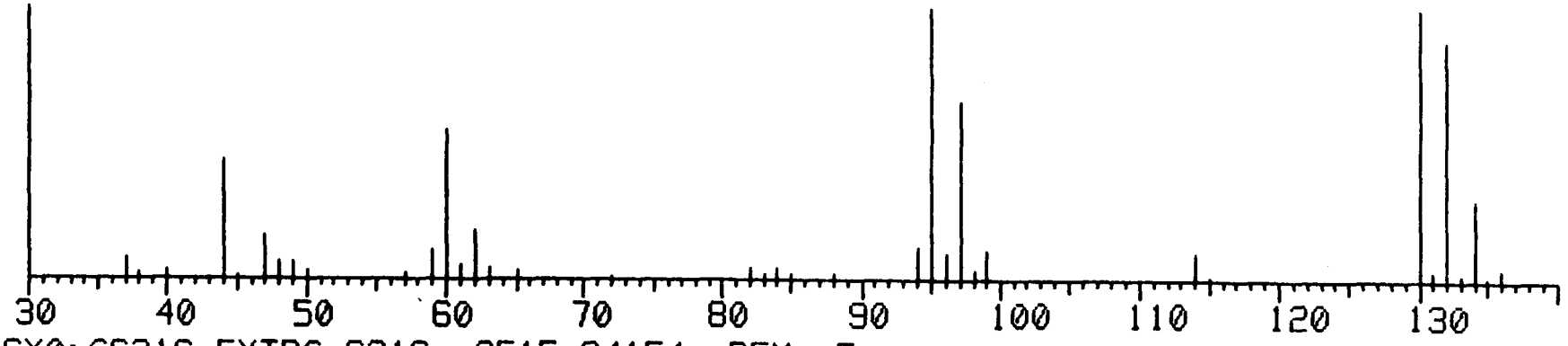
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6316
Injection time: 26-MAR-91 18:25:07

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.245	50. / 128.	1.404	11.6	IA BB RF			1.00
20T	1.035	130. / 114.	0.360	13.0	IA BB RF			1.00
35T	0.840	98. / 117.	1.118	52.2	IA BB RF			1.00
36T	1.139	95. / 117.	0.694	52.0	IA BB RF			1.00
37T	1.113	65. / 128.	2.512	48.3	IA BB RF			1.00
39T	0.956	96. / 128.	1.742	3.3	IA BV RF			1.00
44T	1.323	146. / 117.	0.747	14.9	IA BB RF			1.00

SY0:C63 EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 711 Time 12.52 min.
100 % = 5765

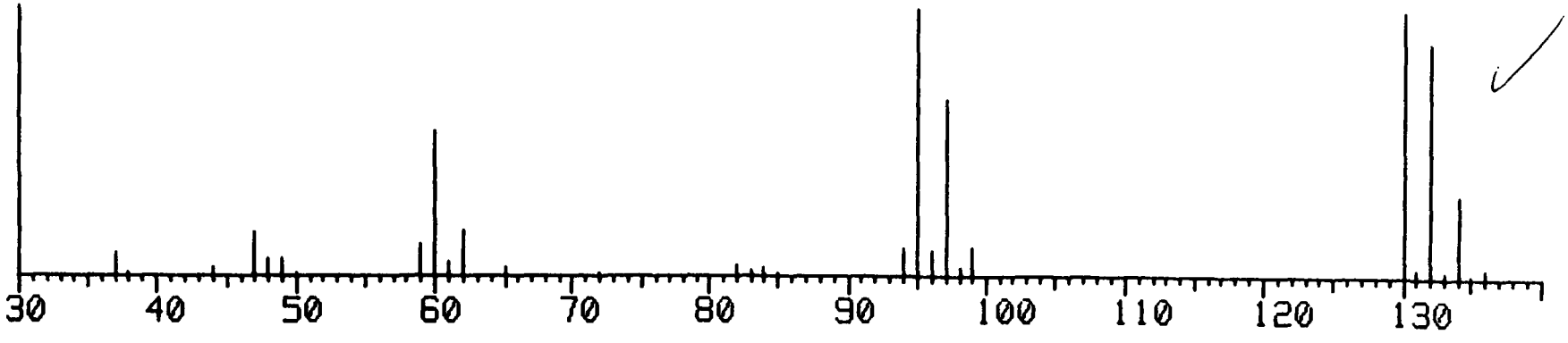
Total
37638



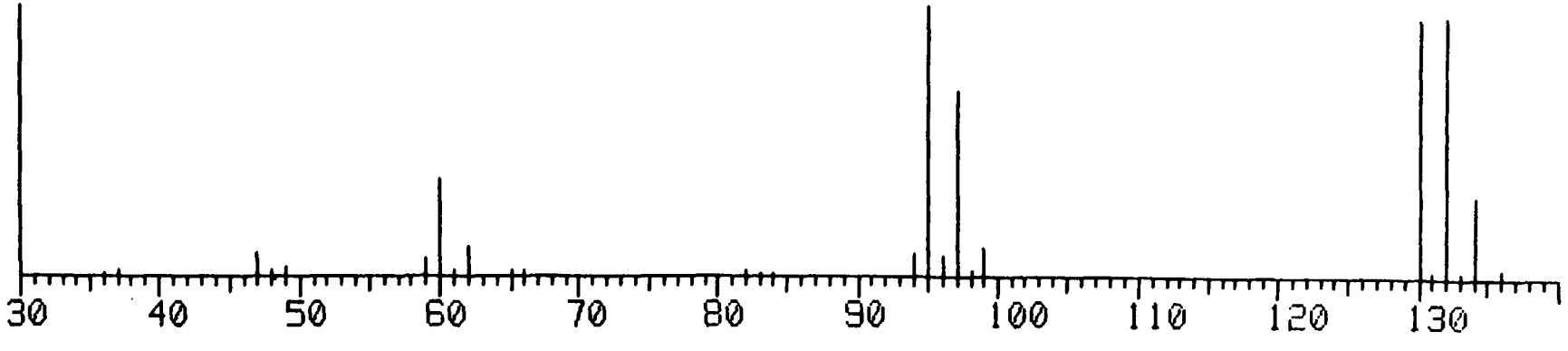
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6316 EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 711 Time 12.52 min.
Bkg scan = 705 100 % = 5765

Total
32834

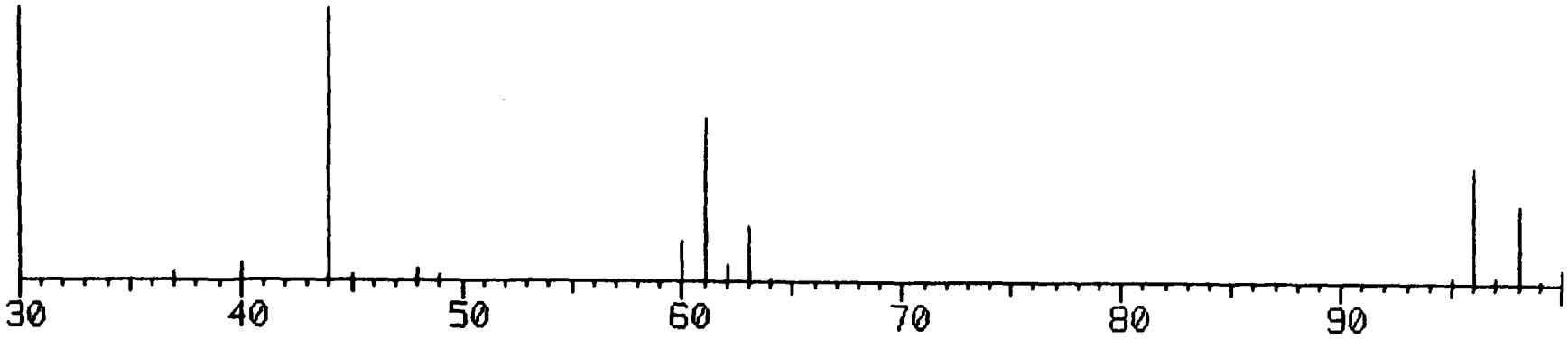


Standard Reference Spectrum: Trichloroethene



SY0:C6[illegible]3 EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 518 Time 9.58 min.
100 % = 1600

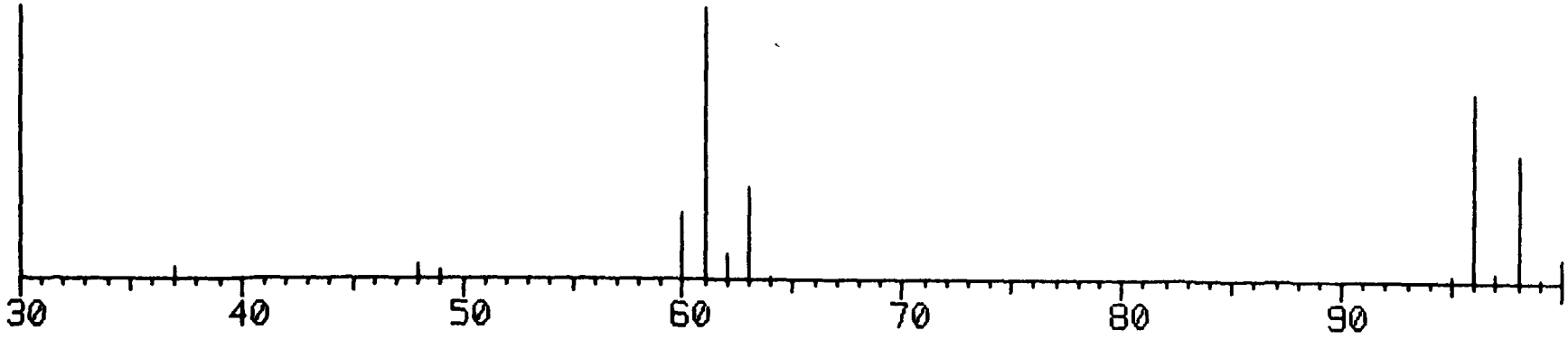
Total
7930



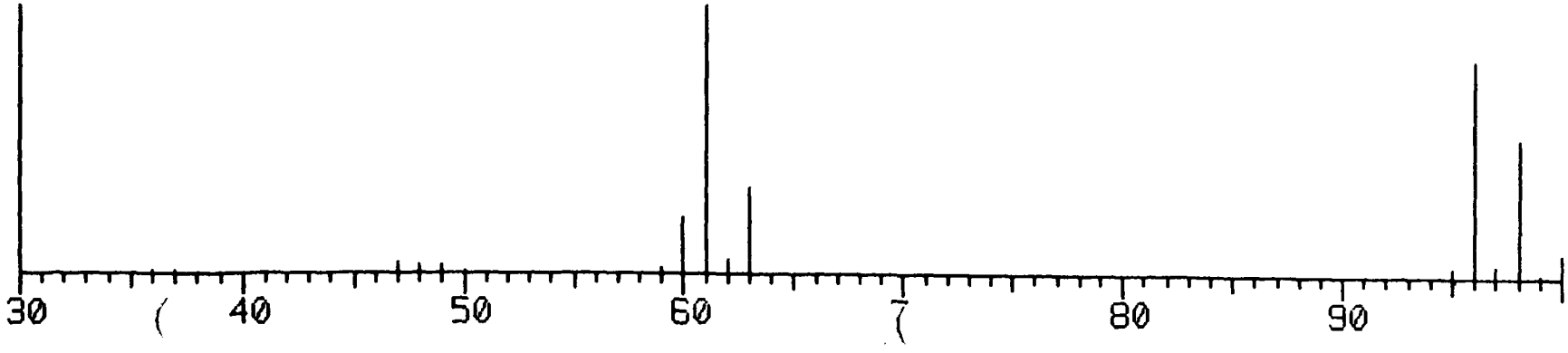
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6316 EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 518 Time 9.58 min.
Bkg scan = 511 100 % = 1600

Total
5009

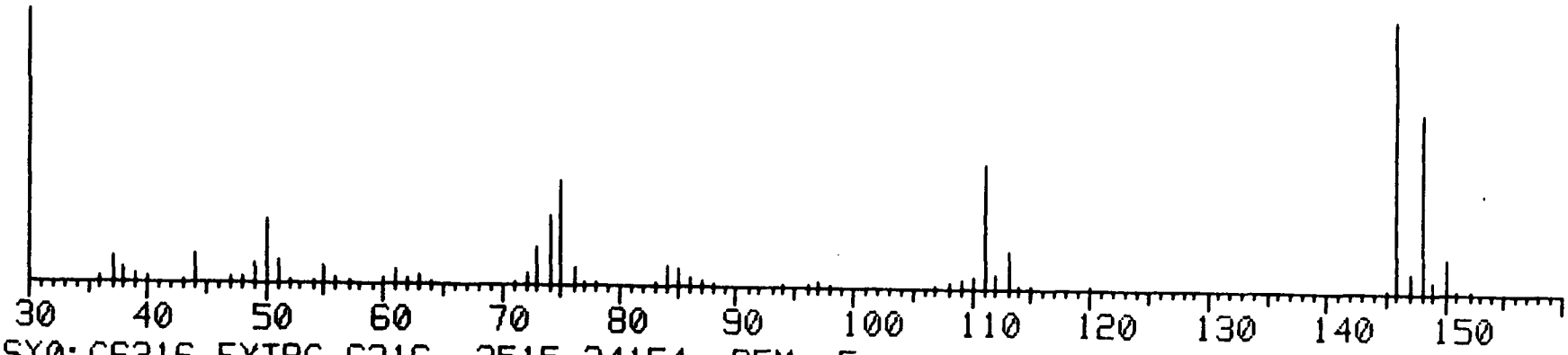


Standard Reference Spectrum: 1,2-Dichloroethene (total)



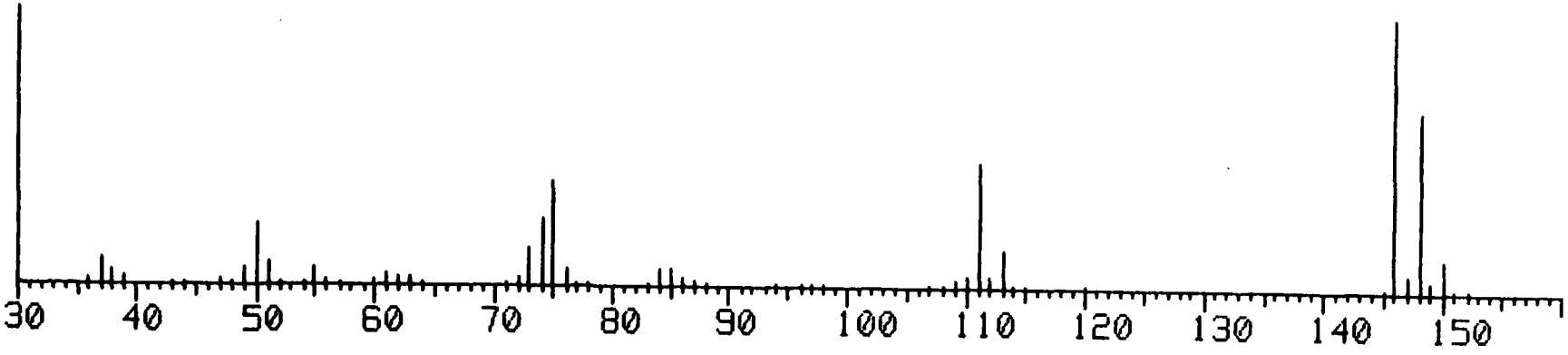
SY0: C6, EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 1429 Time 23.38 min.
100 % = 12546

Total
58847

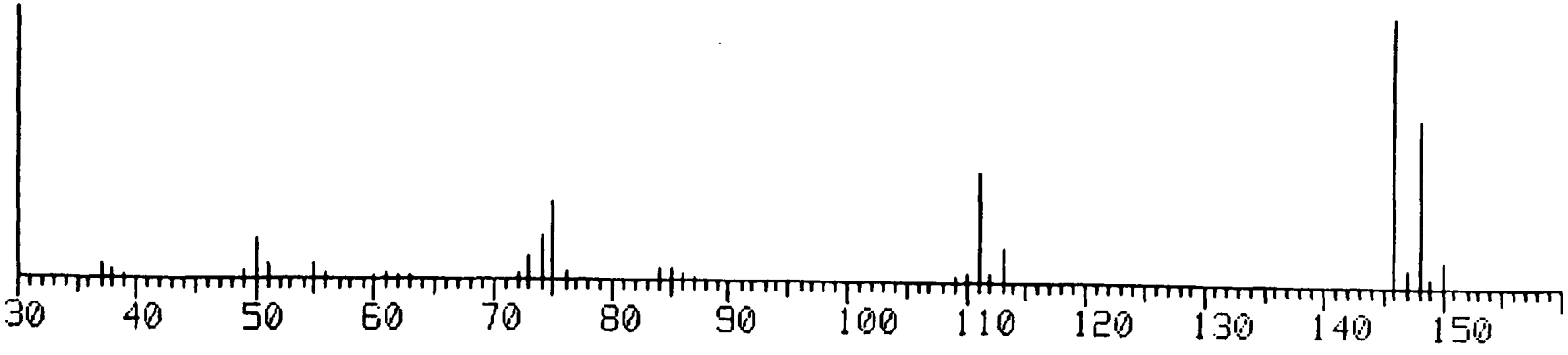


SY0: C6316 EXTRC 6316, 2515-24154, REM, 5.
26-MAR-91 18:25:07 Scan 1429 Time 23.38 min.
Bkg scan = 1396 100 % = 12546

Total
57392



Standard Reference Spectrum: 1,2-Dichlorobenzene



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24154
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

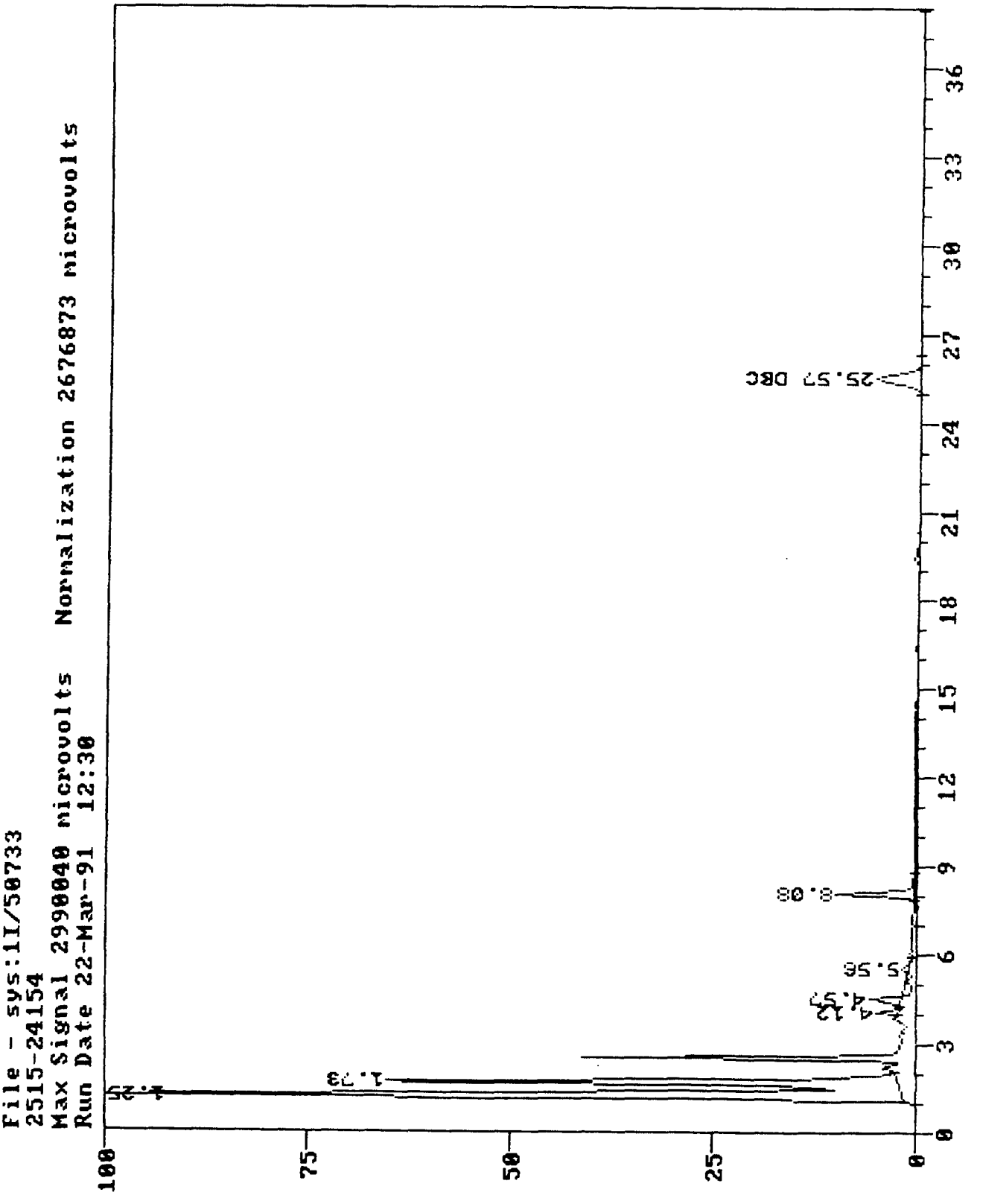
SAMPLE ID: RAU-MW09-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50733
2515-24154

Run date 22-Mar-91 12:30
Analysis date 22-Mar-91 15:29
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.57	3355006	8.416e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24154
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW09-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	15	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24154
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW09-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC. **DATE RECEIVED:** 3/14/91
LAB #: 2515-24154
MATRIX : WATER

SAMPLE ID : RAU-MW09-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	68	1.0	mg/l
Specific Conductance	3/15/91	510	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	ND	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.2		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24155
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/27/91

SAMPLE ID: RAU-MW10-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

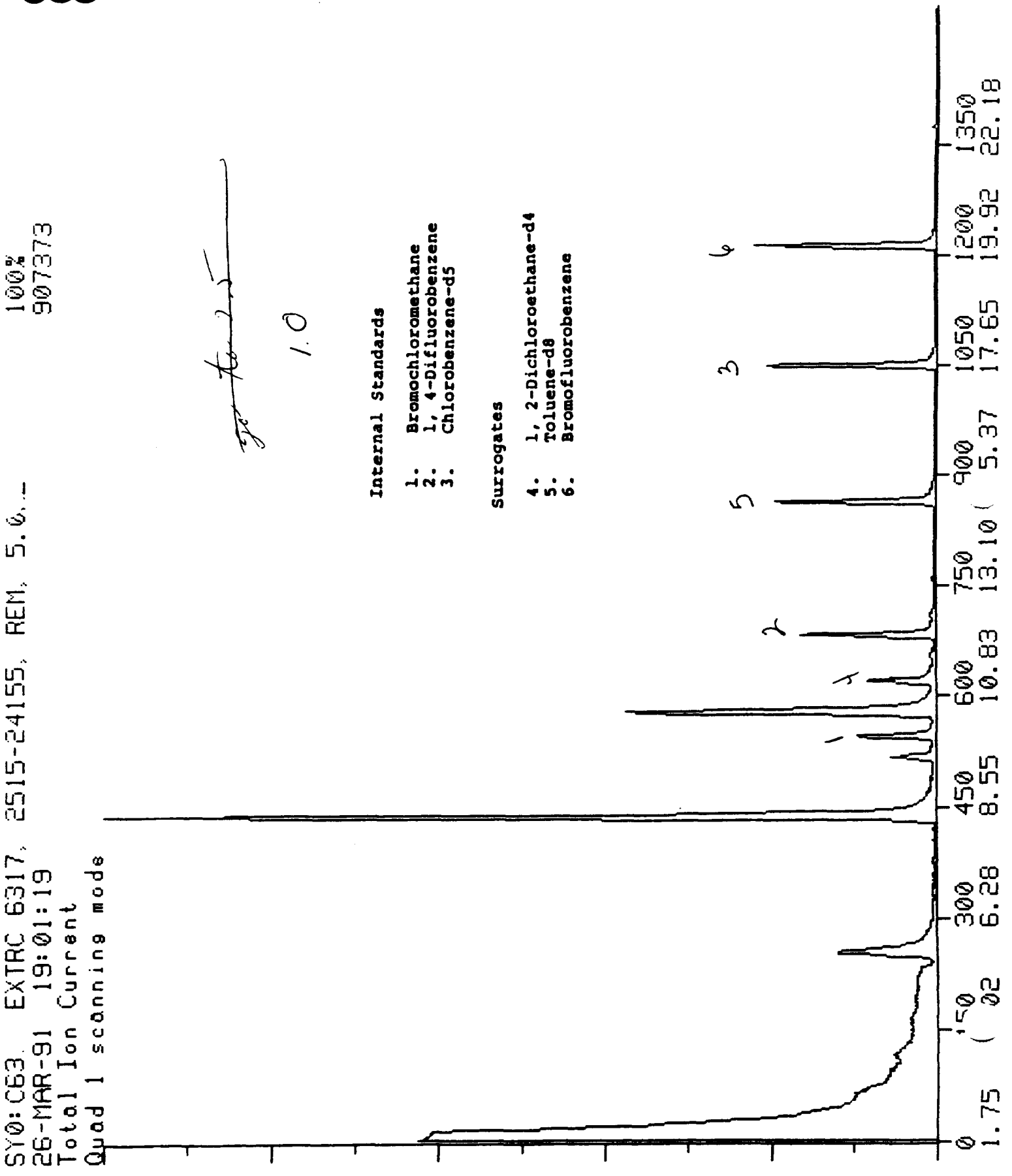
Acrolein	ND**	1,1-Dichloroethene	83
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	23 J
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	37 J	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	210
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	34 J
1,4-Dichlorobenzene	ND		
1,1-Dichloroethane	580		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 25 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 50 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 250 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	93	(76-114)	(70-121)
Toluene-d8	97	(76-114)	(81-117)
Bromofluorobenzene	99	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

C 6317 5.0ml IN Holding Time
1.0ml Rerun Cut of holding



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W.O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6317
Injection time: 26-MAR-91 19:01:19
Comments:
EXTRC 6317, 2515-24155, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.02	546			STD	1.00	50.0	NG/UL
2S	12.08	683			STD	0.78	50.0	NG/UL
3S	17.65	1050			STD	0.77	50.0	NG/UL
1T	2.48	49	50. / 128.	15844. / 65211.	1	0.80	8.7	NG/UL
2T	Was Not Found							
3T	2.68	62	62. / 128.	116128. / 65211.	1	0.83	56.8	NG/UL
4T	3.53	118	64. / 128.	63105. / 65211.	1	1.00	54.5	NG/UL
5T	Is Below Specified Detection Limit							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	5.58	254	96. / 128.	272088. / 65211.	1	0.63	136.4	NG/UL
9T	8.37	437	63. / 128.	3451392. / 65211.	1	0.22	844.8	NG/UL
10T	Is Below Specified Detection Limit							
11T	Was Not Found							
12T	Is Below Specified Detection Limit							
13T	Is Below Specified Detection Limit							
14T	10.50	578	97. / 114.	988532. / 370874.	2	0.80	342.6	NG/UL
15T	10.53	580	117. / 114.	128381. / 370874.	2	0.82	51.5	NG/UL
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Is Below Specified Detection Limit							
23T	Is Below Specified Detection Limit							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.83	864	98. / 117.	380792. /	333450.	3	0.90	51.1	NG/UL
36T	20.12	1213	95. / 117.	237060. /	333450.	3	0.92	51.2	NG/UL
37T	11.13	620	65. / 128.	171833. /	65211.	1	0.75	52.4	NG/UL
38T	Was Not Found								
39T	9.57	517	96. / 128.	63955. /	65211.	1	0.82	28.1	NG/UL

40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Was Not Found
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Was Not Found
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
3T Was Not Found
54T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6317
Injection time: 26-MAR-91 19:01:19

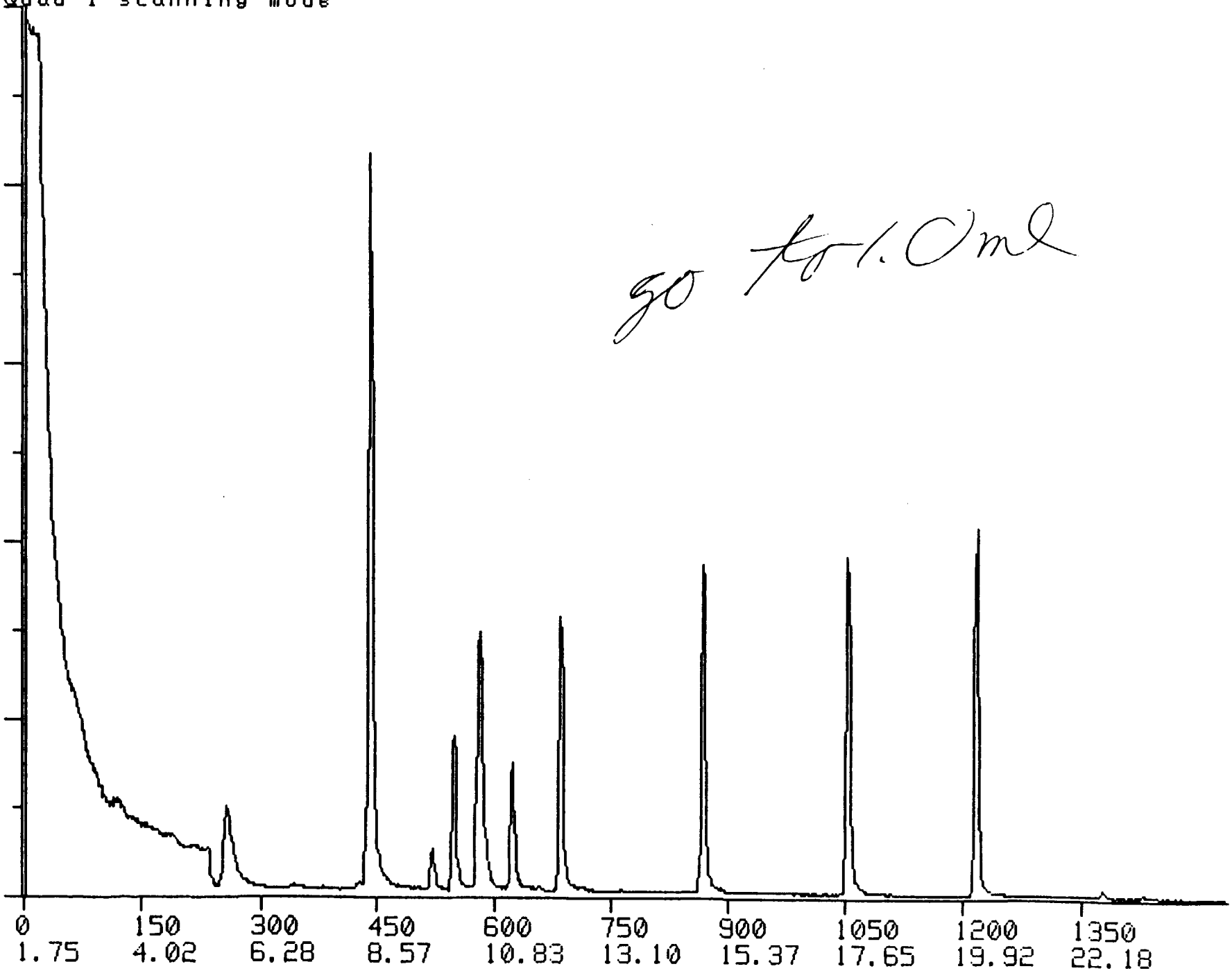
No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.248	50. / 128.	1.404	8.7	IA BB RF			1.00
3T	0.267	62. / 128.	1.567	56.8	IA BB RF			1.00
4T	0.352	64. / 128.	0.887	54.5	IA VB RF			1.00
8T	0.557	96. / 128.	1.530	136.4	IA BB RF			1.00
9T	0.835	63. / 128.	3.132	844.8	IA BB RF			1.00
14T	0.869	97. / 114.	0.389	342.6	IA BB RF			1.00
15T	0.872	117. / 114.	0.336	51.5	IA BV RF			1.00
35T	0.840	98. / 117.	1.118	51.1	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	51.2	IA BB RF			1.00
37T	1.111	65. / 128.	2.512	52.4	IA VB RF			1.00
39T	0.955	96. / 128.	1.742	28.1	IA BB RF			1.00

SY0:C63E EXTRC 6332, 2515-24155, REM, 2.5.
27-MAR-91 12:38:29
Total Ion Current
Quad 1 scanning mode

100%
569240

WADSWORTH/ALERT LABORATORIES, INC.

go to 1.0ml



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6332
Injection time: 27-MAR-91 12:38:29
Comments:
EXTRC 6332, 2515-24155, REM, 2.5ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.05	549			STD	1.00	50.0	NG/UL
2S	12.13	686			STD	0.86	50.0	NG/UL
3S	17.70	1053			STD	0.77	50.0	NG/UL
1T	2.47	48	50. / 128.	1036. / 85184.	1	0.48	0.4	NG/UL
2T	Was Not Found							
3T	2.75	67	62. / 128.	62895. / 85184.	1	0.91	20.7	NG/UL
4T	3.57	120	64. / 128.	35817. / 85184.	1	1.00	21.6	NG/UL
5T	Is Below Specified Detection Limit							
6T	Was Not Found							
7T	Was Not Found							
8T	5.63	257	96. / 128.	149051. / 85184.	1	0.85	57.4	NG/UL
9T	8.40	440	63. / 128.	1813080. / 85184.	1	0.40	340.6	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Is Below Specified Detection Limit							
13T	Was Not Found							
14T	10.55	581	97. / 114.	497754. / 459516.	2	0.72	124.5	NG/UL
15T	10.58	584	117. / 114.	66176. / 459516.	2	0.82	16.9	NG/UL
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Was Not Found								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	867	98. / 117.	458440. /	395424.	3	0.84	49.3	NG/UL
36T	20.17	1216	95. / 117.	280980. /	395424.	3	0.92	49.9	NG/UL
37T	11.18	623	65. / 128.	184152. /	85184.	1	0.75	44.3	NG/UL
38T	Was Not Found								
39T	9.62	520	96. / 128.	37243. /	85184.	1	0.85	12.6	NG/UL
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Is Below Specified Detection Limit								
45T	Was Not Found								
46T	Was Not Found								
47T	8.20	426	57. / 128.	10236. /	85184.	1	1.00	3.3	NG/UL
48T	Was Not Found								
49T	Was Not Found								
50T	11.72	658	41. / 128.	1182. /	85184.	1	0.46	20.4	NG/UL
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

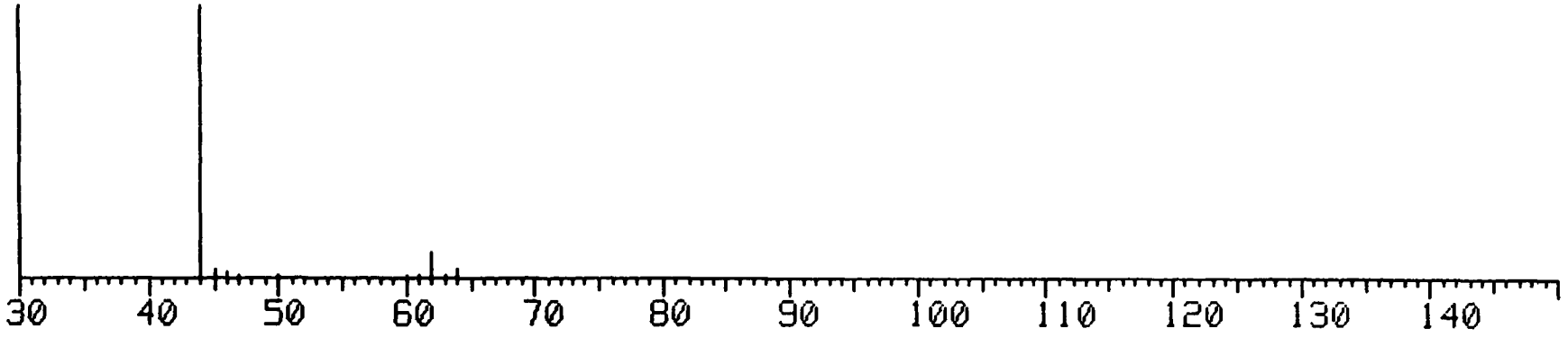
WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

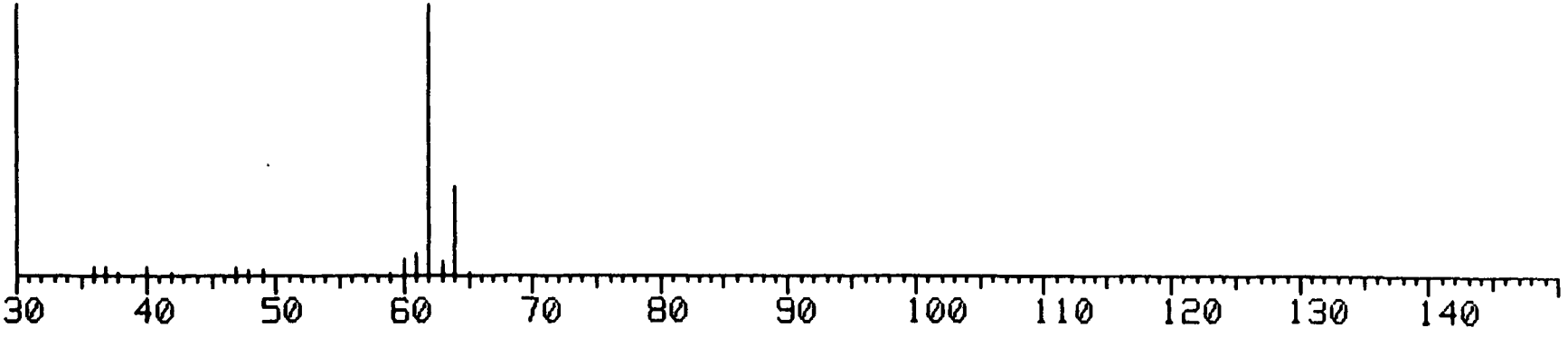
Library used: SYO:DBH20
Data file name: SYO:C6332
Injection time: 27-MAR-91 12:38:29

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.246	50. / 128.	1.655	0.4	IA BV RF			1.00
3T	0.274	62. / 128.	1.782	20.7	IA BB RF			1.00
4T	0.355	64. / 128.	0.974	21.6	IA VB RF			1.00
8T	0.560	96. / 128.	1.523	57.4	IA BB RF			1.00
9T	0.836	63. / 128.	3.124	340.6	IA BB RF			1.00
14T	0.870	97. / 114.	0.435	124.5	IA BB RF			1.00
15T	0.872	117. / 114.	0.426	16.9	IA BV RF			1.00
35T	0.840	98. / 117.	1.175	49.3	IA BB RF			1.00
36T	1.140	95. / 117.	0.713	49.9	IA BB RF			1.00
37T	1.112	65. / 128.	2.437	44.3	IA BB RF			1.00
39T	0.957	96. / 128.	1.740	12.6	IA BB RF			1.00
47T	0.816	57. / 128.	1.836	3.3	IA BV RF			1.00
50T	1.166	41. / 128.	0.034	20.4	IA BB RF			1.00

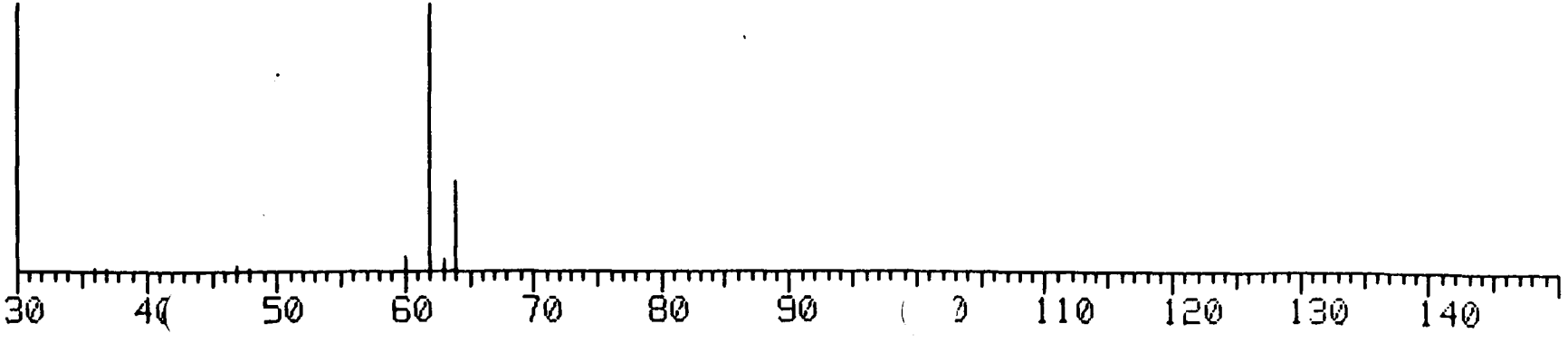
SY0:C63. EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 62 Time 2.68 min. 90366
100 % = 6425



SY0:C6317 EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 62 Time 2.68 min. 11109
Bkg scan = 44 100 % = 6425



Standard Reference Spectrum: Vinyl Chloride



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

QUALITY CONTROL SECTION

WADSWORTH/ALERT
LABORATORIES, INC.

CASE NARRATIVE

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. The matrix spike for lead was diluted out.

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS				
24157	1,1-Dichloroethene	93	94	WATER	(61-145)
	Trichloroethene	101	104		(71-120)
	Chlorobenzene	94	94		(75-130)
	Toluene	91	94		(76-125)
	Benzene	95	96		(76-127)
	POLYCHLORINATED BIPHENYLS				
24157	Arochlor - 1254	87	85	WATER	(55-140)

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PRECENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	TOTAL METALS				
24157	Lead	Diluted Out	Diluted Out	WATER	(75-125)
	DISSOLVED METALS				
24157	Lead	94	96	WATER	(75-125)

WADSWORTH/ALERT
LABORATORIES, INC.

MATRIX SPIKE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPK/DUP PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
24157	Alkalinity	100	99	WATER	(80-120)
24157	Nitrate Nitrogen	111	116	WATER	(80-120)
24157	Total Recoverable Phenolics	96	97	WATER	(80-120)

WADSWORTH/ALERT
LABORATORIES, INC.

DUPLICATE ANALYSIS SECTION

LAB ID	PARAMETER	SAMPLE RESULT	DUPLICATE RESULT	UNITS
24157	Acidity	ND	ND	mg/l
24141	pH	6.6	6.6	su
24141	Specific Conductance	100	100	umhos/cm

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	GC/MS VOLATILE COMPOUNDS			
24138	1,1-Dichloroethene	109	WATER	(61-145)
	Trichloroethene	109		(71-120)
	Chlorobenzene	104		(75-130)
	Toluene	102		(76-125)
	Benzene	107		(76-127)
	POLYCHLORINATED BIPHENYLS			
24138	Arochlor - 1254	82	WATER	(55-140)

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
	TOTAL METALS			
24138	Lead	101	WATER	(75-125)
	DISSOLVED METALS			
24138	Lead	105	WATER	(75-125)

WADSWORTH/ALERT
LABORATORIES, INC.

CHECK SAMPLE DATA

LAB ID	PARAMETER	SPIKE PERCENT RECOVERY	SPIKE MATRIX	QC CONTROL LIMITS
24138	Alkalinity	101	WATER	(80-120)
24138	Specific Conductance	93	WATER	(80-120)
24138	Nitrate Nitrogen	110	WATER	(80-120)
24138	Total Recoverable Phenolics	105	WATER	(80-120)
24138	pH	97	WATER	(80-120)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB#: 9091-90326
MATRIX: WATER

DATE RECEIVED: NA
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: INTRA-LAB BLANK, 3/26/91

VOLATILE ORGANICS USEPA METHOD 624
BLANK COMPOUND LIST-GC/MS

Acrolein	ND**	1,2-Dichloroethane	ND
Acrylonitrile	ND**	1,1-Dichloroethene	ND
Benzene	ND	1,2-Dichloroethene (Total)	ND
Bromodichloromethane	ND	1,2-Dichloroporpane	ND
Bromoform	ND	cis-1,3-Dichloropropene	ND
Bromomethane	ND*	trans-1,3-Dichloropropene	ND
Carbon tetrachloride	ND	Ethylbenzene	ND
Chlorobenzene	ND	Methylene Chloride	ND*
Chloroethane	ND*	1,1,2,2-Tetrachloroethane	ND
2-Chloroethylvinyl ether	ND*	Tetrachloroethene	ND
Chloroform	ND	Toluene	ND
Chloromethane	ND*	1,1,1-Trichloroethane	ND
Dibromochloromethane	ND	1,1,2-Trichloroethane	ND
1,2-Dichlorobenzene	ND	Trichloroethene	ND
1,3-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,4-Dichlorobenzene	ND	Vinyl Chloride	ND*
1,1-Dichloroethane	ND	Xylene (Total)	ND

NOTE:
- ND (None Detected, lower detectable limit = 5.0 ug/l)as rec'd
- ND* (None Detected, lower detectable limit = 10 ug/l)as rec'd
- ND** (None Detected, lower detectable limit = 50 ug/l)as rec'd
- J (Detected, but below quantitation limit; estimated value)
- B (Compound detected in method blank associated with this sample)
- -- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	92	(76-114)	(70-121)
Toluene-d8	105	(88-110)	(81-117)
Bromofluorobenzene	102	(86-115)	(74-121)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90318
MATRIX: WATER

DATE RECEIVED: NA
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/21/91

SAMPLE ID: INTRA-LAB BLANK, 3/18/91

POLYCHLORINATED BIPHENYLS
METHOD 8080 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.5 ug/l)as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l)as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90318
MATRIX : WATER

SAMPLE ID : INTRA-LAB BLANK, 3/18/91

METALS ANALYTICAL BLANK REPORT
TOTAL-LIST

ELEMENT	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Lead	3/19/91	ND	3.0 ug/l

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90318
MATRIX : WATER

SAMPLE ID : INTRA-LAB BLANK, 3/18/91

METALS ANALYTICAL BLANK REPORT
DISSOLVED-LIST

ELEMENT	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Lead	3/18/91	ND	3.0 ug/l

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90315
MATRIX: WATER

SAMPLE ID: INTRA-LAB BLANK, 3/15/91

GENERAL ANALYTICAL BLANK REPORT

PARAMETER	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Specific Conductance	3/15/91	2.1	1.0 umhos/cm
pH	3/15/91	6.6	su

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90318
MATRIX: WATER

SAMPLE ID: INTRA-LAB BLANK, 3/18/91

GENERAL ANALYTICAL BLANK REPORT

PARAMETER	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Acidity	3/18/91	5.5	1.0 mg/l
Alkalinity	3/18/91	1.0	1.0 mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005 mg/l

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: Wadsworth/Alert Laboratories
LAB #: 9091-90325
MATRIX: WATER

SAMPLE ID: INTRA-LAB BLANK, 3/25/91

GENERAL ANALYTICAL BLANK REPORT

PARAMETER	PREPARATION-ANALYSIS DATE	RESULT	DETECTION LIMIT
Nitrate Nitrogen	3/25/91	ND	0.10 mg/l

WADSWORTH/ALERT
LABORATORIES, INC.

Calibration Data

3-25-91

WADSWORTH/ALERT LABORATORIES, INC.

YED - Single Point Response Factor Listing

C[illegible] library files: SYO:DBH20

3-25-91

3-25-91

C6283

Target name	Ave RF	Single RF	% Diff
Chloromethane	1.974	1.814	8.1
Bromomethane	1.856	1.646	11.3
Vinyl Chloride	2.005	1.982	1.1
Chloroethane	1.125	0.952	15.4
Methylene Chloride	2.212	1.930	12.7
Acetone	0.315	0.307	2.8
Carbon Disulfide	5.929	5.538	6.6
1,1-Dichloroethene	1.880	1.804	4.0
1,1-Dichloroethane	3.363	3.215	4.4
1,2-Dichloroethene (total)	1.959	1.845	5.9
Chloroform	3.515	3.304	6.0
1,2-Dichloroethane	3.303	2.950	10.7
2-Butanone	0.680	0.598	12.1
1,1,1-Trichloroethane	0.425	0.426	0.2
Carbon Tetrachloride	0.435	0.374	14.0
Vinyl Acetate	0.649	0.600	7.5
Bromodichloromethane	0.665	0.660	0.7
1,2-Dichloropropane	0.424	0.380	10.4
cis-1,3-Dichloropropene	0.615	0.619	0.6
Trichloroethene	0.395	0.384	2.6
Dibromochloromethane	0.518	0.501	3.4
1,2-Trichloroethane	0.358	0.373	4.1
Benzene	1.078	1.063	1.3
trans-1,3-Dichloropropene	0.540	0.578	7.1
Bromoform	0.362	0.319	12.0
4-Methyl-2-Pentanone	0.425	0.384	9.7
2-Hexanone	0.289	0.267	7.5
Tetrachloroethene	0.415	0.400	3.7
1,1,2,2-Tetrachloroethane	0.701	0.695	0.9
Toluene	0.836	0.839	0.4
Chlorobenzene	1.049	0.996	5.1
Ethylbenzene	0.528	0.512	3.0
Styrene	1.075	1.054	2.0
Xylenes (total) (o)	0.614	0.624	1.6
Toluene-d8	1.214	1.159	4.5
Bromofluorobenzene	0.764	0.727	4.8
1,2-Dichloroethane-d4	2.895	2.614	9.7
Trichlorofluromethane	4.726	4.523	4.3
cis-1,2-Dichloroethene	1.922	1.877	2.3
2-Chloroethylvinyl ether	0.078	0.077	1.7
m-Xylene/p-Xylene	1.318	1.493	13.3
1,3-Dichlorobenzene	0.979	0.920	6.0
1,4-Dichlorobenzene	0.993	0.881	11.3
1,2-Dichlorobenzene	0.809	0.714	11.7
Acrolein	0.052	0.066	26.2
Acrylonitrile	0.509	0.437	14.2

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead	40.0	42.10	105.3	40.0	42.30	105.8	41.50	103.8	F

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead				40.0	40.60	101.5	42.70	106.8	F

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead				40.0	42.80	107.0	42.60	106.5	F

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead_____	____40.0	___41.50	103.8	____40.0	___42.80	107.0	___41.80	104.5	F_

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead_____	_____	_____	_____	____40.0	___43.10	107.8	___42.30	105.8	F_

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead				40.0	45.80	114.5	41.70	104.3	F

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT LABORATORIES, INC.

U.S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: WADSWORTH_PITTSBURGH_____ Contract: _____

Lab Code: WADPA_ Case No.: 2515_ SAS No.: _____ SDG No.: 24141_

Initial Calibration Source: SPEX/EPACI__

Continuing Calibration Source: SPEX/EPACI__

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Lead				40.0	44.00	110.0			F

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

WADSWORTH/ALERT
LABORATORIES, INC.

Raw Data

Inorganics

WADSWORTH/ALERT LABORATORIES, INC.

2515 T

U.S. EPA - CLP

14

ANALYSIS RUN LOG

400 William Pitt Way
Pittsburgh, PA 15238

(412) 826-5477
FAX (412) 826-5571

Lab Name: Wadsworth - Pgh

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID Number: PE3030

Method: _

Start Date: 3-19

End Date: 3-19

BC

EPA Sample No.	D/F	Time	% R	Analytes: AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	HG	MN	MG	NI	K	SE	AG	NA	TL	V	ZN	CN
30															X												
S1 3																											
S2 40																											
S2 40																											
ICV			103.8																								
ICB																											
CCA																											
AB 3-18																											
A			108																								
LCSW 3-18			101.2																								
A			97.5																								
2515-24141	T																										
A			111																								
142	T																										
A			80.5																								
CCV			107																								
CCB																											
143	T																										
A			102																								
144	T																										
A			78.5																								
145	T																										
A			82.5																								
146	T																										
A			105.5																								
147	T																										
A			106																								
CCV			104.5																								
CCB																											
148	T																										
A			91																								
149	T																										
A			102.5																								
150	T																										

FORM XIV 270 - IN

3/90

pg 1 of 3

56	2515-24157SP		1	699		0.1933	
57	2515-24157SP	1	1	696		0.1925	95%
58	2515-24157SP	1	1	688		0.1903	95%
59	WASH	1	1	0		0.0021	I
60	2525-24267SP	1	1	710	T.V. - 0.30	0.1963	98%
61	2525-24267SP	1	1	734		0.2028	102%
62	2525-24267SP	1	1	730		0.2018	101%
63	2525-24267SP	1	1	731		0.2020	101%
64	STD 0.250	1	1	863		0.2381	95%
65	B	1	1	0		0.0021	b
66	2525-24263	100	1	1517		41.7039	41.7 0.50
67	WASH	1	1	0		0.0021	I
68	~~2525-24263~~	~~200~~	~~1~~	~~676~~		~~37.0964~~	VOID
69	WASH	1	1	0		0.0021	I
70	STD 0.250	1	1	867		0.2392	96%
71	B	1	1	0		0.0021	b

INTERCEPT: -7.535242 LINEAR COEF: 3655.617
CORRELATION COEF: .9998577

T.V. SPIKE 0.50 ml 10 ppm phenol std + 245 ml Sample → 250 ml 0.20 ppm phenol spike

G. Ronald Rippin 3.22.91

0322910P

Page 2 of 2

G. Ronald Rippin 3.22.91

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES, INC.

400 William Pitt Way
Pittsburgh, PA 15238

(412) 826-5477
FAX (412) 826-5577

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: Wadsworth - Pgh Contract: ______

Lab Code: ______ Case No.: ______ SAS No.: ______ SDG No.: ______

Instrument ID Number: PE3030 Method: __

Start Date: 3-19 End Date: 3-19

BC

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB															X												
2-15-29111	Diss MS		100.5																								
29111	Diss MSD		102																								
CCV			110																								
CCB																											

FORM XIV 272 - IN

pg 3.43

3/90

R = .9969 3-19-91 BC

WADSWORTH/ALERT LABORATORIES, INC.

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.014	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

MM = 1.0% NH_4

AUTOZERO

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.040	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

TOTAL

STANDARD

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.443	0.429	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	0.160	[illegible]

.160

E-25: READING GREATER THAN HIGHEST STANDARD.

STANDARD

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.784	0.770	0.014
PEAK AREA (ABS-SECONDS)	[illegible]	0.294	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

STANDARD

PB 0001

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.424	0.398	0.026
PEAK AREA (ABS-SECONDS)	0.251	0.157	[illegible]

ICV

103.8%

PB 0002

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	0.007	0.016
PEAK AREA (ABS-SECONDS)	0.022	0.014	[illegible]

ICB

PB 0003

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.049	0.049	0.016
PEAK AREA (ABS-SECONDS)	0.030	0.015	[illegible]

CRA

PB 0004

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.018	0.014	0.014
PEAK AREA (ABS-SECONDS)	0.019	0.005	[illegible]

PBW 3-18

WADSWORTH/ALERT LABORATORIES, INC.

PB 0005

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.290	0.224	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	0.033	[illegible]

A

31.5 108%

PB 0006

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.415	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

LCSW 3-18

40.5 101.2%

PB 0007

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.597	0.590	[illegible]
PEAK AREA (ABS-SECONDS)	0.332	[illegible]	[illegible]

A

50.0 97.5%

PB 0008

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.017	0.016	0.013
PEAK AREA (ABS-SECONDS)	0.020	0.006	0.014

2515-24141

0.3 T

PB 0009

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.317	0.310	0.315
PEAK AREA (ABS-SECONDS)	0.101	0.085	[illegible]

A

33.3 111%

PB 0010

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.611	0.556	0.193
PEAK AREA (ABS-SECONDS)	0.456	0.317	0.339

142 T

57.5

PB 0011

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.797	0.711	0.206
PEAK AREA (ABS-SECONDS)	0.524	0.377	0.348

A

73.9 80.5%

PB 0012

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.422	0.282	0.140
PEAK AREA (ABS-SECONDS)	0.294	0.161	0.133

CCV

42.9 107%

PB 0013

PB 0013 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.039	0.010	0.038

WADSWORTH/ALERT LABORATORIES, INC.

PEAK AREA (ABS-SECONDS) CCB [illegible]

PB 0014

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.252	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

143 T

[illegible]

PB 0015

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.404	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	0.308	[illegible]	[illegible]

A

[illegible] 102%

PB 0016

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.527	0.464	[illegible]
PEAK AREA (ABS-SECONDS)	0.459	[illegible]	[illegible]

144 T

[illegible]

PB 0017

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.852	0.587	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

[illegible] 78.5%

PB 0018

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.848	0.593	0.255
PEAK AREA (ABS-SECONDS)	0.504	0.237	[illegible]

145 T

[illegible]

PB 0019

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.731	0.736	0.220
PEAK AREA (ABS-SECONDS)	0.556	0.299	0.258

A

79.7 82.5%

PB 0020

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.168	[illegible]	0.174
PEAK AREA (ABS-SECONDS)	0.229	0.043	[illegible]

146 T

[illegible]

PB 0021

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.324	0.302	0.170
PEAK AREA (ABS-SECONDS)	0.301	0.121	[illegible]

A

[illegible] 105.5%

PB 0022

WADSWORTH/ALERT LABORATORIES, INC.

PB 0022 CONTINUED

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.127	0.102	0.143
PEAK AREA (ABS-SECONDS)	147	0.172	0.041	0.131

10.9 T

PB 0023

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	A	0.394	0.365	0.136
PEAK AREA (ABS-SECONDS)		0.341	0.119	0.131

31.5 106%

PB 0024

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.399	0.369	0.199
PEAK AREA (ABS-SECONDS)	CCV	0.335	0.153	0.137

41.3 104.5%

PB 0025

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.049	0.007	0.045
PEAK AREA (ABS-SECONDS)	CCB	0.046	0.001	0.045

40.5

PB 0026

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	148	0.578	0.532	0.193
PEAK AREA (ABS-SECONDS)		0.442	0.217	0.224

57.9 T

PB 0027

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.734	0.685	0.193
PEAK AREA (ABS-SECONDS)	A	0.532	0.235	0.237

76.1 91%

PB 0028

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	149	0.295	0.259	0.131
PEAK AREA (ABS-SECONDS)		0.307	0.099	0.209

25.9 T

PB 0029

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.485	0.448	0.179
PEAK AREA (ABS-SECONDS)	A	0.386	0.175	0.211

46.4 102.5%

PB 0030

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.174	0.147	0.177
PEAK AREA (ABS-SECONDS)	150 T	0.243	0.055	0.185

14.9

WADSWORTH/ALERT LABORATORIES, INC.

PB 0031

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

98.5%

PB 0032

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

151 T

PB 0033

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.470	0.443	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	0.430	[illegible]

A

99%

PB 0034

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	0.099	0.173
PEAK AREA (ABS-SECONDS)	[illegible]	0.092	[illegible]

152 T

PB 0035

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	0.174
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

97%

PB 0036

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.472	0.338	0.131
PEAK AREA (ABS-SECONDS)	0.279	[illegible]	[illegible]

CCU

107.8%

PB 0037

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.092	0.007	0.092
PEAK AREA (ABS-SECONDS)	0.095	0.009	0.092

CCB

PB 0038

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.742	0.728	0.214
PEAK AREA (ABS-SECONDS)	0.546	0.395	0.151

153 T

PB 0039

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.885	0.850	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	0.360	0.360

A

WADSWORTH/ALERT LABORATORIES, INC.

E-25: READING GREATER THAN HIGHEST STANDARD.

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

154 T

[illegible]

PB 0041

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

[illegible] 98%

PB 0042

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

155 T

[illegible]

PB 0043

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.764	0.702	0.251
PEAK AREA (ABS-SECONDS)	0.610	0.309	0.301

A

[illegible] 81.5%

PB 0044

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.958	0.916	0.177
PEAK AREA (ABS-SECONDS)	0.930	0.113	[illegible]

156 T

[illegible]

PB 0045

PB 0045 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.522	0.475	0.172
PEAK AREA (ABS-SECONDS)	0.355	0.123	[illegible]

A

[illegible] 96.5%

PB 0046

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.874	0.829	0.233
PEAK AREA (ABS-SECONDS)	0.417	0.352	0.365

157 T

[illegible] E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0047

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	1.007	0.958	[illegible]
PEAK AREA (ABS-SECONDS)	0.484	0.415	0.369

A

[illegible] E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0048

WADSWORTH/ALERT LABORATORIES, INC.

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	CCV	[illegible]	[illegible]	[illegible]

105.8%

PB 0049

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	CCB	[illegible]	[illegible]	[illegible]

PB 0050

157 T

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	MS	[illegible]	[illegible]	[illegible]

PB 0051

157 T

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	0.206
PEAK AREA (ABS-SECONDS)	MSD	[illegible]	[illegible]	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0052

158 T

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)		[illegible]	[illegible]	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0053

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	A	[illegible]	[illegible]	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0054

PB 0054 (CONTINUED)

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	0.390	0.134
PEAK AREA (ABS-SECONDS)	CCV	[illegible]	[illegible]	[illegible]

114.5%

PB 0055

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.029	0.008	[illegible]
PEAK AREA (ABS-SECONDS)	CCB	0.034	0.002	[illegible]

PB 0056

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)		[illegible]	[illegible]	[illegible]

83

153 (2x) T

WADSWORTH/ALERT LABORATORIES, INC.

PB 0057

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.573	0.550	[illegible]
PEAK AREA (ABS-SECONDS)	0.448	0.325	[illegible]

A

[illegible] 91%

PB 0058

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.701	0.688	[illegible]
PEAK AREA (ABS-SECONDS)	0.307	0.273	[illegible]

157 T (5x)

[illegible] 100.

PB 0059

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.573	0.559	[illegible]
PEAK AREA (ABS-SECONDS)	0.347	0.334	[illegible]

A

[illegible] 103.5%

PB 0060

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.154	0.148	[illegible]
PEAK AREA (ABS-SECONDS)	0.135	0.050	[illegible]

157 (5x) T MS

[illegible]

PB 0061

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.355	0.353	0.007
PEAK AREA (ABS-SECONDS)	0.353	0.157	[illegible]

157 (5x) T MSD

[illegible]

PB 0062

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.329	0.317	0.027
PEAK AREA (ABS-SECONDS)	0.424	0.092	0.032

158 (10x) T

[illegible] 240

PB 0063

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.384	0.376	0.024
PEAK AREA (ABS-SECONDS)	0.193	0.165	[illegible]

A

[illegible] 99.5%

PB 0064

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.424	0.395	0.122
PEAK AREA (ABS-SECONDS)	0.275	0.157	[illegible]

CCV

[illegible] 104.2%

PB 0065

PB 0065 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.028	0.008	[illegible]
PEAK AREA (ABS-SECONDS)	0.031	0.002	[illegible]

CCB

WADSWORTH/ALERT
LABORATORIES, INC.

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	0.219	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

2513-24111 Diss MS

100.5%

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

24111 Diss MSD

102%

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

CCV

110%

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.024	0.007	0.074
PEAK AREA (ABS-SECONDS)	[illegible]	0.002	[illegible]

CCB

WADSWORTH/ALERT
LABORATORIES, INC.

Initials/Date	SAMPLE ID.	wt(gm)/VOL(ml)	Appearance Before Dig.	Appearance After Dig.
MC 3/8/91	2515			
FURNACE	2515 BLANK	100ml/100ml	clear no color no sol	clear no color no sol
PD	2515 CHECK		" " "	" " "
By Cust Request	24157 MS		cloudy Brown sol	cloudy lite tan sol.
	24157 MSD		" " "	" " " .
	24141		clear no color no sol	clear no color no sol
	24142		cloudy light tan Brown Sol	cloudy lite tan sol
	24143		cloudy no color no sol	cloudy no color whiteppt
	24144		cloudy Brown sol	cloudy dk Brown sol
	24145		" " "	cloudy faint tan Sol.
	24146		" lite tan "	cloudy lite tan sol
	24147		cloudy no color no sol	clear no color whiteppt
	24148		cloudy tan tint no sol	cloudy tan tint sol
	24149		clear no color no sol	clear no color no sol
	24150		cloudy lite tan sol	clear lit tan sol
	24151		↓ ↓ ↓	↓ ↓ ↓
	24152			
	24153		cloudy dk Brown sol	cloudy dk Brown sol
	24154		cloudy lite tan sol	cloudy lite tan sol
	24155		cloudy tan sol	" " "
	24156		cloudy lite tan sol	cloudy " "
	24157		cloudy Brown sol	cloudy Brown Sol
	24158	↓ ↓	clear no color no sol	clear no color no sol
3-18-91 CMF	2474-23771	.23 → 100	Fine sand Gray Brown w/water	
	D	.20 → 100	↓	
	S	.23 → 100	Fine Gray Brown sand w/water layer	
	23772	.22 → 100	Fine Gray-Brown sand	
	23773	.21 → 100	TAN Clay soil	
	23774	.24 → 100	TAN Clay soil	
	23775	.25 → 100	DARK Brown Clay soil	
	LCSS			
	PBS			

WADSWORTH/ALERT LABORATORIES, INC.

PEAK AREA (ABS-SECONDS)		0.043	0.015	0.034

105 T

****

PB 0057

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.220	0.220	0.092
PEAK AREA (ABS-SECONDS)	A	0.172	0.089	0.083

23.1 115.5%

****

PB 0058

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.495	0.411	0.117
PEAK AREA (ABS-SECONDS)	CCV	0.274	0.169	0.110

42.5 107%

****

PB 0059

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.023	0.019	0.022
PEAK AREA (ABS-SECONDS)	CCB	0.030	0.005	0.025

0.9

****

PB 0060

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.036	0.031	0.034
PEAK AREA (ABS-SECONDS)	106 T	0.044	0.010	0.034

2.1

****

PB 0061

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.246	0.239	0.039
PEAK AREA (ABS-SECONDS)	A	0.119	0.037	0.032

22.4 101.5%

****

PB 0062

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.083	0.034	0.086
PEAK AREA (ABS-SECONDS)	2513-24111 T	0.084	0.010	0.074

2.1

****

PB 0063

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.263	0.245	0.077
PEAK AREA (ABS-SECONDS)	A	0.162	0.090	0.071

23.4 106.5%

****

PB 0064

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.174	0.095	0.176
PEAK AREA (ABS-SECONDS)	120 T	0.216	0.033	0.183

8.2

****

PB 0065

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.359	0.299	0.176

WADSWORTH/ALERT
LABORATORIES, INC. 2515T

U.S. EPA - CLP

14

400 William Pitt Way
Pittsburgh, PA 15238

(412) 826-5477
FAX (412) 826-5571

ANALYSIS RUN LOG

Lab Name: Wadsworth - Pgh

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID Number: PE3030

Method: _

Start Date: 3-19

End Date: 3-19

BC

EPA Sample No.	D/F	Time	% R	Analytes: AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
30																											
S1 3																											
S2 40																											
S2 90																											
ICV			103.8																								
ICB																											
CCB																											
AB 3-19																											
A			108																								
LCSW 3-19			101.2																								
A			97.5																								
2515-24141	T																										
A			111																								
142	T																										
A			80.5																								
CCV			107																								
CCB																											
143	T																										
A			102																								
144	T																										
A			79.5																								
145	T																										
A			82.5																								
146	T																										
A			105.5																								
147	T																										
A			106																								
CCV			104.5																								
CCB																											
148	T																										
A			91																								
149	T																										
A			102.5																								
150	T																										

FORM XIV 270 - IN

3/90

pg 1 of 3

OSWORTH/ALERT
ORATORIES, INC.

Sampling, testing, mobile lab

400 William Pitt Way
Pittsburgh, PA 15238

(412) 826-5477
FAX (412) 826-5

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: Wadsworth - Pgh

Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID Number: PE3030

Method: _

Start Date: 3-19

End Date: 3-19

BC

EPA Sample No.	D/F	Time	% R	Analytes: AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	HG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
A			98.5												X												
151	T																										
A			99																								
152	T																										
A			97																								
CCV			107.8																								
CCB																											
153	T																										
A			Dilute																								
154	T																										
A			98																								
155	T																										
A			91.5																								
156	T																										
A			96.5																								
157	T																										
A			Dilute																								
CCV			105.9																								
CCB																											
157	MST		Dilute																								
157MSD	T																										
158	T																										
A			Dilute																								
CCV			114.5																								
CCB																											
153 T	2x																										
A			91																								
157 T	5x																										
A			103.5																								
157	7MS 5x																										
157	7MSD 5x																										
158 T	10x																										
A			99.5																								
CCV			104.2																								

FORM XIV 271 - IN

pg 2 of 3

3/90

WADSWORTH/ALERT
LABORATORIES, INC.

450 William Pitt Way
Pittsburgh, PA 15238

(412) 826-5477
FAX (412) 826-5571

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: Wadsworth - Pgh   Contract: ______

Lab Code: ______   Case No.: ______   SAS No.: ______   SDG No.: ______

Instrument ID Number: PE3030   Method: __

Start Date: 3-19   End Date: 3-19

BC

EPA Sample No.	D/F	Time	% R	AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
CCB															X												
23,3-24111	Diss MS		100.5																								
24111	Diss MSD		102																								
PSW			110																								
CCB																											

FORM XIV 272 - IN   pg 3 of 3   3/90

R = .9989 3-19-91 BC

WADSWORTH/ALERT LABORATORIES, INC.

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.014	[illegible]	0.014
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

MM = 1.0% NH_4 [illegible]

0.003

AUTOZERO

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.040	[illegible]	0.014
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	0.014

TOTAL

[illegible]

STANDARD 1

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.442	0.428	0.014
PEAK AREA (ABS-SECONDS)	[illegible]	0.160 .160	[illegible]

46.3 E-25: READING GREATER THAN HIGHEST STANDARD.

STANDARD 2

PB

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.784	0.773	0.014
PEAK AREA (ABS-SECONDS)	0.312	0.294	[illegible]

74.1 E-25: READING GREATER THAN HIGHEST STANDARD.

STANDARD 3

PB 0001

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.424	0.398	0.106
PEAK AREA (ABS-SECONDS)	0.251	0.157	0.094

ICV

41.5 103.8%

PB 0002

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.018	0.007	0.018
PEAK AREA (ABS-SECONDS)	0.022	0.004	0.018

ICB

0.4

PB 0003

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.049	0.049	0.016
PEAK AREA (ABS-SECONDS)	0.030	0.015	0.015

CRA

3.2

PB 0004

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.018	0.014	0.014
PEAK AREA (ABS-SECONDS)	0.019	0.005	0.014

PBW 3-18

0.5

WADSWORTH/ALERT LABORATORIES, INC.

PB 0005

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.290	0.284	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	0.039	[illegible]

A

21.6 108%

PB 0006

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.415	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

LCSW 3-18

40.5 101.2%

PB 0007

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.597	0.590	[illegible]
PEAK AREA (ABS-SECONDS)	0.233	[illegible]	[illegible]

A

39.0 97.5%

PB 0008

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.017	0.016	0.013
PEAK AREA (ABS-SECONDS)	0.020	0.006	0.014

2515-24141

0.3 T

PB 0009

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.217	0.210	0.015
PEAK AREA (ABS-SECONDS)	0.101	0.085	[illegible]

A

33.3 111%

PB 0010

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.611	0.556	0.193
PEAK AREA (ABS-SECONDS)	0.456	0.317	0.339

142 T

57.5

PB 0011

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.797	0.711	0.206
PEAK AREA (ABS-SECONDS)	0.524	[illegible]	0.248

A

73.9 80.5%

PB 0012

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.422	0.282	0.140
PEAK AREA (ABS-SECONDS)	0.294	0.161	0.133

CCV

42.9 107%

PB 0013

PB 0013 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.039	0.010	0.038

WADSWORTH/ALERT
LABORATORIES, INC.

PEAK AREA (ABS-SECONDS) CCB [illegible]

PB 0014

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.252	0.244	0.154
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

143 T

[illegible]

PB 0015

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.404	0.414	0.148
PEAK AREA (ABS-SECONDS)	0.306	0.197	[illegible]

A

[illegible] 102%

PB 0016

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.527	0.464	0.230
PEAK AREA (ABS-SECONDS)	0.453	0.184	0.269

144 T

[illegible]

PB 0017

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.850	0.587	0.263
PEAK AREA (ABS-SECONDS)	0.515	0.242	0.273

A

[illegible] 78.5%

PB 0018

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.848	0.533	0.315
PEAK AREA (ABS-SECONDS)	0.504	0.237	0.267

145 T

[illegible]

PB 0019

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.731	0.736	0.220
PEAK AREA (ABS-SECONDS)	0.558	0.299	0.258

A

[illegible] 82.5%

PB 0020

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.168	0.129	0.174
PEAK AREA (ABS-SECONDS)	0.229	0.043	0.186

146 T

[illegible]

PB 0021

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.324	0.302	0.170
PEAK AREA (ABS-SECONDS)	0.301	0.121	[illegible]

A

[illegible] 105.5%

PB 0022

WADSWORTH/ALERT LABORATORIES, INC.

PB 0022 CONTINUED

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.197	0.102	0.143
PEAK AREA (ABS-SECONDS)	0.172	0.041	[illegible]

147 T

10.9

****

PB 0023

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.354	0.285	0.136
PEAK AREA (ABS-SECONDS)	0.341	0.119	[illegible]

A

11.5 106%

****

PB 0024

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.399	0.259	0.139
PEAK AREA (ABS-SECONDS)	0.335	0.182	[illegible]

CCV

41.3 104.5%

****

PB 0025

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.049	0.007	0.045
PEAK AREA (ABS-SECONDS)	0.045	0.001	0.045

CCB

-0.5

****

PB 0026

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.578	0.552	0.193
PEAK AREA (ABS-SECONDS)	0.442	0.217	0.224

148 T

57.6

****

PB 0027

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.734	0.685	0.193
PEAK AREA (ABS-SECONDS)	0.532	0.335	0.237

A

75.[illegible] 91%

****

PB 0028

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.295	0.255	0.131
PEAK AREA (ABS-SECONDS)	0.307	0.199	[illegible]

149 T

35.9

****

PB 0029

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.485	0.448	0.179
PEAK AREA (ABS-SECONDS)	0.386	0.175	0.211

A

46.4 102.5%

****

PB 0030

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.174	0.147	0.177
PEAK AREA (ABS-SECONDS)	0.243	0.155	0.185

150 T

14.9

****

WADSWORTH/ALERT LABORATORIES, INC.

PB 0031

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

98.5%

PB 0032

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

151 T

PB 0033

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.471	0.443	0.471
PEAK AREA (ABS-SECONDS)	[illegible]	0.430	[illegible]

A

99%

PB 0034

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	0.099	0.178
PEAK AREA (ABS-SECONDS)	[illegible]	0.092	[illegible]

152 T

PB 0035

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.307	[illegible]	0.174
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

97%

PB 0036

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.423	0.339	0.131
PEAK AREA (ABS-SECONDS)	0.279	0.193	0.116

CCU

107.8%

PB 0037

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.092	0.007	0.092
PEAK AREA (ABS-SECONDS)	0.089	0.003	0.092

CCB

PB 0038

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.742	0.703	0.214
PEAK AREA (ABS-SECONDS)	0.546	0.296	0.251

153 T

PB 0039

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.855	0.850	0.214
PEAK AREA (ABS-SECONDS)	0.630	0.360	0.250

A

WADSWORTH/ALERT LABORATORIES, INC.

E-25: READING GREATER THAN HIGHEST STANDARD.

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

154 T

[illegible]

PB 0041

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

A

[illegible] 98%

PB 0043

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

155 T

[illegible]

PB 0043

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.764	0.702	0.250
PEAK AREA (ABS-SECONDS)	0.610	0.509	0.601

A

[illegible] 81.5%

PB 0044

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.952	0.915	0.177
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

156 T

[illegible]

PB 0045

PB 0045 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.522	0.475	0.173
PEAK AREA (ABS-SECONDS)	0.385	0.433	[illegible]

A

[illegible] 96.5%

PB 0046

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.874	0.829	0.222
PEAK AREA (ABS-SECONDS)	0.417	0.352	0.355

157 T

[illegible] E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0047

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	1.007	0.959	[illegible]
PEAK AREA (ABS-SECONDS)	0.484	0.415	[illegible]

A

[illegible] E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0048

WADSWORTH/ALERT LABORATORIES, INC.

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.393	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

CCV 105.8%

PB 0049

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

CCB

PB 0050

157 T MS

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

PB 0051

157 T MSD

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	1.279	0.206
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0052

158 T

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	1.370	1.254	0.059
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0053

A

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	1.445	1.324	[illegible]
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	0.145

E-25: READING GREATER THAN HIGHEST STANDARD.

PB 0054

PB 0054 (CONTINUED)

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	[illegible]	0.396	0.134
PEAK AREA (ABS-SECONDS)	[illegible]	[illegible]	[illegible]

CCV 114.5%

PB 0055

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.029	0.008	[illegible]
PEAK AREA (ABS-SECONDS)	0.034	0.002	[illegible]

CCB

PB 0056

	AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	0.414	[illegible]	0.200
PEAK AREA (ABS-SECONDS)	0.434	0.157	[illegible]

83

153 (2x) T

WADSWORTH/ALERT LABORATORIES, INC.

PB 0057

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.573	0.550	0.193
PEAK AREA (ABS-SECONDS)	A	0.449	0.225	0.224

59.9 91%

PB 0058

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.301	0.199	0.142
PEAK AREA (ABS-SECONDS)	157	0.207	0.078	0.129

T (5x)

20.2 100.

PB 0059

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.373	0.359	0.193
PEAK AREA (ABS-SECONDS)	A	0.393	0.154	0.119

40.9 103.5%

PB 0060

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.154	0.149	0.131
PEAK AREA (ABS-SECONDS)	157 (5x)	0.135	0.060	0.124

15.5 T MS

PB 0061

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	157 (5x)	0.365	0.359	0.107
PEAK AREA (ABS-SECONDS)	T MSD	0.262	0.157	0.105

41.6

PB 0062

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	158	0.222	0.217	0.027
PEAK AREA (ABS-SECONDS)	(10x)	0.124	0.092	0.032

24.0 240 T

PB 0063

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.384	0.376	0.024
PEAK AREA (ABS-SECONDS)	A	0.193	0.155	0.038

43.9 99.5%

PB 0064

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.424	0.395	0.122
PEAK AREA (ABS-SECONDS)	CCV	0.276	0.157	0.119

41.7 104.2%

PB 0065

PB 0065 (CONTINUED)

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)	CCB	0.028	0.006	0.028
PEAK AREA (ABS-SECONDS)		0.031	0.002	0.033

WADSWORTH/ALERT
LABORATORIES, INC.

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	0.218	[illegible]
PEAK AREA (ABS-SECONDS)		[illegible]	[illegible]	[illegible]

2513-24111 Diss MS

100.5%

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)		[illegible]	[illegible]	[illegible]

24111 Diss MSD

102%

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		[illegible]	[illegible]	[illegible]
PEAK AREA (ABS-SECONDS)		[illegible]	[illegible]	[illegible]

CCV

110%

		AA	AA-BG	BG
PEAK HEIGHT (ABSORBANCE)		0.024	0.007	0.034
PEAK AREA (ABS-SECONDS)		[illegible]	0.002	[illegible]

CCB

WADSWORTH/ALERT
LABORATORIES, INC.

Initials/Date	SAMPLE I.D.	wt(gm)/VOL(ml)	APPEARANCE Before Dig.	APPEARANCE After Dig.
MC 3/18/91	2515			
FURNACE	2515 BLANK	100ml/100ml	clear no color no sol	clear no color no sol
Pb	2515 CHECK		" " "	" " "
By Cost Request	24157 MS		cloudy Brown Sol	cloudy lite tan sol.
	24157 MSD		" " "	" " "
	24141		clear no color no sol	clear no color no sol
	24142		cloudy light tan Brown Sol	cloudy lite tan sol
	24143		cloudy no color no sol	cloudy no color white ppt
	24144		cloudy Brown sol	cloudy dk Brown sol
	24145		" " "	cloudy faint tan Sol.
	24146		" lite tan "	cloudy lite tan Sol
	24147		cloudy no color no sol	clear no color white ppt
	24148		cloudy tan tint no sol	cloudy tan tint sol
	24149		cloudy no color no sol	clear no color no sol
	24150		cloudy lite tan sol	clear lit tan sol
	24151		↓ ↓ ↓	↓ ↓ ↓
	24152		↓ ↓ ↓	↓ ↓ ↓
	24153		cloudy dk Brown sol	cloudy dk Brown sol
	24154		cloudy lite tan sol	cloudy lite tan sol
	24155		cloudy tan sol	" " "
	24156		cloudy lite tan sol	cloudy " "
	24157		cloudy Brown sol	cloudy Brown Sol
	24158	↓ ↓	clear no color no sol	clear no color no sol
3-18-91 CMF	2371-23771	.23 → 100	Fine sand Light Brown w/ water	
	D	.20 → 100		
	S	.23 → 100	Fine Heavy Brown sand w/ water	
	23772	.22 → 100	Fine Gray-Brown sand	
	23773	.21 → 100	TAN Clay soil	
	23774	.24 → 100	TAN Clay soil	
	23775	.25 → 100	DARK Brown Clay soil	
	LCSS			
	PBS			

WADSWORTH/ALERT
LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES ANALYSIS LOG SHEET

Parameter pH/CONDUCTIVITY
pH Meter Calibration
7.0 7.01
4.0 4.01
10.0 10.05

ACTUAL VALUE
% RECOVERY = TRUE VALUE

Analyst AO
Date 3-15-91
Page 1 of 1

pH BLANK 6.6
pH STANDARD 6.7
pH 97 % recovery

COND BLANK 2.1
COND STANDARD 262
COND 93 % recovery

SAMPLE ID	pH READING	RECORD	COND READING	RECORD
2515-24141	6.57	6.6	103.4	100
24141 Dup	6.58	6.6	106.1	100
24142	6.40	6.4	1503	1500
24143	7.08	7.1	743	740
24144	6.09	6.1	3.11 millimho/3110	3100
24145	6.51	6.5	847	850
24146	6.19	6.2	603	600
24147	7.02	7.0	542	540
24148	6.58	6.6	2.90 millimho/2900	2900
24149	6.04	6.0	1580	1600
24150	6.32	6.3	963	960
24151	6.37	6.4	946	950
24152	6.30	6.3	911	910
24153	6.90	6.9	942	940
24154	6.17	6.2	513	510
24155	5.88	5.9	2.88 millimho/2880	2900
24156	6.64	6.6	959	960
24157	6.55	6.6	1577	1600
2519-24199	6.27	6.3	881	880
2521-24219				
24219 DO 3-19-91	10.78	11		

Ann O'Toole 3-19-91
okay for records J. H. Dukey 3/19/91

WADSWORTH/ALERT LABORATORIES, INC.

Lot ~~[illegible]~~ 2519-
~~2415~~ RB 3/28/91 ~~2415~~ 2515-

WADSWORTH/ALERT LABORATORIES
ACIDITY LOG SHEET

Parameter ACIDITY

Analyst C. Yost

pH meter Cal 7.00 7.0 buffer

Date 3/18/91

4.00 4.0 buffer

Page 1 of 2

pH check std 10.03 ✓ 10.0 buffer

H2SO4 Standardization:

A. ___N of H2SO4 = 0.0201 ✓

(2.5001 g of Na2CO3)(20 ml of Na2CO3)

(47 ml of H2SO4) (53)

B. ___N of H2SO4 =

(____g of Na2CO3)(____ml of Na2CO3)

(____ml of H2SO4) (53)

NaOH Standardization:

A. ___N of NaOH = 0.0199 ✓

(10.0001 g of KHC8H404)(20 ml of KHC8H404)

(49.1 ml of NaOH) (204.2)

B. ___N of NaOH =

(___g of KHC8H404)(___ ml of KHC8H404)

(___ ml of NaOH) (204.2)

Calculations:

Total Acidity as CaCO3 mg\L =

[(ml of NaOH x N of NaOH) - (ml of H2SO4 x N of H2SO4)] x 50000
---
ml of sample

SAMPLE ID	pH	VOLUME ml	ml of NaOH	N of NaOH	ml of H2SO4	N of H2SO4	% SOLID	CONC mg/l	LDL
Blank	5.72	100	[illegible]	0.0199	5	0.0201		6.3 ~~1.5~~ ND	1.0
2519-~~2417~~-24195	4.30		18.8		5			140 ~~27~~	
2519 ~~2419~~-24197	7.00		28.1		50			ND	
2513 ~~2415~~-24120	7.75		6.1		15			ND	
2515 ~~2415~~-24141	6.53		6.2		5			11 ~~2.5~~	
24142	6.58		19.7		50			ND	
24143	3.48		1.6		—			16 ~~2.2~~	ND 3/18/91
24144	6.15		25.4		25			1.5 ~~ND~~	ND 3/18/91
2515 ~~2415~~-24145	6.60	100	10.5	0.0199	15	0.0201		ND	1.0

RB 3/28/91

RB 3/28/91

Cindy Yost 3/19/91

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
ACIDITY LOG SHEET (CONTINUED)

Parameter ACIDITY

Analyst C. Yost

Date 3/18/91

Page 2 of 2

SAMPLE ID	pH	VOLUME	ml of NaOH	N of NaOH	ml of H2SO4	N of H2SO4	% SOLID	CONC	LDL
2515 - 24146	6.65	100	8.7	0.0199	35	0.0201		ND	1.0
24147	7.20		9.9		30			ND	
24148	6.60		13.6		50			ND	
24149	6.09		9.9		15			ND	
24150	6.41		2.5		15			ND	
24151	6.42		3.7		15			ND	
24152	6.57		3.3		10			ND	
24153	6.91		11.2		50			ND	
24154	6.24		3.5		10			ND	
24155	6.03		21		20			8.0 ~~1.6~~	
24156	6.79		4.2		20			ND	
2515 - 24157	6.78		36.1		70			ND	
2519 (dup) - 24195	4.29		17.8		5			130 ~~2.5~~	
Blank	5.43	100	5.9	0.0199	5	0.0201		8.4 ~~1.7~~	1.0

should run MS + MSD on this sample

Cindy Yost 3/19/91
okay to record
[illegible] 3/19/91

Lot 2515

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
ACIDITY LOG SHEET

Parameter ACIDITY

Analyst [illegible]

pH meter Cal [illegible] 7.0 buffer

Date [illegible]

_____ 4.0 buffer

Page _____ of _____

pH check std [illegible]

H2SO4 Standardization:

A. ___N of H2SO4 = [illegible]

(____g of Na2CO3)(____ml of Na2CO3)

(____ml of H2SO4) (53)

B. ___N of H2SO4 =

(____g of Na2CO3)(____ml of Na2CO3)

(____ml of H2SO4) (53)

NaOH Standardization:

A. ___N of NaOH = 0.0199

(____g of KHC8H404)(___ ml of KHC8H404)

(___ ml of NaOH) (204.2)

B. ___N of NaOH =

(___g of KHC8H404)(___ ml of KHC8H404)

(___ ml of NaOH) (204.2)

Calculations:

Total Acidity as CaCO3 mg\L =

[(ml of NaOH x N of NaOH) - (ml of H2SO4 x N of H2SO4)] X50000
---
ml of sample

record units in bench sheets KD3/20/91

mg/L

SAMPLE ID	pH	VOLUME	ml of NaOH	N of NaOH	ml of H2SO4	N of H2SO4	% SOLID	CONC	LDL
[illegible]	[illegible]	100	5.6	[illegible]	5	[illegible]		3.5 [illegible]	[illegible]
[illegible]	[illegible]		35		70			ND	
[illegible]	[illegible]	✓	35.5	✓	70	✓		ND ✓	
[illegible]	[illegible]	100	5.7	[illegible]	5	[illegible]		3.4 ✓	[illegible]

Copy [illegible]

okay & reused

[illegible]

3/20/91

KD3/20/91

2515-

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
AKALINITY LOG SHEET

Parameter ALKALINITY

Analyst R. BELONUS

pH meter Cal 6.97 7.0 buffer

Date 3-18-91

3.92 4.0 buffer

Page 1 of 2

pH check std (10.0) 9.98

Titrant Standardization:

A. [illegible] N of H2SO4 =

([illegible] g of Na2CO3)(20 ml of Na2CO3)

([illegible] ml of H2SO4) (53)

B. ___N of H2SO4 =

(_____g of Na2CO3)(_____ml of Na2CO3)

(_____ml of H2SO4) (53)

Calculations:

Akalinity as CaCO3 mg/L =

(_____ml of H2SO4)(N)(50,000)

ml of sample

Alkalinity Relationships:

Results	OH-	CO32-	HCO3
P = 0	0	0	T
P < 1/2T	0	2P	T - 2P
P = 1/2T	0	2P	0
P > 1/2T	2P - T	2(T - P)	0
P = T	T	0	0

P = phenolphthalein alkalinity (pH 8.3)
T = total alkalinity (pH 4.5)

record units on Bench Sheet

(NOT REQUESTED)

SAMPLE ID	pH	VOLUME	ml to pH 8.3	TOTAL ml pH 4.5	N .0202	T ALK mg/L	OH-	CO32-	HCO3-	% SOLID	LDL
BLANK	5.6	100ml	0.0	.1	.0202	1.0					1.0
ERA 9936 160(147-173)	9.0	25ml	2.5	4.0		161.6 - 101%					
CHECK STD 10ml V-20, [illegible]	10.5	100ml	12.3	23.2		234.3 99.1%					
2515-24141	6.9	100ml	0.0	.77		7.8					
-24142	6.5	100ml	0.0	47.0		470					
-24143	7.2	100ml	0.0	42.3		430					

Robert D Belonus 3/20/91
okay to record
[illegible] 3/20

WADSWORTH/ALERT LABORAT ES
ALKALINITY LOG SHEET (CONTINUED)

WADSWORTH/ALERT LABORATORIES, INC.

Parameter ALKALINITY

Analyst R Belonus

Date 3-18-91

Page 2 of 2

(Not Requested)

SAMPLE ID	pH	VOLUME	ml to pH 8.3	TOTAL ml pH 4.5	N	T ALK	OH-	CO32-	HCO3-	% SOLID	LDL
2515-24144	6.2	100 ml	0.0	23.7	[illegible]	240 ✓					1.0
-24145	6.6		0.0	29.8		300 ✓					
-24146	6.2		0.0	13.4		140 ✓					
-24147	7.1		0.0	27.9		280 ✓					
-24148	6.7		0.0	44.6		450 ✓					
-24149	6.1		0.0	11.0		110 ✓					
-24150	6.4		0.0	13.5		140 ✓					
-24151	6.4		0.0	13.4		140 ✓					
-24152	6.4		0.0	8.2		82 KD 3/20/91					
-24153	7.0		0.0	45.3		460 ✓					
-24154	6.2		0.0	6.7		68 ✓					
-24155	6.2		0.0	16.8		170 ✓					
24156	6.8		0.0	19.6		200 ✓					
-24157	6.8	50 ml	0.0	67.2	(678.72)	680 ✓					
* -24157MS	7.6	50 ml	0.0	41.8		844.36	~~[illegible]~~ 99.6 KD 3/20/91				
* 24157MSD	7.5	50 ml	0.0	41.6		840.32	~~[illegible]~~ 99.2 KD 3/20/91				
BLANK	5.5	100 ml	0.0	.1		1.0					
[illegible] STD [illegible]	10.5	100 ml	12.1	23.2	1	234.3 ✓ 99.1%					✓
MS + MSD	Prep.	45 ml	Spk No.	2515-24157 =		~~(687.72 x 9) 450~~					
		5 ml	Na_2CO_3 STD.		678.72 KD 3/20/91	~~687.72~~ 45 ml / 50 ml	= ~~618.448~~ 610.848 KD 3/20/91				
						5 ml Na_2CO_3 STD / 50 ml	= 236.5 / ~~855.448~~			847.348 KD 3/20/91	

Robert D Belonus 3/20/91

observed to record T. H. Dickey 3/20/91

2515-

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
Spectraphotometric Log Sheet

Parameter Nitrate

Wave Length 410

Curve Regression .9962

Analyst C. Yost, R Belonus

Date 3/25/91

Page 1 of 4

ABSORBANCE READING	STANDARD CONCENTRATION
0.0	Blank
0.04	0.1
0.112	0.2
0.270	0.4
0.75	1.0
0.1	1.2

CALCULATIONS:

SAMPLE ID	LIQUID/ SOLID RATIO	ABSORB	BLANK ABSORB	CONC	ALL DIL FACTORS	% SOLID	FINAL CONC	LDL
Blank		0.00		ND	—		ND	.1
.5V STD		.391		.462	—		9238 462	.1
583 [illegible]							1102	
ERA 9936		.890		.976	1/10		9.76	.1
2515-24141		.095		.156	—		.16 ~~.17~~ RD 3/26/91	
24142		.225		.290	—		.29	.1
24143		.049		.109	—		.11	.1
24144		.179		.243	—		.24	.1
24145		.237		.303	—		.30	.1
24146		.099		.160 RD 3/26/91	—		.16	.1
24147		.070		.130	—		.13	.1
24148		.432		.504	5/10		1.0 ~~1.0~~ CS 3/25/91	.2
24149		.121		.183	—		.18	.1
24150		.125		.187	—		.19	.1
24151		.145		.208	—		.21	.1
24152		.570		.646	5/10		1.3	.2
2515-24153		.105		.166	—		.17	.1

Cindy Yost 3/25/91
Robert J. Belonus 3/25/91
[illegible]

2515-

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
Spectraphotometric Log Sheet

Parameter Nitrates

Wave Length

Curve Regression 9962

Analyst C. Yost R. Belanus

Date 3/25/91

Page 2 of 4

ABSORBANCE READING

STANDARD CONCENTRATION

CALCULATIONS:

SAMPLE ID	LIQUID/ SOLID RATIO	ABSORB	BLANK ABSORB	CONC	ALL DIL FACTORS	% SOLID	FINAL CONC	LDL
2515-24154		.029 ~~.290~~ RB 3/26/91		~~.55~~ RB 3/26/91	-		N.D. ~~.85~~ RB ~~.85~~ RB 3/26/91	.1
24155		.365		435	-		.44	.1
24156		.192		.256	-		.26	1
24157		.150		.213	2x		.43	.2
TV .702 (.451) 24157		.700		.780	-		111E .780	TV=.702
TV=.702 (.450) 2515-24157		.130		.812	-		116E .812	TV=.702
2513-24111		.900		.987	2x		1.97	2
2519-24199		.040		.994	-		ND	.1
Blank		0.00		ND	-		ND	.1
.5 ✓ STD		.390		.461	-		92.1E .461	.1

MS + MSD => 9.5 ml of sol(2x) = .202 ✓

.5 ml of 100ppm stock sol'n .702 = TV ✓

Robert D. Belanus 3/25/91

Cindy Yost 3/25/91

okay to record K. H. Dickey 2/26/91

2515

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
Spectraphotometric Log Sheet

Parameter Nitrates

Wave Length 410

Curve Regression .9958

Analyst C. Yost, R. Belonus

Date 3/25/91

Page 3 of 4

ABSORBANCE READING	STANDARD CONCENTRATION
0.000	Blank
.040	.1
.109	.2
.270	.4
.477	1.0
1.15	1.2

CALCULATIONS:

SAMPLE ID	LIQUID/ SOLID RATIO	ABSORB	BLANK ABSORB	CONC	ALL DIL FACTORS	% SOLID	FINAL CONC	LDL
Blank		0.00		ND	—		ND	.1
.5V STD		.395		.451	—		90.2% .451	.1
ERA 9936		.830		.876	1/10 KD 3/26/91		99.2% 8.76	.1
2524-24244		.020		.085	—		ND	
24245		.042		.106	—		.11	
24246		.000		ND	—		ND	
24247		.006		ND	—		ND	
24248		.000		ND	—		ND	
24249		.000		ND	—		ND	
24250		.010		ND	—		ND	
24251		.120		.182	—		.18	
24252		.025		.089	—		ND KD 3/26/91	
(MSD) 24252	TV = .5	.450		.505	—	TV = .384	~~.0.7%~~ .505 86.5%	
(MSD) 2524-24252	TV = .5	.500		.553	—		~~.0.6%~~ .553 94.0%	
2522-24226	—	.029		.093	—		ND KD 3/26/91	
2522-24227	—	.072		.135	—		.14	.1

Cindy Yost 3/25/91
Robert D. Belonus 3/25/91
obsy & record [illegible] 3/26/91

2515-

WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT LABORATORIES
Spectraphotometric Log Sheet

Parameter Nitrate

Wave Length 410 nm

Curve Regression .9958

Analyst C Yost R. Belonus

Date 3/25/91

Page 4 of 4

ABSORBANCE READING

STANDARD CONCENTRATION

CALCULATIONS:

SAMPLE ID	LIQUID/ SOLID RATIO	ABSORB	BLANK ABSORB	CONC	ALL DIL FACTORS	% SOLID	FINAL CONC	LDL
2533-24361		.235		.295	—		.30	
-24362		.015		.0798	—		N.D	
-24363		.630		.680	10X		6.8	
-24364		.039		.103	—		.10	
-24365		.192		.253	—		.25	
-24366		.750		.798	20X		16	
-24367		.015		.080	2X		N.D	.2*
2535-24383		.042		.106	—		.10	.1
BLANK		.000		N.D.	—		N.D	.1
TV=.5 .5√STD		.40		.456	—		91.2% .456	.1

MS+MSD: 9.5ml sple = N.D.
.5ml 10ppm STD = .5
T.V. = .5

* Sample was diluted to eliminate a slightly turbid color Development that was ~~NB~~ 3/25/91 observed on a previous determination.

Cindy Yost 3/26/91
Robert S. Belonus 3/26/91
okay to record
[illegible] 3/26/91

WADSWORTH/ALERT LABORATORIES, INC.

0312910P

Page 1 of 2

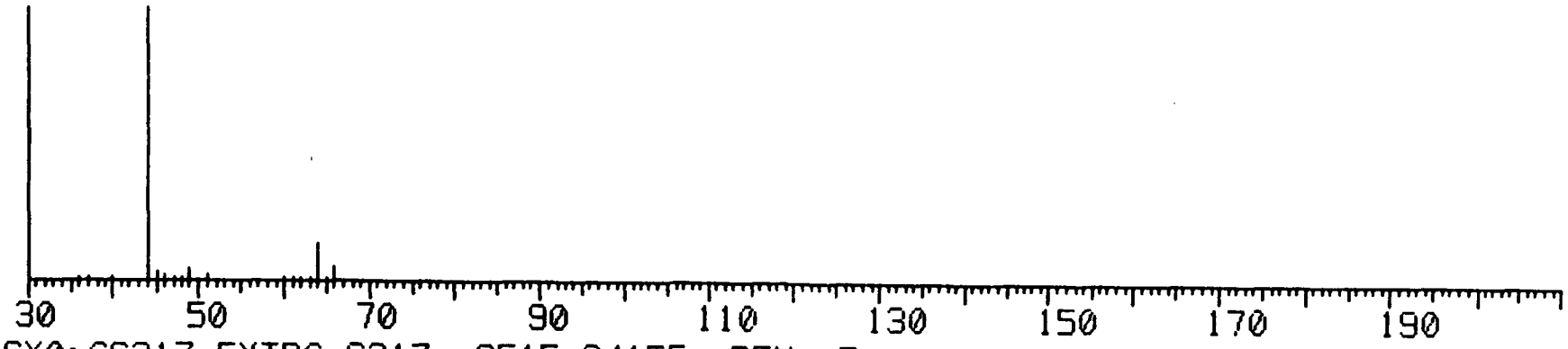
LOT #'s
2420 2515
2424 2519
2513 2522
2524

CHANNEL NAME: PHENOL
RUN DATE: 03-18-1991
SAMPLE TABLE NAME: 0318910P

#	SAMPLE ID	DIL	WGT	HEIGHT	CALC VALUE	EF	RECORD	LDL
1	SYNC	1	1	1773	0.5109	m		
2	CAL	1	1	1701	0.4903			
3	CO	1	1	0	1.2761	c		
4	BLANK	1	1	0	0.0037	I		
5	B	1	1	0	0.0037	b		
6	S1: .005	1	1	5	0.0051	I		
7	S2: .05	1	1	149	0.0463			
8	S3: .1	1	1	380	0.1124	D		
9	S4: .3	1	1	1071	0.3101			
10	S5: .4	1	1	1370	0.3956			
11	S6: .5	1	1	1727	0.4978			
12	B	1	1	0	0.0037	b		
13	ERA 9936 [illegible]	1	1	912	0.2646			
14	STD 0.250	1	1	894	0.2595			
15	B	1	1	0	0.0037	b		
16	2480-23834	1	1	0	0.0037	I	ND	0.005
17	2480-23835	1	1	2	0.0043	R	ND	0.005
18	2480-23836	1	1	11	0.0068		0.007	0.005
19	2480-23837	1	1	17	0.0086		0.009	0.005
20	2480-23838	1	1	6	0.0054		0.005	0.005
21	2480-23839	1	1	0	0.0037	R	ND	0.005
22	2480-23840	1	1	3	0.0046	R	ND	0.005
23	2480-23841	1	1	14	0.0077		0.007	0.005
24	STD 0.250	1	1	918	0.2663			
25	B	1	1	0	0.0037	b		
26	2484-23864	1	1	0	0.0037	I	ND	0.005
27	2484-23865	1	1	0	0.0037	I	ND	0.005
28	2484-23866	1	1	1	0.0040	I	ND	0.005
29	2484-23867	1	1	14	0.0077		0.008	0.005
30	2484-23868	1	1	11	0.0068	I	0.007	0.005
31	2484-23869	1	1	14	0.0077	I	0.008	0.005
32	2513-24111	1	1	24	0.0106	I	0.011	0.005
33	STD 0.250	1	1	923	0.2678			
34	B	1	1	0	0.0037	b		
35	2515-24141	1	1	0	0.0037	I	ND	0.005
36	2515-24142	1	1	0	0.0037	I	ND	0.005
37	2515-24143	1	1	3	0.0046	I	ND	0.005
38	2515-24144	1	1	19	0.0091		0.009	0.005
39	2515-24145	1	1	14	0.0077		0.008	0.005
40	2515-24146	1	1	12	0.0071		0.007	0.005
41	2515-24147	1	1	9	0.0063	I	0.006	0.005
42	2515-24148	1	1	9	0.0063		0.006	0.005
43	2515-24149	1	1	9	0.0063	I	0.006	0.005
44	STD 0.250	1	1	885	0.2569			
45	B	1	1	0	0.0037	b		
46	2515-24150	1	1	0	0.0037	I	ND	0.011
47	2515-24151	1	1	0	0.0037	I	ND	0.005
48	2515-24152	1	1	0	0.0037	I	ND	0.005
49	2515-24153	1	1	0	0.0037	I	ND	0.005
50	2515-24154	1	1	0	0.0037	I	ND	0.005
51	2515-24155	1	1	0	0.0037	I	ND	0.005
52	2515-24156	1	1	0	0.0037	I	ND	0.005
53	2515-24157	1	1	0	0.0037	I	ND	0.005
54	2515-24157-2	1	1		0.0037	I		
55	2515-24157-3	1	1		0.0037	I		
56	STD 0.250	1	1	32	0.2475			
57	B	1	1	0	0.0037	b		

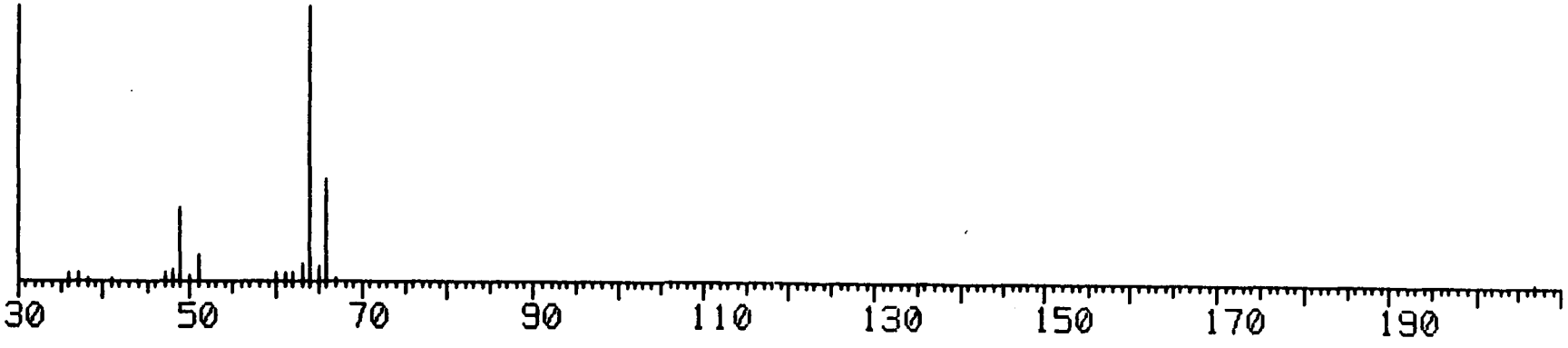
SY0:C63. EXTRC 6317, 2515-24155, REM, 5.
26-MAR-91 19:01:19 Scan 118 Time 3.53 min.
100 % = 4419

Total
45546

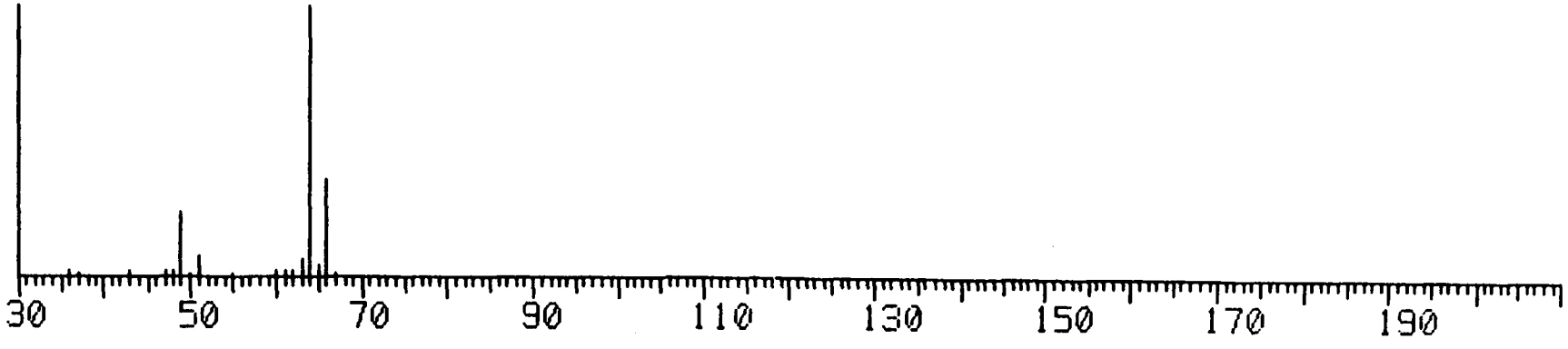


SY0:C6317 EXTRC 6317, 2515-24155, REM, 5.
26-MAR-91 19:01:19 Scan 118 Time 3.53 min.
Bkg scan = 103 100 % = 4419

Total
9497

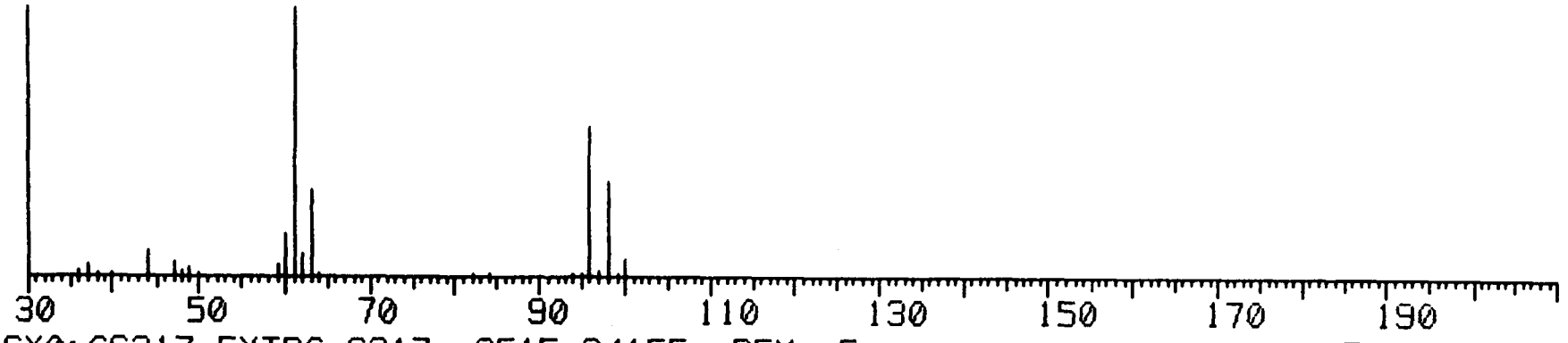


Standard Reference Spectrum: Chloroethane

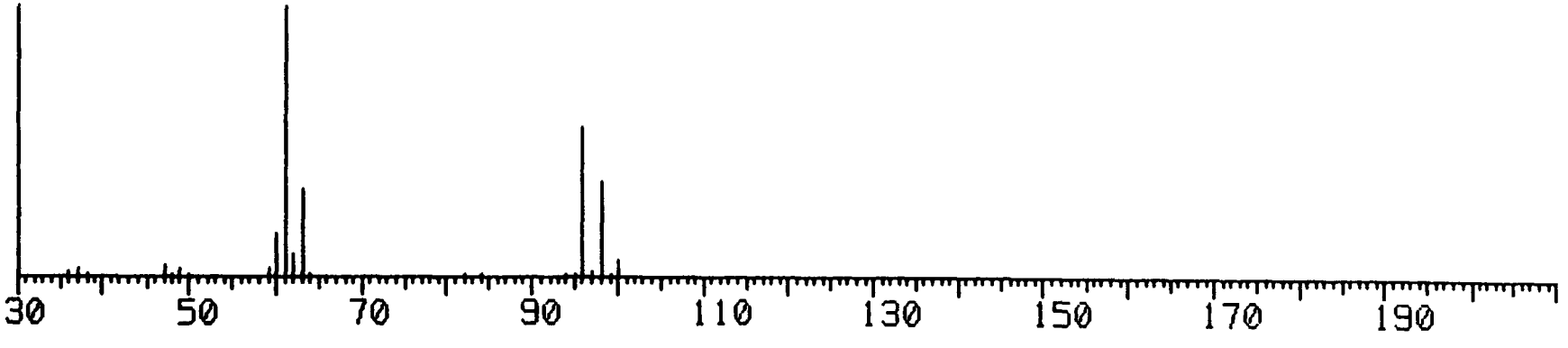


WADSWORTH/ALERT LABORATORIES, INC.

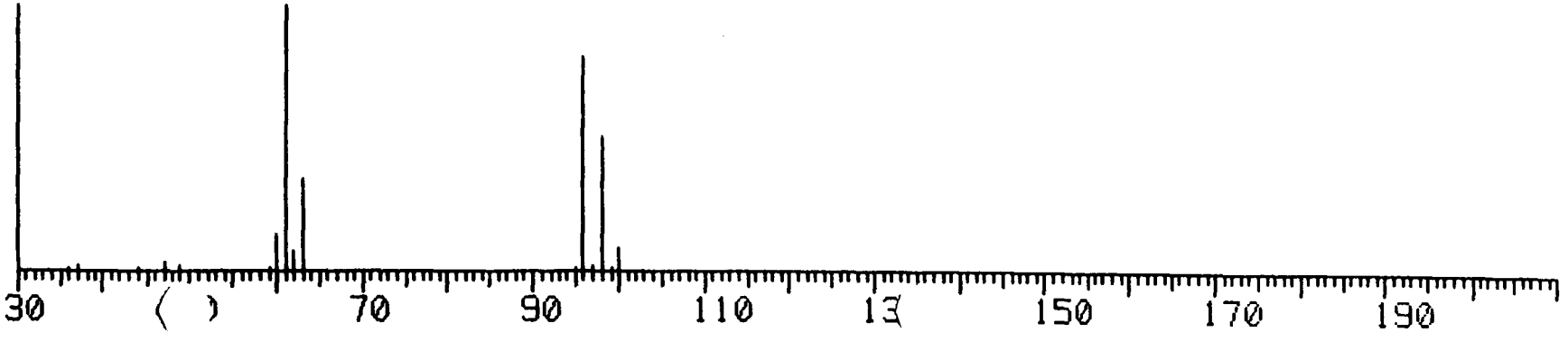
SY0:C63 EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 254 Time 5.58 min. 109340
100 % = 37888



SY0:C6317 EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 254 Time 5.58 min. 104992
Bkg scan = 243 100 % = 37888



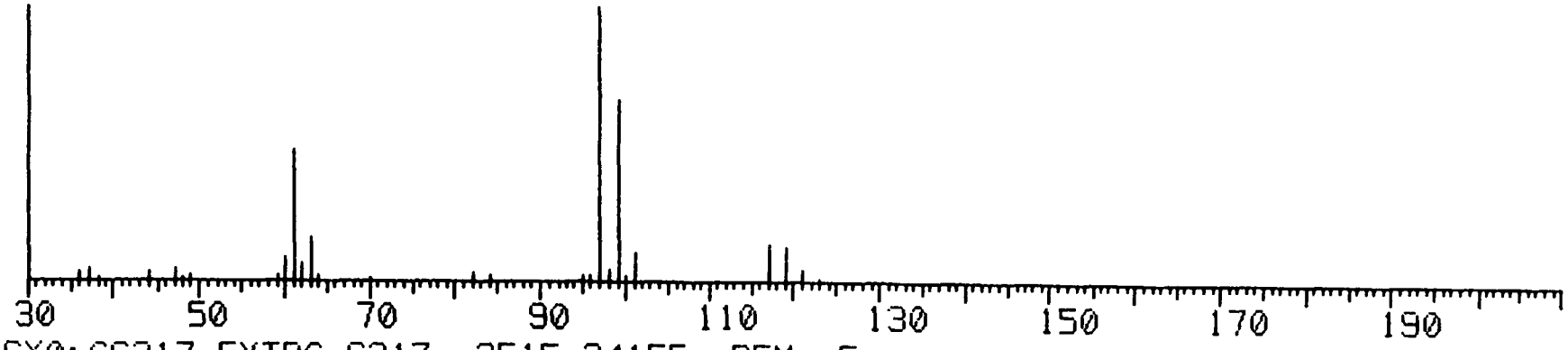
Standard Reference Spectrum: 1,1-Dichloroethene



WADSWORTH/ALERT LABORATORIES, INC.

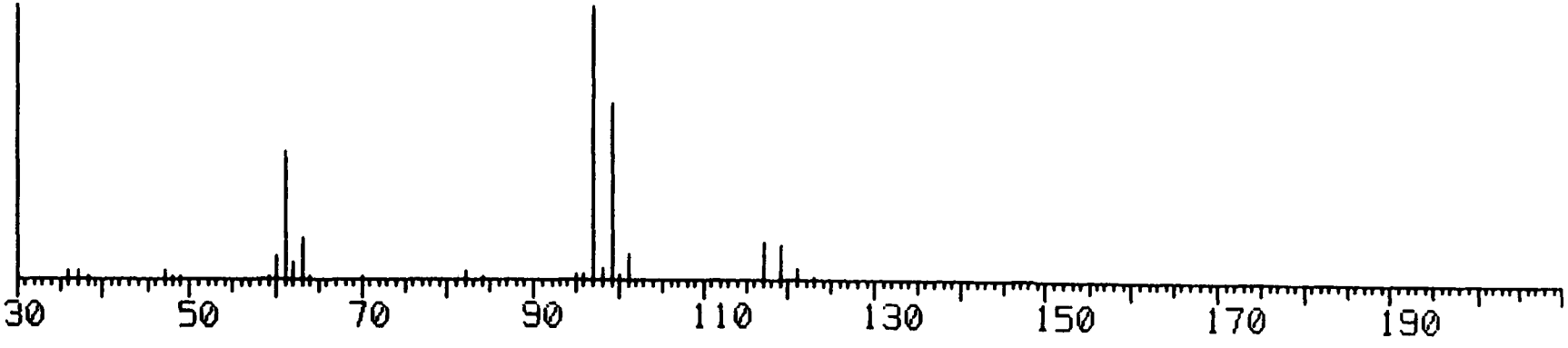
SY0:C63 EXTRC 6317, 2515-24155, REM, 5.
26-MAR-91 19:01:19 Scan 578 Time 10.50 min.
100 % = 106973

Total
339379

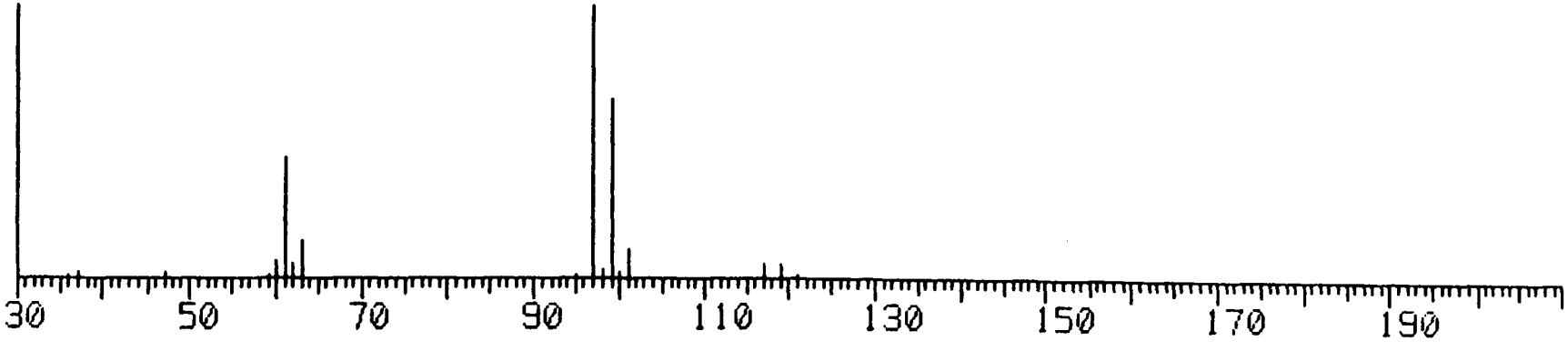


SY0:C6317 EXTRC 6317, 2515-24155, REM, 5.
26-MAR-91 19:01:19 Scan 578 Time 10.50 min.
Bkg scan = 566 100 % = 106973

Total
335469

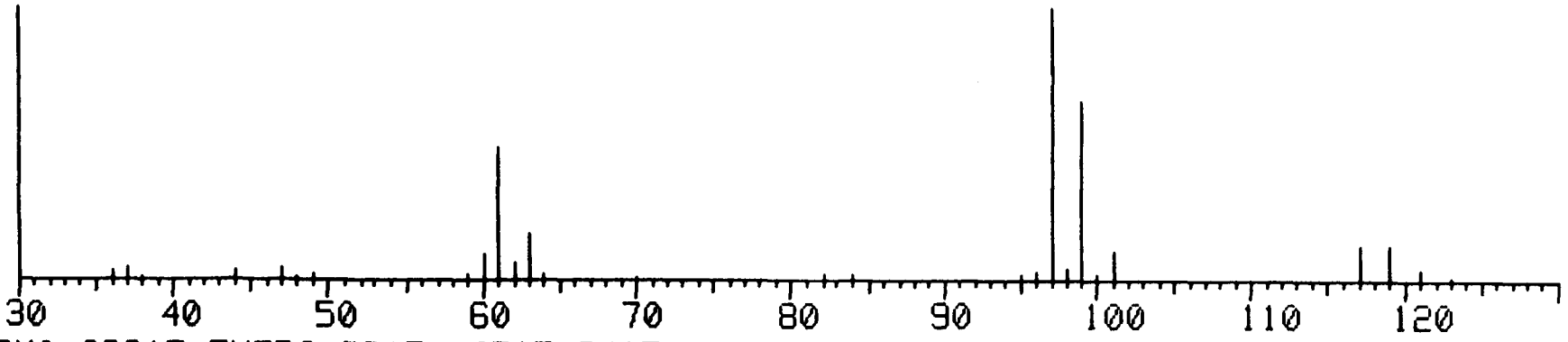


Standard Reference Spectrum: 1,1,1-trichloroethane

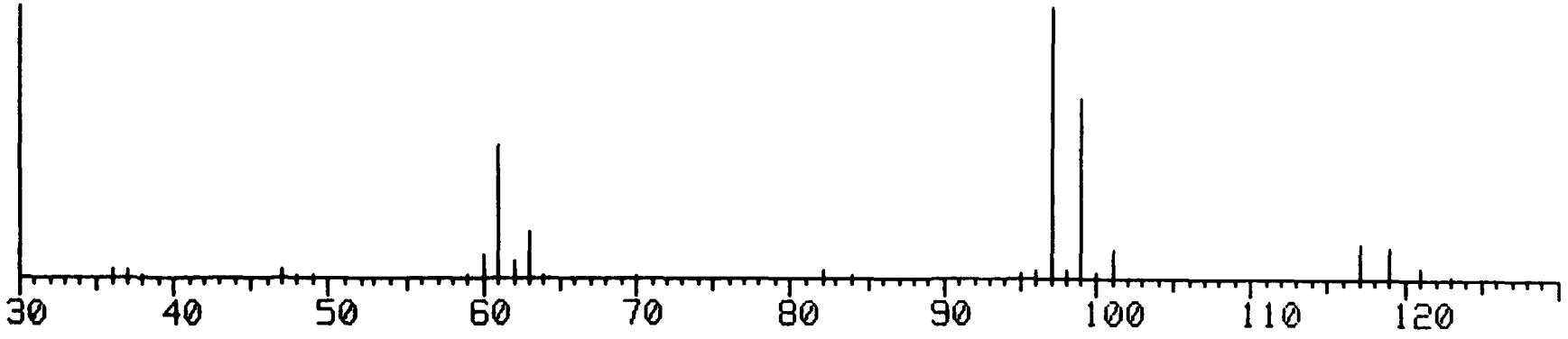


WADSWORTH/ALERT LABORATORIES, INC.

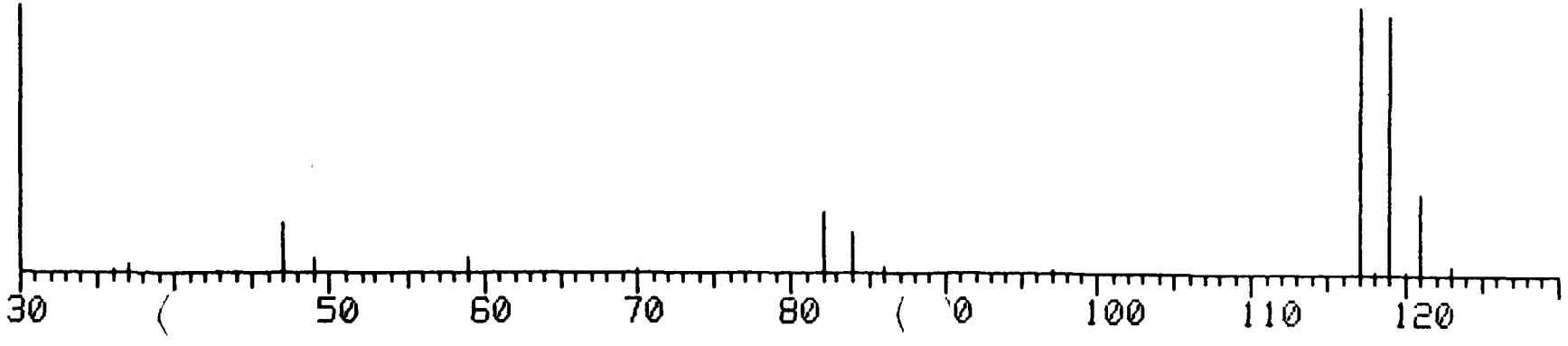
SY0:C63 EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 580 Time 10.53 min. 280774
100 % = 86907



SY0:C6317 EXTRC 6317, 2515-24155, REM, 5. Total
26-MAR-91 19:01:19 Scan 580 Time 10.53 min. 275821
Bkg scan = 568 100 % = 86907

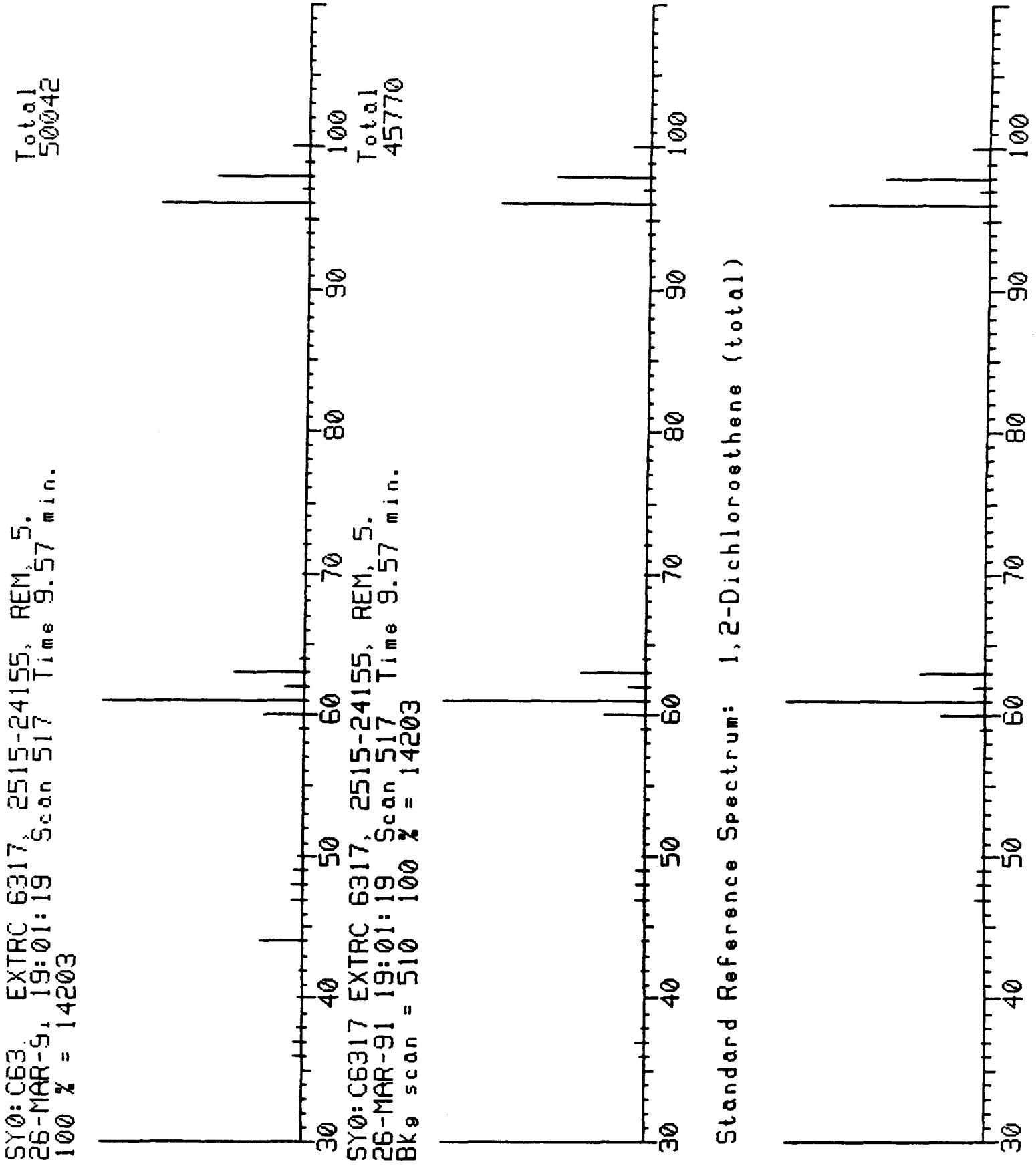


Standard Reference Spectrum: Carbon Tetrachloride

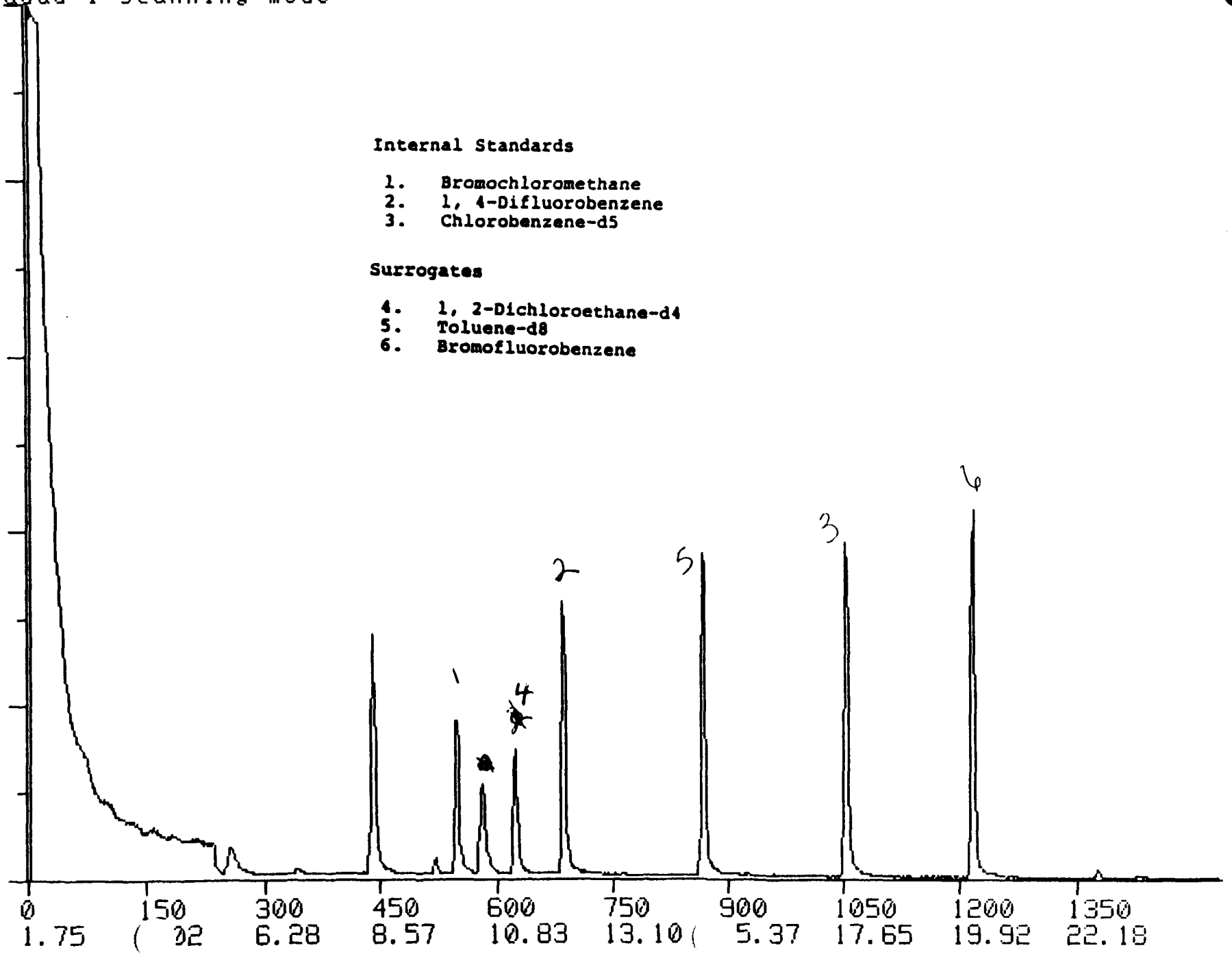


WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.



SY0:C63 EXTRC 6334, 2515-24155, REM, 1.C 100%
27-MAR-91 14:15:58 562058
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

N _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6334
Injection time: 27-MAR-91 14:15:58
Comments:
EXTRC 6334, 2515-24155, REM, 1.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

6334. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.05	549			STD	1.00	50.0	NG/UL
2S	12.13	686			STD	0.86	50.0	NG/UL
3S	17.70	1053			STD	0.77	50.0	NG/UL
1T	2.45	47	50. / 128.	484. / 83035.	1	~~0.48~~	~~0.2~~	~~NG/UL~~
2T	Was Not Found							
3T	2.72	64	62. / 128.	20091. / 83035.	1	0.91	6.8	NG/UL
4T	3.55	119	64. / 128.	11847. / 83035.	1	1.00	7.3	NG/UL
5T	Is Below Specified Detection Limit							
6T	Is Below Specified Detection Limit							
7T	Was Not Found							
8T	5.62	256	96. / 128.	41900. / 83035.	1	0.85	16.6	NG/UL
9T	8.40	440	63. / 128.	597488. / 83035.	1	0.51	115.2	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Is Below Specified Detection Limit							
13T	Was Not Found							
14T	10.55	581	97. / 114.	164491. / 447744.	2	0.87	42.2	NG/UL
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.87	867	98. / 117.	457072. /	400728.	3	0.84	48.5	NG/UL
36T	20.17	1216	95. / 117.	281518. /	400728.	3	0.92	49.3	NG/UL
37T	11.18	623	65. / 128.	187651. /	83035.	1	0.75	46.4	NG/UL
38T	Was Not Found								
39T	9.62	520	96. / 128.	12864. /	83035.	1	0.85	4.5	NG/UL

40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Was Not Found
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Is Below Specified Detection Limit
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
3T Was Not Found
54T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

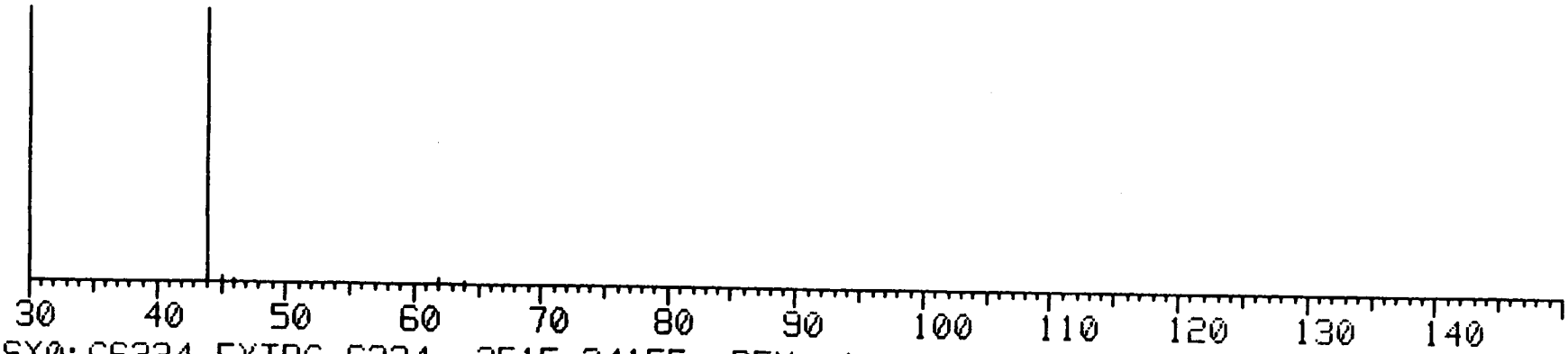
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6334
Injection time: 27-MAR-91 14:15:58

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.244	50. / 128.	1.655	0.2	IA VV RF			1.00
3T	0.271	62. / 128.	1.782	6.8	IA BB RF			1.00
4T	0.353	64. / 128.	0.974	7.3	IA BB RF			1.00
8T	0.559	96. / 128.	1.523	16.6	IA BB RF			1.00
9T	0.836	63. / 128.	3.124	115.2	IA BB RF			1.00
14T	0.870	97. / 114.	0.435	42.2	IA BB RF			1.00
35T	0.840	98. / 117.	1.175	48.5	IA BB RF			1.00
36T	1.140	95. / 117.	0.713	49.3	IA BB RF			1.00
37T	1.112	65. / 128.	2.437	46.4	IA BB RF			1.00
39T	0.957	96. / 128.	1.740	4.5	IA BB RF			1.00

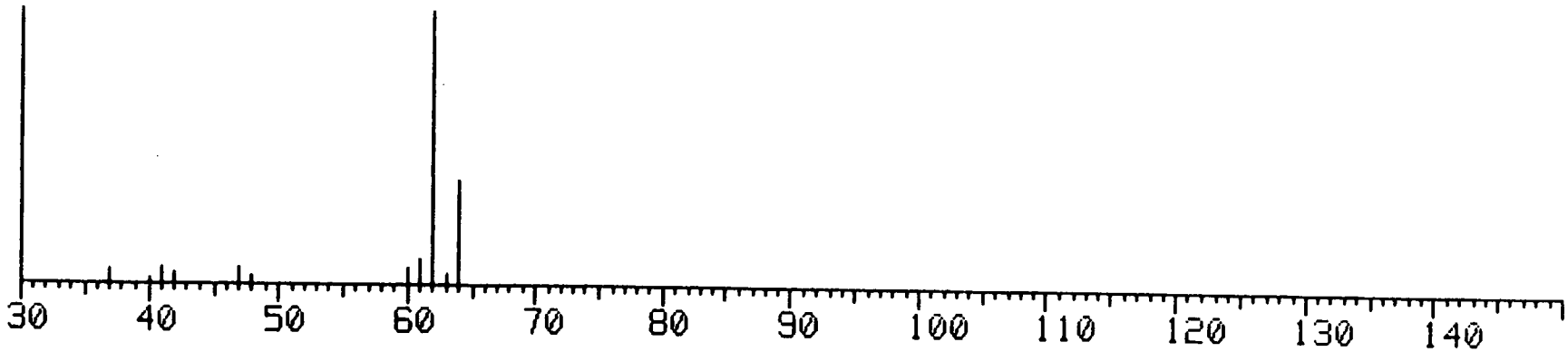
SY0:C63, EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 64 Time 2.72 min.
100 % = 1033

Total
86391

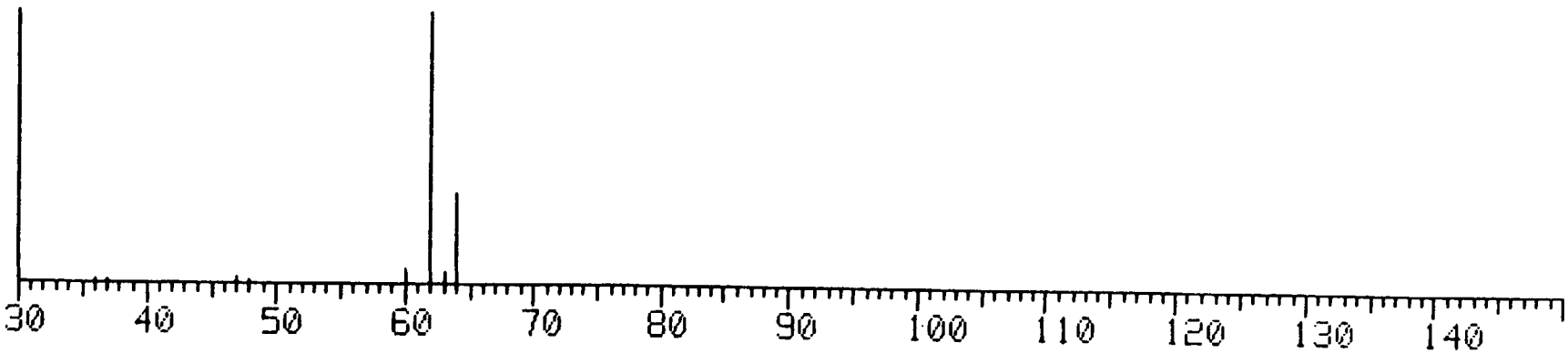


SY0:C6334 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 64 Time 2.72 min.
Bkg scan = 49 100 % = 1033

Total
1920

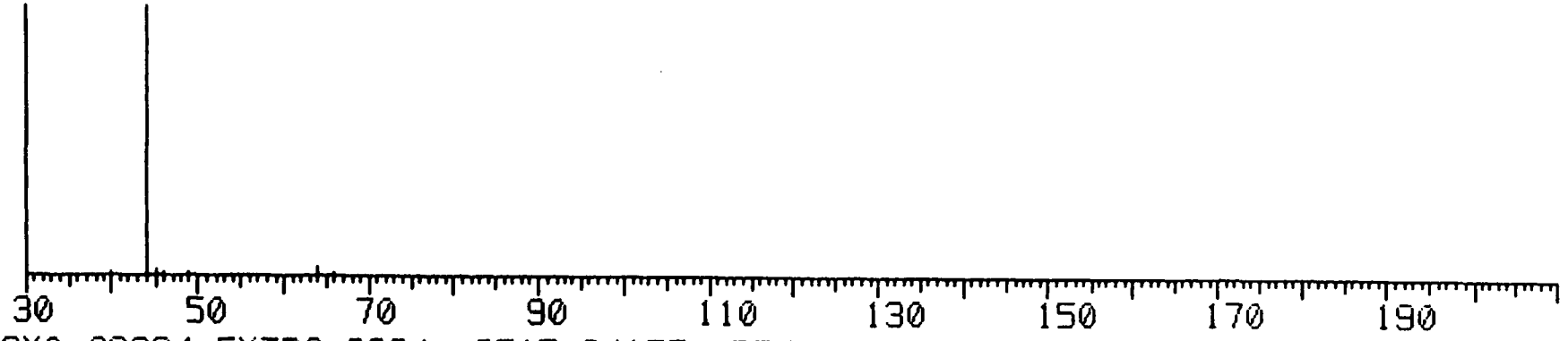


Standard Reference Spectrum: Vinyl Chloride

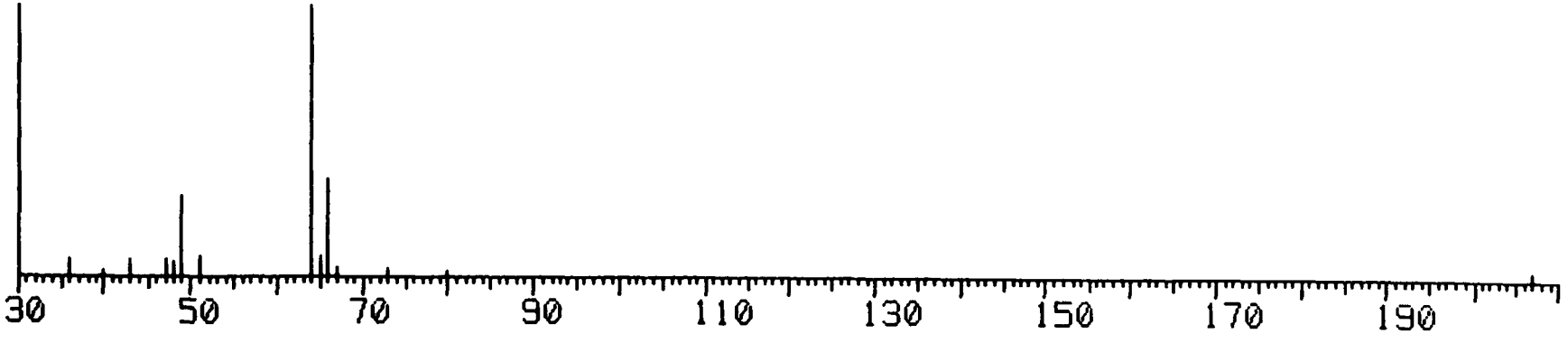


WADSWORTH/ALERT LABORATORIES, INC.

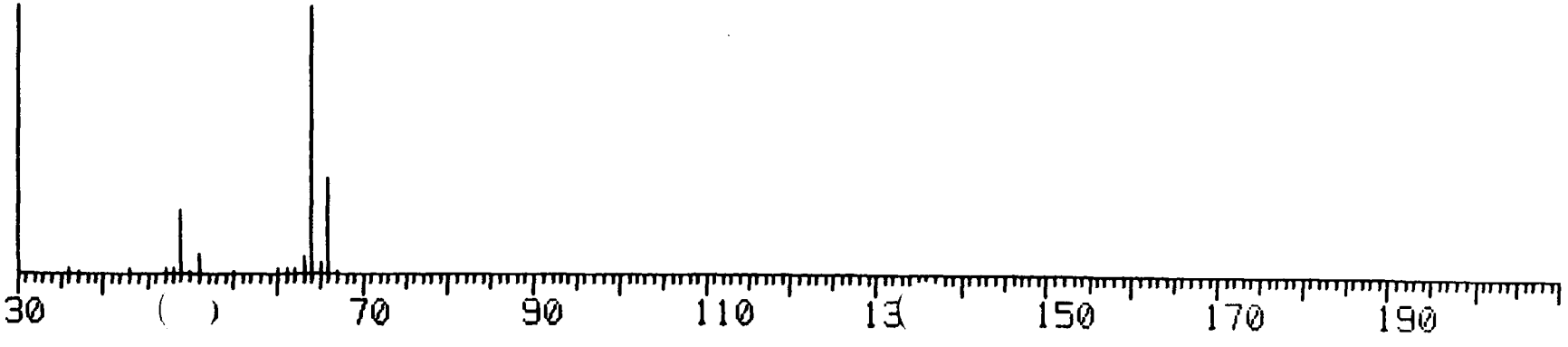
SY0:C63 EXTRC 6334, 2515-24155, REM, 1. Total
27-MAR-91 14:15:58 Scan 119 Time 3.55 min. 39692
100 % = 848



SY0:C6334 EXTRC 6334, 2515-24155, REM, 1. Total
27-MAR-91 14:15:58 Scan 119 Time 3.55 min. 1854
BK_9 scan = 88 100 % = 848



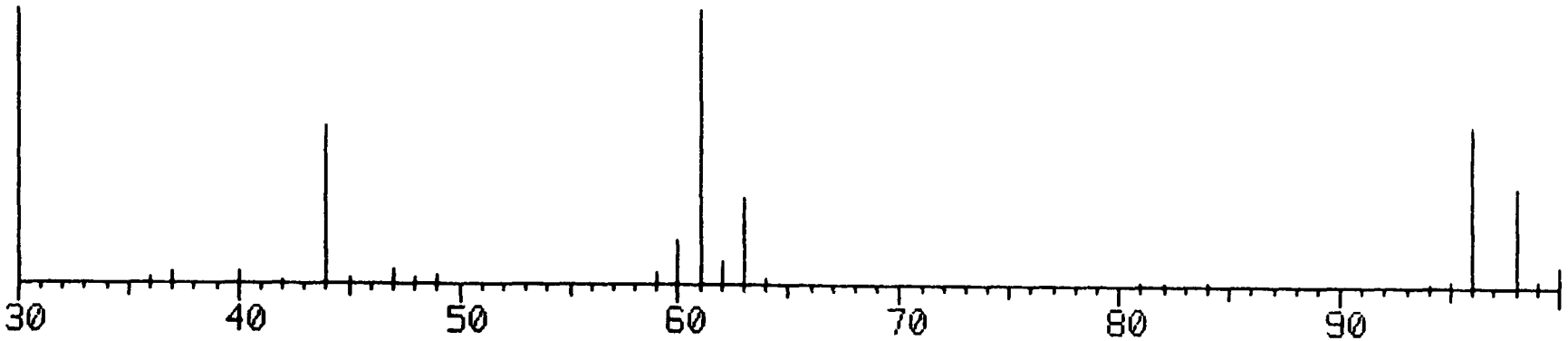
Standard Reference Spectrum: Chloroethane



WADSWORTH/ALERT LABORATORIES, INC.

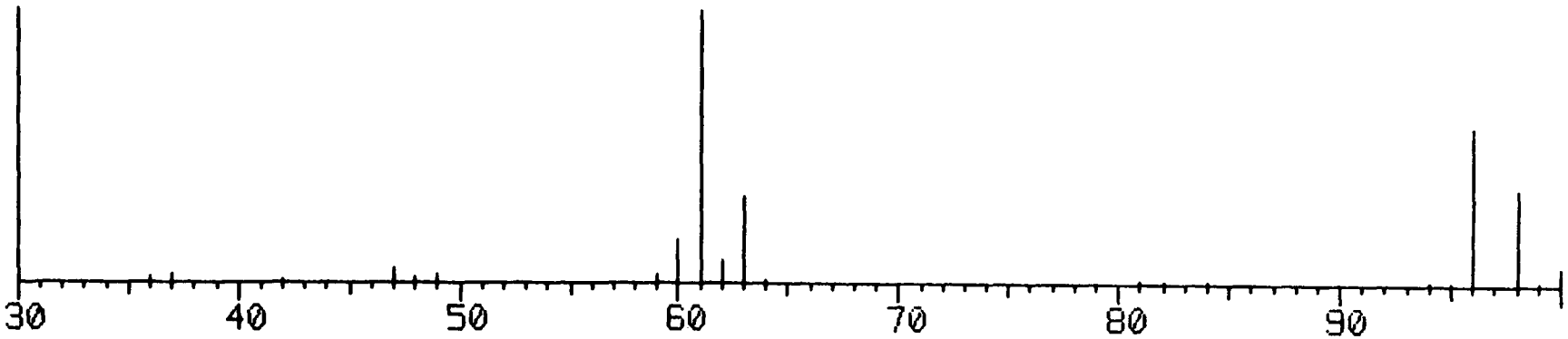
SY0:C63 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-S, 14:15:58 Scan 256 Time 5.62 min.
100 % = 6012

Total
21187

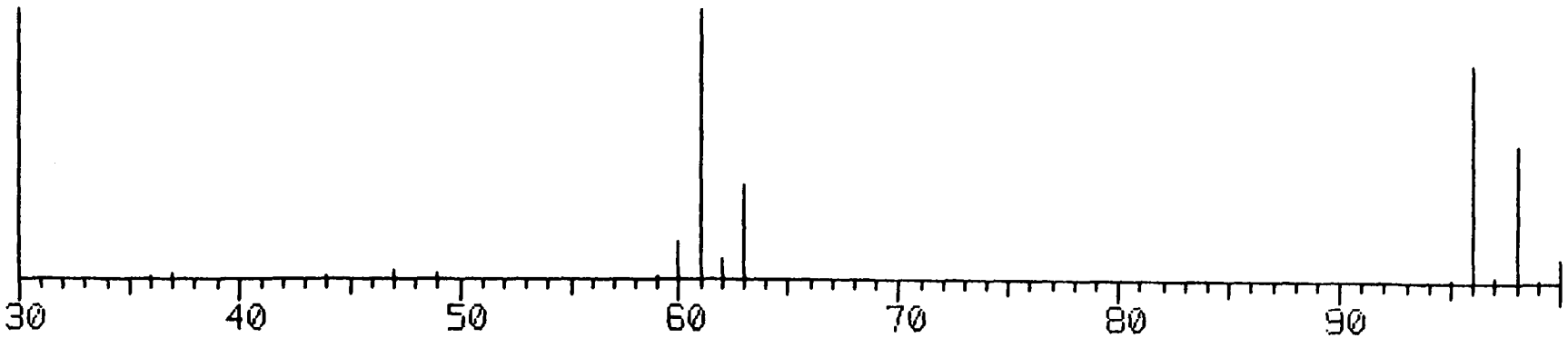


SY0:C6334 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 256 Time 5.62 min.
BK_9 scan = 247 100 % = 6012

Total
16895



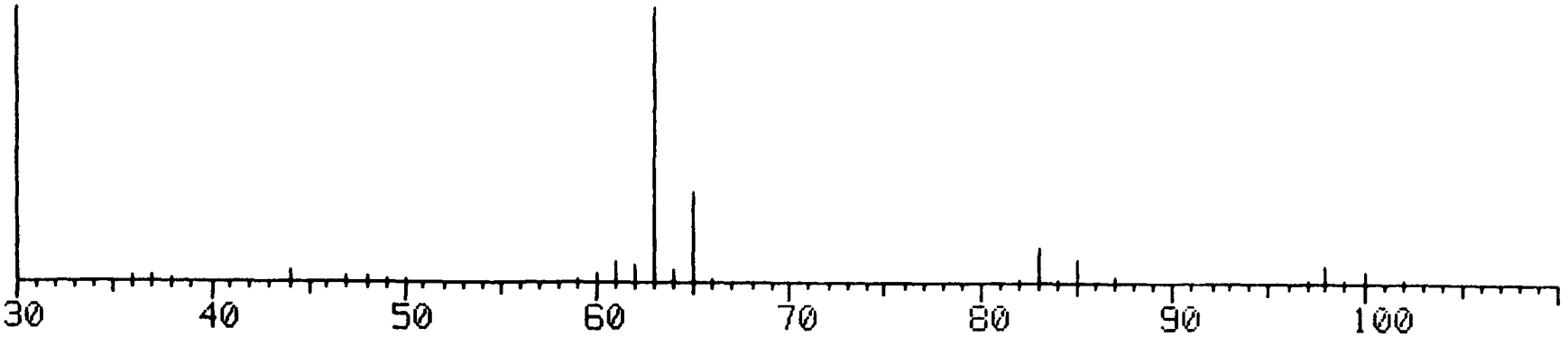
Standard Reference Spectrum: 1,1-Dichloroethene



WADSWORTH/ALERT LABORATORIES, INC.

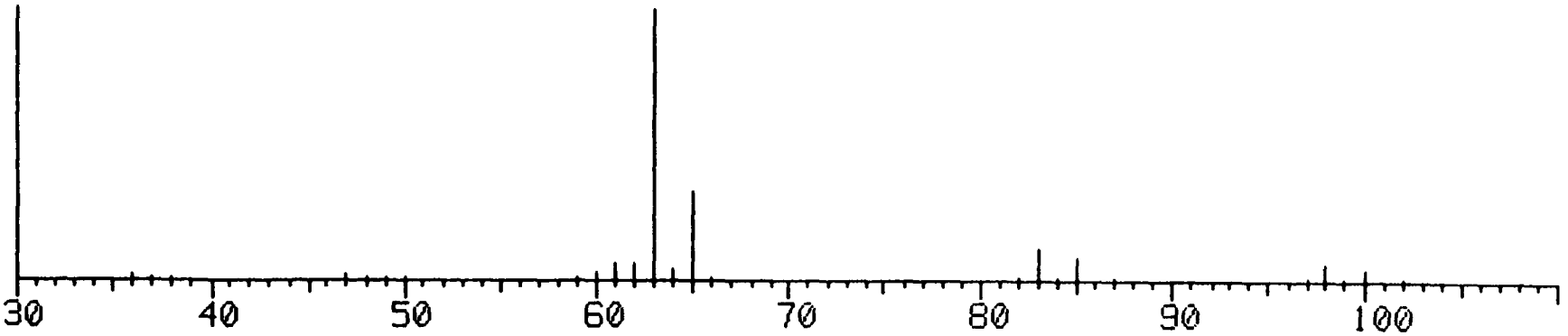
SY0:C63_ , EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 440 Time 8.40 min.
100 % = 78995

Total
158817

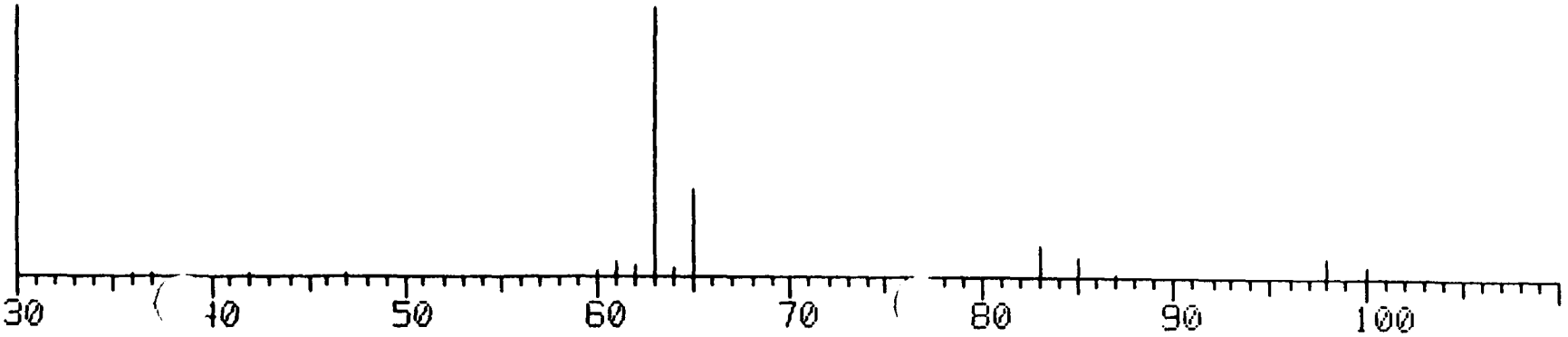


SY0:C6334 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 440 Time 8.40 min.
Bkg scan = 430 100 % = 78995

Total
155167



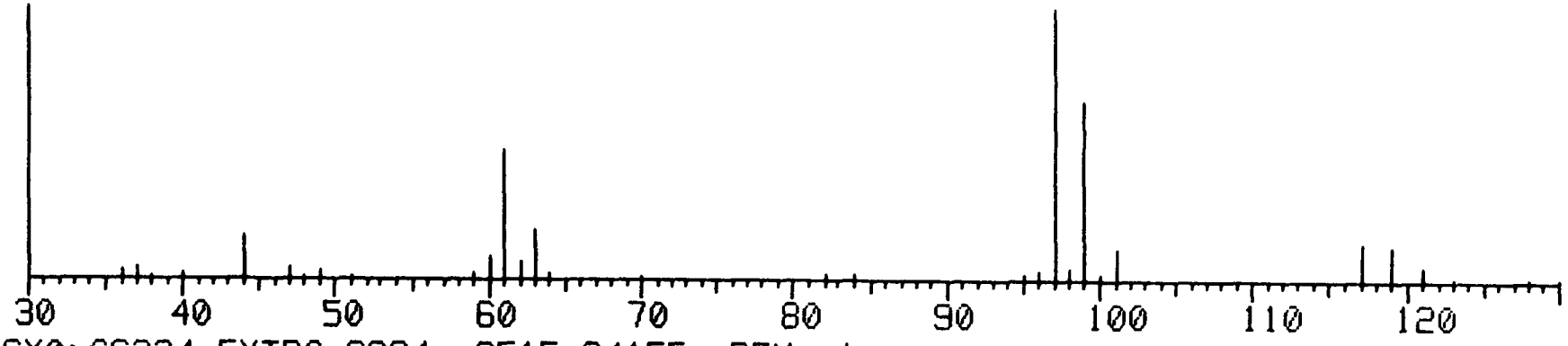
Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

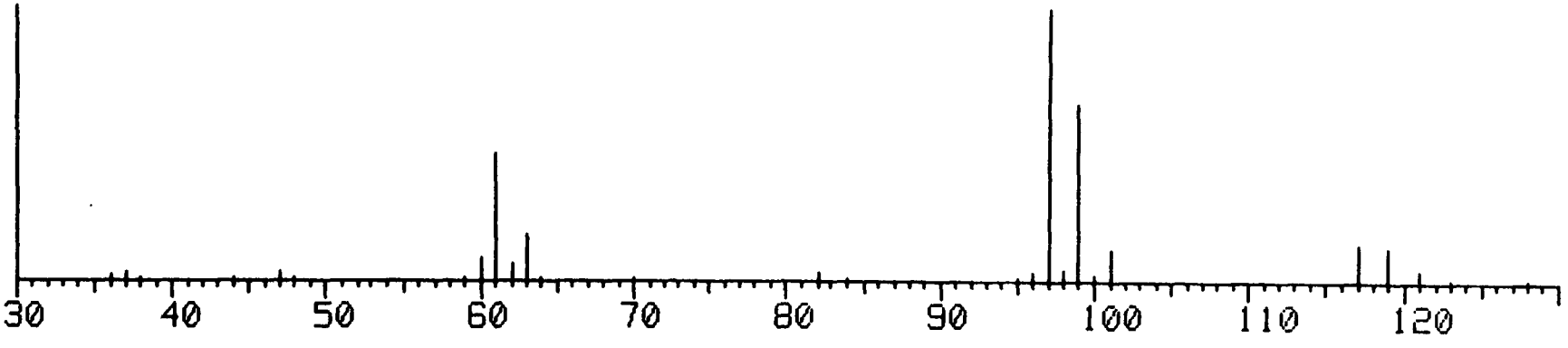
SY0:C63. EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 581 Time 10.55 min.
100 % = 17958

Total
61540

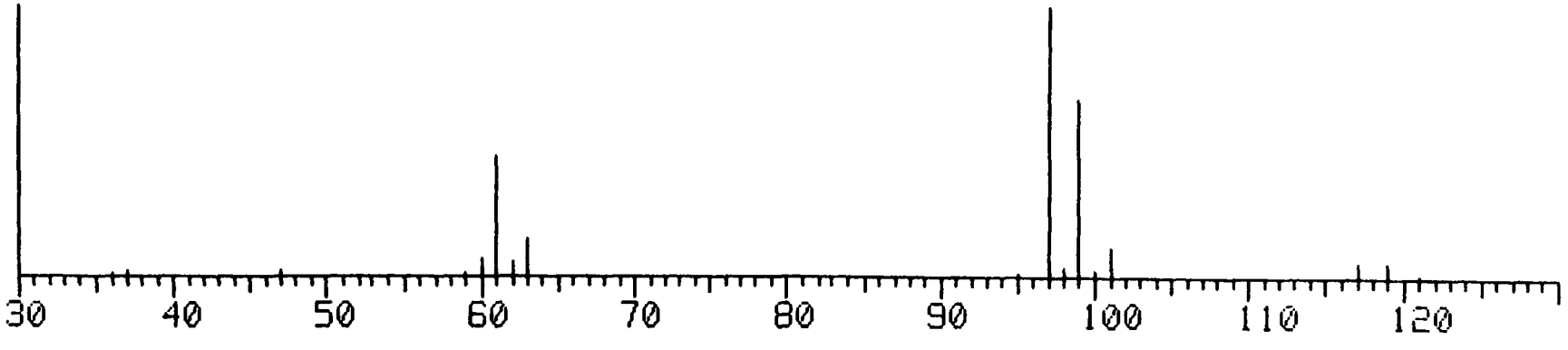


SY0:C6334 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 581 Time 10.55 min.
BKg scan = 572 100 % = 17958

Total
57128



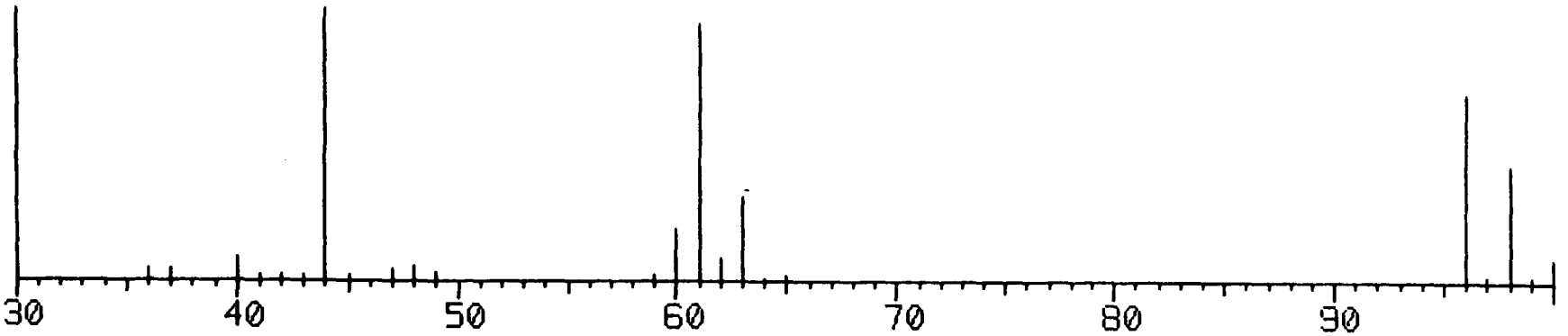
Standard Reference Spectrum: 1,1,1-trichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

SY0:C63 , EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 520 Time 9.62 min.
100 % = 2813

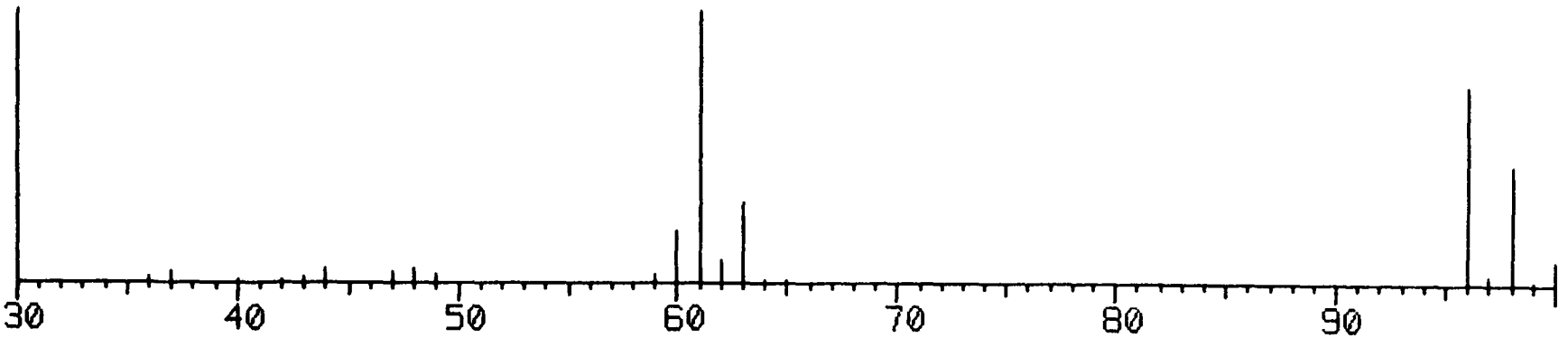
Total
12755



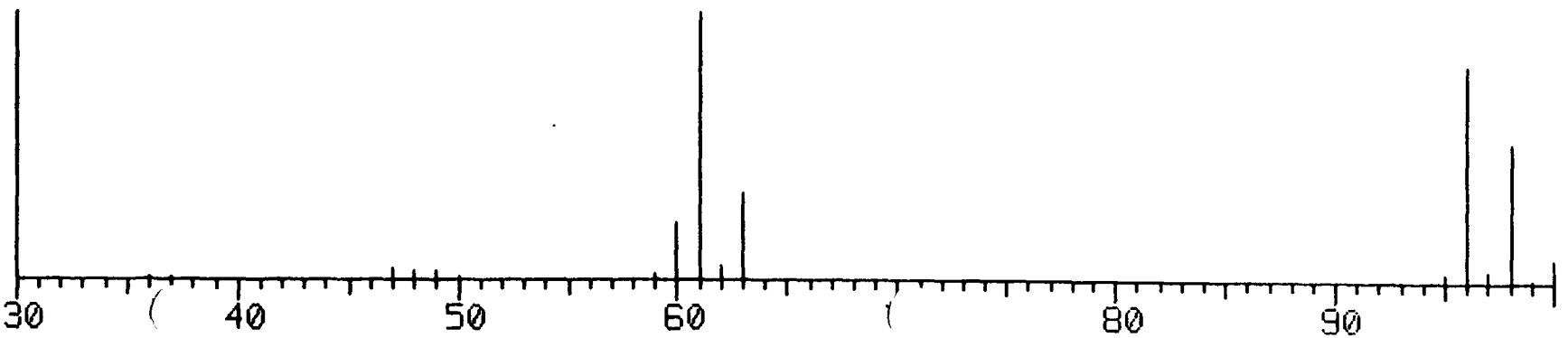
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6334 EXTRC 6334, 2515-24155, REM, 1.
27-MAR-91 14:15:58 Scan 520 Time 9.62 min.
Bkg scan = 514 100 % = 2813

Total
8970



Standard Reference Spectrum: 1,2-Dichloroethene (total)



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24155
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

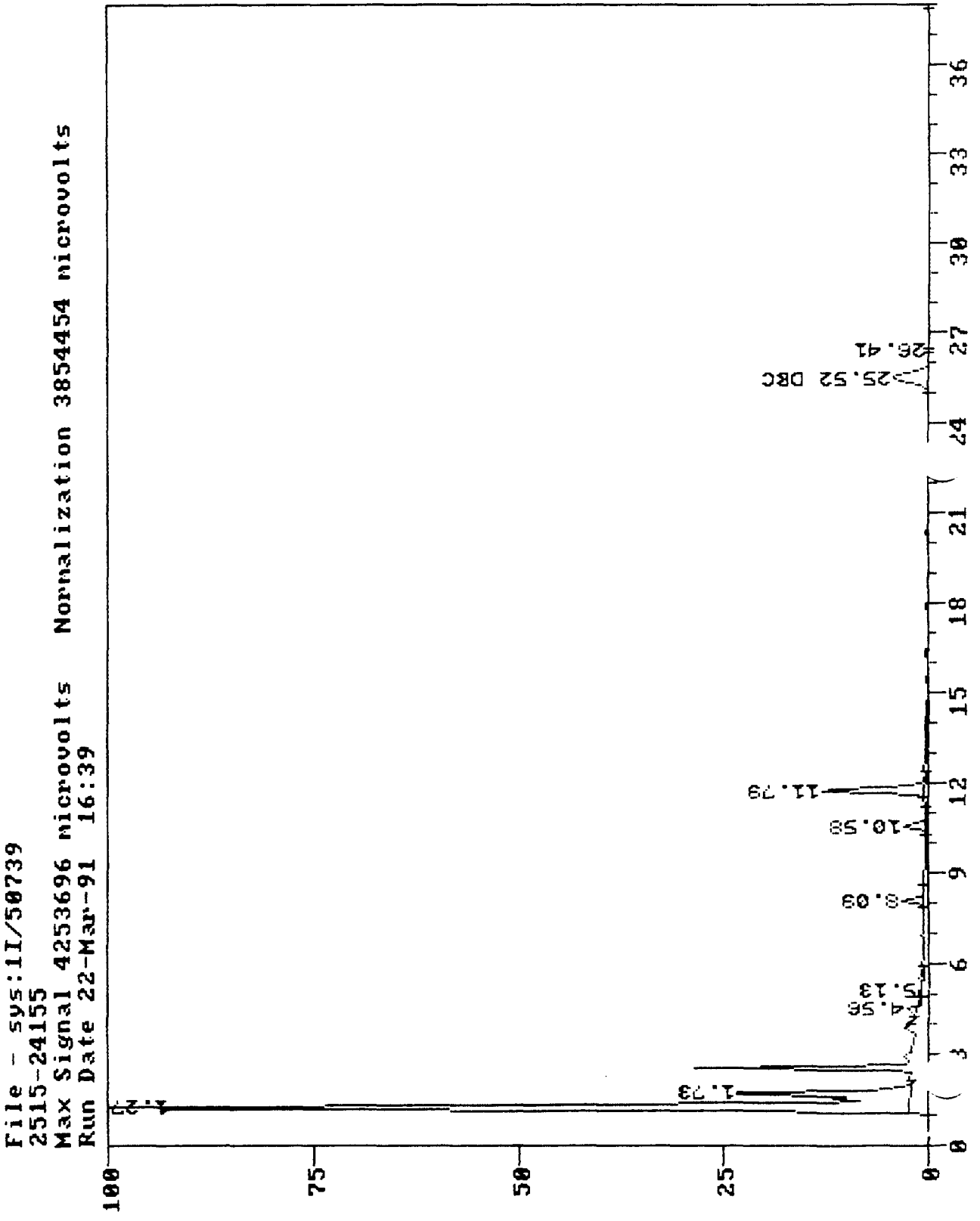
SAMPLE ID: RAU-MW10-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50739
2515-24155

Run date 22-Mar-91 16:39
Analysis date 25-Mar-91 07:50
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.52	3748295	9.403e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24155
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW10-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	66	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24155
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW10-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24155
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW10-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	8.0	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	170	1.0	mg/l
Specific Conductance	3/15/91	2900	1000	umhos/cm
Nitrate Nitrogen	3/25/91	0.44	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	5.9		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24156
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW11-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND		
1,1-Dichloroethane	7.8		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	99	(76-114)	(70-121)
Toluene-d8	104	(76-114)	(81-117)
Bromofluorobenzene	105	(86-115)	(74-121)

SYO:C63 EXTRC 6318, 2515-24156, REM, 5.0 _ 100%
26-MAR-91 19:37:35 561704
Total Ion Current
Quad 1 scanning mode

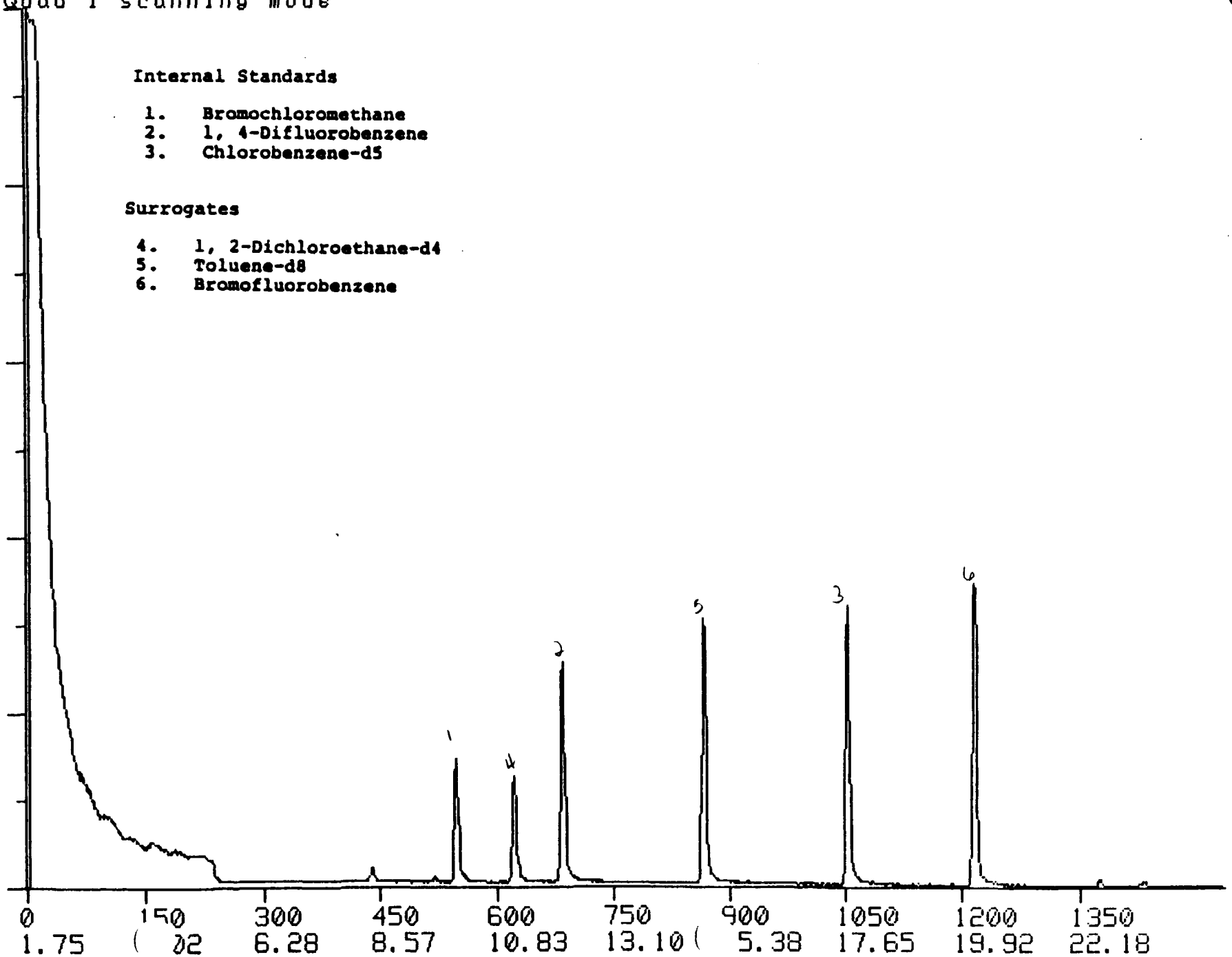
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

N[illegible] _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6318
Injection time: 26-MAR-91 19:37:35
Comments:
EXTRC 6318, 2515-24156, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	0.96	50.0	NG/UL
2S	12.10	684			STD	0.78	50.0	NG/UL
3S	17.67	1051			STD	0.77	50.0	NG/UL
1T	Was Not Found							
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	Was Not Found							
6T	5.88	273	43. / 128.	3923. / 66588.	1	~~0.82~~	~~7.6~~	~~NG/UL~~
7T	Was Not Found							
8T	Was Not Found							
9T	8.37	437	63. / 128.	32404. / 66588.	1	0.89	7.8	NG/UL
10T	Was Not Found							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Is Below Specified Detection Limit							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.85	865	98. / 117.	371754. /	319090.	3	0.90	52.1	NG/UL
36T	20.13	1214	95. / 117.	233476. /	319090.	3	0.92	52.7	NG/UL
37T	11.15	621	65. / 128.	166362. /	66588.	1	0.75	49.7	NG/UL

38T Was Not Found
39T Is Below Specified Detection Limit
40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Was Not Found
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Was Not Found
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
3T Was Not Found
54T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

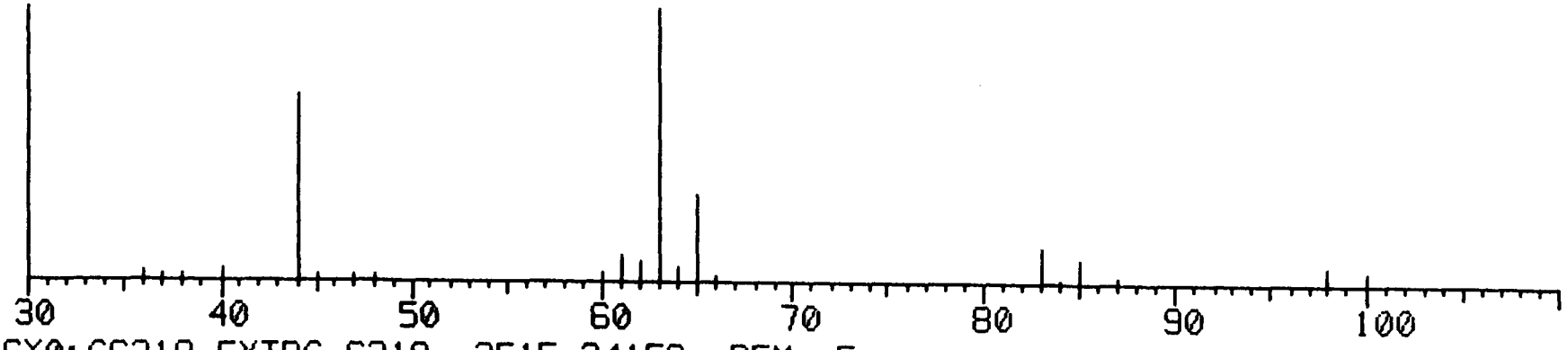
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6318
Injection time: 26-MAR-91 19:37:35

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
6T	0.586	43. / 128.	0.387	7.6	IA BV RF			1.00
9T	0.834	63. / 128.	3.132	7.8	IA BB RF			1.00
35T	0.840	98. / 117.	1.118	52.1	IA BB RF			1.00
36T	1.139	95. / 117.	0.694	52.7	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	49.7	IA BB RF			1.00

SY0:C63 EXTRC 6318, 2515-24156, REM, 5.
26-MAR-91 19:37:35 Scan 437 Time 8.37 min.
100 % = 4522

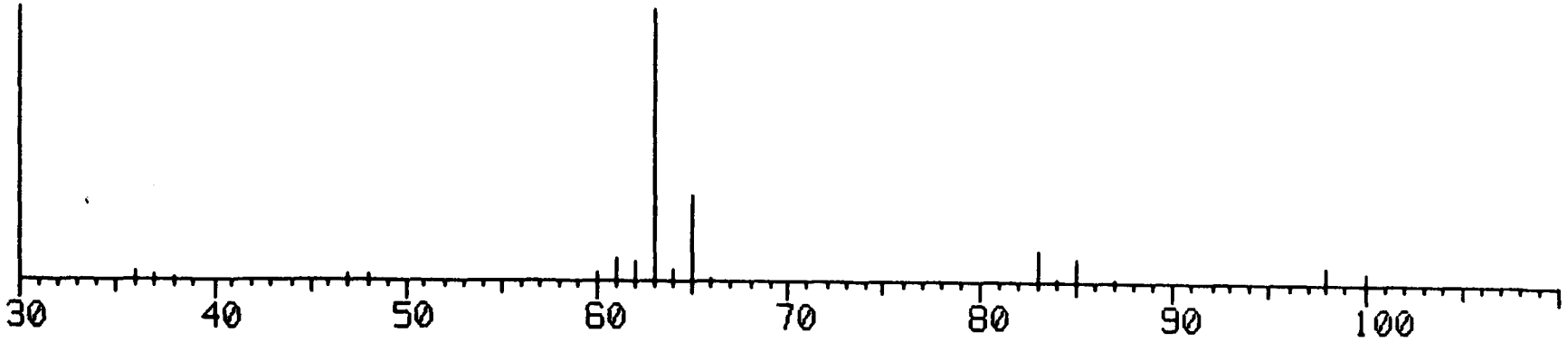
Total
12509



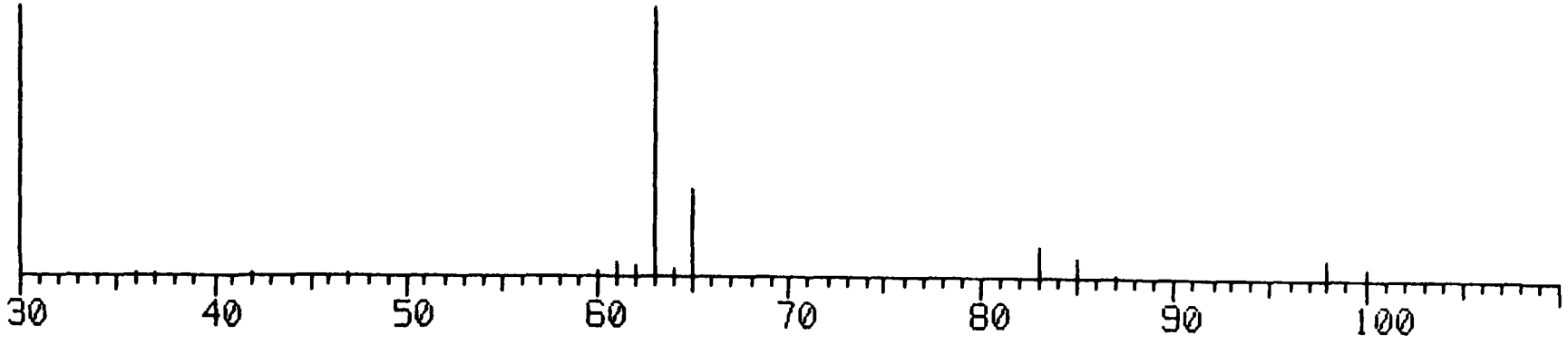
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6318 EXTRC 6318, 2515-24156, REM, 5.
26-MAR-91 19:37:35 Scan 437 Time 8.37 min.
Bkg scan = 430 100 % = 4522

Total
9053



Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24156
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

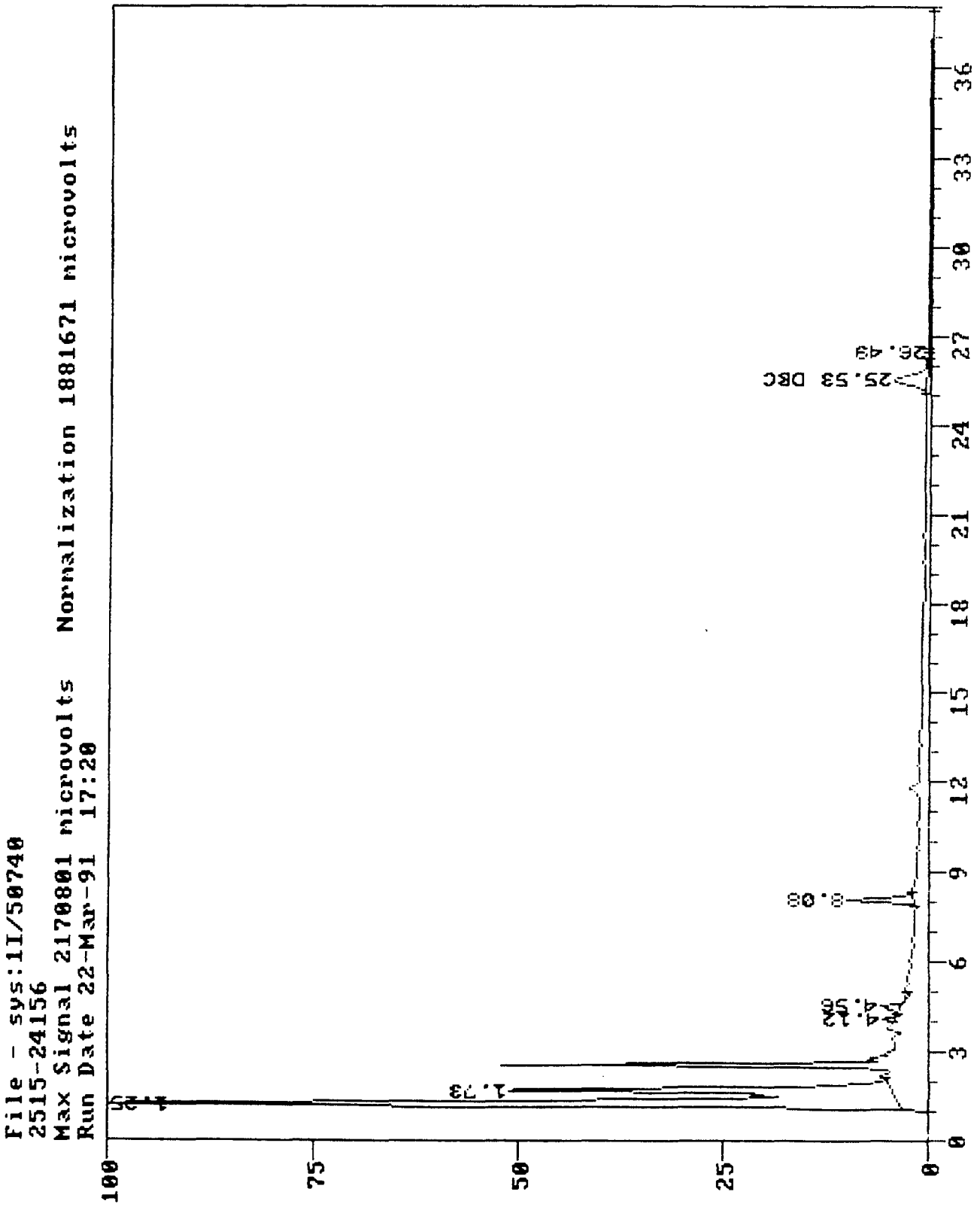
SAMPLE ID: RAU-MW11-15 3-12-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50740
2515-24156

Run date 22-Mar-91 17:20
Analysis date 25-Mar-91 07:50
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.53	1742262	4.371e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24156
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW11-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	30	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24156
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW11-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC. **DATE RECEIVED:** 3/14/91
LAB #: 2515-24156
MATRIX : WATER

SAMPLE ID : RAU-MW11-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	200	1.0	mg/l
Specific Conductance	3/15/91	960	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.26	0.10	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24157
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW12-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	9.0
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	8.4 J
1,4-Dichlorobenzene	ND		
1,1-Dichloroethane	120		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	105	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	107	(86-115)	(74-121)

SY0:C63 EXTRC 6325, 2515-24157, REM, 5.6 _ 100%
26-MAR-91 23:52:48 565100
Total Ion Current
Quad 1 scanning mode

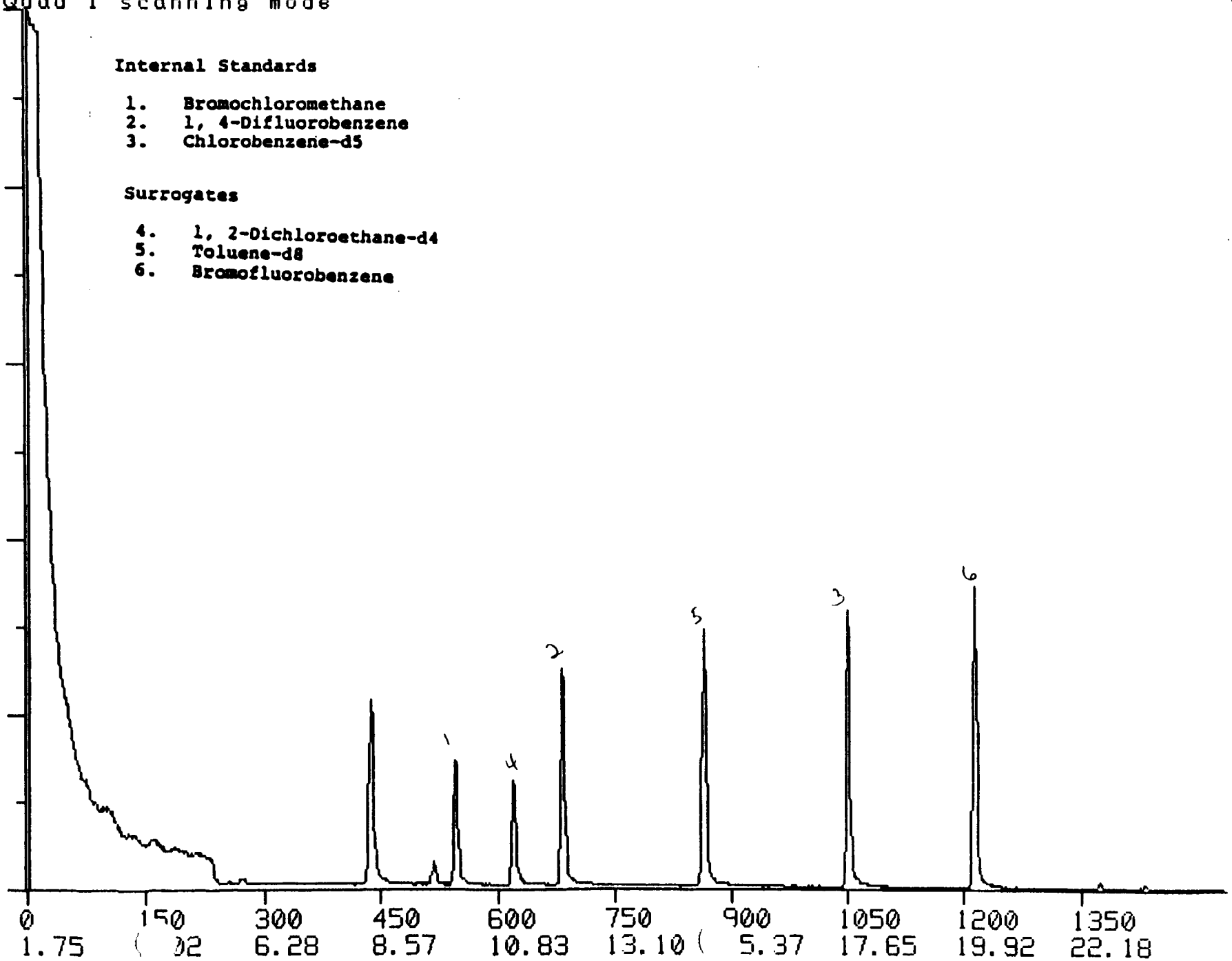
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6325
Injection time: 26-MAR-91 23:52:48
Comments:
EXTRC 6325, 2515-24157, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

325. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.00	545			STD	0.96	50.0	NG/UL
2S	12.08	683			STD	0.78	50.0	NG/UL
3S	17.65	1050			STD	0.65	50.0	NG/UL
1T	2.57	54	50. / 128.	10885. / ~~61867.~~	~~1~~	~~0.57~~	~~6.3~~	~~NG/UL~~
2T	Was Not Found							
3T	2.80	70	62. / 128.	16272. / 61867.	1	0.91	8.4	NG/UL
4T	Is Below Specified Detection Limit							
5T	Is Below Specified Detection Limit							
6T	5.85	271	43. / 128.	19077. / ~~61867.~~	~~1~~	~~1.00~~	~~39.8~~	~~NG/UL~~
7T	Was Not Found							
8T	Is Below Specified Detection Limit							
9T	8.37	437	63. / 128.	455400. / 61867.	1	0.67	117.5	NG/UL
10T	Is Below Specified Detection Limit							
11T	Was Not Found							
12T	Was Not Found							
13T	Was Not Found							
14T	Was Not Found							
15T	Was Not Found							
16T	Is Below Specified Detection Limit							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
23T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T Is Below Specified Detection Limit
31T Was Not Found
32T Was Not Found
33T Was Not Found
34T Was Not Found

35T	14.83	864	98. / 117.	356192. /	310848.	3	0.90	51.2	NG/UL
36T	20.12	1213	95. / 117.	230938. /	310848.	3	0.92	53.6	NG/UL
37T	11.13	620	65. / 128.	162691. /	61867.	1	0.75	52.3	NG/UL
38T	Was Not Found								
39T	9.57	516	96. / 128.	19415. /	61867.	1	0.85	9.0	NG/UL

40T Was Not Found
41T Was Not Found
42T Was Not Found
43T Was Not Found
44T Was Not Found
45T Was Not Found
46T Was Not Found
47T Is Below Specified Detection Limit
48T Was Not Found
49T Was Not Found
50T Was Not Found
51T Was Not Found
52T Was Not Found
3T Was Not Found
54T Was Not Found
55T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

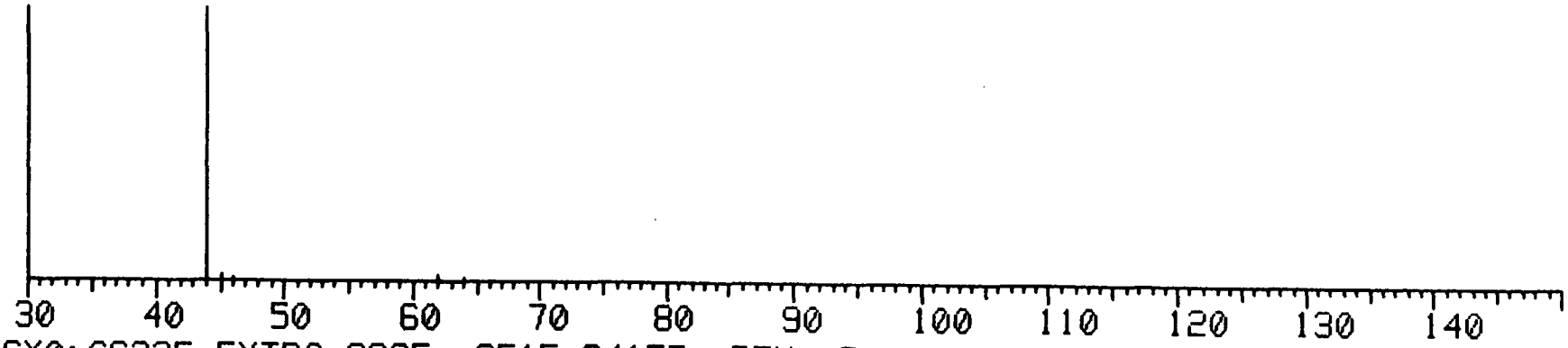
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6325
Injection time: 26-MAR-91 23:52:48

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.257	50. / 128.	1.404	6.3	IA BB RF			1.00
3T	0.280	62. / 128.	1.567	8.4	IA BB RF			1.00
6T	0.585	43. / 128.	0.387	39.8	IA BB RF			1.00
9T	0.837	63. / 128.	3.132	117.5	IA BB RF			1.00
35T	0.840	98. / 117.	1.118	51.2	IA BB RF			1.00
36T	1.140	95. / 117.	0.694	53.6	IA BB RF			1.00
37T	1.113	65. / 128.	2.512	52.3	IA BB RF			1.00
39T	0.957	96. / 128.	1.742	9.0	IA BB RF			1.00

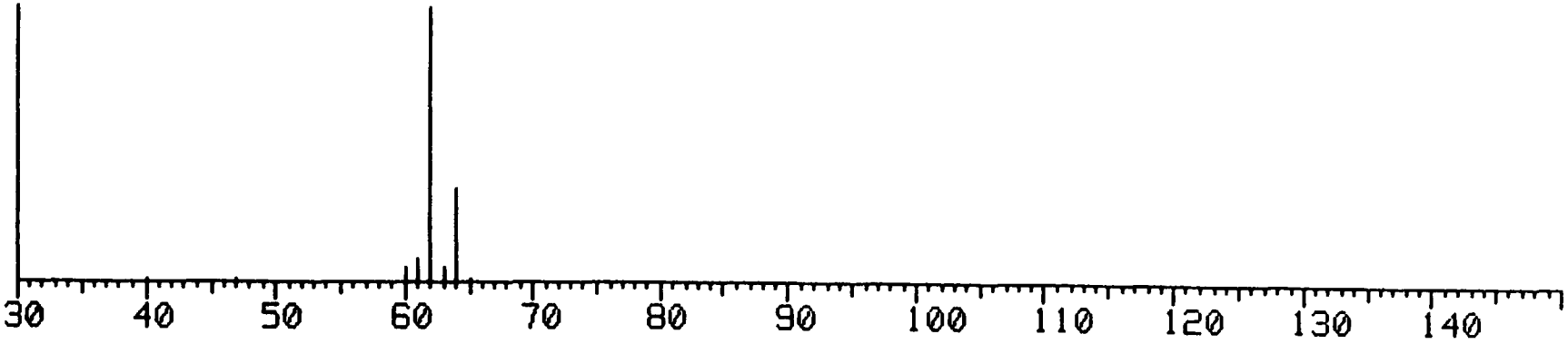
SY0:C6325 EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 70 Time 2.80 min.
100 % = 1018

Total
72153

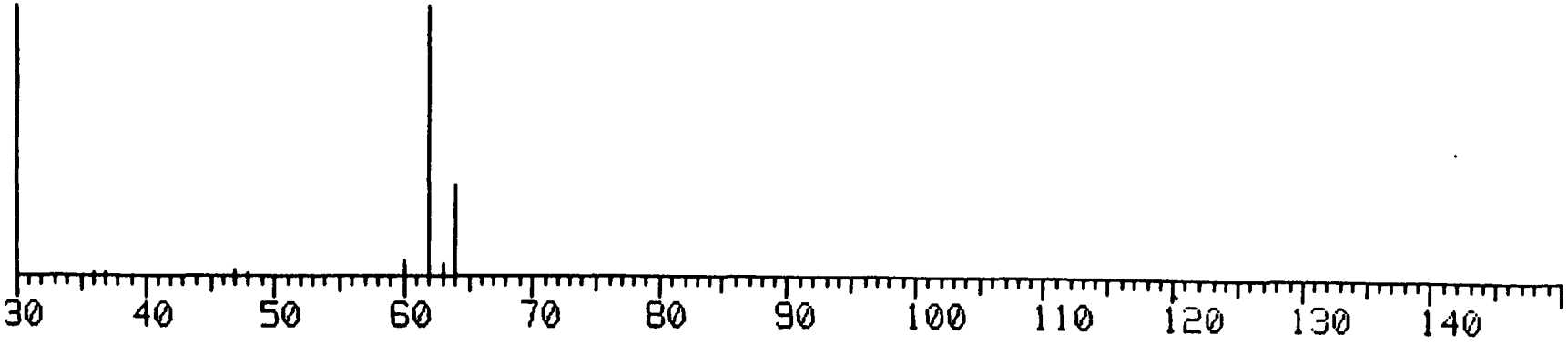


SY0:C6325 EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 70 Time 2.80 min.
Bkg scan = 53 100 % = 1018

Total
1586



Standard Reference Spectrum: Vinyl Chloride



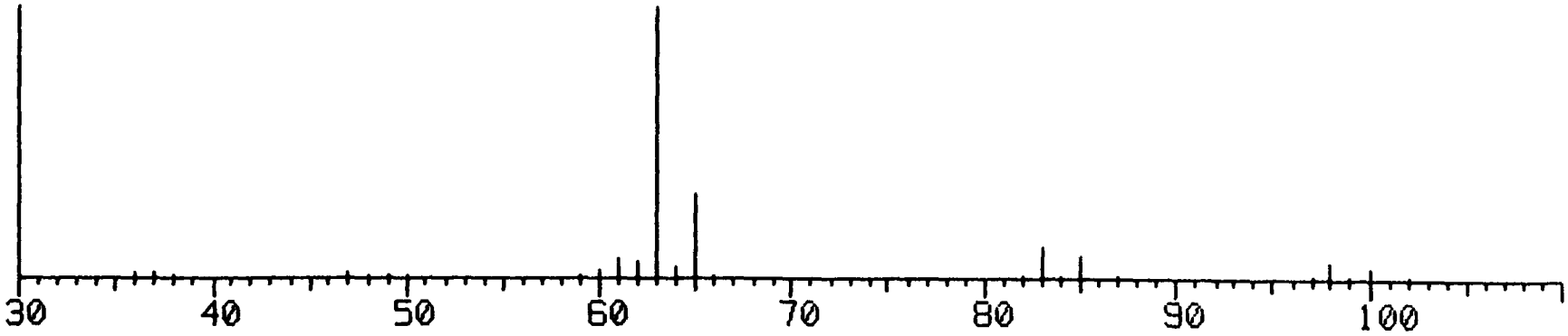
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C63_ EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 437 Time 8.37 min.
100 % = 60308

Total
122412

SY0:C6325 EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 437 Time 8.37 min.
Bkg scan = 427 100 % = 60308

Total
118900

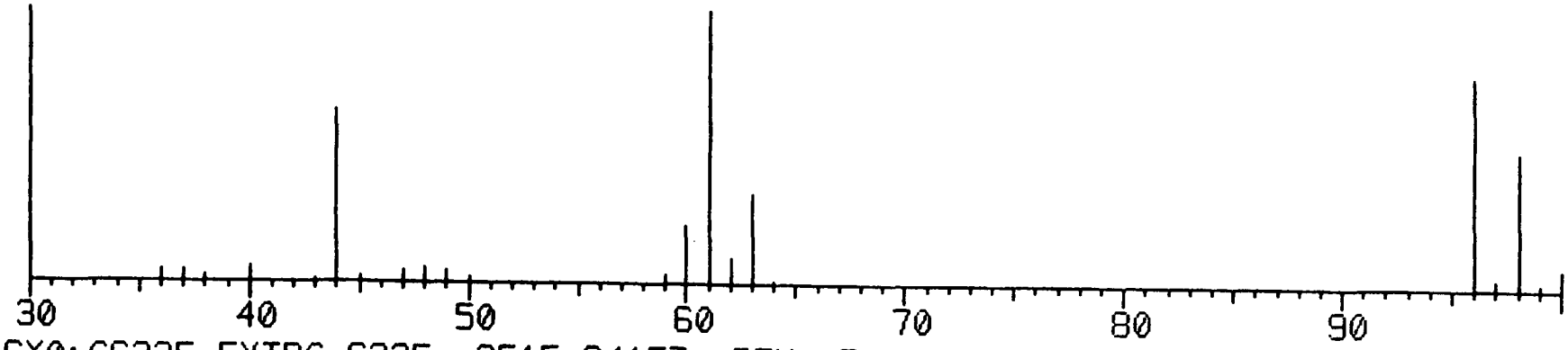


Standard Reference Spectrum: 1,1-Dichloroethane

WADSWORTH/ALERT LABORATORIES, INC.

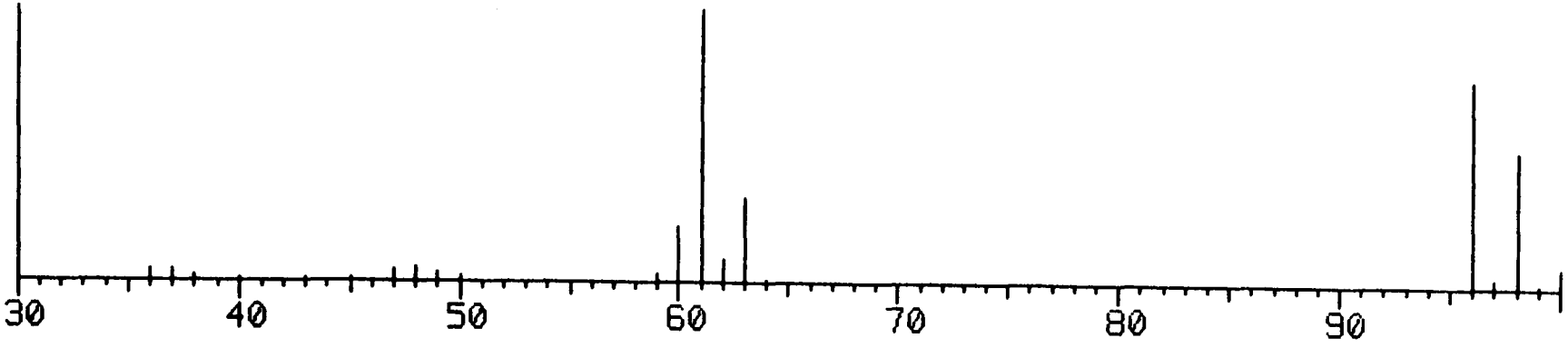
SY0:C63. EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 516 Time 9.57 min.
100 % = 4368

Total
17324

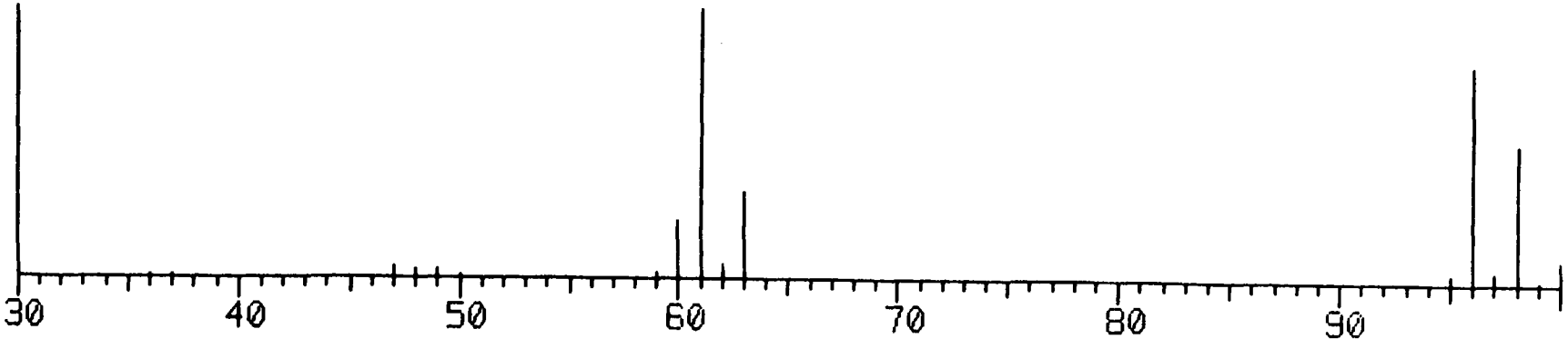


SY0:C6325 EXTRC 6325, 2515-24157, REM, 5.
26-MAR-91 23:52:48 Scan 516 Time 9.57 min.
Bkg scan = 510 100 % = 4368

Total
14296



Standard Reference Spectrum: 1,2-Dichloroethene (total)



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24157
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

SAMPLE ID: RAU-MW12-15 3-12-91

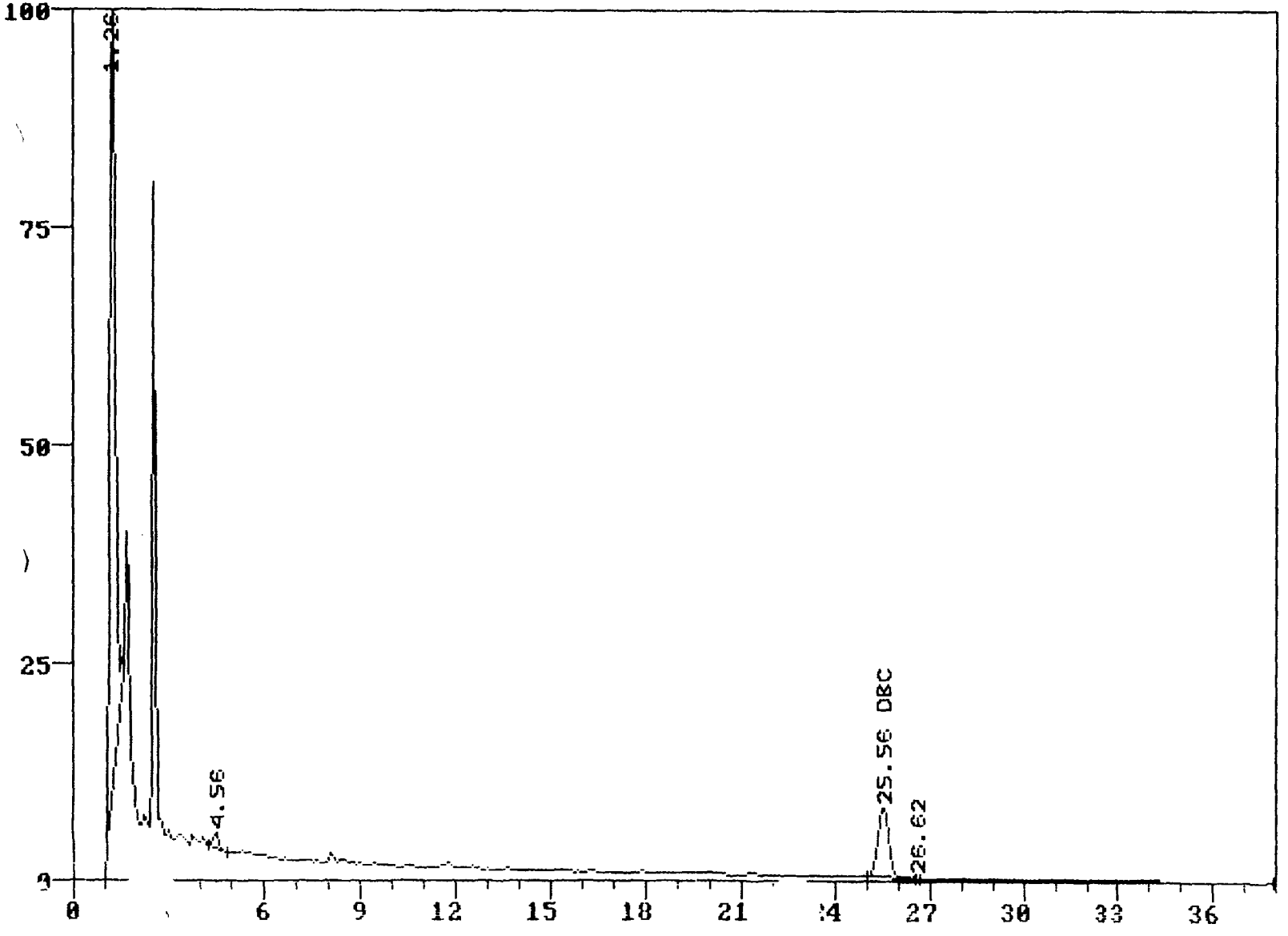
POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	ND*
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50741
2515-24157
Max Signal 1413828 microvolts Normalization 1298604 microvolts
Run Date 22-Mar-91 18:01



WADSWORTH/ALERT
LABORATORIES, INC.

:1I/50741

Run date 22-Mar-91 18:01
Analysis date 25-Mar-91 07:50
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.56	2459456	6.170e-02

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24157
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW12-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	100	15	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24157
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW12-15 3-12-91

METALS ANALYTICAL REPORT
SELECTED LIST

Dissolved metals analysis results

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18/91	ND	3.0	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24157
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-MW12-15 3-12-91

ANALYTICAL REPORT

PARAMETER	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Acidity (CaCO3 to pH 8.3)	3/18/91	ND	1.0	mg/l
Alkalinity (CaCO3 to pH 4.5)	3/18/91	680	1.0	mg/l
Specific Conductance	3/15/91	1600	1.0	umhos/cm
Nitrate Nitrogen	3/25/91	0.43	0.20	mg/l
Total Recoverable Phenolics	3/18/91	ND	0.005	mg/l
pH - Water	3/15/91	6.6		su

NOTE: ND (None Detected)

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24159
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-MW12R-15 3-12-91

VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	9.0
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	9.9 J
1,4-Dichlorobenzene	ND		
1,1-Dichloroethane	120		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	98	(76-114)	(70-121)
Toluene-d8	105	(76-114)	(81-117)
Bromofluorobenzene	106	(86-115)	(74-121)

SY0:C63' EXTRC 6319, 2515-24159, REM, 5.0 . 100%
26-MAR-91 20:14:07 565706
Total Ion Current
Quad 1 scanning mode

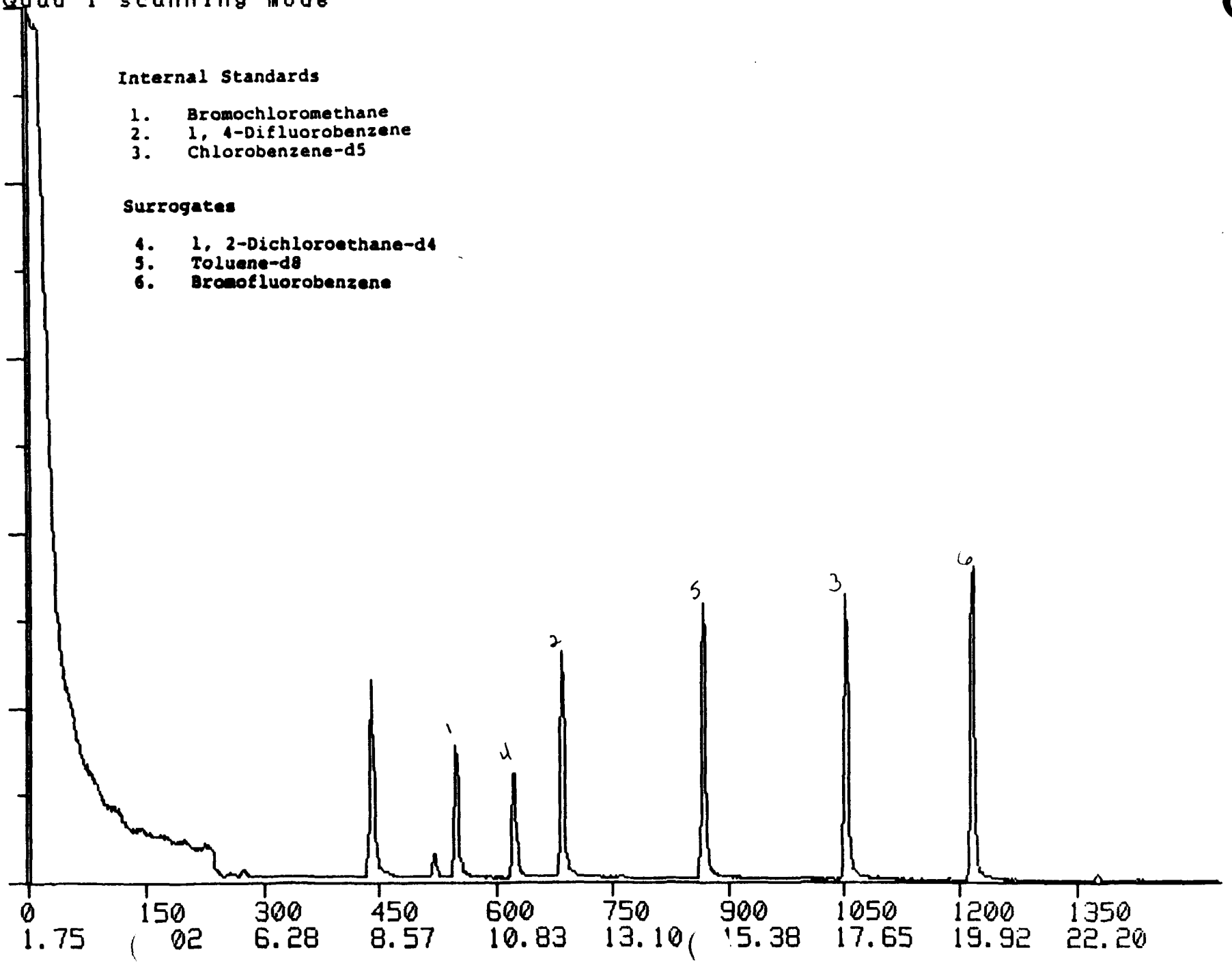
WADSWORTH/ALERT LABORATORIES, INC.

Internal Standards

1. Bromochloromethane
2. 1, 4-Difluorobenzene
3. Chlorobenzene-d5

Surrogates

4. 1, 2-Dichloroethane-d4
5. Toluene-d8
6. Bromofluorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6319
Injection time: 26-MAR-91 20:14:07
Comments:
EXTRC 6319, 2515-24159, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.05	548			STD	1.00	50.0	NG/UL
2S	12.12	685			STD	0.84	50.0	NG/UL
3S	17.68	1052			STD	0.77	50.0	NG/UL
1T	2.48	49	50. / 128.	18843. / ~~68015.~~	~~1~~	~~0.80~~	~~9.9~~	~~NG/UL~~
2T	Was Not Found							
3T	2.77	68	62. / 128.	21173. / 68015.	1	0.66	9.9	NG/UL J
4T	Is Below Specified Detection Limit							
5T	Is Below Specified Detection Limit							
6T	5.90	274	43. / 128.	20627. / 68015.	1	~~1.00~~	~~39.2~~	~~NG/UL~~ don't count
7T	Was Not Found							
8T	Is Below Specified Detection Limit							
9T	8.40	439	63. / 128.	489888. / 68015.	1	0.67	115.0	NG/UL
10T	Is Below Specified Detection Limit							
11T	Was Not Found							
12T	Was Not Found							
13T	Is Below Specified Detection Limit							
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	Was Not Found							
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
22T	Was Not Found							
3T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Is Below Specified Detection Limit								
33T	Was Not Found								
34T	Was Not Found								
35T	14.88	867	98. / 117.	388936. /	330276.	3	0.90	52.7	NG/UL
36T	20.17	1216	95. / 117.	242294. /	330276.	3	0.92	52.9	NG/UL
37T	11.18	623	65. / 128.	167036. /	68015.	1	0.75	48.9	NG/UL
38T	Was Not Found								
39T	9.60	519	96. / 128.	21373. /	68015.	1	0.85	9.0	NG/UL
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
3T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

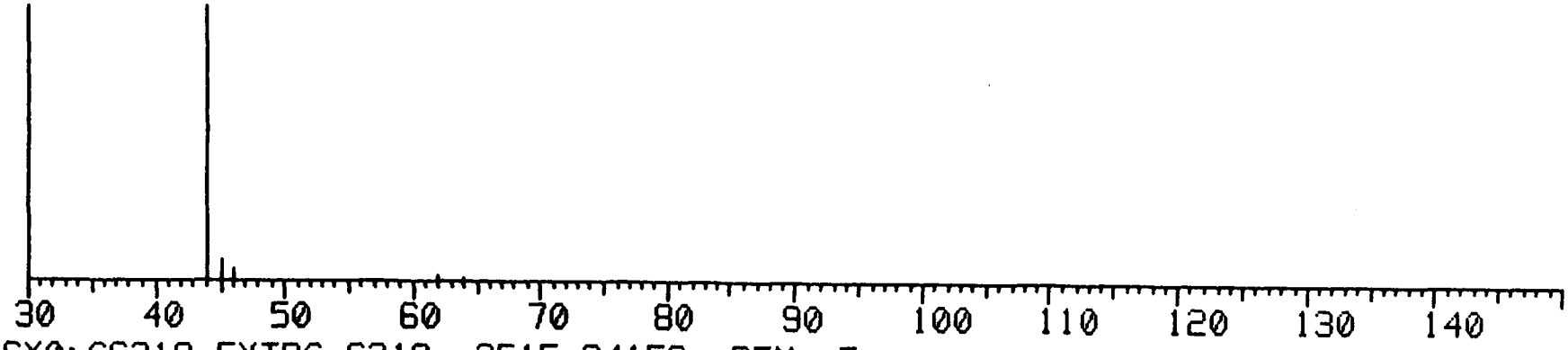
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6319
Injection time: 26-MAR-91 20:14:07

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.247	50. / 128.	1.404	9.9	IA BB RF			1.00
3T	0.276	62. / 128.	1.567	9.9	IA BB RF			1.00
6T	0.587	43. / 128.	0.387	39.2	IA BB RF			1.00
9T	0.836	63. / 128.	3.132	115.0	IA BB RF			1.00
35T	0.842	98. / 117.	1.118	52.7	IA BB RF			1.00
36T	1.141	95. / 117.	0.694	52.9	IA VB RF			1.00
37T	1.112	65. / 128.	2.512	48.9	IA BB RF			1.00
39T	0.955	96. / 128.	1.742	9.0	IA BB RF			1.00

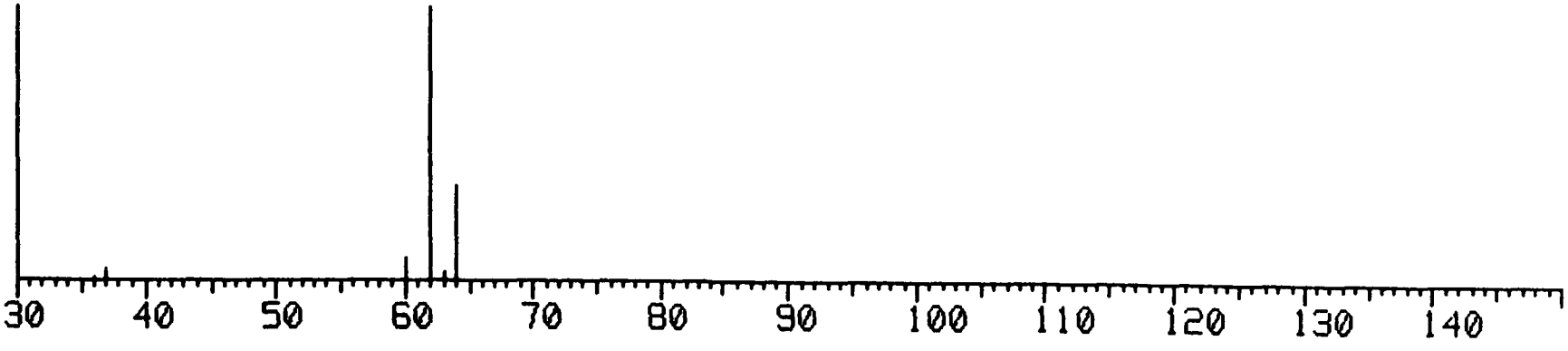
SY0:C63. EXTRC 6319, 2515-24159, REM, 5.
26-MAR-9. 20:14:07 Scan 68 Time 2.77 min.
100 % = 1175

Total
81488

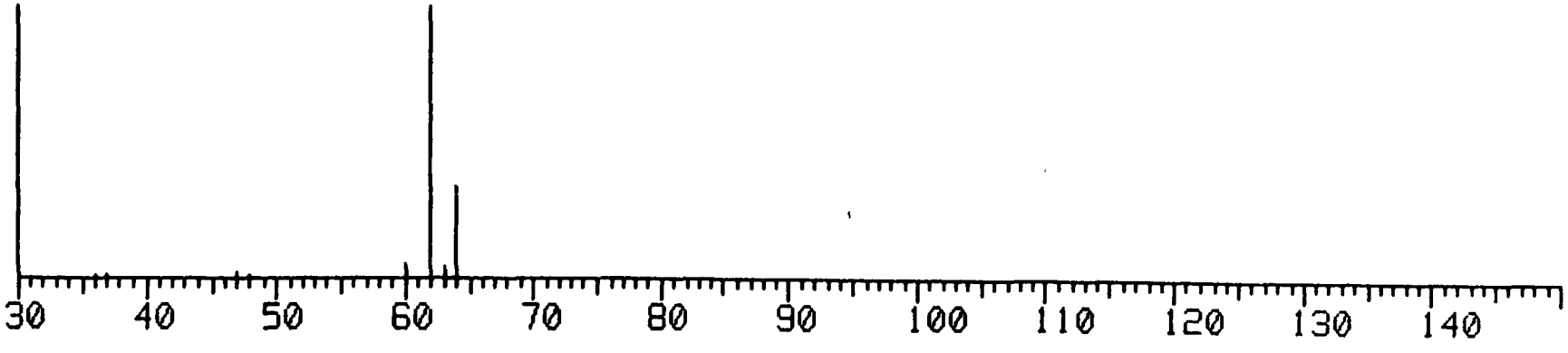


SY0:C6319 EXTRC 6319, 2515-24159, REM, 5.
26-MAR-91 20:14:07 Scan 68 Time 2.77 min.
BKg scan = 49 100 % = 1175

Total
1780



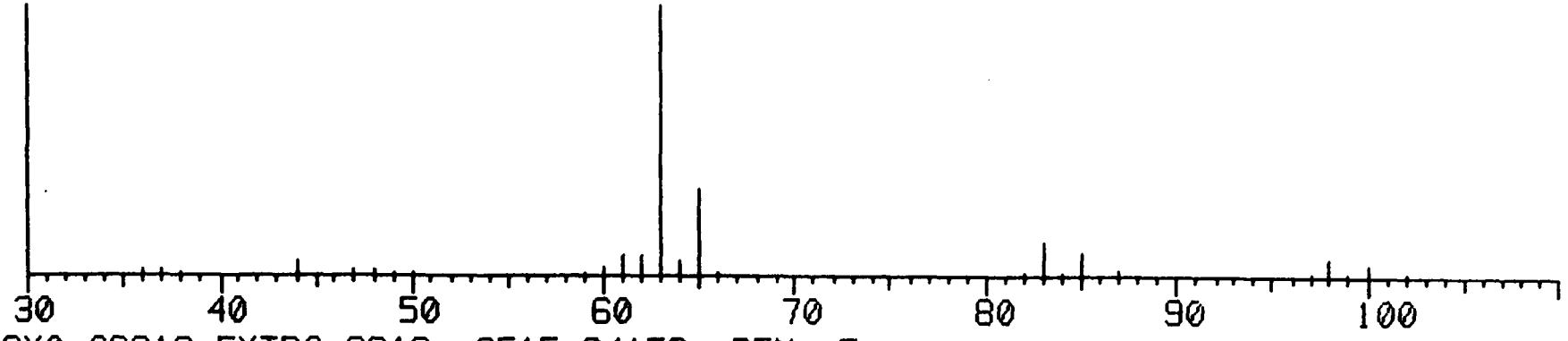
Standard Reference Spectrum: Vinyl Chloride



WADSWORTH/ALERT LABORATORIES, INC.

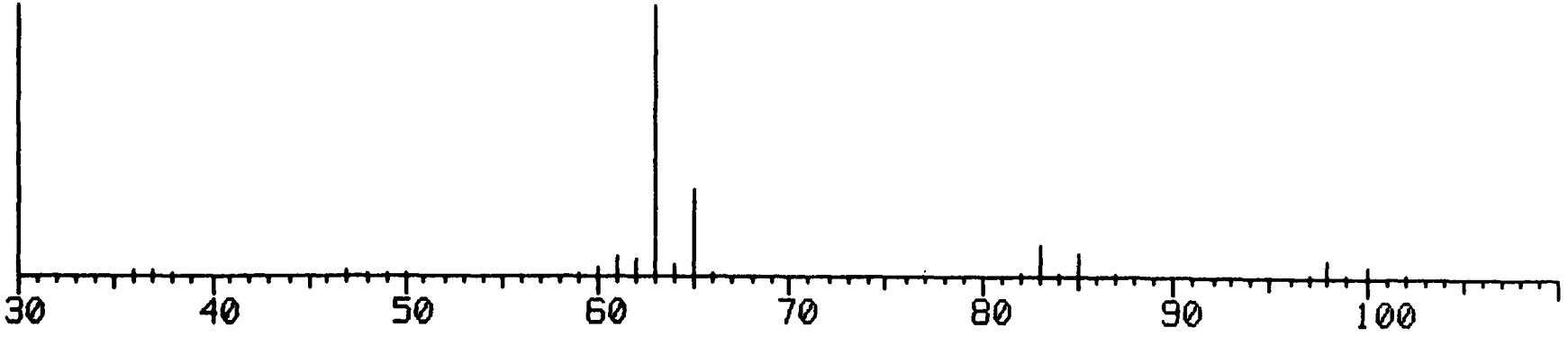
SY0:C63: EXTRC 6319, 2515-24159, REM, 5.
26-MAR-91 20:14:07 Scan 439 Time 8.40 min.
100 % = 64345

Total
131264

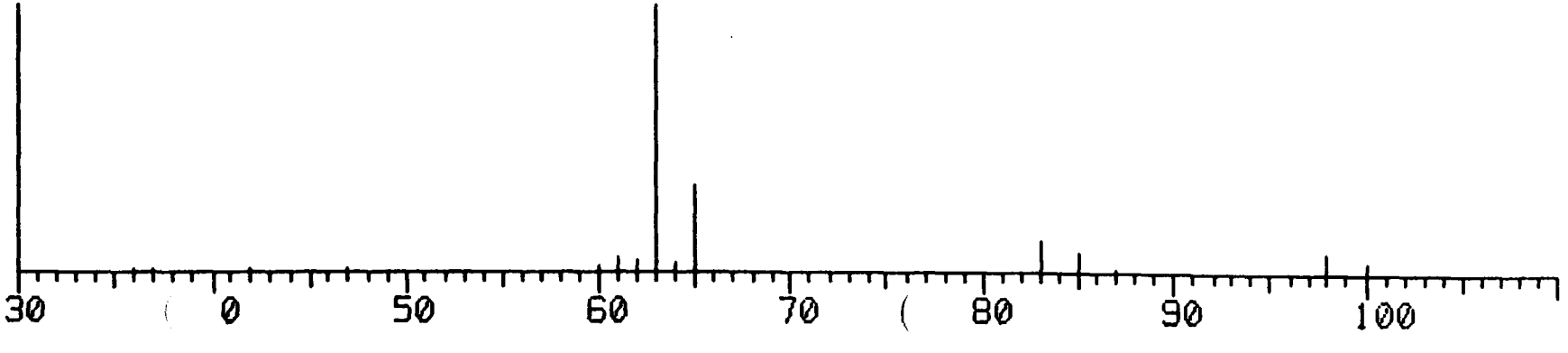


SY0:C6319 EXTRC 6319, 2515-24159, REM, 5.
26-MAR-91 20:14:07 Scan 439 Time 8.40 min.
Bkg scan = 430 100 % = 64345

Total
127578



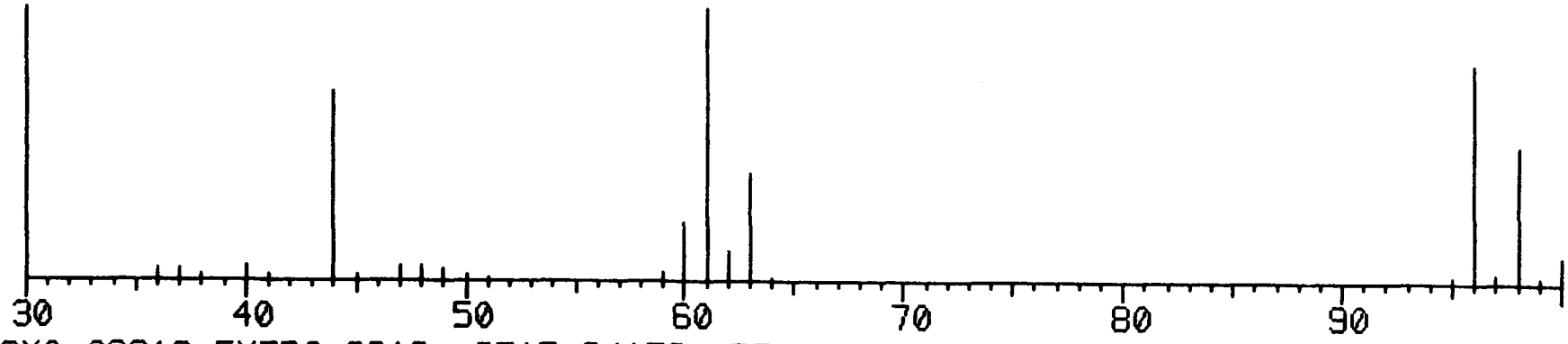
Standard Reference Spectrum: 1,1-Dichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

SY0:C63 EXTRC 6319, 2515-24159, REM, 5.
26-MAR-S. 20:14:07 Scan 519 Time 9.60 mi...
100 % = 4303

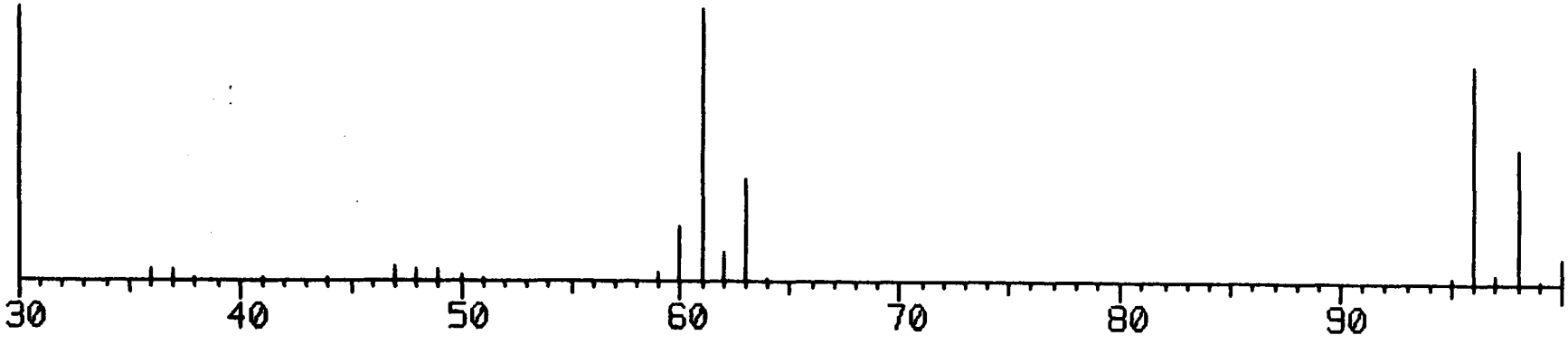
Total
18331



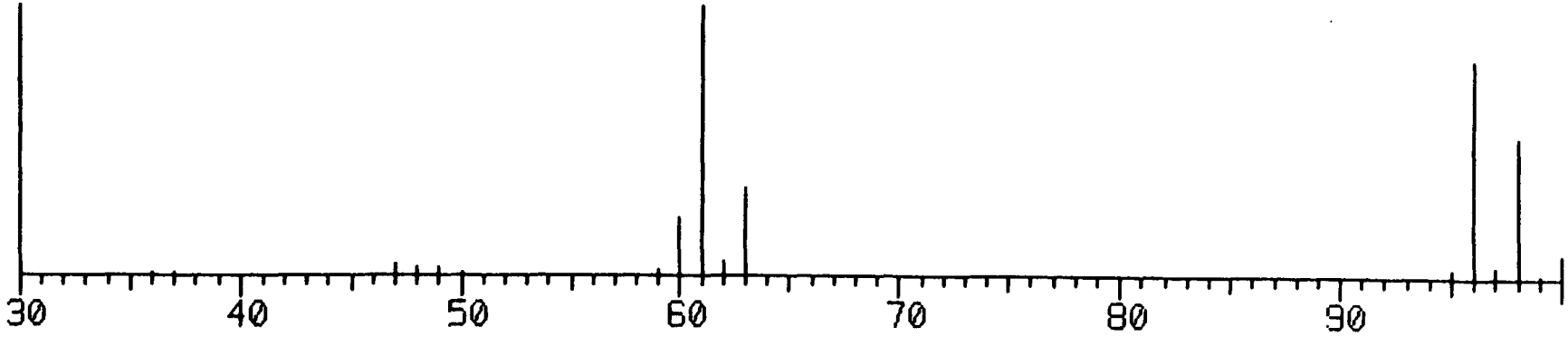
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6319 EXTRC 6319, 2515-24159, REM, 5.
26-MAR-91 20:14:07 Scan 519 Time 9.60 min.
Bkg scan = 512 100 % = 4303

Total
14935



Standard Reference Spectrum: 1,2-Dichloroethene (total)



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24158
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: RAU-OAL08-15 3-11-91

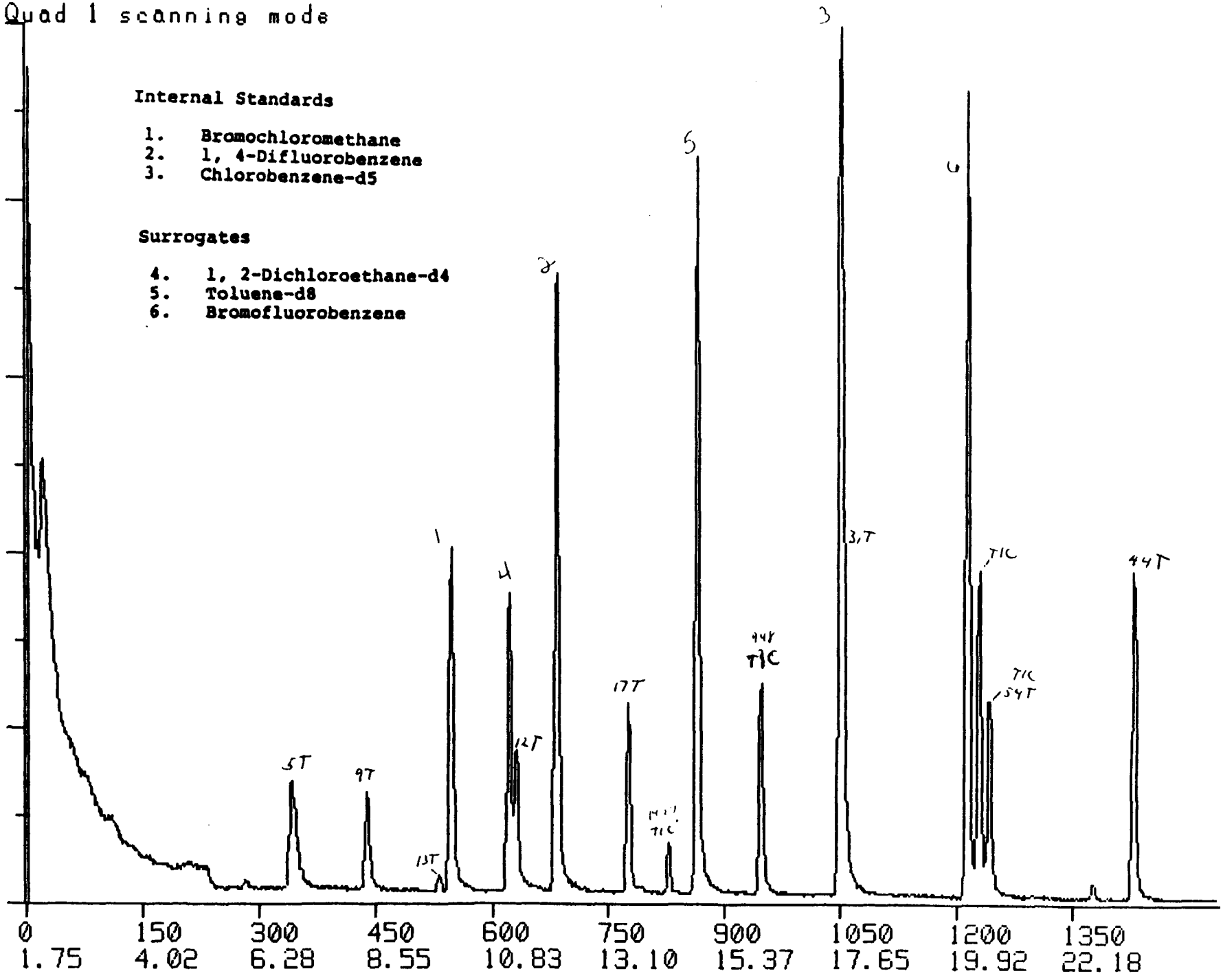
VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	22	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	28
Chlorobenzene	20	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	20	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	19		
1,2-Dichloroethane	20		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	97	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	103	(86-115)	(74-121)

SY0:C63(EXTRC 6308, 2515-24158, REM, 5.0 100%
26-MAR-9. 13:18:51 176852
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6308
Injection time: 26-MAR-91 13:18:51
Comments:
EXTRC 6308, 2515-24158, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

308. QNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.03	547			STD	1.00	50.0	NG/UL
2S	12.10	684			STD	0.84	50.0	NG/UL
3S	17.65	1050			STD	0.77	50.0	NG/UL
1T	Was Not Found							
2T	Was Not Found							
3T	Was Not Found							
4T	Was Not Found							
5T	6.90	341	84. / 128.	58171. / 58801.	1	0.86	27.9	NG/UL ✓
6T	6.00	281	43. / 128.	7348. / 58801.	1	0. ~~64~~	~~16.1~~	~~NG/UL~~ J
							not wanted	
7T	Was Not Found							
8T	Was Not Found							
9T	8.38	438	63. / 128.	70719. / 58801.	1	0.89	19.2	NG/UL ✓
10T	Was Not Found							
11T	Was Not Found							
12T	11.30	631	62. / 128.	66355. / 58801.	1	0.78	19.5	NG/UL ✓
13T	9.77	530	43. / 128.	13642. / 58801.	1	~~0.86~~	~~17.8~~	~~NG/UL~~ ~~J~~
							not wanted.	
14T	Was Not Found							
15T	Was Not Found							
16T	Was Not Found							
17T	13.50	776	83. / 114.	86555. / 326314.	2	1.00	21.7	NG/UL ✓
18T	Was Not Found							
19T	Was Not Found							
20T	Was Not Found							
21T	Was Not Found							
[illegible]T	Was Not Found							
[illegible]T	Was Not Found							
24T	Was Not Found							
25T	Was Not Found							
26T	Was Not Found							
27T	Was Not Found							
28T	Was Not Found							
29T	Was Not Found							

WADSWORTH/ALERT
LABORATORIES, INC.

6308. GNT

30T	Is Below Specified Detection Limit								
31T	17.70	1054	112. / 117.	111256. /	285934.	3	0.85	20.1	NG/UL
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.85	865	98. / 117.	329874. /	285934.	3	0.90	51.6	NG/UL
36T	20.13	1214	95. / 117.	201802. /	285934.	3	0.92	50.9	NG/UL
37T	11.15	621	65. / 128.	143767. /	58801.	1	0.71	48.7	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Was Not Found								
44T	23.37	1428	146. / 117.	84418. /	285934.	3	0.84	19.8	NG/UL
45T	Was Not Found								
46T	Was Not Found								
47T	Is Below Specified Detection Limit								
48T	Was Not Found								
49T	Was Not Found								
50T	11.68	656	41. / 128.	~~203. /~~	~~58801.~~	~~1~~	~~0.52~~	~~5.1~~	~~NG/UL~~
51T	Was Not Found								
52T	Was Not Found								
53T	Was Not Found								
54T	20.55	1242	75. / 117.	55569. /	285934.	3	0.96	22.7	NG/UL
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

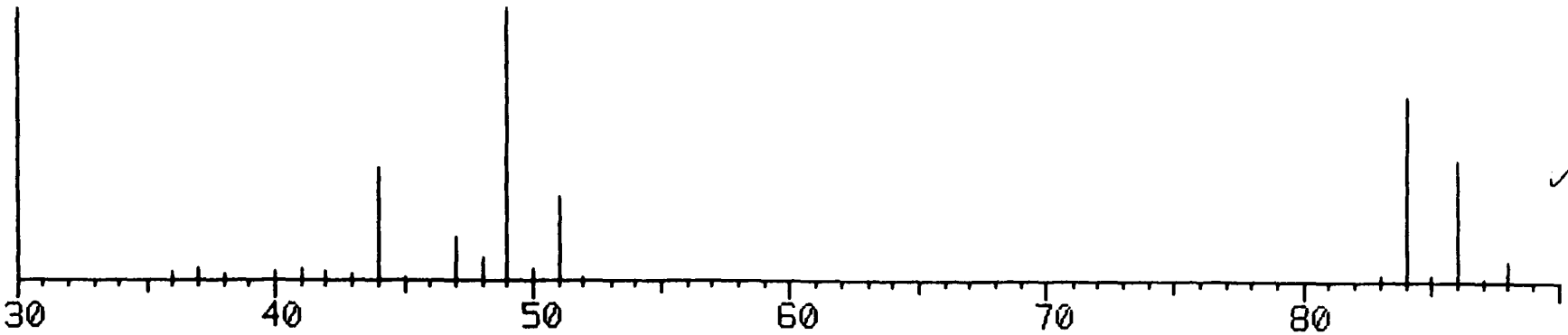
Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6308
Injection time: 26-MAR-91 13:18:51

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
5T	0.688	84. / 128.	1.772	27.9	IA BB RF			1.00
6T	0.598	43. / 128.	0.387	16.1	IA BB RF			1.00
9T	0.835	63. / 128.	3.132	19.2	IA BB RF			1.00
12T	1.127	62. / 128.	2.889	19.5	IA BB RF			1.00
13T	0.974	43. / 128.	0.652	17.8	IA VB RF			1.00
17T	1.116	83. / 114.	0.611	21.7	IA BB RF			1.00
31T	1.003	112. / 117.	0.966	20.1	IA BB RF			1.00
35T	0.841	98. / 117.	1.118	51.6	IA VB RF			1.00
36T	1.141	95. / 117.	0.694	50.9	IA VB RF			1.00
37T	1.112	65. / 128.	2.512	48.7	IA BB RF			1.00
44T	1.324	146. / 117.	0.747	19.8	IA BV RF			1.00
50T	1.165	41. / 128.	0.034	5.1	IA BB RF			1.00
4T	1.164	75. / 117.	0.427	22.7	IA VB RF			1.00

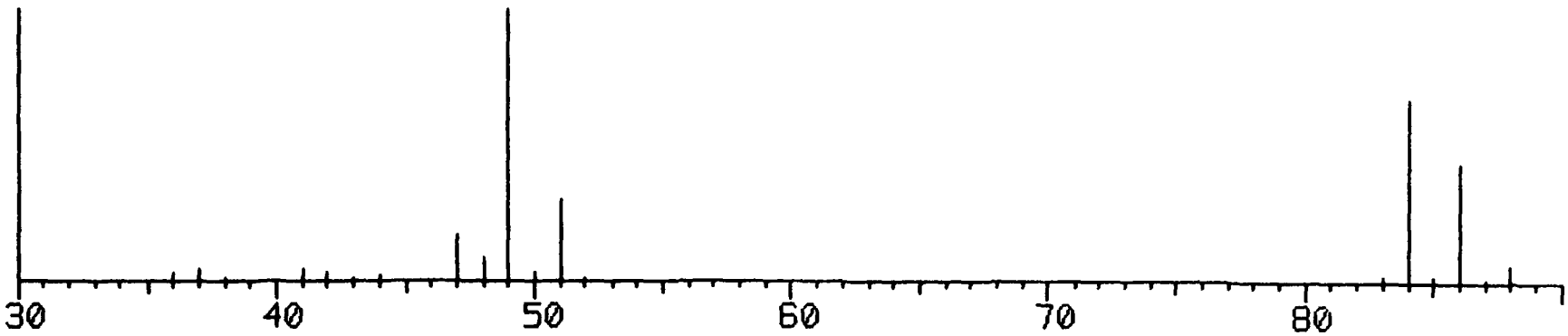
SY0:C6308 EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 341 Time 6.90 min.
100 % = 7151

Total
24888

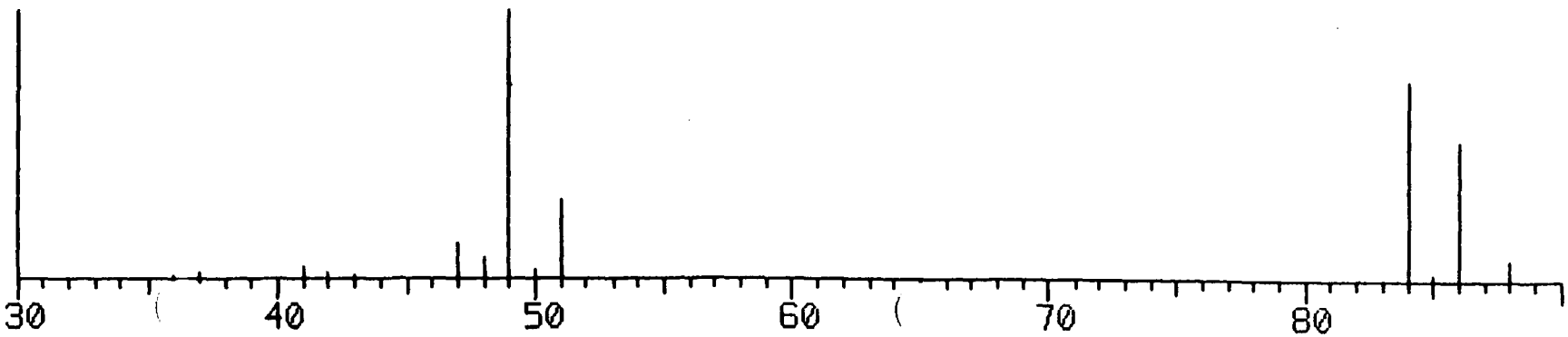


SY0:C6308 EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 341 Time 6.90 min.
Bkg scan = 332 100 % = 7151

Total
21403



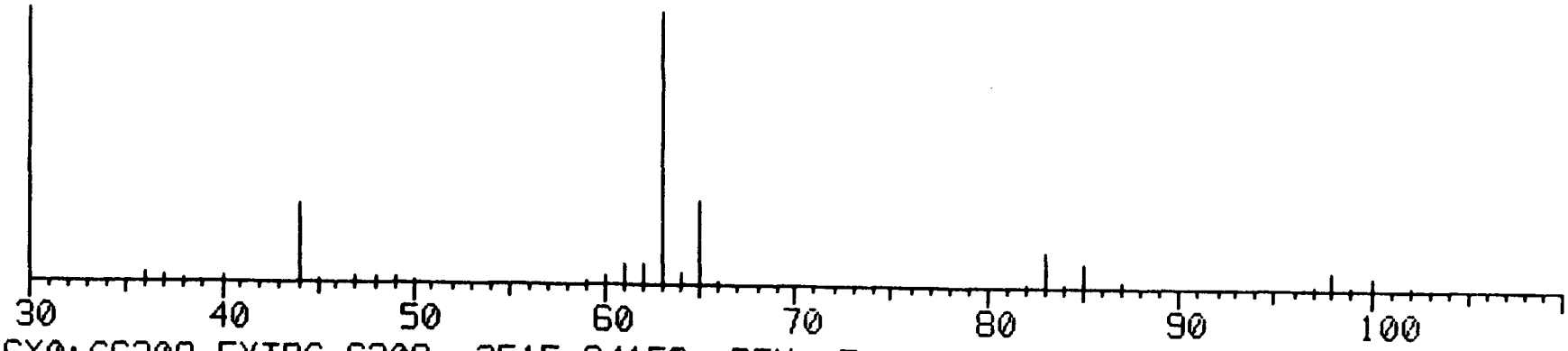
Standard Reference Spectrum: Methylene Chloride



WADSWORTH/ALERT LABORATORIES, INC.

SY0:C63(EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 438 Time 8.38 min.
100 % = 9730

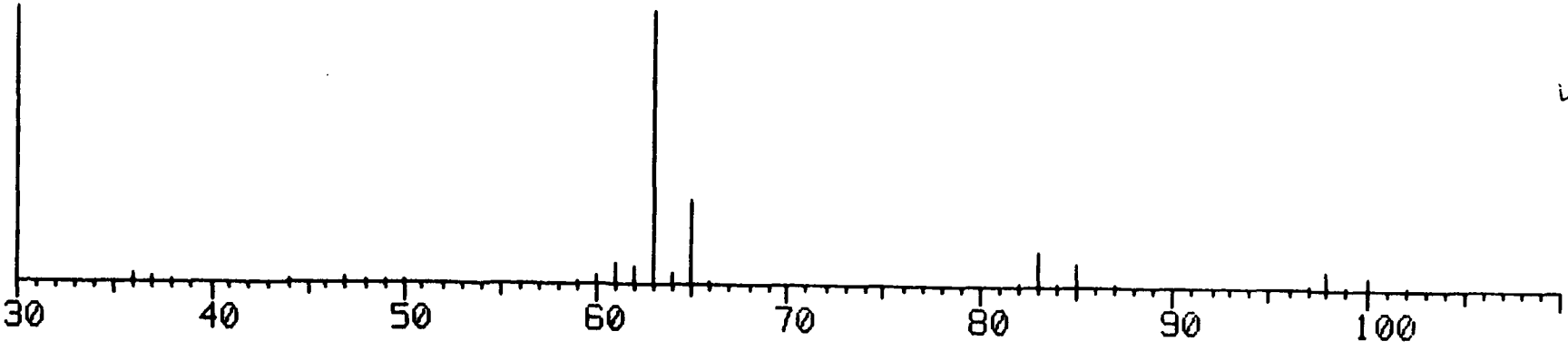
Total
22634



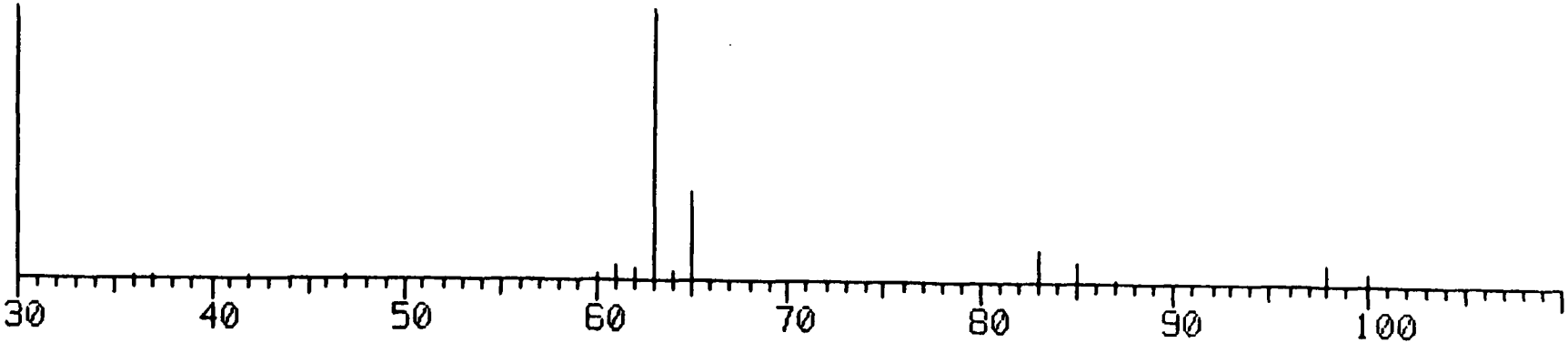
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6308 EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 438 Time 8.38 min.
Bkg scan = 430 100 % = 9730

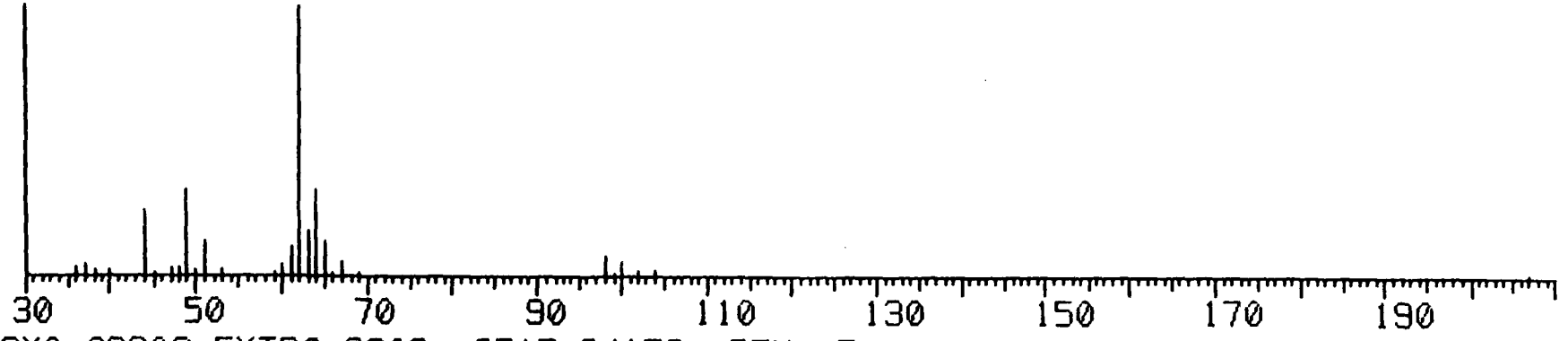
Total
19435



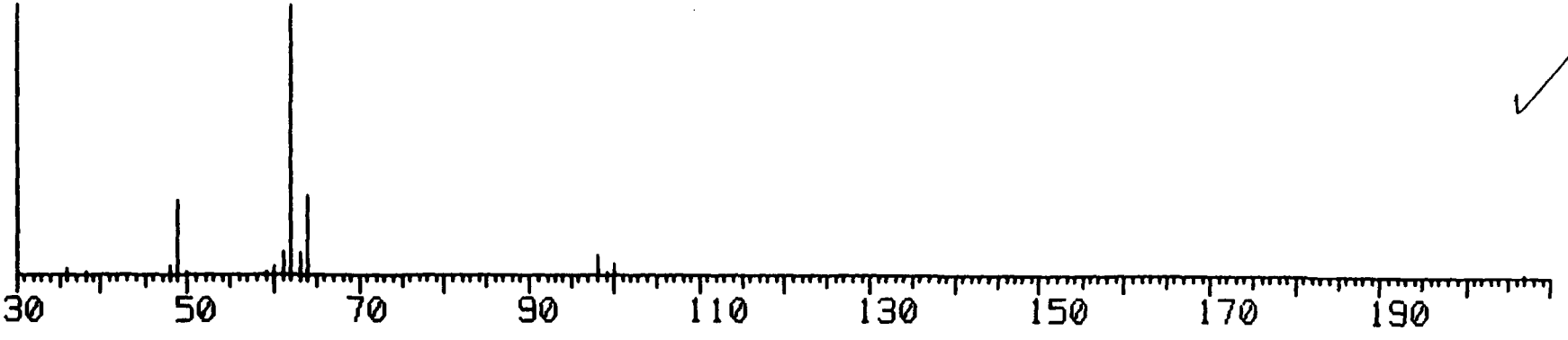
Standard Reference Spectrum: 1,1-Dichloroethane



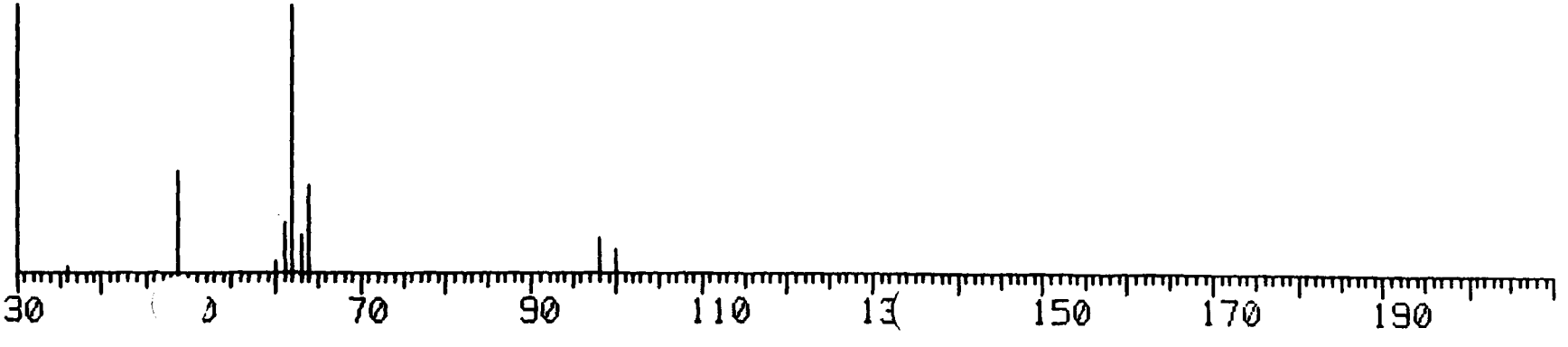
SY0:C63c EXTRC 6308, 2515-24158, REM, 5. Total
26-MAR-91 13:18:51 Scan 631 Time 11.30 min. 30625
100 % = 10513



SY0:C6308 EXTRC 6308, 2515-24158, REM, 5. Total
26-MAR-91 13:18:51 Scan 631 Time 11.30 min. 21045
BKg scan = 624 100 % = 10513



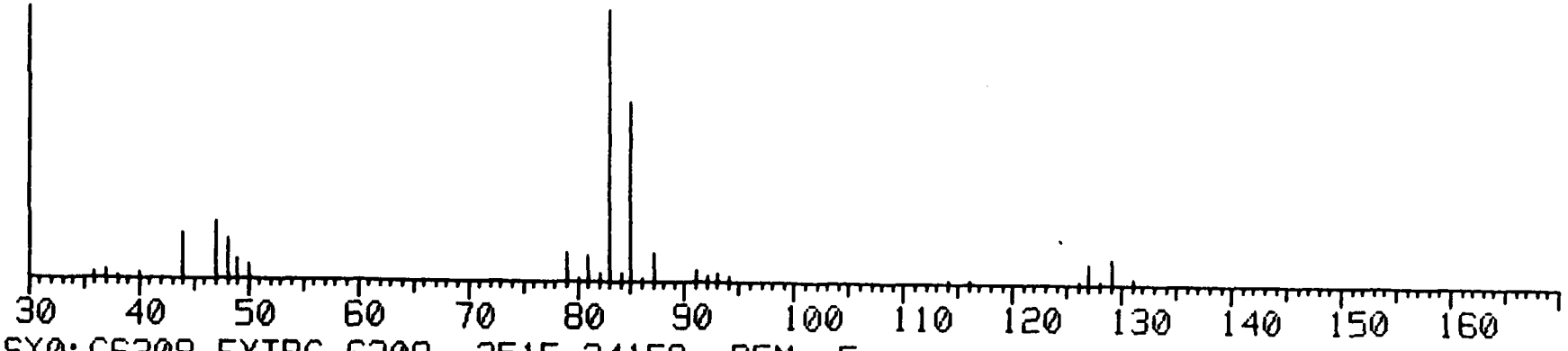
Standard Reference Spectrum: 1,2-Dichloroethane



WADSWORTH/ALERT LABORATORIES, INC.

SY0:C63(EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 776 Time 13.50 min.
100 % = 13406

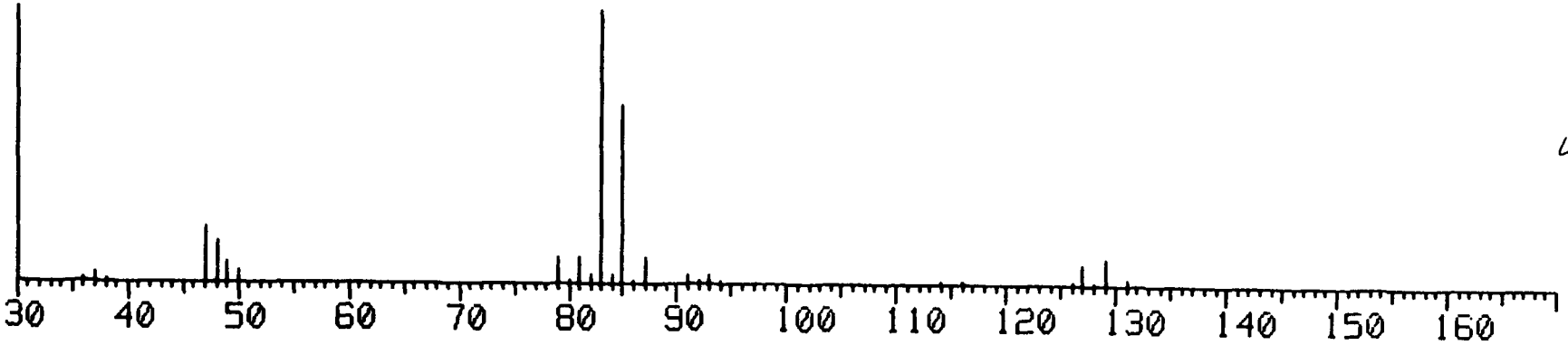
Total
40650



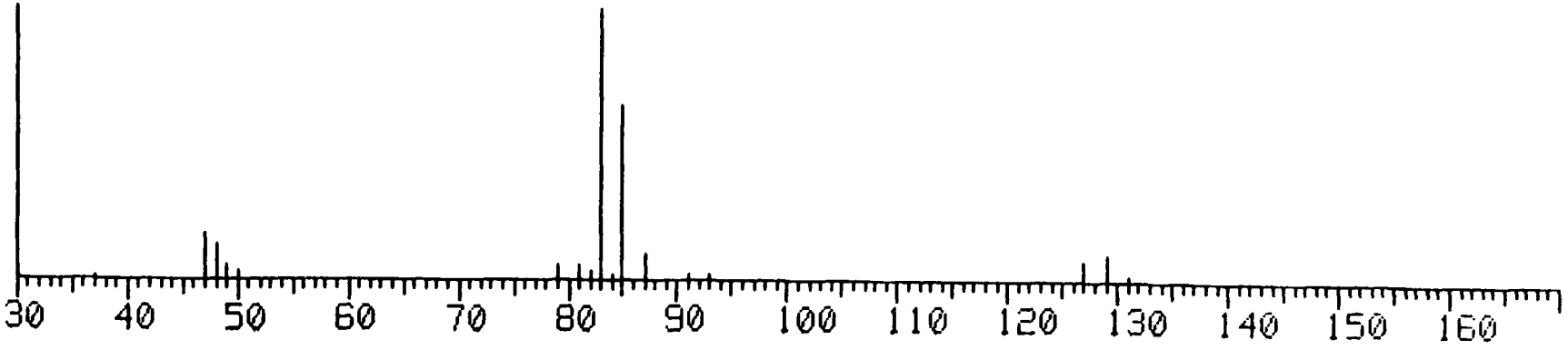
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6308 EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 776 Time 13.50 min.
Bkg scan = 769 100 % = 13406

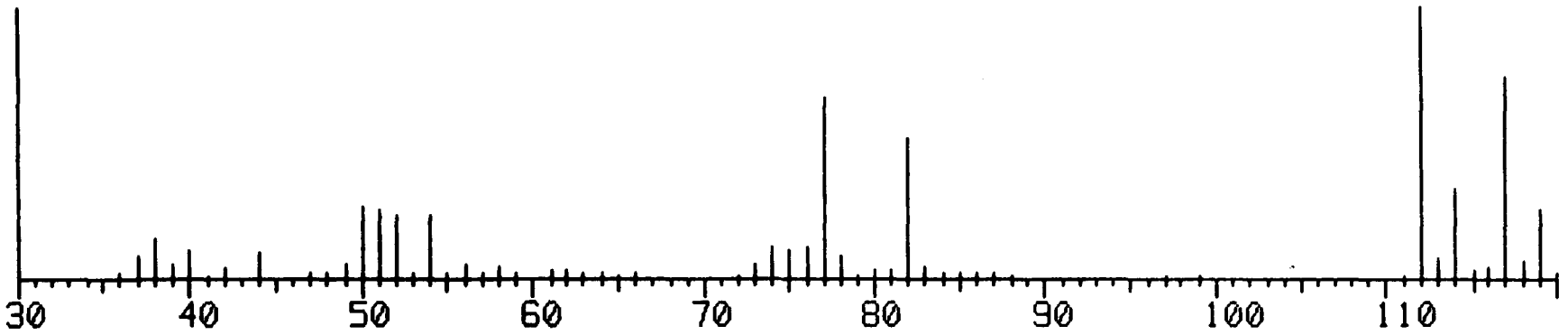
Total
38172



Standard Reference Spectrum: Bromodichloromethane

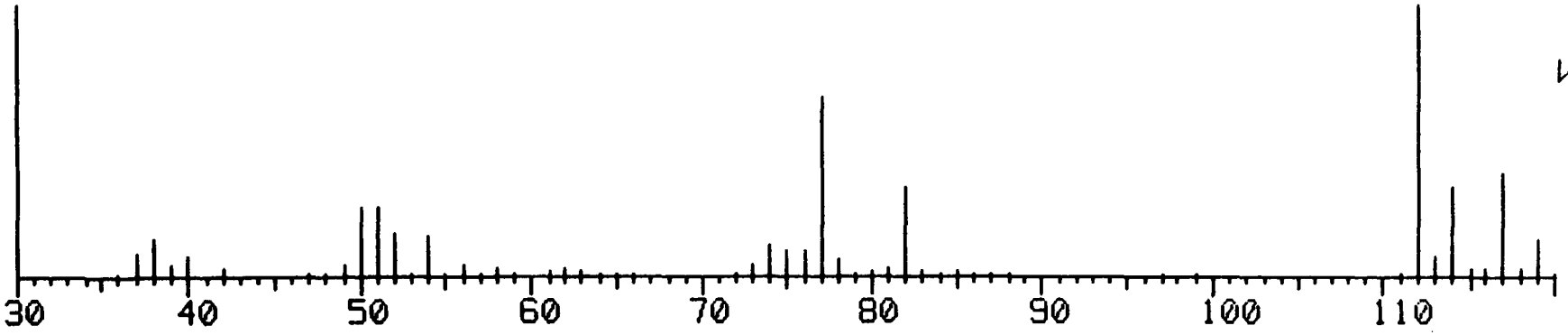


SY0:C63 EXTRC 6308, 2515-24158, REM, 5. Total
26-MAR-91 13:18:51 Scan 1054 Time 17.70 min. 114090
100 % = 18432

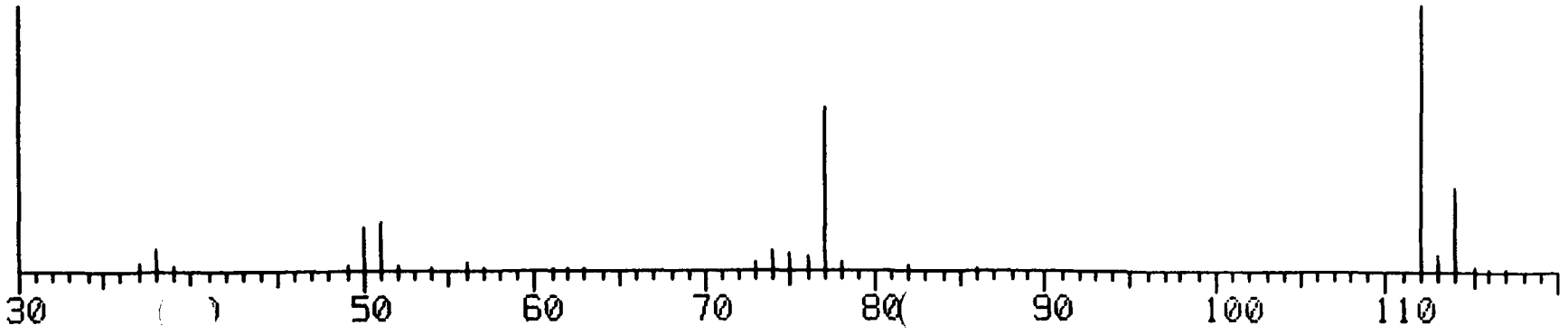


WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6308 EXTRC 6308, 2515-24158, REM, 5. Total
26-MAR-91 13:18:51 Scan 1054 Time 17.70 min. 93305
Bkg scan = 1046 100 % = 18432

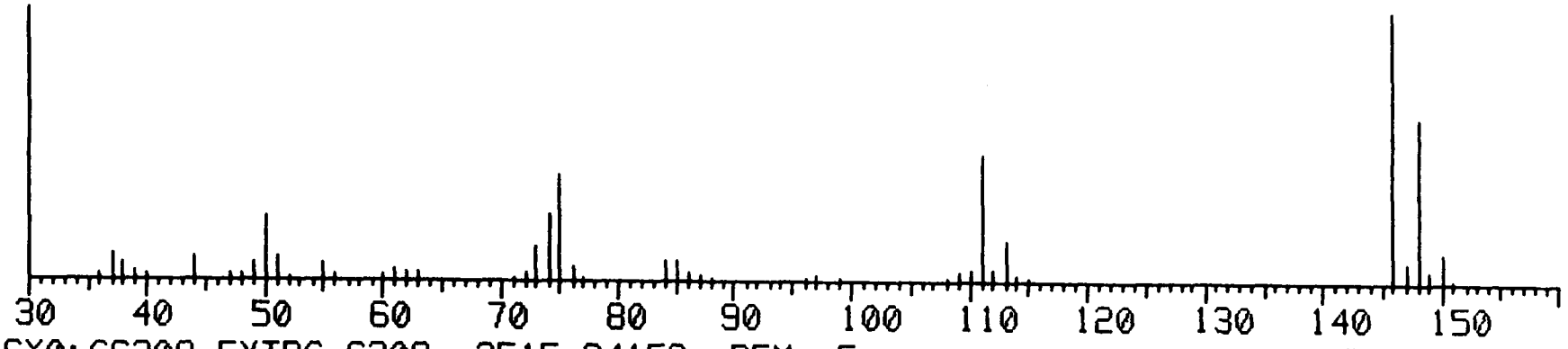


Standard Reference Spectrum: Chlorobenzene



SY0:C63[illegible] EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 1428 Time 23.37 min.
100 % = 14888

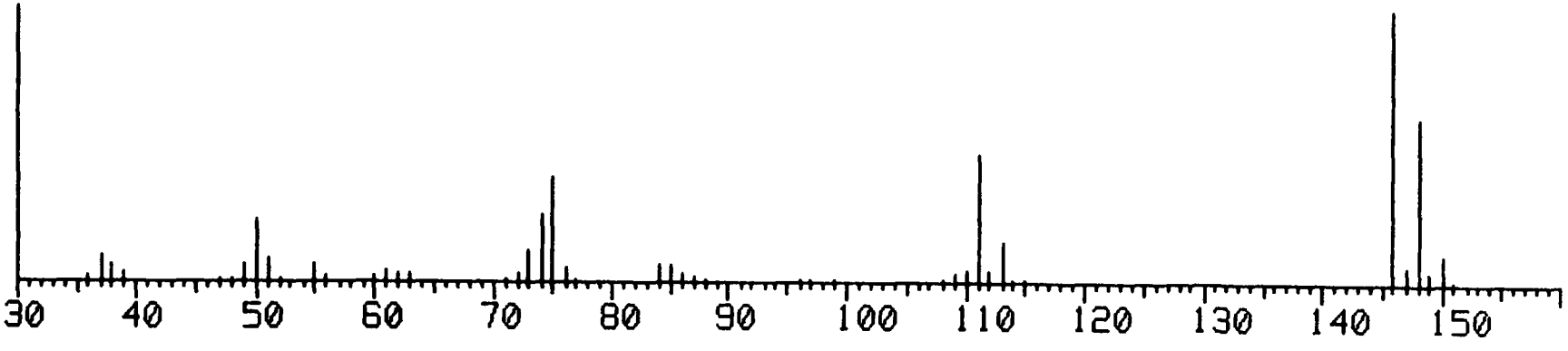
Total
67480



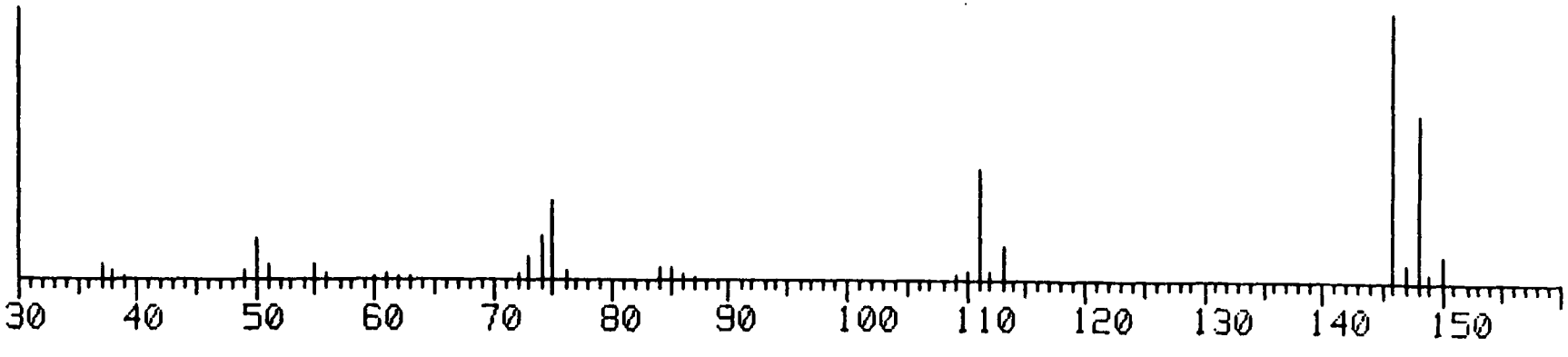
WADSWORTH/ALERT LABORATORIES, INC.

SY0:C6308 EXTRC 6308, 2515-24158, REM, 5.
26-MAR-91 13:18:51 Scan 1428 Time 23.37 min.
Bkg scan = 1420 100 % = 14888

Total
66067



Standard Reference Spectrum: 1,2-Dichlorobenzene



WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24158
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: 3/18/91
DATE ANALYZED: 3/22/91

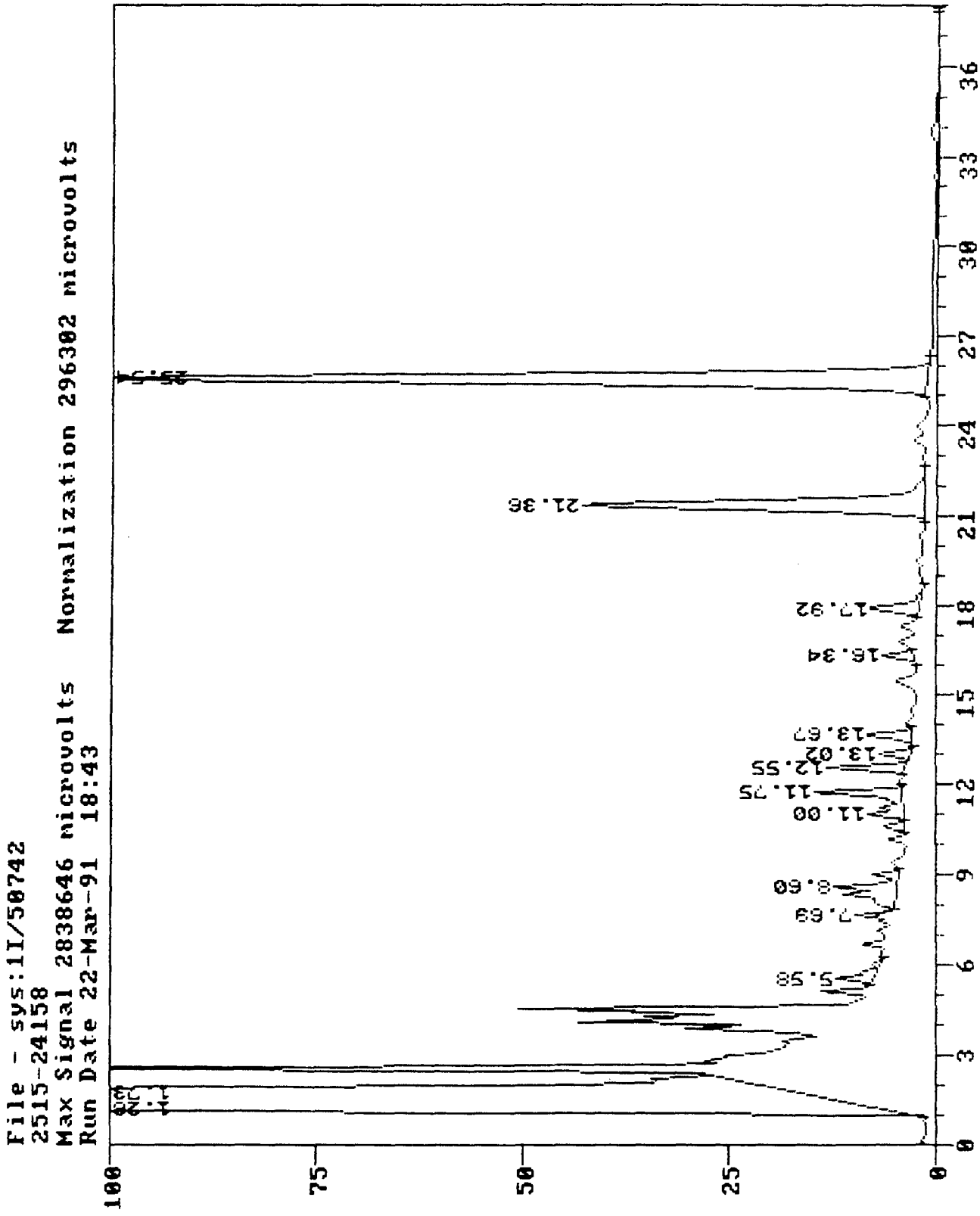
SAMPLE ID: RAU-OAL08-15 3-11-91

POLYCHLORINATED BIPHENYLS
METHOD 608 LIST - GC

PCB-1016	ND
PCB-1221	ND
PCB-1232	ND
PCB-1242	ND
PCB-1248	ND
PCB-1254	1.8
PCB-1260	ND*

NOTE: ND (None Detected, lower detectable limit = 0.50 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 1.0 ug/l) as rec'd
-- (Not Analyzed)

WADSWORTH/ALERT
LABORATORIES, INC.

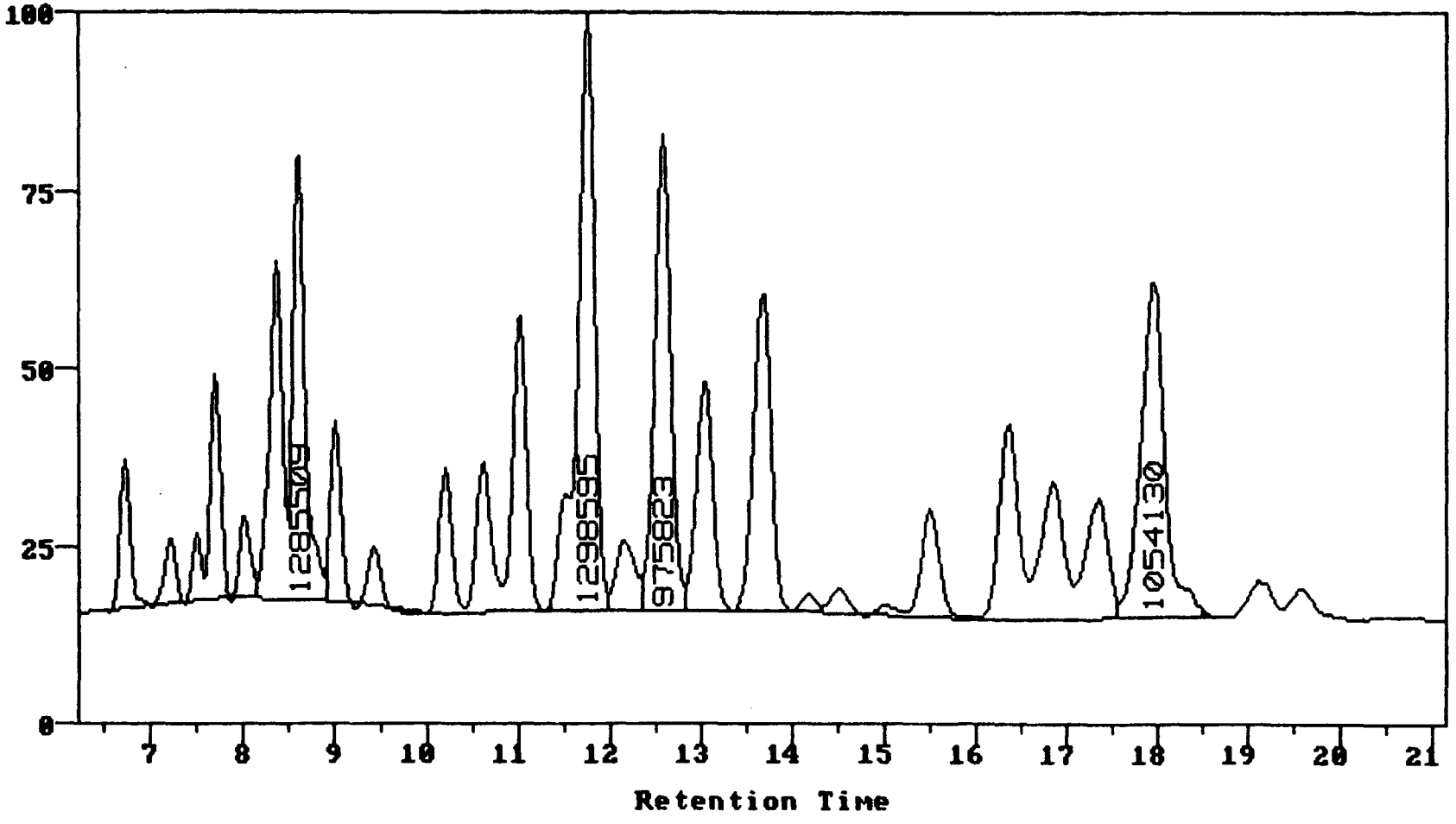


WADSWORTH/ALERT
LABORATORIES, INC.

For sam

File - sys:1I/50704
ar1254

Maximum Signal in Run 187335 microvolts
Maximum Signal for Plot 116636 microvolts
Run Date 21-Mar-91 16:28 Analysis Date 25-Mar-91 07:58
Expanded by 1 Initial Slope Sensitivity 1500 uv/sec



TOTAL AREA: 4614087

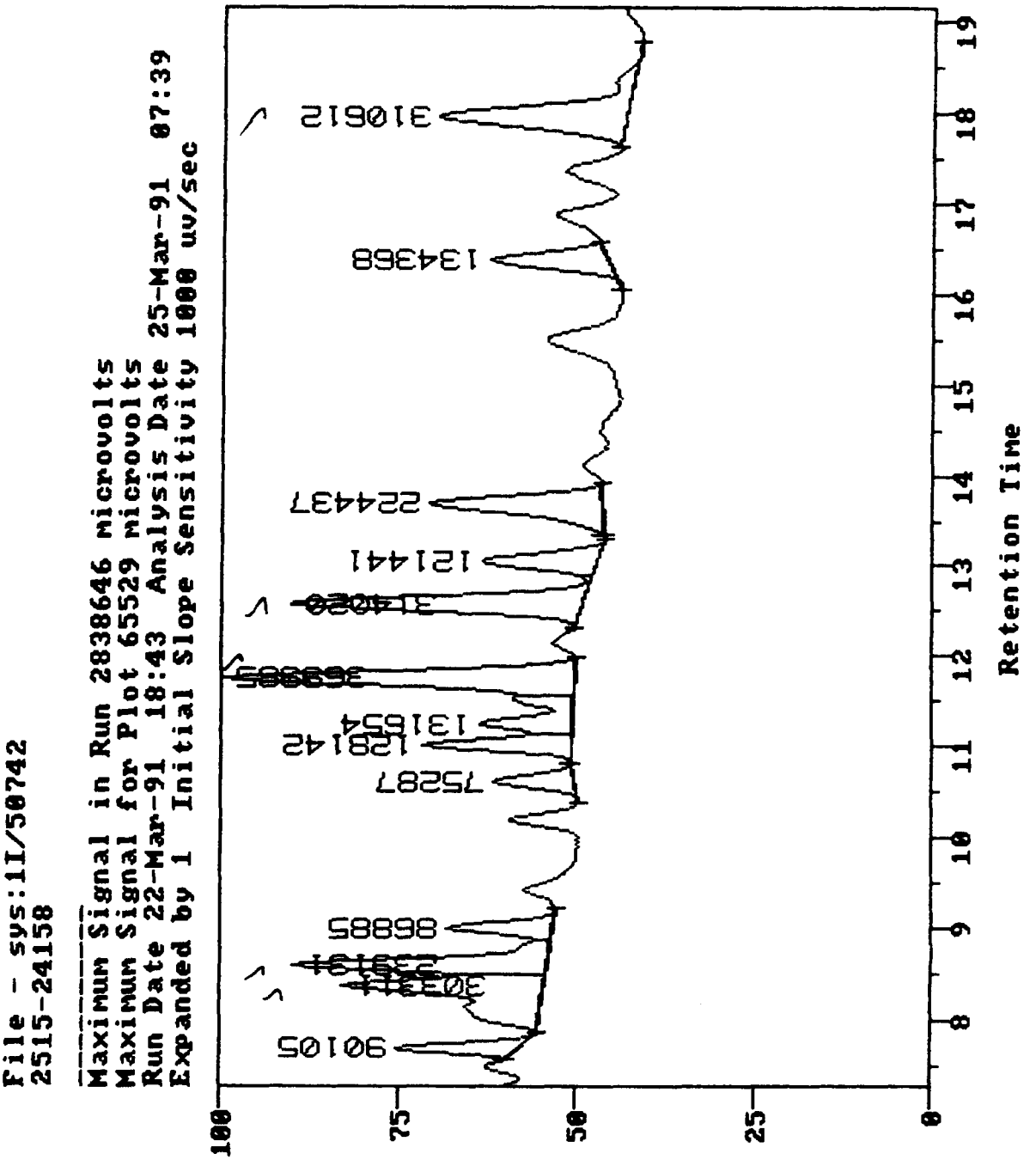
$Df = \frac{.5}{\text{total area}}$

WADSWORTH/ALERT
LABORATORIES, INC.

TOTAL AREA- 1536459

(1536459)(1.1 x 10^-7) = .166 ms/mL AR1254 ppm

.166 ms/mL x 10 mL = 1.66 ms/mL



WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50742
2515-24158

Run date 22-Mar-91 18:43
Analysis date 25-Mar-91 08:22
Method file - sys:gcm/ar608gi
PCB Analysis
Component file - sys:cmp/ar1254s
Lockout time 5.300 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 5.3 min.
Slope Sensitivity 1000 uv/sec from 5.3 to 999.0 min.

13 peaks have passed the time/area filters
18 peaks were found altogether by the peak picker

RT	TYPE	HEIGHT	AREA	HEIGHT PERCENT	AREA PERCENT
5.58	bb	14763	215810	2.4846	1.8525
8.37	bv	18793	303311	3.1628	2.6037
8.60	vv	23891	239131	4.0208	2.0527
11.00	bv	14043	128142	2.3634	1.1000
11.22	vv	8730	131654	1.4692	1.1301
11.75	vb	33158	369985	5.5804	3.1760
12.55	bv	27511	314020	4.6300	2.6956
13.03	vb	10802	121441	1.8179	1.0425
13.67	bb	16191	224437	2.7249	1.9266
16.34	bb	11281	134368	1.8986	1.1534
17.92	bb	17705	310612	2.9797	2.6663
21.36	bb	115358	2682158	19.4144	23.0240
25.54	bb	281961	6474354	47.4532	55.5766

RT	HEIGHT	AREA	HEIGHT PCT.	AREA PCT.	NAME
GROUP	196868	2492911	100.0000	100.0000	1254

WADSWORTH/ALERT
LABORATORIES, INC.

F[illegible]s:1I/50742
2515-24158

Run date 22-Mar-91 18:43
Analysis date 25-Mar-91 08:23
Method file - sys:gcm/ar608gi
PCB Analysis
Calibration file - sys:clm/crv/1254
Linear Least Squares Fit of Calibration Data
Lockout time 5.300 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 5.3 min.
Slope Sensitivity 1000 uv/sec from 5.3 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
1254	0			2492911	1.829e-01

WADSWORTH/ALERT
LABORATORIES, INC.

File - sys:1I/50742
2515-24158

Run date 22-Mar-91 18:43
Analysis date 25-Mar-91 07:51
Method file - sys:gcm/dbc
DBC Recovery
Calibration file - sys:clm/rsp/dbc
Lockout time 3.500 min. Peak reject 100000.0
Slope Sensitivity 100000 uv/sec from 0.0 to 4.0 min.
Slope Sensitivity 2000 uv/sec from 4.0 to 999.0 min.

TARGET NAME	STD	PRED RT	FOUND	AREA	ug/ml
DBC	0	25.55	25.54	6474354	1.624e-01

1 target species out of 1 were found

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY : REMCOR, INC.
LAB #: 2515-24158
MATRIX : WATER

DATE RECEIVED: 3/14/91

SAMPLE ID : RAU-OAL08-15 3-11-91

METALS ANALYTICAL REPORT
SELECTED LIST

Total metals analysis results - as received

ELEMENT	PREPARATION - ANALYSIS DATE	RESULT	DETECTION LIMIT	
Lead	3/18- 3/19/91	240	30	ug/l

NOTE: ND (None Detected) as rec'd

WADSWORTH/ALERT
LABORATORIES, INC.

COMPANY: REMCOR, INC.
LAB #: 2515-24161
MATRIX: WATER

DATE RECEIVED: 3/14/91
DATE EXTRACTED: NA
DATE ANALYZED: 3/26/91

SAMPLE ID: TRIP BLANK 3-11-91

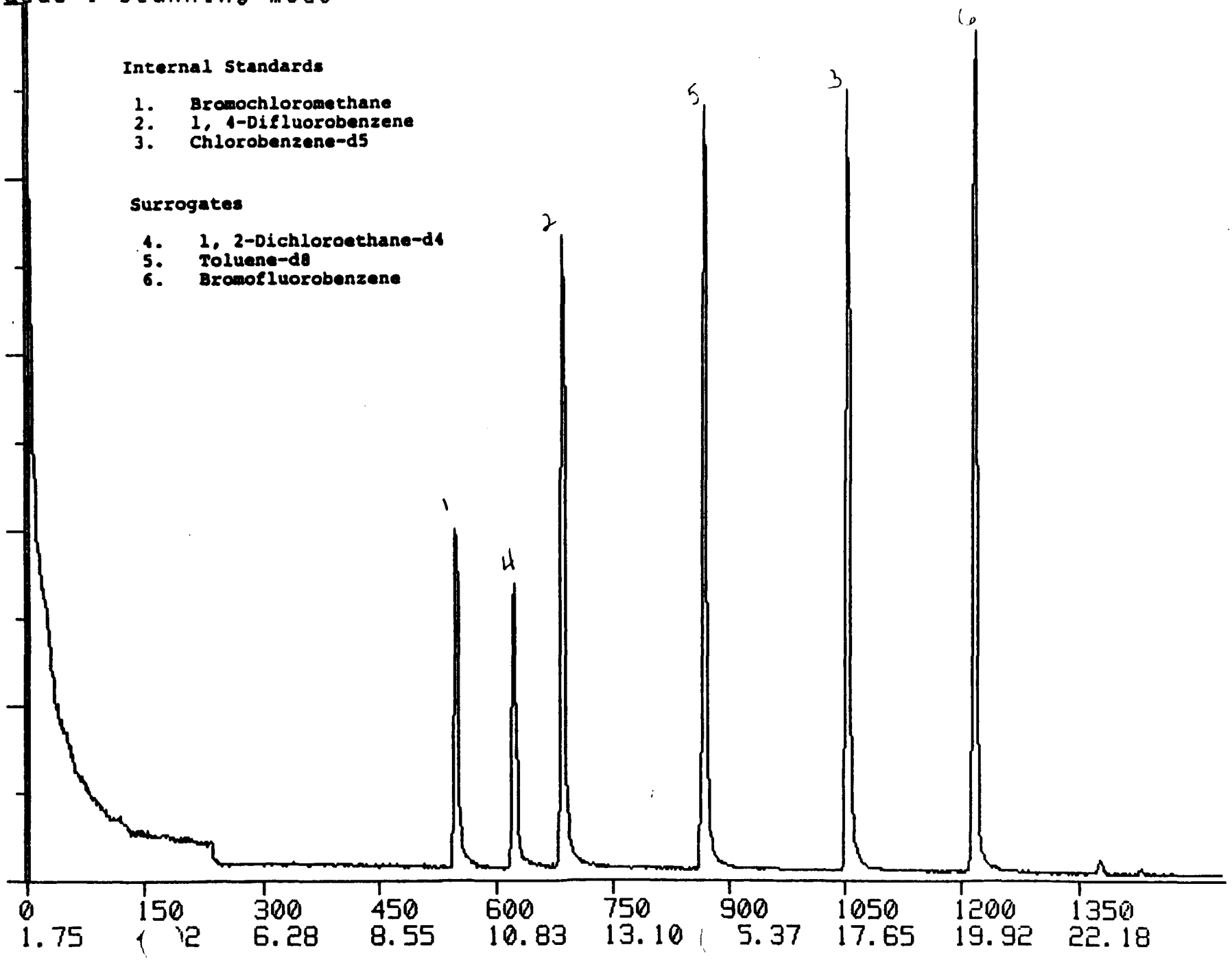
VOLATILE ORGANICS
USEPA METHOD 624 - GC/MS

Acrolein	ND**	1,1-Dichloroethene	ND
Acrylonitrile	ND**	1,2-Dichloroethene(Total)	ND
Benzene	ND	1,2-Dichloropropane	ND
Bromodichloromethane	ND	cis-1,3-Dichloropropene	ND
Bromoform	ND	trans-1,3-Dichloropropene	ND
Bromomethane	ND*	Ethylbenzene	ND
Carbon tetrachloride	ND	Methylene chloride	ND*
Chlorobenzene	ND	1,1,2,2-Tetrachloroethane	ND
Chloroethane	ND*	Tetrachloroethene	ND
2-Chloroethylvinyl ether	ND*	Toluene	ND
Chloroform	ND	1,1,1-Trichloroethane	ND
Chloromethane	ND*	1,1,2-Trichloroethane	ND
Dibromochloromethane	ND	Trichloroethene	ND
1,2-Dichlorobenzene	ND	Trichlorofluoromethane	ND
1,3-Dichlorobenzene	ND	Vinyl chloride	ND*
1,4-Dichlorobenzene	ND	Xylene(Total)	ND
1,1-Dichloroethane	ND		
1,2-Dichloroethane	ND		

NOTE:
ND (None Detected, lower detectable limit = 5.0 ug/l) as rec'd
ND* (None Detected, lower detectable limit = 10 ug/l) as rec'd
ND** (None Detected, lower detectable limit = 50 ug/l) as rec'd
J (Detected, but below quantitation limit; estimated value)
B (Compound detected in method blank associated with this sample)
-- (Not Analyzed)

SURROGATE RECOVERY:	**%**	**ACCEPTABLE LIMITS** WATER	SOLID
1,2-Dichloroethane	97	(76-114)	(70-121)
Toluene-d8	102	(76-114)	(81-117)
Bromofluorobenzene	102	(86-115)	(74-121)

SY0:C630 EXTRC 6307, 2515-24161, TB REM, 5.0 100%
26-MAR-91 12:51:40 203498
Total Ion Current
Quad 1 scanning mode



WADSWORTH/ALERT LABORATORIES, INC.

WADSWORTH/ALERT
LABORATORIES, INC.

EXTREL Quantitation Report

Name: _____ W. O. _____
Analyst: _____ Date: _____
Reviewer: _____ Date: _____
Comments: _____

Library used: SYO:DBH20
Data file name: SYO:C6307
Injection time: 26-MAR-91 12:51:40
Comments:
EXTRC 6307, 2515-24161, REM, 5.0ML
Dilution factor: 1.00

Library entries as follows:

Standards:
1S Bromochloromethane
2S 1,4-Difluorobenzene
3S Chlorobenzene-d5

Targets:
1T Chloromethane
2T Bromomethane
3T Vinyl Chloride
4T Chloroethane
5T Methylene Chloride
6T Acetone
7T Carbon Disulfide
8T 1,1-Dichloroethene
9T 1,1-Dichloroethane
10T 1,2-Dichloroethene (total)
11T Chloroform
12T 1,2-Dichloroethane
13T 2-Butanone
14T 1,1,1-Trichloroethane
15T Carbon Tetrachloride
16T Vinyl Acetate
17T Bromodichloromethane
18T 1,2-Dichloropropane
19T cis-1,3-Dichloropropene
20T Trichloroethene
21T Dibromochloromethane
22T 1,1,2-Trichloroethane
23T Benzene
24T trans-1,3-Dichloropropene
25T Bromoform
26T 4-Methyl-2-Pentanone
27T 2-Hexanone
28T Tetrachloroethene
29T 1,1,2,2-Tetrachloroethane
30T Toluene
31T Chlorobenzene
32T Ethylbenzene
33T Styrene
34T Xylenes (total) (o)

WADSWORTH/ALERT
LABORATORIES, INC.

307. GNT

35T Toluene-d8
36T Bromofluorobenzene
37T 1,2-Dichloroethane-d4
38T Trichlorofluromethane
39T cis-1,2-Dichloroethene
40T 2-Chloroethylvinyl ether
41T m-Xylene/p-Xylene
42T 1,3-Dichlorobenzene
43T 1,4-Dichlorobenzene
44T 1,2-Dichlorobenzene
45T Acrolein
46T Acrylonitrile
47T Hexane
48T Heptane
49T Pyridine
50T Isobutyl Alcohol
51T 1,2-Dibromoethane
52T 3-chloro-1-Propene
53T 1,1,1,2-Tetrachloroethane
54T 1,2,3-Trichloropropane
55T Dichlorodifluoromethane

No.	Time	Scan	Tmass/Smass	Tarea/Sarea	Ref	Fit	Conc	Units
1S	10.05	549			STD	1.00	50.0	NG/UL
2S	12.12	685			STD	0.89	50.0	NG/UL
3S	17.68	1053			STD	0.77	50.0	NG/UL
1T	2.52	51	50. / 128.	10701. / ~~62963.~~	~~1~~	~~0.57~~	~~6.1~~	~~NG/UL~~

blow CREL DLh

2T Was Not Found
3T Was Not Found
4T Was Not Found
5T Is Below Specified Detection Limit
6T Was Not Found
7T Was Not Found
8T Was Not Found
9T Was Not Found
10T Was Not Found
11T Was Not Found
12T Was Not Found
13T Was Not Found
14T Was Not Found
15T Was Not Found
16T Was Not Found
17T Was Not Found
18T Was Not Found
19T Was Not Found
20T Was Not Found
21T Was Not Found
22T Was Not Found
3T Was Not Found
24T Was Not Found
25T Was Not Found
26T Was Not Found
27T Was Not Found
28T Was Not Found
29T Was Not Found

WADSWORTH/ALERT
LABORATORIES, INC.

30T	Is Below Specified Detection Limit								
31T	Was Not Found								
32T	Was Not Found								
33T	Was Not Found								
34T	Was Not Found								
35T	14.87	867	98. / 117.	380790. /	333634.	3	0.90	51.0	NG/UL
36T	20.17	1216	95. / 117.	236522. /	333634.	3	0.92	51.1	NG/UL
37T	11.18	623	65. / 128.	153401. /	62963.	1	0.75	48.5	NG/UL
38T	Was Not Found								
39T	Was Not Found								
40T	Was Not Found								
41T	Was Not Found								
42T	Was Not Found								
43T	Is Below Specified Detection Limit								
44T	Was Not Found								
45T	Was Not Found								
46T	Was Not Found								
47T	Was Not Found								
48T	Was Not Found								
49T	Was Not Found								
50T	Was Not Found								
51T	Was Not Found								
52T	Was Not Found								
T	Was Not Found								
54T	Was Not Found								
55T	Was Not Found								

WADSWORTH/ALERT
LABORATORIES, INC.

Extended Quantitation Report

Library used: SYO:DBH20
Data file name: SYO:C6307
Injection time: 26-MAR-91 12:51:40

No	RRT	Tmass/Smass	Res fac	Conc	Ty Pk Mq	Ave	S.D.	624/625
1S				50.0				
2S				50.0				
3S				50.0				
1T	0.251	50. / 128.	1.404	6.1	IA VB RF			1.00
35T	0.841	98. / 117.	1.118	51.0	IA VB RF			1.00
36T	1.141	95. / 117.	0.694	51.1	IA BB RF			1.00
37T	1.112	65. / 128.	2.512	48.5	IA BB RF			1.00

REMCOR

CHAIN OF CUSTODY RECORD № 2030

PROJECT NO.: 90034

PROJECT NAME: UNION WIRE ROPE

SAMPLERS: REC / JMG

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	40ml VOA VIAL	1L AMBER GLASS	1L PLASTIC	500ml PLASTIC	250ml PLASTIC		REMARKS
RAW MW01-15	3-11-91	1538	WATER	MW-1	9	2	3	1	1	2		
RAW MW02-15	3-12-91	1755		MW-2	9	2	3	1	1	2		
RAW MW03-15	3-12-91	1613		MW-3	9	2	3	1	1	2		NOTE:
RAW MW03A-15	3-12-91	1632		MW-3A	9	2	3	1	1	2		RETURN YELLOW
RAW MW04-15	3-12-91	1908		MW-4	9	2	3	1	1	2		COPY TO REMCOR
RAW MW05-15	3-12-91	1840		MW-5	9	2	3	1	1	2		AFTER SIGNING.
				FED EX #								
				6009496360								

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	3-13-91 1032				
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[signature]	3/14/91 10:10 AM		

REMCOR

CHAIN OF CUSTODY RECORD № 2031

PROJECT NO.: 90034

PROJECT NAME: UNION WIRE ROPE

SAMPLERS: REC / JMG

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	40 ml VOA VIAL	1L AMBER GLASS	1L PLASTIC	500 ml PLASTIC	250 ml PLASTIC	2L AMBER GLASS	REMARKS
RAU-MW06-15	3-12-91	1852	WATER	MW-06	9	2	3	1	1	2		
RAU-MW06R-15	3-12-91	1852		MW-06R	8	1	3	1	1	2		
RAU-MW07-15	3-12-91	1701		MW-07	9	2	3	1	1	2		
RAU-MW08-15	3-12-91	1712		MW-08	9	2	3	1	1	2		
RAU-MW09-15	3-12-91	1649		MW-09	9	2	3	1	1	2		
RAU-MW00-15	3-12-91	1945			9	2	3	1	1	2		NOTE:
RAU-ALØB-15	3-11-91				4	2			1		1	SEND YELLOW COPY
RAU-TB-15	3-11			TRIP BLANK	2	2						TO REMCOR AFTER
RAU-EP-15	3-11-91			ELECTRIC PUMP SAMPLE	2	2						SIGNING.
				FED EX #								
				6009496360								

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	3-13-91 1032				
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[signature]	3/14/91 10:10 am		

REMCOR

CHAIN OF CUSTODY RECORD № 2032

PROJECT NO.: 90034

PROJECT NAME: UNION WIRE ROPE

SAMPLERS: REC / JMG

SAMPLE	DATE	TIME	SAMPLE MEDIUM	SAMPLE LOCATION	NO. OF CONTAINERS	40 ML VOA VIAL	1L AMBER GLASS	1L PLASTIC	500 ML PLASTIC	250 ML PLASTIC		REMARKS
RAU-MW01D-15	3-12-91	1731	WATER	MW-1D	9	2	3	1	1	2		
RAU-MW03D-15	3-12-91	1622		MW-3D	9	2	3	1	1	2		
RAU-MW10-15	3-12-91	1746		MW-10	9	2	3	1	1	2		
RAU-MW11-15	3-12-91	1740		MW-11	9	2	3	1	1	2		
RAU-MW12-15	3-12-91	1815		MW-12	9	2	3	1	1	2		
RAU-MS-15	3-12-91	1815		MW-12	9	2	3	1	1	2		
RAU-MSD-15	3-12-91	1815		MW-12	9	2	3	1	1	2		NOTE:
RAU-MW12R-15	3-12-91	1815		MW-12R	2	2						RETURN YELLOW
												COPY TO REMCOR
				FED EX #								AFTER SIGNING
				6009496360								

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
[signature]	3-13-91 1032				
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:	RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED FOR LAB BY:	DATE/TIME	POSSIBLE HAZARD:	
		[signature]	1/14/91 10:10 AM		

FORM GS-2 REV 191

REQUEST FOR ANALYSIS

REMCOR

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 124

C/C Control No.: 2032

Project Name: UNION WIRE ROPE

Project No.: 90034

Project Contact: CHARLIE FILLINGER

Project Manager: DMC

Send Lab Report to: DAYNE M. CROWLEY
c/o REMCOR INC
701 ALPHA DRIVE
PITTSBURGH PA 15238
PO BOX 38310

Turnaround Time: STANDARD

Laboratory Name: WADSWORTH ALERT

Laboratory Contact: MIKE McDOWELL

Laboratory Address:

Laboratory Phone No.: (412)

Special Notes: EXPANDED DATA DELIVERABLE

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: Priority Pollutant Volatiles (HCl)	PCB	Total Recoverable Petroleum Hydrocarbons (H2SO4)	Specific Conductance, Acidity, Alkalinity	Dissolved Lead (HNO3)	Total Lead (HNO3)	Nitrates (H2SO4)		REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW01D-15	WATER	X	X	X	X	X	X	X		
RAU-MW03D-15		X	X	X	X	X	X	X		
RAU-MW10-15		X	X	X	X	X	X	X		
RAU-MW-11-15		X	X	X	X	X	X	X		
RAU-MW12-15		X	X	X	X	X	X	X		
RAU-MS-15		X	X	X	X	X	X	X		
RAU-MSD-15		X	X	X	X	X	X	X		
RAU-MW12R-15		X								

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS:

DISPOSAL: Lab X Client

WADSWORTH/ALERT LABORATORIES, INC.

51	2515-24155	1	1	0		0.0037	I	ND	0.005
52	2515-24156	1	1	0		0.0037	I	ND	0.005
53	2515-24157	1	1	0		0.0037	I	ND	0.005
54	2515-24157-2	1	1	0		0.0037	I		
55	2515-24157-3	1	1	0		0.0037	I		
56	STD 0.250	1	1	852		0.2475	99%		
57	B	1	1	0		0.0037	b		
58	2480-23834SP	1	1	683	T.V. 0.20	0.1991	100%		
59	2480-23834SP	1	1	716		0.2085	104%		
60	2480-23834SP	1	1	718		0.2091	104%		
61	2480-23834SP	1	1	720		0.2097	105%		
62	WASH	1	1	0		0.0037	I		
63	2484-23864SP	1	1	718	T.V. 0.20	0.2091	104%		
64	2484-23864SP	1	1	716		0.2085	104%		
65	2484-23864SP	1	1	699		0.2037	102%		
66	2484-23864SP	1	1	690		0.2011	100%		
67	STD 0.250	1	1	917		0.2660	106%		
68	B	1	1	0		0.0037	b		
69	2515-24147SP	1	1	736	T.V. 0.20	0.2143	104%		
70	2515-24147SP	1	1	726		0.2114	102%		
71	2515-24147SP	1	1	708		0.2063	100%		
72	2515-24147SP	1	1	715		0.2083	101%		
73	WASH	1	1	6		0.0054	I		
74	2519-24199	1	1	4		0.0048	I	ND	0.005
75	2522-24226	1	1	4		0.0048	I	ND	0.005
76	2522-24227	1	1	14		0.0077		0.005	0.005
77	STD 0.250	1	1	885		0.2569	103%		
78	B	1	1	0		0.0037	b		
79	2524-24244	1	1	0		0.0037	I	ND	0.005
80	2524-24245	1	1	2		0.0043	I	ND	0.005
81	2524-24246	1	1	0		0.0037	I	ND	0.005
82	2524-24247	1	1	0		0.0037	I	ND	0.005
83	2524-24248	1	1	0		0.0037	I	ND	0.005
84	2524-24249	1	1	0		0.0037	I	ND	0.005
85	2524-24250	1	1	0		0.0037	I	ND	0.005
86	2524-24251	1	1	0		0.0037	I	ND	0.005
87	2524-24252	1	1	0		0.0037	I	ND	0.005
88	STD 0.250	1	1	902		0.2618	105%		
89	B	1	1	0		0.0037	b		
90	2524-24244SP	1	1	717	T.V. 0.20	0.2088	104%		
91	2524-24244SP	1	1	722		0.2103	105%		
92	2524-24244SP	1	1	701		0.2043	102%		
93	2524-24244SP	1	1	707		0.2060	103%		
94	STD 0.250	1	1	884		0.2566	103%		
95	B	1	1	0		0.0037	b		

INTERCEPT:-12.93951 LINEAR COEF: 3495.376
CORRELATION COEF: .9996283

A. Ronald Rogers 3-17-91

MR 3-17-91 ~~0319~~ 0318910P

Page 2 of 2

T.V SPIKES 0.50 ml 10 ppm phenol standard
, 24.5 ml Sample
25.0 ml 0.20 ppm phenol ~~standard~~ spike MR 3-17-91

WADSWORTH/ALERT LABORATORIES, INC.

CHANNEL NAME: PHENOL
RUN DATE: 03-22-1991
SAMPLE TABLE NAME: 0322910P

0322910P

Page 1 of 2

Lot #
~~[illegible]~~ 3-22-91
2525
SPIKE LOT 2515

#	SAMPLE ID	DIL	WGT	HEIGHT	CALC VALUE	EF		
1	SYNC	1	1	1694	0.4655	e		
2	CAL	1	1	1709	0.4696	N		
3	CO	1	1	8	0.1169	o		
4	BLANK	1	1	6	0.0042	I		
5	B	1	1	0	0.0021	b		
6	S1: .005	1	1	18	0.0070	I		
7	S2: .05	1	1	177	0.0505			
8	S3: .1	1	1	352	0.0984			
9	S4: .3	1	1	1013	0.2792	D		
10	S5: .4	1	1	1435	0.3946			
11	S6: .5	1	1	1837	0.5046			
12	B	1	1	0	0.0021	b		
13	ERA 9936 T.V: 0.312 (19-91)	1	1	839	0.2316	92%		
14	STD 0.250	1	1	913	0.2518	101%		
15	B	1	1	0	0.0021	b		
16	2525-24258	1	1	18	0.0070	I	0.007	0.005
17	WASH	1	1	0	0.0021	I		
18	2525-24259	1	1	242	0.0683		0.067	0.005
19	WASH	1	1	0	0.0021	I		
20	2525-24260	1	1	0	0.0021	I	ND	0.005
21	WASH	1	1	0	0.0021	I		
22	2525-24261	1	1	144	0.0415		0.042	0.005
23	WASH	1	1	12	0.0053	I		
24	2525-24262	10	1	367	1.0245		1.02	0.05
25	WASH	1	1	20	0.0075	I		
26	~~2525-24263~~	~~25~~	~~1~~	~~3078~~	~~6~~	~~O~~ void [illegible] 3-21-91		
27	WASH	1	1	105	0.0300	I		
28	2525-24264	1	1	52	0.0163	I	0.016	0.005
29	WASH	1	1	46	0.0146	I		
30	2525-24265	1	1	46	0.0146	I	0.015	0.005
31	WASH	1	1	33	0.0111	I		
32	2525-24266	1	1	136	0.0393		0.039	0.005
33	WASH	1	1	10	0.0048	I		
34	STD 0.250	1	1	906	0.2499	100%		
35	B	1	1	0	0.0021	b		
36	2525-24267	1	1	0	0.0021	I	ND	0.005
37	WASH	1	1	0	0.0021	I		
38	2525-24268	1	1	0	0.0021	I	ND	0.005
39	WASH	1	1	15	0.0062			
40	2525-24269	1	1	14	0.0059	I	0.006	0.005
41	WASH	1	1	10	0.0048	I		
42	2525-24272	1	1	5	0.0034	I	ND	0.005
43	WASH	1	1	24	0.0086	I		
44	3/20 ERA9936 T.V: 0.312 (19-91)	1	1	870	0.2401		0.240 95%	0.005
45	3/20 STD(.4)	1	1	1382	0.3801			
46	~~3/20 BLANK~~	~~1~~	~~1~~	~~20~~	~~0.0089~~	~~I~~ void [illegible] 3-22-91		
47	3/20 BLANK	1	1	5	0.0034	R	ND	0.005
48	STD 0.250	1	1	922	0.2543	102%		
49	B	1	1	0	0.0021	b		
50	2525-24258SP	1	1	726 T.V: 0.207	0.2007	97%		
51	2525-24258SP	1	1	705	0.1949	94%		
52	2525-24258SP	1	1	710	0.1963	95%		
53	2525-24258SP	1	1	750	0.2072	100%		
54	WASH	1	1	0	0.0021	I		
55	2515-24157SP	1	1	697 T.V: 0.30	0.1927	96%		
56	2515-24157SP	1	1	699	0.1933	97%		
57	2515-24157SP	1	1	696	0.1925	96%		
58	2515-24157SP	1	1	688	0.1903	95%		
59	WASH	1	1	0	0.0021	I		
60	2525-24267SP	1	1	710 T.V: 0.30	0.1963	97%		
61	2525-24267SP	1	1	734	0.2028	[illegible]		

G. Ronald Rippin 3-22-91

FORM GS-2 REV 191

REQUEST FOR ANALYSIS

REMCOR

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 125

C/C Control No.: 2030

Project Name: UNION WIRE ROPE

Project No.: 90034

Project Contact: CHARLIE FILLINGER

Project Manager: DMC

Send Lab Report to: DAINE M. CROWLEY
c/o REMCOR INC
701 ALPHA DRIVE
PO BOX 38310
PITTSBURGH PA 15238

Turnaround Time: STANDARD

Laboratory Name: WADSWORTH ALERT

Laboratory Contact: MIKE MCDOWELL

Laboratory Address:

Laboratory Phone No.: (412)

Special Notes:

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: PRIORITY POLLUTANT VOC'S (HCL)	PCB	TOTAL RECOVERABLE PHENOLICS (H2SO4)	pH, CONDUCTIVITY, ALKALINITY	DISSOLVED LEAD (HNO3)	TOTAL LEAD (HNO3)	NITRATES (H2SO4)		REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW01-15	WATER	X	X	X	X	X	X	X		
RAU-MW02-15		X	X	X	X	X	X	X		
RAU-MW03-15		X	X	X	X	X	X	X		
RAU-MW03A-15		X	X	X	X	X	X	X		
RAU-MW04-15		X	X	X	X	X	X	X		
RAU-MW05-15		X	X	X	X	X	X	X		

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS:

DISPOSAL: Lab X Client

FORM GS-2 REV 191

REQUEST FOR ANALYSIS

REMCOR

REMCOR, INC. – 701 ALPHA DRIVE, P.O. BOX 38310
PITTSBURGH, PA 15238-8310 (412) 963-1106

R/A Control № 127

C/C Control No.: 2031

Project Name: UNION WIRE ROPE

Project No.: 90034

Project Contact: CHARLIE FILLINGER

Project Manager: DMC

Send Lab Report to: DAYNE M. CROWLEY
c/o REMCOR INC.
701 ALPHA DRIVE
PO BOX 38310
PITTSBURGH PA 15238

Turnaround Time: STANDARD

Laboratory Name: WADSWORTH ALERT

Laboratory Contact: MIKE McDOWELL

Laboratory Address:

Laboratory Phone No.: (412)

Special Notes:

(X – Denotes Testing Program Requested For Sample)

SAMPLE IDENTIFICATION	SAMPLE MEDIUM	TESTING PROGRAM: Priority Pollutant VOC's (HCl)	PCB	Total Recoverable Phenolics (H_2SO_4)	pH, Conductivity, Alkalinity, Acidity	Dissolved Lead (HNO_3)	Total Lead (HNO_3)	Nitrates (H_2SO_4)		REMARKS OR SPECIAL INSTRUCTIONS
RAU-MW06-15	WATER	X	X	X	X	X	X	X		
RAU-MW06R-15		X	X	X	X	X	X	X		* ONLY ONE VOA VIAL SENT
RAU-MW07-15		X	X	X	X	X	X	X		
RAU-MW08-15		X	X	X	X	X	X	X		
RAU-MW09-15		X	X	X	X	X	X	X		
RAU-MW00-15		X	X	X	X	X	X	X		
RAU-DAL08-15		X	X				X			
RAU-TB-15		X								
RAU-EP-15		X								

DISTRIBUTION: White – Accompanies Samples
Yellow – Returned to REMCOR

POSSIBLE HAZARDS:

DISPOSAL: Lab X Client

APPENDIX K

SUMMARY OF GROUND WATER MONITORING DATA
JANUARY 1988 THROUGH NOVEMBER 1990

TABLE K-1
ANALYTICAL DATA FROM SITE MONITORING WELLS
JANUARY 8, 1988 THROUGH NOVEMBER 10, 1990

WELL:		WELL MW-1						
ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	734.61	734.02	738.01	735.53	733.86	735.07	734.35
GENERAL CHEMISTRY								
pH	s.u.	6.3/6.3	6.7	NO	6.8	6.15	7.2	6.7
SPECIFIC CONDUCTANCE	µmho/cm	1600/1600	1500	SAMPLE	1500	1600	1500	1900
ALKALINITY AS CaCO3	mg/l	350/350		COLLECTED		268	320	330
NITRATES AS NO3-N	mg/l		0.1		0.5	0.4	<0.1	0
PHENOLICS	mg/l	<0.01/0.02			0.02	0.01	<0.01	0
TOTAL LEAD	mg/l	0.12/0.19	0.007		0.010	0.002	0.003	0.029
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250/<250	<250		<250	<250	<250	<250
ACRYLONITRILE	µg/l	<250/<250	<250		<250	<250	<250	<250
BENZENE	µg/l	<5/<5	<5		9	<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l	<5/<5	<5		<5	<5	<5	<5
BROMOMETHANE	µg/l	<5/<5	<5		<5	<5	<5	<5
CARBON TETRACHLORIDE	µg/l	<5/<5	<5		<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5/<5	<5		<5	<5	<5	<5
CHLOROETHANE	µg/l	<5/<5	770		<5	770	430	230
2-CHLOROETHYLVINYL ETHER	µg/l	<5/<5	<5		<5	<5	<5	<5
CHLOROFORM	µg/l	<5/<5	<5		<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5/<5	<5		<5	<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l	<5/<5	<5		<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l	<5/<5	630		480	250	340	330
1,2-DICHLOROETHANE	µg/l	<5/<5	<5		6	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	200/130	70		77	58	64	28
1,2-DICHLOROETHENE	µg/l	<5/<5	<5		<5	11	<5	250
1,2-DICHLOROPROPANE	µg/l	<5/<5	<5		<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5/<5	<5		<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l	<5/<5	<5		<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	<5/<5	<5		<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5/<5	<5		<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5/<5	<5		<5	<5	<5	<5
TOLUENE	µg/l	<5/<5	<5		<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	820/610	170		210	100	74	130
1,1,2-TRICHLOROETHANE	µg/l	<5/<5	<5		<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5/<5	<5		9	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l	<5/<5	24		11	<5	<5	180
TOTAL VOCS	µg/l	1020/740	1664		802	1189	908	1148

TABLE K-1
(CONTINUED)

ELL: MW-1 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	734.08	735.9	734.03	734.50	736.58	734.54	733.07
GENERAL CHEMISTRY								
pH	s.u.	6.7	6.9	6.5	6.6	6.3	6.5	NO
SPECIFIC CONDUCTANCE	µmho/cm	1600	1600	1500	990	1400	1600	SAMPLE
ALKALINITY AS CaCO3	mg/l	394	355	424	450	410	460	COLLECTED
NITRATES AS NO3-N	mg/l	0.2	0.2	0.8	<0.1	<0.1	0.31	
PHENOLICS	mg/l	<0.01	0.03	0.02	<0.01	<0.01	<.005	
TOTAL LEAD	mg/l	<0.001	0.012	0.011	0.009	0.01	0.026	
DISSOLVED LEAD	mg/l	0.001	<0.001	0.003	<0.005	<0.005		
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<80	<250	<250	
ACRYLONITRILE	µg/l	<250	<250	<250	<80	<250	<250	
BENZENE	µg/l	<5	<5	<5	<8	<25	<25	
BROMODICHLOROMETHANE	µg/l				<8	<25	<25	
BROMOFORM	µg/l	<5	<5	<5	<8	<25	<25	
BROMOMETHANE	µg/l	<5	<5	<5	<16	<50	<50	
CARBON TETRACHLORIDE	µg/l	8	<5	<5	<8	<25	<25	
CHLOROBENZENE	µg/l	<5	<5	<5	<8	<25	<25	
CHLOROETHANE	µg/l	470	770	700	190	670	610	
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<16	<50	<50	
LOROFORM	µg/l	<5	<5	<5	<8	<25	<25	
HLOROMETHANE	µg/l	<5	<5	<5	<16	<50	<50	
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<8	<25	<25	
1,2-DICHLOROBENZENE	µg/l				<8	<25	<25	
1,3-DICHLOROBENZENE	µg/l				<8	<25	<25	
1,4-DICHLOROBENZENE	µg/l				<8	<25	<25	
1,1-DICHLOROETHANE	µg/l	170	300	<5	190	260	320	
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<8	<25	<25	
1,1-DICHLOROETHENE	µg/l	47	18	22	<8	29	49	
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<8	<25	<25	
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<8	<25	<25	
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<8	<25	<25	
trans-1,3-DICHLOROPROPANE	µg/l				<8	<25	<25	
ETHYLBENZENE	µg/l	<5	<5	<5	<8	<25	<25	
METHYLENE CHLORIDE	µg/l	20	<5	<5	<8	<25	<25	
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<8	<25	<25	
TETRACHLOROETHENE	µg/l	<5	<5	<5	<8	<25	<25	
TOLUENE	µg/l	<5	<5	<5	<8	<25	<25	
1,1,1-TRICHLOROETHANE	µg/l	95	87	140	23	47	73	
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<8	<25	<25	
TRICHLOROETHENE	µg/l	<5	<5	<5	<8	<25	<25	
TRICHLOROFLOUROMETHANE	µg/l				<8	<25	<25	
VINYL CHLORIDE	µg/l	530	<5	140	100	43	50	
TOTAL VOCS	µg/l	1340	1175	1002	503	1049	1102	

TABLE K-1
(CONTINUED)

.LL: MW-2

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	733.76	733.22	738.01	734.52	732.94	733.95	733.25
GENERAL CHEMISTRY								
pH	s.u.	6.3	6.3	NO	6.6	6.0	7.2	6.4
SPECIFIC CONDUCTANCE	µmho/cm	5000	4700	SAMPLE	5000	3500	1500	3800
ALKALINITY AS CaCO3	mg/l	240		COLLECTED		490	320	200
NITRATES AS NO3-N	mg/l		0.1		0.2	1.7	0.2	<0.1
PHENOLICS	mg/l				0.02	0.01	0.01	<0.01
TOTAL LEAD	mg/l	0.035	0.011		<0.001	0.003	0.003	0.031
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l		<250		<250	<250	<250	<250
ACRYLONITRILE	µg/l		<250		<250	<250	<250	<250
BENZENE	µg/l		<5		<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l		<5		<5	<5	<5	<5
BROMOMETHANE	µg/l		<5		<5	<5	<5	<5
CARBON TETRACHLORIDE	µg/l		<5		<5	<5	<5	<5
CHLOROBENZENE	µg/l		<5		<5	<5	<5	<5
CHLOROETHANE	µg/l		<5		<5	<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l		<5		<5	<5	<5	<5
LOROFORM	µg/l		<5		<5	<5	<5	<5
CHLOROMETHANE	µg/l		<5		<5	<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l		<5		<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l		<5		<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l		<5		<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l		<5		<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l		<5		<5	<5	<5	<5
TETRACHLOROETHENE	µg/l		<5		<5	<5	<5	<5
TOLUENE	µg/l		<5		<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
TRICHLOROETHENE	µg/l		<5		<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l		<5		<5	<5	<5	<5
TOTAL VOCs	µg/l		0		0	0	0	

TABLE K-1
(CONTINUED)

ELL: MW-2 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	732.98	734.75	732.39	733.55	735.68	733.35	
GENERAL CHEMISTRY								
pH	s.u.	6.15	7.25	6.1	5.9	6.0	6.1	NO
SPECIFIC CONDUCTANCE	µmho/cm	3700	3500	3900	2400	3000	3400	SAMPLE
ALKALINITY AS CaCO3	mg/l	220	191	208	220	210	250	COLLECTED
NITRATES AS NO3-N	mg/l	<0.1	<0.1	0.4	<0.1	<0.1	0.19	
PHENOLICS	mg/l	<0.01	0.04	0.04	<0.01	<0.01	<0.005	
TOTAL LEAD	mg/l	0.004	0.003	0.003	0.009	0.03	0.035	
DISSOLVED LEAD	mg/l		<0.001	0.002	<0.005	<0.005	<0.003	
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	
BENZENE	µg/l	<5	<5	<5	<5	<5	<5	
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	
CARBON TETRACHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	
CHLOROETHANE	µg/l	<5	<5	<5	19	26	<5	
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	
CHLOROFORM	µg/l	<5	<5	<5	<5	<5	<5	
CHLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	
1,2-DICHLOROBENZENE	µg/l				<5	<5	<5	
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	
1,4-DICHLOROBENZENE	µg/l				<5	<5	<5	
1,1-DICHLOROETHANE	µg/l	<5	<5	<5	79	120	19	
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	
1,1-DICHLOROETHENE	µg/l	<5	<5	110	<5	12	<5	
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	3	<5	
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	
METHYLENE CHLORIDE	µg/l	28	<5	<5	<5	<5	<5	
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	
TETRACHLOROETHENE	µg/l	<5	<5	37	<5	<5	<5	
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	
1,1,1-TRICHLOROETHANE	µg/l	<5	<5	79	<5	19	<5	
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	
TRICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	8	<10	
TOTAL VOCs	µg/l	28	0	226	98	188	19	

TABLE K-1
(CONTINUED)

ELL: MW-3

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	733.96	733.44	738.01	734.87	732.98	734.27	733.44
GENERAL CHEMISTRY								
pH	s.u.	7.1	6.6	NO	7.2	6.5	7.7	6.7
SPECIFIC CONDUCTANCE	µmho/cm	900	800	SAMPLE	800	900	800	900
ALKALINITY AS CaCO3	mg/l			COLLECTED		240	270	268
NITRATES AS NO3-N	mg/l		<0.1		0.2	<0.1	<0.1	<0.1
PHENOLICS	mg/l	<0.01			0.04	<0.01	<0.01	<0.01
TOTAL LEAD	mg/l	0.017	0.006		0.005	<0.002	0.008	0.02
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250		<250	<250	<250	<250
ACRYLONITRILE	µg/l	<250	<250		<250	<250	<250	<250
BENZENE	µg/l	<5	<5		<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l	<5	<5		<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5		<5	<5	<5	<5
CARBON TETRACHLORIDE	µg/l	<5	<5		<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5		<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5		<5	<5	<5	<5
CHLOROFORM	µg/l	<5	<5		<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5		<5	<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l	<5	82		53	13	35	69
1,2-DICHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	380	490		250	<5	350	930
1,2-DICHLOROETHENE	µg/l	<5	<5		11	<5	18	67
1,2-DICHLOROPROPANE	µg/l	<5	<5		<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5		<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l	<5	<5		<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	<5	<5		<5	53	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	10		<5	10	10	13
TOLUENE	µg/l	<5	<5		<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	250	210		64	150	97	430
1,1,2-TRICHLOROETHANE	µg/l	<5	<5		33	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	10		<5	11	9	9
TRICHLOROFLOUROMETHANE	µg/l	<5						
VINYL CHLORIDE	µg/l	<5	<5		<5	<5	<5	<5
TOTAL VOCs	µg/l	630	802		411	237	519	1518

TABLE K-1
(CONTINUED)

..ELL: MW-3 (Cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	733.02	735.13	731.98	733.68	735.77	734.43	732.22
GENERAL CHEMISTRY								
pH	s.u.	6.5	7.6	6.6	6.5	6.5	6.7	6.3
SPECIFIC CONDUCTANCE	µmho/cm	850	850	850	630	750	910	750
ALKALINITY AS CaCO3	mg/l	268	344	264	330	340	350	300
NITRATES AS NO3-N	mg/l	<0.1	<0.1	<0.1	0.3	<0.1	0.44	0.25
PHENOLICS	mg/l	<0.01	0.06	0.09	<0.01	<0.01	<0.005	<0.005
TOTAL LEAD	mg/l	0.017	0.004	0.007	0.012	0.8	0.24	0.110
DISSOLVED LEAD	mg/l		<0.001	0.003	<0.005	<0.005	<0.003	<0.003
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<250	<100	<130	<250
ACRYLONITRILE	µg/l	<250	<250	<250	<250	<100	<130	<250
BENZENE	µg/l	<5	<5	<5	<25	<10	<13	<25
BROMODICHLOROMETHANE	µg/l				<25	<10	<13	<25
BROMOFORM	µg/l	<5	<5	<5	<25	<10	<13	<25
BROMOMETHANE	µg/l	<5	<5	<5	<50	<20	<25	<50
CARBON TETRACHLORIDE	µg/l	46	<5	<5	<25	<10	<13	<25
CHLOROBENZENE	µg/l	<5	<5	<5	<25	<10	<13	<25
CHLOROETHANE	µg/l	<5	<5	<5	<50	<20	<13	<50
^-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<50	<20	<25	<50
.LOROFORM	µg/l	<5	<5	<5	<25	<10	<13	<25
CHLOROMETHANE	µg/l	<5	<5	<5	<50	<20	<25	<50
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<25	<10	<13	<25
1,2-DICHLOROBENZENE	µg/l				<25	<10	<13	<25
1,3-DICHLOROBENZENE	µg/l				<25	<10	<13	<25
1,4-DICHLOROBENZENE	µg/l				<25	<10	<13	<25
1,1-DICHLOROETHANE	µg/l	140	60	88	80	26	38	15
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<25	<10	<13	<25
1,1-DICHLOROETHENE	µg/l	3400	63	310	750	280	300	180
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<25	6	<13	4
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<25	<10	<13	<25
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<25	<10	<13	<25
trans-1,3-DICHLOROPROPANE	µg/l				<25	<10	<13	<25
ETHYLBENZENE	µg/l	<5	<5	<5	<25	<10	<13	<25
METHYLENE CHLORIDE	µg/l	22	<5	26	<25	<10	<13	5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<25	<10	<13	<25
TETRACHLOROETHENE	µg/l	21	6	<5	<25	7	<13	4
TOLUENE	µg/l	<5	<5	<5	<25	<10	<13	<25
1,1,1-TRICHLOROETHANE	µg/l	420	84	47	230	<10	<13	44
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<25	<10	75	<25
TRICHLOROETHENE	µg/l	<5	5	9	<25	5	<13	3
TRICHLOROFLOUROMETHANE	µg/l				<25	<10	<13	<25
VINYL CHLORIDE	µg/l	100	<5	25	55	23	34	9
TOTAL VOCs	µg/l	4149	218	505	1115	347	447	264

TABLE K-1
(CONTINUED)

..ELL: MW-3A

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	734.61	734.02	738.01	735.53	733.86	734.79	733.7
GENERAL CHEMISTRY								
pH	s.u.	NO	NO	NO	NO	NO	7.7	6.6
SPECIFIC CONDUCTANCE	µmho/cm	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	775	850
ALKALINITY AS CaCO3	mg/l	COLLECTED	COLLECTED	COLLECTED	COLLECTED	COLLECTED	142	184
NITRATES AS NO3-N	mg/l						<0.1	<0.1
PHENOLICS	mg/l						<0.01	<0.01
TOTAL LEAD	mg/l						0.005	0.009
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l						<250	<250
ACRYLONITRILE	µg/l						<250	<250
BENZENE	µg/l						<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l						<5	<5
BROMOMETHANE	µg/l						<5	<5
CARBON TETRACHLORIDE	µg/l						<5	<5
CHLOROBENZENE	µg/l						<5	<5
CHLOROETHANE	µg/l						<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l						<5	<5
CHLOROFORM	µg/l						<5	<5
CHLOROMETHANE	µg/l						<5	<5
DIBROMOCHLOROMETHANE	µg/l						<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l						13	10
1,2-DICHLOROETHANE	µg/l						<5	<5
1,1-DICHLOROETHENE	µg/l						290	130
1,2-DICHLOROETHENE	µg/l						<5	<5
1,2-DICHLOROPROPANE	µg/l						<5	<5
cis-1,3-DICHLOROPROPANE	µg/l						<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l						<5	<5
METHYLENE CHLORIDE	µg/l						<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l						<5	<5
TETRACHLOROETHENE	µg/l						17	14
TOLUENE	µg/l						<5	<5
1,1,1-TRICHLOROETHANE	µg/l						41	45
1,1,2-TRICHLOROETHANE	µg/l						<5	<5
TRICHLOROETHENE	µg/l						9	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l						<5	<5
TOTAL VOCs	µg/l						370	199

TABLE K-1
(CONTINUED)

.LL: MW-3A (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	733.5	735.9	732.52	734.69	736.97	735.64	733.40
GENERAL CHEMISTRY								
pH	s.u.	6.35	7.05	6.4	5.9	6.1		6.0
SPECIFIC CONDUCTANCE	µmho/cm	750	700	650	520	540		500
ALKALINITY AS CaCO3	mg/l	140	124	124	130	130		140
NITRATES AS NO3-N	mg/l	<0.1	0.1	0.6	<0.1	<0.1	1.1	0.59
PHENOLICS	mg/l	<0.01	0.03	<0.01	<0.01	0.02	0.013	<0.005
TOTAL LEAD	mg/l	<0.001	0.003	0.006	0.012	0.006	0.006	0.011
DISSOLVED LEAD	mg/l		<0.001	0.004	<0.005	<0.005	<0.003	<0.003
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<80	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<80	<50	<50	<50
BENZENE	µg/l	<5	<5	<5	<8	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<8	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<8	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<16	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	9	<5	<5	<8	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<8	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<16	<10	<5	<10
?-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<16	<10	<10	<10
LOROFORM	µg/l	<5	<5	<5	<8	<5	<5	<5
ILOROMETHANE	µg/l	<5	<5	<5	<16	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<8	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				<8	<5	<5	<5
1,3-DICHLOROBENZENE	µg/l				<8	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<8	<5	<5	<5
1,1-DICHLOROETHANE	µg/l	15	7	24	15	9	9	10
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<8	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	230	26	250	<8	160	110	
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<8	<5	120	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<8	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<8	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<8	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<8	<5	<5	<5
METHYLENE CHLORIDE	µg/l	19	<5	<5	<8	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<8	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	30	22	39	54	37	27
TOLUENE	µg/l	<5	5	<5	<8	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	97	48	65	66	62	45	44
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<8	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5	<5	<8	5	<5	3
TRICHLOROFLOUROMETHANE	µg/l				<8	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<16	<10	<10	<10
TOTAL VOCs	µg/l	370	116	361	120	290	321	204

TABLE K-1
(CONTINUED)

.ELL: MW-4

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	738.69	741.85	738.01	738.88	737.65	738.06	737.8
GENERAL CHEMISTRY								
pH	s.u.	6.6	6.4		6.9	6.0	7.7	6.6
SPECIFIC CONDUCTANCE	µmho/cm	4500	4100		3000	4600	3200	4600
ALKALINITY AS CaCO3	mg/l	430				320	450	356
NITRATES AS NO3-N	mg/l		<0.1		0.2	0.1	<0.1	<0.1
PHENOLICS	mg/l				0.09	<0.01	<0.01	<0.01
TOTAL LEAD	mg/l	0.084	0.46	0.12/0.14	0.072	0.04	0.060	0.11
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l		<250		<250	<250	<250	<250
ACRYLONITRILE	µg/l		<250		<250	<250	<250	<250
BENZENE	µg/l		<5		<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l		<5		<5	<5	<5	<5
BROMOMETHANE	µg/l		<5		<5	<5	<5	<5
CARBON TETRACHLORIDE	µg/l		<5		<5	<5	<5	<5
CHLOROBENZENE	µg/l		<5		<5	<5	<5	<5
CHLOROETHANE	µg/l		<5		<5	<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l		<5		<5	<5	<5	<5
ILOROFORM	µg/l		<5		<5	<5	<5	<5
CHLOROMETHANE	µg/l		<5		<5	<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l		8		6	24	8	170
1,2-DICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l		48		43	28	48	35
1,2-DICHLOROETHENE	µg/l		<5		<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l		<5		<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l		<5		<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l		<5		<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l		<5		<5	14	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l		<5		<5	<5	<5	<5
TETRACHLOROETHENE	µg/l		<5		<5	<5	<5	<5
TOLUENE	µg/l		<5		<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l		58		33	32	26	47
1,1,2-TRICHLOROETHANE	µg/l		<5		<5	<5	<5	<5
TRICHLOROETHENE	µg/l		<5		<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l		<5		<5	<5	<5	<5
TOTAL VOCs	µg/l		114		82	98	82	252

TABLE K-1
(CONTINUED)

ELL: MW-4 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	738.06	740.11	737.51	738.03	742.16	739.25	738.08
GENERAL CHEMISTRY								
pH	s.u.	6.3	7.3	6.4	6.5	6.4	7.1	6.3
SPECIFIC CONDUCTANCE	µmho/cm	3200	2750	2800	1900	2100	2900	2900
ALKALINITY AS CaCO3	mg/l	388	420	412	450	370	430	440
NITRATES AS NO3-N	mg/l	<0.1	<0.1	0.2	0.3	0.2	0.7	0.7
PHENOLICS	mg/l	<0.01	0.03	<0.01	<0.01	<0.01	<0.005	<0.005
TOTAL LEAD	mg/l	0.047	0.11	0.53	0.041	0.02	0.049	0.15
DISSOLVED LEAD	mg/l		0.012	0.009	0.006	<0.005	<0.003	<0.003
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	<50
BENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	5	<5	<5	<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	<10
CHLOROFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,1-DICHLOROETHANE	µg/l	9	<5	<5	5	4	6	9
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	64	14	10	28	28	34	30
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	38	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	21	<5	40	<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	54	23	16	23	21	23	19
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	<10	<10	<10
TOTAL VOCs	µg/l	153	37	66	56	53	101	58

TABLE K-1
(CONTINUED)

ELL: MW-5

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	743.24	742.37	738.01	743.01	742.59	742.64	742.84
GENERAL CHEMISTRY								
pH	s.u.	6.2	6.2	NO	7.1	6.3	7.8	6.3
SPECIFIC CONDUCTANCE	µmho/cm	2500	1400	SAMPLE	1800	1500	1500	1500
ALKALINITY AS CaCO3	mg/l	160		COLLECTED		350	106	100
NITRATES AS NO3-N	mg/l		0.1		0.2	<0.1	0.4	0.1
PHENOLICS	mg/l				0.1	0.02	0.37	<0.01
TOTAL LEAD	mg/l	0.008	0.063		0.01	0.023	0.008	0.02
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l		<250			<250	<250	<250
ACRYLONITRILE	µg/l		<250			<250	<250	<250
BENZENE	µg/l		<5			<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l		<5			<5	<5	<5
BROMOMETHANE	µg/l		<5			<5	<5	<5
CARBON TETRACHLORIDE	µg/l		<5			<5	<5	<5
CHLOROBENZENE	µg/l		<5			<5	<5	<5
CHLOROETHANE	µg/l		<5			<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l		<5			<5	<5	<5
CHLOROFORM	µg/l		<5			<5	<5	<5
CHLOROMETHANE	µg/l		<5			<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l		<5			<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l		<5			<5	<5	<5
1,2-DICHLOROETHANE	µg/l		<5			<5	<5	<5
1,1-DICHLOROETHENE	µg/l		<5			<5	<5	<5
1,2-DICHLOROETHENE	µg/l		<5			<5	<5	<5
1,2-DICHLOROPROPANE	µg/l		<5			<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l		<5			<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l		<5			<5	<5	<5
METHYLENE CHLORIDE	µg/l		<5			<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l		<5			<5	<5	<5
TETRACHLOROETHENE	µg/l		<5			<5	<5	<5
TOLUENE	µg/l		<5			<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l		<5			<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l		<5			<5	<5	<5
TRICHLOROETHENE	µg/l		<5			<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l		<5			<5	<5	<5
TOTAL VOCs	µg/l		0			0	0	0

TABLE K-1
(CONTINUED)

WELL: MW-5 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	743.29	744.07	742.74	742.69	745.72	744.71	742.94
GENERAL CHEMISTRY								
pH	s.u.	5.95	7.4	6.0	5.9	5.7	6.0	6.0
SPECIFIC CONDUCTANCE	µmho/cm	1450	1550	1500	1100	1400	1500	1200
ALKALINITY AS CaCO3	mg/l	104	100	100	110	88	120	120
NITRATES AS NO3-N	mg/l	<0.1	<0.1	<0.1	0.1	<0.1	0.1	0.1
PHENOLICS	mg/l	<0.01	0.08	<0.01	<0.01		0.02	<0.005
TOTAL LEAD	mg/l	0.004	0.004	0.004	0.009	0.04	0.017	0.022
DISSOLVED LEAD	mg/l		<0.001				<0.003	
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	<50
BENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	<10
CHLOROFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,1-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	25	<5	94	<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5	270	<5	<5	<5	<5
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	<10	<10	<10
TOTAL VOCs	µg/l	25	0	364	0	0	0	0

TABLE K-1
(CONTINUED)

.ELL: MW-6 (cont)

ROUND NUMBER:		1	2	3	4
DATE:		1/8/88	2/11/88	3/31/88	4/7/88
	UNITS	-	-	-	-
WATER LEVELS	ft-msl	743.47	742.47	738.01	742.65
GENERAL CHEMISTRY					
pH	s.u.	6.6	6.6	NO	6.90/7.00
SPECIFIC CONDUCTANCE	µmho/cm	2000	1100	SAMPLE	1200/1200
ALKALINITY AS CaCO3	mg/l	120		COLLECTED	
NITRATES AS NO3-N	mg/l		<0.1		0.2/0.2
PHENOLICS	mg/l	<0.01			0.17/0.03
TOTAL LEAD	mg/l	0.008	0.018		0.009/0.005
DISSOLVED LEAD	mg/l				
VOLATILE ORGANIC COMPOUNDS					
ACROLEIN	µg/l		<250		<250/<250
ACRYLONITRILE	µg/l		<250		<250/<250
BENZENE	µg/l		<5		<5/<5
BROMODICHLOROMETHANE	µg/l				
BROMOFORM	µg/l		<5		<5/<5
BROMOMETHANE	µg/l		<5		<5/<5
CARBON TETRACHLORIDE	µg/l		<5		<5/<5
CHLOROBENZENE	µg/l		<5		<5/<5
CHLOROETHANE	µg/l		<5		<5/<5
2-CHLOROETHYLVINYL ETHER	µg/l		<5		<5/<5
CHLOROFORM	µg/l		<5		<5/<5
CHLOROMETHANE	µg/l		<5		<5/<5
DIBROMOCHLOROMETHANE	µg/l		<5		<5/<5
1,2-DICHLOROBENZENE	µg/l				
1,3-DICHLOROBENZENE	µg/l				
1,4-DICHLOROBENZENE	µg/l				
1,1-DICHLOROETHANE	µg/l		<5		<5/<5
1,2-DICHLOROETHANE	µg/l		<5		<5/<5
1,1-DICHLOROETHENE	µg/l		<5		<5/<5
1,2-DICHLOROETHENE	µg/l		<5		<5/<5
1,2-DICHLOROPROPANE	µg/l		<5		<5/<5
cis-1,3-DICHLOROPROPANE	µg/l		<5		<5/<5
trans-1,3-DICHLOROPROPANE	µg/l				
ETHYLBENZENE	µg/l		<5		<5/<5
METHYLENE CHLORIDE	µg/l		<5		<5/<5
1,1,2,2-TETRACHLOROETHANE	µg/l		<5		<5/<5
TETRACHLOROETHENE	µg/l		<5		<5/<5
TOLUENE	µg/l		<5		<5/<5
1,1,1-TRICHLOROETHANE	µg/l		<5		<5/<5
1,1,2-TRICHLOROETHANE	µg/l		<5		<5/<5
TRICHLOROETHENE	µg/l		<5		<5/<5
TRICHLOROFLOUROMETHANE	µg/l				
VINYL CHLORIDE	µg/l		<5		<5/<5
TOTAL VOCs	µg/l		0		0

TABLE K-1
(CONTINUED)

ELL: MW-6 (cont)

ROUND NUMBER:		5	6	7
DATE:		8/28/88	11/18/88	1/25/89
	UNITS	-	-	-
WATER LEVELS	ft-msl	741.07	742.29	741.96
GENERAL CHEMISTRY				
pH	s.u.	6.35	7.9/7.8	6.6/6.5
SPECIFIC CONDUCTANCE	µmho/cm	1000	1000/1100	1000/1000
ALKALINITY AS CaCO3	mg/l	100	134/134	96/108
NITRATES AS NO3-N	mg/l	<0.1	0.1/<0.01	<0.1/<0.1
PHENOLICS	mg/l	<0.01	0.01/<0.01	<0.01/<0.01
TOTAL LEAD	mg/l	0.044	0.021/0.021	0.026/0.036
DISSOLVED LEAD	mg/l			
VOLATILE ORGANIC COMPOUNDS				
ACROLEIN	µg/l	<250	<250/<250	<250/<250
ACRYLONITRILE	µg/l	<250	<250/<250	<250/<250
BENZENE	µg/l	<5	<5/<5	<5/<5
BROMODICHLOROMETHANE	µg/l			
BROMOFORM	µg/l	<5	<5/<5	<5/<5
BROMOMETHANE	µg/l	<5	<5/<5	<5/<5
CARBON TETRACHLORIDE	µg/l	<5	<5/<5	<5/<5
CHLOROBENZENE	µg/l	<5	<5/<5	<5/<5
CHLOROETHANE	µg/l	<5	<5/<5	<5/<5
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5/<5	<5/<5
CHLOROFORM	µg/l	<5	<5/<5	<5/<5
CHLOROMETHANE	µg/l	<5	<5/<5	<5/<5
DIBROMOCHLOROMETHANE	µg/l	<5	<5/<5	<5/<5
1,2-DICHLOROBENZENE	µg/l			
1,3-DICHLOROBENZENE	µg/l			
1,4-DICHLOROBENZENE	µg/l			
1,1-DICHLOROETHANE	µg/l	<5	<5/<5	<5/<5
1,2-DICHLOROETHANE	µg/l	<5	<5/<5	<5/<5
1,1-DICHLOROETHENE	µg/l	<5	<5/<5	<5/<5
1,2-DICHLOROETHENE	µg/l	<5	<5/<5	<5/<5
1,2-DICHLOROPROPANE	µg/l	<5	<5/<5	<5/<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5/<5	<5/<5
trans-1,3-DICHLOROPROPANE	µg/l			
ETHYLBENZENE	µg/l	<5	<5/<5	<5/<5
METHYLENE CHLORIDE	µg/l	<5	<5/<5	<5/<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5/<5	<5/<5
TETRACHLOROETHENE	µg/l	<5	<5/<5	<5/<5
TOLUENE	µg/l	<5	<5/<5	<5/<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5/<5	<5/<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5/<5	<5/<5
TRICHLOROETHENE	µg/l	<5	<5/<5	<5/<5
TRICHLOROFLOUROMETHANE	µg/l			
VINYL CHLORIDE	µg/l	<5	<5/<5	<5/<5
TOTAL VOCs	µg/l	0	0	0

TABLE K-1
(CONTINUED)

WELL: MW-6 (cont)

ROUND NUMBER:		8	9	10	11
DATE:		5/3/89	9/22/89	12/8/89	2/14/90
	UNITS	-			
WATER LEVELS	ft-msl	742.36			
GENERAL CHEMISTRY					
pH	s.u.	6.1/6.1	7.6/7.6	6.30/6.10	6.2/6.10
SPECIFIC CONDUCTANCE	µmho/cm	1000/1000	1050/1000	900/1000	710/710
ALKALINITY AS CaCO3	mg/l	108/112	102/104	112/108	100/100
NITRATES AS NO3-N	mg/l	<0.1/<0.1	<0.1/<0.1	0.6/0.3	<0.1<0.1
PHENOLICS	mg/l	0.01/<0.01	0.05/0.08	<0.01/0.07	<0.01/NA
TOTAL LEAD	mg/l	.009/0.042	0.004/0.010	0.01/0.008	0.021/0.029
DISSOLVED LEAD	mg/l		<0.001/<0.001	0.006/NA	<0.005/NA
VOLATILE ORGANIC COMPOUNDS					
ACROLEIN	µg/l	<250/<250	<250/<250	<250/<250	<50/<50
ACRYLONITRILE	µg/l	<250/<250	<250/<250	<250/<250	<50/<50
BENZENE	µg/l	<5/<5	<5/<5	6/<5	<5/<5
BROMODICHLOROMETHANE	µg/l				<5/<5
BROMOFORM	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
BROMOMETHANE	µg/l	<5/<5	<5/<5	<5/<5	<10/<10
CARBON TETRACHLORIDE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
CHLOROBENZENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
CHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<10/<10
2-CHLOROETHYLVINYL ETHER	µg/l	<5/<5	<5/<5	<5/<5	<10/<10
CHLOROFORM	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
CHLOROMETHANE	µg/l	<5/<5	<5/<5	<5/<5	<10/<10
DIBROMOCHLOROMETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,2-DICHLOROBENZENE	µg/l				<5/<5
1,3-DICHLOROBENZENE	µg/l				<5/<5
1,4-DICHLOROBENZENE	µg/l				<5/<5
1,1-DICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,2-DICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,1-DICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,2-DICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,2-DICHLOROPROPANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
cis-1,3-DICHLOROPROPANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
trans-1,3-DICHLOROPROPANE	µg/l				<5/<5
ETHYLBENZENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
METHYLENE CHLORIDE	µg/l	28/26	<5/<5	27/42	<5/<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
TETRACHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
TOLUENE	µg/l	<5/<5	<5/5	<5/<5	<5/<5
1,1,1-TRICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
1,1,2-TRICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
TRICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5	<5/<5
TRICHLOROFLOUROMETHANE	µg/l				<5/<5
VINYL CHLORIDE	µg/l	<5/<5	<5/<5	<5/<5	<10/<10
TOTAL VOCs	µg/l	28/26	0/5	33/42	0

TABLE K-1
(CONTINUED)

.ELL: MW-6 (cont)

ROUND NUMBER:		12	13	14
DATE:		6/6/90	8/9/90	10/25/90
	UNITS	-	-	-
WATER LEVELS	ft-msl		745.29	744.26
GENERAL CHEMISTRY				
pH	s.u.	6.1/6.10	6.1/6.2	6.20/6.30
SPECIFIC CONDUCTANCE	µmho/cm	880/880	990/100	750/770
ALKALINITY AS CaCO3	mg/l	110/110	120/120	110/120
NITRATES AS NO3-N	mg/l	<0.1/<0.1	0.3/0.4	0.2/0.3
PHENOLICS	mg/l	0.01/<0.01	<0.005/NA	<0.005/<0.005
TOTAL LEAD	mg/l	.105/0.160	0.031/0.043	0.047/0.054
DISSOLVED LEAD	mg/l	0.01/NA	<0.003/NA	<0.003/NA
VOLATILE ORGANIC COMPOUNDS				
ACROLEIN	µg/l	<50/<50	<50/<50	<50/<50
ACRYLONITRILE	µg/l	<50/<50	<50/<50	<50/<50
BENZENE	µg/l	<5/<5	<5/<5	<5/<5
BROMODICHLOROMETHANE	µg/l	<5/<5	<5/<5	<5/<5
BROMOFORM	µg/l	<5/<5	<5/<5	<5/<5
BROMOMETHANE	µg/l	<10/<10	<10/<10	<10/<10
CARBON TETRACHLORIDE	µg/l	<5/<5	<5/<5	<5/<5
CHLOROBENZENE	µg/l	<5/<5	<5/<5	<5/<5
CHLOROETHANE	µg/l	<10/<10	<10/<10	<10/<10
?-CHLOROETHYLVINYL ETHER	µg/l	<10/<10	<10/<10	<10/<10
ILOROFORM	µg/l	<5/<5	<5/<5	<5/<5
CHLOROMETHANE	µg/l	<10/<10	<10/<10	<10/<10
DIBROMOCHLOROMETHANE	µg/l	<5/<5	<5/<5	<5/<5
1,2-DICHLOROBENZENE	µg/l	<5/<5	<5/<5	<5/<5
1,3-DICHLOROBENZENE	µg/l	<5/<5	<5/<5	<5/<5
1,4-DICHLOROBENZENE	µg/l	<5/<5	<5/<5	<5/<5
1,1-DICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5
1,2-DICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5
1,1-DICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5
1,2-DICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5
1,2-DICHLOROPROPANE	µg/l	<5/<5	<5/<5	<5/<5
cis-1,3-DICHLOROPROPANE	µg/l	<5/<5	<5/<5	<5/<5
trans-1,3-DICHLOROPROPANE	µg/l	<5/<5	<5/<5	<5/<5
ETHYLBENZENE	µg/l	3/<5	<5/<5	<5/<5
METHYLENE CHLORIDE	µg/l	<5/<5	<5/<5	<5/<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5
TETRACHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5
TOLUENE	µg/l	<5/<5	<5/<5	<5/<5
1,1,1-TRICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5
1,1,2-TRICHLOROETHANE	µg/l	<5/<5	<5/<5	<5/<5
TRICHLOROETHENE	µg/l	<5/<5	<5/<5	<5/<5
TRICHLOROFLOUROMETHANE	µg/l	<5/<5	<5/<5	<5/<5
VINYL CHLORIDE	µg/l	<10/<10	<10/<10	<10/<10
TOTAL VOCs	µg/l	3/0	0	0

TABLE K-1
(CONTINUED)

ELL: MW-7

SAMPLE NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	746.86	745.5	738.01	747.91	743.39	746.26	745.01
GENERAL CHEMISTRY								
pH	s.u.	6.30	6.70	NO	7.00	6.30	7.70	6.7
SPECIFIC CONDUCTANCE	µmho/cm	2500	2500	SAMPLE	1200	1100	1125	1100
ALKALINITY AS CaCO3	mg/l	120		COLLECTED		78	72	56
NITRATES AS NO3-N	mg/l				0.2	0.4	0.3	0.3
PHENOLICS	mg/l				0.03	<0.01	0.01	0.02
TOTAL LEAD	mg/l	0.026	0.026		0.005	0.005	0.004	0.019
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250		<250	<250	<250	<250
ACRYLONITRILE	µg/l	<250	<250		<250	<250	<250	<250
BENZENE	µg/l	<5	<5		<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l	<5	<5		<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5		<5	<5	<5	<5
CARBON TETRACHLORIDE	µg/l	<5	<5		<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5		<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5		<5	<5	<5	<5
CHLOROFORM	µg/l	<5	<5		<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5		<5	<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	<5	<5		<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l	<5	<5		<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5		<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5		<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l	<5	<5		<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	<5	<5		<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5		<5	<5	<5	<5
TOLUENE	µg/l	<5	<5		<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5		<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5		<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l	<5	<5		<5	<5	<5	<5
TOTAL VOCs	µg/l	0	0		0	0	0	0

TABLE K-1
(CONTINUED)

.ELL: MW-7 (cont)

SAMPLE NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	745.53	747.99	744.33	745.15	749.01	747.71	743.96
GENERAL CHEMISTRY								
pH	s.u.	6.15	7.25	6.2	6.2	6.4	6.5	6.1
SPECIFIC CONDUCTANCE	µmho/cm	1000	1000	950	710	570	910	750
ALKALINITY AS CaCO3	mg/l	72	72	68	100	62	120	77
NITRATES AS NO3-N	mg/l	1.8	0.4	0.6	<0.1	0.5	2.9	1.1
PHENOLICS	mg/l	<0.01	0.11	<0.01	<0.01	<0.01	0.016	<0.005
TOTAL LEAD	mg/l	<0.001	0.004	0.01	0.021	0.06	0.11	0.008
DISSOLVED LEAD	mg/l		<0.001		<0.005			
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	<50
BENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	<10
CHLOROFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,1-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	27	<5	<5	<5	<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	<10	<10	<10
TOTAL VOCs	µg/l	27	0	0	0	0	0	0

TABLE K-1
(CONTINUED)

.ELL: MW-8

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	739.28	738.81	738.01	739.61	738.1	738.28	737.94
GENERAL CHEMISTRY								
pH	s.u.	6.9	7.1	NO	7.4	6.70/6.65	7.7	7.2
SPECIFIC CONDUCTANCE	µmho/cm	1000	800	SAMPLE	1000	900/800	575	900
ALKALINITY AS CaCO3	mg/l	410		COLLECTED		380/380	256	320
NITRATES AS NO3-N	mg/l		<0.1		0.3	<0.1/<0.01	1.1	<0.1
PHENOLICS	mg/l				0.02	<0.01/0.01	<0.01	<0.01
TOTAL LEAD	mg/l	0.008	0.001		0.003	<0.001/0.001	<0.001	0.004
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l		<250		<250	<250/<250	<250	<250
ACRYLONITRILE	µg/l		<250		<250	<250/<250	<250	<250
BENZENE	µg/l		<5		<5	<5/<5	<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l		<5		<5	<5/<5	<5	<5
BROMOMETHANE	µg/l		<5		<5	<5/<5	<5	<5
CARBON TETRACHLORIDE	µg/l		<5		<5	<5/<5	<5	<5
CHLOROBENZENE	µg/l		<5		<5	<5/<5	<5	<5
CHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
2-CHLOROETHYLVINYL ETHER	µg/l		<5		<5	<5/<5	<5	<5
CHLOROFORM	µg/l		<5		<5	<5/<5	<5	<5
CHLOROMETHANE	µg/l		<5		<5	<5/<5	<5	<5
DIBROMOCHLOROMETHANE	µg/l		<5		<5	<5/<5	<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
1,2-DICHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
1,1-DICHLOROETHENE	µg/l		<5		<5	<5/<5	<5	<5
1,2-DICHLOROETHENE	µg/l		<5		<5	<5/<5	<5	<5
1,2-DICHLOROPROPANE	µg/l		<5		<5	<5/<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l		<5		<5	<5/<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l		<5		<5	<5/<5	<5	<5
METHYLENE CHLORIDE	µg/l		<5		<5	<5/<5	<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
TETRACHLOROETHENE	µg/l		<5		<5	<5/<5	<5	<5
TOLUENE	µg/l		<5		<5	<5/<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l		<5		<5	<5/<5	<5	<5
TRICHLOROETHENE	µg/l		<5		<5	<5/<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l		<5		<5	<5/<5	<5	<5
TOTAL VOCs	µg/l		0		0	0	0	0

TABLE K-1
(CONTINUED)

LL: MW-8 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	738.51	739.77	738.44	738.76	741.47	739.01	738.33
GENERAL CHEMISTRY								
pH	s.u.	6.75	7.3	6.8	6.8	6.8	7.0	6.7
SPECIFIC CONDUCTANCE	µmho/cm	900	750	900	630	710	910	820
ALKALINITY AS CaCO3	mg/l	396	369	408	450	390	440	450
NITRATES AS NO3-N	mg/l	<0.1	<0.1	0.3	<0.1	<0.1	0.28	0.25
PHENOLICS	mg/l	<0.01	0.05	<0.01	<0.01		<0.005	<0.005
TOTAL LEAD	mg/l	0.003	0.003	0.007	0.006	0.09	0.051	0.013
DISSOLVED LEAD	mg/l		<0.001					
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	<50
BENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
2-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	<10
LOROFORM	µg/l	<5	<5	<5	<5	<5	<5	2
HLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,1-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	5
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	<10	<10	<10
TOTAL VOCs	µg/l	0	0	0	0	0	0	7

TABLE K-1
(CONTINUED)

WELL: MW-9

ROUND NUMBER:		1	2	3	4	5	6	7
DATE:		1/8/88	2/11/88	3/31/88	4/7/88	8/28/88	11/18/88	1/25/89
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	734.61	734.02	738.01	738.88	737.65	743.09	742.11
GENERAL CHEMISTRY								
pH	s.u.	NO	NO	NO	NO	NO	7.70	6.5
SPECIFIC CONDUCTANCE	µmho/cm	SAMPLE	SAMPLE	SAMPLE	SAMPLE	SAMPLE	600	600
ALKALINITY AS CaCO3	mg/l	COLLECTED	COLLECTED	COLLECTED	COLLECTED	COLLECTED	90	60
NITRATES AS NO3-N	mg/l						0.1	<0.1
PHENOLICS	mg/l						<0.01	<0.01
TOTAL LEAD	mg/l						0.019	0.021
DISSOLVED LEAD	mg/l							
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l						<250	<250
ACRYLONITRILE	µg/l						<250	<250
BENZENE	µg/l						<5	<5
BROMODICHLOROMETHANE	µg/l							
BROMOFORM	µg/l						<5	<5
BROMOMETHANE	µg/l						<5	<5
CARBON TETRACHLORIDE	µg/l						<5	<5
CHLOROBENZENE	µg/l						<5	<5
CHLOROETHANE	µg/l						<5	<5
`-CHLOROETHYLVINYL ETHER	µg/l						<5	<5
.LOROFORM	µg/l						<5	<5
CHLOROMETHANE	µg/l						<5	<5
DIBROMOCHLOROMETHANE	µg/l						<5	<5
1,2-DICHLOROBENZENE	µg/l							
1,3-DICHLOROBENZENE	µg/l							
1,4-DICHLOROBENZENE	µg/l							
1,1-DICHLOROETHANE	µg/l						<5	<5
1,2-DICHLOROETHANE	µg/l						<5	<5
1,1-DICHLOROETHENE	µg/l						<5	<5
1,2-DICHLOROETHENE	µg/l						<5	<5
1,2-DICHLOROPROPANE	µg/l						<5	<5
cis-1,3-DICHLOROPROPANE	µg/l						<5	<5
trans-1,3-DICHLOROPROPANE	µg/l							
ETHYLBENZENE	µg/l						<5	<5
METHYLENE CHLORIDE	µg/l						<5	<5
1,1,2,2-TETRACHLOROETHANE	µg/l						<5	<5
TETRACHLOROETHENE	µg/l						<5	<5
TOLUENE	µg/l						<5	<5
1,1,1-TRICHLOROETHANE	µg/l						<5	<5
1,1,2-TRICHLOROETHANE	µg/l						<5	<5
TRICHLOROETHENE	µg/l						<5	9
TRICHLOROFLOUROMETHANE	µg/l							
VINYL CHLORIDE	µg/l						<5	<5
TOTAL VOCs	µg/l						0	9

TABLE K-1
(CONTINUED)

.ELL: MW-9 (cont)

ROUND NUMBER:		8	9	10	11	12	13	14
DATE:		5/3/89	9/22/89	12/8/89	2/14/90	6/6/90	8/9/90	10/25/90
	UNITS	-	-	-	-	-	-	-
WATER LEVELS	ft-msl	742.71	745.75	741.48	743.56	745.67	744.76	741.22
GENERAL CHEMISTRY								
pH	s.u.	6.0	7.05	6.1	5.9	6.0	6.2	6.0
SPECIFIC CONDUCTANCE	µmho/cm	495	550	550	370	460	520	430
ALKALINITY AS CaCO3	mg/l	64	61	60	60	58	65	62
NITRATES AS NO3-N	mg/l	3.9	<0.1	<0.1	<0.1	<0.1	0.39	0.16
PHENOLICS	mg/l	<0.01	0.08	0.11	<0.01	<0.01	0.012	<0.005
TOTAL LEAD	mg/l	0.003	0.021	0.006	0.028	0.006	0.044	0.006
DISSOLVED LEAD	mg/l		0.001				<0.003	
VOLATILE ORGANIC COMPOUNDS								
ACROLEIN	µg/l	<250	<250	<250	<50	<50	<50	<50
ACRYLONITRILE	µg/l	<250	<250	<250	<50	<50	<50	<50
BENZENE	µg/l	<5	<5	6	<5	<5	<5	<5
BROMODICHLOROMETHANE	µg/l				<5	<5	<5	<5
BROMOFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
BROMOMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
CARBON TETRACHLORIDE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
?-CHLOROETHYLVINYL ETHER	µg/l	<5	<5	<5	<10	<10	<10	<10
ILOROFORM	µg/l	<5	<5	<5	<5	<5	<5	<5
CHLOROMETHANE	µg/l	<5	<5	<5	<10	<10	<10	<10
DIBROMOCHLOROMETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROBENZENE	µg/l				33	27	<5	16
1,3-DICHLOROBENZENE	µg/l				<5	<5	<5	<5
1,4-DICHLOROBENZENE	µg/l				<5	<5	18	<5
1,1-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1-DICHLOROETHENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,2-DICHLOROETHENE	µg/l	<5	<5	<5	<5	2	<5	2
1,2-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
cis-1,3-DICHLOROPROPANE	µg/l	<5	<5	<5	<5	<5	<5	<5
trans-1,3-DICHLOROPROPANE	µg/l				<5	<5	<5	<5
ETHYLBENZENE	µg/l	<5	<5	<5	<5	<5	<5	<5
METHYLENE CHLORIDE	µg/l	<5	<5	40	<5	<5	<5	6
1,1,2,2-TETRACHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TETRACHLOROETHENE	µg/l	<5	<5	10	<5	<5	<5	<5
TOLUENE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,1-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
1,1,2-TRICHLOROETHANE	µg/l	<5	<5	<5	<5	<5	<5	<5
TRICHLOROETHENE	µg/l	23	14	<5	14	18	13	10
TRICHLOROFLOUROMETHANE	µg/l				<5	<5	<5	<5
VINYL CHLORIDE	µg/l	<5	<5	<5	<10	<10	<10	<10
TOTAL VOCs	µg/l	23	14	56	47	47	31	34

TABLE K-2

GROUND WATER MONITORING DATA
SAMPLES COLLECTED AT WELL MW-7
ACID EXTRACTABLE SEMIVOLATILE COMPOUNDS

		SAMPLE NO. AND DATE	
		MW-007-01	MW-007-06
PARAMETER	UNITS	JAN 08, 1988	NOV 18, 1988
2-Chlorophenol	µg/ℓ	NA[1]	<10[2]
2,4-Dichlorophenol	µg/ℓ	NA	<10
2,4-Dimethylphenol	µg/ℓ	NA	<10
4,6-Dinotro-o-cresol	µg/ℓ	NA	<50
2,4-Dinitrophenol	µg/ℓ	NA	<10
2-Nitrophenol	µg/ℓ	NA	<50
4-Nitrophenol	µg/ℓ	NA	<10
P-Chloro-m-cresol	µg/ℓ	NA	<50
Pentachlorophenol	µg/ℓ	<85	<50
Phenol	µg/ℓ	NA	<10
2,4,6-Trichlorphenol	µg/ℓ	NA	<10

(1) "NA" indicates not analyzed.

(2) "<" indicates less than method detection limit.

TABLE K-3

GROUND WATER MONITORING DATA
ADDITIONAL METALS ANALYSES
SAMPLED COLLECTED JANUARY 8, 1988

METAL	UNITS	MW-1 MW-001-01	MW-2 MW-002-01	MW-3 MW-003-01	MW-4 MW-004-01
Arsenic	mg/ℓ	0.014//0.014[1]	-	0.003	-
Barium	mg/ℓ	0.50//0.55	-	0.55	-
Beryllium	mg/ℓ	<0.01//<0.01[2]	-	<0.01	-
Cadmium	mg/ℓ	<0.01//<0.01	-	<0.01	-
Chromium	mg/ℓ	<0.01//0.01	-	0.01	-
Copper	mg/ℓ	0.09//0.09	0.10	0.04	0.08
Mercury	mg/ℓ	<0.0005//<0.0005	-	<0.0005	-
Nickel	mg/ℓ	<0.1//0.1	-	0.1	-
Selenium	mg/ℓ	<0.001//<0.001	-	<0.001	-
Silver	mg/ℓ	0.01//0.02	-	<0.01	-
Zinc	mg/ℓ	0.26//0.26	0.17	0.07	11

See footnotes at end of table.

TABLE K-3
(Continued)

METAL[1]	UNITS	MW-5 MW-005-01	MW-6 MW-006-01	MW-7 MW-007-01	MW-8 MW-008-01	FIELD BLANK MW-000-01
Arsenic	mg/ℓ	-	-	-	0.001	<0.001
Barium	mg/ℓ	-	-	-	<0.01	<0.01
Beryllium	mg/ℓ	-	-	-	<0.01	<0.01
Cadmium	mg/ℓ	-	-	-	<0.01	<0.01
Chromium	mg/ℓ	-	-	-	<0.01	<0.01
Copper	mg/ℓ	0.10	0.10	0.04	<0.01	<0.01
Mercury	mg/ℓ	-	-	-	<0.0005	<0.0005
Nickel	mg/ℓ	-	-	-	<0.1	<0.1
Selenium	mg/ℓ	-	-	-	<0.001	<0.001
Silver	mg/ℓ	-	-	-	<0.01	<0.01
Zinc	mg/ℓ	0.11	0.20	0.09	0.03	<0.01

(1)"#//#" indicates collection and analysis of replicate samples.
(2"<" indicates less than method detection limit.