

IF

t a gleason  
associates

234-pages

**GROUNDWATER MONITORING REPORT  
3rd QUARTER 1994**

**FOR  
ALLIEDSIGNAL INC.  
SOUTH BEND COMPLEX  
SOUTH BEND, INDIANA**

*St. Joseph*

**30 OCTOBER 1994**

**PROJECT # ALCMPX SBIN 084**

**COPY NO. 9**



## TABLE OF CONTENTS

	<u>PAGE</u>
LIST OF FIGURES .....	ii
LIST OF TABLES .....	iii
LIST OF APPENDICES .....	iv
1.0 <u>INTRODUCTION</u> .....	1
2.0 <u>WATER LEVEL MEASUREMENTS</u> .....	1
3.0 <u>SAMPLING METHODOLOGY</u> .....	2
3.1 PURGING .....	2
3.2 SAMPLE COLLECTION .....	2
4.0 <u>QUALITY ASSURANCE/QUALITY CONTROL</u> .....	3
5.0 <u>ANALYTICAL RESULTS</u> .....	3
5.1 VOC RESULTS .....	3
5.1.1 <u>Shallow Monitor Wells</u> .....	3
5.1.2 <u>Deep Monitor Wells</u> .....	4
5.1.3 <u>Naphtha Recovery Wells</u> .....	4
5.1.4 <u>VOC Recovery Wells</u> .....	4
5.2 METALS, CYANIDE, AND PHENOLS .....	5
5.3 FIELD BLANKS .....	5
6.0 <u>SCHEDULE</u> .....	5



## LIST OF FIGURES

<u>NUMBER</u>	<u>TITLE</u>
Figure 1	Site Location
Figure 2	Water Levels Measured - September 1994
Figure 2A	Potentiometric Map - Shallow Aquifer September 1994
Figure 2B	Potentiometric Map - Deep Aquifer September 1994
Figure 3	Wells Sampled September 1994
Figure 4	VOC Recovery Well and Manhole Locations



LIST OF TABLES

<u>NUMBER</u>	<u>TITLE</u>
Table 1	Sample Summary - 3rd Quarter 1994
Table 2A	Water Level Measurements - Shallow Monitor Wells
Table 2B	Water Level Measurements - Deep Monitor Wells
Table 2C	Water Level Measurements - Naphtha Recovery Wells
Table 3	Shallow Monitor Wells - Organic Compounds
Table 4	Deep Monitor Wells - Organic Compounds
Table 5	Naphtha Recovery Wells - Organic Compounds
Table 6	VOC Recovery Wells - Organic Compounds
Table 7	Shallow Monitor Wells - Metals, Cyanide, and Phenols
Table 8	Deep Monitor Wells - Metals, Cyanide, and Phenols
Table 9	Naphtha Recovery Wells - Metals, Cyanide, and Phenols
Table 10	VOC Recovery Wells - Metals, Cyanide, and Phenols





## LIST OF APPENDICES

### APPENDIX A:

- Appendix A-1 Shallow Monitor Wells - Organic Compounds Summary
- Appendix A-2 Deep Monitor Wells - Organic Compounds Summary
- Appendix A-3 VOC Recovery Wells - Organic Compounds Summary
- Appendix A-4 Naphtha Recovery Wells - Organic Compounds Summary

### APPENDIX B:

Table 6A VOC Recovery Wells - Organic Compounds (Before System Reconfiguration)

Table 10A VOC Recovery Wells - Metals, Cyanide, and Phenols (Before System Reconfiguration)



## 1.0 INTRODUCTION

This report presents the results of the 3rd quarter (September) 1994 groundwater monitoring program performed by T A Gleason Associates (TAGA) at the AlliedSignal Inc. South Bend Complex, in South Bend, Indiana (see Figure 1). The groundwater monitoring program was initiated by AlliedSignal in 1981.

Included in the groundwater monitoring program are twenty-seven (27) shallow aquifer monitor wells, seven (7) deep aquifer monitor wells, five (5) naphtha recovery wells, and twenty (20) shallow aquifer and one (1) deep aquifer volatile organic compounds (VOC) recovery wells. Four shallow VOC recovery wells were disconnected in December 1993 because of low yield, and two naphtha recovery wells were deactivated because floating product was not present. The sampling program is presented in Table 1, and the sampling locations are shown on Figures 3 and 4.

## 2.0 WATER LEVEL MEASUREMENTS

Depth to groundwater was measured in the shallow and deep aquifer wells and naphtha recovery wells shown on Figure 2. Depths were measured to the nearest 0.01 ft using an electronic water level indicator. The monitor wells were most recently surveyed by Lang, Feeney & Associates, Inc., during September, 1987 to verify the reference elevations.

Depth to water and the calculated groundwater elevations for the shallow monitor wells, deep monitor wells, and the naphtha recovery wells are presented in Tables 2A, 2B, and 2C, respectively. The potentiometric maps for the shallow and deep aquifers showing depth and direction of groundwater flow are presented in Figures 2A and 2B, respectively.



### 3.0 SAMPLING METHODOLOGY

#### 3.1 PURGING

A total of three (3) well volumes were purged from all monitor wells prior to sample collection. Most wells were purged using a centrifugal pump connected to the water outlet of a dedicated bladder pump. The dedicated bladder pumps were used to purge low yielding wells. Three (3) wells were purged using dedicated PVC bailers. The naphtha recovery well taps were allowed to discharge for approximately five (5) minutes before samples were collected. Also, the VOC recovery wells are allowed to discharge through the sample tap for five minutes prior to sample collection.

#### 3.2 SAMPLE COLLECTION

Figure 3 shows the locations of the wells sampled during the September episode. All monitor wells (except S-16, 86-10, and 86-15) were sampled directly from the outlet of the dedicated bladder pump. Wells S-16, 86-10, and 86-15 were sampled with a dedicated PVC bailer which was carefully lowered into and withdrawn from the well to avoid aeration of the samples. Samples from the naphtha recovery wells were collected directly from a tap at each recovery well. See Table 1 and Figure 3 for well sample locations. Samples from the VOC recovery wells are collected from taps at representative locations along the recovery system (see Table 1 and Figure 4 for representative sample locations).

Samples were measured in the field for pH, specific conductance, and temperature. All field data were recorded on sample data sheets. All samples were placed in insulated coolers with ice packs and shipped to Aqua Tech Environmental Laboratories, Inc., under the appropriate chain-of-custody. During the 3rd quarter 1994 sampling episode, samples were analyzed for VOC (EPA Method 8240), metals, cyanide, and phenols.



#### 4.0 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

In accordance with TAGA QA/QC procedure, duplicate samples from wells D-7 and S-14 and from locations MH-3A and RWB-22 were collected. Three (3) field blanks were prepared and submitted for analyses along with the other samples. Laboratory results, QA/QC data, and sample data sheets are maintained in TAGA files and are available upon request.

#### 5.0 ANALYTICAL RESULTS

The analytical results from August 1986 through September 1994 are presented in Tables 3 through 10 and discussed below.

##### 5.1 VOC RESULTS

Tables 3, 4, 5, and 6 present the historical VOC results and graph the VOC concentrations versus time. The graphs represent the specific VOC and VOC sum for each sample location. The graphs of the value of the VOC sum for each monitor well represents the overall trend at each monitor well. Appendix A presents the summary graphs for specific compounds.

##### 5.1.1 Shallow Monitor Wells

The most recent analytical results are generally consistent with the previous results for total VOC concentrations. Upgradient monitor well S-1, which has detected VOC off and on since 1991, including trichloroethene (TCE) (5.8 ug/l) for the first time in December 1993, detected cis 1,2-dichloroethene (6.4 ug/l) and tetrachloroethane (5.6 ug/l) this episode. Monitor well S-25 did not detect VOC for the first time since February 1993. Monitor well 86-15 detected vinyl chloride at 109 ug/l. Historically, the vinyl chloride concentration has been non-detect. Monitor well S-17 detected 761 ug/l total VOC compared to a historical average of less than 50 ug/l.





### 5.1.2 Deep Monitor Wells

Total VOC concentrations in all deep monitor wells are consistent with historical results and generally indicate a stable or decreasing trend. The most significant decreasing trend is apparent in well 7-D. Well D-4 has detected vinyl chloride in seven (7) consecutive episodes.

### 5.1.3 Naphtha Recovery Wells

Table 5 shows that the naphtha recovery wells continue to show an overall decreasing trend in total VOC concentrations. Naphtha wells RWB-21 and RWB-6 have been deactivated because no floating product is detected at these locations. However, these wells are used for water level measurements.

### 5.1.4 VOC Recovery Wells

As part of the VOC Recovery System rehabilitation, the recovery well pumping configurations were changed so that there are now seven (7) shallow well pumping stations recovering groundwater from a series of sixteen (16) shallow recovery wells located along Bendix Drive. Additionally, there is one (1) deep recovery well RW-13.

Table 6 presents the VOC results for the representative sample locations in the VOC Recovery System. Sample stations RW 1-2, RW 3-4, and RW 5-7 previously had been sampled as one location (RW 1-7). These are now sampled separately and Table 6 shows the 4th quarter 1993 and the 1st, 2nd and 3rd quarter 1994 results for these locations. Also shown are the results for sampling locations RW 17, RW 18, and RW 19. Previous results for these locations are included in Appendix B. Table 6 reports the VOC results for the September sampling episode to be invalid because the samples were contaminated during sampling.



## 5.2 METALS, CYANIDE, AND PHENOLS

Tables 7, 8, 9, and 10 present the results for metals, cyanide, phenols, and field measurements through 3rd quarter 1994. Metals, cyanide, and phenols are only sampled during the 1st and 3rd quarters of each year.

## 5.3 FIELD BLANKS, DUPLICATES, QA/QC

VOC was not detected in any of the field blanks. Lead at 0.004 mg/l was detected in one blank. The two duplicate sample results show that all compounds were within acceptable limits for comparability.

## 6.0 SCHEDULE

The 4th quarter 1994 sampling episode is scheduled for December, 1994.

o o o



**TABLE 1 - SAMPLE SUMMARY  
3RD QUARTER 1994**

DEEP MONITOR WELLS SAMPLED
1-D
2-D
5-D
7-D
8-D
D-4
D-7

SHALLOW MONITOR WELLS SAMPLED	
9-33	S-17
86-10	S-20
86-15	S-21
S-1	S-22
S-4A	S-23
S-9	S-24
S-14	S-25
S-15	S-26
S-16	S-27

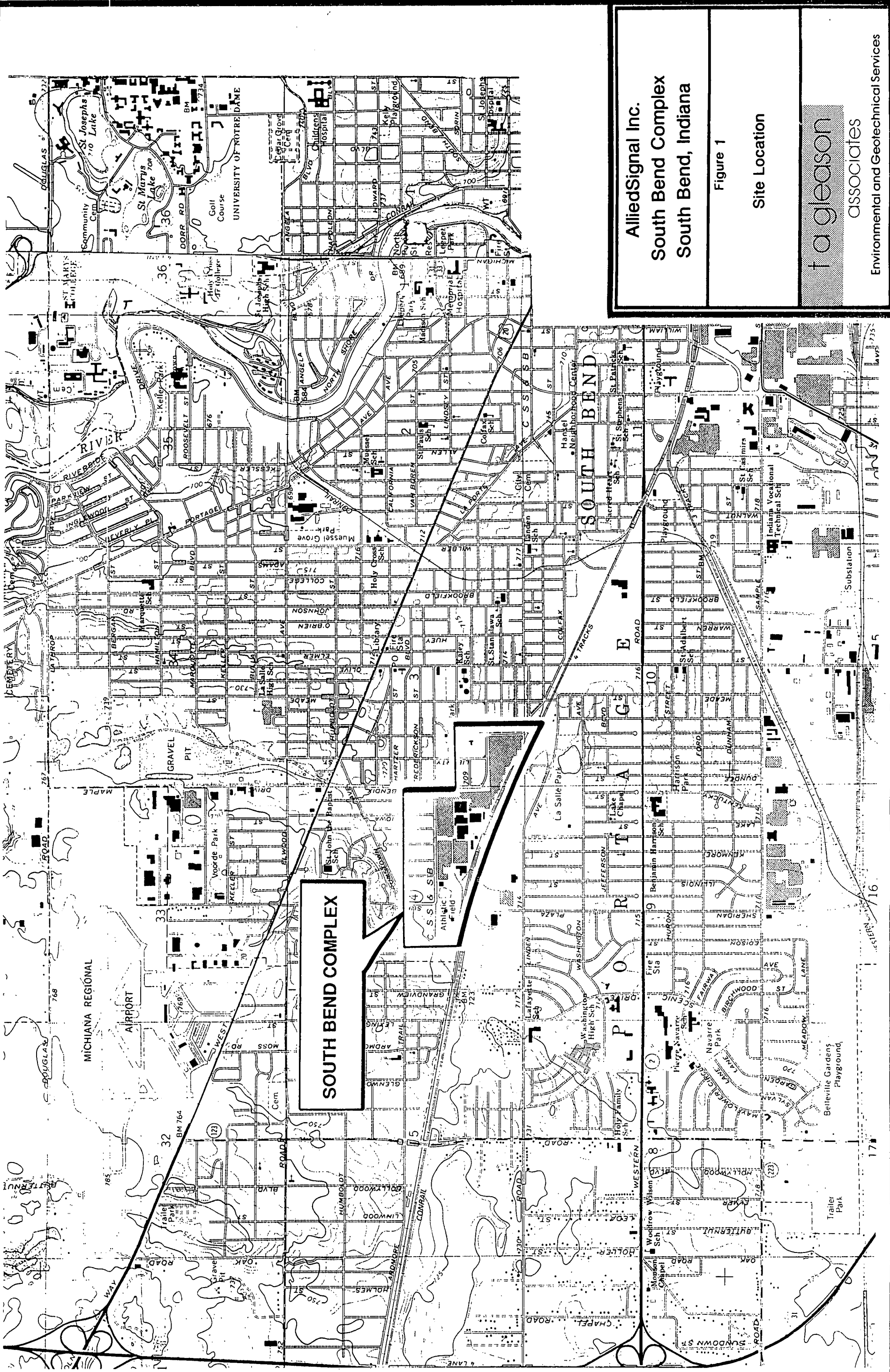
NAPHTHA RECOVERY WELLS SAMPLED
E-3
RWB-16
RWB-22

QA/QC SAMPLES
D-7 DUPLICATE
S-14 DUPLICATE
MH-3A DUPLICATE
RWB-22 DUPLICATE
3 - FIELD BLANKS

VOC RECOVERY WELLS	
REPRESENTATIVE SAMPLE DESIGNATION	RECOVERY WELL(S) REPRESENTED
MH-2/RW 1-2	RW 1, RW 2
MH-3A/RW 3-4	RW 3, RW 3A, RW 4
MH-5/RW 5-7	RW 5, RW 6, RW 7
MH-8/RW 8-11	RW 8, RW 9, RW 9A, RW 10, RW 11
P-13/RW 13	RW 13
MH-17/RW 17	RW 17
MH-18/RW 18	RW 18
MH-19/RW 19	RW 19

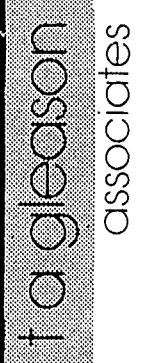


T A GLEASON ASSOCIATES' interpretations, conclusions and recommendations relative to this data are limited to our written reports.



AlliedSignal Inc.  
 South Bend Complex  
 South Bend, Indiana

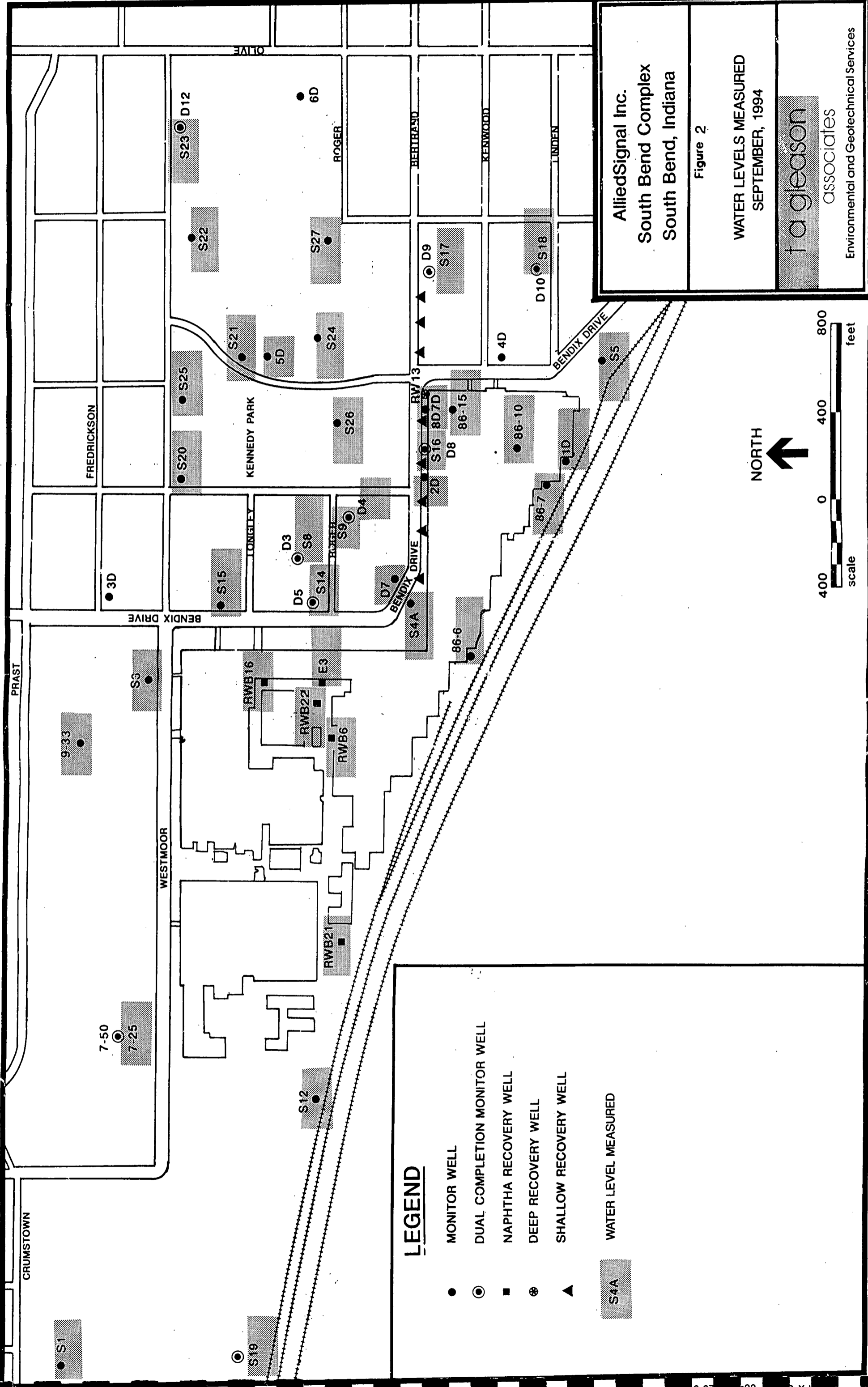
Figure 1  
 Site Location



Environmental and Geotechnical Services







CRUMSTOWN  
PRAST  
WESTMOOR  
BENDIX DRIVE  
FREDRICKSON  
LONGLEY  
KENNEDY PARK  
OLIVE  
ROGER  
BERIBAND  
KENWOOD  
LINDEN  
BENDIX DRIVE

9-33  
7-50  
7-25  
S1  
S19  
S12  
S9  
RWB16  
RWB22  
RWB6  
RWB21  
E3  
S4A  
D7  
D5  
S14  
S8  
D3  
D4  
S9  
S15  
S20  
S25  
S21  
5D  
S24  
S26  
S27  
S24  
S22  
S23  
D12  
6D  
S4A  
S16  
BD7D  
D8  
86-15  
86-10  
86-7  
86-6  
S5  
S10  
D9  
S17  
D10  
S18  
4D

**LEGEND**

- MONITOR WELL
- ⊙ DUAL COMPLETION MONITOR WELL
- NAPHTHA RECOVERY WELL
- ⊗ DEEP RECOVERY WELL
- ▲ SHALLOW RECOVERY WELL
- S4A WATER LEVEL MEASURED

AlliedSignal Inc.  
South Bend Complex  
South Bend, Indiana

Figure 2

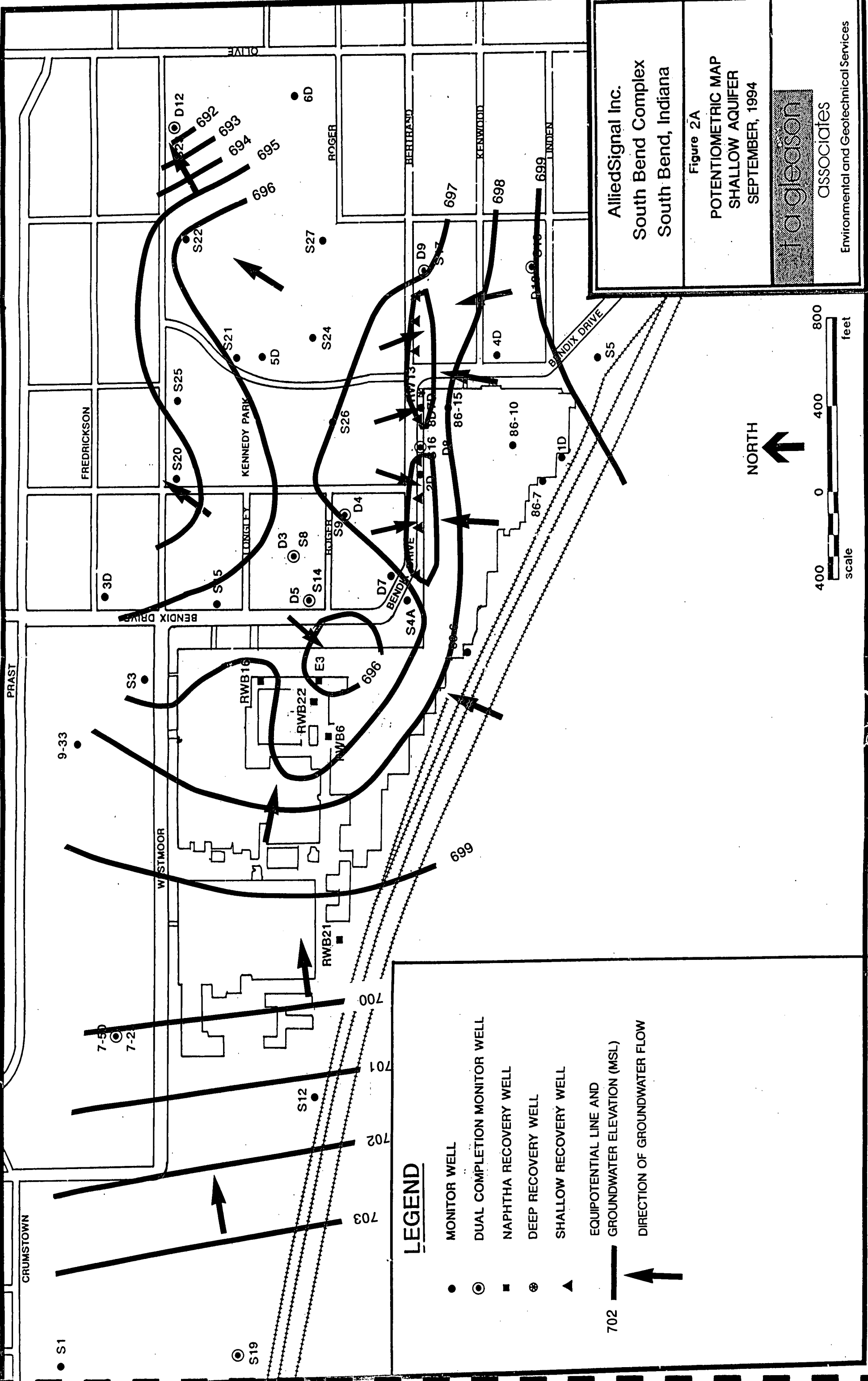
WATER LEVELS MEASURED  
SEPTEMBER, 1994

**Tagleason**  
ASSOCIATES  
Environmental and Geotechnical Services

NORTH

400 0 400 800  
feet  
scale





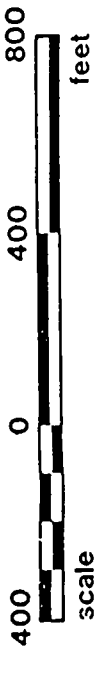
AlliedSignal Inc.  
 South Bend Complex  
 South Bend, Indiana

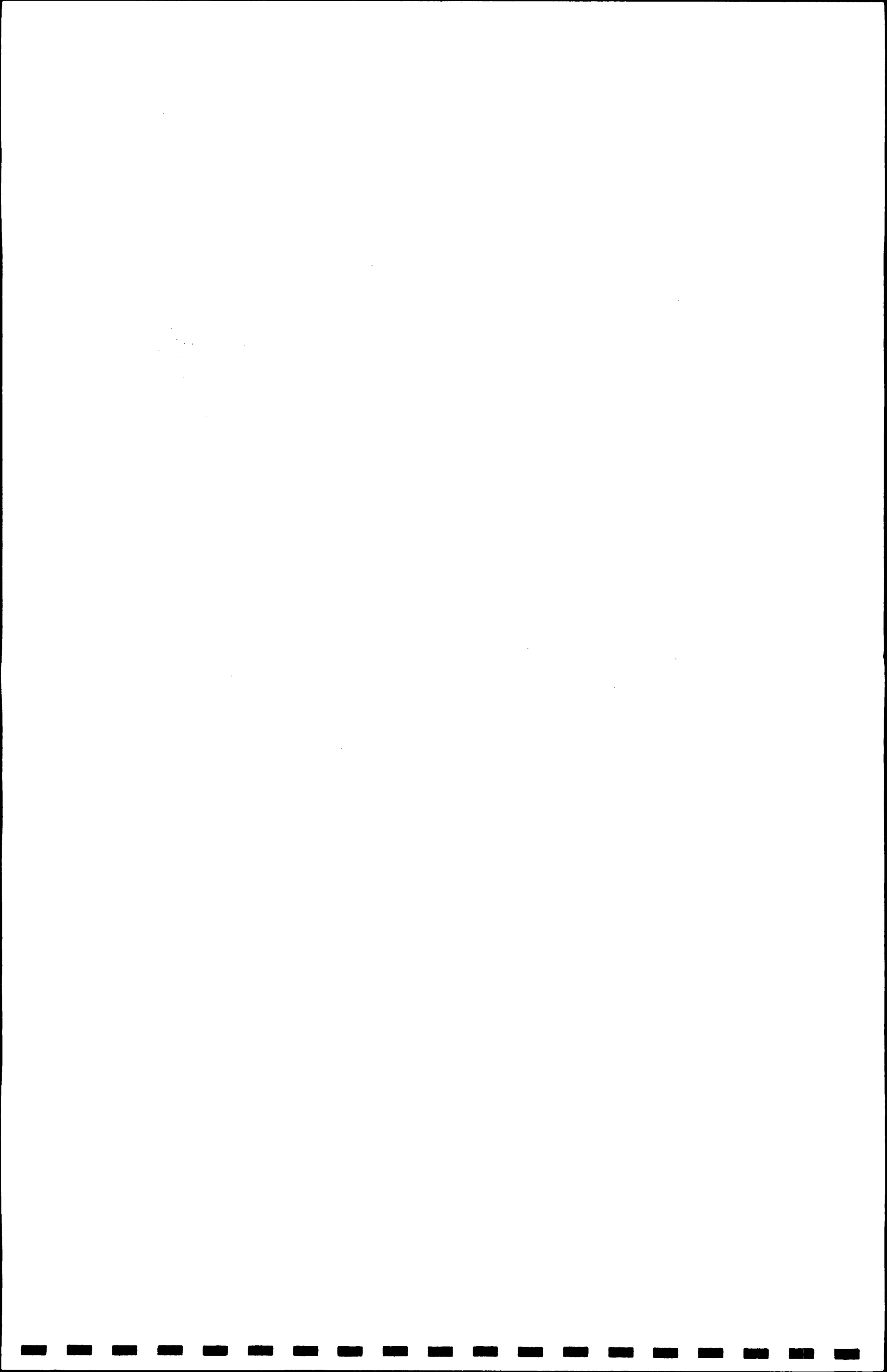
Figure 2A  
 POTENTIOMETRIC MAP  
 SHALLOW AQUIFER  
 SEPTEMBER, 1994

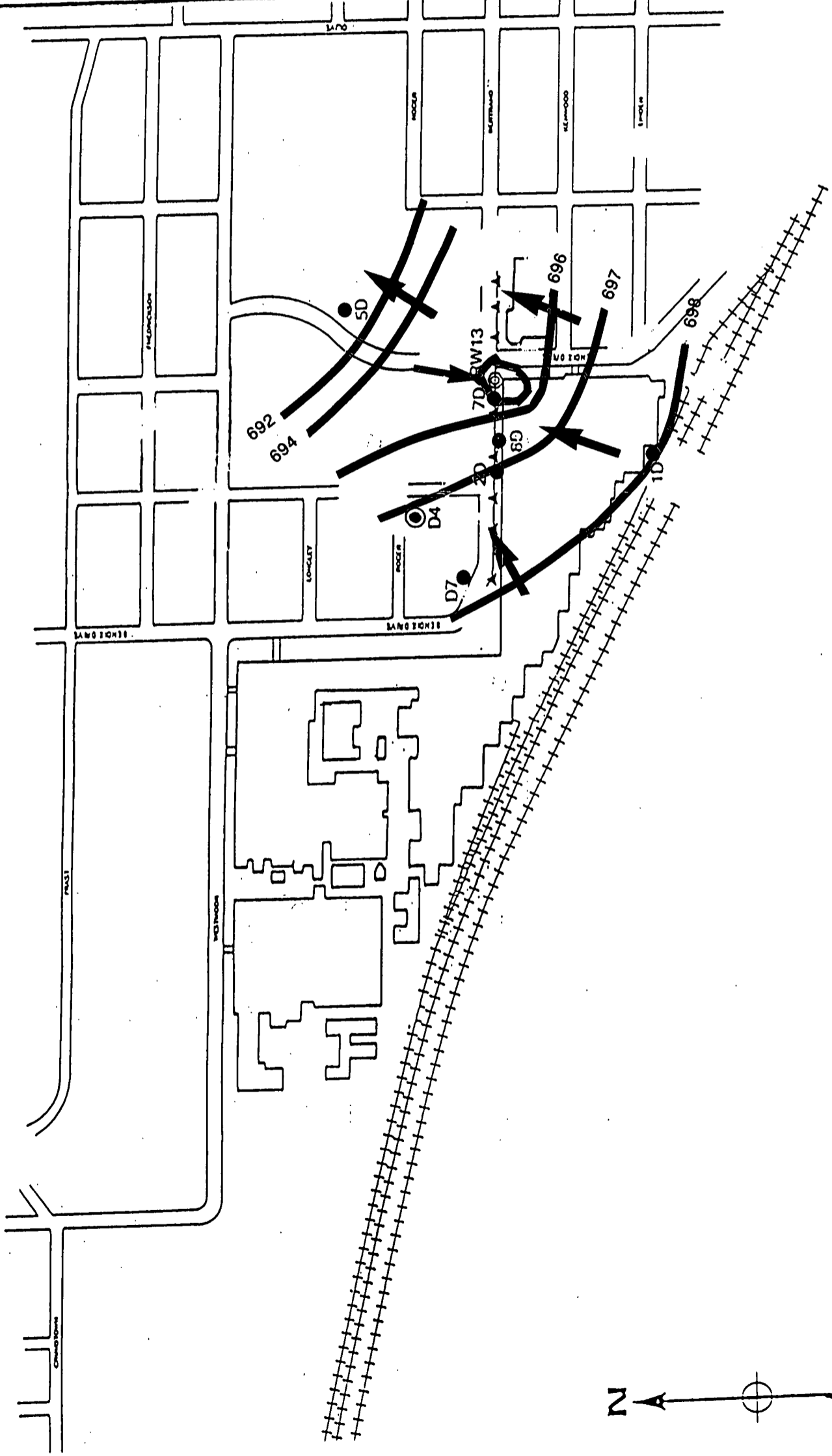
**Ata Gleason**  
 ASSOCIATES  
 Environmental and Geotechnical Services

- LEGEND**
- MONITOR WELL
  - ⊙ DUAL COMPLETION MONITOR WELL
  - NAPHTHA RECOVERY WELL
  - ⊗ DEEP RECOVERY WELL
  - ▲ SHALLOW RECOVERY WELL
  - EQUIPOTENTIAL LINE AND GROUNDWATER ELEVATION (MSL)
  - DIRECTION OF GROUNDWATER FLOW

NORTH ↑







# LEGEND

- MONITOR WELL
- ◎ DUAL COMPLETION MONITOR WELL
- ⊙ DEEP RECOVERY WELL
- ▲ SHALLOW RECOVERY WELL (PUMPING STARTED OCT. 1988)

694  
GROUNDWATER ELEVATION (MSL) EQUIPOTENTIAL LINE  
DIRECTION OF GROUNDWATER FLOW



AlliedSignal Inc.  
South Bend Complex  
South Bend, Indiana

Figure 2B  
POTENTIOMETRIC MAP  
DEEP AQUIFER  
MAY, 1994

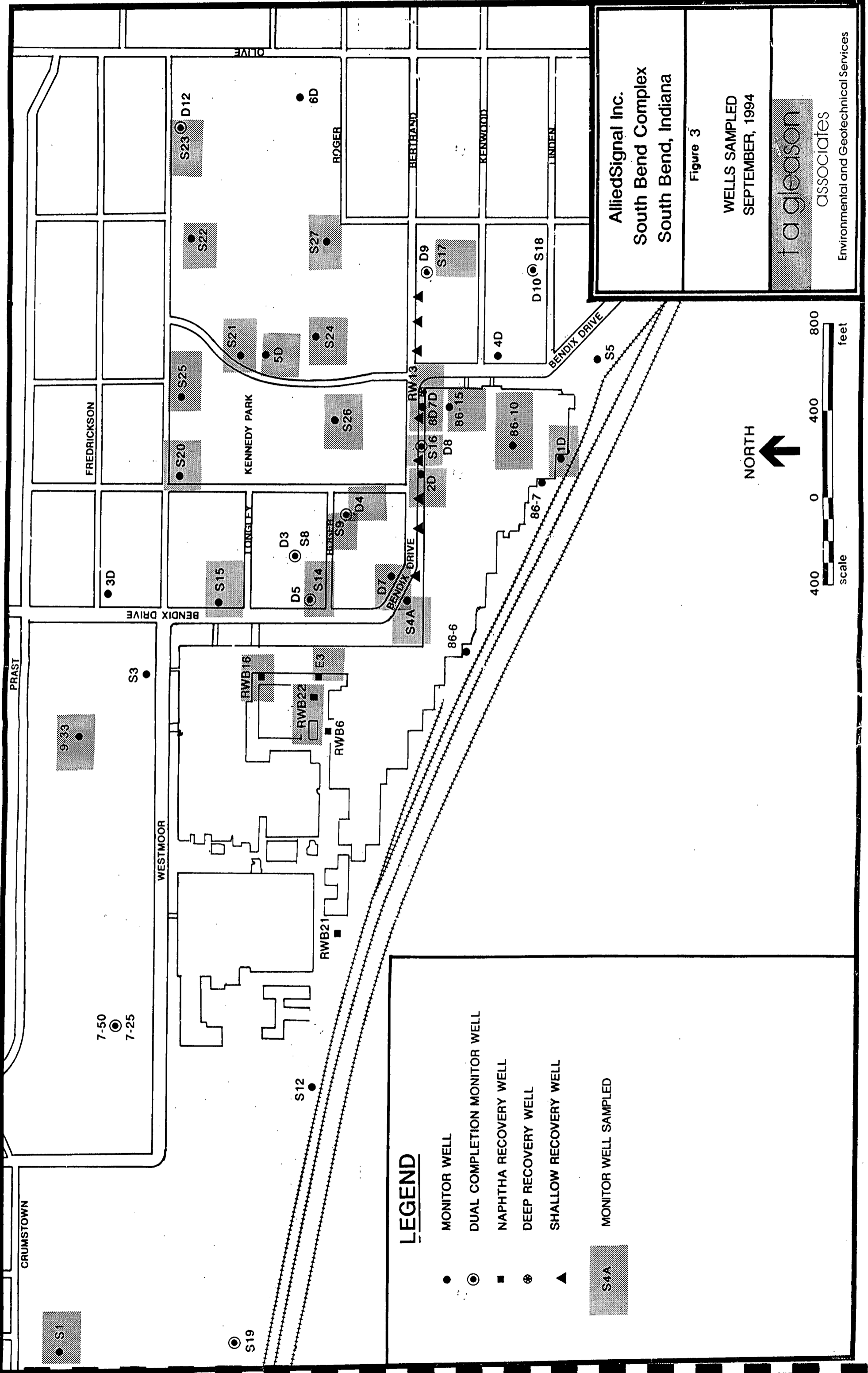


ASSOCIATES  
Environmental and Geotechnical Services



**LEGEND**

- MONITOR WELL
- ⊙ DUAL COMPLETION MONITOR WELL
- NAPHTHA RECOVERY WELL
- ⊛ DEEP RECOVERY WELL
- ▲ SHALLOW RECOVERY WELL
- ▨ MONITOR WELL SAMPLED



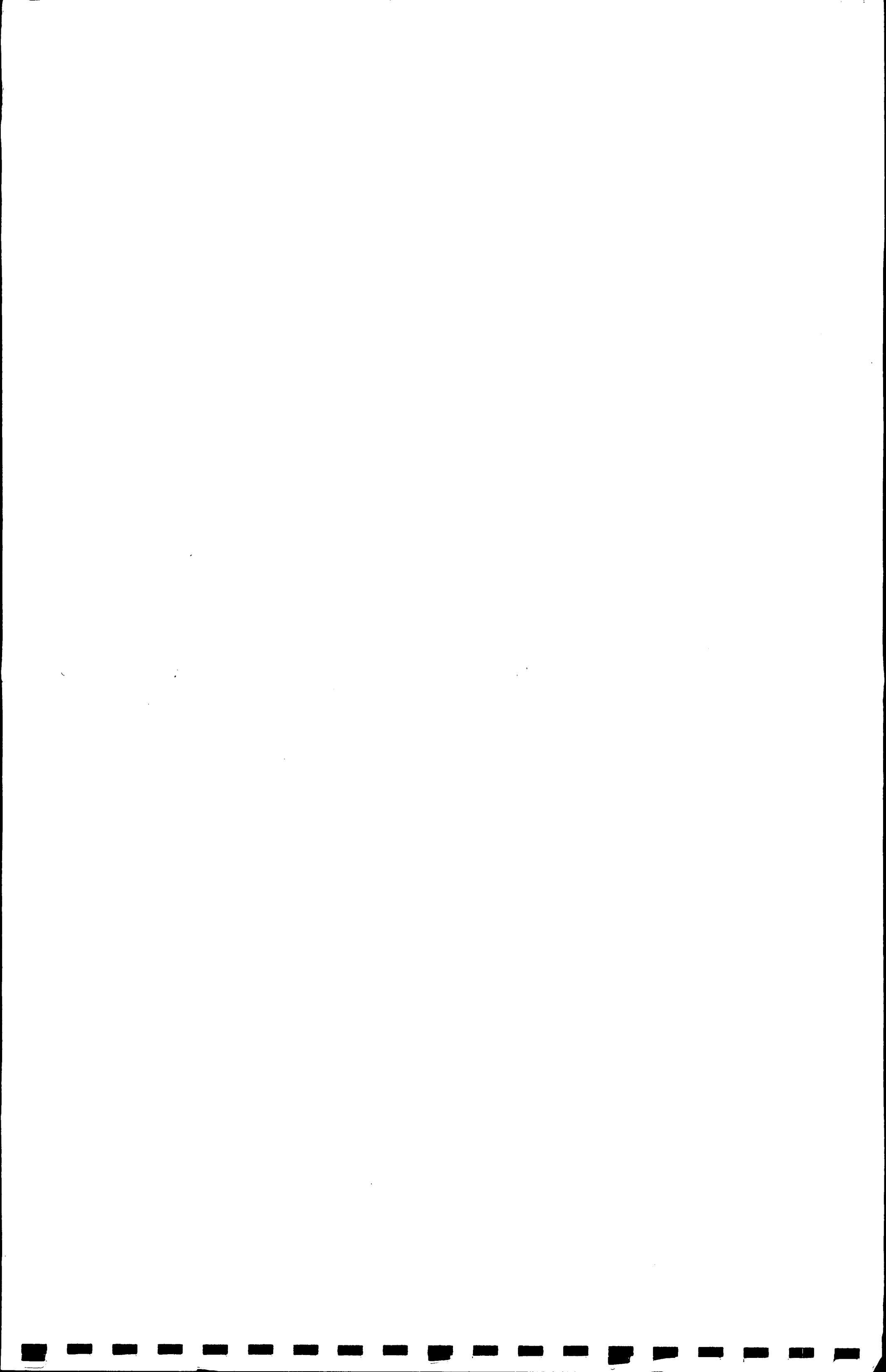
AlliedSignal Inc.  
 South Bend Complex  
 South Bend, Indiana

Figure 3

WELLS SAMPLED  
 SEPTEMBER, 1994

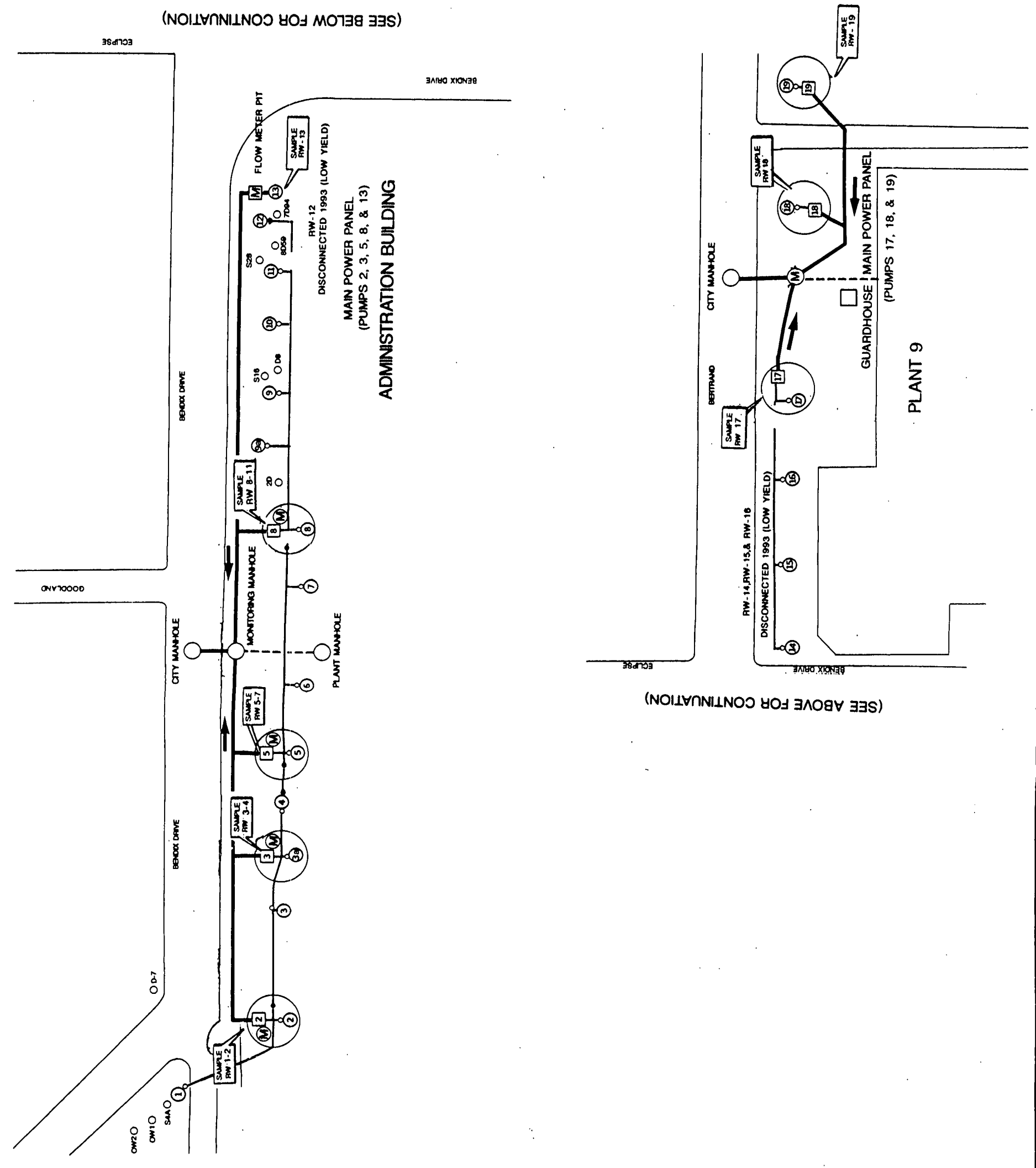
**fa gleason**  
 ASSOCIATES

Environmental and Geotechnical Services





T A GLEASON ASSOCIATES' interpretations, conclusions and recommendations relative to this data are limited to our written reports.



(SEE BELOW FOR CONTINUATION)

(SEE ABOVE FOR CONTINUATION)

**LEGEND**

- ① RECOVERY WELL
- OPEN VALVE AND SUCTION LINE
- CLOSED VALVE AND SUCTION LINE
- 3 PUMP AND DISCHARGE LINE
- CONCRETE MANHOLE
- PUMP LOCATION
- FACILITY DISCHARGE LINE
- D-7 ○ MONITOR/OBSERVATION WELL
- Ⓜ FLOW METER
- Ⓜ FLOW METER

SAMPLE RW 8-11  
DISCHARGE SAMPLE LOCATION

AlliedSignal Inc.  
South Bend Complex  
South Bend, Indiana

Figure 4  
VOC RECOVERY WELL  
AND MANHOLE LOCATIONS

**ta gleason**  
ASSOCIATES  
Environmental and Geotechnical Services



Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
S-1	23.91	704.18	S-19	19.02	704.36	7-25	20.09	700.37	S-12	15.85	705.6
	24.16	703.93		19.37	704.01		19.34	701.12		15.98	705.47
	24.11	703.98		19.11	704.27		20.31	700.15		19.37	702.08
	24.34	703.75		19.12	704.25		20.45	700.02		19.59	701.86
	24.54	703.55		19.68	703.7		19.57	700.9		NM	-
	23.76	704.33		18.85	704.53		20.25	700.22		19.11	702.34
	23.43	704.66		18.56	704.82		20.12	700.35		19.00	702.45
	23.93	704.16		19.23	704.15		20.31	700.16		19.25	702.2
	23.65	704.44		18.92	704.45		20.24	700.23		19.12	702.33
	23.82	704.27		18.95	704.43		20.48	699.99		19.42	702.03
	23.98	704.11		19.02	704.36		20.41	700.05		NM	-
	24.26	703.83		19.46	703.92		20.32	700.15		19.56	701.89

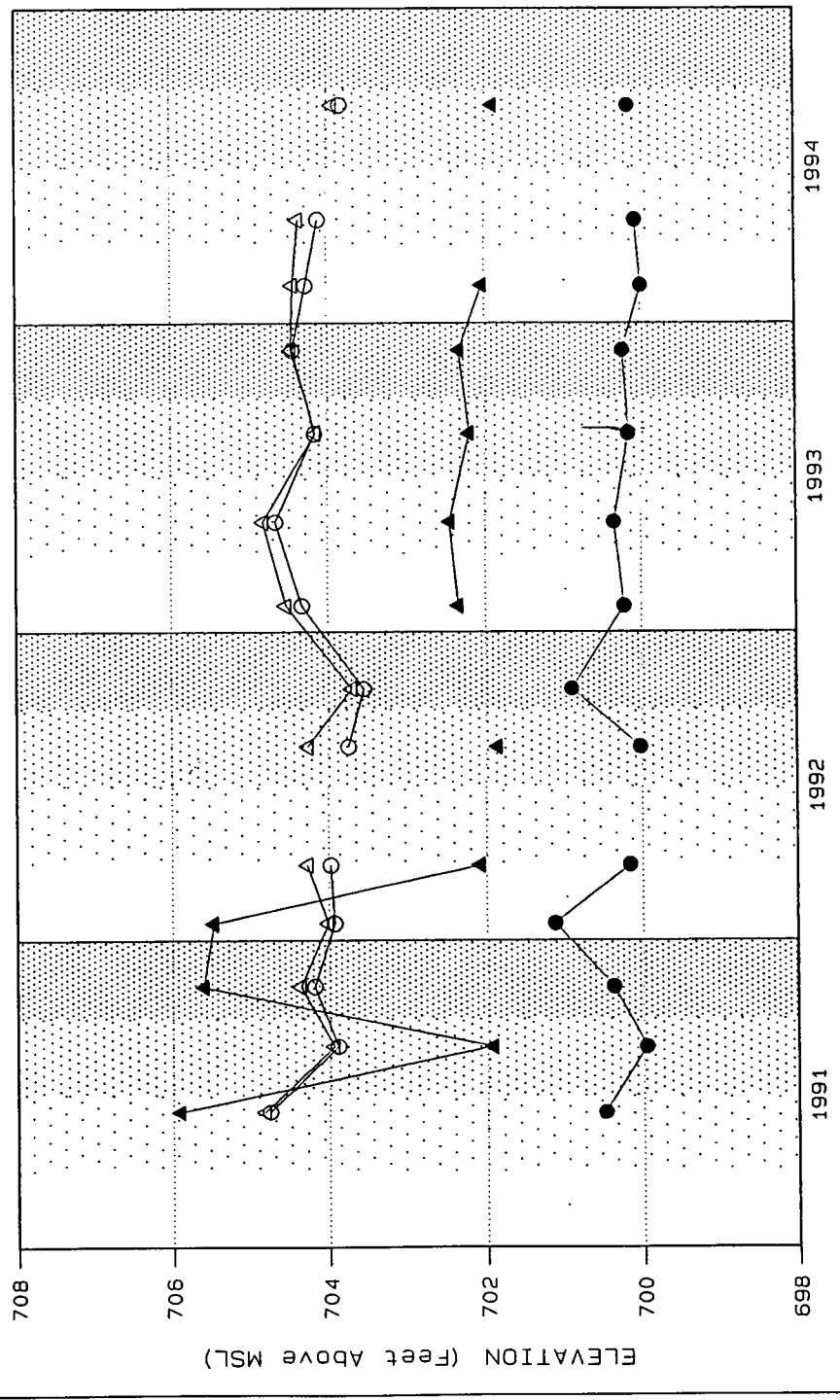
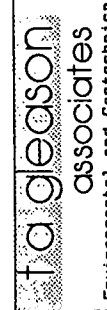


TABLE 2A

WATER LEVEL MEASUREMENTS  
SHALLOW MONITOR WELLS

PAGE 1 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 084





Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
9-33 ○	18.00	698.69	S-3 △	716.65	716.65	●			▲		
Dates:			Dates:			Dates:			Dates:		
11/12/91	18.00	698.69	11/12/91	19.98	696.67						
01/21/92	16.97	699.72	01/21/92	20.05	696.5						
03/30/92	17.79	698.9	03/30/92	19.87	696.78						
08/20/92	18.18	698.51	08/20/92	19.91	696.74						
10/29/92	18.17	698.52	10/29/92	20.17	696.48						
02/02/93	17.29	699.4	02/02/93	17.01	699.64						
05/11/93	16.97	699.72	05/11/93	19.02	697.63						
08/25/93	17.84	698.85	08/25/93	19.87	696.78						
12/05/93	17.66	699.03	12/05/93	19.75	696.9						
02/16/94	18.10	698.59	02/16/94	20.23	696.42						
05/03/94	18.01	698.68	05/03/94	20.15	696.49						
09/16/94	18.00	698.69	09/16/94	19.85	696.8						

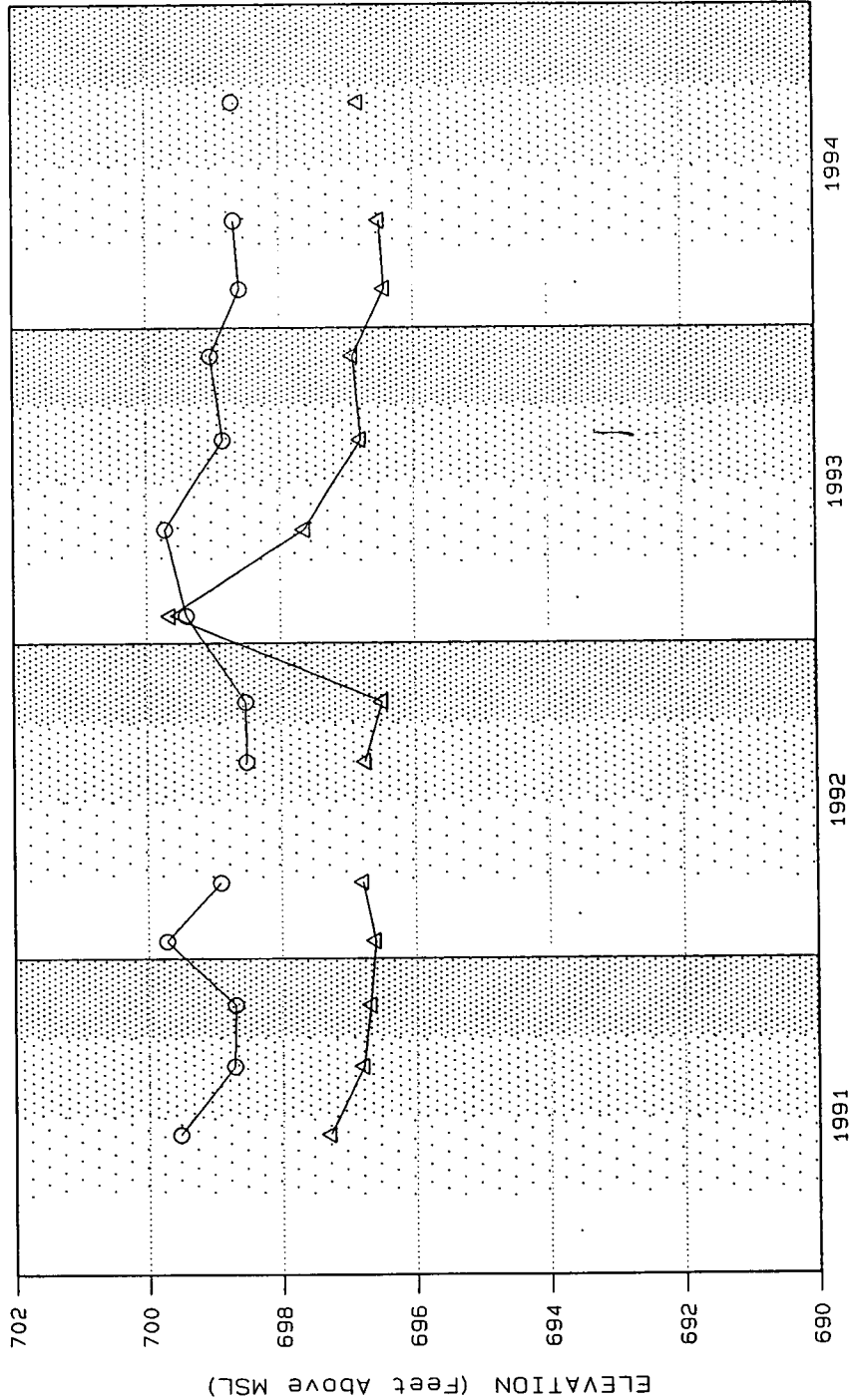


TABLE 2A

WATER LEVEL MEASUREMENTS  
SHALLOW MONITOR WELL

PAGE 2 OF 8

ALLIED SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 084

**taigeason**  
associates  
Environmental and Geotechnical Services

1994

1993

1992

1991



Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
86-6 ○	715.00		S-4A △	711.00		S-8 ●	714.65	
Dates:			Dates:			Dates:		
11/12/91	NM		11/12/91	14.37	696.63	11/12/91	18.18	696.47
01/21/92	16.26	698.74	01/21/92	14.49	696.51	01/21/92	18.51	696.14
03/30/92	16.03	698.97	03/30/92	14.34	696.66	03/30/92	18.29	696.36
08/20/92	16.41	698.59	08/20/92	14.48	696.52	08/20/92	18.22	696.43
10/29/92	16.33	698.67	10/29/92	14.59	696.41	10/29/92	18.59	696.06
02/02/93	15.56	699.44	02/02/93	13.75	697.25	02/02/93	18.21	696.44
05/11/93	15.15	699.85	05/11/93	15.50	695.5	05/11/93	17.46	697.19
08/25/93	16.13	698.87	08/25/93	13.97	697.03	08/25/93	18.05	696.6
12/05/93	15.82	699.18	12/05/93	13.81	697.19	12/05/93	18.07	696.58
02/16/94	16.05	698.95	02/16/94	14.60	696.4	02/16/94	18.23	696.42
05/03/94	16.20	698.8	05/03/94	14.66	696.34	05/03/94	18.36	696.29
09/16/94	16.30	698.7	09/16/94	14.82	696.18	09/16/94	18.29	696.36

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

NM = NOT MEASURED

SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87

WELL S-4A SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/90

WELL 86-6 REFERENCE ELEVATION IS AN ESTIMATE. WELL NOT SURVEYED.

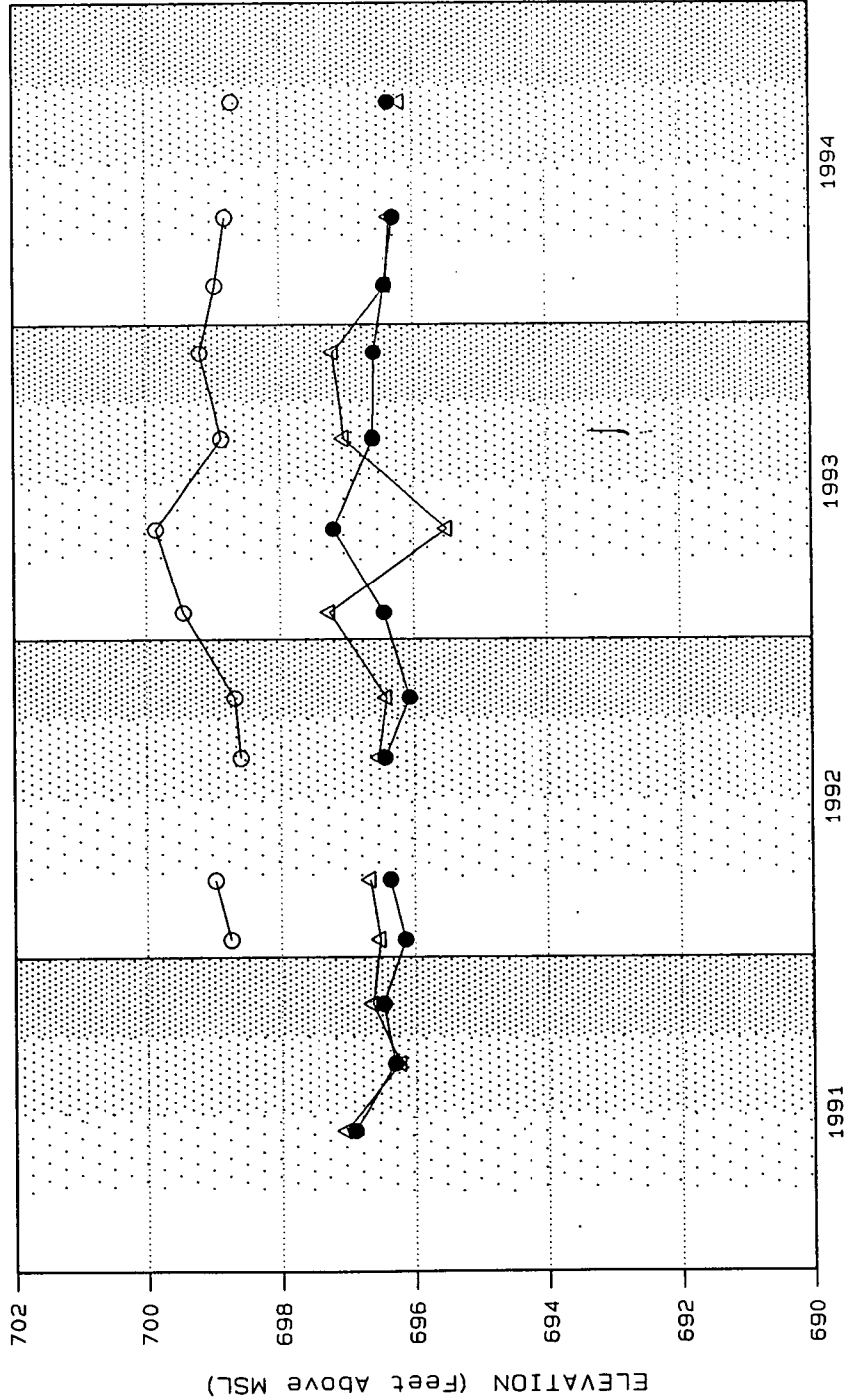


TABLE 2A

WATER LEVEL MEASUREMENTS  
SHALLOW MONITOR WELLS

PAGE 3 OF 8

ALLIEDSIGNAL  
GROUNDWATER INVESTIGATIONS  
SOUTH  
PROJECT # ALCMPX 084

**Tadjeason**  
Associates  
Environmental and Geotechnical Services





NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

NM = NOT MEASURED

SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87

WELL S-4A SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/90.

WELL 86-6 REFERENCE ELEVATION IS AN ESTIMATE. WELL NOT SURVEYED.

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
S-14 O	711.86		S-15 Δ	714.37		S-20 ●	709.97		S-25 ▲	710.60	
Dates:			Dates:			Dates:			Dates:		
11/12/91	15.26	696.6	11/12/91	18.23	696.14	11/12/91	14.14	695.83	11/12/91	14.79	695.81
01/21/92	15.63	696.23	01/21/92	18.48	695.89	01/21/92	14.51	695.46	01/21/92	15.09	695.50
03/30/92	15.38	696.48	03/30/92	18.30	696.07	03/30/92	14.39	695.58	03/30/92	14.91	695.69
08/20/92	15.35	696.51	08/20/92	18.11	696.26	08/20/92	14.36	695.61	08/20/92	15.06	695.54
10/29/92	16.54	695.22	10/29/92	18.76	695.61	10/29/92	12.15	697.81	10/29/92	15.32	695.28
02/02/93	15.02	695.84	02/02/93	17.97	696.4	02/02/93	13.94	696.03	02/02/93	14.24	696.36
05/11/93	14.74	697.12	05/11/93	17.75	696.62	05/11/93	13.88	696.09	05/11/93	13.81	696.79
08/25/93	15.30	696.56	08/25/93	18.01	696.36	08/25/93	15.10	694.87	08/25/93	14.50	696.1
12/05/93	15.05	696.81	12/05/93	18.09	696.28	12/05/93	14.06	695.91	12/05/93	14.56	696.04
02/16/94	15.47	696.39	02/16/94	15.43	698.94	02/16/94	15.55	694.42	02/16/94	15.03	695.56
05/03/94	15.49	696.37	05/03/94	18.21	696.16	05/03/94	14.71	695.25	05/03/94	15.11	695.49
09/16/94	15.65	696.21	09/16/94	18.25	696.12	09/16/94	15.31	694.66	09/16/94	15.18	695.42

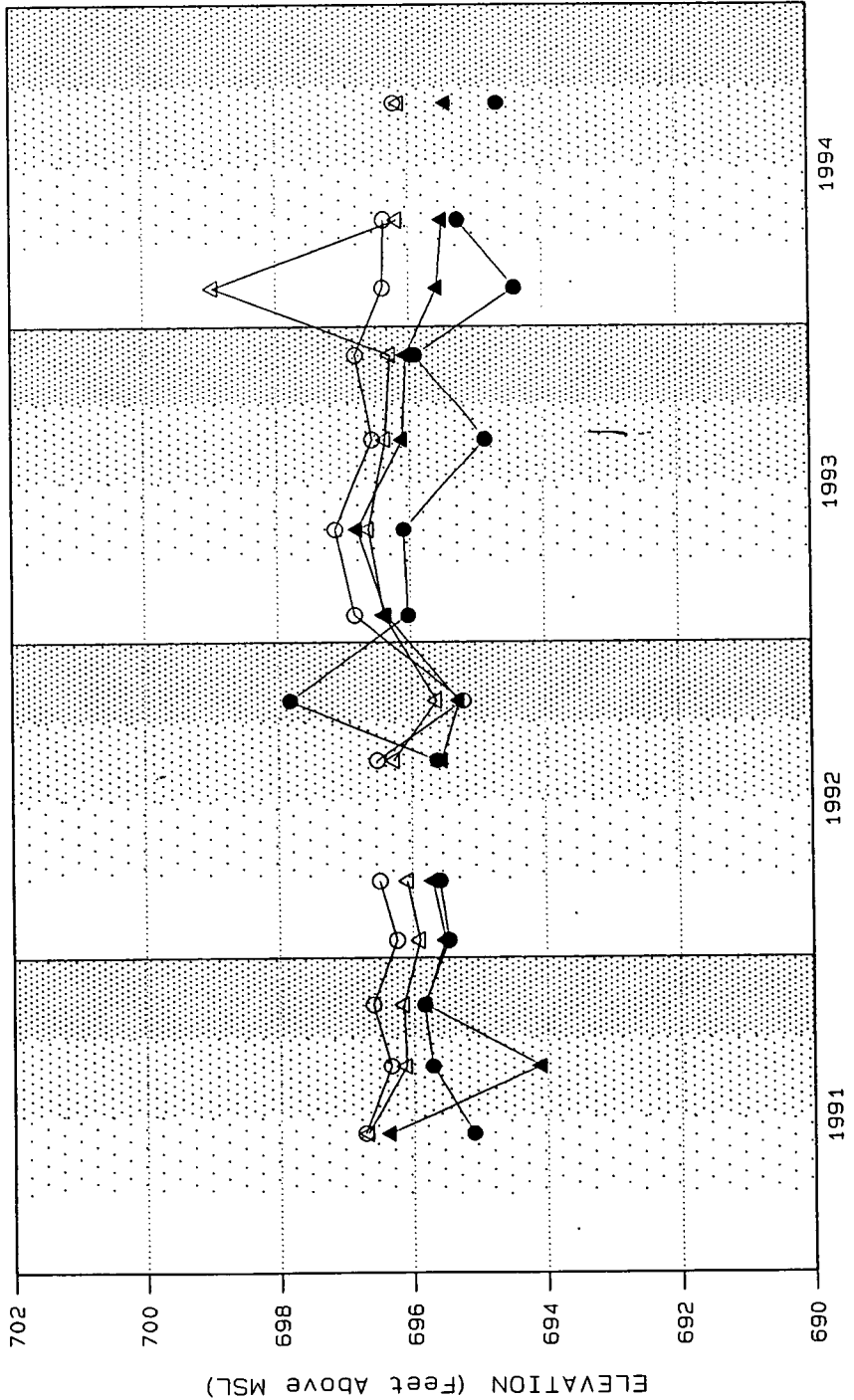


TABLE 2A

WATER LEVEL MEASUREMENTS  
SHALLOW MONITOR WELLS

PAGE 4 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 084

**Tagleason**  
associates  
Environmental and Geotechnical Services

1994

1993

1992

1991



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 NM = NOT MEASURED  
 SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87  
 WELL S-4A SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/90.  
 WELL 86-6 REFERENCE ELEVATION IS AN ESTIMATE. WELL NOT SURVEYED.

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
S-9	16.99	697.18	S-24	16.15	696.88	S-26	17.41	697.09
	16.80	697.37		16.25	696.78		17.58	696.92
	16.96	697.21		15.39	697.64		17.29	697.21
	17.15	697.02		16.54	696.49		17.47	697.03
	17.41	696.76		16.04	696.99		17.60	696.9
	16.45	697.72		14.80	698.23		16.43	698.07
	15.83	698.34		14.32	698.71		15.98	698.52
	16.52	697.55		15.20	697.83		16.74	697.76
	16.68	697.49		15.35	697.68		16.75	697.75
	16.97	697.2		15.82	697.41		17.09	697.41
	17.41	696.76		15.82	697.21		15.59	698.91
	17.12	697.05		16.84	696.19		17.46	697.04

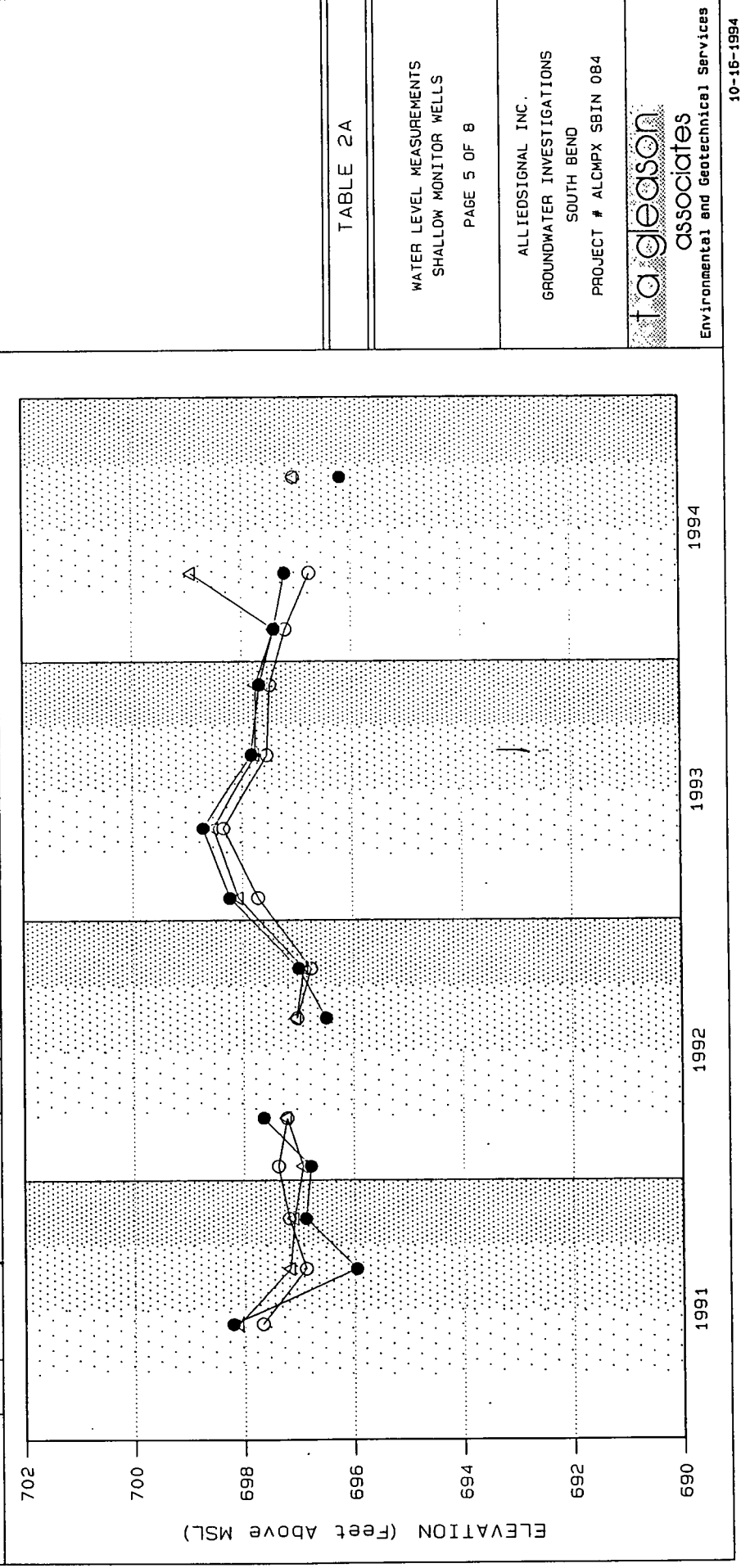
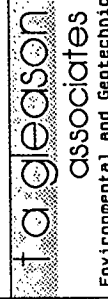


TABLE 2A

WATER LEVEL MEASUREMENTS  
 SHALLOW MONITOR WELLS

PAGE 5 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND  
 PROJECT # ALCMPX SBIN 084





Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
S-27 O	19.17	696.23	S-21 Δ	711.33	S-22 ●	709.33	S-23 ▲	710.24			
Dates:			Dates:		Dates:		Dates:				
11/12/91	19.17	696.23	11/12/91	18.54	11/12/91	14.15	11/12/91	16.99	11/12/91	16.99	693.25
01/21/92	19.11	696.29	01/21/92	14.25	01/21/92	13.42	01/21/92	13.42	01/21/92	NM	-
03/30/92	18.80	696.6	03/30/92	14.25	03/30/92	13.95	03/30/92	13.95	03/30/92	18.50	691.74
08/20/92	18.83	696.57	08/20/92	14.10	08/20/92	14.11	08/20/92	14.11	08/20/92	16.71	693.53
10/29/92	18.66	696.54	10/29/92	14.13	10/29/92	13.57	10/29/92	13.57	10/29/92	17.03	693.21
02/02/93	17.34	698.06	02/02/93	14.20	02/02/93	13.06	02/02/93	13.06	02/02/93	15.45	694.79
05/11/93	16.84	698.56	05/11/93	13.85	05/11/93	13.20	05/11/93	13.20	05/11/93	16.21	694.03
08/25/93	17.50	697.9	08/25/93	15.57	08/25/93	14.01	08/25/93	14.01	08/25/93	16.71	693.53
12/05/93	17.99	697.41	12/05/93	14.31	12/05/93	13.63	12/05/93	13.63	12/05/93	16.84	693.4
02/16/94	18.78	696.62	02/16/94	15.17	02/16/94	13.94	02/16/94	13.94	02/16/94	NM	-
05/03/94	18.83	696.57	05/03/94	14.52	05/03/94	13.69	05/03/94	13.69	05/03/94	16.52	693.72
09/16/94	19.12	696.28	09/16/94	15.25	09/16/94	13.28	09/16/94	13.28	09/16/94	18.71	691.53

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 NM = NOT MEASURED  
 SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87  
 WELL S-4A SURVEYED BY LANG, FEENEY & ASSOC., INC 09/90.  
 WELL 86-6 REFERENCE ELEVATION IS AN ESTIMATE. WELL NOT SURVEYED.

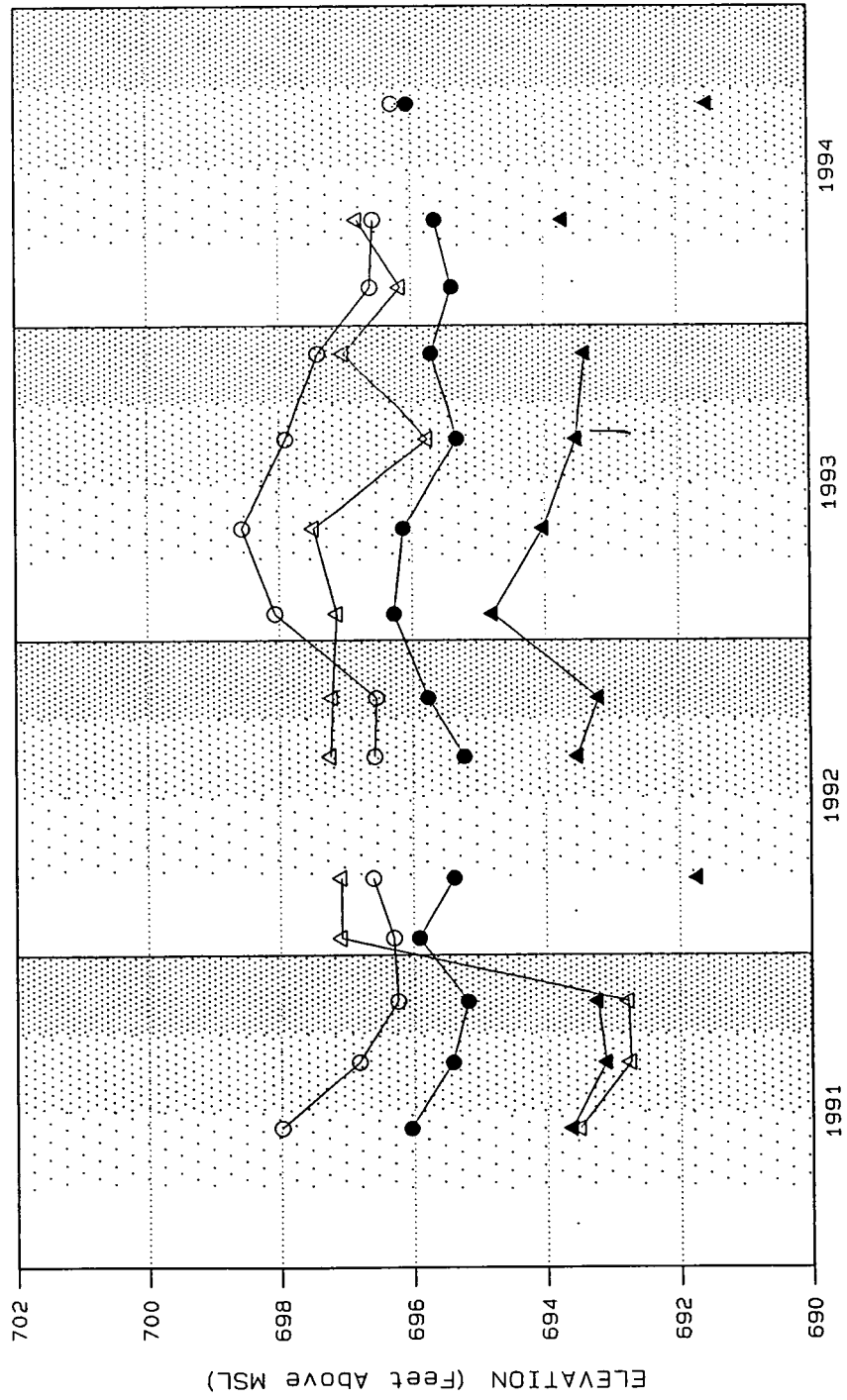
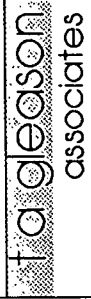


TABLE 2A

WATER LEVEL MEASUREMENTS  
 SHALLOW MONITOR WELLS  
 PAGE 6 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND  
 PROJECT # ALCMPX S8IN 084





Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
S-16 O	716.18	716.18	86-15 Δ	715.06	715.06	S-17 ●	716.97	716.97	▲		
Dates:			Dates:			Dates:					
11/12/91	18.59	697.59	11/12/91	16.95	698.11	11/12/91	19.85	697.11			
01/21/92	18.55	697.53	01/21/92	17.01	698.05	01/21/92	19.84	697.12			
03/30/92	18.35	697.83	03/30/92	16.85	698.21	03/30/92	19.21	697.75			
08/20/92	18.51	697.67	08/20/92	16.85	698.21	08/20/92	19.18	697.79			
10/29/92	18.52	697.66	10/29/92	16.84	698.22	10/29/92	18.43	698.54			
02/02/93	17.49	698.69	02/02/93	15.84	699.22	02/02/93	17.54	699.33			
05/11/93	17.00	699.18	05/11/93	15.27	699.79	05/11/93	16.90	700.06			
08/25/93	17.62	698.56	08/25/93	16.04	699.02	08/25/93	17.75	699.22			
12/05/93	17.65	698.53	12/05/93	15.90	699.16	12/05/93	17.90	699.06			
02/16/94	18.05	698.13	02/16/94	16.58	698.48	02/16/94	19.51	697.45			
05/03/94	18.71	697.47	05/03/94	16.89	698.17	05/03/94	19.34	697.62			
09/16/94	18.47	697.71	09/16/94	16.92	698.14	09/16/94	20.05	696.92			

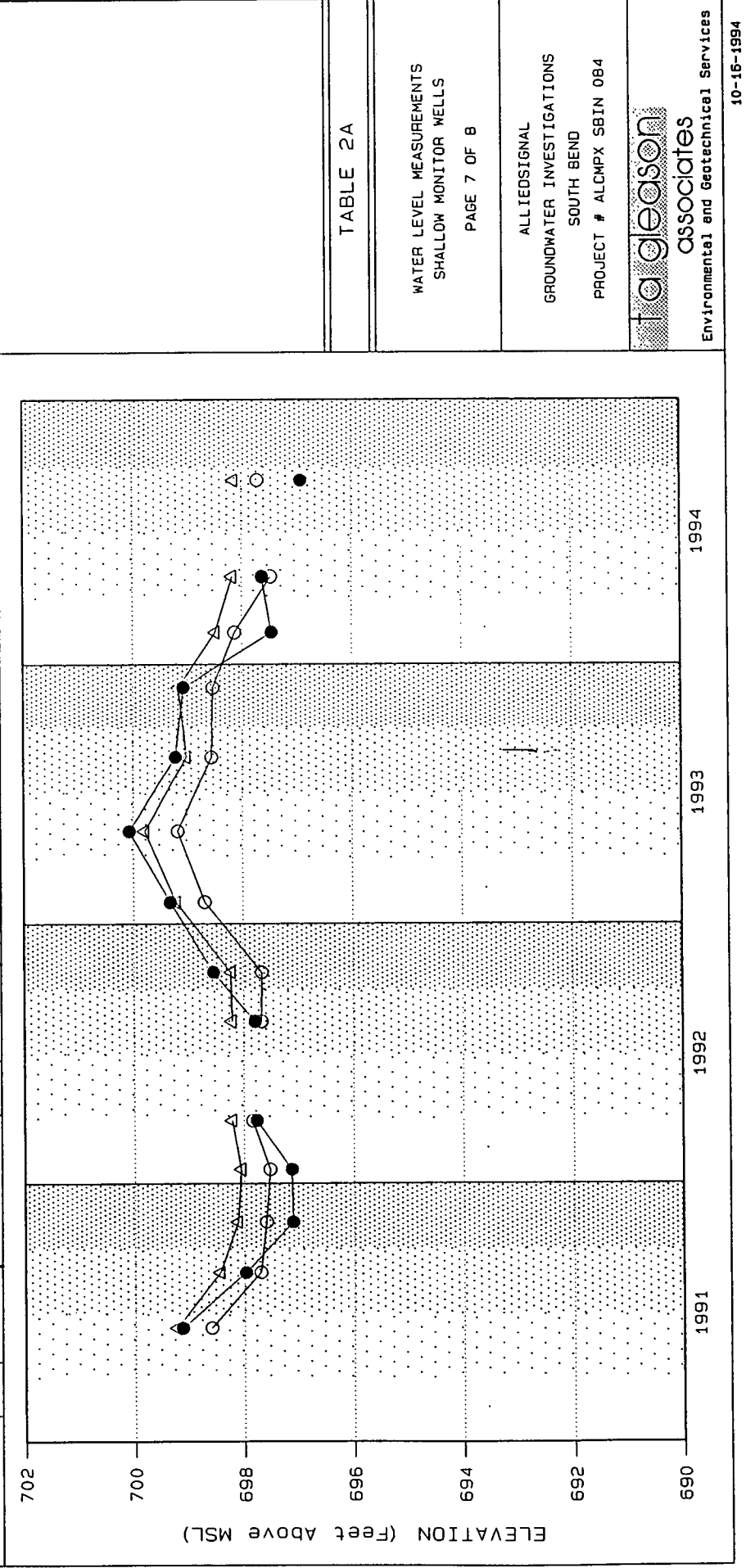
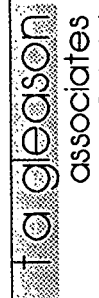


TABLE 2A

WATER LEVEL MEASUREMENTS  
SHALLOW MONITOR WELLS

PAGE 7 OF 8

ALLIEDSIGNAL  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCHPX SBIN 084







NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 NM - NOT MEASURED  
 SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87  
 WELL S-4A SURVEYED BY LANG FEENEY & ASSOC., INC. 09/90  
 WELL 86-6 REFERENCE ELEVATION IS AN ESTIMATE. WELL NOT SURVEYED.

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation	
86-10 ○	715.06	714.15	86-7 △	714.15	712.83	S-5 ●	712.83	S-18 ▲	715.41
Dates:			Dates:			Dates:		Dates:	
11/12/91	16.74	698.32	11/12/91	15.76	698.39	11/12/91	13.68	11/12/91	16.74
01/21/92	16.85	698.21	01/21/92	15.87	698.28	01/21/92	13.76	01/21/92	15.55
03/30/92	16.65	698.4	03/30/92	15.62	698.53	03/30/92	13.34	03/30/92	15.20
08/20/92	16.94	698.12	08/20/92	15.91	698.24	08/20/92	13.67	08/20/92	15.39
10/29/92	16.81	698.25	10/29/92	15.87	698.28	10/29/92	15.77	10/29/92	16.23
02/02/93	15.92	699.14	02/02/93	14.98	699.17	02/02/93	12.45	02/02/93	16.41
05/11/93	15.45	699.6	05/11/93	14.54	699.61	05/11/93	11.99	05/11/93	14.60
08/25/93	16.44	698.62	08/25/93	15.57	698.58	08/25/93	12.88	08/25/93	15.36
12/05/93	16.00	699.06	12/05/93	15.21	698.94	12/05/93	12.73	12/05/93	15.35
02/16/94	16.38	698.68	02/16/94	15.55	698.6	02/16/94	13.24	02/16/94	16.09
05/03/94	16.87	698.19	05/03/94	15.82	698.33	05/03/94	13.40	05/03/94	16.02
09/15/94	16.83	698.23	09/15/94	15.85	698.3	09/15/94	13.25	09/15/94	16.45

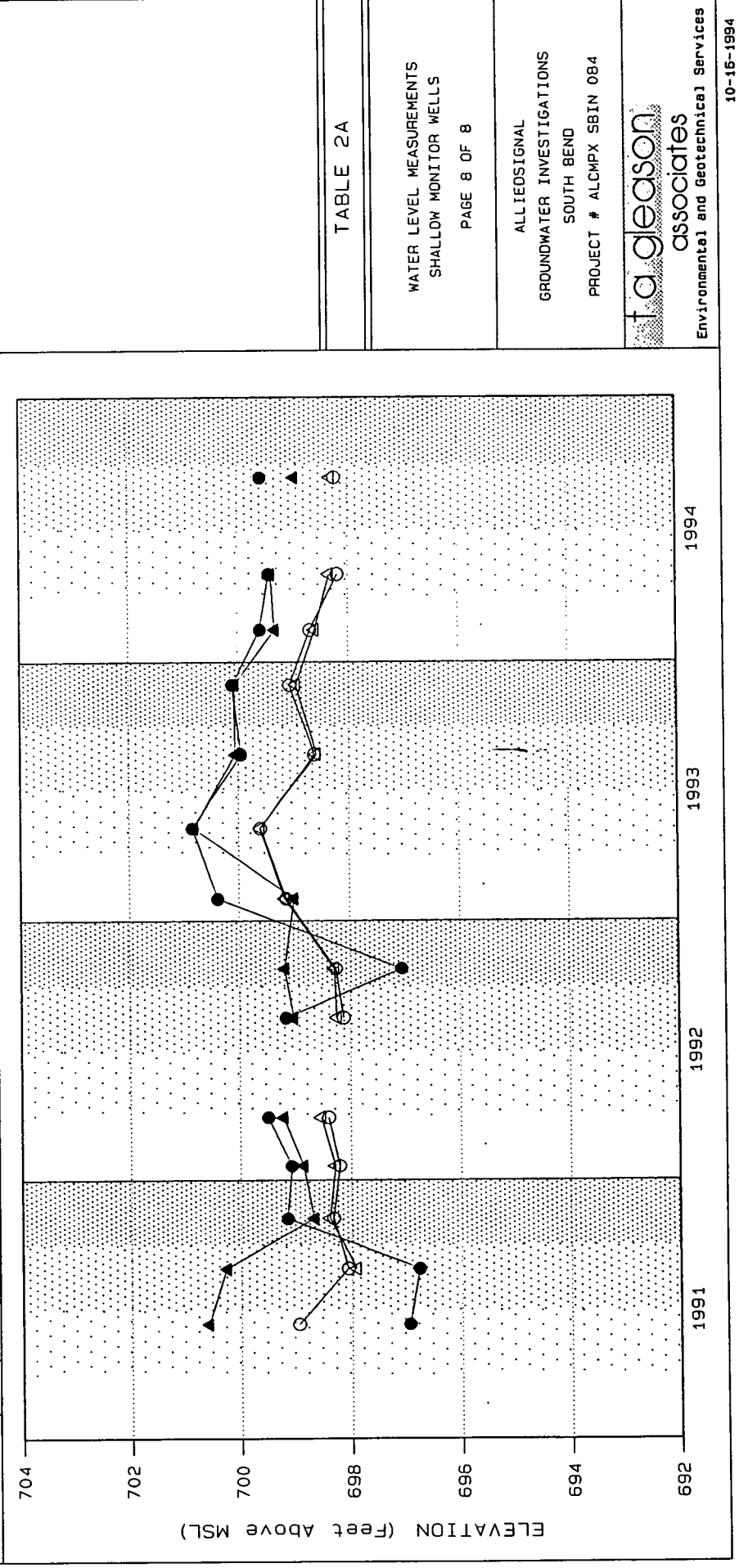


TABLE 2A

WATER LEVEL MEASUREMENTS  
 SHALLOW MONITOR WELLS  
 PAGE 8 OF 8

ALLIED SIGNAL  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND  
 PROJECT # ALCMPX SBIN 084





NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

NM = NOT MEASURED

SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
D-4	20.52	697.33	D-7	16.23	697.6	1-D	15.09	698.08	2-D	17.56	697.7
	20.63	697.22		16.39	697.44		15.14	698.03		17.75	697.6
	20.34	697.50		16.09	697.74		15.93	698.24		17.43	697.93
	20.64	697.21		16.30	697.53		15.24	697.93		17.78	697.58
	20.76	697.09		16.38	697.45		16.13	698.04		17.54	697.82
	19.68	698.17		15.62	698.21		15.22	698.95		16.81	698.55
	19.39	698.46		15.32	698.51		14.81	699.36		16.44	698.92
	20.16	697.69		16.26	697.57		15.64	698.53		17.25	698.11
	19.67	698.18		15.88	697.95		15.42	698.75		17.00	698.35
	20.11	697.74		16.09	697.74		15.87	698.3		17.23	698.13
	20.98	696.87		16.12	697.71		15.26	697.91		17.98	697.38
	20.55	697.3		16.37	697.45		16.13	698.04		17.61	697.75

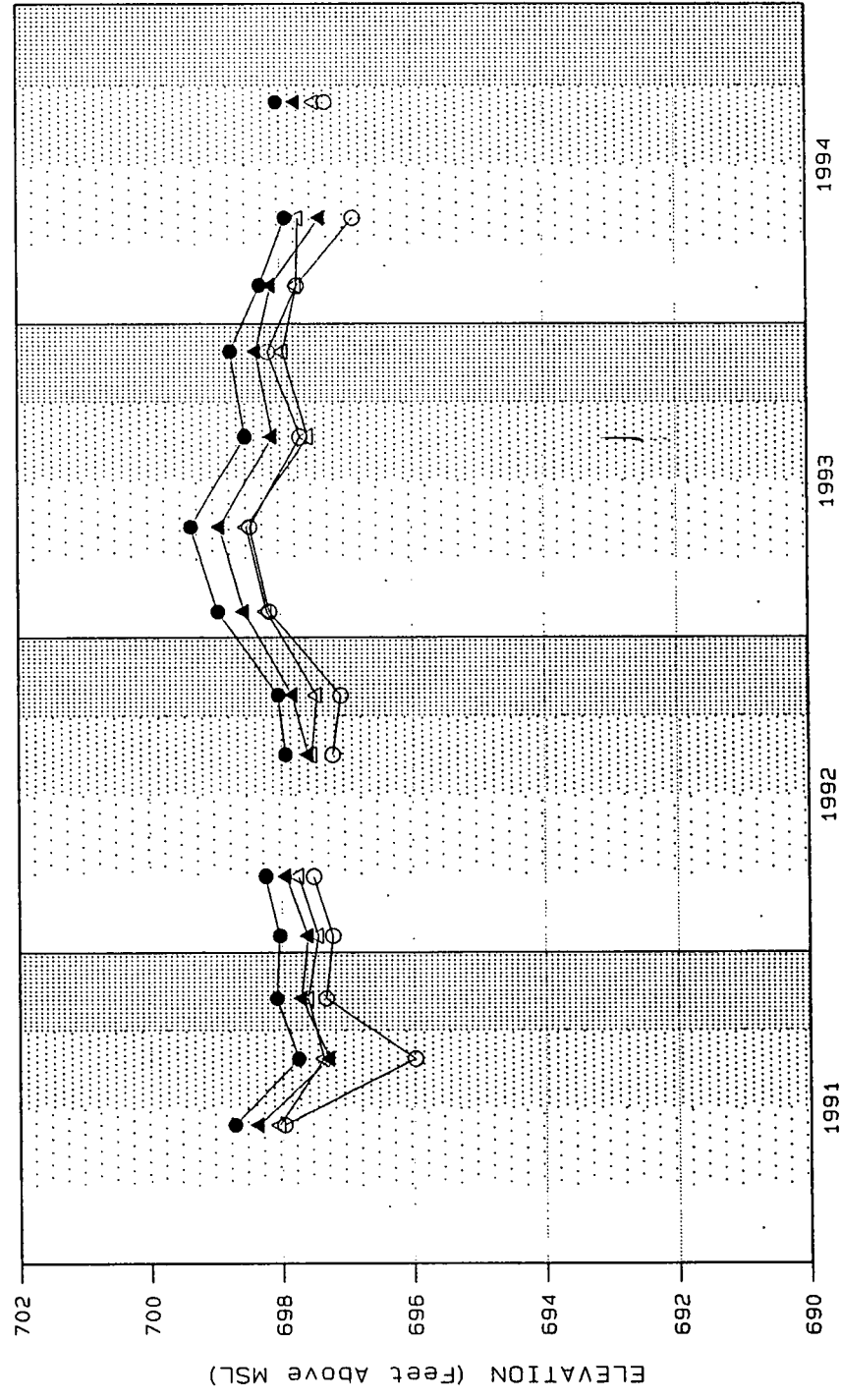


TABLE 2B

WATER LEVEL MEASUREMENTS  
DEEP MONITOR WELLS  
PAGE 1 OF 2

ALLIEDSIGNAL  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 0B4





NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPDR

NM = NOT MEASURED

SURVEYED BY LANG, FEENEY & ASSOC... INC. 09/87

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
5-0	22.34	689.67	7-0	19.58	695.17	8-0	17.42	697.14	▲		
	21.77	690.24		19.53	695.31		17.56	697			
	20.98	691.03		18.99	695.85		17.30	697.26			
	23.78	688.23		19.20	695.65		17.74	696.82			
	22.72	689.29		18.95	695.9		17.75	696.81			
	20.22	691.79		17.43	697.42		16.70	697.86			
	21.00	691.01		16.97	697.88		16.42	698.14			
	22.64	689.37		17.64	697.21		17.06	697.5			
	20.35	691.56		17.05	697.8		16.46	698.1			
	20.08	691.93		17.27	697.58		18.71	695.85			
	21.19	690.82		19.04	695.81		19.24	695.32			
	22.00	690.01		18.15	696.7		17.85	696.71			

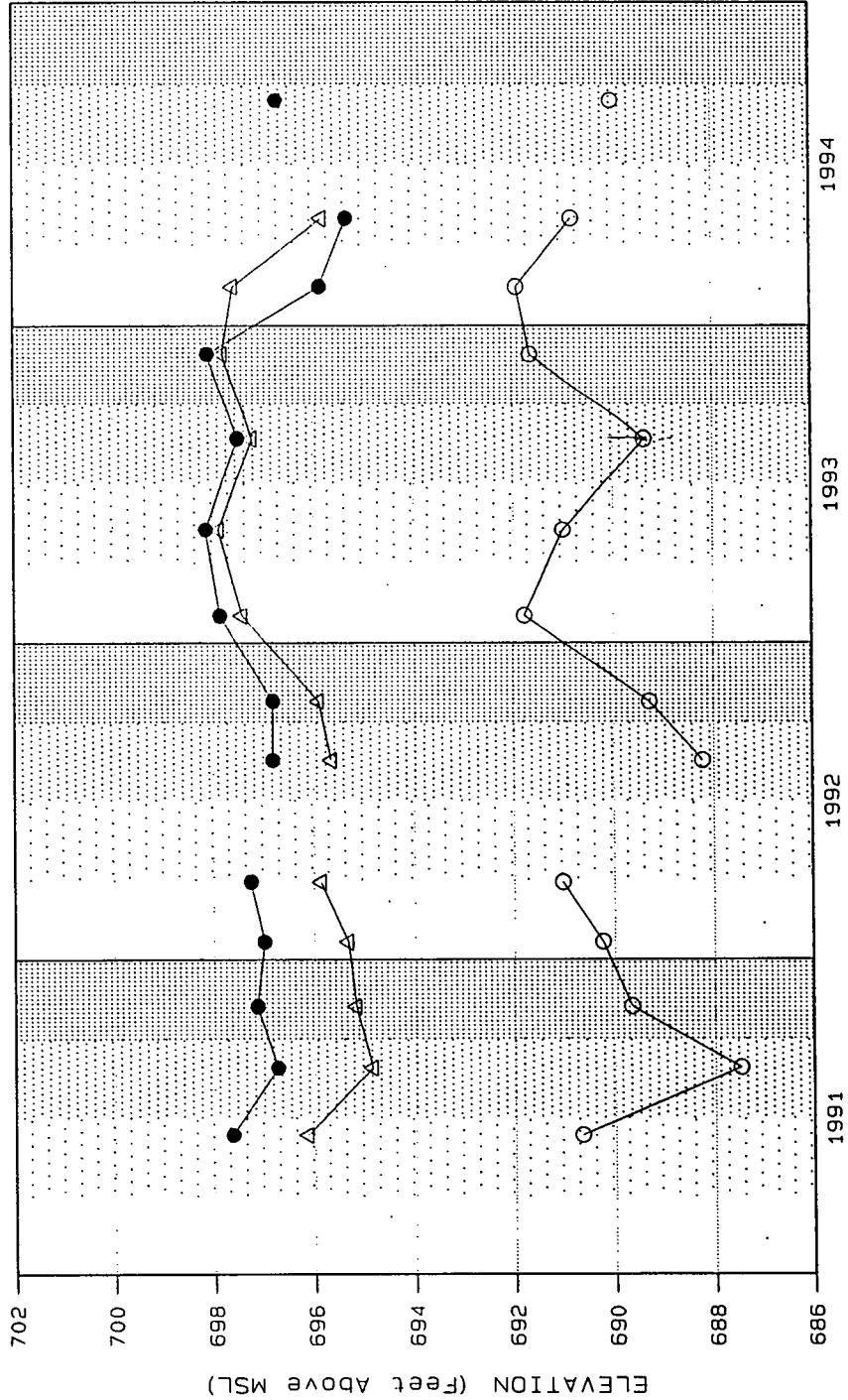


TABLE 2B

WATER LEVEL MEASUREMENTS  
DEEP MONITOR WELLS

PAGE 2 OF 2

ALLIEDSIGNAL  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 084



Environmental and Geotechnical Services



NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 NM = NOT MEASURED

SURVEYED BY LANG, FEENEY & ASSOC., INC. 09/87

Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
RWB-6 O	715.80		RWB-16 Δ	715.30		RWB-21 ●	717.62	
Dates:			Dates:			Dates:		
11/12/91	19.15	696.64	11/12/91	18.13	697.17	11/12/91	21.08	696.54
01/21/92	19.48	696.32	01/21/92	18.50	696.8	01/21/92	21.34	696.28
03/30/92	NM	-	03/30/92	18.15	697.15	03/30/92	20.98	696.64
08/20/92	19.12	696.68	08/20/92	18.12	697.18	08/20/92	21.25	696.37
10/29/92	19.32	696.48	10/29/92	18.22	697.08	10/29/92	21.52	696.1
02/02/93	18.57	697.23	02/02/93	19.49	695.81	02/02/93	20.40	697.22
05/11/93	18.37	697.43	05/11/93	17.44	697.86	05/11/93	21.13	696.49
08/25/93	19.06	696.74	08/25/93	18.05	697.24	08/25/93	21.32	696.3
12/05/93	18.97	696.83	12/05/93	17.58	697.72	12/05/93	21.00	696.62
02/15/94	18.95	696.85	02/15/94	17.43	697.87	02/15/94	20.80	696.82
05/03/94	19.11	696.69	05/03/94	17.85	697.45	05/03/94	20.81	696.81
09/15/94	19.21	696.59	09/15/94	17.90	697.4	09/15/94	20.98	696.64

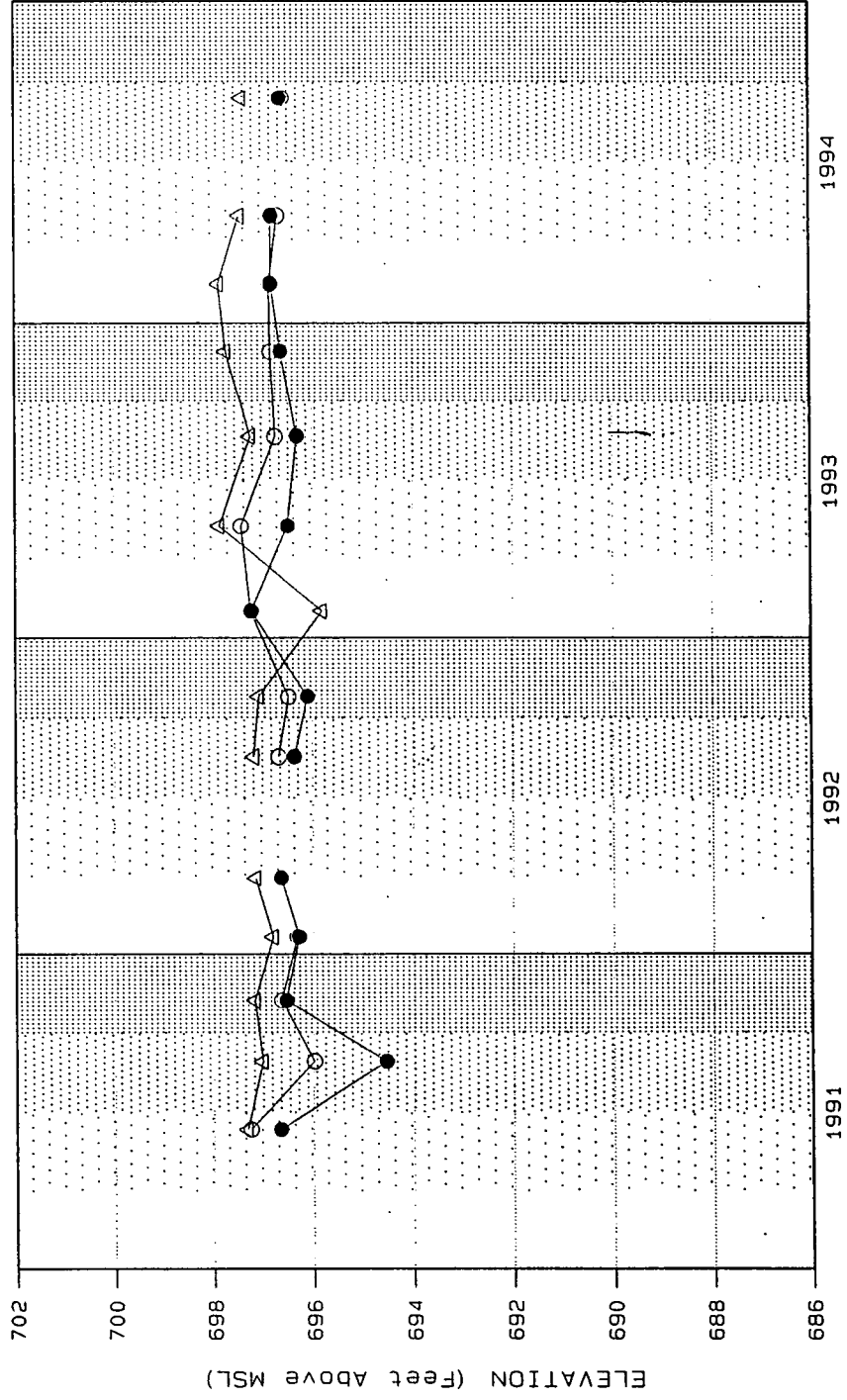


TABLE 2C

WATER LEVEL MEASUREMENTS  
 NAPHTHA RECOVERY WELLS

PAGE 1 OF 2

ALLIEDSIGNAL  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND  
 PROJECT # ALCMPX SBIN 084



Associates  
 Environmental and Geotechnical Services





Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation		Well No.	Reference Elevation	
	Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation		Water Depth	Water Elevation
RWB-220		715.11	E-3	714.50							
Dates:			Dates:			Dates:		Dates:		Dates:	
11/12/91	18.61	696.5	11/12/91	25.17	689.33						
01/21/92	18.82	696.29	01/21/92	24.83	689.67						
03/30/92	18.54	696.57	03/30/92	25.37	689.13						
08/20/92	18.54	696.57	08/20/92	22.55	691.95						
10/29/92	18.80	696.31	10/29/92	21.04	693.46						
02/02/93	18.07	697.04	02/02/93	17.56	696.94						
05/11/93	17.75	697.36	05/11/93	23.83	690.67						
08/25/93	18.49	696.62	08/25/93	25.49	689.01						
12/05/93	18.50	696.51	12/05/93	17.78	696.72						
02/16/94	18.42	696.69	02/16/94	17.88	696.62						
05/03/94	18.69	696.42	05/03/94	19.90	694.6						
09/16/94	18.78	696.33	09/16/94	21.02	693.48						

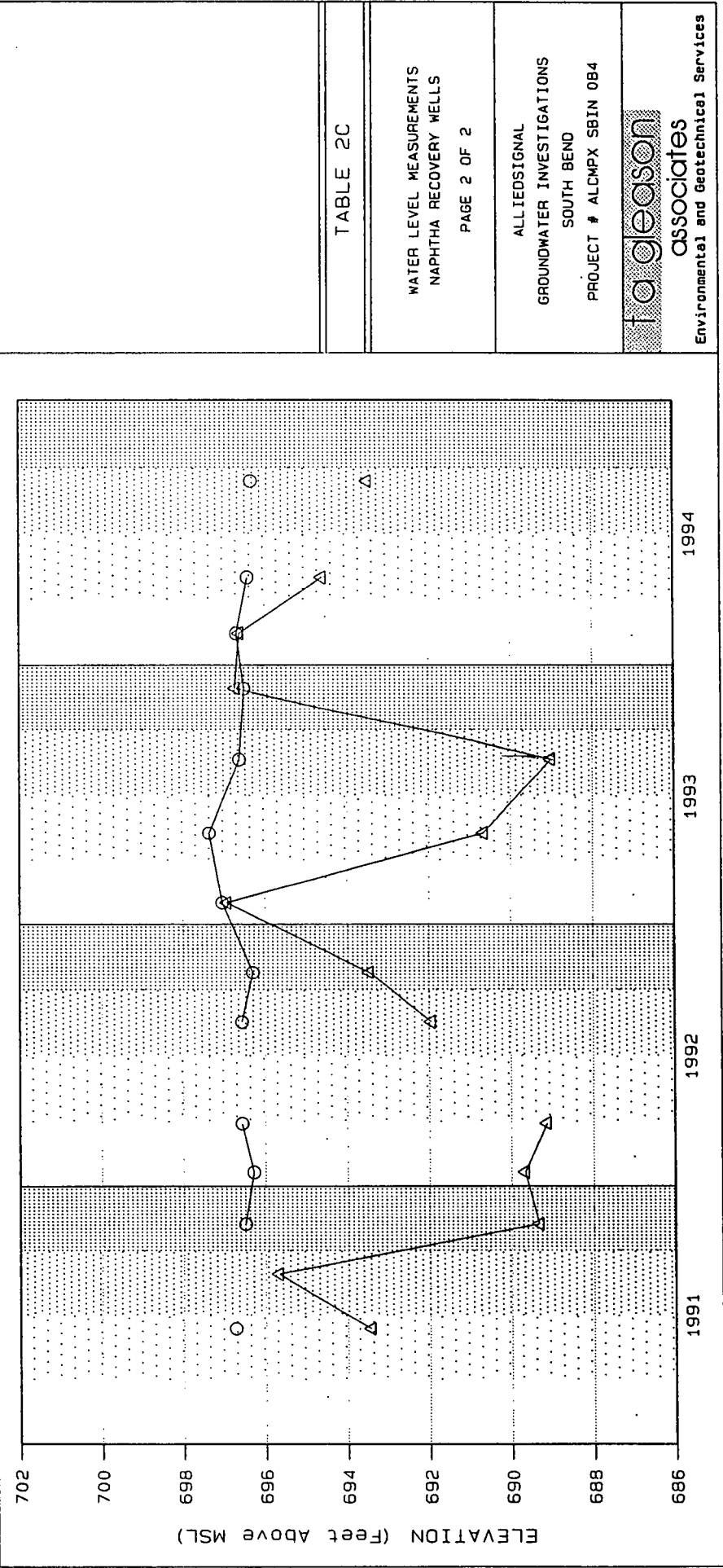


TABLE 2C

WATER LEVEL MEASUREMENTS  
NAPHTHA RECOVERY WELLS

PAGE 2 OF 2

ALLIEDSIGNAL  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ALCMPX SBIN 084



ASSOCIATES

Environmental and Geotechnical Services

10-19-1994



SOURCE: 7-25

NOTES

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	NOTES
06/05/87	2	AQUA		No VOC Detected
09/06/87	2	AQUA		No VOC Detected
01/13/88	2	AQUA		No VOC Detected
02/08/88	2	AQUA		No VOC Detected
05/18/88	2	AQUA		No VOC Detected
09/22/88	2	AQUA		No VOC Detected
12/09/88	13	AQUA		No VOC Detected
03/31/92	22	AQUA	8240	No VOC Detected
09/02/92	43	AQUA	8240	No VOC Detected

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 1 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taigeason**  
Associates

Environmental and Geotechnical Services



SOURCE: 9-33

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULT FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 2 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**Tagleason**  
Associates  
Environmental and Geotechnical Services

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD		NOTES
			MCL	METHOD	
01/08/87	11	AQUA			No VOC Detected
06/05/87	3	AQUA			No VOC Detected
09/03/87	3	AQUA			No VOC Detected
01/13/88	3	AQUA			No VOC Detected
02/10/88	31	AQUA			No VOC Detected
05/18/88	3	AQUA			No VOC Detected
09/22/88	3	AQUA			No VOC Detected
12/09/88	15	AQUA			No VOC Detected
02/22/89	4	AQUA			No VOC Detected
05/10/89	35	AQUA	624		No VOC Detected
05/07/89	4	AQUA	8240		No VOC Detected
12/13/89	32	AQUA	8240		No VOC Detected
02/28/90	5	AQUA	8240		No VOC Detected
05/04/90	33	AQUA	8240		No VOC Detected
05/04/90	34	AQUA	8240		No VOC Detected
08/22/90	2	AQUA	8240		No VOC Detected
10/27/90	3	AQUA	8240		No VOC Detected
02/28/91	11	AQUA	8240		No VOC Detected
05/01/91	24	AQUA	8240		No VOC Detected
08/29/91	11	AQUA	8240		No VOC Detected
11/12/91	5	AQUA	8240		No VOC Detected
01/23/92	12	AQUA	8240		No VOC Detected
04/01/92	32	AQUA	8240		No VOC Detected
08/22/92	11	AQUA	8240		No VOC Detected
02/04/93	8	AQUA	8240		No VOC Detected
02/10/93	1	AQUA	8240		No VOC Detected
05/11/93	12	AQUA	8240		No VOC Detected
05/11/93	13	AQUA	8240		No VOC Detected
08/31/93	2	AQUA	8240		No VOC Detected
12/02/93	19	AQUA	8240		No VOC Detected
02/17/94	7	AQUA	8240		No VOC Detected
05/05/94	12	AQUA	8240		No VOC Detected
05/05/94	13	AQUA	8240		No VOC Detected
09/14/94	9	AQUA	8240		No VOC Detected



OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 3 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 0B4

**ta gleason**  
associates  
Environmental and Geotechnical Services

SOURCE: 86-10	DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	1,1-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-CHLORO-ETHANE		TRI-CHLORO-ETHENE		VINYL CHLORIDE		SUM	NOTES
					NPL	UG/L	P=70	UG/L	P=100	UG/L	200	UG/L	5	UG/L	2	UG/L		
08/02/86	7	AQUA			ND	ND	85.4	ND	308	ND	393							
10/10/86	18	AQUA			5.7	ND	130	99.7	440	ND	675							
02/24/89	22	AQUA			ND	100	41	ND	340	19.8	501							
06/08/89	10	AQUA	624		ND	67.3	35.3	ND	380	ND	483							
09/07/89	3	AQUA	8240		ND	75.7	35.1	15.5	230	16.3	373							
12/12/89	15	AQUA	8240		ND	92.4	48.6	ND	440	15.5	597							
02/28/90	7	AQUA	8240		ND	150	61.8	ND	270	22.1	504							
06/01/90	3	AQUA	8240		ND	81.7	48.5	ND	360	ND	490							
08/23/90	12	AQUA	8240		ND	55.2	30.8	ND	350	ND	436							
10/29/90	24	AQUA	8240		ND	87.4	39.7	10.4	327	ND	465							
03/01/91	14	AQUA	8240		21.2	68.9	46.2	6.0	330	ND	472							
05/31/91	6	AQUA	8240		ND	85.2	78.6	16.9	342.5	ND	523							
08/30/91	16	AQUA	8240		ND	42.4	21.5	32.6	282	ND	379							
11/13/91	10	AQUA	8240		ND	57.3	28.1	15.4	270	ND	371							
01/23/92	7	AQUA	8240		5.8	53.7	24.0	14.5	243	ND	341							
01/23/92	8	AQUA	8240		6.1	53.9	24.7	13.5	248	ND	346							
04/01/92	26	AQUA	8240		ND	47.7	18.0	15.1	246	ND	327							
08/21/92	5	AQUA	8240		ND	64.1	20.1	45.7	272	ND	402							
11/02/92	36	AQUA	8240		9.3	61.9	18.5	61.0	191	ND	342							
02/05/93	23	AQUA	8240		ND	90.2	21.8	17.9	224	ND	354							
05/12/93	21	AQUA	8240		ND	91.8	24.0	12.0	225	ND	353							
09/01/93	21	AQUA	8240		ND	76.4	15.8	ND	143	ND	235							
12/02/93	15	AQUA	8240		5.7	115	32.6	29.1	255	ND	437							
02/18/94	16	AQUA	8240		ND	39.7	23.7	ND	102	ND	165							
05/06/94	23	AQUA	8240		ND	78.9	12.5	27.1	158	ND	277							
09/15/94	18	AQUA	8240		8.7	80.1	10.6	62.7	171	ND	333							





SOURCE: 86-10

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

- o - Date
- o - Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

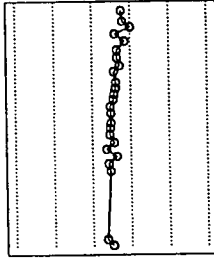
PAGE 3A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

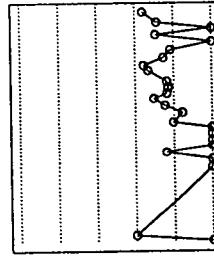
**ta gleason**

associates  
Environmental and Geotechnical Services

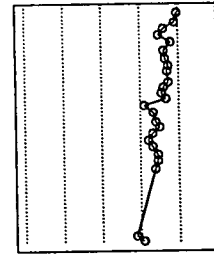
TCE



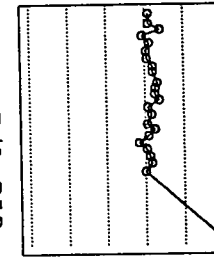
1, 1, 1-TCA



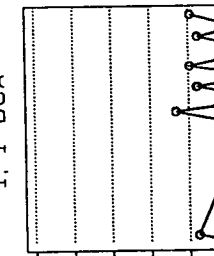
TRANS-1, 2-DCE



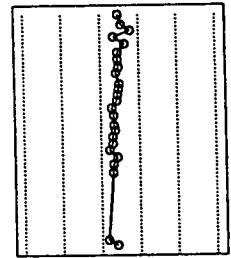
CIS-1, 2-DCE



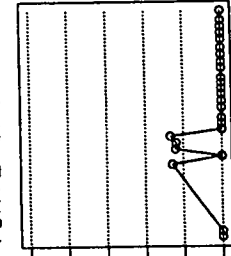
1, 1-DCA

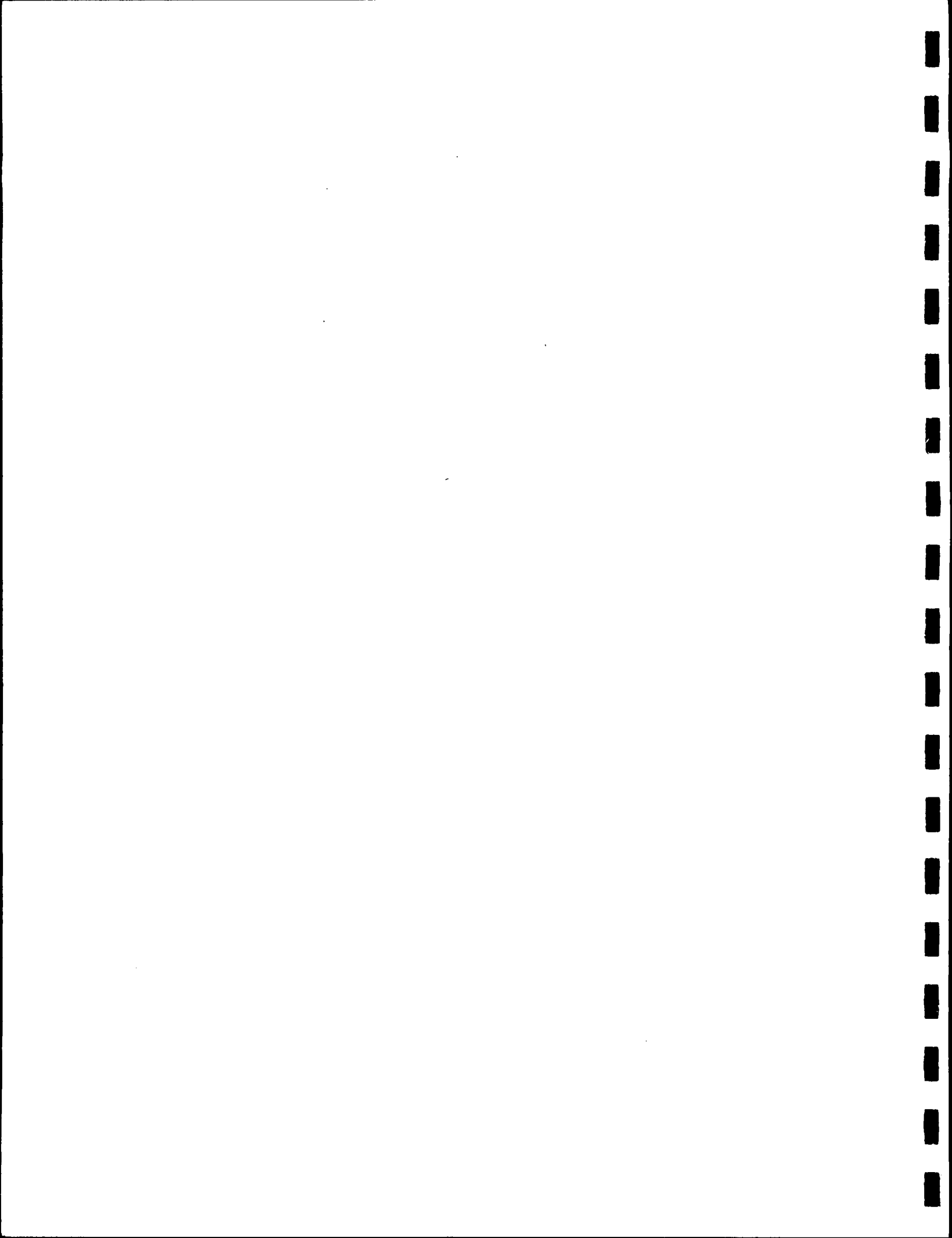


SUM



VINYL CHLORIDE





NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS

PAGE 4 OF 21

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**taigeason**  
 associates  
 Environmental and Geotechnical Services

A:\13\86-15.VT1, 10-18-1994

SOURCE: 86-15	DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	1,1-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-CHLORO-ETHANE		TRI-CHLORO-ETHENE		VINYL CHLORIDE		SUM	NOTES
					NPL	UG/L	P=70	UG/L	P=100	UG/L	200	UG/L	5	UG/L	2	UG/L		
08/02/86	4	AQUA			ND	ND	48.1	64.9	1620	1733	ND	ND	1733					
10/10/86	13	AQUA			ND	ND	33.7	38.0	1280	1352	ND	ND	1352					
02/24/89	24	AQUA			ND	ND	9.2	9.1	400	418	ND	ND	418					
06/08/89	9	AQUA	624		ND	18.2	33.5	7.6	600	659	ND	ND	659					
09/07/89	2	AQUA	8240		ND	20.8	35.0	ND	470	527	ND	ND	527					
12/12/89	14	AQUA	8240		ND	12.2	20.5	10.6	440	483	ND	ND	483					
02/26/90	6	AQUA	8240		ND	16.5	32.7	11.8	520	581	ND	ND	581					
05/01/90	2	AQUA	8240		ND	6.7	11.8	10.8	390	419	ND	ND	419					
08/23/90	11	AQUA	8240		ND	ND	6.1	7.6	370	384	ND	ND	384					
10/29/90	23	AQUA	8240		ND	6.6	10.8	11.2	404	435	ND	ND	435					
03/01/91	13	AQUA	8240		6.1	7.9	13.9	18.1	322	368	ND	ND	368					
05/31/91	5	AQUA	8240		ND	ND	39.1	9.3	449.6	498	ND	ND	498					
08/30/91	15	AQUA	8240		ND	8.4	13.8	8.8	323	354	ND	ND	354					
11/13/91	8	AQUA	8240		ND	12.5	14.2	7.4	381	415	ND	ND	415					
11/13/91	9	AQUA	8240		ND	10.4	15.2	7.1	345	378	ND	ND	378					
01/23/92	5	AQUA	8240		5.6	12.1	21.3	11.5	350	401	ND	ND	401					
04/01/92	25	AQUA	8240		ND	11.9	21.1	7.5	404	445	ND	ND	445					
08/21/92	4	AQUA	8240		ND	20.9	18.2	8.8	546	605	ND	11.1	605					
11/02/92	34	AQUA	8240		ND	28.6	34.1	7.6	408	478	ND	ND	478					
11/02/92	35	AQUA	8240		ND	28.7	33.4	8.3	376	445	ND	ND	445					
02/05/93	22	AQUA	8240		ND	33.1	36.2	7.0	440	515	ND	ND	515					
05/12/93	19	AQUA	8240		ND	28.7	34.1	6.8	364	434	ND	ND	434					
05/12/93	20	AQUA	8240		ND	33.9	40.9	7.8	383	466	ND	ND	466					
09/01/93	20	AQUA	8240		7.3	47.4	41.6	8.1	373	477	ND	ND	477					
12/02/93	14	AQUA	8240		ND	76.1	53.9	ND	891	1021	ND	ND	1021					
02/18/94	15	AQUA	8240		ND	39.7	31.1	ND	374	445	ND	ND	445					
05/06/94	21	AQUA	8240		ND	31.9	37.8	ND	370	440	ND	ND	440					
05/06/94	22	AQUA	8240		ND	37.2	36.3	ND	344	418	ND	ND	418					
09/15/94	17	AQUA	8240		ND	54.5	62.0	ND	575	601	ND	109	601					

;



SOURCE: 86-15

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date  
• - Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

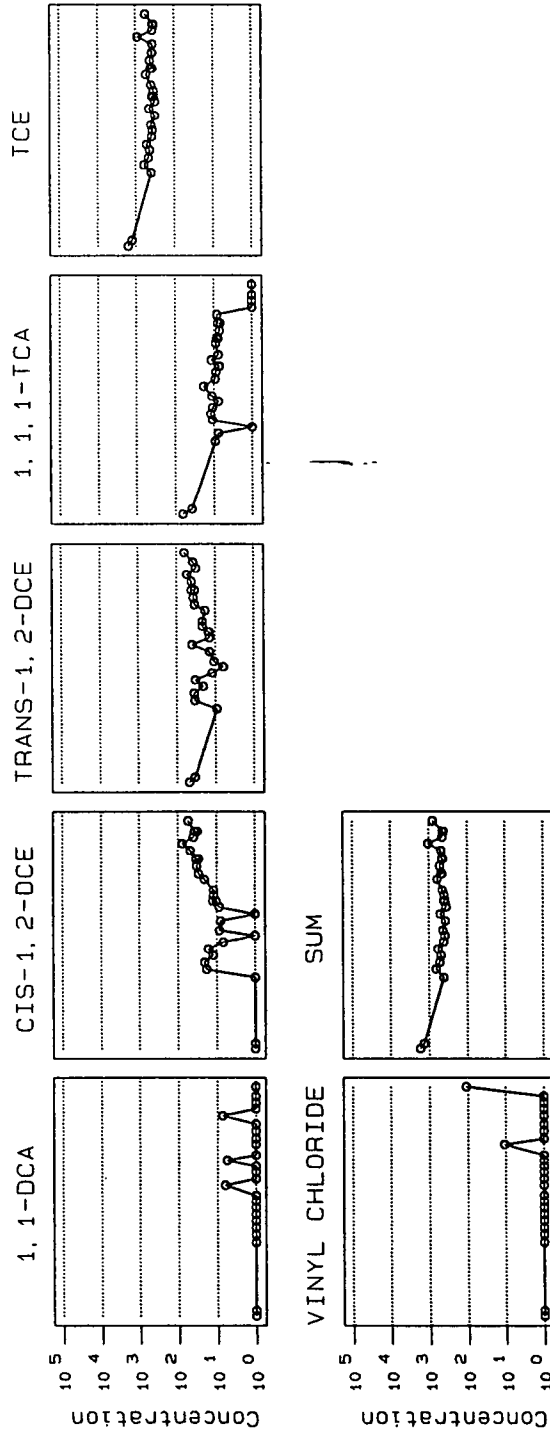
PAGE 4A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taigeason**

associates

Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 5 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

SOURCE: S-1		MCL METHOD	CIS-1,2-DICHLOROETHENE		TETRA-CHLOROETHENE		TRI-CHLOROETHENE		SUM	NOTES
DATE SAMPLED	SAMPLE NO.		LAB	P=70 UG/L	P=5 UG/L	5 UG/L	5 UG/L			
11/05/86	1	AQUA	No VOC Detected							
12/17/86	18	AQUA	No VOC Detected							
06/05/87	1	AQUA	No VOC Detected							
09/03/87	1	AQUA	No VOC Detected							
01/13/88	1	AQUA	No VOC Detected							
02/08/88	1	AQUA	No VOC Detected							
05/18/88	1	AQUA	No VOC Detected							
09/22/88	1	AQUA	No VOC Detected							
12/09/88	12	AQUA	No VOC Detected							
02/22/89	1	AQUA	No VOC Detected							
02/22/89	2	AQUA	No VOC Detected							
06/08/89	14	AQUA 624	No VOC Detected							
06/08/89	15	AQUA 624	No VOC Detected							
09/09/89	20	AQUA 8240	No VOC Detected							
12/11/89	2	AQUA 8240	No VOC Detected							
02/28/90	8	AQUA 8240	No VOC Detected							
06/03/90	24	AQUA 8240	No VOC Detected							
08/24/90	33	AQUA 8240	No VOC Detected							
10/27/90	2	AQUA 8240	No VOC Detected							
02/28/91	4	AQUA 8240	11.2	ND	ND	ND	ND	11		
06/01/91	23	AQUA 8240	No VOC Detected							
08/29/91	10	AQUA 8240	9.3	6.2	ND	ND	ND	16		
11/12/91	4	AQUA 8240	10.9	ND	ND	ND	ND	11		
01/22/92	3	AQUA 8240	10.0	ND	ND	ND	ND	10		
01/22/92	4	AQUA 8240	10.8	ND	ND	ND	ND	11		
03/31/92	20	AQUA 8240	7.3	ND	ND	ND	ND	7		
03/31/92	21	AQUA 8240	6.3	ND	ND	ND	ND	6		
08/22/92	10	AQUA 8240	5.5	ND	ND	ND	ND	6		
10/30/92	10	AQUA 8240	No VOC Detected							
10/30/92	11	AQUA 8240	No VOC Detected							
02/04/93	7	AQUA 8240	No VOC Detected							
05/11/93	11	AQUA 8240	7.5	5.2	ND	ND	ND	13		
08/31/93	1	AQUA 8240	5.3	ND	ND	ND	ND	5		
12/01/93	12	AQUA 8240	7.1	5.8	ND	ND	ND	13		
02/16/94	1	AQUA 8240	6.1	ND	ND	ND	ND	6		
05/04/94	4	AQUA 8240	6.7	ND	ND	ND	ND	7		
09/14/94	6	AQUA 8240	6.4	5.5	ND	ND	ND	12		





SOURCE: S-1

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 5A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason  
associates

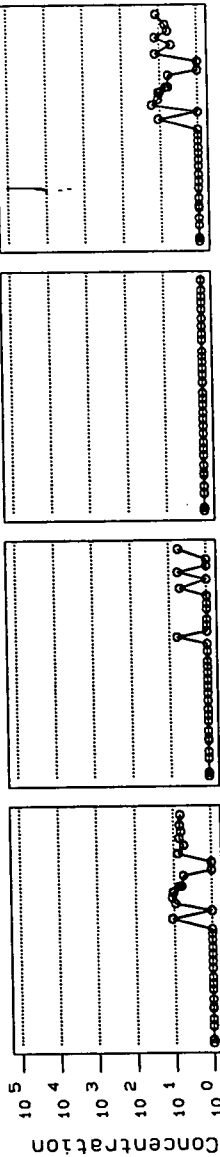
Environmental and Geotechnical Services

SUM

TCE

TETRA-CE

CIS-1, 2-DCE





NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = ND U.S. EPA PUBLISHED LEVEL  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 A = AS OF 06/25/87 WELL S-4 WAS REPLACED BY WELL S-4A.

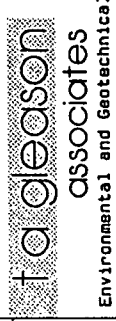
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD		1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DI-CHLORO-ETHENE	TRANS-1,2-DI-CHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
			NPL	UG/L										
06/05/87	22	AQUA	1100	ND	200	820	110	200	120	2550	ND	2550	A	
09/04/87	27	AQUA	1100	ND	80.0	2000	170	ND	17.0	790	790	4157		
01/14/88	25	AQUA	1600	ND	180	1800	112	ND	ND	700	700	4392		
02/08/88	2	AQUA	1500	ND	165	1770	160	ND	ND	900	900	4495		
05/18/88	7	AQUA	1700	ND	165	2800	ND	ND	ND	437	437	5102		
05/18/88	8	AQUA	1640	ND	200	2750	ND	ND	ND	373	373	4963		
09/22/88	7	AQUA	1810	7.0	292	940	154	11.0	40.0	1570	1570	4824		
09/22/88	8	AQUA	1820	7.3	281	920	155	10.0	39.0	1620	1620	4852		
12/10/88	26	AQUA	970	ND	114	1600	135	ND	23.7	633	633	3475		
02/27/89	43	AQUA	700	ND	110	1400	150	8.7	17.2	270	270	2656		
06/10/89	37	AQUA	660	ND	120	1080	190	ND	ND	2050	ND	2050		
06/10/89	38	AQUA	620	ND	110	1040	190	ND	ND	1960	ND	1960		
09/09/89	25	AQUA	580	ND	120	840	190	34	19.7	69.5	69.5	1853		
12/13/89	27	AQUA	880	ND	151	760	180	34.1	32.5	41	41	2079		
03/02/90	37	AQUA	670	ND	92.1	1000	210	27	19	27.4	27.4	2045		
06/03/90	23	AQUA	430	ND	84.0	640	180	20.8	19.1	20.9	20.9	1395		
08/24/90	22	AQUA	231	ND	9.0	500	50.2	9.5	16.6	ND	ND	826		
10/28/90	14	AQUA	408	ND	86.2	677	178	16.8	25.9	ND	ND	1392		
03/02/91	25	AQUA	176	5.7	39.7	311	58.0	6.2	16.0	12.7	12.7	625		
06/02/91	28	AQUA	228	ND	47.2	ND	ND	9.5	26.6	ND	ND	311		
08/31/91	30	AQUA	140	ND	53.8	182	46.6	11.3	34.1	10.3	10.3	478		
11/13/91	21	AQUA	156	ND	45.2	179	47.2	8.6	36.9	ND	ND	473		
11/13/91	22	AQUA	131	ND	41.5	173	40.6	8.6	37.0	ND	ND	432		
01/25/92	27	AQUA	342	ND	51.8	197	46.3	ND	39.8	ND	ND	677		
01/25/92	28	AQUA	322	ND	48.9	180	45.7	ND	34.6	ND	ND	631		
04/01/92	35	AQUA	127	ND	40.5	169	41.0	6.7	25.1	ND	ND	409		
08/22/92	24	AQUA	171	ND	46.4	238	72.4	ND	26.0	ND	ND	554		
10/31/92	18	AQUA	103	ND	37.2	171	46.6	ND	16.7	ND	ND	375		
10/31/92	19	AQUA	94.1	ND	32.2	149	37.1	ND	15.3	ND	ND	328		
02/04/93	18	AQUA	108	ND	37.8	216	46.7	ND	21.8	ND	ND	430		
05/11/93	16	AQUA	90.5	ND	27.0	161	32.8	ND	13.7	ND	ND	325		
08/31/93	15	AQUA	68.4	ND	17.7	125	20.6	ND	20.6	ND	ND	252		
12/03/93	28	AQUA	89.7	ND	55.2	234	26.4	ND	29.4	ND	ND	435		
12/03/93	29	AQUA	83.2	ND	55.6	223	27.7	ND	29.7	ND	ND	419		
02/18/94	18	AQUA	66.8	ND	17.5	201	22.7	ND	16.8	ND	ND	325		
05/05/94	18	AQUA	77.7	ND	17.9	174	31.0	ND	9.9	ND	ND	311		
09/15/94	31	AQUA	96.7	ND	19.9	230	57.7	ND	10.8	ND	ND	415		

PARAMETER  
 o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 6 OF 22

ALLIED SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084





SOURCE: S-4A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = AS OF 06/25/87 WELL S-4 WAS REPLACED BY WELL S-4A.

PARAMETER

o = Date Sampled

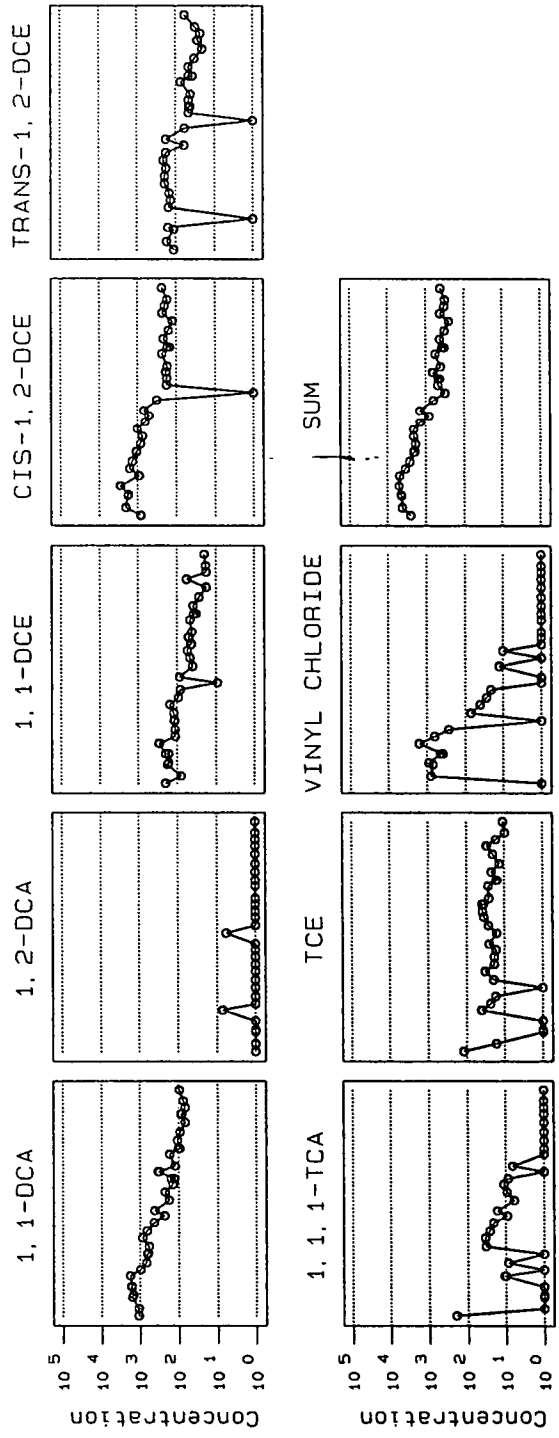
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 6A OF 22

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

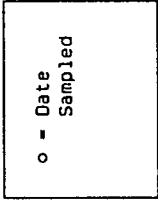
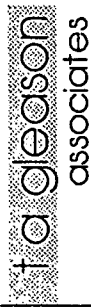


TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 7 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



SOURCE: S-9		1,2-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	5 UG/L	P=70 UG/L	P=100 UG/L	UG/L	UG/L	UG/L	
10/01/86	12	AQUA		81.3	ND	2.2	84			
11/05/86	4	AQUA		29	ND	2.3	31			
12/18/86	20	AQUA		210	15	ND	225			
12/18/86	30	AQUA		43.3	ND	ND	43			
02/12/87	12	AQUA		313	ND	23	336			
06/05/87	7	AQUA		460	17	ND	477			
09/03/87	9	AQUA		170	13	ND	183			
01/13/88	6	AQUA		810	43	ND	853			
02/08/88	9	AQUA		440	ND	ND	440			
05/18/88	9	AQUA		440	47.6	ND	488			
09/23/88	9	AQUA		240	ND	ND	240			
12/08/88	4	AQUA		12.3	ND	ND	12			
02/23/89	13	AQUA		9.2	ND	ND	9			
06/10/89	33	AQUA	624	6.7	ND	ND	7			
09/08/89	15	AQUA	8240	No VOC Detected						
12/13/89	28	AQUA	8240	40.3	ND	ND	40			
02/27/90	4	AQUA	8240	40.0	ND	ND	40			
06/01/90	6	AQUA	8240	34.2	ND	ND	34			
08/22/90	4	AQUA	8240	No VOC Detected						
10/27/90	9	AQUA	8240	No VOC Detected						
02/28/91	3	AQUA	8240	7.6	ND	ND	8			
05/31/91	9	AQUA	8240	16.3	ND	ND	16			
08/29/91	14	AQUA	8240	11.7	ND	ND	12			
11/14/91	33	AQUA	8240	15.0	ND	ND	15			
01/22/92	5	AQUA	8240	42.8	ND	ND	43			
03/30/92	12	AQUA	8240	66.0	ND	ND	66			
06/27/92	20	AQUA	8240	127	5.4	ND	132			
10/31/92	27	AQUA	8240	155	7.9	ND	163			
02/03/93	5	AQUA	8240	221	13.9	ND	235			
05/12/93	29	AQUA	8240	223	11.9	ND	235			
09/02/93	34	AQUA	8240	220	16.8	ND	237			
12/02/93	17	AQUA	8240	324	25.7	5.1	355			
02/17/94	9	AQUA	8240	259	18.9	ND	278			
05/05/94	17	AQUA	8240	215	15.6	ND	231			
09/15/94	24	AQUA	8240	240	18.9	ND	259			





SOURCE: S-9

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

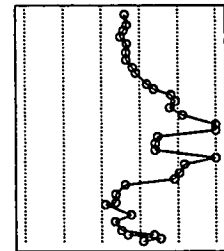
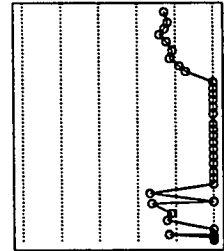
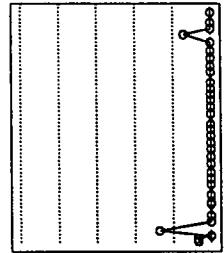
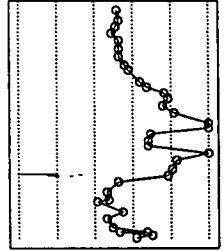
PAGE 7A OF 21

SUM

TRANS-1, 2-DCE

CIS-1, 2-DCE

1, 2-DCA

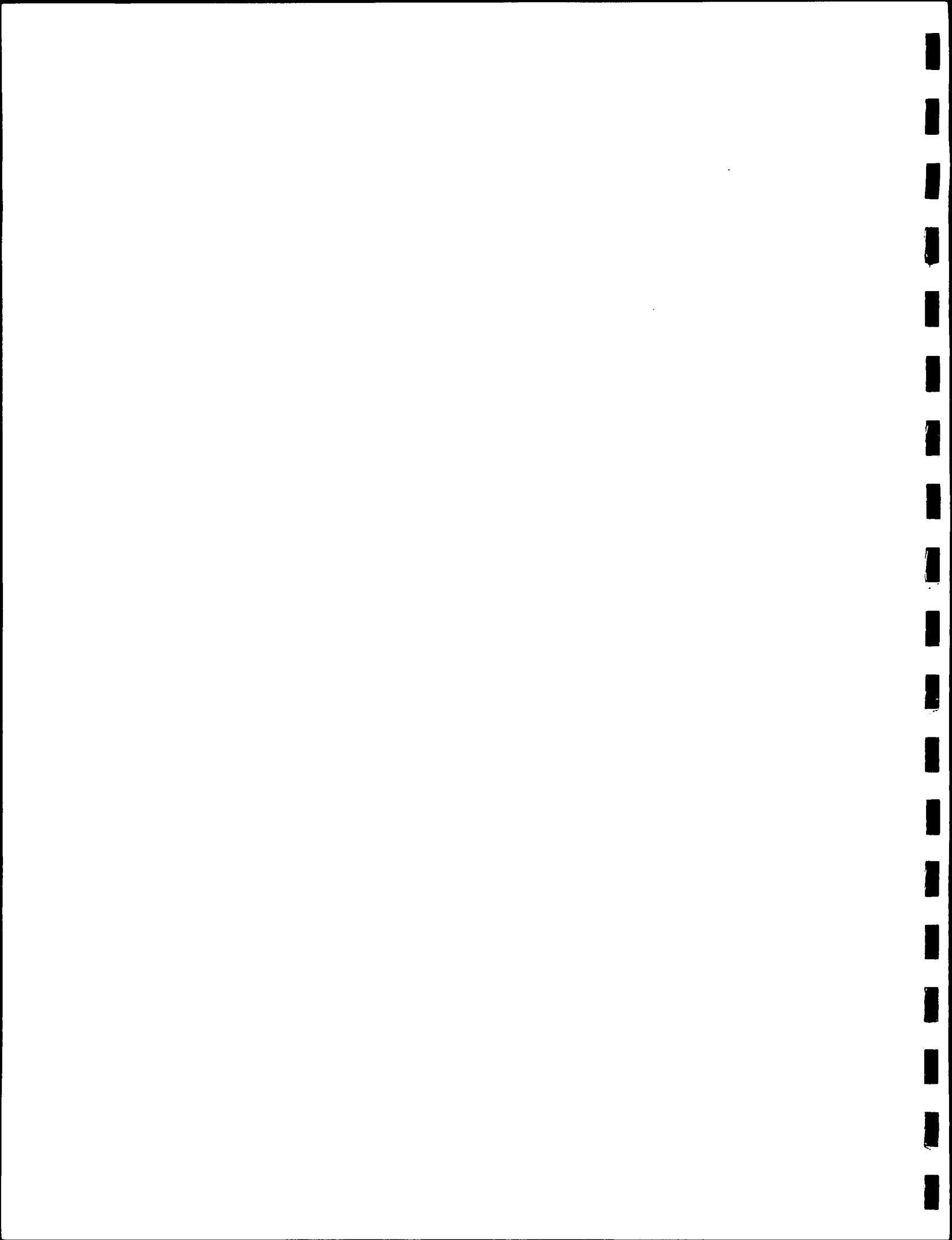


**taigeason**  
associates

Environmental and Geotechnical Services







SOURCE: S-14  
(CONT'D)

DATE SAMPLED: 09/15/94

SAMPLE NO.: 30

LAB: AGLJA

MCL METHOD: 8240

1,1-DI-CHLORO-ETHANE: NPL

1,2-DI-CHLORO-ETHANE: 5

1,1-DI-CHLORO-ETHANE: 7

CIS-1,2-DICHLORO-ETHENE: P=70

TRANS-1,2-DICHLORO-ETHENE: P=100

1,1,1-TRI-CHLORO-ETHANE: 200

TRI-CHLORO-ETHENE: 5

VINYL CHLORIDE: 2

SUM: UG/L

NOTES: 351

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
09/15/94	30	AGLJA	8240	NPL	5	7	P=70	P=100	200	5	2		
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
				38.3	336	5.9	90.1	6.9	33.6	40.4	ND	351	

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 8A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taajeon**

Associates

Environmental and Geotechnical Services

A: 17315-142.VT1, 10-18-1994



SOURCE: S-14

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

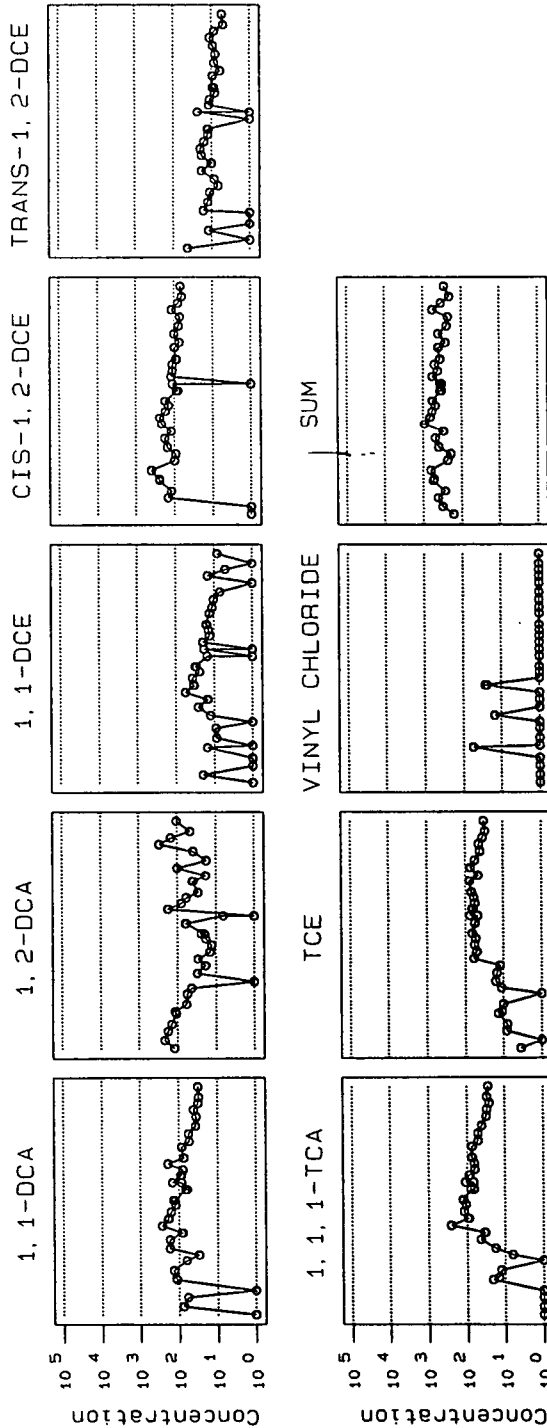
TABLE 3

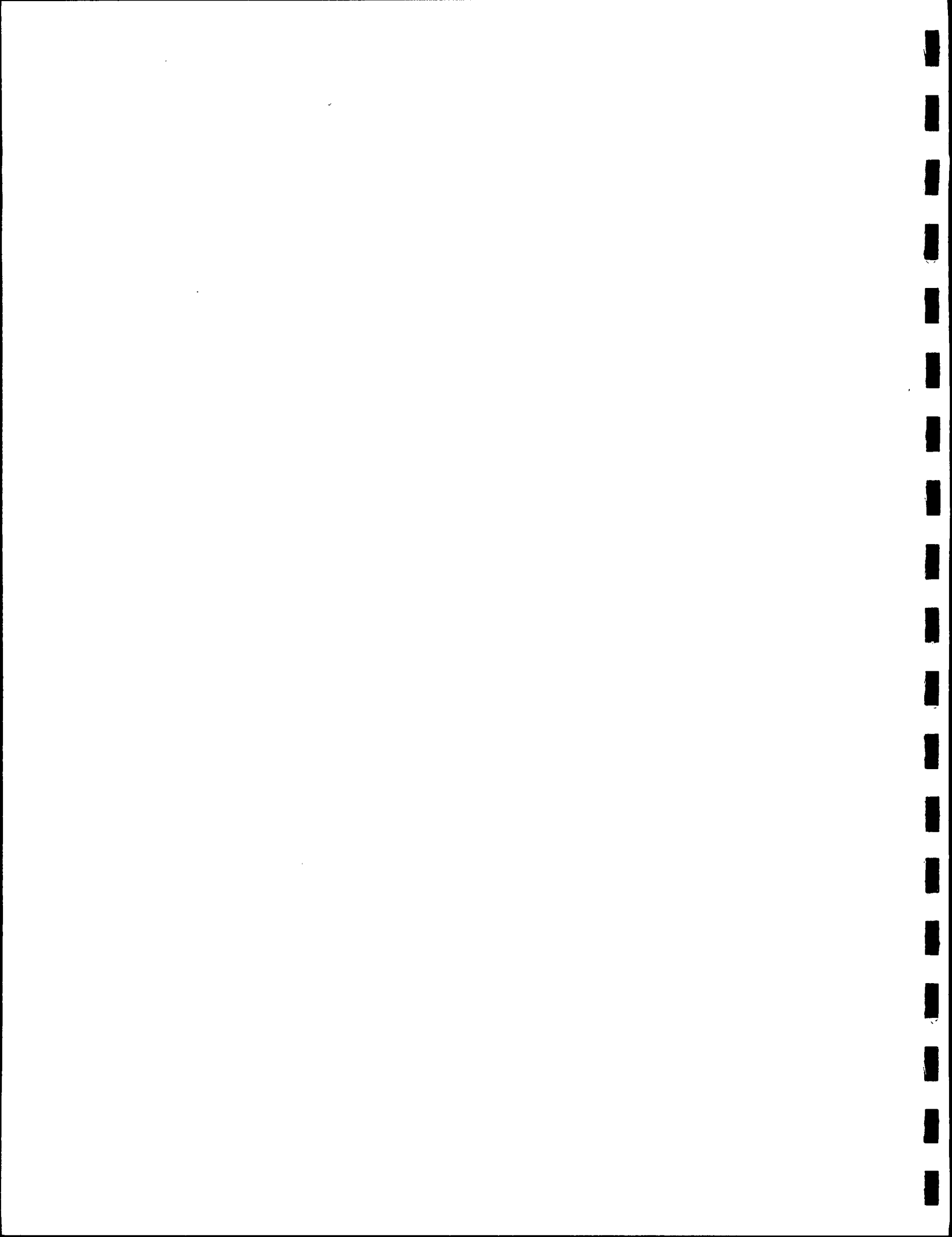
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 8B OF 21

ALLIED SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taigeason**  
ASSOCIATES

Environmental and Geotechnical Services







NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER  
o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 9 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

DATE SAMPLED	SAMPLE NO.	LAB	MCL		1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	VINYL CHLORIDE	OTHER VOC	SUM	NOTES
			U6/L	U6/L								
11/06/86	27	AQUA	ND	1.2	ND	1.5	ND	ND	ND	3		
12/18/86	22	AQUA	No VOC Detected									
06/05/87	6	AQUA	No VOC Detected									
09/03/87	5	AQUA	ND	ND	ND	ND	ND	76	ND	76		
09/03/87	5	AQUA	No VOC Detected									
01/14/88	24	AQUA	22.0	ND	ND	ND	ND	ND	ND	22		
02/08/88	4	AQUA	19.0	ND	ND	ND	ND	ND	ND	19		
05/18/88	6	AQUA	No VOC Detected									
09/23/88	6	AQUA	5.2	ND	ND	ND	ND	ND	ND	5		
12/10/88	24	AQUA	ND	ND	ND	ND	ND	10.9	121	132		
02/23/89	15	AQUA	No VOC Detected									
05/10/89	31	AQUA	No VOC Detected									
09/09/89	22	AQUA	ND	ND	ND	ND	ND	10.5	140	151		
12/12/89	22	AQUA	ND	100	240	26.6	18.5	280	665			
03/03/90	40	AQUA	69.3	ND	ND	ND	31.3	42.6	143			
03/03/90	41	AQUA	71.8	ND	ND	ND	32.0	46.1	150			
06/03/90	25	AQUA	37.9	ND	ND	ND	22.4	ND	60			
08/24/90	20	AQUA	12.8	ND	ND	ND	ND	ND	13			
10/28/90	13	AQUA	27.2	ND	ND	178	ND	ND	205			
03/01/91	12	AQUA	26.8	28.8	27.4	ND	40.9	ND	124			
06/01/91	25	AQUA	22.5	24.5	28.8	10.7	25.2	ND	112			
08/31/91	26	AQUA	23.8	17.3	ND	ND	44.4	ND	86			
11/12/91	6	AQUA	ND	5.7	6.1	ND	36.8	ND	49			
01/25/92	34	AQUA	ND	ND	7.5	ND	ND	ND	8			
04/01/92	33	AQUA	21.5	ND	6.0	ND	22.0	ND	50			
08/22/92	21	AQUA	40.0	12.4	5.9	ND	36.8	ND	95			
10/31/92	16	AQUA	17.8	ND	6.9	ND	17.8	ND	43			
02/04/93	19	AQUA	26.2	83.9	50.7	6.7	40.0	ND	208			
05/11/93	18	AQUA	19.1	69.4	45.1	8.9	36.8	ND	179			
08/31/93	15	AQUA	15.4	48.4	36.8	7.0	25.2	ND	133			
12/03/93	25	AQUA	15.6	17.6	38.9	7.9	29.8	ND	110			
02/17/94	14	AQUA	12.3	ND	17.3	ND	30.0	ND	60			
05/05/94	20	AQUA	11.2	ND	8.0	ND	22.5	ND	42			
09/15/94	28	AQUA	10.8	7.6	21.0	ND	23.8	ND	63			



SOURCE: S-15

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

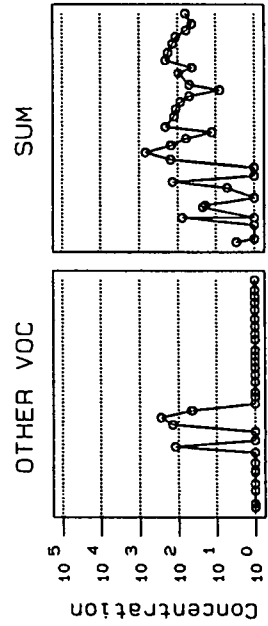
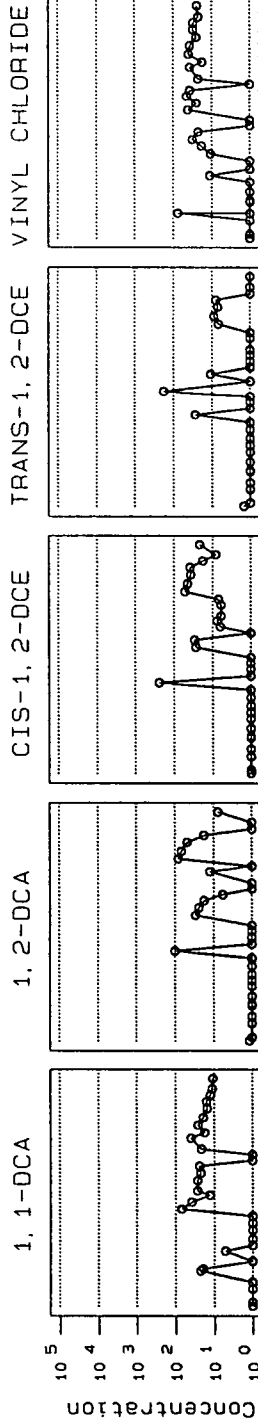
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 9A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taqjeason**  
associates  
Environmental and Geotechnical Services









SOURCE: S-16

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 3

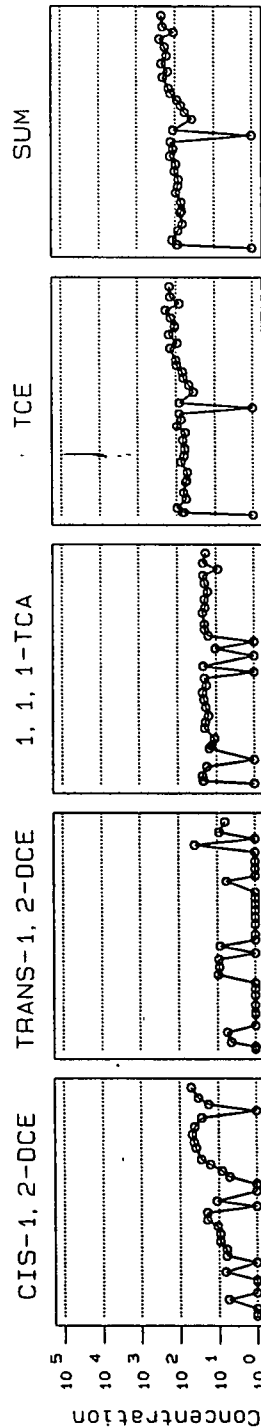
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 10A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services







NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 11 OF 21

ALLIED SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

DATE SAMPLED	SAMPLE NO.	LAB	1,1-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-ETHANE		TRI-CHLORO-ETHENE		SUM	NOTES
			MCL	UG/L	MCL	UG/L	MCL	UG/L	MCL	UG/L	MCL	UG/L	MCL	UG/L	MCL	UG/L		
11/16/86	16	AQUA		4.3		1.5	ND	ND	ND	ND	ND	ND	ND	ND	12.0	18		
01/07/87	4	AQUA		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	94.8	95		
02/12/87	3	AQUA		ND		ND	ND	ND	ND	7.9	ND	ND	ND	ND	116	124		
06/05/87	15	AQUA		ND		ND	ND	5.6	ND	ND	ND	ND	ND	ND	80.0	86		
09/03/87	20	AQUA		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	86.0	86		
01/14/88	22	AQUA		ND		ND	ND	8.8	ND	ND	ND	ND	ND	ND	68.0	77		
02/10/88	33	AQUA		ND		ND	ND	5.8	ND	ND	ND	ND	ND	ND	75.0	81		
05/19/88	25	AQUA		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	60.7	61		
09/23/88	12	AQUA		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	78.0	78		
02/23/89	17	AQUA		ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	75.9	76		
06/09/89	27	AQUA	624	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	65.7	66		
09/08/89	13	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	53.8	54		
12/12/89	25	AQUA	8240	ND		ND	ND	5.1	ND	ND	ND	ND	ND	ND	62.4	68		
03/02/90	25	AQUA	8240	ND		ND	ND	6.9	ND	ND	ND	ND	ND	ND	42.4	49		
06/04/90	35	AQUA	8240	ND		ND	ND	6.2	ND	ND	ND	ND	ND	ND	42.8	49		
08/24/90	34	AQUA	8240	ND		ND	ND	6.9	ND	ND	ND	ND	ND	ND	35.0	42		
08/24/90	35	AQUA	8240	ND		ND	ND	6.5	ND	ND	ND	ND	ND	ND	33.6	40		
10/28/90	22	AQUA	8240	ND		ND	ND	ND	9.6	ND	ND	ND	ND	ND	40.4	50		
03/02/91	24	AQUA	8240	ND		ND	ND	8.2	ND	ND	ND	ND	ND	ND	29.6	38		
06/02/91	30	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	27.2	27		
08/31/91	31	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	32.6	33		
08/31/91	32	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	33.0	33		
11/13/91	23	AQUA	8240	ND		ND	ND	5.5	ND	ND	ND	ND	ND	ND	27.6	33		
01/26/92	39	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	24.5	25		
04/02/92	42	AQUA	8240	ND		ND	ND	7.6	ND	ND	ND	ND	ND	ND	31.2	39		
04/02/92	43	AQUA	8240	ND		ND	ND	10.3	ND	ND	ND	ND	ND	ND	38.9	49		
08/23/92	27	AQUA	8240	ND		ND	ND	5.7	ND	ND	ND	ND	ND	ND	27.0	33		
10/31/92	24	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	17.3	17		
02/06/93	34	AQUA	8240	ND		ND	ND	19.3	ND	ND	ND	ND	ND	ND	28.9	48		
02/06/93	35	AQUA	8240	ND		ND	ND	20.5	ND	ND	ND	ND	ND	ND	36.6	57		
05/11/93	15	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	16.9	17		
08/31/93	13	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	23.7	24		
08/31/93	14	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	22.5	23		
12/02/93	20	AQUA	8240	ND		ND	ND	5.2	ND	ND	ND	ND	ND	ND	34.0	39		
12/02/93	21	AQUA	8240	ND		ND	ND	5.2	ND	ND	ND	ND	ND	ND	35.3	41		
02/19/94	40	AQUA	8240	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	23.8	24		
05/05/94	19	AQUA	8240	12.8		ND	ND	ND	ND	ND	ND	ND	ND	ND	16.1	67		
09/15/94	25	AQUA	8240	136		ND	44.5	ND	ND	ND	ND	ND	53.7	43.2	76.1			



SOURCE: S-17

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date  
Sampled

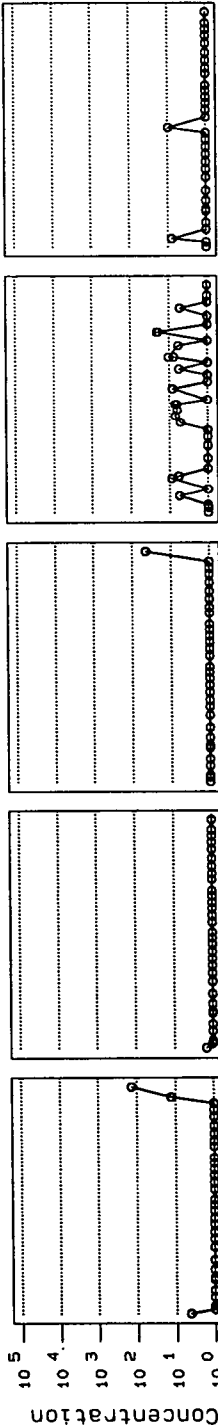
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 11A OF 21

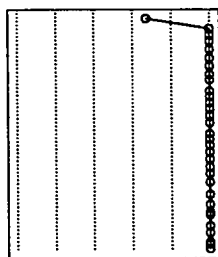
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCNPX SBIN 084

**ta geason**  
Associates  
Environmental and Geotechnical Services

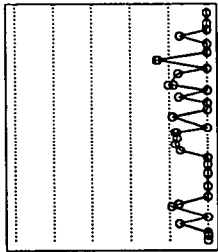
1, 1-DCA



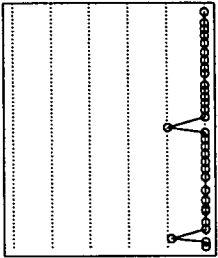
1, 2-DCA



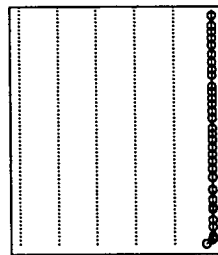
CIS-1, 2-DCE



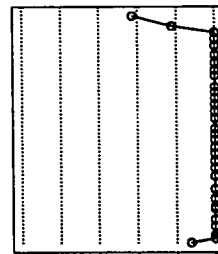
TRANS-1, 2-DCE



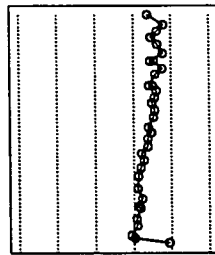
1, 1-DCE



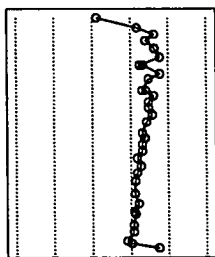
1, 1, 1-TCA



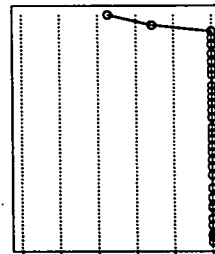
TCE



SUM



1, 1, 1-TCA





SOURCE: S-20

NOTES

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	NOTES
02/12/87	9	AQUA		No VOC Detected
06/05/87	16	AQUA		No VOC Detected
09/03/87	10	AQUA		No VOC Detected
01/13/88	7	AQUA		No VOC Detected
02/09/88	19	AQUA		No VOC Detected
05/19/88	19	AQUA		No VOC Detected
09/25/88	23	AQUA		No VOC Detected
09/25/88	24	AQUA		No VOC Detected
12/08/88	5	AQUA		No VOC Detected
02/22/89	9	AQUA		No VOC Detected
05/09/89	22	AQUA	524	No VOC Detected
09/09/89	29	AQUA	8240	No VOC Detected
12/11/89	3	AQUA	8240	No VOC Detected
12/11/89	4	AQUA	8240	No VOC Detected
03/02/90	36	AQUA	8240	No VOC Detected
06/01/90	7	AQUA	8240	No VOC Detected
08/22/90	5	AQUA	8240	No VOC Detected
10/27/90	4	AQUA	8240	No VOC Detected
02/28/91	5	AQUA	8240	No VOC Detected
05/01/91	13	AQUA	8240	No VOC Detected
08/28/91	6	AQUA	8240	No VOC Detected
11/12/91	7	AQUA	8240	No VOC Detected
01/25/92	31	AQUA	8240	No VOC Detected
03/31/92	17	AQUA	8240	No VOC Detected
08/22/92	12	AQUA	8240	No VOC Detected
10/30/92	5	AQUA	8240	No VOC Detected
02/04/93	9	AQUA	8240	No VOC Detected
05/11/93	6	AQUA	8240	No VOC Detected
08/31/93	4	AQUA	8240	No VOC Detected
12/01/93	2	AQUA	8240	No VOC Detected
02/17/94	4	AQUA	8240	No VOC Detected
05/05/94	8	AQUA	8240	No VOC Detected
09/14/94	11	AQUA	8240	No VOC Detected

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 12 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**Tagleason**

**Associates**  
Environmental and Geotechnical Services



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL  
 P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 13 OF 21

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084



SOURCE: S-21		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	P=70 US/L	P=100 US/L	5 US/L	5 US/L	US/L	US/L		
11/05/86	17	AQUA		ND	116	ND	ND	116			
12/17/86	13	AQUA		ND	69.3	ND	ND	69			
02/11/87	5	AQUA		ND	88.5	ND	ND	89			
06/05/87	17	AQUA		5.0	30.0	ND	ND	35			
06/05/87	18	AQUA		5.5	34.0	ND	ND	40			
09/03/87	14	AQUA		50.0	13.0	ND	ND	63			
01/14/88	11	AQUA		53.2	20.4	ND	ND	74			
02/09/88	22	AQUA		60.0	33.0	ND	ND	93			
05/18/88	13	AQUA		137	11.1	ND	ND	148			
09/23/88	13	AQUA		58.0	49.0	ND	ND	107			
12/08/88	10	AQUA		66.0	32.8	ND	ND	99			
02/23/89	10	AQUA		64.1	32.7	ND	ND	97			
06/09/89	24	AQUA	624	48.3	24.0	ND	ND	72			
09/10/89	41	AQUA	8240	72.5	41.6	ND	ND	114			
12/11/89	9	AQUA	8240	9.3	ND	ND	ND	9			
03/02/90	32	AQUA	8240	98.6	46.0	6.0	6.0	151			
06/02/90	15	AQUA	8240	87.3	52.5	ND	ND	140			
08/23/90	10	AQUA	8240	48.4	28.0	5.7	5.7	82			
10/28/90	19	AQUA	8240	110	58.7	ND	ND	169			
10/28/90	20	AQUA	8240	107	56.1	ND	ND	163			
03/03/91	28	AQUA	8240	69.3	36.2	ND	ND	106			
06/01/91	18	AQUA	8240	31.1	121	ND	ND	152			
08/28/91	3	AQUA	8240	33.5	21.6	6.1	6.1	61			
11/12/91	3	AQUA	8240	33.7	19.7	6.7	6.7	60			
01/21/92	2	AQUA	8240	28.2	14.8	ND	ND	43			
03/30/92	8	AQUA	8240	28.6	14.8	7.5	7.5	51			
08/20/92	3	AQUA	8240	28.1	14.3	8.4	8.4	51			
10/30/92	13	AQUA	8240	47.8	28.0	8.6	8.6	84			
02/03/93	3	AQUA	8240	78.1	51.7	5.6	5.6	135			
05/11/93	3	AQUA	8240	70.3	55.0	ND	ND	125			
08/31/93	12	AQUA	8240	41.4	33.6	5.1	5.1	80			
12/01/93	7	AQUA	8240	79.5	67.8	5.3	5.3	153			
02/16/94	3	AQUA	8240	35.9	27.5	5.9	5.9	70			
05/04/94	3	AQUA	8240	25.1	18.7	5.4	5.4	50			
09/12/94	2	AQUA	8240	11.3	6.3	8.5	8.5	26			





SOURCE: S-21

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

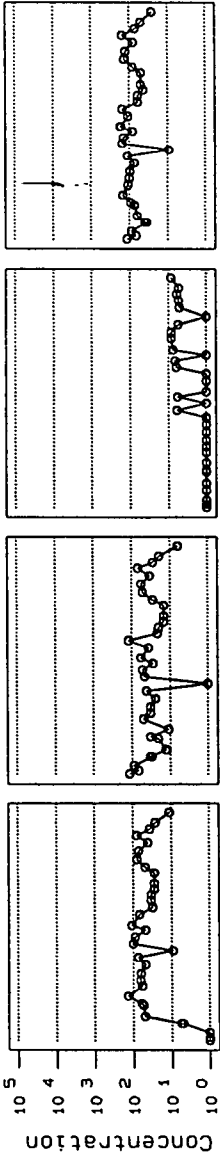
PARAMETER

o - Date  
Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 13A OF 21



ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



associates  
Environmental and Geotechnical Services



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = ND U.S EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

A = METHYLENE CHLORIDE 18.3 UG/L

PARAMETER  
 o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 14 OF 21

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**taaleason**  
 associates  
 Environmental and Geotechnical Services

SOURCE: S-22		DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	CIS-1, 2-DICHLORO-ETHENE		TRANS-1, 2-DICHLORO-ETHENE		SUM	NOTES
P-70	UG/L					P-100	UG/L	UG/L	UG/L		
11/06/86	18	AQUA				ND	164	164	164		
01/07/87	5	AQUA				50	75.8	126	126		
01/07/87	7	AQUA				50	73.6	124	124		
02/12/87	5	AQUA				ND	132	132	132		
02/12/87	7	AQUA				ND	109	109	109		
06/05/87	20	AQUA				41	69	110	110		
09/03/87	12	AQUA				57	41	98	98		
01/13/88	8	AQUA				41.5	ND	42	42		
02/09/88	23	AQUA				48	61	109	109		
05/18/88	15	AQUA				77.5	27.7	105	105		
05/18/88	16	AQUA				82	25.2	107	107		
09/25/88	22	AQUA				21	45	66	66		
02/22/89	6	AQUA				43.1	38.8	82	82		
02/22/89	7	AQUA				35.7	37.5	73	73		
05/09/89	19	AQUA		824		33	40.7	74	74		
06/09/89	20	AQUA		824		37.9	42.1	80	80		
09/09/89	26	AQUA		8240		38.4	45.8	84	84		
12/11/89	6	AQUA		8240		37.7	56.8	95	95		
03/01/90	21	AQUA		8240		59.9	74.4	134	134		
06/01/90	11	AQUA		8240		45.1	71.9	117	117		
08/22/90	7	AQUA		8240		39.9	60.1	100	100		
08/22/90	8	AQUA		8240		40.7	61.4	102	102		
10/27/90	6	AQUA		8240		59.3	82.9	142	142		
02/28/91	7	AQUA		8240		35.9	48.4	84	84		
05/01/91	16	AQUA		8240		52.5	168.0	221	221		
08/28/91	5	AQUA		8240		34.1	61.5	96	96		
11/13/91	12	AQUA		8240		45.9	76.5	122	122		
01/25/92	33	AQUA		8240		50.6	86.8	137	137		
03/31/92	14	AQUA		8240		41.3	64.5	106	106		
08/22/92	15	AQUA		8240		61.7	100.0	162	162		
08/22/92	16	AQUA		8240		53.9	91.3	145	145		
02/04/93	11	AQUA		8240		56.7	91.5	148	148		
02/04/93	12	AQUA		8240		63.7	95.0	160	160		
02/10/93	2	AQUA		8240		54.7	80.0	135	135		
05/11/93	9	AQUA		8240		57.0	90.0	147	147		
08/31/93	7	AQUA		8240		45.6	78.5	124	124	A	
12/01/93	6	AQUA		8240		65.1	113.0	178	178		
02/18/94	23	AQUA		8240		46.8	79.1	126	126		
05/04/94	6	AQUA		8240		38.3	62.1	100	100		
09/14/94	7	AQUA		8240		55.5	86.3	144	144		



SOURCE: S-22

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

A = METHYLENE CHLORIDE 18.3 UG/L

PARAMETER

o = Date Sampled

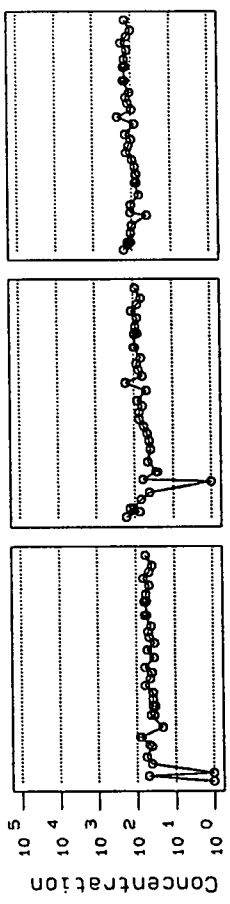
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 14A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = BIS (2-ETHYLHEXYL) PHTHALATE REPORTED 3.4 UG/L

WELL NOT SAMPLED 01/92.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

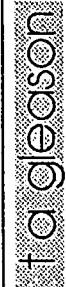
o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 15 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		SUM	NOTES
				P=70 UG/L	P=100 UG/L	P=70 UG/L	P=100 UG/L		
11/06/86	19	AQUA		ND	4.5		5		A
01/07/87	8	AQUA		No VOC Detected					
02/11/87	8	AQUA		No VOC Detected					
06/05/87	21	AQUA		No VOC Detected					
09/03/87	13	AQUA		No VOC Detected					
01/13/88	9	AQUA		No VOC Detected					
02/09/88	24	AQUA		No VOC Detected					
05/18/88	17	AQUA		6.4	ND		6		
09/24/88	17	AQUA		No VOC Detected					
12/08/88	7	AQUA		No VOC Detected					
02/22/89	5	AQUA		No VOC Detected					
06/09/89	17	AQUA	824	No VOC Detected					
09/09/89	27	AQUA	8240	No VOC Detected					
12/11/89	7	AQUA	8240	No VOC Detected					
03/02/90	23	AQUA	8240	No VOC Detected					
06/01/90	10	AQUA	8240	No VOC Detected					
08/22/90	9	AQUA	8240	No VOC Detected					
10/27/90	7	AQUA	8240	No VOC Detected					
02/28/91	8	AQUA	8240	No VOC Detected					
06/01/91	17	AQUA	8240	No VOC Detected					
08/28/91	4	AQUA	8240	No VOC Detected					
11/13/91	19	AQUA	8240	No VOC Detected					
03/31/92	15	AQUA	8240	No VOC Detected					
08/22/92	17	AQUA	8240	No VOC Detected					
02/04/93	13	AQUA	8240	No VOC Detected					
02/10/93	3	AQUA	8240	No VOC Detected					
05/11/93	8	AQUA	8240	No VOC Detected					
08/31/93	6	AQUA	8240	No VOC Detected					
12/01/93	5	AQUA	8240	No VOC Detected					
03/29/94	47	AQUA	8240	No VOC Detected					
05/04/94	5	AQUA	8240	No VOC Detected					
09/14/94	6	AQUA	8240	No VOC Detected					





SOURCE: S-23

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = BIS (2-ETHYLHEXYL) PHTHALATE REPORTED 3.4 UG/L

WELL NOT SAMPLED 01/92.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

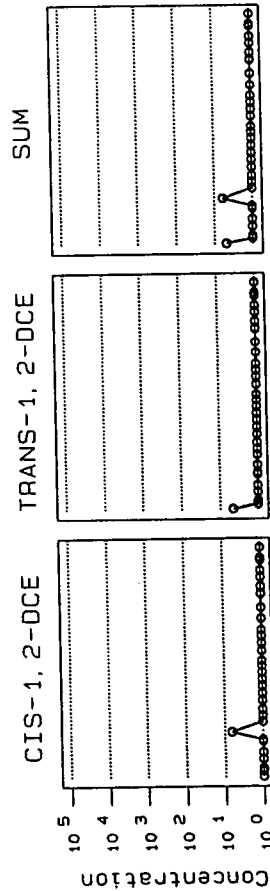
PAGE 15A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason

associates

Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 16 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**to gleason**  
ASSOCIATES  
Environmental and Geotechnical Services

SOURCE: S-24		MCL METHOD	LAB	CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE		SUM	NOTES
DATE SAMPLED	SAMPLE NO.			P=70 UG/L	P=100 UG/L	P=100 UG/L	5 UG/L				
07/10/87	2	170	145	150	465						
09/04/87	25	150	140	170	460						
05/19/88	28	277	230	105	612						
09/25/88	26	75	124	85	284						
12/08/88	1	119	129	66	314						
02/25/89	33	107	146	58.6	312						
06/09/89	26	624	92.7	52.1	255						
09/08/89	16	8240	110	130	285						
09/08/89	17	8240	110	130	286						
12/11/89	10	8240	60.8	79.8	174						
02/28/90	10	8240	81.9	77.9	180						
06/02/90	16	8240	110	150	292						
08/24/90	31	8240	78.1	92.1	209						
10/28/90	18	8240	103	104	312						
02/28/91	10	8240	61.5	63.6	201						
06/01/91	21	8240	95.0	286.0	430						
08/21/91	9	8240	91.7	139	306						
11/13/91	17	8240	89.5	122.0	263						
01/25/92	29	8240	84.9	139	270						
03/31/92	18	8240	63.8	86.3	182						
08/23/92	29	8240	49.3	66.3	139						
02/04/93	15	8240	132	178	341						
02/10/93	6	8240	116	165	309						
05/11/93	4	8240	138	175	349						
08/31/93	9	8240	118	175	346						
12/01/93	9	8240	152	224	422						
02/19/94	39	8240	67.0	92.0	182						
05/05/94	9	8240	63.0	98.1	175						
09/14/94	14	8240	93.6	134	246						



SOURCE: S-24

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date  
- Sampled

TABLE 3

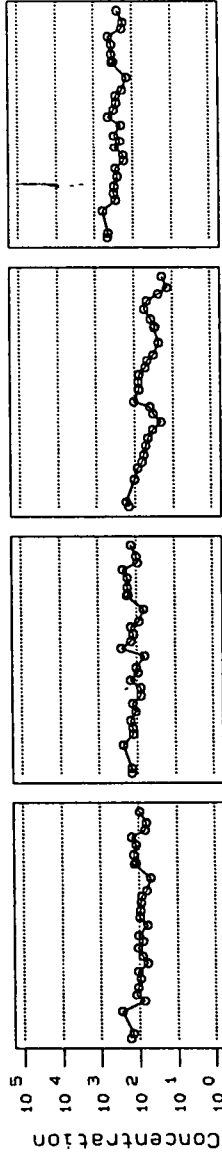
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 16A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**tooleason**  
ASSOCIATES

Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 17 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services

A:\1319-25.VT1. 10-18-1994

SOURCE: S-25		MCL		1,1-DI-CHLORO-ETHANE		1,2-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-CHLORO-ETHANE		TRI-CHLORO-ETHENE		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	METHOD	NPL	UG/L	5	UG/L	P-70	UG/L	P-100	UG/L	P-100	UG/L	5	UG/L	UG/L	UG/L	
07/10/87	1	AQUA		No VOC Detected														
09/03/87	11	AQUA		No VOC Detected														
01/15/88	32	AQUA		No VOC Detected														
02/09/88	20	AQUA		No VOC Detected														
05/18/88	18	AQUA		ND				7.3		ND		ND		ND			7	
09/25/88	25	AQUA		No VOC Detected														
12/08/88	8	AQUA	8240	25.2		38.0		79.0		5.9		6.5		9.6			164	
02/22/89	8	AQUA		No VOC Detected														
02/25/89	32	AQUA		No VOC Detected														
06/09/89	21	AQUA	624	No VOC Detected														
09/09/89	28	AQUA	8240	No VOC Detected														
12/11/89	5	AQUA	8240	No VOC Detected														
03/03/90	39	AQUA	8240	No VOC Detected														
06/01/90	9	AQUA	8240	No VOC Detected														
08/22/90	6	AQUA	8240	No VOC Detected														
12/27/90	5	AQUA	8240	No VOC Detected														
02/28/91	6	AQUA	8240	No VOC Detected														
05/01/91	15	AQUA	8240	No VOC Detected														
08/29/91	7	AQUA	8240	No VOC Detected														
11/13/91	13	AQUA	8240	No VOC Detected														
01/25/92	32	AQUA	8240	No VOC Detected														
03/31/92	16	AQUA	8240	No VOC Detected														
08/22/92	14	AQUA	8240	No VOC Detected														
10/30/92	4	AQUA	8240	No VOC Detected														
02/04/93	10	AQUA	8240	No VOC Detected														
05/11/93	7	AQUA	8240	ND				5.3		ND		ND		ND			5	
08/31/93	5	AQUA	8240	ND				6.0		ND		ND		ND			6	
12/01/93	4	AQUA	8240	ND				10.7		ND		ND		ND			11	
02/17/94	5	AQUA	8240	ND				7.3		ND		ND		ND			7	
05/04/94	7	AQUA	8240	ND				5.5		ND		ND		ND			6	
09/14/94	12	AQUA	8240	No VOC Detected														

;





SOURCE: S-25

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

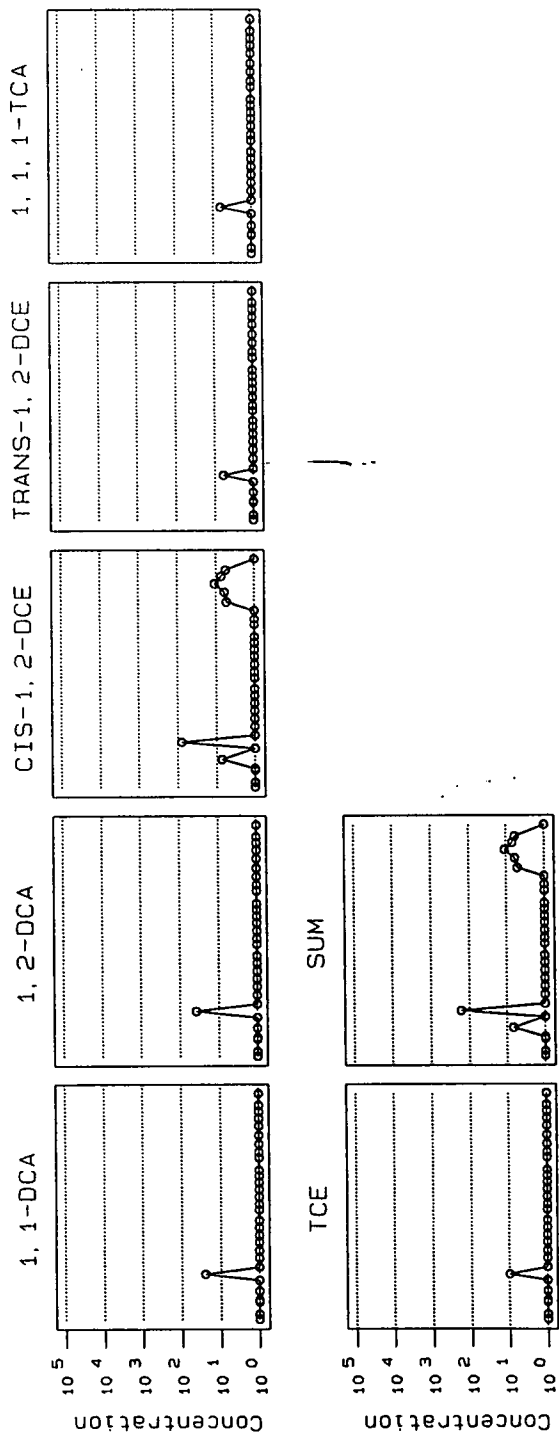
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 17A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taigleason**  
associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 18 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**tooleason**  
associates  
Environmental and Geotechnical Services

SOURCE: S-26				CIS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	P-70	5	UG/L		UG/L			
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L		
07/10/87	7	AQUA		ND	16	16	16	16			
09/03/87	16	AQUA		ND	14	14	14	14			
01/15/88	31	AQUA		ND	17	17	17	17			
02/09/88	18	AQUA		ND	18	18	18	18			
05/19/88	29	AQUA		5.1	15.6	21	21	21			
09/24/88	21	AQUA		ND	17	17	17	17			
02/23/89	18	AQUA		ND	20.1	20	20	20			
06/10/89	29	AQUA	624	ND	17.8	18	18	18			
06/10/89	30	AQUA	624	ND	17.6	18	18	18			
09/08/89	19	AQUA	8240	ND	14.4	14	14	14			
12/11/89	12	AQUA	8240	ND	19.2	19	19	19			
02/28/90	13	AQUA	8240	ND	15.1	15	15	15			
06/01/90	12	AQUA	8240	ND	9.3	9	9	9			
08/24/90	32	AQUA	8240	ND	18.3	18	18	18			
10/28/90	16	AQUA	8240	ND	17.9	18	18	18			
03/01/91	18	AQUA	8240	ND	17.2	17	17	17			
06/01/91	20	AQUA	8240	ND	15.3	15	15	15			
08/29/91	12	AQUA	8240	ND	15.8	16	16	16			
11/13/91	16	AQUA	8240	ND	16.0	16	16	16			
01/23/92	13	AQUA	8240	ND	14.9	15	15	15			
04/01/92	38	AQUA	8240	ND	12.4	12	12	12			
08/23/92	28	AQUA	8240	ND	9.8	10	10	10			
02/04/93	17	AQUA	8240	ND	20.8	21	21	21			
02/10/93	7	AQUA	8240	ND	20.3	20	20	20			
05/11/93	10	AQUA	8240	ND	13.9	14	14	14			
08/31/93	10	AQUA	8240	ND	17.8	18	18	18			
12/01/93	10	AQUA	8240	ND	21.7	22	22	22			
12/01/93	11	AQUA	8240	ND	21.2	21	21	21			
02/18/94	19	AQUA	8240	ND	16.8	17	17	17			
05/05/94	11	AQUA	8240	ND	12.9	13	13	13			
09/14/94	10	AQUA	8240	ND	14.6	15	15	15			



SOURCE: S-26

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date Sampled

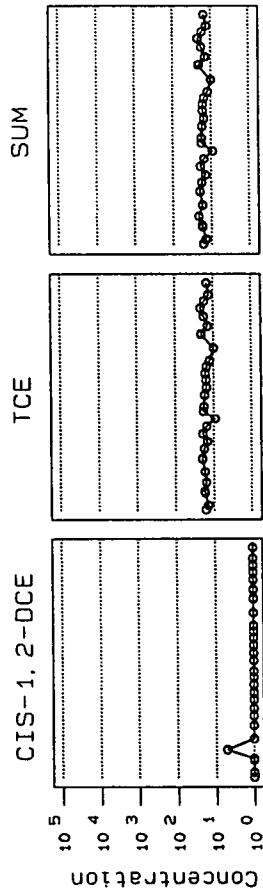
TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 18A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 19 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services

SOURCE: S-27		MCL METHOD	LAB	CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE	SUM	NOTES
DATE SAMPLED	SAMPLE NO.			P=70 UG/L	P=100 UG/L	P=70 UG/L	P=100 UG/L			
07/10/87	8	AQUA		9.4	10	90	109			
09/04/87	26	AQUA		7.5	6	100	116			
01/15/88	33	AQUA		9.8	19	96	125			
02/10/88	32	AQUA		12	16	81	109			
05/19/88	27	AQUA		24.5	18.4	74.6	118			
09/25/88	27	AQUA		11	26	85	122			
12/08/88	2	AQUA		13.3	21	80	114			
02/23/89	12	AQUA		11.1	17	97.1	125			
06/09/89	25	AQUA	624	10.6	12.3	86	109			
09/08/89	18	AQUA	8240	14.8	19.5	78.9	113			
12/11/89	11	AQUA	8240	14.6	20.4	100	135			
02/28/90	11	AQUA	8240	20.4	22.3	83.1	126			
02/28/90	12	AQUA	8240	20	20.9	84.6	126			
06/02/90	17	AQUA	8240	17.4	21.6	84.5	124			
08/24/90	23	AQUA	8240	17.5	17.9	78.0	113			
10/28/90	17	AQUA	8240	20.0	20.9	91.4	132			
02/28/91	9	AQUA	8240	18.1	12.4	76.4	107			
06/01/91	22	AQUA	8240	22.5	60.0	68.7	151			
08/29/91	8	AQUA	8240	14.8	21.9	56.0	93			
11/13/91	18	AQUA	8240	20.0	23.1	54.1	97			
01/25/92	30	AQUA	8240	17.1	18.9	55.2	91			
03/31/92	19	AQUA	8240	16.0	17.9	57.0	91			
08/23/92	25	AQUA	8240	16.5	16.8	58.9	92			
02/04/93	15	AQUA	8240	23.5	19.8	75.3	119			
02/10/93	5	AQUA	8240	28.4	24.2	90.2	143			
05/11/93	5	AQUA	8240	21.4	21.8	58.2	101			
08/31/93	8	AQUA	8240	21.1	21.7	46.5	89			
12/01/93	8	AQUA	8240	59.2	40.3	59.2	159			
02/17/94	6	AQUA	8240	27.3	23.8	ND	51			
05/05/94	10	AQUA	8240	21.1	19.0	34.8	75			
09/14/94	13	AQUA	8240	20.7	16.7	44.0	81			





SOURCE: S-27

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULTS FOR 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date  
Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

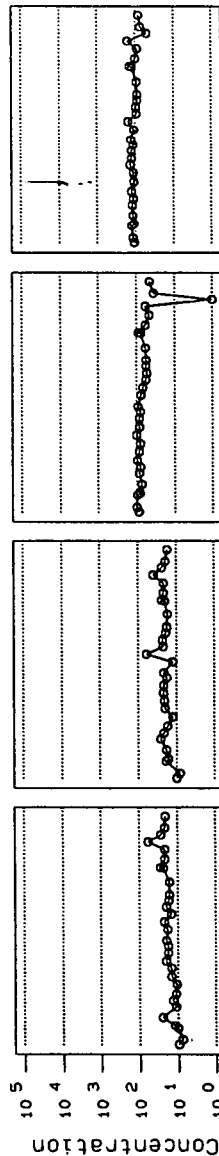
PAGE 19A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason

ASSOCIATES

Environmental and Geotechnical Services





NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 3

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 20 OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Associates

Environmental and Geotechnical Services

SOURCE: FIELD BLANK		CHLORO-FORM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL	
			METHOD	
06/07/89	1	AQUA	624	ND
06/08/89	8	AQUA	624	ND
06/09/89	18	AQUA	624	ND
06/10/89	28	AQUA	624	ND
09/07/89	1	AQUA	8240	ND
09/08/89	12	AQUA	8240	ND
09/09/89	21	AQUA	8240	ND
09/10/89	32	AQUA	8240	ND
12/11/89	1	AQUA	8240	ND
12/12/89	13	AQUA	8240	ND
12/13/89	26	AQUA	8240	ND
12/14/89	35	AQUA	8240	ND
02/27/90	1	AQUA	8240	ND
02/28/90	14	AQUA	8240	ND
03/02/90	24	AQUA	8240	ND
03/03/90	1	AQUA	8240	ND
03/03/90	38	AQUA	8240	ND
06/02/90	13	AQUA	8240	ND
06/03/90	26	AQUA	8240	ND
06/04/90	36	AQUA	8240	ND
08/22/90	1	AQUA	8240	7.3
08/23/90	18	AQUA	8240	5.3
08/24/90	30	AQUA	8240	ND
10/27/90	1	AQUA	8240	9.5
10/28/90	15	AQUA	8240	11.3
10/29/90	25	AQUA	8240	11.7
10/31/90	38	AQUA	8240	8.4
02/28/91	1	AQUA	8240	ND
03/01/91	17	AQUA	8240	25.7
03/04/91	29	AQUA	8240	21.6
05/30/91	1	AQUA	8240	11.9
06/01/91	14	AQUA	8240	11.5
08/28/91	1	AQUA	8240	20.9
08/31/91	25	AQUA	8240	19.1
11/12/91	1	AQUA	8240	ND
11/13/91	15	AQUA	8240	ND
11/14/91	31	AQUA	8240	ND



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULT FOR 1 SAMPLE FROM 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date  
 Sampled

TABLE 3

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS

PAGE 21 OF 21

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX S8IN 084



associates  
 Environmental and Geotechnical Services

SOURCE: FIELD BLANK (CONT'D)		CHLORO-FORM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	NPL UG/L
01/23/92	11	AQUA	8240	ND
01/25/92	26	AQUA	8240	ND
03/30/92	1	AQUA	8240	ND
03/31/92	13	AQUA	8240	ND
04/01/92	24	AQUA	8240	ND
04/01/92	37	AQUA	8240	12.8
04/02/92	44	AQUA	8240	17.8
08/20/92	1	AQUA	8240	13.3
08/22/92	13	AQUA	8240	14.0
08/23/92	26	AQUA	8240	14.0
10/31/92	15	AQUA	8240	29.1
10/31/92	26	AQUA	8240	24.9
11/02/92	41	AQUA	8240	14.8
02/03/93	1	AQUA	8240	38.3
02/04/93	14	AQUA	8240	38.2
02/05/93	28	AQUA	8240	32.7
02/06/93	39	AQUA	8240	30.7
02/10/93	4	AQUA	8240	25.1
05/11/93	2	AQUA	8240	ND
05/11/93	14	AQUA	8240	ND
05/11/93	30	AQUA	8240	ND
08/31/93	3	AQUA	8240	ND
08/31/93	17	AQUA	8240	ND
09/02/93	29	AQUA	8240	ND
12/01/93	3	AQUA	8240	ND
12/02/93	13	AQUA	8240	ND
12/03/93	27	AQUA	8240	ND
02/17/94	10	AQUA	8240	ND
02/18/94	24	AQUA	8240	ND
02/19/94	32	AQUA	8240	ND
05/04/94	1	AQUA	8240	ND
05/05/94	14	AQUA	8240	ND
05/06/94	26	AQUA	8240	ND
05/07/94	38	AQUA	8240	ND
09/12/94	3	AQUA	8240	ND
09/15/94	21	AQUA	8240	ND
09/16/94	41	AQUA	8240	ND



SOURCE: FIELD BLANK  
(CONT'D)

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

NO RESULT FOR 1 SAMPLE FROM 10/92 SAMPLING EPISODE DUE TO LAB ERROR.

PARAMETER

o - Date  
Sampled

TABLE 3

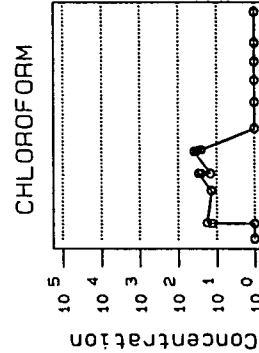
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 21A OF 21

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**footeason**  
associates

Environmental and Geotechnical Services







OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 4

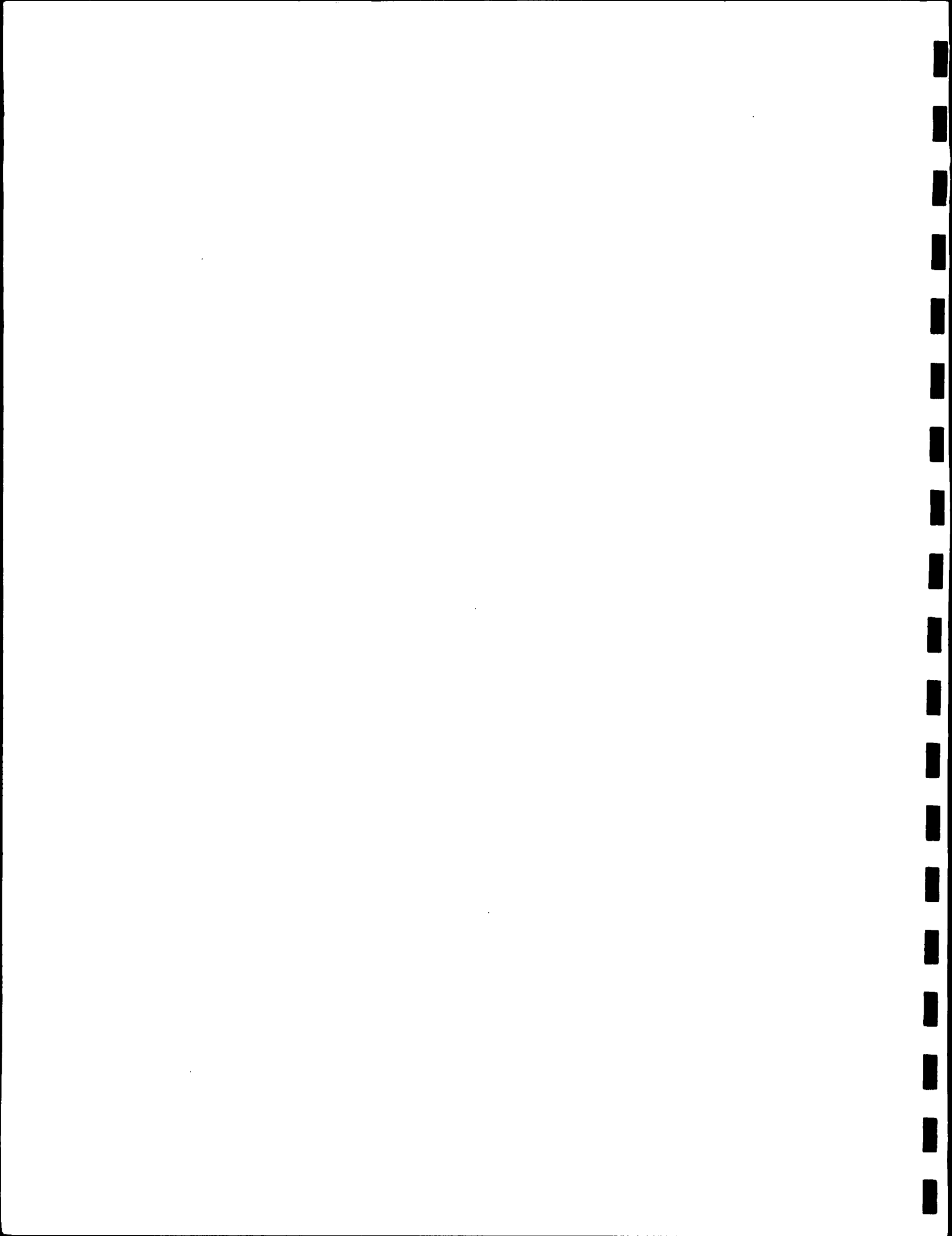
DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 1 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taqclean**  
associates  
Environmental and Geotechnical Services

SOURCE: 1-D		TRI-CHLORO-ETHENE		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	5 UG/L	20 UG/L	
01/08/87	13	AQUA		No VOC Detected		
02/12/87	1	AQUA		19.5	20	
06/05/87	13	AQUA		12	12	
06/05/87	22	AQUA		29	29	
01/14/88	13	AQUA		5.8	6	
02/09/88	16	AQUA		11	11	
05/18/88	11	AQUA		No VOC Detected		
09/23/88	11	AQUA		No VOC Detected		
12/11/88	33	AQUA		No VOC Detected		
02/24/89	23	AQUA		No VOC Detected		
06/08/89	7	AQUA	624	No VOC Detected		
09/08/89	11	AQUA	8240	No VOC Detected		
12/14/89	35	AQUA	8240	No VOC Detected		
02/27/90	2	AQUA	8240	No VOC Detected		
06/01/90	4	AQUA	8240	No VOC Detected		
08/23/90	13	AQUA	8240	No VOC Detected		
10/29/90	26	AQUA	8240	No VOC Detected		
03/01/91	15	AQUA	8240	No VOC Detected		
05/31/91	7	AQUA	8240	No VOC Detected		
08/30/91	17	AQUA	8240	No VOC Detected		
11/13/91	11	AQUA	8240	No VOC Detected		
01/23/92	9	AQUA	8240	No VOC Detected		
04/01/92	31	AQUA	8240	No VOC Detected		
08/21/92	6	AQUA	8240	No VOC Detected		
11/02/92	37	AQUA	8240	No VOC Detected		
02/05/93	25	AQUA	8240	No VOC Detected		
05/12/93	22	AQUA	8240	No VOC Detected		
09/01/93	22	AQUA	8240	No VOC Detected		
12/02/93	16	AQUA	8240	No VOC Detected		
02/18/94	17	AQUA	8240	No VOC Detected		
05/06/94	24	AQUA	8240	No VOC Detected		
09/15/94	19	AQUA	8240	No VOC Detected		



SOURCE: 1-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

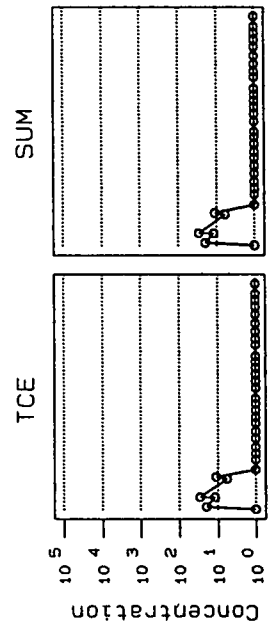
PAGE 1A OF 7

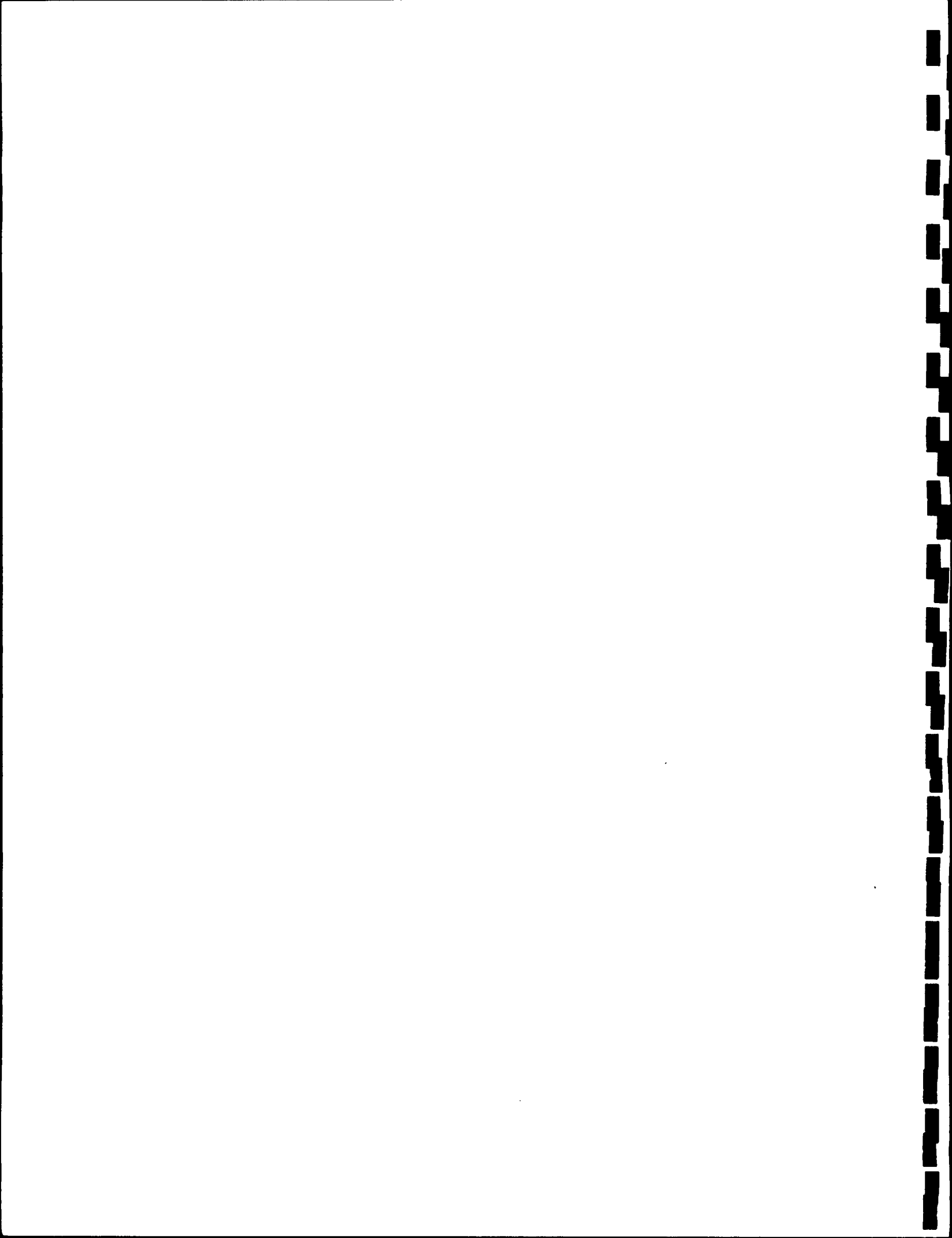
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



associates

Environmental and Geotechnical Services





NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER  
 o = Date Sampled

TABLE 4

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 2 OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084



SOURCE: 2-D		1,2-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	5 UG/L	P-70 UG/L	5 UG/L	5 UG/L	UG/L	UG/L		
12/18/86	2	AQUA		20.4	ND	ND	ND	20	20		
06/05/87	11	AQUA		25	ND	ND	ND	25	25		
09/03/87	19	AQUA		24	ND	ND	ND	24	24		
01/15/88	34	AQUA		34	ND	ND	ND	34	34		
02/09/88	11	AQUA		25	ND	ND	ND	25	25		
05/19/88	24	AQUA		34.2	ND	ND	ND	34	34		
09/24/88	20	AQUA		26	ND	ND	ND	26	26		
12/10/88	27	AQUA		22	ND	ND	ND	22	22		
12/10/88	28	AQUA		21.4	ND	ND	ND	21	21		
02/24/89	19	AQUA		24.8	13.4	ND	ND	38	38		
06/08/89	16	AQUA	824	26.6	22.4	ND	ND	49	49		
09/09/89	31	AQUA	8240	22.6	24.6	ND	ND	47	47		
12/13/89	30	AQUA	8240	21	14.6	ND	ND	36	36		
03/01/90	20	AQUA	8240	23.8	31.8	ND	ND	56	56		
06/03/90	20	AQUA	8240	20.8	26.3	ND	ND	47	47		
08/23/90	19	AQUA	8240	16.0	17.7	ND	ND	34	34		
10/29/90	27	AQUA	8240	20.6	26.8	ND	ND	47	47		
10/29/90	28	AQUA	8240	19.4	25.1	ND	ND	45	45		
03/02/91	26	AQUA	8240	14.7	13.7	ND	ND	28	28		
05/30/91	4	AQUA	8240	14.7	5.1	ND	ND	20	20		
08/31/91	35	AQUA	8240	15.0	14.6	ND	ND	30	30		
11/14/91	41	AQUA	8240	16.0	12.7	ND	ND	29	29		
01/24/92	25	AQUA	8240	16.2	9.3	ND	ND	26	26		
04/02/92	46	AQUA	8240	17.4	12.2	ND	ND	30	30		
08/21/92	7	AQUA	8240	23.6	13.1	ND	ND	37	37		
10/31/92	33	AQUA	8240	ND	9.4	16.0	16.0	25	25		
02/05/93	31	AQUA	8240	22.9	21.3	ND	ND	44	44		
05/12/93	37	AQUA	8240	17.8	11.1	ND	ND	29	29		
09/02/93	28	AQUA	8240	20.0	11.1	ND	ND	31	31		
12/03/93	31	AQUA	8240	21.2	15.7	ND	ND	37	37		
02/18/94	26	AQUA	8240	19.1	12.6	ND	ND	32	32		
05/06/94	30	AQUA	8240	13.9	10.6	ND	ND	25	25		
09/13/94	5	AQUA	8240	16.6	11.3	ND	ND	28	28		



SOURCE: 2-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o - Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 2A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason  
Associates

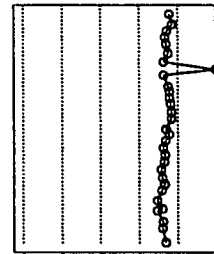
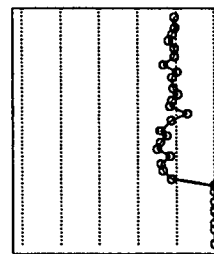
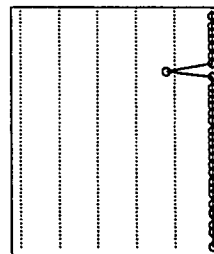
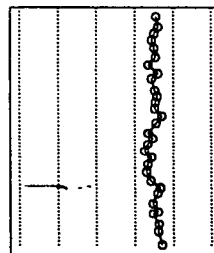
Environmental and Geotechnical Services

SUM

TCE

CIS-1, 2-DCE

1, 2-DCA



Concentration





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = TOLUENE WAS NOT DETECTED IN 5 PREVIOUS SAMPLING EPISODES. A RESAMPLING ON 03/14/88 DETECTED NO TOLUENE. BASED ON PREVIOUS DATA & THE RETEST, WE CONCLUDED THAT THE 02/09/88 SAMPLING DATA ARE ANOMALOUS.

PARAMETER

o = Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 3 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
Associates

Environmental and Geotechnical Services

e:\t4\5-D.VT1. 10-25-1994

SOURCE: 5-D		CIS-1, 2-DICHLORO-ETHENE		TOLUENE		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	P-70 U6/L	P-2000 U6/L	U6/L	U6/L	
12/18/86	4	AQUA		10	ND		10	
12/18/86	5	AQUA		10	ND		10	
02/11/87	4	AQUA		No VOC Detected				
06/05/87	19	AQUA		No VOC Detected				
09/03/87	15	AQUA		No VOC Detected				
01/14/88	12	AQUA		No VOC Detected				
02/09/88	21	AQUA		ND	6.7		7	A
03/14/88	2	AQUA		6.1	ND		6	
05/18/88	14	AQUA		10.4	ND		10	
09/23/88	15	AQUA		No VOC Detected				
12/08/88	9	AQUA		No VOC Detected				
02/25/89	31	AQUA		5.4	ND		5	
06/09/89	23	AQUA	824	No VOC Detected				
09/10/89	36	AQUA	8240	5.5	ND		6	
12/11/89	8	AQUA	8240	7.5	ND		8	
02/28/90	9	AQUA	8240	6.2	ND		6	
06/02/90	14	AQUA	8240	6.4	ND		6	
08/24/90	29	AQUA	8240	No VOC Detected				
10/28/90	21	AQUA	8240	5.7	ND		6	
03/03/91	27	AQUA	8240	No VOC Detected				
05/30/91	2	AQUA	8240	No VOC Detected				
08/28/91	2	AQUA	8240	No VOC Detected				
11/12/91	2	AQUA	8240	No VOC Detected				
01/21/92	1	AQUA	8240	No VOC Detected				
03/30/92	7	AQUA	8240	No VOC Detected				
08/20/92	2	AQUA	8240	No VOC Detected				
10/30/92	12	AQUA	8240	No VOC Detected				
02/03/93	2	AQUA	8240	No VOC Detected				
05/11/93	1	AQUA	8240	No VOC Detected				
08/31/93	11	AQUA	8240	No VOC Detected				
12/01/93	1	AQUA	8240	No VOC Detected				
02/16/94	2	AQUA	8240	No VOC Detected				
05/04/94	2	AQUA	8240	No VOC Detected				
09/12/94	1	AQUA	8240	No VOC Detected				



SOURCE: 5-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A - TOLUENE WAS NOT DETECTED IN 5 PREVIOUS SAMPLING EPISODES. A RESAMPLING ON 03/14/88 DETECTED NO TOLUENE. BASED ON PREVIOUS DATA & THE RETEST, WE CONCLUDED THAT THE 02/09/88 SAMPLING DATA ARE ANOMALOUS.

PARAMETER

o - Date Sampled

TABLE 4

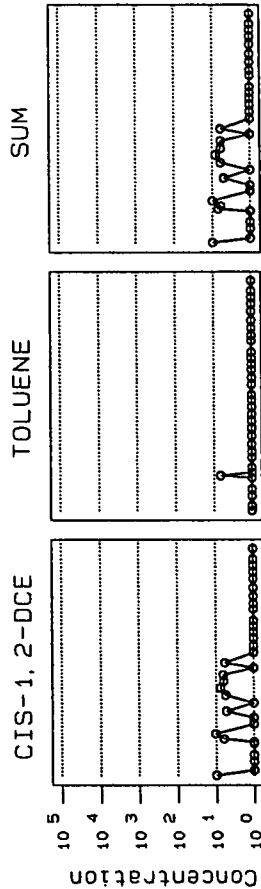
DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 3A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
Associates

Environmental and Geotechnical Services





SOURCE: 7-D

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = NO U.S. EPA PUBLISHED LEVEL  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER  
 o - Date Sampled

TABLE 4

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 4 OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**torgleason**  
 associates  
 Environmental and Geotechnical Services

8: \t47-D.VT1. 11-01-1994

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		TRI-CHLORO-ETHENE		VINYL CHLORIDE	SUM	NOTES		
				P=70 U6/L	P=100 U6/L	P=100 U6/L	U6/L	U6/L	U6/L					
07/10/87	3	AQUA		250	17	19				ND	286			
07/10/87	4	AQUA		250	16	17				ND	283			
09/04/87	29	AQUA		220	14.0	20				ND	254			
01/15/88	30	AQUA		142	10	17				ND	169			
02/09/88	15	AQUA		148	20	14				ND	182			
05/19/88	22	AQUA		210	ND	16.6				ND	227			
09/24/88	18	AQUA		52	7.6	9.2				ND	69			
12/10/88	31	AQUA		No VOC Detected										
02/25/89	34	AQUA		105	7	ND				12.6	126			
06/05/89	13	AQUA	824	110	5.7	ND				ND	116			
09/10/89	33	AQUA	8240	110	7.1	ND				ND	117			
12/11/89	37	AQUA	8240	40.2	ND	ND				ND	40			
03/02/90	34	AQUA	8240	150	8	ND				ND	158			
06/03/90	21	AQUA	8240	91.9	ND	ND				ND	92			
08/23/90	14	AQUA		54.6	ND	ND				ND	55			
10/29/90	29	AQUA	8240	70.5	ND	ND				ND	71			
03/01/91	19	AQUA	8240	59.3	ND	ND				ND	59			
03/01/91	20	AQUA	8240	77.1	ND	ND				ND	77			
05/31/91	10	AQUA	8240	36.9	ND	ND				ND	37			
08/30/91	24	AQUA	8240	35.1	ND	ND				ND	48			
11/14/91	34	AQUA	8240	41.0	ND	ND				ND	41			
01/25/92	38	AQUA	8240	40.2	ND	ND				ND	40			
04/02/92	40	AQUA	8240	70.3	ND	ND				24.0	94			
08/21/92	8	AQUA	8240	69.7	7.1	5.7				12.2	95			
10/31/92	21	AQUA	8240	52.8	ND	ND				ND	53			
02/05/93	32	AQUA	8240	85.8	6.8	5.6				15.2	115			
05/12/93	25	AQUA	8240	77.4	11.6	ND				ND	89			
09/02/93	30	AQUA	8240	59.2	11.1	17.9				ND	88			
12/02/93	22	AQUA	8240	60.9	13.1	17.7				ND	92			
02/18/94	20	AQUA	8240	17.1	ND	5.2				ND	22			
05/06/94	25	AQUA	8240	38.3	ND	ND				ND	38			
09/15/94	20	AQUA	8240	8.8	ND	ND				ND	9			



SOURCE: 7-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

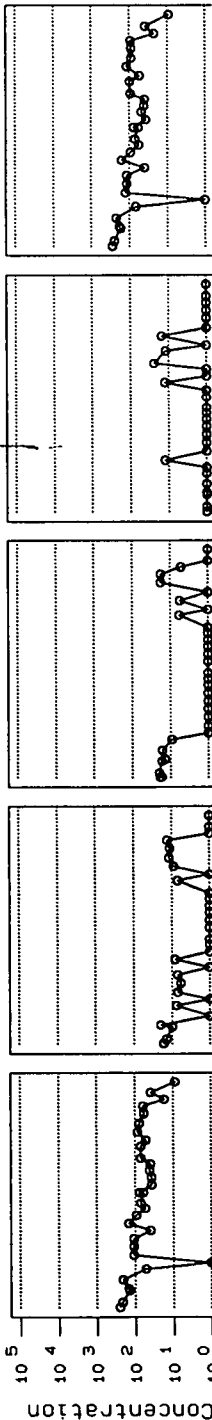
PARAMETER

o - Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 4A OF 7



SUM

**talgeason**  
associates

Environmental and Geotechnical Services

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCPX SBIN 084









SOURCE: 8-0

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

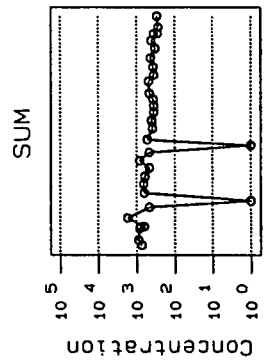
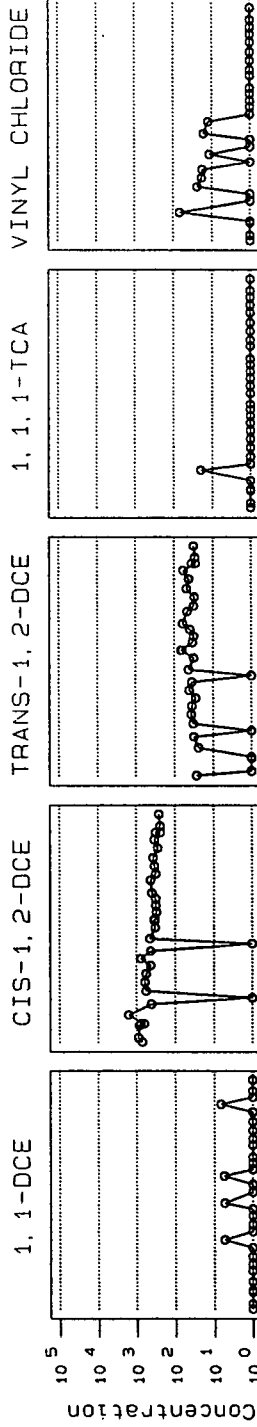
TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 5A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**Tagleason**  
Associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

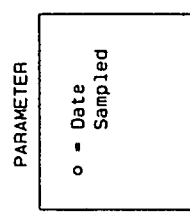


TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 6 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



SOURCE: D-4		VINYL CHLORIDE		OTHER VOC		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	METHOD	MCL	US/L	US/L	US/L	
10/01/86	11	AQUA			No VOC Detected			
02/12/87	13	AQUA			No VOC Detected			
05/05/87	8	AQUA			No VOC Detected			
09/03/87	8	AQUA			No VOC Detected			
01/13/88	4	AQUA			No VOC Detected			
01/13/88	5	AQUA			No VOC Detected			
02/08/88	7	AQUA			No VOC Detected			
02/08/88	8	AQUA			No VOC Detected			
05/18/88	10	AQUA			No VOC Detected			
09/22/88	10	AQUA			No VOC Detected			
12/08/88	3	AQUA			No VOC Detected			
02/23/89	14	AQUA			ND	140	140	
05/10/89	34	AQUA		524	No VOC Detected			
09/08/89	14	AQUA		8240	No VOC Detected			
12/13/89	29	AQUA		8240	No VOC Detected			
02/27/90	3	AQUA		8240	No VOC Detected			
05/01/90	5	AQUA		8240	No VOC Detected			
08/22/90	3	AQUA		8240	No VOC Detected			
10/27/90	8	AQUA		8240	No VOC Detected			
02/28/91	2	AQUA		8240	No VOC Detected			
05/31/91	8	AQUA		8240	No VOC Detected			
08/29/91	13	AQUA		8240	No VOC Detected			
11/13/91	30	AQUA		8240	No VOC Detected			
01/22/92	4	AQUA		8240	No VOC Detected			
03/30/92	11	AQUA		8240	No VOC Detected			
08/22/92	19	AQUA		8240	No VOC Detected			
10/31/92	25	AQUA		8240	No VOC Detected			
02/03/93	4	AQUA		8240	14.7	ND	15	
05/12/93	28	AQUA		8240	14.9	ND	15	
09/02/93	33	AQUA		8240	11.7	ND	12	
12/02/93	18	AQUA		8240	16.5	ND	17	
02/17/94	8	AQUA		8240	16.3	ND	16	
05/05/94	16	AQUA		8240	10.3	ND	10	
05/13/94	4	AQUA		8240	10.4	ND	10	



SOURCE: D-4

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - ND U.S EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

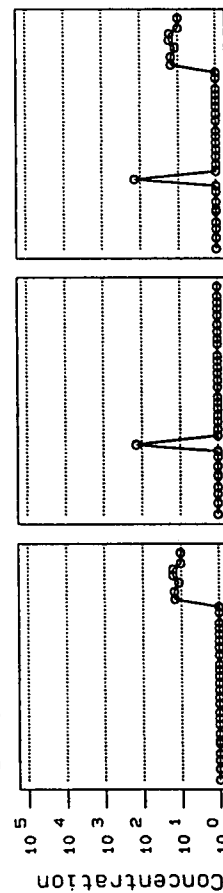
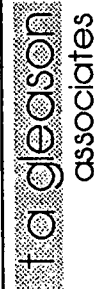
o - Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 6A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



80





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

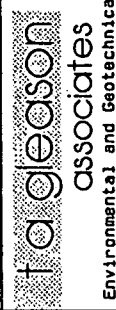
VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER  
o = Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 7 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084



SOURCE: D-7		1,2-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		VINYL CHLORIDE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	5 UG/L	P=70 UG/L	P=100 UG/L	P=100 UG/L	2 UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
10/01/86	10	AQUA		689	ND	ND	20.2	ND	709				
11/09/86	26	AQUA		437	ND	ND	15.7	ND	453				
01/07/87	9	AQUA		902	40	ND	ND	ND	942				
02/12/87	14	AQUA		812	ND	30	ND	ND	842				
06/05/87	9	AQUA		890	33	ND	ND	ND	923				
06/05/87	10	AQUA		900	31	ND	ND	ND	931				
09/03/87	17	AQUA		800	ND	ND	ND	ND	800				
09/03/87	18	AQUA		750	ND	ND	ND	ND	750				
01/14/88	14	AQUA		710	30	ND	ND	ND	740				
02/08/88	10	AQUA		680	ND	ND	ND	ND	680				
05/18/88	20	AQUA		1165	48.2	ND	ND	19.1	1232				
09/24/88	29	AQUA		780	26	ND	ND	ND	805				
12/09/88	16	AQUA		483	22.1	ND	ND	10	515				
12/09/88	17	AQUA		435	21.9	ND	ND	10	467				
02/24/89	21	AQUA		380	16.4	ND	ND	ND	396				
06/10/89	36	AQUA	624	310	15.5	ND	ND	ND	326				
09/09/89	30	AQUA	8240	300	14	ND	ND	ND	314				
12/12/89	24	AQUA	8240	290	10.9	ND	ND	ND	301				
03/01/90	22	AQUA	8240	340	15.3	ND	ND	ND	355				
06/03/90	27	AQUA	8240	340	11.8	ND	ND	ND	352				
08/23/90	17	AQUA	8240	284	9.3	ND	ND	ND	293				
10/27/90	10	AQUA	8240	437	12.9	ND	ND	ND	450				
03/01/91	16	AQUA	8240	239	17.7	ND	ND	ND	257				
06/01/91	19	AQUA	8240	227	ND	ND	ND	ND	227				
08/31/91	29	AQUA	8240	151	6.7	ND	ND	ND	158				
11/13/91	14	AQUA	8240	123	8.4	ND	ND	ND	131				
01/23/92	10	AQUA	8240	149	5.5	ND	ND	ND	155				
04/01/92	39	AQUA	8240	78.5	ND	ND	ND	ND	79				
08/23/92	30	AQUA	8240	82.1	ND	ND	ND	ND	82				
10/30/92	14	AQUA	8240	60.9	ND	ND	ND	ND	61				
02/03/93	6	AQUA	8240	69.4	ND	ND	ND	ND	69				
05/12/93	38	AQUA	8240	34.9	ND	ND	ND	ND	35				
09/31/93	19	AQUA	8240	20.4	ND	ND	ND	ND	20				
12/03/93	30	AQUA	8240	11.0	ND	ND	ND	ND	11				
02/17/94	11	AQUA	8240	13.4	ND	ND	ND	ND	13				
02/17/94	12	AQUA	8240	13.6	ND	ND	ND	ND	14				
05/05/94	15	AQUA	8240	19.0	ND	ND	ND	ND	19				
05/14/94	15	AQUA	8240	19.4	ND	ND	ND	ND	19				
05/14/94	16	AQUA	8240	19.9	ND	ND	ND	ND	20				



SOURCE: D-7

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

PARAMETER

o = Date Sampled

TABLE 4

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 7A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason

ASSOCIATES

Environmental and Geotechnical Services

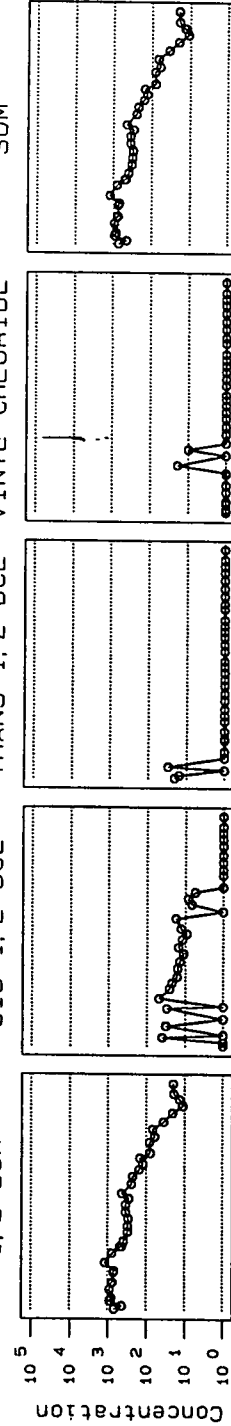
SUM

VINYL CHLORIDE

TRANS-1, 2-DCE

CIS-1, 2-DCE

1, 2-DCA





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = METHYLENE CHLORIDE 6.5 UG/L  
WELL NOT SAMPLED AUGUST, 1993 DUE TO INOPERATIVE PUMP.

PARAMETER

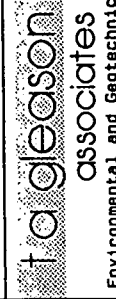
o = Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 1 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



SOURCE: E-3		DATE SAMPLED		SAMPLE NO.	LAB	METHOD	BENZENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	ETHYL BENZENE	TOLUENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	SUM	NOTES
			UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
		03/25/87	72	56	10	10	53	ND	201						
		01/14/88	60	25	9.4	9.2	48	ND	152						
		02/10/88	60	28	11	8.5	61	70	237						
		05/19/88	43	26.6	7.8	ND	86	ND	163						
		09/25/88	51	28	5.6	ND	28	11	124						
		12/09/88	30.4	21.6	ND	ND	84.2	ND	116						
		02/24/89	42.7	26.8	ND	ND	74	7.2	151						
		06/07/89	92.1	18.7	ND	ND	45.8	6.9	164						
		09/07/89	46.3	18.1	ND	ND	52.4	7.8	134						
		12/12/89	77.6	24.4	7.4	24.1	32.5	6	172						
		03/01/90	72.3	20.1	7.4	25.1	59.2	7	191						
		06/04/90	56.7	23.3	ND	ND	50.6	8	139						
		09/24/90	30.6	13.8	ND	ND	32.0	5.2	82						
		08/24/90	30.9	13.7	ND	ND	31.9	5.1	82						
		10/30/90	31.5	20.2	ND	ND	51.4	6.0	109						
		03/04/91	15.8	13.5	ND	ND	35.9	5.3	71						
		06/03/91	15.8	12.2	ND	ND	9.7	ND	38						
		08/30/91	11.7	8.7	ND	ND	20.0	ND	40						
		11/14/91	11.9	13.8	ND	ND	30.5	ND	56						
		01/24/92	13.3	ND	ND	ND	27.2	ND	41						
		03/30/92	14.5	9.7	ND	ND	22.1	ND	46						
		08/24/92	14.3	ND	ND	ND	17.7	8.7	41						
		11/02/92	10.7	ND	ND	ND	9.1	ND	19						
		02/09/93	8.7	ND	ND	ND	ND	ND	9						
		06/18/93	8.4	ND	9.1	ND	21.4	5.1	44						
		12/11/93	ND	ND	ND	ND	ND	ND	ND						
		05/09/94	ND	7.9	ND	ND	12.4	ND	20						
		09/15/94	ND	6.6	ND	ND	21.4	ND	28						



SOURCE: E-3

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = METHYLENE CHLORIDE 6.5 UG/L

WELL NOT SAMPLED AUGUST, 1993 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

TABLE 5

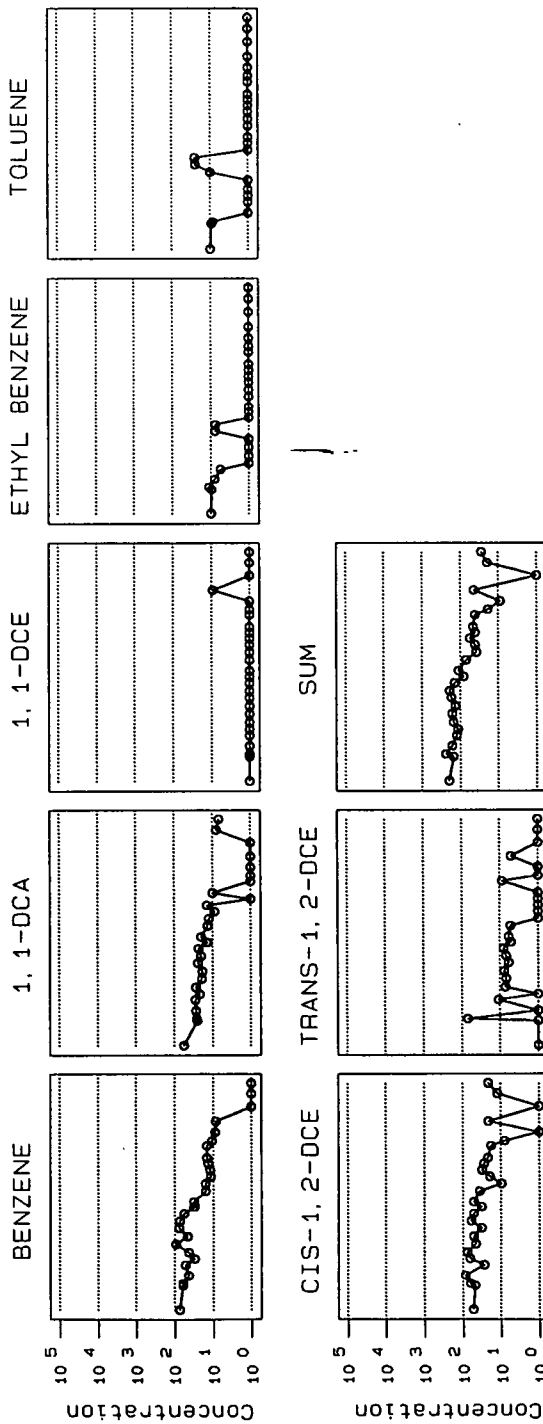
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 1A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 0B4

**taleason**  
associates

Environmental and Geotechnical Services







NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = METHYLENE CHLORIDE 6.5 UG/L  
WELL NOT SAMPLED AUGUST, 1993 DUE TO INOPERATIVE PUMP.

PARAMETER  
o = Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 2 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084



Environmental and Geotechnical Services  
A:\15\B-E-3.VT1, 10-26-1994

SOURCE: E-3 (CONT'D)		DATE SAMPLED	SAMPLE NO.	LAB	METHOD	CARBON TETRA-CHLORIDE UG/L	TRI-CHLORO-ETHENE UG/L	VINYL CHLORIDE UG/L	TOTAL XYLENES UG/L	OTHER VOC UG/L	SUM UG/L	NOTES
		03/25/87	7	AGUA		ND	ND	ND	23	ND	23	
		01/14/88	19	AGUA		ND	ND	ND	ND	ND	0	
		02/10/88	29			ND	ND	ND	ND	ND	0	
		05/19/88	34		8240	29.5	22.9	18.3	15	ND	85	
		09/25/88	32	AGUA		ND	ND	ND	9.2	ND	9	
		12/09/88	21	AGUA		41.7	ND	26.7	ND	489	557	
		02/24/89	28	AGUA		49.5	ND	26.3	ND	520	596	
		06/07/89	5	AGUA	624	100	ND	19.2	7.1	ND	126	
		09/07/89	8	AGUA	8240	ND	ND	29.2	7.6	400	437	
		12/12/89	20	AGUA	8240	ND	ND	ND	13.6	670	684	
		03/01/90	18	AGUA	8240	74.4	ND	16.8	10.8	520	722	
		06/04/90	31	AGUA	8240	51.2	ND	22.7	6.3	550	630	
		08/24/90	26	AGUA	8240	34.7	ND	14.4	ND	ND	49	
		09/24/90	27	AGUA	8240	33.3	ND	14.0	ND	ND	47	
		10/30/90	36	AGUA	8240	66.5	ND	35.9	ND	ND	102	
		03/04/91	34	AGUA	8240	ND	ND	ND	ND	ND	0	
		06/03/91	35	AGUA	8240	ND	ND	13.1	ND	ND	13	A
		08/30/91	20	AGUA	8240	ND	ND	13.5	ND	ND	14	
		11/14/91	37	AGUA	8240	ND	ND	ND	ND	ND	0	
		01/24/92	17	AGUA	8240	ND	ND	ND	ND	ND	0	
		03/30/92	5	AGUA	8240	ND	ND	ND	ND	ND	0	
		08/24/92	34	AGUA	8240	12.0	ND	12.2	ND	ND	24	
		11/02/92	44	AGUA	8240	14.7	ND	ND	ND	ND	15	
		02/09/93	41	AGUA	8240	ND	ND	ND	ND	ND	0	
		06/18/93	1	AGUA	8240	ND	ND	17.2	ND	ND	17	
		12/11/93	40	AGUA	8240	ND	ND	ND	ND	ND	ND	
		05/09/94	43	AGUA	8240	17.2	ND	10.9	ND	ND	28	
		09/16/94	42	AGUA	8240	ND	ND	14.1	ND	ND	14	



SOURCE: E-3  
(CONT'D)

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = METHYLENE CHLORIDE 6.5 UG/L

WELL NOT SAMPLED AUGUST, 1993 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

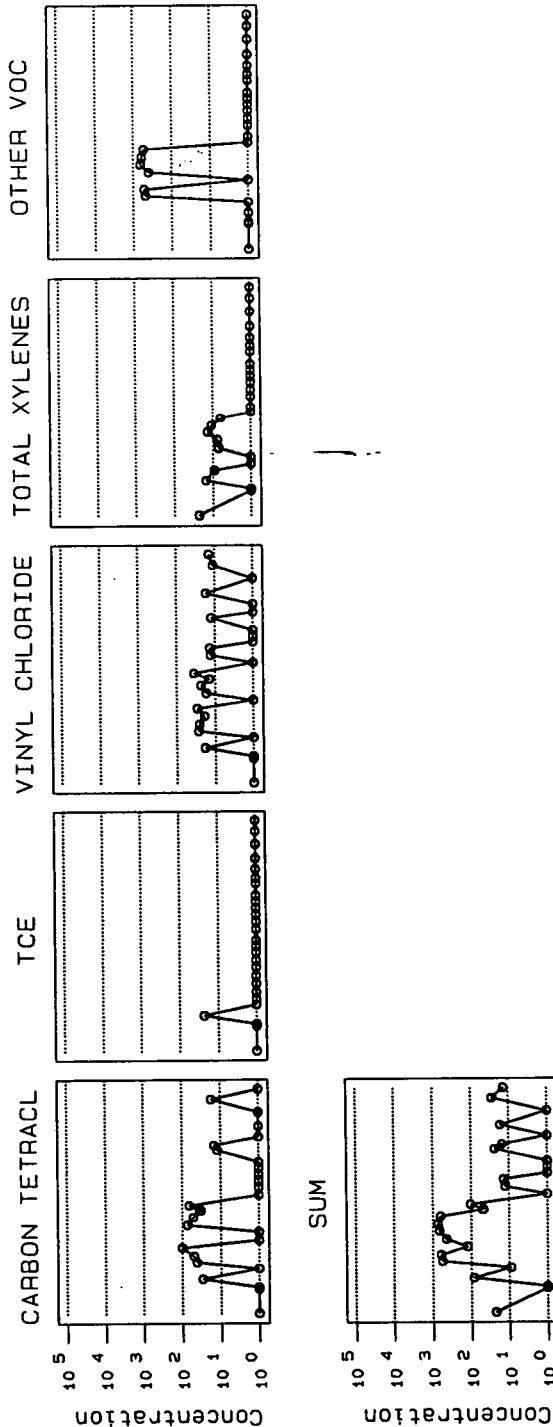
TABLE 5

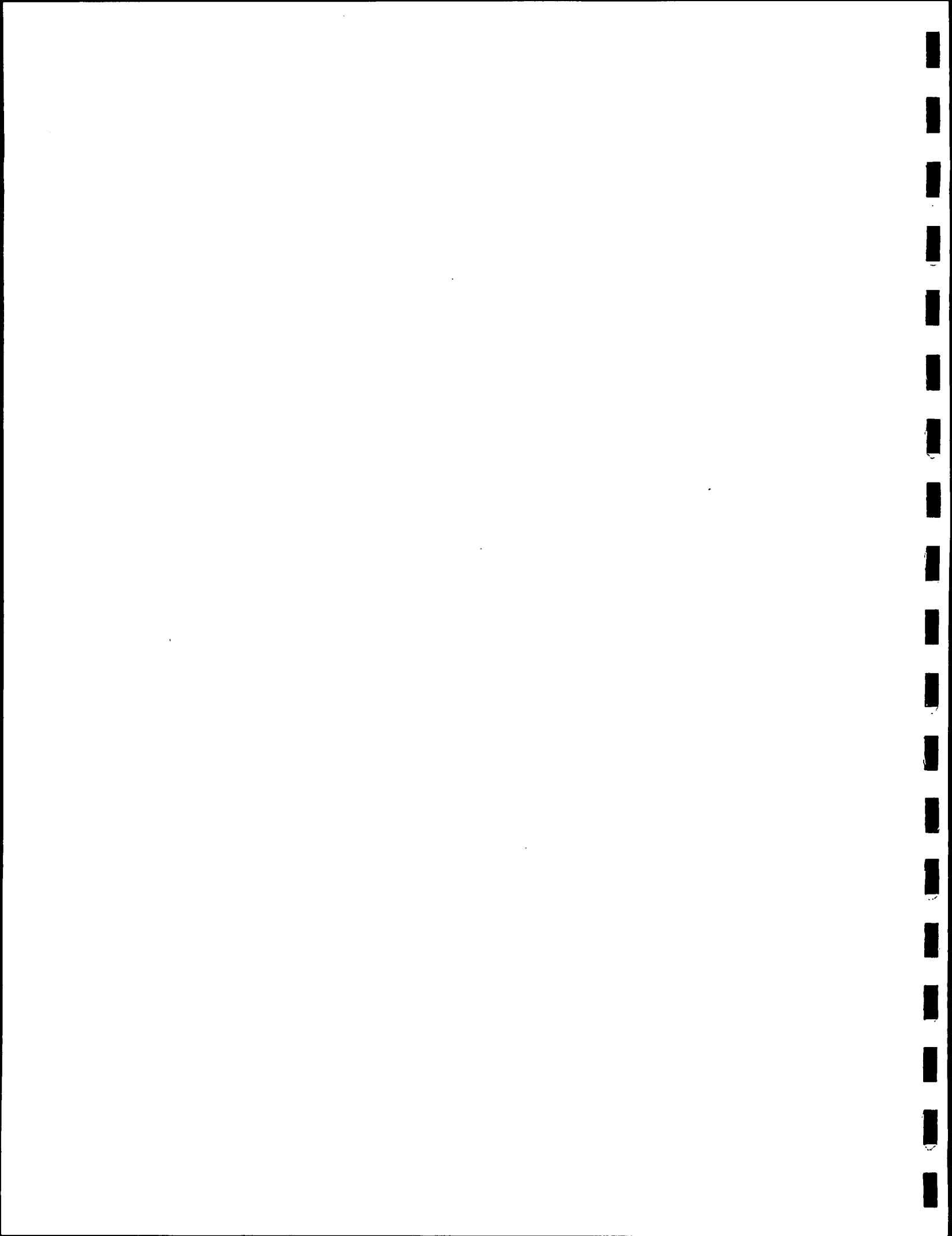
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 2A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
Associates  
Environmental and Geotechnical Services





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED JUNE, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 3 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 082

**to gleason**  
associates  
Environmental and Geotechnical Services

A: 1151A-RWB-6-VT1, 10-26-1994

SOURCE: RWB-6		MCL		1,1-DI-ETHANE		1,1-DI-ETHENE		ETHYL BENZENE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	METHOD	5	NPL	7	P-700	P-70	P-100	U6/L	U6/L	U6/L	U6/L	U6/L	U6/L	U6/L	
03/25/87	10	AQUA		ND	300	8.7	50	410	54	823							
03/25/87	11	AQUA		ND	300	12	50	410	72	844							
09/04/87	33	AQUA		ND	ND	ND	ND	700	45	745							
01/14/88	16	AQUA		ND	ND	ND	ND	460	ND	460							
02/10/88	26	AQUA		ND	ND	ND	ND	550	55	605							
05/19/88	31	AQUA		ND	ND	ND	23.4	672	41.8	737							
09/25/88	31	AQUA		29	8.3	ND	30	230	35	332							
12/09/88	19	AQUA		25.5	ND	ND	22.6	305	27.5	381							
02/24/89	26	AQUA		30.3	6.2	ND	22.5	370	32.9	462							
06/07/89	3	AQUA	624	30.6	ND	ND	18.7	400	40.2	490							
09/07/89	6	AQUA	8240	24.8	ND	ND	58.3	360	38.7	480							
12/12/89	18	AQUA	8240	No VOC Detected													
03/01/90	16	AQUA	8240	ND	ND	ND	13.8	380	33.7	428							
08/29/90	42	AQUA	8240	6.5	ND	ND	ND	51.8	8.4	67							
10/30/90	33	AQUA	8240	15.4	8.7	ND	29.6	237	22.7	313							
10/30/90	34	AQUA	8240	ND	7.7	ND	31.6	255	25.1	319							
03/04/91	31	AQUA	8240	10.8	ND	ND	11.3	137	16.3	175							
08/30/91	19	AQUA	8240	10.4	ND	ND	22.9	81.5	11.9	127							
01/24/92	15	AQUA	8240	8.9	ND	ND	24.4	89.0	15.5	139							
03/31/92	23	AQUA	8240	ND	11.5	ND	ND	29.4	5.5	45							
08/24/92	32	AQUA	8240	ND	35.1	ND	ND	83.3	5.5	124							
11/02/92	39	AQUA	8240	ND	15.4	ND	ND	45.7	ND	61							
11/02/92	40	AQUA	8240	ND	12.8	ND	ND	40.0	ND	53							
02/05/93	26	AQUA	8240	ND	30.5	ND	ND	125	10.1	166							
02/05/93	27	AQUA	8240	ND	32.6	ND	ND	134	10.9	178							
05/12/93	31	AQUA	8240	ND	27.4	ND	ND	67.0	9.5	104							
05/12/93	32	AQUA	8240	ND	30.5	ND	ND	76.6	10.9	118							



SOURCE: RWB-6

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED JUNE, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

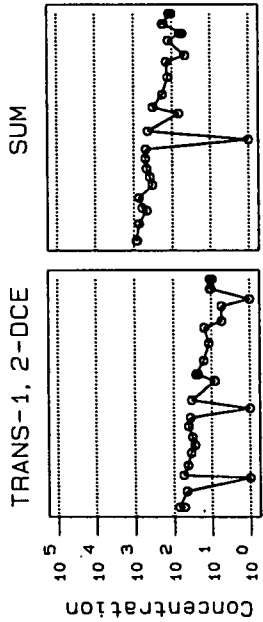
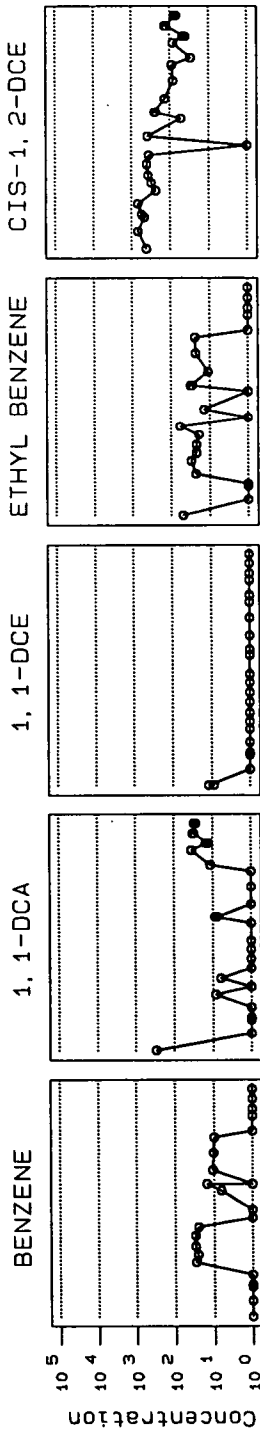
TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 3A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 0B2

**ta gleason**  
associates  
Environmental and Geotechnical Services







SOURCE: RWB-6  
(CONT'D)

DATE SAMPLED	SAMPLE NO.	LAB	MCL		CARBON TETRA-CHLORIDE	1, 2-DI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	TOTAL XYLENES	OTHER VOC	SUM	NOTES
			U6/L	U6/L								
03/25/87	10	AQUA	ND	ND	ND	ND	ND	65	ND	65		
03/25/87	11	AQUA	ND	ND	ND	ND	ND	69	ND	69		
09/04/87	33	AQUA	ND	290	ND	ND	ND	290	ND	290		
01/14/88	16	AQUA	ND	250	ND	ND	ND	250	ND	250		
02/10/88	26	AQUA	ND	230	ND	ND	ND	57	ND	287		
05/19/88	31	AQUA	ND	391	ND	ND	ND	391	ND	391		
09/25/88	31	AQUA	ND	ND	17	ND	ND	49	ND	66		
12/09/88	19	AQUA	ND	133	ND	ND	23.7	40	443	640		
02/24/89	26	AQUA	13.4	180	ND	ND	30.1	35.5	400	659		
06/07/89	3	AQUA	624	180	ND	ND	28.9	25.3	ND	234		
09/07/89	6	AQUA	8240	140	ND	ND	32.8	28.7	360	562		
12/12/89	18	AQUA	8240	ND	ND	ND	21.4	ND	110	131		
03/01/90	16	AQUA	8240	110	ND	ND	20.9	ND	350	481		
08/29/90	42	AQUA	8240	5.4	ND	ND	ND	ND	ND	5		
10/30/90	33	AQUA	8240	72.5	ND	ND	19.9	7.5	ND	100		
10/30/90	34	AQUA	8240	82.4	ND	ND	21.3	7.7	ND	127		
03/04/91	31	AQUA	8240	No VOC Detected								
08/30/91	18	AQUA	8240	17.8	ND	ND	ND	ND	ND	18		
01/24/92	15	AQUA	8240	18.6	ND	ND	ND	26.6	ND	45		
03/31/92	23	AQUA	8240	No VOC Detected								
08/24/92	32	AQUA	8240	ND	ND	ND	27.3	ND	ND	27		
11/02/92	39	AQUA	8240	No VOC Detected								
11/02/92	40	AQUA	8240	No VOC Detected								
02/05/93	26	AQUA	8240	ND	ND	ND	40.5	ND	ND	41		
02/05/93	27	AQUA	8240	ND	ND	ND	44.8	ND	ND	45		
05/12/93	31	AQUA	8240	ND	ND	ND	13.3	ND	ND	13		
05/12/93	32	AQUA	8240	ND	ND	ND	13.0	ND	ND	13		

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED JUNE, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 4 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 082





SOURCE: RWB-6  
(CONT'D)

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED JUNE, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date  
 o - Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS

PAGE 4A OF 8

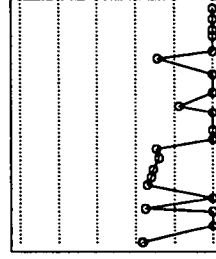
ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 082

**ta gleason**

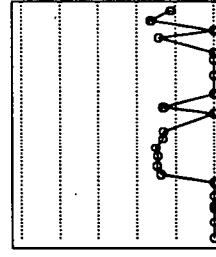
ASSOCIATES

Environmental and Geotechnical Services

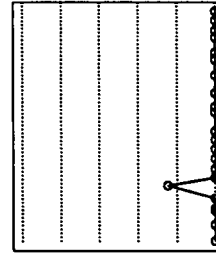
TOTAL XYLENES



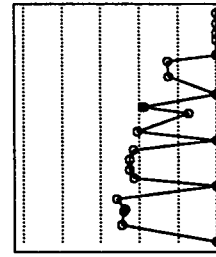
VINYL CHLORIDE



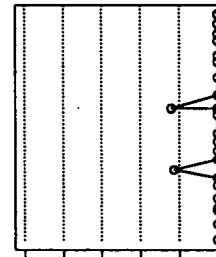
TCE



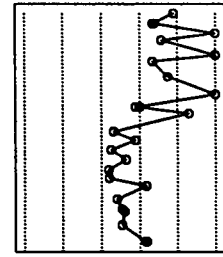
1, 2-DCA



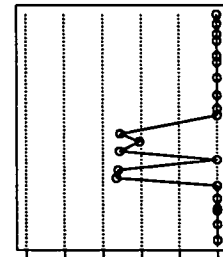
CARBON TETRACL



SUM



OTHER VOC





SOURCE: RWB-16

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	BENZENE		CARBON TETRA-CHLORIDE	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	TRI-CHLORO-ETHENE	OTHER VOC	SUM	NOTES
				U6/L	U6/L									
03/25/87	8	AQUA	8240	5	NPL	NPL	5	5	16	ND	ND	5	54	
09/04/87	35	AQUA	8240	22	ND	No VOC Detected	ND	ND	16	ND	ND	ND	54	
01/14/88	20	AQUA	8240	ND	220	220	ND	ND	ND	8.5	ND	ND	229	
02/10/88	30	AQUA	8240	ND	ND	ND	ND	ND	ND	8.2	ND	ND	8	
05/19/88	35	AQUA	8240	ND	149	149	ND	ND	ND	ND	22.5	ND	172	
09/25/88	33	AQUA	8240	152	ND	ND	ND	ND	ND	6	ND	ND	158	
12/09/88	22	AQUA	8240	ND	140	140	ND	ND	ND	5.4	ND	15	160	
02/24/89	29	AQUA	8240	100	170	170	ND	ND	ND	ND	ND	140	410	
06/07/89	6	AQUA	8240	53	170	170	ND	ND	ND	13	ND	ND	236	
09/07/89	9	AQUA	8240	52.1	270	270	ND	ND	ND	8.2	ND	41.2	372	
09/07/89	10	AQUA	8240	53.2	250	250	ND	ND	ND	7.4	ND	62.4	373	
12/12/89	21	AQUA	8240	150	140	140	8.3	ND	ND	9	ND	50	357	
03/01/90	19	AQUA	8240	120	320	320	10.3	ND	ND	6.3	ND	83.9	541	
06/04/90	32	AQUA	8240	110	380	380	7.6	ND	ND	10.4	ND	250	758	
08/24/90	28	AQUA	8240	ND	114	114	ND	7.5	ND	5.3	ND	ND	127	
10/30/90	37	AQUA	8240	150	110	110	ND	ND	7.2	ND	ND	ND	267	
03/04/91	35	AQUA	8240	65.4	106	106	ND	ND	ND	ND	ND	ND	171	A
06/03/91	36	AQUA	8240	100	93.6	93.6	ND	ND	ND	ND	ND	74.0	268	
06/03/91	37	AQUA	8240	102	110	110	ND	ND	ND	ND	ND	83.0	295	
08/30/91	21	AQUA	8240	ND	46.5	46.5	ND	ND	ND	ND	ND	ND	47	
11/14/91	38	AQUA	8240	6.1	93.1	93.1	ND	ND	ND	ND	ND	ND	99	
11/14/91	39	AQUA	8240	ND	89.2	89.2	ND	ND	ND	ND	ND	ND	89	
01/24/92	18	AQUA	8240	ND	50.0	50.0	ND	ND	ND	ND	ND	ND	50	
01/24/92	19	AQUA	8240	ND	49.8	49.8	ND	ND	ND	ND	ND	ND	50	
03/30/92	6	AQUA	8240	82.2	ND	ND	ND	ND	ND	ND	ND	ND	82	
08/24/92	35	AQUA	8240	54.5	49.7	49.7	ND	ND	ND	ND	ND	ND	104	
11/02/92	43	AQUA	8240	74.6	29.3	29.3	ND	ND	ND	ND	ND	ND	104	
02/05/93	30	AQUA	8240	ND	19.2	19.2	ND	ND	ND	ND	ND	ND	19	
05/12/93	34	AQUA	8240	72.4	ND	ND	ND	ND	ND	ND	ND	ND	72	
09/01/93	24	AQUA	8240	No VOC Detected										
09/01/93	25	AQUA	8240	No VOC Detected										
12/04/93	35	AQUA	8240	ND	18.2	18.2	ND	ND	ND	ND	ND	ND	18	
02/19/94	37	AQUA	8240	43.2	12.7	12.7	ND	ND	ND	ND	ND	ND	56	
02/19/94	38	AQUA	8240	45.7	13.4	13.4	ND	ND	ND	ND	ND	ND	59	
05/07/94	41	AQUA	8240	38.5	ND	ND	ND	ND	ND	ND	ND	ND	39	
09/16/94	43	AQUA	8240	No VOC Detected										

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL - NO U.S. EPA PUBLISHED LEVEL  
 P - PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 A - METHYLENE CHLORIDE 9.0 UG/L

PARAMETER  
 o = Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 5 OF 8

ALLIED SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084





SOURCE: RWB-16

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A - METHYLENE CHLORIDE 9.0 UG/L

PARAMETER

o - Date Sampled

TABLE 5

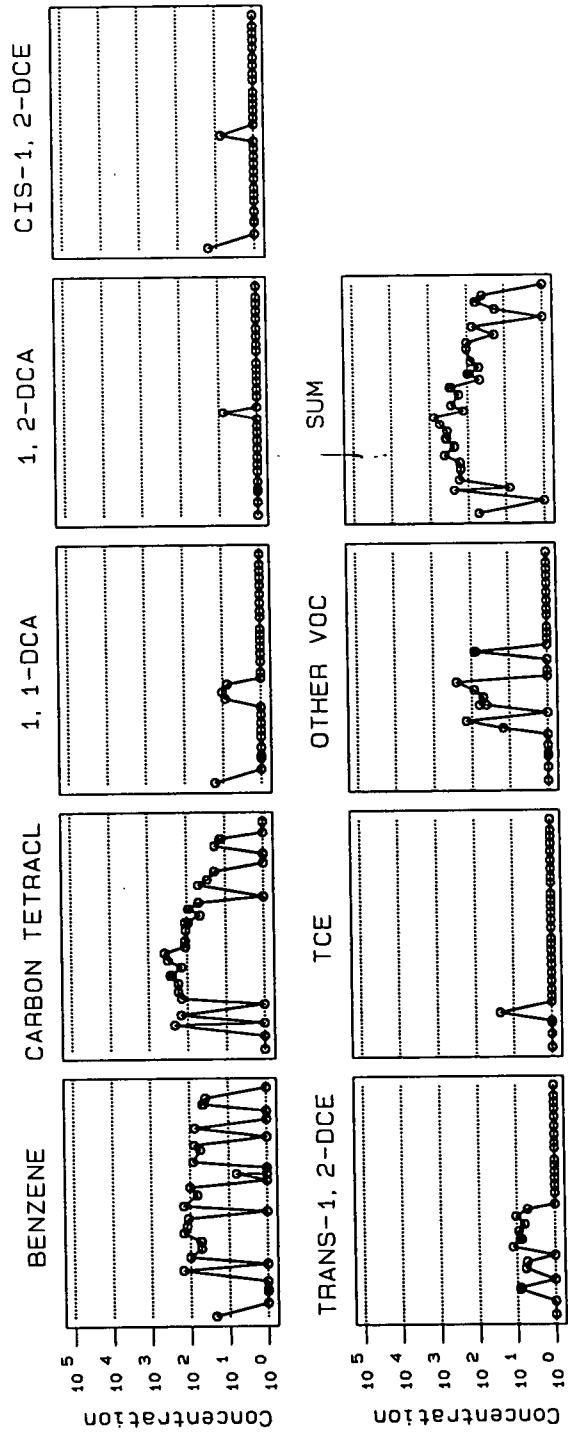
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 5A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASMPX SBIN 084

**ta geason**  
associates

Environmental and Geotechnical Services







OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED FEBRUARY, 1993 AND MAY, 1993 DUE TO INOPERATIVE PUMP.

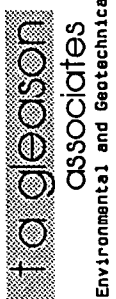
PARAMETER

o - Date  
 . - Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 6 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 082



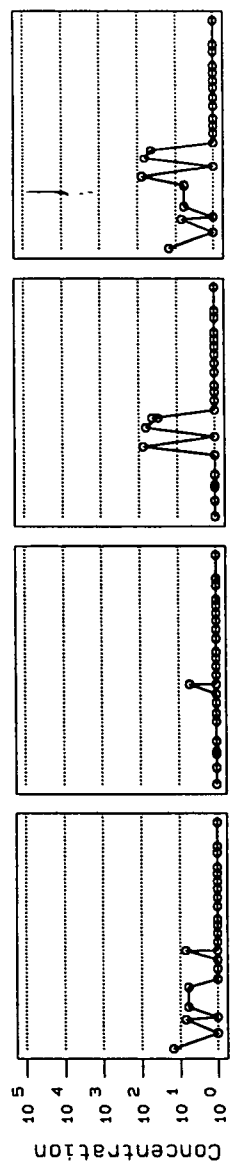
SOURCE: RWB-21		1,1-DI-ETHANE		TRI-ETHENE		OTHER VOC		SUM		NOTES
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	NPL US/L	US/L	US/L	US/L	US/L	US/L	
03/25/87	12	AQUA		15	ND	ND	ND	15		
09/04/87	32	AQUA		No VOC Detected						
01/14/88	15	AQUA		7	ND	ND	ND	7		
02/10/88	25	AQUA		No VOC Detected						
05/19/88	30	AQUA		5.9	ND	ND	ND	6		
12/09/88	18	AQUA		5.9	ND	ND	ND	6		
02/24/89	25	AQUA		ND	ND	ND	77	77		
06/07/89	2	AQUA	624	No VOC Detected						
09/07/89	5	AQUA	6240	ND	ND	64.6	65	65		
12/12/89	16	AQUA	6240	7.1	5.2	32	44	44		
12/12/89	17	AQUA	6240	ND	ND	44	44	44		
03/01/90	15	AQUA	6240	No VOC Detected						
06/04/90	28	AQUA	6240	No VOC Detected						
08/24/90	24	AQUA	6240	No VOC Detected						
10/30/90	32	AQUA	6240	No VOC Detected						
03/04/91	30	AQUA	6240	No VOC Detected						
05/30/91	3	AQUA	6240	No VOC Detected						
08/30/91	18	AQUA	6240	No VOC Detected						
11/14/91	40	AQUA	6240	No VOC Detected						
01/24/92	14	AQUA	6240	No VOC Detected						
03/30/92	2	AQUA	6240	No VOC Detected						
03/30/92	3	AQUA	6240	No VOC Detected						
08/24/92	31	AQUA	6240	No VOC Detected						
11/02/92	38	AQUA	6240	No VOC Detected						
06/22/93	4	AQUA	6240	No VOC Detected						

1,1-DCA

TCE

OTHER VOC

SUM





SOURCE: RWB-22

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	BENZENE		CARBON TETRA-CHLORIDE		1,1-DI-CHLORO-ETHANE		ETHYL BENZENE		TOLUENE		TOTAL XYLENES		SUM	NOTES
				5	UG/L	NPL	UG/L	NPL	UG/L	P-700	UG/L	P-2000	UG/L	P-10000	UG/L		
03/25/87	9	AGUA		184	ND	ND	124	94	ND	199	601						
09/04/87	34	AGUA		ND	420	ND	ND	81	ND	160	661						
01/14/88	17	AGUA		117	70	48	47	22	85	389							
01/14/88	18	AGUA		122	90	53	51	24	91	431							
02/10/88	27	AGUA		170	110	59	73	61	140	613							
02/10/88	28	AGUA		151	ND	51	70	140	140	552							
05/19/88	32	AGUA		119	33.6	48.2	103	79.5	133	516							
05/19/88	33	AGUA		118	35.7	47.9	58.8	34.7	113	408							
09/25/88	30	AGUA		ND	ND	8.3	ND	ND	ND	8							
12/09/88	20	AGUA		65.6	ND	29.7	41	16.4	90	243							
02/24/89	27	AGUA		110	52.6	29.9	52.9	34.4	100	380							
06/07/89	4	AGUA	824	150	64.8	23.4	51.9	42.1	97.1	429							
09/07/89	7	AGUA	8240	100	ND	19.3	47.1	13.1	84.7	264							
12/12/89	19	AGUA	8240	ND	ND	24.2	27	ND	36.8	88							
03/01/90	17	AGUA	8240	82.9	ND	17.4	37.3	5.2	44.1	187							
06/04/90	29	AGUA	8240	76.7	ND	19.4	35.4	12.3	44.2	188							
06/04/90	30	AGUA	8240	76.3	ND	19.3	35.2	12.2	44	187							
08/24/90	25	AGUA	8240	45.7	10.1	16.7	32.0	8.1	54.7	167							
10/30/90	35	AGUA	8240	53.8	26.8	21.9	30.6	7.4	48.2	189							
03/04/91	32	AGUA	8240	21.2	ND	25.1	15.7	ND	24.4	86							
03/04/91	33	AGUA	8240	26.2	ND	13.0	20.0	ND	34.8	94							
06/03/91	38	AGUA	8240	5.6	ND	14.2	ND	ND	ND	20							
11/14/91	36	AGUA	8240	10.8	ND	ND	ND	ND	ND	11							
01/24/92	16	AGUA	8240	14.4	ND	ND	ND	5.9	11.9	32							
03/30/92	4	AGUA	8240	5.9	ND	10.7	ND	ND	ND	17							
08/24/92	33	AGUA	8240	6.1	ND	15.7	ND	ND	ND	22							
11/02/92	42	AGUA	8240	5.8	ND	9.1	ND	ND	ND	15							
02/05/93	29	AGUA	8240	ND	ND	17.4	ND	ND	ND	17							
05/12/93	33	AGUA	8240	ND	ND	12.9	ND	ND	ND	13							
09/01/93	23	AGUA	8240	ND	ND	12.5	ND	ND	ND	13							
12/04/93	33	AGUA	8240	ND	ND	23.3	ND	ND	ND	23							
12/04/93	34	AGUA	8240	ND	ND	21.1	ND	ND	ND	21							
02/19/94	36	AGUA	8240	ND	ND	7.9	ND	ND	ND	8							
05/07/94	39	AGUA	8240	ND	ND	8.6	ND	ND	ND	9							
05/07/94	40	AGUA	8240	ND	ND	8.9	ND	ND	ND	9							
09/15/94	39	AGUA	8240	ND	ND	5.7	ND	ND	ND	6							
09/15/94	40	AGUA	8240	ND	ND	6.0	ND	ND	ND	8							

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED AUGUST, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o = Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 7 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Associates  
Environmental and Geotechnical Services



SOURCE: RWB-22

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL

P = PROPOSED

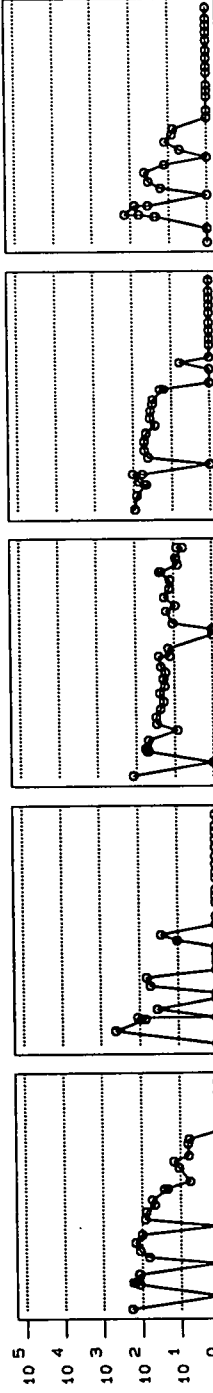
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED AUGUST, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

Concentration



SUM

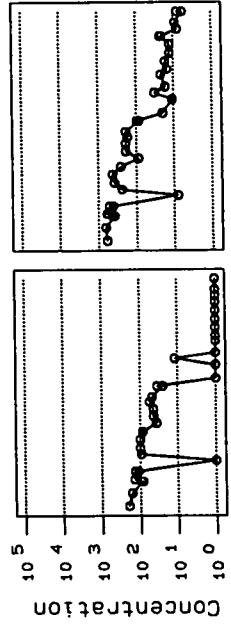


TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 7A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

tagleason

Associates

Environmental and Geotechnical Services



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = ND U.S. EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED AUGUST, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o = Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 8 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

SOURCE: RWB-22 (CONT'D)	DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD		CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-ETHANE	TRI-ETHENE	OTHER VOC	SUM	NOTES
				P=70	P=100							
	03/25/87	9	AGUA			ND	ND	ND	ND	ND	0	
	09/04/87	34	AGUA			ND	ND	ND	ND	ND	0	
	01/14/88	17	AGUA			ND	ND	ND	ND	ND	0	
	01/14/88	18	AGUA			ND	ND	ND	ND	ND	0	
	02/10/88	27	AGUA			ND	ND	ND	ND	ND	0	
	02/10/88	29	AGUA			ND	ND	ND	ND	ND	0	
	05/19/88	32	AGUA			ND	ND	ND	ND	ND	0	
	05/19/88	33	AGUA			ND	ND	ND	ND	ND	0	
	09/25/88	30	AGUA			ND	ND	ND	ND	ND	0	
	12/09/88	20	AGUA			ND	ND	ND	ND	ND	0	
	02/24/89	27	AGUA			ND	ND	ND	ND	ND	0	
	06/07/89	4	AGUA	824		ND	ND	ND	ND	ND	0	
	09/07/89	7	AGUA	8240		ND	ND	ND	ND	ND	0	
	12/12/89	19	AGUA	8240		ND	ND	ND	ND	ND	0	
	03/01/90	17	AGUA	8240		ND	ND	ND	ND	ND	0	
	06/04/90	29	AGUA	8240		ND	ND	ND	ND	ND	0	
	06/04/90	30	AGUA	8240		ND	ND	ND	ND	ND	0	
	08/24/90	25	AGUA	8240		ND	ND	ND	ND	ND	0	
	10/30/90	35	AGUA	8240		ND	ND	ND	ND	ND	0	
	03/04/91	32	AGUA	8240		ND	ND	ND	ND	ND	0	
	03/04/91	33	AGUA	8240		ND	ND	ND	ND	ND	0	
	06/03/91	38	AGUA	8240		ND	ND	ND	ND	ND	0	
	11/14/91	36	AGUA	8240		ND	ND	ND	ND	ND	0	
	01/24/92	16	AGUA	8240		ND	ND	ND	ND	ND	0	
	03/30/92	4	AGUA	8240		ND	ND	ND	ND	ND	0	
	08/24/92	33	AGUA	8240		ND	ND	ND	ND	ND	0	
	11/02/92	42	AGUA	8240		ND	ND	ND	ND	ND	0	
	02/05/93	29	AGUA	8240		ND	ND	ND	ND	ND	0	
	05/12/93	33	AGUA	8240		ND	ND	ND	ND	ND	0	
	09/01/93	23	AGUA	8240		ND	ND	ND	ND	ND	0	
	12/04/93	33	AGUA	8240		ND	ND	ND	ND	ND	0	
	12/04/93	34	AGUA	8240		ND	ND	ND	ND	ND	0	
	02/19/94	36	AGUA	8240		ND	ND	ND	ND	ND	0	
	05/07/94	39	AGUA	8240		ND	ND	ND	ND	ND	0	
	05/07/94	40	AGUA	8240		ND	ND	ND	ND	ND	0	
	09/15/94	39	AGUA	8240		32.4	ND	ND	ND	ND	32	
	09/15/94	40	AGUA	8240		32.4	ND	ND	ND	ND	32	





SOURCE: RWB-22  
(CONT'D)

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL - NO U.S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED AUGUST, 1991 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

TABLE 5

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

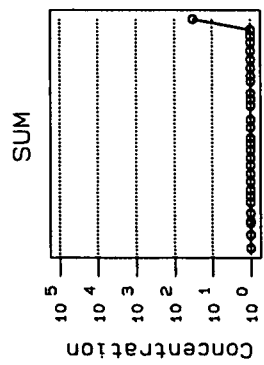
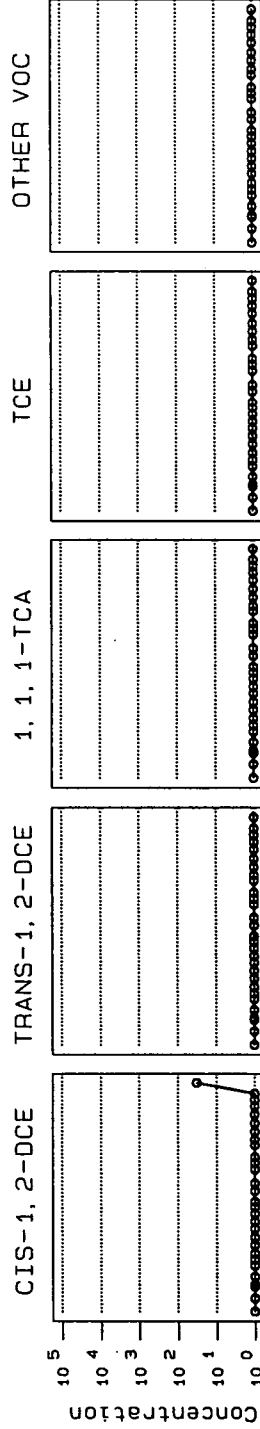
PAGE 8A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**

ASSOCIATES

Environmental and Geotechnical Services





NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = NO U.S. EPA PUBLISHED LEVEL.  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER

o = Date Sampled

TABLE 6

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS

PAGE 1 OF 8

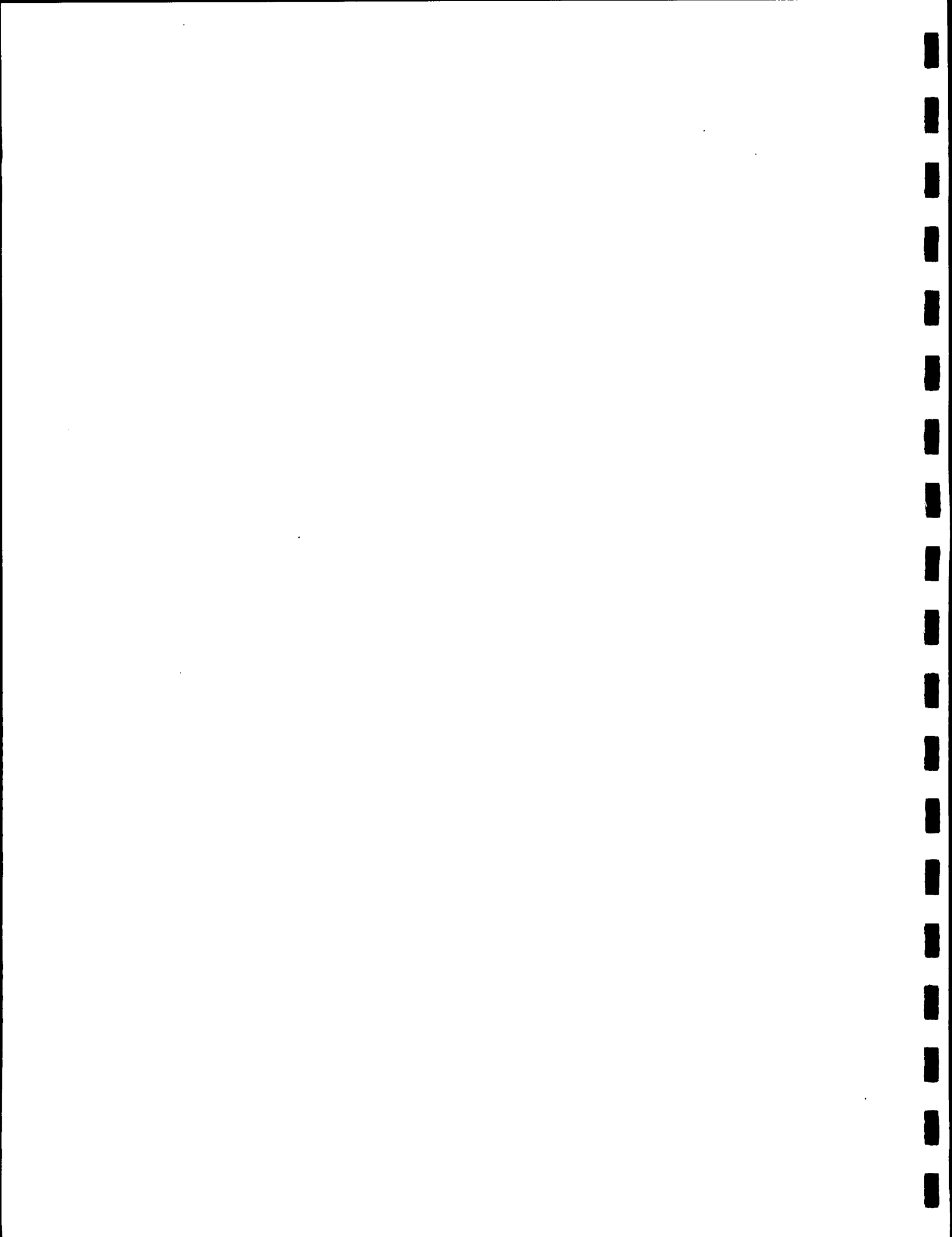
ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**taigeason**  
 Associates  
 Environmental and Geotechnical Services

A:\16\RM1-2.VT1, 11-11-1994

SOURCE: RW-1-2		DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHANE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
DATE SAMPLED	SAMPLE NO.	LAB	METHOD	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
12/09/93	36	AQUA	8240	117	ND	31.0	202	77.6	27.1	187	25.1	667			
02/19/94	27	AQUA	8240	54.1	ND	7.8	123	43.0	19.5	115	ND	362			
05/07/94	32	AQUA	8240	50.3	ND	7.3	113	34.9	22.0	100	ND	328			
09/15/94	32	AQUA	8240											A	





NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = CHLOROFORM 5.4 UG/L

B = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING

PARAMETER

o = Date Sampled

TABLE 6

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS

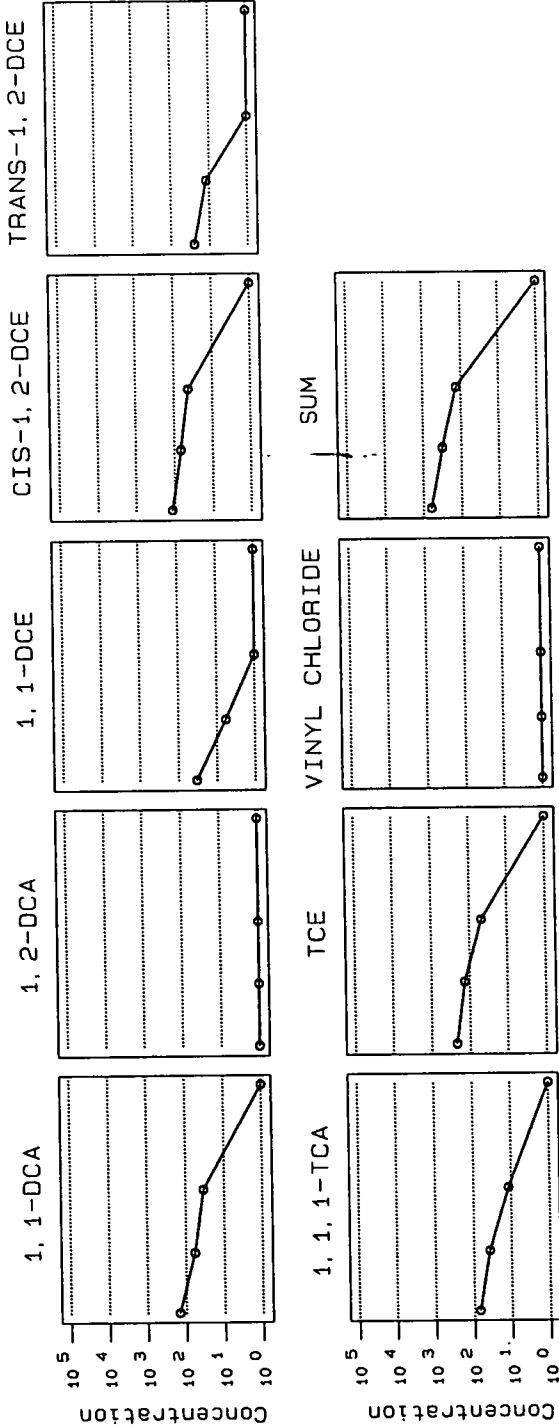
PAGE 2 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**tagleason**  
 ASSOCIATES  
 Environmental and Geotechnical Services

SOURCE: RW 3-4		DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLOROETHANE		1,2-DI-CHLOROETHANE		1,1-DI-CHLOROETHANE		CIS-1,2-DICHLOROETHENE		TRANS-1,2-DICHLOROETHENE		1,1,1-TRI-CHLOROETHANE		TRI-CHLOROETHENE		VINYL CHLORIDE		SUM	NOTES	
UG/L	UG/L					UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L			UG/L
		12/09/83	37	AQUA	8240	150	ND	34.0	115	25.1	70.5	226	ND	621										
		02/19/84	28	AQUA	8240	57.4	ND	5.8	66.6	12.0	37.7	136	ND	316										A
		05/07/84	33	AQUA	8240	34.3	ND	ND	43.1	ND	11.8	47.8	ND	137										B
		09/15/84	33	AQUA	8240																			B
		09/15/94	34	AQUA	8240																			B

No VOC Detected





SOURCE: RW 5-7

DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
12/09/93	38	AQUA	8240	173	ND	41.8	167	38.5	80.2	242	16.7	759	
02/19/94	29	AQUA	8240	102	ND	11.1	143	22.5	50.3	153	21.8	504	
05/07/94	34	AQUA	8240	150	ND	13.9	151	19.8	75.1	164	19.2	593	
09/15/94	35	AQUA	8240										A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.

NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

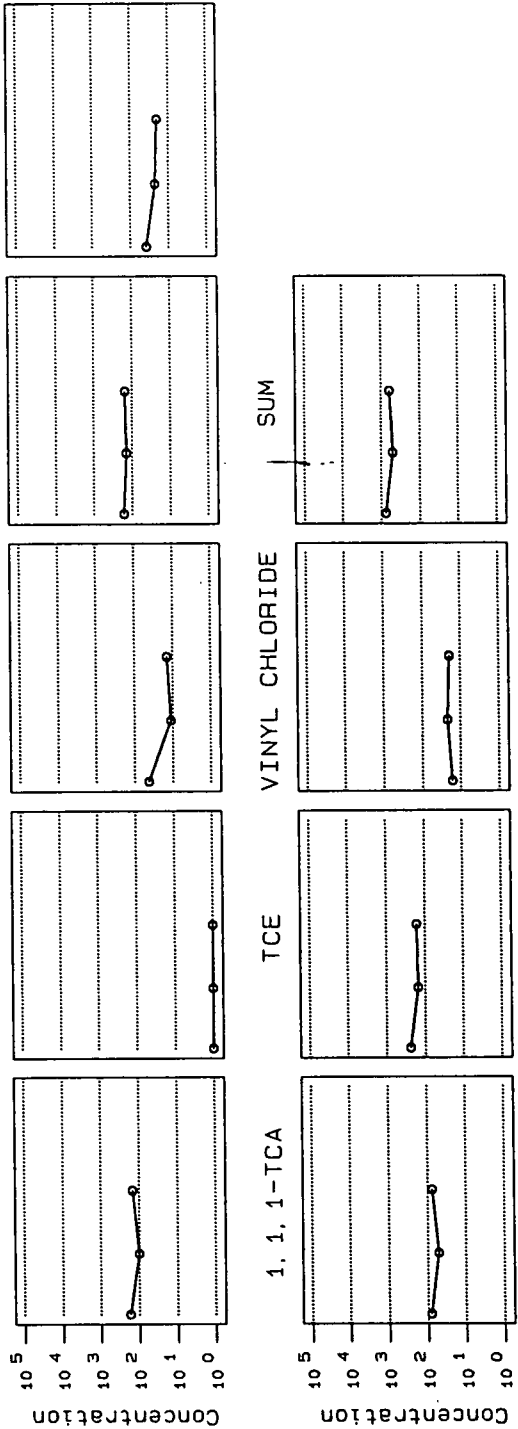
VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER

o = Date Sampled

TABLE 6



VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 3 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



tagleason  
associates  
Environmental and Geotechnical Services

120





SOURCE: RW 8-11		DATE SAMPLED		SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
							UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
		10/04/88		NSM-2	AQUA		6.2	ND	7.1	88	14	ND	215	71	401	
		10/06/88		NSM-5	AQUA		5.6	ND	5.6	75	23	ND	187	ND	296	
		02/26/89		38	AQUA		ND	49.4	ND	500	110	ND	26.3	96.8	789	
		06/11/89		40	AQUA	624	ND	31.4	ND	760	69.1	ND	280	56.7	1197	
		09/10/89		38	AQUA	8240	ND	53.8	6	500	120	ND	39.1	64.5	789	
		12/14/89		39	AQUA	8240	10	21.5	9.9	620	110	ND	83	19.4	874	
		03/02/90		31	AQUA	8240	8.2	77.6	6.1	610	130	ND	49.6	53.4	935	
		06/04/90		38	AQUA	8240	56.8	ND	8.2	210	26.3	11.3	380	18.2	711	
		08/25/90		38	AQUA	8240	6.7	57.7	ND	231	43.2	ND	63.5	22.0	424	
		10/31/90		39	AQUA	8240	ND	ND	ND	744	5.5	ND	1190	50	1990	
		03/04/91		38	AQUA	8240	16.0	50.1	ND	212	20.8	ND	131	32.7	463	
		06/03/91		34	AQUA	8240	29.2	20.9	ND	82.4	22.1	7.0	293	34.3	489	
		11/14/91		27	AQUA	8240	43.1	8.2	5.9	187	18.6	6.8	251	14.6	535	
		01/29/92		40	AQUA	8240	67.5	21.9	ND	205	28.5	ND	185	ND	508	
		04/01/92		30	AQUA	8240	37.5	7.8	10.9	298	28.0	8.5	371	147	909	
		08/24/92		36	AQUA	8240	ND	25.7	ND	292	77.7	ND	32.1	26.4	454	
		10/31/92		28	AQUA	8240	7.5	14.8	ND	265	71.0	ND	59.9	54.0	472	
		10/31/92		29	AQUA	8240	7.6	13.8	ND	261	69.5	ND	59.4	52.8	464	
		02/06/93		36	AQUA	8240	42.5	10.5	11.6	660	74.9	9.1	498	135	1442	
		05/12/93		35	AQUA	8240	29.4	8.7	10.0	655	85.3	7.7	548	144	1488	
		05/12/93		36	AQUA	8240	30.9	8.5	11.8	649	84.5	7.0	547	150	1489	
		12/09/93		39	AQUA	8240	20.8	ND	24.0	514	73.3	12.0	985	44.0	1673	A
		02/19/94		30	AQUA	8240	ND	ND	ND	572	37.7	ND	882	141	1633	
		02/19/94		31	AQUA	8240	ND	ND	ND	496	40.4	ND	720	116	1372	
		05/07/94		42	AQUA	8240	12.0	ND	17.1	523	33.9	11.9	753	134	1485	
		09/16/94		38	AQUA	8240										B

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = NO U.S. EPA PUBLISHED LEVEL.  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = 5.7 UG/L CHLOROFORM  
 B = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER  
 o = Date Sampled

TABLE 6

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 4 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084

**to**gleason  
 associates  
 Environmental and Geotechnical Services

A: \16\PRMB-11.VT1, 11-11-1994



SOURCE: RW 8-11

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL.

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = 6.7 UG/L CHLOROFORM

B = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER

o - Date Sampled

TABLE 6

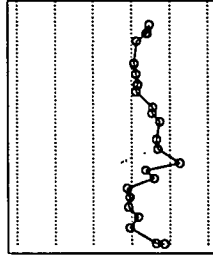
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 4A OF 8

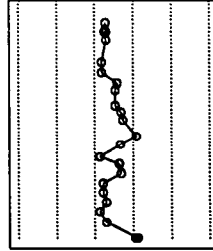
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta**gleason  
associates  
Environmental and Geotechnical Services

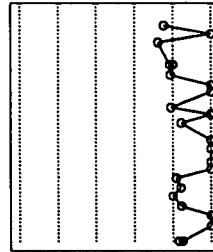
TRANS-1, 2-DCE



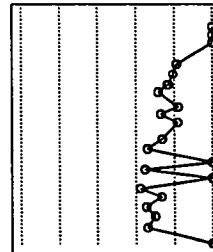
CIS-1, 2-DCE



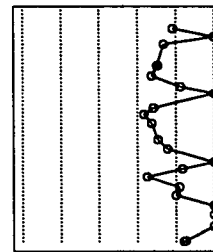
1, 1-DCE



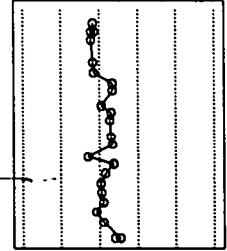
1, 2-DCA



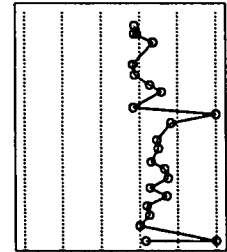
1, 1-DCA



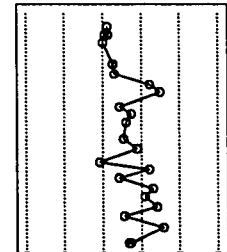
SUM



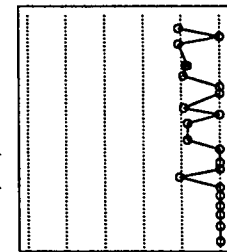
VINYL CHLORIDE



TCE



1, 1, 1-TCA





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = BROMOFORM 17.4 UG/L

B = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER

o - Date Sampled

TABLE 6

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 5 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084



Environmental and Geotechnical Services

A:\16\RM13.VT1, 11-11-1994

SOURCE: RW 13		DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
						UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
10/06/88	NSM-9			AQUA		ND	27	ND	328	65	ND	ND	84	504	
12/11/88	NSM-5			AQUA		ND	ND	33.4	517	81.4	ND	ND	93.3	725	
02/26/89	39			AQUA		ND	47.1	ND	450	110	ND	12	85.6	705	
06/11/89	41			AQUA	624	ND	50.1	ND	500	120	ND	33	ND	703	
09/10/89	39			AQUA	8240	ND	53.5	6.5	490	120	ND	41.4	66.8	778	
09/10/89	40			AQUA	8240	ND	52.4	6.7	480	120	ND	41.8	66.3	767	
12/14/89	40			AQUA	8240	ND	25	9.5	510	120	ND	56.8	17.9	839	
12/14/89	41			AQUA	8240	ND	24.1	8.5	550	110	ND	48.5	18.1	759	
03/02/90	33			AQUA	8240	9	81.5	6.7	640	140	ND	50	51.7	979	
06/04/90	39			AQUA	8240	9.8	80.1	5.9	420	93.9	ND	66.4	47.2	723	
08/25/90	39			AQUA	8240	6.7	54.3	ND	240	48.6	ND	63.0	27.4	440	
10/31/90	41			AQUA	8240	104	6.8	17.0	164	28.3	58.1	173	26.5	588	
10/31/90	42			AQUA	8240	10.6	78.3	ND	335	62.7	ND	65.7	52.9	605	
03/04/91	39			AQUA	8240	ND	75.2	ND	133	10.3	ND	18.6	ND	237	A
03/04/91	40			AQUA	8240	ND	63.3	ND	149	20.0	ND	17.7	14.5	265	
06/02/91	33			AQUA	8240	5.3	62.6	ND	227	90.6	ND	20.2	29.3	435	
08/30/91	23			AQUA	8240	ND	40.7	ND	169	35.7	ND	13.7	26.2	285	
11/14/91	28			AQUA	8240	ND	40.3	5.9	216	43.8	ND	14.8	22.5	343	
01/24/92	21			AQUA	8240	ND	45.4	ND	201	42.7	ND	20.2	ND	309	
04/01/92	27			AQUA	8240	ND	25.6	ND	227	53.5	ND	23.5	27.3	357	
04/01/92	28			AQUA	8240	ND	25.1	ND	219	53.8	ND	23.5	29.4	351	
08/24/92	38			AQUA	8240	ND	31.2	ND	384	112	ND	34.5	40.4	602	
10/31/92	22			AQUA	8240	7.3	17.2	ND	303	87.3	ND	26.8	40.6	482	
02/06/93	40			AQUA	8240	ND	19.5	ND	390	118	ND	51.7	46.5	626	
05/12/93	26			AQUA	8240	7.2	16.5	ND	317	80.0	ND	40.1	20.0	481	
09/01/93	26			AQUA	8240	10.5	20.0	ND	314	109	ND	34.6	31.8	520	
12/03/93	24			AQUA	8240	12.6	20.6	9.1	411	153	ND	36.2	41.6	684	
03/29/94	48			AQUA	8240	11.4	9.7	ND	287	90.3	ND	32.7	26.4	458	
05/06/94	28			AQUA	8240	9.5	30.0	ND	275	84.0	ND	26.5	35.9	461	
09/16/94	36			AQUA	8240										B

Blank area for handwritten notes or signatures.



SOURCE: RW 13

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = BROMOFORM 17.4 UG/L

B = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER

o - Date Sampled

Concentration

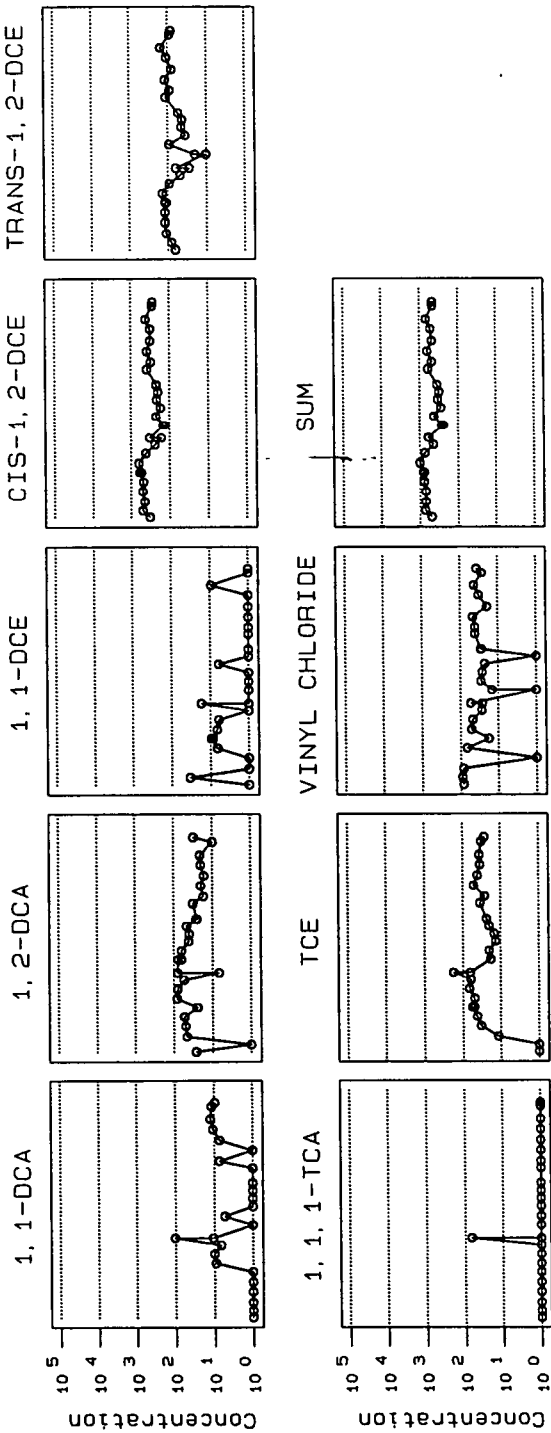


TABLE 6

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 5A OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services





SOURCE: RW 17

DATE SAMPLED	SAMPLE NO.	LAB	METHOD	CIS-1,2-DICHLORO-ETHENE UG/L	TRANS-1,2-DICHLORO-ETHENE UG/L	TRI-CHLORO-ETHENE UG/L	VINYL CHLORIDE UG/L	SUM UG/L	NOTES
10/04/88	NSM-4	AQUA		66	218	27	ND	311	
10/06/88	NSM-7	AQUA		63	197	30	ND	290	
12/11/88	NSM-4	AQUA		ND	26.7	49.1	ND	76	
02/26/89	40	AQUA		97.5	200	54.4	ND	352	
09/19/89	43	AQUA	8240	150	380	66.9	ND	597	
12/14/89	42	AQUA	8240	120	290	87.5	ND	498	
03/20/90	27	AQUA	8240	180	380	79.9	ND	640	
06/04/90	40	AQUA	8240	77.7	190	54.9	ND	323	
08/25/90	40	AQUA	8240	66.5	127	41.1	ND	235	
11/14/91	29	AQUA	8240	81.5	192	43.2	ND	317	
01/24/92	23	AQUA	8240	67.2	169	58.0	ND	294	
01/24/92	24	AQUA	8240	51.3	136	56.0	ND	243	
03/30/92	10	AQUA	8240	55.1	122	56.2	ND	233	
08/24/92	41	AQUA	8240	105	310	77.4	ND	492	
10/31/92	31	AQUA	8240	56.7	126	47.9	ND	231	
02/09/93	42	AQUA	8240	100	242	58.1	ND	400	
06/18/93	3	AQUA	8240	86.1	198	12.4	ND	297	
02/19/94	33	AQUA	8240	55.7	124	47.9	ND	228	
05/07/94	35	AQUA	8240	50.0	115	46.5	ND	212	
05/07/94	36	AQUA	8240	47.3	111	47.2	ND	206	
09/18/94	37	AQUA	8240	-	-	-	-	-	A

PARAMETER  
o - Date Sampled

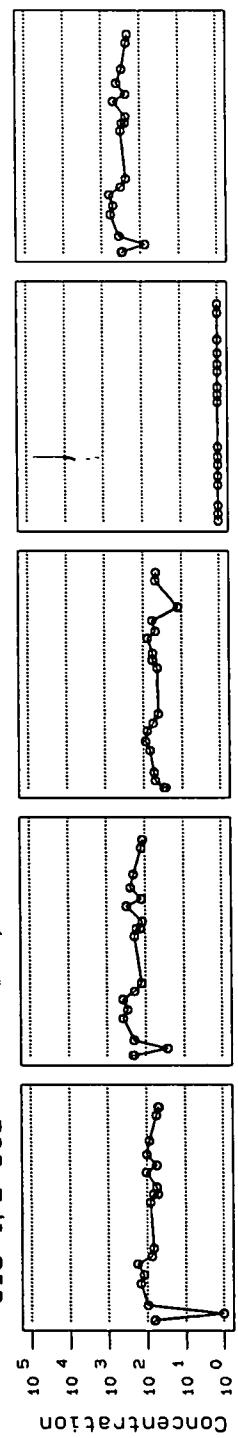
TABLE 6

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 6 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



CIS-1, 2-DCE      TRANS-1, 2-DCE      TCE      VINYL CHLORIDE      SUM





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
NPL = NO U.S. EPA PUBLISHED LEVEL  
P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

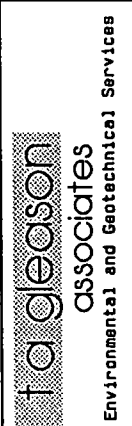
A = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING.

PARAMETER  
o = Date Sampled

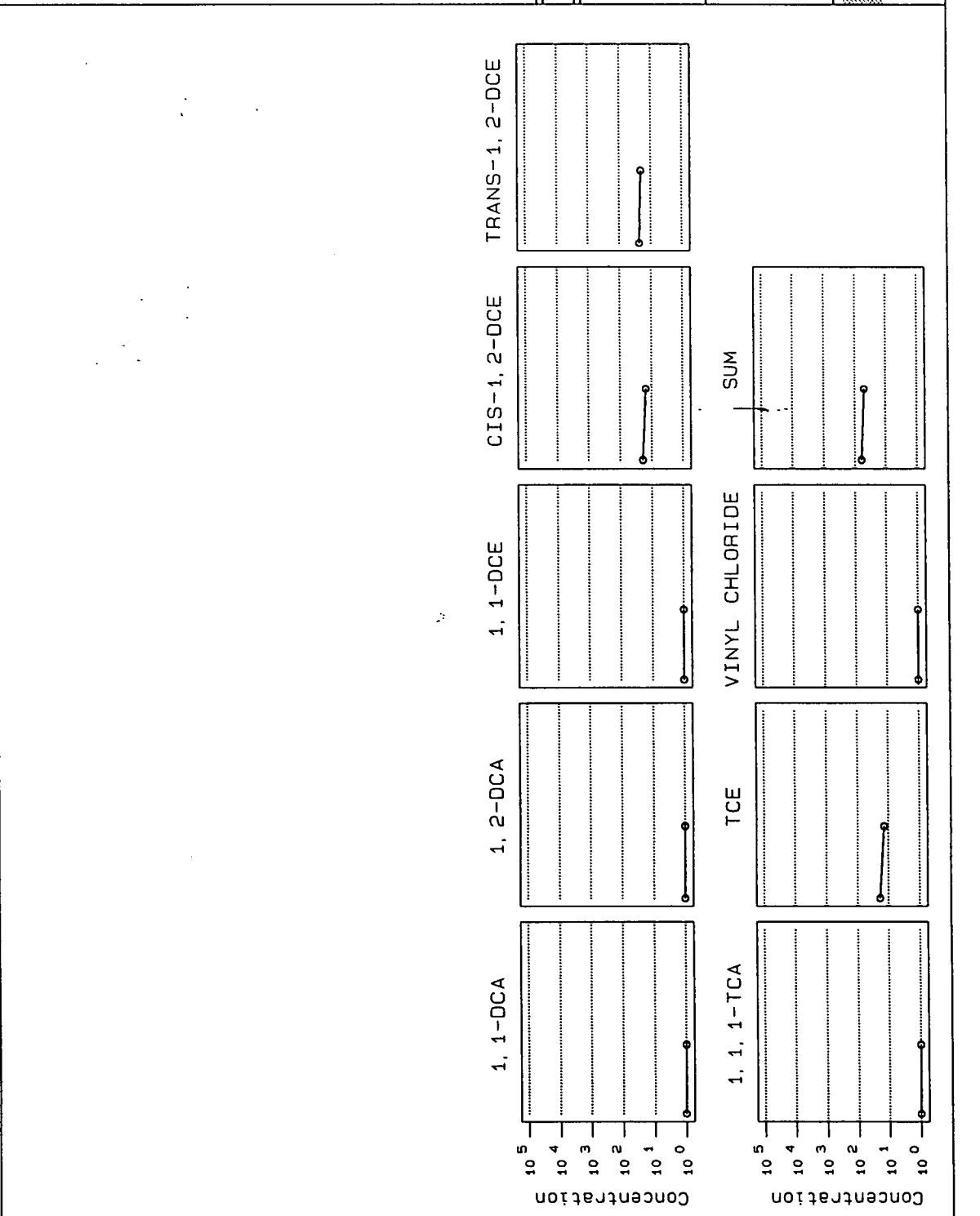
TABLE 6

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 7 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
02/19/94	34	AQUA	8240	ND	ND	ND	18.7	22.7	ND	19.0	ND	60	
05/07/94	37	AQUA	8240	ND	ND	ND	15.3	20.3	ND	14.0	ND	50	
09/15/94	27	AQUA	8240										A





SOURCE: RW 19		DATE SAMPLED	SAMPLE NO.	LAB	METHOD	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
		12/93	-	-	-	-	-	-	-	-	-	-	-	-	
		02/19/94	35	AQUA	8240	6.9	ND	ND	7.9	ND	17.5	18.9	ND	51	
		09/15/94	26	AQUA	8240										A

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY LABORATORY. SEE LAB REPORT.  
 NPL = NO U.S EPA PUBLISHED LEVEL  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 A = ANALYTICAL RESULTS INVALID DUE TO CONTAMINATION DURING SAMPLING

PARAMETER  
 o - Date Sampled

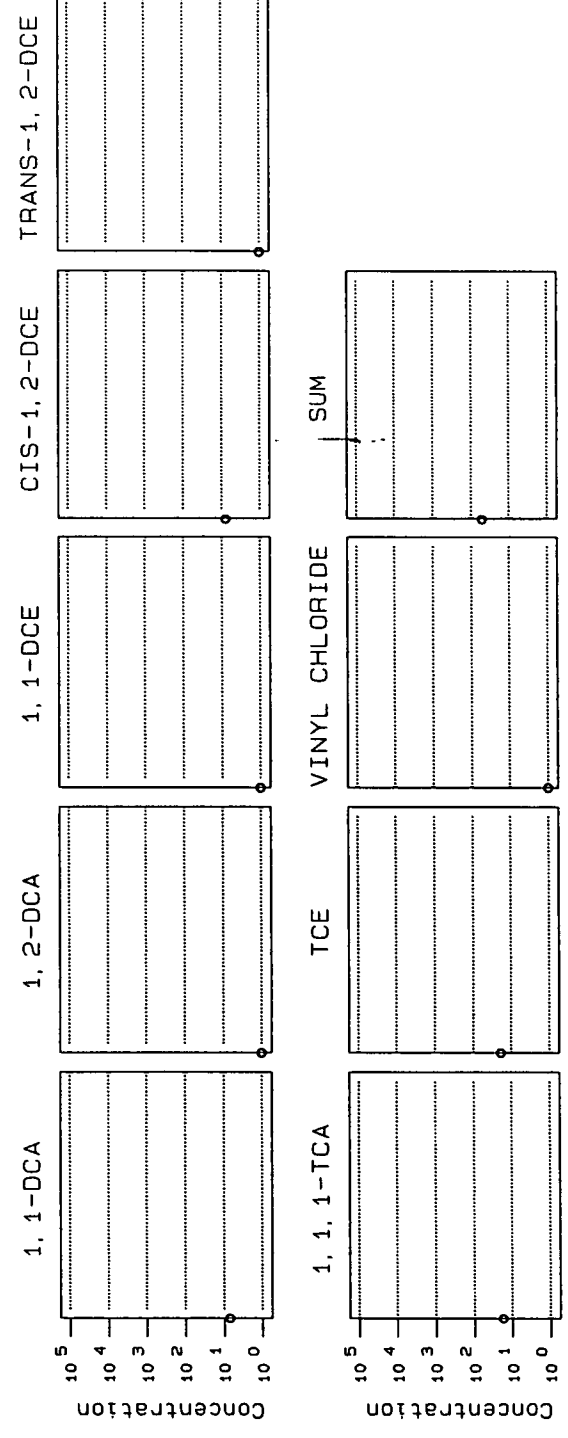


TABLE 6

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 8 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN 084





SOURCE: 7-25

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM		LEAD		ZINC		PHENOLS	NOTES
						50 UG/L	50 UG/L	50 MCL	UG/L	5000 SMCL	UG/L		
11/07/86	31	AQUA	-	-	-	12	66	120	0.01	<0.010			
02/12/87	20	AQUA	700	ND	10.0	16	300	170	ND	ND			
02/12/87	20B	AQUA	-	-	-	<10	3	12	ND	ND			
05/05/87	2	AQUA	500	7.31	12.0	<5.0	<3.0	10	0.026	<0.010			
09/03/87	2	AQUA	500	7.51	13.0	<10.0	<3.0	<4.0	<0.005	<0.010			
01/13/88	2	AQUA	740	7.09	9.0	<20	<30	<10.0	0.02	<0.010			
03/31/92	22		586	7.11	12.9	-	-	-	-	-			

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

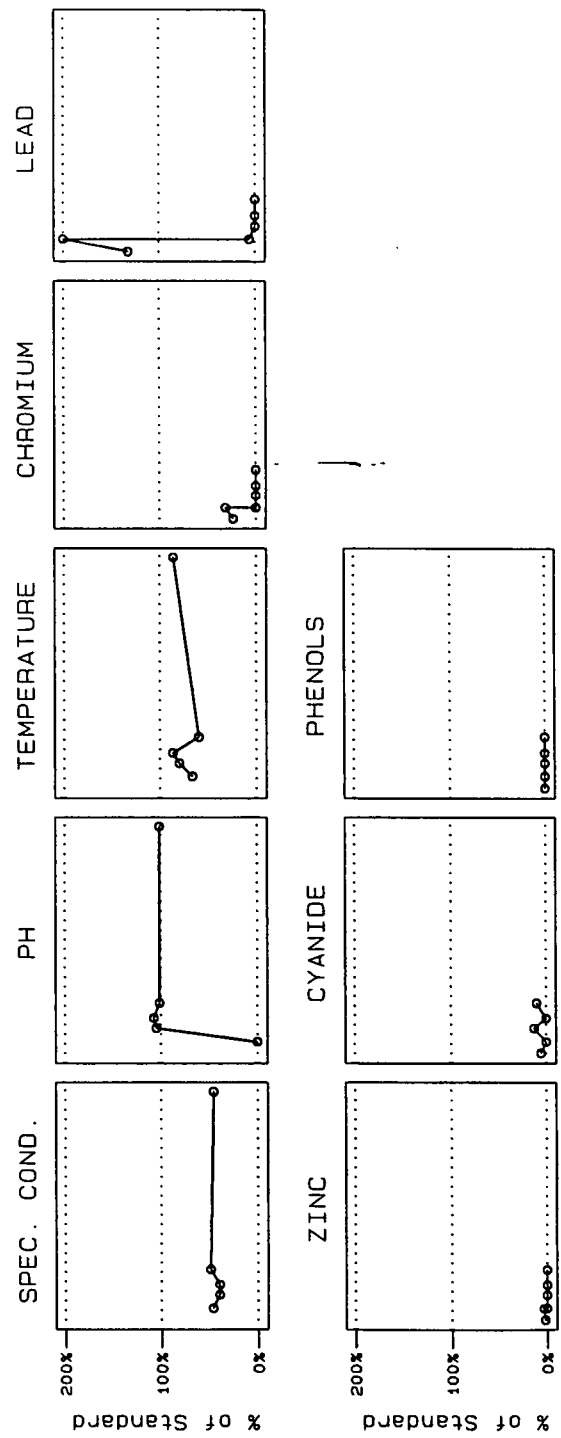
PARAMETER

o - Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 1 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084







SOURCE: 9-33

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
01/08/87	11	AQUA	-	-	-	170	69	840	-	-	
02/12/87	19A	AQUA	-	-	-	844	125	210	.200	.100	
02/12/87	19B	AQUA	-	-	-	<10	<3	12	-	-	
06/05/87	3	AQUA	1250	7.88	14	<5	4	10	0.014	<0.010	
09/03/87	3	AQUA	1150	7.22	15	<10	<3	<4	<0.005	<0.010	
01/13/88	3	AQUA	1030	7.15	13	<20	<30	<10	<0.02	0.03	
02/10/88	31	AQUA	2000	7.40	12	<20	<3	<10	<0.01	<0.010	
05/18/88	3	AQUA	1400	7.34	14	30	<5	<20	<0.01	<0.01	
09/22/88	3	AQUA	980	7.20	17	<30	<6	<20	<0.01	0.04	
12/09/88	15	AQUA	1740	-	15	<30	<5	<20	<0.01	<0.01	
02/22/89	4	AQUA	939	7.65	14	<30	<5	<20	<0.01	0.02	
09/07/89	4	AQUA	604	7.05	18	<10	<2	<10	<0.01	0.04	
02/28/90	5	AQUA	723	7.00	13	<10	<2	<10	<0.01	<0.01	
06/04/90	33	AQUA	661	7.42	16	-	-	-	-	-	
06/04/90	34	AQUA	654	7.47	16	-	-	-	-	-	
08/22/90	2	AQUA	637	7.00	16	<5	<2	<10	<0.01	0.02	
10/27/90	3	AQUA	731	7.05	14	-	-	-	-	-	
02/28/91	11	AQUA	753	7.09	16	<20	<2.0	<10	<0.010	0.045	
06/01/91	24	AQUA	720	7.10	16	-	-	-	-	-	
08/29/91	11	AQUA	558	7.4	18	<10	<2.0	10	<0.010	<0.010	
11/12/91	5	AQUA	669	7.41	15.7	-	-	-	-	-	
01/23/92	12	AQUA	781	7.27	14.9	<10	<2.0	12	<0.010	0.019	
04/01/92	32	AQUA	716	7.37	13.8	-	-	-	-	-	
08/22/92	11	AQUA	762	7.27	18.2	<10	<2	20	<0.010	0.020	
10/30/92	9	AQUA	609	7.46	16.2	-	-	-	-	-	
02/04/93	8	AQUA	710	7.15	13.9	<5	<2	<10	<0.010	<0.010	
05/11/93	12	AQUA	534	7.40	16.7	-	-	-	-	-	
05/11/93	13	AQUA	538	7.37	16.7	-	-	-	-	-	
08/31/93	2	AQUA	569	7.42	16.0	<10	<2	<10	<0.010	<0.010	
12/02/93	19	AQUA	449	7.65	12.0	-	-	-	-	-	
02/17/94	7	AQUA	495	7.65	12.0	<5	<2	29	<0.005	<0.010	
05/05/94	12	AQUA	532	7.35	13.0	-	-	-	-	-	
05/05/94	13	AQUA	535	7.35	13.0	-	-	-	-	-	
09/14/94	9	AQUA	759	7.20	16.0	<5	4.3	37	0.005	0.012	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

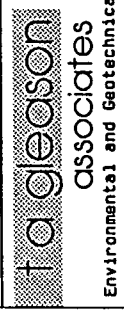
PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 2 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084





SOURCE: 9-33

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

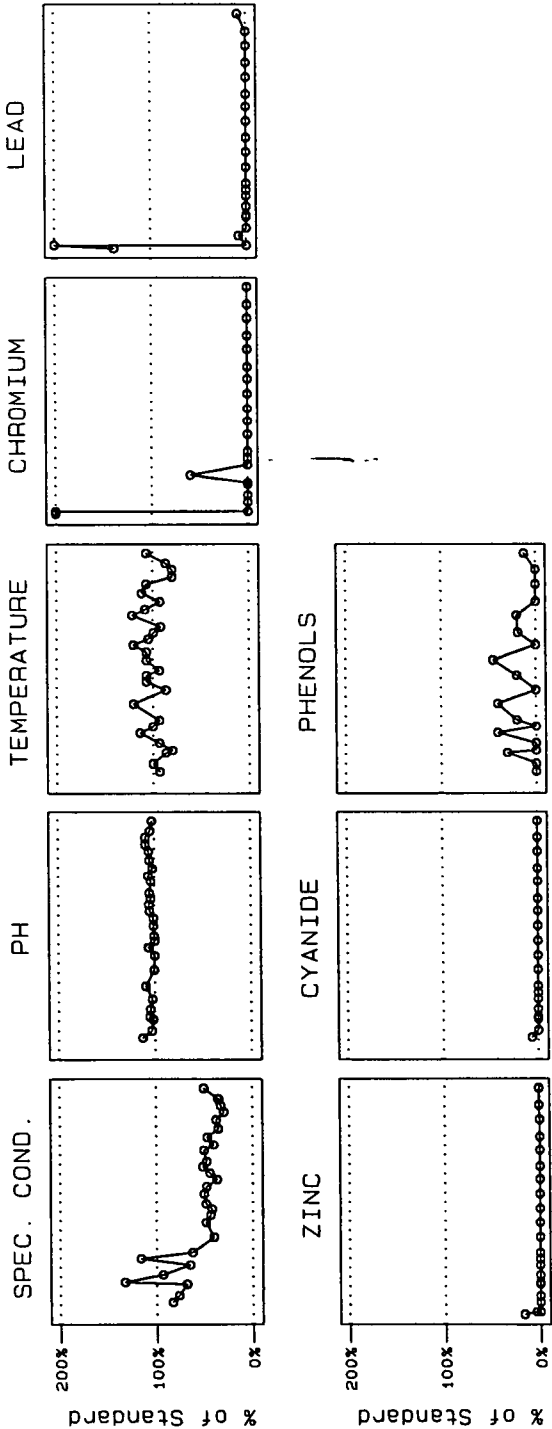
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 2A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**Tagleason**  
associates  
Environmental and Geotechnical Services





SOURCE: 86-10		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD:	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
08/02/86	8	AQUA	1620	6.62	20.4	30	68	140	-	-	
08/02/86	9	AQUA	-	-	-	-	-	-	<0.01	-	
10/10/86	116	AQUA	1900	-	-	-	-	-	0.09	-	
10/10/86	316	AQUA	-	-	-	<20	21	30	-	-	
02/24/89	22	AQUA	1413	7.25	14	<30	<5	20	<0.01	0.03	
09/07/89	3	AQUA	1164	6.60	18	<10	<4	20	<0.01	<0.01	
02/28/90	7	AQUA	1419	6.50	12.5	<10	<2	20	<0.01	0.071	
06/01/90	3	-	1177	7.20	16	-	-	-	-	-	
08/23/90	12	AQUA	1582	7.00	17	<5	<2	<10	<0.01	<0.01	
10/29/90	24	-	1859	6.99	15	-	-	-	-	-	
03/01/91	14	AQUA	2240	6.75	14.7	<20	<2	<10	<0.010	<0.010	
05/31/91	6	-	2280	6.80	18	-	-	-	-	-	
08/30/91	16	AQUA	1784	7.02	18.7	<10	<5	10	<0.01	<0.01	
11/12/91	10	-	2090	7.13	16.7	-	-	-	-	-	
01/23/92	7	AQUA	1650	6.99	14.6	<10	<5	10	<0.01	<0.01	
01/23/92	8	AQUA	1650	6.97	14.6	<10	<5	20	<0.01	<0.01	
04/01/92	26	-	1450	7.06	14.9	-	-	-	-	-	
08/21/92	5	AQUA	1480	7.20	17.5	<10	<2	22	<0.010	<0.010	
11/02/92	36	-	1939	7.20	19.8	-	-	-	-	-	
02/05/93	23	AQUA	1600	7.02	14.9	<10	<2	11	<0.010	<0.010	
05/12/93	21	-	1548	7.02	15.8	-	-	-	-	-	
09/01/93	21	AQUA	2070	7.15	16.0	<10	<2	23	<0.010	<0.010	
12/02/93	15	-	2090	7.05	14.0	-	-	-	-	-	
02/18/94	16	AQUA	2270	6.85	13.0	<5	<2	51	<0.010	<0.010	
05/06/94	23	-	1554	7.00	14.0	-	-	-	-	-	
09/15/94	18	AQUA	1442	6.80	15.0	<5.0	2.5	71	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 3 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCPX SBIN 084





SOURCE: 86-10

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

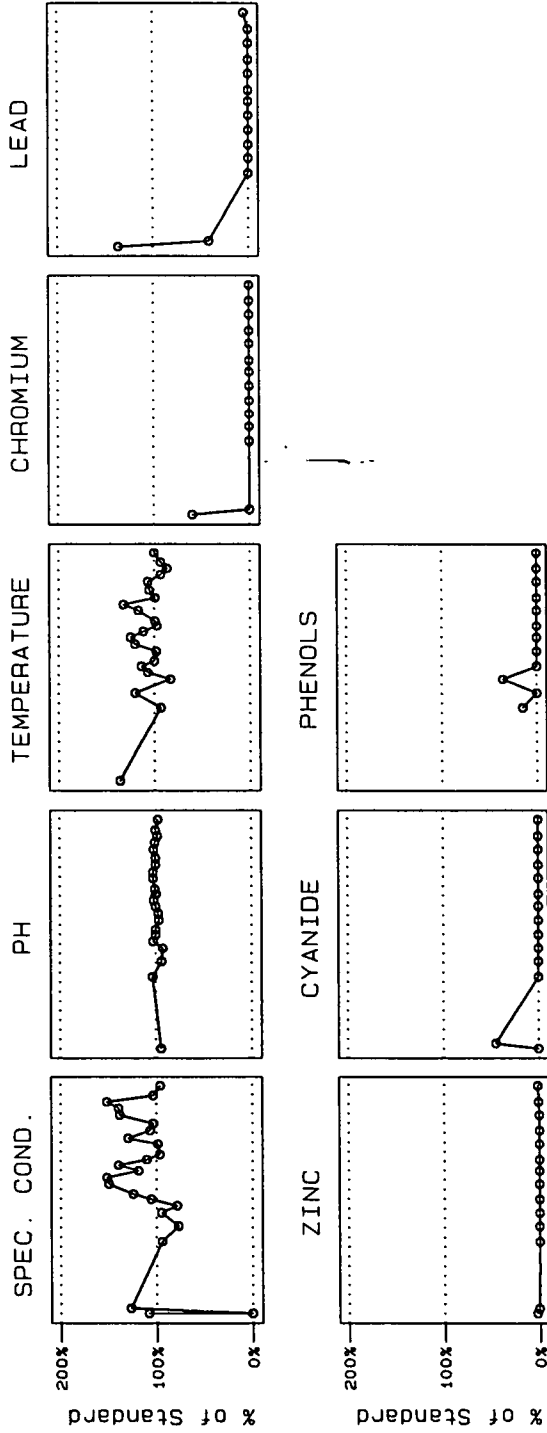
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 3A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taajeon**  
associates  
Environmental and Geotechnical Services







SOURCE: 86-15

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
08/02/86	5	AQUA	1320	6.9	21.7	40	54	190	-	-	
08/02/86	6	AQUA	-	-	-	-	-	-	<0.01	-	
10/10/86	111	AQUA	1310	-	-	-	-	-	0.05	-	
10/10/86	311	AQUA	-	-	-	<20	20	70	-	-	
02/24/89	24	AQUA	1161	7.20	14	<30	<10	20	<0.01	0.02	
09/07/89	2	AQUA	934	6.55	19	<10	<4	20	<0.01	<0.01	
02/28/90	6	AQUA	918	6.70	12	<10	<2	10	<0.01	<0.01	
06/01/90	2		695	7.26	16	-	-	-	-	-	
08/23/90	11	AQUA	1903	6.95	17	<5	<2	<10	<0.01	0.02	
10/29/90	23		1731	6.95	16	-	-	-	-	-	
03/01/91	13	AQUA	2000	6.78	15.8	<20	<2.0	<10	<0.010	<0.010	
05/31/91	5		2180	6.80	18	-	-	-	-	-	
08/30/91	15	AQUA	1739	7.05	19	<10	<5	<10	<0.01	<0.01	
11/12/91	8		2270	7.04	17.7	-	-	-	-	-	
11/12/91	9		2281	7.08	17.7	-	-	-	-	-	
01/23/92	5	AQUA	2220	6.80	16.4	<10	<5	10	<0.01	<0.01	
04/01/92	25		2350	6.87	15.7	-	-	-	-	-	
08/21/92	4	AQUA	2270	6.98	17.8	<10	<2	<10	<0.010	<0.010	
11/02/92	34		2860	6.70	17.3	-	-	-	-	-	
11/02/92	35		2854	6.70	17.3	-	-	-	-	-	
02/05/93	22	AQUA	2810	6.73	16.0	<10	<2	<10	<0.010	<0.010	
05/12/93	19		1909	6.94	16.0	-	-	-	-	-	
05/12/93	20		1904	6.94	16.0	-	-	-	-	-	
09/01/93	20	AQUA	2470	7.05	17.0	<10	<2	25	<0.010	0.025	
12/02/93	14		2890	6.85	14.0	-	-	-	-	-	
02/18/94	15	AQUA	2700	6.90	12.0	<5	<2	30	<0.010	<0.010	
05/06/94	21		2190	6.90	14.0	-	-	-	-	-	
05/06/94	22		2195	6.90	14.0	-	-	-	-	-	
09/15/94	17	AQUA	2040	6.70	15.0	<5.0	<2.0	55	<0.005	<0.010	
09/15/94	17A	AQUA	2040	6.70	15.0	5.0	16	210	-	-	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 4 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



Environmental and Geotechnical Services



SOURCE: 86-15

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

TABLE 7

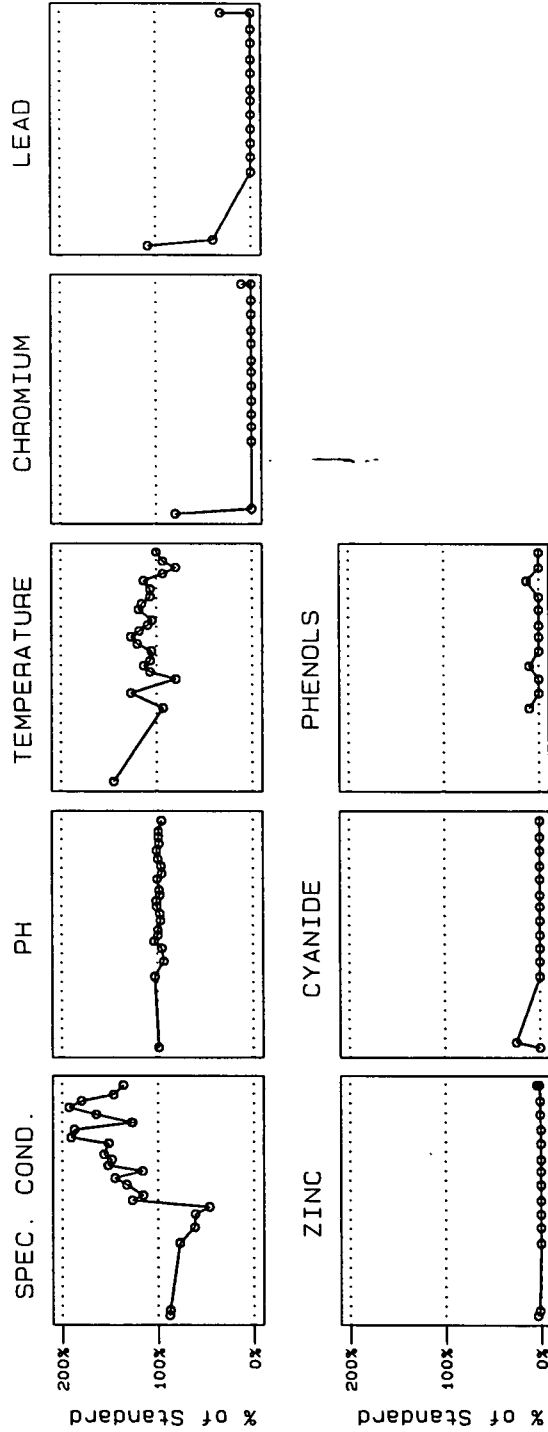
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 4A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taaleason**

associates  
Environmental and Geotechnical Services





SOURCE: S-1		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
11/05/86	1	AQUA	-	-	<10	15	-	<10	15	20	<0.010	0.02	
12/17/86	18	AQUA	-	-	<10	<9	-	<10	<9	ND	<0.010	<0.010	
06/05/87	1	AQUA	625	7.15	<5	<3	14	<5	<3	<10	ND	0.02	
09/03/87	1	AQUA	625	7.01	<10	<3	15	<10	<3	<8	<0.005	0.125	
01/13/88	1	AQUA	690	6.80	<20	<30	10	<20	<30	<10	<0.02	<0.010	
02/08/88	1	AQUA	1840	7.22	20	<3	10	<30	<3	10	<0.01	0.045	
05/18/88	1	AQUA	1000	7.17	<30	<5	13	<30	<5	<10	<0.01	<0.01	
09/22/88	1	AQUA	620	7.10	<30	<6	13	<30	<6	<20	<0.01	0.04	
12/09/88	12	AQUA	1140	-	<30	<5	12.5	<30	<5	<20	<0.01	<0.01	
02/22/89	1	AQUA	660	7.45	<30	<5	12	<30	<5	<20	<0.01	<0.01	
02/22/89	2	AQUA	647	7.50	<30	<5	13	<30	<5	<20	<0.01	<0.01	
09/09/89	20	AQUA	421	7.00	<10	<2	13	<10	<2	<10	<0.01	0.04	
02/28/90	8	AQUA	549	7.20	<10	<2	11	<10	<2	<10	<0.01	<0.01	
06/03/90	24	AQUA	731	7.45	-	-	12	-	-	-	-	-	
08/24/90	33	AQUA	592	7.45	<5	<2	14	<5	<2	<10	<0.01	<0.01	
10/27/90	2	AQUA	550	7.10	-	-	13	-	-	-	-	-	
02/28/91	4	AQUA	566	7.10	<20	<2	ND	<20	<2	10	<0.01	<0.01	
06/01/91	23	AQUA	706	7.0	-	-	15	-	-	-	-	-	
08/29/91	10	AQUA	820	7.15	<10	<2	16	<10	<2	10	<0.01	<0.01	
11/12/91	4	AQUA	671	7.37	-	-	12.7	-	-	-	-	-	
01/22/92	3	AQUA	759	7.29	<10	<2	12.9	<10	<2	<2	<0.01	<0.01	
03/31/92	20	AQUA	680	7.32	-	-	13.2	-	-	-	-	-	
03/31/92	21	AQUA	677	7.30	-	-	13.2	-	-	-	-	-	
08/22/92	10	AQUA	651	7.28	<10	<2	14.1	<10	<2	13	<0.010	<0.010	
10/30/92	10	AQUA	554	7.51	-	-	13.1	-	-	-	-	-	
10/30/92	11	AQUA	556	7.52	-	-	13.1	-	-	-	-	-	
02/04/93	7	AQUA	621	7.12	<5	<2	10.7	<5	<2	<10	<0.010	<0.010	
05/11/93	11	AQUA	503	7.37	-	-	15.5	-	-	-	-	-	
08/31/93	1	AQUA	513	7.45	<10	<2	14.0	<10	<2	<10	<0.010	0.015	
12/01/93	12	AQUA	535	7.35	-	-	10.0	-	-	-	-	-	
02/16/94	1	AQUA	577	7.30	<5	<2	11.0	<5	<2	<10	<0.005	<0.010	
05/04/94	4	AQUA	632	7.15	-	-	12.0	-	-	-	-	-	
09/14/94	8	AQUA	846	7.00	<5.0	<2.0	15.0	<5.0	<2.0	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 5 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



Environmental and Geotechnical Services



SOURCE: S-1

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

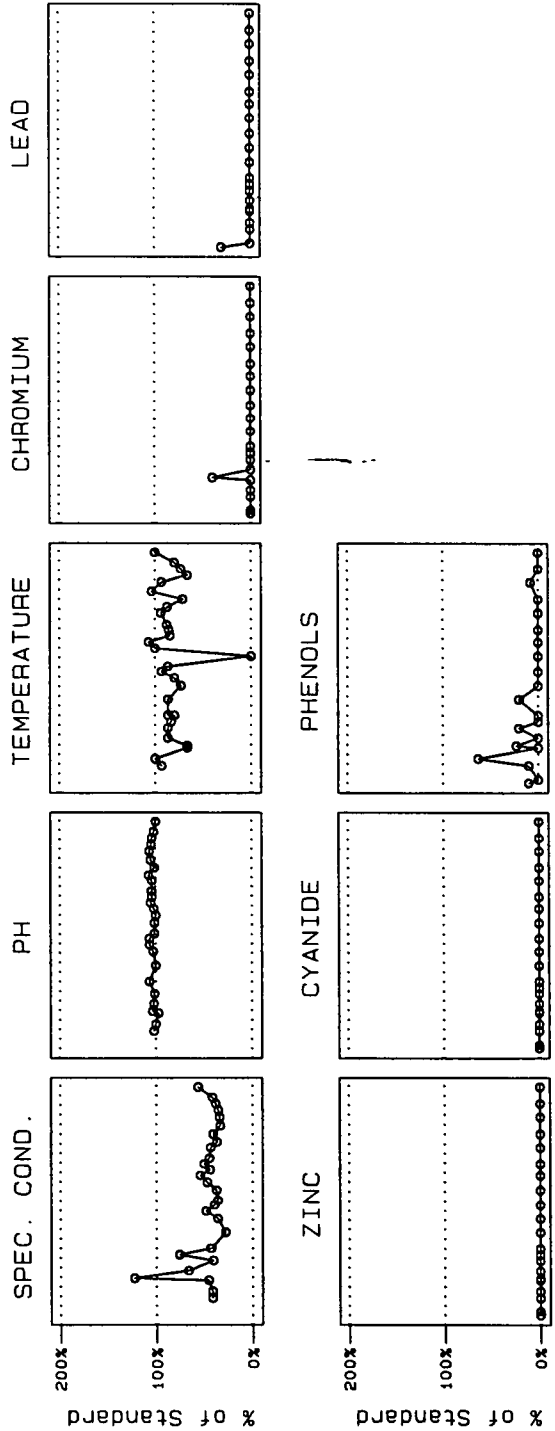
PAGE 5A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



associates

Environmental and Geotechnical Services







SOURCE: S-4A

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
06/05/87	22	AQUA	1600	7.48	16	<5	<3	30	0.028	<0.010	A
09/04/87	27	AQUA	1700	6.94	15	<10	3	24	0.008	0.035	
01/14/88	25	AQUA	2000	6.49	13	<20	<30	10	0.02	0.08	
02/08/88	6	AQUA	2500	7.20	13	<20	<3	60	0.01	7.6	B
05/18/88	7	AQUA	1700	7.27	14	44	<5	48	<0.01	<0.01	
05/18/88	8	AQUA	-	-	-	<30	<5	43	<0.01	<0.01	
09/22/88	7	AQUA	1655	6.95	16.5	<30	<6	<20	<0.01	0.07	
09/22/88	8	AQUA	-	-	-	<30	<6	<20	<0.01	0.04	
12/10/88	26	AQUA	2960	-	14.5	<30	<5	<20	<0.01	0.01	
02/27/89	43	AQUA	1593	6.85	14	<30	<10	40	<0.01	0.03	
09/09/89	25	AQUA	984	6.80	16	<10	<4	10	<0.01	<0.01	
03/02/90	37	AQUA	1050	7.00	13	<10	<5	<10	<0.01	<0.01	
06/03/90	23		1123	7.04	14	-	-	-	-	-	
08/24/90	22	AQUA	1134	6.85	15	<5	<2	<10	<0.01	0.032	
10/28/90	14		1179	7.02	14	-	-	-	-	-	
03/02/91	25	AQUA	1242	6.81	14.9	<20	<2.0	60	<0.010	<0.010	
06/02/91	28		1406	6.70	16	-	-	-	-	-	
08/31/91	30	AQUA	1057	6.8	17	<10	<5	20	<0.01	<0.01	
11/13/91	21		1250	6.90	15.1	-	-	-	-	-	
11/13/91	22		1253	6.95	15.1	-	-	-	-	-	
01/25/92	27	AQUA	1155	6.57	14.0	<10	<5	10	<0.01	<0.01	
01/25/92	28	AQUA	1185	6.58	14.0	<10	<5	10	<0.01	<0.01	
04/01/92	36		1042	7.05	12.8	-	-	-	-	-	
08/22/92	24	AQUA	1109	6.96	16.7	<10	<2	42	<0.010	<0.010	
10/31/92	18		971	7.00	14.2	-	-	-	-	-	
10/31/92	19		968	6.99	14.2	-	-	-	-	-	
02/04/93	18	AQUA	1055	6.97	14.3	<5	<2	111	<0.010	<0.010	
05/11/93	15		741	6.99	15.6	-	-	-	-	-	
08/31/93	15	AQUA	890	7.10	14.0	<10	<2.0	50	<0.010	<0.010	
12/03/93	28		1070	7.00	12.0	-	-	-	-	-	
12/03/93	29		1071	7.01	12.0	-	-	-	-	-	
02/18/94	18	AQUA	1186	6.70	12.0	<5	<2	98	<0.010	<0.010	
05/05/94	18		847	6.85	12.0	-	-	-	-	-	
09/15/94	31	AQUA	849	6.70	14.0	<5.0	7.5	18	0.005	<0.010	
09/15/94	31A	AQUA	849	6.70	14.0	9.8	40	219	-	-	C

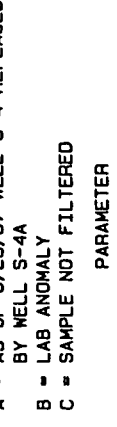
NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED  
MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
A = AS OF 6/25/87 WELL S-4 REPLACED BY WELL S-4A  
B = LAB ANOMALY  
C = SAMPLE NOT FILTERED

PARAMETER  
o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 6 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



SOURCE: S-4A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = AS OF 6/25/87 WELL S-4 REPLACED BY WELL S-4A

B = LAB ANOMALY

C = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

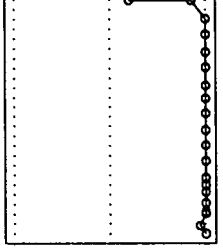
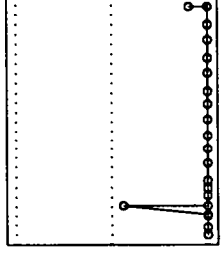
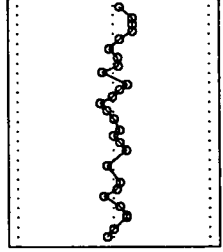
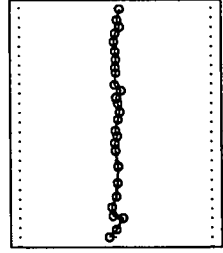
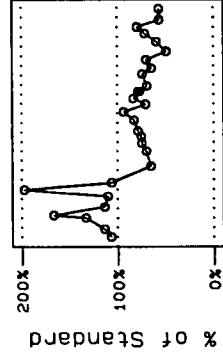
SPEC. COND.

PH

TEMPERATURE

CHROMIUM

LEAD



ZINC

CYANIDE

PHENOLS

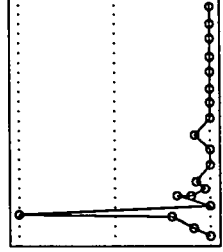
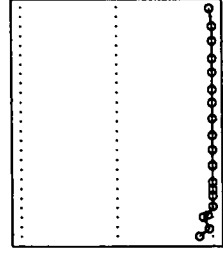
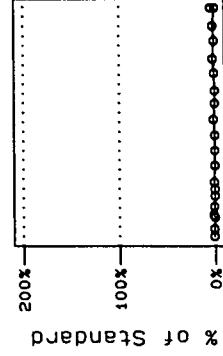


TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 6A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

ta gleason  
associates

Environmental and Geotechnical Services



SOURCE: S-9		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
10/01/86	110	AQUA	-	-	-	-	ND	<0.010	-	
10/01/86	130	AQUA	-	-	<20	33	930	-	-	
11/01/86	4	AQUA	-	-	20	-	500	<0.010	<0.010	
12/18/86	20	AQUA	-	-	<10	<3	120	<0.010	<0.010	
12/18/86	30	CCL	-	-	<10	3	8	<0.010	<0.010	
06/05/87	7	AQUA	7.68	16	<5	<30	10	0.014	0.049	
09/03/87	9	AQUA	7.55	15	<10	-	12	<0.005	<0.010	
01/13/88	6	AQUA	6.75	12	<20	<30	10	<0.02	<0.010	
02/08/88	9	AQUA	7.35	12	<20	<3	20	<0.01	0.202	
05/18/88	9	AQUA	7.41	15	<30	<5	28	<0.01	<0.01	
09/23/88	9	AQUA	7.15	18.5	<30	<6	<20	<0.01	0.04	
12/08/88	4	AQUA	8.35	14	<30	<5	<20	<0.01	0.07	
02/23/89	13	AQUA	7.50	12	<30	<5	<20	<0.01	0.02	
09/08/89	15	AQUA	7.35	17	<10	<2	<10	0.01	<0.01	
02/27/90	4	AQUA	7.00	12.5	<10	<2	10	<0.01	<0.01	
06/01/90	6		7.49	15	-	-	-	-	-	
08/22/90	4	AQUA	7.35	17	<5	<2	<10	<0.01	<0.01	
10/27/90	9		6.85	15	-	-	-	-	-	
02/28/91	3	AQUA	6.83	13.1	<20	<2	10	<0.010	<0.01	
05/31/91	9		7.00	16	-	-	-	-	-	
08/29/91	14	AQUA	7.13	19	<10	<2	10	<0.01	<0.01	
11/14/91	33		6.96	18.4	-	-	-	-	-	
01/22/92	5	AQUA	7.06	14.3	<10	<2	<1	<0.01	<0.01	
03/30/92	12		6.87	13.3	-	-	-	-	-	
08/22/92	20	AQUA	6.96	19.2	<10	<2	<10	<0.010	<0.010	
10/31/92	27		6.87	17.2	-	-	-	-	-	
02/03/93	5	AQUA	6.95	13.3	<5	<2	10	<0.010	<0.010	
05/12/93	29		7.03	16.0	-	-	-	-	-	
09/02/93	34	AQUA	7.10	16.0	<10	<2	<10	<0.010	<0.010	
12/02/93	17		7.05	13.0	-	-	-	-	-	
02/17/94	9	AQUA	7.05	13.0	<5	<2	<10	<0.005	<0.010	
05/05/94	7		7.08	12.0	-	-	-	-	-	
09/15/94	24	AQUA	6.80	15.0	<5.0	<2.0	21	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 7 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



SOURCE: S-9

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

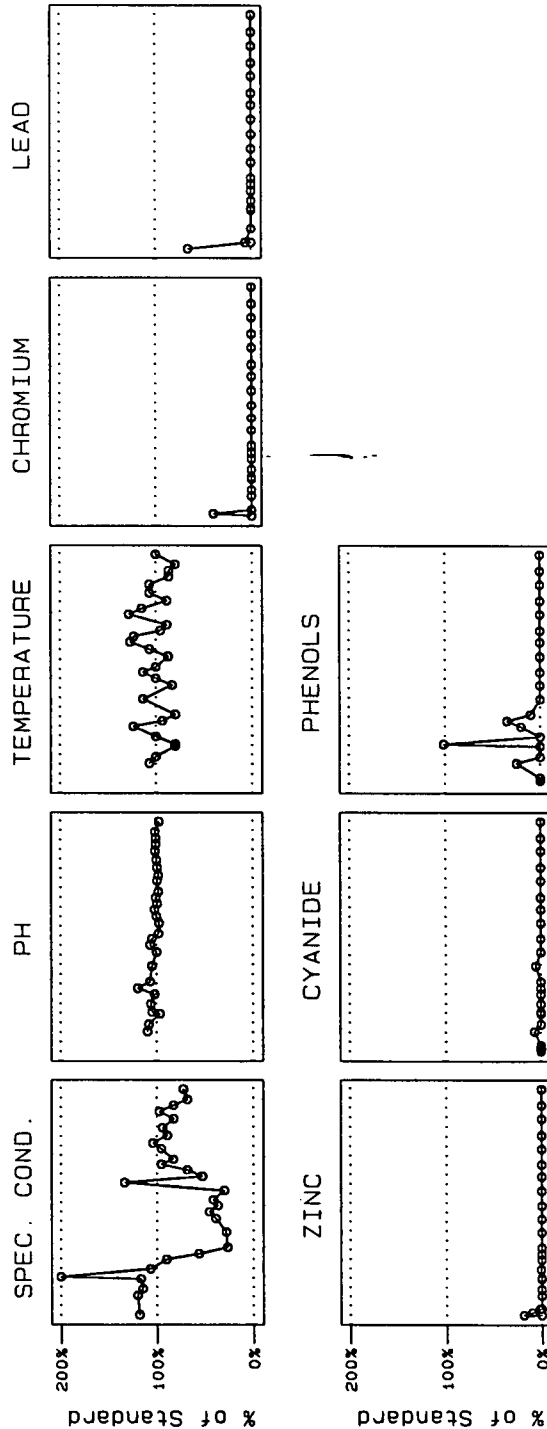


TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 7A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES

Environmental and Geotechnical Services

120





SOURCE: S-14		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.									
11/05/86	21	AQUA	-	-	<10	16	370	<0.010	<0.010	
06/05/87	5	AQUA	7.39	15	<5	<3	10	0.048	<0.010	
09/03/87	7	AQUA	7.28	14	<10	<3	48	<0.005	<0.010	
01/14/88	23	AQUA	6.77	11	<20	<20	20	<0.02	<0.010	
02/08/88	5	AQUA	7.41	12	<20	<3	70	<0.01	<0.010	
05/18/88	5	AQUA	7.36	14	<30	<5	71	<0.01	<0.01	
09/23/88	5	AQUA	6.95	18.5	<30	<6	20	<0.01	0.10	
12/10/88	23	AQUA	-	14	<30	<5	<20	<0.01	0.03	
09/09/89	23	AQUA	6.80	18.5	<10	<2	10	<0.01	<0.01	
09/09/89	24	AQUA	6.80	19	<10	<4	10	<0.01	<0.01	
03/03/90	42	AQUA	6.90	12	<10	<10	<10	<0.01	<0.01	
03/03/90	43	AQUA	6.90	12	<10	<10	<10	<0.01	<0.01	
06/02/90	18		7.15	14	-	-	-	-	-	
08/24/90	21	AQUA	6.85	17	<5	<2	<10	<0.01	<0.01	
10/27/90	11		7.21	16	-	-	-	-	-	
03/02/91	22	AQUA	6.85	14.0	<20	<2.0	10	<0.010	<0.010	
03/02/91	23	AQUA	6.84	14.0	<20	<2.0	<10	<0.010	<0.010	
06/01/91	26		6.90	16	-	-	-	-	-	
08/31/91	27	AQUA	6.8	18	<10	<5	10	<0.01	<0.01	
08/31/91	28	AQUA	6.8	18	<10	<5	10	<0.01	<0.01	
11/13/91	20		7.11	17.8	-	-	-	-	-	
01/25/92	35	AQUA	6.88	12.2	<10	<5	10	<0.01	<0.01	
04/01/92	34		7.22	11.9	-	-	-	-	-	
04/01/92	35		7.23	11.9	-	-	-	-	-	
08/22/92	22	AQUA	6.95	19.1	<10	<2	13	<0.010	<0.010	
08/22/92	23	AQUA	6.95	19.1	<10	<2	13	<0.010	<0.010	
10/31/92	17		6.97	16.4	-	-	-	-	-	
02/04/93	20	AQUA	7.02	13.1	<5	<2	10	<0.010	<0.010	
05/11/93	17		7.08	15.5	-	-	-	-	-	
08/31/93	18	AQUA	7.05	13.0	<10	<2.0	<10	<0.010	0.013	
12/03/93	26		7.00	14.0	-	-	-	-	-	
02/17/94	13	AQUA	7.00	12.0	<5	<2	11	<0.005	<0.010	
05/06/94	31		7.00	14.0	-	-	-	-	-	
09/15/94	29	AQUA	6.70	15.0	<5.0	4.3	<10	<0.005	<0.010	A
09/15/94	30	AQUA	6.75	15.0	<5.0	<2.0	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

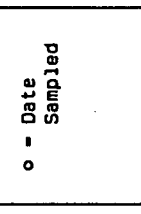


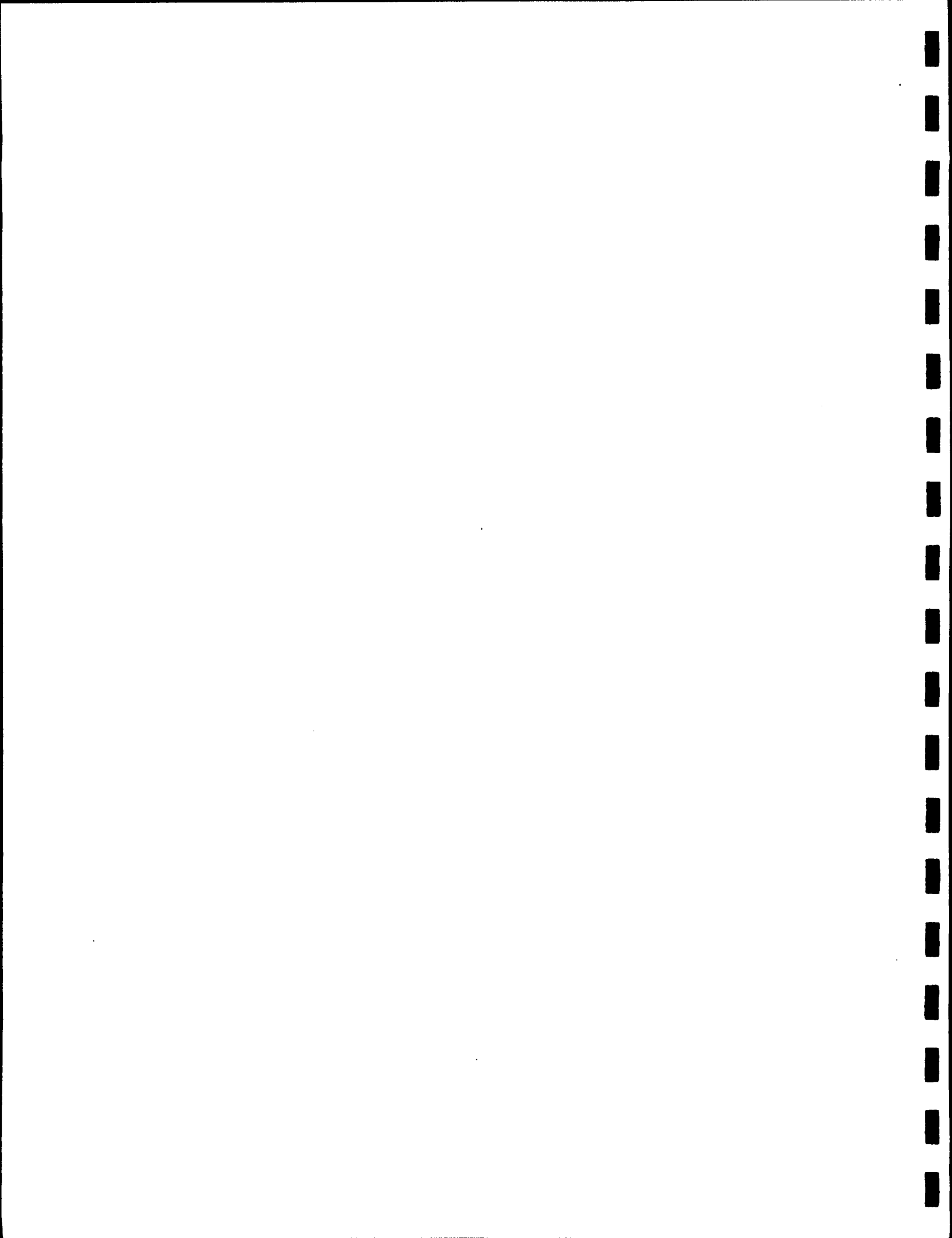
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 8 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



SOURCE: S-14

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

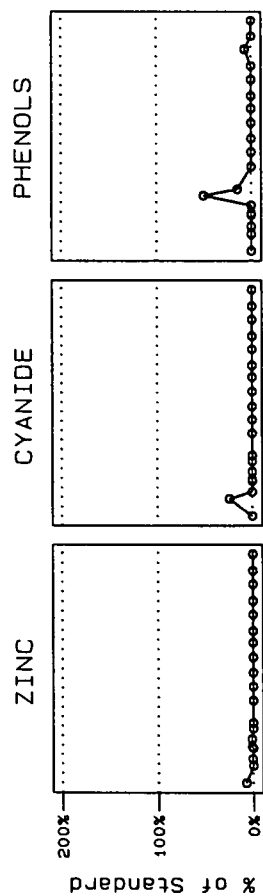
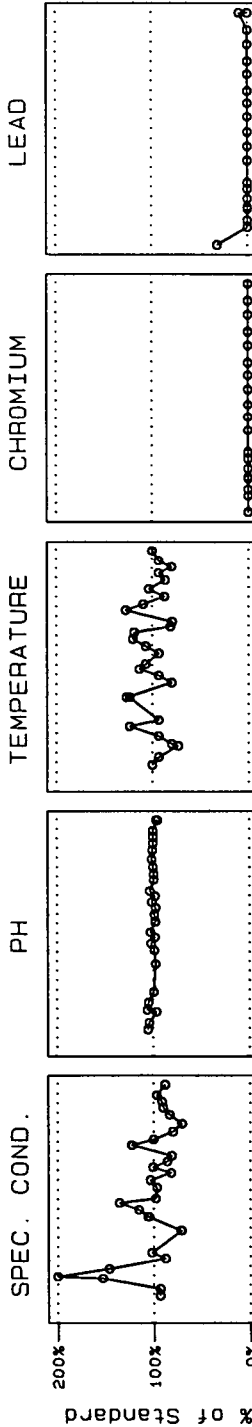


TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 8A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**to gleason**  
associates  
Environmental and Geotechnical Services



SOURCE: S-15

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SHCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
11/06/86	27	AQUA	-	-	-	16	16	120	<0.010	<0.010	
12/18/86	23	AQUA	-	-	-	<10	<15	48	<0.010	<0.010	
06/05/87	6	AQUA	1700	7.27	16	<5	<3	10	0.041	0.01	
09/03/87	5	AQUA	1625	7.18	15	<10	<3	4	<0.005	<0.010	
09/03/87	6	AQUA	1625	7.18	15	<10	<3	12	<0.005	<0.010	
01/14/88	24	AQUA	2300	6.42	12	<20	<30	10	<0.02	0.01	
02/08/88	4	AQUA	2650	7.30	12	<20	<3	10	<0.01	0.034	
05/18/88	6	AQUA	2300	7.22	14	<30	<5	21	<0.01	0.04	
09/23/88	6	AQUA	1800	6.85	18.5	<30	<6	<20	<0.01	0.05	
12/10/88	24	AQUA	3060	-	14	<30	<5	<20	<0.01	0.08	
02/23/89	15	AQUA	2140	6.95	13	<30	<10	<20	<0.01	0.03	
09/09/89	22	AQUA	1586	6.65	17.5	<10	<4	<10	<0.01	<0.01	
03/03/90	40	AQUA	1684	6.70	13	<10	<10	<10	0.001	0.011	
03/03/90	41	AQUA	1756	6.70	13	<10	<10	<10	<0.01	<0.01	
06/03/90	25		1309	6.99	13	-	-	-	-	-	
08/24/90	20	AQUA	2140	6.55	13	<5	<2	<10	<0.01	<0.01	
10/28/90	13		2200	6.53	16	-	-	-	-	-	
03/01/91	12	AQUA	1491	6.36	14.4	<20	<2.0	<10	<0.010	<0.010	
06/01/91	25		1673	6.80	15	-	-	-	-	-	
08/31/91	26	AQUA	1430	6.8	19	<10	<5	10	<0.01	<0.01	
11/12/91	6		1812	6.92	17.0	-	-	-	-	-	
01/25/92	34	AQUA	1812	6.67	14.1	<10	<5	10	<0.01	<0.01	
04/01/92	33		1653	6.95	12.3	-	-	-	-	-	
08/22/92	21	AQUA	1923	6.81	18.9	<10	<2	17	<0.010	<0.010	
10/31/92	16		1675	6.76	16.2	-	-	-	-	-	
02/04/93	19	AQUA	1524	6.84	14.8	<5	<2	12	<0.010	<0.010	
05/11/93	18		1090	6.93	15.8	-	-	-	-	-	
08/31/93	15	AQUA	1430	6.85	17.0	<10	<2	<10	<0.010	<0.010	
12/03/93	25		1809	6.80	14.0	-	-	-	-	-	
02/17/94	14	AQUA	1633	6.95	13.0	<5	<2	10	<0.005	<0.010	
05/05/94	20		1362	6.85	13.0	-	-	-	-	-	
09/15/94	28	AQUA	1575	6.50	15.0	<5.0	3.7	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 9 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taigeason**

Associates

Environmental and Geotechnical Services

A 177S-15.MT.1, 11-10-1994



SOURCE: S-15

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

-- INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

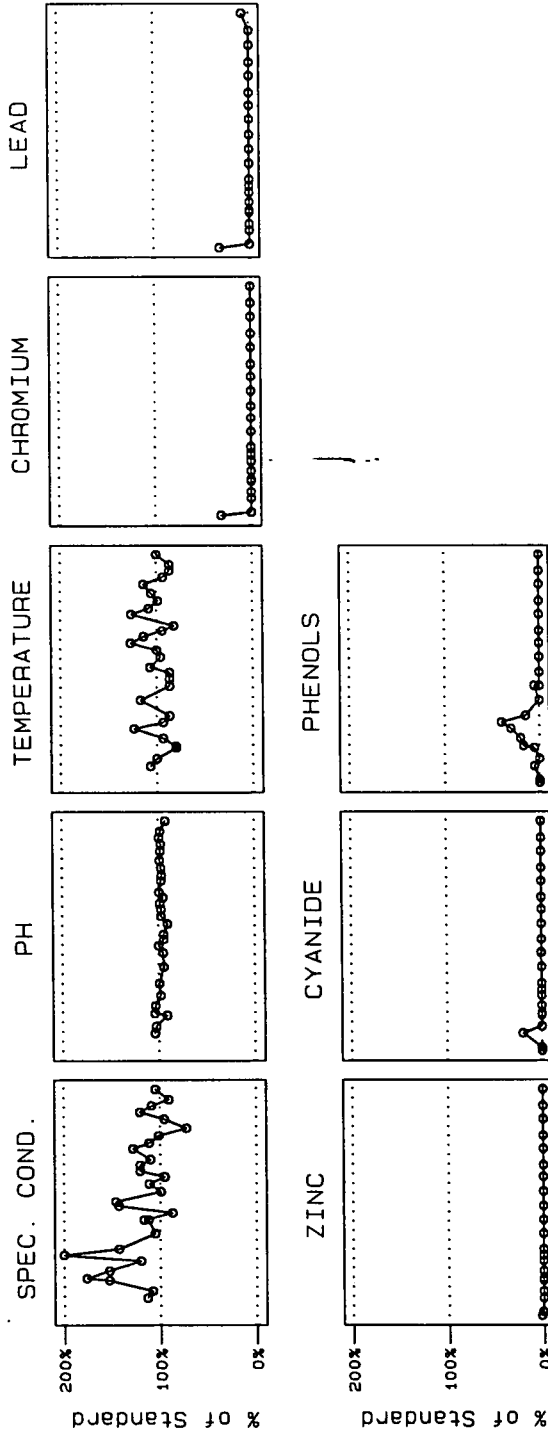
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 9A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 084

**ta gleason**  
Associates  
Environmental and Geotechnical Services







**NOTES:**  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 CCL = COMPUCHEM LABORATORY  
 A = SAMPLE NOT FILTERED

PARAMETER  
 o = Date Sampled

**TABLE 7**  
 SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 10 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**taigeason**  
**associates**  
 Environmental and Geotechnical Services

A: \17AS-16.MT1, 11-10-1994

SOURCE: S-16		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
11/06/86	11	AQUA	-	-	<10	85	<10	65	220	<0.010	0.060		
12/18/86	19	AQUA	-	-	<10	<10	<10	<10	52	<0.010	<0.010		
12/18/86	29	CCL	-	-	<10	<9	<10	<9	4	<0.010	<0.010		
02/12/87	11	AQUA	1450	-	<10	13	<10	13	40	-	-		
06/05/87	12	AQUA	1150	7.57	15	7	<5	7	20	0.07	<0.010		
09/04/87	28	AQUA	1100	7.44	15	<4	<10	<4	40	0.012	0.017		
01/15/88	27	AQUA	1700	6.92	11	<30	<20	<30	10	<0.02	0.01		
02/09/88	12	AQUA	2100	7.62	12	<20	<20	<3	10	0.04	<0.010		
05/19/88	25	AQUA	1450	7.49	14	<30	<30	<5	<20	<0.01	0.02		
09/23/88	14	AQUA	1110	7.20	16.5	<30	<30	<6	<20	<0.01	0.07		
12/10/88	29	AQUA	2320	-	14	<30	<30	<5	<20	<0.01	<0.01		
02/24/89	20	AQUA	1311	7.40	12	<30	<30	<5	<20	<0.01	0.04		
09/10/89	34	AQUA	813	6.95	17	<10	<10	<2	10	<0.01	<0.01		
03/03/90	44	AQUA	819	7.20	-	<10	<10	<5	<10	<0.01	<0.01		
06/03/90	19	AQUA	744	7.25	14	-	-	-	-	-	-		
08/23/90	16	AQUA	877	7.20	17	<5	<5	<2	<10	0.02	<0.01		
10/29/90	30	AQUA	963	7.12	15	-	-	-	-	-	-		
03/04/91	36	AQUA	934	7.11	14.2	<10	<10	<2.0	<10	<0.010	<0.010		
06/02/91	29	AQUA	1238	7.00	16	-	-	-	-	-	-		
08/31/91	33	AQUA	1631	6.9	18	<10	<10	<5	10	<0.01	0.084		
11/14/91	32	AQUA	142	7.16	16.9	-	-	-	-	-	-		
01/26/92	37	AQUA	1764	6.99	13.4	<10	<10	<5	<10	<0.01	<0.01		
04/02/92	45	AQUA	1420	7.17	11.1	-	-	-	-	-	-		
08/22/92	18	AQUA	1952	7.10	18.4	<10	<10	<2	<10	<0.010	<0.010		
10/31/92	20	AQUA	1606	7.15	14.4	-	-	-	-	-	-		
02/05/93	24	AQUA	1709	7.01	11.8	<10	<10	<2	<10	<0.010	<0.010		
05/12/93	23	AQUA	1152	7.31	16.8	-	-	-	-	-	-		
09/01/93	27	AQUA	1402	7.20	11.0	<10	<10	<2	<10	<0.010	0.031		
12/03/93	32	AQUA	1517	7.15	14.0	-	-	-	-	-	-		
02/18/94	25	AQUA	1629	6.65	12.0	<5	<5	<2	<10	<0.010	0.022		
05/06/94	27	AQUA	1261	7.05	13.0	-	-	-	-	-	-		
09/15/94	23	AQUA	1930	6.90	15.0	<5.0	<5.0	2.6	58	0.008	0.125	A	



SOURCE: S-16

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

CCL = COMPUCHEM LABORATORY  
A = SAMPLE NOT FILTERED

PARAMETER

o = Date  
Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

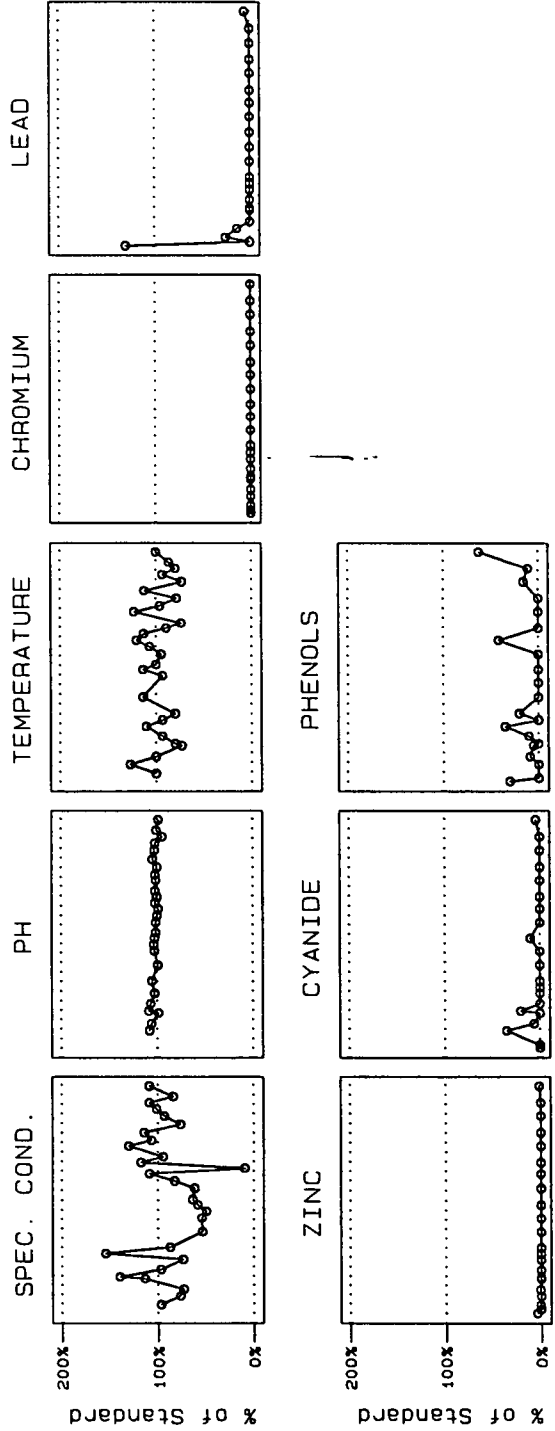
PAGE 10A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taigeason**

associates

Environmental and Geotechnical Services





SOURCE: S-17		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD:	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
11/06/86	16	AQUA	-	-	-	<10	23	150	<0.010	0.025	
06/05/87	15	AQUA	1350	7.55	15	<5	<3	<10	0.024	<0.010	
09/03/87	20	AQUA	1275	7.62	15	<10	<3	4	<0.005	0.425	
01/14/88	22	AQUA	1475	6.57	13	<20	<20	10	<0.02	0.01	
02/10/88	33	AQUA	2100	7.25	12	30	<3	<10	0.01	<0.010	
05/19/88	26	AQUA	1400	7.17	13	<30	<5	<20	<0.01	<0.01	
09/23/88	12	AQUA	1120	7.10	17	<30	<6	<20	<0.01	<0.01	
12/09/88	11	AQUA	2350	-	15	<30	<5	<20	<0.01	<0.01	
02/23/89	17	AQUA	1000	6.95	12	<30	<5	<20	<0.01	0.02	
09/08/89	13	AQUA	839	6.80	16.5	<10	<2	<10	<0.01	<0.01	
03/02/90	25	AQUA	1110	6.50	12	<10	<5	<10	<0.01	<0.01	
06/04/90	35		1195	7.07	14	-	-	-	-	-	
08/24/90	34	AQUA	1235	7.05	15	<5	<2	<10	<0.01	0.035	
08/24/90	35	AQUA	1239	7.05	15	<5	<2	<10	<0.01	<0.01	
10/28/90	22		1254	7.06	13	-	-	-	-	-	
03/02/91	24	AQUA	1429	6.71	15.4	<20	<2.0	<10	<0.010	<0.010	
06/02/91	30		1433	6.90	15	-	-	-	-	-	
08/31/91	31	AQUA	1357	6.8	18	<10	<5	10	<0.01	<0.01	
08/31/91	32	AQUA	1348	6.8	18	<10	<5	10	<0.01	<0.01	
11/13/91	23		1483	6.99	16.2	-	-	-	-	-	
01/26/92	39	AQUA	1345	6.86	13.5	<10	<5	<10	<0.01	<0.01	
04/02/92	42		1326	6.88	13.2	-	-	-	-	-	
04/02/92	43		1320	6.99	13.2	-	-	-	-	-	
08/23/92	27	AQUA	1443	6.67	18.3	<10	<2	<10	<0.010	<0.010	
10/31/92	24		1166	7.01	14.5	-	-	-	-	-	
02/06/93	34	AQUA	1287	6.96	14.1	<10	<2	<10	<0.010	<0.010	
02/06/93	35	AQUA	1287	6.97	14.1	<10	<2	23	<0.010	<0.010	
05/11/93	15		902	7.44	16.4	-	-	-	-	-	
08/31/93	13	AQUA	1042	7.00	16.0	<10	<2	<10	<0.010	<0.010	
08/31/93	14	AQUA	1042	7.05	16.0	<10	<2	<10	<0.010	<0.010	
12/02/93	20		1168	7.00	12.0	-	-	-	-	-	
12/02/93	21		1175	7.04	12.0	-	-	-	-	-	
02/19/94	40	AQUA	1483	7.00	13.0	<5	<2	16	<0.010	<0.010	
05/05/94	19		1113	6.95	13.0	-	-	-	-	-	
09/15/94	25	AQUA	1094	6.70	14.0	<5.0	<2.0	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

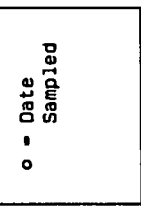


TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 11 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084





SOURCE: S-17

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

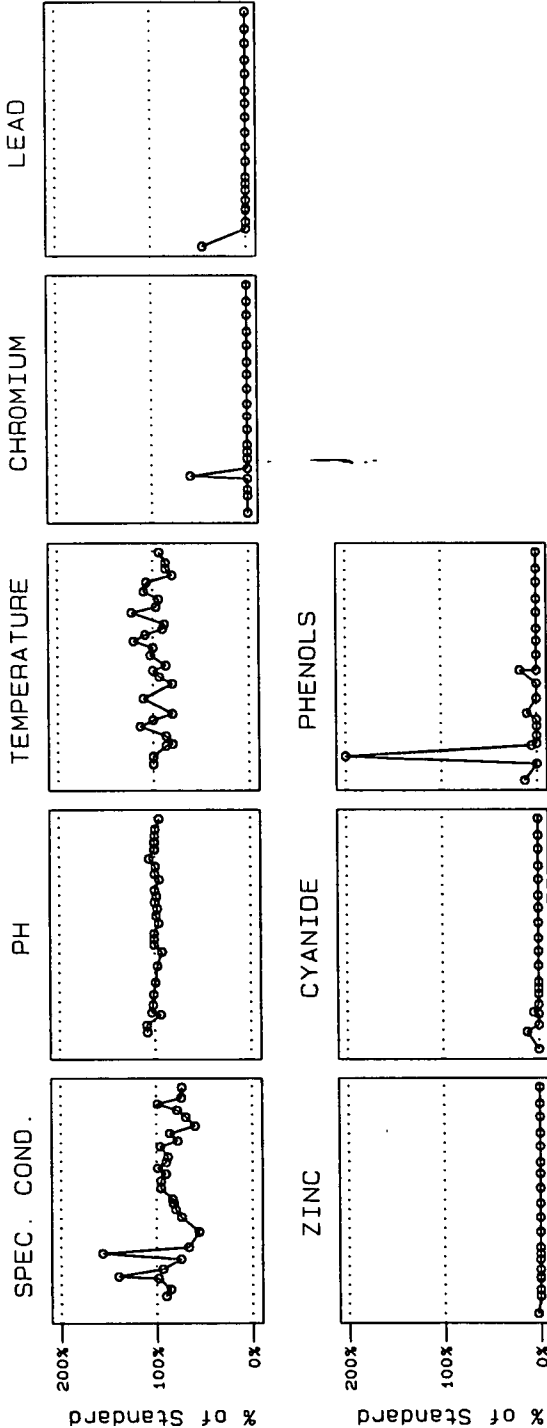
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 11A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
Associates

Environmental and Geotechnical Services







SOURCE: S-20		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
11/07/86	30	-	-	-	15	25	64	0.02	<0.010	
06/05/87	16	1200	7.41	13	<5	<3	10	0.026	<0.010	
09/03/87	10	1250	7.33	14	<10	<3	12	<0.005	0.011	
01/13/88	7	1830	6.78	12	<20	<30	10	<0.02	0.07	
02/09/88	19	3100	7.10	12	<20	<3	10	<0.01	1.48	A
05/18/88	19	1750	7.17	14	<30	<5	33	<0.01	<0.01	
09/25/88	23	1890	6.50	14	<30	<6	<20	<0.01	0.15	
09/25/88	24	-	-	-	<30	<6	<20	<0.01	0.07	
12/08/88	5	1593	8.75	12.5	<30	<5	<20	<0.01	0.02	
02/22/89	9	1539	7.15	11	<30	<10	<20	<0.01	<0.01	
09/09/89	29	822	6.75	15	<10	<4	<10	<0.01	<0.01	
03/02/90	36	1510	7.00	13	<10	<10	<10	<0.01	0.015	
06/01/90	7	1413	7.27	13	-	-	-	-	-	
08/22/90	5	942	7.10	14	<5	<2	<10	<0.01	0.014	
10/27/90	4	1278	7.08	14	-	-	-	-	-	
02/28/91	5	1045	6.83	12.5	<20	<2	<10	<0.010	<0.01	
06/01/91	13	1221	6.90	15	-	-	-	-	-	
08/28/91	6	883	6.95	17	10	<2	10	<0.01	<0.01	
11/12/91	7	1156	7.06	13.8	-	-	-	-	-	
01/25/92	31	1131	6.80	11.4	<10	<5	10	<0.01	0.01	
03/31/92	17	1086	6.85	12.7	-	-	-	-	-	
08/22/92	12	1088	6.97	15.3	<10	<2	12	<0.010	0.020	
10/30/92	5	1074	7.08	13.8	-	-	-	-	-	
02/04/93	9	1120	6.96	11.9	<5	<2	<10	<0.010	0.011	
05/11/93	6	805	6.92	15.8	-	-	-	-	-	
08/31/93	4	927	7.05	15.0	<10	<2	<10	<0.010	<0.010	
12/01/93	2	916	7.05	10.0	-	-	-	-	-	
02/17/94	4	1031	7.05	11.0	<5	<2	<10	<0.005	<0.010	
05/05/94	8	832	6.95	13.0	-	-	-	-	-	
09/14/94	11	1448	6.90	14.0	<5.0	<2.0	<10	<0.005	<0.010	B

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = LAB ANOMALY

B = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 12 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 084





SOURCE: S-20

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = LAB ANOMALY

B = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

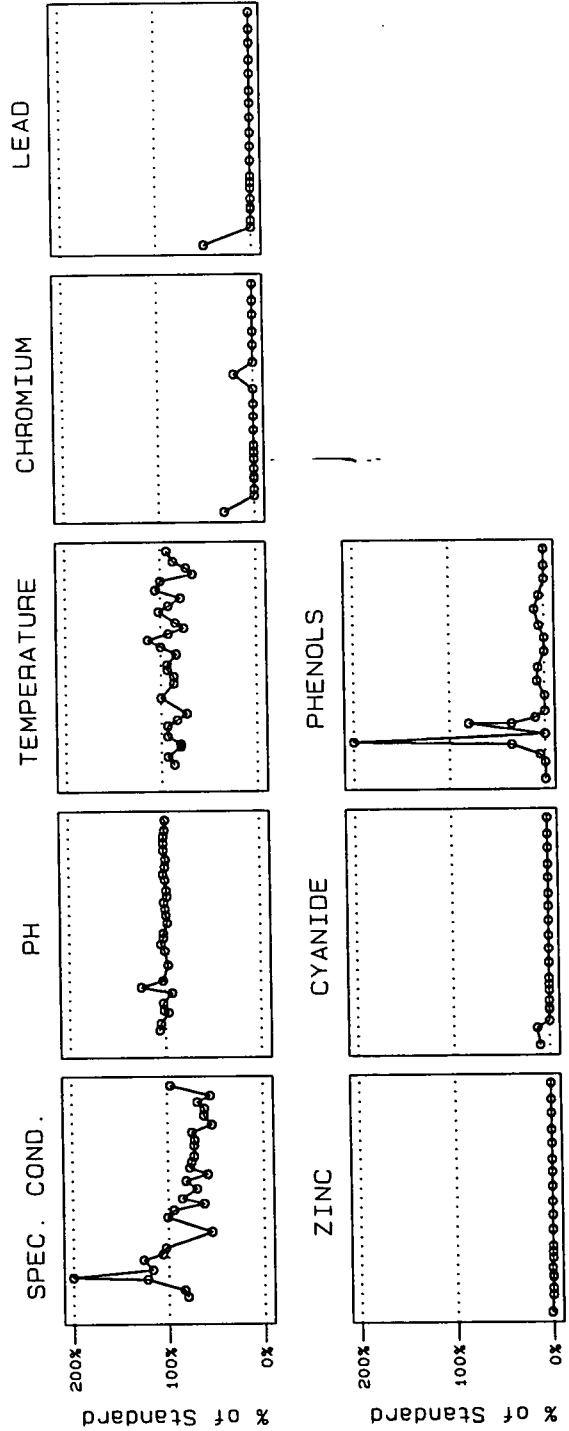
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 12A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





SOURCE: S-21		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD:	UMHOS/CM	S.U.	C	50 MCL	50 MCL	5000 SMCL	MG/L	MG/L	
		LAB				UG/L	UG/L	UG/L	MG/L	MG/L	
11/05/86	17	AQUA	-	-	-	20	33	160	<0.01	<0.010	
06/05/87	17	AQUA	1150	7.80	13	<5	<3	<10	0.023	0.080	
06/05/87	18	AQUA	1150	7.80	13	<5	<3	10	0.031	0.114	
09/03/87	14	AQUA	1100	7.72	14	<10	<3	4	<0.005	<0.010	
01/14/88	11	AQUA	1450	6.53	10	<20	<30	<10	<0.05	0.06	
02/09/88	22	AQUA	2350	6.95	12	20	<3	<10	<0.01	0.055	
05/18/88	13	AQUA	1200	7.07	13	<30	<5	<20	<0.01	<0.01	
09/23/88	13	AQUA	1650	6.90	13	<30	<6	<20	<0.01	0.04	
12/08/88	10	AQUA	2480	-	12.5	<30	<5	<20	<0.01	<0.01	
02/23/89	10	AQUA	1164	6.85	11	<30	<10	<20	<0.01	0.05	
09/10/89	41	AQUA	1075	6.65	13.5	<10	<4	10	<0.01	<0.01	
03/02/90	32	AQUA	1050	7.00	13	<10	<5	<10	<0.01	0.011	
06/02/90	15		1328	7.05	13	-	-	-	-	-	
08/23/90	10	AQUA	1151	6.75	14	<5	<2	<10	<0.01	0.061	
10/28/90	20		1213	7.13	13	-	-	-	-	-	
03/03/91	28	AQUA	1220	6.91	13.8	<10	<2.0	<10	<0.010	<0.010	
06/01/91	18		1275	6.90	15	-	-	-	-	-	
08/28/91	3	AQUA	775	7.0	16	<10	<2	20	<0.01	<0.01	
11/12/91	3		788	7.10	13.6	-	-	-	-	-	
01/21/92	2	AQUA	972	6.92	13.1	<10	<2	<1	<0.01	<0.01	
03/30/92	8		950	6.78	12.7	-	-	-	-	-	
08/20/92	3	AQUA	1064	7.06	14.8	<10	<2	<10	0.014	<0.010	
10/30/92	13		1218	6.99	13.8	-	-	-	-	-	
02/03/93	3	AQUA	1178	6.93	12.3	<5	<2	<10	<0.010	<0.010	
05/11/93	3		912	7.01	14.0	-	-	-	-	-	
08/31/93	12	AQUA	1021	7.20	14.0	<10	<2	<10	<0.010	<0.010	
12/01/93	7		1145	6.95	10.0	-	-	-	-	-	
02/15/94	3	AQUA	964	7.20	10.0	<5	<2	17	<0.005	<0.010	
05/04/94	3		881	7.00	12.0	-	-	-	-	-	
09/12/94	2	AQUA	837	6.90	15.0	<5.0	<2.0	15	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

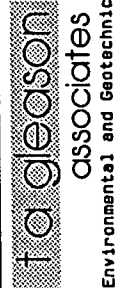
PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 084





SOURCE: S-21

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

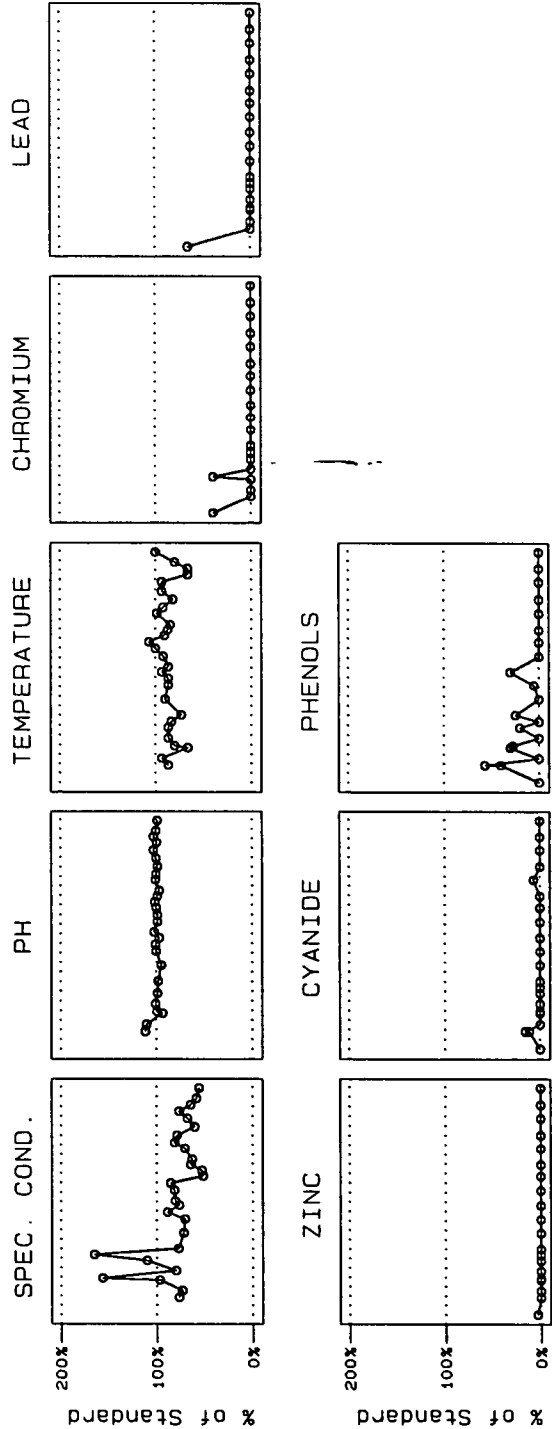
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 13A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX S8IN 084

**ta gleason**  
Associates  
Environmental and Geotechnical Services







NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

SOURCE: S-22

DATE SAMPLED	SAMPLE NO.	STD. LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE .200 MG/L	PHENOLS .200 MG/L	NOTES
11/06/86	18	AQUA	-	-	-	12	12	28	<0.01	<0.010	
06/05/87	20	AQUA	1000	7.64	13	<5	<3	10	0.063	0.018	
09/03/87	12	AQUA	1050	7.51	14	<10	<3	8	<0.005	0.133	
01/14/88	8	AQUA	1180	6.79	9	<20	<30	10	<0.02	0.03	
02/09/88	23	AQUA	2000	6.49	12	<20	<3	<10	<0.01	0.024	
05/18/88	15	AQUA	1300	6.68	11	<30	<5	<20	<0.01	0.03	
05/18/88	16	AQUA	-	-	-	<30	<5	<20	<0.01	<0.01	
09/25/88	22	AQUA	1460	6.75	13	<30	<6	<20	<0.01	0.11	
12/08/88	6	AQUA	1688	8.40	12.5	<30	<5	<20	<0.01	<0.01	
02/22/89	6	AQUA	1224	7.15	13	<30	<10	<20	<0.01	<0.01	
02/22/89	7	AQUA	1204	7.20	13	<30	<10	<22	<0.01	<0.01	
09/09/89	26	AQUA	752	6.55	13	<10	<4	<10	<0.01	0.03	
03/01/90	21	AQUA	893	6.50	12	<10	<5	<10	<0.01	0.038	
06/01/90	11		850	7.23	13	-	-	-	-	-	
08/22/90	7	AQUA	893	7.10	13	<5	<2	<10	<0.01	<0.01	
08/22/90	8	AQUA	893	7.10	13	<5	<2	<10	<0.01	0.055	
10/27/90	6		878	7.10	13	-	-	-	-	-	
02/28/91	7	AQUA	987	6.92	14.1	<20	<2.0	<10	<0.010	<0.010	
06/01/91	16		1068	6.80	15	-	-	-	-	-	
08/28/91	5	AQUA	889	6.97	16	<10	<2	10	<0.01	<0.01	
11/12/91	12		1129	7.06	14.5	-	-	-	-	-	
01/25/92	33	AQUA	1084	6.81	12.2	<10	<5	10	<0.01	<0.01	
03/31/92	14		1103	6.86	13.7	-	-	-	-	-	
08/22/92	15	AQUA	1249	6.94	16.3	<10	<2	<10	<0.010	<0.010	
08/22/92	16	AQUA	1253	6.94	16.3	<10	4.9	<10	<0.010	<0.010	
10/30/92	3		1056	6.99	14.0	-	-	-	-	-	
02/04/93	11	AQUA	1147	7.03	12.5	<5	<2	<10	<0.010	<0.010	
02/04/93	12	AQUA	1147	7.04	12.5	<5	<2	<10	<0.010	<0.010	
05/11/93	9		763	7.13	14.2	-	-	-	-	-	
08/31/93	7	AQUA	793	7.10	14.0	<10	<2	<10	<0.010	<0.010	
12/01/93	6		991	7.05	11.0	-	-	-	-	-	
02/18/94	23	AQUA	1365	7.00	12.0	<5	<2	11	<0.010	<0.010	
05/04/94	6		1021	6.95	12.0	-	-	-	-	-	
09/14/94	7	AQUA	1371	6.90	14.0	<5.0	<2.0	<10	<0.005	<0.010	A

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED



SOURCE: S-22

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

-- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY. ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES. A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

TABLE 7

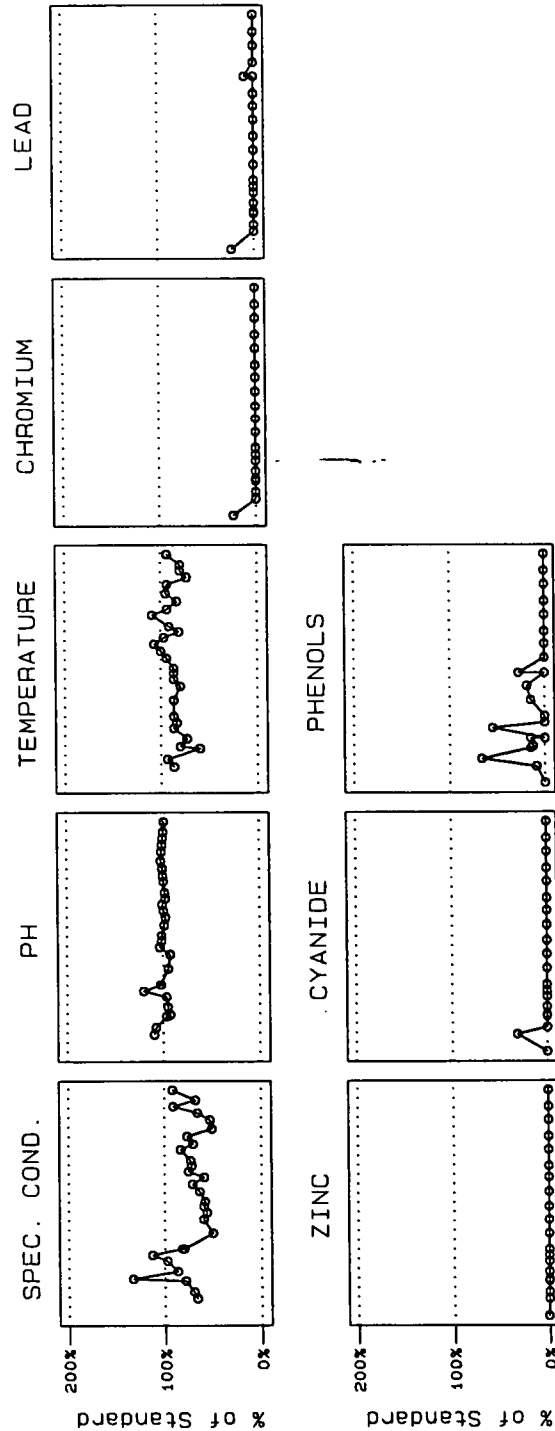
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 14A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**tagleason**  
Associates

Environmental and Geotechnical Services





SOURCE: S-23

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMPOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
11/06/86	19	AQUA	-	-	-	12	34	120	<0.01	<0.010	
06/05/87	21	AQUA	1000	7.59	13	<5	<3	10	0.032	0.242	
09/03/87	13	AQUA	1000	7.27	14	<10	<3	8	0.009	0.64	
01/13/88	9	AQUA	1175	6.89	11	<20	<30	10	<0.02	<0.010	
02/09/88	24	AQUA	2050	7.31	12	<20	<3	<10	0.01	0.108	
05/18/88	17	AQUA	1060	7.22	12	<30	<5	<20	<0.01	<0.01	
09/24/88	17	AQUA	620	6.95	14	<30	<6	<20	<0.01	0.05	
12/08/88	7	AQUA	1832	-	14	<30	<5	<20	<0.01	0.02	
02/22/89	5	AQUA	927	7.35	13	<30	<5	20	<0.01	<0.01	
09/09/89	27	AQUA	518	6.75	14	<10	<2	<10	<0.01	0.02	
03/02/90	23	AQUA	813	6.80	11	<10	<5	<10	<0.01	<0.01	
06/01/90	10		1718	7.28	13	-	-	-	-	-	
08/22/90	9	AQUA	764	7.20	13	<5	<2	<10	<0.01	<0.01	
10/27/90	7		864	7.18	14	-	-	-	-	-	
02/28/91	8	AQUA	866	6.90	14.5	<20	<2.0	<10	<0.010	<0.010	
06/01/91	17		1050	6.70	15	-	-	-	-	-	
08/28/91	4	AQUA	893	7.06	16	<10	<2	10	<0.01	<0.01	
11/13/91	19		939	7.16	15.2	-	-	-	-	-	
03/31/92	15		880	6.96	13.8	-	-	-	-	-	
08/22/92	17	AQUA	958	7.05	15.7	<10	<2	12	<0.010	<0.010	
10/30/92	2		704	6.98	14.5	-	-	-	-	-	
02/04/93	13	AQUA	781	7.09	13.0	<5	<2	<10	<0.010	<0.010	
05/11/93	8		550	7.12	14.5	-	-	-	-	-	
08/31/93	6	AQUA	712	7.10	14.0	<10	<2	<10	<0.010	<0.010	
12/01/93	5		606	7.10	12.0	-	-	-	-	-	
03/29/94	47	AQUA	548	7.10	12.0	<5.0	<2.0	<10	0.008	<0.010	
05/04/94	5		624	7.00	12.0	-	-	-	-	-	
09/14/94	6	AQUA	851	6.90	16.0	<5.0	<2.0	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 15 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



SOURCE: S-23

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

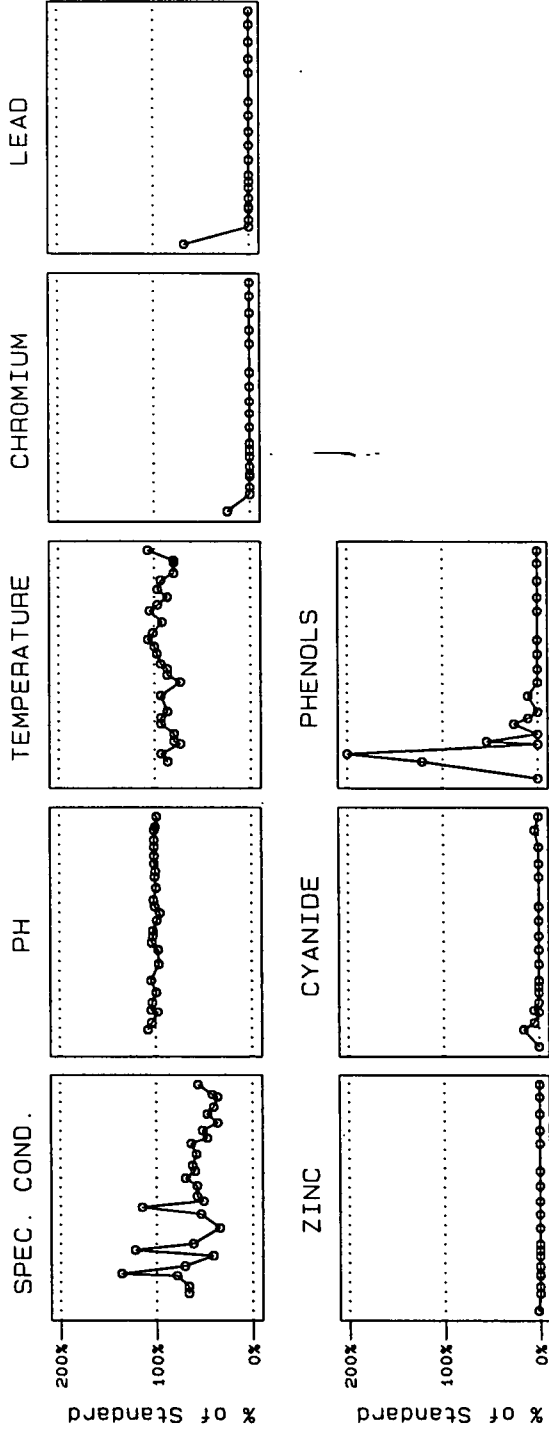
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 15A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**TagJeason**  
ASSOCIATES

Environmental and Geotechnical Services







SOURCE: S-24		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD:	UMHOS/CM	S. U.	C	50 MCL U6/L	50 MCL U6/L	5000 SMCL U6/L	MG/L	MG/L	
09/04/87	25	AQUA	1350	6.96	14	<10	25	88	<0.005	0.017	
05/19/88	28	AQUA	1600	7.32	11	<30	<5	<20	<0.01	0.02	
09/25/88	26	AQUA	1920	6.60	13	<30	<6	<20	<0.01	<0.01	
12/08/88	1	AQUA	1464	7.4	13.5	<30	<5	20	<0.01	<0.01	
02/22/89	33	AQUA	1102	7.75	12	<30	<5	<20	<0.01	0.02	
09/08/89	16	AQUA	862	6.70	14	<10	<2	<10	<0.01	<0.01	
09/08/89	17	AQUA	889	6.65	14	<10	<2	<10	<0.01	<0.01	
02/28/90	10	AQUA	883	7.10	10	<10	<2	<10	<0.01	0.032	
06/02/90	16		885	7.11	12	-	-	-	-	-	
09/24/90	31	AQUA	1482	6.85	14	<5	<2	<10	<0.01	0.059	
10/28/90	18		792	7.02	13	-	-	-	-	-	
02/28/91	10	AQUA	797	6.97	11.9	<20	<2.0	50	<0.010	<0.010	
06/01/91	21		1184	6.70	13	-	-	-	-	-	
09/29/91	9	AQUA	1422	6.83	16	<10	<2	10	<0.01	<0.01	
11/13/91	17		1790	6.98	14.2	-	-	-	-	-	
01/25/92	29	AQUA	1703	6.55	11.7	<10	<5	20	<0.01	<0.01	
03/31/92	18		1579	6.78	11.6	-	-	-	-	-	
08/23/92	29	AQUA	1525	6.94	16.0	<10	<2	10	<0.010	0.020	
10/30/92	7		1516	6.83	13.5	-	-	-	-	-	
02/04/93	15	AQUA	1747	6.93	12.1	<5	<2	15	<0.010	<0.010	
05/11/93	4		1595	6.95	13.0	-	-	-	-	-	
09/31/93	9	AQUA	1652	6.94	15.0	<10	<2	17	<0.010	<0.010	
12/01/93	9		1790	6.90	10.0	-	-	-	-	-	
02/19/94	39	AQUA	2020	6.95	11.0	<5	<2	27	<0.010	<0.010	
05/05/94	9		1634	6.80	12.0	-	-	-	-	-	
05/14/94	14	AQUA	2250	6.80	15.0	<5.0	<2.0	18	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALMPX SBIN 084





SOURCE: S-24

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

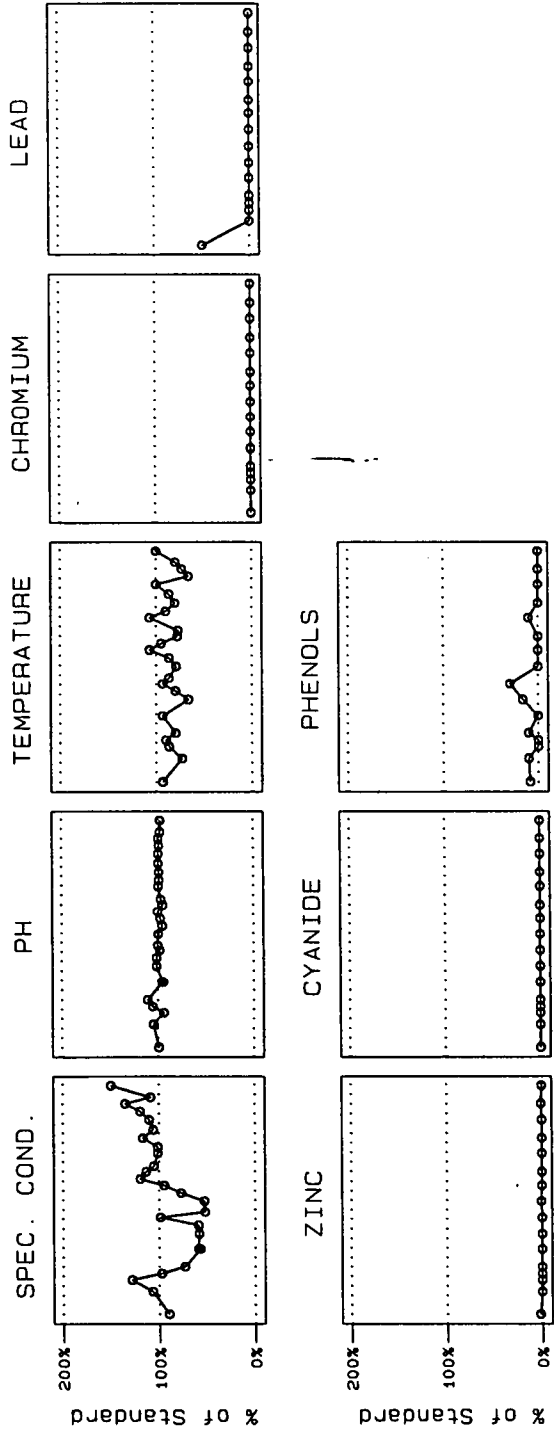
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 16A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**Tagleason**  
Associates

Environmental and Geotechnical Services





SOURCE: S-25		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
09/03/87	11	AQUA	1100	7.17	16	<10	<3	12	<0.005	<0.010	
01/15/88	32	AQUA	1660	6.87	13	<20	<30	10	<0.02	0.06	
02/09/88	20	AQUA	2600	7.15	11	<20	<3	10	<0.01	0.122	
05/18/88	18	AQUA	1440	7.08	14	<30	<5	330	<0.01	<0.01	
09/25/88	25	AQUA	1430	6.70	17	<30	<6	<20	<0.01	<0.01	
02/22/89	8	AQUA	1620	7.10	13	<30	<10	<20	<0.01	<0.01	
02/25/89	32	AQUA	1319	6.95	13	<30	<5	<20	<0.01	0.02	
09/09/89	28	AQUA	757	6.75	17	<10	<4	10	<0.01	0.01	
03/03/90	39	AQUA	1394	6.70	13	<10	<10	<10	<0.01	0.026	
06/01/90	9		1521	7.11	15	-	-	-	-	-	
08/22/90	6	AQUA	915	7.10	16	<5	<2	<10	<0.01	0.154	
10/27/90	5		1232	6.97	15	-	-	-	-	-	
02/28/91	6	AQUA	1405	6.85	16	<20	<2.0	<10	<0.010	<0.010	
06/01/91	15		1568	6.70	16	-	-	-	-	-	
08/29/91	7	AQUA	958	6.95	18	<10	<2	40	<0.01	<0.01	
11/12/91	13		1415	6.92	15.9	-	-	-	-	-	
01/25/92	32	AQUA	1507	6.64	14.4	<10	<5	10	<0.01	<0.01	
03/31/92	16		675	6.71	14.8	-	-	-	-	-	
08/22/92	14	AQUA	1291	6.81	18.1	<10	<2	111	<0.010	<0.010	
10/30/92	4		1026	6.86	15.9	-	-	-	-	-	
02/04/93	10	AQUA	1453	6.84	14.5	<5	<2	<10	<0.010	<0.010	
05/11/93	7		1148	6.83	17.3	-	-	-	-	-	
08/31/93	5	AQUA	1220	6.90	16.0	<10	<2	47	<0.010	<0.010	
12/01/93	4		1376	6.95	12.0	-	-	-	-	-	
02/17/94	5	AQUA	1366	6.95	11.0	<5	<2	21	<0.005	<0.010	
05/04/94	7		1334	6.85	13.0	-	-	-	-	-	
09/14/94	12	AQUA	1185	6.81	15.0	<5.0	2.0	27	<0.005	<0.010	A

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - - INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 A = SAMPLE NOT FILTERED

PARAMETER  
 o - Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 17 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCHPX SBIN 084

**taajeon**  
 associates  
 Environmental and Geotechnical Services



SOURCE: S-25

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

-- INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 7

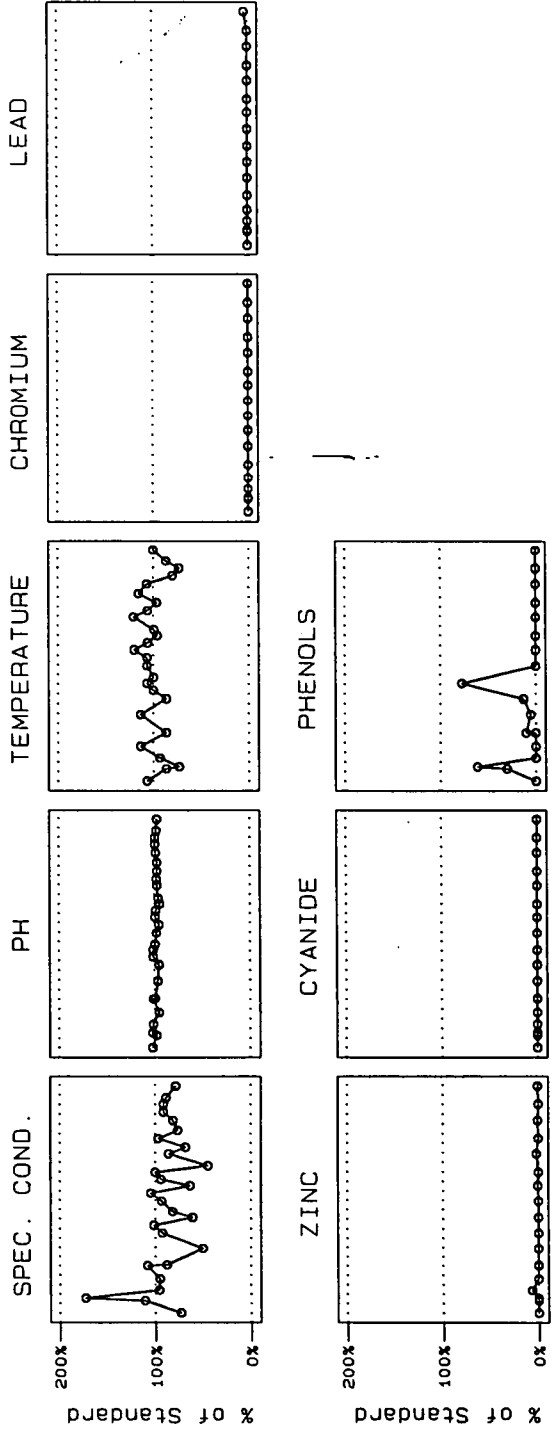
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 17A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

to gleason

associates  
Environmental and Geotechnical Services



748





SOURCE: S-26

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
09/03/87	16	AQUA	1100	7.22	16	<10	<3	4	<0.005	<0.010	
01/15/88	31	AQUA	2200	7.03	14	<20	<30	10	<0.02	0.13	
02/09/88	18	AQUA	3100	6.80	12	<20	<3	20	<0.01	0.106	
05/19/88	29	AQUA	1900	6.92	14	<30	<5	2500	<0.01	0.02	
09/24/88	21	AQUA	1025	6.90	17	<30	<6	<20	<0.01	0.07	
12/10/88	25	AQUA	1980	-	14	<30	<5	<20	<0.01	0.05	
02/23/89	18	AQUA	1370	6.90	13	<30	<5	20	<0.01	0.04	
09/08/89	19	AQUA	714	6.95	17	<10	<2	20	<0.01	0.03	
02/28/90	13	AQUA	1358	6.80	12	<10	<2	20	<0.01	0.24	
06/01/90	12		1169	7.10	16	-	-	-	-	-	
08/24/90	32	AQUA	1308	7.05	16	<5	<2	20	<0.01	0.017	
10/28/90	16		1050	7.00	15	-	-	-	-	-	
03/01/91	18	AQUA	1113	6.84	15.6	<20	<2.0	10	<0.010	0.032	
06/01/91	20		1304	6.80	16	-	-	-	-	-	
08/25/91	12	AQUA	1325	7.05	18	<10	3.2	50	<0.01	0.051	
11/13/91	16		1496	7.12	17.2	-	-	-	-	-	
01/23/92	13	AQUA	2620	6.80	13.9	<10	3.5	188	<0.01	0.100	
04/01/92	38		2270	6.97	13.2	-	-	-	-	-	
08/23/92	28	AQUA	1685	6.91	19.1	<10	<2	53	<0.010	0.218	
10/30/92	8		1151	7.09	16.6	-	-	-	-	-	
02/04/93	10	AQUA	1591	7.09	15.3	<5	<2	48	<0.010	0.022	
05/11/93	10		743	7.09	17.0	-	-	-	-	-	
08/31/93	10	AQUA	612	7.35	17.0	<10	<2	38	<0.010	0.038	
12/01/93	10		787	7.20	14.0	-	-	-	-	-	
12/01/93	11		790	7.21	14.0	-	-	-	-	-	
02/18/94	19	AQUA	2510	6.95	13.0	<5	<2	264	<0.010	0.033	
05/05/94	11		1627	6.95	12.0	-	-	-	-	-	
09/14/94	10	AQUA	2410	6.90	16.0	<5.0	25	314	<0.005	0.055	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY. ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES. A = SAMPLE NOT FILTERED

PARAMETER

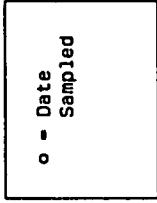


TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 18 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



SOURCE: S-26

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY. ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES. A = SAMPLE NOT FILTERED

PARAMETER

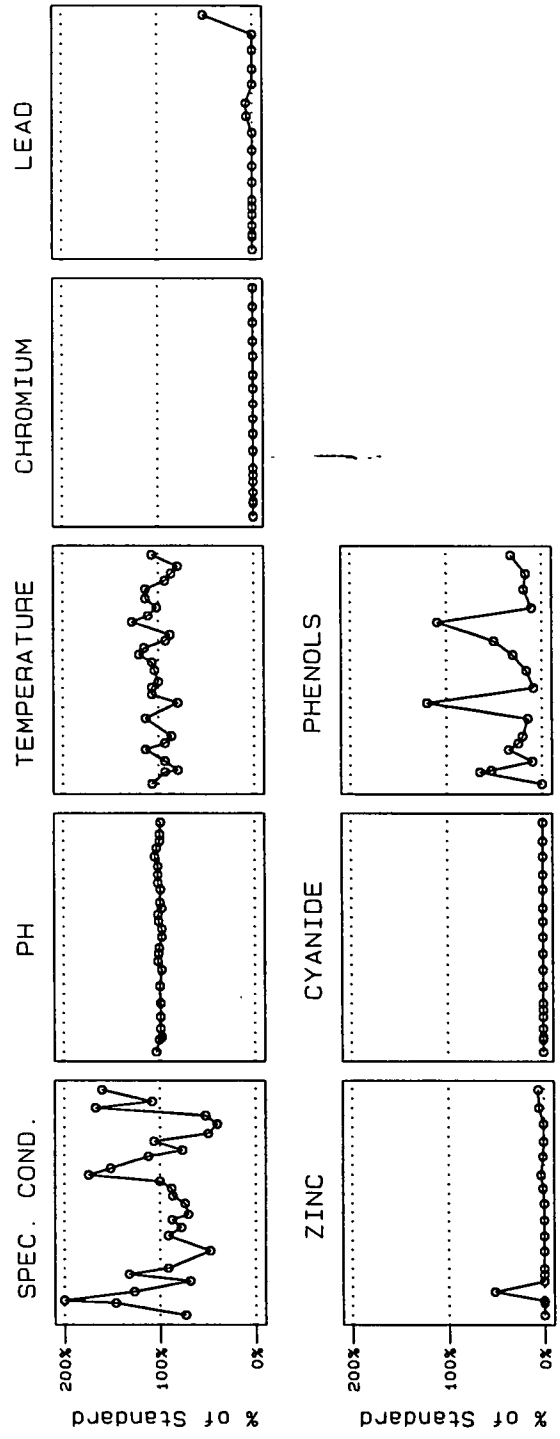
o - Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 18A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084





SOURCE: S-27

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND.		PH	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
			1500 UMHOS/CM	UMHOS/CM								
09/04/87	26	AQUA	1350		6.97	14	<10	4	40	<0.005	<0.010	
01/15/88	33	AQUA	1530		6.98	11	<20	<30	10	<0.02	0.05	
02/10/88	32	AQUA	2600		7.20	12	<20	<3	20	<0.01	0.031	
05/19/88	27	AQUA	1450		7.26	12	<30	<5	38	<0.01	<0.01	
09/25/88	27	AQUA	1855		6.70	13	<30	<5	58	<0.01	0.01	
12/08/88	2	AQUA	2386		7.5	13.5	<30	<5	60	<0.01	<0.01	
02/23/89	12	AQUA	1449		7.15	11	<30	<5	20	<0.01	<0.01	
09/08/89	18	AQUA	1332		6.65	13.5	<10	<4	50	<0.01	<0.01	
02/28/90	11	AQUA	1188		6.90	10	<10	<2	240	<0.01	0.045	
02/28/90	12	AQUA	1188		6.90	10	<10	<2	210	<0.01	<0.01	
06/02/90	17		1142		7.06	13	-	-	-	-	-	
08/24/90	23	AQUA	1282		6.90	14	<5	<2	<10	<0.01	<0.01	
10/28/90	17		1396		6.93	13	-	-	-	-	-	
02/28/91	9	AQUA	1354		6.68	13.7	<20	<2.0	30	<0.010	<0.010	
06/01/91	22		1428		6.70	13	-	-	-	-	-	
08/29/91	8	AQUA	1100		7.04	16	<10	2.4	60	<0.01	<0.01	
11/13/91	18		1345		7.04	14.4	-	-	-	-	-	
01/25/92	30	AQUA	1284		6.65	12.1	<10	<5	40	<0.01	<0.01	
03/31/92	19		1083		6.91	13.0	-	-	-	-	-	
08/23/92	25	AQUA	1219		7.89	15.7	<10	<2	<10	<0.010	<0.010	
10/30/92	6		1035		7.04	13.4	-	-	-	-	-	
02/04/93	16	AQUA	1155		6.85	13.2	<5	<2	12	<0.010	<0.010	
05/11/93	5		836		6.79	14.0	-	-	-	-	-	
08/31/93	8	AQUA	824		7.05	14.0	<10	<2	<10	<0.010	<0.010	
12/01/93	8		1001		7.00	11.0	-	-	-	-	-	
02/17/94	6	AQUA	1060		7.05	11.0	<5	<2	92	<0.005	<0.010	
05/05/94	10		1004		6.90	12.0	-	-	-	-	-	
09/14/94	13	AQUA	1481		6.80	14.0	<5.0	15	188	<0.005	<0.010	A

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

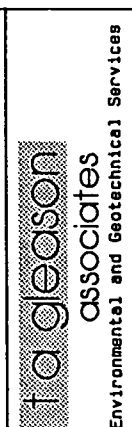
STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
 A = SAMPLE NOT FILTERED

PARAMETER  
 o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 19 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084





SOURCE: S-27

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY. ADDITIONAL SAMPLING PARAMETERS FOR 1986 AND 1987 ARE LOCATED IN TAGA CENTRAL FILES.  
A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

TABLE 7

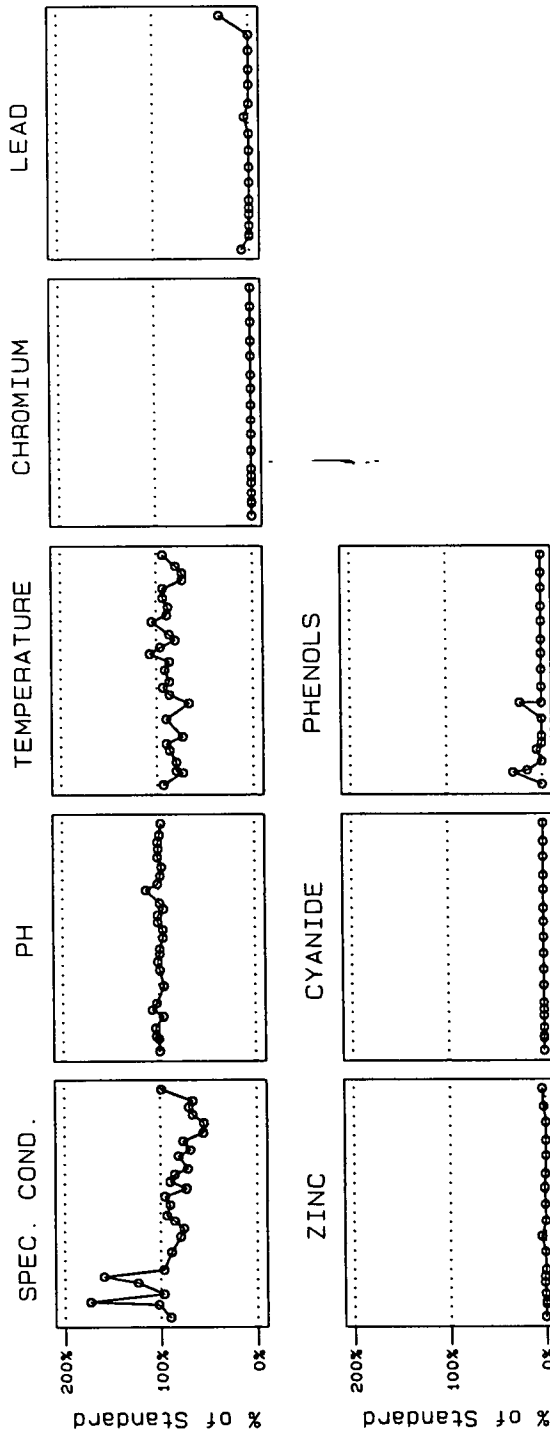
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 19A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
ASSOCIATES

Environmental and Geotechnical Services







SOURCE: FIELD BLANK		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STO: LAB	1500 UMHS/CM S.U.	15 C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
11/06/86	28	AQUA	-	-	<10	<3	4	<0.01	0.023	
12/18/86	25	AQUA	-	-	<10	4	6	0.035	<0.010	
12/18/86	24	AQUA	-	-	<10	<3	4	<0.010	-	
01/08/87	12	AQUA	-	-	<10	<3	<4	-	-	
02/12/87	23	AQUA	-	-	<10	<3	8	-	-	
02/12/87	23	AQUA	-	-	<10	<3	4	-	-	
06/05/87	23	AQUA	-	-	<5	<3	<10	0.029	<0.010	
09/04/87	36	AQUA	-	-	<10	<3	4	<0.005	<0.010	
01/13/88	10	AQUA	-	-	20	<30	10	<0.02	<0.010	
01/15/88	35	AQUA	-	-	<20	<30	<10	<0.02	<0.010	
02/10/88	34	AQUA	-	-	<20	<3	<10	<0.01	<0.010	
02/10/88	35	AQUA	-	-	<20	<3	<10	0.01	<0.010	
05/19/88	21	AQUA	40	22	<30	<5	<20	<0.01	0.09	
05/19/88	36	AQUA	-	-	<30	<5	<20	<0.01	0.01	
09/25/88	28	AQUA	32	7.00	<30	<6	<20	<0.01	0.01	
12/10/88	30	AQUA	58	7.00	<30	<5	<20	<0.01	<0.01	
12/11/88	35	AQUA	65	-	<30	<5	<20	<0.01	0.01	
02/22/89	3	AQUA	38	7.05	<30	<5	<20	<0.01	<0.01	
02/23/89	11	AQUA	29	7.25	<30	<5	<20	<0.01	<0.01	
02/26/89	35	AQUA	57	7.15	<30	<5	<20	<0.01	<0.01	
09/07/89	1	AQUA	3	5.45	<10	<2	<10	<0.01	<0.01	
09/08/89	12	AQUA	3	5.50	<10	<2	<10	<0.01	<0.01	
09/09/89	21	AQUA	6	6.70	<10	<2	<10	<0.01	0.20	
09/10/89	32	AQUA	3	6.75	<10	<2	<10	<0.01	<0.01	
02/27/90	1	AQUA	2	4.40	<10	<2	<10	<0.01	0.013	
03/01/90	14	AQUA	6	6.30	<10	<2	<10	<0.01	<0.01	
03/02/90	24	AQUA	8	6.30	<10	<5	<10	<0.01	<0.01	
03/03/90	38	AQUA	7	6.30	<10	<5	<10	<0.01	<0.01	
06/01/90	1	AQUA	7	6.15	-	-	-	-	-	
06/02/90	13	AQUA	9	5.46	-	-	-	-	-	
06/03/90	26	AQUA	4	4.18	-	-	-	-	-	
06/04/90	36	AQUA	3	6.32	-	-	-	-	-	
08/22/90	1	AQUA	3	6.30	<5	<2	<10	<0.01	0.069	
08/23/90	18	AQUA	3	6.10	<5	<2	<10	<0.01	0.083	
08/24/90	30	AQUA	3	6.35	<5	<2	<10	<0.01	<0.01	
10/27/90	1	AQUA	2	5.47	-	-	-	-	-	
10/28/90	15	AQUA	7	7.62	-	-	-	-	-	
10/29/90	25	AQUA	4	6.87	-	-	-	-	-	
10/31/90	38	AQUA	2	6.02	-	-	-	-	-	

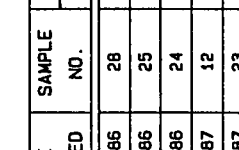
NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER  
 o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 20 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084





SOURCE: FIELD BLANK

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o - Date Sampled

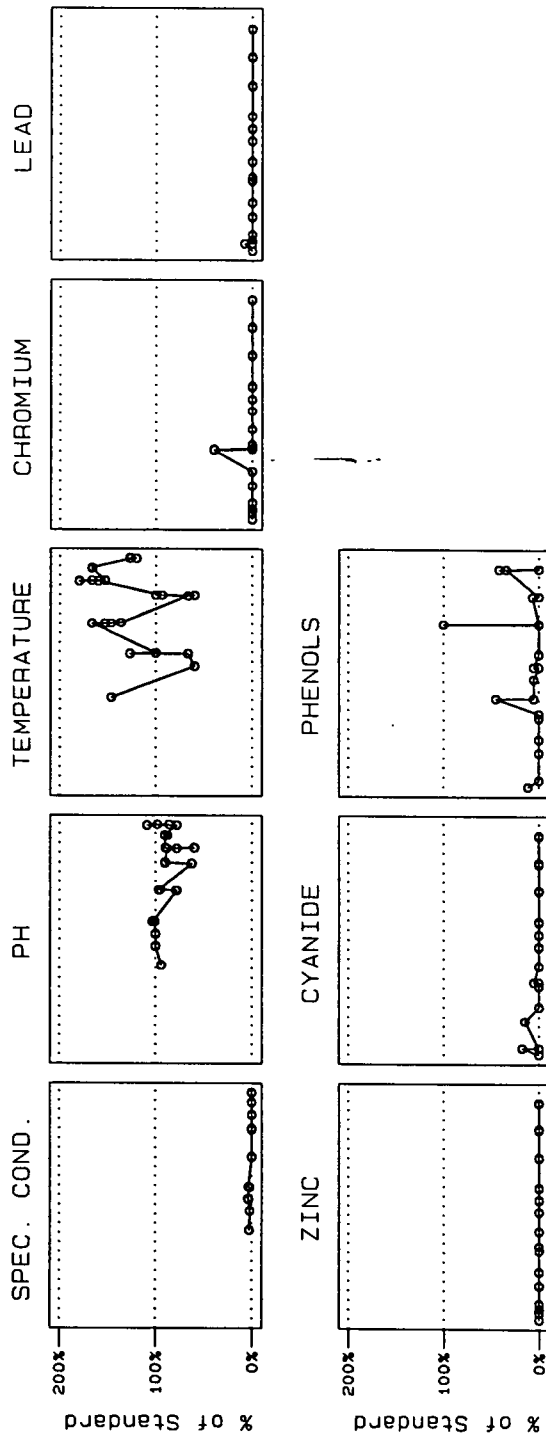
TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 20A OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





SOURCE:		FIELD BLANK (CONT'D)		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMKHS/CM									
02/28/91	1	AQUA	7	7.71	16.6	<20	<2	10	<0.010	<0.010	<0.010	
03/01/91	17	AQUA	7	7.68	15.4	<20	<2	<10	<0.010	<0.010	<0.010	
03/04/91	29	AQUA	10	7.63	16.9	<10	<2	<10	<0.010	<0.010	<0.010	
05/30/91	1		8	7.42	31	-	-	-	-	-	-	
06/01/91	14		8	7.50	25	-	-	-	-	-	-	
08/28/91	1	AQUA	3	6.05	24	<10	<2	<10	<0.01	<0.01	<0.01	
08/31/91	25	AQUA	3	6.1	24	<10	<5	<10	<0.01	<0.01	<0.01	
11/12/91	1		1	6.03	14.9	-	-	-	-	-	-	
11/13/91	15		3	6.05	14.9	-	-	-	-	-	-	
11/14/91	31		9	7.15	18.0	-	-	-	-	-	-	
01/23/92	11	AQUA	9	7.01	10.9	<10	<5	20	<0.01	<0.01	<0.01	
01/25/92	25	AQUA	8	7.00	10.8	<10	<5	10	<0.01	<0.01	<0.01	
03/30/92	1		4	7.05	18.0	-	-	-	-	-	-	
03/31/92	13		5	7.04	18.1	-	-	-	-	-	-	
04/01/92	24		6	7.10	18.0	-	-	-	-	-	-	
04/01/92	37		5	7.09	18.0	-	-	-	-	-	-	
04/02/92	44		4	7.05	18.0	-	-	-	-	-	-	
08/20/92	1	AQUA	5	6.25	20.0	<10	<2	<10	<0.010	<0.010	<0.010	
08/22/92	13	AQUA	4	6.27	21.0	<10	<2	<10	<0.010	<0.010	<0.010	
08/23/92	25	AQUA	7	6.30	21.0	<10	<2	<10	<0.010	<0.010	<0.010	
10/30/92	1		2	5.73	20.0	-	-	-	-	-	-	
10/31/92	15		3	5.76	18.0	-	-	-	-	-	-	
10/31/92	26		4	5.75	18.0	-	-	-	-	-	-	
11/02/92	41		4	5.74	20.0	-	-	-	-	-	-	
02/03/93	1	AQUA	4	5.42	19	<5	<2	10	<0.010	<0.010	<0.010	
02/04/93	14	AQUA	8	6.47	15	<5	<2	<10	<0.010	<0.010	<0.010	
02/05/93	28	AQUA	6	5.77	17	<10	<2	<10	<0.010	<0.010	<0.010	
02/06/93	39	AQUA	4	5.95	18	<10	<2	<10	<0.010	<0.010	<0.010	
05/11/93	2		3	7.11	-	-	-	-	-	-	-	
05/11/93	14		2	7.10	20.0	-	-	-	-	-	-	
05/11/93	30		2	7.09	21.0	-	-	-	-	-	-	
08/31/93	3	AQUA	1	5.70	20.0	<10	<2	<10	<0.010	<0.010	<0.010	
08/31/93	17	AQUA	1	5.70	20.0	<10	<2	<10	<0.010	<0.010	<0.010	
09/02/93	29	AQUA	2	5.70	21.0	<10	<2	<10	<0.010	<0.010	<0.010	
12/01/93	3		3	7.05	19.0	-	-	-	-	-	-	
12/02/93	13		7	6.45	18.0	-	-	-	-	-	-	
12/03/93	27		6	6.50	18.0	-	-	-	-	-	-	
02/17/94	10	AQUA	2	6.95	13.0	<5	<2	<10	<0.005	<0.010	<0.010	
02/18/94	24	AQUA	3	6.97	13.0	<5	<2	<10	<0.010	<0.010	<0.010	
02/19/94	32	AQUA	5	6.97	14.0	<5	<2	<10	<0.010	<0.010	<0.010	

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o = Date Sampled

TABLE 7

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 21 OF 23

ALLIED-SIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 082











SOURCE: FIELD BLANK (CONT'D)		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHDS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE .200 MG/L	PHENOLS .200 MG/L	NOTES
DATE	NO.												
05/04/94	1				6	6.95	19.0	-	-	-	-	-	
05/05/94	14				3	7.00	18.0	-	-	-	-	-	
05/06/94	26				7	7.00	18.0	-	-	-	-	-	
05/07/94	38				8	6.95	19.0	-	-	-	-	-	
05/12/94	3	AQUA			6	7.15	20.0	<5.0	<2.0	<10	<0.005	<0.010	
05/15/94	21	AQUA			3	7.10	22.0	<5.0	4.0	<10	<0.005	<0.010	
05/15/94	41	AQUA			10	7.40	21.0	<5.0	<2.0	<10	<0.005	<0.010	

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER  
 o - Date Sampled

TABLE 7

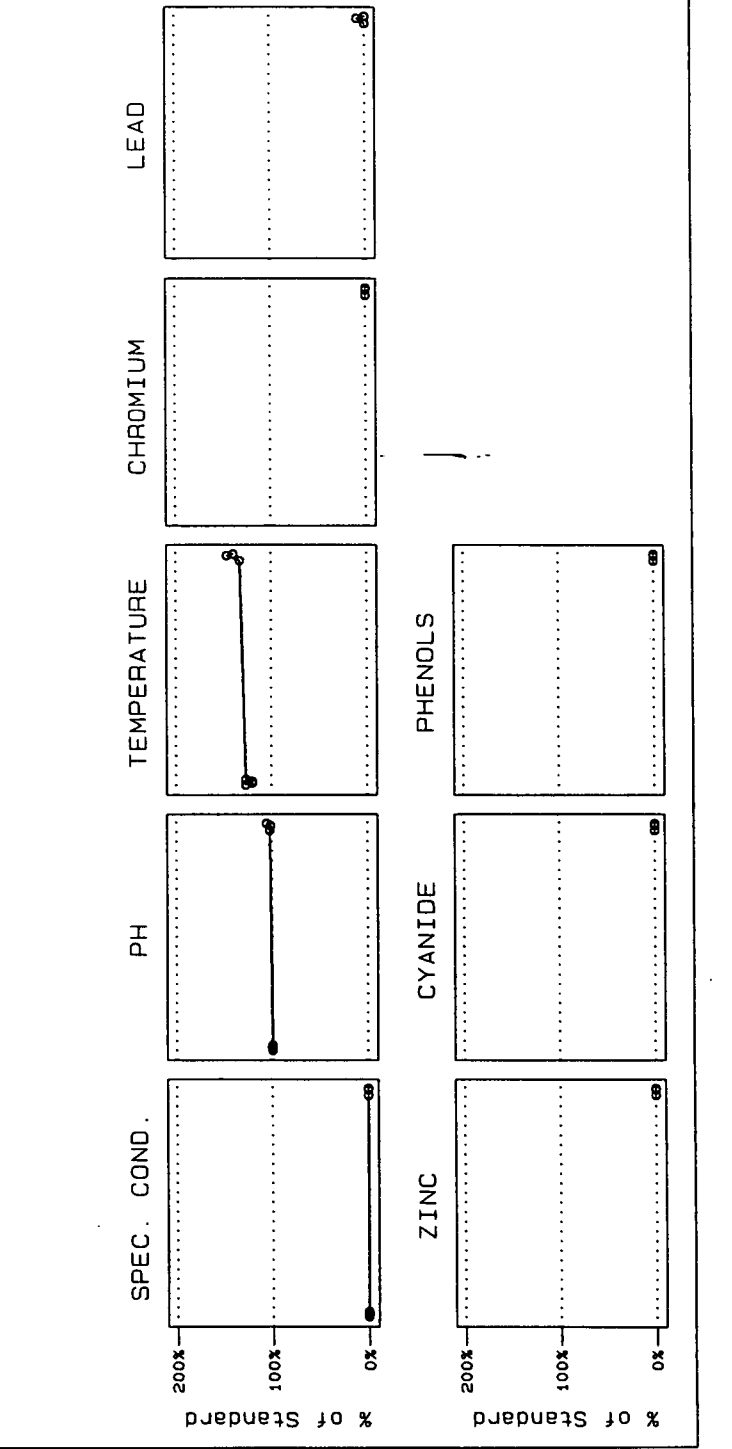
SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 22 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**ta geason**  
 associates  
 Environmental and Geotechnical Services

A:\77\FLOBLK3.MT1, 11-10-1994





SOURCE: TRIP BLANK		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	S. U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
06/04/90		AQUA	-	-	<10	<5	<10	<0.01	<0.01	
08/17/90		AQUA	-	-	<5	<2	<10	<0.01	0.089	
03/02/91		AQUA	-	-	<20	8.6M	40	<0.010	<0.010	

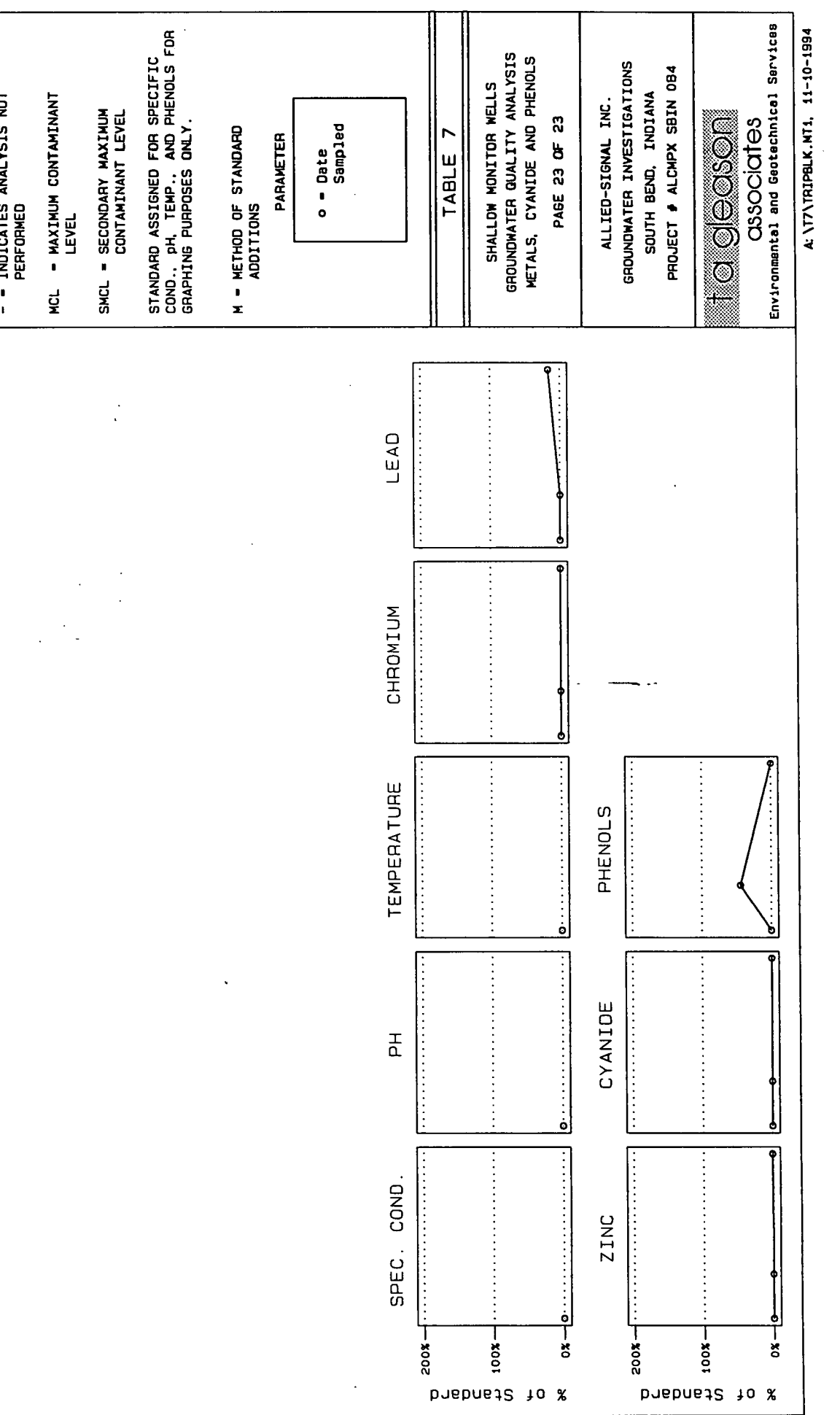
NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - - INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC COND., PH, TEMP., AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 M = METHOD OF STANDARD ADDITIONS  
 PARAMETER

o = Date Sampled

TABLE 7  
 SHALLOW MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 23 OF 23

ALLIED-SIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**Tagleason**  
 Associates  
 Environmental and Geotechnical Services





SOURCE: 1-D		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHRS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
DATE SAMPLED	SAMPLE NO.												
01/09/87	13	AQUA	-	-	-	-	40	240	44	-	-	-	
02/12/87	1	AQUA	1300	-	11	18	18	52	14	-	-	-	
06/05/87	13	AQUA	1250	7.82	13	<5	<5	5	20	0.022	<0.010	<0.010	
09/04/87	22	AQUA	1200	7.71	14	20	20	39	160	0.009	0.048	0.048	
01/14/88	13	AQUA	1400	6.47	10	<20	<20	<30	10	<0.02	<0.010	<0.010	
02/09/88	16	AQUA	2200	7.32	13	30	30	<3	<10	<0.01	<0.010	<0.010	
05/18/88	11	AQUA	1400	7.26	14	<30	<30	<5	21	<0.01	<0.01	<0.01	
09/23/88	11	AQUA	1380	6.95	13	<30	<30	<5	<20	<0.01	0.02	0.02	
12/11/88	33	AQUA	1523	-	14	<30	<30	<5	<20	<0.01	0.01	0.01	
02/24/89	23	AQUA	1466	7.15	13	<30	<30	<10	<20	<0.01	0.02	0.02	
09/08/89	11	AQUA	1043	6.90	16	<10	<10	<2	<10	<0.01	<0.01	<0.01	
02/27/90	2	AQUA	1113	6.70	11	<10	<10	<2	<10	<0.01	0.023	0.023	
06/01/90	4		1192	7.16	14	-	-	-	-	-	-	-	
08/23/90	13	AQUA	1356	6.95	14	<5	<5	<2	<10	<0.01	<0.01	<0.01	
10/29/90	26		1241	6.79	13	-	-	-	-	-	-	-	
03/01/91	15	AQUA	1474	6.79	13.5	<20	<20	<2	<10	<0.010	<0.010	<0.010	
05/31/91	7		1509	6.70	15	-	-	-	-	-	-	-	
09/30/91	17	AQUA	1062	7.04	17	<10	<10	<5	<10	<0.01	<0.01	<0.01	
11/13/91	11		1361	7.04	13.6	-	-	-	-	-	-	-	
01/23/92	9	AQUA	1360	6.93	12.8	<10	<10	<2	<5	<0.01	<0.01	<0.01	
04/01/92	31		1316	7.03	13.0	-	-	-	-	-	-	-	
08/21/92	6	AQUA	1404	7.05	15.0	<10	<10	<2	<10	<0.010	<0.010	<0.010	
11/02/92	37		1484	6.90	14.5	-	-	-	-	-	-	-	
02/05/93	25	AQUA	1364	6.88	13.4	<10	<10	<2	15	<0.010	<0.010	<0.010	
05/12/93	22		1267	6.95	15.0	-	-	-	-	-	-	-	
09/01/93	22	AQUA	1277	7.05	15.0	<10	<10	<2	<10	<0.010	<0.010	<0.010	
12/02/93	16		1301	6.95	11.0	-	-	-	-	-	-	-	
02/18/94	17	AQUA	1405	6.95	12.0	<5	<5	<2	<10	<0.010	<0.010	<0.010	
05/06/94	24		1087	6.85	12.0	-	-	-	-	-	-	-	
09/15/94	19	AQUA	1119	6.70	14	<5.0	<5.0	<2.0	14	<0.005	<0.010	<0.010	A

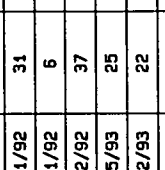
NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 A = SAMPLE NOT FILTERED

PARAMETER  
 o = Date Sampled

TABLE 8  
 DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 1 OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084





SOURCE: 1-D

NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

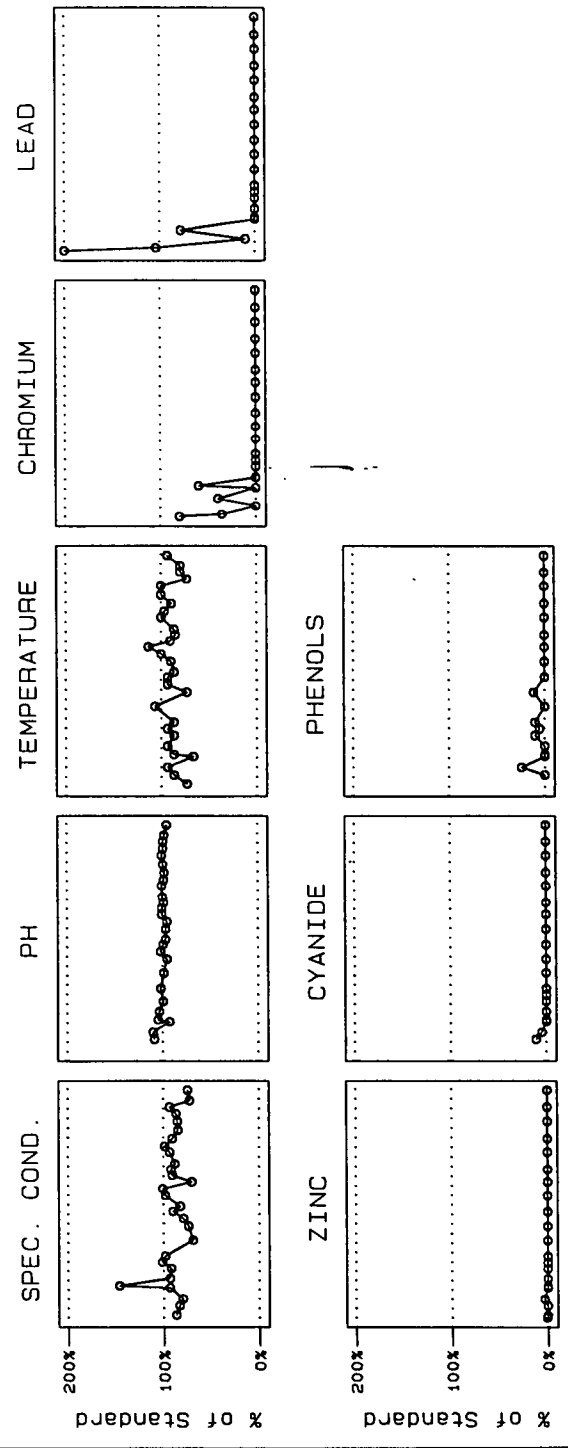
TABLE 8

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084



ASSOCIATES  
 Environmental and Geotechnical Services



OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

TABLE 8

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084



ASSOCIATES  
 Environmental and Geotechnical Services





SOURCE: 2-D		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
12/18/86	2	AQUA	-	-	<10	20	120	-	-	
06/05/87	11	AQUA	7.69	17	<5	<3	10	0.013	<0.010	
09/03/87	19	AQUA	7.81	15	<10	<3	12	<0.005	0.722	
01/15/88	34	AQUA	7.18	13	<20	<30	10	<0.02	0.015	
02/09/88	11	AQUA	7.39	13	<20	<3	10	<0.01	2.8	
05/19/88	24	AQUA	7.39	15	<30	<5	<20	<0.01	<0.01	
09/24/88	20	AQUA	7.10	16	<30	<5	<20	<0.01	0.02	
12/10/88	27	AQUA	-	14.5	30	<5	<20	<0.01	0.01	
12/10/88	28	AQUA	-	14.5	<30	<5	<20	<0.01	<0.01	
02/24/89	19	AQUA	7.25	13	<30	<5	<20	<0.01	0.02	
09/09/89	31	AQUA	6.75	16.5	<10	<2	<10	<0.01	<0.01	
03/01/90	20	AQUA	6.50	13	<10	<5	<10	<0.01	<0.01	
06/03/90	20		7.18	16	-	-	-	-	-	
08/23/90	19	AQUA	6.90	16	<5	<2	<10	<0.01	0.089	
10/29/90	27		7.06	15	-	-	-	-	-	
10/29/90	28		6.93	15	-	-	-	-	-	
03/02/91	26	AQUA	7.01	14.8	<20	<2.0	10	<0.010	<0.010	
05/30/91	4		6.70	14	-	-	-	-	-	
08/31/91	35	AQUA	7.10	17	<10	<5	10	<0.01	<0.01	
11/14/91	41		7.10	17.0	-	-	-	-	-	
01/24/92	25	AQUA	7.09	12.3	<10	<5	<10	<0.01	<0.01	
04/02/92	46		7.08	14.0	-	-	-	-	-	
08/21/92	7	AQUA	7.13	17.5	<10	<2	<10	<0.010	<0.010	
10/31/92	33		7.04	15.5	-	-	-	-	-	
02/05/93	31	AQUA	7.01	14.9	<10	<2	17	<0.010	<0.010	
05/12/93	37		7.05	17.6	-	-	-	-	-	
09/02/93	28	AQUA	7.15	17.0	<10	<2	<10	<0.010	<0.010	
12/03/93	31		7.10	12.0	-	-	-	-	-	
02/18/94	26	AQUA	7.05	13.0	<5	<2	<10	<0.010	<0.010	
05/06/94	30		7.05	14.0	-	-	-	-	-	
09/13/94	5	AQUA	6.90	15.0	<5.0	2.8	<10	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

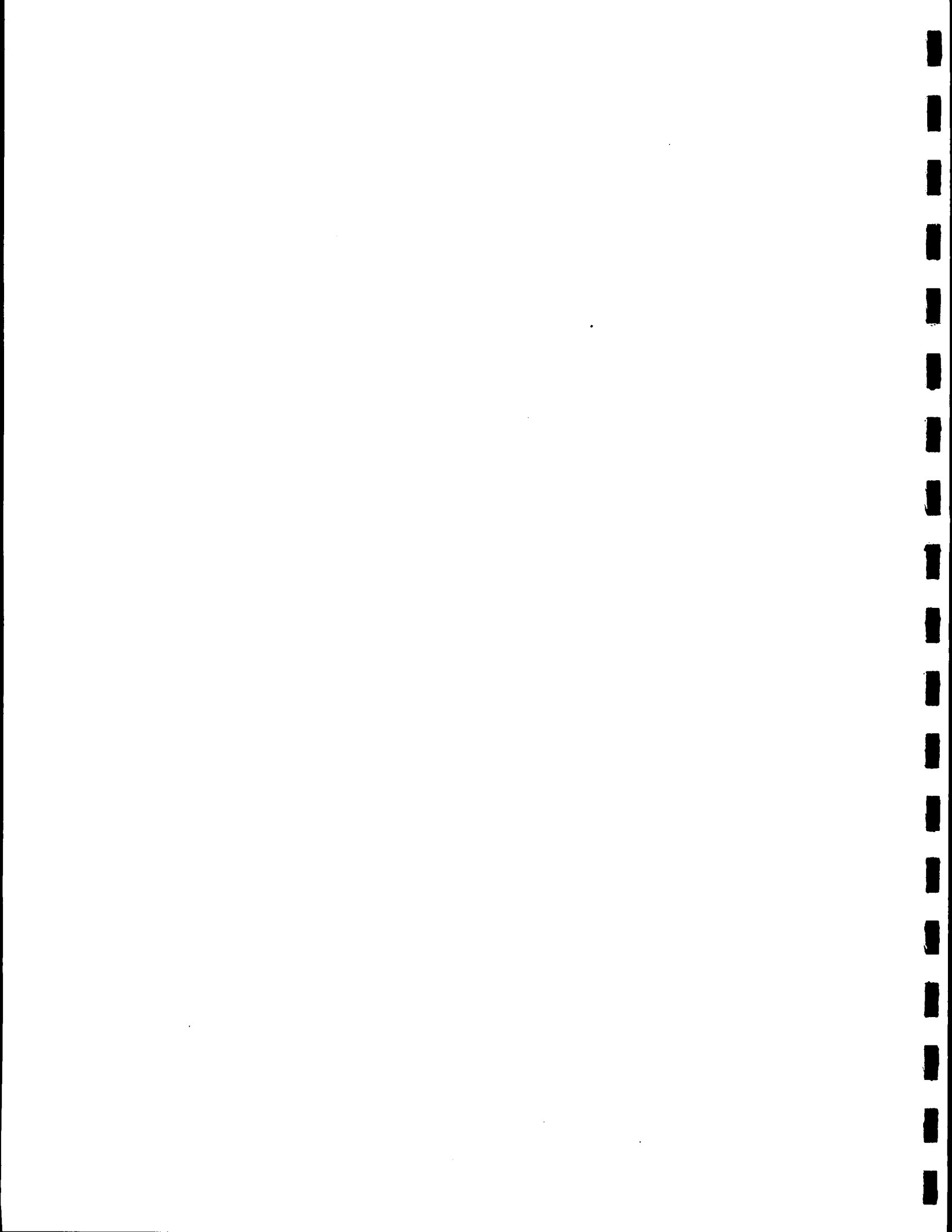


TABLE 8

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**Tagleason**  
 ASSOCIATES  
 Environmental and Geotechnical Services



SOURCE: 2-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- - INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

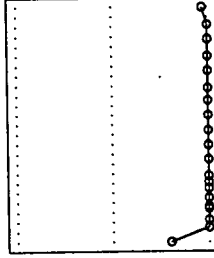
PAGE 2A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

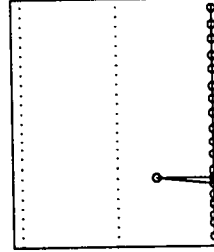
**ta gleason**  
Associates

Environmental and Geotechnical Services

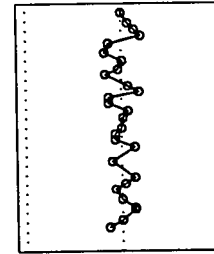
LEAD



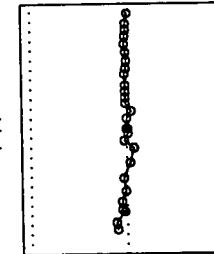
CHROMIUM



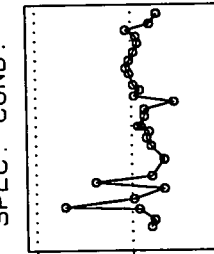
TEMPERATURE



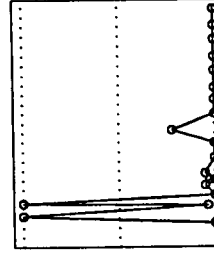
PH



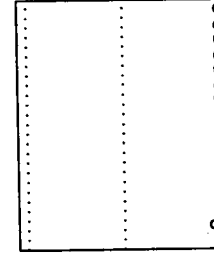
SPEC. COND.



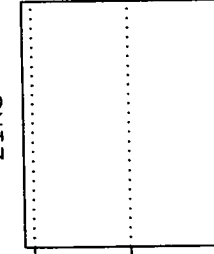
PHENOLS



CYANIDE



ZINC



% of Standard

% of Standard



SOURCE: 5-0		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
12/18/86	4	AQUA	-	-	-	<10	<6	52	-	-	
12/18/86	5	AQUA	-	-	-	<10	<6	40	-	-	
06/15/87	19	AQUA	1000	7.90	14	<5	<3	10	0.013	<0.010	
09/06/87	15	AQUA	950	7.81	13	<10	<3	16	<0.005	<0.010	
01/14/88	12	AQUA	1240	6.71	9	<20	<30	10	<0.02	<0.010	
02/09/88	21	AQUA	2050	6.95	13	20	<3	<10	<0.01	0.039	
05/18/88	14	AQUA	1000	7.18	14	<30	<5	<20	<0.01	0.02	
09/23/88	15	AQUA	1215	6.80	13	<30	<6	<20	<0.01	0.04	
12/08/88	9	AQUA	2190	-	12.5	<30	<5	<20	<0.01	<0.01	
02/25/89	31	AQUA	1113	7.45	13	<30	<5	<20	<0.01	0.02	
09/10/89	35	AQUA	877	7.00	13.5	<10	<2	<10	<0.01	<0.01	
02/28/90	9	AQUA	1085	6.90	13	<10	<2	<10	<0.01	<0.01	
05/02/90	14		1013	7.26	13	-	-	-	-	-	
08/24/90	29	AQUA	1278	7.05	14	<5	<2	<10	<0.01	<0.01	
10/28/90	21		1150	7.34	13	-	-	-	-	-	
03/03/91	27	AQUA	1181	6.93	14.8	<10	<2	10	<0.010	<0.010	
05/30/91	2		1143	7.0	14	-	-	-	-	-	
08/28/91	2	AQUA	1099	7.12	19	<10	<2	20	<0.01	<0.01	
11/12/91	2		1047	7.67	12.8	-	-	-	-	-	
01/21/92	1	AQUA	1149	7.11	13.2	<10	<2	<5	<0.01	<0.01	
03/30/92	7		1142	6.97	14.5	-	-	-	-	-	
08/20/92	2	AQUA	935	6.25	14.9	<10	9.5	<10	<0.010	<0.010	
10/30/92	12		933	7.54	13.6	-	-	-	-	-	
02/03/93	2	AQUA	1048	7.39	12.0	<5	<2	<10	<0.010	<0.010	
05/11/93	1		967	7.31	20.0	-	-	-	-	-	
08/31/93	11	AQUA	948	7.45	15.0	<10	<2	<10	<0.010	0.063	
12/01/93	1		975	7.30	11.0	-	-	-	-	-	
02/16/94	2	AQUA	1052	7.25	11.0	<5	<2	<10	<0.005	<0.010	
05/04/94	2		1022	7.15	13.0	-	-	-	-	-	
09/12/94	1	AQUA	890	6.80	15.0	<5.0	<2.0	7.1	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

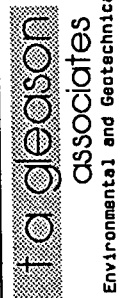
PARAMETER

o - Date Sampled

TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 3 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084





SOURCE: 5-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE B

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

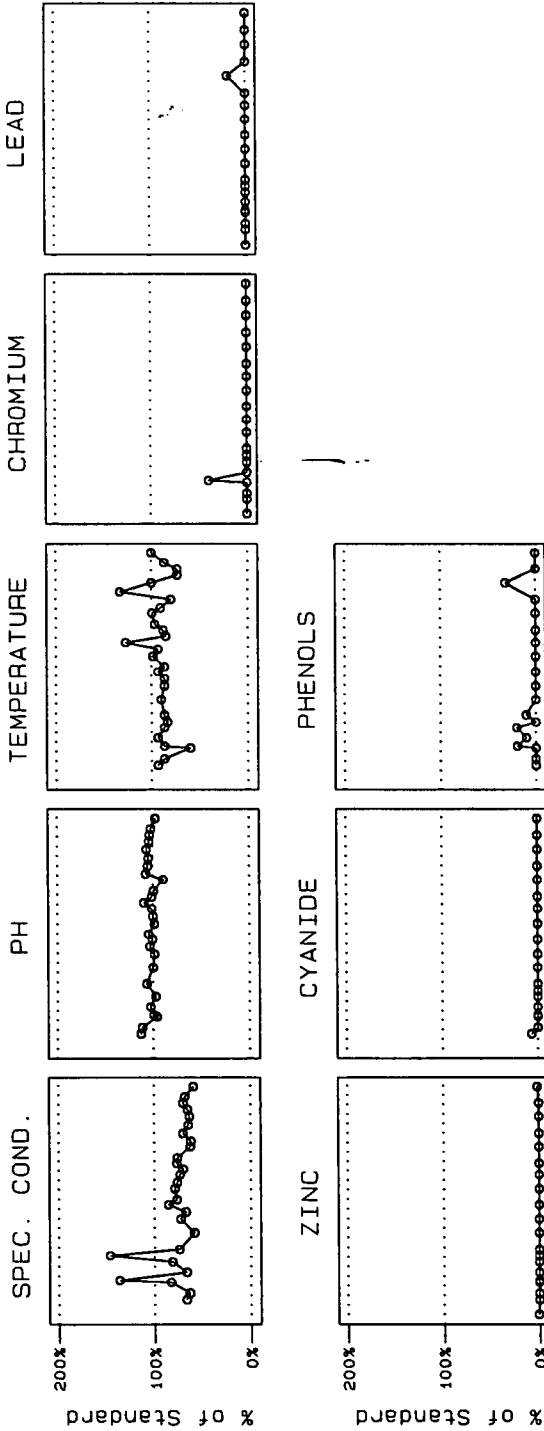
PAGE 3A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**

ASSOCIATES

Environmental and Geotechnical Services







SOURCE: 7-D		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S. U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
09/01/87	29	AQUA	1100	7.17	16	<10	<3	24	<0.01	<0.01	
01/15/88	30	AQUA	1380	7.07	14	<20	<30	10	<0.02	0.05	
02/09/88	15	AQUA	1975	7.33	13	40	<3	40	<0.01	0.031	
05/19/88	22	AQUA	1530	7.24	16	<30	<5	30	<0.01	<0.01	
09/24/88	18	AQUA	995	7.05	17	<30	<6	<20	<0.01	0.03	
12/10/88	31	AQUA	2390	-	14.5	30	<5	<20	<0.01	0.01	
02/25/89	34	AQUA	1855	7.25	14	<30	<5	<20	<0.01	0.02	
09/10/89	33	AQUA	1035	6.75	18	<10	<2	10	<0.01	<0.01	
03/02/90	34	AQUA	1800	6.80	16	<10	<5	<10	<0.01	0.017	
06/03/90	21		1367	7.14	16	-	-	-	-	-	
08/23/90	14	AQUA	1541	7.05	18	<5	<2	10	<0.01	0.057	
10/29/90	29		1502	7.01	15	-	-	-	-	-	
03/01/91	19	AQUA	1862	7.04	16.6	<20	<2	10	<0.010	<0.010	
03/01/91	20	AQUA	1869	7.05	16.6	<20	<2	10	<0.010	<0.010	
05/31/91	10		177	7.20	17	-	-	-	-	-	
08/30/91	24	AQUA	205	7.30	19	<10	<5	80	<0.01	<0.01	
11/14/91	34		19	7.00	18.8	-	-	-	-	-	
01/26/92	38	AQUA	1590	7.00	14.3	<10	<5	10	<0.01	<0.01	
04/02/92	40		1548	7.03	15.9	-	-	-	-	-	
08/21/92	8	AQUA	1860	7.14	18.6	<10	<2	<10	<0.010	<0.010	
10/31/92	21		1495	7.03	15.1	-	-	-	-	-	
02/05/93	32	AQUA	1788	7.05	15.2	<10	<2	19	<0.010	0.094	
05/12/93	25		1755	6.82	18.0	-	-	-	-	-	
09/02/93	30	AQUA	1813	7.05	17.0	<10	<2	24	<0.010	0.034	
12/02/93	22		1738	6.97	13.0	-	-	-	-	-	
02/18/94	20	AQUA	1830	6.95	12.0	<5	<2	14	<0.010	0.010	
05/06/94	25		1416	6.85	14.0	-	-	-	-	-	
09/15/94	20	AQUA	1326	6.80	15.0	<5.0	<2.0	17	<0.005	<0.010	A

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 8

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 4 OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084



ASSOCIATES  
 Environmental and Geotechnical Services



SOURCE: 7-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

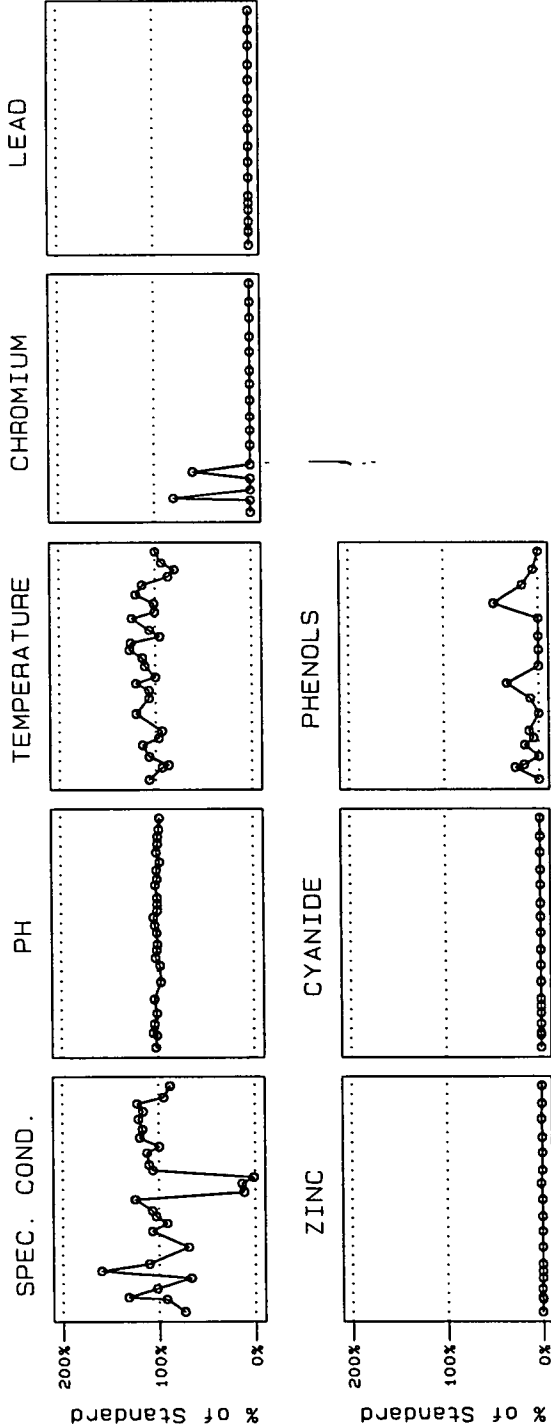
PAGE 4A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taq**teason

ASSOCIATES

Environmental and Geotechnical Services





**NOTES:**  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 A = SAMPLE NOT FILTERED

o - Date Sampled  
 PARAMETER  
**TABLE 8**  
 DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 5 OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084  
**to gleason**  
**ASSOCIATES**  
 Environmental and Geotechnical Services

DATE SAMPLED	SAMPLE NO.	STO: LAB	SPECIFIC COND.		PH	TEMP. C	CHROMIUM		LEAD	ZINC	CYANIDE	PHENOLS	NOTES
			1500 UMHOS/CM	50 MCL UG/L			50 MCL UG/L	5000 SMCL UG/L					
09/04/87	30	AQUA	1300	<10	7.29	16	<10	<3	28	0.014	<0.010		
01/15/88	28	AQUA	2200	<20	6.84	11	<20	<30	10	<0.02	0.01		
01/15/88	29	AQUA	2200	<20	6.84	11	<20	<30	10	<0.02	0.01		
02/09/88	13	AQUA	2700	<20	7.40	13	<20	<3	20	0.14	0.089		
02/09/88	14	AQUA	2700	<20	7.40	13	<20	<3	10	0.14	0.034		
05/19/88	23	AQUA	2100	<30	7.32	15	<30	<5	<20	<0.01	0.04		
09/24/88	19	AQUA	1480	<30	6.90	17.5	<30	<6	<20	0.01	0.08		
12/10/88	32	AQUA	2180	<30	-	14	<30	<5	<20	0.03	0.02		
02/25/89	35	AQUA	1822	<30	7.10	14	<30	<10	<20	0.08	0.02		
09/10/89	35	AQUA	1135	<10	6.65	17.5	<10	<4	<10	0.209	<0.01		
03/02/90	35	AQUA	1580	<10	7.00	15	<10	<10	<10	0.077	<0.01		
06/03/90	22		1323	-	7.13	16	-	-	-	-	-		
08/23/90	15	AQUA	1374	<5	7.10	17	<5	<2	<10	0.25	<0.01		
10/29/90	31		1343	-	7.00	15	-	-	-	-	-		
03/01/91	21	AQUA	1563	<20	6.87	16.8	<20	<2	<10	0.390	<0.010		
06/01/91	11		1661	-	6.90	16	-	-	-	-	-		
06/01/91	12		1654	-	6.90	16	-	-	-	-	-		
08/31/91	34	AQUA	1340	<10	6.9	16	<10	<5	10	0.26	<0.01		
11/14/91	35		1390	-	6.99	17.3	-	-	-	-	-		
01/26/92	36	AQUA	1425	<10	6.78	14.4	<10	<5	10	0.284	<0.01		
04/02/92	41		1518	-	6.94	15.6	-	-	-	-	-		
08/21/92	9	AQUA	1523	<10	7.08	18.0	<10	3.1	57	0.426	<0.010		
10/31/92	23		1331	-	7.03	15.0	-	-	-	-	-		
02/05/93	33	AQUA	1446	<10	7.09	15.3	<10	<2	29	0.313	<0.010		
05/12/93	24		1444	-	7.07	18.8	-	-	-	-	-		
09/02/93	31	AQUA	1589	<10	7.15	16.0	<10	<2	<10	0.312	0.094		
09/02/93	32	AQUA	1587	<10	7.15	16.0	<10	<2	<10	0.308	<0.010		
12/02/93	23		1570	-	7.10	12.0	-	-	-	-	-		
02/18/94	21	AQUA	2150	<5	7.05	13.0	<5	<2	20	0.358	<0.010		
02/18/94	22	AQUA	2149	<5	7.05	13.0	<5	<2	10	0.350	<0.010		
05/06/94	29		1397	-	6.95	14.0	-	-	-	-	-		
09/15/94	22	AQUA	1530	<5.0	6.80	15.0	<5.0	3.8	56	0.278	<0.010	A	



SOURCE: 8-D

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

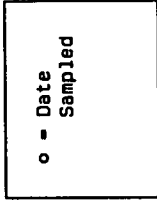


TABLE 8

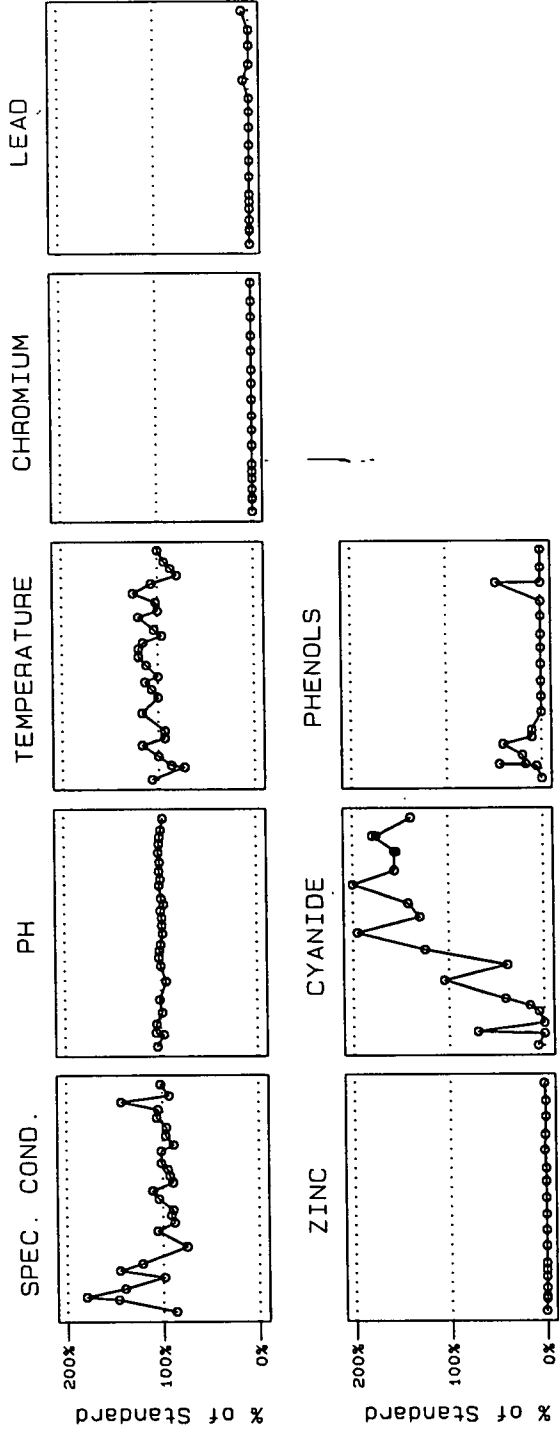
DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 5A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services







NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED PARAMETER

o = Date Sampled

TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 6 OF 7

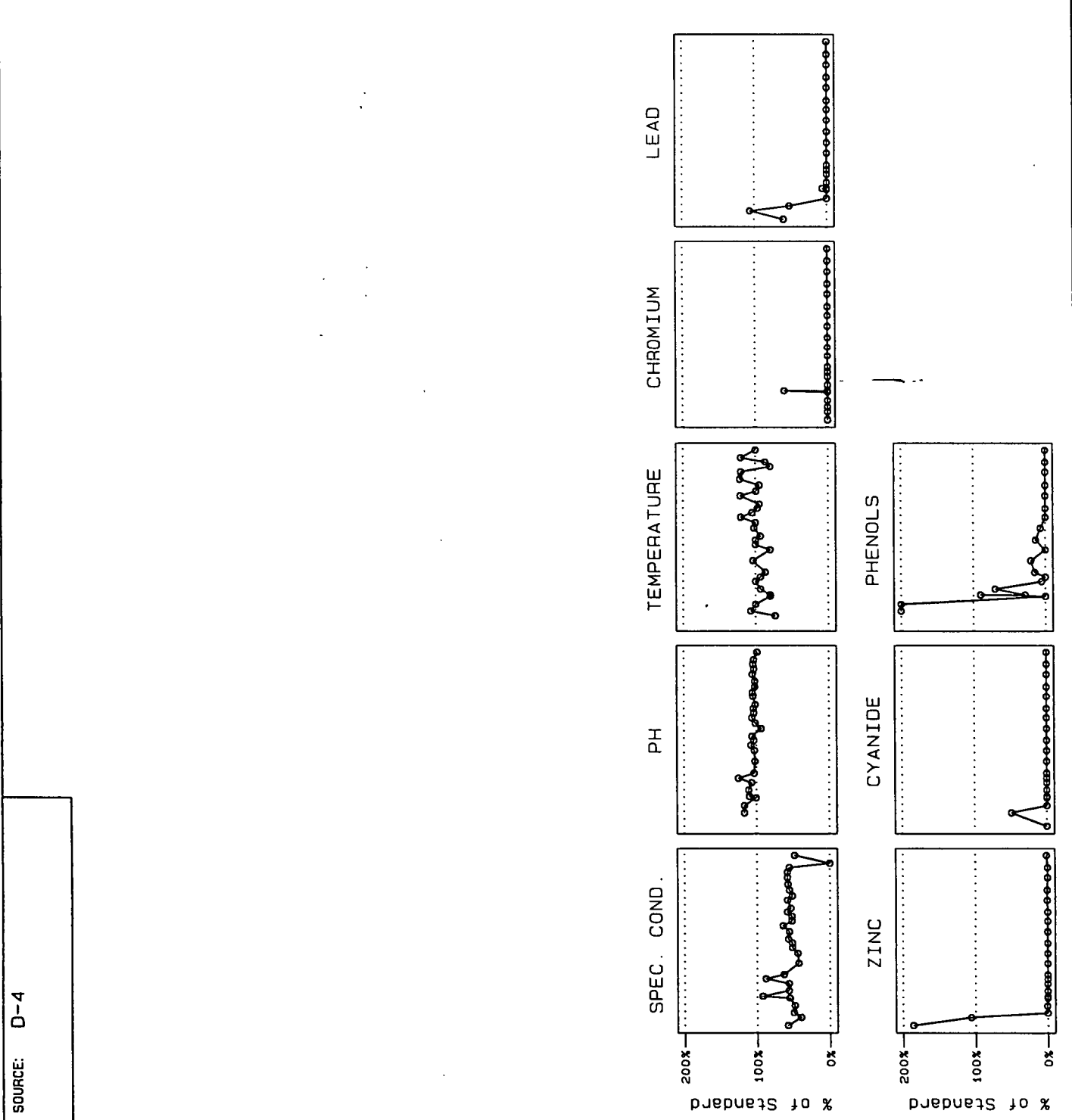
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**to gleason**  
Associates  
Environmental and Geotechnical Services

SOURCE: D-4		DATE SAMPLED	SAMPLE NO.	STD. LAB	SPECIFIC COND. UPHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
10/01/86	109	AQUA	870	-	-	-	<10	-	-	-	<0.01	-	
10/01/86	309	AQUA	-	-	-	-	<10	30	9280	-	-	-	
02/12/87	13	AQUA	600	-	-	11	<10	53	5280	-	-	-	
05/05/87	8	AQUA	750	8.18	16	<5	<5	26	20	0.098	1.33	0.729	
09/03/87	8	AQUA	725	8.15	15	<10	<20	<3	44	<0.005	<0.010	<0.010	
01/13/88	4	AQUA	840	7.06	12	<20	<20	<30	10	<0.02	<0.010	<0.010	
01/13/88	5	AQUA	830	7.06	12	<20	<20	<30	<10	<0.02	<0.010	<0.010	
02/08/88	7	AQUA	1390	7.70	12	30	30	3	10	<0.01	0.179	0.056	
02/08/88	8	AQUA	1380	7.68	12	<20	<20	<3	10	<0.01	0.14	0.01	
05/18/88	10	AQUA	850	7.77	14	<30	<30	<5	<20	<0.01	0.01	0.01	
09/23/88	10	AQUA	850	7.45	15	<30	<30	<6	<20	<0.01	0.01	0.01	
12/08/88	3	AQUA	1320	8.75	14	<30	<30	<5	<20	<0.01	<0.01	<0.01	
02/23/89	14	AQUA	945	7.25	13	<30	<30	<5	<20	<0.01	0.03	0.03	
09/08/89	14	AQUA	648	7.15	15.5	<10	<10	<2	<10	<0.01	0.04	0.04	
02/27/90	3	AQUA	663	7.20	12	<10	<10	<2	<10	<0.01	<0.01	<0.01	
06/01/90	5	AQUA	782	7.54	15	-	-	-	-	-	-	-	
08/22/90	3	AQUA	783	7.25	15	<5	<5	<4	<10	<0.01	0.027	0.027	
10/27/90	8	AQUA	856	7.42	14	-	-	-	-	-	-	-	
02/28/91	2	AQUA	837	6.51	15.3	<20	<20	<2	10	<0.010	0.013	0.013	
05/31/91	8	AQUA	967	7.10	15	-	-	-	-	-	-	-	
08/29/91	13	AQUA	789	7.43	18	<10	<10	<2	<10	<0.01	<0.01	<0.01	
11/14/91	30	AQUA	786	7.22	15.7	-	-	-	-	-	-	-	
01/22/92	4	AQUA	884	7.27	14.6	<10	<10	<2	<4	<0.01	<0.01	<0.01	
03/30/92	11	AQUA	807	7.12	14.2	-	-	-	-	-	-	-	
08/22/92	19	AQUA	879	7.33	18.1	<10	<10	<2	28	<0.010	<0.010	<0.010	
10/31/92	25	AQUA	777	7.40	14.9	-	-	-	-	-	-	-	
02/03/93	4	AQUA	834	7.15	14.2	<5	<5	<2	25	<0.010	<0.010	<0.010	
05/12/93	28	AQUA	865	7.16	18.2	-	-	-	-	-	-	-	
09/02/93	33	AQUA	875	7.40	18.0	<10	<10	<2	<10	<0.010	<0.010	<0.010	
12/02/93	16	AQUA	874	7.25	12.0	-	-	-	-	-	-	-	
02/17/94	8	AQUA	837	7.35	13.0	<5	<5	<2	16	<0.005	<0.010	<0.010	
05/05/94	15	AQUA	7.25	7.25	18.0	-	-	-	-	-	-	-	
09/13/94	4	AQUA	731	6.30	15.0	<5.0	<5.0	<2.0	72	<0.005	<0.010	<0.010	A



SOURCE: D-4



NOTES:  
 OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - - INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED  
 PARAMETER  
 o = Date Sampled

TABLE 8

DEEP MONITOR WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 6A OF 7

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 0B4





NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED  
MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER  
o = Date Sampled

TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 7 OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



SOURCE: D-7		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
1500	7												
10/01/86	108	AQUA	1110	-	-	-	-	-	-	-	<0.01	-	
10/01/86	208	AQUA	-	-	-	-	20	11	320	-	-	-	
11/05/86	26	AQUA	-	-	-	-	<10	3	28	-	<0.01	0.011	
06/05/87	9	AQUA	800	8.31	16	<5	<5	9	10	<10	0.031	0.233	
06/05/87	10	AQUA	800	8.31	16	<5	<5	<3	<10	<10	0.041	0.228	
09/03/87	17	AQUA	850	7.97	15	<10	<10	<3	<8	<20	<0.005	0.369	
09/03/87	18	AQUA	850	7.97	15	<10	<10	<3	4	<20	<0.005	0.4	
01/14/88	14	AQUA	860	6.89	13	<20	<20	<30	10	<20	<0.02	0.15	
02/08/88	10	AQUA	1080	7.94	13	20	20	<3	<10	<20	<0.01	0.5	
05/18/88	20	AQUA	900	7.76	14	<30	<30	<5	<20	<20	<0.01	<0.01	
09/25/88	29	AQUA	1245	7.10	16	<30	<30	<6	<20	<20	<0.01	0.02	
12/09/88	16	AQUA	1332	-	13	<30	<30	<5	<20	<20	<0.01	<0.01	
12/09/88	17	AQUA	1332	-	13	<30	<30	<5	<20	<20	<0.01	<0.01	
02/24/89	21	AQUA	705	7.70	13	<30	<30	<5	<20	<20	<0.01	0.02	
09/09/89	30	AQUA	474	7.10	16	<10	<10	<2	<10	<10	<0.01	<0.01	
03/01/90	22	AQUA	551	7.10	13	<10	<10	<5	<10	<10	<0.01	<0.01	
06/03/90	27	-	540	7.44	15	-	-	-	-	-	-	-	
08/23/90	17	AQUA	607	7.60	16	<5	<5	<2	<10	<10	<0.01	<0.01	
10/27/90	10	-	635	7.61	14	-	-	-	-	-	-	-	
03/01/91	15	AQUA	582	7.05	15.4	<20	<20	<2	<10	<10	<0.010	<0.010	
06/01/91	19	-	746	7.40	13	-	-	-	-	-	-	-	
08/31/91	29	AQUA	480	7.3	18	<10	<10	<5	<10	<10	<0.01	<0.01	
11/13/91	14	-	593	7.64	16.0	-	-	-	-	-	-	-	
01/23/92	10	AQUA	583	7.44	14.8	<10	<10	<2	<5	<5	<0.01	<0.01	
04/01/92	39	-	534	7.60	14.5	-	-	-	-	-	-	-	
08/23/92	30	AQUA	454	7.66	19.2	<10	<10	<2	<10	<10	<0.010	<0.010	
10/30/92	14	-	483	7.49	15.5	-	-	-	-	-	-	-	
02/03/93	6	AQUA	531	7.22	14.7	<5	<5	<2	<10	<10	<0.010	<0.010	
05/12/93	38	-	510	7.68	17.6	-	-	-	-	-	-	-	
08/31/93	19	AQUA	472	7.65	15.0	<10	<10	<2	<10	<10	<0.010	<0.010	
12/03/93	30	-	593	7.65	13.0	-	-	-	-	-	-	-	
02/17/94	11	AQUA	538	7.55	13.0	<5	<5	<2	<10	<10	<0.005	<0.010	
02/17/94	12	AQUA	537	7.55	13.0	<5	<5	<2	<10	<10	<0.005	<0.010	
05/05/94	15	-	484	7.25	14.0	-	-	-	-	-	-	-	
09/14/94	15	AQUA	688	7.40	15.0	<5.0	<5.0	<2.0	11	<10	<0.005	<0.010	A
09/14/94	16	AQUA	687	7.45	15.0	<5.0	<5.0	<2.0	14	<10	<0.005	<0.010	A



SOURCE: D-7

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

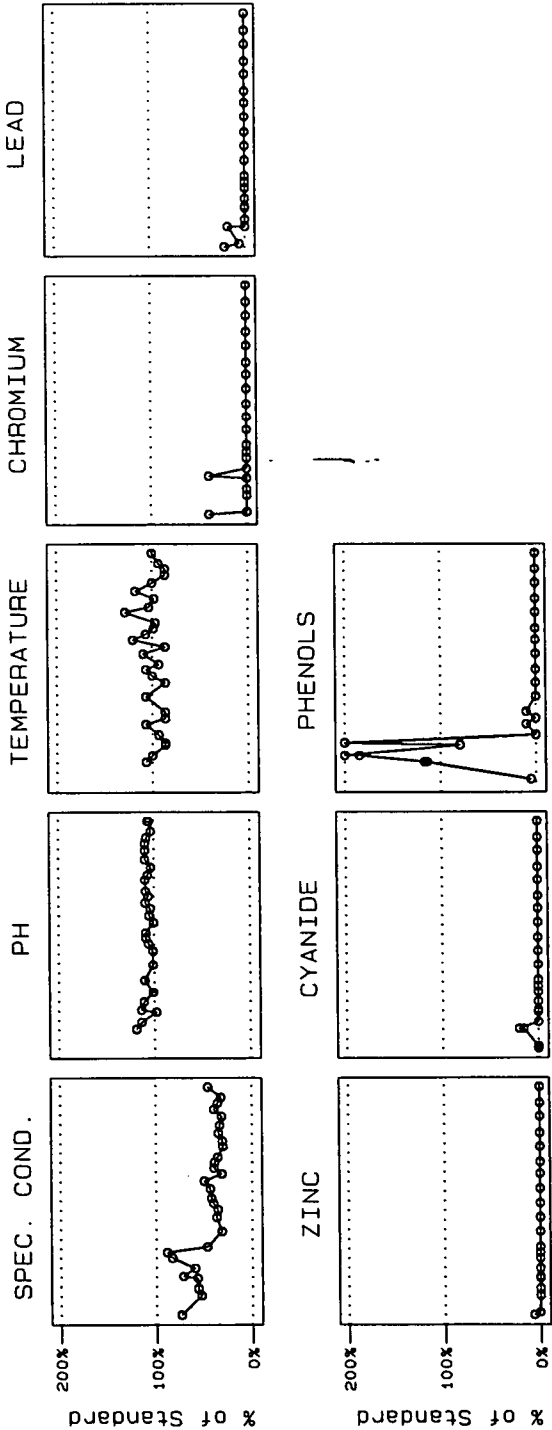
TABLE 8

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 7A OF 7

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCPX SBIN 0B4

**ta gleason**  
associates  
Environmental and Geotechnical Services







SOURCE: E-3		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL U6/L	50 MCL U6/L	5000 SMCL U6/L	MG/L	MG/L	
03/25/87	7	AQUA	-	-	-	<20	<3	.80	0.07	0.012	
01/14/88	19	AQUA	-	-	-	<20	<30	-	<0.02	0.02	
02/10/88	29	AQUA	2600	7.10	16	<20	<3	<10	<0.01	<0.010	
05/19/88	34	AQUA	1420	7.15	15	<30	<5	<20	<0.01	<0.01	
09/25/88	32	AQUA	3010	6.95	18	<30	<6	<20	<0.01	0.08	
12/09/88	21	AQUA	3140	-	14	30	<5	<20	<0.01	<0.01	
02/24/89	28	AQUA	1518	7.30	13	<30	<10	<20	<0.01	0.02	
09/07/89	8	AQUA	1110	6.75	18	<10	<2	<10	<0.01	0.05	
03/01/90	18	AQUA	1185	6.40	13.5	<10	8	<10	<0.01	0.033	
06/04/90	31		1582	7.25	13	-	-	-	-	-	
08/24/90	26	AQUA	1270	7.15	16.5	<5	<2	<10	<0.01	<0.01	
08/24/90	27	AQUA	1268	7.15	16.5	<5	<2	<10	<0.01	<0.01	
10/30/90	35		1285	7.11	14	-	-	-	-	-	
03/04/91	34	AQUA	1139	6.95	14.7	<10	<2.0	<10	<0.010	0.011	
06/03/91	35		1436	7.20	16	-	-	-	-	-	
08/30/91	20	AQUA	1069	7.13	20	<10	<5	20	<0.01	<0.01	
11/14/91	37		1255	7.17	17.9	-	-	-	-	-	
01/24/92	17	AQUA	1314	7.17	13.8	<10	<5	10	<0.01	<0.01	
03/30/92	5		1225	7.18	16.3	-	-	-	-	-	
08/24/92	34	AQUA	1238	8.51	18.4	<10	<2	15	<0.010	0.024	
11/02/92	44		1582	7.00	16.7	-	-	-	-	-	
02/09/93	41	AQUA	1247	7.19	14.5	<5	8.0	11	<0.010	<0.010	
12/11/93	40		1268	6.60	12.0	-	-	-	-	-	
05/09/94	43		1340	7.20	14.0	-	-	-	-	-	
09/16/94	42	AQUA	1074	7.10	15.0	<5.0	2.7	306	<0.005	<0.010	A

TABLE 9

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 1 OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084



Associates  
Environmental and Geotechnical Services

o - Date  
Sampled

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

WELL NOT SAMPLED 5/93 DUE TO INOPERATIVE PUMP.

A = SAMPLE NOT FILTERED PARAMETER



SOURCE: E-3

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

WELL NOT SAMPLED 5/93 DUE TO INOPERATIVE PUMP.

A = SAMPLE NOT FILTERED  
PARAMETER

o = Date  
o = Sampled

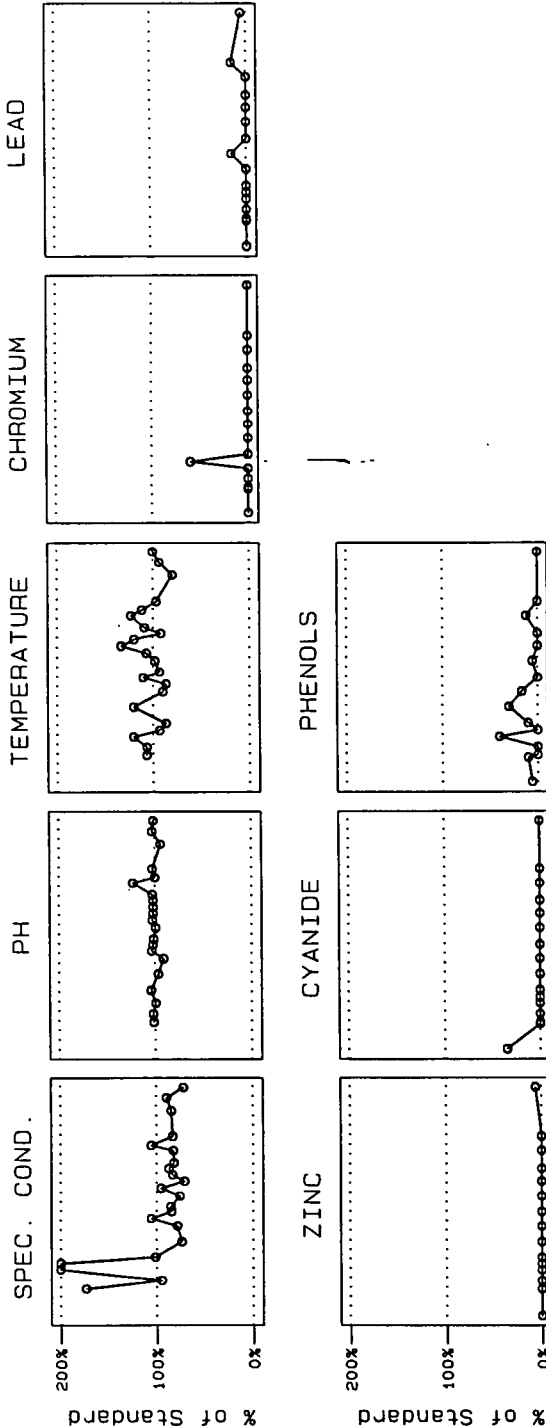
TABLE 9

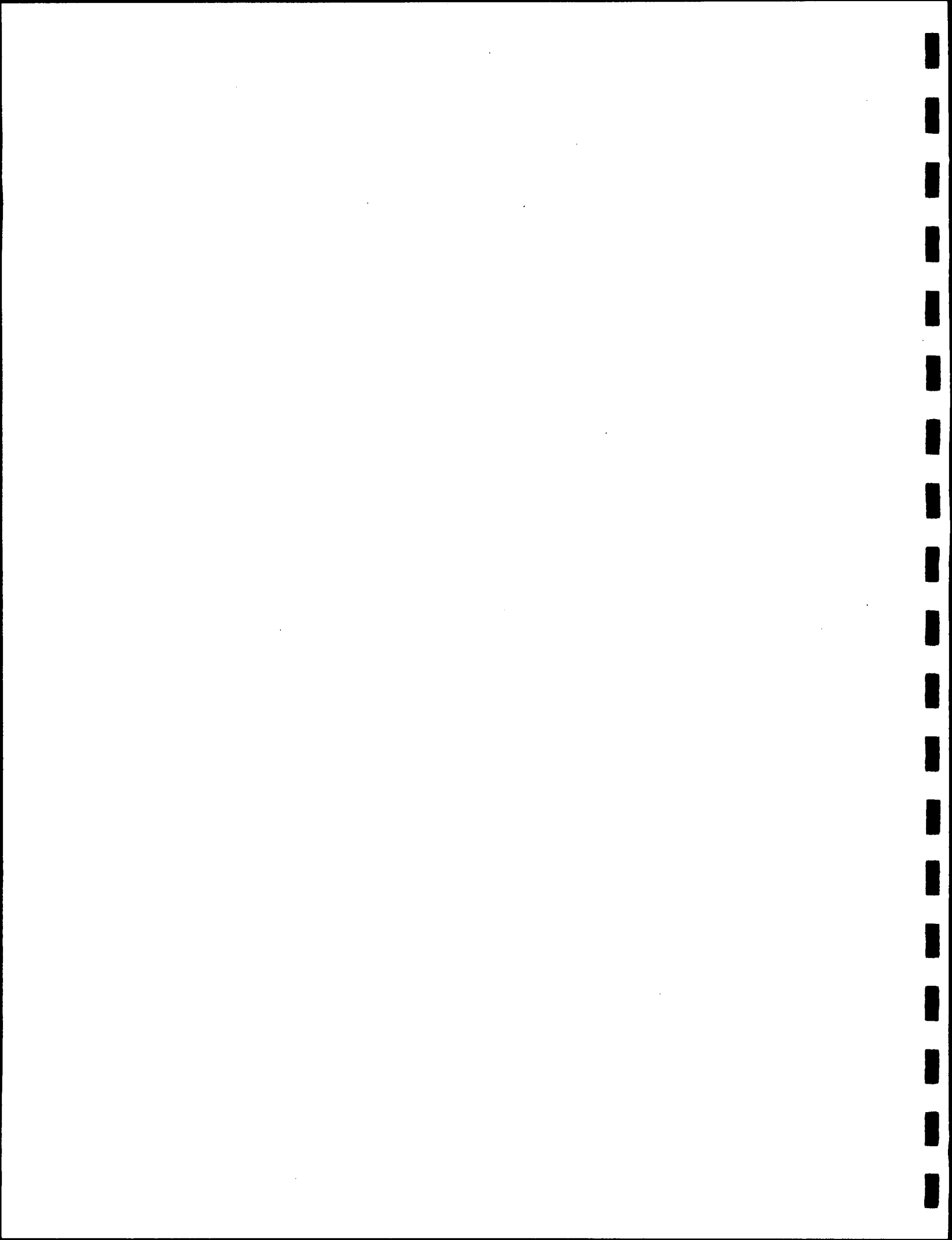
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 1A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

WELL NOT SAMPLED 6/90, 6/91, AND 11/91 DUE TO INOPERATIVE PUMP.

SOURCE: RWB-6		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
03/25/87	10	AQUA	-	-	-	<20	<3	10	0.05	0.131	
03/25/87	11	AQUA	-	-	-	<20	<3	10	0.05	<.01	
01/14/88	15	AQUA	-	-	-	<20	<30	10	<0.02	0.01	
02/10/88	25	AQUA	2400	7.50	13	20	<3	20	<0.01	<0.010	
05/19/88	31	AQUA	1380	7.55	14	<30	<5	<20	<0.01	<0.01	
09/25/88	31	AQUA	2500	6.80	16.5	<30	<6	<20	<0.01	0.07	
12/09/88	19	AQUA	2620	-	15	<30	<5	<20	<0.01	<0.01	
02/24/89	25	AQUA	1456	7.35	14	<30	<10	<20	<0.01	0.02	
09/07/89	5	AQUA	1065	6.80	18	<10	<4	<10	<0.01	<0.01	
03/01/90	16	AQUA	1260	6.20	13	<10	<5	<10	<0.01	0.011	
08/29/90	42	AQUA	-	-	-	<5	<2	<10	<0.01	<0.01	
10/30/90	34		1438	7.23	14	-	-	-	-	-	
03/04/91	31	AQUA	1310	6.71	13.9	<10	<2.0	<10	<0.010	<0.010	
08/30/91	19	AQUA	1164	7.22	18	<10	<5	20	<0.01	<0.01	
01/24/92	15	AQUA	1423	7.10	13.2	<10	<5	<10	<0.01	<0.01	
03/31/92	23		1181	7.10	15.1	-	-	-	-	-	
08/24/92	32	AQUA	1328	8.57	16.3	<10	<4	56	<0.010	<0.010	
11/02/92	39		1786	7.10	20.4	-	-	-	-	-	
11/02/92	40		1790	7.10	20.4	-	-	-	-	-	
02/05/93	26	AQUA	1421	7.11	24.7	<10	<2	14	0.064	<0.010	
02/05/93	27	AQUA	1420	7.10	24.7	<10	<2	<10	<0.010	<0.010	
05/12/93	31		1468	7.02	21.2	-	-	-	-	-	
05/12/93	32		1465	7.00	21.2	-	-	-	-	-	

PARAMETER

o = Date Sampled

TABLE 9

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 2 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCHPX SBIN 084

**fa gleason**  
 Associates  
 Environmental and Geotechnical Services



SOURCE: RWB-6

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
WELL NOT SAMPLED 6/90, 6/91, AND 11/91 DUE TO INOPERATIVE PUMP.

PARAMETER

o = Date Sampled

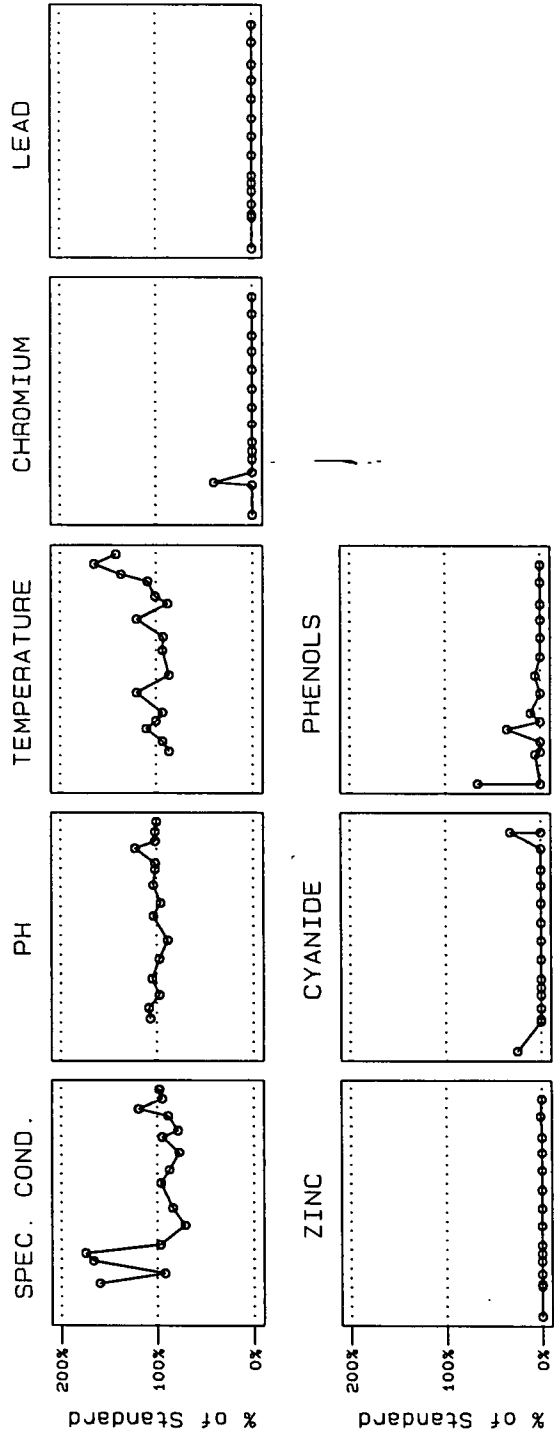
TABLE 9

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 2A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**taigeason**  
associates  
Environmental and Geotechnical Services







SOURCE: RWB-16		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
03/25/87	8	AQUA	-	-	-	<20	<3	10	0.07	0.017	
01/14/88	20	AQUA	-	-	-	<20	<30	10	0.03	0.020	
02/10/88	30	AQUA	2500	7.35	15	<20	<3	20	0.02	<0.010	
05/19/88	35	AQUA	1400	7.29	15	<30	<5	<20	<0.01	<0.02	
09/25/88	33	AQUA	2800	6.70	19	<30	<6	<20	<0.01	0.03	
12/09/88	22	AQUA	2680	-	14	<30	<5	<20	<0.01	<0.01	
02/24/89	29	AQUA	1430	7.25	14	<30	<5	<20	<0.01	0.02	
09/07/89	9	AQUA	975	6.95	21	<10	<2	10	<0.01	<0.01	
09/07/89	10	AQUA	932	7.00	21	<10	<2	<10	<0.01	0.03	
03/01/90	19	AQUA	1000	6.90	13	<10	<5	<10	<0.01	<0.01	
05/04/90	32		1624	7.34	17	-	-	-	-	-	
08/24/90	28	AQUA	1251	7.25	17	<5	<2	<10	<0.01	<0.01	
10/30/90	37		1369	7.17	14	-	-	-	-	-	
03/04/91	35	AQUA	1298	7.41	14.8	<10	<2	<10	<0.010	<0.010	
05/03/91	36		1412	7.30	17	-	-	-	-	-	
05/03/91	37		1418	7.30	17	-	-	-	-	-	
08/30/91	21	AQUA	1129	7.35	20	<10	<5	10	<0.01	<0.01	
11/14/91	38		1324	7.31	18.8	-	-	-	-	-	
11/14/91	39		1325	7.33	18.8	-	-	-	-	-	
01/24/92	18	AQUA	1315	7.25	14.8	<10	<5	10	<0.01	<0.01	
01/24/92	19	AQUA	1314	7.23	14.8	<10	9.4	10	<0.01	<0.01	
03/30/92	6		1309	7.26	17.3	-	-	-	-	-	
08/24/92	35	AQUA	1279	8.03	19.9	<10	<2	<10	<0.010	<0.010	
11/02/92	43		1536	7.20	18.3	-	-	-	-	-	
02/05/93	30	AQUA	1337	7.20	17.4	<10	<2	11	<0.010	<0.010	
05/12/93	34		1259	7.22	19.4	-	-	-	-	-	
09/01/93	24	AQUA	1283	7.10	18.0	<10	<2	<10	<0.010	0.044	
09/01/93	25	AQUA	1283	7.10	18.0	<10	<2	<10	<0.010	<0.010	
12/04/93	35		1309	7.25	15.0	-	-	-	-	-	
02/19/94	37	AQUA	1557	7.35	16.0	<5	<2	16	<0.010	0.261	
02/19/94	38	AQUA	1562	7.35	16.0	<5	<2	15	<0.010	<0.010	
05/07/94	41		1064	7.15	14.0	-	-	-	-	-	
09/16/94	43	AQUA	1112	7.10	16.0	77	20	552	<0.005	<0.010	A

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date  
 Sampled

TABLE 9

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 3 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALMPX SBIN 084





SOURCE: RWB-16

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

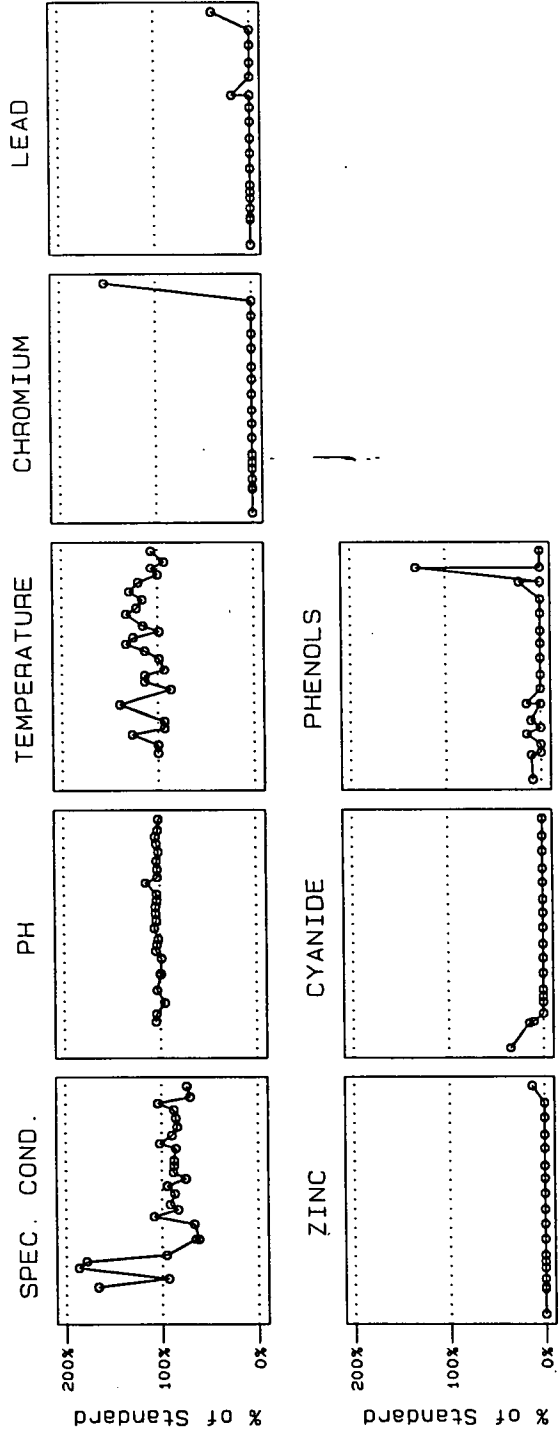
TABLE 9

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 3A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084

**ta gleason**  
ASSOCIATES  
Environmental and Geotechnical Services





SOURCE: RWB-21

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C		CHROMIUM 50 MCL U6/L		LEAD 50 MCL U6/L		ZINC 5000 SMCL U6/L		CYANIDE MG/L	PHENOLS MG/L	NOTES
					15	15	50 MCL	50 MCL	50 MCL	5000 SMCL					
03/25/87	12	AQUA	-	-	-	<20	<20	<3	10	0.05	0.015				
01/14/88	15	AQUA	-	-	-	<20	<20	<30	10	<0.02	0.01				
02/10/88	25	AQUA	1825	7.40	12	<20	<20	<3	<10	<0.01	<0.010				
05/19/88	30	AQUA	1300	7.43	13	<30	<30	<5	22	<0.01	<0.01				
12/09/88	18	AQUA	8300	-	15	<30	<30	<5	<20	<0.01	<0.01				
02/24/89	25	AQUA	1079	7.30	14	<30	<30	<5	<20	<0.01	0.02				
09/07/89	5	AQUA	741	6.85	16	<10	<10	<2	<10	<0.01	<0.01				
03/01/90	15	AQUA	736	6.50	12	<10	<10	<5	<10	<0.01	0.02				
06/04/90	28	AQUA	1024	7.26	12	-	-	-	-	-	-				
08/24/90	24	AQUA	963	7.20	14	<5	<10	<2	<10	<0.01	0.023				
10/30/90	32	AQUA	959	7.11	13	-	-	-	-	-	-				
03/04/91	30	AQUA	891	7.05	14.2	<10	<10	<2.0	<10	<0.010	<0.010				
05/30/91	3	AQUA	841	6.80	16	-	-	-	-	-	-				
08/30/91	18	AQUA	871	6.8	17	<10	<10	<5	10	<0.01	<0.01				
11/14/91	40	AQUA	1011	7.24	16.3	-	-	-	-	-	-				
01/24/92	14	AQUA	1044	7.23	14.0	<10	<10	<5	10	<0.01	<0.01				
03/30/92	2	AQUA	1011	6.90	14.5	-	-	-	-	-	-				
03/30/92	3	AQUA	1010	6.91	14.5	-	-	-	-	-	-				
08/24/92	31	AQUA	908	7.94	16.7	<10	<10	<2	<10	<0.010	<0.010				
11/02/92	38	AQUA	1062	7.20	15.5	-	-	-	-	-	-				

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

WELL NOT SAMPLED 2/93 AND 5/93 DUE TO INOPERATIVE PUMP.

PARAMETER

o = Date Sampled

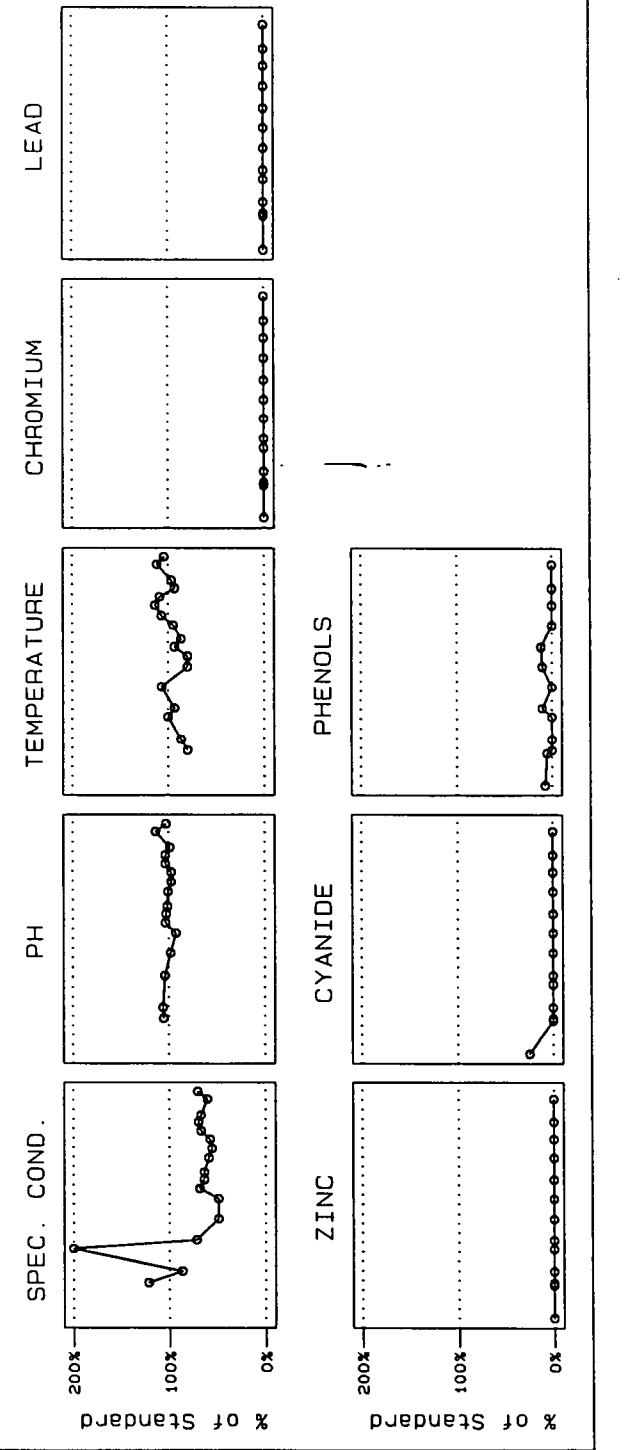
TABLE 9

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 4 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**ta gleason**  
 associates  
 Environmental and Geotechnical Services

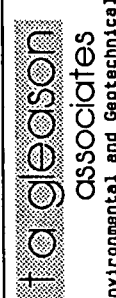




**NOTES:**  
 OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 M = METHOD OF STANDARD ADDITIONS  
 A = SAMPLE NOT FILTERED PARAMETER  
 o = Date Sampled

SOURCE: RWB-22		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
03/25/87	9	AQUA	-	-	-	<20	-	10	0.07	0.012	
01/14/88	17	AQUA	-	-	-	20	<30	10	<0.02	<0.010	
01/14/88	18	AQUA	-	-	-	20	<30	10	<0.02	<0.010	
02/10/88	27	AQUA	2500	7.20	15	50	<3	<10	<0.01	<0.010	
02/10/88	28	AQUA	2500	7.20	15	30	<3	<10	<0.01	<0.010	
05/19/88	32	AQUA	1300	7.27	15	<30	<5	<20	<0.01	<0.01	
05/19/88	33	AQUA	1300	7.24	15	<30	<5	<20	<0.01	<0.01	
09/25/88	30	AQUA	1725	6.70	15	<30	<6	<20	<0.01	0.11	
12/09/88	20	AQUA	2680	-	15	<30	<5	<20	<0.01	<0.01	
02/24/89	27	AQUA	1535	7.35	13	30	<10	<20	<0.01	0.04	
09/07/89	7	AQUA	1107	6.80	19	<10	<2	<10	<0.01	<0.01	
03/01/90	17	AQUA	1231	6.50	13	<10	<5	<10	<0.01	0.038	
06/04/90	29		1629	7.30	13	-	-	-	-	-	
06/04/90	30		1631	7.33	13	-	-	-	-	-	
08/24/90	25	AQUA	1376	7.20	16	<5	<2	<10	<0.01	<0.01	
10/30/90	35		1238	7.10	14	-	-	-	-	-	
03/04/91	32	AQUA	1301	7.54	14.8	<10	3.1-M	<10	<0.01	<0.010	
03/04/91	33	AQUA	1324	7.54	14.8	<10	<2	<10	<0.01	<0.010	
06/03/91	38		1454	6.71	15	-	-	-	-	-	
11/14/91	36		1188	7.12	17.9	-	-	-	-	-	
01/24/92	16	AQUA	1288	7.15	13.8	<10	<5	<10	<0.01	<0.01	
03/30/92	4		1250	7.04	16.2	-	-	-	-	-	
08/24/92	33	AQUA	1227	8.47	18.4	<10	<2	13	<0.010	<0.010	
11/02/92	42		1460	7.10	16.9	-	-	-	-	-	
02/05/93	29	AQUA	1556	7.06	21.8	<10	<2	<10	<0.010	<0.010	
05/12/93	33		1493	7.01	29.7	-	-	-	-	-	
09/01/93	23	AQUA	1479	7.00	24.0	<10	<2	<10	<0.010	<0.010	
12/04/93	33		1533	7.05	18.0	-	-	-	-	-	
12/04/93	34		1540	7.05	18.0	-	-	-	-	-	
02/19/94	36	AQUA	1544	7.15	14.0	<5	<2	<10	0.010	0.016	
05/07/94	39		1047	7.05	14.0	-	-	-	-	-	
05/07/94	40		1042	7.05	14.0	-	-	-	-	-	
09/16/94	39	AQUA	1079	7.20	16.0	<5.0	2.7	107	0.012	<0.010	A
09/16/94	40	AQUA	1078	7.25	16.0	<5.0	3.8	76	0.010	<0.010	A

TABLE 9

NAPHTHA RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 5 OF 5  
 ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084  
  
 Environmental and Geotechnical Services  
 A: \19\RWB-22.MT1, 11-10-1994





SOURCE: RWS-22

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METAL SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE AND PHENOLS FOR GRAPHING PURPOSES ONLY.

M = METHOD OF STANDARD ADDITIONS

A = SAMPLE NOT FILTERED

PARAMETER

o = Date  
    = Sampled

TABLE 9

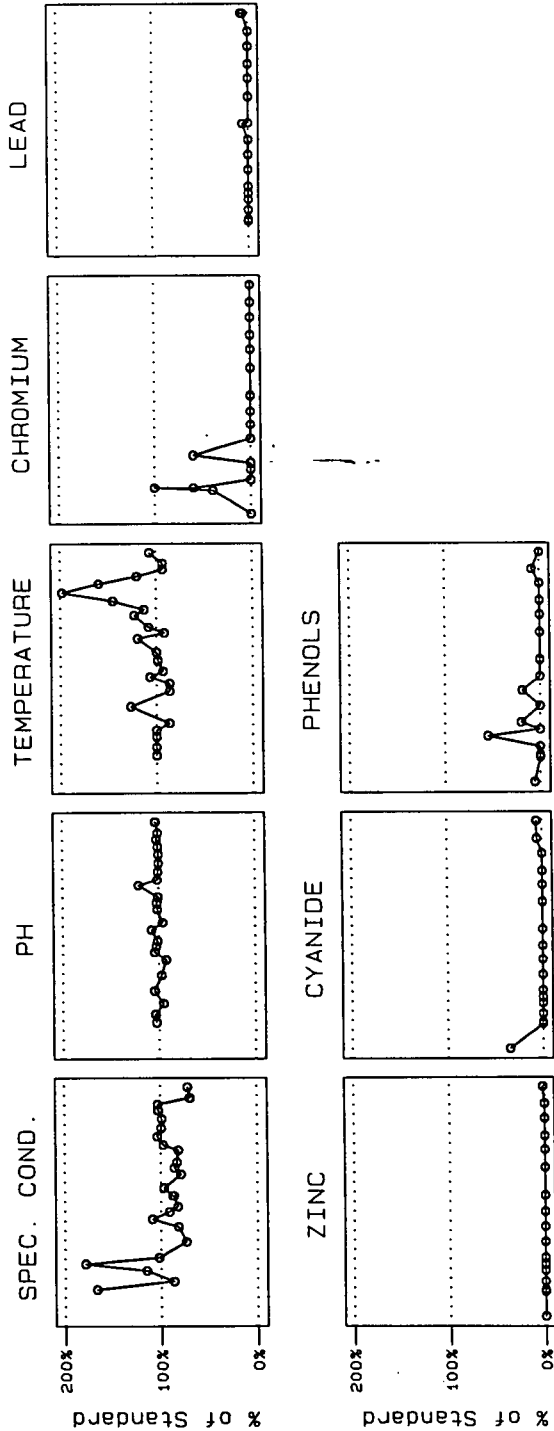
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 5A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 084

**Tagleason**  
Associates

Environmental and Geotechnical Services





SOURCE: RW 1-2		SPECIFIC COND.		PH		TEMP.		CHROMIUM		LEAD		ZINC		CYANIDE		PHENOLS		NOTES	
DATE SAMPLED	SAMPLE NO.	STD:	LAB	UMHOS/CM	S.U.	C	50 MCL	50 MCL	UG/L	50 MCL	UG/L	5000 SMCL	UG/L	MG/L	MG/L	MG/L			
12/09/93	36			1340	7.10	15.0	-	-	-	-	-	-	-	-	-	-	-	-	-
02/19/94	27	AQUA		1345	6.85	13.0	<5	<2	<5	<10	<0.010	<10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
05/07/94	32			1020	6.95	14.0	-	-	-	-	-	-	-	-	-	-	-	-	
09/15/94	32	AQUA		1017	6.80	16.0	<5.0	3.0	<5.0	<10	0.009	<10	0.009	<0.010	<0.010	<0.010	<0.010	<0.010	A

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

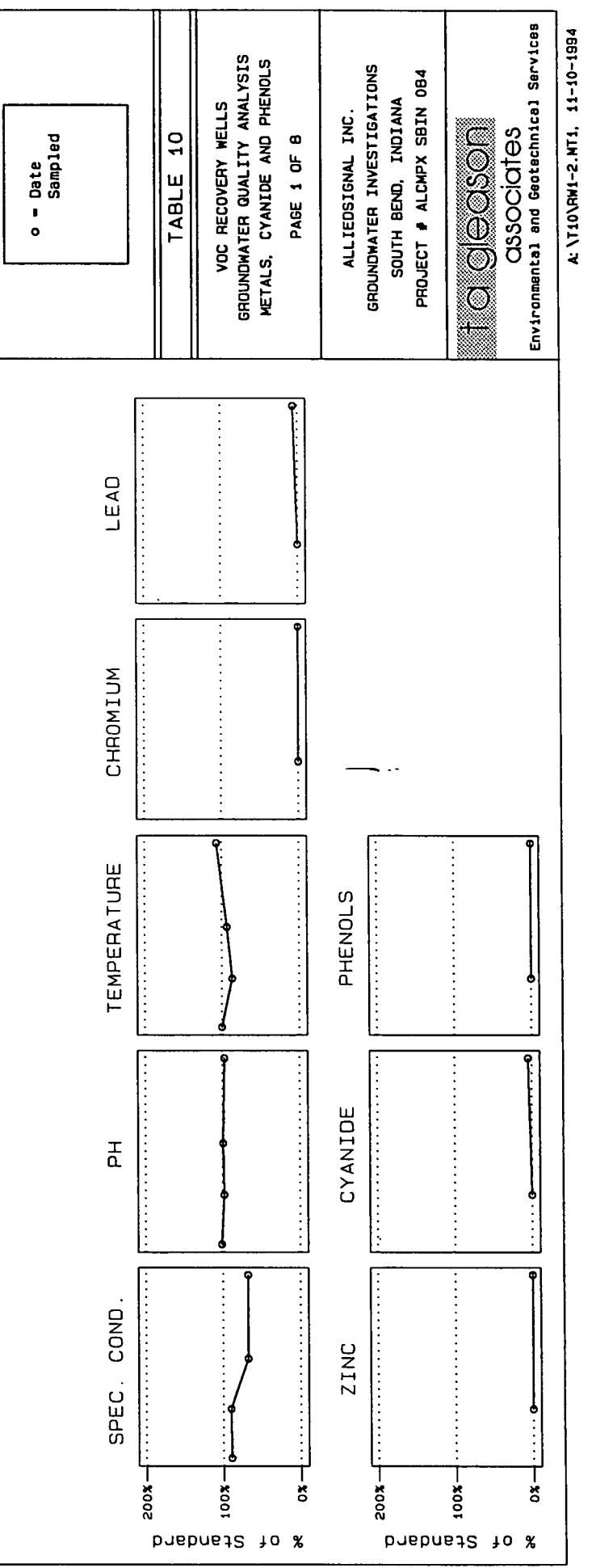
MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled





SOURCE: RW 3-4		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
12/09/93	37		1100	7.30	13.0	-	-	-	-	-	
02/19/94	28	AGUA	1226	7.00	12.0	<5	<2	15	0.053	<0.010	
05/07/94	33		993	7.40	14.0	-	-	-	-	-	
09/15/94	33	AGUA	901	6.70	17.0	<5.0	2.2	21	0.049	<0.010	A
09/18/94	34	AGUA	904	6.70	17.0	<5.0	<2.0	18	0.058	<0.010	A

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

TABLE 10

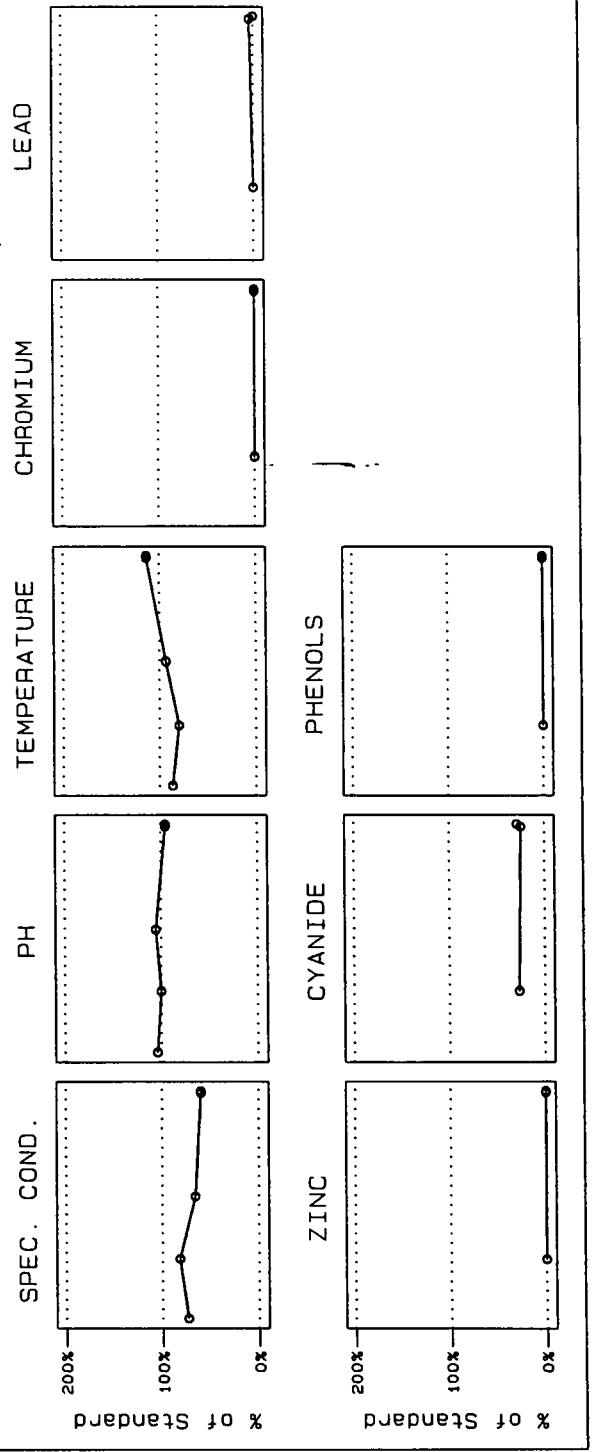
VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 2 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**ta gleason**  
 associates  
 Environmental and Geotechnical Services

A:\110VRW3-4.MT1, 11-10-1994





SOURCE: RW 5-7

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM		LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
						50 MCL UG/L						
12/09/93	38		1310	7.30	12.0	-	-	-	-	-	-	
02/19/94	29	AQUA	1599	7.05	14.0	<5	<2	<10	0.013	0.200	<0.010	
05/07/94	34		1275	7.10	13.0	-	-	-	-	-	-	
09/15/94	35	AQUA	1356	6.90	16.0	<5.0	21	16	0.013	0.200	<0.010	A

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o - Date Sampled

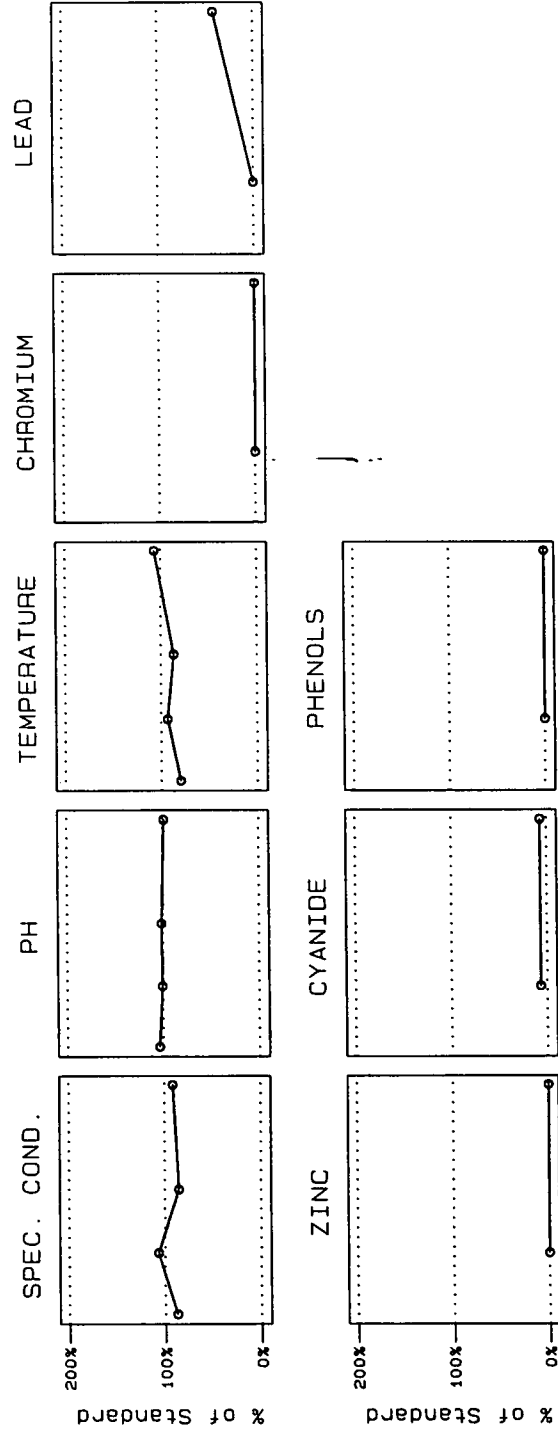
TABLE 10

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 3 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCHPX SBIN 0B4

**ta gleason**  
 associates  
 Environmental and Geotechnical Services







**SOURCE: RW 8-11**  
**DATE SAMPLED**    **SAMPLE NO.**    **STD: LAB**    **SPECIFIC COND. UMHOS/CM**    **PH S.U.**    **TEMP. C**    **CHROMIUM 50 MCL UG/L**    **LEAD 50 MCL UG/L**    **ZINC 5000 SMCL UG/L**    **CYANIDE MG/L**    **PHENOLS MG/L**    **NOTES**

**NOTES:**  
 OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 WELL NOT SAMPLED 12/88 AND 8/91 DUE TO INOPERATIVE PUMP.  
 A = SAMPLE NOT FILTERED

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
02/26/89	38	AQUA	1754	6.95	12	<30	<10	<20	<0.01	<0.01	
09/10/89	38	AQUA	1211	6.85	17	<10	<4	<10	0.028	<0.01	
03/02/90	31	AQUA	1570	6.80	15	<10	<10	<10	<0.01	<0.01	
06/04/90	38		1063	7.23	15	-	-	-	-	-	
08/25/90	38	AQUA	1221	7.05	16	<5	<2	10	0.013	<0.01	
10/31/90	39		1345	7.02	16	-	-	-	-	-	
03/04/91	38	AQUA	1187	6.84	15.1	<10	<2	<10	0.018	<0.010	
06/03/91	34		1751	7.10	17	-	-	-	-	-	
11/14/91	27		1327	7.12	17.1	-	-	-	-	-	
01/29/92	40	AQUA	1446	7.12	14.2	<10	<2	<10	0.022	<0.01	
04/01/92	30		1349	7.15	14.8	-	-	-	-	-	
08/24/92	36	AQUA	1160	7.50	20.1	<10	<2	<10	0.055	<0.010	
10/31/92	28		1550	7.08	16.8	-	-	-	-	-	
10/31/92	29		1555	7.06	16.8	-	-	-	-	-	
02/06/93	36	AQUA	1415	7.19	14.7	<10	<2	<10	<0.010	<0.010	
05/12/93	35		1650	7.06	18.1	-	-	-	-	-	
05/12/93	36		1651	7.05	18.1	-	-	-	-	-	
12/09/93	39		1520	7.40	12.0	-	-	-	-	-	
02/19/94	30	AQUA	1897	7.05	13.0	<5	<2	<10	<0.010	<0.010	
02/19/94	31	AQUA	1887	7.10	13.0	<5	<2	<10	<0.010	<0.010	
05/07/94	42		1540	7.05	14.0	-	-	-	-	-	
09/15/94	38	AQUA	1673	6.90	15.0	<5.0	<2.0	<10	<0.005	<0.010	A

PARAMETER  
 o = Date  
 Sampled

TABLE 10

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 4 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**ta gleason**  
**associates**  
 Environmental and Geotechnical Services

A: 1710 VRW6-11.MT1, 11-10-1994



SOURCE: RW 8-11

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
WELL NOT SAMPLED 12/88 AND 8/91 DUE TO INOPERATIVE PUMP.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date  
Sampled

TABLE 10

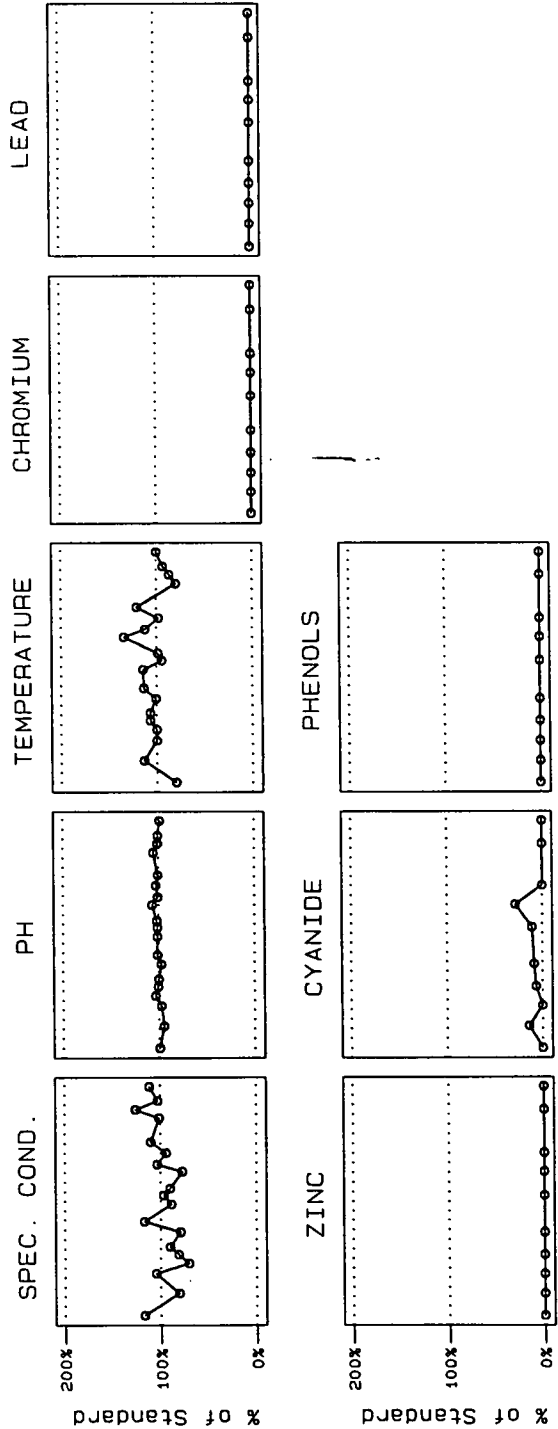
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 4A OF B

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCPX SBIN 084

**ta gleason**  
associates

Environmental and Geotechnical Services





SOURCE: RW-13		DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM 50 MCL UG/L	LEAD 50 MCL UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
DATE SAMPLED	SAMPLE NO.												
12/11/88	NSM-5	AQUA	2610	-	17	<30	<5	60	0.01	0.01	0.01		
02/26/89	39	AQUA	1772	7.05	14.5	<30	<10	<20	<0.01	<0.01	<0.01		
09/10/89	39	AQUA	1281	6.85	17	<10	<2	10	0.03	<0.01	<0.01		
09/10/89	40	AQUA	1278	6.70	17	<10	<4	10	0.033	<0.01	<0.01		
03/02/90	33	AQUA	1590	6.80	16	<10	<5	<10	<0.01	0.013	0.013		
06/04/90	39		1429	7.12	16	-	-	-	-	-	-		
08/25/90	39	AQUA	1236	7.00	16	<5	<2	<10	0.023	<0.01	<0.01		
10/31/90	41		1460	6.91	17	-	-	-	-	-	-		
10/31/90	42		1482	7.09	17	-	-	-	-	-	-		
03/04/91	39	AQUA	1183	7.18	15.1	<10	<2.0	30	0.014	<0.010	<0.010		
03/04/91	40	AQUA	1205	7.05	15.1	<10	<2.0	30	0.025	<0.010	<0.010		
06/02/91	33		1636	7.10	17	-	-	-	-	-	-		
08/30/91	23	AQUA	1198	7.01	20	<10	<5	80	0.016	<0.01	<0.01		
11/14/91	28		1330	6.90	17.0	-	-	-	-	-	-		
01/24/92	21	AQUA	1635	7.03	15.0	<10	<5	70	0.026	<0.01	<0.01		
04/01/92	27		1370	7.00	15.5	-	-	-	-	-	-		
04/01/92	28		1368	7.01	15.5	-	-	-	-	-	-		
08/24/92	38	AQUA	1250	6.90	19.5	<10	<2	34	0.070	<0.010	<0.010		
10/31/92	22		1328	7.03	15.4	-	-	-	-	-	-		
02/06/93	40	AQUA	1398	7.12	14.8	<10	<2	57	0.072	<0.010	<0.010		
05/12/93	26		1465	7.02	19.0	-	-	-	-	-	-		
09/01/93	26	AQUA	1507	7.00	17.0	<10	<2.0	229	0.194	<0.010	<0.010		
12/03/93	24	AQUA	1439	6.95	12.0	-	-	-	-	-	-		
03/29/94	48	AQUA	1740	7.05	14.0	<5.0	<2.0	17	0.081	<0.010	<0.010		
05/06/94	28		1334	6.95	14.0	-	-	-	-	-	-		
09/15/94	36	AQUA	1307	6.90	14.0	13	15	77	0.092	<0.010	<0.010	A	

NOTES:  
 OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL  
 STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
 A = SAMPLE NOT FILTERED

PARAMETER  
 o = Date Sampled

TABLE 10

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS  
 PAGE 5 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**foleason**  
 ASSOCIATES  
 Environmental and Geotechnical Services

A: \T10\RM13.MT1, 11-10-1994





180





SOURCE: RW 17		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
12/12/88	NSH-4	AQUA	-	16	<30	<5	<20	<0.01	<0.01	
02/24/89	40	AQUA	7.15	14	<30	<10	<20	<0.01	<0.01	
09/19/89	43	AQUA	6.25	17	<5	<4	<10	<0.01	<0.01	
03/02/90	27	AQUA	6.90	15	<10	<5	<10	<0.01	0.026	
06/04/90	40		7.37	17	-	-	-	-	-	
09/25/90	40	AQUA	7.10	20	<5	<2	<10	<0.01	<0.01	
11/14/91	29		7.03	18.9	-	-	-	-	-	
01/24/92	23	AQUA	7.03	11.0	<10	<5	10	<0.01	<0.01	
01/24/92	24	AQUA	7.03	11.0	<10	<5	<10	<0.01	<0.01	
03/30/92	10		6.96	16.5	-	-	-	-	-	
08/24/92	41	AQUA	6.90	22.1	<10	<2	10	<0.010	<0.010	
10/31/92	31		6.80	20.1	-	-	-	-	-	
02/09/93	42	AQUA	6.84	15.8	<5	<2	<10	<0.010	<0.010	
02/19/94	33	AQUA	6.95	16.0	<5	<2	32	<0.010	<0.010	
05/07/94	35		6.90	14.0	-	-	-	-	-	
05/07/94	36		6.90	14.0	-	-	-	-	-	
09/16/94	37	AQUA	6.70	17.0	<5.0	11	325	<0.005	<0.010	A

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, DH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.  
WELL NOT SAMPLED 10/90, 3/91, 6/91, 8/91, AND 5/93 DUE TO INOPERATIVE PUMP.

A = SAMPLE NOT FILTERED

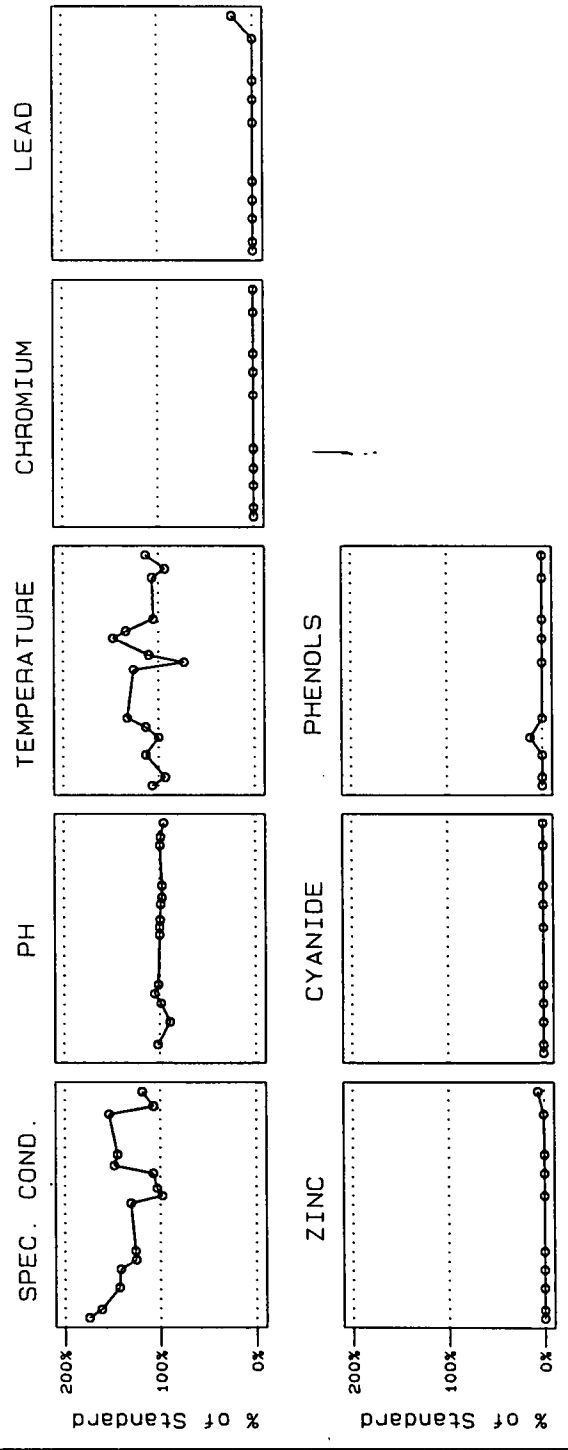
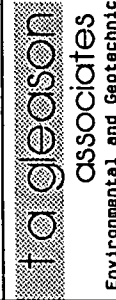
PARAMETER

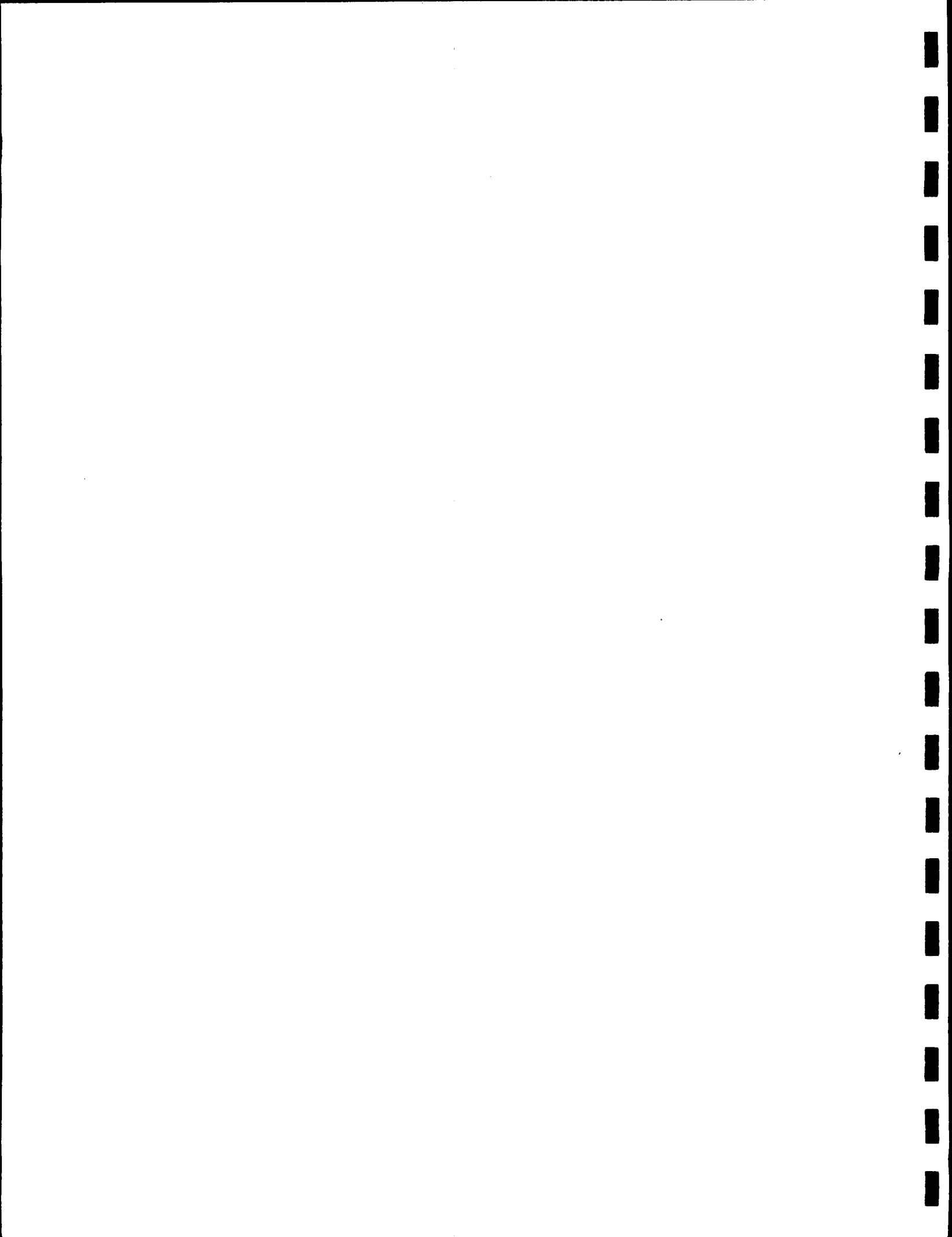
o = Date Sampled

TABLE 10

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 084





OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

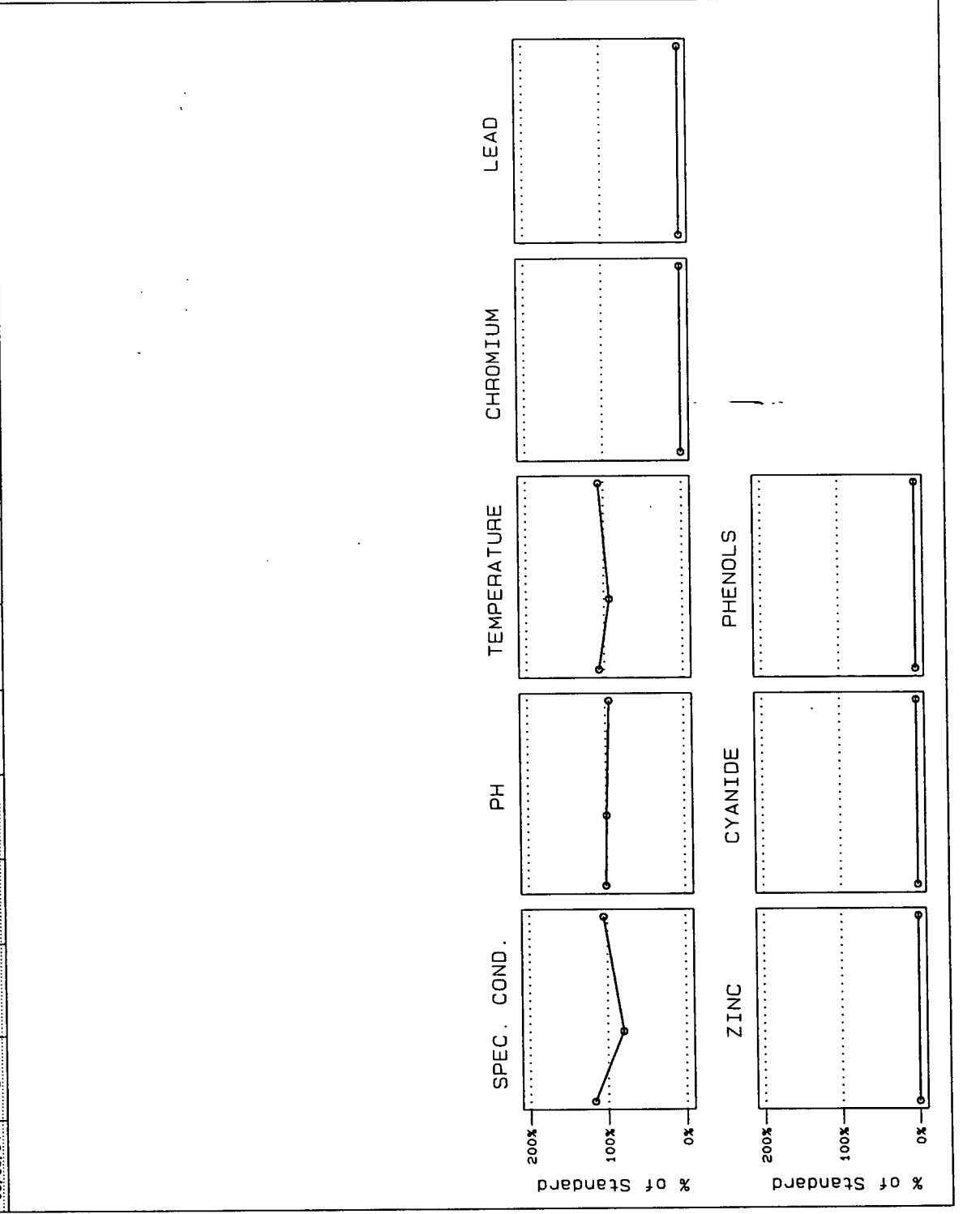
TABLE 10

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084



SOURCE: RW 18		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
02/19/94	34	1758	7.05	16.0	<5	<2	<10	<0.010	<0.010	
05/07/94	37	1205	6.95	14.0	-	-	-	-	-	
09/15/94	27	1575	6.70	16.0	<5.0	<2.0	<10	<0.005	<0.010	A





SOURCE: RW 19		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	.200 MG/L	.200 MG/L	
02/19/94	35	AQUA	1685	7.10	15.0	<5	<2	<10	<0.010	<0.010	
09/15/94	26	AQUA	1049	6.80	15.0	<5.0	3.0	<10	<0.005	<0.010	A

NOTES:  
 OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METALS SAMPLES COLLECTED SINCE 05/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
 - = INDICATES ANALYSIS NOT PERFORMED  
 MCL = MAXIMUM CONTAMINANT LEVEL  
 SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

A = SAMPLE NOT FILTERED

PARAMETER

o = Date Sampled

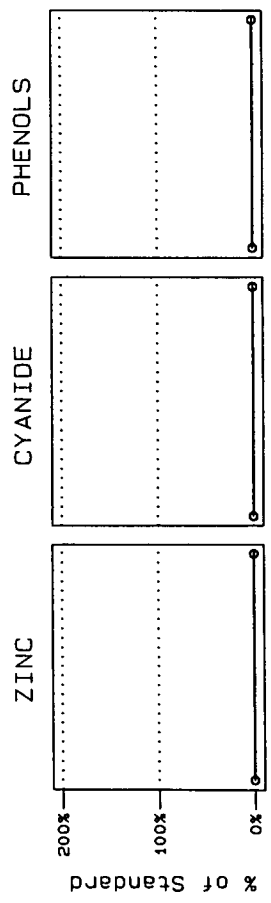
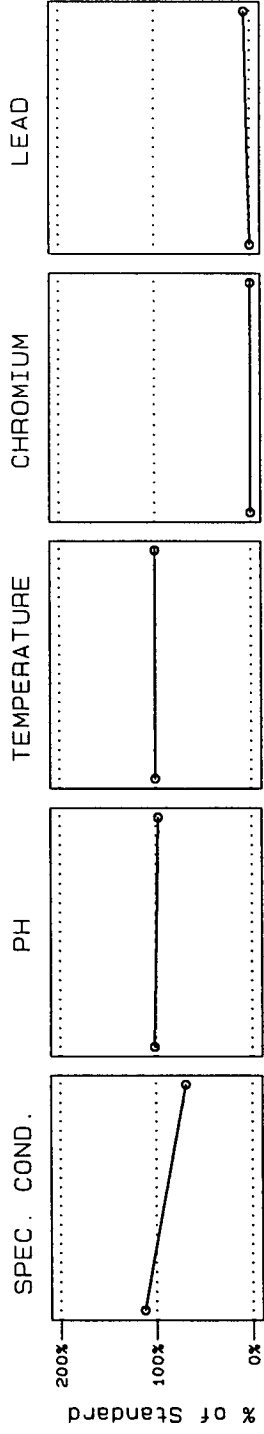


TABLE 10

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 8 OF 8

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 084

**ta gleason**  
 associates  
 Environmental and Geotechnical Services



1. 1-DCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o = Date  
Sampled

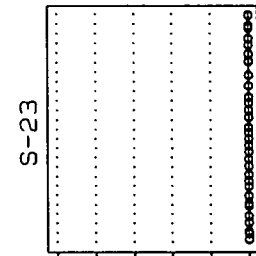
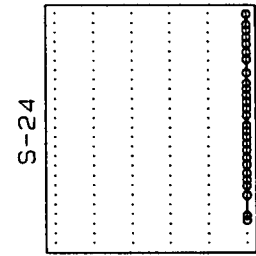
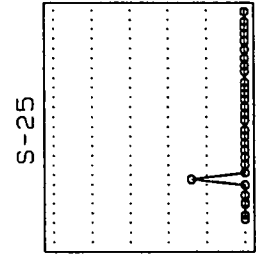
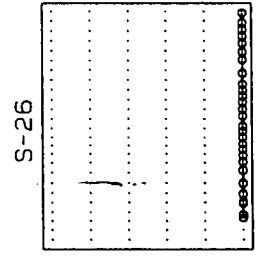
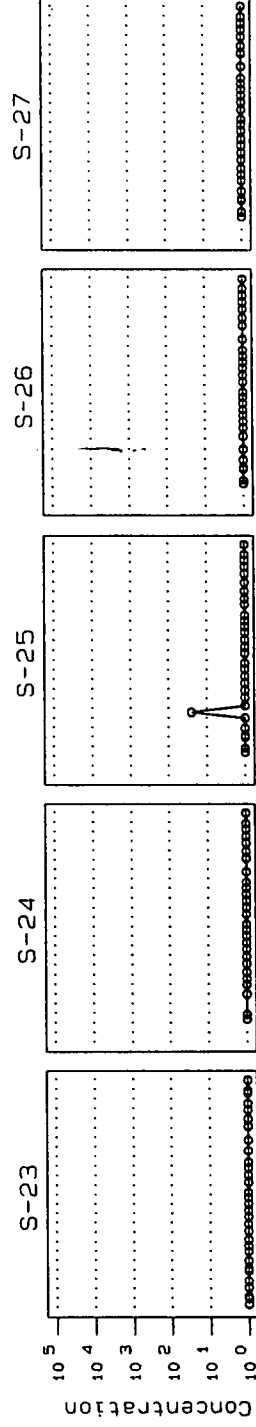
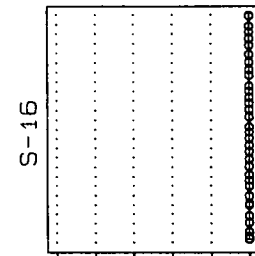
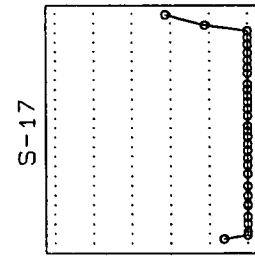
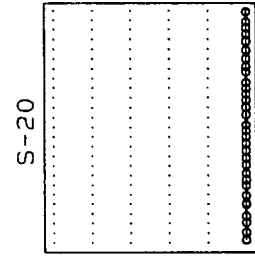
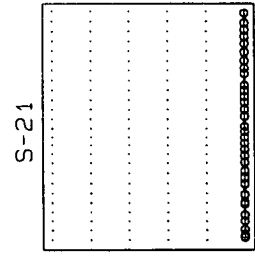
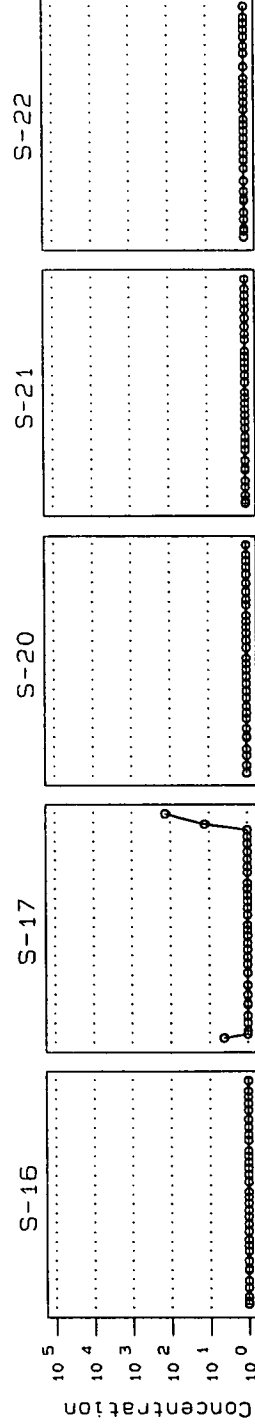
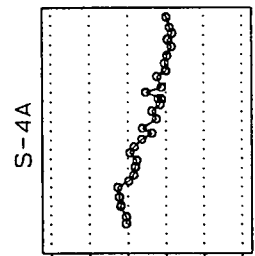
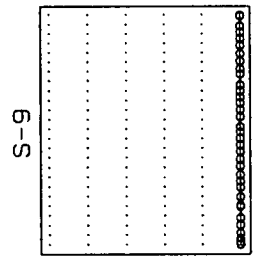
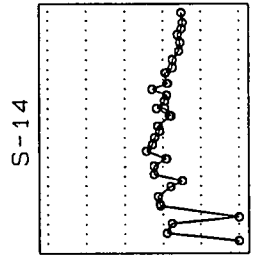
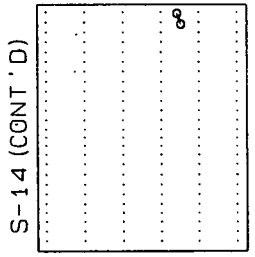
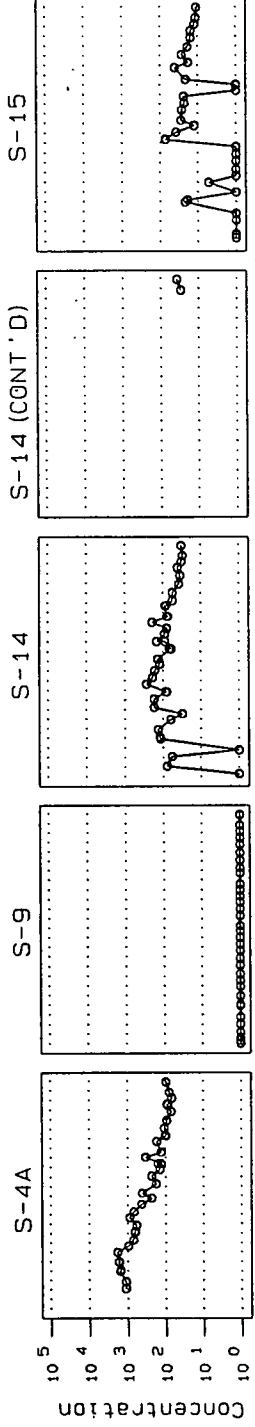
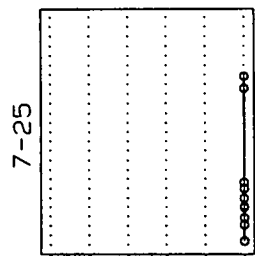
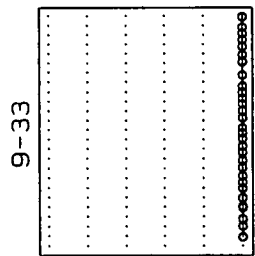
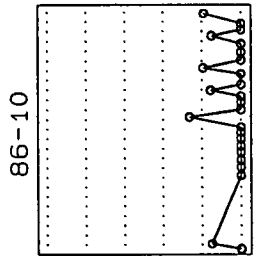
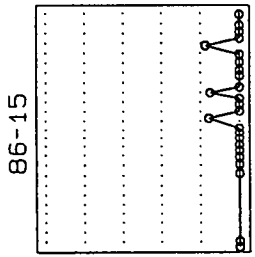
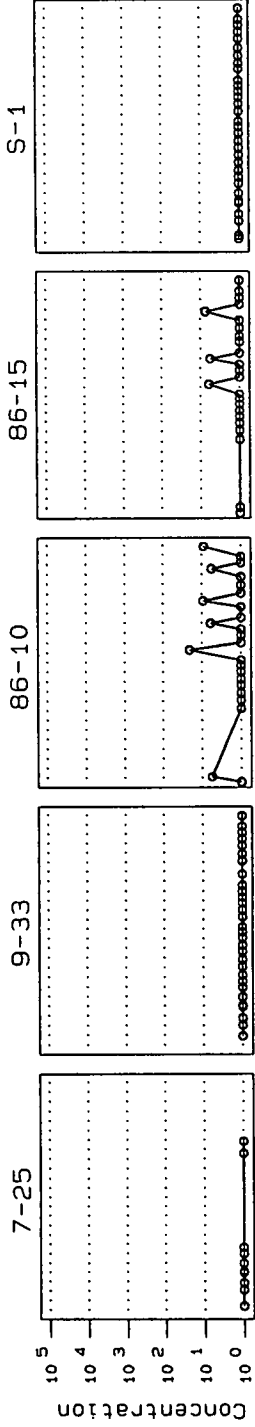
APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 1 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCHPX SBIN 084

**Tagleason**  
associates  
Environmental and Geotechnical Services







1, 2-DCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

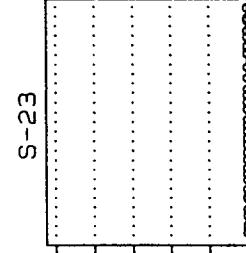
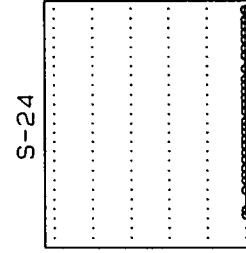
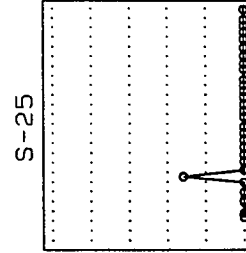
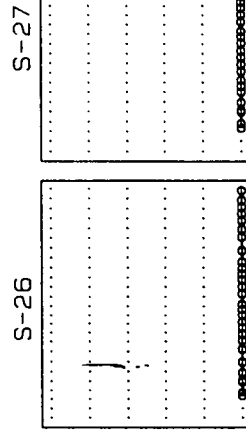
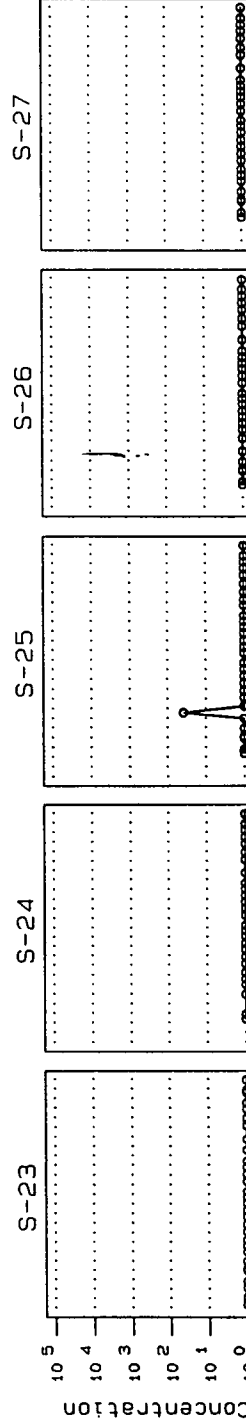
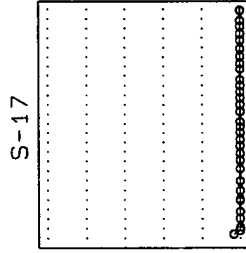
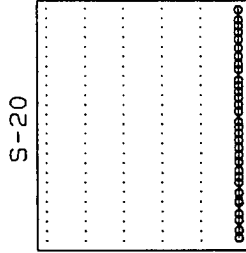
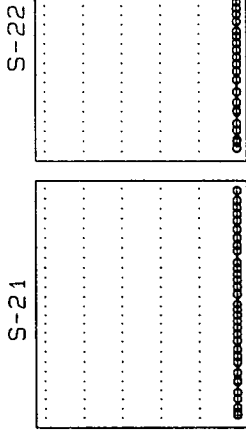
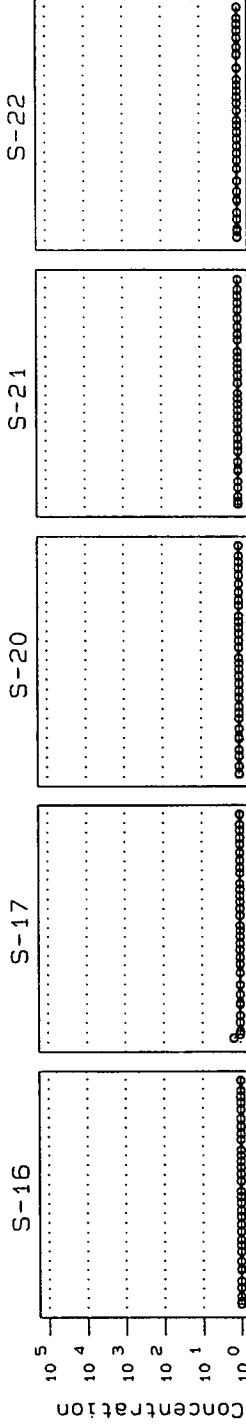
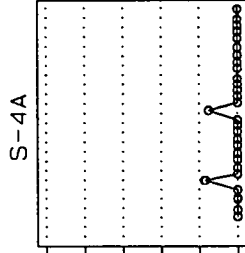
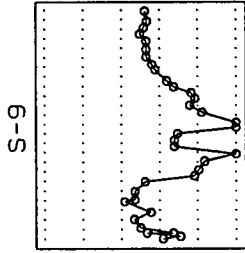
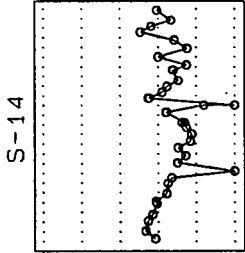
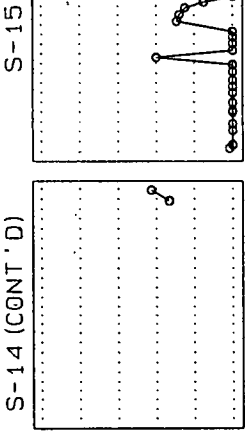
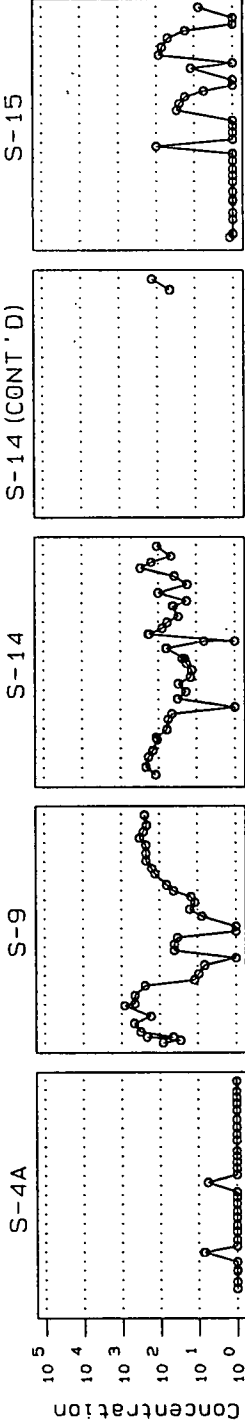
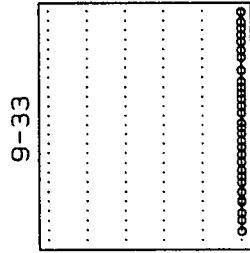
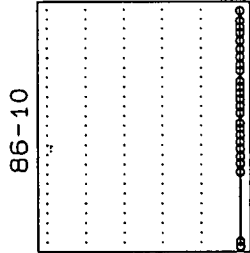
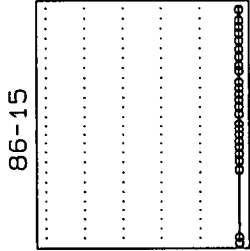
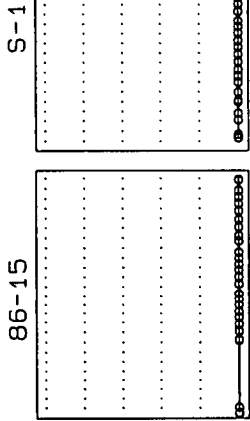
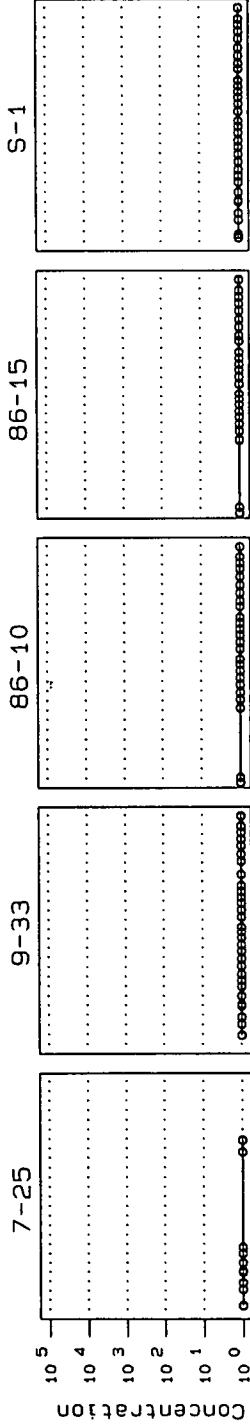
PAGE 2 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

10-19-1994





1, 1-DCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 3 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084

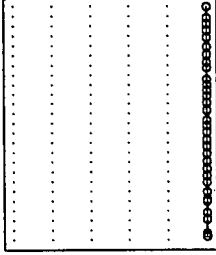


associates

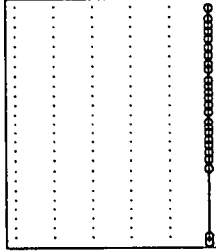
Environmental and Geotechnical Services

10-19-1994

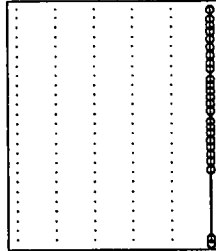
S-1



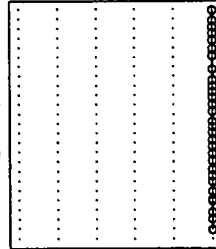
86-15



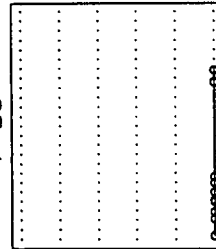
86-10



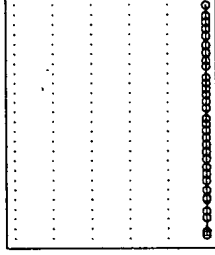
9-33



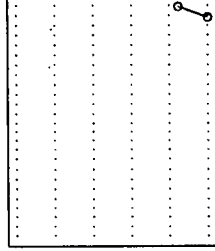
7-25



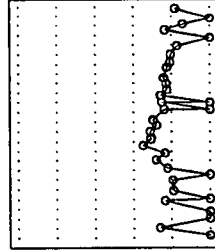
S-15



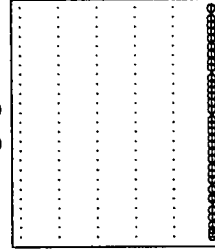
S-14 (CONT'D)



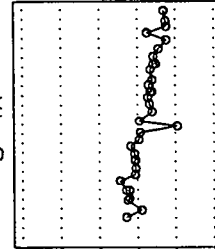
S-14



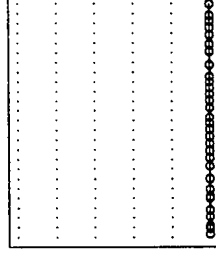
S-9



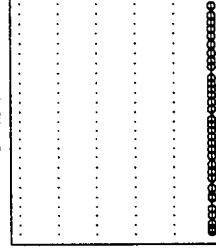
S-4A



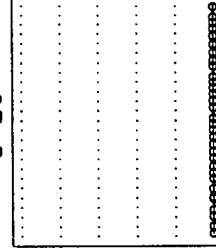
S-22



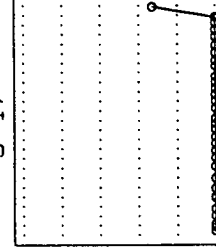
S-21



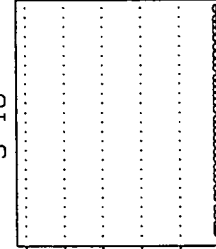
S-20



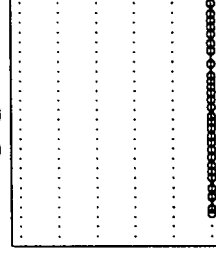
S-17



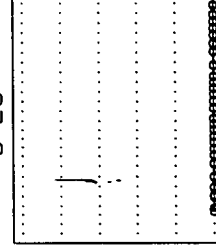
S-16



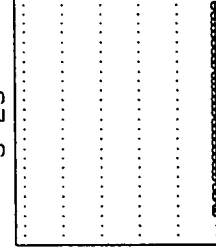
S-27



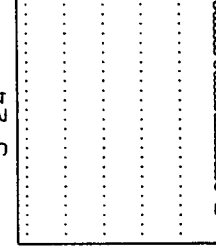
S-26



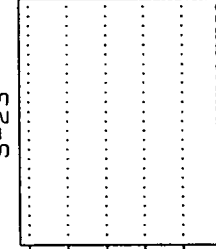
S-25



S-24



S-23





CIS-1, 2-DCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
- - - - - Sampled

APPENDIX A-1

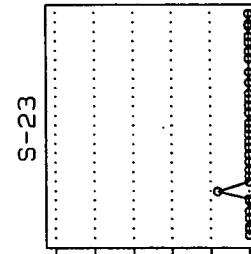
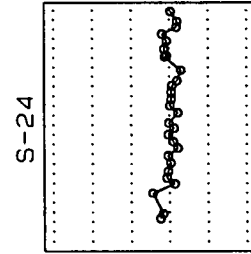
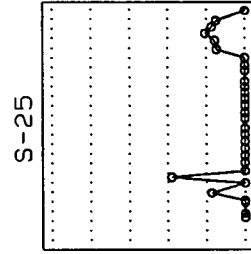
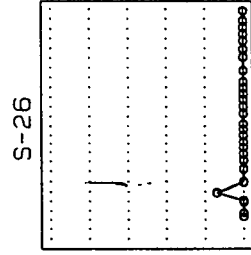
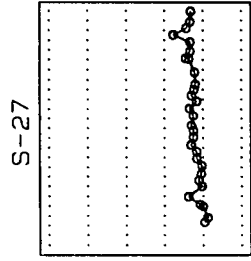
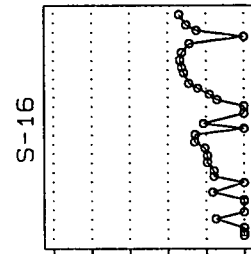
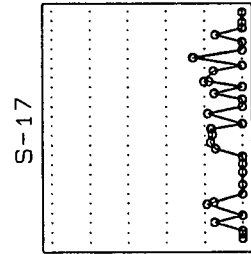
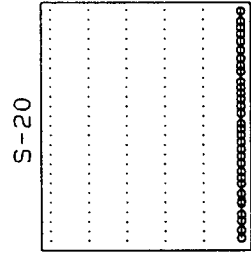
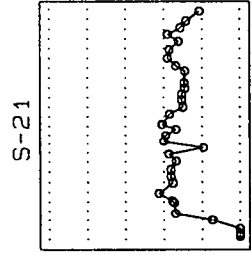
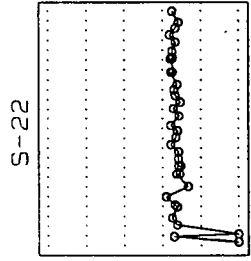
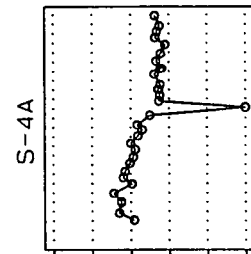
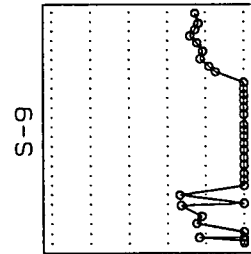
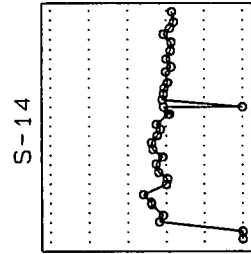
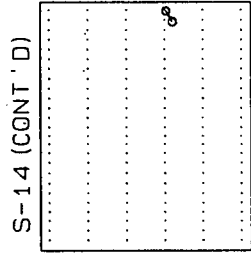
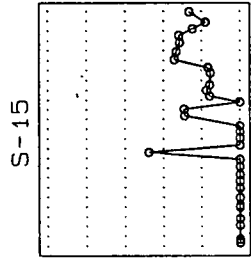
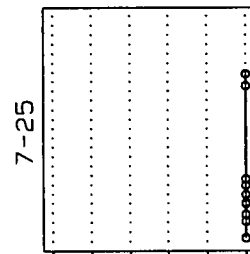
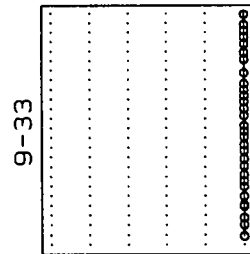
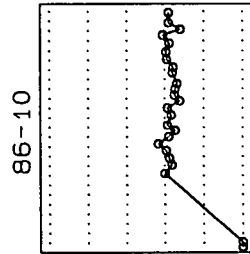
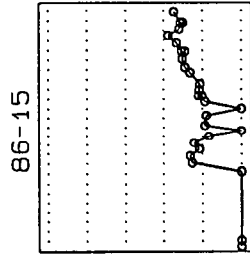
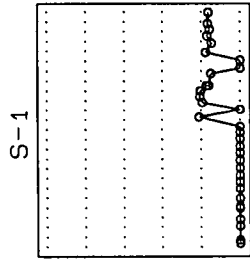
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 4 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084



Associates  
Environmental and Geotechnical Services





TRANS-1, 2-DCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

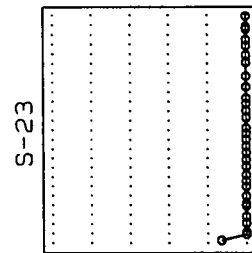
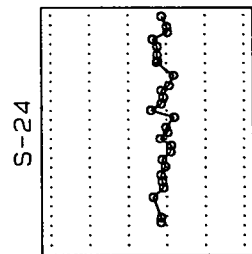
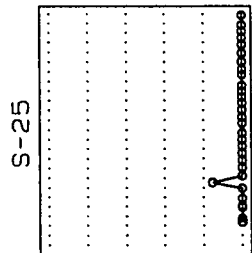
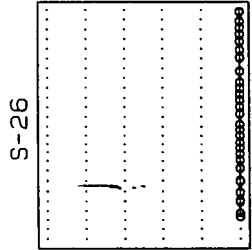
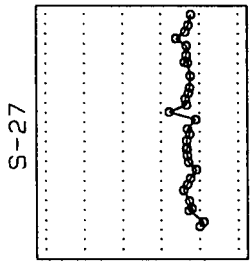
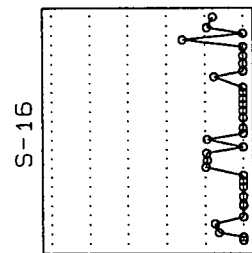
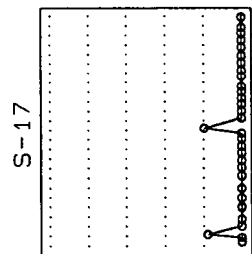
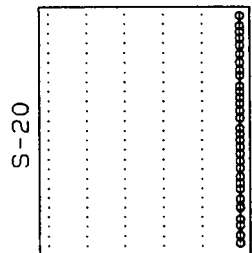
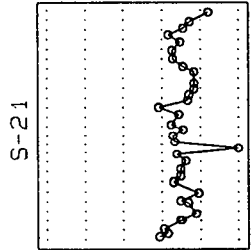
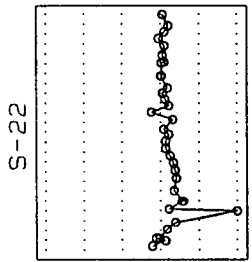
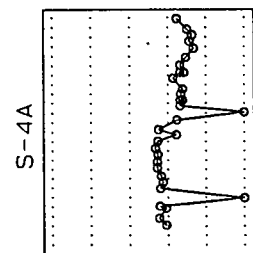
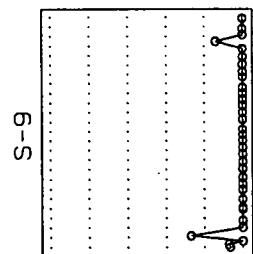
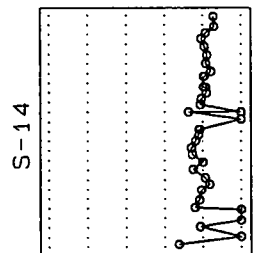
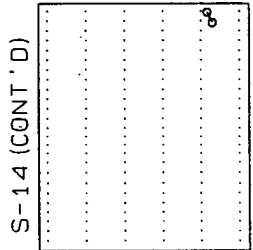
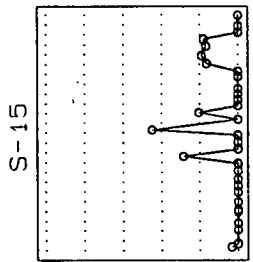
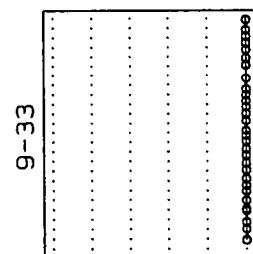
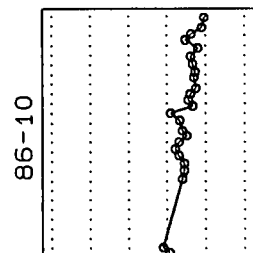
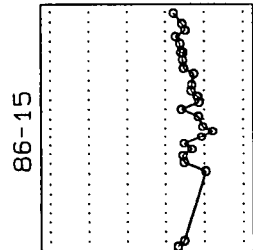
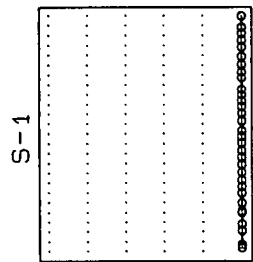
PAGE 5 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 082



Associates  
Environmental and Geotechnical Services

10-19-1994







1. 1. 1-TCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

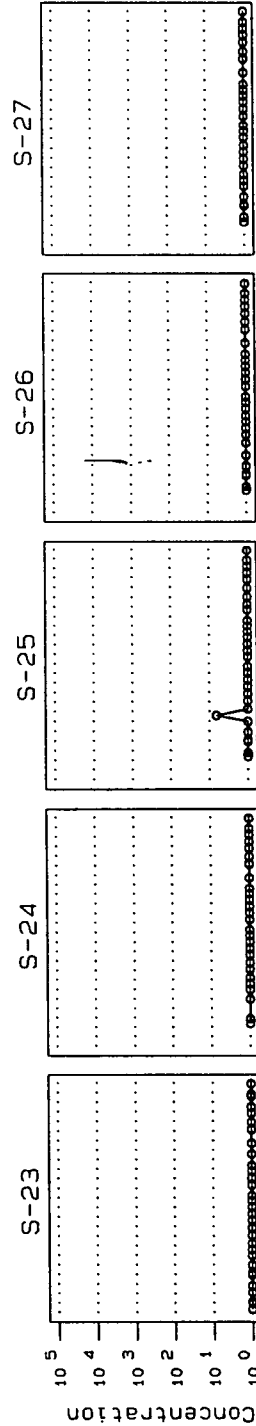
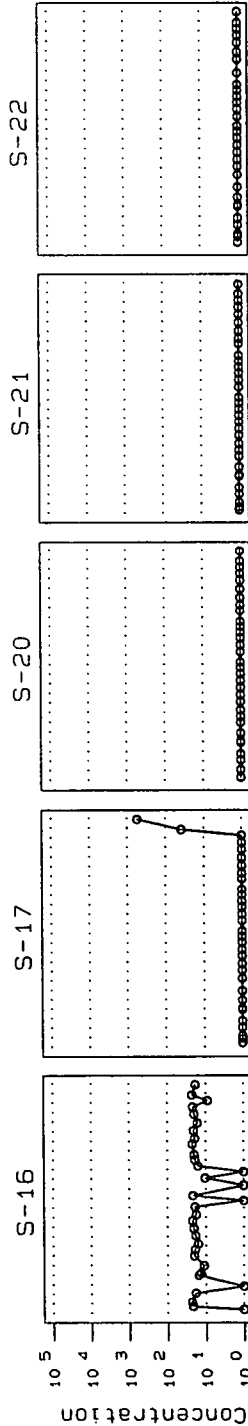
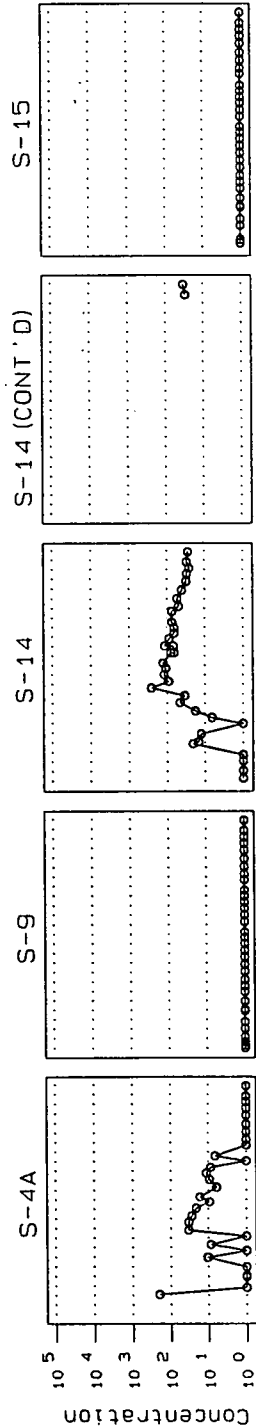
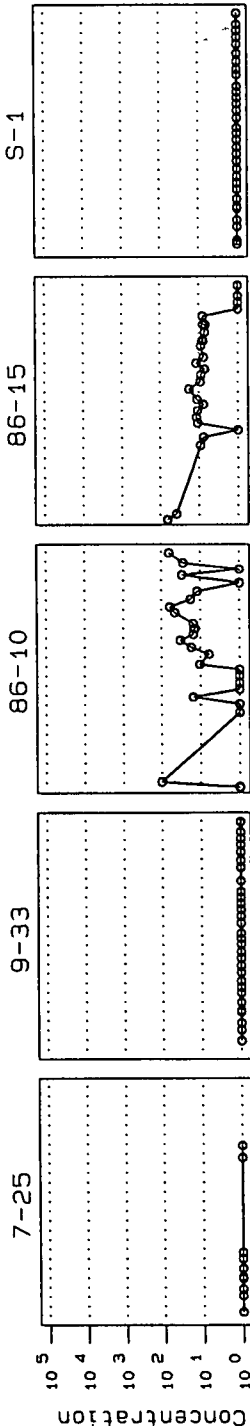
PAGE 6 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084



Environmental and Geotechnical Services

10-19-1994





TCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

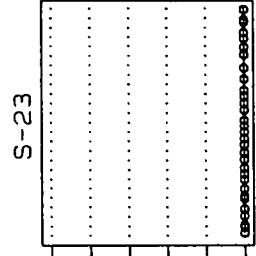
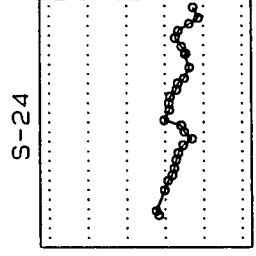
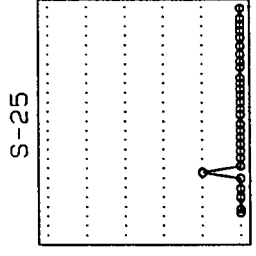
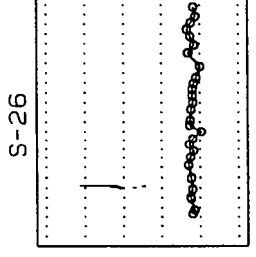
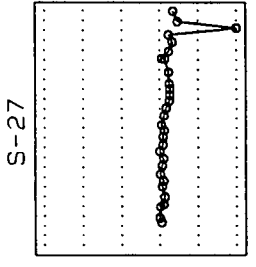
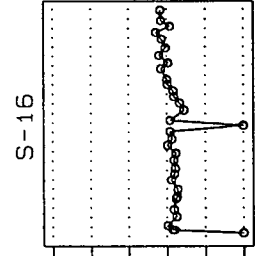
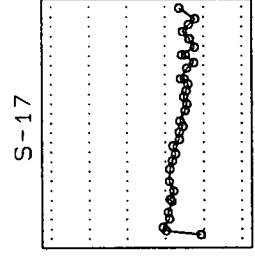
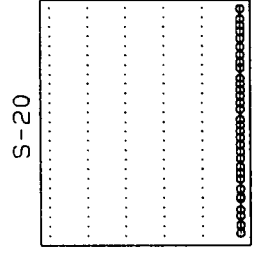
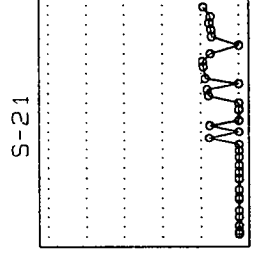
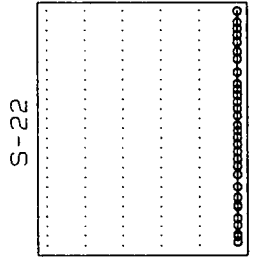
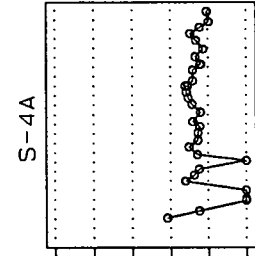
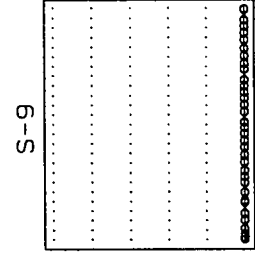
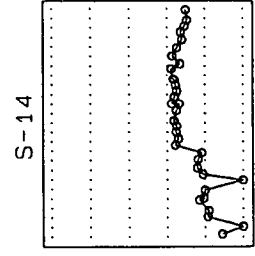
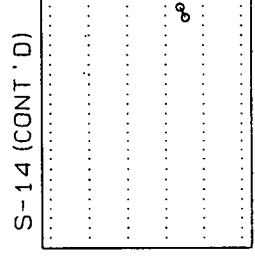
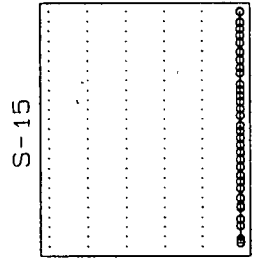
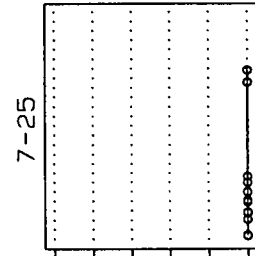
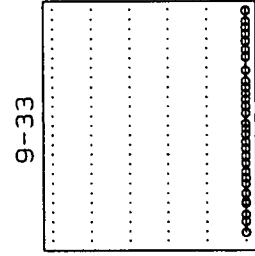
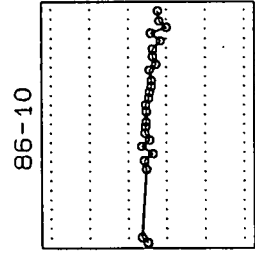
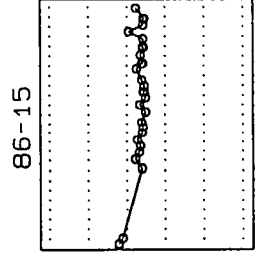
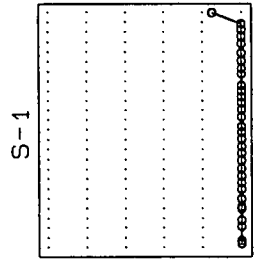
o - Date Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY  
PAGE 7 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084

**taqteason**  
associates  
Environmental and Geotechnical Services





VINYL CHLORIDE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-1

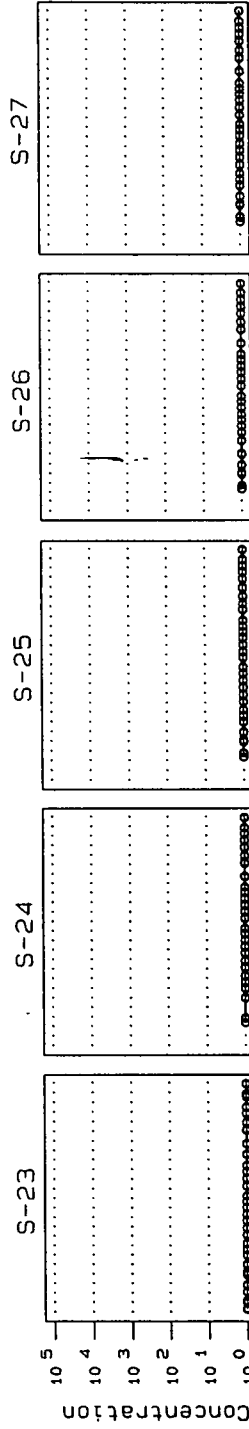
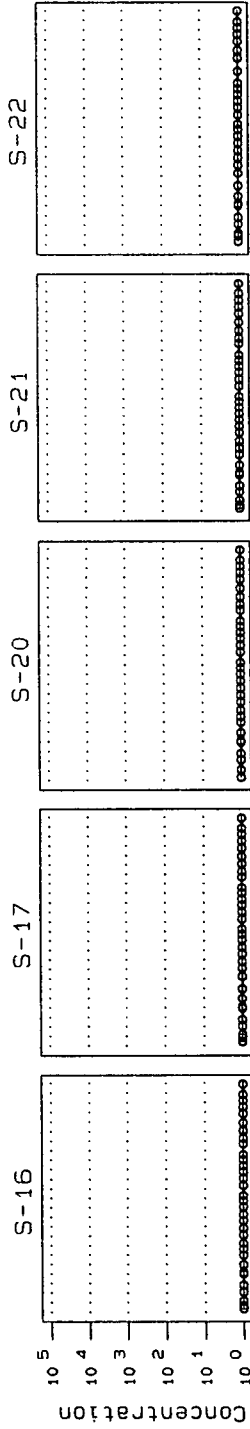
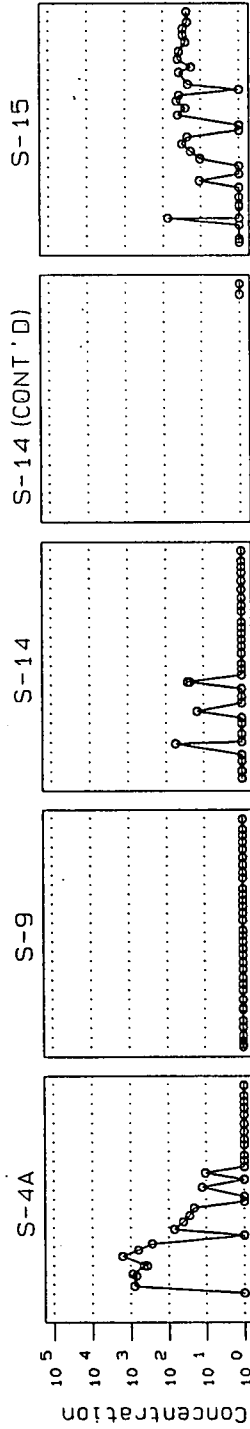
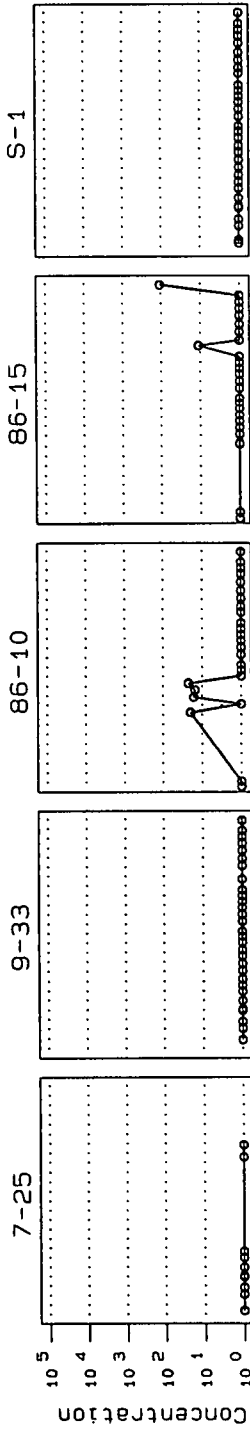
SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 8 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 084

**Taj**geason  
associates  
Environmental and Geotechnical Services

10-19-1994





SUM (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-1

SHALLOW MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

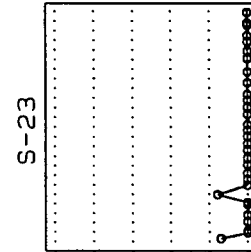
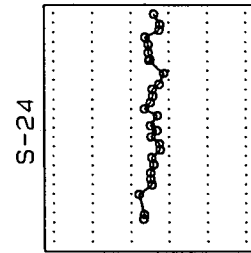
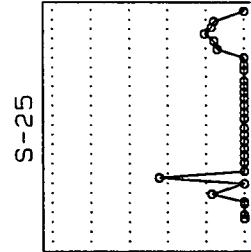
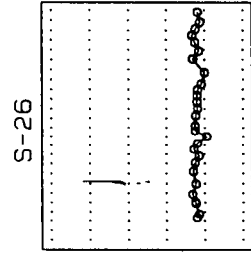
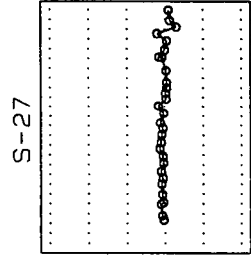
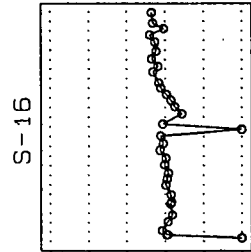
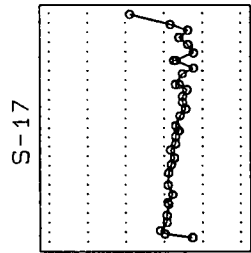
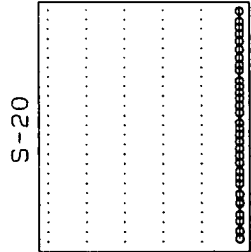
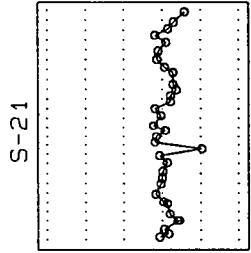
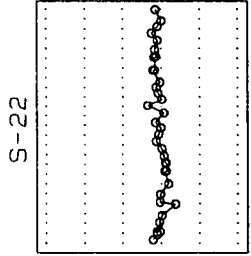
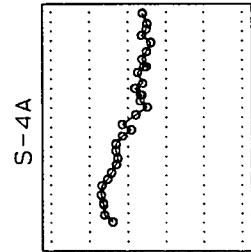
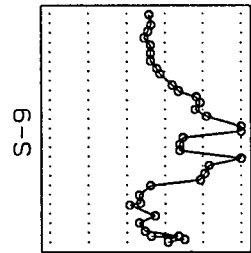
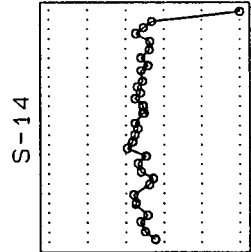
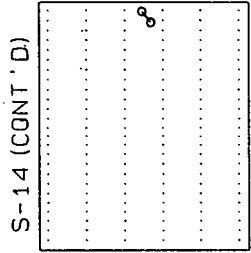
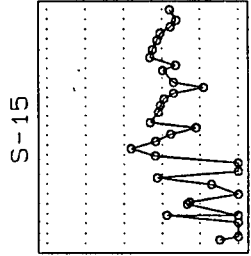
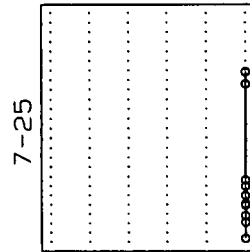
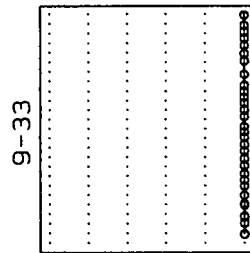
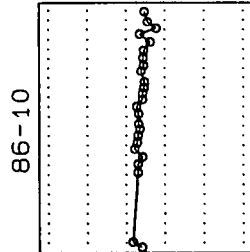
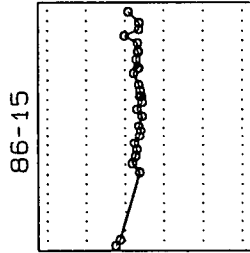
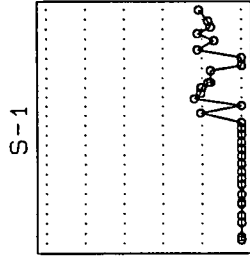
PAGE 9 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND  
PROJECT # ASCMPX SBIN 082



Environmental and Geotechnical Services

10-19-1994







1. 1-DCA (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 1 OF 9

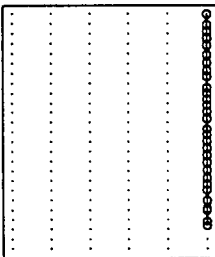
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



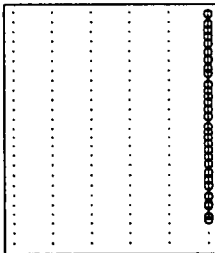
associates

Environmental and Geotechnical Services

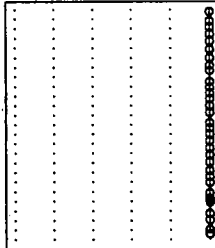
8-D



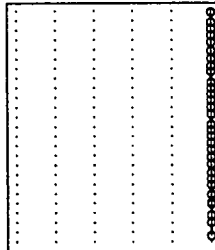
7-D



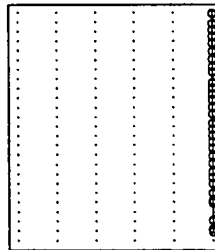
5-D



2-D

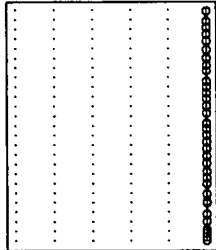


1-D

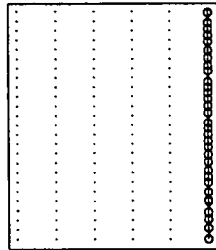


Concentration  
10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>

0-7



D-4



Concentration  
10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>



1, 2-DCA (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

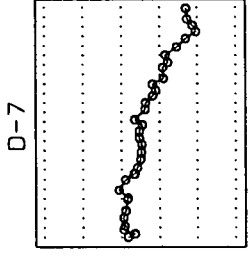
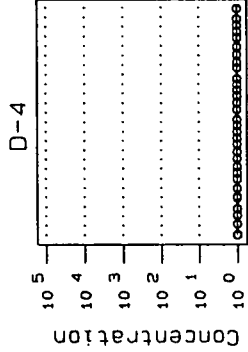
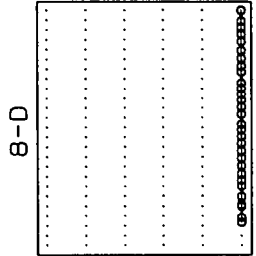
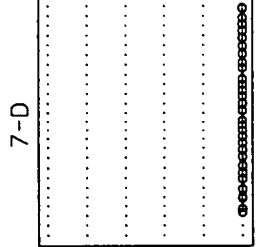
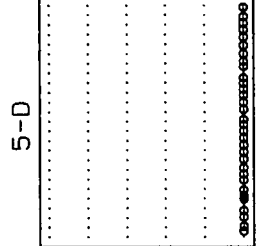
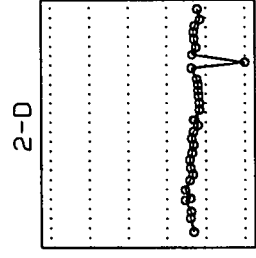
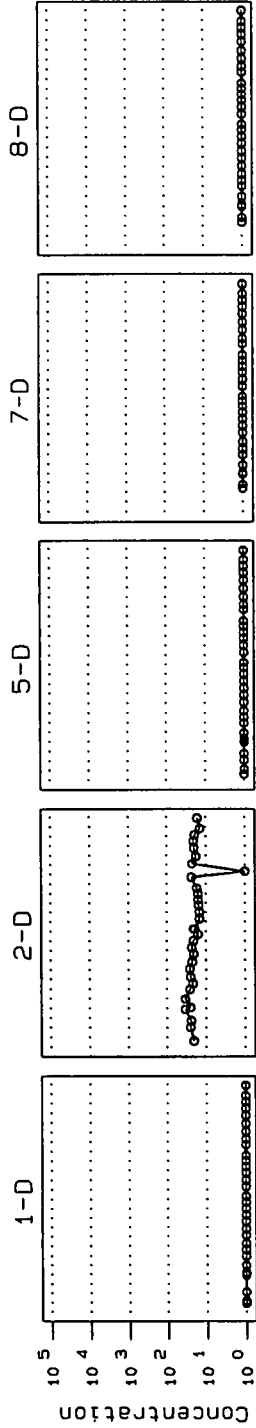
APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 2 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services





1, 1-DCE (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

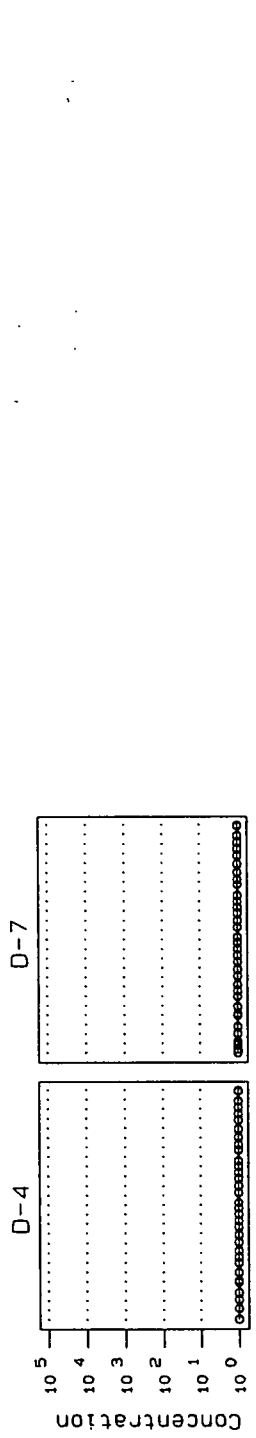
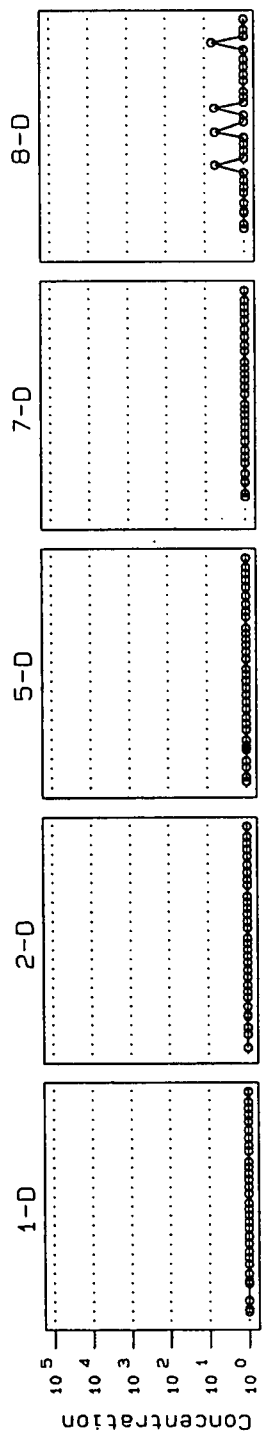
APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 3 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**to gleason**  
associates  
Environmental and Geotechnical Services





CIS-1, 2-DCE (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

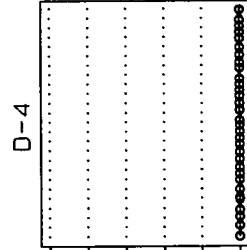
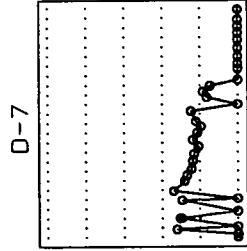
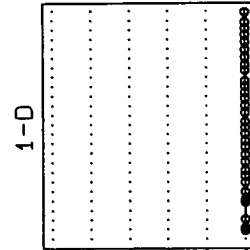
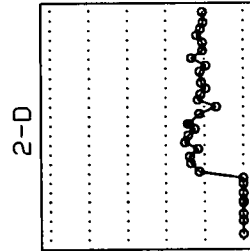
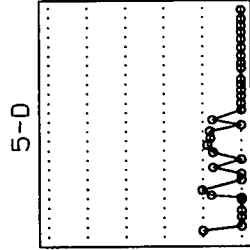
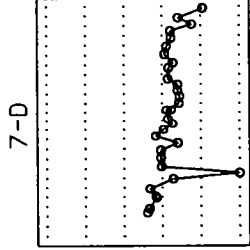
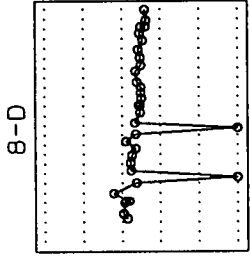
APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 4 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**taigeason**  
ASSOCIATES  
Environmental and Geotechnical Services







TRANS-1, 2-DCE (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

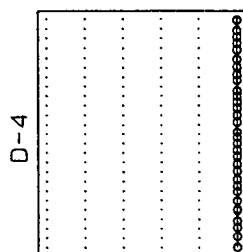
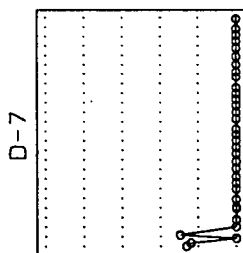
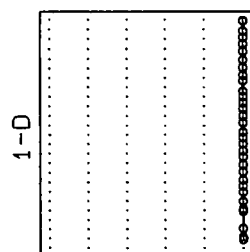
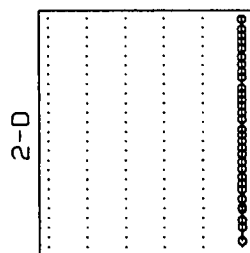
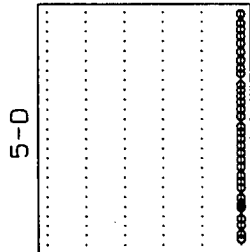
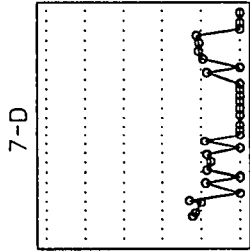
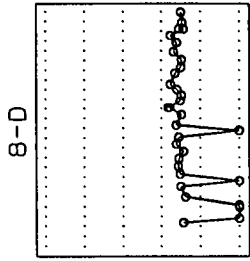
PAGE 5 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 0B4

**ta gleason**  
associates

Environmental and Geotechnical Services

10-17-1994





1. 1. 1-TCA (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

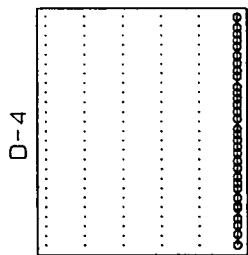
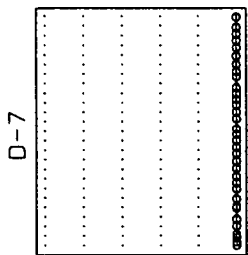
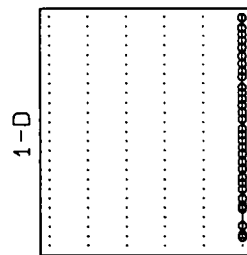
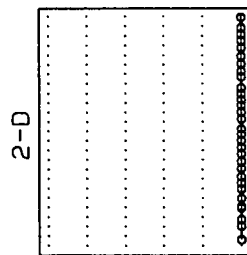
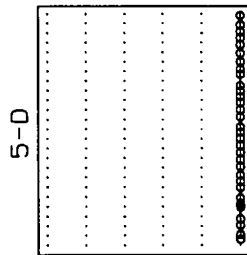
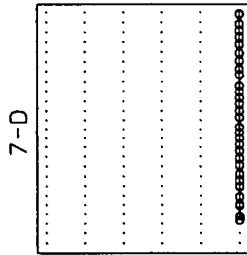
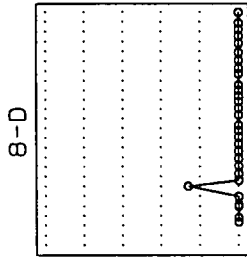
APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 6 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 0B4

**ta gleason**  
associates  
Environmental and Geotechnical Services





TCE (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

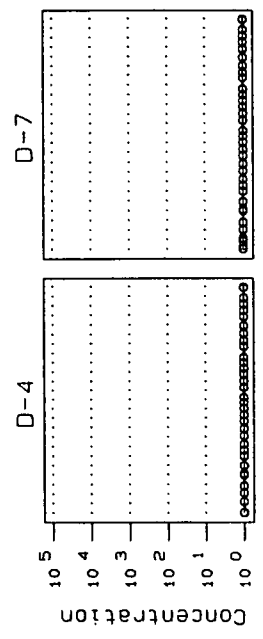
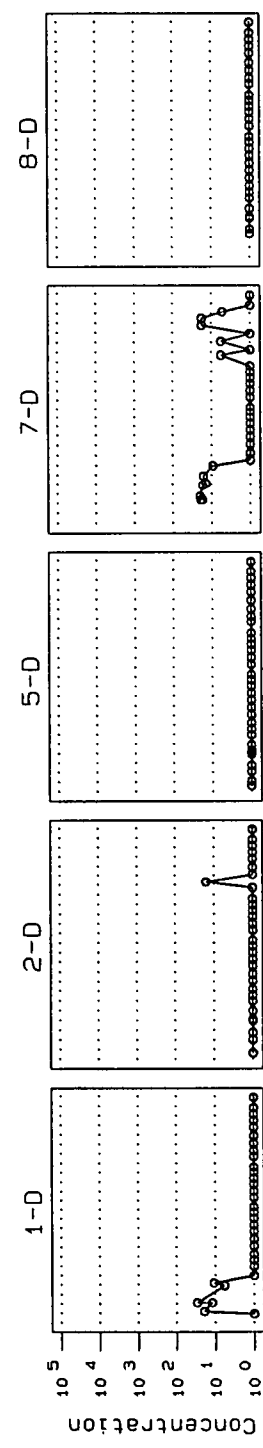
APPENDIX A-2

DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 7 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084

**Tagleason**  
associates  
Environmental and Geotechnical Services





VINYL CHLORIDE (UG/L)

Project Dates:  
10/01/86 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-2

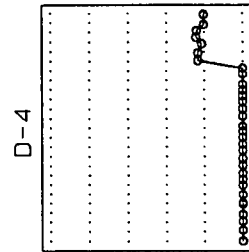
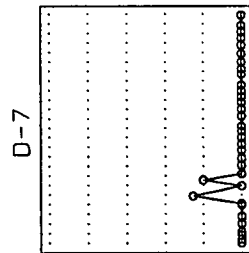
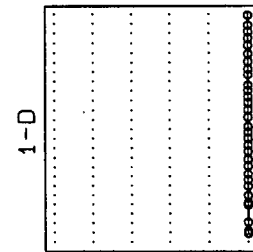
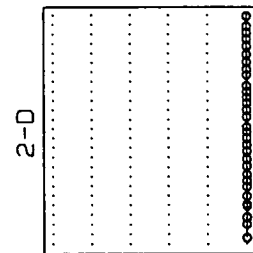
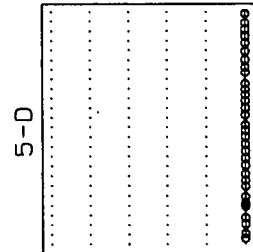
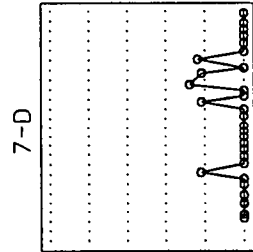
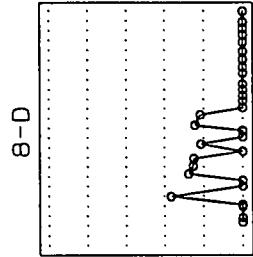
DEEP MONITOR WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 8 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084




Environmental and Geotechnical Services

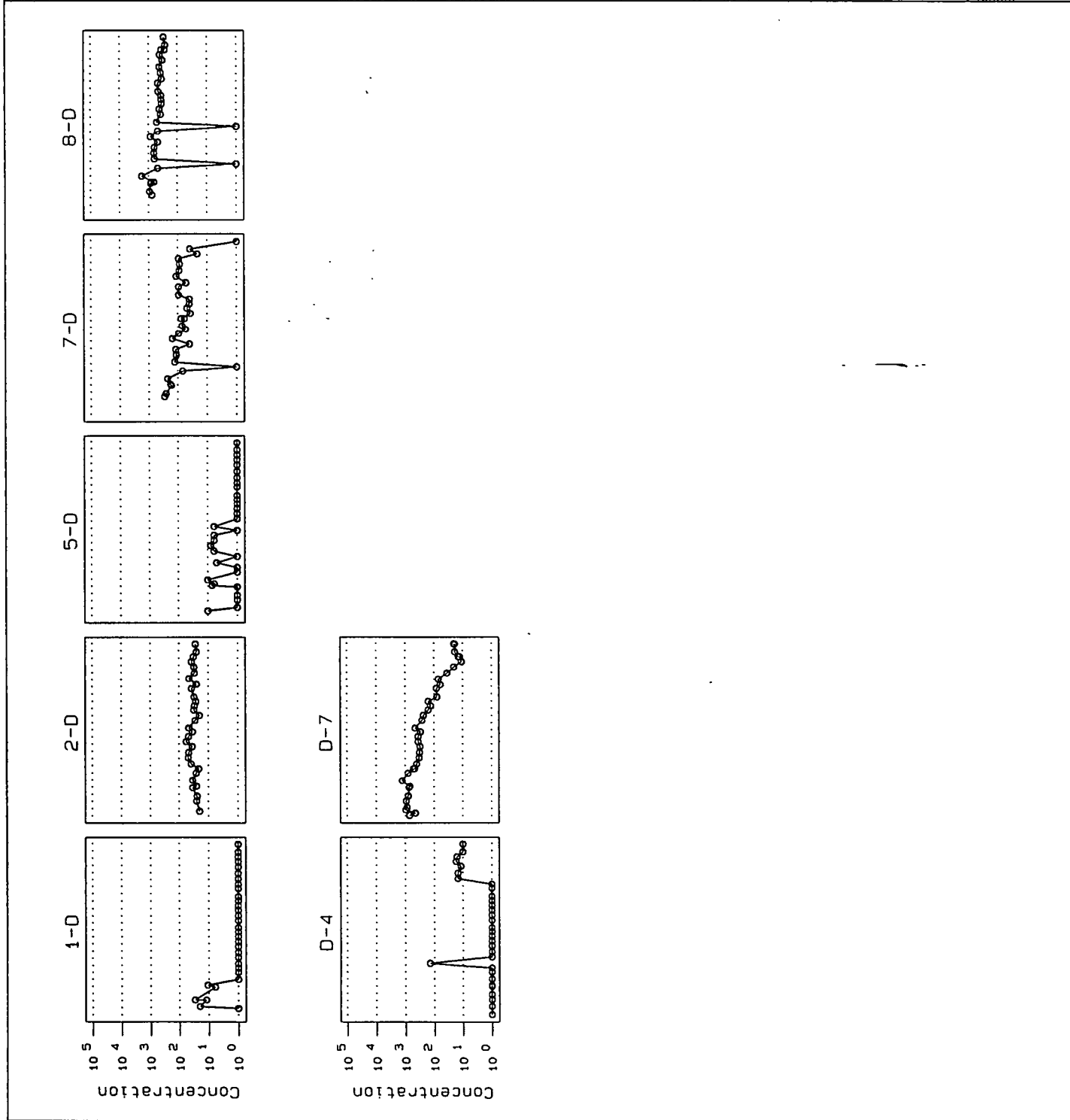


200





SUM (UG/L)	<p>Project Dates: 10/01/86 - 09/16/94</p> <p>NOTES: OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS. VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.</p>
	<p>WELL NO.</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p>o - Date Sampled</p> </div>
	<p>APPENDIX A-2</p>
	<p>DEEP MONITOR WELLS GROUNDWATER QUALITY ANALYSIS ORGANIC COMPOUNDS SUMMARY</p> <p>PAGE 9 OF 9</p>
	<p>ALLIEDSIGNAL INC. GROUNDWATER INVESTIGATIONS SOUTH BEND, INDIANA PROJECT # ASCMPX SBIN 084</p>
	





1, 1-DCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

APPENDIX A-3

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

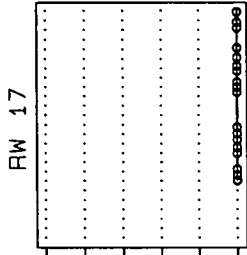
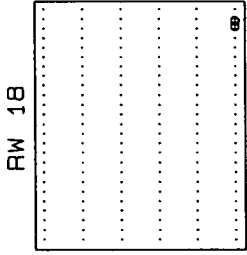
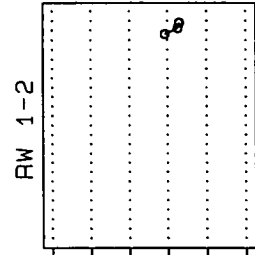
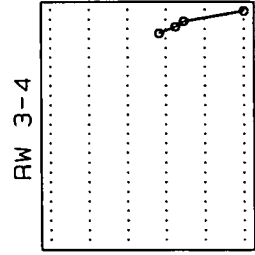
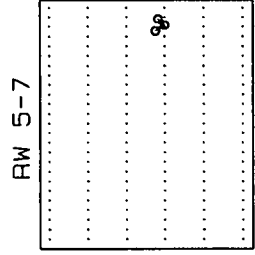
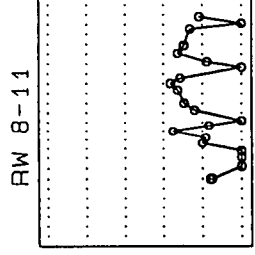
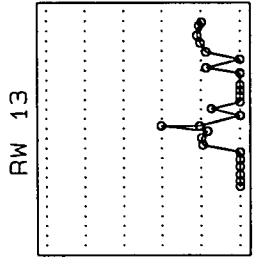
PAGE 1 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



Associates

Environmental and Geotechnical Services





1, 2-DCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o = Date  
Sampled

APPENDIX A-3

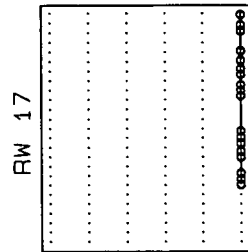
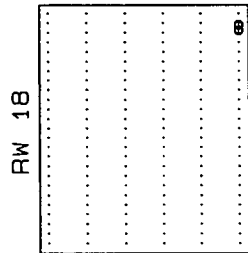
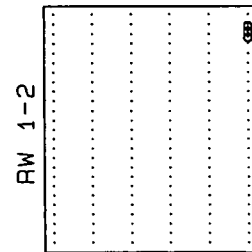
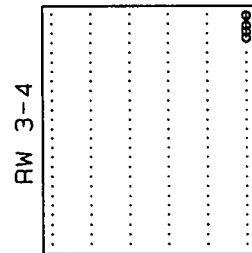
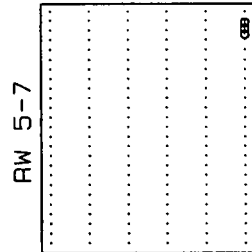
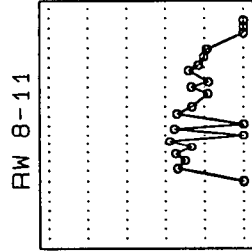
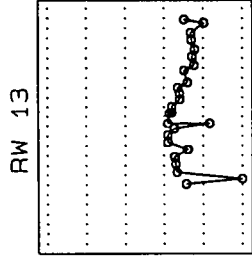
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 2 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 0B4



ASSOCIATES  
Environmental and Geotechnical Services





1, 1-DCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-3

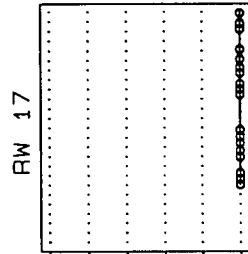
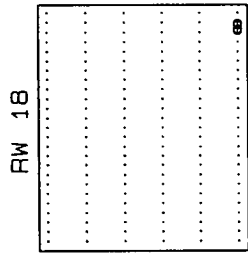
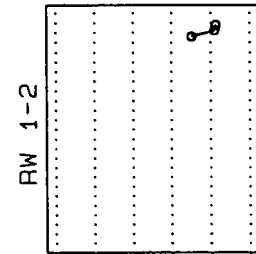
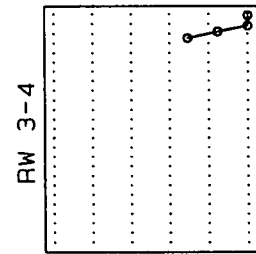
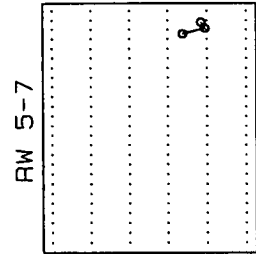
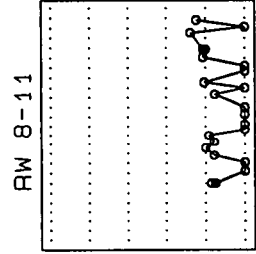
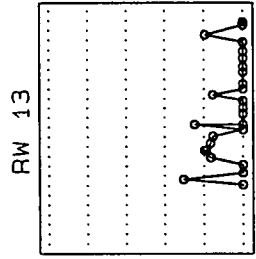
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 3 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



ASSOCIATES  
Environmental and Geotechnical Services



Concentration

Concentration





CIS-1, 2-DCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-3

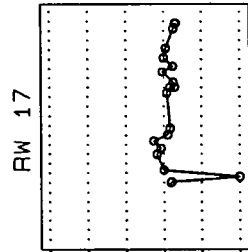
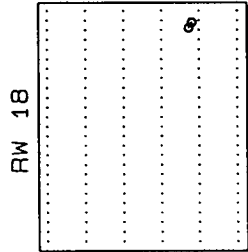
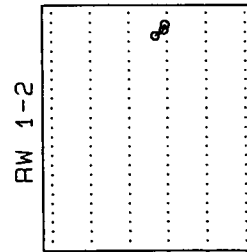
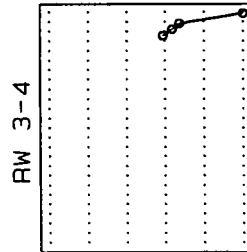
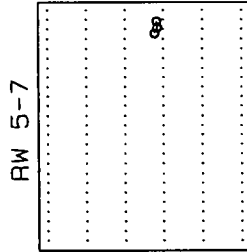
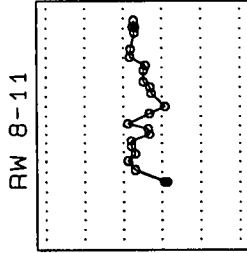
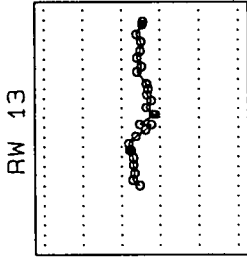
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 4 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**Ta deason**

**associates**  
Environmental and Geotechnical Services



Concentration

Concentration







1, 1, 1-TCA (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-3

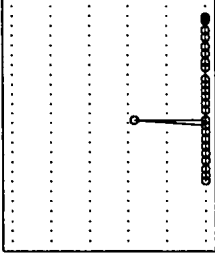
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 6 OF 9

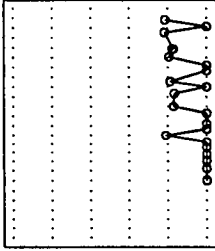
ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCHPX SBIN 084

**ta gleason**  
associates  
Environmental and Geotechnical Services

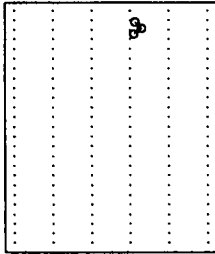
RW 13



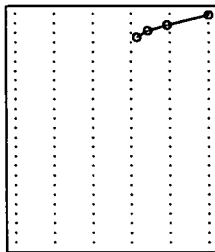
RW 8-11



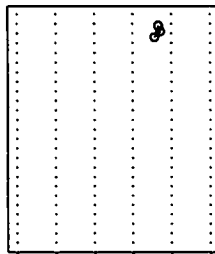
RW 5-7



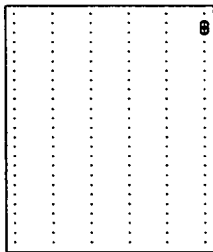
RW 3-4



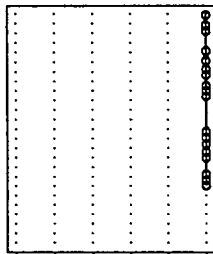
RW 1-2



RW 18



RW 17





TCE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

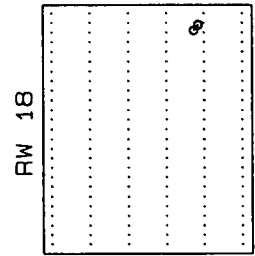
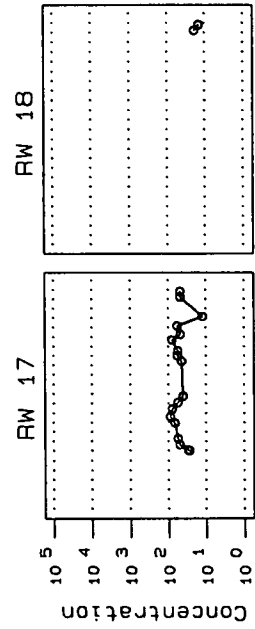
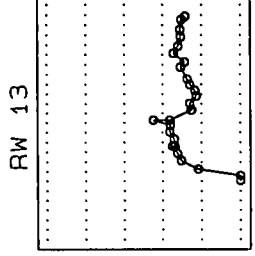
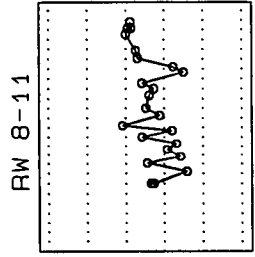
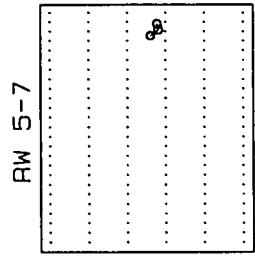
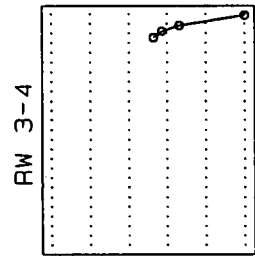
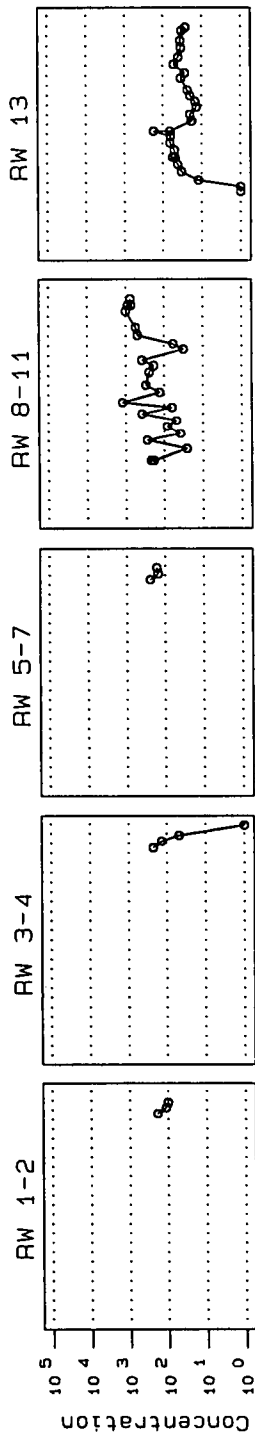
o - Date  
    - Sampled

APPENDIX A-3

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY  
PAGE 7 OF 9

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**tooleason**  
associates  
Environmental and Geotechnical Services







VINYL CHLORIDE (UG/L)

Project Dates:  
10/01/86 - 09/15/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-3

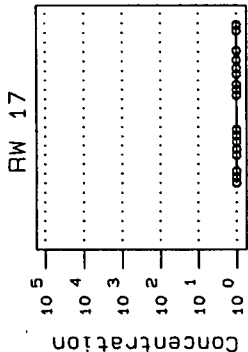
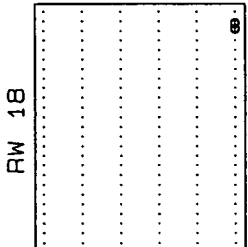
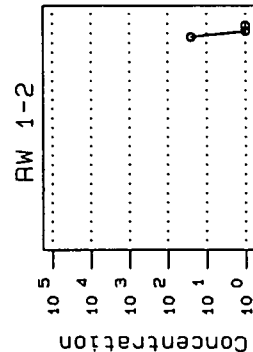
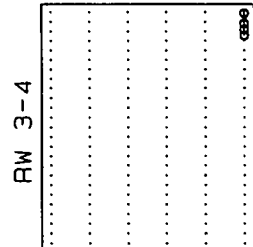
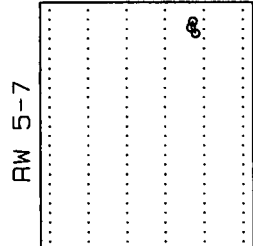
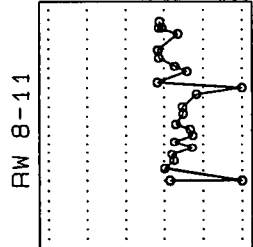
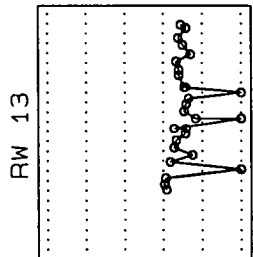
VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 8 OF 9


ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

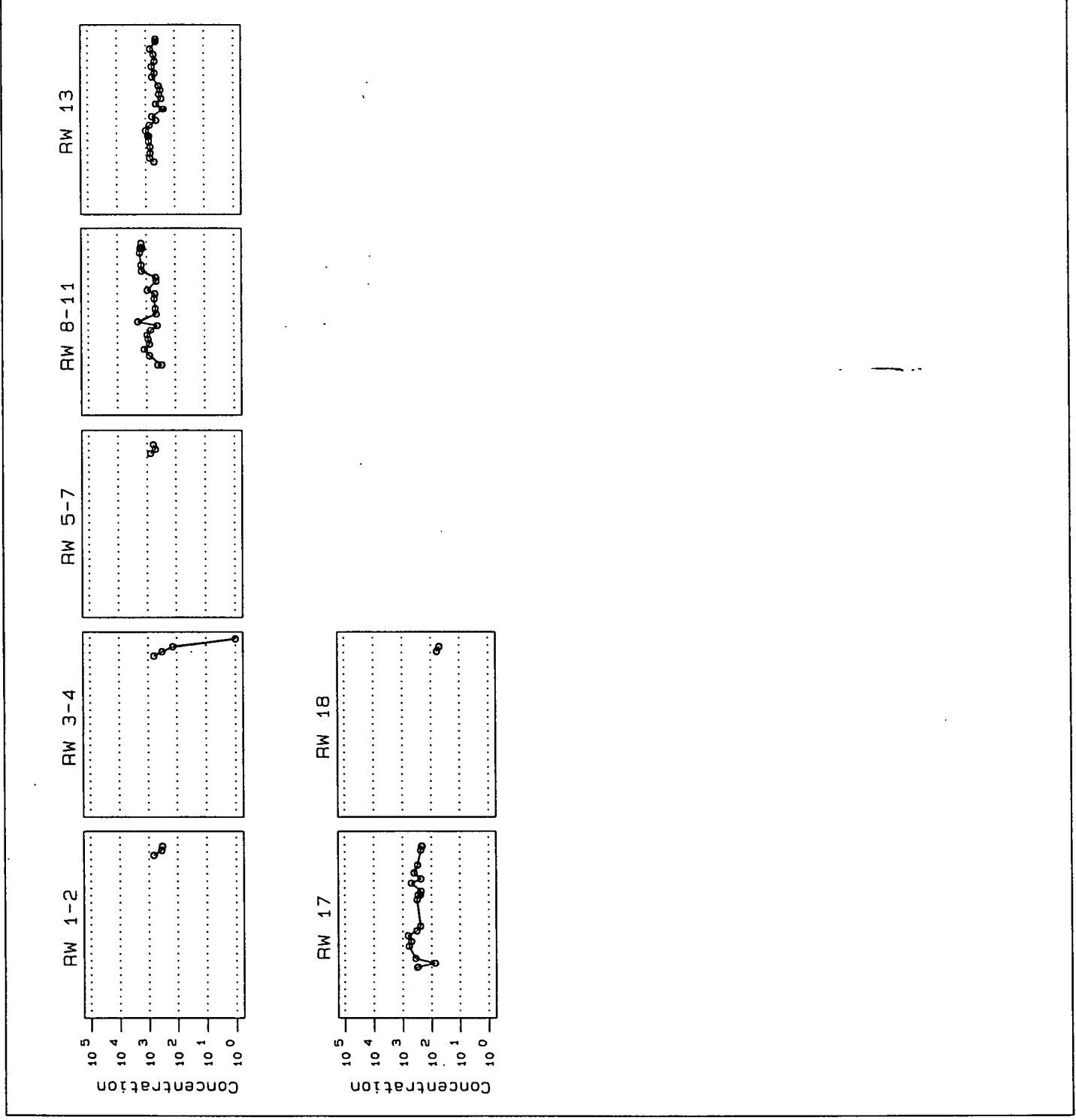


tagleason  
associates  
Environmental and Geotechnical Services





SUM (UG/L)
Project Dates: 10/01/86 - 09/16/94
NOTES: OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.
WELL NO. <div style="border: 1px solid black; padding: 5px; display: inline-block;">           o - Date            - Sampled         </div>
APPENDIX A-3
VOC RECOVERY WELLS GROUNDWATER QUALITY ANALYSIS ORGANIC COMPOUNDS SUMMARY  PAGE 9 OF 9
ALLIEDSIGNAL INC. GROUNDWATER INVESTIGATIONS SOUTH BEND, INDIANA PROJECT # ASCMPX SBIN 084
 <b>tagleason</b> ASSOCIATES Environmental and Geotechnical Services





1, 1-DCA (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o = Date  
    = Sampled

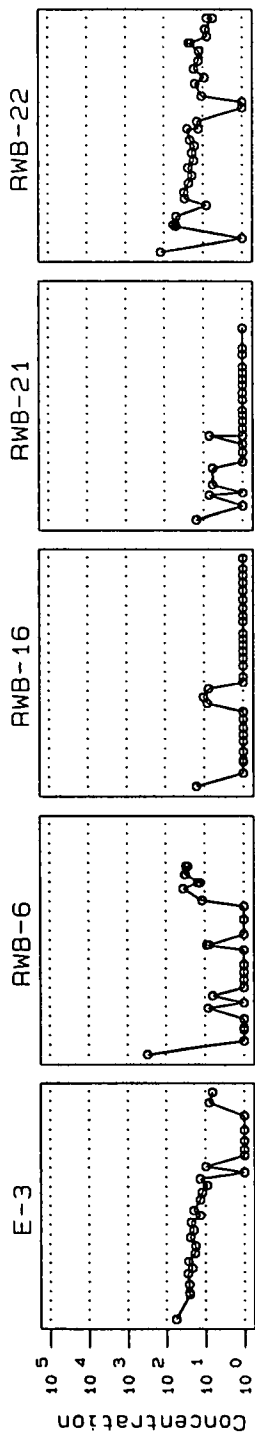
APPENDIX A-4

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 1 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**fugleason**  
associates  
Environmental and Geotechnical Services





CIS-1, 2-DCE (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-4

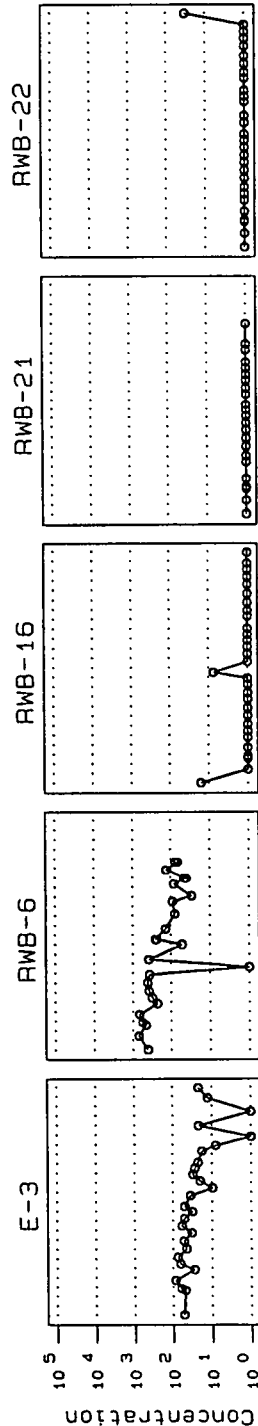
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 2 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**foleason**

associates  
Environmental and Geotechnical Services







TRANS-1, 2-DCE (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date Sampled

APPENDIX A-4

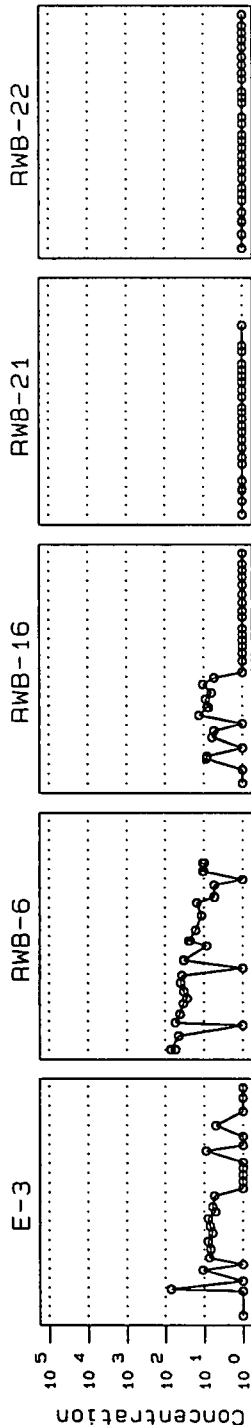
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 3 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



associates  
Environmental and Geotechnical Services





TCE (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

APPENDIX A-4

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

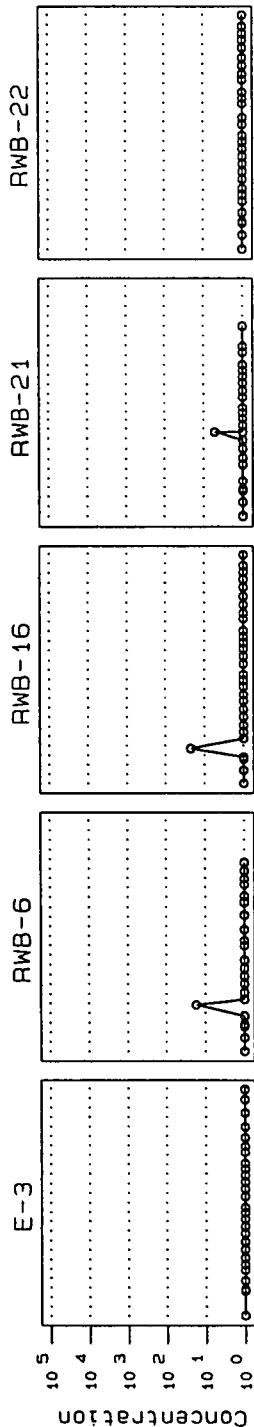
PAGE 4 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084



associates

Environmental and Geotechnical Services





VINYL CHLORIDE (UG/L)

Project Dates:  
03/25/87 - 05/09/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

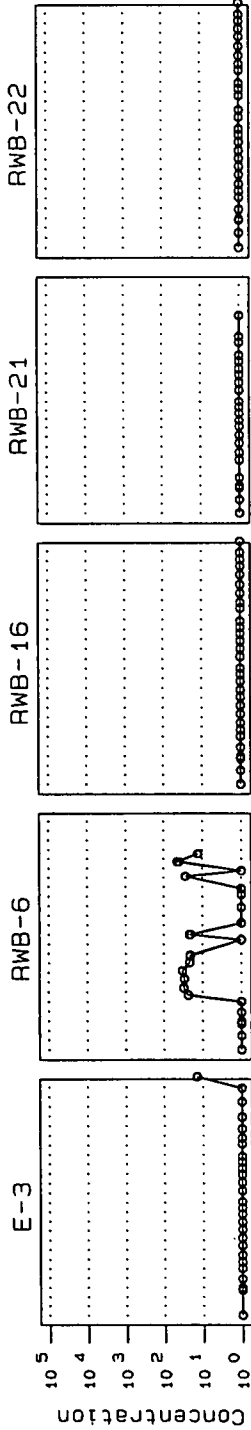
APPENDIX A-4

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 5 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 082

**fo gleason**  
associates  
Environmental and Geotechnical Services





BENZENE (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

APPENDIX A-4

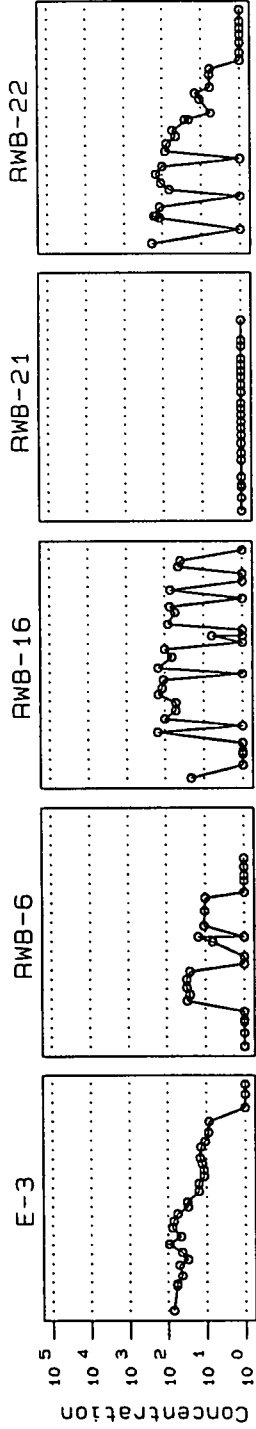
NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 6 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**

**associates**  
Environmental and Geotechnical Services







ETHYL BENZENE (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
    - Sampled

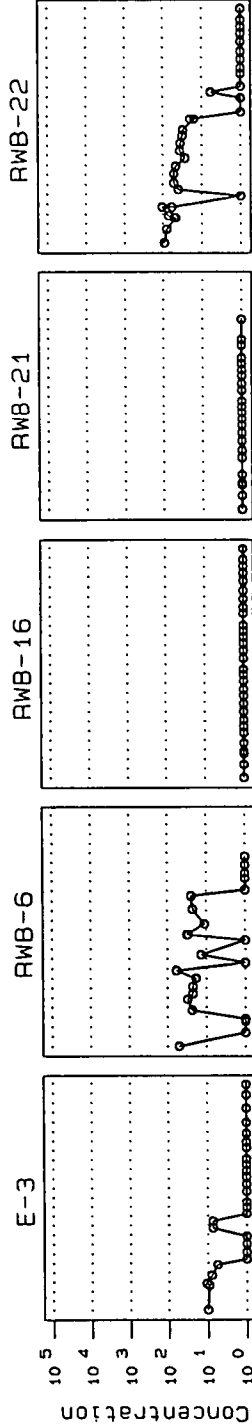
APPENDIX A-4

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 7 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**ta gleason**  
Associates  
Environmental and Geotechnical Services





TOTAL XYLENES (UG/L)

Project Dates:  
03/25/87 - 09/16/94

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NO.

o - Date  
Sampled

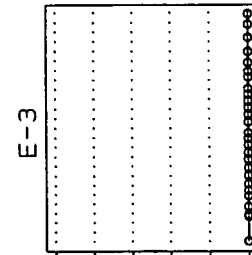
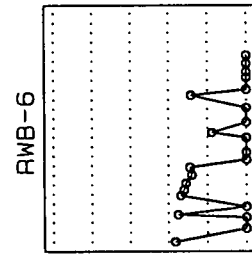
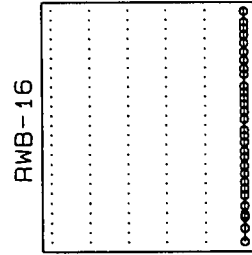
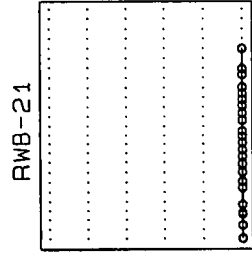
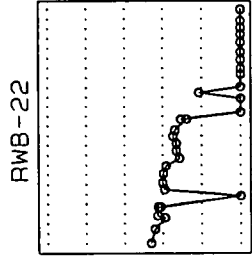
APPENDIX A-4

NAPHTHA RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS SUMMARY

PAGE 8 OF 8

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN 084

**Tajdeason**  
ASSOCIATES  
Environmental and Geotechnical Services



Concentration  
10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>



SOURCE: RW 1-7		MCL METHOD		LAB		1,1-DI-CHLORO-ETHANE		1,2-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHANE		CIS-1,2-DICHLORO-ETHENE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-ETHANE		TRI-CHLORO-ETHENE		VINYL CHLORIDE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	MCL	METHOD	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L	U/L
10/04/88	NSM-21			NPL	1450	ND	220	770	87	260	200	5	235	235	136	3158					2				
10/06/88	NSM-5				1100	ND	180	731	77	273	273	77	280	280	125	2766									
12/11/88	NSM-1				422	ND	53.6	659	45.6	211	211	374	374	374	102	1867									
02/26/89	37				394	ND	63.4	500	53	240	240	53	390	390	80	1720									
06/11/89	39				280	ND	58.2	450	41.4	200	200	360	360	360	74.5	1464									
09/10/89	37				ND	ND	ND	300	39.1	210	210	300	300	300	69.9	919									
12/14/89	38				240	ND	45.4	230	38.2	120	120	280	280	280	31.5	985									
03/02/90	29				190	ND	32.3	340	48.3	120	120	230	230	230	35.9	997									
03/03/90	30				210	ND	37.8	340	56.6	110	110	220	220	220	35	1009									
06/04/90	37				170	ND	29.1	190	45.9	85.6	85.6	190	190	190	24.9	736									
08/25/90	36				94.4	ND	12.8	152	24.6	69.0	69.0	193	193	193	22.9	569									
08/25/90	37				95.3	ND	13.3	26.1	137	63.9	63.9	182	182	182	19.8	537									
10/31/90	40				26.1	55.2	ND	314	46.1	ND	ND	103	103	103	35.5	580									
03/04/91	37				92.8	ND	15.5	122	24.3	56.1	56.1	159	159	159	25.8	496									
06/02/91	31				108	ND	22.4	149	84.3	66.7	66.7	176	176	176	19.8	626									
06/02/91	32				95.9	ND	20.7	136.3	70.1	59.9	59.9	191	191	191	15.3	589									
08/30/91	22				81.4	ND	17.2	10.3	31.6	68.8	68.8	164	164	164	16.9	390									
11/14/91	25				87.8	ND	12.5	126	28.4	55.4	55.4	170	170	170	14.3	494									
11/14/91	26				86.2	ND	12.7	123	37.2	54.1	54.1	168	168	168	ND	481									
01/24/92	20				ND	ND	9.3	109	29.7	52.5	52.5	152	152	152	ND	353									
04/01/92	29				78.1	ND	14.1	115	35.4	48.1	48.1	173	173	173	15.4	479									
08/24/92	37				11.3	ND	ND	134	32.5	55.7	55.7	174	174	174	11.7	419									
10/31/92	30				72.9	ND	10.6	117	26.4	44.7	44.7	129	129	129	ND	401									
10/31/92	30				72.9	ND	10.6	117	26.4	44.7	44.7	129	129	129	ND	401									
02/06/93	37				68.3	ND	8.1	129	25.9	39.9	39.9	177	177	177	11.0	459									
02/06/93	38				74.5	ND	8.9	132	28.2	40.6	40.6	155	155	155	ND	449									
05/12/93	27				108	ND	15.1	130	23.9	67.8	67.8	181	181	181	13.5	539									A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 1 OF 5

TABLE 6 A

PARAMETER  
o = Date Sampled

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN

**Tagleason**  
associates  
Environmental and Geotechnical Services

NOTES:

OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL = ND U. S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCHS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = PUMP 2 WAS NOT RUNNING DURING TIME OF SAMPLING.



SOURCE: RW 1-7

NOTES:

OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL = NO U. S. EPA PUBLISHED LEVEL

P = PROPOSED

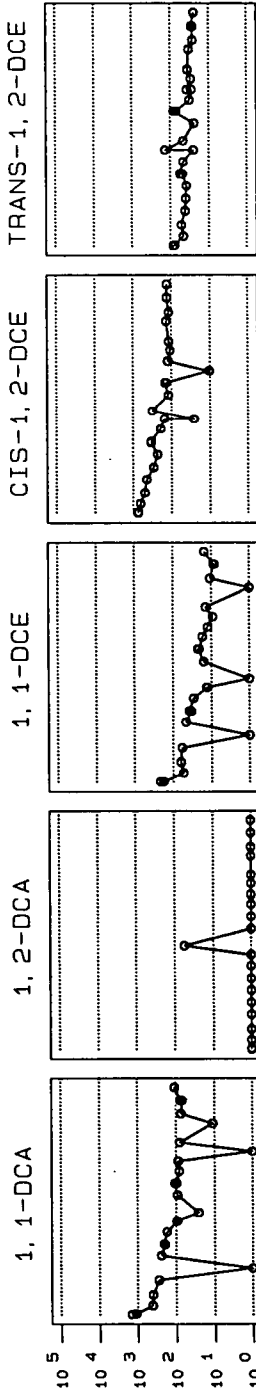
VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = PUMP 2 WAS NOT RUNNING DURING TIME OF SAMPLING.

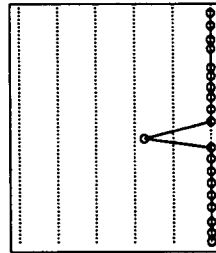
PARAMETER

o = Date  
Sampled

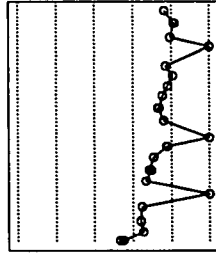
Concentration



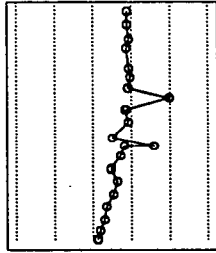
1, 2-DCA



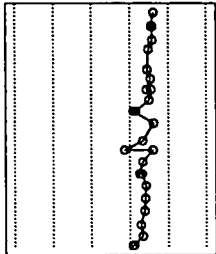
1, 1-DCE



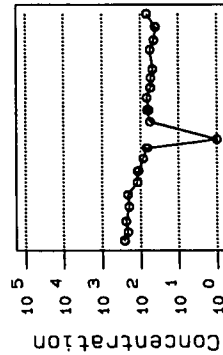
CIS-1, 2-DCE



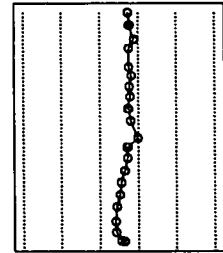
TRANS-1, 2-DCE



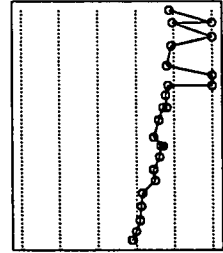
1, 1, 1-TCA



TCE



VINYL CHLORIDE



SUM

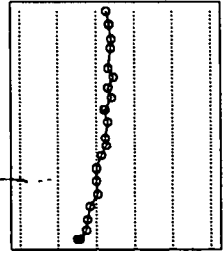


TABLE 6 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 1A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN

**taigeason**  
Associates

Environmental and Geotechnical Services





SOURCE: RW 8-12

DATE SAMPLED	SAMPLE NO.	LAB	MCL		4,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHENE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHENE	VINYL CHLORIDE		SUM	NOTES
			U6/L	NPL								U6/L	U6/L		
10/04/88	NSM-2	AQUA		6.2	ND	7.1	88	14	ND	215	71	71	401		
10/05/88	NSM-6	AQUA		5.6	ND	5.6	75	23	ND	187	ND	ND	296		
02/26/89	38	AQUA		ND	49.4	ND	500	110	ND	26.3	96.8	96.8	783		
06/11/89	40	AQUA	624	ND	31.4	ND	760	69.1	ND	280	56.7	56.7	1197		
09/10/89	38	AQUA	8240	ND	53.8	6	500	120	ND	39.1	64.5	64.5	783		
12/14/89	39	AQUA	8240	10	21.5	9.9	620	110	ND	83	19.4	19.4	874		
03/02/90	31	AQUA	8240	8.2	77.6	6.1	610	130	ND	49.6	53.4	53.4	935		
06/04/90	38	AQUA	8240	56.8	ND	8.2	210	26.3	11.3	380	18.2	18.2	711		
08/25/90	38	AQUA	8240	6.7	57.7	ND	231	43.2	ND	63.5	22.0	22.0	424		
10/31/90	39	AQUA	8240	ND	ND	ND	744	5.5	ND	1190	50	50	1990		
03/04/91	38	AQUA	8240	16.0	50.1	ND	212	20.8	ND	131	32.7	32.7	463		
06/03/91	34	AQUA	8240	29.2	20.9	ND	82.4	22.1	7.0	293	34.3	34.3	489		
11/14/91	27	AQUA	8240	43.1	8.2	5.9	187	18.6	6.8	251	14.6	14.6	535		
01/29/92	40	AQUA	8240	67.5	21.9	ND	205	28.5	ND	185	ND	ND	508		
04/01/92	30	AQUA	8240	37.5	7.8	10.9	298	28.0	8.5	371	147	147	909		
08/24/92	36	AQUA	8240	ND	25.7	ND	292	77.7	ND	32.1	26.4	26.4	454		
10/31/92	28	AQUA	8240	7.5	14.8	ND	265	71.0	ND	59.9	54.0	54.0	472		
10/31/92	29	AQUA	8240	7.5	13.9	ND	261	69.5	ND	59.4	52.8	52.8	464		
02/06/93	36	AQUA	8240	42.5	10.5	11.6	660	74.9	9.1	498	135	135	1442		
05/12/93	35	AQUA	8240	29.4	8.7	10.0	655	85.3	7.7	548	144	144	1488		
05/12/93	35	AQUA	8240	30.9	8.5	11.8	649	84.5	7.0	547	150	150	1489		

NOTES:  
 OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.  
 NPL = NO U. S. EPA PUBLISHED LEVEL  
 P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 WELL NOT SAMPLED DUE TO INOPERATIVE PUMP AUGUST, '91.

PARAMETER  
 o - Date Sampled

TABLE 6 A

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 2 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN





SOURCE: RW 8-12

NOTES:

OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL = NO U. S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED DUE TO INOPERATIVE PUMP AUGUST, '91.

PARAMETER  
o = Date  
Sampled

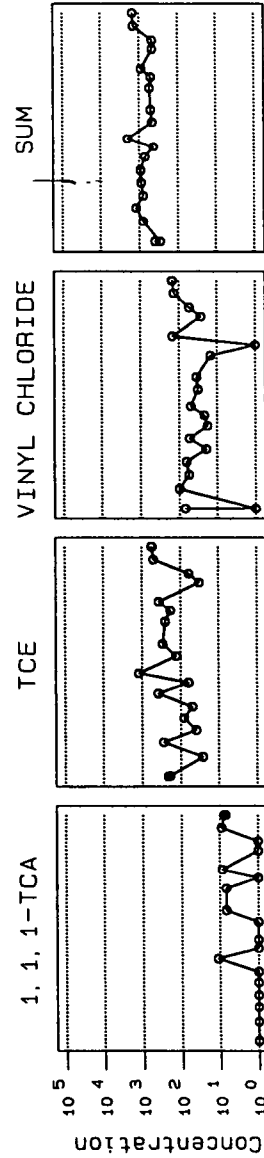
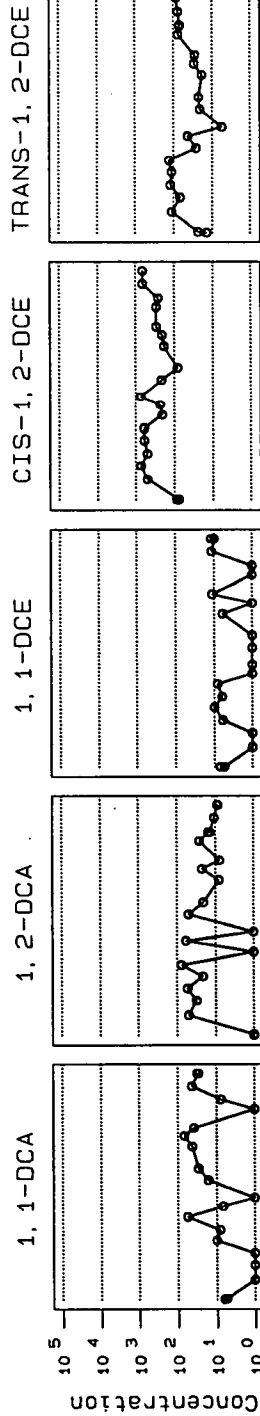


TABLE 6 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 2A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN

**fa gleason**  
associates

Environmental and Geotechnical Services



SOURCE: RW 13		1,1-DI-CHLORO-ETHANE		1,2-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHANE		1,1,1-TRI-CHLORO-ETHANE		TRANS-1,2-DICHLORO-ETHENE		1,1,1-TRI-CHLORO-ETHANE		TRI-CHLORO-ETHENE		VINYL CHLORIDE		SUM		NOTES	
DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD	NPL UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
10/05/88	NSM-9	AQUA		ND	27	ND	328	65	ND	ND	ND	84	504					84	504				
12/11/88	NSM-5	AQUA		ND	ND	33.4	517	81.4	ND	ND	ND	93.3	725					93.3	725				
02/25/89	39	AQUA		ND	47.1	ND	450	110	ND	ND	12	85.6	705					85.6	705				
06/11/89	41	AQUA	8240	ND	50.1	ND	500	120	ND	33	ND	ND	703					ND	703				
09/10/89	39	AQUA	8240	ND	53.5	6.5	490	120	ND	41.4	ND	66.8	778					66.8	778				
09/10/89	40	AQUA	8240	ND	52.4	6.7	480	120	ND	41.8	ND	66.3	767					66.3	767				
12/14/89	40	AQUA	8240	ND	25	9.5	610	120	ND	56.8	ND	17.9	639					17.9	639				
12/14/89	41	AQUA	8240	ND	24.1	8.5	550	110	ND	48.5	ND	16.1	759					16.1	759				
03/02/90	33	AQUA	8240	9	81.5	6.7	640	140	ND	50	ND	51.7	979					51.7	979				
06/04/90	39	AQUA	8240	9.8	80.1	5.9	420	93.9	ND	66.4	ND	47.2	723					47.2	723				
08/25/90	39	AQUA	8240	6.7	54.3	ND	240	48.6	ND	63.0	ND	27.4	440					27.4	440				
10/31/90	41	AQUA	8240	10.4	6.8	17.0	164	28.3	68.1	173	ND	28.5	588					28.5	588				
10/31/90	42	AQUA	8240	10.6	78.3	ND	335	62.7	ND	65.7	ND	52.9	605					52.9	605				
03/04/91	39	AQUA	8240	ND	75.2	ND	133	10.3	ND	18.6	ND	ND	237					ND	237				A
03/04/91	40	AQUA	8240	ND	63.3	ND	149	20.0	ND	17.7	ND	14.6	265					14.6	265				
06/02/91	33	AQUA	8240	5.3	62.6	ND	227	90.6	ND	20.2	ND	29.3	435					29.3	435				
08/30/91	23	AQUA	8240	ND	40.7	ND	169	35.7	ND	13.7	ND	26.2	285					26.2	285				
11/14/91	28	AQUA	8240	ND	40.3	5.9	216	43.8	ND	14.8	ND	22.5	343					22.5	343				
01/24/92	21	AQUA	8240	ND	45.4	ND	201	42.7	ND	20.2	ND	ND	309					ND	309				
04/01/92	27	AQUA	8240	ND	25.5	ND	227	53.5	ND	23.6	ND	27.3	357					27.3	357				
04/01/92	28	AQUA	8240	ND	25.1	ND	219	53.8	ND	23.5	ND	29.4	351					29.4	351				
08/24/92	38	AQUA	8240	ND	31.2	ND	384	112	ND	34.5	ND	40.4	602					40.4	602				
10/31/92	22	AQUA	8240	7.3	17.2	ND	303	87.3	ND	26.8	ND	40.6	482					40.6	482				
02/06/93	40	AQUA	8240	ND	19.5	ND	390	118	ND	51.7	ND	46.5	626					46.5	626				
05/12/93	26	AQUA	8240	7.2	16.5	ND	317	80.0	ND	40.1	ND	20.0	481					20.0	481				
09/01/93	26	AQUA	8240	10.5	20.0	ND	314	109	ND	34.6	ND	31.8	520					31.8	520				

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL = NO U. S. EPA PUBLISHED LEVEL

P = PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A = BROMOFORM 17.4 UG/L


PARAMETER

o - Date Sampled

TABLE 6 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 3 OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN



taqteason  
associates  
Environmental and Geotechnical Services



SOURCE: RW 13

NOTES:

OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL - ND U. S. EPA PUBLISHED LEVEL

P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GC/MS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

A - BROMOFORM 17.4 UG/L

PARAMETER

o - Date Sampled

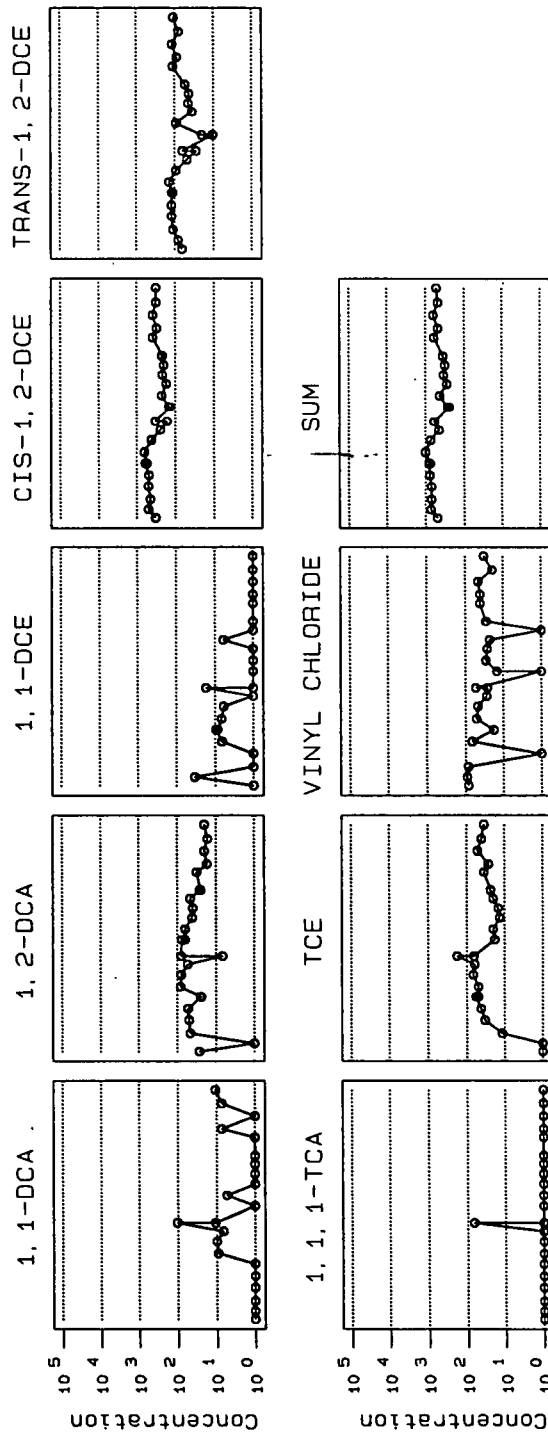
TABLE 6 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 3A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN

**ta gleason**  
associates

Environmental and Geotechnical Services







SOURCE: RW 14-17

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD		CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	TRI-CHLORO-ETHENE	SUM	NOTES
			P=70	P=100					
			UG/L	UG/L	UG/L	UG/L	UG/L		
10/04/88	NSM-4	AQUA	66	218	27		311		
10/06/88	NSM-7	AQUA	63	197	30		290		
12/11/88	NSM-4	AQUA	ND	26.7	49.1		76		
02/26/89	40	AQUA	97.5	200	54.4		352		
09/19/89	43	AQUA	8240	360	66.9		597		
12/14/89	42	AQUA	8240	290	87.5		498		
03/20/90	27	AQUA	8240	360	79.9		640		
06/04/90	40	AQUA	8240	190	54.9		323		
08/25/90	40	AQUA	8240	66.6	127	41.1	235		
11/14/91	29	AQUA	8240	81.8	192	43.2	317		
01/24/92	23	AQUA	8240	67.2	169	58.0	294		
01/24/92	24	AQUA	8240	51.3	136	56.0	243		
03/30/92	10	AQUA	8240	55.1	122	56.2	233		
08/24/92	41	AQUA	8240	105	310	77.4	492		
10/31/92	31	AQUA	8240	56.7	126	47.9	231		
02/09/93	42	AQUA	8240	100	242	58.1	400		
06/18/93	3	AQUA	8240	86.1	198	12.4	297		

NOTES:  
 OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.  
 NPL = ND U. S. EPA PUBLISHED LEVEL  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 WELL NOT SAMPLED 10/90, 03/91, 06/91, 08/91, AND 05/93 DUE TO INOPERATIVE PUMP.

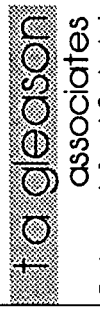
PARAMETER

o - Date Sampled

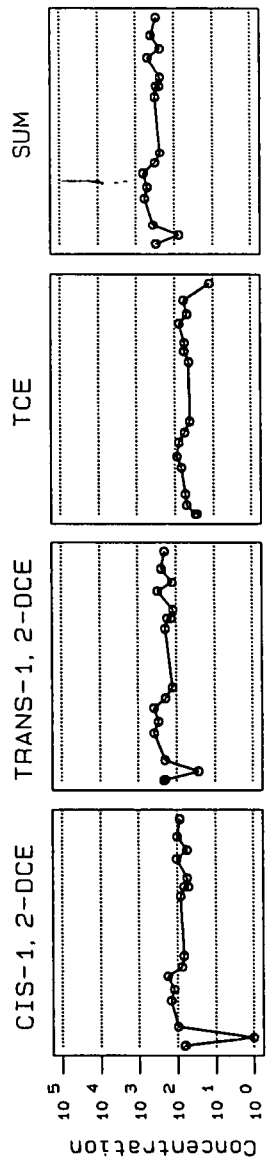
TABLE 6 A

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 4 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN



Environmental and Geotechnical Services





SOURCE: RW 18-19

DATE SAMPLED	SAMPLE NO.	LAB	MCL METHOD		1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	TRI-CHLORO-ETHENE	VINYL CHLORIDE	SUM	NOTES
			NPL	U6/L								
10/04/88	NSM-3	AGUA	ND	ND	19	56	47	47	ND	122		
10/06/88	NSM-8	AGUA	ND	ND	19	57	45	45	ND	121		
12/11/88	NSM-3	AGUA	ND	ND	126	217	37.5	37.5	ND	381		
02/26/89	41	AGUA	ND	ND	22.8	38.4	47.4	47.4	ND	109		
02/26/89	42	AGUA	ND	ND	24.7	41.1	53.6	53.6	ND	119		
06/11/89	42	AGUA	ND	ND	26.8	49.1	51.4	51.4	ND	127		
09/11/89	42	AGUA	ND	ND	20.9	37.2	37.8	37.8	ND	96		
12/14/89	43	AGUA	ND	ND	21.5	35.6	44.9	44.9	ND	102		
03/02/90	26	AGUA	ND	ND	30.5	42.8	34.7	34.7	ND	108		
06/04/90	41	AGUA	ND	ND	25.7	41.4	31.7	31.7	ND	99		
06/04/90	42	AGUA	ND	ND	25.9	42	32.8	32.8	ND	101		
08/25/90	41	AGUA	ND	ND	5.9	ND	35.7	35.7	ND	42		
08/29/90	43	AGUA	ND	ND	13.2	20.8	36.9	36.9	ND	71		
10/31/90	44	AGUA	8.5	81.7	332	60.7	60.8	60.8	48.7	592		
06/07/91	39	AGUA	ND	ND	ND	ND	31.3	31.3	ND	31		
11/13/91	24	AGUA	ND	ND	19.3	31.8	24.9	24.9	ND	76		
01/24/92	22	AGUA	ND	ND	17.1	30.9	20.2	20.2	ND	68		
03/30/92	9	AGUA	ND	ND	21.2	32.9	23.9	23.9	ND	78		
08/24/92	39	AGUA	ND	ND	15.8	19.8	27.3	27.3	ND	63		
08/24/92	40	AGUA	ND	ND	14.0	19.2	26.6	26.6	ND	60		
10/31/92	32	AGUA	ND	ND	6.7	ND	18.7	18.7	ND	25		
02/04/93	21	AGUA	ND	ND	11.3	ND	28.4	28.4	ND	40		
06/18/93	2	AGUA	ND	ND	ND	ND	18.8	18.8	ND	19		

NOTES:  
 OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 ND = NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.  
 NPL = NO U. S. EPA PUBLISHED LEVEL  
 P = PROPOSED  
 VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.  
 WELL NOT SAMPLED 03/94, 08/91, AND 05/93 DUE TO INOPERATIVE PUMP.

PARAMETER  
 o - Date Sampled

TABLE 6 A

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 5 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ASCMPX SBIN





SOURCE: RW 18-19

NOTES:

OUR INTERPRETIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

ND - NOT DETECTED AT DETECTION LIMIT SPECIFIED BY THE LABORATORY. SEE LAB REPORT.

NPL - NO U. S. EPA PUBLISHED LEVEL  
P - PROPOSED

VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

WELL NOT SAMPLED 03/91,  
08/91, AND 05/93 DUE TO  
INOPERATIVE PUMP.

PARAMETER

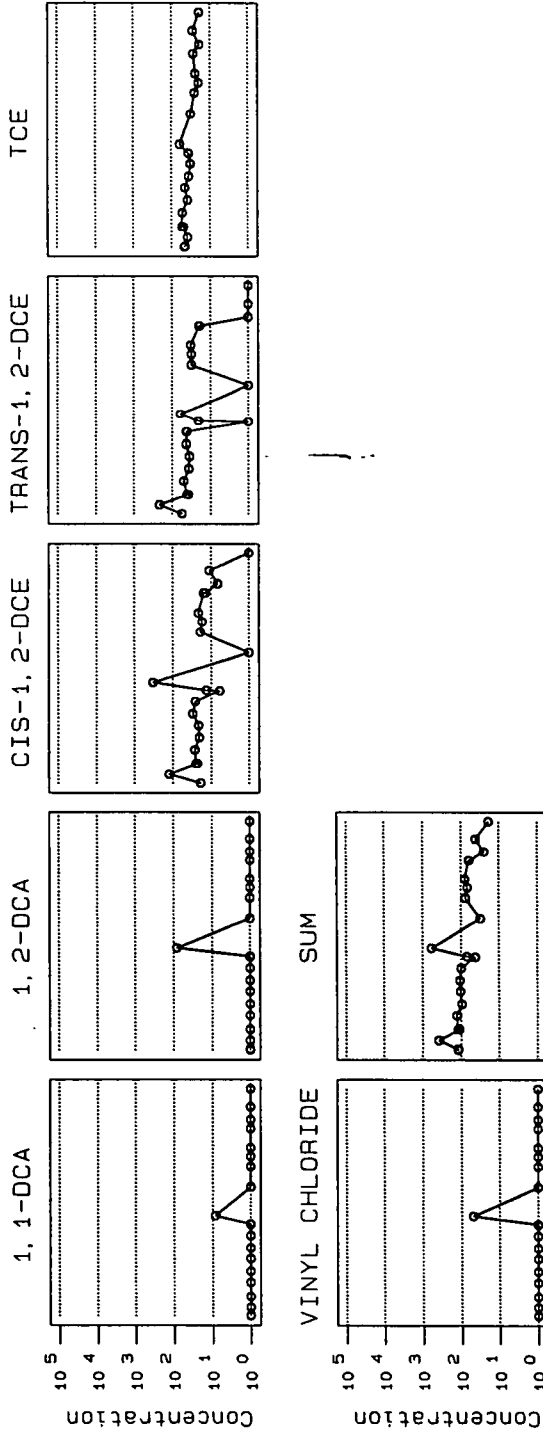
o - Date  
Sampled

TABLE 6 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 5A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ASCMPX SBIN

**taqclean**  
associates  
Environmental and Geotechnical Services





SOURCE: RW 1-7		SPECIFIC COND.		PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL U6/L	50 MCL U6/L	5000 SMCL U6/L	.200 MG/L	.200 MG/L	
12/11/88	NSM-1	AQUA	2380	-	16	<30	<5	<20	0.01	0.01	
02/26/89	37	AQUA	1197	6.95	13	<30	<10	<20	<0.01	<0.01	
09/10/89	37	AQUA	1097	6.50	17	<10	<4	<10	<0.01	<0.01	
03/02/90	29	AQUA	1260	6.80	14	<10	<5	<10	<0.01	0.020	
03/02/90	30	AQUA	1260	6.80	14	<10	<5	<10	<0.01	0.030	
06/04/90	37		1360	7.14	15	-	-	-	-	-	
08/25/90	35	AQUA	1118	6.75	16	<5	<2	<10	<0.01	<0.01	
08/25/90	37	AQUA	1085	6.75	16	<5	<2	10	<0.01	<0.01	
10/31/90	40	AQUA	1383	6.95	17	-	-	-	-	-	
03/04/91	37	AQUA	1213	6.89	15.1	<10	<2.0	<10	<0.010	0.010	
06/02/91	31		1405	7.00	17	-	-	-	-	-	
06/02/91	32		1409	7.00	17	-	-	-	-	-	
08/30/91	22	AQUA	1075	7.02	19	<10	<5	10	<0.01	<0.01	
11/14/91	25		1156	6.96	16.4	-	-	-	-	-	
11/14/91	26		1153	6.99	16.4	-	-	-	-	-	
01/24/92	20	AQUA	1197	7.12	11.8	<10	<5	<10	<0.01	<0.01	
04/01/92	29		1128	7.01	13.8	-	-	-	-	-	
08/24/92	37	AQUA	1060	7.30	18.9	<10	<2	<10	0.012	<0.010	
10/31/92	30		1297	7.00	15.8	-	-	-	-	-	
02/06/93	37	AQUA	1086	7.10	13.3	<10	<2	15	0.010	<0.010	
02/06/93	38	AQUA	1084	7.11	13.3	<10	<2	<10	0.011	<0.010	
05/12/93	27		1244	7.11	16.6	-	-	-	-	-	

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o = Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN



ASSOCIATES

Environmental and Geotechnical Services





SOURCE: RW 1-7

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o - Date Sampled

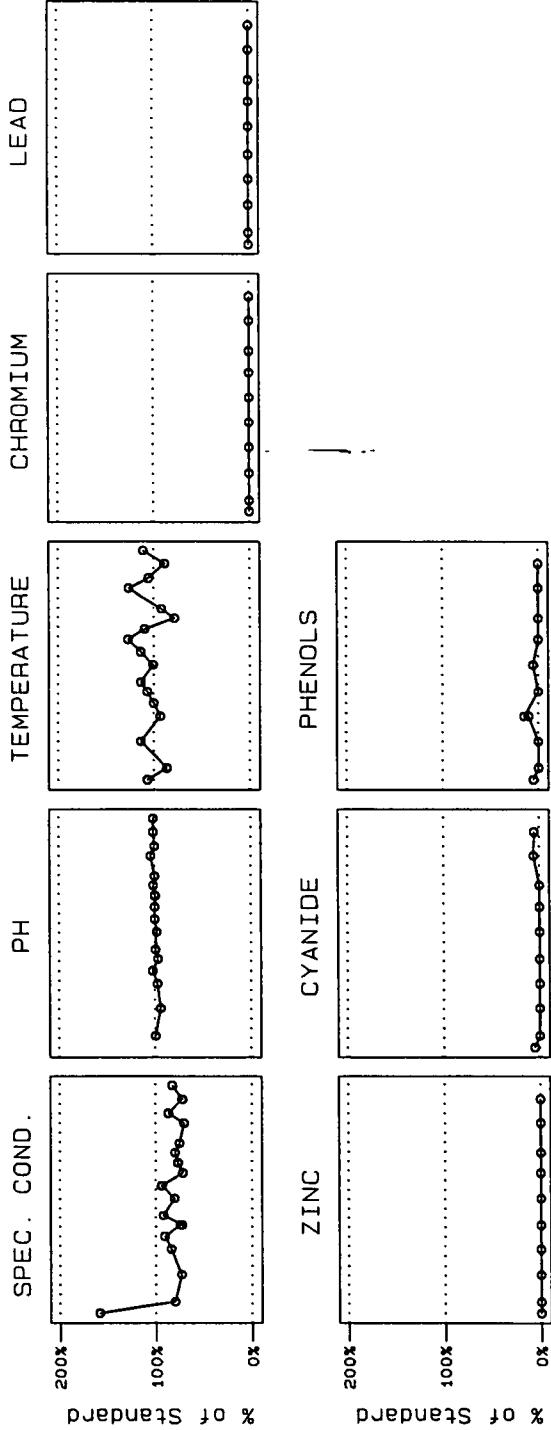
TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 1A OF 5

ALLIEDSIGNAL INC.,  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN

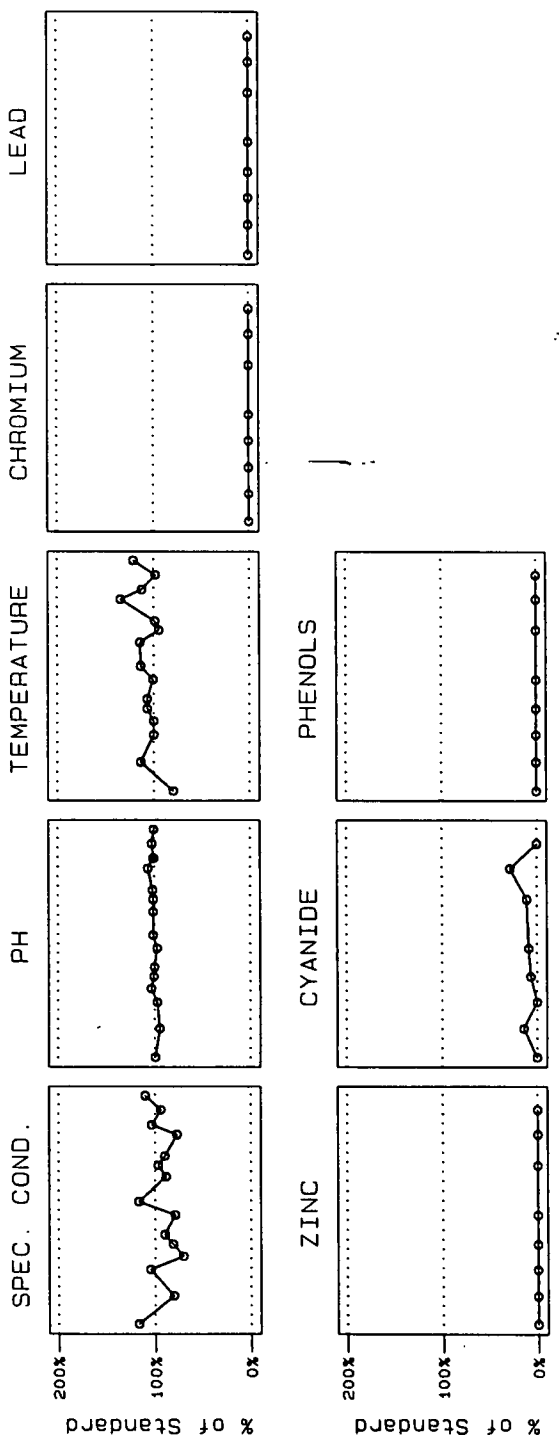
**Tagleason**  
Associates  
Environmental and Geotechnical Services





SOURCE: RW 8-12

DATE SAMPLED	SAMPLE NO.	STD. LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM		LEAD UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
						50 MCL UG/L	50 MCL UG/L					
02/26/89	38	AQUA	1754	6.95	12	<30	<10	<10	<20	<0.01	<0.01	
09/10/89	38	AQUA	1211	6.55	17	<10	<4	<10	<10	0.028	<0.01	
03/02/90	31	AQUA	1570	6.80	15	<10	<10	<10	<10	<0.01	<0.01	
05/04/90	38		1063	7.23	15	-	-	-	-	-	-	
08/25/90	38	AQUA	1221	7.05	16	<5	<2	<10	10	0.013	<0.01	
10/31/90	39		1345	7.02	16	-	-	-	-	-	-	
03/04/91	38	AQUA	1187	6.84	15.1	<10	<2.0	<10	<10	0.018	<0.010	
06/03/91	34		1751	7.10	17	-	-	-	-	-	-	
11/14/91	27		1327	7.12	17.1	-	-	-	-	-	-	
01/29/92	40	AQUA	1446	7.12	14.2	<10	<2	<10	<10	0.022	<0.01	
04/01/92	30		1349	7.15	14.8	-	-	-	-	-	-	
08/24/92	36	AQUA	1160	7.50	20.1	<10	<2	<10	<10	0.056	<0.010	
10/31/92	28		1550	7.08	16.8	-	-	-	-	-	-	
10/31/92	29		1556	7.06	16.8	-	-	-	-	-	-	
02/06/93	36	AQUA	1415	7.19	14.7	<10	<2	<10	<10	<0.010	<0.010	
05/12/93	35		1650	7.06	18.1	-	-	-	-	-	-	
05/12/93	36		1651	7.05	18.1	-	-	-	-	-	-	



NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.  
 < = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING WELL NOT SAMPLED 12/88 AND 8/91 DUE TO INOPERATIVE PUMP.

PARAMETER

o = Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
 GROUNDWATER QUALITY ANALYSIS  
 METALS, CYANIDE AND PHENOLS

PAGE 2 OF 5

ALLIEDSIGNAL INC.  
 GROUNDWATER INVESTIGATIONS  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN





SOURCE: RW-13

DATE SAMPLED	SAMPLE NO.	STD: LAB	SPECIFIC COND. UMHOS/CM	PH S.U.	TEMP. C	CHROMIUM		LEAD UG/L	ZINC 5000 SMCL UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
						50 MCL UG/L	50 MCL UG/L					
12/11/88	NSM-5	AQUA	2610	-	17	<30	<5	60	0.01	0.01	0.01	
02/26/89	39	AQUA	1772	7.05	14.5	<30	<10	<20	<0.01	<0.01	<0.01	
09/10/89	39	AQUA	1281	6.65	17	<10	<2	10	0.03	0.03	<0.01	
09/10/89	40	AQUA	1278	6.70	17	<10	<4	10	0.033	0.033	<0.01	
03/02/90	33	AQUA	1590	6.80	16	<10	<5	<10	<0.01	<0.01	0.013	
06/04/90	39		1429	7.12	16	-	-	-	-	-	-	
08/25/90	39	AQUA	1236	7.00	16	<5	<2	<10	0.023	0.023	<0.01	
10/31/90	41		1460	6.91	17	-	-	-	-	-	-	
10/31/90	42		1482	7.09	17	-	-	-	-	-	-	
03/04/91	39	AQUA	1183	7.18	15.1	<10	<2.0	30	0.014	0.014	<0.010	
03/04/91	40	AQUA	1205	7.05	15.1	<10	<2.0	30	0.025	0.025	<0.010	
06/02/91	33		1636	7.10	17	-	-	-	-	-	-	
08/30/91	23	AQUA	1198	7.01	20	<10	<5	80	0.016	0.016	<0.01	
11/14/91	28		1330	6.90	17.0	-	-	-	-	-	-	
01/24/92	21	AQUA	1635	7.03	15.0	<10	<5	70	0.026	0.026	<0.01	
04/01/92	27		1370	7.00	15.5	-	-	-	-	-	-	
04/01/92	28		1366	7.01	15.5	-	-	-	-	-	-	
08/24/92	38	AQUA	1260	6.90	19.5	<10	<2	34	0.070	0.070	<0.010	
10/31/92	22		1328	7.03	15.4	-	-	-	-	-	-	
02/06/93	40	AQUA	1398	7.12	14.8	<10	<2	67	0.072	0.072	<0.010	
05/12/93	26		1465	7.02	19.0	-	-	-	-	-	-	
09/01/93	26	AQUA	1507	7.00	17	<10	<2.0	229	0.194	0.194	<0.010	

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o - Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 3 OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN





SOURCE: RW-13

NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN

- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL

SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING PURPOSES ONLY.

PARAMETER

o - Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

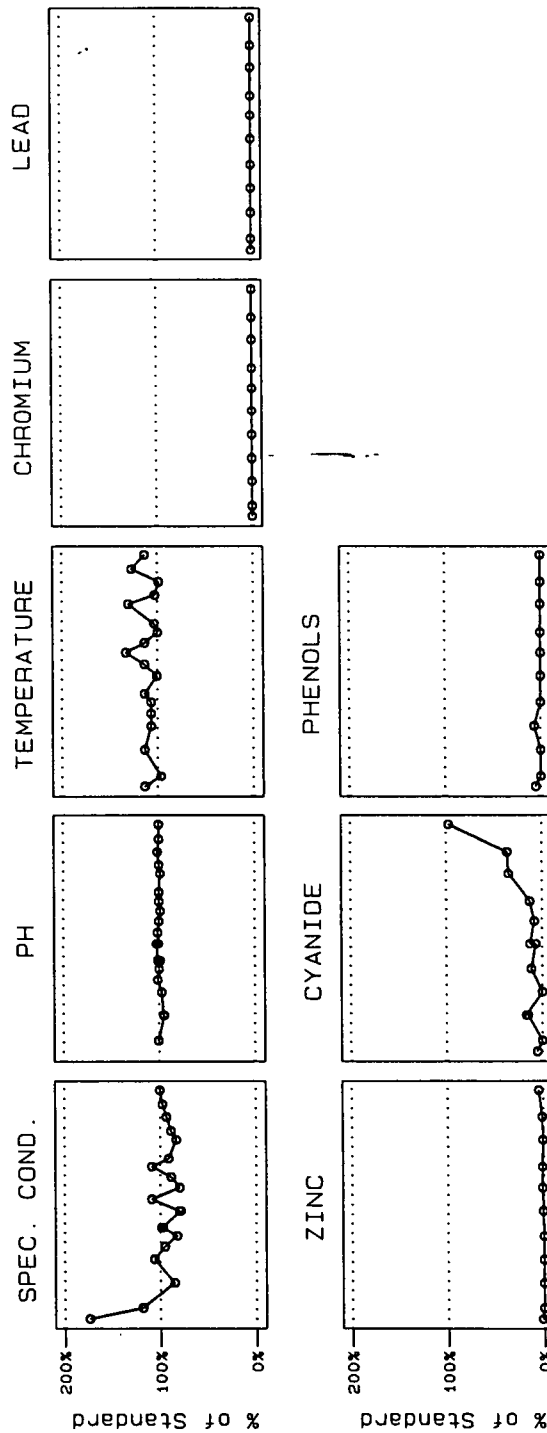
PAGE 3A OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN



ASSOCIATES

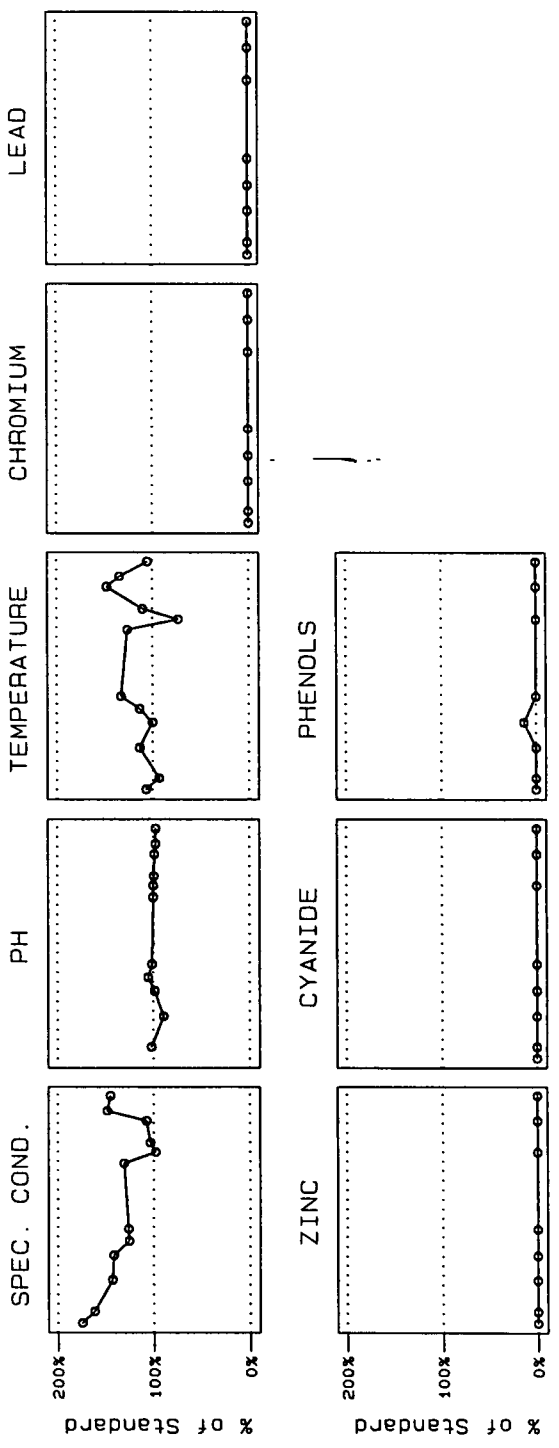
Environmental and Geotechnical Services







SOURCE: RW 14-17		SPECIFIC COND.		PH		TEMP.		CHROMIUM		LEAD		ZINC		CYANIDE		PHENOLS		NOTES	
DATE SAMPLED	SAMPLE NO.	STD: LAB	UMHOS/CM	S.U.	C	50 MCL	UG/L	50 MCL	UG/L	50 MCL	UG/L	5000 SMCL	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
12/12/88	NSM-4	AQUA	2620	-	16	<30	<5	<30	<5	<20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
02/24/89	40	AQUA	2430	7.15	14	<30	<10	<30	<10	<20	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
09/19/89	43	AQUA	2140	6.25	17	<5	<4	<5	<4	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
03/02/90	27	AQUA	2130	6.90	15	<10	<5	<10	<5	<10	<0.01	0.025	<0.01	0.025	<0.01	0.025	<0.01	0.025	
06/04/90	40		1882	7.37	17	-	-	-	-	-	-	-	-	-	-	-	-	-	
08/25/90	40	AQUA	1897	7.10	20	<5	<2	<5	<2	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
11/14/91	29		1967	7.03	18.9	-	-	-	-	-	-	-	-	-	-	-	-	-	
01/24/92	23	AQUA	1468	7.03	11.0	<10	<5	<10	<5	10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
01/24/92	24	AQUA	1468	7.03	11.0	<10	<5	<10	<5	<10	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
03/30/92	10		1555	6.98	16.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
08/24/92	41	AQUA	1610	6.90	22.1	<10	<2	<10	<2	10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
10/31/92	31		2230	6.80	20.1	-	-	-	-	-	-	-	-	-	-	-	-	-	
02/09/93	42	AQUA	2180	6.84	15.8	<5	<2	<5	<2	<10	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	



NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

- < = LESS THAN
- = INDICATES ANALYSIS NOT PERFORMED
- MCL = MAXIMUM CONTAMINANT LEVEL
- SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING WELL NOT SAMPLED 10/90, 3/91, 6/91, 8/91, AND 5/93 DUE TO INOPERATIVE PUMP.

PARAMETER

o - Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

PAGE 4 OF 5

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN





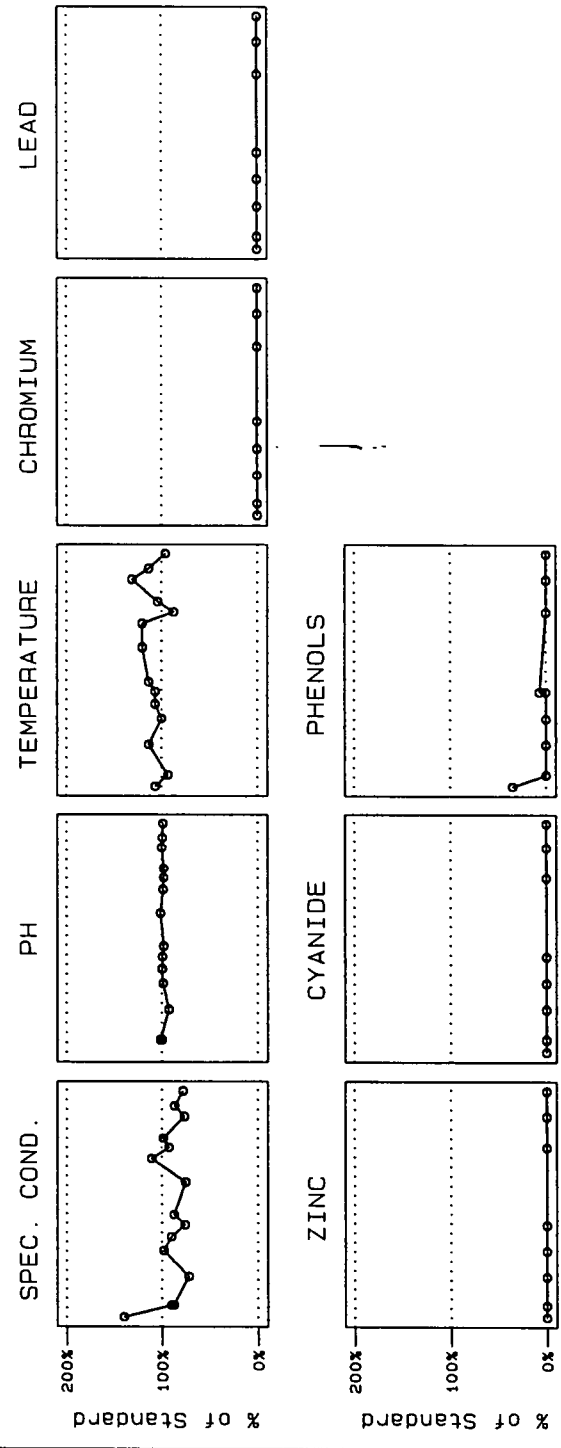
SOURCE: RW 18-19		SPECIFIC COND.	PH	TEMP.	CHROMIUM	LEAD	ZINC	CYANIDE	PHENOLS	NOTES
DATE SAMPLED	SAMPLE NO.	STO: LAB	S.U.	C	50 MCL UG/L	50 MCL UG/L	5000 SMCL UG/L	MG/L	MG/L	
12/12/88	NSH-3	AQUA	-	16	<30	<5	<20	<0.01	0.07	
02/26/89	41	AQUA	7.00	14	<30	<5	<20	<0.01	<0.01	
02/26/89	42	AQUA	7.10	14	<30	<5	<20	<0.01	<0.01	
09/11/89	42	AQUA	6.50	17	<10	<2	<10	<0.01	<0.01	
03/02/90	26	AQUA	6.90	15	<10	<5	<10	<0.01	<0.01	
06/04/90	41		7.01	16	-	-	-	-	-	
06/04/90	42		6.97	16	-	-	-	-	-	
08/25/90	41	AQUA	6.95	16	<5	<2	<10	<0.01	<0.01	
08/25/90	43	AQUA	-	-	<5	<2	<10	<0.01	0.014	
10/31/90	44		6.88	17	-	-	-	-	-	
06/07/91	39		7.12	18	-	-	-	-	-	
11/13/91	24		6.93	18.0	-	-	-	-	-	
01/24/92	22	AQUA	6.89	13.1	<10	<5	<10	<0.01	<0.01	
03/30/92	9		6.86	15.6	-	-	-	-	-	
08/24/92	39	AQUA	7.00	19.6	<10	<2	<10	<0.010	<0.010	
08/24/92	40	AQUA	7.00	19.6	<10	<2	<10	<0.010	<0.010	
10/31/92	32		6.94	17.0	-	-	-	-	-	
02/04/93	21	AQUA	6.91	14.4	<10	<2	14	<0.010	<0.010	

o - Date Sampled

TABLE 10 A

VOC RECOVERY WELLS  
GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS

ALLIEDSIGNAL INC.  
GROUNDWATER INVESTIGATIONS  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN



NOTES:

OUR INTERPRETATION OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.

METALS SAMPLES COLLECTED SINCE 06/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER.

< = LESS THAN  
- = INDICATES ANALYSIS NOT PERFORMED

MCL = MAXIMUM CONTAMINANT LEVEL  
SMCL = SECONDARY MAXIMUM CONTAMINANT LEVEL

STANDARD ASSIGNED FOR SPECIFIC CONDUCTANCE, PH, TEMPERATURE, AND PHENOLS FOR GRAPHING WELL NOT SAMPLED 3/91, 8/91, AND 5/93 DUE TO INOPERATIVE PUMP.

234

