

**Allied-Signal Aerospace Company**

Bendix Engine Controls Division  
717 North Bendix Drive  
South Bend, IN 46620



May 16, 1989

DATE/RECEIVED

MAY 22 1989

Mr. Glen Pratt  
Office of Environmental Management  
105 South Meridian Street  
Post Office Box 6015  
Indianapolis, Indiana 46206-6015

IF

DEM

Dear Mr. Pratt:

Subject: Hydro-Geological Monitoring Applicable to the  
South Bend, Indiana Divisions of Allied-Signal, Inc.

Enclosed is a copy of the Groundwater Monitoring Quarterly Report for the 1st Quarter of 1989 submitted by T A Gleason Associates. In the Quarterly Report for the 4th Quarter of 1988 laboratory tests indicated the possible presence of VOC in monitor well S25 located in Kennedy Park north of our Complex. Due to the fact that Allied-Signal's VOC recovery well system is showing positive results, we questioned the well S25 test results. In February, 1989 this well was sampled in duplicate and both results indicate the lack of VOC in well S25. Please see the enclosed letter from Allied-Signal's consultant, T. Alan Gleason, dated April 10, 1989, which indicates that the 4th Quarter test result for well S25 was an anomaly and not indicative of the water quality at that location.

Allied-Signal has also submitted copies of the report and letter to the United States Environmental Protection Agency, the St. Joseph County Health Department, and the City of South Bend.

If we can be of assistance with respect to the report, please advise the undersigned.

Sincerely,

T. L. Moore  
President

Enclosure

t a gleason  
associates

10 April 1989

Mr. Gerald J. Budzin  
Allied-Signal Corporation  
401 North Bendix Drive  
South Bend, Indiana 46620

RE: Groundwater Monitoring Report  
1st Quarter 1989  
Project # ALCMPX SBIN 020

Dear Gerry:

Enclosed are 13 copies of the Groundwater Monitoring Report for the 1st Quarter 1989. The report includes sampling results for the 21 VOC recovery wells installed along Bendix Drive and Bertrand Street in 1988. We have included the tabulated results for only the wells included in the quarterly monitoring.

The December 1988 sampling of monitor well S25 located in Kennedy Park north of the complex indicated VOC for the first time since quarterly sampling began in July of 1987 (7 sampling episodes). S25 was sampled in duplicate in February 1989 and neither sample detected VOC. Based on this resampling, we conclude that the December 1988 results for S25 are anomalous and not indicative of the aquifer water quality at that location.

Please call if you have any questions.

Very truly yours,  
T A GLEASON ASSOCIATES



T. Alan Gleason, P.E.  
President

TAG/djd

Enclosure

DATE/RECEIVED

MAY 22 1989

DEM

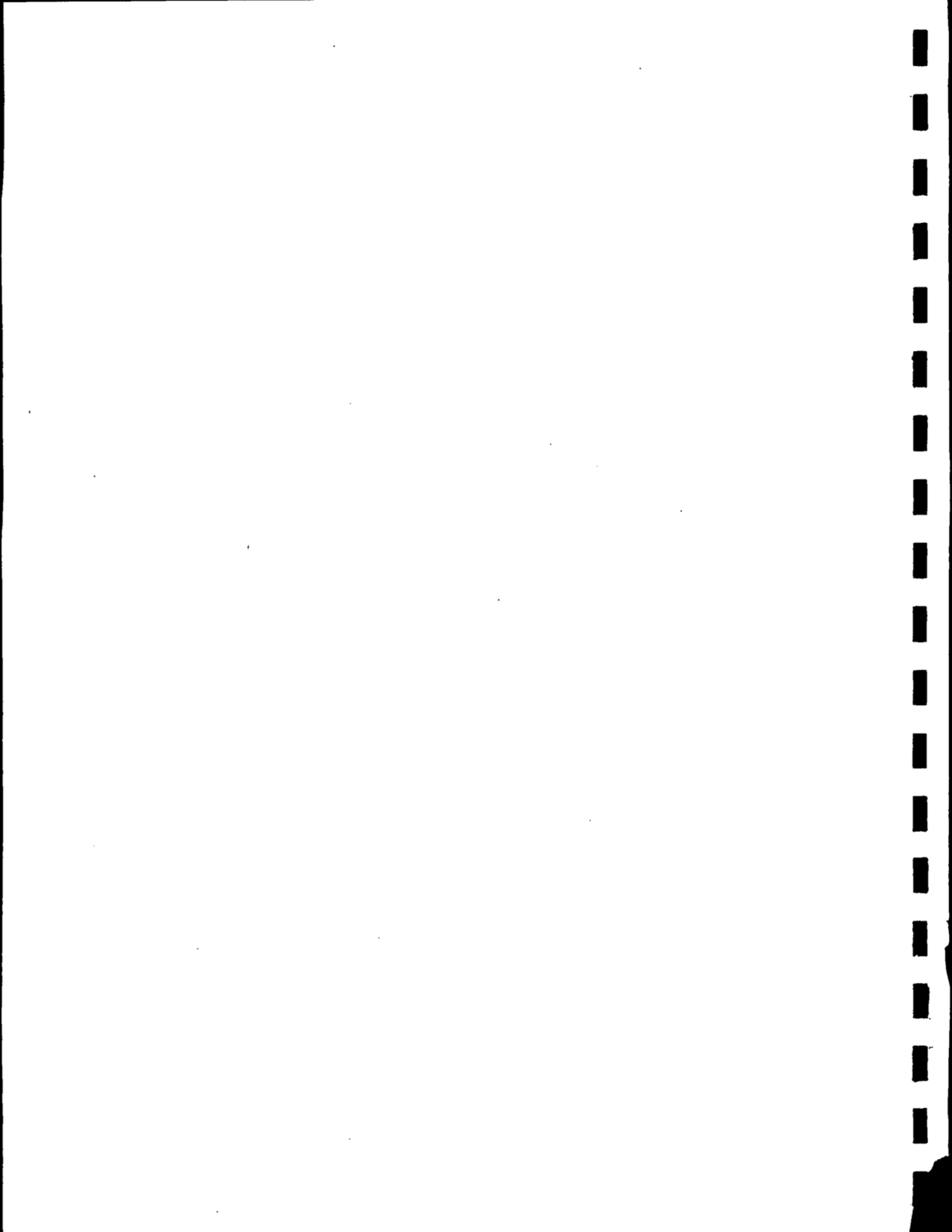
GROUNDWATER MONITORING REPORT  
1ST QUARTER 1989  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND COMPLEX  
SOUTH BEND, INDIANA

PROJECT # ALCMPX SBIN 020

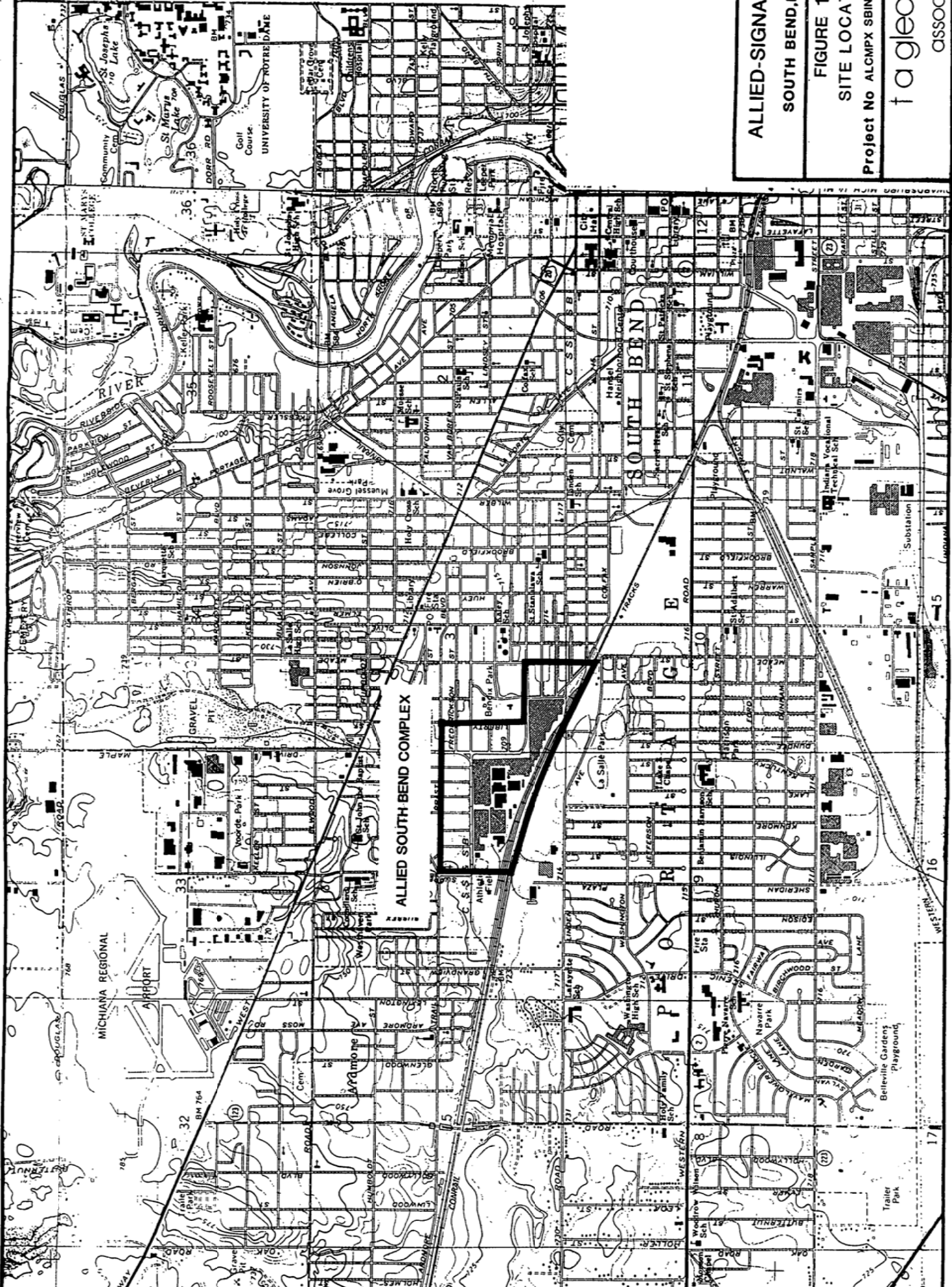
10 April 1989

COPY # 3

t a gleason  
associates



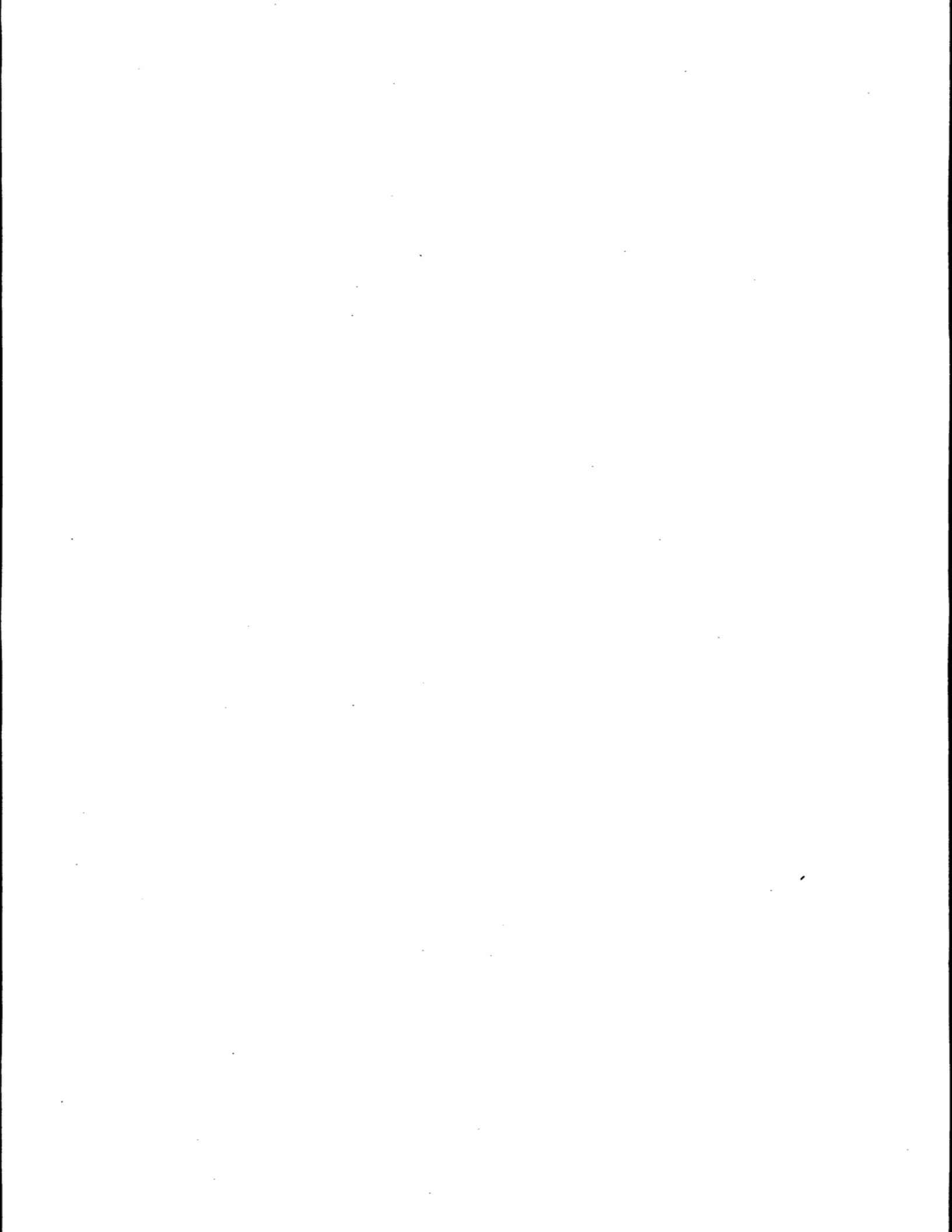


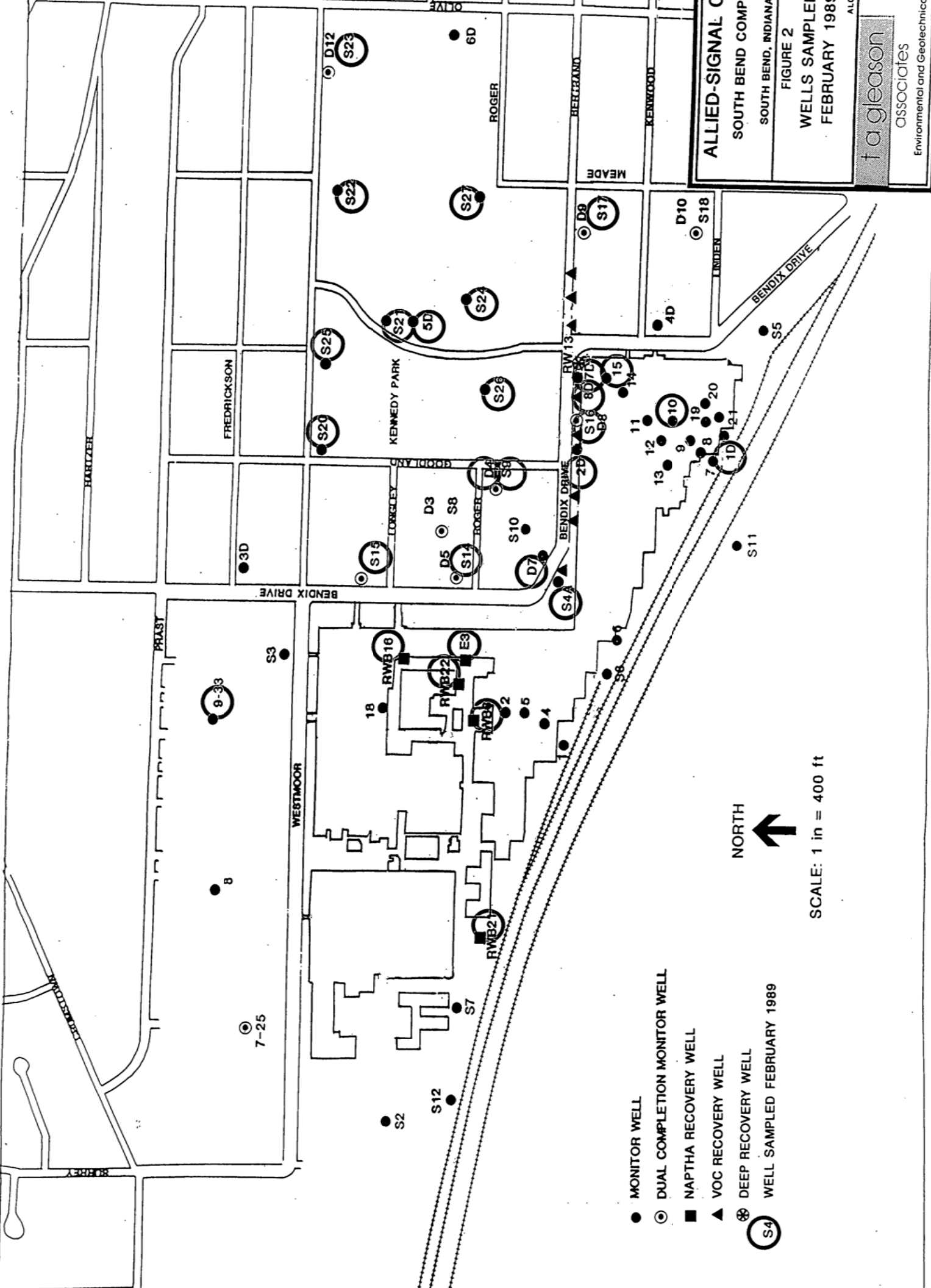


**ALLIED-SIGNAL CORP**  
**SOUTH BEND, INDIANA**

**FIGURE 1**  
**SITE LOCATION**  
**Project No ALCMPX SBIN 020**

**t a gleason**  
**associates**





- MONITOR WELL
- ⊙ DUAL COMPLETION MONITOR WELL
- NAPHTHA RECOVERY WELL
- ▲ VOC RECOVERY WELL
- ⊗ DEEP RECOVERY WELL
- ⊙ S4 WELL SAMPLED FEBRUARY 1988



SCALE: 1 in = 400 ft

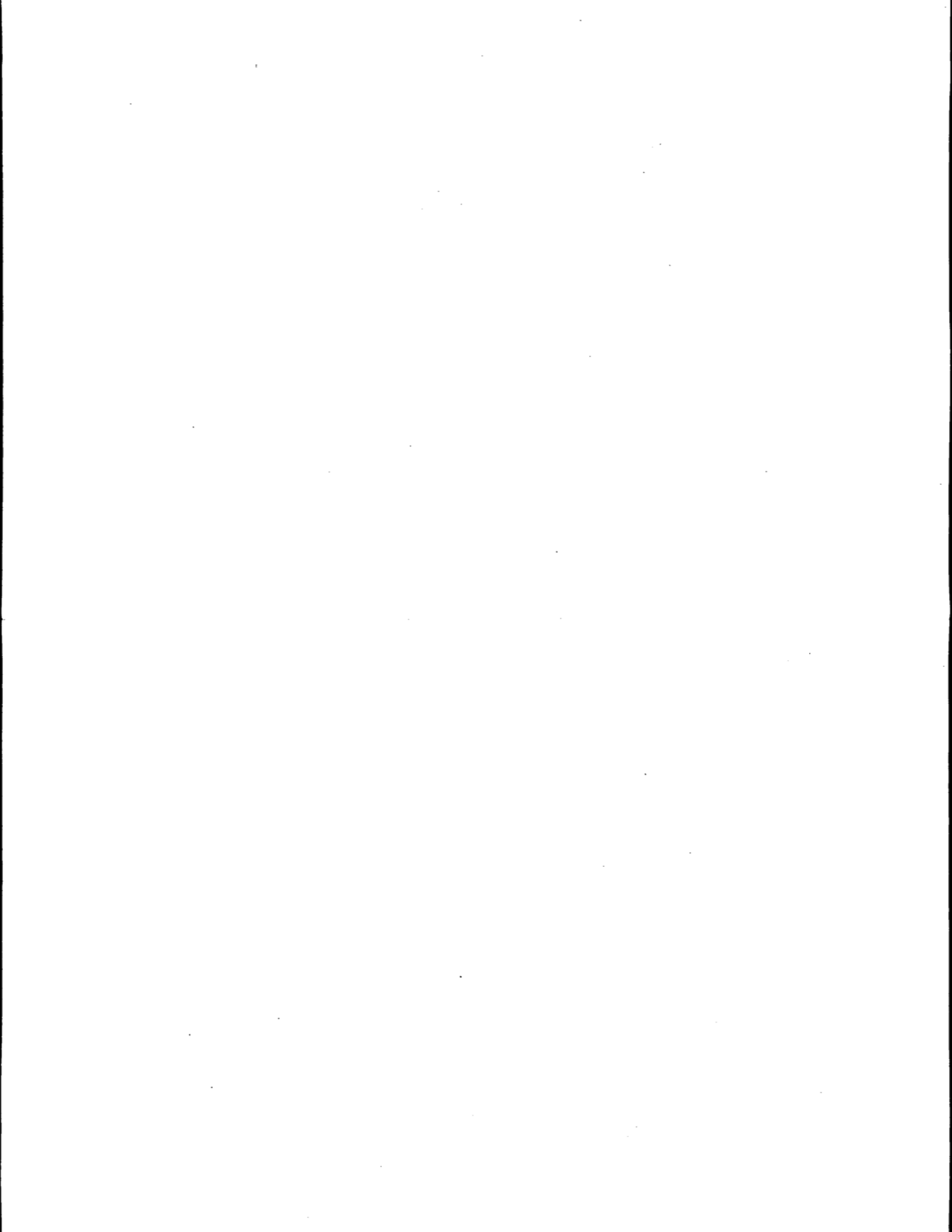
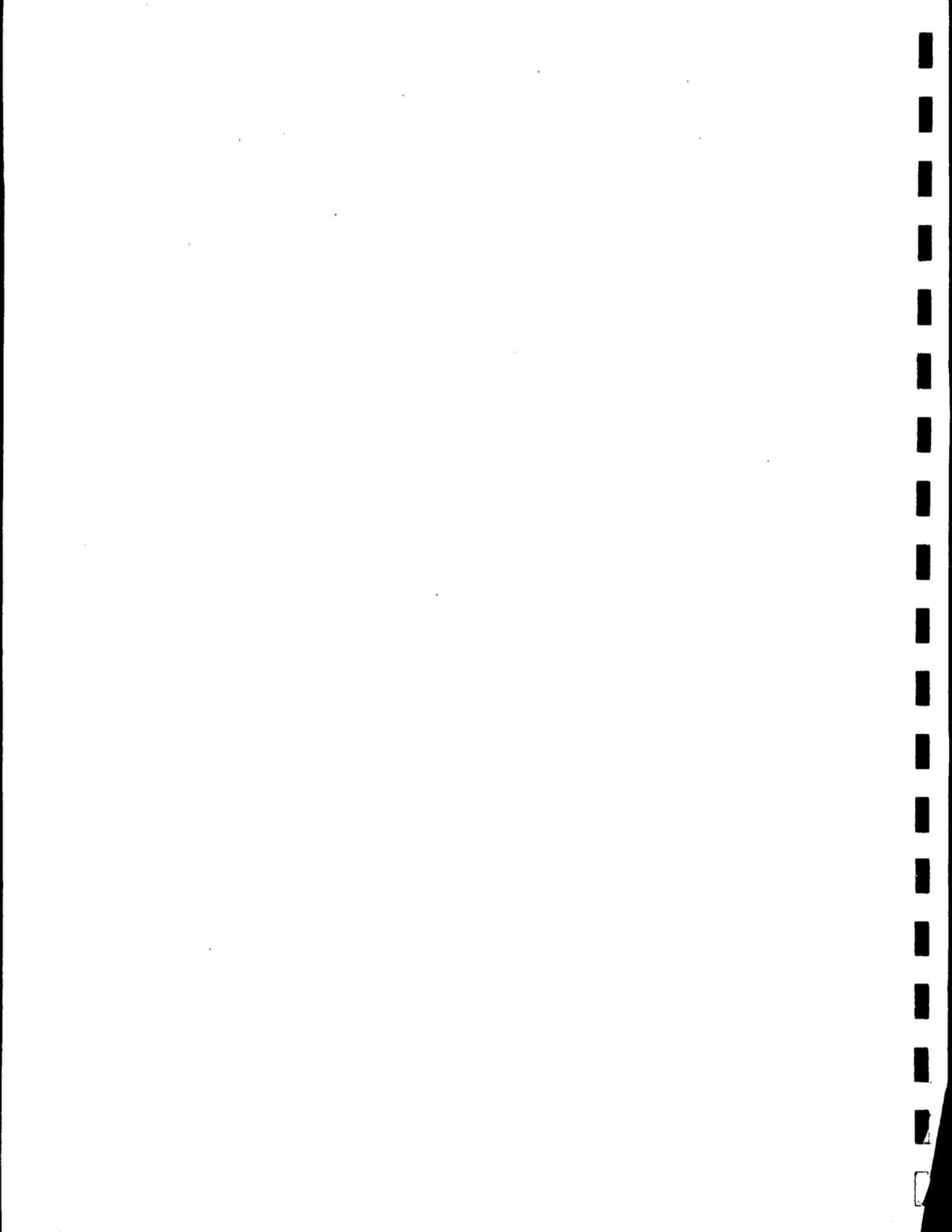


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<u>NUMBER</u>	<u>TITLE</u>
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Table 8	Groundwater Quality Analysis: Organic Compounds, Recovery Wells



## 1.0 INTRODUCTION AND BACKGROUND

This report presents the results of the most recent groundwater sampling and groundwater elevation measurements performed at the Allied-Signal Corporation, South Bend Complex, South Bend, Indiana (see Figure 1). These results are a continuation of the groundwater monitoring program initiated by Allied in 1981.

## 2.0 GROUNDWATER MONITORING PROGRAM

Included in the monitoring program are 25 monitor wells, 5 naptha recovery wells and 21 VOC recovery wells listed in Table 1. The locations of the wells are shown in Figure 2.

## 3.0 SAMPLING METHODOLOGY

### 3.1 PURGING

All monitor wells were purged a total of three well volumes before samples were collected. The wells were purged using a centrifugal pump connected to the water outlet side of the dedicated bladder pumps. The dedicated bladder pumps were used to purge the low yielding wells. The naptha recovery well taps were allowed to run approximately five minutes before samples were collected. The VOC recovery wells were discharging and did not require additional purging, but were allowed to discharge through the sample tap for 5 minutes prior to sample collection.



### 3.2 SAMPLE COLLECTION

All monitor wells were sampled using a dedicated bladder pump. Samples from these wells were collected from the tap on the bladder pump outlet pipe. Well S-16 was sampled with a dedicated PVC bailer which was carefully lowered into and withdrawn from the well to avoid agitating the samples. Samples from the naptha recovery wells were collected directly from a tap. Samples from the VOC recovery wells were collected at five locations along the recovery system. Each of the five points were representative of the recovery wells as listed on Table 1. The samples were collected from a sample tap on the outlet side of the recovery pumps.

### 3.3 SAMPLE HANDLING AND FIELD MEASUREMENTS

#### 3.3.1 Water Quality

Samples were measured in the field for pH, specific conductivity, and temperature immediately upon collection; the data were recorded on the sample data sheets. All monitor well and naptha recovery well samples analyzed for metals were filtered in the field through a 0.45 micron filter before being placed in the pre-preserved, EPA-approved sample containers. The VOC recovery well samples analyzed for metals were unfiltered. All samples were placed in insulated coolers with ice packs and shipped to Aqua Tech Laboratories, Melmore, Ohio, under the appropriate chain-of-custody. Samples were analyzed for the following parameters:

- o VOC (method 624)
- o phenols (method 420.2)
- o lead (method 239.2)
- o cyanide (method 335.3)
- o chromium (method 218.2)
- o zinc (method 289.2)





### 3.3.2 Water Level Measurements

Water elevations were measured from 38 groundwater wells in and around the Bendix Complex (see Figure 2). Elevations were measured to the nearest 0.01 ft using an electronic water level indicator manufactured by Solinst Inc., Ontario, Canada. The new monitor wells and most of the existing monitor wells were surveyed by Lang, Feeney & Assoc., Inc. during September 1987 to verify the reference elevations.

Water level measurements and the calculated water elevations are presented in Table 2.

### 4.0 QA/QC

As part of our quality assurance procedures, duplicate samples were taken at monitor wells S-1, S-22 and S-25. Three field blanks were prepared and submitted for analysis along with the other samples as a QA/QC check.

### 5.0 ANALYTICAL RESULTS

The analytical results of the February 1989 sampling are presented in Tables 3 to Table 8. Tables 3 and 4 present the inorganic results of monitor wells and naptha recovery wells respectively. Tables 5 and 6 present the organic analysis of monitor wells and naptha recovery wells respectively. Tables 7 and 8 present the inorganic and organic analysis of the VOC recovery well samples. The laboratory results, QA/QC data, and sample data sheets are maintained in our files and are available upon request.



TABLE 1 - SAMPLE SUMMARY  
1ST QUARTER 1989

<u>Monitor Wells</u>		Naptha <u>Recovery Wells</u>	
1-D	S-14	E-3	
2-D	S-15	RWB-6	
5-D	S-16	RWB-16	
7-D	S-17	RWB-21	
8-D	S-20	RWB-22	
9-33	S-21		
86-10	S-22*		
86-15	S-23		
D-4	S-24		
D-7	S-25*		
S-1*	S-26		
S-4A	S-27		
S-9			

<u>VOC Recovery Wells</u>		
<u>QA/QC Samples</u>	<u>Sample Location</u>	<u>Recovery Well(s)</u>
Field Blank 1	RW 1-7	RW 1, 2, 3, 3A, 4, 5, 6, 7
Field Blank 2	RW 8-12	RW 8, 9, 9A, 10, 11, 12
Field Blank 3	RW 13	RW 13
S-1 Duplicate	RW 17	RW 14, 15, 16, 17
S-22 Duplicate	RW 18-19	RW 18, 19
S-25 Duplicate		

\*Duplicate Sample Taken



02/21/89

NOTES:

(1)

WELL NO.	REFERENCE ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION
S-1	728.09					25.39	702.70		
S-2	721.82					NM			
S-3	716.65					20.91	695.74		
S-5	712.83					14.81	698.02		
S-6	713.08					NM			
S-7	716.16					NM			
S-8	714.65					18.96	695.69		
S-9	714.17					18.19	695.98		
S-10	715.40 *					NM			
S-11	715.64 *					NM			
S-12	721.45					19.97	701.48		
S-13	721.10 *					NM			
S-14	711.86					16.03	695.83		
S-15	714.37					18.86	695.51		
S-16	716.18					19.87	696.31		
S-17	716.97					20.64	696.33		
S-18	715.41					17.62	697.79		
S-19	723.38					20.56	702.82		
S-20	709.97					15.03	694.94		
S-21	711.33					14.67	696.66		
S-22	709.33					14.18	695.15		
S-23	710.24					15.02	695.22		
S-24	713.03					17.76	695.27		
S-25	710.60					15.42	695.18		
S-26	714.50					18.46	696.04		
S-27	715.40					19.73	695.67		

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

1 = SURVEYED BY LANG, FEENEY & ASSOC., INC. 9/87.

WATER ELEVATIONS PRIOR TO JULY 1987 ARE BASED ON FORMER REFERENCE ELEVATIONS.

\* = FORMER REFERENCE ELEVATIONS

NM = NOT MEASURED THIS DATE

TABLE 2

WATER LEVEL MEASUREMENTS

PAGE 1 OF 6

GROUNDWATER INVESTIGATIONS

ALLIED COMPLEX

SOUTH BEND, INDIANA

PROJECT # ALCMPX 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services



WLM1

WELL NO.	REFERENCE ELEVATION	12/06/88		09/21-25/88		05/17/88		02/03/88		01/2/88		NOTES:
		WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	
S-1	728.09	NM		NM		NM		NM		NM		OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS. 1 = SURVEYED BY LANG, FEENEY & ASSOC., INC. 9/87. WATER ELEVATIONS PRIOR TO JULY 1987 ARE BASED ON FORMER REFERENCE ELEVATIONS. * = FORMER REFERENCE ELEVATIONS NM = NOT MEASURED THIS DATE
S-2	721.82	NM		NM		20.38	701.44	20.60	701.22	20.62	701.20	
S-3	716.65	20.15	696.50	19.69	696.96	19.40	697.25	19.92	696.73	19.95	696.70	
S-5	712.83	14.75	698.08	10.30	702.53	13.77	699.06	14.19	698.64	14.18	698.65	
S-6	713.08	NM		NM		NM		NM		NM		
S-7	716.16	17.75	698.41	17.89	698.27	17.43	698.73	17.70	698.46	17.72	698.44	
S-8	714.65	18.61	696.04	18.36	696.29	17.93	696.72	18.39	696.26	18.39	696.26	
S-9	714.17	17.83	696.34	17.35	696.82	16.90	697.27	17.28	696.89	17.28	696.89	
S-10	715.40 *	NM		NM		NM		NM		NM		
S-11	715.64 *	NM		NM		NM		NM		NM		
S-12	721.45	19.93	701.52	20.34	701.11	19.87	701.58	20.12	701.33	20.15	701.30	
S-13	721.10 *	NM		NM		NM		NM		NM		
S-14	711.86	15.83	696.03	15.55	696.31	15.03	696.83	15.40	696.46	15.42	696.44	
S-15	714.37	18.62	695.75	18.35	696.02	17.83	696.54	18.28	696.09	18.27	696.10	
S-16	716.18	19.72	696.46	18.84	697.34	17.88	698.30	18.61	697.57	18.62	697.56	
S-17	716.97	19.69	697.28	NM		18.11	698.86	NM		NM		
S-18	715.41	17.47	697.94	17.43	697.98	15.90	699.51	16.95	698.46	17.00	698.41	
S-19	723.38	19.98	703.40	20.74	702.64	20.09	703.29	20.44	702.94	20.43	702.95	
S-20	709.97	14.57	695.40	14.85	695.12	14.83	695.14	15.08	694.89	15.09	694.88	
S-21	711.33	NM		NM		NM		NM		NM		
S-22	709.33	NM		NM		NM		NM		NM		
S-23	710.24	16.18	694.06	16.04	694.20	15.41	694.83	15.90	694.34	15.95	694.29	
S-24	713.03	NM		NM		15.12	697.91	NM		NM		
S-25	710.60	14.93	695.67	15.31	695.29	14.94	695.66	15.30	695.30	15.30	695.30	
S-26	714.50	18.16	696.34	17.42	697.08	16.82	697.68	17.53	696.97	17.52	696.98	
S-27	715.40	19.13	696.27	18.92	696.48	18.40	697.00	18.92	696.48	18.87	696.53	

TABLE 2

WATER LEVEL MEASUREMENTS

PAGE 2 OF 6

GROUNDWATER INVESTIGATIONS

ALLIED COMPLEX

SOUTH BEND, INDIANA

PROJECT # ALCMPX 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services





02/21/89

NOTES:

(1)

WELL NO.	REFERENCE ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION
D-1	720.73 *								
D-1A	721.69 *								
D-3	714.51								
D-4	717.85								
D-5	712.14								
D-7	713.83								
D-8	717.04								
D-9	717.00 *								
D-10	716.53								
D-11	723.47								
D-12	710.29								

NM = NOT MEASURED THIS DATE

I-1	711.52								
1-0	714.17	17.44	696.73						
2-0	715.36	19.31	697.61						
3-0	713.29	NM							
4-0	712.10	NM							
5-0	712.01	25.03	686.98						
6-0	711.41	NM							
7-0	714.85	22.04	692.81						
8-0	714.56	20.90	693.66						

TABLE 2

WATER LEVEL MEASUREMENTS

PAGE 3 OF 6

GROUNDWATER INVESTIGATIONS  
ALLIED COMPLEX  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical  
Services

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

1 = SURVEYED BY LANG, FEENEY & ASSOC., INC. 9/87.  
WATER ELEVATIONS PRIOR TO JULY 1987 ARE BASED ON FORMER REFERENCE ELEVATIONS.

\* = FORMER REFERENCE ELEVATIONS



WELL NO.	REFERENCE ELEVATION	12/06-07/88	09/21-25/88	05/17/88	02/03/88	01/2/88	NOTES:
		WATER DEPTH	WATER DEPTH	WATER DEPTH	WATER DEPTH	WATER DEPTH	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
		ELEVATION	ELEVATION	ELEVATION	ELEVATION	ELEVATION	
D-1	720.73 *	NM	NM	NM	NM	NM	1 = SURVEYED BY LANG, FEENEY & ASSOC., INC. 9/87.
D-1A	721.69 *	NM	NM	NM	NM	NM	WATER ELEVATIONS PRIOR TO JULY 1987 ARE BASED ON FORMER REFERENCE ELEVATIONS.
D-3	714.51	18.88	695.84	17.52	18.06	18.06	* = FORMER REFERENCE ELEVATIONS
D-4	717.85	22.12	696.58	20.26	20.70	20.70	NM = NOT MEASURED THIS DATE
D-5	712.14	16.01	696.13	14.94	15.30	15.31	
D-7	713.83	17.15	696.68	16.00	16.40	16.42	
D-8	717.04	21.61	695.43	19.01	19.48	19.50	
D-9	717.00 *	NM	NM	NM	NM	NM	
D-10	716.53	18.65	697.88	17.12	17.98	18.00	
D-11	723.47	20.07	703.40	20.14	20.52	20.53	
D-12	710.29	22.90	687.39	21.47	21.99	22.30	
I-1	711.52	16.85	694.67	16.38	16.69	16.76	
1-D	714.17	17.35	696.82	15.84	16.35	16.32	
2-D	715.36	19.11	696.25	17.23	17.74	17.75	
3-D	713.29	NM	693.89	17.81	18.20	18.22	
4-D	712.10	NM	688.54	22.01	22.48	22.56	
5-D	712.01	NM	686.96	22.81	23.10	23.53	
6-D	711.41	23.96	687.45	22.79	23.19	23.39	
7-D	714.85	21.98	692.87	17.55	17.84	17.85	
8-D	714.56	20.78	693.78	16.80	17.17	17.17	

TABLE 2

WATER LEVEL MEASUREMENTS

GROUNDWATER INVESTIGATIONS  
 ALLIED COMPLEX  
 SOUTH BEND, INDIANA  
 PROJECT # ALCHPX 020

T A GLEASON ASSOCIATES  
 Environmental and Geotechnical Services



-23-Mar-89

WLM3A

02/21/89

NOTES:

(1)

WELL NO.	REFERENCE ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION	WATER DEPTH	WATER ELEVATION
86-1	715.70 *								
86-2	714.98 *								
86-4	715.09 *								
86-5	715.04 *								
86-6	***								
86-7	714.15								
86-8	714.62 *								
86-9	715.25 *								
86-10	715.06								
86-11	715.14 *								
86-12	715.71 *								
86-13	714.75								
86-14	715.05 *								
86-15	715.06 *								
86-18	714.84								
86-19	714.33								
86-20	713.07 *								
86-21	713.76 *								
7-25	720.47								
7-50	719.83								
8-27	715.45 *								
9-33	716.69								
OW-1	***								
OW-2	***								
S4-A	***								
RWB-6	715.80								
RWB-16	715.30								
RWB-21	717.62								
RWB-22	715.11								
RWE-3	714.50								

NH

NH

NH

NH

17.03

NH

NH

NH

18.07

696.99

NH

NH

NH

NH

18.12

696.94

NH

NH

NH

NH

21.25

699.22

NH

NH

18.35

698.34

16.29

19.68

696.12

18.93

696.37

21.67

695.95

19.35

695.76

19.66

694.84

WELL 86-1 WAS DESTROYED

TABLE 2

WATER LEVEL MEASUREMENTS

PAGE 5 OF 6

GROUNDWATER INVESTIGATIONS

ALLIED COMPLEX

SOUTH BEND, INDIANA

PROJECT # ALCHPX 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical

Services



WELL NO.	REFERENCE ELEVATION	12/06-07/88	09/21-25/88	05/17/88	02/3/88	01/2/88	NOTES:	
		WATER DEPTH ELEVATION	WATER DEPTH ELEVATION	WATER DEPTH ELEVATION	WATER DEPTH ELEVATION	WATER DEPTH ELEVATION		
86-1	715.70 *	NM	NM	NM	NM	NM	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.	
86-2	714.98 *	NM	NM	NM	NM	NM		
86-4	715.09 *	NM	NM	NM	NM	NM		
86-5	715.04 *	NM	NM	NM	NM	NM		
86-6	***	NM	NM	NM	NM	NM		
86-7	714.15	16.27	697.88	15.54	698.61	16.12		698.03
86-8	714.62 *	17.20	697.42	16.49	698.57	17.43	697.63	
86-9	715.25 *	17.91	697.34	17.89	696.25	NM	1 = SURVEYED BY LANG, FEENEY & ASSOC., INC. 9/87. WATER ELEVATIONS PRIOR TO JULY 1987 ARE BASED ON FORMER REFERENCE ELEVATIONS;  * = FORMER REFERENCE ELEVATIONS  *** = NO REFERENCE ELEVATION	
86-10	715.06	18.02	697.04	18.42	697.29	NM		
86-11	715.14 *	18.17	696.97	17.44	697.31	NM		
86-12	715.71 *	18.72	696.99	17.55	697.50	NM		
86-13	714.75	17.47	697.28	17.24	697.82	NM		
86-14	715.05 *	17.95	697.10	18.53	696.31	NM		
86-15	715.06 *	17.96	697.10	18.53	696.31	NM		
86-18	714.84	NM	NM	NM	NM	NM		
86-19	714.33	NM	NM	NM	NM	NM		
86-20	713.07 *	NM	NM	NM	NM	NM		
86-21	713.76 *	NM	NM	NM	NM	NM		
7-25	720.47	NM	NM	20.31	700.16	20.84	699.63	
7-50	719.83	20.12	699.71	19.97	699.86	20.24	699.59	
8-27	715.45 *	NM	NM	NM	NM	NM	TABLE 2	
9-33	716.69	18.20	698.49	17.99	698.7	18.37		698.32
9-33	716.69	18.20	698.49	17.99	698.7	18.37		698.32
OW-1	***	15.05	NM	NM	NM	14.36	WATER LEVEL MEASUREMENTS	
OW-2	***	15.12	NM	NM	NM	14.40		
S4-A	***	15.42	NM	13.9	NM	14.21	GROUNDWATER INVESTIGATIONS ALLIED COMPLEX SOUTH BEND, INDIANA PROJECT # ALCMPX 020	
RWB-6	715.80	NM	NM	18.65	697.15	19.02		696.78
RWB-16	715.30	18.92	696.38	17.78	697.52	18.29		697.01
RWB-21	717.62	21.96	695.66	20.82	696.8	21.14		696.48
RWB-22	715.11	NM	NM	18.01	697.1	18.43		696.68
RWE-3	714.50	NM	NM	19.21	695.29	19.52		694.98





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
				UMHOS/CM	SU	C	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	MG/L	MG/L	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  < = LESS THAN
1-D	13	01/09/87	AQUA				<1	<8	<0.4	3	40	<4	240	<0.3	12	<4	<4	<1	44			METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	1	02/12/87	AQUA	1300		11				18			52						14			
	13	06/05/87	AQUA	1250	7.62	13				<5			5						20	0.022	<0.010	
	22	09/04/87	AQUA	1200	7.71	14				20			39						160	0.009	0.048	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	13	01/14/88	AQUA	1400	6.47	10				<20			<30						10	<0.02	<0.010	
	16	02/09/88	AQUA	2200	7.32	13				30			<3						<10	<0.01	<0.010	
	11	05/18/88	AQUA	1400	7.26	14				<30			<5						21	<0.01	<0.01	
	11	09/23/88	AQUA	1380	6.95	13				<30			<6						<20	<0.01	0.02	
	33	12/11/88	AQUA	1523		14				<30			<5						<20	<0.01	0.01	TABLE 3
																						GROUNDWATER QUALITY ANALYSIS
																						METALS, CYANIDE AND PHENOLS
	23	02/24/89	AQUA	1466	7.15	13				<30			<10						<20	<0.01	0.02	PAGE 1 OF 27
																						MONITOR WELLS
																						GROUNDWATER INVESTIGATIONS
																						ALLIED CORPORATION
																						SOUTH BEND, INDIANA
																						PROJECT ALCHPX SB1H 020
																						T A GLEASON ASSOCIATES
																						Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	(SPECIFIC) CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:	
					SU	C	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	MG/L	MG/L	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  < = LESS THAN
2-D	2	12/18/86	AQUA				<6	7	<1	<1	<10	16	20	<0.3	16	<8	<4	<9	120				METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	11	06/05/87	AQUA	1200	7.69	17					<5		<3						10	0.013	<0.010		
	19	09/03/87	AQUA	1150	7.81	15					<10		<3						12	<0.005	0.722		
	34	01/15/88	AQUA	1390	7.18	13					<20		<30						10	<0.02	0.015		BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	11	02/09/88	AQUA	2550	7.39	13					<20		<3						10	<0.01	2.8		
	24	05/19/88	AQUA	1470	7.39	15					<30		<5						<20	<0.01	<0.01		
	20	09/24/88	AQUA	1005	7.10	16					<30		<6						<20	<0.01	0.02		
	27	12/10/88	AQUA	2060		14.5					30		<5						<20	<0.01	0.01		
	28	12/10/88	AQUA	2060		14.5					<30		<5						<20	<0.01	<0.01		TABLE 3
																							GROUNDWATER QUALITY ANALYSIS
																							METALS, CYANIDE
	19	02/24/89	AQUA	1191	7.25	13					<30		<5						<20	<0.01	0.02		AND PHENOLS PAGE 2 OF 27 MONITOR WELLS
																							GROUNDWATER INVESTIGATIONS
																							ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT ALCHPX SBIN 020
																							T A GLEASON ASSOCIATES
																							Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
				UMHDS/CM	SU	C	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	MG/L	MG/L	
5-0	4	12/18/86	AQUA				<6	<4	<1	<1	<10	8	<6	<0.3	<10	<16	4	<12	52			METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICROM FILTER
	5	12/18/86	AQUA				<6	<1	<1	2	<10	8	<6	<0.3	<10	<16	<4	<9	40			
	19	06/15/87	AQUA	1000	7.90	14					<5		<3						10	0.013	<0.010	
	15	09/06/87	AQUA	950	7.81	13					<10		<3						16	<0.005	<0.010	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	12	01/14/88	AQUA	1240	6.71	9					<20		<30						10	<0.02	<0.010	
	21	02/09/88	AQUA	2050	6.95	13					20		<3						<10	<0.01	0.039	
	14	05/18/88	AQUA	1000	7.18	14					<30		<5						<20	<0.01	0.02	
	15	09/23/88	AQUA	1215	6.80	13					<30		<6						<20	<0.01	0.04	
	9	12/09/88	AQUA	2190		12.5					<30		<5						<20	<0.01	<0.01	TABLE 3
																						GROUNDWATER QUALITY ANALYSIS
																						METALS, CYANIDE AND PHENOLS
	31	02/25/89	AQUA	1113	7.45	13					<30		<5						<20	<0.01	0.02	PAGE 3 OF 27
																						MONITOR WELLS
																						GROUNDWATER INVESTIGATIONS
																						ALLIED CORPORATION
																						SOUTH BEND, INDIANA
																						PROJECT ALCHPX SBIN 020
																						T A GLEASON ASSOCIATES
																						Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTHONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES
				UMHROS/CM	SU		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	MG/L	MG/L	
7-D	29	09/01/87	AQUA	1100	7.17	16					<10		<3									METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	30	01/15/88	AQUA	1380	7.07	14				<20			<30									
	15	02/09/88	AQUA	1975	7.33	13				40			<3									
	22	05/19/88	AQUA	1530	7.24	16				<30			<5									
	18	09/24/88	AQUA	995	7.05	17				<30			<6									BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	31	12/10/88	AQUA	2390		14.5				30			<5									
	34	02/25/89	AQUA	1655	7.25	14				<30			<5									
TABLE 3																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE AND PHENOLS																						
PAGE 4 OF 27																						
MONITOR WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCHMPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CAESIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
				UMHOS/CM	SU	C	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	MG/L	MG/L	
8-0	30	09/04/87	AQUA	1300	7.29	16							<3						28	0.014	<0.010	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	28	01/15/88	AQUA	2200	6.84	11							<30						10	<0.02	0.01	
	29	01/15/88	AQUA	2200	6.84	11							<30						10	<0.02	0.01	
	13	02/09/88	AQUA	2700	7.40	13							<3						20	0.14	0.089	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	14	02/09/88	AQUA	2700	7.40	13							<3						10	0.14	0.034	
	23	05/19/88	AQUA	2100	7.32	15							<30						<20	<0.01	0.04	
	19	09/24/88	AQUA	1480	6.90	17.5							<30						<20	0.01	0.08	
	32	12/10/88	AQUA	2180		14							<30						<20	0.03	0.02	
TABLE 3																						
	35	02/25/89	AQUA	1822	7.10	14							<30						<20	0.08	0.02	GROUNDWATER QUALITY ANALYSIS METALS, CYANIDE AND PHENOLS
PAGE 5 OF 27																						
MONITOR WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCHPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						



933MCPHW  
23-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	(SPECIFIC CONDUCTANCE)	PH	TEMP C	SU	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L
9-33	11	01/08/87	AQUA					<50	11	6	2	170	160	69	0.6	220	<80	<4	<1	840		
	19A	02/12/87	AQUA									844		125						210		
	19B	02/12/87	AQUA									<10*		<3*						12*		
	3	06/05/87	AQUA		7.88	14						<5		4						10	0.014	<0.010
	3	09/03/87	AQUA		7.22	15						<10		<3						<4	<0.005	<0.100
	3	01/13/88	AQUA		7.15	13						<20		<30						<10	<0.02	0.03
	31	02/10/88	AQUA		7.40	12						<20		<3						<10	<0.01	<0.010
	3	05/18/88	AQUA		7.34	14						30		<5						<20	<0.01	<0.01
	3	09/22/88	AQUA		7.20	17						<30		<6						<20	<0.01	0.04
	15	12/09/88	AQUA			15						<30		<5						<20	<0.01	<0.01
TABLE 3																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE																						
AND PHENOLS																						
PAGE 6 OF 27																						
MONITOR WELLS																						
4	02/22/89	AQUA	939	7.65	14						<30		<5						<20	<0.01	0.02	
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCHPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and																						
Geotechnical Services																						

NOTES:

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

< = LESS THAN

\*METAL FILTERED THRU .45 MICRON FILTER

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED



861MCPW  
23-Mar-89

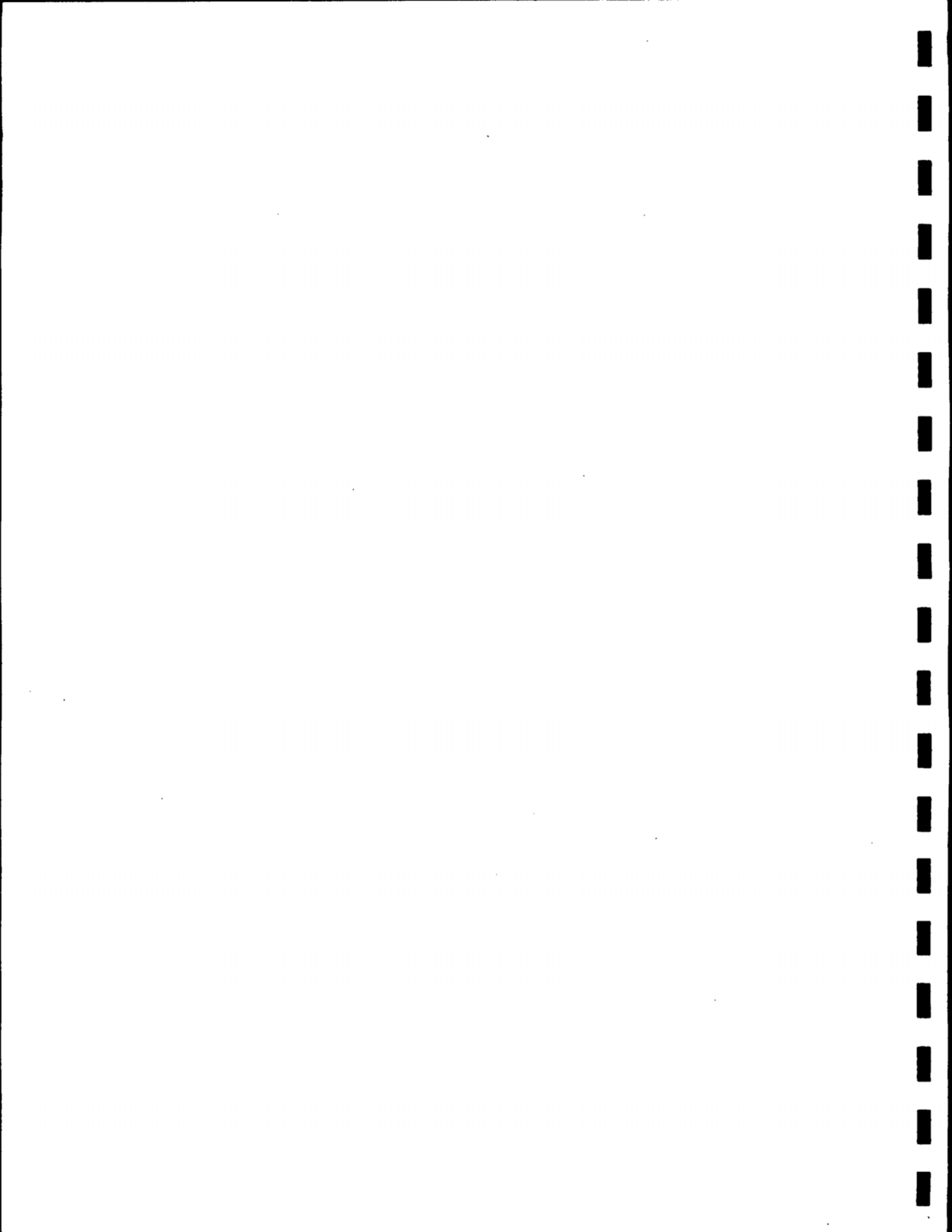
WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	
86-10	8*	08/02/86	AQUA	1620	6.62	20.4				<5	30	68							140			
	9	08/02/86	AQUA																	<0.01		
	116	10/10/86	AQUA	1900																		
	316	10/10/86	AQUA				<6	<4	<1	4	<20	40	21	<0.3	20	<8	<10	<15	30			
	22	02/26/89	AQUA	1413	7.25	16				<30			<5						20	<0.01	0.03	
TABLE 3																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE AND PHENOLS																						
PAGE 7 OF 27																						
MONITOR WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCHPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

\* = TIN <6

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC															NOTES			
				CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM		ZINC	CYANIDE	PHENOLS
				UMHOS/CH	SU	C	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L		
86-15	5*	08/02/86	AQUA	1320	6.9	21.7			<5	40	54						190				METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICROM FILTER	
	6	08/02/86	AQUA															<0.01				
	111	10/10/86	AQUA	1310																		* = TIN <6
	311	10/10/86	AQUA				<6	<4	<1	3	<20	30	20	0.5	20	<8	160	<15	70			BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	24	02/24/89	AQUA	1161	7.20	14					<10						20	<0.01	0.02			
=====																						
TABLE 3																						
=====																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE AND PHENOLS																						
PAGE 8 OF 27																						
MONITOR WELLS																						
=====																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCPX SBIN 020																						
=====																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTHONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES
				UMHOS/CM	SU	C	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	MG/L	MG/L	
D-4	109	10/01/86	AQUA	870																		OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
	309	10/01/86	AQUA				<6	<4	<1	<10	4	30	<0.3	<10	10		<4		9280			< = LESS THAN
	13	02/12/87	AQUA	600		11				<10			53									
	8	05/05/87	AQUA	750	8.18	16				<5			26									METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	8	09/03/87	AQUA	725	8.15	15				<10			<3									BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	4	01/13/88	AQUA	840	7.06	12				<20			<30									
	5	01/13/88	AQUA	830	7.06	12				<20			<30									
	7	02/08/88	AQUA	1390	7.70	12				30			3									
	8	02/08/88	AQUA	1380	7.68	12				<20			<3									TABLE 3
	10	05/18/88	AQUA	850	7.77	14				<30			<5									GROUNDWATER QUALITY ANALYSIS
	10	09/23/88	AQUA	850	7.45	15				<30			<6									METALS, CYANIDE AND PHENOLS
	3	12/08/88	AQUA	1320	8.75	14				<30			<5									PAGE 9 OF 27 MONITOR WELLS
	14	02/23/89	AQUA	945	7.25	13				<30			<5									GROUNDWATER INVESTIGATIONS
																						ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT ALCHPX SBIN 020
																						T A GLEASON ASSOCIATES
																						Environmental and Geotechnical Services



D7MCPM  
23-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCT.	PH	TEMP	SU	C	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
							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	MG/L	MG/L	
D-7	108	10/01/86	AQUA	1110																				
	208	10/01/86	AQUA				<6	4	<1	<1	20	10	11	<0.3	<20	<4	<10				320			
	26	11/06/87	AQUA				<3	4	<1	<1	<10	4	3	<0.3	<8	<4					28	<0.01	0.011	
	9	06/05/87	AQUA	800	8.31	16					<5		9								10	0.031	0.233	
	10	06/05/87	AQUA	800	8.31	16					<5		<3								<10	0.041	0.228	
	17	09/03/87	AQUA	850	7.97	15					<10		<3								<8	<0.005	0.369	
	18	09/03/87	AQUA	850	7.97	15					<10		<3								4	<0.005	0.4	
	14	01/14/88	AQUA	860	6.89	13					<20		<30								10	<0.02	0.16	
	10	02/08/88	AQUA	1080	7.94	13					20		<3								<10	<0.01	0.5	
	20	15/18/88	AQUA	900	7.76	14					<30		<5								<20	<0.01	<0.01	
	29	09/25/88	AQUA	1245	7.10	16					<30		<6								<20	<0.01	0.02	
	16	12/09/88	AQUA	1332		13					<30		<5								<20	<0.01	<0.01	
	17	12/09/88	AQUA	1332		13					<30		<5								<20	<0.01	<0.01	
	21	02/24/89	AQUA	705	7.70	13					<30		<5								<20	<0.01	0.02	

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

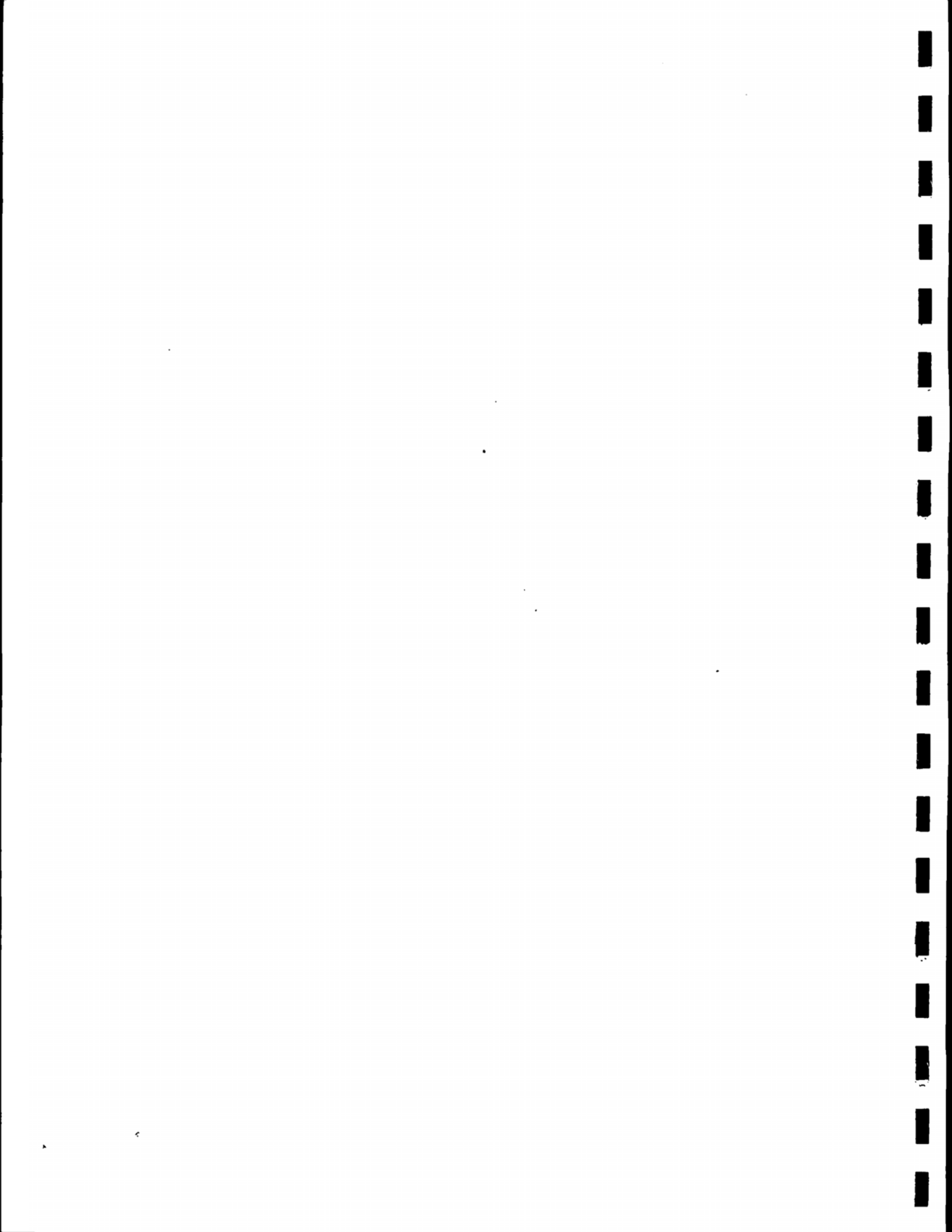
BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 3

GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE  
PAGE 10 OF 27  
MONITOR WELLS  
GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT ALCHPX SBIN 020  
T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	[SPECIFIC CONDUCTANCE]	PH	TEMP C	[ANTIMONY]	[ARSENIC]	[BERYLLIUM]	[CADMIUM]	[CHROMIUM]	[COPPER]	[LEAD]	[MERCURY]	[NICKEL]	[SELENIUM]	[SILVER]	[THALLIUM]	[ZINC]	[CYANIDE]	[PHENOLS]	NOTES:
				[UMHOS/CM]	SU		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	MG/L	MG/L	
S-1	1	11/05/86	AQUA				<3	<4	<1	<1	<10	24	15	<0.3	<10	<12	<4	3	20	<0.010	0.02	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	18	12/17/86	AQUA				<3	<4	<1	<1	<10	44	9	0.3	<10	<8	<10	<6	100	<0.010	<0.010	
	1	06/05/87	AQUA	625	7.15	14					<5		<3						<10	0.042	0.02	
	1	09/03/87	AQUA	625	7.01	15					<10		<3						<8	<0.005	0.126	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	1	01/13/88	AQUA	690	6.80	10					<20		<30						<10	<0.02	<0.010	
	1	02/08/88	AQUA	1840	7.22	10					20		<3						10	<0.01	0.046	
	1	5/18/88	AQUA	1000	7.17	13					<30		<5						<10	<0.01	<0.01	
	1	09/22/88	AQUA	620	7.10	13					<30		<6						<20	<0.01	0.04	
	12	12/09/88	AQUA	1140		12.5					<30		<5						<20	<0.01	<0.01	---TABLE 3
																						GROUNDWATER QUALITY ANALYSIS
	1	02/22/89	AQUA	660	7.45	12					<30		<5						<20	<0.01	<0.01	METALS, CYANIDE AND PHENOLS
	2	02/22/89	AQUA	647	7.50	13					<30		<5						<20	<0.01	<0.01	PAGE 11 OF 27 MONITOR WELLS
																						GROUNDWATER INVESTIGATIONS
																						ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT ALCHPX SBIN 020
																						T A GLEASON ASSOCIATES Environmental and Geotechnical Services

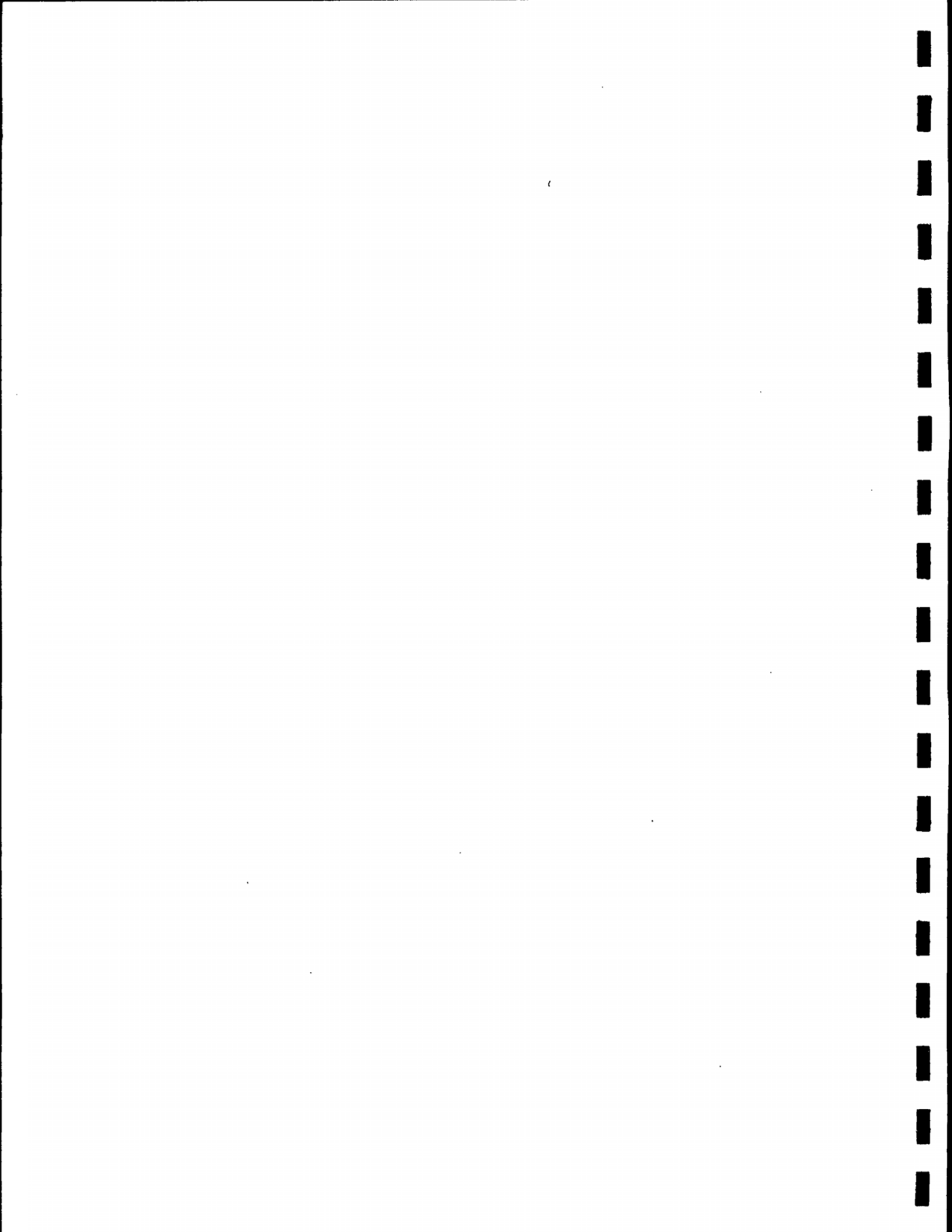


WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
S-4	107	09/28/86	AQUA	1930	6.88																	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
	307	09/28/86	AQUA				<20	44	<2	44	24	200	68	<0.3	44	<40		4	920			
S-4A	22	06/05/87	AQUA	1600	7.48	16																METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	27	09/04/87	AQUA	1700	6.94	15																
	25	01/14/88	AQUA	2000	6.49	13																
	6	02/08/88	AQUA	2500	7.20	13																
	7	15/18/88	AQUA	1700	7.27	14																
	8	15/18/88	AQUA																			
	7	09/22/88	AQUA	1655	6.95	16.5																
	8	09/22/88	AQUA																			
	26	12/10/88	AQUA	2960		14.5																
	43	02/27/89	AQUA	1593	6.85	14																
<p>TABLE 3</p> <p>GROUNDWATER QUALITY ANALYSIS</p> <p>METALS, CYANIDE AND PHENOLS</p> <p>PAGE 12 OF 27</p> <p>MONITOR WELLS</p> <p>GROUNDWATER INVESTIGATIONS</p> <p>ALLIED CORPORATION</p> <p>SOUTH BEND, INDIANA</p> <p>PROJECT ALMCPX SBIN 020</p> <p>T A GLEASON ASSOCIATES</p> <p>Environmental and Geotechnical Services</p>																						





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	SU	ANTHONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	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	MG/L		
S-9	110	10/01/86	AQUA	1775																			OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.	
	130	10/01/86	AQUA		<6	<4	<1	1	<20	130	33	<0.3	<20	<4						930				
	4	11/01/86	AQUA		<3	<4	<1	<1	20											<3	500	<0.010	<0.010	
	20	12/18/86	AQUA		<3	<4	2	2	<10											<24	120	<0.010	<0.010	
	30	12/18/86	CCL		<3	<4	<1	<1	<10											<18	8	<0.010	<0.010	
	7	106/05/87	AQUA	1800	7.68	16			<5											10	0.014	0.049	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER	
	9	09/03/87	AQUA	1725	7.55	15			<10											12	<0.005	<0.010	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED	
	6	01/13/88	AQUA	1750	6.75	12			<20											10	<0.02	<0.010	CCL-COMPUCHEM LABORATORIES	
	9	02/08/88	AQUA	3000	7.35	12			<20											20	<0.01	0.202		
	9	5/18/88	AQUA	1600	7.41	15			<30											28	<0.01	<0.01	TABLE 3 GROUNDWATER QUALITY ANALYSIS	
	9	09/23/88	AQUA	1350	7.15	18.5			<30											<20	<0.01	0.04	METALS, CYANIDE AND PHENOLS	
	4	12/08/88	AQUA	853	8.35	14			<30											<20	<0.01	0.07	PAGE 13 OF 27 MONITOR WELLS	
	13	02/23/89	AQUA	402	7.50	12			<30											<20	<0.01	0.02	GROUNDWATER INVESTIGATIONS ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT ALCHPX SBIN 020	
																							T A GLEASON ASSOCIATES Environmental and Geotechnical Services	



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
S-14	21	11/06/86	AQUA				<3	<4	<1	1	<10	40	16	<0.3	16	<8	<4	<3	370	<0.010	<0.010	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICROM FILTER
	5	06/05/87	AQUA	1400	7.39	15					<5		<3						10	0.048	<0.010	
	7	09/03/87	AQUA	1400	7.28	14					<10		<3						48	<0.005	<0.010	
	23	01/14/88	AQUA	2300	6.77	11					<20		<20						20	<0.02	<0.010	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	5	02/08/88	AQUA	3000	7.41	12					<20		<3						70	<0.01	<0.010	
	5	5/18/88	AQUA	2200	7.36	14					<30		<5						71	<0.01	<0.01	
	5	09/23/88	AQUA	1320	6.95	18.5					<30		<6						20	<0.01	0.10	
	23	12/10/88	AQUA	1530		14					<30		<5						<20	<0.01	0.03	TABLE 3
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE AND PHENOLS																						
PAGE 14 OF 27																						
MONITOR WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCHPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						



S15NCPM  
23-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTHONY	ARSENIC	BERYLLIUM	CADIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				UMHOS/CM	SU	C	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	MG/L	MG/L	
S-15	27	11/06/86	AQUA				<6	<4	<1	<1	16	48	16	<0.3	16	<12	<4	<3	120	<0.010	<0.010	
	23	12/18/86	AQUA				<3	<4	<1	<1	<10	20	<15	<0.3	16	<4	8	<15	48	<0.010	<0.010	
	6	06/05/87	AQUA	1700	7.27	16				<5	<5		<3						10	0.041	0.01	
	5	09/03/87	AQUA	1625	7.18	15				<10	<10		<3						4	<0.005	<0.010	
	6	09/03/87	AQUA	1625	7.18	15				<10	<10		<3						12	<0.005	<0.010	
	24	01/14/88	AQUA	2300	6.42	12				<20	<20		<30						10	<0.02	0.01	
	4	02/08/88	AQUA	2650	7.30	12				<20	<20		<3						10	<0.01	0.034	
	6	5/18/88	AQUA	2300	7.22	14				<30	<30		<5						21	<0.01	0.04	
	6	09/23/88	AQUA	1800	6.85	18.5				<30	<30		<6						<20	<0.01	0.06	
	24	12/10/88	AQUA	3060		14				<30	<30		<5						<20	<0.01	0.08	
<p>GROUNDWATER QUALITY ANALYSIS METALS, CYANIDE AND PHENOLS</p> <p>PAGE 15 OF 27</p> <p>MONITOR WELLS</p> <p>GROUNDWATER INVESTIGATIONS</p> <p>ALLIED CORPORATION</p> <p>SOUTH BEND, INDIANA</p> <p>PROJECT ALDMPX SBIN 020</p> <p>T A GLEASON ASSOCIATES</p> <p>Environmental and Geotechnical Services</p>																						

NOTES:

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

< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 3









WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC														NOTES		
				CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER		THALLIUM	ZINC
		SU	C	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	MG/L	MG/L	
S-17	16	11/06/86	AQUA		<3	<4		<1	<1	<10	12	23	<0.3	20	<24	<4	<3	150	<0.010	0.025
	15	06/05/87	AQUA	1350	7.55	15				<5		<3						<10	0.024	<0.010
	20	09/03/87	AQUA	1275	7.62	15				<10		<3						4	<0.005	0.426
	22	01/14/88	AQUA	1475	6.57	13				<20		<20						10	<0.02	0.01
	33	02/10/88	AQUA	2100	7.25	12				30		<3						<10	0.01	<0.010
	26	15/19/88	AQUA	1400	7.17	13				<30		<5						<20	<0.01	<0.01
	12	09/23/88	AQUA	1120	7.10	17				<30		<6						<20	<0.01	<0.01
	11	12/09/88	AQUA	2350		15				<30		<5						<20	<0.01	<0.01
TABLE 3																				
	17	02/23/89	AQUA	1000	6.95	12				<30		<5						<20	<0.01	0.02
GROUNDWATER QUALITY ANALYSIS																				
METALS, CYANIDE																				
AND PHENOLS																				
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MONITOR WELLS																				
GROUNDWATER INVESTIGATIONS																				
ALLIED CORPORATION																				
SOUTH BEND, INDIANA																				
PROJECT ALCHPX SBIN 020																				
T A GLEASON ASSOCIATES																				
Environmental and																				
Geotechnical Services																				

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

< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES
S-20	30	11/07/86	AQUA				<3	<4	<1	<1	16	16	25	<0.3	<10	<8	<4	<6	64	0.02	<0.010	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	16	06/05/87	AQUA	1200	7.41	13					<5		<3						10	0.026	<0.010	
	10	09/03/87	AQUA	1250	7.33	14					<10		<3						12	<0.005	0.011	
	7	01/13/88	AQUA	1830	6.78	12					<20		<30						10	<0.02	0.07	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	19	02/09/88	AQUA	3100	7.10	12					<20		<3						10	<0.01	1.48	
	19	5/18/88	AQUA	1750	7.17	14					<30		<5						33	<0.01	<0.01	
	23	09/25/88	AQUA	1890	6.50	14					<30		<6						<20	<0.01	0.16	
	24	09/25/88	AQUA								<30		<6						<20	<0.01	0.07	
	5	12/08/88	AQUA	1593	8.75	12.5					<30		<5						<20	<0.01	0.02	TABLE 3
	9	02/22/89	AQUA	1539	7.15	11					<30		<10						<20	<0.01	<0.01	GROUNDWATER QUALITY ANALYSIS METALS, CYANIDE AND PHENOLS PAGE 18 OF 27 MONITOR WELLS
																						GROUNDWATER INVESTIGATIONS ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT ALCHPX S81N 020 T A GLEASON ASSOCIATES Environmental and Geotechnical Services



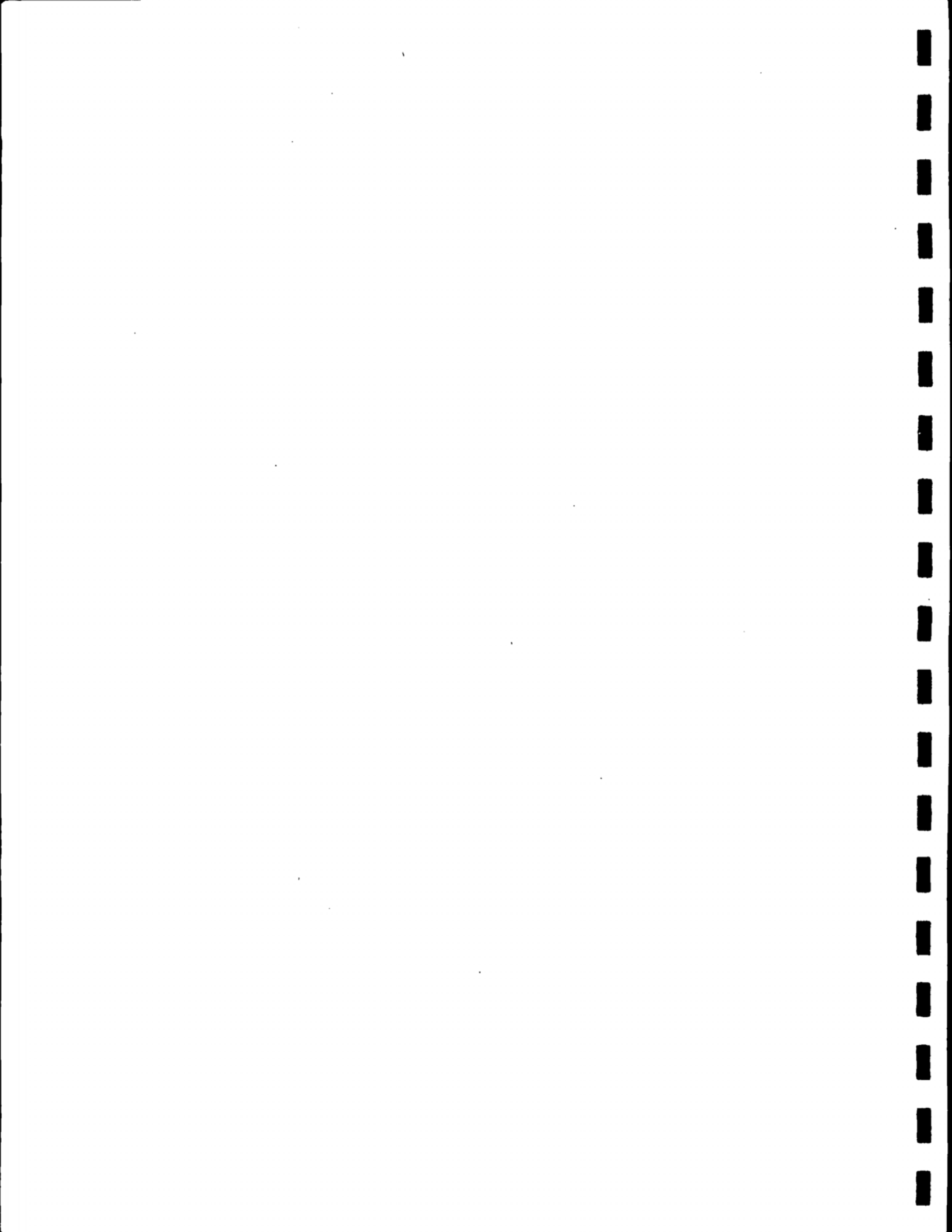
S22NCPHW  
24-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	AMMONIUM	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				UMHOS/CM	SU	C	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	MG/L	MG/L
S-22	18	11/06/86	AQUA				<3	<4	<1	<1	12	<4	12	<0.3	<10	<40	4	<3	28	<0.01	<0.010	
	20	06/05/87	AQUA	1000	7.64	13				<5			<3						10	0.063	0.018	
	12	09/05/87	AQUA	1050	7.51	14				<10			<3						8	<0.005	0.133	
	8	01/14/88	AQUA	1180	6.79	9				<20			<30						10	<0.02	0.03	
	23	02/09/88	AQUA	2000	6.49	12				<20			<3						<10	<0.01	0.024	
	15	05/18/88	AQUA	1300	6.68	11				<30			<5						<20	<0.01	0.03	
	16	05/18/88	AQUA							<30			<5						<20	<0.01	<0.01	
	22	09/25/88	AQUA	1460	6.75	13				<30			<6						<20	<0.01	0.11	
	6	12/08/88	AQUA	1688	8.40	12.5				<30			<5						<20	<0.01	<0.01	
TABLE 3																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE																						
AND PHENOLS																						
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MONITOR WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCMPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS
				UMHRS/CM	SU	C	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	MG/L	MG/L
S-23	19	11/06/86	AQUA				<3	<4	<1	1	12	8	34	<0.3	<10	<16	4	<3	120	<0.01	<0.010
	21	06/05/87	AQUA	1000	7.59	13					<5		<3						10	0.032	0.242
	13	09/03/87	AQUA	1000	7.27	14					<10		<3						8	0.009	0.64
	9	01/13/88	AQUA	1175	6.89	11					<20		<30						10	<0.02	<0.010
	24	02/09/88	AQUA	2050	7.31	12					<20		<3						<10	0.01	0.108
	17	5/18/88	AQUA	1060	7.22	12					<30		<5						<20	<0.01	<0.01
	17	09/24/88	AQUA	620	6.95	14					<30		<6						<20	<0.01	0.05
	7	12/08/88	AQUA	1832		14					<30		<5						<20	<0.01	0.02
TABLE 3																					
																			20	<0.01	<0.01
GROUNDWATER QUALITY ANALYSIS																					
METALS, CYANIDE																					
AND PHENOLS																					
PAGE 21 OF 27																					
MONITOR WELLS																					
GROUNDWATER INVESTIGATIONS																					
ALLIED CORPORATION																					
SOUTH BEND, INDIANA																					
PROJECT ALOMPX SBIN 020																					
T A GLEASON ASSOCIATES																					
Environmental and																					
Geotechnical Services																					

NOTES:

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< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENDS MG/L
S-24	25	09/04/87	AQUA	1350	6.96	14					<10		25						88	<0.005	0.017
	28	05/19/88	AQUA	1600	7.32	11					<30		<5						<20	<0.01	0.02
	26	09/25/88	AQUA	1920	6.60	13					<30		<6						<20	<0.01	<0.01
	1	12/08/88	AQUA	1464	7.4	13.5					<30		<5						20	<0.01	<0.01
	33	02/22/89	AQUA	1102	7.75	12					<30		<5						<20	<0.01	0.02

NOTES:

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< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 3

GROUNDWATER QUALITY ANALYSIS METALS, CYANIDE AND PHENDS  
PAGE 22 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT ALMCPX SBIN 020

T A GLEASON ASSOCIATES

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WELL NO.	SAMPLE #	DATE	LAB	(SPECIFIC) CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				UMHOS/CM	SU	C	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	MG/L	MG/L	
S-25	11	09/03/87	AQUA	1100	7.17	16																
	32	01/15/88	AQUA	1660	6.87	13																
	20	02/09/88	AQUA	2600	7.15	11																
	18	05/18/88	AQUA	1440	7.08	14																
	25	09/25/88	AQUA	1430	6.70	17																
	8	02/22/89	AQUA	1620	7.10	13																
	32	02/25/89	AQUA	1319	6.95	13																
<p>NOTES:</p> <p>OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.</p> <p>&lt; = LESS THAN</p> <p>METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER</p> <p>BLANK SPACE INDICATES ANALYSIS NOT PERFORMED</p> <p>TABLE 3</p> <p>GROUNDWATER QUALITY ANALYSIS</p> <p>METALS, CYANIDE AND PHENOLS</p> <p>PAGE 23 OF 27</p> <p>MONITOR WELLS</p> <p>GROUNDWATER INVESTIGATIONS</p> <p>ALLIED CORPORATION</p> <p>SOUTH BEND, INDIANA</p> <p>PROJECT ALCHPX SBIN 020</p> <p>T A GLEASON ASSOCIATES</p> <p>Environmental and Geotechnical Services</p>																						



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	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	MG/L	MG/L	
S-26	16	09/03/87	AQUA	1100	7.22	16					<10		<3						4	<0.005	<0.010		METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	31	01/15/88	AQUA	2200	7.03	14				<20			<30						10	<0.02	0.13		
	18	02/09/88	AQUA	3100	6.80	12				<20			<3						20	<0.01	0.106		
	29	05/19/88	AQUA	1900	6.92	14				<30			<5						2600	<0.01	0.02		BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	21	09/24/88	AQUA	1025	6.90	17				<30			<6						<20	<0.01	0.07		
	25	12/10/88	AQUA	1980		14				<30			<5						<20	<0.01	0.05		
	18	02/23/89	AQUA	1370	6.90	13				<30			<5						20	<0.01	0.04		
TABLE 3																							
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T A GLEASON ASSOCIATES																							
Environmental and Geotechnical Services																							



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC		PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
				CONDUCTANCE	UMHOS/CM																		
S-27	26	09/04/87	AQUA	1350	6.97	14																	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
	33	01/15/88	AQUA	1530	6.98	11																	< = LESS THAN
	32	02/10/88	AQUA	2600	7.20	12																	
	27	05/19/88	AQUA	1450	7.26	12																	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	27	09/25/88	AQUA	1855	6.70	13																	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	2	12/08/88	AQUA	2386	7.5	13.5																	
	12	02/23/89	AQUA	1449	7.15	11																	TABLE 3
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Environmental and Geotechnical Services																							





WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	SU	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	MICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				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	MG/L
BLANK	28	11/06/86	AQUA					<3	<4	<1	<1	<10	88	<3	<0.3	12	<4	<4	<3	4	<0.01	0.023	
	25	12/18/86	AQUA					<3	<4	<1	<1	<10	4	4	<0.3	<10	<4	<4	<3	6	0.035	<0.010	
	24	12/18/86	AQUA					<3	<4	<1	5	<10	4	<3	0.3	4	<4	<4	<5	4	<0.010		
	12	01/08/87	AQUA					<1	<4	<0.4	<1	<10	<4	<3	<0.3	<10	4	<4	<1	<4			
	23	02/12/87	AQUA									<10		<3						8			
		02/12/87	AQUA									<10		<3						4			
	23	06/05/87	AQUA									<5		<3						<10	0.029	<0.010	
	36	09/04/87	AQUA									<10		<3						4	<0.005	<0.010	
	10	01/13/88	AQUA									20		<30						10	<0.02	<0.010	
	35	01/15/88	AQUA									<20		<30						<10	<0.02	<0.010	
	34	02/10/88	AQUA									<20		<3						<10	<0.01	<0.010	
	35	02/10/88	AQUA									<20		<3						<10	<0.01	<0.010	
	21	05/19/88	AQUA	40	6.59	22						<30		<5						<20	<0.01	0.09	
	36	05/19/88	AQUA									<30		<5						<20	<0.01	0.01	
	28	09/25/88	AQUA	32	7.00							<30		<6						<20	<0.01	0.01	

NOTES:

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

< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 3

GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
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T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES
				UMHRS/CH	SU	C	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	MG/L	MG/L	
BLANK	30	12/10/88	AQUA	58	7.00						<30		<5						<20	<0.01	<0.01	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	35	12/11/88	AQUA	65		9					<30		<5						<20	<0.01	0.01	
	3	02/22/89	AQUA	38	7.05	10					<30		<5						<20	<0.01	<0.01	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	11	02/23/89	AQUA	29	7.25	19					<30		<5						<20	<0.01	<0.01	
	36	02/26/89	AQUA	57	7.15	15					<30		<5						<20	<0.01	<0.01	
TABLE 3																						
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T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC													NOTES:					
				CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM		SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS
				UMHRS/CM	SU	C	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	MG/L	MG/L		
E-3	7	03/25/87	AQUA																			
	19	01/14/88	AQUA																			
	29	02/10/88	AQUA	2600	7.10	16																
	34	05/19/88	AQUA	1420	7.16	16																
	32	09/25/88	AQUA	3010	6.95	18																
	21	12/09/88	AQUA	3140		14																
	28	02/24/89	AQUA	1518	7.30	13																
TABLE 4																						
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Geotechnical Services																						

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
< = LESS THAN

METAL SAMPLES COLLECTED SINCE 1/14/88 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 4

GROUNDWATER QUALITY ANALYSIS  
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NAPHTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS

ALLIED CORPORATION

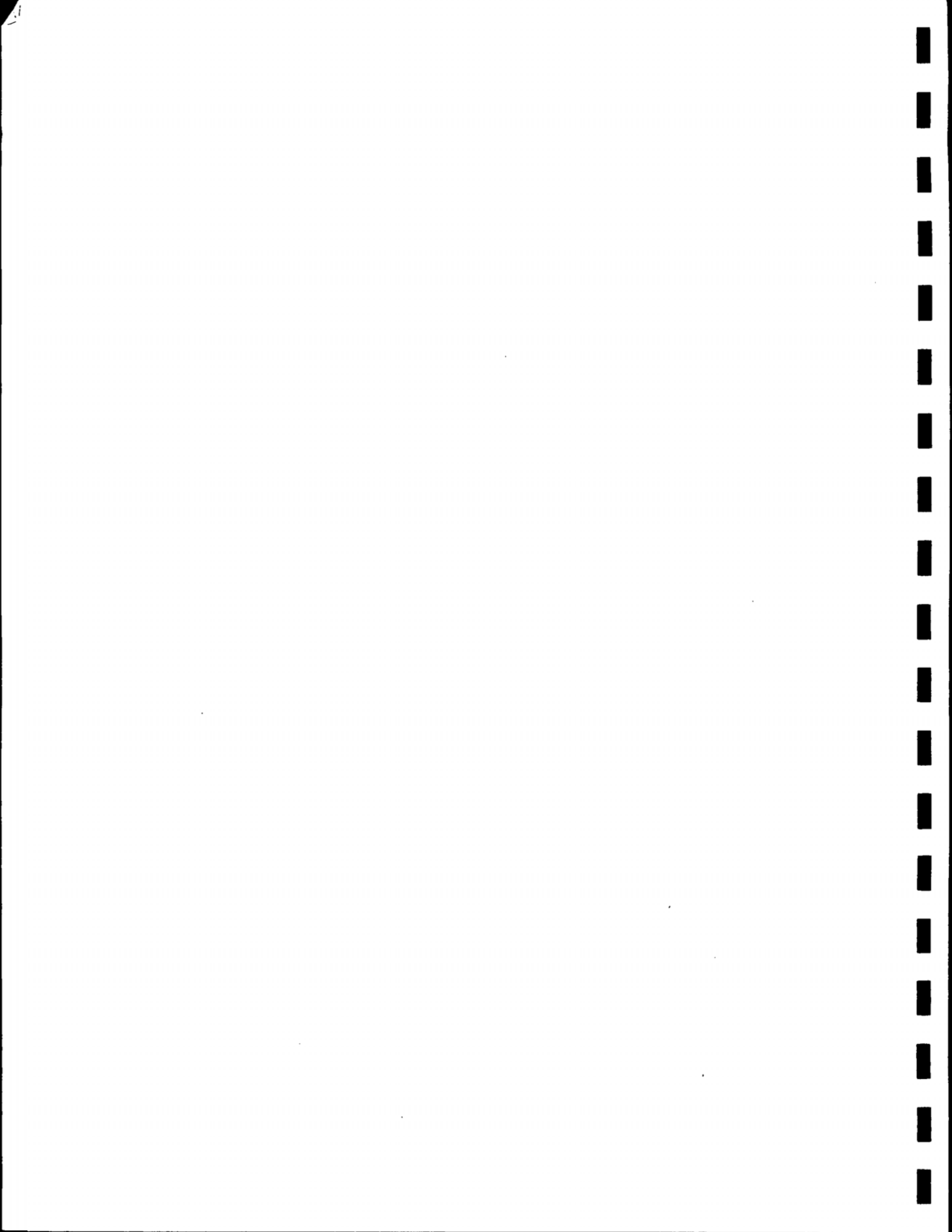
SOUTH BEND, INDIANA

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WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	SU	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	NOTES	
RMB-6	10	03/25/87	AQUA																					OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
	11	03/25/87	AQUA																					< = LESS THAN
	16	01/14/88	AQUA																					METAL SAMPLES COLLECTED SINCE 1/14/88 WERE FILTERED IN THE FIELD THROUGH .45 MICROM FILTER
	26	02/10/88	AQUA	2400	7.50	13																		BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	31	05/19/88	AQUA	1380	7.55	14																		
	31	09/25/88	AQUA	2500	6.80	16.5																		
	19	12/09/88	AQUA	2620		15																		
	26	02/24/89	AQUA	1456	7.35	14																		TABLE 4
																								GROUNDWATER QUALITY ANALYSIS METALS, CYANIDE AND PHENOLS
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																								GROUNDWATER INVESTIGATIONS ALLIED CORPORATION
																								SOUTH BEND, INDIANA PROJECT ALCHPX S81N 020
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																								Environmental and Geotechnical Services









SPECIFIC

WELL NO.	SAMPLE #	DATE	LAB	CONDUCTANCE	PH	TEMP	SU	C	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS
				UMHOS/CM					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	MG/L	MG/L
RMB-21	12	03/25/87	AQUA										<20		<3						10	0.05	0.015
	15	01/14/88	AQUA										<20		<30						10	<0.02	0.01
	25	02/10/88	AQUA	1825	7.40	12							<20		<3						<10	<0.01	<0.010
	30	05/19/88	AQUA	1300	7.43	13							<30		<5						22	<0.01	<0.01
	18	12/09/88	AQUA	8300		15							<30		<5						<20	<0.01	<0.01
	25	02/24/89	AQUA	1079	7.30	14							<30		<5						<20	<0.01	0.02

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
 < = LESS THAN  
 METAL SAMPLES COLLECTED SINCE 1/14/88 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER  
 BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

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 T A GLEASON ASSOCIATES  
 Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				[UMHRS/CH]	SU	C	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	MG/L	MG/L	MG/L
RWB-22	9	03/25/87	AQUA								<20								10	0.07	0.012	
	17	01/14/88	AQUA								20		<30						10	<0.02	<0.010	
	18	01/14/88	AQUA								20		<30						10	<0.02	<0.010	
	27	02/10/88	AQUA	2500	7.20	15					50		<3						<10	<0.01	<0.010	
	28	02/10/88	AQUA	2500	7.20	15					30		<3						<10	<0.01	<0.010	
	32	05/19/88	AQUA	1300	7.27	15					<30		<5						<20	<0.01	<0.01	
	33	05/19/88	AQUA	1300	7.24	15					<30		<5						<20	<0.01	<0.01	
	30	09/25/88	AQUA	1725	6.70	15					<30		<6						<20	<0.01	0.11	
	20	12/09/88	AQUA	2680		15					<30		<5						<20	<0.01	<0.01	
TABLE 4																						
GROUNDWATER QUALITY ANALYSIS																						
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Environmental and Geotechnical Services																						

NOTES:

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

< = LESS THAN

METAL SAMPLES COLLECTED SINCE 1/14/88 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED









WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS										
				1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	1,2-DI-CHLORO-PROPANE	1,1,2-TRI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	VINYL CHLORIDE	FORM	ETHYLENE	ETHERE	VOC	CIS-1,2-DICHLORO-ETHANE	OTHER						
2-D	12/18/86	2	AQUA	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	106/05/87	11	AQUA	ND	25.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	109/03/87	19	AQUA	ND	24.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	101/15/88	34	AQUA	ND	34.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	102/09/88	11	AQUA	ND	25.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	105/19/88	24	AQUA	ND	34.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	109/24/88	20	AQUA	ND	26.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	112/10/88	27	AQUA	ND	22.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	112/10/88	28	AQUA	ND	21.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
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MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 020

T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)												OTHER ORGANIC COMPOUNDS			
				1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	1,1,1,1-TETRA-CHLORO-ETHANE	1,1,2-DI-CHLORO-ETHANE	1,1,2-DI-CHLORO-ETHYLENE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHYLENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	CIS-1,2-DICHLORO-ETHANE	OTHER VOC		
5-D	12/18/86	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0	
	12/18/86	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.0	
	02/11/87	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	06/05/87	19	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/03/87	15	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/14/88	12	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	02/09/88	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7**	ND		
	03/14/88	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1		
	05/18/88	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.4		
	09/23/88	15	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/08/88	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/25/89	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.4	ND	

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
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GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCPX SBIN 020

T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.  
\*\*NOTE: TOLUENE WAS NOT DETECTED IN 6 PREVIOUS SAMPLINGS. A RESAMPLING ON 3/14/88 DETECTED NO TOLUENE. BASED ON PREVIOUS DATA & THE RETEST, WE CONCLUDED THAT THE 2/9/88 SAMPLING DATA IS AN ANOMOLY.

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.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
				1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE	1,1-DI- [CHLORO-] ETHANE
7-D	10/7/87	3	AQUA	ND	ND	17.0	ND	19.0	ND	ND	ND	ND	ND	ND	250.0			
	10/7/87	4	AQUA	ND	ND	16.0	ND	17.0	ND	ND	ND	ND	ND	ND	250.0			
	09/04/87	29	AQUA	ND	ND	ND	ND	20.0	14.0	ND	ND	ND	ND	ND	220.0			
	01/15/88	30	AQUA	ND	ND	10.0	ND	17.0	ND	ND	ND	ND	ND	ND	142.0			
	02/09/88	15	AQUA	ND	ND	20.0	ND	14.0	ND	ND	ND	ND	ND	ND	148.0			
	05/19/88	22	AQUA	ND	ND	ND	ND	16.6	ND	ND	ND	ND	ND	ND	210.0			
	09/24/88	18	AQUA	ND	ND	7.6	ND	9.2	ND	ND	ND	ND	ND	ND	52.0			
	12/10/88	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
TABLE 5																		
	02/25/89	34	AQUA	ND	ND	7.0	ND	ND	12.6	ND	ND	ND	ND	ND	106.0			

NOTES:  
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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS										
				1,1-DI- CHLORO- ETHANE	1,1,2-DI- CHLORO- ETHANE	1,1,1,2-TETRA- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,1,2-TRI- CHLORO- ETHANE	1,2,3-TRI- CHLORO- ETHANE	VINYL CHLORIDE	FORM CHLORIDE	TOLUENE	ETHYLENE DIBROMIDE	CIS-1,2- DIBROMO- ETHANE	OTHER VOC									
8-0	07/10/87	5	AQUA	ND	ND	27.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	720.0							
	09/04/87	30	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	900.0							
	01/15/88	28	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	840.0							
	01/15/88	29	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	855.0							
	02/09/88	13	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	770.0							
	02/09/88	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	630.0							
	05/19/88	23	AQUA	ND	ND	24.0	ND	ND	ND	67.9	ND	ND	ND	ND	ND	1600.0								
	09/24/88	19	AQUA	ND	ND	32.0	20.0	ND	ND	ND	ND	ND	ND	ND	ND	420.0								
	12/10/88	32	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS										
				1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	TRI-ETHYLENE	DI-ETHYLENE	TRI-ETHYLENE	1,1,1-TRI-ETHYLENE	1,1-DI-ETHYLENE	1,2-DI-ETHYLENE	ETHYLENE	PROPANE	VINYL CHLORIDE	FORM	CHLORO-ETHYLENE	TOLUENE	ETHERE	CIS-1,2-DICHLORO-ETHYLENE	OTHER VOC					
9-33	01/08/87	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	06/05/87	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/03/87	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/13/88	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/10/88	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	05/18/88	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/22/88	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/09/88	15	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
TABLE 5																									
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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)													OTHER ORGANIC COMPOUNDS		
				[TRANS-1,2]1,1,1-													[CIS-1,2-	[DICHLORO-	[OTHER
				[1,1-DI-1,2-DI-	[CHLORO-	[ETHYLENE	[ETHANE	[ETHYLENE	[ETHANE	[ETHYLENE	[PROPANE	[CHLORIDE	[FORM	[TOLUENE	[ETHYLENE	[VOC			
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		
86-10	08/02/86	7	AQUA	ND	ND	85.4	ND	308.0	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	10/10/86	18	AQUA	5.7	ND	130.0	99.7	440.0	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/24/89	22	AQUA	ND	ND	41.0	ND	340.0	ND	19.8	ND	100.0	ND	ND	ND	ND	ND		

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS																									
				1,1-DI- [CHLORO- ETHANE]	1,2-DI- [CHLORO- ETHANE]	1,1,1- [TRI- ETHYLENE]	1,1,2- [DI- ETHYLENE]	1,1,2- [TRI- ETHYLENE]	CHLORO- [PROPANE]	VINYL [CHLORIDE]	FORM [TOLUENE]	ETHENE [ETHYLENE]	OTHER [ETHYLENE]	VOC	CIS-1,2- [DICHORO- ETHENE]	OTHER [VOC]	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L																	
86-15	08/02/86	4	AQUA	ND	ND	ND	48.1	64.9	1620.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	10/10/86	13	AQUA	ND	ND	ND	33.7	38.0	1280.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	02/24/89	24	AQUA	ND	ND	ND	9.2	9.1	400.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS				
				VOLATILE ORGANIC COMPOUNDS (VOC)														
				1,1-DI- [CHLORO- ETHANE]	1,2-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1,1- [TRI- ETHYLENE]	1,1,2-DI- [CHLORO- PROPANE]	1,2-DI- [CHLORO- PROPANE]	VINYL [CHLORO- FORM]	TOLUENE	ETHYLENE	CIS-1,2- [DICHORO- ETHENE]	OTHER VOC				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
D-4	10/01/86	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/12/87	13	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	06/05/87	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/03/87	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/13/88	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/13/88	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/08/88	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/08/88	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	05/18/88	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/22/88	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/08/88	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/23/89	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140.0				

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS					
				VOLATILE ORGANIC COMPOUNDS (VOC)															
				1,1-DI-1,2-DI-1,1-DI- CHLORO-CHLORO-CHLORO- ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	ETHYLENE ETHANE	
D-7	10/01/86	10	AQUA	ND	689.0	ND	20.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/06/86	26	AQUA	ND	437.0	ND	15.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/07/87	9	AQUA	ND	902.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/12/87	14	AQUA	ND	812.0	ND	30.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/05/87	9	AQUA	ND	890.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/05/87	10	AQUA	ND	900.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/03/87	17	AQUA	ND	800.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/03/87	18	AQUA	ND	750.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/14/88	14	AQUA	ND	710.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/08/88	10	AQUA	ND	680.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/18/88	20	AQUA	ND	1165.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/88	29	AQUA	ND	780.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/29/88	16	AQUA	ND	483.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/29/88	17	AQUA	ND	435.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/24/89	21	AQUA	ND	380.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS												OTHER ORGANIC COMPOUNDS	NOTES:
				VOLATILE ORGANIC COMPOUNDS (VOC)													
S-4A	06/05/87	22	AQUA	1100.0	ND	200.0	110.0	200.0	120.0	ND	ND	ND	820.0			<p>OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.</p> <p>ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.</p> <p>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>	
	09/04/87	27	AQUA	1100.0	ND	80.0	170.0	ND	17.0	ND	790.0	ND	2000.0				
	01/14/88	25	AQUA	1600.0	ND	180.0	112.0	ND	ND	700.0	ND	ND	1800.0				
	02/08/88	2	AQUA	1500.0	ND	165.0	160.0	ND	ND	900.0	ND	ND	1770.0				
	05/18/88	7	AQUA	1700.0	ND	165.0	ND	ND	ND	437.0	ND	ND	2800.0				
	05/18/88	8	AQUA	1640.0	ND	200.0	ND	ND	ND	373.0	ND	ND	2750.0				
	09/22/88	7	AQUA	1810.0	7.0	292.0	154.0	11.0	40.0	ND	1570.0	ND	940.0				
	09/22/88	8	AQUA	1820.0	7.3	281.0	155.0	10.0	39.0	ND	1620.0	ND	920.0				
	12/10/88	26	AQUA	970.0	ND	114.0	135.0	ND	23.7	ND	633.0	ND	1600.0				
	02/27/89	43	AQUA	700.0	ND	110.0	150.0	8.7	17.2	ND	270.0	ND	1400.0	ND			

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24-Mar-89

WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS												OTHER ORGANIC COMPOUNDS			
				VOLATILE ORGANIC COMPOUNDS (VOC)															
				1,1-DI- [CHLORO- ETHANE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	1,1-DI- [ETHYLENE]	
S-9	10/01/86	12	AQUA	ND	81.3	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/05/86	4	AQUA	ND	29.0	ND	2.3	ND	ND	ND	ND	ND	ND	ND	ND	6.6	ND	ND	
	12/18/86	20	AQUA	ND	210.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.0	ND	ND	
	12/18/86	30	AQUA	ND	43.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	02/12/87	12	AQUA	ND	313.0	ND	23.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	06/05/87	7	AQUA	ND	460.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.0	ND	ND	
	09/03/87	9	AQUA	ND	170.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0	ND	ND	
	01/13/88	6	AQUA	ND	810.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43.0	ND	ND	
	02/08/88	9	AQUA	ND	440.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	05/18/88	9	AQUA	ND	440.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.6	ND	ND	
	09/23/88	9	AQUA	ND	240.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/08/88	4	AQUA	ND	12.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/23/89	13	AQUA	ND	9.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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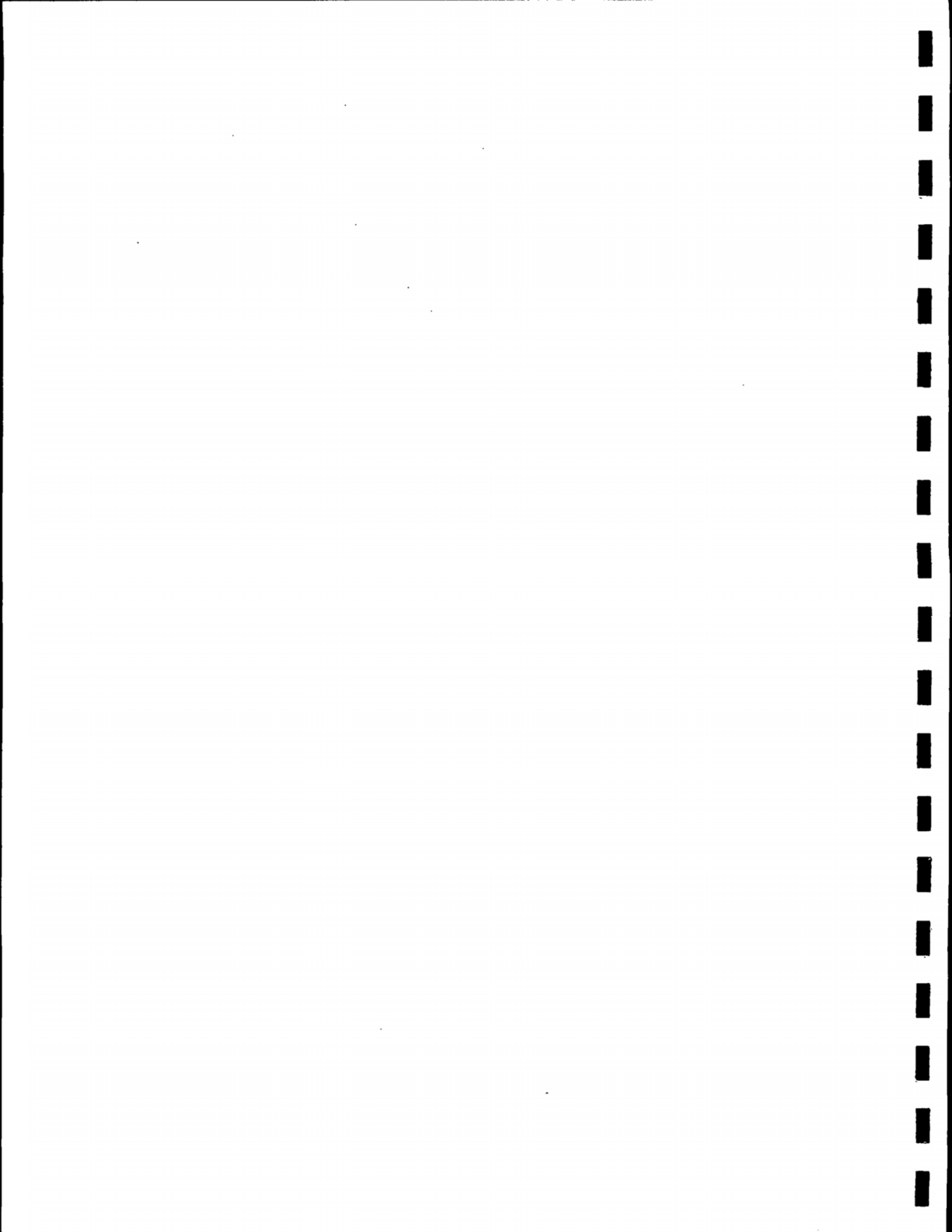
WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS												OTHER ORGANIC COMPOUNDS			NOTES:
				VOLATILE ORGANIC COMPOUNDS (VOC)												CIS-1,2-DICHLORO-ETHENE	TOLUENE	OTHER VOC	
				1,1-DI-1,1-DI-CHLORO-ETHANE	1,1-DI-1,2-DI-CHLORO-ETHANE	1,1,1,2-TETRACHLORO-ETHANE	1,1-DI-1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-2,2,2-TRICHLORO-ETHANE	1,1,1-TRICHLORO-ETHANE	1,1,2-TRICHLORO-ETHANE	1,2-DICHLORO-ETHANE	1,1-DICHLORO-ETHANE	1,2-DICHLORO-ETHANE	1,1,2,2-TETRACHLORO-ETHANE				1,1-DICHLORO-ETHANE
S-14	11/06/86	21	AQUA	ND	120.0	ND	42.2	ND	3.6	ND	ND	ND	ND	ND	ND	ND	ND		
	02/12/87	15	AQUA	77.0	217.0	20.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	06/05/87	5	AQUA	58.0	180.0	ND	12.0	ND	8.5	ND	ND	ND	ND	ND	ND	150.0			
	09/03/87	7	AQUA	ND	140.0	ND	ND	ND	8.0	ND	ND	ND	ND	ND	ND	120.0			
	01/14/88	23	AQUA	113.0	108.0	15.0	ND	21.0	14.0	ND	55.0	ND	ND	ND	240.0				
	02/08/88	5	AQUA	120.0	115.0	ND	16.0	15.0	11.0	ND	ND	ND	ND	ND	250.0				
	05/18/88	5	AQUA	135.0	59.3	8.9	12.3	12.7	10.1	ND	ND	ND	ND	ND	396.0				
	09/23/88	5	AQUA	62.0	55.0	9.3	10.9	ND	ND	ND	ND	ND	ND	ND	98.0				
	12/10/88	23	AQUA	30.5	43.1	ND	6.6	6.5	11.5	ND	ND	ND	ND	ND	91.0				

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MONITOR WELLS  
GROUNDWATER INVESTIGATIONS  
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PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	VOLATILE ORGANIC COMPOUNDS (VOC)												OTHER ORGANIC COMPOUNDS	NOTES:													
				1,1-DI- [CHLORO- [ETHANE]	1,1-DI- [CHLORO- [ETHANE]	1,2-DI- [CHLORO- [ETHANE]	1,2-DI- [CHLORO- [ETHANE]	1,1,1-TRI- [CHLORO- [ETHANE]	1,1,1-TRI- [CHLORO- [ETHANE]	1,1,2-TRI- [CHLORO- [ETHANE]	1,1,2-TRI- [CHLORO- [ETHANE]	1,2,3-TRI- [CHLORO- [ETHANE]	1,2,4-TRI- [CHLORO- [ETHANE]	1,2,4-TRI- [CHLORO- [ETHANE]	1,2,4-TRI- [CHLORO- [ETHANE]			1,2,4-TRI- [CHLORO- [ETHANE]	1,2,4-TRI- [CHLORO- [ETHANE]											
S-15	11/06/86	27	AQUA	ND	ND	1.2	ND	ND	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.5	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.	
	12/18/86	22	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.	
	06/05/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	VOC RESULTS ARE A SUMMARY OF A GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.	
	09/03/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	76.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	06/03/87	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/14/88	24	AQUA	22.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/08/88	4	AQUA	19.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	05/18/88	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/23/88	6	AQUA	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	TABLE 5	
	12/10/88	24	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	121.0		
																													GROUNDWATER QUALITY ANALYSIS ORGANIC COMPOUNDS	
																													PAGE 15 OF 27	
																													MONITOR WELLS	
	02/23/89	15	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	GROUNDWATER INVESTIGATIONS	
																													ALLIED-SIGNAL CORPORATION	
																													SOUTH BEND, INDIANA	
																													PROJECT # ALCMPX SBIN 020	
																													T A GLEASON ASSOCIATES	
																													Environmental and Geotechnical Services	



WELL NO.	DATE	SAMPLE #	PRIORITY POLLUTANTS													OTHER ORGANIC COMPOUNDS	NOTES
			VOLATILE ORGANIC COMPOUNDS (VOC)														
			1,1-DI-1,2-DI-1,1-DI-1,1-DI-1,1-DI-	DI-	TRI-	TRI-	1,2-DI-	CHLORO-	CHLORO-	CHLORO-	VINYL	CHLORO-	CHLORO-	CIS-1,2-	BIS		
			ETHANE	ETHYLENE	ETHANE	ETHYLENE	PROPANE	CHLORIDE	FORM	TOLUENE	ETHENE	PHTHALATE	VOC				
			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		
			LAB														
S-16	11/16/86	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1		
				ND	ND	ND	70.1	ND	ND	ND	ND	ND	ND	ND			
	12/18/86	19	AQUA	ND	ND	22.5	70.1	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	63.8	ND	ND	ND	ND	ND	ND	ND			
	12/18/86	29	AQUA	ND	ND	21.5	63.8	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	4.4	23.3	95.0	ND	ND	ND	ND	ND	ND			
	02/12/87	11	AQUA	ND	ND	4.4	23.3	95.0	ND	ND	ND	ND	ND	ND			
				ND	ND	5.6	18.0	57.0	ND	ND	ND	ND	ND	5.6			
	06/05/87	12	AQUA	ND	ND	5.6	18.0	57.0	ND	ND	ND	ND	ND	5.6			
				ND	ND	ND	ND	65.0	ND	ND	ND	ND	ND	ND			
	09/04/87	28	AQUA	ND	ND	ND	ND	65.0	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	15.0	58.0	ND	ND	ND	ND	ND	ND			
	10/15/88	27	AQUA	ND	ND	ND	15.0	58.0	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	13.5	53.0	ND	ND	ND	ND	ND	ND			
	02/09/88	12	AQUA	ND	ND	ND	13.5	53.0	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	10.9	52.0	ND	ND	ND	ND	ND	6.8			
	05/19/88	25	AQUA	ND	ND	ND	10.9	52.0	ND	ND	ND	ND	ND	6.8			
				ND	ND	ND	20.0	76.0	ND	ND	ND	ND	ND	ND			
	09/23/88	14	AQUA	ND	ND	ND	20.0	76.0	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	18.7	62.1	ND	ND	ND	ND	ND	6.2			
	12/10/88	29	AQUA	ND	ND	ND	18.7	62.1	ND	ND	ND	ND	ND	6.2			
				ND	ND	ND	15.7	60.4	ND	ND	ND	ND	ND	6.1			
	02/24/89	20	AQUA	ND	ND	ND	15.7	60.4	ND	ND	ND	ND	ND	6.1			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			

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GROUNDWATER INVESTIGATIONS  
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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS					
				VOLATILE ORGANIC COMPOUNDS (VOC)															
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	1,1-DI- CHLORO- ETHYLENE	
S-17	11/16/86	16	AQUA	4.3	ND	1.5	ND	ND	12.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/07/87	4	AQUA	ND	ND	ND	ND	ND	94.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/12/87	3	AQUA	ND	ND	ND	7.9	ND	116.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/05/87	15	AQUA	ND	ND	ND	ND	ND	80.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6
	09/03/87	20	AQUA	ND	ND	ND	ND	ND	86.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/14/88	22	AQUA	ND	ND	ND	ND	ND	68.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8
	02/10/88	33	AQUA	ND	ND	ND	ND	ND	75.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.8
	05/19/88	26	AQUA	ND	ND	ND	ND	ND	60.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/23/88	12	AQUA	ND	ND	ND	ND	ND	78.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/23/89	17	AQUA	ND	ND	ND	ND	ND	75.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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NOTES:  
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ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS														NOTES:
				VOLATILE ORGANIC COMPOUNDS (VOC)							OTHER ORGANIC COMPOUNDS							
				1,1-DI- [CHLORO- ETHANE]	1,2-DI- [CHLORO- ETHANE]	1,1,1- [TRI- ETHYLENE]	1,1,2-DI- [TRI- CHLORO- ETHANE]	1,2-DI- [CHLORO- PROPANE]	1,2-DI- [VINYL CHLORO- FORM]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]	1,2-DI- [CHLORO- ETHYLENE]		
				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		
S-22	11/06/86	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/07/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.0		
	01/07/87	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.0		
	02/12/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/12/87	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	06/05/87	20	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.0		
	09/03/87	12	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	57.0		
	01/13/88	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.5		
	02/09/88	23	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	48.0		
	05/18/88	15	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	77.5		
	05/18/88	16	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	82.0		
	09/25/88	22	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21.0		
	02/22/89	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	43.1		
	02/22/89	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35.7		

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ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS		NOTES					
				VOLATILE ORGANIC COMPOUNDS (VOC)																	
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE			
S-23	11/06/86	19	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4		
	01/07/87	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	02/11/87	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	06/05/87	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	09/03/87	13	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	01/13/88	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	02/09/88	24	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	05/18/88	17	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4		
	09/24/88	17	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	12/08/88	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	02/22/89	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			

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WELL NO.		DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS														OTHER ORGANIC COMPOUNDS				NOTES:
					VOLATILE ORGANIC COMPOUNDS (VOC)																		
1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1,1-TRI-CHLORO-ETHANE	1,1,2-TRI-CHLORO-ETHANE	1,1,2,2-TETRA-CHLORO-ETHANE	1,2,3-TRI-CHLORO-PROPANE	1,1,1-TRICHLORO-ETHANE	1,1,2,2-TETRACHLORO-ETHANE	1,1,2,2-TETRACHLORO-ETHANE	1,1,1,2-TETRACHLORO-ETHANE	1,1,1,2,2-PENTACHLORO-ETHANE	1,1,1,2,2-PENTACHLORO-ETHANE	1,1,2,2,3-PENTACHLORO-ETHANE	1,1,1,2,2-PENTACHLORO-ETHANE	CIS-1,2-DICHLORO-ETHENE	TRANS-1,2-DICHLORO-ETHENE	OTHER VOC				
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					
S-24		07/10/87	2	AQUA	ND	ND	ND	ND	ND	145.0	ND	150.0	ND	ND	ND	ND	ND	170.0					
		09/04/87	25	AQUA	ND	ND	ND	ND	ND	140.0	ND	170.0	ND	ND	ND	ND	ND	150.0					
		05/19/88	28	AQUA	ND	ND	ND	ND	ND	250.0	ND	105.0	ND	ND	ND	ND	ND	277.0					
		09/25/88	26	AQUA	ND	ND	ND	ND	ND	124.0	ND	85.0	ND	ND	ND	ND	ND	75.0					
		112/08/88	1	AQUA	ND	ND	ND	ND	ND	129.0	ND	66.0	ND	ND	ND	ND	ND	119.0					
		102/25/89	33	AQUA	ND	ND	ND	ND	ND	146.0	ND	58.6	ND	ND	ND	ND	ND	107.0	ND				

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GROUNDWATER INVESTIGATIONS

ALLIED-SIGNAL CORPORATION

SOUTH BEND, INDIANA

PROJECT # ALCMPX SBIN 020

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS			NOTES:	
				VOLATILE ORGANIC COMPOUNDS (VOC)														
				1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	1,1,1-TRI-ETHYLENE	1,1,1,1-TETRA-ETHYLENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	1,1,1-TRI-ETHYLENE	1,1,1,1-TETRA-ETHYLENE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHYLENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	1,1,1-TRI-ETHYLENE	1,1,1,1-TETRA-ETHYLENE	OTHER VOC
				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
S-25	07/10/87	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/03/87	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/15/88	32	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/09/88	20	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/18/88	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/25/88	25	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/08/88	8	AQUA	25.2	38.0	5.9	6.5	9.6	ND	ND	ND	ND	ND	ND	ND	ND	79.0	ND
	02/22/89	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/25/89	32	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 23 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services



WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS						
				VOLATILE ORGANIC COMPOUNDS (VOC)																
				1,1-DI-1,1-DI-1,1-DI-	ETHANE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE	ETHYLENE		
S-26	07/10/87	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	09/03/87	16	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/15/88	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/09/88	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/19/88	29	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/24/88	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	02/23/89	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

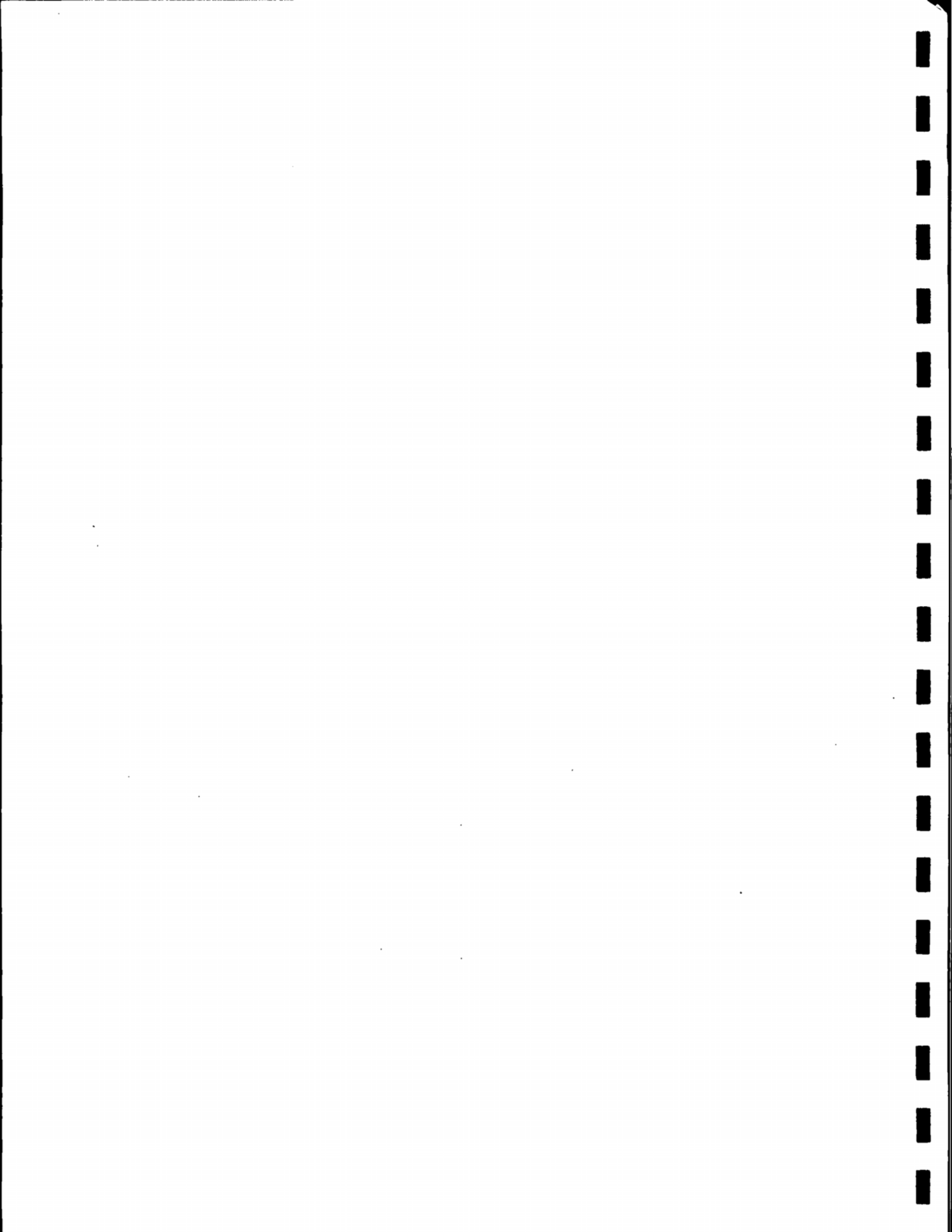
TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 24 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALDMPX SBIN 020

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NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.  
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.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS		NOTES:	
				VOLATILE ORGANIC COMPOUNDS (VOC)													
				1,1-DI- CHLORO- ETHANE	1,1,2-DI- CHLORO- ETHANE	1,1,1,1- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,1,2- TRICHO- RO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE	1,1,2,2- DIBRO- CHLORO- ETHANE
S-27	07/10/87	8	AQUA	ND	ND	ND	10.0	ND	90.0	ND	ND	ND	ND	ND	9.4		
	09/04/87	26	AQUA	ND	ND	ND	8.0	ND	100.0	ND	ND	ND	ND	ND	7.5		
	10/15/88	33	AQUA	ND	ND	ND	19.0	ND	96.0	ND	ND	ND	ND	ND	9.8		
	10/21/88	32	AQUA	ND	ND	ND	16.0	ND	81.0	ND	ND	ND	ND	ND	12.0		
	10/19/88	27	AQUA	ND	ND	ND	18.4	ND	74.6	ND	ND	ND	ND	ND	24.5		
	09/25/88	27	AQUA	ND	ND	ND	26.0	ND	85.0	ND	ND	ND	ND	ND	11.0		
	12/08/88	2	AQUA	ND	ND	ND	21.0	ND	80.0	ND	ND	ND	ND	ND	13.3		
	02/23/89	12	AQUA	ND	ND	ND	17.0	ND	97.1	ND	ND	ND	ND	ND	11.1	ND	

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 25 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 020

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS														OTHER ORGANIC COMPOUNDS	NOTES:
				VOLATILE ORGANIC COMPOUNDS (VOC)															
				1,1-DI- [CHLORO- ETHANE	UG/L	1,1-DI- [CHLORO- ETHANE	UG/L	1,1-DI- [CHLORO- ETHANE	UG/L	1,2-DI- [CHLORO- ETHANE	UG/L	1,2-DI- [CHLORO- ETHANE	UG/L	1,2-DI- [CHLORO- ETHANE	UG/L	1,2-DI- [CHLORO- ETHANE	UG/L		
BLANK	10/01/86	1,000	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	11/06/86	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	11/06/86	28	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/18/86	24	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/18/86	25	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/07/87	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/12/87	23	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	06/05/87	23	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	07/10/87	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/04/87	36	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/13/88	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/13/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 26 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX S81N 020

T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services



WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS										OTHER ORGANIC COMPOUNDS				
				VOLATILE ORGANIC COMPOUNDS (VOC)														
				1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]	1,1-DI- [CHLORO- ETHANE]		
BLANK	02/10/88	34	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.6**	
	02/10/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0**	
	05/18/88	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	05/19/88	36	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/25/88	28	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/10/88	30	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/11/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2**	
	02/22/89	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.7**	
	02/23/89	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2**	
	02/26/89	36	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

TABLE 5

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 27 OF 27  
MONITOR WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED-SIGNAL CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCMPX SBIN 020

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NOTES:

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ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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

\*\* - DICHLOROBROMOMETHANE



RVE30R  
24-Mar-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	NOTES:												
				OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.												
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	ETHYL BENZENE	TOLUENE	ETHYLENE	ETHANE	1,2-DI- CHLORO- ETHANE	CHLORO- ETHANE	CHLORO- ETHYLENE	TRI- CHLORO- ETHYLENE	VINYL CHLORIDE	OTHER VOC	
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	
E-3	103/25/87	7	AQUA	72.0	56.0	ND	10.0	10.0	53.0	ND	23.0	ND	ND	ND		
	101/14/88	19	AQUA	60.0	25.0	ND	9.4	9.2	48.0	ND	19.0	ND	ND	ND		
	102/10/88	29	AQUA	60.0	26.0	ND	11.0	8.5	61.0	70.0	21.0	ND	ND	ND		
	105/19/88	34	AQUA	43.0	26.6	ND	7.8	ND	86.0	ND	15.0	ND	29.5	22.9	18.3	
	109/25/88	32	AQUA	51.0	28.0	ND	5.6	ND	28.0	11.0	9.2	ND	ND	ND	ND	
	112/09/88	21	AQUA	30.4	21.6	ND	ND	ND	64.2	ND	ND	ND	41.7	ND	26.7	
	102/24/89	28	AQUA	42.7	26.8	ND	ND	ND	74.0	7.2	ND	ND	49.5	ND	26.3	
															520.0	

ND = NOT DETECTED.  
SEE LAB REPORT FOR DETECTION LIMITS.

TABLE 6

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
PAGE 1 OF 5  
NAPHA RECOVERY WELLS  
GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCHPX SBIN 020  
T A GLEASON ASSOCIATES  
ENVIRONMENTAL AND GEOTECHNICAL SERVICES



RW060R  
24-Mar-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	TRANS-1,2													NOTES
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYLENE	BENZENE	ETHYL BENZENE	TOLUENE	DICHLORO- ETHANE	ETHYLENE	TOTAL XYLENES	1,2 DI- CHLORO- ETHANE	CHLORO- ETHANE	CHLORO- ETHYLENE	TRI- CHLORO- ETHANE	OTHER VOC	
				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
RMB-6	03/25/87	10	AQUA	ND	300.0	8.7	50.0	ND	410.0	54.0	65.0	ND	ND	ND	ND	ND	
	03/25/87	11	AQUA	ND	300.0	12.0	50.0	ND	410.0	72.0	69.0	ND	ND	ND	ND	ND	
	09/04/87	33	AQUA	ND	ND	ND	ND	ND	700.0	45.0	ND	290.0	ND	ND	ND	ND	
	01/14/88	16	AQUA	ND	ND	ND	ND	ND	460.0	ND	ND	250.0	ND	ND	ND	ND	
	02/10/88	26	AQUA	ND	ND	ND	ND	ND	550.0	55.0	57.0	230.0	ND	ND	ND	ND	
	05/19/88	31	AQUA	ND	ND	ND	23.4	ND	672.0	41.8	ND	391.0	ND	ND	ND	ND	
	09/25/88	31	AQUA	29.0	8.3	ND	30.0	ND	230.0	35.0	49.0	ND	17.0	ND	ND	ND	
	12/09/88	19	AQUA	25.5	ND	ND	22.6	ND	305.0	27.5	40.0	133.0	ND	ND	23.7	443.0	
TABLE 6																	
	02/24/89	26	AQUA	30.3	6.2	ND	22.5	ND	370.0	32.9	35.5	180.0	13.4	ND	30.1	400.0	
GROUNDWATER QUALITY ANALYSIS																	
ORGANIC COMPOUNDS																	
PAGE 2 OF 5																	
NAPHTHA RECOVERY WELLS																	
GROUNDWATER INVESTIGATIONS																	
ALLIED CORPORATION																	
SOUTH BEND, INDIANA																	
PROJECT # ALCMPX SBIN 020																	
T A GLEASON ASSOCIATES																	
ENVIRONMENTAL AND GEOTECHNICAL SERVICES																	

ND = NOT DETECTED.  
SEE LAB REPORT FOR DETECTION LIMITS.

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





SAMPLE SOURCE	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHYLENE		ETHYL BENZENE	TOLUENE	DICHLORO-ETHENE		TRANS-1,2-DI-CHLORO-ETHYLENE		TOTAL XYLENES	1,2-DI-CHLORO-ETHANE		TRI-CHLORO-ETHENE	VINYL CHLORIDE	OTHER VOC	
				UG/L	UG/L	UG/L	UG/L			UG/L	UG/L	UG/L	UG/L		UG/L	UG/L				UG/L
RWB-16	03/25/87	8	AQUA	22.0	16.0	ND	ND	ND	16.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/04/87	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	01/14/88	20	AQUA	ND	ND	ND	ND	ND	8.5	ND	ND	220.0	ND	ND	ND	ND	ND	ND	ND	ND
	02/10/88	30	AQUA	ND	ND	ND	ND	ND	8.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/19/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	149.0	22.5	ND	ND	ND	ND	ND	ND	ND	ND
	09/25/88	33	AQUA	152.0	ND	ND	ND	ND	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/09/88	22	AQUA	ND	ND	ND	ND	ND	5.4	ND	140.0	ND	ND	ND	ND	ND	ND	ND	15.0	ND
	02/24/89	29	AQUA	100.0	ND	ND	ND	ND	ND	ND	170.0	ND	ND	ND	ND	ND	ND	ND	140.0	ND

TABLE 6

GROUNDWATER QUALITY ANALYSIS  
 ORGANIC COMPOUNDS  
 PAGE 3 OF 5  
 NAPHTHA RECOVERY WELLS  
 GROUNDWATER INVESTIGATIONS  
 ALLIED CORPORATION  
 SOUTH BEND, INDIANA  
 PROJECT # ALCMPX SBIN 020  
 T A GLEASON ASSOCIATES  
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 ND = NOT DETECTED.  
 SEE LAB REPORT FOR DETECTION LIMITS.



R4210R  
24-Mar-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	TRANS-1,2														NOTES:
				1,1-D1- CHLORO- ETHANE	1,1-D1- CHLORO- ETHYLENE	ETHYL BENZENE	TOLUENE	DICHLORO- ETHANE	CHLORO- ETHYLENE	CIS-1,2	DI- CHLORO-	TOTAL XYLENES	1,2-D1- CHLORO- ETHANE	CHLORO- ETHANE	TR1- CHLORO- ETHENE	VINYL CHLORIDE	OTHER VOC	
				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	
RMB-21	03/25/87	12	AQUA	ND	15.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	09/04/87	32	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	01/14/88	15	AQUA	ND	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	02/10/88	25	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	05/19/88	30	AQUA	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/09/88	18	AQUA	ND	5.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	02/24/89	25	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	77.0	

ND = NOT DETECTED.  
SEE LAB REPORT FOR DETECTION  
LIMITS.

TABLE 6

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS  
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NAPHTHA RECOVERY WELLS  
GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALCPX SBIN 020  
T A GLEASON ASSOCIATES  
ENVIRONMENTAL AND GEOTECHNICAL SERVICES



RW22OR  
24-Mar-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE		1,1-DI-CHLORO-ETHYLENE		ETHYL BENZENE		TOLUENE		DICHLORO-ETHYLENE		TRANS-1,2-DI-CHLORO-ETHYLENE		TOTAL XYLENES		1,2-DI-CHLORO-ETHANE		TRI-CHLORO-ETHYLENE		VINYL CHLORIDE		OTHER VOC		NOTES	
				UG/L	UG/L	UG/L	MG/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
RMB-22	03/25/87	9	AQUA	184.0	124.0	ND	94.0	ND	ND	60.0	199.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.
	09/04/87	34	AQUA	ND	ND	ND	81.0	ND	ND	ND	160.0	ND	420.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/14/88	17	AQUA	117.0	48.0	ND	47.0	22.0	36.0	ND	85.0	ND	70.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/14/88	18	AQUA	122.0	53.0	ND	51.0	24.0	38.0	ND	91.0	ND	90.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/10/88	27	AQUA	170.0	59.0	ND	73.0	61.0	44.0	14.0	140.0	ND	110.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/10/88	28	AQUA	151.0	51.0	ND	70.0	50.0	46.0	11.0	140.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	05/19/88	32	AQUA	119.0	48.2	ND	103.0	79.5	92.5	ND	133.0	ND	33.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	05/19/88	33	AQUA	118.0	47.9	ND	58.8	34.7	113.0	ND	113.0	ND	35.7	29.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/25/88	30	AQUA	ND	8.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/09/88	20	AQUA	65.6	29.7	ND	41.0	16.4	55.7	12.5	90.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	641.0		
TABLE 6																											
GROUNDWATER QUALITY ANALYSIS																											
ORGANIC COMPOUNDS																											
PAGE 5 OF 5																											
MATHA RECOVERY WELLS																											
GROUNDWATER INVESTIGATIONS																											
ALLIED CORPORATION																											
SOUTH BEND, INDIANA																											
PROJECT # ALCHPX S81N 020																											
T A GLEASON ASSOCIATES																											
ENVIRONMENTAL AND GEOTECHNICAL SERVICES																											

ND = NOT DETECTED.  
SEE LAB REPORT FOR DETECTION LIMITS.



RVIN1-7  
24-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	SU	ANTIMONY UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	
RU 1-7	NSM-1	12/11/88	AQUA	2380		16																
	37	02/26/89	AQUA	1197	6.95	13																

NOTES:

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

< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 7

GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE  
AND PHENOLS  
PAGE 1 OF 5  
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT ALCMPX SBIN 020

T A GLEASON ASSOCIATES  
Environmental and  
Geotechnical Services





WELL NO.	SAMPLE #	DATE	LAB	WELL NOT SAMPLED THIS EPISODE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
					SU	C	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	MG/L	MG/L	
RW 8-12		12/11/88																				
38		2/26/89	AQUA		1754	6.95	12		<30				<10						<20	<0.01	<0.01	
<p>NOTES:</p> <p>OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.</p> <p>&lt; = LESS THAN</p> <p>METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER</p> <p>BLANK SPACE INDICATES ANALYSIS NOT PERFORMED</p>																						
<p>TABLE 7</p> <p>GROUNDWATER QUALITY ANALYSIS</p> <p>METALS, CYANIDE AND PHENOLS</p> <p>PAGE 2 OF 5</p> <p>RECOVERY WELLS</p> <p>GROUNDWATER INVESTIGATIONS</p> <p>ALLIED CORPORATION</p> <p>SOUTH BEND, INDIANA</p> <p>PROJECT ALOMPX SBIN 020</p> <p>T A GLEASON ASSOCIATES</p> <p>Environmental and Geotechnical Services</p>																						



RWJ113  
24-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP C	ANTIMONY UG/L	ARSENIC UG/L	BERYLLIUM UG/L	CADMIUM UG/L	CHROMIUM UG/L	COPPER UG/L	LEAD UG/L	MERCURY UG/L	NICKEL UG/L	SELENIUM UG/L	SILVER UG/L	THALLIUM UG/L	ZINC UG/L	CYANIDE MG/L	PHENOLS MG/L	
RW 13	NSH-5	12/11/88	AQUA	2610		17					<30		<5						60	0.01	0.01	
	39	02/26/89	AQUA	1772	7.05	14.5					<30		<10						<20	<0.01	<0.01	

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
< = LESS THAN

METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 7

GROUNDWATER QUALITY ANALYSIS  
METALS, CYANIDE AND PHENOLS  
PAGE 3 OF 5  
RECOVERY WELLS  
GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT ALCHPX SBIN 020  
T A GLEASON ASSOCIATES  
Environmental and Geotechnical Services



WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	
				UMHOS/CM	SU	C	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	MG/L	MG/L	
RW 17	NSH-4	12/12/88	AQUA	2620		16					<30		<5						<20	<0.01	<0.01	
	40	02/24/89	AQUA	2430	7.15	14					<30		<10						<20	<0.01	<0.01	
NOTES: OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS. < = LESS THAN METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER BLANK SPACE INDICATES ANALYSIS NOT PERFORMED																						
TABLE 7																						
GROUNDWATER QUALITY ANALYSIS																						
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RECOVERY WELLS																						
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SOUTH BEND, INDIANA																						
PROJECT ALCHPX SBIN 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						



RJN18-19  
24-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	CONDUC-TANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES:
UMHOS/CH	SU	C	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	MG/L	MG/L	
RW 18-19	NSM-3	12/12/88	AQUA	2090		16					<30		<5						<20	<0.01	0.07	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	41	02/26/89	AQUA	1356	7.00	14				<30			<5						<20	<0.01	<0.01	
	42	02/26/89	AQUA	1310	7.10	14				<30			<5						<20	<0.01	<0.01	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
TABLE 7																						
GROUNDWATER QUALITY ANALYSIS																						
METALS, CYANIDE AND PHENOLS																						
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RECOVERY WELLS																						
GROUNDWATER INVESTIGATIONS																						
ALLIED CORPORATION																						
SOUTH BEND, INDIANA																						
PROJECT ALCMPX S81N 020																						
T A GLEASON ASSOCIATES																						
Environmental and Geotechnical Services																						





WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)				OTHER ORGANIC COMPOUNDS						
				1,1-DI-1,2-DI-1,1-DI-CHLORO-ETHANE	1,1-DI-1,1-DI-CHLORO-ETHANE	1,2-DI-1,1-DI-CHLORO-ETHANE	1,1,2-DI-1,1-DI-CHLORO-ETHANE	1,2-DI-1,1-DI-CHLORO-ETHANE	1,1,2-DI-1,1-DI-CHLORO-ETHANE	1,2-DI-1,1-DI-CHLORO-ETHANE	1,1,2-DI-1,1-DI-CHLORO-ETHANE			
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L
RW 1-7	10/04/88	NSH-1	AQUA	1450.0	ND	220.0	87.0	260.0	235.0	ND	136.0	ND	770.0	
	10/06/88	NSH-5	AQUA	1100.0	ND	180.0	77.0	273.0	280.0	ND	125.0	ND	731.0	
	12/11/88	NSH-1	AQUA	422.0	ND	53.6	45.6	211.0	374.0	ND	102.0	ND	659.0	
	02/26/89	37	AQUA	394.0	ND	63.4	53.0	240.0	390.0	ND	80.0	ND	500.0	

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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

TABLE 8

GROUNDWATER QUALITY ANALYSIS ORGANIC COMPOUNDS

PAGE 1 OF 5  
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALAUBR SBIN 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services



WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)				OTHER ORGANIC COMPOUNDS							
				1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHANE UG/L				
RW 8-12	10/04/88	NSH-2	AQUA	6.2	ND	7.1	14.0	ND	215.0	ND	71.0	ND	88.0		
	10/06/88	NSH-6	AQUA	5.6	ND	5.6	23.0	ND	187.0	ND	ND	ND	75.0		
	12/88			WELL NOT SAMPLED THIS EPISODE											
	02/26/89	38	AQUA	ND	49.4	ND	110.0	ND	26.3	ND	96.8	ND	500.0		

NOTES:

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

ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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

TABLE 8

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 2 OF 5  
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALAUBR SBIN 020

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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS					
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE		
RW13	10/06/88	NSM-9	AQUA	ND	27.0	ND	65.0	ND	ND	ND	84.0	ND	ND	ND	328.0				
	12/11/88	NSM-5	AQUA	ND	33.4	81.4	ND	ND	ND	93.3	ND	ND	ND	517.0					
	02/26/89	39	AQUA	ND	47.1	110.0	ND	12.0	ND	85.6	ND	ND	ND	450.0					

NOTES:  
OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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

TABLE 8

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 3 OF 5  
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALAUBR SBIN 020

T A GLEASON ASSOCIATES  
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WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)												OTHER ORGANIC COMPOUNDS					
				1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1,1,2-TETRACHLOROETHANE	1,1,1,1-TETRACHLOROETHANE	1,1-DI-CHLORO-ETHYLENE	1,2-DI-CHLORO-ETHYLENE	1,1-DI-CHLORO-ETHYLENE	1,2-DI-CHLORO-ETHYLENE	VINYL CHLORIDE	1,1-DICHLOROETHYLENE	1,2-DICHLOROETHYLENE	STYRENE	TRICHLOROETHYLENE	PCE	TCDF	TCDF
RM 17	10/06/88	NSM-4	AQUA	ND	ND	218.0	ND	27.0	ND	ND	ND	ND	ND	ND	66.0						
	10/06/88	NSM-7	AQUA	ND	ND	197.0	ND	30.0	ND	ND	ND	ND	ND	ND	63.0						
	12/11/88	NSM-4	AQUA	ND	ND	26.7	ND	49.1	ND	ND	ND	ND	ND	ND							
	02/26/89	40	AQUA	ND	ND	200.0	ND	54.4	ND	ND	ND	ND	ND	97.5							
NOTES: OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS. ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS. VOC RESULTS ARE A SUMMARY OF A GMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING FOR PRIORITY POLLUTANT VOLATILE ORGANIC																					
TABLE 8 GROUNDWATER QUALITY ANALYSIS ORGANIC COMPOUNDS PAGE 4 OF 5 RECOVERY WELLS GROUNDWATER INVESTIGATIONS ALLIED CORPORATION SOUTH BEND, INDIANA PROJECT # ALAUBR SBIN 020 T A GLEASON ASSOCIATES Environmental and Geotechnical Services																					





WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS			
				1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE
RW 18-19	10/04/88	NSM-3	AQUA	ND	ND	56.0	ND	47.0	ND	ND	ND	ND	ND	ND	ND	19.0	
	10/06/88	NSM-8	AQUA	ND	ND	57.0	ND	45.0	ND	ND	ND	ND	ND	ND	ND	19.0	
	12/11/88	NSM-3	AQUA	ND	ND	217.0	ND	37.5	ND	ND	ND	ND	ND	ND	ND	126.0	
	02/26/89	41	AQUA	ND	ND	38.4	ND	47.4	ND	ND	ND	ND	ND	ND	ND	22.8	
	02/26/89	42	AQUA	ND	ND	41.1	ND	53.6	ND	ND	ND	ND	ND	ND	ND	24.7	

NOTES:

OUR INTERPRETATIONS OF THESE DATA ARE LIMITED TO OUR WRITTEN REPORTS.  
ND = NOT DETECTED. SEE LAB REPORT FOR DETECTION LIMITS.

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

TABLE 8

GROUNDWATER QUALITY ANALYSIS  
ORGANIC COMPOUNDS

PAGE 5 OF 5  
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS  
ALLIED CORPORATION  
SOUTH BEND, INDIANA  
PROJECT # ALAUBR SBIN 020

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services



S21MCPHW  
23-Mar-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE	PH	TEMP	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC	CYANIDE	PHENOLS	NOTES
				UMHOS/CM	SU	C	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	MG/L	MG/L	
S-21	17	11/06/86	AQUA				<6	<4	<1	<1	20	20	33	<0.3	20	<100	<4	<3	160	<0.01	<0.010	METAL SAMPLES COLLECTED SINCE 6/05/87 WERE FILTERED IN THE FIELD THROUGH .45 MICRON FILTER
	17	06/05/87	AQUA	1150	7.80	13					<5		<3						<10	0.023	0.080	
	18	06/05/87	AQUA	1150	7.80	13					<5		<3						10	0.031	0.114	
	14	09/03/87	AQUA	1100	7.72	14					<10		<3						4	<0.005	<0.010	BLANK SPACE INDICATES ANALYSIS NOT PERFORMED
	11	01/14/88	AQUA	1450	6.53	10					<20		<30						<10	<0.05	0.06	
	22	02/09/88	AQUA	2350	6.95	12					20		<3						<10	<0.01	0.055	
	13	5/18/88	AQUA	1200	7.07	13					<30		<5						<20	<0.01	<0.01	
	13	09/23/88	AQUA	1650	6.90	13					<30		<6						<20	<0.01	0.04	
	10	12/08/88	AQUA	2480		12.5					<30		<5						<20	<0.01	<0.01	TABLE 3
																						GROUNDWATER QUALITY ANALYSIS
																						METALS, CYANIDE AND PHENOLS
	10	02/23/89	AQUA	1164	6.85	11					<30		<10						<20	<0.01	0.05	PAGE 19 OF 27
																						MONITOR WELLS
																						GROUNDWATER INVESTIGATIONS
																						ALLIED CORPORATION
																						SOUTH BEND, INDIANA
																						PROJECT ALCHPX SBIN 020
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