Bendix
IND005461165

GROUNDWATER MONITORING REPORT
4TH QUARTER 1988
ALLIED-SIGNAL CORPORATION
SOUTH BEND COMPLEX
SOUTH BEND, INDIANA

PROJECT # ALCMPX SBIN 017

27 February 1989

COPY # 12

t a gleason
associates

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES

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 26 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 to five 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 except S-16 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 Well S-16 was sampled with a dedicated PVC bailer which was carefully lowered into and withdrawn from the well to avoid agitating the samples.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 MEASURMENTS

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 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. 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)

---

* Samples collected for this parameter were filtered in the field through a 0.45 micron filter.

3.3.2 Water Level Measurements

Water elevations were measured from 48 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 2-D and D-7. Two 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 December 1988 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
4TH QUARTER 1988

Monitor Wells

1-D	S-9
2-D*	S-14
4-D	S-15
5-D	S-16
7-D	S-17
8-D	S-20
7-25	S-21
9-33	S-22
D-4	S-23
D-7*	S-24
S-1	S-25
S-3	S-26
S-4A	S-27

Naptha Recovery Wells

E-3
RWB-6
RWB-16
RWB-21
RWB-22

VOC Recovery Wells

QA/QC Samples	Sample Location	Recovery Well(s)
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
2-D Duplicate	RW 13	RW 13
D-7 Duplicate	RW 17	RW 14, 15, 16, 17
	RW 18-19	RW 18, 19

* Duplicate Sample Taken

** Not Sampled This Episode

t a gleason associates

.=23-Feb-89

WLM1

WELL NO.	(1) REFERENCE ELEVATION	12/06-07/88 WATER DEPTH	12/06-07/88 WATER ELEVATION	09/21-25/88 WATER DEPTH	09/21-25/88 WATER ELEVATION	05/17/88 WATER DEPTH	05/17/88 WATER ELEVATION	02/03/88 WATER DEPTH	02/03/88 WATER ELEVATION	01/2/88 WATER DEPTH	01/2/88 WATER ELEVATION
S-1	728.09	NM		NM		NM		NM		NM	
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

NOTES:

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

GROUNDWATER INVESTIGATIONS
ALLIED COMPLEX
SOUTH BEND, INDIANA
PROJECT # ALCMPX 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

.=23-Feb-89

WLM2

WELL NO.	(1) REFERENCE ELEVATION	12/06-07/88 WATER DEPTH	12/06-07/88 WATER ELEVATION	09/21-25/88 WATER DEPTH	09/21-25/88 WATER ELEVATION	05/17/88 WATER DEPTH	05/17/88 WATER ELEVATION	02/03/88 WATER DEPTH	02/03/88 WATER ELEVATION	01/2/88 WATER DEPTH	01/2/88 WATER ELEVATION
D-1	720.73 *	NM		NM		NM		NM		NM	
D-1A	721.69 *	NM		NM		NM		NM		NM	
D-3	714.51	18.88	695.63	18.67	695.84	17.52	696.99	18.06	696.45	18.06	696.45
D-4	717.85	22.12	695.73	21.27	696.58	20.26	697.59	20.70	697.15	20.70	697.15
D-5	712.14	16.01	696.13	15.90	696.24	14.94	697.20	15.30	696.84	15.31	696.83
D-7	713.83	17.15	696.68	17.04	696.79	16.00	697.83	16.40	697.43	16.42	697.41
D-8	717.04	21.61	695.43	20.11	696.93	19.01	698.03	19.48	697.56	19.50	697.54
D-9	717.00 *	NM		NM		NM		NM		NM	
D-10	716.53	18.65	697.88	18.76	697.77	17.12	699.41	17.98	698.55	18.00	698.53
D-11	723.47	20.07	703.40	20.83	702.64	20.14	703.33	20.52	702.95	20.53	702.94
D-12	710.29	22.90	687.39	23.93	686.36	21.47	688.82	21.99	688.30	22.30	687.99
I-1	711.52	16.85	694.67	17.34	694.18	16.38	695.14	16.69	694.83	16.76	694.76
1-D	714.17	17.35	696.82	NM		15.84	698.33	16.35	697.82	16.32	697.85
2-D	715.36	19.11	696.25	18.35	697.01	17.23	698.13	17.74	697.60	17.75	697.61
3-D	713.29	NM		19.40	693.89	17.81	695.48	18.20	695.09	18.22	695.07
4-D	712.10	NM		23.56	688.54	22.01	690.09	22.48	689.62	22.56	689.54
5-D	712.01	NM		25.05	686.96	22.81	689.20	23.10	688.91	23.53	688.48
6-D	711.41	23.96	687.45	24.95	686.46	22.79	688.62	23.19	688.22	23.39	688.02
7-D	714.85	21.98	692.87	18.63	696.22	17.55	697.30	17.84	697.01	17.85	697.00
8-D	714.56	20.78	693.78	17.88	696.68	16.80	697.76	17.17	697.39	17.17	697.39

NOTES:

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

GROUNDWATER INVESTIGATIONS
ALLIED COMPLEX
SOUTH BEND, INDIANA
PROJECT # ALCMPX 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

.=23-Feb-89

WLM3

WELL NO.	(1) REFERENCE ELEVATION	12/06-07/88 WATER DEPTH	12/06-07/88 WATER ELEVATION	09/21-25/88 WATER DEPTH	09/21-25/88 WATER ELEVATION	05/17/88 WATER DEPTH	05/17/88 WATER ELEVATION	02/3/88 WATER DEPTH	02/3/88 WATER ELEVATION	01/2/88 WATER DEPTH	01/2/88 WATER ELEVATION
86-1	715.70 *	NM		NM		NM		NM		NM	
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	16.81	697.34	15.54	698.61	16.12	698.03	16.12	698.03
86-8	714.62 *	17.20	697.42	17.22	697.40	NM		NM		NM	
86-9	715.25 *	17.91	697.34	17.86	697.39	NM		NM		NM	
86-10	715.06	18.02	697.04	17.75	697.31	16.49	698.57	17.1	697.96	17.43	697.63
86-11	715.14 *	18.17	696.97	18.89	696.25	NM		NM		NM	
86-12	715.71 *	18.72	696.99	18.42	697.29	NM		NM		NM	
86-13	714.75	17.47	697.28	17.44	697.31	NM		NM		NM	
86-14	715.05 *	17.95	697.10	17.55	697.50	NM		NM		NM	
86-15	715.06 *	17.96	697.10	17.24	697.82	16.34		17.1	697.63	NM	
86-18	714.84	NM		18.53	696.31	17.69	697.15	18.21	696.63	18.22	696.62
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	20.8	699.67	20.84	699.63
7-50	719.83	20.12	699.71	11.24	708.59	19.97	699.86	20.21	699.62	20.24	699.59
8-27	715.45 *	NM		NM		NM		NM		NM	
9-33	716.69	18.20	698.49	18.55	698.14	17.99	698.7	18.37	698.32	18.38	698.31
OW-1	***	15.05		14.89		NM		NM		14.36	
OW-2	***	15.12		14.95		NM		NM		14.40	
S4-A	***	15.42		14.87		13.9		NM		14.21	
RWB-6	715.80	NM		19.59	696.21	18.65	697.15	19.02	696.78	19.00	696.80
RWB-16	715.30	18.92	696.38	NM		17.78	697.52	18.29	697.01	18.31	696.99
RWB-21	717.62	21.96	695.66	NM		20.82	696.8	21.14	696.48	21.10	696.52
RWB-22	715.11	NM		22.13	692.98	18.01	697.1	18.43	696.68	18.44	696.67
RWE-3	714.50	NM		19.92	694.58	19.21	695.29	19.52	694.98	19.51	694.99

NOTES:

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

*** = NO REFERENCE ELEVATION

NM = NOT MEASURED THIS DATE

TABLE 2

WATER LEVEL MEASUREMENTS

GROUNDWATER INVESTIGATIONS
ALLIED COMPLEX
SOUTH BEND, INDIANA
PROJECT # ALCMPX 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

1DMCPMW
20-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
1-D	13	01/09/87	AQUA				<1	<8	<0.4	3	40	<4	240	<0.3	12	<4	<4	<1	44		
	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
	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

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
PAGE 1 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

2DMCPMW
19-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
2-D	2	12/18/86	AQUA				<6	7	<1	<1	<10	16	20	<0.3	16	<8	<4	<9	120		
	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
	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

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
PAGE 2 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

4DMCPMW
19-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
4-D	129	10/14/86	AQUA																	0.03	
	329	10/14/86	AQUA				<6	4	<1	2	<20	30	7	<0.3	30	<4	<10	<3	30		
	14	06/06/87	AQUA	1200	7.67	16					<5		<3						20	0.030	0.016
	21	01/14/88	AQUA	1630	6.86	12					<20		<30						10	<0.02	0.02
	17	02/09/88	AQUA	2200	7.50	13					<20		<3						<10	<0.01	2.55
	12	05/18/88	AQUA	1500	7.43	14					<30		<5						23	<0.01	<0.01
	16	09/24/88	AQUA	875	6.81	15.5					<30		<6						<20	<0.01	0.02
	34	12/11/88	AQUA	1430		15					<30		<5						<20	<0.01	0.03

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
PAGE 3 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

5DMCPMW
19-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
5-D	4	12/18/86	AQUA				<6	<4	<1	<1	<10	8	<6	<0.3	<10	<16	4	<12	52		
	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
	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	12/08/88	AQUA	2190		12.5					<30		<5						<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
PAGE 4 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

7DMCPMW
19-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
7-D	29	09/01/87	AQUA	1100	7.17	16					<10		<3						24	<0.01	<0.01
	30	01/15/88	AQUA	1380	7.07	14					<20		<30						10	<0.02	0.05
	15	02/09/88	AQUA	1975	7.33	13					40		<3						40	<0.01	0.031
	22	05/19/88	AQUA	1530	7.24	16					<30		<5						30	<0.01	<0.01
	18	09/24/88	AQUA	995	7.05	17					<30		<6						<20	<0.01	0.03
	31	12/10/88	AQUA	2390		14.5					30		<5						<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
PAGE 5 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

8DMCPMW
20-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
8-D	30	09/04/87	AQUA	1300	7.29	16					<10		<3						28	0.014	<0.010
	28	01/15/88	AQUA	2200	6.84	11					<20		<30						10	<0.02	0.01
	29	01/15/88	AQUA	2200	6.84	11					<20		<30						10	<0.02	0.01
	13	02/09/88	AQUA	2700	7.40	13					<20		<3						20	0.14	0.089
	14	02/09/88	AQUA	2700	7.40	13					<20		<3						10	0.14	0.034
	23	05/19/88	AQUA	2100	7.32	15					<30		<5						<20	<0.01	0.04
	19	09/24/88	AQUA	1480	6.90	17.5					<30		<6						<20	0.01	0.08
	32	12/10/88	AQUA	2180		14					<30		<5						<20	0.03	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 AND PHENOLS
PAGE 6 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

725MCPMW
20-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
7-25	31	11/07/86	AQUA				<6	5	<1	2	12	40	66	<0.3	24	<12	<4	<6	120	0.01	<0.010
	20A	02/12/87	AQUA	700		10					16		300						170		
	20B	02/12/87	AQUA								<10*		3*						12*		
	2	06/05/87	AQUA	600	7.31	12					<5		<3						10	0.026	<0.010
	2	09/03/87	AQUA	600	7.51	13					<10		<3						<4	<0.005	<0.010
	2	01/13/88	AQUA	740	7.09	9					<20		<30						<10	0.02	<0.010
	2	02/08/88	AQUA	1160	7.10	9					<20		<3						10	<0.010	0.72
	2	05/18/88	AQUA	900	7.13	12					<30		<5						<20	<0.01	<0.01
	2	09/22/88	AQUA	640	7.10	14					<30		<6						<20	<0.01	0.01
	13	12/09/88	AQUA	1056		12.5					<30		<5						<20	<0.01	<0.01

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

TABLE 3

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 7 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

933MCPMW
20-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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	1250	7.88	14					<5		4						10	0.014	<0.010
	3	09/03/87	AQUA	1150	7.22	15					<10		<3						<4	<0.005	<0.100
	3	01/13/88	AQUA	1030	7.15	13					<20		<30						<10	<0.02	0.03
	31	02/10/88	AQUA	2000	7.40	12					<20		<3						<10	<0.01	<0.010
	3	05/18/88	AQUA	1400	7.34	14					30		<5						<20	<0.01	<0.01
	3	09/22/88	AQUA	980	7.20	17					<30		<6						<20	<0.01	0.04
	15	12/09/88	AQUA	1740		15					<30		<5						<20	<0.01	<0.01

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

TABLE 3

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 8 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

D4MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
D-4	109	10/01/86	AQUA	870																<0.01	
	309	10/01/86	AQUA				<6	<4	<1	<1	<10	4	30	<0.3	<10	10	<4		9280		
	13	02/12/87	AQUA	600		11					<10		53						5280		
	8	05/05/87	AQUA	750	8.18	16					<5		26						20	0.098	1.33
	8	09/03/87	AQUA	725	8.15	15					<10		<3						44	<0.005	0.729
	4	01/13/88	AQUA	840	7.06	12					<20		<30						10	<0.02	<0.010
	5	01/13/88	AQUA	830	7.06	12					<20		<30						<10	<0.02	<0.010
	7	02/08/88	AQUA	1390	7.70	12					30		3						10	<0.01	0.179
	8	02/08/88	AQUA	1380	7.68	12					<20		<3						10	<0.01	0.056
	10	05/18/88	AQUA	850	7.77	14					<30		<5						<20	<0.01	0.14
	10	09/23/88	AQUA	850	7.45	15					<30		<6						<20	<0.01	0.01
	3	12/08/88	AQUA	1320	8.75	14					<30		<5						<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
PAGE 9 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

D7MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
D-7	108	10/01/86	AQUA	1110																<0.01	
	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	<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	5/18/88	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

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

MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

S1MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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
	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
	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

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
PAGE 11 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S3MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-3	9	11/05/86	AQUA				<15	<4	<1	<1	18	52	86	<0.3	<10	<300	<4	<6	415	<0.010	<0.010
	18	12/12/87	AQUA	1600		12					16		110						380		
	4	06/05/87	AQUA	1600	7.52	14					<5		<3						30	0.04	0.01
	4	09/03/87	AQUA	1500	7.43	14					<10		<3						12	<0.005	<0.010
	26	01/15/88	AQUA	2100	6.86	9					<20		<30						10	<0.02	0.04
	3	02/08/88	AQUA	2400	7.29	12					<20		<3						10	<0.01	0.913
	4	5/18/88	AQUA	2300	7.33	14					<30		<5						24	<0.01	0.04
	4	09/23/88	AQUA	1395	7.05	14.5					<30		<6						<20	<0.01	0.07
	14	12/09/88	AQUA	2130		12.5					<30		<5						<20	<0.01	0.07

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
PAGE 12 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S4AMCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-4	107	09/28/86	AQUA	1930	6.88															<0.010	
	307	09/28/86	AQUA				<20	44	<2	<4	24	200	68	<0.3	44	<40	4		920		
S-4A	22	06/05/87	AQUA	1600	7.48	16					<5		<3						30	0.028	>0.010
	27	09/04/87	AQUA	1700	6.94	15					<10		3						24	0.008	0.035
	25	01/14/88	AQUA	2000	6.49	13					<20		<30						10	0.02	0.08
	6	02/08/88	AQUA	2500	7.20	13					<20		<3						60	0.01	7.6
	7	5/18/88	AQUA	1700	7.27	14					44		<5						48	<0.01	<0.01
	8	5/18/88	AQUA								<30		<5						43	<0.01	<0.01
	7	09/22/88	AQUA	1655	6.95	16.5					<30		<6						<20	<0.01	0.07
	8	09/22/88	AQUA								<30		<6						<20	<0.01	0.04
	26	12/10/88	AQUA	2960		14.5					<30		<5						<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 FIE:D THROUGH .45 MICRON FILTER

BLANK SPACE INDICATES ANALYSIS NOT PERFORMED

TABLE 3

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 13 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S9MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-9	110	10/01/86	AQUA	1775																<0.010	
	130	10/01/86	AQUA				<6	<4	<1	1	<20	130	33	<0.3	<20	<4	<10		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		<3					<24	120	<0.010	<0.010
	30	12/18/86	CCL				<3	<4	<1	<1	<10		3					<18	8	<0.010	<0.010
	7	06/05/87	AQUA	1800	7.68	16					<5		<30						10	0.014	0.049
	9	09/03/87	AQUA	1725	7.55	15					<10								12	<0.005	<0.010
	6	01/13/88	AQUA	1750	6.75	12					<20		<30						10	<0.02	<0.010
	9	02/08/88	AQUA	3000	7.35	12					<20		<3						20	<0.01	0.202
	9	5/18/88	AQUA	1600	7.41	15					<30		<5						28	<0.01	<0.01
	9	09/23/88	AQUA	1350	7.15	18.5					<30		<6						<20	<0.01	0.04
	4	12/08/88	AQUA	853	8.35	14					<30		<5						<20	<0.01	0.07

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

CCL=COMPUCHEM LABORATORIES

TABLE 3

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 14 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S14MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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
	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
	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

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
PAGE 15 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S15MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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		<3						10	0.041	0.01
	5	09/03/87	AQUA	1625	7.18	15					<10		<3						4	<0.005	<0.010
	6	09/03/87	AQUA	1625	7.18	15					<10		<3						12	<0.005	<0.010
	24	01/14/88	AQUA	2300	6.42	12					<20		<30						10	<0.02	0.01
	4	02/08/88	AQUA	2650	7.30	12					<20		<3						10	<0.01	0.034
	6	5/18/88	AQUA	2300	7.22	14					<30		<5						21	<0.01	0.04
	6	09/23/88	AQUA	1800	6.85	18.5					<30		<6						<20	<0.01	0.06
	24	12/10/88	AQUA	3060		14					<30		<5						<20	<0.01	0.08

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
PAGE 16 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S16MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-16	11	11/06/86	AQUA				<6	<4	<1	<1	<10	310	65	<0.3	12	<16	<4	<3	220	<0.010	0.060
	19	12/18/86	AQUA				<6	<4	<1	1	<10		<10	<0.3	12	<8	4	<9	52	<0.010	<0.010
	29	12/18/86	CCL				<3	<4	<1	1	<10		<9	0.4	<10	<8	4	<9	4	<0.010	<0.010
	11	02/12/87	AQUA	1450		15					<10		13						40		
	12	06/05/87	AQUA	1150	7.57	19					<5		7						20	0.07	<0.010
	28	09/04/87	AQUA	1100	7.44	15					<10		<4						40	0.012	0.017
	27	01/15/88	AQUA	1700	6.92	11					<20		<30						10	<0.02	0.01
	12	02/09/88	AQUA	2100	7.62	12					<20		<3						10	0.04	<0.010
	25	5/19/88	AQUA	1450	7.49	14					<30		<5						<20	<0.01	0.02
	14	09/23/88	AQUA	1110	7.20	16.5					<30		<6						<20	<0.01	0.07
	29	12/10/88	AQUA	2320		14					<30		<5						<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

CCL=COMPUCHEM LABORATORY

TABLE 3

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 17 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

S17MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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	5/19/88	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

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
PAGE 18 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

S20MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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
	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
	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

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
PAGE 19 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S21MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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
	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
	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

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
PAGE 20 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S22MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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	09/03/87	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

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
PAGE 21 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S23MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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

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
PAGE 22 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S24MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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

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
PAGE 23 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S25MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-25	11	09/03/87	AQUA	1100	7.17	16					<10		<3						12	<0.005	<0.010
	32	01/15/88	AQUA	1660	6.87	13					<20		<30						10	<0.02	0.06
	20	02/09/88	AQUA	2600	7.15	11					<20		<3						10	<0.01	0.122
	18	05/18/88	AQUA	1440	7.08	14					<30		<5						330	<0.01	<0.01
	25	09/25/88	AQUA	1430	6.70	17					<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
PAGE 24 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 013

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S26MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-26	16	09/03/87	AQUA	1100	7.22	16					<10		<3						4	<0.005	<0.010
	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
	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

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
PAGE 25 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

S27MCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
S-27	26	09/04/87	AQUA	1350	6.97	14					<10		4						40	<0.005	<0.010
	33	01/15/88	AQUA	1530	6.98	11					<20		<30						10	<0.02	0.06
	32	02/10/88	AQUA	2600	7.20	12					<20		<3						20	<0.01	0.031
	27	05/19/88	AQUA	1450	7.26	12					<30		<5						38	<0.01	<0.01
	27	09/25/88	AQUA	1855	6.70	13					<30		<6						58	<0.01	0.01
	2	12/08/88	AQUA	2386	7.5	13.5					<30		<5						60	<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
PAGE 26 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

FBMCPMW
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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
PAGE 27 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

FBMCPP2
26-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
BLANK	30	12/10/88	AQUA	58	7.00						<30		<5						<20	<0.01	<0.01
	35	12/11/88	AQUA	65		9					<30		<5						<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
PAGE 28 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RWE3IN
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
E-3	7	03/25/87	AQUA								<20		<3						.80	0.07	0.012
	19	01/14/88	AQUA								<20		<30						10	<0.02	0.02
	29	02/10/88	AQUA	2600	7.10	16					<20		<3						<10	<0.01	<0.010
	34	05/19/88	AQUA	1420	7.16	16					<30		<5						<20	<0.01	<0.01
	32	09/25/88	AQUA	3010	6.95	18					<30		<6						<20	<0.01	0.08
	21	12/09/88	AQUA	3140		14					30		<5						<20	<0.01	<0.01

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

TABLE 4

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

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RW061N
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
RWB-6	10	03/25/87	AQUA								<20		<3						10	0.05	0.131
	11	03/25/87	AQUA								<20		<3						10	0.05	<.01
	16	01/14/88	AQUA								<20		<30						10	<0.02	0.01
	26	02/10/88	AQUA	2400	7.50	13					20		<3						20	<0.01	<0.010
	31	05/19/88	AQUA	1380	7.55	14					<30		<5						<20	<0.01	<0.01
	31	09/25/88	AQUA	2500	6.80	16.5					<30		<6						<20	<0.01	0.07
	19	12/09/88	AQUA	2620		15					<30		<5						<20	<0.01	<0.01

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

TABLE 4

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 2 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RW16IN
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
RWB-16	8	03/25/87	AQUA								<20		<3						10	0.07	0.017
	20	01/14/88	AQUA								<20		<30						10	0.03	0.020
	30	02/10/88	AQUA	2500	7.35	15					<20		<3						20	0.02	<0.010
	35	05/19/88	AQUA	1400	7.29	15					<30		<5						<20	<0.01	<0.02
	33	09/25/88	AQUA	2800	6.70	19					<30		<6						<20	<0.01	0.03
	22	12/09/88	AQUA	2680		14					<30		<5						<20	<0.01	<0.01

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

TABLE 4

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

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RW21IN
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
RWB-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

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

TABLE 4

GROUNDWATER QUALITY ANALYSIS
METALS, CYANIDE AND PHENOLS
PAGE 4 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RW221N
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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
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

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

TABLE 4

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

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

100CMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
1-D	01/08/87	13	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	02/12/87	1	AQUA	ND	ND	ND	ND	ND	19.5	ND	ND	ND	ND					
	06/05/87	13	AQUA	ND	ND	ND	ND	ND	12.0	ND	ND	ND	ND	ND				
	06/04/87	22	AQUA	ND	ND	ND	ND	ND	29.0	ND	ND	ND	ND	ND				
	01/14/88	13	AQUA	ND	ND	ND	ND	ND	5.8	ND	ND	ND	ND	ND				
	02/09/88	16	AQUA	ND	ND	ND	ND	ND	11.0	ND	ND	ND	ND	ND				
	05/18/88	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	9/23/88	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/11/88	33	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 1 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

2DOCMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
2-D	12/18/86	2	AQUA	ND	20.4	ND	ND	ND	ND	ND	ND	ND	ND					
	06/05/87	11	AQUA	ND	25.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/03/87	19	AQUA	ND	24.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/15/88	34	AQUA	ND	34.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/09/88	11	AQUA	ND	25.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	05/19/88	24	AQUA	ND	34.2	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/24/88	20	AQUA	ND	26.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/10/88	27	AQUA		22.0	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/10/88	28	AQUA		21.4	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 2 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

4DOCMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
4-D	10/14/86	31	AQUA	ND	ND	ND	11.4	ND	ND	ND	ND	ND	ND					
	01/07/87	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	02/11/87	2	AQUA	ND	ND	ND	1.6	ND	ND	ND	ND	ND	ND					
	06/05/87	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.8				
	09/04/87	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/14/88	21	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.8				
	02/09/88	17	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.3**	8.0				
	03/14/88	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.0				
	05/18/88	12	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	33.4				
	09/24/88	16	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.2				
	12/11/88	34	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.5				

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 CONCLUDE 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.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 3 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

5DOCMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
5-D	12/18/86	4	AQUA	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	10.0				
	02/11/87	4	AQUA	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				
	09/03/87	15	AQUA	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				
	02/09/88	21	AQUA	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	6.1				
	05/18/88	14	AQUA	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				
	12/08/88	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 4 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

7DOCMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
7-D	07/10/87	3	AQUA	ND	ND	ND	17.0	ND	19.0	ND	ND	ND	ND	250.0				
	07/10/87	4	AQUA	ND	ND	ND	16.0	ND	17.0	ND	ND	ND	ND	250.0				
	09/04/87	29	AQUA	ND	ND	ND	ND	ND	20.0	14.0	ND	ND	ND	220.0				
	01/15/88	30	AQUA	ND	ND	ND	10.0	ND	17.0	ND	ND	ND	ND	142.0				
	02/09/88	15	AQUA	ND	ND	ND	20.0	ND	14.0	ND	ND	ND	ND	148.0				
	05/19/88	22	AQUA	ND	ND	ND	ND	ND	16.6	ND	ND	ND	ND	210.0				
	09/24/88	18	AQUA	ND	ND	ND	7.6	ND	9.2	ND	ND	ND	ND	52.0				
	12/10/88	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 5 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

8DOCMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE					
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L					
8-D	07/10/87	5	AQUA	ND	ND	ND	27.0	ND	ND	ND	ND	ND	ND	720.0					
	09/04/87	30	AQUA	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	840.0					
	01/15/88	29	AQUA	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	770.0					
	02/09/88	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	630.0					
	05/19/88	23	AQUA	ND	ND	ND	24.0	ND	ND	ND	67.9	ND	ND	1600.0					
	09/24/88	19	AQUA	ND	ND	ND	32.0	20.0	ND	ND	ND	ND	ND	420.0					
	12/10/88	32	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 6 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

7250CMW
28-Feb-89

				PRIORITY									OTHER ORGANIC COMPOUNDS					
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
7-25	11/07/86	31	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	06/05/87	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/06/87	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/13/88	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/08/88	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	05/18/88	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/22/88	2	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/09/88	13	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 7 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

9330CMW
28-Feb-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
9-33	01/08/87	11	AQUA	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				
	09/03/87	3	AQUA	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				
	02/10/88	31	AQUA	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				
	09/22/88	3	AQUA	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				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 8 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

D40CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO ETHENE UG/L
D-4	10/01/86	11	AQUA	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	
	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

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 9 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

D7OCMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L
D-7	10/01/86	10	AQUA	ND	689.0	ND	20.2	ND	ND	ND	ND	ND	ND	
	11/06/86	26	AQUA	ND	437.0	ND	15.7	ND	ND	ND	ND	ND	ND	
	01/07/87	9	AQUA	ND	902.0	ND	ND	ND	ND	ND	ND	ND	ND	40.0
	02/12/87	14	AQUA	ND	812.0	ND	30.0	ND	ND	ND	ND	ND	ND	
	06/05/87	9	AQUA	ND	890.0	ND	ND	ND	ND	ND	ND	ND	ND	33.0
	06/05/87	10	AQUA	ND	900.0	ND	ND	ND	ND	ND	ND	ND	ND	31.0
	09/03/87	17	AQUA	ND	800.0	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
	01/14/88	14	AQUA	ND	710.0	ND	ND	ND	ND	ND	ND	ND	ND	30.0
	02/08/88	10	AQUA	ND	680.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
	05/18/88	20	AQUA	ND	1165.0	ND	ND	ND	ND	ND	19.1	ND	ND	48.2
	09/24/88	29	AQUA	ND	780.0	ND	ND	ND	ND	ND	ND	ND	ND	26.0
	12/09/88	16	AQUA	ND	483.0	ND	ND	ND	ND	ND	10.0	ND	ND	22.1
	12/09/88	17	AQUA	ND	435.0	ND	ND	ND	ND	ND	10.0	ND	ND	21.9

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 10 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S1OCMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L	BASE NEUTRAL COMPOUNDS UG/L	BIS (2-ETHYLHEXYL) PHTHALATE UG/L
				VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS		
S-1	11/05/86	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			15.6
	12/17/86	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		7.0	7.0
	06/05/87	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/03/87	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/13/88	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	02/08/88	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	05/18/88	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/22/88	1	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/09/88	12	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 11 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S30CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DICHLOROETHANE UG/L	1,2-DICHLOROETHANE UG/L	1,1-DICHLOROETHYLENE UG/L	TRANS-1,2-DICHLOROETHYLENE UG/L	1,1,1-TRICHLOROETHANE UG/L	TRICHLOROETHYLENE UG/L	1,2 DICHLOROPROPANE UG/L	VINYL CHLORIDE UG/L	CHLOROFORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLOROETHENE UG/L	BIS (2-ETHYLHEXYL) PHTHALATE UG/L
S-3	11/05/86	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		2.6
	06/05/87	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	09/03/87	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	01/14/88	26	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	02/08/88	3	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	05/18/88	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	09/23/88	4	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/09/88	14	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 12 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S4AOCMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DICHLOROETHANE UG/L	1,2-DICHLOROETHANE UG/L	1,1-DICHLOROETHYLENE UG/L	TRANS-1,2-DICHLOROETHYLENE UG/L	1,1,1-TRICHLOROETHANE UG/L	TRICHLOROETHYLENE UG/L	1,2 DICHLOROPROPANE UG/L	VINYL CHLORIDE UG/L	CHLOROFORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLOROETHENE UG/L
				VOLATILE ORGANIC COMPOUNDS (VOC)							OTHER ORGANIC COMPOUNDS			
S-4A	06/05/87	22	AQUA	1100.0	ND	200.0	110.0	200.0	120.0	ND	ND	ND	ND	820.0
	09/04/87	27	AQUA	1100.0	ND	80.0	170.0	ND	17.0	ND	790.0	ND	ND	2000.0
	01/14/88	25	AQUA	1600.0	ND	180.0	112.0	ND	ND	ND	700.0	ND	ND	1800.0
	02/08/88	2	AQUA	1500.0	ND	165.0	160.0	ND	ND	ND	900.0	ND	ND	1770.0
	05/18/88	7	AQUA	1700.0	ND	165.0	ND	ND	ND	ND	437.0	ND	ND	2800.0
	05/18/88	8	AQUA	1640.0	ND	200.0	ND	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	ND	940.0
	09/22/88	8	AQUA	1820.0	7.3	281.0	155.0	10.0	39.0	ND	1620.0	ND	ND	920.0
	12/10/88	26	AQUA	970.0	ND	114.0	135.0	ND	23.7	ND	633.0	ND	ND	1600.0

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 13 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S90CMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DICHLOROETHANE UG/L	1,2-DICHLOROETHANE UG/L	1,1-DICHLOROETHYLENE UG/L	TRANS-1,2 DICHLOROETHYLENE UG/L	1,1,1-TRICHLOROETHANE UG/L	TRICHLOROETHYLENE UG/L	1,2 DICHLOROPROPANE UG/L	VINYL CHLORIDE UG/L	CHLOROFORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLOROETHENE UG/L	BIS (2-ETHYLHEXYL) PHTHALATE UG/L
				VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS	
S-9	10/01/86	12	AQUA	ND	81.3	ND	2.2	ND	ND	ND	ND	ND	ND		
	11/05/86	4	AQUA	ND	29.0	ND	2.3	ND	ND	ND	ND	ND	ND		6.6
	12/18/86	20	AQUA	ND	210.0	ND	ND	ND	ND	ND	ND	ND	ND	15.0	
	12/18/86	30	AQUA	ND	43.3	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		
	06/05/87	7	AQUA	ND	460.0	ND	ND	ND	ND	ND	ND	ND	ND	17.0	
	09/03/87	9	AQUA	ND	170.0	ND	ND	ND	ND	ND	ND	ND	ND	13.0	
	01/13/88	6	AQUA	ND	810.0	ND	ND	ND	ND	ND	ND	ND	ND	43.0	
	02/08/88	9	AQUA	ND	440.0	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	47.6	
	09/23/88	9	AQUA	ND	240.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/08/88	4	AQUA		12.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 14 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S140CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L
S-14	11/06/86	21	AQUA	ND	120.0	ND	42.2	ND	3.6	ND	ND	ND	ND	
	02/12/87	15	AQUA	77.0	217.0	20.0	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	150.0
	09/03/87	7	AQUA	ND	140.0	ND	ND	ND	8.0	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	240.0
	02/08/88	5	AQUA	120.0	115.0	ND	16.0	15.0	11.0	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	396.0
	09/23/88	5	AQUA	62.0	55.0	9.3	10.9	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	91.0

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 15 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S15OCMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L	BIS (2-ETHYLHEXYL) PHTHALATE UG/L	OTHER VOC UG/L
				VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS		
S-15	11/06/86	27	AQUA	ND	1.2	ND	1.5	ND	ND	ND	ND	ND	ND		8.5	
	12/18/86	22	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
	06/05/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	09/03/87	6	AQUA	ND	ND	ND	ND	ND	ND	ND	76.0	ND	ND	ND		
	06/03/87	5	AQUA	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		
	02/08/88	4	AQUA	19.0	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		
	09/23/88	6	AQUA	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	12/10/88	24	AQUA	ND	ND	ND	ND	ND	ND	ND	10.9	ND	ND	ND		121.0

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 16 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S160CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2-DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L	BIS (2-ETHYLHEXYL) PHTHALATE UG/L
S-16	11/16/86	11	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		6.1
	12/18/86	19	AQUA	ND	ND	ND	ND	22.5	70.1	ND	ND	ND	ND		
	12/18/86	29	AQUA	ND	ND	ND	ND	21.5	63.8	ND	ND	ND	ND		
	02/12/87	11	AQUA	ND	ND	ND	4.4	23.3	95.0	ND	ND	ND	ND		
	06/05/87	12	AQUA	ND	ND	ND	5.6	18.0	57.0	ND	ND	ND	ND	5.6	
	09/04/87	28	AQUA	ND	ND	ND	ND	ND	65.0	ND	ND	ND	ND	ND	
	01/15/88	27	AQUA	ND	ND	ND	ND	15.0	58.0	ND	ND	ND	ND	ND	
	02/09/88	12	AQUA	ND	ND	ND	ND	13.5	53.0	ND	ND	ND	ND	ND	
	05/19/88	25	AQUA	ND	ND	ND	ND	10.9	52.0	ND	ND	ND	ND	6.8	
	09/23/88	14	AQUA	ND	ND	ND	ND	20.0	76.0	ND	ND	ND	ND	ND	
	12/10/88	29	AQUA	ND	ND	ND	ND	18.7	62.1	ND	ND	ND	ND	6.2	

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 17 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S170CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L
S-17	11/16/86	16	AQUA	4.3	ND	1.5	ND	ND	12.0	ND	ND	ND	ND	
	01/07/87	4	AQUA	ND	ND	ND	ND	ND	94.8	ND	ND	ND	ND	
	02/12/87	3	AQUA	ND	ND	ND	7.9	ND	116.0	ND	ND	ND	ND	
	06/05/87	15	AQUA	ND	ND	ND	ND	ND	80.0	ND	ND	ND	ND	5.6
	09/03/87	20	AQUA	ND	ND	ND	ND	ND	86.0	ND	ND	ND	ND	ND
	01/14/88	22	AQUA	ND	ND	ND	ND	ND	68.0	ND	ND	ND	ND	8.8
	02/10/88	33	AQUA	ND	ND	ND	ND	ND	75.0	ND	ND	ND	ND	5.8
	05/19/88	26	AQUA	ND	ND	ND	ND	ND	60.7	ND	ND	ND	ND	ND
	09/23/88	12	AQUA	ND	ND	ND	ND	ND	78.0	ND	ND	ND	ND	ND

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS

MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 013

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S200CMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
				1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
S-20	11/07/86	30	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	02/12/87	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	06/05/87	16	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/03/87	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	01/13/88	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	02/09/88	19	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	05/19/88	19	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/25/88	23	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	09/25/88	24	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				
	12/08/88	5	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 19 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S210CMW
28-Feb-89

WELL NO.	DATE	SAMPLE #	LAB	PRIORITY POLLUTANTS: VOLATILE ORGANIC COMPOUNDS (VOC) 1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	OTHER ORGANIC COMPOUNDS: CIS-1,2-DICHLORO-ETHENE UG/L
S-21	11/06/86	17	AQUA	ND	ND	ND	116.0	ND	ND	ND	ND	ND	ND	
	12/17/86	13	AQUA	ND	ND	ND	69.3	ND	ND	ND	ND	ND	ND	
	02/11/87	5	AQUA	ND	ND	ND	88.5	ND	ND	ND	ND	ND	ND	
	06/05/87	17	AQUA	ND	ND	ND	30.0	ND	ND	ND	ND	ND	ND	5.0
	06/05/87	18	AQUA	ND	ND	ND	34.0	ND	ND	ND	ND	ND	ND	5.6
	09/03/87	14	AQUA	ND	ND	ND	13.0	ND	ND	ND	ND	ND	ND	50.0
	01/14/88	11	AQUA	ND	ND	ND	20.4	ND	ND	ND	ND	ND	ND	53.2
	02/09/88	22	AQUA	ND	ND	ND	33.0	ND	ND	ND	ND	ND	ND	60.0
	05/18/88	13	AQUA	ND	ND	ND	11.1	ND	ND	ND	ND	ND	ND	137.0
	09/23/88	13	AQUA	ND	ND	ND	49.0	ND	ND	ND	ND	ND	ND	58.0
	12/08/88	10	AQUA	ND	ND	ND	32.8	ND	ND	ND	ND	ND	ND	66.0

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 20 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S220CMW
28-Feb-89

				PRIORITY POLLUTANTS																
				VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS					
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE						
				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	164.0	ND	ND	ND	ND	ND	ND							
	01/07/87	6	AQUA	ND	ND	ND	75.8	ND	ND	ND	ND	ND	ND	50.0						
	01/07/87	7	AQUA	ND	ND	ND	73.6	ND	ND	ND	ND	ND	ND	50.0						
	02/12/87	6	AQUA	ND	ND	ND	132.0	ND	ND	ND	ND	ND	ND							
	02/12/87	7	AQUA	ND	ND	ND	109.0	ND	ND	ND	ND	ND	ND							
	06/05/87	20	AQUA	ND	ND	ND	69.0	ND	ND	ND	ND	ND	ND	41.0						
	09/03/87	12	AQUA	ND	ND	ND	41.0	ND	ND	ND	ND	ND	ND	57.0						
	01/13/88	8	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.5						
	02/09/88	23	AQUA	ND	ND	ND	61.0	ND	ND	ND	ND	ND	ND	48.0						
	05/18/88	15	AQUA	ND	ND	ND	27.7	ND	ND	ND	ND	ND	ND	77.5						
	05/18/88	16	AQUA	ND	ND	ND	25.2	ND	ND	ND	ND	ND	ND	82.0						
	09/25/88	22	AQUA	ND	ND	ND	45.0	ND	ND	ND	ND	ND	ND	21.0						

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 21 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 013

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S230CMW
28-Feb-89

				PRIORITY POLLUTANTS																
				VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS					
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE	BIS (2-ETHYLHEXYL) PHTHALATE					
				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-23	11/06/86	19	AQUA	ND	ND	ND	4.5	ND	ND	ND	ND	ND	ND		3.4					
	01/07/87	8	AQUA	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							
	06/05/87	21	AQUA	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						
	01/13/88	9	AQUA	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						
	05/18/88	17	AQUA	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						
	12/08/88	7	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 22 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S240CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L
S-24	07/10/87	2	AQUA	ND	ND	ND	145.0	ND	150.0	ND	ND	ND	ND	170.0
	09/04/87	25	AQUA	ND	ND	ND	140.0	ND	170.0	ND	ND	ND	ND	150.0
	05/19/88	28	AQUA	ND	ND	ND	230.0	ND	105.0	ND	ND	ND	ND	277.0
	09/25/88	26	AQUA	ND	ND	ND	124.0	ND	85.0	ND	ND	ND	ND	75.0
	12/08/88	1	AQUA	ND	ND	ND	129.0	ND	66.0	ND	ND	ND	ND	119.0

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 GCMS SCAN FOR PRIORITY POLLUTANT VOLATILE ORGANIC COMPOUNDS FOR EACH LOCATION AND SAMPLING DATE. SEE LAB REPORT.

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 23 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S250CMW
28-Feb-89

PRIORITY POLLUTANTS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DICHLOROETHANE UG/L	1,2-DICHLOROETHANE UG/L	1,1-DICHLOROETHYLENE UG/L	TRANS-1,2 DICHLOROETHYLENE UG/L	1,1,1-TRICHLOROETHANE UG/L	TRICHLOROETHYLENE UG/L	1,2 DICHLOROPROPANE UG/L	VINYL CHLORIDE UG/L	CHLOROFORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLOROETHENE UG/L
S-25	07/10/87	1	AQUA	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
	01/15/88	32	AQUA	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
	05/18/88	18	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.3
	09/25/88	25	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/08/88	8	AQUA	25.2	38.0	ND	5.9	6.5	9.6	ND	ND	ND	ND	79.0

OTHER ORGANIC COMPOUNDS

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 24 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S260CMW
28-Feb-89

				PRIORITY POLLUTANTS														
				VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
S-26	07/10/87	7	AQUA	ND	ND	ND	ND	ND	16.0	ND	ND	ND	ND	ND				
	09/03/87	16	AQUA	ND	ND	ND	ND	ND	14.0	ND	ND	ND	ND	ND				
	01/15/88	31	AQUA	ND	ND	ND	ND	ND	17.0	ND	ND	ND	ND	ND				
	02/09/88	18	AQUA	ND	ND	ND	ND	ND	18.0	ND	ND	ND	ND	ND				
	05/19/88	29	AQUA	ND	ND	ND	ND	ND	15.6	ND	ND	ND	ND	5.1				
	09/24/88	21	AQUA	ND	ND	ND	ND	ND	17.0	ND	ND	ND	ND	ND				

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 25 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 013

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

S270CMW
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L
S-27	07/10/87	8	AQUA	ND	ND	ND	10.0		90.0	ND	ND	ND	ND	9.4
	09/04/87	26	AQUA	ND	ND	ND	8.0	ND	100.0	ND	ND	ND	ND	7.5
	01/15/88	33	AQUA	ND	ND	ND	19.0	ND	96.0	ND	ND	ND	ND	9.8
	02/10/88	32	AQUA	ND	ND	ND	16.0	ND	81.0	ND	ND	ND	ND	12.0
	05/19/88	27	AQUA	ND	ND	ND	18.4	ND	74.6	ND	ND	ND	ND	24.5
	09/25/88	27	AQUA	ND	ND	ND	26.0	ND	85.0	ND	ND	ND	ND	11.0
	12/08/88	2	AQUA	ND	ND	ND	21.0	ND	80.0	ND	ND	ND	ND	13.3

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 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 26 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

FBOCMW-1
28-Feb-89

				PRIORITY POLLUTANTS															
				VOLATILE ORGANIC COMPOUNDS (VOC)											OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE					
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L					
BLANK	10/01/86	1,000	AQUA	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						
	11/06/86	28	AQUA	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						
	12/18/86	25	AQUA	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						
	02/12/87	23	AQUA	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					
	07/10/87	9	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	09/04/87	36	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	15.0	ND	ND					
	01/13/88	10	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND					
	01/13/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	21.0	ND	ND	7.7**				

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.

** - OTHER VOC; DICHLOROBROMOMETHANE

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 27 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

FBOCMW-2
28-Feb-89

PRIORITY POLLUTANTS

VOLATILE ORGANIC COMPOUNDS (VOC) | OTHER ORGANIC COMPOUNDS

WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
BLANK	02/10/88	34	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	16.0	ND	ND	5.6**			
	02/10/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	15.0	ND	ND	5.0**			
	05/18/88	21	AQUA	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				
	09/25/88	28	AQUA	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				
	12/11/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	18.4	ND	ND	6.2**			

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.

** - OTHER VOC; DICHLOROBROMOMETHANE

TABLE 5

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 28 OF 28
MONITOR WELLS

GROUNDWATER INVESTIGATIONS
ALLIED-SIGNAL CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RWE3OR
30-Jan-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	BENZENE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	ETHYL BENZENE UG/L	TOLUENE UG/L	CIS-1,2 DICHLORO-ETHENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	TOTAL XYLENES UG/L	1,2 DI-CHLORO-ETHANE UG/L	CHLORO-ETHANE UG/L	TRI-CHLORO-ETHENE UG/L	VINYL CHLORIDE UG/L	OTHER VOC
E-3	03/25/87	7	AQUA	72.0	56.0	ND	10.0	10.0	53.0	ND	23.0	ND	ND	ND		
	01/14/88	19	AQUA	60.0	25.0	ND	9.4	9.2	48.0	ND	19.0	ND	ND	ND		
	02/10/88	29	AQUA	60.0	26.0	ND	11.0	8.5	61.0	70.0	21.0	ND	ND	ND		
	05/19/88	34	AQUA	43.0	26.6	ND	7.8	ND	86.0	ND	15.0	ND	29.5	22.9	18.3	
	09/25/88	32	AQUA	51.0	28.0	ND	5.6	ND	28.0	11.0	9.2	ND	ND	ND	ND	
	12/09/88	21	AQUA	30.4	21.6	ND	ND	ND	64.2	ND	ND	ND	41.7	ND	26.7	489.0

NOTES:

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

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

TABLE 6

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 1 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
ENVIRONMENTAL AND GEOTECHNICAL SERVICES

RW06OR
30-Jan-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	BENZENE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	ETHYL BENZENE UG/L	TOLUENE UG/L	CIS-1,2 DICHLORO-ETHENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	TOTAL XYLENES UG/L	1,2 DI-CHLORO-ETHANE UG/L	CHLORO-ETHANE UG/L	TRI-CHLORO-ETHENE UG/L	VINYL CHLORIDE UG/L	OTHER VOC UG/L
RWB-6	03/25/87	10	AQUA	ND	300.0	8.7	50.0	ND	410.0	54.0	65.0	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		
	09/04/87	33	AQUA	ND	ND	ND	ND	ND	700.0	45.0	ND	290.0	ND	ND		
	01/14/88	16	AQUA	ND	ND	ND	ND	ND	460.0	ND	ND	250.0	ND	ND		
	02/10/88	26	AQUA	ND	ND	ND	ND	ND	550.0	55.0	57.0	230.0	ND	ND		
	05/19/88	31	AQUA	ND	ND	ND	23.4	ND	672.0	41.8	ND	391.0	ND	ND	ND	
	09/25/88	31	AQUA	29.0	8.3	ND	30.0	ND	230.0	35.0	49.0	ND	ND	17.0	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

NOTES:

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

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

TABLE 6

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 2 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES

ENVIRONMENTAL AND GEOTECHNICAL SERVICES

RW160R
30-Jan-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	BENZENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	ETHYL BENZENE	TOLUENE	CIS-1,2 DICHLORO-ETHENE	TRANS-1,2 DI-CHLORO-ETHYLENE	TOTAL XYLENES	1,2 DI-CHLORO-ETHANE	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	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		
	09/04/87	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	01/14/88	20	AQUA	ND	ND	ND	ND	ND	ND	8.5	ND	ND	220.0	ND		
	02/10/88	30	AQUA	ND	ND	ND	ND	ND	ND	8.2	ND	ND	ND	ND		
	05/19/88	35	AQUA	ND	ND	ND	ND	ND	ND	ND	ND	ND	149.0	22.5	ND	
	09/25/88	33	AQUA	152.0	ND	ND	ND	ND	ND	6.0	ND	ND	ND	ND	ND	
	12/09/88	22	AQUA	ND	ND	ND	ND	ND	ND	5.4	ND	ND	140.0	ND	ND	15.0

NOTES:

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

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

TABLE 6

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 3 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
ENVIRONMENTAL AND GEOTECHNICAL SERVICES

RW210R
30-Jan-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	BENZENE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	ETHYL BENZENE	TOLUENE	CIS-1,2 DICHLORO-ETHENE	TRANS-1,2 DI-CHLORO-ETHYLENE	TOTAL XYLENES	1,2 DI-CHLORO-ETHANE	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	UG/L	UG/L
RWB-21	03/25/87	12	AQUA	ND	15.0	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		
	01/14/88	15	AQUA	ND	7.0	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		
	05/19/88	30	AQUA	ND	5.9	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

NOTES:

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

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

TABLE 6

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 4 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
ENVIRONMENTAL AND GEOTECHNICAL SERVICES

RW22OR
30-Jan-89

SAMPLE SOURCE	DATE	SAMPLE #	LAB	BENZENE UG/L	1,1-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	ETHYL BENZENE MG/L	TOLUENE UG/L	CIS-1,2 DICHLORO-ETHENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	TOTAL XYLENES UG/L	1,2 DI-CHLORO-ETHANE UG/L	CHLORO-ETHANE UG/L	TRI-CHLORO-ETHENE UG/L	VINYL CHLORIDE UG/L	OTHER VOC UG/L
RWB-22	03/25/87	9	AQUA	184.0	124.0	ND	94.0	ND	ND	60.0	199.0	ND	ND	ND		
	09/04/87	34	AQUA	ND	ND	ND	81.0	ND	ND	ND	160.0	ND	420.0	ND		
	01/14/88	17	AQUA	117.0	48.0	ND	47.0	22.0	36.0	ND	85.0	ND	70.0	ND		
	01/14/88	18	AQUA	122.0	53.0	ND	51.0	24.0	38.0	ND	91.0	ND	90.0	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		
	02/10/88	28	AQUA	151.0	51.0	ND	70.0	50.0	46.0	11.0	140.0	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	
	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	
	09/25/88	30	AQUA	ND	8.3	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	641.0

NOTES:

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

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

TABLE 6

GROUNDWATER QUALITY ANALYSIS
ORGANIC COMPOUNDS
PAGE 5 OF 5
NAPTHA RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALCMPX SBIN 017

T A GLEASON ASSOCIATES
ENVIRONMENTAL AND GEOTECHNICAL SERVICES

RWIN1-7
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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 1-7	NSM-1	12/11/88	AQUA	2380		16					<30		<5						<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 1 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RWIN8-12
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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 8-12		12/11/88		WELL NOT SAMPLED THIS EPISODE																	

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 2 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RWIN13
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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	NSM-5	12/11/88	AQUA	2610		17					<30		<5						60	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 ALCMPX SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RWIN17
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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 17	NSM-4	12/12/88	AQUA	2620		16					<30		<5						<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 4 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RWIN18-19
30-Jan-89

WELL NO.	SAMPLE #	DATE	LAB	SPECIFIC CONDUCTANCE UMHOS/CM	pH SU	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 18-19	NSM-3	12/12/88	AQUA	2090		16					<30		<5						<20	<0.01	0.07

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 5 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT ALCMPX SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RW1-7
30-Jan-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				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	NSM-1	AQUA	1450	ND	220	87	260	235	ND	136	ND	ND	770				
	10/06/88	NSM-5	AQUA	1100	ND	180	77	273	280	ND	125	ND	ND	731				
	12/11/88	NSM-1	AQUA	422	ND	53.6	45.6	211	374	ND	102	ND	ND	659				

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 1 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALAUBR SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RW8-12
30-Jan-89

			PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE UG/L	1,2-DI-CHLORO-ETHANE UG/L	1,1-DI-CHLORO-ETHYLENE UG/L	TRANS-1,2 DI-CHLORO-ETHYLENE UG/L	1,1,1-TRI-CHLORO-ETHANE UG/L	TRI-CHLORO-ETHYLENE UG/L	1,2 DI-CHLORO-PROPANE UG/L	VINYL CHLORIDE UG/L	CHLORO-FORM UG/L	TOLUENE UG/L	CIS-1,2-DICHLORO-ETHENE UG/L				
RW 8-12	10/04/88	NSM-2	AQUA	6.2	ND	7.1	14	ND	215	ND	71	ND	ND	88				
	10/06/88	NSM-6	AQUA	5.6	ND	5.6	23	ND	187	ND	ND	ND	ND	75				
	12/88			WELL NOT SAMPLED THIS EPISODE														

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 2 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALAUBR SBIN 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RW13
30-Jan-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
RW13	10/06/88	NSM-9	AQUA	ND	27	ND	65	ND	ND	ND	84	ND	ND	328				
	12/11/88	NSM-5	AQUA	ND	ND	33.4	81.4	ND	ND	ND	93.3	ND	ND	517				

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 3 OF 5
RECOVERY WELLS

GROUNDWATER INVESTIGATIONS
ALLIED CORPORATION
SOUTH BEND, INDIANA
PROJECT # ALAUBR SBIN 017

T A GLEASON ASSOCIATES

Environmental and Geotechnical Services

RW 17
30-Jan-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
				1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
WELL NO.	DATE	SAMPLE #	LAB															
RW 17	10/04/88	NSM-4	AQUA	ND	ND	ND	218	ND	27	ND	ND	ND	ND	66				
	10/06/88	NSM-7	AQUA	ND	ND	ND	197	ND	30	ND	ND	ND	ND	63				
	12/11/88	NSM-4	AQUA	ND	ND	ND	26.7	ND	49.1	ND	ND	ND	ND	ND				

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 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 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services

RW18-19
30-Jan-89

				PRIORITY POLLUTANTS VOLATILE ORGANIC COMPOUNDS (VOC)										OTHER ORGANIC COMPOUNDS				
WELL NO.	DATE	SAMPLE #	LAB	1,1-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYLENE	TRANS-1,2 DI-CHLORO-ETHYLENE	1,1,1-TRI-CHLORO-ETHANE	TRI-CHLORO-ETHYLENE	1,2 DI-CHLORO-PROPANE	VINYL CHLORIDE	CHLORO-FORM	TOLUENE	CIS-1,2-DICHLORO-ETHENE				
				UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L	UG/L				
RW 18-19	10/04/88	NSM-3	AQUA	ND	ND	ND	56	ND	47	ND	ND	ND	ND	19				
	10/06/88	NSM-8	AQUA	ND	ND	ND	57	ND	45	ND	ND	ND	ND	19				
	12/11/88	NSM-3	AQUA	ND	ND	ND	217	ND	37.5	ND	ND	ND	ND	126				

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 017

T A GLEASON ASSOCIATES
Environmental and Geotechnical Services