



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: 70's, sunny
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	ASPHALT, black				
2	LOAMY SAND, mixed with brick, semi soft, dry, 10YR 3/1 very dark gray	1	soil sample taken between 2'-4' for laboratory analysis	8.5	2
		2		0.7	
4	NO RECOVERY	3			4
6		4			6
8	LOAMY SAND, very moist, 10 YR 4/3 brown	5	soil sample taken between 8'-10' for laboratory analysis	0	8
10	Fine to medium grained SAND, wet, 10 YR 4/3 brown	6		0	10
12	Fine to medium grained SAND, saturated at 11 feet, 10 YR 4/3 brown	7		0	12
14		8		0	14
16	very fine to fine grained SAND, saturated, 10 YR 4/3 brown				
	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: 70's, sunny
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	
	CONCRETE, gray	1	soil sampled between 2'-4' for laboratory analysis	0		
2	SANDY LOAM, non plastic, soft, moist, mottled with medium grained sand, 10 YR 4/3 brown	2		0	2	
4	SANDY LOAM with COAL FILL, moist, 10 YR 2/1 black	3		0.5	4	
6	fine grained SAND, moist, 10 YR 4/3 brown	4		0	6	
8	fine to medium grained SAND, very moist, 10 YR 5/3 brown	5			8	
10		6			10	
12		7		soil sampled between 12'-14' for laboratory analysis		12
14	fine to medium grained SAND, saturated at 14 feet, 10 YR 5/3 brown	8				14
16	Bottom of Boring at 16 ft				16	

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: 70, partly cloudy
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	NO RECOVERY	1	soil sampled between 2'-4' for laboratory analysis		
2	very fine grained SAND, moist, 10 YR 4/6 dark yellowish brown	2		0.0	2
4	very fine grained SANDY LOAM, wet, 10 YR 3/6 dark yellowish brown	3		0.3	4
6	fine to medium grained SAND, wet, 10 YR 4/6 dark yellowish brown	4		1.1	6
8		5		1.1	8
10		6		1.0	10
12	fine to medium grained SAND, saturated at 12 feet, 10 YR 4/6 dark yellowish brown	7		1.0	12
14		8		0.8	14
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70s
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	
	CONCRETE					
2	fine to medium grained SAND with Gravel, moist, 10 YR 6/4 light yellowish brown	1	soil sampled between 0'-2' for laboratory analysis	0	2	
4	fine grained SAND, very moist, 2.5 YR 3/2 very dark grayish brown	2		7.7	4	
4	fine grained SAND with pebbles, very moist, 2.5 YR 4/1 dark gray	3		1	4	
6	fine grained SAND, wet, 2.5 YR 2/1 black	4		0	6	
6	fine grained SAND, wet, 10 YR 4/1 dark gray	4		0	6	
8	fine to medium grained SAND, mottled 10 YR 4/6 dark yellowish brown, very wet, 10 YR 4/3 brown	5		0	8	
10		6		3.7	10	
12	fine grained SAND, very wet, 10 YR 4/3 brown	7		0	12	
14		8		0.8	14	
16	fine grained SAND, saturated at 15 feet, 10 YR 4/3 brown	8				16
16	Bottom of Boring at 16 ft					16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 75
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE				
2	fine grained SAND, dry, 10 YR 4/6 dark yellowish brown	1	soil sampled between 2'-4' for laboratory analysis	1.3	2
4	fine grained SAND, moist, 10 YR 4/4 dark yellowish brown	2		2.5	4
6		3		1.5	6
8		4		1.5	8
10	fine grained SAND, moist, 10 YR 4/6 dark yellowish brown	5		0.8	10
12	fine grained SAND, very moist, 10 YR 4/3 brown	6		1.1	12
14	fine grained SAND, wet, 10 YR 4/6 dark yellowish brown	7		0.9	14
16	fine grained SAND, 10 YR 4/6 dark yellowish brown, saturated at 13 feet	8		0.8	16
	medium to coarse grained SAND, 10 YR 4/6 dark yellowish brown				
	Bottom of Boring at 16 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70s
Logged By: JML	Time Terminated: 1615
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0					
2	Fine grained SAND, dry, 10 YR 3/4 dark yellowish brown	1	soil sampled between 0'-2' for laboratory analysis	1.3	2
4	COAL, black, dry	2		8.2	4
4	fine grained SAND, 10 YR 2/1 black, moist				
6		3		12.2	6
8		4		11.5	8
8	SANDY LOAM, moist, 10 YR 3/2 very dark grayish brown				
10	SILTY CLAY LOAM, very plastic, very moist, 10 YR 4/1 dark gray	5	soil sampled between 10'-12' for laboratory analysis	0.9	10
12	SILTY CLAY LOAM with gravel, very moist, 10 YR 3/1 very dark gray	6		0.7	12
12	SILTY CLAY LOAM with gravel, saturated at 12 feet, 10 YR 3/1 very dark gray, at 13 feet there is a 10YR 4/1 dark gray seam	7		0.5	14
14	fine to medium grained SAND, saturated, 10 YR 5/3 brown	8		0	16
16		9		0	18
18		10		0	20
20	fine to medume grained SAND, saturated, 10 YR 4/4 dark yellowish brown				
20	Bottom of Boring at 20 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70s
Logged By: JML	Time Terminated:
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
2	SANDY LOAM, dry, 10 YR 3/2 very dark grayish brown, mixed with COAL	1	soil sampled between 2'-4' for laboratory analysis	2.2	2
2	fine grained SAND with gravel debris, moist, 10 YR 3/4 dark yellowish brown	2		2.0	2
4	fine grained SAND with gravel debris, moist, 10 YR 3/6 dark yellowish brown	3		1.1	4
6		4		0.7	6
8		5		0.9	8
10	fine grained SAND with gravel debris, moist to wet, 10 YR 4/4 dark yellowish brown	6		1.5	10
12		7		1.3	12
14	fine grained SAND with gravel debris, saturated at 13 feet, 10 YR 4/4 dark yellowish brown	8		0.9	14
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1350
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 20, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	
0	COAL, dry	1	soil sampled between 2'-4' for laboratory analysis	0	0	
2	fine to medium grained SAND, moist, 10 YR 5/6 yellowish brown	2		0	2	
4	fine to medium grained SAND, wet, 10 YR 5/4 yellowish brown	3		0	4	
6		4		0	6	
8	medium grained SAND, very wet, 10 YR 4/6 dark yellowish brown	5		0	8	
10		6		0	10	
12	medium to coarse grained SAND, very wet, 10 YR 3/4 dark yellowish brown	7		0	12	
14		8		0	14	
16	coarse grained SAND, saturated at 16 feet, 10 YR 6/6 brownish yellow	9		soil sampled between 14'-16' for laboratory analysis	0	16
18		10			0	18
20	Bottom of Boring at 20 ft				20	

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 0855
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 20, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0 - 2	fine grained SAND with gravel, dry, 10 YR 3/3 dark brown	1	soil sample taken between 0'-2' for laboratory analysis	0	2
2 - 4		2		0	4
4 - 8	NO RECOVERY	3		0	6
6 - 8		4		0	8
8 - 10	fine grained SAND, very wet, 10 YR 6/3 pale brown	5	soil sample taken between 10'-12' for laboratory analysis water sample taken for laboratory analysis	0	10
10 - 12		6		0	12
12 - 14	fine grained SAND, saturated at 12 feet, 10 YR 6/3 pale brown	7		0	14
14 - 16		8		0	16
16	Bottom of Boring at 16 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1045
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 20, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	ASPHALT with GRAVEL, dry	1	soil sample taken between 4'-6' for laboratory analysis	0	0
2		2		0	2
4	fine grained SAND with gravel, moist, 10 YR 3/3 dark brown	3		0	4
6	fine to medium grained SAND with gravel, moist, 10 YR 4/2 dark grayish brown	4		0	6
8	medium grained SANDY LOAM, very wet, 10 YR 3/3 dark brown	5		0	8
10		6		0	10
12	fine to medium grained SAND, very wet, 10 YR 4/3 brown	7		0	12
14	medium grained SAND, very wet, 10 YR 4/2 dark grayish brown	8		0	14
16	medium grained SAND, saturated at 16 feet, 10 YR 4/2 dark grayish brown	9		0	16
18		10		0	18
20	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 70's
Logged By: DWM	Time Terminated: 1215
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 20, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	fine grained SAND with CONCRETE, dry, 10 YR 3/2 very dark grayish brown	1	soil sample taken between 2'-4' for laboratory analysis	0	0
2	fine to medium grained SAND with CONCRETE, moist, 10 YR 4/2 dark grayish brown	2		2	
4		3		4	
6	fine to medium grained SAND, moist, 10 YR 3/3 dark brown	4		6	
8	fine to medium grained SAND, wet, 10 YR 3/2 very dark grayish brown	5		8	
10	fine to medium grained SAND, very wet, 10 YR 4/3 brown	6		10	
12	medium to coarse grained SAND, saturated at 12 feet, 10 YR 4/3 brown	7		12	
14		8		14	
16	Bottom of Boring at 16 ft			16	

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: partly cloudy, 75
Logged By: RMO	Time Terminated: 1445
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 23, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
2	fine to medium grained SAND, slightly moist, 10 YR 2/1 black	1	soil sample taken between 0'-2' for laboratory analysis	2.7	2
4	fine to medium grained SAND, slightly moist to wet near bottom, 10 YR 4/3 brown	2		1.8	4
6		3		2.0	6
8		4		0.9	8
10		5		0.7	10
12		6		1.3	12
14	fine to medium grained SAND, saturated at 12 feet, 10 YR 4/3 brown	7	soil sample taken between 10'-12' for laboratory analysis	0	14
16		8			16
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 75
Logged By: RMO	Time Terminated: 1630
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 23, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	medium grained SAND, slightly moist, with gravel, 10 YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	0.3	0
2	fine to medium grained SAND, slightly moist, 10 YR 5/4 yellowish brown	2		0.4	2
4	Coarse grained SAND, slightly moist, 10 YR 5/4 yellowish brown	3		0	4
6	medium grained SAND, moist, 10 YR 5/4 yellowish brown	4		0	6
8		5		0	8
10		6		0	10
12	medium to coarse grained SAND, wet, 10 YR 4/3 brown	7		0	12
14	medium to coarse grained SAND, saturated at 13.5, 10 YR 4/3 brown	8		0	14
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: PC, 75
Logged By: RMO	Time Terminated: 1535
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 23, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	SAND, 10 YR 2/1 black	1		0.9	
2	fine to medium grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2	soil sample taken between 2'-4' for laboratory analysis	0.6	2
4		3		0	4
6		4		0	6
8		5		0	8
10	medium grained SAND, moist, 10 YR 2/1 black mottling, 10 YR 4/3 brown	6		soil sample taken between 2'-4' for laboratory analysis	0
12	coarse grained SAND, moist, 10 YR 2/1 black mottling, 10 YR 4/3 brown	7			12
14	coarse grained SAND, saturated at 13.5, 10 YR 2/1 black mottling, 10 YR 4/3 brown fine grained SAND, saturated, 10 YR 2/1 black mottling, 10 YR 4/3 brown	8			14
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70s
Logged By: DWM	Time Terminated: 930
Drilling Company: Midway	Drillers: Zach
Completion Date: June 26, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE/ASPHALT, dry, Black				
2	fine grained SAND, moist, 10 YR 4/2 dark grayish brown	1	soil sample taken between 2'-4' for laboratory analysis		2
4	fine grained SAND, wet, 10 YR 4/3 brown	2		3.0	4
6		3		0.7	6
8	fine to medium grained SANDY LOAM, very wet, 10 YR 3/4 dark yellowish brown	4		1.7	8
10		5		1.8	10
12	fine grained SAND, very wet, 10 YR 4/3 brown	6		0.6	12
14	fine grained SAND, saturated at 12 feet, 10 YR 4/3 brown	7		0.0	14
16		8		0.0	16
16	Bottom of Boring at 16 ft				16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70s
Logged By: RMO	Time Terminated: 1910
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 23, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	medium grained SAND, 10 YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	0	0
2	fine to medium grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2		0	2
4		3		0	4
6		4		0	6
8		5		0	8
10		6		0	10
12	medium grained SAND, slightly moist, 10 YR 4/3 brown	7	soil sample taken between 14'-16' for laboratory analysis	0	12
14	coarse grained SAND, saturated at 16 feet, 10 YR 4/3 brown	8		0	14
16		9		0	16
18		10		0	18
20	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 75
Logged By: RMO	Time Terminated: 1811
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 23, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	medium grained SAND, slightly moist, 10 YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	0	0
2	fine to medium grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2		0	2
4		3		0	4
6		4		0	6
8		5		0	8
10	medium to coarse grained SAND, wet, 10 YR 4/3 brown	6		0	10
12		7		0	12
14	medium to coarse grained SAND, saturated at 14.5 feet, 10 YR 4/3 brown	8		0	14
16		Bottom of Boring at 16 ft		0	16

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1050
Drilling Company: Midway	Drillers: Zach
Completion Date: June 26, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE				
	NO RECOVERY	1			
2	fine to medium grained SAND, moist, 10 YR 4/2 dark grayish brown	2	soil sample taken between 2'-4' for laboratory analysis	0	2
4	fine to medium grained SAND, moist, 10 YR 4/3 brown	3		0	4
6		4		0	6
8	fine to medium grained SAND, wet, 10 YR 4/3 brown	5		0	8
10	fine grained SANDY LOAM, very wet, 10 YR 3/1 very dark gray	6		0.3	10
12		7		0	12
14	fine grained SAND, very wet, 10 YR 5/4 yellowish brown	8	soil sample taken between 14'-16' for laboratory analysis	0	14
16	medium to coarse grained SAND, saturated at 16 feet, 10 YR 4/2 dark grayish brown	9		0	16
18		10		0	18
20	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1135
Drilling Company: Midway	Drillers: Zach
Completion Date: June 26, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE/ASPHALT				
2	fine grained SAND, moist, 10 YR 3/4 dark yellowish brown	1	soil sample taken between 2'-4' for laboratory analysis	0.0	2
4	fine grained SANDY LOAM, moist, 10 YR 3/4 dark yellowish brown	2		0.4	4
6		3		3.2	6
8		4		2.2	8
10	fine grained SAND, wet, 10 YR 3/3 dark brown	5	soil sample taken between 14'-16' for laboratory analysis	0	10
12	fine to medium grained SAND, very wet, 10 YR 4/3 brown	6		0	12
14	fine to medium grained SANDY LOAM, very wet, 10 YR 4/3 brown	7		0	14
16	fine grained SAND, very wet, 10 YR 5/4 yellowish brown	8		0	16
18	medium to coarse grained SAND, saturated at 16 feet, 10 YR 4/3 brown	9		0	18
20		10		0	20
20	Bottom of Boring at 20 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 80's
Logged By: DWM	Time Terminated: 1345
Drilling Company: Midway	Drillers: Zach
Completion Date: June 26, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	FILL	1		0	0
2	fine grained SANDY LOAM, moist, 10 YR 3/3 dark brown	2	soil sample taken between 2'-4' for laboratory analysis	0	2
4		3		0.9	4
6		4		0	6
8		5		0	8
10		6		0	10
12		7		0	12
14		8		1.1	14
15		Bottom of Boring at 15 ft			

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 78
Logged By: RMO	Time Terminated: 1045
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 24, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0 - 2	fine to medium grained SAND with gravel, dry, 10 YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	1.0	2
2 - 4	fine to medium grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2		0.6	4
4 - 6		3		0.4	6
6 - 8	medium grained SAND, moist, 10 YR 4/6 dark yellowish brown	4		0.6	8
8 - 10		5		0.7	10
10 - 12		6		0.4	12
12 - 14		7		0	14
14 - 16		8		0	16
16 - 18	coarse grained SAND, saturation at 16 feet, 10 YR 4/3 brown	9		0	18
18 - 20		10		0	20
20	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 60's
Logged By: DWM	Time Terminated: 1620
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	NO RECOVERY	1			
	fine grained SAND, moist, 10 YR 3/2 very dark grayish brown	2		3.1	
5	fine grained SAND, wet, 10 YR 3/4 dark yellowish brown	3	soil sample taken between 4'-6' for laboratory analysis	17.9	5
		4		3.8	
10	fine grained SAND, very wet, 10 YR 4/2 dark grayish brown	5	soil sample taken between 10'-12' for laboratory analysis	2.0	10
		6		0	
	fine grained SAND, saturated at 12 feet, 10 YR 4/2 dark grayish brown	7		0	
15		8		2.6	15
		9		2.6	
		10		2.9	
20	fine to medium grained SAND, saturated, 10YR 4/4 dark yellowish brown	11		3.0	20
		12		5.2	
25		13		6.0	25
		14		4.5	
	Bottom of Boring at 28 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1050
Drilling Company: Midway	Drillers: Zach
Completion Date: June 26, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
0	CONCRETE with fine grained SAND, dry, 10 YR 4/3 brown	1	soil sample taken between 4'-6' for laboratory analysis		0
2		2		0	2
4	fine grained SAND, moist, 10YR 3/3 dark brown	3		2.1	4
6		4		4.7	6
8	CONCRETE	5			8
10		6			10
12	NO RECOVERY	7			12
14		8		REFUSAL at 15', no saturation point found.	
Bottom of Boring at 15 ft					

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 70's
Logged By: DWM	Time Terminated: 1345
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	ASPHALT				
	fine grained SAND, moist, 10YR 3/2 very dark grayish brown	1	soil sample taken between 2'-4' for laboratory analysis		
		2			
5	NO RECOVERY	3		0.7	5
	fine grained SAND, moist, 10 YR 3/2 very dark grayish brown	4			
	fine to medium grained SANDY LOAM, wet, 10 YR 3/3 dark brown	5	soil sample taken between 10'-12' for laboratory analysis	0.6	10
		6		0.6	
	Saturated at 12 feet, NO RECOVERY	7			
15	medium grained SAND, saturated, 10 YR 4/3 brown	8		2.6	15
	fine grained LOAMY SAND, saturated, 10YR 3/3 dark brown	9		230	
		10		150	20
		11		160	
		12		380	
25	fine grained SAND, saturated, 10YR 4/1 dark gray	13		208	25
		14			
	Bottom of Boring at 28 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: rainy, 60's
Logged By: DWM	Time Terminated: 1520
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE				
	fine grained SAND, dry, 10 YR 3/2 very dark grayish brown	1	soil sample taken between 2'-4' for laboratory analysis	1.5	
		2		0	
5	fine grained SANDY LOAM, moist, 10 YR 3/2 very dark grayish brown	3		0	5
		4		1.4	
	NO RECOVERY	5			
10		6	soil sample taken between 10'-12' for laboratory analysis	0	10
	fine grained SAND, very wet, 10 YR 4/3 brown	7		1.5	
	fine grained SAND, saturated at 12 feet, 10YR 4/3 brown	8		0	15
15		9		1.4	
		10		1.3	
20	medium to coarse grained SAND, saturated, 10 YR 3/4 dark yellowish brown	11		0	20
		12		0	
		13		0	25
25		14		0	
	Bottom of Boring at 28 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 60's
Logged By: DWM	Time Terminated: 945
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE				
	fine to medium grained SAND, moist, 10YR 3/4 dark yellowish brown	1	soil sample taken between 2'-4' for laboratory analysis	0	
		2		0	
5	NO RECOVERY	3		0	5
	fine grained SAND, moist, 10 YR 4/3 brown	4	soil sample taken between 10'-12' for laboratory analysis	0	
	medium to coarse grained SAND with gravel, moist, 10YR 4/2 dark grayish brown	5		0	
10	fine grained SAND, very wet, 10YR 4/4 dark yellowish brown	6		0	10
	medium grained SAND, very wet, 10 YR 4/3 brown	7		0	
	medium grained SAND, saturated at 13 feet, 10YR 4/3 brown	8		0	15
15	medium to coarse grained SAND, saturated, 10 YR 4/3 brown	9		0	
		10	0		
20		12	0	20	
		14	0		
25		16	0	25	
		18	0		
	Bottom of Boring at 28 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 60's
Logged By: DWM	Time Terminated: 1105
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE	1		0	
2	fine to medium grained SAND, moist, 10YR 4/2 dark grayish brown	2	soil sample taken between 2'-4' for laboratory analysis	0	2
4	fine grained SAND, moist, 10 YR 3/6 dark yellowish brown	3		0	4
6		4		0	6
8	fine to medium grained SAND, very wet, 10 YR 4/2 dark grayish brown	5	soil sample taken between 10'-12' for laboratory analysis	0	8
10		6		0	10
12	fine to medium grained SAND, saturated at 12 feet, 10YR 4/3 brown	7		0	12
14		8		0	14
16	medium to coarse grained SAND, saturated, 10YR 4/3 brown	9		0	16
18		10		0	18
20	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: cloudy, 60's
Logged By: DWM	Time Terminated: 1220
Drilling Company: Midway	Drillers: Mark, Zach and JR
Completion Date: June 25, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE	1		0	
2	fine to medium grained SAND, moist, 10YR 4/3 brown	2	soil sample taken between 2'-4' for laboratory analysis	0	2
4		3		0	4
6		4		0	6
8		5		0	8
10	fine grained SAND, wet, 10YR 5/4 yellowish brown	6	soil sample taken between 10'-12' for laboratory analysis	0	10
12		7		0	12
14	fine to medium grained SAND, saturated at 12 feet, 10YR5/4 yellowish brown	8		0	14
16		9		0	16
18		10		0	18
20	medium to coarse grained SAND, saturated, 10YR 5/4 yellowish brown				
	Bottom of Boring at 20 ft				20

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-04-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 70's
Logged By: DWM	Time Terminated: 1700
Drilling Company: Midway	Drillers: Mark
Completion Date: June 24, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	CONCRETE	1	soil sample taken between 2'-4' for laboratory analysis	0	
	medium grained SAND, dry, 10YR 3/6 dark yellowish brown	2		0	
	fine grained SANDY LOAM, moist, 10YR 3/3 dark brown			0	
5	medium grained SAND, moist, 10YR 3/6 dark yellowish brown	3		0	5
		4		0	
	fine grained SAND, very wet, 10YR 5/6 yellowish brown	5		0	10
10		6		0	
	medium grained SAND, saturated at 12 feet, 10YR 5/6 yellowish brown	7		0	
		8		0	15
		9		0	
		10		0	
20		11		0	20
		12	0		
	Bottom of Boring at 24 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 80's
Logged By: RMO	Time Terminated: 1600
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 24, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)
	medium grained SAND, slightly moist, 10YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	0	5
	fine to medium grained SAND, slightly moist, 10YR 5/6 yellowish brown	2			
5		3			
		4			
	medium to coarse grained SAND, wet, 10YR 4/2 dark grayish brown	5	soil sample taken between 10'-12' for laboratory analysis	0	10
10		6			
	medium to coarse grained SAND, saturated at 12.5 feet, 10YR 4/2 dark grayish brown	7			
		8			
15		9		0	15
		10		0	
		11		0	
		12		0	
	Bottom of Boring at 24 ft				

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Weather: sunny, 85
Logged By: RMO	Time Terminated: 1415
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 24, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	
0	medium grained SAND with gravel, dry, 10 YR 2/1 black	1	soil sample taken between 2'-4' for laboratory analysis	0	0	
2	fine to medium grained SAND, slightly moist, 10YR 5/6 yellowish brown	2		0	2	
4	NO RECOVERY	3				4
6	fine to medium grained SAND, moist, 10YR 4/3 brown	4		0	6	
8	NO RECOVERY	5				8
10		6				10
12		7				12
14		8				14
16		9				16
18		10				18
20	Bottom of Boring at 20 ft				20	

BORING LOG 08-03-009 HANNOVER.GPJ BORING LOG.GDT 12/2/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: JML	Time Terminated: Weather: sunny, 70s
Drilling Company: Midway	Drillers: Mark and Zach
Completion Date: June 19, 2008	

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
0 - 4	NO RECOVERY	1, 2		0	0 - 4	Surface Casing
4 - 6	LOAMY SAND, mottled with 10 YR 5/6 yellowish brown, soft, moist, 10 YR 2/2 very dark brown	3		0	4 - 6	Bentonite Seal
6 - 8	LOAMY SAND, soft, moist, 10 YR 2/2 very dark brown	4		0	6 - 8	
8 - 10	fine to medium grained SAND, soft, very moist, 10 YR 6/4 light yellowish brown	5		0	8 - 10	
10 - 12		6		0	10 - 12	
12 - 16	fine to medium grained SAND, soft, saturated at 12 feet, 10 YR 6/4 light yellowish brown	7, 8		0	12 - 16	#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
16 - 18	Boring terminated at 16 ft	9, 10			16 - 18	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: DWM	Time Terminated: 1000 Weather: sunny, 70's
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 20, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
0	fine grained SAND with gravel and coal, dry, 10 YR 3/1 very dark gray	1		0	0	Surface Casing
2	fine grained SAND with gravel, moist, 10 YR 4/3 brown	2		0	2	
4		3		0	4	Bentonite Seal
6		4		0	6	
8	fine grained SAND, wet to very wet, 10 YR 4/3 brown	5		0	8	
10		6		0	10	
12	fine grained SAND, saturated at 12 feet, 10 YR 4/3 brown	7		0	12	#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
14		8		0	14	
16	Boring terminated at 16 ft	9		0	16	
18				0	18	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 1410 Weather: sunny, 75
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 23, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
	COAL, 10 YR 2/1 Black	1				Surface Casing
	Medium grained SAND, slightly moist, 10 YR 4/3 brown	2	soil sample taken to lab for analysis between 2-4 foot interval at 13:55	2.3		
5		3		0.7	5	Bentonite Seal
		4		0.4		
		5		0.9		
10		6		0.7	10	
	fine to medium grained SAND, moist, 10 YR 5/3 brown	7		1.6		
15		8	soil sample taken to lab for analysis between 14-16 foot interval at 14:10	1.1	15	
	fine to medium grained SAND, wet, 10 YR 5/3 brown	9		1.0		#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
	fine to medium grained SAND, saturated at 17 feet, 10 YR 5/3 brown	10		0.9		
20		11			20	
	Boring terminated at 20 ft					

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 1720 Weather: sunny, 75
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 23, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
0	medium grained SAND, moist, 10 YR 2/1 black	1			0	Surface Casing
2	fine to medium grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2	soil sample taken to lab for analysis between the 2-4 foot interval	0.3	2	
4		3		0	4	Bentonite Seal
6		4		0	6	
8	NO RECOVERY	5		0	8	
10		6		0	10	
12	medium to coarse grained SAND, wet, 10 YR 4/3 brown	7	soil sample taken to lab for analysis between the 12-14 foot interval	0	12	
14		8		0	14	#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
16	Boring terminated at 16 ft	9			16	
18		10			18	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 930 Weather: sunny, 75
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 24, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
	CONCRETE					
	medium grained SAND with gravel, slightly moist, 10 YR 2/1 black	1		0		← Surface Casing
	medium to fine grained SAND, slightly moist, 10 YR 5/6 yellowish brown	2	soil sample taken to lab for analysis between the 2-4 foot interval	0		
5		3		0	5	← Bentonite Seal
		4		0		
	NO RECOVERY	5		0		
10	coarse grained SAND, moist, 10 YR 4/3 brown	6		0	10	
		7		0		
15		8	soil sample taken to lab for analysis between the 14-16 foot interval	0	15	
	coarse grained SAND, saturated at 16 feet, 10YR 4/3 brown	9		0		← #5 Quartz Sand Pack ← 2" PVC Sch. 40 ← 0.010 Slot Screen
		10		0		
20	Boring terminated at 20 ft	11			20	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 1000 Weather: sunny, 78
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 24, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
0	ASPHALT/CONCRETE	1		0	0	Surface Casing
2	fine grained SAND, dry, 10 YR 4/6 dark yellowish brown	2		1.5	2	Bentonite Seal
4	fine grained SAND, moist, 10YR 4/6 dark yellowish brown	3		1.2	4	
6		4		1.0	6	
8	fine to medium grained SAND, wet, 10 YR 5/6 yellowish brown	5		1.2	8	
10		6		0.8	10	
12	fine to medium grained SAND, saturated at 12 feet, 10YR 5/6 yellowish brown	7		0.4	12	#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
14		8		0.3	14	
16	Boring terminated at 16 ft	9			16	
18		10			18	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 1350 Weather: sunny, 80's
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 24, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
	fine grained SAND and Gravel, dry, 10 YR 2/1 black	1		0		Surface Casing
	fine to medium grained SAND, slightly moist, 10YR 5/6 yellowish brown	2	soil sample taken for lab analysis between the 2-4 foot interval	0		
5	fine to medium grained SAND, slightly moist, 10YR 5/6 yellowish brown, mottling 10YR 2/1 black	3		0	5	
		4		0		
	fine to medium grained SAND, moist, 10YR 4/3 brown	5		4.6		Bentonite Seal
10		6	soil sample taken for lab analysis between the 10-12 foot interval	0	10	
	coarse grained SAND, moist, 10YR 4/3 brown	7		0		
	coarse grained SAND, saturated at 13 feet, 10YR 4/3 brown	8		0	15	
15		9		0.2		
	fine grained SAND, saturated, strong odor, 10YR 2/1 black	10		234.6	20	
20		11		160.9		#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
		12		283.6		
25	Boring terminated at 24 ft	13			25	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: RMO	Time Terminated: 1155 Weather: sunny, 80's
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 24, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM	
	medium grained SAND, slightly moist, 10YR 2/1 black	1		0		Surface Casing	
	fine to medium grained SAND, slightly moist, 10YR 3/2 very dark grayish brown	2	soil sample taken for lab analysis between the interval of 2-4 feet	0.1			
5	NO RECOVERY	3		0.1	5		
	fine to medium grained SAND, moist, 10 YR 3/1 very dark gray	4		0.3			
		5		0.3		Bentonite Seal	
10	fine to medium grained SAND, wet, 10 YR 3/1 very dark gray	6	soil sample taken for lab analysis between the interval of 10-12 feet	0.1	10		
	fine to medium grained SAND, saturated at 13 feet, 10YR 3/1 very dark gray	7		0.3			
15		8			15		
		9					
20		10			20		
		11		37			
		12		179		#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen	
25		13		462	25		
		14					
	Boring terminated at 28 ft						

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08



Project Number: **08-03-009**

Client: City of South Bend	Drilling Method: Direct Push
Project: Hannover Property	Sampling Method: continuous
Location: 731 West Chippewa Avenue, South Bend, Indiana	Elevation:
Logged By: DWM	Time Terminated: 1310 Weather: sunny, 70's
Drilling Company: Midway Drillers: Mark and Zach	Completion Date: June 20, 2008

Depth (feet)	SOIL DESCRIPTION	Sample	REMARKS	PID (ppm)	Depth (feet)	WELL DIAGRAM
0	fine to medium grained SAND, dry, 10 YR 3/3 dark brown	1		0	0	Surface Casing
2		2		0	2	
4	fine grained SAND, moist, 10 YR 3/2 very dark grayish brown	3		0	4	Bentonite Seal
6		4		0	6	
8	fine to medium grained SAND, moist, 10 YR 3/4 dark yellowish brown	5		0	8	
10		6		0	10	
12	medium grained SAND, moist, 10 YR 5/3 brown	7		0	12	
14	medium to coarse grained SAND, wet, 10 YR 5/3 brown	8		0	14	
16		9		0	16	#5 Quartz Sand Pack 2" PVC Sch. 40 0.010 Slot Screen
18		10		0	18	
20	Boring terminated at 20 ft				20	

WELL LOG 08-03-009 HANNOVER.GPJ WELL LOG.GDT 9/30/08