





Hull &  
Associates, Inc

PROJECT # <u>SBI013</u>	DAILY FIELD REPORT No. _____	SHEET <u>1</u> OF <u>1</u>
PROJECT <u>Plume Deliv.</u>	DATE OF OBSERVATION <u>9/12/02</u>	WEATHER _____
LOCATION <u>South Band</u>	TIME ON SITE FROM <u>740</u>	TO <u>1745</u>
CONTRACTOR (PRIME) _____	(SUBCONTRACTORS) <u>Top flight</u>	
VISITORS ON SITE <u>Roger (Driller)</u>		
DESCRIPTION OF WORK <u>740 - On Site 745. Driller arrives. 870 Cal. Oaken - 7.02 to 7.0 solution 9.74 to 10.0 solution. Completed CTW5, CTW6, CTW7, CTW8, CTW9. Dup @ CTW5d, Field Blank prep @ CTW5 and CTW8. Driller leaves at 1600. Cooler Prep. to Fed Ex @ 1745.</u>		
MATERIALS DELIVERED TODAY _____		

**FedEx** USA Airbill Express  
 FedEx Tracking Number **8358 8679 8458**

1 From Please print and print clearly  
 Date **9/12/02** Sender's FedEx Account Number  
 Phone **(419) 385 2018**

Sender's Name **Mike Coon-Fare**  
 Company **Hull & Associates**

Address **3401 Glendale Ave**  
 City **Toledo** State **OH** zip **43614**

2 Your Internal Billing Reference **SR1013**  
 3 To Recipient's Name **JOHN STEINER** Phone **(937) 294-6856**  
 Company **TESTAMERICA INCORPORATED**

Address **3601 S DIXIE DR**  
 City **DAYTON** State **OH** zip **45439**

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 Or call 1.800.Go.FedEx® 800.483.3338

Form ID No. **02215**  
 MUR 12

4a Express Package Service  
 FedEx Priority Overnight  
 FedEx Standard Overnight  
 Next Business Morning  
 Next Business Afternoon  
 FedEx First Overnight  
 FedEx Next Business Morning  
 FedEx Next Business Afternoon

4b Express Freight Service  
 FedEx 2Day  
 FedEx 1Day Freight\*  
 Next Business Day  
 FedEx Express Saver  
 FedEx 2Day Freight  
 FedEx 3Day Freight  
 Next Business Day  
 First Business Day

5 Packaging  
 FedEx Envelope\*  
 FedEx Pak\*  
 Other

6 Special Handling  
 SATURDAY Delivery  
 HOLD Saturday at FedEx Location  
 Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes  
 HOLD Weekday at FedEx Location  
 Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes  
 Dry Ice  
 Carriage Aircraft Only

7 Payment Bill to:  
 Sender  
 Recipient  
 Third Party  
 Credit Card  
 Cash/Check

8 Release Signature  
 Total Packages **1**  
 Total Weight **0454-1431-0**  
 Total Declared Value\* **\$ 00**

By signing your authorization to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.  
 Signature: **[Signature]**  
 Date: **9/12/02**  
 FedEx Use Only: **447**

PLEASE PRINT AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE.

# FedEx USA Airbill

EXPRESS

FedEx Tracking Number **8358 8679 8480**

Form 1015  
**0215**  
MUR 12

1 From *Please copy and paste here* **9/17/02** Sender's FedEx Account Number

Date **9/17/02** Sender's Name **Mike Confan** Company **Hull's Associates** Phone **419 385 2218**

Address **3401 Glendale Ave** City **Toledo** State **OH** ZIP **43614**

2 Your Internal Billing Reference **882013** Recipient's Name **JOHN STEINER** Company **TESTAMERICA INCORPORATED**

Address **3601 S DIXIE DR** Address to "HOLD" at FedEx location, print FedEx address. Phone **(937) 294-6856**

3 To Recipient's Name **JOHN STEINER** Company **TESTAMERICA INCORPORATED** Address **3601 S DIXIE DR** City **DAYTON** State **OH** ZIP **45439**

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0224653275

4a Express Package Service  
 FedEx Priority Overnight  
 FedEx Standard Overnight  
 Next Business Morning  
 FedEx 2Day  
 FedEx Express Saver  
 FedEx 1Day Freight\*  
 Next Business Day  
 FedEx 2Day Freight  
 Second Business Day  
 FedEx 3Day Freight  
 Third Business Day

5 Packaging  
 FedEx Envelope\*  
 FedEx Pak\*  
 Other

6 Special Handling  
 Saturday Delivery  
 Hold Saturday at FedEx Location  
 Hold Weekend at FedEx Location  
 Fragile - Handle with Care  
 Dry Ice  
 Cargo Aircraft Only

7 Payment Bill to:  
 Sender  
 Recipient  
 Third Party  
 Credit Card  
 Cash/Check

8 Release Signature  
 Total Packages **1**  
 Total Weight **143.5**  
 Total Declared Value\* **.00**  
 Release Signature **0454-143-5**

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

447

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE

# FedEx USA Airbill

Express

FedEx Tracking Number

8358 8679 8469

**1 From** Please print and press hard

Date 9-12-02 Sender's FedEx Account Number

Sender's Name Mike Condran Phone (419) 385-2017

Company Hull & Associates

Address 3401 Glendale Avenue

City Toledo State OH ZIP 43614

**2 Your Internal Billing Reference** SGI013

**3 To** Recipient's Name JOHN STEINER Phone (937) 294-6856

Company TESTAMERICA INCORPORATED

Address 3601 S DIXIE DR

City DAYTON State OH ZIP 45439

**Try online shipping at fedex.com**

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 or call 1.800.Go.FedEx® 800.463.3339.

0224653275

MUR 12

Form ID No. **02215**

Package up to 150 lbs. Delivery commitment may be late in some areas. Express next business morning delivery to select locations.

**4a Express Package Service**

FedEx Priority Overnight  FedEx Standard Overnight  FedEx First Overnight

FedEx 2Day  FedEx Express Saver

**4b Express Freight Service**

FedEx 1Day Freight\*  FedEx 2Day Freight  FedEx 3Day Freight

**5 Packaging**

FedEx Envelope\*  FedEx Pak\*  Other

**6 Special Handling**

Saturday Delivery  Hold Weekend at FedEx Location  Available ONLY for FedEx Priority Overnight and FedEx 2Day to select business days

**7 Payment Bill to:**

Sender  Recipient  Third Party  Credit Card  Cash/Check

**8 Release Signature**

Signature: [Signature]

Total Packages 1 Total Weight 103 Total Declared Value\* 00

447

PULL AND RETAIN THIS COPY BEFORE AFFIXING TO THE PACKAGE



# CHAIN OF CUSTODY RECORD

Dublin  
6130 Wilcox Road  
Dublin, Ohio 43016  
Phone: (614) 385-8777  
Fax: (614) 385-9070

Toledo  
3401 Glendale Avenue  
Suite 300  
Toledo, Ohio 43614  
Phone: (419) 385-2018  
Fax: (419) 385-5489

Mason  
4700 Duke Drive  
Suite 172  
Mason, Ohio 45040  
Phone: (513) 459-9677  
Fax: (513) 459-9686

Solon  
6161 Cochran Road  
Suite A  
Solon, Ohio 44139  
Phone: (440) 519-2555  
Fax: (440) 519-2560

Client: City of Solon, Ohio  
Site: Hazardous Waste Site  
Project#: S35013 Phase:             
Samplers: W Coonance

REPORT TO: Kenneth Waldman

ANALYSES  
PRESERVATIVES: K/P/GA

COMMENTS

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE	SAMPLER ID	NO. OF CONT.	METALS	SAMPLING DATE/TIME	PRESERVATIVES	METALS	ANALYSES	COMMENTS
S35013	ATW1d		412	2	N	9-10-02 1455	A - Cool only, <4° C B - HNO <sub>3</sub> pH<2 C - H <sub>2</sub> SO <sub>4</sub> pH<2 D - NaOH pH>12 E - Zincacetate + NaOH, pH>9 F - Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (1000ppm) G - HCl, pH <2	F - FILTERED B - BOTH N - NONE		412 1255
S35013	ATW1s		412	2	N	9-10-02 1430				
S35013	ATW2d		412	2	N	9-10-02 850				
S35013	ATW2s		412	2	N	9-10-02 920				
S35013	ATW3d		412	2	N	9-10-02 1050				
S35013	ATW3s		412	2	N	9-10-02 1110				
S35013	ATW4d		412	2	N	9-10-02 1745				
S35013	FBI		412	2	N	9-10-02 1645				
S35013	TBI		412	2	N	9-10-02 1450				
S35013	ATW4s		412	2	N	9-10-02 1310				
S35013	ATW5d		412	2	N	9-10-02 1425				
S35013	ATW5s		412	2	N	9-10-02 1450				

REINQUISHED BY:            DATE: 9-12-02 TIME: 1705 RECEIVED BY: FEB CX DATE: 9-12-02 TIME: 1705

REINQUISHED BY:            DATE:            TIME:            RECEIVED BY:            DATE:            TIME:           

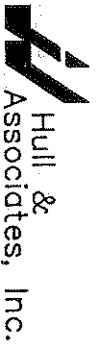
REINQUISHED BY:            DATE:            TIME:            RECEIVED FOR LAB BY:            DATE:            TIME:           

COOLER TEMPERATURE AS RECEIVED:            °C

DISTRIBUTION:  
 WHITE:            LAB USE (MUST BE RETURNED WITH REPORT)  
 YELLOW:            LAB USE  
 PINK:            RETAINED BY HW

Deliver To: Sample Delivery  
 Method of Delivery: FED EX  
 Airbill Number: 8356 6639 2469  
 NOTES: B.W.M. 3-1 TRP 31/03

TURN AROUND TIME: 5 HOURS DAYS



# CHAIN OF CUSTODY RECORD

PAGE 2 OF 2  
 NO. 17403

Dublin  
 6130 Wilcox Road  
 Dublin, Ohio 43016  
 Phone: (614) 385-8777  
 Fax: (614) 385-9070

Toledo  
 3401 Glendale Avenue  
 Suite 300  
 Toledo, Ohio 43614  
 Phone: (419) 385-2018  
 Fax: (419) 385-5489

Mason  
 4700 Duke Drive  
 Suite 172  
 Mason, Ohio 45040  
 Phone: (513) 459-9677  
 Fax: (513) 459-9869

Solon  
 6161 Cochran Road  
 Suite A  
 Solon, Ohio 44139  
 Phone: (440) 519-2555  
 Fax: (440) 519-2560

REPORT TO: Kevin Williams

Client: Clorox Sales Team  
 Site: Horizontal Sluice - Delmarva  
 Project#: SB1013 Phase:           
 Samplers: 1M Composite

- SAMPLE TYPES
- A AIR
  - C ASBESTOS
  - D SEDIMENT
  - G GROUNDWATER
  - P PRODUCT
  - S SOL
  - SL SOL
  - Z OTHERS
  - All samples are kept at 4°C.
- PRESERVATIVES
- A - Cool only, <4° C
  - B - HNO<sub>3</sub>, pH<2
  - C - H<sub>2</sub>SO<sub>4</sub>, pH<2
  - D - NaOH, pH>12
  - E - Zinc acetate + NaOH, pH>8
  - F - Hg, S, O<sub>3</sub> (0.008%)
  - G - HCl, pH<2
- ANALYSES
- F - FILTERED
  - B - BOM

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE	SAMPLER ID	NO. OF CONT.	METALS	SAMPLING DATE/TIME	ANALYSES	COMMENTS
SB1013	ATWZAD		091002	2	N	9-10-02 6:50	X	
SB1013	ATWSAD		091002	2	N	9-10-02 1:25	X	
SB1013	ATW6d		091002	2	N	9-10-02 1:00	X	
SB1013	ATW6s		091002	2	N	9-10-02 6:15	X	
SB1013	ATW7d		091002	2	N	9-10-02 1:30	X	
SB1013	ATW7S		091002	2	N	9-10-02 1:45	X	
SB1013	ATW8d		091102	2	N	9-11-02 7:00	X	
SB1013	ATW8S		091102	2	N	9-11-02 8:55	X	
SB1013	ATW9d		091102	2	N	9-11-02 7:35	X	
SB1013	ATW9S		091102	2	N	9-11-02 8:55	X	
SB1013	ATW10d		091102	2	N	9-11-02 7:35	X	
SB1013	ATW10S		091102	2	N	9-11-02 8:55	X	

RELINQUISHED BY: M. Williams DATE: 9-12-02 TIME: 17:00 RECEIVED BY: FCD Ex DATE: 9-12-02 TIME: 17:00

RELINQUISHED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ RECEIVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RELINQUISHED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ RECEIVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RELINQUISHED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ RECEIVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

COOLER TEMPERATURE AS RECEIVED °C: \_\_\_\_\_ °C

DISTRIBUTION: \_\_\_\_\_

Deliver To: Sample Return

Method of Delivery: Ex

Arb bill Number: 8352 7679 7469

NOTES: \_\_\_\_\_

TURN AROUND TIME: 5 DAYS

Hull & Associates, Inc.

GROUNDWATER SAMPLING  
FIELD DATA SHEET

ATWld

Well I.D. \_\_\_\_\_

Site Location \_\_\_\_\_

Client \_\_\_\_\_

Site No. \_\_\_\_\_

Project No. & Phase

SBI 013

Weather Conditions & Approx. Air Temperature \_\_\_\_\_

Type of Well Construction \_\_\_\_\_

Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_

Cap Locked (Yes / No) \_\_\_\_\_

Lock No. \_\_\_\_\_

Depth to Water \_\_\_\_\_

feet

Total Depth of Well \_\_\_\_\_

feet

LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_

feet

LNAPL Thickness \_\_\_\_\_

feet

Sample Date \_\_\_\_\_

Sample No. \_\_\_\_\_

Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Units _____	Units _____	Units _____
1320	NA	Static Conditions	31.2	7.08	<del>7052</del> 7052	VERY Turbid		
1330	~1.0g	1	24.2	7.06	539	mod. Turbid		
1340	~1.0g	2	21.7	7.07	529	mod Turbid		
1350	~1.0g	3	21.5	7.09	521	Slightly Turbid		
1355	Sample	4						
		5						

One Well Volume Equals

082

Gallons

Comments

~~0.82/well volume = 0.13~~ Purge 1gal/well volume screen from 39-41' bgs, TW located near NCOE Franklin lot ~35' S of Sample

Drum Inventory: Soil \_\_\_\_\_

\_\_\_\_\_

Purge Water \_\_\_\_\_

LNAPL \_\_\_\_\_





Huff & Associates, Inc.  
3401 Glendale Ave. Suite 300  
Toledo, Ohio 43614  
(419) 385-2018  
(419) 385-5487 (fax)

## GROUNDWATER MONITORING WELL FIELD DATA SHEET

**DRAFT** ATW1S  
MONITORING POINT: ATW1S  
DETECTION: \_\_\_\_\_  
ASSESSMENT: \_\_\_\_\_

### FACILITY INFORMATION

NAME: \_\_\_\_\_ PROJECT NUMBER: SBI018  
ADDRESS: \_\_\_\_\_ TELEPHONE: ( )  
CONTACT: \_\_\_\_\_

### MONITORING WELL DATA

COORDINATES: \_\_\_\_\_ N \_\_\_\_\_  
\_\_\_\_\_ E \_\_\_\_\_  
CONDITION OF WELL: \_\_\_\_\_  
GROUND SURFACE ELEVATION: \_\_\_\_\_ CASING MATERIAL/DIAMETER: PVC/2"  
TOTAL DEPTH (FROM GROUND SURFACE): \_\_\_\_\_ TOP OF CASING ELEVATION: \_\_\_\_\_  
SCREENED INTERVAL (INCLUDING SAND PACK): \_\_\_\_\_ TOTAL DEPTH (FROM TOP OF CASING): \_\_\_\_\_  
SCREENED FORMATION: \_\_\_\_\_ SCREENED DEPTH (SCREEN ONLY): \_\_\_\_\_

### WEATHER CONDITIONS

WEATHER: Sunny Clear, 80s WIND DIRECTION: \_\_\_\_\_  
BAROMETRIC PRESSURE: \_\_\_\_\_ TEMPERATURE (°F): 80s

### FIELD MEASURED PARAMETERS

PERSONNEL PRESENT: \_\_\_\_\_  
MEASURED TOTAL DEPTH (FROM TOC): \_\_\_\_\_ STATIC WATER LEVEL (FROM TOC): ~24'  
VOLUME OF STATIC WATER: \_\_\_\_\_ GROUNDWATER ELEVATION: \_\_\_\_\_

### PURGING DATA

DATE OF PURGING: \_\_\_\_\_ TIME OF PURGING: \_\_\_\_\_  
PURGING METHOD: \_\_\_\_\_ VOLUME PURGED: \_\_\_\_\_  
PURGING RATE: \_\_\_\_\_

WELL VOLUMES PURGED							
	Initial	1	2	3	4	5	6/Final
pH	7.28	7.09	7.06	7.04			
Temp.	24.3	21.4	20.6	19.6			
Spec. Cond.	542	532	532	533			
Corr. Cond.							
Redox Pot.							
D.O.							
Turbidity	4	3	3	2			

VOLUME TO PURGE CALCULATION TABLE				
Well casing Diameter (in.)	Gallons Per Foot of Depth	Feet of Standing Water	3 Well Volumes	Total Volume to Purge (Gal.)
1	0.041	X 20	X 3	<del>2.46</del> 0.246
2	0.163	X	X 3	
4	0.653	X	X 3	
6	1.469	X	X 3	

### SAMPLING DATA

DATE/TIME OF SAMPLING: 9/9/02 - 1430 SAMPLING RATE (IF USING DEDICATED PUMP): \_\_\_\_\_  
SAMPLING METHOD: HP/Peristaltic Pump STATIC WATER LEVEL (AFTER SAMPLING): ~24'

### NOTES

0.82 gallons assuming 2' static; screen @ 41' (2' screen)  
TW located near NEC of Franklin lot ~ 35' S of Sample, Screen @ 27-29', 0.21g/v

EXPLOSIVE GAS READING PRIOR TO STATIC WATER LEVEL: %CH<sub>4</sub>: \_\_\_\_\_ %LEL: \_\_\_\_\_

### METER CALIBRATIONS

DATE: \_\_\_\_\_ pH 4.01 = \_\_\_\_\_ Slope = \_\_\_\_\_ 2.5% CH<sub>4</sub> = \_\_\_\_\_  
TIME: \_\_\_\_\_ pH 7.00 = \_\_\_\_\_ Cond. Slope = \_\_\_\_\_ 50% LEL = \_\_\_\_\_  
pH 10.01 = \_\_\_\_\_ 1413 µS/cm \_\_\_\_\_  
Standard Reading = \_\_\_\_\_

*Slightly Turbid*

*5 V214 Turbid*

9/10/02

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client Southern Band

Well I.D. ATW2 d

Site Location LAFAYETTE / ACCESS ROAD

Site No. \_\_\_\_\_

Project No. & Phase SBI013

Weather Conditions & Approx. Air Temperature SUNNY, 80s

Type of Well Construction \_\_\_\_\_

Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_

Cap Locked (Yes / No) \_\_\_\_\_

Lock No. \_\_\_\_\_

Depth to Water 25' feet

Total Depth of Well 42' feet

LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet

LNAPL Thickness \_\_\_\_\_ feet

Sample Date 9/10/02 @ 850

Sample No. \_\_\_\_\_

Purging Method Per. Pump / hand pump

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units	Units	Units
826	NA	Static Conditions	26.1	7.00	625	4		
833	~0.7	1	22.3	7.05	606	3		
838	~1.5	2	21.4	7.15	605	2/3		
843	~2.2	3	20.2	7.18	596	2		
		4						
		5						

One Well Volume Equals 0.70 Gallons 2.1 liter to purge

Comments start @ 805, screen from 38-42' bgs, Petro @ DOE / SHEEN

Drum Inventory: Soil \_\_\_\_\_

Purge Water \_\_\_\_\_

LNAPL \_\_\_\_\_

1  
slightly red

5  
very turbid

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW25  
 Site No. \_\_\_\_\_ Site Location LAFAYETTE / ACCESS ROAD  
 Project No. & Phase S81013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 25' feet Total Depth of Well \_\_\_\_\_ feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 920 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Turb.</u> Units _____	Units _____	Units _____
908	NA	Static Conditions	24.5	7.49	592	3		
912	~ 0.4	1	22.0	7.24	572	2/3		
914	~ 0.3	2	21.0	7.25	580	2		
917	~ 0.4	3	20.5	7.27	580	2		
		4						
		5						

One Well Volume Equals 0.3 Gallons - 1g total

Comments ~ 7' OF WATER START @ 905, SCREEN 28-32

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
slightly bad

5  
very bad

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 3d  
 Site No. \_\_\_\_\_ Site Location South Side of Access Rd. N. of Jct.  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 25' feet Total Depth of Well 39' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1050 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1025	NA	Static Conditions	29.5	7.18	613	5		
1032	0.7	1	25.6	7.18	609	4		
1038	0.7	2	23.1	7.20	597	3		
1045	1.0	3	24.7	7.18	607	1/2		
		4						
		5						

One Well Volume Equals 0.5 Gallons 1.5 total

Comments Start Drilling @ 950, Screen from 38-39' bgs (Screen would not open all the way)

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slightly  
5  
very  
1.0

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 35  
 Site Location South Side of Access Rd, N of Jail  
 Site No. \_\_\_\_\_ Project No. & Phase \_\_\_\_\_  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor): if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20' feet Total Depth of Well 34 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1110 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
R01	NA	Static Conditions	24.3	7.22	583	4		
1104	0.25	1	22.9	7.20	591	3		
1107	0.25	2	22.1	7.16	588	2		
1109	0.25	3	21.9	7.16	589			
		4						
		5						

One Well Volume Equals 0.25 Gallons ~ 0.75 total

Comments Screen from 31-34

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 slightly turbid  
5 very turbid

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 4d  
 Site No. \_\_\_\_\_ Site Location South of new Pub. Works Bldg. in access roads  
 Project No. & Phase SBI03  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 25' feet Total Depth of Well 36-40' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 1245 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	Turb Units _____	_____ Units _____	_____ Units _____
1230	NA	Static Conditions	26.5	7.04	983	4		
1235	~1.0	1	23.0	7.01	1007	3		
1238	0.75	2	21.0	7.02	1015	2/3		
1243	0.75	3	20.0	7.06	1039	2		
		4						
		5						

One Well Volume Equals 0.75 Gallons ~2.5

Comments Start drilling @ 1155, start sampling @ 1245

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 of stable, 1 very fine sand

**GROUNDWATER SAMPLING  
FIELD DATA SHEET**

Well I.D. ATW 4s

Client \_\_\_\_\_ Site Location \_\_\_\_\_

Site No. \_\_\_\_\_ Project No. & Phase \_\_\_\_\_

Weather Conditions & Approx. Air Temperature \_\_\_\_\_

Type of Well Construction \_\_\_\_\_

Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_

Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_

Depth to Water 25' feet Total Depth of Well 28-32 feet

LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet

LNAPL Thickness \_\_\_\_\_ feet

Sample Date 9/10/22 1310 Sample No. \_\_\_\_\_

Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	<u>Turb.</u> Units _____	Units _____	Units _____
1256	NA	Static Conditions	23.6	7.10	1050	4		
1301	~ 0.33	1	24.2	7.47	1212	2/3		
1305	~ 0.33	2	22.8	7.40	1219	3		
1309	~ 0.33	3	23.2	7.40	1240	2		
		4						
		5						

One Well Volume Equals 0.33 Gallons

Comments Start pumping @ 1256, well from 28-32' Bgs

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Stability . . .  
5  
2114

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 5d  
 Site No. \_\_\_\_\_ Site Location Access Pa N. of JAIL, near United  
 Project No. & Phase SBC 013  
 Weather Conditions & Approx. Air Temperature \_\_\_\_\_  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22 feet Total Depth of Well 36' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 1425 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units at 25°C	Turb. Units	Units	Units
1407	NA	Static Conditions	30.7	7.09	975	4		
1412	~ 0.6	1	23.3	7.04	897	3		
1417	~ 0.6	2	20.4	7.05	932	2/3		
1422	~ 1.0	3	19.6	7.06	925	2		
		4						
		5						

One Well Volume Equals 0.60 Gallons - 1.8 gallons

Comments Mob to ATW 5; Start drilling @ 1340, screen did not open, bottom of well @ 36', 1400 @ 36'. Start pumping @ 1407, Sample @ 1425, collect Dup

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

*1 slightly L.C.1*  
*5 very turbid*



GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client \_\_\_\_\_ Well I.D. ATW55  
 Site No. \_\_\_\_\_ Site Location Access Rd N of Jtl, near Unkrd  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22 feet Total Depth of Well 29-24' bgs feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 1450 Sample No. \_\_\_\_\_  
 Purging Method Piezostatic Pump

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units	Units	Units
1440	NA	Static Conditions	20.8	7.18	963	4		
1443	~0.3	1	19.4	6.86	1434	3		
1447	~0.5	2	19.0	6.85	1466	2/3		
1449	~0.5	3	18.4	6.86	1221	2		
		4						
		5						

One Well Volume Equals 0.3 Gallons ~1g total

Comments Start pump @ 1440, sample @ 1450

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slight turb: 0

5  
vial  
- turb: 0.1

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client Suntron Bank Well I.D. ATW 6 d  
 Site Location Row by Contas Bldg  
 Site No. \_\_\_\_\_ Project No. & Phase SST 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21' feet Total Depth of Well 39-36 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1600 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu$ S at 25°C	<u>uvh</u> Units _____	Units _____	Units _____
1540	NA	Static Conditions	30.1	7.23	606	4		
1544	~0.75	1	22.7	7.14	511	3		
1550	~0.75	2	19.8	7.04	512	2/3		
1555	~0.75	3	18.9	7.07	519	2		
		4						
		5						

One Well Volume Equals 0.75 Gallons 2.25 total

Comments 1520 - Start Drilling, 1530 - @ 4', Screen did not come out all the way, 1540 - Start pump. 1605 - Pull well up to 24-27, start pumping

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slightly turbid  
 very turbid

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 65  
 Site Location Row by Center  
 Site No. \_\_\_\_\_ Project No. & Phase \_\_\_\_\_  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 27 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1615 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1606	NA	Static Conditions	23.2	7.03	537	3		
1608	~0.3	1	19.9	7.04	615	3		
1611	~0.4	2	18.8	7.02	626	2/3		
1614	~0.4	3	18.0	7.02	546	2		
		4						
		5						

One Well Volume Equals 0.3 Gallons

Comments Set well from 24-27, start pumping @ 1606, 1615 collect sample

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slightly turbid  
5  
Very turbid

9/10

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 7d  
 Site No. \_\_\_\_\_ Site Location Kerr Street / Perris  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 40 - 36 Screen feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1730 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units	Units	Units
1714	NA	Static Conditions	21.9	7.32	512	4		
1720	~1.0	1	19.7	7.22	492	3		
1724	~0.8	2	18.0	7.15	492	2/3		
1728	~0.8	3	17.5	7.16	495	2/3		
		4						
		5						

One Well Volume Equals 0.8 Gallons

Comments 1640. Start Degrading ATW 7. Prepared Field Blanks @ ATW 7 @ 1645.  
@ 40' @ 1705. Water @ 21' screen 36-40', Start pump @ 1714  
Sample @ 1730

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slight  
very

GROUNDWATER SAMPLING  
FIELD DATA SHEET

9/10

Client South Bend Well I.D. ATW 75  
 Site No. \_\_\_\_\_ Site Location Kearl Prairie  
 Project No. & Phase SEIOB  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 24-28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/10/02 @ 1745 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1737	NA	Static Conditions	18.5	7.23	512			
1740	~0.3	1	17.9	7.24	516			
1742	~0.3	2	17.5	7.19	510			
1744	~0.3	3	17.2	7.20	515			
		4						
		5						

One Well Volume Equals 0.3 Gallons

Comments Start pump @ 1737, Sample @ 1745

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 slight  
5 very  
1 low

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 8d  
 Site No. \_\_\_\_\_ Site Location South of Foundry  
 Project No. & Phase SBI013

Weather Conditions & Approx. Air Temperature \_\_\_\_\_

Type of Well Construction \_\_\_\_\_

Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_

Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_

Depth to Water 20 feet Total Depth of Well 40' feet

LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet

LNAPL Thickness \_\_\_\_\_ feet

Sample Date 9/11/02 820 Sample No. \_\_\_\_\_

Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND Units $\mu S$ at 25°C	Turb Units	Units	Units
803	NA	Static Conditions	18.0	7.16	585	4		
810	1.0	1	16.3	7.03	525	3		
814	1.0	2	15.8	7.04	518	2/3		
817	~0.7	3	15.6	7.06	507	2		
		4						
		5						

One Well Volume Equals 0.82 Gallons - 2.5 total

Comments Start drilling @ 735, screen 36-40', 20' H<sub>2</sub>O column,  
Start pump @ 803. Sample @ 820

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slight turbid  
5  
very turbid

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW85  
 Site Location South of Foundry  
 Site No. \_\_\_\_\_ Project No. & Phase SBI03  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 27 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 835 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

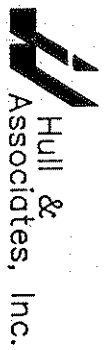
WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>MS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
827	NA	Static Conditions	16.3	7.07	498	3		
830	~ 0.33	1	16.1	7.07	524	3		
832	~ 0.33	2	16.1	7.04	521	2/3		
834	~ 0.33	3	16.0	7.05	512	2		
		4						
		5						

One Well Volume Equals 0.33 Gallons 1 g total

Comments Start Pumping @ 827 sample @ 835

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

slight  
very turbid



Hull & Associates, Inc.

# CHAIN OF CUSTODY RECORD

NO. 91011

Dublin  
 6130 Wilcox Road  
 Dublin, Ohio 43016  
 Phone: (614) 385-8777  
 Fax: (614) 385-9070

Toledo  
 3401 Glendale Avenue  
 Suite 300  
 Toledo, Ohio 43614  
 Phone: (419) 385-2018  
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Mason  
 4700 Duke Drive  
 Suite 172  
 Mason, Ohio 45040  
 Phone: (513) 459-9677  
 Fax: (513) 459-9869

Solon  
 6161 Cochran Road  
 Suite A  
 Solon, Ohio 44139  
 Phone: (440) 519-2555  
 Fax: (440) 519-2560

REPORT TO: Kevin Williams

Client: City of South Beach  
 Site: 20101 21st Avenue Delwood  
 Project#: SBI013 Phase: \_\_\_\_\_  
 Samplers: W. Coomaraswamy

SAMPLE TYPES: A AIR, C ASBESTOS, D SEDIMENT, G GROUNDWATER, P PRODUCT, S SOIL, W WATER, Z OTHERS  
 PRESERVATIVES: A - Cool only, <4° C, B - HNO<sub>3</sub>, pH<2, C - H<sub>2</sub>SO<sub>4</sub>, pH<2, D - KOH, pH>12, E - NaOH, pH>12, F - H<sub>2</sub>O<sub>2</sub>, pH>9, G - H<sub>2</sub>O<sub>2</sub>, pH>9, H - HCl, pH<2  
 METALS: F - FILTERED, N - NOT FILTERED, B - BOTH

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE	SAMPLER ID	NO. OF METALS CONT.	SAMPLING DATE/TIME	ANALYSES	COMMENTS
SBI013	ATW09D	091102	412	2	9-11-02 1000	A.R. A.G.	
SBI013	ATW09S	091102	412	2	9-11-02 1020		@ ATW09
SBI013	FBI	091102	412	2	9-11-02 1030		
SBI013	TB2	091202		1			
SBI013	ATW0D	091102	412	2	9-11-02 1140		
SBI013	ATW0D	091102	412	2	9-11-02 1200		
SBI013	ATW0D	091102	412	2	9-11-02 1330		
SBI013	ATW0D	091102	412	2	9-11-02 1340		
SBI013	ATW0D	091102	412	2	9-11-02 1350		
SBI013	ATW0D	091102	412	2	9-11-02 1400		
SBI013	ATW0D	091102	412	2	9-11-02 1410		
SBI013	ATW0D	091102	412	2	9-11-02 1420		
SBI013	ATW0D	091102	412	2	9-11-02 1430		
SBI013	ATW0D	091102	412	2	9-11-02 1440		
SBI013	ATW0D	091102	412	2	9-11-02 1450		
SBI013	ATW0D	091102	412	2	9-11-02 1500		
SBI013	ATW0D	091102	412	2	9-11-02 1510		
SBI013	ATW0D	091102	412	2	9-11-02 1520		
SBI013	ATW0D	091102	412	2	9-11-02 1530		
SBI013	ATW0D	091102	412	2	9-11-02 1540		
SBI013	ATW0D	091102	412	2	9-11-02 1550		

RELINQUISHED BY: M. O'Neil DATE: 9-12-02 TIME: 1700

RECEIVED BY: EX DATE: 9-12-02 TIME: 1700

RELINQUISHED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RECEIVED FOR LAB BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

Deliver To: S. Williams

Method of Delivery: EX

Airbill Number: 4357 7619 7470

NOTES: \_\_\_\_\_

COOLER TEMPERATURE AS RECEIVED °C: \_\_\_\_\_

DISTRIBUTION: \_\_\_\_\_

TURN AROUND TIME: SLIM AND DAVIS



GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client Sandy Bend Well I.D. ATW 9d  
 Site Location on Prairie south of Viaduct  
 Site No. \_\_\_\_\_ Project No. & Phase SB2013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22' feet Total Depth of Well 40-36' screen feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1000 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units _____	_____ Units _____	_____ Units _____
945	NA	Static Conditions	21.5	7.32	579	4/5		
951	~0.75	1	18.8	7.22	562	3		
954	~0.75	2	17.5	7.14	565	2/3		
958	~0.75	3	17.9	7.14	571	2		
		4						
		5						

One Well Volume Equals 0.75 Gallons = 2.25

Comments 22' to H<sub>2</sub>O, Bottom of screen @ 40', Start pumping @ 945, Sample @ 1000

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
L  
5  
very  
turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW 95  
 Site Location Prarie S of Viaduct  
 Site No. \_\_\_\_\_ Project No. & Phase SBS 013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22' feet Total Depth of Well 28' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1020 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units _____	_____ Units _____	_____ Units _____
1008	NA	Static Conditions	16.8	7.26	575	4		
1012	~ 0.33	1	16.6	7.21	555	4		
1014	~ 0.3	2	16.4	7.16	579	3/4		
1016	~ 0.3	3	16.3	7.14	574			
		4						
		5						

One Well Volume Equals 0.3 Gallons ~ 1 g total

Comments Bring screen to 24-28. start pumping @ 1008  
Strong petro odor w/ screen, Field Blank @ 1030

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
slight  
1  
5  
very  
1

GROUNDWATER SAMPLING  
FIELD DATA SHEET

9/11

Client South Bend Well I.D. ATW 10d  
 Site Location Lafayette South of Rd.  
 Site No. \_\_\_\_\_ Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 25' feet Total Depth of Well 38' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/07 @ 1140 Sample No. \_\_\_\_\_  
 Purging Method Perforated Pump

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>MS</u> at 25°C	<u>turb</u> Units _____	Units _____	Units _____
1134	NA	Static Conditions	23.9	7.24	534	4		
1138	~0.7	1	21.2	7.18	504	3		
1139	~0.5	2	20.0	7.16	518	3		
1140	~0.5	3	19.2	7.18	463	2/3		
		4						
		5						

One Well Volume Equals 0.55 Gallons 1.65

Comments 1106 Start Drilling, set well from 35-38' (screen did not open all the way). Start pumping @ 1134, increased hose diameter, Sample @ 1140

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 Slight  
-ob  
5  
very  
-b

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ATW10S  
 Site No. \_\_\_\_\_ Site Location Lafayette St of Rd  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water \_\_\_\_\_ feet Total Depth of Well 31 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1200 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic Pump

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>AS</u> at 25°C	Turb Units _____	_____ Units _____	_____ Units _____
1152	NA	Static Conditions	22.7	7.19	523	4		
1154	~ 0.3	1	20.0	7.26	501	3/4		
1155	~ 0.25	2	19.6	7.25	505	3		
1156	~ 0.3	3	20.7	7.23	511	3		
		4						
		5						

One Well Volume Equals 0.25 Gallons - 0.75

Comments Screen 27-31. Start pump @ 1152, slight sweet odor, Sample @ 1200

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 slight turb.  
5 very turb.

GROUNDWATER SAMPLING  
FIELD DATA SHEET

a/u

Client South Bend Well I.D. ATW 11d  
 Site Location Stadium Lot, Lafayette St/South  
 Site No. \_\_\_\_\_ Project No. & Phase SBZ03  
 Weather Conditions & Approx. Air Temperature Sunny  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 25' feet Total Depth of Well 39' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1330 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\frac{mS}{cm}$ at 25°C	<u> Turb</u> Units _____	Units _____	Units _____
1320	NA	Static Conditions	20.0	7.22	798	4		
1322	~ 0.75	1	18.8	7.16	771	4		
1324	~ 0.6	2	17.4	7.06	785	3		
1326	~ 0.6	3	17.8	7.06	787	3		
		4						
		5						

One Well Volume Equals 0.6 Gallons 1.8

Comments 1245 Street to HA Boring, no obstruction to 5' bgs. Street drilling @ 1300  
1320 Street Pumping, Screen 35-39, Sample @ 1330

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
5  
vorn  
7.60

GROUNDWATER SAMPLING  
FIELD DATA SHEET

9/11

Client South Bend Well I.D. AT wells  
 Site No. \_\_\_\_\_ Site Location Shannon lot  
 Project No. & Phase SBI003  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water \_\_\_\_\_ feet Total Depth of Well 31 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1340 Sample No. \_\_\_\_\_  
 Purging Method Peristaltic

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units	Units	Units
1334	NA	Static Conditions	18.1	7.05	801	4		
1335	~0.3	1	17.1	7.14	635	4		
1337	~0.3	2	17.3	7.13	609	3		
1338	~0.3	3	17.8	7.11	625	2/3		
		4						
		5						

One Well Volume Equals 0.25 Gallons

Comments Screen 27-31, start pumping @ 1334, Sample @ 1340

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

Slight  
S  
Turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW1d  
 Site Location Maint. Prop (NEC)  
 Site No. \_\_\_\_\_ Project No. & Phase SB1013

Weather Conditions & Approx. Air Temperature \_\_\_\_\_

Type of Well Construction Temp

Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_

Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_

Depth to Water 15' feet Total Depth of Well 41' feet

LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet

LNAPL Thickness \_\_\_\_\_ feet

Sample Date 9/9/02 1700 Sample No. \_\_\_\_\_

Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1540	NA	Static Conditions	33.3	7.11	518	5		
1605	1.06	1	28.3	7.02	522	4		
1630	1.80	2	22.6	7.14	462	3		
1650	3.0	3	21.0	7.15	470	3		
		4						
		5						

One Well Volume Equals 1.06 Gallons

Comments Deep well screened from 39-41' bgs., purged ~3.2 gallons

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

i  
 relatively turbid  
 S  
 very turbid

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client City South Bend Well I.D. CTW15  
 Site No. \_\_\_\_\_ Site Location Mant. Prop (NEC)  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature \_\_\_\_\_  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 15' feet Total Depth of Well 20' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/9/02 1720 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>turb</u> Units _____	Units _____	Units _____
1710	NA	Static Conditions	21.2	6.95	533	5		
1713	0.25	1	20.1	6.86	520	3		
1715	0.25	2	19.3	6.85	530	2		
1717	0.25	3	18.7	6.84	525	2		
		4						
		5						

One Well Volume Equals 0.25 Gallons

Comments Screen 18-20', good flow from shallow screen  
changed up AFTER 1st volume

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

5  
new bio



GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW2d  
 Site Location WEST WAYNE between Scott / Chapin  
 Site No. \_\_\_\_\_ Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 23 feet Total Depth of Well 39 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1525 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>AS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1517	NA	Static Conditions	20.8	7.29	494	4		
1519	~0.7	1	19.4	7.22	469	4		
1521	~1.0	2	18.0	7.16	427	4		
1522	~0.6	3	18.2	7.06	466	3		
		4						
		5						

One Well Volume Equals 0.65 Gallons

Comments NA top 2' - Very Rocky. 1500' Start drilling. Screen 36-39  
Start pumping @ 1517, Sample 1525

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

*sight turb*  
*5*  
*Very turb*

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW25  
 Site Location WEST WAYNE  
 Site No. \_\_\_\_\_ Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 23 feet Total Depth of Well 27-31 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1540 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	Turb Units _____	_____ Units _____	_____ Units _____
1532	NA	Static Conditions	20.6	7.04	483	+		
1533	~0.33	1	18.3	7.10	478	4		
1534	~0.33	2	17.5	7.09	519	4		
1535	0.33	3	16.9	7.06	520	3		
		4						
		5						

One Well Volume Equals 0.33 Gallons 1g total

Comments Screen 27-31" - Start Pump @ 1532 samples @ 1540

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
5  
very  
7-16

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 4d  
 Site No. \_\_\_\_\_ Site Location \_\_\_\_\_  
 Project No. & Phase SBE013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 39 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1740 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>MS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1730	NA	Static Conditions	17.4	7.21	470	4		
1733	~ 1.0	1	16.7	7.14	471	3		
1735	~ 0.7	2	16.3	7.08	471	3		
1736	~ 0.7	3	15.7	7.06	480	2		
		4						
		5						

One Well Volume Equals 0.8 Gallons 2.5 g total

Comments Hand Auger Top 5' - clear, Start Drillage 1710, Screen @ 35-39  
Sample @ 1740

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

slight  
5  
Virt  
thin

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 4s  
 Site No. \_\_\_\_\_ Site Location \_\_\_\_\_  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water \_\_\_\_\_ feet Total Depth of Well 29 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1750 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	Turb Units _____	Units _____	Units _____
1744	NA	Static Conditions	17.2	7.00	499	3		
1745	~0.4	1	15.6	7.05	482	3		
1746	~0.4	2	15.2	7.06	483	3		
1747	~0.4	3	15.8	7.03	477			
		4						
		5						

One Well Volume Equals 0.37 Gallons 1.11 g total

Comments Screen 25-29, Shovel Pumping @ 1744, Sample @ 1750

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
slight  
S  
very  
T shd



Hull & Associates, Inc.

# CHAIN OF CUSTODY RECORD

NO. 07406

Dublin  
 6130 Wilcox Road  
 Dublin, Ohio 43016  
 Phone: (614) 385-8777  
 Fax: (614) 385-9070

Toledo  
 3401 Glendale Avenue  
 Suite 300  
 Toledo, Ohio 43614  
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 4700 Duke Drive  
 Suite 172  
 Mason, Ohio 45040  
 Phone: (513) 459-9877  
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Solon  
 6161 Cochran Road  
 Suite A  
 Solon, Ohio 44139  
 Phone: (440) 519-2555  
 Fax: (440) 519-2560

PRESERVATIVES  
 ANALYSES

Client: C.I. Smith & Sons  
 Site: Haystack Plant Administration  
 Project#: SS5013 Phase: \_\_\_\_\_  
 Samplers: W. Cassin

SAMPLE TYPES:  
 A AIR  
 C ASBESTOS  
 D SEMIMENT  
 O GROUNDWATER  
 P PRODUCT  
 S SOIL  
 W WATER  
 Z OTHERS

PRESERVATIVES:  
 A - Cool only, <4° C  
 B - HNO<sub>3</sub>, pH<2  
 C - H<sub>2</sub>SO<sub>4</sub>, pH<2  
 D - H<sub>2</sub>SO<sub>4</sub>, pH<12  
 E - Zinc nitrate + NaOH, pH>9  
 F - Hot S<sub>2</sub>O<sub>3</sub> (0.008%)  
 G - HCl, pH<2

METALS:  
 F - FILTERED  
 N - NOT FILTERED  
 B - BOTH

All samples are kept at 4°C.

Analytical Lab  
 Vocs

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE	SAMPLER ID	NO. OF METALS CONT.	SAMPLING DATE/TIME	PREPARED	ANALYSES	COMMENTS
SB5013	CTW31D		412	2	9-11-02 1630	X		
SB5013	CTW35		412	2	9-11-02 1630	X		
SB5013	CTW34		412	2	9-11-02 1640	X		
SB5013	CTW35		412	2	9-12-02 950	X		
SB5013	CTW35		412	2	9-12-02 905	X		
SB5013	CTW6d		412	2	9-12-02 1020	X		
SB5013	CTW6S		412	2	9-12-02 1035	X		
SB5013	CTW3d		412	2	9-12-02 1145	X		
SB5013	CTW3S		412	2	9-12-02 1200	X		
SB5013	CTW3d		412	2	9-12-02 135	X		
SB5013	CTW3S		412	2	9-12-02 1530	X		
SB5013	CTW3d		412	2	9-12-02 1425	X		

RELINQUISHED BY: M. Cassin  
 DATE: 9-12-02 TIME: 1300

RECEIVED BY: FEB EK  
 DATE: 9-17-02 TIME: 1300

RELINQUISHED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

RECEIVED FOR LAB BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

COOLER TEMPERATURE AS RECEIVED °C : \_\_\_\_\_

DISTRIBUTION:  
 WHITE --LAB USE (MUST BE RETURNED WITH REPORT)  
 YELLOW --LAB USE  
 PINK --RETAINED BY HW

TURN AROUND TIME: \_\_\_\_\_ DAYS

Deliver To: Sample Room  
 Method of Delivery: FEB EK  
 Airbill Number: 8357 1693 2457

NOTES: \_\_\_\_\_



# CHAIN OF CUSTODY RECORD

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6161 Cochran Road  
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Solon, Ohio 44139  
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Fax: (440) 519-2560

REPORT TO: K. WILBURN

Client: Case South Blvd

Site: Hospital Drive Delin

Project#: SIC013 Phase:           

Samplers: Arbelen Guss

- A AIR
  - C ASBESTOS
  - D SEDIMENT
  - G GROUNDWATER
  - P PRODUCT
  - S SOIL
  - W WATER
  - Z OTHERS
- All samples are kept at 4°C.

- A - Cool only, < 4°C
- B - HNO3, pH<2
- C - H2SO4, pH<2
- D - HNO3, pH<2
- E - Zincate + NaOH, pH>9
- F - No S-O (0.0209x)
- G - HCl 5M @ 2

MEANS  
F - FILTERED  
N - NOT FILTERED  
B - BOTH

PROJECT NO.	SAMPLE LOCATION	SAMPLE TYPE	SAMPLER ID	NO. OF METALS	SAMPLING DATE/TIME	ANALYSES	COMMENTS
SIC013	CIU95	OR1202	412	2	9-17-02 1435	X	
SIC013	TB3	091202	1			X	
SIC013	EB1	091202	412	2	9-17-02	X	
SIC013	FB2	091202	412	2	9-17-02	X	
SIC013	CTWSAD	091702	412	2	9-17-02 1450	X	

RELINQUISHED BY:            DATE: 9-12-02 TIME: 1305 RECEIVED BY: FIDEL DATE: 9-12-02 TIME: 1305

RELINQUISHED BY:            DATE:            TIME:            RECEIVED BY:            DATE:            TIME:           

RELINQUISHED BY:            DATE:            TIME:            RECEIVED FOR LAB BY:            DATE:            TIME:           

COOLER TEMPERATURE AS RECEIVED °C:            °C

DISTRIBUTION:            WHITE LABEL            LAB USE (MUST BE RETURNED WITH REPORT)            REMAINED BY HIM           

Deliver To:             
Method of Delivery:             
Airbill Number: 75576394 / 7457

NOTES:           

TURN AROUND TIME:            DAYS

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bay Well I.D. CTW 3d  
 Site Location Chapin/Thomas  
 Site No. \_\_\_\_\_ Project No. & Phase SBI03  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify ☒  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 38' feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 8/11/02 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1620	NA	Static Conditions	22.7	7.38	788	4		
1621	~0.75	1	18.8	7.27	447	3/4		
1623	~0.75	2	17.6	7.10	444	3		
1624	~0.75	3	17.5	7.09	448	3		
		4						
		5						

One Well Volume Equals 0.75 Gallons 2.25

Comments Shut Drilling @ 1557, Screen @ 34-38, Shut pumping @ 1620, screen did not open, collected Dup

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Shut  
5  
Very  
L

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 35  
 Site No. \_\_\_\_\_ Site Location Chapm/Thomas  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/11/02 @ 1640 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu$ S at 25°C	Turb Units _____	Units _____	Units _____
1636	NA	Static Conditions	20.3	7.04	468	4		
1637	0.33	1	17.8	7.11	475	4		
1638	0.33	2	17.1	7.07	479	3		
1639	0.33	3	17.3	7.07	486	3		
		4						
		5						

One Well Volume Equals 0.33 Gallons 1g total

Comments Series 24-28, start pumping @ 1636, samples @ 1640

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

slight  
h  
5  
very  
Turb



GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. ETW5d  
 Site Location Park S of Western  
 Site No. \_\_\_\_\_ Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 39 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 850 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND Units $\mu S$ at 25°C	Units _____	Units _____	Units _____
843	NA	Static Conditions	19.2	7.15	468	4		
845	~0.75	1	16.7	7.07	455	3/4		
846	~0.75	2	16.0	7.04	454	3		
847	~0.75	3	15.7	7.02	445	3		
		4						
		5						

One Well Volume Equals 0.75 Gallons 2.25 total

Comments HA @ 750 hit slowness/Brick w/ HA, refusal @ 3 spots, start drilling @ 885 @ third spot ~45' SE of FH on S side of Western, start pumping @ 843 Sample @ 850, Dup collected

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
5  
very  
7-12

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 55  
 Site Location Park S of Western  
 Site No. \_\_\_\_\_ Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature \_\_\_\_\_  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 29 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 905 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>MS</u> at 25°C	Turb Units _____	Units _____	Units _____
858	NA	Static Conditions	15.4	7.11	454	3		
859	~0.33	1	14.9	7.13	458	3		
900	~0.33	2	14.8	7.12	458	3		
901	~0.33	3	15.0	7.08	443	3		
		4						
		5						

One Well Volume Equals 0.33 Gallons 15 total

Comments Start Pumping @ 858, screen 25229, Sample @ 905  
Prep Field Blank @ 925

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
5  
Very  
Turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 6d  
 Site No. \_\_\_\_\_ Site Location SWC of Par 12  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22 feet Total Depth of Well 38 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1020 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>MS</u> at 25°C	<u>Turbidity</u> Units _____	Units _____	Units _____
1013	NA	Static Conditions	20.2	7.14	415	4		
1014	~0.7	1	18.5	7.10	396	4		
1016	~0.8	2	17.3	7.06	414	3/4		
1017	~0.6	3	16.4	7.03	416	3		
		4						
		5						

One Well Volume Equals 0.66 Gallons 2 gallons

Comments HA top 5' - Street Drilling @ 955, 3" Screen 34-38,  
~~see~~ 1013 Start Pumping

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
5  
very  
turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW65  
 Site No. \_\_\_\_\_ Site Location SWC of Park  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 70's  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 22 feet Total Depth of Well 28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1035 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu$ S/cm at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1028	NA	Static Conditions	20.4	7.14	441	3/4		
1030	~0.3	1	17.3	7.17	420	3		
1031	~0.3	2	17.4	7.13	432	3		
1032	~0.3	3	17.9	7.09	435	3		
		4						
		5						

One Well Volume Equals 0.25 Gallons 0.75

Comments 24-28 screen - Start pumping @ 1028

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

*slight turb*  
*S very turb.*

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Banc Well I.D. CTW 7d  
 Site No. \_\_\_\_\_ Site Location Lowell Cul de Sac  
 Project No. & Phase SBI03  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 38-34 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1145 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units at 25°C	Turb Units	Units	Units
1138	NA	Static Conditions	24.4	6.85	385	4		
1140	0.75	1	21.6	6.99	380	3		
1142	~0.8	2	19.7	7.02	397	3		
1143	~0.75	3	18.6	7.04	402	3		
		4						
		5						

One Well Volume Equals 0.75 Gallons 2.25 total

Comments 1138 start pump, sample @ 1145

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

*Slightly*  
5  
v/v  
T. 1

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 75  
 Site Location Laurel on de SAC  
 Site No. \_\_\_\_\_ Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 70s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1200 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units $\mu S$ at 25°C	<u>Thurb</u> Units _____	Units _____	Units _____
1155	NA	Static Conditions	19.1	7.12	435	4		
1156	~0.3	1	17.3	7.14	445	3/4		
1157	~0.3	2	17.2	7.14	437	3		
1158	~0.3	3	17.8	7.10	456	3		
		4						
		5						

One Well Volume Equals 0.3 Gallons 1g total

Comments Start pumping @ 1155, Screen 24-28, Sample @ 1200

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

*Sloughly*  
*5 vent*  
*Thurb*

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 8d  
 Site No. \_\_\_\_\_ Site Location \_\_\_\_\_  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 39 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/08 @ 13:15 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1308	NA	Static Conditions	22.3	7.05	455	4		
1310	~0.8	1	19.6	7.09	434	3		
1311	0.75	2	18.1	7.06	438	3		
1312	0.75	3	17.4	7.04	440	3		
		4						
		5						

One Well Volume Equals 0.75 Gallons 2.25 total

Comments Start HA @ 1243, Start Drilling @ 1250. Down Falls Blank @ 1255, Screen 35-39, Start pumping @ 1308 sample @ 1315

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
slight turb  
5  
vis turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW85  
 Site No. \_\_\_\_\_ Site Location \_\_\_\_\_  
 Project No. & Phase SBI 013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 21 feet Total Depth of Well 28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1330 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND Units <u>MS</u> at 25°C	Turb Units _____	Units _____	Units _____
1324	NA	Static Conditions	18.3	7.07	454	3		
1323	0.3	1	<del>16.9</del> 16.9	7.10	453	3		
1324	0.3	2	17.0	7.08	474	3		
1325	0.3	3	17.5	7.06	474	3		
		4						
		5						

One Well Volume Equals 0.33 Gallons 1 g total

Comments Sample @ 1330

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
right  
5  
V-4  
T-4



GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South M. Berg Well I.D. CTW9d  
 Site No. \_\_\_\_\_ Site Location Arnold  
 Project No. & Phase SB1013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 39 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1425 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED (GALLONS) / WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND. Units <u>µS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1415	NA	Static Conditions	19.1	7.04	412	4		
1418	~.9	1	17.6	7.06	383	3		
1419	~.8	2	16.6	7.05	408	3		
1420	~.8	3	16.4	7.07	410	3		
		4						
		5						

One Well Volume Equals 0.9 Gallons 2.5g total

Comments i356 - Start Drilling (Asphalt), Sample @ 1425, screen  
35-39

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1 slight turb  
5 very turb

GROUNDWATER SAMPLING  
FIELD DATA SHEET

Client South Bend Well I.D. CTW 95  
 Site No. \_\_\_\_\_ Site Location Arnold  
 Project No. & Phase SBI013  
 Weather Conditions & Approx. Air Temperature Sunny 80s  
 Type of Well Construction \_\_\_\_\_  
 Condition of Well (Good / Poor); if poor, specify \_\_\_\_\_  
 Cap Locked (Yes / No) \_\_\_\_\_ Lock No. \_\_\_\_\_  
 Depth to Water 20 feet Total Depth of Well 28 feet  
 LNAPL (Yes / No), Depth to LNAPL \_\_\_\_\_ feet  
 LNAPL Thickness \_\_\_\_\_ feet  
 Sample Date 9/12/02 @ 1435 Sample No. \_\_\_\_\_  
 Purging Method \_\_\_\_\_

WELL PURGING			PARAMETERS					
TIME	APPROX. VOLUME PURGED(GALLONS)/WELL VOLUME	NO. OF WELL VOLUMES	TEMP. °C	pH (S.U.) at 25°C	COND Units, <u>µS</u> at 25°C	<u>Turb</u> Units _____	Units _____	Units _____
1429	NA	Static Conditions	17.3	7.19	424	3		
1430	~0.33	1	16.4	7.15	424	3		
1431	~0.33	2	16.0	7.14	428	3		
1432	~0.33	3	15.9	7.09	427			
		4						
		5						

One Well Volume Equals 0.33 Gallons 136gal

Comments Severe 24-28, start pumping @ 1429 Sample @ 1435

Drum Inventory: Soil \_\_\_\_\_ Purge Water \_\_\_\_\_ LNAPL \_\_\_\_\_

1  
Slight  
2

5  
vert  
+ 1b