



CON: 12-15  
Doc # 9008

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII  
901 NORTH 5TH STREET  
KANSAS CITY, KANSAS 66101

AUG 28 2006

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Greg Cornelson  
Clinton Community Schools  
Lyon Middle School  
2810 North 4<sup>th</sup> Street  
Clinton, Iowa 52732

Dear Mr. Cornelson:

RE: Schick (ex) General Hospital Site, Clinton, Iowa  
EPA ID No. IAN000703371  
ASR No. 3050

Enclosed are copies of Sample Collection Field Sheets and Results of Sample Analysis reports for environmental samples collected from the Lyon Middle School property in June 2006, by the U.S. Environmental Protection Agency (EPA). This sampling activity is a continuation of the previous investigation conducted for the above referenced Superfund site.

Sample numbers 3050-12 and -17FB are soil samples. The analytical results from the soil samples indicate that concentrations of metals are considered within acceptable levels (Preliminary Remediation Goals (PRGs)) found in residential soils.

The PRGs role in site "screening" is to help identify areas, contaminants, and conditions that do not require further federal attention at a particular site. Generally, at sites where contaminant concentrations fall below PRGs, no further action or study is warranted under the Superfund program, so long as the exposure assumptions at a site match those taken into account by the PRG calculations. Chemical concentrations above the PRG would not automatically designate a site as "dirty" or trigger a response action. However, exceeding a PRG suggests that further evaluation of the potential risks posed by site contaminants maybe appropriate.

Any questions regarding the public health significance of the results should be directed to Charles Barton at the Iowa Department of Health at 515-281-6881.



This information is forwarded to you in accordance with the provisions of Section 3007(a) of the Resource Conservation and Recovery Act of 1976, as amended; and Section 104(e)(4)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended. This letter is intended to transmit the data received from the laboratory and not to provide a full or detailed analysis of the data.

Thank you for your cooperation with this investigation. If you have questions about the past or future investigation activities, or any other questions, please contact me at 913-551-7568.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald King". The signature is fluid and cursive, with the first name "Ronald" and last name "King" clearly distinguishable.

Ronald King  
Enforcement/Fund Removal Branch  
Superfund Division

Enclosures:

cc: Charles Barton, IDH - w/enclosures  
Dan Cook, IDEQ - w/enclosures

Schick (ex) General Hospital, Clinton, Iowa, EPA ID #IAN000703371  
August 15, 2006

Sample Information ASR Number 3050 Project ID: RKSchick				
MEDIA - SOIL				
Sample No.	Property Address	Analytical Data Results (mg/kg) <sup>1</sup>		Preliminary Remediation Goals <sup>2</sup> (for residential soil (mg/kg))
12 - Soil (0-4' bgs)	Greg Cornelson Clinton Community Schools Lyon Middle School 2810 North 4th Street Clinton, IA 52732	Metals	Aluminum - 3,420 Barium - 44.6 Calcium - 31,600 Chromium - 7.30 Copper - 11.2 Iron - 8,060 Magnesium - 15,800 Manganese - 304 Nickel - 9.81 Vanadium - 14.8 Zinc - 20.4	Aluminum - 76,000 Barium - 5,400 Calcium - NA Chromium - 210 Copper - 3,100 Iron - 23,000 Magnesium - NA Manganese - 1,800 Nickel - 1,600 Vanadium - 78 Zinc - 23,000
		VOCs	Acetone - 93 2-Butanone - 20	Acetone - NA 2-Butanone - NA
17-FB - Soil (Trip Blank Sample)	----	VOCs	Acetone - 18	Acetone - NA

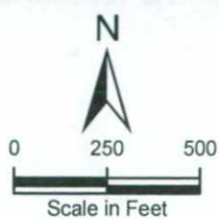
1 - mg/kg. The measurement in Milligrams per Kilograms (parts per million).

2 - The Preliminary Remediation Goals (PRGs) role in site "screening" is to help identify areas, contaminants, and conditions that do not require further federal attention at a particular site. Generally, at sites where contaminant concentrations fall below PRGs, no further action or study is warranted under the Superfund program, so long as the exposure assumptions at a site match those taken into account by the PRG calculations. Chemical concentrations above the PRG would not automatically designate a site as "dirty" or trigger a response action. However, exceeding a PRG suggests that further evaluation of the potential risks that may be posed by site contaminants is appropriate.



#### Legend

- Surface soil sample location
- Surface soil and subsurface soil sample location
- Surface soil, subsurface soil and groundwater sample location
- Sediment sample location



Schick (ex) General Hospital  
Clinton, Iowa

**Figure 2**  
Sample Location Map



**Tetra Tech EM Inc.**

Source: Clinton NW, IA SE and SW DOQQ, 2002 NAIPP Imagery

Date: 06/15/06

Drawn By: Roger Stull

Project No: 19004.L06.0002.006.009





# Sample Collection Field Sheet

US EPA Region 7  
Kansas City, KS

ASR Number: 3050 Sample Number: 12 QC Code: \_\_\_ Matrix: Solid Tag ID: 3050-12-\_\_\_

Project ID: RKSCHICK Project Manager: Ron King  
Project Desc: Schick (EX) General Hospital - PA sampling  
City: Clinton State: Iowa  
Program: Superfund  
Site Name: Multi-Site - General Site ID: 07ZZ Site OU: 00

Location Desc: Soil sample

External Sample Number: \_\_\_\_\_

Expected Conc: (or Circle One: Low Medium High) Date Time(24 hr)  
Latitude: \_\_\_\_\_ Sample Collection: Start: 6/27/06 07:30  
Longitude: \_\_\_\_\_ End: 6/27/06 07:30

## Laboratory Analyses:

Container	Preservative	Holding Time	Analysis
2 - 40 mL VOA	4 Deg C	14 Days	1 TPH Volatiles in Soil by GC/MS
2 - 40 mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14 Days	1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap
<del>1 - 8 oz glass</del>	<del>4 Deg C</del>	<del>180 Days</del>	<del>1 Mercury in Soil or Sediment</del>
1 - 8 oz glass	4 Deg C	180 Days	1 Metals in Solids by ICP <sup>Mercury</sup>
<del>1 - 8 oz glass</del>	<del>4 Deg C</del>	<del>28 Days</del>	<del>1 Perchlorate in Soil by IC</del>
1 - 8 oz glass	4 Deg C	14 Days	1 PCBs in Soil by GC/EC
1 - 8 oz glass	4 Deg C	14 Days	1 TPH Semi-Volatile in Soil by GC/FID <sup>Perchlorate</sup>

## Sample Comments:

(N/A)

Shallow Soil Sample collected from field of Lyons Middle School

Brown clay

2 to 4 ft wet and lighter color

Collected 0-4 ft

Sample Collected By: EF

**Sample Collection Field Sheet**  
**US EPA Region 7**  
**Kansas City, KS**

**ASR Number:** 3050    **Sample Number:** 17    **QC Code:** FB    **Matrix:** Solid    **Tag ID:** 3050-17-FB

**Project ID:** RKSCHICK    **Project Manager:** Ron King  
**Project Desc:** Schick (EX) General Hospital - PA sampling  
**City:** Clinton    **State:** Iowa  
**Program:** Superfund  
**Site Name:** Multi-Site - General    **Site ID:** 07ZZ    **Site OU:** 00

**Location Desc:** Soil 5035/TPH (OA-1) VOA Trip Blank sample

**External Sample Number:** \_\_\_\_\_

**Expected Conc:** \_\_\_\_\_ (or Circle One: Low Medium High)    **Date**    **Time(24 hr)**

**Latitude:** \_\_\_\_\_

**Sample Collection: Start:** 6/27/06    0:0

**Longitude:** \_\_\_\_\_

**End:** 6/27/06    0:0

**Laboratory Analyses:**

Container	Preservative	Holding Time	Analysis
2 - 40mL VOA	4 Deg C	14 Days	90 Moisture / Solids / HC
2 - 40mL VOA vial (preserved/tared)	4 Deg C, H2O + sodium bisulfate (in vial)	14 Days	1 TPH Volatiles in Soil by GC/MS 1 VOC's in Soil at Low Levels by GC/MS Closed-System Purge-and-Trap

**Sample Comments:**

(N/A)

*Trip Blank*

**Sample Collected By:** EF

**United States Environmental Protection Agency**  
**Region 7**  
**901 N. 5th Street**  
**Kansas City, Kansas 66101**

08/09/2006

**Results of Sample Analysis**

Sample: 3050-12

Project ID: RKSCHICK

These are the results from the analysis of solid sample number 3050-12. This sample was collected on 06/27/2006 at the location described as: Soil sample collected from field of Lyons Middle School (0-4'). If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3050-12 for project: RKSCHICK - Schick (EX) General Hospital - PA sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Mercury in Soil or Sediment</u></b>		
Mercury	Less Than 0.122	Milligrams per Kilogram
<b><u>Metals in Soil by Inductively Coupled Argon Plasma (ICP)</u></b>		
Aluminum	3420	Milligrams per Kilogram
Antimony	Less Than 7.30	Milligrams per Kilogram
Arsenic	Less Than 4.17	Milligrams per Kilogram
Barium	Approximately 44.6	Milligrams per Kilogram
Beryllium	Less Than 0.608	Milligrams per Kilogram
Cadmium	Less Than 0.608	Milligrams per Kilogram
Calcium	Approximately 31600	Milligrams per Kilogram
Chromium	Approximately 7.30	Milligrams per Kilogram
Cobalt	Less Than 6.08	Milligrams per Kilogram
Copper	Approximately 11.2	Milligrams per Kilogram
Iron	8060	Milligrams per Kilogram
Lead	Less Than 5.97	Milligrams per Kilogram
Magnesium	Approximately 15800	Milligrams per Kilogram
Manganese	304	Milligrams per Kilogram
Nickel	Approximately 9.81	Milligrams per Kilogram
Potassium	Less Than 608	Milligrams per Kilogram
Selenium	Less Than 4.26	Milligrams per Kilogram
Silver	Less Than 1.22	Milligrams per Kilogram
Sodium	Less Than 608	Milligrams per Kilogram
Thallium	Less Than 3.04	Milligrams per Kilogram
Vanadium	Approximately 14.8	Milligrams per Kilogram
Zinc	Approximately 20.4	Milligrams per Kilogram



Sample: 3050-12  
Project ID: RKSCHICK

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Polychlorinated Biphenyls (PCBs) in Soil by Gas Chromatography and Electron Capture Detection (GC/EC)</u></b>		
Aroclor 1016	Less Than 40	Micrograms per Kilogram
Aroclor 1221	Less Than 40	Micrograms per Kilogram
Aroclor 1232	Less Than 40	Micrograms per Kilogram
Aroclor 1242	Less Than 40	Micrograms per Kilogram
Aroclor 1248	Less Than 40	Micrograms per Kilogram
Aroclor 1254	Less Than 40	Micrograms per Kilogram
Aroclor 1260	Less Than 40	Micrograms per Kilogram
Aroclor 1262	Less Than 40	Micrograms per Kilogram
Aroclor 1268	Less Than 40	Micrograms per Kilogram
<b><u>Perchlorate in Soil by Ion Chromatography (IC)</u></b>		
Perchlorate	Less Than 0.47	Milligrams per Kilogram
<b><u>Semi-volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Flame Ionization Detection (GC/FID)</u></b>		
Extractable TPH	Less Than 81	Milligrams per Kilogram
<b><u>Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)</u></b>		
Purgeable TPH	Less Than 60.5	Micrograms per Kilogram
<b><u>Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.</u></b>		
Acetone	Approximately 93	Micrograms per Kilogram
Benzene	Less Than 5.8	Micrograms per Kilogram
Bromodichloromethane	Less Than 5.8	Micrograms per Kilogram
Bromoform	Less Than 5.8	Micrograms per Kilogram
Bromomethane	Less Than 5.8	Micrograms per Kilogram
2-Butanone	Approximately 20	Micrograms per Kilogram
Carbon Disulfide	Less Than 5.8	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 5.8	Micrograms per Kilogram
Chlorobenzene	Less Than 5.8	Micrograms per Kilogram
Chloroethane	Less Than 5.8	Micrograms per Kilogram
Chloroform	Less Than 5.8	Micrograms per Kilogram
Chloromethane	Less Than 5.8	Micrograms per Kilogram
Cyclohexane	Less Than 5.8	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 5.8	Micrograms per Kilogram
Dibromochloromethane	Less Than 5.8	Micrograms per Kilogram

Sample: 3050-12  
Project ID: RKSCHICK

Analysis/Analyte	Amount Found	Units
1,2-Dibromoethane	Less Than 5.8	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 5.8	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 5.8	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 5.8	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 5.8	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 5.8	Micrograms per Kilogram
1,2-Dichloroethane	Less Than 5.8	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 5.8	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 5.8	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 5.8	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 5.8	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 5.8	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 5.8	Micrograms per Kilogram
Ethyl Benzene	Less Than 5.8	Micrograms per Kilogram
2-Hexanone	Less Than 12	Micrograms per Kilogram
Isopropylbenzene	Less Than 5.8	Micrograms per Kilogram
Methyl Acetate	Less Than 5.8	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 5.8	Micrograms per Kilogram
Methylcyclohexane	Less Than 5.8	Micrograms per Kilogram
Methylene Chloride	Less Than 17	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 12	Micrograms per Kilogram
Styrene	Less Than 5.8	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 5.8	Micrograms per Kilogram
Tetrachloroethene	Less Than 5.8	Micrograms per Kilogram
Toluene	Less Than 5.8	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 5.8	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 5.8	Micrograms per Kilogram
1,1,1-Trichloroethane	Less Than 5.8	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 5.8	Micrograms per Kilogram
Trichloroethene	Less Than 5.8	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 5.8	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 5.8	Micrograms per Kilogram
Vinyl Chloride	Less Than 5.8	Micrograms per Kilogram
m and/or p-Xylene	Less Than 5.8	Micrograms per Kilogram
o-Xylene	Less Than 5.8	Micrograms per Kilogram

**United States Environmental Protection Agency**

**Region 7**

**901 N. 5th Street**

**Kansas City, Kansas 66101**

08/09/2006

**Results of Sample Analysis**

Sample: 3050-17-FB

Project ID: RKSCHICK

These are the results from the analysis of solid sample number 3050-17-FB. This sample was collected on 06/27/2006 at the location described as: Soil 5035/TPH (OA-1) VOA Trip Blank sample. If you have any questions about these results, contact Ron King at the above address or by calling 913-551-7568. Correspondence should refer to sample number 3050-17-FB for project: RKSCHICK - Schick (EX) General Hospital - PA sampling.

<b>Analysis/Analyte</b>	<b>Amount Found</b>	<b>Units</b>
<b><u>Volatile Total Petroleum Hydrocarbon (TPH) in Soil by Gas Chromatography and Mass Selective Detection (GC/MS)</u></b>		
Purgeable TPH	Less Than 51.8	Micrograms per Kilogram
<b><u>Volatile Organic Compounds in Soil at Low Levels by Closed-System Purge-and-Trap GC/MS.</u></b>		
Acetone	Approximately 18	Micrograms per Kilogram
Benzene	Less Than 5.7	Micrograms per Kilogram
Bromodichloromethane	Less Than 5.7	Micrograms per Kilogram
Bromoform	Less Than 5.7	Micrograms per Kilogram
Bromomethane	Less Than 5.7	Micrograms per Kilogram
2-Butanone	Less Than 11	Micrograms per Kilogram
Carbon Disulfide	Less Than 5.7	Micrograms per Kilogram
Carbon Tetrachloride	Less Than 5.7	Micrograms per Kilogram
Chlorobenzene	Less Than 5.7	Micrograms per Kilogram
Chloroethane	Less Than 5.7	Micrograms per Kilogram
Chloroform	Less Than 5.7	Micrograms per Kilogram
Chloromethane	Less Than 5.7	Micrograms per Kilogram
Cyclohexane	Less Than 5.7	Micrograms per Kilogram
1,2-Dibromo-3-Chloropropane	Less Than 5.7	Micrograms per Kilogram
Dibromochloromethane	Less Than 5.7	Micrograms per Kilogram
1,2-Dibromoethane	Less Than 5.7	Micrograms per Kilogram
1,2-Dichlorobenzene	Less Than 5.7	Micrograms per Kilogram
1,3-Dichlorobenzene	Less Than 5.7	Micrograms per Kilogram
1,4-Dichlorobenzene	Less Than 5.7	Micrograms per Kilogram
Dichlorodifluoromethane	Less Than 5.7	Micrograms per Kilogram
1,1-Dichloroethane	Less Than 5.7	Micrograms per Kilogram

Sample: 3050-17-FB  
Project ID: RKSCHICK

Analysis/Analyte	Amount Found	Units
1,2-Dichloroethane	Less Than 5.7	Micrograms per Kilogram
1,1-Dichloroethene	Less Than 5.7	Micrograms per Kilogram
cis-1,2-Dichloroethene	Less Than 5.7	Micrograms per Kilogram
trans-1,2-Dichloroethene	Less Than 5.7	Micrograms per Kilogram
1,2-Dichloropropane	Less Than 5.7	Micrograms per Kilogram
cis-1,3-Dichloropropene	Less Than 5.7	Micrograms per Kilogram
trans-1,3-Dichloropropene	Less Than 5.7	Micrograms per Kilogram
Ethyl Benzene	Less Than 5.7	Micrograms per Kilogram
2-Hexanone	Less Than 11	Micrograms per Kilogram
Isopropylbenzene	Less Than 5.7	Micrograms per Kilogram
Methyl Acetate	Less Than 5.7	Micrograms per Kilogram
Methyl tert-butyl ether	Less Than 5.7	Micrograms per Kilogram
Methylcyclohexane	Less Than 5.7	Micrograms per Kilogram
Methylene Chloride	Less Than 12	Micrograms per Kilogram
4-Methyl-2-Pentanone	Less Than 11	Micrograms per Kilogram
Styrene	Less Than 5.7	Micrograms per Kilogram
1,1,2,2-Tetrachloroethane	Less Than 5.7	Micrograms per Kilogram
Tetrachloroethene	Less Than 5.7	Micrograms per Kilogram
Toluene	Less Than 5.7	Micrograms per Kilogram
1,2,3-Trichlorobenzene	Less Than 5.7	Micrograms per Kilogram
1,2,4-Trichlorobenzene	Less Than 5.7	Micrograms per Kilogram
1,1,1-Trichloroethane	Less Than 5.7	Micrograms per Kilogram
1,1,2-Trichloroethane	Less Than 5.7	Micrograms per Kilogram
Trichloroethene	Less Than 5.7	Micrograms per Kilogram
Trichlorofluoromethane	Less Than 5.7	Micrograms per Kilogram
1,1,2-Trichlorotrifluoroethane	Less Than 5.7	Micrograms per Kilogram
Vinyl Chloride	Less Than 5.7	Micrograms per Kilogram
m and/or p-Xylene	Less Than 5.7	Micrograms per Kilogram
o-Xylene	Less Than 5.7	Micrograms per Kilogram