82031

WARZYN

PROJECT
10010201

VOLUME III of III

TECHNICAL MEMORANDUM NO. 1
INVESTIGATION RESULTS AND ANALYSIS REPORT

REMEDIAL INVESTIGATION/FEASIBILITY STUDY
H.O.D. LANDFILL
ANTIOCH, ILLINOIS

OCTOBER 1993

PREPARED FOR:
WASTE MANAGEMENT OF ILLINOIS, INC.
WESTCHESTER, ILLINOIS

• • •

PREPARED BY:
WARZYN INC.
ADDISON, ILLINOIS

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VILLAGE AND PRIVATE RESIDENCE WATER SUPPLY WELL LOGS

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M1

MUNICIPAL WELL CONSTRUCTION INFORMATION

EXCERPT FROM: "PUBLIC GROUNDWATER SUPPLIES IN LAKE COUNTY": STATE OF ILLINOIS, DEPARTMENT OF REGISTRATION AND EDUCATION, ILLINOIS STATE WATER SURVEY, BULLETIN 60-20, 1976, P. 10-12

ISWS/BUL-60(20)/76
BULLETIN 60-20
STATE OF ILLINOIS
DEPARTMENT OF REGISTRATION AND EDUCATION

Public Groundwater Supplies in Lake County

by DOROTHY M. WOLLER and JAMES P. GIBB

ILLINOIS STATE WATER SURVEY
URBANA
1976

ANTIOCH

The village of Antioch (3189) installed a public water supply in 1907. Two wells (Nos. 3 and 4) are in use and two wells (Nos. 1 and 2) are available for emergency use. In 1949 there were 500 services, all metered; the estimated average and maximum daily pumpages were 25,000 and 50,000 gpd, respectively. In 1974 there were 1400 services, all metered; the average and maximum daily pumpages were 575,000 and 850,000 gpd, respectively. The water is chlorinated and treated with polyphosphate to keep iron in solution. The natural fluoride concentration in the water is adequate to satisfy state requirements.

WELL NO. 1, finished in sand and gravel, was completed in 1907 to a depth of 216 ft by Charles Thorne, DeKalb. This well is available for emergency use. The well is located at the southwest corner of Orchard and Broadway Sts., approximately 1900 ft N and 1200 ft E of the SW corner of Section 8, T46N, R10E. The land surface elevation at the well is approximately 780 ft.

A 6-in. diameter hole was drilled to a depth of 216 ft. The well is cased with 6-in. steel pipe from 0.8 ft above the pumphouse floor to a depth of 207 ft followed by 9 ft of 4.5-in. Johnson screen.

On November 3, 1932, the nonpumping water level was reported to be 40 ft below the pump base.

The pumping equipment presently installed consists of a 20-hp U.S. electric motor (Serial No. 915264), a 6-in., 20 stage Peerless turbine pump set at 150 ft, rated at 150 gpm, and has 150 ft of 4-in. column pipe. A 30-ft section of 4-in. suction pipe is attached to the pump intake. The well is equipped with 150 ft of airline.

A mineral analysis made by the Illinois Environmental Protection Agency (Lab. No. B100780) of a sample collected July 15, 1974, after pumping for 1 hr, showed the water to have a hardness of 173 mg/l, total dissolved minerals of 327 mg/l, and an iron content of 0.16 mg/l.

WELL NO. 2, finished in sand and gravel, was completed in 1906 to a depth of 226 ft, and rebuilt in November 1949 to a depth of 231.5 ft by C. L. Wertz, Antioch. This well is available for emergency use. The well is located about 27 ft south of Well No. 1, approximately 1873 ft N and 1200 ft E of the SW corner of Section 8, T46N, R10E. The land surface elevation at the well is approximately 780 ft.

#2

A drillers log of Well No. 2 follows:

Strata	Thickness (ft)	Depth (ft)
Soil	15	15
Gravel and clay	141	156
Quicksand	50	206
Coarse gravel	20	226
No record	5.5	231.5

A 10-in. diameter hole was drilled to a depth of 210 ft and finished 6 in. in diameter from 210 to 231.5 ft. The well is cased with 10-in. steel pipe from 0.6 ft above the pumphouse floor to a depth of 207.5 ft and a 6-in. pipe from 198.5 ft to a depth of 220.5 ft followed by 11 ft of 6-in. No. 100 slot pipe base Johnson Everdur screen.

On July 11, 1938, the nonpumping water level was reported to be 40 ft below the pump base.

On August 30, 1946, after a 1-hr idle period, the nonpumping water level was reported to be 39 ft below the pump base and after 30 min of pumping at 200 gpm, the drawdown was 22 ft.

In November 1949, after new casing and screen were installed, the well reportedly produced 200 gpm with a drawdown of 70 ft from a nonpumping water level of 45 ft below land surface.

On July 10, 1952, the well reportedly produced 115 gpm with a drawdown of 74 ft from a nonpumping water level of 58 ft.

The pumping equipment presently installed consists of a 20-hp General Electric motor (Serial No. SFJ801827), a 7-in., 7-stage Peerless turbine pump set at 130 ft, rated at 250 gpm, and has 130 ft of 5-in. column pipe. A 20-ft section of 4-in. suction pipe is attached to the pump intake. The well is equipped with 130 ft of airline.

A mineral analysis made by the Illinois Environmental Protection Agency (Lab. No. B100679) of a sample collected July 15, 1974, after pumping for 1 hr at 250 gpm, showed the water to have a hardness of 166 mg/l, total dissolved minerals of 311 mg/l, and an iron content of 0.26 mg/l.

Prior to the construction of Well No. 3, a 6-in. test well was drilled to a depth of 149 ft in December 1952 and had a nonpumping water level of 32.7 ft below land surface.

WELL NO. 3, finished in sand and gravel, was completed in October 1953 to a depth of 140.5 ft by the Layne-Western Co., Aurora. The well is located 500 ft south of Ida St. and 88 ft east of the Soo Line RR right-of-way, approximately 600 ft N and 2360 ft W of the SE corner of Section 8, T46N, R10E. The land surface elevation at the well is approximately 770 ft.

A sample study summary log of Well No. 3 furnished by the State Geological Survey follows:

#3

Strata	Thickness (ft)	Depth (ft)
PLEISTOCENE SERIES		
Silt, buff, yellow	50	50
Clay, gray, laminated	20	70
Till, buff, gray, very silty	20	90
Sand, very fine to fine, well sorted, clean	5	95
Gravel, coarse, poorly sorted; till, brownish gray, sandy	5	100
Sand, fine well sorted, clean	5	105
Till gray, very silty	10	115
Gravel, granular to coarse, clean; sand medium to very coarse	15	130
Sand, very fine to very coarse, well sorted, clean; little till brownish gray	15	145
Silt, brownish gray, clayey	5	150

A 28-in. diameter hole was drilled to a depth of 140.5 ft. The well is cased with 12-in. ID black steel pipe from 0.8 ft above the pumphouse floor to a depth of 120.5 ft followed by 20 ft of 12-in. ID No. 5 (0.105 in.) Layne stainless steel shutter screen. The annulus between the bore hole and casing-screen assembly is filled with cement grout from 0 to 40 ft, with clay from 40 to 90.5 ft, and with gravel from 90.5 to 140.5 ft.

Upon completion, the well reportedly produced 596 gpm with a drawdown of 9 ft from a nonpumping water level of 41 ft below land surface.

On May 29, 1958, after 2 hr of pumping at a rate of 415 gpm, the drawdown was 7 ft from a nonpumping water level of 45 ft below the pump base.

On March 7, 1967, the well reportedly produced 457 gpm with a drawdown of 19 ft from a nonpumping water level of 44 ft.

In December 1970, the well reportedly produced 525 gpm with a drawdown of 9 ft from a nonpumping water level of 56 ft.

The pumping equipment presently installed consists of a 40-hp 1800 rpm U.S. electric motor (Serial No. 2308221), a 10-in., 7-stage Layne turbine pump (Serial No. 26899) set at 70 ft, rated at 400 gpm at about 235 ft TDH, and has 70 ft of 6-in. column pipe. A 10-ft section of 6-in. suction pipe is attached to the pump intake. The well is equipped with 70 ft of airline.

A mineral analysis made by the Illinois Environmental Protection Agency (Lab. No. B34773) of a sample collected March 1, 1976, after pumping for 1 hr at 500 gpm, showed the water to have a hardness of 237 mg/l, total dissolved minerals of 363 mg/l, and an iron content of 0.6 mg/l.

WELL NO. 4, finished in sand and gravel, was completed in June 1965 to a depth of 129 ft by the Layne-Western Co., Aurora. The well is located on Bartlett Road at the end

of McMillen Drive, approximately 350 ft N and 1500 ft W of the SE corner of Section 8, T46N, R10E. The land surface elevation at the well is approximately 770 ft.

A drillers log of Well No. 4 follows:

Strata	*Thickness (ft)*	*Depth (ft)*
Fill	3	3
Soft sandy yellow clay	5	8
Sand and gravel and boulders	16	24
Soft sticky gray clay, some thin sand streaks	56	80
Fine to coarse sand and gray clay	5	35
Fine gray sand	5	90
Blue clay	4	94
Very fine gray sand	8	102
Soft gray clay	3	105
Medium fine to coarse sand; some gravel and boulders 115 to 121 ft very coarse	16	121
Medium fine to coarse sand, gravel and boulders, not as much coarse stuff, also not as tight	4	125
Very coarse sand and gravel, some fine showing at 129 ft	4	129
Very fine gray sand	12	141

A 34-in. diameter hole was drilled to a depth of 15 ft, reduced to 30 in. between 15 and 26 ft, and finished 28 in. in diameter from 26 to 141 ft. The well is cased with 12-in. welded steel pipe from 2 ft above land surface to a depth of 109 ft followed by 20 ft of 12-in. No. 5 (0.105 in.) Layne stainless steel shutter screen. The annulus between the bore hole and casing-screen assembly is filled with cement grout from 0 to 40 ft, with pea gravel from 40 to 86 ft, and with Muscatine No. 3 gravel from 86 to 141 ft.

A production test using one observation well was conducted by the driller on June 22, 1965. After 8 hr of pumping at a rate of 632 gpm, the drawdown was 12 ft from a nonpumping water level of 32 ft below land surface.

On March 1, 1967, the well reportedly produced 800 gpm with a drawdown of 15 ft from a nonpumping water level of 34 ft.

In December 1970, the well reportedly produced 825 gpm with a drawdown of 14 ft from a nonpumping water level of 33 ft.

The pumping equipment presently installed is a 5-stage Jacuzzi oil-lubricated turbine pump (Model No. 10HCA6T-490) set at 75 ft, rated at 775 gpm at about 175 ft TDH, and powered by a 60-hp General Electric motor (Model No. 5K6257XIIIA, Serial No. KAJ1006465).

The following mineral analysis made by the Illinois Environmental Protection Agency (Lab. No. B34770) is for a water sample from the well collected March 1, 1976, after 2 hr of pumping at 750 gpm.

WELL NO. 4, LABORATORY NO. B34770

		mg/l	*me/l*			*mg/l*	*me/l*
Iron	Fe	0.7		Silica	SiO_2	21	
Manganese	Mn	0.00		Fluoride	F	0.7	0.04
Ammonium	NH_4	1.2	0.07	Boron	B	0.4	
Sodium	Na	36	1.57	Nitrate	NO_3	0	0.00
Potassium	K	1.5	0.04	Chloride	Cl	4.5	0.13
Calcium	Ca	43	2.15	Sulfate	SO_4	43	0.89
Magnesium	Mg	29	2.39	Alkalinity (as $CaCO_3$)		256	5.12
Arsenic	As	0.00					
Barium	Ba	0.1		Hardness (as $CaCO_3$)		226	4.52
Copper	Cu	0.01					
Cadmium	Cd	0.00		Total dissolved minerals		329	
Chromium	Cr	0.00					
Lead	Pb	0.00					
Mercury	Hg	0.0000		pH (as rec'd)		8.4	
Nickel	Ni	0.0		Radioactivity			
Selenium	Se	0.00		Alpha *pc/l*		1.2	
Silver	Ag	0.00		±deviation		1.2	
Cyanide	CN	0.00		Beta *pc/l*		1.7	
Zinc	Zn	0.0		±deviation		1.2	

A 5-in. diameter test hole was constructed in July 1975 to a depth of 228 ft by the J. P. Miller Artesian Well Co., Brookfield. The test hole was located approximately 1320 ft S and 1250 ft W of the NE corner of Section 17, T46N, R10E. Upon completion, the nonpumping water level was reported to be 43 ft below land surface.

LAYNE-WESTERN CO., 1953
(MUNICIPAL WELL #3)

Antioch MW

Data	Thickness	Top	Bottom
Summary Sample Study by Lidia Selkregg 7/58.			
PLEISTOCENE SERIES			
Silt, buff, yellow, calcareous, oxidized	10		10
Silt, buff yellow, gray, calcareous, oxidized	40		50
Clay, gray, laminated, calcareous	20		70
Till, buff gray, very silty, calcareous	20		90
Sand, very fine to fine, well sorted, clean	5		95
Gravel, coarse, poorly sorted; till, brownish gray sandy, calcareous	5		100
Sand, fine; well sorted, clean	5		105
Till, gray, very silty, calcareous	10		115
Gravel, granular to coarse, clean; sand, medium to very coarse, clean	10		125
Gravel, granular to coarse, clean	5		130
Sand, very coarse, well sorted, celan; gravel coarse	5		135
Sand, as above; little fill, brownish gray, silty calcareous	5		140
Sand, fine, well sorted, clean; little gravel	5		145
Silt, brownish gray, clayey, calcareous	5		150
Location corrected by Russ Brower.			

COMPANY Layne-Western Co.
WELL Village of Antioch NO. 3
DATE DRILLED October 1953 COUNTY NO. 1944
AUTHORITY Lidia Selkregg
ELEVATION
LOCATION NE NE
COUNTY LAKE S. S. # 23797

8-46N-10E

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner CREGG WENNSTROM Well No. Silver Lake R
Address 42066 N. Deep Lake Rd., Antioch, Ill.
Driller GEORGE E. GAFFKE License No. 102-234
11. Permit No. 102976 Date 4/1/82
12. Water from Sand & Gravel Formation 13. County Lake
at depth 131 to 140 ft. Sec. 9
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev.

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1	137

16. Size Hole below casing: 5 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level ____ ft. when pumping at 15-20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Topsoil	2	2
Brown Clay	10	12
Blue Clay	57	69
Gravel	3	71
Blue Clay	60	131
Sand & Gravel	9	140

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 12/14/82

9-46N-10E

LAYNE-WESTERN CO., 1965
(MUNICIPAL WELL #4)

Village Well 4

Layne-Western Company

721 ILLINOIS AVENUE AURORA, ILLINOIS

Well Information—Drift Wells

Name of Job Village of Antioch Date 7/6/65

City or Village Antioch State Ill.

Well No.: 4 Drillers: Siefers

Well Location: 200 ft. (N) and 1650 ft. (W) of the SE corner of

Section 8 Twp. 46 (N). Range 10 (E) Lake County.

Otherwise located as Approx. 620' east of Well #3

Work Began: Work Completed: Well Depth: 129' + 2' above G.L.

All measurements made from existing ground level at time well was drilled.

Casing Record:

Amount	Dia.	Wt. or Thickness	Material				
111	12		Steel pipe	with Welded	joints from +2' above G.L.	to 109'
				with	joints from	to

Screen Record: Type Shutter

Amount	Dia.	Opening	Material				
20	12	#5	Stainless Steel	with Welded	joints from 109'	to 129'
				with	joints from	to

Type of Seal at Bottom Steel Plate

Hole Record:

34	inch from	0	to	15
30'	inch from	15	to	26
28"		26		142

Gravel Pack Record:

Amount	Size	Source	From	To
13 ton	#3	Muscatine	132'	86'

Cementing Record: Grout from 0' to 40'

Backfill Record: Pea gravel from 40' to 86'

Village Well 4

WELL LOG

Feet		Feet	Description
0	to	3	Fill
3	to	8	Soft sandy yellow clay
8	to	24	Sand and gravel and boulders
24	to	80	Soft sticky gray clay, some thin sand streaks
80	to	85	Fine to coarse sand and gray clay
85	to	90	Fine gray sand
90	to	94	Blue clay
94	to	102	Very fine gray sand
102	to	105	Soft gray clay
105	to	121	Med. fine to coarse sand, some gravel and boulders
	to		115' to 121', very coarse
121	to	125	Med. fine to coarse sand, gravel and boulders, not as
	to		much coarse stuff, also not as tight.
125	to	129	Very coarse sand and gravel, some fine showing at 129'
129	to	141	Very fine gray sand
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		

Well Test Data: Static Level 24'; pumping level 41' after 8 hours pumping at 632 g.p.m.

Length of test 8 hrs. See Well Test Data Sheet Dated June 22, 1965

REMARKS:

~~Pump test on separate sheet.~~

	to	3	Fill
3	to	8	Soft sandy yellow clay
8	to	24	Sand and gravel and boulders
24	to	80	Soft sticky gray clay, some thin sand streaks
80	to	85	Fine to coarse sand and gray clay
85	to	90	Fine gray sand
90	to	94	Blue clay
94	to	102	Very fine gray sand
102	to	105	Soft gray clay
105	to	121	Med. fine to coarse sand, some gravel and boulders
	to		115' to 121', very coarse
121	to	125	Med. fine to coarse sand, gravel and boulders, not as
	to		much coarse stuff, also not as tight.
125	to	129	Very coarse sand and gravel, some fine showing at 129'
129	to	141	Very fine gray sand
	to		
	to		
	to		
	to		
	to		
	to		
	to		

Well Test Data: Static Level 34'; pumping level 46' after 8 hours pumping at 632 g.p.m.
Length of test 8 hrs. See Well Test Data Sheet Dated June 22, 1965

REMARKS:

~~Pump test on separate sheet.~~

From Illinois State Water Survey, Batavia, IL
Oct. 18, 1985

October 4, 1965

WELL PRODUCTION TEST
VILLAGE OF ANTIOCH
LAKE COUNTY
by

Layne-Western Company

Owner:	Village of Antioch
Location:	350'E, 1500'N, SECor T46NR10E-Sec 8.3a
Date of Test:	June 22, 1965
Length of Test:	8 hours
Date Drilled:	June 1965
Aquifer:	Sand & Gravel

WELL DATA

PUMPED WELL

Well No?	4
Driller:	Layne-Western Co.
Depth:	129'
Hole Record:	34" 0-15', 30" 15-26', 28" 26-142'
Casing Record:	12" 0-109' (cemented grout 0-40')
Screen Record:	12" #5 Layne Shutter Screen 109-129' (gravel packed from 40-132')
Pump & Power:	Layne Turbine, Gasoline Engine
Surface Elevation:	LSD 770' MSL
Measuring Point:	Top of casing, 2' above LSD
Measuring Equipment:	6x3' orifice, 80' airline
Static Level:	34' below MP

Observation Wells:

Well No.	Depth	Dia. (in.)	Hole, casing, screen record	Distance, direction from pumped well
3	149	28	12" 0-129' 12" Layne Shutter Screen 129-149'	620' W of #4

...e of Antioch - Well #4

BUILDER'S LOG

Formation	Depth (ft) From	To
Fill	0	3
Soft sandy yellow clay	3	8
Sand and gravel and boulders	8	24
Soft sticky gray clay, some thin sand streaks	24	80
Fine to coarse sand and gray clay	80	85
Fine gray sand	85	90
Blue clay	90	94
Very fine gray sand	94	102
Soft gray clay	102	105
Med. fine to coarse sand, some gravel and boulders 115 to 121' very coarse	105	121
Med. fine to coarse sand, gravel and boulders, not as much coarse stuff, also not as tight	121	125
Very coarse sand and gravel, some fine showing at 129'	125	129
Very fine gray sand	129	141

f Antioch - Well #4

Date 1963	Hour	Time (min)	Air gage (ft)	Depth to water (ft)	Draw-down (ft)	Meas. tube (in.)	Pump. rate (gpm)	Remarks
6/22	9:05 A		45	34				Started pumping
	9:10	5	36	44	10	27	632	Very, very cloudy
	9:15	10	36	44	10	27.5	638	
	9:30	25	36	44	10	27.5	638	
	10:00	55	35	45	11	27.5	638	Cloudy
	10:30	85	35	45	11	27	632	
	11:00	115	35	45	11	26.5	626	
	11:30	165	35	45	11	27	632	Clearing
	12:00 N	175	35	45	11	27	632	
	12:30 P	205	35	45	11	27	632	
	1:00	235	36	44	10	27	632	Well #3 off
	1:30	265	35	45	11	27	632	Well #3 on
	2:00	295	34	46	12	27	632	Dirty
	2:30	325	34	46	12	26.5	626	Clearing
	3:00	355	34	46	12	26.5	626	
	3:30	385	34	46	12	27	632	
	4:00	415	34	46	12	27	632	
	4:30	445	34	46	12	27	632	
	5:00	475	34	46	12	27	632	End of test

Test Hole Prior to Village Well #

TEST HOLE No. 1-65

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST WELL REPORT

1. Owner Village of Antioch Contract No. (CJ-254) Date 4/8/65
2. City Antioch State Ill.
3. Drillers Name Art Rogers Helpers Jim Barker
4. Static Water Level How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length 6' Width 4'

DRILLERS LOG

	BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
C	1			Brown top soil	
	15			Brown sand and gravel	
15	18	9	9.8	Gray sand and gravel - boulders	
8	19			Boulders	
19	73			Gray clay	
3	89			Very soft clay, streaks, will jet	
9	98			Very fine sand	
8	108			Fine sand and streaks of clay	
8	161			Very fine sand to med. sand	
61	237			Very very fine sand, streaks of clay	
7	246			Very soft clay, gravel clay	
46	251			Limestone	

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST HOLE No. 2-65

TEST WELL REPORT

1. Owner Village of Antioch Contract No. (CJ-254) Date 4/10/65
2. City Antioch State Ill.
3. Drillers Name Art Rogers Helpers
4. Static Water Level How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length 6, Width 4

DRILLERS LOG

BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
10			Yellow Clay	
77			Gray clay, soft	
79			Gray sand	
81			Hard Clay, brownish gray	
92			Softer " " "	
96			Very soft silt, will jet	
103			Soft brownish clay	
104			Sand	
105			Clay	
107			Sand	
111			Clay	
121			Sand and gravel fine to med.	
129			Sand and gravel, med. to coarse gravel	
131			Sand	
132			Sand and gravel	
136			Sandy clay, streaks of sand	
140			Fine sand	
142			Clay	
236			Fine sand	
244			Brown clay, streaks of sand	
253			Sand and gravel and lime	
256			Limestone	

Test hole prior to
Village Well 4

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST HOLE
No. 3-65

TEST WELL REPORT

1. Owner Village of Antioch, Contract No. (CJ-254) Date 3/15/65
2. City Antioch State Ill.
3. Drillers Name Lyle Hill Helpers John Siefers
4. Static Water Level How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length 4' Width 6'

DRILLERS LOG

BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
2			Black sandy soil	
5			Brown sand	
23			Fine gravel and sand, gray	
104.5			Soft Gray, clay	
109			Fine sand, gravel and broken lime	
122.5			Fine sand, gravel and boulders	
123			Fine sand	
129			Fine sand, gravel and boulders	
135			Very fine sand, some gravel	
158			Very fine sand, occasional streaks of clay	

This hole is next to the existing well #4.

LAYNE-WESTERN CO., INC, 1978
(MUNICIPAL WELL #5)

Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

721 West Illinois Avenue • Aurora, Illinois 60507 • Phone 312/897-6941

Name of Job: Village of Antioch C-2950B Date: Aug. 26, 1978

City or Village: Antioch State: Illinois

Well No.: 5 Drillers: John Kopp, Carl Glidewell

Location: 35 ft. (S) and 628 ft. (E) of the NW corner of SW 1/4 of NE 1/4

Section 17, Twp. 46 (N), Range 10 (E) Lake County.

Otherwise located as

Work Began: 8/14/78 Work Completed: 9/11/78 Well Depth: 129'

All measurements made from existing ground level at time well was drilled.

Casing Record:

Amount	Dia.	Wt. or Thickness	Material					
112'	16"	3/8" wall	steel	with	welded	joints from	+3'	to 109'
				with		joints from		to

Screen Record: Type Johnson

Amount	Dia.	Opening	Material					
20'	16" OD	0.060"	stainless	with	welded	joints from	109'	to 129'
				with		joints from		to

Type of Seal at Bottom: Stainless steel plate

Hole Reamed:

42" inch from 0 to 40'

38" inch from 40' to 131' T.D.

Gravel Pack Record:

Amount	Size	Source	From	To
App. 20 ton	#1 & #2 Mix	Northern Gravel Company	130'	84'

Cementing Record: Concrete from 20' to 0

Soil Record: Sand and clay from 84' to 20'

SEE OTHER SIDE

Feet		Feet	Description
0	to	7	Hard brown clay
7	to	10	Gray silty clay
10	to	25	Gray silty clay with sand seams
25	to	40	Gray very silty clay
40	to	45	Gray clay
45	to	54	Gray sandy silty clay, traces of gravel, boulder at 48'
54	to	63	Gray silty clay, sticky
63	to	76	Gray sandy silty with gravel intermixed, some small
	to		sand and gravel seams
76	to	91	Gray clay
91	to	93	Fine sand
93	to	97	Fine sand to coarse gravel
97	to	108.5	Very fine sand and/or silt (tight)
108.5	to	129	Fine sand to coarse gravel, tight, occasional boulders
129	to	131 T.D.	Fine to coarse sand
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		

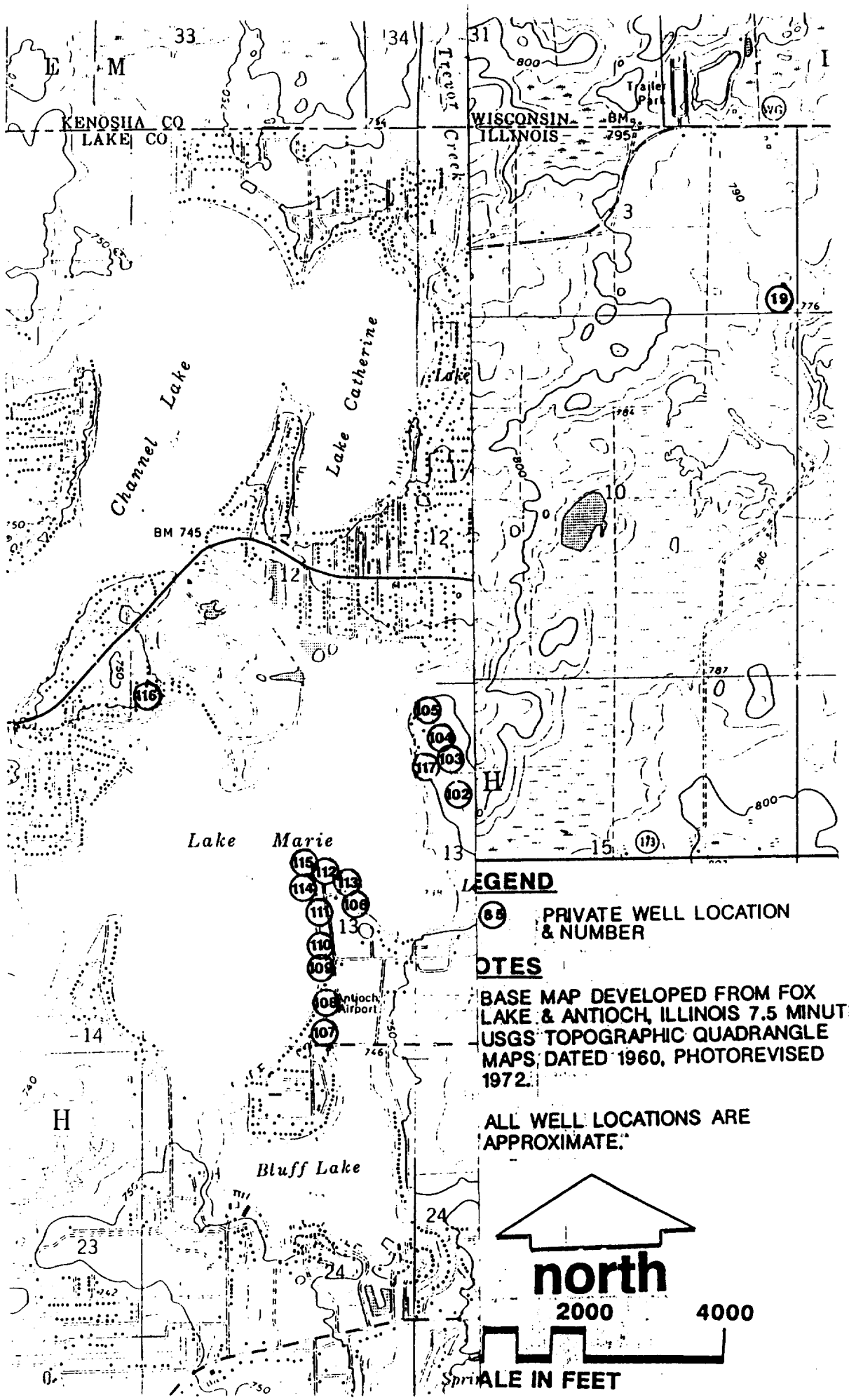
Data: Static Level 52' ; pumping level 62' after 24 hours pumping at 715 g.p.m.

of test 24 hrs. See Well Test Data Sheet Dated September 7 & 8, 1978

REMARKS:

M2

PRIVATE WELL LOGS



EGEND

(85) PRIVATE WELL LOCATION & NUMBER

OTES

BASE MAP DEVELOPED FROM FOX LAKE & ANTIOCH, ILLINOIS 7.5 MINUTE USGS TOPOGRAPHIC QUADRANGLE MAPS, DATED 1960, PHOTOREVISED 1972.

ALL WELL LOCATIONS ARE APPROXIMATE.

WARZYN
WARZYN ENGINEERING INC.

Designed By:
Drawn By: ELR
Checked By: AJS
Approved By:
Date:
Reference:
File Path:

PRIVATE WELL LOCATION MAP

H.O.D. LANDFILL
ANTIOCH, ILLINOIS

Project Number
60953

...ite Copy —
...ll. Dept. of Public Health
...ellow Copy - Well Contractor
...e Copy - Well Owner

...STRUCTIONS TO ...ERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Anton Kahler 22731 W. Silver Lake Av.

395-6670

Well Log No. 1

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 110 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 107 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 47 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed Aug. 6, 1971
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer [illegible] Type [illegible]
   Capacity 8 gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ____

REMARKS:

PRIVATE WELL 1

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner A. Kahler Well No. ____
    Address 1624 [illegible] Ave
    Driller [illegible] License No. 30
11. Permit No. NF-(11850) Date 8/4/71
12. Water from Sand (Formation) at depth 101 to 110 ft.
13. County [illegible]
    Sec. 9
    Twp. 43N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3½ ft. Slot 12

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv. T & C	0	107
	10.81 ppf		

16. Size Hole below casing: 4 in.
17. Static level 36 ft. below casing top which is -1 ft. above ground level. Pumping level 40 ft. when pumping at 15 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	8	8
Blue Clay	48	56
Sandy Clay	17	73
Gravel & Clay	28	101
Sand	9	110

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 9/15/71

ite Copy –
ll. Dept. of Public ... th
llow Copy – Well Contractor
e Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Rec. 9

22667 W. Silver Lake Ave. 395-6205

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	60

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 55 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 6-1 1976
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer [illegible] Type SUBM
   Capacity 10 gpm. Depth of setting 61 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

PRIVATE WELL 2

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner John Halas Well No. 1
    Address R.R. #4 Box 536
    Driller [illegible] License No. 102-69
11. Permit No. 47227 Date May 13 1976
12. Water from SAND (Formation) 13. County WAYNE
    at depth 130 to 135 ft.
    Sec. 9
    Twp. 46 N
    Rge. 10 E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 2 ft. Slot 20

Well Log No. 2

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GALV. STEEL #11	0	132
4"	S.S. SCREEN	132	135

16. Size Hole below casing: 4 in.
17. Static level 44 ft. below casing top which is 1 ft. above ground level. Pumping level 55 ft. when pumping at 25 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil	3	0-3
Yellow clay	13	3-16
Blue Clay & sand	44	16-60
Blue clay	40	60-100
Fine dirty sand	30	100-130
Sand & Gravel	5'/10"	130-135'/10"

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE 11-29-1979

Yellow Copy – W[illegible]ontractor
Blue Copy – Well [illegible]er

PARTMENT OF PUBLIC [illegible]LTH, ROOM 616, [illegible]ATE OFFICE BUILDI[illegible], SPRINGFIELD, ILLINOIS, 62706. DO NOT [illegible]TACH GEOLOGICA[illegible] [illegible]ATER SURVEYS SEC[illegible]. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 122 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY		
SLURRY	0	25.

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast Iron) ____
   Privy 50 Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 5-14-77
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer ____ Type SUBM.
   Capacity 62 gpm. Depth of setting 80 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

PRIVATE WELL 3

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Nicholas Gilio 42153 N. Lakeview Dr. 395-1352

10. Property owner NICK GILIO Well No. 1
    Address BRU BOX 528
    Driller EHGLENNY SONS INC License No. 102-69
11. Permit No. 57824 Date MARCH 14, 77
12. Water from SAND (Formation) at depth 123 to 135 ft.
13. County LAKE
    Sec. 9
    Twp. 46 N
    Rge. 10 E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 15

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GALV. STEEL #11.00	0	132
4.	S.S. SCREEN	132	135

16. Size Hole below casing: 4 in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 69 ft. when pumping at 22 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	1	1
YELLOW CLAY	20	21
BLUE CLAY	80	101
DIRTY SAND	10	111
FINE SAND	12	123
SAND (WATER)	12	135

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 8-1-78

Well Log No. 3

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL, WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED
AUG 27 1984
ENVIRONMENTAL HEALTH DIVIS.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
[illegible]	[illegible]	[illegible]

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed ____
5. Permanent Pump Installed? Yes ____ Date ____ No ____
   Manufacturer ____ Type ____ Location ____
   Capacity ____ gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes ____ No ____
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ____ No ____
9. Pump and Equipment Disinfected? Yes ____ No ____
10. Pressure Tank Size ____ gal. Type ____
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

PRIVATE WELL 4

JUN 1984
Division of Engineering and Sanitation

IDPH 4.065
1/74 – KHB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Ernest Cowan 22623 W. Silver Lake Ave
395-1338

10. Property owner ____ Well No. ____
    Address ____
    Driller ____ License No. ____
11. Permit No. ____ Date ____
12. Water from ____ (Formation) 13. County ____
    at depth ____ to ____ ft. Sec. ____
14. Screen: Diam. ____ in. Twp. ____
    Length: 25 ft. Slot ____ Rge. ____
    Elev. ____

SHOW LOCATION IN SECTION PLAT

Well Log No. 4

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
[illegible]	[illegible]		
	[illegible]		162

16. Size Hole below casing: ____ in.
17. Static level 56 ft. below casing top which is ____ ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0 – 19		
Blue Clay Firm	19 – 36		
Mucky	[illegible]		
Grey clay Firm			
	-130		
Sand Streak	130 – 135		
clay & sand	135 – 155		
Clean Sand & gravel	155 – 165		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED ____ DATE ____

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

RECEIVED
APR 23 1991
LAKE COUNTY HEALTH DEPT.

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4" in. Depth 170 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay	slurry	0-20'

2. Distance to Nearest:
   Building 11 Ft. Seepage Tile Field 75'
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 60 Barnyard —
   Leaching Pit — Manure Pile —
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed Jan 7 - 1951
5. Permanent Pump Installed? Yes ✓ Date Jan No ____
   Manufacturer Peerless Type Sub Location in well
   Capacity 10 gpm. Depth of Setting 70 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Compression
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Peerless Model Number Sub
   How attached to casing? Compression fittings
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type Captive Air
    Location in basement
11. Water Sample Submitted? Yes ✓ No ____

REMARKS:

PRIVATE WELL 5

GEOLOGICAL AND WATER SURVEYS WELL RECORD

42014 N. Gaal Rd.

10. Property owner George Kramer Well No. 1
    Address 424 - Gaal Rd
    Driller C. Wright License No. 27
11. Permit No. 97 4 1 Date Jan 7 - 1951
12. Water from Dirt Formation 13. County Lake
    at depth 164 to 173 ft. Sec. 9
14. Screen: Diam. 2 in. Twp. 46N
    Length: 48 ft. Slot 15 Rge. 10E
    Stainless steel Elev. ____

Well log No. 5

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 lb galvanized	0	169

SHOW LOCATION IN SECTION PLAT
Lot 5 & 6 Silver Lake Park S.D.

16. Size Hole below casing: 4 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level 40 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	To	THICKNESS	DEPTH OF BOTTOM
Brown clay	0-15		
Blue clay	15-40		
Sliding after clay	40-75		
Gravelly clay	75-150		
Sand & rock	150-161		
Gray clay	161-164		
Clean gravel & sand	164-173		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE Jan 7-1951

of Public Health
py – Well Contractor
– Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED
OCT 23 1984
ENVIRONMENTAL HEALTH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Don Collins 42357 N. Center 395-8970

Type of Well

1. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
2. Driven____. Drive Pipe Diam.____in. Depth____ft.
3. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.

4. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
B Clay	0	20

Distance to Nearest:

Building 50 Ft. Seepage Tile Field 113
Cess Pool____ Sewer (non Cast iron)____
Privy____ Sewer (Cast iron)____
Septic Tank 103 Barnyard____
Leaching Pit____ Manure Pile____

Well furnishes water for human consumption? Yes ✓ No____
Date well completed 12-10-83
Permanent Pump Installed? Yes ✓ Date 12-10-83 No____
Manufacturer [illegible] Type [illegible] Location [illegible]
Capacity 10 gpm. Depth of Setting 120 Ft.
Well Top Sealed? Yes____ No____ Type____
Pitless Adapter Installed? Yes ✓ No____
Manufacturer [illegible] Model Number____
How attached to casing? Drilled
Well Disinfected? Yes ✓ No____
Pump and Equipment Disinfected? Yes ✓ No____
Pressure Tank Size 42 gal. Type [illegible]
Location [illegible]
Water Sample Submitted? Yes____ No____

MARKS:

PRIVATE WELL 6

10. Property owner Don Collins Well No. 395-8970
    Address Silver Lake Rd. Ashkum Ill.
    Driller Charles E Madden License No. 92-[illegible]
11. Permit No. 110124 Date 11-30-83
12. Water from Sand (Formation) 13. County Iroquois
    at depth 142 to 152 ft.
14. Screen: Diam. 2 in.
    Length: 5 ft. Slot 010
    Sec. 7
    Twp. 26N
    Rge. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Galv. Pipe	0	117

16. Size Hole below casing: 3 in.
17. Static level 45 ft. below casing top which is 1 ft. above ground level. Pumping level 126 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	21	21
B Clay	119	140
Sand	120	152

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madden DATE 9/24/84
Charles E Madden

Well Log No. 6

PH 4.065
[illegible]

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED
AUG 4 1978
LAKE COUNTY HEALTH DEPT.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 148 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 148 ft.
   c. Drilled —. Finished in Drift —. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Drill silt	0	20

2. Distance to Nearest:
   Building 50 Ft. Seepage Tile Field 85
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 70 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed July 1978
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer [illegible] Type Jet
   Capacity 12 gpm. Depth of setting 25 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS:

PRIVATE WELL 7

IDPH 4.065
10-72
KNB-1

4240 N. Center 395-8533

10. Property owner R. Rothenberg Well No. ____
    Address 720 Greenview, Wilmette, Ill
    Driller C. Lewis Licence No. 37
11. Permit No. 73567 Date July 17-78
12. Water from Drift (Formation) 13. County Lake
    at depth ____ to ____ ft.
14. Screen: Diam. 3 in. —
    Length: 4 ft. Slot 12
    Sec. 9
    Twp. 46N
    Rge. 12E
    Elev. ____

SHOW LOCATION IN SECTION PLAT

Well Log No. 7

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. 11.66	0	145
			145

16. Size Hole below casing: Same in. ø
17. Static level 55 ft. below casing top which is 1 ft. above ground level. Pumping level 52 ft. when pumping at 12 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay 0-15		
Soft smooth clay 15-70		
Gravely clay 70-95		
Sandy Firm clay 95-125		
Sand streak 125-125		
Firm clay 125-130		
Dirty sand 130-135		
Clean sand 135-145		
Fine to Gravel		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE July 17-78

EAU (NVIRONMENTAL HEALTH, 535 WEST
701. DO NOT DETACH GEOLOGICAL/WATER
E PROPER ELL LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 7-78

10. Property owner R. Rottenberg Well No. _____
Address 720 Greentree, Wildwood, #11
Driller C. L. Wertz License No. 57
11. Permit No. 75564 Date July 17-78
12. Water from Drift (Formation) 13. County Lake
at depth ____ to ____ ft. Sec. 9
14. Screen: Diam. 3 in. Twp. 46N
Length: 4 ft. Slot 15 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	gale 11.66	0	75
			145

SHOW LOCATION IN SECTION PLAT
NW NE SW
permit)
78.5
-51

16. Size Hole below casing: screened in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 52 ft. when pumping at 15 gpm for 2 hours. Sub. pump set at 75'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0-15		
Soft smooth clay	15-70	23	
Gravely clay	70-95		
Sandy Firm clay	95-125		
Sand streak	125-128		
Firm clay	128-130		
Dirty sand	130-135	780	780
Clean sand To Fine Gravel	135-148	135	49
		645	731

3 ft.
5 ft.
8 ft.
135-148
127

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE July 17-78

LAKE COUNTY No. 36555 9-46N-10E

PRIVATE WELL 8

(31)

731. DO NOT DETACH GEOLOGICAL/WATER
E PROPER LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-15-78

10. Property owner PETE GURTOWSKI Well No. _____
Address Rt. 4, Box 508, Antioch
Driller Lonny R. Hoover License No. 102-783
11. Permit No. 83103 Date December 28, 1978
12. Water from Sand (Formation) 13. County Lake
at depth 113 to 115 ft. Sec. 9
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot #10 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galvanized T&C	0	113
	14.81 PPF		

SHOW LOCATION IN SECTION PLAT
60'NL, 275'WL, SE
NE SW(permit)

16. Size Hole below casing: 4 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 7 gpm for 1½ hours. Sub. pump set at 84' + 10 x 1"

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Yellow stoney clay		23	23
Gray clay	780	90	113
Sand	79	3	116
	801		

780
113
667

24

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lonny R. Hoover/egn DATE 2/2/79

LAKE COUNTY No. 36554 9-46N-10E

(32)

Whitecopy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED
OCT [illegible]

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

42347 N. Center 3/S/1126 (1145)

GEOLOGICAL AND WATER SURVEYS WELL RECORD

LAKE COUNTY HEALTH DEPT.

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 127 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 125 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 5.5 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast Iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 9/11/76
5. Permanent Pump Installed? Yes ✓ Date 9/21/76 No ____
   Manufacturer Sch-Rite Type Subm Location ____
   Capacity 8 gpm. Depth of Setting 125 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Baker Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 82 gal. Type gal
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

10. Property owner Lile Burtowako Well No. ____
    Address Rt 4 Box 505, Antioch
    Driller Hoover License No. 102-75
11. Permit No. 51618 Date 8/31/76
12. Water from Sand (Formation) at depth 119 to 127 ft.
13. County Lake
    Sec. 9
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 12

	(2)		

SHOW LOCATION IN SECTION PLAT

Well No. 8

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv T&C	0	125
	10.89 ppf.		

16. Size Hole below casing: 4 in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	16	16
Blue Clay	103	119
Sand	8	127

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. Hoover DATE 9/24/76

IDPH 4.065
1/74 – KNB-1

Copy – Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner.

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED OCT

LAKE COUNTY HEALTH DEPT.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 134 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 132 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 9/15/76
5. Permanent Pump Installed? Yes ✓ Date 9/22/76 No ____
   Manufacturer Sta Rite Type Subm Location ____
   Capacity 3 gpm. Depth of Setting 115 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Stiff Baker Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type galv
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Pete Gurtowski Well No. ____
    Address Rt 4 Box 505 Antioch
    Driller [illegible] License No. 102-78
11. Permit No. 51617 Date 8/31/76
12. Water from Sand & Gravel Formation at depth 130 to 134 ft.
13. County Lake
    Sec. 9
    Twp. 41N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 15

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv TYC	0	132
	10.89 ppl		
	1/16.		

16. Size Hole below casing: 4 in.
17. Static level 90 ft. below casing top which is 1 ft. above ground level. Pumping level 95 ft. when pumping at 12 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	17	17
Blue clay	113	130
Sand & Gravel	4	134

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. [illegible] DATE 9/24/76

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS [illegible] DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 174 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth 171 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay slurry c		20

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 75
   Cess Pool – Sewer (non Cast iron) –
   Privy – Sewer (Cast iron) –
   Septic Tank 50 Barnyard –
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 9-20-82
5. Permanent Pump Installed? Yes ✓ Date ____ No ____
   Manufacturer Reddicket Type Sub Location in well
   Capacity 10 gpm. Depth of Setting 80 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type merrill
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Merrill Model Number SPK-1
   How attached to casing? Compression
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ____ No ____
10. Pressure Tank Size 50 gal. Type Vertical galv
    Location Basement
11. Water Sample Submitted? Yes ✓ No ____

REMARKS: St. Brd. of Health

GEOLOGICAL AND WATER SURVEYS WELL RECORD

?

10. Property owner Fred C. Hartman Well No. 1
    Address R.R. Silver Lake Park - Antioch, IV
    Driller C. L. Wertz License No. 57
11. Permit No. 104065 Date 9-20-82
12. Water from Drift (Formation) at depth 171 to 174 ft.
13. County Lake
    Sec. 9
    Twp. 46N
    Rge. 10E
    Elev. 990
14. Screen: Diam. 3 in.
    Length: 4 ft. Slot 15

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv steel	0	171
	11.66 per ft.		

16. Size Hole below casing: Screened
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 53 ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0-08		
Gravel streak	8-10		
Blue clay	10-95		
muck clay	95-105		
Grey clay	105-160		
Dirty fine sand	160-165		
Clean gravel	165-174		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE 9-20-82

Well Log No. 9

PRIVATE WELL 9

IDPH 4.065
1/74 – KHB-1

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed May 30, 1979

10. Dept. Mines and Minerals permit No. 83758 Year 1979
11. Property owner Frank Pressel Well No. 1
Address 1109 Elizabeth - Prairie View, Ill
Driller C. L. Wert License No. 57
12. Water from Drift (Formation) 13. County Lake
at depth 169 to 173 ft.
14. Screen: Diam. 3 in.
Length: 4 ft. Slot 10
Sec. 9
Twp. 46N
Rng. 10E
Elev.

15. Casing and Liner Pipe

Diam (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 lb galv. steel	0	169.

SHOW LOCATION IN SECTION PLAT
500' SL, 500' NE (permit

16. Size Hole below casing: — in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 55 ft. when pumping at 10 gpm for 3 hours. Sub pump set at 110'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Fill muck & clay	0 - 18		
Blue clay	18 - 110		
Gravel "	110 - 140		160
Grey clay	140 - 150		
Dirty sand	150 - 168	805	805
Clean "	168 - 174	168	80
(25)		637	725
(CONTINUE ON SEPARATE SHEET IF NECESSARY)			

SIGNED C. L. Wert DATE May 30-79

COUNTY 1.0.2L-SC11

3 - LAKE 9-46N-10E

IS TO DRILLERS

REQUESTED AND MAIL ORIGINAL TO STATE CONSUMER ...LTH PRO... TION, 535 WEST ... 2761. DO NOT DETACH G...LOGICAL/WATER DE PROPER WELL LOCATION.

Dup 89

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Fred C. Hartman Well No. 1
Address R.R. Silver Lake Park - Antioch, Ill
Driller C. L. Wert License No. 57
11. Permit No. 100605 Date 9-20-82
12. Water from Drift (Formation) 13. County Lake
at depth 171 to 174 ft.
14. Screen: Diam. 3 in.
Length: 4 ft. Slot 15
Sec. 9a
Twp. 46N
Rge. 10E
Elev. 790

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. steel	0	171
	11 lb per ft.		

SHOW LOCATION IN SECTION PLAT
250' N, 250' W, SE/c

16. Size Hole below casing: 5" Cemented
17. Static level 52 ft. below casing top which is 1 ft. above ground level. Pumping level 53 ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay —	0 - 08	(26)	(Correct!)
Gravel streak	8 - 10		
Blue clay —	10 - 95'		
Muck clay —	95' - 105'		
Grey clay	105' - 160'	770	790
Dirty fine sand	160' - 165'	~~785~~	50
Clean gravel	165' - 174	165	740
		825	
(CONTINUE ON SEPARATE SHEET IF NECESSARY)			

SIGNED C. L. Wert DATE 9-22-82
9-46N-10E

34

White Copy – Ill. Dept. [illegible]blic Health
Yellow Copy – [illegible]ell Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINE[illegible] INFORMATION REQU[illegible]ED AND MAIL ORIGIN[illegible] TO STATE DEPARTMENT OF PUBLIC [illegible]EALTH, ROOM 616, [illegible]ATE OFFICE BUILDI[illegible], SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED

JUN 1[illegible] 197[illegible]

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth 123 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven _____. Drive Pipe Diam. 4 in. Depth 169 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 50
   Cess Pool — Sewer (non Cast iron) —
   Privy _____ Sewer (Cast iron) _____
   Septic Tank 60 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No _____
4. Date well completed May 30 - 79.
5. Permanent Pump Installed? Yes ✓ No _____
   Manufacturer Red Jacket Type Sub.
   Capacity 10 gpm. Depth of setting 110 ft.
6. Well Top Sealed? Yes ✓ No _____
7. Pitless Adaptor Installed? Yes ✓ No _____
8. Well Disinfected? Yes ✓ No _____
9. Water Sample Submitted? Yes ✓ No _____

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. 83758 Year 1979
11. Property owner Frank Pressel Well No. 1
    Address 1109 Elizabeth Prairie View, Ill
    Driller C L Wert License No. 57
12. Water from Drift (Formation) 13. County Lake
    at depth 169 to 123 ft.
14. Screen: Diam. 3 in.
    Length: 4 ft. Slot 10
    Sec. 9
    Twp. 46N
    Rng. 10E
    Elev. _____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11.6 galv. steel	0	169

16. Size Hole below casing: — in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 55 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Fill muck clay	0 - 15		
Blue clay	15 - 110		
Gravel "	110 - 140		
Grey clay	140 - 150		
Dirty sand	150 - 165		
Clean "	165 - 174		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)			

SIGNED C L Wert DATE May 30 79

WELL NO. 10
LOG

REQUESTED AND MAIL ORIGINAL TO STATE
NSUMER H .TH PROT' 'ION, 535 WEST
761. DO NL DETACH GE .OGICAL/WATER
E PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner CREGG WENNSTROM Well No. Silver Lake Rd.
Address 42066 N. Deep Lake Rd., Antioch, IL.
Driller GEORGE E. GAFFKE License No. 102-234
11. Permit No. 102976 Date 4/1/82
12. Water from Sand & Gravel Formation 13. County Lake
at depth 131 to 140 ft. Sec. 9.
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1	137

SHOW LOCATION IN SECTION PLAT

16. Size Hole below casing: 5 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level ____ ft. when pumping at 15-20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Topsoil	2	2
Brown Clay	10	12
Blue Clay	57	69
Gravel Sd 1 ✓	3	71
Blue Clay	60	131
Sand & Gravel Sd 2 ✓	9	140

TOP S&G AQUIFER: 800 / 131 / 669
STATIC WATER LEVEL: 800 / 74 / 726

795

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 12/14/82

9-46N-10E

PRIVATE WELL 10

(1)

Page 1 ILLINOIS GEOLOGICAL SURVEY, URE

Strata		Thickness	Top	Bottom
Clay			0	1[illegible]
Blue clay	800		15	1[illegible]
Sandy gravel	128		12[illegible]	1[illegible]
	672			

Finished in sandy gravel.
Casing: 2" from 0 to 130'.
Size hole below casing: 2"
Static level from surface: 70'
Tested capacity: 8 gallons per minute.
Water lowered: 6'.

800
70
730

795

Location

COMPANY C.L. Wertz
FARM Antioch Cemetary
DATE DRILLED July 1935
AUTHORITY C.L. Wertz
ELEVATION
LOCATION SW SW S
GGOC NO.
COUNTY NO. 38

Well Log
No. 11 p182

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Clay	765	0	143
Sand and gravel.	143	143	150
	622		TD

Finished in sand and gravel.
Casing: 6" from 0 to 147'
Size hole below casing: 6"
Static level from surface: 50'
Tested capacity: 30 gallons per minute.
Water lowered: 30'

765
143
622

765
50
715

765
50
715

4

ok

239
145
94

COMPANY C. L. Wertz
FARM Willow Dale Dairy NO. 2
DATE DRILLED August 1945 COUNTY NO. 80
AUTHORITY C. L. Wertz
ELEVATION
LOCATION Ap. NE NE SW
COUNTY LAKE

PRIVATE WELL 11

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	1
Blue clay		15	1[illegible]
Nice gravel (Water level 30'; Tested 50 gallons per minute at 70')		145	1[illegible]
Red clay		149	23[illegible]
Gravel		235	23[illegible]
Limestone and rock		239	[illegible]
			T[illegible]

Same As 5

235
149
86

Finished in rock.
Casing: 8" from 0 to 261'
Static level from surface: 30'
Tested capacity: 50 gallons per minute.
Water lowered: 60'

This well is not a good producer; another well was drilled to 350', approximately 75' away and production is about the same.

5

SAME LOCATION ±
TAKE AV. WATER
LEVEL OF 725

Not a municipal well (Sect. 17)

765
30
735

165
145
620

Antioch Township

COMPANY C. L. Wertz
FARM Willow Dale Dairy NO. 1
DATE DRILLED May 1944 COUNTY NO. 79
AUTHORITY C. L. Wertz
ELEVATION
LOCATION Ap. NE NE SW
COUNTY LAKE

Well Log No. 11 p1 of 2

(45899—20M—2-52)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

(3)

Strata	Thickness	Top	Bottom
Fill, top soil & brown clay	15		15
Clay & stones	115		130
Sand & gravel - last 6 ft. water	20		150
Bearing - W.L. 40' Red clay & small stones	82		232
Dry gravel & clay	5		237
Limestone hole			261
			TD

758
130
628

Cased with 8" from 0 to 237
Size hole below casing 8"
Static level from surface 40'
Tested capacity 20 gal. per min.
Water lowered to 170 ' in 6 hours.
Length of test: 6 hours.

760
40
720

780
40
741

762

237
130
107

#2

location makes no sense

COMPANY C. L. Wertz (Antioch)
FARM Willowdale Dairy Well NO. 2
DATE DRILLED 1944 COUNTY NO. 1927
AUTHORITY C. L. Wertz
ELEVATION 810 CO
LOCATION 100' W. line, 900' S. line SW NE
COUNTY LAKE S. S.#11976 3-46N-10E

#3

LEW
C.L.H.
R.E.R. No Permit

LOG OF WATER WELL

Property owner Willow Dale Dairy Well No. 3

Drilled by C. L. Wertz Year 1945

Formations passed through	Thickness	Depth of Bottom
Top soil - Fill & Brown clay	15	15
Blue clay	128	143
Sand & Gravel	7	150

Vot

775 770
45
725

170
143
627

COUNTY NO. 1928 No Envelope

(Continue on back if necessary)

Finished in Sand & Gravel at 143 to 150 ft.

Cased with 6" inch I.D. Steel Pipe from 0 to 143' ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 40 ft.

Tested capacity 23 gal. per min. Temperature °F.

Water lowered to 75 ft — in. in 4 hrs — min.

Length of test hrs min. Screen 5½" x 7' O.D. Brass

Slot #20 Diam Length Bottom set at ft.

(Show location in Section Plat)

Township name Antioch Elev. 810 Sec. 8

Description of location Twp. 46N

Rge. 10E

No. 12

#200

JMER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER W[illegible] OCATIO[illegible]

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 6-23-78

10. Property owner AR-KAY BLDRS. Well No. 335 Center
Address 7550 Washington St., Gurnee, IL.
Driller J. P. LICHTER License No. 102-6
11. Permit No. 75113 Date 6/7/78
12. Water from Sand-Gravel Formation 13. County Lake
at depth 126 to 130 ft. Sec. 8
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam (in)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	grade	128

SHOW LOCATION IN SECTION PLAT
125'SL, 125'EL
NE NW NW
(permit)

16. Size Hole below casing: 5 in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level ____ ft. when pumping at 10 gpm for ____ hours. Sub. pump set at 100'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Brown Clay		10	10	
Blue Clay		86	96	
Sand	812	1	97	812
Blue Clay	69	29	126	126
Sand - Gravel	743	4	130	686

6

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 10/23/78

COUNTY No. 26553

LAKE 8-46N-10E

PRIVATE WELL 12

PRIVATE WELL 13

No. 13

(4[illegible]—20M—3-53)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bott
Top soil		0	[illegible]
Yellow clay		3	1[illegible]
Blue clay (sand streak)		13	2[illegible]
Blue clay (soft)		23	6[illegible]
Blue clay (sand streak)		68	7[illegible]
Sandy blue clay	773	73	9[illegible]
Medium fine sand (dirty)	116	93	11[illegible]
Medium coarse sand and gravel		116	12[illegible]
Coarse sand and gravel	657	128	14[illegible]
Coarse sand and gravel (dirty)		143	14[illegible]
Clay		147	14[illegible]
			TI

Size of Well: 28" surface to 142'.
Casing Record: 12" I.D. screen 122 to 142'
12" I.D. 122' to 2' above ground.
Water at 122 to 142' 77
Water head 41' 4
Drawn-down 12' 73
Yield: 800 gallons per minute.

Location: 507' S. of Ada Street and 88' E. of the east Soo line RR right of way fence.

SAMPLE SET # 23797

Location corrected by Russ Brower.

COMPANY Layne-Western NO.
FARM Village of Antioch #3 NO.
DATE DRILLED October, 1953 COUNTY NO. 1944
AUTHORITY Layne-Western
ELEVATION
LOCATION NE NE?
COUNTY LAKE

8-46N-10E

Well Information for Layne-Western Co.

This sheet is to be filled in and mailed to office upon completion of well

1. Village of Antioch, Ill. (Name of Job) Nov. 4, 1953 (Date)

2. Antioch, Ill. (City) Ill. (State)

3. Well No. 3 Siefers (Driller's Name)

4. Well location: Southeast corner of town
Give Distance and Direction from Permanent Land Mark so Well can be Accurately Located Several Years from now.

5. Work began Oct. 19, 1953 work completed Oct. 30, 53. Number of working days 10

6. Diameter, length and type of material left in well:

7. 20 feet of shutter (Shutter, Concrete, Keystone) screen made of stainless steel (Armco, Bronze, Stainless Steel, Concrete) No. 5 (Mesh) open s.

8. 122' 6" feet of 12 inch inside casing made of Std. Pipe (Armco, Std. Pipe, Concrete) with Welded (Riveted, Welded, Screw) connections.

9. _____ feet of _____ inch outside casing made of _____ (Armco, Std. Pipe) with _____ (Riveted, Welded, Screw) connections

10. 7 yards of gravel used in well. Size pea

11. Test of well. Did you use test or permanent pump? test _____ (Size of Bowl) _____ (Stages)

12. Pump No. _____; geared head No. _____; ratio _____; r.p.m. _____; pulley diam. _____

13. Power used _____ (Electric Motor, Engine); horse power _____; voltage _____; r.p.m _____; pulley diam. _____; r.p.m. _____

14. Size of orifice _____ inch, by _____ inch. Orifice tube reading _____ inches.

15. Pumping test—measurements from ground level:

Time	G.P.M.	Static	Drawdown	Pumping Level
	5 gal	41'	9'	50'

16. Recovery in 5 minutes _____, in 30 minutes _____

17. Customer's pump No. _____ was installed in this well by _____

you seal bottom of well? yes Thickness 1/4 inches, material Steel plate

Was well under-reamed? no From _____ feet to _____ feet.

From _____ feet to _____ feet.

From _____ feet to _____ feet.

20. If all screen was not placed at bottom, state how it was spaced. all at bottom

From _____ feet to _____ feet; from _____ feet to _____ feet; from _____ feet to _____ feet.

21. Depth of (from ground level to top of plug) 140 feet 6 inches.

22. Was cement put around or between any of the casings? yes

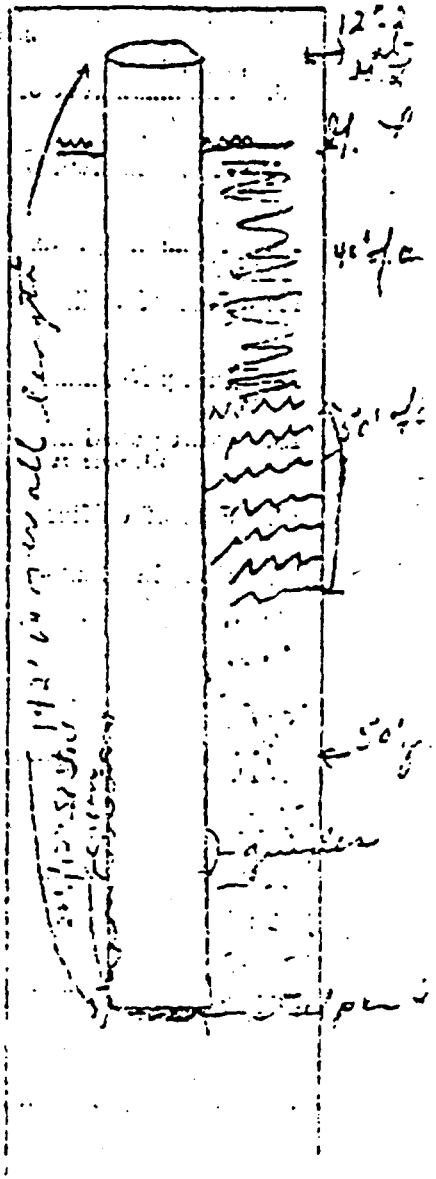
23. If, so, state where, how much and method used. ~~cement grout, from 0' to 10'~~

between 28" and 12"

24. Log of well from ground level: differs from IGS description

Feet		Feet	Formation
0	to	1	Top Soil
1	to	13	Yellow Clay
1	to	85	Blue clay
85	to	97	Fine sand
97	to	99	Gravel
99	to	103	Fine sand
106	to	113	Blue Clay
113	to	143	Sand, gravel, boulders
143	to	145	Fine sand
145	to		Shale
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		

FOR SKETCH



25. Remarks:

Ford C. Moore Corporation, Rochester, N.Y. Binder and holes in leaves, ... Patented 1906. 366700

(3)

TOWN Antioch
COMPANY Antioch Creamery No.
FARM Hosken No.
AUTHORITY 770±
ELEVATION Workman
COLLECTOR DATE DRILLED ?
CONFIDENTIAL N.E. part of Antioch

Map No. 10E
R.
T 46N
Sec 8

No.	COUNTY NO. 1922	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Clay	50		50	
	Sand, sharp	5		55	
	Clay	47		102	
	Sand and gravel with boulders at base	? 10		112	
	Clay	32		144	
	Sand and gravel, with boulders at base	6		150	
	Clay, little sand and gravel on top of rock	90		240	
	Limestone	90		330	

No sulfur, cased to rock with 6" casing

Little water from coarse gravel on top of rock.

160 ft. of drop pipe

60 ft. to water, 20 gpm

(7)

13 exp 90 140

LAKE 0308

County 56 Index No.

T.—DRILL RECORD

(30819—5M—7-31) 2 Illinois Geological Survey, Urbana.

PRIVATE WELL 14

Well log No. 13

(65600—60M—10-57)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Summary Sample Study by Lidia Selkregg 7/58.			
PLEISTOCENE SERIES			
Silt, buff, yellow, calcareous, oxidized	10		1
Silt, buff yellow, gray, calcareous, oxidized	40		5
Clay, gray, laminated, calcareous	20		7
Till, buff gray, very silty, calcareous	20		9
Sand, very fine to fine, well sorted, clean	5		9
Gravel, coarse, poorly sorted; till, brownish gray sandy, calcareous	5		10
Sand, fine; well sorted, clean	5		10
Till, gray, very silty, calcareous	10		11
Gravel, granular to coarse, clean; sand, medium to very coarse, clean	10		12
Gravel, granular to coarse, clean	5		130
Sand, very coarse, well sorted, celan; gravel coarse	5		135
Sand, as above; little fill, brownish gray, silty calcareous	5		140
Sand, fine, well sorted, clean; little gravel	5		145
Silt, brownish gray, clayey, calcareous	5		150
Location corrected by Russ Brower.			

COMPANY Layne-Western Co.
FARM Village of Antioch NO. (3)
DATE DRILLED October 1953 COUNTY NO. 1944
AUTHORITY Lidia Selkregg
ELEVATION
LOCATION NE
COUNTY LAKE S. S. # 23797

8-46N-10E

(13210—20M—3-66)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay	797	0	15
Blue clay	140	15	140
Clean sand		140	152
Fine caving sand	657	152	262
Limestone		262	266
			TD

Finished in limestone.
Casing: 4" black from 0 to 266'
Static level from surface: 65'
Tested capacity: 5 gallons per minute.
Water lowered to 130'

797
65
732

262
140
122

(8)

COMPANY C. L. Ortz
FARM Lo[illegible]er, William
DATE DRILLED June 19[illegible]
AUTHORITY C. L. Ortz
ELEVATION NW NE
LOCATION [illegible]
COUNTY L[illegible]

NO. 1
COUNTY NO. 78

[illegible]-10E

(13)

PRIVATE WELL 15

TOWN Antioch TOWNSHIP Antioch Map No. 3
COMPANY H. Edwards No. R. 10E
FARM Antioch Laundry (old) No. T 46N Sec. 8
AUTHORITY Edwards
ELEVATION 785±
COLLECTOR B.R.M. DATE DRILLED 1930
CONFIDENTIAL Memory

No.	COLLECTION NO. 1925 STRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Soil	2		2	
	Yellow till	10		12	
	Blue till	50		66	787
	Blue clay	54		120	120
	Sand	3		128	
					667

(9)

NO ENVELOPE

County Lake
T.—DRILL RECORD
Index No. 0308
8-46N-10E

(14)

(10910—[illegible]—11-32) Illinois Geological Survey, Urbana.

Well Log
No. 16

LOG OF WATER WELL

Property owner J. Horton Well No. 1

Drilled by Chas. Madson + Sons Year 1951

Formations passed through	Thickness	Depth of Bottom	
Soil	0	3	
Yellow clay	10	13	788
blue clay	107	120	120
fine sand	5	125	668
coarse sand	6	131	
			790
			70
			720

(10)

COUNTY NO. 1921 Vk Grayslake
(Continue on back if necessary)

Finished in coarse sand at 125 to 131 ft.

Cased with 4 inch black pipe from 0 to 125 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 70 ft.

Tested capacity 15 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 6 hrs. — min. Screen Clayton Marko

Slot 60 Diam. 2 in Length 6 ft Bottom set at 131 ft.
(Show location in Section Plat)

Township name Antioch Elev. 790E-7

Description of location NW NE

Sec. 8

Twp. 46

Rge. 10

(15) Signed — County —

Copy for Illinois State Geological S

PRIVATE WELL 16

Page 1 ILLINOIS GEOLOGICAL SURVEY, INDIANA

ENGINEERING BORING	Thickness	Top	Bottom
B-13			
Fill - Brown silty Clay, Topsoil and gravel			6.0
Fill- Gray silty clay			10.0
Soft gray organic clay, very moist			13.0
Soft to stiff gray silty clay, trace sand, very moist		13	18.0
Firm gray fine to coarse sand and gravel, wet			38.0
Dense to very dense gray fine to coarse sand and gravel, wet			48.0
Tough to very tough gray silty clay, trace gravel, moist			55.0

(11)

Typed by Warrenville Office

Soils report with 14 boring logs filed at Warrenville
NO ENVELOPE

COMPANY Testing Service Corporation
FARM Waste Management, Inc. NO. B-13
DATE DRILLED 8-2-73 COUNTY NO. 25980
AUTHORITY Company
ELEVATION 766.3 G.L.
LOCATION 150' from E. line- 100' from S. line
COUNTY LAKE

8-46N-10E

(16)

Well Log No. 17

(12210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Blue clay	775	0	120
Sand	120	120	130
	655		TD

Finished in sand.
Casing: 4" from 0 to 127'
Size hole below casing: 4".
Static level from surface: 40'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

775
40
735

775
120
655

✓ (12) 775

Copied from records in office of C. L. Wertz

COMPANY C. L. Wertz
FARM Heath
DATE DRILLED August 1946
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NE SW NE
COUNTY LAKE

NO. 1
COUNTY NO. 150

T-46N-10E

PRIVATE WELL 17

(17)

John C. ... Corporation, Rochester, N.Y. Binder and holes in leaves, each Patented 1904. 386790

TOWN Antioch TOWNSHIP Antioch
COMPANY Boysen No.
FARM Chain O'Lakes Laundry No.
AUTHORITY Boysen
ELEVATION 785 ?
COLLECTOR DATE DRILLED
CONFIDENTIAL

Map No. 3
R. 10E
T 46N
Sec. 8

No.	COUNTY NO. 1926 SPRATA	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Clay	90		90	
	Sand and gravel	10		100	
	Clay	30		130	
	Gravel	10		140	

785
130
655

✓ (13) ~~14~~ MC

775
90
695

PRIVATE WELL 18

County LAKE 159 Index No. 0308
T.—DRILL RECORD

(80819—8M—7-31) 3 Illinois Geological Survey, Urbana.

(18)

(13210—20M—3-55)

5

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Repaired existing 10" well: TD 231' (to bottom of screen)	?		
Casing: 10" from [illegible] to 231'			
Static level from surface: 4[illegible]			
Tested capacity: 20[illegible] gallons per minute.			
Water lowered: 70'			

770
46
725

(14)

Copied from record [illegible]

COMPANY C. L. Wertz
FARM Antioch Village Well NO. 1
DATE DRILLED Repaired: Nov. '49 COUNTY NO. 149
AUTHORITY C. L. Wertz
ELEVATION
LOCATION [illegible] SW
COUNTY LAKE

(19)

6-46M-10[illegible]

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Top soil and clay		0	
Dark gravel		[illegible]	
Grey clay		[illegible]	
Gravel	?	[illegible]	
Finished in gravel.			
Casing: 4" black, from 0 to 64'			
Static level from surface: 30'			
Tested capacity: 10 gallons per minute.			
Water lowered: 7'			

765
30
725

(15)

765
82
683

COMPANY C. L. Wertz
FARM [illegible]
DATE DRILLED April 194[illegible]
AUTHORITY C. L. Wertz
ELEVATION
LOCATION [illegible] SE
COUNTY LAKE

NO. 1
COUNTY NO. 77

TACH GEOLOGICAL/WATER
LOCATION

No. 19

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 10/4/76

10. Property owner TONY BERO Well No. _____
Address 1314 Maurine Dr., Lake Villa, IL.
Driller HENRY BOYSEN CO. License No. 102-6
11. Permit No. 52532 Date 9/22/76
12. Water from Sand (Formation) 13. County Lake
at depth 124 to 128 ft. Sec. 10
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	grade	126

SHOW LOCATION IN SECTION PLAT
200'NL 100'WL NE NE NE (permit)

16. Size Hole below casing: 5 in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 25 gpm for _____ hours. Sub. pump set at 84'

	FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
	...y	8	8
	...y (16)	27	35
✓1	Sand - Gravel	2	37
	Blue Clay - Lt. Gravel	70	107
✓2	Gravel	2	109
	Soft Blue Clay	6	115
✓3	Blue Clay - Gravel	9	124
✓4	Sand	4	128

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 12/27/76

COUNTY No. 24771

LAKE 10-46N-10E

PRIVATE WELL 19

(23)

...STATE OF ... BUILDING, SPRINGFIELD, ...ICAL/WATER SURVEYS SECTION. BE SURE TO

Log 020

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 11-5-72

10. Property owner ROBERT BURGE Well No. _____
Address 625 CREMONA LAKE VILLA
Driller E E GROSS License No. 291
11. Permit No. M16684 Date 10/26/72
12. Water from SAND (Formation) 13. County Lake
at depth 160 to 179 ft. Sec. 9
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GAL. 11.00	0	177

SHOW LOCATION IN SECTION PLAT
SE NE NE (permit)

16. Size Hole below casing: 4 in.
17. Static level 95 ft. below casing top which is 15" ? ft. above ground level. Pumping level 115 ft. when pumping at 12 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS Top	DEPTH OF BOTTOM
YELLOW CLAY	0	15
BLUE CLAY 788 788	15	160
✓1 SAND 77 160	160	179
711 628		
(17)		
788		
94		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED E E Gross DATE 11/22/72

COUNTY No. 3868

LAKE 9-46N-10E

PRIVATE WELL 20

(24)

GEOLOGICAL WATER SURVEYS WATER WELL RECORD
Completed 9-3-68

10. Dept. Mines and Minerals permit No. OFFIAH Year 68
11. Property owner ROBERT LEGIE Well No. 1
Address ATH BOX 361 ANTIOCH
Driller ENGLEHARDSON Licence No. 97-104
12. Water from SAND (Formation) 13. County LAKE
at depth 126 to 144 ft.
14. Screen: Diam. 4 in.
Length: 7 ft. Slot 15
Sec. 9
Twp. 46N
Rng. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	TAIL SECTION	0	145
4	JOHNSON SCREEN	143	144

SHOW LOCATION IN SECTION PLAT
SW NW SW
(Permit)

16. Size Hole below casing: 4 in.
17. Static level 62 ft. below casing top which is 1 ft. above ground level. Pumping level 51 ft. when pumping at 25 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
TOP SOIL ✓ (19)		4	04	
YELLOW CLAY		18	4-14	
BLUE CLAY	780	92	14-106	780
FINE SAND	61	20	106-126	106
SAND (WATER BEARING)	719	20	126-146	674
				770
(CONTINUE ON SEPARATE SHEET IF NECESSARY)				

SIGNED [illegible] DATE 7-19-69

COUNTY No. 2680

N of 4

9-46N-10E

PRIVATE WELL 21

LAKE

Well Log No. 22

GEOLOGICAL WATER SURVEYS WATER WELL
Completed 4-19

10. Dept. Mines and Minerals permit No. NF 5930 Year 7
11. Property owner Wm. Heath Well No. 1
Address Burnar Rd Antioch
Driller F. Colwertz License No. 37
12. Water from Gravel (Formation) 13. County Lake
at depth 142 to 150 ft.
14. Screen: Diam. 2 1/2 in.
Length: 30 ft. Slot 60 gauze
Sec. 9
Twp. 46N
Rng. 10E
Elev. 770

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11.6 galv.	0	142

SHOW LOCATION IN SECTION PLAT
100'NL 100'E of NW SW
(permit)

16. Size Hole below casing: in.
17. Static level 30 ft. below casing top which is 18" ft. above ground level. Pumping level 50 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Muck & clay		0	16	
Blue clay sticky		120		
and hard	780		136	780
Sand	29	15	151	130
✓ (20)	751			642
Screened from 147 to 150				
(CONTINUE ON SEPARATE SHEET IF NECESSARY)				

SIGNED C. F. Wertz DATE Aug 15 70

COUNTY No. 1685

9-46N-10E

PRIVATE WELL 22

LAKE

28

Well Log

(13210—20M—3-58)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	15
Grey clay		15	175
Fine grey sand	✓1	175	255
Grey and white gravel	✓2	255	257

800
175
625

Finished in grey and white gravel.
Casing: 4" from 0 to 257'
Static level from surface: 45'
Tested capacity: 15 gallons per minute.

21

790
~~860~~
45
745

COMPANY C. L. Wertz
FARM Nacer, Louis NO. 1
DATE DRILLED October 1940 COUNTY NO. 82
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NW NW SE
COUNTY LAKE

9-L6N-10E

PRIVATE WELL 23

29

...6, STATE OFFICE BUILDING, SPRINGFIELD,
...CAL / WATER SURVEYS SECTION. BE SURE TO

DUPLICATE.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 8-6-71

10. Property owner A. Kahler Well No. _____
Address 1624 Greenwood Ave
Driller [illegible] License No. 30
11. Permit No. NF 11850 Date 8/4/71
12. Water from Sand (Formation) 13. County Lake
at depth 101 to 110 ft. Sec. 9
14. Screen: Diam. 4 in. Twp. 46N
Length: 3½ ft. Slot 15 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv. T & C	0	107
	10.89 ppf		

SHOW LOCATION IN SECTION PLAT
50'SL 50'EL of SW (permit)

16. Size Hole below casing: 4 in.
17. Static level 36 ft. below casing top which is 1 ft. above ground level. Pumping level 40 ft. when pumping at 15 gpm for _____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay 0-8	8	8
Blue Clay 8-56	48	56
Sandy Clay 56-73	17	73
Gravel & Clay 73-101 767	28	101
Sand 101	9	110
666		

767
35
732

22

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 9/15/71

30

LAKE

COUNTY NO. 3328

9-L6N-10E

E[illegible]TED [illegible]ND MAIL ORIGINAL TO STATE
SUMER [illegible] TH[illegible] PROT[illegible] ON, 535 WEST
61. DO NOT DETACH GEOLOGICAL/WATER
PROPER WELL LOCATION.

(27)

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Fred C Hartman Well No. 1
Address R.R. Silver Lake Park - Antioch, Ill
Driller C. L. Wertz License No. 57
11. Permit No. 1[illegible]6 Date 9-20-52
12. Water from Drift (Formation) 13. County Lake
at depth 171 to 174 ft.
14. Screen: Diam. 3 in.
Length: 4 ft. Slot 15
Sec. 9
Twp. 46N
Rge. 12E
Elev. 770

SHOW LOCATION IN SECTION PLAT
250'N 250'W SE/c S

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	gal. steel	0	171
	11 lb per ft.		

SAME AS (34)

16. Size Hole below casing: 5" Cemented
17. Static level 5 ft. below casing top which is ____ ft. above ground level. Pumping level 23 ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0-8		
Gravel streak	8-10		
Blue clay	10-95		
Muck clay	95-105		
Grey clay	105-160		
Dirty fine sand	160-165		
Clean gravel	165-174		

(CONTINUE ON SEPARATE SHEET IF NECESSARY) 4-inch PVC

SIGNED C. L. Wertz DATE 9-22-52

783

(35)

PRIVATE WELL 24

Well No. 24
Log

(1[illegible]-20M—3-55)

Page 1 **ILLINOIS GEOLOGICAL SURVEY, URBANA**

Strata	Thickness	Top	Bottom
Blue clay		0	12
Fine sand (very nice gravel at 1[illegible])		12	1[illegible]
Finished in very nice coarse gravel. Casing: [illegible] in. 0 to 1[illegible]. Static level from surface: 75'. Tested capacity: 10 gallons per minute. Water lowered: 5'			
820 / 75 / 745			
Northwest of Antioch, Illinois			

(28)

COMPANY C. L. Wertz
FARM Hyke, John NO. 1
DATE DRILLED October 1 39 COUNTY NO. 70
AUTHORITY C. L. Wertz
ELEVATION
LOCATION [illegible]
COUNTY Lake

9-1[illegible]-1[illegible]

(36)

NSUME EALTH PROTECTION, 535 WEST
761. DO NOT DETACH GEOLOGICAL/WATER
E PROPER ELL LOCAT

Dup of #6

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Don Collins Well No. _____
Address Silver Lake Ave. Antioch, IL
Driller Charles C. Madsen License No. [illegible]
11. Permit No. 110624 Date 11-30-[illegible]
12. Water from SAND (Formation) 13. County LAKE
at depth 142 to 153 ft. Sec. 9 SE
14. Screen: Diam. 3 in. Twp. 46N
Length: 5 ft. Slot 010 Rge. 10E
Elev. _____

SHOW LOCATION IN SECTION PLAT: SE NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Gal. 11 PF	0	147

16. Size Hole below casing: 3 in.
17. Static level 115 ft. below casing top which is 1 ft. above ground level. Pumping level 126 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Yellow Clay		21	21
B Clay	795	119	140
Sand	115	120	152
	680		
✓ (29)			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E. Madsen DATE 9/24/84

Charles E. Madsen 9-4-110E

(37)

PRIVATE WELL 25

[illegible]
761. DO NOT DETACH GEOLOGICAL/WATER
E PROPER WELL LOCATION.

Well Log No. 25

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Marlin Corran Well No. _____
Address 202 Lake St. Evanston, Ill 60201
Driller C. L. Wertz License No. 27
11. Permit No. 112201 Date June 17-84
12. Water from Drift (Formation) 13. County Lake
at depth 102 to 162 ft. Sec. 9 SE
14. Screen: Diam. 3 in. Twp. 46N
Length: 48 ft. Slot 12 Rge. 10E
Elev. _____

SHOW LOCATION IN SECTION PLAT: 650'S & 400'W SE/C SW ?

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Galv-11 lb	0	
	Steel	-	102

16. Size Hole below casing: 3 in. screened
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0-19		
Blue clay Firm	19-36		
" " mucky	36-68		(30)
Grey clay Firm	68-		
some grit	130		
Sand stuck	130-135		
Clay & sand	135-155		
Clean sand & gravel	155-165		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE June 17 84

9-4-110E

(38)

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	15
Blue clay		15	125
Sand to very nice gravel		125	171

805
125
680

Finished in sand to very nice gravel.
Casing: [illegible] from 0 to 171'
Static level from surf co: 65'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

810
65
745

33

B-B'

COMPANY C. E. Hertz
FARM [illegible] Farm NO. 1
DATE DRILLED May 1943 COUNTY NO. 84
AUTHORITY C. E. Hertz
ELEVATION
LOCATION SW SE NW
COUNTY LAKE

(41)

John C. Moore Corporation, Rochester, N. Y. Binder and Index in Leaves Patented. FORM 403B0B

TOWN Antioch TOWNSHIP Antioch MAP NO. 3
COMPANY Henry Boysen, Jr. NO. R. 10E
FARM Nixon, M. C. NO. T. 46 N
AUTHORITY Henry Boysen, Jr.
ELEVATION
COLLECTOR
CONFIDENTIAL DATE DRILLED Dec. 1939

SE cor SW SE NW

No.	Strata	Thickness Feet	Thickness In.	Depth Feet
	1943			
	Clay, red	20		20
	Clay, blue	90		110
	Sand and gravel	45		155

4-1/2" casing to 155'
Water level 62' from surface
Capacity tested to 10 g.p.m.

795
62
733

34

COUNTY Lake INDEX NO. 0316

DRILL RECORD

(42)

Well Log No. 26

761. DO NOT DETACH GEOLOGICAL WATER
DE PROPE LOCA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-8-77

10. Property owner ADAM BARYS Well No. 1
Address LINCOLN DR - ANTIOCH ILL
Driller C. MADSEN License No. 92-202
11. Permit No. 68143 Date 10-14-77
12. Water from Sand (Formation) 13. County LAKE
at depth 118 to 122 ft.
14. Screen: Diam. 2½ in.
Length: 5 ft. Slot 10
Sec. 16
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11 RFT	0	118

SHOW LOCATION IN SECTION PLAT

Lot 16 Lagoona Su
800'SL,400'WL S
SW (permit)

16. Size Hole below casing: 2½ in.
17. Static level 50 ft. below casing top which is 1½ ft. above ground level. Pumping level 63 ft. when pumping at 10 gpm for 2 hours Sub. pump set at 63'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Peat	775	12	12
Blue Clay	20	90	102
Fine Sand	775	10	112
Coarse Sand		10	122
(46)			

775
112
663

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C Madsen DATE

PRIVATE WELL 26

LAKE

COUNTY NO. 26558

16-46N-10E

(55)

W Log No. 27

N REQUESTED AND MAIL ORIGINAL TO STATE
CONSUMER HEALTH PROTECTION, 535 WEST
62761. DO NOT DETACH GEOLOGICAL/WATER
VIDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Richard Good Well No. 2
Address RT 2 Box 128A Antioch Il.
Driller William D Blake License No. 92-[illegible]
11. Permit No. 94710 Date July 8 1980
12. Water from drift (Formation) 13. County Lake
at depth 117 to 120 ft.
14. Screen: Diam. 3¾ in.
Length: 3 ft. Slot 12
Sec. 16.6d
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	TTC Galv. 11.5 lbs/ft	Surface	117

SHOW LOCATION IN SECTION PLAT
NW NE SW

16. Size Hole below casing: 3 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level 84 ft. when pumping at 20 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Top Soil (47)		3	3
Yellow clay		12	15
Blue clay (Smooth)		18	33
Sandy clay (Blue)		25	58
Hard Pan	790	20	78
Gray clay (Sitty)	75	37	115
Sand	715	5	120

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William D Blake DATE 9-2-82
[illegible]

PRIVATE WELL 27

(56)

ION. DRILLERS

ON REQUESTED AND MAIL ORIGINAL TO STATE CONSUME EALTH PI ECTION, 535 WEST 62761. DO NOT DETACH GEOLOGICAL/WATER VIDE PROPER WELL LOCATION.

Well Log No. 28

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Wayne Blanchette Well No. 2
Address 22621 W. Ave 173 Antioch, IL.
Driller William D Blake License No. 92-510
11. Permit No. 101357 Date Sept. 16 81
12. Water from drift (Formation) 13. County Lake
at depth 134 to 138 ft. Sec. 16.5d
14. Screen: Diam. 3 3/4 in. Twp. 46N
Length: 4 ft. Slot 12 Rge. 10E
Elev.

			x
	x		

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C Galv. [illegible]	Surface	134

SHOW LOCATION IN SECTION PLAT
Lot 4 Lagoona NE NE SW

16. Size Hole below casing: 3 in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level 70 ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	1	1
Yellow clay (50)	16	17
Blue clay	12	29
Smooth clay	25	54
Sandy clay (Grey)	30	84
Hard Pan	49	133
Sand	5	138
SAME AS (48)		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William D. Blake DATE 9-7-82
16-46N-10E

PRIVATE WELL 28

(59)

QUESTED AND MAIL ORIGINAL TO STATE SUMER HEALTH PROTECTION, 535 WEST 1. DO NOT TACH GEOLOGICAL/WATER PROPER W. LOCATION

Well Log No. 29

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner RAY NOWAK Well No.
Address 173 and Madison, Antioch
Driller Lonny R. Hoover License No. 102-783
11. Permit No. 91570 Date Nov. 16, 1979
12. Water from Sand (Formation) 13. County Lake
at depth 123 to 129 ft. Sec. 16.5c
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot #10 Rge. ~~12E~~ 10E
Elev.

		x	

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Galv. Steel	0	126
	T&C 14.81 PPF		

SHOW LOCATION IN SECTION PLAT
300'S, 50'E NW/C NW/C SE NE SW

16. Size Hole below casing: 4 in.
17. Static level 63 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 15 gpm for 1½ hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Clay	775	113	113	77
Sandy clay	63	10	123	12
Sand	712	6	129	65
(51)				
770				
-62				

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE 1/14/80

PRIVATE WELL 29

(60)

16 46N 10E

of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Publ. 29 (P.)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 129 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven _____. Drive Pipe Diam. 4 in. Depth 126 ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 50 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed November 16, 1979
5. Permanent Pump Installed? Yes X Date 11/21/79 No____
   Manufacturer Sta-Rite Type Subm Location____
   Capacity 8 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes X No____ Type ____
7. Pitless Adapter Installed? Yes X No____
   Manufacturer Baker Model Number Snappy
   How attached to casing? Approved manner
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 42 gal. Type WX-202
    Location ____
11. Water Sample Submitted? Yes____ No____

REMARKS:

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner RAY NOWAK Well No. ____
    Address 173 and Madison, Antioch
    Driller Lonny R. Hoover License No. 102-783
11. Permit No. 91570 Date Nov. 16, 1979
12. Water from Sand (Formation) 13. County Lake
    at depth 123 to 129 ft. Sec. 16,5c
    Twp. 46N
14. Screen: Diam. 4 in. Rge. 12E/WE
    Length: 3 ft. Slot #10 Elev. ____

SHOW LOCATION IN SECTION PLAT
300 ft, SE, N/c. SE

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Galv. Steel	0	126
	T&C 14.81 PPF		

16. Size Hole below casing: 4 in.
17. Static level 63 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 15 gpm for 1½ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	113	113
Sandy clay	10	123
Sand	6	129

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 1/14/80

NSUMER HEALTH PROTECTION, 535 WEST
761. DO NOT DETACH GEOLOGICAL/WATER
E PROPER WELL LOCATION.

Well Log No. 30

GEOLOGICAL AND WATER SURVEYS WELL RECORD

1206 Hook Circle, Antioch Completed 7-26-77

10. Property owner Frances Graffe Well No. _____
Address 4647 S. St. Louis, Chicago, IL.
Driller Fred H. Matthesius License No. 102-88
11. Permit No. 63590 Date 7-18-77
12. Water from gravel (Formation) 13. County Lake
at depth 123 to 127 ft. Sec. 16
14. Screen: Diam. 5 in. Twp. 46N
Length: 4 ft. Slot 30 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	15# galv. T/C R&D		

SHOW LOCATION IN SECTION PLAT
SE SW SE
(permit)

16. Size Hole below casing: 5 in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level 70 ft. when pumping at 20 gpm for _____ hours.

18. FORMATIONS PASSED THROUGH		~~THICKNESS~~ TOP	DEPTH OF BOTTOM	
clay	790	0	118	790 118
sand & gravel	65	118	127	672
	725			
	516			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Fred H Matthesius DATE 8-23-77

COUNTY No. 1[illegible] 33

LAKE 16-46N-10E

PRIVATE WELL 30

(65)

NSUMER HEALTH PROTECTION, 535 WEST
761. DO NOT DETACH GEOLOGICAL/WATER
E PROPER WELL LOCATION.

Well Log No. 31

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 8-11-77

10. Property owner THE RICHMOND CO. Well No. Washington Lincoln
Address 2413 Sand Lake Rd., Lindenhurst, IL.
Driller HENRY BOYSEN CO. License No. 102-6
11. Permit No. 61040 Date 5/20/77
12. Water from Sand-Gravel (Formation) 13. County Lake
at depth 104 to 112 ft. Sec. 16
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	grade	110

SHOW LOCATION IN SECTION PLAT
75'SL 75'WL
NW NE SW
(permit)

16. Size Hole below casing: 5 in.
17. Static level 49 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at 10-15 gpm for _____ hours. Sub. pump set at 100'.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Brown Clay	5[illegible]	7	7	
Blue Clay		71	78	
Blue Clay - Gravel	780	15	93	7
Blue Clay	50	11	104	1
Sand - Gravel	730	8	112	6

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE 12/29/77

COUNTY No. 25-52

LAKE 16-46N-10E

PRIVATE WELL 31

(66)

...te Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

...TIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5" in. Depth 110 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
mud slurry	0	105'

2. Distance to Nearest:
   Building 16 Ft. Seepage Tile Field 75+
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50+ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 4/27/76
5. Permanent Pump Installed? Yes X Date 4/27/76 No ____
   Manufacturer Red Jkt. Type Sub. Location ____
   Capacity 10 gpm. Depth of Setting 50 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Bolt on
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 52 gal. Type Wards
    Location Basement
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner RAY Schmidt Well No. ____
    Address Rt 2 Box 126A Antioch
    Driller Martin Jurs & Son License No. 102-7
11. Permit No. 46233 Date April 14, 1976
12. Water from Drift (Formation) 13. County Lake
    at depth 100 to 110 ft.
    Sec. 16
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 5 ft. Slot ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	Galv.	0	105

SHOW LOCATION IN SECTION PLAT
Lot #11 Blk 2
Lagoona Sub
SW

16. Size Hole below casing: ____ in.
17. Static level 40 ft. below casing top which is 2 ft. above ground level. Pumping level 50 ft. when pumping at 5 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	0	3
Grey Clay	3	35
Red Clay	35	90
Sand & Gravel	90	110

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED James Hutchings DATE 4/23/76

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 30 (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 5 in. Depth 127 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. ____in. Depth ____ft.
   c. Drilled x. Finished in Drift x. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 50 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes x No____
4. Date well completed 7-26-77
5. Permanent Pump Installed? Yes____ Date____ No____
   Manufacturer____ Type____ Location____
   Capacity____gpm. Depth of Setting____Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes x No____
   Manufacturer Monitor Model Number Snappy
   How attached to casing?____
8. Well Disinfected? Yes x No____
9. Pump and Equipment Disinfected? Yes____ No____
10. Pressure Tank Size____gal. Type____
    Location____
11. Water Sample Submitted? Yes in process No____

REMARKS:

customer to install his own pump and tank

McHENRY COUNTY WELL & PUMP CO.
3200 N. Richmond Rd. (Rt. 31)
McHenry, Illinois 60050
(815) 385-5252

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

1206 Hook Circle, Antioch

10. Property owner Frances Graffe Well No.____
    Address 4647 S. St. Louis, Chicago, Il.
    Driller Fred H. Matthesius License No. 102-88
11. Permit No. 63590 Date 7-18-77
12. Water from gravel Formation 13. County Lake
    at depth 123 to 127 ft.
    Sec. 16 Twp. 46N Rge. 10E Elev.____
14. Screen: Diam. 5 in.
    Length: 4 ft. Slot 30

SHOW LOCATION IN SECTION PLAT
SE SE SE

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	15# galv. T/C R&D		

16. Size Hole below casing: 5 in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level 70 ft. when pumping at 20 gpm for____hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
clay	0	118
sand & gravel	118	127

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Fred H. Matthesius Jr. DATE 8-23-77

Well Log
No. 32

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

3

Strata	Thickness	Top	Bottom
Yellow clay		0	24
Grey clay		24	90
Sand		90	153
Gravel		153	155
			TD

Finished in gravel.
Casing: 4" galv. from 0 to 155'
St tic level from surface: 70'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

770
70
700

Copied from records in office of C. L. Wertz

PRIVATE WELL 32

COMPANY C. L. Wertz
FARM Vox, Cleto
DATE DRILLED May 1953
AUTHORITY C. L. Wertz
ELEVATION
LOCATION SW SE NW
COUNTY LAKE
NO. 1
COUNTY NO. 314

Well Log
No. 33

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

3

Strata	Thickness	Top	Bottom
Brown clay	795	0	15
Clay	145	15	145
Sand to gravel	650	145	160

Finished in sand to gravel.
Casing: 4" from 0 to 165'
Static level from surface: 60'
Tested capacity: 10 gallons per minute.

61

795
60
725

145

Copied from records in office of C. L. Wertz

PRIVATE WELL 33

COMPANY C. L. Wertz
FARM Rosing, H.
DATE DRILLED September 1948
AUTHORITY C. L. Wertz
ELEVATION
LOCATION SW SW
COUNTY LAKE
NO. 1
COUNTY NO. 155

...EYS SECTION. BE SURE TO

Well No. 34

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF07572 Year 1969
11. Property owner RICHARD DANIELS Well No. 1
Address AT 5 DAVIDE Rd ANTIOCH
Driller ENGLEHAM & SONS INC License No. 92-109
12. Water from SAND (Formation) 13. County LAKE
at depth 120 to 143 ft. Sec. 17
14. Screen: Diam. NONE in. Twp. 46N
Length: ___ ft. Slot ___ Rng. 10E
Elev. ___

SHOW LOCATION IN SECTION PLAT

NE SW SW (Permit)

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	galv. steel 15 ft	0	143
Grout:	Clay slurry 0-25'.	- Driller	

16. Size Hole below casing: ___ in.
17. Static level 55 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
FILL	1	0-1
TOP SOIL	1	1-2
YELLOW CLAY	13	2-15
BLUE CLAY	10	15-25
BROWN CLAY 790	10	25-35 790
BLUE CLAY 55 / 735	85	35-120 120
SAND + GRAVEL (WATER)	23	120-143 670
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 1-15-1970

COUNTY No. 3042

LAKE (45) 17-46N-10E

PRIVATE WELL 34

...S, STATE ... BUILDING, SPRINGFIELD, ...AL / WATER SURVEYS SECTION. BE SURE TO

No. 35

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 12-11-71

10. Property owner Bernard Jasmer Well No. 1
Address 2920 W. Paddock Waukegan, Ill
Driller C. J. WERTZ License No. 57
11. Permit No. NF13123 Date Dec-11-71
12. Water from Drift (Formation) 13. County Lake
at depth 176 ft. Sec. 17
14. Screen: Diam. none in. Twp. 46N
Length: — ft. Slot — Rge. 10E
Elev. 750

SHOW LOCATION IN SECTION PLAT

700'SL 700'EL of NW (permit)

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. 11 lb	0	176

16. Size Hole below casing: none in.
17. Static level 30 ft. below casing top which is 18" ft. above ground level. Pumping level 35 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay	0 to	15
Grey "	15 to	40
Very sticky Blue clay	40 to	120
fine dirty sand	120 to	150
Wood particles in sand	150 to	155
Cleaner sand	155 to	170
Sand + fine gravel 800 / 30 / 770	170 to	176

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. J. Wertz DATE Dec 11-71

3431

LAKE (46) 17-46N-10E

PRIVATE WELL 35

IN S... YS SECTION, BE SURE TO Well No. 36 Log

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 6-8-67

10. Dept. Mines and Minerals permit No. NF 2214 Year 1967
11. Property owner [illegible] Well No. 1
Address [illegible]
Driller [illegible] License No. 92-109
12. Water from [illegible] (Formation) 13. County [illegible]
at depth 155 to 157 ft. Sec. 17
14. Screen: Diam. [illegible] in. Twp. 46N
Length: ____ ft. Slot ____ Rng. 10E
Elev. ____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	STEEL #1100	0	157

SHOW LOCATION IN SECTION PLAT

NW SE NE (Permit)

16. Size Hole below casing: ____ in.
17. Static level [illegible] ft. below casing top which is 8" ft. above ground level. Pumping level [illegible] ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	4	0-4
YELLOW CLAY	18	4-22
BLUE CLAY 185	80	22-102
FINE SAND 65	49	102-150
SAND & GRAVEL 110	5	[illegible]
GRAVEL (WATER BEARING)	3	155-157
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [illegible] DATE 6-20-67

PRIVATE WELL 36

65

17-46N-1

Well No. 37 Log

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 10-11-67

10. Dept. Mines and Minerals permit No. NF 2810 Year 1967
11. Property owner J. PITZER Well No. 1
Address RT 2 ANTIOCH
Driller EH GLENN & SONS INC License No. 92-109
12. Water from SAND (Formation) 13. County LAKE
at depth 169 to 176 ft. Sec. 17
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot 15 Rng. 10E
Elev. ____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GALV STEEL #1100	0	173
4	JOHNSON SCREEN	173	176

SHOW LOCATION IN SECTION PLAT

NW SW NE (Permit)

16. Size Hole below casing: 4 in.
17. Static level 53 ft. below casing top which is 8" ft. above ground level. Pumping level 60 ft. when pumping at 22 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	4	0-4
YELLOW CLAY	15	4-19
BLUE CLAY 139	120	19-139
FINE SAND	25	139-164
GRAVEL + CLAY	5	164-169
SAND + GRAVEL	7	169-176
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

PRIVATE WELL 37

SIGNED [illegible] DATE 10-17-67

COUNTY No. 2423

LAKE

17-46N-1

(80) Well Log No. 38

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed July 28, 1968

10. Dept. Mines and Minerals permit No. NE-4191 Year 1968
11. Property owner C. M. Solar Well No. 1
Address 425 Lake St. Antioch, Ill.
Driller C. L. Wertz License No. 3?
12. Water from Drift (Formation) 13. County Lake
at depth ___ to 162 ft. Sec. 17
14. Screen: Diam. — in. Twp. 46N
Length: — ft. Slot ___ Rng. 10E
Elev. 780

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	15 lb per ft	0	
	galv steel		162

SHOW LOCATION IN SECTION PLAT
400' NL, 300' WL of SE (permit)

16. Size Hole below casing: None in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil & Br. clay	0	15
Blue clay 780	21	36
Sandy clay 90	54	90
Fine clay 690	72	
780		162
60		
720		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. L. Wertz DATE July 28, 1968

COUNTY No. 2779

LAKE (89) 17-46N-10E

PRIVATE WELL 38

OFFICE BUI[illegible], SPRINGFIELD, [illegible]ER SURVEYS SE[illegible]ION. BE SURE TO

(81) Well Log No. 39

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NE-06597 Year 1969
11. Property owner LESS Eddy Well No. 1
Address RT 2 Bay [illegible] Rd Antioch Ill.
Driller [illegible] License No. 82-109
12. Water from SAND (Formation) 13. County LAKE
at depth 98 to 147 ft. Sec. 17
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot 15 Rng. 10E
Elev. ___

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv steel 11.00	0	144
4	Johnson screen	144	147

SHOW LOCATION IN SECTION PLAT
SW NE SW (Permit)

16. Size Hole below casing: 4 in.
17. Static level 51 ft. below casing top which is 1 ft. above ground level. Pumping level 62 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay ~~760~~ 760	22	22
Blue clay ~~50~~ 98	76	98
Sand ~~710~~ 662	49	149
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [illegible] DATE 7-29-69

COUNTY No. 2958

LAKE (89) 17-46N-10E

PRIVATE WELL 39

(84) Well Log No. 40

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 9-17-71

10. Dept. Mines and Minerals permit No. NF 11898 Year 1971
11. Property owner [illegible] Well No. [illegible]
Address [illegible]
Driller [illegible] License No. [illegible]
12. Water from [illegible] (Formation) 13. County [illegible]
at depth ____ to [illegible] ft.
14. Screen: Diam. [illegible] in.
Length: [illegible] ft. Slot [illegible]

Sec. 17
Twp. 46N
Rng. 10E
Elev. [illegible]

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
[illegible]	[illegible]	0	164

SHOW LOCATION IN SECTION PLAT
300' SL 650' [illegible] of NE SW (permit)

16. Size Hole below casing: [illegible] in.
17. Static level [illegible] ft. below casing top which is 1 ft. above ground level. Pumping level [illegible] ft. when pumping at 10 gpm for [illegible] hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM	
[illegible] clay Sticky Clay	15	15	780
Blue clay sticky	70	85	50 / 750
Gray clay firm	[illegible]	120	780
[illegible] sand?	30	150	150 ?
Dirty Sand Coarse	10	160	630
Clean sand [illegible] fine grained	4	164	
(CONTINUE ON SEPARATE SHEET IF NECESSARY)			

SIGNED [illegible] DATE Sept 17-71

COUNTY No. 3339

PRIVATE WELL 40

LAKE (91)

17-46N-10E

OFFICE BUILDING, SPRINGFIELD, [illegible] SURVEYS SECTION. BE SURE TO

(83) Well Log No. 41

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 1-15-71

10. Dept. Mines and Minerals permit No. NF 09744 Year 1971
11. Property owner ARTIS ANZINGER Well No. 1
Address PO BOX 311 ANTIOCH ILL
Driller EH GLENN & SONS INC. License No. [illegible]
12. Water from SAND (Formation) 13. County LAKE
at depth 132 to 139 ft.
14. Screen: Diam. 4 in.
Length: 2 ft. Slot 15

Sec. 17
Twp. 46N
Rng. 10E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	[illegible] STEEL 15	0	136
5	[illegible] SCREEN	136	139

SHOW LOCATION IN SECTION PLAT
NW NE SE (permit)

16. Size Hole below casing: ____ in.
17. Static level 2 ft. below casing top which is ____ ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOPSOIL	2	0-2
YELLOW CLAY 790	20	2-22
BLUE CLAY	80	22-102
SANDY CLAY 790	20	102-122
DIRTY SAND 132	10	122-132
SAND (WATER) 650	7	132-139
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [illegible] DATE 7-21-71

COUNTY No. 3390

PRIVATE WELL 41

LAKE (92)

17-46N-10E

Well Reg No. 42

(310—20M—3-55)

(3)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	18
Clay		18	90
Sand	780	90	96
Clay	155	96	155
Sand to gravel.	625	155	161
			TD

Finished in sand to gravel.
Casing: 4" from 0 to 158'
Size hole below casing: 4"
Static level from surface: 70'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

(74)

780
70
710

Copied from records in office of C. L. Wertz

COMPANY C. L. Wertz
FARM Orensman
DATE DRILLED May 1950
AUTHORITY C. L. Wertz
ELEVATION
LOCATION SW NE SW
COUNTY LAKE

NO. 1
COUNTY NO. 152

17-46N-10E

(83)

(11310—20M—3-55)

(3)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Top soil		0	
Clay	100	20	1[illegible]
Sand		100	1[illegible]
Gravel		144	1[illegible]

Finished in gravel.
Casing: 4" galv. from 0 to 147'
Static level from surface: 70'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

(75)

Falls in middle of Lake

Copied from records in office of C. L. Wertz

COMPANY C. L. Wertz
FARM Dwieley, T.
DATE DRILLED June 1954
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NE SW NW
COUNTY LAKE

NO. 1
COUNTY NO. 232

17-46N-10E

(84)

PRIVATE WELL 42

S OFFICE BUILDING, SPRINGFIELD, AL / ER SURVEYS SECTION. BE SURE TO

Well Reg No. 43

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 7-15-72

10. Property owner CHAS GERMACK Well No. _____
Address R.R. 1 ANTIOCH ILL
Driller ART WERTZ License No. 92-81
11. Permit No. NF 14354 Date 4-21-72
12. Water from GRAVEL (Formation) 13. County LAKE CO
at depth 180 to 185 ft. Sec. 17
14. Screen: Diam. _____ in. Twp. 46N
Length: _____ ft. Slot _____ Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	11# STEEL	–	185

SHOW LOCATION IN SECTION PLAT
SE NE NW
(permit)

16. Size Hole below casing: _____ in.
17. Static level 42 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM	
BLUE CLAY 795	160	160	795
SAND + CLAY 40	15	175	175 ?
SAND + GRAVEL 735	10	185	620
775			
40			
735			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Arthur Wertz DATE 9-25-72

COUNTY No. 3665

LAKE

17-46N-10E

PRIVATE WELL 43

PRIVATE WELL 44

Well Reg No. 44

(18210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Clay		0	[illegible]
Clay and sand	785	90	[illegible]
Gravel	140	140	[illegible]
	635		[illegible]

Finished in gravel.
Casing: 4" galv. from 0 to 142'
Static level from surface: 50'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

MC 6-27-81

785
50
735

780
-50
730

Copied from records in office of C. L. Wertz

COMPANY C. L. Wertz
FARM LaPlant NO. 1
DATE DRILLED September 1954 COUNTY NO. 233
AUTHORITY C. L. Wertz
ELEVATION
LOCATION SW SE NE
COUNTY L E

17-46N-10E

Well Log
No. 45

Village Well 4

Layne-Western Company

721 ILLINOIS AVENUE AURORA, ILLINOIS

Well Information—Drift Wells

Name of Job Village of Antioch Date 7/6/65

City or Village Antioch State Ill.

Well No.: 4 Drillers: Siefers

Well Location: 200 ft. (N) and 1650 ft. (W) of the SE corner of

Section 8 Twp. 46 (N). Range 10 (E) Lake County.

Otherwise located as Approx. 620' east of Well #3

Work Began: Work Completed: Well Depth: 129' + 2' above G.L.

All measurements made from existing ground level at time well was drilled.

Casing Record:

Amount	Dia.	Wt. or Thickness	Material				
111	12		Steel pipe	with Welded	joints from +2' above G.L.	to 109'	
				with	joints from	to	

Screen Record: Type Shutter

Amount	Dia.	Opening	Material				
20	12	#5	Stainless Steel	with Welded	joints from 109'	to 129'	
				with	joints from	to	

Type of Seal at Bottom Steel Plate

Hole Record:

34	inch from	0	to	15
30'	inch from	15	to	26
28"		26		142

Gravel Pack Record:

Amount		Size		Source		From		To
13	ton		#3		Muscatine		132'	86'

Cementing Record: Grout from 0' to 40'

Backfill Record: Pea gravel from 40' to 86'

PRIVATE WELL 45

#45

Village Well

WELL LOG

Feet		Feet	Description
0	to	3	Fill
3	to	8	Soft sandy yellow clay
8	to	24	Sand and gravel and boulders
24	to	80	Soft sticky gray clay, some thin sand streaks
80	to	85	Fine to coarse sand and gray clay
85	to	90	Fine gray sand
90	to	94	Blue clay
94	to	102	Very fine gray sand
102	to	105	Soft gray clay
105	to	121	Med. fine to coarse sand, some gravel and boulders
	to		115' to 121', very coarse
121	to	125	Med. fine to coarse sand, gravel and boulders, not as
	to		much coarse stuff, also not as tight.
125	to	129	Very coarse sand and gravel, some fine showing at 129'
129	to	141	Very fine gray sand
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		

Well Test Data: Static Level 24'; pumping level 41' after 8 hours pumping at 632 g.p.m.

Length of test 8 hrs. See Well Test Data Sheet Dated June 22, 1965

REMARKS:

~~Pump test on separate sheet.~~

From Illinois State Water Survey, Batavia, IL
Oct. 18, 1985

#45

October 4, 1969

WELL PRODUCTION TEST
VILLAGE OF ANTIOCH
LAKE COUNTY
by

Layne-Western Company

Owner:	Village of Antioch
Location:	350'S, 1500'W, SEcor T46NR10E-Sec 8.3a
Date of Test:	June 22, 1965
Length of Test:	8 hours
Date Drilled:	June 1965
Aquifer:	Sand & Gravel

WELL DATA

PUMPED WELL

Well No?	4
Driller:	Layne-Western Co.
Depth:	129'
Hole Record:	34" 0-15', 30" 15-26', 28" 26-122'
Casing Record:	12" 0-129' (cemented grout 0-40')
Screen Record:	12" #5 Layne Shutter Screen 109-129' (gravel packed from 40-132')
Pump & Power:	Layne Turbine, Gasoline Engine
Surface Elevation:	LSD 770' MSL
Measuring Point:	Top of casing, 2' above LSD
Measuring Equipment:	6x5' orifice, 80' airline
Static Level:	24' below MP

Observation Wells

Well No.	Depth	Dia. (in.)	Hole, casing, screen record	Distance, direction from pumped well
3	149	23	12" 0-129' 12" Layne Shutter Screen 129-149'	620' S of #4

#45

...e of Antioch - Well #4

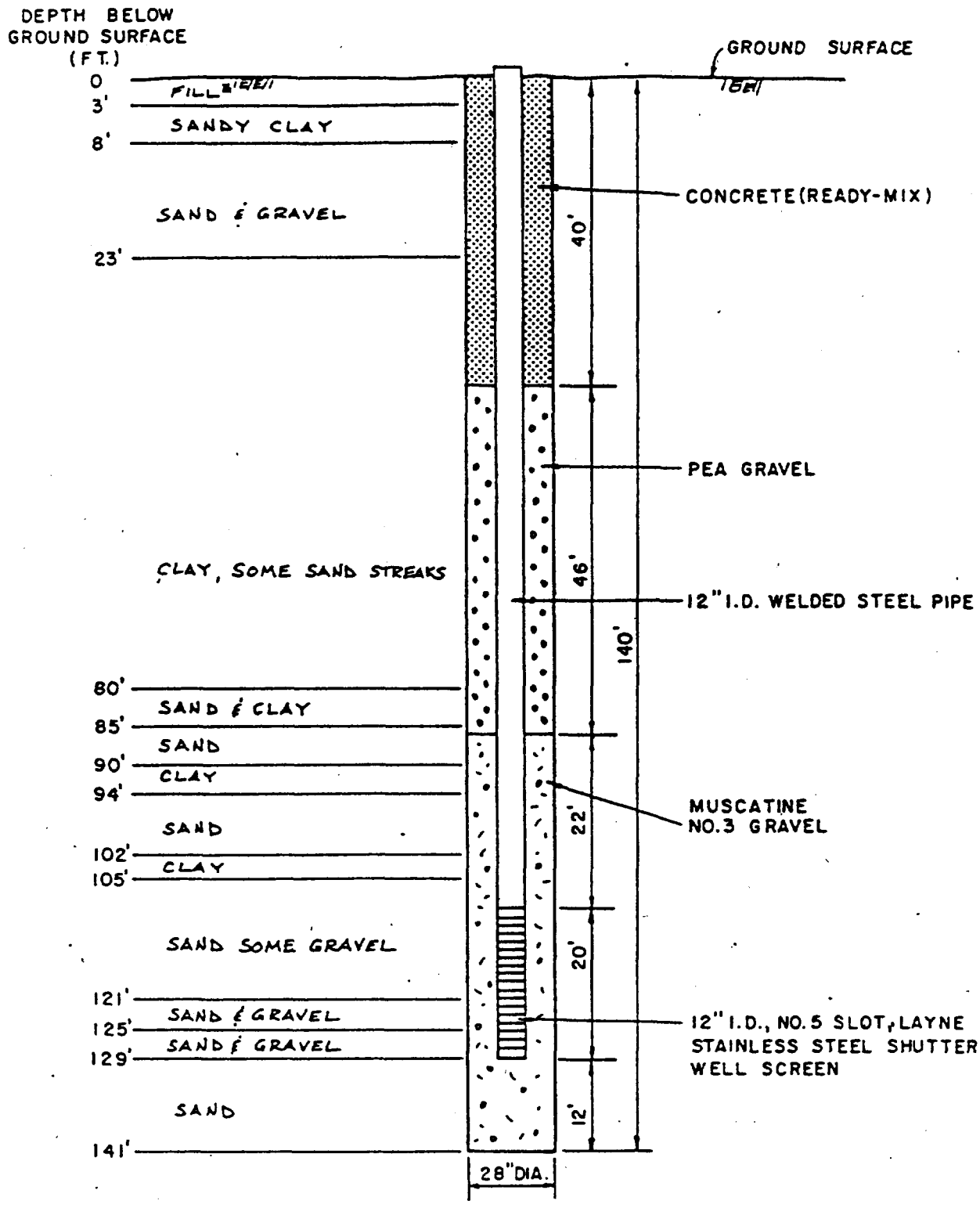
BUILDER'S LOG

Formation	Depth (ft) From	To
Fill	0	3
Soft sandy yellow clay	3	8
Sand and gravel and boulders	8	24
Soft sticky grey clay, some thin sand streaks	24	80
Fine to coarse sand and grey clay	80	85
Fine grey sand	85	90
Blue clay	90	94
Very fine grey sand	94	102
Soft grey clay	102	105
Med. fine to coarse sand, some gravel and boulders 115 to 121' very coarse	105	121
Med. fine to coarse sand, gravel and boulders, not as much coarse stuff, also not as tight	121	125
Very coarse sand and gravel, some fine showing at 129'	125	129
Very fine grey sand	129	141

[illegible] Antioch - Well #4

#45

Date 1969	Hour	Time (min)	Air gage (in)	Depth to water (ft)	Draw-down (ft)	Meas. tube (gal)	Pump rate (gpm)	Remarks
6/22	9:05 A		45	34				Started pumping
	9:10	5	35	44	10	27	632	Very, very cloudy
	9:15	10	36	44	10	27.5	638	
	9:30	25	36	44	10	27.5	638	
	10:00	55	35	45	11	27.5	638	Cloudy
	10:30	85	35	45	11	27	632	
	11:00	115	35	45	11	26.5	626	
	11:30	145	35	45	11	27	632	Clearing
	12:00 N	175	35	45	11	27	632	
	12:30 P	205	35	45	11	27	632	
	1:00	235	36	44	10	27	632	Well #3 off
	1:30	265	35	45	11	27	632	Well #3 on
	2:00	295	34	46	12	27	632	Dirty
	2:30	325	34	46	12	26.5	626	Clearing
	3:00	355	34	46	12	26.5	626	
	3:30	385	34	46	12	27	632	
	4:00	415	34	46	12	27	632	
	4:30	445	34	46	12	27	632	
	5:00	475	34	46	12	27	632	End of test



NOTE:
THIS AS-BUILT DIAGRAM WAS PREPARED FROM INFORMATION CONTAINED IN "PUBLIC GROUNDWATER SUPPLIES IN LAKE COUNTY", PREPARED BY THE ILLINOIS STATE WATER SURVEY IN 1976.

* LITHOLOGIC DESCRIPTIONS TAKEN FROM THE DRILLERS LOG OF THE WELL.

FIGURE 17

AS-BUILT DIAGRAM FOR MUNICIPAL WELL NO. 4

#45 Test Hole prior to Village Well

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST HOLE No. 1-65

TEST WELL REPORT

1. Owner Village of Antioch Contract No. (CJ-254..) Date 4/8/65
2. City Antioch State Ill.
3. Drillers Name Art Rogers Helpers Jim Barker
4. Static Water Level How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length 6' Width 4'

DRILLERS LOG

TOP FT.	BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
0	1			Brown top soil	
1	15			Brown sand and gravel	
15	18	9	9.8	Gray sand and gravel - boulders	
18	19			Boulders	
19	73			Gray clay	
73	89			Very soft clay, streaks, will jet	
89	98			Very fine sand	
98	108			Fine sand and streaks of clay	
108	161			Very fine sand to med. sand	
161	237			Very very fine sand, streaks of clay	
237	246			Very soft clay, gravel clay	
246	251			Limestone	

Test Hole prior to Village well

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST HOLE No. 2-65

TEST WELL REPORT

1. Owner Village of Antioch Contract No. (CJ-254) Date 4/10/65
2. City Antioch State Ill.
3. Drillers Name Art Rogers Helpers
4. Static Water Level How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length 6 Width 4

DRILLERS LOG

OP FT.	BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
0	10			Yellow Clay	
10	77			Gray clay, soft	
77	79			Gray sand	
79	81			Hard Clay, brownish gray	
81	92			Softer " " "	
92	96			Very soft silt, will jet	
[illegible]	103			Soft brownish clay	
03	104			Sand	
04	105			Clay	
05	107			Sand	
07	111			Clay	
11	121			Sand and gravel fine to med.	
21	129			Sand and gravel, med. to coarse gravel	
29	131			Sand	
31	132			Sand and gravel	
32	136			Sandy clay, streaks of sand	
36	140			Fine sand	
40	142			Clay	
42	236			Fine sand	
36	244			Brown clay, streaks of sand	
244	253			Sand and gravel and lime	
253	256			Limestone	

#45 Test Hole Prior To Village Well 4

Layne-Western Company

721 ILLINOIS AVE. AURORA, ILL.

TEST HOLE No. 3-65

TEST WELL REPORT

1. Owner: Village of Antioch, Contract No. (CJ-254) Date: 3/15/65
2. City: Antioch State: Ill.
3. Drillers Name: Lyle Hill Helpers: John Siefers
4. Static Water Level: How Obtained — Washed ( ) Pumped ( )
5. Size Mud Pit — Length: 4' Width: 6'

DRILLERS LOG

TOP FT.	BOTTOM FT.	MUD LOSS INCHES	MUD WEIGHT	DESCRIPTION OF FORMATION	REMARKS
0	2			Black sandy soil	
2	5			Brown sand	
5	23			Fine gravel and sand, gray	
23	104.5			Soft gray, clay	
104.5	109			Fine sand, gravel and broken lime	
[illegible]	122.5			Fine sand, gravel and boulders	
122.5	123			Fine sand	
123	129			Fine sand, gravel and boulders	
129	135			Very fine sand, some gravel	
135	158			Very fine sand, occasional streaks of clay	

This hole is next to the existing Well #4.

Well Log No. 46

Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

721 West Illinois Avenue • Aurora, Illinois 60507 • Phone 312/897-6941

Name of Job: Village of Antioch C-2950B Date: Aug. 26, 1978

City or Village: Antioch State: Illinois

Well No.: 5 Drillers: John Kopp, Carl Glidewell

Location: 35 ft. (S) and 628 ft. (E) of the NW corner of SW 1/4 of NE 1/4

Section: 17 Twp. 46 (N), Range 10 (E) Lake County.

Coordinates located as

Work Began: 8/14/78 Work Completed: 9/11/78 Well Depth: 129'

All measurements made from existing ground level at time well was drilled.

Casing Record

Amount	Dia.	Wt. or Thickness	Material					
112'	16"	3/8" wall	steel	with	welded	joints from	+3'	to 109'
				with		joints from		to

Screen Record: Type: Johnson

Amount	Dia.	Opening	Material					
20'	16" OD	0.060"	stainless	with	welded	joints from	109'	to 129'
				with		joints from		to

Type of Seal at Bottom: Stainless steel plate

Hole Record

42"	inch from	0	to	40'
38"	inch from	40'	to	131' T.D.

Gravel Pack Record

Amount	Size	Source	From	To
App. 20 ton	#1 & #2 Mix	Northern Gravel Company	130'	84'

Cementing Record: Concrete from 20' to 0

Drill Record: Sand and clay from 84' to 20'

SEE OTHER SIDE

PRIVATE WELL 46

#46

From		Feet	Description
0	to	7	Hard brown clay
7	to	10	Gray silty clay
10	to	25	Gray silty clay with sand seams
25	to	40	Gray very silty clay
40	to	45	Gray clay
45	to	54	Gray sandy silty clay, traces of gravel, boulder at 4
54	to	63	Gray silty clay, sticky
63	to	76	Gray sandy silty with gravel intermixed, some small
	to		sand and gravel seams
76	to	91	Gray clay
91	to	93	Fine sand
93	to	97	Fine sand to coarse gravel
97	to	108.5	Very fine sand and/or silt (tight)
108.5	to	129	Fine sand to coarse gravel, tight, occasional boulder
129	to	131 T.D.	Fine to coarse sand
	to		
	to		
	to		
	to		
	to		
	to		
	to		
	to		

Data: Static Level 52' Pumping level 62' after 24 hours pumping at 715 g.p.m

Total test 24 hrs. See Well Test Data Sheet Dated September 7 & 8, 1978

REMARKS:

Well Log No. 47

(13210—20M—3-56)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Yellow clay		0	16
Grey clay		16	93
Sand to nice gravel		93	119
			TD
No sulphur			
Finished in sand to nice gravel.			
Casing: 3" galv. from 0 to 116'			
Size hole below casing: 3"			
Static level from surface: 30'			
Tested capacity: 25 gallons per minute.			
Water lowered: 5'			

Copied from records in office of C. L. Wertz
Approximately 200' NW of Well No. 1

COMPANY	C. L. Wertz		
FARM	Wertz, C. L.	NO.	2
DATE DRILLED	March 1952	COUNTY NO.	337
AUTHORITY	C. L. Wertz		
ELEVATION			
LOCATION	1320' S line, 920' E line of NE		
COUNTY	LAKE		

7-46N-10E

PRIVATE WELL 47

Log No. 48 (1) 1046

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Yellow clay		0	18
Grey clay		18	130
Sand, clean and water bearing		130	150
Red clay		150	222
Gravel, dirty and sulphur water		222	225
Limestone, some sulphur; water is quite soft.		225	232
			TD
Finished in limestone.			
Casing: 5" galv. from 0 to 232'			
Static level from surface: 30'			
Tested capacity: 15 gallons per minute.			
Water lowered: 8'			

780 elev

130

Location corrected by Russ Brower.

NO ENVELOPE

Copied from records in office of C. L. Wertz
Antioch, Illinois

COMPANY	C. L. Wertz		
FARM	Wertz, C. L.	NO.	1
DATE DRILLED	January 1948	COUNTY NO.	311
AUTHORITY	C. L. Wertz		
ELEVATION			
LOCATION	NW SE SE		
COUNTY	LAKE		

7-46N-10E

PRIVATE WELL 48

LTS SECTION, BE SURE TO

well log No. 49

10.5

#1043

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 5-4-73

10. Dept. Mines and Minerals permit No. 11-12614 Year _____
11. Property owner Hinton Lynch Well No. 1
Address 307 Cedar Wood, Antioch
Driller C. L. WERTZ License No. 37
12. Water from Drift 13. County Lake
Formation
at depth 102 to 102 ft.
14. Screen: Diam. 4 in.
Length: 36 ft., Slot 20
Sec. 7
Twp. 46N
Rng. 10E
Elev. 700

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11.46 per	0	102

SHOW LOCATION IN SECTION PLAT

250' SL 250' EL of NW (permit)

755 elev

16. Size Hole below casing: 6 in.
17. Static level 12 ft. below casing top which is _____ ft. above ground level. Pumping level 22 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Black peat	0 - 20		
Gray Clay	20 - 80		
Sand & gravel	80 - 102		
Clay at	102		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)			

SIGNED C. L. Wertz DATE May 9 - 73

3867

PRIVATE WELL 49

LAKE

7-46N-10E

Well log No. 50

(13210--20M--3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Clay		0	110
Red clay		110	103
Gravel (2' wide)		103	105
			TD
Finished in gravel.			
Casing: 4" from 0 to 105'			
Static level from surface: 40'			
Tested capacity: 10 gallons or minute.			
Water lowered: 22'			

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO [illegible]RS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW [illegible] (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 109 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 5/21/82
5. Permanent Pump Installed? Yes X Date 5/24/82 No ____
   Manufacturer Red Jacket Type subm. Location ____
   Capacity 10 gpm. Depth of Setting 80 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Williams Model Number ____
   How attached to casing? clamp
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type Well-X-Trol
    Location ____
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner WICKS HOMES by Jackson Enterprises Well No. Lincoln Ave.
    Address 1819 E. Grand Ave., Lindenhurst, IL.
    Driller GEORGE E. GAFFKE License No. 102-234
11. Permit No. 103455 Date 5/14/82
12. Water from Sand (Formation) at depth 101 to 109 ft.
13. County Lake
    Sec. 16.6
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 5 in.
    Length: 3 ft. Slot 10

SHOW LOCATION IN SECTION PLAT
50'N 75'E SW/C NW SE SW

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1½	106

16. Size Hole below casing: 5 in.
17. Static level 50 ft. below casing top which is 1½ ft. above ground level. Pumping level ____ ft. when pumping at 20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	4	4
Sand to Gravel	21	25
Blue Clay	60	85
Hard Pan	10	95
Blue Clay - Gravel	6	101
Sand - Lt. Gravel	8	109

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 6/14/82

IDPH 4.065
1/74 – KNB-1

Well Log No. 51

[illegible]ED AND MAIL ORIGINAL TO STATE [illegible] HE[illegible]TH PROTEC[illegible]N, 535 WEST [illegible]. DO NOT [illegible]TACH GEO[illegible]ICAL/WATER PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner John Harlin[illegible] Well No. _____
Address Washington Antioch
Driller Charles Madsen License No. 42-202
11. Permit No. 110134 Date 10-25-83
12. Water from Sand (Formation) 13. County Lake
at depth 101 to 112 ft. Sec. 16 (6)
14. Screen: Diam. 3 in. Twp. 46N
Length: 5 ft. Slot .010 Rge. 10E
Elev. _____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Gal. Pipe	0	106
1"	Plastic	4	94

16. Size Hole below casing: 3 in.
17. Static level 81 ft. below casing top which is 1 ft. above ground level. Pumping level 97 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	21	21
Gravel & B Clay	30	51
B Clay	50	101
Sand	11	112
(42) 190		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 1/16/84

16 46N 10E

PRIVATE WELL 51

Well Log No. 52

[illegible]NS TO DRILLERS

I REQUESTED AND MAIL ORIGINAL TO STATE [illegible]ONSUMER [illegible]ALTH PRO[illegible]TION, 535 WEST [illegible]2761. DO NOT DETACH GEOLOGICAL/WATER [illegible]IDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner WICKS HOMES by Jackson Enterprises Well No. Lincoln Ave.
Address 1819 E. Grand Ave., Lindenhurst, IL.
Driller GEORGE E. GAEFKE License No. 102-234
11. Permit No. 103455 Date 5/14/82
12. Water from Sand (Formation) 13. County LAKE
at depth 101 to 109 ft. Sec. 16.6
14. Screen: Diam. 5 in. Twp. 46N
Length: 3 ft. Slot 10 Rge. 10E
Elev. _____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1½	106

16. Size Hole below casing: 5 in.
17. Static level 50 ft. below casing top which is 1½ ft. above ground level. Pumping level _____ ft. when pumping at 20 gpm for _____ hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Brown Clay		4	4	
Sand to Gravel (43)		21	25	
Blue Clay		60	85	
Hard Pan	780	10	95	776
Blue Clay - Gravel	50	6	101	101
Sand - Lt. Gravel	730	8	109	677

(CONTINUE ON SEPARATE SHEET IF NECESSARY) 16-46N-10E

SIGNED [signature] DATE 6/14/82

PRIVATE WELL 52

(52)

Well Log No. 53

'61. DO NOT DETACH GEOLOGICAL/WATER
E PROPER LOCAT

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 7-9-77

10. Property owner RAY EDWARDS Well No. 1
Address RT 173 ANTICCH ILL
Driller C. MADSEN License No. 92-202
11. Permit No. 61121 Date 5-24-77
12. Water from SAND Formation 13. County LAKE
at depth 106 to 112 ft.
14. Screen: Diam. 2 1/2 in.
Length: 5 ft. Slot 12
Sec. 16
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GAL 11PF	0	107

SHOW LOCATION IN SECTION PLAT
Lot4LagonaSub
NE SW(permit)

16. Size Hole below casing: 2 1/2 in.
17. Static level 60 ft. below casing top which is 1 1/2 ft. above ground level. Pumping level 84 ft. when pumping at 10 gpm for 1 hours. Sub. pump set at 84'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
PEAT		8	8	
B Clay	775	87	95	775
Fine Sand	60	10	105	105
C. Sand	715	7	112	670

44

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C Madsen DATE

COUNTY No. 26559

LAKE 16-46N-10E

PRIVATE WELL 53

Well Log No. 54

761. DO NOT DETACH GEOLOGICAL/WATER
E PROPE LOCA

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 9-20-78

10. Property owner Steven Lazansky Well No.
Address 600 Piper Lane, Lake Villa
Driller Lonny R. Hoover License No. 102-783
11. Permit No. 79236 Date September 8, 1978
12. Water from sand Formation 13. County Lake
at depth 110 to 118 ft.
14. Screen: Diam. 4 in.
Length: 32 ft. Slot #15
Sec. 16
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galvanized T&C	0	115
	14.81 ppf		

SHOW LOCATION IN SECTION PLAT
25'NL,50'WL
SE (permit)

16. Size Hole below casing: 4 in.
17. Static level 63 ft. below casing top which is 1 ft. above ground level. Pumping level 68 ft. when pumping at 9 gpm for 1 hours. Sub. pump set at 84'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
Clay	780	110	110	780 110
Sand	63	8	118	670
	717			

45

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lonny R Hoover/sm DATE 10-17-78

COUNTY No. 26566

LAKE 16-46N-10E

PRIVATE WELL 54

Copy –
Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTR[illegible] TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PL Log 53 (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	24

2. Distance to Nearest:
   Building 34 Ft. Seepage Tile Field 78
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 54 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 8-9-77
5. Permanent Pump Installed? Yes X Date 7-12 No ____
   Manufacturer Red Jacket Type Sump Location Well
   Capacity 10 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SBK
   How attached to casing? ____
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size ____ gal. Type 202 W X Tool
    Location CRAWL SPACE
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner RAY EDWARDS Well No. 1
    Address RT 173 ANTIOCH ILL
    Driller C. MADSEN License No. 92-202
11. Permit No. 61121 Date 5-24-77
12. Water from SAND (Formation) at depth 106 to 112 ft.
13. County LAKE
    Sec. 16
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 2½ in.
    Length: 5 ft. Slot 12

	X		

SHOW LOCATION IN SECTION PLAT
Long Lag and Sand [illegible] NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	6 gal 11 PF	0	107

16. Size Hole below casing: 2½ in.
17. Static level 60 ft. below casing top which is 1½ ft. above ground level. Pumping level 84 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Peat	8	8
B C Lug	87	95
Fine Sand	10	105
C. Sand	7	112

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C Madsen DATE ____

IDPH 4.065
1/74 – KNB-1

LOG OF WATER WELL

[illegible] NF 1100

Property Owner [illegible]

[illegible]

Driller [illegible]

[illegible]

OFFICE BUILDING, SPRINGFIELD,
ER SURVEYS SECTION. BE SURE TO

Well Log
No. 55

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 3-6-68

10. Dept. Mines and Minerals permit No. NF3591 Year 68
11. Property owner BRUNING DUCATA Well No. 1
Address 772 - BOX 293 ANTIOCH ILL
Driller E.H. GLENN & SONS INC License No. 92-109
12. Water from WATER SAND (Formation) 13. County LAKE
at depth 120 to 149 ft.
14. Screen: Diam. 5 in.
Length: 4 ft. Slot 20
Sec. 22
Twp. 46N
Rng. 10E
Elev.

SHOW LOCATION IN SECTION PLAT
SW NE SE
(Permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	GALV STEEL 15#	0	145
5"	JOHNSON SCREEN	145	149

16. Size Hole below casing: 5 in.
17. Static level 90 ft. below casing top which is _____ ft. above ground level. Pumping level 100 ft. when pumping at 20 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	1	0-1
YELLOW CLAY	20	1-21
SANDY BLUE CLAY	73	21-94
SAND	6	94-100
BLUE CLAY	20	100-120
SAND & GRAVEL (WATER BEARING)	29	120-149
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 3-29-68

COUNTY NO. 2456

PRIVATE WELL 55

22-46N-10E

JMER HEALTH PROTECTION, 535 WEST
. DO NOT DETACH GEOLOGICAL/WATER
PROPER WE' LOCATION

Well Log
No. 56 # 1010

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 11-14-77

10. Property owner Woodland Const Well No. _____
Address 1819 E Grand Ave, Lindenhurst
Driller L.R. Hoover License No. 102-78
11. Permit No. 66323 Date 9-6-77
12. Water from Sand (Formation) 13. County Lake
at depth 158 to 163 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot #15
Sec. 22
Twp. 46N
Rge. 10E
Elev.

SHOW LOCATION IN SECTION PLAT
200'SL, 250'EL
NE SW SE
(permit)

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Gal. T&C	0	161
	14.81 ppf		

16. Size Hole below casing: 4 in.
17. Static level 95 ft. below casing top which is 1 ft. above ground level. Pumping level 115 ft. when pumping at 12 gpm for 3 hours. Sub. pump set at 126'.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay	15	15
Clay & gravel	70	85
Hardpan	8	93
Clay	3	96
Hardpan	9	105
Gravely clay	15	120
Sticky clay	8	128
Sand	4	132
Dry, gravely clay	13	145
Sloppy clay	4	149
Gravel	1	150
Sand and clay	6	156
Sand	7	163

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lonny R Hoover/agn DATE 12-13-77

COUNTY NO. 25442

PRIVATE WELL 56

22-46N-10E

Well Log No. 57

SUMMER HEALTH PROTECTION, 535 WEST
DO NOT DETACH GEOLOGICAL/WATER
PROPER WELL LOCATION

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 1-16-78

10. Property owner Woodland Const. Well No. Siegel
Address 1819 E. Grand Ave, Lindenhurst
Driller D. R. Hoover License No. 102-78
11. Permit No. 66324 Date 9-6-77
12. Water from Sand (Formation) 13. County Lake
at depth 127 to 132 ft.
14. Screen: Diam. 4 in.
Length: 3½ ft. Slot #8
Sec. 22
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Galv. T+C	0	129
	14.81 ppf		

SHOW LOCATION IN SECTION PLAT
50'NL 300'EL
SW SW SE
(permit)

16. Size Hole below casing: 4 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 10 gpm for 1½ hours.
Sub. pump set at 105'.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	75	75
Gravel & clay	10	85
Clay	42	127
Sand	5	132

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lenny R. Hoover DATE 1-31-78

LAKE COUNTY No. 2553 22-46N-10E

PRIVATE WELL 57

Well Log No. 58

DO NOT DETACH GEOLOGICAL/WATER
PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner E.W. WISWALD BLDRS Well No.
Address 205 W. MONAVILLE RD, LAKE VILLA
Driller L.R. HOOVER License No. 102-753
11. Permit No. 110267 Date 11-8-83
12. Water from Clay (Formation) 13. County LAKE
at depth 129 to 131 ft.
14. Screen: Diam. 4 in.
Length: 3'6" ft. Slot 20
Sec. 22
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv T+C.	0	129
	11.13 ppf		

SHOW LOCATION IN SECTION PLAT
30' S & 150' W of the NE/c SW NW SW

16. Size Hole below casing: 4 in.
17. Static level 50 ft. below casing top which is 3 ft above ground level. Pumping level 105 ft. when pumping at gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	92	9[illegible]
Hardpan	26	11[illegible]
Clay	11	1[illegible]
Gravel & Sand	2	13
Clay	1	13[illegible]

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lenny R Hoover DATE 5-24-84

22 46N/10E

PRIVATE WELL 58

Well Reg No. 59

LOG OF WATER WELL

Property owner A. Mokkalhost (Mokkalhost) Well No. 1

Drilled by Chas. Madsen Year 1948

Formations passed through	Thickness	Depth of Bottom
Soil	3	3
Yellow Clay	17	20
Blue "	76	96
Coarse Sand	7	103

COUNTY NO. 2009 No Envelope

(Continue on back if necessary)

Finished in Coarse Sand at 103 to ft.

Cased with 2 inch Galv. pipe from 0 to 99 ft.

and inch from to ft.

Size hole below casing 1 inch. Static level from surf. 40 ft.

Tested capacity 12 gal. per min. Temperature 50 °F.

Water lowered to ft. in. in hrs. min.

Length of test 1 hrs. 20 min. Screen Clayton Mills

Slot 60 Diam. 1 Length 4 Bottom set at 103 ft.

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Lot 16, Villa Twp. 46N

Lake Shore Loon Lake Rge. 10E

Signed [illegible] County Lake

Copy for Illinois State Geological Survey Index: 21-46N-10E

LOG OF WATER WELL

#1012

Property owner Mr. Karpacek Well No. 1

Drilled by Chas Madsen Year 1941

Formations passed through	Thickness	Depth of Bottom
Soil	3	3
yellow sand	4	7
yellow clay	15	22
blue clay	75	97
fine sand	6	103

COUNTY NO. 1993 No Envelope

(Continue on back if necessary)

Finished in fine sand at 99 to 103 ft.

Cased with 2 inch Galv. pipe from 0 to 99 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 55 ft.

Tested capacity 8 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clayton Mills

Slot 80 Diam. 1 in Length 4 ft Bottom set at 103 ft.

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Northtown Twp. 46N

Lakeshore Lot #31 Rge. 10E

Signed Chas Madsen County Lake

Copy for Illinois State Geological Survey Index: 21-46N-10E

PRIVATE WELL 59

Well No. 60
Log

1013

LOG OF WATER WELL

Property owner T. Miller Well No. 1

Drilled by Chas Madsen Year 1945

Formations passed through	Thickness	Depth of Bottom
Soil	1	1
yellow clay	16	17
blue clay	67	84
sand	6	90
blue clay	4	94
fine sand	6	100
Coarse sand	4	104

[illegible] 2010 No Envelope

(Continue on back if necessary)

Finished in Coarse sand at 100 to 104 ft.

Cased with 2 inch Gal pipe from 0 to 101 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 60 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clay Tr Drainage

Slot 60 Diam. 1 in Length 3 ft Bottom set at 104 ft.

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Loon Lake Twp. 46

Rge. 10

Signed Chas Madsen County Lake

Index: 21-46N-10E

Copy for Illinois State Geological Survey

PRIVATE WELL 60

—20M—3-55

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	[illegible]
Blue clay and sand at base		1	[illegible]
Sand and gravel		[illegible]	[illegible]

Finished in sand and gravel.
Casing: 2" from 0 to 1[illegible]'
Size hole below casing: [illegible]"
Static level from surface: [illegible]'
Tested capacity: 10 gallon [illegible] minutes.
Water lowered: 6'

94

[illegible]

COMPANY C. [illegible] Wertz
FARM [illegible], [illegible] NO. [illegible]
DATE DRILLED October 19[illegible] COUNTY NO. 94
AUTHORITY C. [illegible] Wertz
ELEVATION
LOCATION [illegible]
COUNTY [illegible]

21-[illegible]

Well Log No. 61

#1016

LOG OF WATER WELL

Property owner Wm. Erdinberger Well No. 1

Drilled by Chas Madsen Year 1945

Formations passed through	Thickness	Depth of Bottom
Soil	1	1
yellow clay	18	19
blue clay	64	83
fine sand & clay	20	103
coarse sand	3	106

1985 No Envelope

(Continue on back if necessary)

Finished in Coarse Sand at 103 to 106 ft.

Cased with 2 inch Galv pipe from 0 to 103 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf 60 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clayton Marks

Slot 60 Diam 1 in Length 3 ft Bottom set at 106 ft.

(Show location in Section Plat)

Township name Antioch Elev. — Sec 21

Description of location Loon Lake Twp. 46

Rge. 10

Signed Chas Madsen County Lake

Copy for Illinois State Geological Survey Index: 21-46N-10E

PRIVATE WELL 61

Well Log No. 62

15

LOG OF WATER WELL

Property owner J. Dorsch Well No. 1

Drilled by Chas Madsen Year 1946

Formations passed through	Thickness	Depth of Bottom
Soil	1	1
yellow clay	19	20
blue clay	38	58
sand & gravel	21	79
blue clay	24	103
fine sand	7	110
coarse sand	3	113

Survey No. 1987 No Envelope

(Continue on back if necessary)

Finished in Coarse Sand at 110 to 113 ft.

Cased with 2 inch Galv pipe from 0 to 110 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf 50 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clayton Marks

Slot 60 Diam 1 in Length 3 ft Bottom set at 113 ft.

(Show location in Section Plat)

Township name Antioch Elev. — Sec 21

Description of location Loon Lake Twp. 46N

SE SW NE Rge. 10E

Signed Chas Madsen County Lake

Copy for Illinois State Geological Survey Index: 21-46N-10E

PRIVATE WELL 62

1017

(33210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	1[illegible]
Blue clay		1[illegible]	110
Heaving sand		1[illegible]0	1[illegible]5'
			TD

Finished in heaving sand.
Casing: 4" galv. from 0 to 1[illegible]'
Size hole below casing: 4"
Static level from surface: 65'
Tested capacity: 10 gallons per minute.

Copied from records in office of C. L. Wertz
Loon Lake, Illinois

COMPANY C. L. Wertz
FARM Bergren, John
DATE DRILLED September 1949
AUTHORITY C. L. Wertz
ELEVATION
LOCATION [illegible]

NO. 1
COUNTY NO. 159

Well Log
No. 63

LOG OF WATER WELL

Property owner J. Bishee Well No. 1

Drilled by Chas Madsen & Sons Year 1949

Formations passed through	Thickness	Depth of Bottom
Soil	2	2
Yellow clay	16	18
Blue clay	74	92
fine sand	13	10[illegible]
Coarse sand	4	109

1978 [illegible]

(Continue on back if necessary)

Finished in Coarse sand 105 to 109 ft

Cased with 2 inch Gal pipe from 0 to 105 ft

and — inch — from — to — ft

Size hole below casing — inch. Static level from surf. 40 ft

Tested capacity 10 gal. per min. Temperature — °F

Water lowered to — ft. — in. in — hrs. — min

Length of test 1 hrs. — min. Screen Clayton Mark

Slot 60 Diam. 1" Length 4 ft Bottom set at 109 ft

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Loon Lake Twp. 46

Rge. 10

Signed Chas Madsen County Lake

PRIVATE WELL 63

Well Log No. 64

LOG OF WATER WELL

Property owner P. Schulz Well No. 1

Drilled by Chas Madsen Year 1947

Formations passed through	Thickness	Depth of Bottom
Soil	1	1
yellow clay	18	19
Clay + gravel	72	91
fine sand	2	93
Coarse sand	4	97

COUNTY NO. 2022 No Envelope

(Continue on back if necessary)

Finished in Coarse sand at 93 to 97 ft.

Cased with 2 inch Gal pipe from 0 to 93 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 45 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clayton Marks

Slot 60 Diam. 1 in Length 4 ft Bottom set at 97 ft.

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Loon Lake Twp. 46

Rge. 10

Signed Chas Madsen County LAKE

Copy for Illinois State Geological Survey Index: 21-46N-10E

PRIVATE WELL 64

Well Log No. 65

016

LOG OF WATER WELL

Property owner A. Schroeder Well No. 1

Drilled by Chas Madsen Year 1947

Formations passed through	Thickness	Depth of Bottom
Soil	3	3
yellow Clay	19	22
Clay	86	108
fine sand	3	111
Coarse sand	4	115

COUNTY NO. 2021 No Envelope

(Continue on back if necessary)

Finished in Coarse sand at 111 to 115 ft.

Cased with 2 inch Gal pipe from 0 to 111 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf. 50 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Clayton Marks

Slot 60 Diam. 1 in Length 4 ft Bottom set at 115 ft.

(Show location in Section Plat)

Township name Antioch Elev. Sec. 21

Description of location Loon Lake Twp. 46

Rge. 10E

Signed Chas Madsen County LAKE

Copy for Illinois State Geological Survey Index: 21-46N-10E

PRIVATE WELL 65

Well No. 66

REQUESTED AND MAIL ORIGINAL TO STATE
CONSUMER HEALTH PROTECTION, 535 WEST
12761. DO NOT DETACH GEOLOGICAL/WATER
IDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner GENE THIELE Well No. _____
Address 22794 W. LOON LAKE BLVD - ANTIOCH
Driller C. MADSEN License No. 92-202
11. Permit No. 96449 Date 10-3-80
12. Water from SAND (Formation) 13. County LAKE
at depth 121 to 126 ft.
14. Screen: Diam. 3 in.
Length: 5 ft. Slot .010
Sec. 21 Twp. 46N Rge. 10E Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	16AL HPE	0	121

SHOW LOCATION IN SECTION PLAT 10x10 Villa Rn Subd. SE SW

16. Size Hole below casing: 3 in.
17. Static level 102 ft. below casing top which is 1 ft. above ground level. Pumping level _____ ft. when pumping at _____ gpm for _____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	21	21
B CLAY	17	39
SAND	45	84
B CLAY	34	118
SAND	8	126

(CONTINUE ON SEPARATE SHEET IF NECESSARY) 21-46N-10E

SIGNED Charles E Madsen DATE 9/83

PRIVATE WELL 66

Well Log No. 67

REQUESTED AND MAIL ORIGINAL TO STATE
CONSUMER HEALTH PROTECTION, 535 WEST
12761. DO NOT DETACH GEOLOGICAL/WATER
IDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner John Payne Well No. 1
Address 4045 N Lochman Chicago IL
Driller William Blank License No. 92-[illegible]
11. Permit No. 96434 Date 10-4-77
12. Water from Drift (Formation) 13. County Lake
at depth 12? to 121 ft.
14. Screen: Diam. 3½ in.
Length: 4 ft. Slot 10
Sec. 21 Twp. 46N Rge. 10E Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Tex Cane Weight	Surface	122

SHOW LOCATION IN SECTION PLAT SE SW NE

16. Size Hole below casing: 3 in.
17. Static level 16 ft. below casing top which is 1 ft. above ground level. Pumping level 15 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	12	12
Blue clay	13	25
Smooth clay loose	15	40
Hard Pan	7	47
Sandy clay	75	122
Sand	4	121

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE 11-13-77
21-46N-10E

PRIVATE WELL 67

Well Log No. 68

LOG OF WATER WELL

Property owner H Stilton Well No. 1

Drilled by Chas Madsen & Sons Year 1952

Formations passed through		Thickness	Depth of Bottom
Soil		0	8
yellow clay		18	20
blue clay	790	88	108 108
coarse sand	50 / 740	4	112
	(52)		
Tile & siltstone			

Permit No. 1941 Permit issued 5/2/52

(Continued on back if necessary)

Finished in Coarse sand at 108 to 112 ft.

Cased with 2 inch Galv pipe from 0 to 108 ft.

and — inch — from — to — ft.

Size hole below casing — inch. Static level from surf 50 ft.

Tested capacity 10 gal. per min. Temperature — °F.

Water lowered to — ft. — in. in — hrs. — min.

Length of test 1 hrs. — min. Screen Windwest

Slot 60 Diam. 1" Length 4' Bottom set at 112 ft.

(Show location in Section Plat)

Township name Antioch Elev. — Be 15

Description of location Rd-173 Twp. 46N

NE SW NW Rge. 10E

PRIVATE WELL 68

(61)

SUMER HEALTH PROTECTION, 535 WEST
II. DO NOT DETACH GEOLOGICAL/WATER
PROPER L LOCATI

Well Log No. 69

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Thomas Homan Well No. 173 + Deepl.
Address 21075 North Ave. Antioch 60002
Driller George E. Gaffke License No. 102-331
11. Permit No. 114631 Date 9/7/84
12. Water from Sand + Lt. Gravel (formation) 13. County Lake
at depth 155 to 160 ft.
14. Screen: Diam. 3 in.
Length: 5 ft. Slot 10
Sec. 16 NE
Twp. 46N
Rge. 10E
Elev. —

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6	PVC	+1	160'

SHOW LOCATION IN SECTION PLAT
50'N 200W
SE/C, NE

16. Size Hole below casing: 5 in.
17. Static level 88 ft. below casing top which is +1 ft. above ground level. Pumping level ____ ft. when pumping at 15-20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown Clay		0	8
Blue Clay (53)		20	28
Sand + Gravel		2	30
Blue Clay		44	74
Sand + Gravel		1	75
Blue Clay	792	65	140
Sand	88	1	141 79
Blue Clay	704	14	155 15
Sand + Lt. Gravel		5	160 63

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 3/27/85

792 155 16 46N 10E

PRIVATE WELL 69

(62)

White Copy - Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PWLog 69 (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug X. Bored ____. Hole Diam. 5 in. Depth 160 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 11/27/84
5. Permanent Pump Installed? Yes X Date ____ No ____
   Manufacturer Red Jacket Type Subm Location ____
   Capacity 10 gpm. Depth of Setting 120 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Williams Model Number ____
   How attached to casing? clamp
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type Champion Harvard
    Location ____
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Thomas Homan Well No. 173 + Deeplake Rd.
    Address 21075 North Ave. Antioch 60002
    Driller George E. Gaffke License No. 102-234
11. Permit No. 114634 Date 9/7/84
12. Water from Sand + Lt. Gravel (Formation) 13. County Lake
    at depth 155 to 160 ft. Sec. 16 NE
    14. Screen: Diam. 3 in. Twp. 46N
    Length: 5 ft. Slot 10 Rge. 10E
    Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6	PVC	+1	160

SHOW LOCATION IN SECTION PLAT
50'N 200'W SE/c, NE

16. Size Hole below casing: 5 in.
17. Static level 88 ft. below casing top which is +1 ft. above ground level. Pumping level ____ ft. when pumping at 15-20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	0	8
Blue Clay	20	28
Sand + Gravel	2	30
Blue Clay	44	74
Sand + Gravel	1	75
Blue Clay	65	140
Sand	1	141
Blue Clay	14	155
Sand + Lt. Gravel	5	160

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 3/27/85

IDPH 4.065
1/74 – KNB-1

Well Log No. 70

(13210—20M—3-66)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Top soil		0	12
Gravel		12	16
Blue clay		16	80
Grey clay		80	95
Red sand		95	100
Grey sand and gravel, water bearing		100	111

Finished in sand and gravel.
Casing: 4" from 0 to 111'
Static level from surface: 45'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

795
45
750

795
16
779

54

Little Silver Lake

COMPANY C. L. Wertz
FARM [illegible], N. H.
DATE DRILLED September 1939
AUTHORITY C. L. Wertz
ELEVATION
LOCATION
COUNTY

NO. 1
COUNTY NO. 44

16-[illegible]-10E

PRIVATE WELL 70

Well Log No. 71

16

LOG OF WATER WELL

Property owner Hans Hofman Well No. NE 1100

Drilled by C. L. Wertz Year 1966

Formations passed through	Thickness	Depth of Bottom
0-15 Brown clay	15	15
15-80 Blue clay		
80-140 Hard clay		815
140-160 Fine sand dirty		160
160-180 Clean sand		055
180-185 Some fine gravel		

Card (575)

815
55
785

Received 9-16-66

(Continue on back if necessary)

Finished in fine gravel at 180 to 185 ft.

Cased with 4 inch galvanized from 0 to 181 ft.

and inch from to ft.

Size hole below casing [illegible] inch. Static level from surf. [illegible] ft.

Tested capacity [illegible] gal. per min. Temperature °F.

Water lowered [illegible] ft. in. in. [illegible] hrs. min.

Length of test [illegible] hrs. min. Screen [illegible]

Slot Diam. [illegible] Length 30" Bottom set at 185 ft.

(Show location in Section Plat)

Township name Antioch Elev. 780 Sec. 16

Description of location 500'S and 600'W NE/[illegible] (Permit) Twp. 46

Rge. 10E

Signed C. L. Wertz County Lake

Copy for Illinois State Geological Survey Index:

PRIVATE WELL 71

Well Log No. 72

(13210—20M—3-55)

(3)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Clay	775	0	100
Sand	100	100	104
Very coarse gravel	675	104	106
			TD

Finished in very coarse gravel.
Casing: 6" galv. from 0 to 10[illegible]'
Static level from surface: 30
Tested capacity: 20 gallons per minute.
Water lowered: 5'

775
30
745

(72)

Copied from records in office of C. L. Wertz

COMPANY C. L. Wertz
FARM Hunter, Elmer
DATE DRILLED July 1949
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NW SE NE
LAKE

NO. 1
COUNTY NO. 153

17-46N-10E

PRIVATE WELL 72

Well Log No. 73

(13210—20M—3-55)

(3)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay	782	0	15
Blue clay	120	15	120
Fine sand to gravel	662	120	130
			TD

Finished in fine sand to gravel.
Casing: 4" from 0 to 130'
Static level from surface: 40'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

(73)

777
-40
737

782
40
740

Antioch, Illinois

COMPANY C. L. Wertz
FARM Grimm, Henry
DATE DRILLED March 1945
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NW SE
COUNTY LAKE

NO. 1
COUNTY NO. 85

17-46N-10E

PRIVATE WELL 73

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	15
Blue clay		15	125
Sand to very nice gravel		125	171

805
125
680

Finished in sand to very nice gravel.
Casing: [illegible] from 0 to 171'
Static level from surface: 65'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

810
65
745

33

COMPANY C. B. Wertz
FARM [illegible] Farm
DATE DRILLED May 1943
AUTHORITY C. B. Wertz
ELEVATION [illegible]
LOCATION [illegible] NW

NO. 1
COUNTY NO. 84

John C. Moore Corporation, Rochester, N. Y. Binder and Index in Leaves Patented. FORM 403809

TOWN Antioch TOWNSHIP Antioch MAP NO. 3
COMPANY Henry Boysen, Jr. NO. R. 10E
FARM Nixon, M. C. NO. T. 46 SEC 16
AUTHORITY Henry Boysen, Jr. N
ELEVATION
COLLECTOR
CONFIDENTIAL DATE DRILLED Dec. 1939

SE cor SW SE NW

No.	[illegible] 1943	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Clay, red	20		20	
	Clay, blue	90		110	
	Sand and gravel	45		155	

4-1/2" casing to 155'
Water level 62' from surface
Capacity tested to 10 g.p.m.

795
62
733

34

COUNTY Lake INDEX NO. 0316
DRILL RECORD

LOG OF WATER WELL

Property owner R. Laursen Well No. 1

Drilled by C. L. Wertz Year 1944

Formations passed through

	Thickness	Depth
Top soil & Brown clay	18	18
Grey clay & stones	167	85
Dry lime gravel	5	190
Limestone		215

35

Finished in Limestone at 190 to 215 ft.

Cased with 4 inch Water well pipe from 0 to 19 ft.

and — inch — from — to — ft.

Size hole below casing 4 inch. Static level from surf 30 ft.

Tested capacity 6 gal. per min. Temperature

Water lowered to 50 ft. in. in 4 hrs. min.

Length of test 8 hrs. min. Screen

Slot — Diam. — Length Bottom set at ft.

Township name Newport Elev. 122 Sec. 16

Description of location 1000 St. N. of Tw. 76 N

RL 173 Rge. 10 E

Signed C. L. Wertz County Lake

Index:

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bot
Brown clay	768	0	1
Blue clay	85	15	5
Clean gravel	683	85	8

Finished in clean gravel.
Casing: 3" from 0 to 17'
Static level from surface: 30
Tested capacity: 20 gallons per minute.
Water lowered: 5'

768
30
738

780
30
750

775
780
185

36

Little Silver Lake

COMPANY C. L. Wertz
FARM Hermanck, Ann
DATE DRILLED November 1941
AUTHORITY C. L. Wertz
ELEVATION
LOCATION
COUNTY

NO. 1
COUNTY NO. 45

Well log No. 74

(12210—20M—3-55)

Page 1 **ILLINOIS GEOLOGICAL SURVEY, URBANA**

(3)

Strata	Thickness	Top	Bottom
Brown clay		0	18
Clay		18	90
Sand	780	90	96
Clay	155	96	155
Sand to gravel. ?	625	155	161
			TD

Finished in sand to gravel.
Casing: 4" from 0 to 158'
Size hole below casing: 4"
Static level from surface: 70'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

(74)

780
70
710

Copied from records in office of C. L. Wertz

COMPANY	C. L. Wertz	NO.	1
FARM	Grenemann	COUNTY NO.	152
DATE DRILLED	May 1950		
AUTHORITY	C. L. Wertz		
ELEVATION			
LOCATION	SW NE SW		
	LAKE		17-46N-10E

PRIVATE WELL 74

Well log No. 75

(14—20M—3-55)

Page 1 **ILLINOIS GEOLOGICAL SURVEY, URBANA**

(3)

Strata	Thickness	Top	Bottom
Top soil		0	20
Clay	100	20	100
Sand		100	144
Gravel		144	14[illegible]
			T.

Finished in gravel.
Casing: 4" galv. from 0 to 147'
Static level from surface: 70'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

(75)

Falls in middle of Lake

Copied from records in office of C. L. Wertz

COMPANY	C. L. Wertz	NO.	1
FARM	Dwioloy, T.	COUNTY NO.	232
DATE DRILLED	June 1954		
AUTHORITY	C. L. Wertz		
ELEVATION			
LOCATION	NE SW NW		
COUNTY	LAKE		17-46N-10E

PRIVATE WELL 75

Well Log No. 76

.701 D NOT DETACH GEOLOGICAL WATER
DE PROPER WELL LOCATION.

G CGICAL ID WATER SURVEYS WE RECO
Completed 7-26-74

10. Property owner Bunge Murphy Well No. ____
Address RR Box 186, Lake Tillery
Driller Howard License No. 30
11. Permit No. 31651 Date 7/30/74
12. Water from Sand (Formation) 13. County Stanly
at depth 139 to 145 ft.
14. Screen: Diam. 4 in.
Length: 3 ft. Slot 12
Sec. 16
Twp. 4N
Rge. 16E
Elev. ____

15. Casing and Liner Pipe

Diam (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. T&C	0	142
	10.89 #/ft		

SHOW LOCATION IN SECTION PLAT
350'SL 350'EL of SE (permit)

16. Size Hole below casing: 4 in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 6 gpm for ____ hours, Submersible pump set at 126'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	20	20
Small Gray Clay 780	111	131
Yellow Sand 611 70	8	139
Sand 1A 710	6	145
185 (37)		

779-
139
640

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. E. Howard DATE 8/5/74

COUNTY No. [illegible]

PRIVATE WELL 76

16-461-10E

Log No. 77

ERVATION, 325 WEST
S2701. DO NOT DETACH GEOLOGICAL WATER
IDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 9-13-74

10. Property owner Howard Tuttle Well No. ____
Address RR 1 Box 114, Denton
Driller Howard License No. 30
11. Permit No. 33250 Date 9/23/74
12. Water from Sand (Formation) 13. County Stanly
at depth 127 to 130 ft.
14. Screen: Diam. 12 in.
Length: 3 ft. Slot 12
Sec. 16
Twp. 4N
Rge. 16E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. T&C	0	127
	10.89 #/ft		

SHOW LOCATION IN SECTION PLAT
350'SL 1000 WL of NW
(permit)

16. Size Hole below casing: 4 in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 15 gpm for ____ hours. Submersible pump set at 60'

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Glacial drift 795	127	127
Sand 60	3	130
735		
(38)		
111		
111		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. E. Howard DATE 9/30/74

PRIVATE WELL 77

Well No. 78

STATE OFFICE BUILDING, SPRINGFIELD, ... /WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 2-73

10. Property owner Murphy Farms Well No. _____
Address Ct. 173 Antioch
Driller Hoover License No. 30
11. Permit No. NE 17835 Date 2/9/73
12. Water from sand (Formation) 13. County Lake
at depth 154 to 164 ft. Sec. 16
14. Screen: Diam. 4 in. Twp. 46N
Length: 3½ ft. Slot #8 Rge. 10E
Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. T&C 10.89 PPF	0	161

SHOW LOCATION IN SECTION PLAT 300'SL 850'EI of NE (permit

16. Size Hole below casing: 4 in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level 78 ft. when pumping at 10 gpm for _____ hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM	
yellow clay		19	19	
blue clay		88	107	
sandy clay	775	11	118	77
gravel & clay	70	36	154	15
sand	725	10	164	64
	391			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 2/24/73

COUNTY No. 3823

48

LAKE

GEOLOGICAL WATER SURVEYS WATER WELL

10. Dept. Mines and Minerals permit No. [illegible] Year [illegible]
11. Property owner [illegible]
Address [illegible]
Driller [illegible]
12. Water from [illegible] 13. County [illegible]
at depth [illegible] to [illegible] ft. Sec. [illegible]
14. Screen: Diam. [illegible] in. Twp. [illegible]
Length: [illegible] ft. Slot [illegible] Rge. [illegible]
Elev. _____

15. Casing and Liner Pipe

[illegible]	[illegible]	[illegible]	[illegible]

16. [illegible] in.
17. [illegible] casing top [illegible] pumping level [illegible] when pumping [illegible] gpm for [illegible] hours.

[illegible]	[illegible]

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE [illegible]

LAKE 16-[illegible]

PRIVATE WELL 78

White – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 516, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 78 (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 164 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven _____. Drive Pipe Diam. 4 in. Depth 161 ft.
   c. Drilled _____. Finished in Drift ✓. In Rock____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 7 Ft. Seepage Tile Field ✗
   Cess Pool ✗ Sewer (non Cast iron) ✗
   Privy ✗ Sewer (Cast iron) ✗
   Septic Tank ✗ Barnyard ✗
   Leaching Pit ✗ Manure Pile ✗
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed February 1973
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer Sta Rite Type Turbine
   Capacity 8 gpm. Depth of setting 105 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes____ No____

REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Murphy Farms Well No. ____
    Address Rt. 173 Antioch
    Driller Murphy Water Wells License No. 50
11. Permit No. NE 17835 Date 2/9/73
12. Water from sand (Formation) 13. County Lake
    at depth 154 to 164 ft.
    Sec. 16
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3½ ft. Slot #8

SHOW LOCATION IN SECTION PLAT
300' N & 52' W
SE/4 NE

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. T.&C. 10.89 PPF	0	161

16. Size Hole below casing: 4 in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level 78 ft. when pumping at 10 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	19	19
blue clay	88	107
sandy clay	11	118
gravel & clay	36	154
sand	10	164

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 2/24/73

Well No. 79

I REQUESTED AND MAIL ORIGINAL TO STATE
IEAU ENVIRONMENTAL HEALTH, 535 WEST
2701. DO NOT DETACH GEOLOGICAL/WATER
DE PROPE LOCA

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 9/2/75

10. Property owner Cunningham Well No. 1
Address R R Antioch, Ill
Driller C L Wertz License No. 57
11. Permit No. 37869 Date Sept 8-1975
12. Water from Drift (Formation) 13. County Lake
at depth 82 to 135 ft.
14. Screen: Diam. 2 in.
Length: 42 ft. Slot 15
Sec. 16
Twp. 46N
Rge. 10E
Elev. 820

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	1926 galv	0	132

SHOW LOCATION IN SECTION PLAT
200'NL, 250'EL
NW SE
(Permit)

16. Size Hole below casing: — in. screened
17. Static level 52 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 25 gpm for 3 hours. Sub. pump set at 90'

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown & clay	0 -	18	
Blue grey "	18 -	95	
Dark grey clay	95 -	110 790	790
Dirty sand fine	110 -	128 128	50
Clean " & fine	128 -	135 662	740
gravel			
(40)			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C L Wertz DATE Sept 5-75

COUNTY No. 24582

(41)

PRIVATE WELL 79

16-46N-10E

EQUESTED AND MAIL ORIGINAL TO STATE
SUMER HEALTH PROTECTION, 535 WEST
1. DO NOT DETACH GEOLOGICAL/WATER
PROPER W LOCATIO

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Completed 4/27/76

10. Property owner RAY Schmidt Well No.
Address Rt 2 Box 126A Antioch
Driller Martin Jurs & Son License No. 102-7
11. Permit No. 46233 Date April 14, 1976
12. Water from Drift (Formation) 13. County Lake
at depth 100 to 110 ft.
14. Screen: Diam. 4 in.
Length: 5 ft. Slot
Sec. 2 16
Twp. 46N
Rge. 10E
Elev.

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	GALV.	0	105

SHOW LOCATION IN SECTION PLAT
Lot #11, Blk. 2
Lagoona Subd.
SW (permit)

16. Size Hole below casing: in.
17. Static level 40 ft. below casing top which is 2 ft. above ground level. Pumping level 80 ft. when pumping at 5 gpm for 1 hours. Sub. pump set at 80'

18. FORMATIONS PASSED THROUGH	THICKNESS TOP	DEPTH OF BOTTOM
Brown CLAY	0	3
Grey CLAY	3	35
Red CLAY	35	90 90
SAND & GRAVEL	90	110
(41)		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED James Hutchings DATE 4/29/76

COUNTY No. 24268

LAKE

16-46N-10E

White C
Ill. De... /Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION ... ESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

1/67

No. 80

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 146 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	40

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 5-26-1965
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer AERMOTOR Type 508M.
   Capacity 12 gpm. Depth of setting 100 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF 6099 Year 1969
11. Property owner MA HASSIE Well No. 1
    Address 704 HILLSIDE ANTIOCH ILL
    Driller EH. GLENN & SONS Inc. License No. 92-109
12. Water from SAND (Formation) at depth 90 to 146 ft.
13. County LAKE
    Sec. 18
    Twp. 46N
    Rng. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 15

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GALV STEEL #1100	0	137
4"	Johnson SCREEN	137	140

16. Size Hole below casing: 4 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	10	0-10
BLUE CLAY	80	10-90
SAND & GRAVEL (WATER)	50	90-140
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 10-11-1969

PRIVATE WELL 80

Well Log No. 01

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ___. Bored —. Hole Diam. 5 in. Depth 190 ft.
   Curb material —. Buried Slab: Yes ___ No —
   b. Driven ___. Drive Pipe Diam. 5 in. Depth 190 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	20
cuttings		

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 75
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 50 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ___
4. Date well completed Oct. 6 1969
5. Permanent Pump Installed? Yes ✓ No ___
   Manufacturer Sta-Rite Type Submersible
   Capacity 15 gpm. Depth of setting 110 ft.
6. Well Top Sealed? Yes ✓ No ___
7. Pitless Adaptor Installed? Yes ✓ No ___
8. Well Disinfected? Yes ✓ No ___
9. Water Sample Submitted? Yes ✓ No ___

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF 7209 Year 1969
11. Property owner Mr. Tobieski Well No. ___
    Address Sabrina Manor
    Driller C. L. Wertz License No. 57
12. Water from Drift (Formation) 13. County Lake
    at depth ___ to 190 ft. Sec. 18
    Twp. 46N
    Rng. 10E
    Elev. 76 ✓
14. Screen: Diam. — in.
    Length: ___ ft. Slot —
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	15 lb galv.	0	
	new		190

SHOW LOCATION IN SECTION PLAT
100'S 100'W
NW/C SE

16. Size Hole below casing: None in.
17. Static level 84 ft. below casing top which is 1 ft above ground level. Pumping level 90 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brn. clay & Top soil	20	20
Blue clay	36	56
Grey clay	35	91
Fine Beach sand	19	111
Dirty fine "	75	186
Clean sand & gravel	6	190
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. L. Wertz DATE Oct 6, 1969

PRIVATE WELL 81

Write Copy –
Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO [illegible]

FILL IN ALL PERTINENT INFORMATION REQU[illegible] AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Log No. 82

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	17

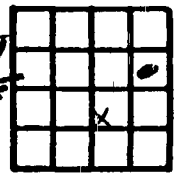
2. Distance to Nearest:
   Building 26 Ft. Seepage Tile Field 85
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 80 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 1-9-80
5. Permanent Pump Installed? Yes X Date ____ No ____
   Manufacturer Bonner Type Sub Location Well
   Capacity 10 gpm. Depth of Setting 126 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Drill thru
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 202 gal. Type Well Xtrol
    Location Basement
11. Water Sample Submitted? Yes X No ____

REMARKS:

PRIVATE WELL 82

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner MIKE GOOD Well No. ____
    Address BEACH GROVE RD - ANTIOCH
    Driller C. MADSEN License No. 92-202
11. Permit No. 91483 Date 11-15-79
12. Water from Sand (Formation) at depth 163 to 173 ft.
13. County LAKE
    Sec. 18.4
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot 10



		X	

SHOW LOCATION IN SECTION PLAT
Lot 8 Sabrina Heights [illegible]
SW NW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11#	0	168

16. Size Hole below casing: 3 in.
17. Static level 72 ft. below casing top which is 1 1/2 ft. above ground level. Pumping level 126 ft. when pumping at 8 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	18	18
Clay & Sand	4	22
Blue Clay	108	130
Sand	19	149
Blue Clay	14	163
Sand	10	173

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

MAY 5 1980

SIGNED C Madsen DATE ____

IDPH 4.065
1/74 – KNB-1

White Co[illegible]
Ill. Dep[illegible] Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTIN[illegible] INFORMATION[illegible]ESTED AND MAIL O[illegible]IAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTE[illegible]ION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Log No. 83

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Slurry	Surface	20

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast Iron) ____
   Privy ____ Sewer (Cast Iron) ____
   Septic Tank 60 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 5-25-84
5. Permanent Pump Installed? Yes ✓ Date 5-25-84 No ____
   Manufacturer Red Jacket Type Sub. Location well
   Capacity 12 gpm. Depth of Setting 63 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Water Tight Cap
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Saddle
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type Precharged
    Location Basement
11. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Steven Applehans Well No. 2
    Address 41548 N. St. 59 Antioch Il.
    Driller William Blake License No. 92-510
11. Permit No. 107184 Date 5-17-83
12. Water from drift (Formation) at depth 70 to 73 ft.
13. County Lake
    Sec. 18 3e
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 3 3/4 in.
    Length: 3 ft. Slot 12

		X	
	X		

SHOW LOCATION IN SECTION PLAT
SE SW NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C galv. 11.00 [illegible]	Surface	70

16. Size Hole below casing: 3 in.
17. Static level 40 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at 12 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	3	3
Yellow clay	15	18
Blue clay	18	36
Hard Pan	25	61
Fine Sand (Gravel)	8	69
Sand + Gravel	4	73

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William P. Blake DATE 9-20-84

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 83

Yellow Cop[illegible] [illegible]ll Contractor
Blue Copy - [illegible] Owner

PARTMENT OF PUBLIC HEALTH, ROOM 6[illegible] [illegible]ATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOG[illegible] WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

No. 84

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 130 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	25

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 50 Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed 12-11-69
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer GOULDS Type: SUBM.
   Capacity 10 gpm. Depth of setting 53 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes____ No ✓

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No NF 5944A Year 1969
11. Property owner MIKE HOFT Well No. 1
    Address RT 3 - BOX 144 ANTIOCH ILL.
    Driller EH GLENN & SONS INC License No. 92-109
12. Water from SAND (Formation) 13. County LAKE
    at depth 120 to 130 ft. Sec. 18
14. Screen: Diam. 4 in. Twp. 46N
    Length: 3 ft. Slot 15 Rng. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT
SE [illegible]

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GALV STEEL #11.00	0	127
4	JOHNSON SCREEN	127	130

16. Size Hole below casing: 4 in.
17. Static level 26 ft. below casing top which is 1 ft. above ground level. Pumping level 35 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
FILL + YELLOW CLAY	15	0-15
BLUE CLAY	85	15-100
DIRTY SAND	20	100-120
SAND (WATER)	10	120-130
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 12-12-69

PRIVATE WELL 84

Well log
No. 85

LOG OF WATER WELL

Property owner H KUDAHL Well No.

Drilled by K.H. TUSCHER NF-5997 Year 1969

Formations passed through	Thickness	Depth of Bottom
TOPSOIL	5	5
YELLOW CLAY	20	25
GRAY CLAY	60	85
GRAY SAND	20	105
GRAY CLAY	40	145
WATER SAND & CLAY	8	153
GRAY CLAY	2	155
WATER SAND & GRAVEL	13	163

[Continue on back if necessary]

Finished in SAND & GRAVEL at 163 to ft.

Cased with 4" inch GALV from 0 to 163 ft.

and inch from to ft.

Size hole below casing inch. Static level from surf 73 ft.

Tested capacity 18 gal. per min. Temperature °F.

Water lowered to 80 ft. in 60 hrs. min.

Length of test 70 hrs. min. Screen YES

Slot 10 Diam 3" Length 5 Bottom set at 163 ft.

[Show location in Section Plat]

Township name AVON Elev. Sec 18-3a

Description of location SABRINA MANOR Twp 46N

ANTIOCH, ILLINOIS Rge 10E

Signed SE SW SE County LAKE

Copy for Illinois State Water Survey Index:

PRIVATE WELL 85

Well Reg No. 86

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO CONTRACTORS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug —. Bored —. Hole Diam. 4 in. Depth 107 ft.
   Curb material —. Buried Slab: Yes — No —
   b. Driven —. Drive Pipe Diam. 4 in. Depth 102 ft.
   c. Drilled X. Finished in Drift X. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 40 Ft. Seepage Tile Field 110
   Cess Pool — Sewer (non Cast Iron) —
   Privy — Sewer (Cast Iron) —
   Septic Tank 90 Barnyard —
   Leaching Pit — Manure Pile —
3. Well furnishes water for human consumption? Yes X No
4. Date well completed Aug 1 86
5. Permanent Pump Installed? Yes X Date Aug 1 No —
   Manufacturer Red Jacket Type Sub Location well
   Capacity 10 gpm. Depth of Setting 70 Ft.
6. Well Top Sealed? Yes X No — Type Compression
7. Pitless Adapter Installed? Yes X No
   Manufacturer Merrill Model Number SPK
   How attached to casing? Compression
8. Well Disinfected? Yes X No
9. Pump and Equipment Disinfected? Yes X No
10. Pressure Tank Size 40 gal. Type Captive Air
    Location Basement
11. Water Sample Submitted? Yes X No

REMARKS: County #28024

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Harold Knutsen Well No. 1
    Address P.O Box 402 – Antioch, Ill 60002
    Driller C. L. Werth License No. 57
11. Permit No. 12875 Date May 86
12. Water from Drift (Formation) 13. County Lake
    at depth — to 107 ft. Sec. 18 NE
    14. Screen: Diam. — in. Twp. 46N
    Length: — ft. Slot — Rge. 10E
    Elev. —

SHOW LOCATION IN SECTION PLAT
300'SL, 1500'WL NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 lb per ft	0	
	Galv. Steel		107

16. Size Hole below casing: — in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 53 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Top soil + clay	0-17		
Blue clay –	17-47		
" with bobbles	47-53		
Grey clay	53-80		
Sandy "	80-95		
Fine sand	95-102		
Clean Fine gravel	102-107		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Werth DATE Aug 13 86

PRIVATE WELL 86

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

STRUCTIONS TO [illegible]ERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Reg No. 87

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
B CLAY	0	17

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 80
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 65 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 11-22-83
5. Permanent Pump Installed? Yes ✓ Date 11-28-83 No ____
   Manufacturer STA RITE Type SUB Location WELL
   Capacity 10 gpm. Depth of Setting 107 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer MERRIAL Model Number ____
   How attached to casing? DRILLED
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type ____
    Location BASEMENT
11. Water Sample Submitted? Yes ✓ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner GORDON PERSHA Well No. ____
    Address BAY VIEW DR. ANTIOCH, IL
    Driller CHARLES MADSEN License No. 92-202
11. Permit No. 110136 Date 10-25-83
12. Water from SAND (Formation) at depth ____ to 152 ft.
13. County LAKE
    Sec. 18 2e
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot .010

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GAL UPE	0	146
1"	PLASTIC	4	104

SHOW LOCATION IN SECTION PLAT
Lot 28 Sabrina Manor Subd
SW SE NE

16. Size Hole below casing: 3 in.
17. Static level 86 ft. below casing top which is 1 ft. above ground level. Pumping level 107 ft. when pumping at 15 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	21	21
B CLAY	101	122
SAND	30	152

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madsen DATE 1/16/84

PRIVATE WELL 87

IDPH 4.065
1/74 – KNB-1

Ill. D. f Public Health
Yellow – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION [illegible]ESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM [illegible], STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Log No. 88

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 104 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	30

2. Distance to Nearest:
   Building 200 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank NONE Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed MAY 22-68
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer PERMOTOR Type SUBM
   Capacity 12 gpm. Depth of setting 60 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF3976 Year 68
11. Property owner FRANK MOSER Well No. I
    Address 910 MAIN ST ANTIOCH ILL
    Driller EHGLEHNSONS INC License No. 92-109
12. Water from SAND (Formation) 13. County LAKE
    at depth 76 to 106 ft. Sec. 18
14. Screen: Diam. 4 in. Twp. 48N
    Length: 3 ft. Slot 15 Rng. 10E
    Elev. ____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GALV STEEL #11.0	0	103
	T&C		
4"	JOHNSON SCREEN	103	106

16. Size Hole below casing: 4 in.
17. Static level 31 ft. below casing top which is 1 ft. above ground level. Pumping level 40 ft. when pumping at 20 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	2	0-2
YELLOW CLAY	10	2-12
BLUE CLAY	64	12-76
SAND	29	76-106
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 9-9-68

PRIVATE WELL 88

Ill. D[illegible] ublic Health
Yellow [illegible] Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTI[illegible]NT INFORMATION [illegible]TED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PU[illegible] HEALTH, ROOM [illegible] STATE OFFICE B[illegible]ING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS [illegible]CTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well [illegible]
No. 89

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	22	22

2. Distance to Nearest:
   Building 21 Ft. Seepage Tile Field 86'
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 66 Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes X No____
4. Date well completed 11-4-74
5. Permanent Pump Installed? Yes X No____
   Manufacturer Red Jacket Type Sub
   Capacity 8 gpm. Depth of setting 105 ft.
6. Well Top Sealed? Yes X No____
7. Pitless Adaptor Installed? Yes X No____
8. Well Disinfected? Yes X No____
9. Water Sample Submitted? Yes X No____

REMARKS:

PRIVATE WELL 89

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. 32369 Year 1974
11. Property owner DON CHISHOLM Well No. 1
    Address SABRINA HTS - ANTIOCH, ILL.
    Driller C. MADSEN License No. 92-202
12. Water from SAND (Formation)
    at depth 151 to 155 ft.
13. County LAKE
    Sec. 18 26
    Twp. 46N
    Rng. 10E
    Elev.____
14. Screen: Diam. 3" in.
    Length: 4 ft. Slot 12
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	GAL 11 PF	0	151

SHOW LOCATION IN SECTION PLAT
NW NE SE
SE

16. Size Hole below casing: 3" in.
17. Static level 80 ft. below casing top which is 1½ ft. above ground level. Pumping level 105 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	22	22
Yellow Clay & Sand	7	29
Blue Clay	110	139
Fine Sand	10	149
C Sand	6	155
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Chas. Madsen DATE____

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION [illegible]TED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Log No. 90

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 150 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 147 ft.
   c. Drilled X : Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 34 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed August 24, 1979
5. Permanent Pump Installed? Yes X Date 9/4/79 No ____
   Manufacturer Sta-Rite Type Subm. Location ____
   Capacity 8 gpm. Depth of Setting 105 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Baker Model Number Snappy
   How attached to casing? Approved manner
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type WX-202
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner WOODLAND CONST. Well No. Lot 9
    Address 1819 Grand Avenue, Lindenhurst
    Driller Lonny R. Hoover License No. 102-783
11. Permit No. 86320 Date June 6, 1979
12. Water from Sand (Formation) 13. County Lake
    at depth 140 to 150 ft. Sec. 18.26
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3½ ft. Slot #8 Slot

			(*)

SHOW LOCATION IN SECTION PLAT
Lot 9 Sabrina Heights
100 N, 100 W, 50 E NW SE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Galv. Steel	0	147
	T&C 14.81 PPF		

16. Size Hole below casing: 4 in.
17. Static level 73 ft. below casing top which is 1 ft. above ground level. Pumping level 74 ft. when pumping at 20 gpm for 1½ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay (Yellow)	18	18
Blue clay	77	95
Hardpan	19	114
Sandy clay	26	140
Sand	10	150

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lonny R. Hoover/ogn DATE 11/9/79

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 90

White – Ill. Public Health
Yellow – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM [illegible] STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Key No. 91

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 155 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 152 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 75
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 60 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed Dec 14-1970
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer Red Jacket Type Submersible
   Capacity 16 gpm. Depth of setting 90 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes ✓ No____

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. 9564 Year 1970
11. Property owner [illegible] Well No. 1
    Address [illegible]
    Driller [illegible] License No. [illegible]
12. Water from Drift Formation
    at depth 152 to 155 ft.
13. County [illegible]
    Sec. 18, 26
    Twp. 46N
    Rng. [illegible]
    Elev. [illegible]
14. Screen: Diam. [illegible] in.
    Length 30' ft. Slot 15
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11.6# galvanized	0	152

SHOW LOCATION IN SECTION PLAT
1320'N
600'W Sec

16. Size Hole below casing: [illegible] in.
17. Static level 20 ft. below casing top which is 18" above ground level. Pumping level 22 ft. when pumping at 20 gpm for 7 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil & Brown clay	15	15
Blue clay soft	10	25
" " & gravel sticky	25	50
Fine sand - Dirty	30	130
Clay & sand	12	150
Clean sand & fine gravel	2	152
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. F. Hertz DATE Dec 14-1970

PRIVATE WELL 91

White Cop
Ill. De[illegible] ublic Health
Yellow Copy — Well Contractor
Blue Copy — Well Owner

FILL IN ALL PERTINENT INFORMATION [illegible]TED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM [illegible] STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Reg No. 92

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 154 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 5 in. Depth 154 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAP SLURRY	0	30

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 55 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 4-20-1969
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer AERMOTOR Type SUBM
   Capacity 12 gpm. Depth of setting 61 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF5607 Year [illegible]
11. Property owner WILLIAM COREY Well No. 1
    Address ATH BOX 339C
    Driller E.H. GLENN & SONS INC. License No. 92-10[illegible]
12. Water from SAND (Formation) at depth 150 to 170 ft.
13. County [illegible]
    Sec. 18 [illegible]
    Twp. 46N
    Rng. 10E
    Elev. ____
14. Screen: Diam. 5 in.
    Length: 3 ft. Slot 15

			X

SHOW LOCATION IN SECTION PLAT
SE NE
SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	GALV. STEEL 15 lbs	0	154
5"	JOHNSON SCREEN	154-	157

16. Size Hole below casing: 5 in.
17. Static level 35 ft. below casing top which is 1 ft. above ground level. Pumping level 50 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	15	0-15
BLUE CLAY	115	15-130
DIRTY SAND	20	130-150
SAND (WATER)	7	150-157
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [signature] DATE 6-20-1969

PRIVATE WELL 92

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO [illegible]ERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGIN[illegible] TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Reg No. 93

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 97 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 95 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 8 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 50 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed August 1977
5. Permanent Pump Installed? Yes ✓ Date____ No____
   Manufacturer R Jacket Type Sub Location____
   Capacity 10 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes ✓ No____ Type Merrill
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrill Model Number 3PK
   How attached to casing? clamp on
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 42 gal. Type galvanized
    Location basement
11. Water Sample Submitted? Yes____ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Dave Faucbo Well No.____
    Address 616 Deerpath Dr Lindenhurst Il.
    Driller EE Gross License No. 102-70
11. Permit No. 61884 Date 6-9-77
12. Water from Sand Formation
    at depth 87 to 97 ft.
13. County Lake
    Sec. 18 ·16
    Twp. 46N
    Rge. 10E
    Elev.____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 10

SHOW LOCATION IN SECTION PLAT
75'S, 250'E, W/c., NE SE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	(gal) 11#	0	95

16. Size Hole below casing: 4 in.
17. Static level 65 ft. below casing top which is 1 ft. above ground level. Pumping level 85 ft. when pumping at 10 gpm for____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
red clay	20	20
blue clay	67	87
sand	10	97

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 5-17-78

PRIVATE WELL 93

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well Reg No. 94

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 180 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 177 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes____ No____
4. Date well completed 7/21/75
5. Permanent Pump Installed? Yes ✓ Date 7/25/75 No____
   Manufacturer Sta Rite Type Submr Location ____
   Capacity 8 gpm. Depth of Setting 105 Ft.
6. Well Top Sealed? Yes____ No____ Type ____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Baker Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 82 gal. Type galv
    Location ____
11. Water Sample Submitted? Yes____ No____

REMARKS:

PRIVATE WELL 94

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Modern Homes Bldrs. Well No. ____
    Address 211 Washington, Waukegan
    Driller Hoover License No. 30
11. Permit No. 38275 Date 6/4/75
12. Water from Sand (Formation) 13. County Lake
    at depth 171 to 180 ft. Sec. 18.1b
    14. Screen: Diam. 4 in. Twp. 46N
    Length: 3 ft. Slot 12 Rge. 10E
    Elev. ____

SHOW LOCATION IN SECTION PLAT
800'N 450'W
SE/c SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv T+C 10.89 PPF	0	177

16. Size Hole below casing: 4 in.
17. Static level 75 ft. below casing top which is 1 ft. above ground level. Pumping level 80 ft. when pumping at 15 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Till	19	19
Blue Clay	36	55
hard pan	40	95
Blue Clay	76	171
Sand	9	180

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. Hoover DATE 8/15/75

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLER

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

WL No. 95

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 150 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 147 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 25 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 11/8/74
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer Sta Rite Type subm
   Capacity 8 gpm. Depth of setting 80 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ____

REMARKS:

IDPH 4.065
10-72
KNB-1

PRIVATE WELL 95

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner James Olsen Well No. ____
    Address Rt 2 - Bx 660, Antioch
    Driller Hoover License No. 30
11. Permit No. 34525 Date 11/6/74
12. Water from sand (Formation) 13. County Lake
    at depth 143 to 150 ft. Sec. 18.1b
    14. Screen: Diam. 4 in. Twp. 46N
    Length: 3 ft. Slot 10 Rge. 10E
    Elev. ____

SHOW LOCATION IN SECTION PLAT
850'N 300'W
SE/4 SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv T+C 10.89 #/ft	0	147

16. Size Hole below casing: 4 in.
17. Static level 72 ft. below casing top which is 1 ft. above ground level. Pumping level 75 ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	115	115
sandy clay	28	143
sand	7	150

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. Hoover DATE 11/13/74

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

...RUCTIONS TO DRILLE...

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well No. 96-1

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a: Dug ____. Bored ____. Hole Diam. 4 in. Depth 162 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 159 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 95 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 7/13/76
5. Permanent Pump Installed? Yes ✓ Date 7/21/76 No ____
   Manufacturer STA RITE Type Subm Location ____
   Capacity 8 gpm. Depth of Setting 126 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Baker Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 82 gal. Type gal.
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Modern Homes Bldrs. Well No. ____
    Address 1712 Washington, Waukegan Ill.
    Driller Hoover License No. 102-78
11. Permit No. 49482 Date 7/9/76
12. Water from Sand (Formation) at depth 154 to 162 ft.
13. County Lake
    Sec. 18 1/2
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 10
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv T+C	0	159
	10.89 pff		

SHOW LOCATION IN SECTION PLAT
SE SE SE

16. Size Hole below casing: 4 in.
17. Static level 82 ft. below casing top which is 1 ft. above ground level. Pumping level 96 ft. when pumping at 10 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	97	97
gravel + Clay	13	110
sand	5	115
sandy Clay	39	154
sand	8	162

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. Hoover DATE 8/5/76

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 96

W... copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCT... TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 54 (Dup)

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 118 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 115 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 45 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed September 20, 1978
5. Permanent Pump Installed? Yes X Date 10-6-78 No ____
   Manufacturer Sta-Rite Type Subm Location ____
   Capacity 8 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes X No ____ Type PITLESS ADAPTER
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer BAKER Model Number SNAPPY
   How attached to casing? APPROVED MANNER
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type GALVANIZED
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Steven Lazansky Well No. ____
    Address 600 Piper Lane, Lake Villa
    Driller Lonny R. Hoover License No. 102-783
11. Permit No. 79236 Date September 8, 1978
12. Water from sand (Formation) at depth 110 to 118 ft.
13. County Lake
    Sec. 16.4
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3½ ft. Slot #15

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galvanized T&C	0	115
	14.81 ppf		

SHOW LOCATION IN SECTION PLAT
25'S, 50'E, Nwc SE

16. Size Hole below casing: 4 in.
17. Static level 63 ft. below casing top which is 1 ft. above ground level. Pumping level 68 ft. when pumping at 9 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	110	110
Sand	8	118

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Lonny R. Hoover/egn DATE 10-17-78

IDPH 4.065
1/74 – KNB-1

White [illegible] Public Health
Ill. [illegible]
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL P[illegible]NENT INFORMATION [illegible]TED AND MAIL[illegible]IGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM [illegible]16, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Well No. 97

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 134 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 134 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY		
SLURRY	0	25

2. Distance to Nearest:
   Building 16 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) 60
   Septic Tank 75 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 5-10-78
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer ____ Type 50 Bdh. in well
   Capacity 10 gpm. Depth of setting 105 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ attached to casing No by threads
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS: 42 gal. steel pressure tank located in basement

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ADRIN MOLLER Well No. 1
    Address 625 PHILLIPS CIRCLE ANTIOCH
    Driller ENGLENN + SONSINC License No. 102-69
11. Permit No. 65122 Date AUG 18 1977
12. Water from SAND. (Formation) 13. County LAKE
    at depth 99 to 134 ft. Sec. 18 [illegible]
14. Screen: Diam. 4 in. Twp. 46N
    Length: 3 ft. Slot 12 Rge. 10E
    Elev. ____

SHOW LOCATION IN SECTION PLAT
SE SE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GALV STEEL	0	131
4	S.S. SCREEN	131	134

16. Size Hole below casing: 4 in.
17. Static level 12 ft. below casing top which is 12 ft. above ground level. Pumping level 99 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	19	19
BLUE CLAY	60	79
SAND (DIRTY)	20	99
SAND. (WATER)	35	134

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED H. Glenn DATE 8-1-78

IDPH 4.065
10/68

PRIVATE WELL 97

Well reg No. 98

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Clay		0	97
Fine sand		97	105
Clay and gravel		105	120
Fine sand and mud		120	260
Clay and sand		260	265
Drift end (rock)		265	269
			TD

Finished in drift end - rock.
Casing: 4" black from 0 to 269'
Static level from surface: 28'
Tested capacity: 15 gallons per minute.
Water lowered: 4'

COMPANY C. L. Wertz
FARM Ferris Farm NO. 1
DATE DRILLED January 1943 COUNTY NO.
AUTHORITY C. L. Wertz
ELEVATION
LOCATION S[illegible] SW
COUNTY L[illegible]

18-46N-10E

PRIVATE WELL 98

Well No 99

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	15
Blue clay		15	80
Sand		80	87
			TD

Finished in sand.
Casing: 3" from 0 to 85'
Size hole below casing: 3"
Static level from surface: 30'
Tested capacity: 20 gallons per minute.

COMPANY C. L. Wertz
FARM Hartman, Russel NO. 1
DATE DRILLED March 1945 COUNTY NO.
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NW NE SE
COUNTY Lake

10-46N-10E

PRIVATE WELL 99

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

No. 100

Strata	Thickness	Top	Bottom
Brown clay		0	14
Blue clay		14	80
Sand, [illegible] and [illegible]		80	95
			TD

Finished in sand.
Casing: 4" from 0 to 91½'
Size hole below casing: 4"
Static level from surface: 30'
Tested capacity: 10 gallons per minute.

COMPANY C. L. Wertz
FARM Larson, [illegible] T. [illegible] NO. 1
DATE DRILLED March 1945 COUNTY NO.
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NE SW NW
COUNTY LAKE

10-40N-10E

PRIVATE WELL 100

Well Log
No. 101

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well Drilled
   a. Dug ____. Bored ____. Hole Diam. 5" in. Depth 162 ft.
   Curb material —. Buried Slab: Yes — No —
   b. Driven ____. Drive Pipe Diam. 5" in. Depth 162 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular —. Gravel Packed —
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	
Cuttings		20

2. Distance to Nearest:
   Building 70 Ft. Seepage Tile Field 80
   Cess Pool — Sewer (non Cast iron) ____
   Privy — Sewer (Cast iron) —
   Septic Tank 75 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed Sept 29, 1969
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer Goulds Type Submersible
   Capacity 10 gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF 06919 Year 1969
11. Property owner Roy McNeil Well No. ____
    Address Rollins Rd Lake Villa
    Driller C. L. Wertz License No. 57
12. Water from Drift (Formation) at depth ____ to 162 ft.
13. County Lake
    Sec. 18 S
    Twp. 46 N
    Rng. 10 E
    Elev. 815
14. Screen: Diam. — in.
    Length: — ft. Slot ____
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	15 lb galv.	0	
	Mess		162

SHOW LOCATION IN SECTION PLAT

16. Size Hole below casing: none in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level 75 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay & Top soil	20	20
Blue clay	20	40
Mud "	10	50
Clay & gravel	25	75
Sandy clay	15	90
Sand dirty & Fine	55	145
Clean sand & fine gravel	17	162
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. L. Wertz DATE Sept 29, 1969

PRIVATE WELL 101

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PWLog 102

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 115 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 112 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed November 3, 1978
5. Permanent Pump Installed? Yes X Date 11-7-78 No ____
   Manufacturer Sta-Rite Type Subm. Location ____
   Capacity 8 gpm. Depth of Setting 63 Ft.
6. Well Top Sealed? Yes x No ____ Type Pitless adapter
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Baker Model Number Snappy
   How attached to casing? Approved manner
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 82 gal. Type Galvanized
    Location ____
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner J & B Construction Well No. Pedersen
    Address Bowles Road, Antioch
    Driller Lonny R. Hoover License No. 102-783
11. Permit No. 79072 Date September 6, 1978
12. Water from Mixed sand (Formation) at depth 109 to 115 ft.
13. County Lake
    Sec. 13AE
    Twp. 46N
    Rge. 9E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot #15
15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	New Galv. T&C	0	112
	14.81 ppf		

SHOW LOCATION IN SECTION FLAT
150W, 50E, SW/c NE SE NE

16. Size Hole below casing: 4 in.
17. Static level 15 ft. below casing top which is 1 ft. above ground level. Pumping level 15 ft. when pumping at 14+ gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	109	109
Mixed sand	6	115

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 12-8-78

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 102

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DR[illegible]ERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 103

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY	0	21

2. Distance to Nearest:
   Building 25 Ft. Seepage Tile Field 100
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 45' Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed Aug 30 [illegible]
5. Permanent Pump Installed? Yes ✓ Date [illegible] No ____
   Manufacturer [illegible] Type [illegible] Location [illegible]
   Capacity 12 gpm. Depth of Setting 10 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer [illegible] Model Number SPK
   How attached to casing? [illegible]
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type [illegible]
    Location Pump House
11. Water Sample Submitted? Yes ✓ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner CHAS. HOPPE Well No. ____
    Address #9 [redacted] BOWLES Rd - ANTIOCH, ILL
    Driller C. MADSEN License No. 92-202
11. Permit No. [redacted] 95539 Date 8-14-80
12. Water from SAND (Formation) at depth 52 to 57 ft.
13. County LAKE
    Sec. 13 (g)
    Twp. 46N
    Rge. 9E
    Elev. ____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot .012
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GAL. PIPE	0	52

SHOW LOCATION IN SECTION PLAT
Lot 10 John P. Bowles Sub
SE NE NE

16. Size Hole below casing: 3 in.
17. Static level 26 ft. below casing top which is 1 ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	21	21
B CLAY	29	50
SAND	7	57

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E. Madsen DATE [illegible]

PRIVATE WELL 103

IDPH 4.065
1/74 – KHB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUIRED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PWLog 104

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 93 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 90 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 6 Ft. Seepage Tile Field 50
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 50 Barnyard
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed Dec 6-1971
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer Red Jacket Type Submersible
   Capacity 10 gpm. Depth of setting 90 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes ✓ No____

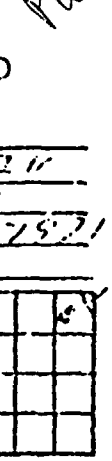
REMARKS:

IDPH 4.065
10/68

PRIVATE WELL 104

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Mrs. Drip Well No. 1
    Address RR 4 Box 88 Bartlett, Ill
    Driller C. Ivert License No. 27
11. Permit No. 41324 Date Dec 6 1971
12. Water from Drift (Formation) 13. County Lake
    at depth 90 to 93 ft.
14. Screen: Diam. 3 in.
    Length: 36" ft Slot 15
    Sec. 13 Twp. 41 Rge. 9E Elev. 750



SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. 11 lb	0	90

16. Size Hole below casing: — in.
17. Static level 18 ft. below casing top which is 1 ft. above ground level. Pumping level 20 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brn. sandy clay	0 to	15
Soft gray clay	15 to	78
Dirty sand	78 to	85
Clean sand & gravel	85 to	93

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. J. Ivert DATE Dec 6-1971

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

PW Log 105

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven ✓. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY	0	19

2. Distance to Nearest:
   Building 25 Ft. Seepage Tile Field____
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 75 Barnyard____
   Leaching Pit____ Manure Pile ✓
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 7-3-86
5. Permanent Pump Installed? Yes ✓ Date 7-5-86 No____
   Manufacturer MYERS Type SUB Location WELL
   Capacity 20 gpm. Depth of Setting 40 Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer MERRIAL Model Number____
   How attached to casing? DRILLED
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 42 gal. Type CLATON MARK
    Location UTILITY ROOM
11. Water Sample Submitted? Yes____ No____

REMARKS: County #28347

PRIVATE WELL 105

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Rodger Stewart Well No.____
    Address 42985 N Janette Antioch
    Driller Charles E Madsen License No. 92-202
11. Permit No. 125086 Date 7-8-86
12. Water from SAND (Formation) at depth 73 to 78 ft.
13. County Lake
    Sec. 13.11
    Twp. 46N
    Rge. 9E
    Elev.____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot .10
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GAL 11 PFT	0	73

SHOW LOCATION IN SECTION PLAT
Lot #37 Warren's Subd NE NE NE

16. Size Hole below casing: 3 in.
17. Static level 10 ft. below casing top which is 1½ ft. above ground level. Pumping level 40 ft. when pumping at 20 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	19	19
BLUE CLAY	26	95
CLAY & SAND MIX	23	68
COURSE SAND	10	78

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 7/16/86

IDPH 4.065

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 106

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug —. Bored —. Hole Diam. 4 in. Depth 90 ft.
   Curb material —. Buried Slab: Yes — No —
   b. Driven —. Drive Pipe Diam. 4 in. Depth 87 ft.
   c. Drilled X. Finished in Drift X. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay slurry	0	20

2. Distance to Nearest:
   Building 50 Ft. Seepage Tile Field 85
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 70 Barnyard —
   Leaching Pit — Manure Pile —
3. Well furnishes water for human consumption? Yes X No
4. Date well completed 4/15/85
5. Permanent Pump Installed? Yes X Date 4/15/85 No —
   Manufacturer Red Jacket Type Sub Location in well
   Capacity 10 gpm. Depth of Setting 30 Ft.
6. Well Top Sealed? Yes X No Type merril
7. Pitless Adapter Installed? Yes X No
   Manufacturer merril Model Number SPK
   How attached to casing? Compression
8. Well Disinfected? Yes X No
9. Pump and Equipment Disinfected? Yes X No
10. Pressure Tank Size 40 gal. Type Captive Air
    Location Basement
11. Water Sample Submitted? Yes X No

REMARKS: [illegible] #27176

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner M. Beckman Well No. 1
    Address R.R. Antioch, Ill
    Driller C. L. Wertz License No.
11. Permit No. 116717 Date 4/15/85
12. Water from Drift (Formation) 13. County Lake
    at depth 87 to 90 ft.
    Sec. 13
    Twp. 46N
    Rge. 9E
    Elev. 750
14. Screen: Diam. 3 in.
    Length: 48" Slot 15

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 lb galv steel	0	87

SHOW LOCATION IN SECTION PLAT
Lots 10, 11, 12, 13 & 14 and George Ackerman added, 2000' N & 1500' E of the Safe SE

16. Size Hole below casing: screened
17. Static level 12 ft. below casing top which is 1 ft. above ground level. Pumping level 15 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay 0-16		
Blue clay Firm-16-47		
Grey clay soft-47-69		
Fine sand 69-85		
Clean coarse sand 85-90		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE 4/15/85

IDPH 4-065

PRIVATE WELL 106

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DR[illegible]RS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 107

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug —. Bored —. Hole Diam. — in. Depth 78 ft.
   Curb material —. Buried Slab: Yes — No —
   b. Driven —. Drive Pipe Diam. ___ in. Depth 75 ft.
   c. Drilled X. Finished in Drift X. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Drill slurry	0	20

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field 78'
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 55 Barnyard —
   Leaching Pit ___ Manure Pile —
3. Well furnishes water for human consumption? Yes X No —
4. Date well completed April 1988
5. Permanent Pump Installed? Yes X Date April 22 No —
   Manufacturer Red Jacket Type Sub Location well
   Capacity 10 gpm. Depth of Setting 30 Ft.
6. Well Top Sealed? Yes X No ___ Type Compression
7. Pitless Adapter Installed? Yes X No ___
   Manufacturer Merril Model Number SPK
   How attached to casing? Compression
8. Well Disinfected? Yes X No ___
9. Pump and Equipment Disinfected? Yes X No ___
10. Pressure Tank Size 30 gal. Type Captive Air
    Location Crawl Space
11. Water Sample Submitted? Yes X No ___

REMARKS: Co. #30536

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Mrs John Slefender Well No. 1
    Address 41258 N. West Lake Ave, Antioch, Ill 60002
    Driller C. L. Wertz License No. 94-579
11. Permit No. 138337 Date [illegible] 12/87
12. Water from Drift (Formation) at depth 75 to 78 ft.
13. County Lake
    Sec. 13:4a
    Twp. 46N
    Rge. 9E
    Elev. 760
14. Screen: Diam. 3 in.
    Length: 42 ft. Slot 15
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Galv. 11 steel	0	75

SHOW LOCATION IN SECTION PLAT
SW[illegible]

16. Size Hole below casing: ___ in. screened
17. Static level 10 ft. below casing top which is 1 ft. above ground level. Pumping level 14 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top soil soft clay 0-20		
Blue clay Firm 20-42		
Soft Clay 42-65		
Smooth " 65-70		
Clean sand 70-78		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE April 22-88

PRIVATE WELL 107

IDPH 4.065
1/74 KNR-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW. Log 108

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 5 in. Depth 42 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. ____in. Depth ____ft.
   c. Drilled ✓. Finished in Drift____. In Rock____.
   Tubular____. Gravel Packed ✓.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building _____ Ft. Seepage Tile Field 75'
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank 45' Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 2/1/82
5. Permanent Pump Installed? Yes ✓ Date 2/24/82 No____
   Manufacturer Red Jacket Type Sub Location _____
   Capacity 15 gpm. Depth of Setting 40 Ft.
6. Well Top Sealed? Yes ✓ No____ Type _____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Williams Model Number _____
   How attached to casing? Coupled
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 40 gal. Type captive
    Location basement
11. Water Sample Submitted? Yes ✓ No____

REMARKS:

PRIVATE WELL 108

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner James A. Smith Well No. _____
    Address 41220 N. Westlake, Antioch
    Driller R. Snelton License No. 42-227
11. Permit No. 102574 102579 Date 1/20/82
12. Water from gravel (Formation) 13. County Lake
    at depth ____ to ____ft.
14. Screen: Diam. ____in.
    Length: ____ft. Slot _____
    Sec. 13 46
    Twp. 46N
    Rge. 9E
    Elev. _____

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	Steel 15#	0	42

SHOW LOCATION IN SECTION PLAT
NW SW SE
Point 2.64

ad 3, block 3, Antioch

16. Size Hole below casing: 5 in.
17. Static level 10 ft. below casing top which is 1 ft. above ground level. Pumping level 20 ft. when pumping at 15 gpm for 5 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
brown clay	0	10
blue "	10	65
Sand	65	75
gravel	75	52

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Richard Smelter DATE 1/4/83

Two Permits by mistake

IDPH 4.065
1/74 – KNB-1

White copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 109

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Slurry	4	20

2. Distance to Nearest:
   Building 5 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 7-17-84
5. Permanent Pump Installed? Yes ✓ Date 7-17-84 No ____
   Manufacturer Myers Type Sub Location Well
   Capacity 12 gpm. Depth of Setting 20 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Water Tight Cap
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Saddle
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type Precharged
    Location Utility Room
11. Water Sample Submitted? Yes ____ No ✓
REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Diane Tomasik Well No. 2
    Address 41360 Northwest Lakeshore Antioch Ill.
    Driller William Blake License No. 99-510
11. Permit No. 113227 Date 7-3-84
12. Water from Drift (Formation) 13. County Lake
    at depth 86 to 89 ft. Sec. 13 4c
    14. Screen: Diam. 3 1/4 in. Twp. 46N
    Length: 3 ft. Slot 12 Rge. 9E
    Elev. ____

SHOW LOCATION IN SECTION PLAT
Lake Marsh
Wind Point Lake
SW NW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T&C Galv. 11 lbs P.P.F.	Surface	86

16. Size Hole below casing: 3 in.
17. Static level 8 ft. below casing top which is 1 ft. above ground level. Pumping level 10 ft. when pumping at 12 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	12	12
Sandy Blue clay	15	27
Smooth Blue clay	20	47
fine silty sand	38	85
Red sand	4	89

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William R. Blake DATE 9-25-84

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 109

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

RECEIVED JUL 11 1988 DIVISION OF ENVIRONMENTAL HEALTH

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven ✓. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled____. Finished in Drift____. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	22

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 100
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 100 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 6/27/88
5. Permanent Pump Installed? Yes ✓ Date 6/30 No____
   Manufacturer Delta Type Sub Location Wood
   Capacity 12 gpm. Depth of Setting 40 Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrell Model Number SPK
   How attached to casing? Drill thru
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 40 gal. Type Under ground
    Location Under ground
11. Water Sample Submitted? Yes____ No____

REMARKS:

Co. # 31066

PRIVATE WELL 110

IDPH 4.065

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Frank Femali Well No.____
    Address 41419 N. Bayside Dr., Antioch, Illinois
    Driller Charles E. Madsen License No. 092-002021
11. Permit No. 002669 Date 6/15/88
12. Water from Sand Formation
    at depth 80 to 88 ft.
13. County Lake
    Sec. 13 4c
    Twp. 46N
    Rge. 09E
    Elev.____

PWLog 110

14. Screen: Diam. 3 in.
    Length: 5 ft. Slot 12
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv 11PFT	0	83

SHOW LOCATION IN SECTION PLAT
SW, NW, SE

16. Size Hole below casing:____in.
17. Static level 15 ft. below casing top which is 1½ ft. above ground level. Pumping level 40 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Blk dirt	2	✓
yellow Clay	19	21
Blue Clay	59	80
Course Sand	8	88

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E. Madsen DATE 6/30/88

White C[illegible] –
Ill. D[illegible] of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIO[illegible] TO DRILLERS

FILL IN ALL PER[illegible]ENT INFORMATION R[illegible]JESTED AND MAIL [illegible]INAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW log 111

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled x. Finished in Drift x. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building____Ft. Seepage Tile Field____
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank____ Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes x No____
4. Date well completed 3/29/72
5. Permanent Pump Installed? Yes x No____
   Manufacturer Red Jacket Type Subm.
   Capacity 5 gpm. Depth of setting 63 ft.
6. Well Top Sealed? Yes x No____
7. Pitless Adaptor Installed? Yes x No____
8. Well Disinfected? Yes x No____
9. Water Sample Submitted? Yes____ No x

REMARKS:

IDPH 4.065
10/68

PRIVATE WELL 111

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Mr. M. Wolczyz Well No.____
    Address 2123 N. Damen, Chicago
    Driller Henry Boysen Co. License No. 92480
11. Permit No. NF 13954 Date 3/22/72
12. Water from Sand (Formation) at depth 80 to 90 ft.
13. County Lake
    Sec. 13 4d
    Twp. 46N
    Rge. 9E
    Elev.____
14. Screen: Diam. 5" in.
    Length: 3 ft. Slot 10

SHOW LOCATION IN SECTION PLAT
NW NW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	galv.	grade	90

16. Size Hole below casing: 5" in.
17. Static level 20 ft. below casing top which is 1 ft. above ground level. Pumping level 45 ft. when pumping at 5 gpm for____hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Red Clay	0	20
Blue Clay	20	40
Blue Clay	40	60
Blue Clay	60	70
SAnd	70	80
Sand	80	90

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 12-27-72

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 112

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 89 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth 86 ft.
   c. Drilled —. Finished in Drift —. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay	0	20

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 50
   Cesspool — Sewer (non Cast Iron) —
   Privy — Sewer (Cast Iron) —
   Septic Tank 20 Barnyard —
   Leaching Pit ____ Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed Oct 17-73
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer Red Jacket Type Sub
   Capacity 10 gpm. Depth of setting 42 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes — No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

PRIVATE WELL 112

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner O. L. Mitchel Well No. 1
    Address Rt 4 Box 276 Antioch, Ill
    Driller C. L. WERTZ License No. [illegible]
11. Permit No. NE-20 645 Date Oct 17-73
12. Water from Drift (Formation) 13. County Lake
    at depth 86 to 89 ft. Sec. 13 Twp. 46N Rge. 9E Elev. 750
14. Screen: Diam. 4 1/2 in OD
    Length 3 ft. Slot 15
15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	15 lb galv.	0	86

SHOW LOCATION IN SECTION PLAT
200's 300'E N½ SE

16. Size Hole below casing: screened
17. Static level 8 ft. below casing top which is 1 ft. above ground level. Pumping level 12 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay 0-18		
Sticky Blue clay 18-63		
Grey clay gummy 63-75		
Soft " 75-80		
Sand coarse 80-90		
sand fine 90-99		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. F. Tuty DATE Oct 17-73

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 113

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 82 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 80 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 75'
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50' Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed Dec. 3, 1977
5. Permanent Pump Installed? Yes X Date ____ No ____
   Manufacturer Red Jacket Type Jet Location ____
   Capacity 10 gpm. Depth of Setting 42 Ft.
6. Well Top Sealed? Yes X No ____ Type Merrill
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Clamp on
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes ____ No X
10. Pressure Tank Size 42 gal. Type galvanized
    Location basement
11. Water Sample Submitted? Yes ____ No X

REMARKS:

PRIVATE WELL 113

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Carl Zimmerman Well No. ____
    Address 725 E. Grand Ave. Lake Villa, Ill.
    Driller Emil E. Gross License No. 102-70
11. Permit No. 68697 Date 10-28-77
12. Water from fine gravel (Formation) 13. County Lake
    at depth 73 to 82 ft. Sec. 13 Twp. 46N Rge. 9E Elev. ____

X			

14. Screen: Diam. 4 in. Length: 3 ft. Slot #15
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. steel 11#	0'	80'

SHOW LOCATION IN SECTION PLAT
300'S 125'W NE 1/4, NW 1/4 SE

16. Size Hole below casing: 4 in.
17. Static level 6 ft. below casing top which is 1 ft. above ground level. Pumping level 15 ft. when pumping at 16 1/2 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	18'	18'
blue clay	55'	73'
fine gravel	9'	82'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Emil E. Gross DATE 5-23-78

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 114

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	18

2. Distance to Nearest:
   Building 7 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast Iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 60 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 10-10-75
5. Permanent Pump Installed? Yes X Date 10-75 No ____
   Manufacturer STAR/TO Type Sub Location Well
   Capacity 8 gpm. Depth of Setting 42 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Screw Thread
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 30 gal. Type Can air
    Location Crawl Space
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner JACOB KOLB Well No. 1
    Address BEACH GROVE RD - ANTIOCH ILL
    Driller C. MADSEN License No. 92-202
11. Permit No. 41613 Date 9-30-75
12. Water from SAND Formation
    at depth 89 to 92 ft.
13. County LAKE
    Sec. 13 1/4
    Twp. 46 N
    Rge. 9 E
    Elev. ____
14. Screen: Diam. 2 1/2 in.
    Length: 8 ft. Slot 10
15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11#	0	89

SHOW LOCATION IN SECTION PLAT
SE

16. Size Hole below casing: 2 1/2 in.
17. Static level 16 ft. below casing top which is 18" ft. above ground level. Pumping level 30 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	2	✓
Yellow Clay	19	21
Sand	4	25
Blue Clay	57	82
Course Sand	10	92

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. Madsen DATE ____

PRIVATE WELL 114

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

STRUCTIONS TO DRI[illegible]

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 115

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 3 in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	18

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy 100 Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 7/10/86
5. Permanent Pump Installed? Yes ✓ Date 7/12/86 No ____
   Manufacturer Delta Type Sunk Location Well
   Capacity 10 gpm. Depth of Setting 30 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type ____
7. Pitless Adapter Installed? Yes ____ No ✓
   Manufacturer ____ Model Number ____
   How attached to casing? ____
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type Gal
    Location Pump house
11. Water Sample Submitted? Yes ____ No ____

REMARKS:

County # 28292

PRIVATE WELL 115

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Joe Bleka Well No. ____
    Address 41379 N Bayside Dr Antioch, Il
    Driller Charles E Madsen License No. 92-202
11. Permit No. 124731 Date 6-20-86
12. Water from Sand (Formation) at depth 75 to 82 ft.
13. County Lake
    Sec. 13-4d
    Twp. 46N
    Rge. 9E
    Elev. ____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot 10

		x	

SHOW LOCATION IN SECTION PLAT
Lot #6 Mercyrized Point Subd.
NW NW SE

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Gal 11PFT	0	77

16. Size Hole below casing: 3 in.
17. Static level 20 ft. below casing top which is 1 1/2 ft. above ground level. Pumping level 30 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Bk dirt	3	3
Yellow Clay	19	22
Blue Clay	53	75
Sand & Gravel	7	82

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madsen DATE 7/14/86

IDPH 4.065
1/74 – KNB-1

opy –
of of Public Health
opy – Well Contractor
y – Well Owner

INSTRUCTIONS TO DRILL!

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 116

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

Type of Well

a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 212 ft.
Curb material ____. Buried Slab: Yes ____ No ____

b. Driven ____. Drive Pipe Diam. 5 in. Depth 206 ft.

c. Drilled X. Finished in Drift ____. In Rock X.
Tubular ____. Gravel Packed ____.

d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

Distance to Nearest:

Building 33 Ft. Seepage Tile Field 51
Cess Pool ____ Sewer (non Cast iron) ____
Privy ____ Sewer (Cast iron) ____
Septic Tank 60 Barnyard ____
Leaching Pit ____ Manure Pile ____

Well furnishes water for human consumption? Yes X No ____
Date well completed May 6, 1987
Permanent Pump Installed? Yes X Date ____ No ____
Manufacturer RedJacket Type sub Location well
Capacity 10 gpm. Depth of Setting 40 Ft.
Well Top Sealed? Yes X No ____ Type Merrill
Pitless Adapter Installed? Yes X No ____
Manufacturer Merrill Model Number SPK
How attached to casing? clamp on
Well Disinfected? Yes X No ____
Pump and Equipment Disinfected? Yes X No ____
Pressure Tank Size 42 gal. Type captive air
Location crawl space
Water Sample Submitted? Yes X No ____
MARKS:

PRIVATE WELL 116

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Tom Overby Well No. ____
Address 3418 Pacific Ave., Waukegan, Illinois
Driller Michael Gross License No. 102-002086
11. Permit No. [redacted]31654 Date 5-14-87
12. Water from Limstone (Formation) 13. County Lake
at depth 206 to 212 ft.
14. Screen: Diam. ____ in.
Length: ____ ft. Slot ____
Sec. 13 NX
Twp. 46N
Rge. 9E
Elev. ____

X			

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	galv. steel	0	206

16. Size Hole below casing: 5 in.
17. Static level 4 ft. below casing top which is 1 ft. above ground level. Pumping level 70 ft. when pumping at 15 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	22	22
Brown clay	50	72
Runny Sand	13	85
Sand-gravel	15	100
Runny sand	41	141
Mud sand	44	185
Gravel	21	206
Limestone	6	212

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Michael Gross DATE 6-1-87

PH 4.065
74 – KNB-1

White & Pink Copies:
Ill. Dept. of Public Health
Yellow Copy: Well Contractor
Golden Copy: Well Owner

Well Construction Report

RECEIVED
AUG 17 1989
DIVISION OF ENVIRONMENTAL HEALTH

Pw log 117

Burton 13-2

THIS FORM MUST BE COMPLETED WITHIN 30 DAYS
OF WELL COMPLETION AND SENT TO
THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
525 WEST JEFFERSON STREET
SPRINGFIELD, ILLINOIS 62761

1. Type of Well
   a. Bored ✓ Hole Diam. 7 7/8 in. Depth 266 ft
      Buried Slab: Yes___ No___
   b. Driven___ Drive Pipe Diam. 5 in. Depth 262 ft
   c. Drilled ✓ Finished in Drift ✓ In Rock___
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
drilling		
mud	0	209

2. Well furnishes water for human consumption? Yes ✓ No___
3. Date well drilled 6-21-88
4. Permanent pump installed? Yes ✓ Date 6-22-88 No___
   Manufacturer Red Jacket Type Sub
   Location___
   Capacity 12 gpm. Depth of setting 120 ft.
5. Well top sealed? Yes ✓ No___ Type Cap
6. Pitless adapter installed? Yes ✓ No___
   Manufacturer Baker Model No. snappy
   How attached to casing? U-clamp
7. Well disinfected? Yes ✓ No___
8. Pump and equipment disinfected Yes ✓ No___

IMPORTANT NOTICE

This State Agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under Public Act 85-0863. Disclosiure of this information is mandatory. This form has been approved by the Forms Management Center.

PRESS FIRMLY WITH BLACK PEN OR TYPE
Do Not Use Felt Pen

IL482-0126

PRIVATE WELL 117

GEOLOGICAL AND WATER SURVEYS WELL RECORD

9. Driller Wm. Huemann License No 102-001427
10. Well Site Address Lot 14 Essex Ln.
11. Property Owner Journey Blds. Well No.___
12. Permit No. 000522 Date Issued 6-11-88
13. Location: Baltimore Est. County Lake
    Sec. 13.2g
    Twp. 46N
    Rge. 9E

Show location in section plat

SW, NE, NE

14. Water from Limestone at depth 209 ft to 266 ft

15. Casing and Liner Pipe			
Diam. (in)	Kind and Weight	From (ft)	To (ft)
5	200 lb. PVC	0	209

16. Screen: Diam. — in, Length —, Slot Size —
17. Size hole below casing 7 7/8 in. 18. Ground Elev.___ ft msl.
19. Static level 68 ft below casing top which is 1 ft. above ground level. Pumping level 100 ft, pumping gpm for 4 hours.

20. Earth Materials Passed Through	Depth of Top	Depth of Bottom
Fill	0	1
top soil	1	2
Clay	2	48
clay + gravel	48	51
Clay	51	209
limestone	209	266

Continue on separate sheet if necessary.

Signed William F Huemann Date___

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Top soil		0	12
Gravel		12	16
Blue clay		16	80
Grey clay		80	95
Red sand		95	100
Grey sand and gravel, water bearing		100	111
			TD

Finished in sand and gravel.
Casing: 4" from 0 to 111'
Static level from surface: 45'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

Little Silver Lake

COMPANY C. L. Wertz
FARM Elfendaum, H. N. NO. 1
DATE DRILLED September 1939 COUNTY NO. 44
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NE SE NW
COUNTY LAKE

16-46N-10E

White C... Ill. D... of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 70 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift ____. In Rock X.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Cuttings		

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes X No ____
4. Date well completed 7/13
5. Permanent Pump Installed? Yes X No ____
   Manufacturer Red Jacket Type Subm
   Capacity ____ gpm. Depth of setting 40 ft.
6. Well Top Sealed? Yes X No ____
7. Pitless Adaptor Installed? Yes X No ____
8. Well Disinfected? Yes X No ____
9. Water Sample Submitted? Yes ____ No X

REMARKS:

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Airhart Construction Well No. —
    Address Parcel 1, Merrywood Point
    Driller K + K Well Drilling License No. 92-532
11. Permit No. 17820 Date 5/22/72
12. Water from limestone (Formation) at depth 10 to 70 ft.
13. County Lake
    Sec. 13
    Twp. 46 N
    Rge. 9 E
    Elev. ____
14. Screen: Diam. ____ in.
    Length: ____ ft. Slot ____
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	Blk. 15#	0	70

SHOW LOCATION IN SECTION PLAT
Parcel 1
Merrywood Point Sub.
NW

16. Size Hole below casing: 5 in.
17. Static level 10 ft. below casing top which is 2 ft. above ground level. Pumping level 40 ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Overburden	70	70
Rock formation	0	70

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 11/27

(12216—60M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Brown clay		0	15
Blue clay		15	125
Sand to very nice gravel		125	171
			TD

Finished in sand to very nice gravel.
Casing: 4½" from 0 to 171'
Static level from surface: 65'
Tested capacity: 10 gallons per minute.
Water lowered: 5'

COMPANY C. L. Wertz
FARM Tague Farm NO. 1
DATE DRILLED May 1943 COUNTY NO.
AUTHORITY C. L. Wertz
ELEVATION
LOCATION SW SE NW
COUNTY LAKE

16-46N-10E

(13210—20M—3-55)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

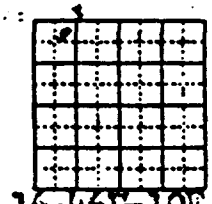
Strata	Thickness	Top	Bottom
Brown clay		0	15
Blue clay		15	85
Clean gravel		85	87
			TD

Finished in clean gravel.
Casing: 3" from 0 to 87'.
Static level from surface: 30'
Tested capacity: 20 gallons per minute.
Water lowered: 5'

Little Silver Lake

COMPANY C. L. Wertz
FARM Hermanek, Ann
DATE DRILLED November 1941
AUTHORITY C. L. Wertz
ELEVATION
LOCATION NE NW NW
COUNTY LAKE

NO. 1
COUNTY NO. 45



16-46E-10E

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 119

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	20

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 60 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 7/26/86
5. Permanent Pump Installed? Yes X Date 7/28/86 No ____
   Manufacturer STARLITE Type SUB Location ____
   Capacity 9 gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer WILLIAMS Model Number B50AC
   How attached to casing? ____
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type AIR BLADDER
    Location CRAWL SPACE
11. Water Sample Submitted? Yes ____ No X

REMARKS: County # 28401

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner LEHMAN CONSTRUCTION Well No. ____
    Address 14970 W-21ST ZION, IL. 60099
    Driller KEN BOYCE License No. 092-006528
11. Permit No. 125254 Date 7/16/86
12. Water from SAND (Formation) at depth 117 to 122 ft.
13. County LAKE
    Sec. 16
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 5 in.
    Length: 3 ft. Slot 15
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	ASTM A-120 T/C	0	119
	USPCO		
	15 lbs PER FT		

SHOW LOCATION IN SECTION PLAT
Lots 12, 13 & Block #7, Jaquiron Subd. SE SW

16. Size Hole below casing: 5 in.
17. Static level 50 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 12 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BLACK DIRT	3	3
YELLOW CLAY	12	15
BLUE CLAY	79	94
HARD PAN	3	97
MEALY SAND	8	105
HARD PAN	12	117
COARSE SAND	5	122

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Kenneth D. Boyce DATE 7/29/86

PRIVATE WELL 119

IDPH 4.065

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

RUCTIONS TO DRI RS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

120

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 145 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven _____. Drive Pipe Diam. 4 in. Depth 142 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock_____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed 7/26/74
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer Sta Rite Type suction
   Capacity 8 gpm. Depth of setting 126 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes____ No____

REMARKS:

IDPH 4.065
10-72
KNB-1

PRIVATE WELL 120

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner George Murphy Well No. ____
    Address PO Box 186, Lake Villa
    Driller Hoover Water Well License No. 3:
11. Permit No. 31651 Date 7/30/74
12. Water from Sand Formation 13. County Lake
    at depth 139 to 145 ft.
    Sec. 16 a
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 12
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv. T+C	0	142
	10.89 #/ft		

SHOW LOCATION IN SECTION PLA
350'N.350'
SE/c. SE

16. Size Hole below casing: 4 in.
17. Static level 70 ft. below casing top which is 1 above ground level. Pumping level 90 ft. when pumping at 6 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	20	20
Soft gray Clay	111	131
Hard pan	8	139
sand	6	145

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L R Hoover DATE 8/5/74

W[illegible] [illegible]oy –
[illegible]L of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMAT[illegible] [illegible]JESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 121

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 6 in. Depth 130 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY		
SLURRY	0	20

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field 110
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 55 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 7-28-77
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer ____ Type Sodal in well
   Capacity 12 gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No Merrill attached to casing by thread
8. Well Disinfected? Yes ____ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS: 82 gal steel pressure tank located in basement

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ARTHUR KING Well No. 1
    Address PO BOX 451 ANTIOCH.
    Driller KNELLENN + SONS License No. 102.49
11. Permit No. 62387 Date JUNE 21-77
12. Water from SAND (Formation) at depth 127 to 134 ft.
13. County ____
    Sec. 16.1a
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 6 in.
    Length: [illegible] ft. Slot 20
15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
6	GALV. STEEL #19.45	0	130
6	S.S. SCREEN	130	134

SHOW LOCATION IN SECTION PLAT
SC SC SC

16. Size Hole below casing: 6 in.
17. Static level 59 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 20 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
FILL	2	2
YELLOW CLAY	15	17
BLUE CLAY	100	117
GRAVEL + CLAY	10	127
SAND (WATER)	7	134

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED H. Glenn DATE 8-1-78

IDPH 4.065
10/68

PRIVATE WELL 121

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT FORMATION REQUIRED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 122

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 151 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 7/29/85
5. Permanent Pump Installed? Yes X Date 7/29/85 No ____
   Manufacturer Red Jacket Type Subm Location ____
   Capacity 10 gpm. Depth of Setting 110 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Williams Model Number ____
   How attached to casing? Clamp
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 12 gal. Type Well-X-trol
    Location ____
11. Water Sample Submitted? Yes X No ____

REMARKS: County #27317

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Norman Flament Well No. Duplake Rd, N of 173
    Address 8624 DANA Waukegan
    Driller George E Gaffke License No. 102-2342
11. Permit No. 117795 Date 5/14/85
12. Water from Sand + Gravel Formation at depth 139 to 151 ft.
13. County Lake
    Sec. 16.1e
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 5 in.
    Length: 3 ft. Slot 10

SHOW LOCATION IN SECTION PLAT
100' N & 150' W
SE/C NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1	151

16. Size Hole below casing: 5 in.
17. Static level 90 ft. below casing top which is +1 ft. above ground level. Pumping level ____ ft. when pumping at 15 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	0	12
Blue Clay	107	119
Gravel	1	120
Blue Clay	19	139
Sand + Gravel	12	151

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 11/2/85

NOV 1985 Division of Engineering and Sanitation

PRIVATE WELL 122

IDPH 4.065

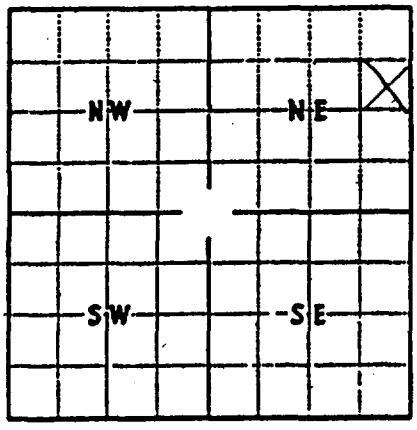
Form 06-8 (63516—3M—2-75)

STATE OF ILLINOIS
County of LAKE } ss.

WATER WELL PLUGGING AFFIDAVIT

W.D. ELAKE & SONS WELL DRILLING & GAS

WAYNE D. ELAKE being first duly sworn, do depose and say the following is a true and correct statement of the details of the plugging of a certain well drilled for water and located as follows:



Locate well accurately on plat of section (Scale one inch—2,000 ft.)

Location in section SE ¼ NE ¼ NE ¼
Section 36, 16 Township 46 N Range 10 E
County LAKE
Well name and number
Year drilled
Reason for plugging ABANDONED
Total depth 127 Formation GRAVEL
How was depth determined? As reported
As measured YES
Diameter of well at land surface 4 inches
Was well clear of obstructions to bottom before plugging? YES
Depth of obstruction Nature of obstruction

Drilling permit No. and date, if known
Permit issued to
Kind of drilling tools used Date plugging completed 11-5-87
Property owner JOHN E. HAJER Address 22636 W. WASHINGTON, ANTIOCH, IL.
Drilling contractor W.D. ELAKE Address ANTIOCH, ILL.

DETAILS OF PLUGGING

Filled with CHLORINED GRAVEL (Cement or other Material)	From 127	To 55	feet
Kind of plug CEMENT	From 55	To 3	feet
Filled with CLAY	From 3	To 0	feet
Kind of plug	From	To	feet
Filled with	From	To	feet
Kind of plug	From	To	feet

CASING RECORD

IN WELL Diameter (In.)	From (Ft.)	To (Ft.)	FULLED OUT From (Ft.)	To (Ft.)	REMARKS

John Edward Hajer
(Signature of person, firm or corporation having custody or control of well.)

Per

Address 22636 W Washington St Antioch

William R. LeFever INSPECTOR
(Signature and title of party supervising plugging of well.)

Address 502 JEFFERSON, HARVARD, IL. 60033

Subscribed and sworn to before me this 6 day of Nov. A.D. 1987

My commission expires

Notary Public

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUIRED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log ~~122~~ 123

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 125 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 123 ft.
   c. Drilled x. Finished in Drift x. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 46 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed May 27, 1988
5. Permanent Pump Installed? Yes x Date ____ No ____
   Manufacturer Red Jacket Type sub Location well
   Capacity 10 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes x No ____ Type Merrill
7. Pitless Adapter Installed? Yes x No ____
   Manufacturer Morrill Model Number SPK
   How attached to casing? clamp on
8. Well Disinfected? Yes x No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type galv.
    Location basement
11. Water Sample Submitted? Yes X No ____

REMARKS: Co. # 30833

41017
Hickory Lane, Antioch, Illinois
Able Homes

IDPH 4.065
1/84 – KNB-1

PRIVATE WELL 123

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Don Gaylord Well No. ____
    Address 40603 Sunset, Antioch, Illinois
    Driller Michael Gross License No. 102-002086
11. Permit No. 001422 Date 4-25-88
12. Water from sand (Formation)
    at depth 118 to 125 ft.
13. County Lake
    Sec. 16 2b
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 15

SHOW LOCATION IN SECTION PLAT
NW, SE, SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv steel	0	123

16. Size Hole below casing: 4 in.
17. Static level 66 ft. below casing top which is 1 ft. above ground level. Pumping level 68 ft. when pumping at 10 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	20	20
blue clay	75	95
hard pan	23	118
sand	7	125

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 6-16-88

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PWLog 124

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 171 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building ____ Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 5/8/87
5. Permanent Pump Installed? Yes X Date 5/12/87 No ____
   Manufacturer RED JACKET Type SUBM Location ____
   Capacity 10 gpm. Depth of Setting 140 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer WILLIAMS Model Number ____
   How attached to casing? CLAMP
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 82 gal. Type HARVARD CHAMPION
    Location ____
11. Water Sample Submitted? Yes X No ____

REMARKS:

Co # 29212

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner KOMEN CO. Well No. DEEP LAKE RD
    Address 42066 DEEP LAKE, ANTIOCH
    Driller GEORGE E. GAFFKE License No. 102-2342
11. Permit No. 13001 3 Date 3/17/87
12. Water from SAND + GRAVEL (Formation) 13. County LAKE
    at depth 162 to 171 ft.
    Sec. 16 29
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 15

SHOW LOCATION IN SECTION PLAT
300' NL, 175' EL
SW, NE, NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	+1	171

16. Size Hole below casing: 5 in.
17. Static level 102 ft. below casing top which is +1 ft. above ground level. Pumping level ____ ft. when pumping at 20 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BROWN CLAY	20	20
BLUE CLAY	38	58
SAND	2	60
BLUE CLAY	102	162
SAND + GRAVEL	9	171

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Gaffke DATE 9/8/87

PRIVATE WELL 124

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO OWNERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 125

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 151 ft.
   Curb material _____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam. 4 in. Depth 149 ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 125
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 100 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed 4-11-86
5. Permanent Pump Installed? Yes X Date____ No____
   Manufacturer Red Jacket Type Deep Location Well
   Capacity 10 gpm. Depth of Setting 126 Ft.
6. Well Top Sealed? Yes X No____ Type Murrell
7. Pitless Adapter Installed? Yes X No____
   Manufacturer Murrell Model Number SPK
   How attached to casing? clamp on
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 42 gal. Type captive air
    Location basement
11. Water Sample Submitted? Yes____ No X

REMARKS: County #28063

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Tom Wedell Well No.____
    Address 41972 N. Deep Lake Rd. Antioch, Il.
    Driller Michael Gross License No. 102-
11. Permit No. 122979 Date 4-11-86
12. Water from sand (Formation) 13. County Lake
    at depth 141 to 151 ft.
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot # 15
    Sec. 16 29
    Twp. 46N
    Rge. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT
SW NE NE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. steel 11#	0	149'

16. Size Hole below casing: 4 in.
17. Static level 100 ft. below casing top which is 1 ft. above ground level. Pumping level 100 ft. when pumping at 10 gpm for____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay & gravel	23	23
blue clay	118	141
sand	10	151'

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Michael Gross DATE 5-2-86

PRIVATE WELL 125

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 126

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 130 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 128 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 75'
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 8-5-81
5. Permanent Pump Installed? Yes X Date ____ No ____
   Manufacturer Red Jacket Type Sub Location ____
   Capacity 10 gpm. Depth of Setting ____ Ft.
6. Well Top Sealed? Yes X No ____ Type Merrill
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? clamp on
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 42 gal. Type galv.
    Location crawl space
11. Water Sample Submitted? Yes ____ No X

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner James Reiter Well No. ____
    Address 25508 West Haven Terrace, Antioch Ill.
    Driller Michael Grove License No. 102-208
11. Permit No. 100877 Date 8-11-81
12. Water from sand (Formation) at depth 118 to 130 ft.
13. County ____
    Sec. 16.3
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot #10
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. steel 11#	0'	128

SHOW LOCATION IN SECTION PLAT
50'N 75'E. SW/C
SE SW SE

16. Size Hole below casing: 4 in.
17. Static level 57 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 9 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
top soil	1'	1'
yellow clay	19'	20'
blue clay	98'	118'
sand	12	130

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Michael Grove DATE 10/5/81

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 126

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 127

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven ✓. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	23

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 75 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 1-22-87
5. Permanent Pump Installed? Yes ✓ Date 2-10- No____
   Manufacturer Bd Jacket Type Suck Location well
   Capacity 10 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes ✓ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Drill thru
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 42 gal. Type Well X Tank
    Location Basement
11. Water Sample Submitted? Yes ✓ No____

REMARKS: County #29002

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Michael Cable Well No.____
    Address 41023 N Ridge Circle Dr
    Driller C Madsen License No. 92-202
11. Permit No. 128929 Date 1-6-87
12. Water from Sand (Formation) 13. County Lake
    at depth 117 to 127 ft.
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot 10
    Sec. 16 3a
    Twp. 46N
    Rge. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT
Lot #19
SE SW SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv 11 PFT	0	122

16. Size Hole below casing: 3 in.
17. Static level 70 ft. below casing top which is 1½ ft. above ground level. Pumping level 100 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Bk Dirt	2	2
Yellow Clay	21	23
Blue Clay	87	110
Fine Sand	7	117
Course Sand	10	127

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madsen DATE 2-20/87

PRIVATE WELL 127

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Plumbing 128

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth 135 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 6 in. Depth 132 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay slurry	0	20

2. Distance to Nearest:
   Building 8 Ft. Seepage Tile Field 75
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 50 Barnyard —
   Leaching Pit ____ Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed Sept. 2-1975
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer Red Jacket Type Submersible
   Capacity 25 gpm. Depth of setting 90 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ____

REMARKS:

IDPH 4.065
10-72
KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Cunningham Cartage Well No. 1
    Address R.R. Antioch, Ill
    Driller C. L. Wertz License No. 57
11. Permit No. 37869 Date Sept. 2-1975
12. Water from Drift Formation at depth 132 to 135 ft.
13. County Lake
    Sec. 16
    Twp. 46N
    Rge. 10E
    Elev. 820
14. Screen: Diam. 5 in.
    Length: 12" ft. Slot 15

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	19 lb galv.	0	132

SHOW LOCATION IN SECTION PLA
200'S
250'W
NE/c Nw

16. Size Hole below casing: — in. Screened
17. Static level 55 ft. below casing top which is 1 ft above ground level. Pumping level 60 ft. when pumping at 25 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Br. soil & clay	0 -	18	
Blue grey "	18 -	95	
muck grey clay	95 -	110	
Dirty sand fine	110 -	128	
Clean " & fine	128 -	135	
gravel			

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE Sept 5-75

PRIVATE WELL 128

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO [illegible]

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 129

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Slurry	Surface	20

2. Distance to Nearest:
   Building 40 Ft. Seepage Tile Field 100
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 95 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 8-15-78
5. Permanent Pump Installed? Yes ✓ Date 8-15-78 No____
   Manufacturer Red Jacket Type Sub Location well
   Capacity 12 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes ✓ No____ Type Merrill Cap
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Saddle
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 42 gal. Type Vertical
    Location Basement
11. Water Sample Submitted? Yes____ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Geoffrey Zieman Well No. 1
    Address #7 Landay Lane Mundelein IL
    Driller William D. Blake License No. 92-710
11. Permit No. 77743 Date 8-2-78
12. Water from Drift (Formation) 13. County Lake
    at depth 128 to 131 ft.
14. Screen: Diam. 3 3/4 in.
    Length: 3 ft. Slot 12
    Sec. 16 1/4
    Twp. 46N
    Rge. 10E
    Elev.____

X		X	

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	T+C Galv. 11.00 lbs	Surface	128

16. Size Hole below casing: 3 in.
17. Static level 58 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 12 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow clay	17	17
Blue clay	23	40
Hard Pan	85	125
Sand (Red)	6.	131

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William D. Blake DATE 9-15-78

PRIVATE WELL 129

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO OWNERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Public 130

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven ✓. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

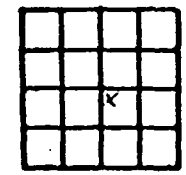
(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	22

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 85
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 75 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 5-10-87
5. Permanent Pump Installed? Yes ✓ Date 5-12 No____
   Manufacturer Delta Type Sub Location Well
   Capacity 10 gpm. Depth of Setting 120 Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Drill Screw
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 42 gal. Type Clayton Mark
    Location utility Room
11. Water Sample Submitted? Yes____ No____

REMARKS: County # 29464

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Al Jacobsen Well No.____
    Address 22381 W. Route #173 Antioch
    Driller Charles E. Madsen License No. 92-202
11. Permit No. 131494 Date 5-6-87
12. Water from Sand formation at depth 150 to 160 ft.
13. County Lake
    Sec. 16 4d
    Twp. 46N
    Rge. 10E
    Elev.____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot 10



15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Sch 11 PFT	0	15.5

SHOW LOCATION IN SECTION PLAT

16. Size Hole below casing:____in.
17. Static level 70 ft. below casing top which is 1/2 ft. above ground level. Pumping level 120 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Fill	2	2
Yellow Clay	18	20
Blue Clay	100	120
Fine Sand	9	129
Blue Clay	21	150
Coarse Sand	10	160

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C Madsen DATE 5/19/87

PRIVATE WELL 130

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUI[illegible] AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Private

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY	0	20

2. Distance to Nearest:
   Building 25 Ft. Seepage Tile Field 78
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 60 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 4-1-79
5. Permanent Pump Installed? Yes ✓ Date 4-1-79 No____
   Manufacturer STA-RITE Type____ Location____
   Capacity____gpm. Depth of Setting 82 Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer MERRIL Model Number____
   How attached to casing? DRILL
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 40 gal. Type WELL X TRK
    Location BASEMENT
11. Water Sample Submitted? Yes ✓ No____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner G FREDERICKSON Well No. 1
    Address WASHINGTON AV - ANTIOCH
    Driller C. MADSEN License No. [redacted] 92-202
11. Permit No. 83789 Date 3-5-79
12. Water from SAND Formation 13. County LAKE
    at depth 95 to 100 ft. Sec. 16.5d
    14. Screen: Diam. 3 in. Twp. 46N
    Length: 5 ft. Slot .012 Rge. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GAL PIPE	0	95

16. Size Hole below casing: 3 in.
17. Static level 65 ft. below casing top which is 16 ft. above ground level. Pumping level 75 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BLACK DIRT	42	42
B CLAY	46	88
SAND	12	100

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

MAY 5 1980

SIGNED C Madsen DATE____

PRIVATE WELL 131

IDPH 4.065
1/74 – KNB-1

Copy – Dept. of Public Health
Copy – Well Contractor
Copy – Well Owner

INSTRUCTIONS TO DRILLER

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Plat page 2

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

. Type of Well
a. Dug____. Bored____. Hole Diam. 4 in. Depth 153 ft.
Curb material _____. Buried Slab: Yes____ No____
b. Driven____. Drive Pipe Diam. 4 in. Depth 151 ft.
c. Drilled X. Finished in Drift X. In Rock____.
Tubular____. Gravel Packed____.
d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
Building 40 Ft. Seepage Tile Field 75
Cess Pool____ Sewer (non Cast iron)____
Privy____ Sewer (Cast iron)____
Septic Tank 50 Barnyard____
Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes X No____
4. Date well completed November 21, 1987
5. Permanent Pump Installed? Yes X Date____ No____
Manufacturer RedJacket Type sub Location well
Capacity 10 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes X No____ Type Merrill
7. Pitless Adapter Installed? Yes X No____
Manufacturer Merrill Model Number CPK
How attached to casing? clamp on
8. Well Disinfected? Yes X No____
9. Pump and Equipment Disinfected? Yes X No____
10. Pressure Tank Size 42 gal. Type____
Location basement
11. Water Sample Submitted? Yes X No____
REMARKS:

Co # 30295

PRIVATE WELL 132

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Tom Dagen Well No.____
Address Box 267, Antioch, Il.
Driller Michael Gross License No. 102-002086
11. Permit No. 136723 Date 10-26-87
12. Water from sand gravel (Formation) 13. County Lake
at depth 143 to 153 ft. Sec. 16 SE
14. Screen: Diam. 4 in. Twp. 46N
Length: 3 ft. Slot #10 Rge. 10E
Elev.____

		(X)	

SHOW LOCATION IN SECTION PLAT
SE SE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	galv. steel 11#	0	151

16. Size Hole below casing: 4 in.
17. Static level 80 ft. below casing top which is 1 ft. above ground level. Pumping level 90 ft. when pumping at 10 gpm for____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
yellow clay	16	16
blue clay	117	133
hard pan	10	143
sand - gravel	10	153

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 1-13-88

IDPH 4.065
1/74 – KNB-1

City near Antioch County Lake

Section 16 5P Twp. No. 46 N. Range 10 E

Location (in feet from section corner) 2600' E & 1300' S. of N W corner ?

Owner Dr. H. N. Elfenbaum Authority Weirty

Contractor C. L. Weirty Address Antioch

Date drilled summer of 1939 Elev. above sea level top of well

Depth 111'

Log 12' topsoil; 4' gravel; 64' blue clay; 15' gray clay; 5' red sand, water bearing; 1' gray sand; 10' gray sand and gravel

Were drill cuttings saved no Where filed

Size hole 4" If reduced, where and how much

Casing record

Distance to water when not pumping 35' Distance to water is 45

feet after pumping at 8 G. P. M. for 10 hours.

Reference point for above measurements

Type of pump Aermotor Distance to cylinder 55'

Length of cylinder 14" Length of suction pipe below cylinder

Length stroke 8" Speed 35

Hours used per day Type of power electric

Rating of motor 3/4 hp Rating of pump in G. P. M.

Can following be measured: (1) Static water level

(2) Pumping level (3) Discharge

(4) Influence on other wells

Temperature of water Was water sample collected

Date 12/10/39 Effect of water on meters, hot water coils, etc.

Date of Analysis Analysis No. 86866

copied 3/4/40 JLB. Recorder

2807-22617 12 Date

Ill. Dept. [illegible] Health
Yellow Copy [illegible] Contractor
Blue Copy — [illegible] Owner

FILL IN ALL PERTINENT INFORMATION [illegible] AND MAIL ORIGINAL TO [illegible] DEPARTMENT OF PUBLIC HEALTH, ROOM 6[illegible] STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

PW Log 133

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth 109 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY		
SLURRY	0	35

2. Distance to Nearest:
   Building [illegible] Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast Iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank [illegible] Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 10-3-76
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer [illegible] Type SUBM.
   Capacity [illegible] gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. [illegible] Year [illegible]
11. Property owner [illegible] Well No. [illegible]
    Address [illegible]
    Driller [illegible] License No. [illegible]
12. Water from SAND (Formation) 13. County [illegible]
    at depth 90 to 109 ft. Sec. [illegible]
14. Screen: Diam. 4 in. Twp. [illegible]
    Length: 3 ft. Slot 15 Rng. [illegible]
    Elev. ____

	X		

SHOW LOCATION IN SECTION PLAT
NW SE
SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	SALD STEEL		
	#1100	0	[illegible]
4	JOHNSON SCREEN	[illegible]	109

16. Size Hole below casing: 4 in.
17. Static level 45 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at [illegible] gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	1	0-1
YELLOW CLAY	15	1-16
BLUE CLAY	[illegible]	[illegible]
SAND (WATER)	19	[illegible]
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED [illegible] Sec. DATE 4-2-71

PRIVATE WELL 133

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUE[illegible]ND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Pw Log 134

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY	0	15

2. Distance to Nearest:
   Building 28 Ft. Seepage Tile Field 84
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 60 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 3-28-79
5. Permanent Pump Installed? Yes ✓ Date 3-28-79 No ____
   Manufacturer STA-RIG Type ____ Location ____
   Capacity ____ gpm. Depth of Setting 82 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer MERRIL Model Number ____
   How attached to casing? DRILL
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 40 gal. Type WELL X TROL
    Location BASEMENT
11. Water Sample Submitted? Yes ✓ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner G. TRAPP Well No. 1
    Address LINCOLN AV - ANTIOCH
    Driller C. MADSEN License No. 92-202
11. Permit No. 83790 Date 3-5-79
12. Water from SAND (Formation) at depth 105 to 110 ft.
13. County LAKE
    Sec. 16.6c
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 3 in.
    Length: 5 ft. Slot .012
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	GAL 11pF	0	105

SHOW LOCATION IN SECTION PLAT
[illegible]

16. Size Hole below casing: 3 in.
17. Static level 70 ft. below casing top which is 1.9 ft. above ground level. Pumping level 79 ft. when pumping at 11 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BLACK DIRT	42	42
B CLAY	58	100
SAND	10	100

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. Madsen DATE MAY 5 1980

PRIVATE WELL 134

IDPH 4.065
1/74 – KNB-1

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

Pull Log 135

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven ✓. Drive Pipe Diam. ✓ in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	22

2. Distance to Nearest:
   Building 15 Ft. Seepage Tile Field 80
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 75 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 10/20/87
5. Permanent Pump Installed? Yes ✓ Date 11/8/87 No____
   Manufacturer Red Jacket Type Sub Location well
   Capacity 10 gpm. Depth of Setting 80 Ft.
6. Well Top Sealed? Yes____ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Drill thru
8. Well Disinfected? Yes ✓ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 02 gal. Type Clayton Mark
    Location Crawl Space
11. Water Sample Submitted? Yes____ No____

REMARKS:

Co# 29724

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Ray Edwards Well No.____
    Address Lot 13 & 14 - Lagoona Subd. - Antioch, Il
    Driller Charles E. Madsen License No. 92-202
11. Permit No. 133023 Date 6-30-87
12. Water from Sand formation 13. County Lake
    at depth 90 to 98 ft. Sec. 16.lod
    14. Screen: Diam. 3 in. Twp. 46N
    Length: 5 ft. Slot 10 Rge. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT
Lots 13+14 Lagoona
NW NE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Galv 11 PFT	0	93

16. Size Hole below casing:____in.
17. Static level 50 ft. below casing top which is 1½ ft. above ground level. Pumping level 80 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Blk dirt	4	4
Yellow Clay	18	22
Blue Clay	68	90
Course Sand	8	98

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madsen DATE 11/9/87

PRIVATE WELL 135

IDPH 4.065
1/74 – KNB-1

Pink Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____ Bored ____ Hole Diam. ____ in. Depth ____ ft.
   Curb material ____ Buried Slab: Yes ____ No ____
   b. Driven ____ Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled X Finished in Drift X In Rock ____
   Tubular ____ Gravel Packed ____
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	20

2. Distance to Nearest:
   Building 24 Ft. Seepage Tile Field 88
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 78 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 12-8-77
5. Permanent Pump Installed? Yes ____ Date 12-10-77 No ____
   Manufacturer Star Pkg Type Sub Location well
   Capacity 10 gpm. Depth of Setting 63 Ft.
6. Well Top Sealed? Yes ____ No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Morrill Model Number SBK
   How attached to casing? Drill Thru
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 202 gal. Type Clear X Val.
    Location Basement
11. Water Sample Submitted? Yes X No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ADAM BARYS Well No. 1
    Address LINCOLN DR - ANTIOCH ILL
    Driller C. MADSEN License No. 92-202
11. Permit No. 68143 Date 10-14-77
12. Water from Sand Formation
    at depth 118 to 122 ft.
13. County LAKE
    Sec. 16 bb
    Twp. 46 N
    Rge. 10 E
    Elev. ____
14. Screen: Diam. 2½ in.
    Length: 5 ft. Slot 10

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11 RFT	0	118

16. Size Hole below casing: 2½ in.
17. Static level 50 ft. below casing top which is 1½ ft. above ground level. Pumping level 63 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Peat	12	12
Blue Clay	90	102
Fine Sand	10	112
Coarse Sand	10	122

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C Madsen DATE ____

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 136

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

STRUCTIONS TO ...

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGIN... TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 130 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 4 in. Depth 127 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field ____
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank ____ Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 9/18/74
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer Sta. Rite Type subm
   Capacity 8 gpm. Depth of setting 80 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ____

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Howard Wells Well No. ____
    Address Rt 1 Bx 114, Antioch
    Driller Hoover License No. 30
11. Permit No. 33250 Date 9/23/74
12. Water from sand (Formation) at depth 127 to 130 ft.
13. County Lake
    Sec. 16.7e
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 12 in.
    Length: 3 ft. Slot 12

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	galv T + C	0	127
	10.89 ppf		

SHOW LOCATION IN SECTION PLAT
350'N 1000'E
SW/C NW

16. Size Hole below casing: 4 in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 15 gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Glacial drift	127	127
Sand	3	130

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED L. R. Hoover DATE 9/30/74
bu

IDPH 4.065
10-72
KNB-1

PRIVATE WELL 137

Ill. Dept. of Public Health
Yellow Copy — Well Contractor
Blue Copy — Well Owner

PARTMENT OF PUBLIC HEALTH, ROOM 616 STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 157 ft.
   Curb material____. Buried Slab: Yes____ No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay Slurry	0	22

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron) 25
   Septic Tank 50 Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes X No____
4. Date well completed 6-8-67
5. Permanent Pump Installed? Yes X No 1
   Manufacturer Aeromotor Type Sub
   Capacity 12 gpm. Depth of setting 84 ft.
6. Well Top Sealed? Yes X No____
7. Pitless Adaptor Installed? Yes X No____
8. Well Disinfected? Yes X No____
9. Water Sample Submitted? Yes X No____

REMARKS:

PRIVATE WELL 138

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF 2214 Year 1967
11. Property owner James Walsh Well No. 1
    Address Rt 2 Box 95 Antioch, Ill.
    Driller E. H. Glenn & Sons License No. 92-109
12. Water from Gravel Formation 13. County Lake
    at depth 155 to 157 ft. Sec. 17
    14. Screen: Diam. None in. Twp. 46N
    Length:____ft. Slot____ Rng. 10E
    Elev.____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	steel #1100	0	152 or
			157(?)

16. Size Hole below casing:____in.
17. Static level 65 ft. below casing top which is 8" ft. above ground level. Pumping level 80 ft. when pumping at 18 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil	4	0-4
Yellow Clay	18	4-22
Blue Clay	80	22-102
Fine Sand	48	102-150
Sand & Gravel	5	150-155
Gravel (Water bearing)	2 or 3?	155-159(
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Henry A. Glenn DATE 6-20-67

Copy – Department of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	30

2. Distance to Nearest:
   Building 12 Ft. Seepage Tile Field 75
   Cess Pool____ Sewer (non Cast Iron)____
   Privy____ Sewer (Cast Iron)____
   Septic Tank 55 Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed 6-7-1977
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer AERMOTOR. Type 303 M.
   Capacity 10 gpm. Depth of setting 105 ft.
6. Well Top Sealed? Yes ✓ No 1
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes ✓ No____

REMARKS:

IDPH 4.065
10/68

PRIVATE WELL 139

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner MIKE GANTAR. Well No. 1
    Address 1125 DOUGLAS ST WAUKEGAN ILL
    Driller EKELENNAFFS INC License No. 102-69
11. Permit No. 5686 Date FEB-17-1977
12. Water from SAND (Formation)
    at depth 103 to 120 ft.
13. County LAKE
    Sec. 17.DC
    Twp. 46 N
    Rge. 10 E
    Elev.____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 16
15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	JALK STEEL #1.20	0	119
6"	SIS! SCREEN	119	122.

SHOW LOCATION IN SECTION PLAT

16. Size Hole below casing: 6 in.
17. Static level 25 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 2-6 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
YELLOW CLAY	23	0-23
BLUE CLAY	70	23-93
DIRTY SAND	10	93-103
FINE SAND.	19	103-122

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] Sec. DATE 12-3-1979

Yellow Copy ... Contractor
Blue Co... Owner.

ILLINOIS, 62706. DO NOT DETACH GEOLO... AL ... TER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLURRY	0	32

2. Distance to Nearest:
   Building 18 Ft. Seepage Tile Field 90
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 80 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed 10.19.78
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer AEA MOTOR Type 30 RM in well
   Capacity 10 gpm. Depth of setting 63 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ Merrill attached to casing by clamp No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ____ No ✓

REMARKS: 42 gal. galv. pressure tank located in basement

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner ARTIS ANZINGER Well No. 2
    Address PO BOX 304 ANTIOCH
    Driller ENGLEHN + SONS INC License No. 102-69
11. Permit No. 79299 Date SEPT. 11-79
12. Water from SAND (Formation) at depth 121 to 130 ft.
13. County LAKE
    Sec. 17.2d
    Twp. 46 N
    Rge. 10 E
    Elev. ____
14. Screen: Diam. 5 in.
    Length: 3 ft. Slot 20

SHOW LOCATION IN SECTION PLAT
NW NE SE

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5.	GALV. STEEL #15.00	0	127
5.	S.S. SCREEN	127	130

16. Size Hole below casing: 5 in.
17. Static level 54 ft. below casing top which is ____ ft. above ground level. Pumping level 56 ft. when pumping at 25 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP. SOIL	1	0-1
SANDY CLAY	20	1-21
BLUE CLAY	80	21-101
DIRTY SAND.	20	101-121
SAND + GRAVEL	9	121-130

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] Sec. DATE 11-27-79

PRIVATE WELL 140

White Copy – Ill. Dept. [illegible] Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINE[illegible] INFORMATION REQ[illegible] AND MAIL ORIG[illegible] TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 616, STATE OFFICE BUIL[illegible], SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

1/67

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ____. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20.

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field 100'
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Is water from this well to be used for human consumption?
   Yes ✓ No ~~[illegible]~~
4. Date well completed Late Nov 1968
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer STA-Rite Type Submersible
   Capacity 6.0 gpm Depth of setting 70 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS:
Completion held up by Building Trades – until late in year
Some work still to be done

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. NF4191 Year 1968
11. Property owner Chas M. Solar Well No. 1
    Address ~~[illegible]~~ 425 Lake St. Antioch, Ill
    Driller C. L. Wertz License No. 57
12. Water from Gravel (Formation) 13. County Lake
    at depth 16.5 to ft. ft. Sec. 17.4d
14. Screen: Diam. none in. Twp. 46N
    Length: — ft. Slot — Rng. 10E
    Elev. 787

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	15 lb. galv.	0	16.5

SHOW LOCATION IN SECTION PLAT
400'S, 300'E
NW/C SE

16. Size Hole below casing: none in.
17. Static level 50 ft. below casing top which is 8" ~~ft.~~ above ground level. Pumping level 55 ft. when pumping at 10 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	~~DEPTH OF BOTTOM~~
Brown clay	0 T	15
Blue clay	15 T	120
Fine sand	120 T	130
Clay	130 T	160
Fine sand + gravel	160 T	165
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. L. Wertz DATE Mar 6-1969

PRIVATE WELL 141

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 5 in. Depth 162 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	20

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field 125
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 75 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed July 28 1968
5. Permanent Pump Installed? Yes ✓ No ____
   Manufacturer STA-Rite Type ____
   Capacity 10 gpm. Depth of setting 90 ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ✓ No ____
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS:

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. Charles M Solar NF 4191 Year 1968
11. Property owner ~~C. M. Solar~~ Well No. 1
    Address 425 Lake St. Anchorage, Ill.
    Driller C. L. Wertz License No. 51
12. Water from Drift (Formation) 13. County Lake
    at depth ____ to 162 ft. Sec. 17.4d
14. Screen: Diam. — in. Twp. 46
    Length: — ft. Slot ____ Rng. 10E
    Elev. 780

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	15 lb per ft.	0	
	glx steel		162

SHOW LOCATION IN SECTION PLAT
400'S 300'E
4 NW/CSE

16. Size Hole below casing: None in.
17. Static level 60 ft. below casing top which is 1 ft. above ground level. Pumping level 65 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Top Soil & Br. clay	0	15
Blue clay	21	36
Sandy Clay	54	90
Firm clay	72	
		162
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. F. Wertz DATE July 28, 1968

PRIVATE WELL 142

White
Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Slurry	Surface	20

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 80
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 80 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 9-10-83
5. Permanent Pump Installed? Yes ✓ Date 9-10-83 No ____
   Manufacturer Meyers Type Sub Location Well
   Capacity 12 gpm. Depth of Setting 84 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Water Tight Cap
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Saddle
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 42 gal. Type Pre-charged
    Location Basement
11. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Randy Kuceyaski Well No. 1
    Address 42966 W. Deephole Rd. Antioch Il
    Driller William Blake License No. 72-510
11. Permit No. 108804 Date 8-16-83
12. Water from drift (Formation) at depth 155 to 158 ft.
13. County Lake
    Sec. 17 Sb
    Twp. 46N
    Rge. 10E
    Elev. ____
14. Screen: Diam. 3 3/4 in.
    Length: 3 ft. Slot 12

			x
	x		

SHOW LOCATION IN SECTION PLAT
Lot #12 Sunset Ridge subd NE SE SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	TFC galv. [illegible]	Surface	155

16. Size Hole below casing: 3 in.
17. Static level 70 ft. below casing top which is 1 ft. above ground level. Pumping level 84 ft. when pumping at 12 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Clay	17	17
Blue Sandy Clay	15	32
Blue Smooth Clay	18	50
Hard Pan	60	110
Silty Sand	30	140
Fine Sand	13	153
Coarse Sand	5	158

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [signature] DATE 9-23-84

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 143

...OIS DEPARTMENT OF PUBLIC HEALTH
...LL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam. 4 in. Depth 147 ft.
   Curb material _____. Buried Slab: Yes_____ No_____
   b. Driven _____. Drive Pipe Diam. 4 in. Depth 144 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock_____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 18 Ft. Seepage Tile Field 75
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 50 Barnyard —
   Leaching Pit — Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No_____
4. Date well completed Dec 1 - 71
5. Permanent Pump Installed? Yes ✓ No_____
   Manufacturer Red Jacket Type Submersible
   Capacity 12 gpm. Depth of setting 105 ft.
6. Well Top Sealed? Yes ✓ No_____
7. Pitless Adaptor Installed? Yes ✓ No_____
8. Well Disinfected? Yes ✓ No_____
9. Water Sample Submitted? Yes ✓ No_____

REMARKS:

PW
L 3
144

PRIVATE WELL 144

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

10. Dept. Mines and Minerals permit No. 12483 Year 1971
11. Property owner Alan Joe Hanes Well No._____
    Address Bayview Rd. Antioch, Il
    Driller C. Wert License No. 57
12. Water from Drift (Formation) 13. County Lake
    at depth 144 to 147 ft.
    Sec. 17
    Twp. 46N
    Rng. 10E
    Elev. 770
14. Screen: Diam. 3 in.
    Length: 36 ft. Slot 15

SHOW LOCATION IN SECTION PLAT
550'N 300'W SW/c 10E

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	11.26 galv. steel	0	145

16. Size Hole below casing: — in.
17. Static level 60 ft. below casing top which is 18 ft. above ground level. Pumping level 80 ft. when pumping at 12 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown clay	0 to	18
Blue clay	18 to	50
Grey clay	50 to	90
Soft gray clay	90 to	140
fine sand to	140 to	144
fine gravel	144 to	147
Very fine sand below this depth		147
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED C. L. Wert DATE Dec 1-71

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS ON REVERSE

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored X. Hole Diam. 7-7/8 in. Depth 134 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 5 in. Depth 134 ft.
   c. Drilled X. Finished in Drift X. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Drilling		
Mud	0	128

2. Distance to Nearest:
   Building 50 Ft. Seepage Tile Field 75
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 50 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes X No ____
4. Date well completed 6/18/79
5. Permanent Pump Installed? Yes X Date 6/22/79 No ____
   Manufacturer Red Jacket Type sub Location ____
   Capacity 15 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes X No ____ Type ____
7. Pitless Adapter Installed? Yes X No ____
   Manufacturer Baker Model Number Snappy
   How attached to casing? u clamp
8. Well Disinfected? Yes X No ____
9. Pump and Equipment Disinfected? Yes X No ____
10. Pressure Tank Size 202 gal. Type Well-x-trol
    Location ____
11. Water Sample Submitted? Yes ____ No X

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Teddy Gessler Well No. ____
    Address 41281 N. Bayview Dr. Antioch, IL
    Driller Wm. F. Bluemann License No. 102-142
11. Permit No. 86562 Date 6/12/79
12. Water from Sand & Gravel (Formation) 13. County Lake
    at depth 128 to 134 ft. Sec. 17.5c
14. Screen: Diam. 5 in. Twp. 46N
    Length: 4 ft. Slot 15 Rge. 10E
    Elev. ____

SHOW LOCATION IN SECTION PLAT

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	200 lb P.V.C.	0	130

16. Size Hole below casing 7-7/8 in.
17. Static level 60 ft. below casing top which is 2 ft. above ground level. Pumping level 80 ft. when pumping at 15 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	128	128
Sandy Gravel	6	134

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED ____ DATE ____

IDPH 4.065
1/74 – KNB-1

PRIVATE WELL 145

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, BUREAU OF ENVIRONMENTAL HEALTH, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62701. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes____No____
   b. Driven _____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled X. Finished in Drift X. In Rock____.
   Tubular _____. Gravel Packed _____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 25
   Cess Pool _____ Sewer (non Cast iron) _____
   Privy _____ Sewer (Cast iron) _____
   Septic Tank 50 Barnyard _____
   Leaching Pit _____ Manure Pile _____
3. Is water from this well to be used for human consumption?
   Yes ✓ No _____
4. Date well completed 8-9-73
5. Permanent Pump Installed? Yes ✓ No _____
   Manufacturer Red Jacket Type 1½hp Sub
   Capacity _____gpm. Depth of setting 150 ft.
6. Well Top Sealed? Yes X No _____
7. Pitless Adaptor Installed? Yes X No _____
8. Well Disinfected? Yes X No _____
9. Water Sample Submitted? Yes [illegible] No [illegible]

REMARKS:

IDPH 4.065
10-72
KNB-1

PRIVATE WELL 148

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Robert Messell Well No. _____
    Address [illegible] LAKE [illegible]
    Driller FRED H. MATHESIUS License No. [illegible]
11. Permit No. NE [illegible] Date [illegible]
12. Water from GRAVEL (Formation) 13. County LAKE
    at depth 220 to 285 ft. Sec. 17 SE
    14. Screen: Diam. _____in. Twp. 46 N
    Length: _____ft. Slot _____ Rge. [illegible]
    Elev. _____

SHOW LOCATION IN SECTION PLAT
SE SE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	5# TAC R/D GALV		

16. Size Hole below casing: 5 in.
17. Static level [illegible] ft. below casing top which is 1 ft. above ground level. Pumping level 120 ft. when pumping at 30 gpm for _____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
CLAY	0	100
SAND	100	260
GRAVEL	260	285

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED [illegible] DATE 8-17-73

McHENRY COUNTY WELL & PUMP CO.
4913 W. McCULLOM LAKE RD

Yellow — Well Contractor
Blue — Well Owner

PARTMENT OF PUBLIC HEALTH, ROOM STATE OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY	—	30

2. Distance to Nearest:
   Building 10 Ft. Seepage Tile Field 80
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 60 Barnyard____
   Leaching Pit____ Manure Pile____
3. Is water from this well to be used for human consumption?
   Yes ✓ No____
4. Date well completed 7-15-72
5. Permanent Pump Installed? Yes ✓ No____
   Manufacturer RED JACKET Type SUBMERSIBLE
   Capacity 10 gpm. Depth of setting 65 ft.
6. Well Top Sealed? Yes ✓ No____
7. Pitless Adaptor Installed? Yes ✓ No____
8. Well Disinfected? Yes ✓ No____
9. Water Sample Submitted? Yes____ No____

REMARKS:

IDPH 4.065
10/68

PRIVATE WELL 149

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner CHAS GERMACK JR. Well No.____
    Address R.R. 1 ANTIOCH ILL
    Driller ART WERTZ License No. 92-57
11. Permit No. NF 14954 Date 4-21-72
12. Water from GRAVEL Formation 13. County LAKE
    at depth 150 to 155 ft.
14. Screen: Diam.____in.
    Length:____ft. Slot____

Sec. 17.50
Twp. 46N
Rge. 10E
Elev.____

SHOW LOCATION IN SECTION PLAT
SE NE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	11# STEEL	—	155

16. Size Hole below casing:____in.
17. Static level 42 ft. below casing top which is 1 ft. above ground level. Pumping level 52 ft. when pumping at 10 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BLUE CLAY	160	160
SAND + CLAY	15	175
SAND + GRAVEL	10	185

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Arthur Wertz DATE 9-25-72

Arthur W. Wertz

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug____. Bored____. Hole Diam.____in. Depth____ft.
   Curb material _____. Buried Slab: Yes____No____
   b. Driven____. Drive Pipe Diam.____in. Depth____ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock____.
   Tubular____. Gravel Packed____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay	0	21

2. Distance to Nearest:
   Building 20 Ft. Seepage Tile Field 80
   Cess Pool____ Sewer (non Cast iron)____
   Privy____ Sewer (Cast iron)____
   Septic Tank 75 Barnyard____
   Leaching Pit____ Manure Pile____
3. Well furnishes water for human consumption? Yes ✓ No____
4. Date well completed 4/29/88
5. Permanent Pump Installed? Yes ✓ Date 5/5 No____
   Manufacturer Red Jacket Type Sub Location Well
   Capacity 10 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes ✓ No____ Type____
7. Pitless Adapter Installed? Yes ✓ No____
   Manufacturer Mossell Model Number SPF
   How attached to casing? Drill thru
8. Well Disinfected? Yes____ No____
9. Pump and Equipment Disinfected? Yes ✓ No____
10. Pressure Tank Size 202 gal. Type Well X Trol
    Location Basement
11. Water Sample Submitted? Yes____ No____

REMARKS: Co. # 30772

PRIVATE WELL 150

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner DAVID L. FALES Well No.____
    Address 23676 W. LAKE VISTA AVE., ANTIOCH, ILL
    Driller Charles E. Madsen License No. 92-202 042
11. Permit No. #000499 Date 3/11/88
12. Water from Sand (Formation) at depth 112 to 120 ft.
13. County Lake
    Sec. 17.6a
    Twp. 46N
    Rge. 10E
    Elev.____
14. Screen: Diam. 5 in.
    Length: 5 ft. Slot 10

	X		

SHOW LOCATION IN SECTION PLAT
SW, SE, SW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11# FT	0	115

16. Size Hole below casing:____in.
17. Static level 70 ft. below casing top which is 1½ ft. above ground level. Pumping level 100 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Blk dirt	2	2
Yellow Clay & Sand	19	21
Blue Clay	81	102
Fine Sand	10	112
Course Sand	8	120

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Charles E Madsen DATE 5/2/88

Yello - Well Contractor
Blue ell Owner

PARTMENT OF P C HEALTH, ROO STATE OFFICE DING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOL L/WATER SURVEY CTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth 156 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. 5 in. Depth 153 ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
clay slurry	0	20

2. Distance to Nearest:
   Building — 12 Ft. Seepage Tile Field not in yet
   Cess Pool — Sewer (non Cast iron) ____
   Privy — Sewer (Cast iron) —
   Septic Tank not in yet Barnyard —
   Leaching Pit ____ Manure Pile —
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed Sept 2-1972
5. Permanent Pump Installed? Yes ____ No ✓
   Manufacturer — Type —
   Capacity ____ gpm. Depth of setting — ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ____ No ✓
8. Well Disinfected? Yes ✓ No ____
9. Water Sample Submitted? Yes ✓ No ____

REMARKS:
Pump by other contractor

IDPH 4.065
10/68

PRIVATE WELL 151

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Feckner Construction Co. Well No. 1
    Address 116 O'-W-Bluebound Rd - Wauwatosa
    Driller C. L. WERTZ License No. 57 Misc
11. Permit No NF 16310 Date Sept 6-72
12. Water from Drift (Formation) at depth 153 to 156 ft.
13. County Lake
    Sec. 17
    Twp. 46N
    Rge. 10E
    Elev. 760
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 10

15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5"	15 lb galv	0	153

SHOW LOCATION IN SECTION PLAT
300'N 100'E SW/c
SE NW

16. Size Hole below casing: none in.
17. Static level 40 ft. below casing top which is 15" ft. above ground level. Pumping level 50 ft. when pumping at 15 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Fill & Topsoil clay	0	15	
Mushy clay	15	50	
Clay gravel	50	90	
Muck clay	90	110	
Smooth "	110	145	
Sand fine	145	150	
Sand fine gravel	150	156	

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE Aug 6-72
Charles L. Wertz

White Copy – Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ___. Bored —. Hole Diam. — in. Depth 173 ft.
   Curb material —. Buried Slab: Yes — No —
   b. Driven —. Drive Pipe Diam. 4 in. Depth 173 ft.
   c. Drilled X. Finished in Drift X. In Rock —.
   Tubular —. Gravel Packed —.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Clay slurry	0	20

2. Distance to Nearest:
   Building 30 Ft. Seepage Tile Field 90
   Cess Pool — Sewer (non Cast iron) —
   Privy — Sewer (Cast iron) —
   Septic Tank 75 Barnyard —
   Leaching Pit — Manure Pile —
3. Well furnishes water for human consumption? Yes ✓ No ___
4. Date well completed July 31 - 84
5. Permanent Pump Installed? Yes ✓ Date 8/3/84 No —
   Manufacturer Red Jacket Type Sub Location well
   Capacity 10 gpm. Depth of Setting 90' Ft.
6. Well Top Sealed? Yes ✓ No ___ Type Compression
7. Pitless Adapter Installed? Yes ✓ No ___
   Manufacturer Merril Model Number 52K
   How attached to casing? Compression
8. Well Disinfected? Yes ___ No ✓
9. Pump and Equipment Disinfected? Yes ✓ No ___
10. Pressure Tank Size 30 gal. Type Captive Air
    Location Basement
11. Water Sample Submitted? Yes ✓ No ___

REMARKS:

IDPH 4.065
1/74 – KNB-1

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Brian Ehlert Well No. ___
    Address 41617 Lake View Dr. Antioch, IL
    Driller C. L. Wertz License No. 37
11. Permit No. 113645 Date Aug 4 - 84
12. Water from Drift (Formation) 13. County Lake
    at depth ___ to 173 ft. Sec. 12 CF
14. Screen: Diam. 4 in. Twp. 46N
    Length: 40 ft. Slot 15 Rge. 10E
    Elev. ___

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	11 16-gal steel	0	173

SHOW LOCATION IN SECTION PLAT (Sec. 12 N 1/2 of Sec. 1 N)

16. Size Hole below casing: — in.
17. Static level 30 ft. below casing top which is 1 ft. above ground level. Pumping level 33 ft. when pumping at 10 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH		THICKNESS	DEPTH OF BOTTOM
Brown clay	0-18		
Firm Blue clay	18-84		
Soft muck clay	84-115		
Sandy clay	115-145		
Dirty sand	145-158		
Clean "	158-170		
Clean fine gravel	170-173		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED C. L. Wertz DATE ___

PRIVATE WELL 152

Permit No. 666

DEPARTMENT
MINES AND MINERALS
RECEIVED
MAR 9 1944
DIVISION OF
OIL and GAS CONSERVATION

PW Log 118

LOG OF WATER WELL

Property owner R. Laursen Well No. 1

Drilled by C. L. Wertz Year 1944

Formations passed through	Thickness	Depth of Bottom
Top soil & Brown clay	18	18
Grey clay & stones	167	185
Dry Lime gravel	5	190
Limestone		215

[Continue on back if necessary]

Finished in Limestone at 190 to 215 ft.

Cased with 4 inch Water well pipe from 0 to 190 ft.

and — inch — from — to — ft.

Size hole below casing 4 inch. Static level from surf. 30 ft.

Tested capacity 6 gal. per min. Temperature — °F.

Water lowered to 50 ft. in. in 4 hrs. — min.

Length of test 8 hrs. — min. Screen —

Slot — Diam. — Length — Bottom set at — ft.

[Show location in Section Plat]

Township name Newport Elev. 722 Sec. 16

Description of location 1000 St. N. of Twp. 46-N

4.173 1400' N line 2600' E line of NE Rge. 10-E

Signed C. L. Wertz County Lake

Copy for Illinois State Water Survey Index:

PRIVATE WELL 118

Ill. Dept. of Public Health
Yellow Copy – Well Contractor
Blue Copy – Well Owner

FILE IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. ____ in. Depth ____ ft.
   Curb material ____, Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
Slurry	Surface	20

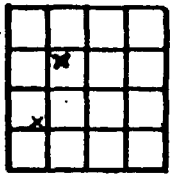
2. Distance to Nearest:
   Building 70 Ft. Seepage Tile Field 120
   Cess Pool ____ Sewer (non Cast iron) ____
   Privy ____ Sewer (Cast iron) ____
   Septic Tank 100 Barnyard ____
   Leaching Pit ____ Manure Pile ____
3. Well furnishes water for human consumption? Yes ✓ No ____
4. Date well completed 4-19-79
5. Permanent Pump Installed? Yes ✓ Date 4-19-79 No ____
   Manufacturer Red Jacket Type Sub. Location Well
   Capacity 12 gpm. Depth of Setting 80 Ft.
6. Well Top Sealed? Yes ✓ No ____ Type Water Tight Cap
7. Pitless Adapter Installed? Yes ✓ No ____
   Manufacturer Merrill Model Number SPK
   How attached to casing? Saddle
8. Well Disinfected? Yes ✓ No ____
9. Pump and Equipment Disinfected? Yes ✓ No ____
10. Pressure Tank Size 82 gal. Type X-Trol
    Location Basement
11. Water Sample Submitted? Yes ____ No ✓

REMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner Michael Sweeney Well No. 1
    Address 212 N. Rte 59, Ingleside, IL.
    Driller William Blake License No. 92-510
11. Permit No. 83230 Date 1-3-79
12. Water from Drift (Formation) 13. County Lake
    at depth 118 to 122 ft. Sec. 17.7c
14. Screen: Diam. 3¾ in. Twp. 46N
    Length: 4 ft. Slot 12 Rge. 10E
    Elev. ____

	x		
x			



SHOW LOCATION IN SECTION PLAT
SE NW 1/4

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
4"	Galv. T+C 11.00 lbs per ft.	Surface	118

16. Size Hole below casing: 3 in.
17. Static level 55 ft. below casing top which is 1 ft. above ground level. Pumping level 60 ft. when pumping at 22 gpm for 4 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
fill	3	3
Black	2	5
Peat	6	11
Yellow clay	9	20
Blue clay	25	45
Hard Pan	30	75
Sandy clay	32	107
Sand + Gravel Bankrun	10	117
Red Sand	5	122

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED William D. Blake DATE 4-30-79

PRIVATE WELL 153

IDPH 4.065
1/74 – KNB-1

N

RESULTS OF LANDFILL CAP EVALUATION

N1 Geotechnical Analytical Results
N2 Boutwell Test Data

N1

GEOTECHNICAL ANALYTICAL RESULTS

Western Atlas International
A Litton/Dresser Company

CORE LABORATORIES

Warzyn, Inc.
HUD Landfill

Table 1
X-ray Diffraction Analysis

File: 193113

Sample ID	Relative Abundance/ Net Clay (weight %)	Illite	Kaolinite	Fe-chlorite	Illite/smectite	Chlorite/smectite
HD-SCPT1-28"	Relative Abundance	84	2	14	0	0
	34	28	1	5	0	0
HD-SCPT3-32"	Relative Abundance	47	1	3	49	0
	34	16	tr	1	17	0
HD-SCPT4-50"	Relative Abundance	64	1	6	29	0
	37	24	tr	2	11	0
HD-SCPT6-52"	Relative Abundance	83	2	15	0	0
	34	28	1	5	0	0
HD-SCPT8-70"	Relative Abundance	84	2	14	0	0
	31	26	1	4	0	0
HD-SCPT9-50"	Relative Abundance	81	2	17	0	0
	34	27	1	6	0	0

% smectite in mixed-layer illite/smectite is 60%

ANALYTICAL PROCEDURES

A sample selected for X-ray diffraction analysis is dried and cleaned of obvious contaminants. The sample is dried, weighed, placed in water, and treated with a sonic probe for 5 minutes. The resultant slurry is centrifuged to fractionate the sample at 4 microns. The >4 micron fraction is dried and weighed to determine the percent of clay- and silt-sized material. The suspended <4 micron fraction is suctioned onto a pure silver substrate to orient the clay mineral particles. The <4 micron sample mount is run in an air-dried state and then treated with ethylene glycol vapor for 24 hours and run again. The diffractograms are then analyzed for mineral content using a profile-fitting algorithm. The integrated areas from the profile-fitting algorithm are entered into a spreadsheet which contains correction coefficients for numerous minerals. These coefficients were obtained according to the adiabatic method outlined by Chung (1974). Tabular data are reported in weight percent format.

Reference

Chung, F.H. (1974) Quantitative interpretation of X-ray diffraction patterns of mixtures. II. Adiabatic principle of X-ray diffraction analysis of mixtures. Journal of Applied Crystallography, 7, 526-531.

WARZYN

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LABORATORY RESULTS

Project: HOD

Project #: 10010201

Location: Antioch, Illinois

Sample Number	Location	Dry Unit Weight lb/cu ft
6979-0001	HD-SCTP1-18	115.5
6979-0002	HD-SCTP2-25	109.3
6979-0003	HD-SCTP5-22	117.7
6979-0004	HD-SCTP6-39	116.4
6979-0005	HD-SCTP8-58	128.3
6979-0006	HD-SCTP10-43	121.9

Ck'd: KJ **App'd:** [illegible]
Date Issued: 7/23/93

[vet-solv-97]
10010201-lab

Job No. 100102
Date: 07/16/93

FALLING HEAD PERMEABILITY TEST

Warzyn Inc., 1 Science Court, Madison, WI 53711 Phone: (608) 231-6955 or 231-4747

PROJECT	H.O.D. LANDFILL RI/FS
LOCATION	Antioch, Illinois
SAMPLE	HD-SCTP3-26
DEPTH (ft)	
SOIL DESCRIPTION (a)	Gray-Brown Lean CLAY, Some Sand, Little Gravel (CL)
SAMPLE DIAMETER (cm)	7.4
SAMPLE AREA, A (cm^2)	42.6

	INITIAL	FINAL
SAMPLE LENGTH, L (cm)	17.6	17.6
MOISTURE CONTENT, %	16.2	16.3
DRY DENSITY (lb/cu ft)	112.7	112.8
PERCENT COMPACTION	-	-

RUN	COEFFICIENT OF PERMEABILITY, k (cm/sec)
1	1.7E-08
2	1.1E-08
3	1.2E-08
4	1.4E-08
5	1.2E-08
6	1.1E-08
7	9.9E-09
8	9.6E-09
9	9.9E-09
10	9.1E-09
11	8.4E-09

AVERAGE COEFFICIENT OF PERMEABILITY = 9.3E-09 cm/sec
(Based on run numbers 8 through 11)

FORMULA: $k = \frac{2.3aL}{At} \log_{10} \frac{h_0}{h_1}$, Where a = cross-sectional area of standpipe,
t = time for water level to fall from initial height, h_0, to final height, h_1
(All other terms are defined above)

FOOTNOTES: (a) Visual Soil Description.

REMARKS: This permeability test was performed on a relatively undisturbed 3-inch diameter Shelby tube sample.

CHECKED BY: CLS DATE: 7-16-93 APPROVED BY: VSR DATE: 7.22.93

Job No. 100102
Date: 07/16/93

FALLING HEAD PERMEABILITY TEST

Warzyn Inc., 1 Science Court, Madison, WI 53711 Phone: (608) 231-6955 or 231-4747

PROJECT	H.O.D. LANDFILL RI/FS
LOCATION	Antioch, Illinois
SAMPLE	HD-SCTP4-30
DEPTH (ft)	
SOIL DESCRIPTION (a)	Gray-Brown Lean CLAY, Some Sand, Trace Gravel (CL)
SAMPLE DIAMETER (cm)	7.4
SAMPLE AREA, A(cm^2)	42.6

	INITIAL	FINAL
SAMPLE LENGTH, L (cm)	18.5	18.5
MOISTURE CONTENT, %	19.6	19.9
DRY DENSITY (lb/cu ft)	105.7	103.8
PERCENT COMPACTION	-	-

RUN	COEFFICIENT OF PERMEABILITY, k(cm/sec)
1	3.2E-08
2	2.1E-08
3	1.2E-08
4	1.7E-08
5	1.6E-08
6	1.5E-08
7	1.6E-08
8	1.6E-08
9	1.5E-08
10	1.2E-08

AVERAGE COEFFICIENT OF PERMEABILITY = 1.4E-08 cm/sec
(Based on run numbers 8 through 10)

FORMULA: $k = \frac{2.3aL}{At} \log_{10} \frac{h_0}{h_1}$, Where a = cross-sectional area of standpipe, t = time for water level to fall from initial height, h_0, to final height, h_1 (All other terms are defined above)

FOOTNOTES: (a) Visual Soil Description.

REMARKS: This permeability test was performed on a relatively undisturbed 3-inch diameter Shelby tube sample.

CHECKED BY: CLS DATE: 7-16-93 APPROVED BY: VJR DATE: 7.22.93

Job No. 100102
Date: 07/16/93

FALLING HEAD PERMEABILITY TEST

Warzyn Inc., 1 Science Court, Madison, WI 53711 Phone: (608) 231-6955 or 231-4747

PROJECT	H.O.D. LANDFILL RI/FS
LOCATION	Antioch, Illinois
SAMPLE	HD-SC1P7-35
DEPTH (ft)	
SOIL DESCRIPTION (a)	Brown Lean CLAY, Some Sand, Trace Gravel (CL)
SAMPLE DIAMETER (cm)	7.4
SAMPLE AREA, A(cm^2)	42.6

	INITIAL	FINAL
SAMPLE LENGTH, L(cm)	18.3	18.3
MOISTURE CONTENT, %	18.6	18.7
DRY DENSITY (lb/cu ft)	108.2	108.4
PERCENT COMPACTION	-	-

RUN	COEFFICIENT OF PERMEABILITY, k(cm/sec)
1	4.8E-08
2	4.6E-08
3	4.5E-08
4	4.1E-08
5	4.0E-08
6	3.9E-08
7	4.2E-08
8	3.8E-08
9	3.8E-08
10	3.6E-08

AVERAGE COEFFICIENT OF PERMEABILITY = 3.7E-08 cm/sec
(Based on run numbers 8 through 10)

FORMULA: $k = \frac{2.3aL}{At} \log_{10} \frac{h_0}{h_1}$, Where a = cross-sectional area of standpipe,
t = time for water level to fall from initial height, h_0, to final height, h_1
(All other terms are defined above)

FOOTNOTES: (a) Visual Soil Description. Bottom 2" of sample - Gray Lean CLAY, Trace Sand (CL)

REMARKS: This permeability test was performed on a relatively undisturbed 3-inch diameter Shelby tube sample.

CHECKED BY: CLS DATE: 7-16-93 APPROVED BY: VJR DATE: 7-22-93

Job No. 100102
Date: 07/16/93

FALLING HEAD PERMEABILITY TEST

Warzyn Inc., 1 Science Court, Madison, WI 53711 Phone: (608) 231-6955 or 231-4747

PROJECT	H.O.D. LANDFILL RI/FS
LOCATION	Antioch, Illinois
SAMPLE	HD-SCTP9-29
DEPTH (ft)	
SOIL DESCRIPTION	Gray Lean CLAY, Trace Sand and Gravel (CL)
SAMPLE DIAMETER (cm)	7.4
SAMPLE AREA, A(cm^2)	42.6

	INITIAL	FINAL
SAMPLE LENGTH, L(cm)	18.2	18.2
MOISTURE CONTENT, %	14.5	15.1
DRY DENSITY (lb/cu ft)	114.7	114.9
PERCENT COMPACTION	-	-

RUN	COEFFICIENT OF PERMEABILITY, k(cm/sec)
1	1.0E-07
2	4.0E-08
3	3.7E-08
4	3.1E-08
5	3.2E-08
6	2.9E-08
7	3.1E-08
8	3.0E-08
9	3.0E-08
10	3.0E-08

AVERAGE COEFFICIENT OF PERMEABILITY = 3.0E-08 cm/sec
(Based on run numbers 8 through 10)

FORMULA: $k = \frac{2.3aL}{At} \log_{10} \frac{h_0}{h_1}$, where a = cross-sectional area of standpipe,
t = time for water level to fall from initial height, h_0, to final height, h_1
(All other terms are defined above)

REMARKS: This permeability test was performed on a relatively undisturbed 3-inch diameter Shelby tube sample.

CHECKED BY: CLS DATE: 7-16-93 APPROVED BY: VJR DATE: 7-22-93

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MOISTURE - DENSITY CURVE

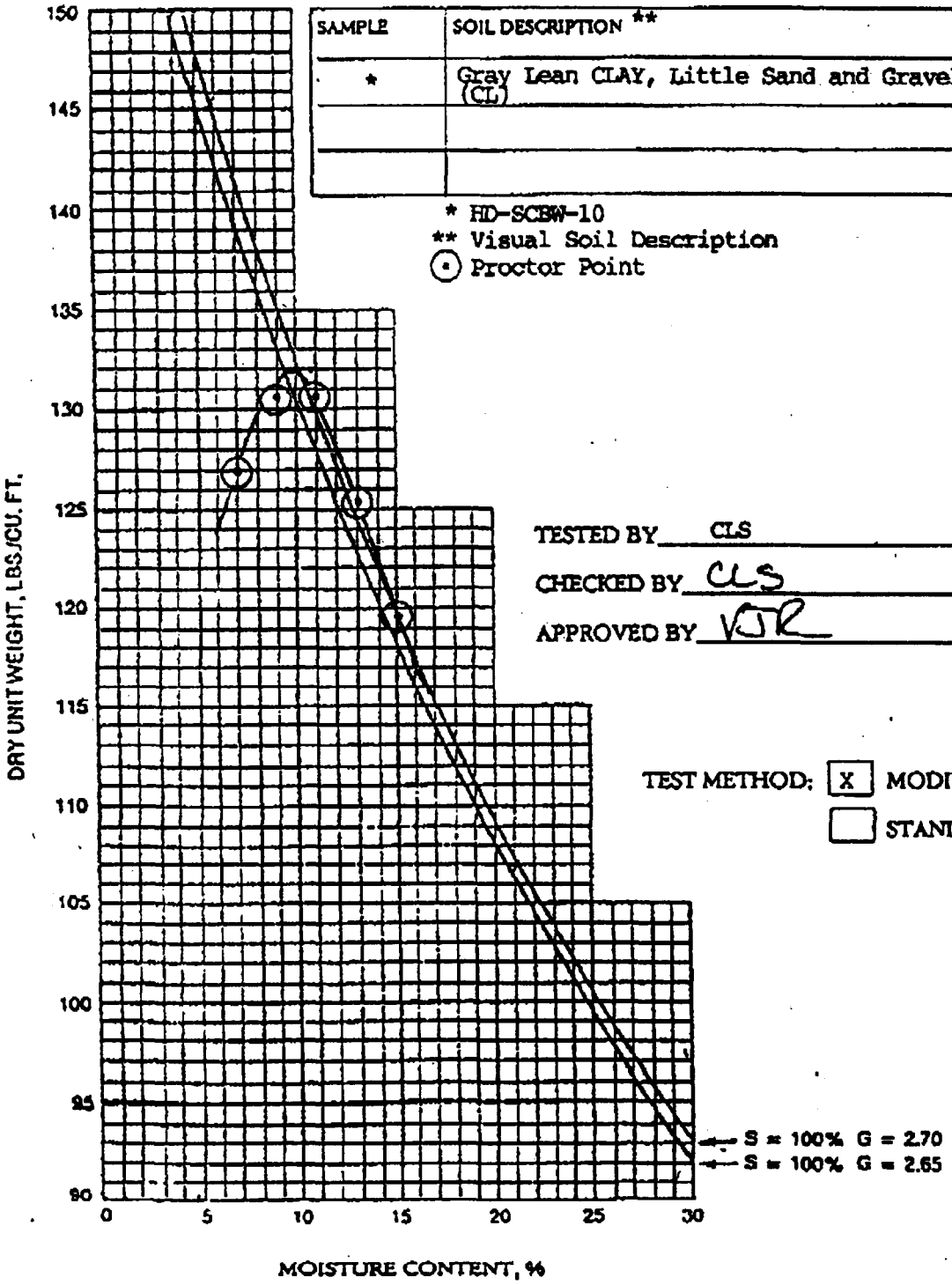
PROJECT: H.O.D. LANDFILL RI/FS LOCATION Antioch, Illinois

FDT REPORT No. _____ JOB No. 10010201 DATE: 7/16/93

SHEET 1 of 4

SAMPLE	SOIL DESCRIPTION **	MAXIMUM DENSITY	OPTIMUM MOISTURE
*	Gray Lean CLAY, Little Sand and Gravel (CL)	132 pcf	10 %

* HD-SCBW-10
** Visual Soil Description
⊙ Proctor Point



TESTED BY CLS

CHECKED BY CLS

APPROVED BY VJR

TEST METHOD: [X] MODIFIED PROCTOR

[ ] STANDARD PROCTOR

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MOISTURE - DENSITY CURVE

PROJECT: H.O.D. LANDFILL RI/FS LOCATION Antioch, Illinois

FDT REPORT No. _____ JOB No. 10010201 DATE: 7/16/93

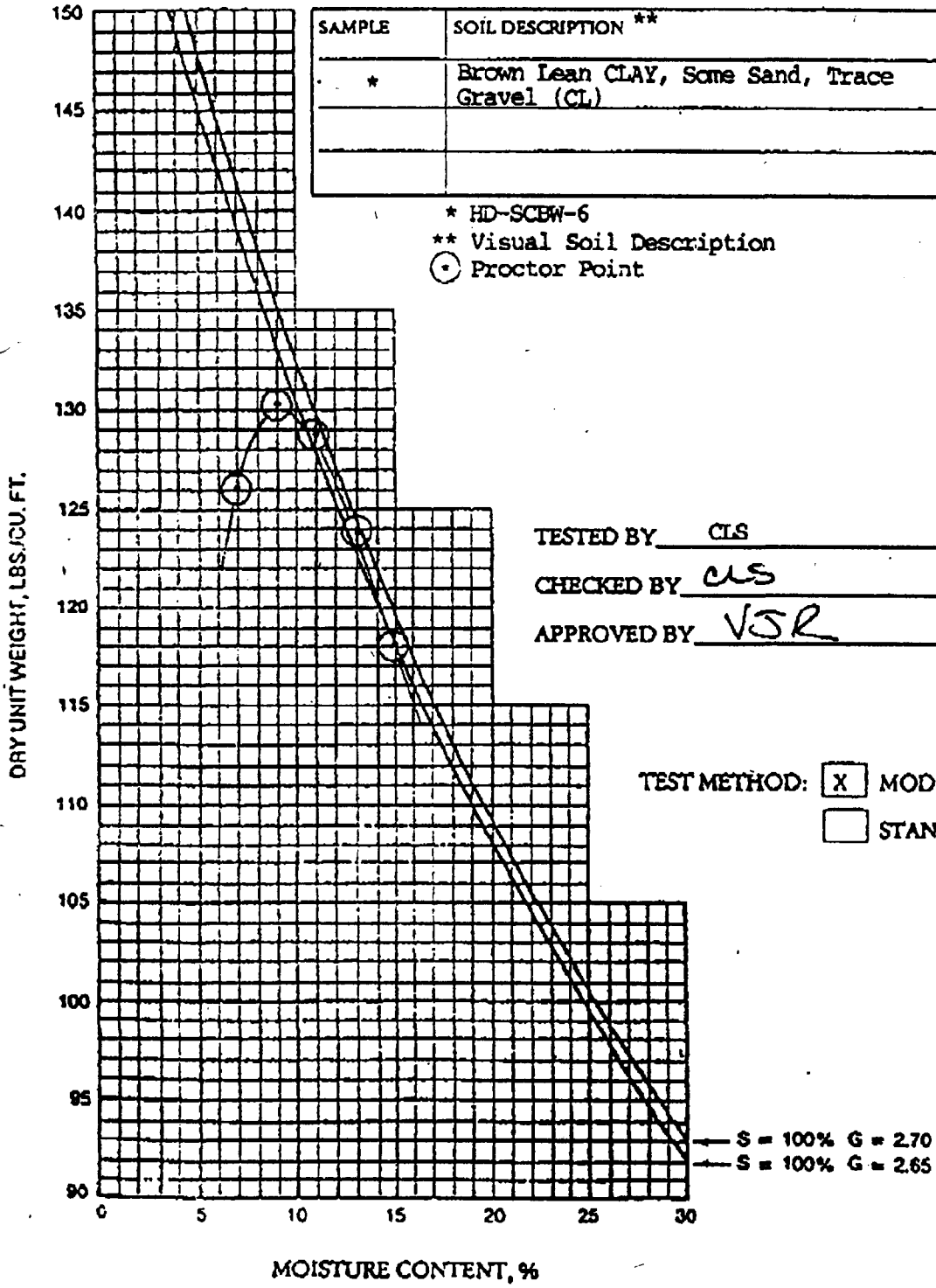
SHEET 2 of 4

SAMPLE	SOIL DESCRIPTION **	MAXIMUM DENSITY	OPTIMUM MOISTURE
*	Brown Lean CLAY, Some Sand, Trace Gravel (CL)	130 pcf	9 %

* HD-SCBW-6

** Visual Soil Description

⊙ Proctor Point



TESTED BY CLS

CHECKED BY CLS

APPROVED BY VJR

TEST METHOD: [X] MODIFIED PROCTOR

[ ] STANDARD PROCTOR

WARZYN

MOISTURE - DENSITY CURVE

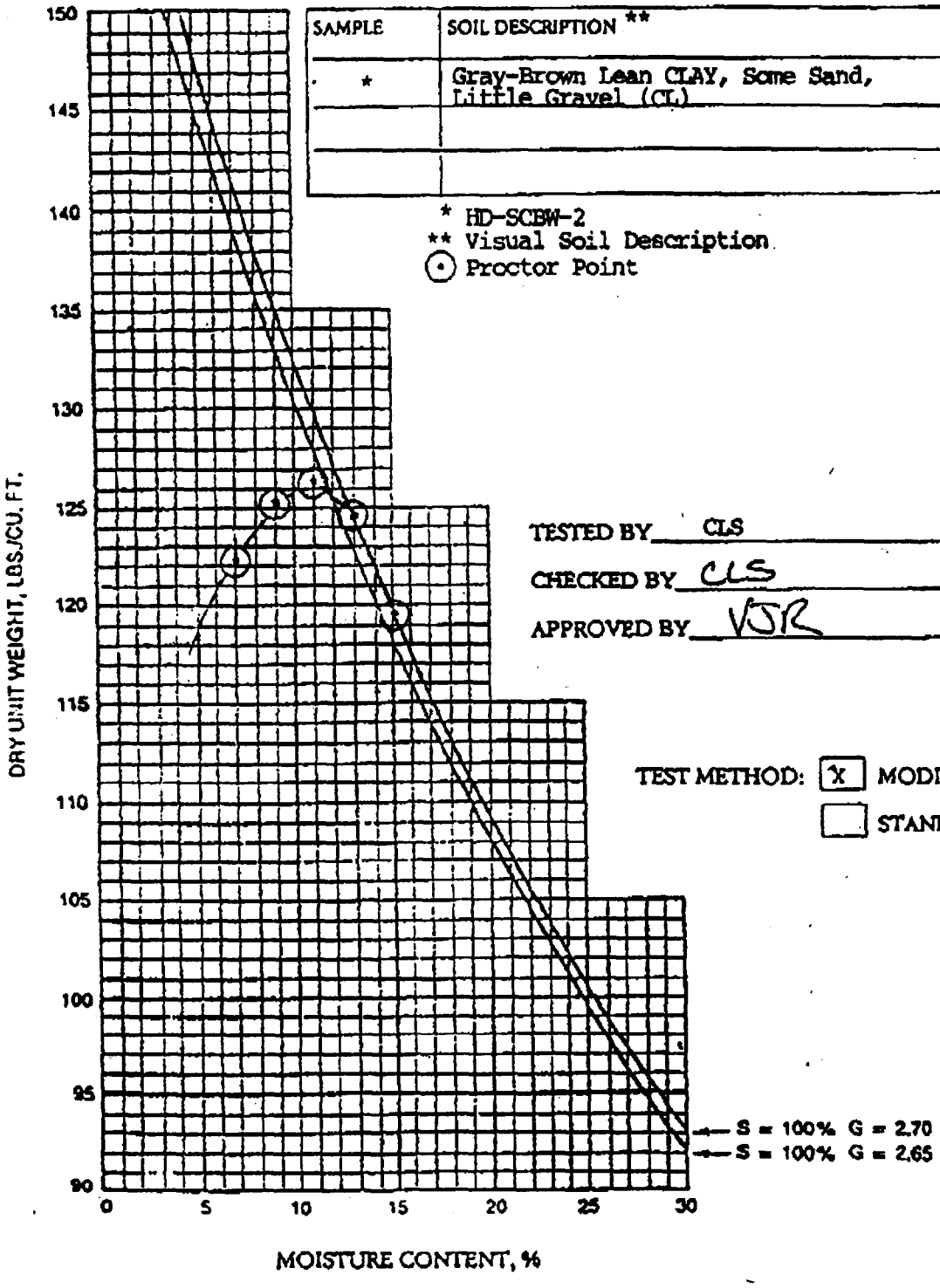
PROJECT: H.O.D. LANDFILL RI/FS LOCATION Antioch, Illinois

FDT REPORT No. _____ JOB No. 10010201 DATE: 7/16/93

SHEET 3 of 4

SAMPLE	SOIL DESCRIPTION **	MAXIMUM DENSITY	OPTIMUM MOISTURE
*	Gray-Brown Lean CLAY, Some Sand, Little Gravel (CL)	126 pcf	11 %

* HD-SCBW-2
** Visual Soil Description
⊙ Proctor Point



TESTED BY CLS

CHECKED BY CLS

APPROVED BY VJR

TEST METHOD: [X] MODIFIED PROCTOR

[ ] STANDARD PROCTOR

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MOISTURE - DENSITY CURVE

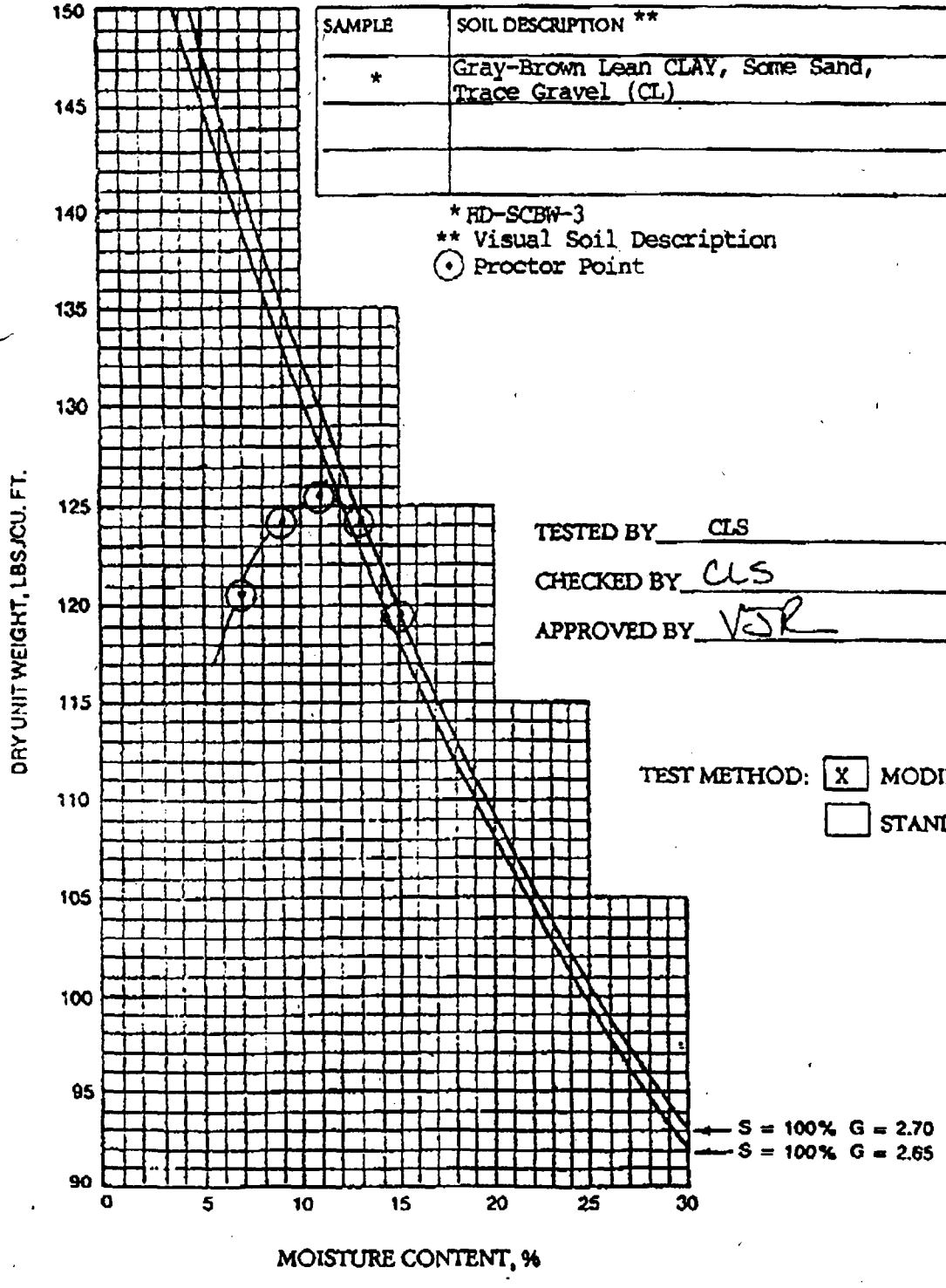
PROJECT: H.O.D. LANDFILL RI/FS LOCATION Antioch, Illinois

FDT REPORT No. _____ JOB No. 10010201 DATE: 7/16/93

SHEET 4 of 4

SAMPLE	SOIL DESCRIPTION **	MAXIMUM DENSITY	OPTIMUM MOISTURE
*	Gray-Brown Lean CLAY, Some Sand, Trace Gravel (CL)	126 pcf	11 %

* HD-SCBW-3
** Visual Soil Description
⊙ Proctor Point



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TEST METHOD: [X] MODIFIED PROCTOR

[ ] STANDARD PROCTOR

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LABORATORY RESULTS

Project: HOD Landfill

Project #: 10010201

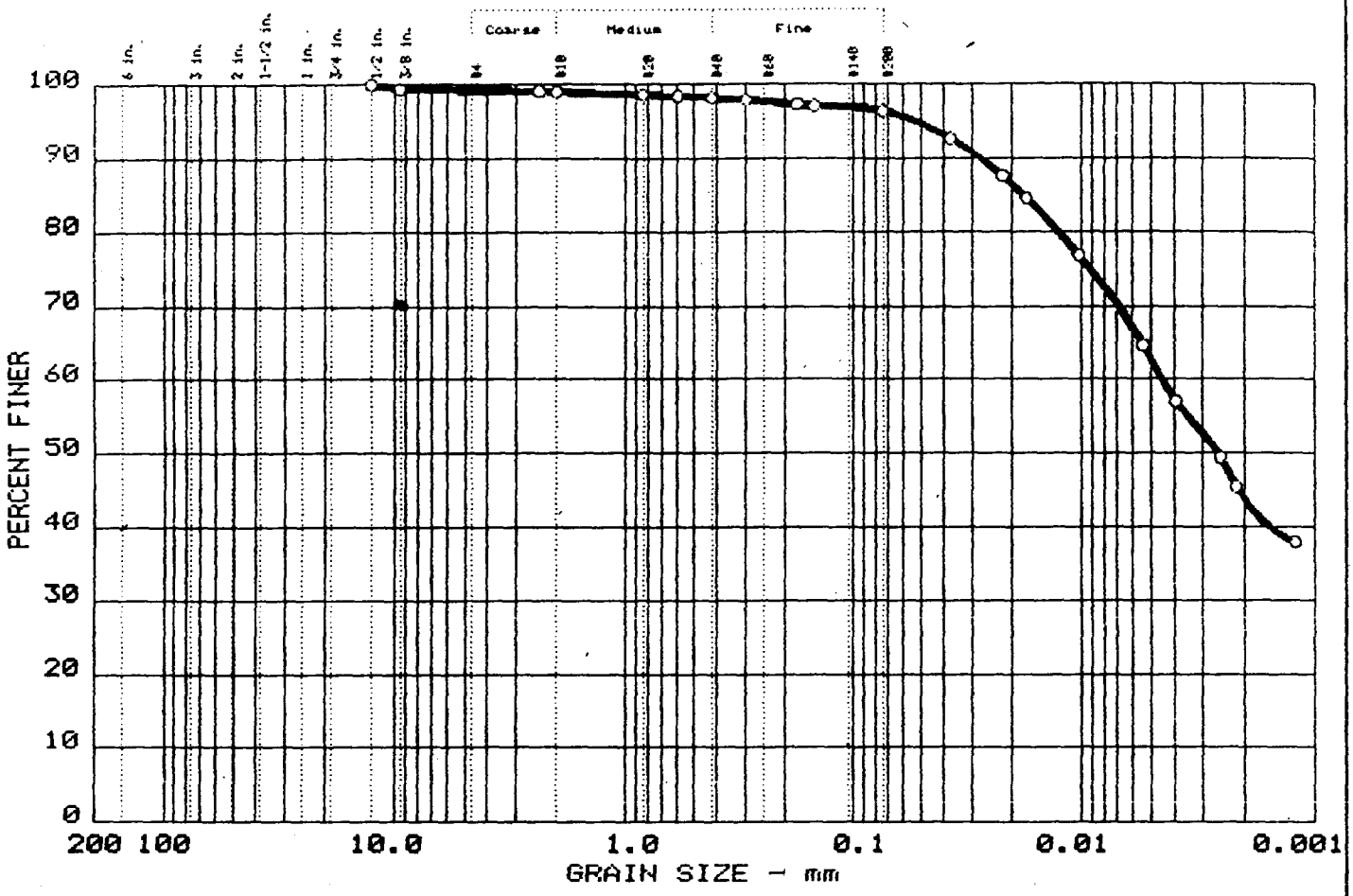
Location: Antioch, Illinois

Sample Number	Description	Natural Moisture
6838-0001	HD-SCTP1-28"	18.7
6838-0002	HD-SCTP2-38"	14.3
6838-0003	HD-SCTP3-32"	19.4
6838-0004	HD-SCTP4-50"	17.6
6838-0006	HD-SCTP6-52"	18.2
6838-0007	HD-SCTP5-19"	13.7
6838-0009	HD-SCTP8-70"	14.8
6838-0010	HD-SCTP9-50"	33.6
6838-0011	HD-SCTP10-45"	16.1
6838-0012	HD-SCTP10-45"-91	15.6
6838-0013	HD-SCTP7-20"	23.8

Ck'd: JMR **App'd:** DTL
Date Issued: 6-25-93

[var-soils-003]
10010201-lab

GRAIN SIZE DISTRIBUTION TEST REPORT



Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	0.7	2.9	33.6	62.8

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	34	15			0.00					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Trace Sand and Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP1-28"

Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY VJR

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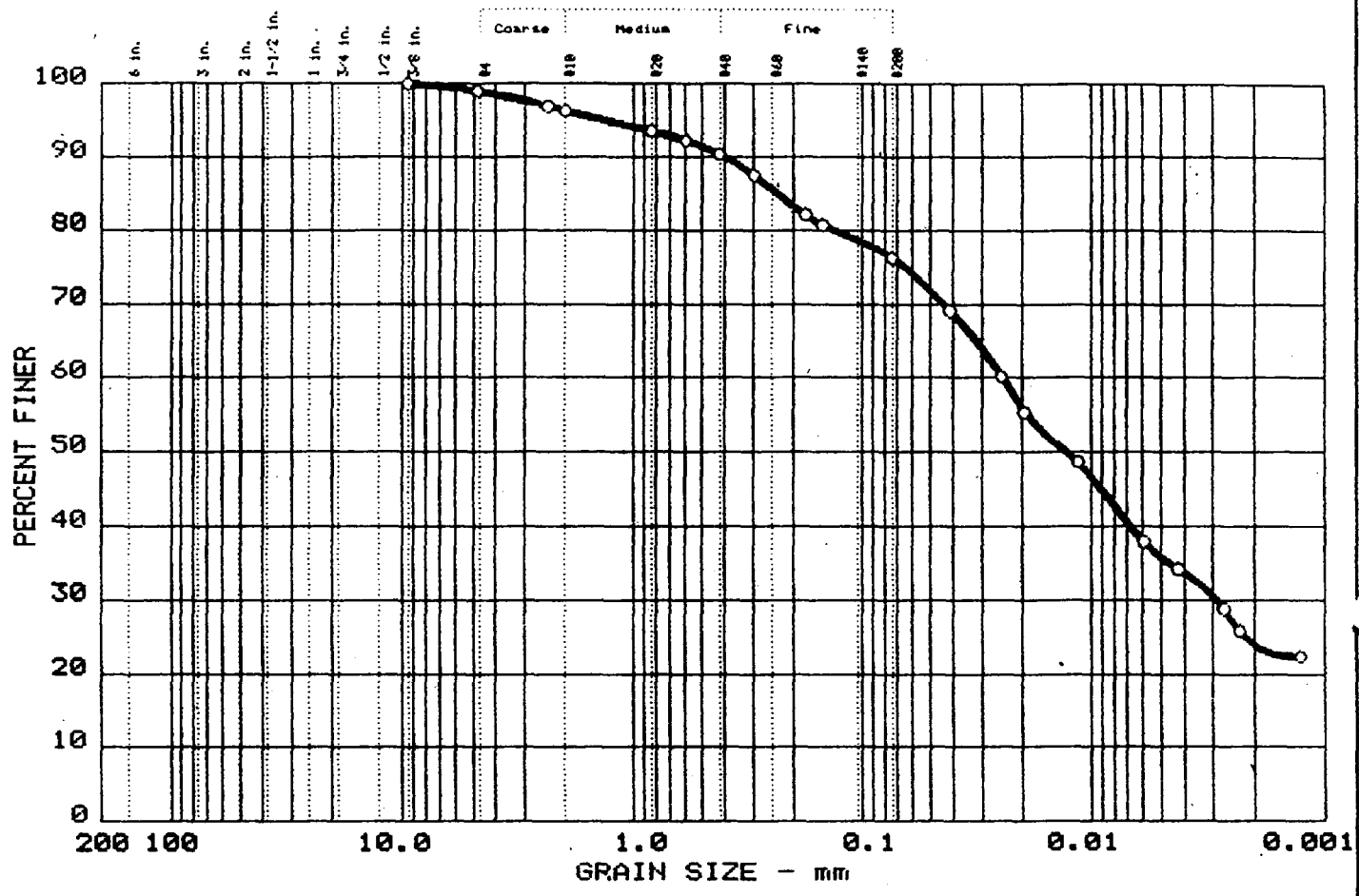

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.0	22.6	40.6	35.8

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	31	14	0.23		0.01	0.003				

MATERIAL DESCRIPTION	USCS
○ Brown Lean CLAY, Some Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP2-38"

Date: 6/18/93

Remarks:
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APPROVED BY VJK

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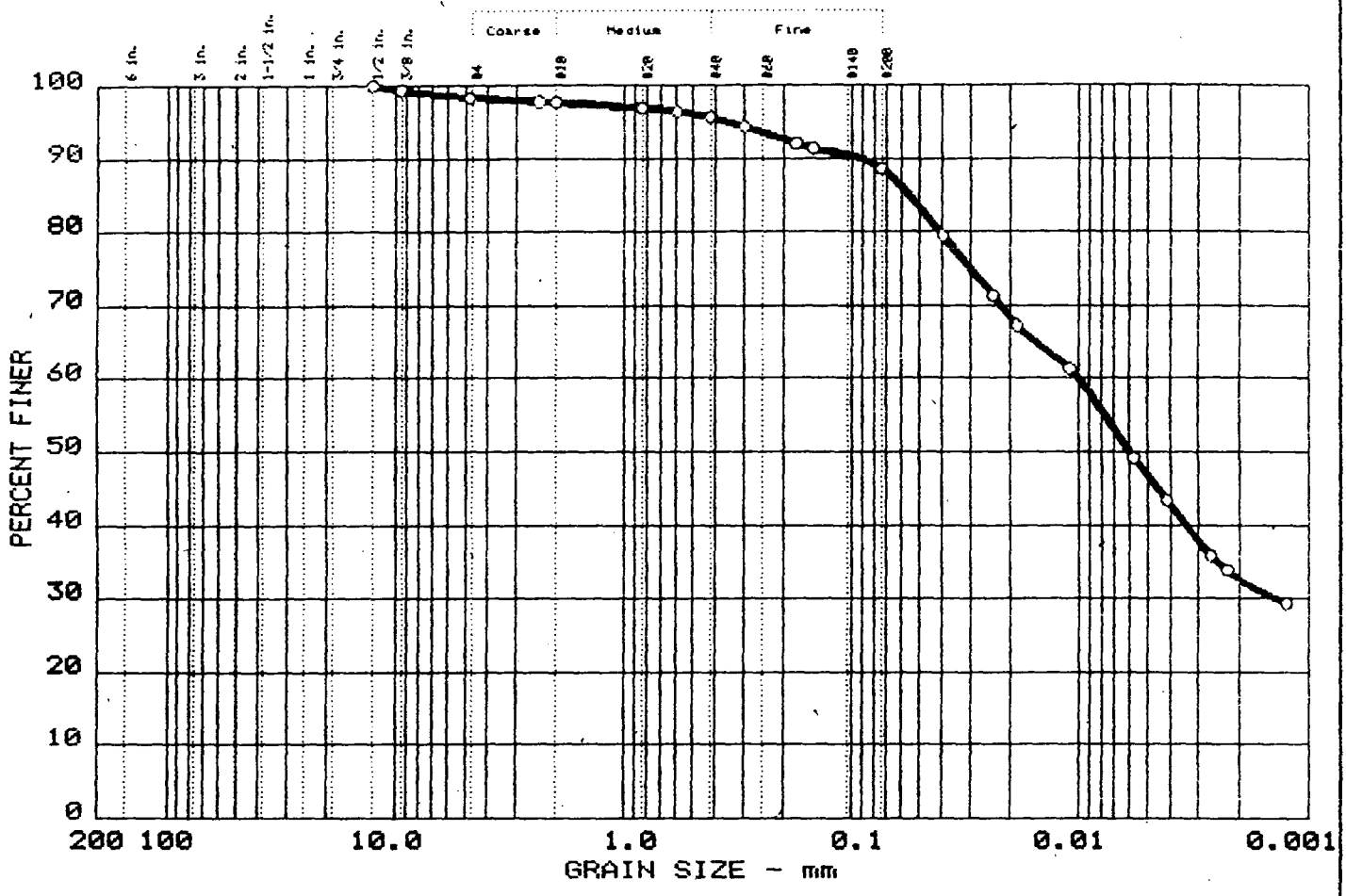

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.6	9.7	41.9	46.8

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	38	21			0.01	0.001				

MATERIAL DESCRIPTION	USCS
○ Brown-Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP3-32"

Date: 6/18/93

Remarks:
TESTED BY CLS
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APPROVED BY VSR

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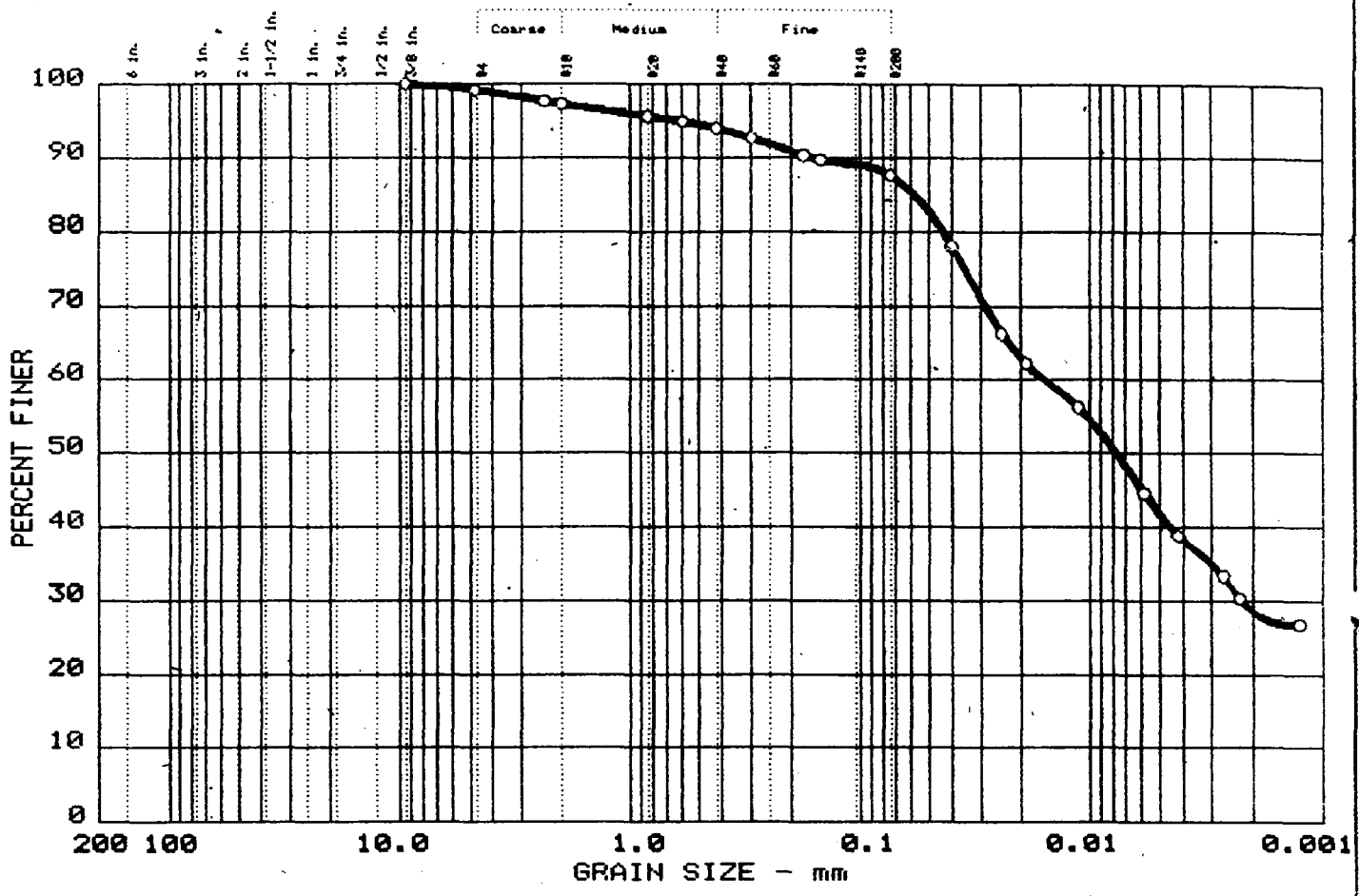

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	0.8	11.5	46.1	41.6

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	33	16			0.01	0.002				

MATERIAL DESCRIPTION	USCS
○ Brown Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP4-50"

Date: 6/18/93

Remarks:
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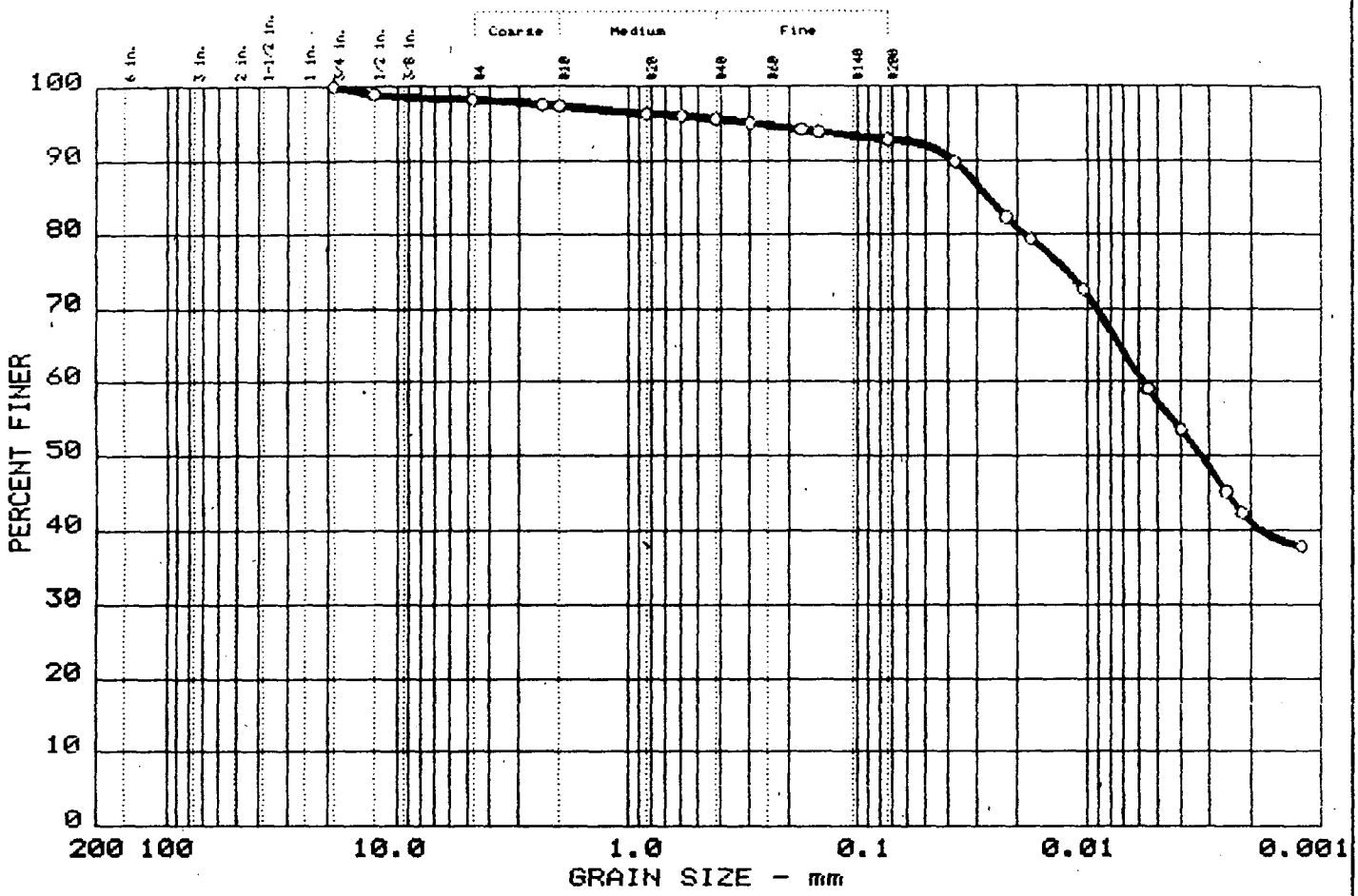

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.7	5.4	35.5	57.4

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	38	19			0.00					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP6-52"

Date: 6/18/93

Remarks:
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APPROVED BY VJR

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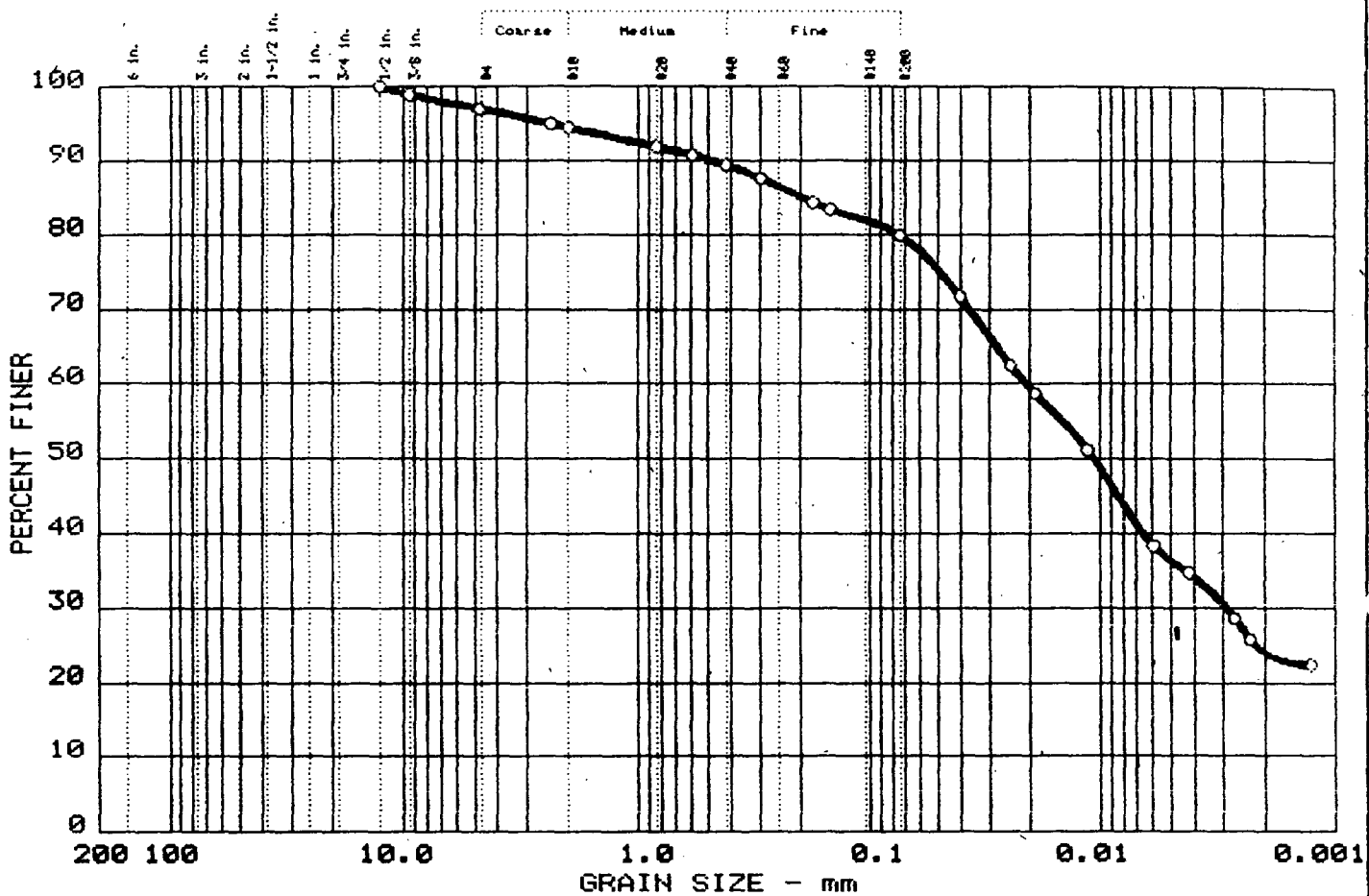

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	3.0	17.1	43.6	36.3

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	33	16	0.19		0.01	0.003				

MATERIAL DESCRIPTION	USCS
○ Brown Lean CLAY, Some Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP5-19"

Date: 6/18/93

Remarks:
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APPROVED BY VJR

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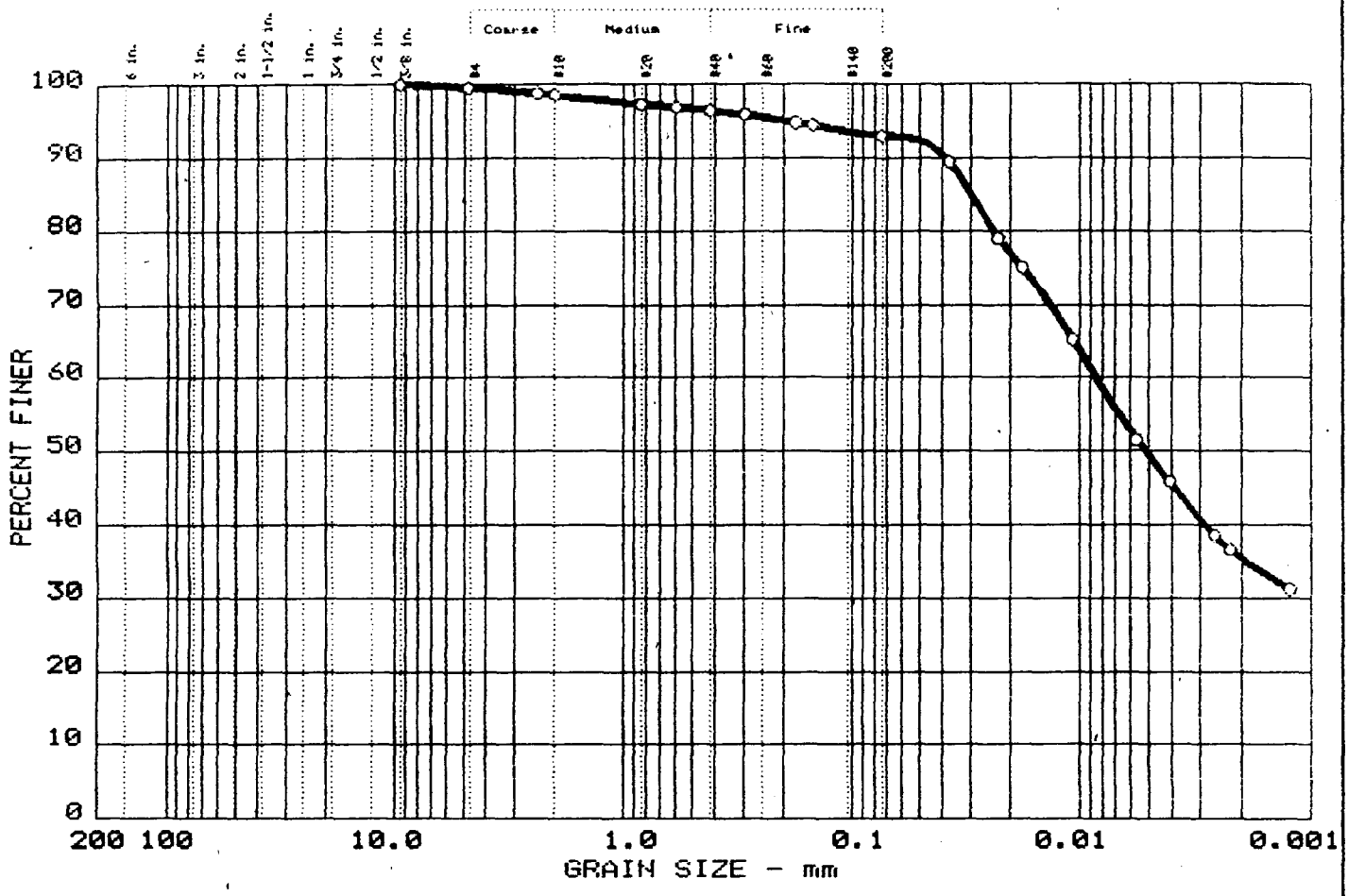

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	0.4	6.6	43.7	49.3

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	34	16			0.01					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP8-70"

Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY VSK

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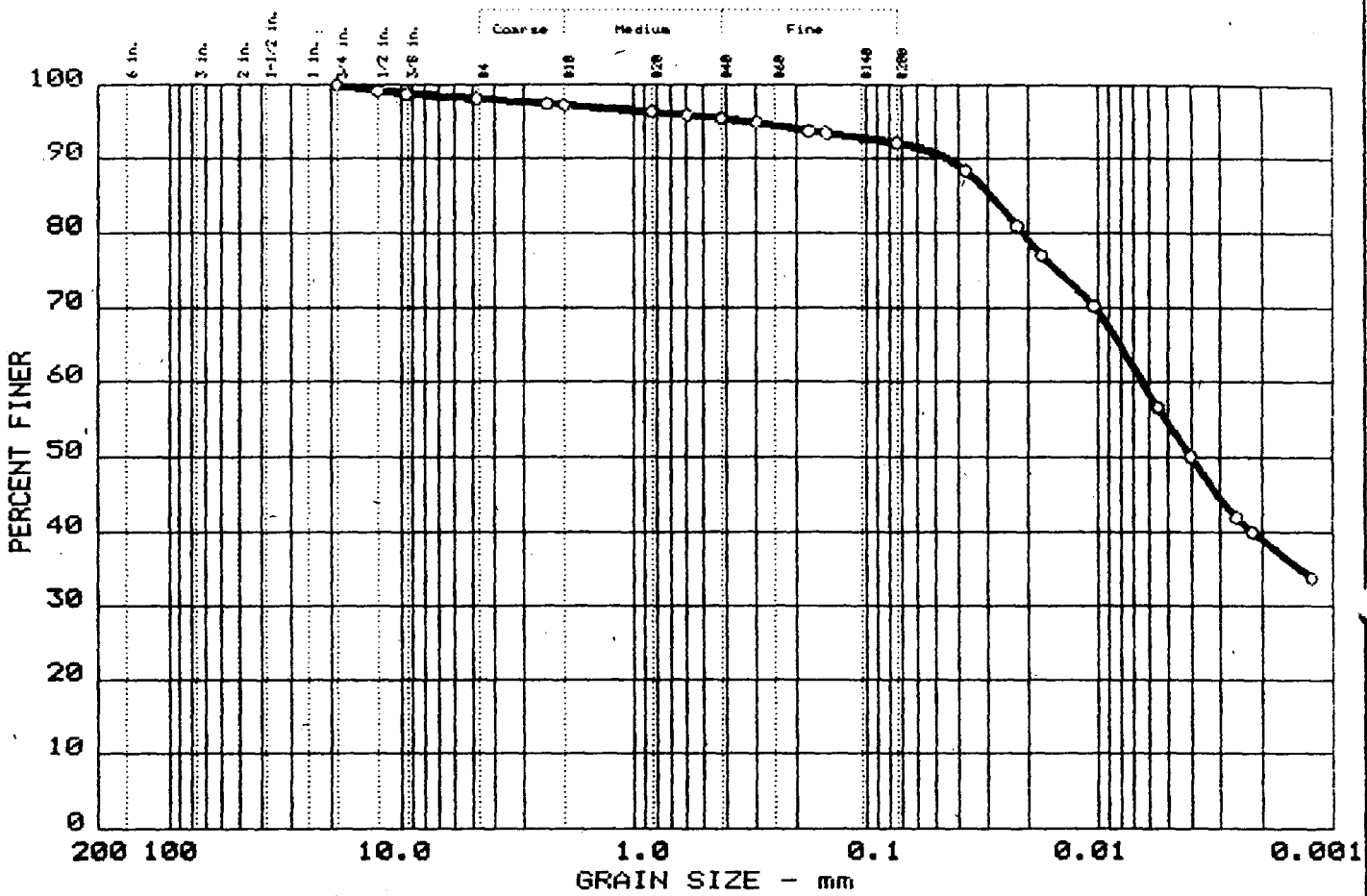

Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.8	6.2	37.4	54.6

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	34	17			0.00					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP9-50"

Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY JSR

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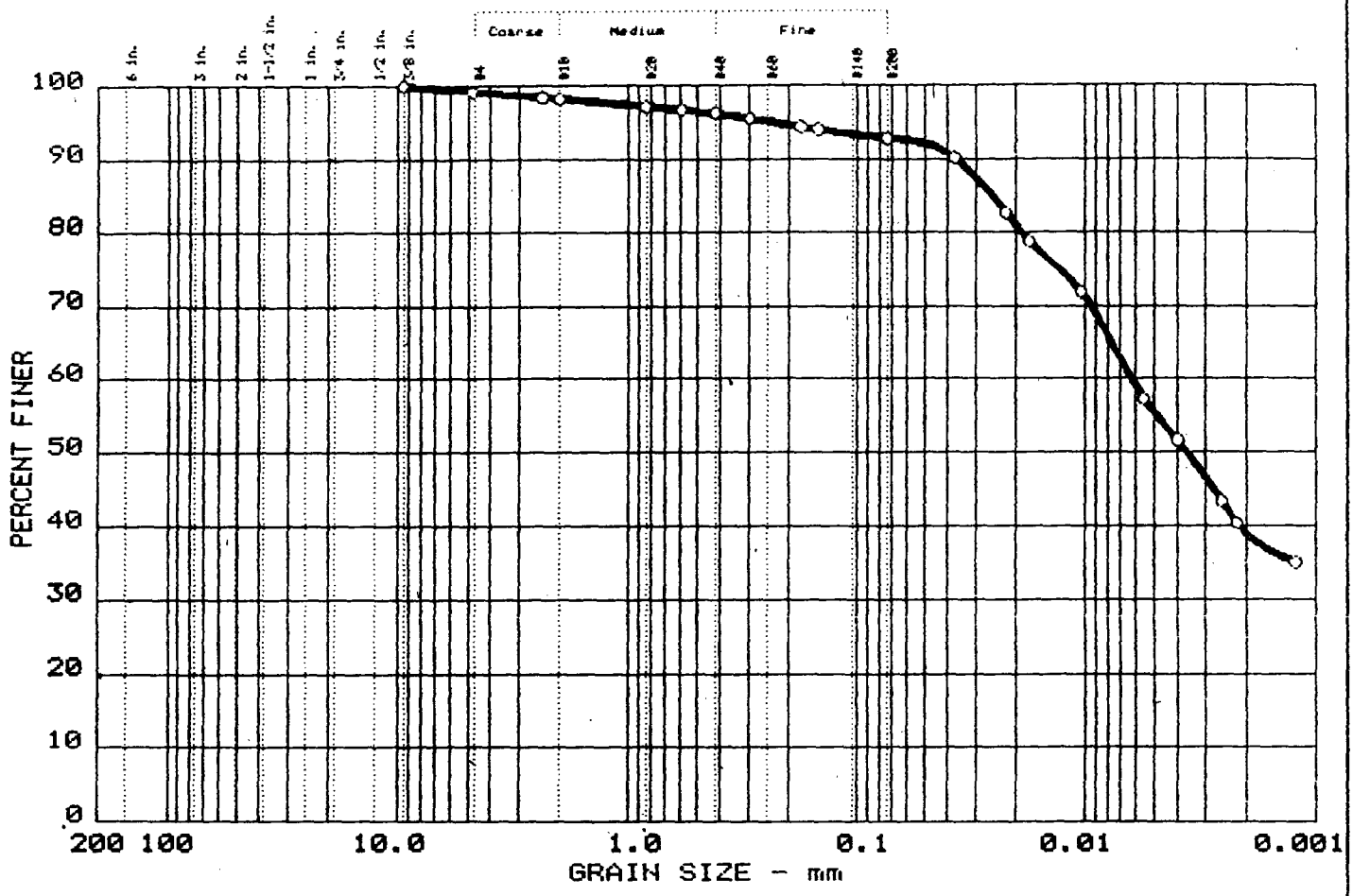


Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	0.7	6.4	37.5	55.4

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	33	16			0.00					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP10-45"

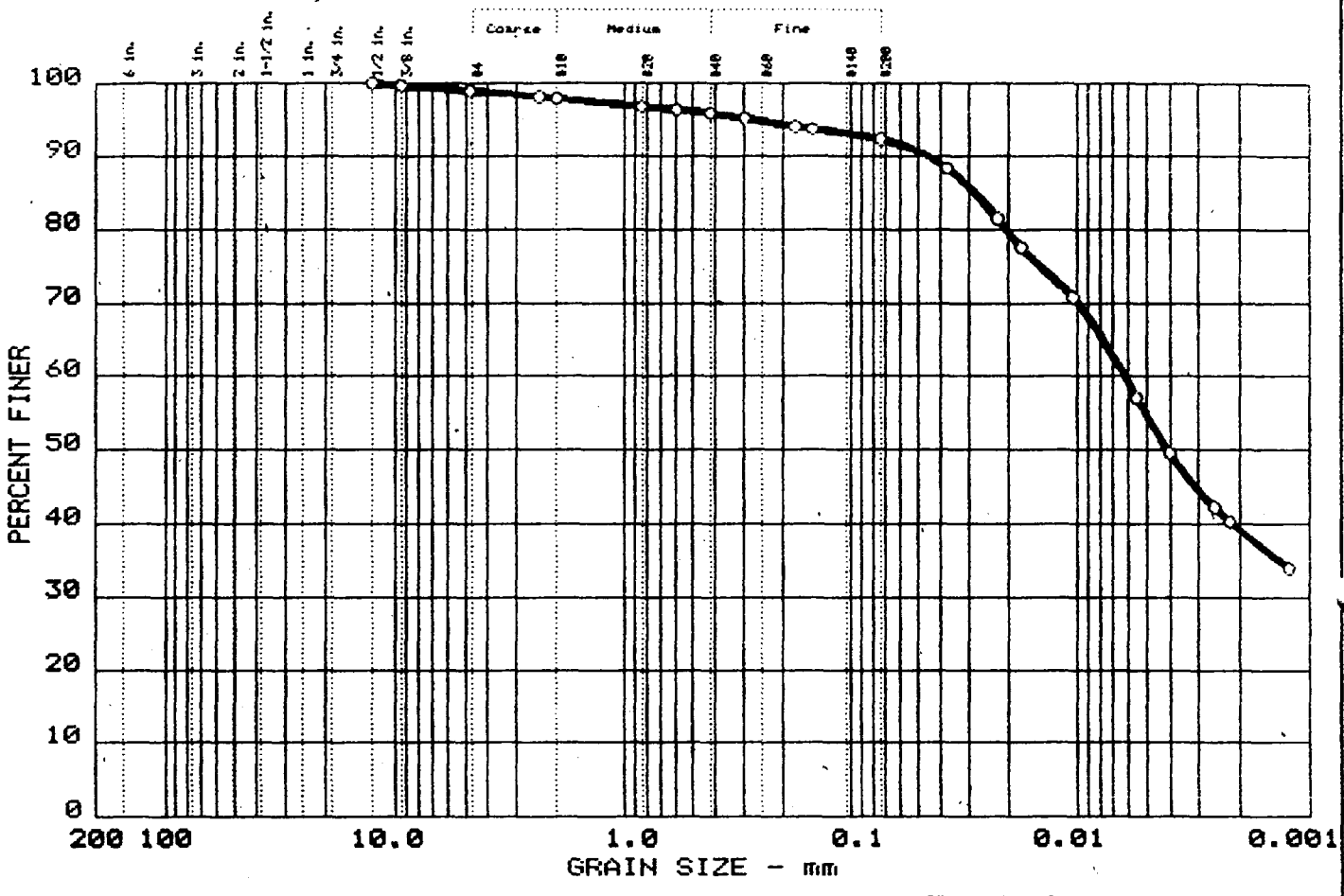
Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY VSR

GRAIN SIZE DISTRIBUTION TEST REPORT
WARZYN, INC.

Sheet No.

GRAIN SIZE DISTRIBUTION TEST REPORT



Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	1.0	6.7	37.7	54.6

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	31	15			0.00					

MATERIAL DESCRIPTION	USCS
○ Gray Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP10-45"-91

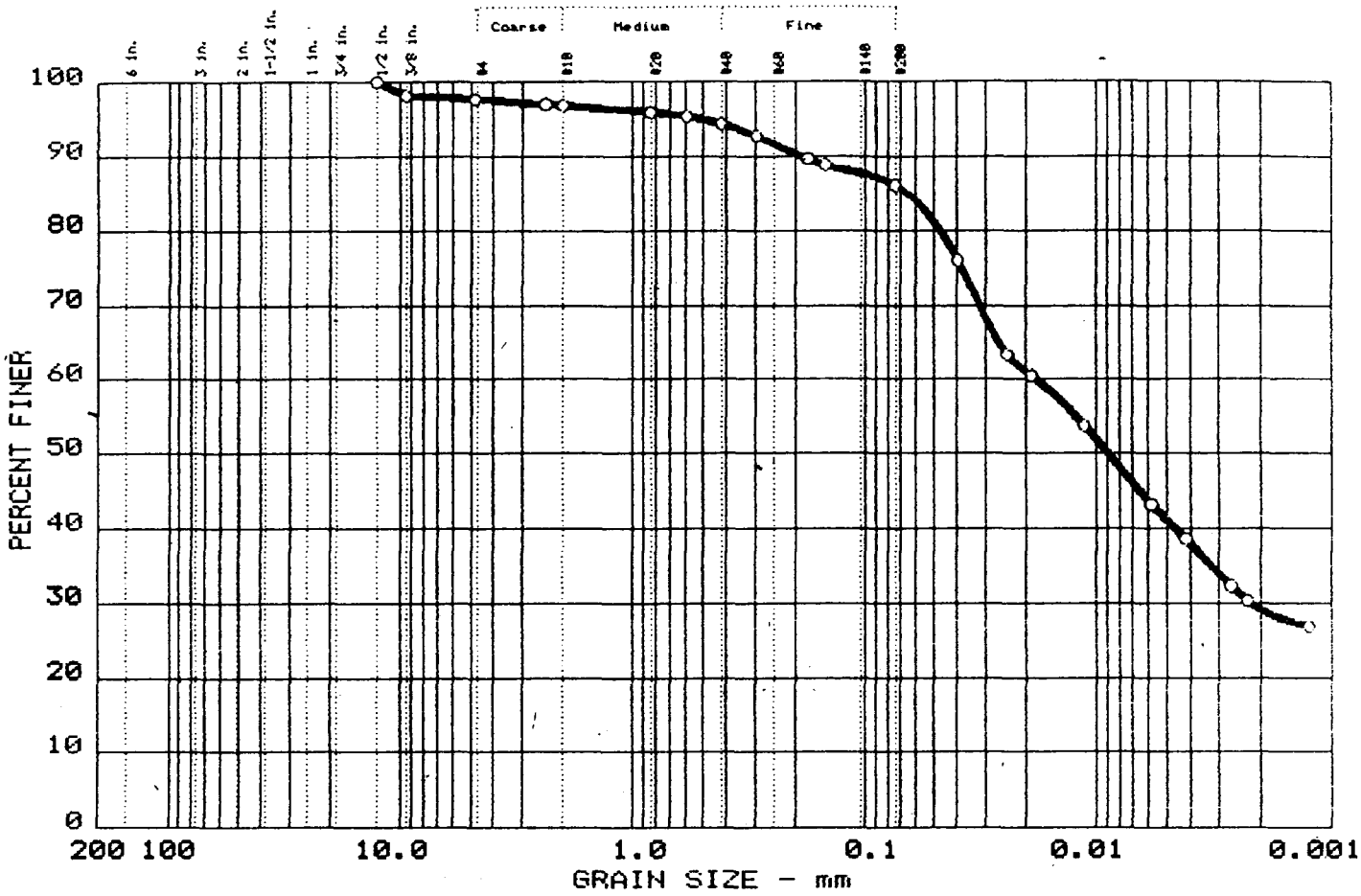
Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY JSR

GRAIN SIZE DISTRIBUTION TEST REPORT
WARZYN, INC.

Sheet No.

GRAIN SIZE DISTRIBUTION TEST REPORT



Symbol	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
○	0.0	2.3	11.6	45.1	41.0

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○	46	25			0.01	0.002				

MATERIAL DESCRIPTION	USCS
○ Brown Lean CLAY, Little Sand, Trace Gravel	CL

Project No.: 10010201-38224
Project: H.O.D. LANDFILL RI/FS Antioch, Illinois
○ Sample: HD-SCTP7-20"

Date: 6/18/93

Remarks:
TESTED BY CLS
CHECKED BY CLS
APPROVED BY VJR

GRAIN SIZE DISTRIBUTION TEST REPORT
WARZYN, INC.

Sheet No.

N2

BOUTWELL TEST DATA

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 1

Date	Time hr:min	Rt cm	Refilled to cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/15/93	9:10 AM	85.1			20	1	58.4	6.6	20.3	1.8	11.40	0.069785717	170.42	98.32	1800	2.13E-05
	9:40 AM	13	89.7	72.1	20.5	1.01	58.4	6.6	20.3	1.8	11.40	0.069785717	175.02	113.62	1500	2.03E-05
	10:05 AM	28.3	90	61.4	21	1.02	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	106.02	1800	1.99E-05
	10:35 AM	20.7	90	69.3	21.5	1.03	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	106.82	1800	1.98E-05
	11:05 AM	21.5	90	68.5	22	1.05	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	108.62	1800	1.95E-05
	11:35 AM	23.3	90.4	66.7	22	1.05	58.4	6.6	20.3	1.8	11.40	0.069785717	175.72	109.02	1800	1.94E-05
	12:05 PM	23.7	90.2	66.7	22	1.05	58.4	6.6	20.3	1.8	11.40	0.069785717				
	1:37 PM	89.3			24	1.1	58.4	6.6	20.3	1.8	11.40	0.069785717	174.62	113.72	1800	1.83E-05
	2:07 PM	28.4	90	60.9	24.5	1.11	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	116.62	1800	1.75E-05
	2:37 PM	31.3	90	58.7	25	1.12	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	119.02	1800	1.68E-05
	3:07 PM	33.7	90.3	56.3	25.5	1.13	58.4	6.6	20.3	1.8	11.40	0.069785717	175.62	119.52	1800	1.69E-05
	3:37 PM	34.2	90	56.1	26	1.15	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	121.12	1800	1.65E-05
	4:07 PM	35.8	90	54.2	26	1.15	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	122.52	1800	1.60E-05
	4:37 PM	37.2	90	52.8	26	1.15	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	120.62	1920	1.56E-05
	5:09 PM	35.3	90.1	54.7	25.5	1.13	58.4	6.6	20.3	1.8	11.40	0.069785717	175.42	125.32	1740	1.52E-05
	5:38 PM	40	90.2	50.1	25	1.12	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	124.52	1800	1.49E-05
	6:08 PM	39.2	90.2	51	24.5	1.11	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	126.62	1800	1.41E-05
	6:38 PM	41.3	90.2	48.9	24	1.1	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	125.82	1800	1.42E-05
	7:08 PM	40.5	90.1	49.7	23	1.07	58.4	6.6	20.3	1.8	11.40	0.069785717	175.42	126.82	1800	1.35E-05
	7:38 PM	41.5		48.6	21.5	1.03	58.4	6.6	20.3	1.8	11.40	0.069785717				
6/16/93	7:51 AM	90			15.5	0.89	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	132.62	1800	9.63E-06
	8:21 AM	47.3	90.2	42.7	17	0.93	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	134.22	1800	9.67E-06
	8:51 AM	48.9	90.3	41.3	18.5	0.96	58.4	6.6	20.3	1.8	11.40	0.069785717	175.62	134.02	1800	1.01E-05
	9:21 AM	48.7	90	41.6	19	0.97	58.4	6.6	20.3	1.8	11.40	0.069785717	175.32	135.22	1800	9.77E-06
	9:51 AM	49.9	90.2	40.1	19.5	0.99	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	136.02	1800	9.79E-06
	10:21 AM	50.7	90.2	39.5	20.5	1.01	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	135.42	1800	1.02E-05
	10:51 AM	50.1	90.3	40.1	21	1.02	58.4	6.6	20.3	1.8	11.40	0.069785717	175.62	136.22	1800	1.00E-05
	11:21 AM	50.9	90.1	39.4	22.5	1.06	58.4	6.6	20.3	1.8	11.40	0.069785717	175.42	135.02	1860	1.04E-05
	11:52 AM	49.7	90.3	40.4	24	1.1	58.4	6.6	20.3	1.8	11.40	0.069785717	175.62	136.42	1800	1.08E-05
	12:22 PM	51.1	90.4	39.2	25	1.12	58.4	6.6	20.3	1.8	11.40	0.069785717	175.72	136.92	1800	1.08E-05
	12:52 PM	51.6	90.2	38.8	25.5	1.13	58.4	6.6	20.3	1.8	11.40	0.069785717	175.52	137.32	1800	1.08E-05
	1:22 PM	52		38.2	26	1.15	58.4	6.6	20.3	1.8	11.40	0.069785717				

CCH/jrs/BER/DJN
[J:10010201/Bout.xls/HOD1.xls]

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 2

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/15/93	8:00 AM	67.1		18	0.95	30.8	31.1	33	1.8	11.40	0.074160171	162	161.4	3540	7.38E-08
	8:59 AM	66.5	0.60	20	1.00	30.8	31.1	33	1.8	11.40	0.074160171	161.4	160.9	3840	5.99E-08
	10:03 AM	66	0.50	21	1.02	30.8	31.1	33	1.8	11.40	0.074160171	160.9	160.3	3600	7.85E-08
	11:03 AM	65.4	0.60	22	1.05	30.8	31.1	33	1.8	11.40	0.074160171	160.3	160	3600	4.05E-08
	12:03 PM	65.1	0.30	22	1.05	30.8	31.1	33	1.8	11.40	0.074160171	160	159.3	5460	6.25E-08
	1:34 PM	64.4	0.70	24	1.10	30.8	31.1	33	1.8	11.40	0.074160171	159.3	158.9	3600	5.70E-08
	2:34 PM	64	0.40	25	1.12	30.8	31.1	33	1.8	11.40	0.074160171	158.9	158.5	3600	5.82E-08
	3:34 PM	63.6	0.40	26	1.15	30.8	31.1	33	1.8	11.40	0.074160171	158.5	158.4	3600	1.50E-08
	4:34 PM	63.5	0.10	26	1.15	30.8	31.1	33	1.8	11.40	0.074160171	158.4	158.1	3600	4.49E-08
	5:34 PM	63.2	0.30	25	1.12	30.8	31.1	33	1.8	11.40	0.074160171	158.1	157.8	3600	4.38E-08
	6:34 PM	62.9	0.30	24	1.10	30.8	31.1	33	1.8	11.40	0.074160171	157.8	157.5	3600	4.31E-08
	7:34 PM	62.6	0.30	21.5	1.03	30.8	31.1	33	1.8	11.40	0.074160171	157.5	153.9	87240	2.02E-08
6/16/93	7:48 AM	59	3.60	15.5	0.89	30.8	31.1	33	1.8	11.40	0.074160171	153.9	153.6	3600	3.58E-08
	8:48 AM	58.7	0.30	18.5	0.96	30.8	31.1	33	1.8	11.40	0.074160171	153.6	153.2	3600	5.16E-08
	9:48 AM	58.3	0.40	19.5	0.98	30.8	31.1	33	1.8	11.40	0.074160171	153.2	152.9	3600	3.96E-08
	10:48 AM	58	0.30	21	1.02	30.8	31.1	33	1.8	11.40	0.074160171				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 3

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/15/93	8:14 AM	87.5		18	0.95	41	21	30.5	1.8	11.40	0.073585567	180	179.3	3780	7.21E-08
	9:17 AM	86.8	0.7	20	1.00	41	21	30.5	1.8	11.40	0.073585567	179.3	178.9	3180	5.17E-08
	10:10 AM	86.4	0.4	21	1.02	41	21	30.5	1.8	11.40	0.073585567	178.9	178.4	3600	5.84E-08
	11:10 AM	85.9	0.5	22	1.05	41	21	30.5	1.8	11.40	0.073585567	178.4	178.1	3600	3.61E-08
	12:10 PM	85.6	0.3	22	1.05	41	21	30.5	1.8	11.40	0.073585567	178.1	177.6	5400	4.02E-08
	1:40 PM	85.1	0.5	24	1.10	41	21	30.5	1.8	11.40	0.073585567	177.6	177.2	3600	5.07E-08
	2:40 PM	84.7	0.4	25	1.12	41	21	30.5	1.8	11.40	0.073585567	177.2	176.9	3600	3.88E-08
	3:40 PM	84.4	0.3	26	1.15	41	21	30.5	1.8	11.40	0.073585567	176.9	176.6	3600	3.99E-08
	4:40 PM	84.1	0.3	26	1.15	41	21	30.5	1.8	11.40	0.073585567	176.6	176.3	3660	3.93E-08
	5:41 PM	83.8	0.3	25	1.12	41	21	30.5	1.8	11.40	0.073585567	176.3	175.9	3600	5.20E-08
	6:41 PM	83.4	0.4	24	1.10	41	21	30.5	1.8	11.40	0.073585567	175.9	175.4	3600	6.40E-08
	7:41 PM	82.9	0.5	21.5	1.03	41	21	30.5	1.8	11.40	0.073585567	175.4	171.1	87180	2.16E-08
6/16/93	7:54 AM	78.6	4.3	15.5	0.89	41	21	30.5	1.8	11.40	0.073585567	171.1	170.6	3600	5.32E-08
	8:54 AM	78.1	0.5	18.5	0.96	41	21	30.5	1.8	11.40	0.073585567	170.6	170.4	3600	2.30E-08
	9:54 AM	77.9	0.2	19.5	0.98	41	21	30.5	1.8	11.40	0.073585567	170.4	170	3600	4.71E-08
	10:54 AM	77.5	0.4	21	1.02	41	21	30.5	1.8	11.40	0.073585567				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 4

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/15/93	8:20 AM	88		18	0.95	40	30.5	30.5	1.8	11.40	0.073585567	189	188.2	3600	8.24E-08
	9:20 AM	87.2	0.8	20	1.00	40	30.5	30.5	1.8	11.40	0.073585567	188.2	187.5	3120	8.79E-08
	10:12 AM	86.5	0.7	21	1.02	40	30.5	30.5	1.8	11.40	0.073585567	187.5	186.8	3600	7.80E-08
	11:12 AM	85.8	0.7	22	1.05	40	30.5	30.5	1.8	11.40	0.073585567	186.8	186.1	3600	8.06E-08
	12:12 PM	85.1	0.7	22	1.05	40	30.5	30.5	1.8	11.40	0.073585567	186.1	185	5400	8.48E-08
	1:42 PM	84	1.1	24	1.10	40	30.5	30.5	1.8	11.40	0.073585567	185	184.5	3600	6.09E-08
	2:42 PM	83.5	0.5	25	1.12	40	30.5	30.5	1.8	11.40	0.073585567	184.5	183.8	3600	8.70E-08
	3:42 PM	82.8	0.7	26	1.15	40	30.5	30.5	1.8	11.40	0.073585567	183.8	183.1	3600	8.97E-08
	4:42 PM	82.1	0.7	26	1.15	40	30.5	30.5	1.8	11.40	0.073585567	183.1	182.6	3660	6.32E-08
	5:43 PM	81.6	0.5	25	1.12	40	30.5	30.5	1.8	11.40	0.073585567	182.6	182.1	3600	6.28E-08
	6:43 PM	81.1	0.5	24	1.10	40	30.5	30.5	1.8	11.40	0.073585567	182.1	181.5	3600	7.42E-08
	7:43 PM	80.5	0.6	21.5	1.03	40	30.5	30.5	1.8	11.40	0.073585567	181.5	176.6	87180	2.38E-08
6/16/93	7:56 AM	75.6	4.9	15.5	0.89	40	30.5	30.5	1.8	11.40	0.073585567	176.6	175.3	3600	1.34E-07
	8:56 AM	74.3	1.3	18.5	0.96	40	30.5	30.5	1.8	11.40	0.073585567	175.3	174.6	3600	7.85E-08
	9:56 AM	73.6	0.7	19.5	0.98	40	30.5	30.5	1.8	11.40	0.073585567				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 5

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/15/93	8:24 AM	87.8		18	0.95	27.5	42.5	22.9	1.8	11.40	0.071068351	180.7	171.7	3600	9.58E-07
	9:24 AM	78.8	9	20	1.00	27.5	42.5	22.9	1.8	11.40	0.071068351	171.7	164.7	3000	9.86E-07
	10:14 AM	71.8	7	21	1.02	27.5	42.5	22.9	1.8	11.40	0.071068351	164.7	156.9	3600	9.77E-07
	11:14 AM	64	7.8	22	1.05	27.5	42.5	22.9	1.8	11.40	0.071068351	156.9	150.2	3600	9.05E-07
	12:14 PM	57.3	6.7	22	1.05	27.5	42.5	22.9	1.8	11.40	0.071068351	150.2	140.4	5460	9.22E-07
	1:45 PM	47.5	9.8	24	1.10	27.5	42.5	22.9	1.8	11.40	0.071068351	140.4	134.7	3600	9.00E-07
	2:45 PM	41.8	5.7	25	1.12	27.5	42.5	22.9	1.8	11.40	0.071068351	134.7	129.3	3600	9.05E-07
	3:45 PM	36.4	5.4	26	1.15	27.5	42.5	22.9	1.8	11.40	0.071068351	129.3	124.4	3600	8.77E-07
	4:45 PM	31.5	4.9	26	1.15	27.5	42.5	22.9	1.8	11.40	0.071068351	124.4	120.4	3600	7.42E-07
	5:45 PM	27.5	4	25	1.12	27.5	42.5	22.9	1.8	11.40	0.071068351				
	5:49 PM	87.5		25	1.12	27.5	42.5	22.9	1.8	11.40	0.071068351	180.4	172.9	3360	1.01E-06
	6:45 PM	80	7.5	24	1.10	27.5	42.5	22.9	1.8	11.40	0.071068351	172.9	165.6	3600	9.37E-07
	7:45 PM	72.7	7.3	21.5	1.03	27.5	42.5	22.9	1.8	11.40	0.071068351				
6/16/93	8:00 AM	87.4		15.5	0.89	27.5	42.5	22.9	1.8	11.40	0.071068351	180.3	173.6	3600	6.65E-07
	9:00 AM	80.7	6.7	18.5	0.96	27.5	42.5	22.9	1.8	11.40	0.071068351	173.6	167.5	3600	6.78E-07
	10:00 AM	74.6	6.1	19.5	0.98	27.5	42.5	22.9	1.8	11.40	0.071068351				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 6

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/9/93	1:18 PM	85.5		26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	265.5	265.2	1800	5.78E-08
	1:48 PM	85.2	0.30	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	265.2	264.5	3600	6.75E-08
	2:48 PM	84.5	0.70	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	264.5	263.9	3600	5.80E-08
	3:48 PM	83.9	0.60	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	263.9	263.3	3600	5.82E-08
	4:48 PM	83.3	0.60	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	263.3	262.7	3600	5.83E-08
	5:48 PM	82.7	0.60	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	262.7	262.1	3600	5.84E-08
	6:48 PM	82.1	0.60	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	262.1	254.9	92400	2.77E-08
6/10/93	8:28 AM	74.9	7.20	22.5	1.06	41.5	14	124.5	1.8	11.40	0.07931222	254.9	254.3	3600	5.50E-08
	9:28 AM	74.3	0.60	25.5	1.13	41.5	14	124.5	1.8	11.40	0.07931222	254.3	254	3600	2.94E-08
	10:28 AM	74	0.30	26.5	1.16	41.5	14	124.5	1.8	11.40	0.07931222	254	253.6	3600	4.03E-08
	11:28 AM	73.6	0.40	28	1.20	41.5	14	124.5	1.8	11.40	0.07931222	253.6	253.3	3600	3.13E-08
	12:28 PM	73.3	0.30	29.5	1.24	41.5	14	124.5	1.8	11.40	0.07931222	253.3	253.2	3600	1.08E-08
	1:28 PM	73.2	0.10	30.5	1.26	41.5	14	124.5	1.8	11.40	0.07931222				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 7

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/9/93	11:35 AM	83.8		26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	214.5	213.3	3600	1.41E-07
	12:35 PM	82.6	1.20	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	213.3	212.4	3600	1.06E-07
	1:35 PM	81.7	0.90	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	212.4	211.4	3600	1.19E-07
	2:35 PM	80.7	1.00	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	211.4	211	3600	4.76E-08
	3:35 PM	80.3	0.40	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	211	210.2	3600	9.55E-08
	4:35 PM	79.5	0.80	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	210.2	209.4	3600	9.59E-08
	5:35 PM	78.7	0.80	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	209.4	208.4	3600	1.20E-07
	6:35 PM	77.7	1.00	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456	208.4	207.5	3600	1.09E-07
	7:35 PM	76.8	0.90	26.5	1.16	40	17	73.7	1.8	11.40	0.078031456				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 8

Date	Time hr:min	Rt cm	Refilled to cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/10/93	12:03 PM	88.4			29	1.23	40	21.7	88.9	2.2	11.40	0.117367218	239	219.7	1020	1.19E-05
	12:20 PM	69.1		19.3	29.5	1.24	40	21.7	88.9	2.2	11.40	0.117367218	219.7	181.6	3600	7.70E-06
	1:20 PM	31	89.5	38.1	30.5	1.27	40	21.7	88.9	2.2	11.40	0.117367218	240.1	191.6	3600	9.34E-06
	2:20 PM	41	89.6	48.5	32	1.31	40	21.7	88.9	2.2	11.40	0.117367218	240.2	190.6	3600	9.88E-06
	3:20 PM	40	89.5	49.6	31.5	1.29	40	21.7	88.9	2.2	11.40	0.117367218	240.1	193.1	3600	9.16E-06
	4:20 PM	42.5	82	47	31	1.28	40	21.7	88.9	2.2	11.40	0.117367218	232.6	189.9	3600	8.46E-06
	5:20 PM	39.3	89.6	42.7	30	1.25	40	21.7	88.9	2.2	11.40	0.117367218	240.2	193.1	3600	8.89E-06
	6:20 PM	42.5	89.7	47.1	29	1.23	40	21.7	88.9	2.2	11.40	0.117367218	240.3	193.9	3600	8.60E-06
	7:20 PM	43.3	89.6	46.4	27	1.17	40	21.7	88.9	2.2	11.40	0.117367218				

HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 9

Date	Time hr:min	Rt cm	Refilled to cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/10/93	8:15 AM	85			22	1.05	41	61	101.6	2.2	11.40	0.117853123	288.6	219.1	1800	1.89E-05
	8:45 AM	15.5	87	69.5	22.5	1.05	41	61	101.6	2.2	11.40	0.117853123	290.6	227.1	1800	1.70E-05
	9:15 AM	23.5	88	63.5	23.5	1.09	41	61	101.6	2.2	11.40	0.117853123	291.6	232.1	1800	1.63E-05
	9:45 AM	28.5	88.4	59.5	25.5	1.13	41	61	101.6	2.2	11.40	0.117853123	292	234.8	1800	1.61E-05
	10:15 AM	31.2	88.4	57.2	26	1.15	41	61	101.6	2.2	11.40	0.117853123	292	236.1	1800	1.60E-05
	10:45 AM	32.5	88.4	55.9	26.5	1.16	41	61	101.6	2.2	11.40	0.117853123	292	236.9	1800	1.59E-05
	11:15 AM	33.3	88.4	55.1	27	1.17	41	61	101.6	2.2	11.40	0.117853123	292	238.1	1800	1.56E-05
	11:45 AM	34.5	88.4	53.9	28	1.20	41	61	101.6	2.2	11.40	0.117853123	292	239.3	1800	1.56E-05
	12:15 PM	35.7	88.4	52.7	29	1.23	41	61	101.6	2.2	11.40	0.117853123	292	239.2	1800	1.61E-05
	12:45 PM	35.6	87	52.8	29.5	1.24	41	61	101.6	2.2	11.40	0.117853123	290.6	238.9	1800	1.59E-05
	1:15 PM	35.3		51.7	30	1.25	41	61	101.6	2.2	11.40	0.117853123				

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HOD LANDFILL
ANTIOCH, ILLINOIS
BOUTWELL NO. 10

Date	Time hr:min	Rt cm	Change cm	Temp °C	Viscosity Ratio Rt	Z cm	Ra cm	b1 cm	d cm	D cm	G1	H1 cm	H2' cm	Elapsed Time sec	Apparent Vertical Conductivity cm/sec
6/9/93	1:00 PM	86.3		26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	207.6	207.4	1800	4.87E-08
	1:30 PM	86.1	0.20	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	207.4	207	3600	4.88E-08
	2:30 PM	85.7	0.40	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	207	206.6	3600	4.89E-08
	3:30 PM	85.3	0.40	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	206.6	206.2	3600	4.90E-08
	4:30 PM	84.9	0.40	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	206.2	205.8	3600	4.91E-08
	5:30 PM	84.5	0.40	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	205.8	205.2	3600	7.38E-08
	6:30 PM	83.9	0.60	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	205.2	200.1	92400	2.48E-08
6/10/93	8:10 AM	78.8	5.10	22.5	1.06	42.5	-5	83.8	1.8	11.40	0.07840977	200.1	199.7	3600	4.62E-08
	9:10 AM	78.4	0.40	25.5	1.13	42.5	-5	83.8	1.8	11.40	0.07840977	199.7	199.4	3600	3.70E-08
	10:10 AM	78.1	0.30	26.5	1.16	42.5	-5	83.8	1.8	11.40	0.07840977	199.4	199	3600	5.07E-08
	11:10 AM	77.7	0.40	28	1.20	42.5	-5	83.8	1.8	11.40	0.07840977	199	198.7	3600	3.94E-08
	12:10 PM	77.4	0.30	29.5	1.24	42.5	-5	83.8	1.8	11.40	0.07840977				

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VILLAGE OF ANTIOCH WATER SUPPLY WELL PUMPING RECORDS

Village Pumping Records have been requested and will be included in the RI Report, if and when received.

P

ANALYTICAL LABORATORY RESULTS

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P3 Leachate VOCs
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P5 Leachate Pesticides/PCBs
P6 Leachate Indicators and Metals
P7 Leachate Tentatively Identified Compounds (TICs)
P8 Surface Soils VOCs
P9 Surface Soils SVOCs
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P1

DATA QUALITY SUMMARY, DATA QUALIFIER DEFINITIONS, AND ANALYTICAL DATA RESULTS

DATA QUALITY SUMMARY, DATA QUALIFIER DEFINITIONS, AND ANALYTICAL DATA RESULTS

This appendix provides analytical reports, data qualifier definitions, and a summary of the data quality for analyses performed on samples collected during May through July 1993, at the H.O.D. Landfill.

The analytical data has been computerized in a format organized to facilitate data review and evaluation. The computerized data set includes the data qualifiers provided by the performing laboratory as well as data qualifiers added by the data reviewer in accordance with the data validation procedures. The assessment of data quality is based on laboratory and field quality control (QC) criteria as described in the Quality Assurance Project Plan (QAPP). Data validation was performed on laboratory analyses according to U.S. EPA guidelines.

DATA QUALITY SUMMARY

Laboratory results for groundwater, private well water, surface water, leachate, landfill gas, and surface soils collected during May through July 1993 at the HOD Landfill were qualified by the laboratory and during the data validation.

The laboratory-provided qualifiers (LQs) will include such items as:

- Non-detects
- Concentration below required detection limit
- Estimated concentration due to poor QC data
- Concentration of chemical also found in the laboratory blank

The data validation qualifiers (DVQs) will indicate whether the data are:

- Usable as a quantitative concentration
- Usable with caution as an estimated concentration
- Unusable due to out-of-control QC results

For the H.O.D. Landfill RI/FS, estimated results are considered acceptable for use in site characterization and evaluation. Unusable results can not be used for site characterization and evaluation.

Private residence well results for the volatile organic compounds 2-butanone, 2-hexanone, and acetone are qualified as unusable and flagged "R" due to response factors below acceptable QC limits of 0.05. These compounds may or may not be present in the qualified samples.

The surface water matrix field blank (HD-SWFB01-01) for cyanide was lost during analysis. Because cyanide was not detected in any investigative samples, this loss does not affect the data quality.

The remainder of the analytical data for samples collected during May through July 1993 at the H.O.D. landfill is acceptable for use in site characterization and evaluation.

SUMMARY OF DATA QUALIFIER DEFINITIONS

Laboratory qualified data are flagged by the performing laboratory. Data may be further qualified by Warzyn personnel during the data validation process. Data qualifiers are letter or symbol codes as outlined below. If data are qualified, the qualifiers are presented with results. The data validation qualifiers (DVQ) and laboratory qualifiers (LQ) are presented with the data as separate columns.

Laboratory Qualifier Definitions

The following qualifiers were used by laboratories performing the various analyses. The qualifiers defined below are presented in the "LQ" column adjacent to the result.

Laboratory Qualifiers for Organic Analysis

U - Indicates the compound was analyzed for, but was not detected. The sample quantification limit is corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for Tentatively Identified Compounds (TICs) where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria, yet the result is less than the Contract Required Quantitation Limit (CRQL), but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is used only for TICs where the identification is based on a mass spectral library search. It is applied to all TIC results.

B - This flag is used when the compound is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified compound. (Note the difference between the LQ inorganic qualifier B and the LQ organic qualifier B.)

E - This flag identifies a compound where the concentration exceeded the calibration range of the instrument for that specific analysis. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed. If the dilution of the extract cause any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported.

D - This flag identifies a compound that was identified in an analysis at a secondary dilution factor.

P - This flag is used for a pesticide/PCB target compound when there is a greater than 25% difference for the detected concentrations between the two GC columns. The lower of the two values is reported.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS.

A - This flag indicates that a TIC is a suspected aldol condensation product.

X - X,Y, and Z flags may be designated by the laboratory to properly define the results. For example, X is often applied to semi-volatile data which were calculated manually (as opposed to computer generated) by the laboratory.

Laboratory Qualifiers for Inorganic Analyses

B - This flag is applied to a value greater than or equal to the instrument detection limit (IDL), but less than the Contract Required Detection Limit (CRDL). (Note the difference between the LQ inorganic qualifier B and the LQ organic qualifier B.)

U - Indicates analyte was analyzed for, but was not detected. The value reported is the instrument detection limit value (e.g., 10U).

E - Indicates the value is estimated due to the presence of interference.

S - Indicates the value was determined by the method of standard addition.

M - Indicates duplicate injection precision for furnace analysis was not met.

N - Indicates spike sample recovery was not within control limits.

* - Indicates duplicate analysis was not within control limits.

+ - Indicates the correlation coefficient for method of standard addition was less than 0.995.

W - Post-digestion spike for Furnace AA analysis was out of control limits (85-115%), while sample absorbance was less than 50% of spike absorbance.

Data Validation Qualifier Definitions

The following qualifiers were used by Warzyn personnel in the validation of laboratory results. Field QC samples (trip blanks, field blanks, field duplicates) were also evaluated during the data validation process. Validation of organics data was performed using National Functional Guidelines for Organic Data Review, U.S. EPA, June 1991. Inorganics data validation was performed using Laboratory Data Validation, Functional Guideline for Evaluating Inorganic Analyses, U.S. EPA, July 1988.

The data validation process was performed with specific project needs in mind. Data quality objectives and intended data usage, as outlined in the QAPP, were referenced. The data validation qualifiers defined below are presented with the data under the "DVQ" column.

Data Validation Qualifiers for Organic Analyses

J - The associated numerical value is an estimated quantity, because quality control criteria were not met and/or because the value was less than the CRQL. TICs are flagged as estimated (J).

U - Indicates compound was analyzed for, but was not detected. The associated value is the sample quantitation limit. The sample quantitation limit may be elevated due to contamination detected in laboratory blanks, field blanks, or trip blanks (for VOCs).

UJ - Indicates the compound was analyzed for, but was not detected. The associated numerical value is an estimated quantitation limit.

R - Quality control indicates the result is not usable (compound may or may not be present).

Data Qualifiers for Inorganic Analyses

J - The associated numerical value is an estimated quantity because quality control criteria were not met (i.e., out of control (low or high) spike recoveries, interferences in serial dilution,or poor correlation coefficients).

R - Quality control data indicates that the value is not usable (analyte may or may not be present).

U - Indicates analyte was analyzed for, but was not detected. The associated value is the sample quantitation limit. The sample quantitation limit may be elevated due to contamination detected in laboratory blanks or field blanks.

UJ - The analyte was analyzed for, but was not detected. The associated numerical value is an estimated quantitation limit.

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Summary Of Well ID Codes
H.O.D. Landfill RI/FS

Well I.D.	RUST ID	Warzyn Sample ID
US01D	GW01D	HD-GWUS01D-01
US01S	GW01S	HD-GWUS01S-01
US03D	GW03D	HD-GWUS03D-01
US03I	GW03I	HD-GWUS03I-01
US03S	GW03S	HD-GWUS03S-01
US04D	GW04D	HD-GWUS04D-01
GW04S	GW04S	HD-GWUS04S-01
US06D	GW06D	HD-GWUS06D-01
OS061	GW06I	HD-GWUS06I-01
US06S	GW06S	HD-GWUS06S-01
G11D	GW11D	HD-GWG11D-01
G11S	GW11S	HD-GWG11S-01
W03D	new well	HD-GWW03D-01
W03SB	new well	HD-GWW03SB-01
W04S	new well	HD-GWW04S-01
W05S	new well	HD-GWW05S-01
W06S	new well	HD-GWW06S-01
W07D	new well	HD-GWW07D-01
G102	G102	not sampled
G103	G103	not sampled
US02D	GW02D	not sampled
US05D	GW05D	not sampled
US07S	GW07S	not sampled
G14D	GW14D	not sampled
G14S	GW14S	not sampled

This table presents well IDs used in the RI report, the well identification codes used for the RI data reports generated by Warzyn, and the historical database well identification codes used by RUST Environmental and Infrastructure.

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Revision:8/31/93

P2

LANDFILL GAS VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-LGLP01-91 06/04/93			HD-LGLP06-01 06/04/93			HD-LGLP07-01 06/04/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Freon 12 (PPB(V/V))		U/	4.	6300.	/	80.	1800.	/	400.
Chloromethane (PPB(V/V))		U/	5.		U/	6000.		U/	500.
Freon 114 (PPB(V/V))		U/	4.	7200.	/	80.		U/	400.
Vinyl chloride (PPB(V/V))		U/	5.	4900.	/	100.	21000.	/	500.
Bromomethane (PPB(V/V))		U/	6.		U/	120.		U/	600.
Chloroethane (PPB(V/V))	47.	/	10.	810.	/	200.		U/	1000.
Freon 11 (PPB(V/V))	78.	/	2.	12000.	D/	200.	270.	/	200.
cis-1,2-Dichloroethene (PPB(V/V))	6.3	/	4.	370.	/	80.	5400.	/	400.
Carbon disulfide (PPB(V/V))		U/	20.	690.	/	400.		U/	2000.
Freon 113 (PPB(V/V))		U/	4.		U/	80.		U/	400.
Acetone (PPB(V/V))		U/	20.	730.	/	400.	3900.	/	2000.
Methylene chloride (PPB(V/V))	95.	/	8.	220.	/	160.		U/	800.
trans-1,2-Dichloroethene (PPB(V/V))		U/	8.		U/	160.		U/	800.
1,1-Dichloroethane (PPB(V/V))		U/	5.	140.	/	100.	540.	/	500.
Vinyl acetate (PPB(V/V))		U/	5.		U/	100.		U/	500.
1,1-Dichloroethene (PPB(V/V))		U/	4.		U/	80.	480.	/	400.
2-Butanone (PPB(V/V))	21.	/	6.	1800.	/	120.	5200.	/	600.
Chloroform (PPB(V/V))		U/	4.		U/	80.		U/	400.
1,1,1-Trichloroethane (PPB(V/V))		U/	4.		U/	80.		U/	400.
Carbon tetrachloride (PPB(V/V))		U/	4.		U/	80.		U/	400.
Benzene (PPB(V/V))	10.	/	6.	420.	/	120.	970.	/	600.
1,2-Dichloroethane (PPB(V/V))		U/	4.		U/	80.		U/	400.
Trichloroethene (PPB(V/V))		U/	5.	160.	/	100.	2500.	/	500.
1,2-Dichloropropane (PPB(V/V))		U/	16.		U/	320.		U/	1600.
Bromodichloromethane (PPB(V/V))		U/	4.		U/	80.		U/	400.
cis-1,3-Dichloropropene (PPB(V/V))		U/	6.		U/	120.		U/	600.
4-Methyl-2-pentanone (PPB(V/V))		U/	12.		U/	280.		U/	1600.
Toluene (PPB(V/V))	540.	/	6.	11000.	/	120.	66000.	/	600.
trans-1,3-Dichloropropene (PPB(V/V))		U/	6.		U/	120.		U/	600.
1,1,2-Trichloroethane (PPB(V/V))		U/	6.		U/	120.		U/	600.
Tetrachloroethene (PPB(V/V))		U/	6.	270.	/	120.	4400.	/	600.
2-Hexanone (PPB(V/V))		U/	10.		U/	200.		U/	1000.
Dibromochloromethane (PPB(V/V))		U/	6.		U/	120.		U/	600.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC

	HD-LGLP08-01 06/04/93			HD-LGLP11-01 06/04/93			HD-LGLP11-91 06/04/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Freon 12 (PPB(V/V))	2100.	/	400.	9100.	/	400.	8600.	/	200.
Chloromethane (PPB(V/V))	720.	/	500.		U/	500.		U/	250.
Freon 114 (PPB(V/V))	760.	/	400.	860.	/	400.	940.	/	200.
Vinyl chloride (PPB(V/V))	13000.	/	500.	1100.	/	500.	1300.	/	250.
Bromomethane (PPB(V/V))		U/	600.		U/	600.		U/	300.
Chloroethane (PPB(V/V))		U/	1000.		U/	1000.		U/	500.
Freon 11 (PPB(V/V))		U/	200.	310.	/	200.	330.	/	100.
cis-1,2-Dichloroethene (PPB(V/V))	1400.	/	400.	2400.	/	400.	2700.	/	200.
Carbon disulfide (PPB(V/V))		U/	2000.		U/	2000.		U/	1000.
Freon 113 (PPB(V/V))		U/	400.		U/	400.		U/	200.
Acetone (PPB(V/V))	15000.	/	2000.		U/	2000.		U/	1000.
Methylene chloride (PPB(V/V))		U/	800.		U/	800.	520.	/	400.
trans-1,2-Dichloroethene (PPB(V/V))		U/	800.		U/	800.		U/	400.
1,1-Dichloroethane (PPB(V/V))		U/	500.		U/	500.		U/	250.
Vinyl acetate (PPB(V/V))		U/	500.		U/	500.		U/	250.
1,1-Dichloroethene (PPB(V/V))		U/	400.		U/	400.		U/	200.
2-Butanone (PPB(V/V))	22000.	/	600.		U/	600.	600.	/	300.
Chloroform (PPB(V/V))		U/	400.		U/	400.		U/	200.
1,1,1-Trichloroethane (PPB(V/V))		U/	400.		U/	400.		U/	200.
Carbon tetrachloride (PPB(V/V))		U/	400.		U/	400.		U/	200.
Benzene (PPB(V/V))	670.	/	600.	630.	/	600.	690.	/	300.
1,2-Dichloroethane (PPB(V/V))		U/	400.		U/	400.		U/	200.
Trichloroethene (PPB(V/V))	590.	/	500.	960.	/	500.	1000.	/	250.
1,2-Dichloropropane (PPB(V/V))		U/	1600.		U/	1600.		U/	800.
Bromodichloromethane (PPB(V/V))		U/	400.		U/	400.		U/	200.
cis-1,3-Dichloropropene (PPB(V/V))		U/	600.		U/	600.		U/	300.
4-Methyl-2-pentanone (PPB(V/V))		U/	4000.		U/	600.		U/	300.
Toluene (PPB(V/V))	53000.	/	600.	20000.	/	600.	21000.	/	300.
trans-1,3-Dichloropropene (PPB(V/V))		U/	600.		U/	600.		U/	300.
1,1,2-Trichloroethane (PPB(V/V))		U/	600.		U/	600.		U/	300.
Tetrachloroethene (PPB(V/V))	830.	/	600.	2700.	/	600.	2800.	/	300.
2-Hexanone (PPB(V/V))		U/	1000.		U/	1000.		U/	500.
Dibromochloromethane (PPB(V/V))		U/	600.		U/	600.		U/	300.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC

HD-LGTB01-01 06/04/93

Parameter	CONC	LQ/DVQ	RDL
Freon 12 (PPB(V/V))		U/	2.
Chloromethane (PPB(V/V))		U/	2.5
Freon 114 (PPB(V/V))		U/	2.
Vinyl chloride (PPB(V/V))		U/	2.5
Bromomethane (PPB(V/V))		U/	3.
Chloroethane (PPB(V/V))		U/	5.
Freon 11 (PPB(V/V))		U/	1.
cis-1,2-Dichloroethene (PPB(V/V))		U/	2.
Carbon disulfide (PPB(V/V))		U/	10.
Freon 113 (PPB(V/V))		U/	2.
Acetone (PPB(V/V))		U/	10.
Methylene chloride (PPB(V/V))		U/	4.
trans-1,2-Dichloroethene (PPB(V/V))		U/	4.
1,1-Dichloroethane (PPB(V/V))		U/	2.5
Vinyl acetate (PPB(V/V))		U/	2.5
1,1-Dichloroethene (PPB(V/V))		U/	2.
2-Butanone (PPB(V/V))		U/	3.
Chloroform (PPB(V/V))		U/	2.
1,1,1-Trichloroethane (PPB(V/V))		U/	2.
Carbon tetrachloride (PPB(V/V))		U/	2.
Benzene (PPB(V/V))		U/	3.
1,2-Dichloroethane (PPB(V/V))		U/	2.
Trichloroethene (PPB(V/V))		U/	2.5
1,2-Dichloropropane (PPB(V/V))		U/	8.
Bromodichloromethane (PPB(V/V))		U/	2.
cis-1,3-Dichloropropene (PPB(V/V))		U/	3.
4-Methyl-2-pentanone (PPB(V/V))		U/	3.
Toluene (PPB(V/V))		U/	3.
trans-1,3-Dichloropropene (PPB(V/V))		U/	3.
1,1,2-Trichloroethane (PPB(V/V))		U/	3.
Tetrachloroethene (PPB(V/V))		U/	3.
2-Hexanone (PPB(V/V))		U/	5.
Dibromochloromethane (PPB(V/V))		U/	3.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC

	HD-LGLP01-91 06/04/93			HD-LGLP06-01 06/04/93			HD-LGLP07-01 06/04/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
1,2-Dibromoethane (PPB(V/V))		U/	4.		U/	80.		U/	400.
Chlorobenzene (PPB(V/V))		U/	5.	180.	/	100.		U/	500.
Ethylbenzene (PPB(V/V))	34.	/	5.	3700.	/	100.	11000.	/	500.
Xylenes (total) (PPB(V/V))	52.	/	10.	7600.	/	200.	30000.	/	1000.
Styrene (PPB(V/V))		U/	14.		U/	280.		U/	1400.
Bromoform (PPB(V/V))		U/	4.		U/	80.		U/	400.
1,1,2,2-Tetrachloroethane (PPB(V/V))		U/	8.		U/	160.		U/	800.
Benzyl chloride (PPB(V/V))		U/	4.		U/	80.		U/	400.
4-Ethyl toluene (PPB(V/V))		U/	8.	520.	/	160.	1300.	/	800.
1,3,5-Trimethylbenzene (PPB(V/V))		U/	5.	200.	/	100.	510.	/	500.
1,2,4-Trimethylbenzene (PPB(V/V))		U/	6.	440.	/	120.	1200.	/	600.
1,3-Dichlorobenzene (PPB(V/V))		U/	6.		U/	120.		U/	600.
1,4-Dichlorobenzene (PPB(V/V))		U/	8.		U/	160.		U/	800.
1,2-Dichlorobenzene (PPB(V/V))		U/	10.		U/	200.		U/	1000.
1,2,4-Trichlorobenzene (PPB(V/V))		U/	14.		U/	280.		U/	1400.
Hexachlorobutadiene (PPB(V/V))		U/	10.		U/	200.		U/	1000.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC

	HD-LGLP08-01 06/04/93			HD-LGLP11-01 06/04/93			HD-LGLP11-91 06/04/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
1,2-Dibromoethane (PPB(V/V))		U/	400.		U/	400.		U/	200.
Chlorobenzene (PPB(V/V))	4500.	/	500.		U/	500.		U/	250.
Ethylbenzene (PPB(V/V))	9700.	/	500.	3200.	/	500.	3400.	/	250.
Xylenes (total) (PPB(V/V))	24000.	/	1000.	7000.	/	1000.	7100.	/	500.
Styrene (PPB(V/V))		U/	1400.		U/	1400.		U/	700.
Bromoform (PPB(V/V))		U/	400.		U/	400.		U/	200.
1,1,2,2-Tetrachloroethane (PPB(V/V))		U/	800.		U/	800.		U/	400.
Benzyl chloride (PPB(V/V))		U/	400.		U/	400.		U/	200.
4-Ethyl toluene (PPB(V/V))	2600.	/	800.		U/	800.	490.	/	400.
1,3,5-Trimethylbenzene (PPB(V/V))	910.	/	500.		U/	500.		U/	250.
1,2,4-Trimethylbenzene (PPB(V/V))	2100.	/	600.		U/	600.	420.	/	300.
1,3-Dichlorobenzene (PPB(V/V))		U/	600.		U/	600.		U/	300.
1,4-Dichlorobenzene (PPB(V/V))		U/	800.		U/	800.		U/	400.
1,2-Dichlorobenzene (PPB(V/V))		U/	1000.		U/	1000.		U/	500.
1,2,4-Trichlorobenzene (PPB(V/V))		U/	1400.		U/	1400.		U/	700.
Hexachlorobutadiene (PPB(V/V))		U/	1000.		U/	1000.		U/	500.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GAS Type: GSVOC

Parameter	HD-LGTB01-01 06/04/93 CONC	LQ/DVQ	RDL
1,2-Dibromoethane (PPB(V/V))		U/	2.
Chlorobenzene (PPB(V/V))		U/	2.5
Ethylbenzene (PPB(V/V))		U/	2.5
Xylenes (total) (PPB(V/V))		U/	5.
Styrene (PPB(V/V))		U/	7.
Bromoform (PPB(V/V))		U/	2.
1,1,2,2-Tetrachloroethane (PPB(V/V))		U/	4.
Benzyl chloride (PPB(V/V))		U/	2.
4-Ethyl toluene (PPB(V/V))		U/	4.
1,3,5-Trimethylbenzene (PPB(V/V))		U/	2.5
1,2,4-Trimethylbenzene (PPB(V/V))		U/	3.
1,3-Dichlorobenzene (PPB(V/V))		U/	3.
1,4-Dichlorobenzene (PPB(V/V))		U/	4.
1,2-Dichlorobenzene (PPB(V/V))		U/	5.
1,2,4-Trichlorobenzene (PPB(V/V))		U/	7.
Hexachlorobutadiene (PPB(V/V))		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P3

LEACHATE VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: VOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-LCFB01-01 05/13/93			HD-LCLP01-01 05/13/93			HD-LCLP01-91 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	25.		U/	50.
Bromomethane (UG/L)		U/	10.		U/	25.		U/	50.
Vinyl chloride (UG/L)		U/	10.		U/	25.		U/	50.
Chloroethane (UG/L)		U/	10.	45.	/	25.	46.	J/	50.
Methylene chloride (UG/L)	1.	J/	10.	160.	/	25.	180.	/	50.
Acetone (UG/L)	13.	/J	10.	110.	/	25.		/U	91.
Carbon disulfide (UG/L)		U/	10.		U/	25.		U/	50.
1,1-Dichloroethene (UG/L)		U/	10.		U/	25.		U/	50.
1,1-Dichloroethane (UG/L)		U/	10.		U/	25.		U/	50.
1,2-Dichloroethene (total) (UG/L)		U/	10.	7.	J/	25.		U/	50.
Chloroform (UG/L)		U/	10.		U/	25.		U/	50.
1,2-Dichloroethane (UG/L)		U/	10.		U/	25.		U/	50.
2-Butanone (UG/L)		U/	10.	190.	/	25.		U/	50.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	25.		U/	50.
Carbon tetrachloride (UG/L)		U/	10.		U/	25.		U/	50.
Bromodichloromethane (UG/L)		U/	10.		U/	25.		U/	50.
1,2-Dichloropropane (UG/L)		U/	10.		U/	25.		U/	50.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	25.		U/	50.
Trichloroethene (UG/L)		U/	10.		U/	25.		U/	50.
Dibromochloromethane (UG/L)		U/	10.		U/	25.		U/	50.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	25.		U/	50.
Benzene (UG/L)		U/	10.	12.	J/	25.	13.	J/	50.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	25.		U/	50.
Bromoform (UG/L)		U/	10.		U/	25.		U/	50.
4-Methyl-2-pentanone (UG/L)		U/	10.	22.	J/	25.	22.	J/	50.
2-Hexanone (UG/L)		U/	10.	14.	J/J	25.		U/	50.
Tetrachloroethene (UG/L)		U/	10.	9.	J/	25.		U/	50.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	25.		U/	50.
Toluene (UG/L)		U/	10.	330.	/	25.	450.	/	50.
Chlorobenzene (UG/L)		U/	10.		U/	25.		U/	50.
Ethylbenzene (UG/L)		U/	10.	52.	/	25.	46.	J/	50.
Styrene (UG/L)		U/	10.		U/	25.		U/	50.
Xylenes (total) (UG/L)		U/	10.	100.	/	25.	90.	/	50.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: VOC

	HD-LCLP06-01 05/13/93			HD-LCLP08-01 05/13/93			HD-LCLP11-01 05/12/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	250.		U/	1000.		U/	500.
Bromomethane (UG/L)		U/	250.		U/	1000.		U/	500.
Vinyl chloride (UG/L)		U/	250.		U/	1000.		U/	500.
Chloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
Methylene chloride (UG/L)	58.	J/	250.		U/	1000.		U/	500.
Acetone (UG/L)	2200.	/	250.	19000.	/J	1000.	1500.	/J	500.
Carbon disulfide (UG/L)		U/	250.		U/	1000.		U/	500.
1,1-Dichloroethene (UG/L)		U/	250.		U/	1000.		U/	500.
1,1-Dichloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
1,2-Dichloroethene (total) (UG/L)		U/	250.		U/	1000.	190.	J/	500.
Chloroform (UG/L)		U/	250.		U/	1000.		U/	500.
1,2-Dichloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
2-Butanone (UG/L)	3200.	/	250.	12000.	/	1000.	3900.	/	500.
1,1,1-Trichloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
Carbon tetrachloride (UG/L)		U/	250.		U/	1000.		U/	500.
Bromodichloromethane (UG/L)		U/	250.		U/	1000.		U/	500.
1,2-Dichloropropane (UG/L)		U/	250.		U/	1000.		U/	500.
cis-1,3-Dichloropropene (UG/L)		U/	250.		U/	1000.		U/	500.
Trichloroethene (UG/L)		U/	250.		U/	1000.		U/	500.
Dibromochloromethane (UG/L)		U/	250.		U/	1000.		U/	500.
1,1,2-Trichloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
Benzene (UG/L)		U/	250.		U/	1000.		U/	500.
trans-1,3-Dichloropropene (UG/L)		U/	250.		U/	1000.		U/	500.
Bromoform (UG/L)		U/	250.		U/	1000.		U/	500.
4-Methyl-2-pentanone (UG/L)	160.	J/	250.	450.	J/	1000.		U/	500.
2-Hexanone (UG/L)		U/	250.		U/	1000.		U/	500.
Tetrachloroethene (UG/L)		U/	250.		U/	1000.		U/	500.
1,1,2,2-Tetrachloroethane (UG/L)		U/	250.		U/	1000.		U/	500.
Toluene (UG/L)	210.	J/	250.	260.	J/	1000.	740.	/	500.
Chlorobenzene (UG/L)		U/	250.		U/	1000.		U/	500.
Ethylbenzene (UG/L)		U/	250.		U/	1000.	130.	J/	500.
Styrene (UG/L)		U/	250.		U/	1000.		U/	500.
Xylenes (total) (UG/L)	170.	J/	250.		U/	1000.	330.	J/	500.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: VOC

Parameter	HD-LCMHE-01 05/13/93			HD-LCTB01-01 05/13/93			HD-LCTB02-01 05/13/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)	18.	/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)	44.	/	10.		U/	10.	3.	J/	10.
Acetone (UG/L)	140.	/J	10.		U/	10.	5.	J/J	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)	5.	J/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)	13.	/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)	70.	/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)	22.	/	10.		U/	10.		U/	10.
2-Butanone (UG/L)	120.	/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)	28.	/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)	14.	/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)	22.	/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)	43.	/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)	9.	J/J	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)	62.	/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)	41.	/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P4

LEACHATE SVOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-LCFB01-01 05/13/93			HD-LCLP01-01 05/13/93			HD-LCLP01-91 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.	160.	/	50.	170.	/	54.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	50.		U/	54.
2-Chlorophenol (UG/L)		U/	10.		U/	50.		U/	54.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	50.		U/	54.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	50.		U/	54.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	50.		U/	54.
2-Methylphenol (UG/L)		U/	10.		U/	50.		U/	54.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	50.		U/	54.
4-Methylphenol (UG/L)		U/	10.	730.	D/	50.	760.	D/	54.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	50.		U/	54.
Hexachloroethane (UG/L)		U/	10.		U/	50.		U/	54.
Nitrobenzene (UG/L)		U/	10.		U/	50.		U/	54.
Isophorone (UG/L)		U/	10.		U/	50.		U/	54.
2-Nitrophenol (UG/L)		U/	10.		U/	50.		U/	54.
2,4-Dimethylphenol (UG/L)		U/	10.	12.	J/	50.	11.	J/	54.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	50.		U/	54.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	50.		U/	54.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	50.		U/	54.
Naphthalene (UG/L)		U/	10.		U/	50.	34.	J/	54.
4-Chloroaniline (UG/L)		U/	10.		U/	50.		U/	54.
Hexachlorobutadiene (UG/L)		U/	10.		U/	50.		U/	54.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	50.		U/	54.
2-Methylnaphthalene (UG/L)		U/	10.		U/	50.		U/	54.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	50.		U/	54.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	50.		U/	54.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	130.		U/	130.
2-Chloronaphthalene (UG/L)		U/	10.		U/	50.		U/	54.
2-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	130.
Dimethylphthalate (UG/L)		U/	10.		U/	50.		U/	54.
Acenaphthylene (UG/L)		U/	10.		U/	50.		U/	54.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	50.		U/	54.
3-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	130.
Acenaphthene (UG/L)		U/	10.		U/	50.		U/	54.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC

	HD-LCLP06-01 05/13/93			HD-LCLP08-01 05/13/93			HD-LCLP11-01 05/12/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)	83.	/	10.	840.	D/	52.	5.	J/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	52.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	52.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	52.		U/	10.
1,4-Dichlorobenzene (UG/L)	5.	J/	10.		U/	52.	20.	/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	52.		U/	10.
2-Methylphenol (UG/L)	16.	/	10.		U/	52.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	52.		U/	10.
4-Methylphenol (UG/L)	1300.	D/	10.	2200.	D/	52.	48.	/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	52.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	52.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	52.		U/	10.
Isophorone (UG/L)		U/	10.		U/	52.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	52.		U/	10.
2,4-Dimethylphenol (UG/L)	4.	J/	10.	20.	J/	52.	3.	J/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	52.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	52.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	52.		U/	10.
Naphthalene (UG/L)	6.	J/	10.	26.	J/	52.	16.	/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	52.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	52.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	52.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	52.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	52.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	52.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	130.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	52.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	52.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	52.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	52.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	52.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC

Parameter	HD-LCMHE-01 05/13/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)	19.	/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.
2-Chlorophenol (UG/L)		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.
2-Methylphenol (UG/L)		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.
4-Methylphenol (UG/L)	5.	J/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.
Hexachloroethane (UG/L)		U/	10.
Nitrobenzene (UG/L)		U/	10.
Isophorone (UG/L)		U/	10.
2-Nitrophenol (UG/L)		U/	10.
2,4-Dimethylphenol (UG/L)	6.	J/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.
Naphthalene (UG/L)		U/	10.
4-Chloroaniline (UG/L)		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.
2-Nitroaniline (UG/L)		U/	26.
Dimethylphthalate (UG/L)		U/	10.
Acenaphthylene (UG/L)		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.
3-Nitroaniline (UG/L)		U/	26.
Acenaphthene (UG/L)		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC

Parameter	HD-LCFB01-01 05/13/93			HD-LCLP01-01 05/13/93			HD-LCLP01-91 05/13/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	130.		U/	130.
4-Nitrophenol (UG/L)		U/	26.		U/	130.		U/	130.
Dibenzofuran (UG/L)		U/	10.		U/	50.		U/	54.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	50.		U/	54.
Diethylphthalate (UG/L)		U/	10.	32.	J/	50.	31.	J/	54.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	50.		U/	54.
Fluorene (UG/L)		U/	10.		U/	50.		U/	54.
4-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	130.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	130.		U/	130.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	50.		U/	54.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	50.		U/	54.
Hexachlorobenzene (UG/L)		U/	10.		U/	50.		U/	54.
Pentachlorophenol (UG/L)		U/	25.		U/	130.		U/	130.
Phenanthrene (UG/L)		U/	10.		U/	50.		U/	54.
Anthracene (UG/L)		U/	10.		U/	50.		U/	54.
Di-n-butylphthalate (UG/L)	1.	BJ/	10.		U/	50.		U/	54.
Fluoranthene (UG/L)		U/	10.		U/	50.		U/	54.
Pyrene (UG/L)		U/	10.		U/	50.		U/	54.
Butylbenzylphthalate (UG/L)		U/	10.		U/	50.		U/	54.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	50.		U/	54.
Benzo(a)anthracene (UG/L)		U/	10.		U/	50.		U/	54.
Chrysene (UG/L)		U/	10.		U/	50.		U/	54.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	50.		U/	54.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	50.		U/	54.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	50.		U/	54.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	50.		U/	54.
Benzo(a)pyrene (UG/L)		U/	10.		U/	50.		U/	54.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	50.		U/	54.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	50.		U/	54.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	50.		U/	54.
Carbazole (UG/L)		U/	10.		U/	50.		U/	54.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC

Parameter	HD-LCLP06-01 05/13/93 CONC	LQ/DVQ	RDL	HD-LCLP08-01 05/13/93 CONC	LQ/DVQ	RDL	HD-LCLP11-01 05/12/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	130.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	130.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	52.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	52.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	52.	4.	J/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	52.		U/	10.
Fluorene (UG/L)		U/	10.		U/	52.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	130.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	130.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	52.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	52.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	52.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	130.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	52.		U/	10.
Anthracene (UG/L)		U/	10.		U/	52.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	52.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	52.		U/	10.
Pyrene (UG/L)		U/	10.		U/	52.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	52.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	52.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	52.		U/	10.
Chrysene (UG/L)		U/	10.		U/	52.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	52.	42.	/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	52.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	52.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	52.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	52.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	52.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	52.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	52.		U/	10.
Carbazole (UG/L)		U/	10.		U/	52.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: SVOC

Parameter	HD-LCMHE-01 05/13/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.
4-Nitrophenol (UG/L)		U/	26.
Dibenzofuran (UG/L)		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.
Diethylphthalate (UG/L)		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.
Fluorene (UG/L)		U/	10.
4-Nitroaniline (UG/L)		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.
Hexachlorobenzene (UG/L)		U/	10.
Pentachlorophenol (UG/L)		U/	26.
Phenanthrene (UG/L)		U/	10.
Anthracene (UG/L)		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.
Fluoranthene (UG/L)		U/	10.
Pyrene (UG/L)		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.
Chrysene (UG/L)		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.
Carbazole (UG/L)		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P5

LEACHATE PESTICIDES/PCBS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: PPCB
Generated by: CAW
Date Issued: 21-SEP-93

	HD-LCFB01-01 05/13/93			HD-LCLP01-01 05/13/93			HD-LCLP01-91 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.056		U/	0.051		U/	0.052
beta-BHC (UG/L)		U/	0.056		U/	0.051		U/	0.052
delta-BHC (UG/L)		U/	0.056		U/	0.051		U/	0.052
gamma-BHC (Lindane) (UG/L)		U/	0.056		U/	0.051		U/	0.052
Heptachlor (UG/L)		U/	0.056		U/	0.051		U/	0.052
Aldrin (UG/L)		U/	0.056		U/	0.051		U/	0.052
Heptachlor epoxide (UG/L)		U/	0.056		U/	0.051		U/	0.052
Endosulfan I (UG/L)		U/	0.056		U/	0.051		U/	0.052
Dieldrin (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.11		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.56		U/	0.51		U/	0.52
Endrin ketone (UG/L)		U/	0.11		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.056		U/	0.051		U/	0.052
gamma-Chlordane (UG/L)		U/	0.056		U/	0.051		U/	0.052
Toxaphene (UG/L)		U/	5.6		U/	5.1		U/	5.2
Aroclor-1016 (UG/L)		U/	1.1	4.6	P/	1.	6.3	P/	1.
Aroclor-1221 (UG/L)		U/	2.2		U/	2.		U/	2.1
Aroclor-1232 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.1		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.11		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: PPCB

Parameter	HD-LCLP06-01 05/13/93			HD-LCLP08-01 05/13/93			HD-LCLP11-01 05/12/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.052		U/	0.051		U/	0.051
beta-BHC (UG/L)		U/	0.052		U/	0.051		U/	0.051
delta-BHC (UG/L)		U/	0.052		U/	0.051		U/	0.051
gamma-BHC (Lindane) (UG/L)		U/	0.052		U/	0.051		U/	0.051
Heptachlor (UG/L)		U/	0.052		U/	0.051		U/	0.051
Aldrin (UG/L)		U/	0.052		U/	0.051		U/	0.051
Heptachlor epoxide (UG/L)		U/	0.052		U/	0.051		U/	0.051
Endosulfan I (UG/L)		U/	0.052		U/	0.051		U/	0.051
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.52		U/	0.51		U/	0.51
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.052		U/	0.051		U/	0.051
gamma-Chlordane (UG/L)		U/	0.052		U/	0.051		U/	0.051
Toxaphene (UG/L)		U/	5.2		U/	5.1		U/	5.1
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.1		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: PPCB

Parameter	HD-LCMHE-01 05/13/93 CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.054
beta-BHC (UG/L)		U/	0.054
delta-BHC (UG/L)		U/	0.054
gamma-BHC (Lindane) (UG/L)		U/	0.054
Heptachlor (UG/L)		U/	0.054
Aldrin (UG/L)		U/	0.054
Heptachlor epoxide (UG/L)		U/	0.054
Endosulfan I (UG/L)		U/	0.054
Dieldrin (UG/L)		U/	0.11
4,4'-DDE (UG/L)		U/	0.11
Endrin (UG/L)		U/	0.11
Endosulfan II (UG/L)		U/	0.11
4,4'-DDD (UG/L)		U/	0.11
Endosulfan sulfate (UG/L)		U/	0.11
4,4'-DDT (UG/L)		U/	0.11
Methoxychlor (UG/L)		U/	0.54
Endrin ketone (UG/L)		U/	0.11
alpha-Chlordane (UG/L)		U/	0.054
gamma-Chlordane (UG/L)		U/	0.054
Toxaphene (UG/L)		U/	5.4
Aroclor-1016 (UG/L)		U/	1.1
Aroclor-1221 (UG/L)		U/	2.2
Aroclor-1232 (UG/L)		U/	1.1
Aroclor-1242 (UG/L)		U/	1.1
Aroclor-1248 (UG/L)		U/	1.1
Aroclor-1254 (UG/L)		U/	1.1
Aroclor-1260 (UG/L)		U/	1.1
Endrin aldehyde (UG/L)		U/	0.11

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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LEACHATE INDICATORS AND METALS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: IND MTL
Generated by: CAW
Date Issued: 21-SEP-93

	HD-LCFB01-01 05/13/93			HD-LCLP01-01 05/13/93			HD-LCLP01-91 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)	62.2	B/	39.	57100.	/	39.	222000.	/	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.	31.3	/	3.	32.	M/J	3.
Barium (UG/L)		U/	1.	510.	/	1.	1710.	/	1.
Beryllium (UG/L)		U/	1.	4.	B/	1.	12.5	/	1.
Cadmium (UG/L)		U/	3.	21.3	/	3.	67.9	/	3.
Calcium (UG/L)	6190.	/	12.	448000.	/	12.	1410000.	/	12.
Chromium, total (UG/L)		U/	3.	126.	/	3.	418.	/	3.
Cobalt (UG/L)		U/	4.	52.8	/	4.	185.	/	4.
Copper (UG/L)	5.2	B/	2.	207.	/	2.	755.	/	2.
Iron (UG/L)	22.6	B/	7.	154000.	/	7.	612000.	/	7.
Lead (UG/L)		UN/UJ	2.	241.	/	2.	884.	/	2.
Magnesium (UG/L)	32.9	B/	17.	357000.	/	17.	780000.	/	17.
Manganese (UG/L)	2.7	B/	1.	2260.	/	1.	9020.	/	1.
Mercury (UG/L)		U/UJ	0.1	0.43	/J	0.1	1.8	/	0.1
Nickel (UG/L)		U/	5.	184.	/	5.	560.	/	5.
Potassium (UG/L)		B/U	132.	283000.	/	55.	297000.	/	55.
Selenium (UG/L)		UN/UJ	2.		UN/UJ	10.		UWN/UJ	10.
Silver (UG/L)		U/	3.	3.	B/	3.	10.9	/	3.
Sodium (UG/L)	726.	B/	24.	1080000.	/	24.	1040000.	/	24.
Thallium (UG/L)		UN/UJ	2.	2.	BNW/J	2.		UWN/UJ	10.
Vanadium (UG/L)		U/	2.	114.	/	2.	386.	/	2.
Zinc (UG/L)	609.	/	6.		/U	2180.	8280.	/	6.
Cyanide (UG/L)		/U	1.8		B/U	19.9		B/U	11.9
Alkalinity, Total (MG/L)		U/	10.	2720.	/	10.	2660.	/	10.
Carbon, Total Organic (MG/L)		U/	1.	32.5	/	1.	30.5	/	1.
Chloride (MG/L)		U/	2.	1310.	/	2.	1330.	/	2.
Hardness (MG/L)		U/	10.	3460.	/	10.	1070.	/	10.
Nitrogen, Ammonia (MG/L)		U/	0.1	214.	/	0.1	223.	/	0.1
Nitrogen, Nitrate (MG/L)		U/	0.02	0.06	/	0.02		U/	0.04
Nitrogen, Nitrite (MG/L)		U/	0.02	0.03	/	0.02	0.05	/	0.02
Total Dissolved Solids (MG/L)		U/	10.	4490.	/	10.	10200.	/	10.
Sulfate (MG/L)		UN/	10.	74.	N/J	10.	74.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: IND MTL

Parameter	HD-LCLP06-01 05/13/93 CONC	LQ/DVQ	RDL	HD-LCLP08-01 05/13/93 CONC	LQ/DVQ	RDL	HD-LCLP11-01 05/12/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)	4770.	/	39.	18000.	/	39.	65900.	/	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)	30.6	/	3.	39.3	/	3.	51.3	/	3.
Barium (UG/L)	257.	/	1.	459.	/	1.	1610.	/	1.
Beryllium (UG/L)	1.2	B/	1.	1.4	B/	1.	4.9	B/	1.
Cadmium (UG/L)	5.8	/	3.	5.6	/	3.	35.4	/	3.
Calcium (UG/L)	204000.	/	12.	119000.	/	12.	550000.	/	12.
Chromium, total (UG/L)	42.1	/	3.	68.	/	3.	174.	/	3.
Cobalt (UG/L)	14.3	B/	4.	38.9	B/	4.	49.9	B/	4.
Copper (UG/L)	33.7	/	2.	63.7	/	2.	378.	/	2.
Iron (UG/L)	24800.	/	7.	43600.	/	7.	257000.	/	7.
Lead (UG/L)	79.8	N/J	2.	104.	N/J	2.	1930.	/	2.
Magnesium (UG/L)	282000.	/	17.	211000.	/	17.	333000.	/	17.
Manganese (UG/L)	816.	/	1.	676.	/	1.	2790.	/	1.
Mercury (UG/L)		U/UJ	0.1	1.3	/	0.1	1.3	/	0.1
Nickel (UG/L)	76.	/	5.	203.	/	5.	172.	/	5.
Potassium (UG/L)	507000.	/	55.	495000.	/	55.	82000.	/	55.
Selenium (UG/L)		UN/UJ	2.		UWN/UJ	2.		UN/UJ	10.
Silver (UG/L)		U/	3.		U/	3.	8.2	B/	3.
Sodium (UG/L)	1140000.	/	24.	1530000.	/	24.	238000.	/	24.
Thallium (UG/L)		UWN/UJ	2.	2.2	BNW/J	2.		UWN/UJ	10.
Vanadium (UG/L)	20.3	B/	2.	45.2	B/	2.	105.	/	2.
Zinc (UG/L)		/U	1740.		/U	1060.		/U	4480.
Cyanide (UG/L)		B/U	4.7		U/	3.1	37.8	/	0.62
Alkalinity, Total (MG/L)	4360.	/	10.	3490.	/	10.	1780.	/	10.
Carbon, Total Organic (MG/L)	36.5	/	1.	36.	/	1.	120.	/	1.
Chloride (MG/L)	1270.	/	2.	2070.	/	2.	196.	/	2.
Hardness (MG/L)	1660.	/	10.	1150.	/	10.	1730.	/	10.
Nitrogen, Ammonia (MG/L)	327.	/	0.1	378.	/	0.1	44.6	/	0.1
Nitrogen, Nitrate (MG/L)		U/	0.02		U/	0.02	0.02	/	0.02
Nitrogen, Nitrite (MG/L)	0.19	/	0.02	0.14	/	0.02	0.07	/	0.02
Total Dissolved Solids (MG/L)	5820.	/	10.	6560.	/	10.	2570.	/	10.
Sulfate (MG/L)	28.	N/J	10.	17.	N/J	10.	530.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC Type: IND MTL

Parameter	HD-LCMHE-01 05/13/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)	151.	B/	39.
Antimony (UG/L)		U/	24.
Arsenic (UG/L)	4.1	B/	3.
Barium (UG/L)	636.	/	1.
Beryllium (UG/L)		U/	1.
Cadmium (UG/L)		U/	3.
Calcium (UG/L)	90300.	/	12.
Chromium, total (UG/L)	9.9	B/	3.
Cobalt (UG/L)	8.1	B/	4.
Copper (UG/L)	9.4	B/U	2.
Iron (UG/L)	7900.	/	7.
Lead (UG/L)	6.2	MN/J	2.
Magnesium (UG/L)	138000.	/	17.
Manganese (UG/L)	76.2	/	1.
Mercury (UG/L)		U/UJ	0.1
Nickel (UG/L)	21.9	B/	5.
Potassium (UG/L)	113000.	/	55.
Selenium (UG/L)		UN/UJ	2.
Silver (UG/L)		U/	3.
Sodium (UG/L)	480000.	/	24.
Thallium (UG/L)	2.	BNW/J	2.
Vanadium (UG/L)	2.4	B/	2.
Zinc (UG/L)		/U	632.
Cyanide (UG/L)		/U	1.4
Alkalinity, Total (MG/L)	1700.	/	10.
Carbon, Total Organic (MG/L)	110.	/	1.
Chloride (MG/L)	823.	/	2.
Hardness (MG/L)	768.	/	10.
Nitrogen, Ammonia (MG/L)	106.	/	0.1
Nitrogen, Nitrate (MG/L)	0.05	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02
Total Dissolved Solids (MG/L)	2430.	/	10.
Sulfate (MG/L)	57.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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LEACHATE TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC
Generated by: CAW
Date Issued: 21-SEP-93

HD-LCFB01-01 05/13/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	7.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCLP01-01 05/13/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Benzenepropanoic acid (UG/L)	840.	J/
Unknown acid (UG/L)	790.	J/
Unknown acid (UG/L)	740.	J/
Unknown acid (UG/L)	310.	J/
Bicyclo[2.2.1]heptan-2-one, (UG/L)	260.	J/
Unknown acid (UG/L)	220.	J/
Unknown (UG/L)	180.	J/
Unknown (UG/L)	140.	J/
Unknown acid (UG/L)	110.	J/
Unknown acid (UG/L)	70.	J/
Unknown acid (UG/L)	61.	J/
Unknown (UG/L)	57.	J/
Unknown (UG/L)	110.	J/
Benzamide, n,n-diethyl-3-met (UG/L)	68.	J/
Unknown acid (UG/L)	66.	J/
Unknown (UG/L)	57.	J/
Unknown (UG/L)	72.	J/
Unknown (UG/L)	70.	J/
Unknown acid (UG/L)	28.	J/
Unknown (UG/L)	27.	J/
Unknown acid (UG/L)	45.	J/
Unknown acid (UG/L)	42.	J/
Unknown (UG/L)	41.	J/
Unknown (UG/L)	37.	J/
2(3H)-Benzothiazolone (UG/L)	48.	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	98.	J/
Unknown (UG/L)	63.	J/
Unknown (UG/L)	86.	J/
Unknown (UG/L)	64.	J/
Unknown (UG/L)	57.	J/
Unknown (UG/L)	38.	J/
Unknown (UG/L)	36.	J/
Unknown (UG/L)	25.	J/
Unknown alkane (UG/L)	31.	J/
Unknown (UG/L)	26.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCLP01-91 05/13/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown acid (UG/L)	1200.	J/
Unknown acid (UG/L)	580.	J/
Unknown acid (UG/L)	520.	J/
Unknown (UG/L)	400.	J/
Bicyclo[2.2.1]heptan-2-one, (UG/L)	400.	J/
Unknown acid (UG/L)	370.	J/
Unknown acid (UG/L)	310.	J/
Unknown (UG/L)	190.	J/
Unknown (UG/L)	150.	J/
Unknown acid (UG/L)	150.	J/
Unknown acid (UG/L)	100.	J/
Unknown acid (UG/L)	82.	J/
Unknown (UG/L)	79.	J/
Unknown (UG/L)	75.	J/
Unknown acid (UG/L)	70.	J/
Unknown (UG/L)	120.	J/
Unknown (UG/L)	110.	J/
Unknown (UG/L)	52.	J/
Benzamide, n,n-diethyl-3-met (UG/L)	50.	J/
Unknown (UG/L)	45.	J/
Unknown (UG/L)	86.	J/
Unknown (UG/L)	45.	J/
Unknown (UG/L)	44.	J/
Unknown (UG/L)	41.	J/
Unknown (UG/L)	78.	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	120.	J/
Unknown (UG/L)	110.	J/
Unknown (UG/L)	57.	J/
Unknown (UG/L)	71.	J/
Unknown (UG/L)	37.	J/
Unknown (UG/L)	50.	J/
Unknown (UG/L)	30.	J/
Unknown (UG/L)	43.	J/
Unknown (UG/L)	35.	J/
Unknown (UG/L)	22.	J/
Unknown (UG/L)	28.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCLP06-01 05/13/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	59.	J/
Unknown (UG/L)	45.	J/
Bicyclo[2.2.1]heptan-2-one (UG/L)	45.	J/
Unknown (UG/L)	40.	J/
Unknown (UG/L)	32.	J/
Unknown (UG/L)	45.	J/
Benzenepropanoic acid (UG/L)	22.	J/
Aldol condensate (UG/L)	21.	J/
Unknown acid (UG/L)	16.	J/
Unknown (UG/L)	16.	J/
Unknown (UG/L)	16.	J/
Unknown (UG/L)	16.	J/
Unknown acid (UG/L)	15.	J/
Unknown (UG/L)	14.	J/
Unknown (UG/L)	11.	J/
Unknown (UG/L)	11.	J/
Unknown (UG/L)	14.	J/
Unknown alkane (UG/L)	13.	J/
Bicyclo[4.1.0]heptane,3,7,7 (UG/L)	8.7	J/
Unknown alkane (UG/L)	13.	J/
Unknown acid (UG/L)	8.1	J/
Unknown alkane (UG/L)	12.	J/
Unknown alkane (UG/L)	11.	J/
Unknown (UG/L)	7.5	J/
Sulfur, mol. (S8) (UG/L)	11.	J/
Unknown alkane (UG/L)	9.4	J/
Unknown alkane (UG/L)	8.2	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	1100.	J/
Unknown (UG/L)	120.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCLP08-01 05/13/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	300.	J/
Unknown acid (UG/L)	140.	J/
Unknown (UG/L)	130.	J/
Unknown (UG/L)	100.	J/
Benzamide, n,n-diethyl-3-met (UG/L)	190.	J/
Bicyclo[2.2.1]heptan-2-one, (UG/L)	90.	J/
Unknown (UG/L)	160.	J/
Unknown (UG/L)	39.	J/
Unknown (UG/L)	38.	J/
Unknown acid (UG/L)	65.	J/
Unknown (UG/L)	30.	J/
Unknown (UG/L)	26.	J/
Aldol condensate (UG/L)	25.	J/
Unknown acid (UG/L)	47.	J/
Unknown (UG/L)	19.	J/
Unknown (UG/L)	40.	J/
Unknown (UG/L)	40.	J/
Unknown (UG/L)	42.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCLP11-01 05/12/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Hexadecanoic acid (UG/L)	39.	J/
Unknown (UG/L)	55.	J/
Ethanone, 1-phenyl- (UG/L)	43.	J/
Unknown (UG/L)	39.	J/
Cineole (VAN) (UG/L)	38.	J/
Sulfur, mol. (S8) (UG/L)	18.	J/
Unknown (UG/L)	27.	J/
Unknown (UG/L)	25.	J/
Unknown acid (UG/L)	22.	J/
Unknown (UG/L)	21.	J/
Unknown (UG/L)	19.	J/
Unknown (UG/L)	18.	J/
Benzene, propyl- (UG/L)	18.	J/
Unknown (UG/L)	18.	J/
Unknown (UG/L)	11.	J/
Unknown (UG/L)	18.	J/
Unknown (UG/L)	17.	J/
Unknown (UG/L)	11.	J/
Unknown (UG/L)	16.	J/
C9H12 Isomer (UG/L)	15.	J/
Unknown (UG/L)	14.	J/
Unknown (UG/L)	8.2	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown substituted benzene (UG/L)	230.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: LEC

HD-LCMHE-01 05/13/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	32.	J/
Bicyclo[2.2.1]heptan-2-one, (UG/L)	30.	J/
Unknown (UG/L)	23.	J/
Unknown (UG/L)	20.	J/
Unknown (UG/L)	19.	J/
Unknown (UG/L)	14.	J/
Unknown alkane (UG/L)	13.	J/
Benzamide, n,n-diethyl-3-met (UG/L)	10.	J/
Unknown (UG/L)	13.	J/
Bicyclo[2.2.1]heptan-2-one, (UG/L)	14.	J/
Methane, sulfonylbis- (UG/L)	13.	J/
Aldol condensate (UG/L)	13.	J/
Unknown (UG/L)	14.	J/
Unknown (UG/L)	8.9	J/
Unknown (UG/L)	8.4	J/
Unknown acid (UG/L)	6.8	J/
Unknown (UG/L)	6.2	J/
Unknown (UG/L)	8.4	J/
Unknown (UG/L)	7.5	J/
Unknown (UG/L)	9.1	J/
Unknown (UG/L)	5.7	J/
Unknown (UG/L)	6.8	J/
Unknown (UG/L)	6.6	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	54.	J/
Unknown (UG/L)	43.	J/
Unknown (UG/L)	19.	J/
Unknown (UG/L)	6.	J/
Unknown (UG/L)	4.	J/
Unknown (UG/L)	3.	J/
Unknown (UG/L)	5.	J/

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SURFACE SOILS VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: VOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SU01-01 05/14/93			HD-SU02-01 05/14/93			HD-SU03-01 05/14/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/KG)		U/	62.		U/	14.		U/	13.
Bromomethane (UG/KG)		U/	62.		U/	14.		U/	13.
Vinyl chloride (UG/KG)		U/	62.		U/	14.		U/	13.
Chloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
Methylene chloride (UG/KG)	570.	/	62.	59.	/	14.	48.	B/	13.
Acetone (UG/KG)	140.	/	62.	17.	/	14.	8.	J/	13.
Carbon disulfide (UG/KG)		U/	62.	6.	J/	14.		U/	13.
1,1-Dichloroethene (UG/KG)		U/	62.		U/	14.		U/	13.
1,1-Dichloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
1,2-Dichloroethene (total) (UG/KG)		U/	62.		U/	14.		U/	13.
Chloroform (UG/KG)		U/	62.		U/	14.		U/	13.
1,2-Dichloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
2-Butanone (UG/KG)		U/	62.		U/	14.		U/	13.
1,1,1-Trichloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
Carbon tetrachloride (UG/KG)		U/	62.		U/	14.		U/	13.
Bromodichloromethane (UG/KG)		U/	62.		U/	14.		U/	13.
1,2-Dichloropropane (UG/KG)		U/	62.		U/	14.		U/	13.
cis-1,3-Dichloropropene (UG/KG)		U/	62.		U/	14.		U/	13.
Trichloroethene (UG/KG)		U/	62.		U/	14.		U/	13.
Dibromochloromethane (UG/KG)		U/	62.		U/	14.		U/	13.
1,1,2-Trichloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
Benzene (UG/KG)	7.	J/	62.		U/	14.		U/	13.
trans-1,3-Dichloropropene (UG/KG)		U/	62.		U/	14.		U/	13.
Bromoform (UG/KG)		U/	62.		U/	14.		U/	13.
4-Methyl-2-pentanone (UG/KG)		U/	62.		U/	14.		U/	13.
2-Hexanone (UG/KG)		U/	62.		U/	14.		U/	13.
Tetrachloroethene (UG/KG)		U/	62.		U/	14.		U/	13.
1,1,2,2-Tetrachloroethane (UG/KG)		U/	62.		U/	14.		U/	13.
Toluene (UG/KG)	55.	J/	62.	3.	J/	14.		U/	13.
Chlorobenzene (UG/KG)		U/	62.		U/	14.		U/	13.
Ethylbenzene (UG/KG)	240.	/	62.	12.	J/	14.		U/	13.
Styrene (UG/KG)		U/	62.		U/	14.		U/	13.
Xylenes (total) (UG/KG)	280.	/	62.	37.	/	14.		U/	13.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: VOC

Parameter	HD-SU04-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SU04-91 05/14/93 CONC	LQ/DVQ	RDL	HD-SU05-01 05/14/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/KG)		U/	64.		U/	13.		U/	12.
Bromomethane (UG/KG)		U/	64.		U/	13.		U/	12.
Vinyl chloride (UG/KG)		U/	64.		U/	13.		U/	12.
Chloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
Methylene chloride (UG/KG)	1200.	B/	64.	210.	B/	13.		/U	33.
Acetone (UG/KG)		U/	64.	15.	/	13.		U/	12.
Carbon disulfide (UG/KG)		U/	64.		U/	13.		U/	12.
1,1-Dichloroethene (UG/KG)		U/	64.		U/	13.		U/	12.
1,1-Dichloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
1,2-Dichloroethene (total) (UG/KG)		U/	64.		U/	13.		U/	12.
Chloroform (UG/KG)		U/	64.		U/	13.		U/	12.
1,2-Dichloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
2-Butanone (UG/KG)		U/	64.		U/	13.		U/	12.
1,1,1-Trichloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
Carbon tetrachloride (UG/KG)		U/	64.		U/	13.		U/	12.
Bromodichloromethane (UG/KG)		U/	64.		U/	13.		U/	12.
1,2-Dichloropropane (UG/KG)		U/	64.		U/	13.		U/	12.
cis-1,3-Dichloropropene (UG/KG)		U/	64.		U/	13.		U/	12.
Trichloroethene (UG/KG)		U/	64.		U/	13.		U/	12.
Dibromochloromethane (UG/KG)		U/	64.		U/	13.		U/	12.
1,1,2-Trichloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
Benzene (UG/KG)		U/	64.		U/	13.		U/	12.
trans-1,3-Dichloropropene (UG/KG)		U/	64.		U/	13.		U/	12.
Bromoform (UG/KG)		U/	64.		U/	13.		U/	12.
4-Methyl-2-pentanone (UG/KG)		U/	64.		U/	13.		U/	12.
2-Hexanone (UG/KG)		U/	64.		U/	13.		U/	12.
Tetrachloroethene (UG/KG)		U/	64.		U/	13.		U/	12.
1,1,2,2-Tetrachloroethane (UG/KG)		U/	64.		U/	13.		U/	12.
Toluene (UG/KG)		U/	64.	2.	J/	13.		U/	12.
Chlorobenzene (UG/KG)		U/	64.		U/	13.		U/	12.
Ethylbenzene (UG/KG)		U/	64.		U/	13.		U/	12.
Styrene (UG/KG)		U/	64.		U/	13.		U/	12.
Xylenes (total) (UG/KG)		U/	64.		U/	13.		U/	12.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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SURFACE SOILS SVOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SU01-01 05/14/93			HD-SU02-01 05/14/93			HD-SU03-01 05/14/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/KG)		U/	410.		U/	420.		U/	430.
bis(2-Chloroethyl) ether (UG/KG)		U/	410.		U/	420.		U/	430.
2-Chlorophenol (UG/KG)		U/	410.		U/	420.		U/	430.
1,3-Dichlorobenzene (UG/KG)		U/	410.		U/	420.		U/	430.
1,4-Dichlorobenzene (UG/KG)	130.	J/	410.		U/	420.		U/	430.
1,2-Dichlorobenzene (UG/KG)		U/	410.		U/	420.		U/	430.
2-Methylphenol (UG/KG)		U/	410.		U/	420.		U/	430.
bis(2-Chloroisopropyl)ether (UG/KG)		U/	410.		U/	420.		U/	430.
4-Methylphenol (UG/KG)		U/	410.		U/	420.		U/	430.
N-Nitroso-di-n-propylamine (UG/KG)		U/	410.		U/	420.		U/	430.
Hexachloroethane (UG/KG)		U/	410.		U/	420.		U/	430.
Nitrobenzene (UG/KG)		U/	410.		U/	420.		U/	430.
Isophorone (UG/KG)		U/	410.		U/	420.		U/	430.
2-Nitrophenol (UG/KG)		U/	410.		U/	420.		U/	430.
2,4-Dimethylphenol (UG/KG)		U/	410.		U/	420.		U/	430.
bis(2-Chloroethoxy)methane (UG/KG)		U/	410.		U/	420.		U/	430.
2,4-Dichlorophenol (UG/KG)		U/	410.		U/	420.		U/	430.
1,2,4-Trichlorobenzene (UG/KG)		U/	410.		U/	420.		U/	430.
Naphthalene (UG/KG)	320.	J/	410.	630.	/	420.		U/	430.
4-Chloroaniline (UG/KG)		U/	410.		U/	420.		U/	430.
Hexachlorobutadiene (UG/KG)		U/	410.		U/	420.		U/	430.
4-Chloro-3-methylphenol (UG/KG)		U/	410.		U/	420.		U/	430.
2-Methylnaphthalene (UG/KG)	61.	J/	410.	390.	J/	420.		U/	430.
Hexachlorocyclopentadiene (UG/KG)		U/	410.		U/	420.		U/	430.
2,4,6-Trichlorophenol (UG/KG)		U/	410.		U/	420.		U/	430.
2,4,5-Trichlorophenol (UG/KG)		U/	990.		U/	1000.		U/	1100.
2-Chloronaphthalene (UG/KG)		U/	410.		U/	420.		U/	430.
2-Nitroaniline (UG/KG)		U/	990.		U/	1000.		U/	1100.
Dimethylphthalate (UG/KG)		U/	410.		U/	420.		U/	430.
Acenaphthylene (UG/KG)		U/	410.		U/	420.		U/	430.
2,6-Dinitrotoluene (UG/KG)		U/	410.		U/	420.		U/	430.
3-Nitroaniline (UG/KG)		U/	990.		U/	1000.		U/	1100.
Acenaphthene (UG/KG)	120.	J/	410.	1000.	/	420.		U/	430.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SVOC

Parameter	HD-SU04-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SU04-91 05/14/93 CONC	LQ/DVQ	RDL	HD-SU05-01 05/14/93 CONC	LQ/DVQ	RDL
Phenol (UG/KG)		U/	420.		U/	430.		U/	410.
bis(2-Chloroethyl) ether (UG/KG)		U/	420.		U/	430.		U/	410.
2-Chlorophenol (UG/KG)		U/	420.		U/	430.		U/	410.
1,3-Dichlorobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
1,4-Dichlorobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
1,2-Dichlorobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
2-Methylphenol (UG/KG)		U/	420.		U/	430.		U/	410.
bis(2-Chloroisopropyl)ether (UG/KG)		U/	420.		U/	430.		U/	410.
4-Methylphenol (UG/KG)		U/	420.		U/	430.		U/	410.
N-Nitroso-di-n-propylamine (UG/KG)		U/	420.		U/	430.		U/	410.
Hexachloroethane (UG/KG)		U/	420.		U/	430.		U/	410.
Nitrobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
Isophorone (UG/KG)		U/	420.		U/	430.		U/	410.
2-Nitrophenol (UG/KG)		U/	420.		U/	430.		U/	410.
2,4-Dimethylphenol (UG/KG)		U/	420.		U/	430.		U/	410.
bis(2-Chloroethoxy)methane (UG/KG)		U/	420.		U/	430.		U/	410.
2,4-Dichlorophenol (UG/KG)		U/	420.		U/	430.		U/	410.
1,2,4-Trichlorobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
Naphthalene (UG/KG)		U/	420.		U/	430.		U/	410.
4-Chloroaniline (UG/KG)		U/	420.		U/	430.		U/	410.
Hexachlorobutadiene (UG/KG)		U/	420.		U/	430.		U/	410.
4-Chloro-3-methylphenol (UG/KG)		U/	420.		U/	430.		U/	410.
2-Methylnaphthalene (UG/KG)		U/	420.		U/	430.		U/	410.
Hexachlorocyclopentadiene (UG/KG)		U/	420.		U/	430.		U/	410.
2,4,6-Trichlorophenol (UG/KG)		U/	420.		U/	430.		U/	410.
2,4,5-Trichlorophenol (UG/KG)		U/	1000.		U/	1100.		U/	990.
2-Chloronaphthalene (UG/KG)		U/	420.		U/	430.		U/	410.
2-Nitroaniline (UG/KG)		U/	1000.		U/	1100.		U/	990.
Dimethylphthalate (UG/KG)		U/	420.		U/	430.		U/	410.
Acenaphthylene (UG/KG)		U/	420.		U/	430.		U/	410.
2,6-Dinitrotoluene (UG/KG)		U/	420.		U/	430.		U/	410.
3-Nitroaniline (UG/KG)		U/	1000.		U/	1100.		U/	990.
Acenaphthene (UG/KG)		U/	420.		U/	430.		U/	410.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SVOC

Parameter	HD-SU01-01 05/14/93			HD-SU02-01 05/14/93			HD-SU03-01 05/14/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/KG)		U/	990.		U/	1000.		U/	1100.
4-Nitrophenol (UG/KG)		U/	990.		U/	1000.		U/	1100.
Dibenzofuran (UG/KG)	59.	J/	410.	620.	/	420.		U/	430.
2,4-Dinitrotoluene (UG/KG)		U/	410.		U/	420.		U/	430.
Diethylphthalate (UG/KG)		U/	410.		U/	420.		U/	430.
4-Chlorophenyl-phenylether (UG/KG)		U/	410.		U/	420.		U/	430.
Fluorene (UG/KG)	68.	J/	410.	500.	/	420.		U/	430.
4-Nitroaniline (UG/KG)		U/	990.		U/	1000.		U/	1100.
4,6-Dinitro-2-methylphenol (UG/KG)		U/	990.		U/	1000.		U/	1100.
N-nitrosodiphenylamine (UG/KG)		U/	410.		U/	420.		U/	430.
4-Bromophenyl-phenylether (UG/KG)		U/	410.		U/	420.		U/	430.
Hexachlorobenzene (UG/KG)		U/	410.		U/	420.		U/	430.
Pentachlorophenol (UG/KG)		U/	990.		U/	1000.		U/	1100.
Phenanthrene (UG/KG)	250.	J/	410.	240.	J/	420.	120.	J/	440.
Anthracene (UG/KG)	46.	J/	410.		U/	420.		U/	430.
Di-n-butylphthalate (UG/KG)		U/	410.		U/	420.		U/	440.
Fluoranthene (UG/KG)	110.	J/	410.		U/	420.	160.	J/	440.
Pyrene (UG/KG)	77.	J/	410.		U/	420.	110.	J/	440.
Butylbenzylphthalate (UG/KG)		U/	410.		U/	420.		U/	430.
3,3'-Dichlorobenzidine (UG/KG)		U/	410.		U/	420.		U/	430.
Benzo(a)anthracene (UG/KG)		U/	410.		U/	420.		U/	430.
Chrysene (UG/KG)		U/	410.		U/	420.		U/	430.
bis(2-ethylhexyl)phthalate (UG/KG)	160.	J/	410.	320.	J/	430.	280.	J/	440.
Di-n-octyl Phthalate (UG/KG)		U/	410.		U/	420.		U/	430.
Benzo(b)fluoranthene (UG/KG)		U/	410.		U/	420.	110.	J/	440.
Benzo(k)fluoranthene (UG/KG)		U/	410.		U/	420.		U/	430.
Benzo(a)pyrene (UG/KG)		U/	410.		U/	420.		U/	430.
Indeno(1,2,3-cd)pyrene (UG/KG)		U/	410.		U/	420.		U/	430.
Dibenz(a,h)anthracene (UG/KG)		U/	410.		U/	420.		U/	430.
Benzo(g,h,i)perylene (UG/KG)		U/	410.		U/	420.		U/	430.
Carbazole (UG/KG)	130.	J/	410.		U/	420.		U/	430.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SVOC

Parameter	HD-SU04-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SU04-91 05/14/93 CONC	LQ/DVQ	RDL	HD-SU05-01 05/14/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/KG)		U/	1000.		U/	1100.		U/	990.
4-Nitrophenol (UG/KG)		U/	1000.		U/	1100.		U/	990.
Dibenzofuran (UG/KG)		U/	420.		U/	430.		U/	410.
2,4-Dinitrotoluene (UG/KG)		U/	420.		U/	430.		U/	410.
Diethylphthalate (UG/KG)		U/	420.		U/	430.		U/	410.
4-Chlorophenyl-phenylether (UG/KG)		U/	420.		U/	430.		U/	410.
Fluorene (UG/KG)		U/	420.		U/	430.		U/	410.
4-Nitroaniline (UG/KG)		U/	1000.		U/	1100.		U/	990.
4,6-Dinitro-2-methylphenol (UG/KG)		U/	1000.		U/	1100.		U/	990.
N-nitrosodiphenylamine (UG/KG)		U/	420.		U/	430.		U/	410.
4-Bromophenyl-phenylether (UG/KG)		U/	420.		U/	430.		U/	410.
Hexachlorobenzene (UG/KG)		U/	420.		U/	430.		U/	410.
Pentachlorophenol (UG/KG)		U/	1000.		U/	1100.		U/	990.
Phenanthrene (UG/KG)	36.	J/	420.		U/	430.	51.	J/	410.
Anthracene (UG/KG)		U/	420.		U/	430.		U/	410.
Di-n-butylphthalate (UG/KG)		U/	420.		U/	430.		U/	410.
Fluoranthene (UG/KG)	59.	J/	420.		U/	430.	73.	J/	410.
Pyrene (UG/KG)	52.	J/	420.		U/	430.	54.	J/	410.
Butylbenzylphthalate (UG/KG)		U/	420.		U/	430.		U/	410.
3,3'-Dichlorobenzidine (UG/KG)		U/	420.		U/	430.		U/	410.
Benzo(a)anthracene (UG/KG)		U/	420.		U/	430.		U/	410.
Chrysene (UG/KG)		U/	420.		U/	430.		U/	410.
bis(2-ethylhexyl)phthalate (UG/KG)	3500.	D/	420.	3600.	D/	430.	9600.	D/	410.
Di-n-octyl Phthalate (UG/KG)		U/	420.		U/	430.		U/	410.
Benzo(b)fluoranthene (UG/KG)		U/	420.		U/	430.		U/	410.
Benzo(k)fluoranthene (UG/KG)		U/	420.		U/	430.		U/	410.
Benzo(a)pyrene (UG/KG)		U/	420.		U/	430.		U/	410.
Indeno(1,2,3-cd)pyrene (UG/KG)		U/	420.		U/	430.		U/	410.
Dibenz(a,h)anthracene (UG/KG)		U/	420.		U/	430.		U/	410.
Benzo(g,h,i)perylene (UG/KG)		U/	420.		U/	430.		U/	410.
Carbazole (UG/KG)		U/	420.		U/	430.		U/	410.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P10

SURFACE SOILS PESTICIDES/PCBS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: PPCB
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SU01-01 05/14/93			HD-SU02-01 05/14/93			HD-SU03-01 05/14/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/KG)		U/	2.1		U/	2.3		U/	2.2
beta-BHC (UG/KG)		U/	2.1		U/	2.3		U/	2.2
delta-BHC (UG/KG)		U/	2.1		U/	2.3		U/	2.2
gamma-BHC (Lindane) (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Heptachlor (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Aldrin (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Heptachlor epoxide (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Endosulfan I (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Dieldrin (UG/KG)		U/	4.1		U/	4.5		U/	4.3
4,4'-DDE (UG/KG)		U/	4.1		U/	4.5		U/	4.3
Endrin (UG/KG)		U/	4.1		U/	4.5		U/	4.3
Endosulfan II (UG/KG)		U/	4.1		U/	4.5		U/	4.3
4,4'-DDD (UG/KG)	4.3	/	4.1		U/	4.5		U/	4.3
Endosulfan sulfate (UG/KG)		U/	4.1		U/	4.5		U/	4.3
4,4'-DDT (UG/KG)		U/	4.1		U/	4.5		U/	4.3
Methoxychlor (UG/KG)		U/	21.		U/	23.		U/	22.
Endrin ketone (UG/KG)		U/	4.1		U/	4.5		U/	4.3
alpha-Chlordane (UG/KG)		U/	2.1		U/	2.3		U/	2.2
gamma-Chlordane (UG/KG)		U/	2.1		U/	2.3		U/	2.2
Toxaphene (UG/KG)		U/	210.		U/	230.		U/	220.
Aroclor-1016 (UG/KG)		U/	41.		U/	45.		U/	43.
Aroclor-1221 (UG/KG)		U/	83.		U/	91.		U/	88.
Aroclor-1232 (UG/KG)		U/	41.		U/	45.		U/	43.
Aroclor-1242 (UG/KG)		U/	41.		U/	45.		U/	43.
Aroclor-1248 (UG/KG)		U/	41.		U/	45.		U/	43.
Aroclor-1254 (UG/KG)		U/	41.		U/	45.		U/	43.
Aroclor-1260 (UG/KG)		U/	41.		U/	45.		U/	43.
Endrin aldehyde (UG/KG)		U/	4.1		U/	4.5		U/	4.3

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: PPCB

Parameter	HD-SU04-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SU04-91 05/14/93 CONC	LQ/DVQ	RDL	HD-SU05-01 05/14/93 CONC	LQ/DVQ	RDL
alpha-BHC (UG/KG)		U/	2.2		U/	2.2		U/	2.1
beta-BHC (UG/KG)		U/	2.2		U/	2.2		U/	2.1
delta-BHC (UG/KG)		U/	2.2		U/	2.2		U/	2.1
gamma-BHC (Lindane) (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Heptachlor (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Aldrin (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Heptachlor epoxide (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Endosulfan I (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Dieldrin (UG/KG)		U/	4.2		U/	4.3		U/	4.1
4,4'-DDE (UG/KG)		U/	4.2		U/	4.3		U/	4.1
Endrin (UG/KG)		U/	4.2		U/	4.3		U/	4.1
Endosulfan II (UG/KG)		U/	4.2		U/	4.3		U/	4.1
4,4'-DDD (UG/KG)		U/	4.2		U/	4.3		U/	4.1
Endosulfan sulfate (UG/KG)		U/	4.2		U/	4.3		U/	4.1
4,4'-DDT (UG/KG)		U/	4.2		U/	4.3		U/	4.1
Methoxychlor (UG/KG)		U/	22.		U/	22.		U/	21.
Endrin ketone (UG/KG)		U/	4.2		U/	4.3		U/	4.1
alpha-Chlordane (UG/KG)		U/	2.2		U/	2.2		U/	2.1
gamma-Chlordane (UG/KG)		U/	2.2		U/	2.2		U/	2.1
Toxaphene (UG/KG)		U/	220.		U/	220.		U/	210.
Aroclor-1016 (UG/KG)		U/	42.		U/	43.		U/	41.
Aroclor-1221 (UG/KG)		U/	86.		U/	88.		U/	83.
Aroclor-1232 (UG/KG)		U/	42.		U/	43.		U/	41.
Aroclor-1242 (UG/KG)		U/	42.		U/	43.		U/	41.
Aroclor-1248 (UG/KG)		U/	42.		U/	43.		U/	41.
Aroclor-1254 (UG/KG)		U/	42.		U/	43.		U/	41.
Aroclor-1260 (UG/KG)		U/	42.		U/	43.		U/	41.
Endrin aldehyde (UG/KG)		U/	4.2		U/	4.3		U/	4.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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SURFACE SOILS METALS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SLIND MTL
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SU01-01 05/14/93			HD-SU02-01 05/14/93			HD-SU03-01 05/14/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Total Solids (%)	81.3	/	0.1	74.1	/	0.1	75.9	/	0.1
Total Organic Carbon (MG/KG)	29900.	/	100.	13100.	/	100.	47000.	/	100.
Aluminum (MG/KG)	7450.	/	9.6	6260.	/	10.5	6640.	/	10.3
Antimony (MG/KG)		U/	5.9		U/	6.5		U/	6.3
Arsenic (MG/KG)	5.2	/	0.74	1.9	BS/	0.81	4.1	/	0.79
Barium (MG/KG)	32.5	BE/J	0.25	25.1	BE/J	0.27	30.7	BE/J	0.26
Beryllium (MG/KG)	0.66	B/	0.25	0.55	B/	0.27	0.54	B/	0.26
Cadmium (MG/KG)		U/	0.74		U/	0.81	1.	B/	0.79
Calcium (MG/KG)	78500.	/	3.	88200.	/	3.2	62900.	/	3.2
Chromium, total (MG/KG)	14.3	/	0.74	10.4	/	0.81	12.5	/	0.79
Cobalt (MG/KG)	8.6	B/	0.98	4.1	B/J	1.1	6.2	B/	1.1
Copper (MG/KG)	19.6	E/J	0.49	17.6	E/J	0.54	19.	E/J	0.53
Iron (MG/KG)	17600.	/	1.7	9160.	/	1.9	23500.	/	1.8
Lead (MG/KG)	12.7	N/J	0.49	11.5	N/J	0.54	12.4	N/J	0.53
Magnesium (MG/KG)	41000.	/	4.2	31000.	/	4.6	31500.	/	4.5
Manganese (MG/KG)	418.	/	0.25	88.6	/	0.27	367.	/	0.26
Mercury (MG/KG)		U/	0.05		U/	0.05		U/	0.05
Nickel (MG/KG)	19.2	/	1.2	10.5	B/	1.3	15.2	/	1.3
Potassium (MG/KG)	1940.	E/J	13.5	1270.	BE/J	14.8	1720.	E/J	14.5
Selenium (MG/KG)		UWN/UJ	0.49		UWN/UJ	1.1		UWN/UJ	0.53
Silver (MG/KG)		U/	0.74		U/	0.81		U/	0.79
Sodium (MG/KG)	524.	B/	5.9	133.	B/	6.5	155.	B/	6.3
Thallium (MG/KG)	0.57	BW/UJ	0.49		U/	0.54		BW/UJ	0.79
Vanadium (MG/KG)	18.6	/	0.49	15.1	/	0.54	19.4	/	0.53
Zinc (MG/KG)	45.3	E/J	1.5	46.2	E/J	1.6	48.2	E/J	1.6
Cyanide (MG/KG)		U/	0.31		U/	0.34		U/	0.33

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS Type: SLIND MTL

	HD-SU04-01 05/14/93			HD-SU04-91 05/14/93			HD-SU05-01 05/14/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Total Solids (%)	77.6	/	0.1	76.1	/	0.1	81.3	/	0.1
Total Organic Carbon (MG/KG)	6830.	/	100.	17100.	/	100.	34500.	/	100.
Aluminum (MG/KG)	8740.	/	10.1	8740.	/	10.2	8450.	/	9.6
Antimony (MG/KG)		U/	6.2		U/	6.3		U/	5.9
Arsenic (MG/KG)	2.2	BS/	0.77	3.3	/	0.79	4.4	/	0.74
Barium (MG/KG)	50.	BE/J	0.26	57.	E/J	0.26	40.4	BE/J	0.25
Beryllium (MG/KG)	0.5	B/	0.26	0.55	B/	0.26	0.74	B/	0.25
Cadmium (MG/KG)		U/	0.77		U/	0.79	1.3	/	0.74
Calcium (MG/KG)	22400.	/	3.1	21300.	/	3.2	79100.	/	3.
Chromium, total (MG/KG)	15.6	/	0.77	15.4	/	0.79	16.1	/	0.74
Cobalt (MG/KG)	8.6	B/	1.	13.4	/	1.1	10.8	B/	0.98
Copper (MG/KG)	15.1	E/J	0.52	15.2	E/J	0.53	25.8	E/J	0.49
Iron (MG/KG)	17500.	/	1.8	18200.	/	1.8	22100.	/	1.7
Lead (MG/KG)	10.5	N/J	0.52	13.4	N/J	0.53	13.7	N/J	0.49
Magnesium (MG/KG)	11000.	/	4.4	11500.	/	4.5	40800.	/	4.2
Manganese (MG/KG)	502.	/	0.26	984.	/	0.26	623.	/	0.25
Mercury (MG/KG)		U/	0.05		U/	0.05		U/	0.05
Nickel (MG/KG)	15.8	/	1.3	16.1	/	1.3	23.	/	1.2
Potassium (MG/KG)	1200.	BE/J	14.2	1230.	BE/J	14.4	1760.	E/J	13.5
Selenium (MG/KG)		UN/UJ	0.52		UWN/UJ	0.53		UN/UJ	0.49
Silver (MG/KG)		U/	0.77		U/	0.79		U/	0.74
Sodium (MG/KG)	64.3	B/	6.2	68.4	B/	6.3	175.	B/	5.9
Thallium (MG/KG)		U/	0.52		UW/UJ	0.53	0.79	BW/UJ	0.49
Vanadium (MG/KG)	26.	/	0.52	27.8	/	0.52	24.6	/	0.49
Zinc (MG/KG)	43.9	E/J	1.5	43.5	E/J	1.6	74.8	E/J	1.5
Cyanide (MG/KG)		U/	0.32		U/	0.33		U/	0.31

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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SURFACE SOILS TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS
Generated by: CAW
Date Issued: 21-SEP-93

HD-SU01-01 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	3300.	J/
Unknown (UG/KG)	2300.	J/
Unknown (UG/KG)	1400.	J/
Unknown (UG/KG)	1200.	J/
Unknown alkane (UG/KG)	1300.	J/
Unknown alkane (UG/KG)	680.	J/
Unknown alkane (UG/KG)	370.	J/
Unknown alkane (UG/KG)	660.	J/
Unknown (UG/KG)	1000.	J/
Unknown alkane (UG/KG)	600.	J/
Unknown alkane (UG/KG)	540.	J/
Unknown (UG/KG)	790.	J/
Unknown alkane (UG/KG)	770.	J/
C10H14 Isomer (UG/KG)	530.	J/
Sulfur, mol. (S8) (UG/KG)	670.	J/
Unknown alkane (UG/KG)	390.	J/
Unknown alkane (UG/KG)	650.	J/
Unknown alkane (UG/KG)	370.	J/
Unknown alkane (UG/KG)	610.	J/
Unknown alkane (UG/KG)	440.	J/
Unknown (UG/KG)	490.	J/
Unknown alkane (UG/KG)	470.	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	150.	J/
Unknown (UG/KG)	44.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS

HD-SU02-01 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	3000.	J/
Unknown (UG/KG)	1900.	J/
Hexadecanoic acid (UG/KG)	1800.	J/
Unknown acid (UG/KG)	1300.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	1500.	J/
Unknown (UG/KG)	1100.	J/
Unknown alkane (UG/KG)	1100.	J/
Unknown alkane (UG/KG)	490.	J/
Unknown (UG/KG)	960.	J/
Bicyclo[2.2.1]heptan-2-one (UG/KG)	490.	J/
Unknown alkane (UG/KG)	410.	J/
Unknown alkane (UG/KG)	780.	J/
Unknown (UG/KG)	780.	J/
Unknown alkane (UG/KG)	530.	J/
Unknown alkane (UG/KG)	360.	J/
Unknown alkane (UG/KG)	360.	J/
Unknown alkane (UG/KG)	370.	J/

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	21.	J/
Unknown (UG/KG)	11.	J/
Unknown (UG/KG)	4.	J/
Unknown (UG/KG)	4.	J/
Unknown (UG/KG)	4.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS

HD-SU03-01 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	2700.	J/
Unknown (UG/KG)	1800.	J/
Unknown (UG/KG)	1200.	J/
Unknown alkane (UG/KG)	690.	J/
Unknown (UG/KG)	1100.	J/
Unknown alkane (UG/KG)	1100.	J/
Unknown alkane (UG/KG)	600.	J/
Unknown alkane (UG/KG)	740.	J/
Unknown alkane (UG/KG)	530.	J/
Unknown alkane (UG/KG)	510.	J/
Unknown (UG/KG)	830.	J/
Unknown alkane (UG/KG)	730.	J/
Hexadecanoic acid (UG/KG)	710.	J/
Unknown (UG/KG)	610.	J/
Unknown (UG/KG)	460.	J/
Unknown alkane (UG/KG)	350.	J/
Unknown alkane (UG/KG)	550.	J/
Unknown alkane (UG/KG)	530.	J/
Unknown acid (UG/KG)	490.	J/
Unknown (UG/KG)	360.	J/
Unknown (UG/KG)	360.	J/
Unknown (UG/KG)	450.	J/

HD-SU04-01 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	2900.	J/
Unknown (UG/KG)	2100.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	830.	J/
Unknown (UG/KG)	660.	J/
C15H24 Isomer (UG/KG)	430.	J/
Unknown alkane (UG/KG)	380.	J/
Unknown alkane (UG/KG)	550.	J/
Unknown (UG/KG)	470.	J/
Unknown (UG/KG)	430.	J/
Unknown (UG/KG)	350.	J/
Unknown acid (UG/KG)	370.	J/
Unknown alkane (UG/KG)	250.	J/
Unknown alkane (UG/KG)	340.	J/
Unknown alkane (UG/KG)	200.	J/
Unknown alkane (UG/KG)	200.	J/
Unknown (UG/KG)	260.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SS

HD-SU04-91 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	3000.	J/
Unknown (UG/KG)	2000.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	810.	J/
Unknown (UG/KG)	420.	J/
Unknown (UG/KG)	680.	J/
Unknown alkane (UG/KG)	380.	J/
Unknown alkane (UG/KG)	550.	J/
Unknown (UG/KG)	440.	J/
Unknown (UG/KG)	410.	J/
Unknown alkane (UG/KG)	230.	J/
Unknown alkane (UG/KG)	360.	J/
Unknown (UG/KG)	310.	J/
Unknown alkane (UG/KG)	180.	J/
Unknown alkane (UG/KG)	170.	J/
Unknown alkane (UG/KG)	170.	J/
Unknown (UG/KG)	190.	J/
Unknown alkane (UG/KG)	260.	J/
Unknown (UG/KG)	240.	J/

HD-SU05-01 05/14/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/KG)	2800.	J/
Unknown (UG/KG)	1800.	J/
Unknown (UG/KG)	1200.	J/
Unknown (UG/KG)	1100.	J/
Unknown alkane (UG/KG)	990.	J/
Unknown (UG/KG)	840.	J/
Unknown (UG/KG)	460.	J/
Unknown alkane (UG/KG)	400.	J/
Unknown alkane (UG/KG)	700.	J/
Unknown alkane (UG/KG)	380.	J/
Unknown (UG/KG)	490.	J/
Unknown (UG/KG)	650.	J/
Unknown alkane (UG/KG)	360.	J/
Hexadecanoic acid (UG/KG)	550.	J/
Unknown (UG/KG)	390.	J/
Unknown acid (UG/KG)	530.	J/
Unknown (UG/KG)	360.	J/
Unknown alkane (UG/KG)	260.	J/
Unknown alkane (UG/KG)	440.	J/
Unknown (UG/KG)	320.	J/
Unknown alkane (UG/KG)	440.	J/

P13

GROUNDWATER VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-GWFB01-01 05/11/93			HD-GWFB02-01 05/12/93			HD-GWFB03-01 06/01/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)	38.	/	10.	19.	/	10.	7.	J/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.	0.9	J/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWG11D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWG11S-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWTB01-01 05/10/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		/U	17.	4.	J/	10.
Carbon disulfide (UG/L)		U/	10.	0.8	J/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWTB02-01 05/10/93			HD-GWTB03-01 05/11/93			HD-GWTB04-01 05/12/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)	4.	J/	10.		U/	10.	7.	J/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWTB05-01 06/01/93			HD-GWUS01D-01 05/11/93			HD-GWUS01S-01 05/10/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)	2.	J/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWUS03D-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03I-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03S-01 05/10/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)	28.	/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)	11.	/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWUS04D-01 05/12/93			HD-GWUS04D-91 05/12/93			HD-GWUS04S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.	35.	/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWUS06D-01 05/12/93			HD-GWUS06I-01 05/11/93			HD-GWUS06S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.	2.	J/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWUS06S-91 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW03D-01 06/01/93 CONC	LQ/DVQ	RDL	HD-GWW03SB-01 06/01/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.		/U	19.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWW04S-01 06/01/93			HD-GWW04S-91 06/01/93			HD-GWW05S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.	19.	/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)		/U	12.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: VOC

Parameter	HD-GWW06S-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW07D-01 05/12/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.
Acetone (UG/L)		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)	2.	J/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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GROUNDWATER SVOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HO-GWFB01-01 05/11/93			HO-GWFB02-01 05/12/93			HO-GWFB03-01 06/01/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

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ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWG11D-01 05/12/93			HD-GWUS01D-01 05/11/93			HD-GWUS01S-01 05/10/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

	HD-GWUS03D-01 05/11/93			HD-GWUS03I-01 05/11/93			HD-GWUS03S-01 05/10/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	25.		U/	25.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	25.		U/	25.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	25.		U/	25.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS04D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04D-91 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04S-01 05/11/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	25.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS06D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS06I-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS06S-01 05/11/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	25.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

	HD-GWUS06S-91 05/11/93			HD-GWW03D-01 06/01/93			HD-GWW03SB-01 06/01/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	11.		U/	11.		U/	11.
bis(2-Chloroethyl) ether (UG/L)		U/	11.		U/	11.		U/	11.
2-Chlorophenol (UG/L)		U/	11.		U/	11.		U/	11.
1,3-Dichlorobenzene (UG/L)		U/	11.		U/	11.		U/	11.
1,4-Dichlorobenzene (UG/L)		U/	11.		U/	11.		U/	11.
1,2-Dichlorobenzene (UG/L)		U/	11.		U/	11.		U/	11.
2-Methylphenol (UG/L)		U/	11.		U/	11.		U/	11.
bis(2-Chloroisopropyl)ether (UG/L)		U/	11.		U/	11.		U/	11.
4-Methylphenol (UG/L)		U/	11.		U/	11.		U/	11.
N-Nitroso-di-n-propylamine (UG/L)		U/	11.		U/	11.		U/	11.
Hexachloroethane (UG/L)		U/	11.		U/	11.		U/	11.
Nitrobenzene (UG/L)		U/	11.		U/	11.		U/	11.
Isophorone (UG/L)		U/	11.		U/	11.		U/	11.
2-Nitrophenol (UG/L)		U/	11.		U/	11.		U/	11.
2,4-Dimethylphenol (UG/L)		U/	11.		U/	11.		U/	11.
bis(2-Chloroethoxy)methane (UG/L)		U/	11.		U/	11.		U/	11.
2,4-Dichlorophenol (UG/L)		U/	11.		U/	11.		U/	11.
1,2,4-Trichlorobenzene (UG/L)		U/	11.		U/	11.		U/	11.
Naphthalene (UG/L)		U/	11.		U/	11.		U/	11.
4-Chloroaniline (UG/L)		U/	11.		U/	11.		U/	11.
Hexachlorobutadiene (UG/L)		U/	11.		U/	11.		U/	11.
4-Chloro-3-methylphenol (UG/L)		U/	11.		U/	11.		U/	11.
2-Methylnaphthalene (UG/L)		U/	11.		U/	11.		U/	11.
Hexachlorocyclopentadiene (UG/L)		U/	11.		U/	11.		U/	11.
2,4,6-Trichlorophenol (UG/L)		U/	11.		U/	11.		U/	11.
2,4,5-Trichlorophenol (UG/L)		U/	28.		U/	26.		U/	27.
2-Chloronaphthalene (UG/L)		U/	11.		U/	11.		U/	11.
2-Nitroaniline (UG/L)		U/	28.		U/	26.		U/	27.
Dimethylphthalate (UG/L)		U/	11.		U/	11.		U/	11.
Acenaphthylene (UG/L)		U/	11.		U/	11.		U/	11.
2,6-Dinitrotoluene (UG/L)		U/	11.		U/	11.		U/	11.
3-Nitroaniline (UG/L)		U/	28.		U/	26.		U/	27.
Acenaphthene (UG/L)		U/	11.		U/	11.		U/	11.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

	HD-GWW04S-01 06/01/93			HD-GWW04S-91 06/01/93			HD-GWW05S-01 05/11/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWW06S-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW07D-01 05/12/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	25.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	25.
Dimethylphthalate (UG/L)		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	25.
Acenaphthene (UG/L)		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWFB01-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWFB02-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWFB03-01 06/01/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)	3.	BJ/	10.	2.	BJ/	10.	3.	BJ/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWG11D-01 05/12/93			HD-GWUS01D-01 05/11/93			HD-GWUS01S-01 05/10/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS03D-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03I-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03S-01 05/10/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	25.		U/	25.
4-Nitrophenol (UG/L)		U/	26.		U/	25.		U/	25.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	25.		U/	25.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	25.		U/	25.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	25.		U/	25.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS04D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04D-91 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04S-01 05/11/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	25.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	25.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	25.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	25.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS06D-01 05/12/93			HD-GWUS06I-01 05/11/93			HD-GWUS06S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	25.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	25.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	25.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	25.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	25.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWUS06S-91 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW03D-01 06/01/93 CONC	LQ/DVQ	RDL	HD-GWW03SB-01 06/01/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	28.		U/	26.		U/	27.
4-Nitrophenol (UG/L)		U/	28.		U/	26.		U/	27.
Dibenzofuran (UG/L)		U/	11.		U/	11.		U/	11.
2,4-Dinitrotoluene (UG/L)		U/	11.		U/	11.		U/	11.
Diethylphthalate (UG/L)		U/	11.		U/	11.		U/	11.
4-Chlorophenyl-phenylether (UG/L)		U/	11.		U/	11.		U/	11.
Fluorene (UG/L)		U/	11.		U/	11.		U/	11.
4-Nitroaniline (UG/L)		U/	28.		U/	26.		U/	27.
4,6-Dinitro-2-methylphenol (UG/L)		U/	28.		U/	26.		U/	27.
N-nitrosodiphenylamine (UG/L)		U/	11.		U/	11.		U/	11.
4-Bromophenyl-phenylether (UG/L)		U/	11.		U/	11.		U/	11.
Hexachlorobenzene (UG/L)		U/	11.		U/	11.		U/	11.
Pentachlorophenol (UG/L)		U/	28.		U/	26.		U/	27.
Phenanthrene (UG/L)		U/	11.		U/	11.		U/	11.
Anthracene (UG/L)		U/	11.		U/	11.		U/	11.
Di-n-butylphthalate (UG/L)		U/	11.		U/	11.		U/	11.
Fluoranthene (UG/L)		U/	11.		U/	11.		U/	11.
Pyrene (UG/L)		U/	11.		U/	11.		U/	11.
Butylbenzylphthalate (UG/L)		U/	11.		U/	11.		U/	11.
3,3'-Dichlorobenzidine (UG/L)		U/	11.		U/	11.		U/	11.
Benzo(a)anthracene (UG/L)		U/	11.		U/	11.		U/	11.
Chrysene (UG/L)		U/	11.		U/	11.		U/	11.
bis(2-ethylhexyl)phthalate (UG/L)		U/	11.		/U	54.		U/	11.
Di-n-octyl Phthalate (UG/L)		U/	11.		U/	11.		U/	11.
Benzo(b)fluoranthene (UG/L)		U/	11.		U/	11.		U/	11.
Benzo(k)fluoranthene (UG/L)		U/	11.		U/	11.		U/	11.
Benzo(a)pyrene (UG/L)		U/	11.		U/	11.		U/	11.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	11.		U/	11.		U/	11.
Dibenz(a,h)anthracene (UG/L)		U/	11.		U/	11.		U/	11.
Benzo(g,h,i)perylene (UG/L)		U/	11.		U/	11.		U/	11.
Carbazole (UG/L)		U/	11.		U/	11.		U/	11.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWW04S-01 06/01/93			HD-GWW04S-91 06/01/93			HD-GWW05S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		/U	11.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: SVOC

Parameter	HD-GWW06S-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW07D-01 05/12/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	25.
4-Nitrophenol (UG/L)		U/	26.		U/	25.
Dibenzofuran (UG/L)		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	25.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	25.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	25.
Phenanthrene (UG/L)		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P15

GROUNDWATER PESTICIDES/PCBS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB
Generated by: CAW
Date Issued: 21-SEP-93

	HD-GWFB01-01 05/11/93			HD-GWFB02-01 05/12/93			HD-GWFB03-01 06/01/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.052		U/	0.052		U/	0.056
beta-BHC (UG/L)		U/	0.052		U/	0.052		U/	0.056
delta-BHC (UG/L)		U/	0.052		U/	0.052		U/	0.056
gamma-BHC (Lindane) (UG/L)		U/	0.052		U/	0.052		U/	0.056
Heptachlor (UG/L)		U/	0.052		U/	0.052		U/	0.056
Aldrin (UG/L)		U/	0.052		U/	0.052		U/	0.056
Heptachlor epoxide (UG/L)		U/	0.052		U/	0.052		U/	0.056
Endosulfan I (UG/L)		U/	0.052		U/	0.052		U/	0.056
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.11
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.11
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.11
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.11
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.11
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.11
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.11
Methoxychlor (UG/L)		U/	0.52		U/	0.52		U/	0.56
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.11
alpha-Chlordane (UG/L)		U/	0.052		U/	0.052		U/	0.056
gamma-Chlordane (UG/L)		U/	0.052		U/	0.052		U/	0.056
Toxaphene (UG/L)		U/	5.2		U/	5.2		U/	5.6
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.1
Aroclor-1221 (UG/L)		U/	2.1		U/	2.1		U/	2.2
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.1
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.1
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.1
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.1
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.1
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.11

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

Parameter	HD-GWG11D-01 05/12/93			HD-GWUS01D-01 05/11/93			HD-GWUS01S-01 05/10/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.054		U/	0.05		U/	0.05
beta-BHC (UG/L)		U/	0.054		U/	0.05		U/	0.05
delta-BHC (UG/L)		U/	0.054		U/	0.05		U/	0.05
gamma-BHC (Lindane) (UG/L)		U/	0.054		U/	0.05		U/	0.05
Heptachlor (UG/L)		U/	0.054		U/	0.05		U/	0.05
Aldrin (UG/L)		U/	0.054		U/	0.05		U/	0.05
Heptachlor epoxide (UG/L)		U/	0.054		U/	0.05		U/	0.05
Endosulfan I (UG/L)		U/	0.054		U/	0.05		U/	0.05
Dieldrin (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.11		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.11		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.11		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.54		U/	0.5		U/	0.5
Endrin ketone (UG/L)		U/	0.11		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.054		U/	0.05		U/	0.05
gamma-Chlordane (UG/L)		U/	0.054		U/	0.05		U/	0.05
Toxaphene (UG/L)		U/	5.4		U/	5.		U/	5.
Aroclor-1016 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.2		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.1		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.1		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.11		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

	HD-GWUS03D-01 05/11/93			HD-GWUS03I-01 05/11/93			HD-GWUS03S-01 05/10/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.051		U/	0.05
beta-BHC (UG/L)		U/	0.051		U/	0.051		U/	0.05
delta-BHC (UG/L)		U/	0.051		U/	0.051		U/	0.05
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.051		U/	0.05
Heptachlor (UG/L)		U/	0.051		U/	0.051		U/	0.05
Aldrin (UG/L)		U/	0.051		U/	0.051		U/	0.05
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.051		U/	0.05
Endosulfan I (UG/L)		U/	0.051		U/	0.051		U/	0.05
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.51		U/	0.5
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.051		U/	0.05
gamma-Chlordane (UG/L)		U/	0.051		U/	0.051		U/	0.05
Toxaphene (UG/L)		U/	5.1		U/	5.1		U/	5.
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

Parameter	HD-GWUS04D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04D-91 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04S-01 05/11/93 CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.052
beta-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.052
delta-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.052
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.052		U/	0.052
Heptachlor (UG/L)		U/	0.051		U/	0.052		U/	0.052
Aldrin (UG/L)		U/	0.051		U/	0.052		U/	0.052
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.052		U/	0.052
Endosulfan I (UG/L)		U/	0.051		U/	0.052		U/	0.052
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.52		U/	0.52
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.052		U/	0.052
gamma-Chlordane (UG/L)		U/	0.051		U/	0.052		U/	0.052
Toxaphene (UG/L)		U/	5.1		U/	5.2		U/	5.2
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.1		U/	2.1
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

Parameter	HD-GWUS06D-01 05/12/93			HD-GWUS06I-01 05/11/93			HD-GWUS06S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
beta-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
delta-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.05		U/	0.051
Heptachlor (UG/L)		U/	0.051		U/	0.05		U/	0.051
Aldrin (UG/L)		U/	0.051		U/	0.05		U/	0.051
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.05		U/	0.051
Endosulfan I (UG/L)		U/	0.051		U/	0.05		U/	0.051
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.5		U/	0.51
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.05		U/	0.051
gamma-Chlordane (UG/L)		U/	0.051		U/	0.05		U/	0.051
Toxaphene (UG/L)		U/	5.1		U/	5.		U/	5.1
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

Parameter	HD-GWUS06S-91 05/11/93			HD-GWW03D-01 06/01/93			HD-GWW03SB-01 06/01/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.061		U/	0.052
beta-BHC (UG/L)		U/	0.051		U/	0.061		U/	0.052
delta-BHC (UG/L)		U/	0.051		U/	0.061		U/	0.052
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.061		U/	0.052
Heptachlor (UG/L)		U/	0.051		U/	0.061		U/	0.052
Aldrin (UG/L)		U/	0.051		U/	0.061		U/	0.052
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.061		U/	0.052
Endosulfan I (UG/L)		U/	0.051		U/	0.061		U/	0.052
Dieldrin (UG/L)		U/	0.1		U/	0.12		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.12		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.12		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.12		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.12		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.12		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.12		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.61		U/	0.52
Endrin ketone (UG/L)		U/	0.1		U/	0.12		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.061		U/	0.052
gamma-Chlordane (UG/L)		U/	0.051		U/	0.061		U/	0.052
Toxaphene (UG/L)		U/	5.1		U/	6.1		U/	5.2
Aroclor-1016 (UG/L)		U/	1.		U/	1.2		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.4		U/	2.1
Aroclor-1232 (UG/L)		U/	1.		U/	1.2		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.2		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.2		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.2		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.2		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.12		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

Parameter	HD-GWW04S-01 06/01/93			HD-GWW04S-91 06/01/93			HD-GWW05S-01 05/11/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
beta-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
delta-BHC (UG/L)		U/	0.051		U/	0.05		U/	0.051
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.05		U/	0.051
Heptachlor (UG/L)		U/	0.051		U/	0.05		U/	0.051
Aldrin (UG/L)		U/	0.051		U/	0.05		U/	0.051
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.05		U/	0.051
Endosulfan I (UG/L)		U/	0.051		U/	0.05		U/	0.051
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.5		U/	0.51
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.05		U/	0.051
gamma-Chlordane (UG/L)		U/	0.051		U/	0.05		U/	0.051
Toxaphene (UG/L)		U/	5.1		U/	5.		U/	5.1
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: PPCB

	HD-GWW06S-01 05/11/93			HD-GWW07D-01 05/12/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.052		U/	0.05
beta-BHC (UG/L)		U/	0.052		U/	0.05
delta-BHC (UG/L)		U/	0.052		U/	0.05
gamma-BHC (Lindane) (UG/L)		U/	0.052		U/	0.05
Heptachlor (UG/L)		U/	0.052		U/	0.05
Aldrin (UG/L)		U/	0.052		U/	0.05
Heptachlor epoxide (UG/L)		U/	0.052		U/	0.05
Endosulfan I (UG/L)		U/	0.052		U/	0.05
Dieldrin (UG/L)		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.52		U/	0.5
Endrin ketone (UG/L)		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.052		U/	0.05
gamma-Chlordane (UG/L)		U/	0.052		U/	0.05
Toxaphene (UG/L)		U/	5.2		U/	5.
Aroclor-1016 (UG/L)		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.1		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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GROUNDWATER INDICATORS AND METALS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL
Generated by: CAW
Date Issued: 21-SEP-93

	HD-GWFB01-01 05/11/93			HD-GWFB02-01 05/12/93			HD-GWFB03-01 06/01/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)	59.4	B/	39.	59.5	B/	39.		U/	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.		U/	3.		U/	3.
Barium (UG/L)		U/	1.		U/	1.		U/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.		B/U	3.5
Calcium (UG/L)	4980.	BE/J	12.	5840.	E/J	12.	2610.	B/	12.
Chromium, total (UG/L)		U/	3.		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		U/	2.		U/	2.		B/U	6.6
Iron (UG/L)		BE/UJ	19.7		BE/UJ	22.		B/U	19.5
Lead (UG/L)	4.1	/	2.		U/	2.	2.4	B/	2.
Magnesium (UG/L)	51.3	B/	17.	56.9	B/	17.		B/U	234.
Manganese (UG/L)		U/	1.		B/U	1.5		B/U	4.3
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		U/	5.		U/	5.
Potassium (UG/L)		U/	55.		U/	55.		B/U	239.
Selenium (UG/L)		U/	2.		U/	2.		U/	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)		B/U	156.	619.	B/	24.		B/U	520.
Thallium (UG/L)		UW/UJ	2.		U/	2.		UW/UJ	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)	594.	E/	6.	678.	E/	6.	241.	/	6.
Cyanide (UG/L)		B/UJ	1.8		B/UJ	0.81		U/	4.
Alkalinity, Total (MG/L)		U/	10.		U/	10.		U/	10.
Carbon, Total Organic (MG/L)		U/	1.		U/	1.		U/	1.
Chloride (MG/L)		U/	2.		U/	2.		U/	2.
Hardness (MG/L)		U/	10.		U/	10.		U/	10.
Nitrogen, Ammonia (MG/L)		U/	0.1		U/	0.1	0.27	/	0.1
Nitrogen, Nitrate (MG/L)		U/	0.02		U/	0.02	0.07	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)		U*/UJ	10.	12.	/	10.	12.	/	10.
Sulfate (MG/L)		UN/	10.		UN/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWG11D-01 05/12/93			HD-GWUS01D-01 05/11/93			HD-GWUS01S-01 05/10/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/UJ	39.		U/	39.		U/UJ	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)	3.1	B/	3.		U/	3.		U/	3.
Barium (UG/L)	282.	/	1.	89.8	B/	1.	34.9	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)	5.6	/	3.		U/	3.		U/	3.
Calcium (UG/L)	112000.	E/J	12.	58800.	E/J	12.	83700.	E/J	12.
Chromium, total (UG/L)	3.5	B/	3.		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		B/U	8.		B/U	3.1	4.4	B/U	2.
Iron (UG/L)		BE/UJ	64.4	660.	E/J	7.	805.	E/J	7.
Lead (UG/L)		/U	3.8		/U	3.6		B/U	2.8
Magnesium (UG/L)	98600.	/	17.	41700.	/	17.	39200.	/	17.
Manganese (UG/L)	32.	/	1.	58.7	/	1.	261.	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		B/U	19.		U/	5.		U/	5.
Potassium (UG/L)	3050.	B/	55.	1150.	B/	55.		B/U	538.
Selenium (UG/L)		U/	2.		UW/UJ	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	33700.	/	24.	25400.	/	24.	21300.	/	24.
Thallium (UG/L)	2.1	BW/J	2.		UW/UJ	2.		UW/UJ	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)		E/U	2110.		E/U	481.		E/J	420.
Cyanide (UG/L)		B/UJ	4.3		B/UJ	1.1		B/UJ	0.72
Alkalinity, Total (MG/L)				318.	/	10.	310.	/	10.
Carbon, Total Organic (MG/L)				1.3	/	1.	1.2	/	1.
Chloride (MG/L)				22.	/	2.	55.	/	2.
Hardness (MG/L)				346.	/	10.	561.	/	10.
Nitrogen, Ammonia (MG/L)				0.77	/	0.1		U/	0.1
Nitrogen, Nitrate (MG/L)					U/	0.02	0.04	/	0.02
Nitrogen, Nitrite (MG/L)					U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)				412.	*/J	10.	448.	*/J	10.
Sulfate (MG/L)				49.	N/J	10.	39.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWUS03D-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03I-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWUS03S-01 05/10/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/UJ	39.		U/UJ	39.		U/UJ	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.	6.3	B/	3.		U/	3.
Barium (UG/L)	129.	B/	1.	41.1	B/	1.	55.1	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.		U/	3.
Calcium (UG/L)	96500.	E/J	12.	45500.	E/J	12.	79800.	E/J	12.
Chromium, total (UG/L)		U/	3.		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		B/U	5.3		B/U	3.3		B/U	4.9
Iron (UG/L)	2400.	E/J	7.		BE/UJ	20.3	1230.	E/J	7.
Lead (UG/L)		B/U	2.6		/U	4.7		U/	2.
Magnesium (UG/L)	46200.	/	17.	34000.	/	17.	29600.	/	17.
Manganese (UG/L)	42.4	/	1.	39.6	/	1.	50.1	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		U/	5.		U/	5.
Potassium (UG/L)	2580.	B/	55.	1710.	B/	55.	2990.	B/	55.
Selenium (UG/L)		UW/UJ	2.		U/	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	67500.	/	24.	36200.	/	24.	98500.	/	24.
Thallium (UG/L)		UW/UJ	2.		U/	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)	474.	E/U	6.		BE/U	10.		E/U	509.
Cyanide (UG/L)		U/UJ	0.62		U/UJ	0.62		U/UJ	0.62
Alkalinity, Total (MG/L)	358.	/	10.	303.	/	10.	380.	/	10.
Carbon, Total Organic (MG/L)		U/	1.		U/	1.	5.9	/	1.
Chloride (MG/L)	144.	/	2.	8.	/	2.	104.	/	2.
Hardness (MG/L)	620.	/	10.	900.	/	10.	1140.	/	10.
Nitrogen, Ammonia (MG/L)		U/	0.1		U/	0.1	1.02	/	0.1
Nitrogen, Nitrate (MG/L)	0.03	/	0.02	0.04	/	0.02	0.14	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	620.	*/J	10.	304.	*/J	10.	600.	/	10.
Sulfate (MG/L)	49.	N/J	10.	30.	N/J	10.	40.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWUS04D-01 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04D-91 05/12/93 CONC	LQ/DVQ	RDL	HD-GWUS04S-01 05/11/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/UJ	39.		U/	39.		U/UJ	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.		U/	3.		U/	3.
Barium (UG/L)	47.6	B/	1.	59.1	B/	1.	106.	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.		U/	3.
Calcium (UG/L)	40300.	E/J	12.	43200.	E/J	12.	119000.	E/J	12.
Chromium, total (UG/L)		U/	3.		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		B/U	5.6		B/U	3.8		B/U	5.8
Iron (UG/L)		BE/UJ	22.6	225.	E/J	7.	2700.	E/J	7.
Lead (UG/L)		/U	3.9		U/	2.		B/U	2.7
Magnesium (UG/L)	26500.	/	17.	25300.	/	17.	46700.	/	17.
Manganese (UG/L)	18.	/	1.	16.	/	1.	72.7	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		B/U	8.3		U/	5.	9.7	B/U	5.
Potassium (UG/L)	1810.	B/	55.	1400.	B/	55.	1570.	B/	55.
Selenium (UG/L)		U/	2.		U/	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	50300.	/	24.	38100.	/	24.	55800.	/	24.
Thallium (UG/L)		U/	2.		U/	2.		UW/UJ	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)		BE/U	13.2		E/U	554.		E/U	530.
Cyanide (UG/L)		U/UJ	0.62		B/UJ	1.3		U/UJ	0.62
Alkalinity, Total (MG/L)	225.	/	10.	227.	/	10.	367.	/	10.
Carbon, Total Organic (MG/L)		U/	1.	1.2	/	1.	3.1	/	1.
Chloride (MG/L)	3.	/	2.	3.	/	2.	93.	/	2.
Hardness (MG/L)	216.	/	10.	222.	/	10.	514.	/	10.
Nitrogen, Ammonia (MG/L)	0.79	/	0.1	0.74	/	0.1		U/	0.1
Nitrogen, Nitrate (MG/L)		U/	0.02		U/	0.02	0.02	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	344.	/	10.	344.	/	10.	666.	*/J	10.
Sulfate (MG/L)	67.	N/J	10.	68.	N/J	10.	133.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

	HD-GWUS06D-01 05/12/93			HD-GWUS06I-01 05/11/93			HD-GWUS06S-01 05/11/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/	39.		U/	39.		U/UJ	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.	9.5	B/	3.		U/	3.
Barium (UG/L)	69.	B/	1.	53.6	B/	1.	68.1	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.		U/	3.
Calcium (UG/L)	48200.	E/J	12.	51200.	E/J	12.	105000.	E/J	12.
Chromium, total (UG/L)		U/	3.		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		B/U	2.2		B/U	3.1		B/U	6.5
Iron (UG/L)	845.	E/J	7.		BE/UJ	39.1	2530.	E/J	7.
Lead (UG/L)		U/	2.		B/U	2.6		B/U	2.8
Magnesium (UG/L)	24400.	/	17.	43900.	/	17.	44800.	/	17.
Manganese (UG/L)	31.	/	1.	20.3	/	1.	87.7	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		B/U	13.		U/	5.
Potassium (UG/L)	1820.	B/	55.	17600.	B/	55.	1290.	B/	55.
Selenium (UG/L)		U/	2.		U/	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	49500.	/	24.	33900.	/	24.	17500.	/	24.
Thallium (UG/L)		U/	2.		U/	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)		E/U	511.		E/U	560.		BE/U	19.8
Cyanide (UG/L)		B/UJ	1.4		B/UJ	1.8		B/UJ	0.68
Alkalinity, Total (MG/L)	218.	/	10.	328.	/	10.	398.	/	10.
Carbon, Total Organic (MG/L)	5.5	/	1.	2.3	/	1.	5.1	/	1.
Chloride (MG/L)	8.	/	2.	27.	/	2.	44.	/	2.
Hardness (MG/L)	227.	/	10.	416.	/	10.	630.	/	10.
Nitrogen, Ammonia (MG/L)	0.75	/	0.1	0.28	/	0.1		U/	0.1
Nitrogen, Nitrate (MG/L)		U/	0.02		U/	0.02	0.05	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	372.	/	10.	392.	*/J	10.	506.	*/J	10.
Sulfate (MG/L)	90.	N/J	10.	32.	N/J	10.	31.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWUS06S-91 05/11/93			HD-GWW03D-01 06/01/93			HD-GWW03SB-01 06/01/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/UJ	39.		U/	39.		U/	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.		U/	3.		U/	3.
Barium (UG/L)	66.7	B/	1.	163.	B/	1.	95.3	B/	1.
Beryllium (UG/L)		U/	1.		B/U	1.		B/U	1.1
Cadmium (UG/L)		U/	3.		U/	3.		U/	3.
Calcium (UG/L)	105000.	E/J	12.	115000.	/	12.	128000.	/	12.
Chromium, total (UG/L)		U/	3.	4.3	B/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		B/U	6.7		B/U	15.		B/U	11.9
Iron (UG/L)	3200.	E/J	7.	707.	/	7.	1070.	/	7.
Lead (UG/L)		U/	2.		U/	2.		U/	2.
Magnesium (UG/L)	43400.	/	17.	62500.	/	17.	55000.	/	17.
Manganese (UG/L)	84.9	/	1.	141.	/	1.	109.	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.	5.2	B/	5.	6.	B/	5.
Potassium (UG/L)	1200.	B/	55.	2610.	B/	55.	1750.	B/	55.
Selenium (UG/L)		UW/UJ	2.		UW/UJ	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	16800.	/	24.	63200.	/	24.	64300.	/	24.
Thallium (UG/L)		U/	2.		UW/UJ	2.		UW/UJ	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)		E/U	558.	314.	/	6.	352.	/	6.
Cyanide (UG/L)		B/UJ	0.7		U/	4.		U/	4.
Alkalinity, Total (MG/L)	399.	/	10.	393.	/	10.	390.	/	10.
Carbon, Total Organic (MG/L)	5.4	/	1.	1.3	/	1.	2.5	/	1.
Chloride (MG/L)	43.	/	2.	153.	/	2.	103.	/	2.
Hardness (MG/L)	551.	/	10.	574.	/	10.	614.	/	10.
Nitrogen, Ammonia (MG/L)		U/	0.1		/U	0.3		U/	0.1
Nitrogen, Nitrate (MG/L)	0.04	/	0.02		/U	0.04		/U	0.04
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	516.	*/J	10.	788.	/	10.	834.	/	10.
Sulfate (MG/L)	31.	N/J	10.	95.	/	10.	171.	/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWW04S-01 06/01/93 CONC	LQ/DVQ	RDL	HD-GWW04S-91 06/01/93 CONC	LQ/DVQ	RDL	HD-GWW05S-01 05/11/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/	39.		U/	39.		U/UJ	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.	4.1	B/	3.		U/	3.
Barium (UG/L)	363.	/	1.	354.	/	1.	182.	B/	1.
Beryllium (UG/L)		B/U	1.4		B/	1.2		U/	1.
Cadmium (UG/L)		B/U	3.4		B/	3.4		U/	3.
Calcium (UG/L)	163000.	/	12.	155000.	/	12.	148000.	E/J	12.
Chromium, total (UG/L)	4.4	B/	3.		U/	3.		U/	3.
Cobalt (UG/L)	9.	B/	4.	4.1	B/	4.		U/	4.
Copper (UG/L)		B/U	17.1		B/U	14.7		B/U	7.6
Iron (UG/L)	238.	/	7.	206.	/	7.	2480.	E/J	7.
Lead (UG/L)		U/	2.		U/	2.		M/UJ	3.2
Magnesium (UG/L)	42500.	/	17.	42400.	/	17.	40200.	/	17.
Manganese (UG/L)	1070.	/	1.	1110.	/	1.	692.	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)	8.4	B/	5.		U/	5.		B/U	8.6
Potassium (UG/L)	14000.	/	55.	14100.	/	55.	4250.	B/	55.
Selenium (UG/L)		UW/UJ	2.		UW/UJ	2.		UW/UJ	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)	50900.	/	24.	52500.	/	24.	38900.	/	24.
Thallium (UG/L)		U/	2.		UW/UJ	2.		U/	2.
Vanadium (UG/L)		B/U	7.4		B/U	2.		U/	2.
Zinc (UG/L)	248.	/	6.	333.	/	6.		E/U	686.
Cyanide (UG/L)		U/	4.		U/	4.		B/UJ	0.68
Alkalinity, Total (MG/L)	580.	/	10.	572.	/	10.	518.	/	10.
Carbon, Total Organic (MG/L)	13.	/	1.	10.	/	1.	7.7	/	1.
Chloride (MG/L)	102.	/	2.	101.	/	2.	59.	/	2.
Hardness (MG/L)	1290.	/	10.	1200.	/	10.	798.	/	10.
Nitrogen, Ammonia (MG/L)	14.5	/	0.1	22.8	/	0.1	3.73	/	0.1
Nitrogen, Nitrate (MG/L)		/U	0.08		/U	0.09	0.05	/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	744.	/	10.	756.	/	10.	664.	*/J	10.
Sulfate (MG/L)		U/	10.		U/	10.	49.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW Type: IND MTL

Parameter	HD-GWW06S-01 05/11/93 CONC	LQ/DVQ	RDL	HD-GWW07D-01 05/12/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/UJ	39.		U/	39.
Antimony (UG/L)		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.		U/	3.
Barium (UG/L)	116.	B/	1.	73.8	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.
Calcium (UG/L)	353000.	E/J	12.	36500.	E/J	12.
Chromium, total (UG/L)	4.4	B/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.
Copper (UG/L)		B/U	10.7		B/U	2.2
Iron (UG/L)	3600.	E/J	7.		BE/UJ	55.2
Lead (UG/L)		B/U	2.5		B/U	2.4
Magnesium (UG/L)	126000.	/	17.	21800.	/	17.
Manganese (UG/L)	745.	/	1.	53.4	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		B/U	7.3
Potassium (UG/L)	4620.	B/	55.	1580.	B/	55.
Selenium (UG/L)		UW/UJ	10.		U/	2.
Silver (UG/L)		U/	3.		U/	3.
Sodium (UG/L)	24300.	/	24.	57300.	/	24.
Thallium (UG/L)		UW/UJ	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.
Zinc (UG/L)		E/U	562.		BE/U	13.2
Cyanide (UG/L)		B/UJ	0.83		B/UJ	1.1
Alkalinity, Total (MG/L)	640.	/	10.	181.	/	10.
Carbon, Total Organic (MG/L)	8.4	/	1.		U/	1.
Chloride (MG/L)	49.	/	2.	4.	/	2.
Hardness (MG/L)	1800.	/	10.	261.	/	10.
Nitrogen, Ammonia (MG/L)	0.78	/	0.1	0.71	/	0.1
Nitrogen, Nitrate (MG/L)	0.06	/	0.02		U/	0.02
Nitrogen, Nitrite (MG/L)		U/	0.02		U/	0.02
Total Dissolved Solids (MG/L)	1880.	*/J	10.	380.	/	10.
Sulfate (MG/L)	790.	N/J	10.	124.	N/J	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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GROUDWATER TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW
Generated by: CAW
Date Issued: 21-SEP-93

HD-GWG11S-01 05/12/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	27.	J/

HD-GWUS03D-01 05/11/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	32.	J/

HD-GWUS03I-01 05/11/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Ethanol, 2-chloro-, phosphate (UG/L)	2.8	J/

HD-GWUS04D-01 05/12/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	32.	J/

HD-GWUS04D-91 05/12/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	6.	J/

HD-GWUS04S-01 05/11/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	21.	J/

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: GW

HD-GWUS06D-01 05/12/93

(TBNA) Tentatively-Identified Semi-Volatiles

Compound (Units)	Concentration	LQ/DVQ
Benzoic acid, 2-[[[4-[(acetyl (UG/L)	2.3	J/

HD-GWUS06S-01 05/11/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	5.	J/

HD-GWW05S-01 05/11/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	38.	J/
Unknown (UG/L)	32.	J/

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PRIVATE WATER SUPPLY VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	1.		U/	1.		U/	1.
Bromomethane (UG/L)		U/	1.		U/	1.		U/	1.
Vinyl chloride (UG/L)		U/	1.		U/	1.		U/	1.
Chloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Methylene chloride (UG/L)		U/	2.		B/U	5.		B/U	5.
Acetone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Carbon disulfide (UG/L)		U/	1.		U/	1.		U/	1.
1,1-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Chloroform (UG/L)		/U	1.		U/	1.		U/	1.
1,2-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
2-Butanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Bromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,1-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Carbon tetrachloride (UG/L)		U/	1.		U/	1.		U/	1.
Bromodichloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dichloropropane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Trichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Dibromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Benzene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Bromoform (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromoethane (UG/L)		U/	1.		U/	1.		U/	1.
4-Methyl-2-pentanone (UG/L)		U/	5.		U/	5.		U/	5.
2-Hexanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Tetrachloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2,2-Tetrachloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Toluene (UG/L)		U/	1.		U/	1.		U/	1.
Chlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

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ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

Parameter	HD-PW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-PWFB01-01 06/29/93 CONC	LQ/DVQ	RDL	HD-PWTB01-01 06/29/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	1.		U/	1.		U/	1.
Bromomethane (UG/L)		U/	1.		U/	1.		U/	1.
Vinyl chloride (UG/L)		U/	1.		U/	1.		U/	1.
Chloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Methylene chloride (UG/L)		B/U	3.	3.	B/	2.	6.	B/	2.
Acetone (UG/L)		U/R	5.	6.	/J	5.	4.	J/J	5.
Carbon disulfide (UG/L)		U/	1.		U/	1.		U/	1.
1,1-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Chloroform (UG/L)		U/	1.	11.	/	1.	11.	/	1.
1,2-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
2-Butanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Bromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,1-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Carbon tetrachloride (UG/L)		U/	1.		U/	1.		U/	1.
Bromodichloromethane (UG/L)		U/	1.	0.9	J/	1.	0.9	J/	1.
1,2-Dichloropropane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Trichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Dibromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Benzene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Bromoform (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromoethane (UG/L)		U/	1.		U/	1.		U/	1.
4-Methyl-2-pentanone (UG/L)		U/	5.		U/	5.		U/	5.
2-Hexanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Tetrachloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2,2-Tetrachloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Toluene (UG/L)		U/	1.		U/	1.		U/	1.
Chlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

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Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

Parameter	HD-PWTB02-01 06/30/93			HD-VW03-01 06/29/93			HD-VW05-01 06/29/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	1.		U/	1.		U/	1.
Bromomethane (UG/L)		U/	1.		U/	1.		U/	1.
Vinyl chloride (UG/L)		U/	1.		U/	1.		U/	1.
Chloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Methylene chloride (UG/L)		U/	2.		B/U	2.		B/U	2.
Acetone (UG/L)	4.	J/J	5.		U/R	5.		U/R	5.
Carbon disulfide (UG/L)		U/	1.		U/	1.	0.6	J/	1.
1,1-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,2-Dichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Chloroform (UG/L)	12.	/	1.		/U	1.		U/	1.
1,2-Dichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
2-Butanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Bromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,1-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Carbon tetrachloride (UG/L)		U/	1.		U/	1.		U/	1.
Bromodichloromethane (UG/L)	0.7	J/	1.		U/	1.		U/	1.
1,2-Dichloropropane (UG/L)		U/	1.		U/	1.		U/	1.
cis-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Trichloroethene (UG/L)		U/	1.		U/	1.		U/	1.
Dibromochloromethane (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2-Trichloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Benzene (UG/L)		U/	1.		U/	1.		U/	1.
trans-1,3-Dichloropropene (UG/L)		U/	1.		U/	1.		U/	1.
Bromoform (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromoethane (UG/L)		U/	1.		U/	1.		U/	1.
4-Methyl-2-pentanone (UG/L)		U/	5.		U/	5.		U/	5.
2-Hexanone (UG/L)		U/R	5.		U/R	5.		U/R	5.
Tetrachloroethene (UG/L)		U/	1.		U/	1.		U/	1.
1,1,2,2-Tetrachloroethane (UG/L)		U/	1.		U/	1.		U/	1.
Toluene (UG/L)		U/	1.		U/	1.		U/	1.
Chlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

Parameter	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	1.
Bromomethane (UG/L)		U/	1.
Vinyl chloride (UG/L)		U/	1.
Chloroethane (UG/L)		U/	1.
Methylene chloride (UG/L)		B/U	3.
Acetone (UG/L)		U/R	5.
Carbon disulfide (UG/L)	0.6	J/	1.
1,1-Dichloroethene (UG/L)		U/	1.
1,1-Dichloroethane (UG/L)		U/	1.
cis-1,2-Dichloroethene (UG/L)		U/	1.
trans-1,2-Dichloroethene (UG/L)		U/	1.
Chloroform (UG/L)		U/	1.
1,2-Dichloroethane (UG/L)		U/	1.
2-Butanone (UG/L)		U/R	5.
Bromochloromethane (UG/L)		U/	1.
1,1,1-Trichloroethane (UG/L)		U/	1.
Carbon tetrachloride (UG/L)		U/	1.
Bromodichloromethane (UG/L)		U/	1.
1,2-Dichloropropane (UG/L)		U/	1.
cis-1,3-Dichloropropene (UG/L)		U/	1.
Trichloroethene (UG/L)		U/	1.
Dibromochloromethane (UG/L)		U/	1.
1,1,2-Trichloroethane (UG/L)		U/	1.
Benzene (UG/L)		U/	1.
trans-1,3-Dichloropropene (UG/L)		U/	1.
Bromoform (UG/L)		U/	1.
1,2-Dibromoethane (UG/L)		U/	1.
4-Methyl-2-pentanone (UG/L)		U/	5.
2-Hexanone (UG/L)		U/R	5.
Tetrachloroethene (UG/L)		U/	1.
1,1,2,2-Tetrachloroethane (UG/L)		U/	1.
Toluene (UG/L)		U/	1.
Chlorobenzene (UG/L)		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Ethylbenzene (UG/L)		U/	1.		U/	1.		U/	1.
Styrene (UG/L)		U/	1.		U/	1.		U/	1.
Xylenes (total) (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromo-3-chloropropane (UG/L)		U/	1.		U/	1.		U/	1.
1,3-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,4-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

	HD-PW05-01 06/29/93			HD-PWFB01-01 06/29/93			HD-PWTB01-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Ethylbenzene (UG/L)		U/	1.		U/	1.		U/	1.
Styrene (UG/L)		U/	1.		U/	1.		U/	1.
Xylenes (total) (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromo-3-chloropropane (UG/L)		U/	1.		U/	1.		U/	1.
1,3-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,4-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

Parameter	HD-PWTB02-01 06/30/93			HD-VW03-01 06/29/93			HD-VW05-01 06/29/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Ethylbenzene (UG/L)		U/	1.		U/	1.		U/	1.
Styrene (UG/L)		U/	1.		U/	1.		U/	1.
Xylenes (total) (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dibromo-3-chloropropane (UG/L)		U/	1.		U/	1.		U/	1.
1,3-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,4-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.
1,2-Dichlorobenzene (UG/L)		U/	1.		U/	1.		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LVOC

Parameter	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
Ethylbenzene (UG/L)		U/	1.
Styrene (UG/L)		U/	1.
Xylenes (total) (UG/L)		U/	1.
1,2-Dibromo-3-chloropropane (UG/L)		U/	1.
1,3-Dichlorobenzene (UG/L)		U/	1.
1,4-Dichlorobenzene (UG/L)		U/	1.
1,2-Dichlorobenzene (UG/L)		U/	1.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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PRIVATE WATER SUPPLY SVOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	5.		B/U	7.		U/	5.
bis(2-Chloroethyl)ether (UG/L)		U/	5.		U/	5.		U/	5.
2-Chlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
2-Methylphenol (UG/L)		U/	5.	0.9	J/	5.		U/	5.
2,2'-oxybis(1-Chloropropane) (UG/L)		U/	5.		U/	5.		U/	5.
4-Methylphenol (UG/L)		U/	5.		U/	5.		U/	5.
n-Nitroso-di-n-propylamine (UG/L)		U/	5.		U/	5.		U/	5.
Hexachloroethane (UG/L)		U/	5.		U/	5.		U/	5.
Nitrobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Isophorone (UG/L)		U/	5.		U/	5.		U/	5.
2-Nitrophenol (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dimethylphenol (UG/L)		U/	5.		U/	5.		U/	5.
bis(2-Chloroethoxy)methane (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dichlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
1,2,4-Trichlorobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Naphthalene (UG/L)		U/	5.		U/	5.		U/	5.
4-Chloroaniline (UG/L)		U/	5.		U/	5.		U/	5.
Hexachlorobutadiene (UG/L)		U/	5.		U/	5.		U/	5.
4-Chloro-3-methylphenol (UG/L)		U/	5.		U/	5.		U/	5.
2-Methylnaphthalene (UG/L)		U/	5.		U/	5.		U/	5.
Hexachlorocyclopentadiene (UG/L)		U/	5.		U/	5.		U/	5.
2,4,6-Trichlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
2,4,5-Trichlorophenol (UG/L)		U/	20.		U/	20.		U/	20.
2-Chloronaphthalene (UG/L)		U/	5.		U/	5.		U/	5.
2-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
Dimethyl phthalate (UG/L)		U/	5.		U/	5.		U/	5.
Acenaphthylene (UG/L)		U/	5.		U/	5.		U/	5.
2,6-Dinitrotoluene (UG/L)		U/	5.		U/	5.		U/	5.
3-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
Acenaphthene (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dinitrophenol (UG/L)		U/	20.		U/	20.		U/	20.
4-Nitrophenol (UG/L)		U/	20.		U/	20.		U/	20.
Dibenzofuran (UG/L)		U/	5.		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC

Parameter	HD-PW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-PWFB01-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW03-01 06/29/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	5.		U/	5.		U/	5.
bis(2-Chloroethyl)ether (UG/L)		U/	5.		U/	5.		U/	5.
2-Chlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
2-Methylphenol (UG/L)		U/	5.		U/	5.		U/	5.
2,2'-oxybis(1-Chloropropane) (UG/L)		U/	5.		U/	5.		U/	5.
4-Methylphenol (UG/L)		U/	5.		U/	5.		U/	5.
n-Nitroso-di-n-propylamine (UG/L)		U/	5.		U/	5.		U/	5.
Hexachloroethane (UG/L)		U/	5.		U/	5.		U/	5.
Nitrobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Isophorone (UG/L)		U/	5.		U/	5.		U/	5.
2-Nitrophenol (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dimethylphenol (UG/L)		U/	5.		U/	5.		U/	5.
bis(2-Chloroethoxy)methane (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dichlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
1,2,4-Trichlorobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Naphthalene (UG/L)		U/	5.		U/	5.		U/	5.
4-Chloroaniline (UG/L)		U/	5.		U/	5.	0.7	J/J	5.
Hexachlorobutadiene (UG/L)		U/	5.		U/	5.		U/	5.
4-Chloro-3-methylphenol (UG/L)		U/	5.		U/	5.		U/	5.
2-Methylnaphthalene (UG/L)		U/	5.		U/	5.		U/	5.
Hexachlorocyclopentadiene (UG/L)		U/	5.		U/	5.		U/	5.
2,4,6-Trichlorophenol (UG/L)		U/	5.		U/	5.		U/	5.
2,4,5-Trichlorophenol (UG/L)		U/	20.		U/	20.		U/	20.
2-Chloronaphthalene (UG/L)		U/	5.		U/	5.		U/	5.
2-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
Dimethyl phthalate (UG/L)		U/	5.		U/	5.		U/	5.
Acenaphthylene (UG/L)		U/	5.		U/	5.		U/	5.
2,6-Dinitrotoluene (UG/L)		U/	5.		U/	5.		U/	5.
3-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
Acenaphthene (UG/L)		U/	5.		U/	5.		U/	5.
2,4-Dinitrophenol (UG/L)		U/	20.		U/	20.		U/	20.
4-Nitrophenol (UG/L)		U/	20.		U/	20.		U/	20.
Dibenzofuran (UG/L)		U/	5.		U/	5.		U/	5.

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ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC

Parameter	HD-VW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		B/U	5.		U/	5.
bis(2-Chloroethyl)ether (UG/L)		U/	5.		U/	5.
2-Chlorophenol (UG/L)		U/	5.		U/	5.
2-Methylphenol (UG/L)	0.5	J/	5.		U/	5.
2,2'-oxybis(1-Chloropropane) (UG/L)		U/	5.		U/	5.
4-Methylphenol (UG/L)		U/	5.		U/	5.
n-Nitroso-di-n-propylamine (UG/L)		U/	5.		U/	5.
Hexachloroethane (UG/L)		U/	5.		U/	5.
Nitrobenzene (UG/L)		U/	5.		U/	5.
Isophorone (UG/L)		U/	5.		U/	5.
2-Nitrophenol (UG/L)		U/	5.		U/	5.
2,4-Dimethylphenol (UG/L)		U/	5.		U/	5.
bis(2-Chloroethoxy)methane (UG/L)		U/	5.		U/	5.
2,4-Dichlorophenol (UG/L)		U/	5.		U/	5.
1,2,4-Trichlorobenzene (UG/L)		U/	5.		U/	5.
Naphthalene (UG/L)		U/	5.		U/	5.
4-Chloroaniline (UG/L)		U/	5.		U/	5.
Hexachlorobutadiene (UG/L)		U/	5.		U/	5.
4-Chloro-3-methylphenol (UG/L)		U/	5.		U/	5.
2-Methylnaphthalene (UG/L)		U/	5.		U/	5.
Hexachlorocyclopentadiene (UG/L)		U/	5.		U/	5.
2,4,6-Trichlorophenol (UG/L)		U/	5.		U/	5.
2,4,5-Trichlorophenol (UG/L)		U/	20.		U/	20.
2-Chloronaphthalene (UG/L)		U/	5.		U/	5.
2-Nitroaniline (UG/L)		U/	20.		U/	20.
Dimethyl phthalate (UG/L)		U/	5.		U/	5.
Acenaphthylene (UG/L)		U/	5.		U/	5.
2,6-Dinitrotoluene (UG/L)		U/	5.		U/	5.
3-Nitroaniline (UG/L)		U/	20.		U/	20.
Acenaphthene (UG/L)		U/	5.		U/	5.
2,4-Dinitrophenol (UG/L)		U/	20.		U/	20.
4-Nitrophenol (UG/L)		U/	20.		U/	20.
Dibenzofuran (UG/L)		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrotoluene (UG/L)		U/	5.		U/	5.		U/	5.
Diethylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
4-Chlorophenyl-phenylether (UG/L)		U/	5.		U/	5.		U/	5.
Fluorene (UG/L)		U/	5.		U/	5.		U/	5.
4-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
4,6-Dinitro-2-methylphenol (UG/L)		U/	20.		U/	20.		U/	20.
n-Nitrosodiphenylamine (UG/L)		U/	5.		U/	5.		U/	5.
4-Bromophenyl-phenylether (UG/L)		U/	5.		U/	5.		U/	5.
Hexachlorobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Pentachlorophenol (UG/L)		U/	20.		U/	20.		U/	20.
Phenanthrene (UG/L)		U/	5.		U/	5.		U/	5.
Anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Di-n-butylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
Fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Butylbenzylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
3,3'-Dichlorobenzidine (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(a)anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Chrysene (UG/L)		U/	5.		U/	5.		U/	5.
bis(2-ethylhexyl)phthalate (UG/L)		U/	5.		B/U	11.		U/	5.
Di-n-octylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(b)fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(k)fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(a)pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Dibenz(a,h)anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(g,h,i)perylene (UG/L)		U/	5.		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC

Parameter	HD-PW05-01 06/29/93			HD-PWFB01-01 06/29/93			HD-VW03-01 06/29/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrotoluene (UG/L)		U/	5.		U/	5.		U/	5.
Diethylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
4-Chlorophenyl-phenylether (UG/L)		U/	5.		U/	5.		U/	5.
Fluorene (UG/L)		U/	5.		U/	5.		U/	5.
4-Nitroaniline (UG/L)		U/	20.		U/	20.		U/	20.
4,6-Dinitro-2-methylphenol (UG/L)		U/	20.		U/	20.		U/	20.
n-Nitrosodiphenylamine (UG/L)		U/	5.		U/	5.		U/	5.
4-Bromophenyl-phenylether (UG/L)		U/	5.		U/	5.		U/	5.
Hexachlorobenzene (UG/L)		U/	5.		U/	5.		U/	5.
Pentachlorophenol (UG/L)		U/	20.		U/	20.		U/	20.
Phenanthrene (UG/L)		U/	5.		U/	5.		U/	5.
Anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Di-n-butylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
Fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Butylbenzylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
3,3'-Dichlorobenzidine (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(a)anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Chrysene (UG/L)		U/	5.		U/	5.		U/	5.
bis(2-ethylhexyl)phthalate (UG/L)		B/U	5.	6.	B/	5.		U/	5.
Di-n-octylphthalate (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(b)fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(k)fluoranthene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(a)pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	5.		U/	5.		U/	5.
Dibenz(a,h)anthracene (UG/L)		U/	5.		U/	5.		U/	5.
Benzo(g,h,i)perylene (UG/L)		U/	5.		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LSVOC

Parameter	HD-VW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
2,4-Dinitrotoluene (UG/L)		U/	5.		U/	5.
Diethylphthalate (UG/L)		U/	5.		U/	5.
4-Chlorophenyl-phenylether (UG/L)		U/	5.		U/	5.
Fluorene (UG/L)		U/	5.		U/	5.
4-Nitroaniline (UG/L)		U/	20.		U/	20.
4,6-Dinitro-2-methylphenol (UG/L)		U/	20.		U/	20.
n-Nitrosodiphenylamine (UG/L)		U/	5.		U/	5.
4-Bromophenyl-phenylether (UG/L)		U/	5.		U/	5.
Hexachlorobenzene (UG/L)		U/	5.		U/	5.
Pentachlorophenol (UG/L)		U/	20.		U/	20.
Phenanthrene (UG/L)		U/	5.		U/	5.
Anthracene (UG/L)		U/	5.		U/	5.
Di-n-butylphthalate (UG/L)		U/	5.		U/	5.
Fluoranthene (UG/L)		U/	5.		U/	5.
Pyrene (UG/L)		U/	5.		U/	5.
Butylbenzylphthalate (UG/L)		U/	5.		U/	5.
3,3'-Dichlorobenzidine (UG/L)		U/	5.		U/	5.
Benzo(a)anthracene (UG/L)		U/	5.		U/	5.
Chrysene (UG/L)		U/	5.		U/	5.
bis(2-ethylhexyl)phthalate (UG/L)		B/U	8.		U/	5.
Di-n-octylphthalate (UG/L)		U/	5.		U/	5.
Benzo(b)fluoranthene (UG/L)		U/	5.		U/	5.
Benzo(k)fluoranthene (UG/L)		U/	5.		U/	5.
Benzo(a)pyrene (UG/L)		U/	5.		U/	5.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	5.		U/	5.
Dibenz(a,h)anthracene (UG/L)		U/	5.		U/	5.
Benzo(g,h,i)perylene (UG/L)		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P20

PRIVATE WATER SUPPLY PESTICIDES/PCBS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LPPCB
Generated by: CAW
Date Issued: 21-SEP-93

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
beta-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
delta-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
gamma-BHC (Lindane) (UG/L)		U/	0.01		U/	0.01		U/	0.01
Heptachlor (UG/L)		U/	0.01		U/	0.01		U/	0.01
Aldrin (UG/L)		U/	0.01		U/	0.01		U/	0.01
Heptachlor epoxide (UG/L)		U/	0.01		U/	0.01		U/	0.01
Endosulfan I (UG/L)		U/	0.01		U/	0.01		U/	0.01
Dieldrin (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDE (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endrin (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endosulfan II (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDD (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endosulfan sulfate (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDT (UG/L)		U/	0.02		U/	0.02		U/	0.02
Methoxychlor (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin ketone (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endrin aldehyde (UG/L)		U/	0.02		U/	0.02		U/	0.02
alpha-Chlordane (UG/L)		U/	0.01		U/	0.01		U/	0.01
gamma-Chlordane (UG/L)		U/	0.01		U/	0.01		U/	0.01
Toxaphene (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1016 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1221 (UG/L)		U/	0.4		U/	0.4		U/	0.4
Aroclor-1232 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1242 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1248 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1254 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1260 (UG/L)		U/	0.2		U/	0.2		U/	0.2

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LPPCB

Parameter	HD-PW05-01 06/29/93			HD-PWFB01-01 06/29/93			HD-VW03-01 06/29/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
beta-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
delta-BHC (UG/L)		U/	0.01		U/	0.01		U/	0.01
gamma-BHC (Lindane) (UG/L)		U/	0.01		U/	0.01		U/	0.01
Heptachlor (UG/L)		U/	0.01		U/	0.01		U/	0.01
Aldrin (UG/L)		U/	0.01		U/	0.01		U/	0.01
Heptachlor epoxide (UG/L)		U/	0.01		U/	0.01		U/	0.01
Endosulfan I (UG/L)		U/	0.01		U/	0.01		U/	0.01
Dieldrin (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDE (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endrin (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endosulfan II (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDD (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endosulfan sulfate (UG/L)		U/	0.02		U/	0.02		U/	0.02
4,4'-DDT (UG/L)		U/	0.02		U/	0.02		U/	0.02
Methoxychlor (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin ketone (UG/L)		U/	0.02		U/	0.02		U/	0.02
Endrin aldehyde (UG/L)		U/	0.02		U/	0.02		U/	0.02
alpha-Chlordane (UG/L)		U/	0.01		U/	0.01		U/	0.01
gamma-Chlordane (UG/L)		U/	0.01		U/	0.01		U/	0.01
Toxaphene (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1016 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1221 (UG/L)		U/	0.4		U/	0.4		U/	0.4
Aroclor-1232 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1242 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1248 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1254 (UG/L)		U/	0.2		U/	0.2		U/	0.2
Aroclor-1260 (UG/L)		U/	0.2		U/	0.2		U/	0.2

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: LPPCB

Parameter	HD-VW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.01		U/	0.01
beta-BHC (UG/L)		U/	0.01		U/	0.01
delta-BHC (UG/L)		U/	0.01		U/	0.01
gamma-BHC (Lindane) (UG/L)		U/	0.01		U/	0.01
Heptachlor (UG/L)		U/	0.01		U/	0.01
Aldrin (UG/L)		U/	0.01		U/	0.01
Heptachlor epoxide (UG/L)		U/	0.01		U/	0.01
Endosulfan I (UG/L)		U/	0.01		U/	0.01
Dieldrin (UG/L)		U/	0.02		U/	0.02
4,4'-DDE (UG/L)		U/	0.02		U/	0.02
Endrin (UG/L)		U/	0.02		U/	0.02
Endosulfan II (UG/L)		U/	0.02		U/	0.02
4,4'-DDD (UG/L)		U/	0.02		U/	0.02
Endosulfan sulfate (UG/L)		U/	0.02		U/	0.02
4,4'-DDT (UG/L)		U/	0.02		U/	0.02
Methoxychlor (UG/L)		U/	0.1		U/	0.1
Endrin ketone (UG/L)		U/	0.02		U/	0.02
Endrin aldehyde (UG/L)		U/	0.02		U/	0.02
alpha-Chlordane (UG/L)		U/	0.01		U/	0.01
gamma-Chlordane (UG/L)		U/	0.01		U/	0.01
Toxaphene (UG/L)		U/	1.		U/	1.
Aroclor-1016 (UG/L)		U/	0.2		U/	0.2
Aroclor-1221 (UG/L)		U/	0.4		U/	0.4
Aroclor-1232 (UG/L)		U/	0.2		U/	0.2
Aroclor-1242 (UG/L)		U/	0.2		U/	0.2
Aroclor-1248 (UG/L)		U/	0.2		U/	0.2
Aroclor-1254 (UG/L)		U/	0.2		U/	0.2
Aroclor-1260 (UG/L)		U/	0.2		U/	0.2

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P21

PRIVATE WATER SUPPLY METALS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: MTL
Generated by: CAW
Date Issued: 21-SEP-93

	HD-PW01-01 07/01/93			HD-PW02-01			HD-PW03-01 06/29/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/	50.		U/	50.	75.	B/	50.
Antimony (UG/L)		US/	5.		US/	5.		US/	5.
Arsenic (UG/L)		U/	2.		U/	2.		U/	2.
Barium (UG/L)	260.	/	10.	109.	B/	10.	131.	B/	10.
Beryllium (UG/L)		U/	5.		U/	5.		U/	5.
Cadmium (UG/L)		U/	0.2		U/	0.2		U/	0.2
Calcium (UG/L)	82700.	/	1000.	31900.	/	1000.	32700.	/	1000.
Chromium, total (UG/L)	0.89	B/	0.2	0.56	B/	0.2	0.2	B/	0.2
Cobalt (UG/L)		U/	10.	10.	B/	10.		U/	10.
Copper (UG/L)	26.	/	10.		U/	10.		U/	10.
Iron (UG/L)	3050.	/	20.	643.	/	20.	549.	/	20.
Lead (UG/L)	5.5	/	3.		U/	3.		U/	3.
Magnesium (UG/L)	47600.	/	1000.	14900.	/	1000.	14500.	/	1000.
Manganese (UG/L)	26.	/	10.		U/	10.		U/	10.
Mercury (UG/L)		U/	0.2		U/	0.2		U/	0.2
Nickel (UG/L)		U/	20.		U/	20.		U/	20.
Potassium (UG/L)	2320.	B/	100.	1570.	B/	100.	1760.	B/	100.
Selenium (UG/L)		US/	2.		US/	2.		US/	2.
Silver (UG/L)		US/UJ	0.5		US/UJ	0.5		US/UJ	0.5
Sodium (UG/L)	56400.	/	2000.	53000.	/	2000.	53400.	/	2000.
Thallium (UG/L)		U/	2.		U/	2.		U/	2.
Vanadium (UG/L)	2.7	BS/	2.		U/	2.		U/	2.
Zinc (UG/L)	73.	/	10.		U/	10.	608.	/	10.
Cyanide (UG/L)		U/	5.		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: MTL

Parameter	HD-PW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-PWFB01-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW03-01 06/29/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/	50.		U/	50.		U/	50.
Antimony (UG/L)		US/	5.		US/	5.		US/	5.
Arsenic (UG/L)		U/	2.		U/	2.	2.1	B/	2.
Barium (UG/L)	61.	B/	10.		U/	10.	59.	B/	10.
Beryllium (UG/L)		U/	5.		U/	5.		U/	5.
Cadmium (UG/L)		U/	0.2		U/	0.2		U/	0.2
Calcium (UG/L)	25600.	/	1000.		U/	1000.	41000.	/	1000.
Chromium, total (UG/L)	0.46	B/	0.2		U/	0.2		U/	0.2
Cobalt (UG/L)		U/	10.		U/	10.		U/	10.
Copper (UG/L)		U/	10.		U/	10.		U/	10.
Iron (UG/L)	162.	/	20.		U/	20.	646.	/	20.
Lead (UG/L)		U/	3.		U/	3.		U/	3.
Magnesium (UG/L)	17200.	/	1000.		U/	1000.	29800.	/	1000.
Manganese (UG/L)		U/	10.		U/	10.		U/	10.
Mercury (UG/L)		U/	0.2		U/	0.2		U/	0.2
Nickel (UG/L)		U/	20.		U/	20.		U/	20.
Potassium (UG/L)	1060.	B/	100.		U/	100.	1490.	B/	100.
Selenium (UG/L)		US/	2.		US/	2.		US/	2.
Silver (UG/L)		U/	0.5		U/	0.5		US/UJ	0.5
Sodium (UG/L)	60600.	/	2000.		U/	2000.	41300.	/	2000.
Thallium (UG/L)		U/	2.		U/	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)	48.	/	10.		U/	10.	25.	/	10.
Cyanide (UG/L)		U/	5.		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: PW Type: MTL

Parameter	HD-VW05-01 06/29/93 CONC	LQ/DVQ	RDL	HD-VW05-91 06/29/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)	55.	B/	50.		U/	50.
Antimony (UG/L)		US/	5.		US/	5.
Arsenic (UG/L)	4.	B/	2.	4.5	B/	2.
Barium (UG/L)	94.	B/	10.	88.	B/	10.
Beryllium (UG/L)		U/	5.		U/	5.
Cadmium (UG/L)		U/	0.2		U/	0.2
Calcium (UG/L)	55400.	/	1000.	54400.	/	1000.
Chromium, total (UG/L)	0.25	B/	0.2	0.24	B/	0.2
Cobalt (UG/L)		U/	10.		U/	10.
Copper (UG/L)		U/	10.		U/	10.
Iron (UG/L)	1100.	/	20.	1100.	/	20.
Lead (UG/L)		U/	3.		U/	3.
Magnesium (UG/L)	36600.	/	1000.	37400.	/	1000.
Manganese (UG/L)	10.	B/	10.	10.	B/	10.
Mercury (UG/L)		U/	0.2		U/	0.2
Nickel (UG/L)		U/	20.		U/	20.
Potassium (UG/L)	1590.	B/	100.	1570.	B/	100.
Selenium (UG/L)		US/	2.		US/	2.
Silver (UG/L)		[illegible]	0.5		US/UJ	0.5
[illegible]						[illegible]
[illegible]						
Vanadium (UG/L)			[illegible]		U/	[illegible]
Zinc (UG/L)		U/	10.		U/	10.
Cyanide (UG/L)		U/	5.		U/	5.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

P22

SURFACE WATER VOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: VOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SWFB01-01 05/13/93			HD-SWS101-01 05/14/93			HD-SWS201-01 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		U/	10.		U/	10.		U/	10.
Acetone (UG/L)	30.	/	10.		U/	10.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)		U/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)		U/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)	1.	J/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: VOC

Parameter	HD-SWS301-01 05/14/93			HD-SWS301-91 05/14/93			HD-SWTB01-01 05/14/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Chloromethane (UG/L)		U/	10.		U/	10.		U/	10.
Bromomethane (UG/L)		U/	10.		U/	10.		U/	10.
Vinyl chloride (UG/L)		U/	10.		U/	10.		U/	10.
Chloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Methylene chloride (UG/L)		/U	33.		U/	10.	6.	J/	10.
Acetone (UG/L)		/U	21.		/U	18.		U/	10.
Carbon disulfide (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethene (total) (UG/L)		U/	10.		U/	10.		U/	10.
Chloroform (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
2-Butanone (UG/L)		U/	10.		U/	10.		U/	10.
1,1,1-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Carbon tetrachloride (UG/L)		U/	10.		U/	10.		U/	10.
Bromodichloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichloropropane (UG/L)		U/	10.		U/	10.		U/	10.
cis-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Trichloroethene (UG/L)		U/	10.		U/	10.		U/	10.
Dibromochloromethane (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2-Trichloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Benzene (UG/L)		U/	10.		U/	10.		U/	10.
trans-1,3-Dichloropropene (UG/L)		U/	10.		U/	10.		U/	10.
Bromoform (UG/L)		U/	10.		U/	10.		U/	10.
4-Methyl-2-pentanone (UG/L)	2.	J/	10.		U/	10.		U/	10.
2-Hexanone (UG/L)	3.	J/	10.		U/	10.		U/	10.
Tetrachloroethene (UG/L)		U/	10.		U/	10.		U/	10.
1,1,2,2-Tetrachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Toluene (UG/L)		U/	10.		U/	10.		U/	10.
Chlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Ethylbenzene (UG/L)		U/	10.		U/	10.		U/	10.
Styrene (UG/L)		U/	10.		U/	10.		U/	10.
Xylenes (total) (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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SURFACE WATER SVOCS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: SVOC
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SWFB01-01 05/13/93			HD-SWS101-01 05/14/93			HD-SWS201-01 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: SVOC

Parameter	HD-SWS301-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SWS301-91 05/14/93 CONC	LQ/DVQ	RDL
Phenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroethyl) ether (UG/L)		U/	10.		U/	10.
2-Chlorophenol (UG/L)		U/	10.		U/	10.
1,3-Dichlorobenzene (UG/L)		U/	10.		U/	10.
1,4-Dichlorobenzene (UG/L)		U/	10.		U/	10.
1,2-Dichlorobenzene (UG/L)		U/	10.		U/	10.
2-Methylphenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroisopropyl)ether (UG/L)		U/	10.		U/	10.
4-Methylphenol (UG/L)		U/	10.		U/	10.
N-Nitroso-di-n-propylamine (UG/L)		U/	10.		U/	10.
Hexachloroethane (UG/L)		U/	10.		U/	10.
Nitrobenzene (UG/L)		U/	10.		U/	10.
Isophorone (UG/L)		U/	10.		U/	10.
2-Nitrophenol (UG/L)		U/	10.		U/	10.
2,4-Dimethylphenol (UG/L)		U/	10.		U/	10.
bis(2-Chloroethoxy)methane (UG/L)		U/	10.		U/	10.
2,4-Dichlorophenol (UG/L)		U/	10.		U/	10.
1,2,4-Trichlorobenzene (UG/L)		U/	10.		U/	10.
Naphthalene (UG/L)		U/	10.		U/	10.
4-Chloroaniline (UG/L)		U/	10.		U/	10.
Hexachlorobutadiene (UG/L)		U/	10.		U/	10.
4-Chloro-3-methylphenol (UG/L)		U/	10.		U/	10.
2-Methylnaphthalene (UG/L)		U/	10.		U/	10.
Hexachlorocyclopentadiene (UG/L)		U/	10.		U/	10.
2,4,6-Trichlorophenol (UG/L)		U/	10.		U/	10.
2,4,5-Trichlorophenol (UG/L)		U/	26.		U/	26.
2-Chloronaphthalene (UG/L)		U/	10.		U/	10.
2-Nitroaniline (UG/L)		U/	26.		U/	26.
Dimethylphthalate (UG/L)		U/	10.		U/	10.
Acenaphthylene (UG/L)		U/	10.		U/	10.
2,6-Dinitrotoluene (UG/L)		U/	10.		U/	10.
3-Nitroaniline (UG/L)		U/	26.		U/	26.
Acenaphthene (UG/L)		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: SVOC

Parameter	HD-SWFB01-01 05/13/93			HD-SWS101-01 05/14/93			HD-SWS201-01 05/13/93		
	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: SVOC

Parameter	HD-SWS301-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SWS301-91 05/14/93 CONC	LQ/DVQ	RDL
2,4-Dinitrophenol (UG/L)		U/	26.		U/	26.
4-Nitrophenol (UG/L)		U/	26.		U/	26.
Dibenzofuran (UG/L)		U/	10.		U/	10.
2,4-Dinitrotoluene (UG/L)		U/	10.		U/	10.
Diethylphthalate (UG/L)		U/	10.		U/	10.
4-Chlorophenyl-phenylether (UG/L)		U/	10.		U/	10.
Fluorene (UG/L)		U/	10.		U/	10.
4-Nitroaniline (UG/L)		U/	26.		U/	26.
4,6-Dinitro-2-methylphenol (UG/L)		U/	26.		U/	26.
N-nitrosodiphenylamine (UG/L)		U/	10.		U/	10.
4-Bromophenyl-phenylether (UG/L)		U/	10.		U/	10.
Hexachlorobenzene (UG/L)		U/	10.		U/	10.
Pentachlorophenol (UG/L)		U/	26.		U/	26.
Phenanthrene (UG/L)		U/	10.		U/	10.
Anthracene (UG/L)		U/	10.		U/	10.
Di-n-butylphthalate (UG/L)		U/	10.		U/	10.
Fluoranthene (UG/L)		U/	10.		U/	10.
Pyrene (UG/L)		U/	10.		U/	10.
Butylbenzylphthalate (UG/L)		U/	10.		U/	10.
3,3'-Dichlorobenzidine (UG/L)		U/	10.		U/	10.
Benzo(a)anthracene (UG/L)		U/	10.		U/	10.
Chrysene (UG/L)		U/	10.		U/	10.
bis(2-ethylhexyl)phthalate (UG/L)		U/	10.		U/	10.
Di-n-octyl Phthalate (UG/L)		U/	10.		U/	10.
Benzo(b)fluoranthene (UG/L)		U/	10.		U/	10.
Benzo(k)fluoranthene (UG/L)		U/	10.		U/	10.
Benzo(a)pyrene (UG/L)		U/	10.		U/	10.
Indeno(1,2,3-cd)pyrene (UG/L)		U/	10.		U/	10.
Dibenz(a,h)anthracene (UG/L)		U/	10.		U/	10.
Benzo(g,h,i)perylene (UG/L)		U/	10.		U/	10.
Carbazole (UG/L)		U/	10.		U/	10.

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

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SURFACE WATER PESTICIDES/PCBS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: PPCB
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SWFB01-01 05/13/93			HD-SWS101-01 05/14/93			HD-SWS201-01 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.05
beta-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.05
delta-BHC (UG/L)		U/	0.051		U/	0.052		U/	0.05
gamma-BHC (Lindane) (UG/L)		U/	0.051		U/	0.052		U/	0.05
Heptachlor (UG/L)		U/	0.051		U/	0.052		U/	0.05
Aldrin (UG/L)		U/	0.051		U/	0.052		U/	0.05
Heptachlor epoxide (UG/L)		U/	0.051		U/	0.052		U/	0.05
Endosulfan I (UG/L)		U/	0.051		U/	0.052		U/	0.05
Dieldrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.51		U/	0.52		U/	0.5
Endrin ketone (UG/L)		U/	0.1		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.051		U/	0.052		U/	0.05
gamma-Chlordane (UG/L)		U/	0.051		U/	0.052		U/	0.05
Toxaphene (UG/L)		U/	5.1		U/	5.2		U/	5.
Aroclor-1016 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.1		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: PPCB

Parameter	HD-SWS301-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SWS301-91 05/14/93 CONC	LQ/DVQ	RDL
alpha-BHC (UG/L)		U/	0.05		U/	0.051
beta-BHC (UG/L)		U/	0.05		U/	0.051
delta-BHC (UG/L)		U/	0.05		U/	0.051
gamma-BHC (Lindane) (UG/L)		U/	0.05		U/	0.051
Heptachlor (UG/L)		U/	0.05		U/	0.051
Aldrin (UG/L)		U/	0.05		U/	0.051
Heptachlor epoxide (UG/L)		U/	0.05		U/	0.051
Endosulfan I (UG/L)		U/	0.05		U/	0.051
Dieldrin (UG/L)		U/	0.1		U/	0.1
4,4'-DDE (UG/L)		U/	0.1		U/	0.1
Endrin (UG/L)		U/	0.1		U/	0.1
Endosulfan II (UG/L)		U/	0.1		U/	0.1
4,4'-DDD (UG/L)		U/	0.1		U/	0.1
Endosulfan sulfate (UG/L)		U/	0.1		U/	0.1
4,4'-DDT (UG/L)		U/	0.1		U/	0.1
Methoxychlor (UG/L)		U/	0.5		U/	0.51
Endrin ketone (UG/L)		U/	0.1		U/	0.1
alpha-Chlordane (UG/L)		U/	0.05		U/	0.051
gamma-Chlordane (UG/L)		U/	0.05		U/	0.051
Toxaphene (UG/L)		U/	5.		U/	5.1
Aroclor-1016 (UG/L)		U/	1.		U/	1.
Aroclor-1221 (UG/L)		U/	2.		U/	2.
Aroclor-1232 (UG/L)		U/	1.		U/	1.
Aroclor-1242 (UG/L)		U/	1.		U/	1.
Aroclor-1248 (UG/L)		U/	1.		U/	1.
Aroclor-1254 (UG/L)		U/	1.		U/	1.
Aroclor-1260 (UG/L)		U/	1.		U/	1.
Endrin aldehyde (UG/L)		U/	0.1		U/	0.1

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
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SURFACE WATER INDICATORS AND METALS

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: MTL
Generated by: CAW
Date Issued: 21-SEP-93

	HD-SWFB01-01 05/13/93			HD-SWS101-01 05/14/93			HD-SWS201-01 05/13/93		
Parameter	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL	CONC	LQ/DVQ	RDL
Aluminum (UG/L)		U/	39.	113.	B/	39.	107.	B/	39.
Antimony (UG/L)		U/	24.		U/	24.		U/	24.
Arsenic (UG/L)		U/	3.		U/	3.		U/	3.
Barium (UG/L)		U/	1.	19.4	B/	1.	22.2	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.	3.3	B/	3.		U/	3.
Calcium (UG/L)	1260.	B/	12.	52600.	/	12.	46700.	/	12.
Chromium, total (UG/L)		U/	3.	3.2	B/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.		U/	4.
Copper (UG/L)		U/UJ	2.	2.3	B/J	2.	2.1	B/J	2.
Iron (UG/L)	35.2	B/	7.		/U	159.	424.	/	7.
Lead (UG/L)		U/	2.		U/	2.		U/	2.
Magnesium (UG/L)	25.6	B/	17.	25700.	/	17.	24900.	/	17.
Manganese (UG/L)		U/	1.	50.9	/	1.	56.8	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		U/	5.		U/	5.
Potassium (UG/L)		U/	55.	2210.	B/	55.	2110.	B/	55.
Selenium (UG/L)		U/	2.		U/	2.		U/	2.
Silver (UG/L)		U/	3.		U/	3.		U/	3.
Sodium (UG/L)		B/U	183.	26000.	/	24.	34400.	/	24.
Thallium (UG/L)		U/	2.		U/	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.		U/	2.
Zinc (UG/L)	154.	/	6.		/U	688.		/U	129.
Cyanide (UG/L)					U/	0.62		U/UJ	0.62

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Conc = Concentration of parameter detected in the sample, LQ/DVQ = Laboratory Qualifier/Data Validation Qualifier, RDL = Reported Detection Limit.

ANALYTICAL DATA REPORT
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW Type: MTL

Parameter	HD-SWS301-01 05/14/93 CONC	LQ/DVQ	RDL	HD-SWS301-91 05/14/93 CONC	LQ/DVQ	RDL
Aluminum (UG/L)	55.5	B/	39.	91.1	B/	39.
Antimony (UG/L)		U/	24.	27.6	B/	24.
Arsenic (UG/L)		U/	3.		U/	3.
Barium (UG/L)	21.9	B/	1.	22.2	B/	1.
Beryllium (UG/L)		U/	1.		U/	1.
Cadmium (UG/L)		U/	3.		U/	3.
Calcium (UG/L)	52500.	/	12.	52400.	/	12.
Chromium, total (UG/L)		U/	3.		U/	3.
Cobalt (UG/L)		U/	4.		U/	4.
Copper (UG/L)		U/UJ	2.		U/UJ	2.
Iron (UG/L)	318.	/	7.	355.	/	7.
Lead (UG/L)	2.	B/	2.		U/	2.
Magnesium (UG/L)	25500.	/	17.	25400.	/	17.
Manganese (UG/L)	54.2	/	1.	53.7	/	1.
Mercury (UG/L)		U/	0.1		U/	0.1
Nickel (UG/L)		U/	5.		U/	5.
Potassium (UG/L)	2060.	B/	55.	2010.	B/	55.
Selenium (UG/L)		U/	2.		U/	2.
Silver (UG/L)		U/	3.		U/	3.
Sodium (UG/L)	35000.	/	24.	34900.	/	24.
Thallium (UG/L)		U/	2.		U/	2.
Vanadium (UG/L)		U/	2.		U/	2.
Zinc (UG/L)		/U	653.		/U	662.
Cyanide (UG/L)		B/UJ	0.75		U/UJ	0.62

Note: In the sample ID: "-91" indicates a field duplicate, "TB" indicates a Trip Blank, and "FB" indicates a Field Blank.
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SURFACE WATER TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

SUMMARY OF TENTATIVELY IDENTIFIED COMPOUNDS
HOD Landfill RI/FS
Antioch, Illinois

Matrix: SW
Generated by: CAW
Date Issued: 21-SEP-93

HD-SWFB01-01 05/13/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	4.	J/

HD-SWS301-01 05/14/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	5.	J/

HD-SWTB01-01 05/14/93

(TVOA) Tentatively-Identified Volatiles

Compound (Units)	Concentration	LQ/DVQ
Unknown (UG/L)	6.	J/