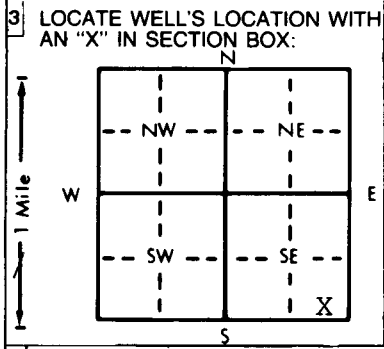


1 LOCATION OF WATER WELL: County: **Jackson** Fraction: **NE 1/4 SE 1/4 SE 1/4** Section Number: **16** Township Number: **T 6 S** Range Number: **R 15 EW**

Distance and direction from nearest town or city street address of well if located within city?

2 WATER WELL OWNER: **US Army Corp of Engineers**
 RR#, St. Address, Box #: **P.O. box 59 Louisville Ky. 40201**
 City, State, ZIP Code: **Louisville Ky. 40201**
 Board of Agriculture, Division of Water Resources
 Application Number:



4 DEPTH OF COMPLETED WELL: **35** ft. ELEVATION: **n/a**
 Depth(s) Groundwater Encountered: 1. **18** ft. 2. ft. 3. ft.
 WELL'S STATIC WATER LEVEL: **27.40** ft. below land surface measured on mo/day/yr: **4-03-02**
 Pump test data: Well water was **n/a** ft. after hours pumping gpm
 Est. Yield gpm: Well water was ft. after hours pumping gpm
 Bore Hole Diameter: **8** in. to ft., and in. to ft.
 WELL WATER TO BE USED AS:
 5 Public water supply 8 Air conditioning 11 Injection well
 1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)
 2 Irrigation 4 Industrial 7 Lawn and garden only 10 Monitoring well **X**
 Was a chemical/bacteriological sample submitted to Department? Yes No **X**; If yes, mo/day/yr sample was submitted
 Water Well Disinfected? Yes No **X**

5 TYPE OF BLANK CASING USED:
 1 Steel 3 RMP (SR) 5 Wrought iron 8 Concrete tile CASING JOINTS: Glued Clamped
 (2 PVC) 4 ABS 6 Asbestos-Cement 9 Other (specify below) Welded
 7 Fiberglass Threaded **X**
 Blank casing diameter: **2** in. to ft., Dia in. to ft., Dia in. to ft.
 Casing height above land surface: **3** in., weight lbs./ft. Wall thickness or gauge No.
 TYPE OF SCREEN OR PERFORATION MATERIAL:
 1 Steel 3 Stainless steel 5 Fiberglass (7 PVC) 10 Asbestos-cement
 2 Brass 4 Galvanized steel 6 Concrete tile 8 RMP (SR) 11 Other (specify)
 9 ABS 12 None used (open hole)
 SCREEN OR PERFORATION OPENINGS ARE:
 1 Continuous slot 3 Mill slot 5 Gauzed wrapped 8 Saw cut 11 None (open hole)
 2 Louvered shutter 4 Key punched 6 Wire wrapped 9 Drilled holes
 7 Torch cut 10 Other (specify)
 SCREEN-PERFORATED INTERVALS: From **35** ft. to **25** ft., From ft. to ft.
 GRAVEL PACK INTERVALS: From **35** ft. to **23** ft., From ft. to ft.
 From ft. to ft., From ft. to ft.

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout 3 Bentonite 4 Other cement/bentonite
 Grout Intervals: From **21** ft. to **2** ft., From ft. to ft., From ft. to ft.
 What is the nearest source of possible contamination:
 1 Septic tank 4 Lateral lines 7 Pit privy 10 Livestock pens 14 Abandoned water well
 2 Sewer lines 5 Cess pool 8 Sewage lagoon 11 Fuel storage 15 Oil well/Gas well
 3 Watertight sewer lines 6 Seepage pit 9 Feedyard 12 Fertilizer storage 16 Other (specify below)
 13 Insecticide storage
 Direction from well? How many feet?

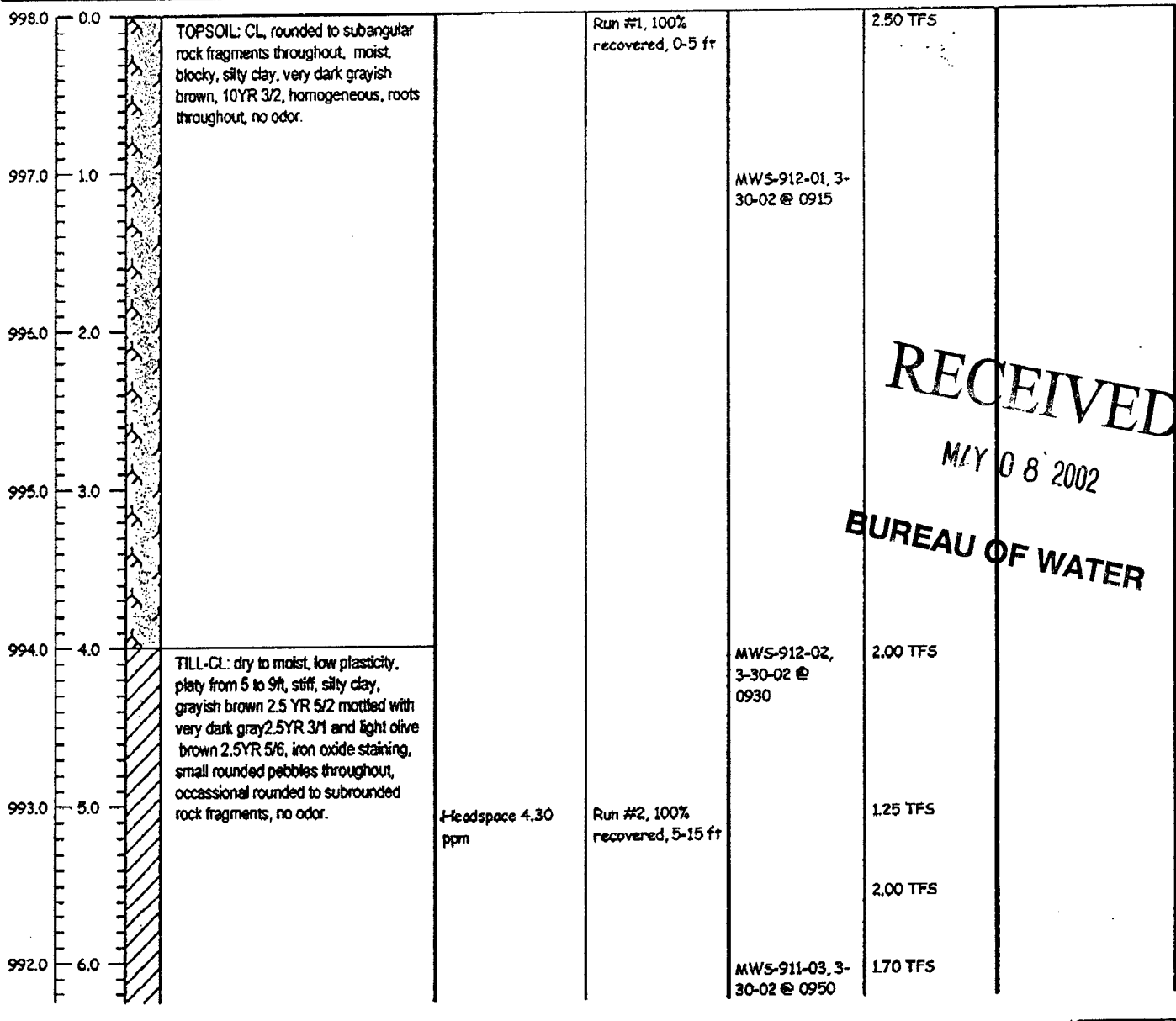
FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS
0	10	grayish, stiff clay	0	10	
10	20	SEE ATTACHED LOG			

7 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was (1) constructed, (2) reconstructed, or (3) plugged under my jurisdiction and was completed on (mo/day/year) and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. **597** This Water Well Record was completed on (mo/day/yr) **26 APRIL 2002** under the business name of **PROSONIC CORPORATION** by (signature) *[Signature]*

HTW DRILLING LOG

Hole No. MW-914

1. Company Name Ellis Environmental Group, LC		2. Drilling Subcontractor Prosonic		Sheet 1 of Sheets 5	
3. Project Forbes Atlas S-9			4. Location Holton, Kansas		
5. Name of Driller Bear			6. Manufacturers Designation of Drill Hawk 70-150-Rotosonic		
7. Sizes and Types of Drilling and Sampling Equipment Rotosonic Sonic 8 inch outer core, 6 inch inner core barrel 6 inch stainless steel core barrel			8. Hole Location MW-914		
			9. Surface Elevation		
			10. Date started 4-01-02		11. Date Completed 4-01-02
12. Overburdened Thickness undetermined			15. Depth Ground Water Encountered 18ft/bgs		
13. Depth Drilled into Rock 0			16. Depth to Water and Elapsed Time after Drilling Completed 27.40 ft, 4-3-02 @ 0805		
14. Total Depth of Hole 35ft			17. Over Water Level Measurements (Specify)		
18. Geotechnical Samples MW-914-G1, 35-35.5 ft, 4-01-02		Disturbed 0	Undisturbed 0	19. Total Number of Core Boxes 0	
20. Samples for Chemical Analysis		VOC	Metals	Other (Specify)	Other (Specify)
MWS-914-01,02, 03, 04-(Replicate)		4	0	0	0
22. Disposition of Hole		Backfilled	Monitoring Well	Other (Specify)	23. Signature of Inspector
Converted to monitoring well		NO	MW-914	Forbes Atlas S-9	
Elev a	Depth b	Lith c	Field Screening Results d	Geo-Tech Sample or Core Box No. e	Analytical Sample No. f
					Pocket Penetrometer g
					Remarks h



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HTW DRILLING LOG

Hole No. MW-914

1. Project Forbes Atlas S-9

2. Inspector Jeffrey Finn

Sheet 2 of Sheets 5

Elev a	Depth b	Descriptions of Materials c	Field Screening Results d	Geo-Tech Sample or Core Box No. e	Analytical Sample No. f	Pocket Penetrometer g	Remarks h
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991.0	7.0		Headspace 5.80 ppm			30-02 @ 0950	3.00 TFS
990.0	8.0						1.50 TFS
989.0	9.0						1.20 TFS
988.0	10.0	TILL-CL: dry to moist, colloidal fracturing, medium plasticity, stiff, silty clay, dark gray 5Y 4/1, no odor					2.70 TFS
987.0	11.0	TILL-CL: dry to moist, medium plasticity, hard, silty, light olive brown 2.5Y 5/3 mottled with yellowish brown 10 YR 5/8 and dark grayish brown 10 YR 4/2, trace iron oxide throughout, small rounded pebbles throughout, occasional rock fragments (rounded to subangular), vertical sand stringers at 12 ft/bgs, no odor.					>4.50 TFS
986.0	12.0		Headspace: 4.50 ppm				>4.50 TFS
985.0	13.0						>4.50 TFS
984.0	14.0						>4.50 TFS
983.0	15.0	TILL-CL: dry to moist, blocky, medium	Headspace: 12.50	Run #3, 100%			

HTW DRILLING LOG

Hole No. MW-914

1. Project Forbes Atlas S-9

2. Inspector Jeffrey Finn

Sheet 3 of Sheets 5

Elev a	Depth b	Descriptions of Materials c	Field Screening Results d	Geo-Tech Sample or Core Box No. e	Analytical Sample No. f	Pocket Penetrometer g	Remarks h
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982.0	16.0	TILL-CL: dry to moist, blocky, medium plasticity, hard, silty, light olive brown 2.5Y 5/3 mottled with yellowish brown 10 YR 5/8 and dark grayish brown 10 YR 4/2, trace iron oxide throughout, small rounded pebbles throughout, occasional rock fragments (rounded)	ppm	recovered, 15-20 ft		2.50 TFS	
981.0	17.0		Headspace: 58.00 ppm			2.50 TFS	
980.0	18.0	TILL-SM: sand lense, wet, fine sand, light olive brown 2.5Y 5/3, well graded, poorly sorted, no odor.				3.00 TFS	
979.0	19.0	TILL-CH: dry to moist, medium plasticity, hard, silty, light olive brown 2.5 Y 5/3 mottled with yellowish brown 10YR 5/8 and also dark grayish brown 10YR 5/2, trace iron oxide throughout, small rounded pebbles throughout, occasional rock fragments (rounded to subangular), no odor.				2.50 TFS	groundwater was first encountered at approximately 18 ft/bgs
978.0	20.0	TILL-SM: sand lense, wet, fine sand, light olive brown 2.5Y 5/3, well graded, poorly sorted, no odor.				2.50 TFS	
977.0	21.0	TILL-CL: dry to moist, medium plasticity, hard, silty, light olive brown 2.5 Y 5/3 mottled with yellowish brown 10YR 5/8 and also dark grayish brown 10YR 5/2, solvent odor.	Headspace: 30.80 ppm	Run #4, 100% recovered, 20-30 ft		1.00 TFS	Used 8- 50 pound bags of filter pack #5 quartz sand from 35 to 21ft/bgs
976.0	22.0	TILL-MF: moist to wet, low plasticity, medium, silt with sand and clay, yellowish brown 10 YR 5/4 mottled with grayish brown 10YR 5/2, solvent odor.				2.50 TFS	
975.0	23.0	TILL-CH: moist, high plasticity, very stiff, silty, light olive brown 2.5Y 5/3 mottled with yellowish brown 10 YR5/6, iron oxide stained sand fractures or joints, small rounded pebbles throughout, occasional rock fragments (rounded to subangular), solvent odor.				2.70 TFS	
974.0	24.0						

HTW DRILLING LOG

Hole No. MW-914

1. Project Forbes Atlas S-9			2. Inspector Jeffrey Finn			Sheet 4 of Sheets 5	
Elev a	Depth b	Descriptions of Materials c	Field Screening Results d	Geo-Tech Sample or Core Box No. e	Analytical Sample No. f	Pocket Penetrometer g	Remarks h

973.0	25.0	<p>TILL-CH: moist, high plasticity, very stiff, silty, dark gray 2.5Y 4/1, iron oxide stained sand stringers, small rounded pebbles throughout, occasional rock fragments (rounded to subangular), solvent odor.</p>				2.70 TFS	
972.0	26.0	<p>TILL-CH: moist, high plasticity, stiff, very sandy, dark gray 2.5Y 4/1, solvent odor.</p>				3.50 TFS	
971.0	27.0	<p>TILL-SC: moist to wet, soft, clayey, light yellowish brown 2.5Y 6/4, solvent odor.</p>				.75 TFS	
970.0	28.0	<p>TILL-SM: moist to wet, soft, fine sand, poorly graded, light brownish gray 2.5Y 6/2, trace iron oxide staining, solvent odor.</p>					
969.0	29.0						
968.0	30.0			Run #5, 100% recovered, 30-35 ft, collected MW-914-G1, 4-01-02, 35-3.5 ft/bgs, shelby		1.00 TFS	Used 155 gallons of water, lost 10 gallons total, recovered 110 gallons in the drilling tub, recovered 35 gallons from the annulus during grouting.
967.0	31.0						
966.0	32.0	<p>TILL-ML: moist, stiff, cross-bedded, colloidal fracturing, light brownish gray 2.5Y 6/2, trace iron oxide staining at the lower contact, no odor</p>				1.00 TFS	

Project Forbes Atlas S-9	Hole No. MW-914
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HTW DRILLING LOG

Hole No.
MW-9141. Project
Forbes Atlas S-92. Inspector
Jeffrey FinnSheet 5
of Sheets 5

Elev a	Depth b	Descriptions of Materials c	Field Screening Results d	Geo-Tech Sample or Core Box No. e	Analytical Sample No. f	Pocket Penetrometer g	Remarks h
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965.0

33.0

964.0

34.0

963.0

35.0

TILL-ML: moist, stiff, loam, cross-bedded, colloidal fracturing, dark gray 2.5Y 4/1, trace iron oxide staining at the upper contact, no odor

2.00 TFS

2" PVC well set @ 33.34 ft/bgs, 3.10 ft. of riser, screened with sch 40, slot-10, 2" PVC from 33.34 to 23.34 ft/bgs.

Boring terminated @ 35 ft/bgs