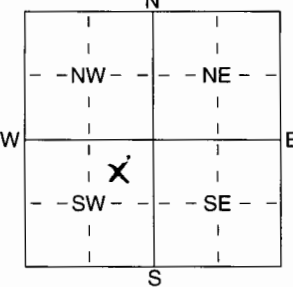


1 LOCATION OF WATER WELL: County: **Jackson** Fraction: **NE 1/4 SW 1/4** Section Number: **15** Township Number: **T 6 S** Range Number: **R 15 E**

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


2 WATER WELL OWNER: **U.S. Army Corp of Engineers - KC District**
RR#, St. Address, Box # : **661 E. 12th St.**
City, State, ZIP Code : **Kansas City, MO 64106**
Board of Agriculture, Division of Water Resources
Application Number:

3 LOCATE WELL'S LOCATION WITH AN "X" IN SECTION BOX:

4 DEPTH OF COMPLETED WELL: **25.0'** ft. ELEVATION:
Depth(s) Groundwater Encountered 1 ft. 2 ft. 3 ft.
WELL'S STATIC WATER LEVEL: **13.83'** ft. below land surface measured on mo/day/yr
Pump test data: Well water was ft. after hours pumping gpm
Est. Yield gpm: Well water was ft. after hours pumping gpm
WELL WATER TO BE USED AS:
1 Domestic 3 Feedlot 6 Oil field water supply 9 Dewatering 12 Other (Specify below)
2 Irrigation 4 Industrial 7 Domestic (lawn & garden) **10** Monitoring well
Was a chemical/bacteriological sample submitted to Department? Yes No; If yes, mo/day/yr sample was submitted
Water Well Disinfected? Yes No

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**
Blank casing diameter in. to ft., Dia in. to ft., Dia in. to ft.
Casing height above land surface: **Flush** in., weight lbs./ft. Wall thickness or gauge No. **Sch 40**
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 Guazed 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) ft.
SCREEN-PERFORATED INTERVALS: From ft. to ft., From ft. to ft.
GRAVEL PACK INTERVALS: From ft. to ft., From ft. to ft.

6 GROUT MATERIAL: 1 Neat cement 2 Cement grout **3** Bentonite 4 Other
Grout Intervals: From ft. to 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 **Diesel Missile Site**
Direction from well? How many feet?

FROM	TO	LITHOLOGIC LOG	FROM	TO	PLUGGING INTERVALS

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) **8-3-05** and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's Licence No **201** This Water Well Record was completed on (mo/day/yr) **5-24-05** under the business name of **PSA Environmental** by (signature) 

INSTRUCTIONS: Use typewriter or ball point pen. PLEASE PRESS FIRMLY and PRINT clearly. Please fill in blanks, underline or circle the correct answers. Send top three copies to Kansas Department of Health and Environment, Bureau of Water, Geology Section, 1000 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Telephone 785-296-5522. Send one to WATER WELL OWNER and retain one for your records. Fee of \$5.00 for each constructed well.



WELL CONSTRUCTION (STANDARD) DETAILS FORM

FIELD REPRESENTATIVE: ALAN RITZGERS

TYPE OF FILTER PACK: PER-PACK SAND & SCREEN

DRILLING CONTRACTOR: PSA ENVIRONMENTAL

GRADIATION: 20/40
AMOUNT OF FILTER PACK USED: _____

DRILLING TECHNIQUE: DIRECT PUSH

TYPE OF BENTONITE SEAL: BENTONITE

AUGER SIZE AND TYPE: 3"

QUANTITY USED: _____

BOREHOLE IDENTIFICATION: PSW-4

TYPE OF GROUT: BENTONITE

BOREHOLE DIAMETER: 3"

AMOUNT GROUT USED: _____

WELL IDENTIFICATION: PSW-4

WELL CONSTRUCTION START DATE: 8/3/2005

WELL CONSTRUCTION COMPLETE DATE: 8/3/2005

DIMENSIONS OF SECURITY CASING: 4"X4"X5'

SCREEN MATERIAL: PVC

TYPE OF WELL CAP: J-PWIG

SCREEN DIAMETER: 1" ID (0.010" SLOTS)

TYPE OF END CAP: SOLID POINT

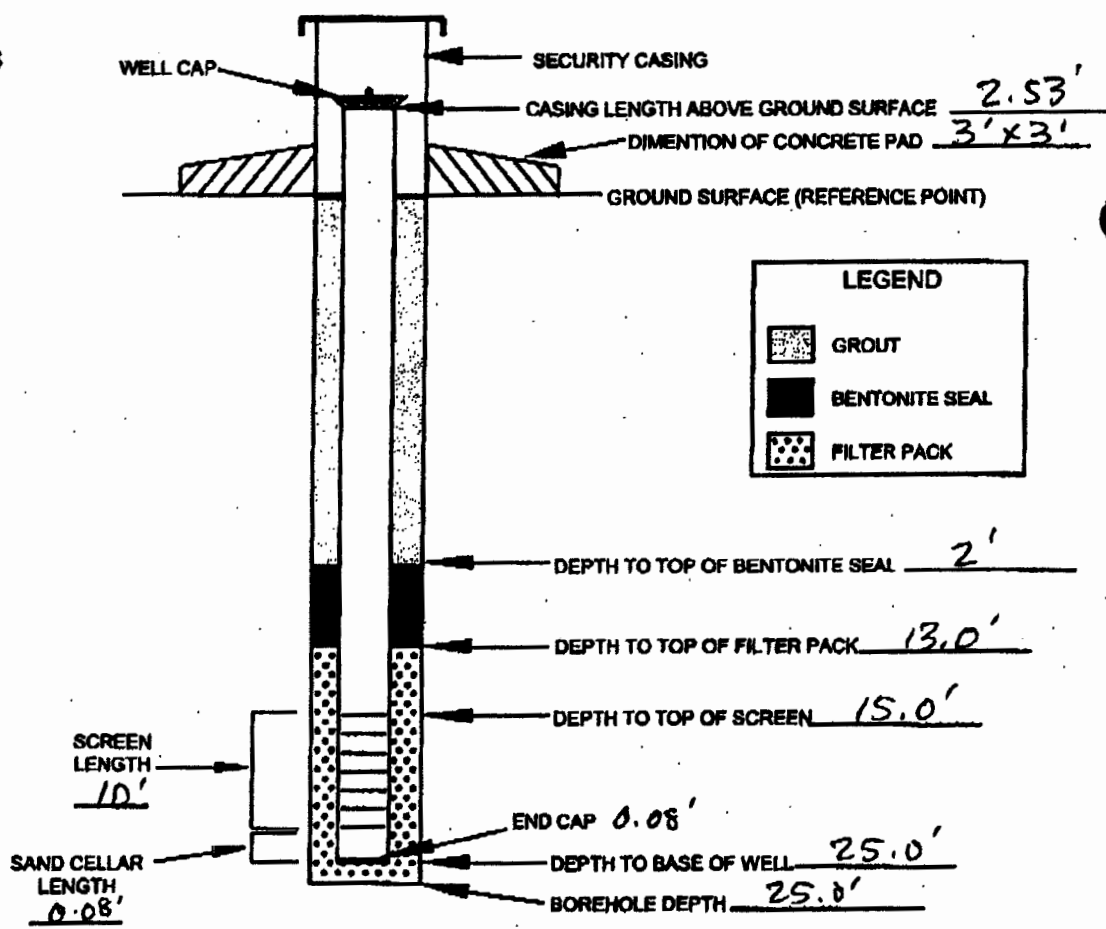
STRATUM-SCREENED INTERVAL (FT): 15'-25'

COMMENTS: _____

CASING MATERIAL: PVC

CASING DIAMETER: 1" ID

SPECIAL CONDITIONS
(describe and draw)



LEGEND

- GROUT
- BENTONITE SEAL
- FILTER PACK

NOT TO SCALE

INSTALLED BY: PSA ENVIRONMENTAL

INSTALLATION OBSERVED BY: ALAN RITZGERS

HTW DRILLING LOG

HOLE NO. **PSB-2 (4)**

1. COMPANY NAME HYDROGEOLOGIC, Inc.		2. DRILLING SUBCONTRACTOR PSA ENVIRONMENTAL		SHEET 1 OF 4 SHEETS	
3. PROJECT FORBES S-9			4. LOCATION HOLTON, KS		
5. NAME OF DRILLER BILL WILSON / AARON BUTLER			6. MANUFACTURER'S DESIGNATION OF DRILL GEOPROBE 6600		
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT GEOPROBE MACROCORE SAMPLER		8. HOLE LOCATION ~ 30' EAST OF MW-944		9. SURFACE ELEVATION	
		10. DATE STARTED 08/02/2005		11. DATE COMPLETED 08/02/2005	
		12. OVERBURDEN THICKNESS 25.0		15. DEPTH GROUNDWATER ENCOUNTERED ~ 13' BGS	
13. DEPTH DRILLED INTO ROCK ∅		16. DEPTH TO WATER AND ELAPSED TIME AFTER DRILLING COMPLETED			
14. TOTAL DEPTH OF HOLE 25.0		17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) MW-944-20.12' TOC @ 1725 8/2/05, GS-1766			
18. GEOTECHNICAL SAMPLES N/A		DISTURBED	UNDISTURBED	19. TOTAL NUMBER OF CORE BOXES	
20. SAMPLES FOR CHEMICAL ANALYSIS N/A		VOC	METALS	OTHER (SPECIFY)	OTHER (SPECIFY)
22. DISPOSITION OF HOLE BACKFILLED BENTONITE		MONITORING WELL	OTHER (SPECIFY)	23. SIGNATURE OF INSPECTOR <i>Ala Fatta</i>	
21. TOTAL CORE RECOVERY %					

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	SLOW COUNTS g	REMARKS h
		TOP SOIL, SILTY CLAY, VERY DARK GRAY BROWN (10' 4 1/2 3/4), DRY, HARD, NON-PLASTIC, ROOTLETS		CORE-1	N/A	N/A	1645 BGS DRILLING
	1	SILTY CLAY, DARK YELLOW BROWN (10' 4 1/2 3/4), DRY, HARD, NON-PLASTIC	○				
	2		○	5.0 / 5.0			
	3		○				
	4		○				
	5		○				1680

HTW DRILLING LOG (CONT.)

HOLE NO.
PSB-2

PROJECT
FORBES S-9

INSPECTOR
ALAN RITZERS

SHEET
OF 2 SHEETS 4

ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
		SAME AS ABOVE		COROS-2	N/A	N/A	
	6	SILTY CLAY, DK YELLOW BROWN + GRAY (104R 5/1), DAMP, VERY STIFF, TRACE PLASTIC TRACE SAND & GRAVEL	0	5.0/ 5.0			
	7	PRESENT. BLACK MANGANESE STAINING & IRON STAINING.	0				
	8		0				
	9		0				
	10	SILT & SAND, SOME CLAY, FINE-GRAINED, YELLOW BROWN (104R 5/4), MOIST, SOFT, MED. PLASTICITY	0	COROS-3	N/A	N/A	1455
	11	SILTY CLAY, SOME SAND & GRAVEL, DK. YELLOW BROWN (104R 4/6), DAMP, STIFF, MED PLASTICITY	0	5.0/ 5.0			
	12		0				
	13	MOTTLED LIGHT BROWN GRAY (104R 6/2)	0				8/1/2005 1830 ✓
	14		0				

HTW DRILLING LOG (CONT.)

HOLE NO.
PSB-2

PROJECT
FORBES S-9

INSPECTOR
Alan Rittgers

SHEET
OF 3 SHEETS 4

ELEV. a	DEPTH. b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	15	SAME AS ABOVE WITH INCREASING GRAVEL AND SAND CONTENT	0				1659
	16		0	CORE-4	N/A	N/A	
	17		0	5.0 / 5.0			
	18		0				
	19		0				
	20	SAND, TRACE SILT, YELLOW BROWN (104R 54), WET, SOFT, FINE-GRAINED, WELL SORTED.	0				163
	21		0	CORE-5	N/A	N/A	
	22		0	5.0 / 5.0			
	23	SILTY CLAY, MOTTLED LIGHT BROWNISH GRAY (104R 64) TO YELLOW BROWN (104R 64), FIRM TO MEDIUM, VERY STIFF, MED TO HIGH PLASTIC	0				

HTW DRILLING LOG (CONT.)							HOLE NO. PSB-2
PROJECT FORBES S-9			INSPECTOR ALAN RITIGERS			SHEET OF 4 SHEETS 4	
ELEV. a	DEPTH b	DESCRIPTION OF MATERIALS c	FIELD SCREENING RESULTS d	GEOTECH SAMPLE OR CORE BOX NO. e	ANALYTICAL SAMPLE NO. f	BLOW COUNTS g	REMARKS h
	24	SILTY CLAY, VERY DARK GRAY (10% 2/1), DAMP, VERY STIFF, MED PLASTICITY	0	CS05	N/A	N/A	
	25		0				1715
		TOTAL DEPTH 25.0'					END DRILLING 1810 BACKFILLED BORING