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PRIMARY DOCUMENT

Remedial Investigation Report for Waste Area Grouping 6 at Paducah Gaseous Diffusion Plant Paducah, Kentucky

Volume 2. Appendices A-H

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Prepared by
CH2M HILL, Inc.
Paducah, Kentucky
under General Order 18B-99345C

for the
U.S. Department of Energy
Office of Environmental Management

Environmental Management Activities at the
PADUCAH GASEOUS DIFFUSION PLANT
Paducah, Kentucky 42002
managed by
BECHTEL JACOBS COMPANY LLC
for the
U.S. DEPARTMENT OF ENERGY
under contract DE-AC05-98OR22700

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Station Locations within Sectors

Location	Station	Location	Station	Location	Station
Sector 1	400-019	Sector 3 (cont)	400-130	Sector 4 (cont.)	400-207
	400-020		400-131		400-211
Sector 2	040-001		400-132		400-215
	040-002		400-173		MW155
	040-003		400-198		MW156
	040-004	Sector 4	011-003		MW157
	040-005		011-004	Sector 5	400-009
	040-006		011-005		400-010
	040-007		011-006		400-015
	040-008		011-007		400-017
	040-009		011-008		400-018
	400-002		400-014		400-030
	400-003		400-016		400-036
	400-005		400-027		400-041
	400-007		400-037		400-045
	400-008		400-038		400-072
	400-042		400-065		400-073
	400-056		400-066		400-074
	400-058		400-067		400-085
	400-059		400-068		400-087
	400-061		400-069		400-088
	400-081		400-070		400-089
	400-094		400-071		400-106
	400-095		400-091		400-107
	400-124		400-092		400-113
	400-126		400-101		400-114
	400-129		400-103		400-115
	400-153		400-104		400-141
	400-167		400-105		400-142
	400-186		400-116		400-143
	400-187		400-117		400-144
	MW178		400-134		400-145
Sector 3	011-001		400-137		400-146
	011-002		400-138		400-147
	400-011		400-139		400-158
	400-025		400-140		400-159
	400-026		400-162		400-160
	400-046		400-163		400-161
	400-047		400-176		400-171
	400-062		400-195		400-172
	400-063		400-197		400-177
	400-064		400-200		400-178
	400-098		400-201		400-191
	400-099		400-202		400-192
	400-100		400-205		400-193

Station Locations within Sectors

Location	Station	Location	Station	Location	Station
Sector 5 (cont;)	400-194	Sector 7 (cont.)	400-122	Sector 9 (cont.)	400-053
	400-204		400-149		400-212
	400-213		400-155		
	400-214		400-156		
Sector 6	047-002		400-165		
	047-003		400-181		
	047-004		400-183		
	047-005		400-188		
	047-007		400-210		
	047-008		400-216		
	047-009		400-217		
	047-010		400-218		
	400-044		400-219		
	400-076	Sector 8	026-001		
	400-083		026-002		
	400-084		026-003		
	400-108		026-004		
	400-148		026-005		
	400-157		026-006		
	400-169		026-007		
	400-170		026-008		
	400-190		026-009		
	400-199		026-010		
	MW 175		026-011		
iector 7	203-001		026-012		
	203-002		026-013		
	203-003		026-014		
	203-004		026-015		
	203-005		026-016		
	203-006		026-017		
	203-007		026-018		
	203-008		026-020		
	400-001		026-025		
	400-004		040-010		
	400-021		400-034		
	400-033		400-043		
	400-035		400-123		
	400-040		400-206		
	400-054		400-208		
	400-077	Sector 9	400-039		
	400-080		400-048		
	400-109		400-049		
	400-111		400-050		
	400-119		400-051		
	400-120		400-052		

Analytical Groups Tested in Sector 1
Soil and Water Samples

	Analytical Group				
400019SA020	X		X		X
400019SA025	X				X
400019SA030	X				X
400019SA035	X				X
400019SA040	X				X
400019SA045	X				X
400019SA050	X				X
400019SA051	X	X			X
400020SA003	X				X
400020SA008	X				X
400020SA012	X	X	X	X	X
400020SA020	X	X	X	X	X
400020SA024	X				X
400020SA032	X				X
400020SA036	X				X
400020SA040	X				X
400020SA044	X				X
400020SA048	X				X
400020SD020	X	X	X	X	X

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Analytical Groups Tested in Sector 2
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
040001WP040	X				X
040002SA015	X	X	X	X	X
040003SA015	X	X	X	X	X
040004SA015	X	X	X	X	X
040005SA015	X	X	X	X	X
040005SD015	X	X	X	X	X
040006SA015	X	X	X	X	X
040007SA030	X	X	X	X	X
040008SA030	X	X	X	X	X
040009WA040	X	X		X	X
040011WA060	X	X		X	X
400002SA001		X	X	X	X
400003SA001		X	X	X	X
400003SA005	X	X	X	X	X
400003SA010	X	X	X	X	X
400003SA020	X	X	X	X	X
400003SA030	X	X	X	X	X
400003SA040	X	X	X	X	X
400003WP040	X				X
400005SA001		X	X	X	X
400005SA005	X	X	X	X	X
400005SA010	X	X	X	X	X
400005SA020	X	X	X	X	X
400005SA030	X	X	X	X	X
400005SA040	X	X	X	X	X
400007SA001		X	X	X	X
400007SA015	X	X	X	X	X
400008SA001	X	X	X	X	X
400008SA005	X	X	X	X	X
400008SA010	X	X	X	X	X
400008SA020	X	X	X	X	X
400008SA030	X	X	X	X	X
400008SA040	X	X	X	X	X
400008SD040	X	X	X	X	X
400042SA001		X	X	X	
400042WA065	X			X	X
400042WA070	X			X	X
400042WA075	X			X	X
400042WA080	X			X	X
400042WA085	X			X	X
400056SA015	X	X	X	X	X

Analytical Groups Tested in Sector 2
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400059SA015	X	X	X	X	X
400061SA015	X	X	X	X	X
400081SA015	X	X	X	X	X
400094SA015	X	X	X	X	X
400095SA015	X	X	X	X	X
400153SA015	X	X	X	X	X

Analytical Groups Tested in Sector 3
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	**PPCB**	METAL	**RADS**
011002SA004	X	X	X	X	X
011002SA008	X	X	X	X	X
011002SA012	X	X	X	X	X
011002SA016	X	X	X	X	X
011002SA020	X	X	X	X	X
011002SA024	X	X		X	X
011002SA028	X	X		X	X
011002SA032	X	X		X	X
011002SA040	X	X		X	X
011002SA044	X	X		X	X
011002SA048	X	X		X	X
400011SA001		X	X	X	X
400011SA005	X	X	X	X	X
400011SA010	X	X	X	X	X
400011SA020	X	X	X	X	X
400011SA030	X	X	X	X	X
400011SA040	X	X	X	X	X
400011SD005	X	X	X	X	X
400025WP040	X				X
400026WP040	X				
400046SA001		X	X	X	X
400046WA060	X			X	X
400046WA065	X			X	X
400046WA070	X			X	X
400046WA075	X			X	X
400046WA080	X			X	X
400046WA085	X			X	X
400047SA001		X	X	X	X
400047WA060	X			X	X
400047WA065	X			X	X
400047WA070	X				X
400047WA075	X			X	X
400047WA080	X			X	X
400047WA085	X			X	X
400062SA015	X	X	X	X	X
400063SA015	X	X	X	X	X
400063WP040	X				X

Analytical Groups Tested in Sector 3
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400098SA008	X	X	X	X	X
400098SA012	X	X	X	X	X
400098SA015	X	X	X	X	X
400098SA020	X	X	X	X	X
400098SA024	X				X
400098SA028	X				X
400098SA032	X				X
400098SA036	X				X
400098SA040	X				X
400098SA044	X				X
400099SA015	X	X	X	X	X
400198SA015	X	X	X		X

Analytical Groups Tested in Sector 4
Soil and Water Samples

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
011003SA012	X	X	X	X	X
011003SA016	X	X	X	X	X
011003SA020	X	X	X	X	X
011003SA024	X	X		X	X
011003SA028	X	X		X	X
011003SA032	X	X		X	X
011003SA036	X	X		X	X
011003SA040	X	X		X	X
011003SA044	X	X		X	X
011003SA048	X	X		X	X
011004SA004	X	X	X	X	X
011004SA008	X	X	X	X	X
011004SA012	X	X	X	X	X
011004SA016	X	X	X	X	X
011004SA020	X	X	X	X	X
011004SA024	X	X		X	X
011004SA028	X	X		X	X
011004SA032	X	X		X	X
011004SA036	X	X		X	X
011004SA040	X	X		X	X
011004SA044	X	X		X	X
011004SA048	X	X		X	X
011004SA049					X
011004SA052	X	X		X	X
011005SA008	X	X	X	X	X
011005SA024	X	X	X	X	X
011005SA028	X	X		X	X
011005SA030	X	X		X	X
011005SA036	X	X		X	X
011005SA040	X	X		X	X
011005SA044	X	X		X	X
011005SA048	X	X		X	X
011005SA052	X	X		X	X
011006SA004	X	X	X	X	X
011006SA008	X	X	X	X	X
011006SA012	X	X	X	X	X
011006SA016	X	X	X	X	X
011006SA020	X	X	X	X	X
011006SA024	X	X	X	X	X
011006SA028	X	X		X	X

Analytical Groups Tested **in** Sector **4**
Soil and Water **Samples**

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
011006SA036	X	X		X	X
011006SA040	X	X		X	X
011006SA044	X	X		X	X
011006SA048	X	X	X	X	X
011007SA025	X	X	X	X	X
011007SA037	X	X	X	X	X
011008SA015	X	X	X	X	X
011008WP040	X				X
011009WA100	X	X		X	X
011010WA070	X	X		X	X
011011WA040	X	X		X	X
400014SA004	X	X	X	X	X
400014SA008	X	X	X	X	X
400014SA012	X	X	X	X	X
400014SA016	X	X	X	X	X
400014SA020	X	X	X	X	X
400014SA024	X	X		X	X
400014SA028	X	X		X	X
400014SA032	X	X		X	X
400014SA036	X	X		X	X
400014SA040	X	X		X	X
400014SA044	X	X		X	X
400014SA048	X	X		X	X
400014SA052	X	X		X	X
400016SA001		X	X	X	X
400016SA005	X	X	X	X	X
400016SA010	X	X	X	X	X
400016SA015	X	X	X	X	X
400016SA020	X	X	X	X	X
400016SA030	X	X	X	X	X
400016SD005	X	X	X	X	X
400016WP040	X				
400027WP040	X				X
400037SA001		X	X	X	X
400037SA015	X	X	X	X	X
400037WA060	X			X	X
400037WA065	X			X	X
400037WA070	X			X	X
400037WA075	X			X	X
400037WA080	X			X	X

Analytical Groups Tested in Sector 4
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400037WA085					
400037WA090	X			X	X
400037WA095	X				X
400038SA001		X	X	X	X
400038SA005	X				X
400038SA010	X				X
400038SA015	X				X
400038SA020	X				X
400038SA025	X				X
400038SA030	X		X	X	X
400038SA035	X				X
400038SA040	X				X
400038SA045	X				X
400038SA050	X				X
400038SA055	X				X
400038SA060	X				X
400038SA070	X				X
400038SA080	X				X
400038SA090	X				X
400038SA100	X				X
400038SA120	X				X
400038SA140	X				X
400038SD140	X				X
400038WA060	X				
400038WA065	X				X
400038WA070	X				X
400038WA075	X				X
400038WA080	X				X
400038WA085	X				X
400038WA090	X				X
400038WA100	X				X
400038WA110	X				X
400038WA130	X				X
400038WA140	X				
400038WD085	X				X
400065SA015	X	X	X	X	X
400066SA015	X	X	X	X	X
400067SA015	X	X	X	X	X
400068SA015	X	X	X	X	X
400069SA015	X	X	X	X	X
400070SA015	X	X	X	X	X

Analytical Groups Tested in Sector 4
Soil and Water Samples

	Analytical Group				
400092SA015	X	X	X	X	X
400101SA015	X	X	X	X	X
400103SA015	X	X	X	X	X
400104SA015	X	X	X	X	X
400105SA015	X	X	X	X	X
400116SA015	X	X	X	X	X
400117SA015	X	X	X	X	X
400134SA015	X	X	X	X	X
400138SA004	X	X	X		X
400138SA008	X	X	X	X	X
400138SA012	X	X	X	X	X
400138SA016	X	X	X	X	X
400138SA020	X	X	X	X	X
400139SA004	X	X	X	X	X
400139SA008	X	X	X	X	X
400139SA012	X	X	X	X	X
400139SA016	X	X	X	X	X
400139SA020	X	X	X	X	X
400163SA004	X	X	X	X	X
400163SA008	X	X	X	X	X
400163SA012	X	X	X	X	X
400163SA016	X	X	X	X	X
400163SA020	X	X	X	X	X
400163SA024	X	X	X	X	X
400163SA028	X				X
400163SA032	X				X
400163SA036	X				X
400163SA040	X				X
400163SA044	X				X
400163SA048	X				X
400200SA005	X	X	X	X	X
400200SA009	X	X	X	X	X
400200SA013	X	X	X	X	X
400200SA017	X	X	X	X	X
400200SA021	X	X	X	X	X
400200SA029	X	X	X	X	X
400201SA004	X	X	X	X	X
400201SA008	X	X	X	X	X
400201SA012	X	X	X	X	X
400201SA016	X	X	X	X	X

Analytical Groups Tested in Sector 4
Soil and Water Samples

	Analytical Group				
400201SA020					
400201SA024	X	X		X	X
400201SA028	X	X		X	X
400201SA032	X	X		X	X
400201SA036	X	X		X	X
400201SA040	X	X		X	X
400201SA044	X	X		X	X
400201SA048	X	X		X	X
400202SA004	X	X	X	X	X
400202SA008	X	X	X	X	X
400202SA012	X	X	X	X	X
400202SA016	X	X	X	X	X
400202SA020	X	X	X	X	X
400202SA024	X	X	X	X	X
400202SA028	X	X	X	X	X
400205SA004	X	X	X	X	X
400205SA008	X	X	X	X	X
400205SA012	X	X	X	X	X
400205SA016	X	X	X	X	X
400205SA020	X	X	X		X
400205SA024	X	X			X
400205SA028	X	X			X
400205SA036	X	X			X
400205SA040	X	X			X
400205SA044	X	X			X
400205SA048	X	X			X
400207SA030	X	X	X	X	X
400207SA045	X				X
400207SA060	X				X
400207SA070	X				X
400207SA080	X				X
400207SA090	X				X
400207SA095	X				X
400207SA120	X				X
400207SA140	X				X
400207SD030	X	X	X	X	X
400207SD045	X				X
400207SD070	X				X
400207SD090	X				X
400207SD095	X				X
400207WA090	X			X	X

Analytical Groups Tested in Sector 4
Soil and Water Samples

	Analytical Group				
400207WA130	X				
400211SA004	X	X		X	X
400211SA008	X		X	X	X
400211SA012	X	X	X		X
400211SA016	X	X	X		X
400211SA020	X	X	X		X
400211SA024	X	X			X
400211SA028	X	X			X
400211SA032	X	X			X
400211SA036	X	X			X
400211SA040	X	X			X
400211SA044	X	X			X
400211SA048	X	X			X
400211SD032	X	X			X
400211SD048	X	X			X
400215WA065	X				X
400215WA070	X				X
400215WA075	X				X
400215WA080	X				X
400215WA085	X				X
400215WA090	X			X	X

Analytical Groups Tested in Sector 5
Soil and Water Samples

	Analytical Group

X X X

X

X X X

Analytical Groups Tested in Sector 5
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400036SA140	X				X
400036SA141					X
400036WA065	X				X
400036WA070	X			X	X
400036WA075	X				X
400036WA080	X			X	X
400036WA085	X				X
400036WA090	X				X
400036WA095	X				X
400036WA100	X				X
400036WA105	X				X
400036WA110	X				X
400036WA115	X				X
400036WA120	X				X
400036WA125	X				X
400036WA130	X				X
400036WA135	X				X
400036WA140	X				X
400041SA001	X	X	X	X	X
400041SA005	X	X	X	X	X
400041SA013	X	X	X	X	X
400041SA030	X	X	X	X	X
400041SA039	X	X			X
400041SA046	X	X			X
400041SA055	X	X			X
400041SA060	X	X	X		X
400041SA075	X	X			X
400041SA085	X	X			X
400041SA095	X	X			X
400041SA110	X	X			X
400041SA120	X	X			X
400041WA065	X	X			X
400041WA070	X	X			X
400041WA075	X	X			X
400041WAOSO	X	X			X
400041WA085	X	X		X	X
400041WA110	X	X			X
400041WA120	X	X			X
400041WD110	X	X			X
400045SA001		X	X	X	X
400045SA015	X	X	X	X	X

Analytical **Groups Tested** in **Sector 5**
Soil **and Water Samples**

	Analytical Group				
400045WA065					
400045WA070	X				X
400045WA075	X			X	X
400045WA080	X			X	X
400045WA085	X			X	X
400045WA090	X			X	X
400045WD080	X			X	X
400072SA015	X	X	X	X	X
400073SA015	X	X	X	X	X
400074SA015	X	X	X	X	X
400085SA015	X	X	X	X	X
400087SA015	X	X	X	X	X
400088SA015	X	X	X	X	X
400089SA015	X	X	X	X	X
400106SA015	X	X	X	X	X
400107SA015	X	X	X	X	X
400113SA015	X	X	X	X	X
400114SA015	X	X	X	X	X
400115SA015	X	X	X	X	X
400141SA004	X	X	X	X	X
400141SA008	X	X	X	X	X
400141SA012	X	X	X	X	X
400141SA016	X	X	X		X
400141SA020	X	X			X
400141SA024	X	X			X
400141SA028	X	X			X
400141SA032	X	X			X
400141SA036	X	X			X
400141SA040	X	X			X
400141SA044	X	X			X
400141SA048	X	X			X
400142SA015	X	X	X	X	X
400145SA004	X	X	X		X
400145SA006	X				
400145SA008	X	X	X	X	X
400145SA010	X				
400145SA012	X	X	X	X	X
400145SA014	X				
400145SA016	X	X	X	X	X
400145SA018	X				
400145SA020	X	X	X	X	X

Analytical Groups Tested in Sector 5
Soil and Water Samples

	Analytical Group				
400145SA024	X	X	X	X	X
400145SA026	X				
400145SA028	X	X	X	X	X
400145SA030	X				
400145SA032	X	X	X	X	X
400145SA034	X				
400145SA036	X	X	X	X	X
400145SA038	X				
400145SA040	X	X	X	X	X
400145SA042	X				
400145SA044	X	X	X	X	X
400146SA018	X	X	X	X	X
400159SA018	X	X	X	X	X
400172SA015	X	X	X	X	X
400192SA008	X	X	X	X	X
400192SA012	X	X	X	X	X
400192SA016	X	X	X		X
400192SA020	X	X	X		X
400192SA024	X	X			X
400192SA028	X	X			X
400192SA032	X	X			X
400192SA036	X	X			X
400192SA040	X	X			X
400192SA044	X	X			X
400192SA048	X	X			X
400194SA004	X	X	X	X	X
400194SA008	X	X	X	X	X
400194SA012	X	X	X		X
400194SA016	X	X	X		X
400194SA020	X	X	X		X
400194SA024	X	X			X
400194SA028	X	X			X
400194SA032	X	X			X
400194SA036	X	X			X
400194SA040	X	X			X
400194SA044	X	X			X
400204SA004	X		X	X	X
400204SA008	X	X	X	X	X
400204SA012	X	X	X		X
400204SA016	X		X		X

Analytical Groups Tested in Sector 5
Soil and Water Samples

	Analytical Group
Project Sample ID	VOA
	X
	X
	X
	X
	X
	X
	X
	X
	X
	X
	X
	X
	X
	X

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Analytical Groups Tested in Sector 6
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
047002SA004	X	X	X	X	X
047002SA012	X	X	X	X	X
047002SA019	X	X	X	X	X
047002SA030	X	X	X	X	X
047003SA001		X	X	X	X
047004SA001		X	X	X	X
047005SA001		X	X	X	X
047007SA001		X	X	X	X
047007SD001		X	X	X	X
047008SA001		X	X	X	X
047009SA001		X	X	X	X
047010SA001		X	X	X	X
047012WA060	X	X		X	X
400044SA001		X	X	X	X
400044WA055	X				X
400044WA060	X			X	X
400044WA065	X				X
400044WA070	X			X	X
400044WA075	X				X
400044WA080	X			X	X
400044WA085	X			X	X
400044WA090	X			X	X
400076SA015	X	X	X	X	X
400083SA015	X	X	X	X	X
400083WP040	X				
400084SA015	X	X	X	X	X
400108SA015	X	X	X	X	X
400148SA015	X	X	X	X	X
400169SA007	X	X	X	X	X
400169SA014	X	X	X	X	X
400199SA007					X

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Analytical Groups Tested in Sector 7
Soil and Water Samples

	Analytical Group				
203001WP040	X				X
203002SA001		X	X	X	X
203002SA030	X	X	X	X	X
203003SA001		X	X	X	X
203003SA015	X	X	X	X	X
203003SA030	X	X	X	X	X
203004SA001		X	X	X	X
203004SA030	X	X	X	X	X
203005WA015	X				X
203006SA015	X	X	X	X	X
203007SA015	X	X	X	X	X
203007SD015	X	X	X	X	X
203008SA015	X	X	X	X	X
400001SA001		X	X	X	X
400004SA001		X	X	X	X
400004SA005	X	X	X	X	X
400004SA010	X	X	X	X	X
400004SA020	X	X	X	X	X
400004SA030	X	X	X	X	X
400004SA040	X	X	X	X	X
400021SA019	X				
400021WP040	X				X
400033WP040	X				X
400035SA001		X	X	X	X
400035WA060	X				X
400035WA065	X				X
400035WA070	X				X
400035WA075	X			X	X
400035WA080	X				X
400035WA085	X			X	X
400035WA100	X				X
400035WA105	X				X
400035WA110	X				X
400035WA115	X				X
400035WA120	X				X
400035WA125	X				X
400035WA130	X				X
400035WA135	X				X
400035WD125	X				X
400040SA005	X		X		

Analytical Groups Tested in Sector 7
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400040SA030					
400040SA060	X			X	X
400040SA075	X			X	X
400040SA085	X			X	X
400040SA095	X			X	X
400040SA100	X			X	X
400040SA110	X			X	X
400040SD030	X	X		X	X
400040SD095	X			X	X
400040WA065	X	X			X
400040WA070	X	X			X
400040WA075	X	X			X
400040WA080	X	X			X
400040WA085	X	X			X
400040WA095	X	X			X
400040WA110	X	X			X
400040WD075	X	X			X
400040WD110	X	X			X
400054SA015	X	X	X	X	X
400077SA015	X	X	X	X	X
400080SA015	X	X	X	X	X
400109SA015	X	X	X	X	X
400111SA001		X	X	X	X
400111SA015	X	X	X	X	X
400119SA015	X	X	X	X	X
400155SA015	X	X	X	X	X
400188SA015	X	X	X	X	X
400210SA010	X				X
400210SA011					X
400210SA024	X				X
400210SA030	X	X	X	X	X
400210SA031					X
400210SA045	X				X
400210SA046					X
400210SA060	X				X
400210SA061					X
400210SA070	X				X
400210SA071					X
400210SA080	X				X
400210SA081					X
400210SA090	X				X

Analytical Groups Tested in Sector 7
Soil and Water Samples

	Analytical Group			
400210SA110	X			X
400210SA111				X
400210SA140	X			X
400210SA141				X
400210SD110	X			X
400210SD140	X			X
400210WB085	X	X	X	X
400216SA001			X	X
400217SA001			X	X
400218SA001			X	X
400219SA001			X	X

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Analytical Groups Tested in Sector 8
Soil and Water Samples

	Analytical Group				
026001SA010	A				X
026001SA011					X
026001SA026	X	X		X	X
026001SA045	X				X
026001SA046					X
026001SA056	X	X		X	X
026001SA057					X
026001SA070	X				X
026001SA071					X
026001SA072	X	X	X	X	X
026001SA080	X				X
026001SA081					X
026001SA090	X				X
026001SA091					X
026001SA100	X				X
026001SA101					X
026001SA120	X				X
026001SA121					X
026001SA140	X				X
026001WA060	X				X
026001WA065	X				X
026001WA070	X			X	X
026001WA075	X				X
026001WA080	X				X
026001WA085	X				X
026001WAWO	X				X
026001WA095	X				X
026001WA100	X				X
026001WA105	X				X
026001WA110	X				X
026001WA115	X				X
026001WA120	X				X
026001WA125	X				X
026001WA130	X				X
026001WA135	X				X
026002WP040	X				X
026003SA007	X	X	X	X	X
026004SA007	X	X	X	X	X
026005SA007	X	X	X	X	X
026006SA007	X	X	X	X	X

Analytical Groups Tested in Sector 8
Soil and Water Samples

026008SA007					
026009SA007					
026018WA003	X				
026020SA003	X	X		X	X
026025SA015	X	X	X	X	X
040010SA030	X	X	X	X	X
400034SA001		X	X	X	X
400034WA060	X			X	X
400034WA065	X			X	X
400034WA070	X			X	X
400034WA075	X			X	X
400034WA080	X			X	X
400034WA085	X			X	X
400034WA095	X				X
400034WA100	X				X
400034WA105	X				X
400034WA110	X				X
400034WA 115	X				X
400034WA120	X				X
400034WA125	X				X
400043SA001		X	X	X	X
400043SA022	X				X
400043WA070	X				X
400043WA075	X				X
400043WA080	X			X	X
400043WA085	X			X	X
400043WA090	X				X
400206WA060	X				X
400206WA065	X				X
400206WA070	X			X	X
400206WA075	X			X	X
400206WA080	X			X	X
400206WA085	X			X	X
400206WA095	X				X
400206WD095	X				X
400208SA010	X				X
400208SA011					X
400208SA030	X	X		X	X
400208SA045	X				X
400208SA046					X

Analytical Groups Tested in Sector 8
Soil and Water Samples

	Analytical Group			
Project Sample ID	VOA			
				X
400208SA061				X
400208SA070	X			X
400208SA071				X
400208SA080	X			X
400208SA081				X
400208SA091				X
400208SA095	X			X
400208SA100	X			X
400208SA140	X			X
400208SA141				X
400208SD100	X			X
400208SD140	X			X
400208WA080	X			X
400208WB085	X	X	X	X

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Analytical Groups Tested in Sector 9
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
		X	X	X	X
400039WA060	X				X
400039WA065	X			X	X
400039WA070	X			X	X
400039WA075	X			X	X
400039WA080	X			X	X
400039WA085	X				X
400039WA090	X				X
400039WA095	X				X
400039WA100	X				X
400039WA110	X				X
400039WA115	X				X
400039WA120	X				X
400039WA125	X				X
400039WA130	X				X
400039WA140	X				X
400048SA001		X	X	X	X
400048WA055	X				
400048WA060	X				X
400048WA065	X				X
400048WA070	X				X
400048WA075	X			X	X
400048WA080	X				X
400048WA085	X				X
400048WA090	X			X	X
400048WA095	X				X
400049SA001		X	X	X	X
400049WA055	X				X
400049WA060	X				X
400049WA065	X				X
400049WA070	X				X
400049WA075	X				X
400049WA080	X				X
400049WA085	X				X
400049WA090	X				X
400049WA095	X				X
400050SA001		X	X	X	X
400051SA001		X	X	X	X
400052SA001		X	X	X	X
400052WA060	X			X	X
400052WA065	X			X	X

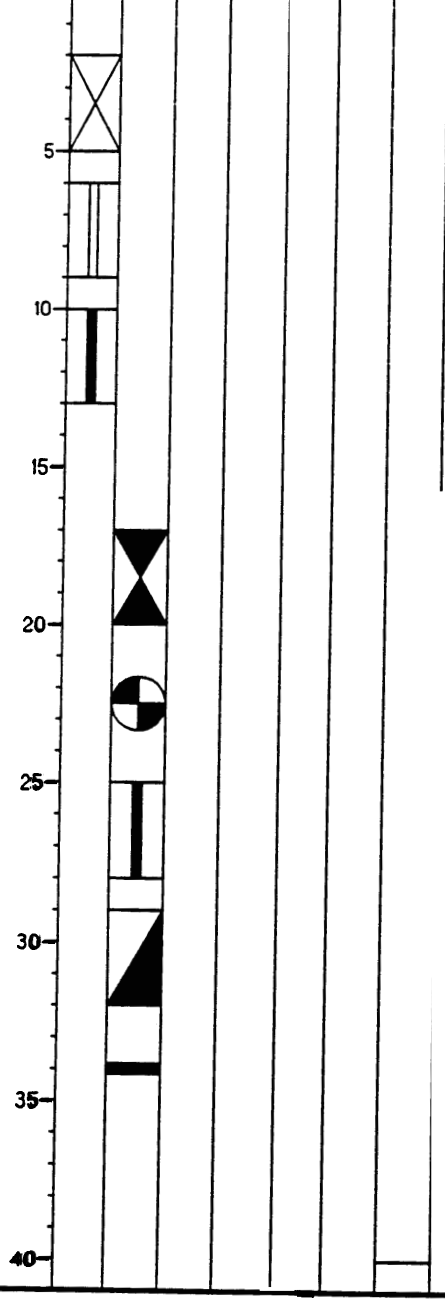
Analytical Groups Tested in Sector 9
Soil and Water Samples

	Analytical Group				
Project Sample ID	VOA	SVOA	PPCB	METAL	RADS
400052WA070	X			X	X
400052WA075	X				X
400052WA080	X				X
400052WA085	X				X
400052WA090	X			X	X
400053SA001		X	X	X	X
400053WA060	X				X
400053WA065	X			X	X
400053WA070	X			X	X
400053WA075	X				X
400053WA080	X				X
400053WA085	X				X
400053WA090	X				X
400053WA095	X				X
400053WA100	X				
400212SA010	X				X
400212SA011					X
400212SA030	X				X
400212SA031					X
400212SA045	X				X
400212SA046					X
400212SA060	X				X
400212SA063	X				X
400212SA070	X				X
400212SA071					X
400212SA080	X				X
400212SA081					X
400212SA090	X				X
400212SA091					X
400212SA095	X				X
400212SA096					X
400212SA100	X				X
400212SA101					X
400212SA120	X				X
400212SD100	X				X
400212WB085	X	X		X	X

Boring SYMBOL KEY

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *E, N*
Location: *Paducah, KY*	Geologist:
Started at *on*	Surface Elevation: *feet msl*
Completed at *on*	Depth to Groundwater: *feet bgs* Measured:
Drilling Method:	Groundwater Elevation: *feet msl*
Drilling Company:	Total Depth: *80 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)



LITHOLOGIC SAMPLE SYMBOLS

Continuous Coring

Shelby Tube

Split Spoon

ANALYTICAL SAMPLE SYMBOLS

Geotechnical

RAD

Soil

Soil Gas

Water

Boring SYMBOL KEY

Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *E, N*
Location: *Paducah*, KY	Geologist:
Started at on	Surface Elevation: feet *msl*
Completed at on	Depth to Groundwater: *feet bgs* Measured:
Drilling Method:	Groundwater Elevation: *feet msl*
Drilling Company:	Total Depth: *80 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								GRAPHIC LOG SYMBOLS	
								Gravel	
45								Sandy Gravel	
								Silty Gravel	
50								Clayey Gravel	
55								Gravelly Sand	
								Sand	
60								Silty Sand	
								Clayey Sand	
65								Silt	
70								Clay	
								Plastic Silt	
75								Highly Plastic Clay	
80									

1

Boring 011-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4102.0000 E, -1410.0000 N*
Location: *Paducah*, KY	Geologist: *J. Albert*
Started at *1055* on *10-08-97*	Surface Elevation: 376150 feet *msl*
Completed at *1615* on *10-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	e (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Silt; (10YR5/8) yellowish brown	377.3
			95%	BG	BG	0		Clayey Gravel; (2.5YR4/6) dark red	376.3
						0		Silt & Clay with trace of Gravel; (10YR5/6) yellowish brown to (10YR6/3) pale brown	375.4
						96			374.5
5						4		Silt; (10Y5/1) greenish gray	
			80%	BG	47	3		Silt & Clay; (10YR6/2) light brownish gray	
						3		Silt with some Clay; (10YR5/8) yellowish brown, (10YR7/1) light gray	
						5			
10			95%	BG	39	0			
						1			
						0			
						0			
			100%	4	BG	0			
15						0			362
						0		Clay & Silt with traces of Sand & Gravel; (10YR5/6) yellowish brown, (10YR7/1) molted light gray	
			100%			0			
						0			359
20						0		Silty Sand: (10YR5/8) yel brn, (10YR7/2) molted lt gry	
			100%	BG	BG	1			
						0			355.5
						0		Clay & Sand; (7.5YR5/8) strong brn, (7.5YR7/1) mollted lt gry	
25			100%	4	BG	0			
						0			352.7
						2		Clayey Sand; (7.5YR5/8) strong brown	351.5
			100%	BG	BG	2		Clay & Silt; (7.5YR7/1) strong brown, (7.5YR5/8)	350.6
						2		Silty Sand; (5YR5/8) yel rd, (5YR7/1) molted lt gry	348.5
30						4		Gravelly Sand; (7.5YR5/6) strong brown	
			95%	4	BG	5		Silt & Sand; (10YR7/1) lt gry to (10YR8/4) v pale brn, with minor (10YR4/6) dk yel brn	
						4			
						0		Sand with trace of Silt; (7.5YR5/6) strong brn & (10YR6/8) brn yel, with trace of (10YR7/1) lt gry molting	344.7
35			75%	BG	BG	7			343
						30		Gravelly Sand; (7.5YR5/4) brown	341.5
						77		Silty Sand	340.8
			100%	BG	BG	66		Clay 6 Silt; (7.5YR5/8) strg brn, (7.5YR7/1)lt gry to (7.5YR6/1)gry	
40						121		Gravelly Sand: (7.5YR6/1) gray	338.8

Boring 011-001

Protect: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4102.0000 E, -1410.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1055 on 10-08-97*	Surface Elevation: *378.50 feet msl*
Completed at *1615 on 10-15-97*	Depth to Groundwater: NA *feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *51.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			85%	BG	BG	18 25 70			
45			90%	BG	BG	98 92 152		Silty Sand; (7.5YR7/1) lt gry & (7.5YR5/6)	334.5
50			75%	BG	BG	143 229 280		Sand; (7.5YR8/1) wht to (7.5YR5/6) strg brn	331
								T.D.= 51.0	327.5
55									
60									
65									
70									
75									
80									

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4091.0000 E, -1584.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1350* on *10-29-97*	*Surface* Elevation: *379.00* feet *msl*
Completed at *1315 on 10-30-97*	Depth to Groundwater: *NA* feet *bgs* Measured: *NA*
	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/ Alpha	RAD/ Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			55	4	25	0 0	Sandy Gravel, with Clay; (2.5YR4/8) dk rd	
								374.5
5			89	BG	25	0 0	Silt, with Clay: (10YR7/4) v. pale brn, (10YR5/4) yel brn	
							Silt; (10YR5/6) yel brn	
10			100	4	105	0 0		
			96	BG	185	0 0 0 0		
15						0 0	Silt, with Clay; (10YR5/6) yel brn, (10YR6/2) mottled lt brn gry	
			100	BG	29	0 0 0		
20						3 3	Silty Sand, with Gravel; (10YR5/6) yel brn	59
			100	BG	BG	0	Clay, with Silt & Sand; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	574
						0 0	Clay, with Silt & Sand; (10YR5/8) yel brn, (10YR6/2) mottled lt brn gy	
			92	BG	33	0 0 0		
							Silt & Gravel, with Clay & Sand; (10YR7/1) lt gry, (10YR5/6) motl yel brn	151
30			92	4	BG	0 0 0	Silty Sand, with Gravel; (7.5YR5/6) strong brn	149
						0 0	Silty Sand; (10YR5/6) yel brn	
			88	0	0			
35						0 0 5	Silty Sand, with Gravel & Clay; (10YR7/3) v. pale brn, (10YR5/8) brn yel, (10YR5/1) mottled gry	
			90	BG	53			
40								339

Boring 011-002

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4091.0000 E, -1584.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1350 on 0-29-97*	Surface Elevation: *379.00 feet msl*
Completed at *1315 on 10-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									339
			50	BG	13	0		Silty Gravel, with Sand & Clay; (10YR5/6) yel brn	338
						-		Sand & Silt; (5YR4/6) yel rd	
						0		Silt, with Sand; (2.5Y5/4) lt olive grn	336
45			91	4	45	7		Silt, with Clay & Sand; (7.5YR5/6) strong brn	
						4			
						4			332.5
								T.D.= 46.5	
50									
55									
60									
65									
70									
75									
80									

Boring 011-003

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4104.9509 E, -1622.8440 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1130 on 11-04-97*	Surface Elevation: *378.84 feet msl*
Completed at *1135 on 11-05-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		ASPHALT	
			50	BG	BG	0		CRUSHED LIMESTONE	
								CLAYEY GRAVEL, W/ SAND; SUBANG; DK RD (2.5YR4/8) MST, FRM (Fill)	
5						0		SAME AS ABOVE	373.3
			37.5	BG	BG	0		NORECOVERY	
						-			37
10			75	4	BG	0		SILT,BRNSH.YEL (10YR6/6)MOTTLES LT.GRY (10YR7/2)MOIST,STIFF (NAT.SOIL)	
			75	-	-	0			
15			75	BG	BG	0		SILT.SL.CLAYEY,YEL.BRN (10YR5/4)MOTTLIN DK.YELSH BRN (10YR4/6)MOIST STF	
			75			0		SILT.CLAY,V.PALE BRN (10YR7/3)MOTTL. YLSH.BRN (10YR5/8)MOIST STIFF	
20			100	BG	BG	0		SAND (65%)M-F;SILT (35%)LT.GRY (10YR7/1)MOIST FIRM	358.8
25			90	08	BG	0		GRAVELY SANO M-C GRAVEL (30%)SILT (10%)YLSH BRN MOIST STIFF	354.8
30			100	BG	BG	0		SAND (60%) MED/CRS; GRAVEL (30%) SUB/SRB; SILT:CLAY YEL BRN	
35			95	BG	BG	09		SAND 80%SILT:CLAY LT GRY, PALE YEL MOIST AND FIRM	346.8
						11		GRAVEL (40%) SUBR-SUBA; SANO (40%) M-C GRAINER, (SILT:CLAY20%) CLAY OCCURS IN DISTANT ZONES (2.3')AS GRY CLAY), YEL BRN (10YR5/8), GRY (10YR6/1)	342.8
40			95	BG	BG	12			338.8

Boring 011-003

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4104.9509 E, -1622.8440 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1130 on 11-04-97*	Surface Elevation: *378.84 feet msl*
Completed at *1135 on 11-05-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									330.8
			92.5	04	BG	07 03 03 30		CLAY,SILT W/20%FINE SAND,YLSH BRN (10YR5/6)MOTTLED LT GRY (10YR7/1).	
45				BG	50	08			
			85	BG	70	16			330.8
								T.D.= 48.0 FT	
50									
55									
60									
65									
70									
75									
80									

Boring 011-004

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4065.0000 E, -1631.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1410 on 10-30-97*	Surface Elevation: *378.50 feet msl*
Completed at *1445 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/ Ipha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			94	BG	BG	0 0 - 0		Silt; (10Y5/1) gm gry	376.5
5			92	BG	4	8 4 7 - 12		Silt; (10Y6/1) gm gry. (10YR7/4) v. pale brn, (10YR5/6) yel brn	
10			92	BG	32	0 0 1 - 0		Silt, with a little Clay; (10YR5/4) yel brn, (10YR7/1) mottled lt gry	
15			96	BG	BG	0 0 0 - 0			
20			90	BG	BG	0 1 0 - 0		Silt, with a little Sand; (10YR6/5) pale brn	
			98	BG	BG	0 0 0		Sandy Gravel, with a little Silt: (7.5YR4/6) strong brn	356.9 / 356.5
						0 0 0		Clay, with a little Silt; (7.5YR4/6) strong brn, (7.5YR7/1)motl lt gry	355
25			92	BG	BG	0		Clay, with Silt & Sand; (7.5YR5/8)strong brn, (7.5YR7/1)mottled lt gry	353.6
						5		Gravelly Sand, with Silt & Clay; (7.5YR5/8) strong brn	352.6
						0		Clay, with Silt, Sand, & Gravel; (10YR5/6)yel brn, (10YR7/1)motl lt gry	351.5
			92	BG	BG	0		Silt, with Clay, Gravel, & Sand; (7.5YR4/6) strong brn	
30						0		Silty Sand, with Gravel; (10YR6/8) brn yel	349.5
						0		Sand, with Gravel; (7.5YR5/8) strong brn, (10YR7/4) pale brn	348
			90	7	BG	0		Silt, with Clay & Sand; (10YR7/8) v. pale brn, (10YR7/1) lt gry	347.1
						0		Gravel & Sand, with Silt & Clay; (10YR4/6)strong brn, (10YR5/8)yel brn	345.6
35			100	BG	BG	0 0 0		Sand & Silt, with Clay & Gravel; (10YR6/3) p. brn, (7.5YR5/8) strong brn, (10YR7/1) lt gry	344
			100	BG	BG	0 0 0		Gravelly Sand, with Silt & Clay: (10YR5/8)yel brn, (10YR7/1)motl lt gy	341
40								Silt, with Clay & Sand; (10YR5/8) yel brn, (10YR5/8) mottled lt gry	338.6

Boring 011–004

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4065.0000 E, -1631.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1410 on 10-30-97*	Surface Elevation: *378.50 feet msl*
Completed at *1445 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0			
						0		Silty Sand, with Clay & Gravel; (7.5YR5/8) strong brn, & lt gry	337.5
			100	BG	BG	0			
						0			
45						0		Silty Sand; (10YR6/8) brn yel, (10YR7/2) mottled lt gry	
			86	BG	BG	0		Silty Sand; (5YR3/4) dk rd brn	
						0			
								T.D.= 48.0	
50									
55									
60									
65									
70									
75									
80									

Boring 011-005

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1681.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0945 on 10-28-97*	Surface Elevation: *379.00 feet msl*
Completed at *1130 on 10-29-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0			
			52	8	31	0 -		Clay, with Silt & Gravel; (10YR5/4) yel brn	377.6
5			52	BG	04	0 0 0		Silt, with Clay & Gravel; (2.5Y5/6) lt olive brn, (2.5Y7/1) lt gry	375
						0		Sand; (5YR5/8) yel red	
10									
			0	-	-	-		No Recovery	387
15									
			0	-	-	-			
20						395		Silt, with Clay & Gravel; (5YR8/1) wh, (7.5Y5/8) strong brn	359
			96	4	31	300 -		Gravelly Sand; (10YR6/4) lt yel brn	-358 -357.4
						330		Clay, with Silt 6 Sand; (10YR8/1)gry, (10YR6/6)brn yel, (7.5YR5/8)s. brn	
						250 176		Silt, with Clay 6 Sand; (10YR6/8) brn yel, (10YR6/1) mottled gry	355
25			92	BG	BG	110 - 120			
						270		Gravelly Sand; (10YR6/4) lt yel brn	351
30			88	4	39	90 1996		Clay: (10YR6/1)	349.7 348.5
						230		Sandy Gravel; (10YR5/6) yel brn	
			85	BG	14	4200 4075		Sandy Gravel; (7.5YR5/6) strong brn Silty Sand. with Gravel; (7.5YR7/3) pk, (7.5YR6/8) rd yel	346.7
35			88	BG	BG	110 0 0 0		Silt, with Clay, Sand & Gravel: (10YR5/8) yel bm, (10YR5/6) mottled	34
						0 40		Gravel & Sand, with Clay & Silt; (7.5YR6/8) rd yel, (7.5YR7/1) lt gry	340.5
40			100	BG	22	17			

Boring 011-005

Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0945 on 10-28-97*	*surface* Elevation: *379.00 feet msl*
Completed at *1130 on 10-29-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						10			
						160		Silty Sand, with Clay; (10YR6/6) brn yel, (10YR8/1) mottled wh	337.5
			100	BG	46	50			
						7			
45						4		Silt, with Clay & Sand; (10YR6/8) brn yel, (10YR7/1) mottled lt gry,	334
			100	BG	BG	7			
						4			
								T.D.= 48.5	
50									
55									
60									
65									
70									
75									
80									

Boring 011-006

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3968.0000 E, -1628.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1500 on 10-21-97*	Surface Elevation: *380.00 feet msl*
Completed at *1430 on 10-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	(ft-msl)
						0		Clay, with Silt; (7.5YR5/6) strong brn	
			80	BG	26	0		Clay, with Silt; (7.5YR5/6) strong brn. (10YR7/6) yel	-3783
						0		Silt; (10YR6/1) gry	
5						142 39 46		Silt with Clay; (10Y6/1)grn gry, (2.5Y6/3)lt yel brn, (10YR4/6)dk yel brn	
			7			0 0 5		Silt, with Clay; (10YR5/8) yel brn, (10YR7/1) lt gry	
10			83	BG	BG	2 0 0 0 0			-368
			90	BG	49	0			
15						0 0 0		Clay, with Silt; (2.5Y6/4) lt yel brn, (10YR5/8) mottled yel brn, (10YR6/1) gry	-364
			100	BG	109	0			
20						0 0 2		Silt, with Clay & Gravel; (10YR6/8) brn yel, (10YR6/1) mottled gry	-360 -358
			91	BG	BG	1 0		Sandy Gravel; (10YR5/4) yel brn	
						0		Silt, with Clay & Gravel; (10YR6/8) brn yel, (10YR6/1) mottled gry	-357.5
						0		Clay, with Silt; (10YR5/8) yel brn, (10YR6/1) mottled gry	-356
			100	BG	109	12 24 30			
						0		Silty Sand; (2.5Y6/8) olive yel, (2.5Y7/1) mottled lt gry to (10YR7/1) lt gry, (10Yr5/1) mottled yel brn	-352
30			90	BG	55	0 0 0			
						0 0		Silty Sand; (10Yr6/8) brn yel, (10YR7/6) mottled yel, (10YR7/1) lt gry	
			80	BG	59	0 0 0			
35						0 1		Silty Sand, with Gravel & Clay; (10Yr6/8) brn yel, (10YR7/4) v. pale brn, (10YR7/1) lt gry	
			90	BG	15	0 13 22 8			
40									

Boring 011-006

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3968.0000 E, -1628.0000 N*
Location: *Paducah*, KY	Geologist: *J. Albert*
Started at *1500 on 10-21-97*	*Surface* Elevation: *380.00 feet msl*
Completed at *1430* on *10-23-97*	Depth to Groundwater: *NA feet bgs* **Measured:** *NA*
Drilling Method: *Rotosonic*	
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	101	0 0 - 2.6 5.4			
45			100	5	106	3.1 4.2 - 7.0 13.9		Clay, with Silt & Sand; (7.5YR5/8)strong brn, (7.5YR7/1)mottled lt gry	336
								T.D.= 48.0	
50									
55									
60									
65									
70									
75									
80									

Boring 011-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3970.0000 E, -1675.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *0940 on 10-23-97*	Surface Elevation: *379.50 feet msl*
Completed at *1415 on 10-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			96	4	62	0 0 -	Clay, with Gravel 6 Silt; (7.5YR5/6) strong bm, (10YR5/8) yel brn	
						55 340	Silt; (10Y6/1) grn gry	378.5
5			89	BG	BG	94 7 -	Silt, with Clay; (10YR4/6) yel brn	
						13 0 8	Silt, with Clay; (10YR5/6) y d bm, (10YR7/1) mottled lt gry	
10			96	4	33	0 - 0 0 0		
			96	4	BG	0 -		
15						0 0 0	Silt, with Clay 6 Gravel; (10YR5/6) yel bm, (10YR6/1) mottling gry	
			96	BG	48	0 -		
20						0 0 0	Silt, with Clay & Sand; (10YR7/1) lt gry, (10YR5/8) yel brn	
			100	3	30	0 -	Silty Sand; (7.5YR5/6) strong bm, (10YR7/1) mottled lt gry	357.5 357
						0 0 0	Silt, with Clay 6 Sand; (10YR7/1) lt gry, (10YR5/8) yel bm	355.5
25			100	BG	110	0 -	Gravelly Sand, with Silt: (7.5YR5/8) strong brn	353.5
						0 0 0	Sand & Silt, with Clay 6 Gravel; (7.5YR5/8) strong bm, (7.5YR6/1) gry	351.5
30			100	BG	BG	0 -	Gravelly Sand, with Silt 6 Clay; (10YR6/6) brn yel, (10YR7/2) mottled lt gry, (10YR5/8)yel brn	349
						0 0 0	Sand 6 Silt, with Clay & Gravel; (7.5YR5/8) strong bm, (7.5YR6/1) gry	347.5
35			97	BG	BG	0 -	Clayey Sand; (7.5YR5/8) strong brn, (2.5Y6/3) mottled lt yel brn	346
						0 0 0	Gravelly Sand; (10YR6/3) p. brn, (10YR5/8) yel brn	343.5
			93	BG	BG	0 -	Silty Sand, with Gravel; (7.5YR5/8)strong brn, (7.5YR7/1)mottled lt gy	341.5
40						0	Silt & Sand; (7.5YR7/1) lt gry	340.5
						0	Sand, with a little Silt; (7.5YR5/8) strong brn, (10YR7/2) lt gry	339.5

Boring 011-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3970.0000 E, -1675.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *0940 on 10-23-97*	Surface Elevation: *379.50 feet msl*
Completed at *1415 on 10-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

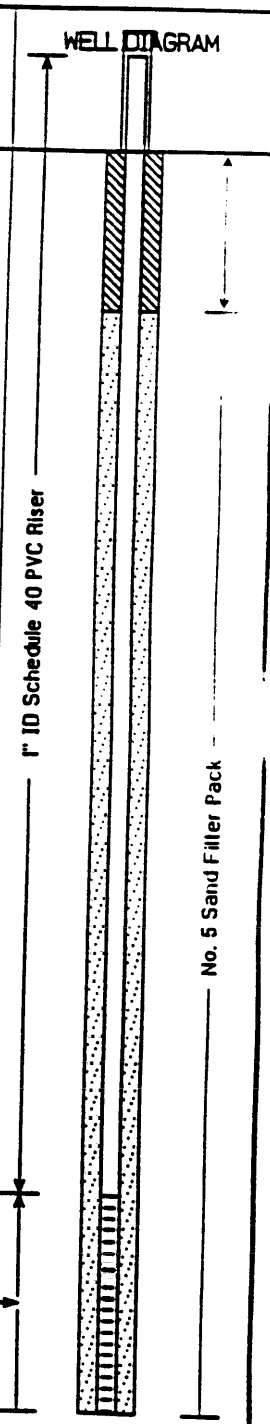
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		100	BG	BG	0 - 0 0 0 0 - 0 0		Clayey Gravel, with Sand; (7.5YR5/8) strong brn, (10YR5/1) gry	338.5
								Silty Sand; (10YR6/6) brn yel, (10YR6/1) mottled gry	336.5
45			96	BG	42			Sand; (7.5YR5/8) strong brn, (7.5YR7/1) lt gry	335.5
								Clay, with Silt & Sand; (7.5YR5/8) strong brn	[illegible]
								T.D.= 48.0	
50									
55									
60									
65									
70									
75									
80									

Piezometer 011-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1721.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.00 feet msl*
Started at *1250 on 07-28-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *33 to 42.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	93			
15			100	-	-	0 0 0		Silt (50%); clay (50%); tr v fn sand (1-10%); v moist to saturated. soft, brownish yellow (10YR6/6), lt blueish gray (7/1) mottles	365
								No Recovery	361
204									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 011-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1721.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.00 feet msl*
Started at *1250 on 07-28-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *33 to 42.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
45								T.D. = 44.0 ft		1" ID x 0.010" Slot Sch 40 PVC Scr; 1" ID Schedule 40 PV
50										
55										
60										
65										
70										
75										
80										

Boring 026-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4249.0000 E, -9932.782 N*
Location: *Paducah, KY*	Geologist: *R. McComb / B. Bergeron*
Started at *1300 on 09-19-97*	Surface Elevation: *376.04 feet msl*
Completed at *1000 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibracorbe/ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							CLAY (90%) STIFF (5YR4/2) OLIVE GRY	
						14		374
						264	CONCRETE TO GRAVEL CHUNKS	371
			35%	BG	43	-	CLAY 100% (10YR5/6) YELL BRN TO (10YR4/3)	
5						139		
						74		
						3	CLAY90% (10YR5/6)YEL BRN (10YR2/2)DK BRN	
						9		
						7		
10						5		
						12		
			-			10		
			-	BG	55	-		
						18		
15						10		
						10		
						0		359
						-	SILTY CLAY (10YR5/6)YRL BRN TO (10YR7/8)YEL&SOME BLK SUBROUND	
						5		
20						25		
						121		355
						199	GRAVLY SAND (75YR5/8) TO (5YR1/6)YEL RED	
			-	BG	35	-		
						222		
						138		
25						153		
						269		
						196		349
						15	CLAY (10YR6/8)BRN YEL TO (10YR6/3)PALE BRN	
						15		
30						10		348
						25	SANDY GRAVEL (10YR5/6)YEL BRN	
						49		344
			-	BG	18	-	SAND (10YR6/8) BRN YEL	343
						96	SANDY GRAVEL (10YR6/8) TO (10YR7/3) VERY PALE BROWN	
35						03		
						35		
						88		340
						87	CLAY (10YR7/1) LT GRY (10YR7/8) YEL TO (10YR6/8) BRN YEL	
						22	CLAY 95% (10YR6/8) TO (10YR7/1) SILT 5%	338
						39	GRAVELLY SAND (10YR6/8) BRN YEL TO YEL BRN	
40						11		

Boring 026-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4249.0000 E, -993.2782 N*
Location: *Paducah, KY*	Geologist: *R. McComb / B. Bergeron*
Started at *1300 on 09-19-97*	Surface Elevation: *376.04 feet msl*
Completed at *1000 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibracorce/ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-	1	63	63		SILT CLAY (10YR6/8)YEL TO (10YR6/8) BRN YEL TO (10YR8/4)V/PAL BRN SOME MAG STAIN,TRAC MICA	335
45						46			
						58			
						11			
						48			
						60			
						27			
						10			
						3			
50						68		SILT 95% (10YR5/8) YEL BRN	
						281			325
			-	BG	27	197		SAND 90% (10YR5/8) YEL BRN	
						122			
						145			
55						140			
						191		SAND (10YR3/1)V/DRK GRY (10YR4/6)DK YEL BRN	
						100			
						05			
						32		SANDY GRAVEL (10YR5/6)YEL BRN	317.5
60			-	BG	BG	17			
						-			
						10			
						65		SANDY GRAVEL (10YR2/2) V DK BRN	
						33			
			-	BG	BG	07			
65						75			
						10			
						18			309
						4		SAND & GRAVEL,W/SILT & CLAY (7.5YR5/8)STRG BRN	
						30			
70			-	1	BG	-			
						35			
						60			
						23		GRAVELY SAND, W/SILT & CLAY (7.5YR5/8)	304
						23			
			-	BG	26	203			
75						-			
						82			
						45			
						45			
						108			
						123			
80			-	BG	9	-			
						198			

Boring 026-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4249.0000 E, -9932.782 N*
Location: *Paducah, KY*	Geologist: *R. McComb / B. Bergeron*
Started at *1300 on 09-19-97*	Surface Elevation: *376.04 feet msl*
Completed at *1000 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						210			
						210			294
						108		SANDY GRAVEL (10YR5/6)YEL BRN (10YR3/2)V/DK GRY ERN STAINING	
85			-	BG	8G	140			
						55			
						101		SILT W/CLAY (2.5YR4/6) RED W/ (2.5YR6/1)REDDISH CLAY	
						38			
			-	BG	2B	12			
90						24			
						89		SAND FINE TO MED. (10YR7/1)LT GRY (10YR5/8)YEL BRN	285.5
						78			284
						10		CLAY & SILT (10B6/1)BL GRY (10YR5/8)YEL BRN	283.5
						03		SAND FINE GRAIN (10YR5/8)YEL BRN	283 / 282.5
95			-	BG	91	-		CLAY (10B5/1)LT BL GRY	
						17			
						13		SAND W/CLAY (10YR5/8)YEL BRN (10B5/1)LT EL GRY	278.5
						08		CLAY (10B4/1)DK BL GRY	279 / 278.5
						07		SILTY SAND (10YR5/8)YEL BRN	278
			-	BG	77	06			
100						05		CLAY (10B5/1)BL GRY	
						04		SILTY SAND W/CLAY (10B5/1) BL GRY (10YR5/8)YEL BRN	275.5
						03		SILT W/ CLAY (5PB7/1)LT BL GRY	
						03			
			-	BG	101	02			
105						02			
						00			
						04			
						05			
						07		SILT W/CLAY (5Y4/1)DK GRY	
110			-	BG	48	06			
						05			
						10			264
						10		CLAY (5Y4/1) DK GRY	
						m			
115			-	1	119	-		CLAY W/ SILT LT GRY (5Y7/1)	
						06			
						05			
						12		CLAY W/ SAND (1GLEY 4/N)DK GRY	
						05			
						m			
120						10			

Boring 026-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4249.0000 E, -993.2782 N*
Location: *Paducah, KY*	Geologist: *R. McComb / B. Bergeron*
Started at *1300 on 09-19-97*	Surface Elevation: *376.04 feet msl*
Completed at *1000 on 10-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*

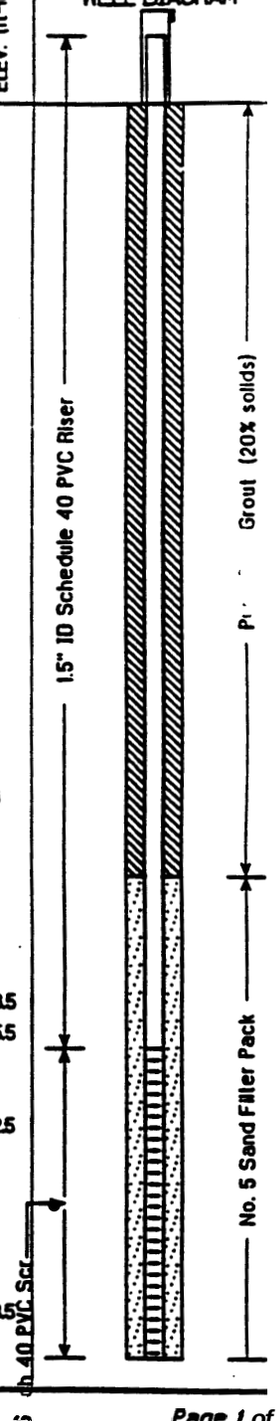
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-	3	74	-			
						18			
						18		CLAY FIRM (10B3/1)DK BL GRY, 20% SILT (5PB7/1)	
						15			
						18			
125			-	BG	70	14			
						27		SAND V. FINE TO FINE GRAINED TRACE SILT (5Y5/1)	250.5
						35			
						01			
						02			
130			-	BG	108	-			246
						02		CLAY (90%) FIRM SILT (10%)COARSE (5Y3/1)V DK GRY,SL MOIST	
						03			
						03			
						00			
						00			
135			-	BG	50	-			
						01			240.5
						01		SAND (100%)V.FINE -F.GRAINED (5Y5/1)	
						04			239
								T.D.=137	
140									
145									
150									
155									
160									

Piezometer 026-002

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5120.0000 E -0995.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.00 feet msl*
Started at *1010 on 07-23-97*	TOC Elevation: *NA feet msl*
Completed at *1410 on 08-23-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.5 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

DEPTH FEET	GEOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						-		Clay (95%); tr gravel; dry; rooty in upper 1 ft; dk greenish gray (SBG4/1), lt red (2.5YR6/8) mottling near base	
			28.5	2	57	0			
5						-			
						-		Clay (95%), sl silty, stiff, reddish brw (2.5YR5/3), lower 5 ft mottled pale red (2.5YR6/2) to red (2.5YR5/8)	
10						-			
			-	1	24	0			
15						-			
						29		Clay (75%); gravel, subrnd to rnd, fn to crs (25%); reddish brw (5YR4/4)	
20						80			
			-	BG	19	140		Silt (70%); sand, v fn gr (20%); tr gravel; reddish yiw (7.5YR6/6) mottled pinkish gray (7.5YR7/2), dry	53
25						18			
						74		Silt, fn to crs (75%); clay (25%)	
						29			348.5
30						34		Gravel, fn to med, subrnd to rnd (50%); clay (50%); tr silt/sand; dk reddish brw (5YR3/4)	345.5
			-			102		Silt (75%); clay (25%); reddish yiw (5YR6/6), mottled pinkish white (5YR8/2)	342.5
35						60		Sand, fn to med grn (80%); silt (20%); reddish yiw (5YR6/6), mottled Pinkish white (5YR8/2)	
						91			
						0			338.5
40			-	3	58	13		Clay (95%); tr silt in mottles; stiff, reddish yiw (5YR7/6), mottled pinkish white (5YR8/2)	

WELL DIAGRAM



Piezometer 026-002

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5120.0000 E, -0995.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.00 feet msl*
Started at *1010 on 07-23-97*	TOC Elevation: *NA feet msl*
Completed at *1410 on 08-23-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.5 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
	X					33			333.5	
								TD. = 41.5 ft		
45										
50										
55										
60										
65										
70										
75										
80										

Boring 026-003

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5620.0000 E, -0952.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1515 on 08-05-97*	surface Elevation: *373.50 feet msl*
Completed at *1220 on 08-05-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				33	90	45			
						0		Sand, crs, ang, mod sorted, wet. brown (10YR4/3)	369.5
			100			0		Clay, silty: tr sand, fn grn (1-10%); firm, v moist, brown (10YR4/3), lt blueish gray (7/1) mottles, tr red (2.5YR5/6)	368.8
				3	900	11			
						46			
						43		T.D. = 8.0 ft	
15									
20									
25									
30									
35									
40									

Boring 026-004

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5494.0000 E, -1042.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1008 on 08-06-97*	Surface Elevation: *375.50 feet msl*
Completed at *1135 on 026-004*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				7	BG	0			
5						0		Clay, silty, soft, v moist, lt blueish gray (7/1), tr ylwish red (5YR5/6) (1-10%)	370.5
			72.5	BG	BG	0			
						0			
								T.D. = 9.0 ft	366.5
10									
15									
20									
25									
30									
35									
40									

Boring 026-005

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5210.000 E, -1050.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0750 on 07-08-97*	Surface Elevation: *375.00 feet msl*
Completed at *0840 on 07-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
			92	BG	130	-		Clay, silty, firm, sl moist. reddish brown (5YR5/4) mottled with lt bluish gray (5YR8/1)	370
10								T.D. = 9.0 ft	
15									
20									
25									
30									
40									

Boring 026-006

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4876.0000 E, -1051.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0725 on 07-02-97*	Surface Elevation: *373.85 feet msl*
Completed at *1230 on 07-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-		Gravel, ang (80%); some silt and clay, v poorly sorted, v firm, sl moist, dk reddish gray (5YR4/2)	
5			100.0	BG	BG	0		Silt, clayey, firm, sl moist, reddish brown (5YR5/4), some lt gray mottling (5YR7/1)	368
								T.D. = 8.5 ft	365.4
10									
15									
20									
25									
30									
35									
40									

Boring 026-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4625.000 E, -1050.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1140 on 07-08-97*	Surface Elevation: *374.00 feet msl*
Completed at *0840 on 07-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
5				BG	BG	25		Clay, silty, firm, moist, reddish brown (5YR5/4); lt blue gray (5YR8/1) mottling	369
			100.0	BG	BG	10			
				BG	BG	6			
				BG	BG	11			
10								T.D. = 9.0 ft	365
15									
20									
25									
30									
35									
40									

Boring 026-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4347.0000 E, -1052.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0805 on 07-10-97*	Surface Elevation: *374.50 feet msl*
Completed at *1055 on 07-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
5			57.5	BG	BG	0		Clay, silty, firm, moist, yellowish brown (10YR5/6), mottled with gray to yellowish brown (10YR5/1 to 10YR5/6)	370.5
								T.D. = *8.0* ft	
10									
15									
20									
25									
30									
35									
40									

Boring **026-009**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4083.0000 E, -1062.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0920 on 08-07-97*	Surface Elevation: *375.50 feet msl*
Completed at *1510 on 08-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION
				BG BG	I	0		
5			50	BG BG	E	0		Clay, silty: tr sand, fn to crs grn, poorly sorted: tr gravel, v ang, poorly sorted; soft, v moist, red (2.5YR5/6) and reddish brown (5YR5/3)
10								
15								
20								
25								
30								
35								
40								

Boring 026–010

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5566.0000 E, -0998.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1020 on 08-05-97*	Surface Elevation: *372.50 feet msl*
Completed at *1515 on 08-05-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *4.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				<20	<100	0			
5								T.D. = 4.0 ft	
10									
15									
20									
25									
30									
35									
40									

Boring 026-011

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5320.0000 E, -1045.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1415 on 07-09-97*	Surface Elevation: *374.00 feet msl*
Completed at *1535 on 07-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *6.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
								T.D. = 6.0 ft	
10									
15									
20									
25									
30									
35									
40									

Boring 026-012

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-5009.0000 E, -1050.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0758 on 07-07-97*	Surface Elevation: *374.00 feet msl*
Completed at *on*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *4.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	68			369.5
5								T.D. = 4.5 ft	
10									
15									
20									
25									
30									
35									
40									

Boring 026-013

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4745.0000 E, -1053.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0840 on 07-01-97*	Surface Elevation: *374.00 feet msl*
Completed at *1230 on 07-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *4.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
5								T.D. = 4.5 ft	369.5
10									
15									
20									
25									
30									
35									
40									

Boring 026-014

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-44420000 E, -10530000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0805 on 07-09-97*	Surface Elevation: *375.28 feet msl*
Completed at *1130 on 07-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *6.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
								T.D. = *6.0* ft	369.3
10									
15									
20									
25									
30									
35									
40									

Boring **026–015**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4393.0000 E, –1051.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1245 on 07–09–97*	Surface Elevation: *375.50 feet msl*
Completed at *1055 on 07–10–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *6.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION
5				–	–	–		
								T.D. = 6.0 ft
10								
15								
20								
25								
40								

Boring 026–016

Project: *Paducah Gaseous Diffusion Plant Wag 5 RI*	Coordinates: *–4281.0000 E, –1056.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0842 on 08-07-97*	*surface* Elevation: *375.00 feet msl*
Completed at *1510 on 08-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *3.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		◢		27	BG	0			
								T.D. = 3.5 ft	
5									
10									
15									
20									
25									
30									
35									
40									

Boring 026-017

Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4199.0000 E, -1057.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1030 on 08-07-97*	Surface Elevation: *375.50 feet msl*
Completed at *1510 on 08-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *3.2 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		◢		17	BG	26			
								T.D. = 3.2 ft	
5									
10									
15									
20									
25									
30									
35									
40									

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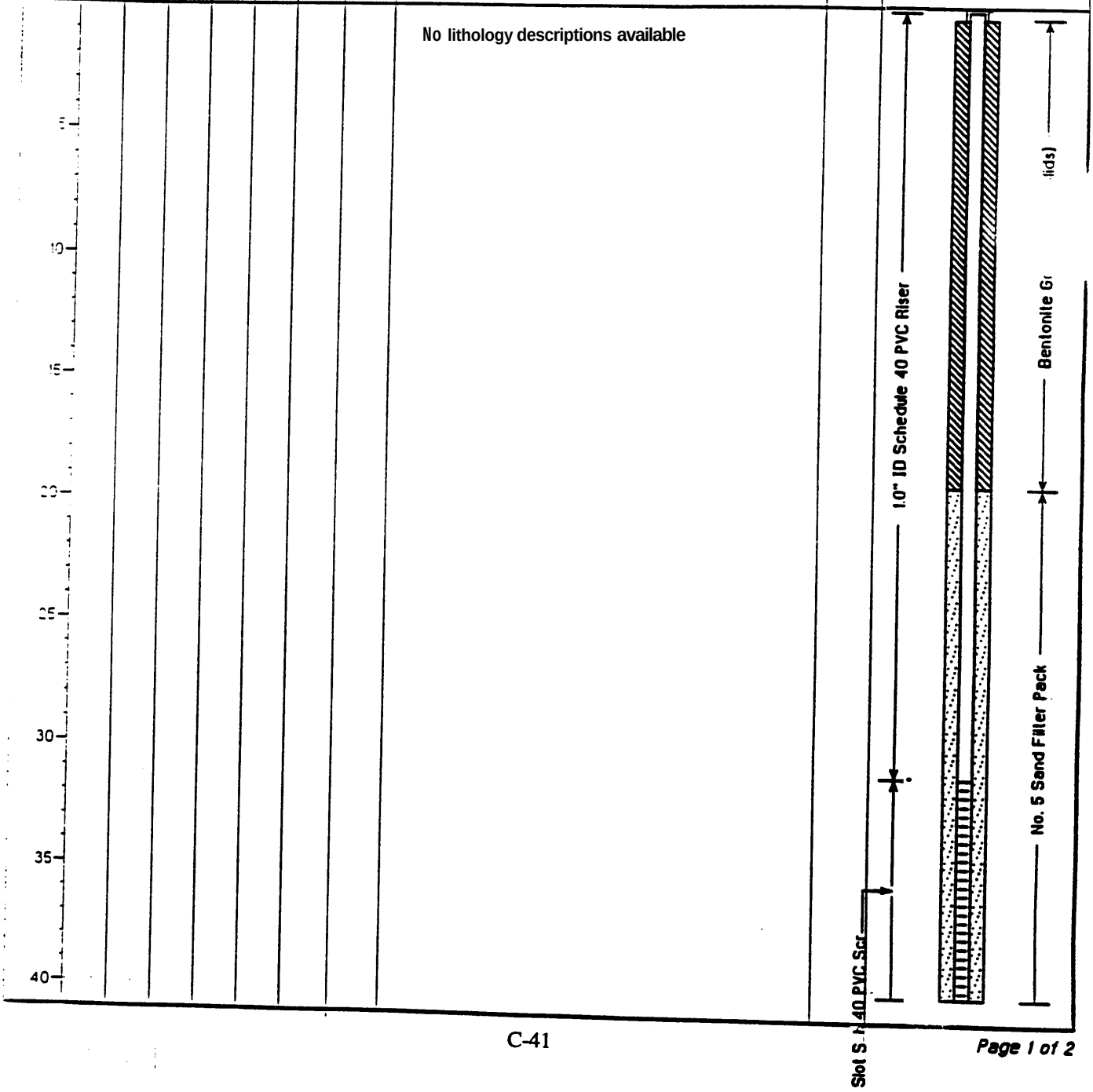
Piezometer 040–001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4052.0000 E, –1148.0000 N*
Location: *Paducah, KY*	Surface Elevation: *376.00 feet msl*
Started at *1045 on 08–21–97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09–06–97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *31 to 40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								No lithology descriptions available		



Piezometet 040-001

Project: *Paducan Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4052.0000 E, -1148.0000 N*
Location: *Paducan, KY*	Surface Elevation: *376.00 feet msl*
Started at *1045 on 08-21-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-06-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *31 to 40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								T.D. = 42.0 ft	1.0" ID x 0.010" Slot Sch 40 PVC Scr	1.0" ID Schedule 40 PVC Sump
25										
30										
35										
40										
45										
50										
55										
60										
65										
70										
75										
80										

Boring **040-003**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4110.0000 E, -1224.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1345 on 08-22-97*	Surface Elevation: *377.50 feet msl*
Completed at *1445 on 08-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	0			
10			-	BG	BG	0		Clay, silty, soft. v moist, brown (10YR5/3)	
								T.D. = 110 ft	368.5
15									
20									
25									
30									
35									
0									

Boring 040-004

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4049.1409 E, -1243.9458 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1245 on 09-16-97*	Surface Elevation: *376.31 feet msl*
Completed at *1400 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *A——*	Total Depth: *11.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	5.0		T.D.= 5.0 *ft*	
						3.5			
						2		T.D.= Silt and clay, brown (10YR5/3 w/1+1), (11-20%) light gray T.D.= (10YR7/1) *firm*, and *moist*	369.3
			100	BG	BG	0			
10									3&.-
15									
20									
25									
30									
35									
40									

Boring 040-005

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4020.5007 E, -1209.0343 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0930 on 09-16-97*	Surface Elevation: *376.18 feet msl*
Completed at *1400 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
	■	■	100	BG	BG	0		Silt & clay, brown (10YR5/3 w/1+1), light grey (11-20%) (10YR7/1) firm, and moist T.D.= 110	
10									365.2
15									
20									
25									
30									
35									
40									

Boring 040-006

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4079.0000 E, -1148.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1345 on 08-21-97*	Surface Elevation: *376.50 feet msl*
Completed at *1500 on 08-21-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10	■	■	50.0	1	BG	0		Clay. silty, soft, moist, brw (10YR5/3), mottled with 11-24% lt blueish gray (7/1)	366
								T.D. = 12.5 ft	364
15									
20									
25									
30									
35									
40									

Boring 040-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4110.0000 E, -1175.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0920 on 09-08-97*	Surface Elevation: *377.00 feet msl*
Completed at *1050 on 09-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation. *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD. Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete slab	376.2
			05.7	BG	BG	0 0 0		Clay, silty; moist, firm, lt olive brw (2.5Y5/4) (fill)	375.6
5			62.9	BG	BG	2 2 -		Gravel, subrnd to subang (65%); clay (30%); sand (5%), moist, firm, dk red (2.5YR4/6) (fill)	
10			57.1	BG	BG	3 6 -			
			40	11	BG	1 - -			
15			37.1	BG	BG	1 2 -			
20			80	BG	58	3 15 7 -		Gravel (70%); silt (25%); sand (5%); wet, firm, dk red (2.5YR4/6) to black (5YR2.5/1)	359.5
				BG	BG	0 1		Sand, med to fn grn (40%); silt (30%); clay (30%), moist, med dense, strong brw (7.5YR5/8), mottled gray (7.5YR6/1) (natural soil @18.2 ft)	358.8
			100.0	BG	BG	0		Sand, med grn (60%); gravel, subrnd to subang (30%); tr clay in distinct laminations; moist, med dense, strong brw (7.5YR5/6)	357.8
25			100.0	BG	BG	21 15		Clay, silty; tr sand, fn grn (10%), moist, stiff, lt gray (7.5YR5/3), mottled (7.5YR7/1)	356
				3	BG	20		Gravel, rnd to subang, poorly sorted (60%); sand (30%); tr silt/ clay (10%); moist, dense, strong brw (7.5YR5/8)	352.5
30			100.0	BG	BG	0 0 14		Clay, silty; sand (5%); grades to silty fn sand, moist, stiff to firm, ylwish brw (10YR5/8)	350.8
			73.3	BG	BG	14 5 8		Sand (50%); silt (40%); clay (10%); moist, firm to stiff, strong brw (7.5YR5/8)	349.5
35			100	BG	BG	4 2 5		Sand, med to crs grn (75%); gravel, subang to subrnd (20%); silt (5%); poorly sorted, moist, dense, strong brw (7.5YR5/6)	348
			63.3	3	BG	7 2 -		Silt; sand (35%); tr clay/fn gravel; moist, firm, lt ylwish brw (10Yr6/4), minor lt gray (10YR7/1) mottling	348.5
40				BG	7	-		Gravel, rnd to subang, poorly sorted (30%); clay (30%); sand (20%); silt (20%); moist, stiff, dense, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	343.5
								Sand, med to crs grn (65%); gravel, rnd to subang, <30mm (25%); silt (10%); moist, dense, brwnish ylw (10YR6/3)	340.5
								No recovery	337.5

Boring 040-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4110.0000 E, -1175.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0920 on 04-08-97*	Surface Elevation: *377.00 feet msl*
Completed at *1050 on 04-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		30	-	-	-			
	X			2	11	0		Clay, silty; tr sand, fn grn; moist, stiff, ylwish brw (10YR5/3), mottled lt gray (10YR7/2)	335.4
	X		100	BG	47	0			
45	X			BG	23	0			331.5
								T.D. = 45.5 ft	
50									
55									
60									
65									
70									
75									
80									

Boring 040-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4063.0000 E, -1169.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0830 on 08-19-97*	Surface Elevation: *376.50 feet msl*
Completed at *1500 on 08-28-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete slab	375.8
			60	1	38	13		Clay, silty; tr gravel: moist, stiff, lt ylwish brw (10YR5/4) and ylwish red (5YR4/6) (fill)	
						17			
						0			373.5
			76.6	2	BG	0		Gravel, clayey, subang, chert (65%); sand (10%); moist. firm, dk red (2.5YR4/8) (fill)	
5						0.2			
						0.6			
			66.6	1	BG	0.3			
						0.3			
						0.2			
10			60	2	30	0.1			
						0.1		Clay, silty, moist, firm, ylwish brw (10YR5/4)	365.8
						0		No recovery	364.9
			83.3	2	17	0		Clay, silty, moist, firm, ylwish brw (10YR5/4)	
						0			
15						0		Gravel, clayey, subang, chert (65%); sand (10%); moist, firm, dk red (2.5YR4/8), no indication of free water (fill)	
			76.6	5	26	1.5			
						0.6		Sandy gravel as above, wet	359.4
				BG	34	0		Clay, silty; tr gravel, fn grn, subrnd; moist, stiff, brwnish ylw (10YR6/8), mottled lt gray (10YR7/2) (Natural soil @ 17.1 ft)	358.5
						0			
20			91.4					Silt, clayey; sand (20%); gravel (10%); moist, stiff, ylwish brw (10YR6/8), mottled lt gray (10YR7/1)	
				4	BG	0			
						1			
				4	BG	0		Clay, silty; tr sand, fn grn; moist, stiff, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	353.9
			100						
				BG	BG	1		Gravel, subrnd to subang, chert, <30mm (40%); sand (30%); silt (30%); moist, dense, poorly sorted, brwnish ylw (10YR6/8)	352.1
25						5			351.5
				4	BG	8			
			100					Sand (60%); gravel, subrnd to subang, <30mm, poorly sorted (25%); silt (15%); moist, dense, strong brw (7.5YR5/6)	350.2
				BG	78	10			349.3
						2		Silt; sand, x fn grn (40%); tr clay; moist, firm, ylwish brw (10YR5/8)	348
				BG	118	2			347.5
30			91.4					Sand (85%); tr silt/gravel; moist, dense, ylwish brw (10YR5/8)	346.6
				BG	34	2			
						1		Sand, med to crs grn. poorly sorted (65%); gravel, ang to subrnd (35%); moist, dense, ylwish brw (10YR5/8)	344.5
				BG	136	2			344
			100					Sand (95%); tr silt; moist, firm, ylwish brw (10YR5/8)	343.4
									343
35				BG	6	2		Gravel (60%); sand, fn to crs grn (30%); tr silt/clay; moist, dense, poorly sorted	
						5			341
				BG	136	0		Silt: sand, fn grn (30%)	340.3
			71.4						
				BG	BG	0		Sand (50%); gravel (30%); clay/silt (20%)	338.8
						9			
40				BG	54			Silt: sand, fn grn (30%)	
								~~Sand, med to fn grn (45%); gravel, subang to subrnd, poorly sorted (35%);~~ silt/clay (20%); dense, strong brw (7.5YR5/8), some lt gray mottling (7.5YR7/1)	

Boring 040-008

Prom: *Paducah* Gaseous *Diffusion Plant Wag 6 RI*	Coordinates: *-4063.0000 E, -1169.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0830 on 08-19-97*	Surface Elevation: *376.50 feet msl*
Completed at *1500 on 08-28-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	V. (ft-msl)
			57.1			7			
						-			
				BG	BG	15			
			100			4			
45				4	BG	4			
								T.D. = 46.0 ft	330.5
50									
55									
60									
65									
70									
75									
80									

Boring 040-009

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4062.0000 E, -1185.0000 N*
Location: *Paducah*, KY	Geologist: *J. Albert*
Started at *1525 on 08-14-97*	Surface Elevation: *376.50 feet msl*
Completed at *1445 on 08-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *24.8 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete	375.7
			25	BG	26	0		Silt, sl moist, firm, grayish brw (10YR5/2)	375.1
						-		Gravel (65%); clayey with tr sand. moist, firm, dk red (2.5YR4/8) (fill)	
						-		No recovery	
5			55	BG	BG	-		Gravel (65%); clayey with tr sand, moist. firm, dk red (2.5YR4/8) (fill)	
						-			
						-			
10			55	1	146	0		Gravel (65%); sand (20%); silt (15%); v moist to wet, firm, dk red (2.5YR4/8) (fill)	367.7
						0			
						-		No recovery	365.5
						0			
			57.5	BG	71	0		Gravel (65%); sand (20%); silt (15%); v moist to net, firm, dk red (2.5YR4/8) (fill)	363.7
15						-			
			100	1	18	0.2		Silt, clayey, moist, stiff, pale vlw (2.5Y7/3) nith brwnish ylw (10YR6/3) mottling (natural soil @ 16.4')	360.1
						0.2			
20				2	BG	0		Gravel, med to fn grn, subrnd, chert (50%); sand (35%); silt (15%); moist, dense, ylwish brw (10YR5/8)	357.1
						0.3			
			0	-	-	-		No recovery	355.7
			65	2	26	0		Silt, clayey; sand, v fn (15%); tr gravel. subrnd, fn: brwnish ylw (10YR6/8) mottled lt gray (10YR7/1)	353.7
						0			
25								T.D. = 24.8 ft	351.7
30									
35									
40									

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Boring 040-010

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4090.0000 E, -1096.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1240 on 09-15-97*	Surface Elevation: *376.50 feet msl*
Completed at *1345 on 09-6-97*	Depth to Groundwater: *NA* feet *bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	EV. (ft-msl)
						0		Silty Sand, w/ Gravel & Sand; (10YR5/4) yel brn, (10YR6/4) lt yel brn	
			95	BG	BG	0		Silt, w/ Clay; sl mst, stiff; (10Y5/1) grn gry	374.5
5			100	4	166	0		Same as above, but (10YR5/6) yel brn	
10			100	BG	58	0		Same as above, but (10YR5/6) yel brn, (10YR7/1) lt gry	
			100	12	102	0			
15			100	4	162	0		Clay w/ Silt & Gravel; (10YR5/6) yel brn, (10YR7/1) mtld lt gry	
20			100	BG	102	0		Clay & Sand, w/ Gravel; v mst, frm/dense; (10YR5/6) yel brn	357.5
			100	4	66	0		Clay, w/ Silt, Sand, 6 Gravel; mst, stf; (10YR5/8) yel brn, (10YR7/1) mtld lt gry	355.5
25			100	a	118	-		Silty Sand, w/ Gravel 6 tr Clay; mst, frm; (7.5YR5/8) strg brn	352
			100	4	BG	0		Sandy Gravel, w/ Silt 6 Clay; mst, dense; subang/subrnd; prly sorted; (7.5YR5/6) strg brn	349.5
30						0		Silt, w/ Clay, Sand & tr Gravel; mst, stf; (10YR5/6) yel brn	346.5
			100	BG	BG	0		Silty Sand. w/ Gravel & tr Clay; fn/med grn; well sorted: mst, frm; (10YR5/8) yel brn	345.1
			100	BG	BG	0		Silt. w/ Clay, Sand & tr Gravel: (7.5YR5/8) strg brn, (7.5YR7/1) lt gy	343.5
35						0		Sandy Gravel, w/ Clay; subang/subrnd (<30MM); prly sorted; (7.5YR5/8) strg brn, (7.5YR7/1) mtld lt gry	342.5
			17	-	-	2		Sandy Gravel, w/ Silt: subang/subrnd; prly sorted: mst, dense; (10YR5/6) yel brn	340
40						0		No Recovery	337.5
								Gravelly Sand, w/ Silt & Clay: prly sorted: subrnd/subang: mst, frm: (7.5YR4/6) strg brn	

Boring 040–010

Project: *Paducah Gaseous Diffusion Plant Wag 6 R I*	Coordinates: *–4090.0000 E, –1096.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1240 on 09–15–97*	Surface Elevation: *376.50 feet msl*
Completed at *1345 on 09–16–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.0 feet*

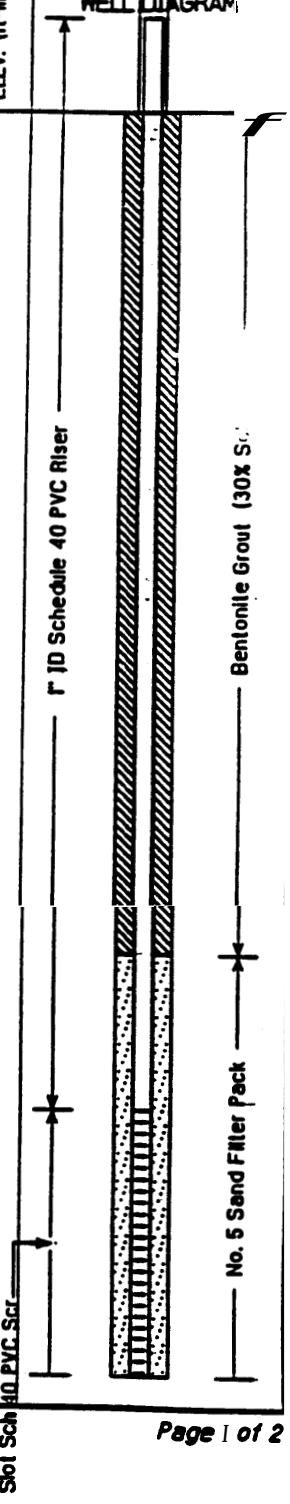
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
			100	BG	55	0			335.9
						0		Silt, w/ Sand & Clay; mst, frm: (7.5YR5/6) strg brn	
						0			
			100	BG	43	0		Same as above, but (7.5YR5/8) strg brn, (7.5YR7/1) mtld lt gry, & (7.5YR2.5/1) blk	
						0			
45								T.D.= 45.0	
50									
55									
60									
65									
70									
75									
80									

Piezometer 047-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4380.0000 E, -1436.0000 N*
Location: *Paducah, KY*	Surface Elevation: *376.50 feet msl*
Started at *1440 on 09-19-97*	TOC Elevation: *NA feet msl*
Completed at *1427 on 09-22-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.2 feet*
Geologist: *B. Bergeron*	Well Screen: *31.5 to 41.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No recovery	
5									
10									
15									
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 047-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4380.0000 E, -1436.0000 N*
Location: *Paducah, KY*	Surface Elevation: *376.50 feet msl*
Started at *1440 on 09-19-97*	TOC Elevation: *NA feet msl*
Completed at *1427 on 09-22-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.2 feet*
Geologist: *B. Bergeron*	Well Screen: *31.5 to 41.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								T.D. = 42.2 ft	1" ID x 0.010" Slot Sch 40 PVC Scr	1" ID Schedule 40 PVC Sump
45										
50										
55										
60										
65										
70										
75										
80										

Boring 047-002

Project: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4367.0000 E, -1418.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1342 on* 09-29-97	Surface Elevation: *378.64 feet msl*
Completed at *1455 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method. *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *47.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	BE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	316	0			-377.6
						0		Sandy Gravel, trace of Silt, moist 6 firm; (7.5YR5/6) strong brown	
			40	BG	58	0		Sandy Gravel, with wood debris 6 wet Black Silt	3764
						0			
						8		Silt & Clay; (10YR5/6) yeliowish brown, molted with light gray	-374.1
5						8		Silt, with trace of Clay; (5Gy5/1) greenish gray	
			60	BG	BG	54			
						23			
						21			
						186		Silt & Clay, moist and firm; (10YR5/8)yellowish brown molted with (10YR6/2) light brownish gray	
10			85	BG	48	82			
						5			
						59			
			90	3	32	13			
15						29			
						6		Silt 6 Clay, moist 6 firm: (10YR5/4) yellowish brown, molted (10YR5/3) with traces of (10YR2/1) black	
			85	BG	90	110			
						185			
						106		Clay 6 Silt; (10YR6/1) gray, (10YR6/8) molted brownish yellow	
20			100	BG	46	148			357.9
						9		Sandy Gravel	
						0			
			85	BG	28	0		Clay & Silt, with traces of Sand; (10YR5/8) yellowish brown, molted w/ (10YR57/1) light gray, w/ (2.5YR4/6) dark red	355
25						6			
						253		Gravelly Sand; (7.5YR5/6) strong brown	352.6
			70	4	BG	42			
						177			
30						3		Clay & Silt, moist & stiff (10YR7/2) light gray, (2.5YR5/6) molted red	349.1
			100	BG	66	0			
						0			
						29		Gravelly Sand, with trace of Silt; (10YR7/4) very pale brown,with some (10YR5/6) yellowish brown	345.6
35			80	BG	46	42			
						0			
						15		Sandy Gravel, trace of Silt; (7.5YR5/8)strong brown, (7.5YR7/1)lt.gray	342.1
			100	BG	BG	12			
						5			
40									

Boring 047-002

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4367.0000 E, -1418.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1342 on 09-29-97*	Surface Elevation: *378.64 feet msl*
Completed at *1455 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Totd Depth: *47.0 feet*

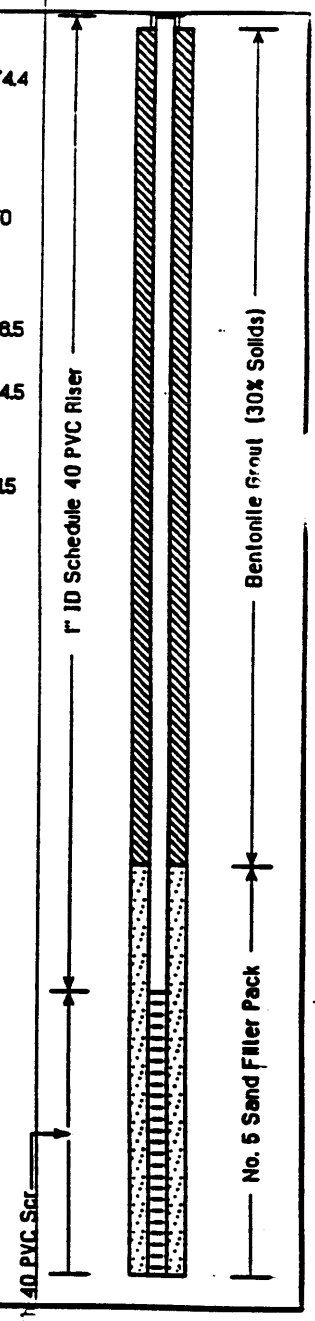
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						5			
			100	BG	BG	5		(lay (Silt; (10YR5/8) yellowish brown	337.1
						2			
						8		Sandy Clay (Clay (40%), Sand (30%), & Silt (30%)); (10YR5/8)yellowish brn	335.1
45			80	4	62	6			
						8		Sand & Silt; (10YR2/1) black, (10YR8/1) white, (10YR7/6) yellow T.D.= 47.0	332.1 331.6
50									
55									
60									
65									
70									
75									
80									

Piezometer 203-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1150.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *0830 on 08-11-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*
Geologist: *J. Albert/B. Bergeron*	Well Screen: *31.0 to 40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X					0		Crushed limestone gravel	
	X			BG	BG	0		Gravel (65%); silt (20%); sand (15%); moist, firm, black (5YR2.5/1) to reddish brw (5YR4/4)	374.4
	X					0			
	X			BG	80	0		Clay, silty, moist, stiff, greenish gray (5GY6/1), (natural soil?)	
5	X					0			
	X			BG	60	0			
	X					0			370
	X			BG	120	0		Silt, sl clayey, moist, firm, ylwish brw (10YR5/6), mottled lt gray (10YR7/1)	
	X					0			
	X			BG	90	0			
10						0			368.5
				-	-	-		No sample	
									364.5
				1	187	0.4		Clay, silty, mist, stiff, lt olive brw (2.5YR5/6)	
						0.5			
15				1	187	0			
									361.5
								No Recovery	
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 203-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1150.0000 N*
Location: *Paducah, KY*	Surface Elevation: *376.50 feet msl*
Started at *0830 on 08-11-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*
Geologist: *J. Albert/B. Bergeron*	Well Screen: *31.0 to 40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								T.D. = 42.0 ft		1" ID x 0.010" Slot Sch 40 PVC Scr; 1" ID Schedule 40 PVC Sump
45										
50										
55										
60										
65										
70										
75										
80										

Boring 203-002

Project *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4332.7648 E, -1168.8151 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0930 on 09-19-97*	Surface Elevation: *378.73 feet msl*
Completed at *1055 on 09-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			80%	BG	BG	0 0 0		Crushed Limestone Clayey Gravel; (2.5YR4/8) dark red	374.2
5			95%	BG	BG	27 30 58		Silt with a trace of Clay; (5BYR6/1) grennish gray, to (2.5Y6/3) light yellowish brown	
10			100%	BG	21	0 0 0 0		Silt to Clay; (10YR6/3) pale brown, (10YR5/6) yellowish brown, & (10YR6/1) molted gray	
15			08%	BG	0	0 0 0			
			85%	4	9	0 0			
20			100%	BG	BG	0 5 19			
						0 6		Silt & Sand; (10YR5/8) yellowish brown, (10YR7/1) molted light gray	357.2 356.7
			100%	BG	BG	0 0 0		Silty Sand; (10YR7/6) very pale brown Gravelly Sand; (7.5YR4/6) strong brown	355.1 353.7
25			98%	BG	BG	0 0 0		Sandy Gravel; (7.5YR5/6) strong brown	
30			90%	4	BG	0 0 0		Sandy Gravel; (5YR5/8) yellowish red. (7.5YR5/8) strong brown. 6 (2.5Y7/3) pale yellow	
			100%	BG	BG	0 0		Sandy Gravel; (10YR5/4) yellowish brown Gravelly Sand with a trace of Silt: (7.5YR5/8) strong brown. (7.5YR7/1) light gray	345.7 344.7
35			0%	0	0	-		No Recovery	
			100%	BG	BG	0 0 0		Sand; (7.5YR5/8) strong brown, 6 (7.5YR7/1) light gray Sandy Gravel	341.7 341.2
40									338.7

Boring 203-002

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4332.7648 E, -1168.8151 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0930 on 09-19-97*	Surface Elevation: *378.73 feet msl*
Completed at *1055 on 09-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV (ft-msl)
	X		100%	BG	BG	0		Silt (70%), Sand (20%), Clay (10%);(2.5Y6/2)light brownish gray,& (10YR6/8)yellow	338.7
						0			336.7
						0		Silty Sand; (2.5Y7/2) light gray, & (10YR6/3) brownish yellow	335.4
			100%	BG	BG	0		Sandy Gravel; (10YR7/1) light gray, & (10YR5/8) yellowish brown	333.7
45						0		Clay and Silt, trace of Sand: (10YR5/8) yellowish brown	332.7
								T.D.= 46.0	
50									
55									
60									
65									
70									
75									
80									

Boring 203-003

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4367.0000 E, -1190.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0835 on 09-13-97*	Surface Elevation: *378.04 feet msl*
Completed at *1355 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Crushed Limestone	
			93	4	260	0 0		Clayey Gravel, w/ Sand; mst, frm: (2.5YR4/8) dk rd	
						2		Sandy Gravel, w/ Clay; mst, frm; (2.5YR4/8) dk rd (FILL)	375
5				8	292	0 0			
			8 3	4	176	0 0 0		Silt, w/ tr Clay; (10GY6/1) grn gry (10YR6/8) brn yel (10YR6/3) p brn	372
10								No Recovery	369
			100	BG	84	0 0 0		Same as 8.6-9.0	367
15			100	BG	104	0 0 0 0		Silt, w/ Clay; (10YR6/8) brn yel, (10YR7/3) mtld v p brn	
			100	4		0 0		Clay w/ Silt & tr Gravel; (10YR6/8) brn yel, (10YR7/3) mtld v p brn	360
20								Clay, w/ Gravel; mst, stf; (10YR6/8) brn yel, (10YR6/1) mtld gry	
			100	4	176	0 4 3		Silty Sand; (10YR5/8) yellowish brown, (5YR5/8) yellowish red	358.5
25			90	8	196	0 6 25			
						4		Clayey Sand; (10YR6/4)	349.5
30			100	4	36	2 3		Sandy Gravel; (10YR5/8) yellowish brown	348.8
			100	BG	24	3 5		Silty Sand; (10YR5/8) yellowish brown, (10YR6/6) brownish yellow, (7.5YR5/8) strong brown, & (10YR7/1) light gray	346
35			90	BG	16			Gravely Sand with trace of Silt; (7.5YR5/8) strong brown, & (7.5YR7/1) light gray	342.5
40								Sand with a trace of Silt, then grades down to a Sandy Gravel	339

Boring 203-003

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4367.0000 E, -1190.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0835 on 09-13-97*	Surface Elevation: *378.04 feet msl*
Completed at *1355 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	4	28	2			
						0			
						2		Sand with a trace of Silt: (7.5YR5/8) strg brn	334.7
			95	BG	52	2		Gravelly Sand, w/ tr Silt & Clay; (7.5YR7/1) lt gry, (7.5YR5/8) strg brn, (7.5YR2.5/1) blk	333.4
45						0		Clay, w/ Silt; mst, stf: (7.5YR5/8) strg brn	332
								T.D.= 46.0	
50									
55									
60									
65									
70									
75									
80									

Boring **203-004**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4313.0161 E, -1167.9895 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0840 on 09-23-97*	Surface Elevation: *378.71 feet msl*
Completed at *1145 on 09-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Concrete	
								Crushed Limestone	-377.33
			80%	BG	BG	0		Clay; (2.5YR4/6) dark red	
						0			374.7
								No recovery	374.2
5						5			
			95%	BG	BG	64		Silt, trace of clay; (5GY6/1) greenish gray, to (2.5Y6/3) light yellowish gray	
						34			
						0			370.7
			95%	BG	2	0		Silt and Clay; (2.5Y5/2) grayish brown, to (10YR5/6) yellowish brown	
10						0			
						0			
			02%	BG	BG	0			
						0			
15						0			
			100%	4	BG	0		Silt and Clay; (10YR5/8) yellowish brown, (10YR7/1) light gray, with a trace of (10YR7/1) black	
						0			
						0			
20									
			100%	BG	BG	0			
						0			358.7
						0		Silty Sand (Sand (40%), Silt (30%), Clay (%%), S Gravel (15%))	
						0			
			101	BG		0		Silty Sand (Sand (40%), Silt (35%), & Gravel (25%)) (7.5YR5/6)strong brn	
25						0			353.2
								Gravelly Sand with trace of Silt; (7.5YR5/8) strong brown	
			87%	BG	BG	0			
						0			
						0			
30									
			80%	BG	BG	0			
						0			
						0			348.2
								Gravelly Sand, trace of Silt; (7.5YR5/8) strong brown, & (7.5YR7/1) light gray	
			87%	BG	BG	0			
35						0			
						0			
			84%	BG	BG	0			
						0			
40						0			

Boring 203-004

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4313.0161 E, -1167.9895 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0840 on 09-23-97*	Surface Elevation: *378.71 feet msl*
Completed at *1145 on 09-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		90%	BG	BG	4 2		Gravelly Sand; (10YR7/3)very pale brown, with (10YR6/8) brownish yellow	
						0			
45			90%	2	BG	0 0 0		Clay 6 Silt; (10YR5/8) brown, with minor (10YR7/1) light gray	333.8
								T.D.= 46.5	
50									
55									
60									
65									
70									
75									
80									

Boring **203-005**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4275.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1050 on 08-20-97*	Surface Elevation: *378.50 feet msl*
Completed at *1600 on 08-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *20.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No soil samples recovered	
5									
10				9	BG	0			
				BG	BG	0			
15									
20								T.O. = 20.5 ft	
25									
30									
35									
40									

Boring 203-006

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4309.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1120 on 08-23-97*	Surface Elevation: *378.50 feet msl*
Completed at *1445 on 08-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *16.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15						0			366
						0		Clay, silty, moist, soft, brw (7.5YR5/2), tr (1-10%) lt blueish gray (7/1)	
15			100.0	BG	BG	0			
						0			
						0			362
								T.D. = 16.5 ft	
20									
25									
30									
35									
40									

Boring 203-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4453.0000 E, -1170.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1000 on 07-17-97*	Surface Elevation: *375.50 feet msl*
Completed at *0927 on 07-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	-			
10						0			
						0		Clay, silty, tr fn to v fn sand, firm, moist, reddish brown (5YR5/4), small light blueish gray (8/1) mottles	365.5
				3	57	0			
						0			
						0			
15								T.D. = 14.0 ft	361.5
20									
25									
30									
35									
40									

Boring 203-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4395.5461 E, -1188.1328 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1100 on 07-18-97*	Surface Elevation: *377.00 feet msl*
Completed at *1345 on 07-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

4

Depth	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5								
10			-	-	-			
					0		Clay, silty; tr fn to v fn sand (1 - 10%), stiff, moist, reddish brown (5YR5/4, small light blueish gray (8/1) mottles (21 - 35%)	
					0			
			2	BG	0			
					0			
15					0		T.D. = 15.0 ft	36
20								
25								
30								
35								
40								

Boring 400-001

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4483.0000 E, -1207.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1435 on 08-11-97*	Surface Elevation: *374.50 feet msl*
Completed at *1030 on 08-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	HNU (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100.0	8	37	3.9		Topsoil and crushed limestone	
						20		Silt; sl mst, dense; lt gry (10YR7/1), yel brn (10YR5/6) mtlg	
						0.4			
						0		Silt, w/ Clay; mst. stf; lt gry (10YR7/1), blk (10YR2/1), yel brn (10YR5/8) mtlg	
5			100.0	1	31	0			
						0			
				BG	42	0			
			100.0	BG	49	0.2			
10				1	86	2.4			
			100.0			3.9			
				2	70	3.5		Silt; mst, stf, lt yel brn (10YR6/4), mtld blk (10YR2/1), lt gry (10YR7/1)	
				2	50	3.6			
			100.0			2.6			
				BG	44				
15				3	72	0.3		Silt, clayey; mst. stf. brn yel (10YR6/6), mtld v pale brn (10YR7/3)	
			100.0			0			
				BG	42	0.7		Clay, w/ Gravel; med/fn, subrnd; mst. stf. yel brn (10YR5/8), mtld gry (10YR6/1)	357
									358.5
20			0	=	=	=		No recovery	
									354
			100.0	BG	BG	0		Sandy Gravel, w/ Silt; subang; prly sort chert; sl mst, dense; strg bn (7.5YR5/8)	
			88.0	BG	4	0			
25						0		Sandy Gravel & tr silt; yel brn (10YR5/6)	49.1
			70.0	4	64	0		Silt, w/ Sand & tr Clay; mst, frm, yel brn (10YR5/6)	347.5
			100.0	3	54	1.1		Gravelly Sand; med/crs; mst/mod dense, yel brn (10YR5/8)	348.1
						1.6		Sand, w/ tr carbonized organics; med grn, well sort; mst, frm; lt gry (10YR7/2)	345.5
30			100.0	2	162	1.1		Gravelly Sand, fn/med grn to med/crs grn; gravel, chert; mst, dense, pink (10YR7/3), w/ rd yel (7.5YR6/8)	343.5
			85.0	3	118	0		Sandy Gravel; prly sort; subang/subrnd, chert; fn/crs grn; mst, dense; strg brn (7.5YR5/8), mtld pink gry (7.5YR7/2)	
			85	3	35	0			
35						0		Sandy Gravel; v mst/wet	339.5
			60	2	05	0		Gravelly Sand, w/ Silt; med/crs grn, prly sort; v mst, dense; rd yel (7.5YR6/8), tr lt gry (7.5YR7/1)	337.5
			95	1	88	0		Sandy Gravel, w/ tr Silt; mst, dense; brn yel (10YR6/8)	336.1
40			10.0			0		Clay, silty, mst, stf, brn yel	

Boring 400-001

Project: *Paducah Gaseous Diffusion Plant Wag 6iU*	Coordinates: *-4483.0000 E, -1207.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1435 on 08-11-97*	Surface Elevation: *374.50 feet msl*
Completed at *1030 on 08-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X			2	76	0		Silt, w/ Sand & tr Gravel; fn grn; v mst, frm; rd yel (7.5YR6/8)	334.4 / 333.5
								T.D. = 41.0 ft	
45									
50									
55									
60									
65									
70									
75									
80									

Boring **400-002**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4225.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1450 on 09-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*

DEPTH IN FEET	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
					Concrete slab	377.7
	77.1	11	BG	0	Crushed limestone gravel	377.2
				0	Gravel (60%); sand (25%); clay (10%); silt (5%); moist, firm, dk red (2.5YR4/8) (fill)	375.8
				-		375
5		BG	BG	61	No recovery	
	100.0			0		
		BG	BG	0	Clay (60%); sand (25%); gravel (15%); moist, firm, lt olive brw (2.5Y5/3) (fill)	371.5
				-		
		-	-	-	No recovery	
10				-		
				-		
		8	BG	0	Silt, clayey; moist, stiff, lt olive brw (2.5Y5/4) (Natural Soil)	
	97.1			0		
		BG	BG	0	Silt, clayey; moist, stiff, ylwish brw (10YR5/4), mottled ylwish brw (10YR5/6) and gray (10YR6/1)	
15		4	BG	0		
	100.0			0		
		BG	BG	0		
		4	BG	0	Clay, silty; tr gravel. fn grn; moist, stiff, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	361
	100.0			0		
20		BG	15	0		
		BG	BG	0	Clayey Sand; med/fn grn; mst, stf; strg brn (7.5YR5/6), mtld gry (7.5YR6/1)	357.5
	100.0			0		
		BG	BG	2	Gravel, subang/subrnd (40%); silt/clay (40%); sand; prly sort; mst, dense, rd yel (7.5YR6/8)	356
				0		354.5
25		BG	BG	13	Gravelly Sand, w/ Silt; mst. med dense; strg brn (7.5YR5/8)	
	100.0					
		4	BG	0		
		-	-	-	No recovery	351.5
	0	-	-	-		
		-	-	-		
30						
		BG	BG	0	Gravelly Sand, w/ Sit; med/crs grn; subrnd/subang; prly sort; mst, dense, pale brn (10YR6/3), yel brn (10YR5/8)	348.5
	100.0			0		
		BG	BG	0		
		BG	BG	0	Silty Sand, w/ tr Clay: med/fn grn, well sort: mst, frm; yel brn (10YR5/8), mtld lt gry (10YR7/1)	345.5
	03.3			0		344.3
35		B6	BG	0	Gravelly Sand, w/ tr Silt; med/crs grn; subang/subrnd, prly sort; mst, dense; lt gry (10YR7/2), yel brn (10YR5/3)	
		BG	136	0		342.5
	100.0			0	Sand, w/ tr Silt 6 Gravel: med/crs grn; fn grn; wet/dense; yel bm (10YR5/8)	341.5
		BG	BG	0		
40					Gravelly Sand, w/ Silt; med/crs grn, qtz; subang/subrnd,; prly sort; mst, dense, yel brn (10YR5/8), lt gry (10YR7/1)	339.5
					No Recovery	

Boring **400-002**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4225.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1450 on 09-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		-	-	-	-			
								T.D.= 42.0	336.5
45									
50									
55									
60									
65									
70									
75									
80									

Boring **400-003**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4231.0000 E, -1190.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert*
Started at *0820 on 08-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1440 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	-		No Recovery	
5			62.5	BG	BG	0			
								Clay, silty, soft, v moist, brn (10YR5/3)	373
			25.0	BG	BG	0			
10									
			100.0					No Recovery	367
15									
20									359
			75	BG	BG	0		Clay, w/ Silt. Sand, 6 tr Gravel; yel brn (10YR5/4), mtld lt gry (10YR7/1) grading to Clayey Sand, w/ tr Silt & Gravel; rnd/ subrnd; strg brn (7.5YR5/8), lt gry mtlg (7.5YR7/1)	
						0			
				BG	BG	320			
25						0		Gravelly Sand, w/ Silt/Clay; med/fn grn; up to 30mm, subrnd/subang; rd (2.5YR4/8), yel rd (5YR5/8), strg brn (7.5YR5/6), gry mtlg (7.5YR7/1)	355
			100	BG	BG	0			
						0			
				4	2	0			
			0			-		No recovery	351
						-			
30						0		Sand, w/ Gravel 6 Silt; fn/med grn; yel red (5YR5/8)	349
			100	4	BG	0		Clay, w/ Sand 6 tr Gravel; fn grn; up to 5mm; yel brn (10YR5/6), gry mtlg (10YR6/1)	348.5 348
						0			
				4	6	0		Gravelly Sand, w/ Silt/Clay; med/crs grn; subrnd/ang;yel brn (10YR5/8)	345
35				2	BG	0			
			100.0			0		Gravelly Sand, w/ Clay 6 med/crs grn quartz; subrnd/subang cht; (10YR5/6) yel brn, (10YR7/1) lt gry mtlg	343.5
				BG	BG	0			
				BG	8	0		Sand, w/ tr Gravel; med grn qutz; subrnd/rnd;mst/qut mst; (7.5YR5/8) strg brn	342.8
			100.0			0			
40				2	BG	0		Gravelly Sand, w/Silt;med/crs grn qutz; subrnd/subang; (7.5YR5/8)stg bn	340.8
								Silty Sand,w/Gravel;v fn grn qutz;subr; (7.5YR5/8)strg brn, (10YR6/4) lt yel brn	339.2 339
								Clay,w/Silt, tr Gravel; subrnd; mst/frm; (10YR6/1) gry	

Boring **400-003**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4231.0000 E, -1190.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert*
Started at *0820 on 08-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1440 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *46.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Sand w/Gravel, Clay & Silt; (7.5YR5/8)strg brn	339
			100	2	12	10.8		Gravelly Sand, w/tr Silt; med/crs grn quartz; suba/subrd qzt chert (Max 10-15MM) (7.5YR6/1)gry, (7.5YR6/3)lt brn	338
			100	BG	BG	8.1			
						0			
45			100	2	BG	0			334.2
						0		Clay,w/Silt 6 Sand(7.5YR6/8)micaceous rd yel, (7.5YR6/4)mtld lt brn (HU3 encountered)	333
								T.D.= 46.0	
50									
55									
60									
65									
70									
75									
80									

Boring 400-004

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4391.0000 E, -1228.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0925 on 08-23-97*	Surface Elevation: *377.50 feet msl*
Completed at *1310 on 08-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			91.4	8	54	0		Gravel (75%); clay (20%); sand (5%); sl moist, firm, ylwish red (5YR4/6) (fill)	375.8
				BG	BG	0		Clay, silty, moist, stiff, greenish gray (10Y6/1) (natural soil?)	374
5			77.1	4	48	6		Silt, moist. stiff, greenish gray (10Y6/1)	
				BG	BG	86 300			
			100.0	4	34	296		Silt, sl clayey, moist, firm, lt gray (10YR7/1) to ylwish brw (10YR5/6)	
10				BG	BG	2 0			
			100.0	8	38	1			
				BG	34	0 0			
15			100.0	BG	8	0 0		Silt; tr clay; moist, stiff, lt ylw brw (10YR6/4), mottled gray (10YR6/1)	
				8	BG	0			
			100.0	BG	20	0 0			
20				BG	BG	0		Sand (65%); gravel, poorly sorted, subang to subrnd, chert (25%); silt (15%); moist, dense, ylwish brw	357.5
			100.0	BG	BG	0 1		Gravel, chert/qtz, suband to subrnd, poorly sorted (60%); sand (30%); silt (10%); moist, dense, lt brwnish ylw (10YR6/4)	356.5
				BG	BG	8		Sand, fn to med grn (70%); gravel, in distinct zones (20%); silt (10%); moist, dense, strong brw (7.5YR5/3)	355
25			04.3	BG	BG	0 0			
				BG	BG	0			
			01.4	8	BG	0 3		Silt, clayey; sand (25%); moist, firm, lt brwnish gray (10YR6/2)	349.5
30				BG	30	4		Gravel, poorly sorted, subang to subrnd, chert (60%); sand (40%); at (10%), v pale brw (10YR7/3) to brwnish ylw (10YR6/8)	348.7
			85.7	BG	23	3 2		Sand, med to fn gm, well sorted (100%), moist, firm, reddish ylw (7.5YR6/8), mottled pink (7.5YR7/3)	346
35				BG	30	2		Sand, fn to crs (80%), gravel, fn to med, subang to subrnd, chert (20%); poorly sorted, moist, mod dense, reddish ylw (7.5YR6/8), mottled pink (7.5YR7/3)	345
			134.3	BG	BG	3 0		Gravel, subrnd to rnd (<20mm) (40%); sand, fn to crs (40%); silt/ clay (20%); poorly sorted, strong brw (7.5YR5/8) to gray and strong brw laminated, moist, dense	342.5
				BG	BG	0			
40			91.4	3	BG	0 0			339

Boring **400-004**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4391.0000 E, -1228.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0925 on 08-23-97*	Surface Elevation: *377.50 feet msl*
Completed at *1310 on 08-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X			3	31	2		Sand. med to crs, qtz, poorly sorted (50%); gravel, subang to submd. quartzite/chert (<30mm) (40%); tr clay/silt; moist. dense, lt gray (7.5YR7/1), mottled strong brw (7.5YR5/8)	335.5
	X		100.0	BG	37	3 3		Clay, silty, sand, v fn, sl micaceous (10%); sl moist, stiff, strong brw (7.5YR5/8) Insufficient GW to attempt sample	
45	X			BG	51	5		T.O. = 45.5 ft	332
50									
55									
60									
65									
70									
75									
80									

Boring 400-005

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4137.0000 E, -1272.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0910 on 09-05-97*	Surface Elevation: *379.00 feet msl*
Completed at *0945 on 09-06-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
					Concrete slab	378.2
	48.6	BG	BG	0	Gravel (50%); clay (40%);sand (10%), moist, firm, dk red (2.5YR4/8) (fill)	
5	71.4	BG	BG	0		
10	91.4	BG	BG	0	Silt, clayey, moist, stiff, ylwish brw (10YR5/6) (natural soil?)	
15	100.0	BG	BG	0		
20	100.0	BG	BG	0	Clay, silty; tr sand, fn grn (5%); scattered gravel (1-3%); moist, stiff, ylwish brw (10YR5/8); mottled lt gray (10YR7/1)	361.5
25	100.0	BG	BG	4	Silt; sand (30-35%); clay (10-20%); moist, firm, ylwish brw (10YR5/8), minor lt gray (10YR7/1) mottling	358
30	100.0	BG	BG	0	Clay, silty; sand, v fn grn (15-20%); moist, stiff, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1) and ylwish red (5YR5/8)	354.5
35	100.0	BG	BG	2	Gravel, subang to subrnd, <40mm (50%); sand, med to crs grn (40%); tr silt/clay; moist, dense, strong brw (7.5YR5/6)	352
	100	BG	BG	6	Silt, clayey; tr sand/gravel; moist, stiff. strong brw (7.5YR5/6), mottled lt gray (7.5YR7/1)	350.3
	100	BG	BG	3	Clay, silty; tr sand, fn grn (10%); tr gravel, fn grn (1-2%); moist, stiff. strong brw (7.5YR5/6), mottled gray (7.5YR6/1)	349
40	0	BG	BG	0	Sand, fn grn (50%); silt (50%); grades to sand (80-90%)/silt (10-20%); moist, firm, ylwish brw (10YR5/6), minor lt gray mottling (10YR7/1)	346
					No recovery	343
		BG	BG	0	Gravel, subang to subrnd (60%); sand, med to crs (35%); tr clay (5%); moist, dense, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	340

Boring **400-005**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4137.0000 E, -1272.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0910 on 09-05-97*	Surface Elevation: *379.00 feet msl*
Completed at *0945 on 09-06-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			93.3			0			
				BG	BG	0			
				BG	BG	0			338.3
			100.10			0		Sand, med to fn grn, well sorted (70%); silt (30%); moist, firm, strong brw (7.5YR5/8)	336
				BG	14	0			
45						0.7		Clay, silty; tr sand, fn grn (5%); moist, stiff, strong brw (7.5YR5/8)	
			100.10	BG	6	0.5		Clay, silty; sand, fn grn (5-10%); moist, stiff, sl micaceous, strong brw (7.5YR5/8), minor pale brw (10YR7/4) mottling	
				BG	14	0.5			331
								T.D. = 48.0 ft	
50									
55									
60									
65									
70									
75									
80									

Boring **400-007**

Protect: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4095.0000 E -1325.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1215 on 09-02-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 09-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *50.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	%	RAD Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						-		Concrete slab	378.2
			28.8			-		Crushed limestone gravel	377.7
						-		Clay; gravel, subang to subrnd, chert (35%); sand (10%); moist, firm. dk red (2.5YR4/6) (fill)	
5				BG	99	0			375
			57.1			0		Clay, gravel. sand, as above; v moist to wet	
						-		Silt, clayey, moist, stiff, lt ylwish brw (2.5Y6/4) (Natural Soil?)	372
						-		No recovery	
10				BG	30	0		Silt, clayey, moist, firm, ylwish brw (10YR5/6)	
			100.0			0			
				BG	30	0			
				BG	79	0			
15			100.0			0			
				BG	30	0			36
				4	79	0		Clay, silty; sand, fn grn (up to 20%); moist, stiff, ylwish brw (10YR5/4), some lt gray (10YR7/1) mottling	
			00.0			0			
				BG	30	0			
20				BG	31	0		Sand, med to fn grn (50%); silt (30%); clay (10%); gravel, subang to subrnd, chert, <30mm (10%); ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	359.5
			100.0			0			
				4	119	0			
				BG	55	0			
25			85.7			0		Clay, silty; moist, stiff, ylwish brw (10YR5/8), lt gray (10YR7/1) and ylwish red (5Yr5/8) mottling	355 354.5
				BG	50	0			
				-	-	-		Silt (45%); sand (30%); Clay (15%); gravel (10%); moist. dense, poorly sorted, ylwish brw (10YR5/6)	352.5
			0			-		No recovery	
30				2	4	0		Sand (40%); silt (35%); gravel (15%); clay (10%); moist, dense, strong brw (7.5YR5/3), mottled lt gray (7.5YR7/1)	349 348
			100.0	2	12	0			
				BG	BG	0		Clay, silty; grades to silty clay containing up to 15% fn grn sand; moist, stiff, strong brw (7.5YR5/8), mottkd lt gray (7.5YR7/1)	347
35			100.0	BG	24	0		Sand (85-90%); silt (10-15%); moist, firm, strong brw (7.5YR5/6), minor lt gray (7.5YR7/1) mottling	
				BG	8	1		Gravel, subang to subrnd, Poorly sorted, chert (50%); sand (5-10%); silt (15-20%); clay (15-20%); moist, dense, brw (10YR5/4), lt gray (10YR7/1)	343 342.7
			106.7	2	BG	5			
				-	-	2		Sand (60%); gravel, subang to subrnd, <30mm (25%); silt/clay (15%); moist, dense, brown (7.5YR5/4)	340
40			0	-	-	-		NO RECOVERY	

Boring 400-007

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4095.0000 E, -1325.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1215 on 0 2 - 9 7*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 09-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *50.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	BE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	(ft-msl) 4
				-	-	-			
			100.0	2	BG	0		Gravel, subang to subrnd (60%);sand (20%); clay (15%); silt (5%); poorly sorted, moist, dense, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	
				2	8	0			
45			100.0	BG	BG	t7		Clay, silty: sand, fn grn (10-15%); moist, firm, sl micaceous, strong brw (7.5YR5/8)	334
				2	BG	1			
			100.0	BG	BG	0			
50				BG	24	0			328.5
								T.D. = 50.5 ft	
55									
60									
65									
70									
75									
80									

Boring **400-008**

Prom: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4102.0000 E, -1352.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0808 on 08-26-97*	Surface Elevation: *378.50 feetmsl*
Completed at *1315 on 08-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *49.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	I	RAD/Alpha	RAD/Beta	B E	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				2	4:3	0 0		Crushed limestone gravel	
			91.4					Silt, dry, firm, ylwish brw (10YR5/6)	377.5
				2	2	13		Gravel (50%); clay (30%); sand (20%); sl moist, firm, dk red (2.5YR4/6) (fill)	375.9
5				BG	B5	72 6		Silt, moist, firm. gray (10YR5/1) (natural soil?)	
			01.4	BG	B5	14			
			100.0	BG	12	1 4		Silt. some clay, moist, firm, ylwish brw (10YR5/6), minor It gray (10YR6/2) mottling	
10				BG	32	7			
			85.7	BG	BG	0 0		Clay, silty, moist, stiff, brwnish ylw (10YR6/6)	
				BG	BG	0			
15			100.0	BG	4	0 0			
				BG	BG	0			
			100.0	4	12	0 0			
20				8	4	0			
			100.0	4	12	0 1		Sand, fn to med grn, qtz (50%); gravel, subang to subrnd, chert, <30mm (40%); tr silt/clay; poorly sorted, moist, dense, strong brw (10YR5/8)	357.5
				BG	BG	2			
25			100.0	BG	BG	0 0		Silt, clayey; sand, fn grn (30%); moist, stiff, strong brw (7.5YR5/8), mottled It gray (7.5YR7/1)	354
				BG	BG	0		Sand, med grn, well sorted (85%); tr gravel, fn grn; tr silt; moist, firm, strong brw (7.5YR5/8)	351.4
				BG	BG	0 1			350.5
30			110.0					Gravel, subang to subrnd, chert, <20mm) (55%); sand, med grn (35%); silt/clay (10%); poorly sorted, moist, dense, strong brw (7.5YR5/6)	348.7
				BG	BG	0		Clay, silty; tr fn sand and gravel, moist, stiff, reddish ylw (7.5YR6/6), mottled It gray (7.5YR7/1)	346.2
			110.0	BG	BG	0 6			
35				BG	BG	0		Sand, fn grn (70%); silt (30%); moist, firm, strong brw (7.5YR5/8), mottled It gray (7.5YR7/1)	343.5
				BG	BG	1 0		Sand, med to fn grn; gravel (15%); tr silt (10%); moist, firm, strong brw (7.5YR5/8), mottled It gray (7.5YR7/1)	342.9
			914.3						
				BG	BG	1		Silt, clayey: send, fn grn (20%); gravel, med to fn (20%); moist, dense, pink (7.5YR7/3)	340.9
				BG	BG	2 0			
40								Gravel, subang to subrnd, poorly sorted (70%); sand (20%); silt/ clay (10%), strong brw (7.5YR5/6)	

Boring 400-008

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4102.0000 E, -1352.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0808 on 08-26-97*	*Surface* Elevation: *378.50 feet msl*
Completed at *1315 on 08-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *49.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100.0	BG	BG	0			
				BG	BG	3 4			
			85.7						
45				BG	BG	2		Gravel, subrnd to subang, poorly sorted, <40mm (50%); sand, med to crs grn, Poorly sorted (45%); silt/clay (5%); v moist to wet, dense, strong brw (7.5YR5/8), minor lt gray (7.5YR7/1) laminations	333
				BG	BG	2 7		Silt; sand (35%); v moist, firm, sl micaceous, strong brw (7.5YR5/6)	
			85.7	BG	BG	6			329.5
50								T.D. = 49.0 ft	
55									
60									
65									
70									
75									
80									

Boring **400-009**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-44420000 E, -1554.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0850 on 08-20-97*	Surface Elevation: *377.00 feet msl*
Completed at *1515 on 08-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			80	2 12	41 43	0 0 0	Gravel, subrnd, chert **(65-70%)**; clay **(20-25%)**; tr sand; sl moist, firm, dk red **(2.5YR4/8)**	375.5
				-	-	-	Clay; silty, mst, stf; lt yel brn **(10YR6/4)** (fill)	374
							No recovery	373.5
5			62.8	6	68	7.4 4.4	Silt: tr clay; sl mst, firm; grn gry **(10Y6/1)** (natural soil)	
			0	-	-	-	No recovery	
10			100.0	4	72	5.9 72	Silt, tr clay; mst, frm; yel brn **(10YR5/8)**, mtld lt gry **(10YR7/2)**	367
15			100.0	0 0	62 16	31 0.3 4.0	Silt. w/ tr gravel; subrnd; mst, stf; yel brn **(10YR5/4)**, mtld gry brn **(10YR5/2)**, some block mineralization	
20			100 60	2 0 0 0 8	60 6 IBG IBG IBG	2.0 2.0 to 12.0 7.0 6.0	Gravelly Sand; med grn qtz; subrnd chert (up to 30mm); prly sort: mst, dense; strg brn **(7.5YR5/8)**	360
25			85.7	0	50	110 5	Silt, clayey, w/ tr sand; mst, stf, brn yel **(10YR48)**, mtld lt gry **(10YR7/2)** Silt, w/ Sand; mst. frm, yel rd **(5YR5/8)**, mtld lt gry **(5YR7/1)**	354.5
				0	46	0	Gravelly Sand: subrnd chert; prly sort, mst, dense. yel rd **(5YR5/8)**	351.5
			130.0	3	IBG	26 132	Gravelly Sand, w/ tr Silt; med/crs grn. qtz: med/fn, subrnd: mst, den; strg brn **(7.5YR5/6)**	349 348.5
30				BG	IBG	23	Sand **(90%)**; silt (10%); moist, firm, ylwish red **(7.5YR6/8)**	
			100.0	BG BG	BG BG	30 65 11 172	Silt 6 Sand: v fn/fn; mst, frm; rd yel **(7.5YR6/8)**, mtld lt gry **(7.5YR7/2)** Silty Sand; med/crs grn, qtz; mod well sort; mst, frm, strg brn **(10YR5/8)**	344.5
35			100.0	IBG IBG	BG BG	0 6 58 8 12	Sand, med/crs, qtz, well sorted; up to 60% gravel in lower 0.3'; mst, frm, rd yel **(7.5YR6/8)** Clay, w/ silt 6 carbbonized organics; mst/stf, lt gry **(7.5YR7/1)** Gravelly Sand: mst, dense; lt gry **(7.5YR7/1)**, rd yel **(7.5YR6/3)**	342.5 340.8 340.2 339
40			68.5	BG	BG	97	*Sandy* Gravel, w/ tr Silt: subrnd/subang chert: med/crs qtz; mst, den; prly sort. yel brn **(10YR5/8)**	337

Boring 400-009

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4442.0000 E, -1554.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0850 on 08-20-97*	Surface Elevation: *377.00 feet msl*
Completed at *1515 on 08-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-		Silt; sand (40%);tr clay (10%), moist, firm, brwnish ylw (10YR6/6), No indication of groundwater	337
			91.4	BG	BG	4			
				4	65	26			
45						24			
			94.3	BG	BG	0			
				BG	13	0			
								T.D. = 48.5 ft	328.5
50									
55									
60									
65									
70									
75									
80									

Boring 400–010

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4366.0000 E, –1557.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1030 on 10–16–97*	Surface Elevation: *379.50 feet msl*
Completed at *1310 on 10–17–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *47.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	3	BG	0	Silty Gravel; (7.5YR4/6) strong brn	
			85	BG	BG	0	Clay & Silt; (2.5Y4/4) olive brn	376
5						1		373.5
			0	0	0	10	No Recovery	
10			0	0	0			
			100	BG	30	8	Silt & Clay; (10Y6/1) grn gry, to (10YR5/4) yel brn	368
15			85	BG	34	4	Silt & Clay; (10YR6/2) lt brn gry, (10YR5/8) mottled yel brn, (10YR3/3) dark brn, (10YR6/2) mottled lt brn gry	
			100	BG	BG	1		
20			70	BG	BG	3	Silt, with little Clay; (10YR7/3) v. pale brn, (10YR5/8) mottled yel brn	360.5
25			80	BG	BG	5	Clayey Sand, with Silt 6 Gravel; (7.5YR5/6) s. brn, (7.5YR6/3) lt brn	358
			100	BG	BG	10	Silt & Clay; (10YR6/8) brn yel	353.5
						18	Silt, with Clay & Gravel; (10YR5/8) yel brn, 6 lt gry	352.2
						7	Gravelly Sand, with trace of Silt; (7.5YR4/6) stron brn	351.3
30			80	BG	BG	3	Sand, with trace of Silt; (7.5YR5/8) strong brn	349.4
						0	Sand & (7.5YR5/8) strong brn to (7.5YR7/1) lt gry	347.9
						8	Sand; (10YR7/6) yel	346.5
35			100	BG	BG	8	Gravelly Sand; (7.5YR5/8) strong brn	344.5
						6		
			65	BG	136	0	Sand; (10YR7/3) v. pale brn to (10YR6/8) brn yel	341.5
40						2		339.5
						38		

Boring 400–010

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4366.0000 E, –1557.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1030 on 10–16–97*	Surface Elevation: *379.50 feet msl*
Completed at *1310 on 10–17–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *47.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Sandy Gravel; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	338.5
			75	4	BG	1		Clayey Sand nith Silt & Gravel; (10YR7/1) lt gry, (10YR5/8) yel brn	338.7
						51		Silty Sand; (10YR5/8) yel brn, (10YR7/1) lt gry	337.8
						47		Clay & Silt, trace of Sand; (7.5YR6/8) rdsh yel	336
45			100	8	BG	98			
						153			
						0			
						0		T.D.= 47.0	332.5
50									
55									
60									
65									
70									
75									
80									

Boring 400-011

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4100.0000 E, -1505.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1350 on 07-27-97*	Surface Elevation: *378.50 feet msl*
Completed at *0955 on 08-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *50.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							Crushed limestone	
			100.0	1	30	0	Cby, silty, moist, stiff, lt olive brown (2.5Y5/6), (fill)	378.5
				-	-	-	(1.1-2.0 ft bgs)clay (65%)gravelly (35%),stiff,yellowish red (5YR4/6)FIL	
				-	-	-		
5								373.5
			100.0	1	27	0	Clay, silty, moist, firm to stiff, pale brown (10YR6/3) to brownish yellow (10YR6/8) to v pale brown (10YR7/3)	
				BG	27	0		
			100.0	BG	48	24	Clay, silty, med stiff, moist, olive yellow (2.5Y6/8), lt gray (2.5Y7/2) mottles	
				2	63	21		
10								368.5
			100.0	BG	79	2.4	Silt, clayey, to clay, silty, stiff, moist, olive yellow (2.5Y6/8), lt gray (2.5Y7/2) mottles	
				BG	53	3.4		
				BG	45	0 n	Clay, silty, med stiff, moist, yellowish brown (10YR5/8), v pale brown (10YR 7/31 and lt gray (10YR7/1) mottles, tr Mack (10YR2/1)	365
15			100.0	BG	1	3.2		
						1.7	(17.0-19.1 ft bgs interval) Cby, silty, moist, stiff, pale yellow (2.5Y7/3), olive yellow (2.5Y6/8) mottles	
			100.0	BG	25	0.0		
				2	43	0.0	Clayey gravel grads to slt/sd.Dense gry (10YR5/1)ylsh brn (10YR5/8)	359.4
20						5.2	Gavelly sand,poorly sorted ylsh brn (10YR5/8)no indication of g-water	358.5
				BG	23	5.5		
			100.0	BG	25	4.5		
			100.0	3	42	0 n	Clay,silty to sandy (5-10%)moist,stiff,rdsh yel (7.5YR6/8)	355
25						0.7	Sand (95%)well sorted,ang,qtz,tr gravel (1-3%)moist,dense,rdsh yel	353.6
			100.0	4	36	0.7	Clay,sandy,moist, stiff,brnsh yel (10YR6/6)gry (10YR6/1)	353
						1.1	Sand (95%),fn-v.fn,well sorted,dense,ylsh brn (10YR5/8)v.pal.brn (10YR5/8) (no indication of groundwater)	352
			100.0	4	67	0.3		351
						0.5	Sand,well sorted,suba,qtz (60%)silt (20-25%)clay (10%)trs grvl,subr;porly sorted;brn yel (10YR6/8)lt gry (10YR7/1)motld lower 1.0FT.	
30						0.0		349
			100.0	4	.88	0.0	Sandy gravel,moist,dense,rdsh yel (7.5YR6/8)	347.7
						0.0	Silty sand,strg brn (7.5YR5/8)gry (7.5YR7/1)motld	346.5
			100.0	2	.82	1.3	Sandy gravel;strng brn (7.5YR4/6)	345.8
						0.0	Silt;f.sand (40%)trs clay (10%)moist,firm,lt gray (7.5YR7/1)	344.9
35				1	4	8.2	Sand,poorly sorted,tr gravel (5%)moist,dense,yel (2.5YR7/6)	343.8
			100.0			4.3	Gravelly sand,yl brn (10YR5/8)to l.yl brn (10YR6/4)	343.5
				2	8	3.5	Clay (75%)sand (15%)tr silt/grvl;moist,stiff,lt ylsh brn (2.5Y6/3)	340.5
				4	3	0.3	Silty sand;trs clay/gravel,moist,dense,olive yel (2.5Y6/8)	340
40			100.0			0.0		338.5

Boring 400–011

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4100.0000 E, -5505.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1350 on 07-27-97*	Surface Elevation: *378.50 feet msl*
Completed at *0955 on 08-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *50.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	3.4			338.5
						1.1		Sandy gravel silt (10%)moist,dense,lt ylsh brn (2.5Y6/4)	337.5
			100.0	3	26	1.1		Gravelly sand strg brn (7.5YR5/8)w/white (7.5YR8/1)	336.5
						1.6		Clay:silt;fn sand (30%)moist,stiff,strg brn (7.5YR5/6)	335.5
			100.0	1	34	0.9		Silty sand moist strgbrn (7.5YR5/8)gry (7.5YR7/1)motld	
45						0.3			
						1.4			
			100.0	BG	2	2.6			
						0.5			330.5
				BG	BG	0.0		Silt;moist,firm,stng brn (7.5YR5/8)sum/white (7.5YR5/8)blk (7.5YR)	
			100.0			0.0			
50						0.0			328
								T.D. = *50.5* ft	
55									
60									
65									
70									
75									
80									

Boring 400-014

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4112.0000 E, -1684.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0930 on 11-01-97*	Surface Elevation: *379.50 feet msl*
Completed at *0905 on 11-3-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *NA feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			50	-	-	00 02 -		GRAVEL (50%)SAND (20%)CLAY (30%)DK RED (2.5YR4/6)MOIST FIRM	
5			100	BG	BG	05 74 72 74		SILT;GRN.GREY (10YR6/1)GRAD-PALE YEL (2.5Y7/3)-DK.YEL.BRN (10YR4/4)M.FRM	375.1
10			100	BG	BG	95 958 - 1625 1400 200		SILT/SL CLAYEYYEL BRN ((10YR5/4)MOLT PAL BRN. (10YR6/3)MOISTS M.STIFF	
15			100	04	08	275 - 310 180 45			
			40	BG	BG	90 - 300			
20			100	BG	50	135 40 375 - 200		SILT/SL.CLAY/W.SCAT.SAND 5% GVLY 10%GREY (10YR6/1)MOIST STIFF.	
25			88	BG	BG	30 150 175 10 20		SAND 80%M-F W/20% SILT;CLAY STRONG BRN (7.5YR5/3)MST.	355.5
								SANO 70%M-C,GRAVEL (20%)SILT:CLAY (10%)STG.BRN (7.5YR5/6)MOIST	354 353.5
								GRAVEL (40%)SBRD-SUBAG,SAND (20%)SILT:CLAY (40%)YEL. (10YR7/8)MOIST	
30			88	BG	BG	07 40 10 00		GRAVEL (60%)SAND (25%)M-C,SILT:CLAY (15%)STG.BRN)PINK (7.5YR7/3)	
			88	04	BG	32 50 10		SANO (50%)GRAVEL (40%)SBRD-SUBAG.SILT (10%)PINK (7.5YR7/3)TO STR.BRN	348.5
35			88	04	BG	18 - 40 110		GRAVEL (45%)SAND (45%)M-L,SILT:CLAY 10%RDSH.YEL (7.5YR6/8)LT.GRY MOTLING (7.5YR7/1)MOIST.	345
40			88	BG	BG	150 75		GRAVEL (60%)SAND (30%)M-C,SILT:CLAYVRN YEL	341.5

Page 1 of 2

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Boring 400-015

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4330.0000 E, -1756.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *0915 on 10-03-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 10-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *43.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100%	-	-	-	Crushed Limestone	
			75%	-	-	-		
						84	Sandy Gravel; (2.5YR4/6) dark red	
5			35%	BG	BE	32	Silt & Clay; (10Y6/1) greenish gray	
						155	Silt 6 Clay; (10YR6/1) gray, molted to (10YR5/3) yellowish brown	
10			85%	BG	BG	285		
						353		
						672		
						110		
			100%	2	BG	94		
15						53	Silt & Clay; (10YR5/4) yellowish brom, molted to (10YR6/2) light brownish gray	
			70%	BG	BG	100		
						55		
						124		
20			90%	BG	BG	153		
						199		
						182		358
						220	Sand & Clay with trace of Silt; (7.5YR5/9) strong brown, nith (7.5YR7/1) light gray molting	
25			100%	BG	BG			
						74		352.5
						65	Sand 6 Silt; (7.5YR5/8) strong brown, (7.5YR7/1) molted light gray	
			100%	BG	BG		Sandy Gravel; (7.5YR5/6) strong brown	
						4		
30						48		
			80%	4	BG	48	Clayey Sand, with trace of Gravel; (5YR5/8) yellowish red, (7.5YR5/8) molted strong brown, & (7.5YR7/1) light gray	348.5
						43		
						54	Silt (75%), Sand (20%), & Clay (5%); (10YR6/4) light yellowish brown, (10YR5/8) molted yellowish brown, & (10YR7/1) light gray	346.5
			100%	BG	BG	44		
35						37	Gravelly Sand; (10YR6/6) brownish yellow	344.5
						122	Sandy Gravel; (10YR6/8) brownish yellow, (10YR5/6) yellowish brown, & (7.5YR4/6) strong brown	343
			55%			33		
						159		
40						18		339.5

Boring 400–015

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4330.0000 E, -1756.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *0915 on 10-03-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 10-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *43.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	Elev.
	X	▮	100%			19 48		Clay & Silt with trace of Sand grading to Clay; (10YR5/8) yellowish brown, (10YR7/1) molted light gray	
								T.D.= 43.0	336
45									
50									
55									
60									
65									
70									
75									
80									

Boring 400–016

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4190.0000 E, -1745.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert/B. Bergeron*
Started at *1005 on 10-04-97*	Surface Elevation: *379.50 feet msl*
Completed at *1615 on 10-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete	
			30	4	24	0		Sandy Gravel: (2.5YR4/8) red, (7.5YR5/8) strong brown	
5						95		Silt; (5GY5/1) greenish gray to (10YR6/2) brownish gray	3745
			35	BG	32	9			
						25		Silt, that is Clayey; (10Y6/1) greenish gray, (10YR6/2) brownish gray, to (10YR5/6) yellowish brown	
10			50	BG	28	55			
						0			
						0			
			60	BG	32	0			
15						0			
						0			
			70	BG	8	0			
						0			
20						0		Silt, that is Clayey & has a trace of Sand; (7.5YR6/8) reddish yellow, (7.5YR6/1) molted to gray	
			80	BG	36	0			
						0			
						17		Clay (50%) & Silt (45%) with trace of Sand & Gravel; (10YR5/6) yellow- ish brown, (10YR7/1) mottled light gray	355.5
25			100	BG	BG	12			
						16			
						0			352
			05	BG	BG	0		Gravelly Sand; (7.5YR5/8) strong brown	
						0			
30						5		No Recovery	349.7 / 348.5
			100	2	BG	22		Clayey Sand; ((7.5YR6/8)reddish yellow, (7.5YR7/1)mottled light gray, & (2.5YR4/8) mottled red	
						23			
						0			
			100	BG	BG	23			
35						0			
						0		Gravelly Sand; (10YR6/6) brownish yellow	343.5
			05	2	150	0		Sand; (10YR7/6) yellow; at the bottom (7.5YR5/8) strong brown	342.5
						0		Clay & Gravel; tr Sand/Silt; (10YR6/1) gry	341.3
40									339.7

Boring 400-016

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4190.0000 E, -1745.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert/B. Bergeron*
Started at *1005 on 10-04-97*	Surface Elevation: *379.50 feet msl*
Completed at *1615 on 10-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.7 feet*

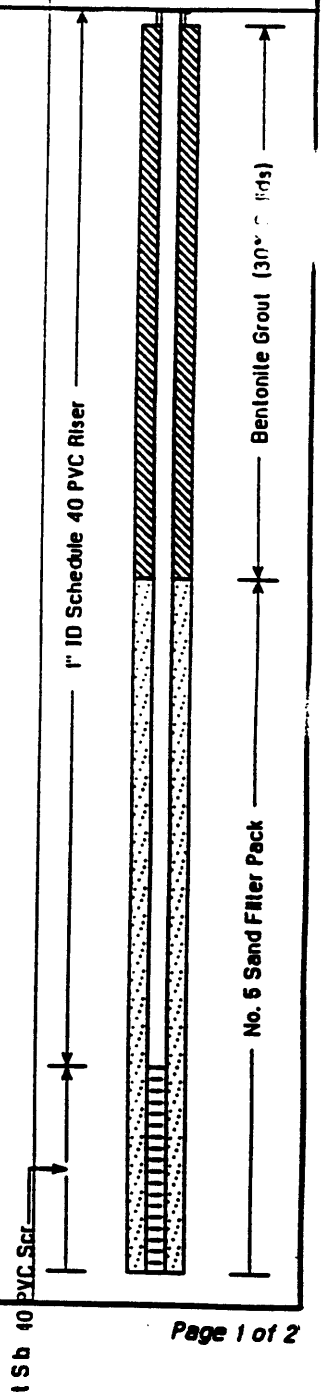
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV (ft-msl)
			25	BG	122	0		No Description	
	X		25	2	66	9.2		Clay & Silt with trace of Sand; (7.5YR5/8) strong brown, (10YR7/1) mottled light gray, & (10YR7/6) mottled yellow	337.5 -3387
45								No Recovery	
								T.D.= 44.7	
50									
55									
60									
65									
70									
75									
80									

Piezometer 400–017

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4344.0000 E, -1819.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1450 on 09-04-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-06-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.5 feet*
Geologist: *B. Bergeron*	Well Screen: *33.5 to 43 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				86	-	27		No Recovery	
5									
10									
15									
23									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 400–017

Project: *Paducah Gaseous Diffusion Plant Waq 6 RI*	Coordinates: *–4344.0000 E, –1819.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1450 on 09–04–97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09–06–97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.5 feet*
Geologist: *B. Bergeron*	Well Screen: *33.5 to 43 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)	WELL DIAGRAM
45								T.D.= 44.5 ft		1" ID x 0.010" Slot Sch 40 PVC Scr; 1" ID Schedule 40 PVC Sump
50										
55										
60										
65										
70										
75										
80										

Boring 400-018

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4263.0000 E, -1795.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0945 on 10-01-97*	Surface Elevation: *379.00 feet msl*
Completed at *1530 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *43.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Concrete Slab	
			70	4	BG	0		Sandy Gravel; (2.5YR4/6) dark red	377
						4		Silt & Clay; (10YR4/6) dark yellowish brown	378.2
5						15		Silt with some Clay; (10Y5/1) greenish gray	
			90	BG	BG	25			
						8			
						18			
10			00	BG	BG	5		Silt & Clay; (10YR5/4) yellowish brown	369.5
						20			
						6			
			00	BG	IBG	6			
						8			
15						2			
			85	BG	45	1		Clay: (10YR5/3) yellowish brown, (10YR6/1) molted gray, & (10YR2/1) black	363
						0			
						7			360.5
20			100	BG	BG	5			
						4			
						10			
			100	BG	BG	21		Silt & Sand with trace of Clay; (10YR6/6) brownish yellow, with minor (10YR7/1) light gray, & (10YR5/6) yellowish brown	355.6
25						19			
						5		Gravel (45%), Sand (45%), & Clay (10%); (7.5YR5/6) strong brown	353.5
			100	BG	BG	3			
						6			
						0		Clayey Sand; (10YR5/6) yellowish brown, (10YR7/2) light gray	350
30			85	BG	BG	0		Silty Sand; (7.5YR7/2) pinkish gray	349
						0			
						0		Gravelly Sand; (7.5YR5/3) strong brown	346.5
			70	BG	BG	0			
35						0			
						3			
			85	BG	BG	0			
						0			
40						0		Sandy Gravel; (10YR5/8) strong brown	339.5

Boring 400-018

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4263.0000 E, -1795.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0945 on 10-01-97*	Surface Elevation: *379.00 feet msl*
Completed at *1530 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *43.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		100	4	BG	0		Clay & Silt; (10YR5/8) yellowish brown, molted (10YR7/1) light gray	336.0
						0			336
								T.D.= 43.0	
45									
50									
55									
60									
65									
70									
75									
80									

Boring 400–019

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4235.0000 E, –1505.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1555 on 11–21–97*	Surface Elevation: *380.00 feet msl*
Completed at *0820 on 11–22–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	ID (ppm)	RAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			–	BG	BG	0		Clayey Gravel w/Sand; subang; prly sorted chert; med grn: moist; (2.5YR4/8) dk rd	
5			–	BG	BG	0			
10			–	BG	BG	0		Silt, slightly Clayev; Manganese Mineralization; v dry, hard; (10YR6/3) p brn, mtlg & laminae (10YR5/8) yel brn	371.3
								No Recovery	369
15			0	–	–	–			
20			–	BG	BG	4		Silt, slightly Clayey; Manganese Mineralization; dry, semi-hard; (10YR6/2) lt brn gry; (10YR6/8) brn yel mtlg	364
								Gravelly Sand, w/Silt; fn grn quartz; ang/subrnd; (10YR6/4) lt yel brn	369
25			–	BG	BG	5		Gravelly Sand, w/Silt; fn/med grn quartz; subrnd/subang (Max 40MM); semi-dry; (10YR5/4) yel brn	
								Same as above, but (10YR6/6) brn yel	
30			–	BG	BG	0		Silt & Clay, w/Sand & Gravel; fn grn; (10YR6/6) brn yel, (10YR7/1) lt gry	354
								Sandy Gravel, w/Silt & Clay; subrnd/subang (Max 30MM); fn/med grn quartz; (7.5YR5/8) strg brn, (5YR4/6) yel rd, (7.5YR6/1) gry mtlg	351.2
35			–	–	–	–			
40			–	BG	BG	3		Gravelly Sand; subrnd/subang; (7.5YR5/8) strg brn, (10YR7/6) yel	344
								Gravelly Sand; med/crs grn; subang/rnd chert 6 quartz; (7.5YR5/6) strg brn	

Boring 400-019

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4235.0000 E, -1505.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1555 on 11-21-97*	Surface Elevation: *380.00 feet msl*
Completed at *0820 on 11-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-	BG	BG	0		Sand, tr Silt & Clay; slightly micaceous; (7.5YR5/6) strg brn, (7.5YR6/1) mtld gry	338.7
						0		Gravel & Clay, w/ Silt & Sand; ang/subrnd chert (Max 20MM); crs grn; (7.5YR5/6) strg brn, (10YR5/1) gry matrix around Gravel	337.3
			-	BG	BE	7		Sand; fn/med grn quartz: (7.5YR5/8) strg brn, (10YR6/8) brn yel, (10YR6/1) gry, mtlg slightly micaceous	335.2
						10		T.D.= 48.0	332
50									
55									
60									
65									
70									
75									
80									

Boring 400-020

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4165.0000 E, -1620.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *0900 on 11-22-97*	Surface Elevation: *380.00 feet msl*
Completed at *1510 on 11-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			23	BG	BG	-		Clayey Gravel, w/Sand; subrnd/subang chert: med grn; (2.5YR4/8) dk rd	
5			33	BG	BG	-			
						0			
			95	BG	bg	0 0 - 0 0	*	Silt, slightly Clayey; (10YR6/4) lt yel brn, (10YR7/2) mtld lt gry	372
10									
			-	-	-	-		No Recovery	368
15									
			98	BG	BG	0 0 - 0 0	*	Silt, slightly Clayey; (10YR5/6) yel brn, (10YR6/1) mtld gry	364
20			85	BG	BG	0 4 - 3 1		Clay, w/Silt & Sand, tr fn grn; (10YR7/6) yel, (10YR5/6) yel brn, (10YR6/1) mtld gry	360
								Silt, w/Clay, Gravel, & Sand; ang/subrnd chert; fn/med grn; (10YR5/8) yel brn, (10YR6/1) mtld gry, (7.5YR5/8) strg brn	357.2
25			0	-	-	-		No Recovery	358
30			100	BG	BG	2 4 - 8 13		Gravelly Sand, w/ Clay & Silt: med/fn grn quartz; rnd/subang quartz, chert; (7.5YR4/6) strg brn, (10YR5/6) yel brn, (10YR6/1) gry (28')	352
35			83	BG	BG	4 6 - 2 4		Clay, w/ Silt, Sand & Gravel; fn grn; rnd/subang chert (Max15MM); dry; (7.5YR5/6) strg brn, (10YR5/6) brn yel, (10YR7/1) gry	348
						2		Silty Sand; fn grn; (10YR7/6) yel	344
			83	BG	BG	4 - 5 2		Gravel & Sand, w/ Clay & Silt; rnd/subang chert; med/crs grn quartz; (7.5YR5/8) strg brn, (10YR6/8) mtld brn yel	342.7
40									340

Boring 400-020

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4165.0000 E, -1620.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *0900 on 11-22-97*	Surface Elevation: *380.00 feet msl*
Completed at *1510 on 11-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

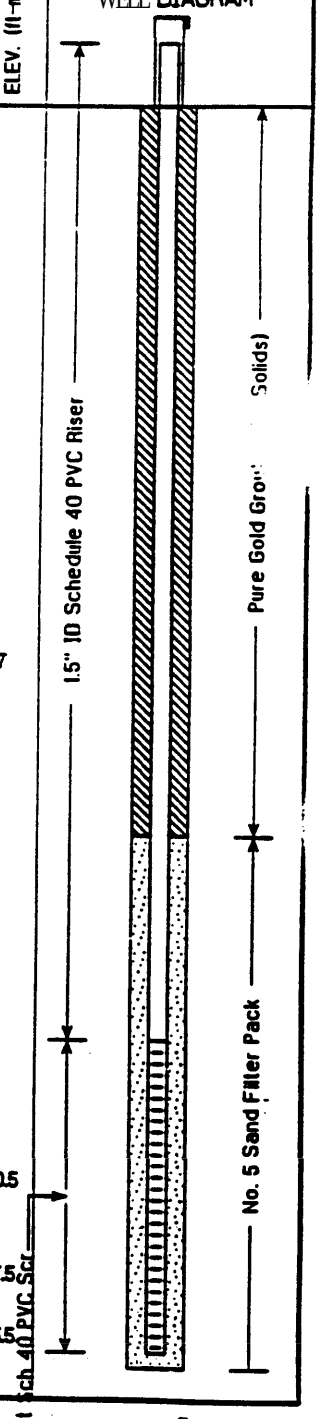
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		88	BG	BG	18 26 - 7 0		Gravel 6 Clay, w/ Silt 6 Sand; ang/subrnd (Max 30MM); Clay Matrix around Gravel; (7.5YR5/8) strg brn, (7.5YR5/6) gry matrix	340
45	X		-	BG	BG	8 10 - 25 20		Clay, w/ Silt 6 Sand; fn grn micaceous; (7.5YR5/8) strg brn, (7.5YR6/1) mtld gry	336
								T.D.= 48.0	
50									
55									
60									
65									
70									
75									
80									

Piezometer 400-021

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4565.0000 E, -1244.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *0750 on 07-22-97*	TOC Elevation: *NA feet msl*
Completed at *1320 on 08-28-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibraprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *29.5 to 39.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5			-	1	67			Clay (100%), v sl silty, *dry* stiff, upper 1 ft rooty and organic rich. It reddish brw (5YR6/4), mottled lt gray (5YR7/1) to Pinkish gray (5YR7/2), abundant manganese staining at 6.5-7 ft bgs	
10								Clay (100%), stiff, plastic, reddish ylw (5YR7/6)	
15			-	3	37			Clay (95%); tr silt/gravel; reddish ylw (5YR7/6), mottled ylwbh red (5YR5/8) and reddish ylw (5YR7/6)	
20			-	1	31	4096		Gravel, fn to crs, subrnd to rnd (75%); sand, fn to med grn (20%); tr silt: ylwish red (5YR4/6)	357
25								Gravel, fn to med (50%); sand (50%); tr clay; pinkish gray (5YR6/2)	
30			-	86	16	85 490 356 428		Gravel, med to fn grn (60%), sand, fn to med grn (30%); clay (10%), ylwish red (5YR4/6) . Gravel (75%); sand (25%)	
35						100 395 143 47		Sand, fn to med grn (75%); gravel, fn to crs (20%); tr clay/silt; reddish ylw (7.5YR7/8) to strong brw (7.5YR5/8) Gravel, fn to crs, subrnd to rnd (75%); sand, fn to med grn (25%); tr clay; reddish ylw (5YR6/6)	340.5 337.5
40			-	2	64	63		Silt (75%); clay (25%); stiff, ylwish red (5YR6/6), mottled pink (5YR7/6 to 5YR7/4)	335.5

WELL DIAGRAM



Piezometer 400-021

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4565.0000 E, -1244.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *0750 on 07-22-97*	TOC Elevation: *NA feet msl*
Completed at *1320 on 08-28-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *29.5 to 39.5 feet*

DEPTH IN FEET	GEOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
	X					60 44		T.D. = 41.0 ft	333.5	
45										
50										
55										
60										
65										
70										
75										
80										

Piezometer 400-022

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4222.0000 E, -112.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.50 feet msl*
Started at *0835 on 09-16-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-22-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibracorde*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *43.8 feet*
Geologist: *B. Bergeron*	Well Screen: *31 to 40.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			67.5	BG 4 BG	BG BG BG	0 0 0	Silt & Sand: fn to med grn; w/ gravel, subang/subrnd, chert: dry, red (2.5Yr4/8), mottled rd brn	378.5
				- 4	- BG	- 0	Silt/clay (85%); gravel, med/crs, subang/subrnd, chert (15%); dry, red (2.5YR4/8), mottled reddish brw (5YR4/3)	374.8 373.5 373.1
5			60	4 BG	BG 95	0 0	No recovery	371.1
				- BG	- BG	- 0	Silt/clay (85%); gravel (15%); same as above	369.5
10			55	4 -	BG -	0 -	Clay, silty (90%); tr gravel, fn/med, rnd; mst, yel red (5YR4/6)	367.3
				- BG	- BG	- 0	No recovery	365.5
			77.5	BG BG	12 23	0 0	Silt, clayey; brn yel (10YR6/6), mtld blk & p rd (2.5YR6/1)	362.4
15				- BG	- 3	- 0	No recovery	361.5
			65	BG BG	15 27	0 0	Silt, clayey; v dk gry brn (10YR3/2)	358.9
20				- 3	- BG	- 0	No recovery	357.5
			100	36 36	BG 4	0 0	Silt, clayey; tr gravel, fn, cherty; tr sand, v fn grn; mst, yel brn (10YR5/6), mtld gry (10YR6/1)	354.5
25			90	3 3	4 36	0 0	Clay, w/Sand & tr Gravel: fn grn; fn/cobble, subang/rnd; mst, yel brn (10YR5/6), mtld gry (10YR6/1) & rd (2.5YR5/8)	353.5 352.5
			100	BG 3	BG BG	0 0	Silty Sand, v fn/med grn; tr gravel, fn grn/rnded; wet, mod sorted, rd yel (5YR6/8)	
			85	16 BG	BG BG	0 0	Gravelly Sand, w/ Clay & tr Silt; v fn/crs; fn/med grn; rd yel (5YR6/8)	348.5
30			100	BG 3	BG 16	0 0	Clayey Sand, w/ Gravel & tr Silt; fn/med grn, prly sorted; subrnd/suba chert; brn (7.5YR6/4), mtld wh (7.5YR8/1), blk (2.5N)	348.4 345
			15	3 86	BG BG	0 0	Gravelly Sand, w/ Silt/Clay; v fn/fn grn;subrnd/subang, fn/med; rd yel (7.5YR6/8)	343.5
35			10	3 86	18 BG	0 0	Silty Sand, w/ Clay & tr Gravel;v fn/fn, mod sort; fn/med, subang;mst; lt gry (7.5YR7/1)	
			75	BG BG	BG BG	0 0	Gravelly Sand, v fn/med grn, mod sort; fn/rnd; wet, yel (10YR7/6)	
40			80	86 86	BG BG	0 0		

WELL DIAGRAM

1" ID Schedule 40 PVC Riser

No. 5 Sand Filter Pack

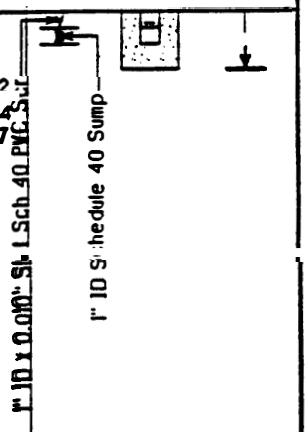
' Slot Sch 40 PVC Scr

Piezometer 400-022

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4222.0000 E, -1112.0000 N
Location: Paducah, KY	Surface Elevation: 377.50 feet msl
Started at: 0335 on 09-16-97	TOC Elevation: NA feet msl
Completed at: 1500 on 09-22-97	Depth to Groundwater: NA feet TOC Measured: NA
Drilling Method: Vibroprobe	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 43.8 feet
Geologist: J. Bergeron	Well Screen: 31 to 40.5 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	SURFACE SAMPLE	Recovery	RAD/Alpha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		90	BG 3	BG BG	0 0		Gravelly Sand, w/ Clay/Silt: v fn/crs, prly sorted: fn/crs, chert, subrnd/subang: v mst/sat: strg brn (7.5YR5/8)	335.2
	X		90	BG 3	BG BG	0 0		Clayey Sand, w/ Silt & gravel: fn/med, chert, subrnd: v mst/wet: brn (7.5YR5/4)	334.4
45								Clay, w/ Silt & Sand: v fn grn: mst, tight: strg brn (7.5YR5/8)	337
								T.D.= 43.8 ft	
50									
55									
60									
65									
70									
75									
80									

WELL DIAGRAM

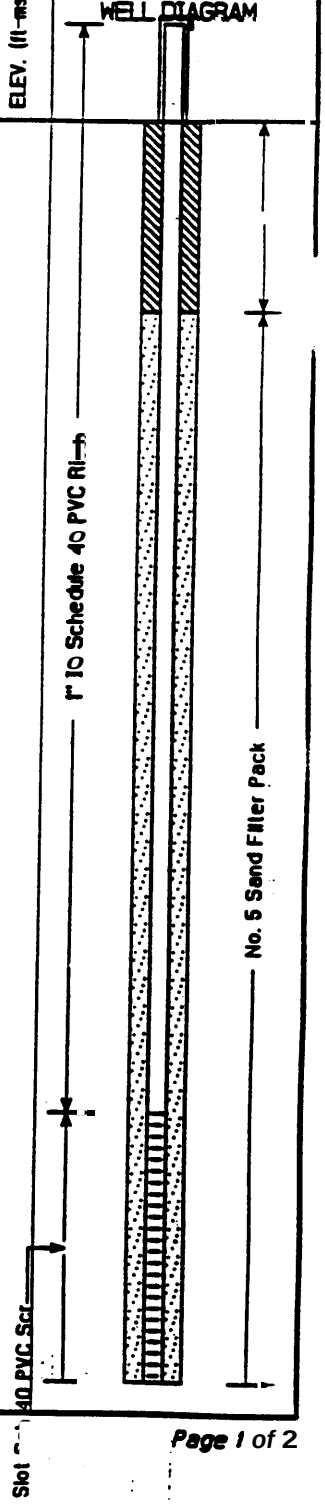


Piezometer **400–025**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4052.0000 E, –1484.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.00 feet msl*
Started at *1310 on 07–16–97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09–06–97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Direct Push Technology*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.4 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *31.4 to 40.9 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
								No Recovery	
5									
10									
15									
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 400-025

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4052.0000 E, -1484.0000 N
Location: Paducah, KY	Surface Elevation: 378.00 feet msl
Started: 1310 on 07-16-97	TOC Elevation: NA feet msl
Completed at 1500 on 09-06-97	Depth to Groundwater: NA feet TOC Measured: NA
Drilling Method: Direct Push Technology	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 41.4 feet
Geologist: D. Doyle/B. Bergeron	Well Screen: 31.4 to 40.9 feet

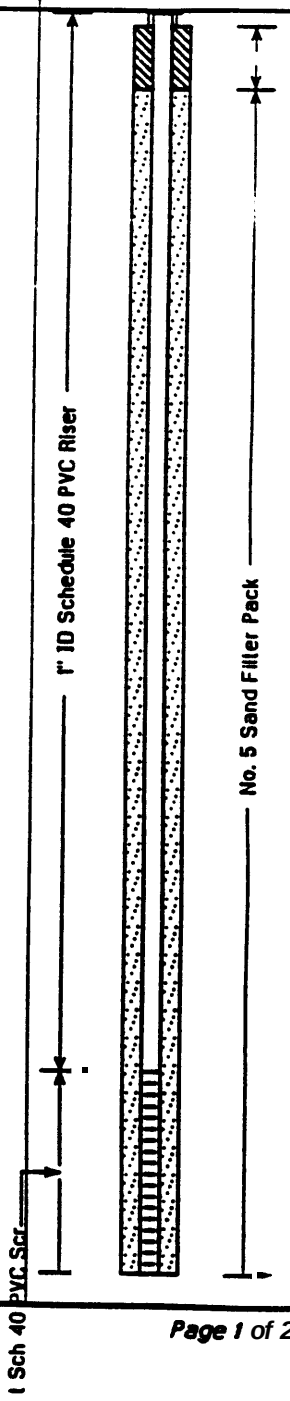
DEPTH IN FEET	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL
							T.D. = 41.4 ft		1" ID x 0.010" Slot Sch 40 PVC Scr; 1" ID Schedule 40 PVC Sump
45									
50									
55									
60									
65									
70									
75									
80									

Piezometer 400-026

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4100.0000 E, -1553.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1215 on 07-29-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-06-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibraprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.5 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *33.5 to 43.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Recovery	
5									
10									
15									
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 400-026

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4100.0000 E, -1553.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1215 on 07-29-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-06-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.5 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *33.5 to 43.0 feet*

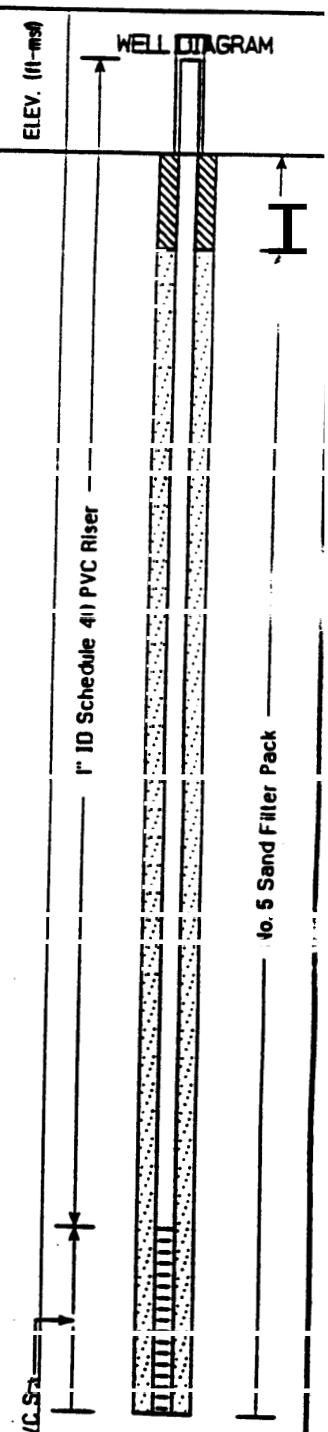
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
45								T.D. = 44.5 ft		1" ID x 0.010" Slot Sch 40 PVC Scr; 1" ID Schedule 40 PVC Sump
50										
55										
60										
65										
70										
75										
80										

Piezometer 400-027

Project: *Paducah Gaseous Diffusion Plant Waq 6 RI*	Coordinates: *-3965.0000 E, -1798.0000 N*
Location: *Paducah, KY*	Surface Elevation: *379.00 feet msl*
Started at *0854 on 09-09-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.0 feet*
Geologist: *B. Bergeron*	Well Screen: *34 to 43.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Recovery	
5									
10									
15									
20									
25									
30									
35									
40									

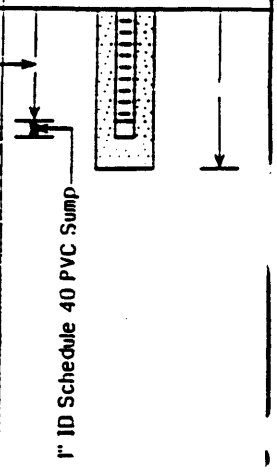
WELL DIAGRAM



Piezometer 400-027

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3965.0000 E, -1798.0000 N*
Location: *Paducah, KY*	Surface Elevation: *379.00 feet msl*
Started at *0854 on 09-09-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *45.0 feet*
Geologist: *B. Bergeron*	Well Screen: *34 to 43.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	Lithologic	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
45								T.D. = 45.0 ft		
50										
55										
60										
65										
70										
75										
80										



Boring **400-030**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4465.0000 E, -1661.0000 N*
Location: *Paducah, KY*	Geologist: *B. Bergeron*
Started at *0741 on 09-25-97*	Surface Elevation: *376.00 feet msl*
Completed at *1500 on 09-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.9 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Recovery	
5									
				-	-	-			
10				BG	BG	0		Silt (65%); clay (35%); damp, reddish ylw (7.5Yr7/8), mottled lt gray (7.5YR7/1)	
			66.3	BG	BG	0			
				-	-	-			
				-	-	-		No recovery	-303.4
15				BG	BG	0		Silt (65%); clay (35%); same as above	-362
			100.0	BG	BG	0			
				3	BG	0			
				BG	BG	0			
								No recovery	-358
20									
25									
30									
35									
40									

Boring **400-030**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4465.0000 E, -1661.0000 N*
Location: *Paducah, KY*	Geologist: *B. Bergeron*
Started at *0741 on 09-25-97*	Surface Elevation: *376.00 feet msl*
Completed at *1500 on 09-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *42.9 feet*

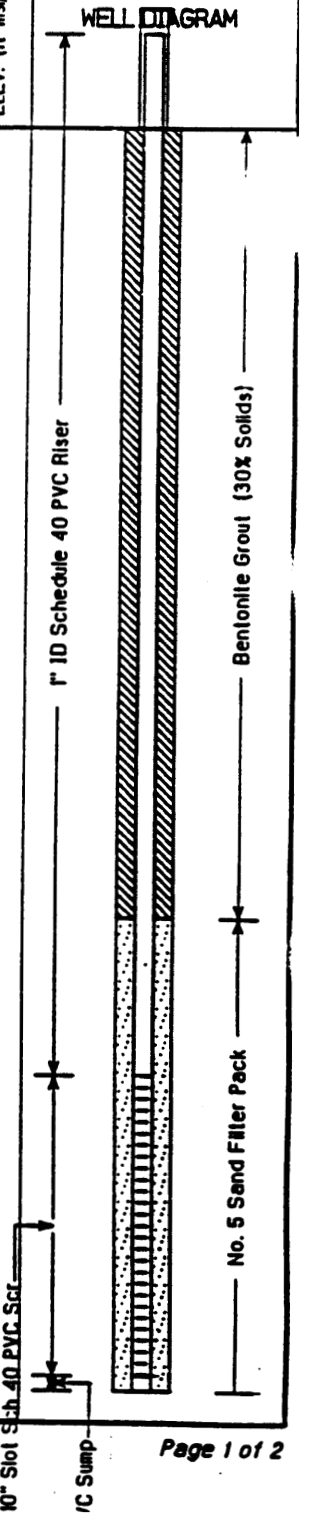
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								T.D. = 42.8 ft	
45									
50									
55									
60									
65									
70									
75									
80									

Piezometer 400-031

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4398.0000 E, -1575.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1343 on 09-22-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-25-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.3 feet*
Geologist: *B. Bergeron*	Well Screen: *30 to 39.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No recovery	
5									
10									
15									
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer 400-031

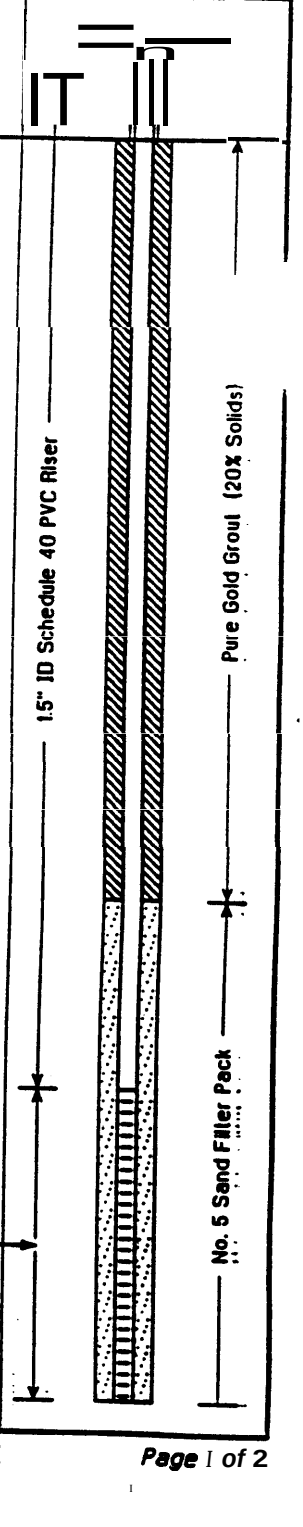
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4398.0000 E, -1575.0000 N*
Location: *Paducah, KY*	Surface Elevation: *378.50 feet msl*
Started at *1343 on 09-22-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-25-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.3 feet*
Geologist: *B. Bergeron*	Well Screen: *30 to 39.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								T.D. = 41.3 ft		
45										
50										
55										
60										
65										
70										
75										
80										

Piezometer 400-033

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-44450.0000 E, -1280.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.50 feet msl*
Started at *0745 on 07-25-97*	TOC Elevation: *NA feet msl*
Completed at *1330 on 08-26-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	HNU	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			42.9	2	16	21, 67		Clay (100%), some gravel, fn to crs, cherty; tr silt; stiff; abundant roots in upper portion, dry, dk greenish gray (5GY4/1) to yiwish red (5YR5/8)	
5									
10								Clay (100%); tr gravel	
			100.0	1	34	9.6		Clay (95%); tr silt	
15						27, 76			
						19		Gravel, fn to med grn, rnd to subrnd, cherty (60%); clay (40%); tr sand; crumbly, dry, yiwish red (5YR4/6)	357.5
20						24			
			100.0	1	45	142			
25						73			
						100		Sand, fn to med grn (80%); gravel, fn to crs grn, subrnd to rnd (20%); si damp, lt reddish brw (5YR6/4), mottled pinkish gray (5YR7/2)	350.5 / 349.5
						6		Gravel, same as 18-25 ft bgs interval	347.5
30								Silt (75%), clay (25%), tr gravel, stiff, crumbly, si moist, lt reddish brw (5YR6/3)	345
			100.0	1	85	171		Gravel, same as 18-25 ft bgs interval	
								Sand, fn to med grn (80%); silt (20%); tr gravel; si moist, pink (5YR7/3) to pinkish gray (5YR7/2), mottled yiwish red (5YR4/6)	342.5
35						29, 40, 2.9, 58			
40			100.0	2	41	17		Gravel, fn to crs grn, subrnd to rnd (75%); yiwish red (5YR4/6)	337 / 336
								Clay (50%); silt (50%), tr sand, fn grn; stiff, mottled reddish yiw (5YR7/6) to dk reddish gray (5YR4/2)	



Piezometer 400-033

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4450.0000 E, -1280.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.50 feet msl*
Started at *0745 on 07-25-97*	TOC Elevation: *NA feet msl*
Completed at *1330 on 08-26-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

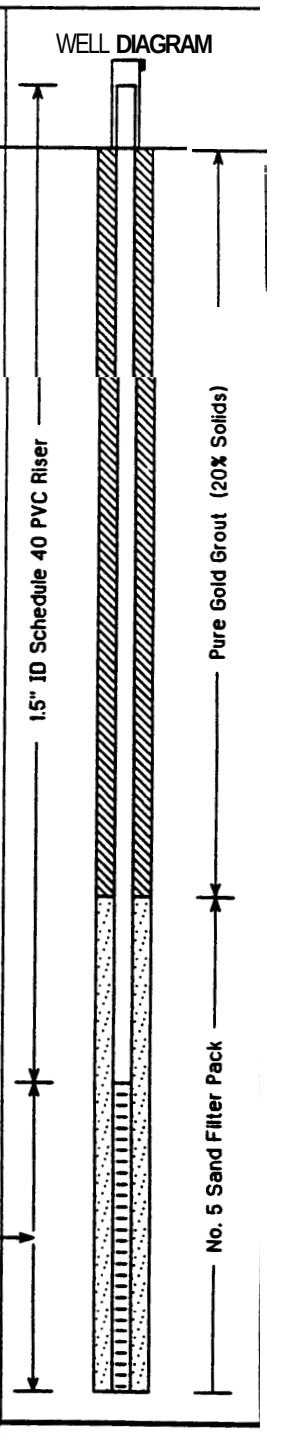
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
	X					32		T.D. = 41.0 ft	334.5	
45										
50										
55										
60										
65										
70										
75										
80										

Monitoring Well 400-033

Protect: *Paducah Gaseous Diffusion Plant* Wag 6 R I	Coordinates: *-4450.0000 E, -1280.0000 N*
Location: *Paducah*, KY	surface Elevation: *375.50 feet msl*
Started at 0745 *on 07-25-97*	TOC Elevation: *NA feet msl*
Completed at *1330 on* 08-26-97	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			42.9	2	16	21, 67		Clay (100%), some gravel, fn to crs, cherty; tr silt; stiff; abundant roots in upper portion, dry, dk greenish gray (5GY4/1) to ylwish red (5YR5/8)	
5								Clay (100%); tr gravel	
10			100.0	1	34	9.6		Clay (95%); tr silt	
15						27, 76			
						19		Gravel. fn to med grn, rnd to subrnd, cherty (60%); clay (40%); tr sand; crumbly, dry, ylwish red (5YR4/6)	357.5
20			100.0	1	45	24, 142			
25						73			350.5
						100		Sand, fn to med grn (80%); gravel, fn to crs grn, subrnd to rnd (20%); sl damp, lt reddish brw (5YR6/4), mottled pinkish gray (5YR7/2)	349.5
						6		Gravel, same as 18-25 ft bgs interval	347.5
30								Silt (75%), clay (25%), tr gravel, stiff, crumbly, sl moist, lt reddish brw (5YR6/3)	345
			100.0	1	85	71		Gravel, same as 18-25 ft bgs interval	
								Sand, fn to med grn (80%); silt (20%); tr gravel; sl moist, pink (5YR7/3) to pinkish gray (5YR7/2), mottled ylwish red (5YR4/6)	342.5
35						9, 40, 2.9, 58			
								Gravel, fn to crs grn, subrnd to rnd (75%); ylwish red (5YR4/6)	337
40			100.0	2	41	17			336
								Clay (50%); silt (50%), tr sand, fn grn; stiff, mottled reddish ylw (5YR7/6) to dk reddish gray (5YR4/2)	

WELL DIAGRAM



Monitoring Well 400-033

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4450.0000 E, -1280.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.50 feet msl*
Started at *0745 on 07-25-97*	TOC Elevation: *NA feet msl*
Completed at *1330 on 08-26-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.0 feet*
Geologist: *D. Doyle/R. McComb*	Well Screen: *30 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
	X					32		T.D. = 41.0 ft	334.5	
45										
50										
55										
60										
65										
70										
75										
80										

Boring 400-034

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1079.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0750 on 07-23-97*	Surface Elevation: *374.50 feet msl*
Completed at *1130 on 11-13-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *1310 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	0		For lithologic descriptions see log for Monitoring Well 400-208	
5									
10									
15									
20									
25									
30									
35									
40									

Boring 400-034

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1079.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0750 on 07-23-97*	Surface Elevation: *374.50 feet msl*
Completed at *1130 on 11-13-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *131.0 feet*

DEPTH IN FEET	LITHOLOG C SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45									
50									
55									
60		-		-	-	-			
65		-		-	-	-			
70		-		-	-	-			
75		-		-	-	-			
80									

Boring 400-034

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1079.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0750 on 07-23-97*	Surface Elevation: *374.50 feet msl*
Completed at *1130 on 11-13-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *1310 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85				-	-	-			
90									
95				-	-	-			
100				-	-	-			
105				BG	BG	-			
110				BG	BG	-			
115				BG	BG	-			
120									

Boring 400-034

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1079.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0750 on 07-23-97*	Surface Elevation: *374.50 feet msl*
Completed at *1130 on 11-13-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *131.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		▬		BG	BG	-			
125		▬		BG	BG	-			
130									
								T.D. = 131.0 ft	
135									
140									
145									
150									
155									
160									

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Boring 400-035

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1295.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0845 on 10-09-97*	Surface Elevation: *377.00 feet msl*
Completed at *1600 on 11-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-	BG	3	-		**Limestone Gravel**	376
								Silt & Clay, moist, firm, & stiff: (10YR5/3) moist brn	
5									
10									
15									
20									
25									
30									
								Silt, Clay, & Sand; Sand fn *coarse*, poorly sorted, subang; (10YR5/6) yel brn	
35									
40									337

Boring 400-035

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1295.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0845 on 10-09-97*	Surface Elevation: *377.00 feet msl*
Completed at *1800 on 11-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	IGIC DESCRIPTION	ELEV. (ft-msl)
								Sand Silt, & Gravel, *with* traces of Clay (11-20%); poorly sorted, rounded; (2.5Y6/1) gry	337 338
								Silt & Clay; (10YR5/3) brn	
45									
50									
55									
								Gravel chert (1/8-1/2 inch), rounded, priy sorted, traces of Silt & Clay	318
60				BG	15	-			
65				1	15	-			
70				1	30	-			
75				BG	60	-			
80									

Boring 400-035

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1295.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0845 on 10-09-97*	Surface Elevation: *377.00 feet msl*
Completed at *1600 on 11-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	
				BG	15	-		Gravel chert (1/8-1/2'), rounded, prly sorted, tr of Silt & Clay	
85				2	30	-			
								Silt & Clay with trace of Sand, fn to crs, poorly sorted, subang; (10YR5/6) yel brn	290
90									
								Clay (black), with trace of Sand, fn to med, subang, firm & moist	285
95									
								Silt & Clay with trace of Sand (21-25%), fn to med, subang; (5Y5/3) olive	280
100				3	80	-			
								Clay (black). with traces of Sand, fn to med, subang, firm & moist	274
105				3	40	-			
110				2	50	-			
115				BG	2	-			
120									

Boring 400-035

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1295.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0845 on 10-09-97*	Surface Elevation: *377.00 feet msl*
Completed at *1600 on 11-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				1	S	-			
								Silt & Sand, v fn. Sand blk, ang, quartz, well sorted	255
125				1	31	-		No Description Available	252
130				1	BG	-			
135				2	22	-			24
								T.D.= 136.0	
140									
145									
150									
155									
160									

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Boring 400-036

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4409.0000 E, -1607.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R.McComb*
Started at *1300 on 08-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1425 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *142.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0	Clayey Gravel, (10YR6/6) brownish yellow	377.5
							Gravel and Clay; (2.5YR5/6) red, (2.5YR5/1) black	
			65%	BG	81	-		
5						3		372.5
						54	Clay (75%), Gravel (25%); (5P7/1) light bluish gray, (2.5YR5/6) clay	
						85		
						344	Clay (80%) stiff, Silt (20%); (10YR8/2) very pale brown to (10YR6/6) brownish yellow	
						343		
10						439		
						70		
			-	BG	53	4	Clay (80%), Silt (20%); (10YR5/4) yel brn, (10YR7/2) lt gry	
						140		
						690		
						848		
15						384		
						130		
						154		
						443		
						90		
20						45		
						1634		
			-	BG	43	1262		
						1622		
						1490	Gravelly Sand; (2.5YR5/8) red to (7.5YR6/8)	355
25						493		
						989	Clayey Gravel; (2.5YR5/8)red, (7.5YR5/8) strg brn, (7.5YR7/1) lt gry	353
						1133	Clayey Gravel: (10YR5/8) yellowish brown	
						435		
						811		
30						558		348.5
						1019	Silt (80%), Sand (20%); (10YR6/6) brn yel, (10YR8/2) v p brn	
			-	BG	32	498		346.5
						1238	Silty Sand; (10YR6/6) brownish ydow	
						2390		
35						1132		
						1080		342.5
						1273	Sandy Gravel; (10YR6/2) light brownish gray	341.5
						442	Gravelly Sand	
						648		339.5
40						537	Silty Sand; (10YR6/6) brownish yellow	

Boring **400-036**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4409.0000 E, -1607.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R.McComb*
Started at *1300 on 08-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1425 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *142.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						517			337.5
			-	BG	38	9511		Silt and Clay; (5YR5/8) yellowish red to (5YR7/1) light gray	337
						53		Silt W/Clay	
						51			
45						86			
						123			
						118			331.5
						0		Silty Sand; (10YR6/8) brn ycl, molted to (10YR7/1) lt gry	
						22			
50						31			
			-	1	34	18			
						30			
						20			324.5
						88		Sand, medium/coarse grains	323
55						49		Silt (75%) Clay (25%); (10YR6/8) brownish yellow	
						71			
						6			320.5
						22		Silty Sand; (5YR6/8) reddish yellow	319
60			80%	2	21			Sand, med/crs grains: (10YR5/8) yellowish brown	
						12			
						137			
						134			
						319			
									314.5
			70%	BG	5	-		Gravelly Sand; (2YR5/8) red	
65						222			
						161			311.5
						128		Gravel and Sand; (10YR5/8) yellowish brown	
						392			
			80%	1	BG	-			
70						102			
						247			
						229			308.5
								Gravelly Sand; (10YR5/8) yellowish brown	
			100%	BG	22	-			
75									
									301.5
						82		Gravel, fn/crs grn, subang/subrnd; sand med/crs, subang/subrnd, qutz & chert sand; tr clay/silt; (10YR4/4) dk yel brn	
						530			300
80			90	BG	8	206			

Boring 400-036

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4409.0000 E, -1607.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R.McComb*
Started at *1300 on 08-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1425 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *142.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						413		Sand med/crs, qutz, chert sand; Gravel fn/crs subang/subrnd, cherty tr silt & clay; (10YR5/8) yel brn	
						444			
						07			
						368			
85			-	BG	28	350			
						304			
						386			291.5
						-		Sand med/crs quartz, chert,tr fn pebbles,mst tr mica (10YR6/8) brn yel	
						50			290
90				BG	18	40		Gravelly Sand; fn/crs; up to 2" subing/subnd; Sand, crs, quartz & cherty, mst (10YR5/6) yel brn; Clay at base mst	
						-			
						28			
						25			283.5
						20		Clay (100%), firm hard motled, (10YR6/3) p brn, (10YR7/8) p brn, (10YR7/8) yel apppears biotcated, same silt (10YR4/4) dk yel brn	
						71			
95				BG	35	4.9			
						-			
						1.9			
						3			
						18			
						2			
100				2	57	11			
						-			278.5
						44		Silt (75%) clay (25%), trace of sand: (5Y6/6) olive yel	
						48			
						33			
				4	31	6		Clay (60%) silt @ (30%) sand (10%); (5YR5/8) yel rd, (2.5Y5/6) lt oliv brn to (2.5Y7/4)p yel & (10B5/1)blu gry	275.5
105						-			
						22			
						24			
						11		Silty-sand; (2.5Y7/2) lt gry. (2.5Y6/6) olv yel (10R8/3) pink	272
						6			
						1			
						3			269
110				BG	IBG	13		Clay (10B7/1) lt blu gry	268.5
						-		Silty Sand; (10R4/8) red, (10R6/6) lt red	267.5
						0			
				24	1	14		Sand and Silt (10YR7/3) v pale brn (10YR7/8) yel	
						0			
						3			
115						0		Clay (10B4/1) dk blu gry	264
						5		Clay: (5GY4/1) dk grn gry (10GY6/1) SILT LAM ODOR	
						8			
								Clay w/ Silt; (5GY4/1) dk grn gry (10GY6/1) grn gry	
				BG	66	-			
20						7			
						10			

Boring 400-036

Protect: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4409.0000 E, -1607.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R.McComb*
Started at *1300 on 09-09-97*	Surface Elevation: *378.50 feet msl*
Completed at *1425 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *142.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						14			
						14			256.5
								Silty Sand (10GY6/1) grn gry	
125			60	3	34	2			
						14			
						2			
						8			
						13			
			-	BG	15	20		Silty Sand, (5GY5/1) grn gry (10Y2.5/1) grn blk	
130						11			
						30			
						20			
						20			
						61			
135			-	3	50	-			243.5
						01		Clay (100%) (N3/1) dk grn gry (10Y6/1) grn gry	
						21			
						13		Clay (95%) Stf hard (5PB3/1) dk Mu gry; Silt 5% (5PB6/1) blu gry	
						0			
						5			
140			-	BG	60	-			
						0			
						0			
						0			236.5
								T.D.= 142.0	
145									
150									
155									
160									

Boring 400-037

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4116.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert/J. Albert*
Started at *0845 on 10-04-97*	Surface Elevation: *379.00 feet msl*
Completed at *1530 on 12-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-		For lithologic descripitions see log for Boring 400-207	
5				-	-	0			
						15			
						875			
			87.5	-	-	480			
						91			
1						96			
15									
20									
25									
30									
35									
40									

Boring 400-037

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4116.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert/J. Albert*
Started at *0845 on 10-04-97*	Surface Elevation: *379.00 feet msl*
Completed at *1530 on 12-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45									
50									
55									
60		▬		-	-	67			
65		▬		-	-	-			
70		▬		-	-	4300			
75		▬		-	-	3100			
80									

Boring 400-037

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4116.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert/J. Albert*
Started at *0845 on 10-04-97*	Surface Elevation: *379.00 feet msl*
Completed at *1530 on 12-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	2877			
85				BG	BG	276			
90				BG	BG	27.9			
95				BG	BG	-			
								T.D. = 96.0 ft	
100									
105									
110									
115									
120									

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Boring 400-038

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4098.0000 E, -1648.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1100 on 07-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 01-21-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *143.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0		Clay, brittle, moist, (60%); gravel, fn to crs grn, ang to subrnd, cherty (40%); strong brown (10YR4/6)	378
				BG	104	0			
			33.:3			-		No recovery	
						-			
5						-			
						-			373
						0		Clay, firm, cohesive (90%); silt, sl moist, highly variegated color (10%); dk yellowish brown (10YR4/8) with very dk gray (10YR8/6), lt gray (10YR7/1), and brownish yellow (10YR6/8) mottling	
						0			
						0			
10						0			
			100	BG	150	0			
						0			
						0			
						0			
15						4			
						0		Clay, firm, sl. moist, cohesive (90%); tr silt; tr gravel, cherty, fn to med gm, rnded to subang; lt yellowish brown (10YR6/4), yellow (10YR7/8) and light gray (10YR7/1) mottle	
						-			
						-			
						-			
20						-			
			100	BG	98	-			358
						-		Sand, fn to med grn, poorly sorted, quartritic (70%); silt (20%); clay (10%), yellowish brown (10YR5/6) to lt gray (10YR7/1), sl. moist	
						-			358
						-		Clay, firm, v. hard (70%); gravel, fn to med grn, cherty, poorly sorted, subang to subrnd (30%); yellowish brown (10YR5/6), lt gray (10YR7/1) mottles, tr sand	
25						-			
						-			
						26			
						0			
						2			
30						35			
						29			348
			100	BG	139	3		Gravel, fn to med grn, subang to subrnd, nod sorted, cherty (SOX); clay, firm, sl moist (40%); tr silt, dk yellowish brown (10YR4/6)	347
						121			
						376		Sand, med to fn grn, quartritic, mod to poorly sorted (80%); gravel, fn to med grn, subang to subrnd, cherty (20%); tr clay/silt, brownish yellow (10YR6/8)	345.5
35						754			
						208			
						285		Gravel (50%); clay (40%), same as 31.0-32.0 ft bgs interval	
						282			
						695			
40						444		Sand (80%); gravel (20%), same as 32.0-33.5 ft bgs interval	339.5

Boring 400-038

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4098.0000 E, -1648.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1100 on 07-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 01-21-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *143.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV.
						339	Clay, v. firm. cohesive (100%); tr fn grn gravel/sand, lt yellowish brown (10YR6/4), sl mottled	338.5
			100	BG	01	304		337.5
						99	Sand, med grn, subang to subrnd, quartzitic, well sorted (60%); gravel, fn to med grn, quarttitic and cherty, subang to subrnd, (40%); tr clay/silt, yellowish brown (10YR5/6)	337
						444		336
45						9		
						85	Sand, fn to med grn, quartritic (100%); tr silt/clay, lt yellowish brown (10YR6/4), yellowish brown (10YR5/8) and lt brownish gray (10YR6/2) mottles	
						143		
						190		
						124	Clay, firm, cohesive (90%); silt (10%);brownish yellow (10YR6/8), lt brownish gray (10YR6/2) mottles, sl. moist, tr gravel in 46.0-52.5 ft bgs interval	
50						1015		
						350		
			75	BG	08	435		
						34	Sand, med grn, subang to subrnd, mod sorted, quarttitic (95%); tr silt/clay, yellowish brown (10YR5/8), 52.5-53.0 ft bgs interval stained v dk gray (10YR3/1)	328.5
						-		325.5
55						-		
						-	Sand, fn grn, quartzitic (50%); silt, cohesive, sl moist, poorly sorted (50%); brownish yellow (10YR6/8)	
						60		
						51	Gravel, fn to crs grn, poorly sorted, ang to subrnd, cherty (60%); sand, med to crs grn, quartzitic, tr chert, subang to subrnd, mod sorted (40%); tr silt/clay, yellowish brown (10YR5/6)	321.5
						28		
60			80	BG	135	94		
						-	Sand, med to crs grn, subang to subrnd, mod sorted, quartzitic, tr chert (70%); gravel fn to crs grn, poorly sorted, subrnd to subang, cherty with tr quartzitic pebbles (30%); tr silt/clay, brownish yellow (10YR6/6)	
						12		
						8		
			100	BG	48	15	Sand, fn to md grained, quartzitic, mod sorted, subrnd to subang (55%); gravel fn to crs (up to 60 mm), suband to subrnd, cherty, poorly sorted (40%); tr silt, yellowish brown (10YR5/6)	
65						80		
						110		313
						311	Gravel, med to crs grn, poorly sorted, cherty, subang to subrnd (60%); sand med to crs grn, tr silt, cherty, subang to subrnd, poorly sorted (40%); strong brown (7.5YR5/6)	
						38		
			80	BG	28	105		
70						477		
						208		
						295		
						244		
			100	BG	18	280		
75						22		
						50		303
						0	Sand, med to crs grn, quartzitic/cherty, poorly sorted, subang to rubrnd (60%); gravel, fn to med grn, cherty, suband to subrnd, poorly sorted, v. moist (40%); tr silt/clay, strong brown (7.5YR5/6)	
			100	2	BG	0		
						8		300
80						11	Gravel, same as above (60%); sand, same as above (40%)	

Boring 400-038

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4098.0000 E, -1648.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1100 on 07-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 01-21-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *143.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-)
						-			298
						15		Sand, med to crs grn. mod sorted, subang to submd, quartzitic, cherty (70%); gravel, fn to med grn, mod sorted, cherty, tr quartz, subang to submd, moist (30%); tr silt, brownish yellow (10YR6/6)	
						18			
			100	BG	4	45			
85						39		Sand (50%); gravel (50%), same as above	
						60			
						-			29[illegible]
						-		Sand, v fn grn, poorly sorted, quartzitic, micaceous, yellowish brown (10YR5/6) (70%);clay, v firm, hard, cohesive, gray (5y5/1) (30%); tr silt, sl moist	
			100	BG	20	-			
90						-			
									288
						14		Clay, v dense, firm, cohesive, gray (10YR5/1) (100%)	287
						12		Sand, med to crs grn, sl micaceous, mod well sorted, quartzitic, ang to submd (95%); tr clay (5%); moist, white (10YR8/1)	
						11			285
95						8		Sand as above, finer grn, yellowish brown (10YR5/8)	
			100	BG	20	12			
						1		Clay, firm, v dense, gray (10YR5/1) (50%); interlaminated with silt (50%); tr v fn sand	
						2			
						4			280
100						3		Sand, med to fn, mod sorted, micaceous, quartzitic,, submd to subang, (80%); silt (20%); tr clay, somewhat cohesive, moist, lt gray (10YR7/1)	
						7			
						0		Sand, as above, reddish yellow (7.5YR6/8) to yellow (10YR7/6) (90%); clay, firm, soft occurs as v thin, rare laminae in sand, lt gray (10YR7/1)	
						0			
						0			
105						0			
			100	2	70	0			
						0			
						0			
						4			
110						0			
						0		Sand, as above, poorly sorted (70%); silt (20%); clay (10%); v moist, yellowish brown (10YR5/8)	
						0			
						0			
						0			
115						0			
			100	BG	82	0			
						0			262
						0		Clay, v firm, hard, gray (5Y5/1) (80%); silt, v fn grn, micaceous, (20%)	
						0			
120						0			

Boring 400-038

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4098.0000 E, -1648.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1100 on 07-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 01-21-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *143.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Clay, v firm, dense, cohesive (60%); silt (30%); sand, v fn grn, (10%);silt and sand occur in v thin (<1/8 inch) laterally discontinuous laminae, dk gray (5Y4/1)	
125			100	-	-	0			
						0		Clay, as above (90%); silt as occassional v thin laminae (10%); v dk gray (1G6y3/N), at 128-128.5 ft bgs interval is an indurated layer of lt greenish gray (1G6y7/10Y), indurated clay, v hard, fractures up to 15 inches large	
130						0		Clay, v dense, hard (100%); tr silt, greenish gray (1G6yN5/1) to black (1G6y2.5N), occassional carbonaceous material	
135			100	BG	90	0		Lignitic layer, dense, crumbly, black (1G6y2.5N), woody structures	
140						0			
						0		Shelby Tube, no description available	238
145						-		T.D. = 143.5 ft	
150									
155									
160									

Boring 400-039

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3943.0000 E, -1072.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert*
Started at *1500 on 08-27-97*	Surface Elevation: *377.50 feet msl*
Completed at *1500 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *141.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0		For lithologic descriptions see log for Monitoring Well 400-212	
5									
10									
15									
20									
25									
30									
35									
40									

Boring 400-039

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3943.0000 E, -1072.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert*
Started at *1500 on 08-27-97*	Surface Elevation: *377.50 feet msl*
Completed at *1500 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *141.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45									
50									
55									
60		▬		BG	BG	-			
65		▬		2	BG	-			
70		▬		BG	BG	-			
75		▬		BG	BG	-			
80									

Boring 400-[illegible]

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3943.0000 E, -1072.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Straufert*
Started at *1500 on 08-27-97*	Surface Elevation: *377.[illegible] feet msl*
Completed at *1500 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *141.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	%	RAD/ Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	-			
85				BG	BG	-			
90				BG	BG	-			
95				BG	BG	-			
100				BG	BG	-			
105									
110				BG	BG	-			
115				BG	BG	-			
120									

Boring 400-[illegible]

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3943.00[illegible]0 E, -1072.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/T. Streufert*
Started at *1500 on 08-27-97*	Surface Elevation: *377.5[illegible] feet msl*
Completed at *1500 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *141.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	CAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	-			
125				BG	1	-			
130				6	BG	-			
135									
140				BG	BG	-			
								T.O. = 141.0 ft	
145									
150									
155									
160									

Boring 400-040

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *206.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	BE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Sandy Gravel, poorly sorted, subrnd/subang chert; med/crs grn, quartz & chert, trace Silt & Clay; **(5YR4/6) yel** rd	
						0			
			50	BG	BG	8			
						9			
5						0			
						25		Silt, v moist, soft; **(10YR6/1)** q n gry	371
						87			
						34		Clay & Silt. moist & firm, scattered Mangenese Mineralization; **(10YR4/6) dk yel brn, (10YR5/1)** mottled gry	369
						18			
10						89			
			100	BG	32	122			
						75			
						13			
						25			
15						34			
						0		Same as above, with **Iron,** Manganese Mineralization **(25-26 ft)**	
						0			
						8			
						0			
20						1			
			100	BG	27	0			
						0			
						0			
						0			
25						0			
						0		Silt, with Clay & tr fn Gravel, extensive Iron, **Manganese** Mnerizton **(29-30 ft); (10YR5/4,5/8)** yel **brn, (10YR6/2)** lt brn **gry**	351
						0			
						0			
						0			
30						0			
			100	BG	134	0			
						0			
						0			
						0			
35						0			
						0		Silt w/ Clay & Sand, tr Gravel subrnd, **well** sorted; **(10YR5/8) yel brn, (10YR5/8)** mottled gry	340
						0			
						0		**Sand** & Gravel w/ Clay, med/crs grn quartz, subrnd/subang, poorly sort chert (Max **60MM); (7.5YR4/6,5/8)** strg brn	
						6			
40									

Boring 400-040

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *208.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FIDD (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45			100	BG	19	6 0 19 15 23 61	Sand & Gravel w/ Clay, med/crs grn qtz, subrnd/subang, prly sorted chert (Max 60MM); (7.5YR4/6,5/8) strg brn	
50			100	BG	6	0 2 0 0 0 0 4	Sandy Gravel, subrnd/subang (Max 50MM) Poorly sorted, med/crs grn chert 6 quartz; (7.5YR5/8) strg bm	33
55						0 0 3	Gravelly Sand, med/crs grn quartz, med (30MM) mod well sorted subrnd/subang; (10YR6/6) bm yel, (10YR5/8) yel brn	324
						3 19	Silty Sand; (10YR5/8) yel bm	321
60			100	BG	BG	12 9 0 0 0 0 0	Gravelly Sand, w/ Silt, fn/crs grn, rnd/subrnd quartz, chert, well sorted (15-20MM); (7.5YR5/6) strg bm	318
65						0 0 3 3 4	Same as above; med/crs grn chert 6 quartz, subrnd/subang, mod well sorted; (10YR7/2) lt gry, (10YR5/8) mottled yel bm	
70			100	BG	BG	8 3 5 8 19 0	Same as above; (10YR6/3) p bm, (10YR5/8) mottled yel brn	
75						0 0 0 6 0	Sat w/ Clay & Gravel, rnd/subang quartz, chert mod well sorted (Max 30MM), med/fn grn quartz; (7.5YR4/6) strg brn	301
80							Clay w/ Silt 6 Sand,tr Gravel, fn gm quartz; (10YR6/6) brn yel	299

Boring **400-040**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *206.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	BE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0			
			100	BG	55	31			
						9			
						0			
						0		Clay w/ Silt & Sand; (7.5YR5/8) strg brn	
85						0			
						0		Same as above (84-86 ft); but (10YR6/3) p brn	
						8			
						3			
						0			
90						28			
			100	BG	43	0			
						18			
						17			
						22			
95						0			
						0		Clay w/ Silt 6 Sand; (7.5YR4/6) strg brn, (10YR6/6) mottled brn yel	
						0			
						0			
						5			
100						14			
			100	BG	19	0			
						0			
						1			
						3			
105						0			
						0		Same as above, but (7.5YR5/6) strg kn, only	
						0			
						0			
						0			
110						0			
			100	BG	1	0		Silt w/ Clay, Sand, 6 Gravel, fn/med gm chert & Quartz, subrnd, poorly	268
						4		sorted (Max 50MM) oxidation Iron staining; (7.5YR5/8) strg brn, staining	
						14		(10YR3/1) v dk gry	
						0			
115						15			
						0		Sandy Gravel, tr Silt subrnd/subang, poorly sorted (Max 80MM), med/crs	261
						0		grn quartz, chert, Iron staining (123-124 ft); (10YR5/8)yel brn	
						50			
120						4			

Boring 400-[illegible]

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *206.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			80	BG	32	14			
						16			
						19			
						0			
						5			
125						34			
						0		Sandy Gravel: subang/subrnd chert (Max 90-100MM); prly sorted; med/crs grn chert, Quartz: mst/sat; (10YR5/8) yel brn	
						0			
						11			
						0			
130			85	1	BG	10			
						27			
						3			
						0			
						8			
135						117			
								Sandy Gravel; subrnd/subang chert (10-40MM); prly sorted; crs/med grn; (10YR5/6) yel brn	
140			90	-	-	-			
									234
								Gravelly Sand, w/ Silt; med/crs grn quartz & chert; subrnd/subang (10-35MM); prly sorted; (7.5YR5/8) strg brn	
145									231
								Sand & Gravel; med/crs grn quartz,chert; prly sorted; slightly Silty; subrnd/subang, chert (10-60MM); v mst, almost saturated; (7.5YR5/8) strg brn	
150			80	5	BG	-			
155									221
						0		Gravelly Sand, w/ tr Silt; med/crs grn chert, minor quartz; prly sorted; rnd/subang chert (10-40MM); (7.5YR5/8) strg brn	
						0			
						0			
160						11			

Boring **400-040**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *206.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	%	RAD/Alpha	RAD/Beta	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	55	15		Gravelly Sand w/ tr Silt; med/crs grn chert. minor quartz; prly sorted; rnd/subang chert (10-40MM); (7.5YR5/8) strg brn	
						25			
						0			
						52		Clay, w/ Silt, Gravel & Sand; (10YR5/1) gry, (7.5YR5/8) mtld strg brn	214
						27			
165						5			
						0		Clay, w/ Clay & Silt; semi-mst, stf; (10YR5/1) gry	
170			100	BG	25	0			
						0			
						0			
						0			
175						0			
						0		clay, w/ Sand & tr Silt; (5Y4/2) dive gry, (10YR5/2) mtld gry brn, (10YR5/8) yel brn	
						0			
						0			
						0			
180			100	BG	103	0			
						0			
						0			
						0			
185						0			192
						0		Clay & Silt, w/ Sand; fn grn quartz; slightly mst, stf; (10YR5/6) yel brn, (10YR5/3) mtld brn	191
						0		Clay, w/ Silt & Sand; fn grn quartz; mst/frm; (10YR6/3) p brn, (10YR5/1) mtld gry, (10YR5/8) yel brn	189
						0			
190			100	BG	128	0		Silty Sand, w/ Clay; fn/med grn; semi-mst; (10YR5/6) yel brn, (10YR7/6) mtld yel	
						0			
						0			
						0			
195						0		Same as above, but (7.5YR5/8) strg brn, (10YR7/6) mtld yel, (10YR6/8) brn yel	
						0		Same as above, but some (10YR5/2) gry brn mtlg	
						0			
						0			
200						2			

Boring **400-040**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4412.0000 E, -1302.0000 N*
Location: *Paducah, KY*	Geologist: *T. Streufert*
Started at *1000 on 12-31-97*	Surface Elevation: *377.00 feet msl*
Completed at *1300 on 01-12-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic/Slanthole*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Allan*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	HNU/Alpha	RAD/Beta	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			95	BG	54	0			
						0			
						0		Clay & Silt, w/ Sand; fn grn micaceous; (2.5Y5/1) gry, (10YR5/8) mtld yel brn	175
						0			
205						0		Same as above, but (2.5Y3/1) v dk gry, (2.5Y7/1) lt gry	
						0		T.D.= 206.0	171
210									
215									
220									
225									
230									
235									
240									

Boring 400–041

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4405.0000 E, –1555.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830 on 08–11–97*	Surface Elevation: *378.50 feet msl*
Completed at *1453 on 11–24–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/ROTOSONIC/SLANT*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *225.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD a	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
						50		FILL GRAVEL,SAND	377.7
						30		CONCRETE RUBLE ZONE	
			-	BG	99	39		CLAYEY GRAVEL (2.5YR4/6)	375.5
						92		CLAY W/SILT (2.5YR4/8)GRN GRY	
5						150			
						40			
						76			371.5
						414		SILT (80%)F.GRAIN/CLAY (20%)(10YR5/1)	
						369			
10			-	BG	133	639			
						-			
						616			
						356			
						429			
						689			
15						14			
						11			
						59			
						168			
						33			
20			-	BG	131	65			
						171			
						243			
						724			
						1126			
25						78		SILT (90%)CLAY (10%) (10YR3/2)V.DK GRN BRN	
						13			
						35			
						08			
						85			
30			-	BG	62	31			348.5
						141		GRAVELLY SAND (10YR6/3) PALE BRN	
						191			
						16			
						25			
35						15			343.5
						36		SILT & CLAY, (10YR5/6)YEL BRN & (10YR6/1)GRY	
						45		SILT (70%)CLAY (30%)GRAVEL (10%) (10YR5/6)	
						83			
						94			
40			-	BG	65	36			

Boring 400–041

Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830 on 08-11-97*	Surface Elevation: *378.50 feet msl*
Completed at *1453 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/ROTOSONIC/SLANT*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *225.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						57		SAND/GRAVEL PALE BRN (10YR6/3)70%@15%	337.5
						34			
						157			
						343			
45						09		SXLT & CLAY (7.5YR5/6), (10YR5/6) RED AND (7.5YRS6/3)LT BRN	333
						00			
						03			
						05			
						00			
50			-	BG	40	-			
						06			
						13		SILT (60%)SAND (30%)GRAVEL (10%) (7.5YR4/6)STRONG BRN/ (7.5YR7/1)LT GRY	327
						14			
						15		SILT (40%)GRAVEL (40%) SAND (20%) (7.5YR4/6)STRONG BRN	324.5
55						00			
						23			322
						49		CLAYEY SAND, (10YR6/8)BRN YEL W/ (10YR6/1) GRY	
						12			
						43			
60			-	BG	37	93			
						25			
						309			
						39			
						11			
65						00		SAND 90%MED CRS, (10YR4/6)DK YEL BRN (10YR2/1)BLACK IN BOTTOM 0.5'	313.5
						71			
						409			
						0		SANO 100%BRN YEL (10YR6/6)	310.5
						0		GRAVEL (60%) SAND (10%) SILT/CLAY (30%)BRN YEL	
70			-	BG	64	69			
						471			
						379			
						175			
						220			
75						39		SAND TO 30% & SILT/CLAY TO 10% (10YR4/6-5/6) DK YEL BRN TO YEL BRN STRONG BRN IN LOWER 3.5'OF THE SECTION, DAMP	303.5
						88			
						22			
						223		SAME AS ABOVE/STRONG BROWN (7.5YR4/6)& (7.5YR5/2)	300.5
						465		CLAYEY SAND (7.5YR4/6)STRONG BRN	
80			-	BG	44	55		GRAVELLY SAND STRONG BRN (7.5YR5/8)	299

Boring 400-041

Project *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1555.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830* on *08-11-97*	Surface Elevation: *378.50 feet msl*
Completed at *1453* on *11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Company: *Alliance*	Total Depth: *225.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						421		CLAY W/GRAVEL FINE TO MED (10YR4/4)DK YEL BRN W/ (10YR6/1)GRY MTX CLAY	298
						391			
						80			
						598			
85						18		CLAY (60%)SILT (40%)(10YR5/6)YEL BRN/ (10YR6/6)BRN YEL (10YR3/1)V.DK GRY STREAKS.	
						23			
						64			
						70			
						126			
90			-	BG	87	50			
						07		CLAY (70%)SILT (30%)FINE TO COARSE (7.5YR5/8)STRONG BRN	
						04			
						40		LT.GRY SOME MOLTING IN UPPER 2'OF INTERVAL (7.5YR3/1)	
						54			
95						00			
						6			
						6		SILT (70%)FIRM CLAY (30%)FIRM HARD (10YR5/8)YEL BRN	281.5
						06			
						58			
100			-	1	175	278		SILTY SAND (10YR5/8)YEL BRN,HEV.MOLT. (10YR3/1)V.DK GRY	278.5
						318			
								(10YR6/8)BROWNISH YELLOW.	
						82			
						219			
105						113		SAND W/10%SILT (10YR6/8)BRN/YEL (7.5YR6/8)REDDISH YEL (7.5YR3/1)DK GRY	
						106			
						40			
						44			
						27			
110			-	BG	124	89			
						112			
						89			
						33			
						21			
115						16		GRAVELLY SAND,FINE TO MED. (10YR4/4)DK YEL BRN	263.5
						11			
						06			
						11			
						00			
120			-	BG	07	11			

Boring 400-041

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1555.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830 on 08-11-97*	Surface Elevation: *378.50 feet msl*
Completed at *1453 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/ROTOSONIC/SLANT*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						00		SANOY GRAVEL MED.-COARSE, (10YR5/4)YEL BRN	257.5
						26			
125						25			
						179			
						104			
						308			
						206			
130			-	BG	88	272			
						827			
						494			
						500			
						272			
135						545			
						23			
						214			
						101			
						111			
140			-	BG	63	148			
						168			
						142			
						107		GRAVELLY SAND, (10YR5/8)	235.5
						58			
145						233		(10YR6/8)BRN YEL	
150			-	BG	62	-			
155									
160			-	BG	41	-			

Boring 400-041

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1555.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830 on 08-11-97*	Surface Elevation: *378.50 feet msl*
Completed at *1453 on 11-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibraprobe/ROTOSONIC/SLANT*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *225.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							GRAVELLY SAND, (10YR5/8)	
165								
170			-	1	45	-		
							SANDY GRAVEL, TRACE OF CLAY & SILT (10YR5/8)YEL BRN	207.5
							CLAY (95%) PROOOM (10YR5/8) YEL BRN; WITH TRACE OF (10YR6/6) GRY N.BASE	205.5
175						00	(5Y4/1) DK GRY W/ (10YR7/8) YEL; MOTLED (5Y6/1) GRY, TRACE SILT	
						00		
						00		
						14		
						00		
180			-	BG	133	00		
						0.3		
						00	CLAY (75%) WITH SILT (25%)	
						07		
						1.0		
185						10		193.5
						00	SILT (60%), CLAY (40%); (5YR5/4) OLIVE W/RARE (10YR4/6) OLIVE BRN	
						00		
						00		
						00		
190			-	BG	100	00		
						00		
						00		
						00		185.5
						00	CLAY (50%), SAND (50%); (10YR5/6) OLIVE BRN	
195						00		183.5
						00	CLAYEY SAND; (10YR5/8) YEL BRN W/ (10YR7/8) YEL BANDING, TR SILT	
						00		
						00		
						00		
200			-	BG	BG	00		

Boring 400-041

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4405.0000 E, -1555.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. MCCOMB*
Started at *0830* on 08-11-91	Surface Elevation: *378.50 feet msl*
Completed at *1453* on 11-24-91	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibraprobe/ROTOSONIC/SLANT*	Groundwater Elevation: *NA msl*
Drilling Company: *Alliance*	Total Depth: *225.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						00		CLAYEY SAND: (10YR5/8) YEL BRN W/ (10YR7/8) YEL BANDING, TR SILT	
						00			
						00			
						00			174.5
205						00		SAND MED-COARSE; (10YR6/6) BRN YEL W/ (10YR4/4) DK YEL BRN STAINIG	
						00			
						00			
						00			17
						00		CLAY (80%), SILT (20%); (5Y4/1) DK GRY, SILT (10R7/2) PALE RED	
210			-	BG	BG	00			
						00			
						00			186
						00		SILTY SAND; (10YR7/8) YEL W/ (10YR7/2) L.GRY	
						00			
215						00			
						00			182
						00		CLAY (90%) VERY DARK GRAY (5Y3/1)	
						00			
						00			159.5
220			-	BG	BG	00		SAND W/CLAY (5Y3/1) V.DK GRY (10R8/1) WHITE; SAND (10YR7/4) V.PALE BRN, MARBLE TEXTURE	
						00			
						00			
						00			155
						00		SILTY SAND; (10YR6/8) BRN/YEL, W/ (10YR6/2) LT.BRN.GRY	
225						00			153.5
								T.D.=225FT	
230									
235									
240									

Boring 400-042

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4192.000 E, -1170.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0800 on 09-22-97*	Surface Elevation: *378.50 feet msl*
Completed at *1100 on 10-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *93.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				5	238	0		Concrete	377.4
								Limestone gravel fill, v poorly sorted, 1/8 to 2 inches, tr silt/ sand (1-10%)	376.8
								No recovery	
5									
10									
15								Silt, clay	363.5
20								Silt, clay; tr gravel, 1/4 to 1/2 inch, rnded mod sorted (1-10%), brown (10YR5/3)	
25								Silt, clay; tr 1/8 to 1/4 inch gravel and crs sand, ang, poorly sorted, brown (10YR5/3)	
30								Silt, clay; sand, v fn to crs, poorly sorted, ang (21-35%), brown (10YR5/3)	
35								Silt, clay; mixed with chert gravel, 1/8 to 1/2 inch, poorly sorted, rnded (approx. 50%); brown (10YR5/3)	
40									

Boring **400-042**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4192.000 E, -1170.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0800 on 09-22-97*	Surface Elevation: *378.50 feet msl*
Completed at *1100 on 10-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *93.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									335.5
45								Clay, silty; sand, fn to crs grn, and chert gravel. 1/8 to 1/4 inch, poorly sorted, subang (11-20%), brown (10YR5/3)	
50									
55									321.5
60								Silt, clay, v dk brown (10YR3/2)	317.5
65				BG	BG	-		Gravel, chert with 21-353 silt and clay, ang, 1/8 to 3/4 inch, poorly sorted	
70				2	187	-			
75				BG	57	-			
80									

Boring 400-042

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4192.000 E, -1170.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0800 on 09-22-97*	Surface Elevation: *378.50 feet msl*
Completed at *1100 on 10-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *93.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-		Gravel, chert with 21-35% Silt and Clay, ang, 1/8 to 3/4 inch, poorly sorted	
85				6	7	-			
								Sand and clay, fn to med grn, mod sorted, subang, brown (10YR5/3), some gray clay	291
90									
								T.D.= 83.5 ft	285
95									
100									
105									
110									
115									
M.D.									

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Boring 400-043

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4464.0000 E, -1075.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1230 on 07-22-97*	Surface Elevation: *374.50 feet msl*
Completed at *1505 on 09-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibraprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0.0		Clay (100%); tr silt; v dry, crumbly, lt gray (2.5Y7/1) to lt ylwish brw (2.5Y6/4), mottled lt gray (2.5Y7/2)	
			42.9	1	113	0.9			
5						17			
						0		Clay (95%); tr silt/gravel; firm, dry, reddish brw (5YR5/4), mottled pink (5YR7/3) and dk reddish gray (5YR4/2), manganese stained	
10						18			
			-	BG	65	0.5			
15						17			
						7			
						40		Clay (60%); gravel, fn to crs, rnd to subrnd (40%); tr sand/silt; dry to sl damp, ylwish red (5YR5/8)	
20						111			
			-	1	BG	5031			
25						95			
						182		Clay, stiff (75%); gravel, cherty, fn to crs (20%); tr sand/silt; lt brw (7.5YR6/4) to strong brw (7.5YR5/6)	347.5
								Sand, fn to med grn (85%); silt ((5%); tr clay; sl gravelly near top 1 ft, tr gravel at 32-33 ft bgs, pale ylw (2.5Y7/3)	
30									
			-	BG	BG	1.1			
						591		Clay (65%); gravel, fn to crs, rnd to subrnd, cherty (35%); stiff, dry, ylwish red (5YR5/6)	341.5
35						64			
						294			337.5
						104		Gravel, fn to med (75%); sand, fn to med grn (25%); tr silt/clay; lt reddish brw (5YR6/4)	336.5
40								Sand, fn to med gr (90%); tr silt/clay; gravelly near base (40- 40.5%), reddish ylw (5YR6/6)	

Boring 400-043

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4464.0000 E, -1075.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1230 on 07-22-97*	Surface Elevation: *374.50 feet msl*
Completed at *1505 on 09-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						97	Clay (90%); silt (10%); firm, dry, (5YR6/8) mottled to (7/8), sl manganese staining near 45.5 ft bgs	334
			-	BG	BG	-		
						63		
45						128	Gravel, fn to crs, cherty (90%); tr sand, heavily stained black (manganese); ylwish red (5YR5/6) stained to dk reddish brw (5YR2.5/2)	329 / 328.5 / 327.5
						-	Sand, fn to med grn (100%); lt gray (2.57/1), mottled ylwish red (5YR5/6)	
50						-	Sand, v fn to fn grn (50%); silt (50%); tr gravel; ylwish brw (10YR5/4)	
						0	No description available	
55						-		
			-	BG	BG	220		
60						-		
						191	Sand, fn to med grn (60%); gravel, fn to crs, submd to rnd, cherty, (30%); tr silt/clay, ylwish brw (10YR5/6)	312.5
65						-		
						-	Sand, fn to crs grn, subang to submd, quarttitic (95%); lt ylwish brw (10YR6/4)	307.5 / 306.5
70			-	-	-	-	Sand, med to crs grn, subang to submd (60%); gravel, fn to crs grn, subang to submd (40%); lt ylwish brw (10YR6/4); at 70-72 ft bgs sand (50%), gravel (50%)	
						428	Gravel, fn to med, ang to submd (80%); sand, crs to med (20%); dk ylwbh brw (10YR4/6)	302.5 / 301.5
75						310	Sand, med to crs grn, subang to submd, quarttitic, cherty (100%); tr fn gravel, (10YR6/6)	299.5
			-	2	15	300	Gravel, fn to crs, subang to submd (75%); sand, med to crs grn, subang to submd (20%); tr clay/silt, dk ylwish brw (10YR4/6)	
80						-		

Boring 400-043

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4464.0000 E, -1075.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb*
Started at *1230 on 07-22-97*	Surface Elevation: *374.50 feet msl*
Completed at *1505 on 09-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						124 - 47 - 111 - 106 - 2 - - 2			
								Sand, v fn to fn grn (95%); tr silt/clay, ylwish red (5YR4/6)	29
85			-	-	-			Clay (95%); tr sand/gravel; dk greenish gray (5GY4/6), mottled ylwish red (5YR5/6)	29
								Clay (50%); silt (50%); tr fn grn sand; blueish gray (10BG5/1), mottled pale green (5G6/2)	286.5
90									282.5
								TD. = 82.0 ft	
95									
100									
105									
110									
115									
120									

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Boring 400-044

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4562.0000 E, -1440.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb/T. Streufert*
Started at *0820 on 07-30-97*	Surface Elevation: *375.50 feet msl*
Completed at *1230 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIP	ELEV. (ft-msl)
				BG	BG	0			
						31		Clay	374
								Clay (75%) firm, moist; gravel (25%); (10YR5/6) yellowish brown, (10R4/8) red	373
			70%	BG	BG	61			
5								Clayey sand: (10YR7/3) molted with (10YR6/8) brownish yellow and (10YR7/1) light gray	
						81			
						2			
						13			
10						24			
						64			
			-	BG	BG			Clayey silt; heavily molted (10YR2/1) black to (10YR7/1) light gray to (10YR5/3) brown & (10YR5/8) red	
						0			
15									
						26			
						28			
						30			
						86			358.5
20						77		Sandy Gravel	
						90			
			-	-	-	17			
25						139			350.5
						262		Gravelly Sand, fine to medium grained	
						51		Sandy Gravel	348.5
						70		Sand (50%) fine grained, silt (40%), clay (10%)	347
30						68			
			-	BG	BG	-			
						235			
								Sandy Gravel	341.5
35								Sand	340.5
						241			
						27			
						14			
40						44			335.5

Boring 400-044

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4562.0000 E, -1440.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb/T. Streufert*
Started at *0820 on 07-30-97*	Surface Elevation: *375.50 feet msl*
Completed at *1230 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibraprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt; (5YR6/6) reddish yellow molted to (5YR7/3) pink & (5YR7/1) gray	335.5
			-	-	-	30			
						-			
						76			
						45			
45						170		Sand, fine to medium grained	330.5
						201			
						16			
			-	BG	BG	14		Silt (75%), Clay (25%), trace of Sand	326
50									
						12			
						10			
						59		Silty Sand	323.5
						54			
			-	BG	BG	-			
55						71			
						230			
						386			318.5
						63		Sand, fine to medium; (5YR4/6) yellowish red	317.5
			-	BG	BG	-		Sandy Gravel, fine to coarse	
60						81			
						197			313.5
						43		Sand (95%), trace of fine Gravel; (10YR4/6) dark yellowish brown	
						39			
65									310.5
						80		Gravel; Sand (5%), Sandy Silt (5%)	
			-	BG	BG	53			
						30			
						34			
70						38			
						17			303.5
								Gravelly Sand	302.5
						28		Gravel: trace of coarse sand	301.5
75						66		Gravelly Sand	
			-	BG	60	22			
						38			
80									

Boring 400-044

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4562.0000 E, -1440.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/R. McComb/T. Streufert*
Started at *0820 on 07-30-97*	Surface Elevation: *375.50 feet msl*
Completed at *1230 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH INFEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	(ft-msl) 4
						99			
						90			
						0.7		Sandy Gravel; trace of Clay, moist (10YR5/6) yellowish brown	293.5
						133			
						52			
85						391			
						101			
			-	3	BG	0			
						0		Clay, very moist; trace of gravel, plastic trace Silt; (10YR5/4) yellowish brown, (10R4/6) red staining, (10B5/1) bluish green mottling	287.5
90									
						3.2			
								T.D.= 92.0	283.5
95									
100									
105									
110									
115									
120									

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Boring 400-045

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1770.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 09-15-97*	Surface Elevation: *376.5 feet msl*
Completed at *1045 on 10-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *98.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				5	97	0		Limestone gravel fill	
								Silt and clay, brown; trace sand (1 to 10%); trace chert gravel, 1/8 to 1/2 inch, poorly sorted, subangular, (1 to 10%)	374
5				136	BG	0			
						-			
						0.4			
			100	4	BG	-			
						-			
						3.7			
10						-			
						0.3			
						0.5			
						-			
15									
20									
25									
30									
35									
40									

Boring 400-045

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1770.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 09-15-97*	Surface Elevation: *376.5 feet msl*
Completed at *1045 on 10-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *98.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45								Silt & Clay, brn: trace Sand (1 to 10%);trace chert Gravel, 1/8-1/2 inch, poorly sorted, subangular, (1 to 10%)	
50									
									322.5
								Chert gravel, poorly sorted, subangular; silt and clay; brown	321.5
55								Sand, fine to medium grained,with approx. 30% silt and clay, sorted, subangular	
60									
									314.5
65						-		Chert gravel, 1/8 to 3/4 inch, poorly sorted, rounded to subangular; silt and clay (20%); fine to coarse grained sand (20%)	
70						-			
75				2	72	-			
80				BG	57	-			

Boring 400-045

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1770.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 09-15-97*	Surface Elevation: *376.5 feet msl*
Completed at *1045 on 10-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *98.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	HE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Chert Gravel, 1/8-3/4 inch, poorly sorted, rounded to subangular: Silt & Clay (20%); fine to coarse grained Sand (20%)	
				1	137	-			
85									
				BG	BG	-			
90									
									283.5
								Clay; silt (21 to 35%);trace fine grained sand, subangular, sorted blueish gray (6/1)	
95									
									278
								T.D. = 08.5 ft	
100									
105									
110									
115									
120									

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Boring **400-046**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1566.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 07-29-97*	Surface Elevation: *378.50 feet msl*
Completed at *1400 on 11-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
ompany: *Alliance*	Total Depth: *85.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0		Clay & Silt; (10YR5/3) brn	
5									
10									
15									
20									
25								Clay 6 Silt: (2.5YR6/2) lt brn gry	
30								Clay; brn gry	348.5
35								Sand with Silt, & Clay. (10YR5/3) bm	342.5
								Clay, with some Silt & Sand; (10YR5/3) brn	340.5
40									

Boring 400-046

Project: *Paducah Gaseous Diffusion Rant Wag 6RI*	Coordinates: *-4030.0000 E, -1566.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 07-29-97*	Surface Elevation: *378.50 feet msl*
Completed at *1400 on 11-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *85.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45									
50									
55									
								Gravel ... a little Silt & Clay; (10YR5/3)	321.5
60								...avel; (10YR4/6) dk yel brn	318.5
65									
70								Sandy Gravel, with trace of Silt	
75									
80									298.5

Boring **400-046**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1566.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 07-29-97*	Surface Elevation: *378.50 feet msl*
Completed at *1400 on 11-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *85.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Deescription	293.5
85								T.D.= 85.0	
90									
95									
100									
105									
110									
115									
120									

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Boring 400-047

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072.0000 E, -1476.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0730 on 10-18-97*	Surface Elevation: *378.50 feet msl*
Completed at *1000 on 10-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	-		Gravel, 1/4 inch; sand; silt/clay; poorly sorted, ang, dry, brown (10YR5/3)	377.5
								No Description Available	
5									
10									
15									
20								Clay, silty; tr sand, fn to med grn, subang, poorly sorted (1- 10%); brown (10YR5/3)	358.5
25									
30									
								Sand silt. fn, subang, mod sorted, lt gray (10YR7/1)	344.5
35								Clay, sandy. fn, s u b @ mod sorted, brown (10YR5/3)	343.5
								Sand, silt. same as 34-35 ft bgs interval	342.5
40									338.5

Boring **400-047**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072,0000* E *-1476,0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Stated at *0730* on *10-18-97*	Surface Elevation: *378.50 feet msl*
Completed at *1000* on *10-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *90.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Clay, sandy, same as 35-36 ft bgs interval	
45								Sand, silt, clay	333.5
50									
55									
								Gravel, chert, 1/8-3/4 inch; sand, fn to v crs grn (11-20%); silt/clay (11-20%); poorly sorted, ang to subrnd	320.5
60				BG	BG	-			
65				1	BG	-			
70				BG	BG	-			
75				1	BG	-			
80									

Boring **400-047**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072.0000 E, -1476.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0730 on 10-18-97*	Surface Elevation: *378.50 feet msl*
Completed at *1000 on 10-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		▬		3	BG	-		Gravel, chert, 1/8-3/4 inch; Sand, fn to v crs grn (11-20%); Silt/Clay (11-20%); poorley sorted, ang to submd	
85		▬		3	BG	-			
									290.5
								Sand, med grn; clay (McNary)	
90									
95									
									282.5
								T.D. = 96.0 ft	
100									
105									
110									
115									
120									

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Boring 400-048

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3944.0000 E, -14210000 N*
Location: *Paducah, KY*	Geologist: *R. McComb*
Started at *1020 on 09-23-97*	Surface Elevation: *379.00 feet msl*
Completed at *1505 on 10-01-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						27		Clayey Gravel; (10YR5/4) yellowish brown	
			15	1	BG	-			
5						152			
						18			372
						1		Clay (85%)firm, Silt (15%); (10YR6/6) brownish yellow, slightly moist	
						5			
10						13			
			-	BG	BG	50		Clay (95%)firm, Silt (5%); (10YR7/1) light gray to (10R5/8) red and (10YR2/1) black; overall (10YR6/6) brownish yellow	
						42			
15									
						5.8			
						20		Clay, firm, slightly moist (10YR5/8) yellowish brown; Iron stained to (10R6/6) light red	
						70			360
20						68		Gravelly Sand	
						133			
			-	BG	BG	184			
						186			358
						2		Silt (50%); Sand and Clay (50%); (2.5YR6/6) light red, clay (2.5YR7/1) light reddish gray	354.5
25						74		Silty Sand (2.5YR6/6) light red, (2.5YR7/1) light reddish gray	
						lo7			
						114			
						8			
						34			
30						78		Sand (80%) fine to fine grained. Silt (10%)fine to medium,Gravel (10%)	
						172			
			-	2	BG	22			
						114			
35									344
						38		Silt (80%) fine grains, Clay (40%) stiff	
						58			
						14			
						46			341
						17		Gravelly Sand	340.5
40						5.9		Gravel and Clay; trace of Sand; (2.5YR7/1) light reddish gray	
						189			

Boring 400-04

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-394410133100E, -1421.0000 N*
Location: *Paducah, KY*	Geologist: *R McComb*
Started at *1020 on 04-23-07*	Surface Elevation: *379.00 feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-	BG	BG	259 119 3			
45						84 293 6		Sand and Gravel; (2.5YR4/4) reddish brown	335 33
50			-	BG	BG	18 16 8 7		Sand, fine to medium grains: (2.5YR5/8)red to (2.5YR7/3) light reddish brown Sand, medium to coarse grains; (2.5YR5/6)red to (2.5YR3/2) dusty red	
55						7			
			-	3	BG	31 33		Gravelly Sand; (2.5YR5/6) red	322
60						51 41 42		Gravel and Sand both medium to coarse; (2.5YR5/6) red moist Gravelly Sand; (5YR5/8) yellowish red	318.5 318.5 318
65			-	1	BG	70 134 44 16		Sandy Gravel; (5YR5/8) yellowish red to (2.5YR4/6) red	
70						96 96 30			
75			-	BG	3	14 13 60 41 5 31		Sandy Gravel; (5YR5/8) yellowish red; (2.5YR5/8) red	
80			-	3	36	36			

Boring 400-048

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3944.0000 E, -1421.0000 N*
Location: *Paducah, KY*	Geologist: *R. McComb*
Started at *1020 on 09-23-97*	Surface Elevation: *379.00 feet msl*
Completed at *1505 on 10-01-97*	Depth to Groundwater: *NA feet bgs* Measured: *N*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						30			
						186			
85			0	BG	61	-			
						138			
						87			
						107			
						23			
			-	BG	67	18		Clay, very stiff; (5PB5/1) bluish gray	290.5
90						-			289
						22		Sand, very fine to fine grains; (10R4/8) red to (2.5YR6/4) light reddish brown	
						35			
						42		Sand, fine to medium grains	287
								T.D.= 92.0	
95									
100									
105									
110									
115									
120									

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Boring 400-0

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3573.0000 E, -1232.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/R. McCamb*
Started at *0945 on 07-22-97*	Surface Elevation: *380.30 feet msl*
Completed at *1440 on 09-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							Cru mestone shed li	
			100.0	7	92	0	Silt, with limestone gravel, dense, sl moist, yellowish brown (10YR5/6) (fill)	
				2	114	0		
				1	BG	0	(1.3-2.5 ft bgs) - Silt, dry, firm, lt yellow brown (2.5Y6/3) (Possible natural soil)	
						0		
5			100.0	4	70	0.2	(3.0-4.7 ft bgs) - Silt, sl clayey, moist, stiff, v pale brown (10YR7/3) to lt gray (10YR7/2)	374.8
				1	60	0		374
						8.7	(4.7-5.5 ft bgs) - Silt, sl clayey, yellowish brown (10YR5/8), lt gray (10YR7/2) mottling (natural soil)	
			100.0	2	58	6.9		
				1	55	0	Clay, silty, moist, firm, yellowish brown (10YR5/6)	371.8
10						0.4		
			100.0	1	BG	0	Silt, moist, firm, lt gray (10YR7/1), minor yellowish brown (10YR5/6) mottling grading to brownish yellow (10YR6/6)	
						0		368.8
				2	61	0	Clay, silty, moist, stiff, lt gray (10YR7/2), brownish yellow (10YR6/8) mottles	
			100.0	1	10	0	Silt, clayey, moist, stiff, lt yellowish brown (2.5YR6/4), lt gray (2.5YR7/1) mottling, grading to lt gray (2.5YR7/1)	
15						0		
						0	Silt (85%); clay (15%); tr gravel; reddish brw (10YR5/6), lt blueish gray mottles	
						0		
						-	Silt (65%); clay (25%); sand (10%); tr gravel	
						-		
20						-		
						-		
			-	3	53	-		
						-		
						-		
25						-		
						-	Silt (50%); sand (20%); clay (20%); gravel (10%)	
						20		353.3
						-	Sand, fn to med grn (35%); silt (35%); clay (25%); gravel (5%); dry, ylwish red (5YR4/6)	
						-		
30			-	BG	33	-		
						-	Sand (95%); silt (5%); tr gravel, v well saturated	
						65	Sand (60%); silt (20%); clay (20%); tr grave&reddish ylw (5YR6/8)	
						-		
						-		
35			-	BG	BG	0		
						-	(90%); silt (10%); reddish ylw (5YR6/8), lt blueish gray (10B8/1) mottles	
						-		343.3
						-	Sand (75%); clay (25%); fn to med grn, 5YR5/4	342.3
						-		
40				BG	13	0	Clay (60%); sand, fn grn (40%); sl moist, 5YR5/4 mottled to 5PB7/1	340.3

Boring 400-C-9

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3573.0000 E, -1232.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/R. McComb*
Started at *0945 on 07-22-97*	Surface Elevation: *380.30 feet msl*
Completed at *1440 on 09-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									340.3
						-		Sand (30%); **silt** (30%); gravel, fn to med, cherty (20%); clay (10%); gravel increases to 40% with 40% sand, 10% silt, 10% clay at bottom of interval, dry, lt blueish gray **(10BG7/1)** to ylwish **brw (10YR5/8)**	
						-			338.3
						-		Gravel, fn to **crs**, subrnd to md, qtz, cherty **(50%)**; sand, fn to med grn (35%); **clay/silt** (15%); very poorly sorted, **moist**, olive ylw **(2.5Y6/6)**, bottom of interval is 3" thick sand (80%), **gravel** (20%), red **(2.5YR5/8)**	
						-			335.8
45			-	BG	13	0			
						-		Silt (40%); clay **(40%)**; sand, v fn **gr** (20%); reddish ylw **(7.5YR6/6)**, mottled with v **thin** *dk* blueish gray **(5PB4/1) laminae**, wavy	
						-			331.3
50			-	BG	BG	0		Sand, fn to v fn grn (40%); silt (40%); tr gravel, subrnd	
						-		Sand (70%); silt (15%); clay (15%); wet to v wet, reddish ylw **(7.5YR6/8)** to ylwish red **(5YR5/8)** to *dk* brw **(7.5YR3/2)**	
						-			
						24		Sand, fn q n **(95%)**, tr clay, v wet, red **(2.5YR4/8)**	
			100.0	BG	60	19			
55						26		Sand, fn to **med** grn (95%); tr gravel; tr silt; major color break from brw/red above to pinkish white **(2.5YR8/2)**, **some pink (2.5YR8/4)** staining/mottling, wet	
						27			
						-			
						5			
						20			
60			-	BG	*30*	-			
						5			
						20			
						-			
						-			318.6
65			-	BG	BG	0		**Gravel, fn to crs, subrnd to rnd (80%); sand, fn to med grn (20%); tr silt/clay; reddish ylw (5YR6/6) to ylwish red (5YR5/6)**	
						-			
						-			
						-			
						-			
70			-	BG	BG	0			
						-			
						-			
						59			
						-			308.3
75			-			-		Sand, fn to **med** grn (60%); gravel, fn grn **(40%)**; tr silt/clay	
						-			
				BG	BG	-			303.3
						-		Gravel, fn to crs, subrnd to rnd (85%); **sand**, fn to med grn (15- **20%)**; ylwish **red (5YR5/6)**	
						-			
80			-			-			

Boring 400-

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3573.0000 E, -1232.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/R. McComb*
Started at *0945 on 07-22-97*	Surface Elevation: *380.30 feet msl*
Completed at *1440 on 09-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *92.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						3			
						13		Gravel (90%); sand (10%)	
						-			
						-			
85			40	BG	BG	-			
						-			
						2		Gravel (75%); sand (20%); clay (5%)	
						-			
						-			291.3
90			-	BG	BG	-		Sand. fn grn, sugary texture (50%); silt (50%); ylw red (5YR5/8) to lt blueish gray (5B7/1) (McNairy @ 89 ft BGS)	
						-			
						-			288.3
								T.D. = 92.0 ft	
95									
100									
105									
110									
115									
120									

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Boring **400-050**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3635.0000 E, -1142.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1238 on 07-23-97*	Surface Elevation: *380.00 feet msl*
Completed at *1500 on 07-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Crushed limestone	
			100.0	BG	BG	.4		Silt, clayey, moist, firm, pale yellow (2.5Y7/3)	379
				4	24	7.5			377
			100.0	BG	26	0		Clay, silty, moist, stiff, olive yellow (2.5Y6/6), (natural soil)	
5				5	BG	0			
				1	BG	0		Clay, same as above, lt gray (2.5Y7/2) mottles	
			100.10	1	BG	0			
				1	BG	0			
10			100.10	1	BG	11.4		Clay, same as above, lt olive brown (2.5Y5/6), pale yellow (2.5Y7/3) and dk olive brown (2.5Y3/3) mottles	
				BG	BG	12.4			
			100.0	2	5	7		Clay, same as above, some lt gray (2.5Y7/1) mottles	
15				1	BG	7.8			
								T.O. = 15.5 ft	364.5
20									
25									
30									
35									
40									

Boring 400-051

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3760.0000 E, -1142.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0855 on 07-23-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 07-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Crushed limestone gravel (road base)	
			100	BG	7	0		Silt, clayey, moist, stiff, lt yellowish brown, lt gray mottles (2.5YR6/4), (2.5Y7/2)	378
				BG	2	0			
			100	BG	BG	0		Silt, same as above, mottled lt gray (2.5Y7/2) and yellowish brown (10YR5/8), (natural soil)	
5				2	23	0			
			100	1	4	0			
				1	4	0			370
10			100	3	31	0		Silt. clavev. to clav silty, moist, firm to stiff, lt yellowish brown (2.5Y6/3), mottled lt gray (2.5Y7/2) and yellowish brown (10YR5/8)	
				3	BG	0		Same as 0.0 to 120 ft bgs interval: upper 1.5 ft v moist, soft to firm; lower 1.5 ft moist, stiff	
			100	3	BG	0			
15				2	BG	0			364
								T.D.= 150 ft	
20									
25									
30									
35									
40									

Boring 400-052

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3635.0000 E, -1074.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1045 on 07-21-97*	Surface Elevation: *379.50 feet msl*
Completed at *1555 on 07-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0		Sod 6 Topsoil	
			82.1	BG	BG	0		Silt; approx. 15% crushed limestone gravel (fill) and tr organics, firm, dry to sl moist, lt yellowish brown (2.5Y6/4) to olive yellow (2.5Y6/6)	
						0			376
				BG	BG	0		Clay, silty. approx. 10% crushed limestone gravel (fill), stiff, moist, brownish yellow (10YR6/3)	
5			100.0			1			
				BG	12	0		Clay, silty, stiff, moist, brownish yellow (10YR6/3) grading to sl clayey silt, firm, moist, brownish yellow (10YR6/6), mottled lt gray (10YR7/2) (Natural soil with tr of organics)	
						0			372
				BG	BG	0		Clay, silty, firm, moist, lt yellowish brown (10YR6/4), mottled lt gray (10YR7/2)	
10			100.0			0			
				BG	BG	0			
						0			368
				4	86	0		Silt, clayey, firm, moist, lt yellowish brown (10YR6/4), mottled lt gray (10YR7/2)	
			100.0	BG	BG	0			
15						0			364.5
								T.D. = 15.0 ft	
20									
25									
30									
35									
40									

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Boring 400-053

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3635.0000 E, -0907.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/S. Parker/R. McComb*
Started at *0935 on 07-18-97*	Surface Elevation: *378.00 feet msl*
Completed at *1010 on 08-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *116.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Crushed limestone, some tar	
						0		Clay, silty, moist, stiff, pale yellow (2.5YR7/3), ylwish brn (10YR5/8) mottles	376.6
			100	BG	BG	0		Silt, clayey, to clay, silty; moist, firm, ylwish brn (10Yr5/6) lt greyish brn (10YR6/2) mottles, (natural soil?)	
5						0			
						0			
						0			
						0			370
						0		Clay, silty, grading to silt; firm to stiff, moist, ylwish brn (10YR5/6) to olive yel (2.5Y6/6), lt gray (2.5Y7/2) mottles	
10						0			
						0			367
			100	BG	BG	0		Silt, clayey, stiff, moist, brwnish yel (10YR6/6), lt gray (10YR7/1) mottles, grading to yel (2.5Y7/6), lt gray (2.5Y7/1) mottles	
						0			
15						0			
						0		Silt (70%); Clay (20%); Sand, v fn/fn grn (10%);moist, mottled, yel brn (10YR5/6), lt blueish gray (5PB7/1), blu gry (5PB6/1)	
						0			
						0			
20						0			
			100	BG	BG	0			
						0			355
						0		Silty Sand: Sand, fn to med grn. wet (80%); silt (10%); tr clay; tr Gravel, ang, 2-6 mm: dk ylwish brw (10YR4/6), blueish gray (5PB6/1) mottles	
25						0			353.2
						0		Clay w/ silt: tr sand: mst, stf, mtld, yel brn (10YR5/6), blu gry (5PB6/1)	352
						0		Clay, silty, to silt. clayey; tr sand, v fn to med grn (10%); tr gravel; mottled, stiff, mst, yel brn (10YR5/6) to Mu gry (5PB6/1)	
			100	BG	BG	0			
						0			
30						0			348
						0		Clay, silty; tr sand, v fn/med grn: stf, mst, mtlg, yel brn (10YR5/6), dk yel brn (10YR4/6)	347
						0			
			100	BG	BG	0		Silt (70%); sand, v fn/med grn (20%); tr gravel (2-4 mm); prly sorted, mottled, sl mst, yel k n (10YR5/6) to lt yel brn (2.5Y6/4)	
						0			
35						0			343.5
						0		Clay w/silt & sand, v fn/med grn, prly sorted, stf, sl mst, mtld, lt yel brn (10YR5/6), yel brn (2.5Y6/4), blu gry (5PB6/1)	342
						0		Sand, v fn/med grn (70); silt (25%); gravel, subang (2-12mm) (5%); mst, sl stf, mtld lt olive brn (2.5Y5/3), mtld strg brn (7.5YR4/6), blu gry (5PB6/1)	340.2
			100	BG	BG	0		Gravel, fn/crs grn, subrnd/ang (75%); sand, fn/med grn, prly sorted (20%); clay/silt (10%); sl mst, dk yel brn (10YR4/6)	339.3
40						0			

Boring 400-053

Project: *Paducah Gaseous Diffusion Plant* Wag 6 RI	Coordinates: *-0907.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/S. Parker/R.*
Started at *0935* on *07-18-97*	Surface Elevation: *378.00 feet msl*
Completed at *1010* on *08-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *116.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Clay (80%);silt (15%); sand, v fn/fn grn (5%); stf, mst, strg brn (7.5YR5/8), lt grn gry (10Y7/1), gry (N6/0) mtls (appears to be upper part of HU3)	
						0			
						0			
			100	BG	BG	0			333.5
45						0		Sand (85%), silty, v fn/med clay blebs, prly sorted, mst/wet, loose, brn yel (10YR6/6) w/ yel brn (10YR5/6) (Sand indicates top RGA (HU4))	
						0			
						0			
			100	BG	BG	0			
						0			
50						0			
						0		Sand (75%); silt/clay (25%); same as above	
						0			
						0		Sand (80%);clay/silt (20%);same as above	
			100	BG	BG				
55						0		Sand (90%); tr silt/clay; tr gravel	
						0		Sand (90%); silt/clay (10%)	
						0		Gravel, fn/crs grn, 2-20 mm, subang/rnd (75%); sand, fn/crs grn (20%); silt/clay (10%);prly sorted, wet, loose, brn yel (10YR6/6), brn (7.5YR4/3), dk yel brn (10YR4/6)	321.2
			100	BG	IBG	0			
60						0			
						0			
						0			
			100	BG	IBG	0			
						0			
65						0			
						0		Gravel, fn/crs grn, up to 50-60 mm, subrnd/subang, chert (85%);sand, med/crs grn (15%);silty, wet. loose, prly sorted, yel brn (10YR5/6)	
						0			
						0			
			100	to	IBG	0			
70						0			
						0			307
								Sand, wed to crs grn, subang, poorly sorted (80%); gravel, subang to ang, fn grn (20%); wet, loose. strong brw (7.5YR5/8)	306.6
			100	BG	IBG	-		Gravel, fn to crs grn, up to 100mm, subrnd to subang, chert (70%); sand, med to crs grn, poorly sorted (30%);strong brw (7.5YR5/8)	
						0			
75								Gravel (75%); sand (25%), same as above	
			100	BG	IBG	18		Gravel (50%); sand (40%); clay (10%) (79.0-79.5 ft bgs interval)	
80								Gravel (80%); sand (20%)	

Boring 400-053

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3635.0000 E, -0907.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/S. Parker/R. McComb*
Started at *0935 on 07-18-97*	Surface Elevation: *378.00 feet msl*
Completed at *1010 on 08-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *116.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									297
								Gravel, fn to med, subrnd to subang (50%); sand, med to crs grn, subrnd to subang, poorly sorted (50%); tr silt (5%); **loose,** wet, strong brw **(7.5YR5/8)**	296
			100	BG	BG	- 0.3		Gravel, fn to crs, up to 150mm, subrnd to subang, chert **(75%);** sand, med to crs grn, subrnd to subang, poorly sorted (25%); tr silt (5%); tr quartzite pebbles; wet, loose, strong brw **(7.5YR5/8)**	
85								Gravel (60%); sand (35%); silt (5%)	
			100	BG	BG	32			
90								Sand, v fn to fn, heavily bioturbated. sand fills burrows, oxidation evident, poss. glauconite (50%); clay (50%); stiff, moist, white **(N8/0),** gray **(N6/0),** strong brw **(7.5YR5/8)** mottling	2bi
			100	BG	22	68		Clay, silty; sand, fn to med grn **(25%);** gravel, fn to crs, up to 3cm **(10%);** heavily bioturbated. fn micaceous sand fills burrows, plastic, mottled, brw **(7YR4/3),** blueish gray **(5PB5/1)**	284.4
95								Sand, v fn to med gr **(80%); silt/clay (20%);** micaceous, moist, loose, pale ylw **(2.5Y7/3)**	281.6
			100	BG	17	22		Clay, sandy; **sand,** v fn to med, filling burrows, some oxidation present, micaceous **(30%);** poorly sorted, moist, plastic, tr carbonaceous material, lt blueish gray **(5PB7/1),** brwnish ylw **(10YR6/8)** mottles	280
100								Sand, v fn to med grn, micaceous, mod sorted **(80%); silt/clay (20%);** oxidation present throughout, loose, wet. brwnish ylw **(10YR6/8),** mottled **(5PB7/1)**	278.4
			-	BG	88	9		Clay, silty; sand, v fn to med grn, poorly sorted (25%); plastic to slightly stiff, moist, brw ylw **(10YR6/8), dk** ylwish brw **(10YR4/6),** blueish gray **(5PB6/1)** mottles	
105								Clay, silty, to clay, sandy; laminated, heavily mottled due to bioturbation (?), oxidation common	
			100	BG	BG	24		Clay **(70%);** some silt/sand in laminae **(1-3mm);** less oxidation than above, dk blueish gray **(5PB4/1)** to blueish gray **(5PB6/1)**	269
110								**Sand** fn to med grn, well sorted (85%); silt/clay (15%); loose, wet, some oxidation, pale brw **(10YR6/3)** to brwnish ylw **(10YR6/8)**	
			100	1	BG	11		**Sand (70%);** silt/clay **(30%);** silt blebs (dk gray **7.5YR5/8)** from underlying unit, strong brw, moist, loose	
115									262.5
								Silt, sandy (60%); sand **(25%);** clay **(15%);** laminated with v fn grn *sand,* micaceous, sl moist, **dk** blueish gray **(10B4/1), laminae** lt blueish **gray (5PB7/1)**	262
120								T.D. = 116.0 ft	

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Boring 400-054

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4429.0000 E, -1202.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0758 on 07-18-97*	Surface Elevation: *376.50 feet msl*
Completed at *0927 on 07-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
0									
1				-	-	-			
						0		Clay, silty, tr fn sand (1-10%), soft, v moist, reddish brown (5YR5/4), small lt blueish gray (8/1) mottles (21-35%)	
			87.5	BG	44	0			
						0			
						0			
								TD. = 14.0 ft	362.5
15									
20									
25									
30									
35									
40									

Boring 400-056

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4042.0000 E, -1185.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1230 on 08-26-97*	Surface Elevation: *376.00 feet msl*
Completed at *1500 on 08-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *16.0 feet*

TH FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	
5				2	274	0			
to									
								Clay, silty, soft, v moist, brw (7.5YR5/3)	364
15			-	BG	14	0			
								T.D.= 16.0 ft	360
20									
25									
30									
35									
40									

4

Boring 400-058

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4049.0000 E, -1324.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1400 on 09-18-97*	Surface Elevation: *377.00 feet msl*
Completed at *1445 on 09-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (f
5				-	-	3.2			
10			100	-	-	0		Silt and clay, yellowish brown (10YR5/4), (11-20%) light grey (10YR7/1), soft, very moist	67
									83
15								T.D.= 14.0	
20									
25									
30									
35									
40									

Boring 400-05[illegible]

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4019.0000 E, -1273.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1015 on 09-17-98*	Surface Elevation: *376.50 feet msl*
Completed at *1400 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No recovery	
5									
				BG	BG	0			
10								Silt and clay, yellowish brown (10YR5/6), (21-35%) light grey (7/1), (1-10%) black (2.5Y2.5/1) soft, very moist	
			90	BG	BG	0			
15								T.D.= 14.0	
20									
25									
30									
35									
40									

Boring 400-[illegible]

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4020.0000 E, [illegible]000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0920 on 09-18-97*	Surface Elevation: *377.00* [illegible]
Completed at *1415 on 09-18-97*	Depth to Groundwater: *NA* [illegible] *bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA* [illegible] *feet msl*
Drilling Comp. my: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	3.4			
10								Silt and clay, yellowish brown (10YR5/6), (21-35%) light grey (7/1), (1-10%) black (2.5/1), soft, very moist, wet	367
			90	-	-	0			
									363
15								T.D.= 14.0	
20									
25									
30									
35									
40									

Boring 400-062

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4019.0000 E, -1425.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1315 on 07-11-97*	Surface Elevation: *377.00 feet msl*
Completed at *1535 on 07-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				-	-	-			
				BG	BG	0		Clay, silty, firm, moist, yellow brown (10YR5/4), lt brownish gray (10YR6/2) mottles	366
			75.0			0			
				BG	232	0			
15								T.D. = 15.0 ft	
20									
25									
30									
35									
40									

Boring 400-033

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-40510000 E, -13850000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/B. Bergeron*
Started at *0940 on 07-11-97*	Surface Elevation: *377.50 feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *39.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	-			
				BG	50	0		Clay, silty, stiff to firm, moist, **yellow** brown **(10YR5/6)**, lt gray **(10YR7/1)** mottles, black **(10YR2/1)** mottles last 1 ft	368.5
			75.0			0			
				BG	125	0			
15						0		**No Recovery**	362.5
20									
25									
30									
35									
40								TR. = 39.0 ft	

Boring 400-064

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-40510000 E, -15380000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0700 on 07-16-97*	Surface Elevation: *378.00 feet msl*
Completed at *1350 on 07-16-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibraprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
				BG	BG	0			369
10				BG	BG	0		Clay, silty, tr fn to v fn sand (1-10%), soft, v moist to saturated, reddish brown (5YR5/4), small lt bluish gray (8/1) mottles	
			-	BG	BG	0			
				BG	BG	0			
				BG	BG	0			365
15								T.D. = 13.0 ft	
20									
25									
30									
35									
40									

Boring 400-065

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4054.1000 E, -1616.1600 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1320 on 9/5/97*	Surface Elevation: *378.27 feet msl*
Completed at *1210 on 9/6/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5			-	8	BG	0			
10			100	1	BG	0		Clay, silty; brw (7.5YR5/3), some (21-35%) lt bkeish gray (7/1), firm, moist.	369.8
								T.D.= 12.5 ft	365.8
15									
20									
25									
30									
35									
40									

Boring 400-066

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4053.0000 E, -1650.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0840 on 09-03-97*	Surface Elevation: *379.00 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				1	BG	0			
								Clay, silty, moist, stiff, lt blueish gray (8/1) and *strong* brw (7.5YR5/8)	366
15			-	BG	BG	0			
								T.D.= 17.0 ft	362
20									
25									
30									
35									
40									

Boring **400-067**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4083.0000 E, -1649.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0925 on 07-26-97*	Surface Elevation: *379.00 feet msl*
Completed at *1350 on 07-26-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
									371
						0		Clay, silty, moist. firm, lt brown (7.5YR6/3), tr (1-10%) lt blueish gray (8/1)	
10			75.0	BG	5	0			
						0			
						4.5			367
								T.D. = 12.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-068

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1660.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1050 on 09-02-97*	Surface Elevation: *378.50 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				18	134	0.7			
								Silt: clay; stiff, moist, brw (10YR5/3), ylw (10YR7/8), and lt gray (5Y7/1), tr v dk brw specks (10YR2/2)	365.5
15			-	5	158	9.0			
								T.D.= 17.0 ft	361.5
20									
25									
30									
35									
40									

Boring 400-069

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4031.0000 E, -1705.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 09-02-97*	Surface Elevation: *378.00 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	He	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				52	210	0			
									365
						4		Silt; clay; soft, moist, brw (10YR5/3) with some (12-35%) lt gray (2.5YR7/1)	
15			-	3	191	3.4			
						1.9			
									361
								T.D.= 17.0 ft	
20									
25									
30									
35									
40									

Boring **400-070**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1818.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 10-02-97*	Surface Elevation: *379.50 feet msl*
Completed at *1420 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *18.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				60	72	0			
15			100	3	70	18		Silt and clay, brown (7.5YR5/4), (50%) light blueish gray (7/1), firm, moist	365.5
								T.D.= 18.0	361.5
20									
25									
30									
35									
40									

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Boring 400–071

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4185.0000 E, –1782.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1100 on 10–01–97*	Surface Elevation: *379.00 feet msl*
Completed at *1415 on 10–02–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
5									
10		◢		BG	BG	1.8 0			
15								T.D.= 15.0	
20									
25									
30									
35									
40									

Boring 400-072

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4317.0000 E, -1784.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1400 on 09-25-97*	Surface Elevation: *379.00 feet msl*
Completed at *1600 on 09-29-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				BG	58	0			
								Clay, silty; light brownish gray (10YR6/2), gray (10YR6/1), soft, moist	366
						2.4			
15			100	BG	BG	5.5			
						5.2			
								T.D.= 17.0 ft	362
20									
25									
30									
35									
40									

Boring 400-073

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4396.0000 E, -1789.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle and S. Parker*
Started at *0930 on 9/10/97*	Surface Elevation: *378 feet msl*
Completed at *1510 on 9/10/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

TH FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				56	105	83			
								Silt, clayey; tr gravel, poorly sorted, rnded (1-10%); firm, moist to saturated, pale brw (10YR6/2), some (21-35%) lt gray (10YR7/1)	368
15			100	BG	157	74			
								T.D.= 17.0 ft	361
20									
25									
30									
35									
40									

Boring 400-074

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4436.0000 E, -1832.0000 N*
Location: *Paducah, KY*	Geologist: *B. Bergeron*
Started at *1525 on 10-16-97*	Surface Elevation: *378.00 feet msl*
Completed at *1035 on 10-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *18.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	OG GRAPH	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				-	-	0			
						0			
						0			
15			100	BG	4	0		Silt (65%), Clay (30%), Sand (5%); (10YR5/8) yellowish brown, (10YR7/1) mottled light gray	364
						0			
						0			
								T.D.= 18.0	360
20									
25									
30									
35									
40									

Boring 400-076

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4465.0000 E, -1471.0000 N*
Location: *Paducah, KY*	Geologist: *B. Bergeron*
Started at *1015 on 10-16-97*	Surface Elevation: *375.50 feet msl*
Completed at *1400 on 10-16-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *18.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE		RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
						0		Clay (50%).Silt (35%), Sand (10%), Gravel (5%); (10YR6/8)brown yellow, (10YR7/1) mottled light gray	361.5
15			95	BG	16	0			
						0			357.5
								T.D.= 18.0	
20									
25									
30									
35									
40									

Boring 400-077

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4466.0000 E, -1317.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1020 on 10-08-97*	Surface Elevation: *374.50 feet msl*
Completed at *1430 on 10-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10			-	-	-	-		*Silt* & Clay; (10YR5/6) yel brn, (10YR7/1) lt gry	364.5
								T.D.= 14.0	360.5
15									
20									
25									
30									
35									
40									

Boring 400-080

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4272.0000 E, -1189.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 08-20-97*	Surface Elevation: *379.00 feet msl*
Completed at *1430 on 08-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0			
5						0			374
						0		Sand, silty, fn to crs grn; tr gravel (1-10%); loose, poorly sorted, saturated, red (10R4/6)	
			75.0	BG	BG	0			372
						0		Clay, silty, stiff, moist, ylw (10YR8/8) to reddish ylw (7.5YR7/6) to lt blueish gray (7/1)	
						0			370
10								T.D.= 9.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-081

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4208.0000 E, -1189.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on 08-25-97*	Surface Elevation: *379.00 feet msl*
Completed at *1030 on 08-28-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

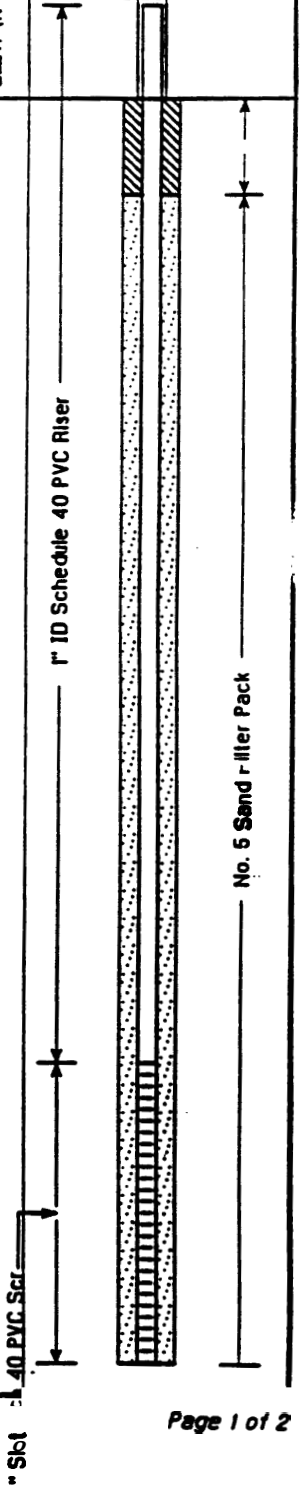
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	4			
			-	BG	BG	24 19 24 0		Clay, silty; tr gravel (limestone. chert, sandstone), ang, v poorly sorted (1-10%); tr sand; stiff to soft, moist to v moist, brw (7.5YR5/3) and gray (7.5YR6/1)	373
10								T.D.= 10.0 ft	369
15									
20									
25									
30									
35									
40									

Piezometer 400-083

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1384.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.50 feet msl*
Started at *1300 on 08-13-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.5 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *30.5 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				2	94	0		No Recovery	
5			100.0	BG	BG	0		Silt (50%): clay (50%): firm, moist, lt blueish gray (7/1)to bm (10YR5/3)	371
								No Recovery	367
10									
15									
20									
25									
30									
35									
40									

WELL DIAGRAM



Piezometer **400-083**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1384.0000 N*
Location: *Paducah, KY*	Surface Elevation: *375.50 feet msl*
Started at *1300 on 08-13-97*	TOC Elevation: *NA feet msl*
Completed at *1500 on 09-11-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *41.5 feet*
Geologist: *D. Doyle/B. Bergeron*	Well Screen: *30.5 to 40 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	THIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
								T.D.= 41.5 ft		1" ID Schedule 40 PVC Sump
45										
50										
55										
60										
65										
70										
75										
80										

Boring 400-084

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4476.0000 E, -1509.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1045 on 07-30-97*	Surface Elevation: *376.0 feet msl*
Completed at *1530 on 07-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				8	BG	0			
10								Clay, silty; tr fn sand (1-10%); v moist. soft, brown (10YR5/3), lt blueish gray (7/1) mottles	366
				BG	BG	0			
								T.D.= 14.0	362
15									
20									
25									
30									
35									
40									

Boring 400-085

Project: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4404.0000 E, -1633.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0810 on* 08-09-97	Surface Elevation: *378.50 feet msl*
Completed at *1430 on 08-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				BG	BG	0			
						0			165
15			-	BG	BG	0		Silt and clay; tr sand, fn grn (1-10%); stiff, moist, gray (7.5YR5/1) mixed with brown (7.5YR5/3)	
						0			
						0			
								T.D.= 17.5	161
20									
25									
30									
35									
40									

Boring 400-087

Project: *Paducah Gaseous Diffusion Plant Wlag 6 RI*	Coordinates: *-4419.0000 E, -1742.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1220 on 08-18-97*	Surface Elevation: *377.00 feet msl*
Completed at *1605 on 08-49-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				2	BG	0			
						200			373
5						130		Clay, silty; tr iron (1-10%); moist, soft, lt gray (10YR7/2)	
			75.0	BG	BG	140			
						110			
									369
								T.D.= 8.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-088

Project: *Paducah Gaseous Diffusion Plant Waq 6 RI*	Coordinates: *-4382.0000 E, -1742.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1430 on 08-8-97*	Surface Elevation: *379.00 feet msl*
Completed at *1605 on 08-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	0			
						2100		Clay, silty, soft, moist, gray (2.5Y6/1) with tr (1-10%) red (2.5YR5/8) near bottom	373
						40			
			75.0	BG	BG	170			
						30			
10								T.D.= 10.0	369
15									
20									
25									
30									
35									
40									

Boring 400-089

Prom: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4254.0000 E, -1743.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1100 on M3 - 97*	Surface Elevation: *3 7 m feet msl*
Completed at *1530 on M3 - 97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
mpany: *Alliance*	

	SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	(FID) (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	94	0			
						7		Clayey silt. bluish gray (6/1), grading to grayish brown (2.5Y5/2), soft, very moist-wet	373.5
			100%	BG	BG	60			
						no			
10						no			369.5
								T.D.= 10.0	

Boring 400-09

Project: *Paducah Gaseous Diffusion Rant Wlag 6 RI*
Location: *Paducah, KY*
Started at *0845 on 07-28-97*
Drilling Company: *Alliance*

Coordinates: *-4054.0000 E -1728.0000 N*
Geologist: *D. Doyle*
surface Elevation: *379.00 feet msl*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				8	160	0			
						17.5		Clay, silty, firm, moist, brown (7.5YR5/4)	37
10			100.0	8	195	35.5		Silt (50%); clay (50%); firm v moist, brown (7.5YR5/4) and lt greenish gray (7/1)	369.5
						12.2			
						0.0		T.D. = 12.0 ft	367
15									
20									
25									
30									
35									
40									

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Boring 400-092

Project: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4068.0000 E, -1871.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 9/8/97*	Surface Elevation: *379* feet *msl*
Completed at *1330 on 9/8/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *20.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	%	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15				BG	33	1.4			
			100	BG	BG	10		Clay, silty, brnnbh yln (10YR6/6) mottled w/ lt gray (2.5Y7/1), firm, moist.	363
20								T.D. = 20.0 ft	359
25									
30									
35									
40									

Boring **400-094**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4216.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 09-22-97*	Surface Elevation: *378.50 feet msl*
Completed at *1045 on 09-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	183			
			100	-	-	0		Clay, silty; brown (10YR5/3 w/lit), (11-20%)light grey (10YR7/1) firm and moist	
15								T.D.= 15.5	363
20									
25									
30									
35									
40									

Boring 400-095

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4039.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1000 on 08-21-97*	Surface Elevation: *376.00 feet msl*
Completed at *1500 on 08-21-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				49	65	0			
						0			368
						0		Clay, silty, sl moist, firm, brw (7.5YR5/4) with some (11-29%) lt blueish gray (7/1)	
10			87.5	5	5	0			
						0			
						0			364
								T.D.= 12.0	
15									
20									
25									
30									
35									
40									

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Boring 400-098

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1460.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1337 on 07-12-97*	Surface Elevation: *379.00 feet msl*
Completed at *1130 on 11-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Recovery	
			0	-	-	-			
5			98	BG	10	0		Silt, slighty Clayey; (10YR5/6) yel brn, (10YR6/2) mtld lt brn	
10			95	BG	4	0			
				BG	BG	0		Same as above, but w/ tr chert Gravel, more Clayey toward 15-16	
			100	BG	BG	0			
			95						
15						0			
			0.5	BG	8	0		Gravelly Sand; med/fn grn quartz; chert ang/subang (Max 20MM); (10YR5/8) yel brn, (10YR6/2) mtld lt brn gry	363
20						0			
			93	BG	BG	0		Silt & Clay, w/ Sand & tr Gravel; semi-mst, stf; (10YR6/8) brn yel, (7.5YR6/1) gry	359
25						0		Same as above, but (7.5YR5/6) strg brn, (10YR6/1) mtld gry	
			08	BG	BG	0			
						0		Gravelly Sand, w/ Silt & Clay; fn/med grn; subrnd/subang chert (Max 20 MM); (7.5YR5/6) strg brn, (10YR7/2) mtld lt gry	352.2
						0		Silt & Clay, w/ tr Sand & Gravel; (10YR5/6) yel brn, (10YR7/1) mtld lt gry	351
30			93	BG	48	0		Silty Sand, w/ Clay; med/crs grn; (7.5YR5/8)strg brn, (7.5YR7/1)lt gry	349.9
						0			
35			100	BG	3	0			
						0		Gravel & Sand, w/ Silt & Clay; subrnd/subang chert (Max 30MM); med/crs grn quartz; (7.5YR5/8) strg brn, (7.5YR6/1) gry	344
			100	BG	BG	0			
						0		Clay:Silt,w/Sand,tr Gravel;fn grn qutz; (7.5YR4/6)strg brn, (7.5YR6/1)gy	340.8
40						0		Gravelly Sand,w/Silt,Clay;fn/med grn qutz;rnd/suba cht/qutz; (10YR7/4)v p brn, (10YR5/8) mtld yel brn	339.9
						0			339

Boring 400-098

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1460.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1337 on 07-12-97*	Surface Elevation: *379.00 feet msl*
Completed at *1130 on 11-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	70	0 0 0 0		Silt & Clay, w/ Sand: (7.5YR5/8) micaceous strg brn, (7.5YR6/1)laminae gry	334
45								T.D.= 44.0	
50									
55									
60									
65									
70									
75									
80									

Boring 400-099

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4019.000 E, -1520.000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0945 on 07-14-97*	Surface Elevation: *379.00 feet msl*
Completed at *1545 on 07-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	
5									
				-	-	-			
10			87.5	BG	BG	0		Clay, silty, tr fn to v fn sand (1-10%), firm, moist, (5YR5/4), small lt blueish gray (8/1) mottles	370
				BG	BG	0			
				BG	BG	0			
				BG	BG	0			
								T.D. = 13.0 ft	368
15									
20									
25									
30									
35									
40									

Boring 400-100

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4019.0000 E, -1536.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1400 on 07-14-97*	Surface Elevation: *377.50 feet msl*
Completed at *0750 on 07-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	-			
								T.D. = *8.0* ft	369.5
10									
15									
20									
25									
30									
35									
40									

Boring 400–101

Protect *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4020.0000 E, -1649.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at 1315 on 9/4/97	Surface Elevation: *378 feet msl*
Completed at *1540 on 9/4/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	0			
								Silt; clay; firm, moist, brw (7.5YR5/4), somes It blueish gray 7/1	371
10			100.0	BG	BG	0			
								T.D.= 110	367
15									
20									
25									
30									
35									
40									

Boring **400-103**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4064.0000 E, -1763.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on 08-18-97*	Surface Elevation: *379.00 feet msl*
Completed at *1605 on 08-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	0			
10			75.0	BG	BG	170 95 94 45		Clay, silty, soft, moist. brw (7.5YR5/4) with some lt blueish gray (7/1)	-370
								T.D.= 13.0	-366
15									
20									
25									
30									
35									
40									

Boring **400-104**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4110.0000 E, -1754.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1415 on 09-03-97*	Surface Elevation: *379.00 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *19.0 feet*

DEPTH	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				10	20	16			
15			-	2	40	160 103 268		Silt; clay; v moist, firm; reddish ylw (7.5YR6/6) and lt blueish gray (8/1)	364
								T.D.= 10.0	360
20									
25									
30									
35									
40									

Boring 400-105

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4163.0000 E, -1890.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0730 on 08-15-97*	Surface Elevation: *378.00 feet msl*
Completed at *1100 on 08-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *11.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				4	BG	0			
						0		Silt: clay; tr sand, fn grn; stiff, moist, red (2.5YR4/6), lt brw (7.2YR6/3), lt blueish gray (7/1) (appears to be fill)	371
			100.0	2	BG	0			
10						0			
						0		T.D.= 11.0	367
15									
20									
25									
30									
35									
40									

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Boring 400-106

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4330.0000 E, -1774.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1000 on 09-29-97*	Surface Elevation: *379.00 feet msl*
Completed at *1105 on 09-29-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Viberprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				BG	22	0			
						24		Silt and clay; gray (10YR6/1), yellowish brown (10YR5/6), soft to firm, moist-very moist	368
15			90	BG	BG	5.5			
						5.2			362
								T.D.= 17.0	
20									
25									
30									
35									
40									

Boring 400–107

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–44410000 E, –1580.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0805 on 08–14–97*	Surface Elevation: *377.00 feet msl*
Completed at *1135 on 08–15–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
5				BG	41	0			
			87.5	4	BG	0		Silt, clayey, moist, soft, grayish brw (10YR5/2) to lt gay (10YR7/1)	371
10								T.D.= 10.0	367
15									
20									
25									
30									
35									
40									

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Boring 400-108

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1360.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1112 on 07-25-97*	Surface Elevation: *375.50 feet msl*
Completed at *1315 on 07-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
									371.5
5			-	20	BG	0.0		Clay, silty, firm, moist, tr organics (wood), lt blueish gray (8/1) with lt reddish brown (5YR5/4)	
									367.5
								T.D. = 8.0 ft	
10									
15									
20									
25									
30									
35									
40									

Boring **400-109**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1204.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1310 on 07-17-97*	Surface Elevation: *376.00 feet msl*
Completed at *0927 on 07-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
10			1100.0	BG	10	0 0 0 0		Clay, silty, tr fn to v fn sand (1-10%), med soft, v moist, reddish brown (5YR5/4), small lt blueish gray (8/10) (21-35%) mottles	367
								T.D.= 13.0 ft	363
15									
20									
25									
30									
35									
40									

Boring 400-111

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4408.0000 E, -1317.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1210 on 07-24-97*	Surface Elevation: *376.00 feet msl*
Completed at *1425 on 07-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0			
5									
				-	-	-			
10									366
						4.8		Clay. silty, firm, moist, reddish brown (5YR5/4), small lt blueish gray (7/1) mottles (21-35%)	
			100.0	BG	2	5.7			
						4.5			
						5.6			362
15								T.D. = 14.0 ft	
20									
25									
30									
35									
40									

Boring 400-113

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4444.0000 E, -1723.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0920 on 07-3t-97*	*Surface* Elevation: *377.50 feet msl*
Completed at *1120 on 07-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *17.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				6	BG	0			
			-	8	BG	0		Clay, silty; tr fn sand (1-10%);moist, firm, brown (10YR5/3), It blueish gray (7/1) mottles	364.5
15									
								T.D.= 17.0	360.5
20									
25									
30									
35									
40									

Boring **400–114**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4389.0000 E, –1818.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0945 on 09–30–97*	Surface Elevation: *377.50 feet msl*
Completed at *1045 on 09–30–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD, Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
5				BG	35	0			
			100%	BG	35	0		Silt and clay, brown (10YR5/3), (21–35%) light bluish gray (7/1), firm and moist	371.5
10								No Description	367.5
				BG	1	0			
15								T.D.= 15.0	
20									
25									
30									
35									
40									

Boring 400–115

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4345.0000 E, –1870.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0850 on 9/9/97*	Surface Elevation: *378 feet msl*
Completed at *1600 on 9/9/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *19.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
5									
10									
				BG	50	1.3			
15			100.0	BG	BG	0		Clay, silty; tr sand, crs grn (1–10%); tr gravel, ang to rnded; poorly sorted, firm, moist, strong brw (7.5YR5/6), some (21–35%) lt blueish gray (7/1)	364
								No lithology description available	360
20								T.O. = 19.0 ft	359
25									
30									
35									
40									

Boring 400-116

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4203.0000 E, -1796.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0940 on 10-01-97*	Surface Elevation: *379.00 feet msl*
Completed at *1415 on 10-02-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.0 feet*

DEPTH FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	63	3.8			
								Silt and clay, brown (7.5YR5/4), light blueish gray (8/1), with trace (1-10%) red (2.5YR5/8)	371
10			100	BG	BG	7.4			
								T.D.= 12.0	367
15									
20									
25									
30									
35									
40									

Boring 40[illegible]-117

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4116.0[illegible]0 E, -1794.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Stated at *1320 on 10-07-97*	Surface Elevation: *[illegible]2.00 feet msl*
Completed at *1500 on 10-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				70	33	0			
						84			372
						32		Silty clay, pale brown (10YR5/3), (20%) light gray (10YR7/1), moist stiff	
			90%	20	4	0			
10						0			
								T.D.= 110	368
15									
20									
25									
30									
35									
40									

Boring 400-119

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4466.0000 E, -1245.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0925 on 10-08-97*	Surface Elevation: *374.00 feet msl*
Completed at *1430 on 10-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10			100	BG	BG	0 0 0 0		Silt & Clay; (10Y5/3) brn, (10YR6/1) gray, (10YR3/2)very dark gry brn	365
								T.D.= 13.0	361
15									
20									
25									
30									
35									
40									

Boring 400-120

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4408.0000 E, -1228.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 07-24-97*	Surface Elevation: *377.00 feet msl*
Completed at *1425 on 07-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *11.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10		◢		-	-	-			
								T.D. = 11.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-122

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4311.0000 E, -1189.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on* 08-23-97	Surface Elevation: *379.00 feet msl*
Completed at *1445 on 08-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5		■		BG	50	0			
								T.D.= *7.0*	
10									
15									
20									
25									
30									
35									
40									

Boring 400-123

Project: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4190.0000 E, -1093.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1420 on 08-07-97*	Surface Elevation: *375.50 feet msl*
Completed at *1510 on 08-07-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *3.0 feet*

DEPTH IN FEET	LIT C SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		◢		BG	BG	0			
								T.D.= 3.0	
5									
10									
15									
20									
25									
30									
35									
40									

Boring 400-124

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4173.0000 E, -1189.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on 09-25-97*	Surface Elevation: *379.00 feet msl*
Completed at *1045 on 09-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprbe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	42	5.5			
5									
10									368
			100	BG	BG	0		Clay, silty, light brown (7.5YR6/4), (21-35%)light grey (7.5YR7/1) moist, firm	
15								T.D.= 15.0	364
20									
25									
30									
35									
40									

Boring 400-126

Project: *Paducah Gaseous Diffusion Plant Wag 6 R I*	Coordinates: *-4020.0000 E, -1251.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1345 on 09-16-97*	*Surface* Elevation: *376.50 feet msl*
Completed at *1405 on 09-18-97*	Depth to Groundwater: *NA feet bgs* Measured *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (t-msl)
5									
10				BG	57	12 5 2.5		T.D.= 10.0	
15									
20									
25									
30									
35									
40									

Boring 400-129

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4125.0000 E, -1311.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1330 on 08-27-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 08-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *6.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5		◢		5	330	4.7			
								T.D.= *6.0*	
10									
15									
20									
25									
30									
35									
40									

Boring 400-130

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4018.0000 E, -1393.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0729 on 07-11-97*	Surface Elevation: *378.00 feet msl*
Completed at *1015 on 07-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft.-msl)
5									
10				-	-	-			
								T.D. = 13.0 ft	365
15									
20									
25									
30									
35									
40									

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Boring 400-131

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072.0000 E, -1411.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0940 on 07-24-97*	Surface Elevation: *377.50 feet msl*
Completed at *1225 on 07-24-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
ompany: *Alliance*	Total Depth: *6.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
								1.0. = 6.5 ft	
10									
15									
20									
25									
30									
35									
40									

Boring 400-132

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1500.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0800 on 07-14-97*	Surface Elevation: *378.50 feet msl*
Completed at *1545 on 07-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				-	-	-			
									364.5
15								TD. = 14.0 ft	
20									
25									
30									
35									
40									

Boring 400-134

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4030.0000 E, -1617.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 9/5/97*	Surface Elevation: *379 feet msl*
Completed at *1210 on 9/6/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *16.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				15	46	0			
			100	BG	22	51		Silt and clay, brw (7.5YR5/8), some (21-35%) lt blueish gray (7/1) and tr (0-10%)black, firm, sl moist	367
15								T.D.= 16.0	363
20									
25									
30									
35									
40									

Boring 400-137

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4053.0000 E -1694.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0940 on 09-02-97*	Surface Elevation: *379.00 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *5.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	129	0			
5								T.D.= 5.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-138

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4029.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0945 on 9/4/97*	Surface Elevation: *379 feet msl*
Completed at *1540 on 9/4/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				6	BG	25			
								T.D.= 13.0	
15									
20									
25									
30									
35									
40									

Boring 400-139

Project: *Paducah Gaseous Diffusion Plant Waste RI*	Coordinates: *-4029.0000 E, -1871.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1400 on 9/8/97*	Surface Elevation: *379.5 feet msl*
Completed at *1505 on 9/8/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *16.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15		◢		BG	37	4.5			
								T.D.= 16.0	
20									
25									
30									
35									
40									

Boring 400-140

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4209.0000 E, -1774.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1005 on 9/6/97*	Surface Elevation: *379 feet msl*
Completed at *1210 on 9/6/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10		◢		BG	64	0			
								T.D.= 110	
15									
20									
25									
30									
35									
40									

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Boring 400-141

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4241.0000 E, -1794.0000 N*
Location: *Paducah, KY*	Geologist: *D.Doyle/J.ALBERT*
Started at *1330 on 09-14-97*	Surface Elevation: *379.00 feet msl*
Completed at *0950 on 11-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			88	BG	BG	0		GRAVEL 70%SUBR-SUBA,SAND (20%)SILT (10%),YLSHRED (5YR4/6)MOIST DENSE	
						0			375
5			63	BG	BG	2		SILT,GRN GRY (5GY5/1)MOIST FIRM	
						0			
						0		SILT,SL CLAYEY LT BRNSH GRY (10YR6/2)MOLT YLSH BRN (10YR5/3)MOIST STIFF	
10			73	BG	87	4			
						0		SAME AS ABOVE W/BLACK MINERALIZTION FROM (15.0-16.5)	
			95	BG	117	0			
15						0			
			93	BG	02	0			
20						1		CLAY,SILTY GRY (10YR6/1)MOTL YLSH BRN (10YR5/3)W/TRS OF FINE SAND	359
			03	03	14	0			
						0			355
25			88	BG	34	0		SILT,CLAYEY W/10%FINE SAND:TRS GRAVEL,YLSH BRN/LT GRY MOIST STIFF	
						0			351
						0		SILTY GRAVEL W/CLAY	349.5
30			100	BG	BG	0		SILTY SAND,POORLY SORTEO LT YLSH BRN TO STRONG BRN MOIST DENSE	
			-	BG	BG	0			347
			95	04	BG	0		GRAVELLY SAND SUBA-SUBR W/TRC SILT STRONG BRN,MOIST	
35						0			343
			85	BG	55	0		SILTY SAND	
40						0			

Boring 400-141

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4241.0000 E, -1794.0000 N*
Location: *Paducah, KY*	Geologist: *D.Doyle/J.ALBERT*
Started at *1330 on 09-14-97*	Surface Elevation: *379.00 feet msl*
Completed at *0950 on 11-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	LITHOLOGIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	82	0		SILTY SAND	
						0			
						0			
						0			
						0		CLAYEY SAND (M TO F)WELL SORTED T.D.=48.0	335
45			88	08	30	0			
						0			
						0			331
50									
55									
60									
65									
70									
75									
80									

Boring 400-142

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4323.0000 E, -1743.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0840 on 10-03-97*	Surface Elevation: *379.50 feet msl*
Completed at *1530 on 10-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *110 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	366	1600			
			100%	BG	2	255		Clay and silt, yellowish brown (10YR5/8), light gray (2.5Y7/1) firm and moist	372.5
10								T.D.= 110	368.5
15									
20									
25									
30									
35									
40									

Boring 400-143

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4365.0000 E, -1743.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1400 on 09-30-97*	Surface Elevation: *379.50 feet msl*
Completed at *1500 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5		◢		BG	9	12.4			
								T.D.= 7.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-144

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4357.0000 E, -1789.0000 N*
Location: *Paducah, KY*	Geologist: *S. Parker*
Started at *1335 on 9/10/97*	Surface Elevation: *379 feet msl*
Completed at *1510 on 9/10/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
		◢		54	73	39.5			
15								TD. = 14.0 ft	
20									
25									
30									
35									
40									

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Boring 400-145

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4419.0000 E, -1722.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0840 on 10-18-97*	Surface Elevation: *377.50 feet msl*
Completed at *1100 on 10-21-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			55	BG	10	0 0 -		Silt S Clay; (10YR5/6) yel brn, (10YR6/4) mottled lt yel brn	
									373.5
5			75	BG	BG	300 30 - 82		Silt; (10Y6/1) grn gry	
						7			369.5
10			90	BG	70	54 76 - 65		Silt & Clay; (10YR5/4) yel brn to (10Y6/1) grn gry, back to (10YR5/4)	
			80	BG	70	130 50 60 - 90		Silt S Clay; (10YR6/4) lt yel brn, (10YR7/1) mottled lt gry	
15									
			90	BG	BG	59 90 10 - 40		Silt S Clay; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	
20						235		Silty Sand	357.5
			80	BG	BG	720 150 - 130		Gravelly Sand	358
								Silt (70%) 6 Sand (30%)	355.3 354.9 354.2
						36		Silty Sand; (10YR7/3)v. pale brn to (10YR5/8)yel brn to (10YR7/1)lt gry	353.5
25			00	BG	BG	25 400 - 730 142		Silty Sand; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	
30			00	BG	BG	35 3 - 275			
								Sandy Gravel; (10YR5/6) yel brn	345.5
35			80	BG	BG	140 m -			
								Gravelly Sand; (10YR6/8) brn yel	341.5
			90	BG	BG	20 45 52 - 8		Sandy Gravel. with a little Clay; (10YR5/6) yel bm, (10YR6/1) gry	338.8
40									337.5

Boring 400-145

Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0840 on 10-18-97*	Surface Elevation: *377.50 feet msl*
Completed at *1100 on 10-21-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X	▮	90	BG	BG	0 0 - 0 0		Silt (40%), Clay (30%), & Sand (30%); (10YR6/8)brn yel, (10YR8/3)p. brn	
45								No Recovwy	
								T.D.= 48.0	
50									
55									
60									
65									
70									
75									
80									

Boring 400-146

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4474.0000 E, -1767.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/B. Bergeron*
Started at *1052 on 08-14-97*	Surface Elevation: *378.5 feet msl*
Completed at *1130 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *19.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	r-ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
				5	BG	7			
15						45		Silt (60%), Clay (35%), with trace of Sand' (10YR6/8) brown yellow, & (10YR7/1) mottled light grey	363.5
			100	BG	6	37			
						37		T.D.= 10.0	359.5
20									
25									
30									
35									
40									

Boring **400–147**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4474.0000 E, –1605.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0820 on 08–04–97*	Surface Elevation: *377.00 feet msl*
Completed at *1500 on 08–04–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				–	–	–			
								T.D. = 12.0	
15									
20									
25									
30									
35									
40									

Boring 400-148

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4467.0000 E, -1408.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1320 on 10-08-97*	Surface Elevation: *375.00 feet msl*
Completed at *1430 on 10-08-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *13.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5			-	-	-	-			
10			100	-	-	0 0 - 0 0		Silt 6 Clay; (10YR5/6) yel brn. (10YR7/1) lt gry	366
								T.D.= 13.0	362
15									
20									
25									
30									
35									
40									

Boring 400-149

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4445.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0840 on 07-17-97*	Surface Elevation: *375.50 feet msl*
Completed at *0927 on 07-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	-			
10								T.O. = 10.0 ft	365.5
15									
20									
25									
30									
35									
40									

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Boring **400-153**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4144.0000 E, -1191.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1215 on 08-19-97*	Surface Elevation: *379.00 feet msl*
Completed at *0800 on 08-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *25.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								No Recovery	
5									
10									
15				BG	BG	0			
20									
			100.0	BG	BG	0		Clay, sandy; sand, clayey, fn to med grn, ang, poorly sorted; silt (21-35%); firm, v moist, red (2.5YR5/6) to reddish ylw (7.5YR6/6) to lt blueish gray (7/1)	358
25								T.O. = 25.0 ft	354
30									
35									
40									

Boring 400-155

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4385.0000 E, -1276.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0922 on 10-09-97*	Surface Elevation: *377.00 feet msl*
Completed at *1200 on 10-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									373
5			70	-	-	13.7 11.3 - 22.8		Silt & Clay; (10YR7/1) lt gry, (10YR5/6) yel brn	
						0		T.D.= 8.0	369
10									
15									
20									
25									
30									
35									
40									

Boring 400-156

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1300.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0830 on 07-25-97*	Surface Elevation: *375.50 feet msl*
Completed at *1315 on 07-25-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *4.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
								T.D. = 4.0 ft	
5									
10									
15									
20									
25									
30									
35									
40									

Boring 400-157

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-44420000 E, -15230000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1055 on 08-11-97*	Surface Elevation: *377.50 feet msl*
Completed at *1130 on 08-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *6.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5		◢		-	-	0			
								T.D. = *6.0* ft	
10									
15									
20									
25									
30									
35									
40									

Boring 400-158

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1690.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0820 on 07-31-97*	Surface Elevation: *378.50 feet msl*
Completed at *1130 on 07-31-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *12.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				10	BG	0			
								T.D. = 12.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400–159

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4486.0000 E, -1740.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/B. Bergeron*
Started at *0850 on 08-08-97*	Surface Elevation: *378.00 feet msl*
Completed at *1130 on 10-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *18.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				-	-	-			
10									
15			80	BG	BG	73 21 27		Clay (65%), Silt (30%), Sand (5%); (10YR6/4) light yellowish brown, & (10YR6/6)Mottled brn yel (10YR7/1)Mottled Gray	364
								T.D. = 18.0	360
20									
25									
30									
35									
40									

Boring 400-160

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4356.0000 E, -1762.0000 N*
Location: *Paducah, KY*	Geologist: *S. Parker*
Started at *1000 on 9/11/97*	Surface Elevation: *379.00 feet msl*
Completed at *1050 on 9/11/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
		◢		BG	BG	-			
15								T.D.= 14.0	
20									
25									
30									
35									
40									

Boring 400-161

Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4237.0000 E, -1742.0000 N*
Location: *Paducah, KY*	Geologist: *S. Parker*
Started at *0800 on 9/11/97*	Surface Elevation: *379.50 feet msl*
Completed at *0930 on 9/11/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
		◢		BG	BG	0			
10								T.D. = 9.0 ft	
15									
20									
25									
30									
35									
40									

Boring **400-162**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4052.0000 E, -1670.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1045 on* 04-03-97	*surface* Elevation: *375.100 feet msl*
Completed at *1630 on 09-03-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
		◢		17	1	0			
								T.D. = *8.0* ft	
10									
15									
20									
25									
30									
35									
40									

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Boring 400-163

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4065.0000 E, -1794.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/B. Bergeron/J. Albert*
Started at *1020 on 08-15-97*	Surface Elevation: *379.00 feet msl*
Completed at *1445 on 12-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		Silt, with trace of Gravel; (2.5Y2.5/1) black	
			50	1	3	-		No descriptor	377
						22			375
5						5.9		Clay, with trace of Silt; (2.5Y5/4) light olive brown, (2GLEY5/1/5B) mottled bluish grey	373.5
			65	1	BG	187		Silt, with trace of clay; (10YR6/4) light yellowish brown, (10YR7/1) mottled light gray	371.5
				1	BG	45.5			371
						10			
						25			
10			85	BG	7	34			
						39			367.3
						12		Silt, with trace of Clay; (10YR6/1) gray, (10YR5/6) mottled yellowish brown, (1GLEY5/1/5G) greenish gray staining	367
			75	1	19	20			
						12			363.5
						77		Silt; (10YR6/1) gray, (10YR5/6) mottled yellowish brown	363
			70	BG	11	91			
						18		No descriptor	359.7
20									
						475		Clay, with a little Sand; (10YR6/1) gry, (10YR6/8) mottled brn yel	358
			100	BG	20	39			
						39		Sand 6 Gravel, w/ Silt 6 Clay; fn/crs grn; subrnd/subang; prly sorted; (10YR5/6) yel bm	355
25			95	BG	IBG	80			
						-		Sand, tr Silt 6 Gravel; mst/dense; (7.5YR5/8) strg brn	352.8
						220			
						247		Silt, w/ Clay, Sand 6 Gravel; (10YR6/2) lt brn gry	351
						78			
30			88	BG	IBG	658			
						-		Clay, w/ Silt & tr Sand; mst/stf; (7.5YR5/8) strg brn, (7.5YR7/1) lt gry	348.5
						792			
						515		Same as above, but tr Gravel; (10YR6/2) lt brn gry	
						79			
			95	4	IBG	34			
35						-			
						62		Silty Gravel, w/ Sand; (7.5YR4/6) strg brn, (7.5YR6/1) mtld gry	344
						982			343
						7		Gravelly Sand, w/ Silt & Clay; prly sorted; mst/dense; (7.5YR5/8) strg brn, (7.5YR7/1) mtld lt gry	
			75	4	BG	301			
						-			
						88			
40						-			339

Boring 400-163

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4065.0000 E, -1794.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/B. Bergeron/J. Albert*
Started at *1020 on 08-15-97*	Surface Elevation: *379.00 feet msl*
Completed at *1445 on 12-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe/Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						36		Clay, w/ Silt, tr Sand & Gravel: (7.5YR6/1) gry	338
			50	8	BG	69		Sand 6 Gravel; (7.5YR5/8) strg brn	
45			75	BG	BG	63		Sand, w/ Silt & tr Gravel; (7.5YR5/8) strg brn, (7.5YR6/4) lt brn	335
						98			
						210		Clay, w/ Silt: mst/stf; (7.5YR5/4) brn	332.2
								No Recovery	331
50								T.D.= 48.0	
55									
60									
65									
70									
75									
80									

Boring **400-165**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4531.0000 E, -1163.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1345 on 07-21-97*	Surface Elevation: *376.0 feet msl*
Completed at *1500 on 07-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	-			
10								TD. = 10.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-167

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4122.0000 E, -1149.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1100 on 08-22-97*	Surface Elevation: *377.50 feet msl*
Completed at *1145 on 08-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				BG	BG	0			
10								T.D. = 10.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-169

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4375.0000 E, -1352.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1325 on 08-11-97*	Surface Elevation: *378.00 feet msl*
Completed at *1545 on 08-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									375
5			75	1	5	0 3850 0		Clay, silty; tr organics (1-10%); soft, moist, lt blueish gray (6/1)	371
10				4	BG	0		No recovery	368
			87.5	-	-	14.5 7 11		Silt and clay, soft, moist, brw (7.5YR5/3)	364
15								T.D. = 14.0 ft	
20									
25									
30									
35									
40									

Boring **400–170**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4550.0000 E, -1365.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0925 on 07-22-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 07-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				-	-	-			
10								T.D. = 10.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-171

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4515.0000 E, -1571.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1420 on 07-30-97*	*surface* Elevation: *377.50 feet msl*
Completed at *1530 on 07-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
		◢		BG	BG	0			
								T.D. = *8.0* ft	
10									
15									
20									
25									
30									
35									
40									

Boring 400-172

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4367.0000 E, -1575.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *1000 on 10-17-97*	Surface Elevation: *379.00 feet msl*
Completed at *1310 on 10-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *10.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
						2300		Silt; (10Y6/1) greenish gry	373
			70	-	-	4600 - 600			
10						358		T.D.= 10.0	369
15									
20									
25									
30									
35									
40									

Boring 400-173

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4056.0000 E, -1587.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1055 on 07-16-97*	Surface Elevation: *378.50 feet msl*
Completed at *1350 on 07-16-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10								T.D = 9.0	
15									
20									
25									
30									
35									
40									

Boring 400-176

Prom: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4054.0000 E, -1717.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on 07-28-97*	*Surface* Elevation: *379.00 feet msl*
Completed at *1500 on 07-28-97*	Depth to Groundwater: *NA feet bgs* Measured *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
		◢		-	-	22			
								T.D. = *8.0* ft	
10									
15									
20									
25									
30									
35									
40									

Boring 400-177

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4257.0000 E, -1775.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0845 on 9/6/97*	Surface Elevation: *379 feet msl*
Completed at *1210 on 9/6/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *14.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
		■		BG	23	5.3			
15								T.D.= 14.0	
20									
25									
30									
35									
40									

Boring 400-178

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4288.0000 E, -1887.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1320 on 9/9/07*	*surface* Elevation: *378* feet *msl*
Completed at *1600 on 9/9/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				35	BG	0			
								T.D. = 7.0 ft	
10									
15									
20									
25									
30									
35									
40									

Boring 400-181

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4428.0000 E, -1174.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1035 on 07-21-97*	Surface Elevation: *376.50 feet msl*
Completed at *1500 on 07-22-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *11.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	-			
								T.D. = 11.0 ft	
15									
20									
25									
30									
35									
40									

Boring 400-183

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4329.0000 E, -1189.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0940 on 08-23-97*	Surface Elevation: *379.00 feet msl*
Completed at *1445 on 08-23-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	0			
								T.D.= 7.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-186

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4164.0000 E, -1167.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0925 on* 08-22-07	Surface Elevation: *378.50 feet msl*
Completed at *1030 on 08-28-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Company: *Alliance*	Total Depth: *5.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5		■		BG	BG	0			
								T.D.= 5.5	
10									
15									
20									
25									
30									
35									
40									

Boring 400-187

Project: *Paducah Gaseous Diffusion Plant Waste RI*	Coordinates: *-4112.0000 E, -1261.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1020 on 08-27-97*	Surface Elevation: *379.00 feet msl*
Completed at *1500 on 08-27-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
				1	221	4.9			
								T.D.= *8.0*	
10									
15									
20									
25									
30									
35									
40									

Boring 400-188

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4426.0000 E, -1261.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1015 on 10-09-97*	Surface Elevation: *376.50 feet msl*
Completed at *1200 on 10-09-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *9.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5			-	2	15	7.5 5 - 33.8 25.7		Silt & Clay: (7/1) lt blu gry, (10YR5/4) yel brn	371.5
10								T.D.= 9.0	367.5
15									
20									
25									
30									
35									
40									

Boring 400-190

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4443.0000 E, -1445.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1025 on 08-04-97*	*surface* Elevation: *376.00 feet msl*
completed at *1500 on* 08-04-97	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet ms*
Drilling Company: *Alliance*	Total Depth: *5.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				-	-	-			
5								T.D.= 5.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-191

Project: *Paducah Gaseous Diffusion Plant Waste 6 RI*	Coordinates: *-4243.0000 E, -1756.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0935 on 9/6/97*	*surface* Elevation: *379 feet msl*
Completed at *1210 on 9/6/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *8.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
		◢		41	BG	0			
								T.D.= 8.0	
10									
15									
20									
25									
30									
35									
40									

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Boring 400-192

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4474.0000 E, -1790.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/J.ALBERT*
Started at *0600 on 10-02-97*	Surface Elevation: *378.50 feet msl*
Completed at *1130 on 11-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			-					NORECOVERY	
									374.5
5			93	03	BG	197 140 7 0		SILT,TRS CLAY,GRNISH GRY (10YR5/1)GRADING TO YEL BRN **(10YR5/4)THEN** MOTTLED W/YLSH BRN **(10YR5/3)MOIST** (NATURAL SOIL)	
10			90	BG	BG	0 0 0		SILT SL.CLAYEY **DK** YLSH BRN **(10YR4/6)MOTLED** LT BRNSH GRY **(10YR6/2)MOIST** STIFF	
15			100	BG	33	0 0 0 0		SAME AS ABOVE	
20			100	BG	20	0 0 0 0 0		SILT,CLAYEY GRY **(10YR6/1)MOTLED** YLSH BRN **(10YR4/6)LT** BRNSH GRY **(10YR5/6)** MOIST,STIFF W/TRS F. ROOTS (W/TRS F.SAND IN LOWER PORTION).	
25			93	BG	BG	0 0 0 0 0		SILT CLAYEY W30%F.SAND:TRS GRL,YLSHBRN **(10YR5/6)GRY (10YR6/1)**	
30			88	BG	BG	0 0 0 0		CLAY SILTY W/35%M-F SAND:TRS GRL (SANDY IN UPPER PORTION)STRONG BRN **(7.5YR5/6)MOTLD** LT GRY **(10YR7/1)MOIST** STIFF	354.5
35			88	BG	BG	10 0 0 0		SILT,CLAYEY **W/25%F.SD;10%SUBR-SUBAGL** GRAVEL ZONE (29.0-29.5)STRG **BRN (7/5YR5/8)MOTLD** GRY (7.5YR6/1)THEN YLSH BRN (10YR5/8)MOIST STIFF.	350.5
			95	BG	BG	1 0 - 0 0 0 0		SAND (50%)F TO C GRAVEL (40%)SUBR-SUBA SILT:CLAY (10%)YLSH BRN **(10TR5/6)TO** LT GRY **(10YR7/10)MOIST** DENSE SAND (40%)GRAVEL (40%)SUBR-SUBA 20%-SILT:CLAY STRG **BRN** 6 LT GRY	348
40						0 0		CLAY,SILTY,TRS F. **SAND DK** YLSH BRN W/LT GRY MOIST,STIFF	340.5

Boring 400–192

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4474.0000 E, –1790.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle/J.ALBERT*
Started at *0600 on 10–02–97*	Surface Elevation: *378.50 feet msl*
Completed at *1130 on 11–12–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
			83	BG	39	0 0 0 0		SAME AS ABOVE W/INCREASING SAND W/25% F. SAND LT GRY &YEL BRN STIFF 1	
45								SILT,SL.CLAYEY W/30% F–VF SANO PALE YEL MOIST AND FIRM	334.5
								T.D.= 48.0	330.5
50									
55									
60									
65									
70									
75									
80									

Boring 400-193

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4420.0000 E, -1797.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1100 on 09-30-97*	Surface Elevation: *377.50 feet msl*
Completed at *1530 on 09-30-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				BG	BG	79		T.D.= 7.0	
10									
15									
20									
25									
30									
35									
40									

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Boring 400-194

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4326.0000 E, -1819.0000 N*
Location: *Paducah, KY*	Geologist: *D.Doyle/J.ALBERT*
Started at *1105 on 11-15-97*	Surface Elevation: *378.50 feet msl*
Completed at *1545 on 11-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			95	BG	05	0 - 470	SANDY GRAVELSUBA TO ANGU 10%CLAY	
								374.5
5			100	BG	18	29 32 - 03 03 01	SILT W/TRS OF CLAY GRN GRY FIRM (NATURAL SOIL)	
10			100	03	99	05 - 09 01	SILT,TRS CLAY	
15			83	05	123	0 - 0 25		
20			93	BG	107	0 0 - 0 0	SILT W/CLAY STRONG BROWN (7.5YR5/3)	
25			83	03	119	0 11 - 0 09		
							CLAY W/ SILT GRADING TO SILTY SAND (55% FINE SAND)LT.GRY OK YLSHBRN	354.5
							GRAVELLY SAND, W/ SILT; SUBRND/SUBANG	353.3
30			95	BG	103	02 0 01 - 0 05		
							SAND (70%)SILT:CLAY GRAVEL YELSH BRN TO V.PAL.BRN	350.5
35			93	BG	111	03 01 - 0 0		
							SANDY GRAVEL SUBR TO SUBA SILT:CLAY (20%)	348.5
			90	03	139	0 0 0 - 0	CLAY,SILTY GRADING TO FINE SAND, W/40%SILT	345
							SAND M TO C TRS/SILT:GRL	342.5
40			75	BG	127	0 0 0 - 0	SANDY GRAVEL SILT:CLAY 25%	341.2
								338.5

Boring 400-194

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4326.0000 E, -1819.0000 N*
Location: *Paducah, KY*	Geologist: *D.Doyle/J.ALBERT*
Started at *1105 on 11-15-97*	Surface Elevation: *378.50 feet msl*
Completed at *1545 on 11-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC.*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X	X	90	327	BG	0 0 - 0 0		SILT,CLAYEY GRADING TO SILT SOME CLAY 10%FINE SAND	338.5
								T.D.= 44.0	334.5
45									
50									
55									
60									
65									
70									
75									
80									

Boring 400-195

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4216.0000 E, -1889.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0900 on 08-15-97*	Surface Elevation: *378.50 feet msl*
Completed at *1100 on 08-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	BE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				1	BG	0			
								T.D.= 7.5	
10									
15									
20									
25									
30									
35									
40									

Boring 400-197

Project: *Paducah Gaseous Diffusion Rant Wag 6 RI*	Coordinates: *-4020.0000 E, -1796.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1020 on 9/4/97*	*surface* Elevation: *379.5 feet msl*
Completed at *1540 on 9/4/97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *7.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				2	15	0			
								T.D.= 7.0	
10									
15									
20									
25									
30									
35									
40									

Boring 400-198

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-40318400 E, -1499.9800 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0825 on 07-15-97*	Surface Elevation: *377.46 feet msl*
Completed at *1345 on 07-15-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *15.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)		GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	-			
				BG	BG	0		Silt, clay; tr fn to v fn **sand (1-10%)**, firm, moist, **(5YR5/4)**, mall lt blueish gray **(8/1)** mottles, tr reddish black **(10R2.5/1)** and yellow **(2.5Y7/8)**	368.5
			100.0	BG	BG	0			
				BG	BG	0			
				BG	BG	0			
15								T.D. = 150 ft	362.3
20									
25									
30									
35									
40									

Boring 400-199

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4375.0000 E, -1352.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0840 on 08-12-97*	Surface Elevation: *378.00 feet msl*
Completed at *1545 on 08-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *2.3 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
		●		-	-	0		Clay, silty; tr organics (1-10%); tr fn sand (21-35%); moist, stiff, reddish brn (2.5YR5/4) to lt blueish gray (7/1)	
								T.D. = 2.3 ft	375.7
5									
10									
15									
20									
25									
30									
35									
40									

Boring 400-200

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4082.0000 E, -1725.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0915 on 10-06-97*	Surface Elevation: *379.50 feet msl*
Completed at *1310 on 10-06-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Vibroprobe*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *25.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			90	BG	BG	2 tl 760 706		Silt and clay (50%/50%), gray (5Y6/1), strong brown (7.5YR5/6), very moist, and soft	
5			90	BG	BG	.1288 .1487 .1480 .1487		Silt and clay, (70%) gray (10YR6/1), (30%)yellowish brown (10YR5/6) very moist, soft-firm	
10			90	BG	BG	.1487 .1487 .1480 3100 .1487		Silt and clay, (80%) yellowish brown (10YR5/6), (20%) gray (10YR6/1) very moist, soft-firm	368.5
15			100	BG	BG	.3950 .1487 790 .1487		Clay w/ Silt. light gray (2.5Y7/1), yellowish brown (10YR5/6)~50%, tr (1-10%) iron, black firm, moist	362.5
20			100	BG	BG	.3340 .1487 .1480 1950 2698		Silt w/ Clay, light gray (2.5Y7/1), yellowish brown (10YR5/6), moist and firm	
25								T.D.= 25.0	354.5
30									
35									
40									

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Boring 400–201

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4077.0000 E, –1706.0000 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1345 on 11–03–97*	Surface Elevation: *feet msl*
Completed at *1100 on 11–03–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
			82.5	BG	10	00 43 39		GRAVEL (50%)CLAY (35%)SAND M–C (15%)DK RED (2.5YR5/3)TO DK.YEL.BRN (10YR4/)	
5			55	BG	02	82 205 –		SILT,SL/CLAY,GRN.GRY. (10YR6/1)V.MOIST,FIRM	
10			80	–	–	211 536 – 252		SILT,SL/CLAY.YEL BRN (10YR4/6)MOLTED LT.GRY (10YR7/1)	
15			72.5	03	02	335 107 186 767 381		SILT,SL/CLAY.YEL BRN (10YR5/6)MOLTED LT BRN GRY (10YR6/2)MOIST/STIFF	
20			87.5	BG	06	219 441 – 58 117		SILT,CLAYEY,W/25%F.SAND & 15%GRAVEL	
25			07.5	BG	BG	627 771 – 1782 123			
30			87.5	BG	BG	87.5	1400		SAND MED TO FINE (95%)TRS GAL GRADING TO SAND (65%)GRAVEL (30%)CLAY (15%) YEL (910YR7/6)GRY TO STRONG BRN (7.5YR5/3)MOIST.
								SILT,CLAYEY;W/25%F.SAND,STRONG BRN (7.5YR5/8)W/MINOR LT.GRY MOTTLING (7.5YR7/1)MOIST,STIFF	
35			07.5	BG	14	1300		SAND (95%)M–C,W/TRC SILT,GRADS–SAND (55%)M–L.GRAVEL (55%)SILT:CLAY (10%) STRONG BRN (7.5YR5/3)W/MIN/LT.GRY MOTTLING (7.5YR7/1)MOIST	
40			97.5	BG	BG	–		SAND40%GRAVEL40% SILT:CLAY20% STRONG BRN (7.5YR5/8)MED–RDSH YEL,MOIST SAND (95%)TRC.GAL,M.GR.YELSH RED (5YR5/8)MOIST WELL SORTED	

Boring 400–201

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4077.0000 E, –1706.0000 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1345 on 11–03–97*	Surface Elevation: *feet msl*
Completed at *1100 on 11–03–97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
								GRAVEL (40%)SAND (40%)SILT:CLAY (40%)LT.GRY–MINOR STAIN BRN:MOIST	
			72.5	BG	BG	–		SILT SL CLAYEY 25–30%F.SAND;YEL BRN MOIST	
45			100	04	BG	10		SILT,CLAYEY (20%)F.SAND TRS DAL,V.PALE.BRN MINOR YLSH BRN FIRM	
								T.D.=48.0	
50									
55									
60									
65									
70									
75									
80									

Boring 400-202

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4112.0000 E, -1706.0000 N*
Location: *Paducah, KY*	Geologist: *B. Bergeron*
Started at *1043 on 10-21-97*	Surface Elevation: *feet msl*
Completed at *1600 on 10-21-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *27.2 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	%recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						15		Silty Gravel with trace of Sand & Clay; **(10R4/6)red, &** **(10YR5/6)yel** brn	
			90	BG	BG	15			
						5040			
5						877		Silt, with a little Clay; **(2GLEY7/5B)** lt bluish gry	
			100	6	21	1270			
						564			
						1488		Silt, with a little Clay: **(10YR5/8)** yel brn, **(10YR7/1)** lt gry	
10			100	2	21	1128			
						370			
						266		Silt, with little Clay; **(10YR6/6)**br yel. **(10YR5/8)yel** brn. **(10YR7/1)**lt gry	
			95	2	37	260			
15						258			
						320		Silt, with clay & trace of Gravel: **(10YR6/6)** brn yel. **(10YR5/8)** yel brn, **(10YR7/1)** lt gry	
			95	BG	1	507			
						525			
20						568		Silty **Sand: (10YR7/4)** v. pale brn to **(10YR7/1)** lt gry	
			85	BG	41	269			
						102			
						46		Clayey **Sand; (7.5YR5/8)** strong brn	
25			65	BG	BG	35			
						51			
								T.D.= 272	
30									
35									
40									

Boring 400-203

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4570.0000 E, -1244.0000 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1510 on 11-13-97*	*surface* Elevation: *374.50 feet msl*
Completed at *0905 on 11-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *36.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			88	BG	85	0		SILT,LT GRY (10YR7/1)MOTL YLSH BRN (1YR5/3)FIRM NATURAL SOIL	
5			100	BG	04	0		SAME AS ABOVE GRADING TO SILT, CLAYEY BRNSH YEL (10YR7/1)MST FIRM	
10			95	BG	BG	0		SILT, SL CLAY YLSH GRN (10YR5/3)V.PALE BRN (10YR7/3)MST STIFF	
15			88	04	BG	0		SAME AS ABOVE	
			93	BG	40	0		CLAY SILTY W/TRS SD&GRL,DK YLSH BRN (10YR4/6)GRY (10YR6/1)	358.5
20			95	BG	IBG	0		SAND (60%) (35%)GRAVEL SUBR-SUBA SILT (5%)YLSH RED (5YR5/8)	354.5
25			75	02	BG	0		SAND (50%)M TO C GRAVEL35% SUBR TO SUBA SILT:CLAY (15%)POORLY SORTED BRN (7.5YR5/8)TO STRONG GRN (7.5YR5/3)	
30			100	BG	BG	0		CLAY,SILT W/TRS F.SD YLSH RED (5YR5/6)TO BRNSH YEL (10YR6/8)TO LT GRY (10YR7/1) MOIST STIFF	346.5
								SAND85% SILT 15%	344.5
35			78	BG	BG	0		SAND85% SILT15%LT GRY (7.5YR7/1)RDSH YEL (7.5YR6/8)MOIST	
								T.D.= 36.0	338.5
40									

Boring 400-204

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4535.0000 E, -1774.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0930 on 11-18-97*	Surface Elevation: *375.00 feet msl*
Completed at *1500 on 11-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			50	BG	24	0	Sandy Gravel, with Silt; (7.5YR4/6) strg brn, (2.5Y6/2) lt brn gry No Recovery	373
								371
5			100	BG	36	0 0 0	Silt, with Clay, moist & firm; (2.5Y6/3)lt yel brn, (10YR4/6)dk yel brn	
10			88	4	11	0 0 0	Silt, with Clay; (10Y6/1)grn gry, (10YR6/4)lt yel brn, (10YR5/6)yel bm	
15			92	BG	BG	0 0 0		
20			96	4	27	0 0 0	Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR6/1) gry	
			50	-	-	0 0	Gravelly Sand, moist 6 dense; (7.5YR5/8) strg brn	155
							No Recovery	151
25			55	BG	12	0 1 0	Sandy Gravel, with Silt, moist & dense; (10YR4/6) dk yel brn Clayey Sand, moist & firm to stiff; (10YR5/8) yel brn Sand, med to fine, moist & firm; (10YR6/8) brn yel	49.2 48.7 47
30			92	BG	11G	0 0	Gravel & Sand, with Silt & Clay, moist & dense; (10YR5/8) yel brn	45.6
35			35	BG	8	0 0		
			97	BG	E G	0 0 0	Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	339
40								

Boring 400-204

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4535.0000 E, -1774.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert*
Started at *0930 on 11-18-97*	Surface Elevation: *375.00 feet msl*
Completed at *1500 on 11-18-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *44.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		89	BG	58	0 0 - 0 0		Silt, with Clay 6 Sand; (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	
								T.D.= 44.0	331
45									
50									
55									
60									
65									
70									
75									
80									

Boring 400-205

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072.0000 E, -1921.0000 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1500 on 11-05-97*	Surface Elevation: *378.50 feet msl*
Completed at *1540 on 11-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	BG	0	GRAVEL (50%)SUBANG-ANGULAR,S:H:CLAY (50%)DK RED (2.5YR4/6)TO YLSH BRN (10YR5/4),SL.MOIST,FRIM	377.3
							SILT,W/20%GRAVEL,LT YLSH BRN (10YR6/4)SL.MOIST TO DRY,STIFF (FILL)	
							SILT YELSH BRN (10YR5/4)SL.MOIST,STIFF (NATURAL SOIL	
5			95	04	BG		SILT,PALE BRN (10YR6/3) (10YR5/8)MOTTLING DRY TO SL MOIST,DINSE	
							SILT,SL CLAY GRY (10YR6/1)MOTTLED DK YELSH BRN (10YR4/6)MOIST STIFF.	
10			80	BG	60			
			100	04	62			
15							SILT,CLAYEY LT BRNSH GRY (10YR6/2)GRY (10YR6/1)YELSH BRN (10YR5/6)MOIST	
			100	BG	BG			
20							SAME AS ABOVE GRADING TO SILT,CLAYEY W/30%M-FSAND AND 20%SUBROUNDED TO SUBANG GRL,STRONG BRN (7.5YR5/8),MOIST,DENSE.	
			95	BG	06			
25			75	BG	06		SAND75%GRAVEL20%	354.1
							SILT,TRS F. SD PALE YEL (2.4YR7/3)SL.MOIST	351.5
30								
			85	BG	02		SILT CLAYEY,W/30% F.SD.,STRG BRN:LT. GRY (7.5YR5/6) (7.5YR7/2)MOIST	
35							60%GRAVEL35%SILT	342.5
			93	BG	62			
40								

Boring 400-205

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4072.0000 E, -1921.0000 N*
Location: *Paducah, KY*	Geologist: *JALBERT*
Started at *1500 on 11-05-97*	Surface Elevation: *378.50 feet msl*
Completed at *1540 on 11-10-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		SAME AS ABOVE-CLAY SILT TRC OF F. SAND	
						0			
						0			
						0			
45			75	BG	110	0		CLAY,SOME SILT V.PALE BRN W BLK (10YR2/1)MOTTLING THEN DK YLSH BRN W/LT GRY (10YR7/1)THEN PALE RED (10YR4/6) SAND (75%)GRAVEL (20%)SILT:CLAY/STRONG BRN (7.5YR5/3)MOIST	334.5
						0			
						0			
						0		T.D.= 48.0	330.5
50									
55									
60									
65									
70									
75									
80									

Boring 400-206

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4564.0000 E, -1077.0000 N*
Location: *Paducah*, KY	Geologist: *D. Doyle*
Started at *1030 on 12-01-97*	Surface Elevation: *374.50 feet msl*
Completed at *1210 on 12-04-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Clay w/ Silt & tr Sand; subang; prly sorted: mst. frm: brn (10YR5/3)	
5									
10									
15									
								Silt & Sand; v fn/v crs; prly sorted: subang/subrnd; frm. dry	358.5
20									
								Gravel w/ Clay & Sand; (1/8-1/4") subrnd; prly sorted; brn (7.5YR4/2)	352.5
25									
								Sand & Clay; fn/med; subang; mst; lt yel brn (10YR6/4)	348.5
								Sand & Gravel; v fn; 1/2 subrnd/subang; prly sorted; brn yel (10YR6/8)	345.5
30									
35								Silt w/ Clay; dry, stf; yel brn (10YR6/8)	339.5
40									

Boring 400-206

Project: Paducah Gaseous Diffusion Plant Wag 6 RI
Location: Paducah, KY
Started at 1030 on 12-01-97
Completed at 1210 on 12-04-97
Drilling Method: Air Rotary
Drilling Company: Alliance

Coordinates: -4564.0000 E, -1077.0000 N
Geologist: D. Doyle
Surface Elevation: 374.50 feet msl
Depth to Groundwater: NA feet bgs Measured: NA
Groundwater Elevation: NA feet msl
Total Depth: 96.0 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt w/ Clay & Sand; v fn/v crs; prly sorted ang	
45									329.5
								Clay; stiff; yel brn (10YR5/8)	
50									
55									318.5
								Sand & Silt; v fn/med; mod sorted, subang; yel brn (10YR5/6)	
								Clayey Gravel w/ Sand; (1/8-1/2") subang/subrnd; dk brn (10YR3/3)	318.5
60									
65									
70									
75									
80									

Boring 400-206

Project: *Paducah Gaseous Diffusion Plant Wag 6tU*	Coordinates: *-4564.0000 E, -1077.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1030 on 12-01-97*	*surface* Elevation: *374.50 feet msl*
Completed at *1210 on 12-04-97*	Depth to Groundwater: Ma *feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *96.0 feet*

	SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Clayey Gravel w/ Sand; (1/8-1/2') subang/subrnd; dk brn (10YR3/3)	
								Clay w/ Silt & tr Sand; v fn/med; subang; mod sorted; mst, frm; gry (2.5Y5/1)	289
								T.D.= 96.0	278.5
100									
105									
110									
115									
120									

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Boring 400-207

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4111.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1340 on 01-02-98*	Surface Elevation: *379.00 feet msl*
Completed at *1548 on 01-15-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *147.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete slab	378
						0		Crushed limestone gravel	377.3
			4a	-	-	-		Gravel (60%); angular sand (30%); clay (10%); moist, firm, yellowish red (5YR5/3) (Fill)	376.5 / 376.2
5								Silt. moist, firm, greenish gray (56Y5/1) (Natural Soil) (May be from deeper interval, unknown due to poor recovery 0.0-7.0 ft)	
								No recovery	372
						121		Silty clay, moist, stiff, yellowish brown (10YR5/6)	
						0			
						0			
10				BG	60	0			
			80	BG	28	0			
						0			
				BG	32	0			
15						0			
				BG	39	0			
						0		Silty clay, moist, stiff, yellowish brown (10YR5/6) mottled with light gray (10YR7/1)	
				BG	24	0			
						0			
20				BG	32	0			
						0		Silty clay nith trace of sand (5 to 10%) and gravel (5 to 10%). moist. stiff, yellowish brown (10YR5/8) mottted with light gray (10YR7/1)	
			90	4	34	0			
						0			
				BG	28	0			
25						0			
				BG	12	0			
						0		Silt, clayey; gravel, subangular (15%); fine sand (10%). moist, stiff, yellowish brown (10YR5/4)	352
				BG	68	0			
						0			
30				BG	72	0			
						0			
			80	BG	76	0			
						0		Sand, medium to fine grained (70%); gravel, subangular to subrounded (20%);silt (10%); moist, dense, yellowish brown (10YR5/3)	348
				BG	56	0			
35						0			
				BG	48	0			
						100		Sand, medium grained (50%); gravel, subrounded to subangular (40%); silt (10%); moist, dense, yellowish brown (10YR5/8)	
				BG	41	182			
40				BG	25	23			

Boring 400-207

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4111.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1340 on 01-02-98*	Surface Elevation: *379.00 feet msl*
Completed at *1548 on 01-15-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *147.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	17	62 720 280			
				BG	33	2350 30			334
45				BG	25	30 42		**Sand,** fine to very fine grained **(75%)**; silt **(20%)**; trace gravel, moist, dense, brownish yellow **(10YR6/8)** qading to light olive brown **(2.5Y5/4)**	332
				BG	29	0 0		Sand (50%); silt **(30%)**; clay **(20%)**;alternating strata of medium to fine grained sand, silty sand and silty clay, trace gravel, moist, dense to stiff, light brownish gray **(10YR6/2)** to reddish yellow **(7.5YR6/8)** to olive yellow (2.56/6), clay intervals occur in two 1 foot strata in upper portion of sample.	
50				BG	33	150			
			100	BG	17	114 370			
				BG	21	620 280			
55				BG	17	350 980			322
				BG	25	280 690		Sand, medium grained **(75%)**;gravel, subangular to subrounded (25%) grading to gravel (55%);sand, medium grained **(40%)**; silt **(5%)**; very moist, dense, pale yellow **(2.5Y7/3)** and brownish yellow **(10YR6/8)**	
60				BG	37	680 680			
			100	BG	41	350 700			
				BG	33	3500 850			
65				BG	53	800 4600			312
				BG	21	>4800 >4800		Gravel, subangular to subrounded (65%); sand, medium to coarse **grained** (35%);very moist, dense, yellowish brown **(10YR5/8)**	
70				4	29	>4800 >4800			
			100	BG	24	>4800 >4800			
				BG	37	4700 2400			
75				BG	17	4000 1300			
				BG	BG	199 88		Gravel, subangular to subrounded (55%); **sand,** medium to coarse **grained** (40%); silt (5%); very moist, **dense, yellowish** brown **(10YR5/8)**	
80				BG	BG	103			

Boring **400-207**

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4111.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1340 on 01-02-98*	Surface Elevation: *379.00 feet msl*
Completed at *1548 on 01-15-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *147.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	BG	40			
						235			
						341			
				BG	BG	36			
85						0			
				BG	31	14			
						48			
				BG	BG	0			
						7			
90				BG	BG	0			
						0			
			100	BG	BG	25			
						8			286
				BG	BG	96		Alternating thin (0.05 to 0.2 inch) laminae of clay and sand, medium to fine grained, some silt, moist, stiff, gray (5YR6/1) to pinkish gray (5YR7/2) to red (2.5YR5/8) to yellow (2.5Y7/8)	
95						555			
				BG	BG	114			
						0			282
				BG	32	2		Sand. medium to fine grained, well sorted (95%); very moist, firm, light gray (2.5Y7/1) grading to yellow (2.5Y7/3) to reddish yellow (7.5YR6/8), some thin (< 0.05) ft clay and silt laminae in upper 1 to 2 feet of interval	
						0			
100				BG	28	0			
						0			
			100	BG	44	8			
						14			
				BG	12	4			
105						5			
				BG	23	8			
						11			
				BG	BG	0		Sand medium to fine grained (95%); trace silt and clay, very moist, firm, laminated, micaeous, red (2.5YR5/6) to yellow (2.5Y7/6) to brownish yellow (10YR6/8)	
						0			
110				BG	48	0			
						0			
			100	BG	78	0			
						0			
				BG	83	0			
115						0			
				BG	26	0			
						0			262
				BG	BG	0		Sand, fine grained (60%); silt (40%); moist, firm, brownish yellow (10YR6/8)	
						0			260
120				BG	184	0		Clay (85%); sit and sand (15%)	

Boring 400-207

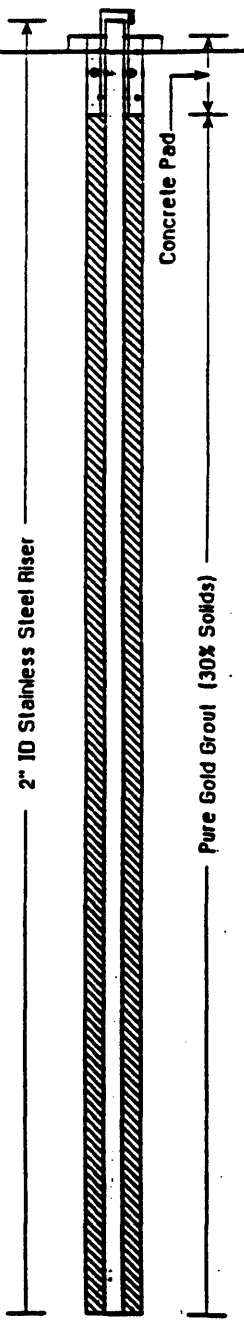
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4111.0000 E, -1783.0000 N*
Location: *Paducah, KY*	Geologist: *J. Albert/T. Streufert*
Started at *1340 on 01-02-98*	Surface Elevation: *379.00 feet msl*
Completed at *1548 on 01-15-98*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *147.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	179	0		Clay (85%);silt and sand, very fine grained (15%); stiff, slightly moist, micaceous, dark greenish gray (5BG3/1), silt occurs as numerous thin (<0.01 ft) laminae, very silty to sandy zone at 126 to 127 ft bgs	
				BG	155	0			
125				BG	21	0			
				BG	45	0		Clay (85%); silt and sand, very fine grained (15%); slightly moist, stiff. black (N2.5/), silt and very fine sand occur in occassional laminae and silty sand zones	
130				BG	BG	0			
			100	BG	03	0			
				BG	34	0			
135				BG	88	0			
				BG	88	0		Clay, some silt, slightly moist, very stiff, dark gray (2.5Y4/1)	
140				BG	125	0			
			100	BG	78	0		Silt with sand, very fine grained (35 to 40%); clay (15 to 203); moist, firm, gray (2.5Y6/1) to dark gray (2.5Y4/1)	238
				BG	177	0			
145				BG	73	0			232
								T.D. = 147.0	
150									
155									
160									

AKGWA NUMBER 8003-3484	MW-343 (400-208)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E -1084.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *1305 on 12-11-97*	TOC Elevation: *NA feet msl*
Completed at *1400 on 12-22-97*	Depth to Groundwater: *47.9 feet TOC* Measured: *12/15/97*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*
Geologist: *R. McComb/J. Albert*	Well Screen: *74.0 to 84.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/A	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			75	BG	6	0 0 0	Gravel, fn/med grn, ang, some clay; brn (10YR5/3), wk rd (10R4/4), rd (10R4/8), mst, soft.	373.2
5			66	BG	17	0 0 0 -	Clay, frm/brt, vary brn, heavily motld, brn yel (10YR6/8), yel brn (10YR5/4), tr v dk brn (10YR3/1) mottling	
			100	BG	20	0 0 0 0 0	Clay, brt/pliable, hard, sl moist, gry (2.5YR6/1), brn yel (10YR6/8) mottling, some mottling, iron oxide stan as sm (0.1"-0.25") dm modules.	
10				86	3	0 0 0 0 0	Clay, tr silt, frm, hard, heavily motld, iron-stain, moist, brn yel (10YR6/8), gry (10YR6/1), and brn yel (10YR5/6), occas v dk gry (10YR3/1) motlg, moist.	
			100	B6	BG	0 0 0 0 0	Clay, silty; gravel, subrnd/subang (15%); sand, med grn (10-15%); yel brn (10YR5/6) motld lt gry (10YR7/1), moist, stiff	
15				B6	BG	0 0 0 0 0		
				B6	BG	0 0 0 0 0	Sand, med grn (50%); gravel, subrnd (25%); silt (25%); (prly sorted) yel brn (10YR5/6)mst, den	358
20			100	BG	86	0 0 0 0 0	Gravel, subrnd/subang (55%); sand, fn/crs grn (30%); Silt (15%); prly sorted, yel rd (5YR5/6)	354
				86	3	0 0 0 0 0	Sand (65%); gravel, subrnd/subang (35%); strg brn (7.5YR5/8), moist	351
25				86	25	0 0 0 0 0	Gravel, subang/subrnd (60%); sand, med/crs grn (30%); Silt (10%); mst, brn (7.5YR5/4)	349 348.5
				86	86	0 0 0 0 0	Clay; gravel, subrnd/subang (25%), rd (2.5YR7/1), moist, v stiff	347.5
				86	4	97 0 0 0 0	Sand, med/fn grn (65%); silt (35%); mst, frm, yel brn (10YR5/8)	345
30			100	BG	82	0 0 0 0 0	Sand, med/crs grn; gravel, subrnd/subang; Silt; mst, den, prly sort, yel brn (10YR5/6)	342
				86	49	159 14 29 2 14	Clay, silty; sand, fn grn; grds-gravel, subrnd/subang; sand; silt/clay strg brn (7.5YR5/8), motld lt gry (7.5YR7/1), mst, den (prly sorted)	338.5
35				86	1	69	Gravel, subrnd/subang; sand, med grn;Silt/Clay, prly sort, den, strg brn (7.5YR5/8)	338
				86	64			
40				BG	21			

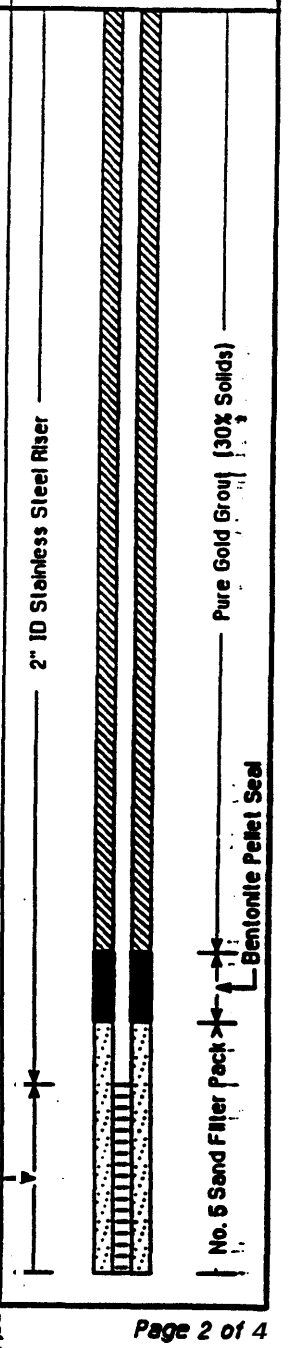
WELL DIAGRAM



AKGWA NUMBER 8003-3484	MW-343 (400-208)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1084.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *1305 on 12-11-97*	TOC Elevation: *NA feet msl*
Completed at *1400 on 12-22-97*	Depth to Groundwater: *47.9 feet TOC* Measured: *12/15/97*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*
Geologist: *R. McComb/J. Albert*	Well Screen: *74.0 to 84.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	23	0		Clay, silty with tr fn sand and gravel strg brn (7.5YR5/8), moist (HU3)	332.5
				86	103	0		Silt with 35-45 fn/v fn sand; tr clay, strg brn (7.5YR5/8), mst, stf micaceous, blk iron stn at approx. 45.5 ft bgs	
45				BG	49	0			
				-	-	-		No Description	328.5
				83	BG	0		Sand, fn grn, (60%); silt (40%); tr clay grdg-sand, med grn; tr tilt. ttrg brn (7.5YR5/8) w/0.5 ft zone dk brn (7.5YR3/2) at 54.0 ft bgs	328.5
50				86	BG	0			
			100	BG	33	0			
55				86	31	0			
				BG	BG	0		Sand, med grn, well sorted (100%), brn yel (10YR6/6), mst, frm	318.5
				BG	58	0		Gravel, subrnd/subang (45%); sand, med/crs grn (45%); sat (10%), yel brn (10YR5/4), mst/v mst, dense prly sorted(sat at approx 64.0 ft bgs)	318.5
60			100	BG	22	0			
				BG	1	0			
65				BG	28	0			
				BG	BG	62		Gravel, subang/subrnd (60%); sand, med/crs grn (30%); Silt (10%); strg brn (7.5YR5/6), mst, dense (sand approx 60%, Gravel approx 40% w/deph) prly sorted	
				136	136	117			
						55			
70						104			
				136	136	751			
			100			262			
				136	136	550			
						586			
75				136	136	175			
						178		Gravel, subang/subrnd (55-60%); sand, med/crs grn (35%); Silt (5-10%); v mst, dense, yel brn (10YR5/8)	
				136	136	202			
						182			
				136	136	453			
80			100			314			

WELL DIAGRAM



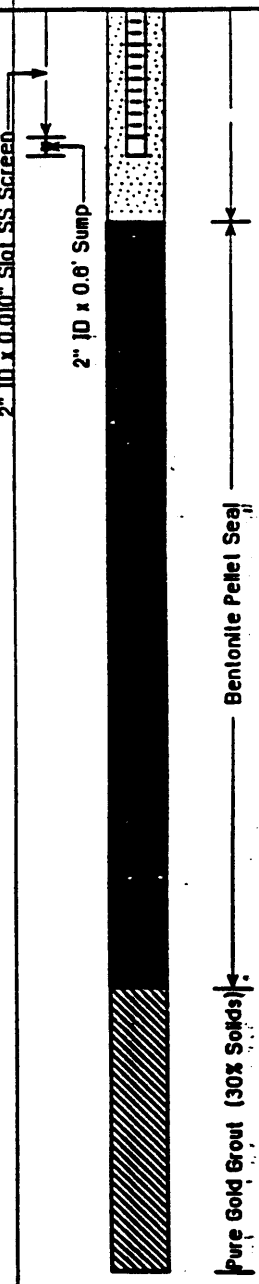
AKGWANUMBER 8003-3484

MW-343 (400-208)

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1084.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *1305 on 12-11-97*	TOC Elevation: *NA feet msl*
Completed at *1400 on 12-22-97*	Depth to Groundwater: *47.9 feet TOC* Measured: *12/15/97*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*
Geologist: *R. McComb/J. Albert*	Well Screen: *74.0 to 84.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	469		Gravel, subrnd/subang (60%); sand, med/crs grn (35%); Silt (5%); strg brn (7.5YR5/6), mst, dense.	
				BG	B6	2			
						2			
			100	BG	BG	0			
						13		Clay, some silt, rd yel (7.5YR6/8), dk gry (7.5YR4/1), mst, v stf-hard	290.5
85				BG	BG	1			
						1		Clay w/ silt & 35% v fn sand, dk gry (5Y4/1), olive gry (5Y5/2), w/ minor yel motlg (5Y7/8), mst, stf	
				BG	99	3			
						0			
				BG	115	1			
90						2			
			100	BG	105	0		Sand, med grn (65-70%); silt & clay (30-35%); laminated/motld, olive yel (2.5Y6/8), gry (10YR5/1), mst, frm	283.5
						0			
				BG	41	3			
						29			
95				BG	54	106		Clay, dk gry (10YR4/1), mst, stf	278.5
						0		Clay, occ thin sand laminae & thin (up to 1' thick) Sand Strata, gry (10YR5/1) w/ yel brn sand, laminae (10YR5/8), v dk gry (10YR3/1), micaceous, mst, frm/v stf, (v dk gry portion has numerous grn gry (10Y6/1) laminae - micaceous)	
				BG	5	6			
						9			
				BG	63	13			
100						21			
			100	BG	160	9			
						2			
				BG	28	0			
						0			
105				BG	80	0			
						1		Clay with numerous v fn sand lenses <0.5" and occ v fn Sand, Silt zones, v dk gry (N3/)to lt grn gry (10Y7/1), mst, stf	
				-	-	9			
						11			
				BG	40	4			
110						11			
			100	BG	12	14			
						21			
				BG	95	44			
						88			
115				BG	lo4	77			
						0		Clay, some silt, with numerous thin v fn sand lenses/laminae (1-5MM), v dk gry (N3/) to lt gry (N7/), mst, stf, micaceous	
				BG	37	2			
						0			
				BG	148	0			
120									

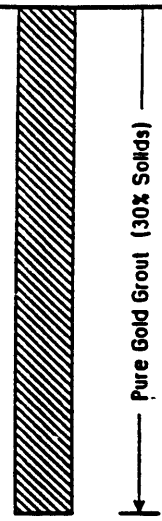
WELL DIAGRAM



AKGWA NUMBER 8003-3484	MW-343 (400-208)
Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4404.0000 E, -1084.0000 N*
Location: *Paducah, KY*	Surface Elevation: *374.50 feet msl*
Started at *1305 on 12-11-97*	TOC Elevation: *NA feet msl*
Completed at *1400 on 12-22-97*	Depth to Groundwater: *47.9 feet TOC* Measured: *12/15/97*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *136.0 feet*
Geologist: *R. McComb/J. Albert*	Well Screen: *74.0 to 84.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		100	BG	131	0		Clay, some silt, w/ numerous thin v fn sand lenses/laminae (1-5MM), v dk gry (N3/), lt gry (N7/), mst, stf, micaceous	
				BG	133	2			
						0			
						0			
125				BG	78	0			
						3			
	X			-	-	1		Sand, med grn (85%-95%), tr silt & clay, grn gry (10Y5/1), mst, frm	248.5
						1			
				BG	137	0			
						0			
130		I	100	BG	84	5			
						0			
				BG	111	0			241.5
						1		Clay grdg to silt w/ clay (15-25%), v fn sand, v dk gry (N3/), mst	
135				BG	190	0			
						0			238.5
								T.D. = 136.0 ft	
140									
145									
150									
155									
160									

WELL DIAGRAM



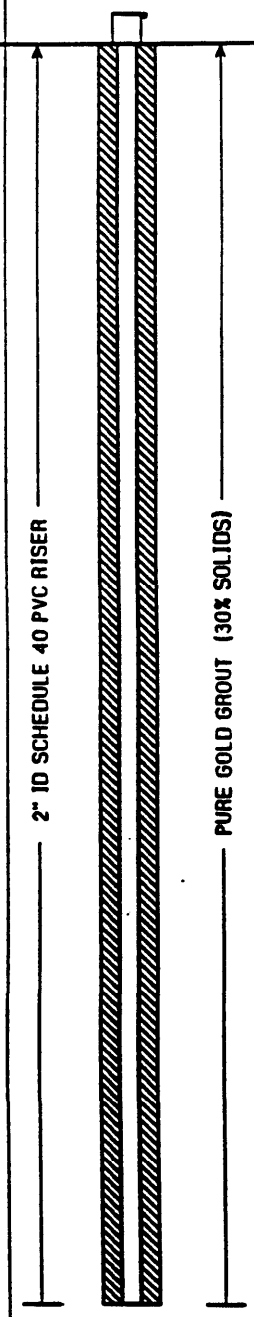
AKGWA NUMBER 8003-3483

MW-342 (400-210)

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1290.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.00 feet msl*
Started at *0700 on 12-15-97*	TOC Elevation: *NA feet msl*
Completed at *1610 on 12-19-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McCOMB*	Well Screen: *75.4 to 85.1 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	He	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						0		CLAY: SOFT,MST, VARIGATED COL (10YR6/8) BRN.YEL (10YR6/1) GRY W/ (10YR3/1) V DK GRY MOLTING	375.5
						33			
			35	BG	BG	-		NO DESCRIPTION	
5									
						03			370
						35		CLAY 90% MOD FRM. SL MST; SILT 10%, (10YR6/8) TR (10YR4/2) motting	
						135			
10						05			
						40			
			-	BG	BG	43			
						227		CLAY W/SILT	
						38			
15						117		CLAY,FIRM TRACE OF SILT (10YR6/8) W/BRN YEL. V PALE BRN & (7.5YR6/8) RD YEL (10YR2/1) STAINING	
						85			
						118			360
						03		GRAVEL (80%) FINE TO CRS; CLAY (20%) YEL BRN (10YR5/6).	
						15			
20						450		CLAY (20%), GRAVELY (40%), SAND (40%)	357
						691			
			-	1	BG	211			
						1058			
						1378			
25						1432			
						25			
						37			
						25			
						lo4			
30						12			347
						168		SILTY SAND, (10YR7/8) YEL. (10YR7/4) V PAL BRN 6 (10YR7/2) LT GRY	
			-	2	BG	277			
						173			
						340			343
35						03		SAND; FRM-MED. GRND. YEL BRN-BRN YEL	
						25			341
						55		CLAYEY GRAVEL, FRM-MED GRAINED (10YR5/8)YEL.BRN.W/ (10YR8/1)WHT.CHT.GRN.	340
						00			
						1.2		SANDY GRAVEL, FN-MED GRAINED, GRAY GRADING - (10YR7/4) V.PAL.BRN.	
40						00			

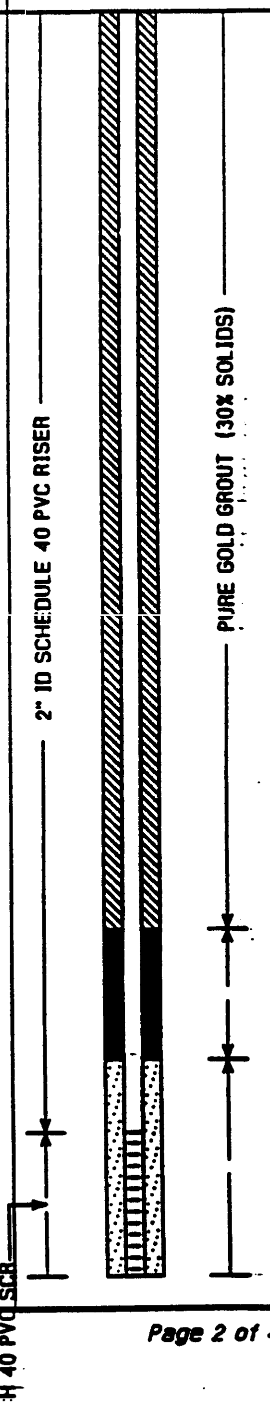
WELL DIAGRAM



AKGWA NUMBER 8003-3483	MW-342 (400-210)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1290.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.00 feet msl*
Started at *0700 on 12-15-97*	TOC Elevation: *NA feet msl*
Completed at *1610 on 12-19-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McCOMB*	Well Screen: *75.4 to 85.1 feet*

DEPTH IN FEET	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				00		
	-	BG	BG	24		334.5
				01	CLAY, SILT (20%)STRONG BRN	
				00		
45				00		
				00		
				00		
				00		
				00		
50				00		
				00		
	-	2	73	00		
				00		
				00		
55				00		
				00		
				00		
				00		
				00		317.5
60	-	1	25	-	CLAYEY GRAVEL, MED.TRACE OF SAND.FIRM	318.5
				00		
				00	SANDY GRAVEL TRACE SILT & CLAY (10YR4/6)	
				24	OK YEL BRN	
				09	SAME AS ABOVE **UPPER 2' MORE CLAY	
		BG	27	21	10%,BOTTOM 2.5'-3'CLEANER.LESS CLAY MORE	
65				-	SAND; (3')-STRG BRN (2')-YEL BRN.	
				40		
				21		
				23	SANOY GRAVEL FINE TO MED.	
				12		
				15		
70				13		
				18		
	-	3	60	07		
				69		
				68		
75				101		
				86		
				19		300
				50	50% GRAVEL 50% SAND MED-CRS.YEL BRN	
				27	STAINED (10YR2/1) BLK (78.5-80.5.)	
80				20		

WELL DIAGRAM



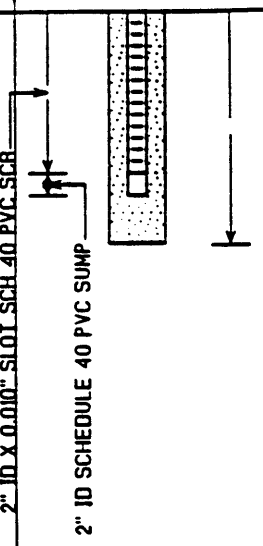
AKGWA NUMBER 8003-3483

MW-342 (400-210)

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4404.0000 E, -1290.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.00 feet msl*
Started at *0700 on 12-15-97*	TOC Elevation: *NA feet msl*
Completed at *1610 on 12-19-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McCOMB*	Well Screen: *75.4 to 85.1 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						22		SANDY GRAVEL FINE-CRS 10% SILT	298.5
			-	BG	34	22			
						22			
						40			
85						24			
						6			
						0			290
						0		CLAY: HARD/FRM (5YR3/1) V.DK.GRY	
						04			
90						7			
						0			
			-	1	40	4			
						3			
						3			
95						00			
						00			
						00		CLAY (60%)FRM; SILT (20%) FN-CRS;	
						00		SAND (20%)V.FN/VARY; OLIVE GRY-DK 6RY	
						00			
100						08			
						00			
			-	1	17	00			275
						00		SAND & CLAY 50/50	274
						00		CLAY: FRM/HD/DK-GRY	
105						00			
						00		SAND & CLAY 50/50	271.5
						2.5			269.5
						11		CLAY/V.HD (10YR3/1) V.DK.GRY.	
						00			
110						00			
						00			
			-	1	4s	00			
						00			
						00			
115						00		SILTY SAND: (5Y5/1) GRAY	262.5
						00			
						00			260
						00		CLAY 100% FRM V.STIFF OK 6RY (10YR4/1)	
						00		CLAYEY SAND: GRY (5YR5/1)	258.5
120						00			

WELL DIAGRAM



AKGWA NUMBER **8003-3483**	**MW-342 (400-210)**
Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4404.0000 E, -1290.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.00 feet msl*
Started at *0700 on 12-15-97*	TOC Elevation: *NA feet msl*
Completed at *1610 on 12-19-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McCOMB*	Well Screen: *75.4 to 85.1 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
			-	BG	46	00		CLAYEY SAND: GRY (5YR5/1)		
						10				
						00				
						00			253	
125						00		CLAY 90% STIFF (10YR4/1) V.DK.GRY		
						00				
						00				
						00				
						00				
130						00				
						00				
			-	BG	38	00				
						00				
						00				
135						00				
						00				
						00			240	
								T.D.= 137.0 (SHELBY TUBE 137.0/139.5)		
140										
145										
150										
155										
160										

Boring 400-211

Project: *Paducah Gaseous Diffusion Plant Waig 6 RI*	Coordinates: *-4037.0000 E, -1185.0000 N*
Location: *Paducah*, KY	Geologist: *J. ALBERT/R. McCOMB*
Started at *0800 on 11-19-97*	Surface Elevation: *376.00 feet msl*
Completed at *1615 on 11-14-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		80	BG	46	0-0		CLAYEY GRAVEL DK YEL BRN (10YR4/4)	375
5	X		85	BG	19	0-0		CLAY,SILT W/20% LS GRAVEL,LT YEL BRN (10YR6/4)	372
10	X		88	8	1	0-0		SILT,CLAY YEL BRN (10YR5/6)MOTL. V.PALE BRN (10YR7/3)MOIST STIFF	368
15	X		100	BG	60	0-0			364
	X		92	BG	48	0-0		SILT,CLAYEY, (10YR5/8)MOTL.LT.GRY (10YR7/1)	360
20	X		-	BG	BG	1-1		SILT,CLAY W/20% (SAND)	356
25	X		85	BG	BG	0-0			
30	X		90	4	BG	1-0		SANDY GRAVEL,BRN YEL (10YR6/3)GRY (10YR6/1)STRONG BRN (7.5YR5/3)	348
35	X		81	BG	BG	0-0		GRAVELY SAND,SILT (10%)YEL BRN (10YR5/8),YEL (10YR7/3)V.P.BRN (10YR8/2)	344
40	X		92	BG	BG	0-0		SANDY GRAVEL,SILT & CLAY (20%)YEL BRN (10YR5/8)LT.GRY (10YR7/1)	340

Boring 400-211

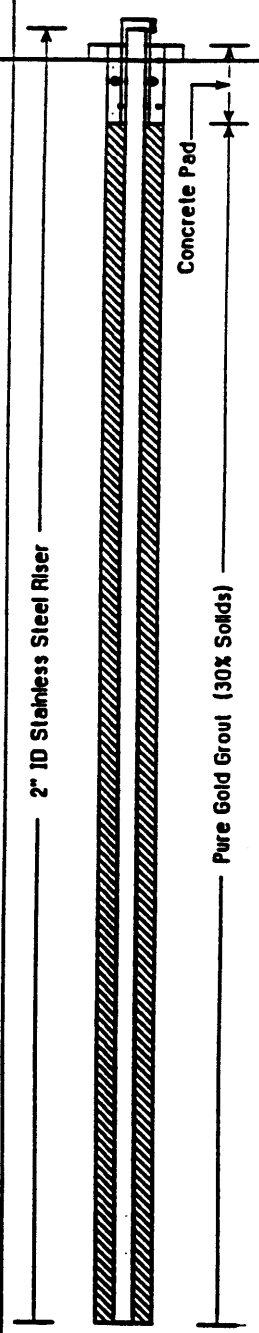
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4037.0000 E, -1185.0000 N*
Location: *Paducah, KY*	Geologist: *J. ALBERT/R. McCOMB*
Started at *0800 on 11-19-97*	Surface Elevation: *376.00 feet msl*
Completed at *1615 on 11-19-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *ROTOSONIC*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *48.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		80	BG	BG	0		SILT,CLAY W/35%YEL BRN(10YR7/1)	
						0			
						0			
						0			
						0			332
45	X		85	BG	BG	0		CLAY,W/35%F.SAND,YEL BRN (10YR5/3)MOT.LT.GRY (10YR7/1)MOIST STIFF	
						0			
						0			328
								T.D.=48.0	
50									
55									
60									
65									
70									
75									
80									

AKGWA NUMBER 8003-3482	MW-341 (400-212)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3940.0000 E, -1062.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.50 feet msl*
Started at *1520 on 12-02-97*	TOC Elevation: *NA feet msl*
Completed at *1110 on 12-13-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McComb*	Well Screen: *75.5 to 85.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	HNu	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		100	BG	BG	0		Clay, moist, sl plastic (50%); gravel, crs, rnd, cherty (50%); abundant root material, yellowish brown (10YR5/8)	378.5
5	X		28.6	BG	11	0		Silt, crumbly, dry (100%); tr lt. gravel, fn om, lt gray (10YK7/1)	
10	X	X	65	BG	6	0		Clay, firm, cohesive, moist (90%); silt (10%); brownish yellow (10YR6/6) with brownish yellow (10YR6/8) and lt gray (10YR7/1) mottling, tr very dk gray organic stain (10YR3/1)	370.5
15	X	X				0		Clay, same as above with tr gravel	
20	X		80	3	IBG	0		Clay, firm, hard (70%); silt, crs (30%); tr sand, cherty gravel, lt yellowish brown (10YR6/4) to v pale brown (10YR7/4), sl moist	
25	X					0		Clay (50%); silt (30%); sand, gravel (10%)	
30	X	X				0		Clay (70%); silt/sand (15%); gravel (15%)	
35	X	X	100	BG	1.6	0		Clay (60%); gravel (30%); silt (10%); sl moist Clay (80%); silt (10%); tr gravel	
40	X					320		Sand, med to fn grn, subang to subrnd, cherty/quartzitic (60%); gravel, cherty, subang to subrnd, fn to med grn (40%); tr silt/clay, ylwish brw (10YR5/8)	345

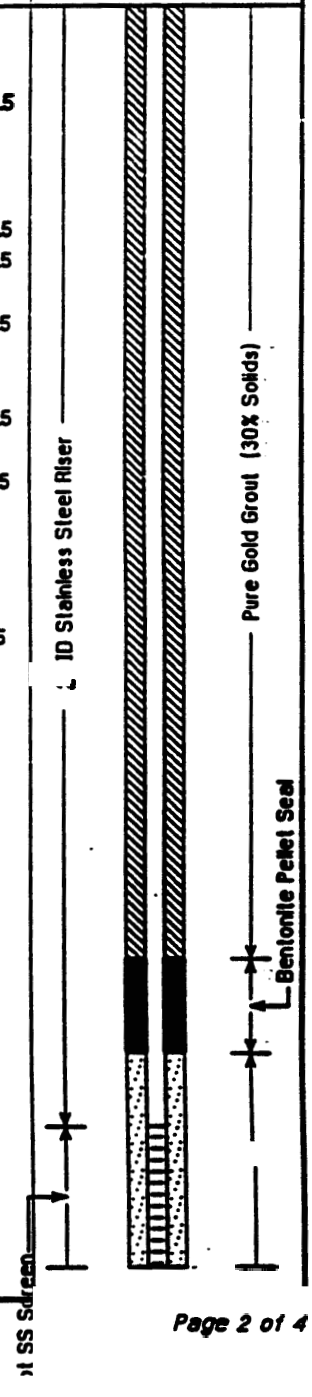
WELL DIAGRAM



AKGWA NUMBER 8003-3482	MW-341 (400-212)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3940.0000 E, -1062.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.50 feet msl*
Started at *1520 on 12-02-97*	TOC Elevation: *NA feet msl*
Completed at *1110 on 12-13-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McComb*	Well Screen: *75.5 to 85.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			60	6	BG	0, 0, 0	Sand (60%); gravel (30%); same as above. clay (10%), *strong* brown (10YR5/8)	334.5
45						- - -		
						0, 0, 0	Clay, firm, dense (80%); silt, v fn to fn (20%); tr fn grn sand, sl moist, ~~brownish~~ yellow (10YR6/8)	330.5, 329.5
50			90	BG	BG	141, 84, 12, 0, 0	Sand, fn to med grn, subang to subrnd, quartzitic, tr ctmt (80%); tilt fn grn (20%); tr clay, yellow (10YR7/8) to yellowish brown (10YR5/6)	327.5, 324.5
55						- - 0, 0, 0	Sand, as above, mod well sorted (100%); tr silt/clay, yellowish brown (10YR5/8), some black (10YR3/1) staining	322.5
							Sand (80%); silt (20%); same as unit at 48-50 ft bgs	
60			100	BG	BG	1097, 449, 0, 928, 774	Sand, med to crs grn, subrnd to subang, quartzitic (95%); gravel, cherty, med grn, subang to subrnd, well sorted (5%); brownish yellow (10YR6/8)	317.5
65			100	BG	BG	651, 501, 4, 6, 2, 2, 3	Gravel, fn to crs grn, subang to subrnd, cherty, tr rnded quartz, poorly sorted (70%); sand, med to crs grn, ang to subrnd, quartzitic with some chert (30%); tr silt/clay; yellowish brown (10YR5/6), upper 1 ft (60-61ft) stained black (10YR2/1), appears to be v fn grn, clayey coating on sand and gravel grains, black staining also at 64 ft bgs	
70			100	BG	33	3, 3, 5, 2, 24, 0, 43, 40, 24	Gravel (70%); sand (30%); tr silt/clay, same as above, dk yellowish brown (10YR4/6), 71-72 ft bgs stained black (10YR2/1)	
75							Gravel (50%); sand (50%); tr silt/clay, same as above, yellowish brown (10YR5/6)	
80								

WELL DIAGRAM



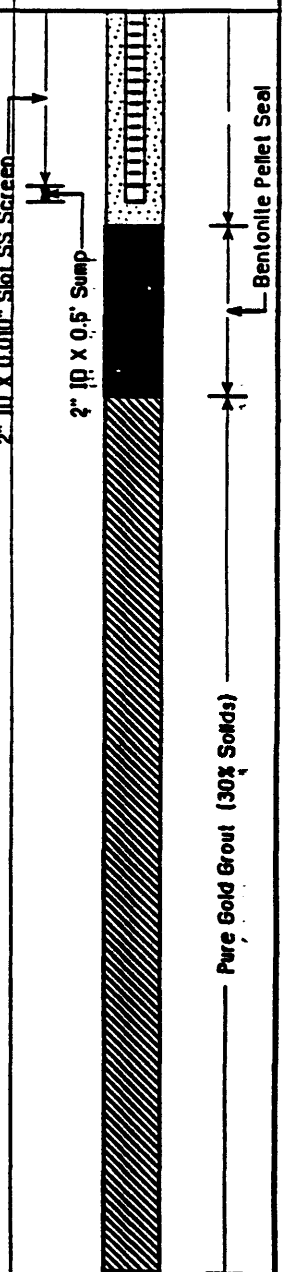
AKGWA NUMBER 8003-3482

MW-341 (400-212)

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3940.0000 E, -1062.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.50 feet msl*
Started at *1520 on 12-02-97*	TOC Elevation: *NA feet msl*
Completed at *1110 on 12-13-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R McComb*	Well Screen: *75.5 to 85.5 feet*

DEPTH IN FEET	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
80–85	95	5	BG	7, 28, 23, 40	Gravel (60%); sand (40%); tr silt/clay, same as above	292.5
85–88.5				2, 6, 17, 0	Sand, med to crs grn, mod sorted, quartzitic, some chert, ang to subrnd (60%); gravel, fn to med, cherty, some quartz, ang to subrnd (40%); tr silt/clay, ylwish brw (10YR5/6)	291.5
88.5–90				0, 0	Gravel (60%); sand (40%); tr silt/clay	287.5
90–91.5				0, 0	Clay, v dense, firm (100%); dk gray (2.5Y4/1)	286
91.5–96.5	100	1	20	0, 0, 0, 0, 0, 0	Sand, fn to med grn, mod sorted, subang to subrnd, quartzitic, some mica (80%); clay, firm, hard, 1-1.5 inch thick sand lens inclusions (20%); moist, v pale brw (10YR8/4) with ylwish red coated sand grains (5YR5/6)	285 / 281
96.5–100				0, 0, 0, 0	Clay, firm, dense, lt gray (10YR7/1), 1/4-1/2 inch layers (50%); laminated sand, v fn grn to silt, mod to prly sorted, sugary texture, micaceous, quartzitic (50%)	280.5
100–102	100	BG	25	0, 0	Sand, fn grn (100%); tr silt, tr clay, reddish ylw (7.5YR6/8)	275.5
102–106				0, 27, 0	Sand, fn grn, quartzitic, micaceous, mod sorted (60%); silt, v fn grn (30%); clay (10%); moist, soft, lt gray (2.5Y7/1) with brwnish ylw (2.5YR6/8) staining	
106–114	100	3	25	0, 0, 0, 0, 0, 0, 0, 0, 0	Clay, dense, firm (80%); interlaminated with silt, crs to fn (20%); tr fn grn sand from 1/8-1/2 inches thick	263.5
114–116				0, 0, 0	Sand, fn to med grn, quartzitic, micaceous, gray (2.5YR6/1), subang to subrnd, mod to prly sorted, clayey, moist	261.5
116–120				0, 0, 0, 0	Clay (90%)	

WELL DIAGRAM



AKGWA NUMBER 8003-3482	MW-341 (400-212)
Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-3940.0000 E, -1062.0000 N*
Location: *Paducah, KY*	Surface Elevation: *377.50 feet msl*
Started at *1520 on 12-02-97*	TOC Elevation: *NA feet msl*
Completed at *1110 on 12-13-97*	Depth to Groundwater: *NA feet TOC* Measured: *NA*
Drilling Method: *Rotosonic*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *137.0 feet*
Geologist: *R. McClend*	Well Screen: *75.5 to 85.5 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	Recovery	RAD/Alpha	RAD/Beta	Be	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
			100	BG	38	0		Sand, v fn to fn grn, quartzitic, micaceous (70%); silt, v fn grn, poorly sorted, moist, cohesive (30%); tr clay, dk gray (2.5YR4/1), some gray (2.5YR6/1)	258.5	Pure Gold Grout (30% Solids)
								Clay (90%), same as 110-114 ft bgs interval	253.5	
130								Clay, firm, hard, gray (2.5YR6/1) (80%); silt, crs to fn grn, micaceous, in thin laminae 0.1-0.2 inches thick (20%); sandy parting from 129.0 to 129.5 ft bgs		
135			100	3	47			Clay, same as above (50 to 60%); silt, fn grn; sand (50 to 40%), gray (2.5YR5/1)		
135									240.5	
								TD. = 137.0 tt		
140										
145										
145										
150										
155										
160										

Boring 400-213

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4750.0228 E, -1755.0576 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1245 on 12-15-97*	Surface Elevation: *375.42 feet msl*
Completed at *1100 on 12-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *95.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt & Clay, firm 6 moist: (10YR4/4) dk yel brn	
5									
10									
15								Silt & Clay, with Sand 6 Gravel, poorly sorted, moist, & firm	
20								Silt, with Sand 6 Gravel, poorly soted, moist & dense	355.4
25									
30									
35									
40									

Boring 400-213

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4750.0228 E, -1755.0576 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1245 on 12-15-97*	Surface Elevation: *375.42 feet msl*
Completed at *1100 on 12-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *95.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									333.4
								Silt & Clay, with sand, med sorted; (10YR5/3) brn	
45									
50									
55									317.
								Silt, with Sand, med sorted; (10Y5/6) yel brn	
60									313.9
								Gravel, rubang, poorly sorted, with Silt, Clay, & Sand; (10YR5/4) yel brn	
65				BG	BG	1.5			
70				BG	BG	1			
75				BG	BG	0			
80				BG	BG	1			

Boring 400-213

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4750.0228 E, -1755.0576 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *1245 on 12-15-97*	Surface Elevation: *375.42 feet msl*
Completed at *1100 on 12-17-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *95.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Gravel, subang, poorly sorted, with Silt, Clay, & Sand; (10YR5/4) yel brn	
85		▬		BG	BG	1			
90		▬		BG	BG	1			
								Clay, with Sand, med sorted, firm & moist; (10YR5/1) gry	282.4
95								T.D.= 95.0	280
100									
105									
110									
115									
120									

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Boring 400-214

Project: *Paducah Gaseous Diffusion Plant Wag 6RI*	Coordinates: *-4368.6819 E, -1971.0000 N*
Location: *Paducah*, KY	Geologist: *D. Doyle*
Started at *0945 on 12-18-97*	Surface Elevation: *376.52* feet *msl*
Completed at *1200 on 12-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *100.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt & Clay, firm, & sl moist; (10YR5/3) brn	
5									
10									
15									
20									355.5
								Silt w/ Clay, moist & firm w/ tr v fn/fn Sand, subangular; (10YR6/8) bm yel	
25									
30									344.5
								Sand 6 Gravel. v fn grn (1/2" rnd/subang), v prly sorted. w/ tr Silt & Clay; (10YR5/4) yel brn	
35									338.5
								Clay w/ Sand, v fn/med grn, mod sorted, subang, firm, 6 moist; (7.5YR4/6) strg brn	
40									

Boring 400-214

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4368.6819 E, -1971.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0945 on 12-18-97*	Surface Elevation: *376.52 feet msl*
Completed at *1200 on 12-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *100.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	(ft-msl) 4
								Clay w/ Sand, v fn/med grn, mod sorted, subang, firm, & moist; (7.5YR4/6) strg brn	
45								Silt & Clay w/ tr Gravel. subang, prly sorted; (10YR6/3) p brn	331.5
50									
55									
								Silty Sand; Sand v fn/fn, subang; mod sorted; (10YR6/3) p brn	319.5
60									
								Silty Gravel w/ tr Clay; Gravel (1/8-1/2") subang/subrnd; prly sorted; (10YR5/4) yel brn	314.5
65				BG	BG	0			
70				BG	BG	0			
75				BG	BG	0			
80									

Boring 400-214

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4368.6819 E, -1971.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0945 on 12-18-97*	Surface Elevation: *376.52 feet msl*
Completed at *1200 on 12-20-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *100.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				BG	BG	0		Silty Gravel w/ tr Clay; Gravel (1/8-1/2") subang/subrnd; prly sorted; (10YR5/4) yel brn	
85				BG	BG	0			
90				BG	BG	0			
95				BG	BG	0			
								Sand & Clay; Sand v fn/med grn, subang; mod sorted, firm; (10YR5/6) yel brn	279
100								T.D.= 100.0	276.5
105									
110									
115									
120									

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Boring 400-215

Project: *Paducah Gaseous Diffusion Plant* Wag 6 *RI*	Coordinates: *-4092.0000 E, -1921.0000 N*
Location: *Paducah*, KY	Geologist: *D. Doyle*
Started at *0815 on 12-11-97*	*Surface* Elevation: *378.50 feet msl*
Completed at *1615 on 12-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *95.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt and clay, firm, moist, *dk* yellowish brown **(10YR4/4)**	
5									
10									
15									
20								**Silt** and clay, firm, moist, yellowish brown **(10YR5/4);** 11-20%v fn sand to gravel, subrnd to ang, poorly sorted	
25									352.5
								Sand and gravel, poorly sorted, ang, strg brown **(7.5YR7/6),** moist, firm	
30									348.5
								Sand, silty, v fn to crs grn; tr gravel, poorly sorted, sng, **moist**	
35									342.5
								Sand, v fn to med grn, tr silt **and** gravel, brownish **yellow (10YR6/6),** moist, subang, well sorted; gravel rnded **and sorted**	
40									

Boring 400-215

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *-4092.0000 E, -1921.0000 N*
Location: *Paducah, KY*	Geologist: *D. Doyle*
Started at *0815 on 12-11-97*	Surface Elevation: *378.50 feet msl*
Completed at *1615 on 12-12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	Total Depth: *95.0 feet*

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								sand, v fn to med grn, tr Silt & Gravel, brn yel (10YR6/6), moist subang, well sorted; Gravel rnded & sorted	
45									
50									
								Silt with 11-20% v fn grn, subang, well sorted sand, lt brownish gray (2.5Y6/3) with approx. 20% pink (7.5YR7/3)	325.5
55									
60									
								Chert gravel, 1/8-1/2 inch, rnded, poorly sorted; 20-35% silt; gray (2.5Y61)	318
65				BG	13	0		Chert gravel, 1/8-1/2 inch, ang to subrnd, poorly sorted; 21-35% silt and sand; lt yellowish brown (10YR6/4), sand content increases with depth to approx. 50%	
70				BG	BG	0			
75				BG	7	0			
80									

Boring 400–215

Prom: *Paducah Gaseous Diffusion Plant Wag 6 RI*	Coordinates: *–4092.0000 E, –1921.0000 N*
Location: *Paducah, KY*	Geologist:
Started at *0815 on 12–11–97*	*surface* Elevation: *378.50 feet msl*
Completed at *1615 on 12–12-97*	Depth to Groundwater: *NA feet bgs* Measured: *NA*
Drilling Method: *Air Rotary*	Groundwater Elevation: *NA feet msl*
Drilling Company: *Alliance*	

SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft–msl)
			1	BG	10		Chert Gravel, 1/8–1/2 inch, ang to subrnd, poorly sorted; 21–35% Silt & Sand; lt yel brn (10YR6/4), Sand content increases with depth to approx. 50%	
			BG	BG	0			
			BG	BG	0			
								285.5
							Clay, sandy, v fn to med grn, mod sorted, subang, firm, brown (10YR5/3)	
								283.5
							T.D. = 95.0 ft	

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MEMORANDUM

DATE: Tuesday, October 07, 1997

TO: Eric Morti

FROM: Matt Norton and David Doyle

COPIES: Timothy A. Lee

REGARDING: Soil Gas Extraction Method Evaluation

On October 4, 1997 an evaluation of the method for obtaining soil gas for the WAG-6 investigation was performed. The purpose of the experiment was to determine if ambient air was being introduced into the sampling stream. Several techniques were used to evaluate potential pathways that ambient air could infiltrate the soil gas extraction system.

The soil gas probe is composed of a perforated drive point connected to sequential hollow drill sections. The assembly is capped with a graduated brass fitting which is connected to an evacuation pump. The probe in this experiment was driven to a depth of 15 feet *after* a soil sample was obtained from 6-10 feet.

The top portion of the soil gas *sampling* assembly was enclosed in an air-tight polyethylene bag. The sample pump was connected to the sampling assembly and the interior purged until flame-ionization detector (FID) read 0.0 FID units. A masslinn soaked with isopropyl alcohol was placed on the ground at the base of the rods to determine if *air* was being drawn from the Surface and into the soil gas probe. No increased FID readings were noted. The air-tight bag was inflated with 12,500 ppm methane and sealed. The sampling pump was restarted and FID readings ranged from 300 to 2,880 FID units. The air-tight bag was aiso noted to be collapsing during the experiment.

The experiment indicates that ambient air is being introduced into the soil gas sample from the joints and fittings above the ground surface. This was indicated by increased FID readings from this area and visibly by the evacuation of the test chamber. The study also provided support that ambient *air* was not being introduced from the ground Surface around the drill rod.

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TECHNICAL REPORT
SOIL GAS SAMPLING

As part of the WAG 6 Remedial Investigation (RI) a soil gas survey is being performed around the C-400 Building. The intent of the soil gas survey is to provide screening data from the subsurface environment adjacent to the buried C-400 Building utility corridor. The data is being used in conjunction with other analytical data to assess the utility comdors as a potential contaminate migration pathway. Over 140 soil gas samples have been collected to date. Approximately seventy (one-half the total samples) of the soil gas samples have associated subsurface soil samples that were collected from the same borehole.

During the early phases of the soil gas program (mid June), field personnel noted that when evacuating the downhole instrument prior to collection of a soil gas sample, an FID reading of the evacuated gas sometimes gave a detection of an unidentified gas. However, the FID reading always went to zero before three volumes of gas were evacuated from the Tedlar bag as recommended by the manufacturer; and before the sample was collected for analyses. Discussions of the problem were held with LMES personnel, an and attempt to capture the first gas evacuated from the line for analysis was attempted from several boreholes. Analyses of the gas by the onsite lab showed none detect for target compounds. As a result the field teams continued to collect soil gas using the approved procedure.

For the next two months of work, no detects of target gas were reported from the soil gas samples. However, most of the eariy drilling and sampling was conducted away from the C-400 Building in areas that would not have been expected to have TCE contaminated soil and the non-detection's of the soil gas were considered normal. Additionally, as no detection's of target compounds were reported from the numerous subsurface soil samples, many of which were collect immediately adjacent to the soil gas sample, nothing out of the ordinary was suspected. Indeed, the target gases were highly volatile TCE and it's degradation products and as TCE had not been used in the area of the C-400 Building for many years it seemed natural that any volatile compounds may have escape to the atmosphere since the use of TCE was discontinued at the site.

During August, the first few hits of soil gas were reported. These hits were later validated when detection's of TCE were reported from the adjacent soil samples. The soil gas sampling system apparently was working at this point. Other than the problem encountered in June the soil gas collection program appeared to be working.

It was not until September that the soil gas tool apparently failed. This conclusion is based on the comparison of seven combination soil gas/soil samples that were collected between 9/2/97 and 9/29/97. In all swen comparisons the subsurface soil had hits of TCE and/or degradation products while the soil gas was non-detect for all target compounds.

Unfortunately the problem was not immediately detected. Recognition of the discrepancies between the soil and soil gas results which should have raised a red flag were simply not apparent. Only seven discrepancies occurred during the entire month, and the data sets

needed to make the comparisons were not available for concurrent inspection because the soil results typically were only available several days after the soils gas results. Therefore, unless a query on soil vs. soil gas detection's was run, the problems would not be recognized, and unless a problem was suspected a comparison of the two data sets would not be warranted.

It was not until mid to late September that questions were raised concerning the soil gas data. This occurred during a review of the data by LMES for presentation to their management. As a result of the few discrepancies that were discovered, it was agreed that a test of the soil gas tool used to collect the samples should be conducted. The results of the test were reported in a memo from Mr. M. Norton and Mr. D. Doyle to Mr. E. Morti dated October 7,1997 (Attachment). The conclusions were that the tool in use at that time was leaking around a brass fitting and perhaps around an above-ground pipe joint. It was due to these leaks, that when placed under a vacuum ambient air was being drawn into the Tetlar bag used to collect the soil gas sample.

Subsequent attempts to correct the problem using Teflon tape around the course treads of the joints proved unsuccessful. A farther attempt to correct the problem will be made using an O-ring and Teflon tape in combination on the joints. The integrity of the sampling system will be tested before the remaining few soil gas samples are collected.

The apparent problems with the sampling tool during September makes the validity of the soil gas data of questionable value. Fortunately the loss of this soil gas information does not seriously impact the goals of the WAG 6 RI. The soil gas data is screening data only. This data cannot be used for risk assessment or as the basis for definitive conclusions concerning contaminant distribution or migration. Additionally, approximately half of the soil gas data was collected in conjunction with soil samples for which definitive analytical results are available. This fact alone makes the soil gas results of limited value.

Upon review of the soil and soil gas data currently available around the C-400 Building the WAG 6 team and LMES staff concluded during a contingency boring discussion that was held on 10/7/97 that fill-in data gaps due to the lack of reliable soil gas data, only two shallow soil borings needed to be re-drilled and that four soil gas borings currently scheduled to be drilled should also have soil samples collected for analyses..

Based on the definitive analytical results available from shallow soil samples collected from the 200 plus locations around the C-400 Building, the loss of some soil gas screening data should have no significant negative impact to the project goals.

Problem Report

Downhole Geophysical Logging

Gamma Ray Response

During the logging of Regional Gravel Aquifer (RGA) and McNairy soil borings for the WAG 6 Project an anomolously high natural gamma ray reading was observed by the Century Logging Site Engineer in bore hole 026-001, a soil boring that was drilled into the RGA at a location on the north side of the C-400 building during October. Due to this high gamma response several additional recording were made over the same interval with the logging tool. Apparently a similar, but not exact, gamma ray anomaly was present during each run. Although in hindsight this inconsistency should have suggested that the data was being impacted by some outside force, perhaps electrical, final log was submitted without comment. Once the high gamma hit was reported, an inspection of all previous logs was conducted and high gamma ray anomalies were found on a total of four logs: 026-001, 400-043, 400-048, and 4001053. The distribution of the four bore holes which showed high gamma activity did not suggest any physiographic relations between the bore holes and the anomalies. Additionally the field radiation detection instruments which had been used to monitor radiation at the site had not detected any elevated rad reading during the drilling or logging of the bore hole which lead to the conclusion that perhaps the instrument was malfunctioning.

During October, the tool that had been used to log the four holes was sent to the shop for inspection. In the mean time several water and soil samples were collected from subsurface zones that exhibited high gamma readings. These samples were analyzed for radiological isotopes that could have caused the gamma ray response. The results of the analyses were non detect for all tested radiological isotopes and for gross alpha and gross beta. These results substantiated the field instruments readings that the gamma ray response was not due to natural or man-made radiological isotopes. In early December Century Logging was asked to provide their opinion of the gamma reading. On December 11, Mr. Brian Peterson of Century Logging sent a fax transmission to CH2M-HILL which stated that the logging tool that had been used to obtain the gamma ray data in question had been tested at Century Logging shop and was found to be malfunctioning due to "an oscillation problem with the guard resistivity, and the contribution onto the gamma ray channel". This problem apparently occurs as the tool passes from the vadose zone to the phreatic zone (water table). In the opinion of the Century representative, the gamma reading is not valid in the interval above the water table to perhaps 20 feet below the water table. Where "normal" gamma reading are available from multiple log runs, a composite log can be created which should be useful for interpreting the shallow subsurface stratigraphy. Century Logging will attempt to produce composite logs for the four logs that have been impacted. Copies of the original logs submitted with high gamma readings will be kept on file but the gamma ray curve will be labeled: "Gamma rav logging instrument malfunctioning while logging this bore hole- gamma ray results not reliable".

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MEMO

To: Steve Parker

From: Matt Norton

Subject: FID-PID Comparison of holes 400-041 and 400-203 & 400-021

Date: February 13, 1998

The WAG-6 team was tasked with investigatingthe possibility of vinyl chloride vapors in boring samples on the southwest comer of C-400. Previous screening results indicated eievated levels of organics by field screening with a fiame-ionization detector. The field study was designed to compare flame-ionization detector results to photo ionization detector results to determine if vinyl chloride or methane was predominantly responsible for the elevated field screening readings.

The ionization potential of vinyl chloride is 9.99 electron volts (eV). Methane has an ionization potential greater than 12 eV. The photo ionization detector (PID) used for the experiment was equipped with a 10.8 eV lamp which would give a positive response in the presence of vinyl chloride but does not have enough energy to detect methane. Therefore, one would expect direct readings with the FID and PID to yield very similar responses in the presence of vinyl chioride. However, if methane was the primary constituent the FID readings would be substantially higher than the PID readings due to the higher ionization potential of methane.

The comparison of data between the FID & PID on holes 400-021 & 400-203 showed that for hole 400-203 no hits at any depth level were recorded by PID screening. The FID screening revealed levels ranging from 0 to 4096 FID units. Comparison of the data indicates the presence of organic compounds with an ionization potential greater than 10.8 eV, probably methane.

The comparison of data for hole 400-041 was taken using a TVA1000, which is a FID and PID combination instrument. At depths from 0-70 feet the FID screening results ranged from 0 to 1126 FID units whiie PID screening results were below 10 PID untts. Once again the discrepancy between these screening values is probably due to the presence of methane. Screening results for depths from 71 to 95 feet ranged from 4 to 598 FID untts while PID results range from 0 to 98 PID untts. This RGA area is known to have detectible levels of TCE. The assumption here is that TCE contamination is positive, as shown by both the FID and PID. The difference between the numbers of the two instruments is probable due to methane. At depths from 96 to 225 feet FID readings are as high as 827 FID untts while no single PID reading above 0 PID units was recorded.

Comparison FID and PID screening results indicates the major component causing the FID to respond has an ionization potential greater than 10.8 eV which is probably due to methane. Also several readings that were obtained using Drager colorimetric detector tubes designed specifically to detect the presence of vinyl chloride, were negative. This would indicated vinyl chloride is not a major constituent of the soil gas.

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Water Level Measurements
WAG 6 RI/FS

boring number	unit	measure point (MP)	MP elevation	29-Aug-97 depth bgs	01-Sep-97 depth bgs	11-Sep-97 depth bgs	18-Sep-97 depth bgs	24-Sep-97 depth bgs	03-Oct-97 depth bgs	08-Oct-97 depth bgs	17-Oct-97 depth bgs	23-Oct-97 depth bgs	01-Nov-97 depth bgs	06-Nov-97 depth bgs	14-Nov-97 depth bgs	22-Nov-97 depth bgs	25-Nov-97 depth bgs	05-Dec-97 depth bgs	11-Dec-97 depth bgs	19-Dec-97 depth bgs	02-Jan-98 depth bgs	08-Jan-98 depth bgs	19-Jan-98 depth bgs
MW155	RGA	N side	381.28	51.53	52.28	52.10	53.31	52.65	53.14	53.57	53.98	54.23	54.18	54.74	55.02	34.83	55.10	55.90	56.11	56.34	56.71	56.36	57.10
MW156	RGA	N side	382.08	52.22	53.10	52.90	DRY	53.45	53.93	54.36	54.80	55.05	55.00	55.53	55.81	56.19	56.29	56.70	56.94	57.12	57.53	57.16	57.95
MW175	RGA	N side	381.20	50.66	52.30	52.12	52.54	52.62	53.14	53.57	54.04	54.25	54.19	54.73	NT	NT	NT	NT	NT	56.35	56.71	56.30	57.15
MW178	RGA	N side	378.81	49.26	49.96	49.81	50.21	50.32	50.62	51.25	51.65	51.58	51.87	52.44	52.64	53.07	53.15	53.60	53.79	54.05	54.36	53.99	54.76
400-341/MW-341	RGA	N side	380.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	55.15
400-212/MW-342	RGA	N side	379.62	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	57.80
400-206/MW-343	RGA	N side	376.99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	53.36
MW157	UCRS	N side	381.58	35.07	35.60	DRY	52.52	DRY	DRY	DRY	DRY	DRY	DRY	34.87	34.85	55.40	34.93	35.25	35.16	35.02	34.75	34.61	34.33
MW176	UCRS	N side	381.25	40.58	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	NT	NT	NT	NT	NT	DRY	DRY	dry	dry
MW177	UCRS	N side	379.74	47.60	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	dry	dry
011-008	UCRS	N side	382.16	NA	NA	38.11	41.68	38.76	NT	40.78	41.72	41.92	40.65	41.37	41.14	41.46	41.93	42.75	42.18	42.00	41.68	40.51	39.42
026-002	UCRS	N side	377.10	NA	NA	NA	12.83	12.65	12.67	12.84	13.66	13.44	12.97	13.34	13.28	13.55	13.81	13.73	13.55	14.11	14.45	13.85	14.50
040-001	UCRS	BGS	376.14	NA	NA	31.90	31.90	31.61	35.33	35.91	35.57	34.75	30.45	30.50	30.57	30.15	29.11	28.74	29.45	28.80	28.89	28.39	28.93
047-001	UCRS	N side	381.23	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	NT	NT	NT	NT	NT	DRY	DRY	dry	dry
203-001	UCRS	BGS	376.51	NA	NA	32.67	32.60	32.89	33.29	33.36	33.36	33.45	33.32	33.58	33.60	33.58	33.50	33.75	33.81	33.85	33.78	33.50	33.63
400-003	UCRS	N side	378.74	NA	NA	NA	NA	NA	37.94	38.10	38.22	38.32	38.32	38.48	38.54	38.55	38.61	38.65	38.69	38.81	38.80	38.72	39.80
400-016	UCRS	N side	379.26	NA	NA	NA	NA	NA	NA	DRY	40.71	DRY	39.91	40.03	NT	40.26	40.39	40.42	40.53	40.78	40.62	40.93	41.39
400-017	UCRS	N side	378.54	NA	NA	40.51	38.17	37.29	37.22	37.33	37.46	37.49	37.54	37.64	37.77	37.86	37.96	38.20	38.10	38.28	38.40	37.49	40.52
400-021	UCRS	N side	376.99	NA	NA	30.00	32.60	32.72	33.05	33.34	33.50	33.67	33.41	34.10	33.83	33.60	33.69	33.94	34.05	34.06	33.93	33.50	33.65
400-022	UCRS	BGS	380.70	NA	NA	NA	38.40	37.37	37.58	38.80	37.82	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	dry	dry
400-025	UCRS	N side	380.55	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	38.97	38.00	36.47	36.83	37.46	37.10	36.75	37.20	36.87	35.60	36.09
400-026	UCRS	BGS	378.69	NA	NA	43.55	42.86	42.85	42.70	42.95	42.04	42.47	41.07	38.86	38.90	42.10	42.71	40.72	42.18	43.18	43.18	42.98	43.33
400-027	UCRS	N side	381.96	NA	NA	39.50	39.50	39.01	38.83	40.03	39.60	DRY	37.92	39.10	38.22	39.21	39.65	38.35	38.36	39.94	39.76	36.11	39.20
400-030	UCRS	BGS	376.16	NA	NA	NA	NA	NA	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	dry	dry
400-031	UCRS	BGS	378.62	NA	NA	NA	NA	35.30	DRY	DRY	42.29	42.17	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	dry	dry
400-033	UCRS	N side	377.84	NA	NA	37.72	36.99	36.60	37.25	37.51	37.68	37.82	37.75	38.00	36.44	37.78	37.70	38.00	38.05	38.14	38.05	37.81	37.94
400-063	UCRS	N side	380.23	NA	NA	30.35	37.60	39.17	39.37	39.47	39.80	39.99	39.40	38.91	38.05	37.75	38.09	38.43	38.24	38.16	38.04	37.49	37.48
400-083	UCRS	N side	378.31	NA	NA	DRY	40.31	40.46	40.61	40.78	40.99	41.07	41.06	41.23	41.07	41.48	41.60	41.66	41.69	41.86	41.82	41.65	41.75

E-1

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CH2MHILL

MONITORING WELL CONSTRUCTION LOG: Standard

Installation Monitoring Well

Well Number MW-341 (400-212)

Site WAG 6

Client/Project PGDP

AKGWA Number 8003-3482

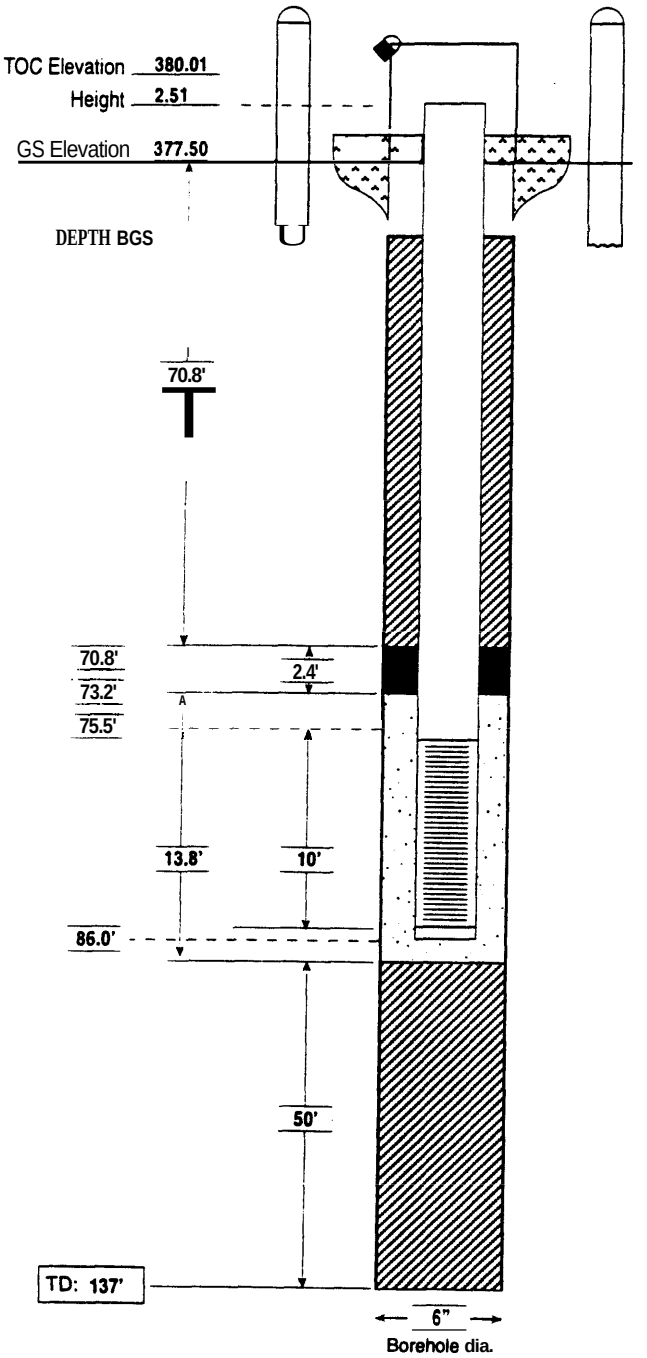
Starting date 12/12/98 time 0700

Drilling Contractor Alliance Environmental, Inc.

Completion date 12/15/98 rime 1600

Built By Ed Miller

Well Coordinates E 3938.34 N 1061.13



PROTECTIVE GROUND POST
Quantity 4
Material / Type **Seamless Steel** Schedule 40 **ASTM A53-90**
Diameter 6"

PROTECTIVE CSG
Mated& / Type **Steel** / Schedule 40
Diameter 6"
Depth **BGS** 3.5'
Water Tight Seal (@/ N)
Weep Hole (@ / N)

SURFACE PAD
Composition & **Size** Concrete 4' x 4' x 8"

RISER PIPE
Type 316 **Stainless Steel** Schedule 5S
Diameter 2"
Total Length (TOC to TOS) 80'

GROUT / SEAL
Composition **& Proportions** Pure Gold Grout with 30% Solids
Tremied (Y/ N)
Interval BGS Surface to 70.8'

CENTRALIZERS (Y / N)
Depth(s) BGS 15.5. 40.5. 65.5'

BENTONITE **SEAL**
Interval BGS 70.8' to 73.2'
Hydrationlime >8 hours

FILTER PACK
Type Number 5 Quartz Sand
Tremied (Y/ N)

SCREEN
Type 316 **Stainless Steel** Schedule 5S
Diameter 2"
Slot Size & Type 0.01" Wire Wrap
Interval BGS 75.5' to 85.5'

BACKFILL PLUG
Material Pure Gold Grout with 30% Solids and Bentonite Pellets
Hydration Time >24 hours
Tremied (Y / N)

CH2MHILL

MONITORING WELL CONSTRUCTION LOG: Standard

Installation Monitoring Well

Well Number MW-342 (400-210)

Site WAG 6

Client/Project PGDP

AKGWA Number 8003-3483

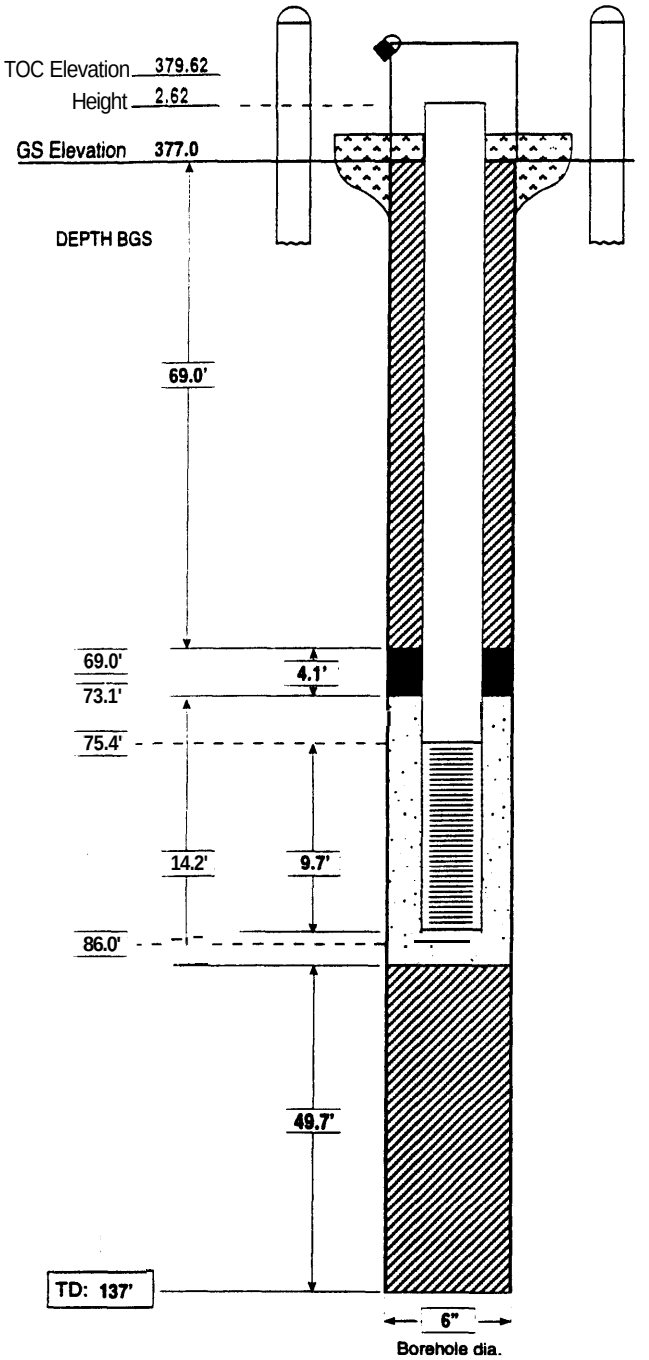
Starting date 12/19/98 time 1012

Drilling Contractor Alliance Environmental, Inc.

Completion date 12/22/98 time 1600

Built By Ed Miller

Well Coordinates E 4404.50 N 1289.70



PROTECTIVE GROUND POST
Quantity 4
Material / Type Seamless Steel Schedule 40 ASTM A53-90
Diameter 6"

PROTECTIVE CSG
Material / Type Steel / Schedule 40
Diameter 6" Water Tight Seal (@ / N)
Depth BGS 3.5' Weep Hole (Y / N)

SURFACE PAD
Composition & Size Concrete 4' x 4' x 8"

RISER PIPE
Type 316 Stainless Steel Schedule 5S
Diameter 2"
Total Length (TOC to TOS) 77.5'

GROUT / SEAL
Composition & Proportions Pure Gold Grout with 30% Solids
Tremied (Y / N)
Interval BGS Surface to 69'

CENTRALIZERS (Y / N)
Depth(s) BGS 15', 40', 65'

BENTONITE SEAL
Interval BGS 69.0' to 73.1'
Hydration Time >8 hours

FILTER PACK
Type Number 5 Quartz Sand
Tremied (Y / N)

SCREEN
Type 316 Stainless Steel Schedule 5S
Diameter 2"
Slot Size & Type 0.01" Wire Wrap
Interval BGS 75.4' to 85.1'

BACKFILL PLUG
Material Pure Gold Grout with 30% Solids and Bentonite Pellets
Hydration Time >24 hours
Tremied (Y / N)

CH2MHILL

MONITORING WELL CONSTRUCTION LOG: Standard

Installation Monitoring Well

Well Number MW-343 (400-208)

Site WAG 6

Client/Project PGDP

AKGWA Number 8003-3484

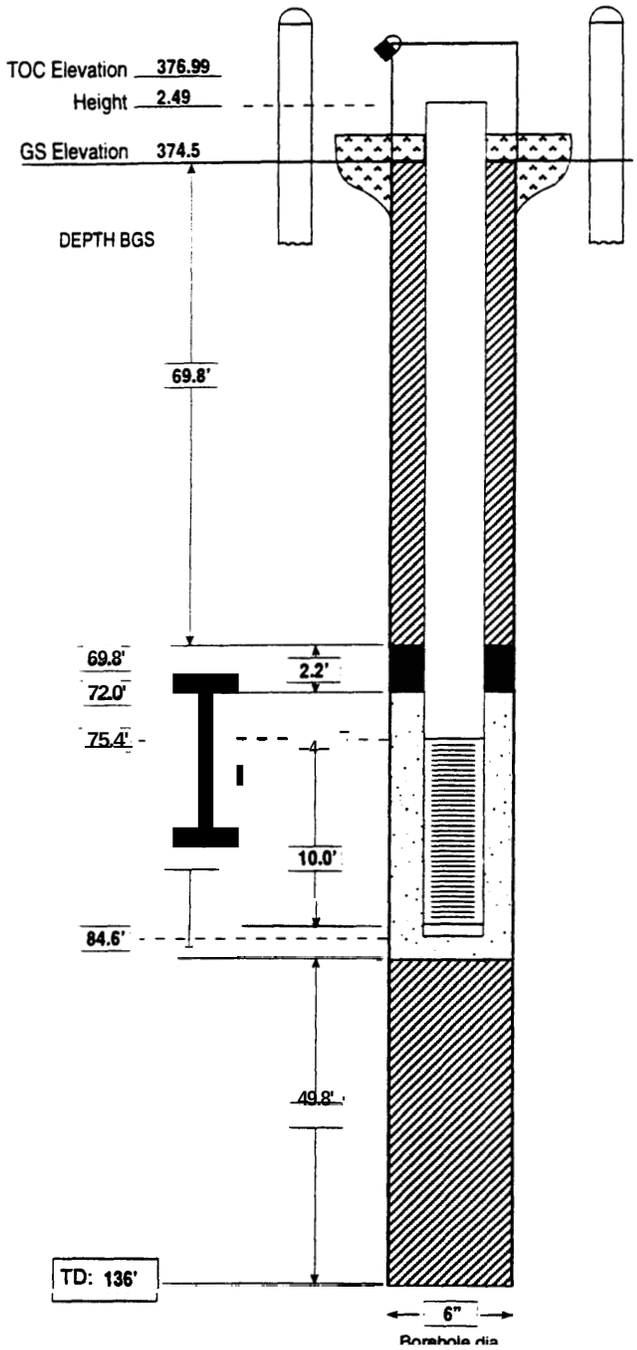
Starting date 12/19/98 time 0830

Drilling Contractor Alliance Environmental, Inc.

Completion date 12120198 time 1600

Built By Ed Miller

Well Coordinates E 4403.97 N 1083.68



PROTECTIVE GROUND POST
Quantity 4
Material / Type Seamless Steel Schedule 40 ASTM A53-90
Diameter 6"

PROTECTIVE CSG
Material / Type Steel / Schedule 40
Diameter 6" Water Tight Seal (@/ N)
Depth BGS 3.5' Weep Hole (Ⓨ/ N)

SURFACE PAD
Composition & Size Concrete 4' x 4' x 8"

RISER PIPE
Type 316 Stainless Steel Schedule 5S
Diameter 2"
Total Length (TOC to TOS) 72.5'

GROUT / SEAL
Composition & Proportions Pure Gold Grout with 30% Solids
Tremied (Ⓨ/ N)
Interval BGS Surface to 69.8

CENTRALIZERS (Ⓨ / N)
Depth(s) BGS 24'. 49. 54'

BENTONITE SEAL
Interval BGS 69.8' to 72.0'
Hydration Time >8 hours

FILTER PACK
Type Number 5 Quark Sand
Tremied (Ⓨ/ N)

SCREEN
Type 316 Stainless Steel Schedule 5S
Diameter 2"
Slot Size & Type 0.01" Wire Wrap
Interval BGS 75.4' to 85.1'

BACKFILL PLUG
Material Pure Gold Grout with 30% Solids and Bentonite Pellets
Hydration Time >24 hours
Tremied (Ⓨ/ N)

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CH2MHILL
WELL DEVELOPMENT LOG

Installation Monitoring Well

Well Number MW-341 (400-212)

Site/Project PGDP / WAG 6

Sample ID Number 400212WB085

AKGWA Number 8003-3482

Development Start date 1/23/98 time 0825

Developed by Ron McComb

Development End date 1/28/98 time 1032

Development Method **Surging, Pumping**

Development Equipment: Stainless Steel Surge Block, Dedicated QED™ Well Wizard Bladder Pump With a QED™ Water Quality Logger Equipped With an In-Line Flow Cell

Quantity of Water Loss During Drilling (if applicable) NA gal

Casing Diameter 2.067 in

Pre-Dev static Water Level 56.00'

Well TD 87' ft BTOC

Maximum Pumping Rate 0.5 gpm

One Well Volume of Water 5.27 gal

Total Quantity of Water Bailed 0 gal

Total Quantity of Water Discharged by Pumping 911.5 gal

Discharge Water Containerized? (Y) / N

Type of Containment 1,000 Gallon Mobile Tank

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Time	Volume Removed (gallons)	Water Level (ft BTOC)	Turbidity (NTU)	Clarity / Color	Temp °C	pH	Conductivity (mS)	DO (%)	Oxidation Reduction Potential (Milivolts)	Remarks
1315	500		66	Cloudy						pumped until turbidity < 10 NTUs
1600	900		14	Clear						pumped until turbidity < 10 NTUs
1018	904			Clear	17.10	6.31	548	35.6	06	
1019	904.5			Clear	17.10	6.34	549	35.2	04	
1022	906			Clear	17.11	6.30	549	36.8	78	
1024	907			Clear	17.13	6.31	548	38.5	76.8	
1029	910			Clear	17.14	6.39	549	38.4	72.9	
1030	910 5			Clear	17.13	6.34	549	37.7	72.7	
1032	911.5			Clear	17.18	6.34	548	36.8	72	development complete

CH2MHILL
WELL DEVELOPMENT LOG

Installation Monitoring Well

Well Number MW-342 (400-210)

Site/Project PGDP WAG 6

Sample ID Number 400210WB085

AKGWA Number 8003-3483

Development Start date 1/15/98 time 1500

Developed by Ron McComb

Development End date 1/23/98 time 0830

Development Method **Surging, Pumping**

Development Equipment: Dedicated QED™ Well Wizard Bladder Pump With a QED™ Water Quality Logger Equipped With an In-Line flow Cell

Quantity of Water Loss During Drilling (if applicable) NA gal.

Casing Diameter 2.067 in

Pre-Dev static Water Level 56.51' Well TD 87' ft BTOC Maximum Pumping Rate 0.5 gpm.

One Well Volume of Water 5.18 gal

Total Quantity of Water Bailed 0 gal

Total Quantity of Water Discharged by Pumping 648 gal

Discharge Water Containerized? (Y) / N Type of Containment 1,000 Gallon Mobile Tank

Time	Volume Removed (gallons)	Water Level (ft BTOC)	Turbidity (NTU)	Clarity / Color	Temp °C	pH	Conductivity (mS)	DO (%)	Oxidation Reduction Potential (Millivolts)	Remarks
1214	500		183	Cloudy						pumped until turbidity <10 NTUs
1243	514.5		off scale	Cloudy						pumped until turbidity <10 NTUs
1322	525		70	Cloudy						pumped until turbidity <10 NTUs
1345	536.5		65	Cloudy						pumped until turbidity <10 NTUs
1415	551.5		39	Cloudy						pumped until turbidity <10 NTUs
	574		22	Cloudy						pumped until turbidity <10 NTUs
1600	604		18	Cloudy						pumped until turbidity <10 NTUs
1611	610		21	Cloudy						pumped until turbidity <10 NTUs
0815	640		10	Clear		5.9	688			pumped until turbidity <10 NTUs
0820	642		10	Clear	20.7	59	690	54.1		
0825	645		9.8	Clear	20.8	5.8	688	54.2		
0830	648		9.9	Clear	20.7	58	687	53.4		development complete

CH2MHILL

WELL DEVELOPMENT LOG

Installation: Monitoring Well

Well Number: MW-343 (400-208)

Site/Project: PGDP / WAG 6

Sample ID Number: 400208WB085

AKGWA Number: 8003-3484

Development Start date: 1/28/98 time: 0700

Developed by: Ron McComb

Development End date: 1/29/98 time: 0936

Development Method: Pumping

Development Equipment: Dedicated OED" Well Wizard Bladder Pump With a QED™ Water Quality Logger Equipped With an In-Line Flow Cell

Quantity of Water Loss During Drilling (if applicable): NA gal

Casing Diameter: 2.067 in

Pre-Dev Static Water Level: 53.75' Well TD: 87' ft BTOC Maximum Pumping Rate: 0.5 gpm

One Well Volume of Water: 5-65 gal

Total Quantity of Water Bailed: 0 gal

Total Quantity of Water Discharged by Pumping: 475 gal

Discharge Water Containerized? (Y) / N Type of Containment: 1,000 Gallon Mobile Tank

Time	Volume Removed (gallons)	Water Level (ft BTOC)	Turbidity (NTU)	Clarity / Color	Temp °C	pH	Conductivity (mS)	DO (%)	Oxidation Reduction Potential (Millivolts)	Remarks
1540	440		17.4	Cloudy						pumped until turbidity <10 NTUS
0810	440.5		18	Cloudy						pumped until turbidity <10 NTUs
0822	444.5		12	Cloudy						pumped until turbidity <10 NTUS
0837	455		14	Cloudy						pumped until turbidity <10 NTUS
0855	460		42	Cloudy						pumped until turbidity <10 NTUS
0907	465		15	Clear						pumped until turbidity <10 NTUs
0917	470		10	Clear						pumped until turbidity <10 NTUS
0925	470.25			Clear	19.71	6.17	722	70.7	292	
0927	471			Clear	19.89	5.96	724	63.1	298	
0929	472			Clear	19.93	5.88	723	61.6	302	
0932	473			Clear	19.91	5.85	724	63.0	306	
0934	474			Clear	19.93	5.84	724	63.0	307	
0936	475			Clear	19.95	5.84	722	62.0	307	development complete

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DUMMER SURVEYING & ENGINEERING SERVICES, INC.

January 29,1998

AVID H. DUMMER, JR, PLS
PRESIDENT
Registered in Kentucky

JOHN C. CHLARSON, PE
VICE PRESIDENT
ENGINEERING SERIVCES
Registered in Kentucky, Tennessee & Illinois

RICKY A TOSH, PLS
VICE PRESIDENT
SURVEYING SERVICES
Registered in Kentucky & Illinois

Bob Robinson
CH2M Hill
209 Wallace Avenue
Kevil, KY 42053

re: WAG 6 - Remedial tnvestigation / Feasibility Study
Paducah Gaseous Diffusion Plant

Dear Sir:

With this letter we are submitting a computer printout of the coordinate list of proposed bore hole locations and as-buiit locations for the above referenced project.

I have reviewed the enclosed information and have found it to be true and accurate to the best of my knowledge and belief.

If you have any questions, please do not hesitate to call.

Respectfully Submitted,

David H. Dummer, Jr., PLS
President

Enclosure

ch2mhill.doc

434 South 6th Street • Paducah, KY 42003
KY 502•444•0220 IL 618•524•4209 Fax 502•444•9493 dse@sunsix.infi.net

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Prepared by: Dummer Surveying Company #CGDS06768
List-Coords/Brg-Azi 597103 1/29/98 10:53:49 Factor: 1.0000000

Pt.No.	Code	North	East	Elevation	Desc.
1		-1207.0000	-4483.0000	374.50	400-001
2		-1149.0000	-4225.0000	378.50	400-002
3		-1190.0000	-4231.0000	379.00	400-003
4		-1228.0000	-4391.0000	377.50	400-004
5		-1272.0000	-4137.0000	379.00	400-005
6		-1298.0000	-4136.0000	379.00	400-006
7		-1325.0000	-4095.0000	379.00	400-007
8		-1352.0000	-4102.0000	378.50	400-008
9		-1554.0000	-4442.0000	377.00	400-009
10		-1557.0000	-4366.0000	379.50	400-010
11		-1505.0000	-4100.0000	378.50	400-011
12		-1630.0000	-4053.0000	378.00	400-012
13		-1S53.0000	-4053.0000	380.00	400-013
14		-1684.0000	-4112.0000	379.50	400-014
15		-1756.0000	-4330.0000	379.00	400-015
16		-1745.0000	-4190.0000	379.50	400-016
17		-1819.0000	-4344.0000	378.50	400-017
18		-1795.0000	-4263.0000	379.00	400-018
19		-1505.0000	-4235.0000	380.00	400-019
20		-1620.0000	-4165.0000	380.00	400-020
21		-1244.0000	-4565.0000	374.50	400-021
22		-1112.0000	-4222.0000	377.50	400-022
23		-1149.0000	-4131.0000	376.50	400-023
24		-1384,0000	-4051.0000	377.50	400-024
25		-1484.0000	-4052.0000	378.00	400-025
26		-1553.0000	-4100.0000	378.50	400-026
27		-1798.0000	-3965.0000	379.00	400-027
28		-1795.0000	-4288.0000	379.50	400-028
29		-1827.0000	-4381.0000	378.50	400-029
30		-1661.0000	-4465.0000	376.00	400-030
31		-1575,0000	-4398.0000	378.50	400-031
32		-1384.0000	-4443.0000	375.50	400-032
33		-1280.0000	-4450.0000	375.50	400-033
34		-1079.0000	-4404.0000	374.50	400-034
35		-1295.0000	-4404.0000	377.00	400-035
36		-1607.0000	-4409.0000	378.50	400-036
37		-1783.0000	-4116.0000	379.00	400-037
38		-1648.0000	-4098.0000	379.00	400-038
39		-1072.0000	-3943.0000	377.50	400-039
40		-1302.0000	-4412.0000	377.00	400-040
41		-1555.0000	-4405.0000	378.50	400-041
42		-1170.0000	-4192.0000	378.50	400-042
43		-1075,0000	-4464,0000	374.50	400-043
44		-1440.0000	-4562,0000	375.50	400-044
45		-1770.0000	-4443.0000	376.50	400-045
46		-1566.0000	-4030.0000	378.50	400-046
47		-1476.0000	-4072.0000	378.50	400-047
48		-1421.0000	-3944.0000	379.00	400-048
49		-1232.0000	-3573.0000	380.30	400-049
0		-1142.0000	-3635.0000	380.00	400-050
		-1142.0000	-3760,0000	379.00	400-051
		-1074.0000	-3635.0000	379.50	400-052
		-907.0000	-3635.0000	378.00	400-053

54	-1202.0000	-4429.0000	376.50	400-054
55	-1180.0000	-4299.0000	379.00	400-055
56	-1185.0000	-4042.0000	376.00	400-056
57	-1243.0000	-4053.0000	377.00	400-057
58	-1324.0000	-4049.0000	377.00	400-058
59	-1278.0000	-4019.0000	376.50	400-059
60	-1299.0000	-4062.0000	377.00	400-060
61	-1319.0000	-4020.0000	377.00	400-061
62	-1425.0000	-4019.0000	377.00	400-062
63	-1385.0000	-4051.0000	377.50	400-063
64	-1538.0000	-4051.0000	378.00	400-064
65	-1616.1600	-4054.1000	378.27	400-065
66	-1650.0000	-4053.0000	379.00	400-066
67	-1649.0000	-4083.0000	379.00	400-067
68	-1660.0000	-4030.0000	378.50	400-068
69	-1705.0000	-4031.0000	378.00	400-069
70	-1818.0000	-4030.0000	379.50	400-070
71	-1782.0000	-4185.0000	379.00	400-071
72	-1784.0000	-4317.0000	379.00	400-072
73	-1789.0000	-4396.0000	378.00	400-073
74	-1832.0000	-4436.0000	378.00	400-074
75	-1690.0000	-4474.0000	377.50	400-075
76	-1471.0000	-4465.0000	375.50	400-076
77	-1317.0000	-4466.0000	374.50	400-077
78	-1213,0000	-4404.0000	379.00	400-078
79	-1189.0000	-4325.0000	379.00	400-079
80	-1189.0000	-4272.0000	379.00	400-080
81	-1189.0000	-4208.0000	379.00	400-081
82	-1258.0000	-4443.0000	374.00	400-082
83	-1384.0000	-4443.0000	375.50	400-083
84	-1509.0000	-4476.0000	376.00	400-084
85	-1633.0000	-4404.0000	378.50	400-085
86	-1770.0000	-4443,0000	376.50	400-086
87	-1742.0000	-4419.0000	377.00	400-087
88	-1742.0000	-4382.0000	379.00	400-088
89	-1743.0000	-42S4.0000	379.50	400-089
90	-1740.0000	-4187.0000	379.50	400-090
91	-1728.0000	-4054.0000	379.00	400-091
92	-1871.0000	-4068.0000	379.00	400-092
93	-1148.0000	-4404.0000	378.00	400-093
94	-1149.0000	-4216.0000	378.50	400-094
95	-1149.0000	-4039.0000	376.00	400-095
96	-1207.0000	-4019.0000	376.00	400-096
97	-1300.0000	-4018.0000	376.00	400-097
98	-1460.0000	-4030.0000	379.00	400-098
99	-1520.0000	-4019,0000	379.00	400-099
100	-1536.0000	-4019.0000	377.50	400-100
101	-1649.0000	-4020.0000	378.00	400-101
102'	-1721,0000	-4030.0000	378.00	400-102
103	-1763.0000	-4064.0000	379.00	400-103
104	-1754,0000	-4110.0000	379.00	400-104
105	-1890.0000	-4163,0000	378.00	400-105
106	-1774.0000	-4330.0000	379.00	400-106
107	-1580.0000	-4441.0000	377.00	400-107
108	-1360.0000	-4443.0000	375.50	400-108
109	-1204.0000	-4443.0000	376.00	400-109
110	-1224,0000	-4109.0000	375.00	400-110
111	-1317.0000	-4408.0000	376.00	400-111
112	-1459.0000	-4428.0000	377.00	400-112
113	-1723.0000	-4444.0000	377.SO	400-113

114	-1818.0000	-4389.0000	377.50	400-114
115	-1870.0000	-4345.0000	378.00	400-115
116	-1796.0000	-4203.0000	379.00	400-116
117	-1794.0000	-4116.0000	379.00	400-117
118	-1234.0000	-4475.0000	375.00	400-118
119	-1245.0000	-4466.0000	374.00	400-119
120	-1228.0000	-4408.0000	377.00	400-120
121	-1390.0000	-4390.0000	378.00	400-121
122	-1189.0000	-4311.0000	379.00	400-122
123	-1093.0000	-4190.0000	375.50	400-123
124	-1189.0000	-4173.0000	379.00	400-124
125	-1185.0000	-4042.0000	376.00	400-125
126	-1251.0000	-4020.0000	376.50	400-126
127	-1304.0000	-4040.0000	379.00	400-127
128	-1325.0000	-4085.0000	379.00	400-128
129	-1311.0000	-4125.0000	379.00	400-129
130	-1393.0000	-4018.0000	378.00	400-130
131	-1411.0000	-4072.0000	377.50	400-131
132	-1500.0000	-4030.0000	378.50	400-132
133	-1595.0000	-4030.0000	379.00	400-133
134	-1617.0000	-4030.0000	379.00	400-134
135	-1649.0000	-4070.0000	378.00	400-135
136	-1647.0000	-4115.0000	379.00	400-136
137	-1694.0000	-4053.0000	379.00	400-137
138	-1783.0000	-4029.0000	379.00	400-138
139	-1871.0000	-4029.0000	379.50	400-139
140	-1774.0000	-4209.0000	379.00	400-140
141	-1794.0000	-4241.0000	379.00	400-141
142	-1743.0000	-4323.0000	379.50	400-142
143	-1743.0000	-4365,0000	379.50	400-143
144	-1789.0000	-4357.0000	379.00	400-144
145	-1722.0000	-4419.0000	377.50	400-145
146	-1767.0000	-4474.0000	378.50	400-146
147	-1605.0000	-4474.0000	377.00	400-147
148	-1408.0000	-4467.0000	375.00	400-148
149	-1149.0000	-4445.0000	375.50	400-149
150	-1202.0000	-4373.0000	378.00	400-150
151	-1186.0000	-4287.0000	379.00	400-151
152	-1189.0000	-4208.0000	379.00	400-152
153	-1191.0000	-4144.0000	379.00	400-153
154	-1276.0000	-4411.0000	375.00	400-154
155	-1276.0000	-4385.0000	377.00	400-155
156	-1300.0000	-4443.0000	375.50	400-156
157	-1523.0000	-4442.0000	377.50	400-157
158	-1690.0000	-4443.0000	378.50	400-158
159	-1740.0000	-4486.0000	378.00	400-159
160	-1762.0000	-4356.0000	379.00	400-160
161	-1742.0000	-4237.0000	379.50	400-161
162	-1670.0000	-4052.0000	379.00	400-162
163	-1794.0000	-4065.0000	379.00	400-163
164	-1833.0000	-4421.0000	378.00	400-164
165	-1163.0000	-4531.0000	376.00	400-165
166	-1149.0000	-4243.0000	378.00	400-166
167	-1149.0000	-4122.0000	377.50	400-167
168	-1363.0000	-4016.0000	378.00	400-168
169	-1352.0000	-4375.0000	378.00	400-169
170	-1365.0000	-4550.0000	379.00	400-170
171	-1571.0000	-4515.0000	377.50	400-171
172	-1575.0000	-4367.0000	379.00	400-172
173	-1587.0000	-4056.0000	378.50	400-173

	N	E		
174	-1633.0000	-4089.0000	376.00	400-174
175	-1632.0000	-4071.0000	376.00	400-175
176	-1717.0000	-4054.0000	379.00	400-176
177	-1775.0000	-4257.0000	379.00	400-177
178	-1887.0000	-4288.0000	378.00	400-178
179	-1823.0000	-4063.0000	379.00	400-179
180	-1149.0000	-4445.0000	375.50	400-180
181	-1174.0000	-4428.0000	376.50	400-181
182	-1167.0000	-4281.0000	378.00	400-182
183	-1189.0000	-4329.0000	379.00	400-183
184	-1167.0000	-4246.0000	379.00	400-184
185	-1189.0000	-4243.0000	378.00	400-185
186	-1167.0000	-4164.0000	378.50	400-186
187	-1261.0000	-4112.0000	379.00	400-187
188	-1261.0000	-4426.0000	376.50	400-188
189	-1465.0000	-4434.0000	377.00	400-189
190	-1445.0000	-4443.0000	376.00	400-190
191	-1756.0000	-4243.0000	379.00	400-191
192	-1790.0000	-4474.0000	378.50	400-192
193	-1797.0000	-4420.0000	377.50	400-193
194	-1819.0000	-4326.0000	378.50	400-194
195	-1889.0000	-4216.0000	378.50	400-195
196	-1808.0000	-4181.0000	379.00	400-196
197	-1796.0000	-4020.0000	379.50	400-197
198	-1410.0000	-4102.0000	378.50	B.H.-11-001
199	-1584.0000	-4091.0000	379.00	B.H.-11-002
200	-1623.0000	-4105.0000	379.00	B.H.-11-003
201	-1631.0000	-4065.0000	378.50	B.H.-11-004
202	-1681.0000	-4030.0000	379.00	B.H.-11-005
203	-1628.0000	-3968.0000	380.00	B.H.-11-006
204	-1675.0000	-3970.0000	379.50	B.H.-11-007
20s	-1721.0000	-4030.0000	378.00	B.H.-11-008
206	-993.0000	-4249.0000	376.04	B.H.-26-001
207	-995.0000	-5120.0000	375.00	B.H.-26-002
208	-952.0000	-5620.0000	373.50	B.H.-26-003
209	-1042.0000	-5494.0000	375.50	B.H.-26-004
210	-1050.0000	-5210.0000	375.00	B.H.-26-005
211	-1051.0000	-4876.0000	373.85	B.H.-26-006
212	-1050.0000	-4625.0000	374.00	B.H.-26-007
213	-1052.0000	-4347.0000	374.50	B.H.-26-008
214	-1062.0000	-4883.0000	375.50	B.H.-26-009
215	-998.0000	-5566.0000	372.50	B.H.-26-010
216	-1045.0000	-5320.0000	374.00	B.H.-26-011
217	-1050.0000	-5009.0000	374.00	B.H.-26-012
218	-1053.0000	-4745.0000	374.00	B.H.-26-013
219	-1053.0000	-4442.0000	375.28	B.H.-26-014
220	-1051.0000	-4393.0000	375.50	B.H.-26-015
221	-1056.0000	-4281.0000	375.00	B.H.-26-016
222	-1057.0000	-4199.0000	375.50	B.H.-26-017
223	-1148.0000	-4052.0000	376.00	B.H.-40-001
224	-1244.0000	-4136.0000	378.00	B.H.-40-002
225	-1224.0000	-4110.0000	377.50	B.H.-40-003
226	-1244.0000	-4049.0000	376.50	B.H.-40-004
227	-1209.0000	-4021.0000	376.00	B.H.-40-005
228	-1148.0000	-4079.0000	376.50	B.H.-40-006
229	-1175.0000	-4110.0000	377.00	B.H.-40-007
230	-1169.0000	-4063.0000	376.50	B.H.-40-008
231	-1185.0000	-4062.0000	376.50	B.H.-40-009
232	-1096.0000	-4090.0000	376.50	B.H.-40-010
233	-1436.0000	-4380.0000	376.50	B.H.-47-001

234	-1418.0000	-4367.0000	378.50	B.H.-47-002
235	-1150.0000	-4405.0000	376.50	B.H.-203-001
236	-1169.0000	-4333.0000	378.50	B.H.-203-002
237	-1190.0000	-4367.0000	378.00	B.H.-203-003
238	-1168.0000	-4313.0000	378.50	B.H.-203-004
239	-1149.0000	-4275.0000	370.50	B.H.-203-005
240	-1149.0000	-4309.0000	378.50	B.H.-203-006
241	-1170.0000	-4453.0000	375.50	B.H.-203-007
242	-1188.0000	-4396.0000	377.00	B.H.-203-008
243	-1500.0000	-4030.0000	378.50	400-198
244	-1352.0000	-4375.0000	378.00	400-199
245	-1725.0000	-4082.0000	379.50	400-200
246	-1706.0000	-4077.0000		400-201
247	-1706.0000	-4112.0000		400-202
248	-1244.0000	-4570.0000	374.50	400-203
249	-1774.0000	-4535.0000	375.00	400-204
250	-1921.0000	-4072.0000	378.50	400-205
251	-1077.0000	-4564.0000	374.50	400-206
252	-1783.0000	-4111.0000	379.60	400-207
253	-1084.0000	-4404.0000	374.50	400-208
254	-1656.0000	-4098.0000	379.00	400-209
255	-1290.0000	-4404.0000	377.00	400-210
256	-1185.0000	-4037.0000	376.00	400-211
257	-1062.0000	-3940.0000	377.50	400-212
258	-1755.0576	-4750.0228	375.42	400-213
259	-1971.0000	-4368.6819	376.52	400-214
260	-1921.0000	-4092.0000	370.50	400-215
261	-1769.8915	-4772.7703	375.95	SAN.M.H.
276	-1117.3575	-4262.0995	377.82	TP/
277	-1129.2545	-4004.6456	376.23	11TH&VA/PK NAIL
278	-1129.1667	-4499.5000	374.70	TP/NAIL@10TH&VA
279	-1129.1693	-4774.4200	373.27	10TH(N)&VA
280	-1398.9563	-4511.4700	376.17	TP/
283	-1206.1196	-4149.7251		NE COR C400
284	-1206.0342	-4352.2455		NW COR C400
285	-1206.9000	-4150.0000		BLDG
286	-1206.9000	-4352.5000		BLDG
207	-1729.4000	-4352.5000		BLDG
280	-1728.6430	-4352.6954		SW COR C400
316	-1129.1246	-5399.5943		PANEL
318	-1129.1667	-4499.5000		10TH & VA
320	-1049.3730	-4500.4875		10TH & TN
321	-1050.2067	-5334.5244	-0.78	026-011
322	-1049.6260	-5209.9706	-0.76	026-005
323	-1050.0752	-5009.1480	-0.95	026-012
324	-1050.5042	-4074.8050	-0.86	026-006
325	-1049.5097	-4624.6229	-1.04	026-007
326	-1425.2114	-3908.2632	379.44	400-048
327	-1231.0409	-3573.3949	380.30	400-049
328	-1050.5171	-4075.0600	373.05	026-006
329	-1052.6709	-4442.2960	375.20	026-014
330	-1051.4650	-4392.6709	375.52	026-015
331	-993.2782	-4229.1962	376.04	026-001
332	-1071.0152	-4463.9455	374.63	400-043
333	-1169.7731	-4452.8364	375.41	203-007
334	-1401.4072	-4023.9557	376.22	M.H.ACID DRAIN
335	-1141.8176	-3760.1606	370.07	400-051
336	-1142.3107	-3635.4035	379.93	400-050
337	-907.0530	-3635.1670	370.04	400-053
338	-1587.2613	-4055.6086	378.34	400-173

339	-1616.1554	-4054.1040	378.27	400-065
340	-1583.0880	-4094.3064	378.85	011-002
341	-1630.0359	-4053.4746	377.89	011-004
342	-1674.5329	-3970.1558	379.35	011-007
343	-1634.4925	-3968,0429	379.79	011-006
344	-1646.4105	-4097.8554	378.97	400-038
345	-1384.8596	-4051,1344	377.29	400-063
346	-1410.7909	-4071.8114	377.60	400-131
347	-1537.6721	-4050.7970	377.78	400-064
348	-1754.4524	-4109.8971	379.18	400-104
349	-1889.9793	-4022.0177	378.61	B.H.-139
350	-1648.1882	-4097.4976	378.90	400-038
351	-1622.8440	-4104.9509	378.84	011-003
352	-1890.4591	-4162.7616	370.06	400-105
353	-1891.8137	-4216.6437	370.03	400-195
354	-1583.9769	-4091.4920	378.76	011-002
355	-1052.2321	-4346.8590	374.69	B.H.026-008
356	-983.3261	-5183.5377	374.51	CATH.PROT.LINE
357	-1045.1368	-5319.7163	374.03	026.011
358	-1797.5508	-3965.1667	378.91	400-027
359	-1628.2545	-3968.1987	379.85	011-006
360	-1425.2014	-3906.2631	379.55	400-048
361	-1862.2974	-4232.2797	378.89	TP/ TP/
362	-1739.8170	-4486.1750	370.07	400-159
363	-1604.7378	-4473.9082	376.98	400-147
364	-1421.4723	-3944.1340	379.06	400-048
365	-1789.1327	-4395.6840	377.91	400-073
366	-1746.1751	-4393.3324	379.12	400-088
367	-1755.7121	-4330.3069	379.08	400-015
368	-1505.0000	-4100.0000	378.66	400-011
369	-1553.0000	-4100.0000	378.00	B.H.-26
370	-1570.9877	-4514.9989	377.26	400-171
371	-1607.2187	-4408.6478	378.27	400-036
372	-1279.8676	-4449.9156	375.33	400-033
373	-1206.8800	-4483.1776	374.58	400-001
374	-1201.8080	-4428.7243	376.44	400-054
375	-1188.1328	-4395.5461	377.00	203-008
376	-1174.0796	-4427.9706	376.25	400-181
377	-1188.1003	-4395.5506	377.00	B.H.-203-008
378	-1169.7653	-4452.8415	375.41	203-007
379	-1244.0154	-4565.0108	374.51	400-021
380	-1294.9524	-4404.0332	376.83	400-035
381	-1294.9524	-4416.0000		400-035
382	-1078.9749	-4403.9515	374.63	400-034
383	-1167.0436	-4340.0478	378.66	203-002
384	-1149.0107	-4309.0190	378.40	203-006
385	-1167.9895	-4313.0161	378.71	203-004
386	-1010.1982	-4517.4440	373.26	S.E.COR.LIFT STA
387	-1074.9878	-4463.9926	374.50	400-043
388	-1317.1383	-4408.1505	376.79	400-040
389	-1228.2521	-4408.1672	376.90	400-120
390	-1261.1945	-4425.5214	376.70	400-188
391	-1440.0257	-4561.5422	375.45	400-044
392	-1074.0716	-3634.9559	379.65	400-052
393	-1727.6803	-4054.0805	379.21	400-091
394	-1717.2159	-4053.6608	379.15	400-176
395	-1402.8091	-4101.7155	378.46	011-001
396	-1324.6381	-4095.0386	378.80	400-007
397	-1351.9633	-4374.5603	378.06	400-169
398	-1345.0588	-4380.1258	377.81	C.L.PIPE

399	-1276.9727	-4385.0045	377.06	400-155
400	-1409.3242	-4431.1098	375.59	400-083
401	-1509.4464	-4476.2460	375.82	400-084
402	-1659.9732	-4475.3806	376.39	400-030
403	-1722.9532	-4443.5517	377.63	400-113
404	-1203.0217	-4172.9731	379.51	400-124
405	-1817.2009	-4029.8392	379.66	400-070
406	-1499.8626	-4030.2298	376.20	400-032
407	-1499.9824	-4031.8425	376.19	400-198
400	-1782.0152	-4184.9997	378.98	400-071
409	-1630.0547	-4053.4652	378.01	400-012
410	-1630.7084	-4064.8019	378.51	011-004
411	-1369.7115	-4050.2166	377.66	400-024
412	-1384.0111	-4050.5702	377.48	400-024
413	-1320.4162	-4106.0251	379.02	TP/ TP/
414	-1880,2225	-4021.0391	379.18	400-139
415	-1880.2150	-4060.5720	378.75	400-092
416	-1888,5678	-4215.8669	378.36	400-195
417	-1880.5189	-4288.8126	378.25	400-178
418	-1880.7702	-4454.0212	378.05	400-145
419	-1890.1669	-4162.8851	378.13	400-105
420	-1817.0051	-4203.7665	378.84	400-116
421	-1774.3920	-4209.2199	379.04	400-140
422	-1748.2282	-4215.2087	379.13	400-016
423	-1742,1001	-4266.3354	379.35	400-089
424	-1774.5096	-4257,2862	378.95	400-177
425	-1795.1652	-4262.7413	378.89	400-018
426	-1782.3954	-4286.7813	378.86	400-106
427	-1818.5907	-4325.7117	378.47	400-194
428	-1755.6108	-4300.3439	379.13	400-142
429	-1762.4379	-4356.1761	379.16	400-160
430	-1741.6776	-4382.3798	379.22	400-088
431	-1795.6621	-4203,1360	379.04	400-116
432	-1741.5146	-4418.8392	377.14	400-087
433	-1739.9926	-4186.9966	379.34	400-090
434	-1149.9414	-4404.7661	376.63	203-001
435	-1227.8680	-4391.3998	377.57	400-004
436	-1275,9472	-4385.0376	377.19	400-155
437	-1445.1363	-4442.8767	376.21	400-190
438	-1493.9037	-4425.6705	377.03	400-112
439	-1522.9310	-4441.9742	377.55	400-157
440	-1550.4071	-4441.8607	377.37	400-009
441	-1568.3268	-4441.5409	377.22	400-107
442	-1632.5145	-4404.3751	378.44	400-085
443	-1168.8151	-4332.7648	378.73	203-002
444	-1188.9882	-4311.0330	379.20	400-122
445	-1179.8892	-4299.2991	379.05	400-055
446	-1188.9803	-4329.1510	379.18	400-183
447	-1189.5288	-4230.8175	379.14	400-003
448	-1189.3196	-4173.3964	379,23	400-124
449	-1149.1606	-4215.9360	378.39	400-094
450	-1169.6659	-4192.0358	378.74	400-042
451	-1112.0575	-4221.7366	377.72	400-022
452	-1169.1839	-4062.9458	376.38	040-008
453	-1184.8242	-4062.2371	376.37	040-009
454	-1185.2299	-4041.8590	375.88	400-125
455	-1351,5383	-4102.2037	378.73	400-008
456	-1071.9209	-3943.0283	377.33	400-039
457	-1129,0598	-5579.5397	374.09	TP/ TP/
458	-1058.0000	-4085.0000	372.50	A .D..

459	-1058.0000	-5470.0000	375.00	ACID DRAIN
460	-984.0000	-5578.0000	375.00	ACID DRAIN
461	-993.0000	-5565.0000	375.00	ACID DRAIN
462	-1058.0000	-5475.0000	375.00	ACID DRAIN
463	-1042.4191	-5494.0315	375.67	026-004
464	-951.9418	-5619.8087	373.30	026-003
465	-1058.0000	-4019.0000	373.50	A.D.
466	-1058.0000	-4084.0000	373.SO	A.D.
467	-1058.0000	-4195.0000	373.50	A.D.
468	-1058.0000	-4275.0000	373.50	A.D.
469	-1092.8252	-4190.0595	375.35	400-123
470	-1095.9449	-4090.2239	376.33	040-010
471	-1062.3335	-4083.1801	375,73	026-009
472	-1057.0827	-4199.0380	375.62	026-017
473	-1056,4068	-4280.9104	374.91	026-016
474	-1209.0343	-4020,5007	376.18	040-005
475	-1250.9738	-4020,2861	376.29	400-126
476	-1277,5269	-4019.2491	376.50	400-059
477	-1318,8375	-4020.3107	376.86	400-061
478	-1323.7574	-4048.5132	377.05	400-058
479	-1243.9458	-4049.1409	376.31	040-004
480	-1817.0000	-4364.0000	378.20	400-017
481	-1818.0000	-4389.0000	377.38	400-114
482	-1832.0000	-4450.0000	377.83	400-074
483	-1796.0000	-4474.0000	377.40	400-192
484	-1797.0000	-4420.0000	377.56	400-193
485	-1833,0000	-4421.0000	378.03	400-164
486	-1818.0000	-4116.0000	379.09	400-117
487	-1742.0000	-4298.0000	379.38	400-142
488	-1245.0000	-4466.0000	374.04	400-119
489	-1317.0000	-4466.0000	374.55	400-077
490	-1355.0000	-4466.0000	374.80	400-032
491	-1408.0000	-4467.0000	375.14	400-148
492	-1418.0000	-4367.0000	370.64	047-002
493	-1557.0000	-4366.0000	379.52	400-010
494	-1575,0000	-4367.0000	379.42	400-172
495	-1743.0000	-4365.0000	379.48	400-143
496	-1742.0000	-4237.0000	379.32	400-161
497	-1190.0000	-4367.0000	378.04	203-003
498	-1471.0000	-4465.0000	375.26	400-076
499	-1554.0000	-4442.0000	377.21	400-009
500	-1580,0000	-4441.0000	377.24	400-107
501	-1617.0000	-4030.0000	378.03	400-134
502	-1480.0000	-4420,0000		RCW.
503	-1480,0000	-4416.0000		RCW,
504	-1680.0000	-4430.5000		RCW,
505	-1680.0000	-4427.0000		RCW.
506	-1457,3131	-4427.8525	377.16	400-112
507	-1459.2977	-4427.8136	377.23	400-112
508	-1383.6406	-4442.6731	375.35	400-083
509	-1870.9147	-4029.1728	379.33	400-139
510	-1870.8102	-4067.8801	379.15	400-092
511	-1870,0875	-4344.9087	378.25	400-115
512	-1871.0516	-4289.4909	378.33	400-178
513	-1887.2596	-4288.1206	370.23	400-178
514	-1818.5249	-4344.1069	370.41	400-017
515	-1436.3998	-4380.2060	376.34	047-001
516	-1660.8969	-4465.1762	376.34	400-030
517	-1849,5223	-4004.9466	379.60	T.P.-247
518	-1849,3862	-4500.4875	377.94	T.P.-252

519	-1473.1107	-3956.7192	379.38	T.P.-253
520	-1770.0002	-4772.8158	376.22	SAN.M.H.
521	-1556.3953	-4411.3264	382.88	TOP CASING
522	-2013.9485	-4425.5293	377.74	C.L.TRACKS
523	-2013.9485	-4425.5293	377.74	C.L.TRACKS
524	-1048.8807	-5215.1585	377.74	TP/
525	-1061.1343	-3938.3430	377.92	M.W.341
526	-1129.1725	-4499.5056	376.43	T.P.278
527	-1083.6767	-4403.9677	375.00	M.W.343
528	-1289.6997	-4404.5028	377.37	M.W.342
529	-1849.3860	-4500.4938	374.98	T.P.-518

Prepared by: Dummer Surveying Company #CGDS06768
List-Coords/Brg-Azi 597103AB 1/29/98 11:20:43 Factor: 1.0000000

Pt.No.	Code	North	East	Elevation	Desc.
1		-1206.7914	-4483.2910	376.34	400-001
2		-1149.0266	-4225.0633	378.27	400-002
3		-1189.4987	-4230.7710	378.27	400-003
4		-1228.0001	-4391.5499	375.02	400-004
5		-1271.9927	-4137.0689	379.44	400-005
7		-1324.5770	-4094.9083	379.44	400-007
8		-1351.6657	-4102.0607	379.44	400-008
9		-1554.1400	-4442.5800		400-009
10		-1556.2447	-4365.7138	376.44	400-010
11		-1504.6298	-4098.9503	376.47	400-011
14		-1603.9609	-4112.1890	379.84	400-014
15		-1756.8415	-4331.1226	378.18	400-015
16		-1745.1700	-4189.9793	379.04	400-016
17		-1819.4749	-4344.0922	378.19	400-017
18		-1794.2000	-4262.7900		400-018
19		-1495.0527	-4221.4490	377.02	400-019
20		-1579.5777	-4196.3360	379.15	400-020
21		1244.3700	4565.1800	374.43	400-021
22		-1112.8203	-4220.5968	378.27	400-022
25		-1482.5900	-4050,6900	378.41	400-025
26		-1553.5328	-4099.7088	379.44	400-026
27		-1798.2031	-3963.8723	379.a4	400-027
30		-1661.1181	-4465.0191	378.18	400-030
31		-1575.1687	-4399.4190	378.18	400-031
32		-1354.5532	-4466.3702	376.44	400-032
33		-1280.0000	-4450.3500	375.71	400-033
34		-1078.6900	-4404.0400	374.65	400-034
35		-1294.3810	-4404.1595	375.02	400-035
36		-1607.3084	-4409.2790	378.18	400-036
37		-1784.3693	-4116.0409	379.84	400-037
38		-1648.5700	-4097.5900	378.93	400-038
39		-1071.5400	-3942.9800		400-039
41		-1556.1990	-4404.3400	370.21	400-041
42		-1169.6401	-4192.0618	370.27	400-042
43		-1074.8400	-4463.8600	374.41	400-043
44		-1440.1180	-4562.4077	376.41	400-044
45		-1770.0261	-4442.7516	370.19	400-045
46		-1566.0000	-4030.1600	378.47	400-046
47		-1476.0568	-4071.8299	376.47	400-047
48		-1420.7516	-3943.5019	379.44	400-048
49		-1232.1719	-3573.0775	376.47	400-049
52		-1074.2089	-3635.3252	376.47	400-052
53		-906.7412	-3635.2114	376.47	400-053
54		-1201.8400	-4428.5800	376.57	400-054
56		-1104.9800	-4040.0600	375.79	400-056
58		-1324.3143	-4048.3745	379.65	400-058
59		-1277.3950	-4019.6359	379.65	400-059
61		-1318.6333	-4020.5354	379.65	400-061
62		-1425.2200	-4017.7700	377.62	400-062
63		-1384.9100	-4051.1300	377.74	400-063
64		-1537.8500	-4050.9700	378.05	400-064
65		-1616.0900	-4054.1800	378.46	400-065
66		-1649.0700	-4053.0400	370.92	400-066

67	-1648.5500	-4083.0300	378.97	400-067
68	-1659.9600	-4029.9800	378.74	400-068
69	-1704.7500	-4031.3100	378.04	400-069
70	-1819.0314	-4028.9089	379.84	400-070
71	-1781.9116	-4184.9263	379.84	400-071
72	-1784.1107	-4317.8627	378.21	400-072
73	-1789.0061	-4395.6755	378.19	400-073
74	-1830.9548	-4435.7398	378.21	400-074
76	-1471.1966	-4465.1220	376.41	400-076
77	-1317.3533	-4466.3010	376.44	400-077
80	-1189.0582	-4271.9927	378.27	400-080
81	-1189.0246	-4208.0229	378.27	400-081
83	-1383.8800	-4442.4400	375.50	400-083
84	-1509.6500	-4475.5800	375.90	400-084
85	-1633.1820	-4404.1410	378.18	400-085
87	-1741.6811	-4419.3614	378.19	400-087
88	-1741.6508	-4382.4658	378.19	400-088
89	-1743.0201	-4253.9110	378.18	400-089
91	-1727.5400	-4054.1600	378.82	400-091
92	-1870.2100	-4067.6800		400-092
94	-1148.7117	-4215.8932	378.27	400-094
95	-1148.9714	-4039.0286	378.27	400-095
98	-1459.8300	-4030.0400	379.13	400-098
99	-1519.7800	-4019.9600	378.89	400-099
100	-1536.0800	-4019.1800	377.69	400-100
101	-1649.1600	-4019.9000	378.14	400-101
103	-1762.9357	-4063.8629	379.84	400-103
104	-1754.1588	-4110.0517	379.84	400-104
105	-1890.6401	-4162.7779	378.19	400-105
106	-1773.8044	-4330.1534	378.19	400-106
107	-1580.0400	-4441.9209	378.21	400-107
108	-1360.1700	-4442.7700	375.61	400-108
109	-1203.0600	-4442.6500	376.18	400-109
111	-1317.0200	-4408.1400	376.70	400-111
113	-1722.5384	-4444.1890	378.18	400-113
114	-1819.4240	-4389.4282	378.21	400-114
115	-1869.1026	-4346.5752	378.19	400-115
116	-1794.9400	-4203.1200		400-116
117	-1793.9274	-4115.8748	379.84	400-117
119	-1245.5024	-4466.1722	376.44	400-119
120	-1228.2300	-4408.2000	377.15	400-120
122	-1188.9390	-4311.1592	378.27	400-122
123	-1092.7913	-4189.7991	378.09	400-123
124	-1189.1245	-4173.2545	378.27	400-124
126	-1250.9685	-4020.7273	379.65	400-126
129	-1311.0403	-4125.0949	379.44	400-129
130	-1392.8400	-4018.0400	377.87	400-130
131	-1409.8017	-4071.7547	379.44	400-131
132	-1499.8600	-4030.2300	378.48	400-132
134	-1617.7800	-4028.2400	378.05	400-134
137	-1692.1700	-4053.7300	379.07	400-137
138	-1782.8315	-4029.4794	379.84	400-138
139	-1869.7100	-4029.2700		400-139
140	-1774.3900	-4209.2200		400-140
141	-1794.0792	-4240.9653	378.18	400-141
142	-1741.1282	-4323.1969	378.19	400-142
143	-1743.7796	-4365.1187	378.21	400-143
144	-1789.1990	-4357.1295	378.19	400-144
145	-1722.2327	-4419.4717	378.18	400-145
146	-1766.8337	-4474.0911	378.19	400-146

147	-1605.1412	-4473.8801	378.18	400-147
148	-1407.7664	-4466.1993	376.44	400-148
149	-1149.5800	-4445.1600	375.41	400-149
153	-1190.9800	-4143.9996	377.59	400-153
155	-1275.9500	-4385.0400		400-155
156	-1299.7500	-4443.1200	375.62	400-156
157	-1522.9000	-4441.7200		400-157
158	-1690.0815	-4442.9705	378.18	400-158
159	-1739.0748	-4486.1439	378.19	400-159
160	-1762.4940	-4356.2017	370.19	400-160
161	-1742.6068	-4236.8185	378.21	400-161
162	-1668.0300	-4052.4200	379.22	400-162
163	-1794.6804	-4064.5295	379.84	400-163
165	-1162.3600	-4530.9000	375.98	400-165
167	-1147.9679	-4122.0558	378.27	400-167
169	-1351.8948	-4374.4254	376.44	400-169
170	-1364.6700	-4550.3100	378.92	400-170
171	-1570.8700	-4513,3300	377.41	400-171
172	-1574.8745	-4367.2482	376.44	400-172
173	-1586.9900	-4056.4600	378.40	400-173
176	-1716.9600	-4053.6800	378.94	400-176
177	-1774.5100	-4257.2900		400-177
178	-1887.0321	-4288.2606	378.19	400-178
181	-1174.3000	-4427.8000	376.52	400-181
183	-1188.9849	-4329.1596	378.27	400-183
186	-1168.1344	-4163.9007	378.27	400-186
187	-1260.9841	-4111.9828	379.44	400-187
188	-1261.6387	-4426.5709	375.02	400-188
190	-1445.2300	-4442.7300	376.07	400-190
191	-1756.1802	-4243.0296	370.18	400-191
192	-1790.2060	-4474.0181	370.19	400-192
193	-1797.3984	-4419.9968	370.21	400-193
194	-1818.4221	-4325.7599	378.19	400-194
195	-1888.5092	-4215.8234	378.19	400-195
197	-1796.0697	-4020.0300	379.04	400-197
198	-1410.9611	-4101.2796	376.47	011-001
199	-1584.1588	-4090.8491	376.47	011-002
200	-1623.2295	-4104.9708	376.47	011-003
201	-1630.9429	-4065.1191	376.47	011-004
202	-1680.3087	-4030.0801	379.84	011-005
203	-1627.8034	-3968.1894	376.47	011-006
204	-1675.3244	-3969,7908	379.84	011-007
205	-1721.1541	-4029.9992	379.04	011-008
206	-992.9774	-4248.2136	376.47	026-001
207	-994.4593	-5120.2724	375.02	026-002
208	-952.3900	-5619.9700		026-003
209	-1042.0209	-5493.7096	373.83	026-004
210	-1049.3200	-5209.9200	375.20	026-005
211	-1050.7900	-4875.0200	374.16	026-006
212	-1049.6800	-4625.0700	374.05	026-007
213	-1052.4600	-4347.1700	374.66	026-008
214	-1062.2499	-4083.3096	378.09	026-009
215	-997.3100	-5566.2400		026-010
216	-1045.4100	-5319.8500	373.90	026-011
217	-1050.5900	-5009.4100	374.09	026-012
218	-1051.8900	-4745.2700	374.21	026-013
219	-1052.5700	-4443.7400	375.33	026-014
220	-1050.8200	-4392.7700	375.53	026-015
221	-1056,5768	-4280,7917	378.09	026-016
222	-1056.9456	-4198,2221	370.09	026-017

223		-1149.2000	-4050.6400	376.12	040-001
224		-1244.5022	-4135.9088	370.92	040-002
225		-1223.5099	-4110.0527	379.44	040-003
226		-1244.3006	-4049.1654	379.65	40-004
227		-1208.7389	-4020.0005	379.65	040-005
228		-1148.0300	-4078.9800	376.62	040-006
229		-1175.1400	-4109.7500	376.88	040-007
230		-1169.1000	-4062.9400	376.64	040-008
231		-1184.8500	-4062.3800		040-009
232		-1095.5552	-4089.9546	378.09	040-010
233		-1435.6532	-4381.2936	376.44	47-001
234		-1419.1638	-4367.4104	376.44	47-002
235		-1150.5000	-4405.4400	376.48	203-001
236		-1168.6000	-4332.8700	378.20	203-002
237		-1109.9226	-4367.0813	370.09	203-003
238		-1168.0200	-4313.0800	378.47	203-004
239		-1149.1100	-4274.9800	370.41	203-005
240		-1148.9500	-4309.0900	378.49	203-006
241		-1169.8300	-4453.0300	375.61	203-007
242		-1188.1200	-4395.4900	376.02	203-008
243		-1499.9800	-4031.8400	377.46	400-198
244		-1351.8081	-4374.4277	376.44	400-199
245		-1725.0020	-4081.0787	379.84	400-200
246		-1705.9761	-4076.5416	379.04	400-201
247		-1706.0499	-4112.2498	379.84	400-202
248		-1243.8442	-4570.3528	375.05	400-203
249		-1773.9737	-4534.5781	378.21	400-204
250		-1921.3200	-4072.0800	370.36	400-205
251		-1076.0776	-4564.0924	374.36	400-206
252		-1703.0190	-4111.0119	379.87	400-207
253		-1083.8725	-4404.1625	374.36	400-208
256		-1664.1179	-4063.9609	379.87	400-211
257		-1062.2676	-3939.1574	375.01	400-212
258		-1755.4677	-4750.4028	377.52	400-213
259		-1971.1085	-4368.5227	377.52	400-214
260		-1921.3604	-4091.8091	379.18	400-215
276		-1117.3575	-4262.0995	377.82	T.P. -276
277		-1129.2545	-4004.6456	376.23	T.P.-277
278		-1129.1667	-4499.5000	374.70	T.P. -278
279		-1129.1693	-4774.4200	373.27	TT.P.-279
280		-1398.9563	-4511.4700	376.17	T.P.-280
361		-1862.2974	-4232.2781	377.90	T.P.-361
413		-1320.4162	-4106.0251	379.15	T.P.-413
457		-1129.0598	-5579.5400	373.56	TP/
458		-1058.0000	-4085.0000	372.50	A.D.
517		-1849.5223	-4004.9466	379.60	T.P.-247
518		-1849.3862	-4500.4875	377.94	T.P.-252
519		-1473.1107	-3956.7192	379.30	T.P.-253
520		-1726.1189	-4197.8363	379.25	TP/
521		-1579.5777	-4196.3360	379.15	400-020
522		-1317.0295	-4408.1499	376.46	STORM/MH
523	40	-1302.1163	-4413.9400	376.26	40 COR/TR
524		-1289.5140	-4403.5552	380.12	210

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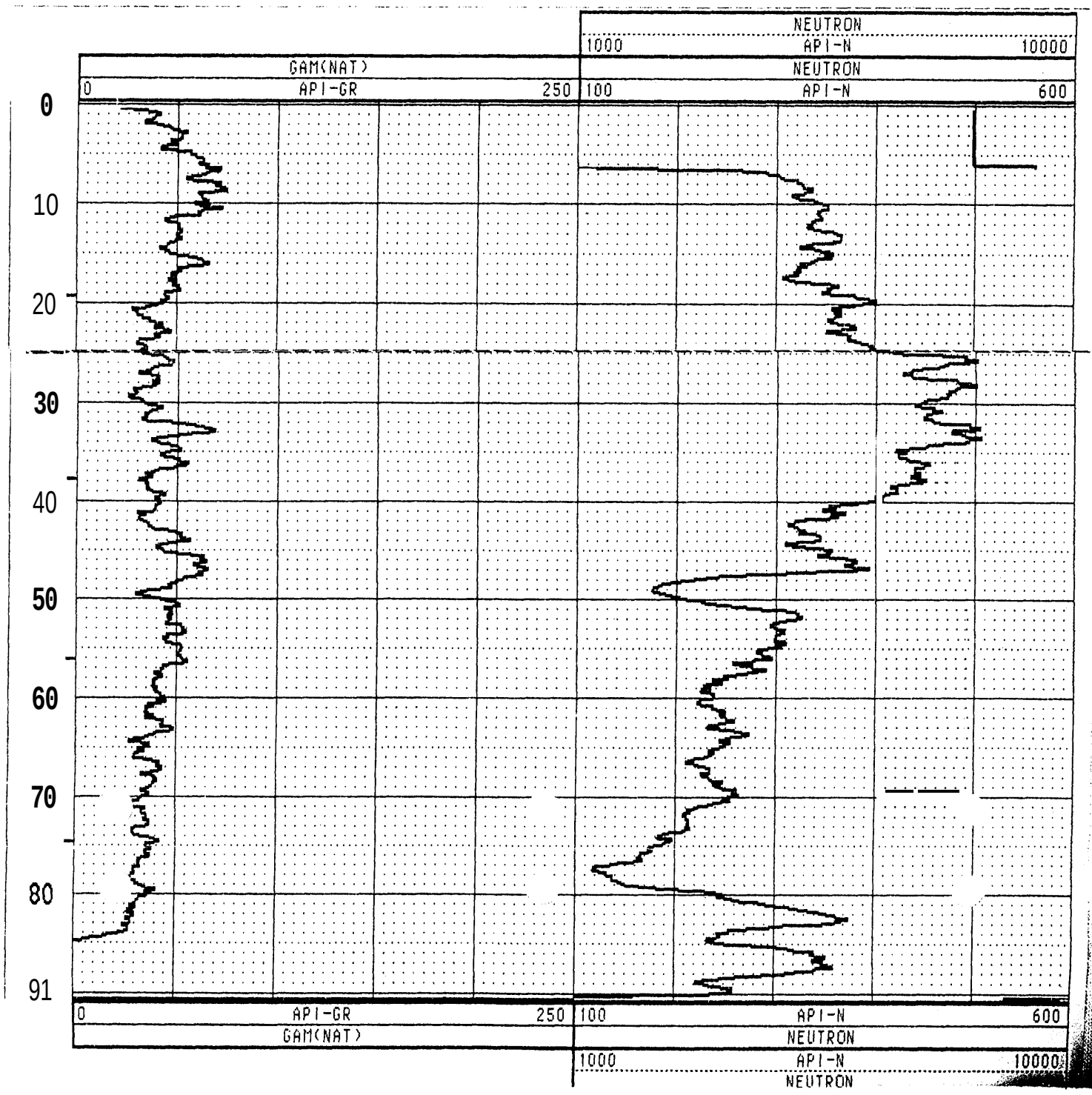
mw-155

COMPANY	: CH2M KILL	OTHER SERVICES-:	
WELL	: MU-155	71-1-281	
LOCATION/FIELD	: WAG 6 COMMON AREA		
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION		TOWNSHIP :	RANGE :

DATE	: 68/69/97	PERHANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 92	ELEU. PERM. DATUM:	G.L.	KB	: N/A
LOG BOTTOM	: 90.90	LOG MEASURED FROM:	G.L.	DF	: N/R
LOG TOP	. 0.78	DRL MEASURED FROM:	G.L.	GL	:
CASING DRILLER	: 92	LOGGING UNIT	: TRL.		
CASING TYPE	: S. STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS:	.125	RECORDED BY	: B. MATAS		
BIT SIZE	: 4	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	:	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 3
FLUID DENSITY	: 1.11	MATRIX DELTA T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	:	THRESH:	5000

REMARKS :
WATER AT 47.26 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



CGC

GEOPHYSICAL CORP.

MW-175

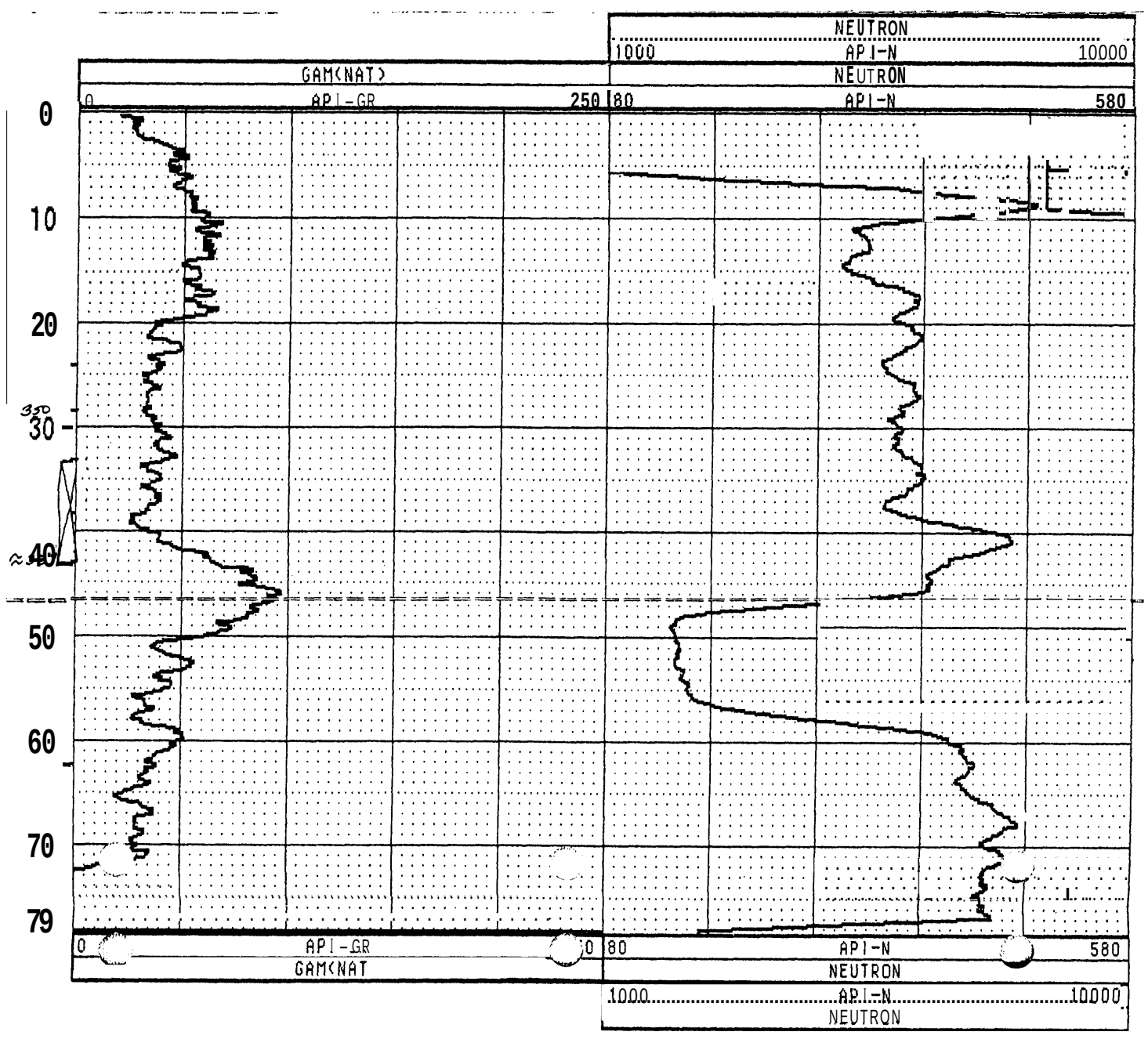
mw-175

COMPANY	: CH2M HILL		OTHER SERVICES: 71-1-281
WELL	: MW-175		
LOCATION/FIELD	: WAG 6 COMMON AREA		
COUNTY	: McCracken		
STISTE	: Kentucky		
SECTION	.	TOWNSHIP ,	RISNCE :

DATE	: 08/11/97	PERMANENT DATUM	: C.L.	ELEVATIONS	
DEPTH DRILLER	: 79	ELEV. PERM. DATUM	: G.L.	KB	: N/A
LOG BOTTOM	: 78.50	LOG MEASURED FROM	: G.L.	DF	: N/R
LOG TOP	: 0.40	DRL MEASURED FROM	: C.L.	CL	: 378.6
CASING DRILLER	: 79	LOGGING UNIT	: TRL.		
CASING TYPE	: S. STEEL	FIELD OFFICE	: TULSIS		
CASING THICKNESS	: .125	RECORDED BY	: B. MATAS		
BIT SIZE	: 4	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	:	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 7
FLUID DENSITY	: 1.11	MQTRIX DELTR T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	:	THRESH	: 5000
REMARKS	:				

WATER AT 47.84 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



Century GEOPHYSICAL CORP.

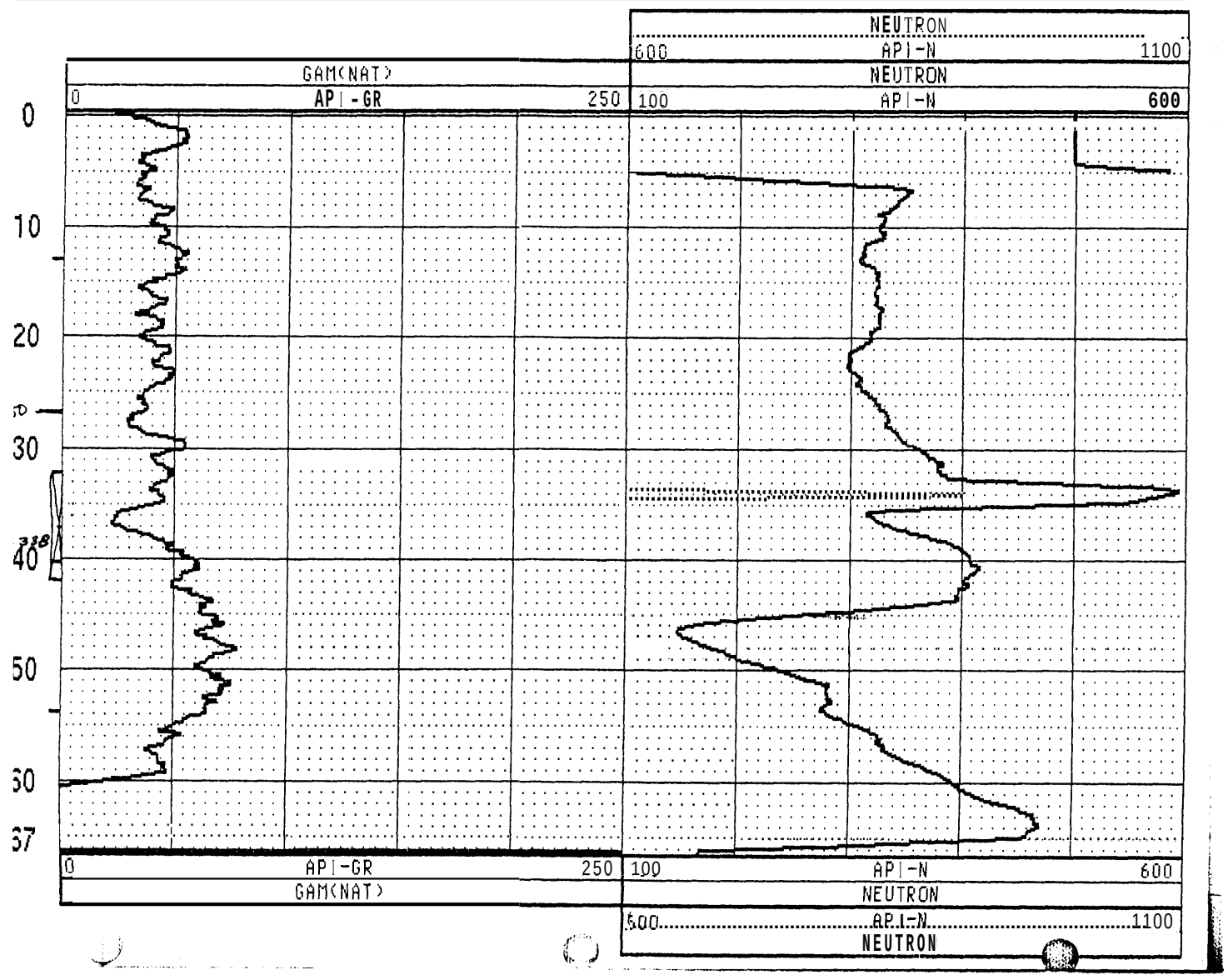
MW-178

COMPRNY	: CH2M HILL		OTHER SERVICES: 71-1-281
UELL	: MW-178		
LOCATION/FIELD	: WAC 6 COMMON AREA		
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION	:	TOWNSHIP :	RRNGE :

DATE	: 08/10/97	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 67.5	ELEU. PERM. DATUM	: C.L.	KB	: N/A
LOG BOTTOM	: 66.68	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	: -0.30	DRL MEASURED FROM	: G.L.	GL	: 376.81
CASING DRILLER	: 67.5	LOGGING UNIT	: TRL.		
CASING TYPE	: S. STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS	: .125	RECORDED BY	: B. MATAS		
BIT SIZE	: 4	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	:	RM		TYPE	: 90670
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 5
FLUID DENSITY	: 1.11	MATRIX DELTA T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	:	THRESH	: 5000

REMARKS :
WATER AT 45.1 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



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Security.

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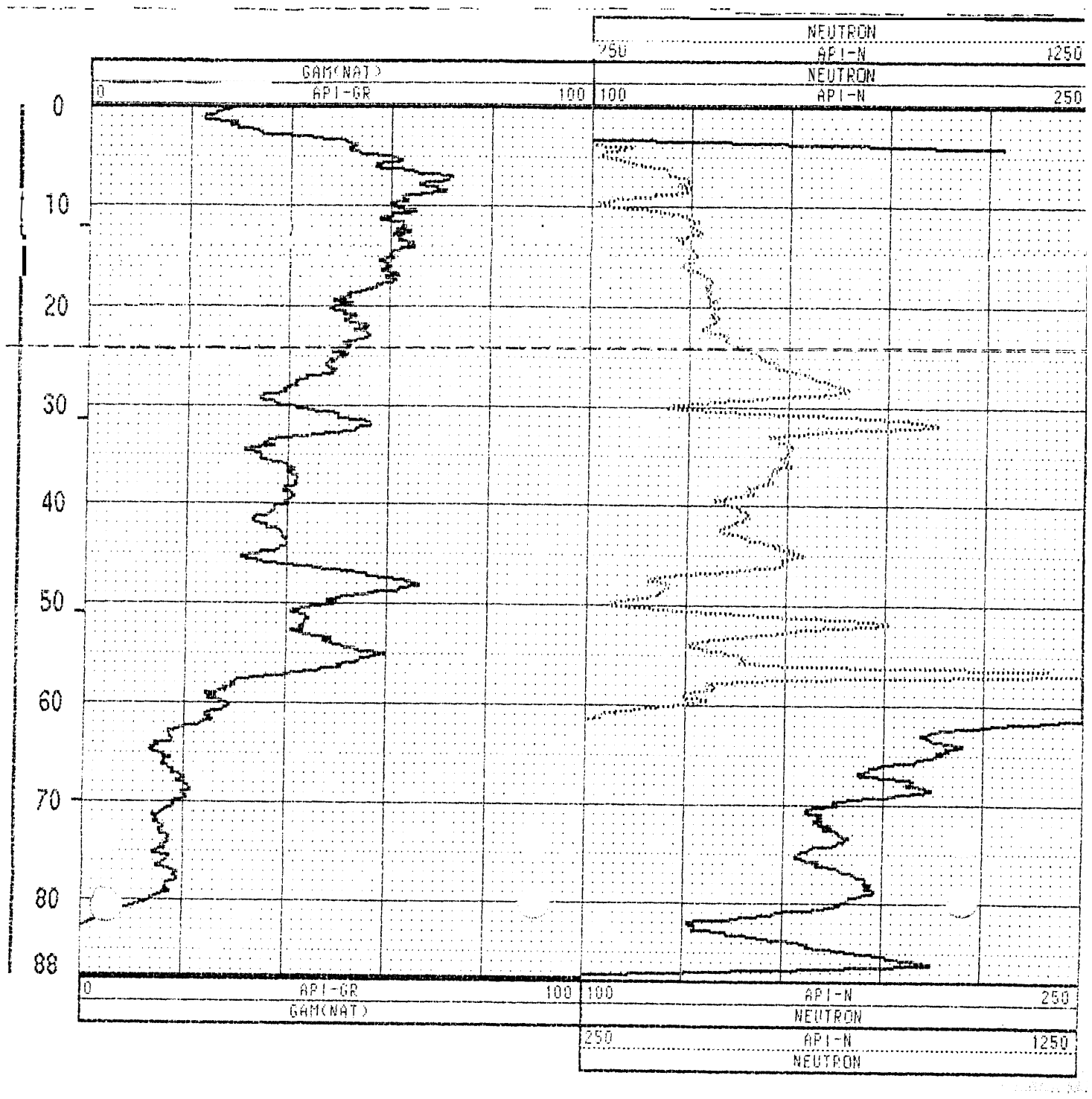
400-037

COMPANY	: CH2M HILL			OTHER SERVICES:	
WELL	: 400-037			71-1-281	
LOCATION/FIELD	: WAG 6 COMMON AREA				
COUNTY	: McCracken				
STATE	: Kentucky				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 12/09/97	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 99	ELEV. PERM. DATUM	: G.L.	XB	: N/A
LOG BOTTOM	: 87.80	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	: -2.10	DRL MEASURED FROM	: G.L.	GL	:
CASING DRILLER	: 96	LOGGING UNIT	: TRL.		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS	: 1.12	RECORDED BY	: B. MATAS		
BIT SIZE	: 5	BOREHOLE FLUID	: WATER	FILE	: ORIGINAL
MAGNETIC DECL.	: 7.0	RM	:	TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 5
FLUID DENSITY	: 1.11	MATRIX DELTA T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	:	THRESH	: 100000

REMARKS :
WATER AT 62.5 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



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400-039

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400-040

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* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

CLIENT : CH2M HILL
FIELD OFFICE : TULSA
DATA FROM :
MAG. DECL. : 7.000

HOLE ID. : 400-040
DATE OF LOG : 01/12/98
PROBE : 9057A , 1066
DEPTH UNITS : FEET LOG 2

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
5.4	5.35	-0.08	0.01	0.1	176.2	58.1	176.2
10.0	7.79	2.25	-1.38	2.6	328.5	58.1	340.6
20.0	12.99	6.85	-4.34	8.1	327.6	58.9	319.2
30.0	18.13	13.20	-6.40	14.7	334.1	59.0	354.5
40.0	23.24	17.23	-7.26	18.7	337.2	59.4	3.8
50.0	28.34	23.20	-7.69	24.4	341.7	59.3	354.1
60.0	33.42	30.58	-8.44	31.7	344.6	59.4	358.3
70.0	38.51	35.47	-8.88	36.6	345.9	59.2	355.8
80.0	43.62	37.15	-11.32	38.8	343.1	59.2	193.4
90.0	48.73	41.43	-9.49	42.5	347.1	59.1	21.9
100.0	53.84	48.30	-9.05	49.1	349.4	59.1	4.7
110.0	58.95	55.75	-9.61	56.6	350.2	59.3	16.8
120.0	64.06	62.09	-5.16	62.3	355.2	59.1	18.8
130.0	69.23	69.52	-2.95	69.6	357.6	59.1	8.8
140.0	74.38	77.27	-1.49	77.3	358.9	59.0	20.5
150.0	79.53	82.07	-0.60	82.1	359.6	59.2	286.1
160.0	84.66	87.82	1.74	87.8	1.1	59.4	26.4
170.0	89.74	95.63	3.75	95.7	2.2	59.9	18.6
180.0	94.76	103.28	7.56	103.6	4.2	60.1	15.7
190.0	99.76'	108.11	6.75	108.3	3.6	60.3	188.9
200.0	104.74	108.17	7.73	108.4	4.1	60.1	13.2
201.7	105.58	109.64	7.89	109.9	4.1	60.8	3.1

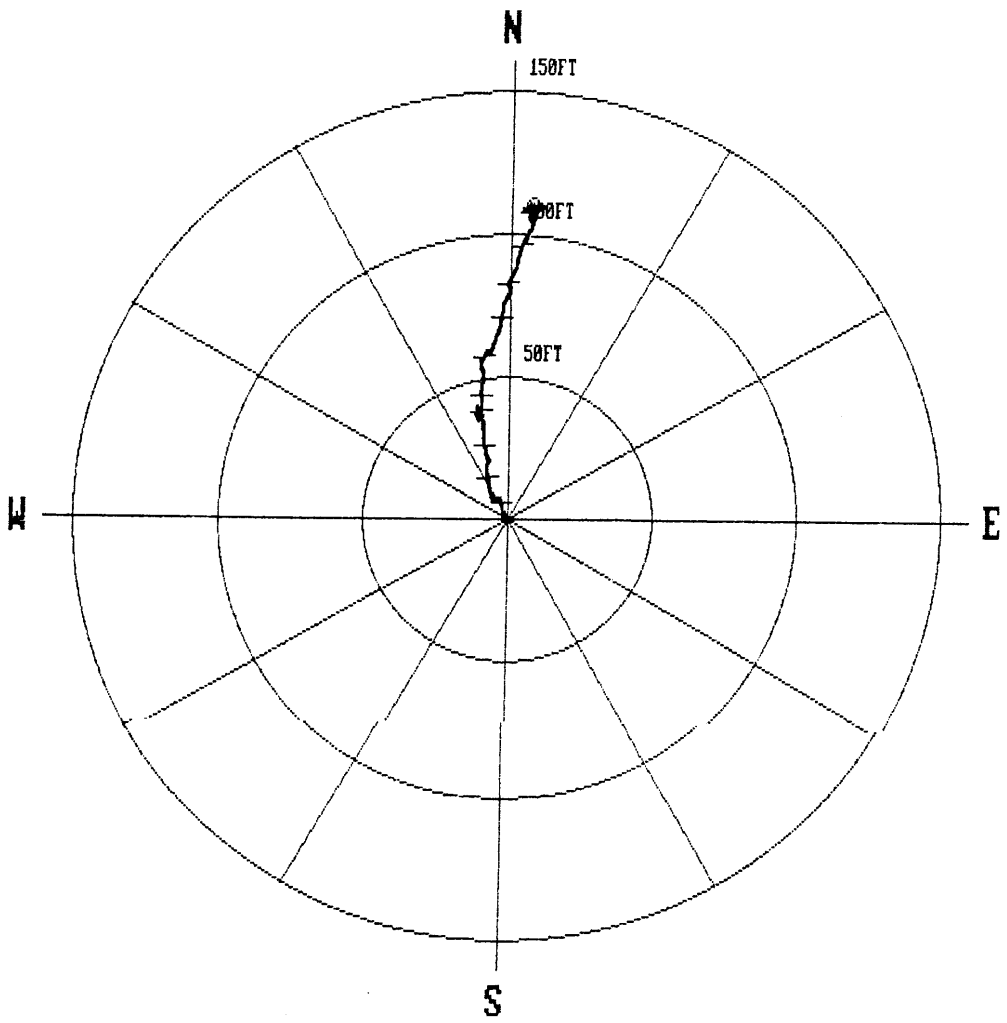
PLAN VIEW

COMPU-LOG DEVIATION

CLIENT: CH2M HILL
LOCATION: WAG 6 COMMON AREA
HOLE ID: 400-040
DATE OF LOG: 01/12/98
PROBE: 9057A 1866

MAG DECL: 7.0

SCALE: 50 FT/IN
TRUE DEPTH: 105.58 FT
AZIMUTH: 4.1
DISTANCE: 109.9 FT
+ = 10 FT INCR
○ = BOTTOM OF HOLE



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* * * * * * * COMPU-LOG - VERTICAL DEVIATION * * * * * * *

CLIENT : CH2M HILL
FIELD OFFICE : TULSA
DATA FROM :
MAG. DECL. : 7.000

HOLE ID. : 400-041
DATE OF LOG : 11/21/97
PROBE : 9057A , 1066
DEPTH UNITS : FEET LOG 4

CABLE DEPTH	TRUE DEPTH	NORTH DEV.	EAST DEV.	DISTANCE	AZIMUTH	SANG	SANGB
3.7	3.65	-0.08	-0.04	0.1	207.5	58.7	207.5
5.0	4.33	0.16	-0.74	0.8	282.1	58.8	343.7
10.0	6.90	0.63	-1.07	1.2	300.5	59.2	355.1
15.0	9.48	4.91	-0.94	5.0	349.2	59.6	5.9
20.0	12.05	5.56	0.81	5.6	8.3	58.6	22.8
25.0	14.62	4.88	3.67	6.1	36.9	59.0	25.6
30.0	17.16	6.57	4.53	8.0	34.6	58.8	339.4
35.0	19.73	10.82	4.17	11.6	21.1	59.4	5.3
40.0	22.27	14.05	4.60	14.8	18.1	59.8	356.7
45.0	24.82	18.31	5.14	19.0	15.7	59.7	9.3
50.0	27.35	21.40	6.01	22.2	15.7	58.5	41.0
55.0	29.88	25.50	7.30	26.5	16.0	59.8	23.3
60.0	32.41	26.66	7.95	27.8	16.6	58.9	0.5
65.0	34.94	30.92	8.55	32.1	15.4	59.9	10.0
70.0	37.46	34.56	9.11	35.7	14.8	59.2	353.0
75.0	39.98	38.86	9.01	39.9	13.1	59.9	8.4
80.0	42.50	41.38	8.07	42.2	11.0	60.5	3.2
85.0	45.02	45.46	9.38	46.4	11.7	59.4	19.2
90.0	47.54	48.67	8.87	49.5	10.3	59.6	345.7
95.0	50.06	51.13	8.71	51.9	9.7	59.5	162.4
100.0	52.53	52.09	10.48	53.1	11.4	60.3	25.0
105.0	55.00	55.94	12.46	57.3	12.6	60.9	19.5
110.0	57.42	58.69	11.95	59.9	11.5	60.9	5.6
115.0	59.86	63.03	12.36	64.2	11.1	61.1	2.6
120.0	62.26	64.24	14.12	65.8	12.4	60.9	67.0
125.0	64.67	68.06	16.22	70.0	13.4	61.3	27.6
130.0	67.06	70.70	17.90	72.9	14.2	60.9	30.4
135.0	69.45	74.99	18.63	77.3	14.0	61.8	359.2
140.0	71.81	77.56	18.27	79.7	13.3	62.1	352.9
145.0	74.19	80.60	20.49	83.2	14.3	62.2	54.6
150.0	76.52	82.74	23.17	85.9	15.6	61.4	51.2
155.0	78.88	86.59	25.15	90.2	16.2	62.4	28.5
160.0	81.19	86.78	26.13	90.6	16.8	61.8	357.8
165.0	83.52	90.89	27.64	95.0	16.9	62.7	21.7
170.0	85.82	94.53	28.73	98.8	16.9	62.0	93.7
175.0	88.13	90.60	30.46	95.6	18.6	62.6	172.3
180.0	90.43	88.53	31.45	94.0	19.6	62.6	356.1
185.0	92.74	92.84	32.26	98.3	19.2	62.4	20.4
190.0	95.04	96.35	33.90	102.1	19.4	62.3	20.3
195.0	97.35	100.38	35.35	106.4	19.4	62.6	17.3
230.8	99.69	104.23	36.44	110.4	19.3	61.8	16.3
205.0	102.03	108.60	37.00	114.7	18.8	63.4	9.6
210.0	104.34	111.56	37.66	117.7	18.7	62.0	27.3
215.0	106.65	113.26	39.82	120.1	19.4	63.3	84.9
220.0	108.95	114.45	41.53	121.8	19.9	62.8	356.2
225.0	111.25	118.40	43.18	126.0	20.0	63.6	44.8
226.9	112.07	119.83	44.11	127.7	20.2	64.4	32.7

400-042

COMPANY	: CH2M HILL		
WELL	: 400-042		
LOCATION/FIELD	: WAG 6 COMMON AREA		
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION		TOWNSHIP .	RCINGE :

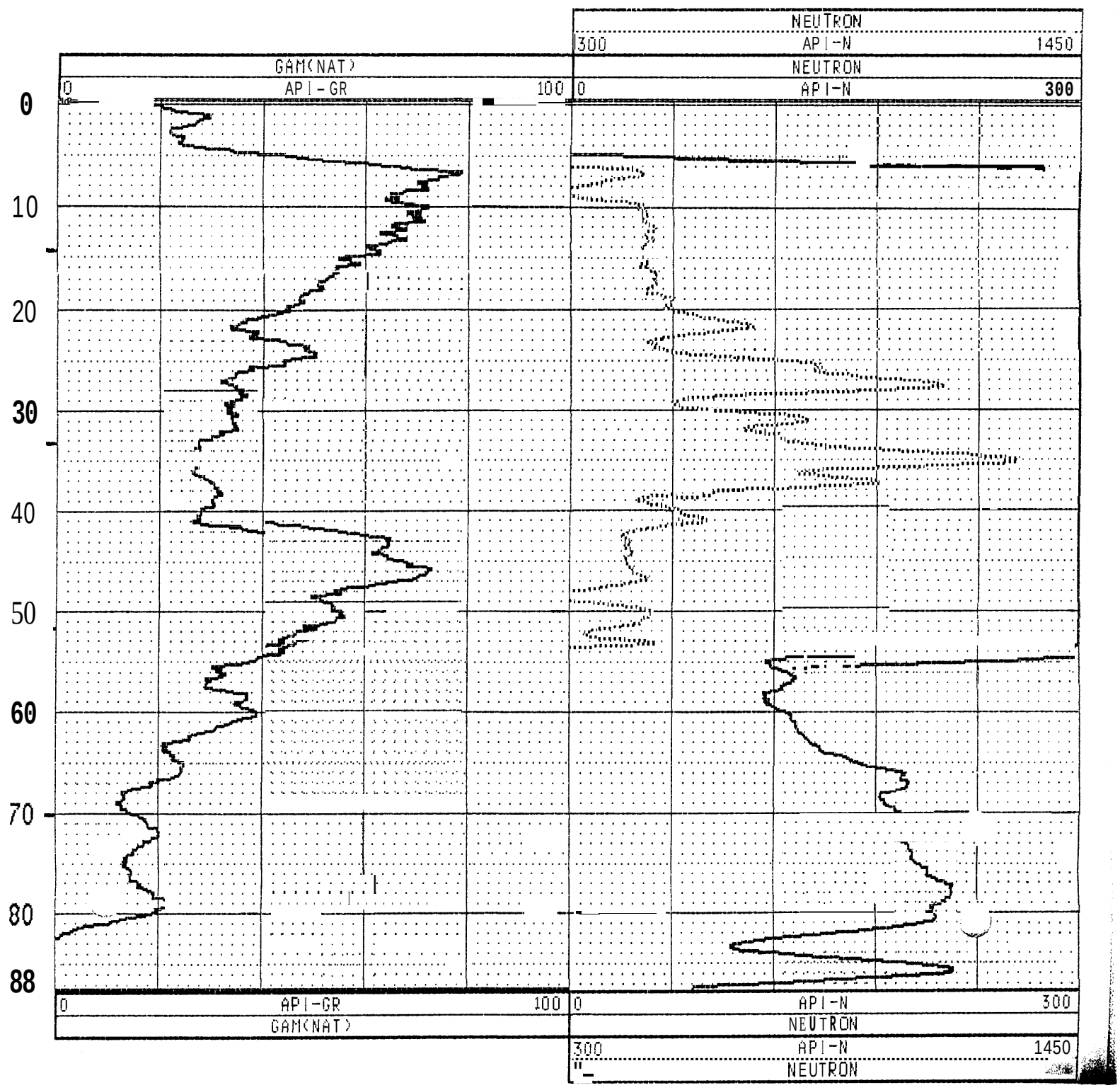
OTHER SERVICES:

71-1-281

DATE	: 18/23/37	PERMANENT DISTUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 94	ELEV. PERM. DATUM	: C.L.	KB	: N/A
LOG BOTTOM	: 87.70	LOG MEWURED FROM	: G.L.	DF	: N/A
LOG TOY	: 0.20	DRL MEASURED FROM	: G.L.	GL	:
CASING DRILLER	: 96	LOGGING UNIT	: TKL.		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS	: 1.12	RECORDED BY	: B. MATAS		
BIT SIZE	: 2.75	BOREHOLE FLUID	: WHTER	FILE	: ORIGINAL
MAGNETIC DECL.	:	RM	.	TYPE	: 9067A
MCITRIX DENSITY	:	WM TEMPERATURE	:	LOG	: 7
FLUID DENSITY	: 1.11	MATRIX DELTA T	:	PLOT	: 3672 3
NEUTRON MQTRXX	: SANDSTONE	FLUID DELTA T	:	THRESH	: 100000

REMARKS
WATER AT 55.3 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



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400-044

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400-045

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400-046

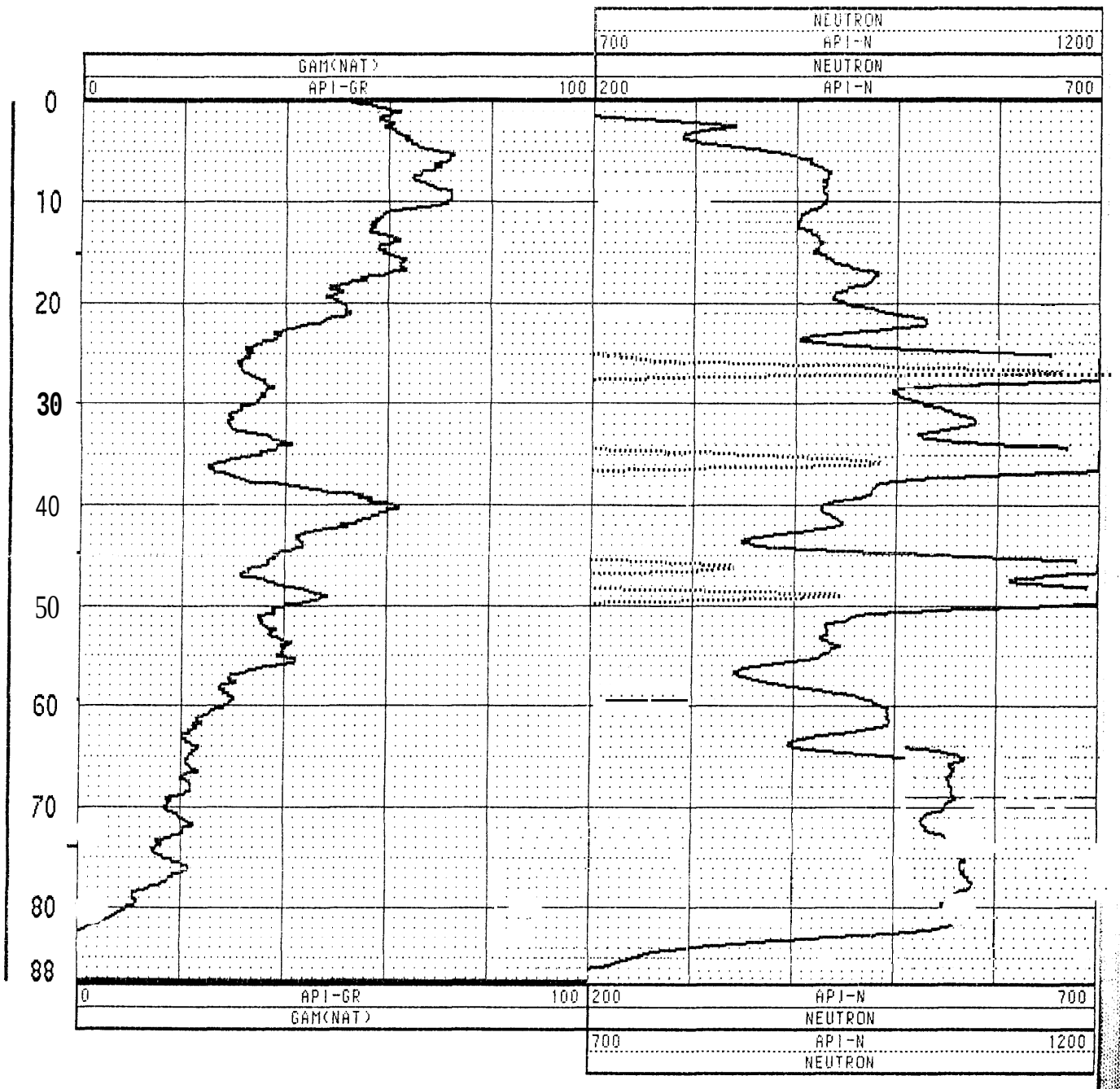
COMPANY	: CH2M HILL	OTHER SERVICES:	
WELL	: 400-046	71-1-281	
LOCATION/FIELI)	: WAG 6 COMMON AREA		
COUNTY	: McCracken		
STQTE	: Kentucky		
SECTION	TOWNSHIP	RANGE :	

DRTE	: 11/02/97	PERMANENT DATUM	: G.L.	ELEUATIONS	
DEPTH DRILLER	: 90	ELEV. PERM. DATUM	: G.L.	KB	: N/A
LOG BOTTOM	: 87.50	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	-4.30	DRL MEASURED FROM	: G.L.	GL	:
CRSING DRILLER	: 98	LOGGING UNIT	: TRL.		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICXNESS	: 1.25	RECORDED BY	B. MATAS		
BIT SIZE	: 2.75	BOREHOLE FLUID	WATER	FILE	: ORICINCIL
MAGNETIC DECL.	:	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE		LOG	: 7
FLUID DENSITY	: 1.11	MATRIX DELTA T		PLOT	: 9872 3
NEUTRON MRTRIX	: SANDSTONE	FLUID DELTA T		THRESH	: J.00000

REMARKS

WATER AT *90* FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

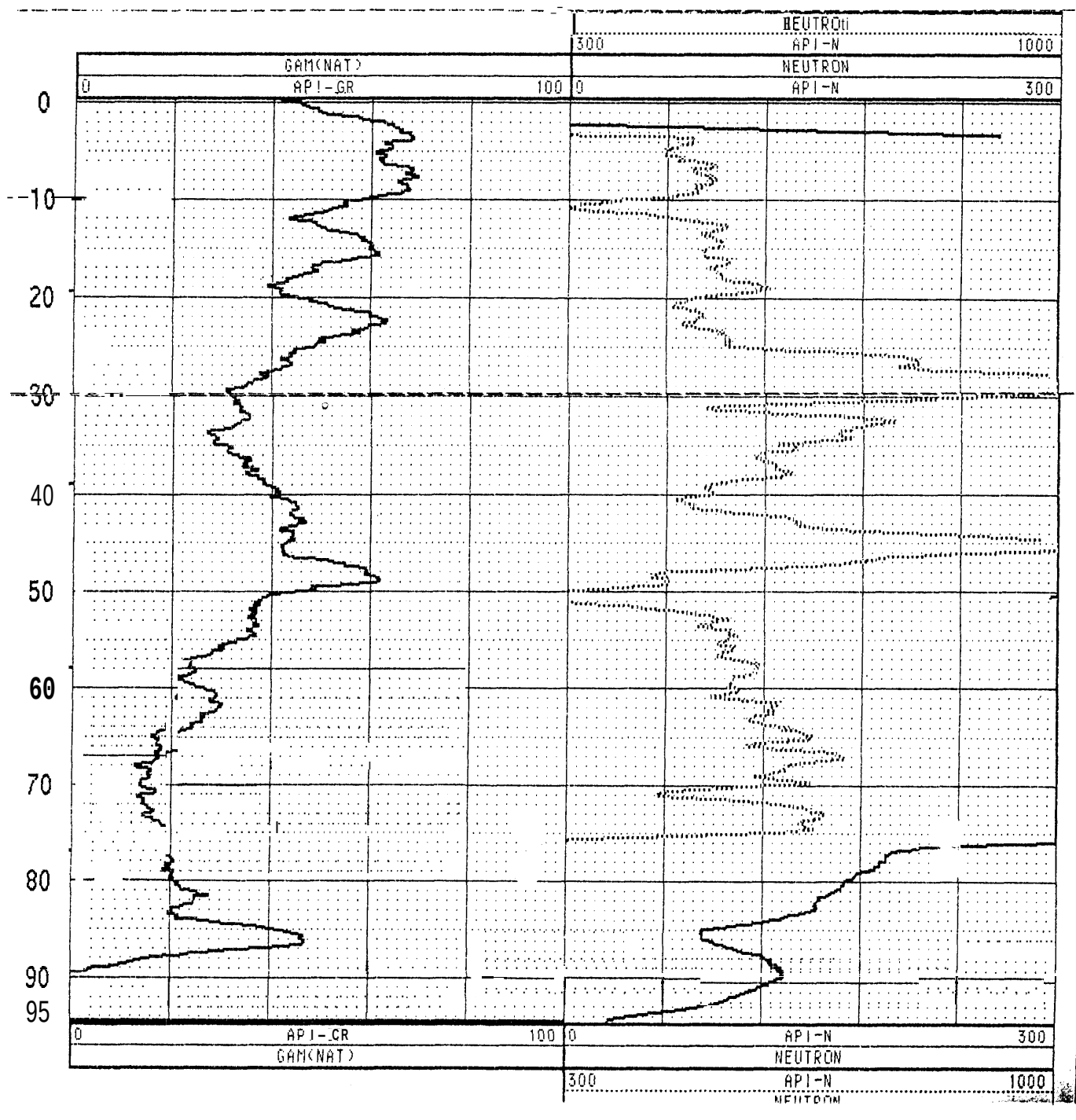


COMPANY	: CH2M HILL	OTHER SERVICES:	
WELL	: 400-047		
LOCATION/FIELD	: WOG 6 COMMON RRECI	71-1-281	
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION	TOWNSHIP	RANGE :	

DATE	: 18/22/97	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 36	ELEV. PERM. DATUM:	C.L.	KB	: N/A
LOG BOTTOM	: 94.70	LOG MEASURED FROM:	C.L.	DF	: N/A
LOG TOP	-2.50	DRL MECISURED FROM:	C.L.	GL	:
CASING DRILLER	: 96	LOGGING UNIT	: TRL.		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS:	1.12	RECORDED BY	: B. MATAS		
BIT SIZE	: 2.75	BOREHOLE FLUID	: WATER	FILE	: ORIGINCIL
MAGNETIC DECL.	:	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 5
FLUID DENSITY	: 1.11	MATRIX DELTR T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SRNDSTONE	FLUID DELTA T	:	THRESH:	100000

REMARKS
WATER AT 76.7 FEET
OUTSIDE C-400 BUILDING

GLL SERVICES PROVIDED SUBJECT TO STANDGRD TERMS AND CONDITIONS



400-048

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Security.

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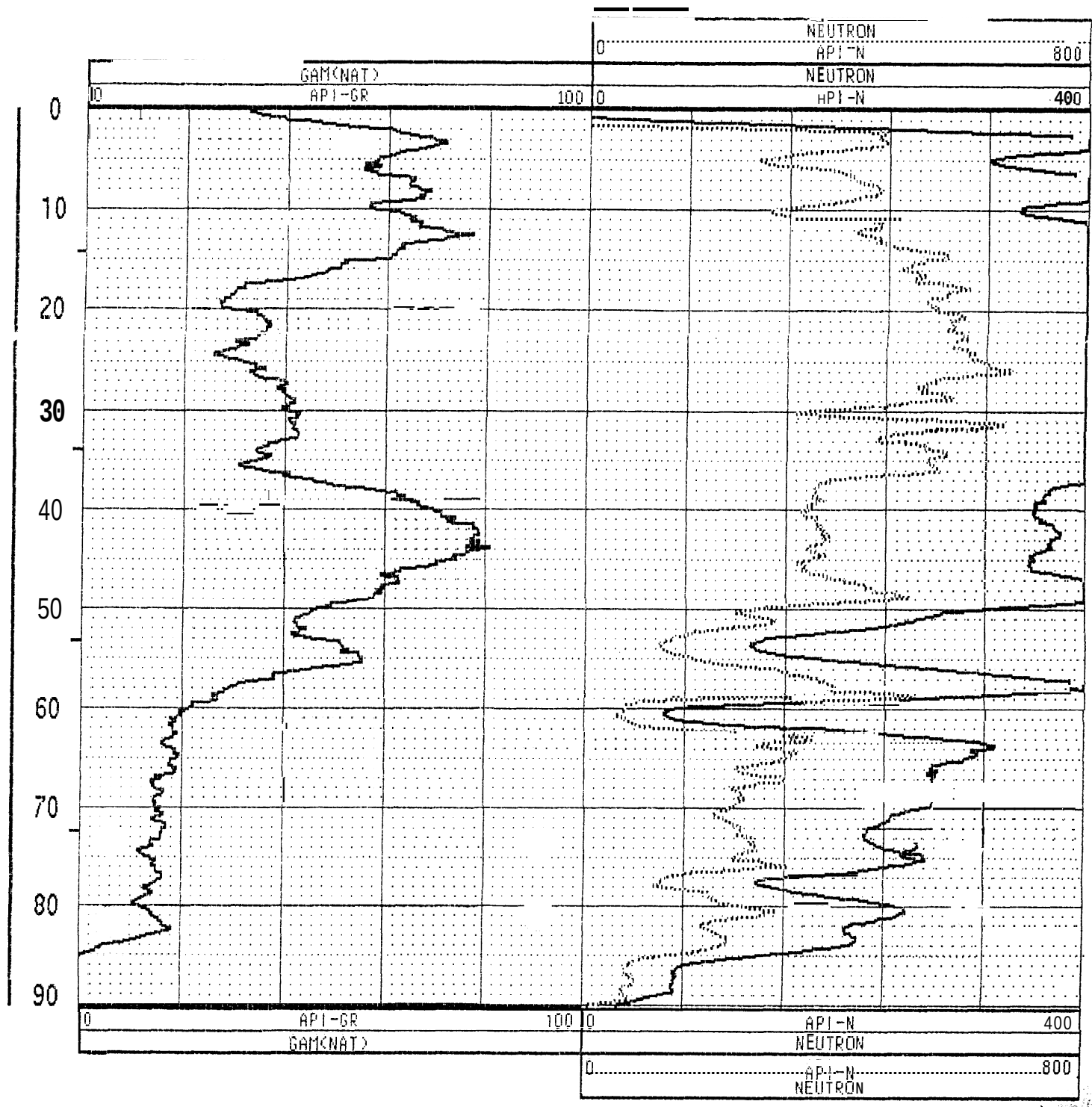
COMPANY	: CH2M HILL	OTHER SERVICES:	[redacted]
WELL	: 400-206	71-1-281	400-206
LOCATION/FIELD	: WAG 6 COMMON QRER		
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION	TOWNSHIP	RRNGE :	

DATE	: 12/02/97	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 95	ELEU. PERM. DATUM	: G.L.	KR	: N/A
LOG BOTTOM	: 38.30	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	-3.90	DRL MEASURED FROM	: G.L.	GL	
CASING DRILLER	: 91	LOGGINC UNIT	: TRL.		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS	: 1.12	RECORDED BY	: B. MATAS		
BIT SIZE	: 5	BOREHOLE FLUID	: WQTER	FILE	: ORIGINAL
MAGNETIC DECL.	: 7.0	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 3
FLUID DENSITY	: 1.11	MATRIX DELTQ T	:	PLOT	: 9072 3
NEUTRON MATRIX	: SRNDSTONE	FLUID DELTA T	:	THRESH:	108888

REMARKS :
WATER AT 52.9 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



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400-210

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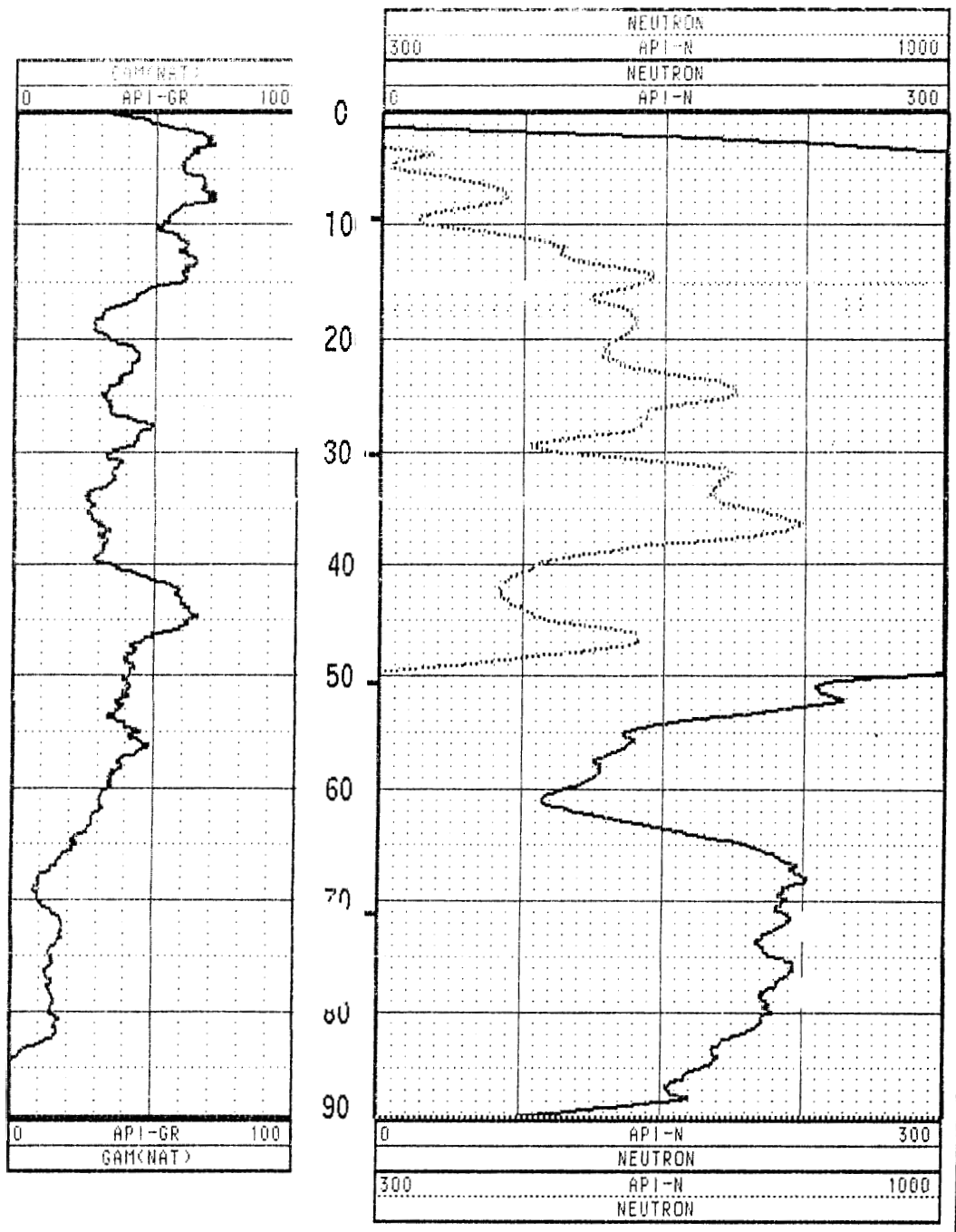
441-5037

COMPANY	: CAZH HILL		OTHER SERVICES:
WELL	: 400-213		71-1-281
LOCATION/FIELD	: WAG 6 COMMON AREA		
COUNTY	: McCracken		
STATE	: Kentucky		
SECTION		TOWNSHIP	RRNGE :

DATE	: 12/16/97	PERMQNENT DATUM	: G.L.	ELEUATIONS	
DEPTH DRILLER	: 95	ELEV. PERM, DATUM	: G.L.	KB	: N/A
LOG BOTTOM	: 89.66	LOG MEASURED FROM	: G.L.	BF	: N/A
LOG TOP	: -3.26	DRL MEASURED FROM	: G.L.	CL	:
CASING DRILLER	: 95	LOGGING UNIT	: TRL,		
CASING TYPE	: STEEL	FIELD OFFICE	: TULSA		
CASING THICKNESS	: 1.12	RECORDED BY	: B. MATAS		
BIT SIZE	: 5	BOREHOLE FLUID	: WRTER	FILE	: ORIGINAL
MAGNETIC DECL.	: 7.0	RM		TYPE	: 9067A
MATRIX DENSITY	:	RM TEMPERATURE	:	LOG	: 0
FLUID DENSITY	: 1.11	MATRIX DELTA T	:	PLOT	: 9072 12
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	:	THRESH	: 100000

REMARKS
WATER AT 50.2 FEET
OUTSIDE C-400 BUILDING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



400-213 12/16/97 514

400-214

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441-5037

Laboratory Geotechnical Data
WAG 6 RVFS

	Seive Size																
	< 200	< 200	200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	>3"		Hydraulic
	Grain Size, millimeters															%	Conductivity
Sample #	Clay	Silt	0.075 ~ 0.15	0.15 ~ 0.25	0.25 ~ 0.5	0.5 ~ 1.0	1 ~2	2 ~ 5	5 ~ 10	10 ~ 20	20 ~ 25	25 ~ 40	40 ~ 50	50 ~ 75	> 75	Porosity	(cm/s)
026001SA010	19.5	41.3	13	13.9	7.2	2.1	3	0	0	0	0	0	0	0	0	35	3.86E-07
026001SA045	37.8	25.8	15.9	14.8	5.6	0.4	0	0	0	0	0	0	0	0	0	38	6.57E-07
026001SA056	8.2	2.7	7.2	23.4	48.5	8.9	0.3	0.2	0.6	0	0	0	0	0	0	36	1.56E-03
026001SA070	2.4	22.2	0.7	3.4		6.4		10.1	15	24.2	12.4	3.3	0	0	0	41	5.69E+00
026001SA080	0.9	23.8	0.8	6.9		4		13.7	14.8	14.7	13.3	3.2	3.9	0	0	41	4.02E+00
026001SA090	0.7	0.5	2.6	37.3	57.4	1.2	0.2	0.1	0	0	0	0	0	0	0	40	1.29E-03
026001SA100	27	25.7	28.3	8	5.6	1.7	1.4	1.7	0.6	0	0	0	0	0	0	48	1.85E-07
026001SA120	1.9	5	10.1	59.1	23.7	0.2	0	0	0	0	0	0	0	0	0	41	1.09E-03
400036SA010	27.7	67.4	0.3	0.7	0.7	0.7	1.5	0.9	0.1	0	0	0	0	0	0	45	2.75E-07
400036SA030	19.3	8.4	2.4	15.6		12		8.6	11.4	17.9	4.3	0	0	0	0	38	3.27E+00
400036SA045	27.5	19.8	6.3	27	18.5	0.9	0	0	0	0	0	0	0	0	0	40	4.67E-06
400036SA060	0.8	27.5	1.6	8.9		11.7		3.4	8.8	24.9	2.2	10.2	0	0	0	35	5.25E-02
400036SA070	6	23.2	1.2	4.8		9.9		13.6	13.5	18.9	7.1	1.7	0	0	0	38	4.12E+00
400036SA080	13.2	14.5	0.9	4.9		12.1		10.4	12.5	26.3	5.2	0	0	0	0	32	1.32E+00
400036SA090	7.3	0.7	3.6	48.5	38.3	1	0.3	0.1	0.2	0	0	0	0	0	0	39	1.62E-01
400036SA095	61.1	10.5	1.5	2.2	3.1	3.8	6.1	7.8	3.9	0	0	0	0	0	0	43	3.365x10-5
400036SA110	4	3.3	16.3	54.6	14.2	5.1	0.6	0.8	1.1	0	0	0	0	0	0	51	3.623x10-4
400036SA120	27.5	15.3	14.8	33	7.1	1.5	0.1	0.7	0	0	0	0	0	0	0	52	8.204x10-8
400036SA140	7.8	22.5	14.6	43.7	10.3	0.7	0.3	0.1	0	0	0	0	0	0	0	48	2.106x10-6
400038SA010																36	2.07E-05
400038SA030	12.9	25.5	1	12.9	15.7	9.1	3.5	4.8	14.6	0	0	0	0	0	0	40	1.12E-01
400038SA045	26	21.8	3.9	19.8	25.1	3.3	0	0.1	0	0	0	0	0	0	0	30	2.042x10-5
400038SA060	22.2	5.7	0.9	10.6		13.1		5.6	9.4	16.6	6.5	9.4	0	0	0	37	1.65E-01
400038SA070	4.6	19.2	0.7	5		7.7		13.4	15.6	22.8	6.4	4.5	0	0	0	42	5.39E-02
400038SA100	54	1.6	2.8	15.3	18.2	5.9	1.8	1	0	0	0	0	0	0	0	50	3.087x10-5
400038SA120	54	37.7	0.1	1.5	2.3	4.4	0	0	0	0	0	0	0	0	0	45	4.731x10-6
400038SA140	27.8	58.6	0.4	6.2	5.1	1.9	0	0	0	0	0	0	0	0	0	32	1.519x10-5
400207SA045	12.5	4.4	1.3	7	18.3	44.7	11.7	0	0.1	0	0	0	0	0	0	35	1.019x10-3
400207SA080	5.5	22.2	0.3	6.1		11.6		12.4	14	21.8	2.6	0	0	3.5	0	44	9.40E+00
400207SA095	24	7.2	2.7	31.3	32.7	1.8	0.1	0.2	0	0	0	0	0	0	0	47	1.040x10-4
400208SA010	21	67.4	1.2	2.7	2.4	1.2	0.6	1	2.5	0	0	0	0	0	0	33	2.69E-07
400208SA045	10.2	15	6.7	38.9	28.6	0.5	0.1	0	0	0	0	0	0	0	0	47	5.56E-02
400208SA060	20	9.7	2.8	19	32.6	14.8	0.8	0.3	0	0	0	0	0	0	0	31	1.17E-03
400208SA070	7.8	14.2	0.1	3.1		5.6		11.5	16.9	24.7	8.8	7.3	0	0	0	39	1.44E+00
400208SA080	10.9	13.8	0.4	5		9.1		15.6	18.1	18.8	4.1	4.2	0	0	0		
400208SA090	72.5	19.4	1.4	4.6	1.9	0.2	0	0	0	0	0	0	0	0	0	54	1.47E-07
400208SA140	15.2	73	6.9	1.7	1.2	0.8	0.9	0.3	0	0	0	0	0	0	0	42	7.36E-05
400210SA010	20	76.1	0.4	0.9	0.9	0.6	0.5	0.4	0.2	0	0	0	0	0	0	32	1.43E-07
400210SA030	8.9	23.7	5.8	12.2	22.7	17.7	8.9	0.1	0	0	0	0	0	0	0		
400210SA045	25.1	33.3	2.5	33.9	4.4	0.7	0.1	0	0	0	0	0	0	0	0	33	1.71E-06
400210SA060	11.6	13.4	0.4	3.2		10.6		6.6	12.8	19.1	13.5	8.8				27	8.32E-01
400210SA070	4.2	20.6	0.5	2.7		8.5		9.3	12.4	18	14.2	9.6				34	7.38E+00
400210SA080	9.1	15.7	0.5	3.6		8.7		7.3	11.6	22	7.5	4.5	9.5			37	8.49E-01
400210SA090	19.1	13.3	2.1	12		6.7		10.6	6	16.3	7.5	2.5	3.9			36	3.88E-06
400210SA110	16	33.8	16.6	32.2	0.7	0.3	0.2	0.2	0	0	0	0	0	0	0	56	1.33E-05
400210SA140	1	24.9	1.3	17.8	50	4.5	0.4	0.1	0	0	0	0	0	0	0		
400212SA010	54	39.2	0.5	0.8	0.8	1.2	1.4	0.5	1.6	0	0	0	0	0	0	37	1.71E-08
400212SA030	13.5	40.7	4.6	12.1	12.3	8	8.8	0	0	0	0	0	0	0	0	25	3.90E-06
400212SA045	11	16	1.9	18.8	36.9	9.1	2	3.3	1	0	0	0	0	0	0	38	8.46E-02
400212SA070	3.4	12.7	0.1	0.6		3.2		12.6	20.4	25.1	12.4	9.6	0	0	0	40	9.09E-01
400212SA080	8.8	17.6	0.5	6.3		9.5		13.7	19.9	18.7	4	1	0	0	0	38	1.13E+00
400212SA090	5.5	21.6	0.7	7.4		9.3		9.6	10.5	16.9	8.5	5.8	4.3	0	0	38	8.91E-01
400212SA095	31	0	1.4	42.8	4.1	4	6.9	6.6	3.2	0	0	0	0	0	0	41	3.74E-06
400212SA100	20	45.4	0.8	28.5	4.6	0.7	0	0	0	0	0	0	0	0	0	46	1.32E-06

	Seive Size																
	< 200	< 200	200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	>3"		Hydraulic
	Grain Size, millimeters															%	Conductivity
Sample #	Clay	Silt	0.075 ~ 0.1	0.15 ~ 0.25	0.25 ~ 0.5	0.5 ~ 1.0	1 ~2	2 ~ 5	5 ~ 10	10 ~ 20	20 ~ 25	25 ~ 40	40 ~ 50	50 ~ 75	> 75	Porosity	(cm/s)
026001SA056	8.2	2.7	7.2	23.4	48.5	8.9	0.3	0.2	0.6	0	0	0	0	0	0	36	1.56E-03
026001SA070	2.4	22.2	0.7	3.4		6.4		10.1	15	24.2	12.4	3.3	0	0	0	41	5.69E+00
026001SA080	0.9	23.8	0.8	6.9		4		13.7	14.8	14.7	13.3	3.2	3.9	0	0	41	4.02E+00
026001SA090	0.7	0.5	2.6	37.3	57.4	1.2	0.2	0.1	0	0	0	0	0	0	0	40	1.29E-03
026001SA100	27	25.7	28.3	8	5.6	1.7	1.4	1.7	0.6	0	0	0	0	0	0	48	1.85E-07
400036SA060	0.8	27.5	1.6	8.9		11.7		3.4	8.8	24.9	2.2	10.2	0	0	0	35	5.25E-02
400036SA070	6	23.2	1.2	4.8		9.9		13.6	13.5	18.9	7.1	1.7	0	0	0	38	4.12E+00
400036SA080	13.2	14.5	0.9	4.9		12.1		10.4	12.5	26.3	5.2	0	0	0	0	32	1.32E+00
400036SA090	7.3	0.7	3.6	48.5	38.3	1	0.3	0.1	0.2	0	0	0	0	0	0	39	1.62E-01
400036SA095	61.1	10.5	1.5	2.2	3.1	3.8	6.1	7.8	3.9	0	0	0	0	0	0	43	3.365x10-5
400038SA060	22.2	5.7	0.9	10.6		13.1		5.6	9.4	16.6	6.5	9.4	0	0	0	37	1.65E-01
400038SA070	4.6	19.2	0.7	5		7.7		13.4	15.6	22.8	6.4	4.5	0	0	0	42	5.39E-02
400038SA100	54	1.6	2.8	15.3	18.2	5.9	1.8	1	0	0	0	0	0	0	0	50	3.087x10-5
400207SA080	5.5	22.2	0.3	6.1		11.6		12.4	14	21.8	2.6	0	0	3.5	0	44	9.40E+00
400207SA095	24	7.2	2.7	31.3	32.7	1.8	0.1	0.2	0	0	0	0	0	0	0	47	1.040x10-4
400208SA060	20	9.7	2.8	19	32.6	14.8	0.8	0.3	0	0	0	0	0	0	0	31	1.17E-03
400208SA070	7.8	14.2	0.1	3.1		5.6		11.5	16.9	24.7	8.8	7.3	0	0	0	39	1.44E+00
400208SA080	10.9	13.8	0.4	5		9.1		15.6	18.1	18.8	4.1	4.2	0	0	0		
400208SA090	72.5	19.4	1.4	4.6	1.9	0.2	0	0	0	0	0	0	0	0	0	54	1.47E-07
400210SA060	11.6	13.4	0.4	3.2		10.6		6.6	12.8	19.1	13.5	8.8				27	8.32E-01
400210SA070	4.2	20.6	0.5	2.7		8.5		9.3	12.4	18	14.2	9.6				34	7.38E+00
400210SA080	9.1	15.7	0.5	3.6		8.7		7.3	11.6	22	7.5	4.5	9.5			37	8.49E-01
400210SA090	19.1	13.3	2.1	12		6.7		10.6	6	16.3	7.5	2.5	3.9			36	3.88E-06
400212SA070	3.4	12.7	0.1	0.6		3.2		12.6	20.4	25.1	12.4	9.6	0	0	0	40	9.09E-01
400212SA080	8.8	17.6	0.5	6.3		9.5		13.7	19.9	18.7	4	1	0	0	0	38	1.13E+00
400212SA090	5.5	21.6	0.7	7.4		9.3		9.6	10.5	16.9	8.5	5.8	4.3	0	0	38	8.91E-01
400212SA095	31	0	1.4	42.8	4.1	4	6.9	6.6	3.2	0	0	0	0	0	0	41	3.74E-06
															highest	54	9.40E+00
															lowest	27	1.85E-07
															mean	39.53846	1.67E+00

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