

**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**

<b>Location</b>	<b>Station</b>	<b>Location</b>	<b>Station</b>	<b>Location</b>	<b>Station</b>
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		
	MW175		026-011		
Sector 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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400019SA003	X		X	X	X
400019SA008	X		X	X	X
400019SA010	X	X	X		X
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**

Project Sample ID	Analytical Group				
	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



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**Analytical Groups Tested in Sector 2  
Soil and Water Samples**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
40058SA015	X	X	X	X	X
40059SA015	X	X	X	X	X
40061SA015	X	X	X	X	X
40081SA015	X	X	X	X	X
40094SA015	X	X	X	X	X
40095SA015	X	X	X	X	X
40153SA015	X	X	X	X	X

**Analytical Groups Tested in Sector 3  
Soil and Water Samples**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
011001SA010	X	X	X	X	X
011001SA020	X	X	X	X	X
011001SA030	X	X	X	X	X
011001SA048	X	X		X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400064SA015	X	X	X	X	X
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
011003SA004	X	X			X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
011006SA032	X	X		X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400037WA085	X			X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400091SA015	X	X	X	X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400201SA020	X	X	X	X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400207WA110	X			X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400009SA001		X	X	X	X
400009SA030	X	X	X	X	X
400009SA033	X				X
400010SA001		X	X	X	X
400010SA005	X	X	X	X	X
400010SA010	X	X	X	X	X
400010SA020	X	X	X	X	X
400010SA030	X	X	X	X	X
400010SA040	X	X	X	X	X
400010SA044	X	X		X	X
400015SA005	X	X	X	X	X
400015SA010	X	X	X	X	X
400015SA020	X	X	X	X	X
400015SA030	X	X	X	X	X
400015SA040	X	X	X	X	X
400017SA001		X	X		X
400017WP040	X				X
400018SA001		X	X	X	X
400018WA040	X			X	X
400030SA015	X	X	X	X	X
400036SA001		X	X	X	X
400036SA010	X				X
400036SA011					X
400036SA014	X				X
400036SA030	X	X	X	X	X
400036SA034	X	X	X	X	X
400036SA045	X				X
400036SA046					X
400036SA060	X				X
400036SA061					X
400036SA065	X	X	X	X	X
400036SA070	X				X
400036SA080	X		X		X
400036SA087	X	X	X	X	X
400036SA090	X				X
400036SA095	X				X
400036SA096					X
400036SA110	X				X
400036SA113					X
400036SA120	X				X
400036SA121					X

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

Project Sample ID	Analytical Group				
	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
400041WA080	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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400045WA065	X				X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400145SA022	X				
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400204SA020	X		X		X
400204SA024	X	X			X
400204SA028	X				X
400204SA032	X				X
400204SA036	X				X
400204SA040	X				X
400213WA065	X			X	X
400213WA070	X			X	X
400213WA075	X			X	X
400213WA080	X			X	X
400213WA085	X				X
400213WA090	X			X	X
400214WA065	X			X	X
400214WA070	X			X	X
400214WA075	X			X	X
400214WA080	X			X	X
400214WA085	X			X	X
400214WA090	X			X	X
400214WD065	X			X	X
400214WD075	X			X	X
400214WD080	X			X	X
400214WD085	X			X	X

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**Analytical Groups Tested in Sector 6  
Soil and Water Samples**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
047002SA001		X	X	X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
203001SA015	X	X	X	X	X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400040SA030	X	X		X	X
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

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**Analytical Groups Tested in Sector 7  
Soil and Water Samples**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400210SA091					X
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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
026001SA002	X	X	X	X	X
026001SA010	X				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
026001WA090	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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
026007SA007	X	X	X	X	X
026008SA007	X	X	X		X
026009SA007	X	X	X	X	X
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
400034WA115	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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	METAL	RADS
400208SA060	X				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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PPCB	METAL	RADS
400039SA001		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**

Project Sample ID	Analytical Group				
	VOA	SVOA	PCPB	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: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>E, N</i>		
Location: <i>Paducah, KY</i>								Geologist:		
Started at on								Surface Elevation: <i>feet msl</i>		
Completed at on								Depth to Groundwater: <i>feet bgs</i> Measured:		
Drilling Method:								Groundwater Elevation: <i>feet msl</i>		
Drilling Company:								Total Depth: <i>80 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
								LITHOLOGIC SAMPLE SYMBOLS		
								Continuous Coring		
5								Shelby Tube		
10								Split Spoon		
15								ANALYTICAL SAMPLE SYMBOLS		
								Geotechnical		
20								RAD		
25								Soil		
30								Soil Gas		
35								Water		
40										

## Boring SYMBOL KEY

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

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

# 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: 378.50 feet msl
Completed at 1615 on 10-15-97	Depth to Groundwater: NA feet bgs      Measured: NA
Drilling Method: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 510 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0								Silt; (10YR5/8) yellowish brown	377.3
0			95%	BG	BG			Clayey Gravel; (2.5YR4/8) dark red	376.3
0								Silt & Clay with trace of Gravel; (10YR5/6) yellowish brown to (10YR6/3) pale brown	375.4
5			80%	BG	47			Silt; (10Y5/1) greenish gray	374.5
								Silt & Clay; (10YR6/2) light brownish gray	
								Silt with some Clay; (10YR5/8) yellowish brown, (10YR7/1) light gray	
10			95%	BG	39				
			100%	4	BG				
15								Clay & Silt with traces of Sand & Gravel; (10YR5/6) yellowish brown, (10YR7/1) molted light gray	362.0
			100%						
20			100%	BG	BG			Silty Sand; (10YR5/8) yel brn, (10YR7/2) molted lt gry	359.0
			100%	4	BG			Clay & Sand; (7.5YR5/8) strong brn, (7.5YR7/1) molted lt gry	355.5
25									
			100%	BG	BG			Clayey Sand; (7.5YR5/8) strong brown	352.7
								Clay & Silt; (7.5YR7/1) strong brown, (7.5YR5/8)	352.0
			100%	BG	BG			Silty Sand; (5YR5/8) yel rd, (5YR7/1) molted lt gry	350.8
30								Gravelly Sand; (7.5YR5/8) strong brown	348.5
			95%	4	BG			Silt & Sand; (10YR7/1) lt gry to (10YR8/4) v pale brn, with minor (10YR4/6) dk yel brn	347.5
			75%	BG	BG			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								Gravelly Sand; (7.5YR5/4) brown	343.0
								Silty Sand	341.5
			100%	BG	BG			Clay & Silt; (7.5YR5/8) strg brn, (7.5YR7/1) lt gry to (7.5YR6/1) gry	340.8
40								Gravelly Sand; (7.5YR6/1) gray	338.8

# Boring 011-001

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4102.0000 E, -1410.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>1055 on 10-08-97</i>	Surface Elevation: <i>378.50 feet msl</i>
Completed at <i>1615 on 10-15-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>510 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		85%	BG	BG	8	○		
	X		90%	BG	BG	25	○		
45	X		90%	BG	BG	70	○		
	X		75%	BG	BG	98	○	Silty Sand: (7.5YR7/1) lt gry & (7.5YR5/6)	334.5
	X		75%	BG	BG	92	○		
	X		75%	BG	BG	143	○	Sand: (7.5YR8/1) wht to (7.5YR5/6) strg brn	331
50	X		75%	BG	BG	229	○		
	X		75%	BG	BG	280	○	T.D. = 510	327.5
55									
60									
65									
70									
75									
80									

# 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 10-29-97	Surface Elevation: 379.00 feet msl
Completed at 1315 on 10-30-97	Depth to Groundwater: NA feet bgs Measured: NA
Drilling Method: Rotasonic	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						0		Sandy Gravel, with Clay; (2.5YR4/8) dk rd	
5			55	4	25	0		Silt, with Clay; (10YR7/4) v. pale brn, (10YR5/4) yel brn	374.5
			89	BG	25	0		Silt; (10YR5/6) yel brn	
10			100	4	105	0		Silt, with Clay; (10YR5/6) yel brn, (10YR6/2) mottled lt brn gry	
			96	BG	185	0		Silty Sand, with Gravel; (10YR5/6) yel brn	359
15			100	BG	29	0		Clay, with Silt & Sand; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	357.4
			92	BG	33	0		Clay, with Silt & Sand; (10YR5/8) yel brn, (10YR6/2) mottled lt brn gy	
20			92	BG	33	0		Silt & Gravel, with Clay & Sand; (10YR7/1)lt gry, (10YR5/6)mottl yel brn	351
			92	4	BG	0		Silty Sand, with Gravel; (7.5YR5/8) strong brn	349
			88	0	0	0		Silty Sand; (10YR5/6) yel brn	
35			90	BG	53	0		Silty Sand, with Gravel & Clay; (10YR7/3) v. pale brn, (10YR5/8) brn yel, (10YR5/1) mottled gry	
40						5			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 10-29-97*

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- <i>msl</i> )
45			50	BG	13	0		Silty Gravel, with Sand & Clay; (10YR5/6) yel brn	338
								Sand & Silt; (5YR4/6) yel rd	338
			91	4	45	0		Silt, with Sand; (2.5Y5/4) lt olive grn	336
						7		Silt, with Clay & Sand; (7.5YR5/6) strong brn	
						4			
						4			
								T.D. = 46.5	332.5
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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0						0		ASPHALT	
0			50	BG	BG	0		CRUSHED LIMESTONE	
0						0		CLAYEY GRAVEL, W/ SAND; SUBANG; DK RD (2.5YR4/8) MST, FRM (FILL)	
0						0		SAME AS ABOVE	
5			37.5	BG	BG	0		NO RECOVERY	373.3
0						0		SILT, BRNSH. YEL (10YR6/8) MOTTLES	
0			75	4	BG	0		LT. GRY (10YR7/2) MOIST, STIFF (NAT. SOIL)	371
0						0		SILT, SL. CLAYEY, YEL. BRN (10YR5/4) MOTTLIN DK. YEL SH BRN (10YR4/6) MOIST STF	
0			75	BG	BG	0		SILT, CLAY, V. PALE BRN (10YR7/3) MOTTL. YLSH. BRN (10YR5/8) MOIST STIFF	
0						0		SAND (65%) M-F; SILT (35%) LT. GRY (10YR7/1) MOIST FIRM	358.8
0			100	BG	BG	0			
0						0		GRAVELY SAND M-C GRAVEL (30%) SILT (10%) YLSH BRN MOIST STIFF	354.8
0			90	08	BG	0		SAND (60%) MED/CRS; GRAVEL (30%) SUB/SRB; SILT:CLAY YEL BRN	
0						0			
0			100	BG	BG	0			
0						0		SAND 80% SILT:CLAY LT GRY, PALE YEL MOIST AND FIRM	346.8
0			95	BG	BG	09			
0						10			
0						0		GRAVEL (40%) SUBR-SUBA; SAND (40%) M-C GRAINER, (SILT:CLAY 20%)	
0			95	BG	BG	01		CLAY OCCURS IN DISTANT ZONES (2.3') AS GRY CLAY, YEL BRN (10YR5/8), GRY (10YR6/1)	342.8
0						12			
0						11			
40									338.8

# Boring 011-003

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-104.9509 E, -1622.8440 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>JALBERT</i>
Started at <i>1130 on 11-04-97</i>	Surface Elevation: <i>378.84 feet msl</i>
Completed at <i>1135 on 11-05-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>ROTOSONIC</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>48.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45	X	█	92.5	04	BG	07	█	CLAY,SILT W/20%FINE SAND, YLSH BRN (10YR5/6)MOTTLED LT GRY (10YR7/1).	335.8
				BG	50	03			
					08	30			
			85	BG	70	16			
50								T.D. = 48.0 FT	330.8
55									
60									
65									
70									
75									
80									

# Boring 011-004

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

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

# Boring 011-004

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

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

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- <i>msl</i> )
0			52	8	31	0		Clay, with Silt & Gravel; (10YR5/4) yel brn	377.8
5			52	BG	94	0		Silt, with Clay & Gravel: (2.5Y5/6) lt olive brn, (2.5Y7/1) lt gry	375
10						0		Sand; (5YR5/8) yel red	
15			0	-	-	-		No Recovery	367
20			98	4	31	395		Silt, with Clay & Gravel: (5YR8/1) wh, (7.5Y5/8) strong brn	359
25			92	BG	BG	390		Gravelly Sand; (10YR6/4) lt yel brn	358
30			88	4	39	330		Clay, with Silt & Sand; (10YR6/1) gry, (10YR6/8) brn yel, (7.5YR5/8) s. brn	357.4
35			85	BG	14	250		Silt, with Clay & Sand; (10YR6/8) brn yel, (10YR6/1) mottled gry	355
40			88	BG	BG	178		Gravelly Sand; (10YR6/4) lt yel brn	351
			85	BG	14	110		Clay; (10YR6/1)	349.5
			88	BG	BG	120		Sandy Gravel; (10YR5/8) yel brn	348.5
			100	BG	22	270		Sandy Gravel; (7.5YR5/8) strong brn	346.7
						4200		Silty Sand, with Gravel; (7.5YR7/3) pk, (7.5YR6/8) rd yel	344
						4075		Silt, with Clay, Sand, & Gravel; (10YR5/8) yel brn, (10YR5/8) mottled	340.5
						110		Gravel & Sand, with Clay & Silt; (7.5YR6/8) rd yel, (7.5YR7/1) lt gry	

# Boring 011-005

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

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

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		Clay, with Silt; (7.5YR5/6) strong brn	
0			80	BG	26	0		Clay, with Silt; (7.5YR5/6) strong brn, (10YR7/6) yel	378.3
0						142		Silt; (10YR6/1) gry	
5						39		Silt with Clay; (10Y6/1)grn gry, (2.5Y6/3)lt yel brn, (10YR4/6)dk yel brn	
5			75	BG	BG	46			
10						0		Silt, with Clay; (10YR5/8) yel brn, (10YR7/1) lt gry	
10			83	BG	BG	2			
15						0			
15			90	BG	49	0			
20						0		Clay, with Silt; (2.5Y6/4) lt yel brn, (10YR5/8) mottled yel brn, (10YR6/1) gry	364
20			100	BG	109	0			
20						0		Silt, with Clay & Gravel; (10YR6/8) brn yel, (10YR6/1) mottled gry	360
20			91	BG	BG	21		Sandy Gravel; (10YR5/4) yel brn	359
25						0		Silt, with Clay & Gravel; (10YR6/8) brn yel, (10YR6/1) mottled gry	357.5
25			100	BG	109	0		Clay, with Silt; (10YR5/8) yel brn, (10YR6/1) mottled gry	358
25						12			
25						24			
30						30		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			
35						0		Silty Sand; (10Yr6/8) brn yel, (10YR7/6) mottled yel, (10YR7/1) lt gry	
35			80	BG	59	0			
35						0			
35						0		Silty Sand, with Gravel & Clay; (10Yr6/8) brn yel, (10YR7/4) v. pale brn, (10YR7/1) lt gry	
35			90	BG	15	0			
40						13			
40						22			



# Boring 011-006

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	B6	101	0			
						0			
						2.6			
						5.4			
45						3.1		Clay, with Silt & Sand; (7.5YR5/8)strong brn. (7.5YR7/1)mottled lt gry	336
			100	5	106	4.2			
						7.0			
						13.9			
50								T.D. = 48.0	
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: Rotasonic

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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
0			98	4	62	0		Clay, with Gravel & Silt; (7.5YR5/6) strong brn, (10YR5/8) yel brn	
5			89	BG	BG	58		Silt; (10Y6/1) grn gry	3765
						340		Silt, with Clay; (10YR4/6) yel brn	
10			98	4	38	7		Silt, with Clay; (10YR5/6) yel brn, (10YR7/1) mottled lt gry	
15			98	4	BG	13		Silt, with Clay & Gravel; (10YR5/6) yel brn, (10YR6/1) mottling gry	
20			98	BG	46	0		Silt, with Clay & Sand; (10YR7/1) lt gry, (10YR5/8) yel brn	
25			100	3	30	0		Silty Sand; (7.5YR5/6) strong brn, (10YR7/1) mottled lt gry	357.5
						0		Silt, with Clay & Sand; (10YR7/1) lt gry, (10YR5/8) yel brn	357
			100	BG	110	0		Gravelly Sand, with Silt; (7.5YR5/8) strong brn	355.5
						0		Sand & Silt, with Clay & Gravel; (7.5YR5/8) strong brn, (7.5YR6/1) gry	353.5
			100	BG	BG	0		Gravelly Sand, with Silt & Clay; (10YR6/6) brn yel, (10YR7/2) mottled lt gry, (10YR5/8) yel brn	351.5
30						0		Sand & Silt, with Clay & Gravel; (7.5YR5/8) strong brn, (7.5YR6/1) gry	349
						0		Clayey Sand; (7.5YR5/8) strong brn, (2.5Y6/3) mottled lt yel brn	347.5
			97	BG	BG	0		Gravelly Sand; (10YR6/3) p. brn, (10YR5/8) yel brn	346
35						0		Silty Sand, with Gravel; (7.5YR5/8) strong brn, (7.5YR7/1) mottled lt gry	343.5
			93	BG	BG	0		Silt & Sand; (7.5YR7/1) lt gry	341.5
40						0		Sand, with a little Silt; (7.5YR5/8) strong brn, (10YR7/2) lt gry	340.5
						0			339.5

# Boring 011-007

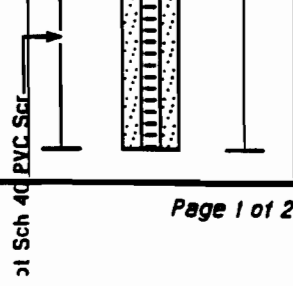
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-3970.0000 E, -1675.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>T. Streufert</i>
Started at <i>0940 on 10-23-97</i>	Surface Elevation: <i>378.50 feet msl</i>
Completed at <i>1415 on 10-23-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>48.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X						0 0 0 0 0 0 0 0 0 0 0 0	Clayey Gravel, with Sand; (7.5YR5/8) strong brn. (10YR5/1) gry	338.5
			100	BG	BG		0 0 0 0 0 0 0 0 0 0 0 0	Silty Sand; (10YR8/8) brn yel. (10YR8/1) mottled gry	336.5 335.5
45			96	BG	42		0 0 0 0 0 0 0 0 0 0 0 0	Sand; (7.5YR5/8) strong brn. (7.5YR7/1) lt gry	
							0 0 0 0 0 0 0 0 0 0 0 0	Clay, with Silt & Sand; (7.5YR5/8) strong brn	332.0
50								T.D. = 48.0	
55									
60									
65									
70									
75									
80									

# Piezometer 011-008

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
5										
10										
15	100			-	-	93		365	1" ID Schedule 40 PVC Riser  No. 5 Sand Filter Pack	
15				-	-	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	361		
20							No Recovery			
25										
30										
35										
40										



# Piezometer 011-008

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
45								T.D. = 44.0 ft	45	
50								50		
55								55		
60								60		
65								65		
70								70		
75								75		
80								80		

# Boring 026-001

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4248.0000 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: Vibracore/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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
0								CLAY (90%) STIFF (5YR4/2) OLIVE GRY	
14								CONCRETE TO GRAVEL CHUNKS	374
20			35%	BG	43			CLAY 100% (10YR5/6) YELL BRN TO (10YR4/3)	
25								CLAY 90% (10YR5/6) YEL BRN (10YR2/2) DK BRN	
30				BG	55			SILTY CLAY (10YR5/6) YRL BRN TO (10YR7/8) YEL & SOME BLK SUBROUND	359
35				BG	35			GRAVELY SAND (7.5YR5/8) TO (5YR1/6) YEL RED	355
38								CLAY (10YR6/8) BRN YEL TO (10YR6/3) PALE BRN	348
40				BG	18			SANDY GRAVEL (10YR5/6) YEL BRN	346
42								SAND (10YR6/8) BRN YEL	344
43								SANDY GRAVEL (10YR6/8) TO (10YR7/3) VERY PALE BROWN	343
45								CLAY (10YR7/1) LT GRAY (10YR7/8) YEL TO (10YR6/8) BRN YEL	340
47								CLAY 95% (10YR6/8) TO (10YR7/1) SILT 5%	338
49								GRAVELLY SAND (10YR6/8) BRN YEL TO YEL BRN	

# 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: Vibracore/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	FI (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
45			-	1	63	63		SILT CLAY (10YR8/8)YEL TO (10YR8/8) BRN YEL TO (10YR8/4)V/PAL BRN SOME MAG STAIN,TRAC MICA	335
50			-	BG	27	88		SILT 95% (10YR5/8) YEL BRN	325
55			-	BG	BG	281		SAND 90% (10YR5/8) YEL BRN	
60			-	BG	BG	197		SAND (10YR3/1)V/DRK GRY (10YR4/8)DK YEL BRN	
65			-	BG	BG	122		SANDY GRAVEL (10YR5/8)YEL BRN	317.5
70			-	BG	BG	145		SANDY GRAVEL (10YR2/2) V DK BRN	
75			-	BG	BG	140		SAND & GRAVEL,W/SILT & CLAY (7.5YR5/8)STRG BRN	309
80			-	BG	9	191		GRAVELY SAND, W/SILT & CLAY (7.5YR5/8)	304
			-	BG	9	100			
			-	BG	9	05			
			-	BG	9	32			
			-	BG	9	17			
			-	BG	9	10			
			-	BG	9	85			
			-	BG	9	33			
			-	BG	9	07			
			-	BG	9	75			
			-	BG	9	10			
			-	BG	9	8			
			-	BG	9	4			
			-	BG	9	30			
			-	BG	9	35			
			-	BG	9	60			
			-	BG	9	23			
			-	BG	9	23			
			-	BG	9	203			
			-	BG	9	82			
			-	BG	9	45			
			-	BG	9	45			
			-	BG	9	108			
			-	BG	9	123			
			-	BG	9	98			

# Boring 026-001

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4248.0000 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: Vibracore/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	FD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
20									
20								SANDY GRAVEL (10YR5/8)YEL BRN (10YR3/2)V/DK GRY BRN STAINING	284
35			-	BG	BG			SILT W/CLAY (2.5YR4/8) RED W/ (2.5YR8/1)REDDISH CLAY	
90			-	BG	28			SAND FINE TO MED. (10YR7/1)LT GRY (10YR5/8)YEL BRN	285.5
95			-	BG	91			CLAY & SILT (10B6/1)BL GRY (10YR5/8)YEL BRN	284 283.5 283 282.5
			-	BG				SAND FINE GRAIN (10YR5/8)YEL BRN	
			-	BG				CLAY (10B5/1)LT BL GRY	
			-	BG				SAND W/CLAY (10YR5/8)YEL BRN (10B5/1)LT BL GRY	279.5 279 278.5 278
			-	BG	77			CLAY (10B4/1)DK BL GRY	
100			-	BG				SILTY SAND (10YR5/8)YEL BRN	
			-	BG				CLAY (10B5/1)BL GRY	
			-	BG				SILTY SAND W/CLAY (10B5/1) BL GRY (10YR5/8)YEL BRN	275.5
			-	BG	101			SILT W/ CLAY (5P87/1)LT BL GRY	
110			-	BG	48			SILT W/CLAY (5Y4/1)DK GRY	
			-					CLAY (5Y4/1) DK GRY	284
115			-	1	119			CLAY W/ SILT LT GRY (5Y7/1)	
			-					CLAY W/ SAND (1GLEY 4/N)DK GRY	
120									



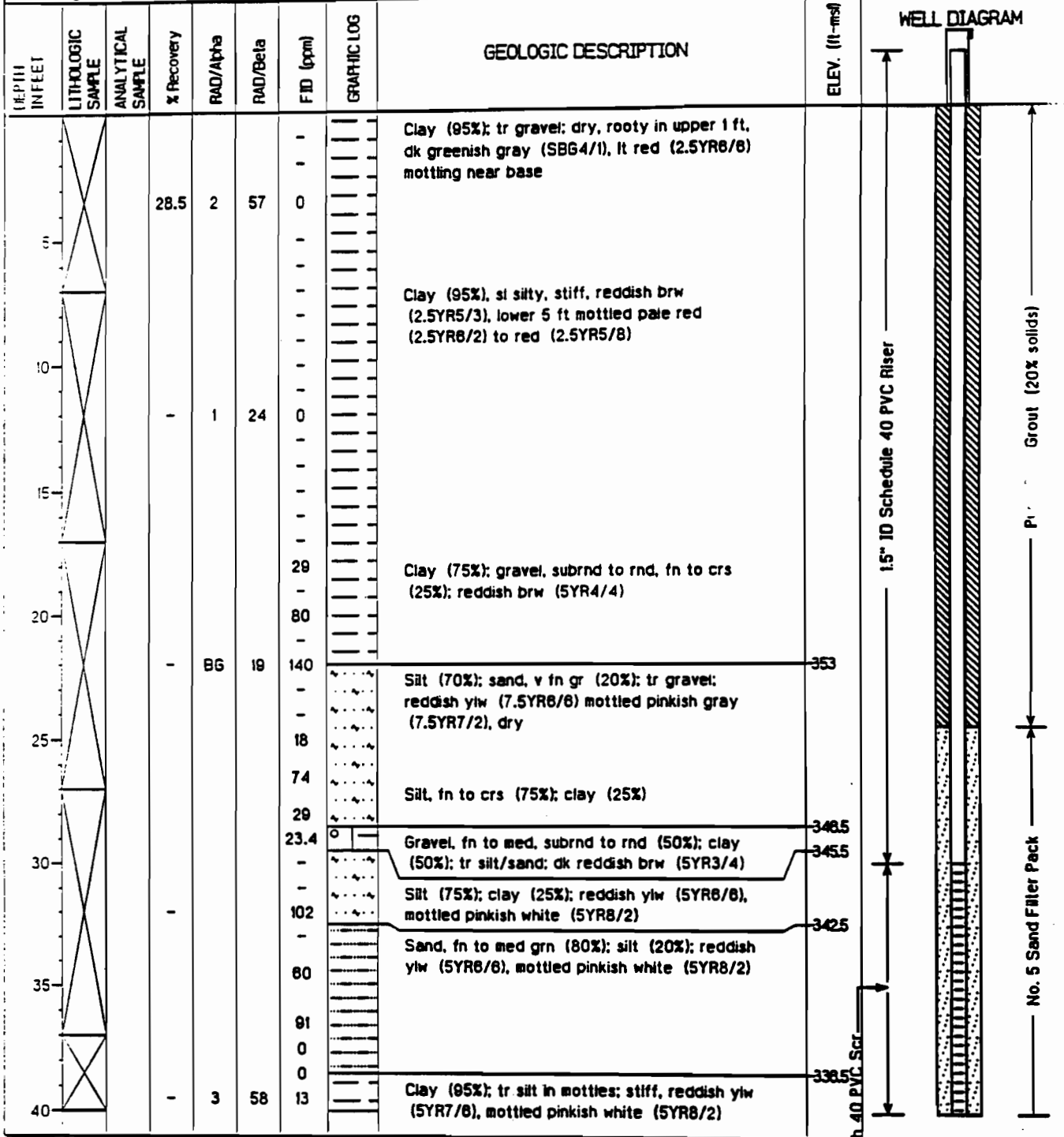
# Boring 026-001

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4249.0000 E -993.2782 N
Locator: 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: Vibracore/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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
125			-	BG	70	27		CLAY FIRM (10B3/1)DK BL GRY. 20% SILT (5PB7/1)	250.5
130			-	BG	108	36		SAND V. FINE TO FINE GRAINED TRACE SILT (5Y5/1)	248
135			-	BG	50	38		CLAY (90%) FIRM SILT (10%)COARSE (5Y3/1)V DK GRY.SL MOIST	240.5
140			-			39		SAND (100%)V.FINE -F.GRAINED (5Y5/1)	239
145			-			40		T.D.=137	
150			-			41			
155			-			42			
160			-			43			


# Piezometer 026-002

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -520.0000 E -0895.0000 N
Location: Paducah, KY	Surface Elevation: 375.00 feet msl
Started at MID on 07-23-97	TOC Elevation: NA feet msl
Completed at MID 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



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
Driing Method: Vibroprobe	Groundwater Elevation: NA feet msl
Driing Company: Alliance	Total Depth: 415 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		T.D. = 415 ft	333.5	
55										
60										
65										
70										
75										
80										

# Boring 026-003

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-5620.0000 E, -0952.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1515 on 08-05-97</i>	Surface Elevation: <i>373.50 feet msl</i>
Completed at <i>1220 on 08-05-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>8.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
5			100	33	90	45		Sand, crs, ang, mod sorted, wet, brown (10YR4/3)	369.5 368.8
0				3	900	11		Clay, silty; tr sand, fn grn (1-10%); firm, v moist, brown (10YR4/3). It blueish gray (7/1) mottles, tr red (2.5YR5/6)	
4.6									
4.0								T.D. = 8.0 ft	

# 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

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			72.5	7 BG	BG	0		Clay, silty, soft, v moist, lt blueish gray (7/1), tr ylwish red (5YR5/6) (1-10%)	370.5
10				BG	BG	0		T.D. = 9.0 ft	366.5

# Boring 026-005

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -520.000 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: Vibracore

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	FTD (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									
35									
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: Vibracore

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)
5			100.0	BG	BG	0		Gravel, ang (80%); some silt and clay, v poorly sorted, v firm, sl moist, dk reddish gray (5YR4/2)	368
								Silt, clayey, firm, sl moist, reddish brown (5YR5/4), some lt gray mottling (5YR7/1)	365.4
								T.D. = 8.5 ft	

								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			100.0	BG	BG	25		Clay, silty, firm, moist, reddish brown (5YR5/4); lt blue gray (5YR8/1) mottling	369	
				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: Vibracore

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
10								T.D. = 8.0 ft	
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	ELEV. (ft- <i>msl</i> )
5			50	BG	BG	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)	368
				BG	BG	0			
								T.D. = 7.5 ft	

# Boring 026-010

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				<20	<100	0		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	X 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)
5				-	-	88		T.D. = 4.5 ft	369.5
10									
15									
20									
25									
30									
35									
40									


# Boring 026-013

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

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	368.5
10									
15									
20									
25									
30									
35									
40									

# Boring 026-014

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4442.0000 E, -1053.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at: <i>0805 on 07-09-97</i>	Surface Elevation: <i>375.28 feet msl</i>
Completed at: <i>1130 on 07-09-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>6.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				-	-	-			
10								T.D. = 6.0 ft	389.3
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	ELEV. (ft-MSL)
5				-	-	-			388.5
10								T.D. = 6.0 ft	
15									
20									
25									
30									
35									
40									



# Boring 026-016

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*

Coordinates: *-42810000 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	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				27	B6	0		T.D. = 3.5 ft	
10									
15									
20									
25									
30									
35									
40									

# Boring 026-017

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				17	BG	26		T.D. = 3.2 ft	
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: Vibracore	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- <i>msl</i> )	WELL DIAGRAM
0								No lithology descriptions available		
5										
10										
15										
20										
25										
30										
35										
40										
40.5										

# Piezometer 040-001

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)	WELL DIAGRAM
30								T.D. = 42.0 ft	30	
35							35			
40							40			
45							45			
50							50			
55							55			

# Boring 040-003

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4110.0000 E, -1224.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1345 on 08-22-97</i>	Surface Elevation: <i>377.50 feet msl</i>
Completed at <i>1445 on 08-22-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>11.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				BG	BG	0			
10			-	BG	BG	0		Clay, silty, soft, v moist, brown (10YR5/3)	
								T.D. = 11.0 ft	366.5

# Boring 040-004

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4049.1409 E, -243.9458 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1245 on 09-16-97</i>	Surface Elevation: <i>376.31 feet msl</i>
Completed at <i>1400 on 09-18-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>11.0 feet</i>

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			369.3
2			100	BG	BG	0		T.D. = Silt and clay, brown (10YR5/3 w/1+1), (11-20%) light gray T.D. = (10YR7/1) firm, and moist	
10									336.0
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: 11.0 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10			100	BG	BG	0		Silt & clay, brown (10YR5/3 w/1+1), light grey (11-20%) (10YR7/1) firm, and moist T.D.= 11.0	-365.2
15									
20									
25									
30									
35									
40									



# Boring 040-006

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10	█	█	50.0	1	B6	0	     	Clay, silty, soft, moist, brw (10YR5/3), mottled with 11-24% lt blueish gray (7/1)	366
15								T.D. = 12.5 ft	364
20									
25									
30									
35									
40									

# Boring 040-007

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -410.0000 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: Rotasonic	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)
							Concrete slab		378.2
			85.7	BG	BG	0	0	Clay, silty; moist, firm, lt olive brw (2.5Y5/4) (fill)	375.8
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		
15			40	11	BG	1	1		
20			37.1	BG	BG	1	2		
25			80	BG	58	3	5	Gravel (70%); silt (25%); sand (5%); wet, firm, dk red (2.5YR4/6) to black (5YR2.5/1)	359.5
30			80	BG	BG	5	7	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
35			100.0	BG	BG	0	1	Sand, med grn (60%); gravel, subrnd to subang (30%); tr clay in distinct laminations; moist, med dense, strong brw (7.5YR5/6)	357.8
40			100.0	BG	BG	0	21	Clay, silty; tr sand, fn grn (10%), moist, stiff, lt gray (7.5YR5/3), mottled (7.5YR7/1)	356
45			100.0	BG	BG	15	5	Gravel, rnd to subang, poorly sorted (60%); sand (30%); tr silt/ clay (10%); moist, dense, strong brw (7.5YR5/8)	352.5
50			100.0	3	BG	20	0	Clay, silty; sand (5%); grades to silty fn sand, moist, stiff to firm, ylwish brw (10YR5/8)	350.8
55			100.0	BG	BG	0	14	Sand (50%); silt (40%); clay (10%); moist, firm to stiff, strong brw (7.5YR5/8)	349.5
60			73.3	BG	BG	14	5	Sand, med to crs grn (75%); gravel, subang to subrnd (20%); silt (5%); poorly sorted, moist, dense, strong brw (7.5YR5/6)	348
65			100	BG	BG	8	4	Silt; sand (35%); tr clay/ fn gravel; moist, firm, lt ylwish brw (10YR6/4), minor lt gray (10YR7/1) mottling	348.5
70			100	3	BG	5	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
75			63.3	BG	7	7	2	Sand, med to crs grn (65%); gravel, rnd to subang, <30mm (25%); silt (10%); moist, dense, brwnish ylw (10YR6/3)	340.5
80						-	-	No recovery	337.5

# Boring 040-007

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4110.0000 E, -1175.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>0920 on 09-08-97</i>	Surface Elevation: <i>377.00 feet msl</i>
Completed at <i>1050 on 09-09-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>45.5 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
	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: Rotasonic	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)
			90	1	38	13	Concrete slab		375.8
						17	Clay, silty; tr gravel; moist, stiff, lt ylwish brw (10YR5/4) and ylwish red (5YR4/6) (fill)		373.5
5			76.6	2	BG	0	Gravel, clayey, subang, chert (85%); sand (10%); moist, firm, dk red (2.5YR4/8) (fill)		
						0.2			
						0.6			
			66.6	1	BG	0.3			
						0.3			
						0.2			
10			60	2	30	0.1	Clay, silty, moist, firm, ylwish brw (10YR5/4)		365.8
						0.1	Clay, silty, moist, firm, ylwish brw (10YR5/4)		364.9
						0	No recovery		
			63.3	2	17	0	Clay, silty, moist, firm, ylwish brw (10YR5/4)		
						0	Gravel, clayey, subang, chert (85%); sand (10%); moist, firm, dk red (2.5YR4/8), no indication of free water (fill)		
			76.6	5	26	15	Sandy gravel as above, wet		359.4
						0.6			358.5
				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)		
20			91.4	4	BG	0	Silt, clayey; sand (20%); gravel (10%); moist, stiff, ylwish brw (10YR6/8), mottled lt gray (10YR7/1)		
				4	BG	1			353.9
			100	BG	BG	1	Clay, silty; tr sand, fn grn; moist, stiff, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)		352.1
25						5	Gravel, subrnd to subang, chert, <30mm (40%); sand (30%); silt (30%); moist, dense, poorly sorted, brwnish ylw (10YR6/8)		351.5
			100	BG	78	8	Sand (60%); gravel, subrnd to subang, <30mm, poorly sorted (25%); silt (15%); moist, dense, strong brw (7.5YR5/6)		350.2
						10			349.3
				BG	118	2	Silt; sand, x fn grn (40%); tr clay; moist, firm, ylwish brw (10YR5/8)		348
30			91.4	BG	34	2	Sand (85%); tr silt/gravel; moist, dense, ylwish brw (10YR5/8)		347.5
						2			346.6
				BG	BG	1	Sand, med to crs grn, poorly sorted (65%); gravel, ang to subrnd (35%); moist, dense, ylwish brw (10YR5/8)		344.5
						2			344
			100	BG	BG	2	Sand (95%); tr silt; moist, firm, ylwish brw (10YR5/8)		343.4
35						2			343
				BG	6	2	Gravel (60%); sand, fn to crs grn (30%); tr silt/clay; moist, dense, poorly sorted		341
			71.4	BG	BG	5			340.3
						0	Silt; sand, fn grn (30%)		
				BG	BG	0	Sand (50%); gravel (30%); clay/silt (20%)		338.8
40				BG	54	9	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

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	CV. (ft-msl)
			57.1			7			
				BG	BG	15			
45			100	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: Rotasonic

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)
				BG	26	0		Concrete	375.7
			25					Silt, sl moist, firm, grayish brw (10YR5/2)	375.1
								Gravel (65%); clayey with tr sand, moist, firm, dk red (2.5YR4/8) (fill)	
5								No recovery	
			55	BG	BG			Gravel (65%); clayey with tr sand, moist, firm, dk red (2.5YR4/8) (fill)	
10			55	1	148	0		Gravel (65%); sand (20%); silt (15%); v moist to wet, firm, dk red (2.5YR4/8) (fill)	367.7
								No recovery	365.5
15			57.5	BG	71	0		Gravel (65%); sand (20%); silt (15%); v moist to wet, firm, dk red (2.5YR4/8) (fill)	363.7
				1	18	0.2		Silt, clayey, moist, stiff, pale ylw (2.5Y7/3) with brwnish ylw (10YR6/3) mottling (natural soil @ 18.4')	360.1
20			100	2	BG	0		Gravel, med to fn grn, subrnd, chert (50%); sand (35%); silt (15%); moist, dense, ylwish brw (10YR5/8)	357.1
			0					No recovery	355.7
25			65	2	28	0		Silt, clayey; sand, v fn (15%); tr gravel, subrnd, fn; brwnish ylw (10YR6/8) mottled lt gray (10YR7/1)	353.7
						0		T.D. = 24.8 ft	351.7

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# Boring 040-010

Project: 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 09-16-97	Depth to Groundwater: NA feet bgs      Measured: NA
Drilling Method: Rotasonic	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)
			95	BG	BG	0	0	Silty Sand, w/ Gravel & Sand; (10YR5/4) yel brn, (10YR6/4) lt yel brn	374.5
						0	0	Silt, w/ Clay; sl mst, stiff; (10Y5/1) grn gry	
5			100	4	166	0	0	Same as above, but (10YR5/6) yel brn	
						0	0		
10			100	BG	58	0	0	Same as above, but (10YR5/6) yel brn, (10YR7/1) lt gry	
						0	0		
15			100	4	162	0	0	Clay w/ Silt & Gravel; (10YR5/6) yel brn, (10YR7/1) mtd lt gry	
						0	0		
20			100	BG	102	0	0	Clay & Sand, w/ Gravel; v mst, frm/dense; (10YR5/6) yel brn	357.5
						0	0		
25			100	4	66	0	0	Clay, w/ Silt, Sand, & Gravel; mst, stf; (10YR5/8) yel brn, (10YR7/1) mtd lt gry	355.5
						0	0		
30			100	8	118	-	-	Silty Sand, w/ Gravel & tr Clay; mst, frm; (7.5YR5/8) strg brn	352
						0	0		
35			100	4	BG	0	0	Sandy Gravel, w/ Silt & Clay; mst, dense; subang/subrnd; prly sorted; (7.5YR5/6) strg brn	348.5
						0	0		
40			100	BG	BG	0	0	Silt, w/ Clay, Sand & tr Gravel; mst, stf; (10YR5/6) yel brn	346.5
						0	0		
			100	BG	BG	0	0	Silty Sand, w/ Gravel & tr Clay; fn/med grn; well sorted; mst, frm; (10YR5/8) yel brn	345.1
						0	0		
			100	BG	BG	0	0	Silt, w/ Clay, Sand & tr Gravel; (7.5YR5/8) strg brn, (7.5YR7/1) lt gy	343.5
						0	0		
			17	-	-	2	2	Sandy Gravel, w/ Clay; subang/subrnd (<30MM); prly sorted; (7.5YR5/8) strg brn, (7.5YR7/1) mtd lt gry	342.5
						0	0		
						0	0	Sandy Gravel, w/ Silt; subang/subrnd; prly sorted; mst, dense; (10YR5/6) yel brn	340
						0	0		
						0	0	No Recovery	337.5
						0	0	Gravelly Sand, w/ Silt & Clay; prly sorted; subrnd/subang; mst, frm; (7.5YR4/6) strg brn	

(7.5YR4/6) strg brn



# Boring 040-010

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4090.0000 E, -1096.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>1240 on 09-15-97</i>	Surface Elevation: <i>376.50 feet msl</i>
Completed at <i>1345 on 09-16-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>45.0 feet</i>

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			335.0
						0		Silt, w/ Sand & Clay; mst, frm; (7.5YR5/6) strg brn	
			100	BG	43	0		Same as above, but (7.5YR5/8) strg brn, (7.5YR7/1) mtld lt gry, & (7.5YR2.5/1) blk	
45						0		T.D. = 45.0	
50									
55									
60									
65									
70									
75									
80									

# Piezometer 047-001

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4380.0000 E, -1436.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>376.50 feet msl</i>
Started at <i>1440 on 09-19-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at <i>1427 on 09-22-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibracore</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>422 feet</i>
Geologist: <i>B. Bergeron</i>	Well Screen: <i>315 to 410 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
<div style="text-align: center;"> </div>								<p>No recovery</p>		<div style="text-align: center;"> <p style="text-align: center;">40 PVC. SER. ↑ JD Schedule 40 PVC Riser No. 5 Sand Filter Pack Bentonite Grout (30% Gr.)</p> </div>

# Piezometer 047-001

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4380.0000 E, -436.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>376.50 feet msl</i>
Started at <i>1440 on 09-19-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at <i>1427 on 09-22-97</i>	Depth to Groundwater: <i>NA feet TDC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>422 feet</i>
Geologist: <i>B. Bergeron</i>	Well Screen: <i>315 to 410 feet</i>

DATE INLET	ULTRALOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
								T.D. = 422 ft		
80										
75										
70										
65										
60										
55										
50										
45										
40										
35										
30										
25										
20										
15										
10										
5										
0										

# Boring 047-002

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100	BG	316	0		Sandy Gravel, trace of Silt, moist & firm; (7.5YR5/6) strong brown	377.8
						0		Sandy Gravel, with wood debris & wet Black Silt	378.4
			40	BG	56	0		Silt & Clay; (10YR5/6) yellowish brown, molted with light gray	374.1
5						6		Silt, with trace of Clay; (5Gy5/1) greenish gray	
			60	BG	BG	54		Silt & Clay, moist and firm; (10YR5/8) yellowish brown molted with (10YR6/2) light brownish gray	
						23			
						21			
						188			
10			85	BG	48	82		Silt & Clay, moist & firm; (10YR5/8) yellowish brown molted with (10YR6/2) light brownish gray	
						5			
						59			
			90	3	32	13		Silt & Clay, moist & firm; (10YR5/4) yellowish brown, molted (10YR5/3) with traces of (10YR2/1) black	
15						29			
						15			
			85	BG	90	110		Silt & Clay, moist & firm; (10YR5/4) yellowish brown, molted (10YR5/3) with traces of (10YR2/1) black	
						165			
						108		Clay & Silt; (10YR6/1) gray, (10YR6/8) molted brownish yellow	
20			100	BG	46	148		Sandy Gravel	357.9
						9			
						0			
			85	BG	26	0		Clay & Silt, with traces of Sand; (10YR5/8) yellowish brown, molted w/ (10YR5/7/1) 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		Clay & Silt, moist & stiff (10YR7/2) light gray, (2.5YR5/6) molted red	349.1
30			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		Sandy Gravel, trace of Silt; (7.5YR5/8) strong brown, (7.5YR7/1) lt. gray	342.1
						15			
			100	BG	BG	12			
						5			
40									

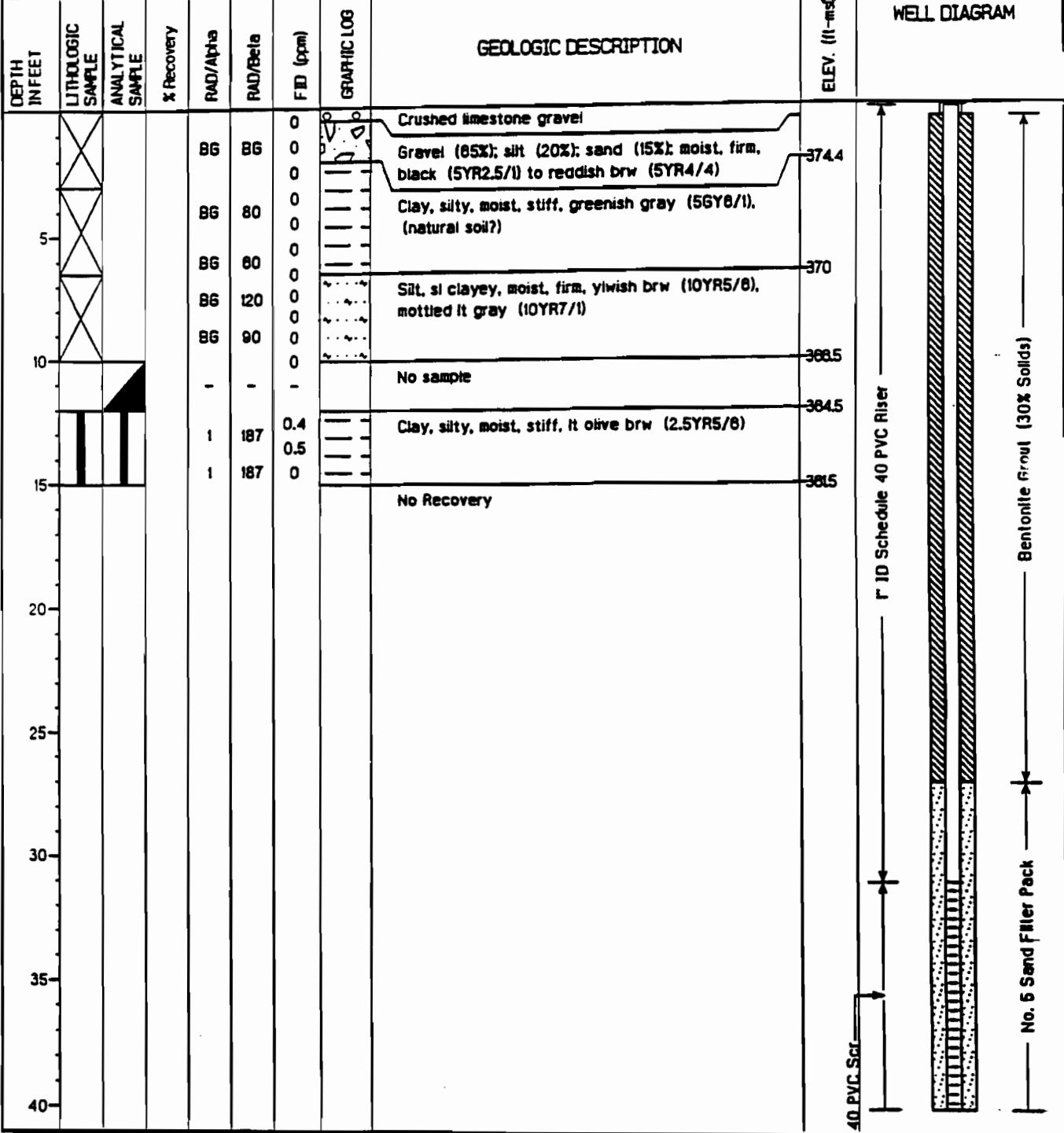
# Boring 047-002

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
45	X		100	BG	BG	5	○	Clay & Silt; (10YR5/8) yellowish brown	337.1
						2			
			80	4	62	8	●	Sandy Clay (Clay (40%), Sand (30%), & Silt (30%)); (10YR5/8) yellowish brn	335.1
						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: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 42.0 feet
Geologist: J. Albert/E. Bergeron	Well Screen: 31.0 to 40.5 feet



1" ID Schedule 40 PVC Riser

No. 5 Sand Filler Pack

Bentonite Grout (30% Solids)

# Piezometer 203-001

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

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. = 42.0 ft		
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: Rotasonic										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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft-MSL)	
			80%	BG	BG	0	Crushed Limestone				
						0	Clayey Gravel; (2.5YR4/8) dark red				
5			95%	BG	BG	27	Silt with a trace of Clay; (5B/6/1) greenish gray, to (2.5Y6/3) light yellowish brown			374.2	
						30					
						58					
			100%	BG	21	0	Silt to Clay; (10YR8/3) pale brown, (10YR5/6) yellowish brown, & (10YR6/1) molted gray				
10						0					
			98%	BG	9	0					
						0					
15			85%	4	9	0					
						0					
						5					
20			100%	BG	BG	19					
						0	Silt & Sand; (10YR5/8) yellowish brown, (10YR7/1) molted light gray			357.2	
						8				356.7	
			100%	BG	BG	0	Silty Sand; (10YR7/6) very pale brown			355.1	
25						0	Gravelly Sand; (7.5YR4/6) strong brown			353.7	
						0	Sandy Gravel; (7.5YR5/6) strong brown				
			98%	BG	BG	0					
						0					
30			90%	4	BG	0	Sandy Gravel; (5YR5/8) yellowish red, (7.5YR5/8) strong brown, & (2.5Y7/3) pale yellow				
						0	Sandy Gravel; (10YR5/4) yellowish brown				
			100%	BG	BG	0					
						0	Gravelly Sand with a trace of Silt; (7.5YR5/8) strong brown, (7.5YR7/1) light gray			345.7	
35			0%	0	0	-	No Recovery			344.7	
						0					
						0	Sand; (7.5YR5/8) strong brown, & (7.5YR7/1) light gray			341.7	
			100%	BG	BG	0	Sandy Gravel			341.2	
						0					
40						0				338.7	



# Boring 203-002

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
									336.7
			100%	BG	BG	0		Silt (70%), Sand (20%), Clay (10%); (2.5Y6/2) light brownish gray, & (10YR6/8) yellow	336.7
						0		Silty Sand; (2.5Y7/2) light gray, & (10YR6/3) brownish yellow	335.4
45			100%	BG	BG	0		Sandy Gravel; (10YR7/1) light gray, & (10YR5/8) yellowish brown	333.7
						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: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4367.0000 E, -1190.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>0835 on 09-13-97</i>	Surface Elevation: <i>378.04 feet msl</i>
Completed at <i>1355 on 09-18-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>46.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
			93	4	260	0		Crushed Limestone	
						0		Clayey Gravel, w/ Sand; mst, frm; (2.5YR4/8) dk rd	
						0			375
						2		Sandy Gravel, w/ Clay; mst, frm; (2.5YR4/8) dk rd (FILL)	
5			-	8	292	0			372
						0		Silt, w/ tr Clay; (10GY6/1) grn gry	
			93	4	176	0		(10YR6/8) brn yel	
						0		(10YR6/3) p brn	369
10						0		No Recovery	367
			100	B6	84	0		Same as 6.6-9.0	
						0		Silt, w/ Clay; (10YR6/8) brn yel, (10YR7/3) mtd v p brn	
15			100	B6	104	0			360
						0		Clay w/ Silt & tr Gravel; (10YR6/8) brn yel, (10YR7/3) mtd v p brn	
20			100	4	56	0			358.5
						0		Clay, w/ Gravel; mst, stf; (10YR6/8) brn yel, (10YR6/1) mtd gry	
			100	4	176	4		Silty Sand; (10YR5/8) yellowish brown, (5YR5/8) yellowish red	
25						3			348.5
			90	8	196	6			348.6
						25			
						4		Clayey Sand; (10YR6/4)	346
30			100	4	36	2		Sandy Gravel; (10YR5/8) yellowish brown	342.5
						3			
						0		Silty Sand; (10YR5/8) yellowish brown, (10YR6/8) brownish yellow, (7.5YR5/8) strong brown, & (10YR7/1) light gray	339
35			100	B6	24	3			
						5		Gravelly Sand with trace of Silt; (7.5YR5/8) strong brown, & (7.5YR7/1) light gray	
			90	B6	16	0			
						0		Sand with a trace of Silt, then grades down to a Sandy Gravel	
40						0			

# Boring 203-003

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
			100	4	28	2		Sand with a trace of Silt; (7.5YR5/8) strg brn	334.7
45			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
						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: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4313.0161 E, -1167.9895 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>0840 on 09-23-97</i>	Surface Elevation: <i>378.71 feet msl</i>
Completed at <i>1145 on 09-25-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>46.5 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
							0	Concrete	
							0	Crushed Limestone	377.3
			80%	BG	BG		0	Clay; (2.5YR4/6) dark red	
							0		374.7
5							5	No recovery	374.2
			95%	BG	BG		64	Silt, trace of clay; (5GY6/1) greenish gray, to (2.5Y6/3) light yellowish gray	
							34		370.7
			95%	BG	2		0	Silt and Clay; (2.5Y5/2) grayish brown, to (10YR5/6) yellowish brown	
10							0		
							0		
			92%	BG	BG		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 (15%), & Gravel (15%))	
			100%	BG	BG		0		
25							0	Silty Sand (Sand (40%), Silt (35%), & Gravel (25%)) (7.5YR5/6) strong brn	
							0		353.2
							0	Gravelly Sand with trace of Silt; (7.5YR5/8) strong brown	
			87%	BG	BG		0		
30							0		
			80%	BG	BG		0		
							0		
							0		346.2
			87%	BG	BG		0	Gravelly Sand, trace of Silt; (7.5YR5/8) strong brown, & (7.5YR7/1) light gray	
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: Rotasonic	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)
45	X		90%	BG	BG	4	(Symbol: circles in a grid)	Gravelly Sand; (10YR7/3) very pale brown, with (10YR6/8) brownish yellow	
45	X		90%	2	BG	0	(Symbol: vertical lines)	Clay & Silt; (10YR5/8) brown, with minor (10YR7/1) light gray	333.8
50								T.D. = 46.5	
55									
60									
65									
70									
75									
80									

# Boring 203-005

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

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

# Boring 203-006

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

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

# 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- <i>msl</i> )
5									
10				-	-	-			
10				3	57	0		Clay, silty, tr fn to v fn sand, firm, moist, reddish brown (5YR5/4), small light blueish gray (8/1) mottles	365.5
15						0		T.D. = 14.0 ft	361.5
20									
25									
30									
35									
40									



# Boring 203-008

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10	█	█		-	-	-	█	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%)	
12	█	█		2	BG	█			
14	█	█				█			
15						█	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: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 410 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100.0	8	37	3.9		Topsoil and crushed limestone	
						2.8		Silt; sl mst, dense; lt gry (10YR7/1), yel brn (10YR5/8) mtlg	
				2	39	0.4			
				5	69	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	11			
						0.2			
10			100.0	1	86	3.9			
						2.4			
				2	70	3.5		Silt; mst, stf, lt yel brn (10YR6/4), mtld blk (10YR2/1), lt gry (10YR7/1)	
						3.8			
			100.0	2	50	2.8			
				BG	44	2.3			
15			100.0	3	72	0.3		Silt, clayey; mst, stf, brn yel (10YR6/6), mtld v pale brn (10YR7/3)	
						0			
				BG	42	0.7			
						-		Clay, w/ Gravel; med/fn, subrnd; mst, stf, yel brn (10YR5/8), mtld gry (10YR6/1)	357
20			0	-	-	-		No recovery	358.5
						-			
			100.0	BG	BG	0		Sandy Gravel, w/ Silt; subang; prly sort chert; sl mst, dense; strg bn (7.5YR5/8)	354
						0			
			68.0	BG	4	0			
25			70.0	4	64	0		Sandy Gravel & tr silt; yel brn (10YR5/8)	349.1
						0			
						0		Silt, w/ Sand & tr Clay; mst, frm, yel brn (10YR5/8)	347.5
			100.0	3	54	11		Gravelly Sand; med/crs; mst/mod dense, yel brn (10YR5/8)	346.1
						1.6			345.5
30			100.0	2	162	0		Sand, w/ tr carbonized organics; med grn, well sort; mst, frm; lt gry (10YR7/2)	343.5
						11			
			85.0	3	118	0		Gravelly Sand, fn/med grn to med/crs grn; gravel, chert; mst, dense; pink (7.5YR7/3) w/ rd yel (7.5YR6/8)	339.5
						0			
			85	3	135	0		Sandy Gravel; prly sort; subang/subrnd, chert; fn/crs grn; mst, dense; strg brn (7.5YR5/8), mtld pink gry (7.5YR7/2)	337.5
35			80	2	105	0		Sandy Gravel; v mst/wet	336.1
						0			
			95	1	168	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
						0			
						0		Sandy Gravel, w/ tr Silt; mst, dense; brn yel (10YR6/8)	336.1
40			100.0			0		Clay, silty, mst, stf, brn yel	

# Boring 400-001

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4483.0000 E, -1207.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>1435 on 08-11-97</i>	Surface Elevation: <i>374.50 feet msl</i>
Completed at <i>1030 on 08-14-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>410 feet</i>

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) T.D. = 41.0 ft	334.4 333.5
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: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 420 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	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
5			100.0	BG	BG		0	No recovery	375
							0	Clay (60%); sand (25%); gravel (15%); moist, firm, lt olive brw (2.5Y5/3) (fill)	3715
			0	-	-		-	No recovery	
10							0	Silt, clayey; moist, stiff, lt olive brw (2.5Y5/4) (Natural Soil)	
			97.1	8	BG		0		
							0	Silt, clayey; moist, stiff, ylwish brw (10YR5/4), mottled ylwish brw (10YR5/8) and gray (10YR6/1)	
15			100.0	4	BG		0		
							0	Clay, silty; tr gravel, fn grn; moist, stiff, ylwish brw (10YR5/8), mottled lt gray (10YR7/1)	361
20			100.0	4	BG		0		
							0	Clayey Sand; med/fn grn; mst, stf; strg brn (7.5YR5/8), mtdl gry (7.5YR6/1)	357.5
			100.0	BG	BG		0		
							2	Gravel, subang/subrnd (40%); silt/clay (40%); sand; prly sort; mst, dense, rd yel (7.5YR6/8)	356
25			100.0	BG	BG		0	Gravelly Sand, w/ Silt; mst, med dense; strg brn (7.5YR5/8)	354.5
							3		
			100.0	4	BG		0	No recovery	3515
			0	-	-		-		
30							0	Gravelly Sand, w/ Silt; med/crs grn; subrnd/subang; prly sort; mst, dense, pale brn (10YR6/3), yel brn (10YR5/8)	348.5
			100.0	BG	BG		0		
							0	Silty Sand, w/ tr Clay; med/fn grn, well sort; mst, frm; yel brn (10YR5/8), mtdl lt gry (10YR7/1)	345.5
35			93.3	BG	BG		0		344.3
							0	Gravelly Sand, w/ tr Silt; med/crs grn; subang/subrnd, prly sort; mst, dense; lt gry (10YR7/2), yel brn (10YR5/3)	342.5
			100.0	BG	BG		0		3415
							0	Sand, w/ tr Silt & Gravel; med/crs grn; fn grn; wet/dense; yel brn (10YR5/8)	3415
40							0	Gravelly Sand, w/ Silt; med/crs grn, qtz; subang/subrnd; prly sort; mst, dense, vel brn (10YR5/8), lt gry (10YR7/1)	339.5

No Recovery

# Boring 400-002

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4225.0000 E, -1149.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at <i>1450 on 09-09-97</i>	Surface Elevation: <i>378.50 feet msl</i>
Completed at <i>1500 on 09-11-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>420 feet</i>

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

# Boring 400-003

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

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			
				BG	BG	0		Clay, silty, soft, v moist, brn (10YR5/3)	373
10			25.0	BG	BG	0			
				BG	BG	0		No Recovery	367
15			100.0						
20				BG	BG	0			359
			75	BG	BG	0		Clay, w/ Silt, Sand, & 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)	355
25				BG	BG	320			
			100	BG	BG	0		Gravelly Sand, w/ Silt/Clay; med/fn grn; up to 30mm, subrnd/subang; rd (2.5YR4/8), yel rd (5YR5/8), strg brn (7.5YR5/8), gry mtlg (7.5YR7/1)	351
30			0	4	2	0		No recovery	349
				4	BG	0		Sand, w/ Gravel & Silt; fn/med grn; yel red (5YR5/8)	348.5
			100	4	BG	0		Clay, w/ Sand & tr Gravel; fn grn; up to 5mm; yel brn (10YR5/8), gry mtlg (10YR6/1)	348
				4	6	0			
				2	BG	0		Gravelly Sand, w/ Silt/Clay; med/crs grn; subrnd/ang; yel brn (10YR5/8)	345
35			100.0	BG	BG	0		Gravelly Sand, w/ Clay & Silt; med/crs grn quartz; subrnd/subang cht; (10YR5/8) yel brn, (10YR7/1) lt gry mtlg	343.5
				BG	BG	0			342.8
			100.0	BG	8	0		Sand, w/ tr Gravel; med grn qtz; subrnd/rnd; mst/qut mst; (7.5YR5/8) strg brn	340.8
40				2	BG	0		Gravelly Sand, w/ Silt; med/crs grn qtz; subrnd/subang; (7.5YR5/8) strg brn	339.2
								Silty Sand, w/ Gravel; fn grn qtz; subrn; (7.5YR5/8) strg brn, (10YR6/4) lt yel brn	338

Clay, w/ Silt, tr Gravel, subrnd; mst/frn; (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)
			100	2	12	0		Sand w/Gravel, Clay & Silt; (7.5YR5/8)strg brn	338
			100	BG	BG	0.8		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
45			100	2	BG	0		Clay,w/Silt & Sand (7.5YR6/8)micaceous rd yel, (7.5YR6/4)mtkd lt brn (HU3 encountered)	334.2
						0		T.D. = 46.0	333
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: Rotasonic	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)
				8	54	0	0.0	Gravel (75%); clay (20%); sand (5%); sl moist, firm, ywish red (5YR4/6) (fill)	375.8
			91.4	BG	BG	6		Clay, silty, moist, stiff, greenish gray (10Y6/1) (natural soil?)	374
5			77.1	4	46	88		Silt, moist, stiff, greenish gray (10Y6/1)	
				BG	BG	296			
			100.0	4	34	2		Silt, sl clayey, moist, firm, lt gray (10YR7/1) to ywish brw (10YR5/6)	
10				BG	BG	1			
			100.0	8	38	0			
				BG	34	0			
15			100.0	BG	6	0		Silt; tr clay; moist, stiff, lt ylw brw (10YR6/4), mottled gray (10YR6/1)	
				8	BG	0			
			100.0	BG	29	0			
20				BG	BG	0		Sand (65%); gravel, poorly sorted, subang to subrnd, chert (25%); silt (15%); moist, dense, ywish brw	357.5
			100.0	BG	BG	0			356.5
				BG	BG	1		Gravel, chert/qtz, subang to subrnd, poorly sorted (80%); sand (30%); silt (10%); moist, dense, lt brwnish ylw (10YR6/4)	355
25			94.3	BG	BG	8		Sand, fn to med grn (70%); gravel, in distinct zones (20%); silt (10%); moist, dense, strong brw (7.5YR5/3)	
				BG	BG	0			
			91.4	8	BG	0		Silt, clayey; sand (25%); moist, firm, lt brwnish gray (10YR6/2)	349.5
30				BG	30	3		Gravel, poorly sorted, subang to subrnd, chert (60%); sand (40%); silt (10%); v pale brw (10YR7/3) to brwnish ylw (10YR6/8)	348.7
			85.7	BG	23	3		Sand, med to fn grn, well sorted (100%), moist, firm, reddish ylw (7.5YR6/8), mottled pink (7.5YR7/3)	348
				BG	39	2			345
35			94.3	BG	BG	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)	342.5
				BG	BG	3			
40			91.4	3	BG	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	339



# Boring 400-004

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

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

# Boring 400-005

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -437.0000 E, -272.0000 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: Rotasonic	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)
			48.8	BG	BG	0	●●●●	Concrete slab	378.2
				-	-	-	●●●●	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, ywish brw (10YR5/6) (natural soil?)	
				BG	BG	0	●●●●		
			100.0	BG	BG	0	●●●●		
15			100.0	BG	BG	0	●●●●		
				BG	BG	0	●●●●		
20			100.0	BG	BG	0	●●●●	Clay, silty; tr sand, fn grn (5%); scattered gravel (1-3%); moist, stiff, ywish brw (10YR5/8); mottled lt gray (10YR7/1)	381.5
				BG	BG	0	●●●●		
25			100.0	BG	BG	0	●●●●	Silt; sand (30-35%); clay (10-20%); moist, firm, ywish brw (10YR5/8), minor lt gray (10YR7/1) mottling	35.8
				BG	BG	4	●●●●		
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 ywish red (5YR5/8)	354.5
				BG	BG	0	●●●●		
			100.0	BG	BG	2	●●●●	Gravel, subang to subrnd, <40mm (50%); sand, med to crs grn (40%); tr silt/clay; moist, dense, strong brw (7.5YR5/8)	352
				BG	BG	0	●●●●		
35			100	BG	BG	6	●●●●	Silt, clayey; tr sand/gravel; moist, stiff, strong brw (7.5YR5/6), mottled lt gray (7.5YR7/1)	350.3
				BG	BG	3	●●●●		349
			100	BG	BG	3	●●●●	Clay, silty; tr sand, fn grn (10%); tr gravel, fn grn (1-2%); moist, stiff, strong brw (7.5YR5/8), mottled gray (7.5YR8/1)	348
				BG	BG	0	●●●●		
40			100	BG	BG	0	●●●●	Sand, fn grn (50%); silt (50%); grades to sand (80-90%)/silt (10-20%); moist, firm, ywish brw (10YR5/6), minor lt gray mottling (10YR7/1)	346
				BG	BG	0	●●●●		
			0	-	-	-	●●●●	No recovery	343
				-	-	-	●●●●		
40				BG	BG	0	●●●●	Gravel, subang to subrnd (60%); sand, med to crs (35%); tr clay (5%); moist, dense, ywish brw (10YR5/8), mottled lt gray (10YR7/1)	340

# Boring 400-005

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -437.0000 E, -272.0000 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: Rotasonic

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)
			93.3	BG	BG	0	○ ○ ○ ○		
				BG	BG	0	○ ○ ○ ○		
			100.0	BG	14	0	— — — —	Sand, med to fn grn, well sorted (70%); silt (30%); moist, firm, strong brw (7.5YR5/8)	336.3
45				BG	6	0.7	— — — —	Clay, silty; tr sand, fn grn (5%); moist, stiff, strong brw (7.5YR5/8)	
			100.0	BG	14	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

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 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: Rotasonic

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)
								Concrete slab	379.2
			28.6					Crushed limestone gravel	377.7
5			57.1	BG	99	0		Clay; gravel, subang to subrnd, chert (35%); sand (10%); moist, firm, dk red (2.5YR4/8) (fill)	375
						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			100.0	BG	39	0		Silt, clayey, moist, firm, ylwish brw (10YR5/8)	
				BG	39	0			
				BG	79	0			
15			100.0	BG	39	0			
				4	79	0		Clay, silty; sand, fn grn (up to 20%); moist, stiff, ylwish brw (10YR5/4), some lt gray (10YR7/1) mottling	363
				BG	39	0			
20			100.0	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
				4	119	0			
				BG	55	0			
25			85.7	BG	59	0		Clay, silty; moist, stiff, ylwish brw (10YR5/8), lt gray (10YR7/1) and ylwish red (5Yr5/8) mottling	355
									354.5
								Silt (45%); sand (30%); clay (15%); gravel (10%); moist, dense, poorly sorted, ylwish brw (10YR5/6)	352.5
			9					No recovery	
30			100.0	2	4	0		Sand (40%); silt (35%); gravel (15%); clay (10%); moist, dense, strong brw (7.5YR5/3), mottled lt gray (7.5YR7/1)	349.3
				2	12	0			348
				BG	BG	0		Clay, silty; grades to silty clay containing up to 15% fn grn sand; moist, stiff, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	347.2
				BG	24	0		Sand (85-90%); silt (10-15%); moist, firm, strong brw (7.5YR5/6), minor lt gray (7.5YR7/1) mottling	
35			100.0			1			343.5
				BG	8	5		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)	342.7
			96.7	2	BG	2			
40			0					Sand (80%); gravel, subang to subrnd, <30mm (25%); silt/clay (15%); moist, dense, brown (7.5YR5/4)	340.5
								No recovery	

# Boring 400-007

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45	X		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)	333
45	X		100.0	BG	BG	17		Clay, silty; sand, fn grn (10-15%); moist, firm, sl micaceous, strong brw (7.5YR5/8)	334
50	X		100.0	BG	BG	0			
50	X		100.0	BG	24	0			
55								T.D. = 50.5 ft	328.5
60									
65									
70									
75									
80									

# 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: Rotasonic

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- <i>msl</i> )
0				2	43	0		Crushed limestone gravel	377.5
0			91.4			0		Silt, dry, firm, ylwish brw (10YR5/6)	
2				2	2	13		Gravel (50%); clay (30%); sand (20%); sl moist, firm, dk red (2.5YR4/6) (fill)	375.9
5			91.4	BG	BG	6		Silt, moist, firm, gray (10YR5/1) (natural soil?)	
				BG	BG	14		Silt, some clay, moist, firm, ylwish brw (10YR5/6), minor lt gray (10YR6/2) mottling	
10			100.0	BG	12	4			
				BG	32	7			
			85.7	BG	BG	0		Clay, silty, moist, stiff, brwnish ylw (10YR6/6)	
15				BG	BG	0			
			100.0	BG	BG	0			
20			100.0	4	12	0			
				8	4	0			
			100.0	4	12	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
25				BG	BG	2			
			100.0	BG	BG	0		Silt, clayey; sand, fn grn (30%); moist, stiff, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	354
				BG	BG	0			
				BG	BG	0		Sand, med grn, well sorted (85%); tr gravel, fn grn; tr silt; moist, firm, strong brw (7.5YR5/8)	351.4 350.5
30			100.0	BG	BG	1		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 lt gray (7.5YR7/1)	348.2
35			100.0	BG	BG	6			
				BG	BG	0		Sand, fn grn (70%); silt (30%); moist, firm, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	343.5 342.9
			94.3	BG	BG	1		Sand, med to fn grn; gravel (15%); tr silt (10%); moist, firm, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	
				BG	BG	1		Silt, clayey; sand, fn grn (20%); gravel, med to fn (20%); moist, dense, pink (7.5YR7/3)	340.9
40				BG	BG	2			
				BG	BG	0		Gravel, subang to subrnd, poorly sorted (70%); sand (20%); silt/clay (10%); strong brw (7.5YR5/6)	

# Boring 400-008

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X	I	100.0	BG	BG	0	[Symbol]		337.5
	X			BG	BG	3	[Symbol]	Sand (70%); gravel (30%); poorly sorted, med to fn grn, moist, firm, strong brw (7.5YR5/8), mottled lt gray (7.5YR7/1)	
	X		85.7	BG	BG	4	[Symbol]		
45	X			BG	BG	2	[Symbol]		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
	X		85.7	BG	BG	2	[Symbol]		
	X			BG	BG	7	[Symbol]	Silt; sand (35%); v moist, firm, sl micaceous, strong brw (7.5YR5/8)	
	X			BG	BG	6	[Symbol]		
50								T.D. = 49.0 ft	328.5
55									
60									
65									
70									
75									
80									

# 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: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 48.5 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Apha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0				2	41	0	0	Gravel, subrnd, chert (65-70%); clay (20-25%); tr sand; sl moist, firm, dk red (2.5YR4/8)	3755
0			80	12	43	0	0	Clay; silty, mst, stf; lt yel brn (10YR6/4) (fill)	374
0				-	-	-	-	No recovery	373.5
5			62.8	6	68	7.4	7.4	Silt; tr clay; sl mst, firm; grn gry (10Y6/1) (natural soil)	
5				-	-	4.4	4.4		
5			0	-	-	-	-	No recovery	
10				-	-	-	-		
10			100.0	4	72	5.9	5.9	Silt, tr clay; mst, frm; yel brn (10YR5/8), mtd lt gry (10YR7/2)	367
10				9	62	3.1	3.1		
15			100.0	0	16	0.3	0.3	Silt, w/ tr gravel; subrnd; mst, stf; yel brn (10YR5/4), mtd gry brn (10YR5/2), some block mineralization	
15				2	69	2.0	2.0		
15			100.0	0	6	2.0	2.0	Gravelly Sand; med grn qtz; subrnd chert (up to 30mm); prly sort; mst, dense; strg brn (7.5YR5/8)	360
15				0	BG	10	10		
20			60	0	BG	7.0	7.0		
20				8	BG	6.0	6.0		
20			85.7	0	50	11.0	11.0	Silt, clayey, w/ tr sand; mst, stf, brn yel (10YR4/8), mtd lt gry (10YR7/2)	354.5
20				0	46	5	5	Silt, w/ Sand; mst, frm, yel rd (5YR5/8), mtd lt gry (5YR7/1)	351.5
25			100.0	3	BG	26	26	Gravelly Sand; subrnd chert; prly sort, mst, dense, yel rd (5YR5/8)	351.5
25				0	46	0	0	Gravelly Sand, w/ tr Silt; med/crs grn, qtz; med/fn, subrnd; mst, den; strg brn (7.5YR5/8)	348
25			100.0	0	BG	132	132	Sand (90%); silt (10%); moist, firm, ylwish red (7.5YR6/8)	348.5
25				BG	BG	23	23	Silt & Sand; v fn/fn; mst, frm; rd yel (7.5YR6/8), mtd lt gry (7.5YR7/2)	
25			100.0	BG	BG	30	30		
25				BG	BG	65	65		
25			100.0	BG	BG	11	11	Silty Sand; med/crs grn, qtz; mod well sort; mst, frm, strg brn (10YR5/8)	344.5
25				BG	BG	172	172		
30			100.0	BG	BG	0	0	Sand, med/crs, qtz, well sorted; up to 60% gravel in lower 0.3'; mst, frm, rd yel (7.5YR6/8)	342.5
30				BG	BG	6	6		
30			100.0	BG	BG	58	58	Clay, w/ silt & carbonized organics; mst/stf, lt gry (7.5YR7/1)	340.8
30				BG	BG	8	8		340.2
30			88.5	BG	BG	12	12	Gravelly Sand; mst, dense; lt gry (7.5YR7/1), rd yel (7.5YR6/3)	339
30				BG	BG	97	97		
40				BG	BG			Sandy Gravel, w/ tr Silt; subrnd/subang chert; med/crs qtz; mst, den; prly sort, yel brn (10YR5/8)	337



# Boring 400-009

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
45	X		91.4	-	-	-	-	Silt; sand (40%); tr clay (10%), moist, firm, brwnish ylw (10YR6/6), No indication of groundwater	337
	X			BG	BG	4	4		
	X			4	65	28	28		
	X		94.3	BG	BG	24	24		
	X			BG	BG	0	0		
	X			BG	13	0	0		
50								T.D. = 48.5 ft	328.0
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: Rotasonic

Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 47.0 feet

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAO/Alpha	RAO/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0			100	3	BG	0		Silty Gravel; (7.5YR4/6) strong brn	
0						0		Clay & Silt; (2.5Y4/4) olive brn	378
5			85	BG	BG	0			
						10		No Recovery	373.5
10			0	0	0	-			
			0	0	0	-			
15			100	BG	30	8		Silt & Clay; (10YR6/1) grn gry, to (10YR5/4) yel brn	368
			85	BG	34	4			
						1		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	0			
						3			
20						5		Silt, with little Clay; (10YR7/3) v. pale brn, (10YR5/8) mottled yel brn	360.5
			70	BG	BG	0			
						5			
25			80	BG	BG	13		Clayey Sand, with Silt & Gravel; (7.5YR5/6) s. brn, (7.5YR6/3) lt brn	358
						10			
						18		Silt & Clay; (10YR6/8) brn yel	353.5
			100	BG	BG	7			
						3		Silt, with Clay & Gravel; (10YR5/8) yel brn, & lt gry	352.2
30						0		Gravelly Sand, with trace of Silt; (7.5YR4/6) stron brn	351.3
			80	BG	BG	0			
						0		Sand, with trace of Silt; (7.5YR5/8) strong brn	349.4
						8		Sand & Silt; (7.5YR5/8) strong brn to (7.5YR7/1) lt gry	347.9
						8		Sand; (10YR7/8) yel	346.5
35			100	BG	BG	6		Gravelly Sand; (7.5YR5/8) strong brn	344.5
						6			
			85	BG	BG	2		Sand; (10YR7/3) v. pale brn to (10YR6/8) brn yel	341.5
40						38			339.5

# 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: Rotasonic	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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
			75	4	BG	0		Sandy Gravel; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	338.5
						1		Clayey Sand, with 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
45			100	8	BG	47		Clay & Silt, trace of Sand; (7.5YR6/8) rdsh yel	336
						98			
						53			
						0			
						0			
						0		T.D. = 47.0	332.5

# 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: Rotasonic	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	FI (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
			100.0	1	39	0	o	Crushed limestone	
						0		Clay, silty, moist, stiff, lt olive brown (2.5Y5/8), (fill)	378.5
						-		(1.1-2.0 ft bgs) clay (65%) gravelly (35%), stiff, yellowish red (5YR4/8) FIL	
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)	373.5
				BG	27	0		Clay, silty, med stiff, moist, olive yellow (2.5Y6/8), lt gray (2.5Y7/2) mottles	
			100.0	BG	48	2.4			
			100.0	2	63	2.1			
10			100.0	BG	79	2.4		Silt, clayey, to clay, silty, stiff, moist, olive yellow (2.5Y6/8), lt gray (2.5Y7/2) mottles	368.5
			100.0	BG	53	3.4			
15			100.0	BG	45	0.0		Clay, silty, med stiff, moist, yellowish brown (10YR5/8), v pale brown (10YR7/3) and lt gray (10YR7/1) mottles, tr black (10YR2/1)	365
			100.0	BG	1	1.7		(17.0-19.1 ft bgs interval) Clay, silty, moist, stiff, pale yellow (2.5Y7/3), olive yellow (2.5Y6/8) mottles	
			100.0	BG	25	0.0			
20			100.0	2	43	0.0		Clayey gravel grads to silt/sd. Dense gry (10YR5/1) yish brn (10YR5/8)	358.4
			100.0	BG	23	5.2		Gravelly sand, poorly sorted yish brn (10YR5/8) no indication of g-water.	358.5
			100.0	BG	25	5.5			
			100.0	BG	25	4.5			
			100.0	3	42	0.0		Clay, silty to sandy (5-10%) moist, stiff, rdsh yel (7.5YR6/8)	355
25			100.0	3	42	0.7		Sand (95%) well sorted, ang, qtz, tr gravel (1-3%) moist, dense, rdsh yel	353.8
			100.0	4	38	0.7		Sand (95%) well sorted, ang, qtz, tr gravel (1-3%) moist, dense, rdsh yel	353
			100.0	4	38	1.1		Clay, sandy, moist, stiff, brnsh yel (10YR6/8) gry (10YR6/1)	352
			100.0	4	67	0.3		Sand (95%), fn-v.fn, well sorted, dense, yish brn (10YR5/8) v. pal. brn (10YR5/8) (no indication of groundwater)	351
			100.0	4	67	0.5			
30			100.0	4	88	0.0		Sand, well sorted, suba, qtz (80%) silt (20-25%) clay (10%) trs grv, subr; poorly sorted; brn yel (10YR6/8) lt gry (10YR7/1) motid lower 1.0FT.	349
			100.0	4	88	0.0			347.7
			100.0	2	62	1.3		Sandy gravel, moist, dense, rdsh yel (7.5YR6/8)	346.5
			100.0	2	62	1.3		Silty sand, strg brn (7.5YR5/8) gry (7.5YR7/1) motid	345.8
			100.0	1	4	6.2		Sandy gravel; strng brn (7.5YR4/8)	344.9
35			100.0	1	4	6.2			343.8
			100.0	2	8	4.3		Silt; f. sand (40%) trs clay (10%) moist, firm, lt gray (7.5YR7/1)	340.5
			100.0	2	8	3.5		Sand, poorly sorted, tr gravel (5%) moist, dense, yel (2.5YR7/8)	340
			100.0	4	3	0.3		Gravelly sand, yl brn (10YR5/8) to Lt brn (10YR6/4)	340.5
40			100.0	4	3	0.0		Clay (75%) sand (15%) tr silt/grv; moist, stiff, lt yish brn (2.5Y6/3)	338.5
								Silty sand; trs clay/gravel moist dense olive yel (2.5Y6/8)	

# 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: Rotasonic

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)
				1	1	3.4			338.5
			100.0	3	28	11		Sandy gravel silt (10%)moist,dense,lt yish brn (2.5Y6/4)	337.5
						11		Gravelly sand strg brn (7.5YR5/8)w/white (7.5YR8/1)	336.5
						16		Clay:silt;fn sand (30%)moist,stiff,strg brn (7.5YR5/8)	335.5
45			100.0	1	34	0.9		Silty sand moist strgbrn (7.5YR5/8)gry (7.5YR7/1)motid	
			100.0	BG	2	0.3			
						1.4			
			100.0	BG	BG	2.6			
						0.5			
50			100.0	BG	BG	0.0		Silt:moist,firm,snng brn (7.5YR5/8)sum/white (7.5YR5/8)blk (7.5YR)	330.5
						0.0			
						0.0			326
								T.D. = 50.5 ft	
55									
60									
65									
70									
75									
80									

# Boring 400-014

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -412.0000 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: Rotasonic	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)
0						00			
0			50	-	-	02		GRAVEL (50%)SAND (20%)CLAY (30%)DK RED (2.5YR4/6)MOIST FIRM	
5						05			3751
			100	BG	BG	74		SILT:GRN.GREY (10YR6/1)GRAD-PALE	
						72		YEL (2.5Y7/3)-DK.YEL.BRN (10YR4/4)M.FRM	
						74			
						85		SILT/SL CLAYEYEL BRN ((10YR5/4)MOLT PAL BRN. (10YR6/3)MOIST	
10			100	BG	BG	858		M.STIFF	
						1825			
						1400			
						200			
			100	04	08	275			
15						310			
						180			
			40	BG	BG	45			
						80			
						300			
20						135		SILT/SL.CLAY/W.SCAT.SAND 5% GVLY10% GREY (10YR6/1)MOIST STIFF.	
			100	BG	50	40			
						375			
						200			3555
25						30		SAND 80%M-F W/20% SILT:CLAY STRONG BRN (7.5YR5/3)MST.	354
			88	BG	BG	150			3535
						175		SAND 70%M-C.GRAVEL (20%)SILT:CLAY (10%)STG.BRN (7.5YR5/6)MOIST	
						10		GRAVEL (40%)SBRD-SUBAG,SAND (20%)SILT:CLAY (40%)YEL. (10YR7/8)MOIST	
						20		GRAVEL (80%)SAND (25%)M-C.SILT:CLAY (15%)STG.BRN/PINK (7.5YR7/3)	
30			88	BG	BG	40			
						00			3485
						32		SAND (50%)GRAVEL (40%)SBRD-SUBAG.SILT (10%)PINK (7.5YR7/3)TO STR.BRN	
			88	04	BG	50			
35						10			345
			88	04	BG	18		GRAVEL (45%)SAND (45%)M-L.SILT:CLAY 10% RDSH.YEL (7.5YR6/8)LT.GRY MOTLING (7.5YR7/1)MOIST.	
						40			
						110		GRAVEL (80%)SAND (30%)M-C.SILT:CLAYVRN YEL.	3415
40			88	BG	BG	75			

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# Boring 400-015

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4330.0000 E, -1756.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Abert/T. Streufert</i>
Started at: <i>0915 on 10-03-97</i>	Surface Elevation: <i>378.00 feet msl</i>
Completed at: <i>1500 on 10-09-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>43.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			100%	-	-	-		Crushed Limestone	
			75%	-	-	-		Sandy Gravel; (2.5YR4/6) dark red	
5			35%	BG	BG	84		Silt & Clay; (10Y6/1) greenish gray	
						32			
						104			
						86		Silt & Clay; (10YR6/1) gray, molted to (10YR5/3) yellowish brown	
10			85%	BG	BG	285			
						353			
						672			
			100%	2	BG	10			
15						94		Silt & Clay; (10YR5/4) yellowish brown, molted to (10YR6/2) light brownish gray	
						98			
			70%	BG	BG	53			
						103			
						100			
20			90%	BG	BG	55			
						124			
						123			
						186			
						182			
25			100%	BG	BG	220		Sand & Clay with trace of Silt; (7.5YR5/9) strong brown, with (7.5YR7/1) light gray molting	358
						94			
						74			
						65		Sand & Silt; (7.5YR5/8) strong brown, (7.5YR7/1) molted light gray	352.5
			100%	BG	BG	14		Sandy Gravel; (7.5YR5/6) strong brown	
						4			
30			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
						48			
						43			
			100%	BG	BG	54		Silt (75%), Sand (20%), & Clay (5%); (10YR6/4) light yellowish brown, (10YR5/8) molted yellowish brown, & (10YR7/1) light gray	346.5
						44			344.5
35						37		Gravelly Sand; (10YR6/6) brownish yellow	343
			55%			122		Sandy Gravel; (10YR6/8) brownish yellow, (10YR5/6) yellowish brown, & (7.5YR4/6) strong brown	343
						33			
						150			
40						16			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: Rotasonic	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)
19	X		100%			19	     	Clay & Silt with trace of Sand grading to Clay; (10YR5/8) yellowish brown, (10YR7/1) mottled light gray	338
48									
45								T.D. = 43.0	
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: Rotasonic

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- <i>msl</i> )
							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		374.5
			35	BG	32	9			
10						25	Silt, that is Clayey: (10Y8/1) greenish gray, (10YR6/2) brownish gray, to (10YR5/6) yellowish brown		
			50	BG	28	55			
15						0			
			60	BG	32	0			
20						0			
			70	BG	8	0			
25						0			
			80	BG	38	0		Silt, that is Clayey & has a trace of Sand; (7.5YR6/8) reddish yellow, (7.5YR6/1) mottled to gray	
30						0			
			100	BG	BG	17		Clay (50%) & Silt (45%) with trace of Sand & Gravel: (10YR5/6) yellow- ish brown, (10YR7/1) mottled light gray	355.5
35						12			
			95	BG	BG	0		Gravelly Sand; (7.5YR5/8) strong brown	352
40						0			
			100	2	BG	5		No Recovery	348.5
45						22		Clayey Sand; ((7.5YR6/8)reddish yellow, (7.5YR7/1)mottled light gray, & (2.5YR4/8) mottled red	
			100	BG	BG	23			
50						0			
			100	BG	BG	23		Gravelly Sand; (10YR6/6) brownish yellow	343.5
55						0			
			95	2	150	0		Sand; (10YR7/6) yellow; at the bottom (7.5YR5/8) strong brown	342.5
60						0			
						0		Clay & Gravel; tr Sand/Silt; (10YR6/1) gry	341.3
65						0			339.7

# Boring 400-016

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		25	86	122	0		No Description	
45			25	2	88	82	+	Clay & Silt with trace of Sand; (7.5YR5/8) strong brown, (10YR7/1) mottled light gray, & (10YR7/8) mottled yellow	337.5 336.7
45								No Recovery	
50								T.D. = 44.7	
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: Vibracore	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
<div style="display: flex; flex-direction: column; align-items: center;"> <span>0</span> <span>10</span> <span>15</span> <span>20</span> <span>25</span> <span>30</span> <span>35</span> <span>40</span> </div>				B6	-	27		No Recovery		<p style="text-align: center;">1" 10 Schedule 40 PVC Riser</p> <p style="text-align: center;">No. 5 Sand Filter Pack</p> <p style="text-align: center;">Bentonite Grout (30" dia)</p>

1 Sch 40 PVC Scr

# 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: Vibracore	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 44.5 feet
Geologist: E. 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		
50										
55										
60										
65										
70										
75										
80										

# Boring 400-018

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (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	-376.2
5							5	Silt with some Clay; (10Y5/1) greenish gray	
			90	BG	BG		25		
							8		
			90	BG	BG		18		
10							5	Silt & Clay; (10YR5/4) yellowish brown	-369.5
							20		
			90	BG	BG		6		
							6		
15							8		
			85	BG	45		2	Clay; (10YR5/3) yellowish brown, (10YR6/1) molted gray, & (10YR2/1) black	-363
							1		
							7		-360.5
20							5		
			100	BG	BG		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		
							15		
30							0	Clayey Sand; (10YR5/6) yellowish brown, (10YR7/2) light gray	-350
			85	BG	BG		0	Silty Sand; (7.5YR7/2) pinkish gray	-349
							0		
							0	Gravelly Sand; (7.5YR5/3) strong brown	-346.5
35							0		
			70	BG	BG		0		
							0		
							3		
			65	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: Rotasonic					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
45						0		T.D. = 43.0		-336
50										
55										
60										
65										
70										
75										
80										

# Boring 400-019

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
0			-	BG	BG	0		Clayey Gravel w/Sand; subang; prly sorted chert; med grn; moist; (2.5YR4/8) dk rd	
0			-	BG	BG	0			
0			-	BG	BG	0			
5			-	BG	BG	3		Silt, slightly Clayey; Manganese Mineralization; v dry, hard; (10YR6/3) p brn, mtld & laminae (10YR5/8) yel brn	371.3
10			-	BG	BG	0			
			0	-	-	-		No Recovery	368
15			-	BG	BG	4		Silt, slightly Clayey; Manganese Mineralization; dry, semi-hard; (10YR6/2) lt brn gry, (10YR6/8) brn yel mtlg	364
20			-	BG	BG	1			
			-	BG	BG	1		Gravelly Sand, w/Silt; fn grn quartz; ang/subrnd; (10YR6/4) lt yel brn Gravelly Sand, w/Silt; fn/med grn quartz; subrnd/subang (Max 40MM); semi-dry; (10YR5/4) yel brn	360
25			-	BG	BG	0			
			-	BG	BG	5		Same as above, but (10YR6/6) brn yel	
30			-	BG	BG	0		Silt & Clay, w/Sand & Gravel; fn grn; (10YR6/8) brn yel, (10YR7/1) lt gry	354
35			-	BG	BG	0			
			-	BG	BG	0		Sandy Gravel, w/Silt & Clay; subrnd/subang (Max 30MM); fn/med grn quartz; (7.5YR5/8) strg brn, (5YR4/8) yel rd, (7.5YR6/1) gry mtlg	351.2
40			-	BG	BG	0			
			-	BG	BG	3		Gravelly Sand; subrnd/subang; (7.5YR5/8) strg brn, (10YR7/6) yel Gravelly Sand; med/crs grn; subang/rnd chert & quartz; (7.5YR5/6) strg brn	344
			-	BG	BG	0			



# 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: Rotasonic	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			-	BG	BG			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
45			-	BG	BG			Sand; fn/med grn quartz; (7.5YR5/8) strg brn, (10YR5/8) brn yel, (10YR6/1) gry, mtlg slightly micaceous	335.2
0								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: Rotasonic	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			23	BG	BG	0		Clayey Gravel, w/Sand; subrnd/subang chert; med grn; (2.5YR4/8) dk rd	
5			33	BG	BG	0			
10			95	BG	bg	0		Silt, slightly Clayey; (10YR6/4) lt yel brn, (10YR7/2) mtid lt gry	372
15			-	-	-	0		No Recovery	368
20			98	BG	BG	0		Silt, slightly Clayey; (10YR5/6) yel brn, (10YR6/1) mtid gry	364
25			85	BG	BG	0		Clay, w/Silt & Sand, tr fn grn; (10YR7/6) yel, (10YR5/6) yel brn, (10YR6/1) mtid gry	360
30			0	-	-	3		Silt, w/Clay, Gravel, & Sand; ang/subrnd chert; fn/med grn; (10YR5/8) yel brn, (10YR6/1) mtid gry, (7.5YR5/8) strg brn	357.2
35			100	BG	BG	2		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')	356
40			83	BG	BG	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	352
45			83	BG	BG	2		Silty Sand; fn grn; (10YR7/6) yel	348
48			83	BG	BG	4		Gravel & Sand, w/ Clay & Silt; rnd/subang chert; med/crs grn quartz; (7.5YR5/8) strg brn, (10YR6/8) mtid brn yel	344
						2			342.7
						2			340

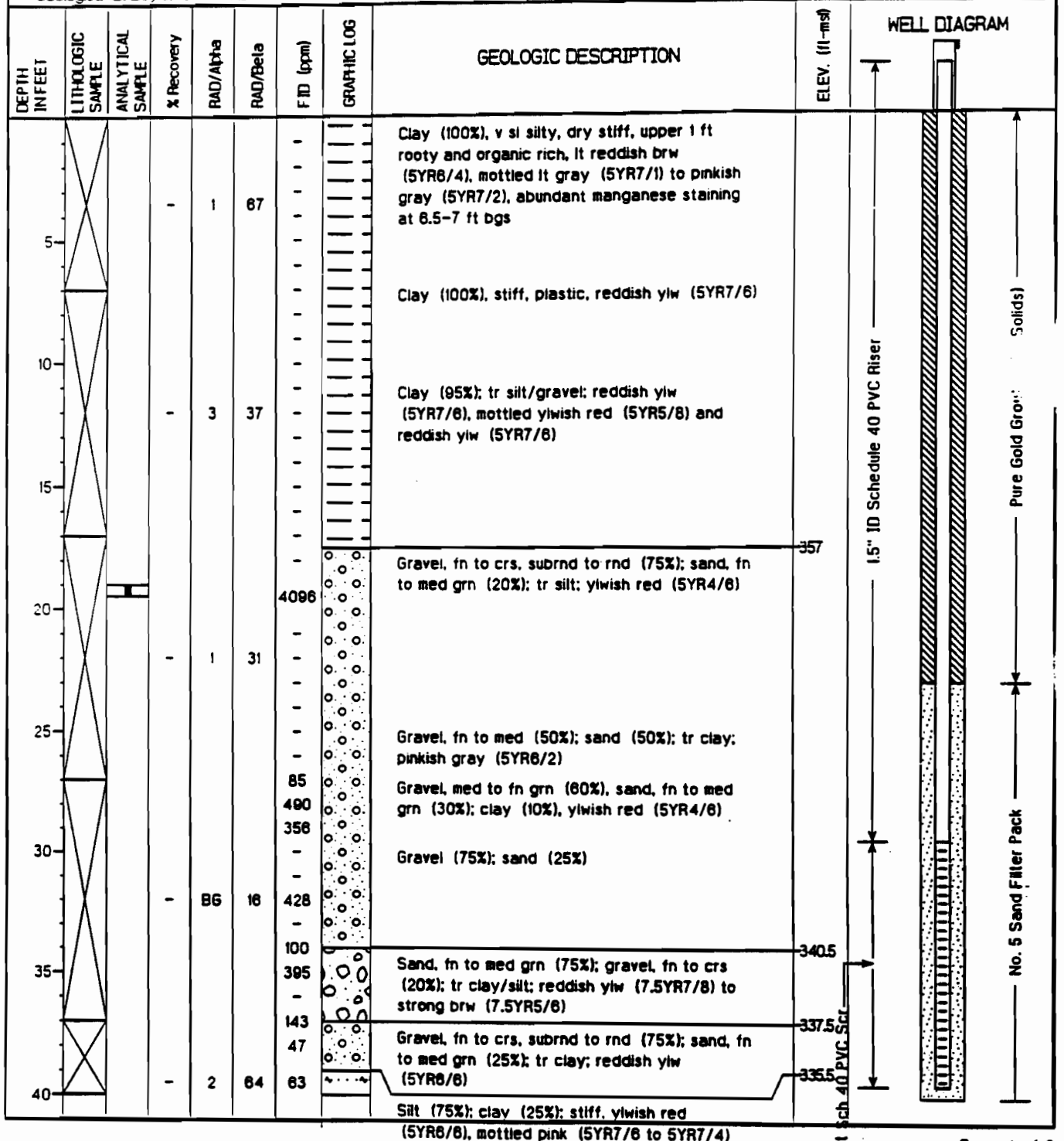
# Boring 400-020

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
45	X	I	88	BG	BG	28		Gravel & Clay, w/ Silt & Sand; ang/subrnd (Max 30MM); Clay Matrix around Gravel: (7.5YR5/8) strg brn, (7.5YR5/8) gry matrix	338
45	X	I	-	BG	BG	8		Clay, w/ Silt & Sand; fn grn micaceous; (7.5YR5/8) strg brn, (7.5YR8/1) mtld gry	
50						25		T.D. = 48.0	
55						20			
60									
65									
70									
75									
80									


# Piezometer 400-021

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4565.0000 E -1244.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>374.50 feet msl</i>
Started at: <i>0750 on 07-22-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1320 on 08-28-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>410 feet</i>
Geologist: <i>D. Doyle/R. McCamb</i>	Well Screen: <i>29.5 to 39.5 feet</i>



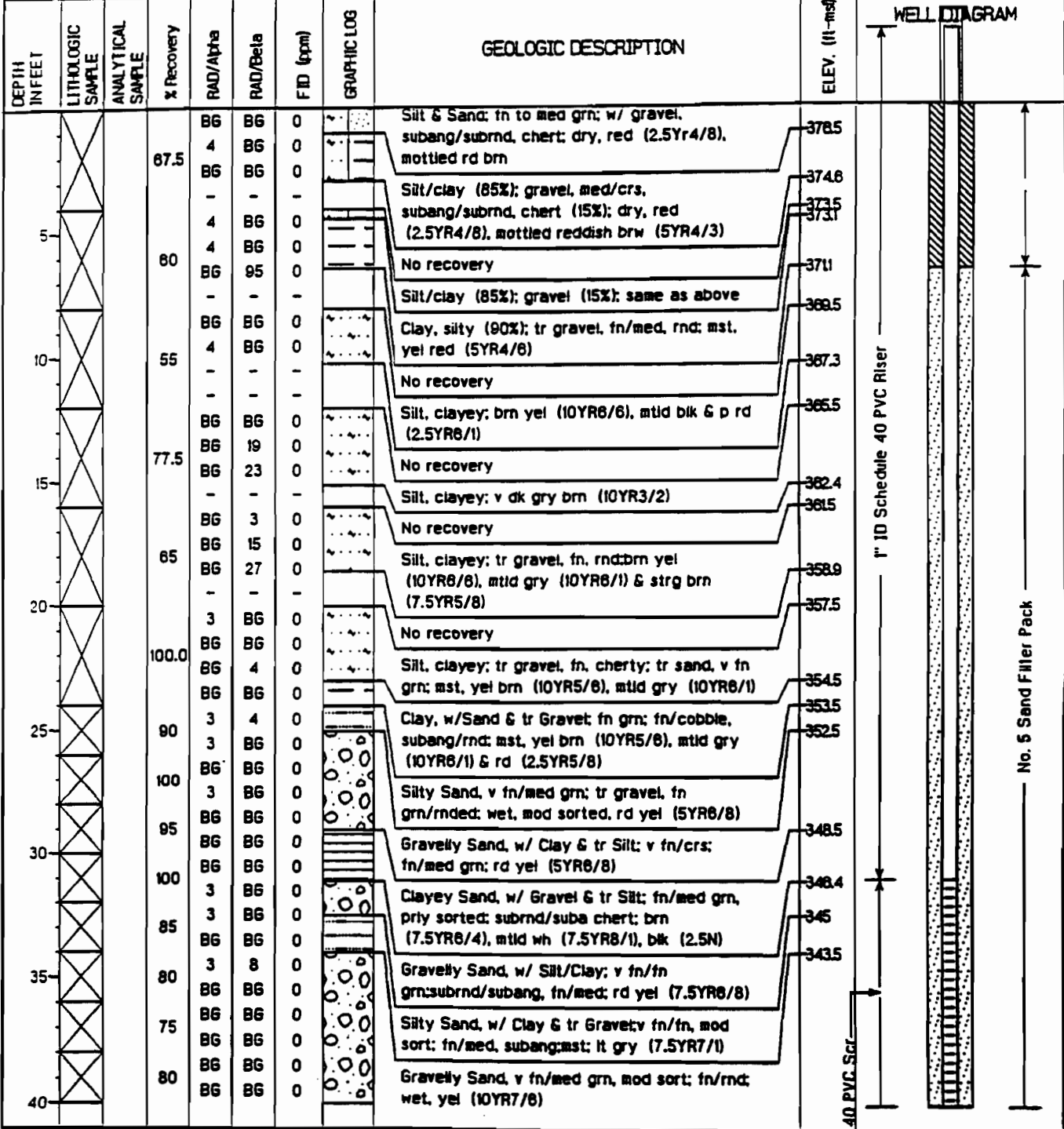
# Piezometer 400-021

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4565.0000 E -1244.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>374.50 feet msl</i>
Started at: <i>0750 on 07-22-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1320 on 08-28-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>410 feet</i>
Geologist: <i>D. Doyle/R. McCamb</i>	Well Screen: <i>29.5 to 39.5 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
	X					80 44		T.D. = 41.0 ft	3335	 y
45										
50										
55										
60										
65										
70										
75										
80										

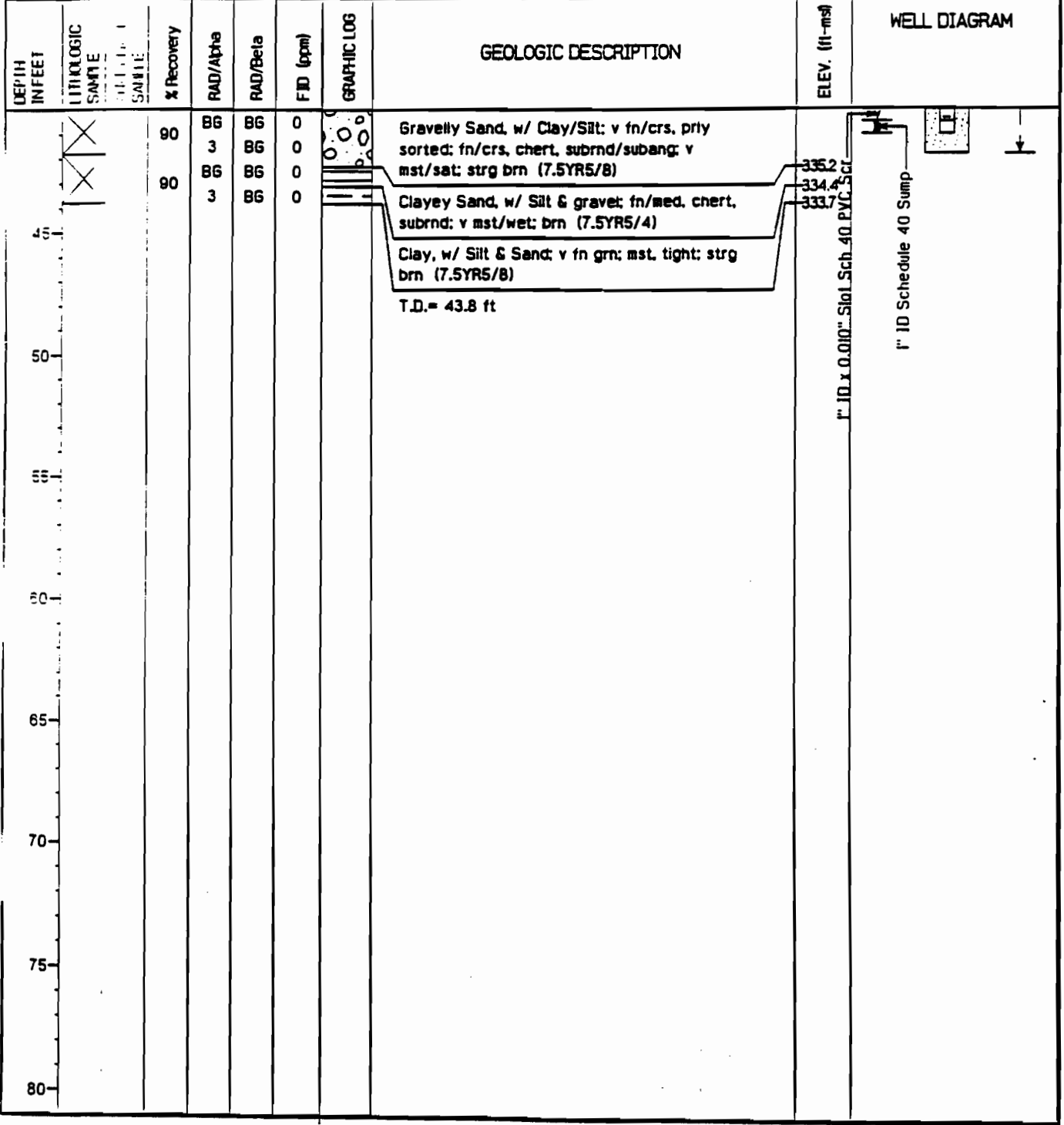
# Piezometer 400-022

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



# Piezometer 400-022

Project: <i>Polucan Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-422.0000 E, -112.0000 N</i>
Location: <i>Polucan, KY</i>	Surface Elevation: <i>377.50 feet msl</i>
Started at: <i>1535 on 09-16-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1500 on 09-22-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>43.8 feet</i>
Geologist: <i>J. Bergeron</i>	Well Screen: <i>31 to 40.5 feet</i>



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 07-16-87	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)	WELL DIAGRAM
5								No Recovery		<p>40 PVC Scr</p> <p>1" ID Schedule 40 PVC Riser</p> <p>No. 5 Sand Filter Pack</p>
10										
15										
20										
25										
30										
35										
40										



		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	
Start Date: 1310 on 07-16-97		TOC Elevation: NA feet msl	
Completion 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: J. Doyle/B. Bergeron		Well Screen: 31.4 to 40.9 feet	

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

# Piezometer 400-026

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4100.0000 E, -553.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>378.50 feet msl</i>
Started at <i>1215 on 07-29-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at <i>1500 on 09-06-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>44.5 feet</i>
Geologist: <i>D. Doyle/B. Bergeron</i>	Well Screen: <i>33.5 to 43.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)	WELL DIAGRAM
5								No Recovery		<p style="text-align: center;">1" ID Schedule 40 PVC Riser</p> <p style="text-align: center;">No. 5 Sand Filter Pack</p>
10										
15										
20										
25										
30										
35										
40										

1 Sch 40 PVC Scr

# Piezometer 400-026

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4100.0000 E, -553.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>378.50 feet msl</i>
Started at <i>1215 on 07-29-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at <i>1500 on 09-06-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alkance</i>	Total Depth: <i>44.5 feet</i>
Geologist: <i>D. Doyle/B. Bergeron</i>	Well Screen: <i>33.5 to 43.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
45								T.D. = 44.5 ft		
50										
55										
60										
65										
70										
75										
80										

# Piezometer 400-027

Project: <i>Paoucan Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-3965.0000 E, -1798.0000 N</i>
Location: <i>Paoucan, KY</i>	Surface Elevation: <i>378.00 feet msl</i>
Started at: <i>0854 on 09-09-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1500 on 09-11-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibracore</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>45.0 feet</i>
Geologist: <i>B. Bergeron</i>	Well Screen: <i>34 to 43.5 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
5								No Recovery		
10									1" ID Schedule 40 PVC Riser	
15										
20										
25										
30										
35										
40										
									No. 5 Sand Filter Pack	
									Sch 40 PVC Scr	

Piezometer 400-027

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

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. = 45.0 ft		<p>1" ID x 0.010" Slot Sch 40 PVC Scr 1" ID Schedule 40 PVC Sump</p>
50										
55										
60										
65										
70										
75										
80										

# Boring 400-030

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5								No Recovery	
10			66.3	BG	BG	0	•••••	Silt (85%); clay (35%); damp, reddish ylw (7.5Yr7/8), mottled lt gray (7.5YR7/1)	363.4
				-	-	-		No recovery	
15			100.0	BG	BG	0	•••••	Silt (85%); clay (35%); same as above	362
				3	BG	0	•••••		
				BG	BG	0	•••••		
20								No recovery	358
25									
30									
35									
40									

								Boring 400-030		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4465.0000 E, -1661.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>B. Bergeron</i>		
Started at <i>0741 on 09-25-97</i>								Surface Elevation: <i>376.00 feet msl</i>		
Completed at <i>1500 on 09-25-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibracore</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>42.9 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
45								T.D. = 42.9 ft		
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: Vibracore	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
5								No recovery		<p>10" Slot Sctn. 40 PVC Scr</p> <p>1" ID Schedule 40 PVC Riser</p> <p>No. 5 Sand Filter Pack</p> <p>Bentonite Grout (30% Solids)</p> <p>RC Sump</p>
10										
15										
20										
25										
30										
35										
40										

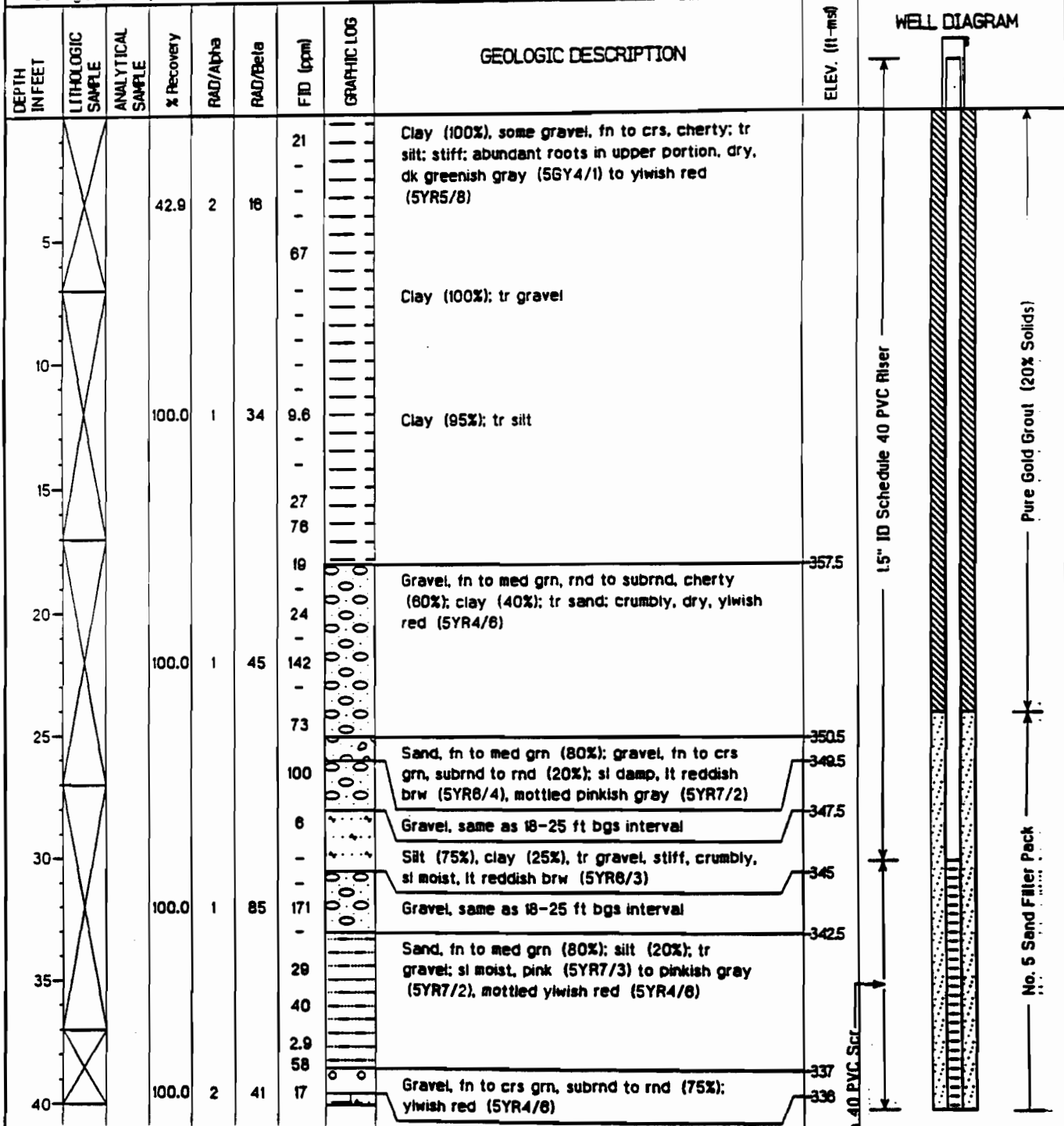


		Piezometer 400-031	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-4398.0000 E, -1575.0000 N</i>	
Location: <i>Paducah, KY</i>		Surface Elevation: <i>378.50 feet msl</i>	
Started at <i>1343 on 09-22-97</i>		TOC Elevation: <i>NA feet msl</i>	
Completed at <i>1500 on 09-25-97</i>		Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>413 feet</i>	
Geologist: <i>E. Bergeron</i>		Well Screen: <i>30 to 39.5 feet</i>	

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. = 41.3 ft		
50										
55										
60										
65										
70										
75										
80										

# Piezometer 400-033

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4450.0000 E -280.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>375.50 feet msl</i>
Started at: <i>0745 on 07-25-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1330 on 08-26-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>410 feet</i>
Geologist: <i>D. Doyle/R. McComb</i>	Well Screen: <i>30 to 40 feet</i>





Clay (50%); silt (50%); tr sand, fn grn; stiff, mottled reddish yiw (5YR7/8) to dk reddish gray (5YR4/2)

3" Slot Sch. 40 PVC Scr.

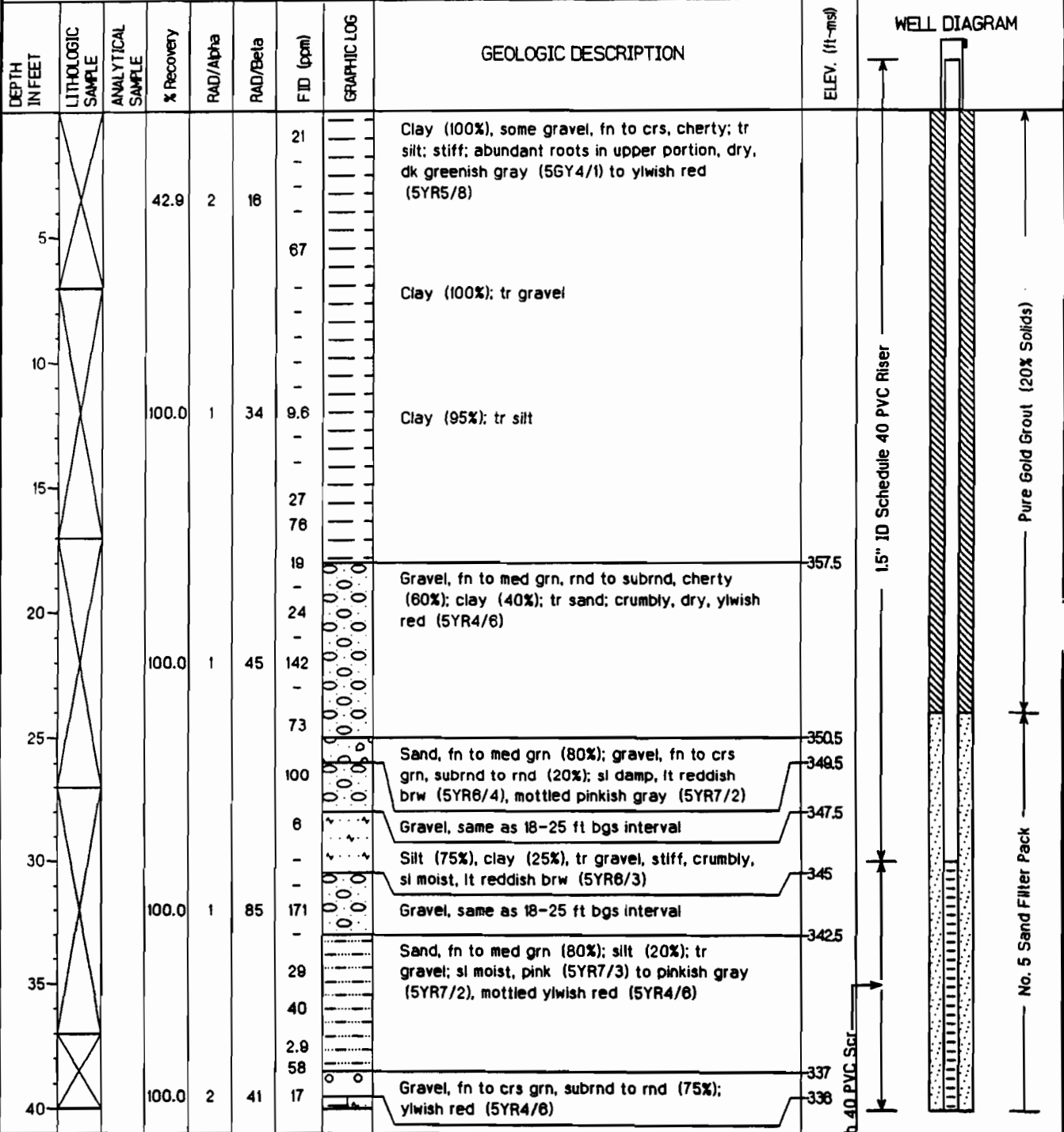
Piezometer 400-033

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
	X					32	+	T.D. = 41.0 ft	3345	 
45										
50										
55										
60										
65										
70										
75										
80										

# 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: 410 feet
Geologist: D. Doyle/R. McComb	Well Screen: 30 to 40 feet



Clay (50%); silt (50%); tr sand, fn grn; stiff, mottled reddish ylw (5YR7/8) to dk reddish gray (5YR4/8)

# Monitoring Well 400-033

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
	X					32		<div style="border-bottom: 1px solid black; padding-bottom: 5px;">T.D. = 41.0 ft</div>	3345	
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)
5				-	-	0		For lithologic descriptions see log for Monitoring Well 400-208		
10										
15										
20										
25										
30										
35										
40										

# Boring 400-034

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

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

# Boring 400-034

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

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



# Boring 400-034

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
125				B6	B6	-			
130				B6	B6	-			
135								T.D. = 131.0 ft	
140									
145									
150									
155									
160									

# 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- <i>msl</i> )
0			-	BG	3	-	○ ○	Limestone Gravel	378
5							○ ○	Silt & Clay, moist, firm, & stiff: (10YR5/3) moist brn	
10							○ ○		
15							○ ○		
20							○ ○		
25							○ ○		
30							○ ○		
35							○ ○	Silt, Clay, & Sand; Sand fn coarse, poorly sorted, subang; (10YR5/6) yel brn	
40							○ ○		337

# Boring 400-035

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
33									
33.8								Sand, Silt, & Gravel, with traces of Clay (11-20%); poorly sorted, rounded; (2.5Y6/1) gry	
								Silt & Clay; (10YR5/3) brn	
45									
50									
55									
60				BG	15	-		Gravel chert (1/8-1/2 inch), rounded, priy sorted, traces of Silt & Clay	38
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	ELEV. (ft-msl)
85				BG	15	-	○ ○ ○ ○ ○	Gravel chert (1/8-1/2"), rounded, prly sorted, tr of Silt & Clay	
90				2	30	-	○ ○ ○ ○ ○	Silt & Clay with trace of Sand, fn to crs, poorly sorted, subang; (10YR5/6) yel brn	280
95								Clay (black), with trace of Sand, fn to med, subang, firm & moist	285
100				3	60	-	○ ○ ○ ○ ○	Silt & Clay with trace of Sand (21-25%), fn to med, subang; (5Y5/3) olive	280
105				3	40	-		Clay (black), with traces of Sand, fn to med, subang, firm & moist	274
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- <i>msl</i> )
				1	5	-			
								Silt & Sand, v fn, Sand blk, ang, quartz, well sorted	255
125				1	37	-		No Description Available	252
130				1	BG	-			
135				2	22	-			
140								T.D. = 136.0	24
145									
150									
155									
160									

# Boring 400-036

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4409.0000 E, -1607.0000 N
Location: Paducah, KY	Geologist: D. Doyle/RMcComb
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	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
				BG	BG	0		Clayey Gravel; (10YR6/8) brownish yellow	377.5
			65%	BG	81	-		Gravel and Clay; (2.5YR5/6) red, (2.5YR5/1) black	
5						54		Clay (75%), Gravel (25%); (5P7/1) light bluish gray, (2.5YR5/6) clay	372.5
						85		Clay (80%) stiff, Silt (20%); (10YR8/2) very pale brown to (10YR6/8) brownish yellow	
						344			
						343			
10						439			
				BG	53	70		Clay (80%), Silt (20%); (10YR5/4) yel brn, (10YR7/2) lt gry	
						4			
						140			
						660			
15						848			
						384			
						130			
						154			
						443			
						90			
20						45			
						1834			
				BG	43	1262			
						1822			
						1490		Gravelly Sand; (2.5YR5/8) red to (7.5YR6/8)	355
25						493			
						969		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		Silt (80%), Sand (20%); (10YR6/8) brn yel, (10YR8/2) v p brn	348.5
						1019			
				BG	32	498		Silty Sand; (10YR6/8) brownish yellow	346.5
						1238			
						2360			
35						1132			
						1080		Sandy Gravel; (10YR6/2) light brownish gray	342.5
						273			341.5
						442		Gravelly Sand	
						648			
40						537		Silty Sand; (10YR6/8) brownish yellow	339.5

# Boring 400-036

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
				BG	38	57			337.5
			-			971		Silt and Clay; (5YR5/8) yellowish red to (5YR7/1) light gray	337
						53		Silt w/Clay	
						51			
45						88			
						123			
						118			
						0		Silty Sand; (10YR6/8) brn yel, molted to (10YR7/1) lt gry	331.5
50						22			
						31			
				1	34	18			
						30			
						20			
55						88		Sand, medium/coarse grains	324.5
						49		Silt (75%) Clay (25%); (10YR6/8) brownish yellow	323
						71			
						6			
						22		Silty Sand; (5YR6/8) reddish yellow	320.5
60			80%	2	21	12		Sand, med/crs grains; (10YR5/8) yellowish brown	319
						137			
						134			
						319			
65			70%	BG	5	-		Gravelly Sand; (2YR5/8) red	314.5
						222			
						161			
						128		Gravel and Sand; (10YR5/8) yellowish brown	311.5
						392			
70			80%	1	BG	-			
						102			
						247			
						229		Gravelly Sand; (10YR5/8) yellowish brown	308.5
75			100%	BG	22	-			
						82			
						530		Gravel, fn/crs grn, subang/subrnd; sand med/crs, subang/subrnd, qtz & chert sand; tr clay/silt; (10YR4/4) dk yel brn	301.5
80			90	BG	8	206			300

# Boring 400-036

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85			-	BG	28	413 444 97 368 350 304		Sand med/crs, qtz, chert sand; Gravel fn/crs subang/subrnd, cherty tr silt & clay; (10YR5/8) yel brn	
						398		Sand med/crs quartz, chert, tr fn pebbles, mst tr mica (10YR8/8) brn yel	291.5
90				BG	18	50 40 28 25 20 7.1		Gravelly Sand; fn/crs; up to 2" subing/subnd; Sand, crs, quartz & cherty, mst (10YR5/6) yel brn; Clay at base mst	290
95				BG	35	4.9 19 3 18 2		Clay (100%), firm hard mottled, (10YR6/3) p brn, (10YR7/8) p brn, (10YR7/8) yel appears biotcated, same silt (10YR4/4) dk yel brn	285.5
100				2	57	44 48 33		Silt (75%) clay (25%), trace of sand; (5Y6/8) olive yel	278.5
105				4	31	6 22 24		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
						11 15 1		Silty-sand; (2.5Y7/2) lt gry, (2.5Y6/6) olv yel (10R8/3) pink	272
110				BG	BG	13		Clay (10B7/1) lt blu gry	269 268.5
						10		Silty Sand; (10R4/8) red, (10R6/6) lt red	267.5
115				24	1	14 0 3		Sand and Silt (10YR7/3) v pale brn (10YR7/8) yel	
						0 5 8		Clay (10B4/1) dk blu gry Clay; (5GY4/1) dk grn gry (10GY6/1) SILT LAM ODOR Clay w/ Silt; (5GY4/1) dk grn gry (10GY6/1) grn gry	264
120				BG	66	7 10			



# Boring 400-036

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4409.0000 E, -1607.0000 N
Location: Paducah, KY	Geologist: D. Doyle/RMcComb
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)
125			60	3	34	14		Silty Sand (10GY6/1) grn gry	258.5
						14			
						2			
						14			
130			-	BG	15	20		Silty Sand, (5GY5/1) grn gry (10Y2.5/1) grn blk	
						8			
						13			
						20			
135			-	3	50	61		Clay (100%) (N3/1) dk grn gry (10Y6/1) grn gry	243.5
						01			
						21			
						13			
140			-	BG	60	5		Clay (95%) Stf hard (5PB3/1) dk blu gry; Silt 5% (5PB6/1) blu gry	
						0			
						0			
						0			
145						0		T.D. = 142.0	238.5
						0			
						0			
						0			
150									
155									
160									

		<b>Boring 400-037</b>	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-4116.0000 E, -1783.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle/T. Streufert/J. Albert</i>	
Started at <i>0845 on 10-04-97</i>		Surface Elevation: <i>379.00 feet msl</i>	
Completed at <i>1530 on 12-09-97</i>		Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe/Air Rotary</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>96.0 feet</i>	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								For lithologic descriptions see log for Boring 400-207	
5			87.5	-	-	0 5 875 480 91 98			
10									
15									
20									
25									
30									
35									
40									

		Boring 400-037	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-416.0000 E, -1783.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle/T. Streufert/J. Albert</i>	
Started at <i>0845 on 10-04-97</i>		Surface Elevation: <i>379.00 feet msl</i>	
Completed at <i>1530 on 12-09-97</i>		Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe/Air Rotary</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>96.0 feet</i>	

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	FIID (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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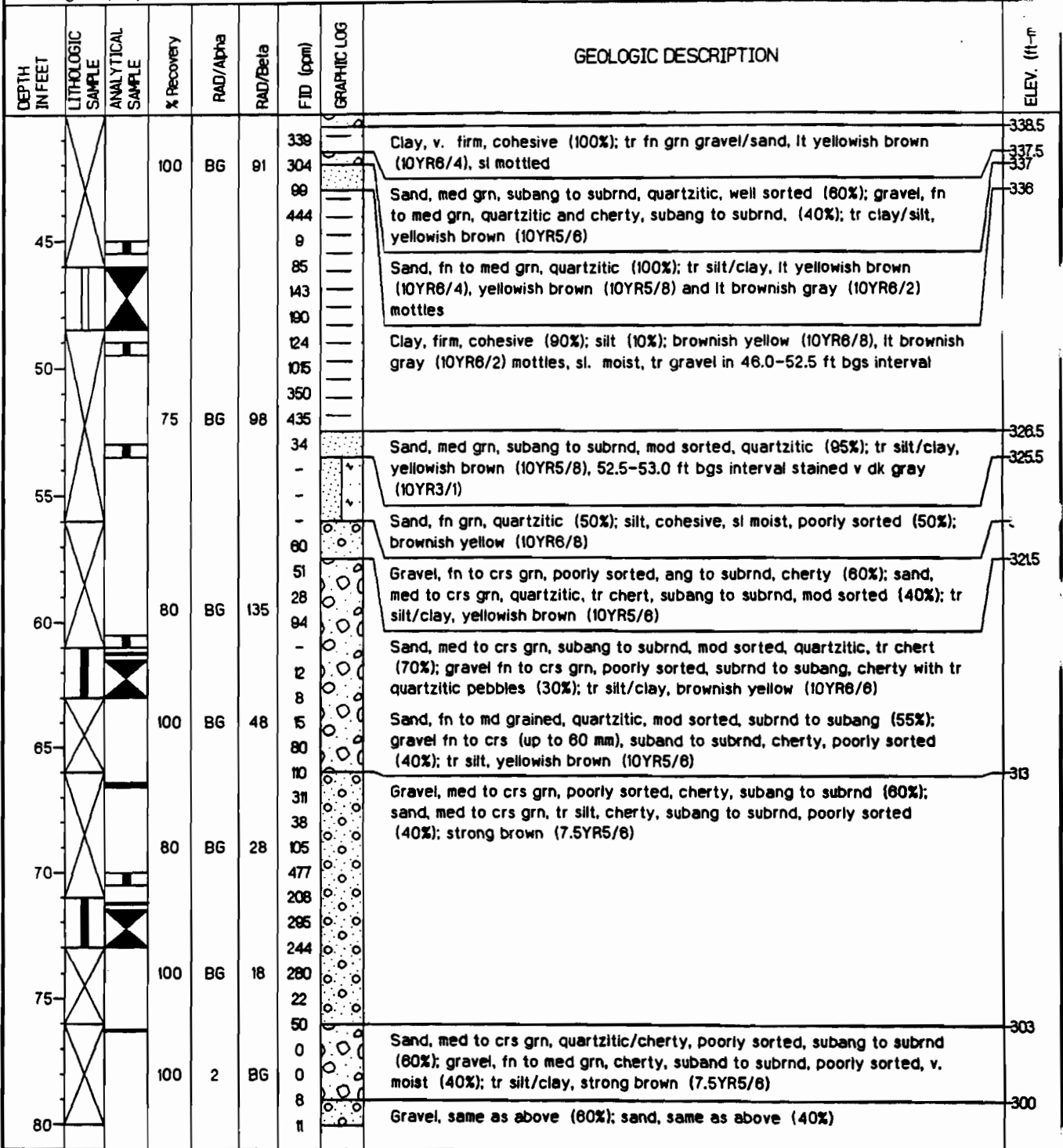
# Boring 400-038

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: Vibraprabe/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	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft)
0				BG	BG	0		Clay, brittle, moist, (60%); gravel, fn to crs grn, ang to subrnd, cherty (40%); strong brown (10YR4/6)	378
0				BG	104	0		No recovery	
5			33.3						
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	373
10			100	BG	150	0			
15						4		Clay, firm, sl. moist, cohesive (90%); tr silt; tr gravel, cherty, fn to med grn, rndd to subang; lt yellowish brown (10YR6/4), yellow (10YR7/8) and light gray (10YR7/1) mottle	
20			100	BG	98			Sand, fn to med grn, poorly sorted, quartzitic (70%); silt (20%); clay (10%), yellowish brown (10YR5/6) to lt gray (10YR7/1), sl. moist	358
25								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	358
28						0			
30			100	BG	139	3		Gravel, fn to med grn, subang to subrnd, mod sorted, cherty (50%); clay, firm, sl moist (40%); tr silt, dk yellowish brown (10YR4/6)	348
35						121		Sand, med to fn grn, quartzitic, mod to poorly sorted (80%); gravel, fn to med grn, subang to subrnd, cherty (20%); tr clay/silt, brownish yellow (10YR6/8)	347
378						378			345.5
754						754			
208						208		Gravel (50%); clay (40%), same as 31.0-32.0 ft bgs interval	
285						285			
282						282			
665						665			
444						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



# Boring 400-038

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft)
85			100	BG	4	-		Sand, med to crs grn, mod sorted, subang to subrnd, quartzitic, cherty (70%); gravel, fn to med grn, mod sorted, cherty, tr quartz, subang to subrnd, moist (30%); tr silt, brownish yellow (10YR8/6) Sand (50%); gravel (50%), same as above	298
90			100	BG	20	-		Sand, v fn grn, poorly sorted, quartzitic, micaceous, yellowish brown (10YR5/8) (70%); clay, v firm, hard, cohesive, gray (5Y5/1) (30%); tr silt, sl moist	294
95			100	BG	20	8		Clay, v dense, firm, cohesive, gray (10YR5/1) (100%) Sand, med to crs grn, sl micaceous, mod well sorted, quartzitic, ang to subrnd (95%); tr clay (5%); moist, white (10YR8/1) Sand as above, finer grn, yellowish brown (10YR5/8)	288 287 285
100			100	2	70	1		Clay, firm, v dense, gray (10YR5/1) (50%); interlamated with silt (50%); tr v fn sand	280
105			100			3		Sand, med to fn, mod sorted, micaceous, quartzitic, subrnd to subang, (80%); silt (20%); tr clay, somewhat cohesive, moist, lt gray (10YR7/1)	
110			100			7		Sand, as above, reddish yellow (7.5YR8/8) to yellow (10YR7/8) (90%); clay, firm, soft occurs as v thin, rare laminae in sand, lt gray (10YR7/1)	
115			100	BG	82	0		Sand, as above, poorly sorted (70%); silt (20%); clay (10%); v moist, yellowish brown (10YR5/8)	
120						0		Clay, v firm, hard, gray (5Y5/1) (80%); silt, v fn grn, micaceous, (20%)	282



# Boring 400-038

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
125	X	X	100	-	-	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)	
130	X	X	100	-	-	0		Clay, as above (90%); silt as occasional 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 1.5 inches large	
135	X	X	100	BG	90	0		Clay, v dense, hard (100%); tr silt, greenish gray (1G6yN5/1) to black (1G6y2.5N), occasional carbonaceous material	
140	X	X	100	BG	90	0		Lignitic layer, dense, crumbly, black (1G6y2.5N), woody structures	
143.5	X	X	100	BG	90	0		Shelby Tube, no description available	238
145	X	X	100	BG	90	0		T.D. = 143.5 ft	
150	X	X	100	BG	90	0			
155	X	X	100	BG	90	0			
160	X	X	100	BG	90	0			

								Boring 400-039		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-3943.0000 E, -1072.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle/T. Streufert</i>		
Started at <i>1500 on 08-27-97</i>								Surface Elevation: <i>377.50 feet msl</i>		
Completed at <i>1500 on 11-24-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibroprobe/Air Rotary</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>1410 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
5				BG	BG	0		For lithologic descriptions see log for Monitoring Well 400-212		
10										
15										
20										
25										
30										
35										
40										

# Boring 400-039

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-3943.0000 E, -1072.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle/T. Streufert</i>
Started at: <i>1500 on 08-27-97</i>	Surface Elevation: <i>377.50 feet msl</i>
Completed at: <i>1500 on 11-24-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe/Air Rotary</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>1410 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (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 400-100

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-3943.0000 E, -1072.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle/T. Straufert</i>
Started at <i>1500 on 08-27-97</i>	Surface Elevation: <i>377.5 feet msl</i>
Completed at <i>1500 on 11-24-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe/Air Rotary</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>1410 feet</i>

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

# Boring 400-103

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -3943.000 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)
125				BG	BG	-			
130				BG	1	-			
135				6	BG	-			
140				BG	BG	-			
145								T.D. = 141.0 ft	
150									
155									
160									

# Boring 400-040

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -442.0000 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: Rotasonic/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	FIID (ppm)	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	
5			50	BG	BG				
8								Silt, v moist, soft; (10Y6/1) grn gry	371
9									
10								Clay & Silt, moist & firm, scattered Manganese Mineralization; (10YR4/6) dk yel brn, (10YR5/1) mottled gry	369
15			100	BG	32				
20								Same as above, with Iron, Manganese Mineralization (25-26 ft)	
25									
30			100	BG	134			Silt, with Clay & tr fn Gravel, extensive Iron, Manganese Mnerizton (20-30 ft); (10YR5/4,5/8) yel brn, (10YR6/2) lt brn gry	351
35									
40								Silt w/ Clay & Sand, tr Gravel subrnd, well sorted; (10YR5/8) yel brn, (10YR5/8) mottled gry	340
								Sand & Gravel w/ Clay, med/crs grn quartz, subrnd/subang, poorly sort chert (Max 60MM); (7.5YR4/6,5/8) strg brn	

# 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: Rotasonic/Sanhole	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	FD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
0			100	BG	19	0		Sand & Gravel w/ Clay, med/crs grn qtz, subrnd/subang, priy sorted chert (Max 80MM); (7.5YR4/8.5/8) strg brn	
5						0			
10						0			
15						0			
23						0			
29						0		Sandy Gravel, subrnd/subang (Max 50MM) poorly sorted, med/crs grn chert & quartz; (7.5YR5/8) strg brn	33
30						0			
32						0			
34			100	BG	8	0		Gravelly Sand, med/crs grn quartz, med (30MM) mod well sorted subrnd/subang; (10YR6/8) brn yel, (10YR5/8) yel brn	324
40						0			
44						4		Silty Sand; (10YR5/8) yel brn	321
46						3			
50						3		Gravelly Sand, w/ Silt, fn/crs grn, rnd/subrnd quartz, chert, well sorted (15-20MM); (7.5YR5/8) strg brn	319
52						2			
54						9		Same as above; med/crs grn chert & quartz, subrnd/subang, mod well sorted; (10YR7/2) lt gry, (10YR5/8) mottled yel brn	
56						0			
58						0			
60			100	BG	BG	0		Same as above; (10YR6/3) p brn, (10YR5/8) mottled yel brn	
62						0			
64						0		Silt w/ Clay & Gravel, rnd/subang quartz, chert mod well sorted (Max 30MM), med/fn grn quartz; (7.5YR4/8) strg brn	301
66						0			
68						0			
70						3		Clay w/ Silt & Sand, tr Gravel, fn grn quartz; (10YR6/8) brn yel	299
72			100	BG	BG	3			
74						5			
76						8			
78						10			
80						0			

# Boring 400-040

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -442.0000 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: Rotasonic/Stanhole

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	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85			100	B6	55	31		Clay w/ Silt & Sand: (7.5YR5/8) strg brn	
						9			
						0			
						0			
						0		Same as above (84-86 ft); but (10YR6/3) p brn	
						6			
						3			
90			100	B6	43	28			
						0			
						8			
						7			
						22			
95						0		Clay w/ Silt & Sand: (7.5YR4/6) strg brn, (10YR6/6) mottled brn yel	
						0			
						0			
						5			
100			100	B6	19	14			
						0			
						0			
						1			
						3			
105						0		Same as above, but (7.5YR5/6) strg brn, only	
						0			
						0			
						0			
						0			
110			100	B6	1	0		Silt w/ Clay, Sand, & Gravel, fn/med grn chert & quartz, subrnd, poorly sorted (Max 50MM) oxidation Iron staining: (7.5YR5/8) strg brn, staining (10YR3/1) v dk gry	206
						4			
						14			
						0			
115						5		Sandy Gravel, tr Silt, subrnd/subang, poorly sorted (Max 80MM), med/crs grn quartz, chert, Iron staining (123-124 ft); (10YR5/8)yel brn	201
						0			
						0			
						50			
						4			
120									



# Boring 400-1000

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -442.0000 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 01-2-98	Depth to Groundwater: NA feet bgs Measured: NA
Drilling Method: Rotasonic/Slant-hole	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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)	
125			80	BG	32	15		Sandy Gravel; subang/subrnd chert (Max 90-100MM); prly sorted; med/crs grn chert, quartz; mst/sat; (10YR5/8) yel brn		
130			85	1	BG	18				
135						27				
140			90	-	-	30				
145						33				
150			80	5	BG	38				
155						40				
160						45				
						50				
						55				
						60				
						65				
						70				
						75				
						80				
						85				
						90				
						95				
						100				
						105				
						110				
						115				
						120				
						125				
						130				
						135				
						140				
						145				
						150				
						155				
						160				
						165				
						170				
						175				
						180				
						185				
						190				
						195				
						200				
						205				
						210				
						215				
						220				
						225				
						230				
						235				
						240				
						245				
						250				
						255				
						260				

# Boring 400-040

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (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	214	
						25		Clay, w/ Silt, Gravel & Sand; (10YR5/1) gry, (7.5YR5/8) mtid strg brn		
						0				
165						52		Clay, w/ Clay & Silt; semi-mst, stf; (10YR5/1) gry		
						27				
						5				
						0				
170			100	BG	25	0		Clay, w/ Sand & tr Silt; (5Y4/2) olive gry, (10YR5/2) mtid gry brn, (10YR5/8) yel brn		
						0				
						0				
175						0				
						0				
						0				
180			100	BG	103	0		Clay & Silt, w/ Sand; fn grn quartz; slightly mst, stf; (10YR5/8) yel brn, (10YR5/3) mtid brn	192	
						0				191
						0			Clay, w/ Silt & Sand; fn grn quartz; mst/frn; (10YR6/3) p brn, (10YR5/1) mtid gry, (10YR5/8) yel brn	189
						0				
185						0				
						0				
190			100	BG	128	0		Silty Sand, w/ Clay; fn/med grn; semi-mst; (10YR5/8) yel brn, (10YR7/8) mtid yel		
						0				
						0				
195						0		Same as above, but (7.5YR5/8) strg brn, (10YR7/8) mtid yel, (10YR6/8) brn yel		
						0		Same as above, but some (10YR5/2) gry brn mtig		
						0				
						0				
200						2				

# Boring 400-040

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -442.0000 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: Rotasonic/Stanhole	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	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
205	X		95	BG	54	0		Clay & Silt, w/ Sand; fn grn micaceous; (2.5Y5/1) gry. (10YR5/8) mtld yel brn	75
						0		Same as above, but (2.5Y3/1) v dk gry. (2.5Y7/1) lt gry	
						0			
						0			
						0			
								T.D. = 206.0	71
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/Beta	F ID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
50								FILL GRAVEL, SAND	377.7
30								CONCRETE RUBLE ZONE	
39				BG	99			CLAYEY GRAVEL (2.5YR4/8)	375.5
82								CLAY W/SILT (2.5YR4/8)GRN GRY	
150									
40									
78									3715
414								SILT (80%)F.GRAIN/CLAY (20%) (10YR5/1)	
369									
10				BG	133				
639									
818									
358									
429									
689									
14									
59									
168									
20				BG	131				
33									
65									
171									
243									
724									
126									
25								SILT (90%)CLAY (10%) (10YR3/2)V.DK GRN BRN	
78									
13									
35									
08									
85									
30				BG	62			GRAVELLY SAND (10YR6/3) PALE BRN	348.5
31									
141									
191									
18									
25									
35									343.5
15								SILT & CLAY, (10YR5/8)YEL BRN & (10YR6/1)GRY	
38									
45								SILT (70%)CLAY (30%) GRAVEL (10%) (10YR5/8)	
83									
94									
40				BG	65				
36									

# 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/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
57						57			337.5
34						34		SAND/GRAVEL PALE BRN (10YR6/3)70%@15%	
157						157			
343						343			
09						09		SILT & CLAY (7.5YR5/8), (10YR5/8) RED AND (7.5YR6/3)LT BRN	333.5
00						00			
03						03			
05						05			
00						00			
50			-	BG	40	06			
						13		SILT (60%)SAND (30%)GRAVEL (10%) (7.5YR4/6)STRONG BRN/ (7.5YR7/1)LT GRY	327
						14			
						5		SILT (40%) GRAVEL (40%) SAND (20%) (7.5YR4/6)STRONG BRN	324.5
55						00			
						23		CLAYEY SAND, (10YR6/8)BRN YEL W/ (10YR6/1) GRY	322
						49			
						2			
						43			
60			-	BG	37	83			
						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		SAND 100% BRN YEL (10YR6/8)	310.5
						0			
						0		GRAVEL (60%) SAND (10%) SILT/CLAY (30%)BRN YEL	310.5
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		SAME AS ABOVE/STRONG BROWN (7.5YR4/6)& (7.5YR5/2)	300.5
						223			
						485		CLAYEY SAND (7.5YR4/6)STRONG BRN	299
80			-	BG	44	55		GRAVELLY SAND STRONG BRN (7.5YR5/8)	299

# Boring 400-041

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85			-	B6	87	421		CLAY W/GRAVEL FINE TO MED (10YR4/4)DK YEL BRN W/ (10YR6/1)GRY MTX CLAY	298
						391			
						80			
						598			
						18			
						23			
						64			
						78			
						126			
						50			
90			-	B6	87	07		CLAY (70%)SILT (30%)FINE TO COARSE (7.5YR5/8)STRONG BRN  LT.GRY SOME MOLTING IN UPPER 2'OF INTERVAL (7.5YR3/1)	
						04			
						40			
						54			
						00			
						5			
						5			
						06			
						58			
						278			
100			-	1	175	318		SILT (70%)FIRM CLAY (30%)FIRM HARD (10YR5/8)YEL BRN  SILTY SAND (10YR5/8)YEL BRN,HEV.MOLT. (10YR3/1)V.DK GRY  (10YR6/8)BROWNISH YELLOW.	2815
						82			
						219			
						113			
						106			
						40			
						44			
						27			
						89			
						12			
110			-	B6	124	89		SAND W/10%SILT (10YR6/8)BRN/YEL (7.5YR6/8)REDDISH YEL (7.5YR3/1)DK GRY	
						33			
						21			
						18			
						11			
						06			
						11			
						00			
						11			
						11			
115			-	B6	97	11		GRAVELLY SAND,FINE TO MED. (10YR4/4)DK YEL BRN	283.5
						06			
						11			
						00			
120			-	B6	97	11			

# Boring 400-041

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						00			257.5
						28		SANDY GRAVEL MED.-COARSE, (10YR5/4)YEL BRN	
125						25			
						179			
						104			
						308			
						206			
130			-	BG	88	272			
						827			
						494			
						500			
						272			
135						545			
						23			
						214			
						101			
						m			
140			-	BG	63	148			
						188			
						142			
						107			
						58		GRAVELLY SAND, (10YR5/8)	235.5
145						233		(10YR6/8)BRN YEL	
150			-	BG	62	-			
155									
160			-	BG	41	-			

# Boring 400-041

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

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



# 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: Vibraprabe/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)
205								CLAYEY SAND: (10YR5/8) YEL BRN W/ (10YR7/8) YEL BANDING, TR SILT	174.5
								SAND MED-COARSE: (10YR6/8) BRN YEL W/ (10YR4/4) DK YEL BRN STAINIG	17
210			-	BG	BG			CLAY (80%), SILT (20%); (5Y4/1) DK GRY, SILT (10R7/2) PALE RED	88
215								SILTY SAND: (10YR7/8) YEL W/ (10YR7/2) L.GRY	82
								CLAY (90%) VERY DARK GRAY (5Y3/1)	59.5
220			-	BG	BG			SAND W/CLAY (5Y3/1) V.DK GRY (10R8/1) WHITE; SAND (10YR7/4)V.PALE BRN, MARBLE TEXTURE	55
225								SILTY SAND: (10YR6/8) BRN/YEL, W/ (10YR6/2) LT.BRN.GRY	53.5
								T.D.=225FT	
230									
235									
240									

# Boring 400-042

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
				5	236	0	○ ○	Concrete	377.4
								Limestone gravel fill, v poorly sorted, 1/8 to 2 inches, tr silt/ sand (1-10%)	376.8
5								No recovery	
10									
15								Silt, clay	363.5
20									
25								Silt, clay; tr gravel, 1/4 to 1/2 inch, rnded, mod sorted (1-10%), brown (10YR5/3)	
30								Silt, clay; tr 1/8 to 1/4 inch gravel and crs sand, ang, poorly sorted, brown (10YR5/3)	
35								Silt, clay; sand, v fn to crs, poorly sorted, ang (21-35%), brown (10YR5/3)	
40								Silt, clay; mixed with chert gravel, 1/8 to 1/2 inch, poorly sorted, rnded (approx. 50%); brown (10YR5/3)	

# Boring 400-042

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -482,000 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)
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)	335.5
50								Silt, clay, v dk brown (10YR3/2)	321.5
55								Gravel, chert with 21-35% silt and clay, ang, 1/8 to 3/4 inch, poorly sorted	317.5
65				BG	BG	-			
70				2	187	-			
75				BG	57	-			
80									

# Boring 400-042

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	TV (ft-msl)
85				6	7	-		Gravel, chert with 21-35% Silt and Clay, ang. 1/8 to 3/4 inch, poorly sorted	
90								Sand and clay, fn to med grn, mod sorted, subang, brown (10YR5/3), some gray clay	291
95								T.D. = 93.5 ft	285
100									
105									
110									
115									
120									

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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: 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)
0				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)	
0.9									
5			42.9	1	113			Clay (95%); tr silt/gravel; firm, dry, reddish brw (5YR5/4), mottled pink (5YR7/3) and dk reddish gray (5YR4/2), manganese stained	
17									
10								Clay (60%); gravel, fn to crs, rnd to subrnd (40%); tr sand/silt; dry to sl damp, ylwish red (5YR5/8)	
18				BG	65				
15								Clay (60%); gravel, fn to crs, rnd to subrnd (40%); tr sand/silt; dry to sl damp, ylwish red (5YR5/8)	
17									
20								Clay (60%); gravel, fn to crs, rnd to subrnd (40%); tr sand/silt; dry to sl damp, ylwish red (5YR5/8)	
27				1	BG	5031			
25								Clay, stiff (75%); gravel, cherty, fn to crs (20%); tr sand/silt; lt brw (7.5YR6/4) to strong brw (7.5YR5/6)	
32									
30								Sand, fn to med grn (85%); silt (15%); tr clay; sl gravelly near top 1 ft, tr gravel at 32-33 ft bgs, pale ylw (2.5Y7/3)	347.5
33									
35				BG	BG	11		Clay (65%); gravel, fn to crs, rnd to subrnd, cherty (35%); stiff, dry, ylwish red (5YR5/6)	341.5
59									
35								Clay (65%); gravel, fn to crs, rnd to subrnd, cherty (35%); stiff, dry, ylwish red (5YR5/6)	
64									
40								Gravel, fn to med (75%); sand, fn to med grn (25%); tr silt/clay; lt reddish brw (5YR6/4)	337.5
204									
40								Sand, fn to med gr (90%); tr silt/clay; gravelly near base (40- 40.5%), reddish ylw (5YR6/6)	336.5
104									

# 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)
45			-	BG	BG	97	Clay (90%); silt (10%); firm, dry, (5YR6/8) mottled to (7/8), sl manganese staining near 45.5 ft bgs	334	
45						83			
45						28	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	
50							Sand, fn to med grn (100%); lt gray (2.5Y7/1), mottled ylwish red (5YR5/6)		
50							Sand, v fn to fn grn (50%); silt (50%); tr gravel; ylwish brw (10YR5/4)		
55						0	No description available		
55			-	BG	BG	220			
65						191	Sand, fn to med grn (60%); gravel, fn to crs, subrnd to rnd, cherty, (30%); tr silt/clay, ylwish brw (10YR5/6)	325	
70							Sand, fn to crs grn, subang to subrnd, quartzitic (95%); lt ylwish brw (10YR6/4)	307.5 306.5	
70							Sand, med to crs grn, subang to subrnd (60%); gravel, fn to crs grn, subang to subrnd (40%); lt ylwish brw (10YR6/4); at 70-72 ft bgs sand (50%), gravel (50%)		
75						428	Gravel, fn to med, ang to subrnd (80%); sand, crs to med (20%); dk ylwish brw (10YR4/6)	302.5 301.5	
75						310	Sand, med to crs grn, subang to subrnd, quartzitic, cherty (100%); tr fn gravel, (10YR6/6)	299.5	
80				2	15	300	Gravel, fn to crs, subang to subrnd (75%); sand, med to crs grn, subang to subrnd (20%); tr clay/silt, dk ylwish brw (10YR4/6)		

# Boring 400-043

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
85						24			288.5
47								Sand, v fn to fn grn (95%); tr silt/clay, ylwish red (5YR4/6)	288.5
85								Clay (95%); tr sand/gravel; dk greenish gray (5GY4/8), mottled ylwish red (5YR5/8)	286.5
108								Clay (50%); silt (50%); tr fn grn sand; blueish gray (10BG5/1), mottled pale green (5G6/2)	282.5
90						2			282.5
92.0								T.D. = 92.0 ft	



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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 DESCRIPTION	ELEV. (ft-MSL)
0				BG	BG	0			-374
31						0		Clay	-373
61			70%	BG	BG	61		Clay (75%) firm, moist; gravel (25%); (10YR5/6) yellowish brown, (10R4/8) red	
81						81		Clayey sand; (10YR7/3) molted with (10YR6/8) brownish yellow and (10YR7/1) light gray	
13						13			
24						24			
64			-	BG	BG	64		Clayey silt; heavily molted (10YR2/1) black to (10YR7/1) light gray to (10YR5/3) brown & (10YR5/8) red	
0						0			
26						26			
28						28			
30						30			
86						86		Sandy Gravel	-358.5
77						77			
90						90			
17						17			
139						139		Gravelly Sand, fine to medium grained	-350.5
262						262			
51						51		Sandy Gravel	-348.5
70						70		Sand (50%) fine grained, silt (40%), clay (10%)	-347
68						68			
618				BG	BG	618			
-						-			
235						235			
153						153		Sandy Gravel	-341.5
241						241		Sand	-340.5
27						27			
14						14			
44						44			-335.5

# Boring 400-044

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Silt; (5YR6/8) reddish yellow molted to (5YR7/3) pink & (5YR7/1) gray	335.5
			-	-	-	30			
						76			
45						45			
						170			330.5
						4		Sand, fine to medium grained	
						201			
						18			
						14			
50			-	BG	BG	12		Silt (75%), Clay (25%), trace of Sand	326
						10			
						58			323.5
						54		Silty Sand	
						71			
55				BG	BG	230			
						388			
						63		Sand, fine to medium; (5YR4/8) yellowish red	318.5
						81		Sandy Gravel, fine to coarse	317.5
60				BG	BG	197			
						40			
						43		Sand (95%), trace of fine Gravel; (10YR4/8) dark yellowish brown	313.5
						39			
65						38			310.5
						80		Gravel; Sand (5%), Sandy Silt (5%)	
						53			
						30			
						34			
70				BG	BG	38			
						17			
						18		Gravelly Sand	303.5
						28		Gravel; trace of coarse sand	302.5
75						66		Gravelly Sand	301.5
						22			
80				BG	BG	38			

# 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 DESCRIPTION	ELEV. (ft-msl)
88							88		
86							86		
85			-	3	BG		85	Sandy Gravel; trace of Clay, moist (10YR5/6) yellowish brown	293.5
90							90	Clay, very moist; trace of gravel, plastic trace Silt; (10YR5/4) yellowish brown, (10R4/6) red staining, (10B5/1) bluish green mottling	287.1
92.0							92.0	T.D. = 92.0	283.5

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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- <i>msl</i> )
		I		5	97	0	○ ○ ○ ○	Limestone gravel fill	
5		▲		138	BG	0	- - - -	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
		I	100	4	BG	0.4	- - - -		
10						3.7	- - - -		
						0.3	- - - -		
						0.5	- - - -		
15							- - - -		
20							- - - -		
25							- - - -		
30							- - - -		
35							- - - -		
40							- - - -		




# Boring 400-045

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

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							-		
55							-	Chert gravel, poorly sorted, subangular; silt and clay; brown	322.5
55							-	Sand, fine to medium grained, with approx. 30% silt and clay, sorted, subangular	321.5
60							-		
65							-	Chert gravel, 1/8 to 3/4 inch, poorly sorted, rounded to subangular; silt and clay (20%); fine to coarse grained sand (20%)	314.5
70							-		
75				2	72		-		
80				B6	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	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85				1	137	-		Chert Gravel, 1/8-3/4 inch, poorly sorted, rounded to subangular; Silt & Clay (20%); fine to coarse grained Sand (20%)	
90				86	86	-			
95								Clay; silt (21 to 35%); trace fine grained sand, subangular, sorted, blueish gray (6/1)	283.5
100								T.D. = 98.5 ft	278
105									
110									
115									
120									



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# Boring 400-046

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

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	[Symbol]	Clay & Silt; (10YR5/3) brn	
10							[Symbol]		
15							[Symbol]		
20							[Symbol]		
25							[Symbol]	Clay & Silt; (2.5YR6/2) lt brn gry	
30							[Symbol]	Clay; brn gry	348.5
35							[Symbol]		
40							[Symbol]	Sand with Silt, & Clay; (10YR5/3) brn	342.5
							[Symbol]	Clay, with some Silt & Sand; (10YR5/3) brn	340.5

# 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- <i>msl</i> )
45									
50									
55									
								Gravel with a little Silt & Clay; (10YR5/3)	321.5
60								Sandy Gravel; (10YR4/6) dk yel brn	38.5
65									
70								Sandy Gravel, with trace of Silt	
75									
80									298.5

		Boring 400-046	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-4030.0000 E, -1566.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle</i>	
Started at <i>0830 on 07-29-97</i>		Surface Elevation: <i>378.50 feet msl</i>	
Completed at <i>1400 on 11-03-97</i>		Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Air Rotary</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>85.0 feet</i>	

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

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								Boring 400-047	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4072.0000 E, -1476.0000 N</i>	
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>	
Started at <i>0730 on 10-18-97</i>								Surface Elevation: <i>378.50 feet msl</i>	
Completed at <i>1000 on 10-22-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Air Rotary</i>								Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>								Total Depth: <i>96.0 feet</i>	
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) No Description Available	377.5
5									
10									
15									
20								Clay, silty; tr sand, fn to med grn, subang, poorly sorted (1- 10%); brown (10YR5/3)	358.5
25									
30									
35								Sand, silt, fn, subang, mod sorted, lt gray (10YR7/1)	344.5
								Clay, sandy, fn, subang, 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

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

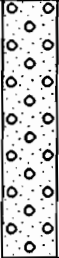

Drilling Method: Air Rotary

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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
33.85								Clay, sandy, same as 35-36 ft bgs interval	33.85
45								Sand, silt, clay	33.5
50									
55									
60				BG	BG	-		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
65				1	BG	-			
70				BG	BG	-			
75				1	BG	-			
80									

Boring 400-047										
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>					Coordinates: <i>-4072.0000 E, -1476.0000 N</i>					
Location: <i>Paducah, KY</i>					Geologist: <i>D. Doyle</i>					
Started at <i>0730 on 10-18-97</i>					Surface Elevation: <i>378.50 feet msl</i>					
Completed at <i>1000 on 10-22-97</i>					Depth to Groundwater: <i>NA feet bgs</i>		Measured: <i>NA</i>			
Drilling Method: <i>Air Rotary</i>					Groundwater Elevation: <i>NA feet msl</i>					
Drilling Company: <i>Alliance</i>					Total Depth: <i>96.0 feet</i>					
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
85				3	BG	-		Gravel, chert, 1/8-3/4 inch; Sand, fn to v crs grn (11-20%); Silt/Clay (11-20%); poorly sorted, ang to subrnd		
90				3	BG	-		Sand, med grn; clay (McNary)	280.5	
95								T.D. = 96.0 ft	282.5	
100										
105										
110										
115										
120										



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# Boring 400-048

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

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	
5			15	1	BG				
32									372
8								Clay (85%) firm, Silt (15%); (10YR6/6) brownish yellow, slightly moist	
10									
13									
50			-	BG	BG			Clay (95%) firm, Silt (5%); (10YR7/1) light gray to (10R5/8) red and (10YR2/1) black; overall (10YR6/6) brownish yellow	
42									
5.8									
20								Clay, firm, slightly moist (10YR5/8) yellowish brown; Iron stained to (10R6/6) light red	
79									360
68								Gravelly Sand	
133									
84			-	BG	BG				
166									358
2								Silt (50%); Sand and Clay (50%); (2.5YR6/6) light red, clay (2.5YR7/1) light reddish gray	354.5
74									
107								Silty Sand (2.5YR6/6) light red, (2.5YR7/1) light reddish gray	
114									
8									
34									
78								Sand (80%) fine to fine grained, Silt (10%) fine to medium, Gravel (10%)	
172									
22			-	2	BG				
114									
38								Silt (60%) fine grains, Clay (40%) stiff	344
58									
14									
46									341
17								Gravelly Sand	340.5
5.9									
89								Gravel and Clay; trace of Sand; (2.5YR7/1) light reddish gray	

# Boring 400-04

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -3944.0000 E, -421.0000 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: NA
Drilling Method: Rotasonic	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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45			-	BG	BG	250			335
45			-	BG	BG	84		Sand and Gravel; (2.5YR4/4) reddish brown	335
50			-	BG	BG	293			330
50			-	BG	BG	18		Sand, fine to medium grains; (2.5YR5/8) red to (2.5YR7/3) light reddish brown	330
50			-	BG	BG	18			330
50			-	BG	BG	8		Sand, medium to coarse grains; (2.5YR5/6) red to (2.5YR3/2) dusty red	330
50			-	BG	BG	7			330
55			-	3	BG	31			322
55			-	3	BG	33		Gravelly Sand; (2.5YR5/6) red	322
60			-			77			318.5
60			-			90		Gravel and Sand both medium to coarse; (2.5YR5/6) red moist	318.5
60			-			51			318.5
60			-			41			318.5
60			-			42		Gravelly Sand; (5YR5/8) yellowish red	318.5
60			-			179			318
60			-			70		Sandy Gravel; (5YR5/8) yellowish red to (2.5YR4/6) red	318
65			-	1	BG	134			
65			-	1	BG	44			
65			-	1	BG	18			
65			-	1	BG	98			
65			-	1	BG	98			
65			-	1	BG	30			
65			-	1	BG	14			
70			-	BG	3	60			
70			-	BG	3	60			
75			-	BG	3	41			
75			-	BG	3	5		Sandy Gravel; (5YR5/8) yellowish red; (2.5YR5/8) red	
75			-	BG	3	31			
80			-	3	38	38			

# Boring 400-048

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
85	X		0	B6	61	30	○		
	X					88	○		
	X					-	○		
	X					138	○		
	X					87	○		
	X					107	○		
	X					23	○		
90			-	B6	67	18	—	Clay, very stiff; (5PB5/1) bluish gray	290.5
						-	—		289
						22	●	Sand, very fine to fine grains; (10R4/8) red to (2.5YR6/4) light reddish brown	287
						35	●		
						42	●	Sand, fine to medium grains	
95								T.D. = 92.0	
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. 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: Rotasonic

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 (cpm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
			100.0	7	92	0		Crushed limestone	
				2	114	0		Silt, with limestone gravel, dense, sl moist, yellowish brown (10YR5/6) (fill)	
				1	BG	0		(1.3-2.5 ft bgs) - Silt, dry, firm, lt yellow brown (2.5Y6/3) (possible natural soil)	
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	80	0		(4.7-5.5 ft bgs) - Silt, sl clayey, yellowish brown (10YR5/8), lt gray (10YR7/2) mottling (natural soil)	374
			100.0	2	58	6.9		Clay, silty, moist, firm, yellowish brown (10YR5/6)	371.8
				1	55	0		Silt, moist, firm, lt gray (10YR7/1), minor yellowish brown (10YR5/6) mottling grading to brownish yellow (10YR6/6)	368.8
10			100.0	1	BG	0		Clay, silty, moist, stiff, lt gray (10YR7/2), brownish yellow (10YR6/8) mottles	
			100.0	2	61	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				1	10	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%)	
						29			353.3
								Sand, fn to med grn (35%); silt (35%); clay (25%); gravel (5%); dry, yiwish red (5YR4/6)	
30				BG	33			Sand (95%); silt (5%); tr gravel, v well saturated	
						65		Sand (80%); silt (20%); clay (20%); tr gravel; reddish yw (5YR6/8)	
35				BG	BG	0		Sand (90%); silt (10%); reddish yw (5YR6/8), lt blueish gray (10B8/1) mottles	343.3
								Sand (75%); clay (25%); fn to med grn, 5YR5/4	342.3
40				BG	23	0		Clay (60%); sand, fn grn (40%); sl moist, 5YR5/4 mottled to 5PB7/1	340.3




# Boring 400-049

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-3573.0000 E, -1232.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert/R. McComb</i>
Started at <i>0945 on 07-22-97</i>	Surface Elevation: <i>380.30 feet msl</i>
Completed at <i>1440 on 09-10-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>82.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
							○		383.3
							○	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
45			-	BG	13	0	○	Gravel, fn to crs, subrnd to rnd, 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
							○	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	
50			-	BG	BG	0	○	Sand, fn to v fn grn (40%); silt (40%); tr gravel, subrnd	331.3
							○	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)	
			100.0	BG	60	24	○	Sand, fn grn (95%), tr clay, v wet, red (2.5YR4/8)	
55						19	○		
						28	○		
						27	○	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	
						5	○		
60			-	BG	30	5	○		
						20	○		
						20	○		
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)	316.6
							○		
70			-	BG	BG	0	○		
							○		
						18	○		
75			-				○	Sand, fn to med grn (60%); gravel, fn grn (40%); tr silt/clay	308.3
				BG	BG		○		
80			-				○	Gravel, fn to crs, subrnd to rnd (85%); sand, fn to med grn (15- 20%); ylwish red (5YR5/6)	303.3

# Boring 400-0107

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: Rotasonic	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)
85			40	BG	BG			Gravel (90%); sand (10%)	
85						2		Gravel (75%); sand (20%); clay (5%)	
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)	291.3
								T.D. = 92.0 ft	288.3
95									
100									
105									
110									
115									
120									



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# Boring 400-050

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
								Crushed limestone	379
			100.0	BG	BG	.4		Silt, clayey, moist, firm, pale yellow (2.5Y7/3)	
				4	24	7.5			377
5			100.0	BG	28	0		Clay, silty, moist, stiff, olive yellow (2.5Y6/6). (natural soil)	
				5	BG	0			
			100.0	1	BG	0		Clay, same as above, lt gray (2.5Y7/2) mottles	
10			100.0	1	BG	0			
			100.0	1	BG	0		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	7			
			100.0	2	5	7		Clay, same as above, some lt gray (2.5Y7/1) mottles	
15				1	BG	7.8			384.5
								T.D. = 15.5 ft	
20									
25									
30									
35									
40									

# Boring 400-051

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
	X		100	BG	7	0	o	Crushed limestone gravel (road base)	378
	X		100	BG	2	0	o	Silt, clayey, moist, stiff, lt yellowish brown, lt gray mottles (2.5YR6/4), (2.5Y7/2)	
5	X		100	BG	BG	0	o	Silt, same as above, mottled lt gray (2.5Y7/2) and yellowish brown (10YR5/8), (natural soil)	
	X		100	2	23	0	o		
	X		100	1	4	0	o		
10	X		100	3	31	0	o	Silt, clayey, to clay, silty, moist, firm to stiff, lt yellowish brown (2.5Y6/3), mottled lt gray (2.5Y7/2) and yellowish brown (10YR5/8)	370
	X		100	3	BG	0	o	Same as 9.0 to 12.0 ft bgs interval; upper 1.5 ft v moist, soft to firm; lower 1.5 ft moist, stiff	
15	X		100	3	BG	0	o		
	X		100	2	BG	0	o		364
								T.D.= 15.0 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: Rotasonic	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	0	Sod & Topsoil	
			82.8	BG	BG	0	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)	
5			100.0	BG	BG	0	0	Clay, silty; approx. 10% crushed limestone gravel (fill), stiff, moist, brownish yellow (10YR6/3)	376
				BG	12	0	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)	372
10			100.0	BG	BG	0	0	Clay, silty, firm, moist, lt yellowish brown (10YR6/4), mottled lt gray (10YR7/2)	
				BG	BG	0	0		
15			100.0	4	BG	0	0	Silt, clayey, firm, moist, lt yellowish brown (10YR6/4), mottled lt gray (10YR7/2)	368
				BG	BG	0	0		
						0	0	T.D. = 15.0 ft	364.5
20									
25									
30									
35									
40									

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# Boring 400-053

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
								Crushed limestone, some tar	
								Clay, silty, moist, stiff, pale yellow (2.5YR7/3), ylwish brn (10YR5/8) mottles	376.6
5			100	BG	BG			Silt, clayey, to clay, silty; moist, firm, ylwish brn (10YR5/6) lt greyish brn (10YR6/2) mottles, (natural soil?)	
10								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	370
15			100	BG	BG			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	366
20								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)	
25			100	BG	BG			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	355
								Clay w/ silt; tr sand; mst, stf, mtld, yel brn (10YR5/6), blu gry (5PB6/1)	353.2
								Clay, silty, to silt, clayey; tr sand, v fn to med grn (10%); tr gravel; mottled, stiff, mst, yel brn (10YR5/6) to blu gry (5PB6/1)	352
30			100	BG	BG			Clay, silty; tr sand, v fn/med grn; stf, mst, mtlg, yel brn (10YR5/6), dk yel brn (10YR4/6)	348
								Silt (70%); sand, v fn/med grn (20%); tr gravel (2-4 mm); prly sorted, mottled, sl mst, yel brn (10YR5/6) to lt yel brn (2.5Y6/4)	347
35			100	BG	BG			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)	343.5
								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)	342
40			100	BG	BG			Gravel, fn/crs grn, subrnd/ang (75%); sand, fn/med grn, prly sorted (20%); clay/silt (10%); sl mst, dk yel brn (10YR4/6)	340.2 339.3

# 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: Rotasonic

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)
45			100	BG	BG	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)	333.5
50			100	BG	BG	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))	
55			100	BG	BG	0	---	Sand (75%); silt/clay (25%); same as above	
60			100	BG	BG	0	---	Sand (80%); clay/silt (20%); same as above	
65			100	BG	BG	0	---	Sand (90%); tr silt/clay; tr gravel	
70			100	BG	BG	0	---	Sand (90%); silt/clay (10%)	321.2
75			100	BG	BG	0	o	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)	
80			100	10	BG	0	o	Gravel, fn/crs grn, up to 50-80 mm, subrnd/subang, chert (85%); sand, med/crs grn (15%); silty, wet, loose, prly sorted, yel brn (10YR5/6)	
85			100	BG	BG	0	o	Sand, med to crs grn, subang, poorly sorted (80%); gravel, subang to ang, fn grn (20%); wet, loose, strong brw (7.5YR5/8)	307.306.6
87.5			100	BG	BG	0	o	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)	
89			100	BG	BG	0	o	Gravel (75%); sand (25%), same as above	
90			100	BG	BG	0	o	Gravel (50%); sand (40%); clay (10%) (79.0-79.5 ft bgs interval)	
91			100	BG	BG	0	o	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: Rotasonic	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)
85			100	BG	BG	0.3		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)	297 296
90			100	BG	BG	32		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) Gravel (60%); sand (35%); silt (5%)	
95			100	BG	22	68		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	287
100			100	BG	17	22		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
105			-	BG	88	9		Sand, v fn to med gr (80%); silt/clay (20%); micaceous, moist, loose, pale ylw (2.5Y7/3)	281.6
110			100	BG	BG	24		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	280 278.4
115			100	1	BG	11		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)	
								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	
								Clay, silty, to clay, sandy; laminated, heavily mottled due to bioturbation (?), oxidation common	
								Clay (70%); some silt/sand in laminae (1-3mm); less oxidation than above, dk blueish gray (5PB4/1) to blueish gray (5PB6/1)	269
								Sand, fn to med grn, well sorted (85%); silt/clay (15%); loose, wet, some oxidation, pale brw (10YR6/3) to brwnish ylw (10YR6/8)	
								Sand (70%); silt/clay (30%); silt blebs (dk gray 7.5YR5/8) from underlying unit, strong brw, moist, loose	262.5
								Silt, sandy (80%); 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: -4428.0000 E, -1202.0000 N

Location: Paducah, KY

Geologist: D. Doyle

Started at 0758 on 07-18-97

Surface Elevation: 378.50 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/Apha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10			87.5	BG	44	0		Clay, silty, tr fn sand (1-10%), soft, v moist, reddish brown (5YR5/4), small lt blueish gray (8/1) mottles (21-35%)	
15								T.D. = 14.0 ft	382.5
20									
25									
30									
35									
40									

# Boring 400-056

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				2	274	0			
10									
15			-	BG	14	0		Clay, silty, soft, v moist, brw (7.5YR5/3)	364
20									
25									
30									
35									
40								T.D. = 16.0 ft	360

# 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. (ft-msl)
5				-	-	32			
10			100	-	-	0		Silt and clay, yellowish brown (10YR5/4), (11-20%) light grey (10YR7/1), soft, very moist	387
15								T.D. = 14.0	383
20									
25									
30									
35									
40									

# Boring 400-050

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4019.0000 E, -1272.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1015 on 09-17-98</i>	Surface Elevation: <i>376.50 feet msl</i>
Completed at <i>1400 on 09-18-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibracore</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>12.0 feet</i>

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

# Boring 400-100

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4020.0000 E - 13000 N

Location: Paducah, KY

Geologist: D. Doyle

Started at 0920 on 09-18-97

Surface Elevation: 377.00

Completed at 1415 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: 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			90	-	-	3.4		Silt and clay, yellowish brown (10YR5/8), (21-35%) light grey (7/1), (1-10%) black (2.5/1), soft, very moist, wet	367
15						0		T.D. = 14.0	363
20									
25									
30									
35									
40									

# Boring 400-062

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4019.0000 E, -425.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert</i>
Started at: <i>1315 on 07-11-97</i>	Surface Elevation: <i>377.00 feet msl</i>
Completed at: <i>1535 on 07-12-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>15.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
5									
10			75.0	BG	BG	0		Clay, silty, firm, moist, yellow brown (10YR5/4), lt brownish gray (10YR6/2) mottles	388
15				BG	232	0		T.D. = 15.0 ft	
20									
25									
30									
35									
40									

# Boring 400-033

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4051.0000 E, -1385.0000 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			75.0	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
15				BG	125	0		No Recovery	362.5
20									
25									
30									
35									
40								T.D. = 39.0 ft	



# Boring 400-064

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-40510000 E, -1538.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>0700 on 07-16-97</i>	Surface Elevation: <i>378.00 feet msl</i>
Completed at <i>1350 on 07-16-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>13.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
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	300
				BG	BG	0			
				BG	BG	0			
				BG	BG	0			
15				BG	BG	0		T.D. = 13.0 ft	305
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- <i>msl</i> )
5			-	8	BG	0			
10			100	1	BG	0		Clay, silty; brw (7.5YR5/3), some (21-35%) lt blueish gray (7/1), firm, moist.	369.8
12.5								T.D. = 12.5 ft	365.8

# Boring 400-06E

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15			-	1 BG	BG	0		Clay, silty, moist, stiff, lt blueish gray (8/1) and strong brw (7.5YR5/8)	368
17.0				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: Vibracore								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	FI D (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
5				-	-	-				
10			75.0	BG	5	0 0 0		Clay, silty, moist, firm, lt brown (7.5YR8/3), tr (1-10%) lt blueish gray (8/1)		371
15						4.5		T.D. = 12.0 ft		367
20										
25										
30										
35										
40										

# Boring 400-068

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15			-	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
17.0				5	158	9.0		T.D. = 17.0 ft	361.5
20									
25									
30									
35									
40									

# Boring 400-069

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FIJ (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				52	210	0			
15			-	3	191	4		Silt; clay; soft, moist, brw (10YR5/3) with some (12-35%) lt gray (2.5YR7/1)	365
						3.4			
						19			
								T.D. = 17.0 ft	361
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									
15			100	60	72	0			
15			3	70	18			Silt and clay, brown (7.5YR5/4), (50%) light blueish gray (7/1), firm, moist	365.5
20								T.D. = 18.0	361.5
25									
30									
35									
40									

								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- <i>msl</i> )
5										
10				BG	BG	180				
15								T.D. = 15.0		
20										
25										
30										
35										
40										



# Boring 400-072



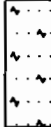
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4317.0000 E, -1784.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1400 on 09-25-97</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at <i>1600 on 09-29-97</i>	Depth to Groundwater: <i>NA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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10									
15	█	█	100	BG	58	0	█	Clay, silty; light brownish gray (10YR6/2), gray (10YR6/1), soft, moist	368
				BG	BG	24	█		362
						5.5	█		
						5.2	█		
20								T.D.= 17.0 ft	
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		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft-msl)
5										
10										
15			100	58 BG	105 157	83 74		Silt, clayey; tr gravel, poorly sorted, rned (1-10%); firm, moist to saturated, pale brw (10YR8/2), some (21-35%) lt gray (10YR7/1)		368
20								T.D. = 17.0 ft		361
25										
30										
35										
40										

# Boring 400-074

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

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

# Boring 400-076

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4465.0000 E, -14710000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>B. Bergeron</i>
Started at <i>1015 on 10-16-97</i>	Surface Elevation: <i>375.50 feet msl</i>
Completed at <i>1400 on 10-16-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotasonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>18.0 feet</i>

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

# Boring 400-077

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

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
15								T.D. = 14.0	360.5
20									
25									
30									
35									
40									

# Boring 400-080

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4272.0000 E, -189.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at: <i>0900 on 08-20-97</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at: <i>1430 on 08-20-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>9.0 feet</i>

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

# Boring 400-081

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5				-	-	4			
24				BG	BG			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						0		T.D. = 10.0 ft	369
15									
20									
25									
30									
35									
40									

# Piezometer 400-083

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4443.0000 E -1384.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>375.50 feet msl</i>
Started at: <i>1300 on 08-13-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1500 on 09-11-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>415 feet</i>
Geologist: <i>D. Doyle/B. Bergeron</i>	Well Screen: <i>30.5 to 40 feet</i>

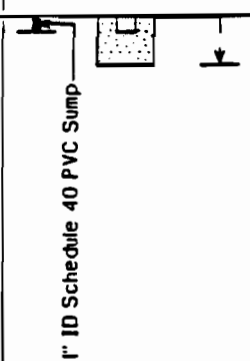
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
5	█	█	100.0	2	94	0	█	No Recovery	371	
5				BG	BG	0	█	Silt (50%); clay (50%); firm, moist, lt blueish gray (7/1) to brw (10YR5/3)	367	
10				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

- Slot Sc 40 PVC Scr



# Piezometer 400-083

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4443.0000 E, -1384.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>375.50 feet msl</i>
Started at <i>1300 on 08-13-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at <i>1500 on 09-11-97</i>	Depth to Groundwater: <i>NA feet TOC</i> Measured: <i>NA</i>
Drilling Method: <i>Vibrocorabe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>415 feet</i>
Geologist: <i>D. Doyle/B. Bergeron</i>	Well Screen: <i>30.5 to 40 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	X Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )	WELL DIAGRAM
45								T.D. = 41.5 ft		 <p style="text-align: center;">1" ID Schedule 40 PVC Sump</p>
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- <i>msl</i> )
5											
10				8	BG	0					
				BG	BG	0		Clay, silty; tr fn sand (1-10%); v moist, soft, brown (10YR5/3), lt blueish gray (7/1) mottles			368
15											
								T.D. = 14.0			362
20											
25											
30											
35											
40											

# Boring 400-085

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

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									
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)	365
17.5				BG	BG	0		T.D. = 17.5	361
20									
25									
30									
35									
40									

# Boring 400-087

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5	█	█	75.0	2	BG	0	█	Clay, silty; tr iron (1-10%); moist, soft, lt gray (10YR7/2)	373
10				BG	BG	130	█		369
15						140	█		
20						180	█		
30								T.D. = 8.0	
35									
40									

# Boring 400-088

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4382.0000 E, -1742.0000 N

Location: Paducah, KY

Geologist: D. Doyle

Started at 1430 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: 10.0 feet

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

								Boring 400-089		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4254.0000 E, -1743.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>		
Started at <i>1100 on 10-03-97</i>								Surface Elevation: <i>379.50 feet msl</i>		
Completed at <i>1530 on 10-03-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibroprobe</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>10.0 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
5				BG	94	0				
			100%	BG	BG	7	~	Clayey silt, bluish gray (6/1), grading to grayish brown (2.5Y5/2), soft, very moist-wet	373.5	
						60	~			
10						110	~		369.5	
						110	~			
								T.D. = 10.0		
15										
20										
25										
30										
35										
40										

# Boring 400-09

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -4054.0000 E, -1728.0000 N
Location: Paducah, KY	Geologist: D. Doyle
Started at 0845 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: 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				8	180	0			
7.5			100.0	8	195	35.5		Clay, silty, firm, moist, brown (7.5YR5/4)	37
10						12.2		Silt (50%); clay (50%); firm v moist, brown (7.5YR5/4) and lt greenish gray (7/1)	369.5
12.0						0.0		T.D. = 12.0 ft	367

								Boring 400-092	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4068.0000 E, -1871.0000 N</i>	
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>	
Started at <i>0900 on 9/8/97</i>								Surface Elevation: <i>379 feet msl</i>	
Completed at <i>1330 on 9/8/97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe</i>								Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>								Total Depth: <i>20.0 feet</i>	
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10									
15				BG	33	14			
16				BG	BG	10		Clay, silty, brwnish ylw (10YR6/6) mottled w/ lt gray (2.5Y7/1), firm, moist.	363
20			100	BG	BG	10		T.D. = 20.0 ft	359
25									
30									
35									
40									



		Boring 400-094	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-4216.0000 E, -1149.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle</i>	
Started at <i>0900 on 09-22-97</i>		Surface Elevation: <i>378.50 feet msl</i>	
Completed at <i>1045 on 09-22-97</i>		Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>15.5 feet</i>	

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10				-	-	183			
15			100	-	-	0		Clay, silty; brown (10YR5/3 w/lit), (11-20%) light grey (10YR7/1) firm and moist	361
								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			
8			87.5	5	5	0		Clay, silty, sl moist, firm, brw (7.5YR5/4) with some (11-29%) lt blueish gray (7/1)	368
10						0			
12.0						0		T.D. = 12.0	364
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)
0			0	-	-	-		No Recovery	
5			98	BG	10	0		Silt, slighty Clayey; (10YR5/8) yel brn, (10YR6/2) mtld lt brn	
10			95	BG	4	0		Same as above, but w/ tr chert Gravel, more Clayey toward 15-18	
15			100	BG	BG	0			
			95	BG	BG	0			
20			95	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
25			93	BG	BG	0		Silt & Clay, w/ Sand & tr Gravel; semi-mst, stf; (10YR6/8) brn yel, (7.5YR6/1) gry	358
			98	BG	BG	0		Same as above, but (7.5YR5/8) strg brn, (10YR6/1) mtld gry	
30			93	BG	48	0		Gravelly Sand, w/ Silt & Clay; fn/med grn; subrnd/subang chert (Max 20 MM); (7.5YR5/8) strg brn, (10YR7/2) mtld lt gry	352.2
			100	BG	3	0		Silt & Clay, w/ tr Sand & Gravel; (10YR5/8) yel brn, (10YR7/1) mtld lt gry	351
			100	BG	BG	0		Silty Sand, w/ Clay; med/crs grn; (7.5YR5/8)strg brn, (7.5YR7/1)lt gry	348.9
35			100	BG	BG	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
40			100	BG	BG	0		Clay:Silt,w/Sand,tr Gravel;fn grn qtz; (7.5YR4/8)strg brn, (7.5YR6/1)gy	340.8
			100	BG	BG	0		Gravelly Sand,w/Silt,Clay;fn/med grn qtz;rnd/suba cht/qtz; (10YR7/4)v p brn, (10YR6/8) mtld yel brn	339.9

# 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- <del>msl</del> )
0						0		Silt & Clay, w/ Sand; (7.5YR5/8) micaceous strg brn, (7.5YR6/1) laminae gry	338
0			100	BG	70	0			
0						0			
0						0			
0						0			
45								T.D. = 44.0	
50									
55									
60									
65									
70									
75									
80									

# Boring 400-099

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
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			
15								T.D. = 13.0 ft	366
20									
25									
30									
35									
40									

# Boring 400-100

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

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

								Boring 400-101		
Project: Paducah Gaseous Diffusion Plant Wag 6 RI								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: 11.0 feet		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
5				BG	BG	0				
			100.0	BG	BG	0		Silt; clay; firm, moist, brw (7.5YR5/4), some lt blueish gray 7/1		371
10										
								T.D. = 11.0		387
15										
20										
25										
30										
35										
40										



# Boring 400-103

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10			75.0	BG	BG	0	---	Clay, silty, soft, moist, brw (7.5YR5/4) with some lt blueish gray (7/1)	370
11				BG	BG	170	---		
12				BG	BG	65	---		
13						94	---		
14						45	---		368
15								T.D. = 13.0	
20									
25									
30									
35									
40									

# Boring 400-104

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-410.0000 E, -1754.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at: <i>1415 on 09-03-97</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at: <i>1630 on 09-03-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibracore</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>19.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				10	20	16			
15									
16				2	40	160		Silt; clay; v moist, firm; reddish ylw (7.5YR6/8) and lt blueish gray (8/1)	364
17						103			
18						268			
19.0								T.D. = 19.0	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- <i>msl</i> )
5	█	█	100.0	4	BG	0	█	Silt; clay; tr sand, fn grn; stiff, moist, red (2.5YR4/8), lt brw (7.2YR6/3), lt blueish gray (7/1) (appears to be fill)	371
10	█	█	100.0	2	BG	0	█	T.D. = 11.0	367
15									
20									
25									
30									
35									
40									

								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- <i>msl</i> )
5										
10										
15			90	BG	BG	0		Silt and clay; gray (10YR8/1), yellowish brown (10YR5/6), soft to firm, moist-very moist		368
				BG	BG	2.4				
						5.5				
						5.2				
20								T.D. = 17.0		362
25										
30										
35										
40										

		Boring 400-107	
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-4441.0000 E, -1580.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle</i>	
Started at <i>0805 on 08-14-97</i>		Surface Elevation: <i>377.00 feet msl</i>	
Completed at <i>1135 on 08-15-97</i>		Depth to Groundwater: <i>NA feet bgs</i>	Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>10.0 feet</i>	

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

# Boring 400-108

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5			-	20	BG	0.0		Clay, silty, firm, moist, tr organics (wood), lt blueish gray (8/1) with lt reddish brown (5YR5/4)	3715
10								T.D. = 8.0 ft	367.5
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			100.0	BG	10	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
13.0						0		T.D. = 13.0 ft	363
15									
20									
25									
30									
35									
40									

# Spring 400-111

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

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	█	█	100.0	BG	2	48 57 45 58	█ █ █ █	Clay, silty, firm, moist, reddish brown (5YR5/4), small lt blueish gray (7/1) mottles (21-35%)	368
15								T.D. = 14.0 ft	362
20									
25									
30									
35									
40									



# Boring 400-113

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
12				6	BG	0			
14				8	BG	0			364.5
15								Clay, silty; tr fn sand (1-10%); moist, firm, brown (10YR5/3), lt blueish gray (7/1) mottles	
17									360.5
20								T.D. = 17.0	
25									
30									
35									
40									

# Boring 400-114

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				B6	35	0			371.5
			100%	B6	35	0		Silt and clay, brown (10YR5/3), (21-35%) light bluish gray (7/1), firm and moist	
10				B6	1	0		No Description	387.5
15								T.D. = 15.0	
20									
25									
30									
35									
40									

# Boring 400-115

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
5									
10									
13				BG	50	13			
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)	384
18								No lithology description available	38L
20								T.D. = 19.0 ft	359
25									
30									
35									
40									

# Boring 400-116

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

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

# Boring 400-117

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -416.0000 E, -1794.0000 N

Location: Paducah, KY

Geologist: D. Doyle

Started at 1320 on 10-07-97

Surface Elevation: 13.00 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: 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				70	33	0			
8.4			90%	20	4	0		Silty clay, pale brown (10YR5/3), (20%) light gray (10YR7/1), moist stiff	372
10						0			
11.0						0		T.D. = 11.0	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: Vibracore	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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
5									
10	█	█	100	BG	BG	0	█	Silt & Clay: (10Y5/3) brn, (10YR6/1) gray, (10YR3/2) very dark gry brn	365
13.0						0		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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10				-	-	-			
15								T.D. = 11.0 ft	
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: Vibracore								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: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>		Coordinates: <i>-1190.0000 E, -1093.0000 N</i>	
Location: <i>Paducah, KY</i>		Geologist: <i>D. Doyle</i>	
Started at <i>1420 on 08-07-97</i>		Surface Elevation: <i>375.50 feet msl</i>	
Completed at <i>1510 on 08-07-97</i>		Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>	
Drilling Method: <i>Vibroprobe</i>		Groundwater Elevation: <i>NA feet msl</i>	
Drilling Company: <i>Alliance</i>		Total Depth: <i>3.0 feet</i>	

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. = 3.0	
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: Vibraprobe	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	42	55			
10									
11			100	BG	BG	0		Clay, silty, light brown (7.5YR6/4), (21-35%) light grey (7.5YR7/1) moist, firm	368
15								T.D. = 15.0	364
20									
25									
30									
35									
40									


# Boring 400-126

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10				B6	57	2 5 25		T.D. = 10.0	
15									
20									
25									
30									
35									
40									

# Boring 400-129

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

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			
10								T.D. = 6.0	
15									
20									
25									
30									
35									
40									

# Boring 400-130

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

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

# Boring 400-131

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4072.0000 E, -1411.0000 N

Location: Paducah, KY

Geologist: J. Abert

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: Rotasonic

Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 6.5 feet

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

# 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									
15				-	-	-		T.D. = 14.0 ft	364.5
20									
25									
30									
35									
40									

# Boring 400-134


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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10				15	46	0			
15			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
								T.D. = 16.0	363
20									
25									
30									
35									
40									




# Boring 400-137

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

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


# Boring 400-138


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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10									
11.5				8	B6	25			
15								T.D. = 13.0	
20									
25									
30									
35									
40									

# Boring 400-139

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4029.0000 E, -1871.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1400 on 9/8/97</i>	Surface Elevation: <i>379.5 feet msl</i>
Completed at <i>1505 on 9/8/97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>16.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10									
15				BG	37	45			
20								T.D. = 16.0	
25									
30									
35									
40									

								Boring 400-140		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4208.0000 E, -1774.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>		
Started at <i>1005 on 9/6/97</i>								Surface Elevation: <i>379 feet msl</i>		
Completed at <i>1210 on 9/6/97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibroprobe</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>11.0 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft-msl)
5										
10				B6	64	0				
15										
20										
25										
30										
35										
40										
								T.D. = 11.0		

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# Boring 400-141

Project: Paducah Gaseous Diffusion Plant Wag 6 RI  
 Location: Paducah, KY  
 Started at 1330 on 09-14-97  
 Completed at 0950 on 11-15-97  
 Drilling Method: Vibracore  
 Drilling Company: Alliance

Coordinates: -4241.0000 E, -1794.0000 N  
 Geologist: D.Doyle/JALBERT  
 Surface Elevation: 379.00 feet msl  
 Depth to Groundwater: NA feet bgs Measured: NA  
 Groundwater Elevation: NA feet msl  
 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			88	BG	BG	0		GRAVEL 70% SUBR-SUBA,SAND (20%)SILT (10%),YLSHRED (5YR4/6)MOIST DENSE	
5			63	BG	BG	2		SILT,GRN GRY (5GY5/1)MOIST FIRM	375
10			73	BG	67	0		SILT,SL CLAYEY LT BRNSH GRY (10YR6/2)MOLT YLSH BRN (10YR5/3)MOIST STIFF	
15			95	BG	117	0		SAME AS ABOVE W/BLACK MINERALIZTION FROM (15.0-18.5)	
20			93	BG	02	0			
20			93	03	14	1		CLAY,SILTY GRY (10YR6/1)MOTL YLSH BRN (10YR5/3)W/TRS OF FINE SAND	359
25			88	BG	04	0		SILT,CLAYEY W/10%FINE SAND:TRS GRAVEL,YLSH BRN/LT GRY MOIST STIFF	355
30			100	BG	BG	0		SILTY GRAVEL W/CLAY	351
30			-	BG	BG	0		SILTY SAND,POORLY SORTED LT YLSH BRN TO STRONG BRN MOIST DENSE	349.5
35			95	04	BG	0		GRAVELLY SAND SUBA-SUBR W/TRC SILT STRONG BRN,MOIST	347
40			85	BG	55	0		SILTY SAND	343

# Boring 400-141

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -42410000 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)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45			100	B6	82	0	[Pattern]	SILTY SAND	
45			88	08	30	0	[Pattern]	CLAYEY SAND (M TO F) WELL SORTED T.D.=48.0	335
50						0	[Pattern]		
55						0	[Pattern]		
60						0	[Pattern]		
65						0	[Pattern]		
70						0	[Pattern]		
75						0	[Pattern]		
80						0	[Pattern]		331

# 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: 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	388	1800			
7.5			100%	BG	2	255		Clay and silt, yellowish brown (10YR5/8), light gray (2.5Y7/1) firm and moist	372.5
11.0								T.D. = 11.0	368.5




# Boring 400-143

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				B6	9	2.4			
10								T.D. = 7.0	
15									
20									
25									
30									
35									
40									

# Boring 400-144

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

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

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# Boring 400-145

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

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		Silt & Clay; (10YR5/6) yel brn, (10YR6/4) mottled lt yel brn	
						0			
						300			373.5
5			75	BG	BG	30		Silt; (10Y6/1) grn gry	
						82			
						7			368.5
						54		Silt & Clay; (10YR5/4) yel brn to (10Y6/1) grn gry, back to (10YR5/4)	
10			90	BG	70	78			
						85			
						130		Silt & Clay; (10YR6/4) lt yel brn, (10YR7/1) mottled lt gry	
			80	BG	70	50			
15						80			
						90		Silt & Clay; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	
						59			
			90	BG	BG	90			
						40			357.5
20						235		Silty Sand	
						720			358
			80	BG	BG	150		Gravelly Sand	355.3
						-			354.8
						130		Silt (70%) & Sand (30%)	354.2
						35		Silty Sand; (10YR7/3)v. pale brn to (10YR5/8) yel brn to (10YR7/1) lt gry	353.5
25			90	BG	BG	25			
						400		Silty Sand; (10YR5/8) yel brn, (10YR7/1) mottled lt gry	
						730			
						142			
30			90	BG	BG	35			
						3			
						275		Sandy Gravel; (10YR5/6) yel brn	345.5
						10			
			80	BG	BG	140			
35						290			
						10		Gravelly Sand; (10YR6/8) brn yel	341.5
			90	BG	BG	20			
						45			
						52		Sandy Gravel, with a little Clay; (10YR5/6) yel brn, (10YR6/1) gry	338.8
40						8			337.5




# Boring 400-145

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

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	•••••	Silt (40%), Clay (30%), & Sand (30%); (10YR6/8)brn yel, (10YR8/3)p. brn	33.5
45						0	•••••	No Recovery	33
50						0	•••••	T.D. = 48.0	
55						0	•••••		
60						0	•••••		
65						0	•••••		
70						0	•••••		
75						0	•••••		
80						0	•••••		


# Boring 400-146

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4474.0000 E, -1767.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle/B. Bergeron</i>
Started at <i>1052 on 08-14-97</i>	Surface Elevation: <i>378.5 feet msl</i>
Completed at <i>1130 on 10-19-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe/Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>19.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10									
15				5	BG	7			
15			100	BG	6	45		Silt (60%), Clay (35%), with trace of Sand; (10YR6/8) brown yellow, & (10YR7/1) mottled light grey	383.5
20						37			
20						37		T.D. = 19.0	359.5
25									
30									
35									
40									

# Boring 400-147

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


DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
10				-	-	-			
15								T.D. = 12.0	
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		Silt & Clay; (10YR5/6) yel brn, (10YR7/1) lt gry	366		
15						0		T.D. = 13.0	362		
20											
25											
30											
35											
40											



# Boring 400-149

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

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

# 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)
5								No Recovery	
10									
15				BG	BG	0			
20									
25			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
								T.D. = 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)
5			70	-	-	13.7 11.3 - 22.8		Silt & Clay; (10YR7/1) lt gry, (10YR5/6) yel brn	373
8.0						0		T.D. = 8.0	369

								Boring 400-156		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4443.0000 E, -1300.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>		
Started at <i>0830 on 07-25-97</i>								Surface Elevation: <i>375.50 feet msl</i>		
Completed at <i>1315 on 07-25-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibraprabe</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>4.0 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft-msl)
5				-	-	-		T.D. = 4.0 ft		
10										
15										
20										
25										
30										
35										
40										

# Boring 400-157

Project: *Paducah Gaseous Diffusion Plant Wag 6 RI*

Coordinates: *-4442.0000 E, -1523.0000 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: *Vibracore*

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- <i>msl</i> )
5				-	-	0		T.D. = 6.0 ft	
10									
15									
20									
25									
30									
35									
40									

# Boring 400-158

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

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


# Boring 400-159

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5									
10									
15			80	BG	BG	73		Clay (65%), Silt (30%), Sand (5%); (10YR6/4) light yellowish brown, & (10YR6/6) Mottled brn yel (10YR7/1) Mottled Gray	384
20						21			
25						27		T.D. = 18.0	380
30									
35									
40									

# Boring 400-160


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

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



# Boring 400-161

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

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

# Boring 400-162

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4052.0000 E, -1670.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1045 on 09-03-97</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at <i>1630 on 09-03-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>8.0 feet</i>

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			
10								T.D. = 8.0 ft	
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			
5						5.9		Clay, with trace of Silt; (2.5Y5/4) light olive brown, (2GLEY5/1/5B) mottled bluish grey	375
			65	1	BG	187		Silt, with trace of clay; (10YR6/4) light yellowish brown, (10YR7/1) mottled light gray	373.5
				1	BG	45.5			371.6
						10			371
10			85	BG	7	25			
						34			
						39			
						12		Silt, with trace of Clay; (10YR6/1) gray, (10YR5/6) mottled yellowish brown, (1GLEY5/1/5G) greenish gray staining	367.3
15			75	1	19	20			367
						12			363.5
						77		Silt; (10YR6/1) gray, (10YR5/6) mottled yellowish brown	363
			70	BG	11	91			
20						18		No descriptor	359.7
						47.5		Clay, with a little Sand; (10YR6/1) gry, (10YR6/8) mottled brn yel	358
			100	BG	20	39			355
25						39		Sand & Gravel, w/ Silt & Clay; fn/crs grn; subrnd/subang; prly sorted; (10YR5/6) yel brn	352.8
			95	BG	BG	80			
						220		Sand, tr Silt & Gravel; mst/dense; (7.5YR5/8) strg brn	351
						247			
						78		Silt, w/ Clay, Sand & Gravel; (10YR6/2) lt brn gry	348.5
30			98	BG	BG	658			
						782		Clay, w/ Silt & tr Sand; mst/stf; (7.5YR5/8)strg brn, (7.5YR7/1)lt gry	
						515		Same as above, but tr Gravel; (10YR6/2) lt brn gry	
						79			
			95	4	BG	34			
35						-			344
						82		Silty Gravel, w/ Sand; (7.5YR4/8) strg brn, (7.5YR6/1) mtd gry	343
						982			
						7		Gravelly Sand, w/ Silt & Clay; prly sorted; mst/dense; (7.5YR5/8) strg brn, (7.5YR7/1) mtd lt gry	
			75	4	BG	301			
40						-			339
						88			

# Boring 400-163

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
						36	—	Clay, w/ Silt, tr Sand & Gravel; (7.5YR6/1) gry	336
			50	8	BG	69	○ ○ ○	Sand & Gravel; (7.5YR5/8) strg brn	338
45						63	○ ○ ○	Sand, w/ Silt & tr Gravel; (7.5YR5/8) strg brn, (7.5YR6/4) lt brn	335
			75	BG	BG	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: -45310000 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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
5									
10				-	-	-		T.D. = 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									
10				BG	BG	0			
15									
20									
25									
30									
35									
40									
								T.D. = 10.0 ft	

# Boring 400-169


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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5			75	1	5	0		Clay, silty; tr organics (1-10%); soft, moist, lt blueish gray (6/1)	375
						3860			
						0		No recovery	371
10			87.5	4	BG	0			368
						14.5		Silt and clay, soft, moist, brw (7.5YR5/3)	
						7			
						11			
15								T.D. = 14.0 ft	364
20									
25									
30									
35									
40									




# Boring 400-170

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

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

T.D. = 10.0 ft

		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			
10								T.D. = 8.0 ft	
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: Rotasonic	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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5									
7.5			70	-	-	2300		Silt; (10Y6/1) greenish gry	373
10						4800			
						600			
						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

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									
10								T.D = 9.0	
15									
20									
25									
30									
35									
40									

# Boring 400-176

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4054.0000 E, -1777.0000 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: Vibraprabe

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			
10								T.D. = 8.0 ft	
15									
20									
25									
30									
35									
40									


# Boring 400-177

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

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	23	53			
20								T.D. = 14.0	
25									
30									
35									
40									


# Boring 400-178

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

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

# Boring 400-181

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4428.0000 E, -1174.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1035 on 07-21-97</i>	Surface Elevation: <i>376.50 feet msl</i>
Completed at <i>1500 on 07-22-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>110 feet</i>

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



# Boring 400-183

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4329.0000 E, -189.0000 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: Vibraprrobe

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			
10								T.D. = 7.0	
15									
20									
25									
30									
35									
40									


# Boring 400-186

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

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: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4112.0000 E, -1261.0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1020 on 08-27-97</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at <i>1500 on 08-27-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measurect: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>8.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				1	228	49			
10								T.D. = 8.0	
15									
20									
25									
30									
35									
40									

# Boring 400-188

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4426.0000 E, -12610000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at <i>1015 on 10-09-97</i>	Surface Elevation: <i>376.50 feet msl</i>
Completed at <i>1200 on 10-09-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Vibroprobe</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>9.0 feet</i>

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 33.6 25.7		Silt & Clay: (7/1) lt blu gry, (10YR5/4) yel brn	3715
10								T.D. = 9.0	387.5
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 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)
5								T.O. = 5.0	
10									
15									
20									
25									
30									
35									
40									

# Boring 400-191

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
5				41	B6	0			
10								T.D. = 8.0	
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/JALBERT
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: Vibracore	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)
								NO RECOVERY	
5			93	03	BG	107 140 7 0 0		SILT, TRS CLAY, GRNISH GRY (10YR5/1) GRADING TO YEL BRN (10YR5/4) THEN MOTTLED W/ YLSH BRN (10YR5/3) MOIST (NATURAL SOIL)	374.5
10			90	BG	BG	0 0 0 0		SILT SL. CLAYEY DK YLSH BRN (10YR4/6) MOTTLED LT BRNSH GRY (10YR6/2) MOIST STIFF	
						0 0		SAME AS ABOVE	
15			100	BG	33	0 0 0 0		SILT, CLAYEY GRY (10YR6/1) MOTTLED YLSH BRN (10YR4/6) LT BRNSH GRY (10YR5/6) MOIST, STIFF W/ TRS F. ROOTS (W/ TRS F. SAND IN LOWER PORTION).	
20			100	BG	29	0 0 0 0		SILT CLAYEY W/ 30% F. SAND: TRS GRL, YLSH BRN (10YR5/8) GRY (10YR6/1)	
			93	BG	BG	0 0 0			
25			88	BG	BG	0 0 0		CLAY SILTY W/ 35% M-F SAND: TRS GRL (SANDY IN UPPER PORTION) STRONG BRN (7.5YR5/6) MOTTLED LT GRY (10YR7/1) MOIST STIFF	354.5
30			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) MOTTLED GRY (7.5YR8/1) THEN YLSH BRN (10YR5/8) MOIST STIFF.	350.5
35			95	BG	BG	0 0 0 0		SAND (50%) F TO C GRAVEL (40%) SUBR-SUBA SILT: CLAY (10%) YLSH BRN (10YR5/8) TO LT GRY (10YR7/10) MOIST DENSE	348
						0 0 0		SAND (40%) GRAVEL (40%) SUBR-SUBA 20% SILT: CLAY STRG BRN & LT GRY	
40						0 0 0		CLAY, SILTY, TRS F. SAND DK YLSH BRN W/ LT GRY MOIST, STIFF	340.5



# Boring 400-192

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

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

								Boring 400-193		
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>								Coordinates: <i>-4420.0000 E, -1797.0000 N</i>		
Location: <i>Paducah, KY</i>								Geologist: <i>D. Doyle</i>		
Started at <i>1100 on 09-30-97</i>								Surface Elevation: <i>377.50 feet msl</i>		
Completed at <i>1530 on 09-30-97</i>								Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>		
Drilling Method: <i>Vibroprobe</i>								Groundwater Elevation: <i>NA feet msl</i>		
Drilling Company: <i>Alliance</i>								Total Depth: <i>7.0 feet</i>		
DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION		ELEV. (ft- <i>msl</i> )
5				BG	BG	79		T.D. = 7.0		
10										
15										
20										
25										
30										
35										
40										

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# Boring 400-194

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (cpm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			95	BG	05	0		SANDY GRAVEL SUBA TO ANGU 10% CLAY	
						479			
5			100	BG	18	29		SILT W/TRS OF CLAY GRN GRY FIRM (NATURAL SOIL)	374.5
						32			
						03		SILT, TRS CLAY	
						03			
10			100	03	99	05			
						09			
						01			
15			83	05	123	0			
						0		SILT W/CLAY STRONG BROWN (7.5YR5/3)	
						25			
			93	BG	107	0			
						0			
20						0			
						0			
			83	03	119	0			
						0			
25						09		CLAY W/ SILT GRADING TO SILTY SAND (55% FINE SAND) LT. GRY DK YLSH BRN	354.5
			95	BG	103	02		GRAVELLY SAND, W/ SILT; SUBRND/SUBANG	353.3
						01			
						0		SAND (70%) SILT:CLAY GRAVEL YELSH BRN TO V.PAL.BRN	350.5
						05			
30			93	BG	111	03			
						01			
						0		SANDY GRAVEL SUBR TO SUBA SILT:CLAY (20%)	348.5
						0			
35			90	03	139	0		CLAY, SILTY GRADING TO FINE SAND, W/40% SILT	345
						0			
						0		SAND M TO C TRS/SILT:GRL	342.5
			75	BG	127	0		SANDY GRAVEL SILT:CLAY 25%	341.2
						0			
40						0			338.5

0

# 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.JALBERT*

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: *ROTONSONIC*

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	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
			90	327	B6	0 0 0 0		SILT, CLAYEY GRADING TO SILT SOME CLAY 10% FINE SAND	338.5
45								T.D. = 44.0	334.5
50									
55									
60									
65									
70									
75									
80									

# Boring 400-195

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

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

# Boring 400-197

Project: *Paducah Gaseous Diffusion Plant 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: *Vibraprrobe*

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: Vibracore

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			100.0	BG	BG	0		Silt, clay; tr fn to v fn sand (1-10%), firm, moist, (5YR5/4), small lt blueish gray (8/1) mottles, tr reddish black (10R2.5/1) and yellow (2.5Y7/8)	388.5
15				BG	BG	0			382.0
20									
25									
30									
35									
40								T.D. = 15.0 ft	



# Boring 400-199

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

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

# Boring 400-200

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
2								Silt and clay (50%/50%), gray (5Y6/1), strong brown (7.5YR5/6), very moist, and soft	
5			90	BG	BG	760 708		Silt and clay, (70%) gray (10YR6/1), (30%) yellowish brown (10YR5/6) very moist, soft-firm	
10			90	BG	BG	4288 4487 4480 4487 4487 4480		Silt and clay, (80%) yellowish brown (10YR5/6), (20%) gray (10YR6/1) very moist, soft-firm	
15			100	BG	BG	3100 4487 3950		Clay w/ Silt, light gray (2.5Y7/1), yellowish brown (10YR5/6)~50%, tr (1-10%) iron, black firm, moist	368.5
20			100	BG	BG	4487 790 4487 3340 4487 4480 1950 2698		Silt w/ Clay, light gray (2.5Y7/1), yellowish brown (10YR5/6), moist and firm	362.5
25								T.D. = 25.0	354.5

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# Boring 400-201

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

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	0000	GRAVEL (50%)CLAY (35%)SAND M-C (15%)DK RED (2.5YR5/3)TO DK.YEL.BRN (10YR4/)	
5			55	BG	02	43 39 82 206	0000 0000 0000 0000	SILT,SL/CLAY,GRN.GRY. (10YR6/1)V.MOIST,FIRM	
10			80	-	-	211 536	0000 0000	SILT,SL/CLAY.YEL BRN (10YR4/6)MOLTED LT.GRY (10YR7/1)	
15			72.5	03	02	252 335 107 186 767	0000 0000 0000 0000 0000	SILT,SL/CLAY.YEL BRN (10YR5/6)MOLTED LT BRN GRY (10YR6/2)MOIST/STIFF	
20			87.5	BG	08	381 219 441 58 117 627	0000 0000 0000 0000 0000 0000	SILT,CLAYEY,W/25%F.SAND & 15%GRAVEL	
25			97.5	BG	BG	771 1782 123	0000 0000 0000		
30			87.5	BG	BG	1400	0000	SAND MED TO FINE (95%)TRS GAL GRADING TO SAND (65%)GRAVEL (30%)CLAY (15%) YEL (810YR7/6)GRY TO STRONG BRN (7.5YR5/3)MOIST.	
35			97.5	BG	14	1300	0000	SILT,CLAYEY;W/25%F.SAND,STRONG BRN (7.5YR5/8)W/MINOR LT.GRY MOTTILING (7.5YR7/1)MOIST,STIFF	
40			97.5	BG	BG	-	0000	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 MOTTILING (7.5YR7/1)MOIST	
							0000	SAND40%GRAVEL40% SILT:CLAY20% STRONG BRN (7.5YR5/8)MED-RDSh YEL,MOIST	
							0000	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

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)
45			72.5	BG	BG	-		GRAVEL (40%)SAND (40%)SILT:CLAY (40%)LT.GRY-MINOR STAIN BRN:MOIST	
								SILT SL CLAYEY 25-30% F.SAND;YEL BRN MOIST	
			100	04	BG	10		SILT,CLAYEY (20%)F.SAND TRS DAL,V.PALE.BRN MINOR YLSH BRN FIRM	
								T.D.=48.0	

# 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: Rotasonic	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- <i>msl</i> )
			90	BG	BG	5		Silty Gravel with trace of Sand & Clay; (10R4/8)red, & (10YR5/8)yel brn	
						5040			
5						877		Silt, with a little Clay; (2GLEY7/5B) lt bluish gry	
			100	6	21	1270			
						584			
						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	
15			95	2	37	260			
						258			
						320		Silt, with clay & trace of Gravel; (10YR6/6)brn yel, (10YR5/8)yel brn, (10YR7/1)lt gry	
20			95	BG	1	507			
						525			
						568		Silty Sand; (10YR7/4) v. pale brn to (10YR7/1)lt gry	
			85	BG	41	269			
						102			
25						46		Clayey Sand; (7.5YR5/8) strong brn	
			65	BG	BG	35			
						51			
30								T.D. = 27.2	
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	
						0		CLAY SILTY W/TRS SD&GRL,DK YLSH BRN (10YR4/6)GRY (10YR6/1)	358.5
20			93	BG	49	0		SAND (80%) (35%)GRAVEL SUBR-SUBA SILT (5%)YLSH RED (5YR5/8)	354.5
25			95	BG	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			75	02	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
			100	BG	BG	0		SAND85% SILT 15%	344.5
35			78	BG	BG	0		SAND85% SILT15%LT GRY (7.5YR7/1)RDSH YEL (7.5YR6/8)MOIST	
						0		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: Rotasonic

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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
0						0		Sandy Gravel, with Silt; (7.5YR4/6) strg brn, (2.5Y6/2) lt brn gry	
5			50	BG	24	0		No Recovery	373
10						0		Silt, with Clay, moist & firm; (2.5Y6/3)lt yel brn, (10YR4/6)dk yel brn	371
15			100	BG	36	0		Silt, with Clay; (10Y6/1)grn gry, (10YR6/4)lt yel brn, (10YR5/6)yel brn	
20			88	4	11	0		Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR6/1) gry	
25			92	BG	BG	0		Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR6/1) gry	
30			96	4	27	0		Gravelly Sand, moist & dense; (7.5YR5/8) strg brn	355
35			50	-	-	0		No Recovery	351
38			55	BG	12	0		Sandy Gravel, with Silt, moist & dense; (10YR4/6) dk yel brn	349.2
39						0		Clayey Sand, moist & firm to stiff; (10YR5/8) yel brn	348.7
40						0		Sand, med to fine, moist & firm; (10YR6/8) brn yel	347
41			92	BG	BG	0		Gravel & Sand, with Silt & Clay, moist & dense; (10YR5/8) yel brn	345.6
42						0		Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	339
43			35	BG	18	0		Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	
44			97	BG	BG	0		Silt, with Clay & Sand; (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	



# 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: Rotasonic

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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
45	X		89	B6	58	0 0 0 0 0		Silt, with Clay & Sand: (7.5YR5/8) strg brn, (7.5YR7/1) mottled lt gry	331
								T.D. = 44.0	

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

# 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	FIID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								SAME AS ABOVE-CLAY SILT TRC OF F. SAND	
45			75	BG	110			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
								T.D.= 48.0	330.5
50									
55									
60									
65									
70									
75									
80									

# Boring 400-206

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

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

# Boring 400-206

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

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



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# Boring 400-207

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-411,0000 E, -1783,0000 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>J. Albert/T. Streufert</i>
Started at: <i>1340 on 01-02-98</i>	Surface Elevation: <i>379.00 feet msl</i>
Completed at: <i>1548 on 01-15-98</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Rotosonic</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>147.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FI D (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
								Concrete slab	378
						0	○ ○ ○	Crushed limestone gravel	377.3
			40	-	-	-		Gravel (60%); angular sand (30%); clay (10%); moist, firm, yellowish red (5YR5/3) (Fill)	376.5
5								Silt, moist, firm, greenish gray (5B Y5/1) (Natural Soil) (May be from deeper interval, unknown due to poor recovery 0.0-7.0 ft)	376.2
						21		No recovery	372
						0		Silty clay, moist, stiff, yellowish brown (10YR5/6)	
10				BG	60	0			
			80	BG	28	0			
				BG	32	0			
15				BG	39	0			
				BG	24	0		Silty clay, moist, stiff, yellowish brown (10YR5/6) mottled with light gray (10YR7/1)	
20				BG	32	0			
			90	4	34	0		Silty clay with trace of sand (5 to 10%) and gravel (5 to 10%), moist, stiff, yellowish brown (10YR5/8) mottled with light gray (10YR7/1)	
				BG	28	0			
25				BG	12	0			
				BG	68	0		Silt, clayey; gravel, subangular (15%); fine sand (10%), moist, stiff, yellowish brown (10YR5/4)	352
30				BG	72	0			
			80	BG	78	0			
				BG	58	0		Sand, medium to fine grained (70%); gravel, subangular to subrounded (20%); silt (10%); moist, dense, yellowish brown (10YR5/3)	348
35				BG	48	0			
				BG	41	100		Sand, medium grained (50%); gravel, subrounded to subangular (40%); silt (10%); moist, dense, yellowish brown (10YR5/8)	
40				BG	25	23			



# Boring 400-207

Project: Paducah Gaseous Diffusion Plant Wag 6 RI	Coordinates: -411.0000 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: Rotasonic	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)
45			100	BG	17	82 720 280			334
				BG	33	2350 30			
				BG	25	30 42		Sand, fine to very fine grained (75%); silt (20%); trace gravel, moist, dense, brownish yellow (10YR6/8) grading 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 (7.5YR8/8) to olive yellow (2.5B/6), clay intervals occur in two 1 foot strata in upper portion of sample.	
50			100	BG	33	150 0			
				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			100	BG	37	680 680			
				BG	41	350 700			
				BG	33	3500 850			
65				BG	53	800 4800			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: -411.0000 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: Rotasonic

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)
40						40			
235			100	BG	BG	235			
341				BG	BG	341			
36				BG	BG	36			
0				BG	BG	0			
85				BG	31	14			
				BG	BG	46			
				BG	BG	0			
				BG	BG	7			
90				BG	BG	0			
			100	BG	BG	0			
				BG	BG	25			
				BG	BG	8			286
95				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)	
				BG	BG	555			
				BG	BG	14			282
				BG	BG	0			
				BG	BG	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 (7.5YR6/6), some thin (< 0.05) ft clay and silt laminae in upper 1 to 2 feet of interval	
100				BG	32	0			
				BG	BG	28			
			100	BG	BG	8			
				BG	44	14			
				BG	BG	4			
105				BG	12	5			
				BG	BG	23			
				BG	BG	0			
				BG	BG	0		Sand, medium to fine grained (95%); trace silt and clay, very moist, firm, laminated, micaceous, red (2.5YR5/8) to yellow (2.5Y7/8) to brownish yellow (10YR6/8)	
110				BG	BG	48			
			100	BG	BG	0			
				BG	79	0			
				BG	BG	83			
115				BG	BG	0			
				BG	BG	28			
				BG	BG	0			282
				BG	BG	0		Sand, fine grained (80%); silt (40%); moist, firm, brownish yellow (10YR6/8)	
				BG	BG	0			
120				BG	BG	0		Clay (85%); silt and sand (15%)	280
				BG	164	0			

# Boring 400-207

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4110000 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: Rotasonic

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)
125			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			
				BG	21	0			
130				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 occasional laminae and silty sand zones	
				BG	BG	0			
			100	BG	93	0			
135				BG	34	0		Clay, some silt, slightly moist, very stiff, dark gray (2.5Y4/1)	
				BG	88	0			
				BG	88	0			
140				BG	125	0		Silt with sand, very fine grained (35 to 40%); clay (15 to 20%); moist, firm, gray (2.5Y6/1) to dark gray (2.5Y4/1)	238
			100	BG	78	0			
				BG	177	0			
145				BG	73	0		T.D. = 147.0	232
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: Rotasonic

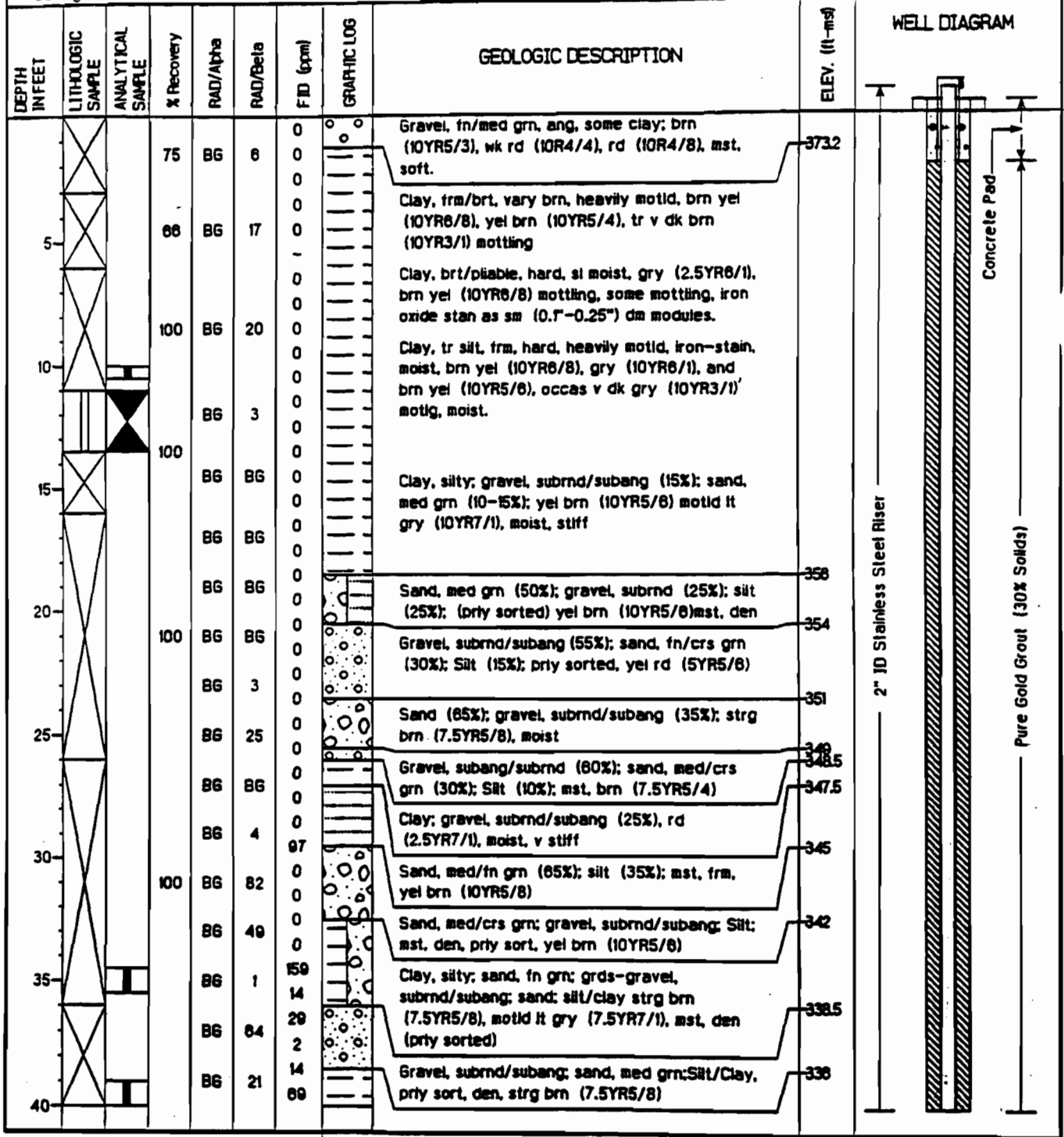
Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 136.0 feet

Geologist: R. McComb/J. Albert

Well Screen: 74.0 to 84.0 feet



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: Rotasonic

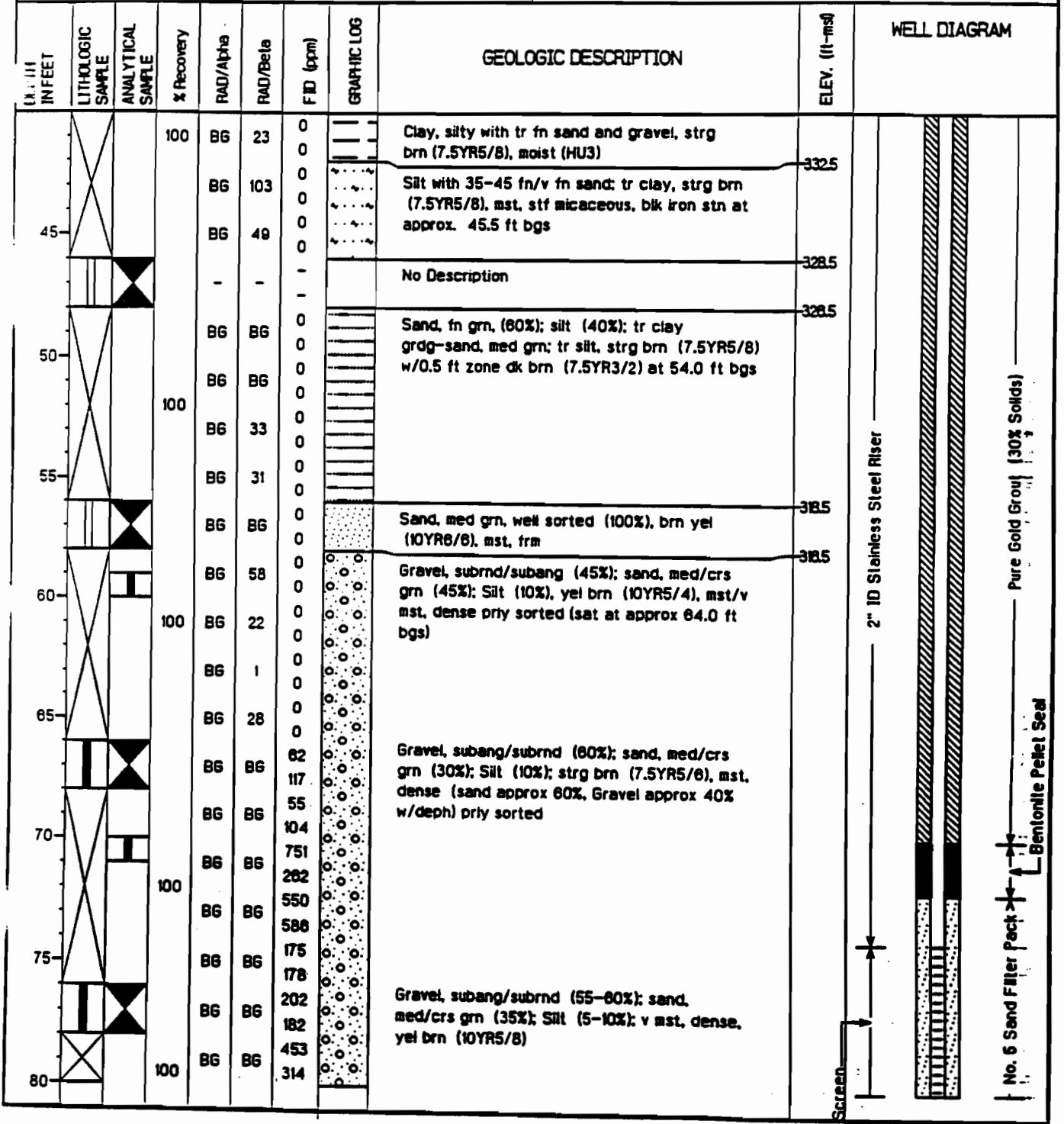
Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 136.0 feet

Geologist: R. McComb/J. Albert

Well Screen: 74.0 to 84.0 feet



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 Elevator: NA feet msl

Completed at 1400 on 12-22-97

Depth to Groundwater: 47.9 feet TOC Measured: 12/15/97

Drilling Method: Rotasonic

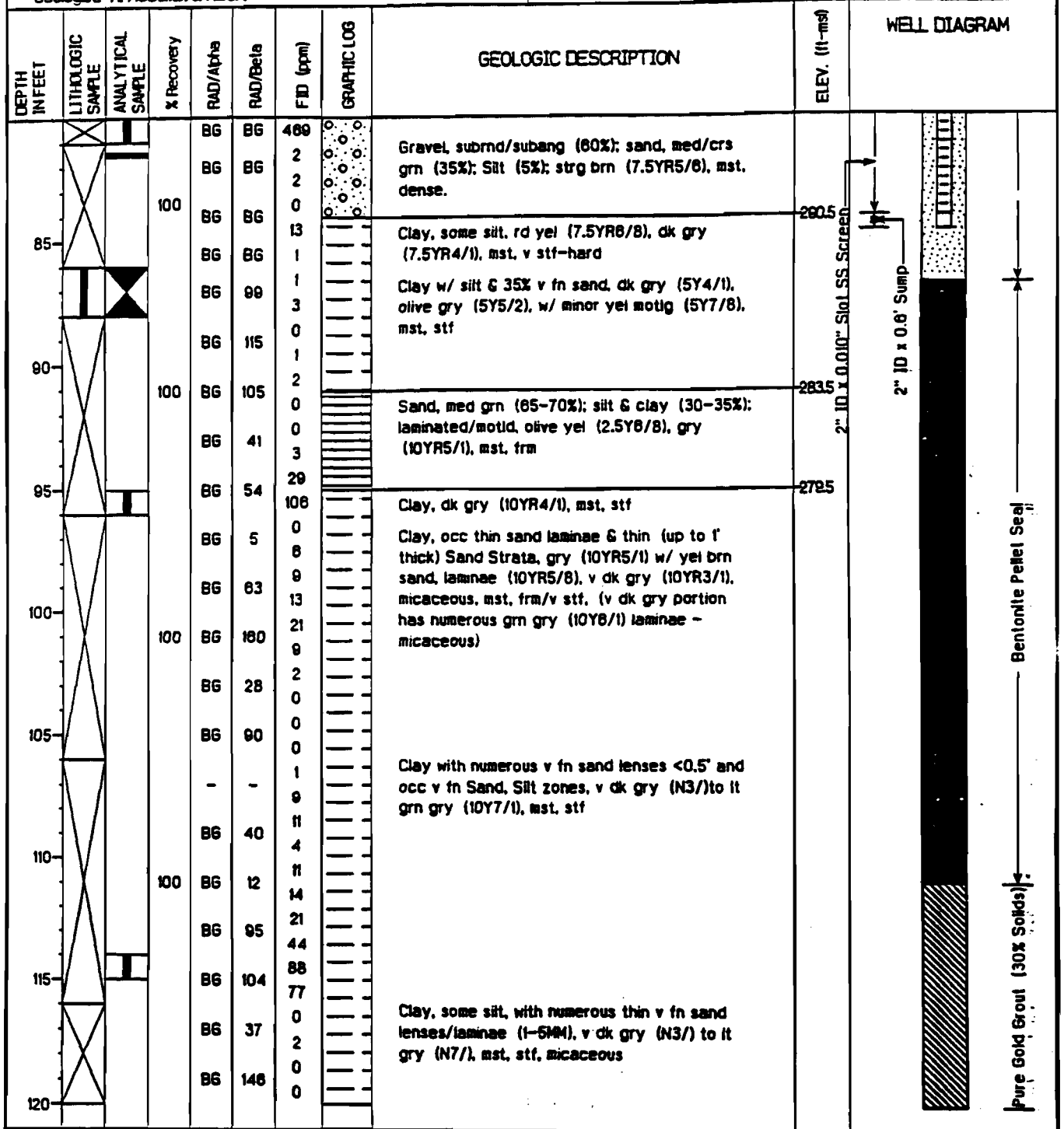
Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 136.0 feet

Geologist: R. McComb/J. Albert

Well Screen: 74.0 to 84.0 feet



AKGWA NUMBER 8003-3484

MW-343 (400-208)

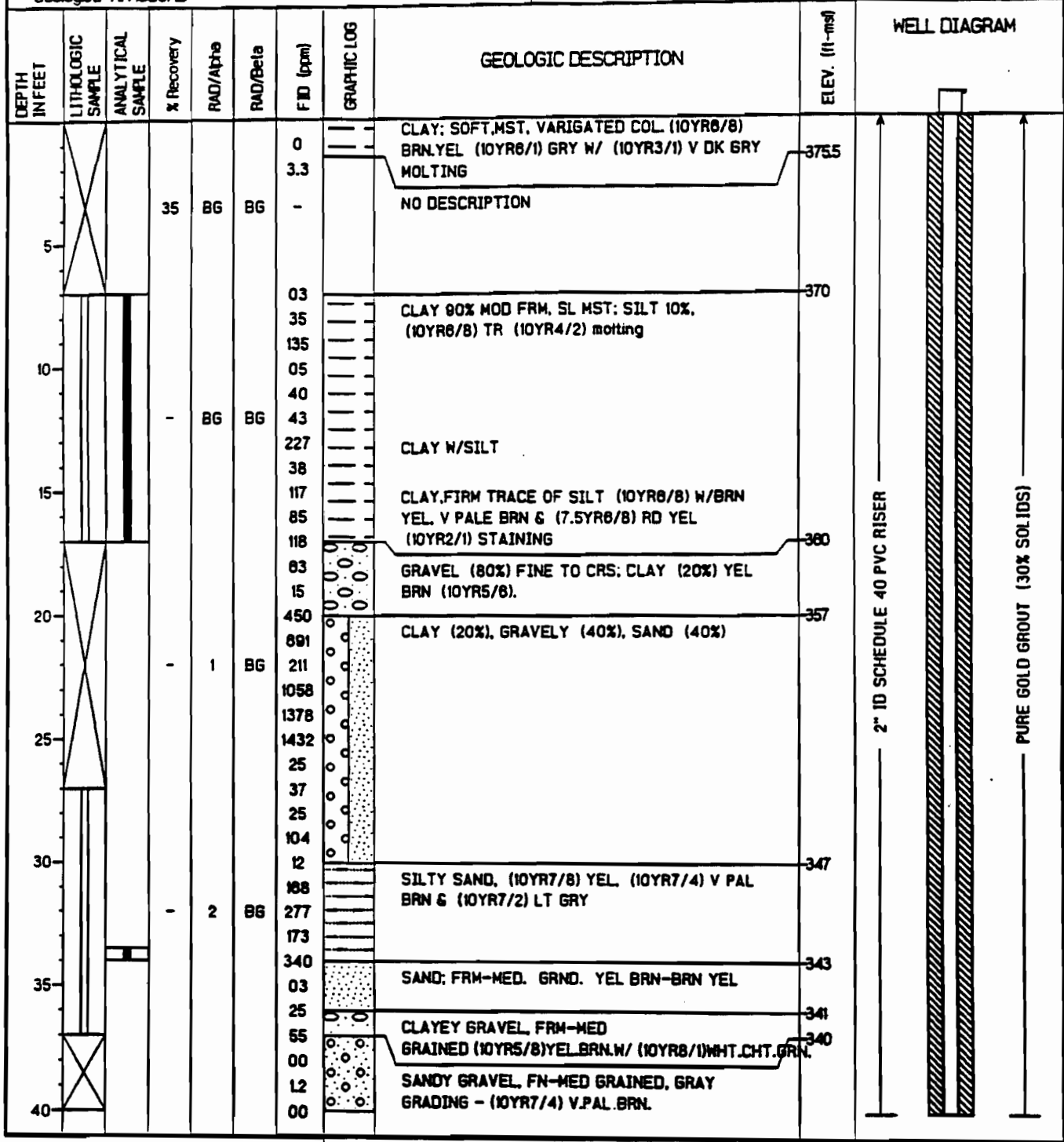
Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4404.0000 E, -1084.0000 N</i>
Location: <i>Paducah, KY</i>	Surface Elevation: <i>374.50 feet msl</i>
Started at: <i>1305 on 12-11-97</i>	TOC Elevation: <i>NA feet msl</i>
Completed at: <i>1400 on 12-22-97</i>	Depth to Groundwater: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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)	WELL DIAGRAM
125			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		<p>Pure Gold Grout (30% Solids)</p>
				BG	133	0	---			
				BG	78	0	---			
				-	-	1	•••	Sand, med grn (85%-95%), tr silt & clay, grn gry (10Y5/1), mst. frm	248.5	
130				BG	137	0	•••			
			100	BG	84	5	---	Clay grd to silt w/ clay (15-25%), v fn sand, v dk gry (N3/), mst		
				BG	111	0	---			
135				BG	190	0	---			
						0	---	T.D. = 136.0 ft	238.5	
140										
145										
150										
155										
160										

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









AKGWA NUMBER 8003-3483

MW-342 (400-210)

Project: Paducah Gaseous Diffusion Plant Wag 6 RI

Coordinates: -4404.0000 E -290.0000 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
125			-	B6	46	00		CLAYEY SAND: GRY (5YR5/1)		
130			-	B6	38	00		CLAY 90% STIFF (10YR4/1) V.DK.GRY	253	
135			-	B6	38	00				
140			-	B6	38	00		T.D. = 137.0 (SHELBY TUBE 137.0/139.5)	240	
145			-	B6	38	00				
150			-	B6	38	00				
155			-	B6	38	00				
160			-	B6	38	00				

# Boring 400-211

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

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



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: Rotasonic

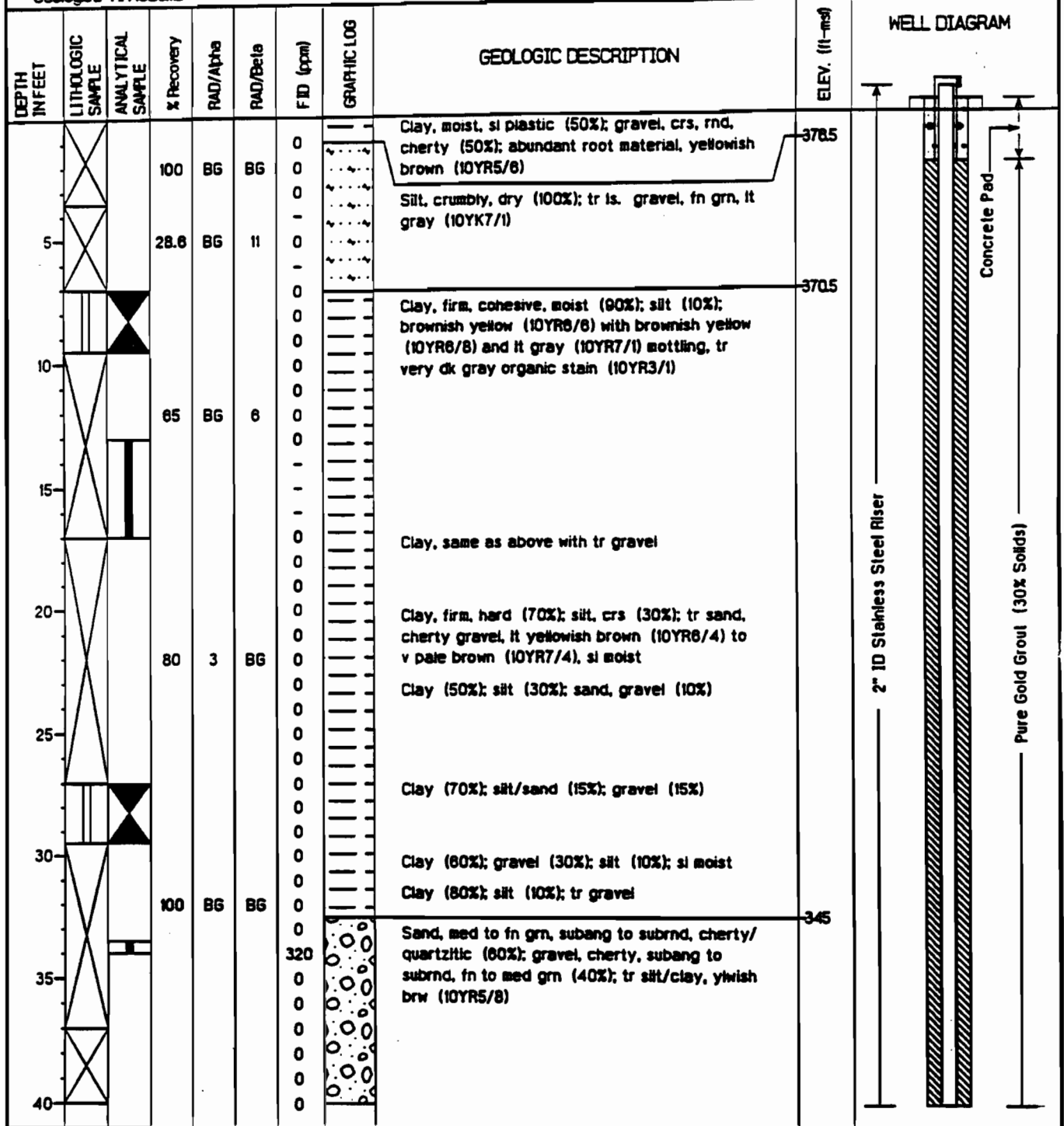
Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 137.0 feet

Geologist: R. McComb

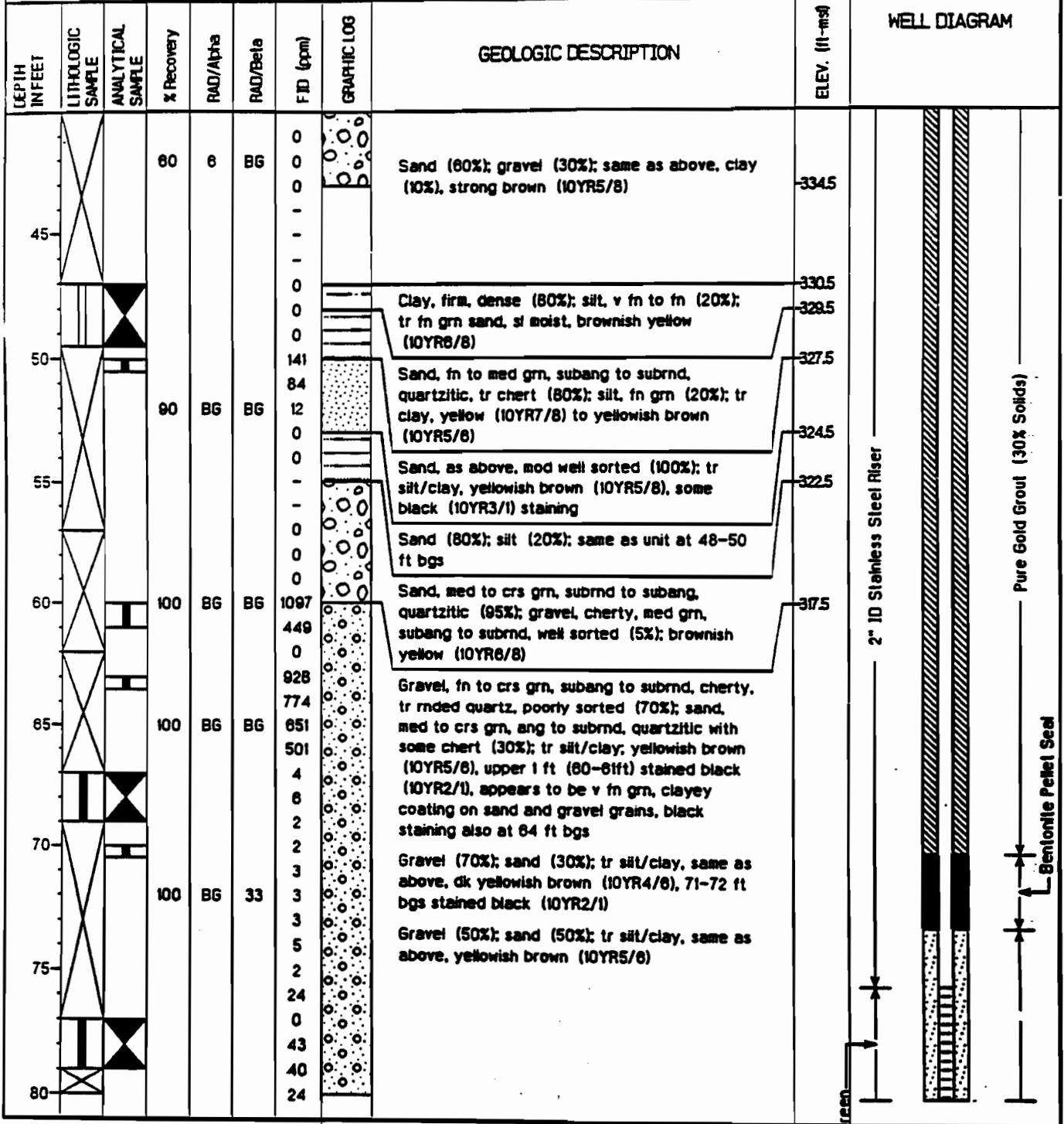
Well Screen: 75.5 to 85.5 feet



AKGWA NUMBER 8003-3482

MW-341 (400-212)

Project: Paducah Gaseous Diffusion Plant Wsg 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 1100 on 12-13-97	Depth to Groundwater: NA feet TOC Measured: NA
Drilling Method: Rotasonic	Groundwater Elevation: NA feet msl
Drilling Company: Alliance	Total Depth: 137.0 feet
Geologist: R. McComb	Well Screen: 75.5 to 85.5 feet



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 110 on 12-13-97

Depth to Groundwater: NA feet TOC Measured: NA

Drilling Method: Rotasonic

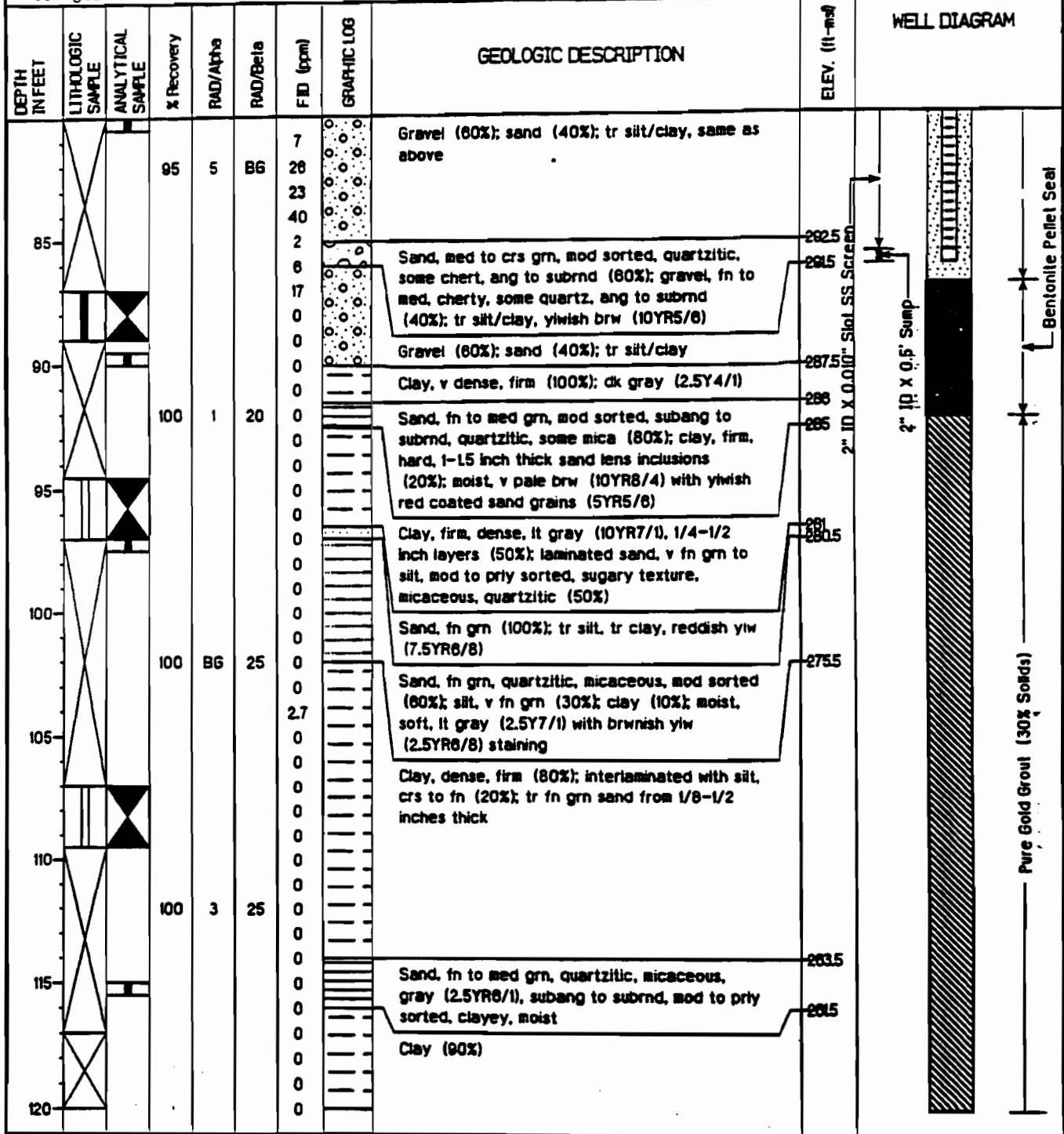
Groundwater Elevation: NA feet msl

Drilling Company: Alliance

Total Depth: 137.0 feet

Geologist: R. McComb

Well Screen: 75.5 to 85.5 feet







# Boring 400-213

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

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

# Boring 400-213

Project: <i>Paducah Gaseous Diffusion Plant Wag 6 RI</i>	Coordinates: <i>-4750.0228 E, -1755.0576 N</i>
Location: <i>Paducah, KY</i>	Geologist: <i>D. Doyle</i>
Started at: <i>1245 on 12-15-97</i>	Surface Elevation: <i>375.42 feet msl</i>
Completed at: <i>1100 on 12-17-97</i>	Depth to Groundwater: <i>NA feet bgs</i> Measured: <i>NA</i>
Drilling Method: <i>Air Rotary</i>	Groundwater Elevation: <i>NA feet msl</i>
Drilling Company: <i>Alliance</i>	Total Depth: <i>85.0 feet</i>

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-MSL)
45							[Symbol]	Silt & Clay, with sand, med sorted; (10YR5/3) brn	333.4
50							[Symbol]		
55							[Symbol]		
60							[Symbol]	Silt, with Sand, med sorted; (10Y5/6) yel brn	317.
65				BG	BG	15	[Symbol]	Gravel, subang, poorly sorted, with Silt, Clay, & Sand; (10YR5/4) yel brn	313.9
70				BG	BG	1	[Symbol]		
75				BG	BG	0	[Symbol]		
80				BG	BG	1	[Symbol]		



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# Boring 400-214

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

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

# Boring 400-214

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
45								Clay w/ Sand, v fn/med grn, mod sorted, subang, firm, & moist: (7.5YR4/6) strg brn	331.5
50								Silt & Clay w/ tr Gravel, subang, prly sorted: (10YR6/3) p brn	318.5
55								Silty Sand; Sand v fn/fn, subang; mod sorted: (10YR6/3) p brn	314.5
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)
85				BG	BG	0		Silty Gravel w/ tr Clay; Gravel (1/8-1/2") subang/subrnd; prly sorted; (10YR5/4) yel brn	
90				BG	BG	0			
95				BG	BG	0			
100								Sand & Clay; Sand v frn/med grn, subang; mod sorted, firm; (10YR5/6) yel brn	279
								T.D. = 100.0	276.5
105									
110									
115									
120									



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# Boring 400-215

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft- <i>msl</i> )
5								Silt and clay, firm, moist, dk yellowish brown (10YR4/4)	
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								Sand and gravel, poorly sorted, ang, strg brown (7.5YR7/8), moist, firm	3525
30								Sand, silty, v fn to crs grn; tr gravel, poorly sorted, ang, moist	3485
35									
40								Sand, v fn to med grn, tr silt and gravel, brownish yellow (10YR6/8), moist, subang, well sorted; gravel rnded and sorted	3425

# Boring 400-215

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FTD (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
45								sand, v fn to med grn, tr Silt & Gravel, brn yel (10YR6/6), moist subang, well sorted; Gravel rnded & sorted	
50									
55								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
60									
65				BG	13	0		Chert gravel, 1/8-1/2 inch, rnded, poorly sorted; 20-35% silt; gray (2.5Y6/1)	316
70				BG	BG	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%	
75				BG	7	0			
80									

# Boring 400-215

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

DEPTH IN FEET	LITHOLOGIC SAMPLE	ANALYTICAL SAMPLE	% Recovery	RAD/Alpha	RAD/Beta	FID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	ELEV. (ft-msl)
85				1	BG	0	●	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%	
90				BG	BG	0	●		
95				BG	BG	0	●		285.5
95								Clay, sandy, v fn to med grn, mod sorted, subang, firm, brown (10YR5/3)	283.5
100								T.D. = 95.0 ft	
105									
110									
115									
120									

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**MEMORANDUM**

DATE: Tuesday, October 07, 1997  
TO: Eric Mort  
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 also 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 corridors 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, and an 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 early 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-detections of the soil gas were considered normal. Additionally, as no detections of target compounds were reported from the numerous subsurface soil samples, many of which were collected immediately adjacent to the soil gas sample, nothing out of the ordinary was suspected. Indeed, the target gases were highly volatile TCE and its 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 escaped 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 detections 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 seven 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 anomalously 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 400-053. 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 ray 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 investigating the possibility of vinyl chloride vapors in boring samples on the southwest corner of C-400. Previous screening results indicated elevated levels of organics by field screening with a flame-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 chloride. 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 while PID screening results were below 10 PID units. 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 units while PID results range from 0 to 98 PID units. This RGA area is known to have detectable 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 units 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 indicate vinyl chloride is not a major constituent of the soil gas.

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Water Level Measurements  
WAG 6 R/WFS

boring number	unit	measure point (MPP)	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	15-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	54.83	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	50.82	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	379.82	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	57.80
400-208/MW-343	RGA	N side	378.99	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	40.68	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	NT	NT	NT	NT	NT	DRY	DRY	dry	dry
MW177	UCRS	N side	378.74	47.80	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	38.78	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
028-002	UCRS	N side	377.10	NA	NA	NA	12.83	12.85	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	32.80	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	378.26	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	40.82	40.83	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	37.84	37.77	37.86	37.96	38.20	38.10	38.28	38.40	37.49	40.52
400-021	UCRS	N side	378.99	NA	NA	30.00	32.80	32.72	33.05	33.34	33.50	33.67	33.41	34.10	33.83	33.80	33.69	33.94	34.05	34.06	33.93	33.50	33.85
400-022	UCRS	BGS	380.70	NA	NA	NA	36.40	37.37	37.58	36.80	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	36.90	42.10	42.71	40.72	42.18	43.16	43.18	42.98	43.33
400-027	UCRS	N side	361.96	NA	NA	39.50	39.50	39.01	38.83	40.03	39.60	DRY	37.92	39.10	38.22	39.21	39.85	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	37.88	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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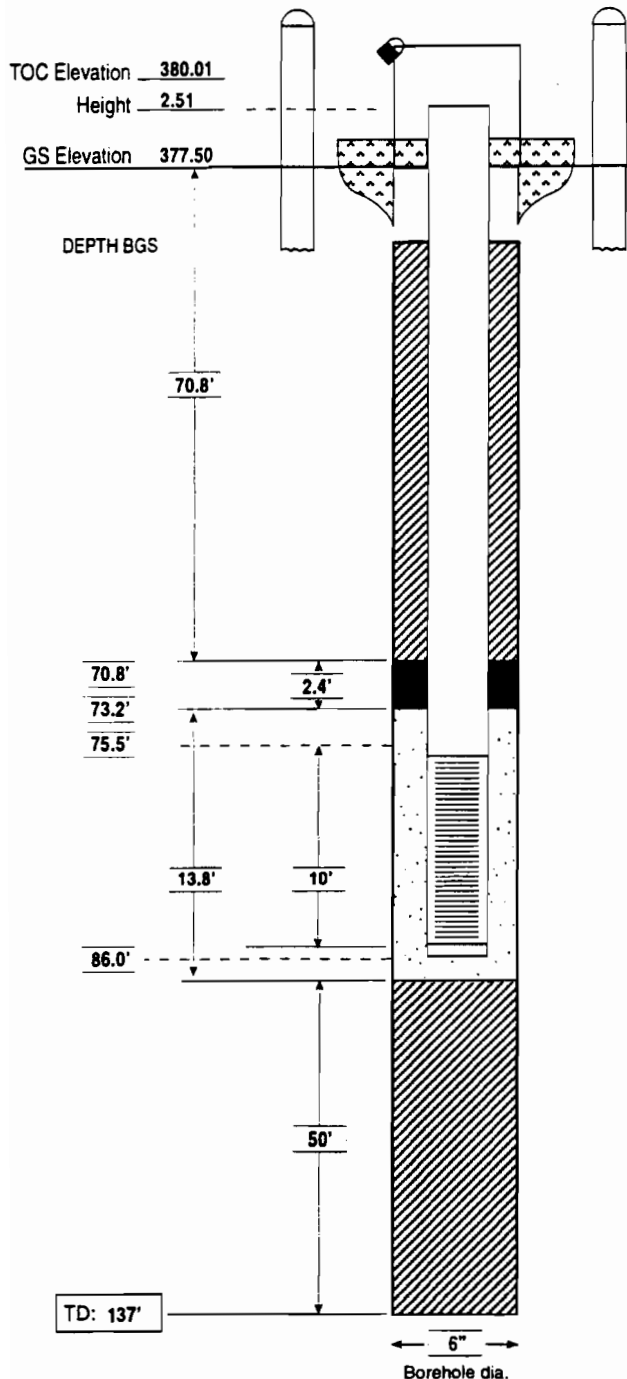


# CH2MHILL

## MONITORING WELL CONSTRUCTION LOG: Standard

Installation Monitoring Well  
 Site WAG 6  
 AKGWA Number 8003-3482  
 Drilling Contractor Alliance Environmental, Inc.  
 Built By Ed Miller

Well Number MW-341 (400-212)  
 Client/Project PGDP  
 Starting date 12/12/98 time 0700  
 Completion date 12/15/98 time 1600  
 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

Material / Type Steel / Schedule 40  
 Diameter 6" Water Tight Seal (Y / 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) 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'  
 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 75.5' 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

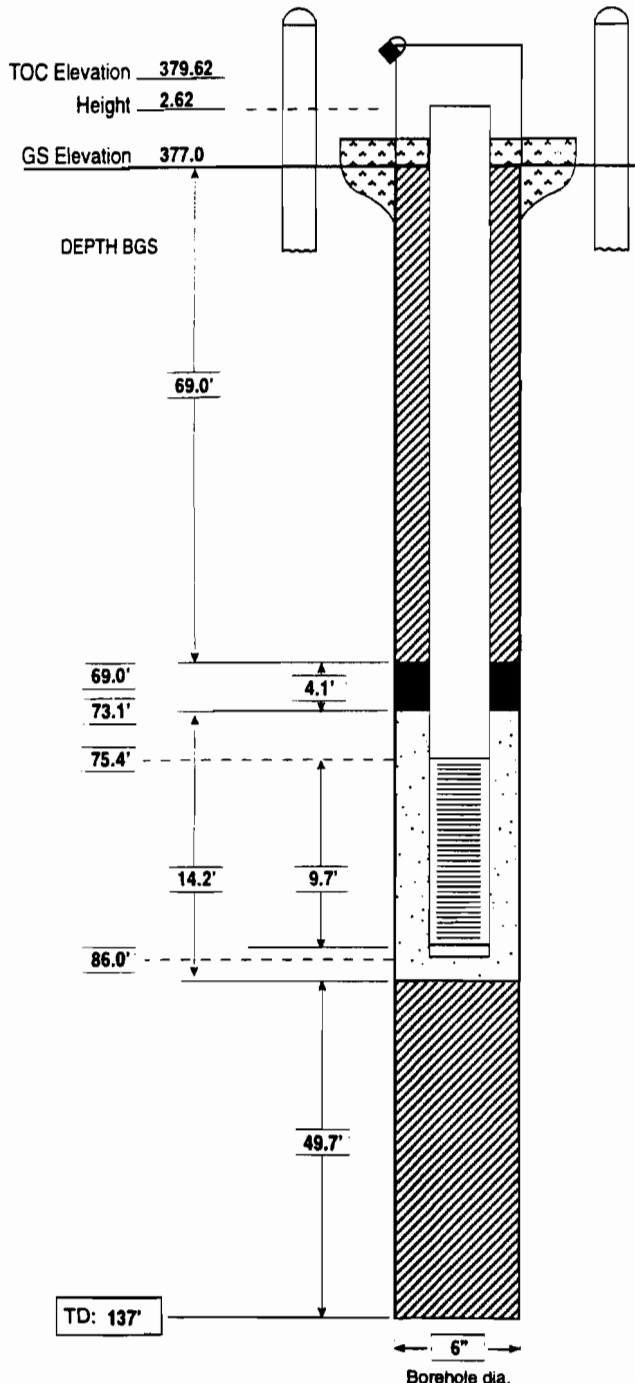
Starting date 12/19/98 time 1012

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 (Y / 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

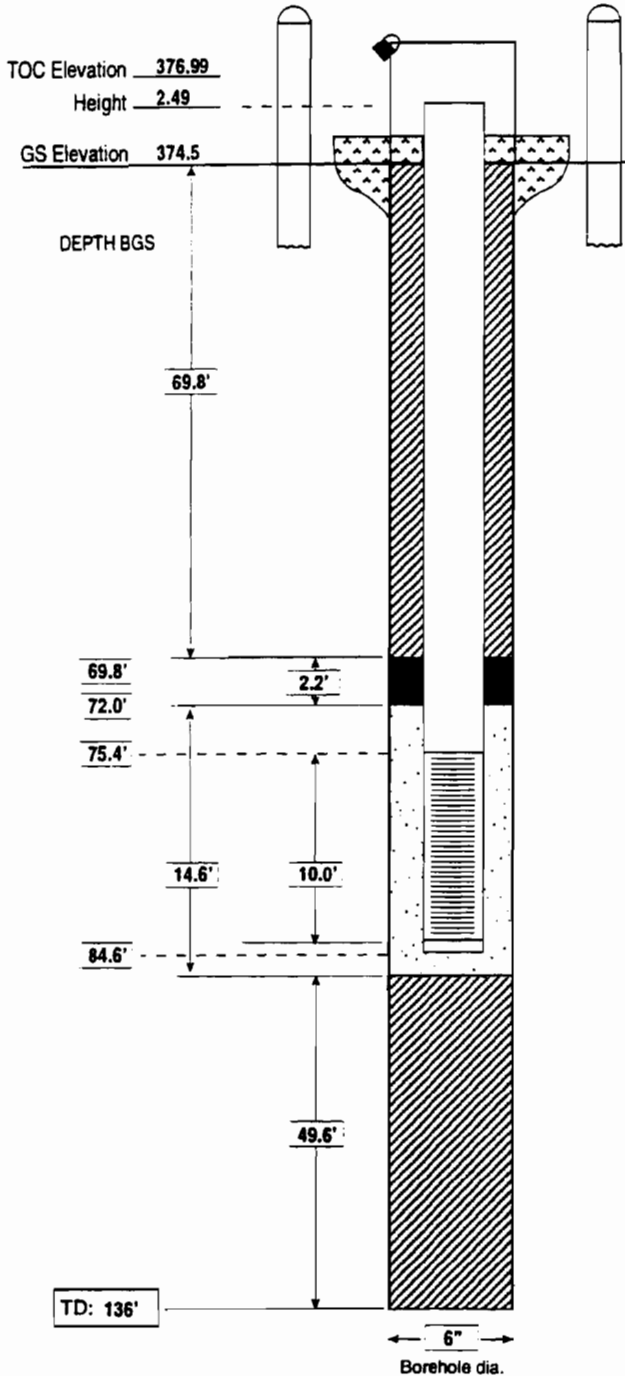
Starting date 12/19/98 time 0830

Drilling Contractor Alliance Environmental, Inc.

Completion date 12/20/98 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 Quartz 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?  / N

Type of Containment 1,000 Gallon Mobile Tank

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αδδθηφκλ:  
ζεχθβνμ./θρεπτυγιον{}  
ΑΣΔΦΓΗΘΚΛ:  
ΖΞΧςBNM<?

Time	Volume Removed (gallons)	Water Level (ft BTOC)	Turbidity (NTU)	Clarity / Color	Temp °C	pH	Conductivity (mS)	DO (%)	Oxidation Reduction Potential (Millivolts)	Remarks
1315	500		66	Cloudy						pumped until turbidity < 10 NTUs
1600	900		14	Clear						pumped until turbidity < 10 NTUs
1014	902			Clear	16.26	6.37	531		91.0	
1018	904			Clear	17.10	6.31	548	35.6	86	
1019	904.5			Clear	17.10	6.34	549	35.2	84	
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	17.19	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?  /  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 (µS)	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
1500	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	5.9	690	54.1		
0825	645		9.8	Clear	20.8	5.8	688	54.2		
0830	648		9.9	Clear	20.7	5.8	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 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 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 (µS)	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 SERVICES  
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 Investigation / 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-built locations for the above referenced project.

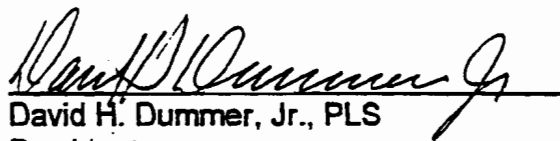


I have reviewed the enclosed information and have found it to be true and accurate to the best of my knowledge and belief.

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

Respectfully Submitted,



  
David H. Dummer, Jr., PLS  
President



National Society of Professional Engineers

Enclosure



Kentucky Society of Professional Engineers

ch2mhill.doc



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Prepared by: Dummer Surveying Company #CGDS06768  
List-Coords/Brg-Azi 597103 1/29/98 10:53:49 Factor: 1.0000000  
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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		-1553.0000	-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
50		-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	-4254.0000	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	377.50	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	-1190.0000	-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
205	-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	-4083.0000	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	378.50	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	379.00	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	378.50	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	374.78	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
287	-1729.4000	-4352.5000		BLDG
288	-1728.6430	-4352.6954		SW COR C400
316	-1129.1246	-5399.5943		PANEL
318	-1129.1667	-4499.5000		10TH & VA
320	-1849.3738	-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	-4874.8850	-0.86	026-006
325	-1049.5897	-4624.6229	-1.04	026-007
326	-1425.2114	-3908.2632	379.44	400-048
327	-1231.8409	-3573.3949	380.30	400-049
328	-1050.5171	-4875.8688	373.85	026-006
329	-1052.6709	-4442.2960	375.28	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	378.87	400-051
336	-1142.3187	-3635.4035	379.93	400-050
337	-907.0538	-3635.1670	378.04	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	378.06	400-105
353	-1891.8137	-4216.6437	378.03	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	378.07	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	-1727.6883	-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	-4476.2468	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	376.28	400-032
407	-1499.9824	-4031.8425	376.19	400-198
408	-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	377.83	400-112
439	-1522.9310	-4441.9742	377.55	400-157
440	-1550.4071	-4441.8687	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	373.50	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	378.64	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	-1383.6486	-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	378.23	400-178
514	-1818.5249	-4344.1069	378.41	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	-1848.8887	-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

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 Prepared by: Dummer Surveying Company #CGDS06768  
 List-Coords/Brg-Azi 597103AB 1/29/98 11:20:43 Factor: 1.000000  
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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		-1683.9609	-4112.1890	379.84	400-014
15		-1756.8415	-4331.1226	378.18	400-015
16		-1745.1700	-4189.9793	379.84	400-016
17		-1819.4749	-4344.0922	378.19	400-017
18		-1794.2000	-4262.7900		400-018
19		-1495.0527	-4221.4490	377.82	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	-4099.7888	379.44	400-026
27		-1798.2831	-3963.8723	379.84	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	-4409.2798	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	378.21	400-041
42		-1169.6401	-4192.0618	378.27	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	378.19	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		-1184.9800	-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		-1649.8700	-4053.0400	378.92	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	378.19	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	378.18	400-191
192	-1790.2060	-4474.0181	378.19	400-192
193	-1797.3984	-4419.9968	378.21	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	379.84	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	379.84	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	373.98	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	378.09	026-017

223	-1149.2000	-4050.6400	376.12	040-001
224	-1244.5022	-4135.9088	378.92	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	-1168.6800	-4332.8700	378.28	203-002
237	-1189.9226	-4367.0813	378.09	203-003
238	-1168.8200	-4313.0800	378.47	203-004
239	-1149.1100	-4274.9800	378.41	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	376.82	203-008
243	-1499.9800	-4031.8400	377.46	400-198
244	-1351.8881	-4374.4277	376.44	400-199
245	-1725.0020	-4081.0787	379.84	400-200
246	-1705.9761	-4076.5416	379.84	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	378.36	400-205
251	-1076.0776	-4564.0924	374.36	400-206
252	-1783.0190	-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	375.81	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	374.78	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	377.98	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	379.38	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	-1302.1163	-4413.9400	376.26	40 COR/TR
524	-1289.5140	-4403.5552	380.12	210

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The **Enclosure** is not available due to ***SIZE***.

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**Laboratory Geotechnical Data  
WAG 6 R/FS**

Sample #	Seive Size																Porosity	Hydraulic Conductivity (cm/s)
	< 200		200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	>3"	%		
	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			
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	
400036SA080	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	

I-H

UCRS Laboratory Geotechnical Data  
WAG 6 RI/FS

Sample #	Sieve Size																% Porosity	Hydraulic Conductivity (cm/s)	
	< 200	< 200	200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	>3"				
	Grain Size, millimeters																		
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					
026001SA010	19.5	41.3	13	13.9	7.2	2.1	3	0	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	0	38	6.57E-07	
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	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	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	0	40	4.67E-06	
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	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	0	30	2.042x10-5	
400207SA045	12.5	4.4	1.3	7	18.3	44.7	11.7	0	0.1	0	0	0	0	0	0	0	35	1.019x10-3	
400208SA010	21	67.4	1.2	2.7	2.4	1.2	0.6	1	2.5	0	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	0	47	5.56E-02	
400210SA010	20	76.1	0.4	0.9	0.9	0.6	0.5	0.4	0.2	0	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	0			
400210SA045	25.1	33.3	2.5	33.9	4.4	0.7	0.1	0	0	0	0	0	0	0	0	0	33	1.71E-06	
400212SA010	54	39.2	0.5	0.8	0.8	1.2	1.4	0.5	1.6	0	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	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	0	38	8.46E-02	
																	highest	45	3.27E+00
																	lowest	25	1.71E-08
																	mean	36.375	2.51E-01

H-2

RGA Laboratory Geotechnical Data  
WAG 6 R/FS

Sample #	Sieve Size															% Porosity	Hydraulic Conductivity (cm/s)		
	< 200	< 200	200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	>3"				
	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				
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0			
400208SA090	72.5	19.4	1.4	4.6	1.9	0.2	0	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	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	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	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	0	41	3.74E-06	
																	highest	54	9.40E+00
																	lowest	27	1.85E-07
																	mean	39.53846	1.67E+00

H-3

McNairy Laboratory Geotechnical Data  
WAG 6 RI/FS

Sample #	Sieve Size																Porosity %	Hydraulic Conductivity (cm/s)	
	< 200	< 200	200	100	60	40	20	10	4	0.375"	0.75"	1"	1.5"	2"	> 3"				
	Clay	SBt	0.075	0.15	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			
026001SA120	1.9	5	10.1	59.1	23.7	0.2	0	0	0	0	0	0	0	0	0	0	41	1.09E-03	
400036SA110	4	3.3	16.9	54.6	14.2	5.1	0.6	0.8	1.1	0	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	0	52	8.204x10-8	
400036SA140	7.8	22.5	14.8	43.7	10.3	0.7	0.3	0.1	0	0	0	0	0	0	0	0	46	2.106x10-6	
400036SA180	54	37.7	0.1	1.5	2.3	4.4	0	0	0	0	0	0	0	0	0	0	45	4.731x10-6	
400036SA146	27.8	58.6	0.1	8.2	5.1	1.9	0	0	0	0	0	0	0	0	0	0	32	1.519x10-5	
400212SA140	15.2	73	6.9	1.7	1.2	0.8	0.9	0.3	0	0	0	0	0	0	0	0	42	7.36E-05	
400212SA136	16	33.8	16.6	32.2	0.7	0.3	0.2	0.2	0	0	0	0	0	0	0	0	56	1.33E-05	
400212SA140	1	24.9	1.3	17.8	50	4.5	0.4	0.1	0	0	0	0	0	0	0	0			
400212SA160	20	45.6	0.8	28.5	4.8	0.7	0	0	0	0	0	0	0	0	0	0	46	1.32E-06	
																	highest	56	1.09E-03
																	lowest	32	8.204x10-8
																	average	45.88889	2.95E-04

H-4