RF/ER-96-0012.UN

KAISER•HILL
COMPANY

FINAL PHASE I RFI/RI REPORT WOMAN CREEK PRIORITY DRAINAGE, OPERABLE UNIT 5

RMRS Rocky Mountain Remediation Services, LLC
...protecting the environment

VOLUME 3

APPENDICES B, C, AND D
TEXT, FIGURES, AND TABLES

• Environmental Restoration •
Rocky Flats Environmental Technology Site

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

April 1996

A-OU05-000566

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.80	GROUND ELEVATION (FT) 5820.50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747687	AREA: IHSS 142.10 C-1 POND	CASING DIAMETER (IN): 2.00	GEOLOGIST: T. S. DREILING	50092
EAST:	2086417	LOCATOR NUMBER: N7	BOREHOLE DIAMETER (IN): 10.00	DATE DRILLED: 11/03/92	

REMARKS: DRILLING EQUIPMENT CME 75. ASI RIG GEOLOGIST: THERESA SANTANGELO DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.50 /2.50	5820	0			ML	0.0'-2.5' Clayey Silt with some Sand and trace Gravel. Grayish brown (5 YR 3/2) to dusky brown (5 YR 2/2). Trace sub-angular quartzitic fine to coarse gravel, to 2.0 in. max. Some feldspar/quartzose f.g. sand, sub-angular to sub-rounded, poorly graded. Low plasticity, moist, roots throughout interval. Lacks obvious bedding. 5% gravel, 19% sand, 46% silt, 30% clay
				0.70 /1.50	5819	1			GM	2.5'-7.7' Sandy Gravel with some Cobbles and Silt and trace Clay. Very light gray (N8) to light gray (N7). Cobbles >4.0 in., sub-rounded and quartzitic (angular, clean, powdered, fresh surfaces on cobbles are apparently drilling induced). Gravel sub-angular and quartzitic (also bit fractured surfaces). Sand pred. m.g., sub-angular, muscovite-quartzose. Slightly calcareous. Well graded, low plasticity, dry. Silty Gravel texture dominant over clean gravel. Lacks obvious bedding over interval. (gm-gp) 15% cobbles, 55% gravel, 21% sand, 6% silt, 3% clay.
				0.30 /0.25	5818	2				
				0.60 /0.65	5817	3				
	BR50009AS			0.50 /0.50	5816	4				No recovery (3.2-4.0'), and (6.4-7.2')
				1.00 /1.00	5815	5				
				0.20 /0.80	5814	6				
	BR50000AS			2.80 /2.80	5813	7			GC	7.7'-10.2' Sandy Gravel with some Clay and trace Silt. Mod. yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/2). Gravel 1.5 in. avg., sub-rounded, quartzitic. Sand pred. m.g., sub-angular to sub-rounded, muscovite, feldspar, quartz. Slightly calcareous, poorly graded, mod. plasticity, dry. MnO2 coatings from 8.6' to 9.0'. Interval from 9.6' to 10.2'. Reworked bedrock. 55% gravel, 28% sand, 4% silt, 13% clay
					5812	8				
					5811	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 80	GROUND ELEVATION (FT) 5820 50	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747687	AREA IHSS 142 10 C-1 POND	CASING DIAMETER (IN) 2 00	GEOLOGIST T S DREILING	50092
EAST	2086417	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 11/03/92	

REMARKS: DRILLING EQUIPMENT CME 75 ASI RIG GEOLOGIST THERESA SANTANGELO DREILING NOTE CORE LOSS (NO RECOVERY) I NTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50002AS			0.40 /0.40	5810	10			CLAYSTONE	10 2'-12.6' Top of Bedrock at 10 2'. Claystone with some Silt and trace Sand Light brown (5 YR 5/6) and light gray (N7). Mottled, with some silt and trace of f.g. sand. Argillaceous, non-calcareous, massive bedding but with carbonaceous material, tan and orange FeOx stained, moist Wavy laminations at 10 4', apparently drilling induced. 1% sand, 15% silt, 84% clay
				1.00 /1.00	5809	11				
				2.00 /2.00	5808	12				
					5807	13			SILTY CLAYSTONE	12.6'-12.8' Silty Claystone with trace Sand. Sandy appearing zone of interval contains sand, sub-rounded to rounded, f.g., well sorted, 0.16 mm avg diameter, quartz Porosity 10%, mod. argillaceous, cemented, mod. friable, no apparent bedding. 3% sand, 27% silt, 70% clay
				1.20 /1.40	5806	14			CLAYSTONE	12.8'-14.6' Claystone. Same as above, (reference interval 10 2' to 12.6') Wavy laminations at 13 4' apparently drilling induced, 2 degree dip in bedding at 13 5'. No recovery (14 6-14 8')
					5805	15				
					5804	16				
					5803	17				
					5802	18				
					5801	19				
						20				

Total Depth Drilled 14.80 Total Depth Casing 13 10
Bottom of Filter Pack 11.60

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.10	GROUND ELEVATION (FT)	5745.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747533	AREA: IHSS 142.11 C-2 POND	CASING DIAMETER (IN):	2.00	GEOLOGIST	T.S. DREILING	50192
EAST:	2089222	LOCATOR NUMBER: 07	BOREHOLE DIAMETER (IN):	10.00	DATE DRILLED:	11/05/92	

REMARKS: DRILLING EQUIPMENT: CME 75. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.20 /2.50	5745	0–1			CL	0.0'-1.2' Silty Clay with some Sand and Gravel. Dusky brown (5 YR 2/2). Non-calcareous. Mod. well cemented. Dry, weathered, mod. plasticity. Roots throughout interval. Some coarse gravel (quartzite) to 1-3/8 in. Sand poorly graded, pred. sub-angular quartz in coarse fraction. Angular to sub-angular quartz in fine fraction. <10% gravel, 15% sand, 30% silt, 45% clay No recovery (1.2-2.5').
					5744	2				
				3.30 /1.50	5743	3			SC	2.5'-4.0' Clayey Sand with some Silt and Gravel. Color change to pred. mod. yellowish brown (10 YR 5/4) with some dark yellowish brown (10 YR 4/2) and white (N9) caliche lenses. Entire interval slightly calcareous. Sample dry, weathered. Some iron oxide. Low plasticity, hard and well cemented (argillaceous/some calcareous) when dry. Some coarse gravel at top of interval (to 1-3/4 in. quartzite). Becomes finer in lower part of interval. Sand mod. well graded. Pred. sub-angular to angular quartz. (sc-ml) 7% gravel, 41% sand, 21% silt, 31% clay Note: 1.8' extra core recovery.
					5742	4				
				0.90 /1.00	5741					
	BH50004AS			0.50 /0.50		5			GW	4.0'-7.0' Sandy Gravel with some Silt and trace Clay. Gravel well graded. Matrix grayish orange (10 YR 7/4) to mod. yellowish brown (10 YR 5/4). Gravel pred. quartzite. Some schist and granitic fragments. Coarse gravel to cobbles at top of interval. Pred. sub-angular sand. Mod. well graded. Pred. c.g. to m.g. sub-angular quartz. Some feldspar. Trace mica. Interval weathered. Very low plasticity. Dry, slightly cemented. Non-calcareous. (gw-gm) 70% gravel, 22% sand, >6% silt, <2% clay No recovery (7.0-7.5')
					5740	6				
				1.50 /2.00	5739	7				
	BH50005AS				5738	8			GM	7.5'-8.2' Sandy Gravel with some Silt and Clay. Very pale orange (10 YR 8/2) (dry) to mod. yellowish brown (10 YR 5/4) when damp. Unconsol., low plasticity. Dry, weathered. Gravel well graded, pred. quartzite, angular to sub-angular. Sand well graded, same as sand in above interval (reference interval 4.0' to 7.0'). (gm-sm) 40% gravel, 39% sand, 13% silt, 8% clay
				1.90 /2.00	5737	9				
									GW	8.2'-9.8' Sandy Gravel with some Silt and trace Clay. Same as above (reference interval 4.0' to 7.0')
				0.50 /0.50	5736	10				

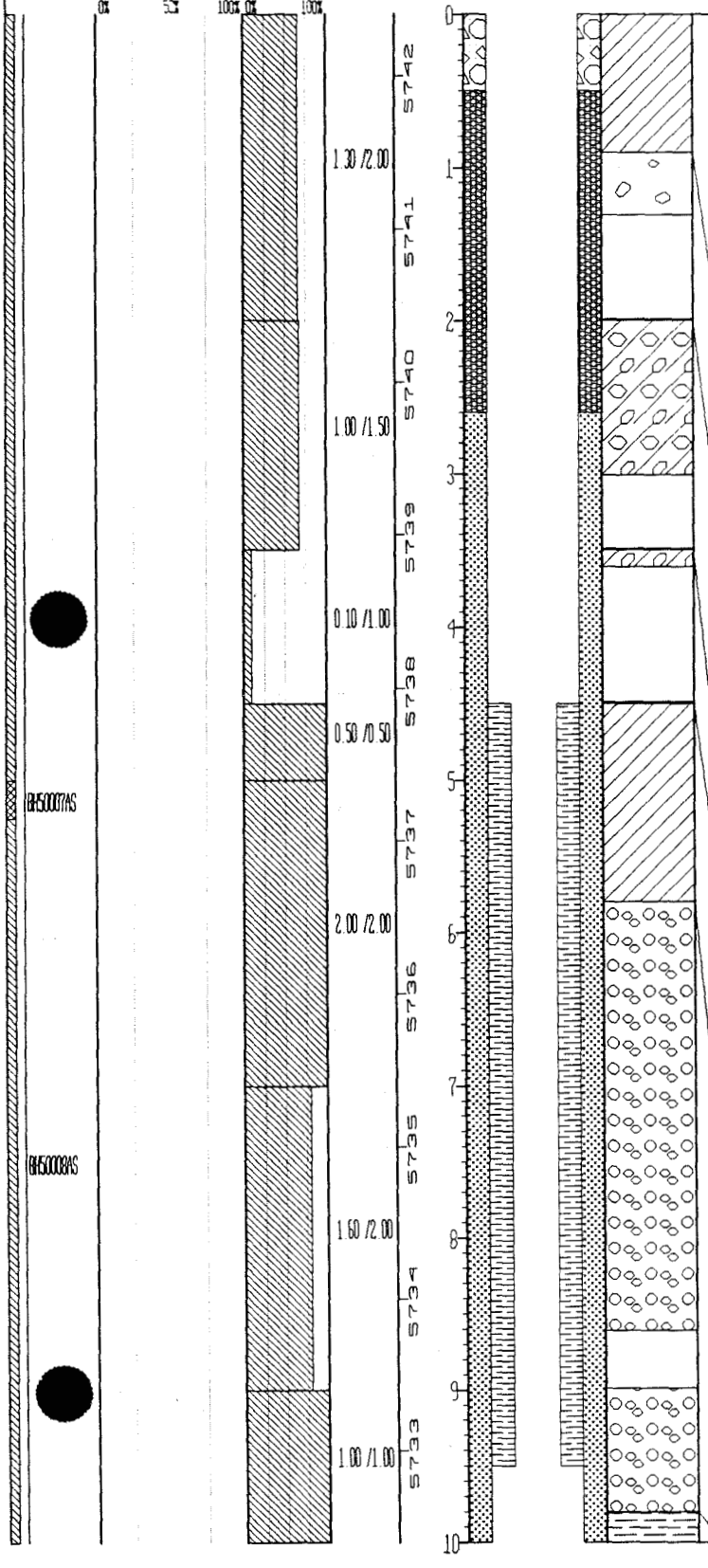
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.10	GROUND ELEVATION (FT) 5745.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747533	AREA IHSS 142.11 C-2 POND	CASING DIAMETER (IN) 2.00	GEOLOGIST T.S. DREILING	50192
EAST 2089222	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 11/05/92	

REMARKS: DRILLING EQUIPMENT: CME 75 ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	0H50010AS			1.50/1.50	5735	10–11			CLAYSTONE	9.8'-13.1' Top of Bedrock at 9.8' Claystone with some Silt and trace Sand. Grayish orange (10 YR 7/4) with dark yellowish orange (10 YR 6/6) mottling to approx. 12.2'. Color change to pred. dusky yellowish brown (10 YR 2/2) below 12.2' with mod. heavy zones of iron oxide (mod. yellowish brown (10 YR 5/4)). Claystone slightly damp, dense with silty to slightly sandy lenses. Trace of Mn staining. No apparent bedding or fractures. Trace sand, 10-15% silt, 85-90% clay.
				0.70/0.70	5734	12				
				1.40/1.40	5733	13				
				1.50/1.50	5732	14			CLAYSTONE	13.1'-15.1' Claystone with some Silt. Yellowish gray (5 Y 7/2) with pervasive iron staining (hematite-limonite). Dark yellowish orange (10 YR 6/6). Some Mn staining. Indications of mineralized fracture surfaces. Core dry, dense, mod. indurated. No apparent bedding. Some traces v f g. sand. 20% silt, 80% clay
					5731	15				
					5730	16				Total Depth Drilled: 15.10 Total Depth Casing: 12.90 Bottom of Filter Pack: 10.20
					5729	17				
					5728	18				
					5727	19				
					5726	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.50	GROUND ELEVATION (FT) 5742.40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747328	AREA IHSS 142.11 C-2 POND	CASING DIAMETER (IN) 2.00	GEOLOGIST T.S. DREILING	50292
EAST	2089313	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 11/06/92	

REMARKS: DRILLING EQUIPMENT: CME 75. ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0.0'-0.9' Sandy Clay with some Gravel and Silt. Yellowish brown (10 YR 5/4). Mod. plasticity, dry, well cemented. Gravel mod. well graded, max. coarse gravel size 1.5 in. Sub-angular, dom. lithology quartzite. Sand mod. well graded. C.g. fraction quartz, some quartzite, feldspar and trace mica, sub-angular. F.g. fraction pred. quartz, trace feldspar and mica, sub-angular. Sample weathered, roots throughout interval. 20% gravel, 30% sand, 15% silt, 35% clay.
GP	0.9'-1.3' Gravel or Cobbles with trace Sand, Clay and Silt. Poorly graded. Matrix mod. yellowish brown (10 YR 5/4). Apparent cobble zone. Dom. lithology quartzite. Sample dry, weathered. 90% gravel, 4% sand, <2% silt, >4% clay. No recovery (1.3-2.0')
GC	2.0'-3.0' Clayey Gravel with some Sand and Silt. Mod. yellowish brown (10 YR 5/4). Gravel well graded, max. coarse gravel size 2.5 in. sand, poorly graded, pred. m.g. (70%), pred. quartz, some quartzite and feldspar, trace mica, sub-angular. Med. plasticity weathered, dry, well cemented when dry. Some Fe staining. Clayey zone at bottom of interval. 40% gravel, 22% sand, 11% silt, 27% clay. No recovery (3.0-3.5')
GC	3.5'-3.6' Clayey Gravel with some, Sand and Silt. Same as above, (reference interval 2.0' to 3.0') No recovery (3.6-4.5')
CL	4.5'-5.8' Sandy Clay with some Gravel and Silt. Dark yellowish brown (10 YR 4/2). Sample dry and hard (well cemented when dry), med. plasticity, weathered. Gravel to 1.75 (at base of interval), pred. quartzite. Sand mod. well graded, pred. quartz, some quartzite and feldspar in c.g. and m.g. fraction, sub-angular. F.g. fraction 95% quartz, sub-angular to angular. 15% gravel, 30% sand, 11% silt, 44% clay.
GW	5.8'-9.8' Sandy Gravel with trace Silt and Clay. Matrix light brownish gray (5 YR 6/1) to pale yellowish brown (10 YR 6/2). Gravel well graded, max. coarse gravel size to 2.5 in. Lithology quartzite, granite fragments and schist fragments, sub-angular. Some clasts drilling fractured. Interval dry, matrix low plasticity, weathered. Some intervals contain higher percentage of clay. Lower 0.3' of interval consists of reworked bedrock (Claystone with Gravel). 70% gravel, 23% sand, 4% silt, 3% clay. No recovery (8.6-9.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.50	GROUND ELEVATION (FT)	5742.40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747328	AREA IHSS 142.11 C-2 POND	CASING DIAMETER (IN)	2.00	GEOLOGIST	T.S DREILING	50292
EAST	2089313	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	11/06/92	

REMARKS: DRILLING EQUIPMENT: CME 75. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50011A5			0.30 /0.50	5732	10			CLAYSTONE	9.8'-14.5' Top of Bedrock at 9.8'. Claystone with trace Silt. Olive gray (5 YR 4/1) with dark yellowish orange (10 YR 6/6) mottling to approx. 12.0' (FeOx-some fracturing with FeOx min.). Color change to pred. dark yellowish orange (10 YR 6/6) and grayish orange (10 YR 7/4) to approx. 13.0'. Grades to pred. olive gray (5 Y 4/1) and brownish gray (5 YR 4/1) to total depth. Some Mn staining in upper half of interval. Some carbonaceous material in bottom 1.0' (approx.) of interval. Upper portion of core shows indications of disturbed sediments. Some drilling induced fractures. Some caliche lenses in top 1.5' of interval. Gravel at 10.5' is stuff from above. >95% clay, <5% silt.
				2.00 /2.00	5731	11				
					5730	12				
				2.01 /2.00	5729	13				
					5728	14				
					5727	15				Total Depth Drilled: 14.50 Total Depth Casing: 12.40 Bottom of Filter Pack: 10.00
					5726	16				
					5725	17				
					5724	18				
					5723	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) 6023.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 749088	AREA SURF. DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	50392	
EAST 2082630	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED 12/03/92		

REMARKS: DRILLING EQUIPMENT: CME 75 AUGER. ASI RIG GEOLOGIST: T. SANTANGELO-DREILING. NOTE: LOSS OF CORE (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6023	0			ML	0.0'-0.6' Sandy Silt with some Clay and Gravel. Dusky brown (5 YR 2/2). Fine gravel, sub-rounded, quartzite (average 0.5 in). Sand sub-angular, pred. c.g., feldspathic, quartzitic. Fines of low plasticity, with roots. Moist. 18% gravel, 25% sand, 35% silt, 22% clay.
				2.00 /2.00	6022	1			GW	0.6'-8.4' Sandy Gravel with some Cobbles and Silt, trace Clay. Grayish brown (5 YR 3/2) to light brown (5 YR 5/6). Cobbles >3 in., sub-rounded, feldspathic and quartzitic. Gravel sub-rounded, quartzitic, well graded. Sand sub-angular, feldspathic, muscovite, quartzose and quartzitic, pred. m.g. Silt with trace phlogopite. Mod. plastic, fines, dry, no obvious bedding. Upper 0.6' of interval mixed with roots, dusky brown (5 YR 2/2). Interval from 0.8' to 4.4' mod. well limonite cemented. (low-gm) 20% cobbles, 42% gravel, 31% sand, 6% silt, 1% clay.
	BH50018AS			0.80 /0.80	6021	2				
	BH50012AS			0.00 /0.20	6020	3				
				1.50 /1.50	6019	4				No recovery (7.5-8.0')
	BH50019AS									
				1.20 /1.30	6018	5				
				0.00 /0.20	6017	6				
	BH50020AS									
				1.50 /2.00	6016	7				
					6015	8				
	BH50021AS									
	BH5			2.00 /2.00	6014	9			SM	8.4'-13.8' Gravelly Sand with some Silt and Clay. Brown (5 YR 5/6) to olive gray (5 Y 6/1). F. gravel sub-rounded, quartz and quartzitic, max 1.0 in. diameter. Sand sub-angular, muscovite, feldspar, quartz, quartzitic, pred. med. grained. Silt with trace phlogopite, well graded, no apparent bedding, mod. plasticity, moist, limonitic oxidation with trace MnO2 bottom of interval. 22% gravel, 54% sand, 14% silt, 10% clay.
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 30.00	GROUND ELEVATION (FT): 6023.00	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER	
NORTH: 749088	AREA: SURF DIST. E OF 115	CASING DIAMETER (IN):	GEOLOGIST: T.S. DREILING		
EAST: 2082630	LOCATOR NUMBER: J8	BOREHOLE DIAMETER (IN): 2.00	DATE DRILLED: 12/03/92	50392	

REMARKS: DRILLING EQUIPMENT: CME 75 AUGER. ASI RIG GEOLOGIST: T. SANTANGELO-DREILING. NOTE: LOSS OF CORE (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50022AS				6013	10				
				2.00 /2.00	6012	11				
	BH50023AS				6011	12				
				2.00 /2.00	6010	13				
	BH50024AS				6009	14			GW	13.8'-15.9': Sandy Gravel with some Cobbles and Silt, trace Clay. Dark yellowish orange (10 YR 6/6). Cobbles sub-angular, granitic and quartzitic. Gravel sub-rounded, quartzitic, well graded, micaceous, feldspathic, quartz. Sand sub-angular to sub-rounded, well graded, micaceous, feldspathic, quartzitic and quartzose. Silt phlogopite, feldspathic, quartz, well graded, no apparent bedding, moist. Limonitic with hematite oxidation, silty gravel dom. over clean well graded gravel. (gm-gw) 20% cobbles, 45% gravel, 25% sand, 8% silt, 2% clay.
	BH50014AS			1.90 /2.00	6008	15				
	BH50025AS				6007	16			GW	15.9'-16.3': Sandy Gravel with some Cobbles and Silt, trace Clay. Same as above (reference interval 13.8' to 15.9')
				1.80 /2.00	6006	17			CL	16.3'-18.7': Silty Clay with some Sand and Gravel. Light olive gray (5 Y 5/2) and dark yellowish orange (10 YR 6/6). Gravel sub-rounded, quartzitic, 1.5 in. max. diameter. Sand angular to sub-rounded, micaceous, feldspathic with quartz predominating, m.g. Clay, med. plasticity containing silt, caliche, and thin sandy layers, 2 to 10 degrees to core axis. FeOx, damp. Authigenic (?) specularite and quartz, MnO2 and caliche, filling clay dessication fractures. 15% gravel, 11% sand, 15% silt, 59% clay
	BH50026AS				6005	18				
				2.00 /2.00	6004	19			SW	18.7'-21.8': Gravelly Sand with trace of Silt and Clay. Dark yellowish orange (10 YR 6/6) to mod. yellowish brown (10 YR 5/1). C. gravel sub-angular to sub-rounded, quartzitic, 1.2 in. max. diameter. Sand c.g.-f.g., angular, muscovite, feldspar, quartz, non-calcareous. Very well graded, unconsol., damp. 45% gravel, 50% sand, 4.5% silt, 0.5% clay
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) 6023.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 749088	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50392	
EAST 2082630	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED 12/03/92		

REMARKS: DRILLING EQUIPMENT CME 75 AUGER ASI RIG GEOLOGIST T. SANTANGELO-DREILING NOTE LOSS OF CORE (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50027AS	0% 50%	100% 0% 100%		6003	20				
	BH50015AS			2.00 /2.00	6002	21				
	BH50028AS				6001	22			CL	21.8'-22.2' Clay Lense of mod plastic clay Yellowish gray (5 Y 8/1) Micaceous, with iron oxide (No percentages recorded)
				2.00 /2.00	6000	23	12/04/92 ▽		SW	22.2'-24.0' Gravelly Sand with trace of Silt and Clay Same as above, (reference interval 18.7' to 21.8') Water reported perched above 24.0'. From 23.0' to 24.0' base of Qrf is thoroughly limonite and hematite oxidized overlying bedrock.
	BH50029AS				5999	24			CLAYSTONE	24.0'-25.7' Top of Bedrock at 24.0' Claystone Grayish orange (10 YR 7/4) and light olive gray (5 YR 6/1) Argillaceous and non-calcareous, massively bedded with distorted laminae indicated by common 1.0 mm orange FeOx layers at 0 to 15 degrees from core axis. Contact with Qrf alluvium sharp. Fractures with MnO2 + FeOx coating dipping 10 degrees, 30 degrees, and 70 degrees at 25.0'. Damp. <1% silt, >99% clay
				1.70 /2.00	5998	25				No recovery (25.7-26.0')
	BH50030AS				5997	26			CLAYSTONE	26.0'-30.0' Claystone Same as above (reference interval 24.0' to 25.7') <1% silt, >99% clay
	BH50016AS			2.00 /2.00	5996	27				
					5995	28				
				2.00 /2.00	5994	29				
						30				Total Depth Drilled 30.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38.00	GROUND ELEVATION (FT) 6025.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	749077	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	50492
EAST	2082461	LOCATOR NUMBER 39	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/07/92	

REMARKS: DRILLING EQUIPMENT: CME 75. RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/08/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6025	0			SC	0.0'-13.3' Gravelly Sand with some Clay and Silt, trace Cobbles NOTE: This description covers lithology from 0.0' to 17.3' unless otherwise noted. Light brown (5 YR 5/6) to yellowish brown (10 YR 5/4). Cobbles sub-rounded, granitic, quartzitic, crushed by drill bit, >3.0 in. diameter. Gravel sub-rounded to rounded, f.-c. quartzitic, well graded, avg. 0.75 in. diameter. Sand pred. m.g., sub-angular to sub-rounded, biotite, muscovite, feldspar, and quartz. Silt muscovite and quartz. Clay and silt mod. plasticity, massive bedding, moist to damp. Limonite oxidation throughtout finer silt and clay portions. Roots present from 0.0' to 1.5' within clay rich top of interval. The two clay zones within contact of the sandy clay zones of this interval may represent claystone cobbles, and reworked bedrock. Therefore sediment section may be classified as colluvium. 5% cobbles, 25% gravel, 48% sand, 9% silt, 13% clay. No recovery (1.4-2.0'), (3.5-4.0'), and (5.35-6.0'). No recovery (7.5-8.0').
				1.40/2.00	6024	1				
	BH50043AS				6023	2				
	BH50037AS			1.50/2.00	6022	3				
	BH50044AS				6021	4				
				1.35/2.00	6020	5				
	BH50045AS				6019	6				
				1.45/1.50	6018	7				
	BH50046AS			0.00/0.50	6017	8				
	BH50038AS BH50036AS			2.00/2.00	6016	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT) 6025 10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/07/92	

REMARKS: DRILLING EQUIPMENT CME 75 RIG GEOLOGIST THERESA SANTANGELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/08/92 NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERED (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50047AS				6015	10				
			2 00 /2.00	6014	11				
BH50048AS				6013	12				
			1 80 /2.00	6012	13				
								CL	13 3'-13 7' Clay with some Silt and trace Sand Yellowish gray (5 Y 7/2) Sand f g., rounded, muscovite, quartz Fines muscovite, quartz, and clay of med plasticity Trace of MnO2 and limonite staining, no distinct bedding, damp Trace of carboniferous material within clay rich zone from 13 3' to 13 7' 5% sand, 10% silt, 85% clay
BH50049AS				6011	14				
			2 00 /2.00	6010	15			SC	13 7'-17 3' Gravelly Sand Continuation of interval described in 0 0' to 13 3'
BH50039AS				6009	16				
BH50050AS									
			2 00 /2.00	6008	17			CL	17 3'-19 5' Clay with trace Silt and Sand Pale olive (10 Y 6/2) to light olive gray (5 Y 5/2) Trace muscovite and phlogopite, <1%, f g Trace of silt, abundt high plasticity clay No apparent bedding, moist, pervasive mottled limonite is discordant to laminae, trace MnO2 <1% sand, 4% silt, 95% clay
				6007	18				
BH50051AS								GC	19 5'-20 1' Sandy Gravel with some Clay, Cobbles, and Silt Light olive gray (5 Y 6/1) to light brown (5 YR 5/6) Cobbles sub-rounded, quartzite, >3 0 in diameter Gravel sub-rounded aplite, quartzite, well graded Sand rounded to sub-rounded, mica, feldspar, quartzite, quartz, well graded pred m g Silt and clay mod plastic, massive bedding, moist and wet at base Clay zone within gravelly clay interval at 20 0' may define base of colluvium 7% cobbles, 38% gravel, 38% sand, 6% silt, 11% clay
			2 00 /2.00	6006	19				
					20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38.00	GROUND ELEVATION (FT) 6025.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T.S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/07/92	

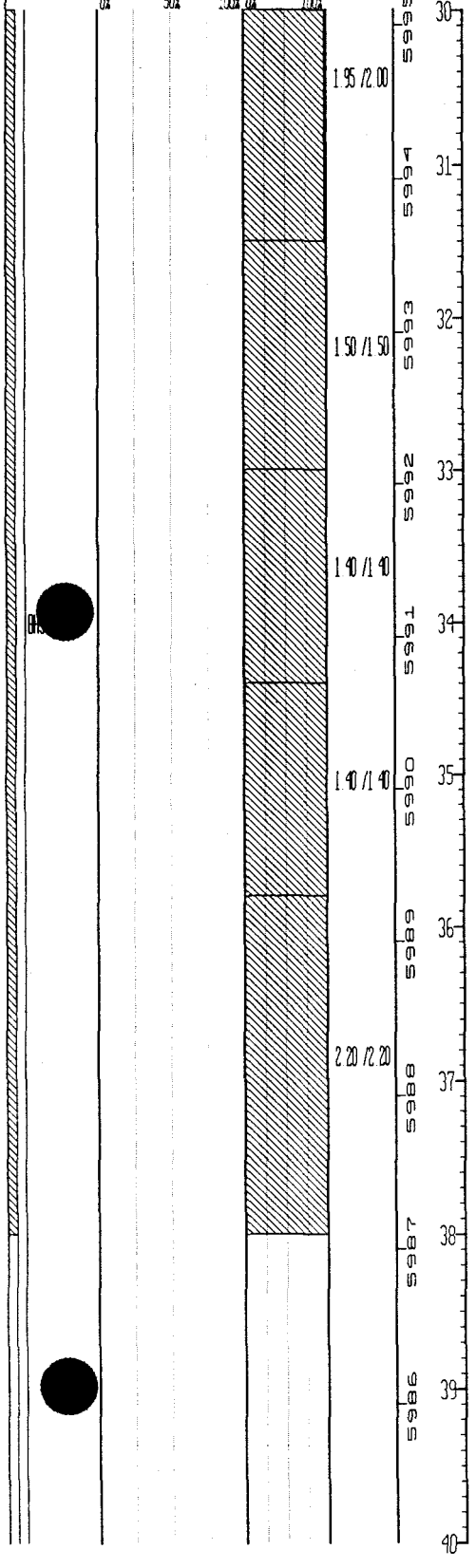
REMARKS: DRILLING EQUIPMENT CME 75 RIG GEOLOGIST THERESA SANTANGELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/08/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

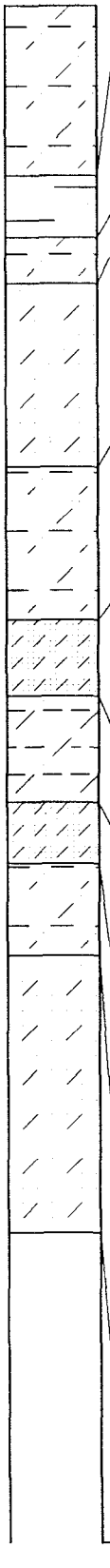
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50052AS				6005	20			CL	20.1'-20.9': Clay. Continuation of interval described in 17.3' to 19.5'. Except with gravel, but no MnO2.
	BH50040AS			2.00/2.00	6004	21			GC	20.9'-27.2': Sandy Gravel. Continuation of interval described in 19.5' to 20.1'. Oxidation indicated by pervasive staining with limonite and some hematite at 25.0'
	BH50053AS				6003	22				
				2.00/2.00	6002	23				
	BH50054AS				6001	24				
				2.00/2.00	6000	25				
	BH50055AS				5999	26	12/07/92 ▽			
				1.90/2.00	5998	27				
	BH50056AS				5997	28			CLAYEY SILTSTONE	27.2'-31.1': Top of Bedrock at 27.2'. Clayey Siltstone with some Sand. Yellowish gray (5 Y 7/2) with some f.g. sand, sub-rounded, well sorted, 0.08 mm to 0.25 mm, avg 0.16 mm. Poorly sorted, wavy laminations with discontinuous 1.0 mm thick clay layers. Small trace carbonaceous grains, mica, chert, feldspar, quartz, with trace of limonite nodules and limonite staining, moist. 21% sand, 47% silt, 32% clay.
				1.40/1.50	5996	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT) 6025 10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/07/92	

REMARKS DRILLING EQUIPMENT CME 75 RIG GEOLOGIST THERESA SANTANGELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/08/92 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION





CLAYEY SANDSTONE 31 1'-31 5' Clayey Sandstone with some Silt Grayish yellow (5 Y 8/4) F g , 0 2 mm avg , poorly sorted sub-angular Thin olive gray clay interbeds (1 0 - 2 0mm), 20% porosity Slightly argillicly cemented, mod friable, muscovite, feldspar, quartz, with limonite oxidation, damp 10 degree bedding angle 38% sand, 25% silt, 37% clay

CLAYEY SILTSTONE 31 5'-31 8' Clayey Siltstone Similar to interval 27 2 to 31 1'

SILTY SANDSTONE 31 8'-33 0' Silty Sandstone with some Clay Dark yellowish orange (10 YR 6/6) to very pale orange (10 YR 8/2) F g , 0 2 mm avg , poorly sorted, sub-rounded, 20% porosity, very weakly argillicly cemented, friable , chert, muscovite, quartz, feldspar Wavy, thin laminations, with trace MnO2, but common limonite oxidation, damp 53% sand, 26% silt, 21% clay

CLAYEY SILTSTONE 33 0'-34 0' Clayey Siltstone with abundt Sand Yellowish (5 Y 7/2) with f g sand, sub-rounded, well graded, chert, feldspar, quartz, with carbon trash Poorly sorted, mod argillicly cemented, mod friable, laminated, distorted, oxidized, moist 27% sand, 40% silt, 33% clay

SANDY SILTSTONE 34 0'-34 5' Sandy Siltstone with some Clay Light gray (N7), with f g sand, and some clay, poorly sorted, 10% porosity, weakly argillicly cemented, friable, muscovite, feldspar, chert, quartz, and carbon trash Bedding disrupted by bioturbation with worm fossil at 34 1', damp 30% sand, 55% silt, 15% clay

SILTY CLAYSTONE 34 5'-35 2' Silty Claystone with abundt Sand Light gray (N7) Silty claystone at top, gradational to Sandy Claystone at base, moist 26% sand, 35% silt, 39% clay

SANDY SILTSTONE 35 2'-35 6' Sandy Siltstone with some Clay Yellowish gray (5 Y 7/2) F g in biomodal sizes 25% 0 24 mm, and 75% 0 08 mm, poorly sorted, rounded to sub-rounded, 10% porosity, weakly argillicly cemented, friable, muscovite, feldspar, quartz, chert, and carbon trash Some limonitic oxidaiton, wavy thin laminations, damp 38% sand, 43% silt, 19% clay

CLAYEY SILTSTONE 35 6'-36 2' Clayey Siltstone with abundt Sand Yellowish gray (5 Y 7/2), f g sand (0 16mm avg diameter, rounded), poorly sorted, 10% porosity, mod argillicly cemented, mod friable, biotite, chert, muscovite, feldspar, quartz, wavy laminations with selective 25% bleaching along laminae and 50 degree fractures, 75% limonitic oxidation, with small trace of carbonized wood, moist 26% sand, 41% silt, 33% clay

SILTY SANDSTONE 36 2'-38 0' Silty Sandstone with some Clay Yellowish gray (5 Y 7/2) F g , 0 16 mm avg Poorly sorted, rounded, 10% to 25% porosity, mod argillicly cemented, mod friable Chert, carbon trash, feldspar, quartz, thinly laminated with trough cross-stratification forset beds at 25 degrees overlying wavy laminations Selective limonitic oxidation, damp, 3 degree bedding angle, fracture at 50 degrees 44% sand, 42% silt, 14% clay

Total Depth Drilled 38 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 6027.30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 748051	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST	T.S. DREILING	50592
EAST 2082358	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	12/15/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGIST: THERESA SANTANGELO DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/16/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER: BH50068AS, BH50062AS, BH50069AS, BH50070AS, BH50071AS, BH50063AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2.00 /2.00; 1.50 /2.00; 1.80 /2.00; 1.80 /2.00; 2.00 /2.00

DATUM (FT): 6027, 6026, 6025, 6024, 6023, 6022, 6021, 6020, 6019, 6018

DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

SM — 0.0'-1.0': Gravelly Sand with some Silt and trace Clay. Mod. brown (5 YR 4/4). Gravel fine, well graded, sub-angular to sub-rounded, aplitic and quartzitic. Sand very well graded, sub-angular to sub-rounded, biotite, muscovite, chert, feldspar, aplite, and quartzite. No obvious bedding. Contains roots and traces of ferromagnetic metals, probably drill bit chips. Mod. FeOx cemented, moist.
32% gravel, 50% sand, 16% silt, 2% clay.

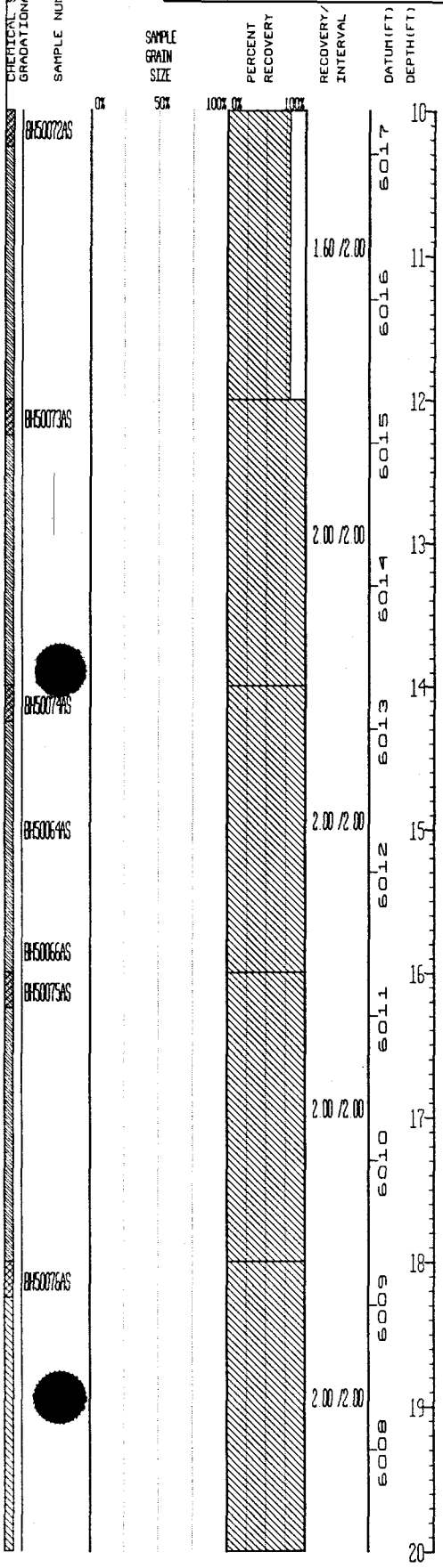
GW — 1.0'-3.5': Sandy Gravel (abundt. Cobbles) with some Silt and trace Clay. Light brown (5 YR 6/4) to gray orange (10 YR 7/4). Cobbles crushed by drill bit, arkose and granite. Gravel coarse to fine, well graded, sub-rounded, aplite, gneiss, and quartzite. Sand c.g. to f.g., well graded, aplite, schist, quartzite, muscovite, feldspar, and quartz. Bedding not apparent. Mod. FeOx cemented in upper part.
38% cobbles, 24% gravel, 30% sand, 7% silt, 1% clay.

No recovery (3.5-4.0')

GW — 4.0'-11.6': Sandy Gravel (abundt. Cobbles) with some Silt and trace Clay. Continuation of interval described from 1.0' to 3.5' above. Caliche cemented at 6.4' and with caliche from 9.8' to 11.6'. Nearly dry. Matrix fines are pale olive (10 Y 6/2) over zone from 8.0' to 10.5'

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 6027.30	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 748051	AREA SURF DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	50592
EAST: 2082358	LOCATOR NUMBER: J8	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/15/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGIST: THERESA SANTANGELO DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/16/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
NO RECOVERY	No recovery (11.6-12.0').
SM	12.0'-12.7' Silty Sand with some Clay and Gravel. Light brown (5 YR 5/6) and yellowish gray (5 Y 7/2). Gravel fine, poorly graded, sub-angular to rounded, gneiss, quartzite, and aplite (mainly at interval contacts). Sand pred. f.g., poorly graded, sub-angular to sub-rounded, muscovite, feldspar, phlogopite, aplite, quartz, and quarzite. Weathered with minor MnO2, major limonite, non-calcareous. Argillic and limonitic constituents account for well consol. bedding. Slightly moist interval. 6% gravel, 49% sand, 27% silt, 18% clay.
SM	12.7'-16.8' Cobbly Sand with some Gravel and Silt, trace Clay. Light brown (5 YR 5/6). Cobbles crushed by drill bit, schist, granite, and quartzite. Gravel coarse to fine, well graded sub-angular to sub-rounded, aplite, and quartzite. Sand c.g. to f.g., pred. m.g., sub-angular to rounded, schist, aplite, feldspar, quartz, and quartzite. Mod. cemented with FeOx throughtout and containing MnO2 locally. Bedding not apparent, slightly moist. (sw-sm) 22% cobbles, 18% gravel, 46% sand, 11% silt, 3% clay.
CL	16.8'-21.9' Silty Clay with some Sand and trace Gravel. Pale olive (10 Y 6/2), mottled with mod. yellowish brown (10 YR 5/4). Gravel fine, max. diameter 0.7 in., rounded, quartz. Sand small trace c.g. and m.g., pred. f.g., poorly graded, sub-rounded, phlogopite, muscovite, feldspar, and quartz. Fines of mod. plasticity, thinly laminated to laminated as indicated by FeOx laminae replacement bedding at 2 degrees. MnO2 associated with 75 degree dessication fracture at top of interval. Local traces of calcite nodules, weathered, moist. Part of interval from 18.0' to 18.7' contains approx. 8% f.g. gravel, sub-rounded, quartzite. 1% gravel, 13% sand, 17% silt, 69% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 6027.30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	748051	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	50592
EAST	2082358	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/15/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST: THERESA SANTANGELO DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/16/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50077AS				6007	20				
	BH50065AS			2.00 /2.00	6006	21				
	BH50078AS				6005	22			SM	21.9'-26.0' Silty Sand with some Gravel and Clay. Dark yellowish orange (10 YR 6/6) to pale olive (10 Y 6/2). Gravel trace coarse, pred. fine, well graded, sub-angular to rounded. Sandstone arkose, aplite, quartz, and quartzite. Sand c.g. to f.g., well graded, sub-angular to sub-rounded; aplite, phlogopite, muscovite, chert, feldspar, and quartz. No apparent bedding, weathered with hematite and limonite oxidation. non-calcareous, moist. 16% gravel, 36% sand, 34% silt, 14% clay
				2.00 /2.00	6004	23				
	BH50079AS				6003	24				
				2.00 /2.00	6002	25				
	BH50080AS				6001	26			SILTY CLAYSTONE	26.0'-32.0' Top of Bedrock at 26.0' Silty Claystone with some Sand. Pred. light olive gray (5 Y 3/2) to yellowish gray (5 Y 7/2) with dark yellowish orange (10 YR 6/6). Sand f.g., avg. diameter 0.16 mm., well sorted; phlogopite, muscovite, chert, and quartz. Porosity at 10%, mainly argillic with minor limonitic cement, non-calcareous. Mod. friable, laminated, moist. The alluvial material in sharp contact against mod. weathered, but competent bedrock. 26.2'- One quarter in. wide bleached zone flanking tight, vertical fracture. 27.2'- Three degree bedding at thin f.g. sand. 27.5'- MnO2 on 10 degree fracture. 28.8'- MnO2 on 5 degree fracture. 29.0'- 0.4 in. wide zone with pervasive limonitic oxidation and on 85 degree to 10 degree fractures. 29.5'- Thin, fine, sandy laminae highly contorted by soft sediment deformation, subsequently preferentially limonite oxidized with clay matrix relatively unoxidized. 31.0'-Limonitic oxidation associated with fine sand laminae. 31.5'- Fractures at 10 degrees with limonite and MnO2 oxidation. 14% sand, 34% silt, 52% clay
				2.00 /2.00	6000	27				
	BH50081AS				5999	28				
				2.00 /2.00	5998	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT)	6027.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	749051	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)		GEOLOGIST	T.S. DREILING	50592
EAST:	2082358	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	12/15/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG. GEOLOGIST: THERESA SANTANGELO. DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/16/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	5997	30				
					5996	31				
					5995	32				Total Depth Drilled: 32.00
					5994	33				
					5993	34				
					5992	35				
					5991	36				
					5990	37				
					5989	38				
					5988	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21.00	GROUND ELEVATION (FT) 5993.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747914	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST L. HOST/T. DREILING	50692
EAST	2082505	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/08/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGISTS: LAURIE HOST, AND THERESA SANTANG. ELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/09/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						0			ML	0.0'-0.6' Clayey Silt with some Gravel and Sand. Dusky yellowish brown (10 YR 2/2), gravel coarse to fine, sub-angular; quartz and quartzite, max. 1.2 in. Sand c.g. to m.g., sub-rounded; quartzite. Silt and clay fines of low to med. plasticity. Well graded, not obviously bedded, very moist, roots common. 24% gravel, 15% sand, 35% silt, 26% clay.
				1.50 /2.00	5993	1				
					5992	2			GM	0.6'-3.3' Sandy Gravel with some Silt, trace Clay. Dark yellowish brown (10 YR 4/2). Well graded. Gravel coarse to fine, sub-angular to sub-rounded, 1.2 in. max. size; aplite and quartzite. Sand pred. f.g., sub-angular to sub-rounded; quartz and quartzite, trace of charred wood. Fines of low plasticity, bedding not apparent, trace roots, damp. 40% gravel, 34% sand, 23% silt, 3% clay.
	BH50091AS									
				1.30 /2.00	5991	3				No recovery (1.5-2.0').
	BH50087AS								NO RECOVERY	No recovery (3.3-4.0')
					5990	4				
	BH50092AS								CL	4.0'-5.7' Clayey Sand with some Silt and Gravel, trace Cobbles. Mod. yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/2). Well graded. Cobbles indicated by remnant chips of granite, aplite, and sandstone crushed by drill bit. Coarse gravel is sub-rounded, max. size 2.0 in.; granite and quartzite. Fine gravel is sub-rounded to sub-angular; granite and quartzite sand sub-rounded to rounded, pred. f.g.; magnetite, muscovite, phlogopite, calcite, feldspar, quartzite, and quartz. Fines of low plasticity, well graded, no obvious bedding, moist. This interval contains colluvial material from 4.2' to 8.6', consisting of limonitic oxidized claystone, pale brown (5 YR 5/2). Material internal consistency within this interval to 8.6', below it diminishes and likely forms part of the matrix of the soil materials. <5% cobbles, 10% gravel, 34% sand, 22% silt, 29% clay
				1.70 /2.00	5989	5				
					5988	6				
	BH50093AS									
				2.00 /2.00	5987	7				No recovery (5.7-6.0').
					5986	8			CL	6.0'-9.2' Clayey Sand with some Silt and Gravel, trace Cobbles. Continuation of interval described from 4.0' to 5.7'. Interval from 6.3' to 6.5' contains black granular material consisting of totally charred wood with traces of cream white, porous, non-calcareous scale. Probably represents anthropogenic wastes.
	BH50094AS									
				1.20 /2.00	5985	9				No recovery (9.2'-10.0').
	BH50088AS									
					5984	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21.00	GROUND ELEVATION (FT) 5993.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747914	AREA: SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST L. HOST/T. DREILING	50692
EAST:	2082505	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/08/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGISTS: LAURIE HOST, AND THERESA SANTANG. ELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/09/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50095AS	0% 50% 100%	0% 100%	1.50/2.00	5983 5982	10 11 12			CL	10.0'-11.5' Clayey Sand with some Silt and Gravel, trace Cobbles. Continuation of interval described from 4.0' to 5.7'. No recovery (11.5-12.0')
	BH50096AS			1.30/2.00	5981 5980	12 13 14			CL	12.0'-13.3' Clayey Sand with some Silt and Gravel, trace Cobbles. Continuation of interval described from 4.0' to 5.7'. No recovery (13.3-15.0')
	BH50097AS			1.00/2.00	5979 5978	15 16			CLAYSTONE	15.0'-19.7' Top of Bedrock at 15.0'. Claystone with some Silt and trace Sand. Yellowish gray (5 Y 7/2) to light olive gray (5 Y 5/2). Sand is m.g. to f.g., angular; muscovite, feldspar, and quartz. Fines consisting of clay and silt composed of muscovite and quartz, 15% porosity. Mod. argillicly cemented, moist. Interval consists of fining upward clastic sequence, with claystone top down to 19.7' and siltstone base at 19.9'. <1% sand, 9% silt, 90% clay.
				1.30/1.50	5977	17				
	BH50098AS			1.90/2.00	5976 5975	18 19			SILTSTONE	19.7'-19.9 Siltstone with some Clay. Yellowish gray (5 Y 7/2) with trace of f.g. sand, poorly sorted, sub-rounded to angular, 20% porosity, argillicly cemented, slightly friable. Muscovite, quartz, with clay matrix. Wavy laminae with limonite oxidation, moist. Non-calcareous, upper contact gradational by fining upward to claystone. 85% silt, 15% clay
					5974	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 21.00	GROUND ELEVATION (FT) 5993.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747914	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST L. HOST/T. DREILING		
EAST 2082505	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/08/92		50692

REMARKS: DRIVE SAMPLER 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGISTS: LAURIE HOST, AND THERESA SANTANG ELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/09/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1.50/1.50	5973 5972 5971 5970 5969 5968 5967 5966 5965 5964	20 21 22 23 24 25 26 27 28 29 30			CLAYSTONE	19.9'-20.5' Claystone with some Silt. Same as interval described from 15.0' to 19.7'
									SILTSTONE	20.5'-21.0' Siltstone with some Clay. Yellowish gray (5 Y 7/2), mod. well sorted, sub-rounded to angular, 25% porosity. Weakly argillicly cemented, mod. friable; muscovite and quartz with clay matrix. Wavy laminations, selective limonitic oxidation, slightly moist. Trace of carbonized wood, contains horizontal and vertical silt-filled worm burrows (0.15 in diameter). Upper contact gradational by fining upward to claystone, non-calcareous zone within bedrock interval. Bedrock consists of two fining upward sequences: upper has a claystone top down to 19.7' with a siltstone base at 19.9'; lower has a claystone top from 19.9' to 20.5' grading to a clayey siltsone which extends from 20.5' to the base of the boring at 21.0'. 85% silt, 15% clay.
										Total Depth Drilled 21.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 16.00	GROUND ELEVATION (FT):	5993.20	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	7-7886	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN):		GEOLOGIST:	T. DREILING	50792
EAST:	2382384	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	8.00	DATE DRILLED:	12/11/92	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/11/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			0			GM	0.0'-1.4': Sandy Gravel with some Cobbles and Silt, trace Clay. Dark yellowish brown (10 YR 4/2). Cobbles (broken by drill bit) sub-rounded, quartzite. Gravel sub-angular to rounded, fine, well graded, aplite, gneiss, and quartzite. Sand c.g. to f.g., well graded, sub-rounded to rounded, phlogopite, muscovite, chert, magnetite, quartzite, and quartz. No obvious bedding, calcareous with roots, moist. 20% cobbles, 35% gravel, 22% sand, 18% silt, 5% clay.
				1.60 /2.00	5992	1				
	BH50108AS				5991	2			GM	1.4'-7.5': Sandy Gravel with some Silt and Cobbles, trace Clay. Light brown (5 YR 5/6). Cobbles (broken by drill bit) sub-rounded, quartzite. Gravel, coarse to fine, max. diameter 1.75 in., well graded, aplite, quartz, and quartzite. Sand c.g. to f.g., well graded, magnetite, aplite, quartz, and quartzite. Abundt fines, trace of calcite and roots in upper half. Pervasive limonite oxidation cement, locally containing MnO2. Few ferromagnetic fragments to 2 mm. Contact with underlying bedrock sharp. Moist. Top part of interval from 1.4' to 2.5' is somewhat finer grained (lacking cobbles and coarse gravel) and appears more consolidated. 10% cobbles, 35% gravel, 26% sand, 24% silt, 5% clay. No recovery (1.6-2.0'), and (5.5-6.0')
	BH50104AS			1.80 /2.00	5990	3				
	BH50109AS				5989	4				
				1.50 /2.00	5988	5				
	BH50110AS				5987	6			CLAYSTONE	7.5'-16.0': Top of Bedrock at 7.5'. Claystone with some Silt, trace Sand. Light olive gray (5 Y 5/2). Sand f.g., well sorted, sub-angular, muscovite, feldspar, limonite, and quartz. Less than 10% porosity, argillic cement, slightly friable, no obvious bedding. Ironstone (limonite) nodules to 1.0 in. diameter from 11.5' to 16.0', calcareous from 7.5' to 9.7'. Moist. Structural features within interval are: 8.0' to 8.5'- slough of overlying alluvium containing drill fractured gravel in vertical contact with bedrock claystone negate a contact at 8.5', 9.7'- limonite on 10 degree open fracture, calcite on 50 degree fracture, 10.7'- limonite on 5 and 10 degree fractures, 11.4'- limonite on 5 and 80 degree fractures near local carbonaceous material, 14.2'- MnO2 on 20 degree fracture, 14.3'- limonite on 35 degree fracture <1% sand, 15% silt, 85% clay
				2.00 /2.00	5986	7				
	BH50105AS				5985	8				
	BH50111AS									
				2.00 /2.00	5984	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 5993.20	PROJECT NUMBER 15-RFI/RI	LOG OF BORING NUMBER
NORTH 747886	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T. DREILING	50792
EAST 2082384	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/11/92	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/11/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		BH50112AS			2.00 /2.00	5983	10				
						5982	11				
					2.00 /2.00	5981	12				
						5980	13				
					2.00 /2.00	5979	14				
						5978	15				
						5977	16				Total Depth Drilled: 16.00
						5976	17				
						5975	18				
						5974	19				
							20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 5996 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747882	AREA SURF. DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST L A HOST	50892
EAST	2082279	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/14/92	

REMARKS: DRIVE SAMPLER 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST LAURIE HOST BOREHOLE ABANDONED AND GROUTED ON 12/14/92.

NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER: BH50125AS, BH50121AS, BH50126AS, BH50127AS, BH50128AS, BH

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 2.00 /2.00; 1.70 /2.00; 1.80 /2.00; 1.70 /2.00; 2.10 /2.00

DATUM (FT): 5996, 5995, 5994, 5993, 5992, 5991, 5990, 5989, 5988, 5987

DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0'-0 9' Silty Clay with some Sand and Gravel Dusky brown (5 YR 2/2) Gravel pred. fine, 1 0 in max. diameter, sub-angular, aplite, and quartzite Sand c g. to f g., well graded, sub-rounded, quartzite and quartz Fines of low plasticity, roots common, non-calcareous, slightly moist 15% gravel, 18% sand, 22% silt, 45% clay
CL	0 9'-7 7' Sandy Clay with some Silt and trace Gravel Mod yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/2) Gravel pred. fine, max. size 1 0 in, poorly graded, sub-angular, aplite and quartzite. Sand predom. f g, sub-angular to rounded, chert, magnetite, muscovite, phlogopite, feldspar, quartzite, and quartz Fines of low plasticity, calcareous to 6 0', locally with caliche Weathered with limonite oxidation from 3.5' to 10.4' Bedding not apparent, interval is well consol, slightly moist At approx 1 5' a single grain, 0 3 mm in length, observed having properties similar to the mineral molybdenite. 3% gravel, 24% sand, 11% silt, 62% clay. No recovery (3.7-4 0')
NO RECOVERY	No recovery (7 7-8 0')
CL	8 0'-10 4' Sandy Clay with some Silt and trace Gravel. Termination of interval began at 0 9'. Alluvium of sandy clay is in sharp contact with claystone bedrock Base of alluvium contains increasing amount of c gravel in zone from 9 9' to 10 3'. C gravel in part broken by drill bit, up to 1 3 in. max. diameter, sub-rounded, quartzite and aplite

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 5996.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747882	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)	GEOLOGIST L.A. HOST	50892
EAST	2082279	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/14/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST: LAURIE HOST. BOREHOLE ABANDONED AND GROUTED ON 12/14/92.
NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50129AS				5986	10				
				2.10 /2.00	5985	11			CLAYSTONE:	10.4'-16.0' Top of Bedrock at 10.4'. Claystone with some Silt and trace Sand. Light olive gray (5 Y 5/2) to olive gray (5 Y 3/2). Sand f.g., well sorted, rounded, chert, muscovite, feldspar and quartz, less than 10% porosity, mod. lithified in part with argillic cement, friable, laminated to thinly laminated locally but more commonly shows soft sediment deformation. Locally oxidized with limonite and ironstone nodules. Lignite layers to 2.0 mm thick. F.g. sand confined locally to 1 to 2 mm thick layers. Moist. Other lithologic features located at: 10.5' to 11.8'- very weakly indurated, clay rich, commonly carbonaceous (woody/vegetal) materials; 11.8'- 1 mm thick lignite or carbonaceous material, provides sedimentary parting and suggests bedding dip of approx. 3 degrees; 13.5'- undulatory open fracture dipping approx. 30 degrees, flanked by carbonaceous material suggesting local bedding dip of 30 degrees, and enclosed by limonite oxidation; 14.0' to 15.6'- ironstone nodules to 0.5 in. in zone; 14.3'- large carbonized deciduous leaf; 15.0'- open fracture dipping 30 degrees, flanked by 0.25 in. limonite oxidation; 15.6'-sedimentary layering as 0.25 in., thick color bands distorted by soft sediment deformation up to 55 degrees. 3% sand, 13% silt, 84% clay.
	BH50123AS				5984	12				
	BH50130AS			2.10 /2.00	5983	13				
					5982	14				
				1.90 /2.00	5981	15				
					5980	16				Total Depth Drilled: 16.00
					5979	17				
					5978	18				
					5977	19				
						20				

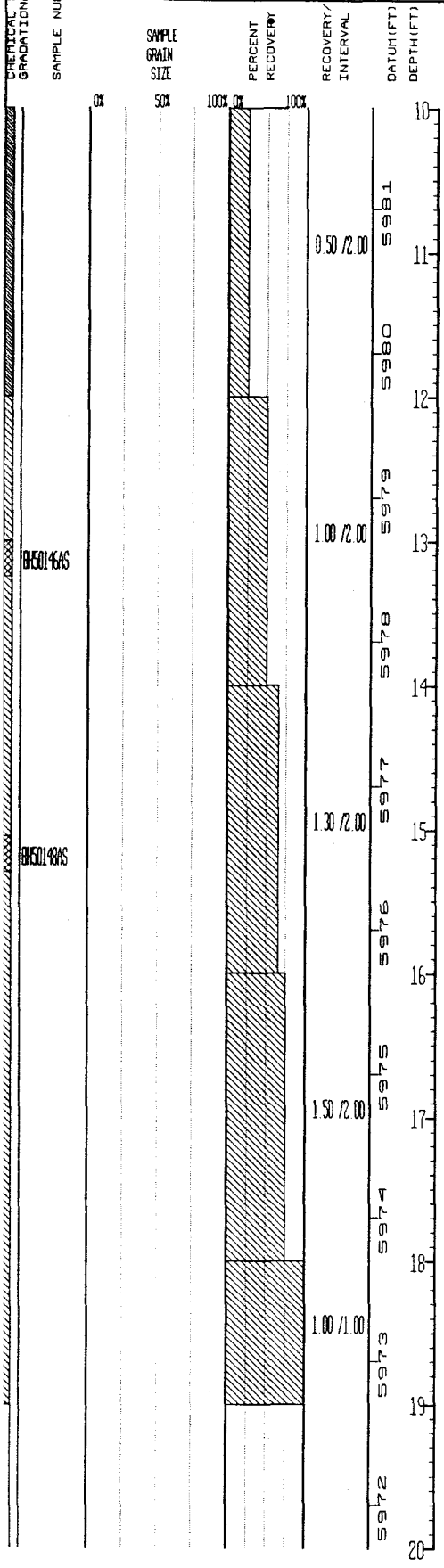
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT) 5991.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747843	AREA IHSS 196	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	50992
EAST	2081536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/18/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/18/94. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	5991	0–1			SM	0.0'-1.0' Silty Sand with some Gravel and trace Clay. Brownish black (5 YR 2/1). Gravel fine, max. 0.6 in. diameter, mod. graded, sub-angular to sub-rounded; aplite and quartzite. Sand c.g. to f.g., well graded, sub-angular to sub-rounded; muscovite, phlogopite, aplite, quartz and quartzite. Non-calcareous, roots common, traces of graphite, moist. 8% gravel, 57% sand, 33% silt, 2% clay.
	BH50147AS				5990	2			GW	1.0'-4.25' Sandy Gravel with some Cobbles and Silt, trace Clay. Dark gray (N3) to grayish black (N7). Cobbles (broken by drill bit) sub-rounded; aplite and quartzite. Gravel coarse to fine, max. diameter 2.0 in., well graded, sub-rounded; schist and quartzite. Sand c.g. to f.g., pred. m.g., well graded, sub-angular, no apparent bedding, calcareous, slightly moist. Anthropogenic materials include flat glass, ceramic, shingles, nails, metal cuttings, and 60% graphite in #4 mesh (gw-gm). 20% cobbles, 40% gravel, 33% sand, 6% silt, 1% clay.
	BH50138AS			0.70/2.00	5989	3				
	BH50142AS				5988	4				No recovery (2.7-4.0').
				2.00/2.00	5987	5			SM	4.25'-6.0' Silty Sand with some Gravel and Clay. Dark yellowish brown (10 YR 4/2). Gravel coarse to fine, well graded, sub-rounded; schist and quartzite. Calcareous, no apparent bedding. Anthropogenic materials include nails, and 2% graphite. 25% gravel, 38% sand, 28% silt, 9% clay.
	BH50143AS				5986	6	12/18/92 ▽		SM	6.0'-12.5' Silty Sand with some Gravel and trace Clay. Mod. brown (5 YR 3/4) to dusky brown (5 YR 2/2). Gravel coarse to fine, max. diameter 2.0 in., sub-angular to sub-rounded; aplite, gneiss and quartzite. Sand c.g. to f.g., well graded, rounded to sub-angular; muscovite, aplite, gneiss, quartz and quartzite. Trace of graphite from upper interval. Base of fill approx. 7.0 ft. No apparent bedding, saturated (water level measured during drilling at 6.0').
				1.00/2.00	5985	7				
	BH50144AS				5984	8				No recovery (7.0-8.0'), (9.5-10.0'), and (10.5-12.0').
	BH50140AS BH50145AS			1.50/2.00	5983	9				
					5982	10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT):	5991.70	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747843	AREA: IHSS 196	CASING DIAMETER (IN):		GEOLOGIST:	T. S. DREILING	50992
EAST:	2081536	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN):	8.00	DATE DRILLED:	12/18/92	

REMARKS: DRIVE SAMPLER: 2.5 IN. MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/18/94 NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2' NOT SHOWN



WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		SANDY CLAYSTONE	12.5'-14.2': Top of Bedrock at 12.5'. Sandy Claystone with some Silt. Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 5/2). Sand trace m.g., pred. f.g., well sorted, sub-rounded to rounded, biotite, muscovite, chert, feldspar and quartz, with trace limonite nodules. Weak argillic cemented, 20% porosity, friable. Thinly bedded with 40 degree foreset crossbeds, intensely weathered and oxidized. Gravel slough at top, clay rich at base, saturated. 39% sand, 19% silt, 42% clay.
			No recovery (13.0-14.0')
		CLAYSTONE	14.2'-15.3': Claystone with some Silt and trace Sand. Grayish black (N2), except top 0.2', which is similar to above weathered interval. Sand f.g., well sorted, sub-angular to sub-rounded. Argillicly cemented, <10% porosity, slightly friable. Contains approx. 8% carbonized wood, ubiquitous dessication (?) fractures, moist. <1% sand, 10% silt, 89% clay
			No recovery (15.3-16.0')
		CLAYSTONE	16.0'-17.5': Claystone with some Silt and trace Sand. Similar to interval from 14.2' to 15.3' except: Interval is dark gray (N3). Contains approx. 1% carbonized wood, and the following additional features: 16.0' - Open fracture, 65 degrees, with some sand filling, and limonite staining, probably of dessication origin. <1% sand, 10% silt, 89% clay
			No recovery (17.5-18.0')
		CLAYSTONE	18.0'-19.0': Claystone with some Silt and trace Sand. Continuation of interval described from 16.0' to 18.0', with the following additional features: 18.2' - bedding dip of 2 degrees indicated by attitude of carbonized wood; 18.3' - slickensides, with 90 degree fractures; 12.5' to 19.0' - non-calcareous; 14.2' to 19.0' - bedding not apparent. <1% sand, 10% silt, 89% clay
			Total Depth Drilled: 19.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 5991.10	PROJECT NUMBER 015-RFI/RI	LOG OF BORING NUMBER
NORTH 747769	AREA IHSS 196	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	51092
EAST 2081497	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 12/21/92	

REMARKS: DRILLING EQUIPMENT: CME 75C ATV WITH CALIFORNIA SPLIT SPOONS. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/21/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50157AS			1.40 /2.00	5991 5990				GM	0.0'-3.1': Cobbly Sand with some Silt, Gravel and Clay. Dark yellowish brown (10 YR 4/2). Cobbles (broken by drill bit) sub-angular, quartzite. Gravel fine to coarse, 1.5 in. max. diameter, well graded, sub-angular to sub-rounded, aplite and quartzite. Sand f.g. to c.g., well graded, sub-rounded to rounded; trace magnetite, muscovite, feldspar, quartz, aplite, gneiss, and quartzite, with approx. 1% graphite in #40 mesh. Roots common at top, no apparent bedding. Moist. 24% Cobbles, 12% gravel, 34% sand, 18% silt, 12% clay. No recovery (1.4-2.0').
	BH50153AS BH50158AS			1.10 /2.00	5989 5988					
					5987				NO RECOVERY	No recovery (3.1-4.0')
				2.00 /2.00	5986				CL	4.0'-6.2': Silty Clay with some Sand and Gravel. Dusky brown (5 Y 2/2). Gravel coarse to fine, max. diameter 1.5 in., well graded, rounded; quartz. Sand c.g. to pred. f.g., mod. well graded, sub-angular to sub-rounded; muscovite, feldspar, quartz, gneiss, aplite, and quartzite, with small trace of graphite and roots. No apparent bedding, moist to very moist at base. Contact sharp with siltstone bedrock. Wettest zone at approx. 6.0' showed no measureable water level during 4.0 hours that boring was accessible. 8% gravel, 24% sand, 27% silt, 41% clay.
	BH50154AS BH50159AS				5985					
				2.00 /2.00	5984				SANDY SILTSTONE	6.2'-7.8': Top of Bedrock at 6.2' Sandy Siltstone with some Clay. Dark yellowish orange (10 YR 6/2) to pale yellowish brown (10 YR 6/2). Sand f.g., avg. diameter 0.12 mm, well sorted, rounded, muscovite, feldspar and quartz, with small trace calcareous, and carbonaceous materials. 15% porosity except to 30% in some 5 mm thick f.g. sandy zones. Weakly argillicly cemented, highly friable. Laminated to very thinly bedded, bedding dip to 12 degrees inferred at 7.0' at weathered parting. At 6.8' roots follow open dessication fractures dipping 85 degrees containing, in part, pink clay and calcareous infilling. Bedrock contact especially weathered with pervasive limonitic oxidation. Very moist near top to moist at bottom of interval. 28% sand, 51% silt, 21% clay.
	BH50160AS				5983					
				2.00 /2.00	5982	10				

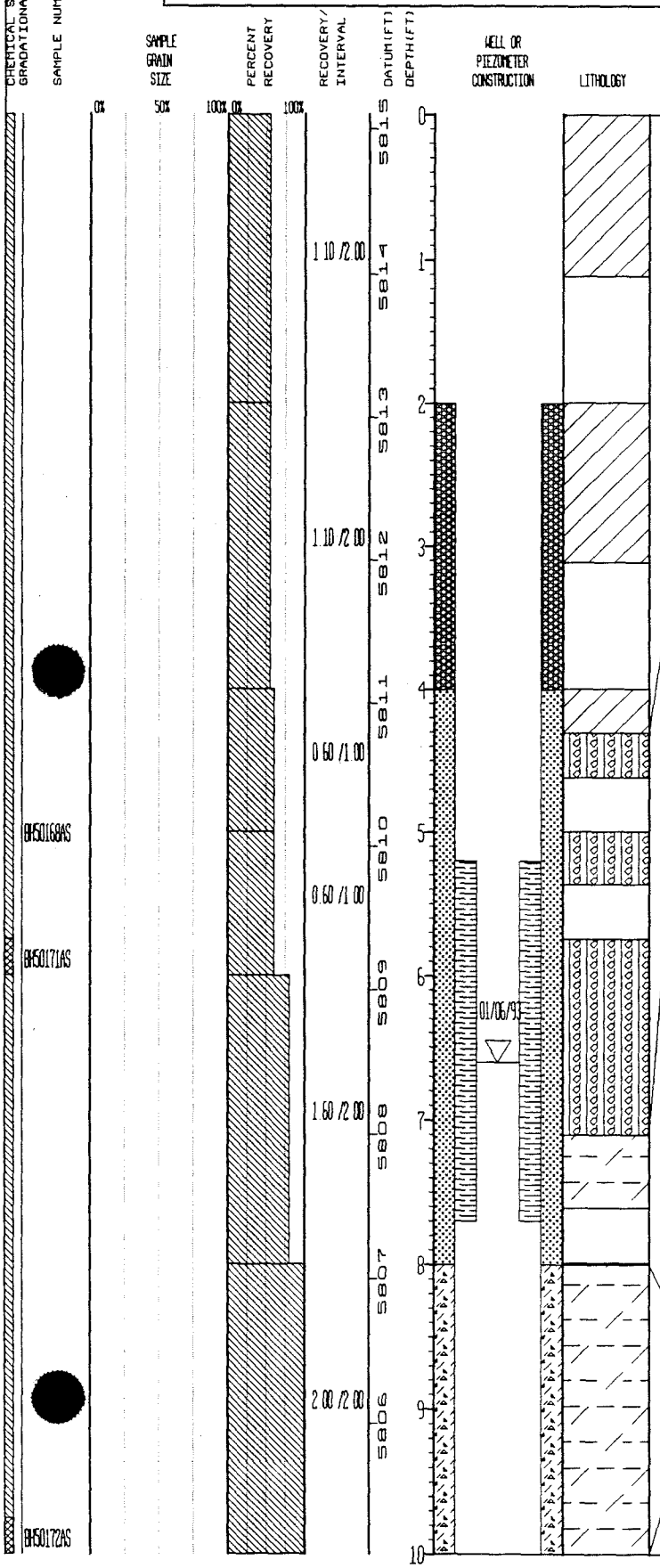
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 5991.10	PROJECT NUMBER 045-RFI/RI	LOG OF BORING NUMBER
NORTH:	747769	AREA: IHSS 196	CASING DIAMETER (IN):	GEOLOGIST: T. S. DREILING	51092
EAST:	2081497	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 8.00	DATE DRILLED 12/21/92	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOONS ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING BORE HOLE ABANDONED AND GROUTED ON 12/21/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%	1.45/2.00	5981 5980 5979 5978 5977 5976 5975 5974 5973 5972	10 11 12 13 14 15 16 17 18 19 20			SILTY CLAYSTONE	7.8'-11.45': Silty Claystone with some Sand. Pale yellowish brown (10 YR 6/2) to dark yellowish brown (10 YR 4/2). Sand f.g., avg. diameter 0.12 mm, very well sorted, sub-rounded to rounded; muscovite, feldspar and quartz, with small trace calcareous and carbonaceous materials. Less than 15% porosity, weakly argillicly cemented, mod. friable. Bedding obliterated or distorted by pervasive weathering. Limonitic oxidation scattered throughout interval; moist. Also with these features at: 8.4'- caliche nodules to 3 mm, limonite nodules to 7 mm, roots, trace MnO2; 9.0'- 4 mm thick zone shows oxidation with MnO2 center, enveloped by dark orange than lighter orange limonite staining enclosed in unoxidized, gray, fine sand/silt; 10.2'- randomly oriented f.g. sand layers to 2 mm thick; 10.5'-limonite nodules to 5mm. 7% sand, 37% silt, 56% clay. No recovery (11.45-12.0')
										Total Depth Drilled: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 5815 10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747775		AREA IHSS 142 10 C-1 POND	CASING DIAMETER (IN) 2 00	GEOLOGIST L. A. HOST	51193
EAST 2086379		LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 01/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV WITH CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST LAURIE HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN



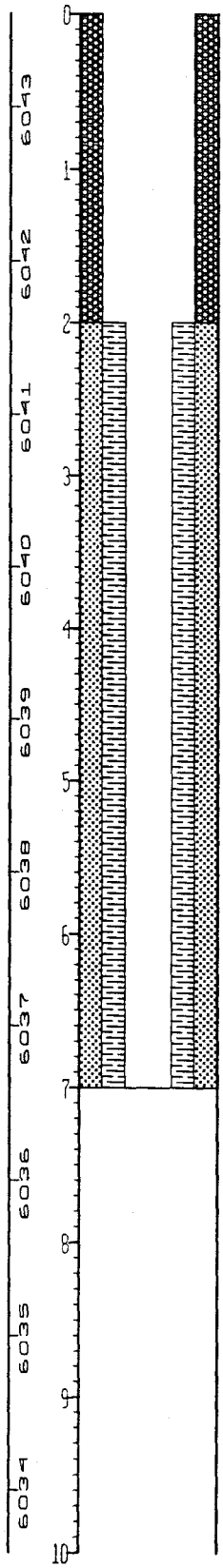
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0'-4 3' Gravelly Clay with some Silt, Sand, and Cobbles. Grayish brown (5 YR 3/2) near top, interval mainly dark yellowish brown (10 YR 4/2). Cobbles (crushed by drill bit) quartzite. Gravel c. - f., 2 0 in. max. diameter, poorly graded, sub-rounded. Sand c.g. to f.g., pred. f.g., sub-angular; aplite, quartzite, muscovite, feldspar, and quartz. Fines of med. plasticity, calcareous, with roots, no apparent bedding, moist to very moist. 7% cobbles, 16% gravel, 14% sand, 15% silt, 58% clay No recovery (1 1-2 0'), and (3 1-4.0')
SM	4 3'-7 1' Gravelly Sand with some Silt and trace Clay. Grayish brown (5 YR 3/2). Gravel c. - f., poorly graded, avg. diameter 2.0 in., sub-rounded; gneiss, aplite, and quartzite. Sand c.g. to f.g., pred. m.g., sub-angular to sub-rounded, gneiss, quartzite, muscovite, feldspar and quartz. Fetid odor, no apparent bedding. Saturated, water level at 6 6' on 01/06/93. 30% gravel, 55% sand, 12% silt, 3% clay No recovery (4 6-5 0') and (5 35-5 75')
SILTY CLAYSTONE	7.1'-8 0' Top of Bedrock at 7 1'. Silty Claystone with trace Sand. Dom. light brown (5 YR 5/6) with med. gray (N5). Sand f.g., 0 14 mm avg. diameter, well sorted, sub-rounded to rounded; muscovite, chert, and quartz. 10% porosity, cement is argillic with some limonite, friable. Locally with carbonaceous material and calcite. Laminated locally as indicated by 1 mm, f.g. sand layers, weathered, moist. Structural features at 8 5'- fractures at 80, and 85 degrees, calcite and limonite filled; 9.2'- bedding approx. 5 degrees; 9 4'- fracture at 75 degrees with limonite surfaces; 9 6'- fracture at 40 degrees with limonite and MnO2 surfaces. 5% sand, 35% silt, 60% clay No recovery (7 6-8 0')
SILTY CLAYSTONE	8 0'-10 0' Silty Claystone with trace Sand. Termination of interval begun at 7 1'. Upper contact of weathered bedrock sharp with overlying alluvium. Weathered interval from 7 1' to 8 4' with 1 mm wide concordant and discordant calcareous fillings, relatively broken, and light gray (N7) with mottled yellowish brown (10 YR 5/4)

Total Depth Drilled 10 00 Total Depth Casing 10 00
Bottom of Filter Pack 8 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 7.00	GROUND ELEVATION (FT)	6043.60	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747247	AREA: WOMAN CK W. OF 133	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T. S. DREILING	51293
EAST:	2078315	LOCATOR NUMBER: F7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED:	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



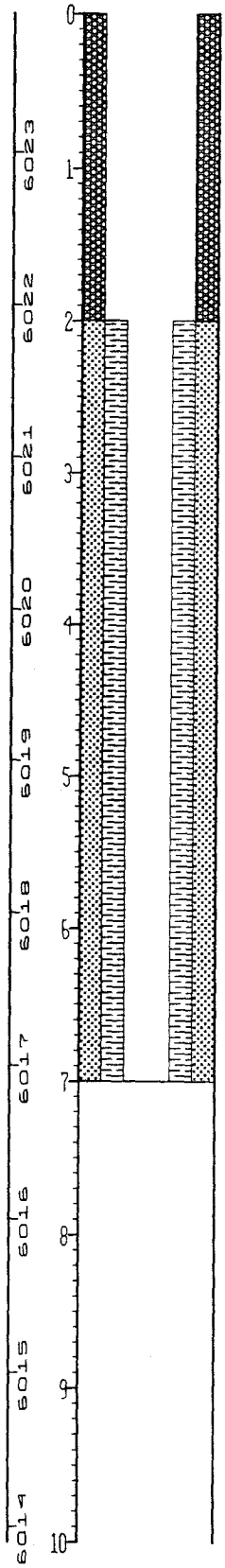
Total Depth Drilled: 7.00
Bottom of Filter Pack: 7.00

Total Depth Casing: 7.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 7.00	GROUND ELEVATION (FT)	6023.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747314	AREA: WOMAN CK S. OF 133 6	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	51393
EAST:	2079057	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 7.00
Bottom of Filter Pack: 7.00

Total Depth Casing: 7.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 2.00	GROUND ELEVATION (FT):	6001.90	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747283	AREA: WOMAN CK. S OF 133.4	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	51493
EAST:	2079717	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/03/93	

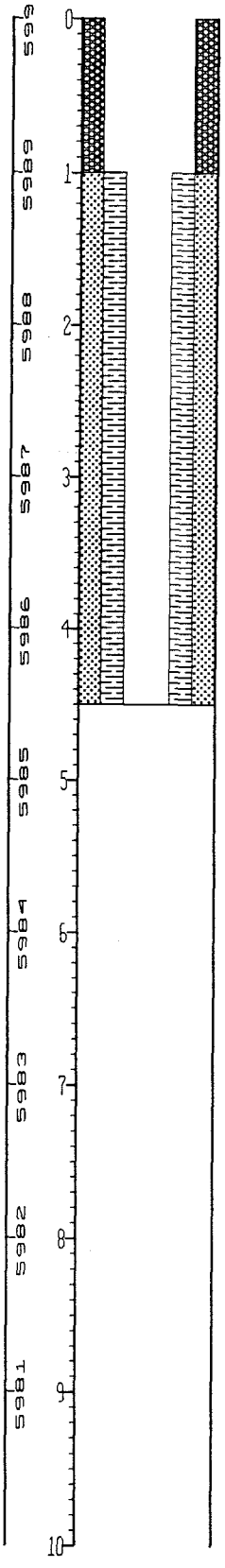
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6001	0				Total Depth Drilled: 2.00 Total Depth Casing: 2.00
						1				Bottom of Filter Pack: 2.00
					6000	2				
					5999	3				
					5998	4				
					5997	5				
					5996	6				
					5995	7				
					5994	8				
					5993	9				
					5992	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.50	GROUND ELEVATION (FT)	5990.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]060	AREA WOMAN CK. S OF 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T. S. DREILING	51593
EAST	2090102	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

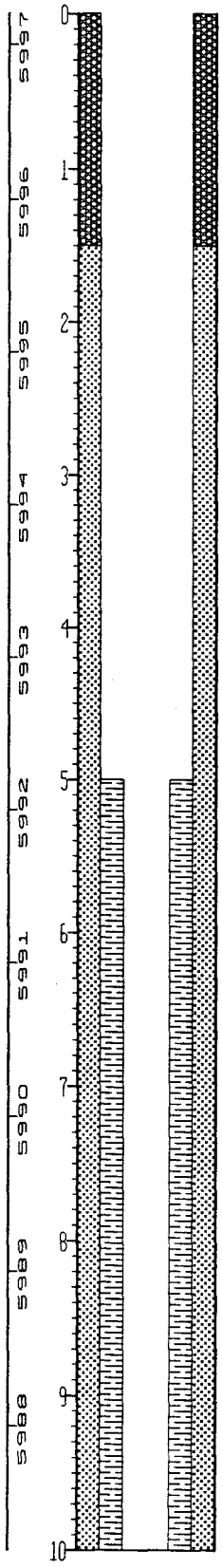


Total Depth Drilled: 4.50
Bottom of Filter Pack: 4.50
Total Depth Casing: 4.50

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 10.00	GROUND ELEVATION (FT): 5997.20	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747147	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN): 0.30	GEOLOGIST: T.S. DREILING	51693
EAST:	2080102	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 1.00	DATE DRILLED: 02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT) 5997 5996 5995 5994 5993 5992 5991 5990 5989 5988
DEPTH(FT) 0 1 2 3 4 5 6 7 8 9 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



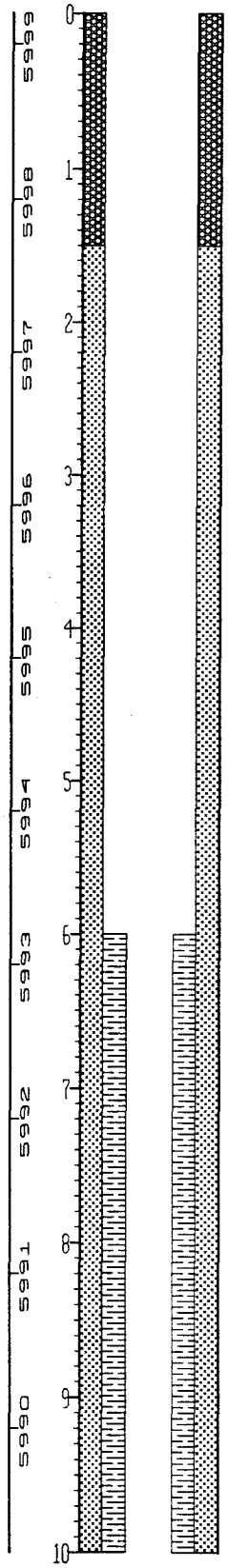
Total Depth Drilled: 10.00 Total Depth Casing: 10.00
Bottom of Filter Pack: 10.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 11.00	GROUND ELEVATION (FT):	5999.20	PROJECT NUMBER:	305-RFI/RI
NORTH: 747166	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING
EAST: 2080104	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/03/93

LOG OF BORING NUMBER: 51793

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 11.00
Bottom of Filter Pack: 11.00
Total Depth Casing: 11.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT) 5999.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747166	AREA SOUTH OF IHSS 133.3	CASING DIAMETER (IN) 0.30	GEOLOGIST T.S. DREILING	51793
EAST 2080104	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5989	10				
					5988	11				
					5987	12				
					5986	13				
					5985	14				
					5984	15				
					5983	16				
					5982	17				
					5981	18				
					5980	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT) 6000.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747185	AREA SOUTH OF IHSS 133.3	CASING DIAMETER (IN) 0.30	GEOLOGIST T.S. DREILING	51893	
EAST 2080105	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/03/93		

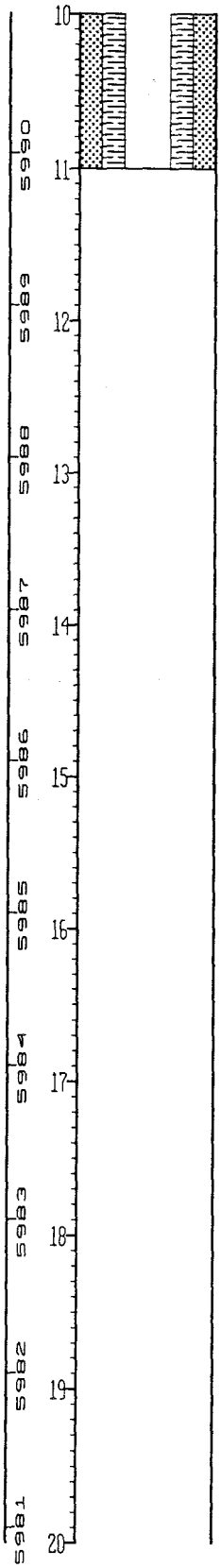
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6000	0				Total Depth Drilled: 11.00 Total Depth Casing: 11.00
						1				Bottom of Filter Pack: 11.00
					5999	2				
					5998	3				
					5997	4				
					5996	5				
					5995	6				
					5994	7				
					5993	8				
					5992	9				
					5991	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	6000.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747185	AREA: SOUTH OF THSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	51893
EAST:	2080105	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

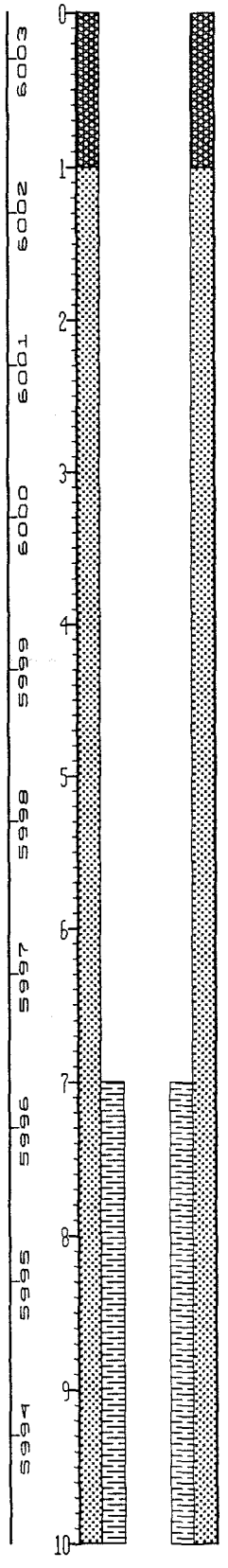
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6003.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747205	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	51993
EAST:	2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 12.00 Total Depth Casing: 12.00
Bottom of Filter Pack: 12.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 12.00	GROUND ELEVATION (FT):	6003.30	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747205	AREA SOUTH OF IHSS 133.3	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DRILLING	51993
EAST:	2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/03/93	

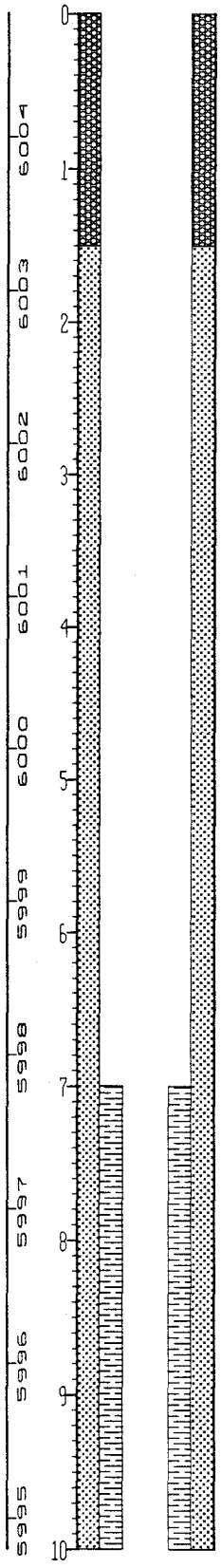
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5993	10				
					5992	11				
					5991	12				
					5990	13				
					5989	14				
					5988	15				
					5987	16				
					5986	17				
					5985	18				
					5984	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6004.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747225	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN) 0.30	GEOLOGIST T.S. DREILING	52093
EAST:	2080103	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

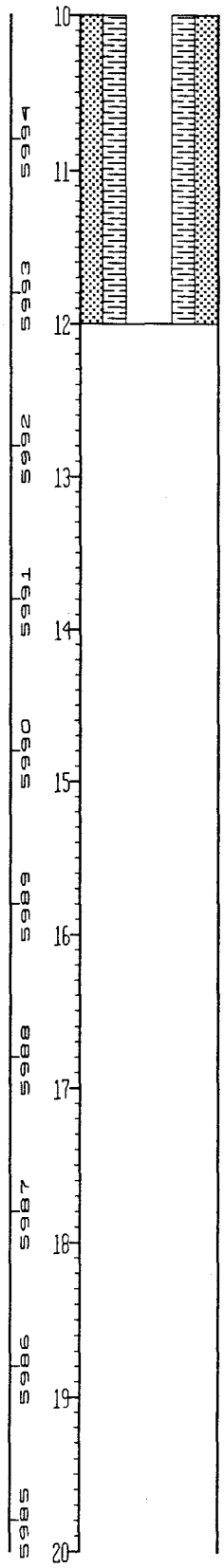


Total Depth Drilled: 12.00 Total Depth Casing: 12.00
Bottom of Filter Pack: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6004.80	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747225	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST:	T.S. DREILING	52093
EAST:	2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED:	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

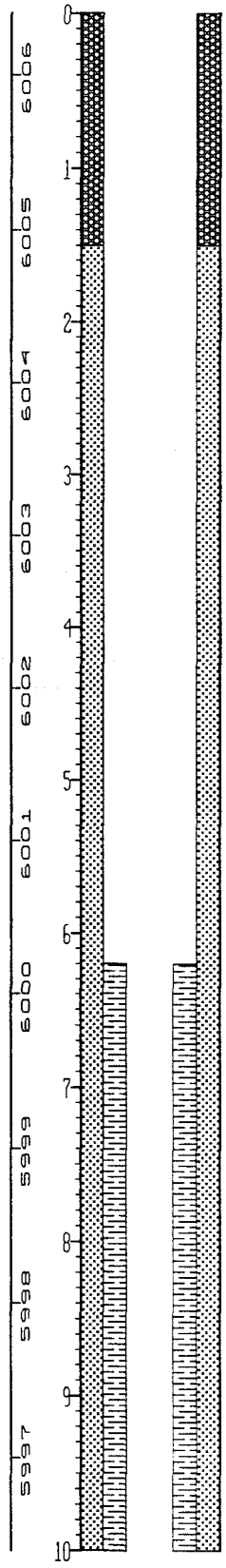
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT): 11.20	GROUND ELEVATION (FT):	6006.40	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747245	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DRILLING	52193
EAST:	2080102	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

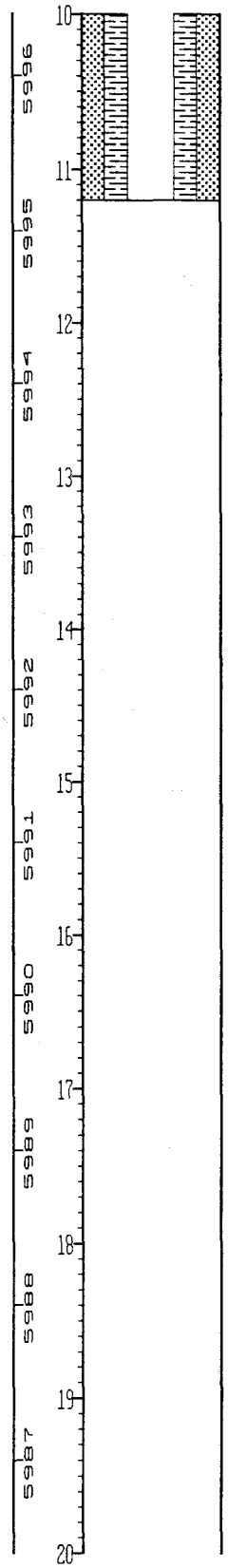


Total Depth Drilled: 11.20
Bottom of Filter Pack: 11.20
Total Depth Casing: 11.20

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.20	GROUND ELEVATION (FT)	6006.40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747245	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52193
EAST	2080102	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

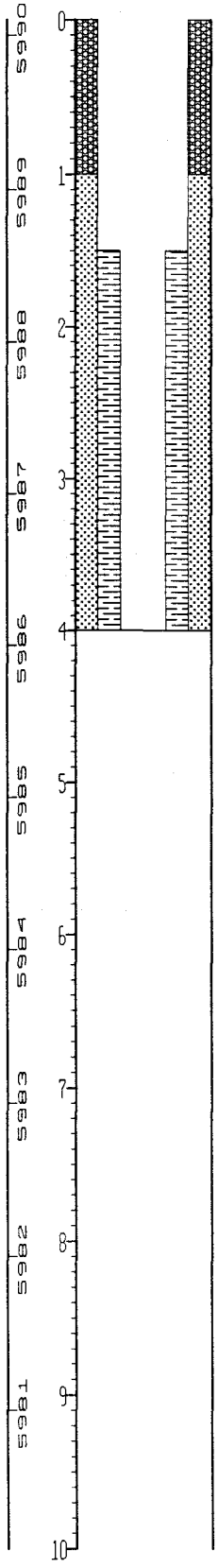
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5990.10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	746946	AREA WOMAN CK S OF 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52293
EAST	2099088	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT) 5990 5989 5988 5987 5986 5985 5984 5983 5982 5981
DEPTH(FT) 0 1 2 3 4 5 6 7 8 9 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 4.00 Total Depth Casing 4.00
Bottom of Filter Pack 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6016.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	746490	AREA S. FORK OF WOMAN CK	CASING DIAMETER (IN) 0.30	GEOLOGIST T.S. DREILING	52393
EAST:	2079702	LOCATOR NUMBER G6	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL

DATUM (FT): 6016, 6015, 6014, 6013, 6012, 6011, 6010, 6009, 6008, 6007

DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

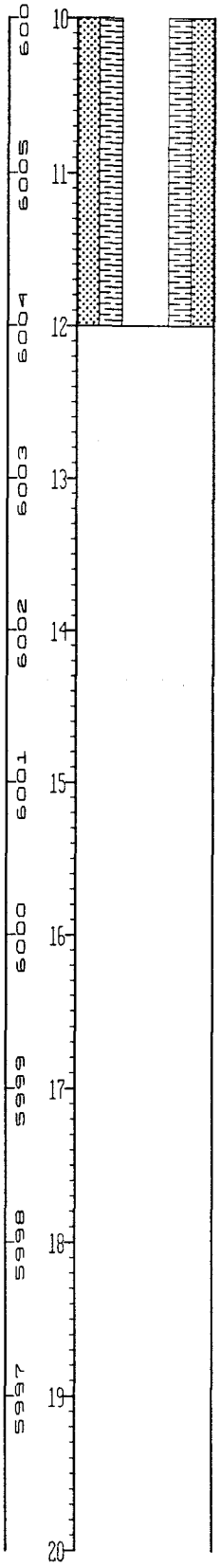
DESCRIPTION

Total Depth Drilled: 12.00
Bottom of Filter Pack: 12.00
Total Depth Casing: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6016.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	746490	AREA: S. FORK OF WOMAN CK.	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52393
EAST	2079702	LOCATOR NUMBER: 66	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

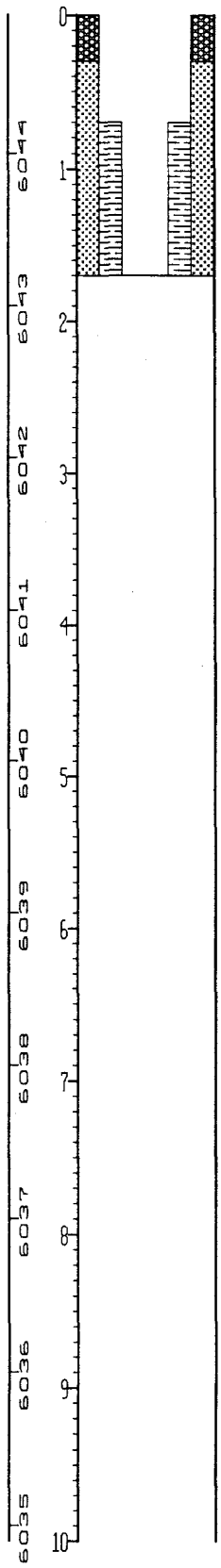
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 1.70	GROUND ELEVATION (FT)	6044.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	746213	AREA S. FORK OF WOMAN CK.	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52493
EAST	2078977	LOCATOR NUMBER F6	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



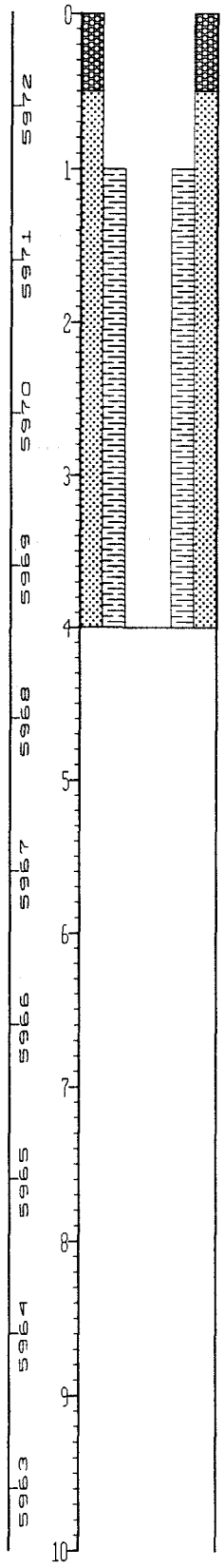
Total Depth Drilled: 1.70
Bottom of Filter Pack: 1.70

Total Depth Casing: 1.70

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5972.60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747036	AREA WOMAN CK S OF 133.2	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52593
EAST	2080671	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

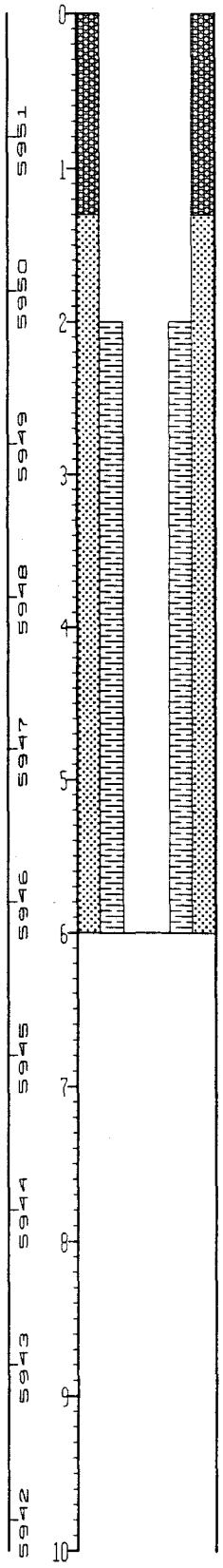


Total Depth Drilled: 4.00
Bottom of Filter Pack: 4.00
Total Depth Casing: 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5951 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747544	AREA OU5	CASING DIAMETER (IN)		GEOLOGIST	T S OREILING	52693
EAST	2081505	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 6 00
Bottom of Filter Pack 6 00
Total Depth Casing 6 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5937.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	77442	AREA OU5	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52793
EAST	2082003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE. NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0%	100%	5937	0				
					5936	1				
					5935	2				
					5934	3				
					5933	4				
					5932	5				
					5931	6				
					5930	7				
					5929	8				
					5928	9				
						10				

Total Depth Drilled 4.00
Bottom of Filter Pack 4.00

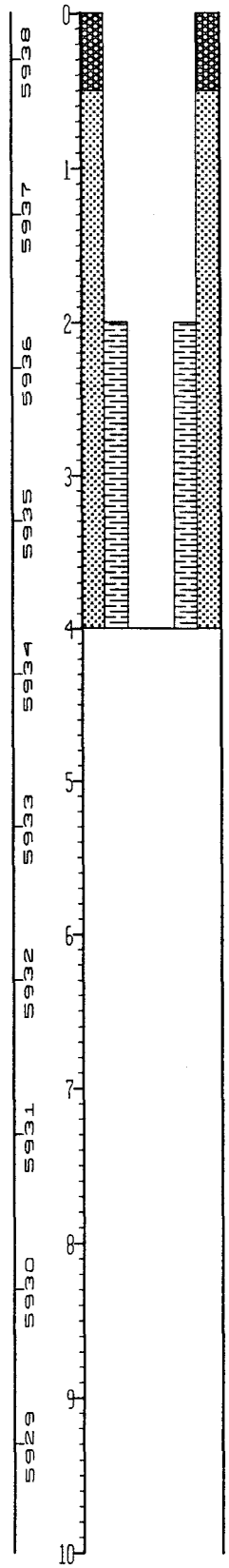
Total Depth Casing 4.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 4.00	GROUND ELEVATION (FT):	5938.30	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747518	AREA: WOMAN CK. S. OF 115	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING
EAST: 2082002	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 52893

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT): 5938, 5937, 5936, 5935, 5934, 5933, 5932, 5931, 5930, 5929
DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



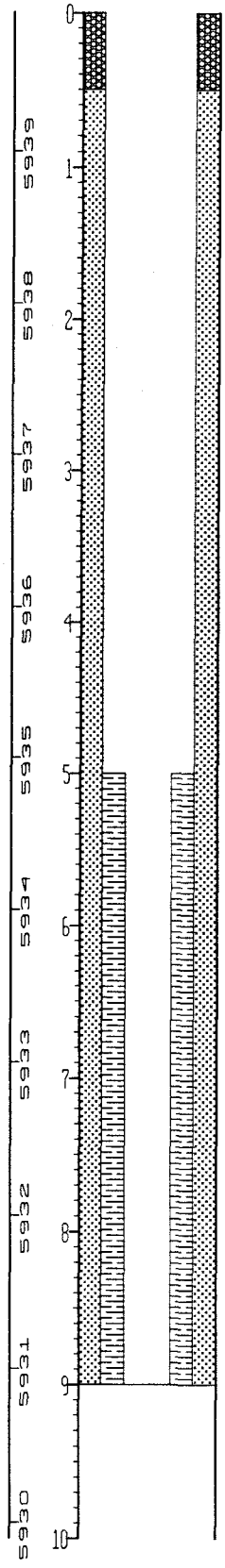
Total Depth Drilled: 4.00
Bottom of Filter Pack: 4.00

Total Depth Casing: 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT)	5939.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747563	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DRILLING	52993
EAST	2082002	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



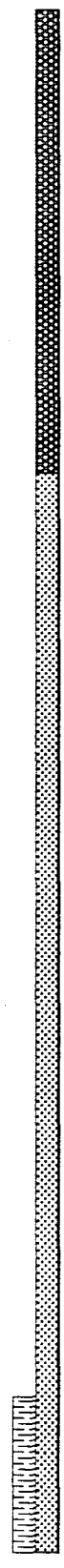
Total Depth Drilled: 9.00
Bottom of Filter Pack: 9.00

Total Depth Casing: 9.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT)	5950 50	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747594	AREA OU5, IHSS 115	CASING DIAMETER (IN):	0 30	GEOLOGIST:	T.S. DREILING	53093
EAST:	2082005	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1 00	DATE DRILLED:	02/08/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT): 5950, 5949, 5948, 5947, 5946, 5945, 5944, 5943, 5942, 5941
DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

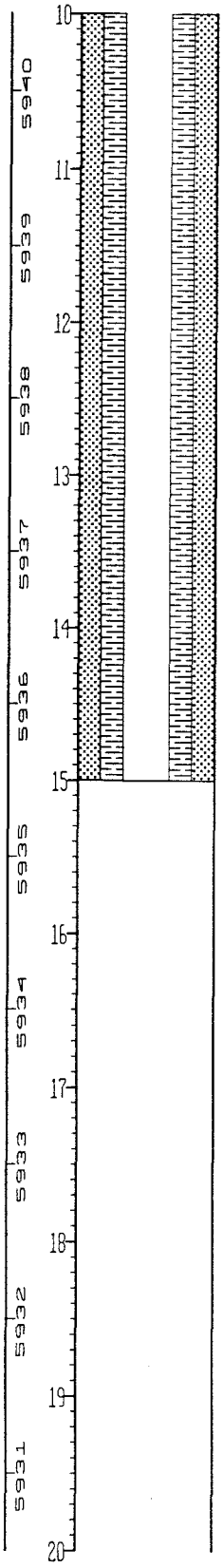


Total Depth Drilled: 15 00 Total Depth Casing: 15.00
Bottom of Filter Pack: 15 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT)	5950 50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747594	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	53093
EAST	2082005	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

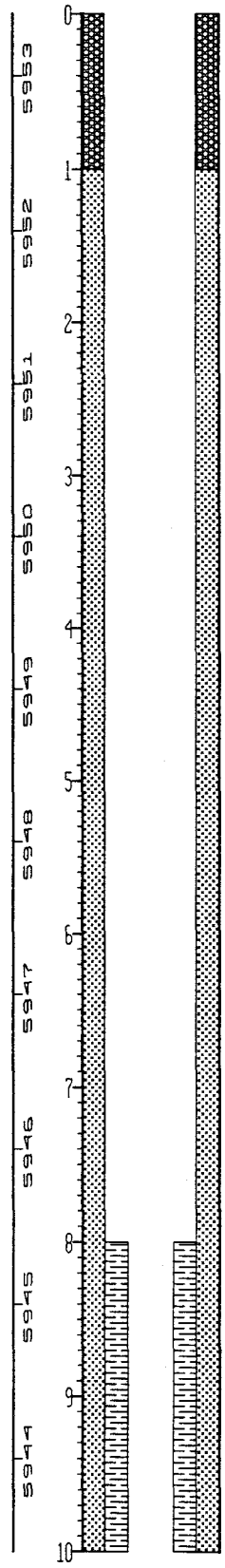
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT)	5953 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747613	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	53193
EAST	2082003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

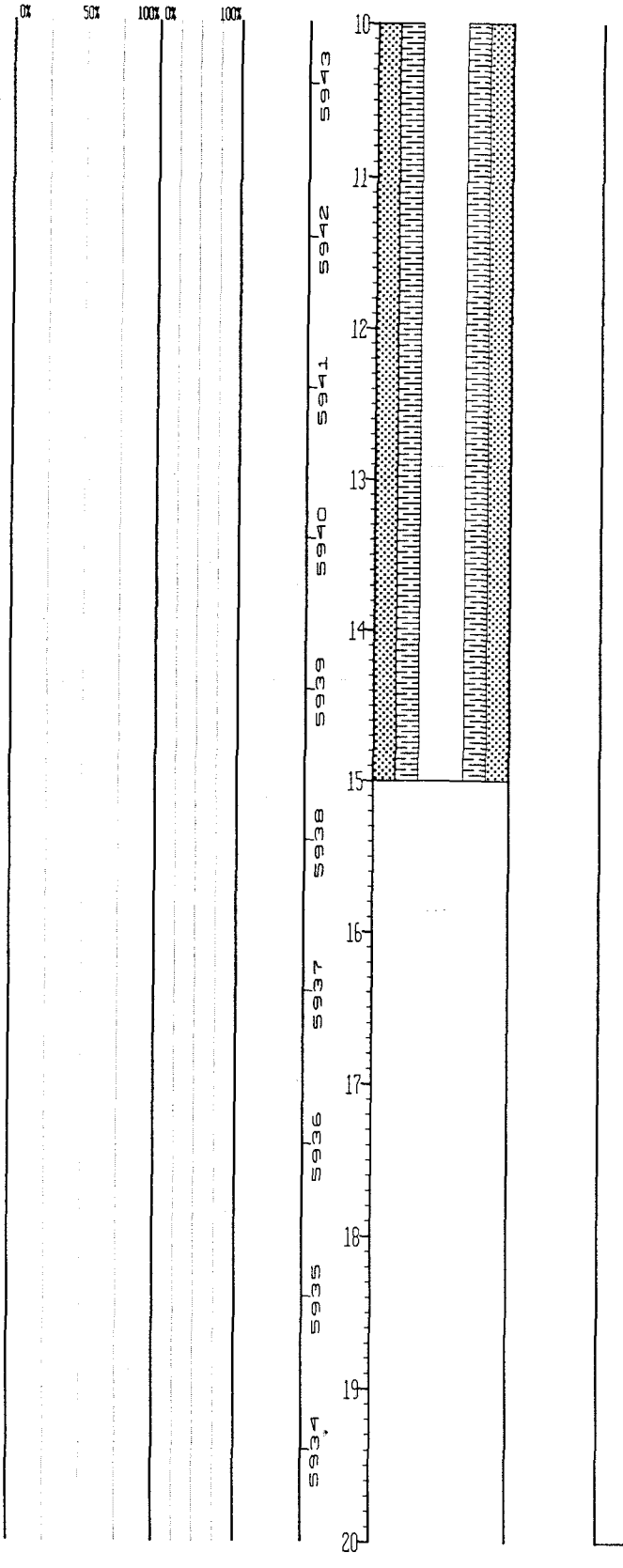


Total Depth Drilled: 15 00
Bottom of Filter Pack: 15 00
Total Depth Casing: 15 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT)	5953 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747613	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S BREILING	53193
EAST	2082003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

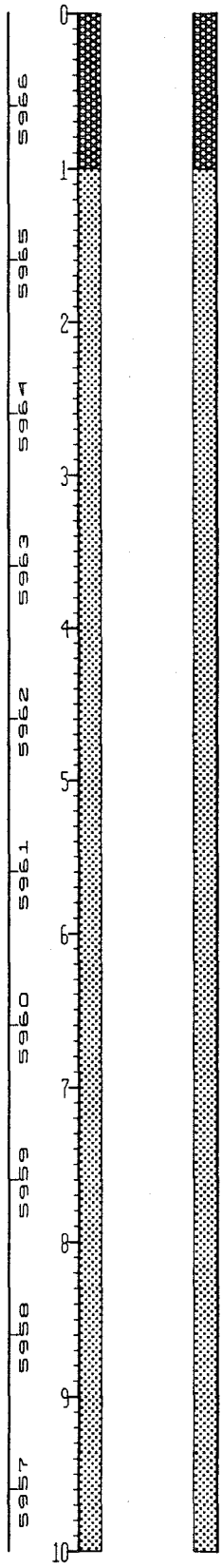
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24.00	GROUND ELEVATION (FT)	5966.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747657	AREA 005, THSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T. S. DREILING	53293
EAST	2082004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/08/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

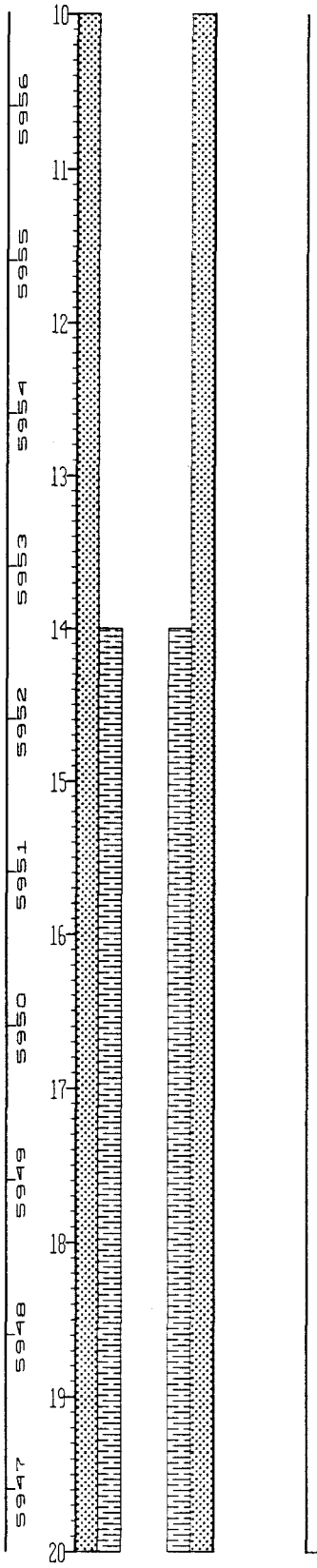


Total Depth Drilled: 24.00 Total Depth Casing: 24.00
Bottom of Filter Pack: 24.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 00	GROUND ELEVATION (FT)	5966 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747657	AREA 005, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DRILLING	53293
EAST	2082004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

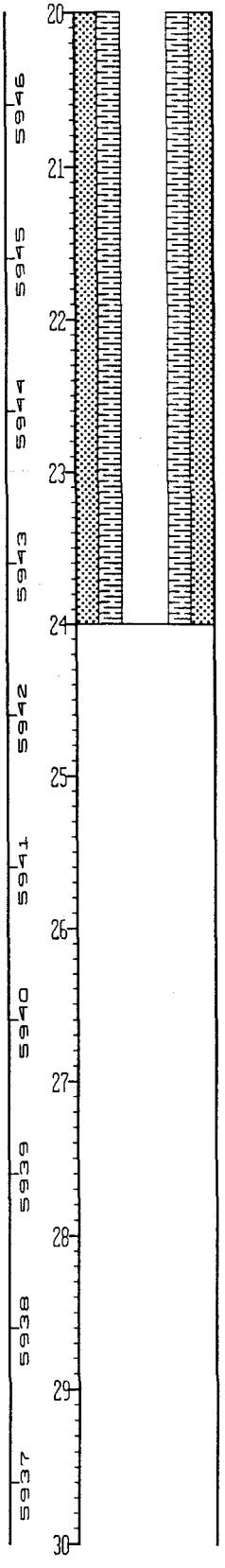
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
0% 50% 100%
PERCENT RECOVERY
0% 100%
RECOVERY/ INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 24.00	GROUND ELEVATION (FT):	5966.60	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747657	AREA: OU5, IHSS 115	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T. S. DREILING	53293
EAST:	2082004	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/08/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

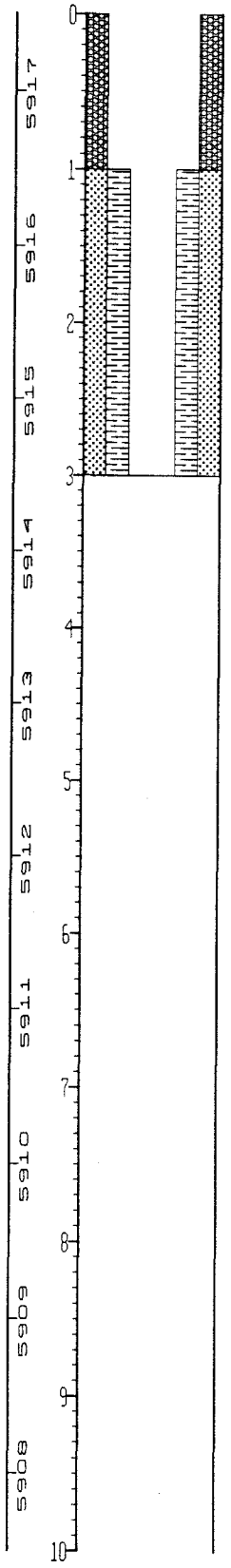
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 3.00	GROUND ELEVATION (FT) 5917.50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH: 747500	AREA WOMAN CK SE 115	CASING DIAMETER (IN) 0.30	GEOLOGIST T. S. DREILING	53393	
EAST: 2082736	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/04/93		

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT) / DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



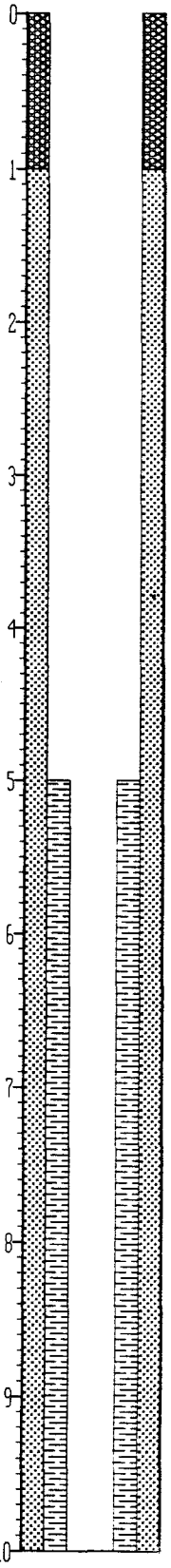
Total Depth Drilled: 3.00
Bottom of Filter Pack: 3.00

Total Depth Casing: 3.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 10.00	GROUND ELEVATION (FT):	5905.30	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747196	AREA: WOMAN CK. SE 115	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T. S. DREILING	53493
EAST:	2083174	LOCATOR NUMBER: K7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT): 5905, 5904, 5903, 5902, 5901, 5900, 5899, 5898, 5897, 5896
DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 10.00 Total Depth Casing: 10.00
Bottom of Filter Pack: 10.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 3 00	GROUND ELEVATION (FT)	5877 40	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	747223	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	[illegible] S DREILING	53593
EAST	2083950	LOCATOR NUMBER K7	BOREHOLE DIAMETER (IN)	0 30	DATE DRILLED	[illegible]/04/93	

REMARKS WELLPOINT INSTALLED WITH GEOPROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE RETAIN	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5877	0				Total Depth Drilled 3 00 Total Depth Casing 3 00
					5876	1				Bottom of Filter Pack 3 00
					5875	2				
					5874	3				
					5873	4				
					5872	5				
					5871	6				
					5870	7				
					5869	8				
					5868	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT) 5884 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 741129	AREA 005	CASING DIAMETER (IN)	GEOLOGIST T S DRILLING	53693
EAST 2083987	LOCATOR NUMBER K7	BOREHOLE DIAMETER (IN) 0 30	DATE DRILLED 02/04/93	

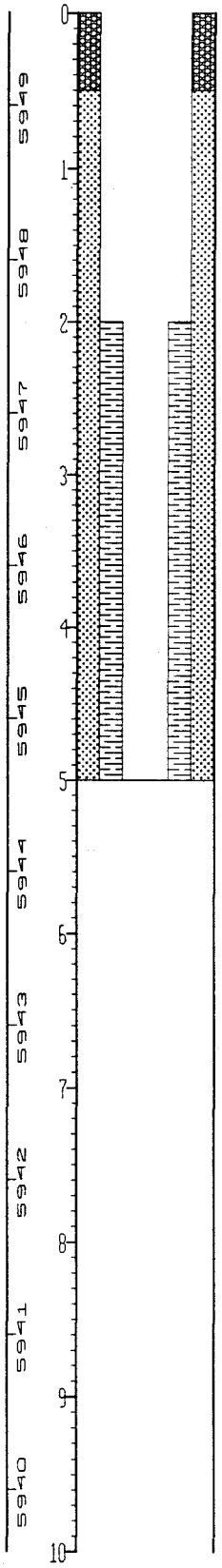
REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5884	0				Total Depth Drilled 6 00 Total Depth Casing 6 00
										Bottom of Filter Pack 6 00
					5883	1				
					5882	2				
					5881	3				
					5880	4				
					5879	5				
					5878	6				
					5877	7				
					5876	8				
					5875	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5 00	GROUND ELEVATION (FT)	5949 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7462071	AREA ANTELOPE SPRINGS CK	CASING DIAMETER (IN)	0 30	GEOLOGIST	TSD	53793
EAST	2082801	LOCATOR NUMBER J6	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 5 00
Bottom of Filter Pack: 5 00

Total Depth Casing: 5 00

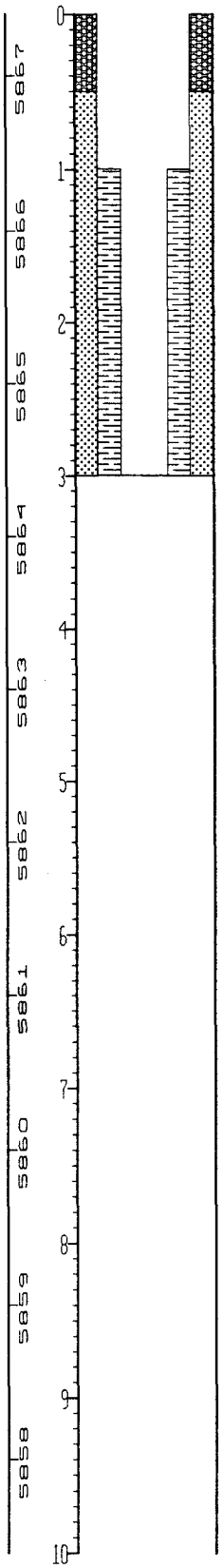
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 3.00	GROUND ELEVATION (FT)	5867.40	PROJECT NUMBER	005-RFI/RI
NORTH 747387	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T. S. DREILING
EAST 2084559	LOCATOR NUMBER L7	BOREHOLE DIAMETER (IN)	0.30	DATE DRILLED	02/04/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE. NO CORE WAS COLLECTED.

LOG OF BORING NUMBER

53893

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



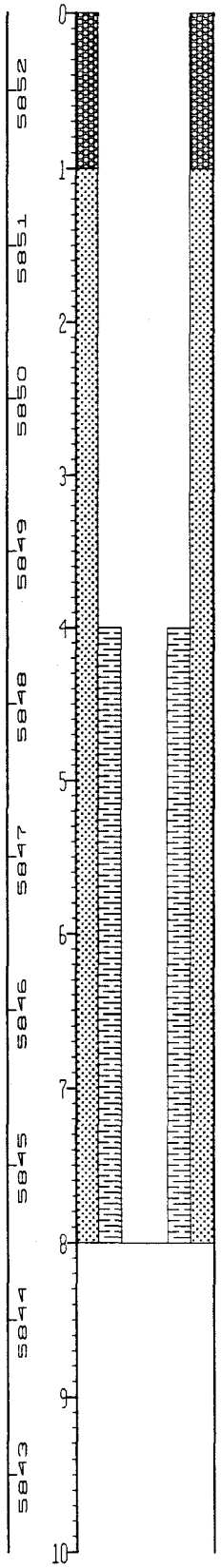
Total Depth Drilled: 3.00
Bottom of Filter Pack: 3.00

Total Depth Casing: 3.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT) 5852 50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747614	AREA WOMAN CK W C-1 POND	CASING DIAMETER (IN) 0 30	GEOLOGIST T S DRILLING	53993
EAST	2085058	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN) 1 00	DATE DRILLED 02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



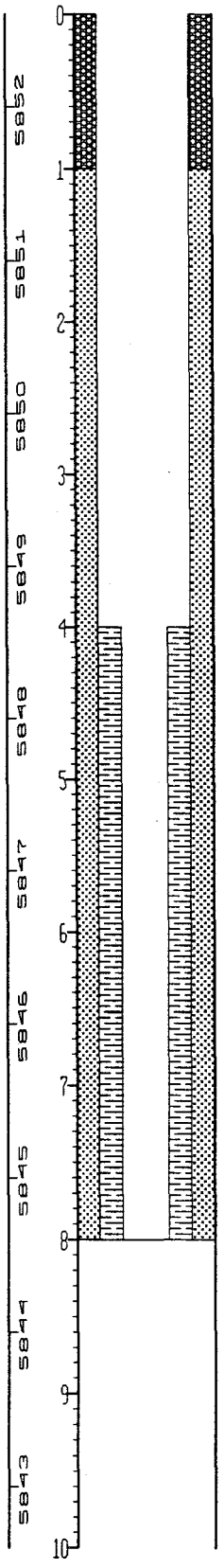
Total Depth Drilled 8 00
Bottom of Filter Pack 8 00

Total Depth Casing 8 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 8.00	GROUND ELEVATION (FT):	5852.60	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747642	AREA: OU5, W. OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	54093
EAST:	2085052	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



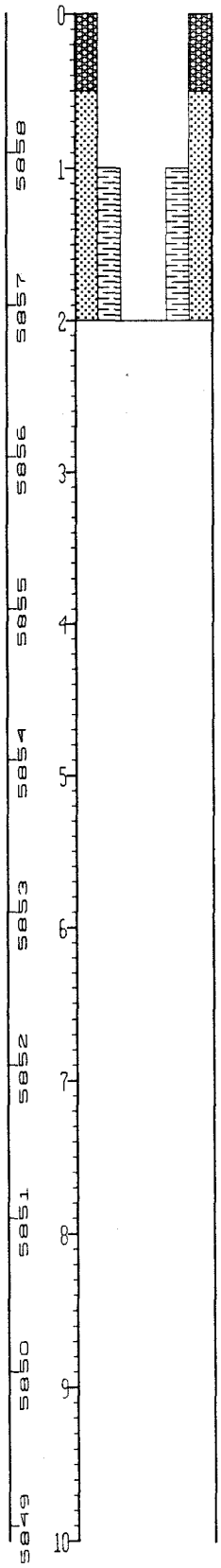
Total Depth Drilled: 8.00
Bottom of Filter Pack: 8.00

Total Depth Casing: 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 2.00	GROUND ELEVATION (FT)	5558.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747669	AREA: OU5, W OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST	T.S. DREILING	54193
EAST:	2085046	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



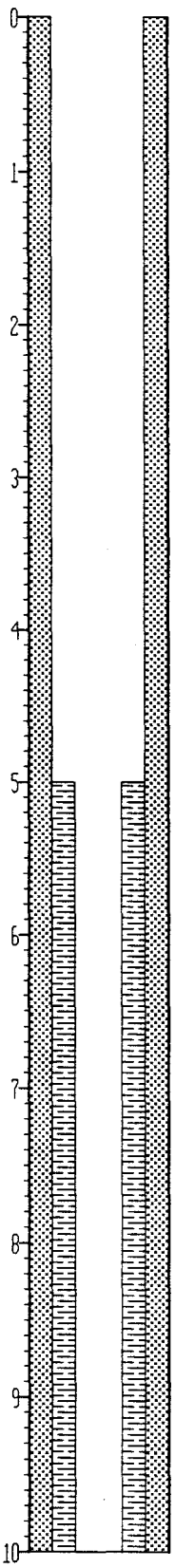
Total Depth Drilled: 2.00
Bottom of Filter Pack: 2.00

Total Depth Casing: 2.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 10.00	GROUND ELEVATION (FT):	5866.10	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747689	AREA: OU5, W. OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	54293
EAST:	2085040	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT): 5866, 5865, 5864, 5863, 5862, 5861, 5860, 5859, 5858, 5857
DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

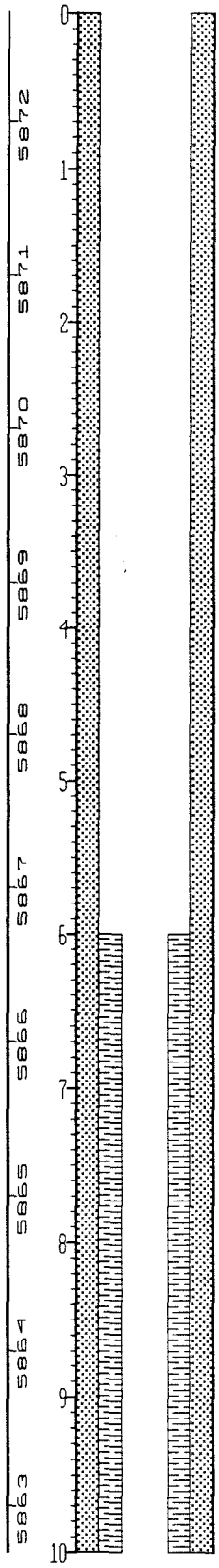


Total Depth Drilled: 10.00 Total Depth Casing: 10.00
Bottom of Filter Pack: 10.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	5872.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747709	AREA 005, W OF C-1 POND	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	54393
EAST:	2085034	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



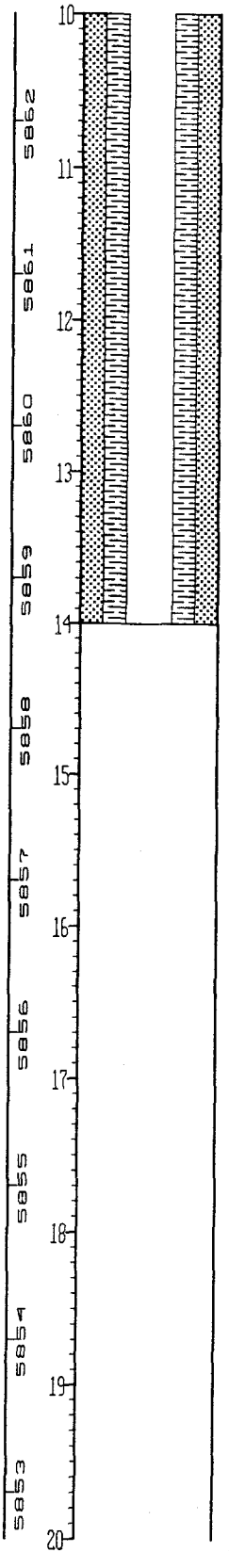
Total Depth Drilled: 14.00
Bottom of Filter Pack: 14.00

Total Depth Casing: 14.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 14.00	GROUND ELEVATION (FT):	5872.70	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747709	AREA: OU5, W. OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	54393
EAST:	2085034	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT): 19.00	GROUND ELEVATION (FT):	5881.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747742	AREA: OU5, W. OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. OREILING	54493
EAST:	2085025	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5881	0				
					5880	1				
					5879	2				
					5878	3				
					5877	4				
					5876	5				
					5875	6				
					5874	7				
					5873	8				
					5872	9				
						10				

Total Depth Drilled: 19.00 Total Depth Casing: 19.00
Bottom of Filter Pack: 19.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 19.00	GROUND ELEVATION (FT):	5881.80	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747742	AREA: OU5, W. OF C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	54493
EAST:	2085025	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

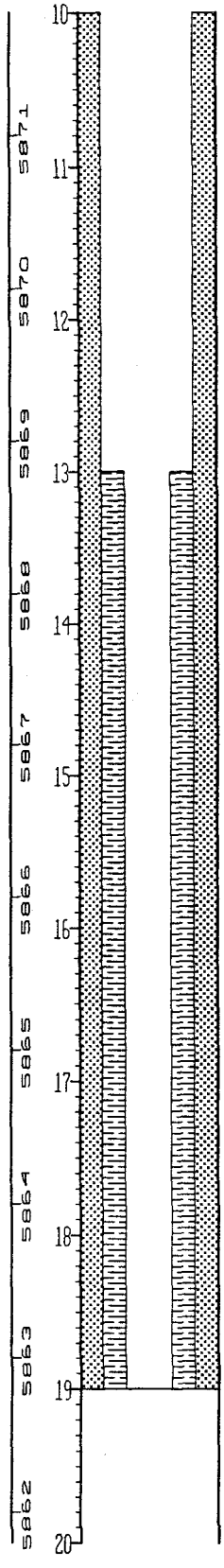
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL

DATUM (FT) / DEPTH (FT)



WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

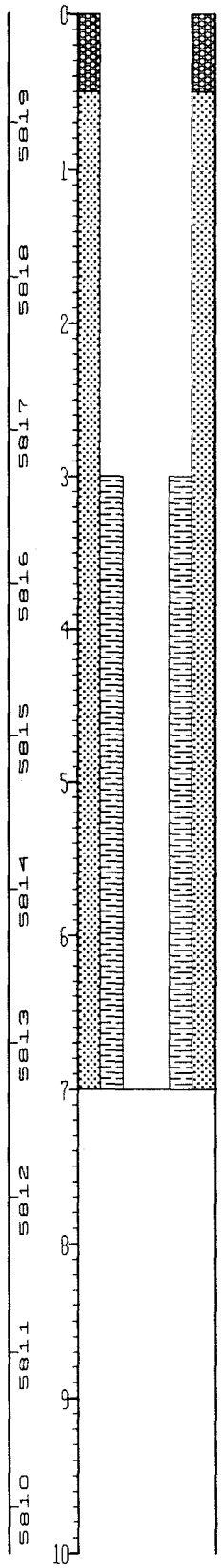
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 7.00	GROUND ELEVATION (FT):	5819.70	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747845	AREA WOMAN CK AT C-1 POND	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DREILING	54593
EAST:	2086378	LOCATOR NUMBER: N7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



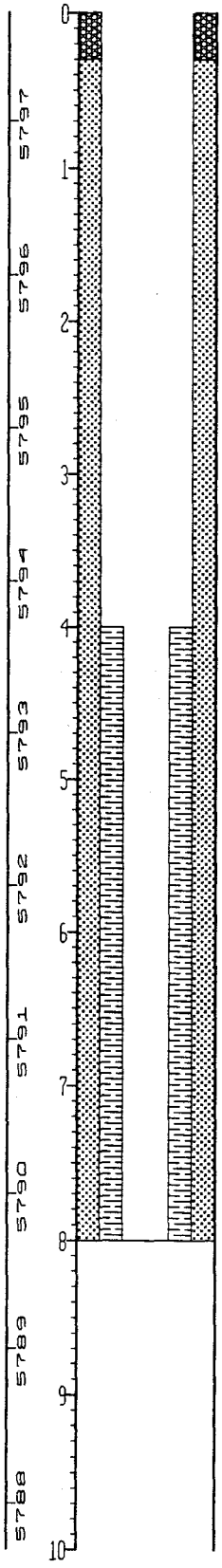
Total Depth Drilled: 7.00
Bottom of Filter Pack: 7.00
Total Depth Casing: 7.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT):	5797.70	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747937	AREA: OU5, E. OF POND C-1	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DRILLING
EAST: 2087123	LOCATOR NUMBER: 07	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 54693

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT): 5797, 5796, 5795, 5794, 5793, 5792, 5791, 5790, 5789, 5788
DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

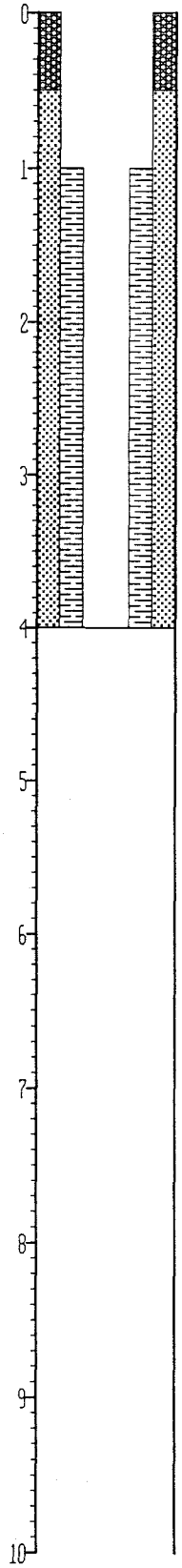


Total Depth Drilled: 8.00
Bottom of Filter Pack: 8.00
Total Depth Casing: 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5774.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747844	AREA: OU5, W OF POND C-2	CASING DIAMETER (IN)	0.30	GEOLOGIST	T S DREILING	54793
EAST	2087876	LOCATOR NUMBER: 07	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT) 5774 5773 5772 5771 5770 5769 5768 5767 5766 5765
DEPTH(FT) 0 1 2 3 4 5 6 7 8 9 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled: 4.00 Total Depth Casing: 4.00
Bottom of Filter Pack: 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT) 6030.50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747366	AREA 005, IHSS 133.6	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	54893
EAST	2079039	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/03/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST: T. S. DREILING. NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% OK – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6030	0			ML	0.0'-0.9': Clayey Silt with some Sand and Gravel. Dusky yellowish brown (10 YR 2/2). Good root development. Sand poorly graded, pred. f.g., trace c.g., pred. quartz and feldspar, pred. angular. Low plasticity, interval moist. Gravel poorly graded, f.g. to 0.75 inch, sub-angular. Interval non-calcareous. No visible bedding. 10% gravel, 17% sand, 55% silt, 18% clay
				1.20 /2.00	6029	1				
					6028	2			SM	0.9'-3.2': Silty Sand with some Clay. Dark yellowish orange (10 YR 6/6). Sand poorly graded, f.g. Interval contains roots, calcareous pockets. No bedding or fractures visible, damp to dry, low plasticity. Trace gravel (0.75 in.). 55% sand, 30% silt, 15% clay.
	BH50017AS			1.20 /2.40	6027	3				No recovery (1.2-2.0')
						4			NO RECOVERY	No recovery (3.2-4.4').
					6026	5			GC	4.4'-9.3': Sandy Gravel with some Clay and Silt. Matrix light brown (5 YR 5/6) to mod. brown (5 YR 4/4). Gravel mod. graded, 0.5 inch to 2.5 inch, sub-rounded to angular (broken by sampler), pred. quartzite. Sand mod. to well graded, f.g. to c.g., angular to sub-rounded, pred. quartz and feldspar with trace granite fragments. Matrix low plasticity, moist, no bedding or fractures visible, very slightly calcareous at very top of interval. Texture fines toward bottom of interval from approx. 50% gravel to approx. 35% gravel. Red iron-stained sandstone gravel at 7.5 ft. 40% gravel, 30% sand, 10% silt, 20% clay.
				2.10 /2.10	6025	6				
					6024	7				
				1.50 /1.50	6023	8				
	BH50031AS				6022	9			CLAYSTONE	9.3'-10.0': Top of Bedrock at 9.3'. Claystone with trace to some Silt. Light gray (N7) to med. light gray (N6). Trace c.g. sand, probably stuff from above. Mottled with dark yellowish orange (10 YR 6/6). Fe staining (weathered). Bedding not evident. Interval moist, non-calcareous, slightly to non-friable. 5% silt, 95% clay.
				2.00 /2.00	6021	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT) 6030.50	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747366	AREA OU5, THSS 133.6	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	54893
EAST	2079039	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/03/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST: T. S. DREILING NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2.00/2.00; 2.00/2.00; 1.00/1.00

DATUM (FT): 6020, 6019, 6018, 6017, 6016, 6015, 6014, 6013, 6012, 6011

DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	10.0'-15.0': Claystone with trace Silt. Heavy dark yellowish orange to light brown (10 YR 6/6 to 5 YR 5/6) staining. (Highly weathered). Increased iron staining mottling at bottom of interval. Calcareous material in a seam at approx. 10.6 ft. and as pockets. Trace carbonaceous material. Bedding not evident (massive). Low porosity, mod. friable to friable. Possible stem/plant remains in some partings. Moist. Less iron staining starting at 14.5 ft. >95% clay.
	Total Depth Drilled: 15.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6024.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747332	AREA 005, IHSS 133.6	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	54993
EAST:	2079117	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/03/93	

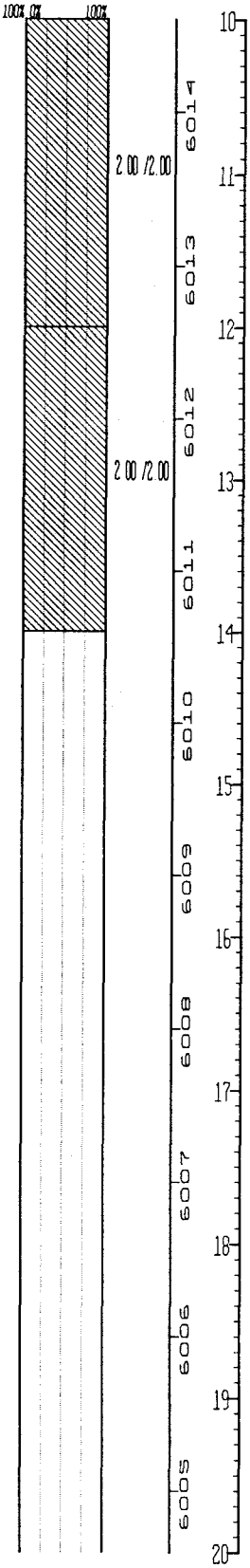
REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST: T SANTANGELO-DREILING NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT shown.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.70 /2.10	6024	0			GM	0.0'-0.9' Sandy Gravel with some Silt and trace Clay. Dusky yellowish brown (10 YR 2/2). Very organic - good root development. Gravel rounded to sub-rounded, mod. graded, c.g. to 2.0 in., pred. quartzite. Moist. Sand m.g. to f.g., mod. graded, pred. quartz. 52% gravel, 35% sand, 9% silt, 4% clay.
					6023	1			CL	0.9'-1.7' Silty Clay with abundt Sand. Grayish brown (5 YR 3/2) to dusky brown (5 YR 2/2). Mod. organic with good root development. Trace gravel at top. Sand and gravel pred. quartzite and feldspar. Moist. Low plasticity. Gravel poorly graded, pred. c.g. sized, sub-rounded. Sand poorly graded, pred. f.g. 30% sand, 30% silt, 40% clay.
					6022	2				
	BH50035AS			2.00 /2.00	6021	3				No recovery (1.7-2.1').
				0.00 /0.10		4			SM	2.1'-8.2' Silty Sand with some Gravel and Clay. Yellowish brown (10 YR 5/4) to mod. brown (5 YR 4/4). Sand mod. graded to well graded, f.g. to c.g., pred. quartz and feldspar. Gravel generally localized, abundt. from 4.4 to 4.8'. Gravel is mod. to poorly graded, c.g. to max. size of 2.5 in., sub-rounded to angular (broken by sampler), pred. quartizite. Zone of sluff from above from 4.1' to 4.2'. Calcareous material in isolated pockets. No bedding visible. Matrix dry to damp. Interval coarsens downward from 6.9' with cobbles of schist at bottom of interval greater than 0.2' wide. Organics as roots occur to approx. 4.3'. 10% gravel, 63% sand, 18% silt, 9% clay.
				1.80 /1.80	6020	5				
					6019	6				
				1.40 /1.40	6018	7				
				0.00 /0.60	6017	8				No recovery (7.4-8.0').
	BH50042AS			2.00 /2.00	6016	9			SILTY CLAYSTONE	8.2'-10.0' Top of Bedrock at 8.2'. Silty Claystone with some Sand. Med. light gray (N6) to med. gray (N5). Weathered, iron staining (10 YR 6/6) throughout as mottles. No apparent bedding. Interval very slightly calcareous. Trace carbonaceous material. Sand f.g., mod. to well sorted, pred. quartz, trace mica. Moist. 10-20% sand, 30% silt, 50% clay.
					6015	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6024.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747332	AREA 005, THSS 133.6	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	54993
EAST	2079117	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/03/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST: T. SANTANGELO-DREILING. NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT shown.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



SLUFF	10.0'-10.4' Sluff from above (gravelly sand and clay)
CLAYSTONE	10.4'-14.0' Claystone with some Silt. Pred. olive gray (5 Y 4/1) mottled with olive black (5 Y 2/1) to light olive gray (5 Y 6/1). Trace dark yellowish orange staining (10 YR 6/6). Trace v.f.g. sand. Interval weathered, bedding not evident. Irregular fractures throughout. Trace calcareous material in stringers and pockets near top. Trace carbonaceous material throughout. Core is mod. friable, mod. indurated. Interval becomes siltier at bottom. Slighty damp 20% silt, 80% clay
	Total Depth Drilled: 14.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 14.50	GROUND ELEVATION (FT):	6020.70	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747348	AREA: OU5, IHSS 133.6	CASING DIAMETER (IN):		GEOLOGIST:	T. S. DREILING	55093
EAST:	2079206	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN):	8.00	DATE DRILLED:	03/04/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST: T. SANTANGELO-DREILING. NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6020	0–1			ML	0.0'-2.0': Sandy Silt with some Clay. Abundt. plant roots. Dusky yellowish brown (10 YR 2/2). Sand poorly graded, pred. f.g., some m.g., trace c.g., angular to sub-angular. Bedding not visible. Trace calcareous pockets at top of interval. Mod. to low plasticity. Trace fine gravel. Moist. 27% sand, 50% silt, 22% clay.
					6019	1–2				
				2.00 /2.00	6018	2–3			CL	2.0'-2.9': Silty Clay with abundt. Sand. Same as above, reference interval 0.0 to 2.0 ft, except interval is slightly more plastic (medium). Moist. 27% sand, 35% silt, 37% clay.
BH5006OAS						3			ML	2.9'-5.0': Sandy Silt with some Clay and Gravel. Dark yellowish brown (10 YR 4/2). Sand mod. graded, f.g. to m.g., trace c.g., angular to sub-rounded, pred. quartz. Gravel mod. to well graded, f.g. to 1.5 inches, angular to sub-rounded. Gravel localized at approx. 3 ft. No apparent bedding. Trace calcareous material in pockets at top of interval. Trace dark yellowish orange staining (10 YR 6/2). Interval moist, low plasticity. Large gravel pieces at bottom of interval. Water at bottom of interval. 10% gravel, 29% sand, 37% silt, 24% clay.
					6017	4				
				1.00 /2.00	6016	5	03/04/94 ▽			No recovery (5.0-6.0').
					6015	6				No recovery (6.0-8.0'). Hydropunch sampled from 6.0 to 8.0 ft. for a water sample.
				0.00 /2.60	6014	7				No recovery (8.0-8.6'). Drilled through to 8.6' to collect tip and screen and to get beyond disturbed zone.
					6013	8			CLAYSTONE	8.6'-9.9': Top of Bedrock at 8.6'. Claystone with trace Silt and Sand. Med. gray (N5) to med. dark gray (N4). Top 1.2' has iron staining. Dark yellowish orange (10 YR 6/6). Very indurated and non-friable at top, grading to more weathered, less indurated, more friable at bottom. Carbonaceous fragments throughout. Bedding not evident. Low porosity, moist. >95% clay.
					6012	9				
BH5013OAS				1.30 /2.10	6011	10				No recovery (9.9-10.7')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 50	GROUND ELEVATION (FT) 6020 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747348	AREA OU5, IHSS 133 6	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55093
EAST 2079206	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/04/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST T SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 2.50 /2.50; 1.30 /1.30

DATUM(FT): 6010, 6009, 6008, 6007, 6006, 6005, 6004, 6003, 6002, 6001

DEPTH(FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SLUFF	10 7'-11 0' Sluff from above
CLAYSTONE	11 0'-14 5' Claystone with trace Silt Same as above, reference interval 8 6 to 9 9' Core mod. to well indurated to approx 14 0' At 14 0', iron staining increases and core is less indurated >95% clay
	Total Depth Drilled 14 50

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6047.50	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747597	AREA OU5, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	55193
EAST 2079232	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/08/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST: T. S. DREILING. NOTE: CORE LOSS (NO RECOVERY)LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50 /2.00	6047 6046	0 1			ML	0.0'-1.2' Sandy Silt with some Clay and Gravel. Grayish brown (5 YR 3/2) to dusky brown (5 YR 2/2). Sand mod. graded, pred. f.g., angular to sub-rounded, quartz, feldspar and muscovite. Gravel mod. graded, f.g. to 0.75 inch, sub-angular. Interval dry, no apparent bedding, mod. to slightly calcareous, some root material. Low plasticity. 15% gravel, 23% sand, 43% silt, 19% clay
	BH5009AS			2.00 /2.00	6045 6044	2 3			SM	1.2'-4.0' Silty Sand with some Clay. Mod. brown (5 YR 3/4) (from 1.2 to 1.5 ft.) and mod. brown (5 YR 4/4) (from 2.0 to 4.0 ft.). Sand, poorly graded, pred. f.g. quartz with trace heavy minerals and muscovite. Angular to sub-angular. Roots throughout. Bedding not evident. Interval moist. Bottom 0.5 ft. contains approx. 15% gravel. Matrix low plasticity, very slightly calcareous. 54% sand, 30% silt, 16% clay. No recovery (1.5-2.0')
				1.20 /2.00	6043 6042	4 5			SM	4.0'-5.2' Gravelly Sand with some Silt and Clay. Mod. reddish brown (10 R 4/6). Gravel well graded, c.g. to 2.5 inches, angular (broken from sampler) to sub-rounded. Sand angular to sub-rounded, well graded, f.g. to c.g., pred. quartz and granite fragments. Matrix low plasticity. Bedding not evident. Moist. 25% gravel, 56% sand, 13% silt, 6% clay. No recovery (5.2-6.0').
	BH5009AS			2.00 /2.00	6041 6040	6 7			CLAYSTONE	6.0'-10.0' Top of Bedrock at 6.0'. Claystone with trace Silt. Light gray (N7) to med. light gray (N6). Some areas of iron staining (dark yellowish orange - (10 YR 6/6)). Trace carbonaceous material throughout. No visible bedding or fractures. Mod. indurated from 6.0 to 7.0 ft. Mod. friable and weathered. Interval moist. Low porosity. 5% silt, 95% clay.
				2.00 /2.00	6039 6038	8 9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6047.50	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747597	AREA 005, IHSS 133.5	CASING DIAMETER (IN)		GEOLOGIST	T. S. DREILING	55193
EAST	2079232	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	03/08/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST: T. S. DREILING NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 2.00 /2.00

DATUM (FT): 6037, 6036, 6035, 6034, 6033, 6032, 6031, 6030, 6029, 6028

DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	10.0'-12.0' Claystone with trace Silt. Same as above, reference interval 6.0 to 10.0 ft. Increased silt content to approx. 15%. Iron staining in fractures oriented from 0 to 20 degrees. Weathered and mod. friable. Minor calcareous stringer at mid interval. 5% silt, 95% clay.
	Total Depth Drilled 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 6048 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747619	AREA 005 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55293
EAST	2079429	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.30 /2.00	6048	0			GM	0.0'-1 2' Sandy Gravel with some Silt and Clay Grayish brown (5 YR 3/2) to dusky brown (5 YR 2/2) Gravel, sub-rounded to rounded, quartzite and granite Sand angular to sub-rounded, quartz and feldspar with some granite fragments, mica and heavy minerals Very organic with good root development Matrix low plasticity, moist 40% gravel, 38% sand, 15% silt, 7% clay No recovery (1 2-2 0')
					6047	1				
						2				
				1 70 /2.00	6046	3			ML	2 0'-4 3' Sandy Silt with some Clay Grayish brown (5 YR 3/2) at top of interval to mod yellowish brown (10 YR 5/4) at bottom Mod root development Sand, pred quartz and feldspar, with some mica and granite fragments, angular to sub-rounded Matrix low to med plasticity, no bedding or fractures visible, weathered and moist 38% sand, 40% silt, 22% clay No recovery (3 7-4 0')
BH50106AS					6045	4				
				1 50 /2.00	6044	5			GW	4 3'-7 1' Sandy Gravel with some Silt and trace Clay Matrix med brown (5 YR 4/4) Sand f g to c g, angular to sub-rounded, pred quartz, with feldspar, mica and heavy minerals Gravel max size less than 0 2 ft, pred quartzite Low plasticity, no bedding or fractures visible Moist (gw-gm) 55% gravel, 36% sand, 7% silt, 2% clay No recovery (5 5-6 0'), and (7 1-8 0')
					6043	6				
				1 10 /2.00	6042	7				
					6041	8				
BH50107AS				2 00 /2.00	6040	9			SILTY CLAYSTONE	8 0'-14 0' Top of Bedrock at 8 0 ft Silty Claystone with trace Sand Med light gray (N6) to med gray (N5) Fe staining in isolated zones and trace carbonaceous materials throughout No bedding or fractures visible Weathered, moist Increased Fe staining from 12 0 to 14 0 ft and heavy Fe staining along occasional fractures oriented at approx 60 to 70 degrees 30% silt, 70% clay
					6039	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 6048 60	PROJECT NUMBER 0U5-RFI/RI	LOG OF BORING NUMBER
NORTH	747619	AREA 0U5 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55293
EAST	2079429	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 00 /2 00; 2 00 /2 00

DATUM(FT): 6038, 6037, 6036, 6035, 6034, 6033, 6032, 6031, 6030, 6029

DEPTH(FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

Total Depth Drilled 14 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT) 6081 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747764	AREA 005 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55393
EAST	2079234	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	

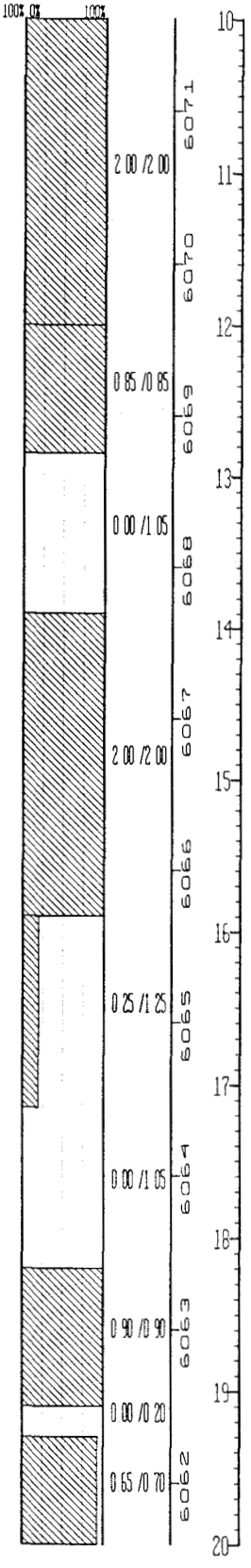
REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

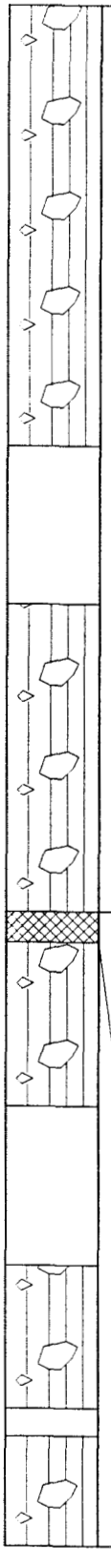
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 5%	100% 0% 100%	1 30 /2 00	6081	0			GM	0 0'-4 0' Sandy Gravel with some Silt and Clay Matrix mod brown (5 YR 4/4) to (5 YR 3/4) Gravel mod to well graded, angular, fine to cobble sized Sand well graded, f g to c g, angular to sub-angular, consists primarily of quartz and feldspar Low plasticity Bedding not evident Interval non-calcareous, dry (gm-gc) 40% gravel, 32% sand, 14% silt, 14% clay
					6080	1				No recovery (1 3-2 0')
	BH50163AS			2 00 /2 00	6079	2				
					6078	3				
				2 00 /2 00	6077	4			SC	4 0'-6 0' Sandy Clay with some Gravel and Silt Light brown (5 YR 5/6) to light olive gray (5 Y 6/1) Interval heterogenous, contains reworked bedrock mixed with typical alluvium Sand well graded, f g to c g Gravel mod to well graded, angular, broken Interval damp, non-calcareous Sand mostly quartz, angular to sub-angular Low plasticity 25% gravel, 32% sand, 10% silt, 33% clay
					6076	5				
				1 20 /2 00	6075	6			CL	6 0'-7 2' Clayey Sand with some Silt and trace Gravel Lightbrown (5 YR 5/6) Sand poorly graded, f g to m g, angular to sub-angular Gravel fine, angular to sub-angular Low plasticity Interval non-calcareous Bedding massive in interval Interval moist 47% sand, 21% silt, 32% clay
					6074	7				No recovery (7 2-8 0')
				2 00 /2 00	6073	8			SC	8 0'-10 0' Clayey Sand with some Silt and Gravel Same as above, reference interval 4 0 to 6 0 ft 25% gravel, 32% sand, 10% silt, 33% clay
	BH50164AS				6072	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT) 6081 60	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747764	AREA OU5 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55393
EAST	2079234	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50%)
PERCENT RECOVERY (100% 0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION





BH50165AS
BH50180AS

GM — 10 0'-15 9' Silty Gravel with some Sand and Clay Matrix primarily light brown to mod brown (5 YR 5/6) to (5 YR 4/4) Gravel mod to well graded, primarily angular and broken, fine to cobble sized Sand well graded, f g to c g , angular to sub-rounded, mostly sub-angular Bedding not evident Sand is primarily quartz with some mica and feldspar Non-calcareous Interval moist
50% gravel, 18% sand, 19% silt, 13% clay

No recovery (12 85-13 9')

ASH — 15 9'-16 1' Ash Light olive gray to grayish olive (5 Y 5/2) to (10 Y 4/2) Ash confirmed by observance of carbonaceous fragments under microscope Some of the ash has a black and white - "salt and peppery" appearance Interval damp
50% gravel, 18% sand, 19% silt, 13% clay

GM — 16 1'-20 5' Silty Gravel with some Sand and Clay Same as above, reference interval 10 0 to 15 9 ft
50% gravel, 18% sand, 19% silt, 13% clay

No recovery (17 15-18 2'), (19 1-19 3'), and (20 5-21 8')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT) 6081 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747764	AREA 005 IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55393
EAST	2079234	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /0 50	6061	20				
	BH50116AS			0 00 /1 30	6060	21				
				2 00 /2 00	6059	22			SC	21 8'-26 2' Clayey Sand with some Gravel and Silt Matrix light brown (5 YR 5/6) Sand well graded, f g to c g, angular to sub-angular, pred quartz, some mica, trace feldspar Gravel mod graded, fine to coarse, approx 0 1 ft, angular to sub-angular Bedding not evident Interval non-calcareous Possible ash residue at bottom of interval Interval moist Gravel content slightly larger (20%+) and gravel size larger starting at 23 8' (sc-gc) 10-20% gravel, 38% sand, 11% silt, 31% clay
				2 00 /2 00	6058	23				
				2 00 /2 00	6057	24				
				0 40 /0 40	6056	25				
	BH50117AS			0 00 /1 10	6055	26			NO RECOVERY	26 2'-27 3' No Recovery Top of Bedrock at 27 0 ft (according to driller)
				2 00 /2 00	6054	27			CLAYSTONE	27 3'-33 0' Claystone Light olive gray (5 YR 6/1) and dark yellowish orange (10 YR 6/6) - mottled from weathering Trace carbonaceous material throughout interval Bedding appears massive Interval damp Non-calcareous 95% clay, 5% silt
					6053	28				
					6052	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT)	6081 60	PROJECT NUMBER	005-RFI/RI
NORTH 747764	AREA 005 IHSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST 2079234	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/11/93

LOG OF BORING NUMBER 55393

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6051	30				
						31				
					6050	32				
				1.70 /2.00	6049	33			NO RECOVERY	No recovery (33 0-33 3')
					6048	34				Total Depth Drilled 33 30
					6047	35				
					6046	36				
					6045	37				
					6044	38				
					6043	39				
					6042	40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36.20	GROUND ELEVATION (FT) 6084.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747714	AREA 005, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	55493
EAST 2079354	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/09/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST: T. DREILING NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50032AS			1.20/2.00 0.00/2.00	6084 6083 6082 6081	0 1 2 3			SW	0.0'-1.2' Gravelly Sand with trace Silt and Clay. Dusky brown (when moistened) (5 YR 2/2). Sand mod. graded, f.g. to c.g., primarily c.g., angular to sub-angular. Gravel angular, poorly graded, approx. 0.75 to 1.0 inch. Interval dry, unconsolidated. Bedding not evident. Interval very slightly calcareous. Probably fill. 19% gravel, 75% sand, 3% silt, 4% clay No recovery (1.2-2.0'), and (2.0-4.0')
				1.50/2.00 1.40/2.00	6080 6079 6078 6077	4 5 6 7			CL	4.0'-7.4' Silty Clay with some Sand and Gravel. Pale yellowish brown (10 YR 6/2) to dark yellowish orange (10 YR 6/6), mottled. Some mod. brown (5 YR 4/4). Interval is mottled, weathered. Contains traces of caliche (calcareous patches). Trace carbonaceous materials. Sand f.g., poorly graded, angular to sub-rounded. Gravel poorly graded, f.g. to c.g., trace cobbles, angular, broken. Bedding not evident. Interval moist. Low plasticity. 10% gravel, 15% sand, 23% silt, 52% clay No recovery (5.5-6.0'), (7.4-8.0'), and (8.0-8.7')
	BH50033AS			0.00/0.70 1.20/2.00	6076 6075	8 9 10			SC	8.7'-9.9' Clayey Sand with abundt. Silt and some Gravel. Mod. brown (5 YR 3/4). Sand mod.-well graded, sub-rounded to sub-angular, f.g. to c.g. Gravel mod. graded, sub-rounded to angular, to 0.1'. Interval non-calcareous. No apparent bedding. moist. 10-20% gravel, 34% sand, 25% silt, 26% clay No recovery (9.9-10.7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.20	GROUND ELEVATION (FT) 6084.60	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747714	AREA OU5, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	55493
EAST	2079354	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/09/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST: T. DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6074	10				
				1.30 /1.70	6073	11			GM	10.7'-12.0' Sandy Gravel with some Silt and Clay. Matrix mod. brown, (5 YR 4/4). Sand well graded, f. to c.g., sub-angular to sub-rounded. Gravel mod. to well graded, sub-rounded to angular, gravel and cobbles. Non-calcareous. No apparent bedding, moist. (gm-gc) 50% gravel, 20% sand, 15% silt, 15% clay. No recovery (12.0-12.4')
					6072	12				
				1.90 /1.90	6071	13			SM	12.4'-15.3' Gravelly Sand with some Silt and Clay. Matrix mod. brown (5 YR 4/4) with some grayish brown (5 YR 3/2). Sand mod. to well graded, f.g. to c.g., angular to sub-angular, mostly quartz. Gravel angular, mod. graded, c.g. to 2.5 inches, many broken from drilling. Non-calcareous. Bedding not evident. Interval moist. Slightly calcareous at 14.3 ft. 30% gravel, 39% sand, 16% silt, 15% clay. No recovery (15.3-17.3').
				1.00 /1.00	6070	14				
	BR50034S			0.00 /0.70	6069	15				
				0.00 /1.30	6068	16				
					6067	17				
				2.00 /2.00	6066	18			SM	17.3'-19.3' Gravelly Sand with some Silt and Clay. Matrix light brown (5 YR 5/6). Same as above, reference interval 12.4 to 15.3 ft., except slightly lower gravel content. Non-calcareous. 20-30% gravel, 40% sand, 18% silt, 17% clay
				0.70 /0.70	6065	19			GM	19.3'-20.0' Sandy Gravel with some Silt and Clay. Matrix as above, reference interval 12.4 to 15.3 ft. Gravel mod. to poorly graded, angular, broken by drilling, fine to coarse gravel with trace cobbles. 70-80% gravel, 14% sand, 6% silt, 5% clay
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.20	GROUND ELEVATION (FT) 6084.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747714	AREA 005, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	55493
EAST	2079354	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/09/93	

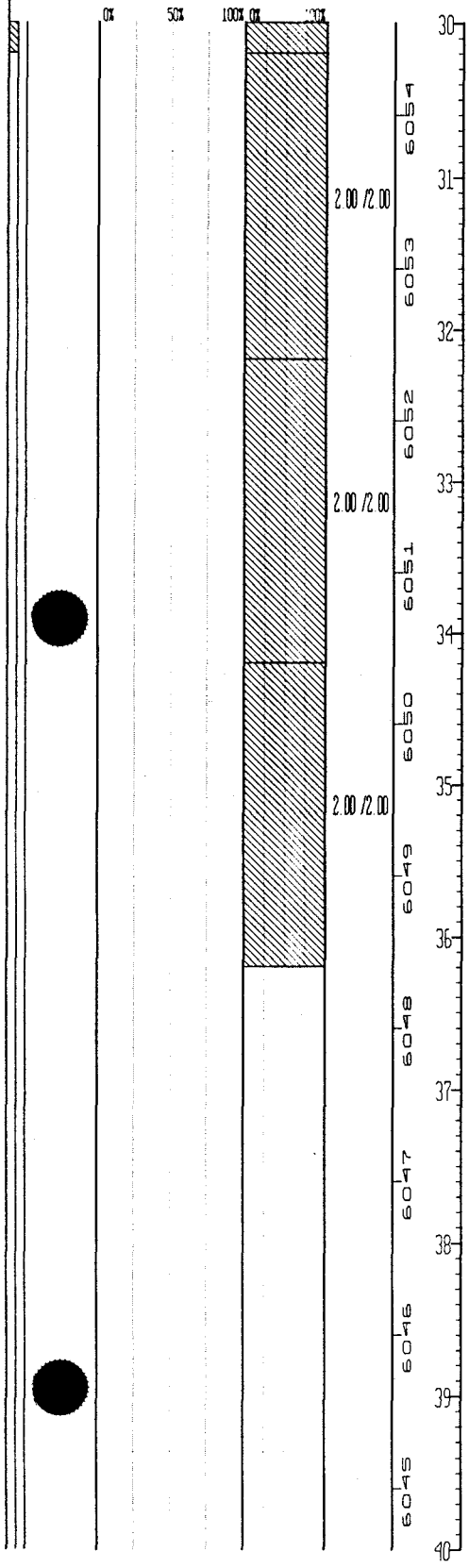
REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST T. DREILING. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50166AS			1.50/1.50	6064	20–21			SM	20.0'-21.5' Gravelly Sand with some Silt and Clay. Matrix mod. brown (5 YR 4/4). Same as above, reference interval 12.4 to 15.3 ft. Zone of possible ash residue near top of interval, approx. 2.0 inches wide. Unable to confirm with microscope. Possible traces of asbestos residue also. Moist. 20-30% gravel, 40% sand, 18% silt, 17% clay
				0.00/0.80	6063	22				No recovery (21.5-22.3')
				2.00/2.00	6062	23			GC	22.3'-25.2' Sandy Gravel with some Clay and Silt. Matrix mottled, primarily mod. brown (5 YR 4/4) to mod. yellowish brown (10 YR 5/4). Some patchy zones of mod. orange pink (10 YR 7/4), silt to f.g. sand. Gravel angular, mod. to well graded gravel and cobbles. Sand well graded, f.g. to c.g., sub-rounded to angular, mostly quartz. Interval non-calcareous, bedding not evident. Moist. 50% gravel, 28% sand, 6% silt, 16% clay
				0.90/0.90	6060	25				
				0.00/0.30	6059	26				
				0.00/1.50	6058	27				No recovery (25.2-27.0')
	BH50169AS			2.00/2.00	6057	28			GC	27.0'-30.2' Gravelly Sand with some Clay and Silt. Mod. brown (5 YR 4/4) to light brown (5 YR 5/6). Sand mod. graded, f.g. to c.g., mostly f.g., angular to sub-angular, mostly quartz. Gravel mod. to well graded, angular to sub-angular (broken from drilling), f.g. to cobbles. Bedding not evident. Non-calcareous. Interval moist. 25% gravel, 43% sand, 13% silt, 19% clay
				1.20/1.20	6055	30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36.20	GROUND ELEVATION (FT) 6084.60	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]7714	AREA OU5, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T.S. DREILING	55493
EAST 2079354	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/09/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI RIG GEOLOGIST: T. DREILING NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	30.2'-32.2' Silty Clay with some Sand and trace Gravel. Mottled light brown (5 YR 5/6) and light olive gray (5 YR 6/1). Gravel poorly graded, fine to approx. 0.5 inches, sub-rounded. Sand poorly graded, f.g., sub-rounded to sub-angular. Low plasticity. Trace carbonaceous material and iron staining. Bedding not evident. Interval moist. <5% gravel, 20% sand, 26% silt, 50% clay
CL	32.2'-32.8' Silty Clay with some Sand and trace Gravel. Same as above, reference interval 30.2 to 32.2 ft. Increase in gravel content and size, decrease in sand and silt content. Gravel rounded to angular (broken from drilling). Non-calcareous. <5% gravel, 20% sand, 26% silt, 50% clay
CLAYSTONE	32.8'-36.2' Top of Bedrock at 32.8 ft. Claystone with trace Silt. Light olive gray (5 YR 6/1) with some dark yellowish orange staining. Weathered, friable, bedding not evident, trace carbonaceous material. Some iron nodules toward bottom of interval. Interval moist, noncalcareous. >96% clay, <4% silt.
	Total Depth Drilled: 36.20

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) 6032 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7474197	AREA 005 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST L HOST	55593
EAST	2079379	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/09/93	

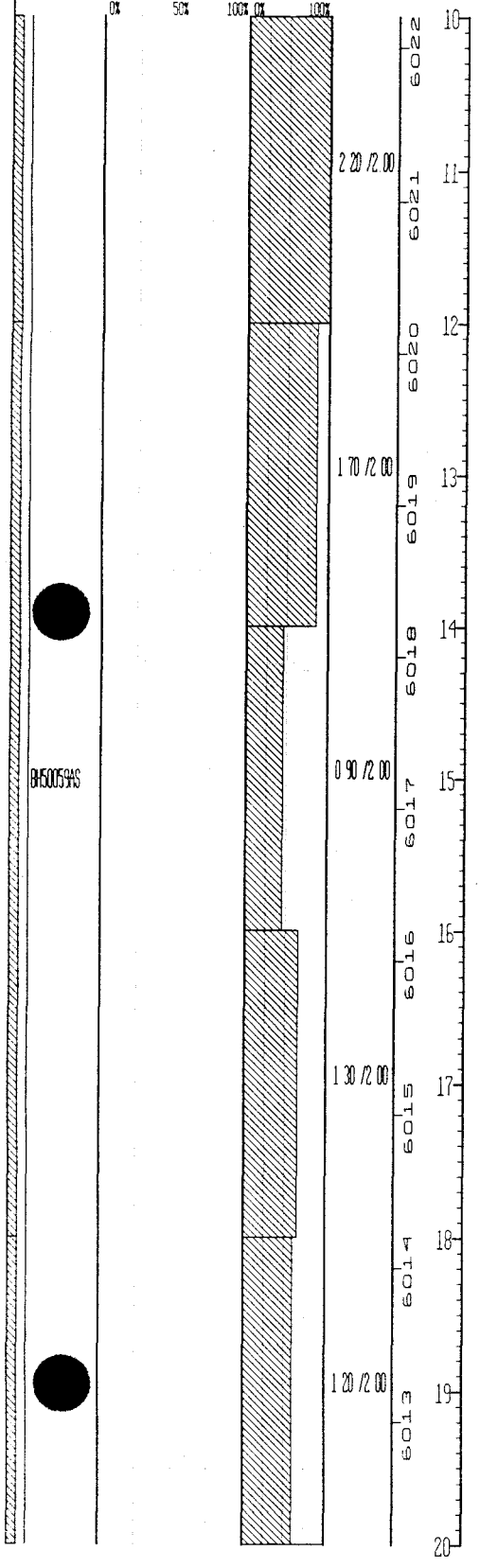
REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50057AS			0 80 /2 00 1 00 /2 00	6032 6031 6030 6029	0 1 2 3			ML	0 0'-3 0' Clayey Silt with some Sand and trace Gravel Moderate brown (5 YR 3/4) Trace Root material Sand poorly graded, f g , sub-angular to sub-rounded Gravel sub-rounded to sub-angular, to approx 0 75 inches Trace calcareous material Low plasticity Bedding not evident (massive) 18% sand, 62% silt, 20% clay No recovery (0 8-2 0'), and (3 0-4 0')
				1 40 /2 00 1 40 /2 00	6028 6027 6026 6025	4 5 6 7			ML	4 0'-13 7' Sandy Silt with some Clay and trace Gravel Mod brown (5 YR 4/4) Sand mod graded, f g to m g , sub-angular to sub-rounded Gravel sub-angular, fine to approx 0 5 in Low plasticity, no apparent bedding Trace calcareous material Sand micaceous and trace carbonaceous Gravel to 2 0 in from 10 0 to 13 7 ft 4% gravel, 20% sand, 56% silt, 20% clay No recovery (5 4-6 0'), (7 4-8 0'), and (9 0-10 0')
	BH50058AS			1 00 /2 00	6024 6023	8 9 10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) 5532 20	PROJECT NUMBER 365-RFI/RI	LOG OF BORING NUMBER
NORTH	7474197	AREA OU5 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST L HOST	55593
EAST	2079379	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 9 00	DATE DRILLED 03/09/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



	NO RECOVERY	No recovery (13 7-14 0')
	GM	14 0'-14 9' Silty Gravel with some Clay and Sand Matrix mod brown (5 YR 4/4) Gravel well graded, fine to coarse to 2 0 in , angular to sub-rounded, broken from drilling Sand mod graded, f g to m g , sub-angular to sub-rounded No apparent bedding Non-calcareous 50% gravel, 10% sand, 28% silt, 10% clay No recovery (14 9-16 0')
	GM	16 0'-17 3' Sandy Gravel with some Silt and Clay Matrix mottled, light olive gray (5 YR 6/1) to pale yellowish brown (10 YR 6/2), and mod yellowish brown (10 YR 5/4) Gravel well graded, fine to coarse, trace cobbles, angular to sub-angular Sand well graded, f g to c g No apparent bedding Noncalcareous 40% gravel, 32% sand, 20% silt, 8% clay No recovery (17 3-18 0')
	GM	18 0'-19 2' Sandy Gravel with some Silt and trace Clay Matrix primarily light olive gray (5 YR 6/1), but mottled Some zones of mod yellow (5 Y 7/6) tint Sand f g to c g , well graded, sub-angular to angular Gravel well graded, fine to coarse, trace cobbles, angular Non-calcareous 50% gravel, 30% sand, 15% silt, 5% clay No recovery (19 2-20 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) 6032 20	PROJECT NUMBER 205-RFI/RI	LOG OF BORING NUMBER
NORTH	7474197	AREA OU5 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST L HOST	55593
EAST	2079379	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/09/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 10 /1 00	6012	20			GM	20 0'-23 4' Sandy Gravel with some Silt and Clay Same as above, reference interval 16 0 to 17 3 ft 40% gravel, 32% sand, 20% silt, 8% clay No recovery (21 1-22 0'), and (23 4-24 0')
	BH50082AS			0 00 /1 00	6011	21				
				1 40 /2 00	6010	22				
				1 60 /0 70	6009	23				
	BH50083AS			1 60 /1 30	6008	24			CLAYSTONE	24 0'-25 6' Top of Bedrock at 24 0 ft. Claystone Light olive gray (5 YR 6/1) with dark yellowish orange (10 YR 6/6) staining as mottles Faint laminations (not distinct) visible Slightly friable Core damp, low porosity Traces of carbonaceous material as localized coaly patches Color change to pale yellowish brown (10 YR 6/2) - abrupt, then to dusky yellowish brown (10 YR 2/2) at bottom Weathered, more carbonaceous material at bottom >95% clay, <5% silt No recovery (25 6-26 0')
				1 80 /2 00	6007	25			CLAYSTONE	26 0'-27 8' Claystone with some Silt Dusky yellowish brown (10 YR 2/2) Mod friable, slightly damp, weathered Bedding not evident, appears massive Irregular fracture approx 40 degrees Carbonaceous material present (on fractures) Color grades to mod yellowish brown (10 YR 5/4) Ironstone nodule present near middle of interval at approx 27 0 ft 85% clay, 15% silt No recovery (27 8-28 0')
				2 00 /2 00	6006	26			CLAYSTONE	28 0'-30 0' Claystone with some silt Light olive gray (5 YR 6/1) Mottled, weathered Slightly friable Numerous fractures healed with iron oxide staining within vertical to near vertical orientation Bedding not evident (massive?) Core more consolidated at bottom, less iron staining Trace carbonaceous material Unable to measure fractures - too irregular 85% clay, 15% silt
					6005	27				
					6004	28				
					6003	29				
						30				Total Depth Drilled 30 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT)	6033.30	PROJECT NUMBER	105-RFI-RI	LOG OF BORING NUMBER
NORTH	747429	AREA 905, IHSS 133.4	CASING DIAMETER (IN)		GEOLOGIST	L. A. HOST	55693
EAST	2079435	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	03/11/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

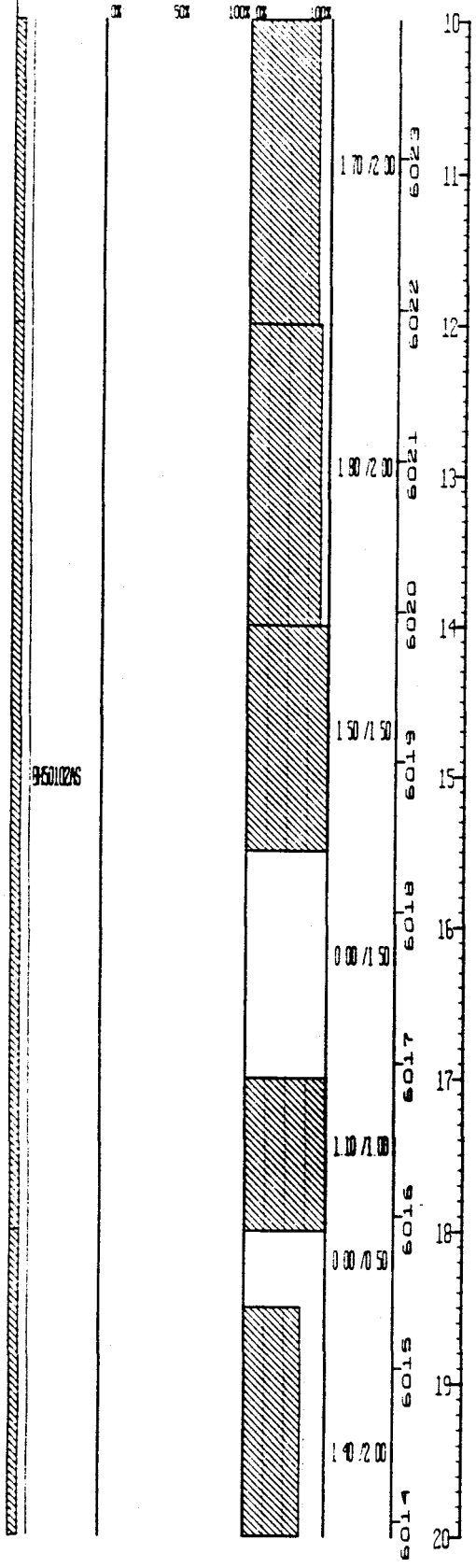
CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NO.	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50/2.00	6033	0–1			ML	0.0'-1.5' Clayey Silt with some Sand. Mod. brown (5 YR 3/4) to grayish brown (5 YR 3/2). Some root material at top of interval, trace throughout. Sand poorly graded, f.g., sub-angular. Mildy calcareous. Low plasticity, bedding massive, slightly damp. 18% sand, 42% silt, 40% clay. No recovery (1.5-2.0')
					6032	2			ML	2.0'-3.7' Clayey Silt with some Sand and trace Gravel. Mod. brown (5 YR 4/4). Sand mod. graded, f.g. to m.g., sub-angular to sub-rounded. Low plasticity, bedding massive. Trace carbonaceous material and root material. Small zone of grayish brown and very pale orange (5 YR 3/2) to (10 YR 8/2) sandy areas. Fine gravel. Interval moist (ml-cl). <1% gravel, 20% sand, 40% silt, 40% clay. No recovery (3.7-4.0')
	BH50100AS			1.70/2.00	6031	3				
					6030	4			CL	4.00'-5.60' Silty Clay with some Sand and Gravel. Mod. brown (5 YR 4/4). Interval moist. Gravel sub-rounded to sub-angular, poorly graded, 0.5 to 1.0 inch. Trace MnOx staining. Bedding massive. Low plasticity. Sand pred. v.f.g., trace m.g. and c.g., angular to sub-rounded. 10% gravel, 15% sand, 35% silt, 37% clay. No recovery (5.6-6.0'), and (6.0-7.0')
				1.60/2.00	6029	5				
					6028	6				
				0.00/1.00	6027	7			CL	7.0'-9.0' Silty Clay with some Sand and trace Gravel. Same as above, reference interval 4.0 to 5.6 ft. Less gravel. Slightly more MnOx and FeOx staining. Low plasticity. Some areas mottled with light olive gray (5 YR 6/1). Interval damp. 5% gravel, 16% sand, 39% silt, 40% clay. No recovery (9.0-10.0')
				2.10/2.00	6026	8				
	BH50101AS				6025	9				
				0.00/1.00	6024	10				

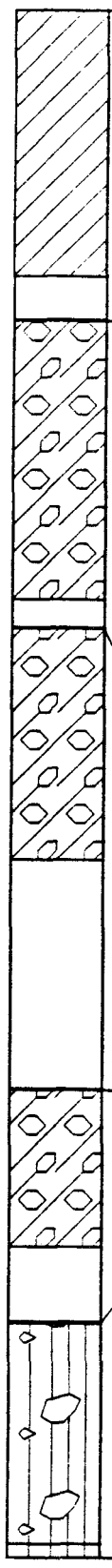
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 6033.30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747429	AREA OU5, IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	55693
EAST 2079435	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/11/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION





UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	10.0'-11.7' Silty Clay with some Gravel and Sand. Matrix mod. brown (5 YR 4/4). Gravel poorly graded, 1.0 inch to cobbles (3+in), sub-rounded to angular. Sand poorly graded, sub-angular to sub-rounded, trace m.g. and f.g. Interval damp, low plasticity. Non-calcareous. 20% gravel, 14% sand, 30% silt, 36% clay No recovery (11.7-12.0')
GC	12.0'-13.8' Gravelly Clay with some Sand and Silt. Matrix primarily mod. brown (5 YR 4/4) with some light olive gray (5 YR 6/1) reworked bedrock present from 13.4 to 13.8 ft., and as mottles throughout. Gravel poorly to mod. graded, f.g. to c.g., pred. 1.0 inch c.g., angular (broken by drilling) to sub-rounded. Sand mod. graded, f.g. to c.g., pred. f.g. to m.g., pred. angular. No apparent bedding. Damp. Calcareous nodule in reworked bedrock area. 30% gravel, 22% sand, 12% silt, 36% clay No recovery (13.8-14.0')
GC	14.0'-15.5' Gravelly Sand with some Clay and Silt. Mod. brown (5 YR 4/4) and light olive gray (5 YR 6/1) mottled. Sand well graded, f.g. to c.g. Angular (c.g.) to sub-rounded (f.g.). Gravel mod. to well graded, sub-rounded to angular, f.g. to c.g. Interval damp. 30% gravel, 36% sand, 14% silt, 20% clay No recovery (15.5-17.0')
GC	17.0'-18.0' Gravelly Clay to Clayey Gravel with some Sand and Silt. Same as above, reference interval 12.0 to 13.8 ft. Broken cobbles at bottom of interval. (gc-cl) 33% gravel, 22% sand, 12% silt, 33% clay No recovery (18.0-18.5')
GM	18.5'-19.9' Gravelly Sand with some Silt and Clay. Primarily mod. brown (5 YR 4/4). Sand well graded, f.g. to c.g., angular to sub-angular. Gravel mod. to well graded, sub-rounded to angular. No apparent bedding. Interval damp to moist, non-calcareous. Low plasticity. 25% gravel, 45% sand, 17% silt, 13% clay No recovery (19.9-20.5')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT) 6033 90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747429	AREA 005 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST	L A HOST	55693	
EAST 2079435	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED	03/11/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50113MS			1 40 /2 00	6013 6012	20 21 22			GM	20 5'-21 9' Sandy Gravel with some Silt and Clay Some broken cobbles in interval Low plasticity All else same as above (reference interval 18 5' to 19 9 ft) 40% gravel, 36% sand, 13% silt, 11% clay No recovery (21 9-22 5')
				2 20 /2 00	6011 6010	23 24			GM	22 5'-23 0' Gravelly Sand with some Silt and Clay Same as above, (reference interval 18 5 to 19 9 ft) 25% gravel, 45% sand, 17% silt, 13% clay
				1 70 /2 00	6009 6008	25 26			CLAYSTONE	23 0'-24 5' Top of Bedrock at 23 0' Claystone with some Silt Light olive gray (5 YR 6/1) Light brown to dark yellowish orange iron staining (5 YR 5/6 to 10 YR 6/6) Low porosity Weathered, slightly friable Bedding not visible, possibly massive, damp Healed fractures with iron staining Trace MnO2 staining Small ironstone nodules at bottom 90% clay, 10% silt
				2.30 /1.75	6007 6006	27 28			CLAYSTONE	24 5'-26 2' Claystone with some Silt Light brownish gray to brownish gray (5 YR 6/1 to 5 YR 4/1) Slighty damp Bedding appears massive Trace MnO2 staining Gravel at top of interval is likely sluff from above Becomes siltier at bottom of interval 85% clay, 15% silt No recovery (26 2-26 5')
				0 75 /0 75	6005 6004	29 30			CLAYSTONE	26 70'-29 00' Claystone with trace of Silt Light brownish gray to brownish gray (5 YR 6/1 to 5 YR 4/1) Relatively unweathered Very stiff Trace dark yellowish orange, iron staining Top 0 5' sluff from above Bedding appears massive, very slightly damp 95% clay
										Total Depth Drilled 29 00

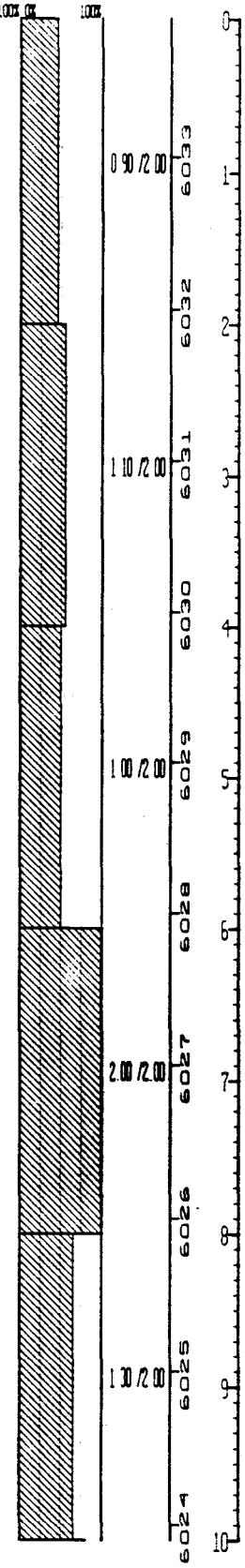
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT) 6033 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747413	AREA OU5, IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST	L A HOST	55693A
EAST 2079441	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/16/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L A HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0 90 /2 00	6033	0	CL	0 0'-0 9' Silty Clay with some Sand Light to mod brown (5 YR 5/6 to 5 YR 4/4) Very moist Grass and topsoil at very top Abundt roots throughout No recovery (0 9-2 0')
1 10 /2 00	6032	2	CL	2 0'-3 1' Silty Clay with some Sand Dark yellowish brown (10 YR 4/2) Small to tiny localized areas of f g to m g sand Trace to some root material Mod damp to moist No recovery (3 1-4 0')
1 00 /2 00	6031	3	CL	4 0'-5 0' Sandy Clay with some Silt and Gravel Mod brown (5 YR 4/4) Zone in middle (approx 1 in thick) may be ash residue Interval damp to moist Gravel fine to approx 0 5 in, rounded No recovery (5 0-6 0')
2.00 /2.00	6030	4	CL	6 0'-8 0' Sandy Clay with trace to some Gravel Mod brown (5 YR 4/4) with dark yellowish orange iron staining as mottles Sand v f g to m g Some carb staining Trace root material Gravel fine to large, poorly graded Some angular broken (from drilling) gravel at top of interval Rest is sub-angular Core damp
1 30 /2 00	6029	5	CL	8 0'-9 3' Sandy Clay with some Gravel as above More iron stain Broken gravel at bottom of interval No recovery (9 3-10 0')
	6028	6		
	6027	7		
	6026	8		
	6025	9		
	6024	10		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT) 6033 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747413	AREA OU5 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST	L A HOST	55693A
EAST 2079441	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/16/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L A HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NO.	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					10			CL	10 0'-11 6' Gravelly Clay with some Sand and trace Silt Light brown (5 YR 5/6) with some yellowish gray (5 Y 8/1) clay stringers (reworked bedrock?) Gravel poorly to mod graded, avg approx 0 5 in Some larger broken pieces, sub-rounded Interval damp No recovery (11 6-12 0')
			1 60 /2 00	6023	11				
				6022	12			CL	12 0'-13 7' Gravelly Clay with some Sand as above More sand and gravel than above Gravel mod graded Interval damp No recovery (13 7-14 0')
			1 70 /2 00	6021	13				
				6020	14			CL	14 0'-15 6' Gravelly Clay with some Sand as above Large cobble (to 3 0 in) in shoe Not as many yellow-gray clay stringers No recovery (15 6-16 0')
			1 60 /2 00	6019	15				
				6018	16			CL	16 0'-17 6' Gravelly Clay as above Some yellowish gray clay at bottom of interval Gravel more abundt , sand less abundt than above No recovery (17 6-18 0')
			1.60 /2.00	6017	17				
				6016	18				Total Depth Drilled 18 00
				6015	19				
				6014	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25 99	GROUND ELEVATION (FT) 6035 00	PROJECT NUMBER 015-RFI/RI	LOG OF BORING NUMBER	
NORTH 747429	AREA 005 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55793	
EAST 2079506	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/20/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50306AS	1 70 /2 00	6035	0	CL	0 0'-2 2' Silty Clay with some Sand Dark yellowish brown (10 YR 3/2) Trace gravel up to 0 5 in F g to c g, well graded, sub-rounded quartzose sand Some roots No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 23% sand, 23% silt, 54% clay No recovery (1 7-2 0')
BH50307AS	1 60 /2 00	6034	1	CL	2 2'-3 6' Sandy Clay with some Silt Mod yellowish brown (10 YR 4/4) Trace gravel up to 0 75 in Pred f g, sub-rounded quartzose sand with some m g and c g sand Trace ironstone nodules up to 2 mm Some whitish mottling of caliche, trace roots No apparent bedding or fractures Moist, low plasticity, highly calcareous 39% sand, 9% silt, 52% clay No recovery (3 6-4 0')
	1 70 /2 00	6033	2	CL	4 0'-5 7' Sandy Clay with some Silt Dark yellowish orange (10 YR 5/6) Trace gravel up to 0 75 in, fine to coarse Pred f g, sub-rounded quartzose sand Trace rounded ironstone nodules up to 2 mm No apparent bedding of fractures, low plasticity, non-calcareous 41% sand, 17% silt, 42% clay No recovery (5 7-6 0')
	1 60 /2 00	6032	3	SC	6 0'-7 6' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (5 YR 4/6) Sub-angular gravel up to 1 0 in Pred f g and m g, some c g, sub-rounded, quartzose sand No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Some carbonaceous material at 6 4 ft 5% gravel, 48% sand, 7% silt, 40% clay No recovery (7 6-8 0')
BH50308AS	2 00 /2 00	6031	4	SC	8 0'-11 4' Gravelly Sand with some Clay and Silt Mod yellowish brown (10 YR 5/6) Fine to coarse, sub-rounded gravel up to 2 5 in, possibly broken cobbles F g to c g well graded, sub-rounded, quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 35% gravel, 36% sand, 6% silt, 23% clay
		6030	5		
		6029	6		
		6028	7		
		6027	8		
		6026	9		
			10		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25.00	GROUND ELEVATION (FT) 6035.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747429	AREA 005 IHSS 123.4	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	55793
EAST 2079506	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/20/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		1.40/2.00	6025, 6024	10, 11				
		0.00/0.40	6023	12			NO RECOVERY	No recovery (11.4-12.4')
		2.00/2.00	6022, 6021	13, 14			SC	12.4'-12.7' Gravelly Sand with some Clay and Silt. Same as above (reference interval 8.0-12.7')
		1.50/2.00	6020, 6019	15, 16			SM	12.7'-15.9' Gravelly Sand with some Silt and trace Clay. Pred. yellowish gray (5 YR 6/2). Fine to coarse, sub-rounded gravel. Pred. mica schist and other fine grained metamorphic rocks, some broken cobbles (?). F.g. to c.g., well graded, sub-rounded, quartzose sand with some mica. No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. 30% gravel, 53% sand, 13% silt, 4% clay No recovery (15.9-16.4')
		2.00/2.00	6018, 6017	17, 18			SM	16.4'-18.4' Gravelly Sand with some Silt and trace Clay. Mod. brown (5 YR 4/6). Fine to coarse, sub-rounded gravel. Pred. metamorphic rocks, some weathered granitic rock, some broken cobbles (?). F.g. to c.g., well graded sub-rounded, quartzose sand with trace mica. No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. Interval below 18.4 ft is pred. cobble fragments. 30% gravel, 57% sand, 8% silt, 5% clay
		1.00/2.00	6016	19, 20			GC	18.4'-19.4' Clayey Gravel with some Sand and trace Silt. Mod. to light brown (5 YR 6/6). Fine to coarse gravel and broken cobbles, some pinkish color. F.g. to c.g., sub-angular, well graded quartzose sand. Moist, low plasticity fines, non-calcareous. 60% gravel, 14% sand, 5% silt, 21% clay
							NO RECOVERY	No recovery (19.4-20.4')

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STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25 90	GROUND ELEVATION (FT) 6035 00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747429	AREA 005 I-SS 133 4	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	55793
EAST 2079506	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/20/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50309AS				6015	20				
				2 00 /2 00	6014	21			CLAYSTONE	20 4'-25 9' Top of Bedrock at 20 4' Claystone with trace Silt Light olive gray (5 Y 3/2), to olive gray (5 Y 3/2) (20 4 ft to 20 6 ft is highly weathered and Fe stained) Some carbonaceous material, typically black, some is Fe stained color Abundt carbonaceous material at 21 3 ft as thin (less than 0 1 mm) layers near horiz Black carbonaceous leaf imprint at 23 1 ft Some Fe staining at 24 0 ft No apparent fractures, dry to moist, non-calcareous <5% silt, >95% clay
					6013	22				
				2 00 /2 00	6012	23				
					6011	24				
				1 50 /1 50	6010	25				
					6009	26				Total Depth Drilled 25 90
					6008	27				
					6007	28				
					6006	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6034.70	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747420	AREA CU5, IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	55793A
EAST 2079496	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/16/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L. A. HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN
LOGGED FROM CUTTINGS EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH NO CORE WAS SAVED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					0			CL	No recovery (0.0-5.0') Center bit drilled Sandy Clay cuttings
				6034	1				
				6033	2				
			0.00/5.00	6032	3				
				6031	4				
				6030	5			CL	5.0'-7.0' Sandy Clay Mod yellowish brown (10 YR 5/4) Iron staining throughout Small lense of gray material with fibrous texture Possibly asbestos Lense approx 2 in wide
			0.00/2.00	6029	6				
				6028	7			NO RECOVERY	No recovery (7.0-10.0')
				6027	8				
			0.00/3.00	6026	9				
				6025	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6034.70	PROJECT NUMBER 0U5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747420	AREA 0U5 CASS 133.4	CASING DIAMETER (IN)	GEOLOGIST L. A. HOST	55793A	
EAST 2079496	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/16/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L. A. HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN
LOGGED FROM CUTTINGS EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH NO CORE WAS SAVED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00/2.00	6024	10			CL	10.0'-12.0' Gravelly Clay with some to abundt Sand (v f g to m g) Some yellowish gray clay stringers (Reworked bedrock?)
					6023	11				
						12				Total Depth Drilled 12.00
					6022	13				
					6021	14				
					6020	15				
					6019	16				
					6018	17				
					6017	18				
					6016	19				
					6015	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6034.70	PROJECT NUMBER	015-RFI-RI	LOG OF BORING NUMBER	
NORTH	747432	AREA 005, IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55793B	
EAST	2079497	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/24/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D.C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0.00/5.00	6034, 6033, 6032, 6031, 6030	0–5			CL	0.0'-5.0' Clay Dark yellowish brown (10 YR 4/2), trace silt, low plasticity, trace of moisture Augered 0-5' with no split spoon sample
			1.10/2.00	6029, 6028	5–7			CL	5.0'-6.1' Clay, light brown (5 YR 4/2), some silt, trace sand, trace gravel, low plasticity, trace moisture No recovery (6.1-7.0')
			0.00/3.00	6027, 6026, 6025	7–10			CL	7.0'-10.0' Clay, light brown (5 YR 4/2), some silt, trace sand, trace gravel, low plasticity, trace moisture Augered to 10' with no split spoon sample

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6034 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747432	AREA 005 IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	55793B
EAST 2079497	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/24/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D C BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 20 /2 00	6024	10			CL	10 0'-11 2' Gravelly Clay, light brown (5 YR 4/2), some silt, trace sand, some gravel, poorly graded, angular Clay fraction has low plasticity with trace moisture
					6023	11				No recovery (11 2-12 0')
					6022	12				Total Depth Drilled 12 00
					6021	13				
					6020	14				
					6019	15				
					6018	16				
					6017	17				
					6016	18				
					6015	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6034.50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747444	AREA OU5, IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55793C
EAST 2079507	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/24/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D.C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6034	0			CL	0.0'-5.0' Clay, mod brown (5 YR 3/4), trace silt, mod plasticity, trace moisture Augered 0-5' with no split spoon sample
				6033	1				
			0.00/5.00	6032	2				
				6031	3				
				6030	4				
				6029	5			CL	5.0'-6.1' Clay, mod yellowish brown (10 YR 5/4), some silt, trace sand, v f g, mod plasticity, trace moisture No recovery (6.1-7.0')
			1.10/2.00	6028	6				
				6027	7			CL	7.0'-10.0' As above Augered 7-10' with no split spoon sample
			0.00/3.00	6026	8				
				6025	9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6034 50	PROJECT NUMBER 305-RFD RI	LOG OF BORING NUMBER
NORTH 747444	AREA 305 BASS 133 4	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	55793C
EAST 2079507	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/24/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D C BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 50 /2 00	6024	10			CL	10 0'-11 5' Gravelly Clay, mod brown (5 YR 4/4), trace silt, some gravel, angular, poorly sorted, clay fraction has mod plasticity, trace moisture No recovery (11 5-12 0')
					6023	11				
					6022	12				Total Depth Drilled 12 00
					6021	13				
					6020	14				
					6019	15				
					6018	16				
					6017	17				
					6016	18				
					6015	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6035.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747422	AREA OU5, IHSS 133.4	CASING DIAMETER (IN)		GEOLOGIST	D. C. BAUGHN	55793D
EAST	2079514	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	03/24/93	

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D. C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6035	0			CL	0.0'-5.0' Clay, dark yellowish brown (10 YR 4/2), some silt, low plasticity, no moisture. Augered 0-5' with no split spoon sample
				6034	1				
			0.00/5.00	6033	2				
				6032	3				
				6031	4				
				6030	5			CL	5.0'-6.0' Gravelly Clay, light brown (5 YR 4/2), some silt, some gravel, low plasticity, trace moisture No recovery (6.0-7.0')
			1.00/2.00	6029	6				
				6028	7			CL	7.0'-10.0' As above. Augered 7-10' with no split spoon sample
			0.00/3.00	6027	8				
				6026	9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6035.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747422	AREA OU5 IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793D
EAST 2079514	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/24/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D. C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.80/2.00	6025	10			CL	10.0'-10.8' Clay, mod yellowish brown (10 YR 5/4), trace silt, some sand, some gravel, mod plasticity, trace moisture
					6024	11				No recovery (10.8-12.0')
					6023	12				Total Depth Drilled 12.00
					6022	13				
					6021	14				
					6020	15				
					6019	16				
					6018	17				
					6017	18				
					6016	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT) 6037.00	PROJECT NUMBER 305-PC1-PI	JOB OF BORING NUMBER	
NORTH 757497	AREA 005 DASS 123 4	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	55893	
EAST 2079485	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 04/02/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Paul Jordan Note Core loss (no recovery) less than 0.2' not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION / SAMPLE NUMBER	SAMPLE GRAIN SIZE 50%	PERCENT RECOVERY 100%	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50141AS			1.40/2.00	6037	0			CL	0.0'-2.3' Silty Clay with trace Sand. Mod. brown (5 YR 3/4). Sand f.-g., poorly graded, sub-rounded, mostly quartz. Bedding not evident. Interval moist, trace roots. Med. to high plasticity. Non-calcareous. (cl-ch) 3% sand, 27% silt, 70% clay No recovery (1.4-2.0')
				6036	1				
					2				
BH50149AS			1.40/2.00	6035	3			ML	2.3'-3.4' Clayey Silt with some Sand. Mottled, color ranges from grayish orange (10 YR 7/4) to dusky brown (5 YR 2/2). Trace to some root material. Sand is f.-g., well sorted, sub-rounded. Sand is mod. porous, argillaceous cement. Mod. friable, pred. quartz with some plagioclase feldspar (approx. 10%). Faint irregular bedding with near horizontal orientation visible in some zones. Dry to moist. Non-calcareous. 16% sand, 44% silt, 40% clay No recovery (3.4-4.0')
				6034	4				
			1.00/2.00	6033	5			ML	4.0'-4.2' Clayey Silt with some Sand. Same as above, reference interval 2.3 to 3.4 ft. Top of interval contains trace of gravel. 16% sand, 44% silt, 40% clay
				6032	6			CLAYEY SILTSTONE	4.2'-5.0' Top of Bedrock at 4.2 ft. Clayey Siltstone with some Sand. Very pale orange (10 YR 8/2) to dark yellowish brown (10 YR 4/2). Trace to some roots. Sand f.-g., poorly sorted, sub-rounded, pred. quartz. Argillaceous cement. Mod. friable, mod. porous. Faint bedding (nearly horizontal), irregular, dry to moist. non-calcareous. 16% sand, 45% silt, 39% clay No recovery (5.0-6.0')
			1.00/2.00	6031	7				
				6030	8			CLAYEY SILTSTONE	6.0'-7.8' Clayey Siltstone with some Sand. Mottled dark yellowish orange and light olive gray (10 YR 6/6) and (5 Y 6/1). Sand v.f.-g., well sorted, sub-rounded, primarily quartz. Mod. to mod. high porosity. Argillaceous cement. Mod. friable. Dry to moist. Mod. weathered. Some calcareous (calichel stringers. Trace carbonaceous material and as staining. Bedding not evident. Irregular fracture near bottom, unable to measure. 5% sand, 66% silt, 29% clay No recovery (7.9-8.0')
				6029	9				
				6028	10				Total Depth Drilled 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	6037.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747498	AREA 005 IHSS 133.4	CASING DIAMETER (IN)		GEOLOGIST	D.C. BAUGHN	55993
EAST	2079541	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	03/30/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50189AS					0			CL	0.0'-1.1' Sandy Clay with some Silt Mod brown (5 Y 3/6) Trace gravel, prea f g, sub-rounded quartzose sand with abundt mafic fragments Some m g and trace c g sand, some roots No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 37% sand, 6% silt, 57% clay
BH50162AS			1.10/2.00	6037	1				No recovery (1.1'-2.0')
				6036	2			CL	2.0'-2.3' Sandy Clay with some Silt Same as above, reference interval 0.0 to 1.1 ft NOTE Core from 2.0 to 11.0 ft has elevated readings of alpha, beta, and gamma activity Core is in separate box and not logged per SOP Descriptions come from field log
BH50151AS			1.00/2.00	6035	3				2.3'-3.0' Ash Contains glass, metal turnings and other metallic objects Registers 1,200 cpm beta/gamma
				6034	4				No recovery (3.0'-4.0')
			0.80/2.00	6033	5				4.0'-4.8' Ash Same as above, reference interval 2.3 to 3.0 ft Alpha detected at 2,500 cpm
				6032	6				No recovery (4.8'-6.0')
			1.60/1.25	6031	7				6.0'-7.3' Ash as above, reference interval 2.3 to 3.0 ft reddish brown (10 YR 4/6) to blackish red (5 YR 2/2) upper 0.4 ft Poorly defined layers--black/red Black 0.05 ft, remainder red Clay from 5.65 ft, light brown (5 Y 5/6) Trace silt, mod plasticity, trace moisture
BH50161AS			1.40/2.05	6030	8			CL	7.3'-8.7' Clay as above and Ash as above comingled Irregular layer of ash from 8.3 to 8.7 ft
				6029	9				No recovery (8.7'-9.3')
				6028	10			CL	9.3'-10.0' Clay Light brown (5 YR 5/6) Trace silt, abundt gravel at 10.7 ft Mod plasticity, trace moisture

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21.00	GROUND ELEVATION (FT)	6037.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747498	AREA OU5 IHSS 133.4	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	55993
EAST	2079541	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	03/30/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT shown

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.90/1.70		10			CL	10.0'-11.0' Clay Same as above, reference interval 9.3 to 10.0 ft Light brown (5 YR 5/6) Trace silt, abundt gravel at 10.7 ft Mod plasticity, trace moisture
					6027	11			SC	11.0'-14.3' Gravelly Sand with some Clay and trace Silt Mod brown (5 Y 4/4) Fine to coarse, sub-rounded to rounded quartzite gravel Max size greater than 2 in Broken cobble from 12.2 to 12.4 ft F g to c g, well graded, sub-rounded, quartzose sand, trace mica No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Below approx 12.9 ft gravel content appears to decrease 11.0 - 12.5 ft 40% gravel, 45% sand, 2% silt, 13% clay 12.5 - 13.4 ft 40% gravel, 44% sand, 2% silt, 14% clay 13.4 - 14.3 ft 25% gravel, 56% sand, 5% silt, 14% clay
	BH50187AS			2.00/2.00	6026	12				
					6025	13				
				1.90/2.00	6024	14			CLAYSTONE	14.3'-16.7' Top of Bedrock at 14.3 ft Claystone with trace Silt Pred light olive gray (5 Y 6/1), 2 in cobble at 14.9 ft has been pushed there from above No apparent bedding, some microfractures with Mn coatings and some carbonaceous material <5% silt, >95% clay No recovery (16.7'-17.0')
					6023	15				
				1.70/2.00	6022	16				
					6021	17			CLAYSTONE	17.0'-20.0' Claystone with trace Silt Same as above, reference interval 14.3 to 14.7 ft Some Fe staining below approx 18.0 ft, Fe stained with some Mn staining Fracture at approx 10 to 15 degrees Approx 0.25 in ironstone piece at 18.7 ft No recovery (18.7'-19.0')
				1.70/2.00	6020	18				
					6019	19				
				1.40/2.00	6018	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 21 00	GROUND ELEVATION (FT) 6037 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747498	AREA 005 CHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	55993
EAST 2079541	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED	03/30/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1 40 /2 00		20			CLAYSTONE	20 0'-20 4' Claystone with trace Silt Same as above, reference interval 19 0 to 20 0 ft Abundt Fe stained fractures and microfractures in bottom 0 2 ft
					6017	21				No recovery (20 4'-21 0')
										Total Depth Drilled 21 00
					6016	22				
					6015	23				
					6014	24				
					6013	25				
					6012	26				
					6011	27				
					6010	28				
					6009	29				
					6008	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT)	6037.30	PROJECT NUMBER	105-471.01	LOG OF BORING NUMBER
NORTH	74511	AREA 105 CASS 1004	CASING DIAMETER (IN)		GEOLOGIST	D. C. BAUGHN	56093
EAST	1079605	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	03/25/99	

REMARKS: DRILLING EQUIPMENT: CME ATV 750 ASI RIG GEOLOGIST: DAN BAUGHN NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

Sample Depth	Chemical Analysis	Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Elevation (ft)	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
			0% 50% 100%	0% 100%						NO RECOVERY	0.0'-2.0' No Recovery No split spoon
					0.00/2.00	6037				ML	2.0'-2.5' Silty Sand with some Clay Dark yellowish brown (10 YR 3/2) F.g. and m.g., sub-rounded, mafic sand Some clay, trace roots No apparent bedding or fractures Dry to moist Slightly calcareous 48% sand, 31% silt, 21% clay
					1.00/1.90	6035				ML	2.5'-5.0' Silty Sand with some Clay Dark yellowish brown (10 YR 3/2) F.g. and m.g., sub-rounded, mafic sand Some clay, trace roots No apparent bedding or fractures Dry to moist Slightly calcareous 48% sand, 31% silt, 21% clay No recovery (3.0'-4.0'), and (5.0-6.0')
		1H5027UAS			0.00/0.10	6034					
					1.00/1.25	6033					
					0.00/0.75	6032					
					1.20/1.20	6031				SC	6.0'-8.9' Sandy Clay with some Gravel and Silt Mod brown (5 YR 4/4) Sub-angular to sub-rounded gravel, c.g. >2 in Pred f.g. sand, some m.g., trace c.g., sub-rounded pred quartzose sand Trace c.g. sand No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 20 % gravel, 30% sand, 18% silt, 32% clay No recovery (7.2-8.0')
					0.00/0.80	6030					
					1.50/2.00	6029				CLAYSTONE	8.9'-9.5' Top of Bedrock at 8.9 ft Claystone Light olive gray (5 Y 6/1) Mod friable Abundt caliche inclusions, possibly as filled fractures No apparent bedding Dry to moist 100% clay No recovery (9.5-10.0')
						6028					

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 4037.80	PROJECT NUMBER 305-PFD-PL	LOG OF BORING NUMBER
NORTH [illegible]	AREA 105 DESS 133.4	CASING DIAMETER (IN)	GEOLOGIST D. C. BAUGHN	56093
EAST [illegible]	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 10/26/93	

REMARKS DRILLING EQUIPMENT CME ATV 750 ASI RIG GEOLOGIST JAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
3H5027ZAS			2.00/2.00	6027	10–11			CLAYSTONE	10.0'-13.6' Claystone Light olive gray (5 Y 6/1) with some Fe mottling Mod friable Some caliche inclusions, slightly carbonaceous No apparent bedding or fractures Dry to moist
			2.00/2.00	6026	12				
				6025	13				
			2.00/2.00	6024	14			SILTY CLAYSTONE	13.6'-16.0' Silty Claystone with some Sand Light olive gray (5 YR 6/1) with some Fe staining Mod to highly friable Some possible crude bedding at less than 10 degrees, layers typically seperate lenses of sand that are typically less tann 1 mm in thickness Some v f g sub-rounded quartz sand Dry to moist Sand is whitish and pred occurs in streaks or "pieces" within clay Slightly carbonaceous 25% fine sand, 30% silt, 45% clay
				6023	15				
			2.00/2.00	6022	16				
				6021	17				Total Depth Drilled 16.00
				6020	18				
				6019	19				
				6018	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.30	GROUND ELEVATION (FT) 6038.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747503	AREA OU5, IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	56093A
EAST	2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/25/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST D.C. BAUGHN. ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG. EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH.

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00/4.50	6038, 6037, 6036, 6035, 6034	0, 1, 2, 3, 4			CL	0.0'-4.5' Clay, dark yellowish brown (10 YR 4/2), trace silt, mod. plasticity, trace moisture. Augered without split spoon sampling. Rig position requires first sample at 4.5' instead of 5'
				1.30/2.00	6033, 6032	5, 6			CL	4.5'-5.8' Clay, light brown (5 YR 5/6), trace silt, trace gravel, rounded, clay has low plasticity, trace moisture No recovery (5.8-6.5').
				0.00/3.00	6031, 6030, 6029	7, 8, 9			CL	6.5'-9.5' Clay, light brown (5 YR 5/6), trace silt, some gravel, low plasticity, trace moisture. Augered 6.5 to 9.5' with no split spoon samples.
						10			CL	9.5'-10.5' Clay, light brown (5 YR 5/6), trace silt, some gravel - rounded 0.25 in. to 1.0 in., mod. sorted - clay matrix is mottled yellowish gray (5 Y 8/1), high plasticity, trace moisture No recovery (10.5'-11.3')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 11 30	GROUND ELEVATION (FT) 6038 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747503	AREA 005, THSS 133.4	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	56093A	
EAST 2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/25/93		

REMARKS: DRILLING EQUIPMENT: CME 750 ATV. ASI RIG GEOLOGIST D C BAUGHN. ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG.
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.00 /1.75	6028	10				
					6027	11				
										Total Depth Drilled 11 30
					6026	12				
					6025	13				
					6024	14				
					6023	15				
					6022	16				
					6021	17				
					6020	18				
					6019	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6037.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 7[illegible]511	AREA 005, IHSS 120.4	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	56093B
EAST 2079605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/25/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D. C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0.00/5.00	6037, 6036, 6035, 6034, 6033	0–5			CL	0.0'-5.0' Clay, grayish brown (5 YR 3/2), trace silt, mod plasticity, trace moisture. Augered 0-5' without split spoon samples
			1.90/2.00	6032, 6031	5–7			CL	Clay, mod brown (5 YR 4/4), trace silt, low plasticity, trace moisture
			0.00/3.00	6030, 6029, 6028	7–10			CL	7.0'-10.0' As above

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6037.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	56093B
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]/25/93	

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D. C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.30/2.00	6027	10–11			CL	10.0'-11.3' Clay, light brown (5 YR 5/6), trace silt, some gravel - angular, poorly sorted, clay fraction has mod plasticity, trace moisture No recovery (11.3-12.0')
					6026	11–12				
					6025	12–13				Total Depth Drilled 12.00
					6024	13–14				
					6023	14–15				
					6022	15–16				
					6021	16–17				
					6020	17–18				
					6019	18–19				
					6018	19–20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6037 80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747490	AREA 005, IHSS 133 4	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	56093C
EAST	2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/26/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D C BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /5 00	6037 6036 6035 6034 6033	0 1 2 3 4 5			CL	0 0'-5 0' Clay, dark yellowish brown (10 YR 4/2), trace silt, trace gravel, mod plasticity, trace moisture. Augered without collecting split spoon samples.
				0 80 /0 80	6032	5			CL	5 0'-5 8' Clay, grayish orange (10 YR 7/4), trace silt, some gravel - angular, poorly sorted, low plasticity, trace moisture
				0 00 /4 20	6031 6030 6029 6028	6 7 8 9 10			CL	5 8'-10.0' Clay, light brown (5 YR 5/6), trace silt, trace gravel, low plasticity, trace moisture. Augered 5 8-10 0' without split spoon sampling

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6037.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747490	AREA 005 IHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST D. C. BAUGHN	56093C
EAST	2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 03/26/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D. C. BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.60/2.00	6027	10			CLAYSTONE	10.0'-11.6' Weathered Claystone, light olive gray (5 Y 6/1), mottled dark yellowish orange (10 YR 6/6), argillaceous cement, mod friable, with iron staining and caliche, bedding not apparent, fractures not apparent, moist.
					6026	11				No recovery (11.6-12.0')
					6025	12				Total Depth Drilled 12.00
					6024	13				
					6023	14				
					6022	15				
					6021	16				
					6020	17				
					6019	18				
					6018	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34.00	GROUND ELEVATION (FT) 6074.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747799	AREA 005 N OF IHSS 103	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56193
EAST 2079734	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2 FT NOT SHOWN

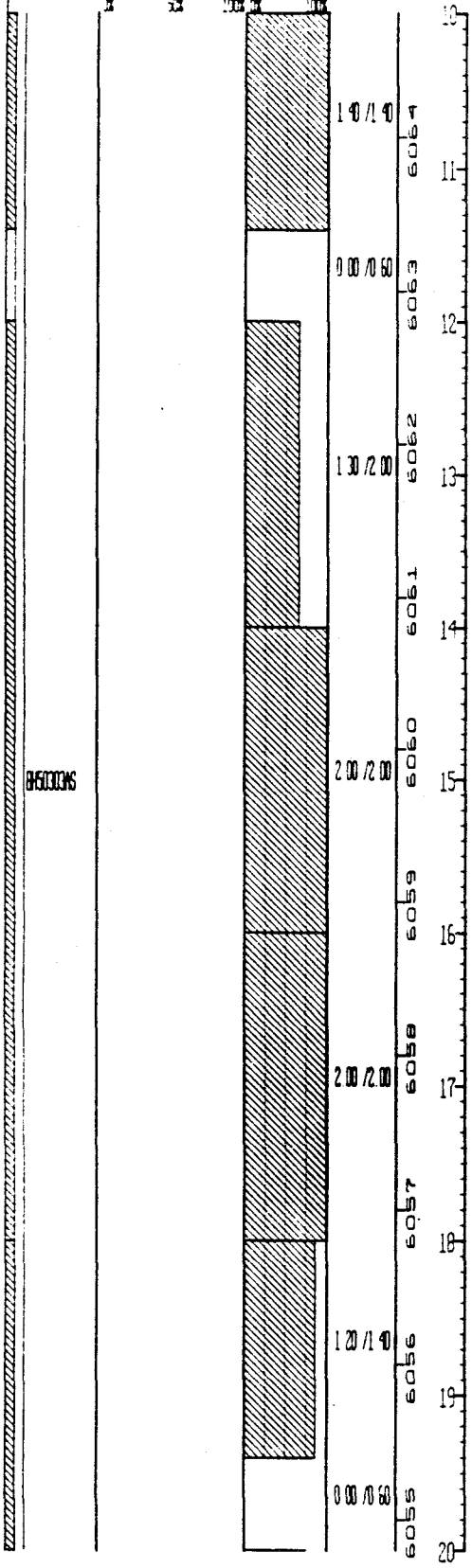
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50176AS			1.40/2.00	6074	0			SC	0.0'-1.4' Sand and Gravel with some Cobbles and Clay Dark yellowish brown (10 YR 4/2) Trace roots Angular to sub-angular, well graded Slightly moist, med plasticity (gc-sc) Note All of the sample was collected for analysis except for the cobbles that would not fit in bottles This description taken from field log No recovery (1.4'-2.0')
BH50177AS			2.00/2.00	6073	2			SC	2.0'-4.0' Gravelly Sand with some Clay and Silt, trace Cobble Light brown (5 YR 5/6) Angular, well graded Sand consists of 10.5% c.g., 14.5% m.g., and 20% f.g. Med plasticity, slightly moist Gravel is fine to coarse, well graded, sub-angular and pred quartzite Mod weathered Trace cobbles 36% gravel, 45% sand, 11% clay, 8% silt
			2.00/2.00	6072	3				
			1.70/2.00	6071	4			SC	4.0'-7.0' Gravelly Sand with Clay and Silt, trace Cobbles Same as above (reference interval 2.0 to 4.0), with light olive gray (5 YR 6/1) mottling
				6070	5				
				6069	6				
				6068	7			SC	7.0'-7.7' Gravelly Sand with some Clay and Silt, trace Cobbles Same as above (reference interval 2.0 to 4.0 ft), with light olive gray (5 Y 6/1) mottling No recovery (7.7'-8.0')
				6067	8				
BH50178AS			2.00/2.00	6066	9			SC	8.0'-10.0' Gravelly Sand with some Clay and Silt, trace Cobbles Same as above (reference interval 2.0 to 4.0 ft) mottled with light olive gray (5 YR 6/1)
				6065	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6074.80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005, N OF IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56193
EAST 2078734	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2 FT NOT SHOWN

DRAFT



CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.40/1.40	6064	10–11			SC	10.0'-11.4' Gravelly Sand with some Clay, trace Cobbles and Silt. Light brown (5 YR 5/6). Sub-angular to rounded f.g. to c.g. sand and gravel. Well graded, med. plasticity, slightly moist, mod. to highly weathered. 3% cobbles, 30% gravel, 55% sand, 8.5% clay, 3.5% silt. No recovery (11.4'-12.0')
				0.00/0.60	6063	11–12				
				1.30/2.00	6062	12–13			SC	12.0'-13.3' Gravelly Sand with some Clay, trace Cobbles and Silt. Same as above (reference interval 10.0 to 11.4 ft). No recovery (13.3'-14.0')
					6061	13–14				
	BH50303AS			2.00/2.00	6060	14–15			SC	14.0'-16.0' Clayey Sand with some Gravel and Silt. Mottled pale olive (10 YR 6/2) and mod. yellowish brown (10 YR 5/4). Sand and gravel pred. fine to medium grained, well graded quartz. Trace feldspar and mica. Low plasticity, highly weathered. 17% gravel, 53% sand, 6% silt, 24% clay
					6059	15–16				
				2.00/2.00	6058	16–17			SM	16.0'-19.2' Gravelly Sand with some Silt and Clay. Pred. light brown (5 YR 5/6), some pale olive (10 YR 6/2). Gravel is angular to sub-rounded, fine to coarse quartz clasts, feldspar and mafic. Sand is sub-angular to sub-rounded quartz, some mica, trace mafic minerals, pred. f.g. Low plasicity, dry, highly weathered. 35% gravel, 46% sand, 10% silt, 9% clay. No recovery (19.2'-19.4'). No recovery (19.4'-20.0'). Drilled through rock
					6057	17–18				
				1.20/1.40	6056	18–19				
				0.00/0.60	6055	19–20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34 00	GROUND ELEVATION (FT) 6074 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747789	AREA OUS N OF IHSS 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	56193
EAST 2079734	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2 FT NOT SHOWN

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50304AS			1 50 /2 00	6054	20			SM	20 0'-21 5' Gravelly Sand with some Silt and Clay Pred light brown (5 YR 5/6), some pale olive (10 YR 6/2) Gravel is angular to sub-rounded, fine to coarse, well graded, quartz, feldspar, and mafic Sand is pred f g, sub-angular to sub-rounded quartz with some m g to c g sand, some mica, trace mafic minerals Low plasticity, dry Mod to highly weathered 35% gravel, 46% sand, 10% silt, 9% clay
				0 00 /1 00	6053	21				No recovery (21 5'-22 0'), and (22 0'-23 0')
				2 00 /2 00	6052	22				
				1 40 /1 40	6051	23			SM	23 00'-26 40' Gravelly Sand with some Silt and Clay Same as above (reference interval 20 0 to 21 5 ft)
	BH50305AS			0 00 /1 60	6050	24				
				2 00 /2 00	6049	25				
					6048	26			NO RECOVERY	26 40'-28 00' Top of Bedrock 28 0 ft No recovery Drilled through rock
					6047	27				
					6046	28			CLAYSTONE	28 0'-31 8' Claystone with some Silt Light olive gray (5 Y 5/2) Abundt iron staining Some carbonaceous material dry, non to slightly friable, mod weathered 15% silt, 85% clay
					6045	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34.00	GROUND ELEVATION (FT) 6074.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747789	AREA 005 N OF IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56193
EAST 2079734	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2 FT NOT SHOWN

DRAFT

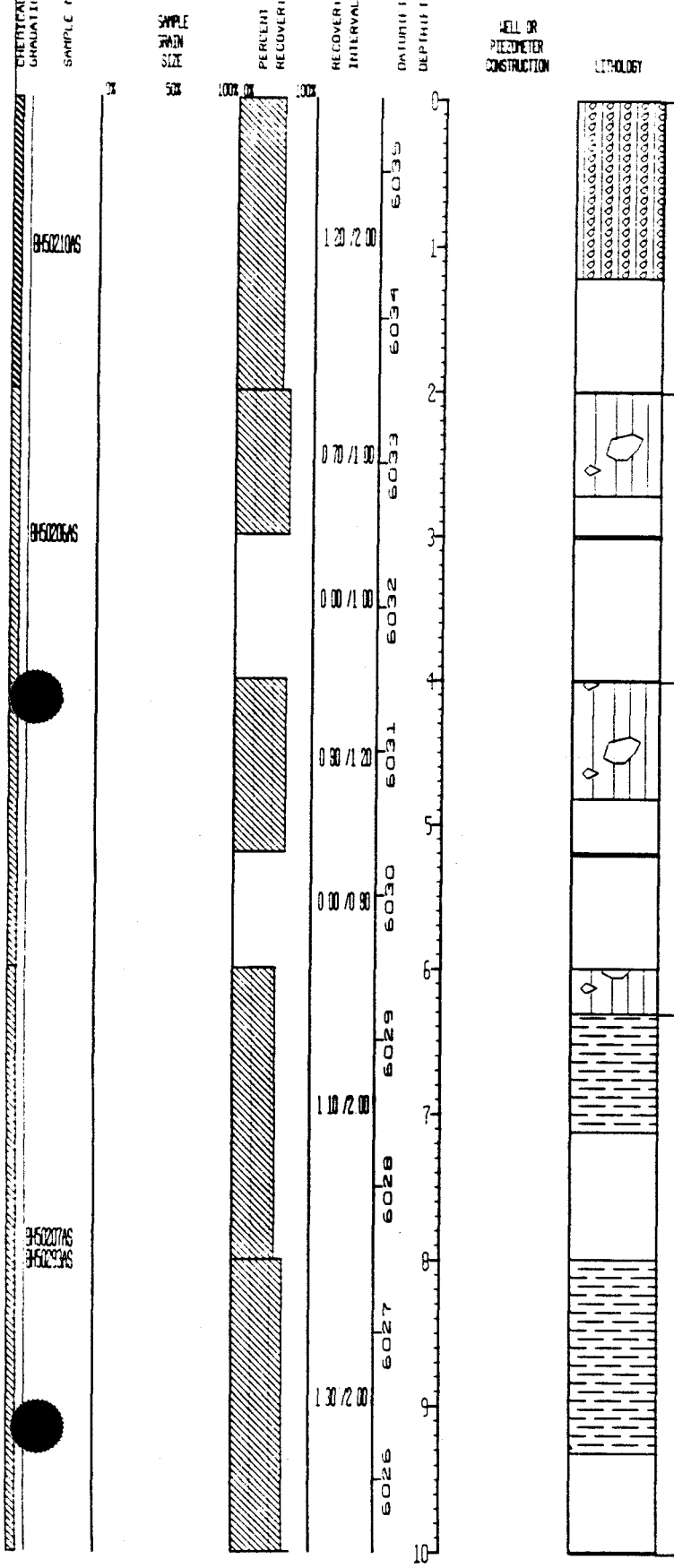
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
2.00 /1.80	6044	30		
	6043	31		
2.00 /2.20	6042	32	CLAYSTONE	31.8'-34.0' Claystone with some Silt Light olive gray (5 Y 5/2) Some iron staining Trace carbonaceous material, dry 10% silt, 90% clay
	6041	33		
	6040	34		Total Depth Drilled 34.00
	6039	35		
	6038	36		
	6037	37		
	6036	38		
	6035	39		
		40		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	6035.50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747498	AREA OU5 IHSS 133.1	CASING DIAMETER (IN)		GEOLOGIST	DCB	56293
EAST	2079916	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	04/07/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0.0'-1.2' Silty Sand with trace Gravel and Clay. Grayish brown (5 YR 3/2) to light brown (5 YR 5/6). Fine to coarse, sub-angular gravel, max size 1 in. Pred f.g. and m.g., sub-angular quartzose sand. Some mafic sand, some roots. No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. 5% gravel, 70% sand, 20% silt, 5% clay. No recovery (1.2-2.0')
GM	2.0'-2.7' Sluff at top 0.2 to 0.3 ft of interval. Not enough sample to positively identify but gravel seems to indicate part of interval from 4.6 to 6.3 ft (gm-sm). No recovery (2.7-3.0'), and (3.0-4.0')
GM	4.0'-6.3' Sandy Gravel with some Silt and trace Clay. Light brown (5 YR 4/4) to mod. yellowish brown (10 YR 5/4). Pred. fine, sub-rounded, quartzitic gravel. Some coarse gravel up to 2.5 in., probable broken cobbles. Trace cobbles. F.g. to m.g., sub-rounded quartzose sand with some c.g. sand. No apparent bedding of fractures. Moist, low plasticity fines, non-calcareous. 40% gravel, 36% sand, 19% silt, 5% clay. No recovery (4.8-5.2'), and (5.2-6.0')
CLAYSTONE	6.3'-9.3' Top of Bedrock at 6.3 ft. Claystone with trace v.f.g. Sand and Silt. Olive gray (5 Y 5/1). Trace carbonaceous material slightly to mod. friable. No apparent bedding or fractures. Dry to moist, non-calcareous. 1% sand, 5% silt, 94% clay. No recovery (7.1-8.0'), and (9.3-10.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	6015.50	PROJECT NUMBER	305 HFCAPC	LOG OF BORING NUMBER
NORTH	1754987	AREA 305 CASS 123.1	CASING DIAMETER (IN)		GEOLOGIST	DCB	56293
EAST	1079916	LOCATOR NUMBER GT	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	04/07/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN SAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50 / 2.00	6025	10			SANDY CLAYSTONE	10.0'-13.3' Sandy Claystone with some Silt. Olive gray (5 YR 5/1) mottled with dark yellowish orange (10 YR 6/6), sand is typically whitish. Trace carbonaceous material. V.f.g., sub-rounded to rounded quartz sand. Some Fe staining, highly to mod. friable. No apparent fractures or slickensides. Non-calcareous, dry to moist. Approx. 0.5 in. thick layer at approx. 10.8 ft. is Fe stained and contains Fe concretions. Fe nodule or concretion at approx. 12.7 ft. that is approx. 0.75 in. in diameter with some smaller ones above. Possible healed fracture at 12.9 ft. appears to be filled with gray clay at approx. 70 degrees. Some possible crude beds of thin, white, or light gray, v.f.g., rounded, quartz sand, typically less than 20 degrees but not very consistent and varies from 5 degrees to 35 degrees. 22% sand, 8% silt, 70% clay. No recovery (11.5-12.0'), and (13.3-14.0')
					6024	11				
					6023	12				
				1.30 / 2.00	6022	13				
					6021	14				Total Depth Drilled 14.00
					6020	15				
					6019	16				
					6018	17				
					6017	18				
					6016	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6000 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747508	AREA 005 - IHSS 133 1	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	56393
EAST	2080003	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED 04/06/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGISTS P JORDAN, D BAGAN CORE CONTAINS RADIOACTIVE MATERIAL AND IS STORED IN CONEX CONTAINING RADIOACTIVE MATERIALS LOG IS FROM FIELD DESCRIPTION ONLY

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50206AS	0% 50%	100% 0%			0	04/05/93 ▽		CL	0 0'-1 2' Gravelly Clay Dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2) Moist No recovery (1 2-2 0')
	BH50211AS			1 20 /2 00	6032	1				
					6031	2				
				0 60 /2 00	6030	3			SM	2 0'-4 4' Silty Sand with some Clay Varicolored, mod yellowish brown (10 YR 5/4) Fine to med sand with glass, burned material and rust (possible ash material) Wet to saturated No recovery (2 6-4 0')
					6029	4				
					6028	4			CL	4 4'-4 8' Silty Clay Yellowish gray (5 Y 7/2) Wet, low plasticity
				1 40 /2 00		5			CL	4 8'-5 2' Silty Clay with some Sand Dark yellowish brown (10 YR 4/2)
					6027	6			CL	5 2'-5 4' Silty Clay Same as above (reference interval 4 4 to 4 8 ft) No recovery (5 4-6 0')
					6026	7			CL	5 4'-6 9' Clay with abundt Sand and some Gravel Olive gray (5 Y 4/1) Plastic limit exceeded Abundt moisture from 6 0 to 6 9 ft NOTE Water sample taken with Hydropunch from 6 0 to 8 0 ft
	BH50213AS			1 30 /2 00					CLAYSTONE	6 9'-7 3' Top of Bedrock at 6 9 ft Claystone Mottled light olive gray (5 Y 6/1) and dark yellowish orange (10 YR 6/6) Argillaceous cement, mod friable No apparent bedding, abundt moisture No recovery (7 3-8 0')
					6025	8				
					6024	9			CLAYSTONE	8 0'-9 6' Claystone Same as above (reference interval 6 9-7 3 ft) Slough in upper 0 3 ft No recovery (9 6-10 0')
				1 60 /2 00	6023	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6032.78	PROJECT NUMBER 315-RFI/RI	LOG OF BORING NUMBER
NORTH 77538	AREA 005 - IHSS 133.1	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	56393
EAST 1380003	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 04/06/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGISTS P. JORDAN, D. BAUGHN CORE CONTAINS RADIOACTIVE MATERIAL AND IS STORED IN CONEX CONTAINING RADIOACTIVE MATERIALS LOG IS FROM FIELD DESCRIPTION ONLY

DRAFT

PRIMARY SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	6022	10			CLAYSTONE	10.0'-12.0' Claystone Same as above (reference interval 6.9 to 7.3 ft.) May contain some slough from above
					6021	11				
						12				Total Depth Drilled 12.00
					6020	13				
					6019	14				
					6018	15				
					6017	16				
					6016	17				
					6015	18				
					6014	19				
					6013	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 7.00	GROUND ELEVATION (FT) 6032.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747496	AREA OU5, IHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393A
EAST 2080013	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST P. J. JORDAN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NO.	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6032	0			CL	0.0'-5.0' Silty Clay (looks like bedrock) Spin augers
				6031	1				
				6030	2				
			0.00/5.00						
				6029	3				
				6028	4				
				6027	5			SILTY CLAYSTONE	5.0'-6.7' Silty Claystone Grayish orange (10 YR 6/5) moist, some very fine to fine sand No visible bedding
			1.70/2.00	6026	6				No recovery (6.7-7.0')
				6025	7				Total Depth Drilled 7.00
				6024	8				
				6023	9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.00	GROUND ELEVATION (FT) 6030.30	PROJECT NUMBER	105-RFI-RI	LOG OF BORING NUMBER
NORTH 747463	AREA 105, CHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393B
EAST 2080014	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/05/93	

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST P J JORDAN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

Recovery/Interval	Datum (ft)	Depth (ft)	Unified Soils Classification or Rock Type	Description
0.00/3.00	6030	0	CL	0.0'-3.0' Cuttings are Silty Clay, looks like bedrock, but augers are chattering like gravel and cobbles
1.80/2.00	6028	3	SILTY CLAYSTONE	3.0'-4.8' Silty Claystone, varicolored grayish orange (10 YR 6/5), moist, some fine sand No visible bedding No recovery (4.8-5.0')
	6026	5		Total Depth Drilled 5.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.00	GROUND ELEVATION (FT) 6032.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7507	AREA OU5, IHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	56393C
EAST 2080007	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST P J JORDAN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0.00/3.00	6032, 6031, 6030	0–3	04/05/93		CL	0.0'-3.0' Cuttings are Silty Clay. Looks like weathered bedrock but augers are scratching or chattering like cobbles
			0.70/2.00	6029, 6028	3–5			SC	3.0'-3.7' Sand with burnt wood fragments. Fine to med sand, some silt, wet to saturated No recovery (3.7-5.0')
				6027, 6026, 6025, 6024, 6023	5–10				Total Depth Drilled 5.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 6032 50	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 74516	AREA OU5 TASS 133 1	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	56493
EAST 2380111	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED 04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GH50220AS			0 50 /2 00	6032	0			CL	0 0'-0 5' All recovery used for sample From field log Clay Mod yellowish brown (10 YR 5/4) Trace silt and gravel Mod plasticity, trace moisture Gravel rounded (one piece) approx 1 0 ft No recovery (0 5-2 0')
				1 90 /2 00	6031	1			CL	2 0'-3 9' Clay with trace Silt and trace Sand Pale yellowish to dark yellowish brown (10 YR 6/2 to 10 YR 4/2) Trace f g sand, angular, poorly graded, feldspar Bedding not evident Damp to moist Med plasticity Trace CaCO3 as caliche (slightly calcareous) Trace roots 5% sand, 5% silt, 90% clay No recovery (3 9-4 6') Stuff from above
	GH50219AS			1 70 /2 00	6030	2			CLAYSTONE	4 6'-10 0' Top of Bedrock at 4 6' Claystone with trace Silt and trace Sand Pale yellowish brown (10 YR 6/2) to light olive gray (5 Y 6/1) Sand f g Interval weathered with dark yellowish orange (10 YR 6/6) mottles Mod friable, mod porosity Bedding not evident Trace calcareous material Damp Argillaceous cement Some olive gray (5 Y 4/1) coloring included with other previously mention colors toward 8 0 ft Not as friable toward bottom of interval Some Fe staining in healed irregular fractures Trace Mn mineralization 3% sand, 2% silt, 95% clay No recovery (5 7-6 0')
				1 50 /2 00	6029	3				
				1 80 /2 00	6028	4				
					6027	5				
					6026	6				
					6025	7				
					6024	8				
					6023	9				
						10				Total Depth Drilled 10 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT)	6030 40	PROJECT NUMBER	115-RFI/RI	LOG OF BORING NUMBER
NORTH	747437	AREA OU5 IHSS 133 3	CASING DIAMETER (IN)		GEOLOGIST	L A HOST	56593
EAST	2079916	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST LAURIE HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50221AS			1 00 /2 00	6030	0			CL	0 0'-2 6' Sandy Clay with some Silt trace Gravel and Cobbles Dusky yellowish brown (10 YR 2/2) Some roots Fine to coarse, sub-rounded gravel with max size greater than 2", possibly broken cobbles Abundt f g, sub-rounded quartzose sand, some m g and c g sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 5% gravel, 34% sand, 15% silt, 46% clay No recovery (1 0-2 0')
	BH50222AS			1 60 /2 00	6029	1			SC	2 6'-4 5' Clayey Sand with some Gravel, Cobbles and Silt Mod brown (5 YR 4/6) Some sub-rounded, fine to coarse gravel with max size greater than 2 in, possibly cobbles F g to m g sub-rounded, quartzose sand with trace mafic mineral grains, trace c g sand No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous 20% gravel, 35% sand, 7% silt, 38% clay No recovery (3 6-4 0')
				1 60 /1 80	6028	2			CL	4 5'-7 7' Sandy Clay with some Silt Light brown (5 YR 5/6), brown (5 YR 4/4) with white caliche patches F g to c g sand, pred f g, sub-rounded quartz sand No apparent bedding or fractures Caliche throughout interval Moist, highly calcareous (caliche) 36% sand, 6% silt, 58% clay No recovery (5 6-5 8'), (5 8-6 0'), and (7 7-8 0')
				0 00 /0 20	6027	3				
				1 70 /1 80	6026	4				
				0 00 /0 20	6025	5				
				1 20 /1 30	6024	6				
				0 60 /1 30	6023	7				
					6022	8			GC	8 0'-10 6' Sandy Gravel with some Clay and Silt Mod brown (5 YR 4/4) Some possible broken cobbles, fine to coarse, sub-angular gravel, max size greater than 2 in Sub-rounded quartzose sand is f g to c g but pred f g No apparent bedding or fractures Moist, low plasticity fines, some caliche, highly calcareous 40% gravel, 33% sand, 11% silt, 16% clay No recovery (9 2-10 0')
					6021	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT) 6030 40	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	647437	AREA 005 EHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST L A HOST	56593
EAST	2079916	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST LAURIE HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6020	10				
						11			NO RECOVERY	No recovery (10 6-12 0') and (12 0-13 0')
				0 00 /1 40	6019					
						12				
				0 00 /1 00	6018					
						13			SC	13 0'-13 6' Clayey Sand with some Silt and trace Gravel Light brown (5 YR 5/4) Fine, sub-angular gravel F g to c g graded, sub-rounded, quartzose sand No apparent bedding or fractures Moist, non-calcareous 2% gravel, 71% sand, 8% silt, 19% clay
				1 40 /2 00	6017	14			CLAYSTONE	13 6'-14 4' Top of Bedrock at 13 6 ft Claystone with trace Silt Pred light olive gray (5 YR 6/1) Some Fe staining and carbonaceous material No apparent bedding, fractures or slickensides, trace caliche Only trace carbonaceous material below 14 2 ft 5% silt, 95% clay
	BH50224AS				6016					No recovery (14 4-15 0')
					6015	15			CLAYSTONE	15 0'-16 3' Claystone with trace Silt Same as above, reference interval 13 6 to 14 4 ft except 1 in piece of caliche at 16 0 ft 16 2 to 16 3 ft contains abunct black carbonaceous material
				1 30 /2 00	6014	16				No recovery (16 3-17 0')
					6013	17			CLAYSTONE	17 0'-19 0' Claystone with trace Silt Same as above, reference interval 13 6 and 14 4 ft and 15 0 to 16 3 ft except some sub-vertical and Fe stained (80%) fractures from approx 17 4 to 18 6 ft and trace black carbonaceous material below 18 6ft
				2 00 /2 00	6012	18				
					6011	19				Total Depth Drilled 19 00
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 9 00	GROUND ELEVATION (FT) 6027 00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747445	AREA 005 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST L A HOST	56693	
EAST 2080010	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/08/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI-RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6027	0			CL	0 0'-2 5' Silty Clay with some Sand Dusky brown (5 YR 2/2) top (topsoil) to pale yellowish brown (10 YR 6/2) Sand f g , poorly graded, sub-rounded, pred quartz Bedding not evident Very moist Mod plasticity Trace to some roots, trace calcareous material Trace gravel - 1 piece, 1 0 in , sub-rounded 9% sand, 18% silt, 73% clay No recovery (1 0-2 0')
3H50226AS			1 00 /2 00	6026	1				
				6025	2				
3H50227AS			2 00 /2 00	6024	3			CLAYSTONE	2 5'-4 0' Top of Bedrock at 2 5 ft Claystone with trace Silt Light olive gray (5 Y 6/1 to 5 Y 4/1) Low porosity Mod friable, weathered Bedding not evident (massive) Damp Iron stains present in micro fractures (irregular) at bottom of interval, trace CaCO3 (calcareous) stringers Trace roots Less CaCO3 at 6 0 ft 5% silt, 95% clay
				6023	4			CLAYSTONE	4 0'-6 0' Claystone with trace Silt Same as above (reference interval 2 5 to 4 0 ft) Slightly damp 5% silt, 95% clay
			2 00 /2 00	6022	5				
				6021	6			CLAYSTONE	6 0'-6 9' Claystone with trace Silt Same as above (reference interval 2 5-4 0 ft) Less CaCO3 5% silt, 95% clay No recovery (6 9-8 0')
			0 90 /2 00	6020	7				
				6019	8			CLAYSTONE	8 0'-8 6' Claystone with trace Silt Same as above (reference interval 2 5-4 0 ft) Fe staining in healed fracture (irregular), dark yellowish orange (10 YR 6/6) 5% silt, 95% clay No recovery (8 6-9 0')
			0 60 /1 00	6018	9				
					10				Total Depth Drilled 9 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4 00	GROUND ELEVATION (FT) 6026 10	PROJECT NUMBER 105-PED-R1	LOG OF BORING NUMBER
NORTH 747437	AREA 905 TASS 133 3	CASING DIAMETER (IN)	GEOLOGIST L A HOST	56693A
EAST 2080012	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L A HOST ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6026	0			NO RECOVERY	No recovery (0 0-2 0') Drilled out
				0 00 /2 00	6025	1				
					6024	2			CLAYSTONE	2 0'-4 0' Claystone Bedrock near surface Light olive gray with iron staining Damp Grass and root material from above at very top
				2 00 /2 00	6023	3				
					6022	4				Total Depth Drilled 4 00
					6021	5				
					6020	6				
					6019	7				
					6018	8				
					6017	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4 00	GROUND ELEVATION (FT)	6025 10	PROJECT NUMBER	305-RFI/RI
NORTH 147427	AREA 305 IHSS 133 3	CASING DIAMETER (IN)		GEOLOGIST	L A HOST
EAST 2080013	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/08/93

LOG OF BORING NUMBER **56693B**

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L A HOST ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6025	0			NO RECOVERY	No recovery (0 0-2 0') Drilled out
				0 00 /2 00	6024	1				
					6023	2			CLAYSTONE	2 0'-4 0' Claystone Light olive gray Damp Some root material at top (from above)
				2 00 /2 00	6022	3				
					6021	4				Total Depth Drilled 4 00
					6020	5				
					6019	6				
					6018	7				
					6017	8				
					6016	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT) 6026.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747455	AREA OU5, IHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	56693C
EAST 2080013	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST L. A. HOST ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

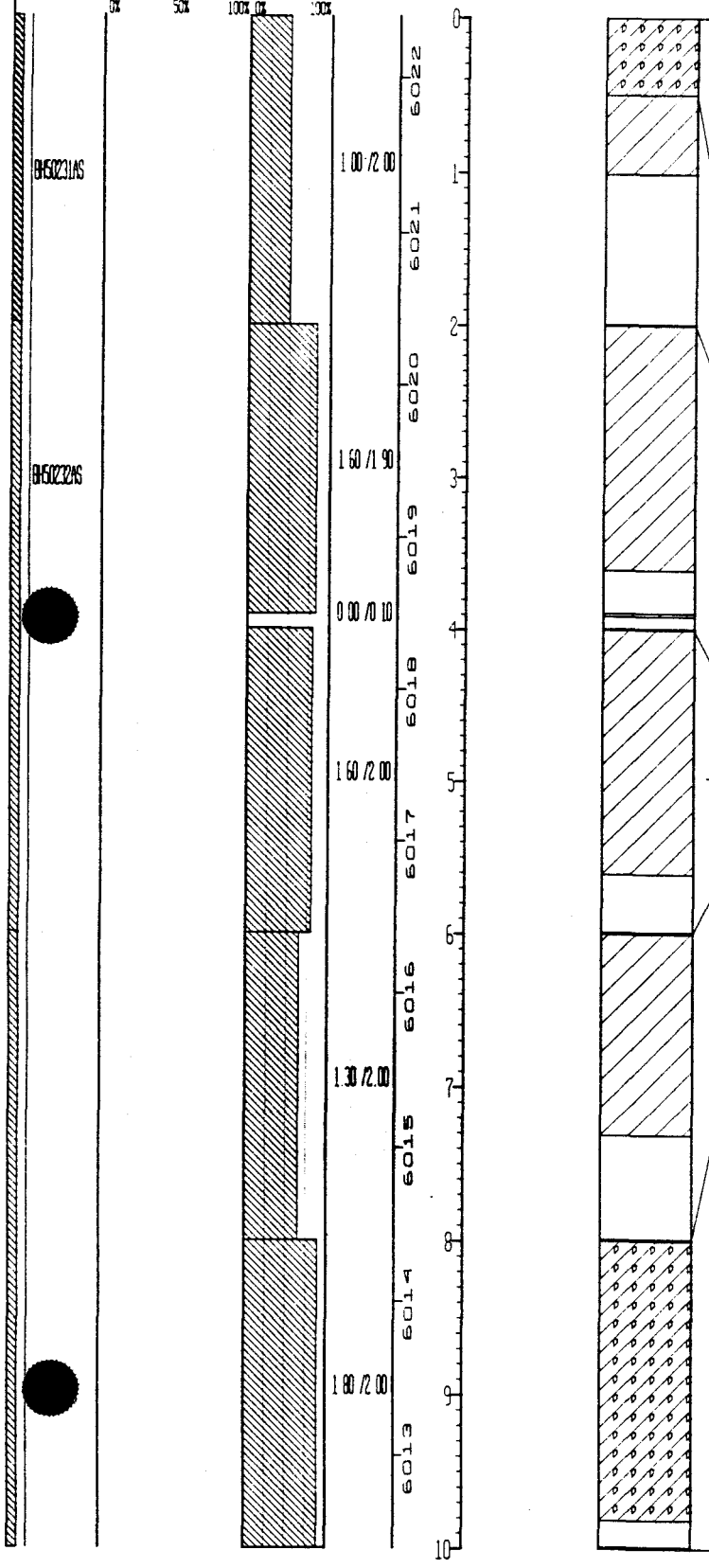
RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0	NO RECOVERY	No recovery (0.0-2.0') Drilled out
0.00/2.00	6026	1		
	6025	2	CLAYSTONE	2.0'-3.5' Claystone Light olive gray with some iron staining Damp Grass and roots in very top of interval
1.50/2.00	6024	3		No recovery (3.5-4.0')
	6023	4		Total Depth Drilled 4.00
	6022	5		
	6021	6		
	6020	7		
	6019	8		
	6018	9		
	6017	10		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT)	6022 40	PROJECT NUMBER	015-RFI/RI	LOG OF BORING NUMBER
NORTH	747441	AREA 0U5 IHSS 133 3	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	56793
EAST	2080113	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	6 00	DATE DRILLED	04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D C BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-0 5' Clayey Sand with some Silt and trace Gravel Dark yellowish brown (10 YR 2/2) Sub-rounded, fine gravel up to 0 75 in F g and m g, sub-rounded, pred quartzose sand with mafic rock fragments, some c g sand, abundt No apparent bedding or fractures moist, non-calcareous 5% gravel, 48% sand, 7% silt, 40% clay
CL	0 5'-1 0' Silty Clay with some Sand Dark yellowish brown (10 YR 4/2) F g, sub-rounded, quartz sand, some roots No apparent bedding or fractures, moist, non-calcareous 7% sand, 14% silt, 79% clay No recovery (1 0-2 0')
CL	2 0'-3 6' Sandy Clay with some Silt Yellowish brown (10 YR 5/2) Approx 0 1 ft of sluff in core box F g, sub-rounded, quartzose sand, with trace mica and mafic minerals Trace m g and c g sand, some roots Trace rounded ironstone granules up to approx 1 mm Occasional sub-rounded gravel No apparent bedding or fractures, moist low plasticity, mod calcareous, slightly carbonaceous 21% sand, 12% silt, 67% clay No recovery (3 6-3 9'), and (3 9-4 0')
CL	4 0'-5 6' Sandy Clay with some Silt Same as above, reference interval 2 0 to 3 6 ft Approx 0 1 ft of sluff in core box No roots, slightly to mod calcareous Some gravel up to 1 in near 5 2 ft 38% sand, 6% silt, 56% clay No recovery (5 6-6 0')
CL	6 0'-7 3' Sandy Clay with some Silt and trace Gravel Dark yellowish brown (10 YR 4/2) Sub-rounded gravel up to 1 in F g to c g, pred f g, sub-rounded, quartzose sand Trace carbonaceous material No apparent bedding or fractures, trace Fe stained, moist, low to mod plasticity, non-calcareous 3% gravel, 18% sand, 8% silt, 71% clay No recovery (7 3-8 0')
SC	8 0'-9 8' Clayey Sand with some Silt, trace Gravel Pale yellowish brown (10 YR 6/2), mottled with mod yellowish brown (10 YR 5/4) Sub-rounded gravel up to approx 1 in F g to c g well graded, sub-angular to sub-rounded sand Sub-angular sand appears to be silt and clay cemented with CaCO3 Sub-rounded sand is quartzose No apparent bedding or fractures, occasional gray and black lined rootlet like features Moist, low to mod plasticity fines At 9 8 ft core contains more sand and granitic (feldspathic), sub-angular gravel up to approx 0 5 in Mod calcareous 5% gravel, 47% sand, 10% silt, 38% clay No recovery (9 8-10 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT) 6022 40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747441	AREA 005 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	56793	
EAST 2080113	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED 04/12/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST D C BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	B5G0234WS			2 10 /2 00	6012	10			SC	10 0'-10 9' Clayey Sand with some Silt, trace Gravel Same as above reference interval 8 0 to 9 8 ft Note Due to discrepancy on field log, this logger logged the core as if interval from 10 0 to 12 0 ft was sampled with most of the core lost and then resampled with the core retained
				2 00 /2 00	6011	11			CLAYSTONE	10 9'-12 8' Top of Bedrock at 10 9 ft Claystone with trace Silt Light olive gray (5 YR 5/2) Some caliche, some on possible fractures, some Fe staining, trace carbonaceous material No apparent bedding highly calcareous From approx 11 7 to 12 3 ft color changes to pred light olive brown (5 Y 5/6) Dry to moist <5% silt, >95% clay
				1 90 /2 00	6010	12			CLAYSTONE	12 8'-16 9' Claystone with some Clay Brownish gray (5 YR 4/1) ft, then olive gray (5 Y 4/2) Some Fe staining, trace some carbonaceous material, some Fe stained microfractures These fractures increase in number below approx 14 5 ft Dry to moist Approx 0 5 in ironstone nodule at approx 16 5 ft At approx 16 9 ft, ironstone lense approx 0 25 in thick 5% silt, 95% clay
				0 90 /2 00	6009	13				No recovery (16 9-18 0')
					6008	14				
					6007	15				
					6006	16				
					6005	17				
					6004	18				Total Depth Drilled 18 00
					6003	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24 30	GROUND ELEVATION (FT) 6027 40	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 747657	AREA 305 (HSS 133 2)	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	56893
EAST 2080475	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/31/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LE SS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GH50236AS			1 80 /2 00	6027 / 6026	0 – 2			SC	0 0'-1 8' Clayey Sand with some Silt, trace Gravel Mod brown (5 YR 4/6) F g to c g, well graded, sub-rounded, pred quartzose sand Gravel up to 2 in, trace roots No apparent fractures or bedding Moist, mod plasticity, non-calcaceous 3% gravel, 49% sand, 7% silt, 41% clay No recovery (1 8-2 0')
	GH50237AS			1 30 /2 00	6025 / 6024	2 – 4			SC	2 0'-3 3' Clayey Sand with some Silt, trace Gravel Same as reference interval 0 0 to 1 8 ft Rig geologist noted ash and charcoal May have been removed in samples No recovery (3 3-4 0')
				0 30 /1 70	6023 / 6022	4 – 6			GC	4 0'-5 7' Sampler fell through void, 0 3 ft recovered Sandy Gravel with some Clay and Silt Mod yellowish brown (10 YR 5/2) Well graded sub-rounded gravel, up to 2 in F g to c g, well graded sub-rounded sand, some silt No apparent bedding or fractures Moist, non-calcareous, low plasticity 50% gravel, 27% sand, 10% silt, 13% clay
	GH50238AS			0 60 /2 00	6021 / 6020	6 – 8			ASH	5 7'-8 8' Ash material Core removed to separate core box due to radioactivity Logged by field geologist as black ash and coal Some light brown sand and/or clay Appears to be metal and glass pieces. No recovery (6 5-7 7'), and (7 7-8 3')
				0 00 /0 60	6019	8 – 9			GC	8 8'-10 6' Sandy Gravel with some Clay and Silt Mod yellowish brown (10 YR 5/2) Fine to coarse, well graded, sub-rounded gravel up to 1 5 in Well graded, sub-rounded, pred quartzose sand, some silt No apparent bedding or fractures Moist, mod plasticity, non-calcareous (Bottom of Trench at approx 8 8') 50% gravel, 28% sand, 9% silt, 13% clay No recovery (10 0-10 3')
				1 70 /2 00	6018	9 – 10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24 30	GROUND ELEVATION (FT) 6027 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747657	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56893
EAST 2080475	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/31/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

Depth scale: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Sample number: BH5023AS

Recovery/interval: 2 00 /2 00; 2 00 /2 00; 1 60 /2 10; 1 40 /1 40; 0 00 /0 40; 1 60 /2 10

Datum (FT): 6017, 6016, 6015, 6014, 6013, 6012, 6011, 6010, 6009, 6008

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	10 6'-12 3' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (10 YR 5/2) Well graded, sub-rounded, pred quartzose sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 56% sand, 11% silt, 33% clay
SC	12 3'-13 2' Gravelly Sand with some Clay, and trace Silt Light brown (5 YR 5/2) F g to c g, well graded, subrounded quartzose sand Sub-angular gravel up to 0 75 in, trace silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 30% gravel, 55% sand, 3% silt, 12% clay
CL	13 2'-14 5' Sandy Clay with some Silt Mod yellowish brown (10 YR 5/4) Pred f g, sub-rounded, pred quartzose sand Some m g to c g sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 42% sand, 8% silt, 50% clay
GC	14 5'-17 8' Sandy Gravel with some Clay and trace Silt Mod brown (10 YR 4/2) Well graded, sub-angular gravel up to 2 in Well graded sub-rounded, pred quartzose sand, trace silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous (gc-gw) 60% gravel, 30% sand, 2% silt, 8% clay No recovery (15 9-16 4'), and (17 8-18 2')
CLAYSTONE	18 2'-19 8' Top of Bedrock at 18 2 ft Claystone with some Silt Pred light olive gray (5 YR 4/2), some mottled dark yellowish orange (10 YR 6/6) Slightly to mod friable No apparent bedding or fractures Moist, some Fe staining and trace carbonaceous material, weathered 8% silt, 92% clay
NO RECOVERY	No recovery (19 8-20 3')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24 30	GROUND ELEVATION (FT) 6027 40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 247657	AREA 005 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	56893
EAST 3080475	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/31/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LE SS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6027	20			CLAYSTONE	20 3'-24 3' Claystone Same as above, reference interval 18 2 to 19 8 ft with some Fe stained fractures with random orientation and some apparent fractures with MnO2 staining
				1 50 /2 00	6026	21				No recovery (21 8-22 3')
					6025	22				
				2 00 /2 00	6024	23				
					6023	24				Total Depth Drilled 24 30
					6022	25				
					6021	26				
					6020	27				
					5999	28				
					5998	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32.30	GROUND ELEVATION (FT) 6025.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]7660	AREA 005 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56993
EAST [illegible]80547	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/22/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

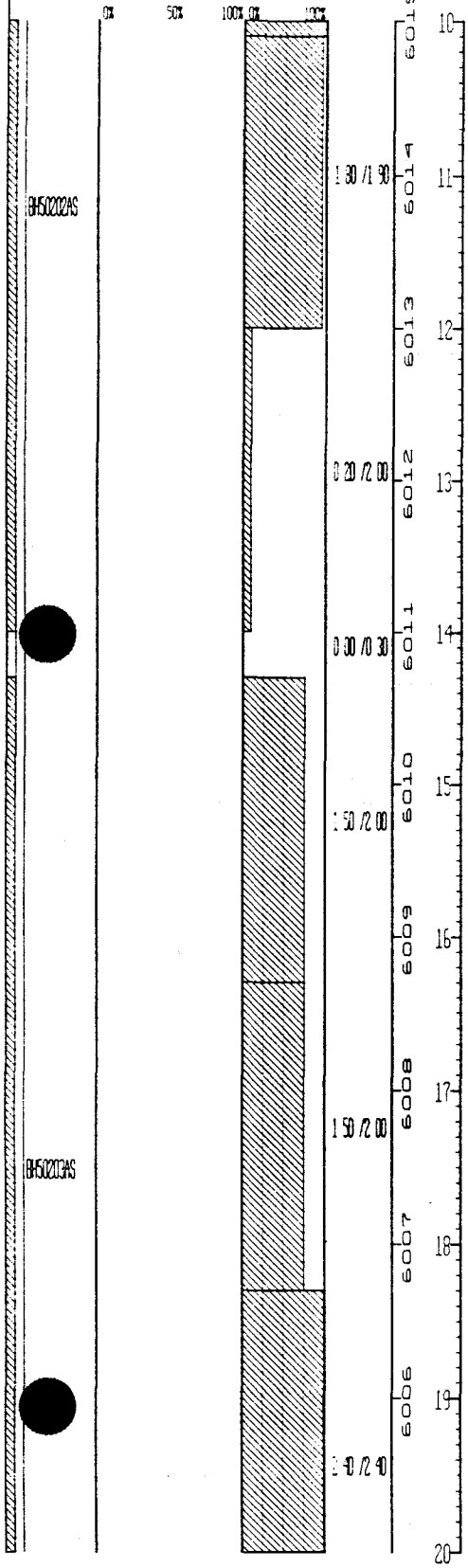
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	HP50133AS				6025	0			GM	0.0'-1.8' Gravelly Silt with abundant Sand and some Clay Mod brown (5 YR 4/4) and grayish brown (5 YR 3/2) Gravel poorly graded, to 2.0 in., sub-rounded to angular Sand well graded, f g to c g, angular to sub-angular Low plasticity, no apparent bedding, non-calcareous Minimal root material 30% gravel, 27% sand, 33% silt, 11% clay No recovery (1.8-2.0')
	BH50198AS			1.80 /2.00	6024	1				
	BH50199AS				6023	2			ML	2.0'-3.1' Gravelly Silt with some Sand and Clay Matrix dark yellowish brown (10 YR 4/2) Gravel mod graded, granules 2-1/4 in., angular to sub-rounded Sand poorly graded, mostly v f g, some c g, angular to sub-rounded, mostly quartz, some mica, trace feldspar Interval non-calcareous dry, bedding not evident 25% gravel, 19% sand, 42% silt, 14% clay No recovery (3.1-4.0') and (4.0-4.9')
				1.10 /2.00	6022	3				
				0.00 /0.90	6021	4				
					6020	5				4.9'-8.1' Styrofoam and Sandy Clay Dark yellowish brown (10 YR 4/2) White fiber material Note Only 0.2 ft was recovered, all was used in sample Driller hit a void and spoon fell to 8.1 ft Above description was taken from field log
				0.20 /3.20	6019	6				
					6018	7				
					6017	8				8.1'-8.4' Charcoal, fibrous material, styrofoam and gray in a clayey material Recovery taken for sample, this description from field log
	BH50200AS			2.00 /2.00	6016	9			GM	8.4'-10.1' Silty Gravel with some Sand and Clay Matrix mod light brown (5 YR 4/4 to 5 YR 5/6) Gravel mod to well graded, fine to coarse gravel to 2.5 in., sub-rounded to angular, mostly angular, (broken from drilling) Sand well graded, f g to c g, pred angular, pred quartz, some to trace feldspar Bedding not visible slightly moist, low plasticity, non-calcareous Ash material present at approx mid interval Traces of styrofoam at top 50% gravel, 19% sand, 23% silt, 8% clay
						10				

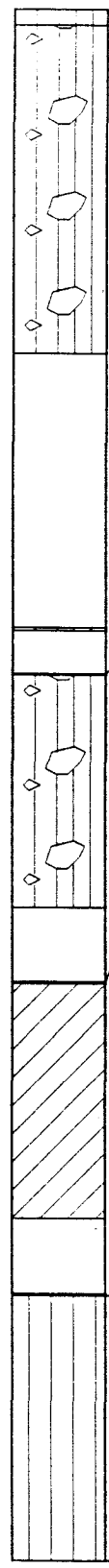
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 30	GROUND ELEVATION (FT)	6025 00	PROJECT NUMBER	0L5-RFI/RI	LOG OF BORING NUMBER
NORTH	747660	AREA 0U5 IHSS 133 2	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	56993
EAST	2080547	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/22/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE / PERCENT RECOVERY / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION





UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GM	10 1'-12 2' Sandy Gravel with some Silt and Clay Matrix mod brown (5 YR 5/2) with some zones of light brown (5 YR 5/6) yellowish orange (10 YR 6/6) and grayish orange (10 YR 7/4) Gravel mod to well graded, sub-rounded to angular, granules to 2 0 in Sand mod graded, c g to f g, pred f g, angular to sub-rounded, mostly sub-angular, pred quartz, trace to some mica, trace feldspar Interval moist, low plasticity, non-calcareous, no apparent bedding Ash zone from approx 10 75 to 10 9 ft 45% gravel, 25% sand, 22% silt, 8% clay No recovery (12 2-14 0'), and (14 0-14 3')
GM	14 3'-15 8' Silty Gravel with some Sand and Clay Matrix pred brown (5 YR 4/4) Gravel well graded, fine to coarse gravel to 2 0 in, sub-angular to sub-rounded Sand mod to well graded, f g to c g, pred angular, pred quartz No apparent bedding, low plasticity, very moist at time of drilling Non-calcareous 40% gravel, 22% sand, 23% silt, 15% clay No recovery (15 8-16 3')
CL	16 3'-17 8' Gravelly to Silty Clay with some Sand Matrix mod light brown (5 YR 4/4 to 5 YR 5/6) Patchy areas of dark yellowish orange (10 YR 6/6) Gravel poorly to mod graded, fine gravel to approx 1 0 in, one cobble at bottom approx 3 0 in, rounded to sub-rounded Sand mod graded, f g to c g (pred f g) Angular to sub-rounded, pred quartz, trace mica and feldspar Fines mod to low plasticity Bedding not visible, very moist, non-calcareous 25% gravel, 23% sand, 25% silt, 27% clay No recovery (17 8-18 3')
ML	18 3'-20 0' Sandy Silt with abundt Clay and trace Gravel Mod yellowish brown (10 YR 5/4) and greenish to light olive gray (5 GY 6/1) and (5 Y 6/1) with traces of light red (5 R 6/6) Gravel poorly graded, mostly fine, angular to sub-rounded Sand mod graded, f g to c g, pred f g, pred quartz Matrix moist, low plasticity, bedding not evident Interval non-calcareous 5% gravel, 31% sand, 35% silt, 29% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT)	6005 00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747560	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	56993
EAST	2080547	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	05/22/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

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CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER: BH50204AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 1 40 /2 00; 2 00 /2 00; 2 00 /2 00; 0 70 /1 60; 0 80 /2 00

DATUM (FT): 6005, 6004, 6003, 6002, 6001, 6000, 5999, 5998, 5997, 5996

DEPTH (FT): 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GC	20 0'-20 7' Sandy Gravel with some Clay and Silt Light olive gray (5 Y 6/1) and mod yellowish brown (10 YR 5/4) Gravel well graded, fine to coarse, angular to sub-rounded Sand f g to c g, well graded, mostly quartz Low plasticity, moist, non-calcareous Bedding not evident 70% gravel, 11% sand, 9% silt, 10% clay
ML	20 7'-22 1' Sandy Silt with some Clay and trace Gravel Light greenish gray (5 GY 6/1) to pale yellowish brown (10 Y R 6/2) Gravel poorly graded, sub-rounded, 2 0 to 2 5 in Sand mod graded, c g to f g, pred f g, pred quartz Bedding not evident Moist, low plasticity, non-calcareous 5% gravel, 30% sand, 52% silt, 13% clay No recovery (22 1-22 7')
ML	22 7'-24 7' Silty Sand with some Clay and trace Gravel Pale yellowish brown (10 YR 6/2) changing to light brown (5 YR 5/6) yellowish orange (10 YR 6/6) at approx 24 3 ft Sand mod well graded, c g to f g, pred m g to c g, pred quartz Gravel fine, sub-angular Faint evidence of horiz to near horiz bedding Moist Low plasticity, non-calcareous 3% gravel, 44% sand, 32% silt, 21% clay
ML	24 7'-26 3' Silty Sand with some Clay and trace Gravel Light brown to mod yellowish brown (5 YR 5/6 to 10 YR 5/4) Sand mod well graded, c g to f g, mostly m g to f g Sand is sub-angular to sub-rounded, mostly quartz Gravel poorly graded, approx 1 0 in, sub-rounded Bedding not evident, moist to wet Low plasticity, non-calcareous 3% gravel, 41% sand, 33% silt, 23% clay
CLAYSTONE	26 3'-27 3' Top of Bedrock at 26 3 ft Claystone with some Silt Mottled, pale yellowish brown (10 YR 6/2) dark yellowish orange (10 YR 6/6) and olive gray (5 Y 6/1) Weathered, abundt Fe staining Abundt irregular fractures from drying of core Bedding not evident Damp to moist Mod friable Low to non-porous 10% silt, 90% clay No recovery (27 3-28 3')
SILTY CLAYSTONE	28 3'-29 1' Silty Claystone with some Sand Dark yellowish orange (10YR 6/6) and light olive gray (5 Y 6/1) Mottled Mod to low porosity, mod friable Irregular bedding with near horiz orientation Interval damp, non-calcareous Small irregular healed fractures with Fe stain in filling Trace Mn staining Sand v f g, sub-rounded 7% sand, 28% silt, 65% clay No recovery (29 1-30 3')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 6025.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747660	AREA 005 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56993
EAST 2080547	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 9.00	DATE DRILLED	03/22/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0.70/2.00	5995	30			SILTY CLAYSTONE	30.3'-31.0' Silty Claystone with some Sand. Dark yellowish orange (10 YR 6/6) and light olive gray (5 Y 6/1) Mottled. Low porosity, non friable. Bedding not evident. Interval damp. Healed fractures filled with Fe staining. Sand is v f g. Trace of black staining, maybe Mn. One piece of 1.0 gravel near top, sub-rounded, believed to be from above. Interval non-calcareous. Fracture at bottom of interval appears natural, 45 degrees. 7% sand, 28% silt, 65% clay. No recovery (31.0-32.3')
				5994	31				
				5993	32				
				5992	33				Total Depth Drilled 32.30
				5991	34				
				5990	35				
				5989	36				
				5988	37				
				5987	38				
				5986	39				
					40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 37.10	GROUND ELEVATION (FT) 6023.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747667	AREA OU5 IASS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T.S. DREILING	57093
EAST 2080616	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/25/93	

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T. DREILING NOTE: CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN

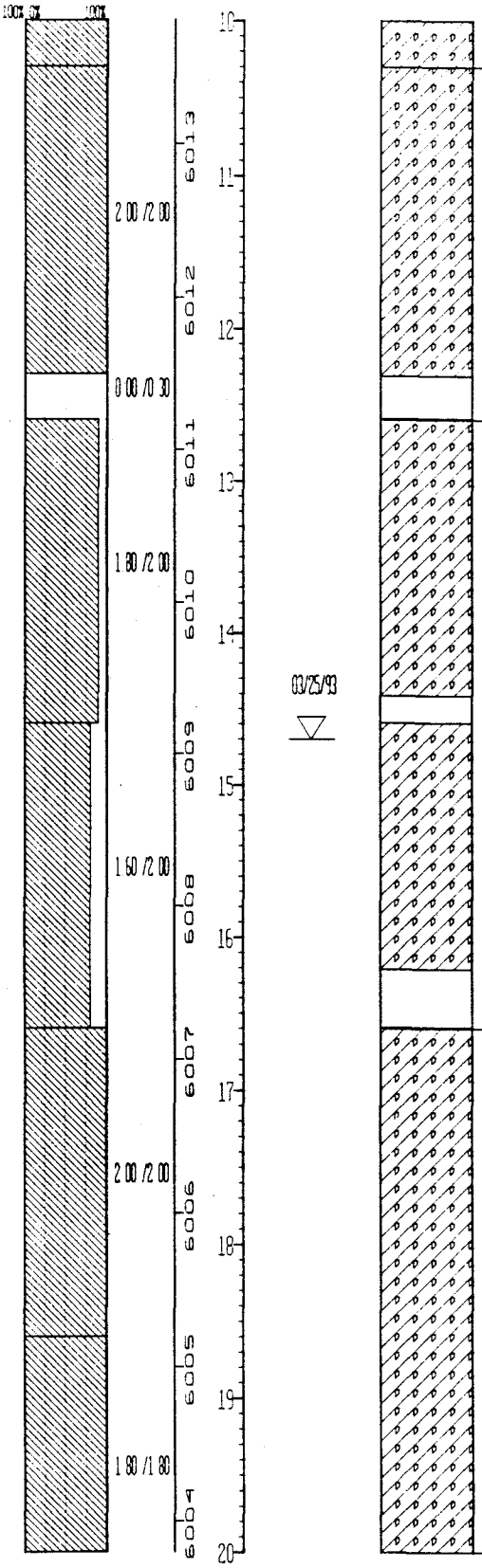
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50241AS			1.40/2.00	6023	0–1			SC	0.0-3.8' Clayey Sand with some Silt and trace Gravel. Dusky brown (5 YR 2/2) grading to dark yellowish brown (10 YR 4/2). Trace sub-angular gravel up to 1/2 in. F.g. to m.g. sand, sub-rounded, quartzose and rock fragments. Trace roots. No apparent bedding or fractures. Moist, low to mod. plasticity, non-calcareous. 54% sand, 7% silt, 39% clay. No recovery (1.4-2.0'), and (3.8-4.0')
	BH50242AS			1.80/2.00	6022, 6021, 6020	2–4				
				1.80/2.00	6019, 6018	4–6			SC	4.0'-6.5' Clayey Sand with some Silt and trace Gravel. Mod. yellowish brown (10 YR 5/6). Pred. f.g., sub-rounded, quartzose sand, trace sub-angular gravel up to 1/2 inch. No apparent bedding or fractures. Moist, low to mod. plasticity. Slightly calcareous. 57% sand, 17% silt, 26% clay. No recovery (5.8-6.0')
				2.00/2.00	6017	6–7			SC	6.5'-10.3' Gravelly Sand with some Clay and Silt. Mod. yellowish brown (10 YR 5/4). F.g. to c.g., well graded, sub-rounded, quartzose sand. Sub-angular gravel up to 2.0 in. (probably cobbles broken by drilling). Some silt, no apparent bedding or fractures. Moist, low to mod. plasticity, non-calcareous. 20% gravel, 50% sand, 12% silt, 18% clay. No recovery (8.0-8.2')
				0.00/0.20	6016	8				
	BH50243AS			2.10/2.10	6015, 6014	9–10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 37 10	GROUND ELEVATION (FT) 6000 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747667	AREA 005 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57093
EAST 2080616	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/25/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT SHOWN

DRAFT



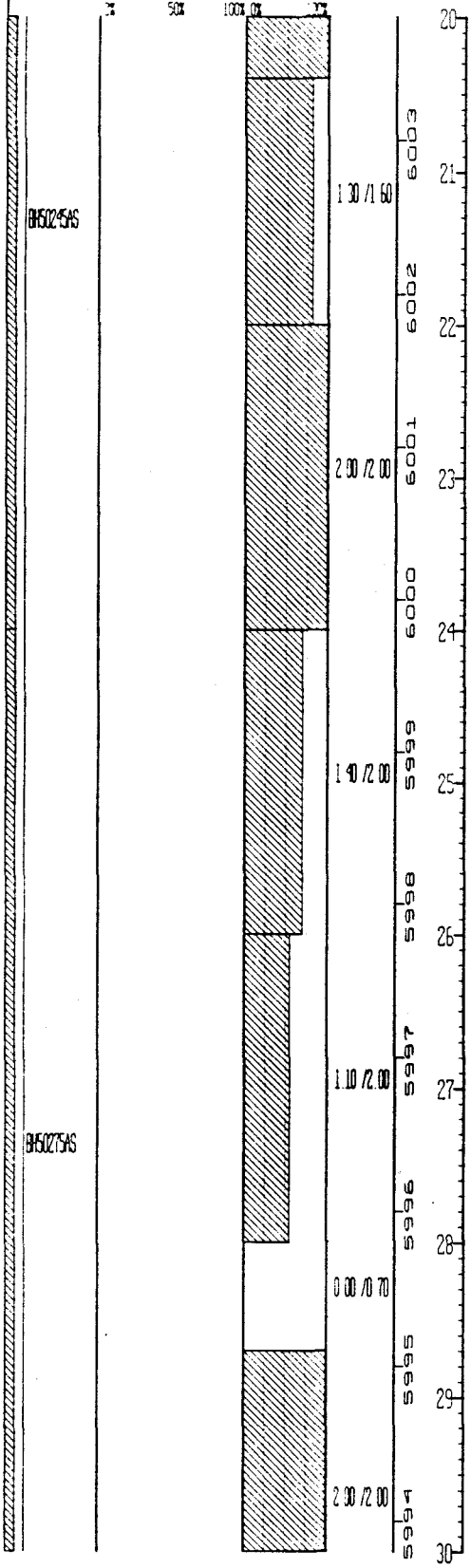
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					10			SC	10 3'-12 6' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (10 YR 5/4) F g to c g, well graded, sub-rounded quartzose sand Trace gravel up to 1 0 in, gravel content appears to increase with depth No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 5% gravel, 59% sand, 14% silt, 22% clay No recovery (12 3-12 6')
			2 00 /2 00	6013	11				
				6012	12				
			0 00 /0 30						
				6011	13			SC	12 6'-16 2' Gravelly Sand with some Clay and trace Silt Mod yellowish brown (10 YR 5/6) Sub-angular, well graded gravel, max size greater than 2-1/2 in (larger pieces are possible broken cobbles, fine to coarse) Well graded, sub-rounded quartzose sand, some silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 30% gravel, 50% sand, 8% silt, 12% clay No recovery (14 4-14 6'), and (16 2-16 6')
			1 80 /2 00	6010	14	03/25/93			
				6009	15				
BH50244AS			1 60 /2 00	6008	16				
				6007	17			SC	16 6'-21 7' Gravelly Sand with some Clay and trace Silt Same as above, reference interval 12 6 to 14 4 ft 30% gravel, 52% sand, 6% silt, 12% clay
			2 00 /2 00	6006	18				
				6005	19				
			1 80 /1 80	6004	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 37 10	GROUND ELEVATION (FT) 6023 80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]	AREA 005 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57093
EAST 2080616	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/25/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50%) | PERCENT RECOVERY (100% 0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
NO RECOVERY	No recovery (21 7-22 0')
SC	22 0'-23 2' Gravelly Sand with some Clay and trace Silt Same as above, reference interval 12 6 to 14 4 ft, except wet 30% gravel, 52% sand 6% silt, 12% clay
	23 2'-23 4' Fine grained mica schist cobble from 23 2 to 23 4ft
SC	23 4'-27 1' Gravelly Sand with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Well graded, sub-angular gravel, max size greater than 2-1/2 in F g to c g, well graded, sub-rounded quartzose sand, trace silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 20% gravel, 64% sand, 5% silt, 11% clay No recovery (25 4-26 0'), (27 1-28 0'), and (28 0-28 7')
SC	28 7'-34 1' Gravelly Sand with some Clay and trace Silt Mod yellowish brown (10 YR 5/6) Sub-angular, well graded Gravel max size 2 0 inches Well graded, sub-rounded quartzose sand, trace silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 30% gravel, 56% sand, 2% silt, 12% clay

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 37 10	GROUND ELEVATION (FT) 6023 80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 7[illegible]7667	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57093
EAST 0080616	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/25/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			30				
					5993	31				
				1 40 /1 40						
					5992	32				
					5991					
				2 00 /2 00		33				
	BH50276AS									
					5990	34				
					5989				CLAYEY SANDSTONE	34 1'-35 4' Top of Bedrock at 34 1 ft Clayey Sandstone with abundt Silt Dark yellowish orange (10 YR 6/6) Pred v f g quartz sand with some f g sand Sand is rounded to sub-rounded Sand is whitish and mottled with clayey matrix Mod to highly friable, weathered Fe content increases near base as evident by Fe stains and possible limonite stains No apparent bedding or fractures Moist 36% sand, 32% silt, 32% clay
				2 00 /2 00		35				
					5988	36			CLAYSTONE	35 4'-37 1' Claystone with trace Silt Mod olive gray (5 Y 4/2) Mod to highly friable, slightly calcareous Slightly weathered, no apparent bedding or fractures Dry 5% silt, 95% clay
				1 00 /1 00	5987	37				
					5986	38				Total Depth Drilled 37 10
					5985	39				
					5984	40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.50	GROUND ELEVATION (FT) 6018.20	PROJECT NUMBER 105-RFI/RI	LOG OF BORING NUMBER	
NORTH 747547	AREA 305, CASS 133.2	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING		
EAST 2060478	LOCATOR NUMBER HT	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/08/93		57193

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50246AS			1.10 /2.00	6018 6017	0 1			CL	0.0'-1.1' Sandy Clay with some Silt. Dusky brown (5 YR 2/6). F.g., sub-rounded sand, trace m.g. sand, poorly graded, pred. quartz grains, trace mica, some roots. No recognized bedding or fractures. Moist, low to mod. plasticity, non-calcareous. 20% fine sand, 8% silt, 72% clay. No recovery (1.1-2.0')
	BH50247AS			1.60 /2.00	6016 6015	2 3			CL	2.0'-2.6' Sandy Clay with trace Silt. Mod. brown (5 YR 4/4). Sub-rounded f.g. sand with trace m.g. sand. Poorly graded, pred. quartz grains, trace mica and roots. Clump of carbonaceous material near base. No recognized bedding or fractures. Moist, low to mod. plasticity, non-calcareous. Piece of calcite cemented sandstone approx. 2 in. at 2.6 ft. 38% sand, 3% silt, 59% clay
				0.90 /1.50	6014 6013	4 5			GC	2.6'-4.9' Sandy Gravel with some Clay, trace Silt. Mod. yellowish brown (10 YR 5/4). Sub-rounded, f-c gravel, max size greater than 2 in. Sub-rounded f.g. to c.g., well graded sand, primarily quartz fragments, with some igneous and metamorphic rock fragments. No recognized bedding or fractures. Moist, low to mod. plasticity, non-calcareous. Possible broken cobble at 14.5 ft. 60% gravel, 28% sand, 1% silt, 11% clay. No recovery (3.6-4.0')
				0.00 /1.50	6012	6			NO RECOVERY	No recovery (4.9-5.5')
									NO RECOVERY	No recovery (5.5-7.0'). Not sampled. Drilled through rocks
				2.00 /2.00	6011 6010 6009	7 8 9			SC	7.0'-11.0' Gravelly Sand with some Clay, trace Silt. Mod. yellowish brown (10 YR 5/4). F.g. to c.g., pred. f.g., well graded, sub-rounded, primarily quartz sand. Sub-rounded igneous and metamorphic f-c gravels up to 1.5 in. No recognized bedding or fractures. Moist, low to mod. plasticity, non-calcareous. 30% gravel, 56% sand, 4% silt, 10% clay
				2.00 /2.00		10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 18 50	GROUND ELEVATION (FT)	6018 30	PROJECT NUMBER	305-AF0-92	LOG OF BORING NUMBER
NORTH	7[illegible]547	AREA 305 PASS 133 3	CASING DIAMETER (IN)		GEOLOGIST	F G DREILING	57193
EAST	1380479	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

SAMPLE NUMBER	GRADATION	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
8505305		50%	100%	2 00 /2 00	10				
					11			SC	11 0'-12 2' Clayey Sand with trace Gravel and Silt Mod yellowish brown (10 YR 5/4) F g to c g, well graded sub-rounded, quartzose sand Trace sub-rounded fine gravel up to 1 in No recognized bedding or fractures Moist, mod plasticity, non-calcareous 5% gravel, 73% sand, 3% silt, 19% clay
				2 00 /2 00	12			SC	12 2'-12 5' Clayey Sand with some Silt, trace Gravel Mod yellowish brown (10 YR 5/4) F g and m g sub-rounded, quartzose sand Trace sub-rounded fine gravel up to 0 5 in No recognized bedding or fractures Moist, mod plasticity 2% gravel, 51% sand, 12% silt, 35% clay
				2 00 /2 00	13			CLAYSTONE	12 5'-18 5' Top of Bedrock at 12 5 ft Claystone Pred light olive gray (5 Y 6/1), grades to pred dark yellowish orange (10 YR 6/6) between 14 5 and 15 5 ft Some Fe staining Trace rounded ironstone nodules up to 0 25 in from 14 0 to 15 0 ft No apparent bedding Some Fe stained sub-horizontal fractures, trace sub-vertical Possible Mn staining on fractures Trace carbonaceous material Dry to moist, highly to mod friable, weathered non-calcareous From 17 0 to 17 2 ft mod to slightly friable 5% silt, 95% clay
				2 00 /2 00	14				
				2 00 /2 00	15				
				1 50 /1 50	16				
					17				
					18				
					19				Total Depth Drilled 18 50
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 6016 50	PROJECT NUMBER 305-PFC/RI	LOG OF BORING NUMBER	
NORTH 74546	AREA 305 DASS 123 2	CASING DIAMETER (IN)	GEOLOGIST T G DREILING		
EAST 1080542	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/05/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

57293

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH5025US			1 20 /2 00	6016	0			CL	0 0'-2 5' Clayey Sand with some Silt Olive gray (5 Y 3/2) F g, to m g, sub-rounded, pred quartzose sand with abundt mafic sand, trace c g sand, some roots No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 48% sand, 8% silt, 44% clay No recovery (1 2-2 0')
	BH5025US			1 60 /2 00	6015	1			CL	2 5'-3 6' Clayey Sand with some Silt Light brown (5 YR 5/6) F g, sub-rounded quartzose sand, Trace m g and c g sand No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 47% sand, 11% silt, 42% clay No recovery (3 6-4 0')
				1 80 /2 00	6014	2			CL	4 0'-10 0' Clayey Sand with some Silt Same as above (reference interval 2 5 ft to 3 6 ft), except non-calcareous No recovery (5 8-6 0'), and (7 3-8 0')
				1 30 /2 00	6013	3				
				2 00 /2 00	6012	4				
					6011	5				
					6010	6				
					6009	7				
					6008	8				
	BH5025US				6007	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 30	GROUND ELEVATION (FT) 6016 50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7546	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S CREILING	57293
EAST 1380542	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T CREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 70 /2 00	6006 6005	10 11			CL	10 0'-11 7' Clayey Sand with some Silt Same as above (reference interval 4 0 to 5 8 ft) Light brown (5 YR 5/6) F g , sub-rounded quartzose sand Trace m g and c g No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous No recovery (11 7-12 0')
				1 70 /2 00	6004 6003	12 13			CL	12 0'-15 3' Clayey Sand with some Silt and trace Gravel Same as above (reference interval 10 0 to 11 7 ft) with increasing gravel Light brown (5 YR 5/6) F g sub-rounded, quartzose sand with some m g and c g sand Max gravel size is approx 0 75 in No apparent bedding or fractures except very small vertical tube/like structure at 13 5 ft which appears to be lined with a gray mateial surrounded by an FE stained ring or zone Moist, low to mod plasticity, non-calcareous 5% gravel, 32% sand, 9% silt, 53% clay No recovery (13 7-14 0')
	BH50254AS			2 00 /2 00	6002 6001	14 15			SC	15 3'-21 0' Clayey Sand with some Gravel and Silt Mod yellowish brown (10 YR 5/4) F g to c g , well graded, sub-rounded quartzose sand Sub-angular gravel, max size greater than 2 5 in Possible broken cobble at 16 5 ft No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 20% gravel, 38% sand, 8% silt, 34% clay No recovery (17 4-18 0'), and (18 0-20 0')
				1 40 /2 00	6000 5999	16 17				
				0 00 /2 00	5998 5997	18 19 20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 80	GROUND ELEVATION (FT) 6016 50	PROJECT NUMBER 065-RFI-RI	LOG OF BORING NUMBER	
NORTH 747546	AREA 015 IASS 133 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	57293	
EAST 2080542	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 9 00	DATE DRILLED 04/05/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						20				
				2 00 /2 00	5996	21			SM	21 0'-23 6' Silty Sand with some Clay and trace Gravel Light olive gray (5 Y 5/2) Sub-rounded, pred quartzite gravel F-c gravel to greater than 2 5 in F g to m g, sub-rounded quartzose sand with abundt mafic sand grains No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Possible broken quartzite cobbles at 21 0 and 23 4 ft Possible decomposed rock fragment with abundt dark minerals 5% gravel, 55% sand, 24% silt, 16% clay
					5995	22				
					5994					
	BH50255AS			1 60 /2 00		23				No recovery (23 6-24 0')
					5993					
						24			SC	24 0'-25 0' Gravelly Sand with some Clay and trace Silt Mod olive gray (5 Y 4/2) Sub-angular fine gravel, max size 1 in F g to c g, well graded, sub-angular quartz sand, trace silt No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Matrix is possibly reworked bedrock 20% gravel, 66% sand, 1% silt, 13% clay
				2 00 /2 00	5992	25				
					5991				SC	25 0'-26 9' Clayey Sand with some Silt Mod olive gray (5 Y 4/2) Pred f g, some m g and c g, well graded, sub-rounded quartz sand. No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Matrix is possibly reworked bedrock, sub-rounded quartzite gravel at 25 8 ft 77% sand, 9% silt, 14% clay
					5990	26				
				2 00 /2 00		27			CLAYSTONE	26 9'-27 6' Top of Bedrock at 26 9 ft Claystone with trace Silt Pred light olive gray (5 Y 5/2), mottled with dark yellowish orange (10 YR 6/6) Fe staining, mod friable, trace carbonaceous material No apparent bedding or fractures Moist <5% silt, >95% clay
	BH50292AS				5989					
						28			CLAYSTONE	27 6'-30 0' Claystone with trace Silt Same as above (reference interval 26 9 to 27 6 ft) but changes to olive gray (5 YR 4/2), and changes to olive gray (5 YR 3/2) below 28 7 ft with some black carbonaceous streaks and pieces below 29 5 dt Few near vertical to 85 degree fractures at approx 29 4 ft Fractures are clean with no coatings Microfractures have Fe coatings or stains <5% silt, >95% clay
				2 00 /2 00	5988	29				
					5987	30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 80	GROUND ELEVATION (FT) 5016 50	PROJECT NUMBER 015-RFI/RI	LOG OF BORING NUMBER	
NORTH 7-7546	AREA 005 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 2080542	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/05/93		57293

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	0 30 /0 80	5986	30			CLAYSTONE	30 0'-30 8' Claystone Olive gray (5 Y 4/2) and med dark gray (N4) Mod friable, carbonaceous material No apparent bedding or fractures Moist, black streaks and pieces of carbonaceous material from 30 2 to 30 6 ft Trace Fe nodules up to 0 25 in in bottom 0 2 ft <5% silt, >95% clay
					5985	31				
					5984	32				
					5983	33				
					5982	34				
					5981	35				
					5980	36				
					5979	37				
					5978	38				
					5977	39				
						40				

Total Depth Drilled 30 80

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6016.40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747545	AREA 005, IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57293A
EAST 2080545	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T S DREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6016	0			NO RECOVERY	0.0'-5.0' Drilled down to 5.0'
					6015	1				
				0.00/5.00	6014	2				
					6013	3				
					6012	4				
					6011	5			CL	5.0'-7.1' Sandy Clay Light brown (5 YR 5/6)
				0.00/2.10	6010	6				
					6009	7			NO RECOVERY	7.1'-10.0' Drilled down to 10'
				0.00/2.90	6008	8				
					6007	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION FT	6016 40	PROJECT NUMBER	OU5-RFI/RI
NORTH 747545	AREA OU5, IHSS 133 2	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST 2080545	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/05/93

LOG OF BORING NUMBER 57293A

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T S DREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0 00 /2 00	6006	10			CL	10 0'-12 0' Sandy clay, light brown (5 YR 5/6)
				6005	11				
				6004	12				Total Depth Drilled 12 00
				6003	13				
				6002	14				
				6001	15				
				6000	16				
				5999	17				
				5998	18				
				5997	19				
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6016.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747556	AREA OU5 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. OREILING	57293B
EAST 2080543	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T. S. OREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						0				0.0'-5.0' Drilled out
					6016	1				
					6015	2				
				0.00/5.00	6014	3				
					6013	4				
					6012	5			CL	5.0'-7.0' Sandy Clay, light brown (5 YR 5/6)
				0.00/2.00	6011	6				
					6010	7			NO RECOVERY	No recovery (7.0-10.0') Drilled out
					6009	8				
				0.00/3.00	6008	9				
					6007	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6016 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747556	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57293B
EAST 2080543	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/05/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T S DREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						10			CL	10 0'-12 0' Sandy Clay, trace gravel, light brown (5 YR 5/6)
				0 00 /2 00	6006	11				
					6005	12				Total Depth Drilled 12 00
					6004	13				
					6003	14				
					6002	15				
					6001	16				
					6000	17				
					5999	18				
					5998	19				
					5997	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6015.30	PROJECT NUMBER 305-RF[illegible]	LOG OF BORING NUMBER	
NORTH 74536	AREA 005, IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	57293C	
EAST 1080546	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/05/93		

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T. S. DREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE- TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6015	0			NO RECOVERY	No recovery (0.0-5.0') Drilled out
					6014	1				
						2				
				0.00/5.00	6013	3				
					6012	4				
					6011	5				
					6010	6			CL	5.0'-7.0' Sandy Clay, light brown (5 YR 5/6)
				0.00/2.00	6009	7				
					6008	8			NO RECOVERY	No recovery (7.0-10.0') Drilled out
				0.00/3.00	6007	9				
					6006	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6015 80	PROJECT NUMBER 305-HFDRI	LOG OF BORING NUMBER	
NORTH 74536	AREA 305 DASS 133 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 1380546	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/05/93	57293C	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T S DREILING ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION	SAMPLE NUMBER	SAMPLE GRADIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0%	100%		10			CL	10 0'-12 0' Sandy Clay, light brown (5 YR 5/6)
				0 00 /2 00	6005	11				
					6004	12				
										Total Depth Drilled 12 00
					6003	13				
					6002	14				
					6001	15				
					6000	16				
					5999	17				
					5998	18				
					5997	19				
					5996	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 6014 00	PROJECT NUMBER 105-PF1-91	LOG OF BORING NUMBER	
NORTH 1[illegible]548	AREA DUS BASS 100 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 1368605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/07/93		57393

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI PTG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6014	0			CL	0 0'-1 6' Sandy Clay with some Silt Dark yellowish brown (10 YR 3/2) F g, sub-rounded quartz sand, trace roots No apparent bedding or fractures Moist, low to mod plasticity, mod calcareous 20% sand, 19% silt, 60% clay
	BH5025GAS			1 60 /2 00	6013	1				No recovery (1 6-2 0')
					6012	2			CL	2 0'-10 0' Clayey Sand with some Silt Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) Pred f g quartz sand, some m g quartzose sand, trace c g quartzose sand, sand is sub-rounded Some Fe staining, trace carbonaceous material No apparent bedding or fractures Moist, low to mod plasticity, slightly to mod calcareous Non- to slightly calcareous from 4 6 to 6 3 ft Non-calcareous from 6 6 to 10 0 ft 45% sand, 19% silt, 36% clay
	BH5025TAS			1 40 /2 00	6011	3				
				0 00 /0 60	6010	4				No recovery (3 4-4 0'), (4 0-4 6'), and (6 3-6 6')
					6009	5				
				1 70 /2 00	6008	6				
				1 60 /1 60	6007	7				
					6006	8				
	BH5025BAS			2 00 /2 00	6005	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) 6014 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7548	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57393
EAST 1380605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/07/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6004	10			CL	10 0'-15 0' Sandy Clay with some Silt Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) Trace gravel starting at 13 6 ft F g, sub-rounded quartz sand, trace m g and c g sand Some Fe staining, trace carbonaceous material No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 36% sand, 22% silt, 42% clay
				1 90 /1 90	6003	11				
					6002	12				
				2 00 /2 00	6001	13				
					6000	14				
	BH50259AS			2 00 /2 00	5999	15			CL	15 0'-23 2' Sandy Clay with some Silt and Gravel Mod yellowish brown (10 YR 5/4) Sub-rounded fine to coarse gravel F g to c g sand, pred f g, sub-rounded, quartz sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 8% gravel, 30% sand, 25% silt, 37% clay
					5998	16				
				2 00 /2 00	5997	17				
					5996	18				
				2 00 /2 00	5995	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) 5614.00	PROJECT NUMBER	305-PF0-PC
NORTH	247548	AREA 305 PASS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T.S. GREILING
EAST	2080605	LOCATION NUMBER H7	BOREHOLE DIAMETER (IN) 9.00	DATE DRILLED	04/07/93

REMARKS DRILLING EQUIPMENT CME 750 ATV AST RIG GEOLOGIST T. GREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

LOG OF BORING NUMBER 57393

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5594	20				
	BH50260AS			2.00/2.00	5593	21				
					5592	22				
				2.00/2.00	5591	23				
					5590	24			SM	23.2'-24.3' Silty Sand with some Gravel and Clay. Mod yellowish brown (10 YR 5/4). Fine to coarse, sub-rounded gravel with max. size 1 in. F.g. to c.g., sub-rounded quartz sand, pred. f.g. No apparent bedding or fractures. Moist, low to mod. plasticity fines, non-calcareous. 15% gravel, 46% sand, 29% silt, 10% clay
	BH50291AS			2.00/2.00	5589	25			CL	24.3'-24.8' Silty Clay with trace Sand. Mod. yellowish brown (10 YR 5/4) mottled with light olive gray (5 Y 5/2). Trace sub-angular c.g. sand. Some Fe staining, trace carbonaceous material. No apparent bedding, fractures, or slickensides. Moist, mod. to high plasticity, non-calcareous. 1% sand, 29% silt, 70% clay
					5588	26			CLAYSTONE	24.8'-27.0' Top of Bedrock at 24.8'. Claystone with some Silt. Mod. olive gray (5 Y 4/2). Some Fe staining, mod. to highly friable, some carbonaceous material. No apparent bedding or fractures. Dry to moist. 10% silt, 90% clay
				2.00/2.00	5587	27				
					5586	28			CLAYSTONE	27.0'-30.2' Claystone with trace Silt. Olive gray (5 Y 3/2). Some carbonaceous material, mod. to highly friable. No apparent bedding, fractures, or slickensides. Dry to moist. Several pieces of black carbonaceous material between 27.6 and 27.9 ft. 5% silt, 95% clay
				2.10/2.10	5585	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 20	GROUND ELEVATION (FT) 5914 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 75548	AREA 005 DHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 1380605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 3 20	DATE DRILLED 04/07/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

57393

DRAFT

CHEMICAL SAMPLE DEPTH
GRADUATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	0% 100%		5984	30				Total Depth Drilled 30 20
			5983	31				
			5982	32				
			5981	33				
			5980	34				
			5979	35				
			5978	36				
			5977	37				
			5976	38				
			5975	39				
				40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 40	GROUND ELEVATION (FT) 6000 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747753	AREA 005 DISS 133	CASING DIAMETER (IN)	GEOLOGIST	T S S DREILING	57493
EAST 2080819	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

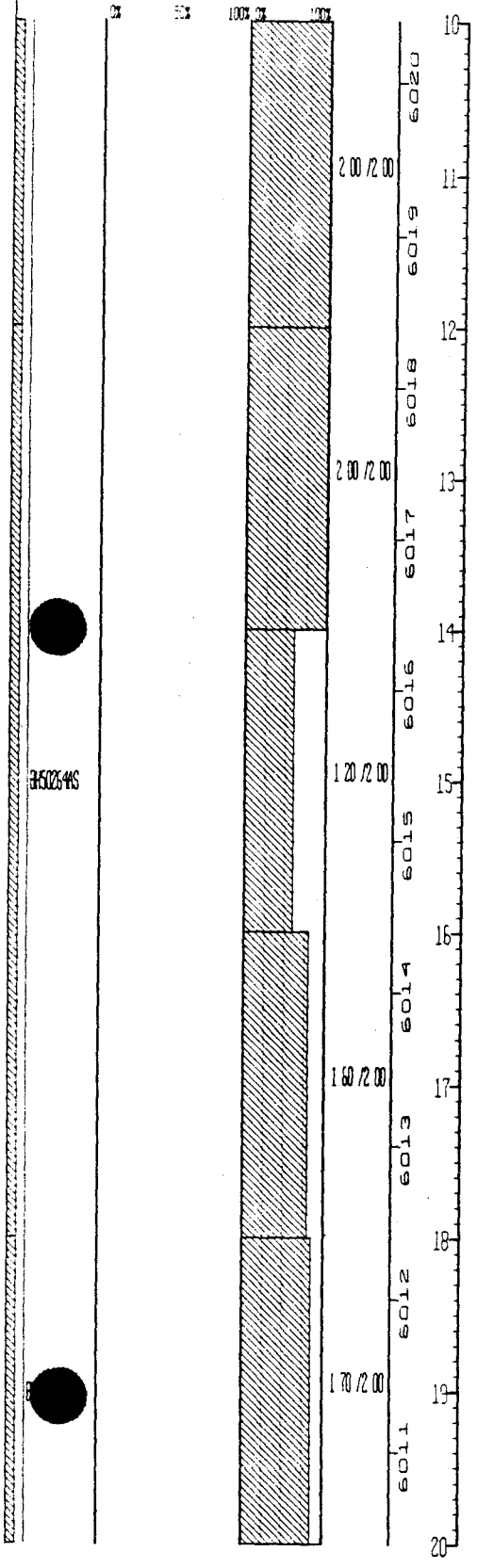
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50261AS			1 80 /2 00	6030 / 6029	0 / 1			CL	0 0'-1 8' Sandy Clay with some Silt and trace Gravel Dusky brown (5 YR 2/2) to approx 1 4 ft, mod borwn (5 YR 4/6) below 1 4 ft Sub-angular to sub-rounded gravel, up to 1 in, abundt roots in upper 0 4 ft Fine to coarse grained (pred fine grained), sub-rounded quartzose sand (trace mica ?) No apparent bedding or fractures, moist Low to mod plasticity, non-calcareous Gravel content increases towards base 3% gravel, 37% sand, 18% silt, 42% clay No recovery (1 8-2 0')
	BH50262AS			1 60 /2 00	6028 / 6027	2 / 3			SC	2 0'-5 3' Gravelly Sand with some Clay and Silt Mod brown (5 YR 3/4) to dark reddish brown (10 R 3/4) Gravel fine to coarse, sub-angular, up to and greater than 2 0 in, probably broken cobbles, especially at bottom of interval Sand, f g to c g, sub-angular to sub-rounded, quartzose with abundt mafic rock fragments No apparent bedding or fractures, low plasticity fines, non-calcareous Moist 35% gravel, 46% sand, 7% silt, 12% clay No recovery (3 6-4 0'), and (5 3-6 0')
				1 30 /2 00	6026 / 6025	4 / 5				
				2 00 /2 00	6024 / 6023	6 / 7			SM	6 0'-8 0' Silty Sand with some Gravel and Clay Mod brown (5 YR 4/6) Gravel fine to coarse, sub-rounded, max size greater than 2 0 in, probably broken cobble at 6 2 ft Sand f g to c g, sub-rounded, quartzose with trace mafics and mica No apparent bedding or fractures, low to mod plasticity fines, non-calcareous Moist 10% gravel, 66% sand, 17% silt, 7% clay
	BH50263AS			2 00 /2 00	6022 / 6021	8 / 9			GM	8 0'-10 0' Sandy Gravel with some Silt and trace Clay Mod yellowish brown (10 YR 5/4) Gravel fine to coarse, sub-angular to sub-rounded, max size approx 2 0 in Gravel is pred highly weathered metamorphic rock fragments (quartzite and mica schist) Sand f g to c g, sub-rounded, pred quartzose with some mafics and mica No apparent bedding or fractures, non-calcareous Moist 50% gravel, 37% sand, 9% silt, 5% clay
						10				

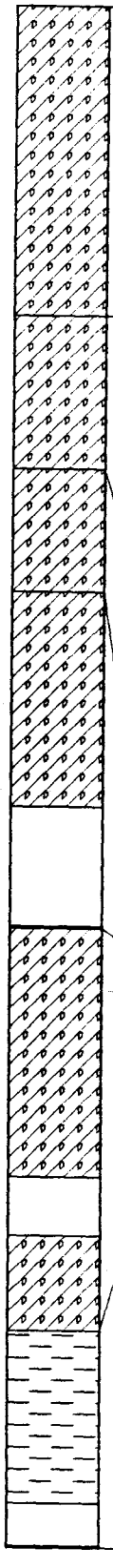
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT) 6030 40	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747753	AREA 005 IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T G S DRILLING	57493
EAST	2060819	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DRILLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION





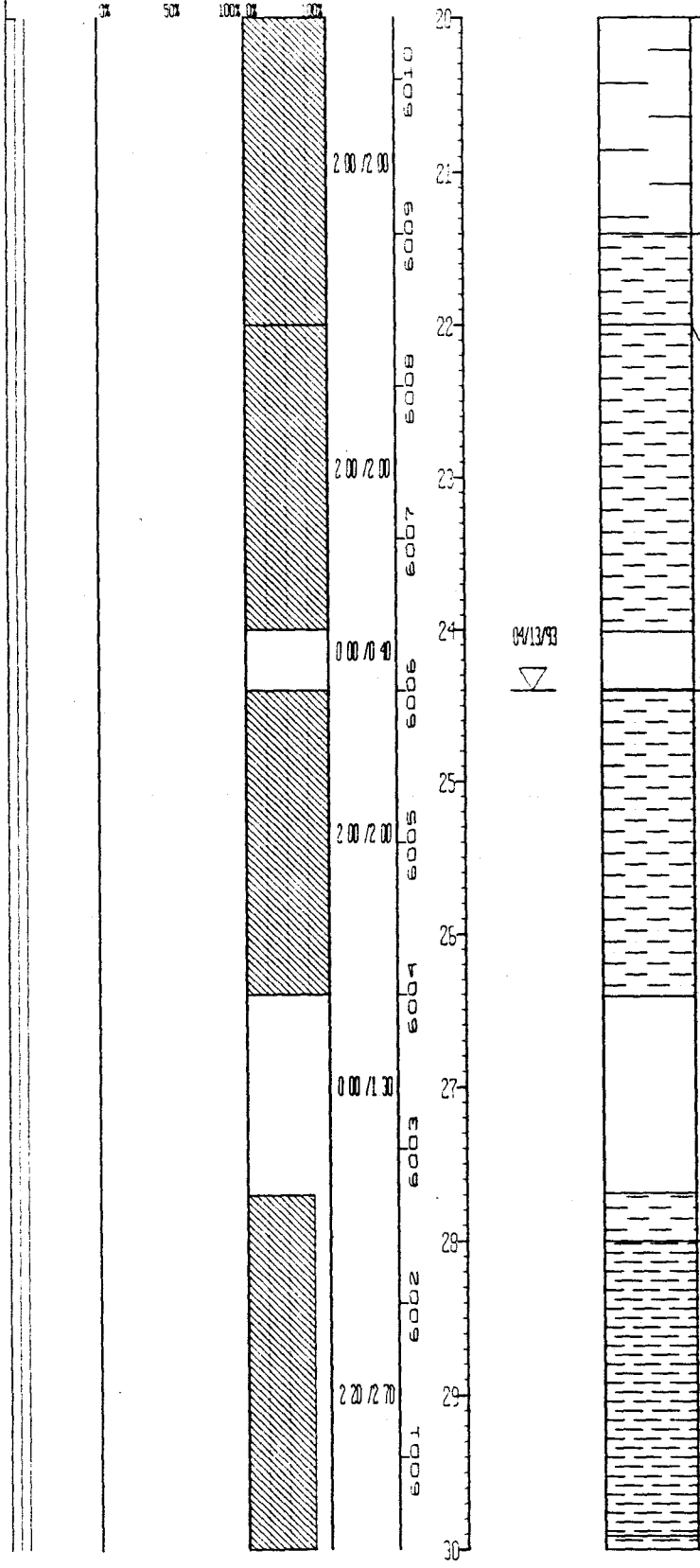
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	10 0'-12 0' Gravelly Sand with some Clay, trace Silt Dark yellowish orange (10 YR 6/6) Gravel fine to coarse, sub-angular to sub-rounded, max size approx 2 0 in, pred quartz rich metamorphic rock fragments Sand, pred m g, some f g and c g, sub-rounded, quartzose with trace mafic rock fragments and mica, trace gold No apparent bedding or fractures, low to mod plasticity fines, non-calcareous Moist 35% gravel, 51% sand, 5% silt, 9% clay
SC	12 0'-13 0' Gravelly Sand with some Clay, trace Silt Light brown (5 YR 5/6), below 13 0 ft grayish orange (10 YR 7/4) Gravel fine to coarse, sub-rounded, max size up to 2 0 in Sand f g to c g, well graded, sub-rounded quartzose No apparent bedding or fractures, low plasticity fines, non-calcareous Moist 25% gravel, 56% sand, 5% silt, 14% clay
SC	13 0'-13 8' Clayey Sand with trace Silt and Gravel Dark yellowish orange (10 YR 6/6) Gravel fine, sub-angular Sand f g to c g, well graded, sub-rounded quartzose No apparent bedding or fractures, low plasticity fines, non-calcareous Moist 5% gravel, 79% sand, 4% silt, 17% clay
SC	13 8'-15 2' Gravelly Sand with some Clay, trace Silt Same as above (reference interval 12 0 to 13 0 ft) Broken cobble at approx 14 3 ft 25% gravel, 56% sand, 5% silt, 14% clay No recovery (15 2-16 0')
SC	16 0'-18 6' Clayey Sand with some Gravel and Silt Mod yellowish brown (10 YR 5/6) Gravel fine to coarse, sub-rounded, max size greater than 2 0 in, possibly broken cobbles Sand f g to c g, well graded, sub-rounded, quartzose, with trace mica Trace carbonaceous material at approx 17 4 ft No apparent bedding or fractures, low to mod plasticity fines, non-calcareous Moist 15% gravel, 57% sand, 6% silt, 22% clay No recovery (17 6-18 0')
SANDY CLAYSTONE	18 6'-19 7' Top of Bedrock at 18 6' Sandy Claystone with some Silt Pred light olive brown (5 Y 5/6) Sand v f g, sub-rounded to rounded, quartzose Sand is typically whitish Some near vertical fractures coated with carbonaceous material Abundt Fe stained layers and areas, non-calcareous Dry to moist 30% sand, 7% silt, 63% clay No recovery (19 7-20 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT) 6030 40	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747753	AREA 005 IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T S S DREILING	57493
EAST 2080819	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 30	DATE DRILLED	04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE 0% 50% 100%
PERCENT RECOVERY 0% 100%
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



CLAYEY SANDSTONE 20 0'-21 4' Clayey Sandstone with trace Silt Pred dark yellowish orange (10 YR 6/6) Sand v f g, rounded quartzose There is a layer of whitish sand at approx 20 7 ft, 0 5 in thick Abundt Fe staining Fe stained silty layer (0 5 in thick) at approx 21 3 ft
63% sand, 4% silt, 33% clay

SANDY CLAYSTONE 21 4'-22 0' Sandy Claystone with some Silt Same as above (reference interval 18 6 to 19 7 ft)
Crudely laminated between approx 21 8 to 22 0 ft
30% sand, 7% silt, 63% clay

SANDY CLAYSTONE 22 0'-24 0' Sandy Claystone with some Silt Pred light olive brown (5 Y 5/6) Sand v f g, rounded quartzose Possible Fe stained bedding at approx 15 to 30 degrees at approx 22 4 ft Trace carbonaceous material near 23 6 ft Mica flakes at approx 23 6 ft, 2 0 mm in size Non-calcareous Dry to moist
40% sand, 6% silt, 54% clay

No recovery (24 0-24 4')

SANDY CLAYSTONE 24 4'-28 0' Sandy Claystone with some Silt Same as above (reference interval 22 0 to 24 0 ft) Light gray or whitish sand occurs in thin (typically less than 1 mm thick) layers These layers are approx 30 degrees from horiz and 1 0 to 2 0 in apart No apparent fractures
41% sand, 6% silt, 53% clay

No recovery (26 4-27 7') NOTE Hydropunch tip and 1 5 in of screen at 27 7 ft

CLAYSTONE 28 0'-29 9' Claystone with some Sand and Silt Pred olive brown (5 Y 5/4) Sand v f g, rounded quartz No apparent bedding, abundt Fe stained micro-fractures and what appears to be plant parts Some areas of caliche Dry to moist
13% sand, 9% silt, 78% clay

No recovery (29 9-30 4')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT)	6030 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747753	AREA OU5 IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	T S S DREILING	57493
EAST	2080819	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6000	30				
									Total Depth Drilled 30 40
				5999	31				
				5998	32				
				5997	33				
				5996	34				
				5995	35				
				5994	36				
				5993	37				
				5992	38				
				5991	39				
					40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747746	AREA E OF 133 W END 115	CASING DIAMETER (IN)	GEOLOGIST	D BAUGHN	57593
EAST 1380885	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED	04/13/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50298AS			1.10/2.00	6025	0			SM	0.0'-4.5' Gravelly Sand with some Silt and Clay, trace Cobbles. Sand and gravel angular to sub-rounded, well graded, f.g. to c.g., pred. f.g., quartzose. Low to med plasticity. Dry. 38% gravel, 44% sand, 11% silt, 7% clay. No recovery (1.1'-2.0'), (3.1'-4.0')
	BH50299AS			1.10/2.00	6024	1				
					6023	2				
					6022	3				
				1.30/2.00	6021	4			SM	4.5'-9.2' Gravelly Sand with some Silt and Clay, trace Cobbles. Mod. yellowish brown (10 YR 5/4). Sand and gravel, are sub-angular to sub-rounded. Sand is pred. m.g., quartzose, with trace muscovite and mafic minerals. Low to med. plasticity. Dry. 34% gravel, 44% sand, 13% silt, 9% clay. No recovery (5.3'-6.0'), (6.75'-8.0'), and (9.2'-10.0')
				0.50/0.75	6020	5				
				0.00/1.25	6019	6				
	BH50294AS BH50300AS			1.20/2.00	6018	7				
					6017	8				
					6016	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT) 6025 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH [illegible]	AREA E OF 133 W END 115	CASING DIAMETER (IN)	GEOLOGIST D BAUGHN	57593	
EAST 2080885	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED 04/13/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					10			SC	10 0'-11 7' Gravelly Sand with some Clay and trace Silt Pred mod yellowish brown (10 YR 5/4), mottled with dark yellowish brown (10 YR 4/2) Gravel, pred coarse, poorly sorted, quartzose Sand pred m g to c g, well graded, sub-angular to rounded, quartzose, some mafic minerals, trace mica Low to mod plasticity Dry 28% gravel, 53% sand, 5% silt, 14% clay
			1 90 /2 00	6015	11				
				6014	12			SANDY CLAYSTONE	11 7'-13 3' Top of Bedrock at 11 7 ft Sandy Claystone with some Silt Mottled light olive gray (5 YR 6/1) and light brown (5 YR 5/6) Sand is well sorted, sub-rounded to rounded, quartzose Occasional layers of clay throughout interval Trace carbonaceous material, some Fe staining Med plasticity, mod friable Dry 27% sand, 8% silt, 65% clay
BH50301AS			1 90 /2 00	6013	13				
				6012	14			SANDY CLAYSTONE	13 3'-16 6' Sandy Claystone with some Silt Mottled light olive gray (5 YR 6/1) and light brown (5 YR 5/6) Sand is well sorted, sub-rounded to rounded, quartzose Bedrock is laminated with some Fe staining Low plasticity, highly friable Dry 41% sand, 15% silt, 44% clay
			1 90 /1 75	6011	15				
			0 00 /0 25	6010	16				
			1 90 /1 90	6009	17			CLAYSTONE	16 6'-18 0' Claystone with some Sand and Silt Mottled light olive gray (5 Y 6/1) and light brown (5 YR 5/6) Some Fe staining Some f g quartzose sand and silt Trace carbonaceous material interbedded with f g to m g, rounded sand 12% sand, 13% silt, 75% clay
			0 00 /0 10	6008	18				Total Depth Drilled 18 00
				6007	19				
				6006	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5954 50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	746753	AREA SURF DIST w IHSS 209	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57693
EAST	1085298	LOCATOR NUMBER M6	BOREHOLE DIAMETER (IN)	3 00	DATE DRILLED	04/27/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50325AS			1 30 /2 00	5954	0			CLAYSTONE	0 0'-1 3' Top of Bedrock at 0 0 ft Claystone, with trace Silt Pred light olive gray (5 Y 5/4) Some Fe staining, some roots to 2 5 ft No apparent bedding or fractures Non-calcareous, moist Softness of core indicates highly weathered <5% silt, >95% clay No recovery (1 3'-2 0')
	BH50319AS			1 20 /2 00	5953	1			CLAYSTONE	2 0'-4 5' Claystone Same as above, reference interval 0 0 to 1 3 ft except some microfractures that are Fe stained Weathering decreases with depth No recovery (3 2'-4 0')
				1 30 /2 00	5952	2			CLAYSTONE	4 5'-5 3' Claystone with trace Silt Pred brownish gray (5 YR 4/1) Slightly friable, no apparent bedding, non-calcareous, dry to moist Some Fe stained microfractures Possible thin, v f g quartzose sand lense at top of interval Slightly weathered interval <5% silt, >95% clay No recovery (5 3'-6 0')
					5951	3				
					5950	4				
					5949	5				
					5948	6				Total Depth Drilled 6 00
					5947	7				
					5946	8				
					5945	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 80	GROUND ELEVATION (FT)	6070 80	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH	746235	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57793
EAST	2080235	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/29/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown Area Surface Disturbance South of IHSS 133

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50329AS			1 10 /2 00	6070	0			SC	0 0'-1 1' Gravelly Sand with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Some broken cobbles Gravel fine to coarse, well graded, sub-rounded Sand f g to c g, well graded, sub-rounded, quartzose with some rock fragments and mica, some roots Low plasticity fines mod to highly calcareous Dry 40% gravel, 43% sand, 2% silt, 15% clay No recovery (1 1-2 0')
BH50321AS BH50330AS			1 00 /2 00	6069 6068	1 2 3			SC	2 0'-5 4' Gravelly Sand with some Clay and trace Silt Same as above, (reference interval 0 0 to 1 1 ft) except no roots No recovery (3 0-4 0')
[illegible]			1 40 /1 75	6067 6066	4 5				
			0 00 /0 55	6065	6			NO RECOVERY	No recovery (5 4-6 3')
BH50332AS			1 60 /2 00	6064 6063	7 8			SC	6 3'-7 3' Clayey Sand with trace Silt Light brown (5 YR 5/6) Trace sub-angular, fine gravel Sand f g to m g, sub-rounded, quartzose, with some mafic rock fragments, some caliche No apparent bedding or fractures Low plasticity fines, highly calcareous Moist 66% sand, 3% silt, 31% clay
			2 00 /2 00	6062 6061	9 10			SC	7 3'-11 4' Clayey Sand with some Silt Light olive gray (5 Y 6/1), mottled with light brown (5 YR 5/6) below approx 9 6 ft Trace fine, sub-rounded gravel and c g sand Sand f g to m g, sub-rounded, quartzose No apparent bedding or fractures Low plasticity fines, slightly calcareous Moist 53% sand, 7% silt, 40% clay No recovery (7 9-8 3')

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	00 00	GROUND ELEVATION (FT)	6070 00	PROJECT NUMBER	005-RFI/RI
NORTH	746295	AREA SURF DIST S OF 133		CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST	0080235	LOCATOR NUMBER	H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/29/93

LOG OF BORING NUMBER **57793**

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown Area Surface Disturbance South of IHSS 133

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE / PERCENT RECOVERY / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

0% 50% 100% 0% 100%

BH50334AS
BH50333AS
BH50323AS
BH50335AS
BH50336AS

RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)
1 45 /1 75	6060	10
0 00 /0 15	6059	11
1 00 /1 30	6058	12
1 80 /2 00	6057	13
1 75 /1 75	6056	14
0 60 /1 00	6055	15
0 00 /0 60	6054	16
0 75 /0 75	6053	17
0 00 /0 40	6052	18
	6051	19
		20

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	11 4'-11 7' Clayey Sand with some Silt Light olive gray (5 Y 6/1), mottled with light brown (5 YR 5/6) Gravel and broken cobbles at approx 11 7 ft Same as above, (reference interval 8 3 to 10 0 ft)
	No recovery (11 7-12 0')
NO RECOVERY	No recovery (12 0-12 2') Drilled through rock
SC	12 2'-15 3' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6) Broken cobbles at top and bottom of run Gravel fine to coarse, sub-rounded quartzite Sand f g to c g, well graded, sub-rounded, quartzose No apparent bedding or fractures Non-calcareous Dry 25% gravel, 61% sand, 4% silt, 10% clay
	No recovery (13 2-13 5'), and (15 3-15 5')
SC	15 5'-16 3' Clayey Sand with trace Silt Mod yellowish brown (10 YR 5/4) Trace sub-angular to sub-rounded, fine gravel and c g sand Sand f g to m g, sub-rounded, quartzose. No apparent bedding or fractures Low plasticity fines, non-calcareous Dry 62% sand, 4% silt, 34% clay
SC	16 3'-19 6' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6) Gravel fine to coarse, sub-rounded, quartzite and mica schist and broken cobbles Sand f g to c g, pred m g, sub-rounded, quartz sand No apparent bedding or fractures, non-calcareous Dry 35% gravel, 49% sand, 3% silt, 13% clay
	No recovery (17 85-18 25'), and (18 25-18 85')
NO RECOVERY	No recovery (19 6-20 0') Drilled through rock

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 90	GROUND ELEVATION (FT)	6070 90	PROJECT NUMBER	CLS-RFI/RI	LOG OF BORING NUMBER
NORTH	746295	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57793
EAST	2080235	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/29/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown Area Surface Disturbance South of IHSS 133

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE / PERCENT RECOVERY / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

0% 50% 100% 0% 100%

BH50324AS
BH50351AS
BH50353AS
BH50338AS
BH50354AS

RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)
1 30 /2 00	6050	20
	6049	21
0 00 /1 00	6048	22
1 10 /1 40	6047	23
0 00 /0 50	6046	24
1 50 /2 00	6045	25
	6044	26
1 70 /2 00	6043	27
	6042	28
2 00 /2 00	6041	29
		30

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	20 0'-24 1' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6) Gravel sub-rounded and broken up to approx 2 0 in Sand f g to c g, well graded, sub-rounded, quartzose No apparent bedding or fractures Low plasticity fines, non-calcareous Dry 40% gravel, 46% sand, 1% silt, 13% clay No recovery (21 3-22 0'), (22 0-23 0'), and (24 1-24 4') No recovery (24 4-24 9') Drilled through rocks
SC	24 9'-26 4' Clayey Sand with some Silt Light brown (5 YR 5/6), mottled with light olive gray (5 Y 6/1) Sand pred f g, some m g and c g, sub-rounded, quartzose No apparent bedding or fractures Low plasticity fines, non-calcareous Moist 65% sand, 7% silt, 28% clay No recovery (26 4-26 9')
SC	26 9'-28 0' Gravelly Sand with some Clay and trace Silt Same as above, (reference interval 20 0 to 24 1 ft)
CL	28 0'-28 6' Sandy Clay with trace Silt Light brown (5 YR 5/6) Trace gravel, fine grained, sub-rounded Sand pred f g to c g, sub-rounded, quartzose Some carbonaceous material, trace 1 0 mm ironstone nodules (less than 1 0 mm) No apparent bedding or fractures Low to mod plasticity, non-calcareous Moist Note Upper 0 3 or 0 4 ft of core in box is sluff 47% sand, 5% silt, 48% clay No recovery (28 6-28 9')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33 90	GROUND ELEVATION (FT) 6070 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 746295	AREA SURF DIST S OF 133	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57793
EAST 0380235	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/29/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown Area Surface Disturbance South of IHSS 133

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE / PERCENT RECOVERY / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

0% 50% 100% 0% 100%

Recovery/Interval	Datum (ft)	Depth (ft)
	6040	30
	6039	31
2 00 /2 00	6038	32
1 30 /1 00	6037	33
	6036	34
	6035	35
	6034	36
	6033	37
	6032	38
	6031	39
		40

Unified Soils Classification or Rock Type	Description
CL	28 9'-30 2' Sandy Clay with trace Silt Same as above (reference interval 28 0 to 28 6 ft), except color is mod yellowish brown (10 YR 5/6) Coarse fraction decreases with depth Some Fe staining, iron nodules up to 5 0 mm Note Top of Bedrock was indicated on field log at 28 0 ft Top of Bedrock was moved to 30 2 ft due to presence of gravel and alluvial type sand 47% sand, 5% silt, 48% clay
CLAYSTONE	30 2'-33 9' Top of Bedrock at 30 2 ft Claystone with some Silt and trace Sand Light olive brown (5 Y 5/6), mottled with pale olive (10 Y 6/2) Sand v f g, sub-rounded to rounded quartz, occasional c g, rounded sand No apparent bedding or fractures Occasional Fe stained rootlet or worm burrows Interval from approx 31 9 to 32 2 ft is sandier(approx 5-10% sand) Occasional ironstone nodule Trace carbonaceous material Non-calcareous Moist <5% sand, 15% silt, >80% clay
	Total Depth Drilled 33 90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.40	GROUND ELEVATION (FT)	6062.30	PROJECT NUMBER	305-HE3/R1
NORTH 746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DRESLING
EAST 2380338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/03/93

LOG OF BORING NUMBER **57893**

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Drexling Note Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

Sample Number	Sample Depth	Sample Grain Size	Percent Recovery	Recovery/Interval	Depth (ft)	Elevation	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
GH5035AS		50%	100% 0% 100%	1.40/2.00	1	6062			SM	0.0'-1.4' Silty Sand with abundant Gravel and Clay Grayish brown (5 Y 3/2) Dry Note Insufficient quality and quantity of core to log Description from field log No recovery (1.4'-2.0')
GH5038AS				2.00/2.00	2	6061			SM	2.0'-2.6' Gravelly Sand with some Silt, trace Clay Light brown (5 YR 5/6) Gravel sub-angular to rounded quartzose and conglomertic, max size up to 0.5 in Sand f g to c g sub-angular, well graded, quartzose with some mafic rock fragments Trace roots, no apparent bedding or fractures Non-calcareous, non-plastic Dry 20% gravel, 70% sand, 9% silt, 1% clay
GH5036AS					3	6060			SM	2.6'-7.8' Silty Sand with some Gravel and Clay Light olive gray (5 Y 6/1) mottled with light brown (5 YR 5/6) Gravel pred fine with max size up to 2.0 in, sub-rounded to rounded, quartzose Sand f g to c g, well graded, sub-angular to sub-rounded, quartzose with some mafic rock fragments Non-calcareous, no apparent bedding or fractures Dry possible broken cobble at approx 5.5 ft 15% gravel, 53% sand, 19% silt, 13% clay No recovery (5.8'-6.0')
GH5037AS				1.80/2.00	4	6059				
GH5038AS				1.80/2.00	5	6058				
					6	6057				
				1.80/2.00	7	6056				
				0.00/0.40	8	6055			NO RECOVERY	No recovery (7.8-8.0')
									NO RECOVERY	No recovery (8.0-8.4') Overdrilled
					9	6054			SC	8.4'-9.1' Gravelly Sand with some Clay and Silt Yellowish gray (5 Y 7/2) Gravel sub-rounded, max size up to 1.5 in Sand f g to c g, well graded, quartz No apparent bedding or fractures Low plasticity fines, non-calcareous Dry 15% gravel, 63% sand, 9% silt, 13% clay
				1.50/2.00	10	6053			SM	9.1'-9.7' Silty Sand with some Gravel and Clay Same as above (reference interval 6.0 to 7.4 ft) Based on fines being taken for samples

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20 40	GROUND ELEVATION (FT)	6062 90	PROJECT NUMBER	305 RFD/RI	LOG OF BORING NUMBER
NORTH 746257	AREA SURF DIST 3 OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREELING	57893
EAST 2080338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	05/03/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreeling Note Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						10			SC	9 7'-13 4' Clayey Sand with some Gravel, trace Silt Light brown (5 YR 5/6) Gravel fine, sub-rounded Sand f g to c g, well graded, sub-rounded, quartzose No apparent bedding or fractures Possible broken cable at approx 11 0 ft Low plasticity fines, non-calcareous Moist 10% gravel, 72% sand, 5% silt, 13% clay No recovery (10 0'-10 4'), and (12 2'-12 4')
					6052	11				
				1 80 /2 00						
					6051	12				
	BH5036AS									
					6050	13				
				1 60 /2 00						
					6049	14			SC	13 4'-17 75' Clayey Sand with some Gravel, trace Silt Mod yellowish brown (10 YR 4/4) Gravel sub-rounded, f-c, max size up to approx 1 0 in Sand pred f g to m g, trace c g, sub-rounded, quartzose with some mica No apparent bedding or fractures, non-calcareous Low plasticity fines Dry to moist 15% gravel, 53% sand, 3% silt, 29% clay No recovery (14 0'-14 4'), (14 4'-16 8'), and (16 8-17 75')
	BH5036AS									
					6048	15				
	BH5036AS			1 60 /1 60						
					6047	16				
	BH5036AS									
				1 75 /1 75	6046	17				
	BH5036AS									
					6045	18			NO RECOVERY	No recovery (17 75-18 7') Drilled through rocks
				0 00 /0 95						
					6044	19			SC	18 7'-19 1' Clayey Sand with trace Gravel and Silt Light brown (5 YR 4/6) Gravel sub-angular, fine, max size up to 0 5 in Sand pred f g to m g, trace c g, sub-rounded, quartz No apparent bedding or fractures, non-calcareous Low plasticity fines Dry to moist 5% gravel, 53% sand, 4% silt, 38% clay
				1 50 /1 50						
					6043	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT)	6062 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57893
EAST	2080338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	05/03/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50365AS					20			SC	19 1'-20 2' Clayey Sand with some Gravel, trace Silt Same as above (reference interval 13 4 to 17 75 ft)
				0 70 /0 90	6042	21			SC	20 2'-20 9' Gravelly Sand with some Clay, trace Silt Yellowish gray (5 Y 7/2) mottled with light brown (5 YR 5/6) Gravel and cobbles rounded, quartzite Sand f g to c g, well graded, sub-rounded, quartz No apparent bedding or fractures, non-calcareous Low plasticity fines Dry 40% gravel, 46% sand, 1% silt, 13% clay
				0 00 /0 90	6041	22				No recovery (20 9'-21 1'), and (21 1'-22 0')
	BH50342AS			1 60 /2 00	6040	23			SC	22 0'-23 6' Clayey Sand with some Gravel, trace Silt Same as above (reference interval 13 4 to 17 75 ft) Cobble at 23 3 ft
	BH50366AS				6039	24				No recovery (23 6'-24 0'), (24 0'-24 4') Overdrilled
				0 00 /0 40						
					6038	25			CLAYEY SANDSTONE	24 4'-26 9' Top of Bedrock at 24 4 ft Clayey Sandstone with some Silt Yellowish orange (10 YR 6/6) Sand v f g with trace f g, sub-rounded, quartz Trace carbonaceous material Occasional Fe staining and filled rootlets or burrows Mod to highly weathered, mod to highly friable, poorly indurated No apparent bedding or fractures, non-clacareous 52% sand, 20% silt, 28% clay
				2 00 /2 00	6037	26				
	BH50367AS				6036	27			SANDSTONE	26 9'-27 3' Sandstone with some Silt and Clay Dark yellowish orange (10 YR 6/6) Sand v f g to c g, poorly sorted, sub-rounded to sub-angular, quartz Some ironstone nodules less than 2 0 mm Occasionally rootlet like structures Fe stained and filled Mod to highly weathered, mod to highly friable, poorly indurated No apparent bedding or fractures, non-calcareous
				2.00 /2.00	6035	28			CLAYEY SANDSTONE	27 3'-28 4' Clayey Sandstone with some Silt Same as above (reference interval 24 4 to 26 9 ft)
					6034	29			SANDSTONE	28 4'-29 9' Sandstone with some Silt and Clay Same as above(reference interval 26 9 to 27 3 ft) Occasional ironstone nodules or whitish sandstone fine gravel clast max size up to 1 0 cm and trace organics
				1 50 /2 00	6033	30				No recovery (29 9'-30 4')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT) 6362 30	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER	
NORTH 746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN)	GEOLOGIST T G DREILING		
EAST 2380338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN) 6 30	DATE DRILLED 05/03/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2 ft not shown

57893

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CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6032	30				
					6031	31				Total Depth Drilled 30 40
					6030	32				
					6029	33				
					6028	34				
					6027	35				
					6026	36				
					6025	37				
					6024	38				
					6023	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	6089.50	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	745738	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57993
EAST	0079226	LOCATOR NUMBER 65	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	04/28/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50320MS BH50327MS			1.00/2.00 1.60/2.00	6089 6088 6087 6086	0 1 2 3			SC	0.0'-3.6' Gravelly Sand with some Clay and trace Silt Mod brown (5 YR 4/6) Well graded, sub-rounded f-c gravel up to 2.0 in Broken cobble at approx 3.1 ft f g to c g, well graded, sub-rounded quartz sand with some mafic sand No apparent bedding or fractures, dry, low plasticity fines, non-calcareous 40% gravel, 43% sand, 3% silt, 14% clay No recovery (1.0-2.0'), (3.6-4.0')
BH50328MS			1.60/2.00	6085 6084	4 5			SC	4.0'-5.6' Gravelly Sand with some Clay and Silt Yellowish brown (10 YR 6/4) Sub-rounded, f-c gravel up to approx 2 in Pred f g, some m g and c g sub-rounded Some sub-rounded quartz sand with some mafic sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 25% gravel, 47% sand, 7% silt, 21% clay No recovery (5.6-6.0')
			1.70/2.00	6083 6082	6 7			SC	6.0'-9.8' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6), sub-angular to sub-rounded f-c gravel up to 1.5 in f g to c g well graded, sub-rounded quartzose sand with some mafic sand No apparent bedding and fractures Dry to moist, low plasticity fines, non-calcareous 35% gravel, 46% sand, 2% silt, 17% clay No recovery (7.7-8.0')
			2.00/2.00	6081 6080	8 9 10			SW	9.8'-10.0' Sand with trace Silt and Clay Well graded sand composed of decomposed granite rock, with sub-angular pred quartz grains, some mafic sand, micas and hornblende Dry non-plastic, non-calcareous 90% sand, 5% clay, 5% silt

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 22.00	GROUND ELEVATION (FT)	6089.50	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	745738	AREA SURF DIST 3 OF 133	CASING DIAMETER (IN)		GEOLOGIST	T.S. DREILING	57993
EAST	2079226	LOCATOR NUMBER 65	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	04/28/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			2.00/2.00	6079	10			SC	10.0'-11.0' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 6.0 to 9.8 ft) 35% gravel, 46% sand, 2% silt, 17% clay
			2.00/2.00	6078, 6077	11, 12			SC	11.0'-13.0' Gravelly Sand with some Clay and Silt Light brown (5 YR 5/6) Sub-rounded gravel up to 2 in Broken cobble at 11.8 ft F.g. to c.g., well graded, sub-rounded quartz sand with abundt mafic sand (predom mica and hornblende) No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 20% gravel, 56% sand, 5% silt, 19% clay
			2.00/2.00	6076	13			SC	13.00'-14.00' Clayey Sand with trace Gravel and Silt Light brown (5 YR 5/6) Sub-rounded gravel up to approx 0.5 in F.g. to m.g. and some c.g., sub-rounded quartz sand No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous 5% gravel, 72% sand, 2% silt, 21% clay
			2.00/2.00	6075, 6074	14, 15			SC	14.0'-15.2' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (10 YR 5/6) F.g. to m.g. sub-rounded quartz sand with trace mica and c.g. sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 61% sand, 12% silt, 27% clay
			0.75/0.75	6073	16			GC	15.2'-16.8' Sandy Gravel with some Clay and trace Silt Light brown (5 YR 5/6) Broken cobbles, fine to coarse, sub-angular to sub-rounded gravel Pred F.g. to c.g., sub-rounded, quartz sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 50% gravel, 37% sand, 3% silt, 10% clay
			0.00/1.75	6072	17				No recovery (16.8-18.5')
			2.00/2.00	6071, 6070	18, 19, 20			SC	18.5'-20.0' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6) Sub-rounded gravel, f-c up to approx 1.5 in Broken cobbles at approx 19.6 ft and 20.5 ft F.g. to c.g., pred m.g., sub-rounded, quartzose sand with some mafic minerals (mica) No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 30% gravel, 56% sand, 2% silt, 12% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 22.00	GROUND ELEVATION (FT)	6089.50	PROJECT NUMBER	015-PFD-RI	LOG OF BORING NUMBER
NORTH	795798	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57993
EAST	2079226	LOCATOR NUMBER 65	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	04/28/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		1.40/1.50	6069, 6068, 6067, 6066, 6065, 6064, 6063, 6062, 6061, 6060	20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30			SC	20.0'-22.0' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 18.5 to 20.0 ft) Broken cobbles at approx 20.5 ft and 21.6 ft
								Total Depth Drilled 22.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 30	GROUND ELEVATION (FT)	6035 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747478	AREA 005 IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	58093
EAST	2079688	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/22/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologists T Santangelo-Dreiling, P Jordan Core contains radi oactive intervals and is stored in conex containing radioactive materials Log is from field description only

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50313NS			1 50 /2 00	6035	0			CL	0 0'-1 5' Clay with some Gravel and Sand Mod brown (5 YR 4/4) Some roots Trace to some cobbles Moist No recovery (1 5-2 0')
					6034	1				
					6033	2			CL	2 0'-3 0' Gravelly Clay with some Sand and Cobbles Mod brown Ash mixed in clay at bottom of sample No recovery (3 0-4 0'), (4 0-4 5'), and (4 5-6 0')
				1 00 /2 00	6032	3				
	BH50314NS			0 00 /0 50	6031	4				
				0 00 /1 50	6030	5	04/22/93 ▽			
					6029	6			WASTE/FILL	6 0'-6 6' Asbestos, rusted materials Sand and clay, ashy material, some gravel Wet Some metal pieces and glass Hydropunch from 8 0 - 10 ft Drilled out No recovery (6 6-8 0'), and (8 0-10 0')
				0 60 /2 00	6028	7				
					6027	8				
				0 00 /2 00	6026	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 6035 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747478	AREA OU5, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T S OREILING	58093
EAST 2079688	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/22/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologists T Santangelo-Oreiling P Jordan Core contains radi oactive intervals and is stored in conex containing radioactive materials Log is from field description only

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH5031SAS			1 70 /2 00	6025	10			SILTY CLAYSTONE	10 0'-16 0' Top of Bedrock at 10 0 ft Silty Claystone Light olive gray (5 Y 5/2) Weathered to unweathered Mod plasticity Dry to moist No recovery (11 7-12 0'), and (13 2-14 0')
					6024	11				
				1 20 /2 00	6023	12				
					6022	13				
				2 00 /2 00	6021	14				
					6020	15				
					6019	16				Total Depth Drilled 16 00
					6018	17				
					6017	18				
					6016	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.00	GROUND ELEVATION (FT) 6035.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747479	AREA 005, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	58093A	
EAST 2079690	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/22/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T. S. DREILING NO SAMPLES WERE COLLECTED ALL DESCRIPTIONS ARE BASED ON FIELD GEOLOGIST'S LOG EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						0			NO RECOVERY	No recovery (0.0-5.0') Drilled through Center bit reading 400 counts per minute No sample collected
					6035	1				
					6034	2				
				0.00 /5.00						
					6033	3				
					6032	4				
					6031	5				Total Depth Drilled 5.00
					6030	6				
					6029	7				
					6028	8				
					6027	9				
					6026	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 70	GROUND ELEVATION (FT) 609 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747929	AREA 005, IHSS 115	CASING DIAMETER (IN)	GEOLOGIST T G DREILING	58393	
EAST 2081652	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 05/12/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) le ss than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		609	0			SC	0 0'-1 0' Clayey Sand with some Silt and Gravel Dark yellowish brown (10 YR 6/2) Predom sub-angular to angular, fine to cobble size gravel Sand f g to c g, predom m g, well graded, sub-angular, quartzose with abundt mafic sand, black graphite material Trace roots, no apparent bedding or fractures Low plasticity fines, non-calcareous Dry 10% gravel, 67% sand, 9% silt, 14% clay
	BH50418MS			1 70 /2 00	608	1			WASTE/FILL	1 0'-1 7' Landfill Waste Grayish black (N2) Pred sand sized Graphite material, trace clay, glass No recovery (1 7'-2 0')
	BH50419MS			1 50 /2 00	607	2			WASTE/FILL	2 0'-3 5' Landfill Waste Same as above (reference interval 1 0 to 1 7 ft), except 1 in pieces of rusted metal near top of run 1 in pieces of refractory material near bottom of run From field log "The shoe contained yellowish gray (5 Y 8/1) chunks that appear to be dried paint No recovery (3 5'-4 0')
	BH50420MS			1 40 /2 00	606	3			WASTE/FILL	4 0'-5 4' Landfill Waste Same as above (reference interval 2 0 to 3 5 ft), with pieces of vitrified clay pipe, firebrick and charcoal or burnt wood From field log "some blue and white material, and dried paint?" No recovery (5 4'-6 0')
				0.70 /2.00	605	4			WASTE/FILL	6 0'-6 7' Landfill Waste Same as above (reference interval 4 0 to 5 4 ft), with some light brown (5 YR 5/6) clayey material No recovery (6 7'-8 0'), (8 0'-8 7')
				0 00 /0 70	604	5			WASTE/FILL	8 7'-9 7' Landfill Waste Same as above (reference interval 4 0 to 5 4 ft), with some burnt wood and <0 5 mm thick pieces of fiber board
	BH50421MS			2 00 /2 00	603	6			SC	9 7'-10 5' Clayey Sand with some Silt and Gravel Dark yellowish brown (10 YR 6/2) Pred sub-angular to angular, fine gravel F g to c g, pred m g, sub-angular quartzose sand with some mafic sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 15% gravel, 54% sand, 9% silt, 22% clay
					602	7				
					601	8				
					600	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 70	GROUND ELEVATION (FT) 5009 60	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER	
NORTH 747929	AREA 005, IHSS 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	58393	
EAST 2081652	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 05/12/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) le ss than 0 2 Ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%			10				
	1H60-42LAS				5999	11			CLAYSTONE	10 5'-12 0' Top of Bedrock at 10 5 ft Claystone with trace Silt Mod yellowish brown (10 YR 5/4) Trace carbonaceous material, no apparent bedding Some Fe stained random fractures, occasionally with roots Slightly friable, dry to moist, non-calcareous <5% silt, >95% clay
				1 30 /2 00	5998	12				No recovery (12 0'-12 7')
					5997	13			CLAYSTONE	12 7'-14 7' Claystone with trace Silt Same as above (reference interval 10 5 to 12 0 ft) Color is olive gray (5 Y 4/1) Near verticle Fe stained and filled fracture extends from 12 7 ft to approx 13 6 ft Trace less than 1 mm ironstone nodules, some rootlet-like (1 mm) structures below approx 13 7 ft <5% silt, >95% clay
				2 00 /2 00	5996	14				
					5995	15				Total Depth Drilled 14 70
					5994	16				
					5993	17				
					5992	18				
					5991	19				
					5990	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.90	GROUND ELEVATION (FT) 6008.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747995	AREA 005 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	T.S. DRILLING	58493
EAST 2081653	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	05/13/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Drilling NOTE Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.00/2.00	6008	0			SC	0.0'-2.5' Gravelly Sand with some Clay and trace Silt. Mod. brown (5 YR 4/4). Angular to sub-angular, f-c gravel up to 2 in. F.g. to c.g., well graded, sub-rounded quartz sand with abundt. mafic sand, trace roots. No apparent bedding or fractures, dry to moist, low plasticity, slightly calcareous. 40% gravel, 43% sand, 3% silt, 14% clay. No recovery (1.0'-2.0')
					6007	1				
					6006	2				
	BH50345AS			1.40/2.00	6005	3				2.5'-3.4' Material from 0.0 to 2.5 ft mixed with graphite. Grayish black (N2). No recovery (3.4'-4.0')
	BH50422AS									
					6004	4				4.0'-5.4' Graphite. Grayish black (N2). Dry, some broken glass and other debris. No recovery (5.4'-6.0')
				1.40/2.00	6003	5				
	BH50423AS									
					6002	6				6.0'-8.3' Graphite. Same as above (reference interval 4.0 to 5.4 ft). Some Fe staining. No recovery (7.0'-8.0')
	BH50424AS			1.00/2.00	6001	7				
					6000	8			SC	8.3'-9.4' Graphite as from interval 8.0 to 8.3 ft mixed with Clayey Sand with some Gravel. Light brown (5 YR 5/6). Moist, low plasticity fines, mod. calcareous. 10% gravel, 59% sand, 2% silt, 29% clay
	BH50346AS			1.70/2.00	5999	9			CLAYSTONE	9.4'-9.7' Top of Bedrock at 9.4 ft. Claystone with trace Silt. Pred. light olive gray (5 Y 4/2). No apparent bedding or fractures, some Fe staining, trace ironstone nodules (<0.5 mm). Slightly calcareous, dry. <5% silt, >95% clay. No recovery (9.7'-10.0')
	BH50426AS					10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 90	GROUND ELEVATION (FT)	6008 00	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747895	AREA 305 PASS 215	CASING DIAMETER (IN)		GEOLOGIST	T G DREILING	58493
EAST	2081653	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	6 00	DATE DRILLED	05/13/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	5998	10			CLAYSTONE	10 0'-12 0' Claystone with trace Silt Same as above (reference interval 9 4 to 9 7 ft) Pred light olive gray (5 Y 4/2) with some Fe staining, dry No apparent bedding or fractures, slightly calcareous Trace black carbonaceous material
				2 00 /2 00	5997	11				
				2 00 /2 00	5996	12			CLAYSTONE	12 0'-13 5' Claystone as from interval 10 0 to 12 0 ft , but abundt black carbonaceous material Occurs as both pieces as between 12 0 to 12 3 ft and layers at approx 30 degrees as at 13 4 ft High angle Fe stained fracture at approx 13 5 ft , possible slickensides at approx 12 6 ft at approx 30 degrees
				2 00 /2 00	5995	13				
				0 90 /0 90	5994	14			SANDY CLAYSTONE	13 5'-14 9' Sandy Claystone with trace Silt Light olive gray (5 Y 4/2) V f g to f g , sub-rounded, quartzose sand Non-calcareous No apparent bedding or fractures, except fracture at approx 14 7 ft at approx 70 degrees is coated with crystals of (gypsum) clear to white Dry 24% sand, 4% silt, 72% clay
					5993	15				Total Depth Drilled 14 90
					5992	16				
					5991	17				
					5990	18				
					5989	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21 13	GROUND ELEVATION (FT)	6006 10	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747912	AREA OU5 IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	58593
EAST	2081632	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	05/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50427AS			1 20 /2 00	6006 / 6005	0 / 1			GC	0 0'-1 2' Sand and Gravel Dark yellowish orange (10 YR 4/2) Abundt clay, trace cobbles (Previous description is a field description, since only gravel remains in the core box) Gravel is rounded to angular, containing some mica Trace roots Dry No recovery (1 2'-2 0')
	BH50347AS BH50402AS BH50428AS			1 40 /2 00	6004 / 6003	2 / 3			CL	2 0'-3 2' Sandy Clay with some Silt and trace Gravel Mottled dark yellowish brown (10 YR 4/2) and light olive brown (5 Y 5/6) Sand is pred f g , poorly graded with some quartz and mafic minerals Trace sub-rounded mica Low to mod plasticity dry 3% gravel, 22% sand, 19% silt, 56% clay
	BH50429AS			0 90 /2 00	6002 / 6001	4 / 5			CL	3 2'-4 9' Sandy Clay with some Silt and trace Gravel Olive black (5 Y 2/1) Sand is pred f g , poorly graded, sub-angular to rounded, mostly graphite with abundt quartz and trace mica Material is calcareous and contains a trace of glass chips, low plasticity, dry 3% gravel, 37% sand, 18% silt, 42% clay No recovery (3 4'-4 0'), (4 9'-6 0')
	BH50376AS			1 20 /2 00	6000 / 5999	6 / 7			SC	6 0'-6 6' Gravelly Sand with some Silt and Clay Grayish brown (5 YR 3/2) Sand is pred f g , angular to sub-rounded quartzose, some graphite, trace mafic minerals and mica Calcareous, low plasticity, dry 34% gravel, 36% sand, 11% silt, 19% clay
					5998	8			GC	6 6'-7 2' Sandy Gravel with some Clay and trace Silt Mod brown (5 YR 4/4) Gravel is angular to sub-rounded quartz, fine to coarse Sand is pred f g , angular to sub-rounded, quartzosewith abundt mica, some mafic minerals and trace graphite and feldspar Low plasticity, dry 66% gravel, 16% sand, 5% silt, 13% clay No recovery (7 2'-8 0')
	BH50368AS			1 40 /2 00	5997	9 / 10			SC	8 0'-9 4' Clayey Sand with some Gravel and Silt Light brown (5 YR 5/6) Sand is pred f g to m g , angular to sub-rounded, quartz, trace mafic minerals and mica, low to mod plasticity, moist 6% gravel, 63% sand, 11% silt, 20% clay No recovery (9 4'-10 0'), (10 0'-10 5')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21 10	GROUND ELEVATION (FT)	5306 10	PROJECT NUMBER	305-PR5261	LOG OF BORING NUMBER
NORTH	74912	AREA 305 TASS 115	CASING DIAMETER (IN)		GEOLOGIST	F G DREILING	58593
EAST	1081632	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	05/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /0 50	5996	10				
					5995	11			SC	10 5'-14 9' Clayey Sand with some Silt and Gravel, possible broken cobbles Light brown (5 YR 5/6) Sand is fred f g , angular to sub-rounded, quartz, trace feldspar, mica and mafic minerals, low plasticity moist 30% gravel, 40% sand, 12% silt, 18% clay No recovery (14 9'-16 1')
	BH50369AS			1 20 /2 00	5994	12				
	BH50370AS			0 60 /1 60	5993	13				
					5992	14				
	BH50371AS			0 80 /2 00	5991	15				
	BH50104AS				5990	16				
				1 50 /2 00	5989	17			CLAYSTONE	16 1'-17 6' Top of Bedrock at 16 1 ft Claystone with some Silt Light olive gray (5 Y 5/2), some carbonaceous and iron staining Trace of calcareous material 10% silt, 90% clay No recovery (17 6'-18 1')
	BH50372AS				5988	18				
				2 00 /2 00	5987	19			CLAYSTONE	18 1'-20 0' Claystone with some Silt Same as above (referece interval 16 1 to 17 6 ft) Some healed near verticle fractures coated with some to trace Fe staining below approx 18 9 ft
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 21 10	GROUND ELEVATION (FT) 6006 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747912	AREA OU5 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	58593
EAST 2081632	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	05/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			1 00 /1 00	5986	20			CLAYSTONE	20 0'-21 1' Claystone with some Silt Same as above (reference interval 18 1 to 20 0 ft) Approx 1 in. ironstone nodule at 20 5 ft , some smaller ironstone nodules from approx 20 0 to 21 1 ft Partially healed Fe stained, 80 degree fracture at approx 20 4 ft 10% silt, 90% clay
				5985	21				Total Depth Drilled 21 10
				5984	22				
				5983	23				
				5982	24				
				5981	25				
				5980	26				
				5979	27				
				5978	28				
				5977	29				
					30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 30	GROUND ELEVATION (FT) 5999 60	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 1[illegible]344	AREA 905, TASS 115	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	58693
EAST 1381584	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	05/17/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Don Baughn NOTE Core loss (no recovery intervals) less than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50644WS			0 30 /2 00	5999	0			WASTE/FILL	0 0'-0 3' Landfill Waste Gravel with trace Sand Black (N1) Gravel is pred coarse, sub-rounded to sub-angular Sand is graphite, m g to f g No recovery (0 3'-2 0')
	BH50648WS BH50337WS			1 10 /2 00	5998 5997	1 2			CL	2 0'-3 1' Gravelly Clay with abundt Silt and some Sand Dark gray (N3) Low plasticity, negligible moisture Gravel fractions, well graded, sub-rounded (Description is taken from field log) No recovery (3 1-4 0')
				0 60 /2 00	5996	4			WASTE/FILL	4 0'-4 6' Landfill Waste Large cobble with fine powdery material at 4 4 ft Grayish black (N2) This material does not appear to be soil (Description is taken from field log) No recovery (4 6'-6 2')
	BH50373WS			0 80 /2 00	5994 5993	5 6			WASTE/FILL	6 2'-7 0' Landfill Waste Grayish black (N2) material mingled with poorly sorted sub-rounded gravel (Description is taken from field log) No recovery (7 0'-8 2'), (8 2'-10 2'), and (10 2'-10 3')
	BH50417WS			0 00 /2 00	5992 5991 5990	7 8 9 10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	30.30	GROUND ELEVATION (FT)	5999.60	PROJECT NUMBER	CUS-RFI/RI
NORTH	747944	AREA	CUS, IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	D.C. BAUGHN
EAST	2081584	LOCATOR NUMBER	17	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/17/93

LOG OF BORING NUMBER **58693**

REMARKS: Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE: Core loss (no recovery intervals) less than 0.2 ft not shown

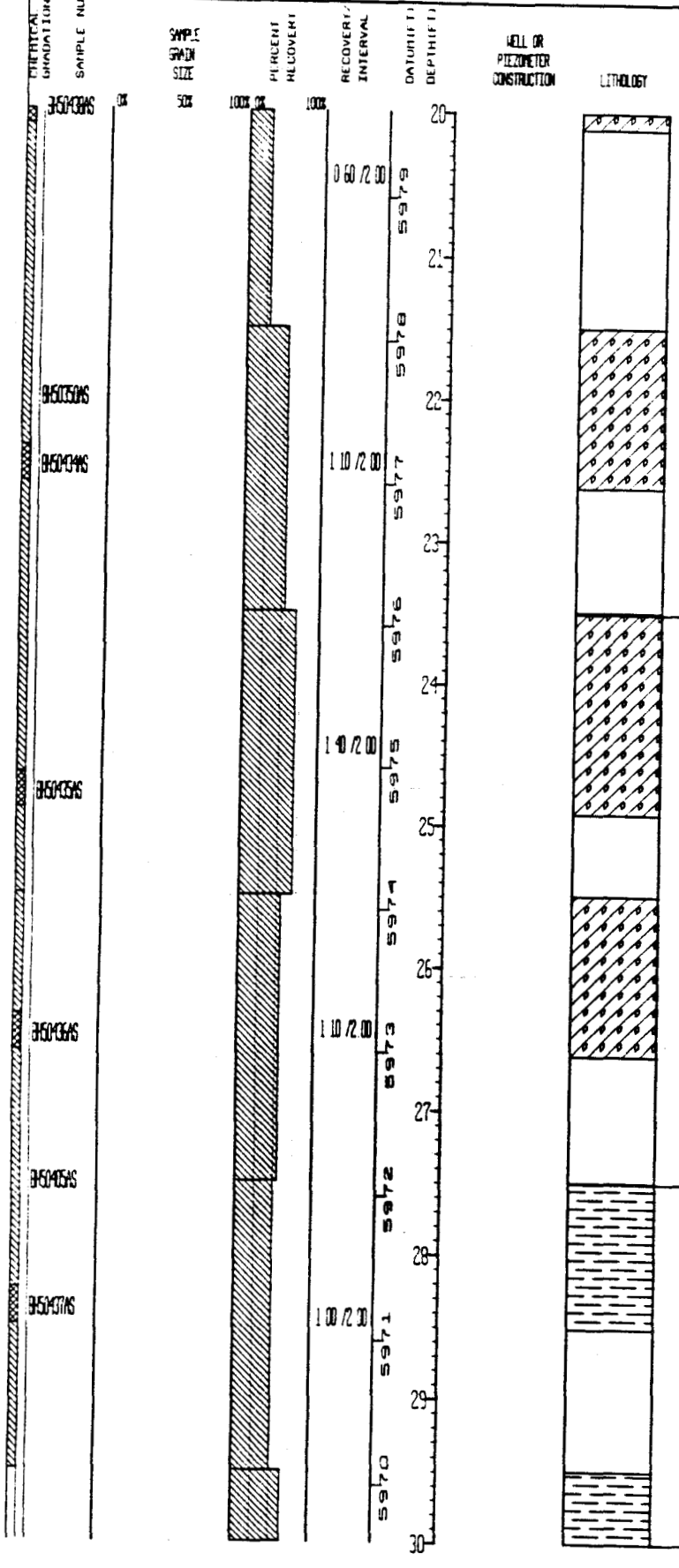
DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			10				
				0.00/0.10	5989				WASTE/FILL	10.3'-11.1' Sand and Gravel size graphite. Grayish black (N2) and other tar like materials appear to be coated with asbestos (originated from a building?)
	BH50374AS			0.90/1.70	5988	11				No recovery (11.1'-12.0'), (12.0'-15.5')
					5987	12				
				0.00/3.50	5986	13				
					5985	14				
	BH50349AS BH50672AS(DUP)				5984	15			SC	15.5'-17.0' Clayey Sand with some Silt and trace Gravel. Pred. dusky brown (5 YR 2/2), some pale brown (5 YR 5/2). Gravel is poorly graded and sub-angular. Sand is pred. f.g., poorly graded, angular to sub-angular, mostly quartz and mafic sand, trace mica, some feldspar. Mod. plasticity, wet, highly weathered.
	BH50375AS			1.50/2.00	5983	16				4% gravel, 54% sand, 15% silt, 27% clay. No recovery (17.0'-17.5')
					5982	17			SC	17.5'-22.6' Clayey Sand with some Silt and Gravel. Pale brown (5 YR 5/2). Gravel is fine to coarse, sub-rounded quartzose. Sand is mod. graded, pred. f.g., angular to sub-angular, quartzose, some mica. Low plasticity, wet, and highly weathered.
				1.30/2.00	5981	18				17% gravel, 36% sand, 12% silt, 35% clay. No recovery (18.8'-19.5'), (20.1'-21.5'), and (22.6'-23.5')
					5980	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 30	GROUND ELEVATION (FT) 5999 60	PROJECT NUMBER	OU5-RFI RI	LOG OF BORING NUMBER
NORTH 747944	AREA OU5 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	58693
EAST 2081584	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	05/17/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE Core loss (no recovery intervals) less than 0 2 Ft not shown

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	23 5'-26 6' Clayey Sand with some Gravel and Silt Pale brown (5 YR 5/2) Gravel is pred fine, and angular to sub-angular Sand is well graded, pred f g, angular to sub-rounded and quartzose with some mica Low plasticity, wet, and highly weathered 20% gravel, 40% sand, 13% silt, 27% clay No recovery (24 9'-25 5'), (26 6'-27 5')
CLAYSTONE	27 5'-30 4' Top of Bedrock between 26 6 and 27 5 ft Claystone with some Silt with trace Sand Med to light gray (N6) Sand is f g Some carbonaceous material Mod plasticity, low friability, dry 2% sand, 18% silt, 80% clay No recovery (28 5'-29 5'), (30 4'-30 9')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.90	GROUND ELEVATION (FT) 5999.50	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 747944	AREA 305 CHSS 115	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	58693
EAST 2081584	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	05/17/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE Core loss (no recovery interval) less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.90/1.40		30				
					5969				NO RECOVERY	No recovery (30.4-30.9')
						31				Total Depth Drilled 30.90
					5968					
						32				
					5967					
						33				
					5966					
						34				
					5965					
						35				
					5964					
						36				
					5963					
						37				
					5962					
						38				
					5961					
						39				
					5960					
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 40	GROUND ELEVATION (FT)	6012 50	PROJECT NUMBER	305-RFCRI	LOG OF BORING NUMBER
NORTH	1475912	AREA 305, CROSS 133 2	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	58793
EAST	1380605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	05/20/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

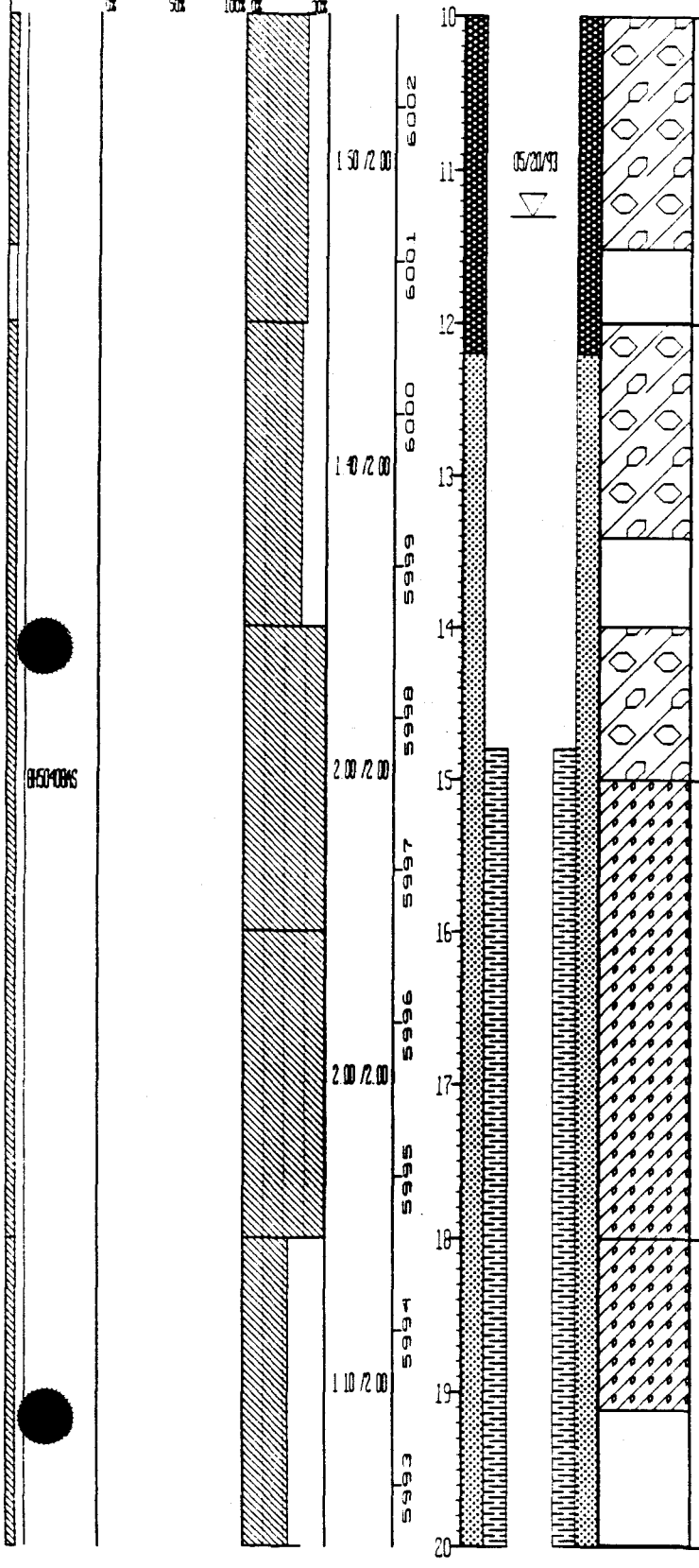
Sample Number	Recovery/Interval	Depth (ft)	Unified Soils Classification or Rock Type	Description
	1 50 /2 00	0–1.5	SC	0 0'-1 5' Clayey Sand with some Silt and trace Gravel Dark yellowish brown (10 YR 3/2) Fine, sub-angular gravel F g to c g, well graded, sub-rounded quartzose sand with some mafic sand, some roots No apparent bedding or fractures, dry, low plasticity fines, slightly calcareous 5% gravel, 51% sand, 11% silt, 33% clay No recovery (1 5'-2 0')
B6S4M06MS	0 80 /2 00	2–3.8	SC	2 0'-2 8' Clayey Sand with some Gravel and trace Silt Mod yellowish brown (10 YR 5/4) Sub-angular gravel up to 1 0 in, but prev fine gravel F g to c g, well graded, sub-rounded, quartzose sand with trace mafic sand, trace roots, trace ironstone nodules less than 1 mm No apparent bedding or fractures Dry, low plasticity fines, slightly calcareous 25% gravel, 46% sand, 3% silt, 26% clay No recovery (2 8-4 0'), (4 0-4 1')
	0 00 /0 10	4		
	1 50 /2 00	4.1–4.9	SC	4 1'-4 9' Clayey Sand with some Gravel and Silt Light brown(5 YR 5/6) Sub-rounded gravel up to 1 5 in F g to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 15% gravel, 45% sand, 8% silt, 32% clay
	1.10 /2.00	4.9–5.6	SC	4 9'-5 6' Gravelly Sand with abundt Clay and some Silt Mod yellowish brown (10 YR 5/4) mottled with light brown (5 YR 5/6) Well graded, sub-rounded gravel up to approx 2 0 in F g. to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 30% gravel, 37% sand, 6% silt, 27% clay No recovery (5 6-6 1')
		6.1–6.9	SC	6 1'-6 9' Gravelly Sand with abundt Clay and some Silt Same as above (reference interval 4 9 to 5 6 ft) Possible broken cobble at 6 3 ft
B6S4M07MS	1 60 /1 90	6.9–7.2	SC	6 9'-7 2' Gravelly Sand with some Silt and Clay Light olive gray (5 Y 6/1) Fine gravel F g to c g, well graded, sub-rounded quartz sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 20% gravel, 56% sand, 10% silt, 14% clay No recovery (7 2-8 1'), (9 7-10 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 28 40	GROUND ELEVATION (FT)	6012 60	PROJECT NUMBER	015-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7512	AREA OU5, IHSS 133 2	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	58793
EAST 2080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	05/20/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH | GRADATION | SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 30%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GC	10 0'-11 5' Sandy Gravel with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Fine to coarse, well graded, sub-angular gravel up to cobble size Cobbles are broken F g to c g, well graded, sub-rounded quartz sand with trace mica No apparent bedding or fractures Moist, wet at 11 3 ft Low plasticity fines, non-calcareous 50% gravel, 37% sand, 4% silt, 9% clay No recovery (11 5'-12 0')
GC	12 0'-15 0' Sandy Gravel with some Clay and trace Silt Same as above, (reference interval 10 0 to 11 5 ft) Color is mod brown (5 YR 4/4) No recovery (13 4-14 0')
SC	15 0'-18 0' Gravelly Sand with some Clay and trace Silt Light brown (5 YR 5/6) Below approx 15 8 ft, color changes to pred pale olive (10 Y 6/2) Pred fine sub-rounded to rounded gravel F g to c g but pred m g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Dry, moist below approx 16 0 ft Low plasticity fines, non-calcareous 20% gravel, 64% sand, 4% silt, 12% clay
SC	18 0'-19 1' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) mottled with pale olive (10 Y 6/2) Pred fine, sub-rounded gravel F g to c g, well graded, quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 30% gravel, 51% sand, 6% silt, 13% clay No recovery (19 1'-20 0')

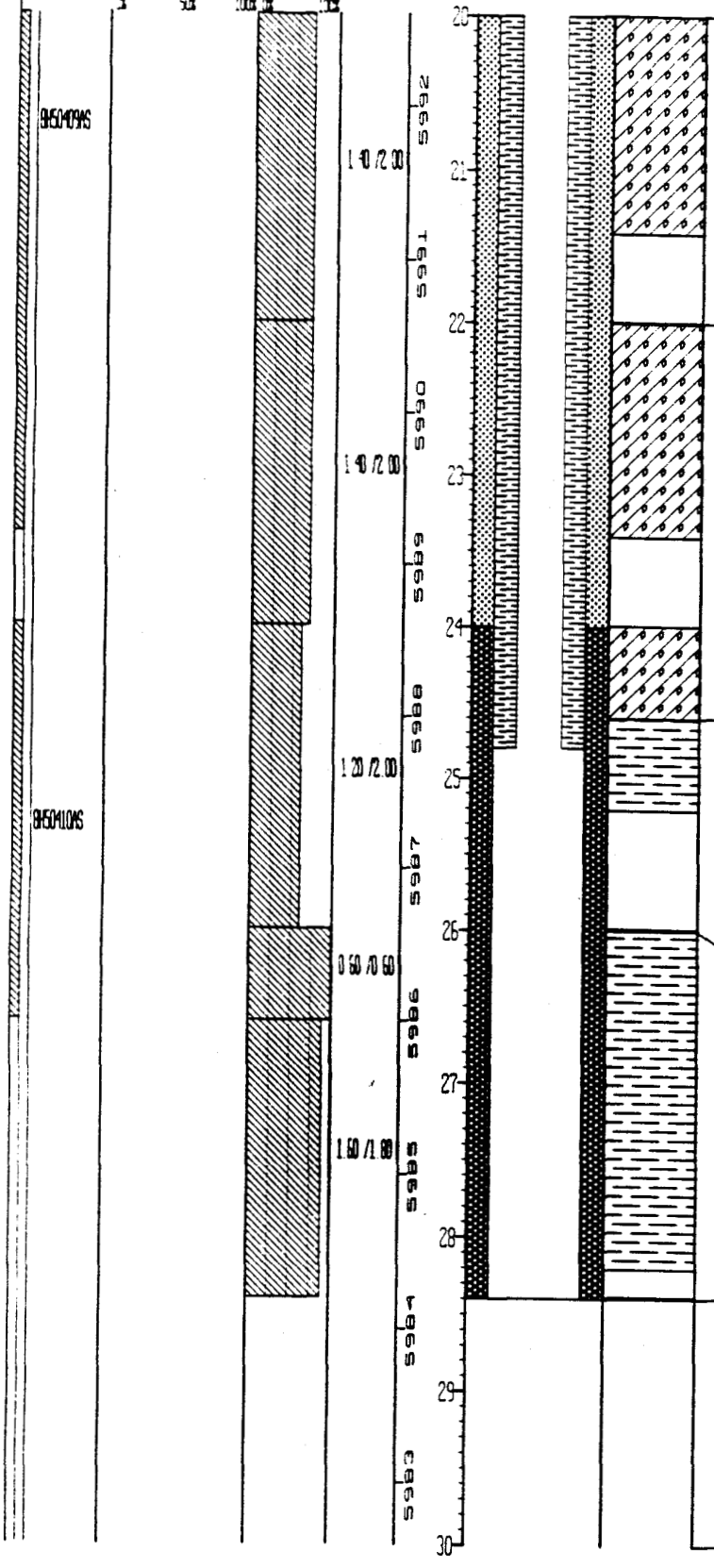
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 28 40	GROUND ELEVATION (FT)	5012 50	PROJECT NUMBER	OU5-RFI/RI
NORTH [illegible]	AREA OU5, IHSS 133 2	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING
EAST 2080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	05/20/93

LOG OF BORING NUMBER **58793**

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH — SAMPLE NUMBER — SAMPLE GRAIN SIZE (0% 50% 100%) — PERCENT RECOVERY (0% 100%) — RECOVERY/INTERVAL — DATUM (FT) — DEPTH (FT) — WELL OR PIEZOMETER CONSTRUCTION — LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	20 0'-21 4' Gravelly Sand with some Silt and Clay Same as above, (reference interval 18 0 to 19 1 ft) Broken cobble in middle of interval No recovery (21 4'-22 0')
SC	22 0'-24 6' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) Pred fine sub-rounded gravel F g to c g , well graded, sub-rounded quartzose sand with abundt mafic sand and minerals (pred micas and hornblende) No apparentbedding or fractures Dry to moist, low plasticity fines, non-calcareous 25% gravel, 57% sand, 11% silt, 7% clay No recovery (23 4-24 0')
CLAYSTONE	24 6'-25 2' Top of Bedrock at 24 6 ft Claystone with trace Silt Olive gray (5 Y 4/1), trace carbonaceous material Micro-fractures indicate possible soft sediment deformation 5% silt, 95% clay No recovery (25 2'-26 0')
CLAYSTONE	26 0'-28 2' Claystone with trace Silt Same as above, (reference interval 24 6 to 25 2 ft), except micro-fracture texture is replaced by occasional Fe stained fractures at 70 degrees to near vertical No recovery (28 2-28 4')

Total Depth Drilled 28 40 Total Depth Casing 27 30
Bottom of Filter Pack 24 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6001.30	PROJECT NUMBER 015-RFI-RI	LOG OF BORING NUMBER
NORTH 7[illegible]475	AREA 005 [illegible]	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	58893
EAST 2079962	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/10/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Don Baughn Note Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.20/2.00	6031	0–2			CL	0.0'-1.2' Sandy Clay with some Silt Mod yellowish brown (10 YR 5/4) Trace sub-rounded gravel, f-c, up to 0 in Pred f g, sub-rounded, quartz sand Trace roots no apparent bedding or fractures, dry, low to mod plasticity, non-calcareous 25% sand, 8% silt, 67% clay No recovery (1.2-2.0')
				0.80/2.00	6030	2–4			CL	2.0'-4.6' Sandy Clay with some Silt Same as above (reference interval 0.0 to 1.2 ft), but no roots No recovery (2.8-4.0')
	8H50458AS			1.30/2.00	6029	4–5			WASTE/FILL	4.6'-5.2' Waste Burnt piece of wood approx 1.25 x 0.75 x 3.0 in Pieces of white fibrous material mixed with ash and soil
				1.00/2.00	6028	5–7			CLAYSTONE	5.2'-5.3' Top of Bedrock at 5.2 ft Claystone with some Silt Light gray (N7), mottled with dark yellowish orange (10 YR 6/6) Mod friable, occasional ironstone nodule Trace carbonaceous material No apparent bedding or fractures 20% silt, 80% clay No recovery (5.3-6.0')
				1.30/2.00	6027	7–10			CLAYSTONE	6.0'-11.4' Claystone with some Silt Same as above (reference interval 5.2 to 5.3 ft), except some Fe staining, especially from 6.7 to 7.0 ft No recovery (7.0-8.0'), (9.3-10.0'), and (11.4-12.0')
	8H50458AS				6026	6				
					6025	7				
					6024	8				
					6023	9				
					6022	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6031.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7475	AREA 005, IHSS 133.1	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	58893
EAST 2079962	LOCATOR NUMBER 37	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED	06/10/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn Note Core loss (no recovery) intervals less than 0.2 ft. not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.40 / 2.00	6021	10				
					6020	11				
					6019	12				Total Depth Drilled 12.00
					6018	13				
					6017	14				
					6016	15				
					6015	16				
					6014	17				
					6013	18				
					6012	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6033 00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747465	AREA 005 IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	58993
EAST	2079697	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/13/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2 FT NOT SHOWN

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50647AS			0 70 /2 00	6033 6032	0 1			CL	0 0'-0 7' Sandy Clay with trace Silt and Gravel Grayish brown (5 YR 3/2) Fine, sub-rounded gravel f g to c g, well graded, quartzose sand with abundt mafic sand, some roots No apparent bedding or fractures Dry, low to mod plasticity, non-calcareous 5% gravel, 37% sand, 5% silt, 53% clay No recovery (0 7'-2 0')
	BH50480AS BH50481AS(DUP)			1 90 /2 00	6031 6030	2 3			CL	2 0'-3 9' Sandy Clay with some Silt and trace Gravel Mod yellowish brown (10 YR 5/4) Pred f g sub-rounded quartz sand with some mafic sand Some ironstone nodules (less than 1 mm), trace carbonaceous material and roots No apparent bedding or fractures Dry, low plasticity, non-calcareous 29% sand 14% silt, 57% clay
				1 10 /2 40	6029 6028	4 5			CL	3 9'-5 1' Silty Clay with trace Sand Pred light olive gray (5 YR 6/1) Some Fe staining, trace carbonaceous material, mod weathered Trace ironstone nodules (less than 1 mm), non-calcareous No apparent fractures Appears to be reworked Claystone 6% silt, 94% clay
					6027	6			NO RECOVERY	5 1'-6 4' No recovery Approx 0 2 ft of slough in corebox at 6 4 ft
				1 70 /1 90	6026	7			CL	6 4'-8 7' Silty Clay with trace Sand Same as above (reference interval 4 0 to 5 1 ft) Layer of sandy material at approx 7 2 ft, med to coarse grained, sub-angular sand No recovery (8 1'-8 3')
	BH50664AS(DUP)				6025	8			CL	8 7'-12 0' Silty Clay with trace Sand Pred light olive gray (5 Y 6/1) Abundt white mottled caliche Trace ironstone nodules (less than 1 mm) F g sub-rounded quartz sand Trace sub-rounded gravel, up to 0 5 in No apparent bedding or fractures Highly calcareous Appears to be reworked Claystone 3% sand, 5% silt, 92% clay No recovery (10 0'-10 4')
				1 70 /2 10	6024	9 10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6033.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 747465	AREA OU5, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	58993
EAST 2079697	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED	06/13/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN BAUGHN NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2 FT NOT SHOWN

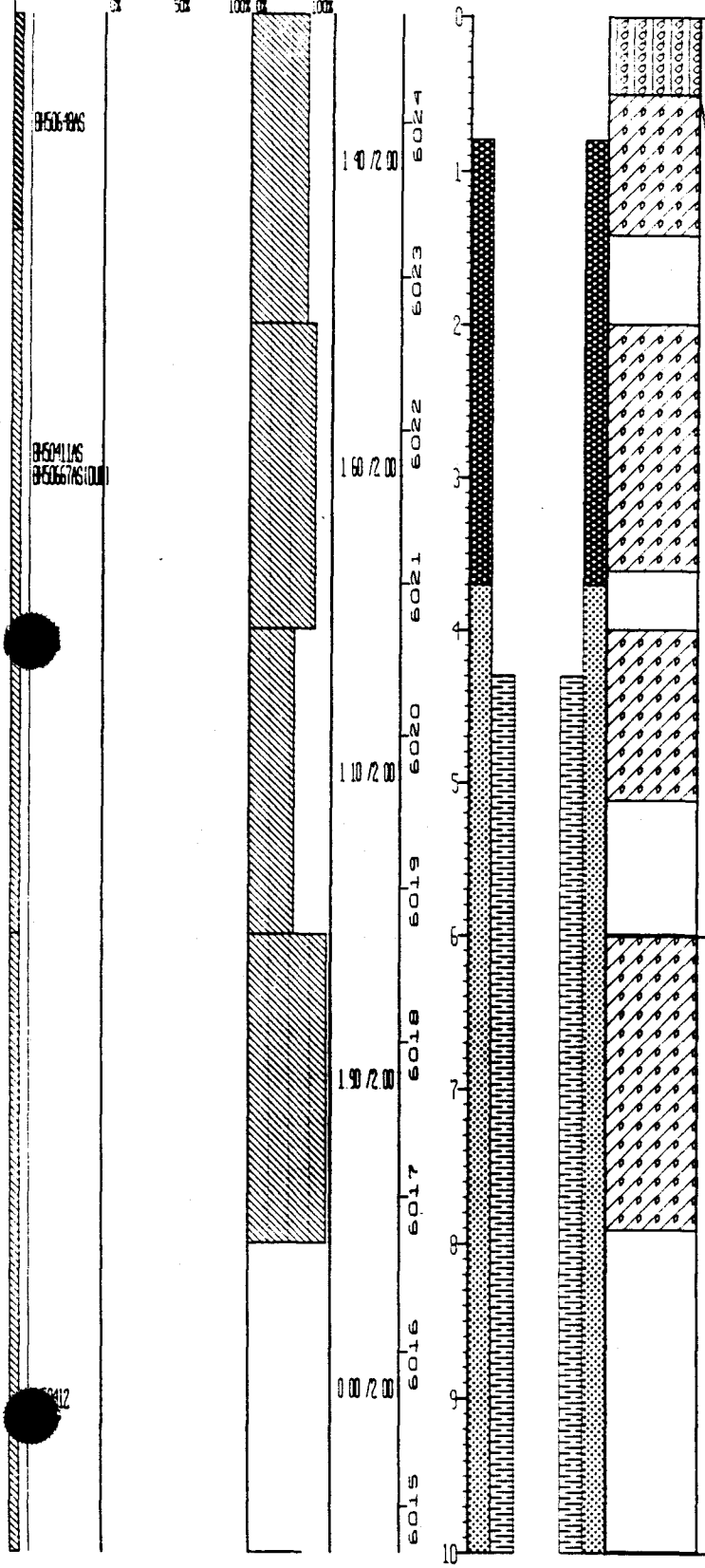
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.60 / 1.60	6023	10				
					6022	11				
					6021	12				Total Depth Drilled 12.00
					6020	13				
					6019	14				
					6018	15				
					6017	16				
					6016	17				
					6015	18				
					6014	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 40	GROUND ELEVATION (FT)	6024 70	PROJECT NUMBER	DUS-RFI-RI	LOG OF BORING NUMBER
NORTH	747350	AREA DUS ISS 133 4	CASING DIAMETER (IN)	0 00	GEOLOGIST	D C BAUGHN	59093
EAST	2079327	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/02/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn Note Core loss (no recovery intervals) less than 0 2 ft not shown

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0 0'-0 5' Sandy Silt with some Gravel and Clay Dark yellowish brown (10 YR 4/2) Gravel is angular to sub-rounded, pred coarse Sand is well graded, pred f g, angular to sub-rounded, quartzose with some mafic sand Abundt roots Non-calcareous, mod plasticity, dry 20% gravel, 32% sand, 34% silt, 14% clay
SC	0 5'-5 1' Clayey Sand with some Silt Mod brown (5 YR 4/4) Sand is poorly graded, pred f g, angular to sub-rounded, quartzose, some mica Low plasticity, slightly calcareous, dry, some Fe staining 55% sand, 15% silt, 30% clay No recovery (1 4-2 0'), (3 6-4 0'), and (5 1-6 0')
SC	6 0'-7 9' Clayey Sand with some Silt and Gravel Same as above (reference interval 0 5 to 5 1 ft) Gravel is poorly graded, pred f and sub-rounded 10% gravel, 49 5% sand, 13 5% silt, 27% clay No recovery (7 9-10 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 40	GROUND ELEVATION (FT) 6024 70	PROJECT NUMBER 305-RFI-PE	LOG OF BORING NUMBER	
NORTH [illegible]	AREA 305, CASS 133 4	CASING DIAMETER (IN) 2 30	GEOLOGIST D C BAUGHN	59093	
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED 16 02 93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Jon Baugnn Note Core loss (no recovery intervals) less than 0 2 ft not shown

DRAFT

Depth (ft)	Unified Soils Classification or Rock Type	Description
10 0'-11 3'	GM	Sandy Gravel with some Silt and Clay Light brown (5 YR 5/6) Gravel is well graded, angular to sub-rounded, pred quartz, some mafics and feldspar Sand is well graded, angular to sub-angular, quartzose, abundt mica, trace mafic sand Low plasticity, non-calcareous, dry 50% gravel, 34% sand, 10% silt, 6% clay No recovery (11 3-12 0')
12 0'-12 9'	SM	Silty Sand with some Clay Mottled light brown (5 YR 5/6) and pale yellowish brown (10 YR 6/2) Sand is pred f g , angular to sub-angular, quartzose, some feldspar and mica Mod plasticity, non-calcareous, dry 62% sand, 22% silt, 16% clay
12 9'-13 8'	GM	Sandy Gravel with some Silt and Clay Light brown (5 YR 5/6) Gravel is well graded, angular to sub-rounded, mostly quartz, some mafics Sand is well graded, angular to sub-angular, quartzose, some mica and mafic grains Low plasticity, non-calcareous, dry 50% gravel, 34% sand, 10% silt, 6% clay No recovery (13 8-14 3')
14 3'-16 0'	SILTY CLAYSTONE	Top of Bedrock at 14 3 ft Silty Claystone with trace f g Sand Brownish gray (5 YR 4/1) to olive black (5 YR 2/1) Abundt carbonaceous material, some Fe staining, mod plasticity, non-friable, massively bedded At 14 6 ft there is a thin (less than 0 1 ft) layer of Sandy Claystone Sand is well graded, sub-angular to sub-rounded Dry 23% silt, 2% sand, 75% clay No recovery (16 0-16 3')
16 3'-18 4'	CLAYSTONE	Claystone with some Silt Light olive gray (5 YR6/1) Some carbonaceous material, trace Fe staining, mod plasticity, slightly friable, massively bedded, dry 20% silt, 80% clay

Total Depth Drilled 18 40 Total Depth Casing 17 15
Bottom of Filter Pack 14 30

Sample Number: 0850413S

Chemical Sample Depth / Graduational Sample Depth

Sample Grain Size: 50%

Percent Recovery: 100% 0%

Recovery Interval: 1 30 /2 00; 1 80 /2 00; 1 70 /2 30; 2 10 /2 10

Datum (ft): 6014, 6013, 6012, 6011, 6010, 6009, 6008, 6007, 6006, 6005

Depth (ft): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Well or Piezometer Construction

Lithology

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5980 60	PROJECT NUMBER	DUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747569	AREA DUS IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	59193
EAST	1081261	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/09/93	

REMARKS Drilling equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) in tervals less than 0 2 Ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50462AS			0 30 /2 00	5980	0			NO RECOVERY	0 0'-0 3' No recovery The following description is from field log Clayey Sand Grayish-brown (5 YR 3/2) Abundant roots, dry No recovery (0 30'-2 0')
				0 40 /2 00	5979	1			SM	2 0'-2 4' Silty Sand with some Clay and trace Gravel Dusky yellowish brown (10 YR 2/2) Abundt roots Sand is pred f g, angular to sub-rounded, quartz and mafic sand grains Gravel is fine, angular to sub-angular Low plasticity, non-calcareous, dry 3% gravel, 45% sand, 32% silt, 20% clay No recovery (2 4'-4 0')
	BH50457AS BH50671AS(DUP) BH50463AS			1 60 /2 00	5978	2			CLAYEY SILTSTONE	4 0'-5 6' Top of Bedrock between 2 4 and 4 0 ft Clayey Siltstone with some f g quartzose Sand Light olive gray(5 Y 6/1) Some calcareous material occuring in pockets Trace iron staining, massively bedded Moist, slightly friable 6% sand, 52% silt, 42% clay No recovery (5 6'-6 0')
				2 00 /2 00	5977	3			SLUFF	6 0'-6 7' Sluff
	BH50464AS			1 50 /2 30	5976	4			SILTY CLAYSTONE	6 7'-7 0' Silty Claystone with trace f g Sand Olive gray (5 Y 4/1) Abundt iron staining Trace calcareous material Moist 3% sand, 40% silt, 57% clay
					5975	5			CLAYEY SILTSTONE	7 0'-9 5' Clayey Siltstone with some f g Sand Light olive gray (5 Y 6/1) Some iron staining, mod friability, massively bedded Some of the iron staining occured in fractures Moist to 8 7 ft, dry from 8 7 ft to 9 5 ft 7% sand, 54% silt, 39% clay No recovery (9 5-10 3')
					5974	6				
					5973	7				
					5972	8				
					5971	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 30	GROUND ELEVATION (FT) 5980 50	PROJECT NUMBER 305 RFI/RI	LOG OF BORING NUMBER
NORTH	747569	AREA 305 DASS 115	CASING DIAMETER (IN)	GEOLOGIST T S DRILLING	59193
EAST	2081261	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED 06/09/93	

REMARKS Drilling equipment CME 750 ATV ASI Rig Geologist T Santangelo-Drilling Note Core loss (no recovery) in intervals less than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5970	10				Total Depth Drilled 10 30
					5969	11				
					5968	12				
					5967	13				
					5966	14				
					5965	15				
					5964	16				
					5963	17				
					5962	18				
					5961	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13 30	GROUND ELEVATION (FT) 5946 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747584	AREA OU5 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	59293
EAST 2082143	LOCATOR NUMBER U7	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED	06/04/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NO	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50444AS			1 25 /2 00	5946 / 5945	0 / 1			CL	0 0'-1 25' Clayey Sand with some Silt and trace Gravel Grayish brown (5 YR 3/2) F g to m g, sub-rounded to sub-angular quartz sand with abundt mafic mineral sand grains Some roots No apparent bedding or fractures Dry, low to mod plasticity, non-calcareous Well weathered 46% sand, 22% silt, 32% clay No recovery (1 25-2 0')
	BH50439AS BH50445AS			1 35 /2 00	5944 / 5943	2 / 3			CL	2 0'-3 35' Sandy Clay with some Silt Dark yellowish brown (10 YR 4/2) F g, sub-rounded to sub-angular quartz sand with some mafic rock fragments No apparent bedding or fractures Dry, low to mod plasticity, mod calcareous Well weathered 2 in sub-rounded gravel at approx 3 0 ft 17% sand, 8% silt, 75% clay No recovery (3 35-4 0')
	BH50446AS			1 30 /2 00	5942 / 5941	4 / 5			CL	4 0'-5 3' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (10 YR 5/4) Pred f g and m g to c g, sub-rounded to sub-angular quartz sand No apparent bedding or fractures Dry, low to mod plasticity, non-calcareous Well weathered 48% sand, 10% silt, 42% clay No recovery (5 3-6 0')
	BH50447AS			1 60 /2 00	5940 / 5939	6 / 7			CL	6 0'-7 6' Clayey Sand with some Silt and trace Gravel Same as above, (reference interval 4 0 to 5 3 ft), with trace ironstone nodules Well weathered No recovery (7 6-8 0')
	BH50440AS BH50448AS			1 60 /2 00	5938 / 5937	8 / 9 / 10			SC	8 0'-10 3' Clayey Sand with some Gravel and Silt Mod yellowish brown (10 YR 5/4) Fine sub-angular gravel F g to c g well graded, sub-rounded quartzose sand with trace mica No apparent bedding or fractures Dry to moist low plasticity fines Possible broken cobble at approx 9 3 ft 20% gravel, 45% sand, 9% silt, 26% clay No recovery (9 6-10 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 90	GROUND ELEVATION (FT) 5946 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747584	AREA 005, IHSS 115	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	59293	
EAST 2082143	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 06/04/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE Core loss (no recovery) intervals less than 0 2 ft not shown

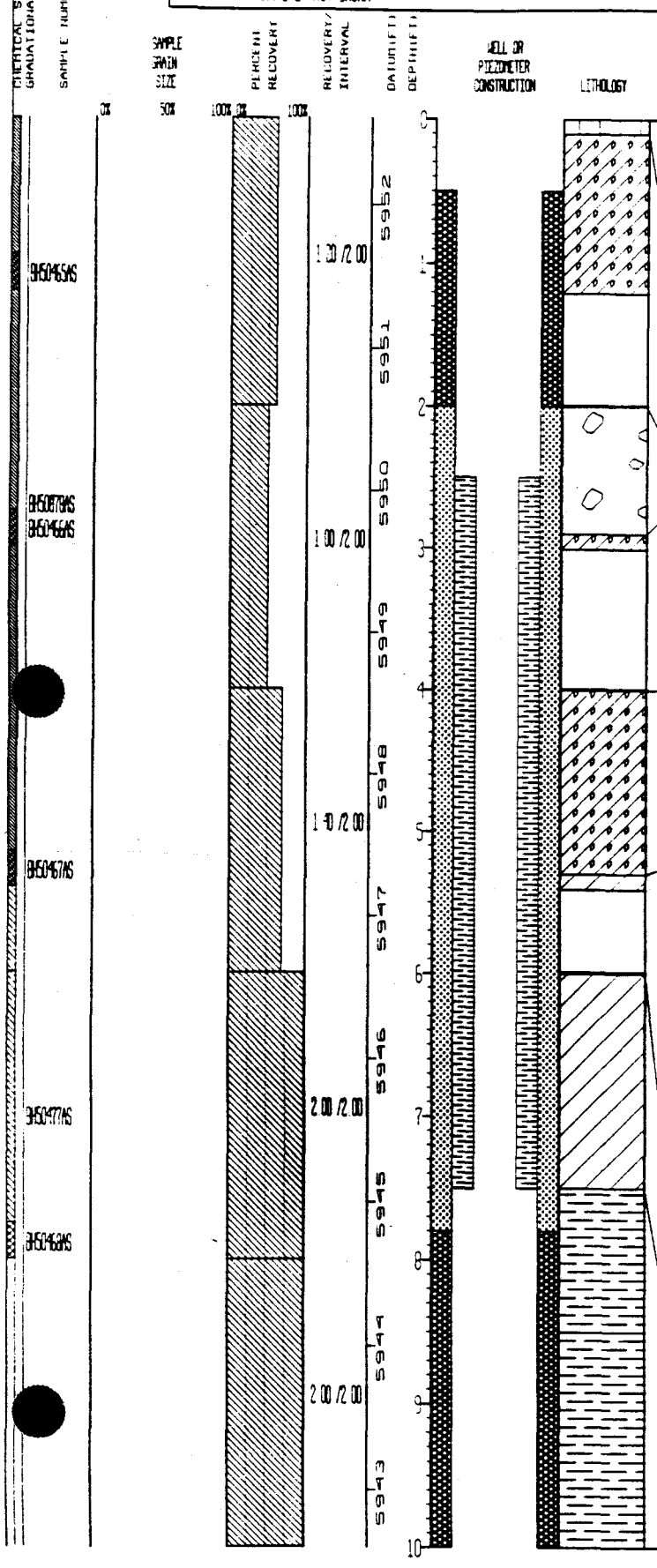
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5936	10				
				2 00 /2 00	5935	11			CLAYSTONE	10 3'-12 0' Reworked Claystone Block Pred pale yellowish brown (10 YR 6/2) Slightly to non-friable, no apparent bedding, trace ironstone nodules Some Fe staining Micro-fractures indicate reworked material Moist, slightly calcareous <5% silt, >95% clay
	0H50449US				5934	12			CL	12 0'-13 8' Gravelly Clay with some Silt and trace Sand Pale yellowish brown (10 YR 6/2) mottled with mod yellowish brown (10 YR 5/4) Sub-rounded gravel up to cobble size F g to c g well graded, sub-rounded quartzose sand Slightly to non-friable Moist, non-calcareous Broken cobble at 13 5 ft 15% gravel, 5% sand, 9% silt, 76% clay
				1 90 /2 00	5933	13				
	0H50450US									No recovery (13 8-14 0')
					5932	14			CL	14 00'-16 90' Gravelly Clay with some Silt and trace Sand Same as above, (reference interval 12 0 to 13 8 ft), but slightly calcareous Broken cobble at 16 9 ft
					5931	15				
	0H50441US			2 90 /2 90	5930	16				
					5929	17			CLAYSTONE	16 9'-18 5' Top of Bedrock at 16 9 ft Claystone with trace Silt Dark yellowish orange (10 YR 6/6) Slightly to non-friable, some Fe staining, trace carbonaceous material No apparent bedding, occasional healed Fe stained fractures with random orientation Moist, non-calcareous <5% silt, >95% clay
				1 60 /2 00	5928	18				
	0H50451US									No recovery (18 5-18 9')
					5927	19				Total Depth Drilled 18 90
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.40	GROUND ELEVATION (FT)	5952.60	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747555	AREA 005, IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T. S. DREILING	59393
EAST	2081489	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/10/93	

REMARKS: DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT



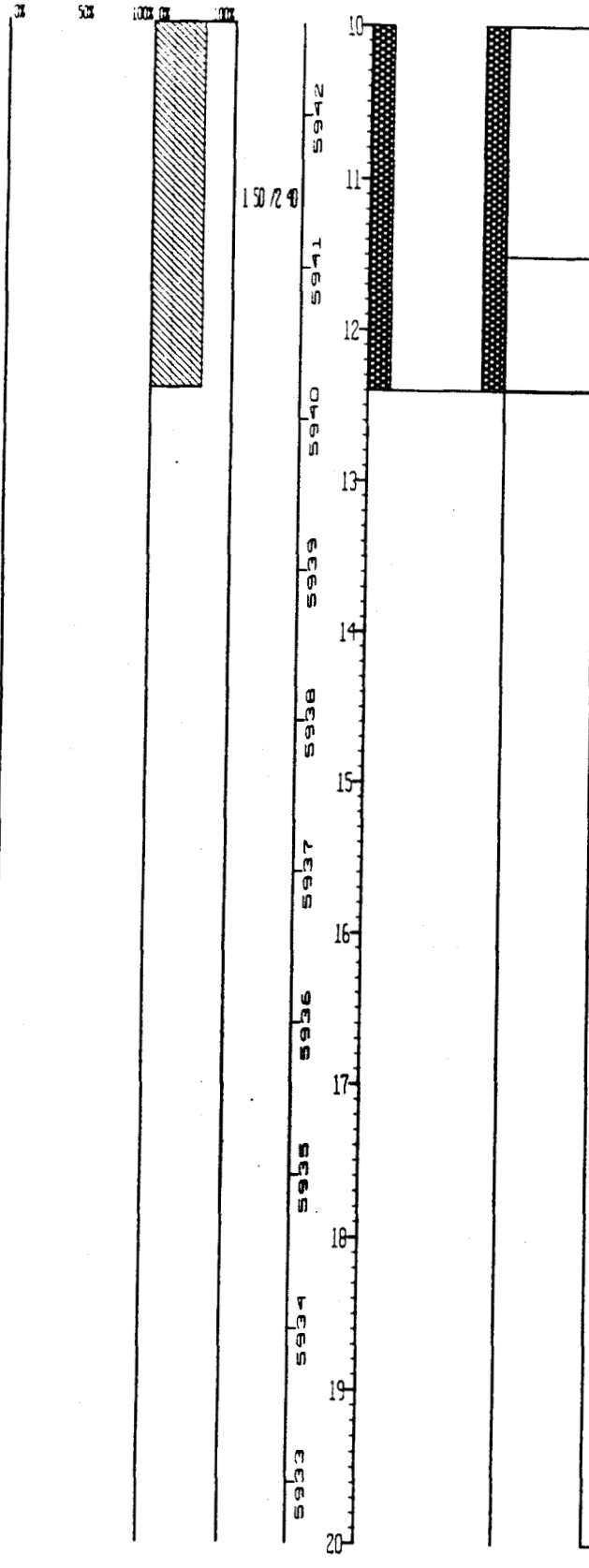
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
ML	0.0'-0.1' Sandy Silt with abundt Clay Mod yellowish brown (10 YR 5/4) Pred f g, sub-rounded quartzose sand with trace m g sand Some roots, possibly thinly bedded, no apparent fractures, dry, low plasticity, slightly calcareous 27% sand, 47% silt, 26% clay
SC	0.1'-1.2' Clayey Sand with some Silt trace Gravel Dark yellowish brown (10 YR 4/2) Sub-angular gravel f g to m g, mod graded, sub-rounded, quartz sand, some c g, sub-angular sand Some roots, no apparent bedding or fractures, dry, slightly calcareous <5% gravel, 60% sand, 17% silt, 18% clay No recovery (1.2-2.0')
GP	2.0'-2.9' Broken Cobbles Quartzite with some micaceous and feldspathic partings 100% cobbles
SC	2.9'-3.0' Clayey Sand with some Silt Mod brown (5 YR 3/4) F g to c g, well graded, sub-rounded, quartzose sand with trace mafics Trace fibrous mineral (actinolite? chrysotyle?) No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 58% sand, 10% silt, 32% clay No recovery (3.0-4.0')
SC	4.0'-5.3' Clayey Sand with some Silt and trace Gravel Mod brown (5 YR 3/4) Sub-angular, quartzite, metamorphic gravel F g to c g, well graded, sub-rounded, pred quartz sand with some mafics No apparent bedding Moist to wet, low plasticity fines, non-calcareous 5% gravel, 55% sand, 8% silt 32% clay
CL	5.30'-5.40' Sandy Clay with some Silt, trace Gravel Pred light olive gray (5 Y 5/2), mottled with mod yellowish brown (10 YR 4/4), and light brown (5 YR 5/6), appears to be Reworked Claystone intermixed with coarser alluvium Sub-rounded gravel up to 1.5 in F g to c g, well graded, sub-rounded, quartzose sand No apparent bedding structures or fractures Moist to wet, low to mod plasticity, slightly calcareous (esp claystone) 5% gravel, 41% sand, 11% silt, 43% clay No recovery (5.4-6.0')
CL	6.0'-7.5' Sandy Clay with some Silt, trace Gravel Same as above, reference interval 5.3 to 5.4 ft Appears to be Reworked Claystone Approx 0.25 in Fe stained layers at approx 6.5 and 6.9 ft Generally coarser grained layer between 7.0 and 7.4 ft with pred cobbles between 7.4 and 7.5 ft
CLAYSTONE	7.5'-8.5' Top of Bedrock at 7.5 ft Claystone with trace Silt and Sand Pred light olive gray (5 Y 5/4), mottled with Fe stained blotches Trace calcite patches Slightly carbonaceous, moist to wet, trace 1 to 2 mm ironstone nodules at approx 7.6 ft White, v f g sand is in thin layers and patches between 8.0 and approx 8.3 ft At approx 8.3 ft brown organic piece approx 2 cm by 2mm around <5% sand, 5% silt, >90% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.40	GROUND ELEVATION (FT)	5952.50	PROJECT NUMBER	305-RFI-P1	LOG OF BORING NUMBER
NORTH	747555	AREA 305, CASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T. G. DREILING	59393
EAST	2081-889	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/10/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



CLAYSTONE

8.5'-10.0' Claystone with abundt carbonaceous material (coal), as near horiz laminea between 8.5 and 9.0 ft and as larger near vertical structures below 9.0 ft. Pred olive gray (5 Y 4/1), with abundt Fe staining. Lignite is black (N1). No apparent bedding or fractures. Non-calcareous except trace of caliche at approx 9.9 ft. Lightly weathered, moist. <5% silt, >95% clay

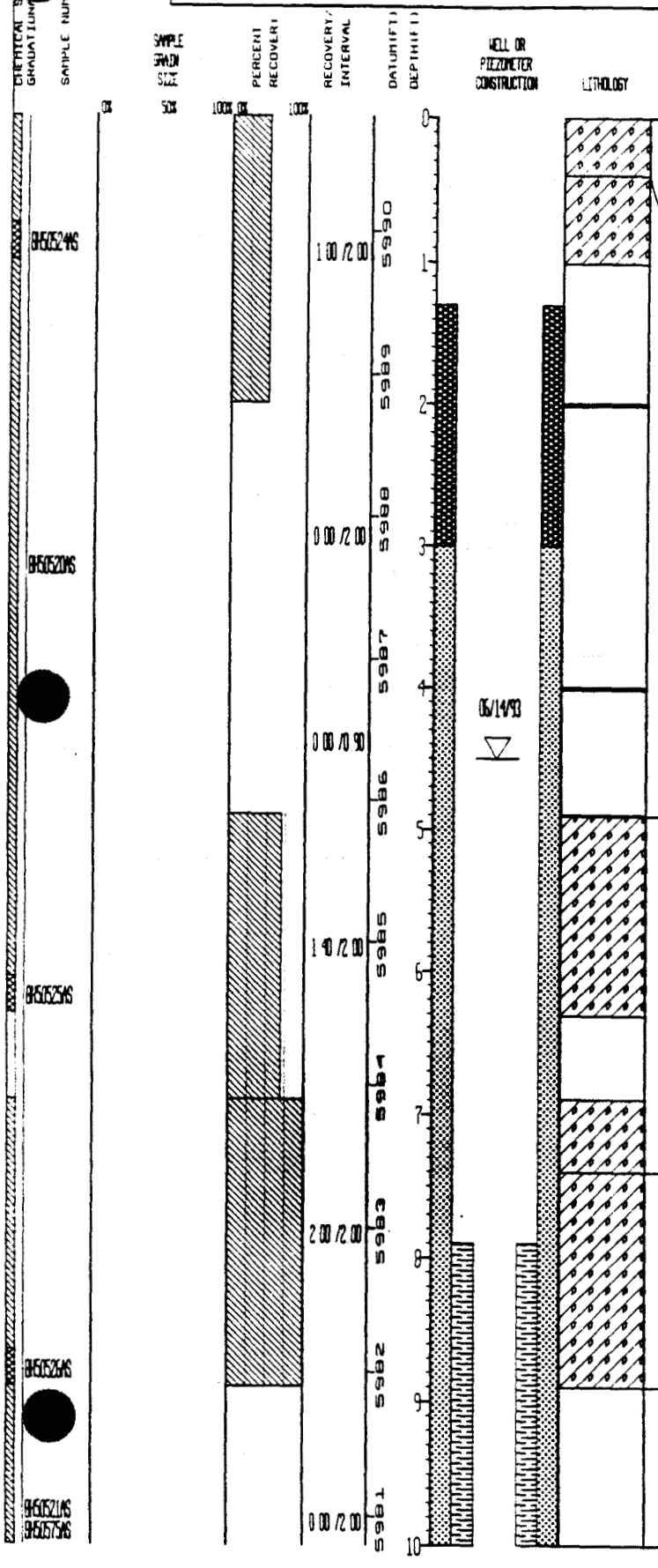
10.0'-11.5' Lignite with some Claystone in upper 0.7 ft. Highly friable. Black (N1). No apparent bedding or fractures. Non-calcareous, moist. No recovery (11.5-12.4')

Total Depth Drilled 12.40 Total Depth Casing 10.00
Bottom of Filter Pack 7.30

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT)	5990 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7324	AREA OU5, IHSS 115 & 196	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	59493
EAST	2081536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LES S THAN 0 2' NOT SHOWN

DRAFT



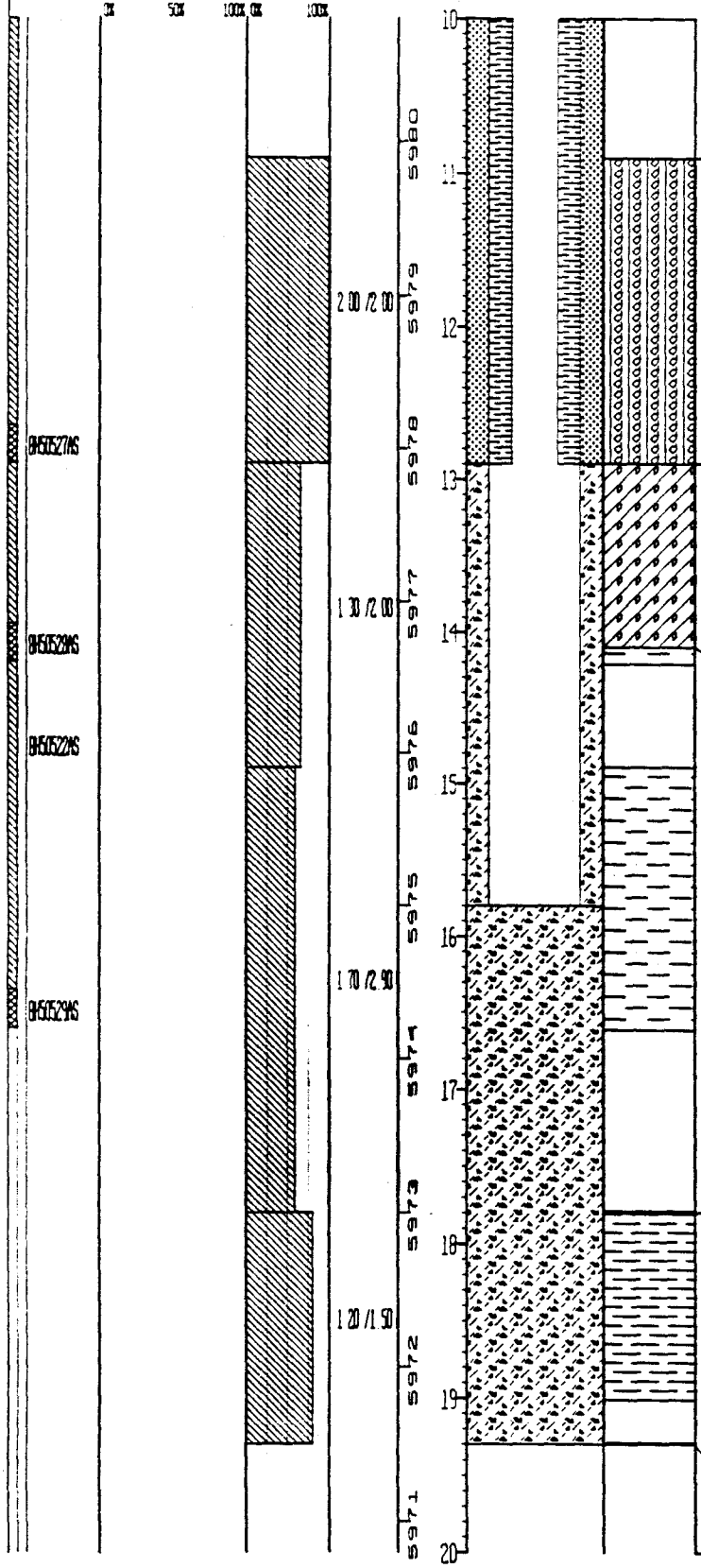
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-0 4' Description from field log due to insufficient quality and quantity of sample Clayey Sand Dark yellowish brown (10 YR 4/2) Abundt gravel, some roots Dry
SC	0 4'-1 0' Description from field log due to insufficient quality and quantity of sample Same as above, reference interval 0 0 to 0 4 ft, but grayish black (N2), some Fe staining NOTE From field geologist's log 2 0-4 0 ft cuttings were black, wet Contained large metal pieces Probable graphite also No recovery (1 0-2 0'), (2 0-4 0') and (4 0-4 9')
SC	4 9'-7 4' Gravelly Sand with some Silt and trace Clay Olive black (5 Y 2/1) Sub-rounded to rounded gravel up to approx 1 in F g to c g, well graded, sand Pred graphite with some to abundt quartz, some wood pieces/chips No apparent bedding or fractures Wet, low plasticity fines, non-calcareous 20% gravel, 63% sand, 12% silt, 5% clay No recovery (6 3-6 9')
SC	7 4'-8 9' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) Sub-angular gravel up to 2 in, possible broken cobbles F g to c g, sub-rounded quartz sand No apparent bedding or fractures Wet, low plasticity fines, non-calcareous 25% gravel, 55% sand, 8% silt, 12% clay
	8 9'-10 9' From field log "Sample kept falling out To rectify problem, driller drove the sampler approx 4 in and let it set for approx 15 min Sample was recovered "

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT)	5990 80	PROJECT NUMBER	015-RFI/RI	LOG OF BORING NUMBER
NORTH	747924	AREA 005 IHSS 115 & 196	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	59493
EAST	2061536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LES S THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION



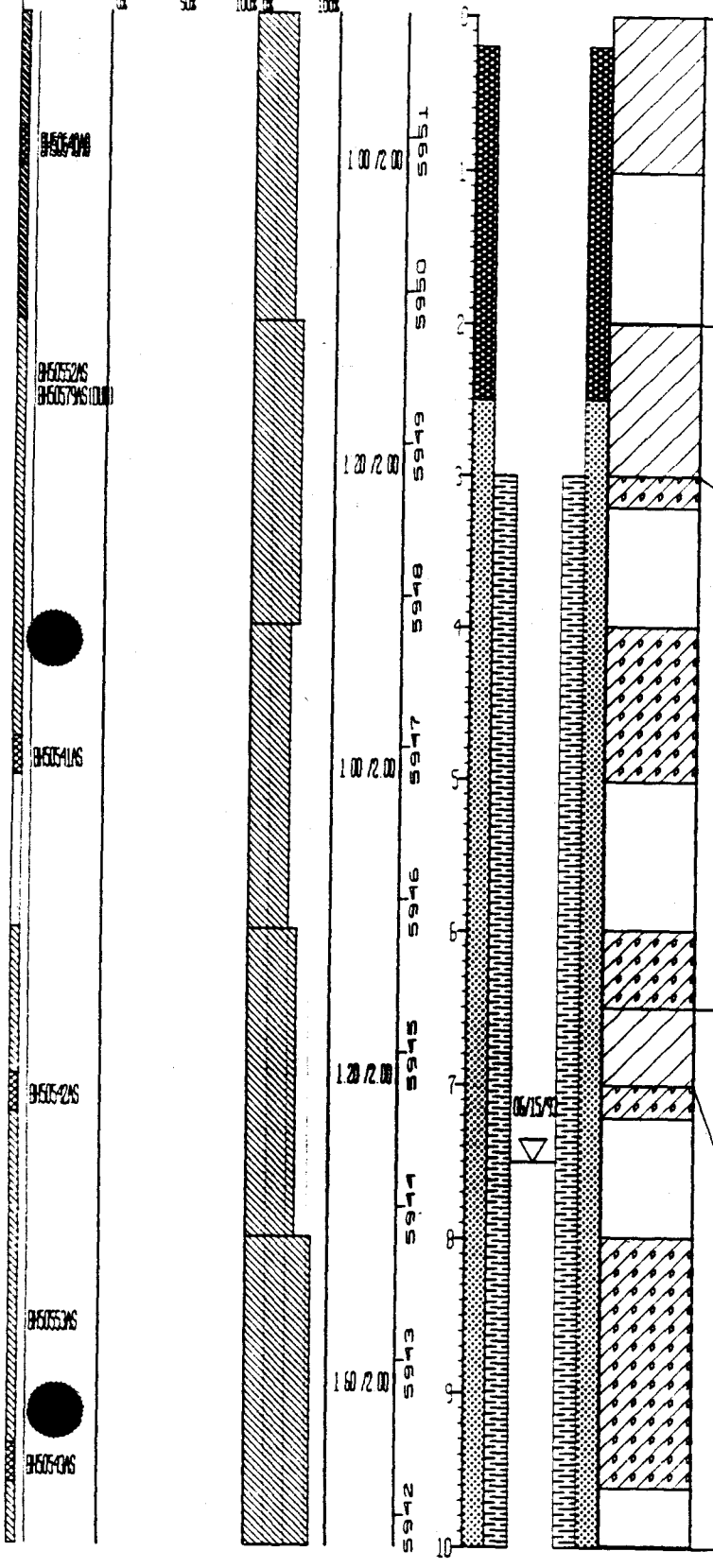
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	10 9'-12 9' Gravelly Sand with some Silt and trace Clay Olive black (5 Y 2/1) Trace broken amber glass Gravel up to approx 1 5 in is rounded to sub-rounded F g to c g, well graded, sub-angular to sub-rounded, quartzose sand with some black minerals No apparent bedding or fractures Wet, non-calcareous 30% gravel, 61% sand, 6% silt, 3% clay
SC	12 9'-14 1' Clayey Sand with some Silt and Gravel Mod yellowish brown (10 YR 5/4) Sub-rounded gravel up to 2 in Pred f g to c g., sub-rounded, quartz sand, trace mafics No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 10% gravel, 50% sand, 7% silt, 33% clay
SANDY CLAYSTONE	14 1'-16 6' Top of Bedrock at 14 1 ft Sandy Claystone with some Silt Dark yellowish orange (10 YR 6/6) V f g, sub-rounded, quartz sand, some Fe staining No apparent bedding or fractures Non-calcareous, moist 46% sand, 8% silt, 46% clay No recovery (14 2-14 9') and (16 6-17 8')
CLAYSTONE	17 8'-19 0' Claystone with trace Silt Olive black (5 Y 2/1) Trace to some carbonaceous material 2 mm seam of carbonaceous material at approx 18 1 ft No apparent bedding or fractures Mod weathered, moist, non-calcareous <5% silt, >95% clay No recovery (19 0-19 3')

Total Depth Drilled 19 30 Total Depth Casing 15 30
Bottom of Filter Pack 12 90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17 30		GROUND ELEVATION (FT)	5951 30	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7577	AREA CU5 IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	59593
EAST	2081786	LOCATOR NUMBER I7		BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0'-1 0' Sandy Clay with some Gravel Pred mod yellowish brown (10 YR 5/4), abundt roots, stiff, dry Description from field log due to no core in box No recovery (1 0-2 0')
CL	2 0'-3 0' Clay with some Silt and trace Gravel Pred dark yellowish brown (10 YR 4/2) Gravel up to 0 75 in No apparent bedding or fractures Dry, low to mod plasticity, non-calcareous 8% silt, 92% clay
SC	3 0'-6 5' Clayey Sand with some Gravel and Silt Dark yellowish brown (10 YR 4/2) Fine, sub-angular to sub-rounded gravel Pred f g and m g, sub-rounded quartz sand with trace mafics No apparent bedding or fractures Dry, low plasticity fines, non-calcareous Broken cobble at 3 0 ft 20% gravel, 52% sand, 7% silt, 21% clay No recovery (3 2-4 0') and (5 0-6 0')
CL	6 5'-7 0' Clay with trace Silt Pred light olive gray (5 Y 5/2) with abundt Fe staining No apparent bedding or fractures Moist, mod plasticity, non-calcareous <5% silt, >95% clay
SC	7 0'-9 6' Gravelly Sand with some Silt and Clay Grayish brown (5 YR 3/2) Sub-rounded c gravel and cobbles up to 3 0 in F g to c g, well graded, sub-rounded quartz sand with some mafics and mica, some roots No apparent bedding or fractures Wet, low plasticity fines, non-calcareous Possible broken mica schist cobble at 9 6 ft 25% gravel, 55% sand, 10% silt, 10% clay No recovery (7 2-8 0') and (9 6-10 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17 90	GROUND ELEVATION (FT)	5951 30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747577	AREA 305, IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	59593
EAST	2081786	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0 2 ft not shown .

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50544AS			1 10 /2 00	5941	10			SC	10 0'-11 1' Gravelly Sand with some Silt and Clay Same as above (reference interval 8 0 to 9 6 ft) Cobble at approx 10 2 ft Driller estimates top of Bedrock at 13 0 ft No recovery (11 1-12 0'), (12 0-14 0'), and (14 0-14 4')
				0 00 /2 00	5940	11				
				0 00 /0 40	5939	12				
	BH50554AS			1 80 /2 00	5938	13			CLAYSTONE	14 4'-16 2' Claystone with trace Silt Light olive gray (5 Y6/1) mottled with mod yellowish brown (10 YR 5/4) Some carbonaceous material, some caliche filled random fractures Micro-fractures indicate possible soft sediment deformation Wet, highly calcareous No recovery (16 2-16 4')
	BH50545AS			1 30 /1 50	5937	14				
					5936	15				
					5935	16			CLAYSTONE	16 4'-17 7' Claystone with trace Silt Same as above (reference interval 14 4 to 16 2 ft), except decrease in micro-fracture texture Few 1 mm laminae of black carbonaceous material Caliche is along longer and more continuous fractures No recovery (17 7-17 9')
					5934	17				
					5933	18				Total Depth Drilled 17 90 Total Depth Casing 15 95 Bottom of Filter Pack 13 50
					5932	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 50	GROUND ELEVATION (FT)	6017 50	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747365	AREA OU5 I-SS 133 3	CASING DIAMETER (IN)		GEOLOGIST	R M ZEILER	59693
EAST	2079753	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	06/16/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST R ZEILER NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE / PERCENT RECOVERY / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

0% 50% 100% 0% 100%

BH50580AS(OUT)
BH50556AS

1 00 /2 00
1 90 /2 00
2 00 /2 00
0 40 /2 00
0 60 /2 00

6017 6016 6015 6014 6013 6012 6011 6010 6009 6008

0 1 2 3 4 5 6 7 8 9 10

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0 0'-3 7' Gravelly Sand with some Silt and Clay Mod yellowish brown (10 YR 5/4) Fine to coarse, well graded, sub-angular gravel F g to c g well graded, sub-angular quartzose sand with abundt mafic rock fragments, some roots No apparent bedding or fracturs Dry, low plasticity fines, non-calcareous Moist from 2 0 - 3 7 ft 35% gravel, 37% sand, 20% silt, 8% clay No recovery (1 0-2 0')
CL	3 7'-6 0' Sandy Clay with some Silt and trace Gravel Mod yellowish brown (10 YR 5/4) Sub-angular gravel up to approx 2 in Pred f g, sub-rounded quartzose sand No apparent bedding or fractures Moist, low plasticity, slightly calcareous Broken cobble at 4 5 ft 5% gravel, 41% sand, 11% silt, 43% clay
GC	6 0'-6 4' Sandy Gravel with some Clay and trace Silt Mod brown (5 YR 3/4) Fine to coarse, sub-angular gravel up to cobble in size (cobbles are broken by drilling) F g to c g, well graded, sub-angular to sub-rounded quartzose sand with some mafic rock fragments No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 60% gravel, 27% sand, 3% silt, 10% clay No recovery (6 4-8 0') and (8 0-8 1')
SC	8 0'-11 0' Gravelly Sand with some Clay and trace Silt Dark yellowish orange (10 YR 6/6) Pred fine, sub-rounded gravel, occasionally up to 2 in F g to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 35% gravel, 45% sand, 4% silt, 16% clay No recovery (8 7-10 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 50	GROUND ELEVATION (FT) 6017 50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 57365	AREA 005 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST R M ZEILER	59693
EAST 2079753	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 06/16/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST R ZEILER NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		6007	10				
				2 00 /2 00	6006	11			CL	11 0'-13 2' Claystone with trace Silt (Claystone boulder?) Light olive gray (5 Y 5/2) mottled with dark yellowish orange (10 YR 6/6) Mod. to highly weathered, slightly to non-friable No apparent bedding or fractures Moist, non-calcareous Interval 12 1 - 13 2'ft is moist to wet <5% silt, >95% clay No recovery (12 0-12 1')
					6005	12				
				2 00 /2 00		13				
6H5065BAS 6H5066BAS (DUP)					6004	14			CL	13 2'-13 6' Sandy Clay with some Silt and trace Gravel (Claystone mixed/remolded with alluvium) Light olive gray (5 Y 5/2) mottled with mod. yellowish brown (10 YR 5/4) Fine, sub-angular gravel Pred f g to m g and c g sub-rounded quartzose sand, some caliche No apparent bedding or fractures Moist, low plasticity, mod to highly calcareous 5% gravel, 39% sand, 6% silt, 50% clay
				1 00 /1 00	6003					
				0 00 /0 50	6002	15			GC	13 6'-15 0' Sandy Gravel with some Clay and Silt Mod yellowish brown (10 YR 5/4) Pred fine sub-angular gravel with abundt cobbles F g to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous NOTE Borehole/Well #63093 is continuation of this borehole/location to depth of 24 8 ft 40% gravel, 33% sand, 8% silt, 19% clay No recovery (15 0-15 5')
					6001	16				
					6000	17				Total Depth Drilled 15 50
					5999	18				
					5998	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 30	GROUND ELEVATION (FT) 5944 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747553	AREA OU5 IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST	T S DREILINGO	59793
EAST 3082128	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED	06/11/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50488AS			1 10 /2 00	5944	0			CL	0 0'-1 1' No core in box Description from field Sandy Clay Dark yellowish brown (10 YR 4/2) Abundt roots Dry, stiff No recovery (1 1-2 0')
	BH50489AS BH50484AS			1 20 /2 00	5943	1			CL	2 0'-3 2' Sandy Clay with some Silt and trace Gravel Light brown (5 YR 5/6) Pred f g, sub-rounded, quartz sand, trace roots No apparent bedding or fractures Dry, low plasticity, non-calcareous Note Dark yellowish brown Sandy Clay in this interval at top is likely from 0 0 to 1 1 ft interval 29% sand, 18% silt, 53% clay No recovery (3 2-4 0') and (4 0-5 3')
				0 00 /1 30	5942	2				
					5941	3				
					5940	4				
	BH50490AS			1 20 /2 00	5939	5			CL	5 3'-8 7' Sandy Clay with some Silt and trace Gravel Light olive gray (5 Y 6/1), mottled with light brown (5 YR 5/6) Pred f g, sub-rounded, quartz sand No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous Pink conglomerate cobble at 8 5 ft 14% sand, 9% silt, 77% clay No recovery (6 5-7 3') and (8 7-9 3')
					5938	6				
					5937	7				
	BH50885AS BH50491AS			1 40 /2 00	5936	8			SC	9 3'-10 8' Clayey Sand with some Silt and trace Gravel Light olive gray (5 Y 6/1) Rounded f gravel up to approx 0 5 in Pred f g with some m g and c g, sub-rounded, quartz sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous Rounded cobbles at 10 6 to 10 8 ft 5% gravel, 59% sand, 7% silt, 29% clay No recovery (10 8-11 3') and (11 3-13 3')
					5935	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 18 30	GROUND ELEVATION (FT)	5944 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747553	AREA OU5, IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILINGO	59793
EAST	2082128	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/11/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreiling Note Core loss (no recovery) intervals less than 0 2' not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50492AS			1 50 /2 00	5934	10				
					5933	11				
				0 00 /2 00	5932	12				
					5931	13			CLAYSTONE	13 3'-16 1' Top of Bedrock at 13 3' Claystone with trace Silt Light olive gray (5 Y5/2) Trace v f g, sub-rounded, quartz sand Mod to highly weathered Some Fe staining, some caliche, some carbonaceous material, mod calcareous. No apparent bedding or fractures Interval between approx 13 6 to 13 8 ft contains approx 20% f g to c g, rounded, quartz sand Fe staining is not as abundt below approx 15 3 ft <5% silt, >95% clay.
	BH50486AS			2 00 /2 00	5930	14				
	BH50493AS				5929	15				No recovery (16 1-17 3')
				0 80 /2 00	5928	16				
					5927	17			CLAYSTONE	17 3'-18 3' Claystone as from 13 3 to 16 1 ft with occasional decomposed ironstone nodules approx 1 to 2 mm Some near vertical Fe stained healed fractures No apparent bedding Non-calcareous
				1 00 /1 00	5926	18				
					5925	19				
						20				

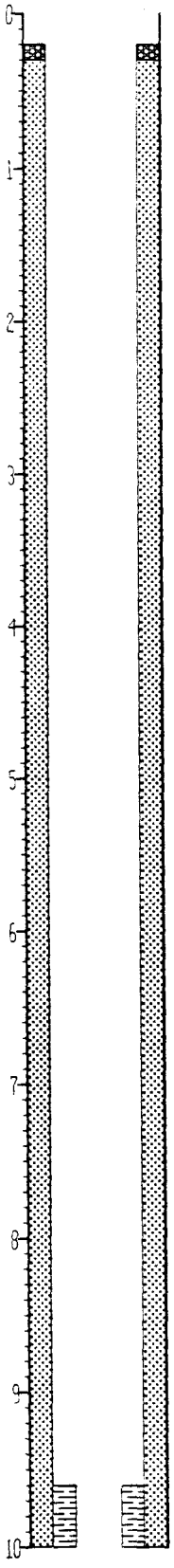
Total Depth Drilled 18 30 Total Depth Casing 16 60
Bottom of Filter Pack 14 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT)	5946.30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747594	AREA OU5 IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN	59893
EAST	2082528	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5946	0				Total Depth Drilled 14.60 Total Depth Casing 14.60
										Bottom of Filter Pack 14.60
					5945	1				
					5944	2				
					5943	3				
					5942	4				
					5941	5				
					5940	6				
					5939	7				
					5938	8				
					5937	9				
						10				



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.50	GROUND ELEVATION (FT)	5946.30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	247594	AREA 305 SWSS 115	CASING DIAMETER (IN)	2.40	GEOLOGIST	P J JORDAN	59893
EAST	2082528	LOCATION NUMBER J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5936	10				
					5935	11				
					5934	12				
					5933	13				
					5932	14				
					5931	15				
					5930	16				
					5929	17				
					5928	18				
					5927	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 30	GROUND ELEVATION (FT)	5944 00	PROJECT NUMBER	005-RFI/RI
NORTH	747550	AREA 005 IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST	2082132	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/09/93

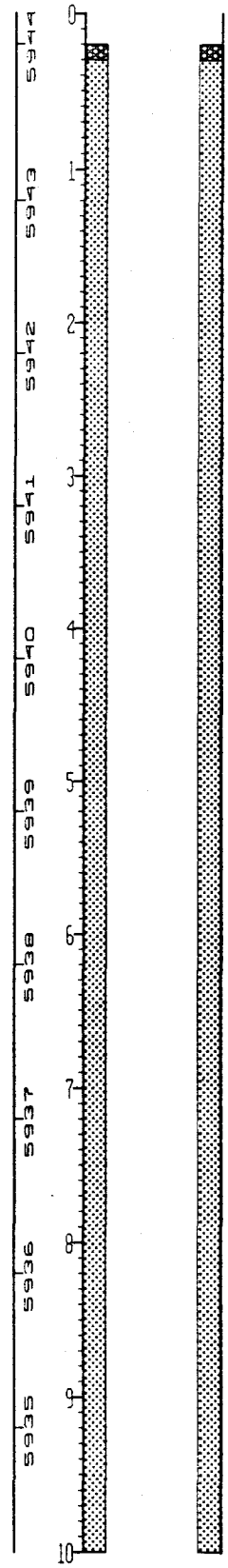
LOG OF BORING NUMBER

59993

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



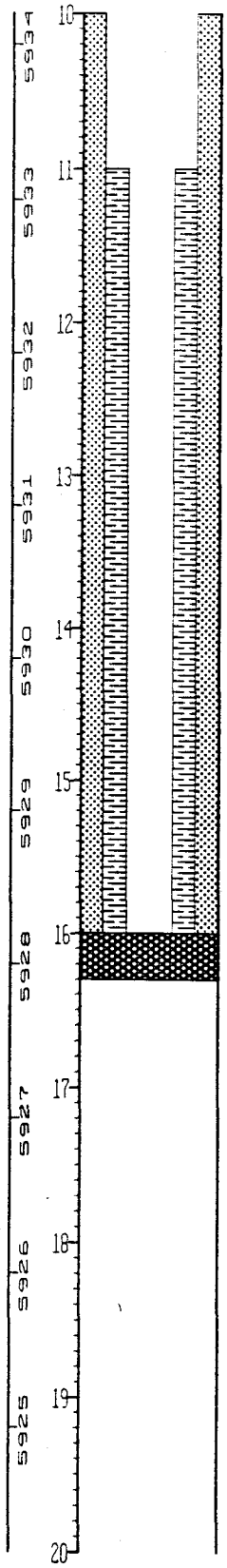
Total Depth Drilled 16 30 Total Depth Casing 16 00
Bottom of Filter Pack 16 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.30	GROUND ELEVATION (FT) 5944.20	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 74550	AREA OU5 IHSS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P J JORDAN	59993
EAST 1082132	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5945 20	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST 2082046	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/09/93

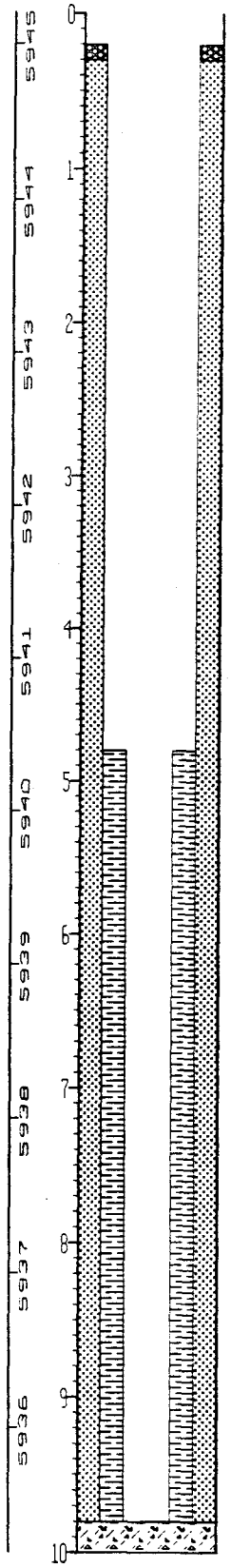
REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

LOG OF BORING NUMBER

60093

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE 0% 50% 100%
PERCENT RECOVERY 0% 100%
RECOVERY/INTERVAL
DATUM(FT)
DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



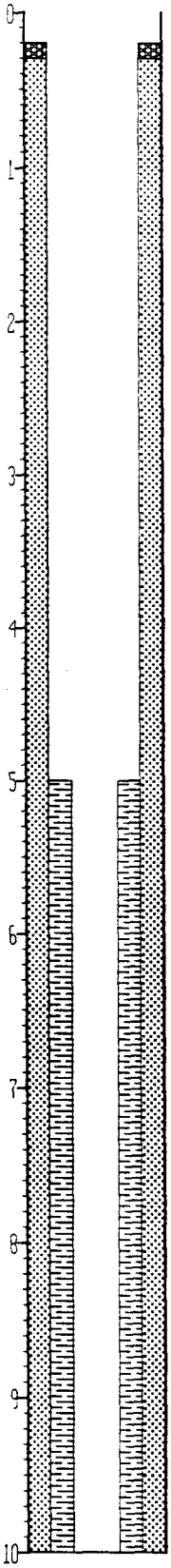
Total Depth Drilled 10 00 Total Depth Casing 9 80
Bottom of Filter Pack 9 80

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5949.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747594	AREA IHSS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P J JORDAN	60193
EAST 2081950	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5949	0				
					5948	1				
					5947	2				
					5946	3				
					5945	4				
					5944	5				
					5943	6				
					5942	7				
					5941	8				
					5940	9				
						10				



Total Depth Drilled 10.00 Total Depth Casing 10.00
Bottom of Filter Pack 10.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	5949 40	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747596	AREA IHSS 115	CASING DIAMETER (IN)	2 40	GEOLOGIST	P J JORDAN	60293
EAST	2081847	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

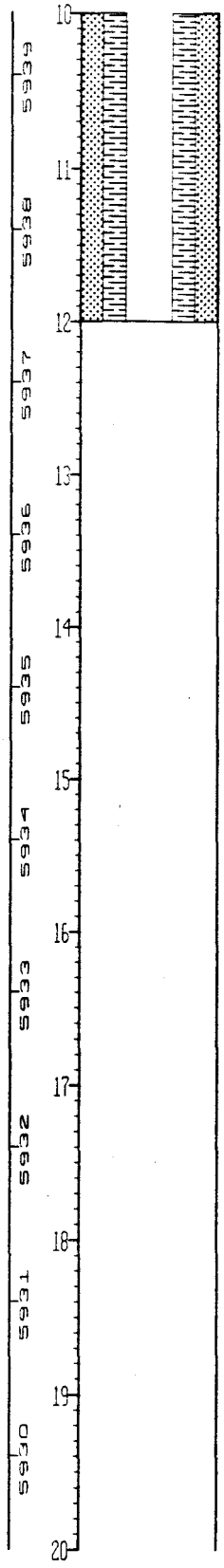
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5949	0				Total Depth Drilled 12 00 Total Depth Casing 12 00 Bottom of Filter Pack 12 00
					5948	1				
					5947	2				
					5946	3				
					5945	4				
					5944	5				
					5943	6				
					5942	7				
					5941	8				
					5940	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5949.40	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747586	AREA IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN	60293
EAST	1081847	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%							

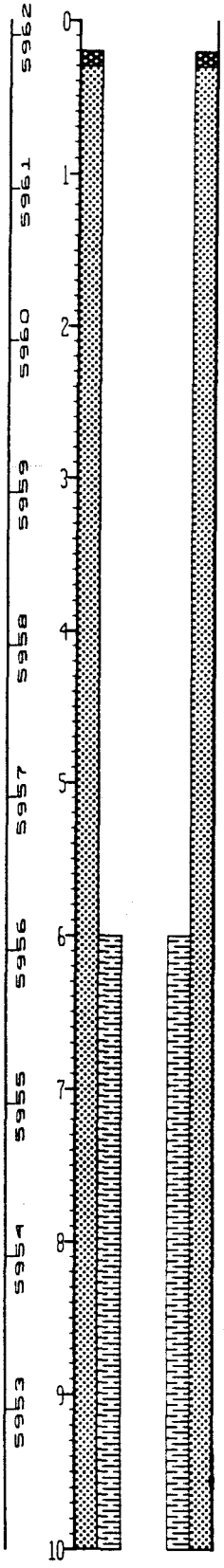


STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 30	GROUND ELEVATION (FT)	5962 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747619	AREA IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN	60393
EAST	2081539	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/11/93	

REMARKS NO CORE WAS TAKEN FOR LOGGING

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 11.00 Total Depth Casing 0.00
Bottom of Filter Pack 11.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	11 00	GROUND ELEVATION (FT)	5962 10	PROJECT NUMBER	[illegible]
NORTH	747619	AREA	IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORGAN
EAST	2081539	LOCATOR NUMBER	I7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/11/93

REMARKS NO CORE WAS TAKEN FOR LOGGING.

LOG OF BORING NUMBER

60393

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5952	10				
					5951	11				
					5950	12				
					5949	13				
					5948	14				
					5947	15				
					5946	16				
					5945	17				
					5944	18				
					5943	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	5984.60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747589	AREA IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN	60493
EAST	2081257	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5984	0				Total Depth Drilled 14.00 Total Depth Casing 14.00
										Bottom of Filter Pack 14.00
					5983	1				
					5982	2				
					5981	3				
					5980	4				
					5979	5				
					5978	6				
					5977	7				
					5976	8				
					5975	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5984.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747589	AREA IHSS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P J JORDAN	60493
EAST 2081257	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5974	10				
					5973	11				
					5972	12				
					5971	13				
					5970	14				
					5969	15				
					5968	16				
					5967	17				
					5966	18				
					5965	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.40	GROUND ELEVATION (FT)	6015.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	745676	AREA OHSS 115	CASING DIAMETER (IN)	1.90	GEOLOGIST	P.J. JORDAN	60593
EAST	2080973	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		6015	0				
						6014	1				
						6013	2				
						6012	3				
						6011	4				
						6010	5				
						6009	6				
						6008	7				
						6007	8				
						6006	9				
							10				

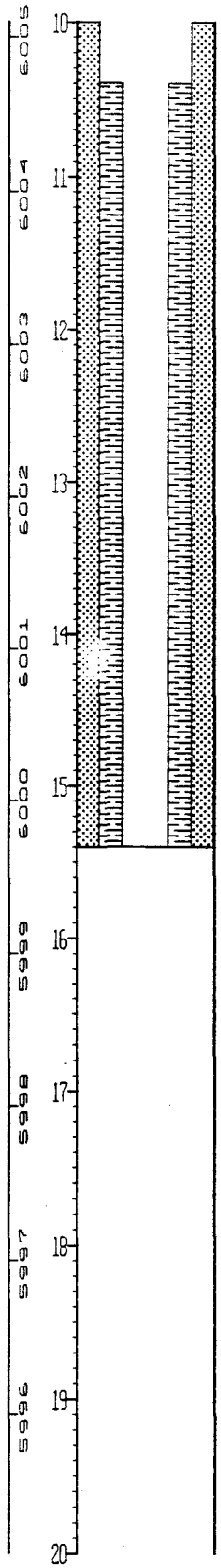
Total Depth Drilled 15.40 Total Depth Casing 15.40
Bottom of Filter Pack 15.40

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.40	GROUND ELEVATION (FT) 6015.10	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747676	AREA IHSS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P.J. JORDAN	60593
EAST 2080973	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		6005	10				
						6004	11				
						6003	12				
						6002	13				
						6001	14				
						6000	15				
						5999	16				
						5998	17				
						5997	18				
						5996	19				
							20				

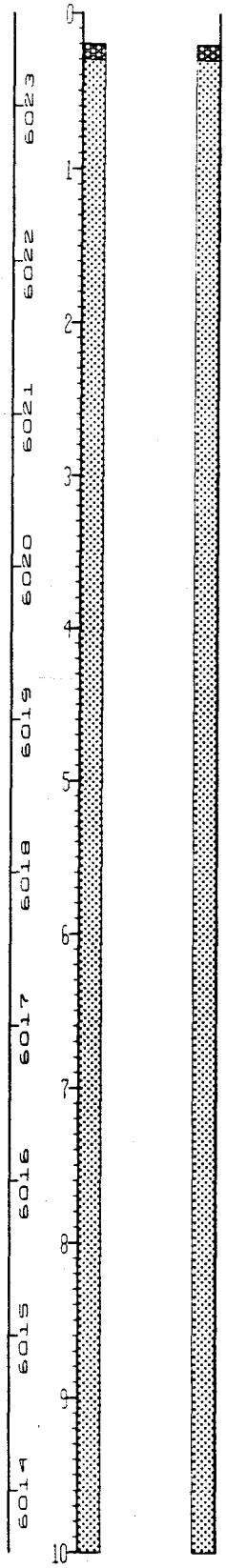


STATE PLANE COORDINATES		TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT)	6023 60	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	747685	AREA DASS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J [illegible]	60693
EAST	2080896	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	16/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



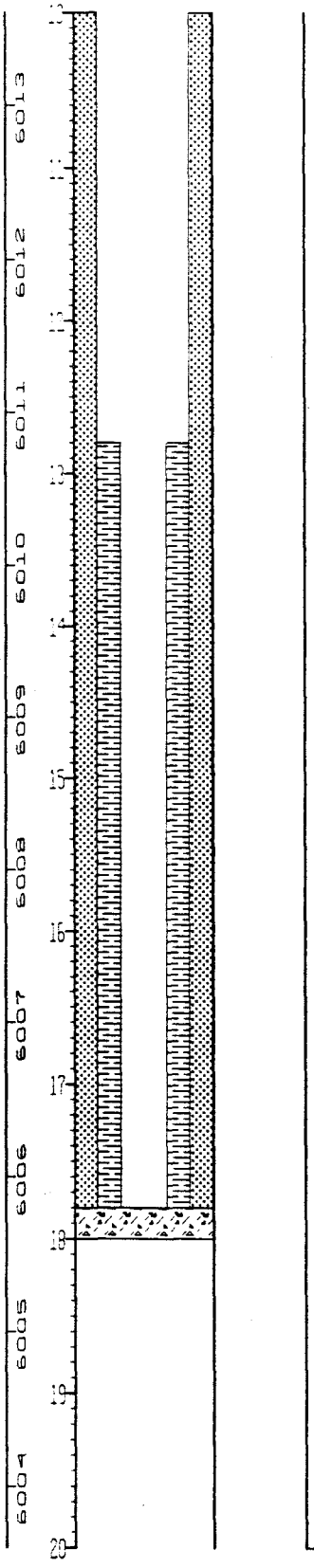
Total Depth Drilled 18 00 Total Depth Casing 17 80
Bottom of Filter Pack 17 80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 18.00	GROUND ELEVATION (FT)	6023.60	PROJECT NUMBER	305-RFI/A1	LOG OF BORING NUMBER
NORTH	77685	AREA IHSS 115	CASING DIAMETER (IN)	8.40	GEOLOGIST	P.J. JORDAN	60693
EAST	2080896	LOCATION NUMBER H7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT)	6030 30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	745836	AREA IAGS 115	CASING DIAMETER (IN)	2 40	GEOLOGIST	P J JORDAN	60793
EAST	2080822	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						6030	0				
						6029	1				
						6028	2				
						6027	3				
						6026	4				
						6025	5				
						6024	6				
						6023	7				
						6022	8				
						6021	9				
							10				

Total Depth Drilled 16 00 Total Depth Casing 16 00
Bottom of Filter Pack 16 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT)	6000.00	PROJECT NUMBER	005-RFI/RI
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN)	2.40	GEOLOGIST	P J JORDAN
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	06/11/93

LOG OF BORING NUMBER 60793

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						6020	10				
						6019	11				
						6018	12				
						6017	13				
						6016	14				
						6015	15				
						6014	16				
						6013	17				
						6012	18				
						6011	19				
							20				

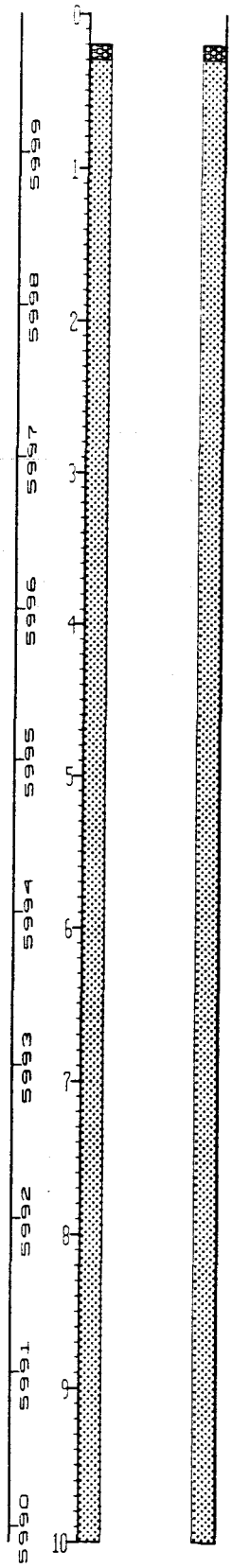
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT)	5999 90	PROJECT NUMBER	305-RFI/RI
NORTH 747843	AREA 1988 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST 2081585	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/14/93

LOG OF BORING NUMBER

60893

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 23 00
Bottom of Filter Pack 23 00

Total Depth Casing 23 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT)	5999 30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	75743	AREA IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORGAN	60893
EAST	2081565	LOCATOR NUMBER IT	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/14/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5990	10				
					5989	11				
					5988	12				
					5987	13				
					5986	14				
					5985	15				
					5984	16				
					5983	17				
					5982	18				
					5981	19				
					5980	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	23.00	GROUND ELEVATION (FT)	5999.90	PROJECT NUMBER	005-RFI/RI
NORTH	747943	AREA	IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN
EAST	2081585	LOCATOR NUMBER	I7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/14/93

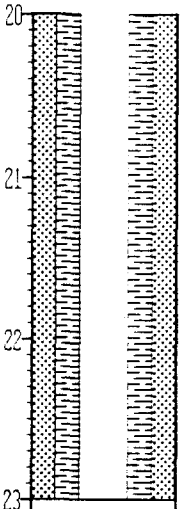
LOG OF BORING NUMBER

60893

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						5979	20				
						5978	21				
						5977	22				
						5976	23				
						5975	24				
						5974	25				
						5973	26				
						5972	27				
						5971	28				
						5970	29				
							30				



STATE PLANE COORDINATE		TOTAL DEPTH FT 8.00		GROUND ELEVATION FT	5985.40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]817	AREA 005 CASS 115		CASING DIAMETER IN	0.50	GEOLOGIST	P. JORDAN	60993
EAST	0381948	LOCATOR NUMBER I7		BOREHOLE DIAMETER IN	1.40	DATE DRILLED	06/23/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas Sampler ASI Rig Geologist P. Jordan All core was consumed for samples Log is from field descriptions only

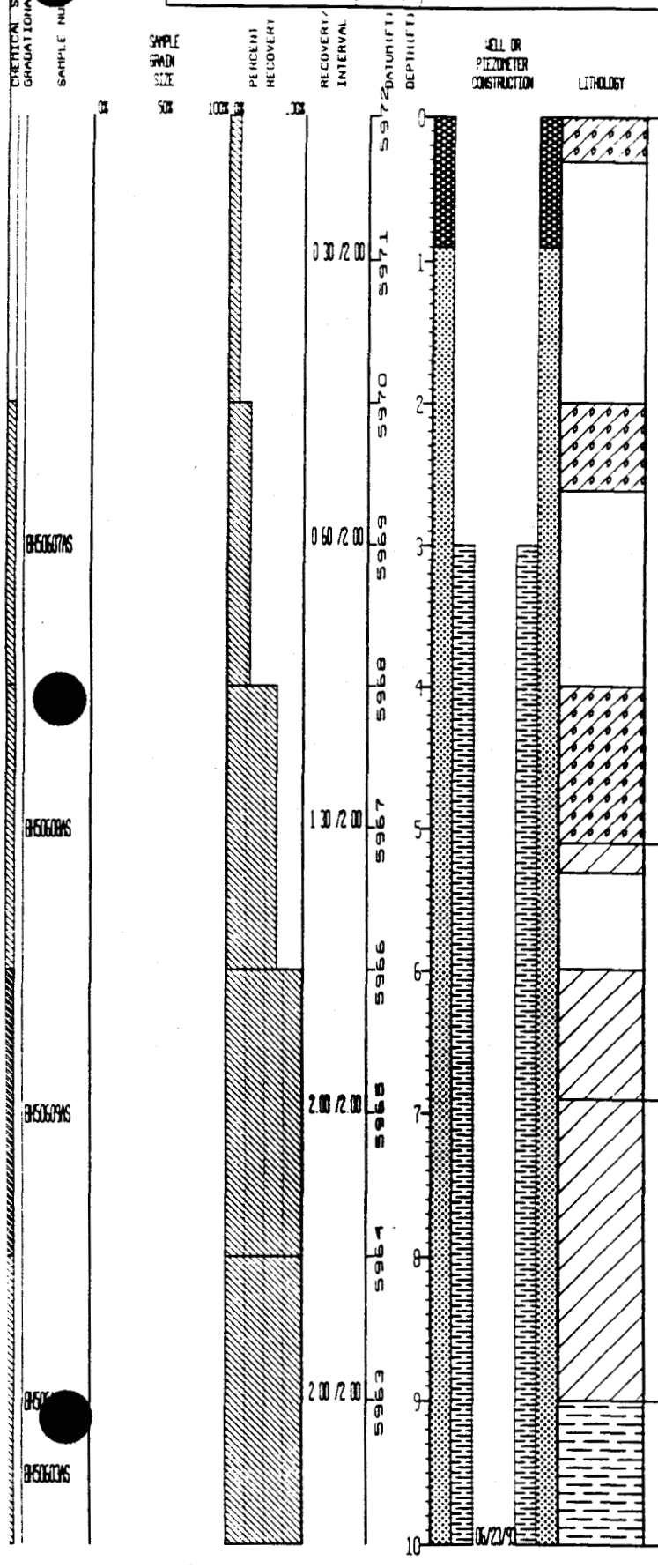
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50592AS			1.20 /2.00	5985, 5984	0, 1			CL	0.0'-3.9' Sandy Clay with some Gravel Pred light olive brown (5 Y 5/6) Dry 20% fine- to coarse grained sand Low plasticity No recovery (1.2'-2.0')
	BH50588AS BH50593AS			2.00 /2.00	5983, 5982	2, 3				
	BH50594AS			2.00 /2.00	5981, 5980	4, 5			CLAYSTONE	3.9'-8.0' Top of Bedrock at approx 3.9 ft Olive Claystone with some Sand and trace Silt Some Fe staining and micro fractures
	BH50595AS			2.00 /2.00	5979, 5978	6, 7				
					5977, 5976	8, 9, 10				Total Depth Drilled 8.00 Total Depth Casing 3.00 Bottom of Filter Pack 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT)	5972 00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]764	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	P J JORDAN	61093
EAST	2081952	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	06/23/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas Sampler ASI Rig Geologist P Jordan All core was consumed for samples Log is from field descriptions only

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-5 1' Clayey Sand with abundt Gravel and Clay Mod brown (5 YR 4/4) Fine to coarse sand Dry to moist No recovery (0 3-2 0') and (2 6-4 0')
CL	5 1'-6 9' Sandy Clay Olive gray, moist No recovery (5 3-6 0')
CL	6 90'-9 00' Appears to be Reworked Claystone with iron concretions at 7.2 ft Dry to moist Thin lense of dry to moist Sandy Clay at 9 0 ft
CLAYSTONE	9 00'-10 00' Top of Bedrock at 9 0' Claystone No recovery (10 0-12 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT) 5972 00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747764	AREA OU5 IHSS 115	CASING DIAMETER (IN) 0 50	GEOLOGIST	P J JORDAN	61093
EAST 2081952	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED	06/23/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas Sampler ASI Rig Geologist P Jordan All core was consumed for samples Log is from field descriptions only

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5962	10	06/23/93			
				0 00 /2 00	5961	11				
					5960	12			CLAYSTONE	12 00'-12 70' Claystone Olive gray, some Fe staining
	BH5061LAS			0 70 /1 00						No recovery (12 7-13 0')
					5959	13				Total Depth Drilled 13 00 Total Depth Casing 13 10 Bottom of Filter Pack 13 00
					5958	14				
					5957	15				
					5956	16				
					5955	17				
					5954	18				
					5953	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 10	GROUND ELEVATION (FT)	6020 30	PROJECT NUMBER	305-HF2/R1
NORTH 7[illegible]4[illegible]8	AREA 305 [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] BAUGHN/R M [illegible]
EAST 3060053	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/11/93

LOG OF BORING NUMBER 61193

REMARKS Drill Equipment CME 750 ATV ASI Geologist Rose Zeller and Dan Baugnn Note Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

Chemical Graduation	Sample Number	Sample Grain Size	Percent Recovery	Recovery/Interval	Datum (ft)	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	BH506496			1 20 /2 00	6020	0			SC	0 0'-1 2' Gravelly Silty Clay Pale brown (5 YR 5/2) Well graded, low plasticity, rich organic materials Becomes sandy gravel to gravelly clay last 3 0 in of interval Dry to moist (sc-gc) NOTE Interval description from rig geologist field log No recovery (1 2-2 0')
	BH506506			1 40 /1 80	6018	3			SC	2 0'-3 1' Gravelly Sand with some Clay and Silt Grayish brown (5 YR 3/2) Gravel is well graded, angular to sub-rounded, mostly quartz Sand is well graded, predom f g, angular to sub-rounded, quartz with some mica and mafics Low plasticity Dry 30% gravel, 42% sand, 7% silt, 21% clay
				0 00 /0 20	6017	4			SC	3 1'-3 4' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) Gravel is well graded, angular to sub-rounded, mostly quartz with some mafics Sand is well graded, angular to sub-rounded, quartz with some mica Low plasticity, calcareous Moist 39% gravel, 41% sand, 8% silt, 12% clay No recovery (3 4-4 0')
				1 10 /2 00	6016	5			SC	4 0'-5 1' Gravelly Sand with some Clay and Silt Light brown(5 YR 5/6) Same as above (reference interval 3 1' to 4 0') 39% gravel, 41% sand, 8% silt, 12% clay No recovery (5 1-6 2')
				0 00 /0 20	6015	6			CLAYSTONE	6 2'-8 4' Top of Bedrock at 6 2' Claystone with some Silt, and trace Sand Yellowish (5 Y 8/1) Some Fe staining, and carboneous material, calcareous material occuring in pockets, and trace Mn Section of roots occuring at top of interval, then again at bottom Fe staining micro-fractures indicating possibly disturbed sediments, possiblysoft sediment deformation Slightly friable, mod plasticity Moist 2% sand, 18% silt, 80% clay
	BH506034S BH506664S(DUP)			2 00 /1 90	6014	7				
				1 90 /1 90	6012	9			CLAYSTONE	8 4'-10 0' Claystone with some Silt Olive gray (5 Y 4/1) Abundt Fe staining with trace Mn and carboneous material Slightly friable, mod plasticity, massive bedding Moist 15% silt, 85% clay
					6011	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 10	GROUND ELEVATION (FT) 6020 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747408	AREA OU5 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN/R M ZEILER	61193
EAST 2080053	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED	06/11/93	

REMARKS Drill Equipment CME 750 ATV ASI Geologist Rose Zeiler and Dan Baughn Note Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

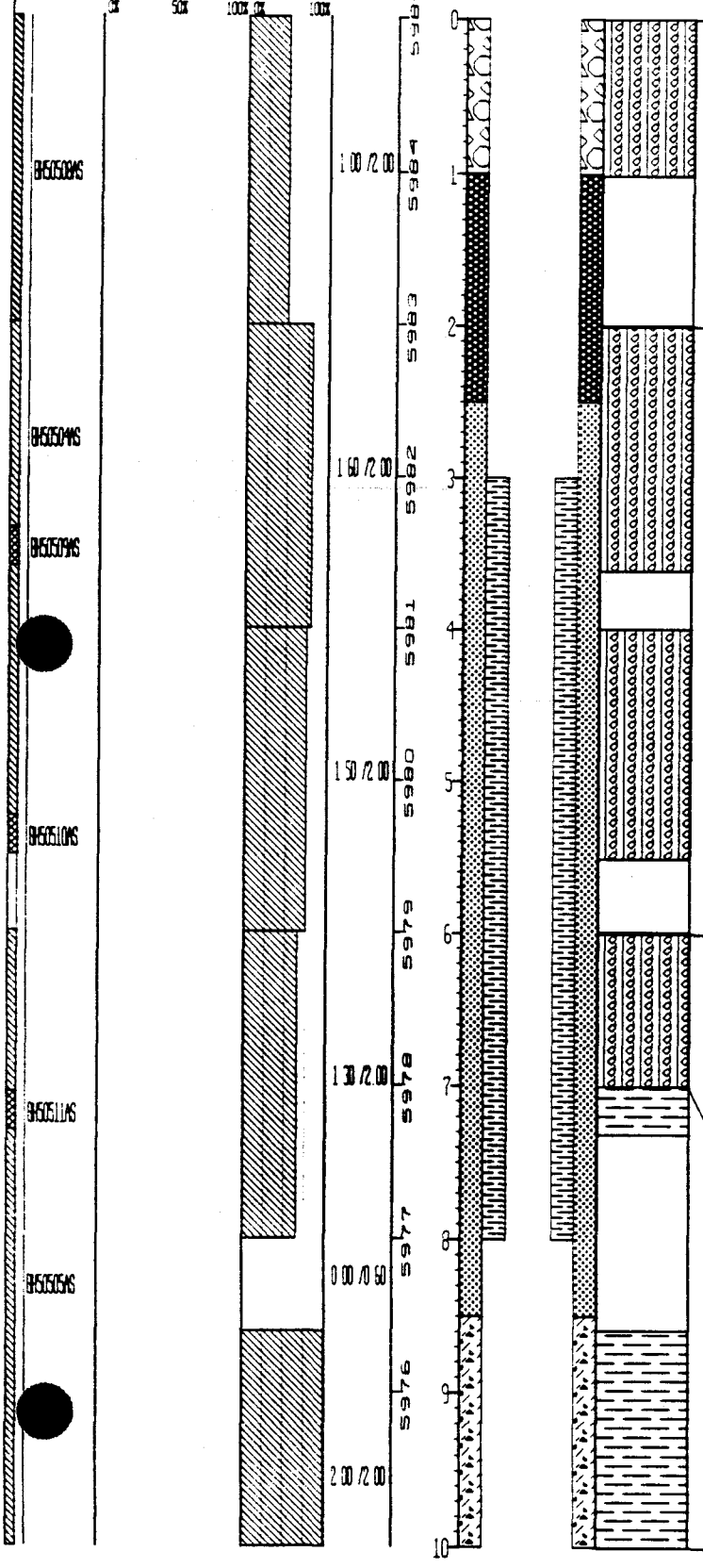
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /0 10		10			CLAYSTONE	10 0'-11 9' Claystone with some Silt Light olive gray (5 Y 6/1) Some Fe staining with trace Mn slightly friable mod plasticity Texture and micro-type fractures indicate possibly disturbed bedding or soft sediment deformation Moist 15% silt, 85% clay No recovery (11 9-12 2')
				1 90 /2 10	6010	11				
					6009	12				
				2 00 /1 90	6008	13			CLAYSTONE	12 20'-14 10' Claystone with some Silt Olive gray (5 Y 4/1) Same as above with a trace of Fe staining (reference interval 10 1' to 11 9') 15% silt, 85% clay
					6007	14				
					6006	15				Total Depth Drilled 14 10
					6005	16				
					6004	17				
					6003	18				
					6002	19				
					6001	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5985.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA OU5, IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T S DREILING	61293
EAST	2081148	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/12/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0.0'-1.0' Silty Sand with some Clay and trace Gravel Dusky brown (5 YR 2/2) Abundt roots Sand is pred f g, angular to sub-angular, mostly quartz and mafics Low plasticity, dry 3% gravel, 48% sand, 29% silt, 20% clay No recovery (1.0-2.0')
SM	2.0'-5.5' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) Pred fine, sub-rounded gravel up to cobble in size F g to c g, well graded, sub-rounded quartz sand with some mafic grains Trace roots No apparent bedding or fractures Moist, low plasticity fines, non-calcareous Broken cobble at approx 2.2 ft Cobble layer at approx 5.0 ft 20% gravel, 52% sand, 17% silt, 11% clay No recovery (3.6-4.0'), and (5.5-6.0')
SM	6.0'-7.0' Gravelly Sand with some Silt and trace Clay Lightbrown (5 YR 5/6) Pred fine, sub-rounded gravel F g to c g, well graded, sub-rounded quartz sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous 30% gravel, 60% sand, 6% silt, 4% clay
CLAYSTONE	7.0'-10.6' Top of Bedrock at 7.0 ft Claystone with trace Silt Light olive gray (5 Y 6/1) mottled with light brown (5 YR 5/6) Non-friable, some Fe stains Trace carbonaceous material No apparent bedding or fractures Moist, non-calcareous <5% silt, >95% clay No recovery (7.3-8.6')

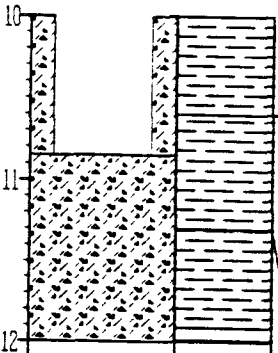
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5985.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA 005, IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T S DREILING	61293
EAST	2081148	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/12/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%
PERCENT RECOVERY: 0% 100%
RECOVERY/INTERVAL: 1.30/1.40
DATUM (FT): 5975, 5974, 5973, 5972, 5971, 5970, 5969, 5968, 5967, 5966
DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20



WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	10.6'-11.3' Claystone with some Sand and trace Silt Light olive gray (5 Y 5/2) V f g, sub-rounded quartzose sand Mod to slightly friable Trace carbonaceous material and Fe stains Near horiz bedding or partings, some Mn staining on randomly oriented fractures Moist, non- to slightly calcareous Bedding angle 0 to 5 degrees 8% sand, 3% silt, 89% clay
CLAYSTONE	11.3'-11.9' Claystone with some Sand and trace Silt Light olive gray (5 Y 5/2) V f g, sub-rounded quartz sand Slightly to mod friable, trace carbonaceous material in very small pieces (less than 0.1 mm) Near vertical healed Fe stained fracture Moist, non-calcareous Fracture angle 85 to 90 degrees 17% sand, 3% silt, 80% clay No recovery (11.9-12.0')

Total Depth Drilled 12.00 Total Depth Casing 10.85
Bottom of Filter Pack 8.50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	6025 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7391	AREA 005 IHSS 133 3	CASING DIAMETER (IN)		GEOLOGIST	R M ZEILER	61393
EAST	1079883	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/13/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeiler NOTE Core loss (no recovery) intervals less than 0 2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50650AS			1 30 /2 00	6025	0			CL	0 0'-1 3' Insufficient sample in core box to log Description is from field log Silty Clay with some Gravel Dark yellowish brown Mod graded, low plasticity, organic rich, large boulder at base Dry Plant roots and 3 broken cobbles (granite and quartzite) are the only things in the core box No recovery (1 3-2 0')
	BH50570AS BH50662AS(DUP)			2 00 /2 00	6024	1			CLAYSTONE	2 0'-2 6' Top of Bedrock at 2 0 ft Claystone with trace Silt Pred yellowish gray (5 Y 7/2) Slightly to non-friable, trace Fe staining and carbonaceous material Occasional ironstone nodules, approx 2 mm Some roots No apparent bedding or fractures Moist, some spotty caliche <5% silt, >95% clay
				0 00 /0 20	6023	2			CLAYSTONE	2 6'-4 0' Claystone with trace Silt Same as above (reference interval 2 0-2 6 ft), except increased Fe staining, caliche, carbonaceous material but fewer roots Mottled in microfracture and sugary texture indicates some possible post depositional deformation <5% silt, >95% clay No recovery (4 0-4 2')
				1 90 /1 80	6022	3			CLAYSTONE	4 2'-6 4' Claystone with some Silt Pred light olive gray (5 Y 5/2) Slightly to non-friable, some Fe staining on healed fractures and in splotches Caliche in clumps, trace carbonaceous material and occasional root No apparent bedding Moist 10% silt, 90% clay
				1 80 /2 00	6021	4			SILTY CLAYSTONE	6 4'-7 4' Silty Claystone with some Sand Dark yellowish orange (10 YR 6/6) V f g , sub-rounded quartz sand with trace mafic grains and mica Slightly to mod friable, abundt Fe stains Trace Mn staining/coatings and carbonaceous material No apparent bedding or fractures Moist, non-calcareous 19% sand, 24% silt, 57% clay
				0 00 /0 30	6020	5			CLAYSTONE	7 4'-7 8' Claystone with some Silt Same as above (reference interval 4 2 to 6 4 ft) No recovery (7 8-8 0') and (8 0-8 3')
				2 00 /1 70	6019	6			CLAYSTONE	8 3'-8 6' Claystone with trace Silt and Sand Light olive brown (5 Y 5/6) V f g , sub-rounded quartz sand in less than 1 mm layer at approx 50 degrees to core Lithified more than core above or below Moist, mod calcareous Possible breccia zone 5% sand, 5% silt, 90% clay
					6018	7			CLAYSTONE	8 6'-9 0' Claystone with some Silt Same as above (reference interval 4 2 to 6 4 ft)
					6017	8			CLAYSTONE	9 0'-10 0' Claystone with trace Silt Olive gray (5 Y 4/2) Slightly to non-friable Abundt carbonaceous material Crude bedding or partings at approx 35 to 40 degrees Moist, non-calcareous <5% silt, >95% clay
					6016	9				Total Depth Drilled 10 00
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15.30	GROUND ELEVATION (FT)	6017.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747364	AREA OU5, IHSS 133.3	CASING DIAMETER (IN)		GEOLOGIST	R M ZEILER	61493
EAST	2079749	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Rose Zeiler Note Loss of core (no recovery) intervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50651AS			1.60/2.00	6017	0			SC	0.0'-0.8' Clayey Sand with trace Gravel and Silt. Dusky brown (5 YR 2/2). Gravel, sub-rounded to sub-angular, fine, max. size up to 1.0 in. Sand f.g. to c.g., well graded, sub-rounded, quartzose with some mafic grains. Abundt roots, no apparent bedding or fractures. Low to mod plasticity fines, non-calcareous. Dry. 5% gravel, 63% sand, 3% silt, 29% clay
	BH50587AS BH50583AS			0.00/1.50	6016	1			SC	0.8'-5.5' Clayey Sand with some Silt, trace Gravel. Mod brown (5 YR 4/4). Gravel sub-angular, max. size up to 0.75 in. Sand pred. f.g. with some m.g. to c.g., sub-rounded, quartzose. No apparent bedding or fractures, non-calcareous. Low plasticity fines. Moist. Mod. calcareous below 4.6 ft. 3% gravel, 59% sand, 15% silt, 23% clay. No recovery (1.6-2.0'), and (2.0-3.5')
				2.60/2.00	6015	2				
					6014	3				
					6013	4				
					6012	5				
				3.50/3.00	6011	6			SC	5.5'-6.4' Gravelly Sand with some Clay and trace Silt. Mod. brown (5 YR 4/4). Gravel fine to coarse, trace cobbles. Sand f.g. to c.g., well graded, sub-rounded, quartz with trace mafics. No apparent bedding or fractures, slightly to mod. calcareous. Low plasticity fines. Moist. Broken cobble at 6.0 ft. 40% gravel, 41% sand, 4% silt, 15% clay
					6010	7			CL	6.4'-6.9' Clayey Sand with some Silt. Mod. brown (5 YR 4/4). Sand f.g. to m.g., sub-rounded, quartz. No apparent bedding or fractures. Low plasticity, non- to slightly calcareous. Moist. 46% sand, 11% silt, 43% clay
	BH50584AS BH50661AS(OU)				6009	8			SC	6.9'-10.0' Gravelly Sand with some Clay, trace Silt. Same as above (reference interval 5.5 to 6.4 ft.). Decayed rock at approx. 7.8 ft, greenish color. Cobble at approx. 8.0 ft, rounded, quartzite. Color change to light brown (5 YR 5/6) at 8.5 ft. Cobble at 10 ft measuring approx. 1.5 x 1.5 x 5.0 in. 40% gravel, 49% sand, 1% silt, 10% clay
					6008	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 90	GROUND ELEVATION (FT)	6017 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747364	AREA OU5, IHSS 133 3	CASING DIAMETER (IN)		GEOLOGIST	R M ZEILER	61493
EAST	2079749	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Rose Zeiler Note Loss of core (no recovery) intervals less than 0 2 ft not shown

DRAFT

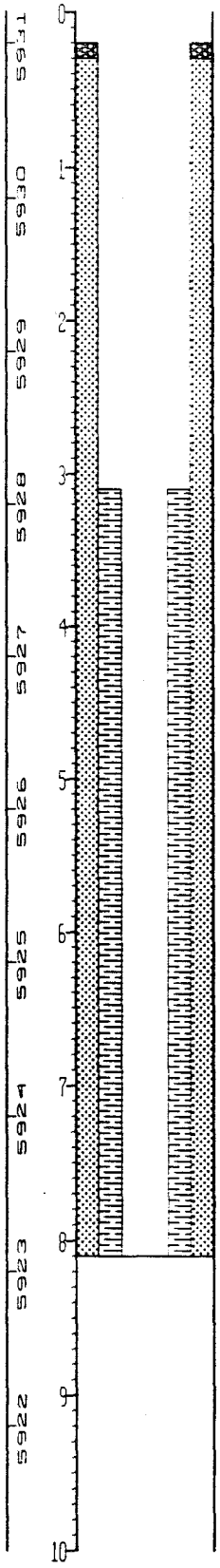
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				5 00 /5 00	6007 6006 6005	10 11 12 13			CL	10 0'-13 3' Clay, appears to be reworked or displaced Claystone Light olive gray (5 Y 6/1) mottled with light olive brown (5 Y 5/6) Some Fe staining, some carbonaceous material, mod to highly weathered No apparent bedding or fractures Moist, non-calcareous This interval is likely remolded or displaced as evident by the material below Possible claystone boulder <5% silt, >95% clay
	5AS			0 80 /0 80	6004	14			SC	13 3'-14 3' Gravelly Sand with some Silt and Clay Light brown (5 YR 5/6) Gravel, fine to coarse, trace cobbles, pred quartzite Sand f g to c g, well graded, quartz with trace mica No apparent bedding or fractures, non-calcareous Low plasticity fines Moist Broken cobble at 14 3 ft Note Field log indicates drill rig chattering, drilling with center bit 35% gravel, 46% sand, 6% silt, 13% clay
				0 00 /0 10	6003					
				0 00 /1 40	6002	15				No recovery (14 3-15 9')
				0 00 /0 10						
					6001 6000 5999 5998	16 17 18 19 20				Total Depth Drilled 15 90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.10	GROUND ELEVATION (FT) 5931.30	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 746739	AREA 005	CASING DIAMETER (IN) 0.40	GEOLOGIST P.J. JORDAN	61593
EAST 2084341	LOCATOR NUMBER 16	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED 06/17/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



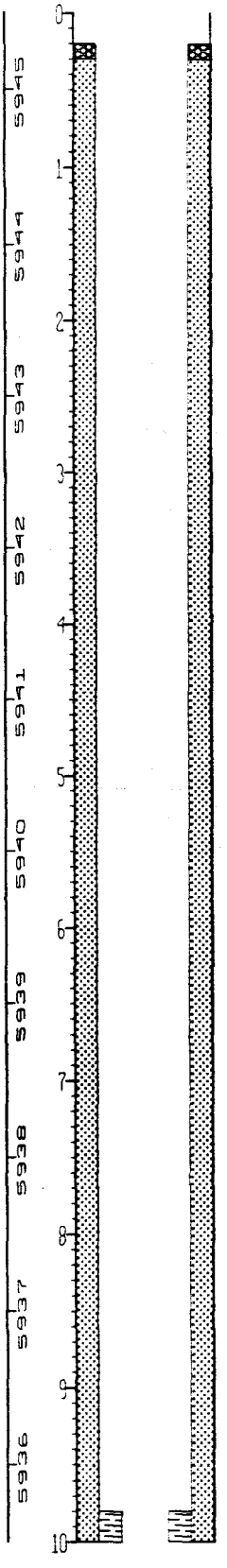
Total Depth Drilled 8.10 Total Depth Casing 8.10
Bottom of Filter Pack 8.10

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.80	GROUND ELEVATION (FT) 5945.50	PROJECT NUMBER	305-AFD/RI	LOG OF BORING NUMBER
NORTH	745405	AREA 005	CASING DIAMETER (IN) 2.00	GEOLOGIST	P.J. JORDAN	61693
EAST	2082887	LOCATOR NUMBER 16	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED	06/17/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 14.80 Total Depth Casing 14.80
Bottom of Filter Pack 14.80

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT)	5945.50	PROJECT NUMBER	305-RFI/RI
NORTH 746405	AREA 305	CASING DIAMETER (IN)	1.40	GEOLOGIST	P.J. JORDAN
EAST 2082987	LOCATOR NUMBER J6	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/17/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

LOG OF BORING NUMBER 61693

DRAFT

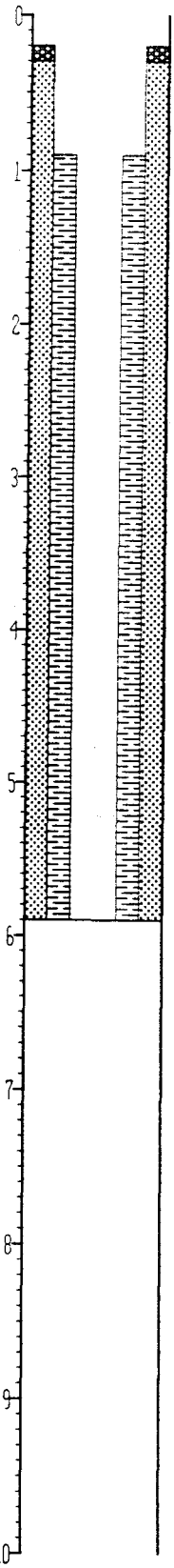
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5935	10				
					5934	11				
					5933	12				
					5932	13				
					5931	14				
					5930	15				
					5929	16				
					5928	17				
					5927	18				
					5926	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5 90	GROUND ELEVATION (FT)	5918 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]111	AREA OU5	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN	61793
EAST	2082816	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5918	0				
					5917	1				
					5916	2				
					5915	3				
					5914	4				
					5913	5				
					5912	6				
					5911	7				
					5910	8				
					5909	9				
						10				



Total Depth Drilled 5 90 Total Depth Casing 5 90
Bottom of Filter Pack 5 90

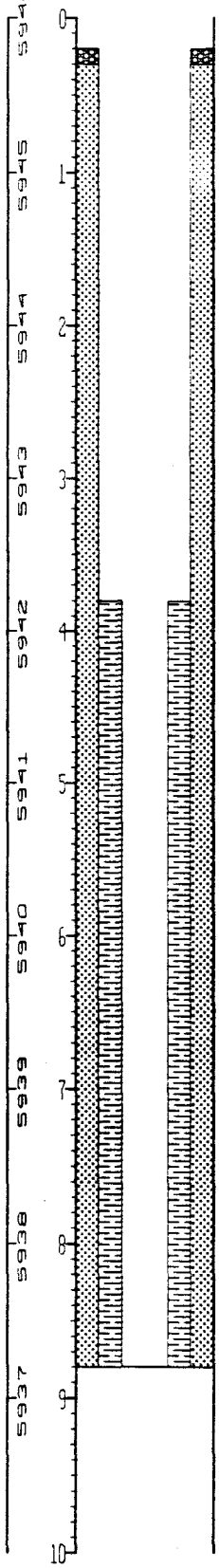
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.90	GROUND ELEVATION (FT)	5946.00	PROJECT NUMBER	005-RFI/RI
NORTH 74993	AREA 005	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN
EAST 1060625	LOCATOR NUMBER J6	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/16/93

LOG OF BORING NUMBER **61893**

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5946	0				
					5945	1				
					5944	2				
					5943	3				
					5942	4				
					5941	5				
					5940	6				
					5939	7				
					5938	8				
					5937	9				
						10				



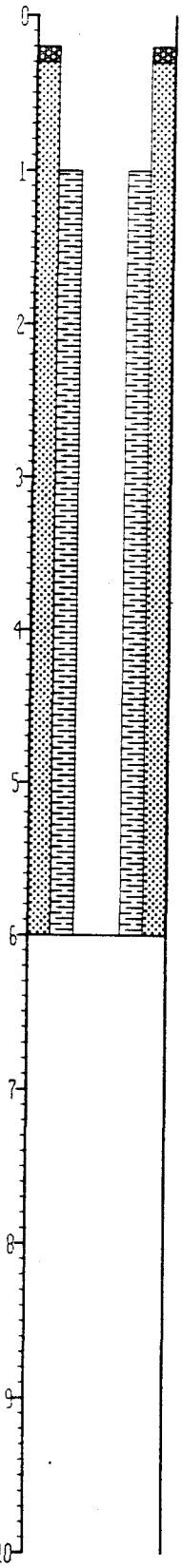
Total Depth Drilled 8.90 Total Depth Casing 8.90
Bottom of Filter Pack 8.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT)	5935.40	PROJECT NUMBER	015-RFI/RI	LOG OF BORING NUMBER
NORTH	747215	AREA 005	CASING DIAMETER (IN)	0.10	GEOLOGIST	P. J. JORDAN	61993
EAST	2082375	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5935	0				Total Depth Drilled 6.00 Total Depth Casing 6.00
					5934	1				Bottom of Filter Pack 6.00
					5933	2				
					5932	3				
					5931	4				
					5930	5				
					5929	6				
					5928	7				
					5927	8				
					5926	9				
						10				



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.80	GROUND ELEVATION (FT)	6011.10	PROJECT NUMBER	305-RFI/RI
NORTH 236620	AREA 605	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN
EAST 2079975	LOCATOR NUMBER 56	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93

LOG OF BORING NUMBER 62093

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		6011	0				
						6010	1				
						6009	2				
						6008	3				
						6007	4				
						6006	5				
						6005	6				
						6004	7				
						6003	8				
						6002	9				
							10				

Total Depth Drilled 8.80 Total Depth Casing 8.00
Bottom of Filter Pack 8.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	5.90	GROUND ELEVATION (FT)	6013.30	PROJECT NUMBER	305-RFI/RI
NORTH	746569	AREA	305	CASING DIAMETER (IN)	2.90	GEOLOGIST	P.J. JORGAN
EAST	2079679	LOCATOR NUMBER	66	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93

LOG OF BORING NUMBER 62193

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

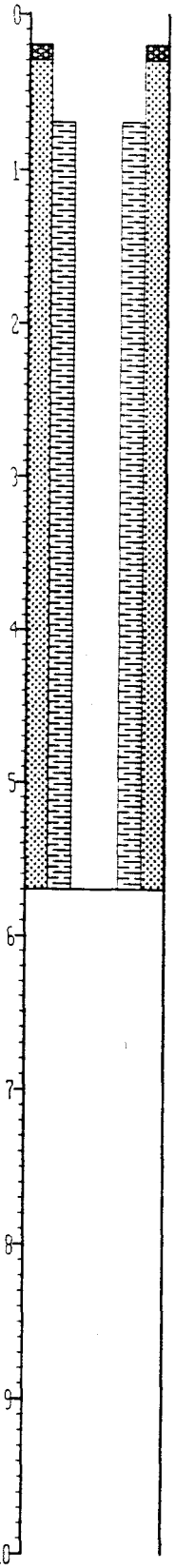
CHEMICAL SAMPLE	GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%	50% 100%	0%	100%			6018	0				
						6017	1				
						6016	2				
						6015	3				
						6014	4				
						6013	5				
						6012	6				
						6011	7				
						6010	8				
						6009	9				
							10				

Total Depth Drilled 5.90 Total Depth Casing 5.90
Bottom of Filter Pack 5.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5.70	GROUND ELEVATION (FT)	6023.20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	746457	AREA 005	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN	62293
EAST	2079817	LOCATOR NUMBER G6	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6023	0				Total Depth Drilled 5.70 Total Depth Casing 5.70
					6022	1				Bottom of Filter Pack 5.70
					6021	2				
					6020	3				
					6019	4				
					6018	5				
					6017	6				
					6016	7				
					6015	8				
					6014	9				
						10				

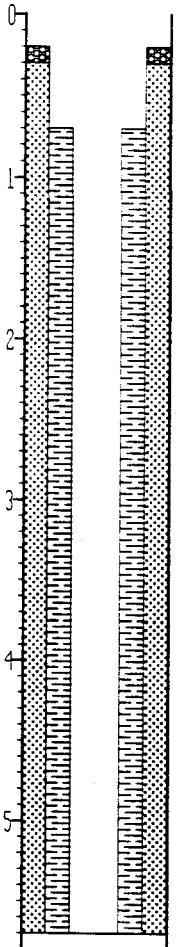


STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5.70	GROUND ELEVATION (FT)	6063.90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	746948	AREA 005	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN	62393
EAST	0078159	LOCATOR NUMBER F6	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				6063	0				Total Depth Drilled 5.70 Total Depth Casing 5.70
				6062	1				Bottom of Filter Pack 5.70
				6061	2				
				6060	3				
				6059	4				
				6058	5				
				6057	6				
				6056	7				
				6055	8				
				6054	9				
					10				



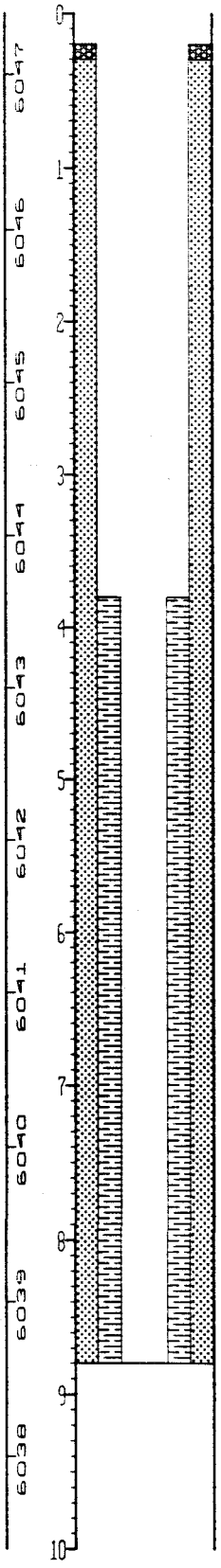
STATE PLANE COORDINATE		TOTAL DEPTH (FT)	9 30	GROUND ELEVATION (FT)	6047 40	PROJECT NUMBER	305-RFI/RI
NORTH	74976	AREA	905	CASING DIAMETER (IN)	3 40	GEOLOGIST	P J JORGAN
EAST	2078853	LOCATOR NUMBER	F6	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/16/93

LOG OF BORING NUMBER 62493

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
ELEVATION (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 8 80 Total Depth Casing 8 80
Bottom of Filter Pack 8 80

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	8 40	GROUND ELEVATION (FT)	6047 60	PROJECT NUMBER	005-RFI/RI
NORTH	747620	AREA	IHSS 133 5	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST	2079457	LOCATOR NUMBER	67	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/15/93

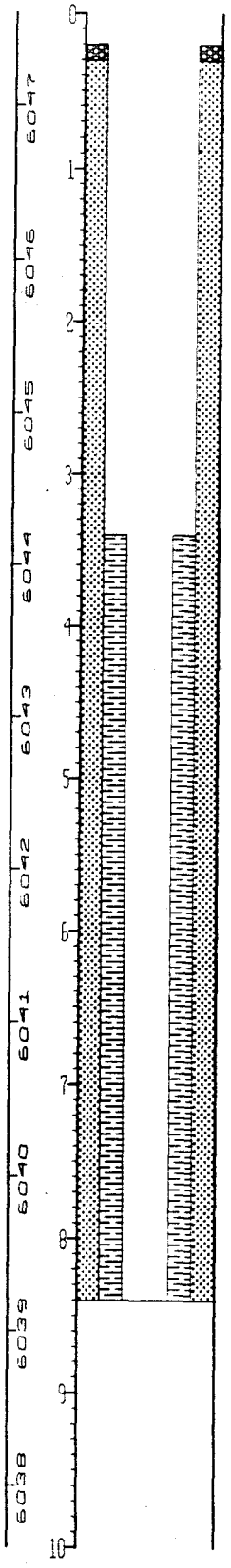
LOG OF BORING NUMBER

62593

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION

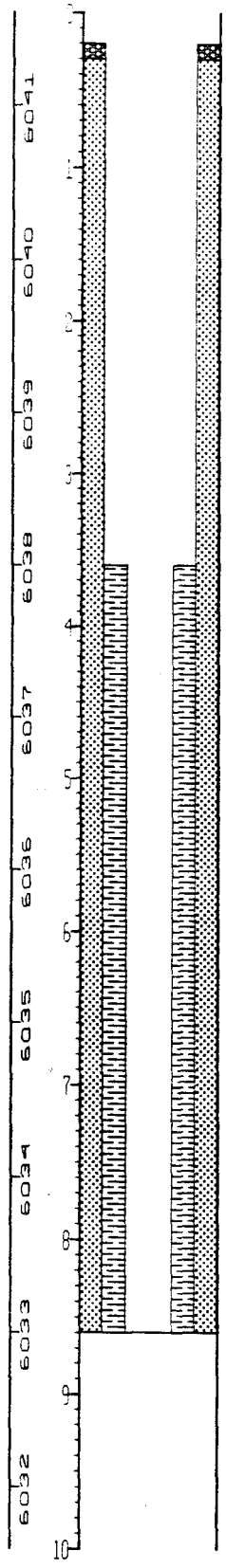


Total Depth Drilled 8 40 Total Depth Casing 8 40
Bottom of Filter Pack 8 40

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.60	GROUND ELEVATION (FT)	6041.60	PROJECT NUMBER	305-RFD/RI	LOG OF BORING NUMBER
NORTH	747627	AREA CASS 133.3	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN	62693
EAST	2079926	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 8.60 Total Depth Casing 6.50
Bottom of Filter Pack 8.60

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.80		GROUND ELEVATION (FT)	5939.40	PROJECT NUMBER	OU5-RFI/RI
NORTH	747597	AREA SW BUFFER ZONE		CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN
EAST	2082304	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/21/93

REMARKS: NO CORE WAS TAKEN FOR LOGGING.

LOG OF BORING NUMBER 62793

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%			50%	100% 0%	100%	5939	0				
						5938	1				
						5937	2				
						5936	3				
						5935	4				
						5934	5				
						5933	6				
						5932	7				
						5931	8				
						5930	9				
							10				

Total Depth Drilled: 11.80 Total Depth Casing: 0.00
Bottom of Filter Pack: 11.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 80	GROUND ELEVATION (FT)	5939 40	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747547	AREA SW BUFFER ZONE	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN	62793
EAST	2082304	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/21/93	

REMARKS NO CORE WAS TAKEN FOR LOGGING

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5929	10				
					5928	11				
					5927	12				
					5926	13				
					5925	14				
					5924	15				
					5923	16				
					5922	17				
					5921	18				
					5920	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 80		GROUND ELEVATION (FT)	5995 00	PROJECT NUMBER	OUS-RFI/RI
NORTH	747964	AREA SW BUFFER ZONE		CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST	2082700	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/15/93

REMARKS: NO CORE WAS TAKEN FOR LOGGING

LOG OF BORING NUMBER

62893

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		5995	0				
						5994	1				
						5993	2				
						5992	3				
						5991	4				
						5990	5				
						5989	6				
						5988	7				
						5987	8				
						5986	9				
							10				

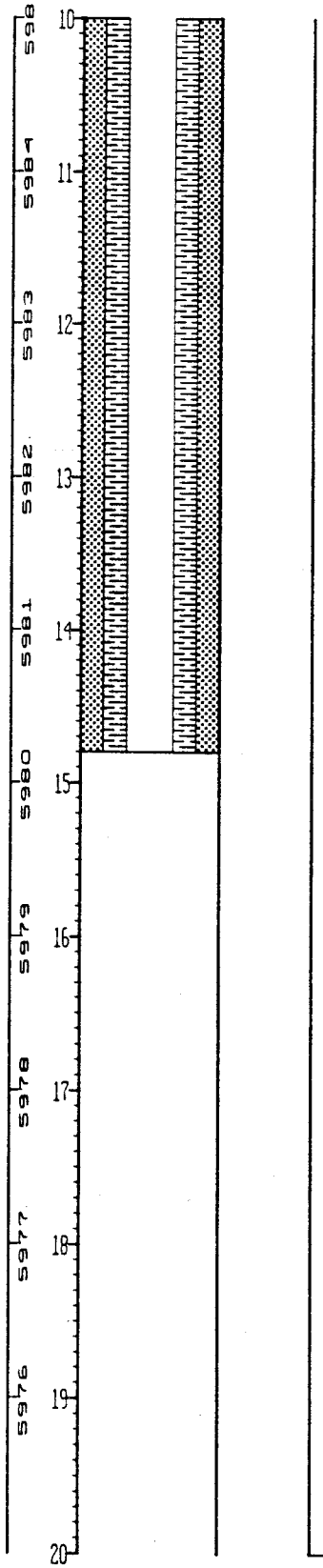
Total Depth Drilled: 14 80 Total Depth Casing: 0.00
Bottom of Filter Pack: 14 80

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.80	GROUND ELEVATION (FT)	5995.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747964	AREA SW BUFFER ZONE	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN	62893	
EAST 2082700	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/15/93		

REMARKS: NO CORE WAS TAKEN FOR LOGGING

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM(FT) / DEPTH(FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 80	GROUND ELEVATION (FT) 6019 09	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	74357	AREA 305, BASS 133 3	CASING DIAMETER (IN) 2 00	GEOLOGIST R M ZEILER	63093
EAST	2279751	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 06/16/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeiler NOTE Core loss (no recovery) interval less than 0 2 ft not shown

DRAFT

CHEMICAL DEPTH / GRADATION DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	0 00 /15 00	6019 6018 6017 6016 6015 6014 6013 6012 6011 6010	0 1 2 3 4 5 6 7 8 9 10				0 0'-10 0' Augered with center bit NOTE Borehole *59693 is nominally 10 ft away and was logged from 0 to 15 5 ft

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 80	GROUND ELEVATION (FT)	6019 00	PROJECT NUMBER	015-RFI/RI	LOG OF BORING NUMBER
NORTH	747357	AREA 005 IHSS 133 3	CASING DIAMETER (IN)	2 00	GEOLOGIST	R M ZEILER	63093
EAST	2079751	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	06/16/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeiler NOTE Core loss (no recovery) interval less than 0 2 ft not shown

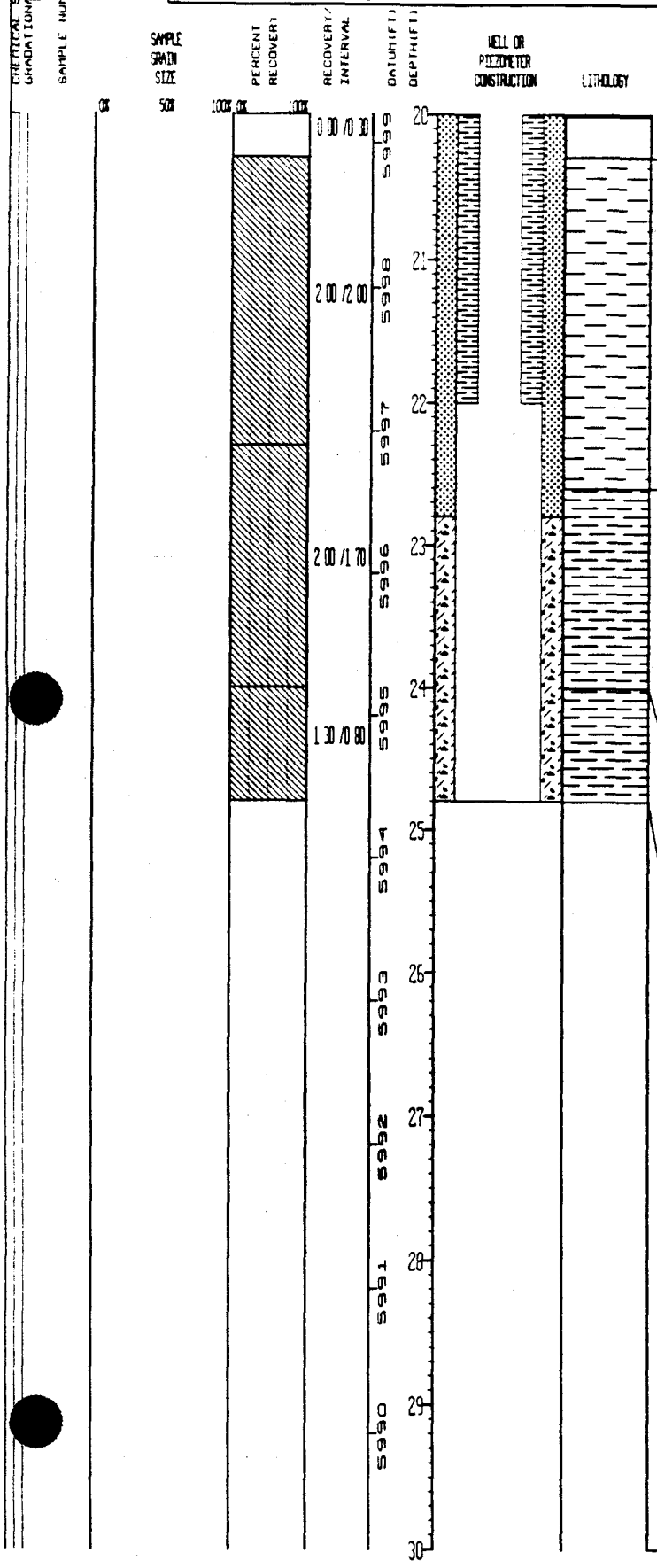
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6009	10				10 0'-15 0' Augered with center bit
					6008	11				
					6007	12				
					6006	13				
					6005	14				
				0 80 /0 90	6004	15			GC	15 0'-18 2' Sandy Gravel with some Clay and trace Silt Mod yellowish brown (10 YR 5/4) Fine to coarse, well graded, sub-angular gravel with some broken cobbles Pred f g to m g and some c g, sub-angular quartz sand with trace mica No apparent bedding or fractures Moist, low plasticity fines, non-calcareous Gravel pred quartzite 50% gravel, 33% sand, 4% silt, 13% clay No recovery (15 9'-18 0')
				0 00 /2.10	6003	16			CL	18 2'-19 6' Sandy Clay with some Silt and trace Gravel Grayish orange (10 YR 7/4) Sub-rounded gravel, pred cobbles F g to m g, mod graded, sub-rounded quartz sand Trace carbonaceous material, some Fe staining No apparent bedding or fractures Moist, mod plasticity, non-calcareous Mn staining bottom of interval 5% gravel, 21% sand, 7% silt, 67% clay
	3H50559MS				6002	17				
				2 00 /2 00	6001	18			SANDY CLAYSTONE	19 6'-20 0' Top of Bedrock at 19 6 ft Sandy Claystone with some Silt Mod yellowish brown (10 YR 5/6) V f g, sub-rounded, quartz sand Slightly to mod friable Some Fe staining, some carbonaceous material Some ironstone nodules, 0 25 in by 1 in A round ironstone nodule at 19 8 ft Some randomly oriented Fe stained fractures Fe stained, sandy and/or carbonaceous material in near horiz laminae less than 1 mm thick Moist, non-calcareous 27% sand, 15% silt, 58% clay No recovery (20 0'-20 3')
					6000	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 80	GROUND ELEVATION (FT)	6019 00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747357	AREA 005, IHSS 133 3	CASING DIAMETER (IN)	2 00	GEOLOGIST	R M ZEILER	63093
EAST	2079751	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	06/16/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeiler NOTE Core loss (no recovery) interval less than 0 2 ft not shown

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SANDY CLAYSTONE	20 3-22 6' Sandy Claystone with some Silt Same as above (reference interval 19 6 to 20 0 ft) Near vertical fracture between approx 20 5 and 20 7 ft
CLAYSTONE	22 6'-24 0' Claystone with some Sand and Silt Pred olive gray (5 Y 3/2) V f g , sub-rounded quartz sand Some carbonaceous material Trace Fe staining Near horiz to approx 15 degree bedding Moist, non-calcareous, occasional Fe stained near vertical fractures 1 to 2 mm thick carbonaceous material at approx 45 degrees Near vertical Fe stained fractures from approx 23 7 ft to 24 0 ft 11% sand, 9% silt, 80% clay
CLAYSTONE	24 0'-24 8' Claystone with some Silt and Sand Olive gray (5 Y 3/1) V f g , sub-rounded quartz sand Abundt carbonaceous material Near horiz bedding/partings Moist, non-calcareous 8% sand, 9% silt, 83% clay

Total Depth Drilled 24 80 Total Depth Casing 24 80
Bottom of Filter Pack 22 80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5968.50	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747837	AREA 005, IHSS 115	CASING DIAMETER (IN)	3.50	GEOLOGIST	P J JORDAN	63193
EAST	2082542	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	06/22/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas sampler ASI Rig Geologist P Jordan All core was consumed for samples Log is from field descriptions only

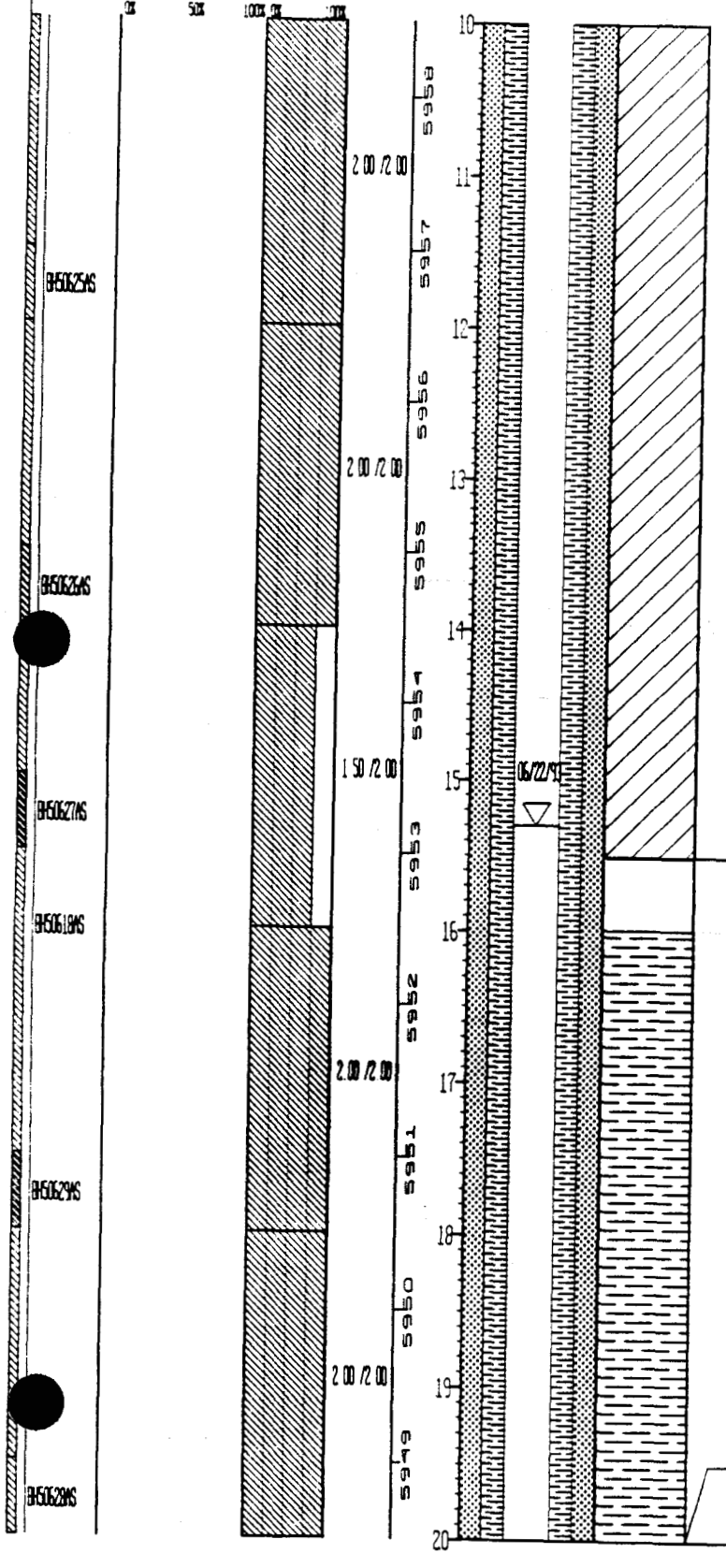
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50620AS			1.00/2.00	5968	0			CL	0.0'-5.0' Sandy Clay with some Silt and trace Gravel Mod brown (5 YR 4/4) to dark yellowish brown (10 YR 4/2) F g to c g, sub-rounded sand Some roots in upper 2 ft of interval Moist to dry No recovery (1.0-2.0'), and (3.0-4.0')
	BH50621AS				5967	1				
	BH50616AS			1.00/2.00	5966	2				
					5965	3				
					5964	4				
				1.50/2.00		5			CL	5.0'-15.5' Clay with some Sand and Gravel Mod brown (5 YR 6/6) Possible reworked bedrock Red rock in shoe at 14.0 ft Water encountered at approx 15.0' No recovery (5.5-6.0'), and (7.5-8.0')
	BH50622AS				5963					
					5962	6				
				1.50/2.00		7				
	BH50623AS				5961					
					5960	8				
	BH50617AS			2.00/2.00		9				
	BH50624AS				5959	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5968.50	PROJECT NUMBER	DUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747697	AREA DUS IHSS 115	CASING DIAMETER (IN)	0.50	GEOLOGIST	P J JORDAN	63193
EAST	2082542	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	06/22/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas sampler ASI Rig Geologist P Jordan All core was consumed for samples Log is from field descriptions only

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	15.5'-20.0' Top of Bedrock at 15.5' No recovery (15.5-16.0') Claystone with some Silt and trace Sand Fe staining, micro-fractures Moist

Total Depth Drilled 20.00 Total Depth Casing 20.00
Bottom of Filter Pack 20.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	8 00	GROUND ELEVATION (FT)	5815 60	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA	[illegible]	CASING DIAMETER (IN)	0 50	GEOLOGIST	TSD
EAST	[illegible]	LOCATOR NUMBER	N7	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	07/21/93

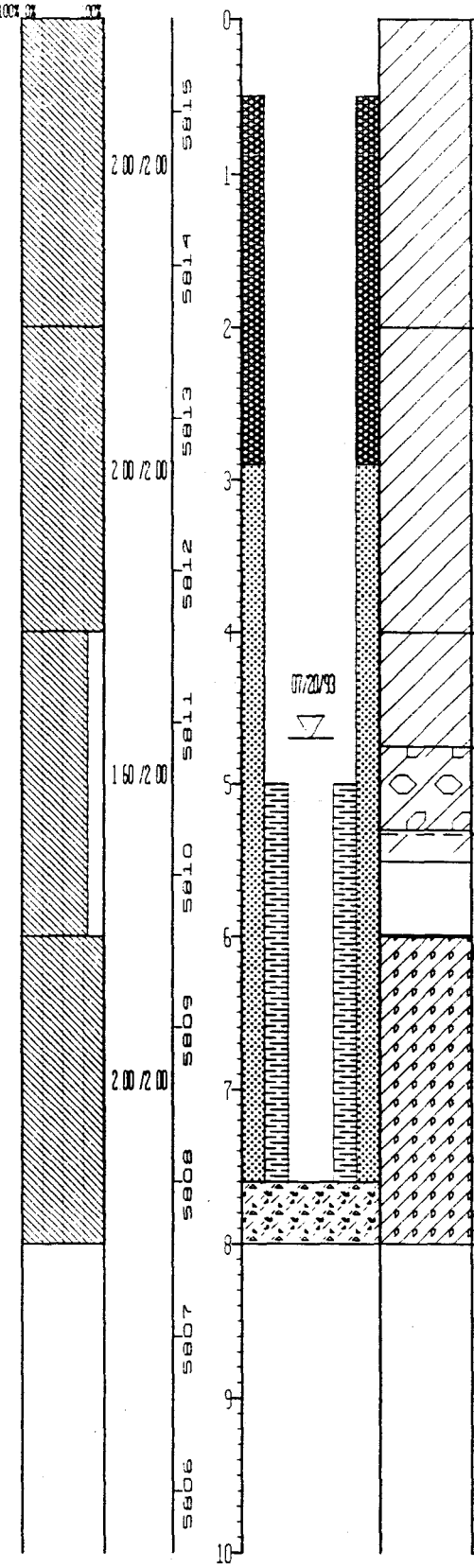
LOG OF BORING NUMBER

63293

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0'-2 0' Clay Mod yellowish brown (10 YR 5/4) Some fine sand, trace gravel, rounded, poorly graded Moist
CL	2 0'-4 0' Sandy Clay Olive gray (5 Y 4/1) Some roots, trace gravel, poorly graded, sub-rounded Very moist
CL	4 0'-4 75' Clay Mod yellowish brown (10 YR 5/4) Abundt sand, poorly graded, angular to sub-angular Moist at top, very moist at bottom
GC	4 75'-5 3' Sand and Gravel Olive black (5 Y 2/1) Trace to some clay Well graded, sub-angular to sub-rounded Wet
SILTY CLAYSTONE	5 3'-5 5' As above, (reference interval 4 75'-5 3'), then grades to Silty Claystone/Clayey Siltstone Light olive gray (5 Y 6/1) mottled with light brown (5 YR 5/6) Moist Top of Bedrock at approx 5 4' No recovery (5 5-6 0')
SC	6 0'-8 0' Silty Claystone Light brown (5 YR 5/6), mottled with light olive gray (5 Y 6/1) F g sand interbedded in thin laminae and pockets, poorly graded Moist

Total Depth Drilled 8 00 Total Depth Casing 7 60
Bottom of Filter Pack 7 60

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5815 30	PROJECT NUMBER	115-RFI/RI	LOG OF BORING NUMBER
NORTH	747784	AREA IHSS 142 10	CASING DIAMETER (IN)	0 50	GEOLOGIST	T S DREILING	63393
EAST	2086381	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	07/22/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

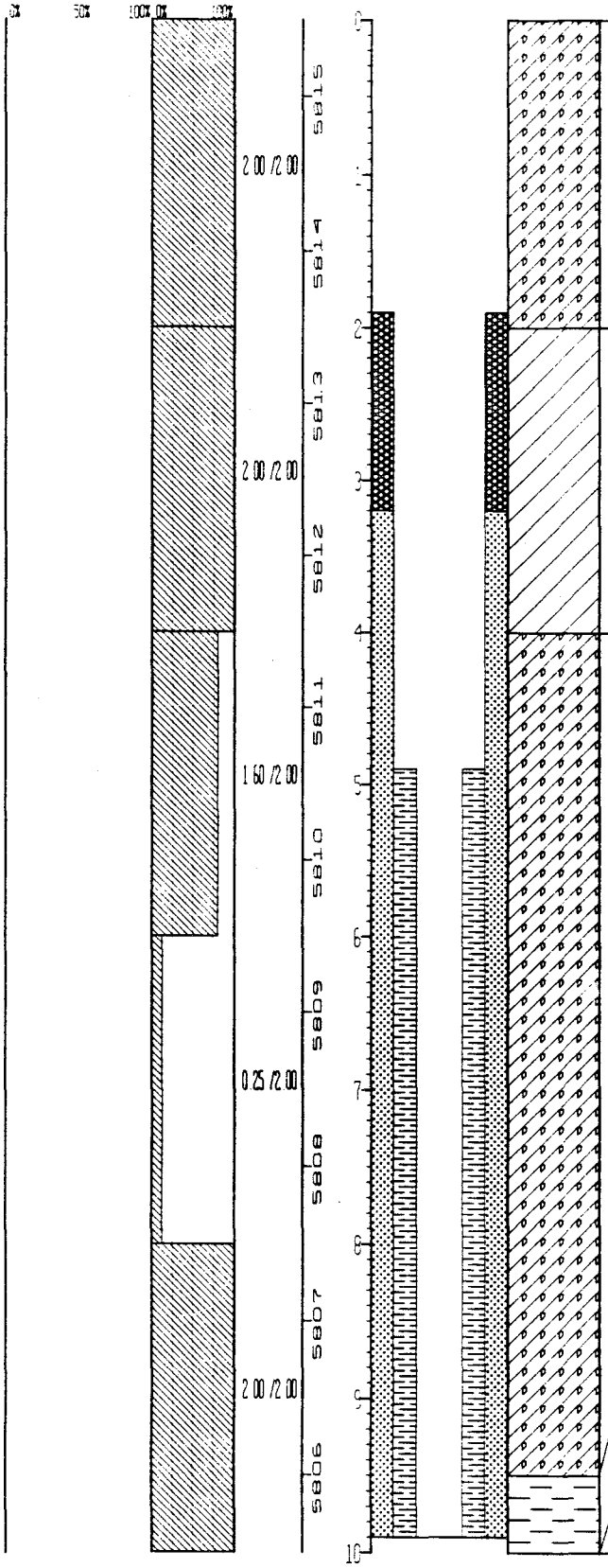
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			100%	2 00 /2 00	5815	0			CL	0 0'-2 0' Clay Dark yellowish brown (10 YR 4/2) Some sand and gravel, poorly graded, angular to sub-angular, abundt roots Wet
				2 00 /2 00	5814	1				
				2 00 /2 00	5813	2			SC	Clayey Sand and Gravel Med dark gray (N4) Gravel well graded, angular to sub-angular, some roots Gravel increases in abundance in bottom of run Wet at top 0 5', remaining sample is moist
				2 00 /2 00	5812	3				
				2 00 /2 00	5811	4			SANDY CLAYSTONE	4 0'-8 0' Sandy Claystone Light olive gray (5 Y 6/1) and medium light gray (N6) Some Fe staining in vertical fractures Sand is f g and poorly graded Moist NOTE 6 0'-7 5' is stiff
				2 00 /2 00	5810	5				
				2 00 /2 00	5809	6				
				0 50 /2 00	5808	7				
					5807	8				Total Depth Drilled 8 00 Total Depth Casing 4 50 Bottom of Filter Pack 4 50
					5806	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9.90	GROUND ELEVATION FT	5815.50	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747774	AREA CASS 142.10	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING	63493
EAST	2086385	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	07/23/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATION SAMPLE DEPTH
SAMPLE NUMBER



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0.0'-2.0' Sandy Clay Mod yellowish brown (10 YR 5/4) Some gravel, mod graded, angular to sub-angular, abundant roots Some Fe staining Approx 1 in gravel zone near the bottom Moist
CL	2.0'-4.0' Clay Dark greenish gray (5 GY 4/1) Abundant sand, some gravel, well graded, angular, some roots Moist at top half, very moist bottom half, wet at tip
SC	4.0'-6.0' Sand and Gravel, some Clay Grayish black (N2) Gravel and sand well graded, angular to sub-angular, no plasticity Wet
SANDY CLAYSTONE	9.5'-10.0' Sandy Claystone Med light gray (N6), mottled with light brown (5 YR 5/6) Sand pred f g, low plasticity Moist

Total Depth Drilled 9.90 Total Depth Casing 9.90
Bottom of Filter Pack 9.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	26.00	GROUND ELEVATION (FT)	6012.70	PROJECT NUMBER	OU5-RFI/RI
NORTH	7[illegible]	AREA	IHSS 133.2	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING
EAST	2080603	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	07/20/93

LOG OF BORING NUMBER **63593**

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			2.00/2.00	6012	0			SC	0.0'-3.3' Clayey Sand Mod brown (5 YR 4/4) Some gravel, poorly graded, sub-rounded to sub-angular, some roots Dry
				6011	1				
			2.00/2.00	6010	2				
				6009	3			CL	3.3'-4.0' Clay Mod brown (5 YR 4/4) Abundt sand, trace gravel, poorly graded, sub-rounded Some organic material slightly moist
			2.00/2.00	6008	4			SC	4.0'-6.0' Sandy Clay Light brown (5 YR 5/6) Some to abundt gravel, well graded, sub-rounded to angular Moist
				6007	5				
			2.00/2.00	6006	6			SC	6.0'-7.4' Sandy Gravelly Clay Light brown (5 YR 5/6) and light olive gray (5 Y 6/1) Well graded, angular to sub-angular Moist There's a white powdery coating on outer diameter of core (calcareous?) Some clean Sandy Gravel at approx 7.2'-7.4'
				6005	7			SC	7.4'-8.0' Sandy Clay Mod yellowish brown (10 YR 5/4) Some gravel, poorly graded, sub-rounded Color change to pale yellowish brown (10 YR 5/4) at 8.0 to 9.4 ft Moist
			2.00/2.00	6004	8				
				6003	9			SC	9.4'-10.0' Clayey Sand and Gravel Pale yellowish brown (10 YR 4/2) Well graded, angular to sub-rounded Moist
					10				

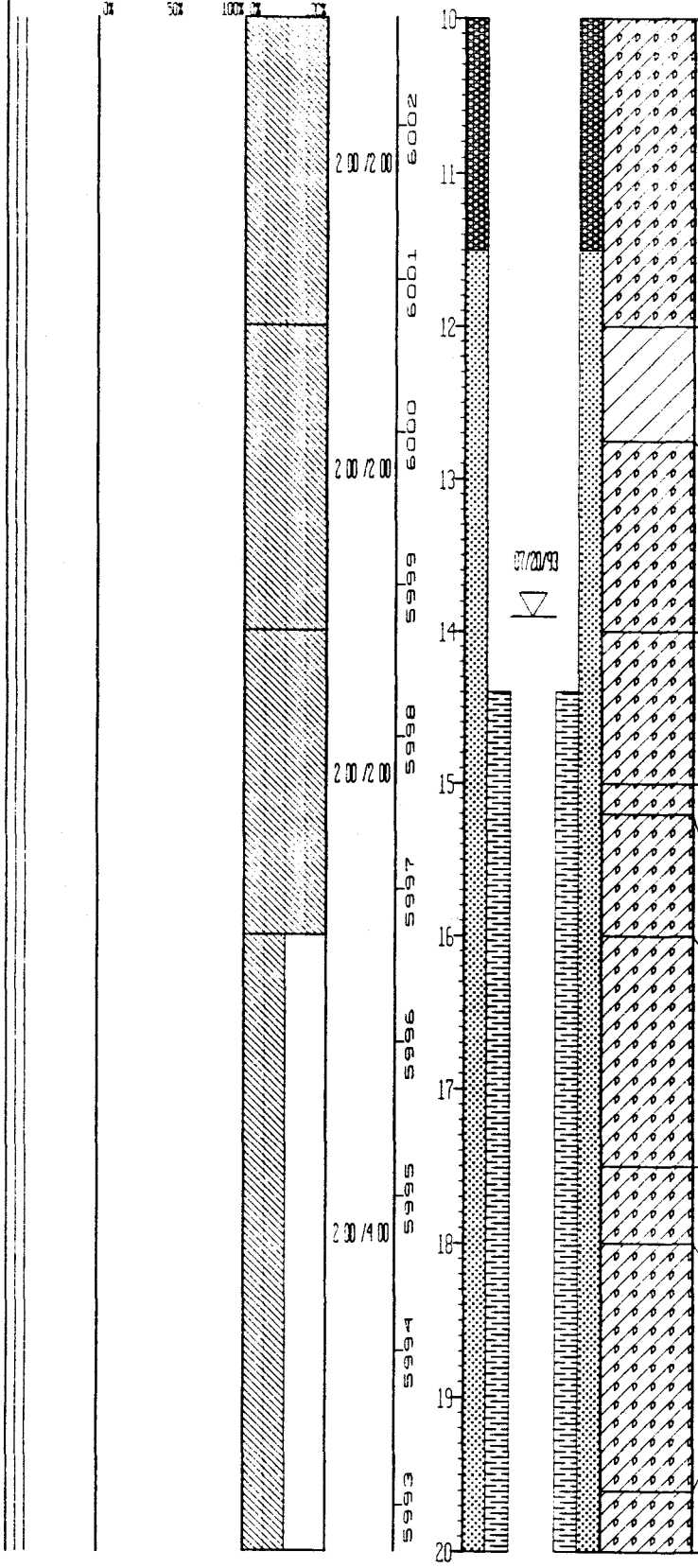
STATE PLANE COORDINATE		TOTAL DEPTH (FT)	26.00	GROUND ELEVATION (FT)	6012.70	PROJECT NUMBER	DUS-RFI/RI
NORTH	747514	AREA	IHSS 133.2	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING
EAST	1060603	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	07/20/93

LOG OF BORING NUMBER **63593**

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	10.0'-12.0' Sandy Clay Light brown (10 YR 5/6) Abundt gravel, well graded, angular to sub-rounded Moist
CL	12.0'-12.75' Clay Mod yellowish brown (10 YR 5/4) Abundt sand, some gravel, well graded, sub-angular to sub-rounded Moist
SC	12.75'-14.0' Sandy Clay/Clayey Sand Light brown (5 YR 5/6) Abunt gravel, well graded angular to sub-rounded Moist, wet at tip
SC	14.0'-15.0' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Angular to sub-rounded, well graded Wet
SC	15.0'-15.2' Sand and Gravel, trace Clay Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-angular Wet
SC	15.2'-16.0' Clayey Sand and Gravel Same as above, reference interval 14.0'-15.0', but moist
SC	16.0'-17.5' Sand and Gravel, some Clay Mod yellowish brown (10 YR 5/4) Mod graded, sub-angular to sub-rounded Wet
SC	17.5'-18.0' Sand and Gravel, abundt Clay Same as above, reference interval 16.0'-17.5', except well graded, angular to sub-rounded Very moist to wet
SC	18.0'-19.6' Sand and Gravel, abundt Clay Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-rounded Two to three 0.2' zones of clean sand and gravel Wet
SC	19.6'-20.0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) Well graded, sub-rounded to sub-angular Sand pred m g Very moist

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	26.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	005-RFI/RI
NORTH	747514	AREA (MSS 100)		CASING DIAMETER (IN)	[illegible]	GEOLOGIST	T. G.
EAST	1380603	LOCATION NUMBER	H7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	07/20/93

DRILLING 63593

REMARKS: WELLPOINT INSTALLED USING KANSAS SAMPLER. ALL CORE WAS USED FOR ANALYTICAL SAMPLES. ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		50%	100% 0%	100%		20			SC	20.0'-25.4' Sand and gravel, abundant Clay. Mod yellowish brown (10 YR 5/4). Well graded, angular to sub-rounded. Wet
				2.00/2.00	5992	21				
					5991	22				
				2.00/2.00	5990	23				
					5989	24				
				2.00/2.00	5988	25				
					5987	26			CLAYSTONE	25.4'-26.0' Claystone. Pale yellowish brown (10 YR 6/2) and light olive gray (5 Y 6/1). Some carbonaceous material. Moist
					5986	27				
					5985	28				
					5984	29				
					5983	30				

Total Depth Drilled: 26.00 Total Depth Casing: 24.30
Bottom of Filter Pack: 24.30

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 22 00	GROUND ELEVATION (FT) 6011 90	PROJECT NUMBER	SUS-RFI/RI
NORTH	74562	AREA IHSS 133 2	CASING DIAMETER (IN) 0 50	GEOLOGIST	T S DREILING
EAST	2080608	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED	07/30/93

LOG OF BORING NUMBER **63693**

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

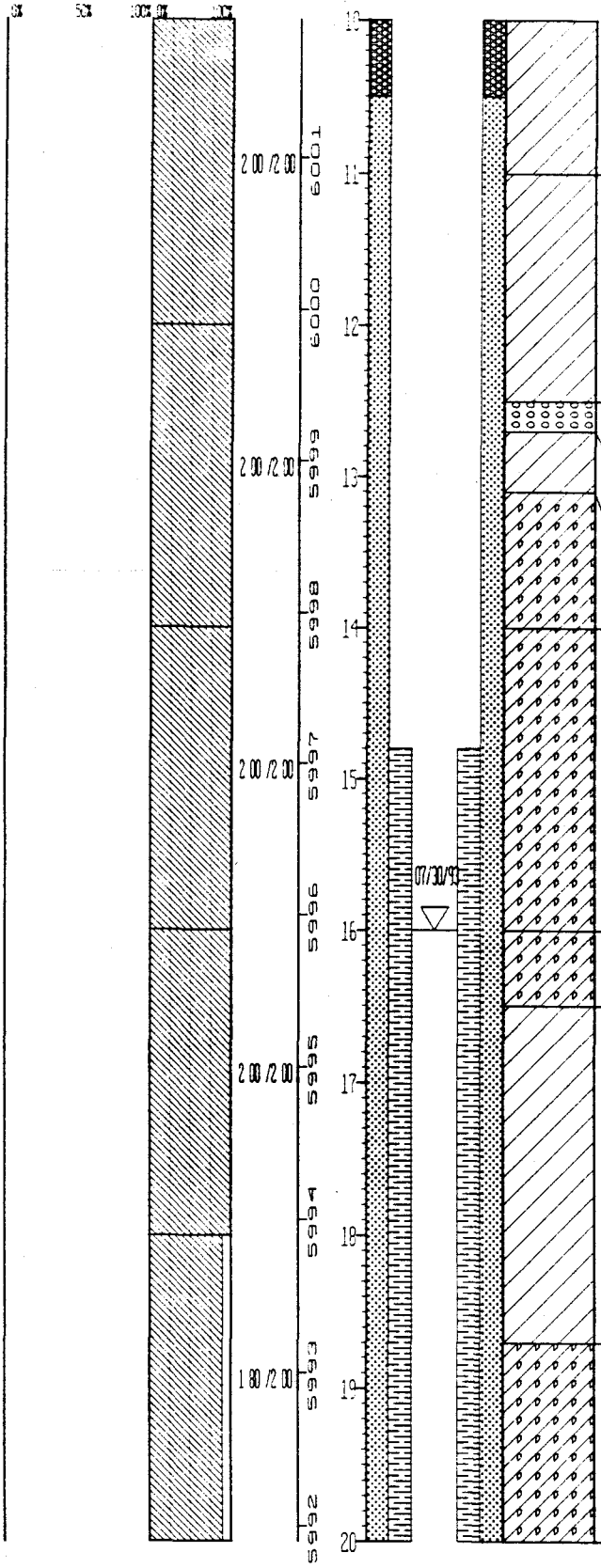
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						0			CL	0 0'-0 5' Sandy Clay Mod brown (5 YR 4/4) Abundt roots, trace gravel Sand pred f g, low plasticity, poorly graded Dry
				1 60 /2 00	6011	1			GW	0 5'-0 9' Gravel and Sand Pinkish gray (5 YR 8/1) Well graded, angular, dry (gw-sw)
					6010	2			CL	0 9'-1 6' Sandy Clay Mod yellowish brown (10 YR 5/6) Sand pred f g, poorly graded, angular to sub-angular, dry No recovery (1 6-2 0')
				1 80 /2 00	6009	3			CL	2 0'-8 0' Sandy Clay Mod yellowish brown (10 YR 5/4) Trace gravel and roots Sand is pred f g, sub-angular, low plasticity Dry Grades to pale yellowish brown (10 YR 6/2) at 4 0 ft Some Fe staining Gravel poorly graded, angular to sub-angular from 6 0 to 8 0 ft
					6008	4				
				1 80 /2 00	6007	5				
					6006	6				
				2 00 /2 00	6005	7				
					6004	8			SLUFF	8 0'-8 2' Sluff
									SW	8 2'-8 4' Sand and Gravel Well graded, angular to sub-angular (sw-gw)
				1 80 /2 00	6003	9			CL	8 4'-11 0' Sandy Clay Light brown (5 YR 5/1), mottled with light greenish gray (5 GY 8/1) Abundt gravel Sand is well graded, angular to sub-rounded Moist
					6002	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	22.00	GROUND ELEVATION (FT)	6011.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA	CASS 133 2	CASING DIAMETER (IN)	0.50	GEOLOGIST	[illegible] DREILING	63693
EAST	1080608	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	07/30/93	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	11.0'-12.5' Sandy Clay Light brown (5 YR 5/6) some light olive gray (5 Y 6/1) Sand is pred f g, poorly graded, angular to sub-rounded Trace gravel Moist
SW	12.5'-12.7' Sand and Gravel Pinkish gray (5 YR 8/1) Well graded, angular to sub-angular Dry (sw-gw)
CL	12.7'-13.1' Sandy Gravelly Clay Light brown (5 YR 5/6) Well graded, angular to sub-angular, low plasticity Moist
SC	13.1'-14.0' Sandy Clay/Clayey Sand Light brown (5 YR 5/6) M g to f g sand, some gravel Moist
SC	14.0'-16.0' Sandy Clay/Clayey Sand Light brown (5 YR 5/6) Abundt gravel, well graded, angular to sub-rounded Very moist
SC	16.0'-16.5' Clayey Sand and Gravel Light brown (5 YR 5/6) Well graded, angular to sub-angular Wet
CL	16.5'-18.7' Sandy Clay Light brown (5 YR 5/6) Trace gravel, poorly graded, pred f g sand, low plasticity Very moist
SC	18.7'-20.0' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Well graded angular to sub-rounded Increase in clay at bottom 0.3' of interval Moist

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22 00	GROUND ELEVATION (FT)	6011 30	PROJECT NUMBER	305-RFI/RI
NORTH 747502	AREA IHSS 133 2	CASING DIAMETER (IN)	0 50	GEOLOGIST	T S DREILING
EAST 2080608	LOCATOR NUMBER HT	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	07/30/93

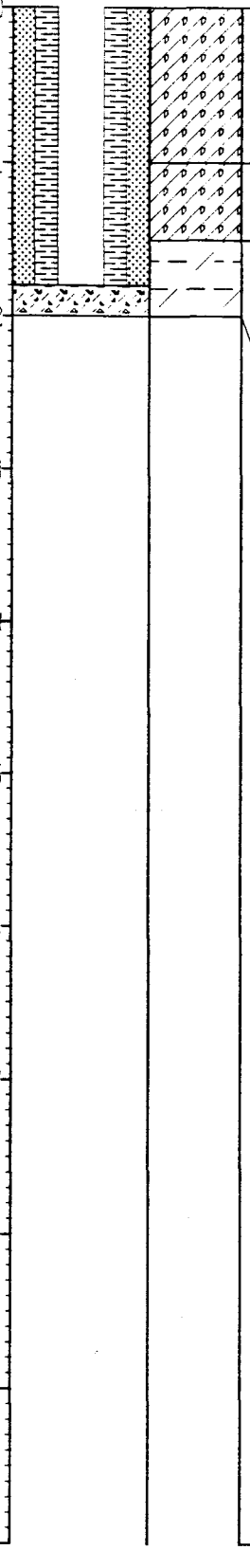
LOG OF BORING NUMBER 63693

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER. ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRAVITIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% 50%) | PERCENT RECOVERY (100% 0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	20 0'-21 0' Sand and Gravel Mod yellowish brown (10 YR 4/2) abundt clay Sand and gravel are well graded, sub-angular to sub-rounded Wet
SC	21 0'-21 5' Clayey Sand Light olive gray (5 Y 6/1) Sand is pred m g Some Fe staining
SILTY CLAYSTONE	21 5'-22 0' Top of Bedrock at 21 5' Silty Claystone Light olive gray (5 Y 6/1) mottled with dark yellowish orange (10 YR 6/6) Abundt Fe staining, some carbonaceous material Moist

Total Depth Drilled 22 00 Total Depth Casing 21 80
Bottom of Filter Pack 21.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 28 00	GROUND ELEVATION (FT)	6012 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747515	AREA IHSS 133 2	CASING DIAMETER (IN)	0 50	GEOLOGIST	T S DREILING	63793
EAST	2080611	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	08/02/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100%

PERCENT RECOVERY 0% 100%

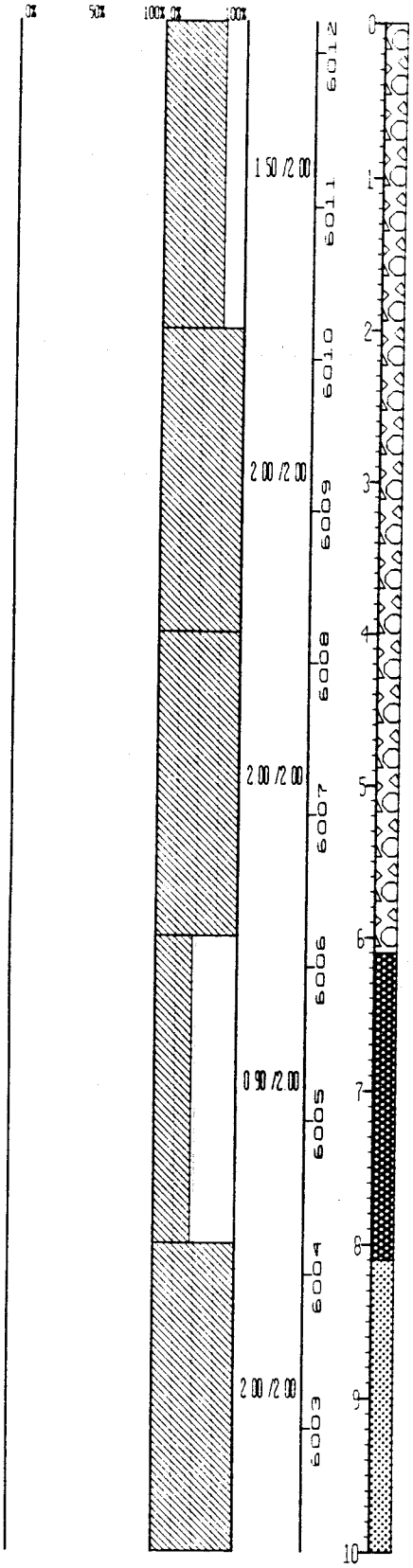
RECOVERY/INTERVAL: 1 50 /2 00; 2 00 /2 00; 2 00 /2 00; 0 90 /2 00; 2 00 /2 00

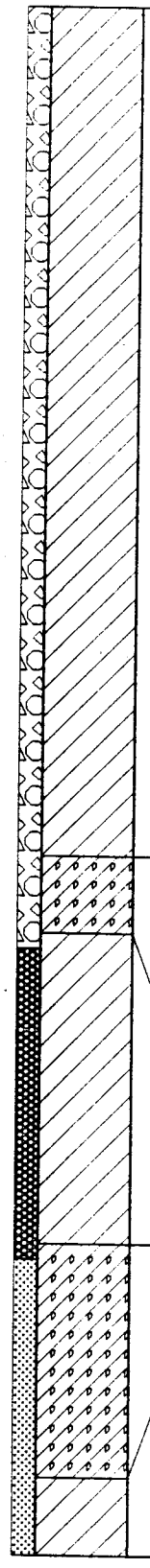
DATUM (FT): 6012, 6011, 6010, 6009, 6008, 6007, 6006, 6005, 6004, 6003

DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY





UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0'-5 5' Sandy Clay Abundt Silt, trace Gravel Mod brown (5 YR 3/4)' Some roots, trace calcium carbonate Sand is well graded, sub-angular to sub-rounded Dry Gravelly zone from 2 0 to 2 3 ft Some to abundt gravel from 4 0 to 5 5 ft
SC	5 5'-6 0' Sand and Gravel, abundt Clay Light brown (5 YR 5/6) Sand and gravel are well graded, angular to sub-rounded, mostly quartz Dry
CL	6 0'-8 0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) Sand is pred f g Sand and gravel are angular to sub-rounded Gravel is well graded 1 or 2 small layers of clean (without fines) sand and gravel Dry to slightly moist
SC	8 0'-9 5' Clayey Sand and Gravel Light olive gray (5 Y 6/1) Sand and gravel are well graded, angular to sub-rounded, quartzose Dry
CL	9 5'-10 0' Sandy Gravelly Clay Light olive gray (5 Y 6/1) Sand and gravel as above, reference interval 8 0'-9 5' Calcium carbonate? Slightly moist

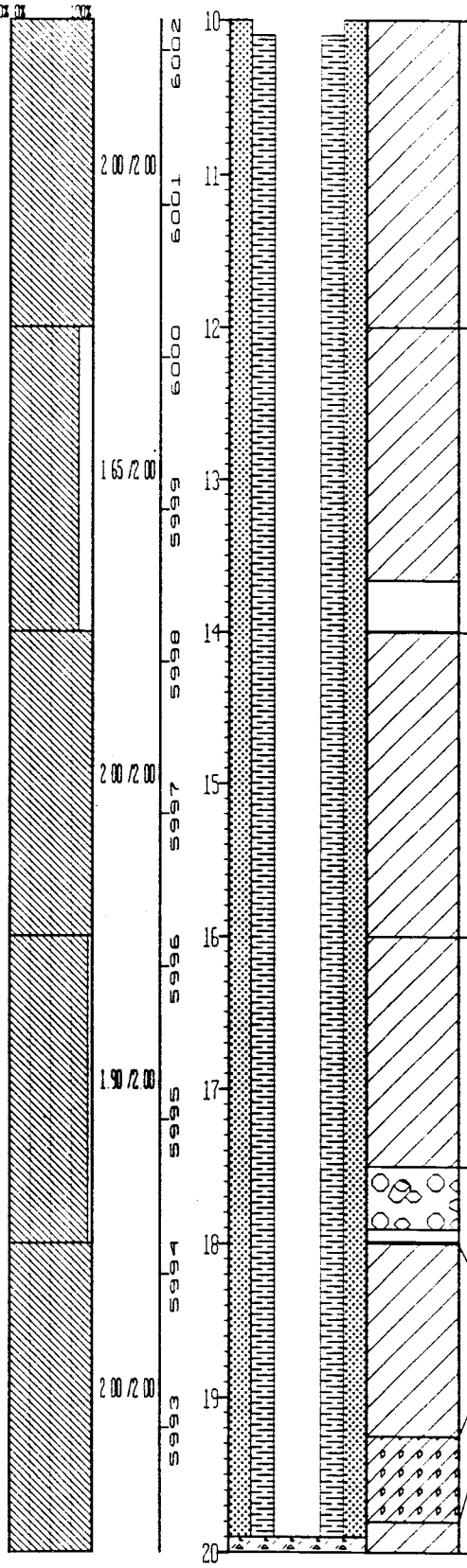
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30		SPRING ELEVATION (FT)	6012 30	PROJECT NUMBER	OU5-RFI/RI
NORTH	747515	AREA IHSS 133 2		CASING DIAMETER (IN)	0 50	GEOLOGIST	T S DREILING
EAST	1080611	LOCATOR NUMBER	H7	BORE-HOLE DIAMETER (IN)	2 00	DATE DRILLED	08/02/93

LOG OF BORING NUMBER 63793

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	10 0'-12 0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) mottled with light olive gray (5 Y 6/1) Sand is pred m g to f g Gravel is well graded, angular to sub-rounded Some calcium carbonate Moist
CL	12 0'-13 65' Sandy Gravelly Clay Light brown (5 YR 5/6) Sand and gravel is well graded, angular to sub-rounded Moist for 1 64' and wet at tip No recovery (13 65-14 0')
CL	14 0'-16 0' Sandy Clay, abundt Gravel Pale yellowish brown (10 YR 6/2) to mod yellowish brown (10 YR 5/4) Sand pred f g Gravel is angular to sub-rounded Moist
CL	16 0'-17 5' Sandy Clay, some Gravel Light brown (5 YR 5/6) Sand is pred f g Gravel is mostly fine, sub-angular to sub-rounded Moist
GW	17 5'-17 9' Sandy Gravel Angular, pred coarse, size is approx 1 in Dry (SW-GP) No recovery (17 9-18 0')
CL	18 0-19 25' Sandy Clay, some Gravel Mod yellowish brown Sand and gravel are mostly f g, poorly graded, sub-rounded Moist
SC	19 25'-19 8' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-rounded Wet
CL	19 8'-20 0' Sandy Clay, some Gravel Same as above, reference interval 18 0'-19 25'

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 28.00	GROUND ELEVATION (FT)	6010.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747515	AREA IHSS 133.2	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING	63793
EAST	1080611	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	08/02/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			2.00/2.00	5992, 5991	20, 21			CL	20.0'-22.0' Sandy Clay, some to abundant Gravel. Mod yellowish brown (10 YR 5/4) to light brown (5 YR 5/6). Sand is mostly f.g., poorly graded. Gravel is well graded, angular to sub-rounded. Moist
			2.00/2.00	5990, 5989, 5988	22, 23, 24			CL	22.0'-24.8' Sandy Clay, some Gravel. Light brown (5 YR 5/6). Sand is mostly f.g., poorly graded. Gravel is sub-angular to sub-rounded. Gravelly zones occurring at 23.1'-23.2' and 23.7'-24.0'. Moist to very moist
			2.00/2.00	5987	25			CL	24.8'-26.0' Sandy Gravelly Clay. Light brown (5 YR 5/6). Sand is mostly f.g. Gravel is well graded, angular to sub-angular. Mostly quartz and some mica and feldspar. Moist. Tip appears to be silty claystone
			1.30/2.00	5986, 5985, 5984, 5983	26, 27, 28, 29, 30			SILTY CLAYSTONE	26.0'-28.0' Top of Bedrock at 26.0'. Silty Claystone. Med. light gray (N6) mottled with olive gray (5 Y 5/2). Some carbonaceous material. One fracture at approx. 80 degrees

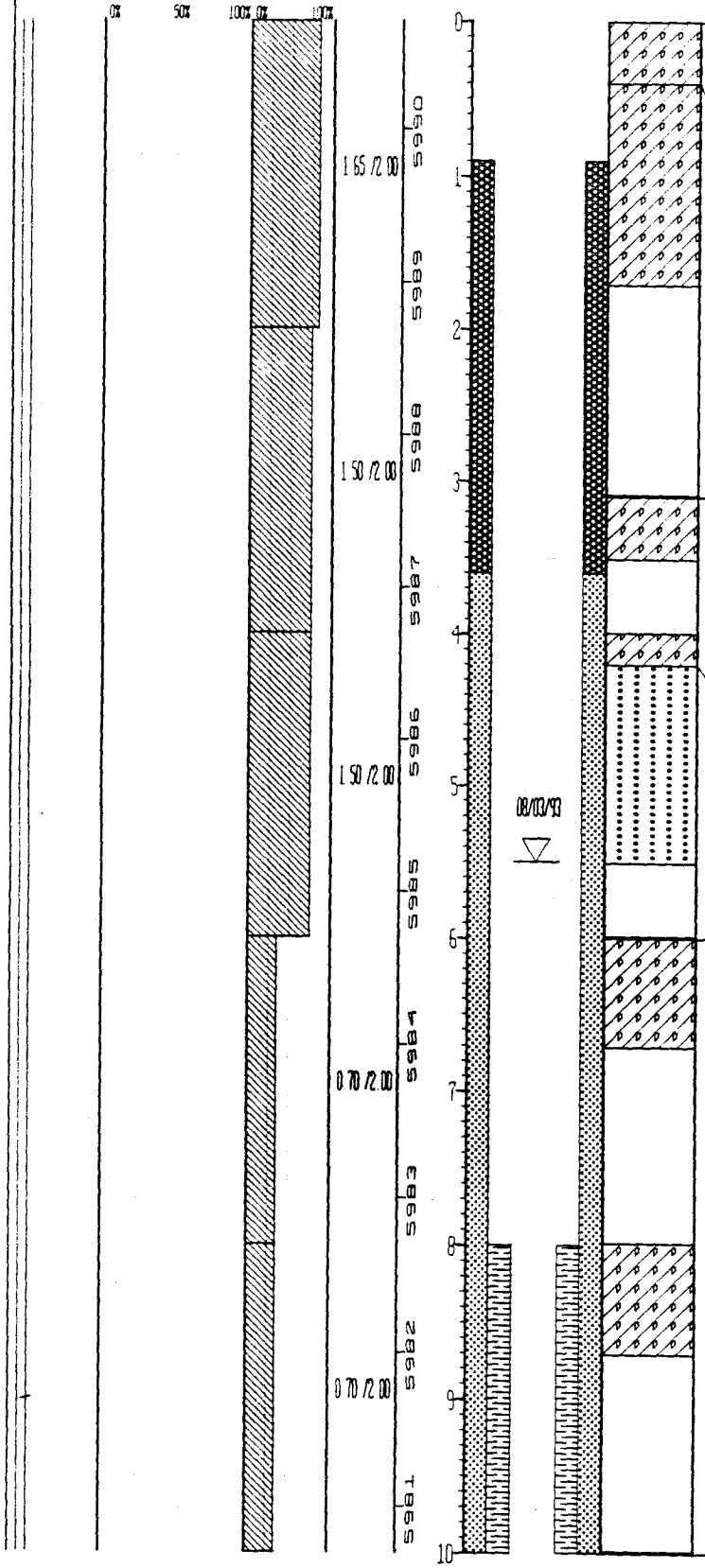
Total Depth Drilled 28.00 Total Depth Casing 19.90
Bottom of Filter Pack 19.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5990.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7828	AREA IHSS 115/196	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING	63893
EAST	2081536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	08/03/93	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ONFIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY / UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0.0'-0.4' Clayey Sand and Gravel, some Silt Mod yellowish brown (5 YR 5/6) Well graded, angular to sub-rounded, abundt roots Dry
SC	0.4'-1.7'-Sand, abundt Clay, some Gravel Olive black (5 Y 2/1) Some Fe staining, abundt concrete (0.4'-0.8') Sand is pred f.g. graphite, poorly graded Gravel is mostly med grained, poorly graded, sub-rounded to sub-angular Dry No recovery (1.7-3.1')
SC	3.1'-4.2' Clayey Sand/Sandy Clay Mod yellowish brown (10 YR 5/4) Trace Gravel Sand is pred m.g., sub-rounded In center of interval is a clean (without fines), m.g., Fe stained sand zone Moist No recovery (3.5-4.0')
SP	4.2'-5.5' Sand, some to trace Gravel Grayish black (N2) Trace clay Sand is m.g. to f.g., sub-rounded, graphite Moist from 4.2 to 5.2 ft to wet at 5.2 to 5.5 ft (sp-sw) No recovery (5.5-6.0')
SC	6.0'-8.7' Sand and Gravel, some Clay Dark yellowish brown (10 YR 4/2) Sand is pred f.g. to m.g. Gravel is poorly graded, angular to sub-angular Wet No recovery (6.7-8.0'), and (8.7-10.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5990.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7328	AREA IHSS 115/196	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING	63893
EAST	2081536	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	08/03/93	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ONFIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100%

PERCENT RECOVERY 0% 100%

RECOVERY/INTERVAL: 0.30/2.00; 1.80/2.00; 2.00/2.00; 0.00/2.00; 2.00/2.00

DATUM (FT): 5980, 5979, 5978, 5977, 5976, 5975, 5974, 5973, 5972, 5971

DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SP	10.0'-12.2' Sand, trace Clay and Gravel Dark yellowish brown (10 YR 4/2) Sand is poorly graded, pred m g to f g, sub-angular to sub-rounded One piece of gravel is sub-angular Wet No recovery (10.3-12.0')
SC	12.2'-13.8' Clayey Sand, some Gravel Becoming clayier at bottom half of run Dusky yellowish brown Sand is poorly graded, pred f g Gravel is angular to sub-rounded Wet to very moist No recovery (13.8-14.0')
SC	14.0'-19.2' Sand, abundt Gravel, trace to some Clay Dusky yellowish brown, (10 YR 2/2) Sand is poorly graded, pred m g to f g Gravel is poorly graded, pred med grained, angular to sub-rounded Wet No recovery (16.0-18.0')
SILTY CLAYSTONE	19.2'-19.4' Top of Bedrock at approx 19.2' Silty Claytone Dark yellowish orange (10 YR 6/6) Highly weathered, very moist
CLAYSTONE	19.4-20.0' Claystone Med dark gray (N4) Slightly moist

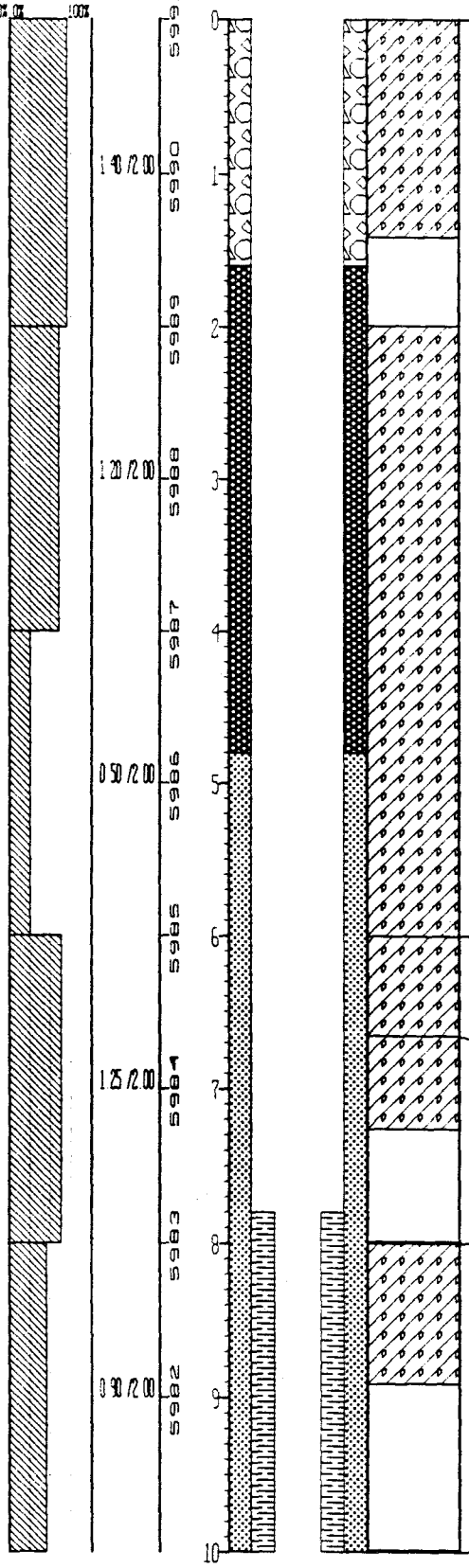
Total Depth Drilled 20.00 Total Depth Casing 12.90
Bottom of Filter Pack 12.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT) 5991 00	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 757322	AREA IHSS 115/196	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	63993
EAST 2081530	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED	08/03/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-6 0' Sand, abundt Gravel, some to trace Clay Top 0 7 ft is olive gray (5 Y 4/1), color change to grayish black (N2) Sand is m g graphite Gravel is angular to sub-rounded Some roots and glass Dry to moist No recovery (1 4-2 0')
SC	6 0'-6 65' Sand, some Gravel and Clay Grayish black (N2) Sand is poorly graded, pred m g, sub-rounded graphite Gravel is well graded, angular Wet
SC	6 65-7 25' Clayey Sand, trace Gravel Dark yellowish brown (10 YR 4/2) Sand poorly graded, pred f g Wet No recovery (7 25-8 0')
SC	8 0'-8 9' Sand, some Gravel and Clay Grayish black (N2) Well graded, angular to sub-rounded, trace glass Wet No recovery (8 9-10 0')

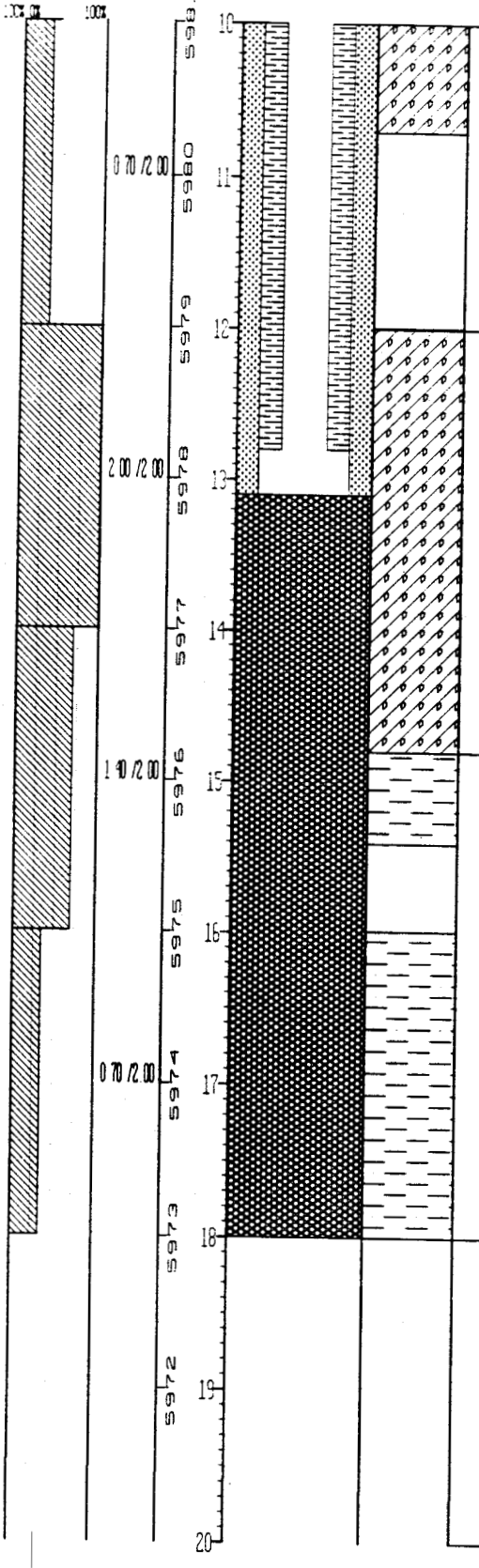
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 00	GROUND ELEVATION (FT) 5591 00	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 747822	AREA IHSS 115/196	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	63993
EAST 2081530	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED	08/03/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (50% 100%) | PERCENT RECOVERY (100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	10 0'-10 7' Clayey Sand, trace Gravel Dark yellowish brown (10 YR 4/2) Sand is poorly graded, pred f g Gravel is poorly graded, angular Wet No recovery (10 7-12 0')
SC	12 0'-14 8' Clayey Sand, trace Gravel Dusky yellowish brown (10 YR 2/2) Sand is poorly graded, f g Gravel is poorly graded, angular to sub-angular Wet
SANDY CLAYSTONE	14 8'-18 0' Top of Bedrock at 14 8' Sandy Claystone Mod yellowish brown (10 YR 4/4) Some Fe staining, highly weathered No recovery (15 4-16 0')
	Total Depth Drilled 18 00 Total Depth Casing 13 10 Bottom of Filter Pack 13 10

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 5990 00	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747818	AREA IHSS 115/136	CASING DIAMETER (IN) 3 50	GEOLOGIST F S DREILING	64093
EAST	2081543	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED 08/05/93	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 1 00 /2 00; 1 00 /2 00; 0 60 /2 00; 0 65 /2 00; 0 80 /2 00

DATUM (FT): 5990, 5989, 5988, 5987, 5986, 5985, 5984, 5983, 5982, 5981

DEPTH (FT): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-0 5'-Sand and Gravel, some Clay Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-rounded Some roots, trace metal Dry
SC	0 5'-1 0' Sand with some Gravel Grayish black (N2) Sand is poorly graded, f g, graphite Dry No recovery (1 0-2 0')
SC	2 0'-3 0' Sand, some Gravel Same as above, reference interval 0 5'-1 0', with a 2 in interval in the center that is clayey sand Mod yellowish brown The tip is gravel, some sand, well graded, angular Dry No recovery (3 0-4 0')
SW	4 0'-4 6' Sand, some Gravel, trace Clay Grayish black (N2) and mod yellowish brown (10 YR 5/4) Sand well graded, sub-angular to sub-rounded, graphite Gravel is poorly graded, pred med grained, angular to sub-rounded Some roots, trace glass Dry No recovery (4 6-6 0')
SC	6 0'-6 65' Sand and Gravel, some Clay Grayish black (N2) Well graded, sub-angular to angular, graphite Wet No recovery (6 65-8 0')
SW	8 0'-8 5'-Sand, some Gravel Mod yellowish brown (10 YR 5/4) Well graded, sub-angular to sub-rounded, quartzose Wet
SC	8 5'-8 8' Clayey Sand Grayish black (N2) Sand pred f g Some unknown material Wet No recovery (8 8-10 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	5990 00	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747818	AREA BASE LINE/GRID	CASING DIAMETER (IN)	0 50	GEOLOGIST	T S DREILING	64093
EAST	2281543	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	08/05/93	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50%	100% 0% 100%		5985	10			SC	10 0'-10 3' Clayey Sand Dusky yellowish brown (10 YR 2/2) Trace gravel, poorly graded, mostly fine grained, sub-rounded Wet
		1 30 /2 00	5975	11				No recovery (10 3-12 0')
			5965	12			SC	12 0'-12 7' Clayey Sand/Sandy Clay, some Gravel Dusky yellowish brown (10 YR 2/2) Sand is well graded, sub-rounded Gravel is poorly graded, angular to sub-rounded Moist
		0 70 /2 00	5955	13				No recovery (12 7-14 0')
			5945	14				Total Depth Drilled 14 00 Total Depth Casing 13 10 Bottom of Filter Pack 13 10
			5935	15				
			5925	16				
			5915	17				
			5905	18				
			5895	19				
				20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 6056 40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747413	AREA 005 MAG ANOMALY 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	64493
EAST	2078474	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1 87	DATE DRILLED 07/30/93	

REMARKS ASI Rig Geologist T Santangelo-Dreiling Note Core loss, no recovery intervals less than 0 2 ft not shown Located in magnetic anomaly west of IHSS 133 Log is from field description only All core went to samples

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6056	0			CL	0 0'-8 0' Sandy Clay with abundt Silt and trace Gravel Mod brown (5 YR 4/4) Sand is f g Some roots Interval from 6 0-8 0 ft has no gravel
	BH50652AS			1 00 /2 00	6055	1				No recovery (1 0-2 0'), (3 7-4 0'), and (5 8-6 0')
					6054	2				
	BH50630AS			1 70 /2 00	6053	3				
					6052	4				
				1 80 /2 00	6051	5				
					6050	6				
				2.00 /2.00	6049	7				
					6048	8			CL	8 0'-10 0' Sandy Clay with some Silt Light brown (5 YR 5/6) Sand is pred f g Moist
	BH50631AS			2 00 /2 00	6047	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	6056 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747413	AREA 005 MAG ANOMALY 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	64493
EAST	2078474	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN)	1 97	DATE DRILLED	07/30/93	

REMARKS ASI Rig Geologist T Santangelo-Dreiling Note Core loss, no recovery intervals less than 0 2 ft not show n Located in magnetic anomaly west of IHSS 133 Log is from field description only All core went to samples

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATION SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						10			CL	10 0'-14 0' Sandy Clay with trace Gravel Light brown (5 YR 5/6) Sand pred f g Moist
				2 00 /2 00	6046					No recovery (12 0-14 0')
					6045	11				
					6044	12				
	BH50632AS			0 00 /2 00	6043	13				
					6042	14				Total Depth Drilled 14 00
					6041	15				
					6040	16				
					6039	17				
					6038	18				
					6037	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 6053.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747414	AREA 005 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	64593	
EAST 2078527	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1.87	DATE DRILLED 07/30/93		

REMARKS Drilling Equipment Hydraulic Hammer Rig ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0.2 Ft not shown Located in magnetic anomaly west of IHSS 133 Log is from field description only All core went to samples

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50653AS			1.80/2.00	6053	0			CL	0.0'-5.7' Sandy Clay with trace Gravel Mod brown (5 YR 4/4) Some roots Sand is primarily f g, dry No recovery (1.8-2.0'), (3.7-4.0'), and (5.7-6.0')
					6052	1				
	BH50634AS			1.70/2.00	6051	2				
					6050	3				
				1.70/2.00	6049	4				
					6048	5				
				2.00/2.00	6047	6			CL	6.0'-10.0' Sandy Clay with trace Gravel Light brown (5 YR 5/6) Sand is mostly f g, slightly moist
					6046	7				
	BH50635AS			2.00/2.00	6045	8				
					6044	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT)	6053 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747414	AREA OU5 Mag West of 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	64593
EAST 2078527	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN)	1 87	DATE DRILLED	07/30/93	

REMARKS Drilling Equipment Hydraulic Hammer Rig ASI Rig Geologist T Santangelo-Dreiling NOTE Core loss (no recovery) intervals less than 0 2 Ft not shown Located in magnetic anomaly west of IHSS 133 Log is from field description only All core went to samples

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATION SAMPLE DEPTH	SAMPLE NO	SAMPLE GRADIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%			10			CL	10 0'-11 5' Sandy Gravelly Clay with a Gravel zone from approx 10 4 to 10 7 Ft Light brown (5 YR 5/6) Becoming Sandy Clay with some Gravel at bottom 0 5 in Moist No recovery (11 5-12 0')
					1 50 /2 00	6043	11				
						6042	12			CL	12 0'-16 0' Sandy Clay with some Gravel Light brown (5 YR 5/6) Fairly stiff Sand, well graded, pred f g, moist
					2 00 /2 00	6041	13				
						6040	14				
		BH5063AS			2 00 /2 00	6039	15				
						6038	16			CL	16 0'-20 0' Sandy Gravelly Clay Light brown (5 YR 5/6) Moist No recovery (17 4-18 0')
					1 9 /2 00	6037	17				
						6036	18				
		BH5063AS			2 00 /2 00	6035	19				
						6034	20				Total Depth Drilled 20 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 6051 10	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747414	AREA 305 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	64693
EAST	2078579	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1 37	DATE DRILLED 07/30/93	

REMARKS DRILLING EQUIPMENT HYDRAULIC HAMMER RIG ASI RIG GEOLOGIST T SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY INTERVALS) LESS THAN 0 2 FT NOT SHOWN LOCATED IN MAGNETIC ANOMALY WEST OF PSS 133 LOG IS FROM FIELD DESCRIPTION ONLY ALL CORE WENT TO SAMPLES

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6051	0			CL	0 0'-4 0' Sandy Clay with abundt Silt Mod yellowish brown (10 YR 5/4) Some roots Sand is pred f g, dry
	BH5065WS			1 65 /2 00	6050	1				No recovery (1 65-2 0')
					6049	2				
	BH5063WS			2 05 /2 00	6048	3				
					6047	4			CL	4 0'-6 0' Sandy Clay with some Silt Same as above (reference interval 2 0 to 4 0 ft) Slightly moist, trace roots.
				2.13 /2 00	6046	5				
					6045	6			CL	6 0'-10 0' Sandy Clay with trace Gravel Light brown (5 YR 5/6) Sand is pred. f g., some c g, trace roots, moist
				2.05 /2.00	6044	7				
					6043	8				
	BH5063WS			2 10 /2 00	6042	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT)	6051 40	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	749414	AREA 305 Mag West of 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	64693
EAST	2078579	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN)	1 87	DATE DRILLED	07/30/93	

REMARKS DRILLING EQUIPMENT HYDRAULIC HAMMER RIG ASI RIG GEOLOGIST T SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY INTERVALS) LESS THAN 0 2 FT NOT SHOWN LOCATED IN MAGNETIC ANOMALY WEST OF DASS 133 LOG IS FROM FIELD DESCRIPTION ONLY ALL CORE WENT TO SAMPLES

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	6041	10			CL	10 0'-16 0' Sandy Clay with some Sand and trace Gravel Light brown (5 YR 5/6), some carbonaceous material Sand is mostly f g Very moist Interval from 12 0-14 0 ft is moist
				2 00 /2 00	6040	11				
				2 00 /2 00	6039	12				
				2 00 /2 00	6038	13				
				2 00 /2 00	6037	14				
				2 00 /2 00	6036	15				
					6035	16				Total Depth Drilled 16 00
					6034	17				
					6033	18				
					6032	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT)	6046.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747538	AREA IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	55194
EAST	2079113	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	09/29/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50/2.00	6046	0			SW	0.0'-1.5' Gravelly Sand with trace Silt and Clay. Mod. brown (5 YR 4/4) to mod. brown (5 YR 3/4). Gravel fine grained. Sand f.g. to m.g., well graded, angular to sub-angular. Core is dry. 43% gravel, 54% sand, 2% silt, 1% clay.
				1.50/2.00	6045	1				
				1.50/2.00	6044	2			SC	2.0'-13.5' Clayey Sand with trace Silt. Mod. yellowish brown (10 YR 5/4). Sand m.g. to f.g., consists of feldspars, quartz, mafic and micaceous material, sub-angular. Bedding massive. Some Fe staining. Trace of carbonaceous material. Core dry from 2.0'-6.0'. Core moist from 6.0'-13.5'. 78% sand, 2% silt, 15% clay.
	GH0022AS			1.50/2.00	6043	3				No recovery (1.5-2.0') and (3.5-4.0')
				2.00/2.00	6042	4				
				2.00/2.00	6041	5				
				2.00/2.00	6040	6				
				2.00/2.00	6039	7				
				2.00/2.00	6038	8				
				2.00/2.00	6037	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.00		GROUND ELEVATION (FT) 6046.10		PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747538	AREA	IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	55194
EAST	2079113	LOCATOR NUMBER	67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	09/29/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	6036	10				
					6035	11				
					6034	12				
				1.50/2.00	6033	13				
									NO RECOVERY	13.5'-14.0' No Recovery.
	BH00030AS				6032	14			SC	14.0'-16.1' Most of core taken for sample BH00030AS, not enough core to determine grain size distribution. According to Well Site Field Log interval is a Clayey Sand. Same as above (reference interval 2.0'-14.0'), with abundt. sand and gravel fragments. Caliche appears at 15.6'-16.0'.
				2.00/2.00	6031	15				
					6030	16			CLAYSTONE	16.1'-19.0' Top of Bedrock at 16.1' Claystone with some Silt. Med. dark gray (N4) to light olive gray (5 Y 6/1) with dark yellowish brown (10 YR 6/6). Bedding massive. Traces of carbonaceous material. Core is fractured from 17.0-19.0', may be due to lack of moisture in core box. 90% clay, 10% silt.
				2.00/2.00	6029	17				
					6028	18				
				1.00/1.00	6027	19				
						20				

Total Depth Drilled 19.00 Total Depth Casing 19.00
Bottom of Filter Pack 19.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 20.00	GROUND ELEVATION (FT): 6045.30	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747537	AREA: IHSS 133	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	55294
EAST: 2079132	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED: 09/30/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	6045	0			SW	0.0'-10.0' Gravelly Sand with trace Clay and Silt. Mod. yellowish brown (10 YR 5/4). Gravel med. and coarse to fine grained, avg. size: 0.5 in., max: 1.5 in., angular, well graded. Sand is f.g. to c.g. in a Clay matrix, sub-angular. Sand is composed of quartz, feldspars, mafic minerals and micaceous minerals. 29% gravel, 67% sand, 1% silt, 3% clay.
					6044	1				
					6043	2				No recovery (3.5-4.0')
	BH00031AS			1.50/2.00	6042	3				
					6041	4				
				2.00/2.00	6040	5				
					6039	6				
				2.00/2.00	6038	7				
					6037	8				
	S			2.00/2.00	6036	9				
						10				

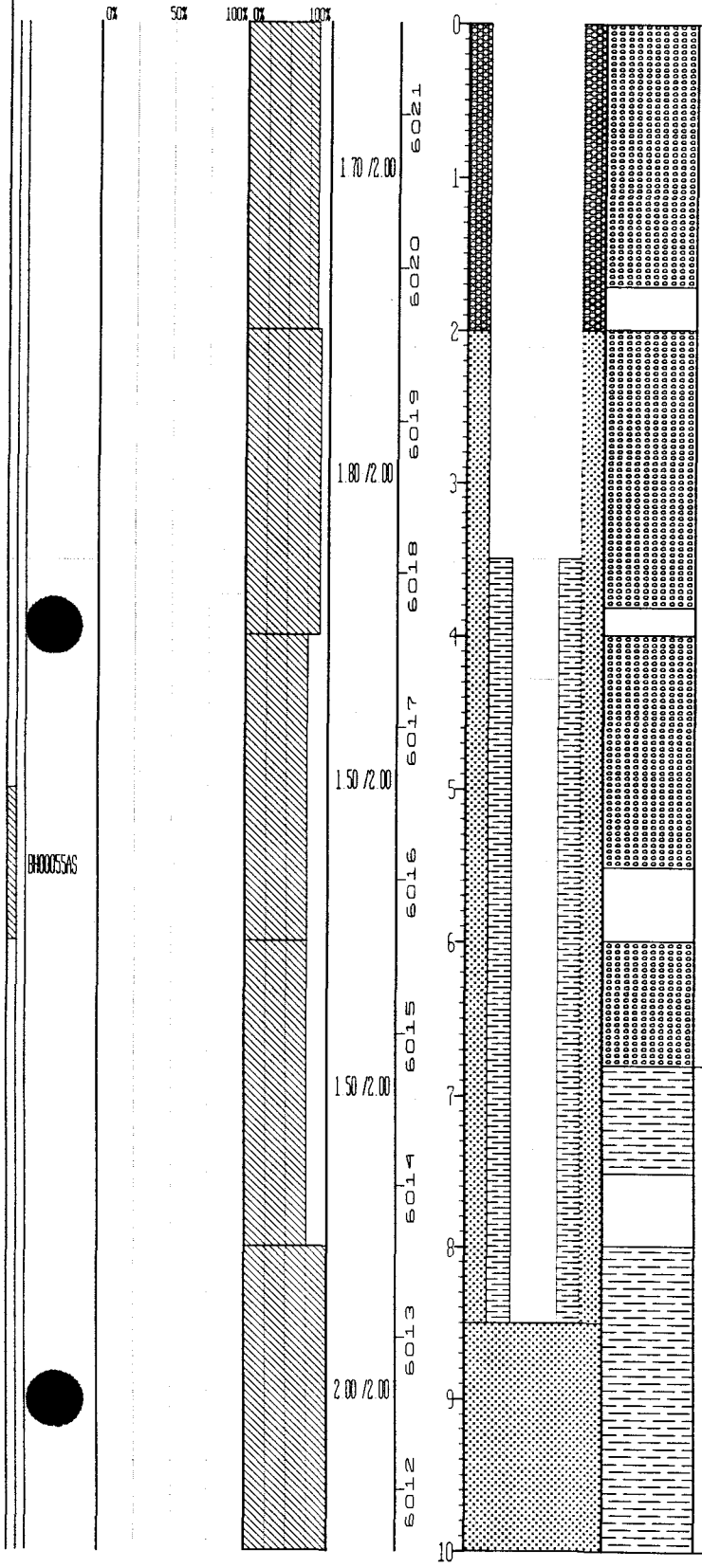
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 6045.30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747537	AREA IHSS 135	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55294
EAST	2079132	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/30/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI F23 GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00033AS	0% 50%	100% 0% 100%	2.00 /2.00	6035 6034	10 11			SW	10.0'-15.25' Gravelly Sand with trace Clay and Silt. Most of core is gone from core box, core was taken for samples BH00031AS and BH00032AS. Clay/Silt content may increase, grain distribution may vary, but not enough core is available to make that determination. Not able to determine bedding. Some carbonaceous material. Gravel appears to increase with depth. Core is dry.
						12				No recovery (13.4-14.0')
				1.40 /2.00	6033 6032	13				
						14				
				2.00 /2.00	6031 6030	15			CLAYSTONE	15.25'-16.0' Top of Bedrock at 15.25'. Claystone with trace Silt. Light olive gray (5 Y 6/1). Bedding is apparent, horiz. with some indications of slumping. 95% Clay, 5% Silt.
						16			SANDY CLAYSTONE	16.0'-17.6' Sandy Claystone with trace Silt. Light olive gray (5 Y 5/2). Probably reworked bedrock and alluvium. 20% sand, 4% silt, 76% clay.
				1.60 /2.00	6029 6028	17				No recovery (17.6-18.0')
						18			CLAYSTONE	18.0'-20.0' Claystone with trace Silt. Same as above (reference interval 15.25'-16.0').
				2.00 /2.00	6027 6026	19				
						20				Total Depth Drilled: 20.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6021.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747297	AREA: IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	55394
EAST	2079129	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/11/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.



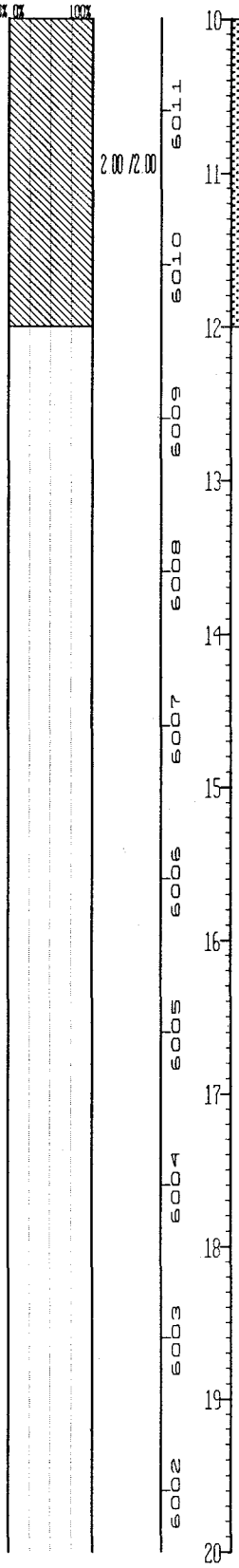
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	0.0'-6.8': Gravelly Sand with trace Silt and Clay. Mod. yellowish brown (10 YR 5/4). Gravel: coarse to fine, avg. size: 0.5 in., max. size: 1.0 in., composed of quartzite and granite, sub-angular to angular. Sand is c.g. to f.g., sub-angular to angular. Some mica in sand. Well graded. Weathered. Bedding not apparent. Core is dry and loosely consolidated. 38% gravel, 59% sand, 2% silt, 1% clay. No recovery (1.7-2.0'), (3.8-4.0'), and (5.5-6.0').
CLAYSTONE	6.8'-12.0': Top of Bedrock at 6.8'. Claystone with some Silt. Dusky yellow (5 Y 6/4) to med. gray (N5). Trace of Fe staining and carbonaceous material. From 8.0'-10.0' core is fractured. Fractures predominantly drilling induced. Bedding is mostly massive with some mottled beds. Some Mn staining. Non-friable. Core is dense when dry. Rig Geologist's field log indicates core is moist to wet. 20% silt, 80% clay. No recovery (7.5-8.0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5021.60	PROJECT NUMBER	OU5-RFI/RI
NORTH 747297	AREA IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL
EAST 2079129	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/11/94

LOG OF BORING NUMBER 55394

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

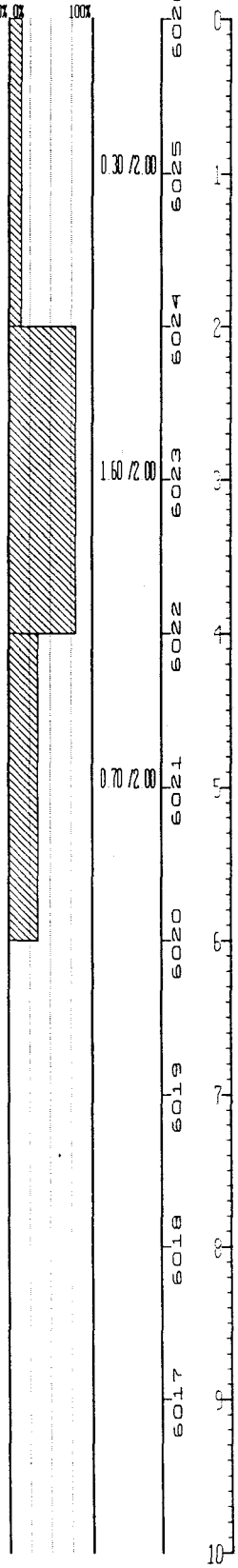


Total Depth Drilled: 12.00 Total Depth Casing: 8.50
Bottom of Filter Pack: 8.50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT) 6026.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747331	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55494
EAST	2079449	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/28/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL. OFFSET OF 55494. COORDINATES ARE ESTIMATED BASED ON WELL 55494.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GM	0.0'-0.3': Silty Gravel with some Sand and trace Clay. Duskly yellowish brown (10 YR 2/2). Mostly topsoil. Sand is f.g. to m.g., sub-rounded. Gravel is med. to fine, max. 0.75 in., angular to sub-angular. No apparent bedding. Core dry, low plasticity. Difficult to determine accurate grain size distribution due to lack of core in box. 51% gravel, 21% sand, 24% silt, 3% clay. No recovery (0.3-2.0').
SM	2.0'-4.7': Gravelly Sand with some Silt and trace Clay. Mod. brown (5 YR 4/4). Some mod. orange pink (10 R 7/4) silty fragments. Sand is f.g. to m.g., sub-angular to sub-rounded, well sorted. Gravel is coarse to fine, sub-angular. Some pulverized rock and caliche. Core dry, low plasticity. Bedding not apparent. 37% gravel, 41% sand, 18% silt, 4% clay. No recovery (3.6-4.0') and (4.7-6.0').
	Total Depth Drilled: 6.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6026.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747331	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55494A
EAST	2079448	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/28/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	GEOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.90/2.00	6025	1			SM	0.0'-2.7': Gravelly Sand with some Silt and trace Clay. Dark yellowish brown (10 YR 4/2) to pale yellowish brown (10 YR 6/2). Sand is f.g. to m.g., well sorted, sub-angular. Gravel is fine, up to 0.50 in. in diameter, well sorted, consisting of metamorphic and granitic clasts. Some root fragments. Bedding not apparant, low plasticity. 32% gravel, 44% sand, 19% silt, 5% clay. No recovery (0.9-2.0') and (2.7-4.0').
				0.70/2.00	6023	3				
				1.80/2.00	6021	5			SM	4.0'-9.3': Silty Sand with trace Gravel and Clay. Mod. brown (5 YR 4/4). Sand is f.g. to m.g., well sorted, sub-angular to sub-rounded. Some Mn staining. Some caliche. Low plasticity. Bedding massive. Gravel up to 0.40 in., well sorted. 2% gravel, 67% sand, 28% silt, 3% clay. No recovery (5.8-6.0'), (7.7-8.0'), and (9.3-10.0')
	GH00023AS			1.70/2.00	6019	7				
				1.30/2.00	6017	9				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6026.00	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747331	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55494A
EAST	2079448	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/28/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00024S	0% 50%	100% 0% 100%	1.90/2.00	6016 6015	10 11			SC	10.0'-11.4' Clayey Sand with some Gravel. Mod. yellowish brown (10 YR 5/4) to light brown (5 YR 5/6). Sand is f.g. to m.g., well sorted, sub-rounded. Some caliche. Trace carbonaceous material. Bedding massive. Core dry, low plasticity. 9% gravel, 55% sand, 36% clay.
					6014	12			CL	11.4'-11.9' Clay with caliche. Yellowish gray (5 Y 7/2) and dark yellowish orange (10 YR 6/6). Dry to moist. Mn staining along fractures. Trace f.g. to c.g. sand, sub-angular to sub-rounded. No recovery (11.9-12.0').
				1.60/2.00	6013	13			CL	12.0'-12.6' Sandy Clay. Mod. yellowish brown (10 YR 4/4) to mod. olive brown (5 Y 4/4). Sand is f.g. Stiff. Some caliche. F.g. to c.g. sand, sub-angular to sub-rounded. F-c gravel, well graded. 33% sand, 67% clay.
					6012	14			CL	12.6'-13.6' Sandy Clay with some Gravel. Mod. yellowish brown (10 YR 4/4). Sand is f.g. to c.g., well graded, sub-rounded. Some Mn and FeO staining. Some caliche. F-c gravel. NOTE: Well Site Field Log notes gravel up to 0.3 in. and bottom 0.25' pulverized granite cobble. 10% gravel, 38% sand, 53% clay. No recovery (13.6-14.0').
					6011	15				
					6010	16				Total Depth Drilled: 14.00 Total Depth Casing: 14.00 Bottom of Filter Pack: 14.00
					6009	17				
					6008	18				
					6007	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	6033.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747409	AREA: IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST:	J. W. HARWELL	55594
EAST:	2079583	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED:	09/28/94	

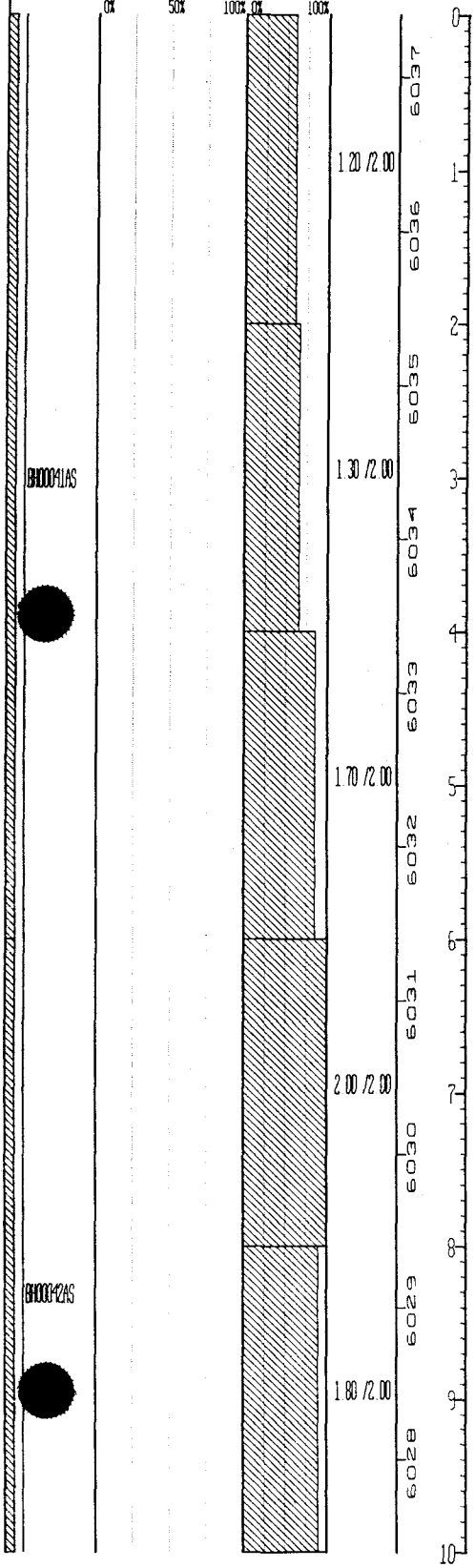
REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	6033	0–1			CL	0.0'-4.0' Sandy Clay. Mod. yellowish brown (10 YR 5/4) to light olive gray (5 Y 5/2). Sand is m.g. to f.g. in clay matrix, sub-angular to sub-rounded. Trace gravel and coarse sand, poorly graded. Upper 1.5' more Fe stained and weathered than rest of interval. Bedding massive. Core dry according to Well Site Field Log. Low plasticity. 24% sand, 76% clay
				2.00/2.00	6032	1–2				
					6031	2–3				
					6030	3–4				
				1.70/2.00	6029	4–5			CLAYSTONE	4.0'-7.3' Top of Bedrock at 4.0'. Claystone. Med. gray (N5) to olive black (5 Y 2/1). Trace of caliche. Bedding massive. Dry. Some Fe staining, especially along fractures. Fractures both drilling induced and natural (random). Possible disturbed sediments and/or breccia in lower foot of interval at approx. 7.0'. 100% clay.
	BH0025AS				6028	5–6				
				1.30/2.00	6027	6–7				No recovery (7.3-8.0')
					6026	7–8				
					6025	8–9				Total Depth Drilled: 8.00 Total Depth Casing: 8.00 Bottom of Filter Pack: 8.00
					6024	9–10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 16.00	GROUND ELEVATION (FT)	6037.40	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747491	AREA: IHSS 133	CASING DIAMETER (IN):		GEOLOGIST:	J.W. HARWELL	55694
EAST	2079584	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN):	1.40	DATE DRILLED	10/05/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST J. W. HARWELL. CORE IS STORED IN HOT CONEX, THEREFORE ALL DESCRIPTIONS ARE TAKEN FROM THE RIG GEOLOGIST'S FIELD LOG.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% – 50% – 100%) | PERCENT RECOVERY (0% – 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	0.0'-1.2' Gravelly Sand. The following sample description has been taken from the Well Site Field Log. The box of core is in the Hot Conex, and unavailable to do sieve analysis, etc. Mod. yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/2). Gravel up to 0.5 in. Sand is f.g. to c.g. Massive, dry, roots. No recovery (1.2-2.0').
ML	2.0'-2.3' Sandy Silt. Waste/fill, Metallic Waste, and Ash. Dark yellowish brown (10 YR 4/2) with some yellowish rust colors. Some metal and glass fragments, sand and silt size ash.
CL	2.3'-3.0' Sandy Clay with some Gravel. Mod. yellowish brown (10 YR 5/4). Some ash and metallic waste. Core massive and dry.
SP	3.0'-3.3' Sand. Grayish orange (10 YR 7/4). M.g. to f.g. Massive. Dry. Some metallic waste. No recovery (3.3-4.0').
ML	4.0'-4.7' Sandy Silt. Waste/fill, Metallic Waste, and Ash. Same as above (reference interval 2.0'-2.3').
SC	4.7'-5.7' Clayey Sand. Dark yellowish orange (10 YR 6/6). Trace to some fine gravel. Massive, dry. Abundt. white powdery material, possibly rock flour. Some metallic waste. No recovery (5.7-6.0')
ML	6.0'-6.7' Sandy Silt. Waste/fill and Metallic Waste. Same as above (reference interval 2.0'-2.3').
SC	6.7'-8.0' Clayey Sand. Same as above (reference interval 4.7'-5.7'). Abundt. gravel, some silt. Massive, dry.
SC	8.0'-9.1' Clayey Sand. Same as above (reference interval 4.7'-5.7'). Dark yellowish orange (10 YR 6/6) to mod. orange pink (5 YR 8/4).
SP	9.1'-9.4' Sand. F.g. to m.g.
SC	9.4'-9.8' Clayey Sand No recovery (9.8-10.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT)	6037.40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747491	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J.W. HARWELL	55694
EAST	2079584	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/05/94	

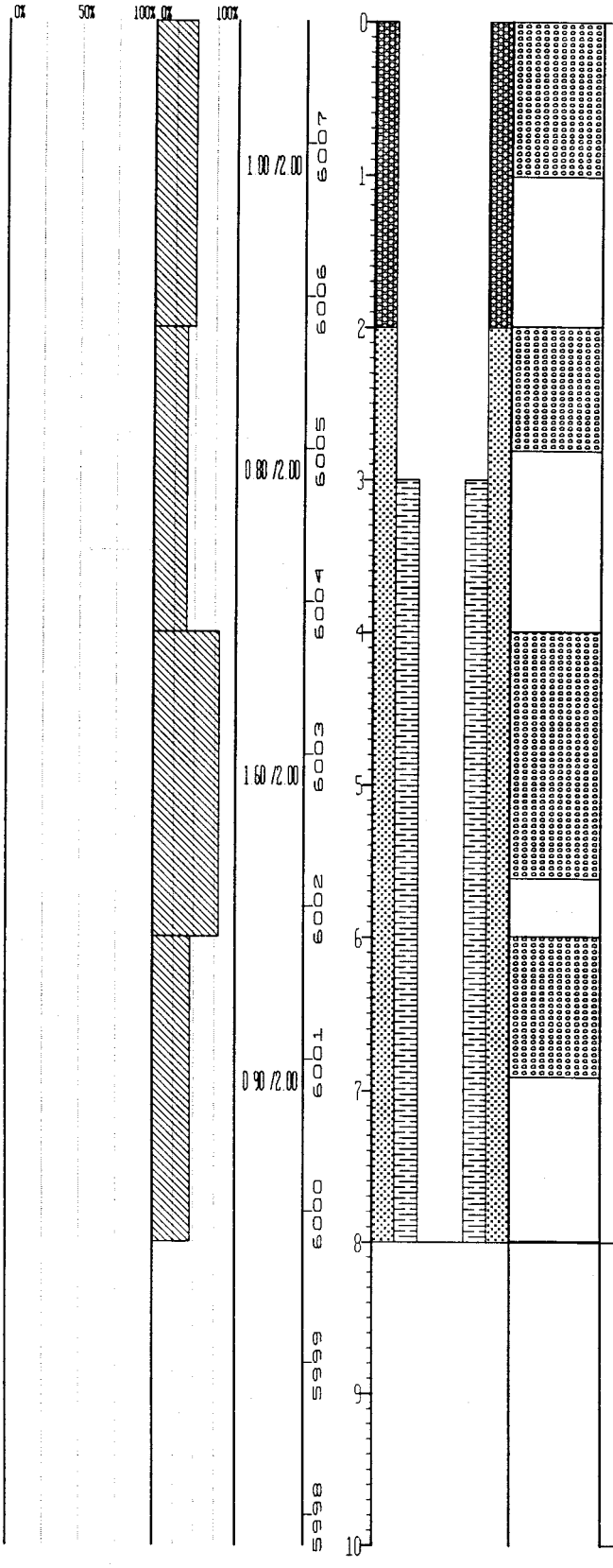
REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST J. W. HARWELL. CORE IS STORED IN HOT CONEX, THEREFORE ALL DESCRIPTIONS ARE TAKEN FROM THE RIG GEOLOGIST'S FIELD LOG.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6027	10			SC	10.0'-10.6'. Clayey Sand. Dark yellowish orange (10 YR 6/6). Trace gravel. Some Fe and Mn staining. Some carbonaceous material. Massive. Dry to moist.
				2.00 /2.00	6026	11			CLAYSTONE	10.6'-16.0'. Claystone. Yellowish gray (5 Y 7/2) to light olive gray (5 Y 6/1). Trace Fe staining, trace carbonaceous material. Massive. Dry to moist. At 13.6', color grades to dark yellowish orange (10 YR 6/6).
				2.00 /2.00	6025	12				
				2.00 /2.00	6024	13				
				2.00 /2.00	6023	14				
					6022	15				
					6021	16				Total Depth Drilled: 16.00
					6020	17				
					6019	18				
					6018	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT) 6007.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747311	AREA IHSS 133	CASING DIAMETER (IN) 0.50	GEOLOGIST J. W. HARWELL	55794	
EAST 2079711	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/11/94		

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



SW

0.0'-8.0' Gravelly Sand with trace of Silt and Clay. Dark yellowish brown (10 YR 4/2). Gravel is coarse to fine, angular to sub-angular, well graded, max. 1.5 in., avg. 0.50 in. Gravel is composed of quartzite and granite. Sand is c.g. to f.g., sub-angular. Composed of quartz, mafic minerals, and feldspars. Sand is in silty clay matrix. Traces of carbonaceous material. Core unconsolidated, contains some pulverized rock and rock flour. Some clayey zones or lenses. Rig Geologist's Well Site Field Log indicates core is dry. Low plasticity.
45% gravel, 48% sand, 5% silt, 2% clay.

No recovery (1.0-2.0'), (2.8-4.0') and (5.6-6.0').

No recovery (6.9-8.0').

Total Depth Drilled: 8.00 Total Depth Casing: 8.00
Bottom of Filter Pack: 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6040.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747538	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55894
EAST	2079716	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/03/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ~~FI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1.40/2.00	6040	0			SM	0.0'-2.3': Silty Sand with some Gravel. Following sample description has been taken from the Well Site Field Log. Core for this interval was taken for sample. Mod. yellowish brown (10 YR 5/4). Massive bedding. Dry. F.g. sand. Unconsolidated to weakly consolidated. No recovery (1.4-2.0').
					6039	1				
						2				
	BH0003GAS			1.50/2.00	6038	3			CL	2.3'-3.5': Silty Clay with some Sand. Following sample description was taken from the Well Site Field log. Core for this interval was taken for sample. Sand is f.g. Pale yellowish brown (10 YR 6/2) to mod. yellowish brown (10 YR 5/4). Some white ash present. Massive, dry. No recovery (3.5-4.0').
					6037	4				
				2.00/2.00	6036	5			CL	4.0'-6.4': Sandy Clay. Following sample description taken from Well Site Field Log. Core for this interval was taken for sample. Light olive gray (5 Y 6/1) to mod. yellowish brown (10 YR 5/4). Sand is f.g. Massive. Dry to slightly moist.
					6035	6				
				1.60/2.00	6034	7			CLAYSTONE:	6.4'-12.0': Top of Bedrock at 6.4'. Claystone with some Silt. Light olive gray (5 Y 6/1) to mod. yellowish brown (10 YR 5/4). Heavy Fe and Mn staining throughout claystone. Some indicated 45 degree fractures. Dry to slightly moist. 10% silt, 90% clay
					6033	8				
				2.00/2.00	6032	9				
					6031	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6040.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747538	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55894	
EAST 2079716	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1 [illegible]	DATE DRILLED 10/03/94		

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0% 100%	2.00 /2.00	6030 6029 6028 6027 6026 6025 6024 6023 6022 6021	10 11 12 13 14 15 16 17 18 19 20				Total Depth Drilled: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6040.30	PROJECT NUMBER 2.5-RFI/RI	LOG OF BORING NUMBER
NORTH	747547	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	55994
EAST	2079762	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 03/30/94	

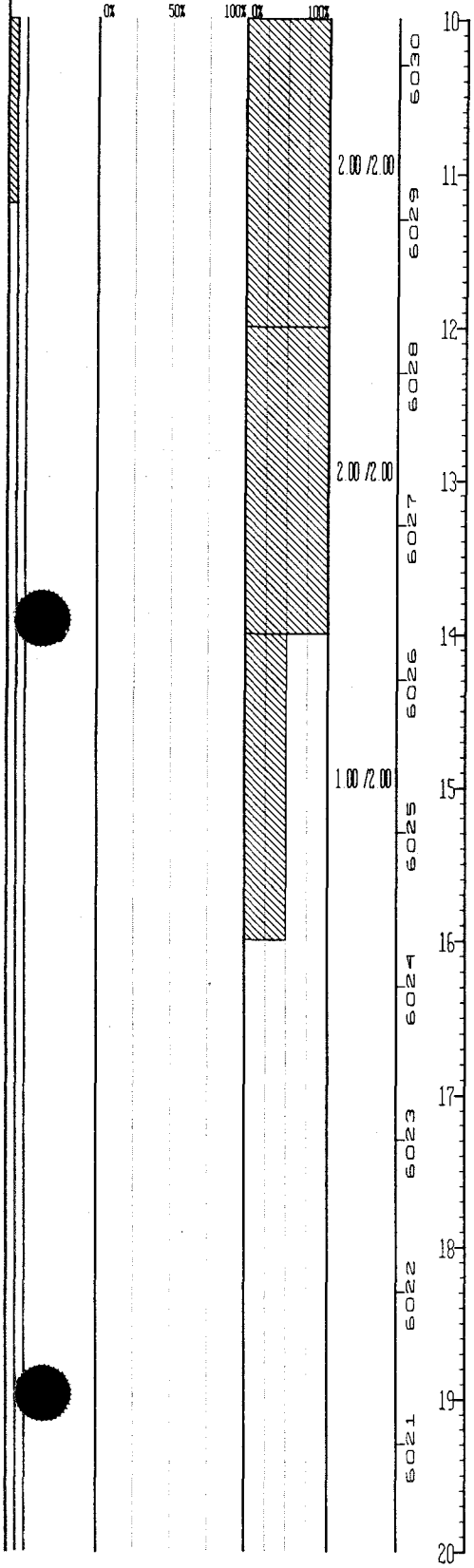
REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL. CORE IS IN HOT CONEX. DESCRIPTIONS TAKEN FROM WELL SITE FIELD LOG.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0%	100%	6040	0			SM	0.0'-0.9': Silty Sand. Mod. yellowish brown (10 YR 5/4). Massive. Dry. Roots.
				1.10 /2.00	6039	1			ML	0.9'-4.5': Sandy Silt. Metallic Waste/fill. Heavy Fe stained. Glass fragments. Various colors include rust, yellow, black and white, loose. Approx. 2500 cpm on Bicron B50 beta/gamma. No recovery (1.1-2.0'), and (2.3-4.0').
					6038	2				
	BH00034AS			0.30 /2.00	6037	3				
					6036	4				
				1.10 /2.00	6035	5			SW	4.5'-5.1': Gravelly Sand with trace Silt. Massive, dry. Matrix is light brown (5 YR 5/6). No recovery (5.1-6.0').
					6034	6			SW	6.0'-6.60': Gravelly Sand. Same as above (reference interval 4.5'-5.1'). Some carbonaceous material. Various colored staining.
				1.20 /2.00	6033	7			SW	6.6'-7.2': Gravelly Sand. Same as above (reference interval 4.5'-5.1'), with abundt. yellowish white staining, ash? Granular. No recovery (7.2-8.0').
					6032	8			ML	8.0'-8.5': Sandy Silt. Waste/fill. Metallic waste. Dusky yellowish brown (10 YR 2/2) with mod. reddish brown (10 YR 4/6) staining. Dry.
	BH00035AS			2.00 /2.00	6031	9			SM	8.5'-8.9': Silty (ashy) Sand. Sand f.g. Grayish orange (10 YR 7/4). Some gravel up to 0.75 in.
						10			SC	8.9'-12.00': Gravelly Sand with abundt. Clay. Dark yellowish orange (10 YR 6/6) to yellowish gray (5 Y 7/2). Massive. Dry. Some metallic waste from (10.0'-12.0').

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6040.30	PROJECT NUMBER GU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 747547	AREA: IHSS 133	CASING DIAMETER (IN)	GEOLOGIST: J. W. HARWELL	55994
EAST: 2079762	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED: 09/30/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL. CORE IS IN HOT CONEX. DESCRIPTIONS TAKEN FROM WELL SITE FIELD LOG.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERED (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	12.0'-14.0': Clay. Light olive gray (5 Y 6/1) with some dark yellowish orange (10 YR 6/6) staining. Very stiff, moist, trace ash, (Fill material)
CL	14.0'-16.0': Sandy Clay. Mod. reddish brown, trace gravel. 12.00'-14.0'). Some glass and trace metallic material (ash) (fill material). F-c sand. Fine gravel. 6% glass fragments, f-c sand size.
	Total Depth Drilled: 16.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 22.00	GROUND ELEVATION (FT)	6038.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747548	AREA OU5, IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	JEFF HARWELL	56094
EAST	2079818	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/23/95	

REMARKS: CONTINUOUS CORE, 1 INCH

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.70 /2.00	6038	0			SM	0.0'-4.0' Silty Sand with some gravel: mod. yellowish brown (10YR 5/4) grades to dark yellowish orange (10YR 6/6), dry, massive, dense, some roots. No recovery (1.7-2.0') and (2.1-4.0')
					6037	1				
						2				
	BH00037AS			0.10 /2.00	6036	3				
					6035	4				
				1.40 /2.00	6034	5			ML	4.0'-4.6' Sandy Silt. Waste/Fill: Metallic Waste/Ash: multicolored dark yellowish orange (10YR 6/6), light brown (5YR 5/6), black (N1), yellowish gray (5Y 8/1) and white (N9), dry, glass fragments, fill/waste material, silt to sand size ash
					6033	6			CL	4.6'-10.0' Sandy Clay with some carbon/ash material: massive, dry to moist, some Mn and Fe staining, silt to sand size ash material, f-c sand, sub-angular to sub-rounded. 8.0'-10.0' Some fragments of yellowish gray (5Y 7/2) clay No recovery (5.4-6.0') and (7.3-8.0')
				1.30 /2.00	6032	7				
					6031	8				
	BH00038AS			2.00 /2.00	6030	9				
					6029	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22.00	GROUND ELEVATION (FT) 6038.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747548	AREA OUE IHSS 133	CASING DIAMETER (IN)	GEOLOGIST JEFF HARWELL	56094
EAST 2079818	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 02/23/95	

REMARKS CONTINUOUS CORE, 1 INCH

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.20 /2.00	6028	10–11			CL	10.0'-14.0' Sandy Clay with trace to some gravel: mod. yellowish brown (10YR 5/4) to dark yellowish orange (10YR 6/6) massive, moist, some carbon/ash material, f-c gravel sub-angular to sub-rounded, f-c sand, quartz, sub-angular to sub-rounded. No recovery (11.2-12.0') and (13.5-14.0')
				1.50 /2.00	6027 / 6026	12–13				
				1.40 /2.00	6025 / 6024	14–15			CL	14.0'-18.0' Sandy Clay with some gravel: dark yellowish orange (10YR 6/6), dense, dry to moist. No recovery (15.4-16.0') and (17.8-18.0')
	BH00039AS			1.80 /2.00	6023 / 6022	16–17				
				1.50 /2.00	6021 / 6020	18–19			CL	18.0'-18.4' Sandy Clay with some ash: metallic waste/fill, some glass fragments, waste/fill material.
					6019	20			CL	18.4'-20.0' Sandy Clay with some gravel: same as 14.0-18.0'

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 22.00	GROUND ELEVATION (FT): 6038.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 747548	AREA OU5, IHSS 133	CASING DIAMETER (IN):	GEOLOGIST: JEFF HARWELL	56094	
EAST: 2079818	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN): 1.00	DATE DRILLED: 02/23/95		
REMARKS: CONTINUOUS CORE, 1 INCH.					

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	8H00040AS	0% 50% 100%	0% 100%	2.00 /2.00	6018 6017	20 21 22			CL	20.0'-22.0' Sandy Clay with some gravel to Clayey Sand (Cl/Sc): dark yellowish orange (10YR 6/6) to mod. yellowish brown (10YR 5/4) f-c sand (quartz), f-c gravel
					6016 6015 6014 6013 6012 6011 6010 6009	23 24 25 26 27 28 29 30				Total Depth Drilled: 22.00

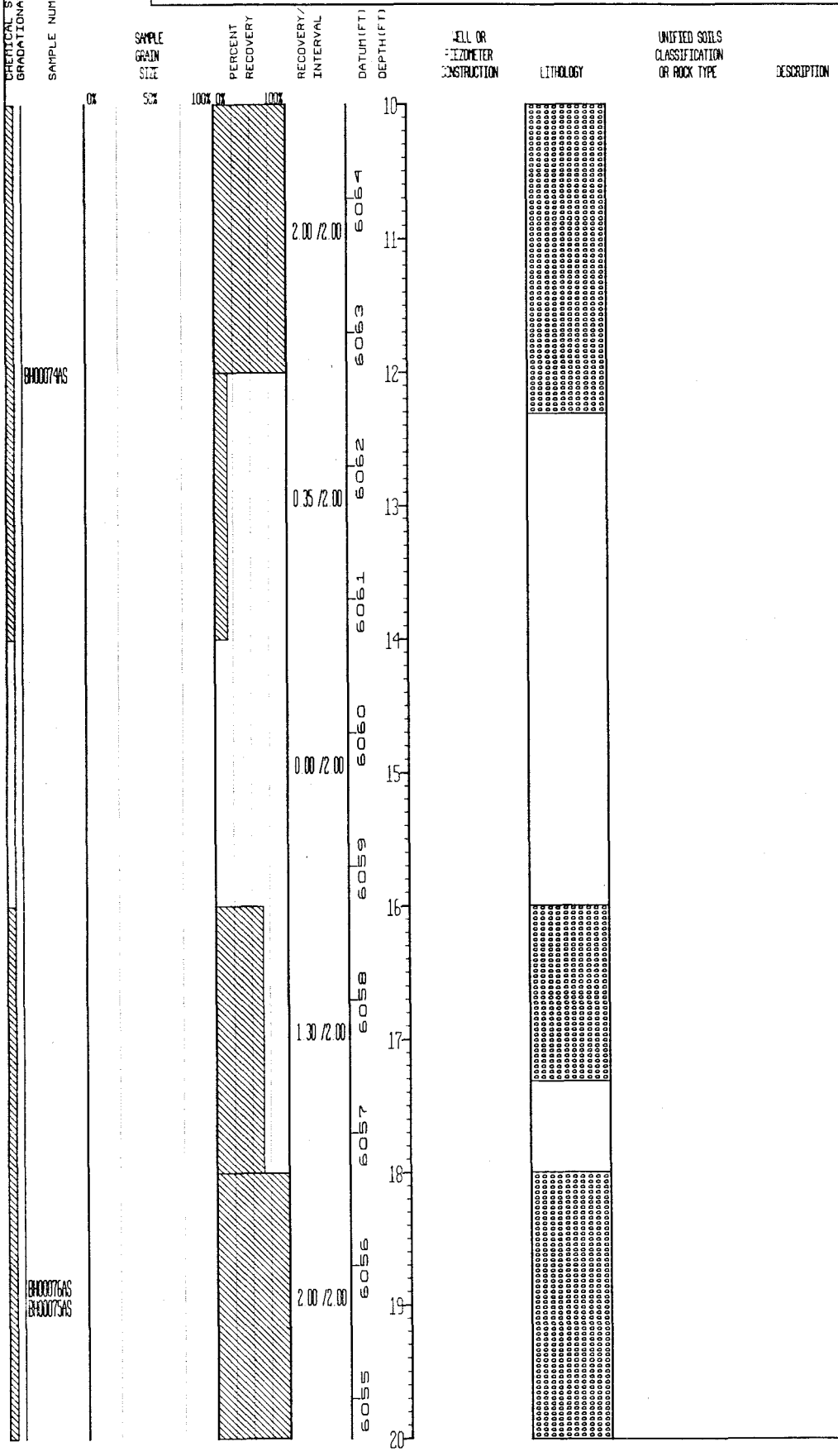
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT)	6074.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747751	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	56194
EAST	2079691	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	10/27/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00072AS			1.50 /2.00	6074	0			SW	0.0'-28.0' Gravelly Sand with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4) to yellowish orange (10 YR 6/6). Gravel is coarse to fine, composed of quartzite and granite, sub-angular to sub-rounded, max. size: 2.5 in, avg. size: 0.5 in. Sands c.g. to f.g., well graded, sub-angular to sub-rounded. Sands consist of quartz, granite, feldspars, mafic and micaceous minerals. Dry. Abundt. Fe staining and caliche. Core is badly broken. Clay content increases from (18.0'-10.0'). Clasts of siltstone, pale reddish brown (10 R 5/4) at 16.0'. Clayey zone (intact core) at approx. 16.9' to 17.3'. Broken cobble zone at 22.7' to 25.0'. 32% gravel, 58% sand, 9% clay, 1% silt.
					6073	1				
				0.70 /2.00	6072	2				No recovery (1.5-2.0'), (2.7-4.0') and (5.4-6.0'). No recovery (6.6-8.0'), (9.4-10.0') and (12.3-16.0'). No recovery (17.3-18.0') and (25.0-26.0').
					6071	3				
					6070	4				
				1.40 /2.00	6069	5				
					6068	6				
	BH00073AS			0.65 /2.00	6067	7				
					6066	8				
				1.40 /2.00	6065	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) 6074.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747751	AREA THSS 100	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56194
EAST 2079691	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 10/27/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 - ASI RIG GEOLOGIST: J. W. HARWELL

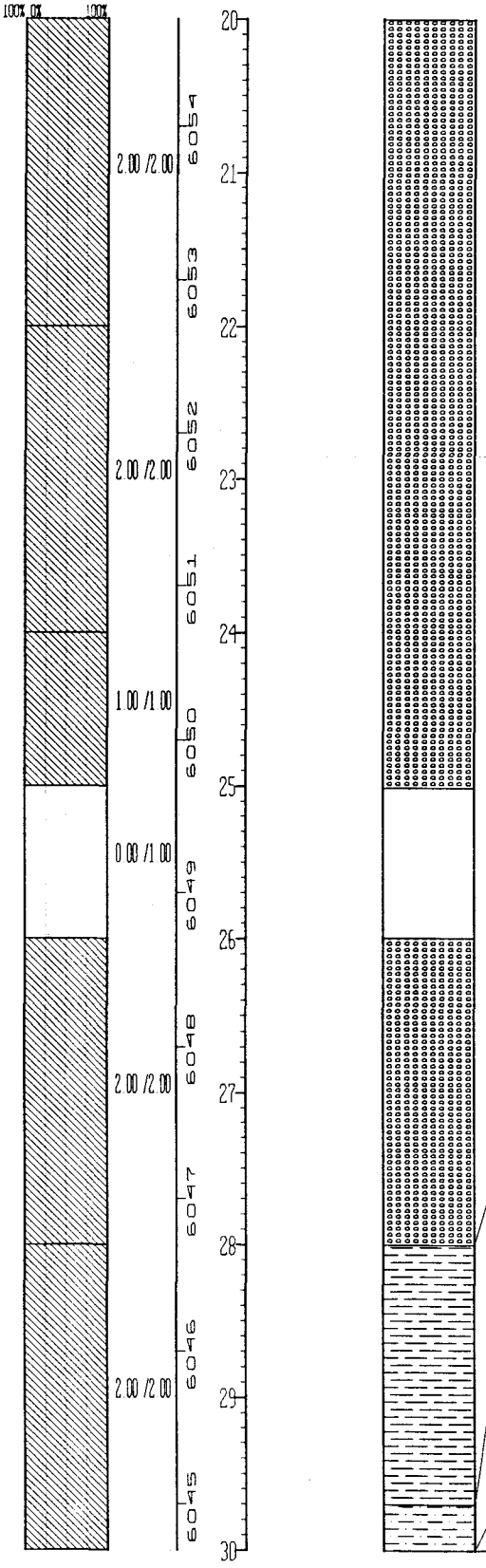


STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT)	6074.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747751	AREA: IHSS 133	CASING DIAMETER (IN)		GEOLOGIST:	J. W. HARWELL	56194
EAST:	2079691	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED:	10/27/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% – 50%) | PERCENT RECOVERY (100% 0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



BH00077AS

CLAYSTONE: 28.0'-29.7' Top of Bedrock at 28.0'
Claystone with some Silt. Yellowish gray (5 Y 7/2) to light olive gray (5 Y 5/2). Bedding massive. Core is moist. Some Fe staining. Mod. friable.
85% clay, 15% silt

SANDY CLAYSTONE: 29.7'-30.0' Sandy Claystone with trace Silt. Yellowish gray (5 Y 7/2) to light olive gray (5 Y 5/2). Core is moist, fractured. Bedding horiz.-thin beds.
35% sand, 5% silt, 60% clay

Total Depth Drilled: 30.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	6074.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747751	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	56194A
EAST	2079691	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/05/94	

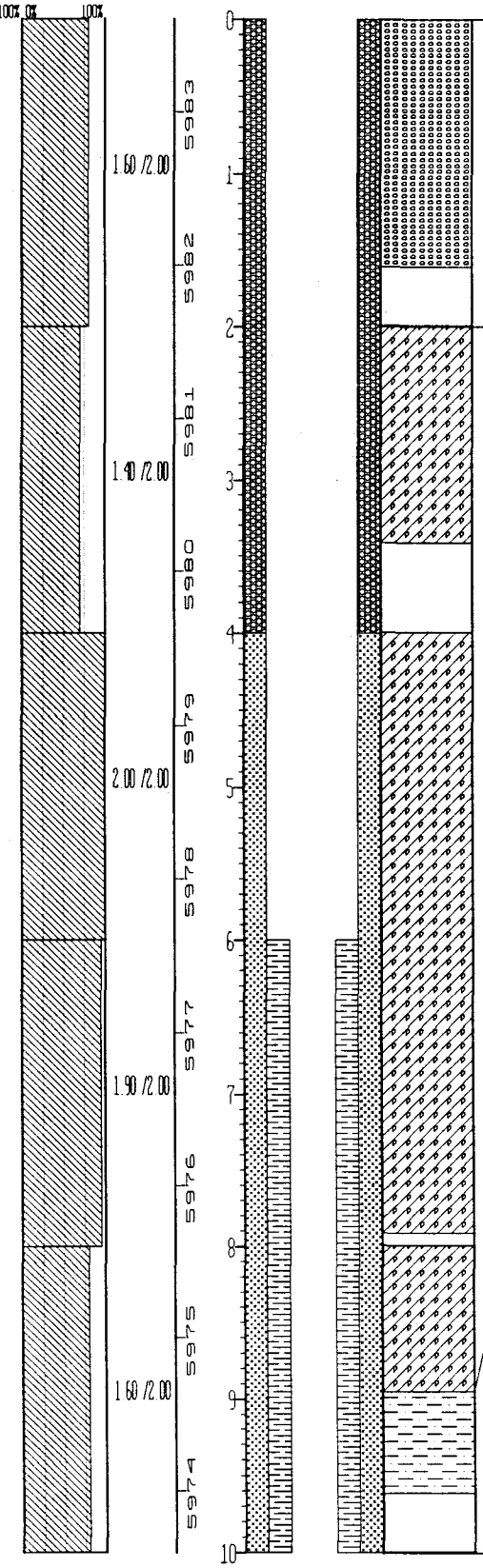
REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL. OFFSET OF 56194. ALL DESCRIPTIONS ARE TAKEN FROM THE WELL SITE FIELD LOG, THEREFORE THERE IS NO GRAIN SIZE DISTRIBUTION. COORDINATES ARE ESTIMATED BASED ON 56194.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6074	0			SW	0.0'-0.7' Gravelly Sand. Dark yellowish brown (10 YR 4/2). Some organic material. Core massive, dry (topsoil).
				1.50 /2.00		1			CL	0.7'-1.5' Gravelly Clay. Mod. brown (5 YR 4/4) to light brown (5 YR 5/6). Gravel up to 1.0 in. in diameter. Yellowish white powdery coating (ash or rock flour possibly). Heavy FeO staining. Massive, dry.
					6073	2			NO RECOVERY	1.5'-4.0' No recovery
	BH00413AS			0.00 /2.00	6072	3				
					6071	4			SW	4.0'-5.6' Gravelly Sand. Pale brown (5 YR 5/2). Gravel up to 0.50 in. in diameter. Abundt rock flour. No recovery (5.6-6.0').
				1.60 /2.00	6070	5				
					6069	6			NO RECOVERY	6.0'-8.0' Complete refusal
				0.00 /2.00	6068	7				
					6067	8				Total Depth Drilled: 8.00
					6066	9				
					6065	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT)	5983.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747401	AREA IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	56294
EAST	2080135	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	09/29/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE, ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



BH00026AS

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	0.0'-1.6' Gravelly Sand with some Silt and trace Clay. Dark yellowish brown (10 YR 4/2). Gravel is coarse to fine, consists of granite and quartzite, sub-angular. Sand is c.g to f.g., well graded, sub-angular. Massive. Dry. (sw/sm). 42% gravel, 48% sand, 8% silt, 2% clay. No recovery (1.6-2.0')
SC	2.0'-8.95' Clayey Sand with a trace of Silt. Pale yellowish brown (10 YR 6/2). Sand is m.g. to f.g. in a clay/silt matrix, sub-angular to sub-rounded, well sorted, poorly graded. Fracturing apparent. Traces of Fe staining and some caliche. Bedding massive. Dry. Low plasticity. 70% sand, 5% silt, 25% clay. No recovery (3.4-4.0') and (7.9-8.0').
SANDY CLAYSTONE	8.9'-12.0' Top of Bedrock at 8.95. Sandy Claystone. Light olive gray (5 Y 5/2). Some caliche. Dry, dense, indurated. Bedding massive. Sand f.g., sub-rounded, non-friable. 40% sand, 60% clay. No recovery (9.6-10.0').

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 5983.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747401	AREA IHSS 133	CASING DIAMETER (IN) 0.50	GEOLOGIST J. W. HARWELL	56294	
EAST 2080135	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/29/94		

REMARKS: DRILLING EQUIPMENT: HURRICANE, ASI RIG GEOLOGIST: J.W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00027AS			2.00 /2.00	5973	10–11				
				2.00 /2.00	5971	12–13				SILTY CLAYSTONE 12.0'-16.0': Silty Claystone. Dark gray (N3). Some Fe staining, especially along fractures. Bedding massive. Dry, dense and indurated. Some carbonaceous material. 24% silt, 76% clay.
				2.00 /2.00	5969	14–15				
					5967	16				Total Depth Drilled: 16.00 Total Depth Casing: 16.00 Bottom of Filter Pack: 16.00
					5966	17				
					5965	18				
					5964	19–20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT)	5983.60	PROJECT NUMBER	0.5-RFI/RI	LOG OF BORING NUMBER
NORTH	747026	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	56394
EAST	2080268	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/11/94	

REMARKS: DRILLING EQUIPMENT HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00056AS			2.00 /2.00	5983	0			GW	0.0'-6.0' Sandy Gravel with trace Silt and Clay. Most of core is not in core box. It is difficult to get accurate grain size distribution percentages due to lack of core. Pale yellowish brown (10 YR 4/2). Abundt. gravel, pulverized rock and rock flour. Sand is c.g. to f.g., sub-angular to angular. Gravel and sand consist of quartzite, granite, feldspars and mafic minerals. Core loose, unconsolidated, well graded. Gravel max.: 1.5 in, avg.: 0.50 in. Low plasticity. At 6.0', refusal. 47% gravel, 46% sand, 5% silt, 2% clay.
					5982	1				
				1.50 /2.00	5981	2				No recovery (3.5-4.0')
					5980	3				
				2.00 /2.00	5979	4				
					5978	5				
					5977	6				Total Depth Drilled: 6.00
					5976	7				
					5975	8				
					5974	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6011.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747585	AREA IHSS 133	CASING DIAMETER (IN) 0.50	GEOLOGIST J. W. HARWELL	56494
EAST	2080703	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 09/28/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1.40/2.00	6011	0–1			SW	0.0'-1.4' Gravelly Sand with trace Silt and Clay. Dark yellowish brown (10 YR 4/2). Gravel is coarse to fine, sub-angular. Sand is c.g. to f.g., sub-angular to sub-rounded, well graded. Dry. 47% gravel, 48% sand, 4% silt, 1% clay. No recovery (1.4-2.0')
				2.00/2.00	6010	1–2			SC	2.0'-5.5' Clayey Sand with trace Gravel and Silt. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4). Sand is well graded, sub-angular, consists of quartz, feldspars, and mafic minerals. Trace of carbonaceous material and caliche. Low plasticity. Core is dry and slightly weathered. 3% gravel, 53% sand, 38% clay, 2% silt. No recovery (5.5-6.0').
				1.50/2.00	6009	2–3				
				2.00/2.00	6008	3–4				
	BH00026AS			2.00/2.00	6007	4–5				
				1.20/2.00	6006	5–6				
					6005	6–7			SC	6.0'-10.0' Clayey Sand with trace Silt. Dark yellowish orange (10 YR 6/6). Sand is m.g., sub-angular to sub-rounded, poorly graded quartzose. Occasional yellowish gray (5 Y 7/2) clay strings. Core is Fe stained throughout interval. Sand grades to f.g. at 7.0' and back to m.g. at 8.0'. Dry. Low plasticity. 76% sand, 3% silt, 21% clay. No recovery (9.2-10.0')
					6004	7–8				
					6003	8–9				
					6002	9–10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 14.00	GROUND ELEVATION (FT)	6011.70	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747585	AREA: IHSS 133	CASING DIAMETER (IN)	0.50	GEOLOGIST:	J. W. HARWELL	56494
EAST:	2080703	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED:	09/28/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00022AS			2.00/2.00	6001	10–11			CLAYSTONE	10.0'-14.0': Top of Bedrock at 10.0'. Claystone with some Silt. Dark yellowish orange (10 YR 6/6) to light gray (N7) to yellowish gray (5 Y 7/2). Some Fe and Mn staining. Rig Geologists Well Site Field Log indicates core is dry from 10.0'-12.0'. Core is dry to moist from 12.0'-13.8'. Mod. to slightly friable. 8% silt, 92% clay.
					6000	11–12				
				1.80/2.00	5999	12–13				No recovery (13.8-14.0').
					5998	13–14				
					5997	14–15				Total Depth Drilled: 14.00 Total Depth Casing: 14.00 Bottom of Filter Pack: 14.00
					5996	15–16				
					5995	16–17				
					5994	17–18				
					5993	18–19				
					5992	19–20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 5969.60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747175		AREA IHSS 133	CASING DIAMETER (IN) 0 50	GEOLOGIST J W HARWELL	56594
EAST 2080804		LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED 10/11/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00059AS	0% 50% 100%	0% 100%	1 40 /2.00 1 40 /2.00 1.60 /2.00 1 30 /2.00 1 60 /2.00	5969 5968 5967 5966 5965 5964 5963 5962 5961 5960	0 1 2 3 4 5 6 7 8 9 10			GW	0 0'-6 8' Sandy Gravel with trace of Clay and Silt. Dark brown (5 YR 3/2). Gravel consists of quartzite and granite, sub-angular, max 1 0 in., avg 50 in., large gravel broken while drilling. Sand is c g to f g, sub-angular to sub-rounded, well graded. Fine sand consists of mafic and micaceous minerals, quartz and feldspars. Core is dry to moist to 5.6'. Well site field log indicates core is wet from 5 6'-6 0'. Low plasticity. 54% gravel, 41% sand, 4% clay, 1% silt No recovery (1.4-2.0'), (3 4-4 0'), and (5 6-6.0').
									CLAYSTONE	6.8'-9.6' Top of Bedrock at 6.8'. Silty Claystone. Color varies from dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2) to very light gray (N8). Core is slightly fractured. Some Fe and Mn staining. Some carbonaceous material. Well site field log indicates core is moist to wet. Bedding massive. Core dense, indurated and non-friable. 80% clay, 20% silt No recovery (7 3-8 0') and (9.6-10.0')

Total Depth Drilled 10.00 Total Depth Casing 8.00
Bottom of Filter Pack 8.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 150.70	GROUND ELEVATION (FT):	5962.90	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747718	AREA: IHSS 115	CASING DIAMETER (IN):		GEOLOGIST:	J. W. HARWELL	56694
EAST:	1382723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						0			CL	0.0'-4.0': Sandy Clay with some Silt. Mod. yellowish brown (10 YR 5/4). Sand is f.g. to c.g., sub-rounded to sub-angular, well graded, predom. f.g. sand. Some micaceous material. Calcareous material throughout interval (caliche). Bedding massive. Med. plasticity. Minor Fe staining. Moist (possible fill). 2.0'-4.0' organic material. 32% sand, 12% silt, 56% clay.
				2.40/2.00	5962	1				
	BH00092AS				5961	2				
	BH00095AS BH00096AS			2.20/2.00	5960	3				
	[illegible]03AS				5959	4			CL	4.0'-8.25': Sandy Clay with some Gravel and Silt. Mottled mod. yellowish brown (10 YR 5/4). Matrix grades to light olive gray (5 Y 6/1) and yellow gray (5 Y 8/1) around 6.5'. Moist. Gravel is coarse to fine, sub-rounded to sub-angular. Max. size: 2.0 in., avg. size: 0.75 in., predom. quartzite. Sand is f.g. to c.g., sub-rounded to sub-angular, well graded. Some caliche, whole interval reacts with HCl. Some pulverized rock. Trace iron staining throughout interval. Low plasticity. Bedding not apparent (possible fill). 20% gravel, 24% sand, 7% silt, 49% clay. No recovery (8.25-10.0').
				2.20/2.00	5958	5				
	BH00094AS				5957	6				
				2.40/2.00	5956	7				
	BH00098AS				5955	8				
				0.25/2.00	5954	9				
					5953	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 747718	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	56694
EAST: 2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						10			NO RECOVERY	10.0'-12.0' No recovery.
				0.00 /2.00	5952	11				
					5951	12			CL	12.0'-14.0' Clay with trace Gravel. Light olive gray (5 Y 5/2) to dusky yellow (5 Y 6/4). Core very disturbed from Roscoe Moss sampler. Trace fine gravel, sub-angular to sub-rounded (fill material).
				2.20 /2.00	5950	13				
	BH00099AS				5949	14			CLAYSTONE	14.0'-16.35' Claystone with trace Silt. Light olive gray (5 Y 6/1) with some mod. yellow (5 Y 7/6). Core moist according to Well Site Field Log. Core in box is very dried out, indurated. Some FeO staining, trace Mn staining. Mod. to slighly friable. Bedding massive. Appears strongly disturbed from Rescoe Moss Sampler. 4% silt, 96% clay. No recovery (15.6-16.0') and (16.35-18.0')
				1.60 /2.00	5948	15				
					5947	16				
				0.35 /2.00	5946	17				
	BH00111AS				5945	18			CLAYSTONE	18.0'-22.0' Claystone with trace Silt. Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) where Fe stained to light olive gray (5 Y 6/1). Mod. to strongly weathered. Some Mn and Fe staining along fractures. Dry. Indurated in core box. Loose. According to Well Site Field Log, core moist. Trace laminations where core is intact. Strongly disturbed from Roscoe Moss Sampler. Slightly friable.
				2.20 /2.00	5944	19				
					5943	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST:	2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

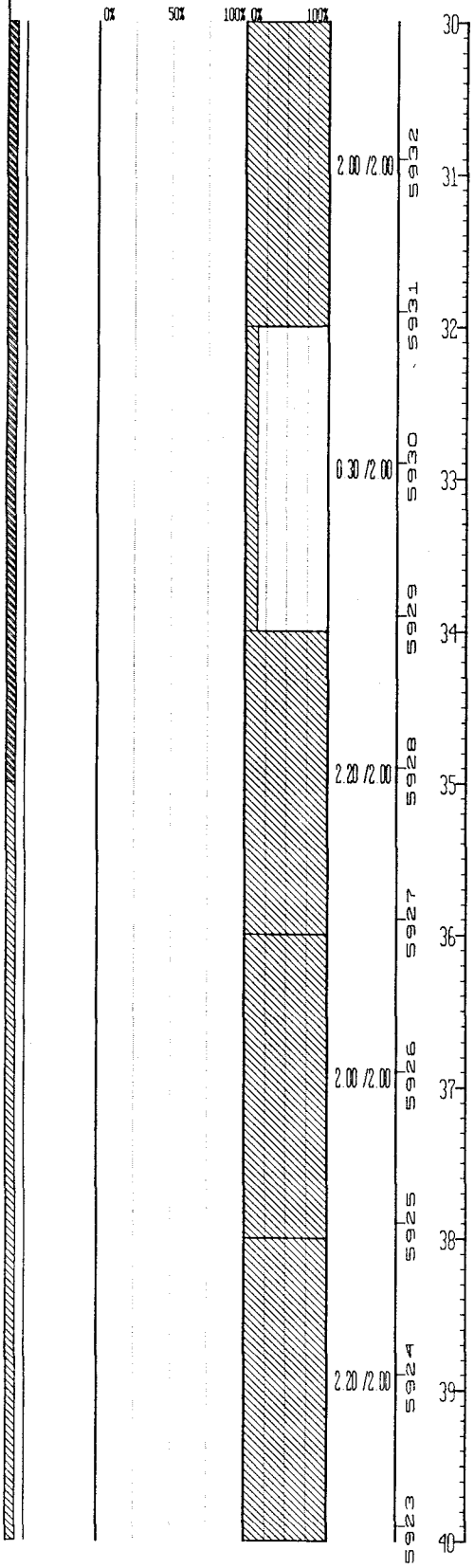
REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00112AS			2.30/2.00	5942	20				
					5941	21				
				2.30/2.00	5940	22			CLAYSTONE	22.0'-32.3' Claystone with trace Silt. Same as above (reference interval 18.0'-20.0'). Mod. weathered. Bedding massive. Trace laminations where core is intact. Indications of disturbed sediments. Slickensides at 29.0', approx. 20 degrees. Varying degrees of weathering (FeO) throughout interval. Mod. friable where core is loose, indurated. Where consolidated, core dense. Slightly friable. Trace Fe nodules. Strong Fe staining at 24.0'-24.25'. Core very disturbed from Roscoe Moss Sampler.
					5939	23				No recovery (32.3-34.0')
				2.30/2.00	5938	24				
					5937	25				
				2.30/2.00	5936	26				
					5935	27				
				2.30/2.00	5934	28				
					5933	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT)	5952.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	34.0'-36.0' Claystone. Highly weathered to 34.4' then mod. to slightly weathered. 34.4' contact from dark yellowish orange (10 YR 6/6) to dark gray (N4) claystone. Bedding massive. Loose, fractured. Dry to moist
CLAYSTONE	36.0'-37.75' Claystone. Olive gray (5 Y 4/1). Minor Fe staining along fractures.
CLAYSTONE	37.75'-40.0' Top of unweathered Bedrock at 37.75'. Claystone. Grayish black (N2). Trace carbonaceous material. Very stiff. Massive to thinly bedded. Slightly friable. Core very disturbed from Roscoe Moss sampler.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5922	40			CLAYSTONE	40.0'-42.1': Claystone. Light olive gray (5 Y 6/1). From 41.0'-41.3' some Fe staining (10 YR 6/6). Other staining along fractures, mod. reddish brown (10 R 4/6). At 41.9' abundt. organic material, wood and leaf imprints. Slickensides at approx. 42.1', 45 degrees. 40.7-41.0' cement grout from surface casing. No recovery from (42.1-45.7').
					5921	41				
					5920	42				
				1.40 /5.70	5919	43				
					5918	44				
					5917	45				
					5916	46			CLAYSTONE	45.7'-50.2': Claystone. Same as above (reference interval 40.0'-42.1'). Abundt. organic material. Leaf imprints. At 46.25' core has conchoidal fracture. At 48.0'-50.0' color changes to dark gray (N3) with thin siltstone laminae (horiz). No recovery (50.20-50.70').
					5915	47				
				4.50 /5.00	5914	48				
					5913	49				
						50				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747718	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	56694
EAST:	2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 5.20 /5.00; 2.55 /5.00

DATUM (FT): 5912, 5911, 5910, 5909, 5908, 5907, 5906, 5905, 5904, 5903

DEPTH (FT): 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

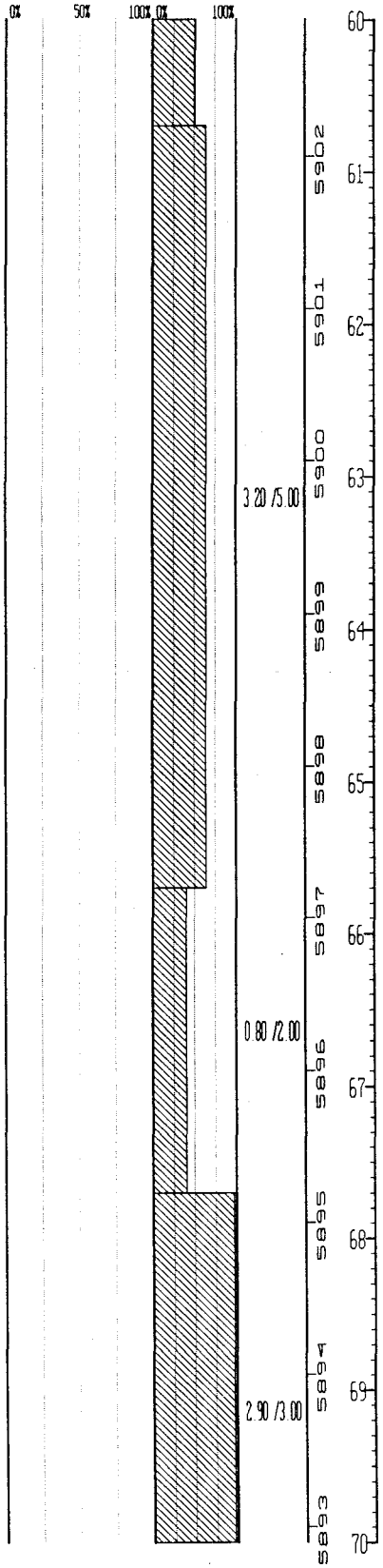
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	50.7'-58.25' Claystone. Dark gray (N3). Hard, massive, trace laminations. Dry to moist. Trace carbonaceous material. No recovery (58.25-60.0') and (60.0-60.7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% – 50% – 100%) | PERCENT RECOVERY (0% – 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

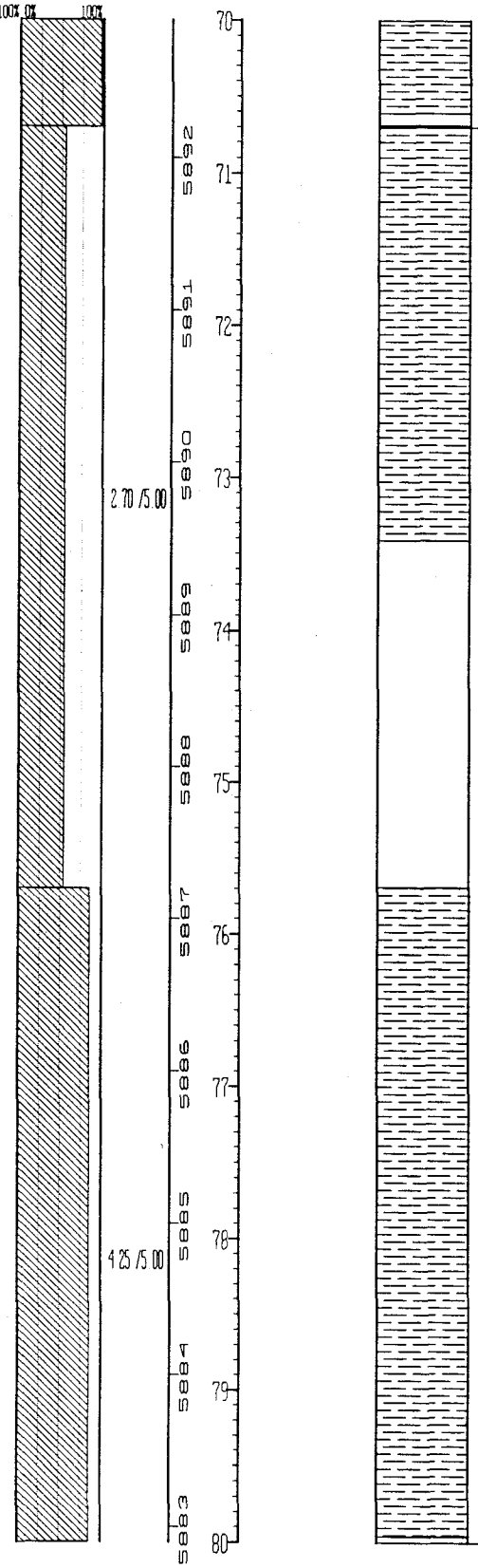


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	60.7'-63.9'. Claystone. Same as above (reference interval 50.7'-58.25'). Amount of organics increases with depth, leaf imprints. Around 62.2' slickensides, approx. 45 degrees. Thin laminae of silt, mottled in appearance. Around 63.9', material appears to be lignite. No recovery (63.9-65.7').
CLAYSTONE	65.7'-70.6'. Claystone. Same as above (reference interval 50.7'-58.25'). Some organics, not as abundt. as 60.7'-63.9'. Minor siltstone laminae, otherwise bedding massive. No recovery (66.5-67.7') and (70.6-70.7').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



CLAYSTONE: 70.7'-79.95': Claystone. Olive gray (5 Y 4/1) Unweathered. Thin beds and laminations of siltstone. Some organic carbon. Small burrow holes (trace fossils) around 70~9'. Slickensides almost vertical around 90 degrees. Bedding massive (horizontal to 1 degree dip)

No recovery (73.4-75.7') and (79.95-80.7')

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 150.70	GROUND ELEVATION (FT): 5962.90	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747718	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	56694
EAST: 2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		5%	100% 0% 100%			80				
					5882	81			CLAYSTONE:	80.7'-84.7': Claystone. Olive gray (5 Y 4/1). Abundt. organics. Carbonaceous laminae (lignite). Thin laminae of siltstone. Iron and calcite cemented sandy claystone interbedded from 84.4' to 84.7' No recovery (84.7-85.7').
					5881	82				
				4.00 /5.00	5880	83				
					5879	84				
					5878	85				
					5877	86			CLAYSTONE:	85.7'-89.6': Claystone. Olive gray (5 Y 4/1) to olive gray (5 Y 3/2). Abundt. disseminated organic carbon, leaf imprints. Slumped siltstone interbeds, thin bedded to thick laminae. Bedding near horizontal to 3 degrees possible cross bedding. Some rip-up clasts of siltstone, f.g. sand to fine gravel size. Siltstone clasts are light brown (5 YR 6/4) No recovery (89.6-90.0') and (90.0-90.7').
					5876	87				
				3.90 /5.00	5875	88				
					5874	89				
					5873	90				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT)	5962.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	11/14/94	

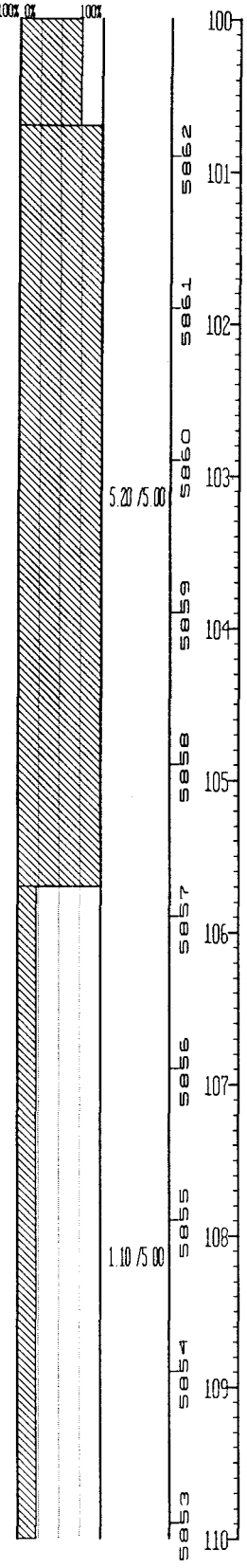
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						90				
					5872	91			CLAYSTONE	90.7'-99.2': Claystone. Same as above (reference interval 85.7'-89.6'). Organics, more leaf imprints. From 92.6'-94.8' amount of organics decreases, not as abundt. as above. No recovery (94.8-95.7').
					5871	92				
				4.10 / 5.00	5870	93				
					5869	94				
					5868	95				
					5867	96				
					5866	97				
					5865	98			SILTSTONE	99.2'-105.5': Siltstone with trace Clay. Olive gray (5 Y 4/1) to mod. yellowish brown (10 YR 5/4). Slumping of silty/clayey beds (soft sediment deformation), appears mottled. Slightly friable. Cross bedded to thinly laminated claystone interbeds. Core hard. Some carbonaceous material. Trace fossils (burrows). 97% silt, 3% clay. No recovery (99.4-100.0') and (100.0-100.7')
				3.70 / 5.00						
					5864	99				
					5863	100				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 150.70	GROUND ELEVATION (FT): 5962.90	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747718	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	56694
EAST: 2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	105.5'-106.8': Claystone. Light olive gray (5 Y 5/2). Abundt. organics, more leaf and wood imprints. Bedding massive to horizontal. From 105.7'-106.8' amount of organics decreases to trace amount.
NO RECOVERY	No recovery (106.8-110.7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						110				
					5952				SILTY CLAYSTONE	110.7'-113.5' Silty Claystone. Same as above (reference interval 105.5-106.8')
						111				
					5951					
				3.00/3.00		112				
					5950					
						113				
					5949				CLAYEY SILTSTONE	113.5'-121.7' Clayey Siltstone interbedded with Silty Claystone. Grayish olive (10 Y 4/2) to mod. yellowish brown (10 YR 5/4). Hard. Cross bedded, thin bedded to thinly laminated. Trace lignite, trace leaf imprints. Some f.g. sand laminae. Soft sediment deformation. Some thin claystone interbeds.
						114				
					5948					No recovery (114.5-118.7') and (120.0'-120.7')
						115				No recovery (121.7-124.9')
					5947					
				0.80/5.00		116				
					5946					
						117				
					5945					
						118				
					5944					
						119				
				1.10/2.00						
					5943	120				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747718		AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST 2082723		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%			120				
					5842	121				
					5841	122				
				1.00 /5.00	5840	123				
					5839	124				
					5838	125			CLAYSTONE	124.9'-130.4': Claystone. Light olive gray (5 Y 5/2) Mod. hard. Predom. massive, some thin horizontal bedding and laminae. Trace carbon/organic lignite. Trace siltstone clasts similar to interval from 85.7'-89.6'. From 125.0-125.7', 90-80 degree fracture with slickensides. No recovery (130.4-130.7').
					5837	126				
					5836	127				
				4.70 /5.00	5835	128				
					5834	129				
					5833	130				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694	
EAST 2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94		

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERED: 0% 100%

RECOVERY/INTERVAL: 2.40/5.00; 0.40/5.00

DATUM (FT): 5932, 5931, 5930, 5929, 5928, 5927, 5926, 5925, 5924, 5923

DEPTH (FT): 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

CLAYEY SILTSTONE: 130.7'-146.5': Clayey Siltstone with some Sand. Med. dark gray (N4). Massive. Well cemented. Very hard. Dry. Some carbonaceous/lignite material, especially along fractures. Slickensides at 132.0' approx. 40 degrees with lignite. Sand is v.f.g., sub-rounded, predom. quartz.
Note: according to the geophysical log for 56694 the siltstone grades to claystone at approx. 142.0' to 144.0'. Lithologic log apears to be about 2 ft. deeper than the geophysical log.
16% sand, 50% silt, 34% clay.

No recovery (133.1-135.7') and (136.1-140.0').
No recovery (140.0-140.7') and (140.95-145.7').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT) 5962.90	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747718		AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	56694
EAST 2082723		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/14/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			140				
					5822	141				
					5821	142				
				0.25/5.00	5820	143				
					5819	144				
					5818	145				
					5817	146				
					5816	147			NO RECOVERY	No recovery (146.5-150.7')
				0.80/5.00	5815	148				
					5814	149				
					5813	150				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 25.00	GROUND ELEVATION (FT):	5995.20	PROJECT NUMBER:	3.5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747921	AREA: IHSS 115	CASING DIAMETER (IN):		GEOLOGIST:	P. J. JORDAN	56794
EAST:	2082450	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	6.50	DATE DRILLED:	02/07/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.10/2.00	5995	0			GW	0.0'-1.1' Sandy Gravel with trace Silt and Clay. Grayish brown (5 YR 3/2) to dark yellowish orange (10 YR 6/6). Gravel is angular to sub-angular, max. size: 2.0 in., avg. size: 0.50 in.-0.75 in. Sand is c.g. to f.g., angular to sub-angular. Micaceous material present. Low plasticity. Core loose. Core dry. 48% gravel, 47% sand, 4% silt, 1% clay. No recovery (1.1-2.0').
				1.50/2.00	5994	1			CL	2.0'-3.5' Silty Clay with some Sand and trace Gravel. Some caliche. Core for this interval was taken for sample. Sample description is taken from Well Site Field Log. No recovery (3.5-4.0').
	BH00228AS			2.00/2.00	5993	2			SC	4.0'-10.0' Sand with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4) to med. gray (N5). Sand is m.g. to f.g., sub-angular to sub-rounded, poorly graded, well sorted. Core is dry to 6.0', moist from 6.0'-10.0'. Slightly fractured, random. Bedding massive. Trace of Fe staining, caliche and Mn staining. FeO abundt. around 9.4'. Low plasticity. Some siltstone fragments, moderate red (10 R 4/6). 85% sand, 10% clay, 5% silt. No recovery (7.4-8.0'). Note: Composite samples BH00229AS, from 6.0-8.0' and BH00232AS, from 0.0-12.0', had geotechnical sieve and hydrometer analysis performed which indicated the material is a Ch.
	BH00237AS BH00232AS			1.40/2.00	5992	3				
	BH00229AS			2.00/2.00	5991	4				
					5990	5				
					5989	6				
					5988	7				
					5987	8				
					5986	9				
	BH00230AS					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25.00	GROUND ELEVATION (FT) 5995.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747921	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	56794
EAST 2082450	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/07/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%			10			SC	10.0'-14.0' Sand with some Clay and trace Silt. Same as above (reference interval 4.0'-7.4'), except red (5 R 4/6), no caliche.
				2.00 /2.00	5985	11				
					5984	12				
	GP00034AS GP00035AS			1.90 /2.00	5983	13				
	GH00231AS				5982	14			CLAYSTONE	14.0'-19.0' Top of Bedrock at 14.0'. Claystone with some Silt. Med. gray (N5) to dark yellowish orange (10 YR 6/6). Core moist to wet. At 14.0', organic material. At 15.0', ash like? Trace Mn staining. Mod. friable. Bedding massive. 92% clay, 8% silt.
				1.10 /2.00	5981	15				No recovery (15.1-16.0') and (16.8-17.0')
				0.80 /1.00	5980	16				
				1.00 /1.00	5979	17				
				2.00 /2.00	5978	18			CLAYSTONE	19.0'-22.4' Claystone with some Silt and trace Sand. Abundt. sandy intervals, lenses. f.g. sand. Fe staining along horiz. bedding planes. Some carbonaceous material. At 22.1', unweathered claystone. 4% sand, 8% silt, 88% clay.
					5977	19				No recovery (22.4-23.0').
					5976	20				

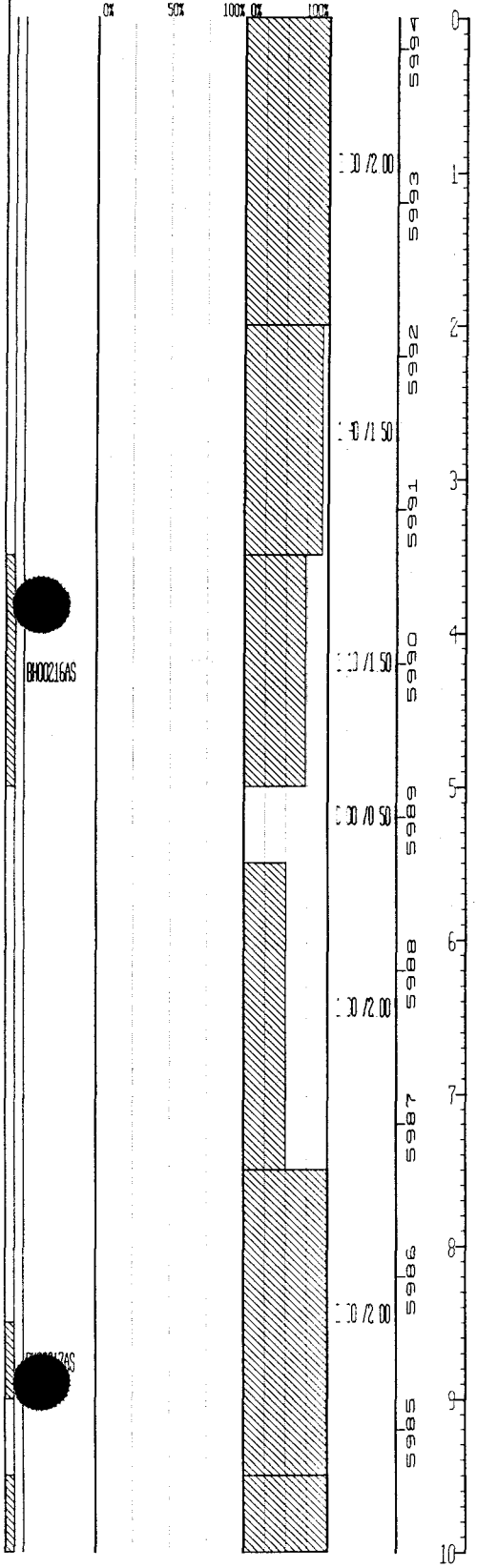
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25.00	GROUND ELEVATION (FT) 5995.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747921	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	56794
EAST	2082450	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/07/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00233AS			1.00/1.00	5975	20				
					5974	21				
				1.40/2.00	5973	22				
					5972	23			CLAYSTONE	23.0'-24.3' Claystone with some silty lenses. Unweathered. Core indurated, can't determine bedding.
				1.30/2.00	5971	24				No recovery (24.3-25.0')
					5970	25				Total Depth Drilled: 25.00
					5969	26				
					5968	27				
					5967	28				
					5966	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33.00	GROUND ELEVATION (FT) 5994.20	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 747855	AREA: IHSS 133	CASING DIAMETER (IN)	GEOLOGIST:	P. J. JORDAN	56894	
EAST: 2082224	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED	02/06/95		
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN						

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0.0'-4.6' Gravelly Sand with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4). Gravel is coarse to fine, sub-angular, max. 3.0 in. Abundt. pulverized rock. Sand is c.g. to f.g., sub-angular, well graded. Bedding massive. Low plasticity. 37% gravel, 51% sand, 10% clay, 2% silt. No recovery (3.4-3.5'), (4.6-5.0'), and (5.0-5.5').
SC	5.5'-6.5' Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-3.4'). Dark yellowish orange (10 YR 6/6). Fragments of siltstone, mod. red (5 R 4/6). Core badly broken, can't determine bedding. No recovery (6.5-7.5').
SANDY SILTSTONE	7.5'-8.0' Top of Bedrock at 7.5'. Sandy Siltstone with some Clay. Dark yellowish orange (10 YR 6/6) to med. gray (N5). Traces Mn staining and carbonaceous material. Low plasticity. Sand is v.f.g. 35% sand, 42% silt, 23% clay.
CLAYSTONE	8.0'-10.0' Claystone with some Silt. Med. dark gray (N4). Abundt. carbonaceous material. Trace Fe staining. Mod. hardy. Severely weathered. Plastic. 20% silt, 80% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 00	GROUND ELEVATION (FT) 5994 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747855	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	56894
EAST	2082224	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/06/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERED (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00218AS			2.00 /2.00	5984	10			NO RECOVERY	10.0'-11.5' Core taken for sample.
					5983	11				
				1.50 /1.50	5982	12			CLAYSTONE	11.5'-30.0' Claystone with some Silt and Sand. Mod. hardy yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) to light gray (N7). Sand is v f g., rounded, well sorted. Claystone interbedded with thin laminae of v f g. sand and silt. Core dry to moist. Mod. to heavy Fe staining. Some Mn staining and some Fe nodules. Bedding horizontal, some Mn and Fe staining along bedding planes. Mod. friable. Mod. weathered. Plastic. Friable. Trace-some carbonaceous material. 9% sand, 10% silt, 81% clay.
					5981	13				
	BH00219AS			2.00 /2.00	5980	14				
					5979	15				
				2.00 /2.00	5978	16				
					5977	17				
				2.00 /2.00	5976	18				
					5975	19				
				2.00 /2.00		20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33.00	GROUND ELEVATION (FT)	5994.20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747855	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	P. J. JORDAN	56894
EAST	2082224	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	02/06/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00220AS			2.00/2.00	5974	20				
					5973	21				
				2.00/2.00	5972	22				
					5971	23				
				2.00/2.00	5970	24				
					5969	25				
				2.00/2.00	5968	26				
	BH00221AS			0.70/0.70	5967	27				
				1.30/1.30	5966	28				
					5965	29				
				2.00/2.00		30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33.00	GROUND ELEVATION (FT) 5994.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747855	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	56894
EAST	2082224	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/06/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00222AS			2.00 /2.00	5964	30			CLAYSTONE	30.0'-33.0' Claystone with some Silt and Sand. Same as above (reference interval 11.5'-30.0') Dark gray (N3) to dark yellowish orange (10 YR 6/6). Some Fe staining. Core dense. Indurated. Slightly friable in silty zones. Dry. Some slumping of thin beds of sand. Becomes unweathered at 31.0'.
					5963	31				
				2.00 /2.00	5962	32				
					5961	33				Total Depth Drilled: 33.00
					5960	34				
					5959	35				
					5958	36				
					5957	37				
					5956	38				
					5955	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 6019.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747987		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	56994
EAST 2082009		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/16/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.10 /2.00	6019	0–1			GM	0.0'-7.9' Sandy Gravel with some Silt and trace Clay. (Waste/fill material) Mod. yellowish brown (10 YR 5/4) to black (N1) asphalt fragments. Gravel is coarse to fine, sub-angular, consists of quartzite and granite. Fragments of large gravel at 1.1', broken due to drilling. Sand is c.g. to f.g., sub-angular to sub-rounded, well graded. No apparent bedding. From 2.0'-4.6' asphalt debris material is abundt. 56% gravel, 26% sand, 16% silt, 2% clay No recovery (1.1-2.0'), (3.6-4.0'), and (4.6-6.0') No recovery (6.9-7.9') and (7.9-9.0') Note: Soil classification changed from Sw to Gm on the basis of mechanical sieve and hydrometer results of BH00188AS.
					6018	2				
	BH00185AS			1.60 /2.00	6017	3				
					6016	4				
				0.60 /2.00	6015	5				
	BH00188AS				6014	6				
	BH00186AS			0.90 /1.90	6013	7				
					6012	8			GM	9.0'-10.6' Sandy Gravel with some Silt and trace Clay. Very dusky red (10 R 2/2). Fine to coarse gravel, angular to sub-angular. Sand is f.g. to c.g., 17% coarse, 45% med., 38% fine, rounded to sub-angular. Mod. plastic clay matrix. No apparent bedding, high porosity (possible alluvium). 45% gravel, 41% sand, 10% silt, 4% clay. No recovery (10.6-11.0').
				0.00 /1.10	6011	9				
				1.60 /2.00	6010	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 6019.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	74987	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	56994
EAST	3382009	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/16/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.60 /2.00		10				
					6009	11			SC	11.0'-20.1'. Clayey Sand with trace Silt and Gravel. Mod. brown (5 YR 4/4) to light brown (5 YR 5/6). Sand is c.g. to f.g., sub-rounded, well graded. Bedding massive. Moist to wet. Low plasticity. Trace of Mn staining. Some clay and gravel at 19.0', probably slough. 83% sand, 3% silt, 14% clay.
				2.20 /2.00	6008	12				
					6007	13				No recovery (18.7-19.0') and (20.1-21.0').
	BH00187AS			2.00 /2.00	6006	14				
					6005	15				
	BH00189AS			2.00 /2.00	6004	16	01/17/95			
					6003	17				
	BH00190AS			1.70 /2.00	6002	18				
					6001	19				
				1.10 /2.00	6000	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 6019.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747997	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	56994
EAST 2082009	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/16/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0%	100% 1.10/2.00	5999	20				
				0.80/2.00	5998	21			SW	21.0'-21.8': Gravelly Sand with some Clay. Mod. yellowish orange (10 YR 4/2) to pale yellowish orange (10 YR 8/6). Poorly sorted. Core moist to wet. Coarse to fine gravel throughout interval. Sand is m.g. to f.g., rounded, well graded. Low plasticity. Some carbonaceous material. Cobble at bottom of interval. 14% gravel, 46% sand, 11% clay.
					5997	22				No recovery (21.8-23.0').
				2.00/2.00	5996	23			SC	23.0'-24.4': Clayey Sand with some Gravel. Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6). Sand is m.g. to f.g., rounded, high porosity. Gravel is coarse to fine, sub-rounded. Core is wet. No carbonaceous material. Low plasticity. Fe stained. 10% gravel, 70% sand, 20% clay.
					5995	24			CLAYSTONE	24.4'-29.0': Top of Bedrock at 24.4'. Claystone with trace Silt. Dark gray (N3) to grayish black (N2). From 24.4'-26.7' disturbed sediments, then core turns dense, indurated from 26.7'-29.0'. Slightly friable. Slickensides approx. 24.45', 85 degree angle. Trace carbonaceous material. Bedding massive at 27.0' with thin to thick laminae. From 25.5'-27.0' core appears disturbed from drill/sample run. 5% silt, 95% clay.
	BH00191AS			2.00/2.00	5994	25				
					5993	26				
				2.20/2.00	5992	27				
					5991	28				
					5990	29				Total Depth Drilled: 29.00 Total Depth Casing: 26.50. Bottom of Filter Pack: 27.00
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40.00	GROUND ELEVATION (FT) 5970.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747719		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST L. A. HOST	57094
EAST 2081996		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/15/94	

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST L. A. HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.10 /2.00	5969	1			GM	0.0'-3.6' Gravelly Sand with some Silt and trace Clay (fill). Mixed dark yellowish brown (10 YR 4/2) to dark yellowish orange (10 YR 6/6), trace olive black (5 Y 2/1). Gravel is coarse to fine, avg. size 0.50 in. to 0.75 in., sub-angular to sub-rounded. Sand is f.g. to c.g., well graded, sub-angular to sub-rounded. Trace fragments of broken cobbles. Dry to damp, med. dense to dense. Fragments of claystone. 40% gravel, 45% sand, 13% silt, 2% clay. No recovery (1.1-2.0') and (3.6-4.0')
				1.60 /2.00	5967	3				
				1.40 /2.00	5965	5			GM	4.0'-6.0' Sandy Gravel with some Silt and Clay (fill). Olive black (5 Y 2/1). Gravel and sand same as above (reference interval 0.0'-4.0'). Very moist. Dense. Silt and clay mod. plastic. (Gm/Gc) 55% gravel, 34% sand, 16% silt, 5 clay. No recovery (5.4-6.0'). Note: Percentages changed based on mechanical sieve and hydrometer results from BH00139AS.
	BH00139AS									
				1.60 /2.40	5963	7			SM	6.0'-8.5' Silty Sand with some Gravel (fill). Sample modified from the Rig Geologist's Well Site Field Log. Core taken for sample BH00138AS. Dark brown to black. Moist. Dense to very dense. (Sm/Sc) 20% gravel, 41% sand, 29% silt, 10% clay. No recovery (7.6-8.0')
	BH00138AS									
				1.90 /2.10	5961	9			CL	8.5'-10.5' Sandy Clay with some Silt and Gravel (fill material). Dark yellowish brown (10 YR 6/6). Sand is f-cg, sub-angular to sub-rounded. Gravel is f-c. Note: apparent claystone fragments. Moist to very moist. Stiff, plastic. Note: Soil classification and percentages changed based on mechanical sieve and hydrometer results from BH00140AS.

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 40.00	GROUND ELEVATION (FT) 5970.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747719	AREA THSS 115	CASING DIAMETER (IN) 2.30	GEOLOGIST L. A. HOST	57094
EAST 2081996	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/15/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00140AS				5960	10				
	BH00141AS			0.80 /2.00	5959	11			CL	10.5'-14.0': Sandy Clay with some Silt and Gravel. Same as above (reference interval 8.5'-10.5'). Note: no claystone fragments. 9% gravel, 28% sand, 24% silt, 39% clay. No recovery (11.3-12.5').
				1.60 /2.00	5958	12				
					5957	13				
					5956	14			GM	14.0'-15.8': Sandy Gravel with some Silt and trace Clay. Dark yellowish brown (10YR 6/6), same as 4.0-6.0', damp, and dense. 71% gravel, 19% sand, 9% silt, 1% clay. No recovery (14.1-14.5') and (15.8-16.5'). Note: Soil classification and percentages changed based on mechanical sieve and hydrometer results from BH00142AS.
	BH00142AS			1.35 /2.00	5955	15				
					5954	16				
	BH00143AS			2.00 /2.00	5953	17			SC	16.5'-21.9': Gravelly Sand with some Clay and trace Silt. Yellowish gray (5 Y 7/2) to mod. brown (5 YR 4/4). Core is moist. Trace of Mn staining. Bedding not apparent. Sand m.g. to f.g., sub-angular to sub-rounded. Med. plasticity. Slough from 20.0'-20.5'. 34% gravel, 45% sand, 1% silt, 20% clay. No recovery (19.8-20.0') and (21.9-22.0').
					5952	18				
	BH00144AS			1.30 /1.50	5951	19				
	BH00147AS					20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40.00	GROUND ELEVATION (FT) 5970.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747719	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST L. A. HOST	57094
EAST	2081996	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/15/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00148AS	0% 50% 100%	0% 100%		5950	20				
				1.90 /2.00	5949	21				
					5948	22			CL	22.0'-25.1' Sandy Clay with some Gravel and trace Silt. Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6). Some Mn staining. Bedding massive. Moist to very moist. Sand is f.g. to c.g., sub-rounded. Gravel avg size approx. 0.50 in., well sorted. Med. plasticity. Very stiff. 10% gravel, 40% sand, 5% silt, 45% clay. No recovery (23.8-24.0') and (25.1-26.0').
				1.80 /2.00	5947	23				
					5946	24				
				1.10 /2.00	5945	25				
					5944	26			CL	26.0'-33.7' Sandy Clay with some Gravel and trace Silt. Same as above (reference interval 22.0'-25.1'). Landslide breccia. Angular clasts of claystone, siltstone and sandstone. Trace Fe nodules. Becomes wet at 32.5' (base of landslide breccia). No recovery (33.7-34.0').
				2.00 /2.00	5943	27				
					5942	28				
	BH00145AS			2.50 /2.50	5941	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40.00	GROUND ELEVATION (FT)	5970.20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747719	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	L. A. HOST	57094
EAST:	2081996	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN):	6.50	DATE DRILLED:	12/15/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2.00/2.00; 1.20/1.50; 2.00/2.00; 2.00/2.00; 2.00/2.00

DATUM (FT): 5940, 5939, 5938, 5937, 5936, 5935, 5934, 5933, 5932, 5931

DEPTH (FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

BH0014GAS

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	34.0'-40.0': Top of Bedrock 34.0' Claystone with some Silt. Light olive gray (5 Y 5/2). Thin laminae of f.g. silt along sub-horizontal bedding planes. Mod. weathered. Core is dried out. Low friability. Trace Fe staining, light brown (5 YR 5/6), along fractures and bedding. Fractures random. Becomes less weathered at 37.0'. Trace Fe staining along thin laminae from 38.0'-39.0'. Top of unweathered bedrock at 39.0' 8% silt, 92% clay

Total Depth Drilled: 40.00 Total Depth Casing: 36.00
Bottom of Filter Pack: 36.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]7885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST [illegible]82008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50 /2.00	5998	0			GC	0.0'-3.4' Gravelly Sand with abundt. Clay. Mod. yellowish brown (10 YR 5/4) and some dark yellowish orange (10 YR 6/6) and dark yellowish brown (10 YR 4/2). Sandstone gravel=2.0 in., light brown (5 YR 5/6). Top 0.30 in. top soil, roots. Some micaceous material. Gravel is coarse to fine, well graded, sub-angular to sub-rounded, max. 2.0 in., avg. 0.50 in. Sand is c.g. to f.g., sub-rounded, well graded. Calcareous material througout interval (reacts with HCl). Low plasticity. Bedding not apparent. Core damp to dry. (gc-sc) 34% gravel, 38% sand, 4% silt, 24% clay. No recovery (1.5-3.0').
				0.00 /1.00	5997	1				
					5996	2				
					5995	3			CLAYSTONE	3.4'-5.3' Claystone. Mottled med. gray (N5) to mod. yellowish brown (10 YR 5/4). Distinct dark gray (N3) clay filled slide plane at 4.0', dips 10 degrees with slickensides. No apparent bedding. Interval appears very disturbed/brecciated with abundt. FeO2 and caliche disseminated throughout. Some roots from 4.1'-4.7'. Trace MnO2 from 5.0'-5.3' (landslide material). No recovery (4.7-5.0').
				1.70 /2.00	5994	4				
					5993	5			CLAYSTONE	5.3'-11.0' Top of Weathered Bedrock at 5.3' Claystone with some Silt. Dusky yellow (5 Y 6/4) to light olive gray (5 Y 5/2), mottled. Strongly weathered. Abundt. random fratures filled with gypsum and iron oxide. Trace MnO2. Trace to some caliche. Bedding near horizontal. Trace leaf imprints. Mod. hard to mod. indurated. Slightly friable. 7% silt, 93% clay. No recovery (6.5-7.0'), and (8.7-9.0').
				1.50 /2.00	5992	6				
					5991	7				
	BH00192AS			1.70 /1.90	5990	8				
					5989	9				
				1.40 /1.40		10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL, SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BP00015AS	0% 50%	100% 0% 100%		5988	10				
				0.90 /1.70	5987	11				11.0'-11.9': Bag sample. Core not available. Same as above (reference interval 5.3'-11.0') according to Well Site Field Log.
	BH00193AS									
				0.40 /1.00	5986	12			CLAYSTONE:	12.0'-12.4': Claystone. Same as above (reference interval 5.3'-11.0'). No recovery (12.4-13.0').
					5985	13			CLAYSTONE:	13.0'-17.0': Claystone with some Silt. Same as above (reference interval 5.3'-11.0'). Trace iron nodules. Indurated. Core broken up from Moss sampler. Appears laminated where intact. Becomes less fractured and becomes mod. weathered. Trace to some iron oxide staining. Some gypsum from 13.0'-15.0'.
				2.00 /2.00	5984	14				
					5983	15				
	BP00014AS			2.00 /2.00	5982	16				
					5981	17			SILTY CLAYSTONE:	17.0'-22.0': Silty Claystone. Olive gray (5 Y 4/1) to mod. yellowish brown (10 YR 5/4). FeO staining heavy in fractures and along laminae. Trace carbonceous material. Horizontal thin laminations of siltstone from 18.0'-20.0'. Core damp to dry. Core indurated. Slightly friable. Abundt. FeO2 staining from 20.0'-21.0'. 20% silt, 80% clay.
	BH00194AS			1.00 /1.00	5980	18				
				2.00 /2.00	5979	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST 2082008	LOCATOR NUMBER J?	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	5978	20				
					5977	21				
					5976	22			CLAYSTONE	22.0'-28.0' Claystone with some Silt. Olive gray (5 Y 4/1) and dark yellowish orange (10 YR 6/6) where oxidized. Core indurated. Mod. weathered. Mod. to slightly friable. Damp to moist. Core disturbed from Moss sampler 26.0'-28.0'.
				2.00 /2.00	5975	23				
	BH00195AS				5974	24				
				2.00 /2.00	5973	25				
	BP00016AS				5972	26				
				2.00 /2.00	5971	27				
					5970	28			CLAYSTONE	28.0'-32.0' Claystone with some Silt. Same as above (reference interval 22.0'-28.0') Olive gray (5 Y 4/1) grades to predom. dark gray (N3). Horizontal thin laminations. Core indurated. Indications of disturbed sediments, soft sediment deformation structures. Slightly to unweathered. From 30.0-32.0' no Fe staining. Core damp. 9% silt, 91% clay.
				2.00 /2.00	5969	29				No recovery (32.0-33.5')
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747385	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GH00196AS			2.00/2.00	5968	30				
					5967	31				
					5966	32				
				0.00/1.50	5965	33				
					5964	34			SILTY CLAYSTONE	33.5'-36.1' Interbedded Silty Claystone and Clayey Siltstone. Olive gray (5 Y 3/2) to light olive gray (5 Y 5/2) with mod. yellowish brown (10 YR 5/4). Hard siltstone nodules and gravel size siltstone clasts. Thin to thick laminations. Mod. hard. Mod. friable. Nodules are sub-rounded. Interval is predom. silty claystone with increasingly siltstone interbeds to 36.1'. Some soft sediment deformation structures.
					5963	35	02/04/95 ▽			
				3.10/5.00	5962	36			SANDY SILTSTONE	36.1'-39.5' Calcareous Sandy Siltstone. Pale olive (10 Y 6/2) to light olive gray (5 Y 5/2). Well to mod. cemented (calcareous), well indurated. Hard. Thinly laminated with some crossbedding. Some soft sediment deformation structures. Pebble conglomerate zone with sandy siltstone clasts (fine granule size) from 39.2'-39.5'. Vertical fracture at 36.4'. Mod. weathered. Sand is f.g., well rounded quartz.
					5961	37				
					5960	38				No recovery (36.6-38.5')
					5959	39			SANDY SILTSTONE	39.5'-40.3' Sandy Siltstone. Light olive gray (5 Y 6/1). Non-calcareous. Thin bedded. Sharp contact at 40.3' with silty claystone. Sand f.g., well rounded quartz.
						40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT):	5998.10	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747885	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	A. R. AGLIARDO
EAST: 2082008	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	01/19/95

LOG OF BORING NUMBER: 57194

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL: 3.50/5.00; 5.00/5.00
DATUM (FT): 5958, 5957, 5956, 5955, 5954, 5953, 5952, 5951, 5950, 5949
DEPTH (FT): 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	40.3'-41.3': Claystone. Dark gray (N3) to grayish black (N2). Siltstone laminae and nodules. Thin bedded to laminated. Some organic laminae. Trace calcareous, m.g. sand size nodules. Slightly weathered.
CLAYSTONE	41.3'-55.3': Claystone. Olive gray (5 Y 4/1). Trace carbonaceous material. Core damp to moist. Some thin siltstone laminae at 48.0'. No FeO, unweathered. Trace calcareous material. Thinly laminated to massive. Slightly friable. Slightly plastic. Mod. indurated. At 48.5' color grades to dark greenish gray (5 GY 4/1). No recovery (42.0-43.5').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5938.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747885	AREA IHSS 115	CASING DIAMETER (IN) 6.00	GEOLOGIST: A. R. AGLIARDO	57194
EAST:	2082008	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 5.50	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L. S. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				5.00/5.00	5948	50				
					5947	51				
					5946	52				
					5945	53				
					5944	54				
					5943	55				
				5.00/5.00	5942	56			SILTY CLAYSTONE	55.3'-57.5': Silty Claystone. Light olive gray (5 Y 5/2) Thin bedded to laminated. Mod. hard. Mod. friable. Mod. indurated. Trace calcareous.
					5941	57				
					5940	58			CLAYSTONE	57.5'-63.5': Claystone with some Silt. Light olive gray (5 Y 5/2) to dark gray (N4). Some siltstone laminae. Laminated with some soft sediment deformation structures. Mod. hard. Mod. friable. Trace carbonaceous material.
					5939	59				
						60				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST:	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST
ADDITIONAL CENTRALIZERS 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	5.00/5.00	5938	60				
					5937	61				
					5936	62				
					5935	63				
					5934	64			SILTY CLAYSTONE	63.5'-63.8' Silty Claystone. Light olive gray (5 Y 5/2). Mod. hard. Mod. friable. Laminated.
									CLAYEY SILTSTONE	63.8'-64.7' Clayey Siltstone. Light olive gray (5 Y 5/2). Thin bedded to laminated.
					5933	65			SILTY CLAYSTONE	64.7'-66.0' Silty Claystone. Same as above (reference interval 63.5'-63.8').
				5.00/5.00	5932	66			CLAYSTONE	66.0'-68.5' Claystone with some Silt. Same as above (reference interval 57.5'-63.5').
					5931	67				
					5930	68				
					5929	69			NO RECOVERY	No recovery (68.5-72.0') and (72.0-73.5').
						70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST

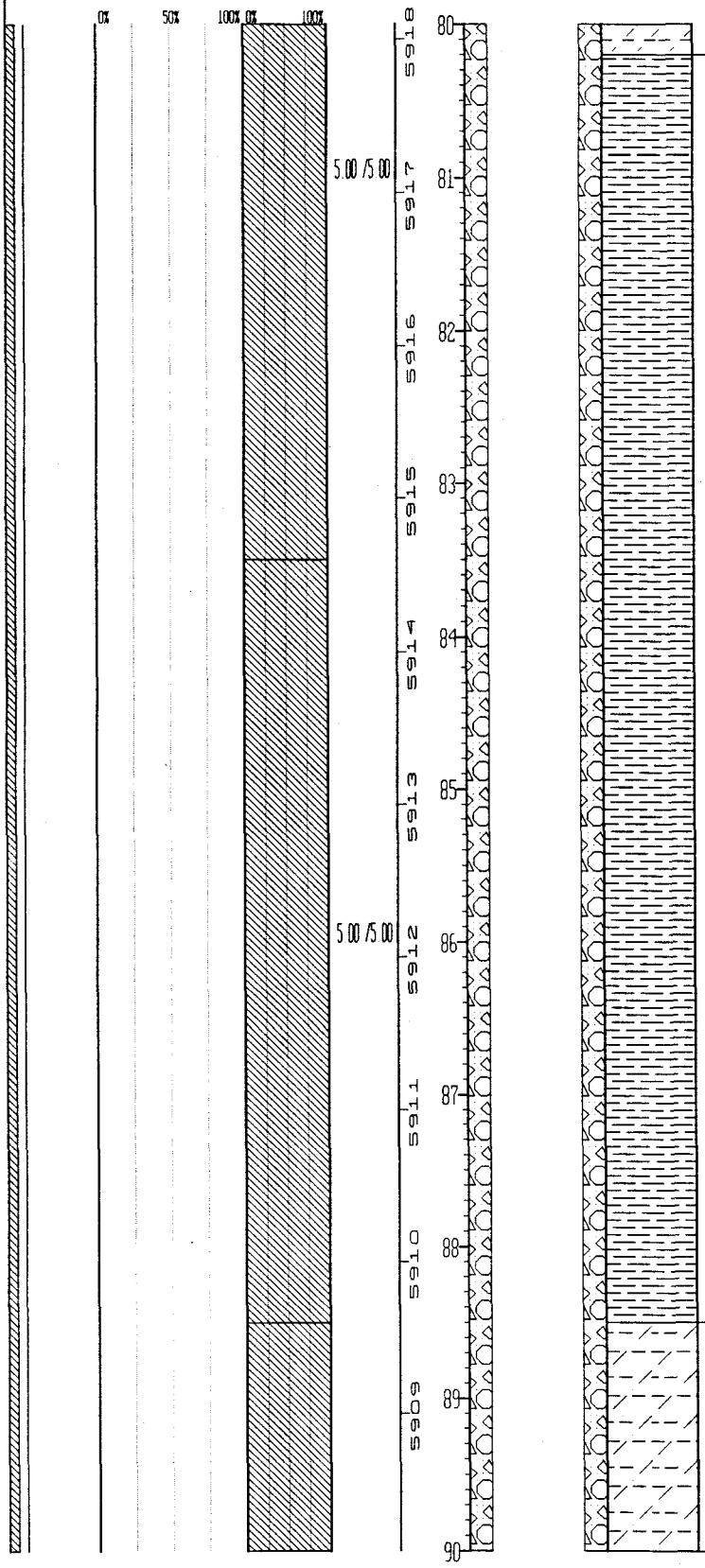
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				3.50/5.00	5928	70				
					5927	71				
					5926	72				
					5925	73				
					5924	74			CLAYSTONE	73.5'-74.4': Claystone. Light olive gray (5 Y 3/2). Little silt. Some organics. Trace FeO staining. Increase in carbonaceous material to 74.4'
	BP00029AS				5923	75			COAL	74.4'-75.0': Lignite/Coal. Black (N1) with thin laminae of claystone. Olive gray (5 Y 4/1). Appears subbituminous locally, otherwise predom. clayey (disseminated).
				5.00/5.00	5922	76			SILTY CLAYSTONE	75.0'-79.2': Silty Claystone. Light olive gray (5 Y 5/2) to dark gray (N3). Interbedded silty claystone and claystone. Thin bedded to laminated. Mod. hard. Mod friable. Low porosity. Some to trace carbonaceous material.
					5921	77				
					5920	78				
					5919	79			CLAYEY SILTSTONE	79.2'-80.2': Clayey Siltstone with some Sand. Light olive gray (5 Y 5/2). Sand is v.f.g., well rounded quartz. Thin bedded. Mod. porosity. Mod. hard to hard. Mod. friable. Trace carbonaceous material
						80				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	80.2'-88.5' Claystone with some Silt. Dark gray (N3) to light olive gray (5 Y 6/1). Bedding massvie with some laminations and thin beds. Soft to mod. hard. Friable to slightly friable. Trace carbonaceous material. Core moist.
SILTY CLAYSTONE	88.5'-90.1' Silty Claystone. Light olive gray (5 Y 5/2) to olive gray (5 Y 4/1). Thinly laminated. Friable to slightly friable. Low porosity. Mod. hard.

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST 2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'

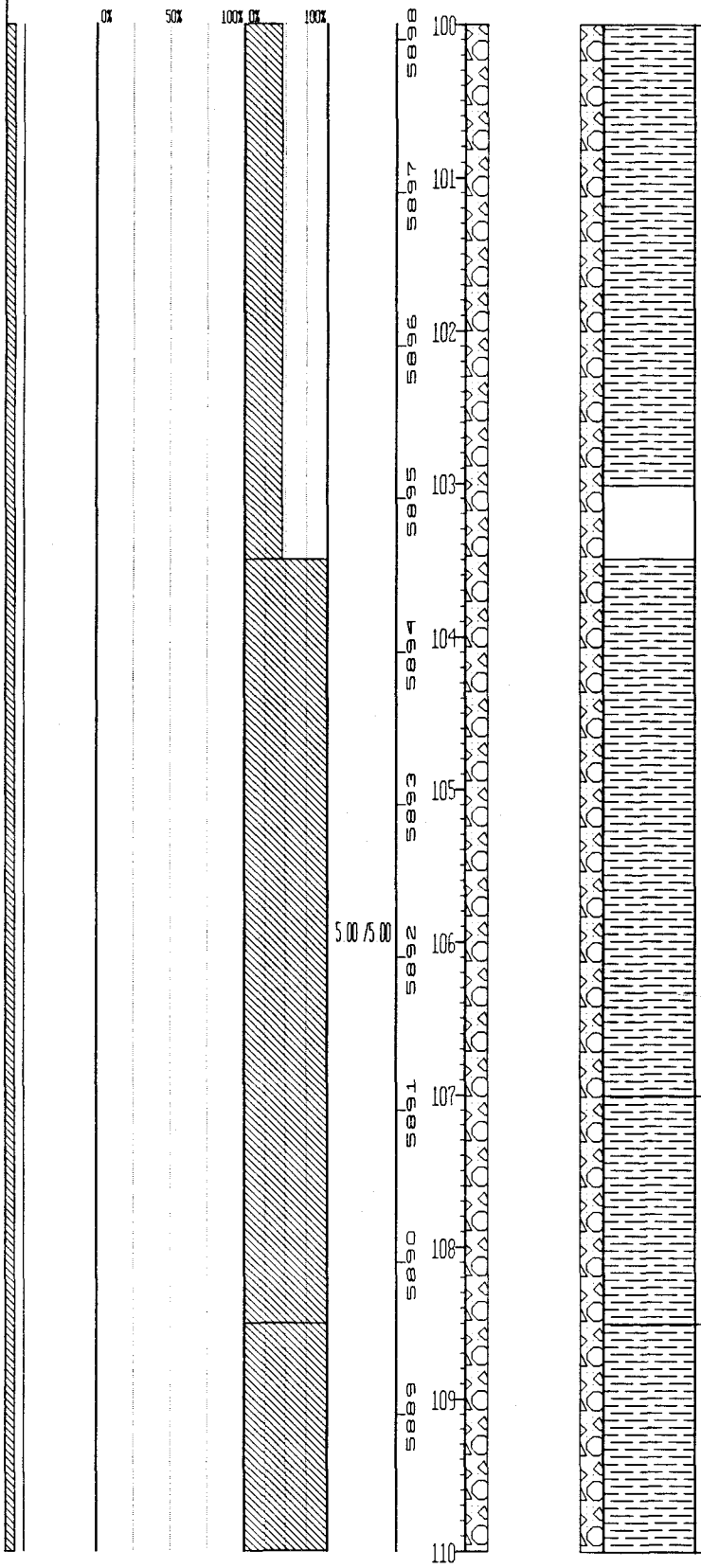
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL: 5.00/5.00; 4.50/10.00
DATUM (FT): 5908, 5907, 5906, 5905, 5904, 5903, 5902, 5901, 5900, 5899
DEPTH (FT): 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
WELL OR PIEZOMETER CONSTRUCTION: 02/07/95 ▽
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	90.1'-91.8' Claystone with some Silt. Same as above (reference interval 88.5'-90.1'), with less silt.
CLAYSTONE	91.8'-93.3' Claystone. Med. dark gray (N4) to grayish black (N2). Laminated to thin bedded. Carbonaceous material disseminated and as laminae. Mod. friable. Slightly plastic.
SILTY CLAYSTONE	93.3'-95.7' Silty Claystone. Olive gray (5 Y 4/1) Mottled with 5% disseminated carbonaceous material. Mod. hard. Mod. friable. Low porosity. Slightly calcareous.
CLAYSTONE	95.7'-97.7' Claystone. Dark gray (N3). Trace carbonaceous material. Mod. hard. Non-friable. Mod. indurated. No recovery (97.7-98.5').
CLAYSTONE	98.5'-100.0' Claystone with some Silt. Olive gray (5 Y 4/1) to med. dark gray (N4). Massive to thinly laminated (siltstone laminae). Mod. hard. Mod. friable. Slightly to mod. calcareous. Trace to some carbonaceous material.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	100.0'-107.0': Claystone with trace Silt. Olive gray (5 Y 4/1). No visible laminae. Some carbonaceous material. Massive to laminated. Slightly friable. Slightly calcareous. Mod. hard. 2% silt, 98% clay. No recovery (103.0-103.5').
CLAYSTONE	107.0'-108.5': Claystone with trace Silt. Same as above (reference interval 100.0'-107.0'). Color changes to dark gray (N3). Appears slightly plastic, with no silt. Non-calcareous.
CLAYSTONE	108.5'-113.5': Claystone. Same as above (reference interval 100.0'-107.0'). Increase in Silt content from 112.5'-113.5'.

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5993 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747885	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST A R AGLIARDO		
EAST 2082068	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 01/19/95		57194

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO, J W HARWELL, L A HOST
ADDITIONAL CENTRALIZERS 84 0-84 9', 113.9-115 1', AND 129 8-131 0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%
PERCENT RECOVERY: 0% 100%
RECOVERY / INTERVAL: 5 00 /5 00; 5 00 /5 00
DATUM (FT): 5988, 5987, 5986, 5985, 5984, 5983, 5982, 5981, 5980, 5979
DEPTH (FT): 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTY CLAYSTONE	113.5'-117.6' Silty Claystone. Olive gray (5 Y 4/1) to light olive gray (5 Y 5/2). Thin bedded to laminated with thin beds and laminae of claystone. Mod hard. Mod friable. Trace to some carbonaceous material. Disseminated. Locally slightly calcareous. Low porosity. 20% silt, 80% clay.
CLAYEY SILTSTONE	117.6'-118.5' Clayey Siltstone. Light olive gray (5 Y 5/2) to yellowish gray (5 Y 7/2). Thinly laminated, near horizontal. Mod hard to hard. Soft sediment deformation structures. Trace crossbedding and possible trough and scour structures. 60% silt, 40% clay.
CLAYSTONE	118.5'-124.4' Claystone with trace Silt. Dark gray (N3) to med dark gray (N4). Massive. Trace silt laminae. Slightly indurated. Slightly plastic. Trace carbonaceous material. Locally slightly calcareous. 5% silt, 95% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 - ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST.
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL: 5.00/5.00; 5.00/5.00
DATUM (FT): 5878, 5877, 5876, 5875, 5874, 5873, 5872, 5871, 5870, 5869
DEPTH (FT): 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

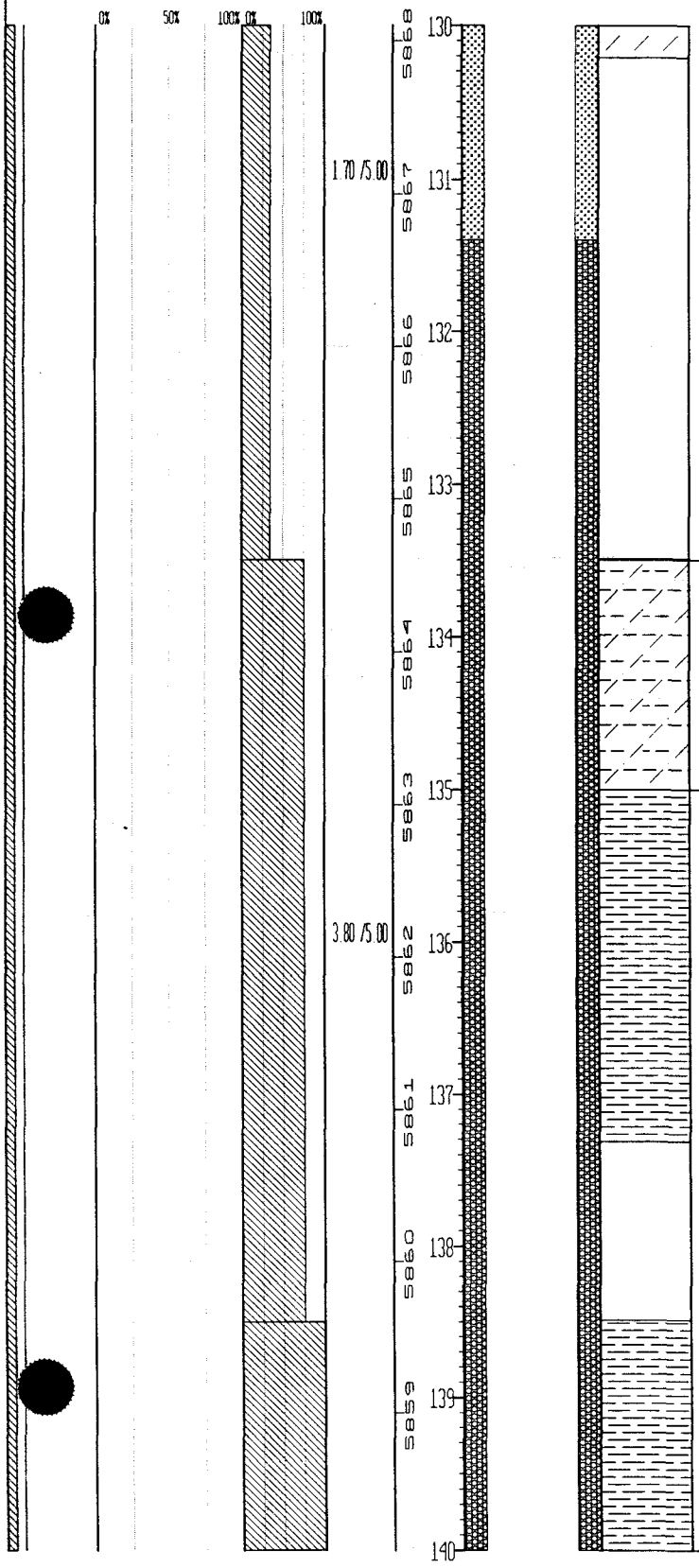
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTSTONE	124.4'-130.2': Siltstone with some Clay. Olive gray (5 Y 4/1) to mod. yellowish brown (10 YR 5/4). Trace FeO nodules. Laminae slumped, soft sediment deformation structures as well as horizontal (0 to 5 degrees). Trace crossbedding. Thin bedded to laminated. Mod. hard to hard. Locally very hard. Well indurated. Slightly friable. Mod. porosity. Upward fining, silt content increases with depth. Some to trace leaf and wood imprints (carbonaceous material). Non-calcareous. Some thin claystone interbeds with conchoidal fractures observed from 129.4'-130.0'. Trace iron staining. 78% silt, 22% clay.
	No recovery (130.2-133.5')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5998.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747885	AREA: IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST: A. R. AGLIARDO	57194
EAST:	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 - ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L.A. HOST

ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTY CLAYSTONE	133.5'-135.0': Silty Claystone. Same as above (reference interval 113.5-117.6'). Some soft sediment deformation structures (turbidite?).
CLAYSTONE	135.0'-150.0': Claystone with some to trace Silt. Light olive gray (5 Y 5/2) to dark gray (N3). Thin bedded to laminated. Friable. Mod. to poorly indurated. Mod. hard to soft. Mod. to low porosity. No recovery (137.3-138.5').

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT): 5998.10	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	767885	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: A. R. AGLIARDO	57194
EAST:	2082008	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/19/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO, J. W. HARWELL, L. A. HOST
ADDITIONAL CENTRALIZERS: 84.0-84.9', 113.9-115.1', AND 129.8-131.0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%						CLAYSTONE	140.0'-146.0': Claystone with trace Silt. Same as above (reference interval 135.0'-140.0'). Slightly calcareous. Iron stained. Siltstone clasts at 145.5'
				5.00 /5.00	5858 5857 5856 5855 5854 5853	140 141 142 143 144 145				
				2.90 /5.00	5852 5851 5850 5849	146 147 148 149			SANDY SILTSTONE	146.0'-149.6': Carbonaceous Sandy Siltstone. Grayish black (N2) to med. dark gray (N4). V.f.g. sand, well sorted, well rounded. Thinly laminated. Soft sediment deformation structures. Mod. hard. Mod. indurated. Friable. Laminae near horizontal. Carbon/coal disseminated and as laminae. 10% carbon, 10% sand, 75% silt, 5% clay. No recovery (146.4-148.5') and (149.6-150.0').
				1.10 /1.50		150				Total Depth Drilled: 150.00 Total Depth Casing: 131.40 Bottom of Filter Pack: 131.40

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT) 6027.40	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747659	AREA OU5, IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST JEFF HARWELL	57294	
EAST 2080479	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 4.00	DATE DRILLED 11/12/94		
REMARKS					

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00090AS				6027	0				4.0-8.0' Composite/bulk sample BH00090AS. Sample lithology refer to borehole 56893
					6026	1				
					6025	2				
					6024	3				
					6023	4				
					6022	5				
					6021	6				
					6020	7				
					6019	8				Total Depth Drilled 8.00
					6018	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT) 5938 20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747479	AREA PHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57394
EAST 2081988	LOCATION NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 12/01/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 10 /2 00	5938	0			SC	0 0'-3 5' Gravelly Sand with some Clay and Silt Dark brown (10 YR 2/2) to dark yellowish brown (10 YR 4/2) Gravel is coarse to fine, well graded, sub-angular, max 3 5 in, avg 0 75-1 0 in Sand is c g to f g, well graded, sub-angular to sub-rounded Non-plastic Trace cobbles Core medium dense Core moist to wet Water at 2 0' 20% gravel, 65% sand, 6% silt, 9% clay
				1 00 /1 00	5937	1				No recovery (1 1-2 0') and (3 5-4 0')
				0 50 /1 00	5936	2	12/01/94			
				1 40 /1 40	5935	3			SW	4 0'-5 9' Gravelly Sand with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Sand and gravel well graded, prdom f g, sub-angular to sub-rounded Non plastic Dense to very dense Some cobbles Wet (sw-sc) 31% gravel, 59% sand, 3% silt, 7% clay
				1 00 /2 00	5934	4			CL	5 9'-6 4' Sandy Clay with some Gravel Mod yellowish brown (10 YR 5/4) Gravel is fine, sub-rounded Core soft, mod to low plasticity Sand is m g to f g, well sorted 7% gravel, 13% sand, 80% clay
				1 30 /2 50	5933	5				No recovery (6 4-7 4')
	BH00123AS				5932	6			CLAYSTONE	7 4'-10 0' Top of Weathered Bedrock at 7 4' Claystone with trace Silt Dark yellowish orange (10 YR 6/6) to yellowish brown (10 YR 5/4) Traces of calcareous material (caliche) Bedding massive Mod friable 3% silt, 97% clay
					5931	7				
					5930	8				
					5929	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT) 5938 20	PROJECT NUMBER 065-RFI/RI	LOG OF BORING NUMBER
NORTH	747479	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57394
EAST	2081988	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 12/01/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%	BH00124AS	50%	100% 0% 100%	1 90 /2 10	5928 5927	10 11			CLAYSTONE	10 0'-11 9' Claystone with trace Silt Same as above (reference interval 7 4'-10 0') Grayish brown (5 YR 3/2) Dry Trace organics Bedding not apparent No recovery (11 9-12 0')
				2 00 /2 00	5926 5925	12 13			CLAYSTONE	12 0'-16 0' Claystone with trace Silt Same as above (reference interval 7 4-10 0') Slightly to mod weathered Dry Trace organics, carbonaceous material Bedding massive
				2 00 /2 00	5924 5923	14 15				
				1 70 /2 00	5922 5921	16 17			CLAYSTONE	16 0'-17 7' Claystone Dusky yellowish brown (10 YR 2/2) Slightly weathered Dry Thinly laminated to thinly bedded No recovery (17 7-18 0')
				1 80 /2 00	5920 5919	18 19 20			CLAYSTONE	18 0'-19 8' Claystone Olive gray (5 Y 4/1) Becomes unweathered at 19 5' Slightly friable Thinly laminated, soft sediment deformation structures (18 0-19 8') No recovery (19 8-20 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23.00	GROUND ELEVATION (FT) 5938.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]479	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	57394
EAST [illegible]1988	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/01/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57; ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GEOTECHNICAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00125AS			2.00/2.00	5918	20			CLAYSTONE	20.0'-21.0' Claystone. Grayish black (N2). Some carbonaceous material (lignite). Bedding not apparent.
					5917	21			CLAYSTONE	21.0'-23.0' Claystone. Olive gray (5 Y 4/1). Unweathered. Mod. hard. Massive, dry.
				1.00/1.00	5916	22				
					5915	23				Total Depth Drilled: 23.00
					5914	24				
					5913	25				
					5912	26				
					5911	27				
					5910	28				
					5909	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.50	GROUND ELEVATION (FT) 5971.40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747711	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	57494
EAST	2082227	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/05/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50/2.00	5971	0			CL	0.0'-5.2' Clay with some Silt and trace Gravel. Trace gravel top 0.5' of interval. Dark yellowish orange (10 YR 6/6) to mod. yellowish brown (10 YR 5/4). Low to med. plasticity. Top 0.6', top soil with some roots. Core dry, unconsolidated. Heavy Fe stained. Trace calcareous material. No gravel from 2.0'-3.5'. 5% gravel, 10% silt, 85% clay. No recovery (1.5-2.0'), (3.5-4.0') and (5.2-6.0').
				1.50/2.00	5970	1				
				1.20/2.00	5969	2				
				1.40/2.00	5968	3				
				2.40/2.50	5967	4				
					5966	5				
					5965	6			SC	6.0'-7.4' Clayey Sand with some Gravel and trace Silt. Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6). At 6.8' color changes to dark yellowish brown (10 YR 4/2). No Fe staining. Sand is m.g. to f.g., sub-rounded. Gravel is medium to fine, sub-angular. Core moist, stiff. Low plasticity. Bedding not apparent. Some Fe nodules from 6.0'-6.8'. 14% gravel, 49% sand, 2% silt, 34% clay. No recovery (7.4-8.0')
					5964	7				
					5963	8			CH	8.0'-10.5' Silty Clay with trace sand. Mod. yellowish brown (10YR 5/4) to dark yellowish brown (10YR 4/2). F.g. sand. High plasticity. Stiff. 4% sand, 46% silt, 50% clay. Note: Soil classification based on mechanical sieve and hydrometer results from BH00175AS.
	BH00175AS				5962	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT) 5971 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747711	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57494
EAST 2082227	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	01/05/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00176AS			2 50 /2 50	5961, 5960, 5959	10, 11, 12			CLAYSTONE	10 5'-13 0' Top of Bedrock at 10 5' Claystone Core taken for sample According to Well Site Field Log weathered Claystone
				1 50 /1 50	5958, 5957	13, 14			CLAYSTONE	13 0'-16 0' Claystone with some Silt Dark yellowish brown (10 YR 4/2) to med dark gray (N4) to dark yellowish orange (10 YR 6/6) where Fe stained Mod friable Abundt Fe staining including nodules of FeO Trace calcareous material Intact core dense Fragments fissle 90% clay, 10% silt No recovery (16 0-16 5')
				1 50 /2 00	5956, 5955	15, 16				
				2 00 /2 00	5954, 5953	17, 18			CLAYSTONE	16 5'-22 0' Claystone with some Silt Same as above (reference interval 13 0'-16 0') At 18 0' heavy Fe staining Nodules 0 50 in concretions Bedding not apparent Fe nodules could possibly be hematite and/or limonite Possibly 45 degree healed fracture Indications of reworked or disturbed sediment Numerous random fractures No recovery (22 0-22 5')
	BH00177AS			1 60 /2 00	5952	19, 20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	5971 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	74711	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	57494
EAST	2092227	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/05/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5951	20				
						21				
				1 50 /2 00	5950					
						22				
					5949					
						23			CLAYSTONE	22 5'-24 0' Claystone with trace Silt Grayish black (N2) to dark yellowish brown (10 YR 4/2) Core indurated Some carbonaceous material Inferred 60 degree +/- fractures in lower part if interval, healed, opened by drilling Indications of disturbed sediments 3% silt, 97% clay No recovery (24 0-24 5')
				1 50 /2 00	5948					
						24				
					5947					
						25			CLAYSTONE	24 5'-26 0' Claystone with some Silt Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) Highly weathered Sediments reworked or disturbed Some unaltered silty claystone clasts, med light gray (N6) Trace calcareous material 12% silt, 88% clay No recovery (26 0-26 5')
				1 50 /2 00	5946					
						26				
					5945					
						27			CLAYSTONE	26 5'-30 0' Claystone with some Silt Same as above (reference interval 24 5'-26 0') Amount of oxidation decreases in interval No recovery (28 2-28 5')
				1 70 /2 00	5944					
						28				
					5943					
						29				
				2 00 /2 00	5942					
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.50	GROUND ELEVATION (FT)	5971.40	PROJECT NUMBER	OU5-RFI/RI
NORTH	747711	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P. J. JORDAN
EAST	2082227	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	01/05/95

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN.

LOG OF BORING NUMBER: 57494

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5941	30			CLAYSTONE	30.0'-30.5': Claystone. Well defined contact with overlying sediments.
				2.00/2.00	5940	31			CLAYSTONE	30.5'-32.5': Claystone with trace Silt. Same as above (reference interval 22.5'-24.0'). Olive black (5 Y 2/1). Very thin laminae of Fe concentrations.
					5939	32				
				2.00/2.00	5938	33			SILTY CLAYSTONE	32.5'-36.5': Silty Claystone. Olive gray (5 Y 4/1) to light olive gray (5 Y 5/2). Some claystone clasts and traces of FeO. 73% clay, 27% silt
					5937	34				
				2.00/2.00	5936	35				
					5935	36				
					5934	37				Total Depth Drilled: 36.50
					5933	38				
					5932	39				
						40				

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 104.90	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747550	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	57594
EAST	2082253	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL PROTECTIVE CASING LENGTH 3.0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0.3'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	ALLUVIUM INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00079AS			1.00/2.00	5946	0			ML	0.0'-1.0' Sandy Silt with some Clay and Gravel. Dark yellowish brown (10 YR 4/2). Sand is f.g. to m.g., sub-rounded to rounded, well sorted. Gravel is coarse to fine, sub-rounded. Some caliche. Some roots. Bedding not apparent. Low plasticity. 7% gravel, 41% sand, 42% silt, 10% clay No recovery (1.0-2.0')
	BH00078AS BH00080AS			1.00/2.00	5943	3			ML	2.0'-3.3' Sandy Silt with some Clay and Gravel. Same as above (reference interval (0.0'-1.0'). Dark yellowish brown (10 YR 4/2) to olive gray (5 Y 6/1). Massive. Stiff. Dry to moist. Some caliche. Clay content increases. No recovery (3.3-4.0')
	BH00081AS			1.00/2.00	5941	5			CL	4.0'-7.0' Sandy Clay with some Gravel and trace Silt. Color varies from dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2) to mod. yellowish brown (10 YR 5/4). Sand is f.g. to m.g., sub-rounded to sub-angular, well sorted. Gravel is fine, sub-angular to sub-rounded. Some micaceous fragments. Some carbonaceous material. Some caliche and FeO concretions. Massive. Low plasticity. Moist. 7% gravel, 44% sand, 3% silt, 46% clay No recovery (5.7-6.0')
	BH00083AS			1.00/2.00	5939	7			CL	7.0'-9.7' Clay with trace Silt (landslide block). Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1). Some dusky brown (5 YR 2/2). Trace calcareous nodules. Trace c.g. sand. Some Fe and Mn staining. Fe staining is banded, some FeO concretions. 10% claystone fragments, angular. Mod. to slightly friable. Dry to moist. Interval 8.0'-9.7' is broken and brecciated. Trace fine gravel, angular, claystone gravel clasts in a clay matrix. 4% silt, 96% clay No recovery (7.4-8.0'), and (9.7-10.0')
				1.00/2.00	5937	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	5936	10			CL	10 0'-13 5' Clay with some Silt Mottled pale olive gray (10 Y 6/2), dusky brown (5 YR 2/2) and dark yellowish orange (10 YR 6/6) Strongly brecciated with claystone fragments, fine to coarse gravel size, angular with some angular ironstone clasts, trace organics and claiche Highly weathered Very stiff Dry to moist Strongly brecciated with abundt iron staining at 11 25'-12 0' Becomes hard, appears to be landslide breccia 7% silt, 93% clay
				1 70 /2 00	5935	11				
					5934	12				
					5933	13				
				2 00 /2 00	5932	14			CL	13 5'-14 25' Gravelly Clay Mottled dark yellowish orange (10 YR 6/6), mod yellowish brown (10 YR 5/4) and light olive gray (5 Y 6/1) Soft to stiff Wet to saturated Fine to coarse gravel, angular to sub-rounded F g to c g sand, sub-rounded to sub-angular, predom metamorphic gneiss and quartzite 27% gravel, 10% sand, 9% silt, 54% clay No recovery (13 7-14 0')
					5931	15				
	BH00084S				5930	16			CL	14 25'-16 0' Clay, (landslide breccia) Same as above (reference interval 10 0'-13 5')
									CL	16 0'-16 5' Gravelly Clay Some as above (reference interval 13 5'-14 25') Possible slough
				2 10 /2 00	5929	17			CLAYSTONE	16 5'-20 0' Top of Weathered Bedrock at 16 5' Claystone Mod weathered Some dark yellowish orange (10 YR 6/6), predom yellow gray (5 Y 7/2) to med gray (N5) Some carbonaceous material Bedding massive Hard Mod indurated Moist 80 degree open fractures with MnO2 and FeO2 from 16 75' to 17 8' and 17 8' to 19 25' 60 degree fracture, open from 19 25' to 19 75' 0 degree horizontal fracture at 19 9'
					5928	18				
				2 00 /2 00	5927	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 0	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	865-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

BH00085AS

0% 50% 100% 0% 100%

0 60 /4 90

3 10 /5 00

Depth (ft)	Datum (ft)
20	5926
21	5925
22	5924
23	5923
24	5922
25	5921
26	5920
27	5919
28	5918
29	5917
30	

20 0'-20 6' Core in box is grout from setting surface casing

NO RECOVERY No recovery (20 6-24 9')

CLAYSTONE 24 9'-28 0' Claystone Med dark gray (N4) Some carbonaceous material Massive to thinly laminated at 25 0' Moist Slightly friable At 26 5', silt content increases Abundant organics Some Fe nodules to 28 0' Predom unweathered

No recovery (28 0-30 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 4 20 /5 00; 3 00 /5 00

DATUM (FT): 5916, 5915, 5914, 5913, 5912, 5911, 5910, 5909, 5908, 5907

DEPTH (FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	30 0'-37 9' Claystone Same as above (reference interval 24 9'-28 0') Med dark gray (N4) Slickensides at 33 5', approx 80 degrees At 33 7' amount of organics decreases to trace amount Fractured Very stiff Slightly friable Massive No recovery (34 1-34 9'), and (37 9-40 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 3 40 /5 00; 5 00 /5 00

DATUM (FT): 5906, 5905, 5904, 5903, 5902, 5901, 5900, 5899, 5898, 5897

DEPTH (FT): 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

SILTY CLAYSTONE 40 0'-54 2' Silty Claystone Light olive gray (5 Y 6/1) Well cemented, very stiff, dense Some organics Massive Slightly friable Dry to moist Vertical fracture at approx 45 1' Interval 50 0'-54 2' is mod porosity Thinly laminated to thin bedded, trace cross-bedding 26% silt, 74% clay

No recovery (43 4-44 9'), and (54 2-54 9')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

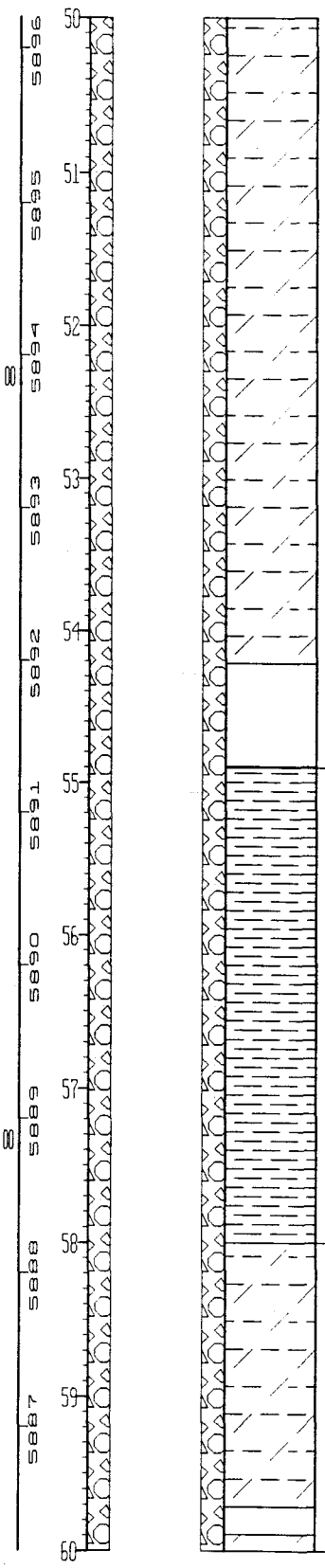
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 4 20 /5 00; 4 80 /5 00



WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

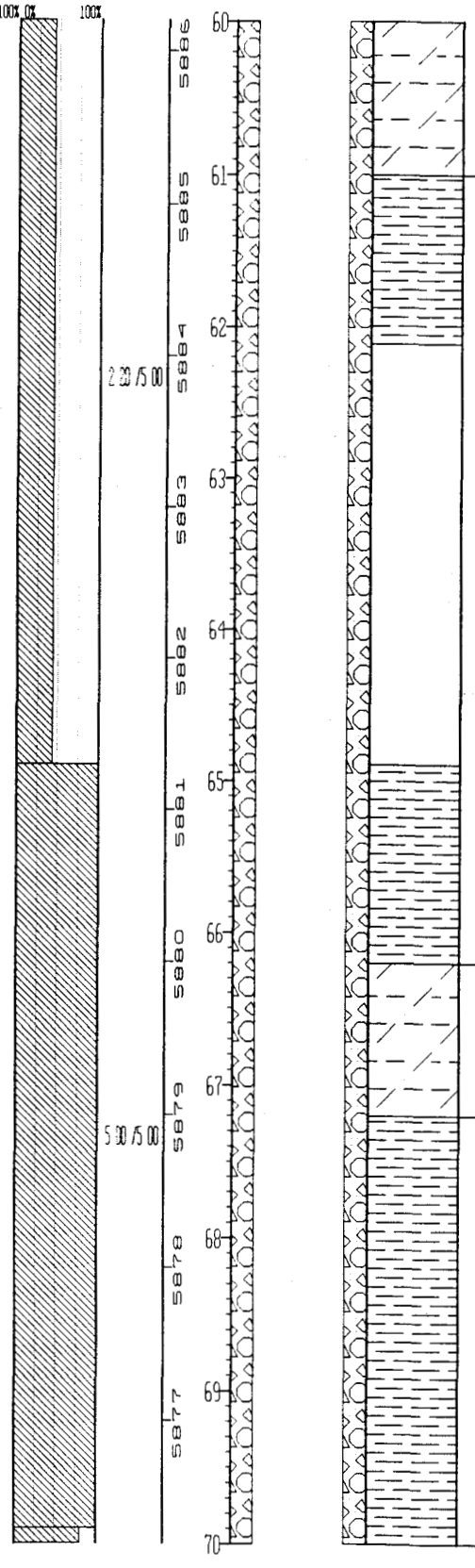
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	54 9'-58 0' Claystone Med dark gray (N4) Unweathered Sediments appear slightly disturbed Slickensides abundt through interval, at 55 5', 55 7' and 56 0', almost vertical at 80° degrees (approx)
SILTY CLAYSTONE	58 0'-61 0' Silty Claystone Same as above (reference interval 40 0'-54 2') Exhibits conchoidal fracture Some small burrow holes Trace fossils at 59 4' No recovery (59 7-59 9')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104.90	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL PROTECTIVE CASING LENGTH 3.0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0.3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

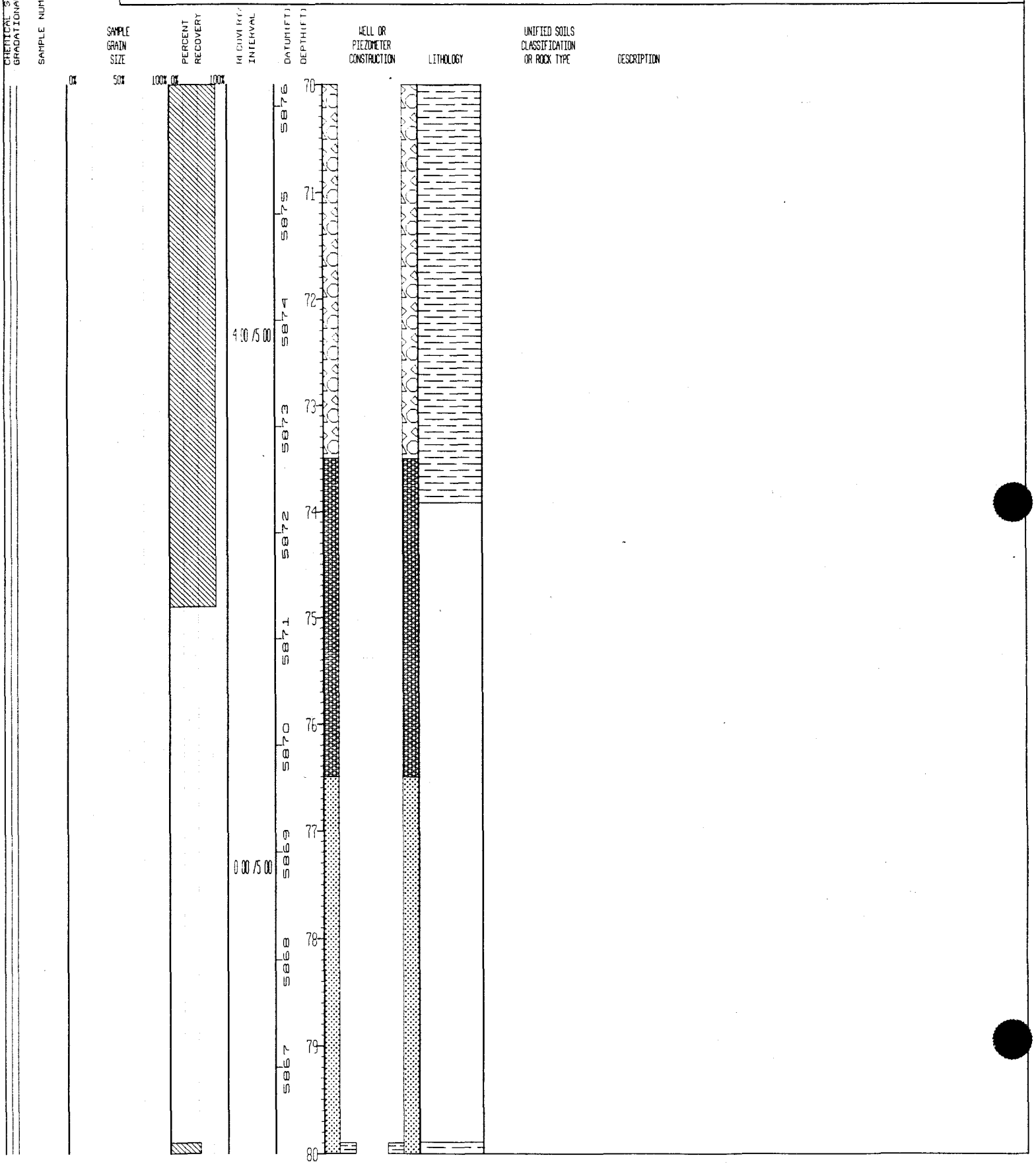
SAMPLE GRAIN SIZE (0% – 50% – 100%) | PERCENT RECOVERY (0% – 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	61.0'-66.2' Claystone. Same as above (reference interval 54.9'-58.0') No recovery (62.1-64.9')
SILTY CLAYSTONE	66.2'-67.2' Silty Claystone. Same as above (reference interval 50.0'-54.2')
CLAYSTONE	67.2'-80.7' Claystone. Same as above (reference interval 54.9'-58.0'). Some fractures. Sand on outside of core due to the addition of sand to the borehole to aid in the retrieval of drill rod (see WSFL). Massive to thinly bedded in areas. Slickensides at 69.2', approx. 80 degrees. Some organics. Exhibits conchoidal fracture No recovery (73.9-79.9'), and (80.7-81.4')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

RECOVERY/INTERVAL: 0 80 /1 50; 2 40 /3 50; 5 00 /5 00

DATUM (FT): 5866, 5865, 5864, 5863, 5862, 5861, 5860, 5859, 5858, 5857

DEPTH (FT): 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

SILTY CLAYSTONE 81 4'-83 8' Silty Claystone Med dark gray (N4) Visible laminations of silt Trace FeO nodules Slight deformation of sedimentation Cemented Lignite fragments Slightly friable

No recovery (83 8-84 89')

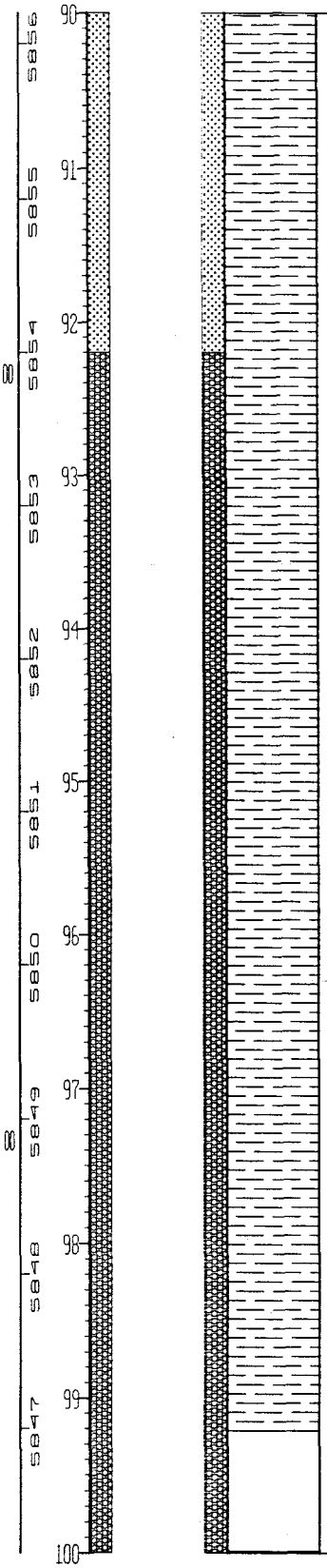
CLAYEY SANDSTONE 84 9'-90 0' Clayey Sandstone Med dark gray (N4) Sand is v f g, rounded to sub-rounded, well sorted Massive to laminated Well cemented Local crossbedding Exhibits conchoidal fracture at 87 8', 89 2' and 89 8' in thin claystone laminae and thin claystone interbeds, nearly horizontal

BH00287AS

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 30	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	90 0'-99 2' Claystone with trace Silt Dark med gray (N4) Abundant organics, leaf imprints and stem imprints at 95 0' Massive to thinly laminated Slightly friable Exhibits conchoidal fracture at 95 0'-96 8' More leaf imprints and organics from 95 0'- 96 0' Sediments slightly disturbed soft sediment at approx 96 0' Dry, very stiff, dense 4% silt, 96% clay No recovery (99 2-100 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 605-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				4 30 /5 00	5946	100			CLAYSTONE	100 0'-104 2' Claystone with trace Silt Same as above (reference interval 90 0'-99 2') Visible silty interbeds and laminae Thinly bedded to massive Some organics Dry Well consolidated, very hard Some calcareous material Some clasts of clay No recovery (140 2-104 9')
					5945	101				
					5944	102				
					5943	103				
					5942	104				
					5941	105				Total Depth Drilled 104 90 Total Depth Casing 92 20 Bottom of Filter Pack 92 20
					5940	106				
					5939	107				
					5938	108				
					5937	109				
						110				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.50	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747595		AREA THSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57694
EAST 2082495		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/27/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	5946				SC	0.0'-3.9' Clayey Sand with some Gravel and trace Silt. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4). Sand is m.g. to f.g., angular to sub-angular, poorly graded. Gravel is predom. fine, trace coarse, angular, avg. size: 0.50 in. Core is moist according to Well Site Field Log. Dry, dense and indurated. Low plasticity. 6% gravel, 60% sand, 2% silt, 32% clay. No recovery (3.9-4.0').
	BH00197AS			1.90 /2.00	5945					
				1.30 /2.00	5944				CLAYSTONE	4.0'-5.3' Top of Weathered Bedrock 4.0'. Claystone. Dark yellowish brown (10 YR 4/2) to olive gray (5 Y 4/1) to dark yellowish orange (10 YR 6/6). Mod. friable. Brecciated texture. Core dry according to Well Site Field Log. Some roots. Mod. to strongly weathered. Numerous fractures. Some Fe stained fractures. From 6.0'-10.0' claystone moderatly weathered. 100% clay. No recovery (5.3-6.0').
					5943					
					5942					
					5941					
					5940				CLAYSTONE	6.0'-10.0' Claystone. Same as above (reference interval 4.0'-5.3'). Becomes mod. weathered claystone. Some Fe stained fractures. Core is dry. (Interval description taken from Well Site Field Log- all core was taken for sample). Note: Atlerberg limit/plasticity data for BH00199AS for 8.0-10.0' interval indicates material is ch.
	BH00198AS			2.00 /2.00	5939					
					5938					
	BH00199AS			2.00 /2.00	5937					

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.50	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747595	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	57694
EAST	2082495	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/27/95	

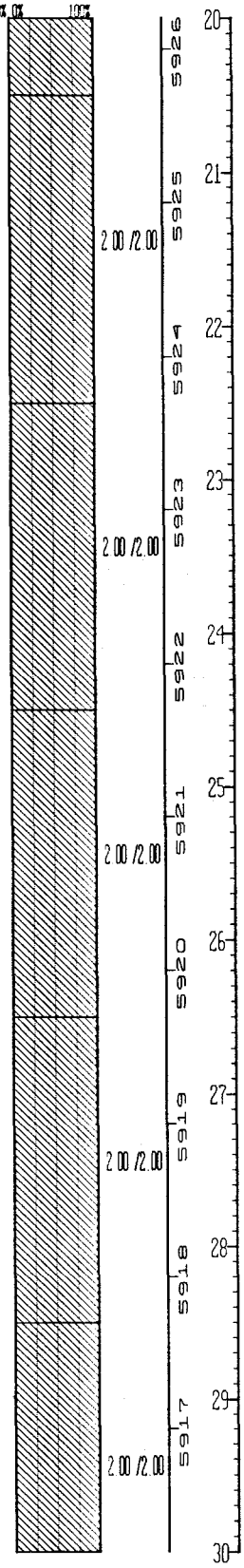
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%			10			CLAYSTONE	10.0'-11.5' Claystone. Med. dark gray (N4). Slightly to mod. weathered. Some Fe stained fractures, primarily near vertical. Non-brecciated. Well Site Field Log indicates core is dry. Core indurated. Bedding massive. Some carbonaceous material. 100% clay. No recovery (11.5-12.0')
				1.50 /2.00	5935	11				
					5934	12			CLAYSTONE	12.0'-17.3' Claystone. Dark gray (N3) to grayish black (N2). Dry to moist. Slightly friable. Stuff from 14.0' to 14.25'. Some black carbonaceous material at 14.9'. Mod fractured at 14.9' to 15.1'. Slickensides, 35 degress (approx.), with FeO2 staining, at 16.5'. No recovery (17.3-18.5')
	BH00200AS			2.00 /2.00	5933	13				
					5932	14				
				2.00 /2.00	5931	15				
	BH00201AS				5930	16				
				1.30 /1.50	5929	17				
				0.00 /1.00	5928	18			CLAYSTONE	18.5'-22.5' Claystone. Same as above (reference interval 12.0'-17.3'). Slightly to mod. weathered. Well Site Field Log indicates core is dry and indurated. Random fractures. FeO2 staining along fractures. Some organics. Highly disturbed and brecciated from Moss sampler. Possibly landslide breccia. Trace FeO2 stained weathered claystone fragments in slightly to mod. weathered claystone.
				2.00 /2.00	5927	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 36.50	GROUND ELEVATION (FT): 5946.20	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747595	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: P. J. JORDAN	57694
EAST:	2082495	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 6.50	DATE DRILLED: 01/27/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	22.5'-24.5' Claystone. Mod. yellowish brown (10 YR 5/4). Mod. to highly weathered. Trace Fe nodules up to 3mm. Strongly disturbed from Moss Sampler.
CLAYSTONE	24.5'-28.5' Claystone. Olive gray (5 Y 4/1). Non- to slightly weathered. Trace FeO2 staining. Strongly disturbed from Moss Sampler. Claystone becomes mod. to slightly weathered at 26.5'. Trace FeO2 and MnO2 staining.
SILTY CLAYSTONE	28.5'-32.4' Silty Claystone. Dark yellowish brown (10 YR 4/2). Mod. weathered. Some Fe staining and siltstone or Fe nodules up to 1 cm. Indurated. From 28.5' to 29.5' core more highly disturbed from Moss Sampler. From 29.5' to 30.5' less disturbed and thin to thick laminae with FeO2 staining along silty laminae.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36.50	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747595	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	57694
EAST	2082495	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/27/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2.00/2.00; 1.50/2.00; 2.00/2.00

DATUM(FT): 5916, 5915, 5914, 5913, 5912, 5911, 5910, 5909, 5908, 5907

DEPTH(FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	32.4'-33.5': Claystone. Black (N1). Some lignite/carbonaceous material. Slightly to non-weathered. Core mod. disturbed from Moss Sampler. Slickensides, approx. 30 degrees, at 33.5'. Dry.
CLAYSTONE	33.5'-36.5': Claystone. Dark gray (N3). Appears laminated where not strongly disturbed by Moss Sampler. No recovery (34.0-34.5').
	Total Depth Drilled: 36.50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 5985.90	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747509		AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	57794
EAST 2081114		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/06/94	

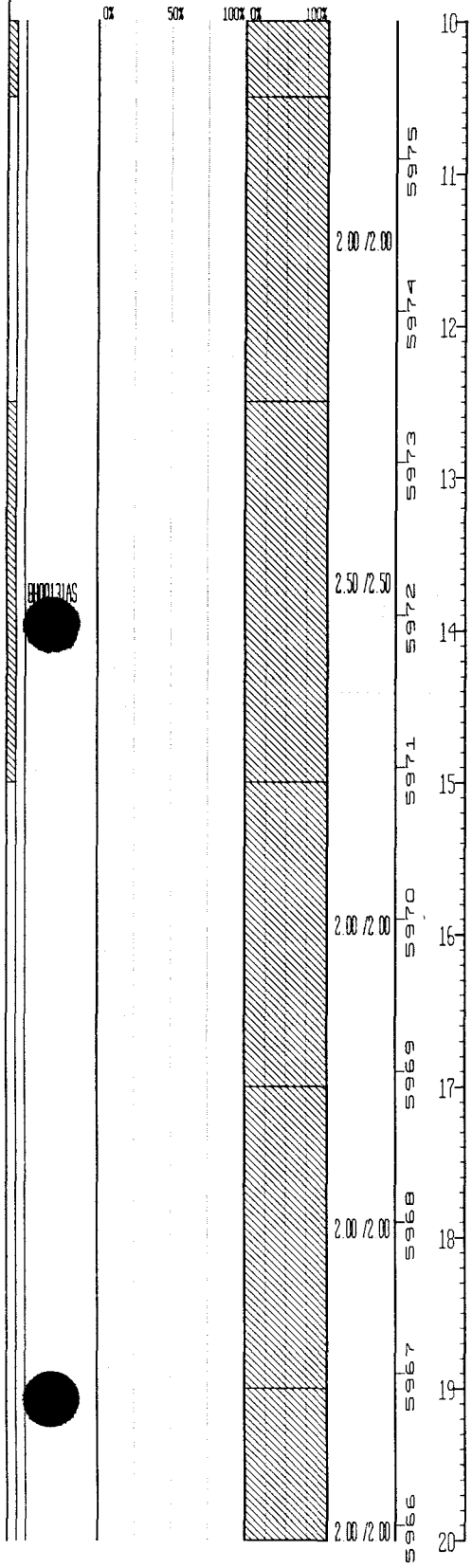
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	5985	0–1			CL	0.0'-2.5': Sandy Clay with trace Silt. Dark yellowish brown (10 YR 4/2) to grayish brown (5 YR 3/2). Sand is f.g. to v.f.g., sub-rounded to rounded, poorly graded. Abundt. caliche from 1.0'-2.0', med. grained nodules. Lots of roots. Dry. Dense. Stiff. Low to med. plasticity. 38% sand, 2% silt, 60% clay.
	BH00129AS				5984	2				
				2.00 /2.00	5983	3			CL	2.5'-6.4': Sandy Clay with some Gravel and Silt. Pale yellowish brown (10 YR 6/2) to dark yellowish orange (10 YR 6/6). Sand is f.g. to v.f.g., rounded. Gravel is fine, avg. size: 0.50 in., sub-rounded. Some caliche nodules. Fe and Mn staining. Some micaceous material present. Plasticity. Stiff. 13% gravel, 15% sand, 35% silt, 37% clay. No recovery (5.5-6.0'). Note: Percentages changed based on mechanical sieve and hydrometer results from BH00129AS.
					5982	4				
	BH00129AS			1.50 /2.00	5981	5				
					5980	6				
				1.60 /2.00	5979	7			CLAYSTONE	6.4'-10.0': Top of Bedrock at 6.4'. Claystone with trace Silt. Dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2) to med. light gray (N6). Some pulverized rock from 6.4'-6.8'. Some carbonaceous material. Abundt. Fe staining. Some Mn staining. Low friability. Massive. Core stiff, dense. Dry. 3% silt, 97% clay. No recovery (7.6-8.0').
					5978	8				
					5977	9				
	BH00130AS			2.50 /2.50	5976	10				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 29.00	GROUND ELEVATION (FT): 5985.90	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 747509	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: P. J. JORDAN	57794	
EAST: 2081114	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 6.50	DATE DRILLED: 12/06/94		

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE:	10.0'-15.0' Claystone with trace SIlt. Trace Fe and Mn staining. Light olive gray (5 Y 6/1), trace dark yellowish orange (10 YR 6/6). Core dense. Stiff. Low friability. Fractures random, both natural and drilling induced, 15 degrees. Dry
CLAYSTONE:	15.0'-18.2' Claystone with trace Silt. Light olive gray (5 Y 6/1). Bands (layers) of mod. yellowish brown (10 YR 5/4) and dark yellowish brown (10 YR 4/2). Core indurated. Alternating horizontal layers of gray clay and oxidized beds, up to 0.25 in. thick. Disturbed sedimentation. Core dry. Some Fe stained fractures at various angles.
CLAYSTONE:	18.2'-20.0' Claystone with some Silt. Same as above (reference interval 15.0'-18.2'). Silty lenses throughout interval. At 19.0' Mn staining increases and core contains some organic material. 10% silt, 90% clay

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT)	5985.90	PROJECT NUMBER	OU5-RFI/RI
NORTH 747509	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P. J. JORDAN
EAST 2081114	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	12/06/94

LOG OF BORING NUMBER 57794

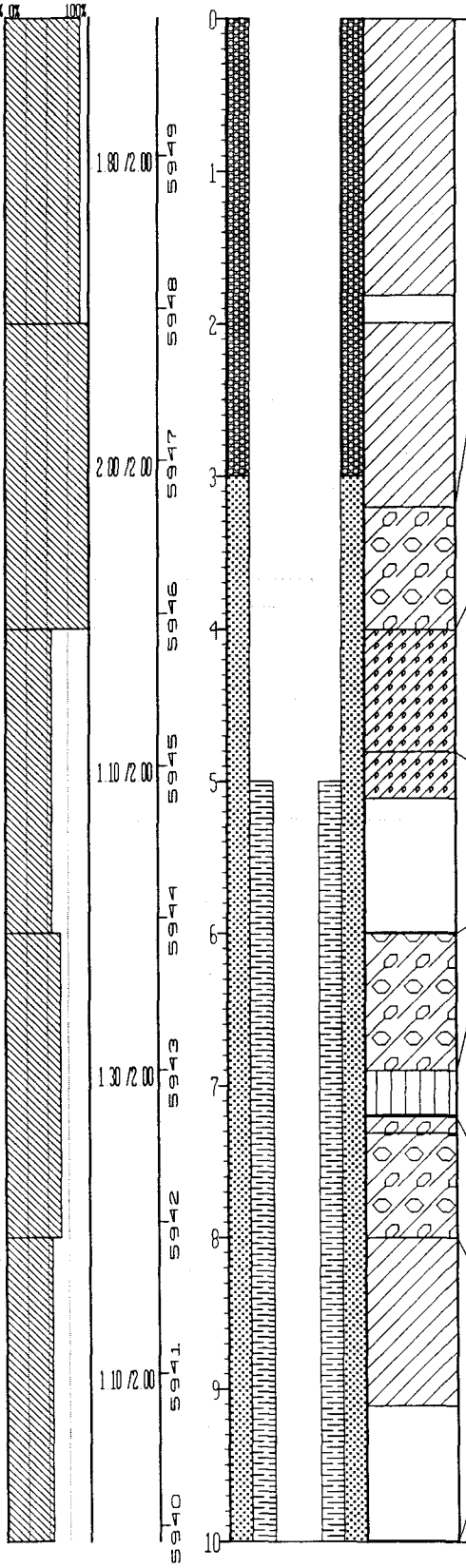
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 - ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	2.00 /2.00		20			CLAYSTONE	20.0'-27.0'. Claystone with some Silt. Same as above (reference interval (18.0'-20.0'). At 23.0' horizontal layer, 0.25 in. thick of black organic material. Disturbed sedimnetation. At 24.0' nodules of Fe oxide. Abundt. Fe staining. Fractures, 80 degrees, Fe stainind. Disturbed sedimentation. Mottled appearance. At around 26.0', slumping appears to show some crossbedding to 27.0'.
					5965	21				
				2.00 /2.00	5964	22				
					5963	23				
				2.00 /2.00	5962	24				
					5961	25				
				2.00 /2.00	5960	26				
					5959	27			CLAYSTONE	27.0'-29.0'. Unweathered Claystone. Dark gray (N3) to med. gray (N5). Trace Fe staining at 27.0'. Some silty lenses. Some disturbed sedimentation to 28.0'. At 28.0' bedding massive to 29.0'. 100% clay.
				2.00 /2.00	5958	28				
					5957	29				Total Depth Drilled: 29.00
					5956	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5949.90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747565	AREA: IHSS 115	CASING DIAMETER (IN): 0.50	GEOLOGIST: J. W. HARWELL	57894
EAST:	2081741	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED: 09/27/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL AND L. A. HOST.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

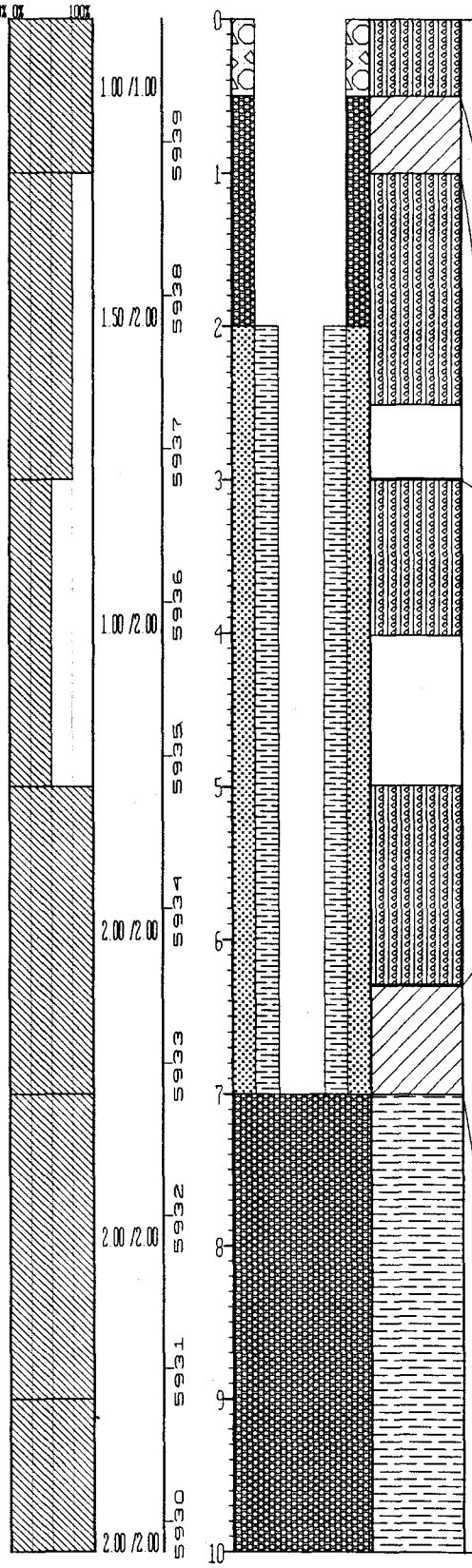


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0.0-3.2': Sandy Clay with trace Gravel. Pale yellowish brown (10 YR 6/2) and dark yellowish orange (10 YR 6/6) grades to dark yellowish brown (10 YR 4/2). Some Mn staining and FeO staining. Sand is f.g., well sorted, sub-angular. Bedding massive. Low plasticity. Core is stiff and dry. 2% gravel, 22% sand, 76% clay. No recovery (1.8-2.0').
GC	3.2'-4.0': Sandy Gravel with some Clay. Matrix is pale yellowish brown (10 YR 6/2). Sand is m.g. to f.g., well graded, sub angular to sub-rounded. Gravel is coarse to fine, max: 0.50 in., sub-angular. Core massive. Low plasticity. Dry. 53% gravel, 36% sand, 11% clay
SC	4.0'-4.8': There is no core in core box representing this interval. Sample description taken from the Well Site Field Log. Sand. Very pale orange (10 YR 8/2) to grayish orange (10 YR 7/4) grading to mod. yellowish brown (10 YR 5/4) at 4.4'.
SC	4.8'-5.1': Clayey Sand. Sand is sub-angular to sub-rounded, well sorted throughout interval. No recovery (5.1-6.0').
GC	6.0'-6.9': Sandy Gravel. Same as above (reference interval 3.2'-4.0')
ML	6.9'-7.2': Sandy Silt with trace Gravel and some Clay. Brownish black (5 YR 2/1). Gravel is fine, sub-anglular, well sorted. Sand is f.g., sub-angular to sub-rounded, well sorted. Low plasticity. Bedding massive. Dry. 3% gravel, 37% sand, 42% silt, 9% clay.
GC	7.2'-8.0': Sandy Gravel. Same as above (reference interval 3.2-4.0). Some caliche. No recovery (7.3-8.0)
CL	8.0'-9.1': Sample description for this interval taken from the Well Site Field Log. Silty Clay. Mod. yellowish brown (10 YR 5/4). Core is wet. No recovery (9.1-10.0').
	Total Depth Drilled: 10.00 Total Depth Casing: 10.00 Bottom of Filter Pack: 10.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT) 5939.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747547	AREA: IHSS 115	CASING DIAMETER (IN): 0.50	GEOLOGIST: J. W. HARWELL	57994
EAST:	2082266	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED 10/07/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



SAMPLE NUMBER	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	SM	0.0'-0.5': Silty Sand with abundt. Gravel. Dark yellowish brown (10 YR 4/2). Massive. Dry. Roots (topsoil). There is no core in core box representing intervals 0.0'-6.0'. Sample description taken from Well Site Field Log.
BH00044AS	CL	0.5'-1.0': Silty Clay with trace Sand. Dark yellowish brown (10 YR 4/2). Massive, very stiff, dry. Some organic matter.
	SM	1.0'-2.5': Silty Sand. Sand is f.g. Dark yellowish brown (10 YR 4/2). Trace to some gravel. Massive. Dry. No recovery (2.5-3.0').
BH00047AS	SM	3.0'-6.3': Silty Sand. Light olive gray (5 Y 5/2). Sand is f.g. to m.g. Some Fe staining. Massive. Dry to moist. No recovery (4.0-5.0').
BH00045AS		
BH00046AS	CL	6.3'-7.0': Sandy Clay. Light olive gray (5 Y 4/1). Sand is f.g., sub-rounded, well sorted. Trace of sub-rounded gravel. Some micaceous material. Bedding massive. Some FeO staining, dark yellowish orange (10 YR 6/6). Core moist. Low plasticity. 32% sand, 68% clay. No recovery (2.5-3.0) and (4.0-5.0).
	CLAYSTONE	7.0'-11.0': Top of Bedrock at 7.0'. Claystone. Dark yellowish orange (10 YR 6/6) to mod. yellowish brown (10 YR 5/4) to light olive gray (5 Y 6/1). Some Mn staining, some carbonaceous material. Mottled in appearance. From 7.3'-9.0' mod. weathered. At approx. 9.0' core weathered (FeO). FeO mostly along fractures between 9.0'-10.0'. Bedding massive. Core moist. Slightly friable. 100% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	5939.80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747547	AREA IHSS 115	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	57994
EAST	2082266	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/07/94	

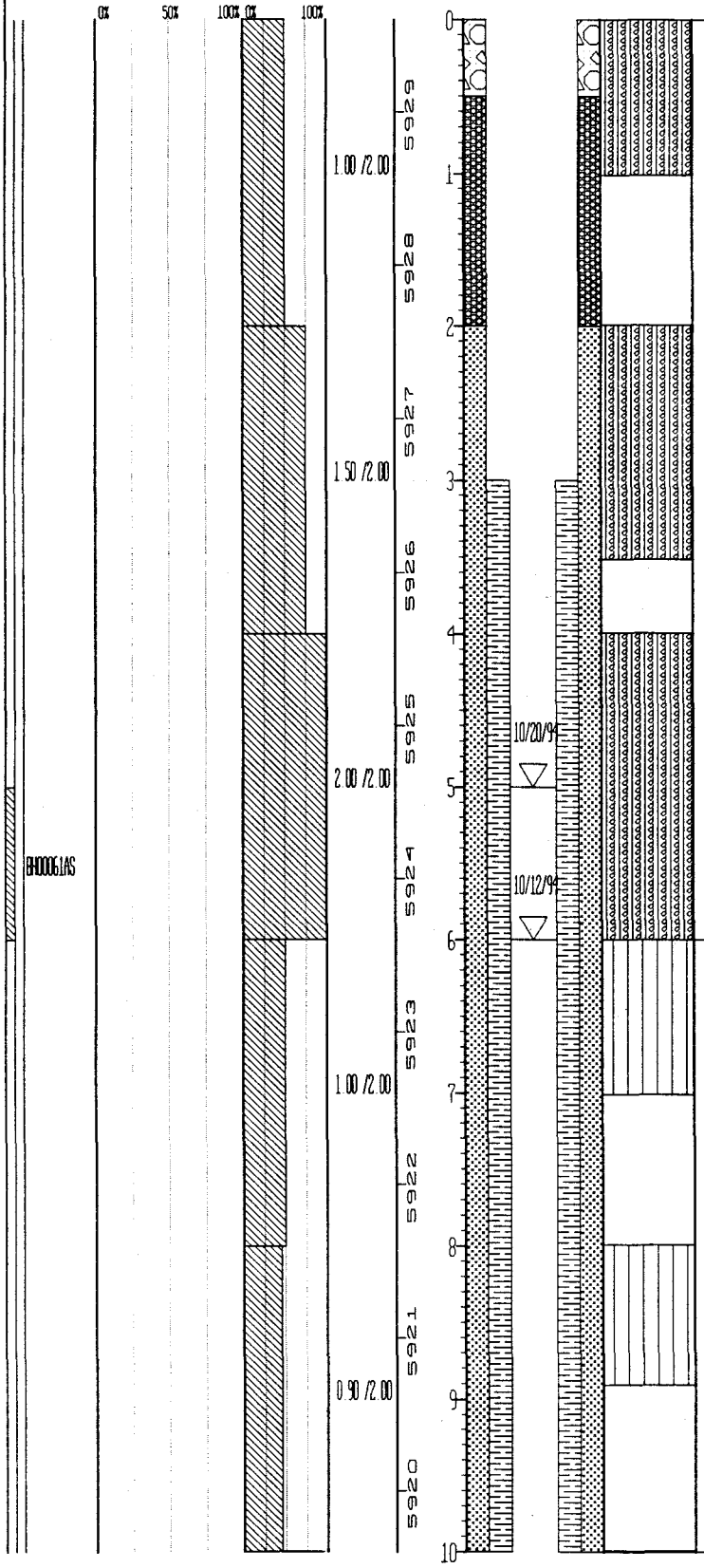
REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%	2.00 /2.00	5929	10				
						5928	11				Total Depth Drilled: 11.00 Total Depth Casing: 7.00 Bottom of Filter Pack: 7.00
						5927	12				
						5926	13				
						5925	14				
						5924	15				
						5923	16				
						5922	17				
						5921	18				
						5920	19				
							20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5929.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 747452	AREA: IHSS 115	CASING DIAMETER (IN)	6.50	GEOLOGIST	L. A. HOST	58094
EAST: 2082247	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/12/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: L.A. HOST

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



SM: 0.0'-6.0': Silty Sand with some Gravel and Clay. Dark yellowish brown (10 YR 4/2). Sand and Gravel very pale orange (10 YR 8/2). Sand and gravel well graded, coarse to fine, sub-angular. Abundt pulverized rock. Core loose. Unconsolidated. Dry. Bedding not apparent. Top 0.2 in. top soil, grass, roots. Low plasticity. Color grades to pale brown (5 YR 5/2) at 5.0' and core is damp.
12% gravel, 52% sand, 29% silt, 7% clay.

No recovery (1.0-2.0') and (3.5-4.0').

ML: 6.0'-10.0': Sandy Silt. Dusky yellowish brown (10 YR 2/2). Sand is f.g., sub-rounded to sub-angular, well sorted. Trace of FeO staining. Some micaceous material. Bedding massive. Core wet. Low plasticity.
40% sand, 60% silt

No recovery (7.0-8.0'), and (8.9-10.0').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.90	GROUND ELEVATION (FT) 5929.60	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747452		AREA: IHSS 115	CASING DIAMETER (IN) 0.50	GEOLOGIST L. A. HOST	58094
EAST 2082247		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/12/94	

REMARKS: DRILLING EQUIPMENT HURRICANE AEI RIG GEOLOGIST L. A. HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.90 /2.00	5919	10			CLAYSTONE	10.0'-11.9' Top of Bedrock at 10.0'. Claystone with some Silt. Brownish gray (5 YR 4/1) and some dark yellowish orange (10 YR 6/6) where FeO stained. Core wet. Some carbonaceous material. Bedding massive. Slightly friable. Strong MnO2 and FeO staining at 11.9'. 9% silt, 91% clay.
					5918	11				
					5917	12				Total Depth Drilled 11.90 Total Depth Casing 11.00 Bottom of Filter Pack 11.90
					5916	13				
					5915	14				
					5914	15				
					5913	16				
					5912	17				
					5911	18				
					5910	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 8.00	GROUND ELEVATION (FT): 5928.60	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747493	AREA: IHSS 115	CASING DIAMETER (IN): 0.50	GEOLOGIST: J. W. HARWELL	58194
EAST:	1082380	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED: 10/12/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00 /2.00	5928	0			SM	0.0'-4.7'. Silty Sand with some Gravel and Clay. Dark yellowish brown (10 YR 4/2). Sand is c.g. to f.g., sub-angular to sub-rounded, well graded. Gravel is coarse to fine, sub-angular to sub-rounded, well graded. Core dry. Unconsolidated. Low plasticity. Bedding not apparent. Some siltstone fragments from 4.0'-4.7' grayish red (5 R 4/2). 22% gravel, 42% sand, 29% silt, 7% clay No recovery (0.0-2.0'), and (3.2-4.0').
				1.20 /2.00	5927	1				
					5926	2				
					5925	3				
					5924	4				
				2.00 /2.00	5923	5			CL	4.7'-6.6'. Sandy Clay. Dark yellowish brown (10 YR 4/2). Sand is f.g., well sorted. Trace caliche. FeO staining along fractures. Low plasticity. Massive. Core dry. Color grades to olive gray (5 Y 4/1) at 5.7'. Abundant rock flour. 41% sand, 59% clay
					5922	6				
	BH00062AS			1.60 /2.00	5921	7			CLAYSTONE	6.6'-8.0'. Top of Bedrock at 6.6'. Claystone with trace Silt. Light olive gray (5 Y 6/1). Trace carbonaceous material. Trace MnO2 and FeO staining. Fractures random. Bedding not apparent. Some caliche around 7.0'. Slightly friable. 97% clay, 3% silt No recovery (7.6-8.0').
					5920	8				
					5919	9				
						10				

Total Depth Drilled: 8.00 Total Depth Casing: 8.00
Bottom of Filter Pack: 8.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT) 5928.60	PROJECT NUMBER: 095-RFI/RI	LOG OF BORING NUMBER	
NORTH: 747493	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: L. A. HOST	58194A	
EAST: 2082380	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED: 10/12/94		

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: L. A. HOST. OFFSET HOLE FROM LOCATION 58194.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%	1.50 /2.00	5928 5927	0 1			SM	0.0'-1.5': Silty Sand and Gravel. Very pale orange (10 YR 8/2). Pulverized rock. Trace topsoil. Note: Sample description taken from Well Site Field Log. No recovery (1.5-2.0').
	BH00062AS			0.80 /2.00	5926 5925	2 3 4			SM	2.0'-2.8': All of sample saved for Geotech sampling. Note: Sample description taken from Well Site Field Log. No recovery (2.8-4.0').
				0.00 /2.00	5924 5923	5 6			NO RECOVERY	4.0'-6.0': Drill hit refusal. No recovery. Note: Sample description taken from the Well Site Field Log.
					5922 5921 5920 5919	7 8 9 10				Total Depth Drilled: 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT)	5947.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747566	AREA: IHSS 115	CASING DIAMETER (IN)	0.50	GEOLOGIST	J. W. HARWELL	58294
EAST:	2082404	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	10/07/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.40/1.00	5947	0			SM	0.0'-1.0' Silty Sand. Dark yellowish brown (10 YR 4/2). Sand is f.g. Bedding massive. Core dry, contains some roots (topsoil). Color grades at 0.3' to mod. yellowish brown (10 YR 5/4). Note: Core is not in core box representing interval 0.0'-4.0'. Sample description has been taken from the Well Site Field Log. No recovery (0.4-1.0')
					5946	1				
	BH00050AS BH00048AS			1.20/2.00	5945	2			CL	1.0'-3.0' Silty Clay. Dark yellowish orange (10 YR 6/6) and light olive gray (5 Y 6/1). Massive, dry. Note: Description taken from Well Site Field Log. No recovery (2.2-3.0')
					5944	3				
	BH00049AS			1.50/2.00	5943	4			CLAYSTONE	3.0'-4.5' Top of Bedrock at 3.0' Claystone. Light olive gray (5 Y 6/1) and dark yellowish orange (10 YR 6/6), where FeO stained. Some caliche. Moderatly FeO stained. Core indurated, hard to determine any planar features. Some dusky yellowish brown (10 YR 2/2). Core slightly broken, dessicated. Some carbonaceous material. Slightly friable. Core dry. No recovery (4.5-5.0')
					5942	5				
				2.00/2.00	5941	6			CLAYSTONE	5.0'-9.0' Claystone. Same as above (reference interval 3.0'-4.5'). Some Mn and Fe staining, mottled in appearance. Light olive gray (5 Y 6/1) grades to grayish black (N2). From 8.0'-9.0' Mn and FeO staining mostly along fractures. Bedding massive. Core dry. Note: Alluvial slough from 5.0'-5.25' and 7.0'-7.5' in core box. 100% clay.
					5940	7				
				2.00/2.00	5939	8				
					5938	9				
						10				

Total Depth Drilled: 9.00 Total Depth Casing: 5.00
Bottom of Filter Pack: 5.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9.50	GROUND ELEVATION (FT)	5997.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747881	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	J. W. HARWELL	58394
EAST:	2082009	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	6.60	DATE DRILLED:	02/06/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 AND HS AUGER. ASI RIG GEOLOGIST: J. W. HARWELL. ALL OF CORE WAS TAKEN FOR SAMPLES BH00223AS THROUGH BH00227AS. SAMPLE DESCRIPTION TAKEN FROM WELL SITE FIELD LOG AND LOG OF 57194.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00223AS			1.00 /1.40	5997	0–1.5			GC	0.0'-2.9'. Gravelly Sand with Clay. Dark yellowish brown (10 YR 4/2) to pale yellowish brown (10 YR 6/2) with some dark yellowish orange (10 YR 6/6) where Fe stained. Massive. Dry. Some glass shards and rusted metallic debris along with several cobbles (fill material). (gc-sc) No recovery (1.0-1.4') and (2.9-3.8').
	BH00224AS			1.50 /1.50	5996 / 5995	1.5–3				
				0.00 /0.40						
				0.00 /0.50	5994	3–4				
									GC	3.8'-4.3'. Gravelly Sand. Same as above (reference interval 0.0'-2.9'). Recovery estimated from field log. Shelby tube attempt to sample slide plane interval at 4.0'
	BH00225AS			0.50 /1.60	5993	4–5			NO RECOVERY	4.3'-5.5'. Estimated Top of weathered Bedrock at 5.3' from 57194. No recovery (4.3-5.5').
				0.00 /0.10	5992	5–6			CLAYSTONE	5.5'-6.9'. Claystone. Olive gray (5 Y 4/1). Highly weathered. Some Fe staining and gypsum in fractures. Trace caliche. Massive. Dry. Becomes mod. weathered at 6.3' No recovery (6.9-7.5').
	BH00226AS			1.75 /2.00	5991	6–7				
					5990	7–8			CLAYSTONE	7.5'-9.25'. Claystone. Same as above (reference interval 5.5'-6.9'). Vertical iron stained fracture from 7.5'-9.0' No recovery (9.25-9.50').
	BH00227AS			1.75 /2.00	5989	8–9				
					5988	9–10				

Total Depth Drilled: 9.50 Total Depth Casing: 7.40
Bottom of Filter Pack: 7.40

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT) 5994.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747922	AREA: IHSS 115	CASING DIAMETER (IN) 0.50	GEOLOGIST J. W. HARWELL	58494
EAST:	2082460	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/13/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.00 /1.00	5994	0–1			SC	0.0'-1.75': No core in core box representing this interval. Sample description has been taken from the Well Site Field Log. Clayey Sand. Moderate yellowish brown (10 YR 5/4). Sand is c.g. to f.g.. Massive, dry. Some gravel (crushed rock at 0.6 in.). Color grades to moderate brown (5 YR 3/4) at 0.6 in. Low plasticity.
	BH00065AS			1.30 /2.00	5993	2			CL	1.75'-2.3': Sandy Clay with trace Gravel. Pale yellowish brown (10 YR 6/2), trace dark reddish brown (10 YR 3/4) staining. Trace carbonaceous material. Sand is m.g. to f.g., well graded, sub-angular to sub-rounded. Low plasticity. Core stiff. Dense. Bedding massive. Some micaceous material.
	BH00068AS				5992	3				No recovery (2.3-3.0')
	BH00066AS			1.80 /2.00	5991	4			CL	3.0'-6.0': Sandy Clay with trace Gravel. Same as above (reference interval 1.75-2.3'). Sand is f.g. Fragments of micaceous material. Mod. weathered. Bedding massive. Core dry to slightly moist. Trace carbonaceous material. 5% gravel, 38% sand, 57% clay.
					5990	5				No recovery (4.8-5.0')
	BH00067AS			1.70 /2.00	5989	6			CL	6.0'-7.3': Sandy Clay. Same as above (reference interval 3.0'-6.0'). Sand content diminishing to trace to some. Note: No core in box, description taken from Well Site Field Log.
										No recovery (6.0-6.7')
	BH00071AS			1.70 /2.00	5988	7			CL	7.3'-9.75': Clay with trace Silt and Sand. Light olive gray (5 Y 4/1), some mod. yellowish brown (10 YR 5/4). Some Fe staining. Trace carbonaceous material. Massive. Dry. Slightly friable. Note: Description taken from Well Site Field Log.
					5987					No recovery (8.7-9.0')
	BH00069AS				5986	8–9	11/21/94		CL	9.75'-12.75': Clay. Light olive gray (5 Y 6/1) to med. light gray (N6), some dark yellowish orange (10 YR 6/6) where FeO stained. Some Mn staining. Staining mottled in appearance. Some organics. FeO along almost vertical fractures. Core dry to moist. Bedding massive. Slightly friable. Sand and gravel from 12.4-12.5'. 93% clay, 3% silt.
	BH00070AS			2.00 /2.00	5985	10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 13.00	GROUND ELEVATION (FT):	5994.80	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747922	AREA: IHSS 115	CASING DIAMETER (IN):	0.50	GEOLOGIST:	J. W. HARWELL	58494
EAST:	2082460	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.40	DATE DRILLED:	10/13/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	5984	10				
						11				
				2.00/2.00	5983	12				
					5982	13			SC	12.25'-12.75': Sandy Clay.
									CLAYSTONE	12.75'-13.0': Claystone. Top of Bedrock 12.75'. Some FeO staining, dry to moist, some organics, dark yellowish orange (10 YR 6/6) to mod. reddish brown (10 R 4/6). Some Mn staining. Mod. to slightly friable.
					5981	14				Total Depth Drilled: 13.00 Total Depth Casing: 10.00 Bottom of Filter Pack: 10.00
					5980	15				
					5979	16				
					5978	17				
					5977	18				
					5976	19				
					5975	20				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 8.00	GROUND ELEVATION (FT):	5917.90	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747519	AREA: IHSS 115	CASING DIAMETER (IN):	2.50	GEOLOGIST:	J. W. HARWELL	58594
EAST: 2082791	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	2.40	DATE DRILLED:	10/12/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00063AS			1.20 /2.00 1.20 /2.00 1.50 /2.00 2.00 /2.00	5917 5916 5915 5914 5913 5912 5911 5910 5909 5908	0 1 2 3 4 5 6 7 8 9 10	11/21/94		SM	0.0'-5.4': Silty Sand with trace Gravel and Clay. Dark yellowish brown (10 YR 4/2). From 0.0'-0.2' topsoil, grass, roots. Trace FeO staining. Abundt. pulverized rock. Bedding massive, low plasticity. Core dry. Sand is mostly m.g. to f.g., sub-angular to sub-rounded. Amount of pulverized rock and rock flour increase from 2.0'-3.2'. Matrix color grades to dark medium gray (N4) at 2.0'. Core loose, unconsolidated. Dry. Amount of Clay increases at 4.8' (core not available to do sieve analysis to determine grain size distribution. Sample description taken from Well Site Field Log.) Color grades to light olive gray (5 Y 6/1) and dark yellowish orange (10 YR 6/6). Sand is mostly f.g. Massive. Dry. 5% gravel, 68% sand, 23% silt, 4% clay. No recovery (1.2-2.0') and (3.2-4.0').
									CLAYSTONE:	5.4'-8.0': Top of Bedrock at 5.4'. Claystone with some Silt. Olive gray (5 Y 4/1). Slightly friable. Bedding massive. Core dry. Some fractures, trace FeO along fractures. Some caliche. Trace carbonaceous material. Sluff from 6.0'-6.4'. 93% clay, 7% silt. No recovery (5.5-6.0').
										Total Depth Drilled: 8.00 Total Depth Casing: 6.00 Bottom of Filter Pack: 6.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT) 5958.50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747670	AREA IHSS 115	CASING DIAMETER (IN) 0.50	GEOLOGIST J. W. HARWELL	58694
EAST	2082718	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/07/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00052AS			0.80 /1.00	5958	0			SM	0.0'-2.2' Silty Sand with some Gravel and Clay. Dark yellowish brown (10 YR 4/2) grades to dark yellowish orange (10 YR 6/6). Sand is c.g. to f.g., sub-angular to sub-rounded. Gravel is fine, sub-angular. Core is loose, unconsolidated. Bedding not apparent. Low plasticity. Core is dry. Interval from 1.0'-2.2' has abundt. calcareous material, whole core reacts with HCl. 6% gravel, 62% sand, 26% silt, 6% clay. No recovery (0.8-1.0').
	BH00051AS			1.30 /2.00	5957	1			CLAYSTONE	2.2'-2.3' Top of Bedrock at 2.2'. Claystone. Pale yellowish brown (10 YR 6/2) to med. gray (N5). Core dry. Massive. Slightly friable. 100% clay. No recovery (2.3-3.0')
				2.00 /2.00	5956	2			CLAYSTONE	3.0'-9.0' Claystone. Same as above (reference interval 2.2'-2.3') Color grades to light olive gray (5 Y 6/1) and some dark yellowish orange (10 YR 6/6). Core slightly to mod. FeO stained, mostly stained along fractures. Trace Mn Staining. Core dessicated. Dry. Indurated. Note: Slough at 5.0'-7.0'. 100% clay.
				2.00 /2.00	5955	3				
				2.00 /2.00	5954	4				
				2.00 /2.00	5953	5				
				2.00 /2.00	5952	6				
				2.00 /2.00	5951	7				
					5950	8				
					5949	9				
						10				

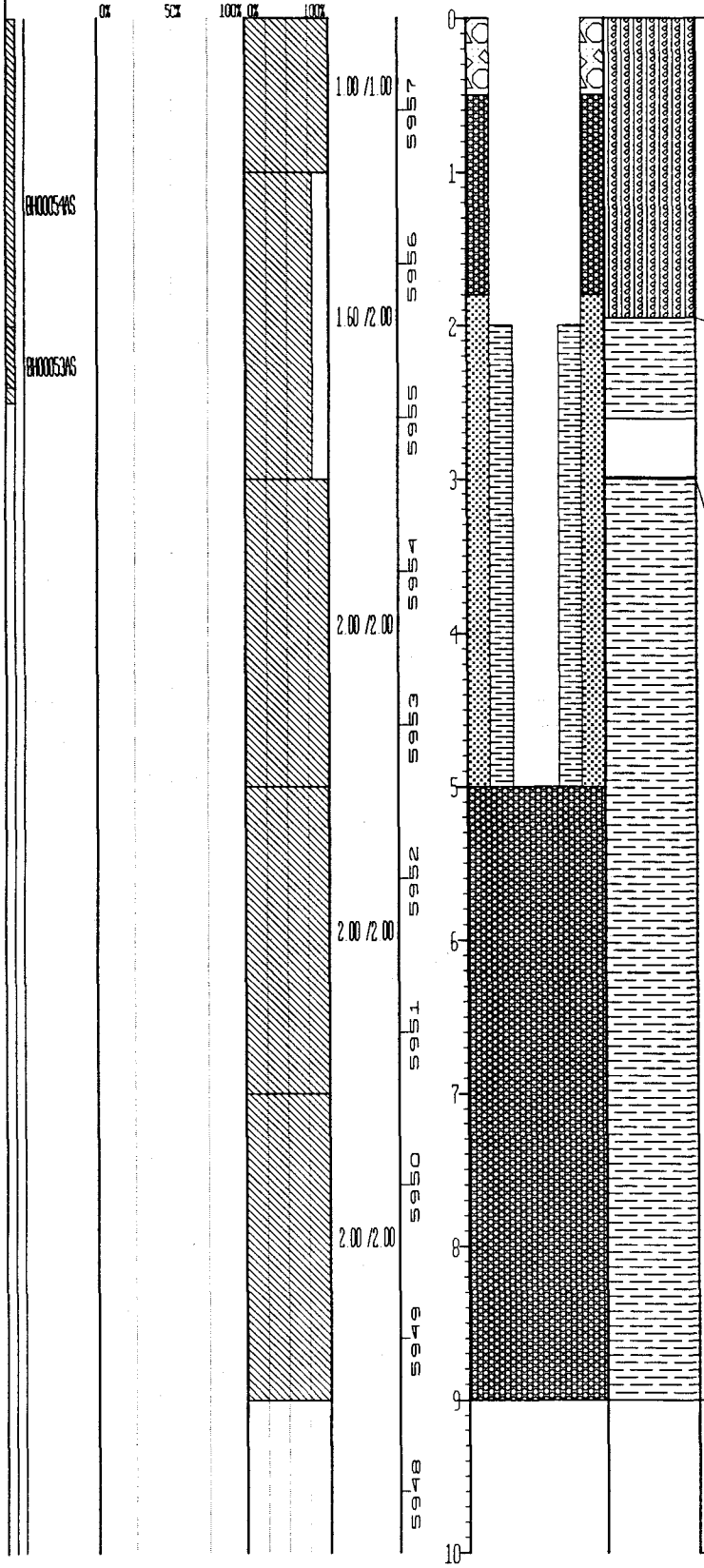
Total Depth Drilled: 9.00 Total Depth Casing: 5.00
Bottom of Filter Pack: 5.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 9.00	GROUND ELEVATION (FT):	5957.60	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747703	AREA: IHSS 115	CASING DIAMETER (IN):	0.50	GEOLOGIST:	J. W. HARWELL
EAST: 2082782	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.40	DATE DRILLED:	10/07/94

LOG OF BORING NUMBER: 58794

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 5% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



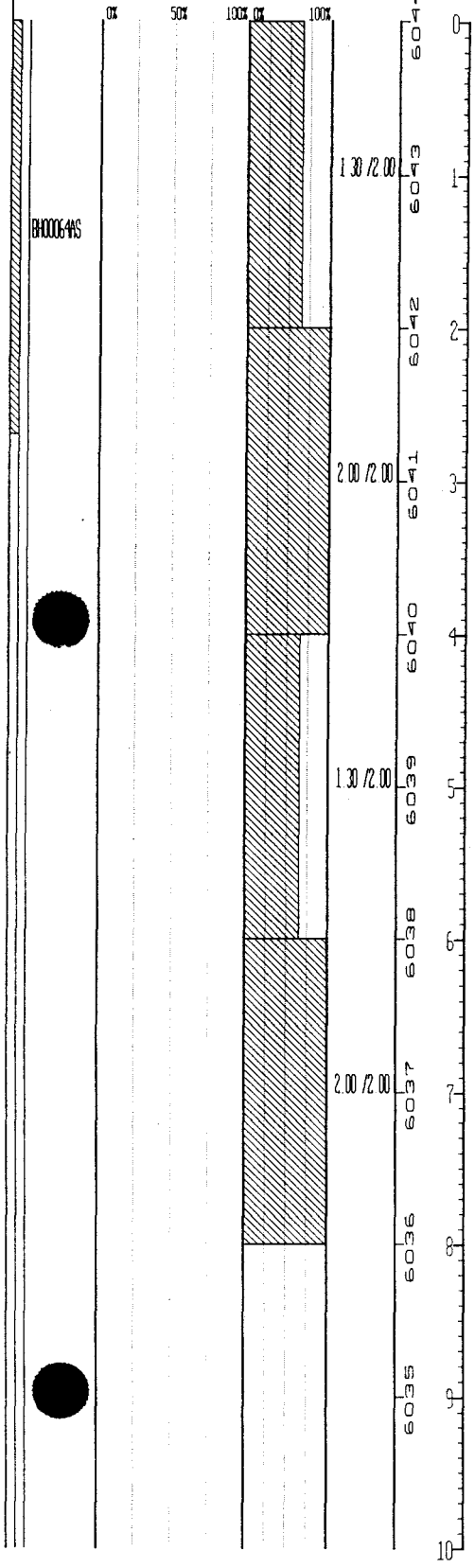
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0.0'-1.95': Silty Sand with some Gravel and trace Clay. Dark yellowish brown (10 YR 4/2). Sand c.g. to v.f.g., sub-angular to sub-rounded, well graded. Top 0.2 in topsoil, roots. Very little core in box representing interval, difficult to describe anymore characteristics of coe. Low plasticity. Massive, dry. 8% gravel, 60% sand, 29% silt, 3% clay.
CLAYSTONE	1.95'-2.6': Top of Bedrock at 1.95'. Claystone. Light olive gray (5 Y 6/1) to med. gray (N5). Fe stained in fractures. Core slightly dessicated. Core dry. Some caliche. Slightly friable. No recovery (2.6-3.0')
CLAYSTONE	3.0'-9.0': Claystone. Same as above (reference interval 1.95'-2.6'). Core is indurated. At 8.0' core is highly weathered. FeO along almost vertical fracture from 8.25'-8.75'. Some caliche. Bedding massive. Color grades to more med. gray (N5). Slough at 5.0-5.1' and 7.0'-7.25'. 100% claystone.

Total Depth Drilled: 9.00 Total Depth Casing: 5.00
Bottom of Filter Pack: 5.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT) 6044.00	PROJECT NUMBER C.5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747419	AREA: IHSS 133	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	58894
EAST:	2078777	LOCATOR NUMBER: F7	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 10/13/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL. CORE FROM 0.0'-2.7' WAS TAKEN FOR SAMPLES, THEREFORE ALL DESCRIPTIONS ARE BASED ON WELL SITE FIELD LOG

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0.0'-1.3': Silty Sand. Mod. yellowish brown (10 YR 5/4). Sand is f.g. Massive, dry, some roots. Unconsolidated to 0.9', consolidated from 0.9'-1.3' No recovery (1.3-2.0').
CL	2.0'-2.7': Silty Clay with some Sand. Mod. yellowish brown (10 YR 5/4) with some light olive gray (5 Y 6/1). Some roots. Some micaceous fragments. Minor Fe staining, minor caliche. Massive. Dry to moist. Sand is f.g. Low plasticity.
CLAYSTONE	2.7'-8.0': Claystone. Dusky yellow (5 Y 6/4) and dark yellowish orange (10 YR 6/6). Some carbonaceous material. Core appears mottled. Small FeO concretions. Dry to moist. Bedding massive. At 4.0' core slightly weathered, color grades to light olive gray (5 Y 6/1). Some Mn staining around 6.0', especially along fractures. Slightly friable. 100% clay. No recovery (5.3-6.0').
	Total Depth Drilled: 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.30	GROUND ELEVATION (FT) 5952.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	58994
EAST	2081476	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/05/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5952	0			GC	0.0'-4.5': Sandy Gravel with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2). Gravel max: 2.0 in., avg: 0.75 in. fine to coarse, sub-angular to sub-rounded. Sand is c.g. to f.g., well graded, sub-angular to sub-rounded. Upper 0.2 in., top soil, roots. Low plasticity. Dense. Becomes wet at 4.4', perched water on top of bedrock. 51% gravel, 38% sand, 9% clay, 2% silt. No recovery (0.5-2.0'), (2.0-3.0'), and (3.5-4.3').
				0.50 /2.00	5951	1				
					5950	2				
				0.00 /1.00						
					5949	3				
				0.50 /1.00						
				0.00 /0.30	5948	4				
									CLAYSTONE	4.5'-10.0': Top of Weathered Bedrock at 4.5'. Claystone with trace Silt. Highly weathered. Light olive gray (5 Y 6/1), dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2). Abundt. caliche. Moist. At 9.6' bedding horizontal, indications of soft sediment structures. Mottled laminations. 4% silt, 96% clay. No recovery (5.3-6.3') and (7.9-9.3').
				1.00 /2.00	5947	5				
					5946	6				
					5945	7				
	BH00126AS			1.60 /2.50						
					5944	8				
				0.00 /0.50	5943	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19.30	GROUND ELEVATION (FT) 5952.10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747523	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	58994
EAST 2081476	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/05/94	

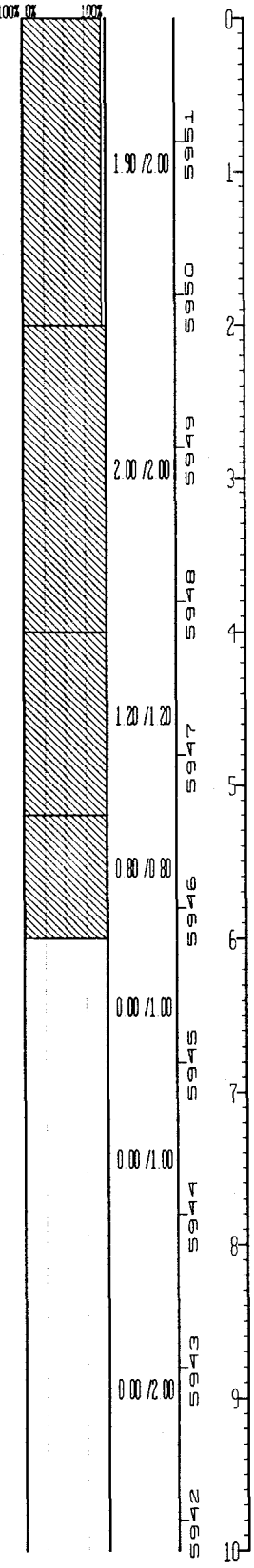
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN

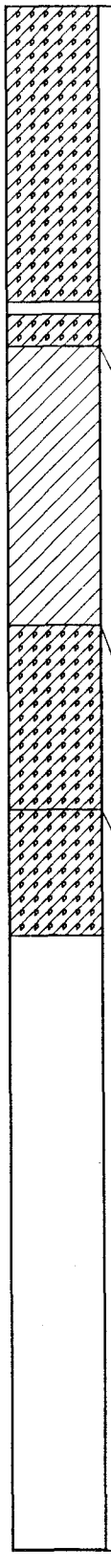
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%	1.80 /1.80	5942	10			SILTY CLAYSTONE	10.0'-16.3': Silty Claystone with some v.f.g. Sandstone laminae (10.9'-14.1'). Predom. thin to thick laminae of claytone and siltstone. Some thin beds of claystone and sandy siltstone (13.3'-13.5'). Fe oxide nodules. Caliche nodules. Core indurated. Mod. to slightly friable.
					5941	11				No recovery (12.4-13.3'), and (14.6-14.8').
	BH001Z7AS			1.30 /1.30	5940	12				
				0.00 /0.90	5939	13				
				0.80 /1.00	5938	14				
				2.00 /2.00	5937	15				
					5936	16				
				1.50 /2.00	5935	17			SILTY CLAYSTONE	16.3'-19.3': Top of Unweathered Bedrock at 16.3'. Silty Claystone. Olive gray (5 Y 4/1). Very hard. Broken and disturbed from Moss sampler. Damp. Hard.
					5934	18				No recovery (17.8-18.3')
				1.00 /1.00	5933	19				
						20				Total Depth Drilled: 19.30

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17.00	GROUND ELEVATION (FT) 5951.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747565	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	59094
EAST	2081609	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 01/30/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION





SC — 0.0'-2.2' Gravelly Sand with some Clay and trace Silt. Mod. brown (5 YR 3/4) to pale yellowish orange (10 YR 8/6). Grades to pale olive (10 Y 6/2) matrix with some mod. yellowish brown (10 YR 5/4) at 1.0'. Gravel is fine to coarse, max.: 3.0 in., avg.: 0.50 in., well graded. Sand is c.g. to f.g., well graded, sub-angular to sub-rounded. Low plasticity. Abundt. micaceous material. Some rock flour and pulverized rock.
38% gravel, 45% sand, 4% silt, 13% clay.

No recovery (1.9-2.0').

SANDY CLAY — 2.2'-4.0' Sandy Clay with trace Silt (landslide material). Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1) to med. gray (N5). Highly weathered. Sand is m.g. to v.f.g., well sorted, well rounded. Low plasticity. Trace caliche. Indications of disturbed sediments, locally brecciated. Mod. to high porosity. Trace roots.
36% sand, 4% silt, 61% clay.

SC — 4.0'-5.2' Gravelly Sand with some Clay. Same as above (reference interval 0.0'-1.9'). Dark yellowish brown (10 YR 4/2). Core taken for Shelby tube, sample description taken from Well Site Field Log.

SC — 5.2'-6.0' Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-1.9'). Dark yellowish brown (10 YR 4/2). Trace cobbles.
30% gravel, 47% sand, 5% silt, 18% clay.

No recovery (6.0'-10.0') and (10.0-11.0').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17.00	GROUND ELEVATION (FT) 5951.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747565	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	59094
EAST	2081609	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 01/30/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 0.00 /1.00; 1.00 /2.00; 1.80 /2.00; 0.80 /1.00; 1.00 /1.00

DATUM (FT): 5941, 5940, 5939, 5938, 5937, 5936, 5935, 5934, 5933, 5932

DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

WELL OR PIEZOMETER CONSTRUCTION

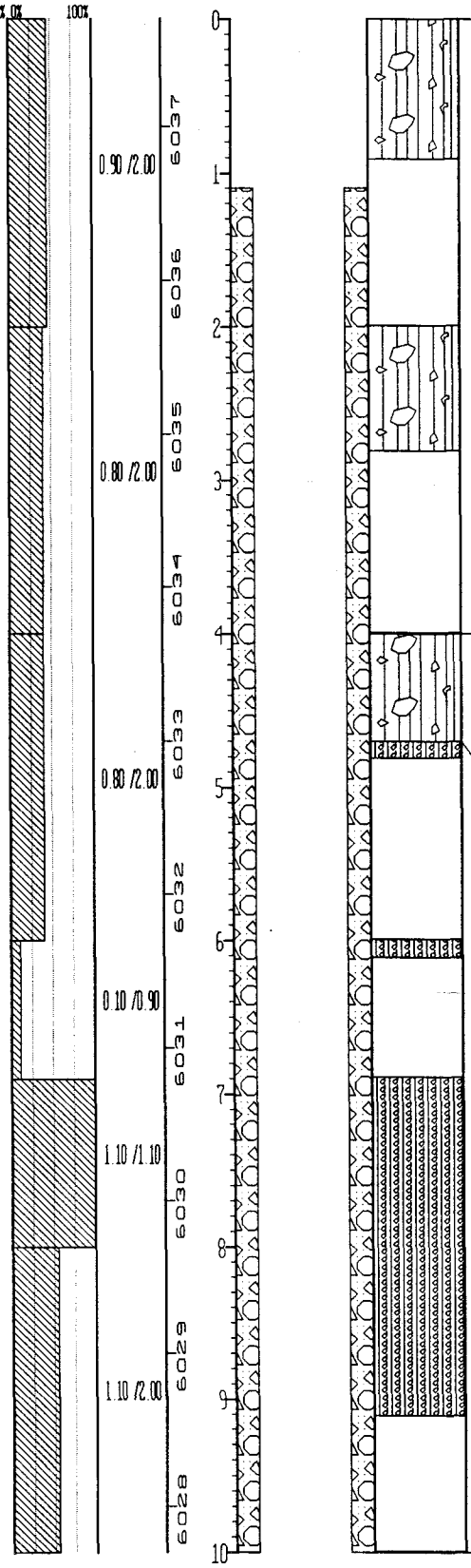
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	11.0'-11.5' Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-1.9').
CLAYSTONE	11.5'-17.0' Top of Bedrock at 11.5'. Claystone with some f.g Sand. Dark yellowish brown (10 YR 4/2) grades to olive gray (5 Y 4/1). 11.5'-12.0' core appears brecciated, at 11.9' healed 40 degree fracture filled with FeO2. Water level at 12.4'. Mod. to highly weathered. Dry to moist. Trace caliche. Disturbed sediments around 14.8'. Fe oxide along fractures (bedding planes at 80 to 85 degrees) at 16.25'. Bedding massive to thinly laminated. Mod. to slightly friable. 16% sand, 83% clay.
	Total Depth Drilled: 17.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46.00	GROUND ELEVATION (FT) 6037.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747997	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59194
EAST	2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/08/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE INSTALLATION.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% – 50% – 100%)
PERCENT RECOVERY (0% – 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



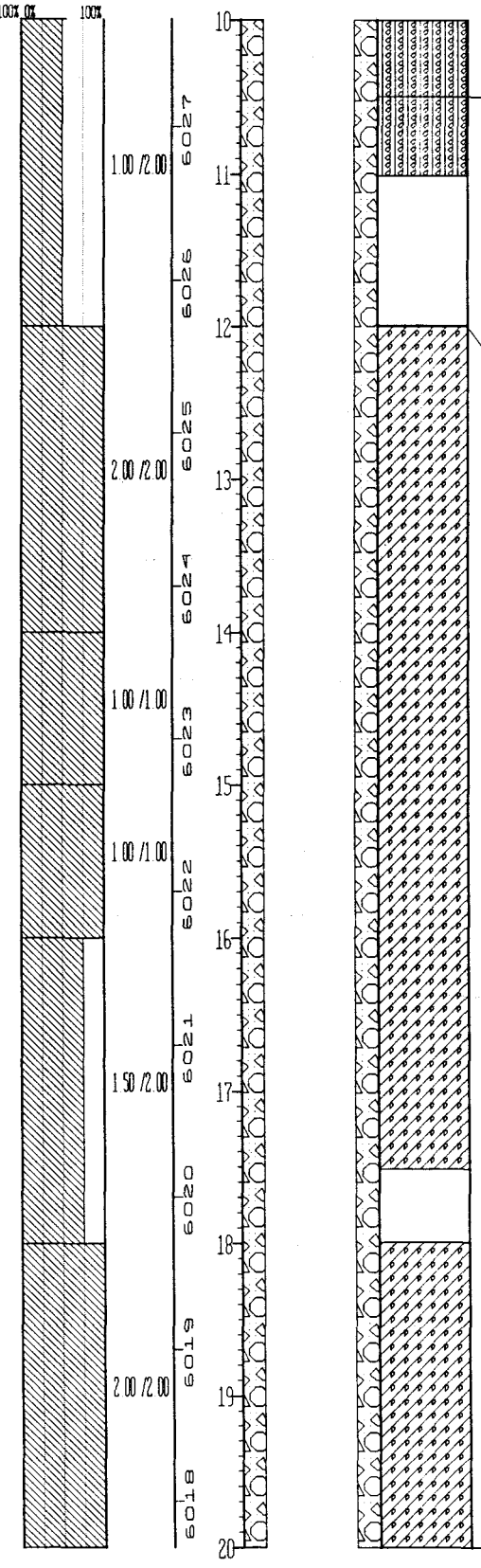
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GM	0.0'-2.8': Gravelly Sand with some Silt and trace Clay (fill). Grayish brown (5 YR 3/2) to dark yellowish brown (10 YR 4/2) to dusky yellowish brown (10 YR 2/2). Gravel is well graded, max. 2.2 in., avg. 0.50-0.75 in., sub-rounded. Sand is c.g. to f.g., well graded, sub-rounded. Micaceous, silty matrix. Low plasticity. Dry. 40% gravel, 45% sand, 10% silt, 5% clay. No recovery (0.9-2.0'), and (2.8-4.0').
GM	4.0'-4.7': Gravelly Sand with some Silt and trace Clay (fill). ame as above (reference interval 0.0'-2.8'). Graphite in bottom of sample shoe.
SM	4.7'-10.5': Gravelly Sand with some Silt and Gravel (waste/fill material). Grayish black (N2) to black (N1). Gravel is fine to coarse, sub-rounded to sub-angular. Sand is f.g. to c.g. (18% c.g., 41% m.g., 28% f.g.). Fine grained sand to silt size metallic particles, glass, graphite. Fine to c.g. sand size ceramic fragments, angular. Waste/fill material. At 8.9' core is wet. Increase in clay content at 10.0'. 22% gravel, 68% sand, 10% silt. No recovery (4.8-6.0'), (6.1-6.9'), and (9.1-10.0').

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 46.00	GROUND ELEVATION (FT) 6037.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747997	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59194
EAST 2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/08/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE INSTALLATION

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% – 50%) | PERCENT RECOVERY (100% 0% – 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

SM: 10.5'-11.0' Gravelly Sand with some Clay and trace Silt (bottom of waste/fill material). Dusky yellowish brown (10 YR 4/2). Moist to wet with glass fragments. Trace graphite.
40% gravel, 50% sand, 2% silt, 8% clay.

No recovery (11.0-12.0').

SC: 12.0'-20.0' Gravelly Sand with some Clay and trace Silt. Dusky yellowish orange (10 YR 6/6) fragments to mod. orange pink (10 YR 7/4) and pale reddish brown (10 YR 5/4). Matrix grades from dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1) from 13.0'-16.0'. Abundt. pulverized rock and Mn staining. Gravel is fine to coarse, sub-rounded to sub-angular. Sand is f.g. to c.g., well graded, sub-rounded to sub-angular. Moist to wet.

No recovery (17.5-18.0').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46.00	GROUND ELEVATION (FT) 6037.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747997		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59194
EAST 2081690		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/08/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE INSTALLATION.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 0.90 /1.00; 1.00 /1.00; 2.00 /2.00; 0.50 /2.00; 2.00 /2.00; 2.00 /2.00

DATUM (FT): 6017, 6016, 6015, 6014, 6013, 6012, 6011, 6010, 6009, 6008

DEPTH (FT): 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	20.0'-20.5': Sand with some Clay and trace Silt. Dark yellowish orange (10 YR 6/6). Sand is m.g to f.g., well sorted, sub-rounded. Moist to wet. Low plasticity.
SC	20.5'-26.0': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 12.0'-17.5'). Variations in percentages of gravel and clay. 88% sand, 2% silt, 10% clay.
CL	26.0'-30.0': Sandy Clay with trace Silt. Mottled light gray (N7) to light olive gray (5 Y 6/1) to dark yellowish orange (10 YR 6/6) where Fe stained. Trace Mn staining. Core weathered throughout interval. Thinly bedded to laminated. Sand is f.g., poorly graded, sub-rounded. Med. plasticity. Stiff. Moist to wet. Increase in gravel at 28.5' to 5%. 45% sand, 1% silt, 54% clay.

BH00240AS

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 46.00	GROUND ELEVATION (FT) 5037.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH: 747997	AREA: IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST: P. J. JORDAN		
EAST: 2081690	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED: 02/08/95	59194	

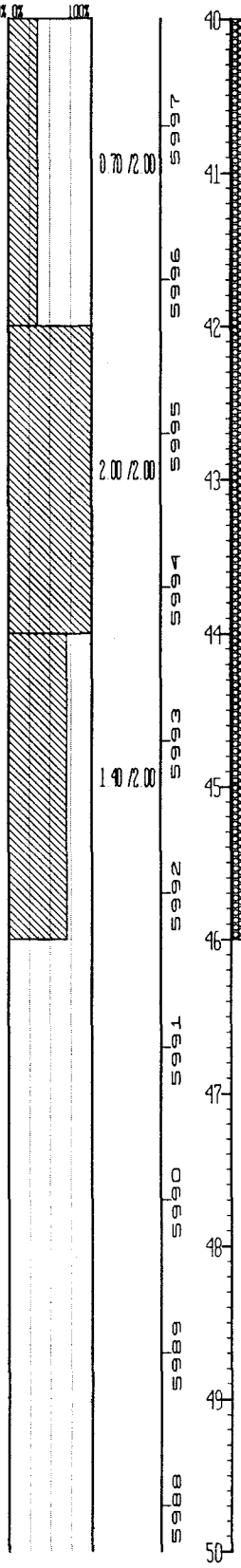
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE INSTALLATION.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%						CL	30.0'-33.4': Gravelly Clay. Mottled mod. orange pink (10 R 7/4) and grayish orange (10 YR 7/4) to mod. yellowish brown (10 YR 5/4). Gravel is fine to coarse, granite, gneiss and sandstone clasts, sub-rounded to sub-angular. Some rock flour and pulverized rock. Sand is m.g. to f.g., sub-rounded to sub-angular. Wet. 31% gravel, 27% sand, 42% clay. No recovery (31.4-32.0').
				1.40/2.00	6007	30, 31				
				2.00/2.00	6006, 6005	32, 33	03/16/95			
	BH00241AS			0.90/1.00	6004	34			CLAYSTONE	33.4'-37.0': Top of Weathered Bedrock at 33.4'. Claystone. Highly to mod. weathered. Mottled dusky yellow (5 Y 6/4), to dusky yellowish orange (10 YR 6/6), and light olive brown (5 Y 5/6). Horizontal thin laminations oxidized. 100% clay. No recovery (35.9-36.0').
				0.90/1.00	6003	35				
				2.00/2.00	6002, 6001	36, 37				
	BH00242AS			2.00/2.00	6000, 5999, 5998	38, 39, 40			CLAYSTONE	37.0'-43.2': Claystone. Dark gray (N3). At 37.0' slickensides 40 degrees (approx.). Disturbed core from moss sampler. Mod. to slightly weathered. Some laminations otherwise massive. Dry to moist. Slightly friable. No recovery (40.7-42.0').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46.00	GROUND ELEVATION (FT) 6037.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747997	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59194
EAST	2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/08/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE INSTALLATION.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	43.2'-46.0': Top of Unweathered Bedrock at 43.2'. Claystone. Dark gray (N3). Core indurated. Hard. Disturbed sediments from Moss Sampler. Fractures both natural and drilling induced. Trace FeO2 staining on occasional fractures. Thin to thick laminations. Some silty laminae.

Total Depth Drilled: 46.00 Total Depth Casing: 38.00
Bottom of Filter Pack: 38.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 5980.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747691	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST L. A. HOST	59294
EAST	2081620	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/21/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST. OPEN HOLE INSTALLATION. CAVE IN FROM 23.0' TO 32.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.60/2.00	5980	0			SC	0.0'-1.6': Gravelly Sand with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2). Sand c.g. to f.g., sub-angular to sub-rounded, well graded. Gravel fine to coarse, avg. size 0.25 in. to 0.50 in. Upper 0.4 in. top soil, roots, grass. Some pulverized rock and rock flour. Low plasticity. Dry. Unconsolidated. Trace calcareous material. Small Fe oxide nodules. 32% gravel, 53% sand, 2% silt, 13% clay. No recovery (1.6-2.0').
				1.30/2.00	5979	1			SC	2.0'-3.3': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0-1.6'). Fill material. Trace glass, concrete. No recovery (3.3-4.0').
				1.50/2.00	5978	2			SC	4.0'-5.5': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-1.6'). No recovery (5.5-6.0').
				1.20/2.00	5977	3			SC	6.0'-7.2': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0-1.6'). Color grades from dark yellowish brown (10 YR 4/2) to dark yellowish orange (10 YR 6/6) to mod yellowish orange (10 YR 5/4). No recovery (7.2-8.0').
				1.00/2.00	5976	4			SC	8.0'-9.0': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 6.0'-7.2'). Appears to be fill material. No recovery (9.0-10.0').
					5975	5				
					5974	6				
					5973	7				
					5972	8				
					5971	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 5980.80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747691	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST L. A. HOST	59294
EAST	2081620	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/21/94	

REMARKS DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST L. A. HOST OPEN HOLE INSTALLATION. CAVE IN FROM 23.0' TO 32.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00170AS			1.90 /2.00	5970	10–11			CL	10.0'-13.2' Sandy clay with some silt and gravel. Same as above (reference intervals 0.0-1.6' and 6.0-7.2'). Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6). Some pale yellowish orange (10 YR 6/2). Some carbonaceous material. Some Fe and Mn staining. Core damp according to Well Site Field Log. Sandstone and claystone fragments especially from 10.5-12.0'. 14% gravel, 53% sand, 33% clay. From 10.0-10.5' 3% gravel 33.4% sand 28.3% silt and 38% clay.
					5969	12				No recovery (11.9-12.0'), and (13.2-14.0').
	BH00171AS			1.20 /2.00	5968	13				Note: Classification and percentages changed based in mechanical sieve and hydrometer results from BH00170AS.
					5967	14			SANDY CLAYSTONE	14.0'-15.4' Top of Bedrock at 14.0'. Sandy Claystone. Light olive gray (5 6/1) to light gray (N7). Sand is v.f.g., sub-rounded, well sorted. Low plasticity. Bedding thinly laminated. Damp. Abundt. roots. 47% sand, 53% clay.
				1.90 /2.00	5966	15				
					5965	16			CLAYSTONE	15.4'-18.8' Claystone. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Slide plane contact at 15.4', root growing through contact at 15.4'. Fractures random and drilling induced. Thin laminae of sand. Disturbed sedimentation. Bedding massive. Mod. friable. Damp. 100% clay.
	BH00172AS			1.10 /2.00	5964	17				No recovery (15.9-16.0'), (17.1-18.0'), and (18.8-19.0').
					5963	18				
				0.80 /1.00	5962	19			CLAYSTONE	19.0'-22.5' Claystone. Same as above (reference interval 15.4-18.8'). Core indurated. Heavily Fe stained throughout core. Fe stained bands alternating with unweathered claystone.
				2.00 /2.00	5961	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	32.00	GROUND ELEVATION (FT)	5980.80	PROJECT NUMBER	OU5-RFI/RI
NORTH	747691	AREA	IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	L. A. HOST
EAST	2081620	LOCATOR NUMBER	I7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	12/21/94

LOG OF BORING NUMBER: 59294

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: L. A. HOST. OPEN HOLE INSTALLATION. CAVE IN FROM 23.0' TO 32.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50%	100% 0% 100%	2.00 /2.00	5960	20				
			5959	21				
		2.00 /2.00	5958	22				
			5957	23			CLAYSTONE	22.5'-24.5': Claystone. Heavily weathered (oxidized and Mn stained). Dark yellowish orange (10 YR 6/6). Nodules of Fe oxide. Sandy/silty layers grayish red (5 R 4/2) to pale brown (5 YR 5/2).
		1.50 /2.00	5956	24				No recovery (24.5-25.0')
			5955	25			CLAYSTONE	25.0'-29.7': Claystone. Same as above (reference interval 15.4-18.8'). Olive gray (5 Y 4/1). Core indurated. Less Fe staining. Disturbed sedimentation. At 26.3' (approx.) slickensides, approx. 30 degrees from horiz. Thin f.g. sand laminae. From 29.0' to 29.7' thin laminae of f.g. sand alternate with clay beds. Core breaks easily along horizontal bedding planes. Mod. friable. Becomes unweathered.
		2.00 /2.00	5954	26				
			5953	27				
		2.00 /2.00	5952	28				
			5951	29				No recovery (29.7-30.0')
		0.70 /1.00		30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT) 5980.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747691	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST L. A. HOST	59294
EAST	2081620	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 12/21/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST. OPEN HOLE INSTALLATION. CAVE IN FROM 23.0' TO 32.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	5950	30			CLAYSTONE	30.0'-32.0' Claystone. Unweathered. Olive gray (5 Y 4/1). Core indurated. Bedding horizontal where apparent. Thin laminae of f.g. sand or silt.
					5949	31				
					5948	32				Total Depth Drilled: 32.00 Total Depth Casing: 19.00 Bottom of Filter Pack: 19.00
					5947	33				
					5946	34				
					5945	35				
					5944	36				
					5943	37				
					5942	38				
					5941	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89.50	GROUND ELEVATION (FT) 5965.30	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747725	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59394
EAST	2082699	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/12/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57; ASI RIG GEOLOGIST: J. W. HARWELL. OTHER CENTRALIZERS AT 55.0' AND 73.0'. CORE WAS NOT LOGGED FOR 59394. WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED. CORE WAS NOT LOGGED. SEE LOG FOR 56694 FOR CORE DESCRIPTION.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0%	100%	5965	0				Refer to geologic log of 56694.
					5964	1				Total Depth Drilled: 89.50 Total Depth Casing: 89.50
					5963	2				Bottom of Filter Pack: 89.50
					5962	3				
					5961	4				
					5960	5				
					5959	6				
					5958	7				
					5957	8				
					5956	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50		GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	OU5-RFI/RI
NORTH	747725	AREA IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	2082699	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94

LOG OF BORING NUMBER 59394

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						5955	10				
						5954	11				
						5953	12				
						5952	13				
						5951	14				
						5950	15				
						5949	16				
						5948	17				
						5947	18				
						5946	19				
							20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5945	20				
					5944	21				
					5943	22				
					5942	23				
					5941	24				
					5940	25				
					5939	26				
					5938	27				
					5937	28				
					5936	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT) 5965 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747725	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59394
EAST:	2082599	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/12/94	

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5935	30				
					5934	31				
					5933	32				
					5932	33				
					5931	34				
					5930	35				
					5929	36				
					5928	37				
					5927	38				
					5926	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT) 5965 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						5925	40				
						5924	41				
						5923	42				
						5922	43				
						5921	44				
						5920	45				
						5919	46				
						5918	47				
						5917	48				
						5916	49				
							50				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT) 5965 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55.0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5915	50				
					5914	51				
					5913	52				
					5912	53				
					5911	54				
					5910	55				
					5909	56				
					5908	57				
					5907	58				
					5906	59				
						60				

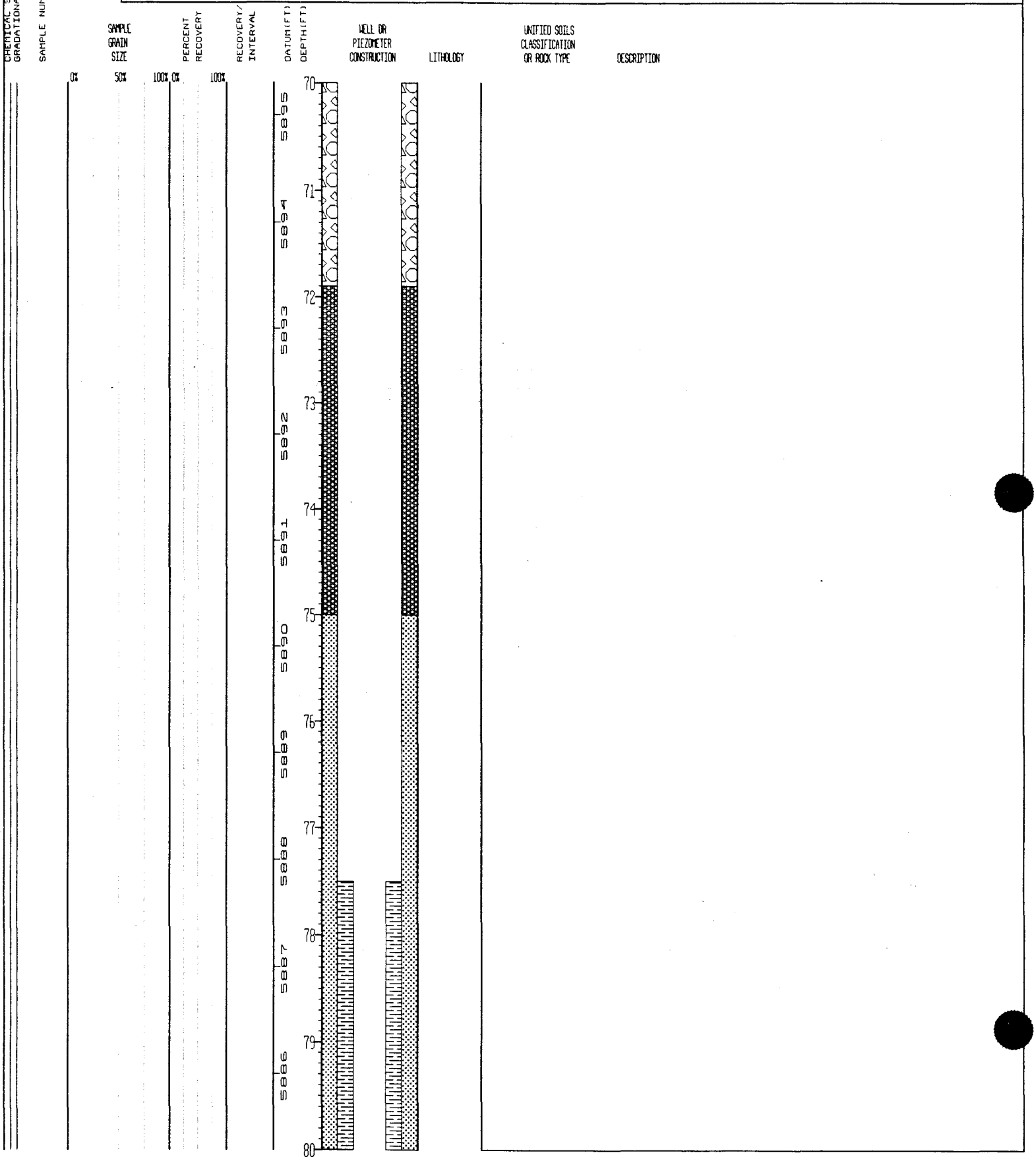
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT) 5365 30	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J. W. HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED 12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		5905 5904 5903 5902 5901 5900 5899 5898 5897 5896	60 61 62 63 64 65 66 67 68 69 70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA THSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		5885 5884 5883 5882 5881 5880 5879 5878 5877 5876	80 81 82 83 84 85 86 87 88 89 90	03/16/95			

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.90	GROUND ELEVATION (FT) 6026.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747730	AREA: IHSS 115	CASING DIAMETER (IN)	GEOLOGIST: J. W. HARWELL	59494
EAST:	2080726	LOCATOR NUMBER: F7	BOREHOLE DIAMETER (IN): 6.40	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.70 /1.90	6026	0			SC	0.0'-0.7' Gravelly Sand with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2) grades to dark yellowish orange (10 YR 6/6). Very loose. Dry. Top 4 in. top soil, roots, cactus. Bedding not apparent. Low plasticity. Sand is c.g. to f.g., well sorted, sub-angular to sub-rounded. Gravel is coarse to fine, well graded, sub-angular, avg.: 0.75 in. 35% gravel, 48% sand, 2% silt, 15% clay. No recovery (0.7-2.0').
				1.40 /2.00	6025	1			SC	2.0'-3.4' Gravelly Sand with some Clay. Same as above (reference interval 0.0'-0.7'). Amount of gravel decreases. Sand is c.g. to f.g. Gravel is coarse to fine. 18% gravel, 65% sand, 3% silt, 14% clay. No recovery (3.4-3.9').
	BH00152AS				6024	2				
	BH00150AS				6023	3				
				0.90 /2.00	6022	4			SM	3.9'-4.8' Silty Sand. Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1). Heavy FeO staining and nodules. Staining is banded. Trace Mn staining. Bedding massive. Core loose. Sand mostly f.g. to m.g., well sorted, sub-angular to sub-rounded. Low plasticity. 47% sand, 49% silt, 4% clay. No recovery (4.8-5.9')
	BH00151AS				6021	5				
				1.60 /2.00	6020	6			SW	5.9'-10.8' Gravelly Sand with trace Silt and Clay. Dark yellowish orange (10 YR 6/6). Sand is f.g. to c.g., 55% fine, 34% med., 11% coarse, well graded, rounded to sub-angular. Gravel is coarse to fine, predom. fine, sub-rounded to sub-angular. Non plastic. No apparent bedding. 42% gravel, 47% sand, 5% silt, 5% clay. No recovery (7.5-7.9'), (8.3-9.9') and (10.8-11.9').
	BH00153AS				6019	7				
				0.40 /2.00	6018	8				
	BH00155AS				6017	9				
						10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 19.90	GROUND ELEVATION (FT):	6026.20	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747730	AREA: IHSS 115	CASING DIAMETER (IN):		GEOLOGIST:	J. W. HARWELL	59494
EAST:	2080726	LOCATOR NUMBER: F7	BOREHOLE DIAMETER (IN):	6.40	DATE DRILLED:	12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.80 /2.00	6016	10				
					6015	11				
	BH00154AS									
				2.10 /2.00	6014	12			SANDY SILTSTONE	11.9'-16.3'. Top of Weathered Bedrock at 11.9'. Sandy Siltstone with some Clay. Dark yellowish orange (10 YR 6/6) to yellowish gray (5 Y 8/1). V f g. sand, rounded to sub-rounded. Moist. Strongly weathered. Weakly indurated. Thin bedded to thinly laminated. Bedding appears disturbed. At 13.0' iron nodule, strong Fe staining. Slightly plastic. 42% sand, 50% silt, 8% clay.
					6013	13				
	BH00155AS									
					6012	14				No recovery (16.3-17.9') and (17.9-19.9').
	BH00159AS BH00160AS			2.10 /2.00	6011	15				
	BH00157AS									
					6010	16				
				0.40 /2.00	6009	17				
	BH00156AS									
					6008	18				
				0.00 /2.00	6007	19				
						20				Total Depth Drilled: 19.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 41.00	GROUND ELEVATION (FT): 6046.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747981	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: L. A. HOST	59594
EAST:	2081244	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 10.00	DATE DRILLED: 12/08/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6046	0–1			SC	0.0'-2.5': Gravelly Sand with some Clay and trace Silt. Mod. yellowish brown (10 YR 4/6) to pale yellowish orange (10 YR 8/6) to dark yellowish orange (10 YR 6/6). Above colors mottled. Gravel is fine to coarse, max.: 1.5 in., avg.: 0.50 in., well graded, sub-angular to sub-rounded (predom. sub-angular). Sand is c.g. to f.g., sub-angular to sub-rounded. Some mica, quartzite fragments and pulverized cobbles of quartz to gneiss. Non-plastic. Dense. Some calcareous material (caliche). Core damp to moist. (sc-gc). 34% gravel, 50% sand, 1% silt, 15% clay.
				1.50 /2.00	6044	3			SC	2.5'-3.5': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-2.5'). Mostly pulverized rock and rock flour. Dry to damp (taken from Well Site Field Log). (sc-gc). No recovery (3.5-4.0').
				1.30 /2.00	6042	5			SC	4.0'-5.3': Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 0.0'-2.5'). Pulverized rock. Dry. (sc-gc). No recovery (5.3-6.0').
				1.50 /2.00	6040	7			SC	6.0'-21.0': Clayey Sand with some Gravel and trace Silt. Mod. olive brown (5 Y 4/4) to mod. orange pink (5 YR 8/4) to dark yellowish orange (10 YR 6/6). Matrix light greenish gray (5 GY 8/1). Sand is c.g. to f.g., well graded, sub-angular, predom. quartz and quartzite. Gravel is fine to coarse. Some calcareous material (caliche). Fe oxide stained. Some Mn staining and carbonaceous material. At 10.0' bedding massive. Core damp to moist. 20% gravel, 51% sand, 4% silt, 25% clay. No recovery (7.5-8.5'), (17.2-18.0') and (19.0-20.0'). No recovery (21.0-22.0').
				0.00 /0.50	6039	8				
	BH00132AS			0.50 /0.40	6038	9				
				1.10 /1.10	6037	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 41.00	GROUND ELEVATION (FT)	6046.70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]381	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	L. A. HOST	59594
EAST	2081244	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	12/08/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: L. A. HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00134AS	0% 50%	100% 0% 100%	1.00 /1.00	6036	10				
	BH00130AS			1.00 /1.00	6035	11				
						12				
				2.00 /2.00	6034	13				
					6033	14				
				2.00 /2.00	6032	15				
					6031	16				
				1.20 /2.00	6030	17				
					6029	18				
				1.00 /2.00	6028	19				
					6027	20				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 41.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747981	AREA IHSS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST:	L. A. HOST	59594
EAST:	2081244	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED:	12/08/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: L. A. HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.00 /2.00	6026	20				
					6025	21				
				2.00 /2.00	6024	22			CL	22.0'-29.4' Sandy Clay with some silt and trace gravel. Dark yellowish orange (10 YR 6/6) to yellowish gray (5 Y 8/1) mottled. Core is highly weathered. Trace carbonaceous material. Sand is c.g. to f.g., sub-rounded to rounded; 5% coarse, 15% med., 45% fine, predom. quartz. Trace calcareous material (caliche). Trace magnetite. Core is dense. Moist. Trace Mn staining. Low to med. plasticity. Bedding not apparent, massive. From 24.0-26.0' 1% gravel 34% sand, 23% silt, 42% clay. No recovery (26.4-26.5')
					6023	23				
					6022	24				
	BH00135AS			2.40 /2.50	6021	25				Note: Classification and percentages changed based on mechanical sieve and hydrometer results from BH00135AS.
					6020	26				
				1.00 /1.00	6019	27				
				0.60 /0.60	6018	28				
				1.30 /2.00	6017	29	12/12/94		NO RECOVERY	No recovery (29.4-30.1')
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 41.00	GROUND ELEVATION (FT):	6046.70	PROJECT NUMBER:	135-RFI/RI	LOG OF BORING NUMBER
NORTH:	747981	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	L. A. HOST	59594
EAST:	2081244	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN):	10.00	DATE DRILLED:	12/08/94	

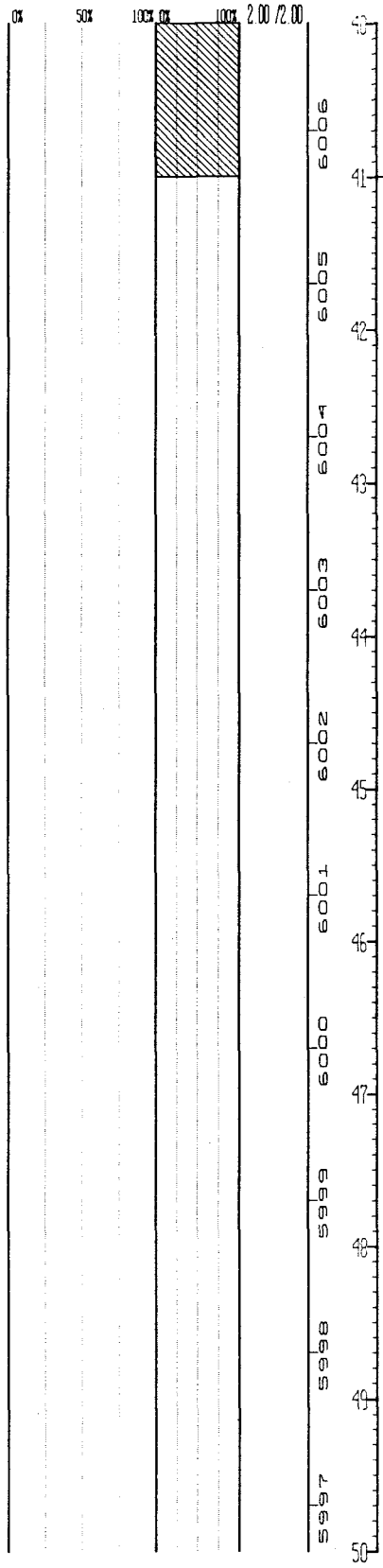
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
							30			SC	30.1'-30.7'. Clayey Sand. Same as above (reference interval 6.0'-10.0').
					1.40 /1.90	6016	31			CL	30.7'-31.4'. Sandy Clay with trace Silt. Light gray (N7) to dark yellowish orange (10 YR 6/6). Dry. Core indurated, can't determine bedding, possibly thinly bedded. Low plasticity. Sand is f.g., rounded, well sorted. Possible sandy claystone cobble/boulder fragment. 35% sand, 5% silt, 60% clay.
						6015	32				No recovery (31.4-32.0').
					1.90 /2.00	6014	33			SP	32.0'-37.45'. Sand. Color between dark yellowish orange (10 YR 6/6) and mod. yellowish brown (10 YR 5/4). Sand is m.g. to f.g., sub-rounded to rounded, predom. quartz, trace of feldspar and mica, poorly graded. Sand is predom. f.g., well rounded and quartz. Mottled. Massive. Core is wet. Dense. Color grades at 33.2 to a light olive gray (5Y 6/1) to dark yellowish orange (10 YR 6/6). 89% sand, 3% silt, 8% clay.
						6013	34				
					1.00 /1.00	6012	35				No recovery (33.9-34.0') and (35.9-36.0').
		BH00136AS			0.90 /0.85	6011	36				
					0.90 /2.25	6010	37				
						6009	38	12/14/94 ▽		SANDY CLAYSTONE	37.45'-41.0'. Top of weathered Bedrock at 37.45'. Sandy Claystone. Dark yellowish orange (10 YR 6/6) and light olive gray (5 Y 6/1). Highly weathered. Some MnO2 and FeO2 staining. Bedding thinly laminated to thinly bedded. Core damp to moist. Mottled. Slumping features (soft sediment deformation structures). Mod. hard to soft. Friable. At 39.0' f.g. sand interbeds and laminae. Becomes mod. weathered. Bedding around horizontal to 1-2 degree angle. 15% sand, 5% silt, 80% clay.
		BH00137AS			2.00 /0.90	6008	39				
					2.00 /2.00	6007	40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 41.00	GROUND ELEVATION (FT)	6046.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747981	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	L. A. HOST	59594
EAST	2081244	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	12/08/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: L. A. HOST.

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



Total Depth Drilled: 41.00
Bottom of Filter Pack: 39.50
Total Depth Casing: 39.60

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 5997.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747760		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59694
EAST 2081356		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/03/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE, DRY INSTALLATION.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	5997	0			SC	0.0'-4.0' Clayey Sand with some Gravel. Olive gray (5 Y 3/2) to olive gray (5 Y 4/1). Waste/fill material, damp, dense. Gravel is fine to coarse, sub-angular, max.: 2.0 in., avg.: 0.50 in. Sand c.g to f.g., sub-rounded, well graded. Some pulverized cobbles. Low plasticity. Core dry. 23% gravel, 51% sand, 26% clay. No recovery (2.5-3.0').
				0.50 /1.00	5996	1				
				1.60 /2.00	5995	2				
	BH00211AS			2.00 /2.00	5994	3				
				2.00 /2.00	5993	4			SC	4.0'-4.6' Clayey Sand with some Gravel. Same as above (reference interval 0.0'-4.0'). Abundt. pulverized rock and rock flour. Some calcareous material. Some silty material mod. reddish orange (10 R 6/6) and pale olive (10 Y 6/2). Trace carbonaceous material. Core moist to wet at 5.0'. Bedding not apparent. Becomes mod. dense. No recovery (4.6-5.0')
					5992	5				
					5991	6			SC	5.0'-7.0' Clayey Sand with some Gravel. Same as above (reference interval 0.0'-4.6').
	BH00215AS				5990	7			CL	7.0'-10.0' Sandy Clay with some Gravel and trace Silt. Matrix olive gray (5 Y 3/2) and dark yellowish orange (10 YR 6/6). Well graded, fill material. Sand m.g. to f.g., sub-rounded. Fine gravel, sub-rounded to sub-angular. Core moist to wet. Low to med. plasticity. Stiff. 10% gravel, 32% sand, 5% silt, 53% clay.
	BH00212AS			2.00 /2.00	5989	8				
				1.80 /2.00	5988	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 5997.00	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747760	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59694
EAST	2081356	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/03/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN. OPEN HOLE, DRY INSTALLATION

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 50% 100%) / PERCENT RECOVERY (0% 100%) / RECOVERY/INTERVAL / DATUM (FT) / DEPTH (FT) / WELL OR PIEZOMETER CONSTRUCTION / LITHOLOGY

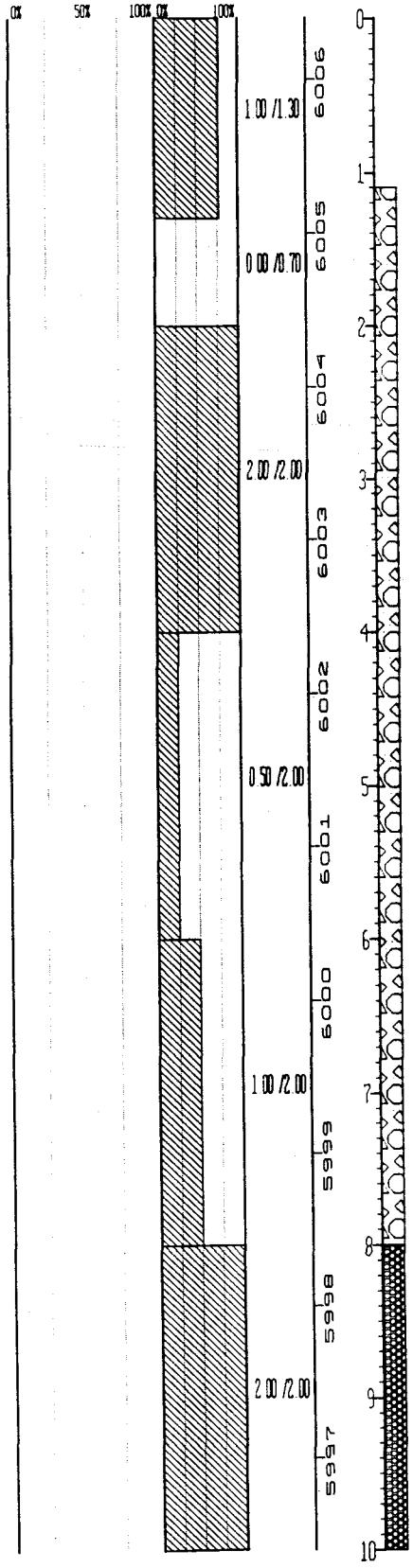
SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	1.80 /2.00	5987	10	CL	10.0'-12.8': Sandy Clay with some Gravel and trace Silt. Same as above (reference interval 7.0'-10.0'). Highly plastic.
		5986	11		No recovery (12.8-13.0').
					Note: BH00215AS composite sample from 0.0-15.0' is a sm, Silty Sand with some clay and gravel, 12% Gravel, 40% Sand, 29% Silt, and 19% Clay. Based on mechanical sieve and hydrometer results.
	1.80 /2.00	5985	12		03/16/95
BH00213AS		5984	13		
BH00214AS				CL	13.0'-14.1': Sandy Clay with some Gravel and trace Silt. Same as above (reference interval 7.0'-10.0'). Wet, soft, plastic. Possible colluvium slide material.
	1.10 /2.00	5983	14		No recovery (14.1-15.0')
		5982	15	CL	15.0'-16.1': Sandy Clay with some Gravel and trace Silt. Same as above (reference interval 7.0'-10.0'). Highly weathered. Dark yellowish orange (10 YR 6/6). Soft, plastic. Possible slide.
	2.00 /2.00	5981	16	CLAYSTONE	16.1'-19.8': Top of Bedrock at 16.1'. Claystone with some Silt. Light olive gray (5 Y 5/2) to olive gray (5 Y 3/2). Fe staining along fractures. Trace organics. Indications of disturbed sediments. At 18.0' core becomes unweathered. Indurated, core too broken up to determine any planar features. Trace very thin laminae of sand. Mod. to slightly friable. 6% silt, 94% clay
	0.90 /1.00	5980	17		
		5979	18		No recovery (17.9-18.0') and (19.8-20.0')
	1.80 /2.00	5978	19		
			20		

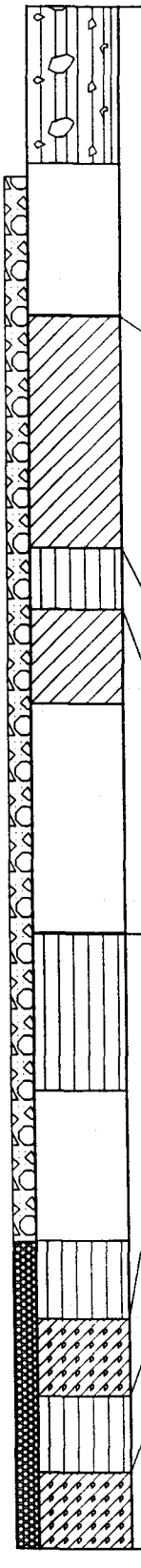
Total Depth Drilled: 20.00 Total Depth Casing: 18.00
Bottom of Filter Pack: 18.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25.20	GROUND ELEVATION (FT) 6006.40	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747922	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST P. J. JORDAN	59794
EAST	2081635	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 01/09/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

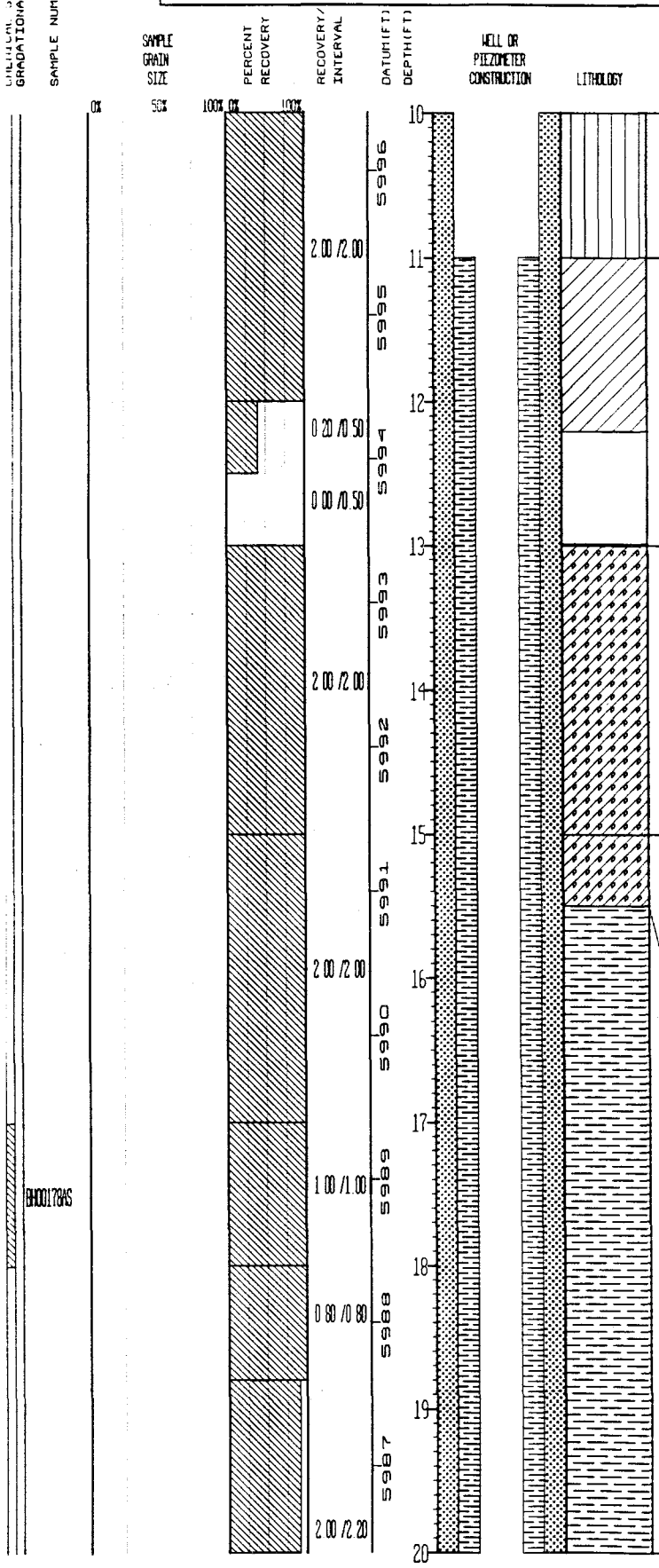




Unified Soils Classification or Rock Type	Description
GM	0.0'-1.0' Sandy Gravel with some Silt and trace Clay (Fill material). Dusky yellowish brown (10 YR 2/2). Gravel fine to coarse, sub-angular, well graded, max. size 2.25 in., avg. size 0.50 in. Sand is mostly m.g. to f.g. sub-angular, poorly graded. Some micaceous material. Low plasticity. Core loose, alluvium. Some pulverized rock. Dry. Trace asphalt fragments. 57% gravel, 26% sand, 15% silt, 2% clay. No recovery (1.0-2.0')
CL	2.0'-3.5' Sandy Clay with some Gravel (waste fill material) and trace Silt. Dark yellowish orange (10 YR 6/6) to pale yellowish brown (10 YR 6/2) to dark yellowish brown (10 YR 4/2). Some Mn and Fe staining. Bedding not apparent. Low plasticity. Sand mostly m.g. to f.g., sub-angular. Some glass shards. Trace graphite. Trace caliche. Trace roots. Core dense. Dry. 16% gravel, 40% sand, 4% silt, 40% clay.
ML	3.5'-3.9' Sandy Silt. Waste/fill material. Black Graphite. Glass shards. Fill material.
CL	3.9'-4.5' Sandy Clay with some Gravel and trace Silt. Same as above (reference interval 2.0-3.5'). Core highly FeO stained. Some glass shards and black graphite. Core indurated. 16% gravel, 40% sand, 4% silt, 40% clay No recovery (4.5-6.0')
ML	6.0'-8.5' Sandy Silt. Waste/fill material. Black Graphite. Shards of glass. No recovery (7.0-8.0')
SC	8.5'-9.0' Clayey Sand. Dark yellowish orange (10 YR 6/6). Sand is m.g. to f.g., sub-rounded. Low plasticity. Bedding not apparent. Dry. 59% sand, 41% clay.
ML	9.0'-9.5' Sandy Silt. Waste/fill material. Black Graphite. Shards of glass.
SC	9.5'-10.0' Clayey Sand with some Gravel. Same as above (reference interval 8.5-9.0'). Dark yellowish orange (10 YR 6/6) and mod. yellowish brown (10 YR 5/4). Moist. 8% gravel, 51% sand, 41% clay.

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 25.20	GROUND ELEVATION (FT)	6006.40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH	747922	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST:	P. J. JORDAN	59794
EAST	2081635	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	01/09/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST P. J. JORDAN



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
ML	10.0'-11.0' Sandy Silt. Waste/fill material. Black Graphite. Fill. Abundt. glass fragments.
CL	11.0'-12.2' Sandy Clay with some Gravel, top of Alluvium. From 12.0-12.2 mostly pulverized rock and cobbles. No recovery (12.2-13.0')
SC	13.0'-15.0' Clayey Sand with some Silt and trace Gravel. Light brown (5 YR 5/6), trace olive gray (5 Y 6/1). Sand is f.g. to m.g., sub-rounded. Some micaceous material, sub-angular. Trace Mn staining. Bedding not apparent. Dry. Low plasticity. 66% sand, 10% silt, 24% clay
SC	15.0'-15.5' Clayey Sand with trace Gravel. Dark yellowish orange (10 YR 6/6) and pale yellowish orange (10 YR 8/6) and light brown (5 YR 5/6). From 14.8' to 15.5' claystone clasts. Low plasticity. Bedding not apparent. Dry. 5% gravel, 62% sand, 1% silt, 23% clay
CLAYSTONE	15.5'-20.0' Top of Bedrock at 15.5'. Claystone with trace Silt. Weathered. Fe stained. Olive gray (5 Y 4/1) to med. gray (N5). Some Mn staining. Core stiff, dense. Small FeO concretions. At 16.5' core contains calcareous material (core reacts with HCl). Slightly to mod. friable. Disturbed sediments from 15.5' to 17.0' then thinly laminated. Fractures, 30 degrees (approx.). Mn staining along fractures. 18.3' to 19.0' more calcareous material. Dry to moist. 4% silt, 96% clay BH00178AS with 1% sand, 39% silt, and 60% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25.20	GROUND ELEVATION (FT): 5006.40	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747922	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: P. J. JORDAN	59794
EAST:	2081635	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 6.50	DATE DRILLED: 01/09/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GH00179AS			2.00 /2.00	5986 5985 5984	20 21 22 23			CLAYSTONE:	20.0'-23.1' Claystone with trace Silt. Mod olive brown (5 Y 4/4) to dark yellow brown (10 YR 4/2) to dark yellowish orange (10 YR 6/6). Bands of FeO staining throughout interval. Some carbonaceous material. Fractures random. Core disturbed by sampling. 4% silt, 96% clay.
				0.50 /0.50	5983	23			SANDY SILTSTONE:	23.1'-23.3' Sandy Siltstone. Dark yellowish orange (10 YR 6/6). Sand is f g., sub-rounded, predom. quartz.
				1.00 /1.00	5982	24			CLAYSTONE:	23.3'-24.0' Claystone with trace Silt. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Unweathered. 4% silt, 96% clay.
	GH00180AS			0.70 /0.70	5981	25			SILTY CLAYSTONE:	24.0'-25.2' Gray Silty Claystone. Fine partings that are horizontal. Core breaks easy along silty bedding planes. Few near vertical Fe stained fractures. Core disturbed by drilling and sampling. 22% silt, 78% clay.
					5980	26				Total Depth Drilled: 25.20 Total Depth Casing: 23.00 Bottom of Filter Pack: 23.00
					5979	27				
					5978	28				
					5977	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

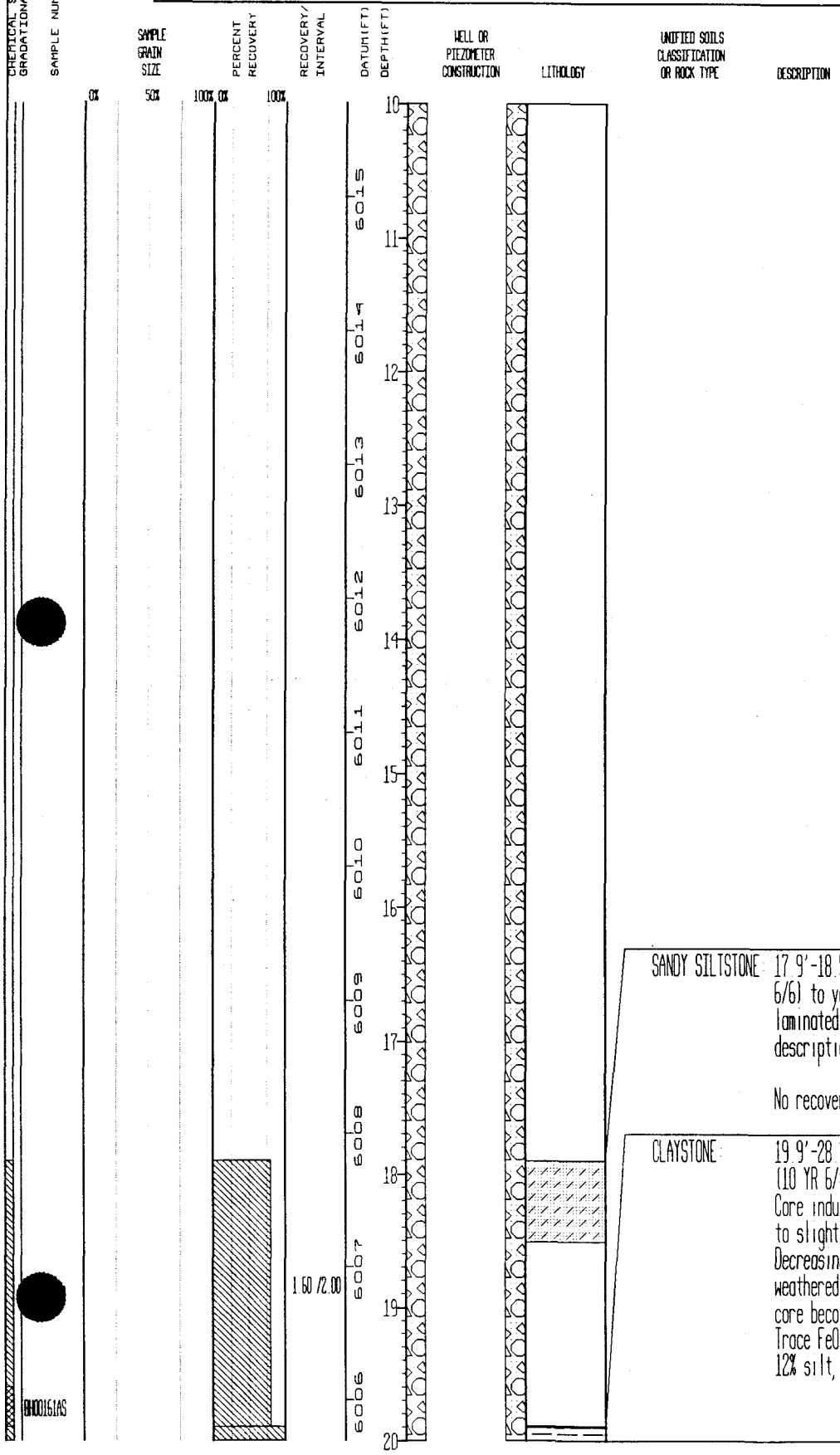
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00 /17.90	6025, 6024, 6023, 6022, 6021, 6020, 6019, 6018, 6017, 6016	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10				0.0'-17.9' Hollow Stem Auger. Ream to set surface casing to 17.9'. 59894 is a 2 foot offset of 59494.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57; ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



SANDY SILTSTONE: 17.9'-18.5': Sandy Siltstone. Dark yellowish orange (10 YR 6/6) to yellowish gray (5 Y 8/1). Thinly bedded to thinly laminated. Moist. Well sorted v.f.g. sand. Note: Sample description taken from Well Site Field Log.

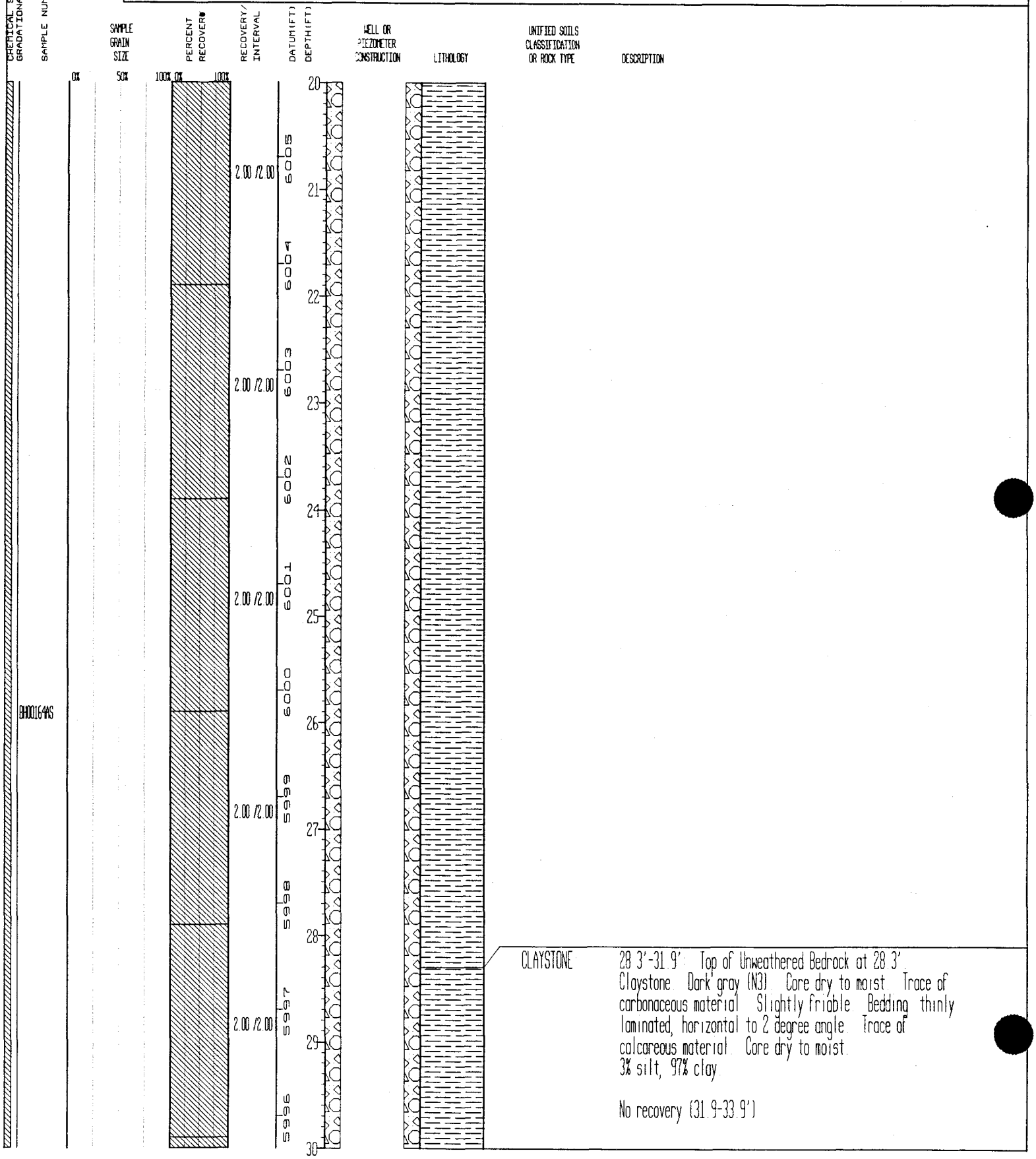
No recovery (18.5-19.9').

CLAYSTONE: 19.9'-28.3': Claystone with some Silt. Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1). Bedding not apparent. Core indurated, disturbed sediments from drilling method. Mod. to slightly friable. Colors mottled. Core dry to moist. Decreasing amount of silt. 21.90'-24.5' Core extrememly weathered with FeO. Some silty interbeds. At around 25.0' core becomes mod. weathered, FeO mostly along fractures. Trace FeO nodules at 27.9'.
12% silt, 88% clay.

BH00161AS

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

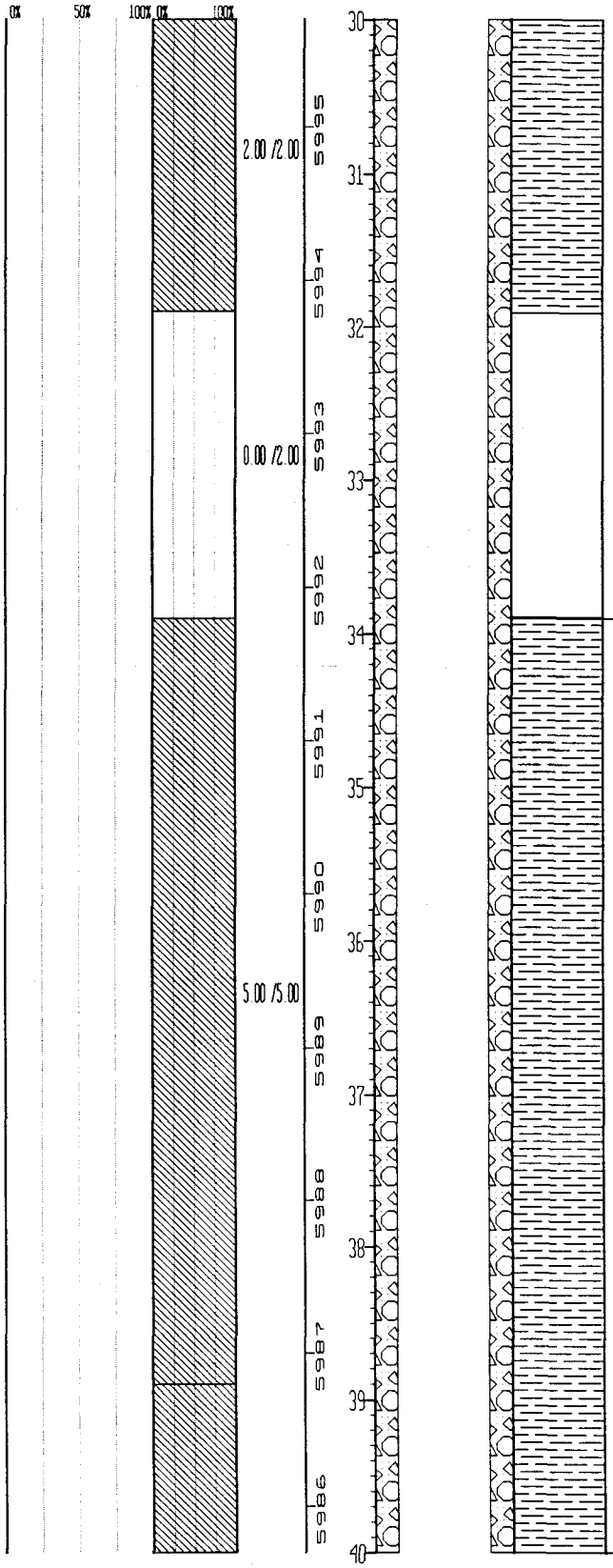
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT): 6025.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747728	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	59894
EAST:	2080724	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE:	33.9'-40.5': Claystone. Med. gray (N5) to light olive gray (5 Y 5/2). Thinly bedded to thinly laminated, becomes massive at 35.0'. Mod. hard.

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 132.50	GROUND ELEVATION (FT): 6025.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747728	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	59894
EAST:	2080724	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 5.00/5.00; 5.00/5.00; 1.40/1.50

DATUM (FT): 5985, 5984, 5983, 5982, 5981, 5980, 5979, 5978, 5977, 5976

DEPTH (FT): 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

WELL OR PIEZOMETER CONSTRUCTION: 01/14/95; 03/16/95

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	40.5'-42.8': Clayey Siltstone. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Core dense, stiff. Trace carbonaceous material. Thinly bedded to thinly laminated. Trace crossbedding. Some thin interbeds of claystone. Well cemented. 80% silt, 20% clay.
CLAYSTONE	42.8'-48.6': Claystone. Grayish black (N2). Slightly FeO stained, mod. reddish brown (10 R 4/6). Some organics. Trace calcareous thin interbeds and thin laminations of siltstone. Iron nodule at 45.0'.
CLAYEY SILTSTONE	48.6'-48.9': Clayey Siltstone. Same as above (reference interval 40.5'-42.8'). Some FeO staining, weathered.
CLAYSTONE	48.9'-58.4': Claystone. Same as above (reference interval 42.8'-48.6'). Bedding becomes massive between 50.4'-52.3'. No recovery (52.3-55.4').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747728		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST 2080724		LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%

PERCENT RECOVERY: 100% 0% 100%

RECOVERY/INTERVAL: 1.90 /5.00; 5.00 /5.00

DATUM (FT): 5975, 5974, 5973, 5972, 5971, 5970, 5969, 5968, 5967, 5966

DEPTH (FT): 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

CLAYEY SILTSTONE 58.4'-58.85': Clayey Siltstone interbed. Med. dark gray (N4) to light olive gray (5 Y 6/1). Bedding massive. Well cemented. Trace fossil (root cast or burrow).

CLAYSTONE 58.85'-60.0': Claystone. Same as above (reference interval 42.8'-48.6').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747728	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	59894
EAST:	2080724	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				4.20 /5.00	5965	60			SILTY CLAYSTONE	60.0'-70.7': Silty Claystone. Med. dark gray (N4) to light olive gray (5 Y 6/1). Thinly bedded. Some crossbedding observed in thin siltstone interbeds. Some iron staining along siltstone interbeds. Mod. porosity. Mod. hard. Some soft sediment defomation structures.
					5964	61				No recovery (64.6-65.4') and (69.5-70.4')
					5963	62				
					5962	63				
					5961	64				
					5960	65				
					5959	66				
				4.10 /5.00	5958	67				
					5957	68				
					5956	69				
						70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

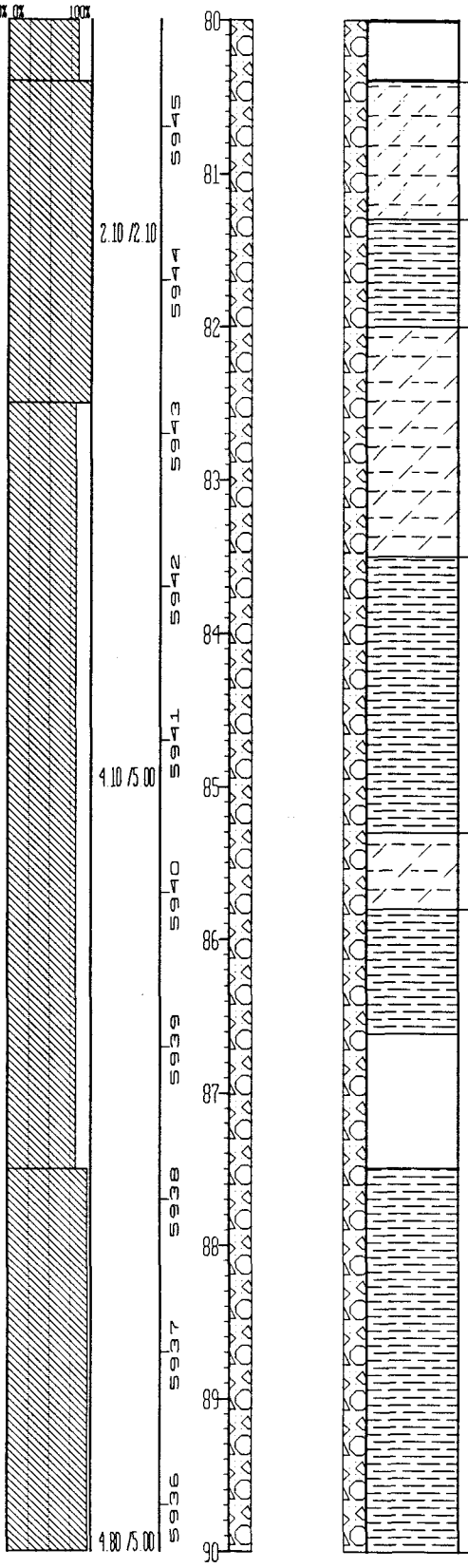
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57; ASI RIG GEOLOGIST J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				5.00/5.00	5955, 5954, 5953	70, 71, 72, 73				CLAYEY SILTSTONE 70.7'-79.6': Clayey Siltstone. Med. dark gray (N4) to light olive gray (5Y 6/1). Massive to thinly laminated horizontal bedding. Core dense. Well cemented. Some slumped and crossbedding structures. Amount of silt decreases at 75.4'. 87% silt, 13% clay. No recovery (79.6-80.0') and (80.0-80.4')
				4.20/5.00	5952, 5951, 5950, 5949, 5948, 5947, 5946	74, 75, 76, 77, 78, 79, 80				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747728	AREA IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	59894
EAST:	2080724	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

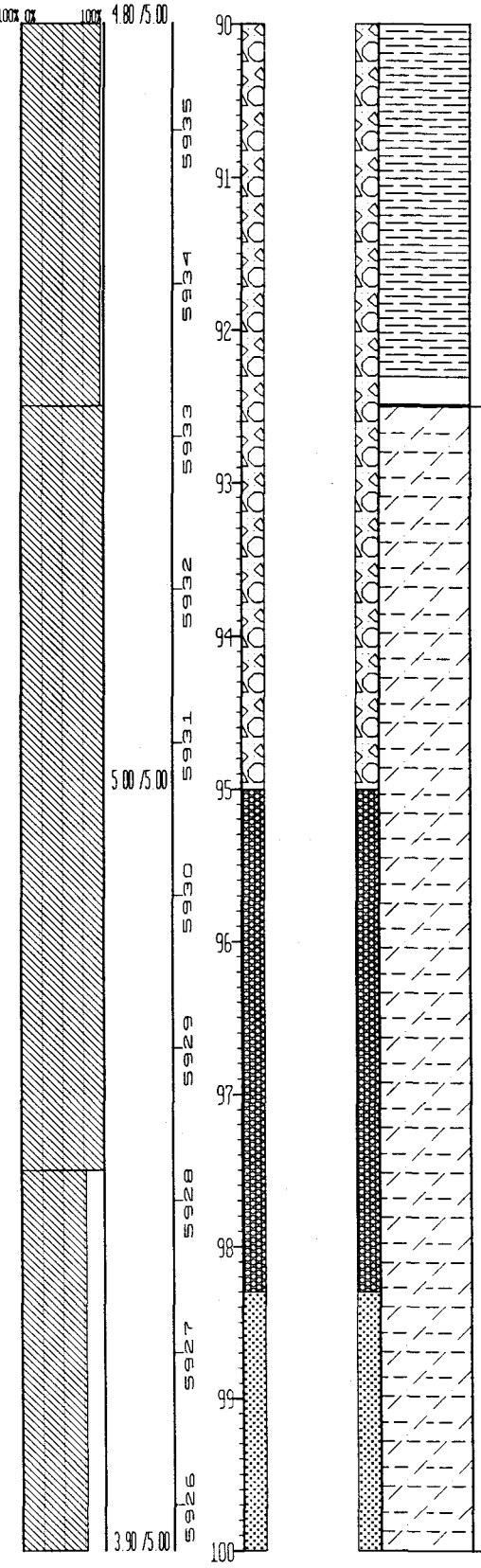


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	80.4'-81.3': Clayey Siltstone. Same as above (reference interval 70.7'-79.6').
CLAYSTONE	81.3'-82.0': Claystone. Olive gray (5 Y 4/1). Massive. Mod. hard.
SILTY CLAYSTONE	82.0'-83.5': Silty Claystone. Olive gray (5 Y 4/1). Thinly laminated. Trace soft sedinet deformation structures. Trace claystone fine gravel clasts.
CLAYSTONE	83.5'-85.3': Claystone. Same as above (reference interval 81.3'-82.0').
SILTY CLAYSTONE	85.3'-85.8': Silty Claystone. Same as above (reference interval 82.0'-83.5').
CLAYSTONE	85.8'-92.3': Claystone. Dark gray (N3) to olive black (5 Y 2/1). Mod hard. Massive to thinly bedded. Trace silty claystone interbeds. At 91.8' fracture in core at 75 degrees, smooth clay in filling. No recovery (86.6-87.5') and (92.3-92.5').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT)	6025.70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

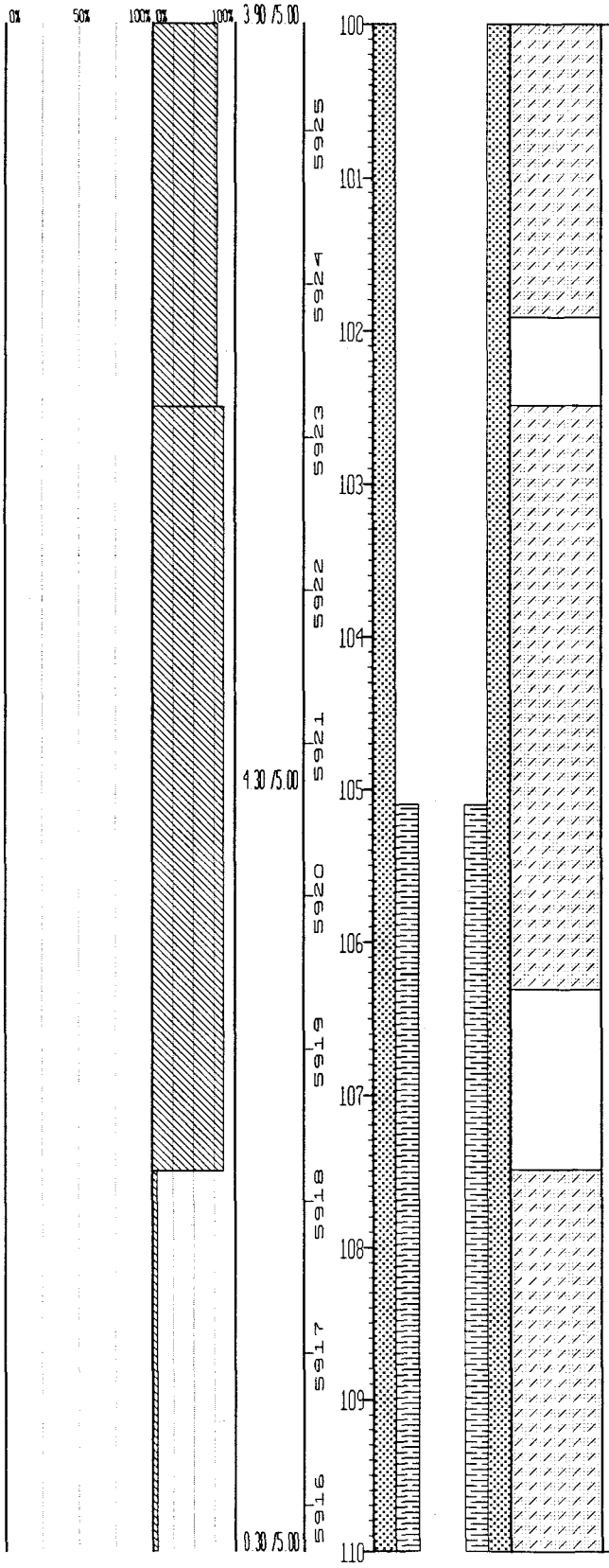


SILTY CLAYSTONE: 92.5'-100.0': Silty Claystone. Olive gray (5 Y 4/1). Mod. hard. Massive to laminated. Trace carbonaceous material. Some clayey siltstone interbeds. Conchoidal fracture at 97.7'. Increase in silt and v.f.g. sand content at 98.5'.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747728	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	59894
EAST:	2080724	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

SANDY SILTSTONE: 100.0'-113.7' Sandy Siltstone with trace Clay. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Some organics. Hard to mod. hard. Sand is v f g, rounded, mod. cemented, mod. porosity, well sorted. Thinly laminated. Trace soft sediment deformation and trace fossils (burrows). Crossbedded.
17% sand, 78% silt, 5% clay.

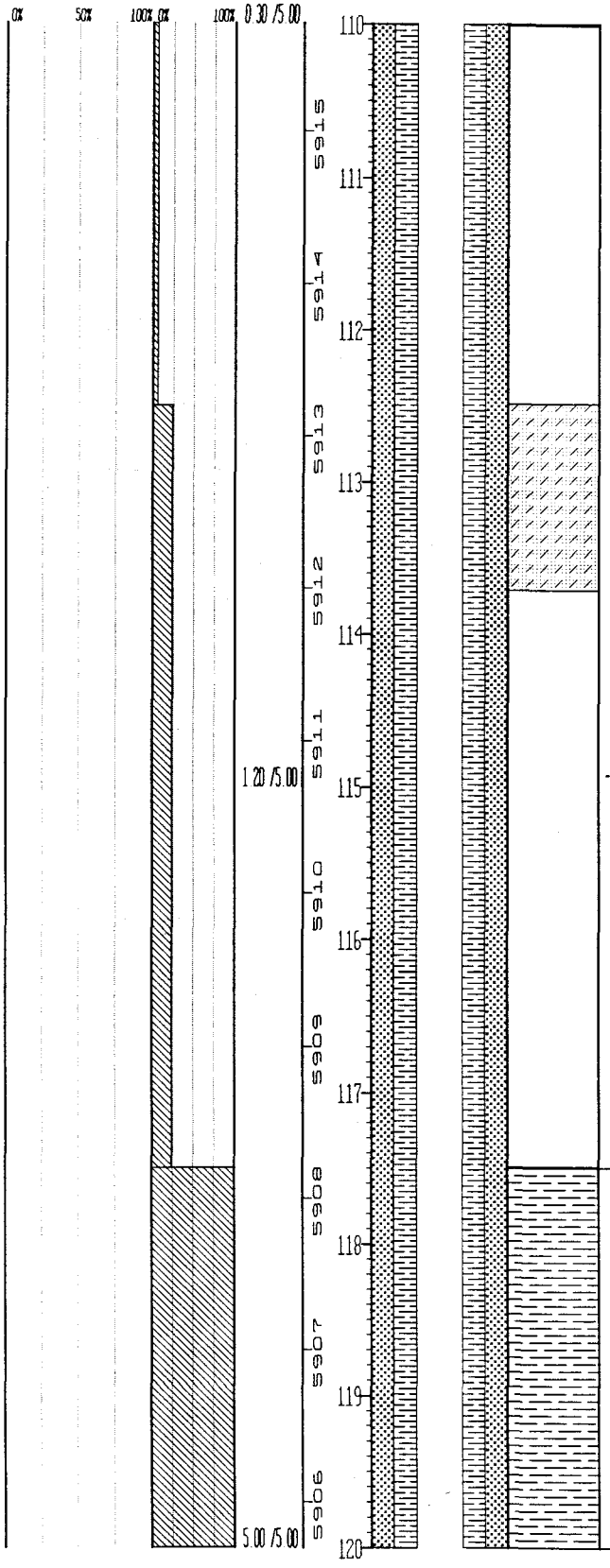
No recovery (101.9-102.5'), (106.3-107.5') and (107.8-110.0')

No recovery (110.0-112.5') and (113.7-117.5').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'

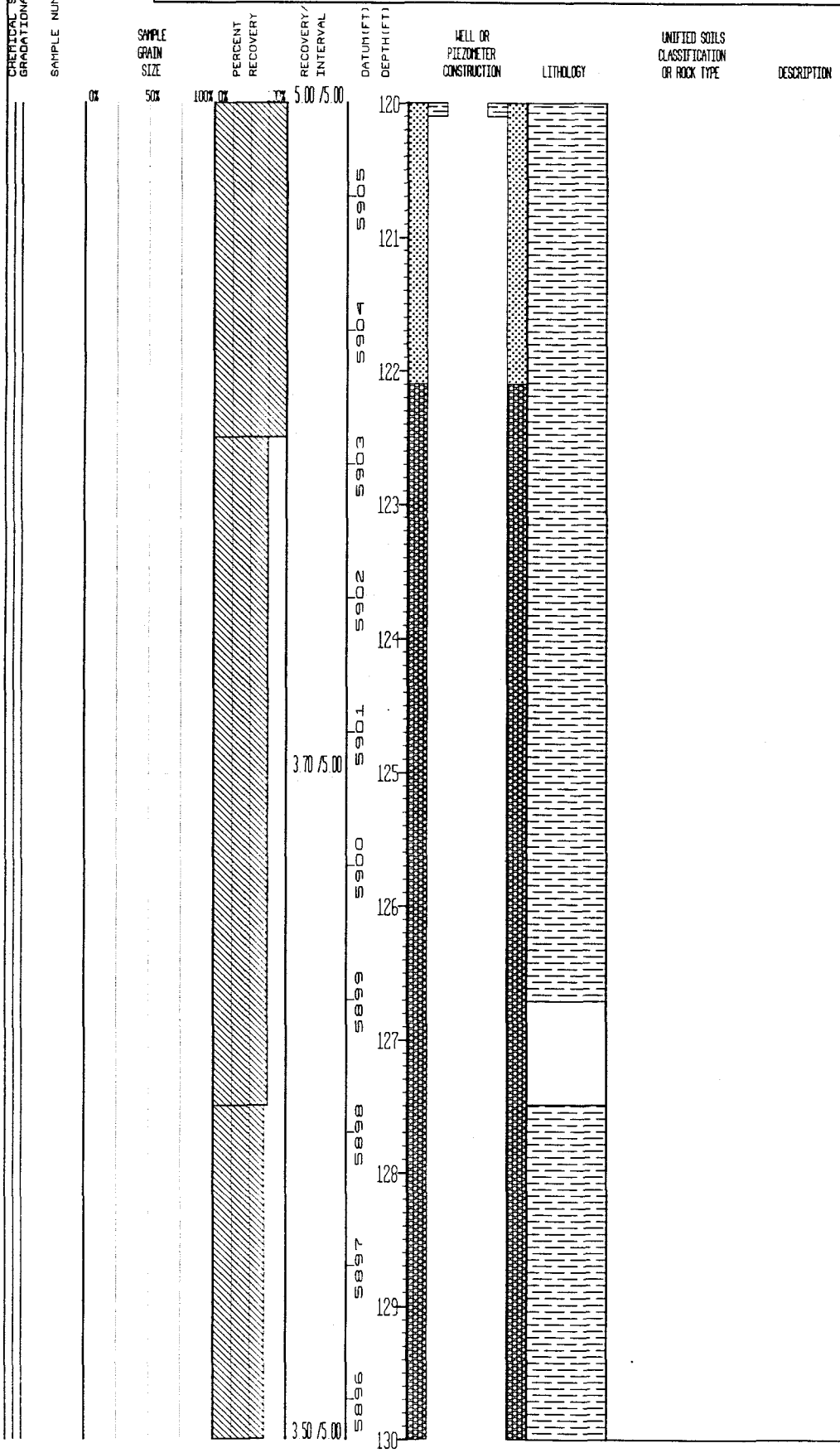
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	117.5'-131.0': Claystone. Olive gray (5 Y 4/1) to grayish black (N2). Trace carbonaceous material. Massive. Interval from 120.0'-126.7' contains some organics, especially along thin fractures. Thin bedding (horizontal). Some areas bedding massive. At 129.5'-131.0' some Fe stained siltstone clasts fine gravel size. No recovery (126.7-127.5') and (131.0-132.5').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]728	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST	[illegible]80724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 - ASI RIG GEOLOGIST: J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'.



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747728		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	59894
EAST 2080724		LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 12/16/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57. ASI RIG GEOLOGIST J. W. HARWELL. ADDITIONAL CENTRALIZERS AT 75.0', 95.0' AND 121.0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 3.50 /5.00

DATUM (FT): 5895, 5894, 5893, 5892, 5891, 5890, 5889, 5888, 5887, 5886

DEPTH (FT): 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

Total Depth Drilled: 132.50 Total Depth Casing: 122.10
Bottom of Filter Pack: 122.10

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6043.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747528	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J. W. HARWELL	59994
EAST	2079159	LOCATOR NUMBER	BOREHOLE DIAMETER (IN) 1.40	DATE DRILLED 11/09/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE ASI RIG GEOLOGIST: J. W. HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00088AS			0.90 /2.00	6043	0			SM	0.0'-0.7' Silty Sand with some Clay and Gravel. Mottled dark yellowish brown (10 YR 4/2), to mod. yellowish brown (10 YR 5/4), dark yellowish orange (10 YR 6/6) and pale yellow brown (10 YR 6/2). Massive. Dry. Sample descriptions taken from Well Site Field Log. Not enough core in box to make an accurate grain size distribution percentage and sample description.
				0.20 /2.00	6042	1			ML	0.7'-0.9' Sandy Silt. Ash. Waste/fill material. Dark gray (N3). Dry. Loose. Predom. metallic f.g. to c.g. sand and silt size ash. Some asbestos fragments (up to 1.0 in.), fibers, glass. No recovery (0.9-2.0').
				2.00 /2.00	6041	2			ML	2.0'-2.2' Sandy Silt. Ash. Waste/fill material. Same as above (reference interval 0.7'-0.9'). Some Fe staining. No recovery (2.2-4.0').
				1.60 /2.00	6040	3			ML	4.0'-4.9' Sandy Silt. Ash. Waste/fill material. Same as above (reference interval 0.7'-0.9'). Some glass shards.
				2.00 /2.00	6039	4			SM	4.9'-5.3' Silty Sand. Dark yellowish orange (10 YR 6/6) (waste fill material). Some fine gravel. Dry.
					6038	5			CL	5.3'-6.0' Clay. Yellowish gray (5 Y 8/1) and grayish orange (10 YR 7/4). (Waste/fill material). Moist. Trace f.g. sand size metallic ash.
					6037	6			CL	6.0'-7.6' Clay. Same as above (reference interval 5.3'-6.0'). Some ash at 6.0'-6.25', possible slough with large 1.0 in. fragments of possible asbestos. No recovery (7.6-8.0').
					6036	7				
					6035	8			ML	8.0'-8.6' Sandy Silt. Ash. Waste/fill material. Same as above (reference interval 0.7'-0.9'). Large fragments of glass. Trace fine gravel size Fe stained fragments.
					6034	9			CL	8.6'-10.0' Clay. Same as above (reference interval 5.3'-6.0' (waste/fill material)).
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6043.20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J. W. HARWELL	59994
EAST	2079159	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	11/09/94	

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.80 /2.00	6033	10			ML	10.0'-10.7': Sandy Silt. Ash. Waste/fill material. Same as above (reference interval 0.7'-0.9'). Large 1.0 in. fragments of possible asbestos. Trace gravel. Some glass.
					6032	11			CL	10.7'-11.8': Clay. Same as above (reference interval 5.3-6.0' (waste/fill material)). No recovery (11.8-12.0')
					6031	12				Total Depth Drilled: 12.00
					6030	13				
					6029	14				
					6028	15				
					6027	16				
					6026	17				
					6025	18				
					6024	19				
						20				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT): 6042.80	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 747528	AREA: IHSS 133	CASING DIAMETER (IN):	GEOLOGIST: J. W. HARWELL	60094	
EAST: 2079179	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN): 1.40	DATE DRILLED: 11/09/94		

REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J.W. HARWELL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.50 /2.00	6042	0			SM	0.0'-0.5': Silty Sand. Mod. yellowish brown (10 YR 5/4). Massive. Moist. (Top soil). Some black ash. Sample description taken from the Well Site Field Log. Core is missing from 0.0'-4.0' in box. No recovery (0.5-2.0').
	BH00089AS			0.20 /2.00	6041	1			ML	2.0'-2.2': Sandy Silt. Ash. Waste/fill material. Black (N1) to grayish black (N2). Waste material. Massive. Dry. Very loose. Pred. f.g. sand size with some m.g. to c.g. Shiny metallic in appearance. Some glass. No recovery (2.2-4.0').
				2.00 /2.00	6040	2			ML	4.0'-4.4': Sandy Silt. Ash with some quartzite gravel. Waste/fill material. Sub-angular, fine to coarse.
				2.00 /2.00	6039	3			SC	4.4'-5.0': Clayey Sand with trace Silt. Yellowish gray (5 Y 7/2) and dark yellowish orange (10 YR 6/6). Massive. Fe staining in fractures. Dry to moist. Sand is f.g. to c.g., well sorted. Low plasticity. 72% sand, 4% silt, 24% clay.
				2.00 /2.00	6038	4			CL	5.0'-6.0': Clay with trace Silt. Waste/fill material. Yellowish gray (5 Y 7/2) to dark yellowish orange (10 YR 6/6). Friable. Claystone clasts. Moist. Fe stained fractures. Trace to some metallic ash. 5% silt, 95% clay.
				2.00 /2.00	6037	5			ML	6.0'-7.1': Ash. Waste/fill material. Same as above (reference interval 2.0'-2.2').
				2.00 /2.00	6036	6			CL	7.1'-8.0': Clay with trace Silt. Waste/fill material. Same as above (reference interval 5.0'-6.0').
				2.00 /2.00	6035	7			ML	8.0'-8.95': Sandy Silt. Ash. Waste/fill material. Same as above (reference interval (2.0'-2.2').
				2.00 /2.00	6034	8			CL	8.95'-10.0': Clay (Fill). Pale yellowish brown (10 YR 6/2). Massive. Moist. Fe staining. Trace metallic ash in matrix.
					6033	9				Total Depth Drilled: 10.00
						10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER: 015-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747917	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST:	2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00/11.00	6006	0				0.0'-10.0': Refer to log of 59794 for 0.0'-25.2'.
					6005	1				No recovery (10.0-11.0').
					6004	2				
					6003	3				
					6002	4				
					6001	5				
					6000	6				
					5999	7				
					5998	8				
					5997	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER GU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747917		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST 2081634		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER	RECOVERY/INTERVAL	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			11.0'-11.4': Graphite, fill. Moist.
BH00182AS	1.30/1.30	CL	11.4'-13.5': Sandy Clay with some Gravel. Dark yellowish orange (10 YR 6/6) to grayish yellow green (5 GY 7/2) to mod. yellowish brown (10 YR 5/4). Gravel fine to coarse, max. size: 1.5 in., avg. size: 0.55 in., sub-angular to sub-rounded, well graded. Sand mostly f.-g., poorly graded, sub-angular to sub-rounded. Some Mn staining. Some organics and pulverized rock. Some calcareous material. Bedding massive. Low plasticity. 17% gravel, 38% sand, 45% clay.
BP00008AS	0.00/0.70		
	0.50/1.00		No recovery (12.3-13.0'), and (13.5-14.0').
BH00183AS	2.00/2.00	CLAYSTONE	14.0'-24.0': Top of Bedrock at approx. 16.0'. No core representing this interval. According to Well Site Field Log Claystone at 16.0' and Claystone at 17.2'. After 17.2' drilled to 24.0'. See log of 59794. BH00183AS (14.0'-16.0') with 4% sand, 21% silt, and 75% clay.
BH00184AS	1.20/1.20		No recovery (17.2-20.0'), and (20.0-24.0').

SAMPLE GRAIN SIZE: 0% 50% 100%
PERCENT RECOVERY: 0% 100%
DATUM (FT): 5996, 5995, 5994, 5993, 5992, 5991, 5990, 5989, 5988, 5987
DEPTH (FT): 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747917		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST 2081634		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							
				0.00 /6.80	5986	20				
					5985	21				
	BP00009AS				5984	22				
					5983	23				
					5982	24			SANDY SILTSTONE	24.0'-25.2': Sandy Siltstone with some Clay. Light olive gray (5 Y 4/1). Core indurated. Mod. to highly friable. Bedding massive to laminated. Silty laminae appear to be crossbedded. Sand is f g., rounded, well sorted. Some carbonaceous material. 33% sand, 60% silt, 7% clay.
				1.20 /2.00	5981	25				No recovery (25.2-26.0').
				0.85 /1.00	5980	26			CLAYSTONE	26.0'-26.85': Claystone. Med. dark gray (N4). Bedding massive. Moist. Trace caliche nodules. Slightly friable. Slightly to unweathered.
										No recovery (26.85-27.0').
					5979	27			CLAYSTONE	27.0'-30.4': Claystone with some Silt. Bedding massive, appears horizontal. Mod. friable. At 29.0', caliche layer approx. 2.0 in. thick. At 29.0' claystone with some to trace silt. 70 degree fracture with clay in filling, 2 in. hanging wall of well cemented (calcareous) sandstone 3 in. of foot wall with 2 m. iron nodules, appears disturbed clay/claystone with carbonate. 12% silt, 88% clay.
					5978	28				
				3.40 /5.00	5977	29				No recovery (30.4-32.0').
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747917	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST:	2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/23/95	

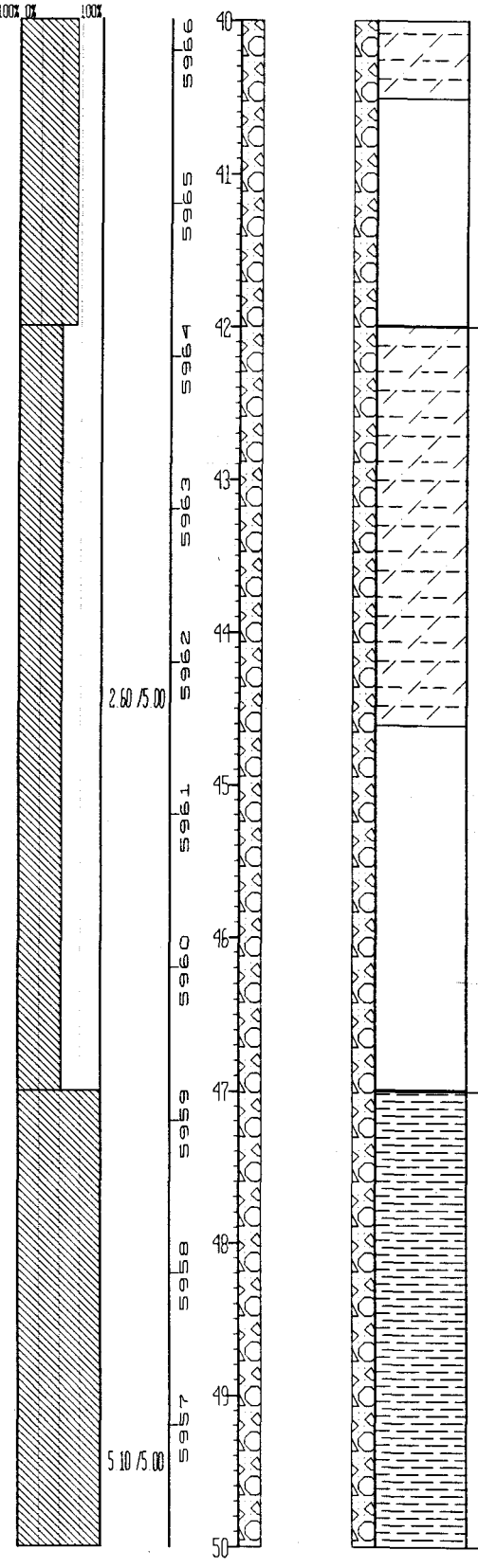
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.53'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5976	30				
					5975	31				
					5974	32			SILTY CLAYSTONE	32.0'-34.3' Silty Claystone. Med. dark gray (N4). Core moist. Bedding massive. Some fractures. Some FeO concretions. Possibly slickensides at approx. 32.8'. Visible lenses of silt. Slightly to mod. friable. No recovery (34.3-37.0')
					5973	33				
					5972	34				
				2.30 /5.00	5971	35				
					5970	36				
					5969	37			SILTY CLAYSTONE	37.0'-40.5' Silty Claystone. Same as above (reference interval 32.0'-34.3'). Some nodules of siltstone. Some brown mottling of siltstone laminae from 37.3'-37.6'. Competancy varies from very soft to very hard (taken from Well Site Field Log). No recovery (40.5-42.0')
					5968	38				
				3.50 /5.00	5967	39				
						40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT)	6006.20	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 747917	AREA IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	J. W. HARWELL	71194
EAST: 2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTY CLAYSTONE	42.0'-44.6': Silty Claystone. Same as above (reference interval 32.0'-34.3'). Varying competancy. Slumped beds of siltstone. Some claystone interbeds about 2.0 in. thick. No recovery (44.6-47.0')
CLAYSTONE	47.0'-50.0': Claystone with some Silt. Dark gray (N3). Bedding massive to laminated. Some organics, leaf imprints at approx. 47.5'. Bedding gets slightly disturbed around 48.8' to 50.0'. Visible silty laminations. Slightly friable. Trace carbonaceous material

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747917		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST 2081634		LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5956	50			CLAYSTONE	50.0'-52.0'. Claystone with some Silt. Same as above (reference interval 47.0'-50.0'). Dark gray (N3) to olive gray (5 Y 4/1).
					5955	51				
					5954	52			CLAYSTONE	52.0'-53.0'. Claystone. Med. dark gray (N4). Massive. Very soft. Plastic. Wet.
					5953	53			SILTY CLAYSTONE	53.0'-60.9'. Silty Claystone. Dark gray (N3) to olive gray (5 Y 4/1). Core hard to very hard. Slickensides at approx. 58.5', 75 degrees, possibly drilling induced. At approx. 58.8', visible laminations of siltstone. Some carbonaceous material, and nodules of siltstone. Thin bedded to laminated.
				1.70 /5.00	5952	54				No recovery (53.7-57.0').
					5951	55				
					5950	56				
					5949	57				
					5948	58				
					5947	59				
				4.25 /5.00		60				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

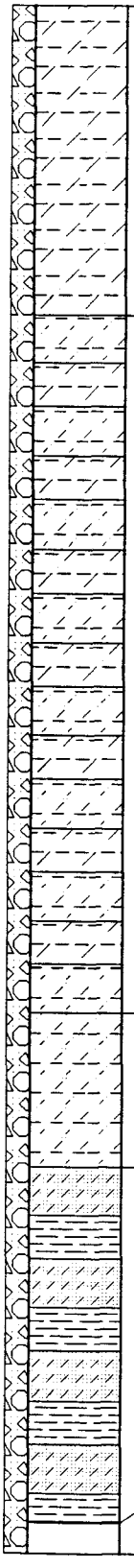
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5946	60				
					5945	61			CLAYSTONE	60.9'-61.5': Silty Claystone. Same as above (reference interval 53.0'-60.9'). Some FeO staining along fractures. Layers of lignite at approx. 61.0'. Increase in silt content with soft sediment deformation of laminae. Core dense. No recovery (61.5-62.0').
					5944	62			CLAYSTONE	62.0'-62.9': Claystone. Same as above (reference interval 53.0-60.9'). Becomes light olive gray (5 Y 5/2).
					5943	63			CLAYEY SILTSTONE	62.9'-63.7': Clayey Siltstone. Med. dark gray (N4). Bedding laminated. Some fractures filled with carbonaceous material. Core well cemented. Mod. hard. Slighly to mod. friable. 72% silt, 28% clay No recovery (63.7-66.0').
				1.70/4.00	5942	64				
					5941	65				
					5940	66			SILTY CLAYSTONE	66.0'-70.0': Silty Claystone. Light olive gray (5 Y 5/2) to olive gray (5 Y 4/1). Thin interbeds of siltstone and claystone. Some organics. Lignite at 67.5'. At approx. 68.4' increase in organics, leaf and stem imprints. Trace FeO staining along siltstone laminae. Trace crossbedding. 40% silt, 60% clay
				1.00/1.00	5939	67				
					5938	68				
					5937	69				
				5.10/5.00		70				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT): 6006.20	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747917	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST:	2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL: 5.00/5.00; 0.30/5.00
DATUM (FT): 5936, 5935, 5934, 5933, 5932, 5931, 5930, 5929, 5928, 5927
DEPTH (FT): 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

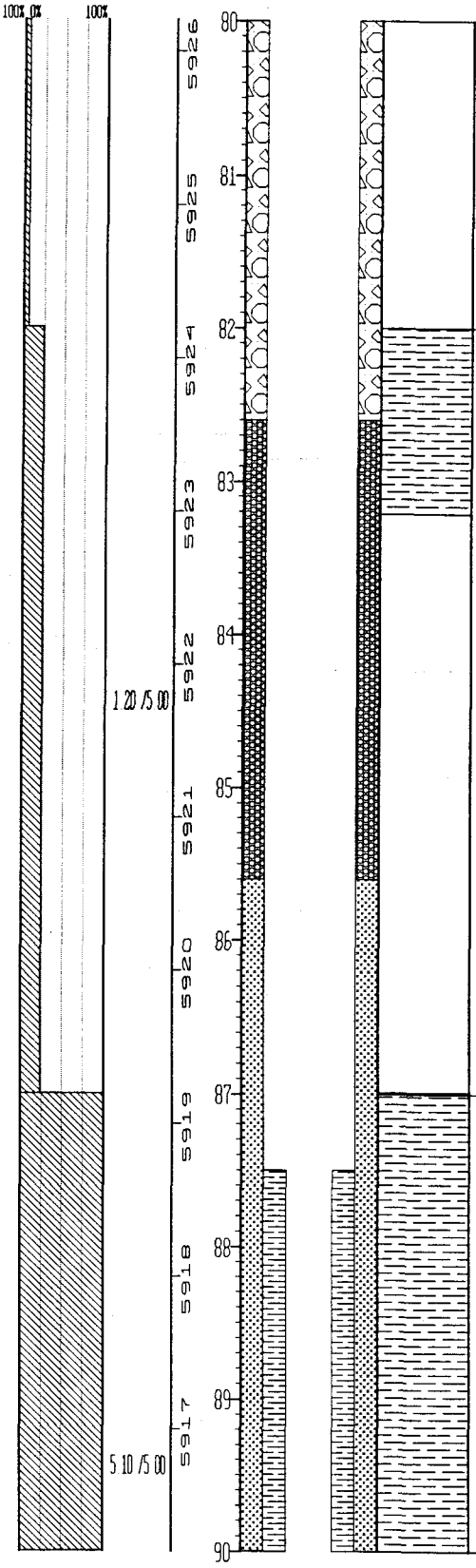


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTY CLAYSTONE	70.0'-72.0'. Silty Claystone. Same as above (reference interval 66.0'-70.0'). Thin lenses/laminae of siltstone. Increase in leaf imprints. Trace iron staining along siltstone laminae.
CLAYEY SILTSTONE	72.0'-76.5'. Clayey Siltstone with Silty Claystone interbeds. Olive gray (5 Y 4/1). Thinly bedded to laminated horizontal. Mod. hard. Some carbonaceous material. 72.0'-72.3' according to Well Site Field Log, gravel size claystone clasts with carbonaceous material. 65% silt, 35% clay
CLAYEY SILTSTONE	76.5'-77.5'. Calcareous Clayey Siltstone. Olive gray (5 Y 4/1). Thinly laminated to thinly bedded. Hard. Trace carbonaceous material.
SANDY SILTSTONE	77.5'-79.8'. Sandy Siltstone with Claystone interbeds. Light olive gray (5 Y 5/2). Thinly bedded to laminated. Some soft sediment deformation. Some fine sand.
NO RECOVERY	No recovery (79.8-82.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57. ASI RIG GEOLOGIST J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794 REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	82.0'-83.2' Claystone, slough. Predom. washed in from above mixed with alluvial gravel. No recovery (83.2-87.0').
CLAYSTONE	87.0'-90.0' Claystone. Med. dark gray (N4). Some siltstone lenses and thin beds (1 in.). Some organics, leaf imprints. Bedding massive to thin bedded. Siltstone iron cemented nodules at 88.5'.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747917	AREA: IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST:	2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5916	90			CLAYEY SILTSTONE	90.0'-98.6' Clayey Siltstone. Light olive gray (5 Y 5/2) to olive gray (5 Y 4/1). Mod. hard. Slightly friable. Thin bedded to thinly laminated. Bedding varies from horizontal up to 10 degrees, some crossbedding. Thin claystone laminae and thin beds up to 2.0 in., soft sediment deformation structures. Some carbonaceous material, leaf and wood imprints. Clay and silt content varies. Closed 60 degree fracture at 96.0'.
					5915	91				
					5914	92				
					5913	93				
				5.10 /5.00	5912	94				
					5911	95				
					5910	96				
					5909	97				
					5908	98				
					5907	99			CLAYSTONE	98.6'-99.1' Claystone. Dark gray (N3). Slightly friable. Mod. hard. Slightly plastic. Trace to some silt.
				2.10 /5.00					NO RECOVERY	No recovery (99.1-102.0').
						100				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT): 6006.20	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	7-7917	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST:	2381634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/23/95	

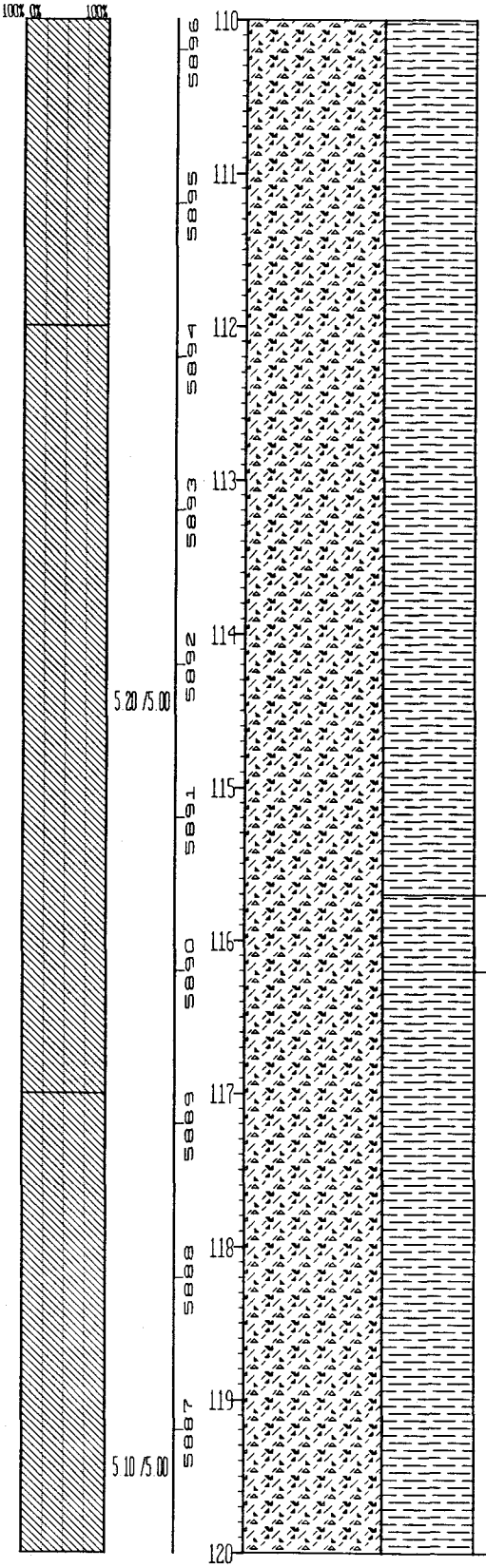
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5906	100				
					5905	101				
					5904	102			CLAYSTONE:	102.0'-115.7': Claystone. Same as above (reference interval 98.6'-99.1'). Med. dark gray (N4) to dark gray (N3), mottled. Some organics, little silt. Thin bedded to laminated. Core reacts with HCl, calcareous material present. At approx. 108.3' more organics, stem and leaf imprints. Fractures at approx. 106.5' and 106.8' are approx. 70-80 degrees, exhibits slickensides, possibly drilling induced (core run from 102.0'-107.0' appears to be disturbed from sample barrel). Color changes to olive gray (5 Y 4/1) from 106.9 to 108.0' then back to dark gray (N3) with med. dark gray (N4) interbeds. More organics at 110.0'.
					5903	103				
				5.10/5.00	5902	104				
					5901	105				
					5900	106				
					5899	107				
					5898	108				
				5.15/5.00	5897	109				
						110				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 150.00	GROUND ELEVATION (FT): 6006.20	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 747917	AREA: IHSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST: 2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE / DESCRIPTION

CLAYSTONE: 115.7'-116.2': Carbonaceous Claystone.

CLAYSTONE: 116.2'-120.0': Claystone. Same as above (reference interval 102.0'-110.0'). Some carbonaceous thin beds and laminae of claystone. Trace to some silty lenses. Carbonaceous material along fractures. At approx. 119.8', slickensides almost vertical, around 80-85 degrees.

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747917	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST 2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 5.15/5.00; 5.10/5.00

DATUM (FT): 5886, 5885, 5884, 5883, 5882, 5881, 5880, 5879, 5878, 5877

DEPTH (FT): 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	120.0'-128.0'. Claystone. Same as above (reference interval 102.0'-110.0'). At 124.0', 75 degree (approx.) slickensides. Trace FeO nodules. Abundt. organics, stem and various other imprints. Some siltstone iron stained clasts. Mottled siltstone laminae. Core has conchoidal fracture. Some organics, slightly Fe oxidized. Siltstone clasts, gravel size, fine to coarse.
SILTSTONE	128.0'-130.0'. Siltstone. Light olive gray (5 Y 5/2) to olive gray (5 Y 3/2) with some dark reddish brown (10 R 3/4). Thinly laminated, some laminae of claystone bedding near horizontal to 5 degrees, crossbedding, scour and trough structures. Some soft sediment deformation. Hard. Some calcareous and iron cementation.

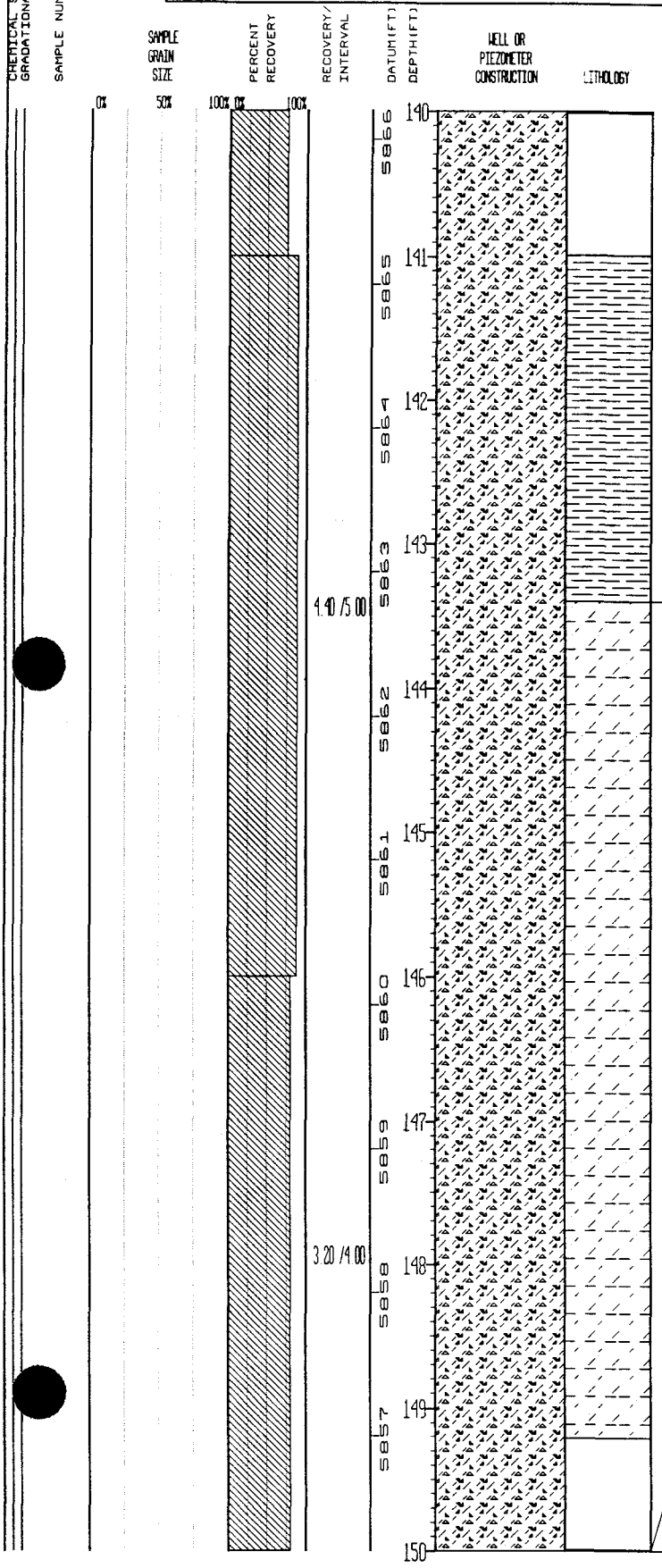
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 5006.20	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747917	AREA: IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST: J. W. HARWELL	71194
EAST: 2081634	LOCATOR NUMBER: I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED: 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0' BACKFILLED WITH NATIVE MATERIAL.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5876	130			CLAYSTONE	130.0'-131.8'. Claystone. Dark gray (N3) to light olive gray (5 Y 5/2). Exhibiting conchoidal fracturing from 130.0'-131.5'. Some leaf and stem imprints. Mod. hard. Thin beds and laminae of siltstone. Bedding near horizontal.
					5875	131				
					5874	132			CLAYSTONE	131.8'-143.4'. Claystone. Dark gray (N3). Massive to thin bedded. Mod. hard to soft. Slightly friable. Moist. Some organic/carbonaceous material. At 137.0'-137.6' some iron stained, coarse sand size siltstone clasts. No recovery (140.0'-141.0').
					5873	133				
				5.00 /5.00	5872	134				
					5871	135				
					5870	136				
					5869	137				
					5868	138				
				3.00 /4.00	5867	139				
						140				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00	GROUND ELEVATION (FT) 6006.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 01/23/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL, L. A. HOST, P. J. JORDAN. 71194 IS 6.0' SOUTH OF 59794. REFER TO LOG OF 59794 FOR 0.0'-25.2'. ADDITIONAL CENTRALIZERS AT 51.65'-52.79', 72.21'-73.38' AND 97.90'-99.07', 139.3'-150.0'. BACKFILLED WITH NATIVE MATERIAL.



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	143.4'-149.2': Sandy Clayey Siltstone. Light olive gray (5 Y 5/2). Bedding gradational. Some organics/carbonaceous material. Hard. Bedding appears massive with some laminations. Some thin claystone interbeds. Some v.f.g. sand, well sorted, predom. well rounded quartz. Some soft sediment deformation structures. 38% sand, 62% clay.
	No recovery (149.2-150.0').

Total Depth Drilled: 150.00 Total Depth Casing: 99.50
Bottom of Filter Pack: 100.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 34.30	GROUND ELEVATION (FT) 5934.40	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747578	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	71294
EAST	2082835	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.50	DATE DRILLED 02/01/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	5934	0			ML	0.0'-2.0' Sandy Silt with some Gravel and Clay. Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) where FeO stained. Core indurated. Bedding not apparent. Trace micaceous material. Some FeO concretions. Trace roots. Sand predom. f.g., trace m.g. and c.g., well sorted, rounded. Gravel is fine, sub-angular to sub-rounded. Dry to moist. Mod. plasticity. Stiff. 23% gravel, 31% sand, 32% silt, 14% clay.
				2.00 /2.00	5933	1				
				2.00 /2.00	5932	2			CL	2.0'-5.1' Sandy Clay with some Silt and trace Gravel. Olive gray (5 Y 4/1) to dark yellowish orange (10 YR 6/6) where FeO stained, to mod. yellowish brown (10 YR 5/4). Bedding not apparent. Trace roots. Low plasticity. Trace Mn staining. Sand is m.g. to f.g. Gravel 4-5% predom. fine, trace coarse granite clasts. Dry. Some calcareous material. Trace carbonaceous material. Some small FeO concretions. At 5.0'-5.1' small slide surface between claystone and alluvium, approx. 80 degrees. 5% gravel, 34% sand, 12% silt, 49% clay.
				2.00 /2.00	5931	3				
				1.10 /2.00	5930	4				No recovery (5.1-6.0').
					5929	5				
					5928	6			CL	6.0'-7.2' Sandy Clay to Clayey Sand with some Gravel. Core dry to moist. All core was used for sample, therefore the description is taken from Well Site Field Log.
	BH00204AS			2.00 /2.00	5927	7				
	BH00205AS				5926	8			CLAYSTONE	7.2'-10.0' Top of Bedrock at 7.2'. Claystone. Brecciated. Mod. to strongly weathered. Trace caliche. Some fresh claystone clasts in with crushed clay matrix. Dry. Fe stained. Sample description taken from Well Site Field Log. Core taken for sample BH00205AS.
				2.00 /2.00	5925	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 34.30	GROUND ELEVATION (FT) 5924.40	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747578		AREA THSS 115	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	71294
EAST 2082835		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6.63	DATE DRILLED 02/01/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: P. J. JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH0026AS	0% 50% 100%	0% 100%	1.70 /2.00	5924	10			CLAYSTONE	10.0'-15.3' Claystone. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Grades to pale yellowish brown (10 YR 6/2). Some dark yellowish orange (10 YR 6/6) where FeO stained. Claystone fractured. FeO staining along fractures, trace MnO2 staining. Some organics. Some Fe concretions at 12.4'. Fractures angle around 10 to 80 degrees. Slightly friable. Dry. Massive. Trace caliche. Mod. weathered. Increase in Mn staining at 13.2'. Core appears to become platy at 13.2'. At 14.75' caliche in filling of 45 degree fracture. 100% clay No recovery (11.7-12.0'), (13.3-13.5') and (14.4-14.5') No recovery (15.3-15.5')
				1.30 /1.50	5923	11				
				0.90 /1.00	5922	12				
				0.80 /1.00	5921	13				
				2.00 /2.00	5920	14				
	BP0002GAS			1.00 /1.00	5919	15			CLAYSTONE	15.5'-20.0' Claystone. Pale yellowish brown (10 YR 6/2) to light olive gray (5 Y 5/2) at 17.5'. Slightly to mod. weathered. FeO stained fracture at 18.0', approx. 80 degrees. Degree of weathering lessens with depth to slightly weathered. 6 in. Fe stained open fracture from 15.5' to 16.0'. Core becomes silty at 19.0', increase in laminations.
				2.00 /2.00	5918	16				
					5917	17				
					5916	18				
					5915	19				
						20				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 34.30	GROUND ELEVATION (FT):	5934.40	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747578	AREA: IHSS 115	CASING DIAMETER (IN):		GEOLOGIST:	P. J. JORDAN	71294
EAST: 2082835	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	6.50	DATE DRILLED:	02/01/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.50/0.50	5914	20			SILTY CLAYSTONE	20.0'-21.0': Silty Claystone. Olive gray (5 Y 4/1). Possible healed fracture at around 20.0', approx. 60 degree angle. Dry. Thinly laminated (clay and silt laminae).
	BH00208AS			1.00/1.00	5913	21			CLAYSTONE	21.0'-26.0': Claystone. Light olive gray (5 Y 6/1). Some pale reddish brown (10 R 5/4) oxide, mottled. Fractures heavily oxidized. Becomes damp to moist at 22.0'.
				2.00/2.00	5912	22				
					5911	23				
				2.00/2.00	5910	24				
	BH00209AS				5909	25				
				2.00/2.00	5908	26			SILTY CLAYSTONE	26.0'-28.0': Silty Claystone. Light olive gray (5 Y 5/2) to dark yellowish orange (10 YR 6/6). Laminated. Soft sediment deformation structures. Mod. weathered. Abundt. organics, mostly leaf imprints, stems. Leaf imprints FeO oxidized to 30.0'. Core cleaves easily, breaking horizontally. Find leaf imprints on fracture surfaces where core cleaves (breaks) along laminations. Both shades of FeO appear mottled (10 YR 6/6 and 10 R 5/4). Some siltstone laminae from 27.0'-27.8'. Slightly friable. Becomes damp to moist.
					5907	27				
				0.80/0.80	5906	28			SILTSTONE	28.0'-28.8': Siltstone. Mod. brown (5 YR 3/4) to mod. yellowish brown (10 YR 5/4). Strongly weathered. Iron cemented. Possibly brecciated. Wet at top of interval dry at bottom. Hard. Dusky brown (5 YR 2/2) iron staining along fractures.
				2.00/2.00	5905	29			SILTY CLAYSTONE	28.8'-30.0': Silty Claystone. Olive gray (5 Y 4/1). Trace Fe staining. Trace carbonaceous material. Hard. Slightly to mod. weathered.
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT): 34.30	GROUND ELEVATION (FT): 5934.40	PROJECT NUMBER: 305-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 747578	AREA: IHSS 115	CASING DIAMETER (IN):	GEOLOGIST: P. J. JORDAN	71294	
EAST: 2082835	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 6.50	DATE DRILLED: 02/01/95		

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: P. J. JORDAN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5904	30			SILTY CLAYSTONE:	30.0'-30.8': Silty Claystone. Same as above (reference interval 28.8'-30.0'). Becomes massive. Slightly weathered. Core disturbed by Moss sampler.
				1.00 /2.00	5903	31			CLAYSTONE:	30.8'-34.3': Claystone. Dark gray (N3). Unweathered. Trace lignite. Damp to dry. Indurated. Core broken by Moss sampler. Slightly friable to friable. Massive. (Very hard drilling).
					5902	32				No recovery (31.8-32.8')
	BH0210AS			1.50 /1.50	5901	33				
					5900	34				
					5899	35				Total Depth Drilled: 34.30
					5898	36				
					5897	37				
					5896	38				
					5895	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5983.80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747027	AREA '	CASING DIAMETER (IN) 2.00	GEOLOGIST A. R. AGLIARDO	71394
EAST	2080265	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6.30	DATE DRILLED 02/20/95	

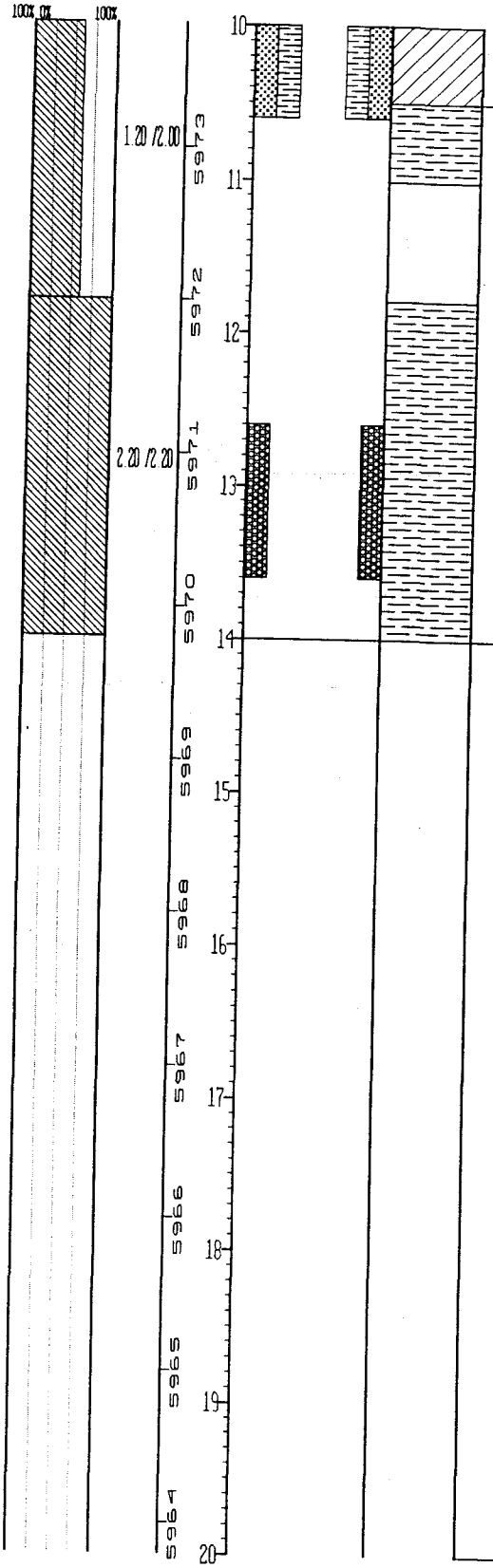
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: A. R. AGLIARDO

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.85 /1.80	5983	0			GM	0.0'-2.7' Sandy Gravel with some Silt and trace Clay. Dark yellowish brown (10 YR 4/2) to mod. yellowish brown (10 YR 5/4). Gravel is coarse to fine, sub-angular to sub-rounded, well graded, avg. 0.75 in. Predom. quartzite gravel, grayish red (5 R 4/2). Sand is c.g. to f.g., sub-angular to sub-rounded, well graded. Low plasticity. Moist. Dense. Abundt. pulverized rock, some rock flour. Some micaceous material. 46% gravel, 43% sand, 8% silt, 3% clay. No recovery (0.85-1.8') and (2.7-3.8')
				0.90 /2.00	5981	3				
	BH0025AS			1.60 /2.00	5979	5			GC	3.8'-7.0' Sandy Gravel with some Clay and Silt. Mod. yellowish brown (10 YR 5/4). Matrix dark greenish gray (5 GY 4/1). SOme dark yellowish orange (10 YR 6/6). Core indurated, stiff. Abundt. pulverized cobbles of quartzite. Gravel and sand same as above (reference interval 0.0'-3.8'). Some micaceous and organic material. Bedding not apparent. Low plasticity. Dense. 41% gravel, 37% sand, 15% clay, 7% silt. No recovery (5.4-5.8') and (7.0-9.8')
				1.20 /2.00	5977	7				
				0.00 /2.00	5975	9			CL	9.8'-10.5' Sandy Clay with some Gravel and trace Silt and Cobbles. Light olive gray (5 Y 5/2) and dark yellowish orange (10 YR 6/6). Sand is f.g., sub-rounded, poorly graded, well sorted. Mod. palsticity. Damp to moist. 14% gravel, 26% sand, 2% silt, 58% clay.
					5974	10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 14.00	GROUND ELEVATION (FT):	5983.80	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747027	AREA: '	CASING DIAMETER (IN):	2.00	GEOLOGIST:	A. R. AGLIARDO	71394
EAST:	2080265	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	6.30	DATE DRILLED:	02/20/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST: A. R. AGLIARDO

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50%)
PERCENT RECOVERY (100% 0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



CLAYSTONE: 10.5'-14.0': Top of Weathered Bedrock at 10.5'. Claystone with trace Silt. Olive gray (5 Y 4/1). Some dark yellowish orange (10 YR 6/6) where core is oxidized and weathered (strongly to mod.). Heavy Fe and MnO2 staining and caliche along fractures and around burrow holes (approx. 0.50 in. in diameter). Thin laminations at 12.0', otherwise bedding is massive with some soft sediment structures. Fractures at 12.0' between 10 and 20 degrees and fractures at 13.8', 30 degrees.
4% silt, 96% clay.

No recovery (11.0-11.8').

Total Depth Drilled: 14.00 Total Depth Casing: 12.60
Bottom of Filter Pack: 10.60

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 48.10	GROUND ELEVATION (FT): 5997.70	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747882	AREA: THSS 115	CASING DIAMETER (IN): 2.00	GEOLOGIST: J. W. HARWELL	71494
EAST:	2082014	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN): 5.60	DATE DRILLED: 02/14/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. 45.3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN).

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00 /4.00	5997, 5996	0, 1, 2				0.0'-29.0'. See log 57194 for sample description. Shelby tube sample, 4.0'-5.4', for slide plane as observed in boring 57194. According to Well Site Field Log: Gravelly clay fill material on top of tube and severely weathered claystone on bottom.
	GH00243AS			1.50 /1.50	5995, 5994, 5993	3, 4, 5				
	BP00042AS BP00043AS				5992, 5991, 5990, 5989, 5988	6, 7, 8, 9, 10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT): 48.10	GROUND ELEVATION (FT):	5997.70	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747882	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	J. W. HARWELL	71494
EAST:	2082014	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	02/14/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. 45.3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN)

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00 /23.50	5987	10				
					5986	11				
					5985	12				
					5984	13				
					5983	14				
					5982	15				
					5981	16				
					5980	17				
					5979	18				
					5978	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48.10	GROUND ELEVATION (FT) 5997.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747882	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71494
EAST	2082014	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 02/14/95	

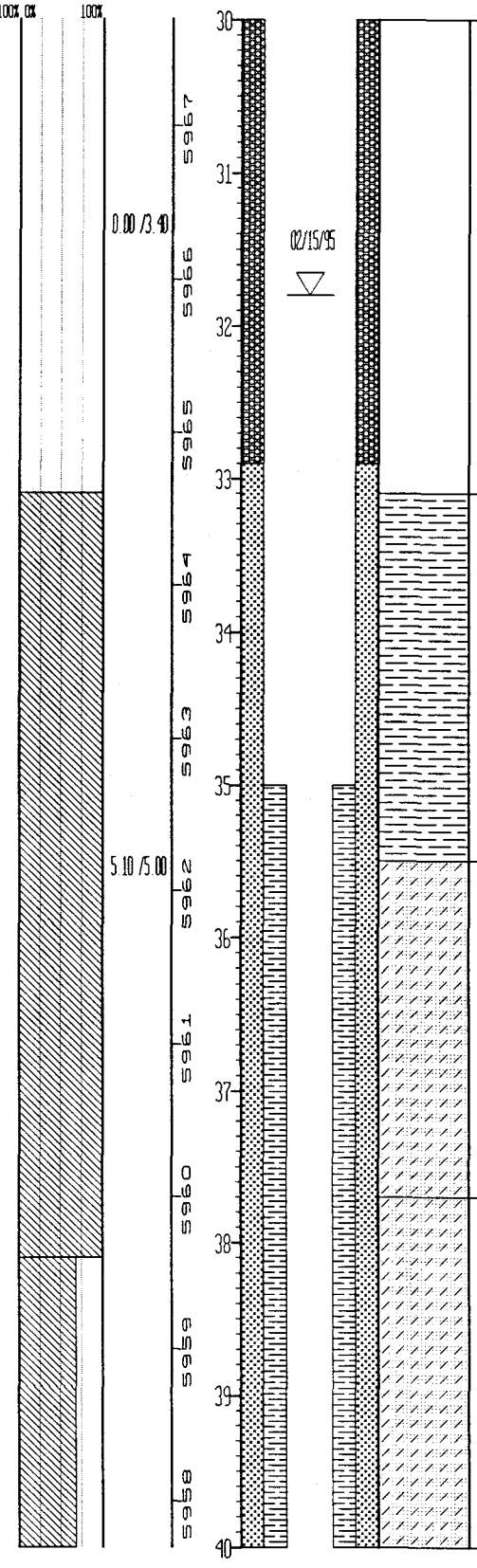
REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57; ASI RIG GEOLOGIST: J. W. HARWELL. 45.3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN).

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GP0045AS			0.70/0.70	5977, 5976, 5975, 5974, 5973, 5972, 5971, 5970, 5969, 5968	20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30	03/16/95		CLAYSTONE	29.0'-29.7': Claystone. Med. dark gray (N4) to olive gray (5 Y 4/1). Unweathered. Laminated. Core dry. Core cleaves easily, breaks horizontally. Imprint (unrecognizable) at 29.5'. Trace fe along fractures. Sediments appear disturbed. No recovery (29.7-30.0').

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48.10	GROUND ELEVATION (FT) 5997.70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747882		AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	71494
EAST 2082014		LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 02/14/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. 45.3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN).

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



30.0'-33.1': Grout from surface casing installation.

CLAYSTONE: 33.1'-35.5': Claystone with some Silt. Med. dark gray (N4). Thin bedded to laminated. Vertical fracture at 33.2'-33.5'. Hard. Indurated from 33.7'-35.5'. Some hard siltstone nodules, sub-rounded, coarse to fine gravel size in claystone matrix. Trace to some calcareous cement. 10% silt, 90% clay.

SANDY SILTSTONE: 35.5'-37.7': Calcareous Sandy Siltstone. Pale olive gray (10 Y 6/2) to olive gray (5 Y 4/1). Thin bedded to laminated. Mod. hard to hard. Well cemented from 35.5'-36.3' (calcareous). Slightly weathered. Mod. cemented and mod. hard, slightly friable to 37.7' with increasing clay content. Crossbedded from 36.0'-36.3'. Increase in clay content from 36.5'-37.7' with soft sediment deformation structures. Sand, f.g., well rounded quartz.

SANDY SILTSTONE: 37.7'-41.5': Sandy Siltstone (non-calcareous). Olive gray (5 Y 4/1). Slightly weathered. Thin bedded to laminated. Trace hard siltstone nodules. Trace calcareous cemented laminae and thin beds. Mod. hard. Mod. friable. Mod. induarated.

No recovery (41.5-43.1').

GP00048AS

STATE PLANE COORDINATE:		TOTAL DEPTH (FT): 48.10	GROUND ELEVATION (FT):	5997.70	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747882	AREA: IHSS 115	CASING DIAMETER (IN):	2.00	GEOLOGIST:	J. W. HARWELL	71494
EAST:	2082014	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	02/14/95	

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57. ASI RIG GEOLOGIST: J. W. HARWELL. 45.3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN).

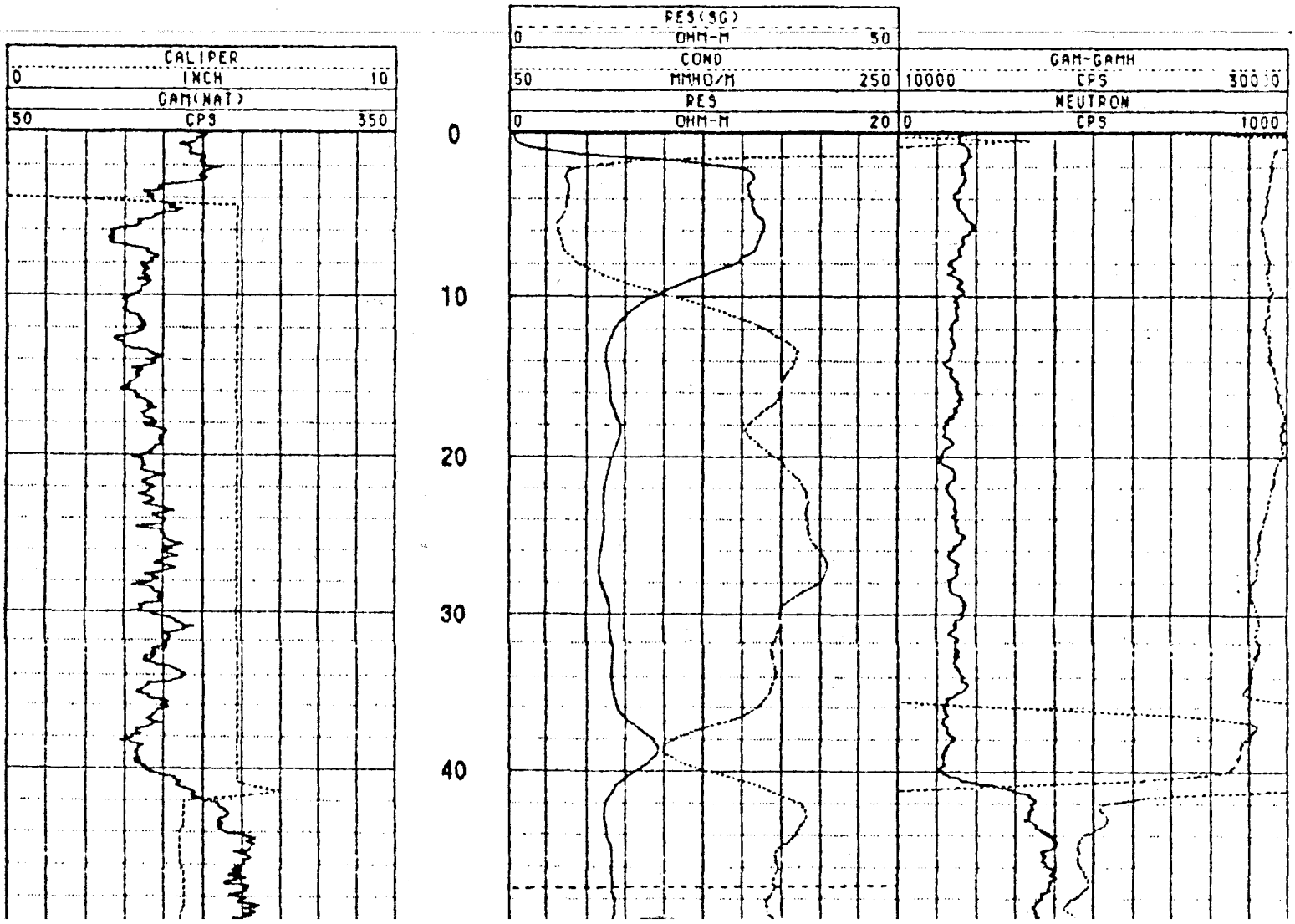
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	HP0049HS	0% 50% 100%	0% 100%	3.40/5.00	5957	40				
					5956	41				
					5955	42				
					5954	43			CLAYSTONE	43.1'-47.5': Claystone. Olive gray (5 Y 4/1). Core very soft. Moist. At 43.8' core is dry, very stiff. Some organics. Possible slickensides at 45.8', approx 30 degrees, apparently drilling induced. Core grades to dark gray (N3) to grayish black (N2). Bedding massive. Slightly friable.
					5953	44				
				4.40/5.00	5952	45				No recovery (47.5-48.1').
					5951	46				
					5950	47				
					5949	48				Total Depth Drilled: 48.10 Total Depth Casing: 42.00 Bottom of Filter Pack: 42.00
					5948	49				
						50				

Century GEOPHYSICAL CORP.

56694

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 56694				
LOCATION/FIELD	: OU 5				
COUNTY	: JEFFERSON				
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 11/23/94	PERMANENT DATUM	:	ELEVATIONS	
DEPTH DRILLER	: 150.7	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 147.40	LOG MEASURED FROM	: G.L.	DF	:
LOG TOP	: -7.00	DRL MEASURED FROM	: G.L.	GL	:
CASING DRILLER	: 41	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .5	RECORDED BY	: R.FEDERWISCH		
BIT SIZE	: 3.9	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 13	RM	: -	TYPE	: 9067C
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 4
FLUID DENSITY	: 1	MATRIX DELTA T	: 1	PLOT	: ROCKY 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 1	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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RES(SG)
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NEUTRON
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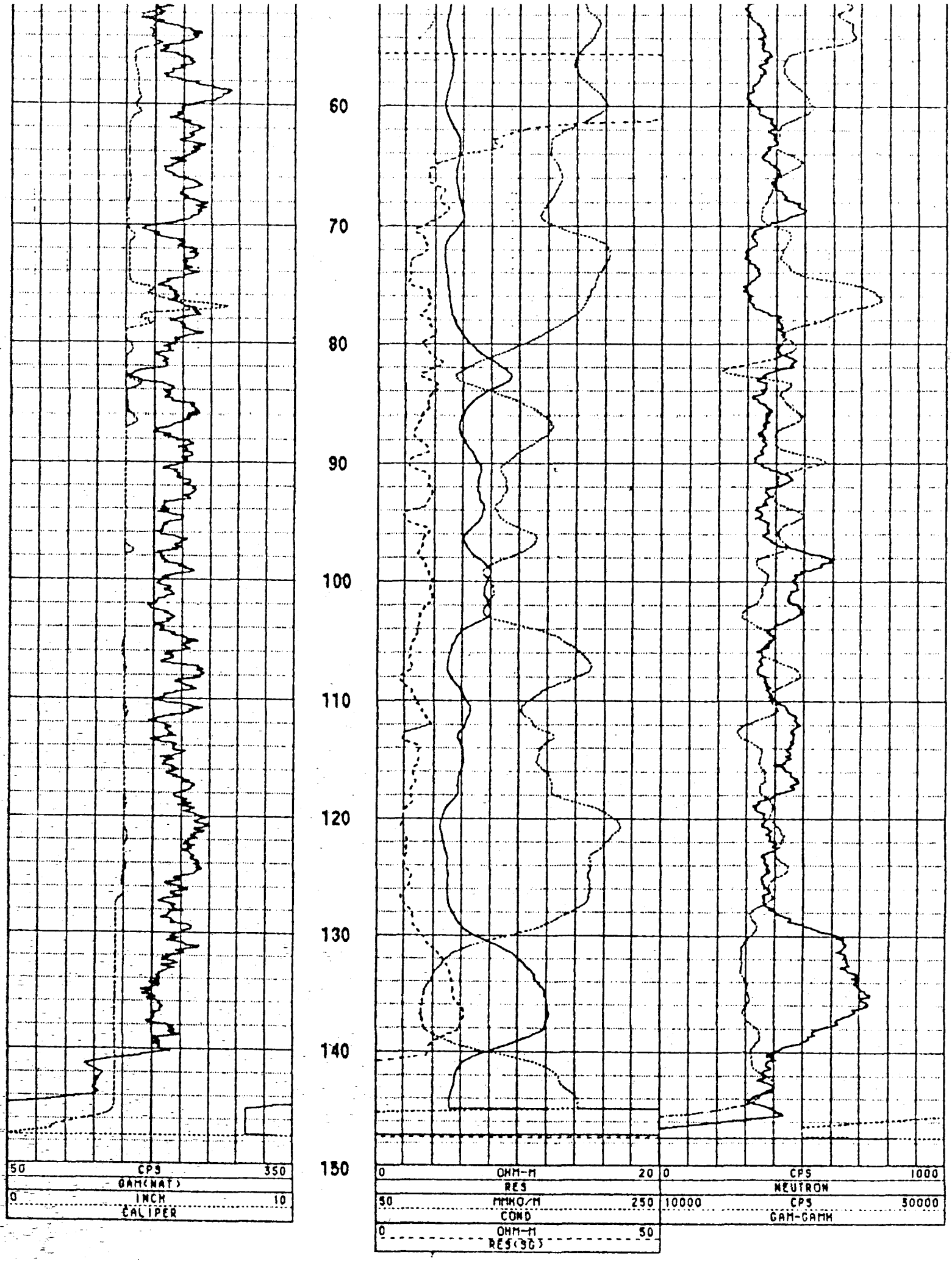
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OHM-M
20
RES
50
MMHO/M
250
COND
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OHM-M
50
RES(3C)
0
CPS
1000
NEUTRON
10000
CPS
50000
GAM-GAMM

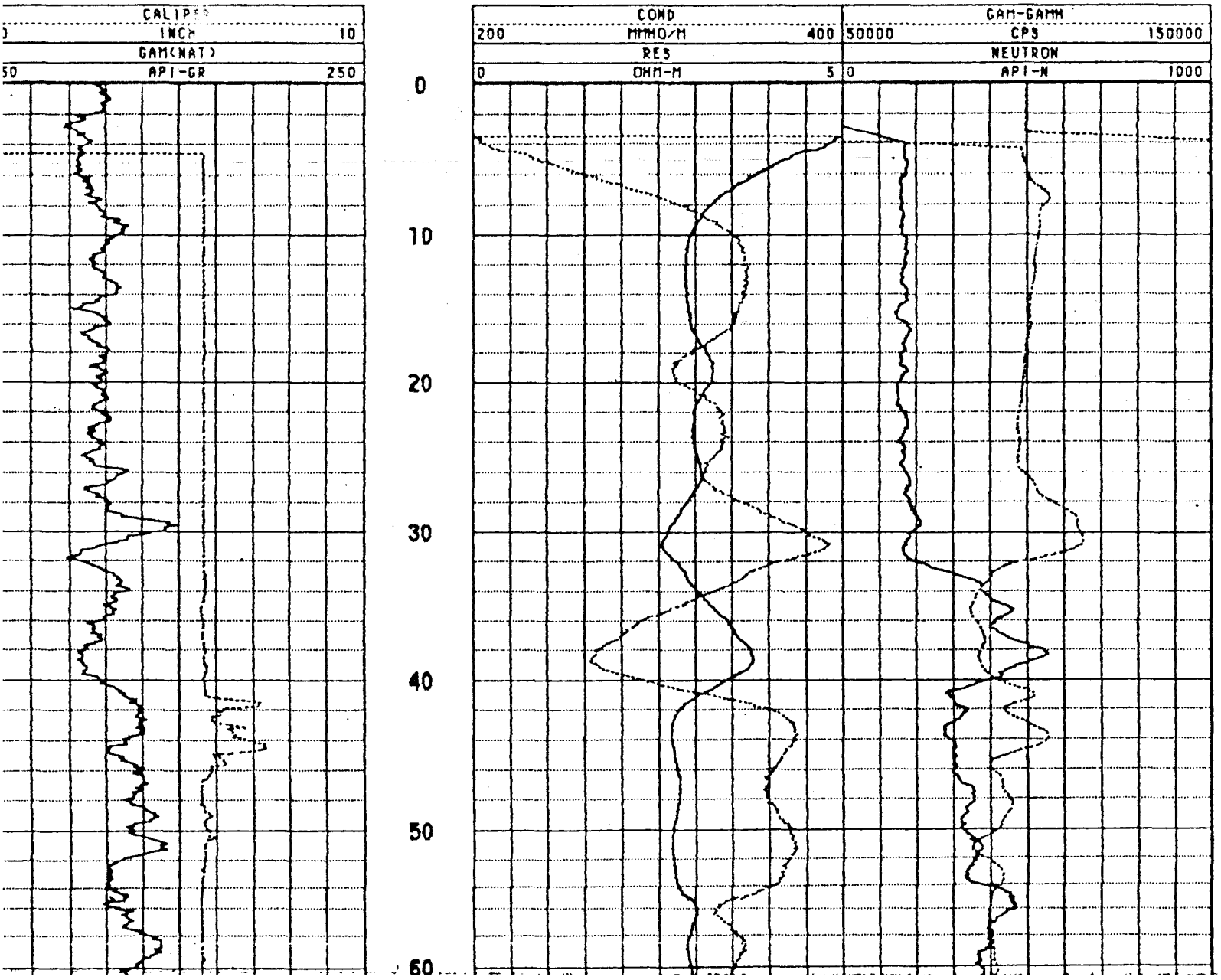
Century GEOPHYSICAL CORP.

57194

COMPANY	: A.S.I.				
WELL	: 57194				
LOCATION/FIELD	: OU-5				
COUNTY	: JEFFERSON				
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 02/03/95	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 150.0	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 150.00	LOG MEASURED FROM	: T.O.C.	DF	:
LOG TOP	: -2.50	DRL MEASURED FROM	: GL	GL	:
CASING DRILLER	: 32	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .5	RECORDED BY	: D.STEWART		
BIT SIZE	: 5.625	BOREHOLE FLUID	: H2O	FILE	: PROCESSED
MAGNETIC DECL.	: 11	RM	: -	TYPE	: 9510A
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 9
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: RF 1
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: -	THRESH	: 500000
REMARKS	:				

OTHER SERVICES:
RES
DENSITY
CALIPER

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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API-GR
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COND
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MMHO/M
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RES
OHM-M
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CPS
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NEUTRON
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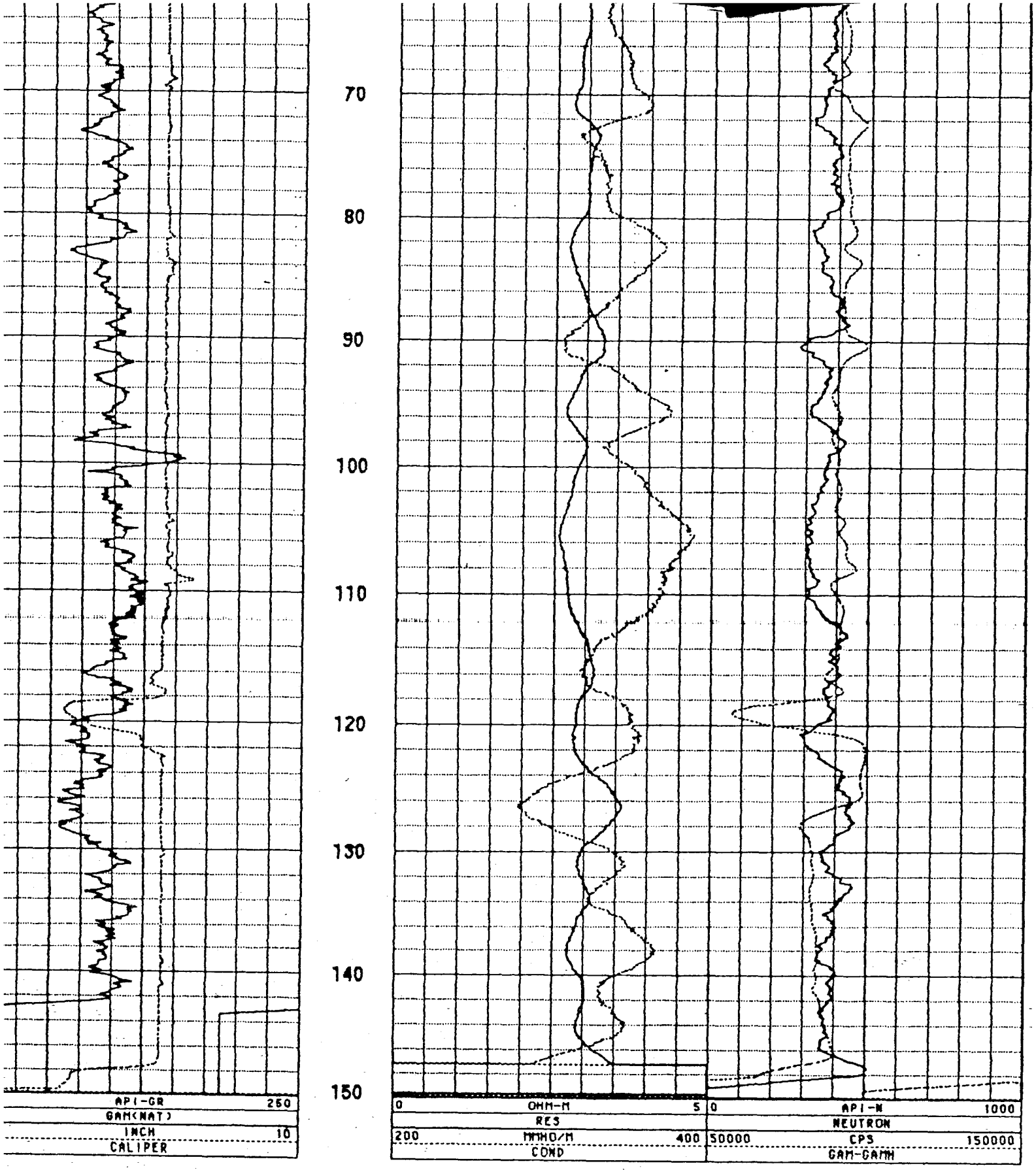
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CALIPER
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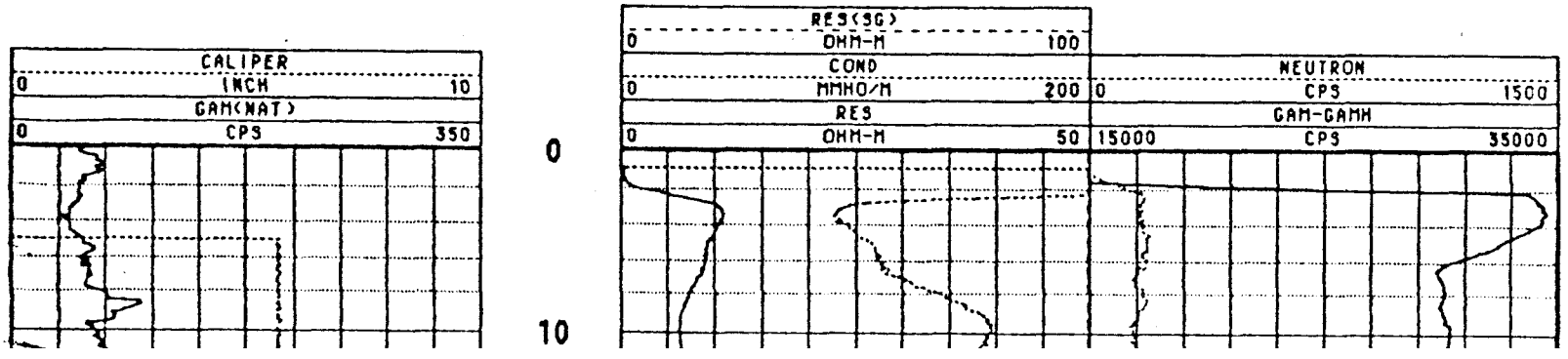
OHM-M
5
RES
200
MMHO/M
400
COND
0
API-N
1000
NEUTRON
50000
CPS
150000
GAM-GAMM

Century GEOPHYSICAL CORP.

57594

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 57594				
LOCATION/FIELD	: OU 5				
COUNTY	: JEFFERSON				
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 11/11/94	PERMANENT DATUM	:	ELEVATIONS	
DEPTH DRILLER	: 105	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 106.70	LOG MEASURED FROM	: G.L.	DF	:
LOG TOP	: -4.20	DRL MEASURED FROM	: G.L.	GL	:
CASING DRILLER	: 24	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .25	RECORDED BY	: R.FEDERWISCH		
BIT SIZE	: 5.6	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 13	RM	: 48.59	TYPE	: 9067C
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 0
FLUID DENSITY	: 1	MATRIX DELTA T	: 1	PLOT	: ROCKY 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 1	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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GAM(NAT)
0 CPS 350
RES(SG)
0 OHM-M 100
COND
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RES
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NEUTRON
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GAM-GAMM
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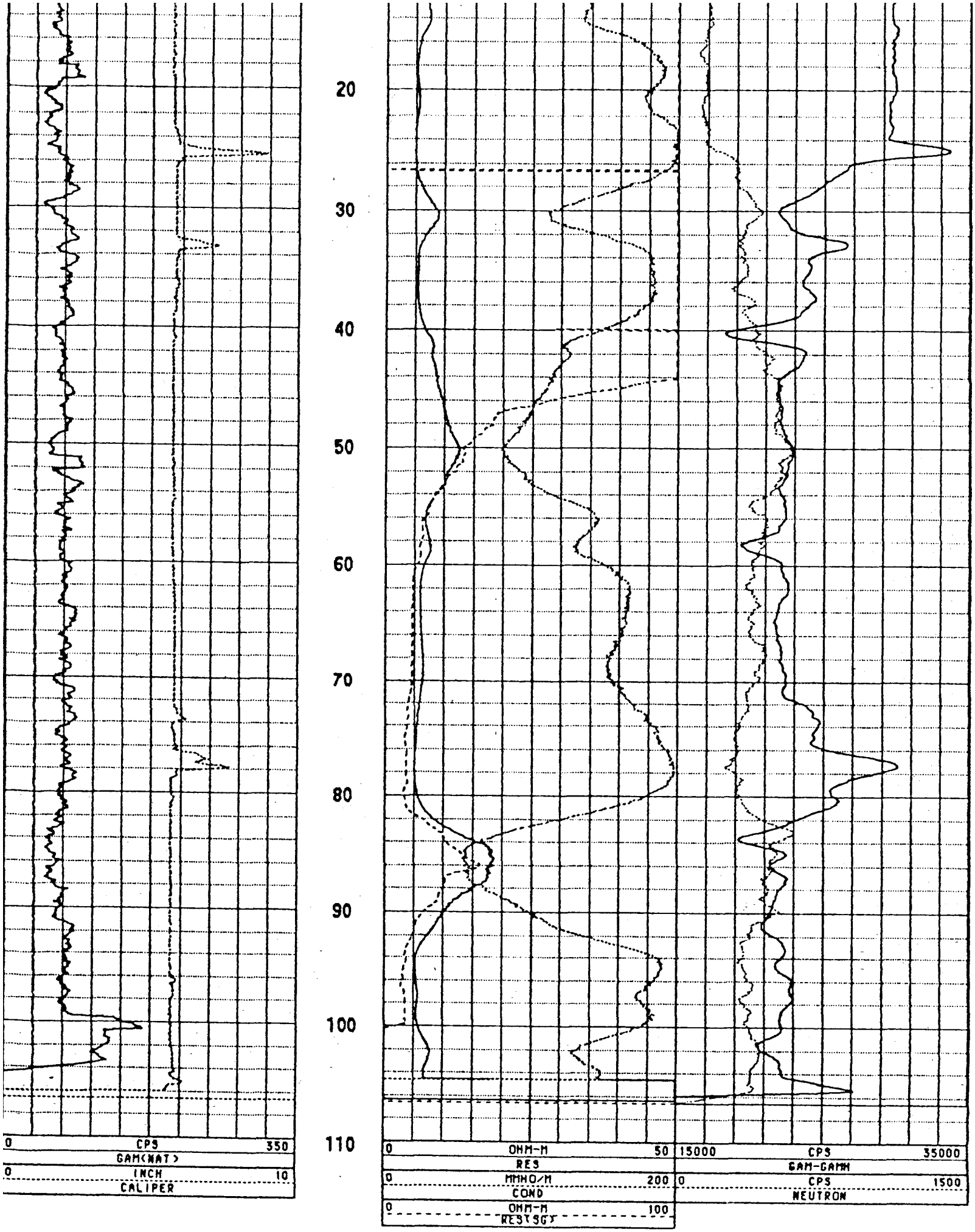
0
10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60
70
80
90
100
110
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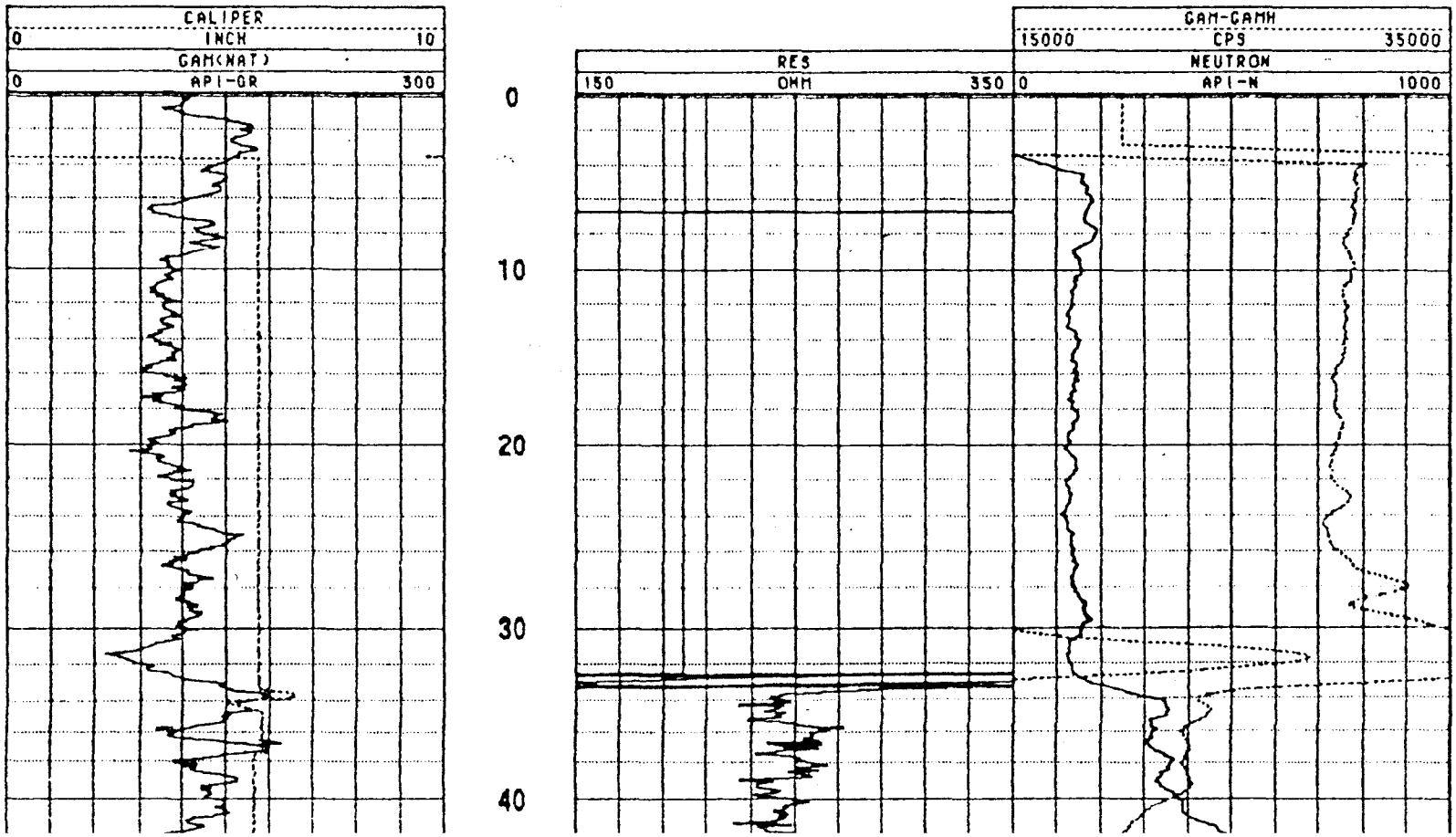
CPS
350
GAM(NAT)
0
INCH
10
CALIPER
0
OHM-M
50
RES
0
MMHO/M
200
COND
0
OHM-M
100
RES(SG)
15000
CPS
35000
GAM-GAMM
0
CPS
1500
NEUTRON

Century GEOPHYSICAL CORP.

59894

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 59894			RES	
LOCATION/FIELD	: OU-5			DENSITY	
COUNTY	: JEFFERSON			CALIPER	
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 01/13/95	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 132.5	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 132.10	LOG MEASURED FROM	: T.O.C.	DF	:
LOG TOP	: -2.50	DRL MEASURED FROM	: GL	GL	:
CASING DRILLER	: 32	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .5	RECORDED BY	: D.STEWART		
BIT SIZE	: 5.625	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 11	RM	: -	TYPE	: 9067A
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 0
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: RF 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: -	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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GAM(NAT)
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GAM-GAMM
15000 CPS 35000
NEUTRON
0 API-N 1000
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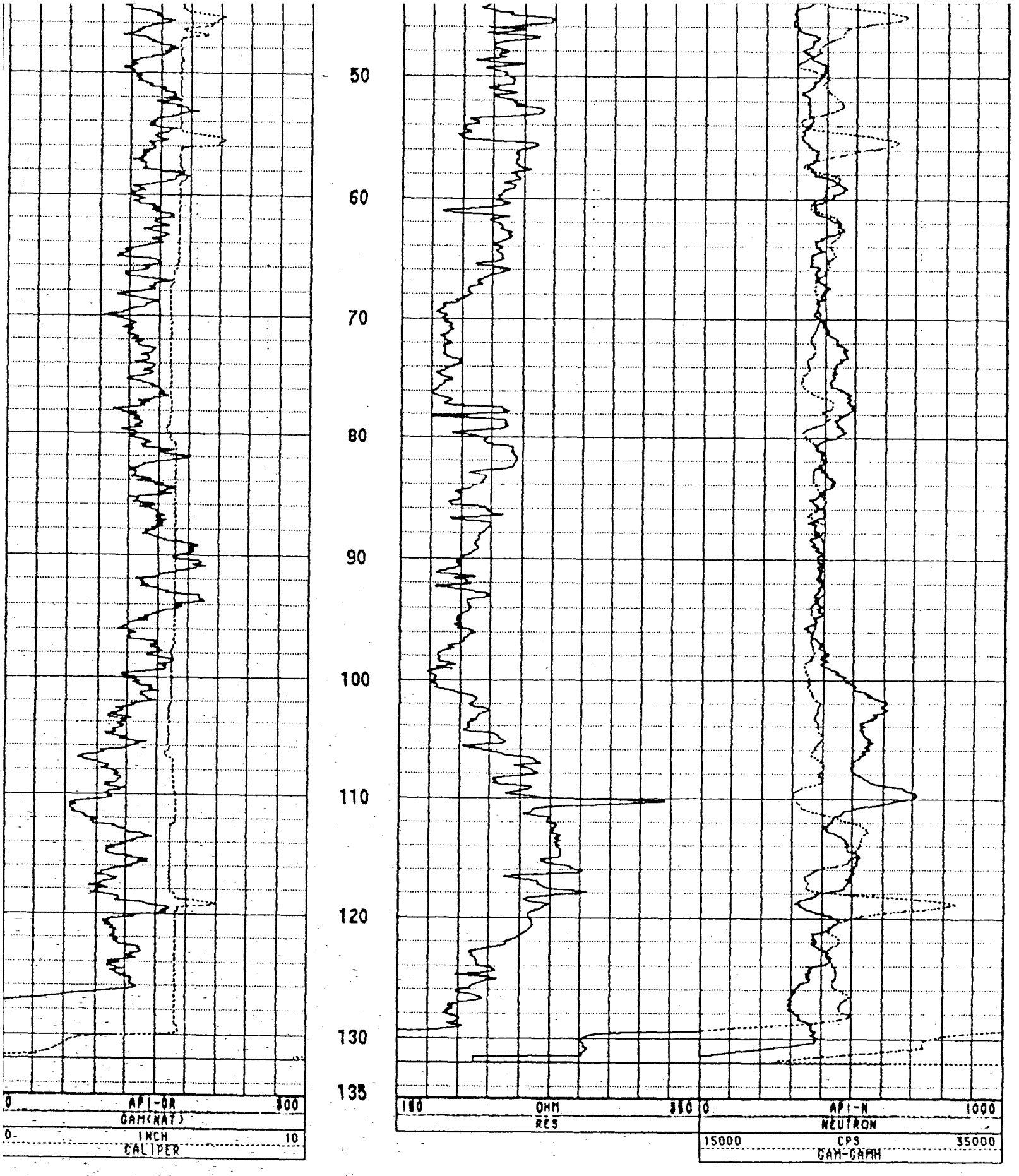
30
40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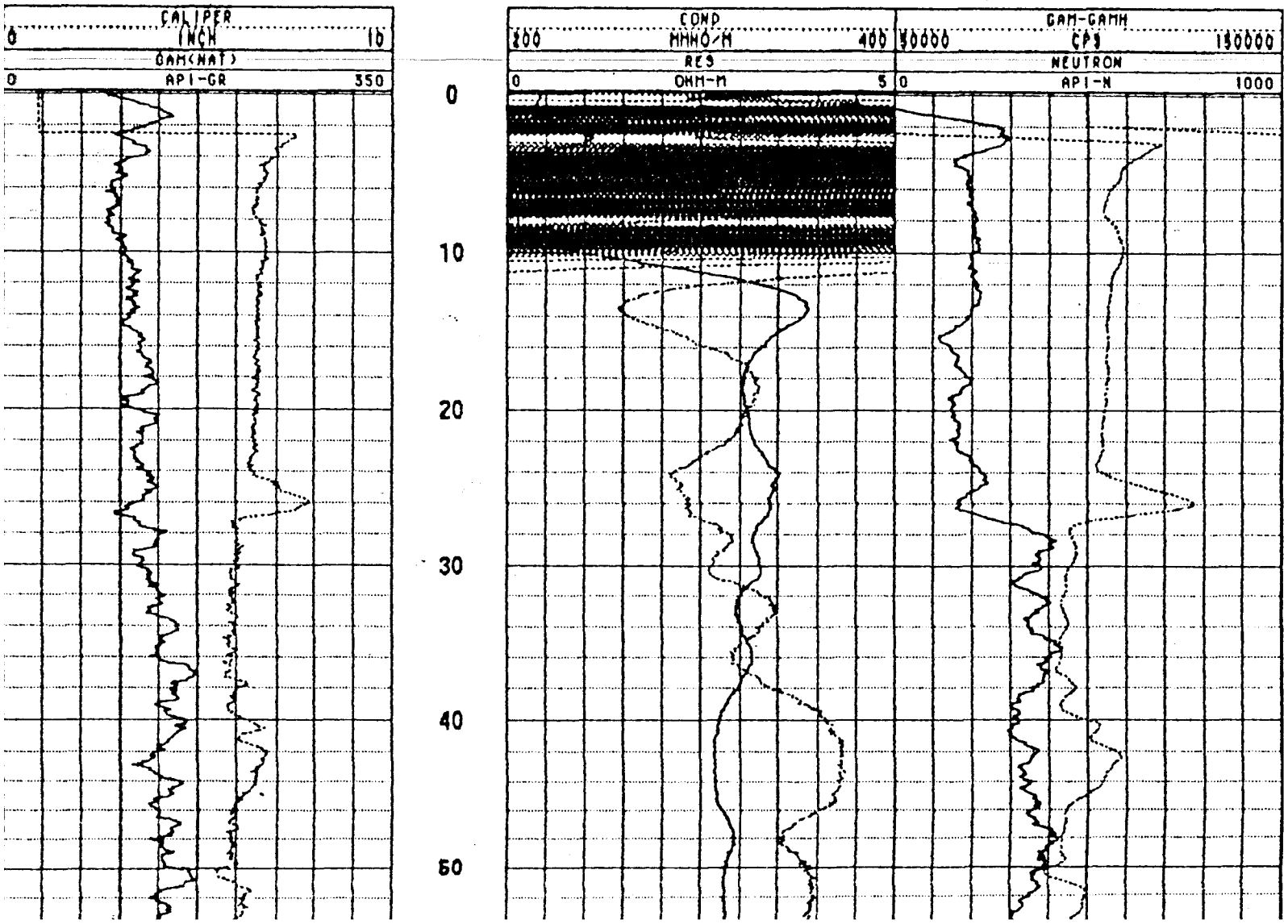
10
CALIPER
160
OHM
360
RES
0
API-N
1000
NEUTRON
15000
CPS
35000
GAM-GAMM

Century GEOPHYSICAL CORP.

71194

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 71194			RES	
LOCATION/FIELD	: OU-5			DENSITY	
COUNTY	: JEFFERSON			CALIPER	
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 01/24/95	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 150.0	ELEV. PERM. DATUM:		KB	:
LOG BOTTOM	: 145.40	LOG MEASURED FROM:	T.O.C.	DF	:
LOG TOP	: -7.80	DRL MEASURED FROM:	GL	GL	:
CASING DRILLER	: 26	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS:	.5	RECORDED BY	: D.STEWART		
BIT SIZE	: 5.625	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 11	RM	: -	TYPE	: 9510A
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 5
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: RF 1
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: -	THRESH:	500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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API-GR
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10
20
30
40
50
COND
200
MMHO/M
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RES
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OHM-M
5
GAM-GAMM
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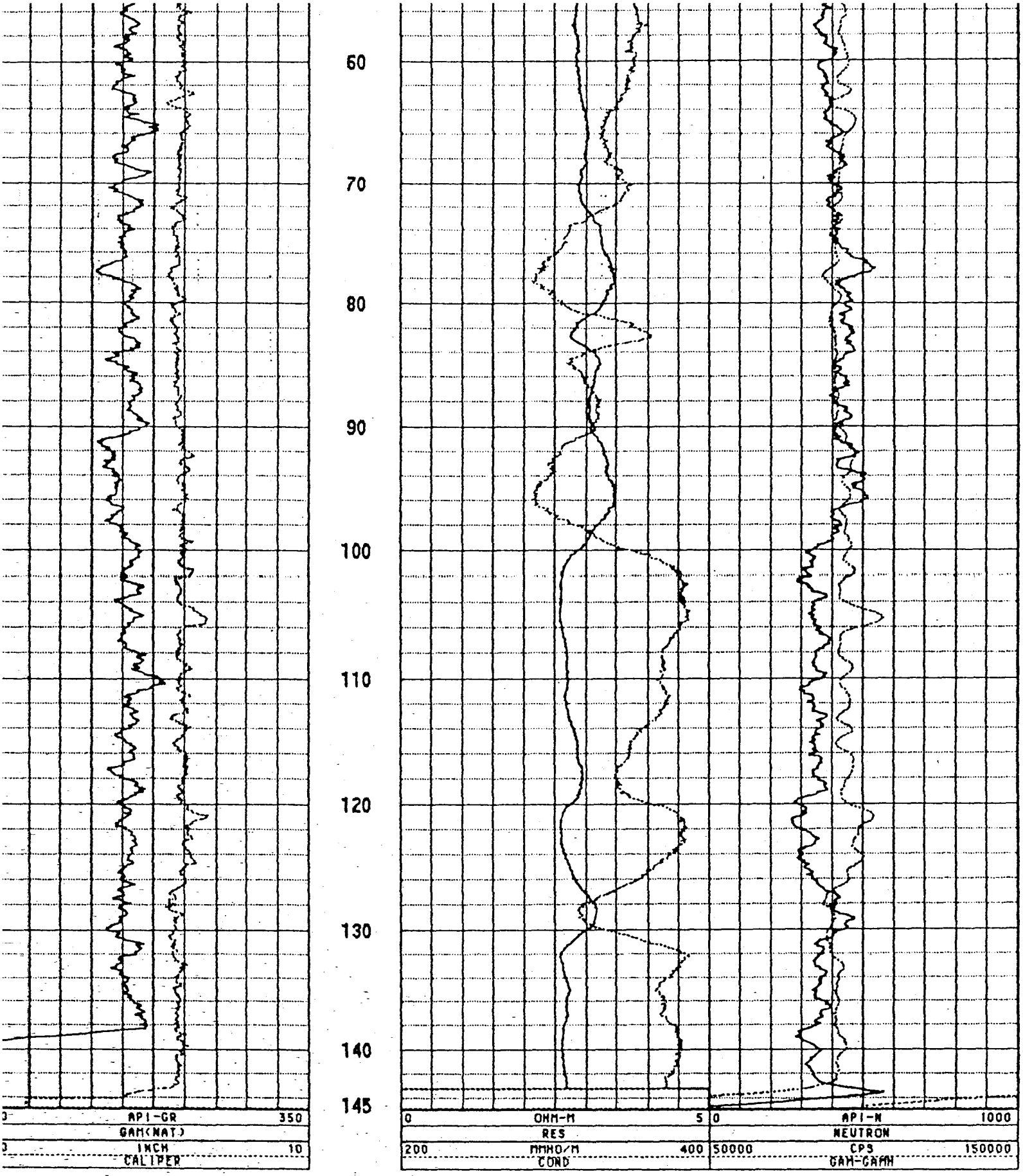
CPS
150000
NEUTRON
0
API-N
1000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80
90
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110
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140
145
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API-GR
350
GAM(NAT.)
0
INCH
10
CALIPER
0
OHM-M
5
RES
200
MMHO/M
400
COND
0
API-N
1000
NEUTRON
50000
CPS
150000
GAM-GAMM

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
51393	Sep-94	3.30	6020.60
51393	Oct-94	3.06	6020.84
51393	Nov-94	2.97	6020.93
51393	Feb-95	6.69	6017.21
51393	Mar-95	3.07	6020.83
51393	Apr-95	DRY	NA
51393	May-95	2.92	6020.98
51393	Jun-95	3.02	6020.88
51393	Jul-95	4.05	6019.85
51393	Aug-95	*	*
51493	Sep-94	1.68	6000.42
51493	Oct-94	1.50	6000.60
51493	Nov-94	1.47	6000.63
51493	Feb-95	1.35	6000.75
51493	Mar-95	1.65	6000.45
51493	Apr-95	DRY	NA
51493	May-95	1.38	6000.72
51493	Jun-95	1.56	6000.54
51493	Jul-95	1.63	6000.47
51493	Aug-95	*	*
51593	Sep-94	DRY	NA
51593	Oct-94	DRY	NA
51593	Nov-94	DRY	NA
51593	Feb-95	DRY	NA
51593	Mar-95	4.58	5985.52
51593	Apr-95	DRY	NA
51593	May-95	DRY	NA
51593	Jun-95	DRY	NA
51593	Jul-95	DRY	NA
51593	Aug-95	*	*
51693	Sep-94	13.66	5983.64
51693	Oct-94	14.08	5983.22
51693	Nov-94	13.93	5983.37
51693	Feb-95	13.97	5983.33
51693	Mar-95	DRY	NA
51693	Apr-95	DRY	NA
51693	May-95	7.04	5990.26
51693	Jun-95	7.26	5990.04
51693	Jul-95	10.04	5987.26
51693	Aug-95	*	*
51793	Sep-94	DRY	NA
51793	Oct-94	DRY	NA
51793	Nov-94	DRY	NA
51793	Feb-95	DRY	NA
51793	Mar-95	DRY	NA
51793	Apr-95	DRY	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
51793	May-95	10.76	5988.64
51793	Jun-95	7.21	5992.19
51793	Jul-95	8.25	5991.15
51793	Aug-95	*	*
51893	Sep-94	10.76	5990.24
51893	Oct-94	DRY	NA
51893	Nov-94	DRY	NA
51893	Feb-95	DRY	NA
51893	Mar-95	DRY	NA
51893	Apr-95	DRY	NA
51893	May-95	6.54	5994.46
51893	Jun-95	5.21	5995.79
51893	Jul-95	8.04	5992.96
51893	Aug-95	*	*
51993	Sep-94	DRY	NA
51993	Oct-94	DRY	NA
51993	Nov-94	DRY	NA
51993	Feb-95	DRY	NA
51993	Mar-95	DRY	NA
51993	Apr-95	DRY	NA
51993	May-95	7.74	5995.76
51993	Jun-95	3.99	5999.51
51993	Jul-95	10.17	5993.33
51993	Aug-95	*	*
52093	Sep-94	DRY	NA
52093	Oct-94	DRY	NA
52093	Nov-94	DRY	NA
52093	Feb-95	DRY	NA
52093	Mar-95	DRY	NA
52093	Apr-95	DRY	NA
52093	May-95	4.33	6000.57
52093	Jun-95	3.06	6001.84
52093	Jul-95	10.33	5994.57
52093	Aug-95	*	*
52193	Sep-94	11.34	5995.16
52193	Oct-94	11.42	5995.08
52193	Nov-94	11.36	5995.14
52193	Feb-95	DRY	NA
52193	Mar-95	DRY	NA
52193	Apr-95	10.39	5996.11
52193	May-95	10.03	5996.47
52193	Jun-95	3.53	6002.98
52193	Jul-95	5.31	6001.19
52193	Aug-95	*	*
52593	Sep-94	2.80	5969.90
52593	Nov-94	1.62	5971.08

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
52593	Feb-95	2.52	5970.18
52593	Mar-95	2.06	5970.64
52593	Apr-95	1.63	5971.07
52593	May-95	1.62	5971.08
52593	Jun-95	1.70	5971.00
52593	Jul-95	1.86	5970.84
52593	Aug-95	*	*
52693	Sep-94	DRY	NA
52693	Oct-94	DRY	NA
52693	Nov-94	5.60	5946.40
52693	Feb-95	DRY	NA
52693	Mar-95	5.77	5946.23
52693	Apr-95	DRY	NA
52693	May-95	5.51	5946.49
52693	Jun-95	5.48	5946.53
52693	Aug-95	*	*
52793	Sep-94	DRY	NA
52793	Oct-94	3.22	5934.68
52793	Nov-94	2.62	5935.28
52793	Feb-95	2.51	5935.39
52793	Mar-95	2.96	5934.94
52793	Apr-95	2.51	5935.39
52793	May-95	2.68	5935.22
52793	Jun-95	2.40	5935.50
52793	Jul-95	3.06	5934.84
52793	Aug-95	*	*
52893	Sep-94	DRY	NA
52893	Oct-94	3.22	5935.28
52893	Nov-94	1.96	5936.54
52893	Feb-95	1.70	5936.80
52893	Mar-95	3.22	5935.28
52893	Apr-95	1.35	5937.15
52893	May-95	1.98	5936.52
52893	Jun-95	1.96	5936.55
52893	Jul-95	3.09	5935.41
52893	Aug-95	*	*
52993	Sep-94	6.02	5933.98
52993	Oct-94	5.04	5934.96
52993	Nov-94	4.10	5935.90
52993	Feb-95	2.73	5937.27
52993	Mar-95	3.01	5936.99
52993	Apr-95	2.30	5937.70
52993	May-95	3.06	5936.94
52993	Jun-95	3.11	5936.89
52993	Jul-95	4.24	5935.76
52993	Aug-95	*	*

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
53093	Sep-94	DRY	NA
53093	Oct-94	DRY	NA
53093	Nov-94	DRY	NA
53093	Feb-95	DRY	NA
53093	Mar-95	DRY	NA
53093	Apr-95	DRY	NA
53093	May-95	13.17	5937.53
53093	Jun-95	12.73	5937.98
53093	Jul-95	13.25	5937.45
53093	Aug-95	*	*
53193	Sep-94	DRY	NA
53193	Oct-94	DRY	NA
53193	Nov-94	DRY	NA
53193	Feb-95	10.96	5942.54
53193	Mar-95	DRY	NA
53193	Apr-95	10.37	5943.13
53193	May-95	9.87	5943.63
53193	Jun-95	5.53	5947.97
53193	Jul-95	7.85	5945.65
53193	Aug-95	*	*
53293	Sep-94	11.07	5955.73
53293	Oct-94	11.78	5955.02
53293	Nov-94	11.04	5955.76
53293	Feb-95	10.67	5956.13
53293	Mar-95	10.88	5955.92
53293	Apr-95	10.54	5956.26
53293	May-95	8.41	5958.39
53293	Jun-95	7.93	5958.87
53293	Jul-95	8.54	5958.26
53293	Aug-95	*	*
53393	Sep-94	DRY	NA
53393	Nov-94	1.57	5916.13
53393	Feb-95	1.59	5916.11
53393	Apr-95	1.40	5916.30
53393	May-95	1.31	5916.39
53393	Jun-95	1.26	5916.45
53393	Jul-95	1.53	5916.17
53393	Aug-95	*	*
55194	Sep-94	NOT INSTALLED/DEVELOPED	NA
55194	Oct-94	15.55	6033.14
55194	Mar-95	18.11	6030.58
55194	Apr-95	17.84	6030.85
55194	May-95	9.21	6039.48
55194	Jun-95	7.18	6041.51
55194	Jul-95	12.20	6036.4
55194	Aug-95	*	*

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
55394	Sep-94	NOT INSTALLED/DEVELOPED	NA
55394	Oct-94	5.54	6018.01
55394	Nov-94	5.51	6018.04
55394	Dec-94	5.50	6018.05
55394	Jan-95	5.44	6018.11
55394	Feb-95	5.41	6018.14
55394	Mar-95	5.56	6017.99
55394	Apr-95	5.20	6018.35
55394	May-95	5.33	6018.22
55394	Jun-95	5.46	6018.09
55394	Jul-95	5.48	6018.07
55394	Aug-95	*	*
55494	Sep-94	NOT INSTALLED/DEVELOPED	NA
55494	Oct-94	DRY	NA
55494	Nov-94	DRY	NA
55494	Jan-95	DRY	NA
55494	Feb-95	DRY	NA
55494	Mar-95	DRY	NA
55494	Apr-95	DRY	NA
55494	May-95	14.70	6012.18
55494	Jun-95	14.71	6012.17
55494	Jul-95	14.70	6012.18
55494	Aug-95	*	*
55594	Sep-94	NOT INSTALLED/DEVELOPED	NA
55594	Oct-94	DRY	NA
55594	Nov-94	DRY	NA
55594	Jan-95	DRY	NA
55594	Feb-95	DRY	NA
55594	Mar-95	DRY	NA
55594	Apr-95	DRY	NA
55594	May-95	5.72	6028.08
55594	Jun-95	6.12	6027.68
55594	Jul-95	9.29	6024.51
55594	Aug-95	*	*
55794	Sep-94	NOT INSTALLED/DEVELOPED	NA
55794	Oct-94	DRY	NA
55794	Nov-94	DRY	NA
55794	Jan-95	DRY	NA
55794	Feb-95	DRY	NA
55794	Mar-95	DRY	NA
55794	Apr-95	DRY	NA
55794	May-95	DRY	NA
55794	Jun-95	DRY	NA
55794	Jul-95	DRY	NA
55794	Aug-95	*	*

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
56294	Sep-94	NOT INSTALLED/DEVELOPED	NA
56294	Oct-94	19.56	5998.93
56294	Nov-94	18.68	5999.81
56294	Jan-95	17.85	6000.64
56294	Mar-95	17.85	6000.64
56294	Apr-95	3.64	6014.85
56294	May-95	3.26	6015.23
56294	Jun-95	4.66	6013.83
56294	Jul-95	12.66	6005.83
56294	Aug-95	*	*
56494	Sep-94	NOT INSTALLED/DEVELOPED	NA
56494	Oct-94	13.70	5998.99
56494	Nov-94	13.52	5999.17
56494	Dec-94	13.15	5999.54
56494	Jan-95	13.11	5999.58
56494	Mar-95	13.13	5999.56
56494	Apr-95	12.75	5999.94
56494	May-95	8.89	6003.80
56494	Jun-95	1.21	6011.48
56494	Jul-95	4.71	6007.98
56494	Aug-95	*	*
56594	Sep-94	NOT INSTALLED/DEVELOPED	NA
56594	Oct-94	4.25	5966.60
56594	Nov-94	3.20	5967.65
56594	Dec-94	4.49	5966.36
56594	Jan-95	3.19	5967.66
56594	Mar-95	4.00	5966.85
56594	Apr-95	3.24	5967.61
56594	May-95	3.36	5967.49
56594	Jun-95	3.40	5967.45
56594	Jul-95	3.47	5967.38
56594	Aug-95	*	*
56994	Sep-94	NOT INSTALLED/DEVELOPED	NA
56994	Oct-94	NOT INSTALLED/DEVELOPED	NA
56994	Nov-94	NOT INSTALLED/DEVELOPED	NA
56994	Dec-94	NOT INSTALLED/DEVELOPED	NA
56994	Jan-95	NOT INSTALLED/DEVELOPED	NA
56994	Feb-95	NOT INSTALLED/DEVELOPED	NA
56994	Mar-95	18.42	6003.21
56994	Apr-95	18.46	6003.17
56994	May-95	17.42	6004.21
56994	Jun-95	14.29	6007.34
56994	Jul-95	15.79	6005.84
56994	Aug-95	*	*
57094	Sep-94	NOT INSTALLED/DEVELOPED	NA
57094	Oct-94	NOT INSTALLED/DEVELOPED	NA
57094	Nov-94	NOT INSTALLED/DEVELOPED	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
57094	Dec-94	NOT INSTALLED/DEVELOPED	NA
57094	Mar-95	34.97	5937.15
57094	Apr-95	34.40	5937.72
57094	May-95	34.82	5937.30
57094	Jun-95	35.24	5936.88
57094	Jul-95	34.19	5937.93
57094	Aug-95	*	*
57194	Sep-94	NOT INSTALLED/DEVELOPED	NA
57194	Oct-94	NOT INSTALLED/DEVELOPED	NA
57194	Nov-94	NOT INSTALLED/DEVELOPED	NA
57194	Dec-94	NOT INSTALLED/DEVELOPED	NA
57194	Jan-95	NOT INSTALLED/DEVELOPED	NA
57194	Feb-95	NOT INSTALLED/DEVELOPED	NA
57194	Mar-95	123.46	5876.56
57194	Apr-95	124.01	5876.01
57194	May-95	127.90	5872.12
57194	Jun-95	99.83	5900.19
57194	Jul-95	100.04	5899.98
57194	Aug-95	*	*
57594	Sep-94	NOT INSTALLED/DEVELOPED	NA
57594	Oct-94	NOT INSTALLED/DEVELOPED	NA
57594	Nov-94	NOT INSTALLED/DEVELOPED	NA
57594	Dec-94	NOT INSTALLED/DEVELOPED	NA
57594	Jan-95	NOT INSTALLED/DEVELOPED	NA
57594	Feb-95	NOT INSTALLED/DEVELOPED	NA
57594	Mar-95	3.20	5945.23
57594	Apr-95	7.45	5940.98
57594	May-95	7.90	5940.53
57594	Jun-95	7.09	5941.34
57594	Jul-95	8.75	5939.68
57594	Aug-95	*	*
57894	Sep-94	NOT INSTALLED/DEVELOPED	NA
57894	Oct-94	5.59	5944.42
57894	Nov-94	6.04	5943.97
57894	Jan-95	5.81	5944.20
57894	Feb-95	5.82	5944.19
57894	Mar-95	5.97	5944.04
57894	Apr-95	5.35	5944.66
57894	May-95	5.55	5944.46
57894	Jun-95	5.59	5944.43
57894	Jul-95	6.81	5943.20
57894	Aug-95	*	*
57994	Sep-94	NOT INSTALLED/DEVELOPED	NA
57994	Oct-94	7.30	5933.97
57994	Nov-94	6.39	5934.88
57994	Dec-94	5.74	5935.53
57994	Jan-95	5.48	5935.79

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
57994	Feb-95	5.48	5935.79
57994	Mar-95	5.67	5935.60
57994	Apr-95	5.43	5935.84
57994	May-95	5.48	5935.79
57994	Jun-95	5.00	5936.27
57994	Jul-95	6.16	5935.11
57994	Aug-95	*	*
58094	Sep-94	NOT INSTALLED/DEVELOPED	NA
58094	Oct-94	5.00	5925.91
58094	Nov-94	4.21	5926.70
58094	Dec-94	4.16	5926.75
58094	Jan-95	4.00	5926.91
58094	Feb-95	4.00	5926.91
58094	Mar-95	4.13	5926.78
58094	Apr-95	4.04	5926.87
58094	May-95	4.19	5926.72
58094	Jun-95	4.39	5926.52
58094	Jul-95	5.09	5925.82
58094	Aug-95	*	*
58194	Sep-94	NOT INSTALLED/DEVELOPED	NA
58194	Oct-94	DRY	NA
58194	Nov-94	DRY	NA
58194	Jan-95	6.57	5924.06
58194	Feb-95	6.57	5924.06
58194	Mar-95	5.93	5924.70
58194	Apr-95	5.39	5925.24
58194	May-95	4.38	5926.25
58194	Jun-95	4.37	5926.26
58194	Jul-95	6.86	5923.77
58194	Aug-95	*	*
58294	Sep-94	NOT INSTALLED/DEVELOPED	NA
58294	Oct-94	DRY	NA
58294	Nov-94	DRY	NA
58294	Jan-95	DRY	NA
58294	Feb-95	DRY	NA
58294	Mar-95	DRY	NA
58294	Apr-95	DRY	NA
58294	May-95	DRY	NA
58294	Jun-95	DRY	NA
58294	Jul-95	DRY	NA
58294	Aug-95	*	*
58394	Sep-94	NOT INSTALLED/DEVELOPED	NA
58394	Oct-94	NOT INSTALLED/DEVELOPED	NA
58394	Nov-94	NOT INSTALLED/DEVELOPED	NA
58394	Dec-94	NOT INSTALLED/DEVELOPED	NA
58394	Jan-95	NOT INSTALLED/DEVELOPED	NA
58394	Feb-95	NOT INSTALLED/DEVELOPED	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
58394	Mar-95	8.72	5990.82
58394	Apr-95	8.91	5990.63
58394	May-95	8.91	5990.63
58394	Jun-95	5.87	5993.67
58394	Jul-95	6.87	5992.67
58394	Aug-95	*	*
58494	Sep-94	NOT INSTALLED/DEVELOPED	NA
58494	Oct-94	DRY	NA
58494	Nov-94	8.68	5987.70
58494	Dec-94	7.95	5988.43
58494	Jan-95	7.59	5988.79
58494	Feb-95	7.59	5988.79
58494	Mar-95	7.08	5989.30
58494	Apr-95	6.39	5989.99
58494	May-95	2.52	5993.86
58494	Jun-95	2.54	5993.84
58494	Jul-95	5.97	5990.41
58494	Aug-95	*	*
58594	Sep-94	NOT INSTALLED/DEVELOPED	NA
58594	Oct-94	NOT INSTALLED/DEVELOPED	NA
58594	Nov-94	4.97	5915.17
58594	Dec-94	4.97	5915.17
58594	Jan-95	4.88	5915.26
58594	Feb-95	4.88	5915.26
58594	Mar-95	4.80	5915.34
58594	Apr-95	4.71	5915.43
58594	May-95	4.85	5915.29
58594	Jun-95	4.97	5915.17
58594	Jul-95	5.24	5914.90
58594	Aug-95	*	*
58694	Sep-94	NOT INSTALLED/DEVELOPED	NA
58694	Oct-94	DRY	NA
58694	Nov-94	DRY	NA
58694	Jan-95	DRY	NA
58694	Feb-95	DRY	NA
58694	Mar-95	DRY	NA
58694	Apr-95	DRY	NA
58694	May-95	DRY	NA
58694	Jun-95	DRY	NA
58694	Jul-95	DRY	NA
58694	Aug-95	*	*
58793	Sep-94	16.65	5997.55
58793	Oct-94	17.22	5996.98
58793	Nov-94	17.50	5996.70
58793	Dec-94	17.51	5996.69
58793	Jan-95	17.64	5996.56
58793	Feb-95	17.72	5996.48

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
58793	Mar-95	17.76	5996.44
58793	Apr-95	17.73	5996.47
58793	May-95	16.78	5997.42
58793	Jun-95	7.68	6006.52
58793	Jul-95	9.16	6005.04
58793	Aug-95	*	*
58794	Sep-94	NOT INSTALLED/DEVELOPED	NA
58794	Oct-94	DRY	NA
58794	Nov-94	DRY	NA
58794	Jan-95	DRY	NA
58794	Feb-95	DRY	NA
58794	Mar-95	DRY	NA
58794	Apr-95	DRY	NA
58794	May-95	5.80	5953.11
58794	Jun-95	DRY	NA
58794	Jul-95	DRY	NA
58794	Aug-95	*	*
59093	Sep-94	18.30	6006.40
59093	Oct-94	18.45	6006.25
59093	Nov-94	15.80	6008.90
59093	Dec-94	15.61	6009.09
59093	Jan-95	15.21	6009.49
59093	Feb-95	14.86	6009.84
59093	Mar-95	15.81	6008.89
59093	Apr-95	15.39	6009.31
59093	May-95	17.00	6007.70
59093	Jun-95	11.25	6013.45
59093	Jul-95	9.06	6015.64
59093	Aug-95	*	*
59194	Sep-94	NOT INSTALLED/DEVELOPED	NA
59194	Oct-94	NOT INSTALLED/DEVELOPED	NA
59194	Nov-94	NOT INSTALLED/DEVELOPED	NA
59194	Dec-94	NOT INSTALLED/DEVELOPED	NA
59194	Jan-95	NOT INSTALLED/DEVELOPED	NA
59194	Feb-95	NOT INSTALLED/DEVELOPED	NA
59194	Mar-95	33.42	6006.32
59194	Apr-95	32.16	6007.58
59194	May-95	30.68	6009.06
59194	Jun-95	27.19	6012.55
59194	Jul-95	29.69	6010.05
59194	Aug-95	*	*
59294	Sep-94	NOT INSTALLED/DEVELOPED	NA
59294	Oct-94	NOT INSTALLED/DEVELOPED	NA
59294	Nov-94	NOT INSTALLED/DEVELOPED	NA
59294	Dec-94	NOT INSTALLED/DEVELOPED	NA
59294	Jan-95	NOT INSTALLED/DEVELOPED	NA
59294	Feb-95	NOT INSTALLED/DEVELOPED	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
59294	Mar-95	DRY	NA
59294	Apr-95	DRY	NA
59294	May-95	DRY	NA
59294	Jun-95	DRY	NA
59294	Jul-95	DRY	NA
59294	Aug-95	*	*
59393	Sep-94	9.42	5945.28
59393	Oct-94	9.25	5945.45
59393	Nov-94	8.71	5945.99
59393	Dec-94	8.61	5946.09
59393	Jan-95	8.45	5946.25
59393	Feb-95	8.21	5946.49
59393	Mar-95	8.64	5946.06
59393	Apr-95	7.89	5946.81
59393	May-95	7.46	5947.24
59393	Jun-95	7.22	5947.48
59393	Jul-95	6.12	5948.58
59393	Jul-95	7.73	5946.97
59393	Aug-95	*	*
59394	Sep-94	NOT INSTALLED/DEVELOPED	NA
59394	Oct-94	NOT INSTALLED/DEVELOPED	NA
59394	Nov-94	NOT INSTALLED/DEVELOPED	NA
59394	Dec-94	NOT INSTALLED/DEVELOPED	NA
59394	Jan-95	NOT INSTALLED/DEVELOPED	NA
59394	Feb-95	NOT INSTALLED/DEVELOPED	NA
59394	Mar-95	81.11	5885.85
59394	Apr-95	84.42	5882.54
59394	May-95	72.00	5894.96
59394	Jun-95	55.39	5911.57
59394	Jul-95	62.58	5904.38
59394	Aug-95	*	*
59493	Sep-94	9.25	5983.15
59493	Oct-94	10.23	5982.17
59493	Nov-94	10.23	5982.17
59493	Dec-94	9.97	5982.43
59493	Jan-95	9.38	5983.02
59493	Feb-95	8.72	5983.68
59493	Mar-95	7.59	5984.81
59493	Apr-95	5.88	5986.52
59493	May-95	4.35	5988.05
59493	Jun-95	4.19	5988.21
59493	Jul-95	5.47	5986.93
59493	Aug-95	*	*
59593	Sep-94	12.25	5940.75
59593	Oct-94	10.15	5942.85
59593	Nov-94	9.66	5943.34
59593	Dec-94	9.67	5943.33

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
59593	Jan-95	9.47	5943.53
59593	Feb-95	9.29	5943.71
59593	Mar-95	9.33	5943.67
59593	Apr-95	9.05	5943.95
59593	May-95	9.10	5943.90
59593	Jun-95	9.12	5943.88
59593	Jul-95	9.75	5943.25
59593	Aug-95	*	*
59594	Mar-95	32.58	6016.33
59594	Apr-95	31.00	6017.91
59594	May-95	25.93	6022.98
59594	Jun-95	24.08	6024.83
59594	Jul-95	28.91	6020.00
59594	Aug-95	*	*
59694	Sep-94	NOT INSTALLED/DEVELOPED	NA
59694	Oct-94	NOT INSTALLED/DEVELOPED	NA
59694	Nov-94	NOT INSTALLED/DEVELOPED	NA
59694	Dec-94	NOT INSTALLED/DEVELOPED	NA
59694	Jan-95	NOT INSTALLED/DEVELOPED	NA
59694	Feb-95	NOT INSTALLED/DEVELOPED	NA
59694	Mar-95	11.92	5987.08
59694	Apr-95	7.16	5991.84
59694	May-95	16.93	5982.07
59694	Jun-95	4.77	5994.23
59694	Jul-95	6.62	5992.38
59694	Aug-95	*	*
59793	Sep-94	13.10	5932.70
59793	Oct-94	12.92	5932.88
59793	Nov-94	12.62	5933.18
59793	Dec-94	12.43	5933.37
59793	Jan-95	11.46	5934.34
59793	Feb-95	13.58	5932.22
59793	Mar-95	12.73	5933.07
59793	Apr-95	11.89	5933.91
59793	May-95	14.50	5931.30
59793	Jun-95	8.61	5937.19
59793	Jul-95	9.40	5936.40
59793	Aug-95	*	*
59794	Sep-94	NOT INSTALLED/DEVELOPED	NA
59794	Oct-94	NOT INSTALLED/DEVELOPED	NA
59794	Nov-94	NOT INSTALLED/DEVELOPED	NA
59794	Dec-94	NOT INSTALLED/DEVELOPED	NA
59794	Jan-95	NOT INSTALLED/DEVELOPED	NA
59794	Mar-95	DRY	NA
59794	Apr-95	DRY	NA
59794	May-95	19.18	5989.70
59794	Jun-95	14.06	5994.82

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
59794	Jul-95	16.64	5992.24
59794	Aug-95	*	*
59893	Sep-94	10.81	5935.60
59893	Nov-94	11.57	5934.83
59893	Feb-95	12.45	5933.95
59893	Apr-95	12.74	5933.66
59893	May-95	14.40	5932.00
59893	Jun-95	7.22	5939.18
59893	Jul-95	9.97	5936.43
59893	Aug-95	*	*
59894	Sep-94	NOT INSTALLED/DEVELOPED	NA
59894	Oct-94	NOT INSTALLED/DEVELOPED	NA
59894	Nov-94	NOT INSTALLED/DEVELOPED	NA
59894	Dec-94	NOT INSTALLED/DEVELOPED	NA
59894	Jan-95	NOT INSTALLED/DEVELOPED	NA
59894	Feb-95	NOT INSTALLED/DEVELOPED	NA
59894	Mar-95	46.67	5981.67
59894	Apr-95	43.05	5985.29
59894	May-95	54.31	5974.03
59894	Jun-95	41.27	5987.07
59894	Jul-95	40.68	5987.66
59894	Aug-95	*	*
59993	Sep-94	10.29	5934.01
59993	Oct-94	9.89	5934.41
59993	Nov-94	8.72	5935.58
59993	Jan-95	8.23	5936.07
59993	Feb-95	8.94	5935.36
59993	Mar-95	8.48	5935.82
59993	Apr-95	7.79	5936.51
59993	May-95	7.77	5936.53
59993	Jun-95	7.29	5937.01
59993	Jul-95	8.29	5936.01
59993	Aug-95	*	*
60093	Sep-94	DRY	NA
60093	Oct-94	DRY	NA
60093	Nov-94	DRY	NA
60093	Jan-95	9.29	5936.11
60093	Feb-95	9.31	5936.09
60093	Mar-95	9.55	5935.85
60093	Apr-95	8.70	5936.70
60093	May-95	8.81	5936.59
60093	Jun-95	8.37	5937.03
60093	Jul-95	9.37	5936.03
60093	Aug-95	*	*
60193	Sep-94	8.18	5941.02
60193	Oct-94	DRY	NA
60193	Nov-94	DRY	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
60193	Jan-95	DRY	NA
60193	Feb-95	DRY	NA
60193	Mar-95	DRY	NA
60193	Apr-95	DRY	NA
60193	May-95	DRY	NA
60193	Jun-95	DRY	NA
60193	Jul-95	DRY	NA
60193	Aug-95	*	*
60293	Sep-94	9.26	5940.24
60293	Oct-94	6.15	5943.35
60293	Nov-94	6.76	5942.74
60293	Jan-95	6.38	5943.12
60293	Feb-95	6.57	5942.93
60293	Mar-95	6.30	5943.20
60293	Apr-95	6.01	5943.49
60293	May-95	6.08	5943.42
60293	Jun-95	6.22	5943.28
60293	Jul-95	6.96	5942.54
60293	Aug-95	*	*
60393	Sep-94	DRY	NA
60393	Nov-94	DRY	NA
60393	Jan-95	DRY	NA
60393	Feb-95	DRY	NA
60393	Mar-95	DRY	NA
60393	Apr-95	2.91	5960.29
60393	May-95	5.01	5958.19
60393	Jun-95	7.53	5955.68
60393	Jul-95	DRY	NA
60393	Aug-95	*	*
60493	Sep-94	11.64	5973.07
60493	Oct-94	11.61	5973.09
60493	Nov-94	11.10	5973.60
60493	Jan-95	10.64	5974.06
60493	Feb-95	11.23	5973.47
60493	Mar-95	10.77	5973.93
60493	Apr-95	10.23	5974.47
60493	May-95	13.06	5971.64
60493	Jun-95	5.01	5979.70
60493	Jul-95	7.25	5977.45
60493	Aug-95	*	*
60593	Sep-94	13.65	6001.65
60593	Oct-94	13.69	6001.61
60593	Nov-94	13.64	6001.66
60593	Jan-95	13.72	6001.58
60593	Feb-95	13.93	6001.37
60593	Mar-95	13.56	6001.74
60593	Apr-95	12.62	6002.68

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
60593	May-95	7.19	6008.11
60593	Jun-95	4.48	6010.82
60593	Jul-95	9.72	6005.58
60593	Aug-95	*	*
60693	Sep-94	15.98	6007.73
60693	Oct-94	16.06	6007.64
60693	Nov-94	14.43	6009.27
60693	Jan-95	16.26	6007.44
60693	Feb-95	16.91	6006.79
60693	Mar-95	15.96	6007.74
60693	Apr-95	14.89	6008.81
60693	May-95	12.11	6011.59
60693	Jun-95	10.69	6013.02
60693	Jul-95	14.34	6009.36
60693	Aug-95	*	*
60793	Sep-94	DRY	NA
60793	Oct-94	DRY	NA
60793	Nov-94	DRY	NA
60793	Jan-95	DRY	NA
60793	Feb-95	DRY	NA
60793	Mar-95	DRY	NA
60793	Apr-95	DRY	NA
60793	May-95	14.18	6016.22
60793	Jun-95	12.85	6017.55
60793	Jul-95	DRY	NA
60793	Aug-95	*	*
60893	Sep-94	12.71	5987.29
60893	Oct-94	16.20	5983.80
60893	Nov-94	16.73	5983.27
60893	Jan-95	17.11	5982.89
60893	Feb-95	17.64	5982.36
60893	Mar-95	16.03	5983.97
60893	Apr-95	14.22	5985.78
60893	May-95	11.91	5988.09
60893	Jun-95	11.71	5988.29
60893	Jul-95	12.81	5987.19
60893	Aug-95	*	*
60993	Sep-94	DRY	NA
60993	Oct-94	DRY	NA
60993	Nov-94	DRY	NA
60993	Jan-95	DRY	NA
60993	Feb-95	DRY	NA
60993	Mar-95	DRY	NA
60993	Apr-95	6.64	5980.26
60993	May-95	3.62	5983.28
60993	Jun-95	3.21	5983.69

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
60993	Jul-95	8.10	5978.80
60993	Aug-95	*	*
61093	Sep-94	11.43	5962.18
61093	Oct-94	10.18	5963.42
61093	Nov-94	8.98	5964.62
61093	Jan-95	8.22	5965.38
61093	Feb-95	7.95	5965.65
61093	Mar-95	7.92	5965.68
61093	Apr-95	7.84	5965.76
61093	May-95	6.09	5967.51
61093	Jun-95	4.13	5969.47
61093	Jul-95	7.42	5966.18
61093	Aug-95	*	*
61293	Sep-94	9.20	5977.50
61293	Oct-94	9.20	5977.50
61293	Nov-94	9.03	5977.67
61293	Dec-94	9.01	5977.69
61293	Jan-95	8.70	5978.00
61293	Feb-95	7.92	5978.78
61293	Mar-95	4.57	5982.13
61293	Apr-95	7.30	5979.40
61293	May-95	10.01	5976.69
61293	Jun-95	4.28	5982.42
61293	Jul-95	5.53	5981.17
61293	Aug-95	*	*
62593	Sep-94	8.25	6039.56
62593	Nov-94	DRY	NA
62593	Jan-95	8.06	6039.74
62593	Feb-95	8.13	6039.67
62593	Mar-95	7.50	6040.30
62593	Apr-95	8.06	6039.74
62593	May-95	1.29	6046.51
62593	Jun-95	1.02	6046.79
62593	Jul-95	3.41	6044.39
62593	Aug-95	*	*
62693	Sep-94	8.55	6033.26
62693	Nov-94	8.43	6033.37
62693	Jan-95	DRY	NA
62693	Feb-95	DRY	NA
62693	Mar-95	8.24	6033.56
62693	Apr-95	6.96	6034.84
62693	May-95	1.00	6040.80
62693	Jun-95	0.00	6041.80
62693	Jul-95	2.96	6038.84
62693	Aug-95	*	*

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
62793	Sep-94	6.13	5933.38
62793	Nov-94	4.62	5934.88
62793	Jan-95	4.13	5935.37
62793	Feb-95	3.97	5935.53
62793	Mar-95	4.66	5934.84
62793	Apr-95	3.66	5935.84
62793	May-95	3.81	5935.69
62793	Jun-95	3.42	5936.08
62793	Jul-95	4.61	5934.89
62793	Aug-95	*	*
62893	Sep-94	2.90	5992.30
62893	Oct-94	1.85	5993.35
62893	Nov-94	1.36	5993.84
62893	Jan-95	1.50	5993.70
62893	Feb-95	0.77	5994.43
62893	Mar-95	1.03	5994.17
62893	Apr-95	0.39	5994.81
62893	May-95	0.72	5994.48
62893	Jun-95	0.00	5995.20
62893	Jul-95	1.96	5993.24
62893	Aug-95	*	*
63093	Sep-94	21.42	5997.78
63093	Oct-94	23.75	5995.45
63093	Nov-94	20.25	5998.95
63093	Dec-94	20.09	5999.11
63093	Jan-95	20.04	5999.16
63093	Feb-95	20.05	5999.15
63093	Mar-95	23.58	5995.62
63093	Apr-95	19.75	5999.45
63093	May-95	19.05	6000.15
63093	Jun-95	18.92	6000.28
63093	Jul-95	19.63	5999.57
63093	Aug-95	*	*
63193	Sep-94	11.98	5958.02
63193	Oct-94	11.90	5958.10
63193	Nov-94	11.75	5958.25
63193	Jan-95	10.71	5959.29
63193	Feb-95	10.28	5959.72
63193	Mar-95	10.07	5959.93
63193	Apr-95	9.57	5960.43
63193	May-95	9.08	5960.92
63193	Jun-95	8.65	5961.35
63193	Jul-95	10.18	5959.82
63193	Aug-95	*	*
63593	Sep-94	14.92	5997.88
63593	Oct-94	15.51	5997.29
63593	Nov-94	15.76	5997.04

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
63593	Mar-95	16.24	5996.56
63593	Apr-95	16.16	5996.64
63593	May-95	17.43	5995.37
63593	Jun-95	5.84	6006.96
63593	Jul-95	7.01	6005.79
63593	Aug-95	*	*
63693	Sep-94	13.80	5998.40
63693	Oct-94	15.35	5996.85
63693	Nov-94	15.53	5996.67
63693	Jan-95	15.77	5996.43
63693	Mar-95	15.85	5996.35
63693	Apr-95	15.83	5996.37
63693	May-95	14.38	5997.82
63693	Jun-95	5.74	6006.46
63693	Jul-95	7.25	6004.95
63693	Aug-95	*	*
63793	Sep-94	14.00	5999.00
63793	Oct-94	14.73	5998.27
63793	Nov-94	15.20	5997.80
63793	Mar-95	17.98	5995.02
63793	Apr-95	17.47	5995.53
63793	May-95	13.52	5999.48
63793	Jun-95	5.30	6007.70
63793	Jul-95	7.23	6005.77
63793	Aug-95	*	*
63893	Sep-94	8.50	5983.20
63893	Oct-94	9.45	5982.25
63893	Nov-94	9.43	5982.27
63893	Jan-95	8.60	5983.10
63893	Mar-95	12.98	5978.72
63893	Apr-95	5.29	5986.41
63893	May-95	3.53	5988.17
63893	Jun-95	3.36	5988.34
63893	Jul-95	4.68	5987.02
63893	Aug-95	*	*
63993	Sep-94	9.00	5983.20
63993	Oct-94	9.91	5982.29
63993	Nov-94	9.84	5982.36
63993	Jan-95	9.08	5983.12
63993	Mar-95	6.78	5985.42
63993	Apr-95	8.83	5983.37
63993	May-95	4.05	5988.15
63993	Jun-95	3.85	5988.35
63993	Jul-95	5.18	5987.02
63993	Aug-95	*	*

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
64093	Sep–94	8.19	5983.31
64093	Oct–94	9.29	5982.21
64093	Nov–94	9.36	5982.14
64093	Jan–95	8.39	5983.11
64093	Mar–95	6.57	5984.93
64093	Apr–95	5.09	5986.41
64093	May–95	3.30	5988.20
64093	Jun–95	3.10	5988.40
64093	Jul–95	4.40	5987.10
64093	Aug–95	*	*
71194	Sep–94	NOT INSTALLED/DEVELOPED	NA
71194	Oct–94	NOT INSTALLED/DEVELOPED	NA
71194	Nov–94	NOT INSTALLED/DEVELOPED	NA
71194	Dec–94	NOT INSTALLED/DEVELOPED	NA
71194	Jan–95	NOT INSTALLED/DEVELOPED	NA
71194	Feb–95	NOT INSTALLED/DEVELOPED	NA
71194	Mar–95	101.07	5907.60
71194	Apr–95	100.39	5908.28
71194	May–95	98.90	5909.77
71194	Jun–95	97.64	5911.03
71194	Jul–95	96.52	5912.15
71194	Aug–95	*	*
71394	Sep–94	NOT INSTALLED/DEVELOPED	NA
71394	Oct–94	NOT INSTALLED/DEVELOPED	NA
71394	Nov–94	NOT INSTALLED/DEVELOPED	NA
71394	Dec–94	NOT INSTALLED/DEVELOPED	NA
71394	Jan–95	NOT INSTALLED/DEVELOPED	NA
71394	Feb–95	NOT INSTALLED/DEVELOPED	NA
71394	Mar–95	NOT INSTALLED/DEVELOPED	NA
71394	Apr–95	DRY	NA
71394	May–95	4.54	5981.35
71394	Jun–95	4.45	5981.44
71394	Jul–95	5.58	5980.31
71394	Aug–95	*	*
71494	Sep–94	NOT INSTALLED/DEVELOPED	NA
71494	Oct–94	NOT INSTALLED/DEVELOPED	NA
71494	Nov–94	NOT INSTALLED/DEVELOPED	NA
71494	Dec–94	NOT INSTALLED/DEVELOPED	NA
71494	Jan–95	NOT INSTALLED/DEVELOPED	NA
71494	Feb–95	NOT INSTALLED/DEVELOPED	NA
71494	Mar–95	29.29	5970.51
71494	Apr–95	29.09	5970.71
71494	May–95	29.13	5970.67
71494	Jun–95	28.14	5971.66
71494	Jul–95	28.57	5971.23
71494	Aug–95	*	*

* DATA WILL BE FILLED IN WHEN MEASUREMENTS ARE TAKEN.

APPENDIX D
AQUIFER TEST DATA

A single well aquifer pumping test was performed on well 59593 on May 11, 1994. The test was performed using two peristaltic pumps to achieve an average pumping rate of 0.25 gallons/minute (gpm). The data acquired from the pumping test (Table D-1) were analyzed by the Neuman method for delayed yield utilizing the Aqtesolv program developed by Geraghty & Miller, Inc. Modeling Group (Duffield, G. and Rumbaugh, J., 1989). The test curve was matched to a type "a" curve (Figure D-1). The results indicated a transmissivity of approximately 0.012 ft^2/min. Therefore, given that the saturated thickness was 5.7 feet at the time of the test, a hydraulic conductivity (K) of 0.0021 ft/min (1.0×10^{-3} cm/sec) was calculated. This K is within the range of what would be expected in fine-grained materials such as silty sands or fine grained sands (as logged at 59593).

A multiple well aquifer pumping test was performed at well 58793 on May 10, 1994 (the data are presented in Table D-2). This test however was unsuccessful. Drawdown was not observed in the observation wells, and the drawdown observed in the pumping well (Figure D-2) was a result of well bore storage loss.

TABLE D-1

59593 PUMPING TEST DATA

ELAPSED TIME	DRAWDOWN	WATER LEVEL
0	−0.01	9.79
0.0033	−0.01	9.79
0.0066	−0.01	9.79
0.0099	−0.01	9.79
0.0133	0	9.8
0.0166	0	9.8
0.02	0	9.8
0.0233	0	9.8
0.0266	0.01	9.81
0.03	0.01	9.81
0.0333	0.01	9.81
0.05	0.03	9.83
0.0666	0.04	9.84
0.0833	0.05	9.85
0.1	0.06	9.86
0.1166	0.07	9.87
0.1333	0.09	9.89
0.15	0.1	9.9
0.1666	0.04	9.84
0.1833	0.17	9.97
0.2	0.1	9.9
0.2166	0.2	10
0.2333	0.15	9.95
0.25	0.23	10.03
0.2666	0.2	10
0.2833	0.25	10.05
0.3	0.22	10.02
0.3166	0.27	10.07
0.3333	0.25	10.05
0.4167	0.29	10.09
0.5	0.36	10.16
0.5833	0.39	10.19
0.6667	0.44	10.24
0.75	0.45	10.25
0.8333	0.44	10.24
0.9167	0.43	10.23
1	0.47	10.27
1.0833	0.41	10.21
1.1667	0.53	10.33
1.25	0.49	10.29
1.3333	0.45	10.25
1.4166	0.52	10.32
1.5	0.44	10.24
1.5833	0.54	10.34
1.6667	0.53	10.33
1.75	0.53	10.33
1.8333	0.59	10.39
1.9167	0.54	10.34
2	0.58	10.38
2.5	0.57	10.37

TABLE D-1

59593 PUMPING TEST DATA
(Continued)

ELAPSED TIME	DRAWDOWN	WATER LEVEL
3	0.6	10.4
3.5	0.62	10.42
4	0.62	10.42
4.5	0.66	10.46
5	0.61	10.41
5.5	0.57	10.37
6	0.67	10.47
6.5	0.66	10.46
7	0.71	10.51
7.5	0.72	10.52
8	0.66	10.46
8.5	0.68	10.48
9	0.72	10.52
9.5	0.68	10.48
10	0.71	10.51
11	0.71	10.51
12	0.7	10.5
13	0.71	10.51
14	0.74	10.54
15	0.71	10.51
16	0.73	10.53
17	0.76	10.56
18	0.68	10.48
19	0.78	10.58
20	0.74	10.54
21	0.71	10.51
22	0.65	10.45
23	0.69	10.49
24	0.65	10.45
25	0.73	10.53
26	0.72	10.52
27	0.75	10.55
28	0.78	10.58
29	0.77	10.57
30	0.75	10.55
31	0.74	10.54
32	0.77	10.57
33	0.64	10.44
34	0.77	10.57
35	0.65	10.45
36	0.71	10.51
37	0.66	10.46
38	0.72	10.52
39	0.74	10.54
40	0.74	10.54
41	0.76	10.56
42	0.71	10.51
43	0.7	10.5
44	0.69	10.49
45	0.63	10.43

TABLE D-1

59593 PUMPING TEST DATA
(Continued)

ELAPSED TIME	DRAWDOWN	WATER LEVEL
46	0.72	10.52
47	0.76	10.56
48	0.75	10.55
49	0.7	10.5
50	0.85	10.65
51	0.83	10.63
52	0.82	10.62
53	0.86	10.66
54	0.86	10.66
55	0.78	10.58
56	0.77	10.57
57	0.89	10.69
58	0.86	10.66
59	0.88	10.68
60	0.82	10.62
61	0.91	10.71
62	0.86	10.66
63	0.79	10.59
64	0.88	10.68
65	0.9	10.7
66	0.87	10.67
67	0.88	10.68
68	0.88	10.68
69	0.92	10.72
70	0.87	10.67
71	0.9	10.7
72	0.89	10.69
73	0.86	10.66
74	0.88	10.68
75	0.89	10.69
76	0.78	10.58
77	0.85	10.65
78	0.87	10.67
79	0.89	10.69
80	0.9	10.7
81	0.88	10.68
82	0.86	10.66
83	0.81	10.61
84	0.9	10.7
85	0.93	10.73
86	0.93	10.73
87	0.91	10.71
88	0.88	10.68
89	0.92	10.72
90	0.9	10.7
91	0.91	10.71
92	0.88	10.68
93	0.88	10.68
94	0.87	10.67
95	0.88	10.68

TABLE D-1

59593 PUMPING TEST DATA
(Continued)

ELAPSED TIME	DRAWDOWN	WATER LEVEL
96	0.89	10.69
97	0.93	10.73
98	0.92	10.72
99	0.88	10.68
100	0.84	10.64
101	0.87	10.67
102	0.86	10.66
103	0.8	10.6
104	0.89	10.69
105	0.87	10.67
106	0.81	10.61
107	0.9	10.7
108	0.9	10.7
109	0.9	10.7
110	0.9	10.7
111	0.8	10.6
112	0.87	10.67
113	0.9	10.7
114	0.89	10.69
115	0.86	10.66
116	0.93	10.73
117	0.92	10.72
118	0.91	10.71

TABLE D-2

58793 PUMPING TEST DATA

ELAPSED TIME	WATER LEVEL	DRAWDOWN
0.1666	14.59	−0.01
0.1833	14.6	0
0.2	14.59	−0.01
0.2166	14.59	−0.01
0.2333	14.59	−0.01
0.25	14.59	−0.01
0.2666	14.59	−0.01
0.2833	14.59	−0.01
0.3	14.6	0
0.3166	14.59	−0.01
0.3333	14.6	0
0.4167	14.59	−0.01
0.5	14.59	−0.01
0.5833	14.59	−0.01
0.6667	14.59	−0.01
0.75	14.59	−0.01
0.8333	14.59	−0.01
0.9167	14.6	0
1	14.6	0
1.0833	14.6	0
1.1667	14.59	−0.01
1.25	14.59	−0.01
1.3333	14.63	0.03
1.4166	14.65	0.05
1.5	14.58	−0.02
1.5833	14.58	−0.02
1.6667	14.58	−0.02
1.75	14.63	0.03
1.8333	14.6	0
1.9167	14.56	−0.04
2	14.59	−0.01
2.5	14.66	0.06
3	14.75	0.15
3.5	14.87	0.27
4	14.98	0.38
4.5	15.08	0.48
5	15.18	0.58
5.5	15.28	0.68
6	15.37	0.77
6.5	15.46	0.86
7	15.55	0.95
7.5	15.63	1.03
8	15.71	1.11
8.5	15.8	1.2
9	15.88	1.28
9.5	15.96	1.36
10	16.03	1.43
11	16.2	1.6
12	16.34	1.74
13	16.48	1.88

TABLE D-2

58793 PUMPING TEST DATA
(Continued)

ELAPSED TIME	WATER LEVEL	DRAWDOWN
14	16.64	2.04
15	16.8	2.2
16	16.95	2.35
17	17.1	2.5
18	17.24	2.64
19	17.39	2.79
20	17.57	2.97
21	17.67	3.07
22	17.7	3.1
23	17.72	3.12
24	17.75	3.15
25	17.79	3.19
26	17.83	3.23
27	17.88	3.28
28	17.92	3.32
29	17.95	3.35
30	17.99	3.39
31	18.01	3.41
32	18.04	3.44
33	18.07	3.47
34	18.1	3.5
35	18.13	3.53
36	18.17	3.57
37	18.2	3.6
38	18.24	3.64
39	18.3	3.7
40	18.36	3.76
41	18.41	3.81
42	18.45	3.85
43	18.49	3.89
44	18.53	3.93
45	18.57	3.97
46	18.63	4.03
47	18.72	4.12
48	18.81	4.21
49	18.92	4.32
50	19.03	4.43
51	19.14	4.54
52	19.2	4.6
53	19.23	4.63
54	19.25	4.65
55	19.28	4.68
56	19.3	4.7
57	19.32	4.72
58	19.35	4.75
59	19.38	4.78
60	19.4	4.8
61	19.42	4.82
62	19.45	4.85
63	19.47	4.87

TABLE D-2

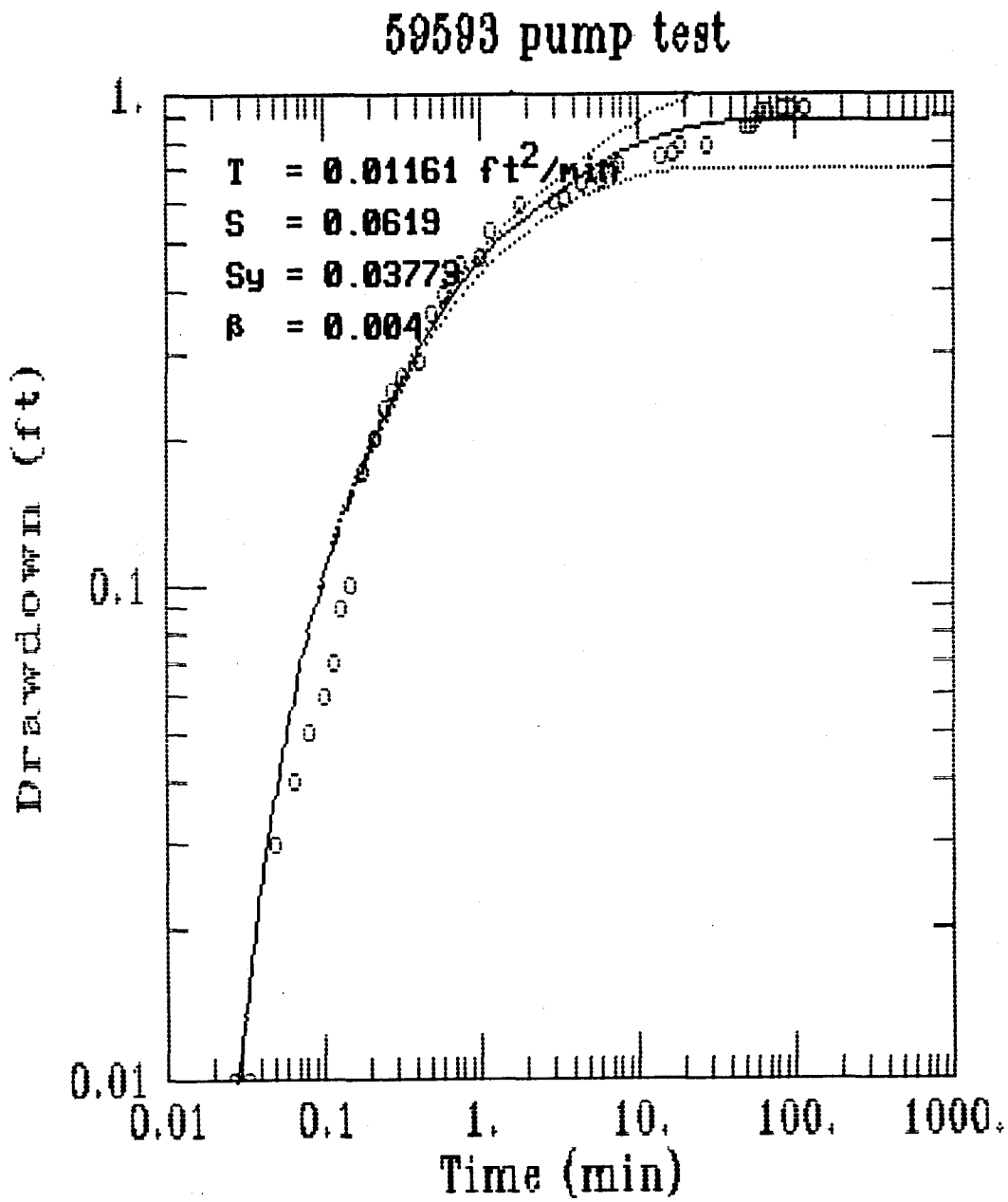
58793 PUMPING TEST DATA
(Continued)

ELAPSED TIME	WATER LEVEL	DRAWDOWN
64	19.5	4.9
65	19.54	4.94
66	19.56	4.96
67	19.59	4.99
68	19.62	5.02
69	19.66	5.06
70	19.69	5.09
71	19.71	5.11
72	19.74	5.14
73	19.77	5.17
74	19.8	5.2
75	19.82	5.22
76	19.85	5.25
77	19.87	5.27
78	19.9	5.3
79	19.92	5.32
80	19.94	5.34
81	19.97	5.37
82	20	5.4
83	20.02	5.42
84	20.05	5.45
85	20.07	5.47
86	20.08	5.48
87	20.08	5.48
88	20.08	5.48
89	20.08	5.48
90	20.08	5.48
91	20.08	5.48
92	20.08	5.48
93	20.08	5.48
94	20.08	5.48
95	20.08	5.48
96	20.08	5.48
97	20.08	5.48
98	20.08	5.48
99	20.08	5.48
100	20.08	5.48
101	20.08	5.48
102	20.08	5.48
103	20.08	5.48
104	20.08	5.48
105	20.08	5.48
106	20.08	5.48
107	20.08	5.48
108	20.08	5.48
109	20.08	5.48
110	20.08	5.48
111	20.08	5.48
112	20.08	5.48
113	20.08	5.48

TABLE D-2

58793 PUMPING TEST DATA
(Continued)

ELAPSED TIME	WATER LEVEL	DRAWDOWN
114	20.08	5.48
115	20.08	5.48
116	20.08	5.48
117	20.08	5.48
118	20.08	5.48



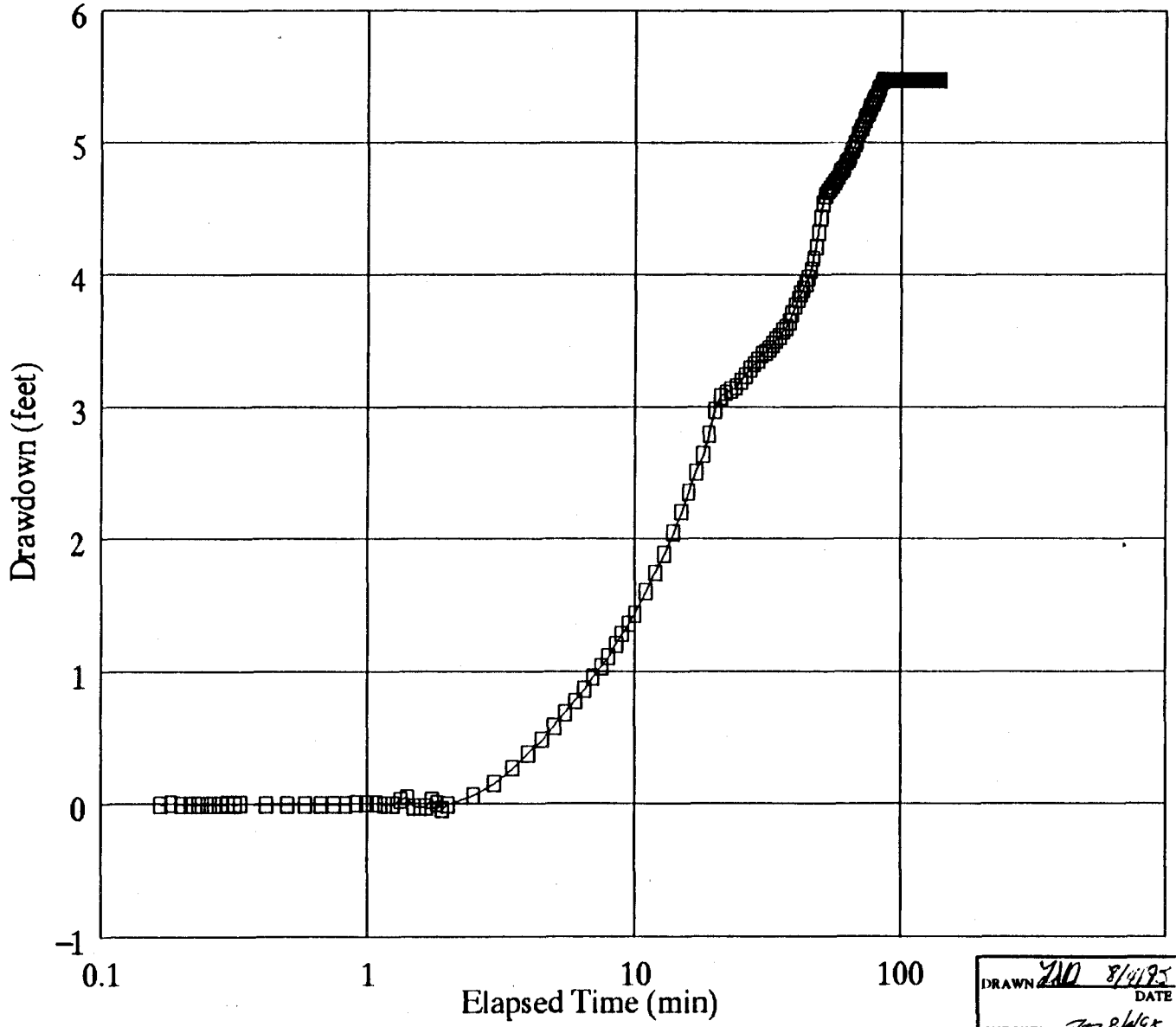
AQTESOLV

GERAGHTY & MILLER, INC.

Modeling Group

DRAWN 8/4/95 DATE	59593 AQUIFER TEST DRAWDOWN VS TIME
CHECKED 8/4/95 DATE	ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
APPROVED DATE	OU5 - WOMAN CREEK PRIORITY DRAINAGE
F6-2.DRW	RFI/RI REPORT
	FIGURE D-1

58793 Pumping Test – Hermit Data



DRAWN ZAD 8/4/95 DATE	58793 AQUIFER TEST DRAWDOWN VS TIME
CHECKED JEP 8/4/95 DATE	ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
APPROVED ____ DATE	OU5 - WOMAN CREEK PRIORITY DRAINAGE
F6-2.DRW	RFI/RI REPORT
	FIGURE D-2