DRAFT FINAL

KAISER•HILL COMPANY

PHASE I RFI/RI REPORT

WOMAN CREEK PRIORITY DRAINAGE OPERABLE UNIT NO. 5

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE, COLORADO

RMRS Rocky Mountain Remediation Services, L.L.C. ...protecting the environment

APPENDICES B - D

Prepared For:

U.S. DEPARTMENT OF ENERGY
Rocky Flats Environmental Technology Site
Golden, Colorado

• Environmental Restoration • Rocky Flats Environmental Technology Site

DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

ADMIN RECORD

October 1995

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APPENDIX B

GEOLOGIC LOGS

GEOLOGIC LOGS FOR 1992 AND 1993 BOREHOLES

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.80	GROUND ELEVATION (FT)	5820.50	PROJECT NUMBER	035-RFI/RI	LOG OF BORING NUMBER:
NORTH:	7[illegible]587	AREA: IHSS 142.10 C-1 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S. DREILING	50092
EAST	2096417	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	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 50 /2.50	5820 5819	0 1			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	5818 5817	2 3			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		4				
				0.60 /0 65	5816					
	BH50009AS			0 50 /0 50	5815	5				No recovery (3.2-4 0'), and (6 4-7 2')
				1.00 /1.00		6				
				0.20 /0.80	5814	7				
	BH50000AS			2.80 /2 80	5813 5812	8 9			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
					5811	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 80	GROUND ELEVATION (FT)	5820.50	PROJECT NUMBER	065-RFI/RI
NORTH: [illegible]587	AREA: IHSS 142 10 C-1 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING
EAST 1336417	LOCATOR NUMBER: N7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	11/03/92

LOG OF BORING NUMBER: 50092

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
	B50002AS			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 redox 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				Total Depth Drilled 14 80 Total Depth Casing 13 10 Bottom of Filter Pack 11 60
					5804	16				
					5803	17				
					5802	18				
					5801	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 10	GROUND ELEVATION (FT) 5745 80	PROJECT NUMBER: OU5-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 / 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%						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').
				1 20 /2.50	5745 5744	0 1 2			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.
				3 30 /1.50	5743 5742	3 4			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')
	BH5000HS			0 90 /1.00 0 50 /0 50	5741 5740	5 6				
				1 50 /2.00	5739	7			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. Uncansol., 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
	BH5000AS			1 90 /2 00	5738 5737	8 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				

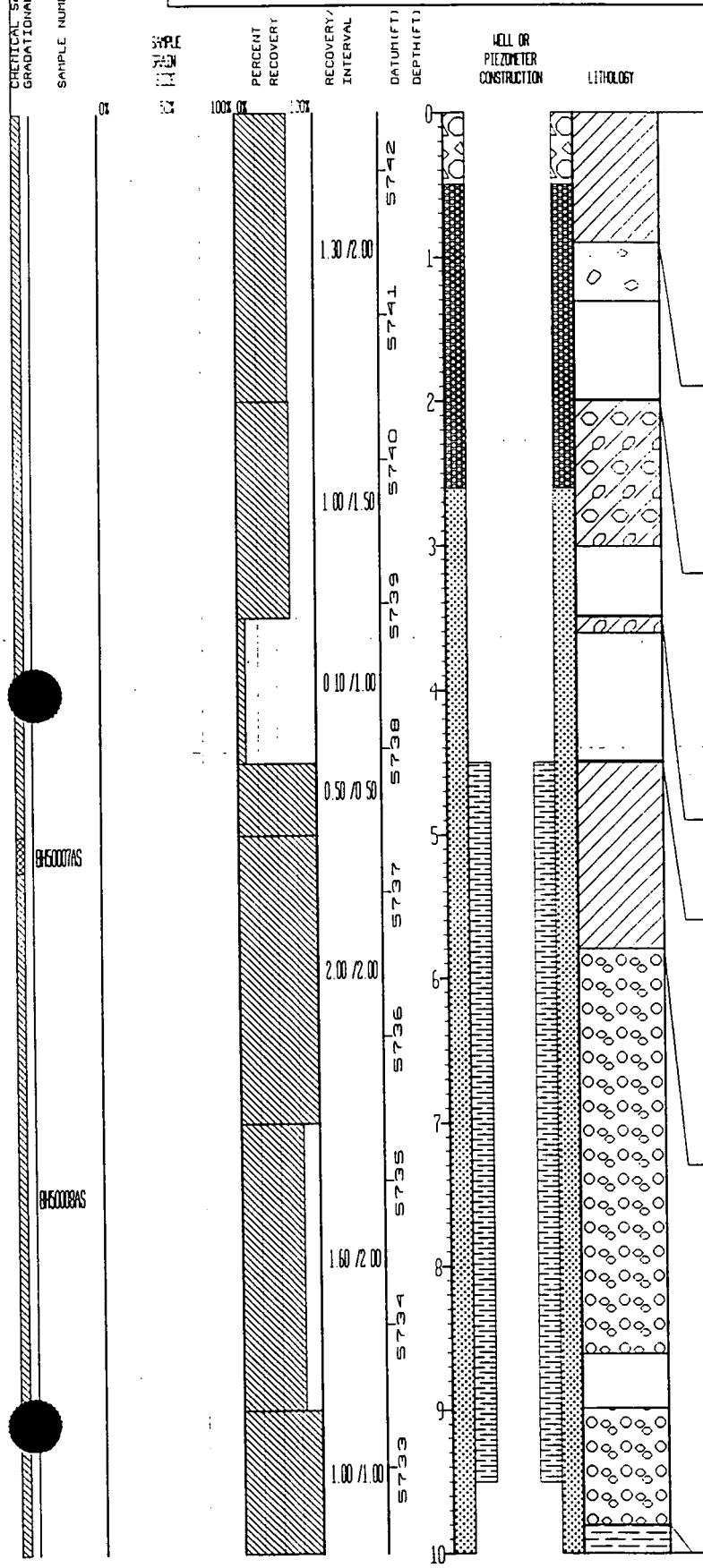
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 10	GROUND ELEVATION (FT) 5745 80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747533	AREA IHSS 142.11 C-2 POND	CASING DIAMETER (IN) 2 30	GEOLOGIST T S. DREILING	50192	
EAST 2089222	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 11/05/92		

REMARKS: DRILLING EQUIPMENT CME 75 ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING. NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 [illegible] NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	BLOWS/6 INCHES INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50010AS	0% 50% 100%	0% 100%	1 50 / 1 50	5735	10			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 30 / 0 70	5734	11				
				1 10 / 1 40	5733	12				
					5732	13			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
				1 50 / 1 50	5731	14				
					5730	15				Total Depth Drilled 15 10 Total Depth Casing 12.90 Bottom of Filter Pack 10 20
					5729	16				
					5728	17				
					5727	18				
					5726	19				
						20				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 14 50	GROUND ELEVATION (FT) 5742.40	PROJECT NUMBER 605-RFI/RI	LOG OF BORING NUMBER:
NORTH 77328	AREA: IHSS 142.11 C-2 POND	CASING DIAMETER (IN) 2 00	GEOLOGIST T S DREILING	50292
EAST 2389313	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, 22% 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. DRILLING	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-DRILLING. 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
	BH50011AS			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 sluff 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 GU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 7-9088	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. (gw-gm) 20% cobbles, 42% gravel, 31% sand, 6% silt, 1% clay.
	BH50018-S			0.80 /0.80	6021	2				
	BH50012-S			0.00 /0.20	6020	3				
				1.50 /1.50	6019	4				No recovery (7.5-8.0')
	[illegible]19-S									
				1.20 /1.30	6018	5				
				0.00 /0.20	6017	6				
	BH50020-S									
				1.50 /2.00	6016	7				
					6015	8				
	BH50021-S									
	[illegible]-S			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 7-8088	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S. DREILING		
EAST 1082630	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:	OU5-RFI/RI
NORTH: 7[illegible]8088	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

LOG OF BORING NUMBER: 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% SGX 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH5002?AS				6003	20				
	BH5001?AS			2.00 /2.00	6002	21				
	BH5002?AS				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 Grf is thoroughly limonite and hematite oxidized overlying bedrock.
	[illegible]?AS				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 Grf 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				
	BH5003?AS				5997	26				No recovery (25.7-26.0').
	BH5001?AS			2.00 /2.00	5996	27			CLAYSTONE	26.0'-30.0' Claystone Same as above (reference interval 24.0' to 25.7') <1% silt, >99% clay
					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: 135-RFI/RI	LOG OF BORING NUMBER:
NORTH: 748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST F S DREILING	50492
EAST: 2082461	LOCATOR NUMBER 38	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
				1 40 /2 00	6024	1			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
	BH50043AS				6023	2				
	BH50037AS			1 50 /2.00	6022	3				
	BH50044AS				6021	4				No recovery (1 4-2.0'), (3 5-4 0'), and (5 35-6.0')
				1 35 /2.00	6020	5				
	BH50045AS				6019	6				No recovery (7 5-8.0')
				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) 5625.10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH: 7-5977	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50492	
EAST 2382461	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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50047AS	0% 50% 100%	0% 100%	2 00 /2.00	6015	10				
	BH50048AS			1 80 /2.00	6014	11				
	[illegible]AS			2 00 /2.00	6013	12				
	BH50049AS			2 00 /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.
	BH50050AS			2 00 /2.00	6011	14			SC:	13 7'-17 3' Gravelly Sand. Continuation of interval described in 0.0' to 13.3'
	BH50051AS			2 00 /2.00	6010	15			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
				2 00 /2.00	6009	16			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	6008	17				
				2 00 /2.00	6007	18				
					6006	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT) 5525.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST	T S DRILLING	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-DRILLING 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 005-RFI/RI	LOG OF BORING NUMBER
NORTH: 7-9077	AREA SURF. DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST: T S DREILING	50492
EAST 2982461	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: 1.95 /2 00; 1 50 /1 50; 1 40 /1 40; 1.40 /1 40; 2 20 /2 20

DATUM (FT): 5995, 5994, 5993, 5992, 5991, 5990, 5989, 5988, 5987, 5986

DEPTH (FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

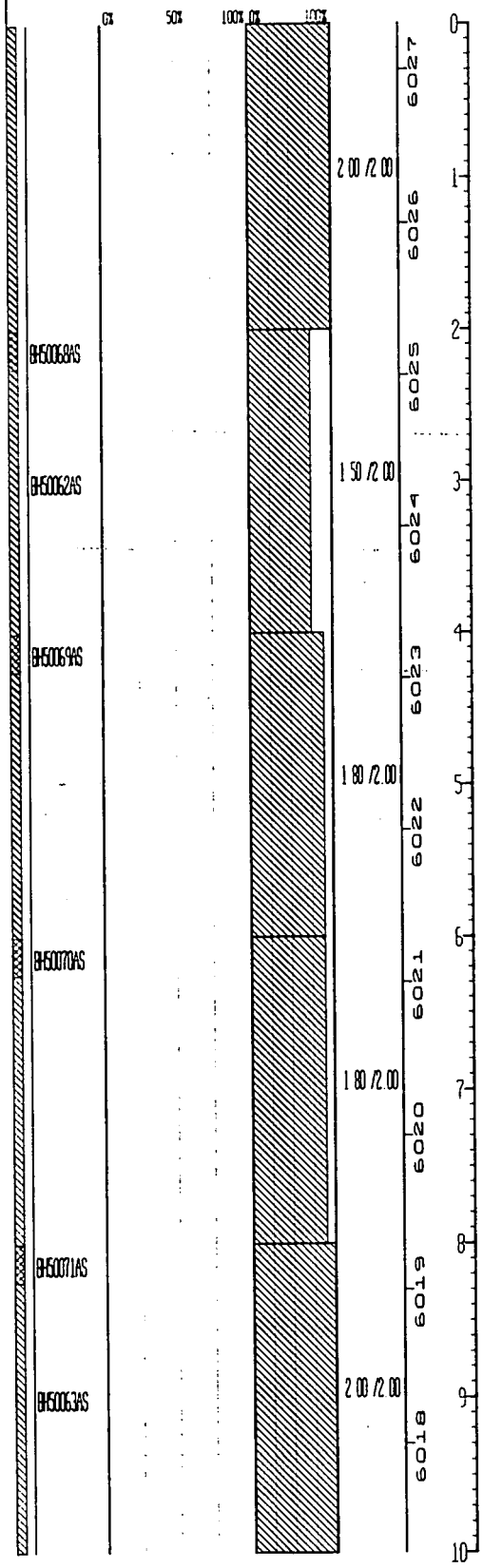
WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 bimodal 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	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7?9051	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



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 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
	BH50072AS			1.60 /2.00	6017	10				
					6016	11			NO RECOVERY	No recovery (11.6-12 0').
	BH50073AS			2 00 /2.00	6015	12			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.
					6014	13				
	BH50074AS			2 00 /2.00	6013	14			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.
	BH50064AS			2 00 /2.00	6012	15				
	BH50066AS									
	BH50075AS				6011	16				
				2 00 /2.00	6010	17			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.
	BH50076AS				6009	18				
				2 00 /2.00	6008	19				
						20				

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: F 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: BH50077AS, BH50065AS, BH50078AS, BH50079AS, BH50080AS, BH50081AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

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

DATUM (FT): 6007, 6006, 6005, 6004, 6003, 6002, 6001, 6000, 5999, 5998

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
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
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, 53% clay

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 32.00	GROUND ELEVATION (FT): 6027.30	PROJECT NUMBER:	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	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	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 7914	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST L. HOST/T DREILING	50692
EAST 82505	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
		0% 50% 100%	0% 100%			0				
				1 50 /2 00	5993	1				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
					5992	2				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 quarizite. 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									
					5990	4			NO RECOVERY	No recovery (3 3-4 0')
	BH50092AS									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				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				
	BH50088AS									No recovery (9.2'-10 0')
					5984	10				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 21.00	GROUND ELEVATION (FT) 5993.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER:	
NORTH: 74914	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

CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50095AS	0% 50% 100%	0% 100%	1.50 /2.00	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	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')
	50097AS			1.00 /2.00	15			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	17				
	BH50098AS			1.90 /2.00	18 19 20			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

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
		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 7-7986	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST: T DREILING	50792	
EAST 1382384	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% – 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	5993	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.
					5992	1				
	BH50108AS			1.80 /2.00	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				5990	3				
					5989	4				
	BH50109AS			1.50 /2.00	5988	5				
					5987	6				
	BH50110AS			2.00 /2.00	5986	7			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
	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:	LOG OF BORING NUMBER:
NORTH: 7-7886	AREA SURF. DIST. E OF 115	CASING DIAMETER (IN)		GEOLOGIST:	50792
EAST 2382384	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED:	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST THERESA SANTANGELO-DRILLING. BOREHOLE ABANDONED AND GROUTED ON 12/11/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

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
	B50112AS	0% 50%	100% 0% 100%	2.00 /2.00	5983	10				
					5982	11				
					5981	12				
				2.00 /2.00	5980	13				
					5979	14				
				2.00 /2.00	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	GUS-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747982	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
				2 00 /2 00	5996	0–1			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.
	BH50125AS			1 70 /2 00	5995 5994	1–3			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.
	BH50121AS			1 80 /2 00	5993 5992	3–5				No recovery (3.7-4 0')
	BH50127AS			1 70 /2.00	5991 5990 5989	5–7				
						7–8			NO RECOVERY	No recovery (7 7-8 0')
	BH50129AS			2 10 /2 00	5988 5987	8–10			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	OU5-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 ASE RIG GEOLOGIST: LAURIE HOST BOREHOLE ABANDONED AND GROUTED ON 12/14/92

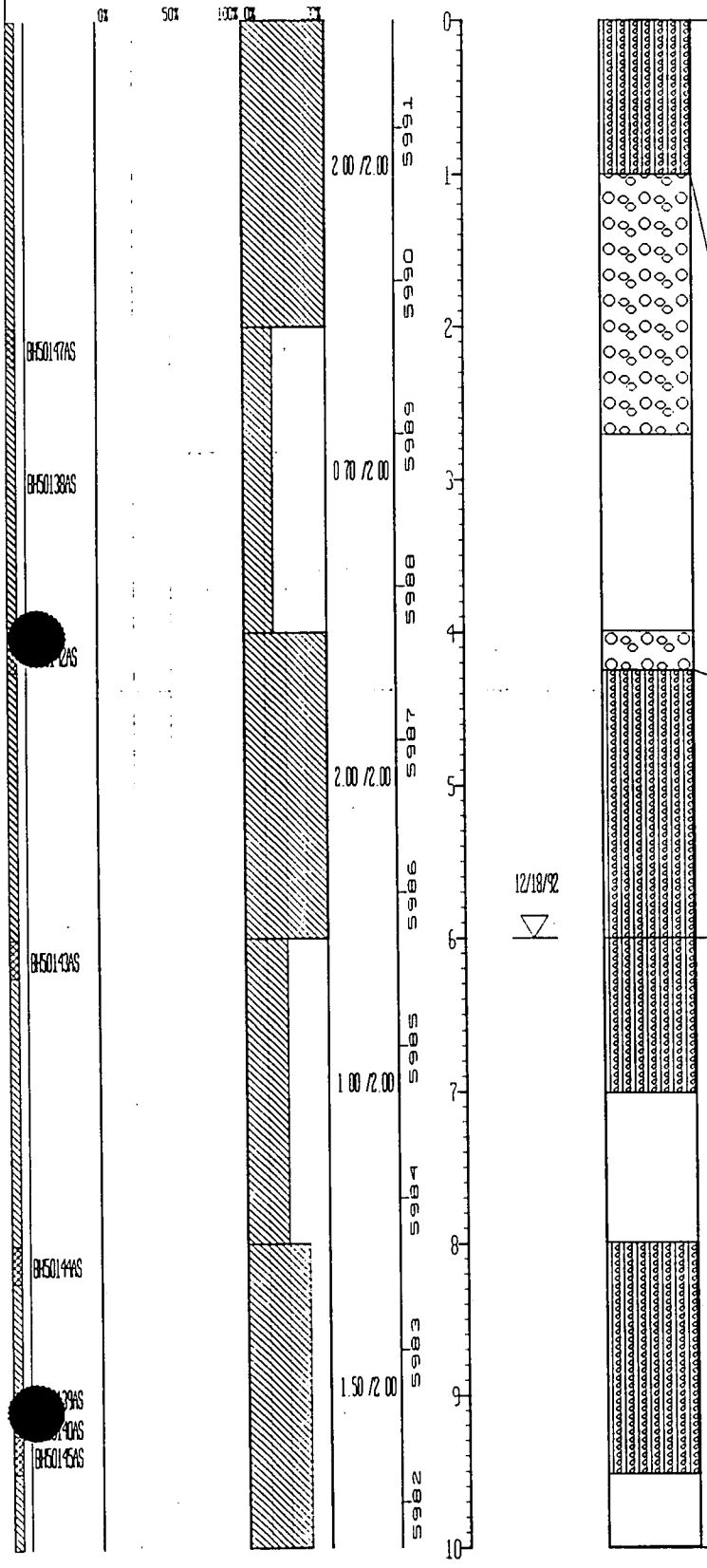
NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50129AS					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				5985					
	BH50130AS					12				
				2 10 /2 00	5984					
					5983	13				
						14				
				1.90 /2 00	5982					
					5981	15				
						16				Total Depth Drilled: 16 00
					5980					
						17				
					5979					
						18				
					5978					
						19				
					5977					
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT) 5991.70	PROJECT NUMBER	[illegible]5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]343	AREA: IHSS 196	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	50992
EAST [illegible]31536	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 / 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
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.
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. No recovery (2.7-4.0')
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.
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'). No recovery (7.0-8.0'), (9.5-10.0'), and (10.5-12.0')

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT): 5991 70	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER	
NORTH [illegible]7843	AREA: IHSS 196	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST [illegible]381536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED: 12/18/92	50992	

REMARKS: CORE 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	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 50 /2.00	5981	11				
					5980	12			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 rounced, 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
				1 00 /2.00	5979	13				No recovery (13 0-14 0')
	BH50146AS				5978	14			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
				1.30 /2.00	5977	15				No recovery (15 3-16 0')
	BH50148AS				5976	16			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.
				1.50 /2.00	5975	17				No recovery (17 5-18 0')
					5974	18			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
				1 00 /1 00	5973	19				
					5972	20				Total Depth Drilled: 19.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 5991.10	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747769	AREA: BASS 196	CASING DIAMETER (IN)	GEOLOGIST: T S OREILING	51092
EAST: 2081497	LOCATION 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-OREILING. BORE HOLE ABANDONED AND GROUTED ON 12/21/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN.

CHEMICAL SAMPLE DEPTH / GRADATION DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	ELEVATION (FEET)	DEPTH (FEET)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50157AS			1 10 /2 00	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.
	BH50153AS				5989					No recovery (1 4-2 0')
	BH50158AS			1 10 /2 00	5988				NO RECOVERY	No recovery (3 1-4.0')
					5987				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.
				2 00 /2 00	5986					
	BH50154AS				5985					
	BH50159AS								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.
				2 00 /2 00	5984					
	BH50160AS				5983					
				2 00 /2 00	5982					

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	5991 10	PROJECT NUMBER	OU5-RFI/RI
NORTH: 747769	AREA IHSS 196	CASING DIAMETER (IN):		GEOLOGIST:	F S DREILING
EAST 2081497	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN):	8 00	DATE DRILLED	12/21/92

LOG OF BORING NUMBER 51092

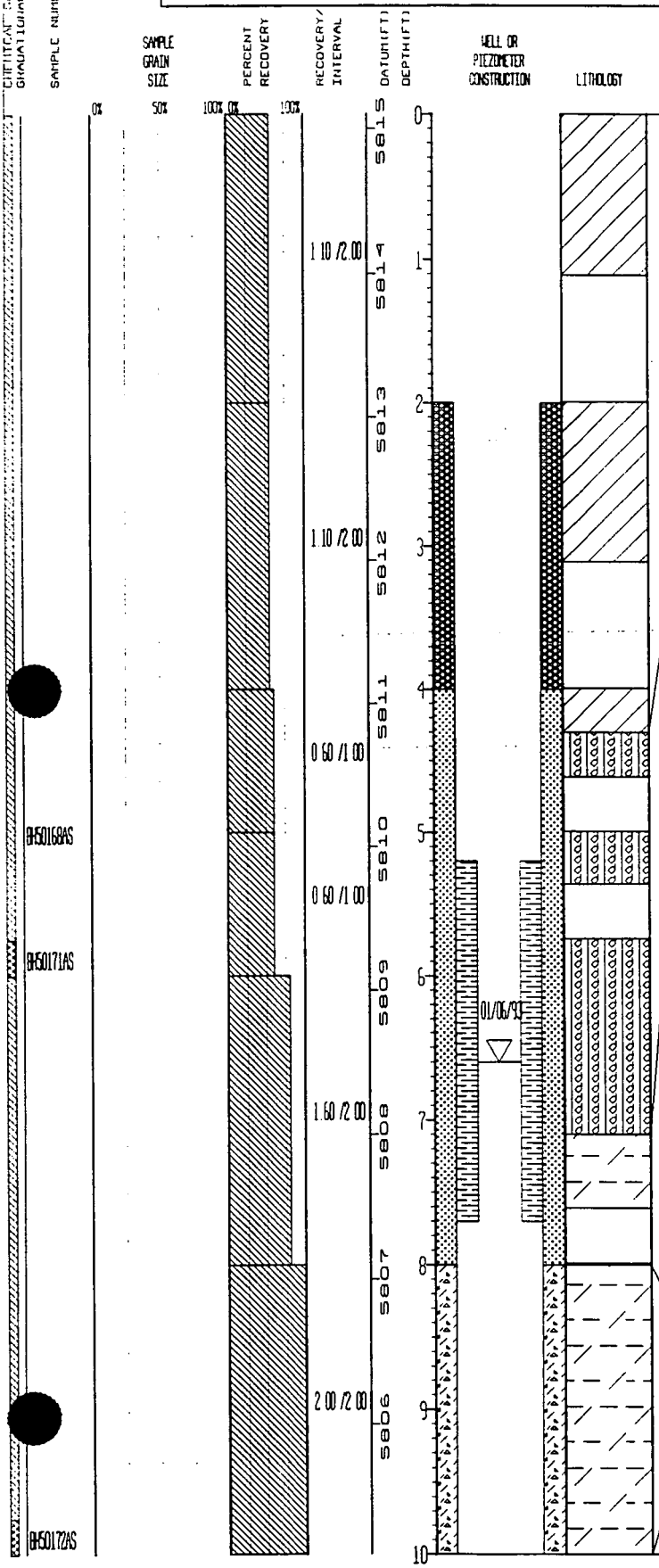
REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOONS ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING BORE HOLE ABANDONED AND GROUTED ON 12/21/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

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 3'-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'- 2 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:	005-RFI/RI
NORTH: 7-7775	AREA: IHSS 142.10 C-1 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST:	L. A. HOST
EAST: 2086379	LOCATOR NUMBER: N7	BOREHOLE DIAMETER (IN):	10 00	DATE DRILLED	01/05/93

LOG OF BORING NUMBER: 51193

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



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

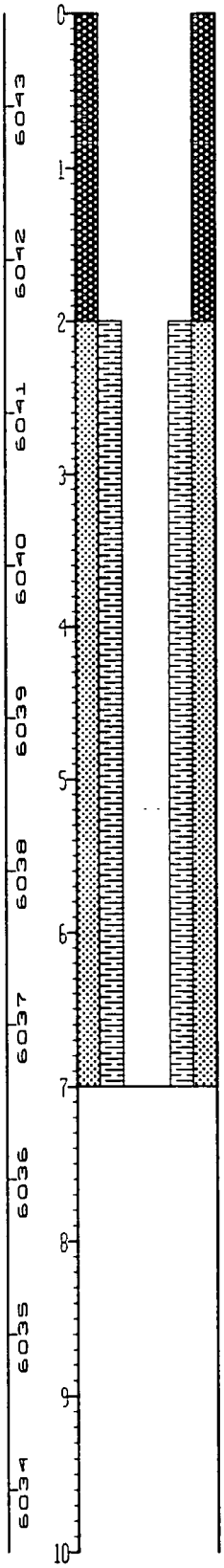
8 0'-10 0' Silty Claystone with trace Sand. Termination of interval begun at 7 1' Upper contact of weathered bedrock sharp with overlying alluvium. Weathered interval from 7 1' to 8.4' with 1 mm wide concordant and discordant calcareous fillings, relatively broken, and light gray (N7) with mottled yellowish 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:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH	747247	AREA WOMAN CK W OF 133	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S. DRILLING	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



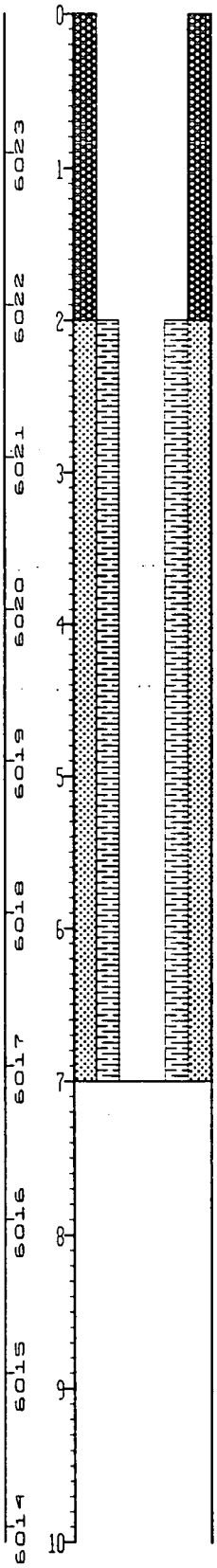
Total Depth Drilled 7.00
Bottom of Filter Pack: 7 00

Total Depth Casing: 7 00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 7 00	GROUND ELEVATION (FT)	6023.90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER:
NORTH	7-7314	AREA: WOMAN CK S OF 133 6	CASING DIAMETER (IN):	0 30	GEOLOGIST:	T S DRILLING	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

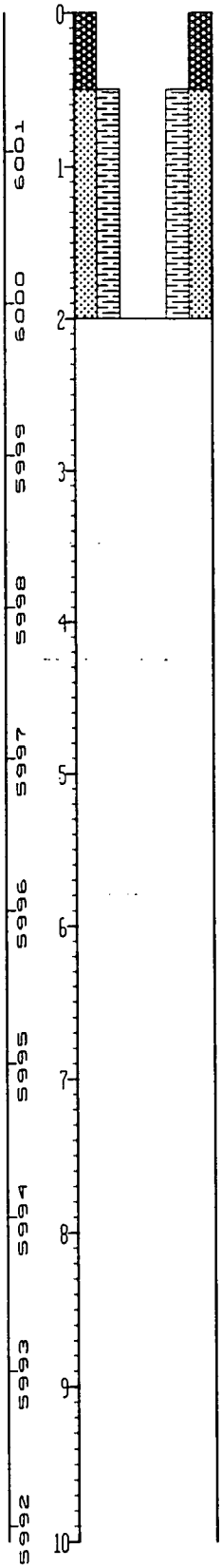
DATUM (FT) / DEPTH (FT)

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION



Total Depth Drilled: 2.00 Total Depth Casing: 2.00
Bottom of Filter Pack 2.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4.50	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH [illegible]	AREA WOMAN CK S OF 133 3	CASING DIAMETER (IN) [illegible]	GEOLOGIST:	T S DRILLING	51593
EAST [illegible]	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED:	02/03/93	

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

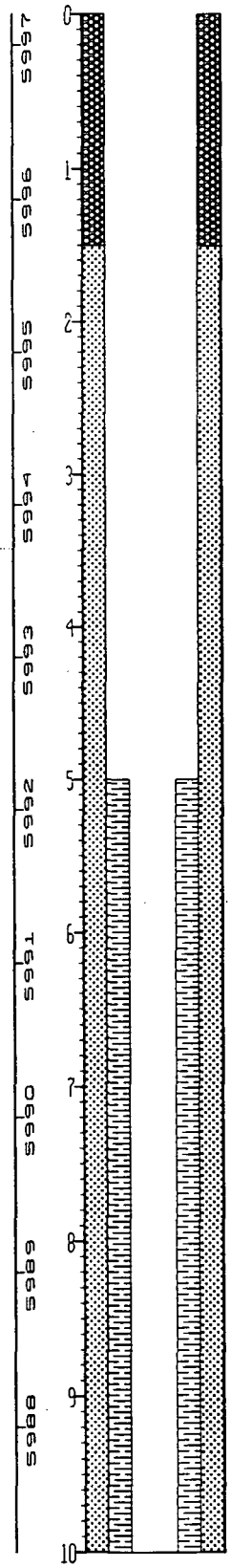
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5990	0				
					5989	1				
					5988	2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

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5997.20	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 57147	AREA SOUTH OF THSS 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

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: 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:	135-RFI/RI
NORTH: 747166	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. DRILLING
EAST: 2080104	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED	12/03/93

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

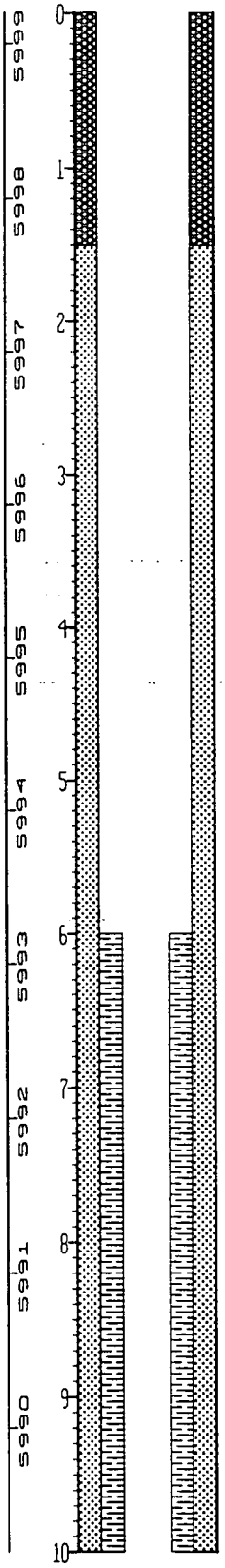
DATUM (FT) | DEPTH (FT)

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 905-RFI/RI	LOG OF BORING NUMBER	
NORTH 747166	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN) 0 30	GEOLOGIST T S OREILING	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

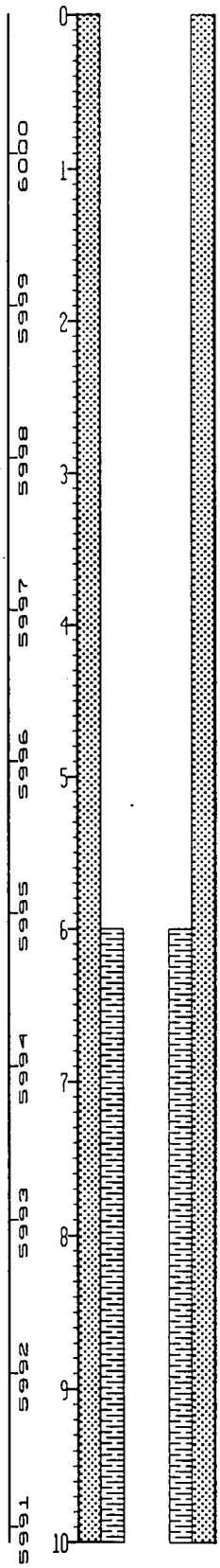
SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	0% 100%		5989	10				
			5988	11				
			5987	12				
			5986	13				
			5985	14				
			5984	15				
			5983	16				
			5982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

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT): 6000.90	PROJECT NUMBER	GU5-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



Total Depth Drilled: 11 00
Bottom of Filter Pack: 11 00

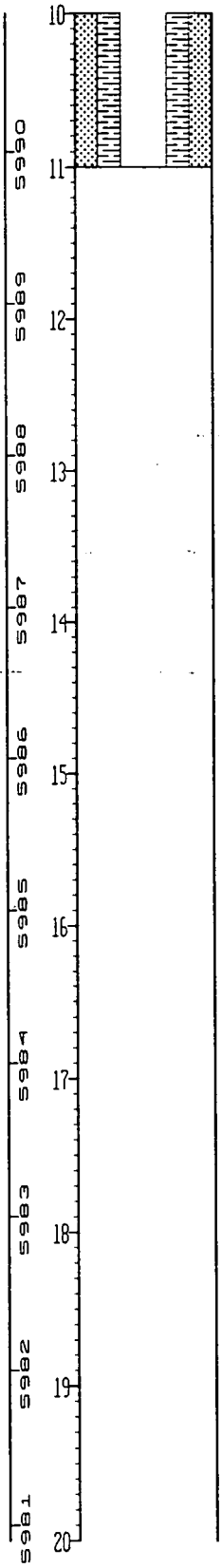
Total Depth Casing: 11.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 11.00	GROUND ELEVATION (FT):	6000.90	PROJECT NUMBER	005-RFI/RI
NORTH: 7-7195	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN)	0 30	GEOLOGIST:	T S DREILING
EAST: 2080105	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1 00	DATE DRILLED	02/03/93

LOG OF BORING NUMBER 51893

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

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



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6003.30	PROJECT NUMBER: 045-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: 2380103	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 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%		6003	0				
						6002	1				
						6001	2				
						6000	3				
						5999	4				
						5998	5				
						5997	6				
						5996	7				
						5995	8				
						5994	9				
							10				

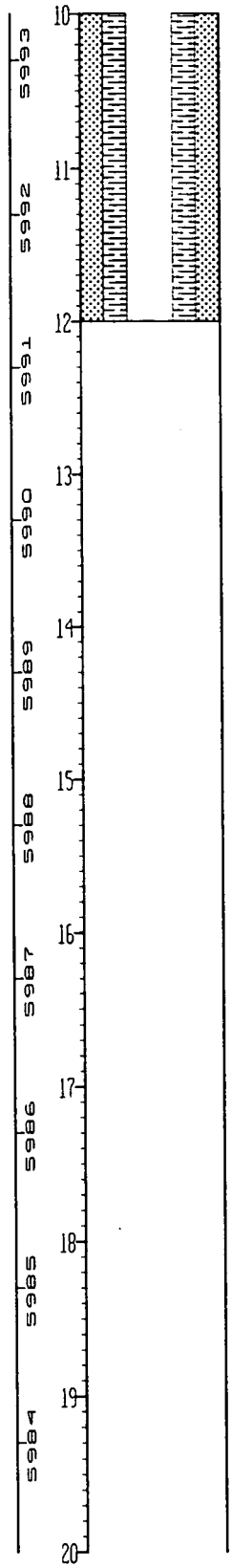
Total Depth Drilled: 12.00 Total Depth Casing: 12.00
Bottom of Filter Pack: 12.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6003.30	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747205	AREA SOUTH OF THSS 133.3	CASING DIAMETER (IN):	0 30	GEOLOGIST:	T S DREILING
EAST 2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN):	1 00	DATE DRILLED	02/03/93

LOG OF BORING NUMBER: 51993

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

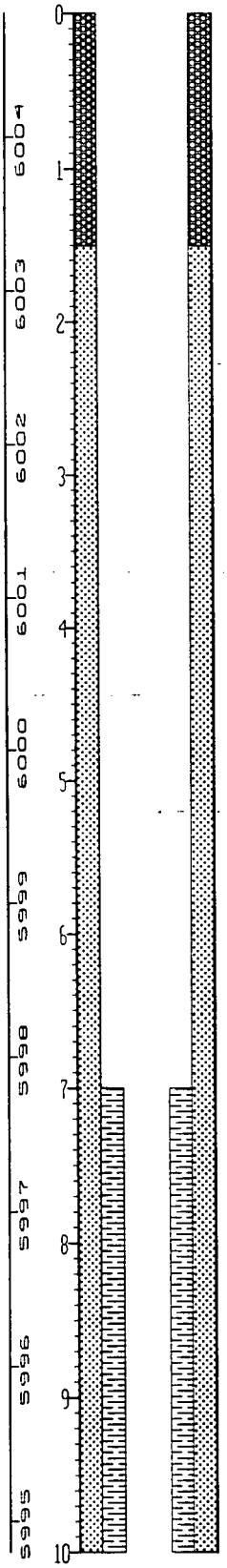


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6004.80	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 7-7225	AREA: SOUTH OF IHSS 133.3	CASING DIAMETER (IN) 0.30	GEOLOGIST: T.S. DREILING	52093
EAST: 2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED: 02/03/93	

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
Bottom of Filter Pack: 12.00
Total Depth Casing: 12.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6004 80	PROJECT NUMBER 005-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
						5994	10				
							11				
						5993	12				
						5992	13				
						5991	14				
						5990	15				
						5989	16				
						5988	17				
						5987	18				
						5986	19				
						5985	20				

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

LOG OF BORING NUMBER: 52193

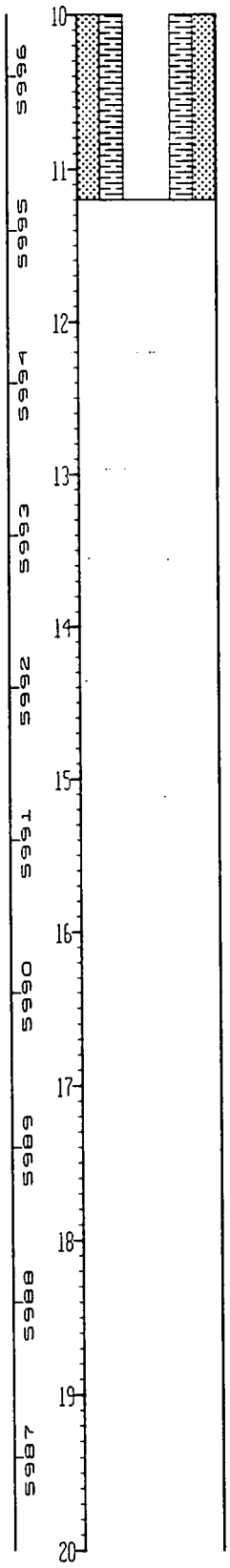
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

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
					6006	0				Total Depth Drilled: 11.20 Total Depth Casing: 11.20
										Bottom of Filter Pack: 11.20
					6005	1				
					6004	2				
					6003	3				
					6002	4				
					6001	5				
					6000	6				
					5999	7				
					5998	8				
					5997	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 20	GROUND ELEVATION (FT)	6006 40	PROJECT NUMBER	605-RFI/RI	LOG OF BORING NUMBER:
NORTH	747245	AREA: SOUTH OF THSS 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	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%							



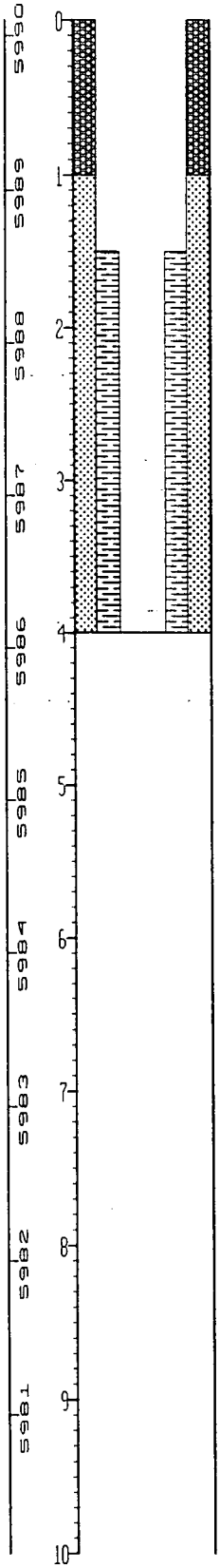
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5990.10	PROJECT NUMBER	OU5-RFI/RI
NORTH: [illegible]	AREA WOMAN CK S OF 133 3	CASING DIAMETER (IN)	0.30	GEOLOGIST:	T S DREILING
EAST: [illegible]	LOCATOR NUMBER: H6	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93

LOG OF BORING NUMBER: 52293

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

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: 4.00
Bottom of Filter Pack: 4.00

Total Depth Casing 4.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT):	6016.00	PROJECT NUMBER:	005-RFI/RI
NORTH: 746490	AREA: S. FORK OF WOMAN CK	CASING DIAMETER (IN):	2.30	GEOLOGIST:	T S DREILING
EAST: 2079702	LOCATOR NUMBER: 66	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 52393

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
		0% 50% 100%	0% 100%		6016	0				
					6015	1				
					6014	2				
					6013	3				
					6012	4				
					6011	5				
					6010	6				
					6009	7				
					6008	8				
					6007	9				
						10				

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)	6016.00	PROJECT NUMBER:	005-RFI/RI
NORTH: 746490	AREA S FORK OF WOMAN CK	CASING DIAMETER (IN):	0 30	GEOLOGIST	T S DREILING
EAST 2079702	LOCATOR NUMBER: G6	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 52393

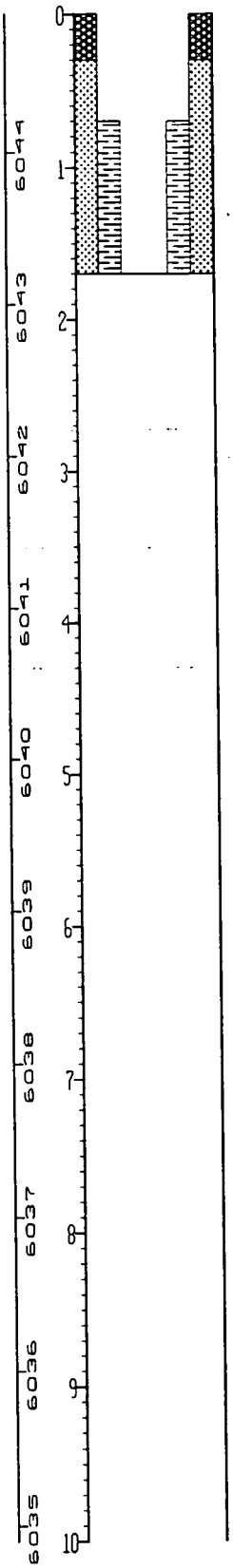
REMARKS: DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH	GROUNDWATER LEVEL	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%		6006	10				
						6005	11				
						6004	12				
						6003	13				
						6002	14				
						6001	15				
						6000	16				
						5999	17				
						5998	18				
						5997	19				
							20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 1.70	GROUND ELEVATION (FT) 6044.90	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 74213	AREA: S. FORK OF MONAN 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

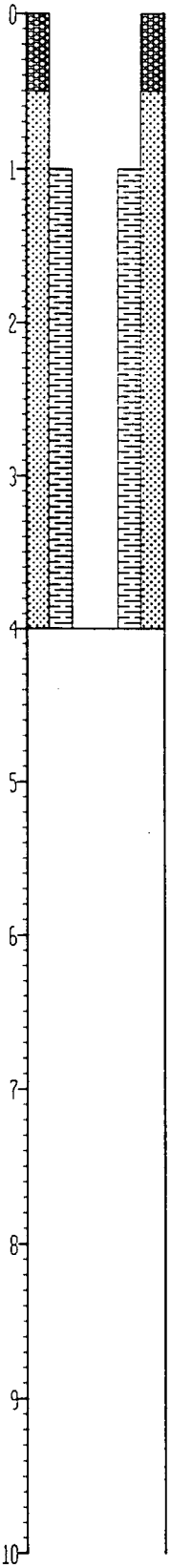


Total Depth Drilled: 1.70
Bottom of Filter Pack: 1.70
Total Depth Casing: 1.70

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT)	5972.60	PROJECT NUMBER:	OU5-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%)
PENETRATION 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

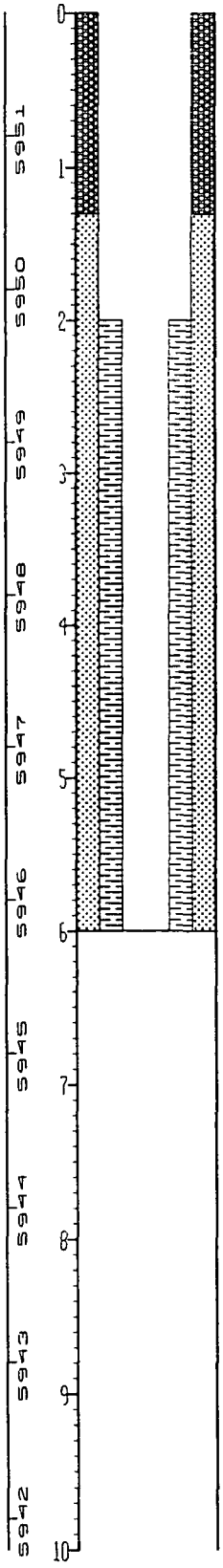
Total Depth Casing: 4.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5951 80	PROJECT NUMBER	005-RFI/RI
NORTH 74544	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T S DRILLING
EAST 2031505	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93

LOG OF BORING NUMBER 52693

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

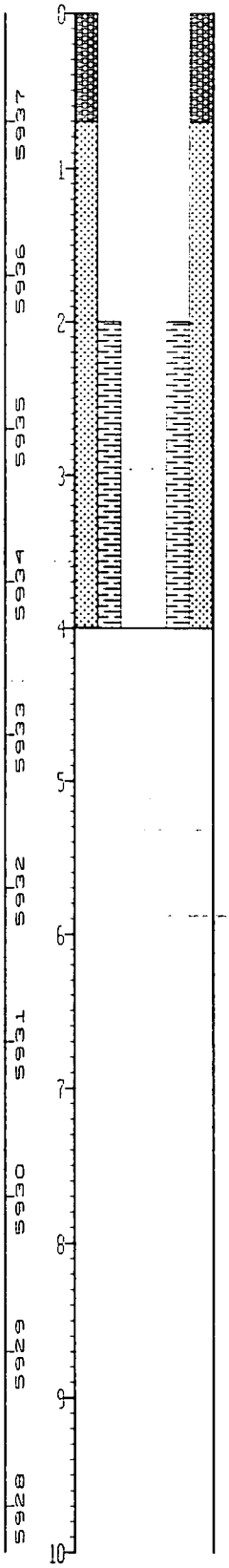


Total Depth Drilled 6 00
Bottom of Filter Pack 6 00
Total Depth Casing 6 00

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible] DRILLING	52793
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED [illegible]/94/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE [illegible] CORE WAS COLLECTED

CHEMICAL/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%							



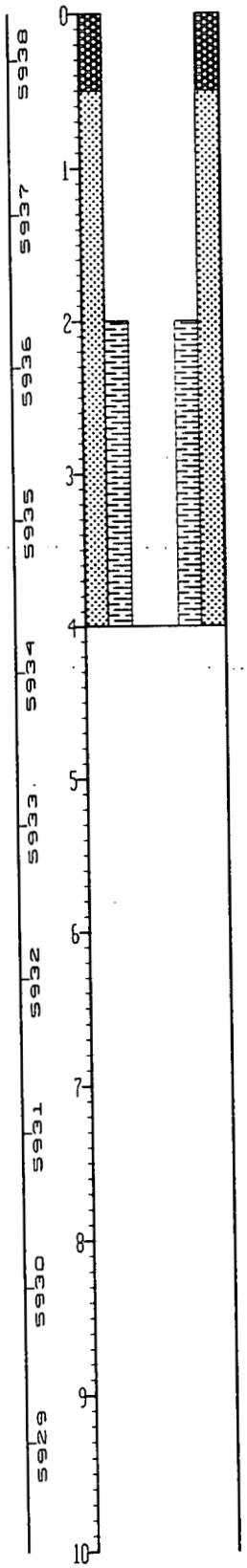
Total Depth Drilled [illegible]
Bottom of Filter Pack [illegible]

Total Depth Casing 4.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT): 5938.30	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:	
NORTH: [illegible]518	AREA: WOMAN CK 3 OF 115	CASING DIAMETER (IN) 0.30	GEOLOGIST: T.S. DREILING	52893	
EAST: 2032002	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

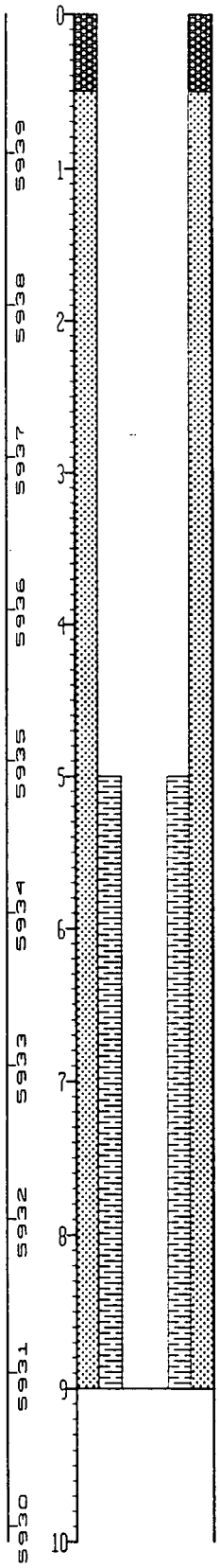


Total Depth Drilled: 4.00 Total Depth Casing: 4.00
Bottom of Filter Pack: 4.00

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT)	5939.90	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER:
NORTH:	7-7563	AREA 005, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	52993
EAST	3382002	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

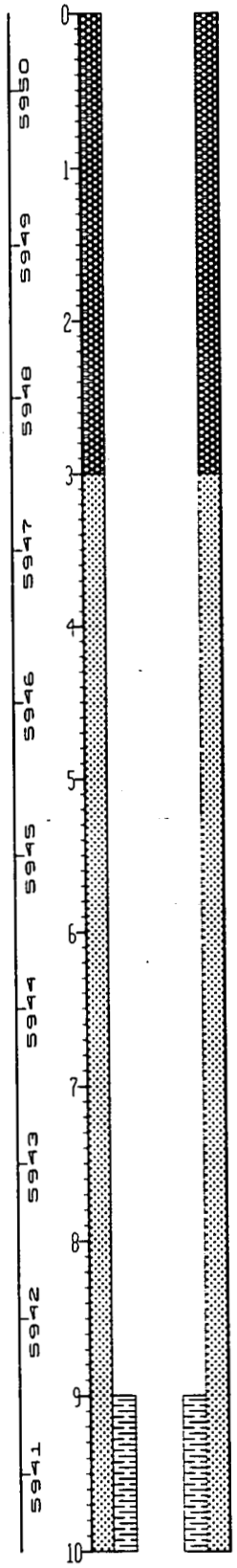
Total Depth Casing: 9.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT):	5950.50	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747594	AREA: OU5, IHSS 115	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T.S. OREILING
EAST: 2082005	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/08/93

LOG OF BORING NUMBER: 53093

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

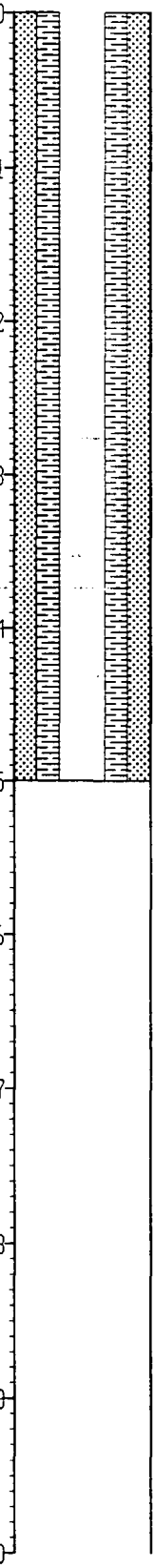
STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT):	5950.50	PROJECT NUMBER	005-RFI/RI
NORTH: 747594	AREA: 0U5, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING
EAST 2082005	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED:	02/08/93

LOG OF BORING NUMBER

53093

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

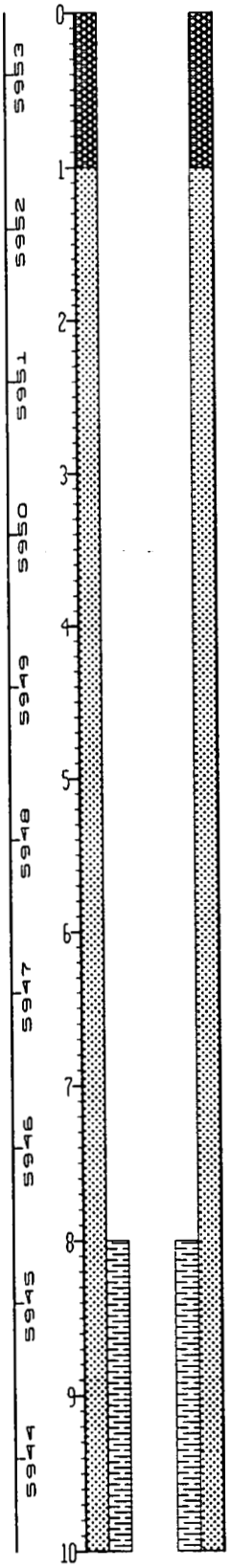
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5940	10				
					5939	11				
					5938	12				
					5937	13				
					5936	14				
					5935	15				
					5934	16				
					5933	17				
					5932	18				
					5931	19				
						20				



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT) 5953.40	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER
NORTH: 47613	AREA: OU5, IHSS 115	CASING DIAMETER (IN) 2 30	GEOLOGIST: T.S DRILLING	53193
EAST 1082003	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



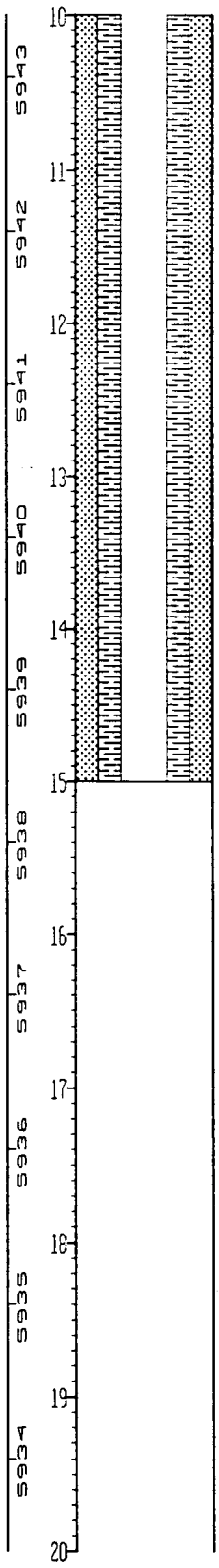
Total Depth Drilled: 15 00
Bottom of Filter Pack: 15 00

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. 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

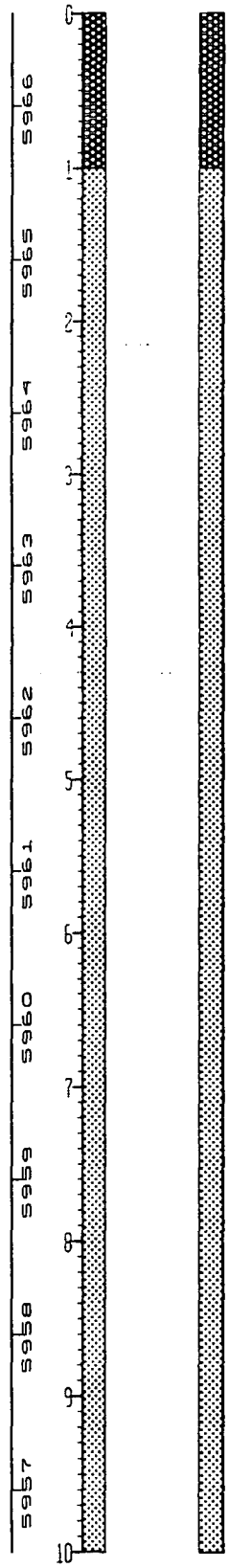
CHEMICAL SAMPLE GRADATIONAL DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							



STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 24.00	GROUND ELEVATION (FT)	5966.60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	[illegible]7657	AREA: OU5, IHSS 115	CASING DIAMETER (IN):	0.30	GEOLOGIST:	T. S. DREILING	53293
EAST	[illegible]82004	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
		0% 50% 100%	0% 100%			0				Total Depth Drilled: 24.00 Total Depth Casing: 24.00
					5966					Bottom of Filter Pack 24.00
						1				
					5965					
						2				
					5964					
						3				
					5963					
						4				
					5962					
						5				
					5961					
						6				
					5960					
						7				
					5959					
						8				
					5958					
						9				
					5957					
						10				



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24.00	GROUND ELEVATION (FT)	5966.60	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER:
NORTH	74657	AREA 005, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST:	T. S. DREILING	53293
EAST	2092004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/08/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

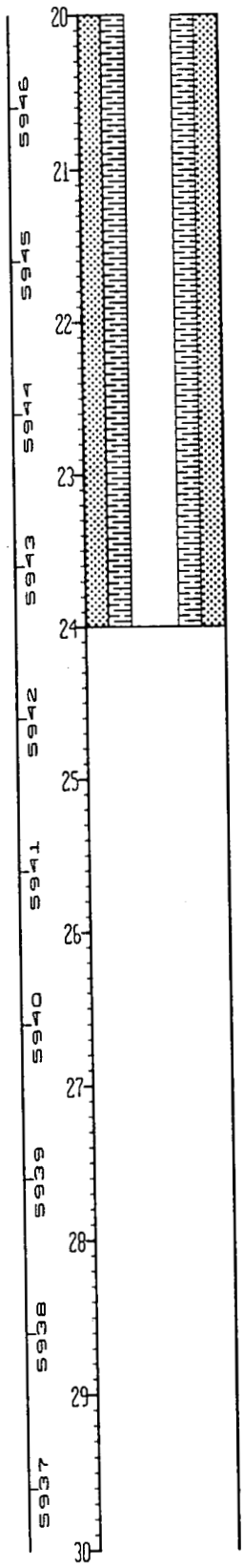
CHEMICAL SAMPLE DEPTH / GRADATIONAL DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							
					5966	10				
						11				
					5965	12				
					5964	13				
					5963	14				
					5962	15				
					5961	16				
					5960	17				
					5959	18				
					5958	19				
					5957	20				

STATE PLANE COORDINATE:	TOTAL DEPTH (FT): 24.00	GROUND ELEVATION (FT):	5366.60	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747657	AREA: OU5, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T. S. DREILING
EAST: 2082004	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	1.00	DATE DRILLED	02/08/93

LOG OF BORING NUMBER: 53293

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

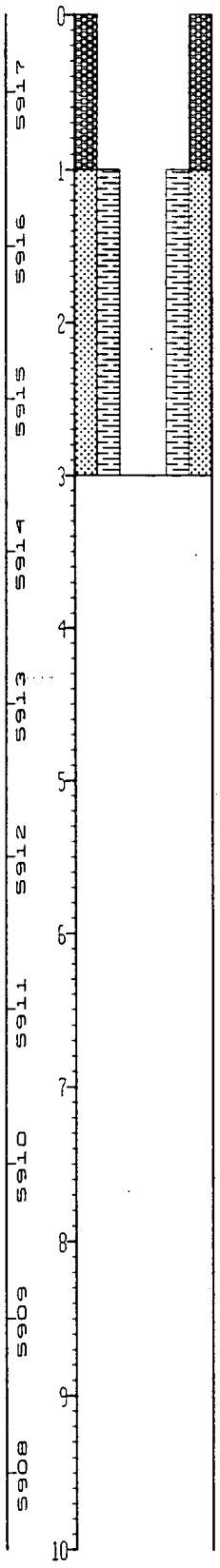


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 3.00	GROUND ELEVATION (FT)	5917.50	PROJECT NUMBER	005-RFI/RI
NORTH: 747500	AREA WOMAN CK SE 115	CASING DIAMETER (IN)	3.30	GEOLOGIST	T. S. DREILING
EAST 2082736	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER 53393

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



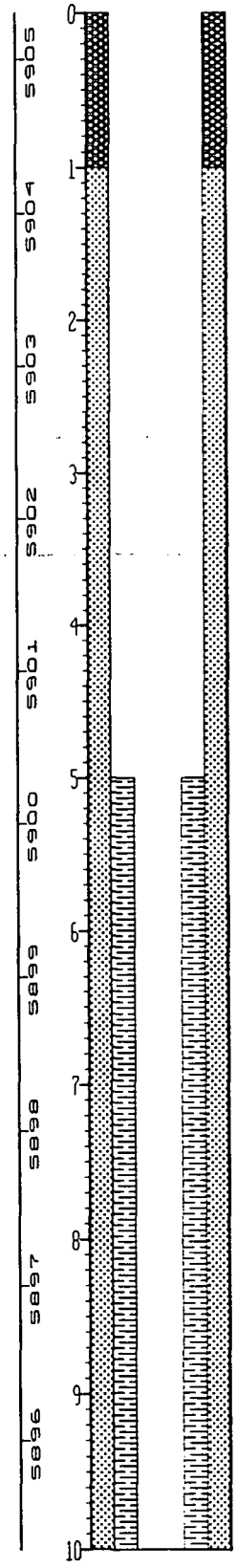
Total Depth Drilled: 3.00
Bottom of Filter Pack: 3.00

Total Depth Casing: 3.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 5905.30	PROJECT NUMBER: OU5-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: X7	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

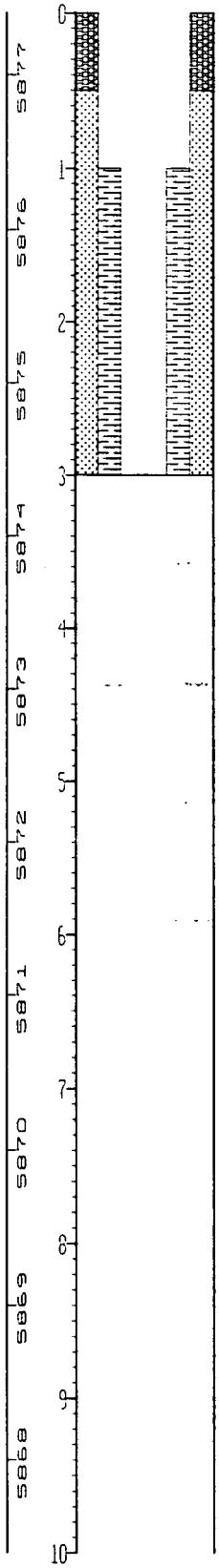


Total Depth Drilled: 10 00 Total Depth Casing: 10 00
Bottom of Filter Pack: 10.00

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] 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 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
		0% 50% 100%	0% 100%							



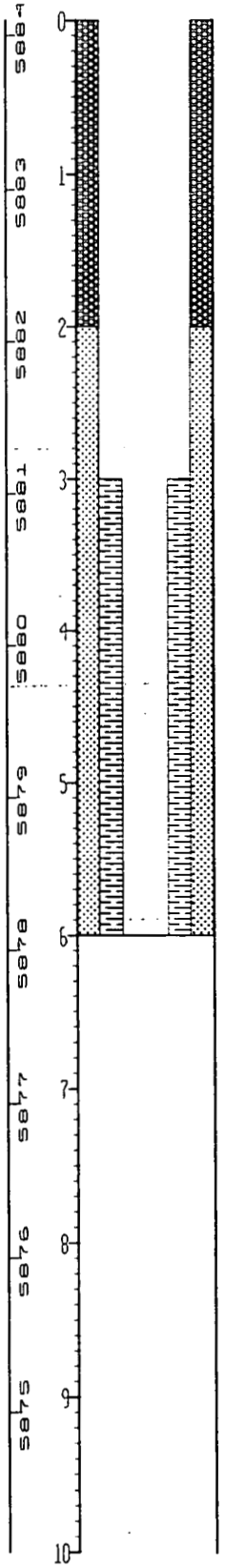
Total Depth Drilled 3.00 Total Depth Casing 3.00
Bottom of Filter Pack 3.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5384 10	PROJECT NUMBER	305-RFI/RI
NORTH [illegible]	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST 2083397	LOCATOR NUMBER K7	BOREHOLE DIAMETER (IN)	0 30	DATE DRILLED	02/04/93

LOG OF BORING NUMBER 53693

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%)
BLOWS/6" INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



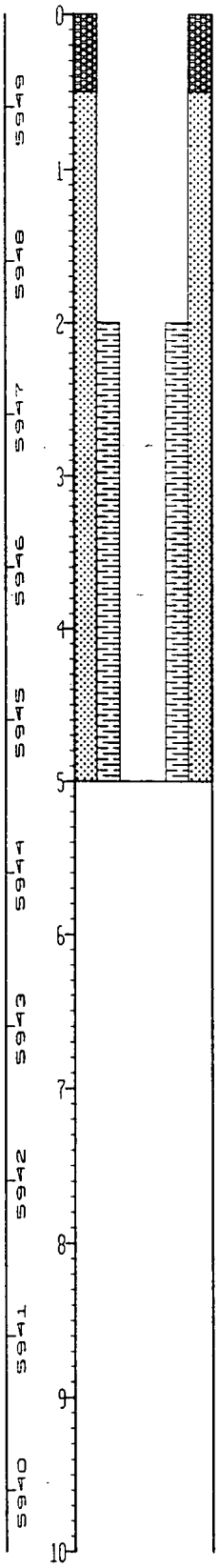
Total Depth Drilled 6 00
Bottom of Filter Pack 6 00

Total Depth Casing 6 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5 00	GROUND ELEVATION (FT)	5949 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	752071	AREA ANTELOPE SPRINGS CK	CASING DIAMETER (IN)	0 30	GEOLOGIST:	TSD	53793
EAST	1382801	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
ELEVATION (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



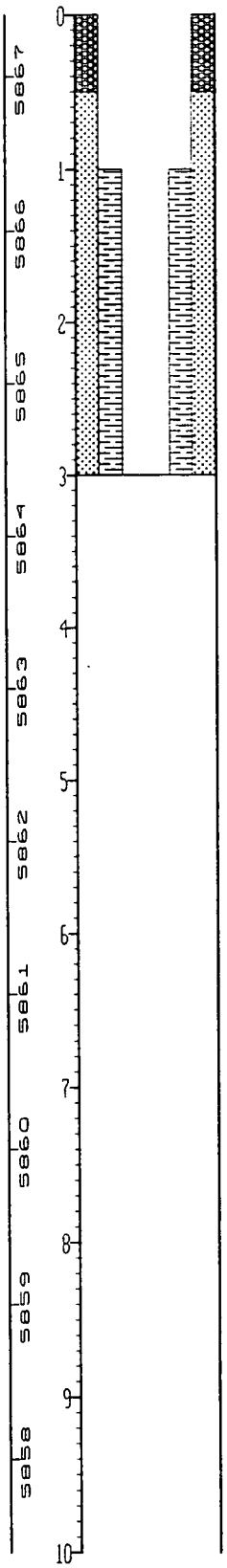
Total Depth Drilled: 5 00
Bottom of Filter Pack: 5 00

Total Depth Casing: 5 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 3 00	GROUND ELEVATION (FT)	5867 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7387	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	53893
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

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



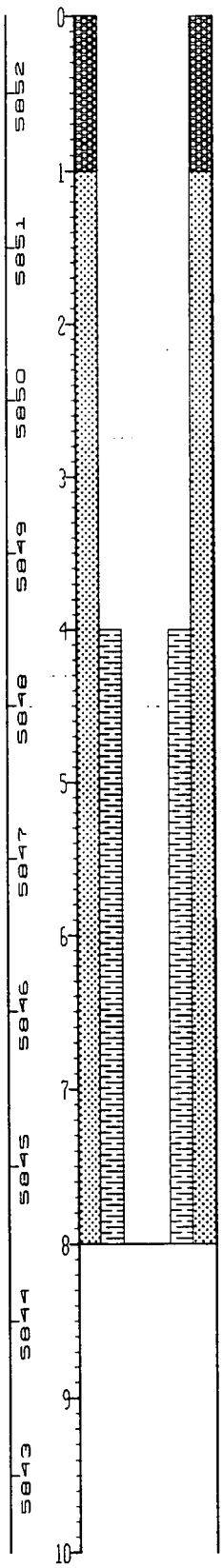
Total Depth Drilled 3 00 Total Depth Casing 3 00
Bottom of Filter Pack 3 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5852.50	PROJECT NUMBER	605-RFI/RI	LOG OF BORING NUMBER
NORTH	747614	AREA WOMAN CK W C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	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
PENETRATION RECOVERY
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION

0% 50% 100% 0% 100%



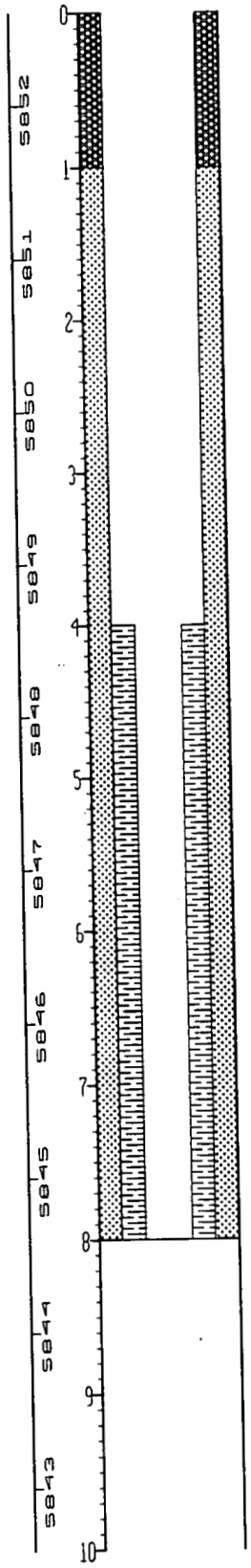
Total Depth Drilled: 8 00
Bottom of Filter Pack: 8 00
Total Depth Casing: 8 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5852.60	PROJECT NUMBER	OU5-RFI/RI
NORTH: 747642	AREA: OU5, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING
EAST: 2085052	LOCATOR NUMBER: M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 54093

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

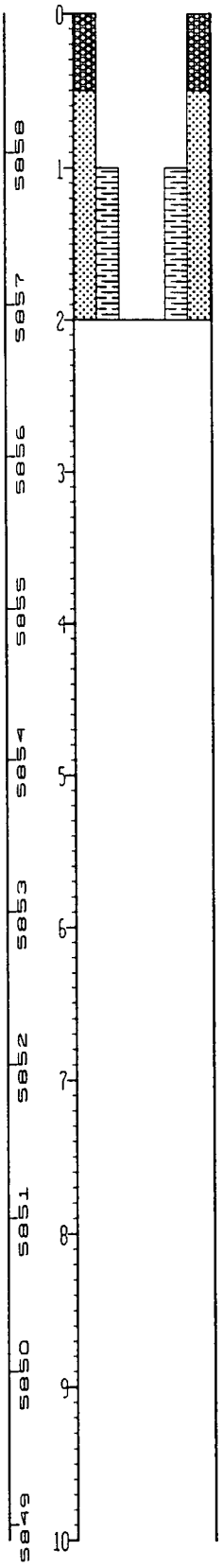
Total Depth Casing: 8 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 2.00	GROUND ELEVATION (FT)	5858.90	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 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%



Total Depth Drilled: 2.00 Total Depth Casing: 2.00
Bottom of Filter Pack: 2.00

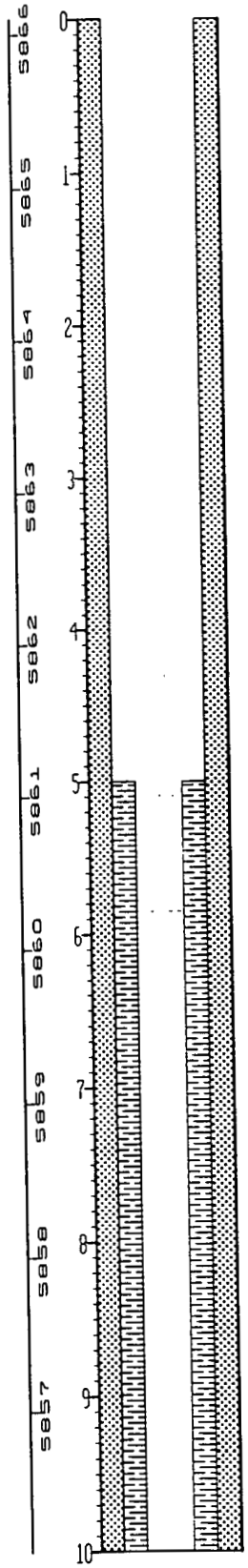
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5866 10	PROJECT NUMBER	115-RFI/RI
NORTH: 747689	AREA 005, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S OREILING
EAST: 2085040	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93

LOG OF BORING NUMBER 54293

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

0% 50% 100% 0% 100%



Total Depth Drilled 10 00
Bottom of Filter Pack 10 00

Total Depth Casing: 10.00

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. OREILING	54393
EAST	2085034	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED:	02/04/93	

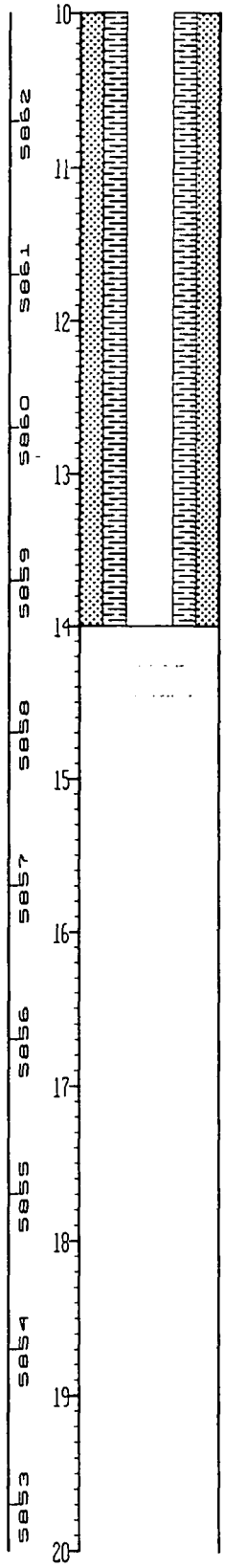
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

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
					5872	0				Total Depth Drilled: 14.00 Total Depth Casing: 14.00 Bottom of Filter Pack 14.00
					5871	1				
					5870	2				
					5869	3				
					5868	4				
					5867	5				
					5866	6				
					5865	7				
					5864	8				
					5863	9				
						10				

STATE PLANE COORDINATE:		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	5872.70	PROJECT NUMBER:	605-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

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



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	2385025	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/04/93	

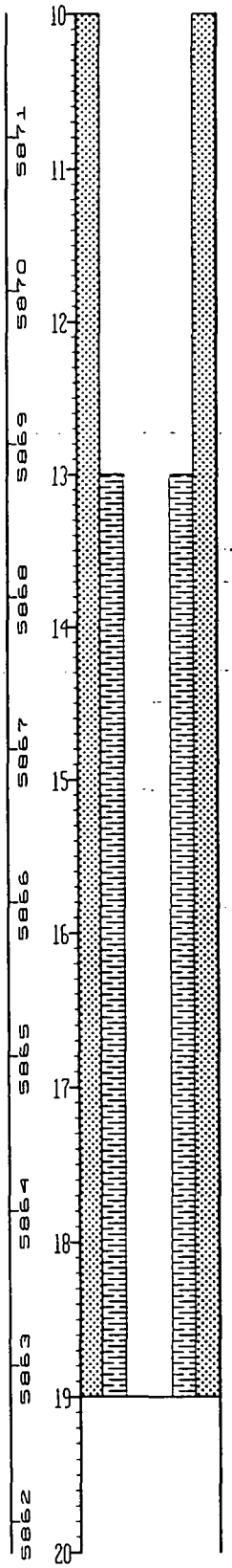
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			% 50%	100% 0%	100%	5881	0				Total Depth Drilled: 19.00 Total Depth Casing: 19 00 Bottom of Filter Pack: 19 00
						5880	1				
						5879	2				
						5878	3				
						5877	4				
						5876	5				
						5875	6				
						5874	7				
						5873	8				
						5872	9				
							10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT)	5881.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	7:7742	AREA 005, W OF C-1 POND	CASING DIAMETER (IN):	0 30	GEOLOGIST	T S DRILLING	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

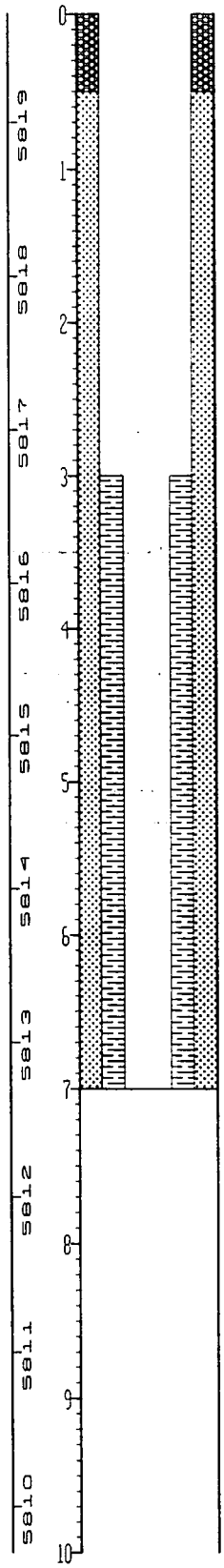


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 7.00	GROUND ELEVATION (FT)	5819.70	PROJECT NUMBER:	045-RFI/RI
NORTH: 747845	AREA WOMAN CK AT C-1 POND	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING
EAST: 2086378	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 54593

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

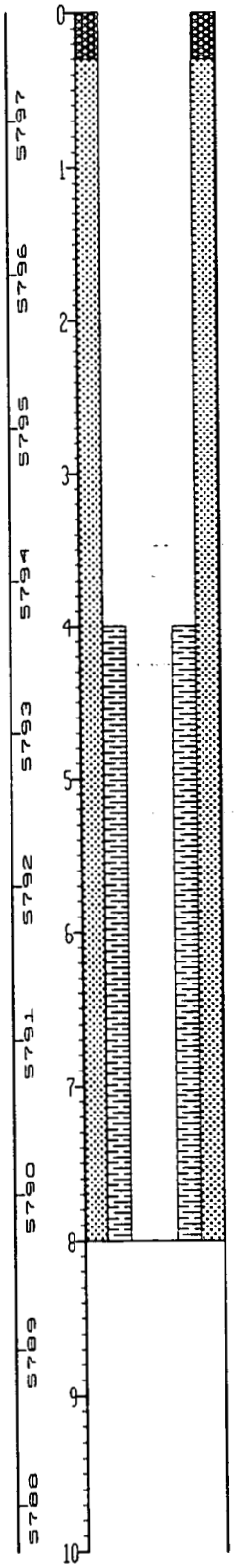
Total Depth Casing: 7.00

STATE PLANE COORDINATE:	TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT) 5797 70	PROJECT NUMBER	335-RFI/RI	LOG OF BORING NUMBER
NORTH: 747937	AREA: OU5, E. OF POND C-1	CASING DIAMETER (IN) 0 30	GEOLOGIST:	T S DRILLING	54693
EAST: 2087123	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
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%



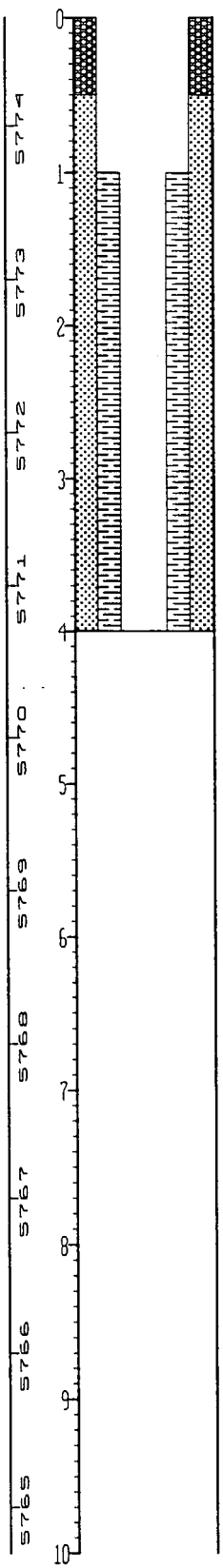
Total Depth Drilled: 8 00
Bottom of Filter Pack 8 00

Total Depth Casing: 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT): 5774.70	PROJECT NUMBER: 005-RFI/RI	LOG OF BORING NUMBER:
NORTH:	747844	AREA: 005, 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)
DEPTH (FT)
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: OU5-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	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%		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			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
					6028	2				
	BH5001A5			1.20/2.40	6027	3				No recovery (1.2-2.0')
									NO RECOVERY	No recovery (3.2-4.4').
					6026	4			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	5				
					6024	6				
				1.50/1.50	6023	7				
	BH5003A5				6022	8				
				2.00/2.00	6021	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.
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.00	GROUND ELEVATION (FT) 6050.50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH: 747366	AREA 005, 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	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	6020	10			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
					6019	11				
				2.00/2.00	6018	12				
					6017	13				
				1.00/1.00	6016	14				
					6015	15				Total Depth Drilled: 15.00
					6014	16				
					6013	17				
					6012	18				
					6011	19				
						20				

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
						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.
				1.70 /2.10	6024	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
					6023	2				
	BH5003SAS			2 00 /2 00	6022	3				No recovery (1.7-2 1')
				0.00 /0.10	6021	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				No recovery (7 4-8 0')
				1.40 /1.40	6018	7				
				0.00 /0.60	6017	8				
	BH5004SAS								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.
				2.00 /2.00	6016	9				
					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, 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 / 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
		0% 50%	100% 0% 100%	2.00/2.00	6014	10			SLUFF:	10.0'-10.4' Sluff from above (gravelly sand and clay)
				2.00/2.00	6013	11			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
					6012	12				
					6011	13				
					6010	14				Total Depth Drilled: 14.00
					6009	15				
					6008	16				
					6007	17				
					6006	18				
					6005	19				
						20				

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		
EAST: 1379206	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN): 8.00	DATE DRILLED: 03/04/93	55093	

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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6020	0			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			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
	BH50060AS			2.00 /2.00	6018	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				
					6016	5	03/04/93			No recovery (5.0-6.0')
				1 00 /2.00						No recovery (6 0-8 0') Hydropunch sampled from 6.0 to 8 0 ft. for a water sample.
					6015	6				No recovery (8 0-8.6'). Drilled through to 8.6' to collect tip and screen and to get beyond disturbed zone
					6014	7				
				0.00 /2.60	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				
	BH50131AS			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	005-RFI/RI	LOG OF BORING NUMBER
NORTH: 7-7348	AREA 005, IHSS 133 6	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	55093
EAST: 3579206	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	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				
					6010	11			SLUFF	10.7'-11 0' Sluff from above.
				2 50 /2 50	6009	12			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
					6008	13				
				1 30 /1 30	6007	14				
					6006	15				Total Depth Drilled 14 50
					6005	16				
					6004	17				
					6003	18				
					6002	19				
					6001	20				

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: BH50090AS, BH50099AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 1.50/2.00; 2.00/2.00; 1.20/2.00; 2.00/2.00; 2.00/2.00

DATUM (FT): 6047, 6046, 6045, 6044, 6043, 6042, 6041, 6040, 6039, 6038

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
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
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')
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')
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

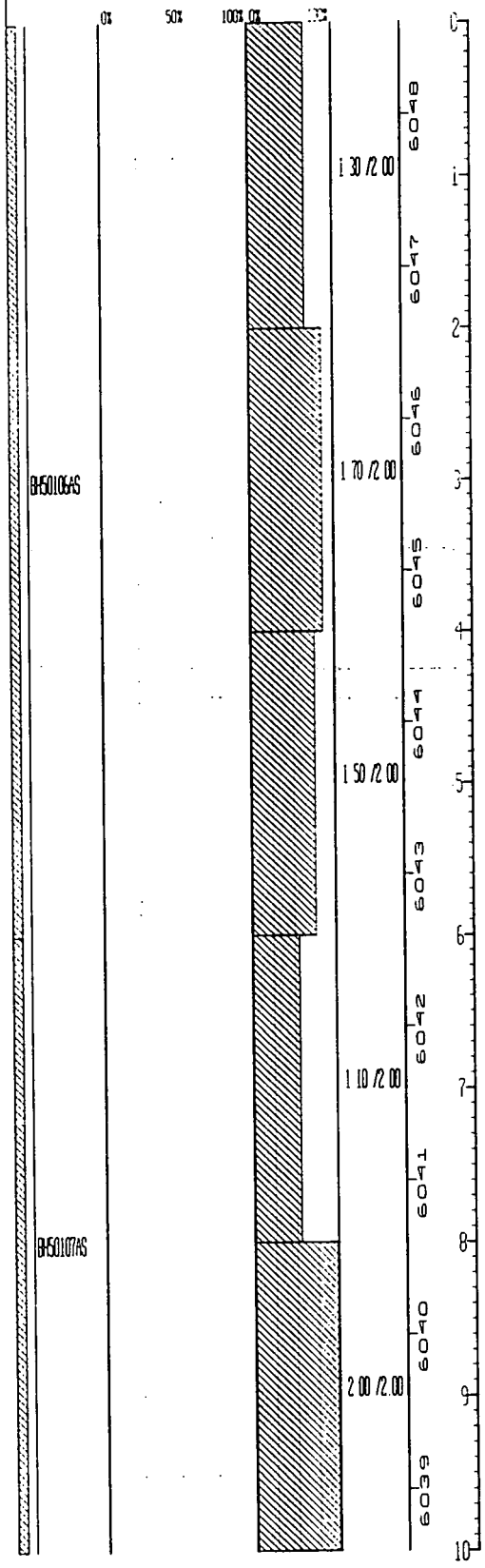
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6047 50	PROJECT NUMBER: OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH	747537	AREA OU5, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST: T S DREILING	55193
EAST	2079232	LOCATOR NUMBER: 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED: 03/08/93	

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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		% 50%	100% 0% 100%	2 00 /2.00	6037 6036 6035 6034 6033 6032 6031 6030 6029 6028	10 11 12 13 14 15 16 17 18 19 20			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 [illegible]	AREA 005 (HSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S OREILING	55293	
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/08/93		

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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')
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')
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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	6048 60	PROJECT NUMBER	005-RFI/RI
NORTH	747619	AREA 005 IHSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST	2079429	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/08/93

LOG OF BORING NUMBER 55293

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

CUMULATIVE 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				
					2 00 /2 00	6038	11				
						6037	12				
					2 00 /2 00	6036	13				
						6035	14				Total Depth Drilled 14 00
						6034	15				
						6033	16				
						6032	17				
						6031	18				
						6030	19				
						6029	20				

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 OU5 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	55393
EAST 1079234	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% 50% 100%	0% 100%			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 No recovery (1 3-2 0')
				1 30 /2 00	6081	1				
					6080					
						2				
	BH50163AS			2 00 /2 00	6079	3				
					6078					
						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
				2 00 /2 00	6077	5				
					6076					
						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 No recovery (7 2-8 0')
				1 20 /2 00	6075	7				
					6074					
						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			2 00 /2 00	6073	9				
					6072	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33 33	GROUND ELEVATION (FT) 6081 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 77764	AREA 005 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55393
EAST 1079234	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	

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

CHEMICAL SAMPLE	GRADATIONAL SAMPLE	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	6071	10			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')
					0 85 /0 85	6070	11				
					0 00 /1 05	6069	12				
					2 00 /2 00	6068	13				
		BH5016SAS BH5018AS			0 25 /1 25	6067	14				
					0 00 /1 05	6066	15				
					0 90 /0 90	6065	16			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
					0 00 /0 20	6064	17			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')
					0 65 /0 70	6063	18				
						6062	19				
							20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 33	GROUND ELEVATION (FT) 6081 60	PROJECT NUMBER 605-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7764	AREA 605 IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST T S DRETLING	55393
EAST	3079234	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dretling 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	ELEVATION / DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /0 50	20				
	BH50116AS			0 00 /1 30	21				
				2 00 /2 00	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	23				
				2 00 /2 00	24				
				0 10 /0 10	25				
	BH50117AS			0 00 /1 10	26			NO RECOVERY	26 2'-27 3' No Recovery Top of Bedrock at 27 0 ft (according to driller)
				2 00 /2 00	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
					28				
					29				
					30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT) 6061 60	PROJECT NUMBER	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	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	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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7714	AREA OU5, IHSS 133.5	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	55493
EAST 1079354	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 | 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%

BH50032AS

BH50033AS

RECOVERY/INTERVAL	DATUM (FT)
1 20 /2 00	6084
	6083
	6082
0 00 /2 00	
	6081
	6080
1 50 /2 00	
	6079
	6078
1 40 /2.00	
	6077
0 00 /0 70	
	6076
1 20 /2.00	6075

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

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')

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').

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 0U5-RFI/RI	LOG OF BORING NUMBER:
NORTH: 747714	AREA: 0U5, 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: BH50034AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 1.30/1.70; 1.90/1.90; 1.00/1.00; 0.00/0.70; 0.00/1.30; 2.00/2.00; 0.70/0.70

DATUM (FT): 6074, 6073, 6072, 6071, 6070, 6069, 6068, 6067, 6066, 6065

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

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')

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').

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

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36 20	GROUND ELEVATION (FT) 6084 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH: 7-7714	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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50166AS	0% 50% 100%	0% 100%	1 50 /1 50	6064	20			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	21				No recovery (21 5-22.3')
				2 00 /2 00	6062	22			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	6061	23				No recovery (25.2-27 0')
				0.00 /0 30	6060	24				
				0.00 /1.50	6059	25				
	BH50169AS			2 00 /2.00	6058	26			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	6057	27				
					6056	28				
					6055	29				
						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]714	AREA OU5, IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S. DREILING	55493
EAST [illegible]79354	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	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	6054	30–31			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
				2 00 /2.00	6053	31–32				
				2 00 /2.00	6052	32–33			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
				2.00 /2.00	6051	33–34			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.
				2.00 /2.00	6050	34–35				
					6049	35–36				
					6048	36–37				Total Depth Drilled 36 20
					6047	37–38				
					6046	38–39				
					6045	39–40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7-74197	AREA 005 [illegible] 133 4	CASING DIAMETER (IN)	GEOLOGIST	L HOST	55593
EAST 2079379	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) [illegible]	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

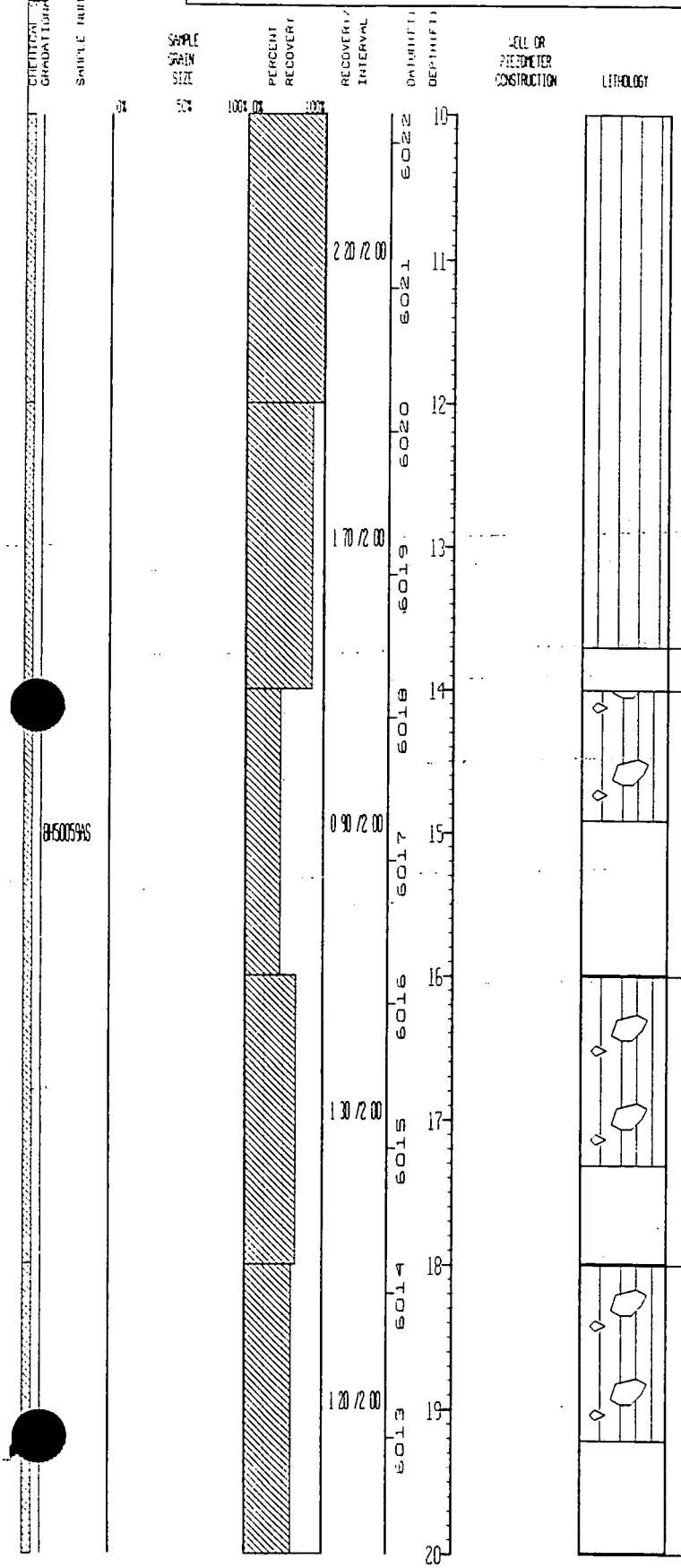
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%			0			ML	0 0'-3 0' Clayey Silt with some Sand 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')
				0 80 /2 00	6032	1				
					6031					
					6030	2				
	BH50057AS			1 00 /2 00	6029	3				
					6028	4			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')
				1 40 /2 00	6027	5				
					6026	6				
				1 40 /2 00	6025	7				
					6024	8				
	BH50058AS			1 00 /2 00	6023	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]5-RFI/RI
NORTH [illegible]-74197	AREA OU5 IHSS 133 [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] HOST
EAST 2079379	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	[illegible]3/09/93

LOG OF BORING NUMBER

55593

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



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	[illegible]-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				
					6009	23				
				1 60 /0 70	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')
	BH50083AS			1 60 /1 30	6007	25				
				1 80 /2 00	6006	26			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')
					6005	27				
				2 00 /2 00	6004	28			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
					6003	29				
						30				Total Depth Drilled 30 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT) 6023.10	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	HEAD [illegible] DESS 123.4	CASING DIAMETER (IN)	GEOLOGIST [illegible]	55693
EAST 1079435	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 3.50	DATE DRILLED 10/11/92	

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

PHOTO INDEX	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
				1.50/2.00	6023	0			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. Mildly calcareous. Low plasticity, bedding massive, slightly damp. 18% sand, 42% silt, 40% clay. No recovery (1.5-2.0')
				1.70/2.00	6021	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')
BREDIDIAS				1.60/2.00	6019	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')
				0.00/1.00	6017	6				
				2.10/2.00	6015	8			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 Y 6/1). Interval damp. 5% gravel, 16% sand, 39% silt, 40% clay. No recovery (9.0-10.0')
BREDIDIAS				0.00/1.00	6013	10				

STATE PLANE COORDINATES	TOTAL DEPTH (FT) 20.10	GROUND ELEVATION (FT) 6000.00	PROJECT NUMBER 305-HC01-F2	LOG OF BORING NUMBER
NORTH [illegible]	HPGA 305 DOSS 100-4	CASING DIAMETER (IN)	GEOLOGIST L. A. HOST	55693
EAST 1077425	LOCATOR NUMBER 37	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 06/11/93	

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

DRAFT

Sample Number	Sample Depth	Sample Grain Size	Percent Recovery	Recovery Interval	Blows/6 in	Elevation	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	10								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')
	11			1.70/2.00	6029				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')
	12				6022					
	13			1.30/2.00	6021					
	14				6020					
	15			1.50/1.50	6019				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')
	16			0.00/1.50	6018					
	17			1.10/1.00	6017				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')
	18			0.00/0.50	6016					
	19			1.40/2.00	6015				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. 35% gravel, 45% sand, 17% silt, 13% clay. No recovery (19.9-20.5')
	20				6014					

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 29 00 | GROUND ELEVATION (FT) 6003 80 | PROJECT NUMBER | HOLE NUMBER

NORTH | WATER LEVEL (BGS) 23 4 | CASING DIAMETER (IN) | GEOLOGIST L A HOST

EAST 2079405 | LOCATION NUMBER 37 | BOREHOLE DIAMETER (IN) 6 00 | DATE DRILLED 10/16/92

REMARKS DRILLING EQUIPMENT CME 750 4X4 AST RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

55693

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
9450113KS			1 40/2 00	6013	20			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')
				6012	22				
			2 20/2 00	6011	23			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
				6010	24			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
			1 70/2 00	6009	25			CLAYSTONE	24 5'-26 2' Claystone with some Silt Light brownish gray to brownish gray (5 YR 6/1 to 5 YR 4/1) Slightly 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')
				6008	26				
			2 38/1 75	6007	27			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
				6006	28				
			0 75/0 75	6005	29				Total Depth Drilled 29 00
				6004	30				

STATE PLANE COORDINATES | TOTAL DEPTH (FT) 3 30 | GROUND ELEVATION (FT) 6023 30 | PROJECT NUMBER 115-HF0141 | LOG OF BORING NUMBER

NORTH 1[illegible]412 | AREA 305 CASS 133 4 | CASING DIAMETER (IN) | GEOLOGIST L A HOST | **55693A**

EAST 1079441 | LOCATION NUMBER 67 | BOREHOLE DIAMETER (IN) 8 00 | DATE DRILLED 10/16/93

REMARKS DRILLING EQUIPMENT CME 750 ATV AST 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 | PENETRATION RECOVERY | RECOVERY/INTERVAL | INTERVAL DEPTH | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

Interval depth	Unified soils classification	Description
0	QL	0 0'-0 9' Silty Clay with some Sand Light to mod brown (5 YR 5/6 to 5 (R 4/4) Very moist Grass and topsoil at very top Abundt roots throughout No recovery (0 9-2 0')
0 30 /2 00		
1		
2	QL	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 10 /2 00		
3		
4	QL	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')
1 00 /2 00		
5		
6	QL	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
2.00 /2 00		
7		
8	QL	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')
1 30 /2 00		
9		
10		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18.00	GROUND ELEVATION (FT) 6033.00	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 105 CASE 133-4	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	55693A
EAST [illegible]	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

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			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')
		1.50/2.00	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 COORDINATES | TOTAL DEPTH [illegible] | GROUND ELEVATION [illegible] | PROJECT NUMBER [illegible] | LOG OF BORING NUMBER

NORTH [illegible] | AREA [illegible] | BORING DIAMETER [illegible] | GEOLOGIST [illegible] | DRILLING

EAST [illegible] | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER [illegible] | DATE DRILLED [illegible]

55793

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

Sample Number	Sample Depth Elev	Sample Drain Elev	Percent Recovery	Recovery Interval	Elevation	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
					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 Fine 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')
95030GAS				1.0/2.00	6034	1				
					6033	2				
									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')
95030TAS				1.50/2.00	6032	3				
					6031	4				
									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 or fractures, low plasticity, non-calcareous 41% sand, 17% silt, 42% clay No recovery (5.7-6.0')
				1.70/2.00	6030	5				
					6029	6			SC	5.0'-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')
				1.60/2.00	6028	7				
					6027	8				
									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 Fine 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
95030BAS				2.00/2.00	6026	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] DREILING	55793
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	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	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	0% 50% 100%	0% 100%		10				
			1 40 /2 00	11				
			0 00 /0 40	12			NO RECOVERY	No recovery (11 4-12 4')
							SC	12 4'-12 7' Gravelly Sand with some Clay and Silt Same as above (reference interval 8 0-12 7')
			2 00 /2 00	13			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
				14				
				15				No recovery (15 9-16 4')
3H50310AS			1 50 /2 00	16				
			2.00 /2.00	17			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
				18				
			1 00 /2 00	19			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 50% gravel, 1-% sand, 5% silt, 21% clay
				20			NO RECOVERY	No recovery (19 4-20 4')

STATE PLANE COORDINATE	TOTAL DEPTH FT 25.90	GROUND ELEVATION FT 6035.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 7[illegible]429	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	
EAST 2079506	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/20/93	55793

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	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
3H6D09AS	0% 50% 100%	0% 100%		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 105-RFD-R1	LOG OF BORING NUMBER
NORTH 747420	AREA 015 DISS 133.4	CASING DIAMETER (IN)	GEOLOGIST L. A. HOST	55793A
EAST 1079496	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
					6034	0			CL	No recovery (0.0-5.0') Center bit drilled Sandy Clay cuttings
					6033	1				
				0.00/5.00	6032	2				
					6031	3				
					6030	4				
						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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	55793A
EAST [illegible]	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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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 abundant Sand (v f g to m g) Some yellowish gray clay stringers (Reworked bedrock?)
					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) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CG5, [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793B
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 3.00	DATE DRILLED	[illegible]/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

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
			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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793B
EAST [illegible]	LOCATOR NUMBER FT	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
				10.0 / 12.00	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 No recovery (11.2-12.0')
					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) 6034.50	PROJECT NUMBER	OU5-RFI-RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA OU5, CHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55793C
EAST 2079507	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 3.00	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

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	005-RFD-R1	LOG OF BORING NUMBER
NORTH 747444	AREA 005 CASS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55793C
EAST 2079507	LOCATOR NUMBER 37	BOREHOLE DIAMETER (IN) 9.00	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
					6023	11				No recovery (11.5-12.0')
					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) [illegible]	GROUND ELEVATION (FT) 6035.60	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]422	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793D
EAST [illegible]79514	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

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			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
			6035	1				
			6034	2				
		0.00/5.00	6033	3				
			6032	4				
			6031	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	6030	6				
			6029	7			CL	7.0'-10.0' As above. Augered 7-10' with no split spoon sample
			6028	8				
		0.00/3.00	6027	9				
			6026	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6025.50	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 105 (SSS 133.4)	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793D
EAST [illegible]	LOCATOR NUMBER 57	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	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)		GEOLOGIST	P. J. JORDAN	55893
EAST	[illegible]	LOCATOR NUMBER [illegible]	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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50141AS			1.0/2.00	6037	0–2			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')
	BH50149AS			1.0/2.00	6035	2–4			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')
				1.00/2.00	6033	4–5			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
				1.00/2.00	6032	5–6			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	6–7			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 (caliche) 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')
					6030	8				
					6029	9				
					6028	10				Total Depth Drilled 8.00

STATE PLANE COORDINATE	TOTAL DEPTH FT 11.00	GROUND ELEVATION FT 6037.30	PROJECT NUMBER	0US-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 0US CHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55993
EAST [illegible]	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 5.00	DATE DRILLED	03/30/93	

REMARKS GRILLING 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
	BH50189AS					0			CL	0.0'-1.1' Sandy Clay with some Silt Mod brown (5 Y 3/6) Trace gravel, pred 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 No recovery (1.1'-2.0')
	BH50162AS			1.10/2.00	6037	1				
					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 No recovery (3.0'-4.0')
					6034	4				4.0'-4.8' Ash Same as above, reference interval 2.3 to 3.0 ft Alpha detected at 2,500 cpm No recovery (4.8'-6.0')
				0.90/2.00	6033	5				
					6032	6				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
				1.60/1.25	6031	7				
	BH50161AS								CL	7.3'-8.7' Clay as above and Ash as above comingled Irregular layer of ash from 8.3 to 8.7 ft No recovery (8.7'-9.3')
				1.40/2.05	6030	8				
					6029	9				
					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) 20.00	GROUND ELEVATION (FT) 6037.30	PROJECT NUMBER 305-8F0-F4	LOG OF BORING NUMBER
NORTH 1[illegible]498	HEAD 305 (PASS 100 4)	CASING DIAMETER (IN)	GEOLOGIST D.C. BAUGHN	55993
EAST 2[illegible]354	LOCATION NUMBER 6T	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 09/30/93	

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

DRAFT

SAMPLE NUMBER	SAMPLE DRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUMFIT DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				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, sound gravel at 10.7 ft Mod plasticity, trace moisture
GH50187MS			1.90/1.90 2.00/2.00 1.90/2.00 1.70/2.00 1.70/2.00 1.40/2.00	11 12 13 14 15 16 17 18 19 20			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
							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')
							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')

STATE PLANE COORDINATE	TOTAL DEPTH FT 21.00	GROUND ELEVATION FT 6037.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	55993
EAST [illegible]	LOCATOR NUMBER [illegible]	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 No recovery (20.4'-21.0')
					6017	21				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 16.00	GROUND ELEVATION FT 4027.30	PROJECT NUMBER	105-[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER IN	GEOLOGIST	[illegible] BAUGHN	56093
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED	[illegible]	

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 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			NO RECOVERY	0.0'-2.0' No Recovery No split spoon
			0.00 / 2.00	6037	1				
				6036	2			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	3			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')
			0.00 / 0.10	6034	4				
			1.00 / 1.25	6033	5				
BH5027LAS			0.00 / 0.75	6032	6			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')
			1.20 / 1.20	6031	7				
			0.00 / 0.80	6030	8				
			1.50 / 2.00	6029	9			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	10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 16.00	GROUND ELEVATION FT 6037.80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible] BAUGHN	56093
EAST [illegible]	LOCATOR NUMBER 37	BOREHOLE DIAMETER [illegible]	DATE DRILLED	[illegible]	

REMARKS DRILLING EQUIPMENT CME ATV 750 ASI R16 GEOLOGIST JAN 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
[illegible]	0% 50% 100%	0% 100%			10			CLAYSTONE	10.0'-13.6' Claystone Light olive gray (5 Y 6/1) with some Fe mottling Mod friable Some calcite inclusions slightly carbonaceous No apparent bedding or fractures Dry to moist
			2.00/2.00	6027	11				
				6026	12				
			2.00/2.00	6025	13				
				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 than 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
			2.00/2.00	6023	15				
				6022	16				Total Depth Drilled 16.00
				6021	17				
				6020	18				
				6019	19				
				6018	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 30	GROUND ELEVATION (FT)	6038 10	PROJECT NUMBER	OU5-RFI/RI
NORTH	747503	AREA OU5, IHSS 133 4	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN
EAST	2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/25/93

LOG OF BORING NUMBER **56093A**

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	0			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'
						6037	1				
						6036	2				
						6035	3				
						6034	4				
					1 30/2 00	6033	5			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')
						6032	6				
					0 00/3 00	6031	7			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.
						6030	8				
						6029	9			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')
							10				

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, 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% 50% 100%	0% 100%	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 [illegible]	GROUND ELEVATION FT	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN
EAST [illegible]	LOCATOR NUMBER [illegible]	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

LOG OF BORING NUMBER

56093B

DRAFT

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			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
		0 00 /5 00	6037	1				
			6036	2				
			6035	3				
			6034	4				
			6033	5			CL	Clay, mod brown (5 YR 4/4), trace silt, low plasticity, trace moisture
		1 90 /2 00	6032	6				
			6031	7			CL	7 0'-10 0' As above
		0 00 /3 00	6030	8				
			6029	9				
			6028	10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 12.00	GROUND ELEVATION FT 6037.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	56093B
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]	

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

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			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
		1.30/2.00	6027	11				No recovery (11.3-12.0')
			6026	12				Total Depth Drilled 12.00
			6025	13				
			6024	14				
			6023	15				
			6022	16				
			6021	17				
			6020	18				
			6019	19				
			6018	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6037 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747490	AREA OU5, 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	0			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	6036	1			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	6035	2			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.
					6034	3				
					6033	4				
					6032	5				
					6031	6				
					6030	7				
					6029	8				
					6028	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 6037 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747490	AREA 005 LESS 133 4	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	560936
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	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%	1.60 /2.00	6027 6026 6025 6024 6023 6022 6021 6020 6019 6018	10 11 12 13 14 15 16 17 18 19 20			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 No recovery (11.6-12 0')
										Total Depth Drilled 12 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6074.80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA GUS N OF [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DREILING	56193
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 6.00	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%)	PERCENT RECOVERY (100% 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, 6073	0, 1			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	6072, 6071	2, 3			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	6070, 6069	4, 5, 6			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
				1.70/2.00	6068, 6067	7, 8			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')
	BH50178AS			2.00/2.00	6066, 6065	9, 10			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)

STATE PLANE COORDINATE	TOTAL DEPTH FT 34.00	GROUND ELEVATION FT 6074.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005, N OF CASS 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	56193
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 3.00	DATE DRILLED	[illegible]/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T DRILLING 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	PERCENT RECOVERY	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				
BH5000CMS			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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS N OF [illegible] 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DREILING	56193
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] 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
						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. No recovery (21.5'-22.0'), and (22.0'-23.0')
	BH50304AS			1.50/2.00	6054	21				
					6053	22				
				0.00/1.00	6052	23				
				2.00/2.00	6051	24			SM	23.00'-26.40' Gravelly Sand with some Silt and Clay. Same as above (reference interval 20.0 to 21.5 ft.)
					6050	25				
				1.40/1.40	6049	26				
	BH50305AS			0.00/1.60	6048	27			NO RECOVERY	26.40'-28.00' Top of Bedrock 28.0 ft. No recovery. Drilled through rock
					6047	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
				2.00/2.00	6046	29				
					6045	30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34.00	GROUND ELEVATION (FT) 6074.30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH [illegible]	AREA 005 N OF CASS 133	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING	56193	
EAST [illegible]	LOCATOR NUMBER 37	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	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				
				2.00/1.30	6074	31				
					6073	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
				2.00/2.20	6042	33				
					6041	34				Total Depth Drilled 34.00
					6040	35				
					6039	36				
					6038	37				
					6037	38				
					6036	39				
					6035	40				

STATE PLANE COORDINATE	TOTAL DEPTH FT 14.00	GROUND ELEVATION FT 6035.00	PROJECT NUMBER	015-RFI-RI	LOG OF BORING NUMBER
NORTH 7[illegible]499	AREA 015 IHSS 133.1	CASING DIAMETER (IN)	GEOLOGIST	DCB	56293
EAST 2079916	LOCATOR NUMBER 37	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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50210AS			1.20/2.00	6035 6034	0 1			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')
	BH50206AS			0.70/1.00	6033	2			SM	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')
				0.00/1.00	6032	3				
				0.80/1.20	6031	4			SM	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')
				0.00/0.90	6030	5 6				
				1.10/2.00	6029 6028	7			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')
	BH50207AS BH50293AS			1.30/2.00	6027 6026	8 9 10				

STATE PLANE COORDINATE		TOTAL DEPTH FT 14.00		GROUND ELEVATION FT 6035.50		PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA [illegible]		CASING DIAMETER (IN)		GEOLOGIST	[illegible]
EAST	[illegible]	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	[illegible]

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

56293

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.
				6024	11				
				6023	12				
			1.30/2.00	6022	13				22% sand, 8% silt, 70% clay
									No recovery (11.5-12.0'), and (13.3-14.0')
				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)	6032 70	PROJECT NUMBER	065-FFD/RI	LOG OF BORING NUMBER
NORTH	74509	AREA 005 - CASS 133 1	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	56393
EAST	2080003	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	6 30	DATE DRILLED	04/06/93	

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

DRAFT

Sample Number	Recovery (%)	Recovery/Interval	Elevation (ft)	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
3-502206AS	0% 50% 100%		6032	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')
3-502110AS	100%	1 20/2 00	6031	1				
			6030	2			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')
		0 60/2 00	6029	3				
3-502212AS			6028	4			CL	4 4'-4 8' Silty Clay Yellowish gray (5 Y 7/2) Wet, low plasticity
		1 10/2 00	6027	5			CL	4 8'-5 2' Silty Clay with some Sand Dark yellowish brown (10 YR 4/2)
							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	6			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
3-502213AS		1 30/2 00		7				
			6025	8			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')
		1 60/2 00	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')
			6023	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6032.70	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 - [illegible]	CASING DIAMETER (IN)	GEOLOGIST P. J. JORDAN	56393
EAST 1080003	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

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	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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA DUS, IHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393A
EAST 1080013	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

SAMPLE GRAIN SIZE (0% 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	6032	0			CL	0.0'-5.0' Silty Clay (looks like bedrock) Spin augers
			6031	1				
			6030	2				
			6029	3				
			6028	4				
		1.70/2.00	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 No recovery (6.7-7.0')
			6026	6				
			6025	7				Total Depth Drilled 7.00
			6024	8				
			6023	9				
				10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 5.00	GROUND ELEVATION FT 6000.00	PROJECT NUMBER	115-RFI-RI	LOG OF BORING NUMBER
NORTH 7[illegible]	AREA 115 CASS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393B
EAST 1080014	LOCATOR NUMBER 37	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 (% 50% 100%)	PERCENT RECOVERY (% 100%)	RECOVERY INTERVAL	DATUM FT / DEPTH FT	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0.00/3.00	6030 6029 6028			CL	0.0'-3.0' Cuttings are Silty Clay, looks like bedrock but augers are chattering like gravel and cobbles
			1.80/2.00	6027 6026			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')
				6025 6024 6023 6022 6021				Total Depth Drilled 5.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.00	GROUND ELEVATION (FT) 6032.50	PROJECT NUMBER	005-RFD/RI	LOG OF BORING NUMBER
NORTH 7[illegible]507	AREA 005, CASS 133.3	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393C
EAST 1080007	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

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	04/05/93		CL	0.0'-3.0' Cuttings are Silty Clay. Looks like weathered bedrock but augers are scratching or chattering like cobbles
			0.00/3.00	6031	1				
				6030	2				
					3			SC	3.0'-3.7' Sand with burnt wood fragments. Fine to med sand, some silt, wet to saturated
				6029					No recovery (3.7-5.0')
			0.70/2.00		4				
				6028					
					5				Total Depth Drilled 5.00
				6027					
					6				
				6026					
					7				
				6025					
					8				
				6024					
					9				
				6023					
					10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6030.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER	
NORTH	[illegible]	AREA OU5 [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] BAUGHN		
EAST	1080111	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED	[illegible]/12/93		56493

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
	BH50220AS			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')
					6031	1				
				1.90/2.00	6030	2			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
					6029	3				
	BH50219AS				6028	4				
				1.70/2.00	6027	5			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')
					6026	6				
				1.50/2.00	6025	7				
					6024	8				
				1.80/2.00	6023	9				
						10				Total Depth Drilled 10.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER	
NORTH [illegible]	AREA OUS [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible] HOST		
EAST 2079916	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED [illegible]/08/93	56593	

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 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
	BH50221AS			1 30 /2 00	6030 6029 6028	0 1 2			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 50 /2 00	6027 6026	3 4			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 0 00 /0 20 1 70 /1 80 0 00 /0 20	6025 6024 6023	5 6 7			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')
	BH50223AS			1 20 /1 30 0 50 /1 30	6022 6021	8 9 10			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')

STATE PLANE COORDINATE		TOTAL DEPTH FT 19 00	GROUND ELEVATION FT	6000 40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA GWS CASS 133 3	CASING DIAMETER (IN)		GEOLOGIST	L A HOST	56593
EAST	1079916	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

Sample Number	Recovery Interval	Datum Elev	Depth Ft	Unified Soils Classification or Rock Type	Description
		6020	10	NO RECOVERY	No recovery (10 6-12 0') and (12 0-13 0')
	0 00 / 1 40	6019	11		
	0 00 / 1 00	6018	12		
		6017	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
BH50224AS	1 40 / 2 00	6016	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 No recovery (14 4-15 0')
		6015	15		
	1 30 / 2 00	6014	16	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 abundant black carbonaceous material 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) 6022.00		PROJECT NUMBER	315-6F0.E	LOG OF BORING NUMBER
NORTH	1274145	REF. MLS DATUM (CODE)	CASING DIAMETER (IN)		GEOLOGIST	L. A. HOST	56693
EAST	1380010	LOCATION NUMBER HT	BOREHOLE DIAMETER (IN) 3.00		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	Percent Recovery	Recovery/Interval	Elevation	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
36022SAS			1.00/2.00	6022	0			SC	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')
36022SAS			1.00/2.00	6021	1				
36022SAS			1.00/2.00	6020	2				
36022SAS			2.00/2.00	6019	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
36022SAS			2.00/2.00	6018	4				
36022SAS			2.00/2.00	6017	5			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
36022SAS			2.00/2.00	6016	6				
36022SAS			2.00/2.00	6015	7			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')
36022SAS			0.90/2.00	6014	8				
36022SAS			0.60/1.00	6013	9			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')
					10				Total Depth Drilled 9.00

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 4.00 | GROUND ELEVATION (FT) 6026.00 | PROJECT NUMBER [illegible] | LOG OF BORING NUMBER

NORTH [illegible] | AREA 305 CASS [illegible] | CASING DIAMETER (IN) | GEOLOGIST [illegible]

EAST 1080012 | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER (IN) 4.00 | DATE DRILLED [illegible]

56693A

REMARKS DRILLING EQUIPMENT CME 750 ATV HSI 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	GEOTECHNICAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM ELEVATION	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	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747427	AREA 005 CASS 133.3	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	56693B
EAST 0080013	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 / 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
					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) 6026.30	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 905, [illegible]	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	56693C
EAST 1080013	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

Depth (ft)	Recovery/Interval	Datum (ft)	Unified Soils Classification or Rock Type	Description
0		6026	NO RECOVERY	No recovery (0.0-2.0') Drilled out
1	0.00 /2.00			
2		6025	CLAYSTONE	2.0'-3.5' Claystone Light olive gray with some iron staining Damp Grass and roots in very top of interval
3	1.50 /2.00	6024		No recovery (3.5-4.0')
4		6023		Total Depth Drilled 4.00
5		6022		
6		6021		
7		6020		
8		6019		
9		6018		
10		6017		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	56793
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED [illegible]/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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50231AS			1 00 /2 00	6022	0			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
					6021	1			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')
	BH50232AS			1 60 /1 90	6020	2			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')
				0 00 /0 10	6019	3				
				1 60 /2 00	6018	4			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')
					6017	5				
				1 30 /2 00	6016	6			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')
					6015	7				
	BH50233AS			1 80 /2 00	6014	8			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')
					6013	9				
						10				

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) 5 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
	9H50234AS			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
					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
					6010	12				
				2 00 /2 00	6009	13			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
					6008	14				
				1 90 /2 00	6007	15				No recovery (16 9-18 0')
					6006	16				
				0.90 /2.00	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 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747657	AREA 005 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

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50236AS	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')
BH50237AS	1.00/2.00	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	4–5.7	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
BH50238AS	0.80/2.00	6021, 6020	5.7–8.8	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	8.8–10.6	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	10		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 00	GROUND ELEVATION (FT)	6027 40	PROJECT NUMBER	305-HF01-F1	LOG OF BORING NUMBER
NORTH	1[illegible]557	AREA 005 CASS 122 2	CASING DIAMETER (IN)		GEOLOGIST	F G SPEELING	56893
EAST	1080475	LOCATOR NUMBER HF	BOREHOLE DIAMETER (IN)	3 00	DATE DRILLED	03/31/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST F SPEELING 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
		% 50%	100% 0%	10%		10				
					6017					
				2 00 /2 00	6016	11			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
	96[illegible]2[illegible]9AS				6015	12				
				2 00 /2 00	6014	13			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
					6013	14			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
				1 60 /2 10	6012	15			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 (loc-gw) 60% gravel, 30% sand, 2% silt, 8% clay
					6011	16				No recovery (15 9-16 4'), and (17 8-18 2')
	96[illegible]4[illegible]AS 96[illegible]2[illegible]9AS			1 0 /1 0	6010	17				
				0 00 /0 0		18				
					6009				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 3% silt, 92% clay
				1 60 /2 10	6008	19				
						20			NO RECOVERY	No recovery (19 8-20 3')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24.30	GROUND ELEVATION (FT) 6027.40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747557	AREA OU5 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	56893
EAST 1080475	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
						20				
					6007				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	6006	21				No recovery (21.8-22.3')
					6005	22				
				2.00 /2.00	6004	23				
					6003	24				Total Depth Drilled 24.30
					6002	25				
					6001	26				
					6000	27				
					5999	28				
					5998	29				
						30				

STATE PLANE COORDINATES	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6025.00	PROJECT NUMBER	ELEVATION	LOG OF BORING NUMBER
NORTH 1[illegible]660	AREA DUS 1-55 103 2	CASING DIAMETER (IN)	GEOLOGIST	T S SPEELING	56993
EAST 1380547	LOCATION NUMBER H7	BOREHOLE DIAMETER (IN) 9 50	DATE DRILLED	10/20/95	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GEOTECHNICAL SAMPLE DEPTH	SAMPLE TYPE	SAMPLE NUMBER	RECOVERY / INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
P501195				6025	0			GW	0 0'-1 8' Gravelly Silt with sand and some clay Mod brown (5 YR 4/4) and grayish brown (5 YR 5/2) 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')
B501995			1 30 /2 00	6024	1				
B501995				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				
				6021	4				
			0 00 /0 90						
				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
				6019	6				
			0 20 /3 20						
				6018	7				
									8 1'-8 4' Charcoal, fibrous material, styrofoam and gray in a clayey material Recovery taken for sample, this description from field log
				6017	8				
B502005								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, med angular med 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
			2 00 /2 00	6016	9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT) 4525 00	PROJECT NUMBER	DATE-FROM-TO	HOLE OF BORING NUMBER
NORTH [illegible]	HEAD DIS [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T B BREILING	56993
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	[illegible]/92	

REMARKS DRILLING EQUIPMENT SME 750 ATV ASST FOR GEOLOGIST T BREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	ELEVATION	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
10								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')
11	B5020205		100%	1 30/1 30	6014				
12					6013				
13				0 30/2 00	6012				
14				0 30/0 30	6011			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')
15				1 50/2 00	6010				
16					6009			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')
17	B5020305			1 50/2 00	6008				
18					6007				
19				1 40/2 40	6006			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 [illegible]% gravel, 31% sand, 35% silt, 29% clay
20									

STATE PLANE COORDINATES | TOTAL DEPTH [illegible] | GROUND ELEVATION [illegible] | PROJECT NUMBER [illegible] | BORING NUMBER

NORTH [illegible] | AREA [illegible] | CASING DIAMETER [illegible] | GEOLOGIST [illegible] | DRILLING

EAST [illegible] | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER [illegible] | DATE DRILLED [illegible]

56993

REMARKS DRILLING EQUIPMENT CME 750 ATV ASE RIG GEOLOGIST [illegible] DRILLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

Depth (ft)	Sample Type	Recovery	Blows/6"	Lithology	Unified Soils Classification or Rock Type	Description
20					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
21			6004		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 YR 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
		1 10/2 00	6003			No recovery (22 1-22 7')
22						
23			6002		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
24	0450294S	2 00/2 00	6001			
25			6000		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, 22% clay
		2 00/2 00	5999			
26					CLAYSTONE	26 3'-27 3' Top of Bedrock at 26 3 ft Claystone with some Silt Mottled, pale yellowish brown (10 YR 5/2) 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
27		0 70/1 60	5998			No recovery (27 3-28 3')
28			5997		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
29		0 90/2 00	5996			No recovery (29 1-30 3')
30						

STATE PLANE COORDINATE	TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible] DREILING	
EAST [illegible]80547	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED [illegible]/22/93	56993

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] DREILING 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
				5995	30				
			0 70 /2 00	5994	31				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
				5993	32				No recovery (31 0-32 3')
									Total Depth Drilled 32 30
				5992	33				
				5991	34				
				5990	35				
				5989	36				
				5988	37				
				5987	38				
				5986	39				
					40				

STATE PLANE COORDINATE	TOTAL DEPTH FT 37.10	GROUND ELEVATION FT 4023.80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER IN	GEOLOGIST	T S DREILING	57093
EAST 1080616	LOCATOR NUMBER 47	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

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
3H50241AS			1.40/2.00	6023	0			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')
3H50242AS			1.80/2.00	6022	1				
				6021	2				
				6020	3				
			1.80/2.00	6019	4			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')
				6018	5				
			2.00/2.00	6017	6			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	7				
3H50243AS			2.10/2.10	6015	8				
				6014	9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 37.00	GROUND ELEVATION (FT) 6023.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 747667	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57093
EAST 1080616	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

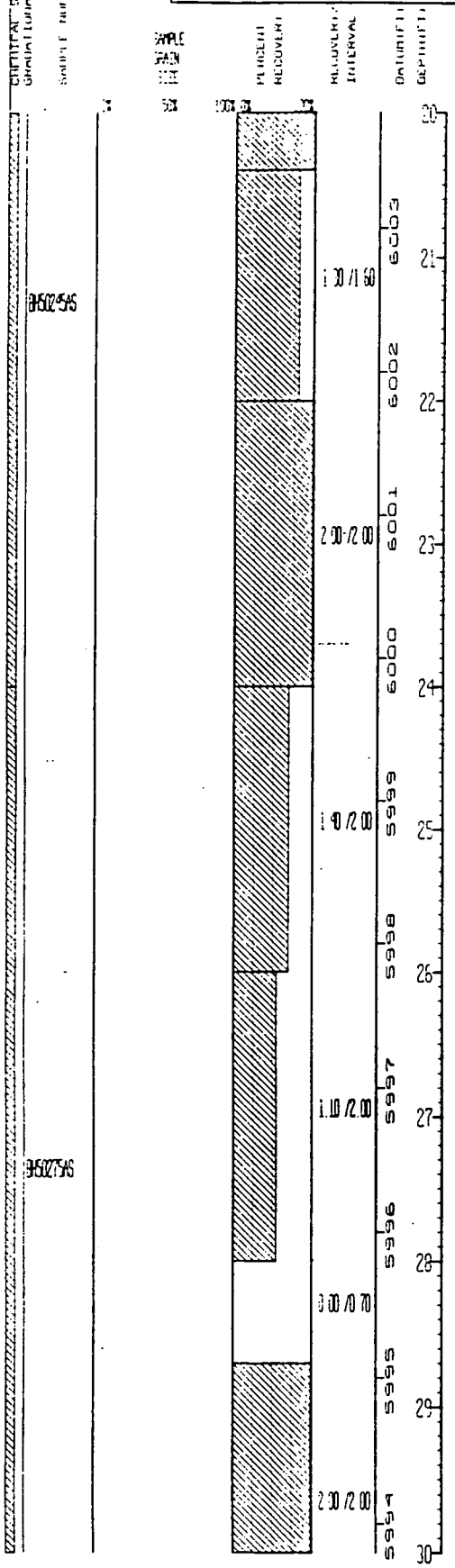
SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	0% 50% 100%	0% 100%			10				
			2.00/2.00	6013	11			SC	10.3'-12.6' Clayey Sand with some Silt and trace Gravel. Mod. 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')
			0.00/0.30	6012	12				
			1.80/2.00	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')
				6010	14	03/25/93			
			1.60/2.00	6009	15				
BH50244S				6008	16				
			2.00/2.00	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
				6006	18				
			1.80/1.80	6005	19				
				6004	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]		PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] DRILLING	
EAST	[illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	[illegible]/25/93	

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

57093

DRAFT



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) 6023.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 CASS 133.2	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	
EAST 1260616	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]/25/93	57093

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] DRILLING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0.2' NOT SHOWN

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CRITICAL 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%			30				
				1.40/1.40	5993	31				
					5992	32				
				2.00/2.00	5991	33				
	8H50276AS				5990	34				
				2.00/2.00	5989	35				
					5988	36				
				1.00/1.00	5987	37				
					5986	38				
					5985	39				
					5984	40				

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

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

Total Depth Drilled 37.10

STATE PLANE COORDINATE	TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT [illegible]	PROJECT NUMBER [illegible]	[illegible] BORING NUMBER	
NORTH [illegible]	AREA [illegible] CASS [illegible]	CASING DIAMETER IN	GEOLOGIST [illegible] DREILING		
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER IN. [illegible]	DATE DRILLED [illegible]/98/93		

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

57193

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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
9H50246AS			1.10 /2.00	6018	0			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')
9H50247AS			1.60 /2.00	6017	1			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 2.5 ft 38% sand, 3% silt, 59% clay
			0.30 /1.50	6016	2			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	6015	3			NO RECOVERY	No recovery (4.9-5.5')
				6014	4			NO RECOVERY	No recovery (5.5-7.0') Not sampled Drilled through rocks
			2.00 /2.00	6013	5			GC	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	6012	6				
				6011	7				
				6010	8				
				6009	9				
					10				

STATE PLANE COORDINATE		TOTAL DEPTH FT. 18.50		GROUND ELEVATION FT.	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA 105 CHSS 133 C		CASING DIAMETER (IN)		GEOLOGIST	[illegible] DREILING
EAST	1080479	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	3.00	DATE DRILLED	04/08/93

LOG OF BORING NUMBER 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

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
3H50C50AS	0% 50%	100% 0% 100%	2.00/2.00	6008	10				
				6007	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	6006	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
				6005	13				
			2.00/2.00	6004	14			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
				6003	15				
			2.00/2.00	6002	16				
				6001	17				
			1.50/1.50	6000	18				
				5999	19				Total Depth Drilled 18.50
					20				

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 10.00 | GROUND ELEVATION (FT) 6015.50 | PROJECT NUMBER | LOG OF BORING NUMBER

NORTH 17546 | HOLE SIZE (DIA) 10.0 | CASING DIAMETER (IN) | GEOLOGIST | TYPE OF DRILLING

EAST 10805-2 | LOCATION NUMBER | BOREHOLE DIAMETER (IN) 8.00 | DATE DRILLED 04/05/90

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

5729 3

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE PAN SIZE	PENETRATION RESISTANCE	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	9450251MS			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, pres 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')
	9450252MS			1.50/2.00	6014	2			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')
	9450253MS			1.80/2.00	6012	4			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	6010	6				
				2.00/2.00	6008	8				
					6007	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 30	GROUND ELEVATION (FT) 6016 50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS CHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	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 DRILLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL DEPTH / 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			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	6006 6005	11				
					12			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 material 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')
			1 70 /2 00	6004 6003	13				
					14				
8H50254NS			2 00 /2 00	6002 6001	15				
					16			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	17				
					18				
			0 00 /2 00	5998 5997	19				
					20				

STATE PLANE COORDINATES		TOTAL DEPTH OF HOLE 30.00	GROUND ELEVATION FT	5015.50	PROJECT NUMBER	DATE STARTED	HOLE OR BORING NUMBER
NORTH	1475546	DEPTH TO FIRST WATER	CASING DIAMETER (IN)		GEOLOGIST	TIME DRILLING	57293
EAST	1380502	DEPTH TO WATER AT COMPLETION FT	BOREHOLE DIAMETER (IN)	5.00	DATE DRILLED	04/05/93	

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

DRAFT

SAMPLE NUMBER	SAMPLE TYPE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			2.00/2.00	21				
				22			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
			1.60/2.00	23				No recovery (23.6-24.0')
			2.00/2.00	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	25			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
			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
			2.00/2.00	29			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 ft. 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
				30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.80	GROUND ELEVATION (FT) 5016.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]546	AREA [illegible] CHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57293
EAST 2080542	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 3.00	DATE DRILLED	[illegible]/95/93	

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

DRAFT

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%	0.80/0.80	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				Total Depth Drilled 30.80
			5984	32				
			5983	33				
			5982	34				
			5981	35				
			5980	36				
			5979	37				
			5978	38				
			5977	39				
				40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6016.40	PROJECT NUMBER	005-RFD-RI	LOG OF BORING NUMBER
NORTH 7[illegible]5	AREA 005, CHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57293A
EAST 1080545	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	105-RFD/RI	LOG OF BORING NUMBER
NORTH 7[illegible]5	AREA 005 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57293A
EAST 2060545	LOCATOR NUMBER 57	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 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'-12.0' Sandy clay, light brown (5 YR 5/6)
				0.00 /2.00	6006					
					6005	11				
						12				Total Depth Drilled 12.00
					6004					
					6003	13				
					6002	14				
					6001	15				
					6000	16				
					5999	17				
					5998	18				
					5997	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 CASS [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57293B
EAST 2080543	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	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
						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) 5016.30	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
				0.00 /2.00	6006	10			CL	10.0'-12.0' Sandy Clay, trace gravel, 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) 6015.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA OU5 IHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57293C
EAST 1380546	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
						0			NO RECOVERY	No recovery (0.0-5.0') Drilled out
					6015					
					6014	2				
				0.00/5.00	6013	3				
					6012	4				
					6011	5			CL	5.0'-7.0' Sandy Clay, light brown (5 YR 5/6)
				0.00/2.00	6010	6				
					6009	7			NO RECOVERY	No recovery (7.0-10.0') Drilled out
					6008	8				
				0.00/3.00	6007	9				
					6006	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6015.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]536	AREA 005 OHSS 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 / 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'-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 COORDINATES	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 2014.00	PROJECT NUMBER 1184-PC-01	LOG OF BORING NUMBER
NORTH 1[illegible]9	AREA 105 [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible]	57393
EAST 1386605	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/07/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASE PCS GEOLOGIST [illegible] DRILLING NOTE CORE LOSS AND RECOVERY INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

PHOTO SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE OPEN TIME	PENETRATION RESISTANCE	RECOVERY INTERVAL	DRILLING DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	3H5025SAS			1.50/2.00	6014 6013			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. No recovery (1.6-2.0')
	3H5025TAS			1.40/2.00	6012 6011			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. No recovery (3.4-4.0'), (4.0-4.6'), and (6.3-6.6')
				0.00/0.60	6010				
				1.70/2.00	6009 6008				
				1.60/1.60	6007				
	3H5025WAS			2.00/2.00	6006 6005				

STATE PLANE COORDINATE		TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	[illegible]	PROJECT NUMBER	[illegible]	HOLE OR BORING NUMBER
NORTH	[illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] BRECKLING	
EAST	[illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	[illegible]	

REMARKS DRILLING EQUIPMENT CME 750 ATV HSI RIG GEOLOGIST [illegible] BRECKLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

57393

DRAFT

SAMPLE NUMBER	CHEMISTRY (GRAVIMETRIC)	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	10.0'-15.0' Sandy Clay with some Silt. Mod. yellowish brown (10YR 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
BH02594S				2.00/2.00	6001	14			CL	15.0'-23.2' Sandy Clay with some Silt and Gravel. Mod. yellowish brown (10YR 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
				2.00/2.00	5999	15				
					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) [illegible] | PROJECT NUMBER [illegible] | LOG OF BORING NUMBER

NORTH 1[illegible]98 | AREA [illegible] | CASING DIAMETER (CM) | GEOLOGIST [illegible] | 57393

EAST 1380605 | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER (CM) [illegible] | DATE DRILLED 04/07/93

REMARKS DRILLING EQUIPMENT [illegible] | ASSIST RIG GEOLOGIST [illegible] | DRILLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

CHEMICAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	%	100%	200%	PENETRATION RESISTANCE	RECOVERY INTERVAL	DEPTH (FT)	ELEVATION (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
								20					
	9502505						2.30/2.00	21	5993				
								22	5992				
							2.30/2.00	23	5991			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
								24	5990				
	9502915						2.30/2.00	25	5989			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
								26	5988			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	27	5987				
								28	5986			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
							2.30/2.10	29	5985				
								30					

STATE PLANE COORDINATE	TOTAL DEPTH FT. 30 20	GROUND ELEVATION FT. 5014 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747549	AREA 005 CASS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	57393
EAST 1080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 10	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 GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERIOD RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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 OF BORING [illegible] | GROUND ELEVATION [illegible] | PROJECT NUMBER [illegible] | LOCATION OF BORING NUMBER

NORTH [illegible] | DATUM [illegible] | BORING DIAMETER (IN) | GEOLOGIST [illegible] | DRILLING

EAST 1360819 | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER (IN) 6 00 | DATE DRILLED 04/12/93

57493

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

DRAFT

Graphic Depth	Sample Number	Sample Type	Sample Recovery	Recovery Interval	Blows	Elevation	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	3H5025AS			1 80 /2 00	6029				CL	0 0'-1 9' Sandy Clay with some Silt and trace Gravel Dusky brown (5 YR 3/2) to approx 1 5 ft, mod brown (5 YR 4/6) below 1 4 ft Sub-angular to sub-rounded gravel, up to 1 in, abundant roots in upper 0 4 ft Fine to coarse grained (and 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 13% silt, 42% clay No recovery (1 9-2 0')
	3H5026AS			1 60 /2 00	6028 6027				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 abundant 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					
				2 00 /2 00	6024 6023				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
	3H5027AS			2 00 /2 00	6022 6021				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 58% gravel, 37% sand 5% silt, 5% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 0	GROUND ELEVATION FT	4639 40	PROJECT NUMBER	LOG-INFO/AR	LOG OF BORING NUMBER
NORTH	1477753	HPA 305 CASS 133	CASING DIAMETER (IN)		GEOLOGIST	T B S DRILLING	57493
EAST	1380819	LOCATOR NUMBER HT	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	04/12/93	

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

DRAFT

CHEMICAL ANALYSIS	SAMPLE NUMBER	SAMPLE DATA TYPE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	10			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
				2 90 /2 00	11			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
				1 20 /2 00	12			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, 74% sand, 4% silt, 17% clay
				1 60 /2 00	13			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')
				1 70 /2 00	14			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')
					15			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')
					16				
					17				
					18				
					19				
					20				

3H502549S

3H502550S

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible] DRILLING	
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	DATE DRILLED	04/12/93	

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

57493

DRAFT

SAMPLE GRAIN SIZE	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	2 00 /2 00	20			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
		21			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
	2 00 /2 00	22			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')
	0 00 /0 40	24	04/13/93			
	2 00 /2 00	25			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
	0 00 /1 30	27				
	2 20 /2 70	28			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')
		29				
		30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT) 6030 40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57493
EAST 1060819	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 9 00	DATE DRILLED	04/10/93	

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

DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM ID	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	0% 100%			30				
			6000					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 COORDINATES	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6000.00	PROJECT NUMBER	LOCATION OF BORING NUMBER
NORTH 1477.16	AREA OF 100 x 100	CASING DIAMETER (IN)	GEOLOGIST	D. BAUGHN
EAST 1003885	LOCATION NUMBER 47	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED	04/13/93

57593

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	PENETRATION RESISTANCE	RECOVERY / INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	9602998			1.10/2.00	6025	1			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, 45% sand, 11% silt, 7% clay. No recovery (1.1'-2.0'), (3.1'-4.0')
	9602999			1.10/2.00	6023	3				
				1.10/2.00	6021	5			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	6019	7				
				0.00/1.25	6018	8				
	9602994 9602000			1.20/2.00	6017	9				
					6016	10				

STATE PLANE COORDINATES	TOTAL DEPTH FT 18 00	GROUND ELEVATION FT 1025 00	PROJECT NUMBER 365-RFC 91	LOG OF BORING NUMBER	
NORTH 1 7746	HEAD OF 133 W AND 135	CASING DIAMETER (IN)	GEOLOGIST D BAUGHN	57593	
EAST 1360885	LOCATION 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

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
			1 90/2 00	6015	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 29% gravel, 53% sand, 5% silt, 14% clay
				6014	11			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
			1 90/2 00	6013	12				
365DDUS				6012	13			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	14				
			0 00/0 25	6010	15				
			1 90/1 90	6009	16			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	17				
				6007	18				Total Depth Drilled 18 00
				6006	19				
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT) 5954.50	PROJECT NUMBER	LOG OF BORING NUMBER	
NORTH 1[illegible]6753	PRE-PLUG DEPTH (FT) 0.00	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57693
EAST 1085298	LOCATION NUMBER 16	BOREHOLE DIAMETER (IN) 3.00	DATE DRILLED	04/27/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV HSA 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	% RECOVERY	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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')
	0H5002SAS			1.30/2.00	1				
					2			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')
	0H5001SAS			1.20/2.00	3				
					4				
				1.30/2.00	5			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')
					6				Total Depth Drilled 6.00
					7				
					8				
					9				
					10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6073.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER	
NORTH	76035	AREA BLAF DIST 6 OF 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible]		57793
EAST	1089025	LOCATION NUMBER 46	BORE-HOLE DIAMETER (IN) 9.00	DATE DRILLED	04/29/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Drelling Note Core loss (no recovery) intervals less than 0.2 ft not shown Area Surface Disturbance South of BHSS 133

DRAFT

Sample Number	Sample Depth (ft)	Sample Grain Size	Percent Recovery	Recovery Interval	Elevation (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
3450294S	0–2			1.10/2.00	6070, 6069			SC	0.0'-2.1' 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')
3450292S, 3450300S	2–4			1.30/2.00	6069, 6068			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')
3450301S	4–6			1.40/1.75	6067, 6066				
	6–8			0.00/0.55	6065, 6064			NO RECOVERY	No recovery (5.4-6.3')
	6–8			1.60/2.00	6064			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
3450302S	8–10				6063, 6062, 6061			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')
3450303S	10–12			2.00/2.00					

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	BOTTOM	PROJECT NUMBER	305-8051-91	LOG OF BORING NUMBER
NORTH	76625	AREA SURF COORD (FT)	CASING DIAMETER (IN)		GEOLOGIST	T. G. DREDLING	57793
EAST	1368025	LOCATION NUMBER 4	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	04/29/93	

REMARKS: Drilling Equipment CME 750 ATV ASE Rig Geologist Theresa Santangelo-Brewing Note Core loss (no recovery) intervals less than 0.2 ft not shown Area Surface Disturbance South of PASS 123

DRAFT

Sample Number	Sample Depth (ft)	Recovery (ft)	Interval	Blows/6 in	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
9450024S									
9450025S									
			1.5/1.75	6060	11				
			0.00/0.15	6059	12			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')
			1.00/1.30	6058	13			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
			1.90/2.00	6057	14				
				6056	15				No recovery (13.2-13.5'), and (15.3-15.5')
9450026S									
			1.75/1.75	6055	16			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
9450027S			0.60/1.00	6054	17			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
			0.00/0.60	6053	18				No recovery (17.85-18.25'), and (18.25-18.85')
			0.75/0.75	6052	19				
9450028S			0.00/0.40	6051	20			NO RECOVERY	No recovery (19.6-20.0') Drilled through rock

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT)	6070 00	PROJECT NUMBER	105-HT0-R2	LOG OF BORING NUMBER
NORTH	74625	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T G DREILING	57793
EAST	1080235	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	09/29/93	

REMARKS Drilling Equipment CME 750 ATV ASE 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

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
			1 30/2 00	6050	20			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
BH6102HS BH6103HS				6049	21				No recovery (21 3-22 0'), (22 0-23 0'), and (24 1-24 4')
			0 00/1 00	6048	22				No recovery (24 4-24 9') Drilled through rocks
			1 10/1 40	6047	23				
BH6102HS			0 00/0 50	6046	24				
			1 50/2 00	6045	25			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
BH6103HS				6044	26				No recovery (26 4-26 9')
BH6103HS			1 70/2 00	6043	27			SC	26 9'-28 0' Gravelly Sand with some Clay and trace Silt Same as above, (reference interval 20 0 to 24 1 ft)
BH6104HS				6042	28			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
			2 00/2 00	6041	29				No recovery (28 6-28 9')
					30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33.90	GROUND ELEVATION (FT) 6070.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA SURF DIST S OF 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57793
EAST 1080235	LOCATOR NUMBER 46	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/29/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Drilling Note Core loss (no recovery) intervals less than 0.2 ft not shown Area Surface Disturbance South of IHSS 133

DRAFT

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			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
			6040	31				
		2.00 /2.00	6039	32			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
			6038	33				
		1.30 /1.00						
			6037	34				Total Depth Drilled 33.90
			6036	35				
			6035	36				
			6034	37				
			6033	38				
			6032	39				
			6031	40				

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 10.40	GROUND ELEVATION (FT)	6062.30	PROJECT NUMBER	105 PROJECT	LOG OF BORING NUMBER
NORTH	74637	PROJECT DATUM (FT) OF 103	CASING DIAMETER (IN)		GEOLOGIST	T G SPECKING	57893
EAST	1080038	LOCATION NUMBER 46	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/03/93	

REMARKS: Drilling Equipment CME 750 ATV ASI Rig Geologist Teresa Santangelo-Greeling 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	Elevation (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
94S0055MS				1.40/2.00	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')
94S0058MS				2.00/2.00	6060			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 conglomeritic, 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
94S0056MS				1.80/2.00	6058			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 graded 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')
94S0057MS				1.80/2.00	6056				
94S0059MS				0.00/0.40	6055			NO RECOVERY	No recovery (7.8-8.0')
								NO RECOVERY	No recovery (8.0-8.4') Overdrilled
94S0040MS				1.50/2.00	6054			SC	8.4'-9.1' Gravelly Sand with some Clay and Silt. Yellowish gray (5 Y 7/2). Gravel sub-rounded, max size 1.0 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
94S0059MS					6053			SM	9.1'-9.7' Silty Sand with some Gravel and Clay. (core is above reference interval 6.0 to 7.4 ft.) based on fines being taken for samples

STATE PLANE COORDINATE	TOTAL DEPTH FT 20 0	GROUND ELEVATION FT	1062 30	PROJECT NUMBER	DATE BEGUN	LOG OF BORING NUMBER
NORTH 76637	PRE-RUN DIST TO TOP 1 33	CASING DIAMETER (IN)		GEOLOGIST	T S SPECKLING	57893
EAST 1380038	LOCATION NUMBER 46	BORE-HOLE DIAMETER (IN)	8 00	DATE DRILLED	05/03/93	

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

DRAFT

Chemical Sample Depth / Analytical Sample Number	Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Datum Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				1 30 /2 00	1062 / 11			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')
	945036JAS				1062 / 12				
				1 60 /2 00	1062 / 13				
	945036JAS				1062 / 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')
	945034JAS			1 60 /1 60	1062 / 15				
	945036JAS				1062 / 16				
				1 75 /1 75	1062 / 17				
	945036JAS				1062 / 18			NO RECOVERY	No recovery (17 75-18 7') Drilled through rocks
				0 00 /0 95					
				1 50 /1 50	1062 / 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
					1062 / 20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 40	GROUND ELEVATION (FT)	6062 30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	57893
EAST	2080338	LOCATOR NUMBER 46	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

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50065AS			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 30/0 30	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 No recovery (20 9'-21 1'), and (21 1'-22 0')
	0 30/0 90	6041	22		
BH50042AS	1 50/2 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 No recovery (23 6'-24 0'), (24 0'-24 4') Overdrilled
BH50066AS	0 00/0 40	6039	24		
	2 00/2 00	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
BH50067AS		6037	26		
	2.00/2.00	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
		6035	28	CLAYEY SANDSTONE	27 3'-28 4' Clayey Sandstone with some Silt Same as above (reference interval 24 4 to 26 9 ft)
	1 50/2 00	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 No recovery (29 9'-30 4')
		6033	30		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.40	GROUND ELEVATION (FT) 6062.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN) *	GEOLOGIST	T S DREILING	57893
EAST 0380338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN) 6.00	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 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				
					6032	31				Total Depth Drilled 30.40
					6031	32				
					6030	33				
					6029	34				
					6028	35				
					6027	36				
					6026	37				
					6025	38				
					6024	39				
					6023	40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA SURF DIST S OF [illegible]		CASING DIAMETER (IN)		GEOLOGIST	[illegible]
EAST	[illegible]	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	[illegible]/93

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

57993

DRAFT

SAMPLE NUMBER	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
[illegible]	1.00/2.00	6089, 6088	0–2	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 [illegible] 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')
[illegible]	1.60/2.00	6087, 6086	2–4		
[illegible]	1.60/2.00	6085, 6084	4–6	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	6–8	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	8–10	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. [illegible]% sand, 5% clay, 5% silt

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	20.00	GROUND ELEVATION (FT)	6089.50	PROJECT NUMBER	105-RFI/RI
NORTH	745738	AREA SURF DIST 3 OF 133		CASING DIAMETER (IN)		GEOLOGIST	[illegible] DRILLING
EAST	1079226	LOCATOR NUMBER	35	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	04/29/93

LOG OF BORING NUMBER **57993**

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

DRAFT

SAMPLE GRAIN SIZE	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, 14			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	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, 18				No recovery (16.8-18.5')
	2.00/2.00	6071, 6070	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 [illegible] 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	[illegible]	LOG OF BORING NUMBER
NORTH 7[illegible]5738	AREA CORP DIST S OF [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57993
EAST 2079225	LOCATOR NUMBER 65	BOREHOLE DIAMETER (IN) 9.00	DATE DRILLED	04/23/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Drilling Note Core loss and recovery intervals less than 0.2 Ft not shown

DRAFT

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%			20			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
			1.40/1.50	6069	21				
				6068	22				Total Depth Drilled 22.00
				6067	23				
				6066	24				
				6065	25				
				6064	26				
				6063	27				
				6062	28				
				6061	29				
				6060	30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 30	GROUND ELEVATION (FT) 6035 30	PROJECT NUMBER 305-NFDR1	LOG OF BORING NUMBER	
NORTH 7-7478	AREA 305 GRSS 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	58093	
EAST 1097688	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 radioactive intervals and is stored in conex containing radioactive materials Log is from field description only

DRAFT

Chemical Sample Depth	Radiational 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
						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
		04S001CN5			1 50 /2 00	6034	1				No recovery (1 5-2 0')
						6033	2			CL	2 0'-3 0' Gravelly Clay with some Sand and Cobbles Mod brown Ash mixed in clay at bottom of sample
					1 00 /2 00	6032	3				No recovery (3 0-4 0'), (4 0-4 5'), and (4 5-6 0')
		04S001HN5			0 00 /0 50	6031	4				
					0 00 /1 50	6030	5	04/22/93 ▽			
					0 00 /2 00	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
						6028	7				No recovery (6 6-8 0'), and (8 0-10 0')
					0 00 /2 00	6027	8				
						6026	9				
							10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6035.30	PROJECT NUMBER	DUS-RFI/RI	LOG OF BORING NUMBER
NORTH 747478	AREA DUS, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	F.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 radioactive 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
	BH50315AS			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) 6035.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA OU5, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	58093A
EAST 1079630	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 pit 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)	6009.60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747929	AREA 005, CASS 115	CASING DIAMETER (IN)		GEOLOGIST	T. S. GREILING	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-Greiling Note Core loss (no recovery) less than 0.2 ft not shown

DRAFT

CHEMICAL DATE 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			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	6009	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')
	BH50403MS BH50419MS			1.50/2.00	6008 6007 6006	2 3 4			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')
				1.40/2.00	6005 6004	5 6			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')
	BH50420MS			0.70/2.00	6003 6002	7 8			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	6001	9			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
	BH50344MS			2.00/2.00	6000	10			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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.70	GROUND ELEVATION (FT) 6009.60	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) 9.00	DATE DRILLED 05/12/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist T Santangelo-Dreiling Note Core loss (no recovery) 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
	BH50M21AS			1.30/2.00	5999, 5998, 5997	10, 11, 12			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 No recovery (12.0'-12.7')
				2.00/2.00	5996, 5995	13, 14			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
					5994, 5993, 5992, 5991, 5990	15, 16, 17, 18, 19, 20				Total Depth Drilled 14.70

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	6008.00	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/13/93

LOG OF BORING NUMBER **58493**

REMARKS: Drilling Equipment CME 750 ATV ASI Rig Geologist [illegible] Santangelo-Drelling 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
				1.00/2.00	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, fine 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. [illegible]% silt, >95% clay. No recovery (9.7'-10.0')
	BH50426AS					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.90	GROUND ELEVATION (FT) 6006.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7395	AREA 005 CASS 115	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	58493
EAST 0081653	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 5.00	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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	5998, 5997	10, 11			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	5996, 5995	12, 13			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
				0.90/0.90	5994, 5993, 5992, 5991, 5990, 5989	14, 15, 16, 17, 18, 19, 20			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
										Total Depth Drilled 14.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	4306.00	PROJECT NUMBER	[illegible]	[illegible]
NORTH	1-7912	AREA 305 LOSS 115	CASING DIAMETER (IN)		GEOLOGIST	T B BREELING	
EAST	1381632	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/14/93	

58593

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

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE	RECOVERY / INTERVAL	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
B150427AS		1.20/2.00	0			SC	0.0'-1.2' Sand and Gravel Dark yellowish orange (10 YR 4/2) Abundant 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')
B150347AS B150402AS B150429AS		1.40/2.00	2			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
B150429AS		0.90/2.00	4			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 abundant 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')
B150035AS		1.20/2.00	6			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
			7			SC	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, quartzose with abundant 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')
B150403AS B150364AS		1.40/2.00	9			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')
			10				

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 20 0 | GROUND ELEVATION (FT) 1006 10 | PROJECT NUMBER | HOLE OR BORING NUMBER

NORTH 147312 | APPROX 365 FASS 115 | CASING DIAMETER (CM) | GEOLOGIST | DRILLING

EAST 1381632 | LOCATION NUMBER FT | BOREHOLE DIAMETER (CM) 8 00 | DATE DRILLED 05/24/99

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

58593

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY INTERVAL	ELEVATION	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /0 50	9965					
					9965	11			SC	10 5'-14 9' Clayey Sand with some Silt and Gravel possible broken cobbles Light brown (5 Y 5/6) Sand is fine 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')
				1 20 /2 00	9964	12				
	BH5006AS									
	BH5007AS			0 60 /1 60	9963	13				
					9962	14				
	BH5007AS			0 80 /2 00	9961	15				
	BH5010AS				9960	16			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')
				1 50 /2 00	9959	17				
	BH5007AS				9958	18			CLAYSTONE	18 1'-20 0' Claystone with some Silt Same as above (reference interval 16 1 to 17 6 ft) Some healed near verticle fractures coated with some to trace fe staining below approx 18 9 ft
				2 00 /2 00	9957	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH FT 21 10	GROUND ELEVATION (FT) 6006 10	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	58593
EAST 2081632	LOCATOR NUMBER [illegible]	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

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 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) 10.00	GROUND ELEVATION (FT)	5999.60	PROJECT NUMBER	105-4F5/91	LOG OF BORING NUMBER
NORTH	1[illegible]44	AREA NAS [illegible] 115	CASING DIAMETER (IN)		GEOLOGIST	D.C. BAUGHN	58693
EAST	1081584	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	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.10/2.00	0–1			WASTE/FILL	0.0'-0.3' Landfill Waste Gravel with trace Sand Black (N1) Gravel is graded coarse, sub-rounded to sub-angular Sand is graphite, fine to fine No recovery (0.3'-2.0')
	9650449S								
	9650498S			1.10/2.00	2–3			CL	2.0'-3.1' Gravelly Clay with abundant 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')
	9650077S								
				0.60/2.00	4–5			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')
				0.00/0.20	6–7				
	9650077S			0.80/2.00	7–8			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')
	9650107S			0.00/2.00	9–10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] BAUGHN	58693
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]/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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% / 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				
	BH50374AS			0.30 / 1.70	5989	11			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?) No recovery (11.1'-12.0'), (12.0'-15.5')
					5988	12				
					5987	13				
				0.00 / 3.50	5986	14				
					5985	15				
	BH50349AS BH50672AS(DUP)				5984	16			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. 4% gravel, 54% sand, 15% silt, 27% clay No recovery (17.0'-17.5')
				1.50 / 2.00	5983	17				
	BH50375AS				5982	18			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. 17% gravel, 36% sand, 12% silt, 35% clay No recovery (18.8'-19.5'), (20.1'-21.5'), and (22.6'-[illegible]
				1.30 / 2.00	5981	19				
					5980	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.30	GROUND ELEVATION (FT) 5999.50	PROJECT NUMBER	US-RFI-RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 105 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	G.C. BAUGHN	58693
EAST 1081584	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 9.00	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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	9H50438AS			0.60/2.00	5979	20				
					5978	21				
	9H50350AS					22				
	9H50434AS			1.10/2.00	5977					
					5976	23				
						24			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')
				1.40/2.00	5975					
	9H50435AS					25				
					5974					
						26				
	9H50436AS			1.10/2.00	5973					
						27				
	9H50405AS				5972				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')
						29				
	9H50437AS			1.00/2.00	5971					
						29				
					5970					
						30				

STATE PLANE COORDINATE	TOTAL DEPTH FT 30.90	GROUND ELEVATION FT 5969.90	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 105 CASS 115	CASING DIAMETER (IN)	GEOLOGIST	C.C. BAUGHN	58693
EAST 0081584	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(s) 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
				0.90/1.40	5969	30				
									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) 10.00	GROUND ELEVATION (FT)	6012.50	PROJECT NUMBER	105-PFC-91	LOG OF BORING NUMBER
NORTH	1.7512	AREA 305 DRES 122.2	CASING DIAMETER (IN)	2.00	GEOLOGIST	F.G. DRILLING	58793
EAST	1080605	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	05/20/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST F. 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	LABORATORY DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.50/2.00	6012			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')
	9650086			0.80/2.00	6010			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	6009			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
				1.50/2.00	6008			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 (5.6-5.1')
				1.10/2.00	6007			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.
	9650076			1.60/1.90	6006			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')
					6005				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19.40	GROUND ELEVATION (FT)	6002.50	PROJECT NUMBER	1159-4[illegible]
NORTH [illegible]	AREA 305 CASS 133.2	CASING DIAMETER (IN)	2.00	GEOLOGIST	T. E. BRECKLING
EAST 1080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	05/20/93

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

58793

DRAFT

CHEMICAL/GEOTECHNICAL 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
				1.50/2.00	6002	10			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.
					6001	11	05/20/93 ▽			No recovery (11.5'-12.0')
				1.50/2.00	6000	12			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).
					5999	13				No recovery (13.4-14.0')
				2.00/2.00	5998	14				
850108S					5997	15			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.
				2.00/2.00	5996	16				
					5995	17				
				1.10/2.00	5994	18			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.
					5993	19				No recovery (19.1'-20.0')
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 28 40	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA 005 CASS 133 2	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] DRILLING
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	05/20/93

LOG OF BORING NUMBER **58793**

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
	8H5040AS			1 40 /2 00	5992	20			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')
				1 40 /2 00	5991	21				
					5990	22			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')
					5989	23				
					5988	24				
	8H5041AS			1 20 /2.00	5987	25			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')
				0 60 /0 60	5986	26			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')
				1.60 /1.80	5985	27				
					5984	28				
					5983	29				
						30				

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

STATE PLANE COORDINATES		TOTAL DEPTH (FT)	12.00	GROUND ELEVATION (FT)	6021.30	PROJECT NUMBER	315-4F01-01
NORTH	1004775	HOLE DIAS (IN)		CASING DIAMETER (IN)		GEOLOGIST	D. C. BAUGHN
EAST	1079962	LOCATION NUMBER	57	BOREHOLE DIAMETER (IN)	12.00	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

58893

DRAFT

Sample Number	Sample Depth (Elevation)	Sample Length	Sample Grain Size	Percent Recovery	Recovery Interval	Elevation (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
					1.20/2.00	6021			CL	0.0'-1.2' Sandy Clay with some Silt. Mod. yellowish brown (10 YR 5/4). Trace sub-rounded gravel, f-c, sub to [illegible]. Fred 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	6020			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')
350459S						6019				
						6018				
					1.30/2.00	6017			WASTE/FILL	4.6'-5.2' Waste. Burnt piece of wood approx. [illegible] x 3.0 in. Pieces of white fibrous material mixed with sand and soil
						6016			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, [illegible] ironstone nodule. Trace carbonaceous material. No apparent bedding or fractures. 20% silt, 80% clay. No recovery (5.3-6.0')
					1.00/2.00	6015			CLAYSTONE	6.0'-11.4' Claystone with some Silt. Same as above (reference interval 5.2 to 5.3 ft.), except some red staining, especially from 6.7 to 7.0 ft. No recovery (7.0-8.0'), (9.3-10.0'), and (11.4-12.0')
						6014				
					1.30/2.00	6013				
350459S						6012				

STATE PLANE COORDINATE	TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] BAUGHN	58893
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED	[illegible]/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
				1.0 / 2.00	6021	10				
						11				
					6020	12				Total Depth Drilled 12.00
					6019	13				
					6018	14				
					6017	15				
					6016	16				
					6015	17				
					6014	18				
					6013	19				
					6012	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	6033 00	PROJECT NUMBER	115-RFS/RI
NORTH 747465	AREA 005 (HSS 133)	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN
EAST 1079697	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/13/93

LOG OF BORING NUMBER **58993**

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

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		6033	0	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')
BH50647AS	0 70 /2 00	6032	1		
		6031	2	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
BH50480AS BH50481AS(DUP)	1 90 /2 00	6030	3		
		6029	4	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
	1 10 /2 40	6028	5	NO RECOVERY	5 1'-6 4' No recovery Approx 0 2 ft of slough in corebox at 6 4 ft
		6027	6		
				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')
	1 70 /1 90	6026	7		
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')
BH50482AS	1 70 /2 10	6024	9		
			10		

STATE PLANE COORDINATE	TOTAL DEPTH FT 12.00	GROUND ELEVATION FT [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005, CASS 133	CASING DIAMETER (IN)	GEOLOGIST D.C. BAUGHN	58993
EAST 1079697	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 12.00	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
				1.50/1.50	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 [illegible]	GROUND ELEVATION [illegible]	[illegible]	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]		GEOLOGIST	59093
EAST [illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]		DATE DRILLED 06/02/93	

REMARKS Drilling Equipment CME 750 ATV HSA Rig Geologist Jon Baugh Note Core loss (no recovery intervals) less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE NUMBER / 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
B5061B6			1.40/2.00	6024			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
				6023			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')
B5061U6 B5061A6 (DUP)			1.60/2.00	6022				
			1.10/2.00	6021				
			1.90/2.00	6020			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')
B5061Z			0.00/2.00	6019				
				6018				
				6017				
				6016				
				6015				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18.40	GROUND ELEVATION (FT) 6024.00	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 CASS 133 4	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible]	59093
EAST [illegible]	LOCATION NUMBER 37	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED [illegible]	

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

DRAFT

Sample Number	Sample Depth	Sample Length	Percent Recovery	Recovery Interval	Blow Counts	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
06504136	10–12	1.0	100%	1.00/2.00	6014, 6013			GM	10.0'-11.3' 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')
	12–14	1.0	100%	1.80/2.00	6012, 6011			GM	12.0'-12.9' 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
								GM	12.9'-13.8' 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')
	15–17	1.0	100%	1.70/2.00	6010, 6009			SILTY CLAYSTONE	14.3'-16.0' 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')
	18–20	1.0	100%	2.10/2.10	6008, 6007, 6006, 6005			CLAYSTONE	16.3'-18.4' Claystone with some Silt Light olive gray (5 YR 6/1) 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 [illegible]
Bottom of Filter Pack 14.30

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5960.60	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH 747569	AREA CUS CHSS 115	CASING DIAMETER (IN)	GEOLOGIST	T S CREILING	59193
EAST 2081251	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED	06/09/93	

REMARKS Drilling equipment CME 750 ATV ASI Rig Geologist T Santangelo-Creiling Note Core loss (no recovery) in tervals less than 0.2 ft not shown

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (3% 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, 5979	0, 1			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	5978, 5977	2, 3			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	5976, 5975	4, 5			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')
				5974	6			SLUFF	6.0'-6.7' Sluff
			2.00/2.00	5973	7			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
BH50464AS			1.50/2.30	5972, 5971	8, 9, 10			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')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.30	GROUND ELEVATION (FT) 5980.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	59193
EAST 2081251	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 10.30	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

PHYSICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				Total Depth Drilled 10.30
					5970					
						11				
					5969					
						12				
					5968					
						13				
					5967					
						14				
					5966					
						15				
					5965					
						16				
					5964					
						17				
					5963					
						18				
					5962					
						19				
					5961					
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.30	GROUND ELEVATION (FT) 1345.10	PROJECT NUMBER 105-PRODUCE	LOG OF BORING NUMBER	
NORTH 1[illegible]7364	HOLE DIAS 12.25	CASING DIAMETER (IN)	GEOLOGIST D.C. BAUGHN	59293	
EAST 1382249	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 12.00	DATE DRILLED 06/04/93		

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

Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Depth (ft)	Lithology	Unified Soils Classification or Rock Type	Description
9650444AS			1.25/2.00	0		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 abundant 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')
9650439AS			1.35/2.00	2		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')
9650446AS			1.30/2.00	4		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')
9650447AS			1.60/2.00	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')
9650448AS			1.60/2.00	9		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. 9.2 ft. 29% gravel, 45% sand, 9% silt, 26% clay. No recovery (9.6-10.0')
9650449AS				10			

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 18 90	GROUND ELEVATION (FT)	5946 0	PROJECT NUMBER	305-RFS 91	LOG OF BORING NUMBER
NORTH	7475584	AREA 305, SSS 115	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	59293
EAST	2082143	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	06/04/93	

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
					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
	B50449US				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				
	B50450US								No recovery (13 8-14 0')
					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
	B50451US			2 90 /2 90	15 / 16				
					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.
	B50452US			1 60 /2 00	18				No recovery (18 5-18 9')
					19				Total Depth Drilled 18 90
					20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5960.50	PROJECT NUMBER	115-HFLFS	BORING NUMBER
NORTH	74555	AREA 305 CASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T. G. DREELING	59393
EAST	2081989	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/10/93	

REMARKS: DRILLING EQUIPMENT: CME 750 ATV ASI 916 GEOLOGIST: THERESA SANTANGELO-DREELING NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

Sample Number	Sample Interval	Recovery	Depth (ft)	Lithology	USCS / Description
			0		ML: 0.0'-0.1' Sandy Silt with abundant 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, 25% clay
3650465AS	1.00/2.00	1.00/2.00	1		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')
3650479AS / 3650466AS	1.00/2.00	1.00/2.00	2		GP: 2.0'-2.9' Broken Cobbles. Quartzite with some micaceous and feldspathic partings. 100% cobbles
			3		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')
	1.00/2.00	1.00/2.00	4		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
3650467AS			5		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')
3650477AS	2.00/2.00		6		
			7		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
3650468AS			8		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 carbonate patches. Slightly carbonaceous, moist to wet, trace [illegible] ironstone nodules at approx. 7.6 ft. White, [illegible] in thin layers and patches between 8.0 and approx. [illegible] ft. At approx. 8.3 ft brown organic piece approx. [illegible] mm around. <5% sand, 5% silt, 590% clay
	2.00/2.00		9		
			10		

Sample Number: 3650465AS, 3650479AS, 3650466AS, 3650467AS, 3650477AS, 3650468AS

Sample Interval: 1.00/2.00; 1.00/2.00; 1.00/2.00; 2.00/2.00; 2.00/2.00

Recovery: 1.00/2.00; 1.00/2.00; 1.00/2.00; 2.00/2.00; 2.00/2.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.40	GROUND ELEVATION (FT)	5952.60	PROJECT NUMBER	005-RFI-RI	LOG OF BORING NUMBER
NORTH	747555	AREA 005 CASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	F. S. DREILING	59393
EAST	2081489	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
		0% 50% 100%	0% 100%	1.50/2.40	5942 5941 5940 5939 5938 5937 5936 5935 5934 5933	10 11 12 13 14 15 16 17 18 19 20			CLAYSTONE	9.5'-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) 10 30	GROUND ELEVATION (FT) 5990 30	PROJECT NUMBER 305-HFB.R1	LOG OF BORING NUMBER
NORTH 1[illegible]324	AREA 305 (305 115 & 1 [illegible])	CASING DIAMETER (IN) 0 00	GEOLOGIST [illegible] DRILLING	59493
EAST 1081536	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 06/14/93	

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

DRAFT

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
9605249S			1 00/2 00	5990	0–1			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
					1–2			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')
9605250S			0 00/2 00	5989	2–3				
				5988	3–4				
			0 00/0 90	5987	4–5	06/14/93			
				5986	5–6			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')
9605251S			1 00/2 00	5985	6–7				
				5984	7–8			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
			2 00/2 00	5983	8–9				
9605252S				5982	9–10				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"
9605253S 9605254S			0 00/2 00	5981	10				

STATE PLANE COORDINATES	TOTAL DEPTH (FT) 19.30	GROUND ELEVATION (FT) 5990.30	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH 74924	HEAD HUS BASS LIS & ASS	CASING DIAMETER (IN) 2.30	GEOLOGIST [illegible]	
EAST 2061536	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 6/14/92	59493

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] 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
					5980	10				
					5979	11			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
				2.00 /2.00	5978	12				
	B6052716				5977	13			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
				1.30 /2.00	5976	14				
	B6052816								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')
	B6052216				5975	15				
					5974	16				
	B6052916			1.70 /2.90	5973	17				
					5972	18			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')
				1.20 /1.50	5971	19				
						20				Total Depth Drilled 19.30 Total Depth Casing [illegible] Bottom of Filter Pack 12.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5951.00	PROJECT NUMBER	305-RFS.01
NORTH 1-9577	AREA 305 DASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	F.G. SPECKING
EAST 1381786	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/15/93

LOG OF BORING NUMBER **59593**

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

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
365040			1.00/2.00	5951	1			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')
365052AS, 365079AS (DUP)			1.00/2.00	5950	2			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
365041AS			1.00/2.00	5947	5			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')
365042AS			1.00/2.00	5945	7	06/15/93		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
365053AS			1.60/2.00	5943	8			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')
365054AS				5942	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 17.90	GROUND ELEVATION (FT) 3951.30	PROJECT NUMBER 105-9F01-F1	LOG OF BORING NUMBER
NORTH 7-9577	HCA 105, DHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST F. G. GREELING	59593
EAST 2081786	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist F. Santangelo-Greeling 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	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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.
	06SE4H6			1.10/2.00		No recovery (11.1-12.0'), (12.0-14.0'), and (14.0-14.4')
				0.00/2.00		
				0.00/0.10		
					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
	06SE5H6			1.80/2.00		No recovery (16.2-16.4')
	06SE6H6					
				1.30/1.50	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')
						Total Depth Drilled 17.90 Total Depth Casing 15.35 Bottom of Filter Pack 13.50

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

Unified Soils Classification: SC; CLAYSTONE

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 50	GROUND ELEVATION (FT) 6017 50	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747365	AREA 005 [illegible]	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 [illegible] RIG GEOLOGIST R ZEILER 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
	BH50580AS(DUB) BH50556AS			1 00 /2 00	6017 6016	0 1 2			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')
				1 90 /2 00	6015 6014	3				
				2.00 /2 00	6013 6012	4 5			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
				0.40 /2.00	6011 6010	6 7			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')
	BH50557AS			0 60 /2 00	6009 6008	8 9 10			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	015-RFI/RI	LOG OF BORING NUMBER
NORTH 7365	AREA OU5 IHSS 133 3	CASING DIAMETER (IN)	GEOLOGIST	R M ZEILER	59693
EAST 1079753	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 (0% 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				
				2 00 /2 00	6007	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')
					6006	12				
				2.00 /2 00	6005	13				
	BH5055BAS BH5066AS(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	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')
				0 00 /0.50	6002	16				
					6001	17				Total Depth Drilled: 15 50
					6000	18				
					5999	19				
					5998	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.0	GROUND ELEVATION (FT) 5944.30	PROJECT NUMBER 305-BF0/R1	LOG OF BORING NUMBER	
NORTH 1[illegible]555	AREA 305 [illegible]	CASING DIAMETER (IN) 2.00	GEOLOGIST F.S. DREELINGO		
EAST 1382128	LOCATOR NUMBER [illegible]7	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/11/93		

59793

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Dreeling 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
	B5048WS			1.10/2.00	5944	1			CL	0.0'-1.1' No core in box Description from field Sandy Clay Dark yellowish brown (10 YR 4/2) Abundant roots Dry, stiff No recovery (1.1-2.0')
	B5049WS B5049MS			1.20/2.00	5943 5942	2 3			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	5941	4				
	B5050WS			1.20/2.00	5940 5939	5 6			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	7				
	B5051WS B5051MS			1.40/2.00	5937 5936	8 9			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 10.5 to 10.8 ft 5% gravel, 59% sand, 7% silt, 29% clay No recovery (10.8-11.3') and (11.3-13.3')
					5935	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 30	GROUND ELEVATION (FT) 5944 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 74553	AREA OU5, IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST	F S DREILINGO	59793
EAST 2082128	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED	06/11/93	

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

DRAFT

CHEMICAL SAMPLE NUMBER	SAMPLE GRADE SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT) DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
3H5049215			1 50/2 00	4965				
			0 00/2 00	4963				
				4962				
3H5049615			2 00/2 00	4961			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. No recovery (16 1-17 3')
3H5049015				4960				
			0 80/2 00	4959				
				4958				
			1 00/1 00	4957			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
				4956				Total Depth Drilled 18 30 Total Depth Casing 16 50 Bottom of Filter Pack 14 00
				4955				
				4954				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT)	5946.00	PROJECT NUMBER	005-RFI/RI
NORTH 7[illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)	2.40	GEOLOGIST	P J JORDAN
EAST 2082525	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/09/93

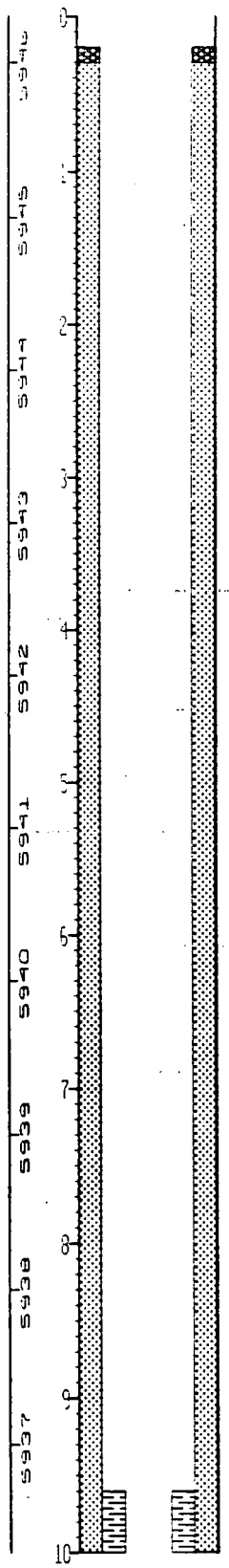
LOG OF BORING NUMBER

59893

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

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%							



Total Depth Drilled 14.60 Total Depth Casing 14.60
Bottom of Filter Pack 14.60

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT) 5946.30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]594	AREA 115 CASS 115	CASING DIAMETER (IN) 2.40	GEOLOGIST	P J JORDAN	59893
EAST 1082528	LOCATOR NUMBER [illegible]	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)	[illegible]	PROJECT NUMBER	[illegible]	[illegible] OF BORING NUMBER
NORTH	747550	AREA OUS IHSS 115	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN	59993
EAST	2082132	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
					5944	0				
					5943	1				
					5942	2				
					5941	3				
					5940	4				
					5939	5				
					5938	6				
					5937	7				
					5936	8				
					5935	9				
						10				

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA 9U5 DHSS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P J JORDAN
EAST [illegible]82132	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/09/93

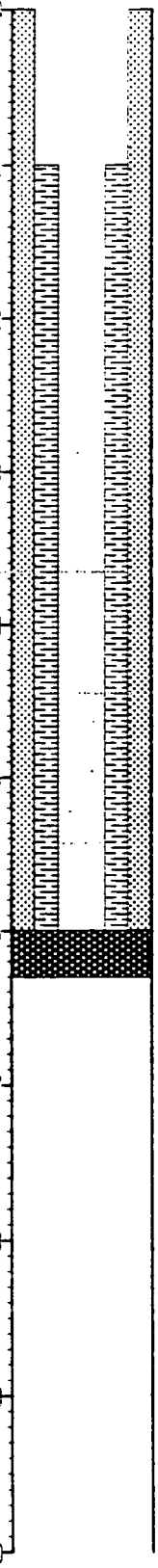
REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

LOG OF BORING NUMBER

59993

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
					5934	10				
					5933	11				
					5932	12				
					5931	13				
					5930	14				
					5929	15				
					5928	16				
					5927	17				
					5926	18				
					5925	19				
						20				

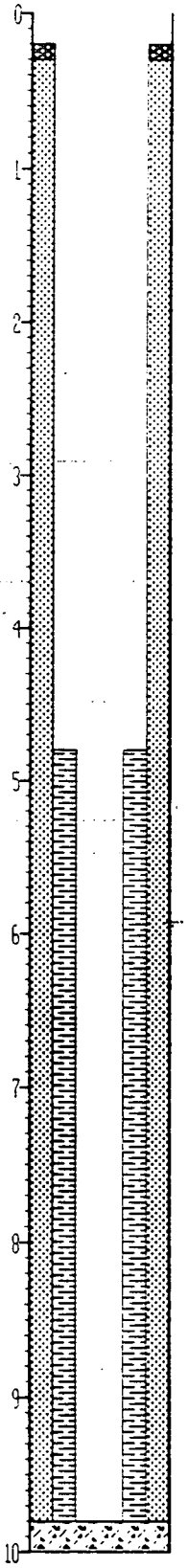


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5945.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P. J. JORDAN	60093
EAST 1082046	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL 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
		0% 50% 100%	0% 100%		5945	0				
					5944	1				
					5943	2				
					5942	3				
					5941	4				
					5940	5				
					5939	6				
					5938	7				
					5937	8				
					5936	9				
						10				



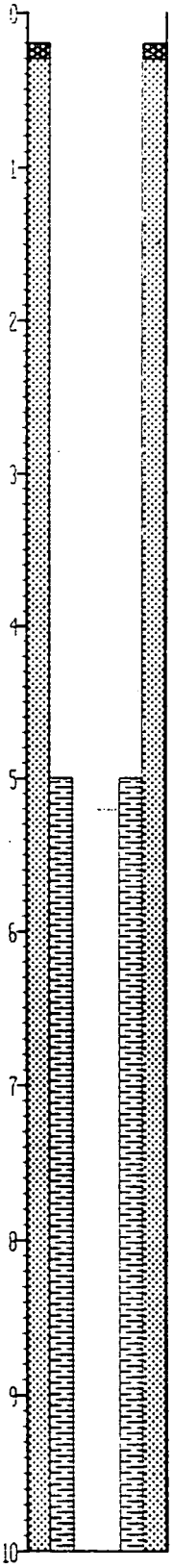
Total Depth Drilled 10.00 Total Depth Casing 9.80
Bottom of Filter Pack 9.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5949.10	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. JORDAN	60193
EAST	2081350	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
						5949	0				
						5948	1				
						5947	2				
						5946	3				
						5945	4				
						5944	5				
						5943	6				
						5942	7				
						5941	8				
						5940	9				
							10				



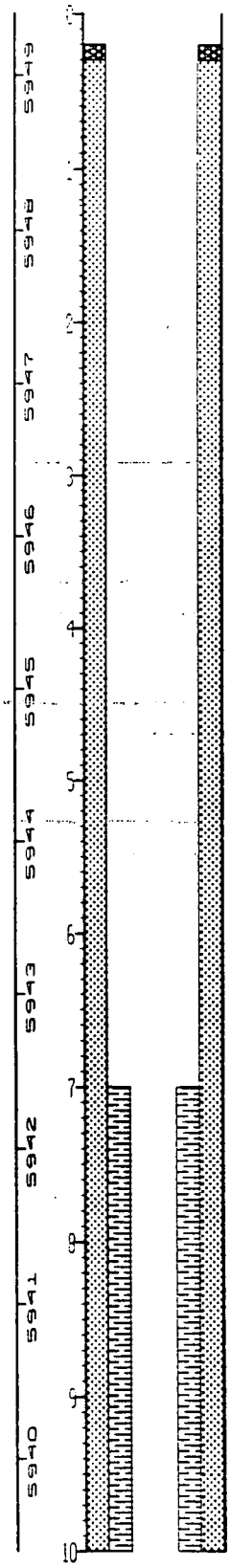
Total Depth Drilled 10.00 Total Depth Casing 10.00
Bottom of Filter Pack 10.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 5949.40	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	60293
EAST 2081347	LOCATOR NUMBER I7	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
					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				



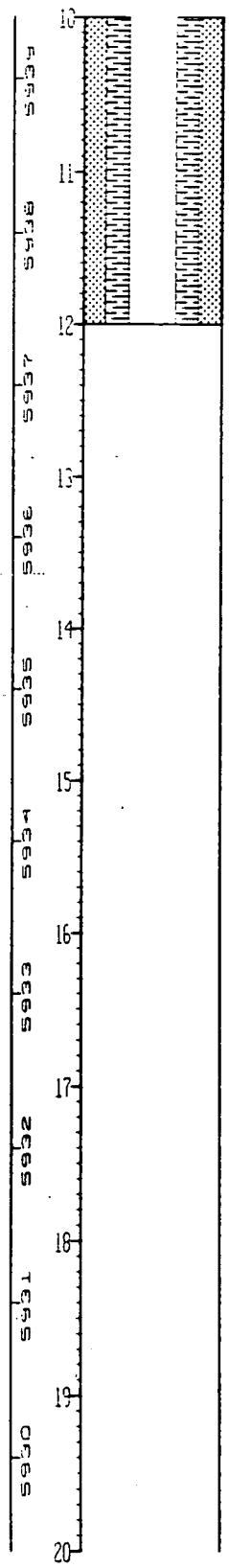
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] JORDAN
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/11/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

60293

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)	11.00	GROUND ELEVATION (FT)	5962.10	PROJECT NUMBER	OU5-RFI/RI
NORTH	747619	AREA	IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN
EAST	2081539	LOCATOR NUMBER	17	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93

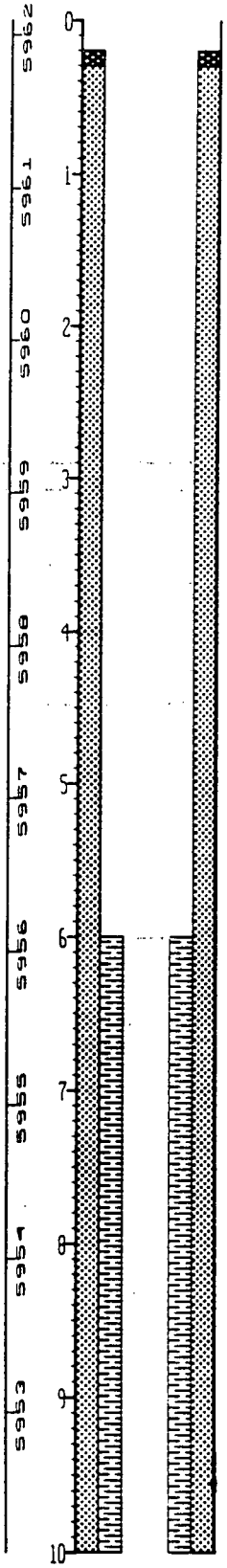
REMARKS NO CORE WAS TAKEN FOR LOGGING.

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



Total Depth Drilled 11.00
Bottom of Filter Pack 11.00

Total Depth Casing 0.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	11.00	GROUND ELEVATION (FT)	5962.10	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	747619	AREA IHSS 115		CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. JORGAN	60393
EAST	2081539	LOCATOR NUMBER	I7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93	

REMARKS: NO CORE WAS TAKEN FOR LOGGING.

DRAFT

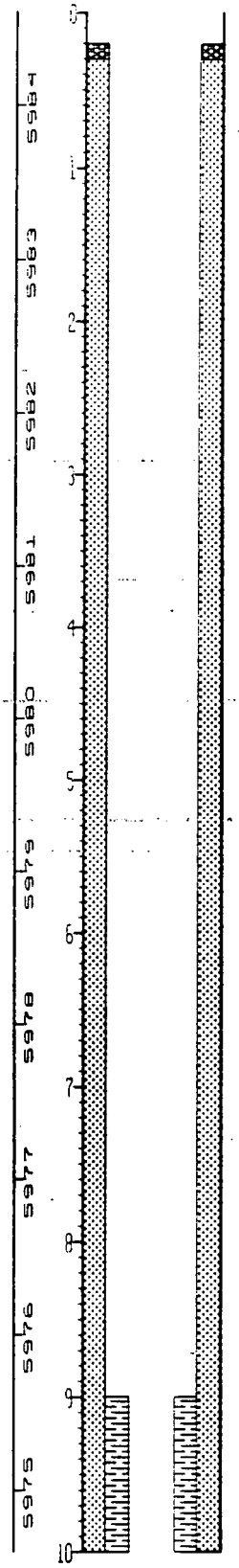
CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						5952	10				
						5951	11				
						5950	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	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA CASS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. JORDAN	60493
EAST	1081257	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 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
		0% 50% 100%	0% 100%							



Total Depth Drilled 14.00 Total Depth Casing 14.00
Bottom of Filter Pack 14.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P. J. JORDAN
EAST 1081257	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/11/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

60493

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				
						11				
					5973					
						12				
					5972					
						13				
					5971					
						14				
					5970					
						15				
					5969					
						16				
					5968					
						17				
					5967					
						18				
					5966					
						19				
					5965					
						20				

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	[illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible] JORDAN	60593
EAST 2080973	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 16/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

DEPTH (FT)	GROUND ELEVATION	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%		6015	0				
						6014	1				
						6013	2				
						6012	3				
						6011	4				
						6010	5				
						6009	6				
						6008	7				
						6007	8				
						6006	9				
							10				

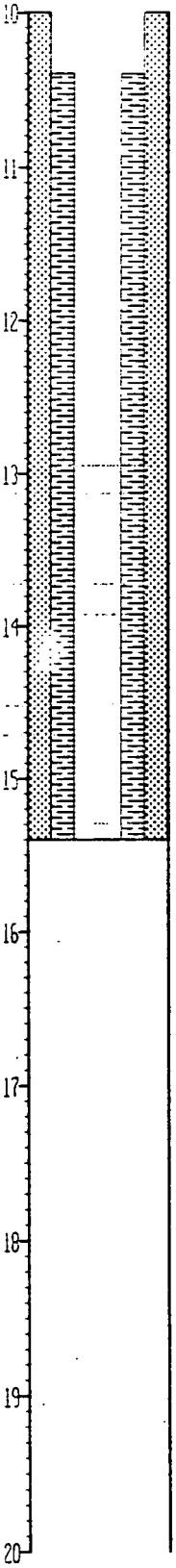
Total Depth Drilled 15.40 Total Depth Casing 15.40
Bottom of Filter Pack 15.40

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.40	GROUND ELEVATION (FT) 6015.10	PROJECT NUMBER	115-RFI/RI	LOG OF BORING NUMBER
NORTH 747676	AREA DASS 115	CASING DIAMETER (IN) 3.40	GEOLOGIST	P. J. JORDAN	60593
EAST 1080973	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
						6005	10				
						6004	11				
						6003	12				
						6002	13				
						6001	14				
						6000	15				
						5999	16				
						5998	17				
						5997	18				
						5996	19				
							20				



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18.00	GROUND ELEVATION (FT) 6023.60	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA PASS 115	CASING DIAMETER (IN) 3.40	GEOLOGIST [illegible]	60693
EAST 2080896	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED [illegible]	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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 18.00 Total Depth Casing 17.80
										Bottom of Filter Pack 17.80
					6022	1				
					6021	2				
					6020	3				
					6019	4				
					6018	5				
					6017	6				
					6016	7				
					6015	8				
					6014	9				
						10				

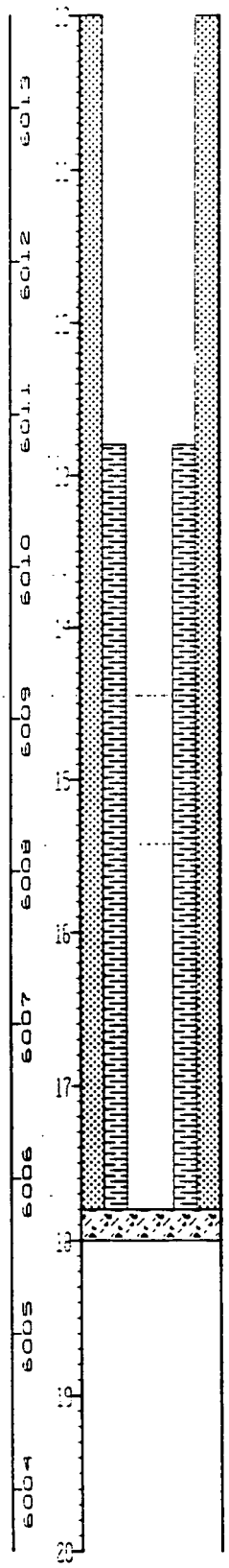
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT)	6023.60	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA BASE 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. LORDAN
EAST 2080896	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

60693

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) 6030.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	60793
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) [illegible]	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				Total Depth Drilled 16.00 Total Depth Casing 16.00
										Bottom of Filter Pack 16.00
					6029	1				
					6028	2				
					6027	3				
					6026	4				
					6025	5				
					6024	6				
					6023	7				
					6022	8				
					6021	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT)	6030.00	PROJECT NUMBER	CUS RFI/RI
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/11/93

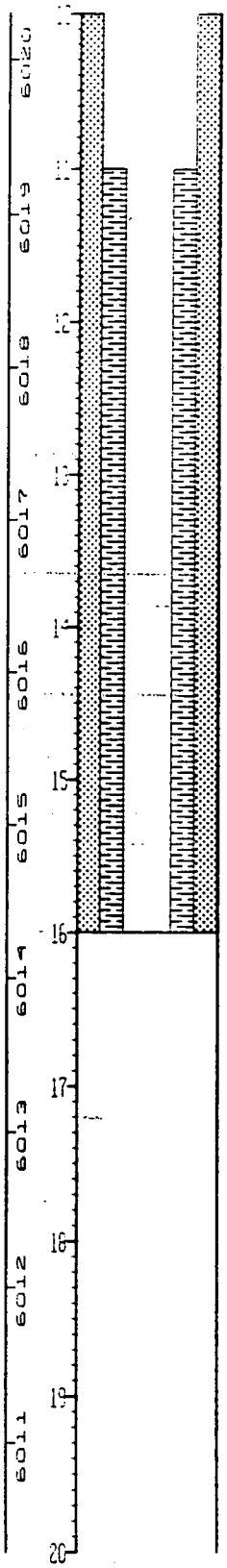
LOG OF BORING NUMBER

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



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23.00	GROUND ELEVATION (FT) 5999.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN) 0.40	GEOLOGIST	P J JORDAN	60893
EAST 1081585	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED	06/14/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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
					5999	0				
					5998	1				
					5997	2				
					5996	3				
					5995	4				
					5994	5				
					5993	6				
					5992	7				
					5991	8				
					5990	9				
						10				

Total Depth Drilled 23.00 Total Depth Casing 23.00
Bottom of Filter Pack 23.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P.J. JORDAN
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/14/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

60893

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
					5989	10				
						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) [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA (MSS 115)	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P. J. JORDAN
EAST 0081585	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/14/93

LOG OF BORING NUMBER

60893

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

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%			20				
			5979	21				
			5978	22				
			5977	23				
			5976	24				
			5975	25				
			5974	26				
			5973	27				
			5972	28				
			5971	29				
			5970	30				

STATE PLANE COORDINATE		GROUND ELEVATION FT	5965.40	PROJECT NUMBER	[illegible]
NORTH	[illegible]	CASING DIAMETER IN	2.50	GEOLOGIST	[illegible]
EAST	[illegible]	BOREHOLE DIAMETER IN	1.40	DATE DRILLED	[illegible]

LOG OF BORING NUMBER **60993**

REMARKS Drilling Equipment Scorpion ATV with Kansas Sampler ASI Rig Geologist [illegible] 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			1.00 /2.00	5965	0			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	5964	1				
BH50594AS			2.00 /2.00	5963	2				
BH50595AS			2.00 /2.00	5962	3				
				5961	4			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
				5960	5				
				5959	6				
				5958	7				
				5957	8				Total Depth Drilled 8.00 Total Depth Casing [illegible] Bottom of Filter Pack 8.00
				5956	9				
					10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5970.00	PROJECT NUMBER	105-9F6.R1	LOCATION OF BORING NUMBER
NORTH	1777.64	AREA 105, CASS 115	CASING DIAMETER (IN)	3.50	GEOLOGIST	P. JORDAN	61093
EAST	1361952	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN)	3.40	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 GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY/INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.30/2.00	5971	1			SC	0.0'-5.1' Clayey Sand with abundant 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')
				0.60/2.00	5969	3				
	065607MS			1.30/2.00	5967	5				
									CL	5.1'-6.9' Sandy Clay. Olive gray, moist No recovery (5.3-6.0')
	065608MS			2.00/2.00	5966	7			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.
	065609MS			2.00/2.00	5963	9			CLAYSTONE	9.00'-10.00' Top of Bedrock at 9.0' Claystone No recovery (10.0-12.0')
	065610MS					10	06/23/93			

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST P J JORDAN	61093
EAST [illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	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

CRITICAL 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
					5962	10	06/23/93			
				0.00/2.00	5961	11				
					5960	12			CLAYSTONE	12.00'-12.70' Claystone Olive gray, some Fe staining
	SHELBY TUBE			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)	[illegible]	GROUND ELEVATION (FT)	6020.30	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA CODE	[illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]
EAST	1060053	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/11/93

REMARKS Drill Equipment CME 750 ATV ASI Geologist Rose Zeller and Dan Baughn Note Core loss (no recovery) intervals less than 0.2 ft not shown

61193

DRAFT

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50649AS	1.20/2.00	6020	0–1	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')
BH50500AS	1.40/1.80	6019	2–3	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	6018	3–4	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	6017	4–5	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	6016	5–6	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
BH50503AS BH50666AS(DUB)	2.00/1.90	6015	6–8	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
	1.90/1.90	6014	7–9		
		6013	8–10		
		6012	9–10		
		6011	10		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 10	GROUND ELEVATION (FT)	6020 30	PROJECT NUMBER	005-PFD/RI	LOG OF BORING NUMBER
NORTH	747408	AREA 005 (HSS 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

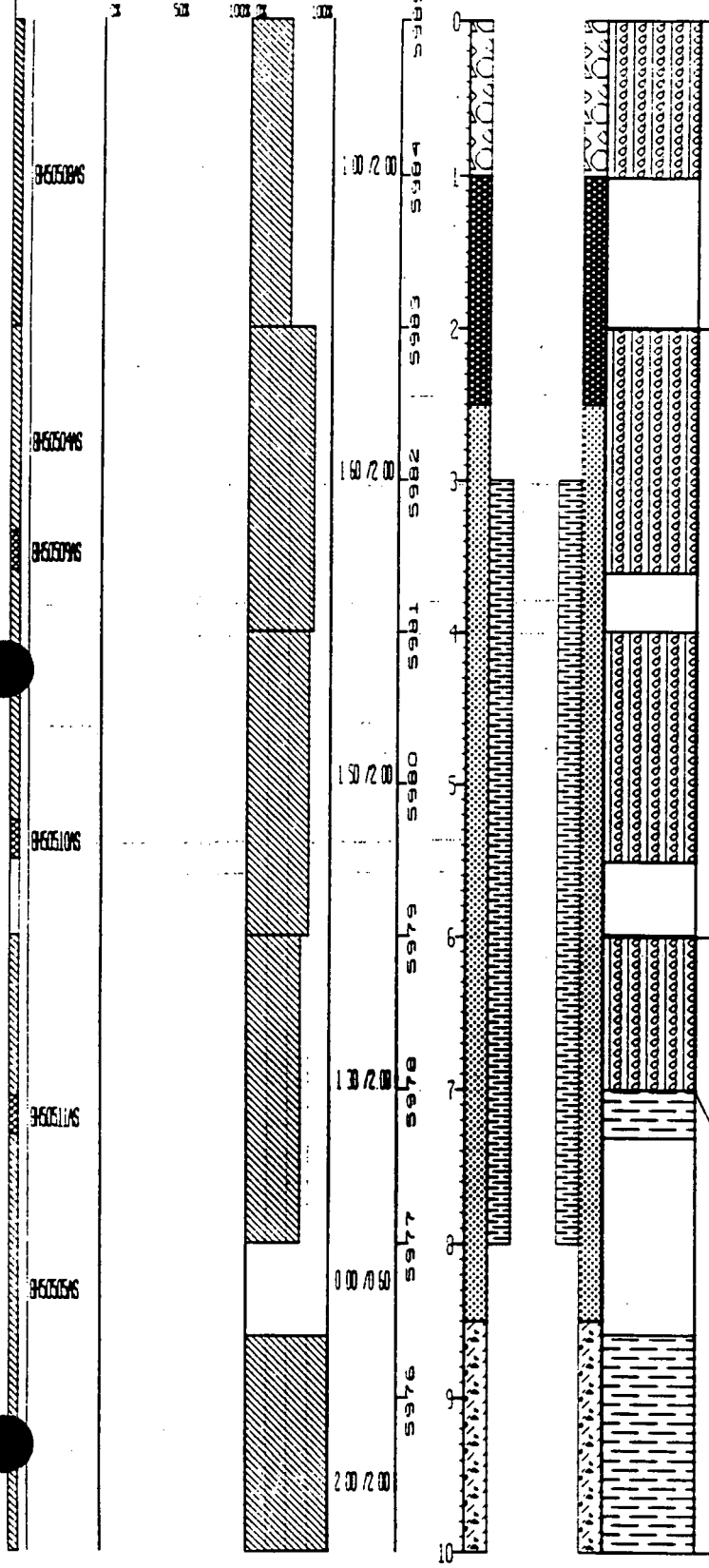
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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 /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	DUS-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7523	AREA OU5, IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST	F S GREILING	61293
EAST 0381148	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED	06/12/93	

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

DRAFT



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-RFD-RI	LOG OF BORING NUMBER
NORTH 7-7523	AREA 005, IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST T S DREILING	61293
EAST 2081148	LOCATOR NUMBER IT	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	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			1.30/1.40	5975	10				
				5974	11			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
				5973	12			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
				5972	13				
				5971	14				No recovery (11.9-12.0')
				5970	15				Total Depth Drilled 12.00 Total Depth Casing 10.85 Bottom of Filter Pack 8.50
				5969	16				
				5968	17				
				5967	18				
				5966	19				
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6525.30	PROJECT NUMBER 65-HF0141	LOG OF BORING NUMBER
NORTH 74[illegible]	AREA 305 [illegible]	CASING DIAMETER (IN)	GEOLOGIST R. M. Zeiner	61393
EAST 1[illegible]3883	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/13/93	

REMARKS Dri[illegible] ng Equipment CME 750 ATV ASI Rig Geologist R. Zeiner NOTE Core loss (no recovery) intervals less than 0.2 ft not shown

DRAFT

Sample Number	Recovery Interval	Depth (ft)	Lithology	Unified Soils Classification or Rock Type	Description
		0		OL	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 bouider 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')
B6G650AS	1.30/2.00	1			
		2		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
B6G670AS B6G662AS(DUP)	2.00/2.00	3			
				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')
	0.00/0.20	4			
				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
	1.90/1.80	5			
				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
		6			
	1.80/2.00	7		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')
				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
	0.00/0.30	8			
				CLAYSTONE	8.6'-9.0' Claystone with some Silt. Same as above (reference interval 4.2 to 6.4 ft.)
	2.00/1.70	9		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
		10			Total Depth Drilled 10.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6017.50	PROJECT NUMBER 305-RFDARE	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 DRSS 100 0	CASING DIAMETER (IN)	GEOLOGIST R M Zeller	61493
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/15/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Rose Zeller 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	PERCENT RECOVERY	RECOVERY INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	06005SIMS			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. Abundant roots, no apparent bedding or fractures. Low to mod plasticity fines, non-calcareous. Dry. 5% gravel, 63% sand, 3% silt, 29% clay
	06006TMS 06006BMS			0.00 /1.50	6015	2			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	6013	4				
				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
	06008GMS 06008LMS (DUP)				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. 9.0 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	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 90	GROUND ELEVATION (FT) 6017 60	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 747364	AREA 305 CHSS 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
	8H505B5AS			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		15				No recovery (14 3-15 9')
				0 00 /0 10	6002					
					6001	16 17				Total Depth Drilled 15 90
					6000	18				
					5999	19				
					5998	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	8 10	GROUND ELEVATION (FT)	5931 20	PROJECT NUMBER	[illegible]
NORTH	746739	AREA	605	CASING DIAMETER (IN)	0 40	GEOLOGIST	P. J. JORDAN
EAST	2084341	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/17/93

LOG OF BORING NUMBER

61593

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%		5931	0				
						5930	1				
						5929	2				
						5928	3				
						5927	4				
						5926	5				
						5925	6				
						5924	7				
						5923	8				
						5922	9				
							10				

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	105-RFD-RI	LOG OF BORING NUMBER
NORTH 746405	AREA 005	CASING DIAMETER (IN)	0.40	GEOLOGIST	P J JORDAN	61693
EAST 2082687	LOCATOR NUMBER 15	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/17/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL 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
					5945	0				Total Depth Drilled 14.80 Total Depth Casing 14.80
						1				Bottom of Filter Pack 14.80
					5944	2				
					5943	3				
					5942	4				
					5941	5				
					5940	6				
					5939	7				
					5938	8				
					5937	9				
					5936	10				

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH [illegible]	[illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible] JORDAN
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	DATE DRILLED	06/17/93

61693

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CRITICAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	ELEVATION	DEPTH	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) 5.90	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA 005	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P. J. JORDAN
EAST 1082816	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/16/93

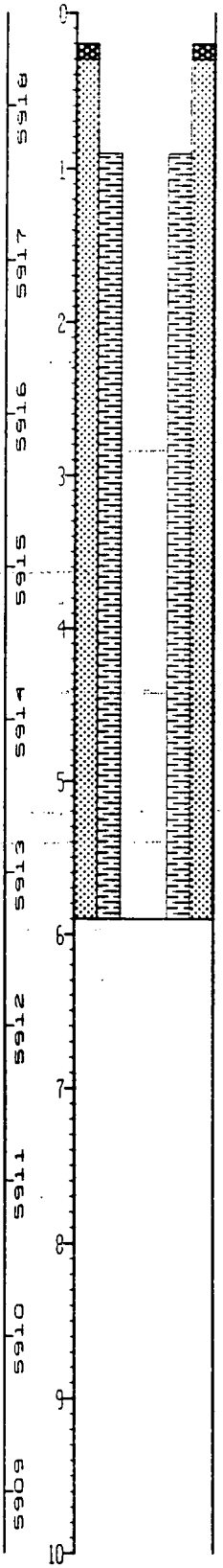
LOG OF BORING NUMBER

61793

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 5.90
Bottom of Filter Pack 5.90
Total Depth Casing 5.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.30	GROUND ELEVATION (FT)	5946.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	AREA 005	CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. JORDAN	61893
EAST	LOCATOR NUMBER 06	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

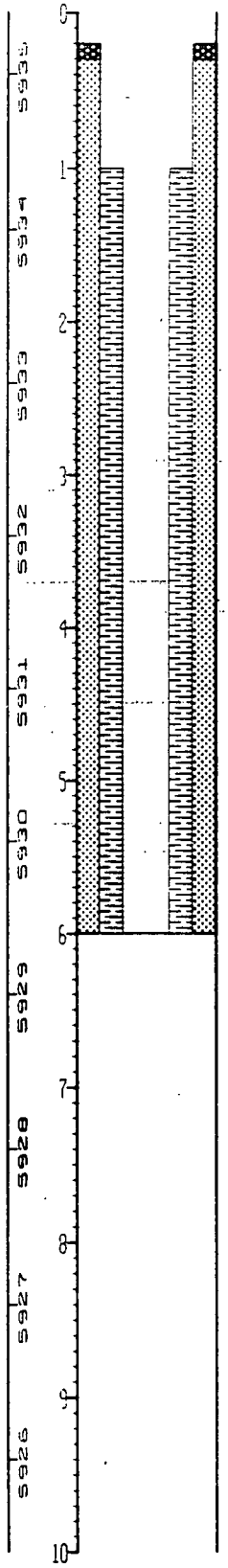
CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5946	0				
					5945	1				
					5944	2				
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

Total Depth Drilled 8.30 Total Depth Casing 8.30
Bottom of Filter Pack 8.30

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT) 5935.40	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005	CASING DIAMETER (IN) 3.10	GEOLOGIST [illegible] JORDAN	61993
EAST 1382375	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED 06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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%							



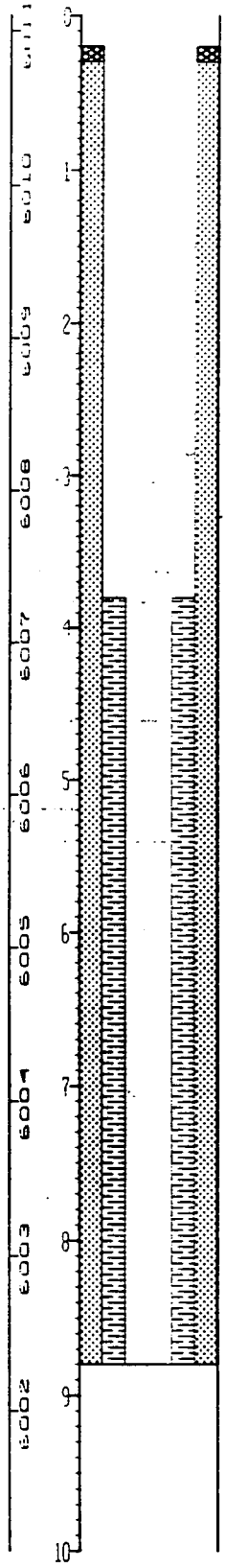
Total Depth Drilled 6.00 Total Depth Casing 6.00
Bottom of Filter Pack 6.00

STATE PLANE COORDINATE	TOTAL DEPTH FT 8.80	GROUND ELEVATION (FT) 6011.10	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 7[illegible]6620	AREA 005	CASING DIAMETER (IN) 0.40	GEOLOGIST	P. J. JORDAN	62093
EAST 6079975	LOCATOR NUMBER 36	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
					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
Bottom of Filter Pack 8.80

Total Depth Casing [illegible]

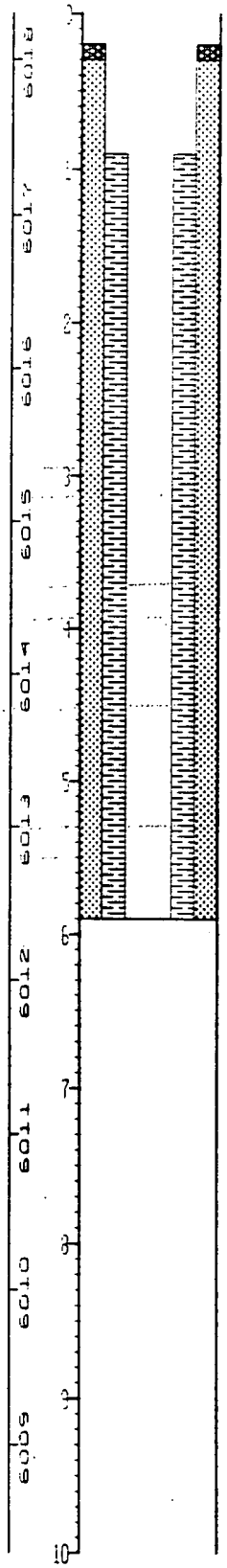
STATE PLANE COORDINATE		TOTAL DEPTH (FT)	5.90	GROUND ELEVATION (FT)	6013.30	PROJECT NUMBER	005-RFI/RI
NORTH	746569	AREA	005	CASING DIAMETER (IN)	2.40	GEOLOGIST	P. J. JORDAN
EAST	2079679	LOCATOR NUMBER	06	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/16/93

LOG OF BORING NUMBER

62193

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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%							

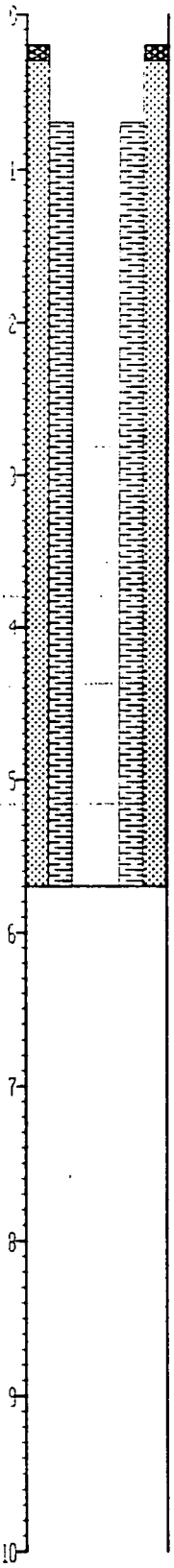


Total Depth Drilled 5.90 Total Depth Casing 5.90
Bottom of Filter Pack 5.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.70	GROUND ELEVATION (FT) 6023.20	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 746457	AREA 015	CASING DIAMETER (IN) 3.40	GEOLOGIST	P J JORDAN	62293
EAST 2373817	LOCATOR NUMBER 06	BOREHOLE DIAMETER (IN) 1.50	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				

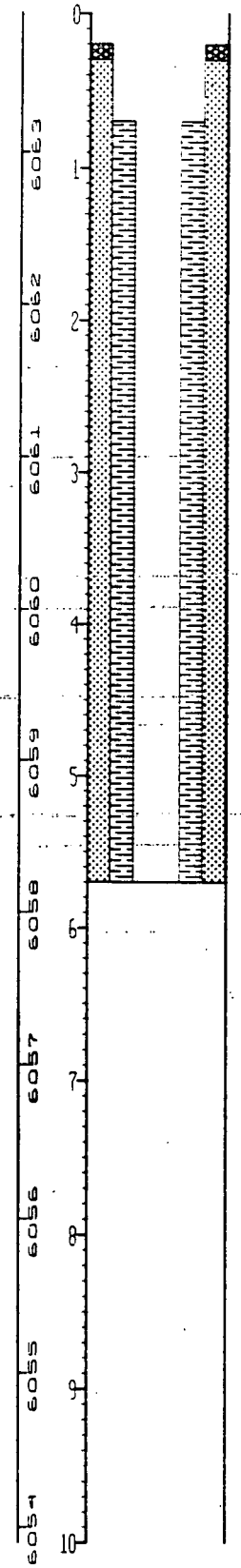


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.70	GROUND ELEVATION (FT) 6063.30	PROJECT NUMBER [illegible]	[illegible] OF BORING NUMBER
NORTH [illegible]	AREA 005	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible] JORDAN	62393
EAST [illegible]	LOCATOR NUMBER F6	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 06/16/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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%							



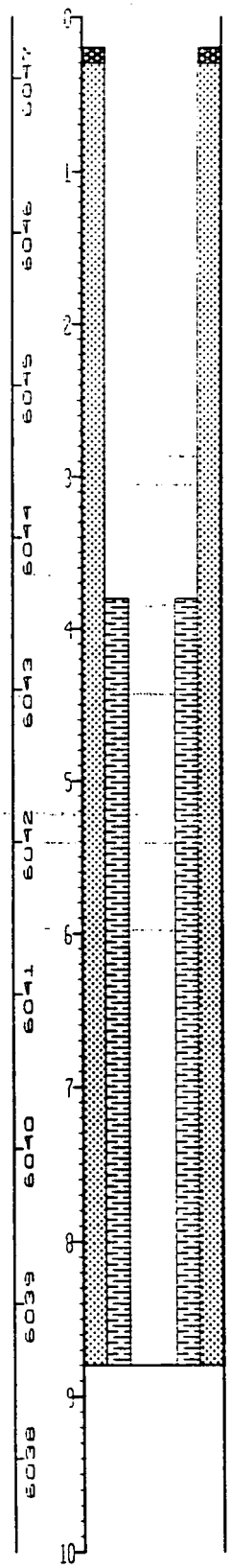
Total Depth Drilled 5.70 Total Depth Casing 5.70
Bottom of Filter Pack 5.70

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.80	GROUND ELEVATION (FT) 6047.40	PROJECT NUMBER 105-RFI/RI	LOG OF BORING NUMBER
NORTH 746376	AREA 005	CASING DIAMETER (IN) 3.40	GEOLOGIST P.J. JORGAN	62493
EAST 1078853	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

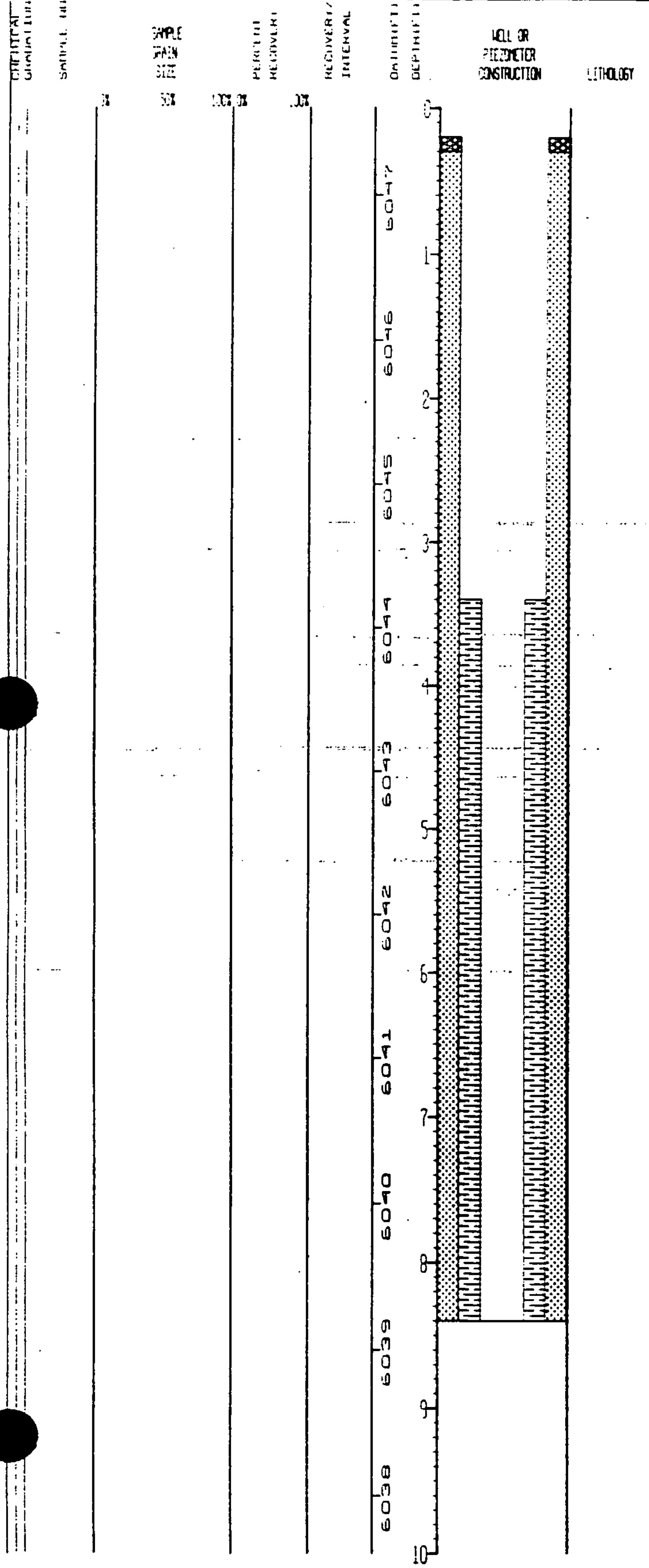


Total Depth Drilled 8.80 Total Depth Casing 8.80
Bottom of Filter Pack 8.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.40	GROUND ELEVATION (FT)	6047.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]520	AREA CLASS [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P. J. JORDAN	62593
EAST	[illegible]73457	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/15/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

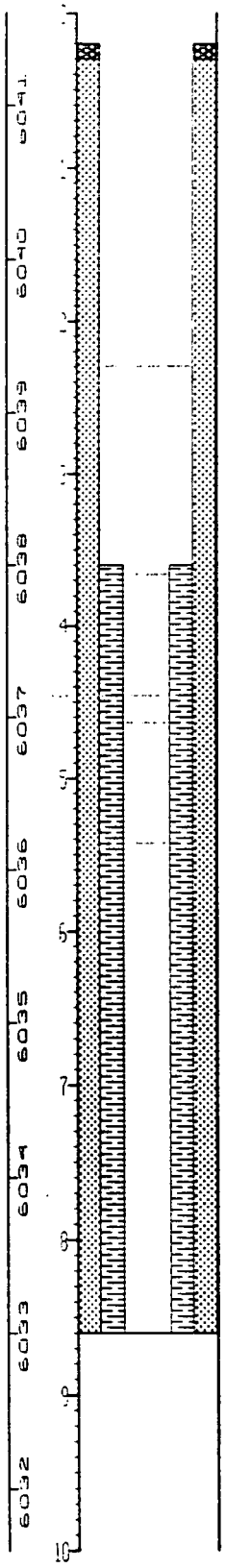
DESCRIPTION

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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]527	AREA [illegible]	CASING DIAMETER IN 0.40	GEOLOGIST	P. J. JORDAN	62693
EAST 2079926	LOCATOR 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	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%							



Total Depth Drilled 8.60 Total Depth Casing 8.60
Bottom of Filter Pack 8.60

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 11 80	GROUND ELEVATION (FT) 5939 40	PROJECT NUMBER 305-BFI/RI	LOG OF BORING NUMBER	
NORTH 77547	AREA SW BUFFER ZONE	CASING DIAMETER (IN) 0 40	GEOLOGIST P J JORDAN	62793	
EAST 3082304	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1 30	DATE DRILLED 06/21/93		

REMARKS NO CORE WAS TAKEN FOR LOGGING.

DRAFT

CHEMICAL DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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) 11.30	GROUND ELEVATION (FT) 5939.40	PROJECT NUMBER	OU5-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	005-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 & 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

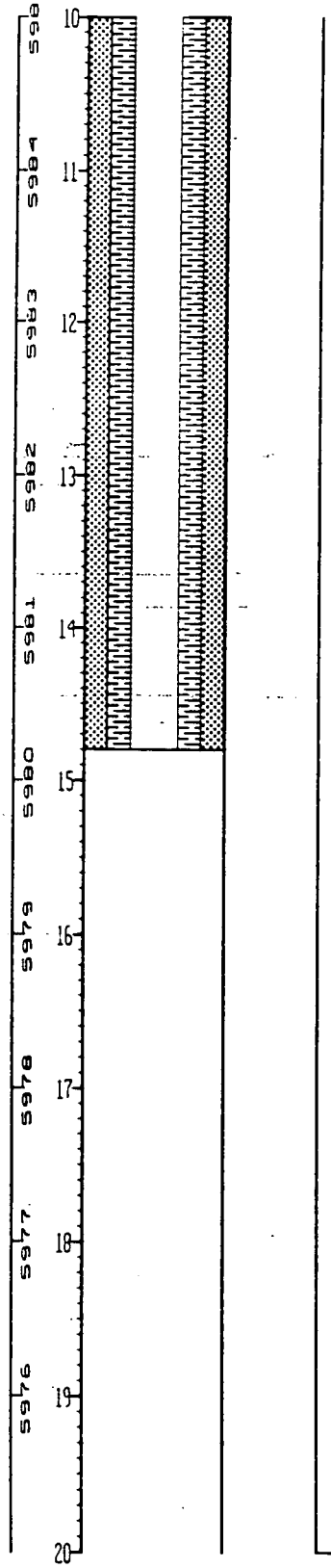
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 30		GROUND ELEVATION (FT)	5995 00	PROJECT NUMBER	GU5-RFI/RI
NORTH	74964	AREA SW BUFFER ZONE		CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN
EAST	1382700	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED	06/15/93

REMARKS: NO CORE WAS TAKEN FOR LOGGING.

LOG OF BORING NUMBER 62893

DRAFT

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

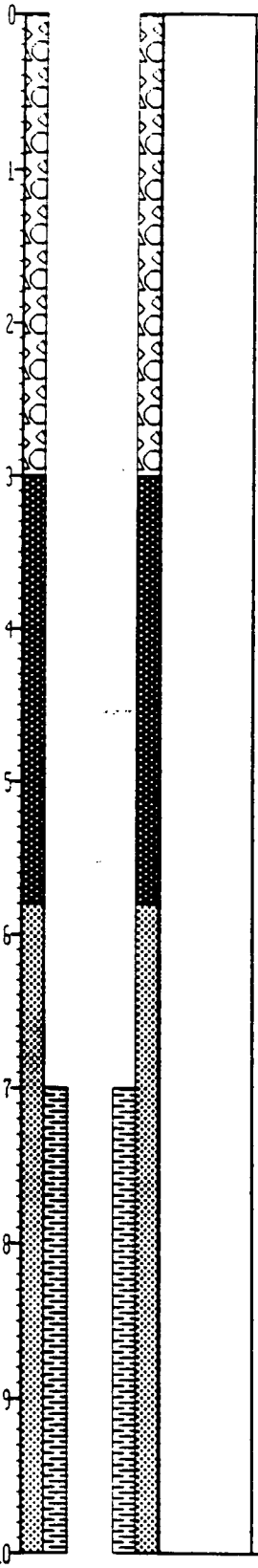


STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24.80	GROUND ELEVATION (FT) 6019.00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]7357	AREA OU5, CHSS 133.3	CASING DIAMETER (IN) 2.00	GEOLOGIST	R.M. ZEILER	63093
EAST	2079751	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	06/16/93	

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 DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6019	0				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.
					6018	1				
					6017	2				
					6016	3				
					6015	4				
					6014	5				
					6013	6				
				0.00/15.00	6012	7				
					6011	8				
					6010	9				
						10				



STATE PLANE COORDINATE		TOTAL DEPTH (FT)	20.00	GROUND ELEVATION (FT)	6023.00	PROJECT NUMBER	315-HOT-01
NORTH	74357	AREA 305 CASS 103 3		CASING DIAMETER (IN)	2.00	GEOLOGIST	R. Zeller
EAST	2079751	LOCATOR NUMBER	57	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	06/16/93

LOG OF BORING NUMBER **63093**

REMARKS: Drilling Equipment: CME 750 ATV. ASI Rig Geologist: R. Zeller. NOTE: Core loss (no recovery) interval less than 0.2 ft not shown

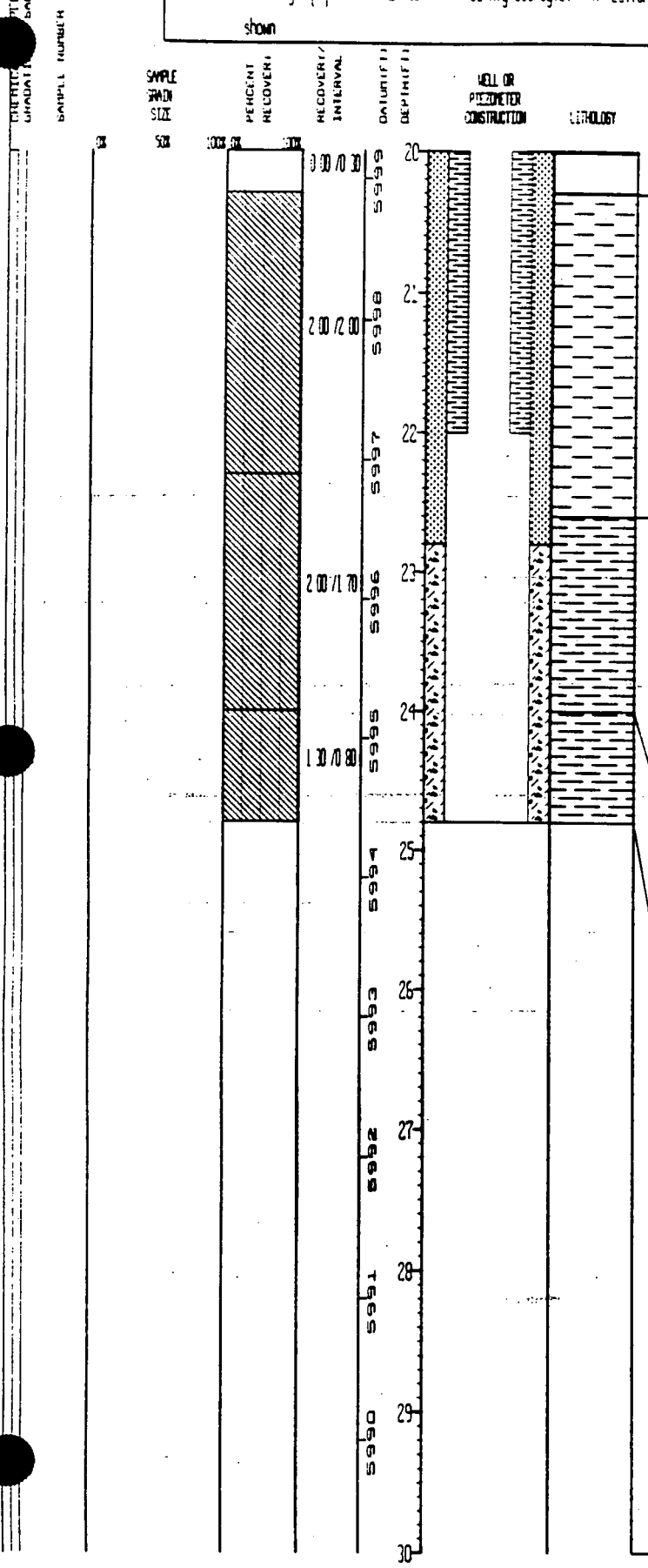
DRAFT

STRATIGRAPHIC 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				10.0'-15.0' Augered with center bit
					6009					
						11				
					6008					
						12				
					6007					
						13				
					6006					
						14				
					6005					
				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')
					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.
				0.00/2.00	6002	17				
3405595						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.
				2.00/2.00	6000	19				No recovery (20.0'-20.3')
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24.80	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	R.M. ZEILER	63093
EAST [illegible]	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) [illegible]	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)	966.50	PROJECT NUMBER	365-96-02
NORTH 74797	HOLE DIA 3.25 / 3.25	CASING DIAMETER (IN)	2.50	GEOLOGIST	P. J. JORDAN
EAST 206254	LOCATION NUMBER J7	BOREHOLE DIAMETER (IN)	3.50	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.

63193

DRAFT

Physical Sample Depth / Chemical Sample Depth	Sample Number	Sample Grain Size	Physical Recovery	Recovery / Interval	Elevation	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	365620MS			1.00 / 2.00	966.0	1			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')
	365621MS			1.00 / 2.00	965.7	2				
	365619MS				965.6					
				1.50 / 2.00	965.5	3				
	365622MS				965.4	4				
				1.50 / 2.00	965.3	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')
	365623MS				965.2	6				
				1.50 / 2.00	965.1	7				
	365617MS			2.00 / 2.00	965.0	8				
	365624MS				964.9	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5968.50	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747697	AREA CUS CHSS 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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50625AS			2.00/2.00	5958	10				
					5957	11				
					5956	12				
	BH50626AS			2.00/2.00	5955	13				
					5954	14				
	BH50627AS			1.50/2.00	5953	15	06/22/93			
	BH50618AS				5952	16			CLAYSTONE	15.5'-20.0' Top of Bedrock at 15.5'
				2.00/2.00	5951	17				No recovery (15.5-16.0')
	BH50629AS				5950	18				Claystone with some Silt and trace Sand Fe staining, micro-fractures Moist
				2.00/2.00	5949	19				
	BH50628AS					20				

Total Depth Drilled 20.00 Total Depth Casing [illegible]
Bottom of Filter Pack 20.00

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	5615.50	PROJECT NUMBER	0.5-HFC-FX	LOG OF BORING NUMBER
NORTH	1[illegible]	HOLE DIPS (DEG)	CASING DIAMETER (IN)	2.00	GEOLOGIST	TGB	63293
EAST	1[illegible]	LOCATION NUMBER N7	BOREHOLE DIAMETER (IN)	3.00	DATE DRILLED	07/20/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WASSISED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CRITICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/2.00	S1L5 S1L4			CL	0.0'-2.0' Clay Mod yellowish brown (10 YR 5/4) Some fine sand, trace gravel, rounded, poorly graded Moist
				2.00/2.00	S1L3 S1L2			CL	2.0'-4.0' Sandy Clay Olive gray (5 Y 4/1) Some roots, trace gravel, poorly graded, sub-rounded Very moist
				1.50/2.00	S1L1 S1L0	07/20/93		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
				2.00/2.00	S1L9 S1L8 S1L7 S1L6			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)	5815.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]7794	AREA IHSS 142.10	CASING DIAMETER (IN)	0.50	GEOLOGIST	[illegible] DRILLING	63393
EAST	1086381	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 DEPTH / GRADATION SAMPLE DEPTH / SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100% 0% 100%

PERCENT RECOVERY

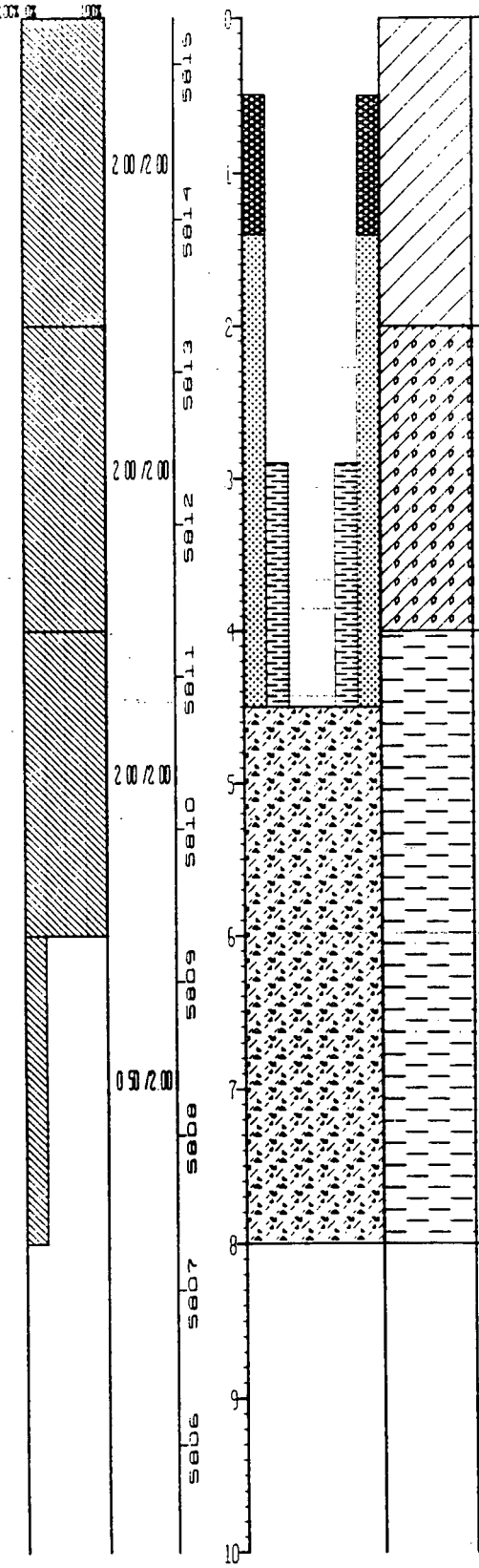
RECOVERY/INTERVAL: 2.00/2.00, 2.00/2.00, 2.00/2.00, 0.50/2.00

DATUM (FT): 5815, 5814, 5813, 5812, 5811, 5810, 5809, 5808, 5807, 5806

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

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY



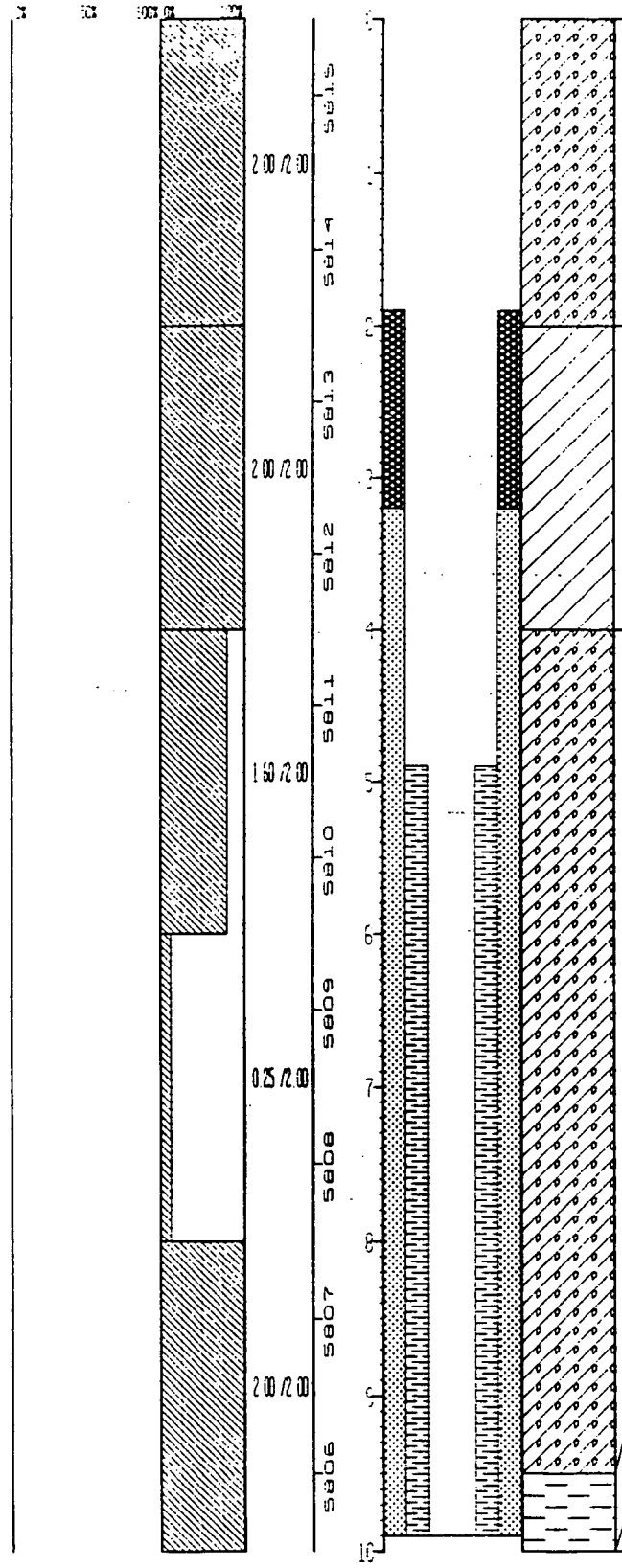
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0.0'-2.0' Clay Dark yellowish brown (10 YR 4/2) Some sand and gravel, poorly graded, angular to sub-angular, abundt roots Wet
SC	Clayey Sand and Gravel Med dark gray (N4) Gravel well graded, angular to sub-angular, some roots Gravel increases in abundance in bottom of run Wet at top 0.5', remaining sample is moist
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 sluff

Total Depth Drilled 8.00 Total Depth Casing 4.50
Bottom of Filter Pack 4.50

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 9.90	GROUND ELEVATION (FT) 5815.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) 0.50	GEOLOGIST	T. S. DREILING	63493
EAST 0066385	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN) 0.00	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



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 [illegible]
Bottom of Filter Pack 9.90

STATE PLANE COORDINATES — TOTAL DEPTH [illegible] — GROUND ELEVATION [illegible] — PROJECT NUMBER [illegible] — LOG OF BORING NUMBER 63593

NORTH [illegible] — AREA [illegible] — CASING DIAMETER [illegible] — GEOLOGIST [illegible] — DRILLING [illegible]

EAST 1580603 — LOCATION NUMBER [illegible] — BOREHOLE DIAMETER [illegible] — DATE DRILLED 07/20/93

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE ANALYSED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

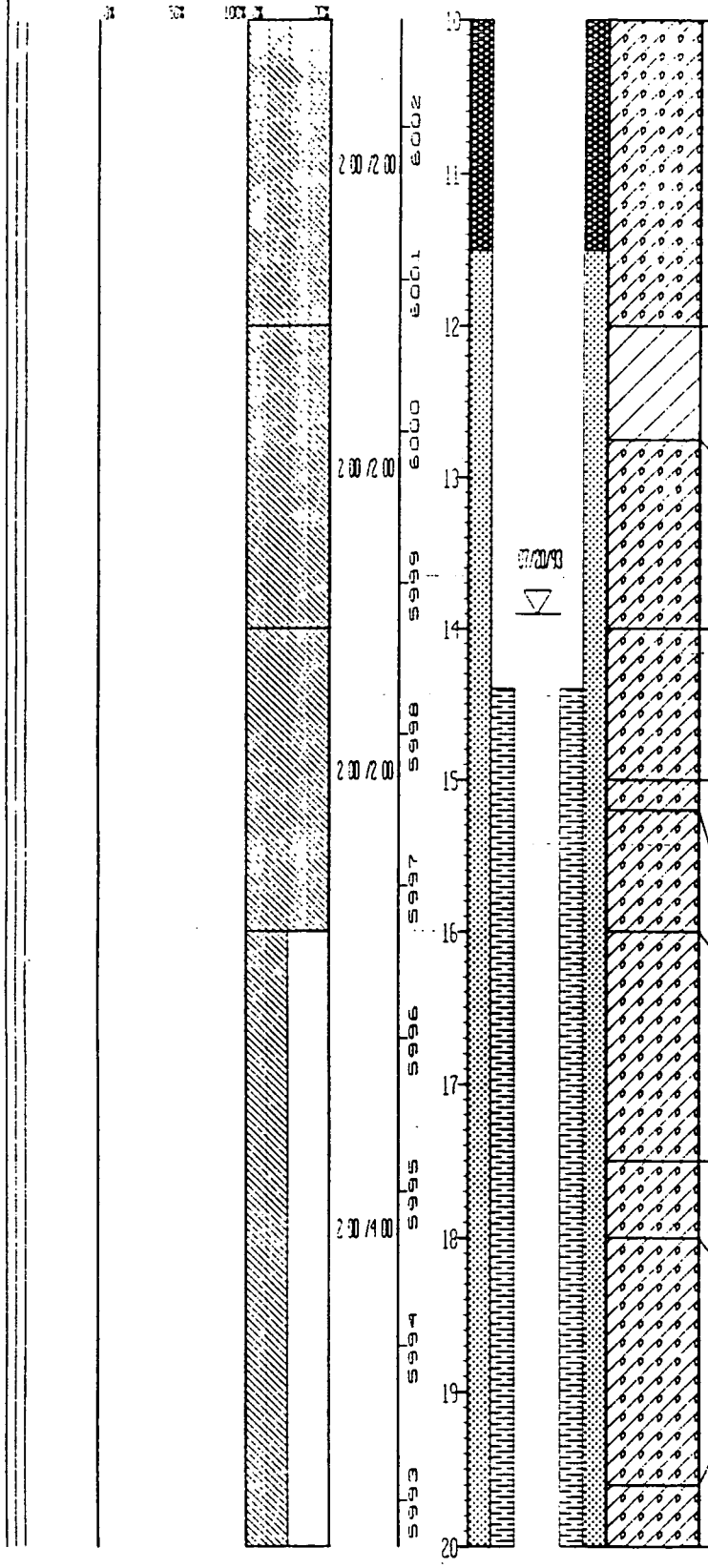
Sample Grain Size	Percent Recovery	Recovery Interval	Elevation	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
		2.30/2.00	6012	0			SC	0.0'-3.3' Clayey Sand Mod brown (5 YR 4/4) Some gravel, poorly graded, sub-rounded to sub-angular, some roots Dry
		2.30/2.00	6011	1				
			6010	2				
			6009	3				
		2.90/2.00	6008	4			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
			6007	5			SC	4.0'-6.0' Sandy Clay Light brown (5 YR 5/6) Some to abundt gravel, well graded, sub-rounded to angular Moist
		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				
		2.00/2.00	6004	8			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
			6003	9				
				10			SC	9.4'-10.0' Clayey Sand and Gravel Pale yellowish brown (10 YR 4/2) Well graded, angular to sub-rounded Moist

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASE [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible]	63593
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 07/20/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

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



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	26.00	GROUND ELEVATION		PROJECT NUMBER	LOG OF BORING NUMBER
NORTH	7[illegible]514	AREA CASS		CASING DIAMETER (IN)		GEOLOGIST	T. B. DREILING
EAST	1080603	LOCATOR NUMBER	47	BOREHOLE DIAMETER (IN)		DATE DRILLED	07/20/93

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

63593

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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%			20			SC	20.0'-25.4' Sand and Gravel, abundt 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				Total Depth Drilled 26.00 Total Depth Casing 24.30 Bottom of Filter Pack 24.30
			5985	28				
			5984	29				
			5983	30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT) 4011.30	PROJECT NUMBER 105-FT/A1	LOG OF BORING NUMBER	
NORTH 147592	AREA BASE (CD 2	CASING DIAMETER (IN) 4.50	GEOLOGIST F. G. DREILING	63693	
EAST 1309608	LOCATOR NUMBER -1	BOREHOLE DIAMETER (IN) 2.50	DATE DRILLED 07/30/93		

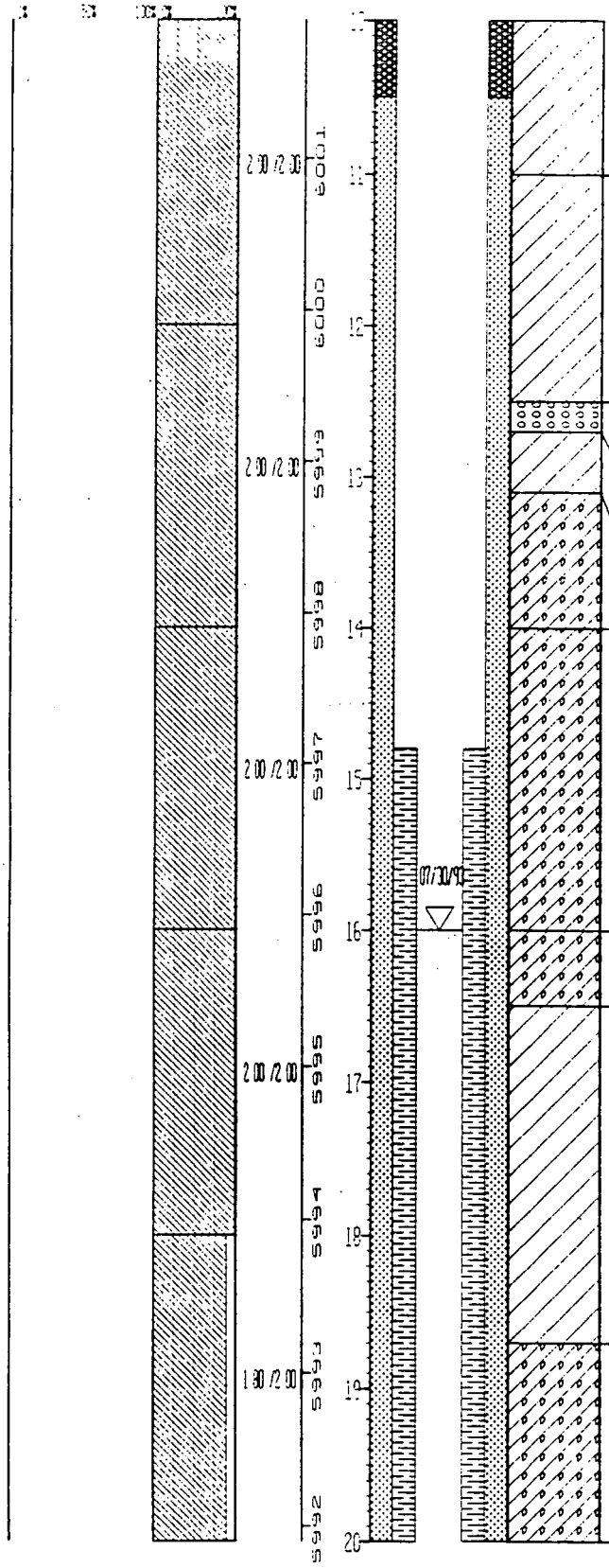
REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					0			SL	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
				1.50 /2.00	1			GW	0.5'-0.9' Gravel and Sand Pinkish gray (5 YR 8/1) Well graded, angular, dry (gw-sw)
								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')
					2			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
				1.80 /2.00	3				
					4				
				1.80 /2.00	5				
					6				
				2.00 /2.00	7				
					8			STUFF	8.0'-8.2' Stuff
								GW	8.2'-8.4' Sand and Gravel Well graded, angular to sub-angular (sw-gw)
				1.80 /2.00	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
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible] DRILLING	63693
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED [illegible]	

REMARKS WELLPOINT INSTALLED WITH KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

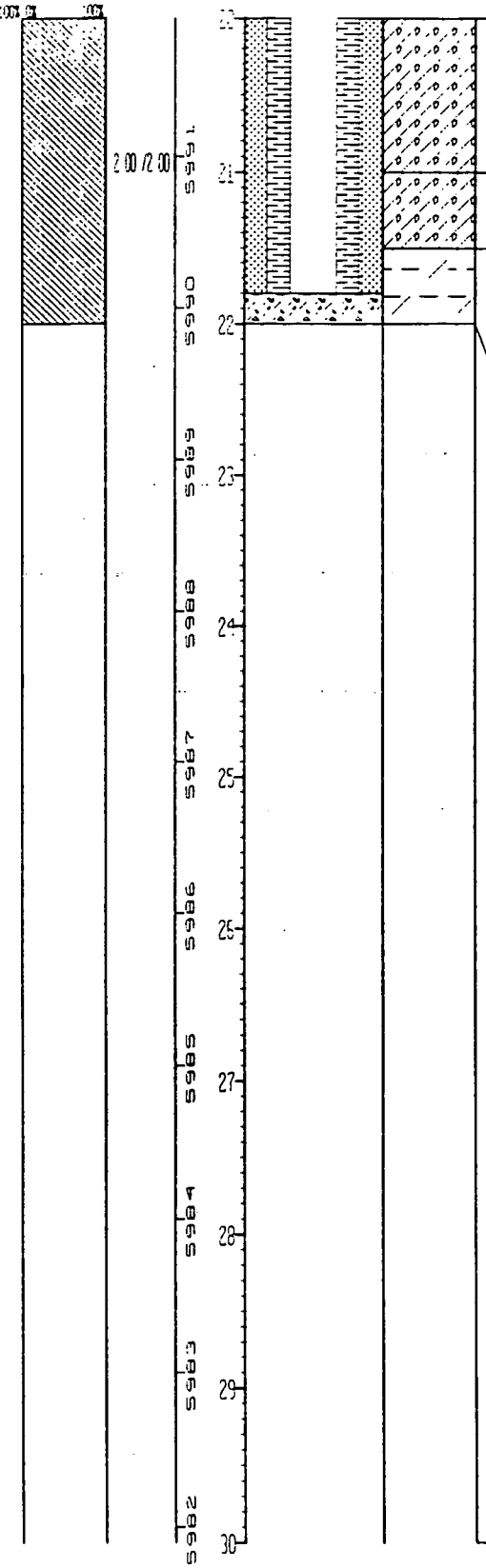


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	11.0'-12.5' Sandy Clay Light brown (5 YR 5/6) some light olive gray (5 Y 6/1) Sand is pred f g poorly graded, angular to sub-rounded Trace gravel Moist
GW	12.5'-12.7' Sand and Gravel Pinkish gray (5 YR 8/1) Well graded, angular to sub-angular Dry (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) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	[illegible] DRILLING	63693
EAST 2080608	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	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



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%			20			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
		2 00 /2 00	5991	21			SC	21 0'-21 5' Clayey Sand Light olive gray (5 Y 6/1) Sand is pred m g Some Fe staining
			5990	22			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
			5989	23				
			5988	24				
			5987	25				
			5986	26				
			5985	27				
			5984	28				
			5983	29				
			5982	30				

Total Depth Drilled 22 00 Total Depth Casing 21 80
Bottom of Filter Pack 21 80

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 20.00 | GROUND ELEVATION (FT) 6002.00 | PROJECT NUMBER | LOG-NO. | LOG OF BORING NUMBER

NORTH 1177315 | HOLE DIAM 1.00 | CASING DIAMETER (IN) 1.50 | GEOLOGIST | TYPE OF DRILLING

EAST 1336611 | LOCATOR NUMBER H7 | BORE-HOLE DIAMETER (IN) 2.00 | DATE DRILLED 09/02/93

6793

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WASUSED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		1.50/2.00	6012	0			CL	0.0'-5.5' Sandy Clay Abundnt 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 abundnt gravel from 4.0 to 5.5 ft
		2.00/2.00	6011	1				
		2.00/2.00	6010	2				
		2.00/2.00	6009	3				
		2.00/2.00	6008	4				
		2.00/2.00	6007	5				
		2.00/2.00	6006	6			SC	5.5'-6.0' Sand and Gravel, abundnt Clay Light brown (5 YR 5/6) Sand and gravel are well graded, angular to sub-rounded, mostly quartz Dry
		0.90/2.00	6005	7			CL	6.0'-8.0' Sandy Clay, abundnt Gravel Light brown (5 YR 5/6) Sand is gred 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
		2.00/2.00	6004	8			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
			6003	9			CL	9.5'-10.0' Sandy Gravelly Clay Light olive gray (5 Y 6/1) Sand and gravel as above, reference interval 9.0'-9.5' Calcium carbonate? Slightly moist
				10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20.00	DRILLING ELEVATION (FT) 6202.00	PROJECT NUMBER 305-RFI.R1	LOG OF BORING NUMBER
NORTH 77515	AREA (MSS 123.2)	CASING DIAMETER (IN) 2.50	GEOLOGIST F. S. SPEILING	63793
EAST 1380611	LOCATOR NUMBER 67	BORE-HOLE DIAMETER (IN) 2.00	DATE DRILLED 08/02/93	

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WASISSED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CRITICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	100.0%	2.00/2.00	6202	10			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
		1.65/2.00	6201	11			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')
		2.00/2.00	6200	12			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
		1.90/2.00	5999	13			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
		2.00/2.00	5998	14			SW	17.5'-17.9' Sandy Gravel Angular, pred coarse, size is approx 1 in Dry (SW-GP) No recovery (17.9-18.0')
			5997	15			CL	18.0-19.25' Sandy Clay, some Gravel Mod yellowish brown Sand and gravel are mostly f g, poorly graded sub-rounded Moist
			5996	16			SC	19.25'-19.8' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-rounded Wet
			5995	17			CL	19.8'-20.0' Sandy Clay, some Gravel Same as above, reference interval 18.0'-19.25'
			5994	18				
			5993	19				
				20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 28.00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible]	
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 08/02/93	

63793

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

SAMPLE GRAIN SIZE	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	2.00/2.00	5992	20			CL	20.0'-22.0' Sandy Clay, some to abundant Gravel. Med 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
		5991	21				
	2.00/2.00	5990	22			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
		5989	23				
		5988	24				
	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	26			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
		5985	27				
		5984	28				Total Depth Drilled 28.00 Total Depth Casing [illegible] Bottom of Filter Pack 19.90
		5983	29				
			30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5990.00	PROJECT NUMBER	SCE 8812.01	HOLE OR BORING NUMBER
NORTH	1[illegible]539	AREA CRSS 115/136	CASING DIAMETER (IN)	3.50	GEOLOGIST	R. G. SPECKLING	63893
EAST	2081536	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	2.30	DATE DRILLED	08/03/93	

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	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5990	0			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
				1.65/2.00	5989	1			SC	0.4'-1.7' Sand, abundt Clay, some Gravel. Olive black (5 Y 2/1). Some Fe staining, abundt concrete (0.4'-0.9'). 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')
				1.50/2.00	5988	3				
					5987	4			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')
				1.50/2.00	5986	5	08/03/93 ▽		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. (Perch-sw) No recovery (5.5-6.0')
					5985	6				
				0.70/2.00	5984	7			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')
					5983	8				
				0.70/2.00	5982	9				
					5981	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5990.70	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA CASS 115/136	CASING DIAMETER (IN)	0.50	GEOLOGIST	T. S. DREILING
EAST 1081536	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	13/03/93

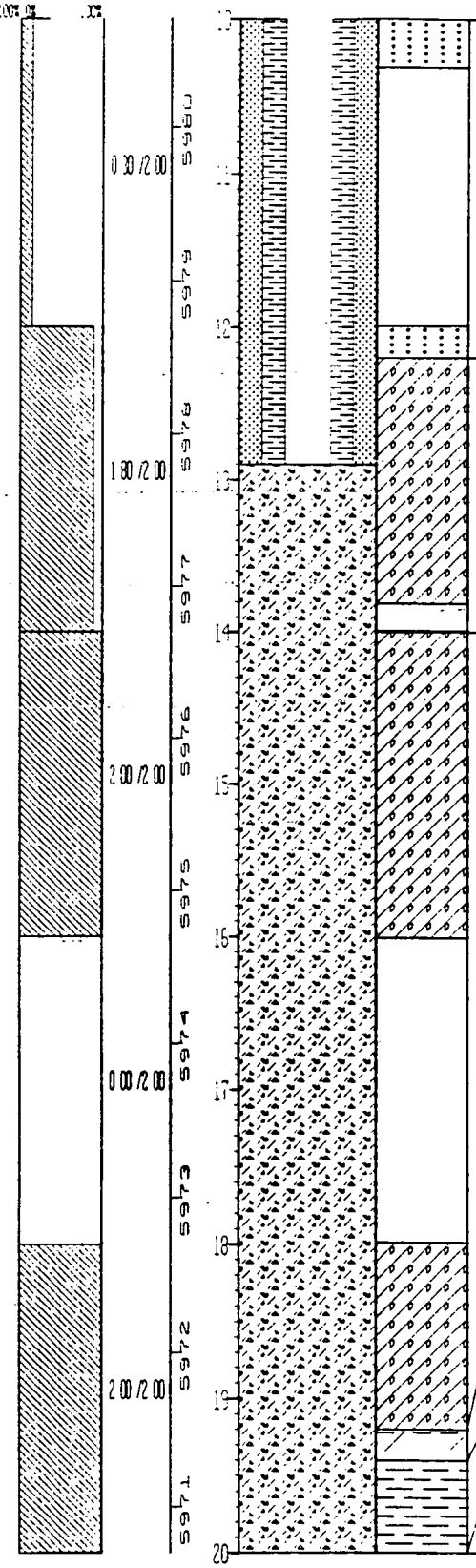
LOG OF BORING NUMBER **63893**

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 | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



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 12.30
Bottom of Filter Pack 12.90

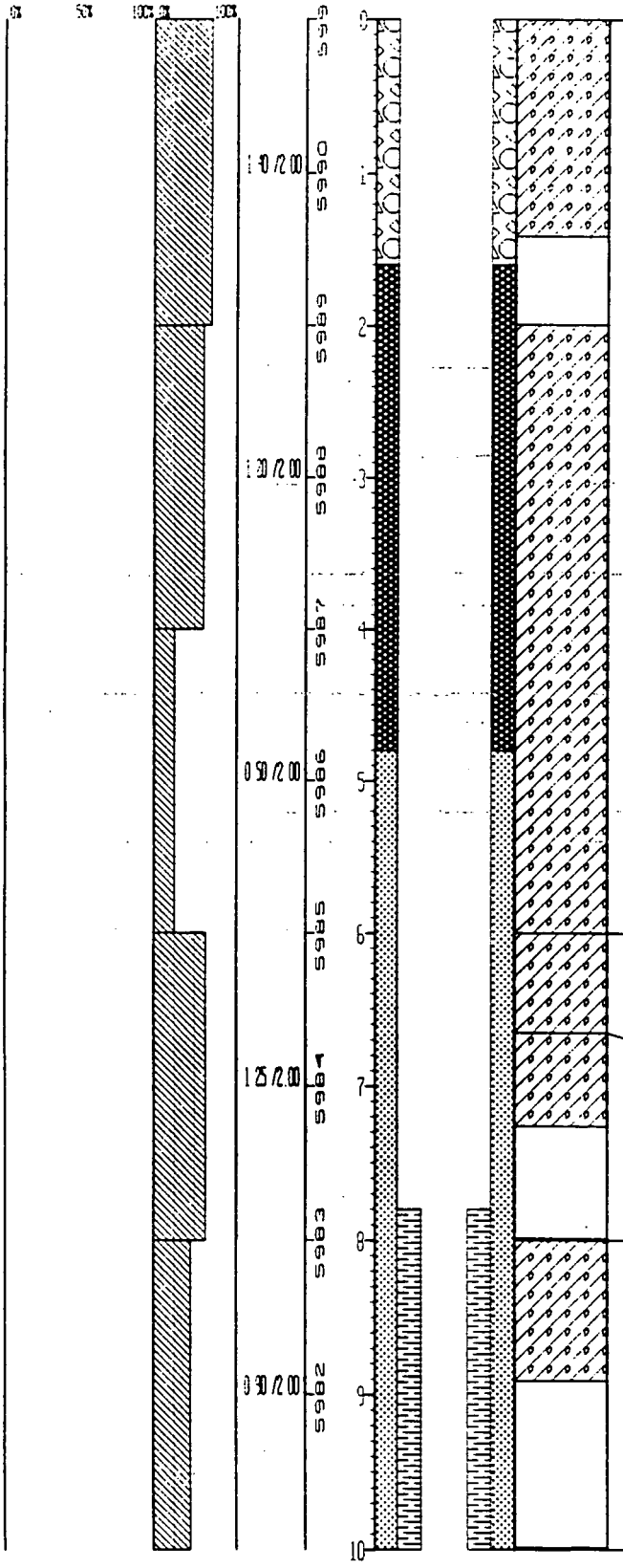
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13 00	GROUND ELEVATION FT	5991 00	PROJECT NUMBER	005 RFI/RI
NORTH	747922	AREA IHSS 115/196	CASING DIAMETER (IN)	GEOLOGIST	F S DREILING
EAST	2081530	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED	08/03/93

LOG OF BORING NUMBER 63993

REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

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



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 5991.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115/136	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	63993
EAST [illegible]	LOCATOR NUMBER [illegible]	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 GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER

SAMPLE GRAIN SIZE

PERCENT RECOVERY

RECOVERY INTERVAL

DATUM (FT)

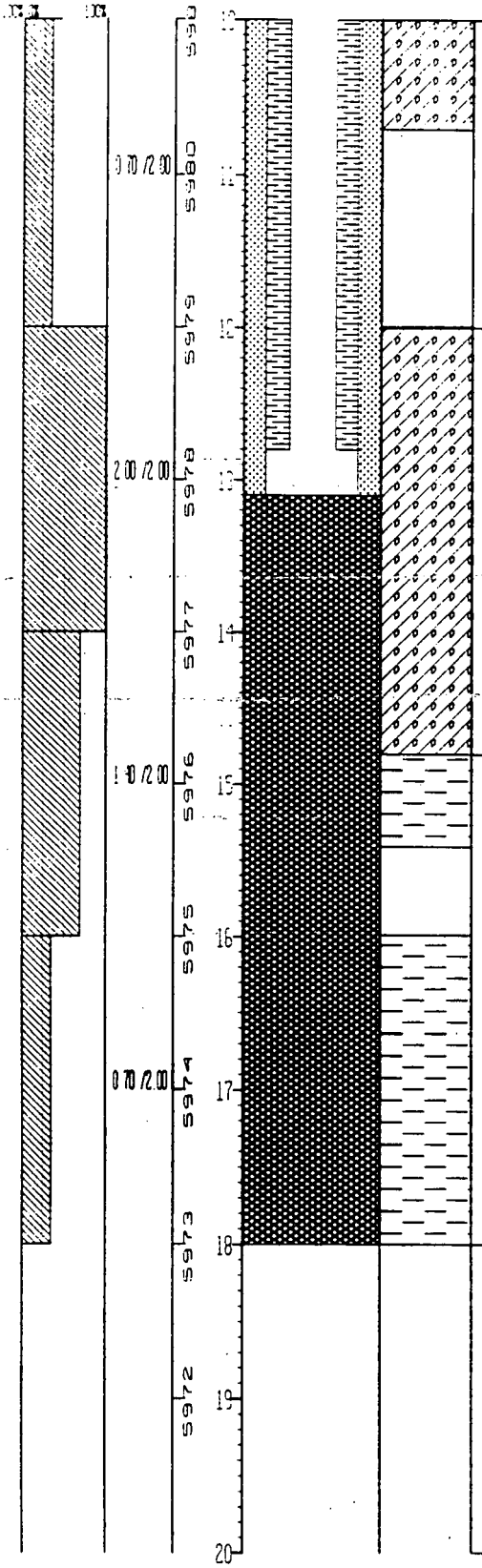
DEPTH (FT)

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION



Unified Soils Classification or Rock Type	Description
SC	10.0'-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 [illegible]
Bottom of Filter Pack 13.10

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5990.00	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA IHSS 115/136	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible]	64093
EAST 2081543	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	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% 0% 100%

PERCENT RECOVERY

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	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747918	AREA [illegible]	CASING DIAMETER (IN)	0.50	GEOLOGIST	[illegible] DREILING	64093
EAST	2081543	LOCATOR NUMBER [illegible]	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 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			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	5980 5979	11				No recovery (10.3-12.0')
					5978	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	5977	13				No recovery (12.7-14.0')
					5976	14				Total Depth Drilled 14.00 Total Depth Casing 13.10 Bottom of Filter Pack 13.10
					5975	15				
					5974	16				
					5973	17				
					5972	18				
					5971	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6056.40	PROJECT NUMBER 005-BFD-RI	LOG OF BORING NUMBER	
NORTH 7-7413	AREA 005 MAG ANOMALY 133	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 2078474	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1.87	DATE DRILLED 07/30/93	64493	

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
	BH50652AS			1.00/2.00	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 No recovery (1.0-2.0'), (3.7-4.0'), and (5.8-6.0')
					6055	1				
	BH50630AS			1.70/2.00	6054	2				
					6053	3				
				1.80/2.00	6052	4				
					6051	5				
				2.00/2.00	6050	6				
					6049	7				
	BH50631AS			2.00/2.00	6048	8			CL	8.0'-10.0' Sandy Clay with some Silt Light brown (5 YR 5/6) Sand is pred f g Moist
					6047	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 6056.40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 MAG ANOMALY 133	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	64493
EAST 2078474	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1.37	DATE DRILLED	[illegible]/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 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
				2.00/2.00	6046	10			CL	10.0'-14.0' Sandy Clay with trace Gravel. Light brown (5 YR 5/6). Sand pred f g. Moist. No recovery (12.0-14.0')
					6045	11				
					6044	12				
	BH5063ZMS			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) 6053.30	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 2079527	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
						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')
	BH50653AS			1.80/2.00	6053	1				
					6052	2				
	BH50634AS			1.70/2.00	6051	3				
					6050	4				
				1.70/2.00	6049	5				
					6048	6			CL	6.0'-10.0': Sandy Clay with trace Gravel Light brown (5 YR 5/6) Sand is mostly f g., slightly moist
				2.00/2.00	6047	7				
					6046	8				
	BH50635AS			2.00/2.00	6045	9				
					6044	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT) 6053 30	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747414	AREA 005 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST T S DRILLING	64593
EAST 2078527	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1 67	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 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'-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')
				1.4 /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) 6051.40	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747414	AREA CU5 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 I-SS 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 No recovery (1.65-2.0')
	BH5065AS			1.65/2.00	6050	1				
					6049	2				
	BH5063AS			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				
	BH5063AS			2.10/2.00	6042	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6051.40	PROJECT NUMBER 105-RFI-RI	LOG OF BORING NUMBER	
NORTH 747414	AREA 105 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST F S DREILING	64693	
EAST 1078579	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 IHSS 133 LOG IS FROM FIELD DESCRIPTION ONLY ALL CORE WENT TO SAMPLES

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
					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				
					6039	12				
				2.00/2.00	6038	13				
	BH5064DNS				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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747538	AREA IHSS 133	CASING DIAMETER (IN) 8 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	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%		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 c 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				
					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'-5 0' Core moist from 6 0'-13 5' 78% sand, 2% silt 15% clay No recovery (1 5-2 0') and (3 5-4 0')
	BH00298S			1 50 /2 00	6043	3				
					6042	4				
				2.00 /2 00	6041	5				
					6040	6				
				2.00 /2 00	6039	7				
					6038	8				
	BH00299S			2 00 /2 00	6037	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]7538	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST J W HARWELL	55194
EAST 1379113	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 09/29/94	

REMARKS DRILLING EQUIPMENT HURRICANE [illegible] 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%			10				
				2 00 /2 00	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				
				1 00 /1 00	6028	18				
					6027	19				Total Depth Drilled 19 00 Total Depth Casing 19 00 Bottom of Filter Pack 19 00
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 00		GROUND ELEVATION (FT)	6045 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH	7-7537	AREA IHSS 133		CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL		55294
EAST	2079132	LOCATOR NUMBER	G7	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	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%						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. No recovery (3 5-4 0')
				2 00 /2 00	6045	0				
					6044	1				
					6043	2				
	0H00031AS			1 50 /2 00	6042	3				
					6041	4				
				2 00 /2 00	6040	5				
					6039	6				
				2 00 /2 00	6038	7				
					6037	8				
	0H00032AS			2 00 /2 00	6036	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH [illegible] 20 00	GROUND ELEVATION (FT)	6045 30	PROJECT NUMBER	905-RFI/RI
NORTH [illegible]537	AREA IHSS [illegible]	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST 1079132	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/30/94
REMARKS DRILLING EQUIPMENT HURRICANE ASSIGNED GEOLOGIST J W HARWELL					

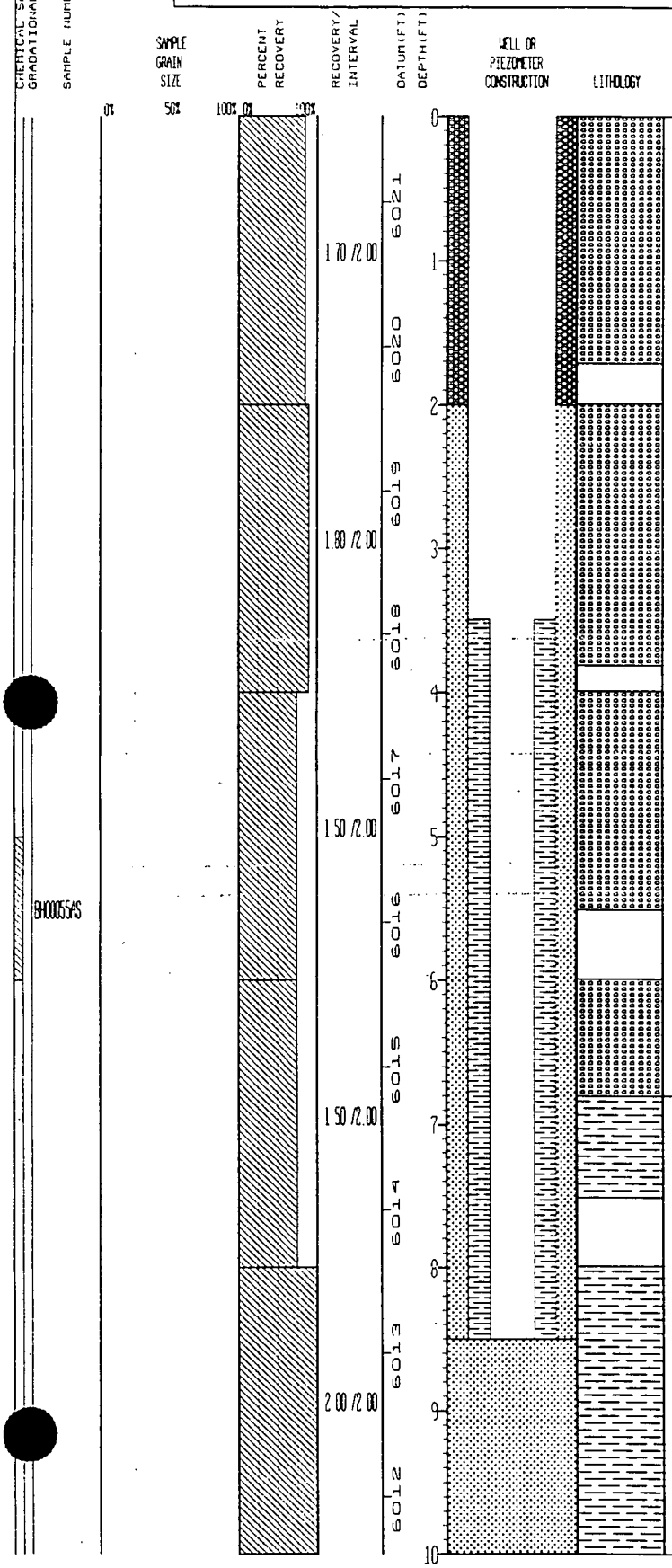
LOG OF BORING NUMBER

55294

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GAIN TIME	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00031AS		0% 50% 100% 0% 100%	2 00 /2 00 1 40 /2.00 2 00 /2 00 1 60 /2 00 2 00 /2 00	6035 6034 6033 6032 6031 6030 6029 6028 6027 6026	10 11 12 13 14 15 16 17 18 19 20			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 No recovery (13 4-14 0')
									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
									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 No recovery (17 6-18 0')
									CLAYSTONE	18 0'-20 0' Claystone with trace Silt Same as above (reference interval 15 25'-16.0')
										Total Depth Drilled 20 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 [illegible]	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

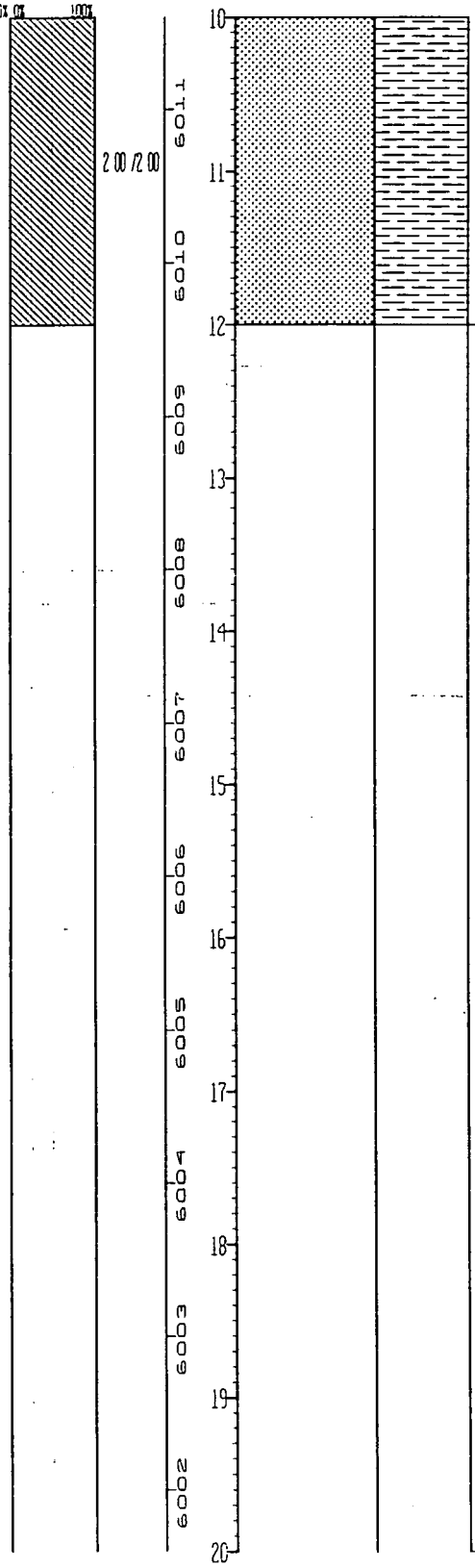


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	0 0'-6 8' Gravelly Sand with trace Silt and Clay Mod yellowish brown (10 YR 5/4) Gravel coarse to fine, avg size 0 5 in, max. size 1 0 in., composed of quartzite and granite, sub-angular to angular Sand is c g to f g, sub-angular to angular Some 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) 221 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747297	AREA IHSS 133	CASING DIAMETER (IN) 2 50	GEOLOGIST J W HARWELL	55394	
EAST 2079129	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 4 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% 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

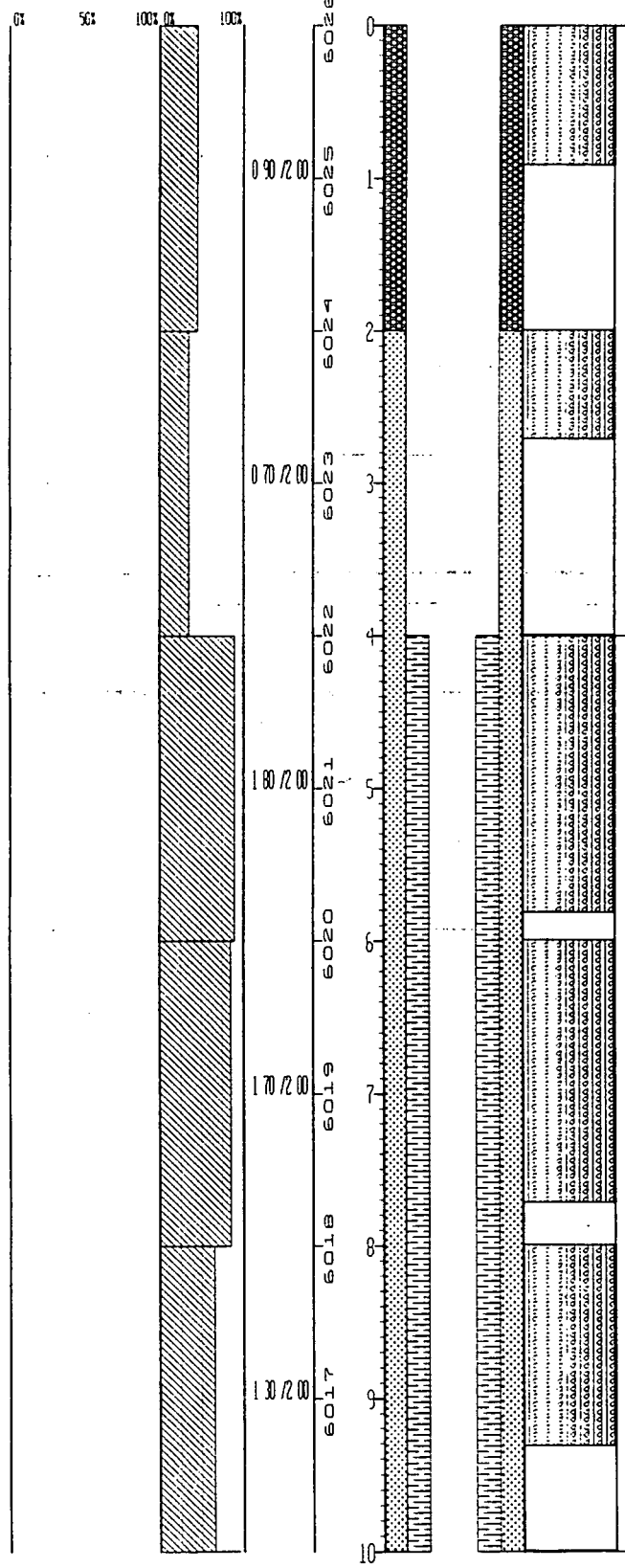
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT) 6026 00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747331	AREA CHSS 133	CASING DIAMETER (IN)	GEOLOGIST	J W HARWELL	55494
EAST 2079449	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1 50	DATE DRILLED	09/28/94	

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	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 30 /2 00	6025	2			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')
				1 60 /2 00	6023	4			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')
				0 70 /2 00	6021	5				
					6020	6				Total Depth Drilled 6.00
					6019	7				
					6018	8				
					6017	9				
						10				

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 49	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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 apparent, low plasticity 32% gravel, 44% sand 19% silt, 5% clay No recovery (0 9-2 7') and (2 7-4 0')
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 7'), (7 7-8 0'), and (9 3-10 0')

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 DEPTH / GRADATIONAL 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%

BH00024S

1 90 /2.00

1 60 /2.00

6016 6015 6014 6013 6012 6011 6010 6009 6008 6007

10 11 12 13 14 15 16 17 18 19 20

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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.
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')
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
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')

Total Depth Drilled 14 00 Total Depth Casing 14 00
Bottom of Filter Pack. 14 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00		GROUND ELEVATION (FT)	6033 80	PROJECT NUMBER	305-RFI/RI
NORTH	747409	AREA IHSS 133		CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL
EAST	2079583	LOCATOR NUMBER	67	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/28/94

LOG OF BORING NUMBER 55594

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	6033	0			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
					6032	1				
				2 00 /2 00	6031	2				
					6030	3				
				1 70 /2 00	6029	4			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.
	BH00254S				6028	5				No recovery (7 3-8.0')
				1 30 /2 00	6027	6				
					6026	7				
					6025	8				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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7491	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	J W HARWELL	55694
EAST 1079584	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	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1 20 /2 00	6037 6036	0 1			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')
					6035	2			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
	BH00041AS			1 30 /2 00	6034	3			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.
					6033	4			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')
				1 70 /2 00	6032	5			ML	4 0'-4 7' Sandy Silt Waste/fill, Metallic Waste, and Ash Same as above (reference interval 2 0'-2.3')
					6031	6			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')
				2 00 /2 00	6030	7			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
	BH00042AS				6029	8			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)
				1 80 /2 00		9			SP	9 1'-9 4' Sand F g. to m g.
					6028				SC	9 4'-9 8' Clayey Sand No recovery (9 8-10 0')
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 6037 40	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH	7-7-91	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 D ESCRIPTIONS ARE TAKEN FROM THE RIG GEOLOGIST'S FIELD LOG

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%	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)
					6025	12				
				2 00 /2 00	6024	13				
					6023	14				
				2 00 /2 00	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
	BH00057AS	0% 50% 100%	0% 100%	1 00 /2 00 0 80 /2.00 1 60 /2 00 0 90 /2.00	6007 6006 6005 6004 6003 6002 6001 6000 5999 5998	0 1 2 3 4 5 6 7 8 9 10			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	OU5-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 #11 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
				1 40 /2 00	6040	0–1			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	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) 6[illegible] 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747538	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL		
EAST 3079716	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1[illegible]	DATE DRILLED 10/03/94	55894	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

CHEMICAL GRADATION	DEPTH SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE TYPE	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%	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	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 12/30/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL CORE IS IN HOT CONEX DESCRIPTIONS TAKEN FROM WELL SITE FIELD LOG

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
			0% 100%		6040	0			SM	0 0'-0 9' Silty Sand Very 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'), core (2 3-4 0')
					6038	2				
	BH0003HS			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
	BH0003SHS			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	365-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	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	10 11				
				2 00 /2 00	6028 6027	12 13			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)
				1 00 /2 00	6026 6025	14 15			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.
					6024 6023 6022 6021	16 17 18 19 20				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	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%						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')
				1 70 /2 00	6038 6037	0 1 2				
	BH00037AS			0 10 /2 00	6036 6035	3 4				
				1 40 /2 00	6034 6033	5 6			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
				1 30 /2.00	6032 6031	7 8			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')
	BH00038AS			2 00 /2 00	6030 6029	9 10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22 00	GROUND ELEVATION (FT) 6038 70	PROJECT NUMBER 905-RFI/RI	LOG OF BORING NUMBER
NORTH 747548	AREA OUE CASS 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 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 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				
					6025	14			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')
	9H0009AS			1 40 /2.00	6024	15				
					6023	16				
				1 80 /2.00	6022	17				
					6021	18			CL	18 0'-18 4' Sandy Clay with some ash metallic waste/fill, some glass fragments, waste/fill material
				1 50 /2.00	6020	19			CL	18 4'-20 0' Sandy Clay with some gravel same as 14 0-18 0'
					6019	20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22 00	GROUND ELEVATION (FT) 6038 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7475548	AREA 005, 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
	B00040S	0% 50% 100%	0% 100%	2 00 /2 00	6018 6017 6016 6015 6014 6013 6012 6011 6010 6009	20 21 22 23 24 25 26 27 28 29 30			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
										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 INSS 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

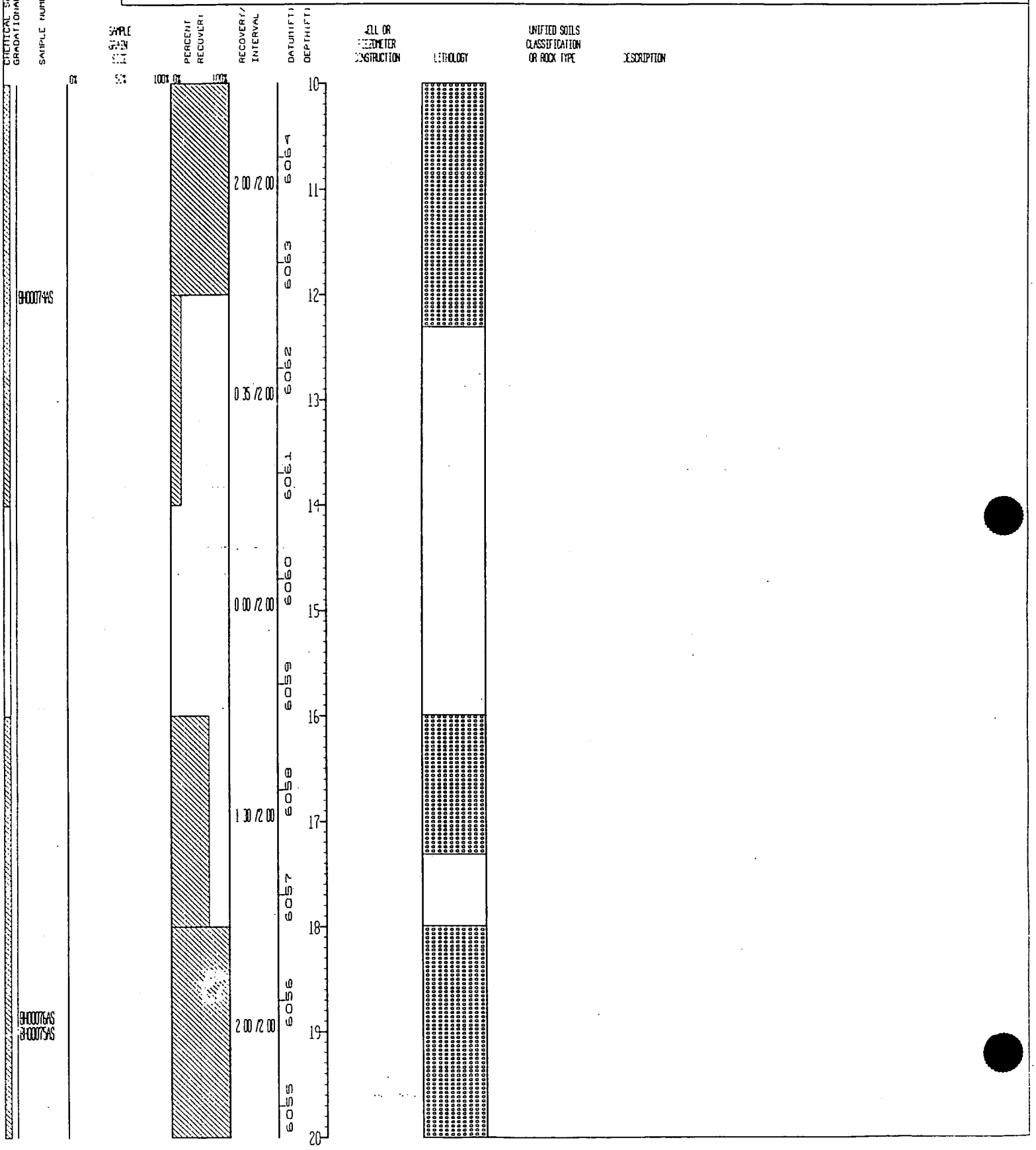
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00072AS			1 50 /2.00	6074	0				0 0'-28 0' 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 (8 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
				0 70 /2 00	6072	2				
				1 40 /2.00	6071	3				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')
					6070	4				
					6069	5				
	BH00073AS			0 65 /2 00	6068	6				
				1 40 /2 00	6067	7				
					6066	8				
					6065	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	30.00	GROUND ELEVATION (FT)	6074.70	PROJECT NUMBER	005-RFI/RI
NORTH	747751	AREA	IHSS [illegible]	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
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

LOG OF BORING NUMBER

56194



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT)	6074 70	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]-7751	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56194
EAST	[illegible]079691	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% 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	6054	20				
					6053	21				
						22				
				2.00 /2.00	6052	23				
					6051	24				
				1.00 /1.00	6050	25				
	BH00077AS			0.00 /1.00	6049	26				
				2.00 /2.00	6048	27				
					6047	28				
				2.00 /2.00	6046	29				
					6045	30				

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
[illegible]% 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	OU5-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 TA KEN 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%)	PENETRATION 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	6073	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
					6072	2			NO RECOVERY	1 5'-4 0' No recovery
	BH0049AS			0 00 /2 00	6071	3				
				1 60 /2 00	6070	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')
					6069	5				
				0 00 /2 00	6068	6			NO RECOVERY	6 0'-8 0' Complete refusal
					6067	7				
					6066	8				Total Depth Drilled 8.00
					6065	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT)	5983 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7401	AREA IHSS 133	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	56294
EAST	3080135	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	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			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.
				1 60 /2 00	5983	1				No recovery (1.6-2 0')
					5982	2			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.
				1 40 /2 00	5981	3				No recovery (3 4-4.0') and (7 9-8 0')
					5980	4				
				2 00 /2 00	5979	5				
	BH0026AS				5978	6				
				1 90 /2 00	5977	7				
					5976	8				
				1 60 /2 00	5975	9			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
					5974	10				No recovery (9 6-10 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00		GROUND ELEVATION (FT)	5983 60	PROJECT NUMBER	OU5-RFI/RI
NORTH	747401	AREA THSS 133		CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL
EAST	2080135	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/29/94

REMARKS DRILLING EQUIPMENT HURRICANE FSI RIG GEOLOGIST J W HARWELL

LOG OF BORING NUMBER 56294

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

BH00227AS

2 00 /2 00
2 00 /2 00
2 00 /2 00

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

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

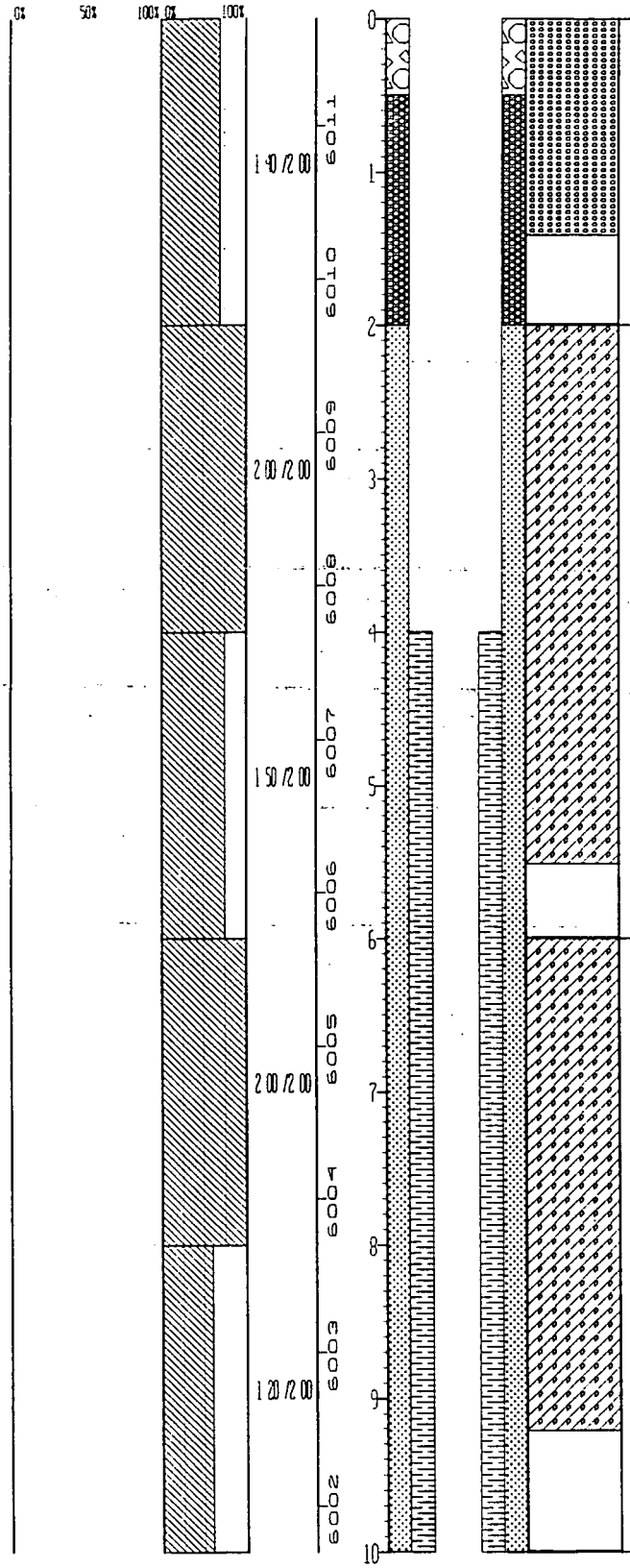
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5983 60	PROJECT NUMBER	1.5-RFI/RI	LOG OF BORING NUMBER
NORTH	747026	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56394
EAST	2080268	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/11/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL.

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
		0% 50%	100% 0% 100%	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				
	GH0056AS			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	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
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
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')
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')
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')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5911.70	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	

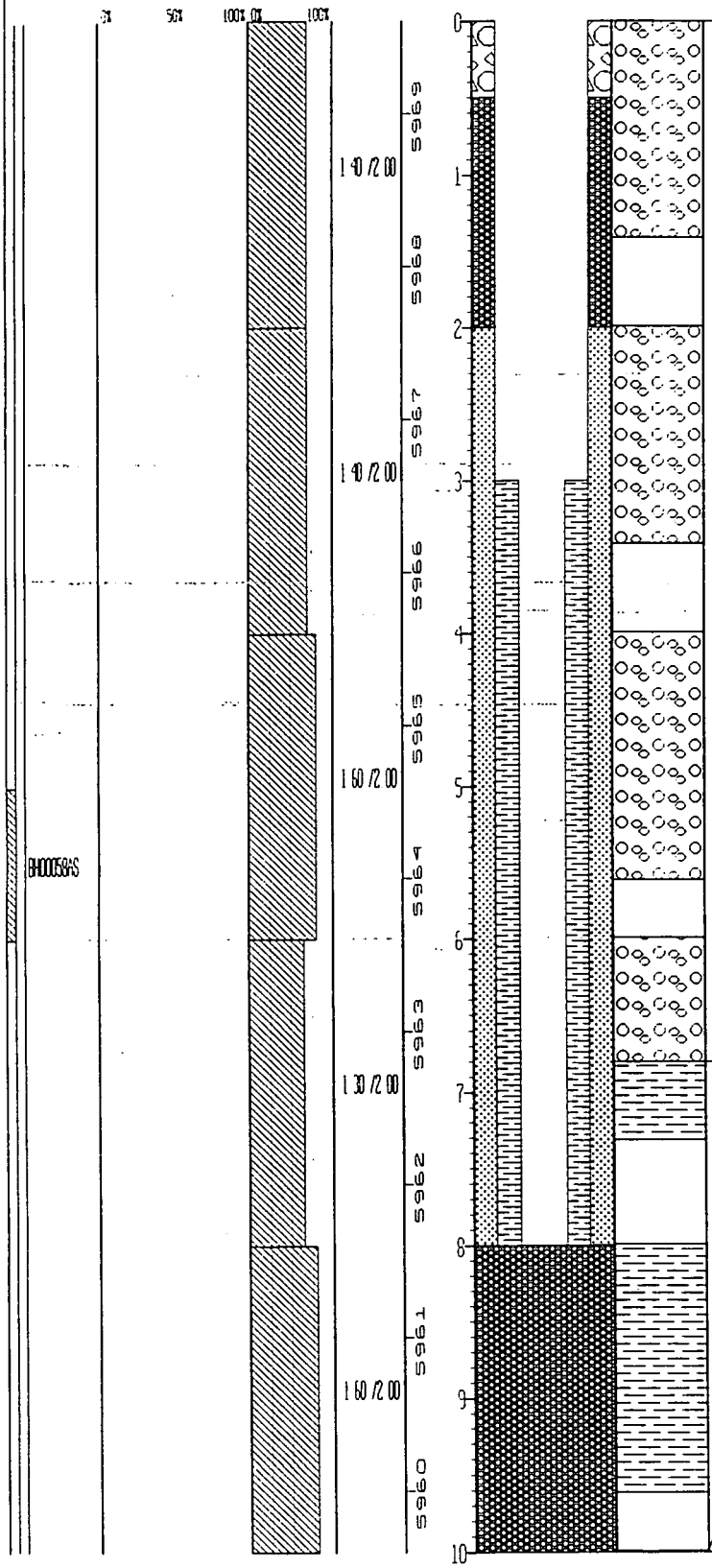
REMARKS: DRILLING EQUIPMENT: HURRICANE. ASI RIG GEOLOGIST: J. W. HARWELL.

CHEMICAL 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
	BH00022AS	0% 50%	100% 0% 100%	2.00/2.00	6001	10			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				No recovery (13.8-14.0').
				1.80/2.00	5999	13				
					5998	14				Total Depth Drilled: 14.00 Total Depth Casing: 14.00. Bottom of Filter Pack: 14.00.
					5997	15				
					5996	16				
					5995	17				
					5994	18				
					5993	19				
					5992	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5969 60	PROJECT NUMBER	OU5-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 . 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



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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	J. W HARWELL	56694
EAST 1132723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED	11/14/94	
REMARKS GRILLING EQUIPMENT· MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL					

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
				2 40 /2 00	5962	0–1			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
	GH00092AS				5961	2				
	GH00095AS GH00096AS			2 20 /2 00	5960	3				
	GH00093AS				5959	4				
				2 20 /2 00	5958	5			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')
	GH00094AS				5957	6				
				2.40 /2.00	5956	7				
	GH00098AS				5955	8				
				0 25 /2 00	5954	9				
					5953	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5952 90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7318	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	J W HARWELL	56694
EAST 2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED	11/14/94	
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL					

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
						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				
	BH00994S				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	

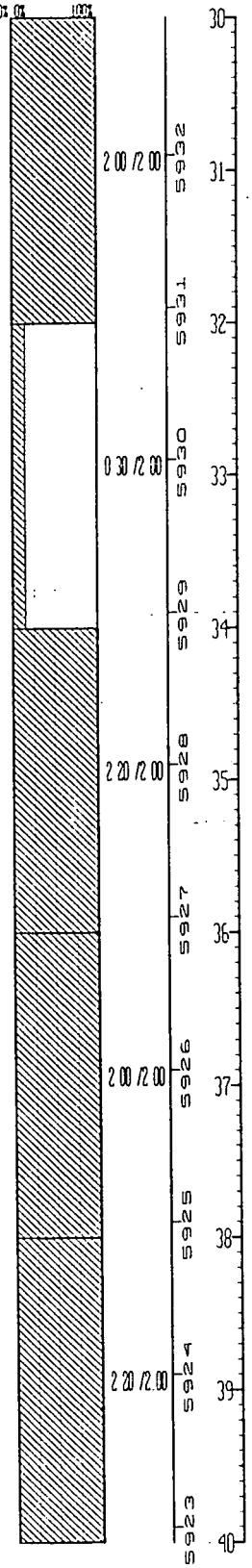
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL.

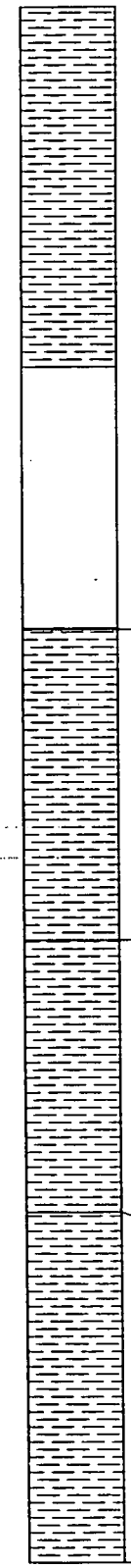
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00112AS					20				
				2 00 /2 00	5942	21				
					5941	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 No recovery (32.3-34.0')
				2 00 /2 00	5940	23				
					5939	24				
				2 00 /2 00	5938	25				
					5937	26				
				2 00 /2 00	5936	27				
					5935	28				
				2 00 /2 00	5934	29				
					5933	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5962 90	PROJECT NUMBER 305-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





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) 1[illegible] 70	GROUND ELEVATION (FT) 5962 90	PROJECT NUMBER [illegible]05-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%	1 40 /5 70	5922 5921 5920 5919 5918 5917 5916	40 41 42 43 44 45 46			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')
				4 50 /5 00	5915 5914 5913	47 48 49 50			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')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5962 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7718	AREA THSS 115	CASING DIAMETER (IN)	GEOLOGIST	J W HARWELL	56694
EAST	2592723	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

CRITICAL 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

ELEVATION (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) 5932 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 50	DATE DRILLED 11/14/94	

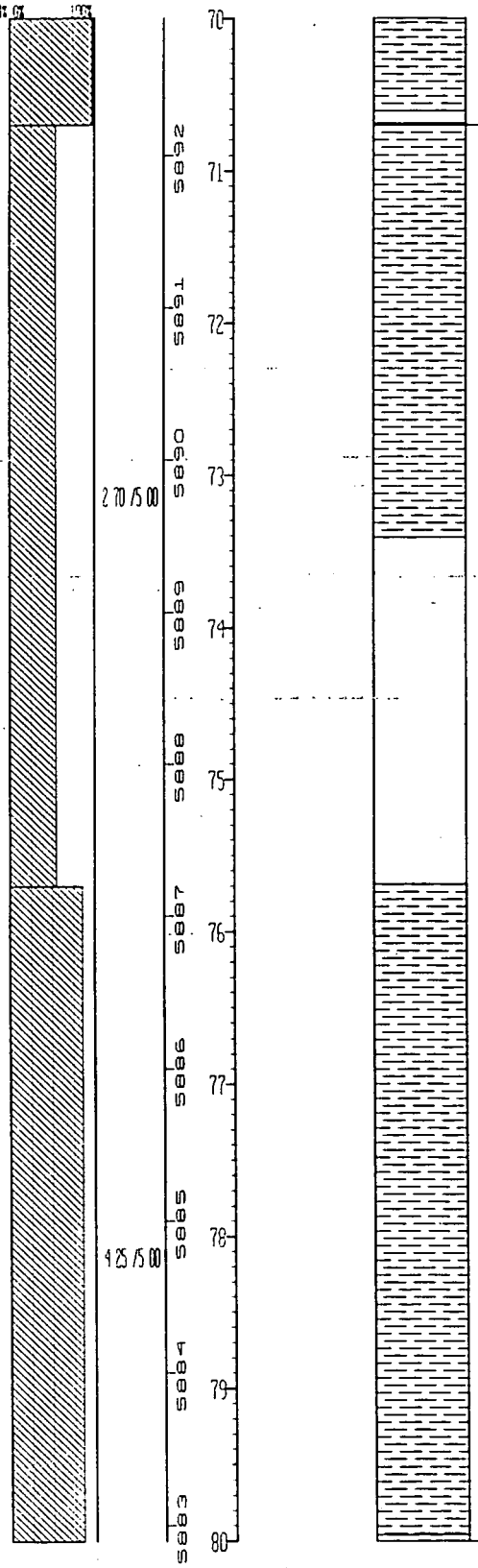
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL

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
						60				
					5902	61			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')
					5901	62				
				3 20 /5.00	5900	63				
					5899	64				
					5898	65				
					5897	66			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')
				0 80 /2.00	5896	67				
					5895	68				
				2 90 /3 00	5894	69				
					5893	70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7718	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



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 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%			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) 5562 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 00	DATE DRILLED	11/14/94	

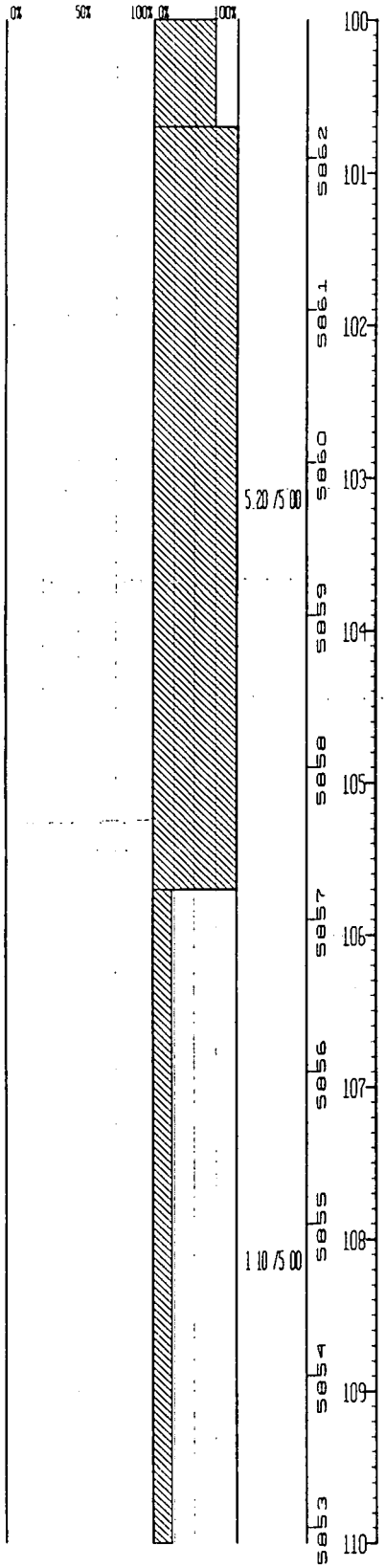
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (100% 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				
					5870	93				
				4 05 5 00						
					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 75 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



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)	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	

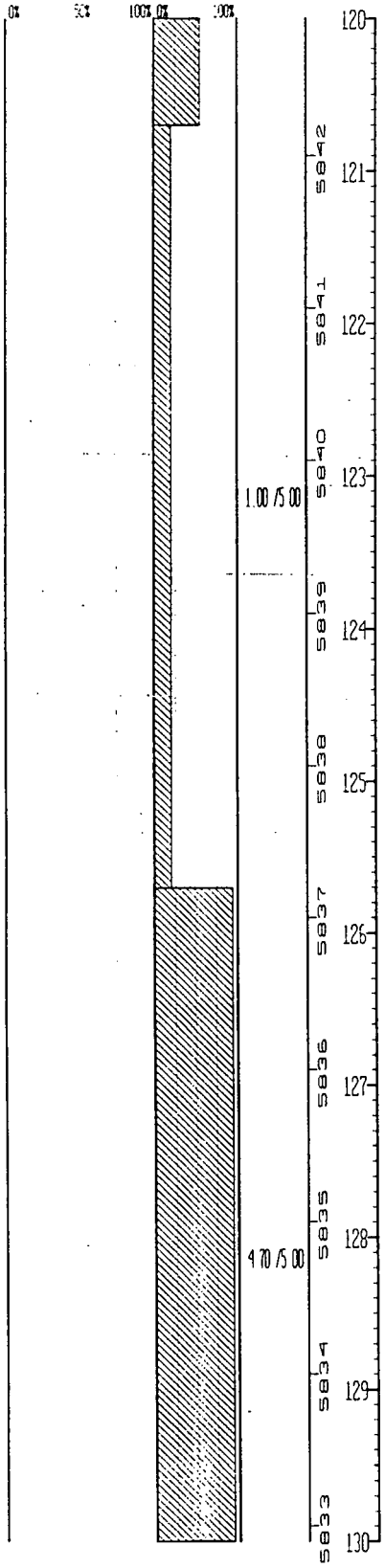
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL

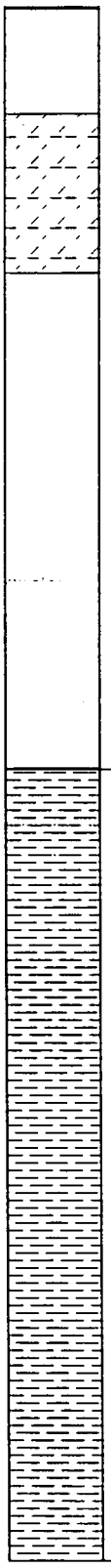
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			110				
					5952	111			SILTY CLAYSTONE	110.7'-113.5' Silty Claystone Same as above (reference interval 105.5-106.8')
				3.00/3.00	5951	112				
					5950	113				
					5949	114			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.
					5948	115				No recovery (114.5-118.7') and (120.0'-120.7')
					5947	116				No recovery (121.7-124.9')
				0.80/5.00	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 OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	47718	AREA THSS 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
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
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')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5362 90	PROJECT NUMBER 045-RFI/RI	LOG OF BORING NUMBER
NORTH 74718	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL	56694
EAST 2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED 11/14/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL

CRITICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 40 / 5 00; 0 40 / 5 00

DATUM (FT): 5832, 5831, 5830, 5829, 5828, 5827, 5826, 5825, 5824, 5823

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' Cloyey 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	305-RFI/RI
NORTH	747718	AREA IHSS 115		CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST	2082723	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	11/14/94

LOG OF BORING NUMBER

56694

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
						140				
					5822	141				
					5821	142				
				0.25/5.00	5820	143				
					5819	144				
					5818	145				
					5817	146				
									NO RECOVERY	No recovery (146.5-150.7')
					5816	147				
				0.80/5.00	5815	148				
					5814	149				
					5813	150				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT)	5295 20	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	747921	AREA THSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	56794
EAST	2082450	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	[illegible]/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%	1 10 /2 00	5295 5294	0 1			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')
	BH00228AS			1 50 /2 00	5293 5292	2 3			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')
	BH00227AS BH00232AS			2 00 /2 00	5291 5290 5289	4 5 6			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
	BH00229AS			1 40 /2 00	5288	7				
	BH00230AS			2 00 /2 00	5287 5286	8 9 10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT) 5985 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 37	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 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%		5985	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	5984	11				
				5983	12				
BP00034AS BP00035AS									
BH00231AS			1.90 /2.00	5982	13				
				5981	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	5980	15				
				5979	16				No recovery (15.1-16.0') and (16.8-17.0')
			0.80 /1.00						
				5978	17				
			1.00 /1.00						
				5977	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
			2.00 /2.00	5976	19				No recovery (22.4-23.0')
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT) 5995 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 74921	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
	BH0023DAS			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 No recovery (24 3-25 0')
				1 30 /2.00	5971	24				
					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	095-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]	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	PERCENT RECOVERY	BLOWS/6 INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%						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')
				10/2 00	5993	1				
					5992	2				
				10/1 50	5991	3				
	BH0216AS			10/1 50	5990	4				
				10/0 50	5989	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')
				10/2.00	5988	6				
					5987	7				
									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
				10/2 00	5986	8				
	BH0217AS								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
					5985	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33.0	GROUND ELEVATION (FT) 5394.20	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
				2.00/2.00	5984	10			NO RECOVERY	10.0'-11.5' Core taken for sample
	BH0219AS				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				
				2.00/2.00	5980	14				
	BH0219AS				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	BUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747555	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 AST 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
		5% 50%	100% 0% 100%	2 00 /2 00	5974	20				
	BH0220HS				5973	21				
				2 00 /2 00	5972	22				
					5971	23				
				2 00 /2 00	5970	24				
					5969	25				
				2 00 /2 00	5968	26				
	BH0221HS			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 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
	BH022224S			2 00 /2 00 2 00 /2 00	5964 5963 5962 5961 5960 5959 5958 5957 5956 5955	30 31 32 33 34 35 36 37 38 39 40			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'
										Total Depth Drilled 33 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT)	6013 80	PROJECT NUMBER	OU5-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 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	6019	0			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
					6018	1				
						2				No recovery (1.1-2 0'), (3 6-4 0'), and (4 6-5 0') No recovery (6 9-7 9') and (7 9-9 0')
	BH00185AS			1 60 /2 00	6017	3				Note Soil classification changed from Sw to Gm on the basis of mechanical-sieve and hydrometer results of BH00188AS
					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
				0 00 /1 10	6011	9				
				1 60 /2 00	6010	10				No recovery (10 6-11 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00		GROUND ELEVATION (FT)	5019 80	PROJECT NUMBER	305-RFI/RI
NORTH	77987	AREA IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	1082009	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/16/95

LOG OF BORING NUMBER 56994

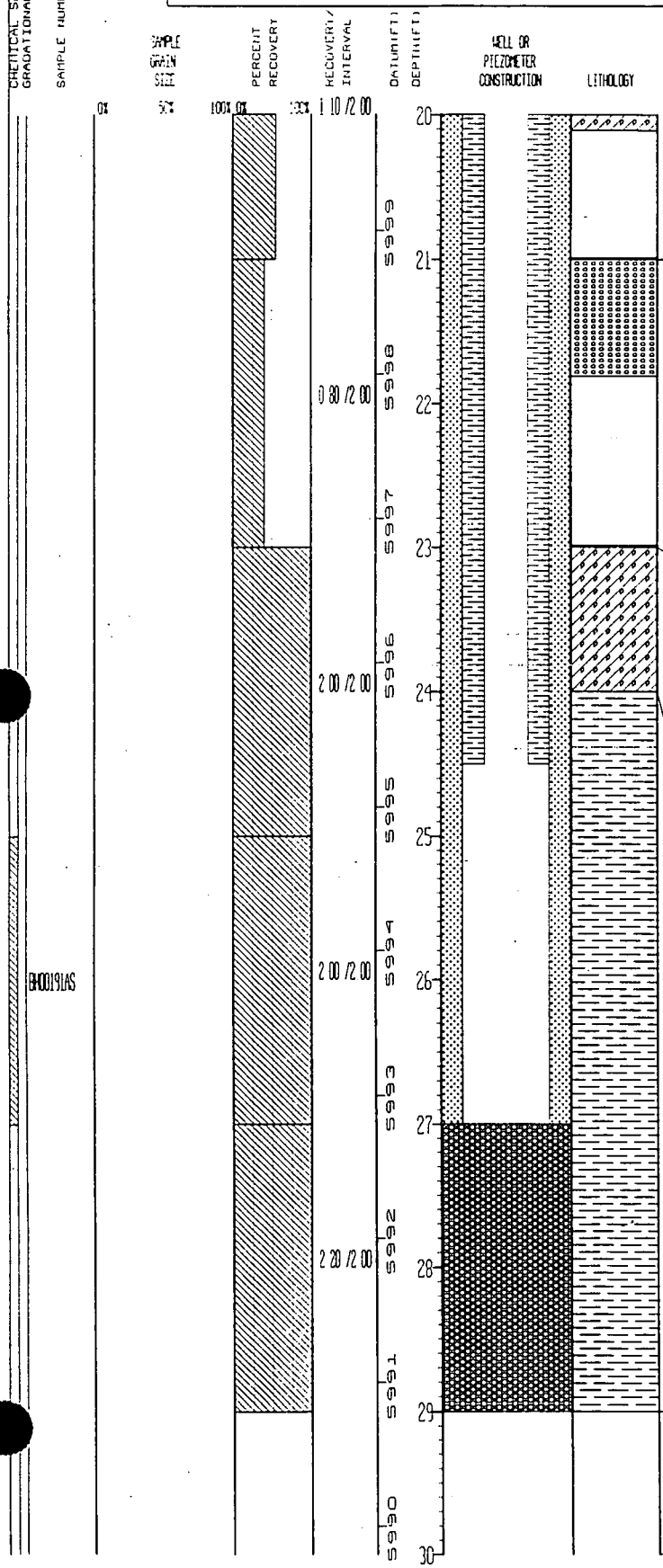
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL

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% 75%	1 60 /2 00	6009	10				
						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 No recovery (18 7-19 0') and (20 1-21 0')
				2 20 /2 00	6008	12				
					6007	13				
	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
NORTH	747337	AREA	IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	2082009	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	01/16/95

LOG OF BORING NUMBER **56994**

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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. No recovery (21.8-23.0')
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.
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

Total Depth Drilled 29.00 Total Depth Casing 26.50
Bottom of Filter Pack 27.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40 00	GROUND ELEVATION (FT)	5970 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7719	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	L A HOST	57094
EAST	1381996	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

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
		0% 50% 100%	0% 100%	1 10 /2 00	5970	0				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	5969	1				
				1 40 /2 00	5968	2				
					5967	3				
					5966	4				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
					5965	5				
	BH00139AS				5964	6				
				1 60 /2 40	5963	7				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				5962	8				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
				1 90 /2 10	5961	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 40 00	GROUND ELEVATION (FT) 5570 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 747719	AREA IHSS 115	CASING DIAMETER (IN) 2 30	GEOLOGIST	L A HOST	57094
EAST 2081996	LOCATION 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
	BH00140AS	0% 50%	100% 0% 100%		5960	10			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')
	BH00141AS			0 80 /2 00	5959	11				
					5958	12				
				1 60 /2 00	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 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	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH0014BAS	0% 50%	100% 0% 100%	1 90 /2 00	5950 5949	20 21				
				1 80 /2 00	5948 5947	22 23			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 10 /2.00	5946 5945	24 25				
				2 00 /2 00	5944 5943	26 27			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 50 /2 50	5942 5941	28 29				
	BH0014GAS					30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40 00	GROUND ELEVATION (FT)	5930 20	PROJECT NUMBER	395-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
				2 00 /2 00	5940	30				
					5939	31				
					5938	32				
				1 20 /1 50	5937	33				
					5936	34			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
	BH00146AS			2 00 /2 00	5935	35				
					5934	36				
				2 00 /2.00	5933	37				
					5932	38				
				2 00 /2 00	5931	39				
						40				

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) [illegible] 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]885	AREA IHSS 115	CASING DIAMETER (IN) [illegible] 30	GEOLOGIST	A R AGLIARDO	57194
EAST	[illegible]92008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) [illegible] 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%	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				
				1 70 /2 00	5994	4			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')
					5993	5				
				1 50 /2 00	5992	6			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')
					5991	7				
	B-001924S			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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747985	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'

CRITICAL DEPTH / GRADUATIONAL 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.
	BH00190AS									
					5986	12			CLAYSTONE	12 0'-12.4' Claystone Same as above (reference interval 5 3'-11.0')
				0 40 /1 00						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'
	BH00194AS			1 00 /1 00						
					5980	18				20% silt, 80% clay
				2 00 /2 00	5979	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]885	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	[illegible]/19/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 [illegible]IG 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%	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 No recovery (32.0-33 5')
				2 00 /2 00	5969	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]35	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2092008	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', [illegible] 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
	BH00196AS	0% 50% 100%	0% 100%	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				No recovery (36 6-38 5')
					5960	38				
					5959	39				
						40			[illegible]	[illegible] 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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 50	GROUND ELEVATION (FT) 5959 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2 30	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 A 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	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
				3 50 /5 00	5958 5957	40 41			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)
					5956	42				
					5955	43				No recovery (42 0-43 5')
					5954	44				
					5953	45				
				5 00 /5 00	5952	46				
					5951	47				
					5950	48				
					5949	49				
						50				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	[illegible] 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA [illegible] 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	01/19/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO, J W HARWELL, L [illegible] HOST

ADDITIONAL CENTRALIZERS 84 0-[illegible] 3', 113 9-115 1', AND 129 8-131.0'

CHEMICAL SA[illegible] DEPTH
GRADATIONAL [illegible] 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)	DEPTH (FT)
5948	50
5947	51
5946	52
5945	53
5944	54
5943	55
5942	56
5941	57
5940	58
5939	59
	60

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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.
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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00		GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	[illegible]5-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

5 00 /5 00

5938 5937 5936 5935 5934 5933 5932 5931 5930 5929

60 61 62 63 64 65 66 67 68 69 70

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

SILTY CLAYSTONE 64 7'-66 0' Silty Claystone Same as above (reference interval 63.5'-63 8')

CLAYSTONE 66 0'-68 5' Claystone with some Silt Same as above (reference interval 57 5'-63.5')

NO RECOVERY No recovery (68 5-72 0') and (72.0-73 5')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	325-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%	3 50 /5 00	5928 5927 5926 5925	70 71 72 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 5921 5920	76 77 78			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
					5919	79 80			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

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 POST

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	5918	80			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
					5917	81				
					5916	82				
					5915	83				
					5914	84				
					5913	85				
				5 00 /5 00	5912	86				
					5911	87				
					5910	88				
					5909	89			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
						90				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5998 10	PROJECT NUMBER 3U5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA 3HSS 115	CASING DIAMETER (IN) 2 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 EDIL B-57 ASI RIG GEOLOGIST A R AGLIARDO, J W HARWELL, L A HOST

ADDITIONAL CENTRALIZERS 84 8-94 9', 113 9-115 1', AND 129 8-131.0'

CHEMICAL DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5908	90			CLAYSTONE	90 1'-91.8' Claystone with some Silt Same as above (reference interval 88 5'-90 1'), with less silt
				5 00 /5 00	5907	91				
					5906	92			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
					5905	93				
					5904	94			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
					5903	95				
					5902	96			CLAYSTONE	95 7'-97 7' Claystone Dark gray (N3) Trace carbonaceous material Mod. hard Non-friable Mod indurated No recovery (97 7-98 5')
					5901	97	02/07/95 ▽			
				4 50 /10 00	5900	98				
					5899	99			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
						100				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	150 00	GROUND ELEVATION (FT)	5598 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

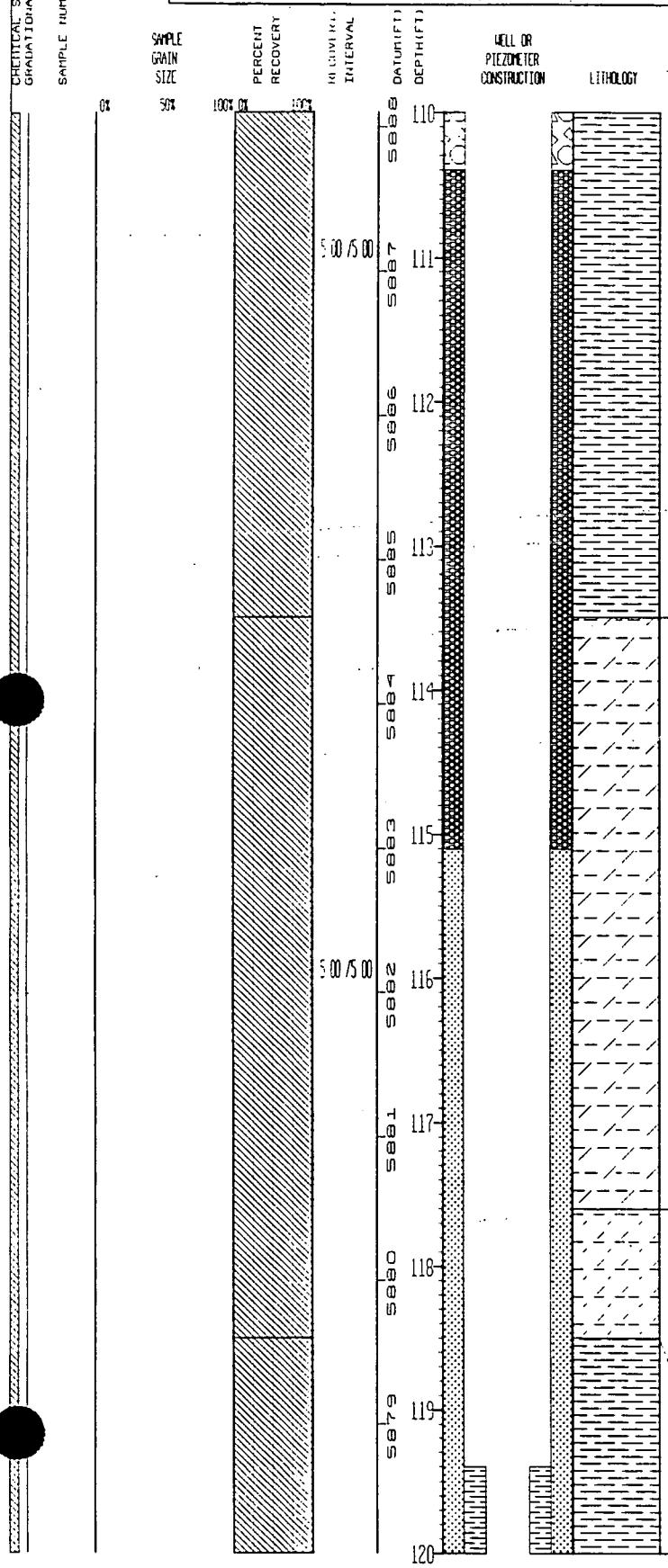
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO, J W HARWELL, L A HOST
ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129 8-131 0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PETROLEUM RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5598	100			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')
					5597	101				
					5596	102				
					5595	103				
					5594	104				
					5593	105				
				5 00 /5 00	5592	106				
					5591	107			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.
					5590	108				
					5589	109			CLAYSTONE	108 5'-113 5' Claystone Same as above (reference interval 100 0'-107 0') Increase in Silt content from 112 5'-113.5'
						110				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	[illegible] 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]5	AREA IHSS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	[illegible]	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 0-94 9', 113 9-115 1', AND 129 8-131 0'



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)	5299 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 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%		5298	120				
				5 00 /5 00	5297	121				
					5296	122				
					5295	123				
					5294	124				
					5293	125			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
				5 00 /5 00	5292	126				
					5291	127				No recovery (130.2-133 5')
					5290	128				
					5289	129				
						130				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 153 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	905-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 37	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/19/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST 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%	1 70 /5 00	5968 5967 5966 5965	130 131 132 133				
					5964	134			SILTY CLAYSTONE	133 5'-135 0' Silty Claystone Same as above (reference interval 113 5-117 6') Some soft sediment deformation structures (turbidite?)
				3 80 /5 00	5963 5962 5961 5960 5959	135 136 137 138 139 140			CLAYSTONE	135 0'-140 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 005-RFI/RI	LOG OF BORING NUMBER	
NORTH [illegible]385	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 WARWELL, 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
				5 00 /5 00	5958	140			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'
					5957	141				
					5956	142				
					5955	143				
					5954	144				
					5953	145				
				2 90 /5 00	5952	146			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')
					5951	147				
					5950	148				
				1 10 /1 50	5949	149				
						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
NORTH 747659	AREA OU5, IHSS 133 2	CASING DIAMETER (IN)		GEOLOGIST	JEFF HARNELL
EAST 2080479	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	4 00	DATE DRILLED	11/12/94
REMARKS					

LOG OF BORING NUMBER

57294

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				4 0-8 0' Composite/bulk sample BH00090AS Sample lithology refer to borehole 56393
					6026	1				
					6025	2				
					6024	3				
					6023	4				
					6022	5				
	BH00090AS				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)	5933 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747479	AREA CASS 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%)	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 /2 00	5930		12/01/94		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 No recovery (1 1-2 0') and (3 5-4 0')
				1 00 /1 00	5936					
				0 50 /1 00	5939					
				1 40 /1 40	5934				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
					5933					
				1 00 /2 00	5932				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 No recovery (6 4-7 4')
					5931					
	BH00123AS			1 30 /2 50	5930				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
					5929					

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT)	5939.20	PROJECT NUMBER	1151-RFT/RI	TYPE OF BORING NUMBER
NORTH	74479	AREA EHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P. J. JORDAN	57394
EAST	1081988	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	12/01/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASSISTING GEOLOGIST P. J. JORDAN

CHEMICAL SAMPLE NUMBER	SAMPLE PAIN TEST	HEMOGLOBIN RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
GH001246		0% 50% 100% 0% 100%	1.90 /2.10	5928	10			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')
				5927	11				
				5926	12			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	5925	13				
				5924	14				
			2.00 /2.00	5923	15				
				5922	16			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')
			1.70 /2.00	5921	17				
				5920	18			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')
			1.80 /2.00	5919	19				No recovery (19.8-20.0')
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT) 5938 20	PROJECT NUMBER 005-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 / GRAVITATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 75%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5918	20			CLAYSTONE	20 0'-21 0' Claystone Grayish black (N2) Some carbonaceous material (lignite) Bedding not apparent
	BH00125AS			2 00 /2 00	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 2095-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7711	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	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			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	5971	1				
					5970					
						2				
					5969					
				1 50 /2 00		3				
					5968					
						4				
					5967					
				1 20 /2 00		5				
					5966					
						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')
					5965					
				1 40 /2 00		7				
					5964					
						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
					5963					
BH00175AS				2 40 /2 50		9				
					5962					
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22 50	GROUND ELEVATION (FT) 5971 48	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]711	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57494
EAST 1222227	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	01/05/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASE RIG GEOLOGIST P J JORDAN

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				
				5961				CLAYSTONE	10 5'-12 [illegible] Top of Bedrock at 10 5' Claystone Core taken for sample According to Well Site Field Log, weathered Claystone
				5960	11				
B400176AS			2 50 /2 50		12				
				5959					
				5958	13			CLAYSTONE	13 0'-16 [illegible] Claystone with some Silt Dark yellowish brown (10 [illegible] 4/2) to med dark gray (N4) to dark yellowish orange (10 [illegible]R 6/6) where Fe stained Mod friable Abundt Fe staining including nodules of FeO Trace calcareous material Intact core dense Fragments fissle 90% clay, [illegible]% silt
			1 50 /1 50						
				5957	14				No recovery (16 0-16 5')
				5956	15				
			1 50 /2 00						
				5955	16				
				5954	17			CLAYSTONE	16 5'-22 [illegible] 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
			2 00 /2 00						
				5953	18				
				5952	19				No recovery (22 0-22 5')
B400177AS			1 50 /2 00						
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT) 5971 40	PROJECT NUMBER	SUS-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA (HSS) 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57494
EAST 1382227	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

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
50%	100% 0%		5951	20				
		1 50 /2 00	5950	21				
			5949	22				
		1 50 /2 00	5948	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')
			5947	24				
		1 50 /2 00	5946	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')
			5945	26				
		1 70 /2 00	5944	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')
			5943	28				
		2 00 /2 00	5942	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 EHSS 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
					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 COORDINATE	TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA INSS 115	CASING DIAMETER (IN) 0 00	GEOLOGIST	J W HARWELL	57594
EAST [illegible]	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED	11/08/94	

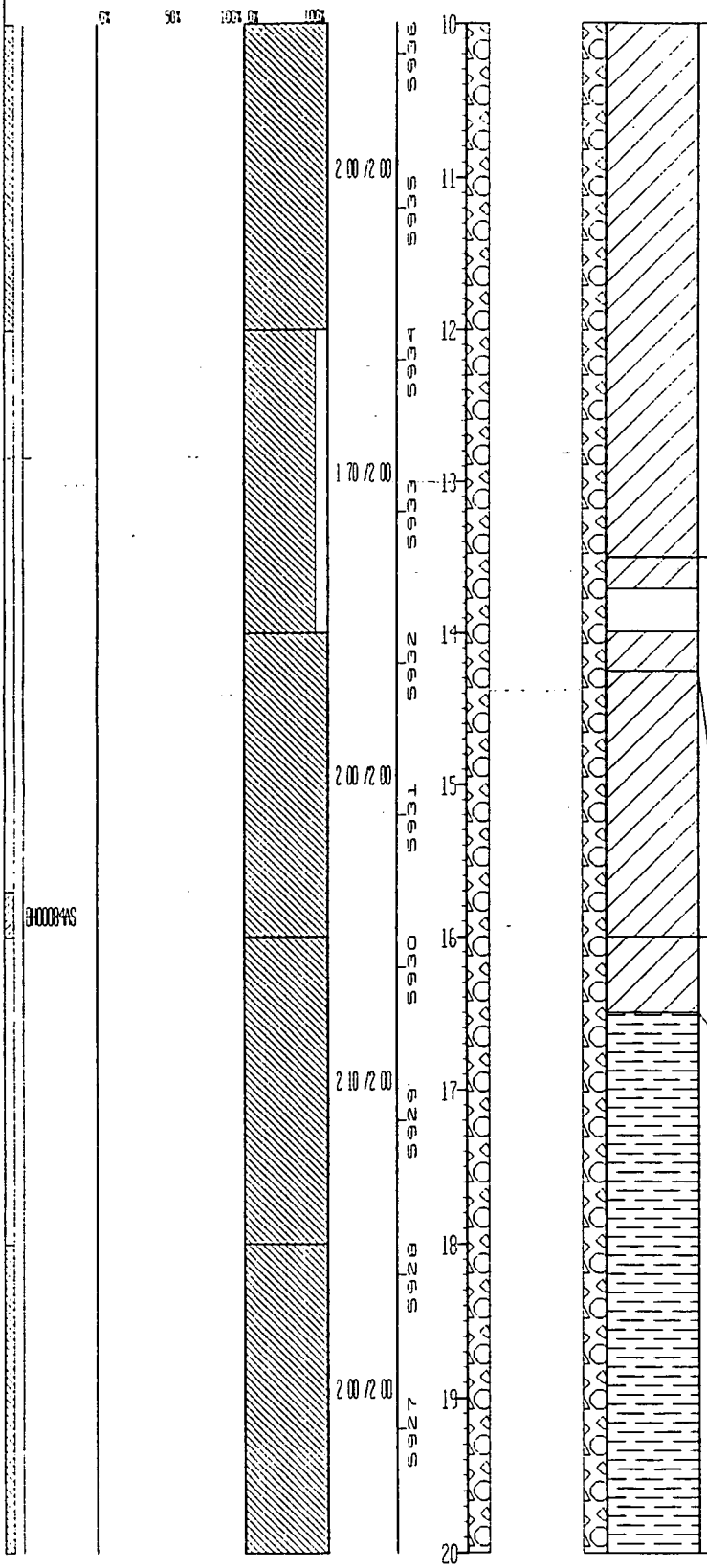
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

CHEMICAL SAMPLE NUMBER	SAMPLE GRAIN SIZE	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH00079AS		1 00 /2 00	5946 5945	0 1	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	5944 5943	2 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 70 /2 00	5942 5941 5940	4 5 6	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 40 /2 00	5939 5938	7 8	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')
BH00082AS		1 70 /2 00	5937	9 10		

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'

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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
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')
CL	14 25'-16 0' Clay, (landslide breccia) Same as above (reference interval 10 0'-13 5')
CL	16 0'-16 5' Gravelly Clay Same as above (reference interval 13 5'-14 25') Possible slough
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'

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	[illegible]
NORTH [illegible]590	AREA [illegible]	CASING DIAMETER (IN)	2 20	GEOLOGIST	J W HARWELL
EAST 1382153	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	[illegible]/93

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASST RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

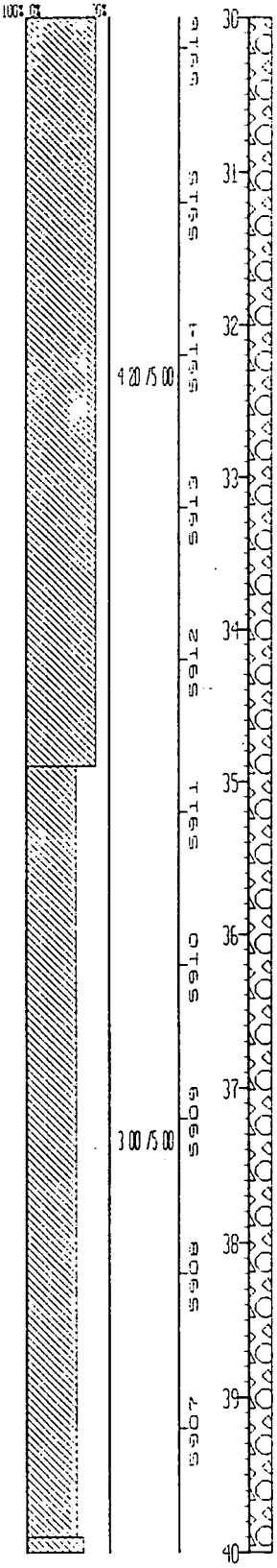
LOG OF BORING NUMBER 57594

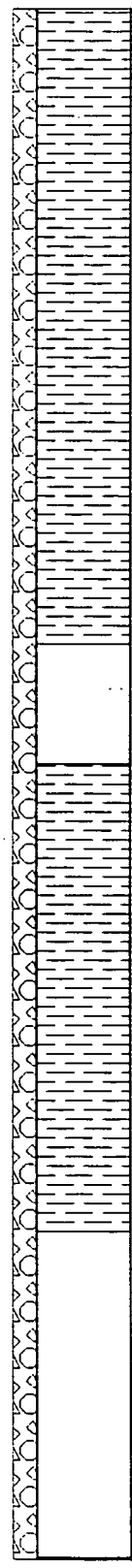
SAMPLE BASIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				20				20 0'-20 6' Core in box is grout from setting surface casing
				21			NO RECOVERY	No recovery (20 6-24 9')
				22				
		0 60 / 4 90						
				23				
				24				
				25			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
				26				No recovery (28 0-30 0')
				27				
		3 10 / 5 00						
				28				
				29				
				30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 104.90	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER [illegible]-RFI/RI	LOG OF BORING NUMBER	
NORTH [illegible]-7590	AREA IHSS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	57594	
EAST [illegible]82153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED [illegible]/08/94		

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL PROTECTIVE CASING LENGTH [illegible] 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% 70%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION





Recovery/Interval	Depth (ft)	Unified Soils Classification or Rock Type	Description
4.20 /5.00	30	CLAYSTONE	30.0'-37.[illegible]' Claystone Same as above (reference interval 24.9'-28.[illegible]') Med dark gray (N4) Slickensides at 33.5', approx [illegible] degrees At 33.7' amount of organics decreases to trace amount Fractured Very stiff Slightly friable Massive
	31		
	32		No recovery (34.1-34.9'), and (37.9-40.0')
	33		
	34		
	35		
	36		
3.00 /5.00	37		
	38		
	39		
	40		

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)	5.00	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'

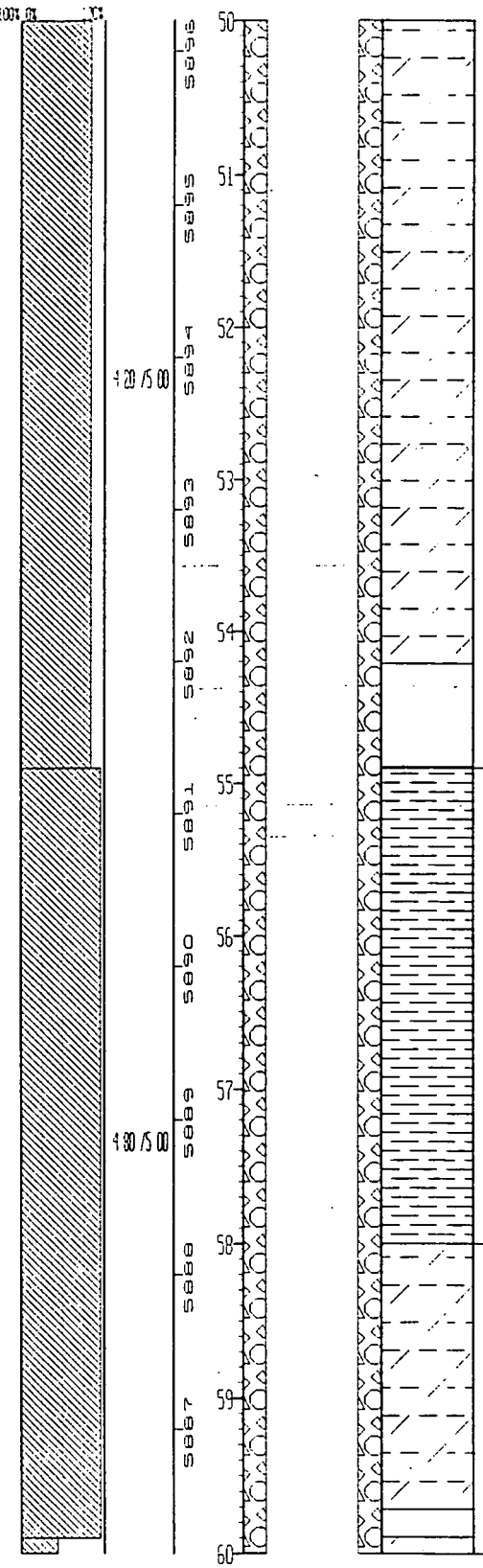
CHEMICAL GRADATIONAL	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%							
				3.40/5.00	5906	40			SILTY CLAYSTONE	40.0'-54.2' Silty Claystone 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
					5905	41				
					5904	42				
					5903	43				
					5902	44				
					5901	45				
					5900	46				
				5.00/5.00	5899	47				
					5898	48				
					5897	49				
						50				

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-[illegible]	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 | PERCENT RECOVERY | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



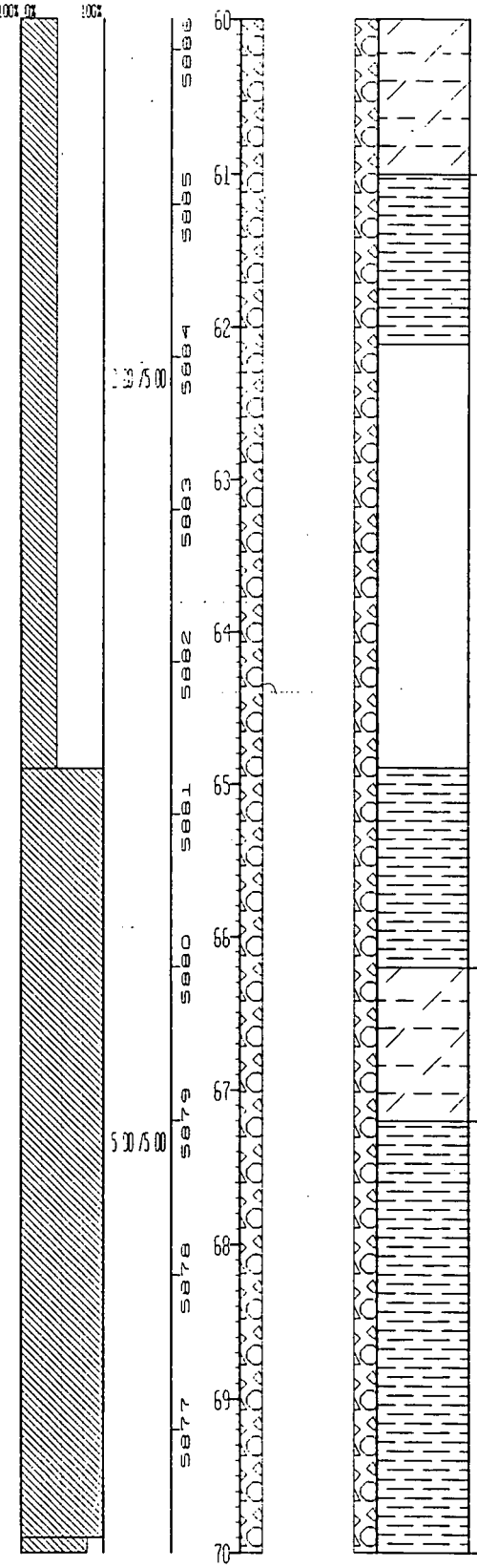
CLAYSTONE	54.9'-58.0' Claystone Med dark gray (N4) Unweathered Sediments appear slightly disturbed Slickensides abundt through interval at 55.5', 55.7' and 56.3', almost vertical at 80 degrees (approx.)
SILTY CLAYSTONE	58.0'-61.0' Silty Claystone Same as above (reference interval 40.0'-54.2') Exhibits 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	115-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 00	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

0% 50% 100% 0% 100%



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')

2 00 /5 00

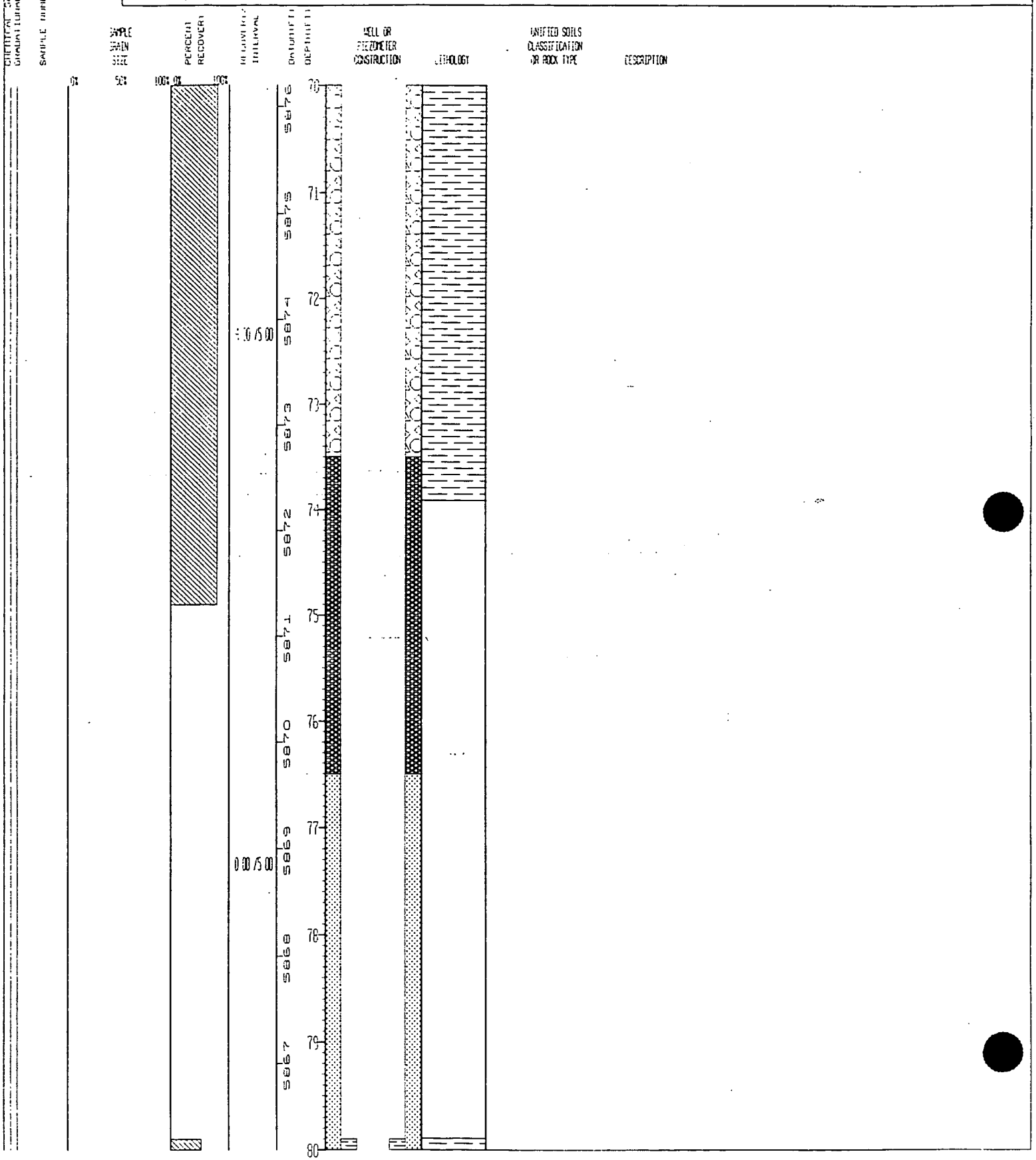
5 00 /5 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	104.00	GROUND ELEVATION (FT)	5946.00	PROJECT NUMBER	005-RFI/RI
NORTH	747530	AREA	IASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J W HARWELL
EAST	2082153	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	11/08/94

LOG OF BORING NUMBER

57594

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 20	GROUND ELEVATION (FT)	5945 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	745590	AREA TASS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	1082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL PROTECTIVE CASING LENGTH 3 0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0 3'

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%	0 80 /1 50	5865	80				
			5865	81				
			5864	82			SILTY CLAYSTONE	81 4'-83 3' 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')
		2 40 /3 50	5863	83				
			5862	84				
			5861	85			CLAYEY SANDSTONE	84 9'-90 0' Clayey Sandstone Med dark gray (N4) Sand is v f c, 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
			5860	86				
		5 00 /5 00	5859	87				
			5858	88				
			5857	89				
				90				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	OU5-RFI/RI
NORTH	747590	AREA	IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	2082153	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/08/94

LOG OF BORING NUMBER

57594

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 [illegible] 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: 5 00 /5 00; 4 30 /5 00

DATUM (FT): 5856, 5855, 5854, 5853, 5852, 5851, 5850, 5849, 5848, 5847

DEPTH (FT): 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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 [illegible]	LOG OF BORING NUMBER
NORTH 747590	AREA (HSS) [illegible]	CASING DIAMETER (IN) 2.00	GEOLOGIST J. W. HARWELL	57594
EAST 2082153	LOCATOR NUMBER JT	BOREHOLE DIAMETER (IN) 5.60	DATE DRILLED 11/06/94	

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 % / 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%	4.30 / 5.00	5846, 5845, 5844, 5843, 5842, 5841, 5840, 5839, 5838, 5837	100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110			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 (104.2-104.9')

Total Depth Drilled 104.90 Total Depth Casing 92.20
Bottom of Filter Pack 92.20

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	5945 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	LOCATION 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	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		2% 50% 100%	0% 100%					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 5% gravel, 60% sand, 2% silt, 32% clay No recovery (3 9-4 0')
	BH00197AS			2 00 /2 00 1 90 /2 00	5946 5945 5944 5943			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')
	BH00198AS			1 30 /2 00 2 00 /2 00	5942 5941 5940 5939			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 Atterberg limit/plasticity data for BH00199AS for 8 0-10 0' interval indicates material is ch
	BH00199AS			2 00 /2 00	5938 5937				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	CU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7595	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%)	PERCENT RECOVERY (100% 0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5936	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 Sluff 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				
	BH00201AS			2 00 /2 00	5931	15				
					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	74[illegible]35	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	57694
EAST	2002495	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	ALLOWABLE INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5926	20				
				2 00 /2 00	5925	21				
					5924	22				
				2 00 /2 00	5923	23			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
					5922	24				
				2 00 /2.00	5921	25			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
					5920	26				
				2 00 /2.00	5919	27				
					5918	28				
				2 00 /2 00	5917	29			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
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	5945 20	PROJECT NUMBER	005-RFI/RI
NORTH 747595	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
EAST 2082495	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 50	DATE DRILLED	01/27/95
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN					

LOG OF BORING NUMBER

57694

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%							
					5916	30				
					5915	31				
				2 00 /2 00						
					5914	32				
									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
					5913	33				
				1.50 /2 00						
									CLAYSTONE	33 5'-36.5' Claystone. Dark gray (N3) Appears laminated where not strongly disturbed by Moss Sampler
					5912	34				No recovery (34 0-34.5')
					5911	35				
				2 00 /2 00						
					5910	36				
										Total Depth Drilled 36 50
					5909	37				
					5908	38				
					5907	39				
						40				

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

SAMPLE NUMBER	SAMPLE GRAIN SIZE	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	0% 50% 100%	0% 100%		0	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
		2 00 /2 00	5985	1		
			5984	2		
BH00128AS						
		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 / 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			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
					5975	11				
				2 00 /2 00						
					5974	12				
					5973	13				
	BH00131AS			2.50 /2.50	5972	14				
					5971	15			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
				2 00 /2 00	5970	16				
					5969	17				
				2 00 /2 00	5968	18			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
					5967	19				
				2 00 /2 00	5966	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT) 5985 90	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7509	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: 2.00 /2.00; 2.00 /2.00; 2.00 /2.00; 2.00 /2.00; 2.00 /2.00; 2.00 /2.00

DATUM (FT): 5965, 5964, 5963, 5962, 5961, 5960, 5959, 5958, 5957, 5956

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

WELL OR PIEZOMETER CONSTRUCTION

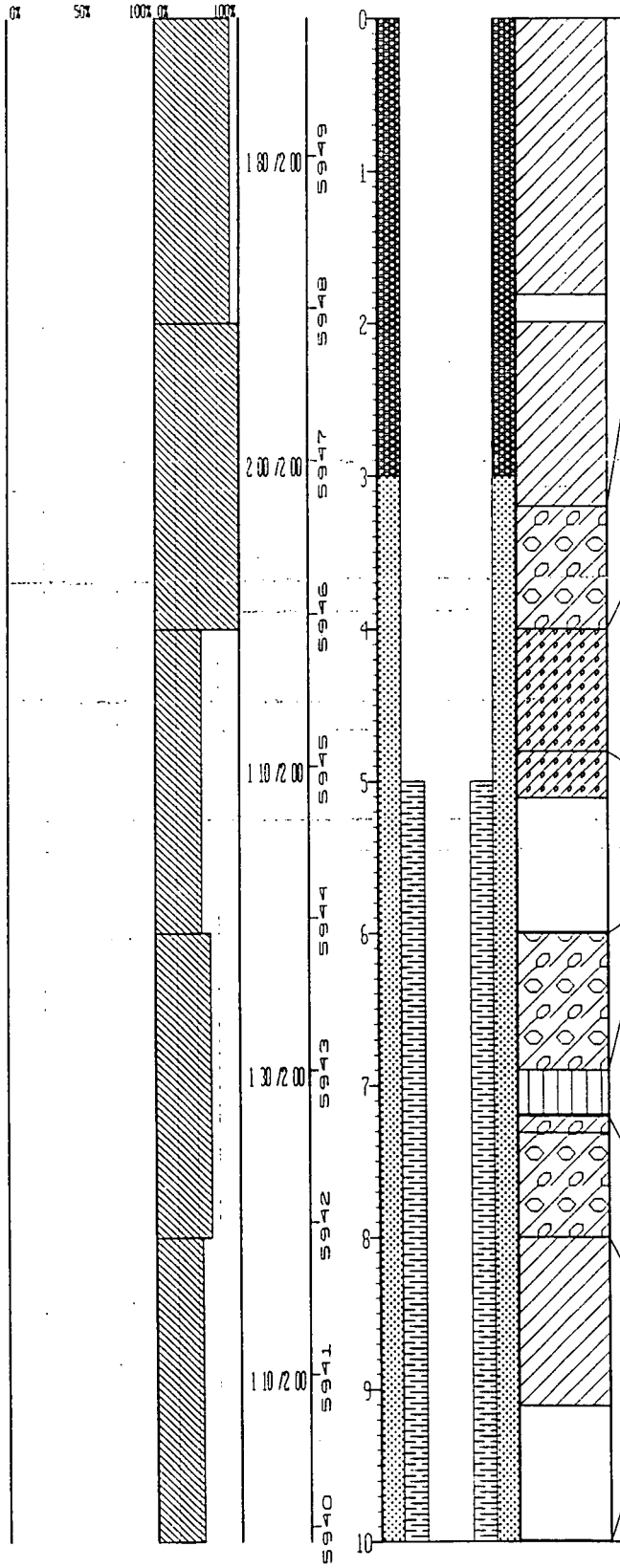
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 sedimentation 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'
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
	Total Depth Drilled 29 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5949 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747565	AREA THSS 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



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-angular, 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 30
Bottom of Filter Pack 10 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 00	GROUND ELEVATION (FT)	5939 80	PROJECT NUMBER	305-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%	1 00 /1 00	5939	0			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.
						1			CL	0 5'-1 0' Silty Clay with trace Sand. Dark yellowish brown (10 YR 4/2) Massive, very stiff, dry Some organic matter
	BH00944S			1 50 /2.00	5938	2			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')
	BH00947S				5937	3			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')
	BH00950S			1 00 /2.00	5936	4				
					5935	5				
	BH00946S			2.00 /2 00	5934	6			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)
					5933	7				
				2 00 /2 00	5932	8			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
					5931	9				
				2 00 /2 00	5930	10				

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)	6 50	GEOLOGIST	J W HARWELL	57994
EAST	2092266	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	005-RFI/RI
NORTH 747452	AREA IHSS 115	CASING DIAMETER (IN)	5 50	GEOLOGIST	L A HOST
EAST 2082247	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	8 40	DATE DRILLED	10/12/94

REMARKS: DRILLING EQUIPMENT HURRICANE. ASI RIG GEOLOGIST L A HOST

LOG OF BORING NUMBER

58094

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
		0% 50% 100%	0% 100%						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')
	GH0006LAS			1 00 /2 00 1 50 /2 00 2 00 /2 00 1 00 /2.00 0 90 /2 00	5929 5928 5927 5926 5925 5924 5923 5922 5921 5920	0 1 2 3 4 5 6 7 8 9 10	10/20/94 10/12/94		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 [illegible]	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 [illegible] RIG GEOLOGIST L A HOST

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
				1 90 /2 00	5919 5918 5917 5916 5915 5914 5913 5912 5911 5910	10 11 12 13 14 15 16 17 18 19 20			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
										Total Depth Drilled 11 90 Total Depth Casing 11.00 Bottom of Filter Pack 11 90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5928 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7493	AREA IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	58194
EAST	1382380	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL.

CRITICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER

SAMPLE GRAIN SIZE (0% 50% 100%)

PERCENT RECOVERY (0% 100%)

RECOVERY/INTERVAL: 0 00 /2 00; 1 20 /2 00; 2.00 /2 00; 1 60 /2.00

DATUM (FT): 5928, 5927, 5926, 5925, 5924, 5923, 5922, 5921, 5920, 5919

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

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

BH0062AS

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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
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')

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	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

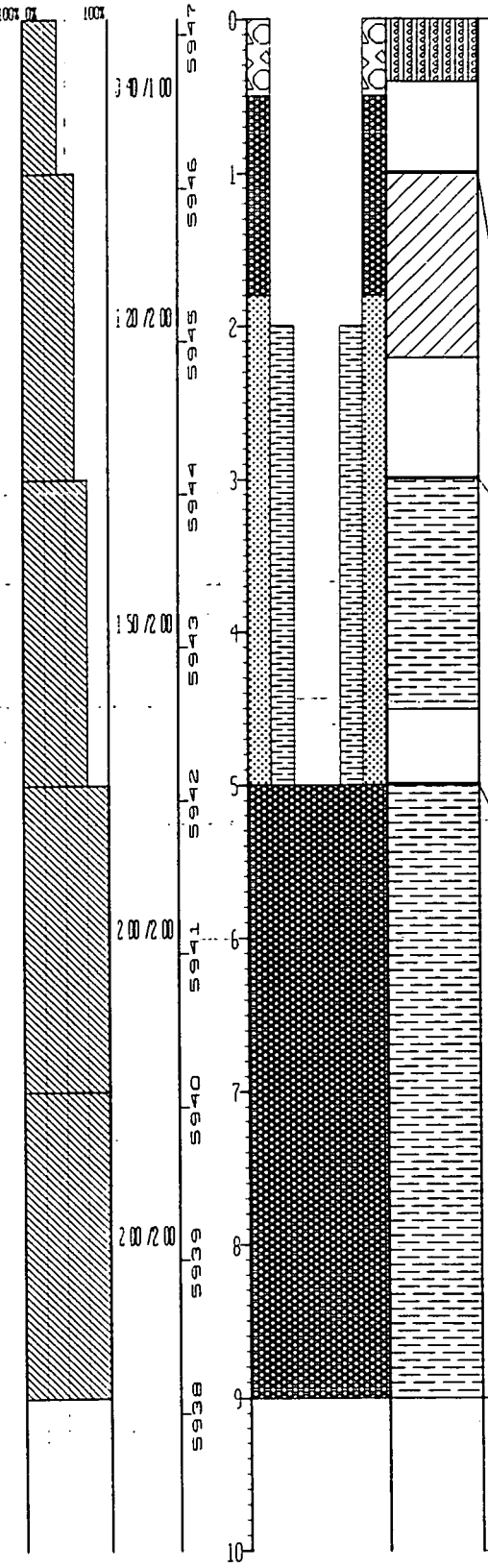
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE WASH LOSS	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT) / DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%	1 50 /2 00	5928 5927			SM	0 0'-1 5' Silty 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			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			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				Total Depth Drilled 4 00

0 1 2 3 4 5 6 7 8 9 10

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9 00	GROUND ELEVATION (FT)	5947 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747556	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



BH00050AS
BH00048AS
BH00049AS

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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')
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')
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.

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	905-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	

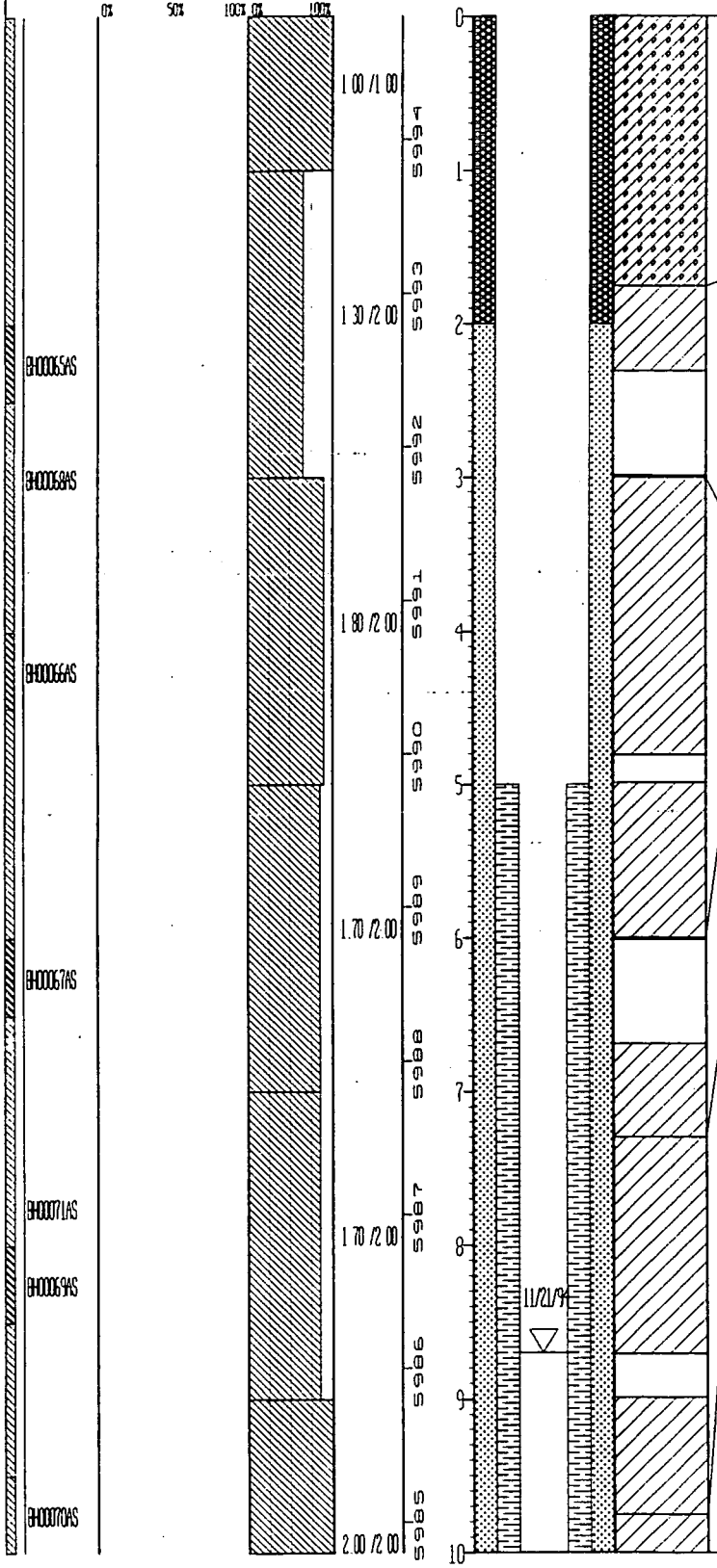
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AND HS AUGER ASI RIG GEOLOGIST J W HARWELL ALL OF CORE WAS TAKEN FOR SAMPLES BH00223AS THROUGH BH00227AS SAMPLE DESCRIPTION TAKEN FROM WELL SITE FIELD LOG AND LOG OF 57194

CHEMICAL SAMPLE / GRADATIONAL	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00223AS			1 00 /1 40	5997	0			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	1				
				0 00 /0 40	5995	2				
				0 00 /0 50	5994	3				
	BH00225AS			0 50 /1 60	5993	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'
				0 00 /0 10	5992	5			NO RECOVERY	4 3'-5 5' Estimated Top of weathered Bedrock at 5 3' from 57194. No recovery (4 3-5 5')
	BH00226AS			1 75 /2 00	5991	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')
	BH00227AS			1 75 /2 00	5990	7			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')
					5989	8				
					5988	9				Total Depth Drilled 9 50 Total Depth Casing 7 40 Bottom of Filter Pack 7 40
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT)	5994 90	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



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

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

No recovery (2 3-3 0')

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

No recovery (4 8-5 0')

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')

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

No recovery (8 7-9 0')

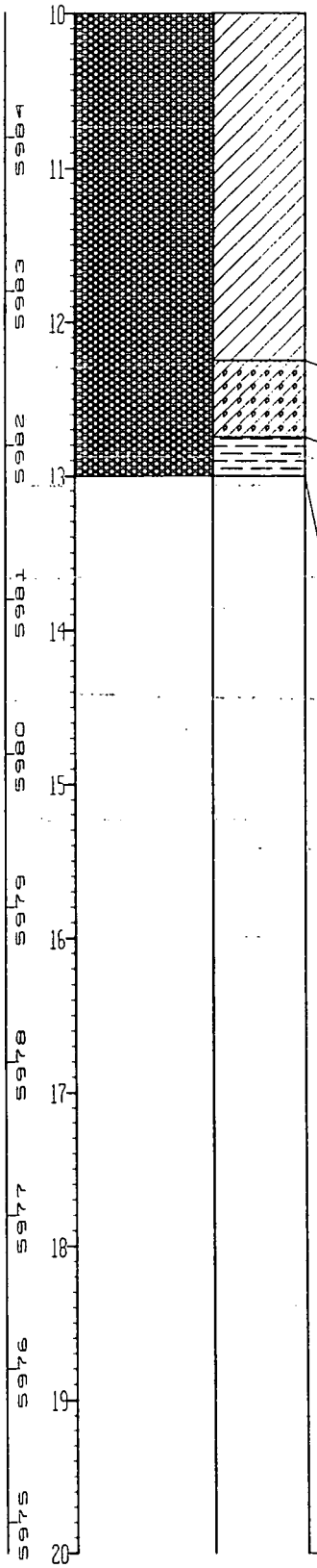
CL 9 75'-12.75' Clay Light olive gray (5 Y 6/1) to med light gray (N6), some dark yellowish orange (10 YR 6/6) where FeO stained Some Mn staining. Staining mottled in appearance Some organics FeO along almost vertical fractures Core dry to moist Bedding massive Slightly friable Sand and gravel from 12.4-12.5'
93% clay, 3% silt

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT) 5994 80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7922	AREA IHSS 115	CASING DIAMETER (IN) 0 50	GEOLOGIST J W HARWELL	58494
EAST	3022460	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
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



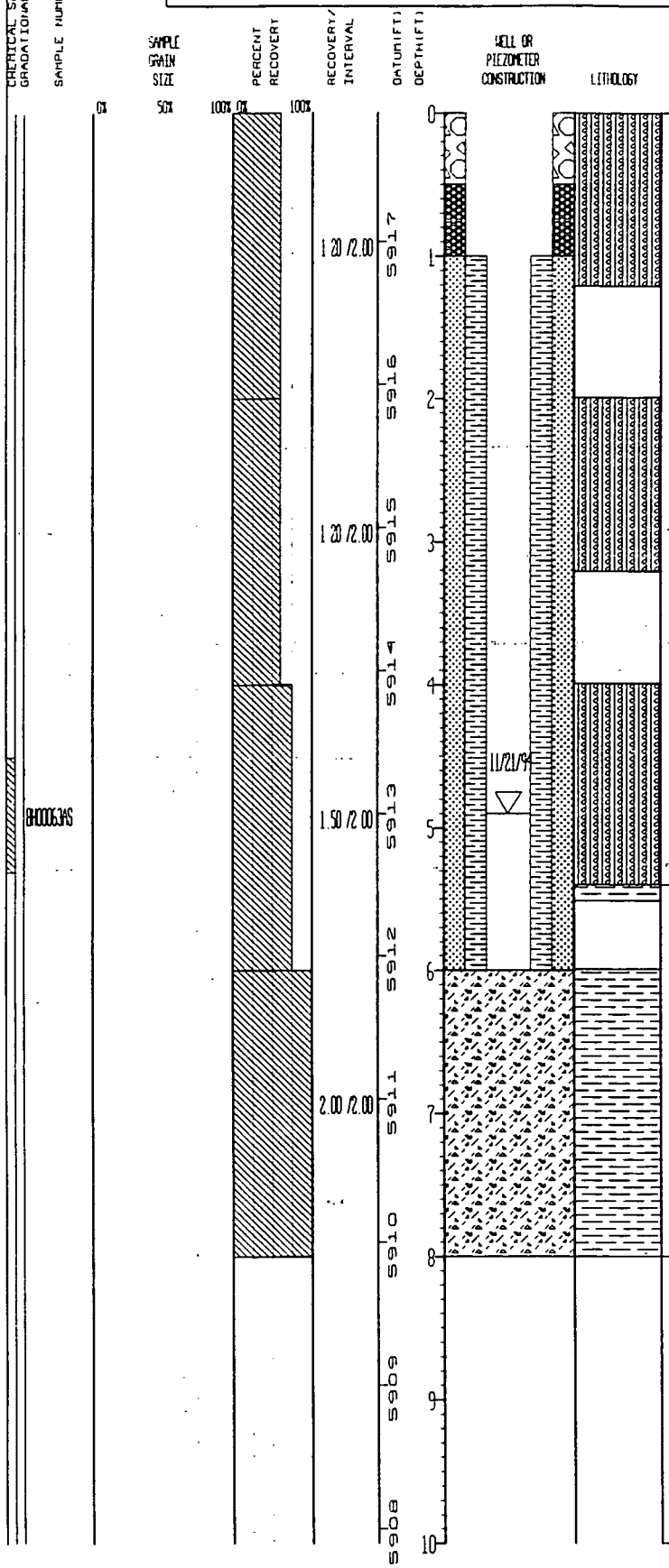
2 00 /2 00

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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.

Total Depth Drilled 13.00 Total Depth Casing 10 00
Bottom of Filter Pack 10 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	[illegible]7 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747519	AREA IHSS 115	CASING DIAMETER (IN)	[illegible] 50	GEOLOGIST	J W HARWELL	58594
EAST	2082791	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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	OU5-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	

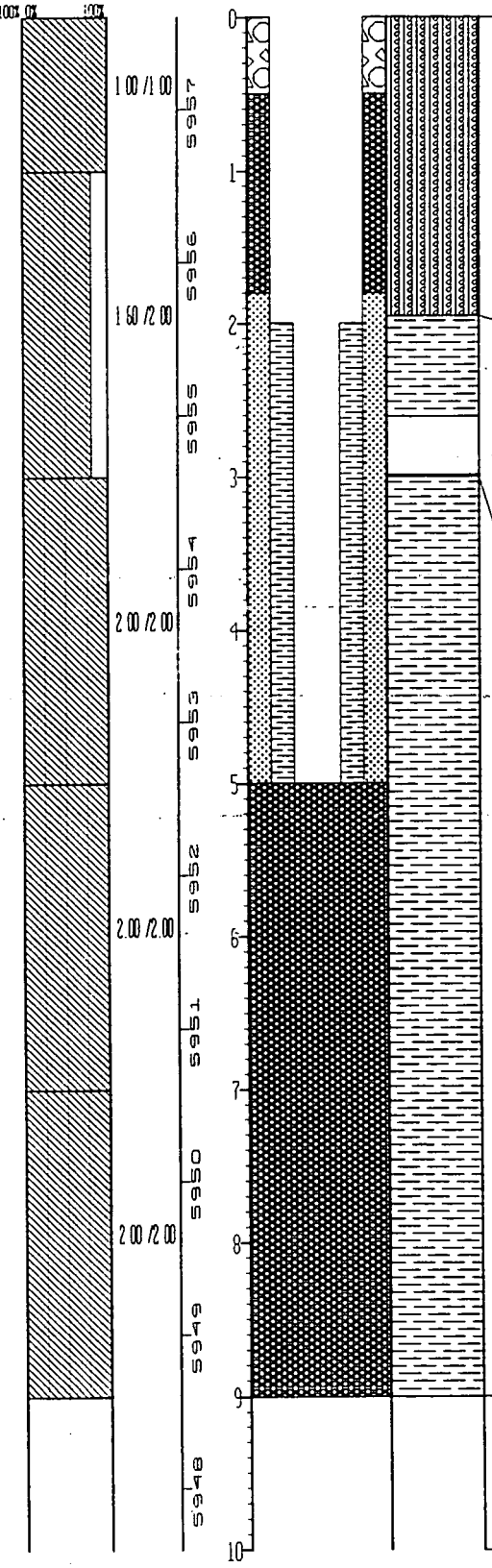
REMARKS DRILLING EQUIPMENT HURRICANE AST RIG GEOLOGIST J W HARWELL

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
	GH00052AS			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')
	GH00051AS			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				
					5951	7				
					5950	8				
					5949	9				Total Depth Drilled 9 00 Total Depth Casing 5 00 Bottom of Filter Pack 5 00
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9 00	GROUND ELEVATION (FT)	5957 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747703	AREA IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	58794
EAST	2082782	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



SAMPLE NUMBER: BH00054AS, BH00053AS

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. Fe8 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 [illegible]-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 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
	BH00644S			1 30 /2 00	6043	1			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')
				2 00 /2 00	6041	3			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
				1 30 /2.00	6039	5			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')
				2.00 /2 00	6037	7				
					6036	8				Total Depth Drilled 8 00
					6035	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT)	5952 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA THSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	58994
EAST	2081476	LOCATOR NUMBER E7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	12/05/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST P J JORDAN

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
				0 50 /2 00	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 00 /1 00	5951	1				
				0 50 /1 00	5950	2				
				0 00 /0 30	5949	3				
				1 00 /2.00	5948	4				
				1.60 /2.50	5947	5			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')
				0 00 /0 50	5946	6				
	BH0126AS				5945	7				
					5944	8				
					5943	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT) 5952 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	58994
EAST	2081476	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 12/05/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

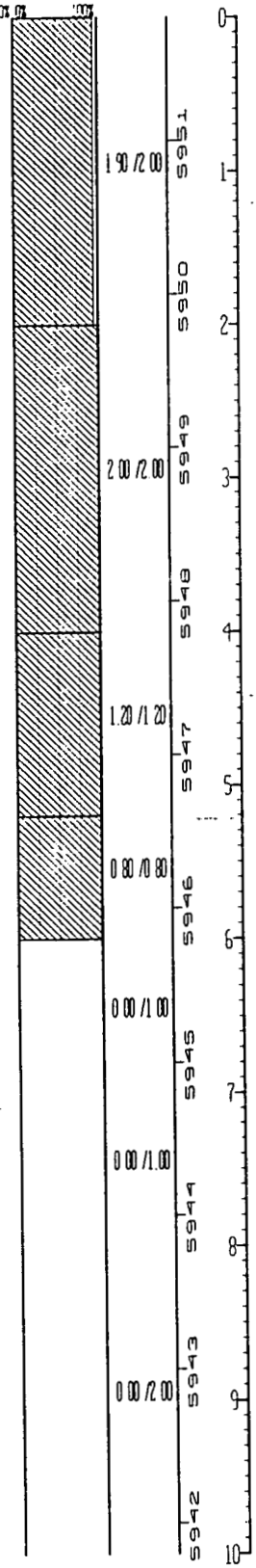
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00127AS	0% 50% 100%	0% 100%	1 80 /1 80	5942	10			SILTY CLAYSTONE	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
				1 30 /1 30	5941	11				No recovery (12 4-13 3'), and (14 6-14 8')
				0 00 /0 90	5940	12				
				0 80 /1 00	5939	13				
				2 00 /2 00	5938	14				
				1 50 /2 00	5937	15				
				1 00 /1 00	5936	16			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
					5935	17				No recovery (17 8-18 3')
					5934	18				
					5933	19				
						20				Total Depth Drilled 19 30

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 17 00	GROUND ELEVATION (FT)	5951 80	PROJECT NUMBER	005-RFI/RI
NORTH 7-7565	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
EAST 1081609	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	01/30/95

LOG OF BORING NUMBER 59094

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

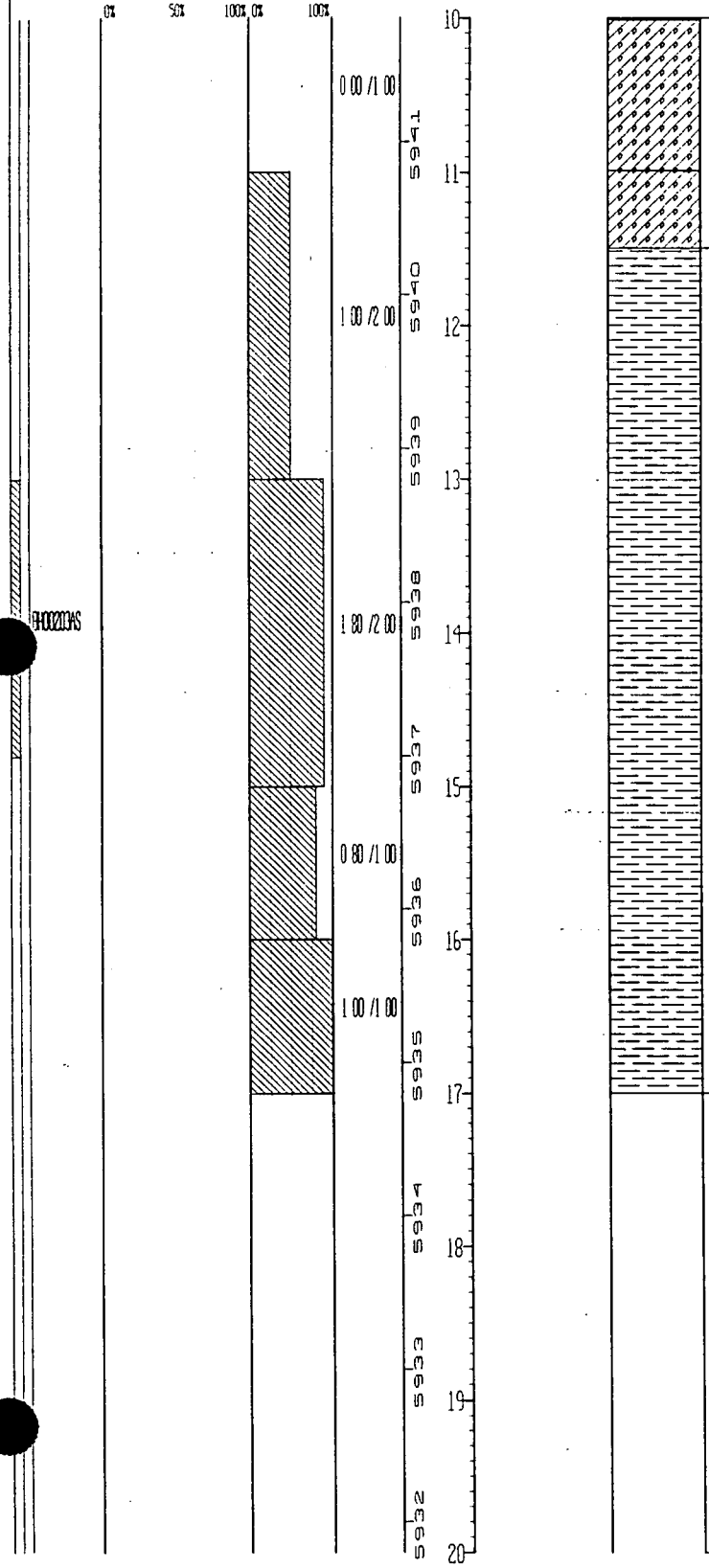


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-2 2' Gravelly Sand with some Clay and trace Silt Mod brown (5 YR 3/4) to pale yellowish orange (10 YR 8/6) Grades to pale olive (10 Y 6/2) matrix with some mod yellowish brown (10 YR 5/4) at 1.0' Gravel is fine to coarse, max 3 0 in, avg 0.50 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% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION

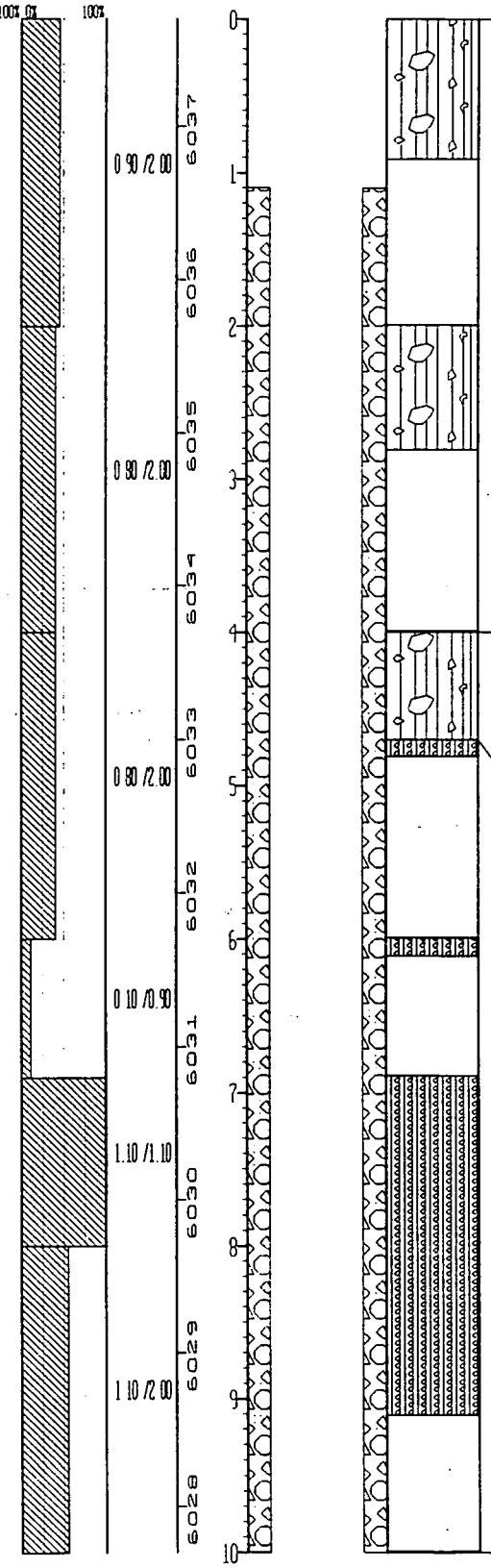


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	11 0'-11 5' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 0 0'-1.9').
CLAYSTONE	11.5'-17 0' Top of Bedrock at 11.5'. Claystone with some f g Sand. Dark yellowish brown (10 YR 4/2) grades to olive gray (5 Y 4/1) 11.5'-12 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) 5037 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

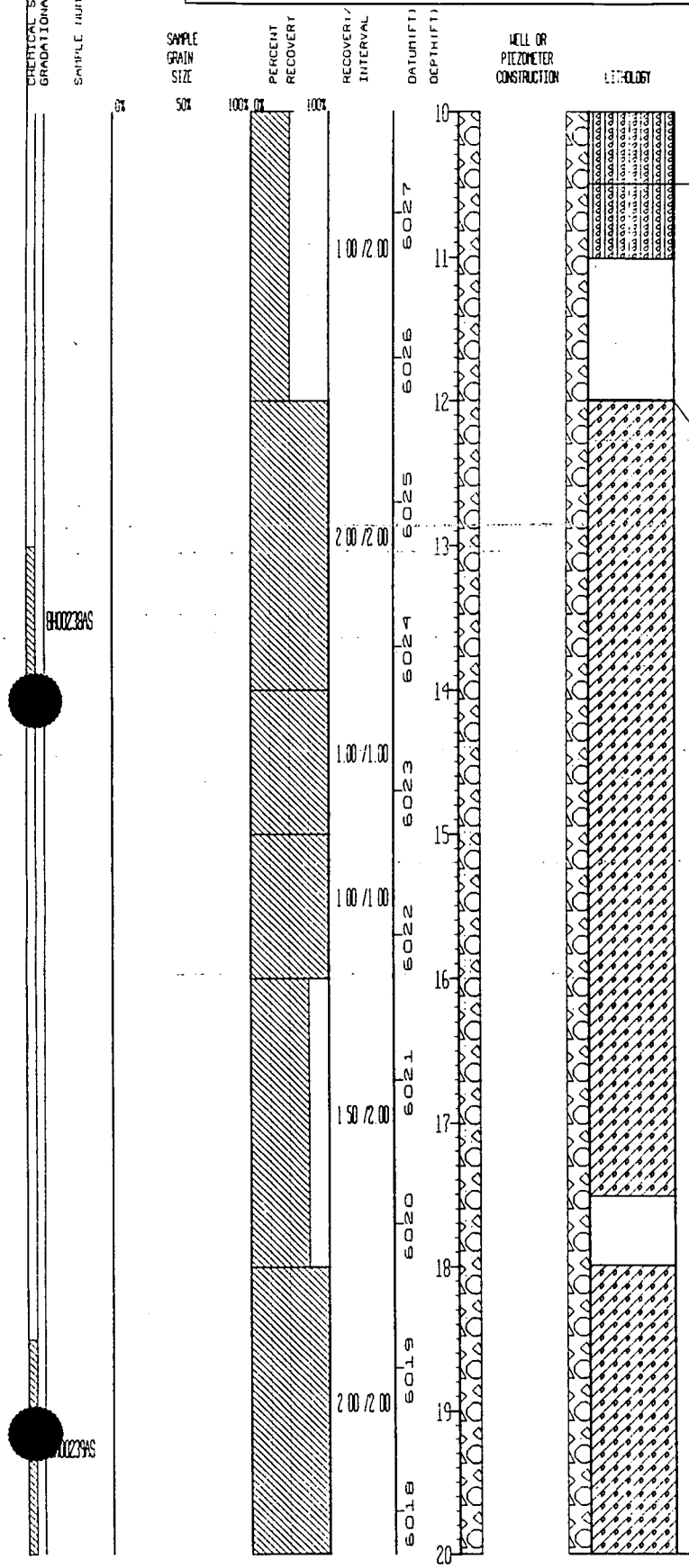
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



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

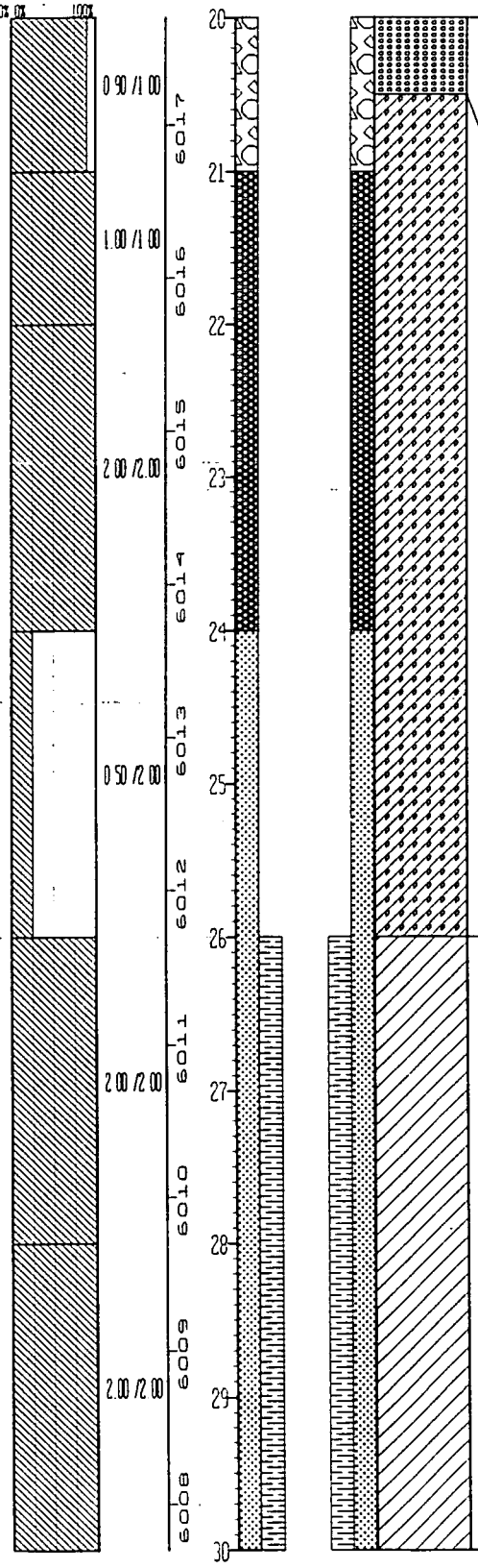


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	10.5'-11.0' Gravelly Sand with some Clay and trace Silt (bottom of waste/fill material) Dusky yellowish brown (10 YR 4/2) Moist to wet with glass fragments Trace graphite 40% gravel, 50% sand, 2% silt, 8% clay No recovery (11.0-12.0')
SC	12 0'-20.0' 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 | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



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) [illegible]37 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]97	AREA IHSS 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	59194
EAST 2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	02/08/95	

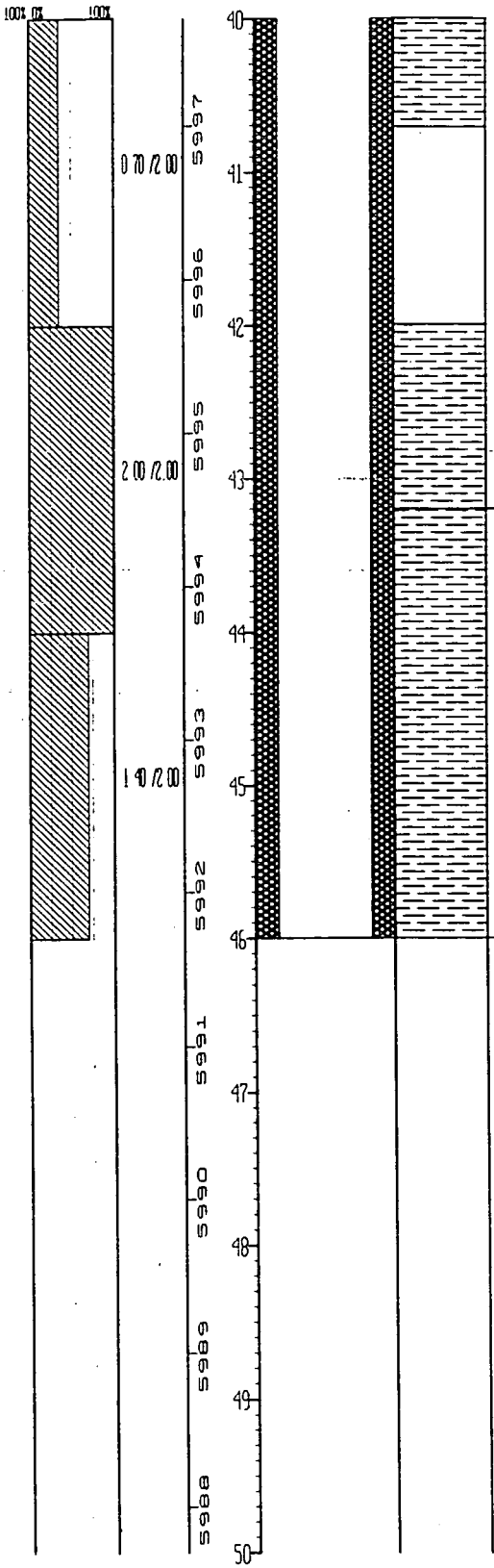
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN OPEN HOLE INSTALLATION

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
				1 40 /2 00	6007	30			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')
					6006	31				
						32				
				2 00 /2 00	6005	33	03/16/95			
					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').
	BH00241AS			0 90 /1 00	6003	35				
				0 90 /1.00	6002	36				
				2 00 /2 00	6001	37			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')
	BH00242AS				6000	38				
				2 00 /2 00	5999	39				
					5998	40				

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	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
PERCENT RECOVERY
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) 5990 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 DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	0–1			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')
					5979	2				
				1 30 /2 00	5978	3			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')
					5977	4				
				1.50 /2.00	5976	5			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')
					5975	6				
				1 20 /2.00	5974	7			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')
					5973	8				
				1 00 /2.00	5972	9			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')
					5971	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT) 5980 80	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747591	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 AST 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
	BH00170AS			1 90 /2 00	5970	10			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	11				
						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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7591	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	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				
				21				
		2 00 /2.00	5959	22				
			5958	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) No recovery (24.5-25 0')
		1 50 /2.00	5957	24				
			5956	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 No recovery (29 7-30 0')
		2 00 /2.00	5955	26				
			5954	27				
		2 00 /2.00	5953	28				
			5952	29				
		0 70 /1 00	5951	30				

94001736

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: 2 00 /2 00

WELL OR PIEZOMETER CONSTRUCTION

DATUM (FT)	DEPTH (FT)	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
5980	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
5979	31			
5978	32			Total Depth Drilled 32 00 Total Depth Casing 19 00 Bottom of Filter Pack 19 00
5977	33			
5976	34			
5975	35			
5974	36			
5973	37			
5972	38			
5971	39			
	40			

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5955 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
		% 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)	5955 30	PROJECT NUMBER	OU5-RFI/RI
NORTH	[illegible]7725	AREA IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	1082699	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94

[illegible] 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	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%		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	7-7725	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) 39 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 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
					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	305-RFI/RI
NORTH	747725	AREA INSS 115		CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	2082699	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5.50	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
						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	305-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7725	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	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%			50				
					5915					
						51				
					5914					
						52				
					5913					
						53				
					5912					
						54				
					5911					
						55				
					5910					
						56				
					5909					
						57				
					5908					
						58				
					5907					
						59				
					5906					
						60				

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)	1 00	GEOLOGIST	J W HARWELL
EAST 1082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94

LOG OF BORING NUMBER

59394

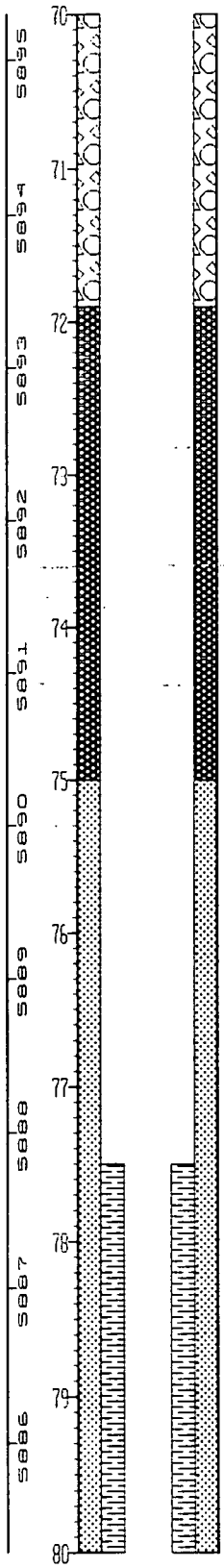
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5905	60				
					5904	61				
					5903	62				
					5902	63				
					5901	64				
					5900	65				
					5899	66				
					5898	67				
					5897	68				
					5896	69				
						70				

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 AST 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



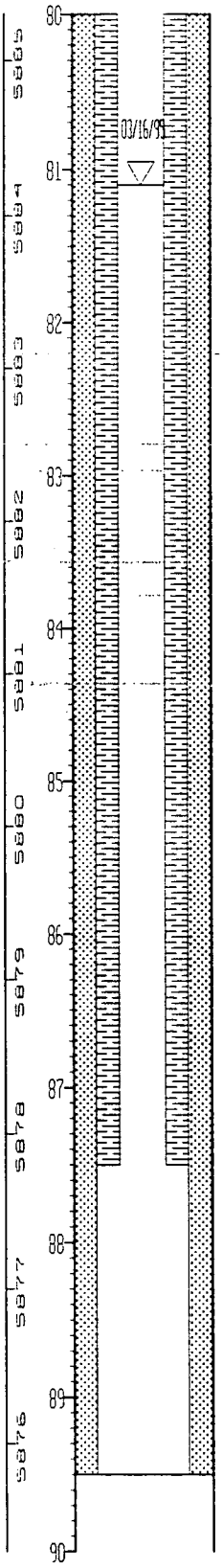
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50		GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	115-RFI/RI
NORTH	747725	AREA IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	2082699	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/12/94

LOG OF BORING NUMBER 59394

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST 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 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



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')
					6025	1				
					6024	2				
				1 40 /2 00	6023	3			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									
	BH00150AS									
					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')
				0 90 /2 00	6021	5				
	BH00151AS									
					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')
				1 60 /2.00	6019	7				
	BH00153AS									
					6018	8				
	BH00155AS			0.40 /2 00	6017	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 90	GROUND ELEVATION (FT)	6026 20	PROJECT NUMBER	005-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 DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				
	BH0015HS									
				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
	BH0015GS				6013	13				
					6012	14				No recovery (16.3-17.9') and (17.9-19 9')
	BH0015QS BH0016QS			2.10 /2.00	6011	15				
	BH0015HS				6010	16				
				0 40 /2.00	6009	17				
	BH0015RS				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	905-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			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	6045	1			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)
				1 30 /2 00	6044	2				No recovery (3 5-4 0')
				1.50 /2.00	6043	3			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)
				0 00 /0 50	6042	4				No recovery (5.3-6 0').
				0 50 /0.40	6041	5			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
				1 10 /1 10	6040	6				No recovery (7.5-8.5'), (17 2-18 0') and (19 0-20 0')
					6039	7				No recovery (21.0-22.0')
	GH00132AS				6038	8				
					6037	9				
						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	2281244	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

CRITICAL 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%							
				1 00 /1 00	6036	10				
	EH00134AS					11				
	EH00133AS			1 00 /1.00	6035					
						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				

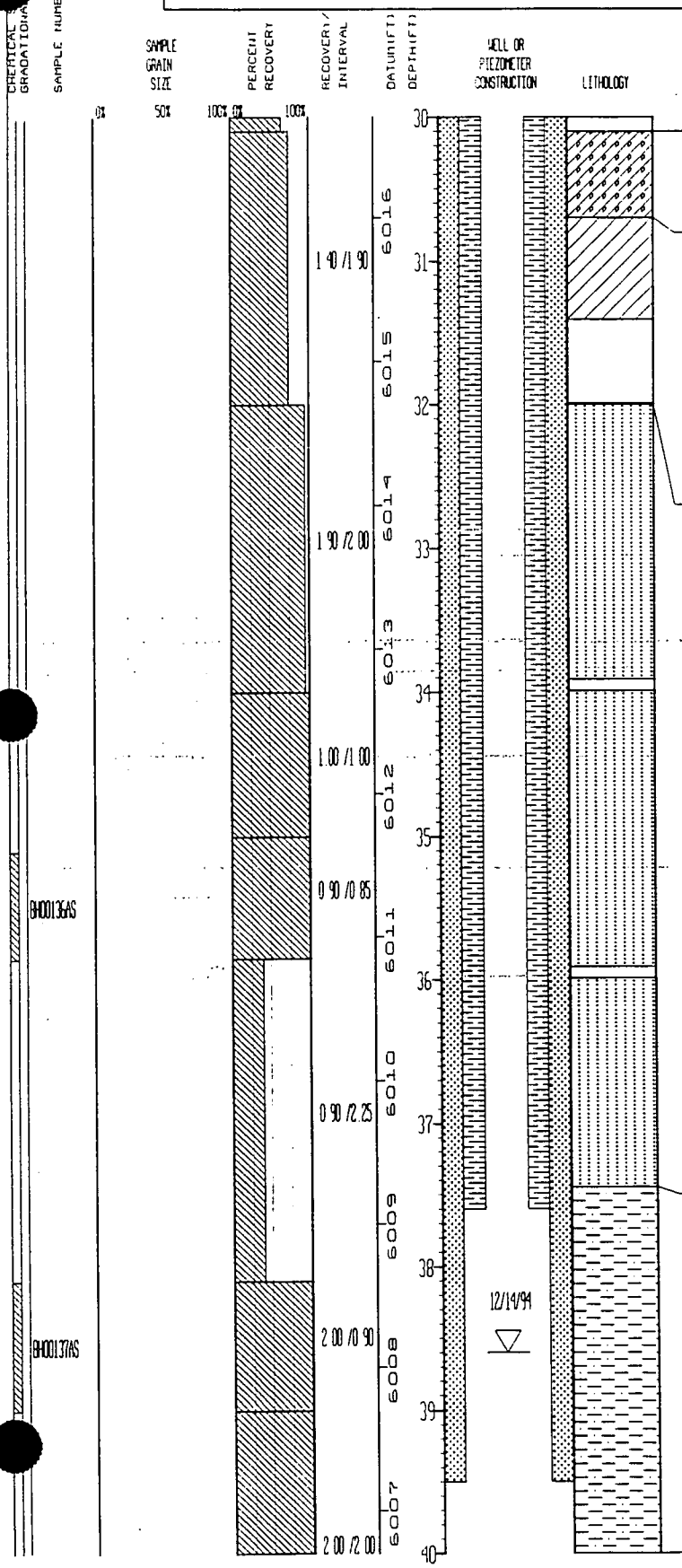
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 41 00	GROUND ELEVATION (FT) [illegible] 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747981	AREA IHSS 115	CASING DIAMETER (IN) [illegible] 30	GEOLOGIST	L A HOST	59594
EAST	2081244	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) [illegible] 30	DATE DRILLED	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
		0% 50%	100% 0% 100%	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 carbonceous 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
					6023	23				
						24				No recovery (26 4-26 5')
					6022					Note Classification and percentages changed based on mechanical sieve and hydrometer results from BH00135AS
	BH00135AS			2 40 /2 50	6021	25				
						26				
				1 00 /1 00	6020	27				
				0 60 /0 60	6019	28				
				1 30 /2 00	6018	29	12/12/94			
					6017	30			NO RECOVERY	No recovery (29 4-30 1')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 41 00	GROUND ELEVATION (FT)	6046 70	PROJECT NUMBER	[illegible]	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.



SC 30.1'-30 7' Clayey Sand. Same as above (reference interval 6 0'-10.0')

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

No recovery (31.4-32 0')

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

No recovery (33 9-34.0') and (35 9-36 0')

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

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 2 00 /2 00

DATUM (FT) 6006 6005 6004 6003 6002 6001 6000 5999 5998 5997

DEPTH (FT) 41 42 43 44 45 46 47 48 49 50

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

Total Depth Drilled 41 00 Total Depth Casing 39 60
Bottom of Filter Pack 39 50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT) 5997 00	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7750	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	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%		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')
				2 00 /2 00	5996	1				
				0 50 /1.00	5995	2				
	BH00211AS				5994	3				
				1 60 /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				
				2.00 /2 00	5991	6			SC	5 0'-7 0' Clayey Sand with some Gravel Same as above (reference interval 0 0'-4 6')
					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
	BH00215AS									
	BH00212AS			2 00 /2 00	5989	8				
					5988	9				
				1 80 /2.00		10				

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 17	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/03/95	

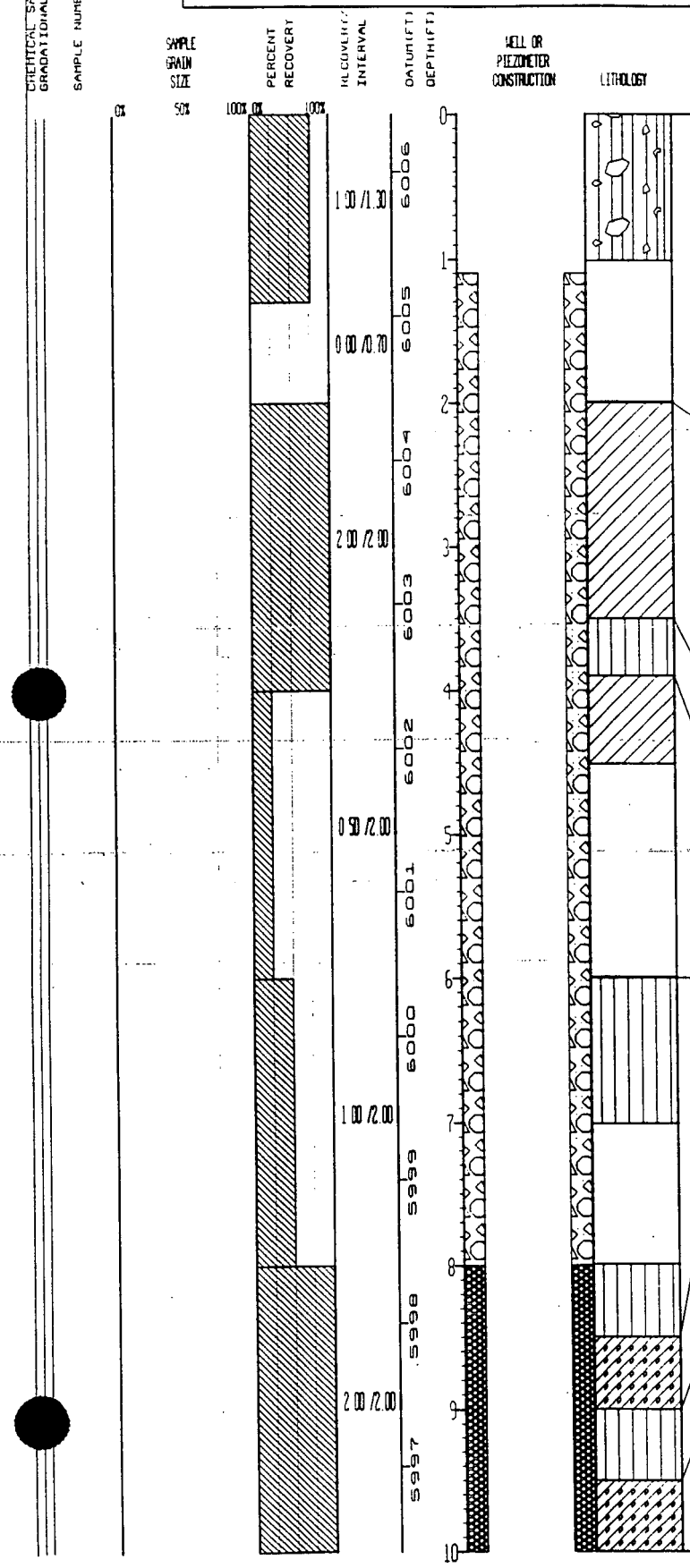
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN OPEN HOLE, DRY INSTALLATION

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
	BH00213AS			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 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	5986	11	03/16/95			
	BH00214AS			1 10 /2 00	5985	12			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 No recovery (14 1-15 0')
				2 00 /2.00	5984	13			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
				0.90 /1 00	5983	14			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 No recovery (17 9-18 0') and (19 8-20.0')
				1 80 /2 00	5982	15				
					5981	16				
					5980	17				
					5979	18				
					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	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
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)	5006.40	PROJECT NUMBER	005-RFI/RI
NORTH	747922	AREA	IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	P. J. JORDAN
EAST	2081635	LOCATOR NUMBER	17	BOREHOLE DIAMETER (IN)	6.50	DATE DRILLED	01/09/95

LOG OF BORING NUMBER **59794**

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				
				2.00/2.00	5996	11				10.0'-11.0' Sandy Silt Waste/fill material Black Graphite Fill Abundt. glass fragments
				0.20/0.50	5995	12				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')
				0.00/0.50	5994	13				
				2.00/2.00	5993	14				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
				2.00/2.00	5992	15				
				2.00/2.00	5991	16				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
	BH00178AS			1.00/1.00	5990	17			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
				0.80/0.80	5989	18				
				2.00/2.20	5988	19				
					5987	20				

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 17	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/09/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

CRITICAL SAMPLE DEPTH / GRADATIONAL 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
	GH00179AS			2 00 /2 00	5986 5985 5984	20 21 22			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 5979 5978 5977	26 27 28 29 30				Total Depth Drilled 25.20 Total Depth Casing 23 00 Bottom of Filter Pack 23 00

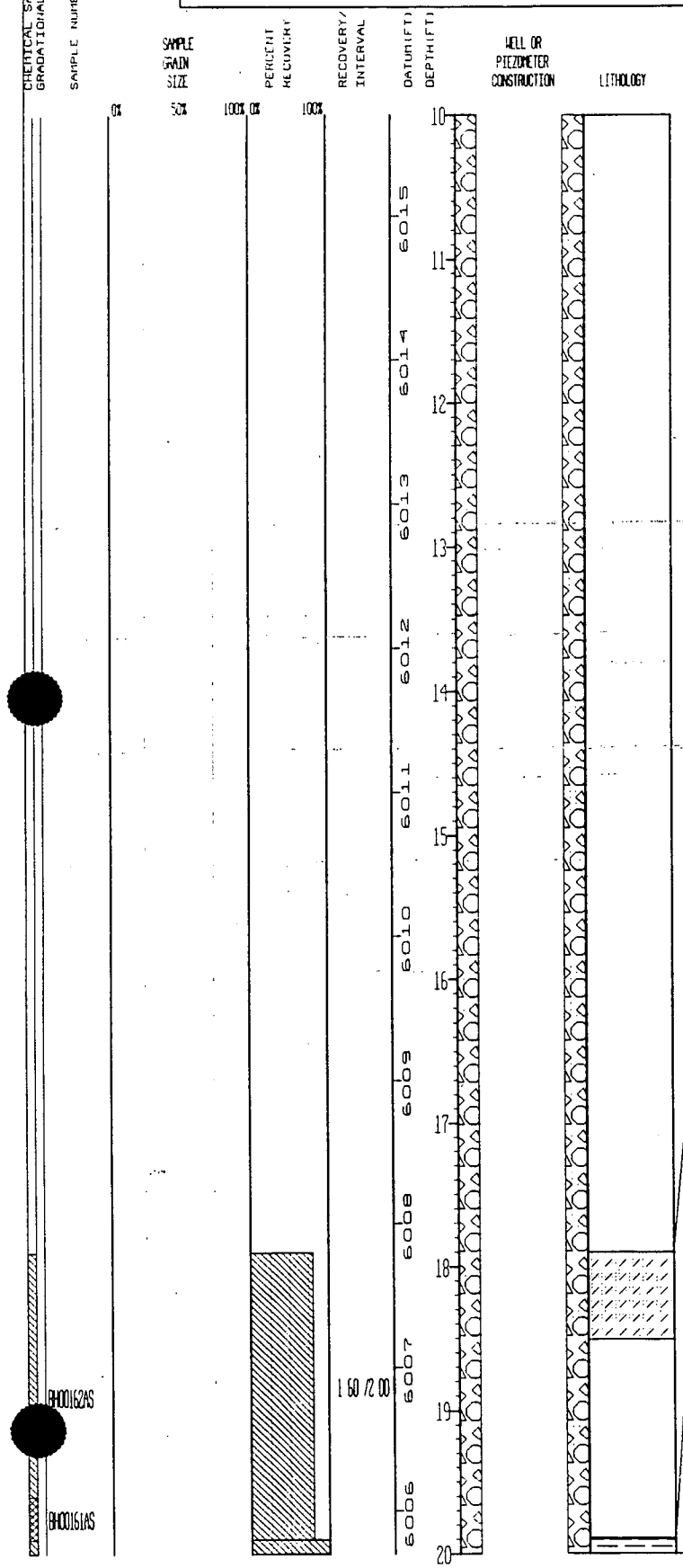
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 6025 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/16/94	

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) 5825 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7728	AREA THSS 115	CASING DIAMETER (IN) 2 50	GEOLOGIST	J W HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5 50	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'



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 extremely 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, 98% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 5525 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 5 00	GEOLOGIST J W HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED 12/16/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST 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	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	6005	20				
					6004	21				
				2 00 /2 00	6003	22				
					6002	23				
				2 00 /2 00	6001	24				
					6000	25				
	GH00164AS			2 00 /2 00	5999	26				
					5998	27				
				2 00 /2 00	5997	28			CLAYSTONE	28 3'-31 9' Top of Unweathered Bedrock at 28 3' Claystone Dark gray (N3) Core dry to moist Trace of carbonaceous material Slightly friable Bedding thinly laminated, horizontal to 2 degree angle Trace of calcareous material Core dry to moist 3% silt, 97% clay
					5996	29				No recovery (31 9-33.9')
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 6025 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7728	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-53 AST 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	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	5995	30				
					5994	31				
				0.00 /2.00	5993	32				
					5992	33				
					5991	34			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.
				5 00 /5.00	5990	35				
					5989	36				
					5988	37				
					5987	38				
					5986	39				
						40				

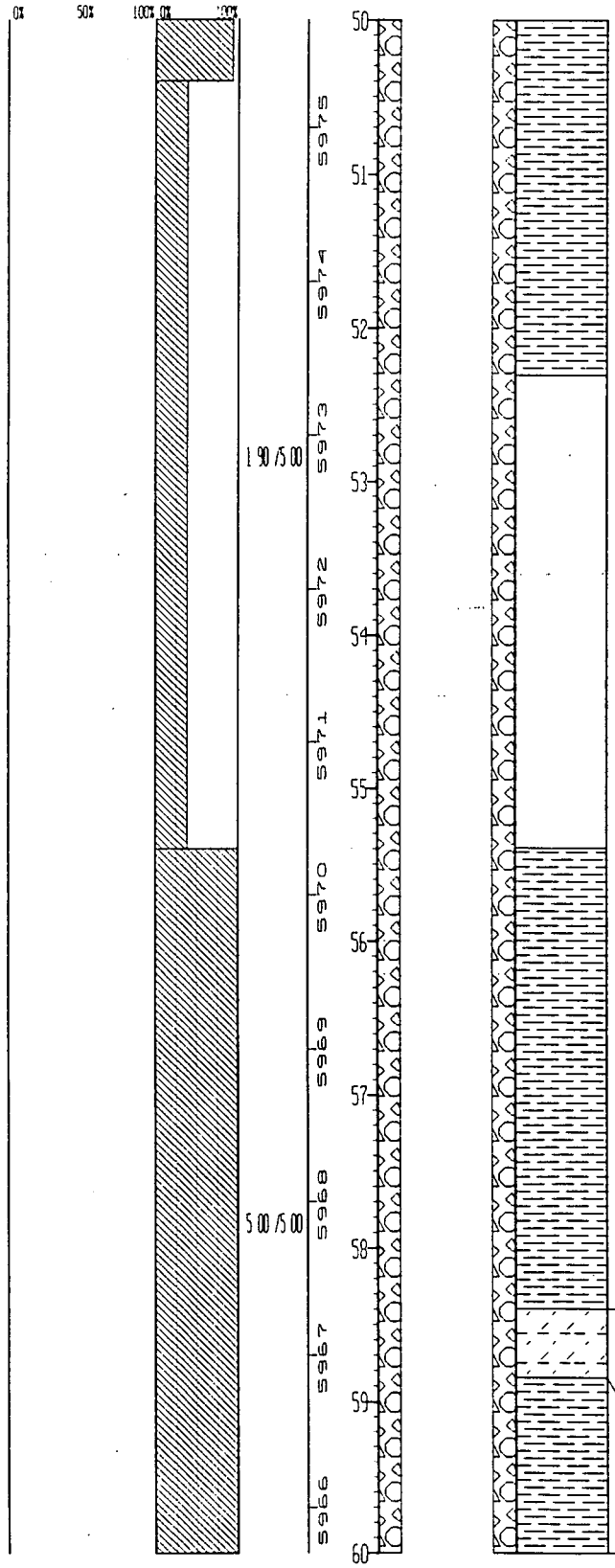
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 6025.70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2.90	GEOLOGIST J. W. HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5.50	DATE DRILLED 12/16/94	

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	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%			40				
					5985	41			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
				5.00/5.00	5984		01/14/95 ▽			
					5983	42				
					5982	43			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'
					5981	44				
					5980	45				
				5.00/5.00	5979	46	03/16/95 ▽			
					5978	47				
					5977	48				
					5976	49			CLAYEY SILTSTONE	48.6'-48.9' Clayey Siltstone. Same as above (reference interval 40.5'-42.8'). Some FeO staining, weathered.
				1.40/1.50					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')
						50				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT)	6025 70	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	59894
EAST	1080724	LOCATION 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'

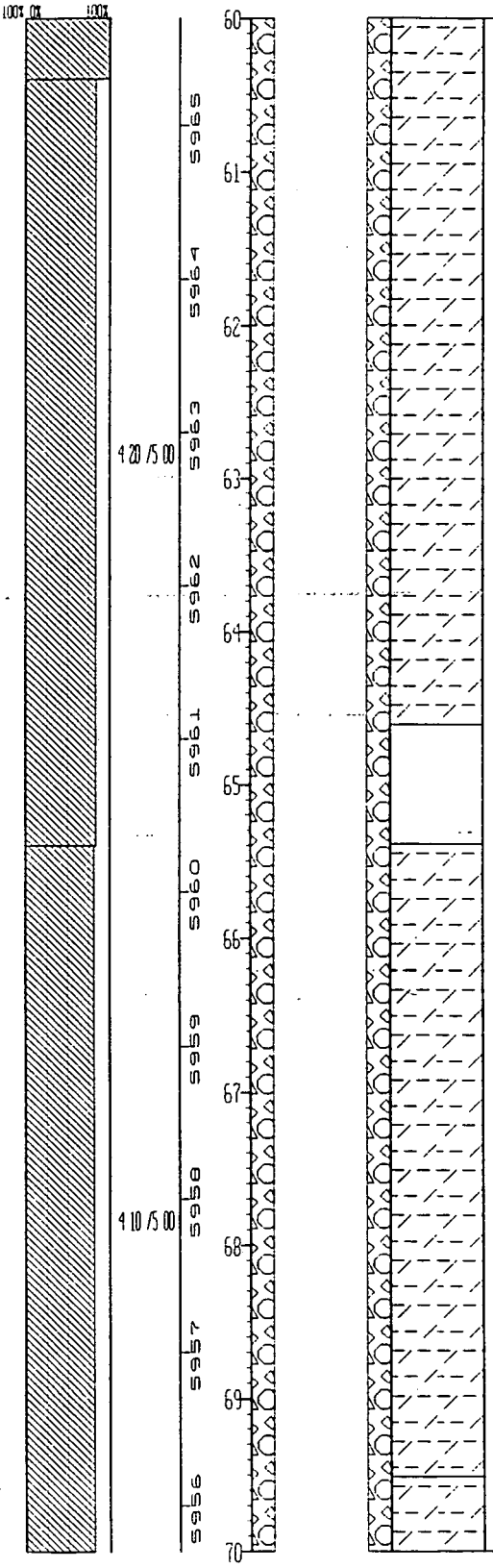


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	58 4'-58 85' Clayey Siltstone interbed Med dark gray (N4) to light olive gray (5 Y 6/1) Bedding massive Well cemented Trace fossil (root cast or burrow)
CLAYSTONE	58 85'-60 0' Claystone Same as above (reference interval 42 8'-48 6')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 122 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 W7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/16/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ESI 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



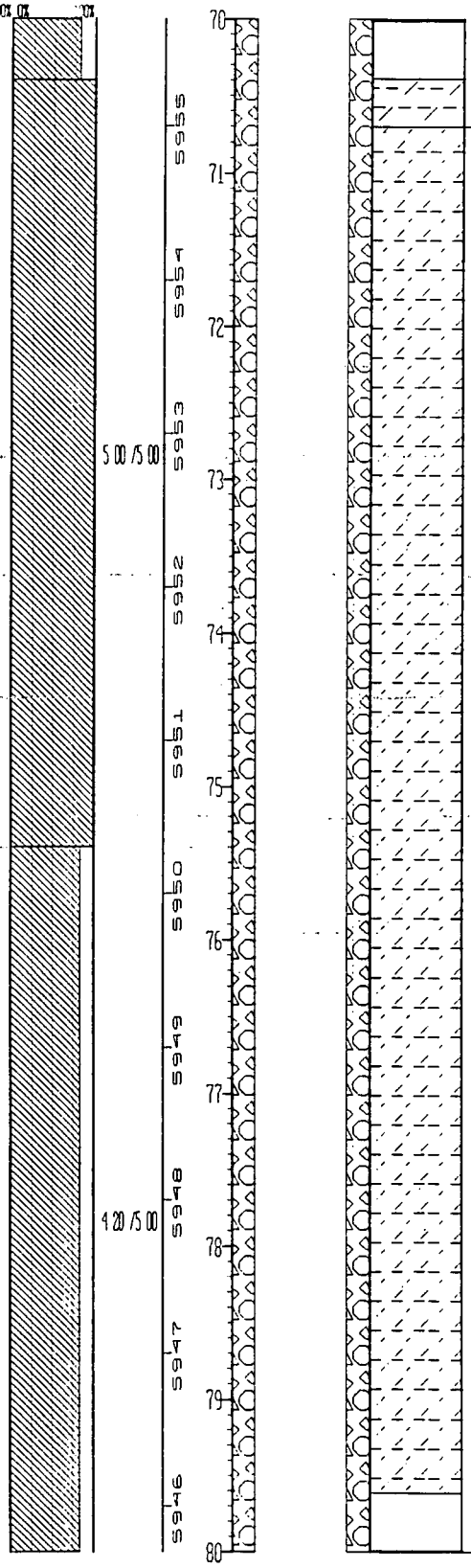
SILTY CLAYSTONE 60 0'-70 7' Silty Claystone Med dark gray (N4) to light olive gray (5 Y 6/1) Thinly bedded Some crossbedding observed in thin siltstone interbeds Some iron staining along siltstone interbeds Mod. porosity Mod hard Some soft sediment deformation structures

No recovery (64 6-65 4') and (69 5-70 4')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT)	6025 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7728	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	59894
EAST	080724	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 70 7'-79 6' Clayey Siltstone Med dark gray (N4) to light olive gray (5 Y 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')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 5025 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7728	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: 2 10 /2 10; 4 10 /5 00; 4 80 /5 00

DATUM (FT): 5945, 5944, 5943, 5942, 5941, 5940, 5939, 5938, 5937, 5936

DEPTH (FT): 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

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) 5025 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 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%	4 80 /5 00	5935	90				
					5934	91				
					5933	92				
					5932	93			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'
				5 00 /5 00	5931	94				
					5930	95				
					5929	96				
					5928	97				
					5927	98				
				3 90 /5 00	5926	99				
						100				

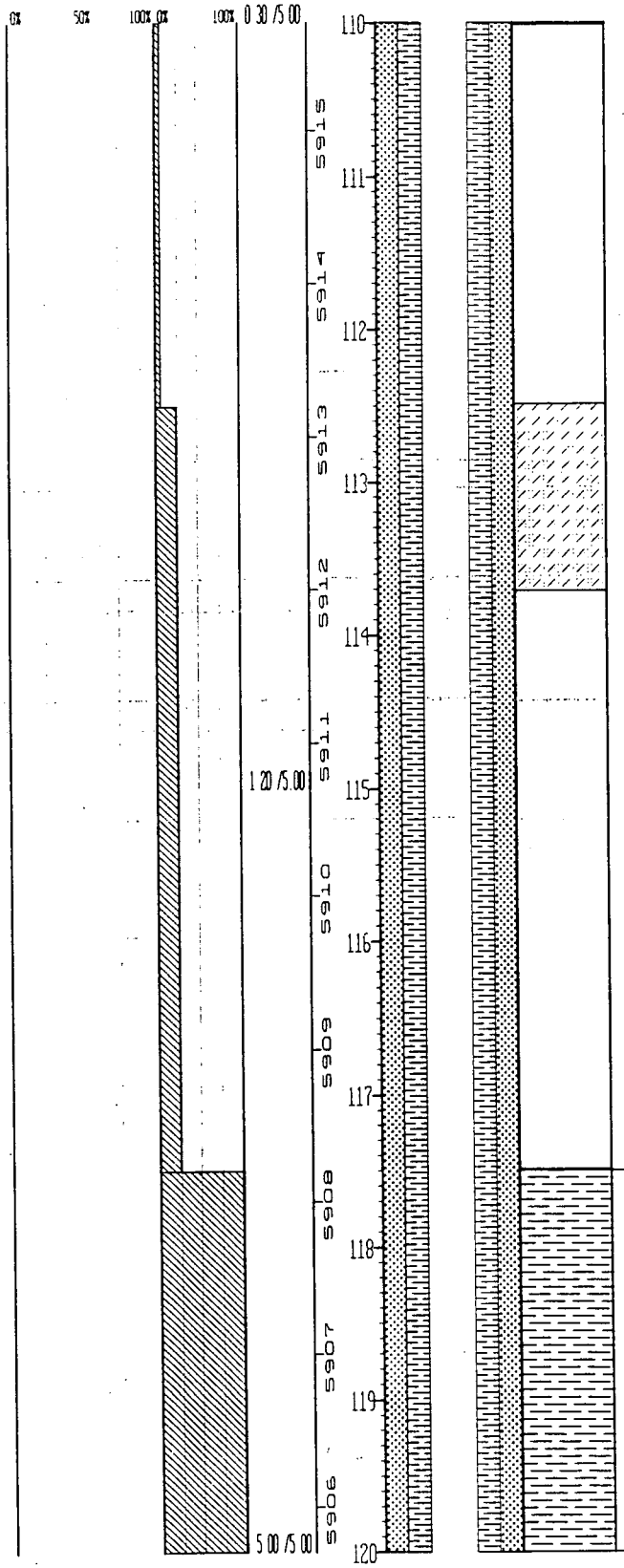
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 5625 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/16/94	

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	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%	3 90 /5 00	5925	100			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')
					5924	101				
					5923	102				
					5922	103				
				4 30 /5 00	5921	104				
					5920	105				
					5919	106				
					5918	107				
					5917	108				
				0 30 /5 00	5916	109				
						110				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132.50	GROUND ELEVATION (FT) 5025.70	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) 5.50	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'

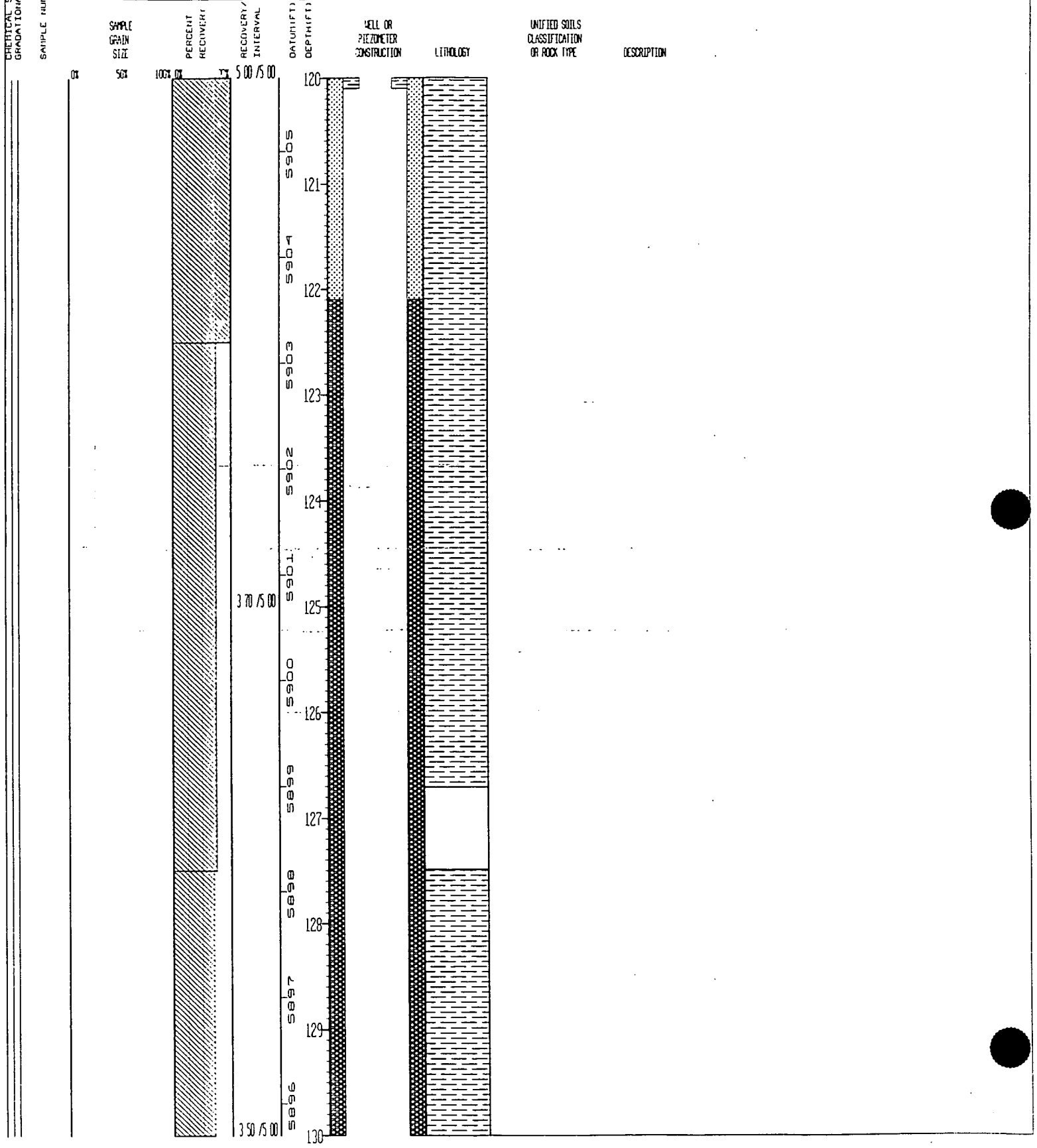


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	117.5'-131.0': Claystone. Olive gray (5 Y 4/1) to grayish black (N2). Trace carbonaceous material. Massive. Interval from 120.0'-126.7' contains some organics, especially along thin fractures. Thin bedding (horizontal). Some areas bedding 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	305-RFI/RI
NORTH	1-7728	AREA	IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL
EAST	1030724	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	12/16/94

LOG OF BORING NUMBER 59894

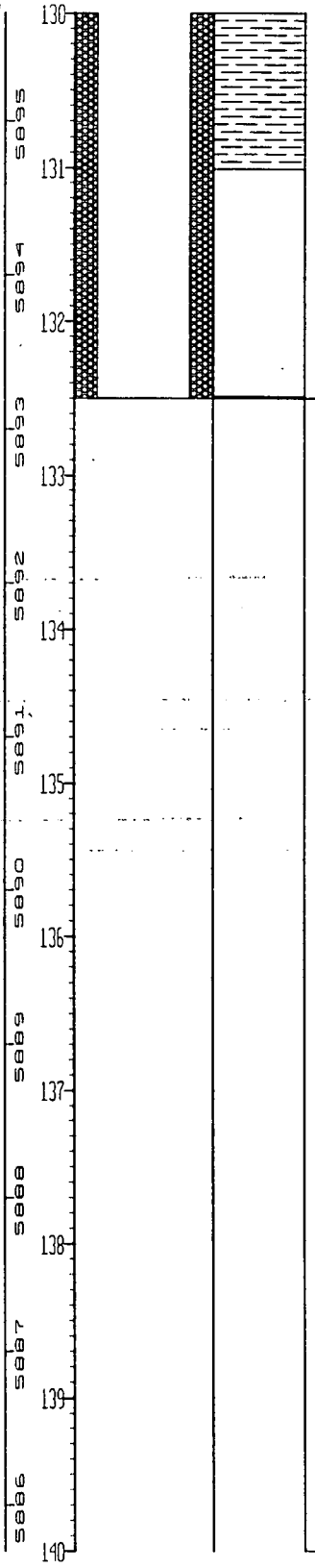
REMARKS DRILLING EQUIPMENT MOBILE DRILL 9-57 ASI RIG GEOLOGIST J W HARWELL. ADDITIONAL CENTRALIZERS AT 75 0', 95 0' AND 121.0'



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. AST RIG GEOLOGIST J W. HARWELL. ADDITIONAL CENTRALIZERS AT 75 0', 95 0' AND 121.0'

CHEMICAL DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL (3 50 /5 00)
DATUM (FT)
DEPTH (FT)
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) 10 00	GROUND ELEVATION (FT)	6043 20	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH	74528	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	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%		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 90 /2 00	6042	1				
					6041	2			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')
	BH00088AS			0 20 /2 00	6040	3			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')
					6039	4			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	6038	5			SM	4 9'-5 3' Silty Sand Dark yellowish orange (10 YR 6/6) (waste fill material) Some fine gravel Dry
					6037	6			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
				1 60 /2.00	6036	7			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')
					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
				2 00 /2 00	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 THSS 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 DEPTH / GRADATIONAL DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	HEADSPACE INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1 80 /2 00	6033 6032 6031 6030 6029 6028 6027 6026 6025 6024	10 11 12 13 14 15 16 17 18 19 20			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
									CL	10 7'-11.8' Clay Same as above (reference interval 5 3-6.0' (waste/fill material))
										No recovery (11.8-12.0')
										Total Depth Drilled: 12.00

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 -0	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')
					6041	1				
						2			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')
	BH00089HS			0 20 /2 00	6040	3				
					6039	4			ML	4 0'-4 4' Sandy Silt Ash with some quartzite gravel Waste/fill material Sub-angular, fine to coarse
				2 00 /2 00	6038	5			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
					6037	6			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	6036	7			ML	6 0'-7 1' Ash Waste/fill material Same as above (reference interval 2 0'-2.2')
					6035	8			CL	7 1'-8 0' Clay with trace Silt Waste/fill material Same as above (reference interval 5 0'-6 0')
									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	9			CL	8 95'-10 0' Clay (Fill) Pale yellowish brown (10 YR 6/2) Massive Moist. Fe staining Trace metallic ash in matrix
					6033	10				Total Depth Drilled 10 00

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 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%		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				
				0.00 /11.00	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	305-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7917	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%		5996	10				
					5995	11				11 0'-11 4' Graphite, Fill Moist
	BH00182AS			1 30 /1 30	5994	12			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
	BP00089AS			0 00 /0 70	5993	13				No recovery (12.3-13.0'), and (13 5-14 0')
				0 50 /1 00	5992	14			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
	BH00183AS			2 00 /2 00	5991	15				No recovery (17 2-20.0'), and (20 0-24 0')
	BH00184AS			1 20 /1 20	5990	16				
					5989	17				
					5988	18				
					5987	19				
						20				

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	

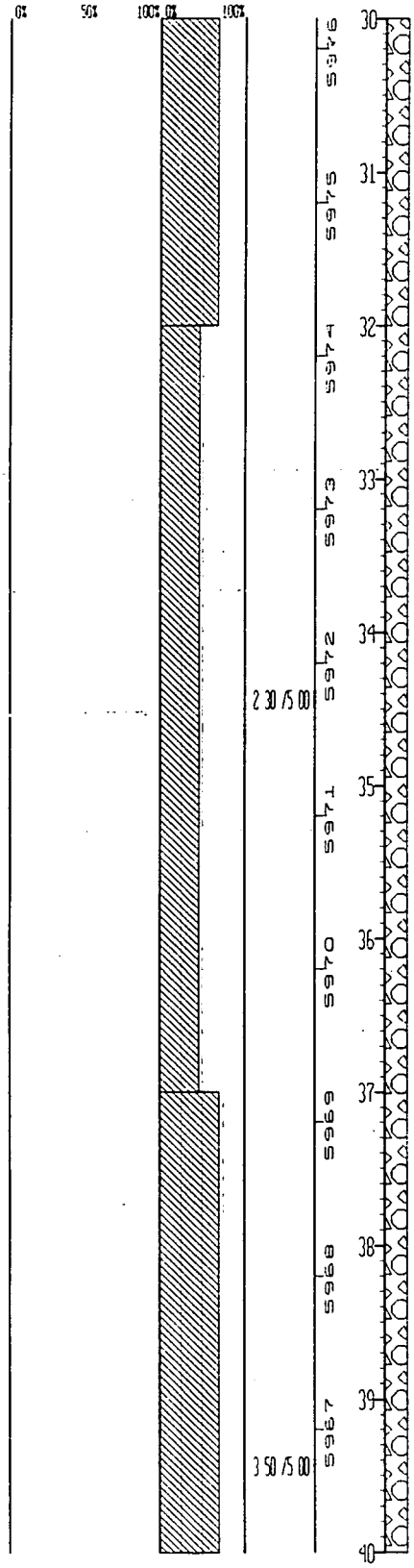
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57. ASI RIG GEOLOGIST J W HARWELL, L A HOST, P J JORDAN 71194 IS 6 0' SOUTH OF 59794.
REFER TO LOG OF 59794 FOR 0 0'-25 2'. ADDITIONAL CENTRALIZERS AT 51.65'-52 79', 72 21'-73 38' AND 97 90'-99 07', 139 3'-150.0' BACKFILLED WITH NATIVE MATERIAL

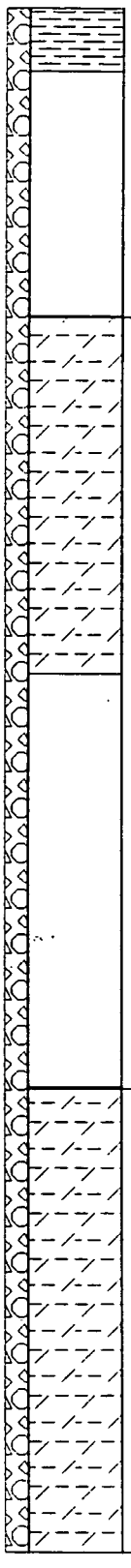
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	0.00 /6 80	5986	20				
					5985	21				
	BP0009HS				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. No recovery (25.2-26 0')
				1 20 /2.00	5981	25				
					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')
				0.85 /1 00	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 No recovery (30 4-32.0')
					5978	28				
					5977	29				
				3 40 /5 00		30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5906 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7917	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5 50	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 [illegible]-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





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')

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')

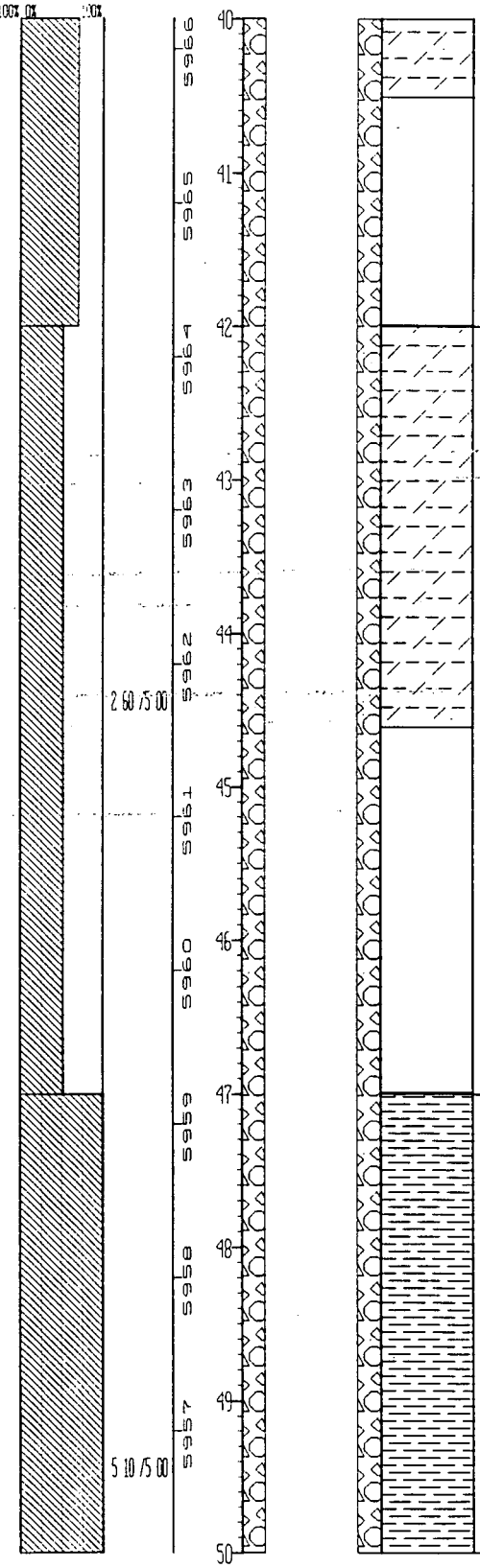
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	6006 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7917	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71194
EAST	031634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/23/95	

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%



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

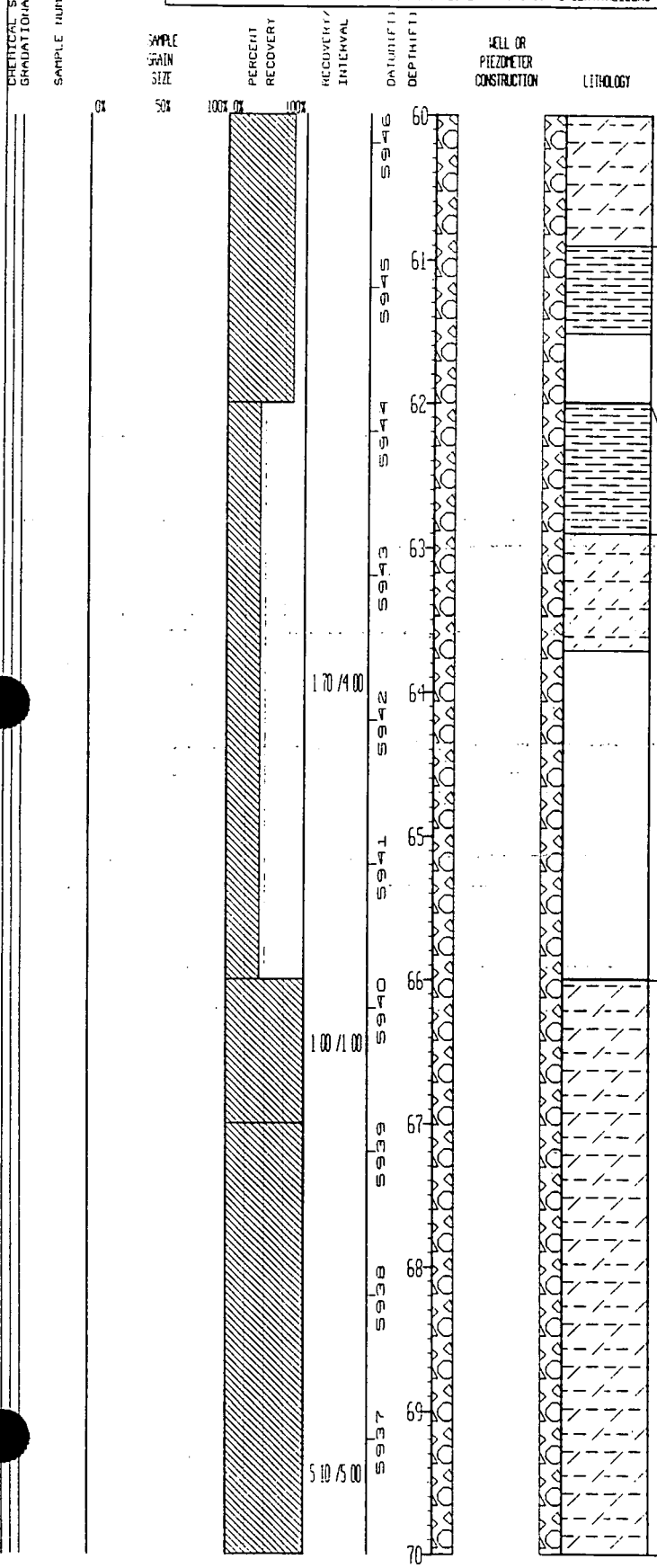
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5006 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/23/95	

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%		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.
					5952	54				
				1 70 /5 00	5951	55				No recovery (53 7-57 0')
					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 IT	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
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')
CLAYSTONE	62 0'-62 9' Claystone Same as above (reference interval 53 0-60 9'). Becomes light olive gray (5 Y 5/2)
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')
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

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 E7	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

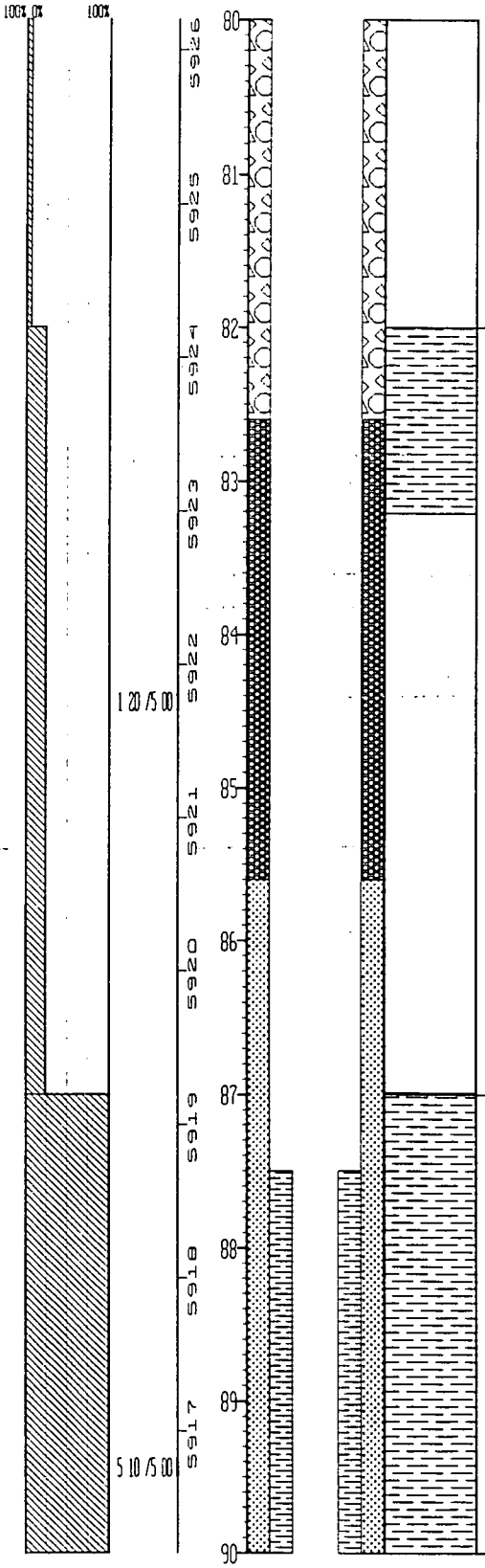
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SILTY CLAYSTONE	70 0'-72 0' Silty Claystone Same as above (reference interval 66 0'-70 0') Thin lenses/laminae of siltstone. Increase in leaf imprints Trace iron staining along siltstone laminae
CLAYEY SILTSTONE	72 0'-76 5' Clayey Siltstone with Silty 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 E 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

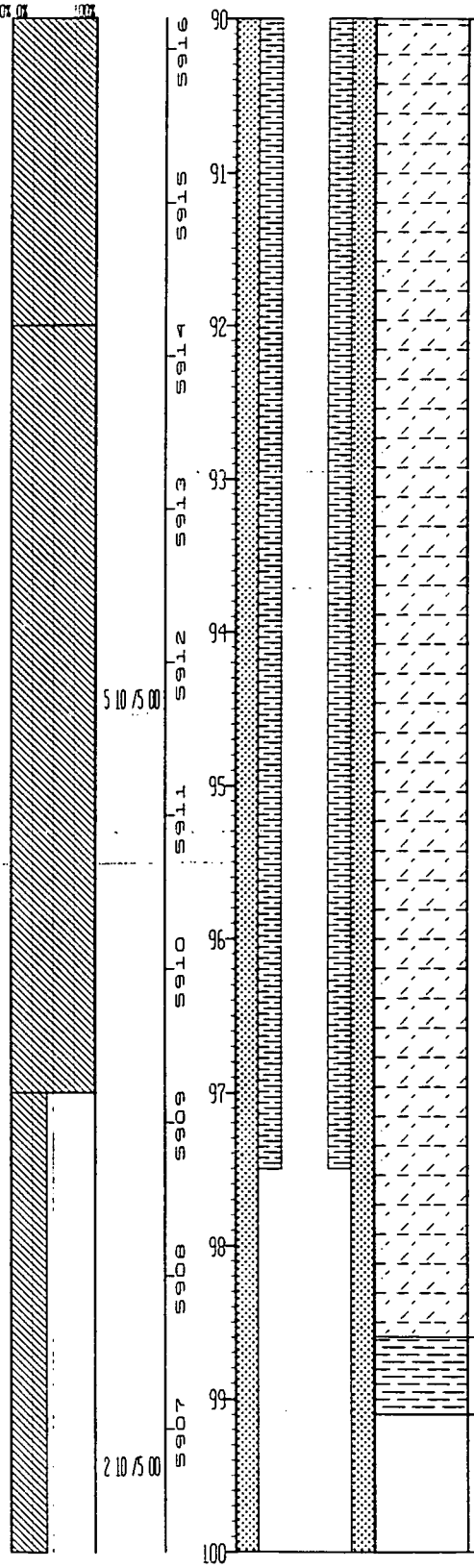


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	82.0'-83 2' Claystone, slough Predom. washed in from above mixed with alluvial gravel No recovery (83 2-87 0')
CLAYSTONE	87 0'-90 0' Claystone Med. dark gray (N4) Some siltstone lenses and thin beds (1 in') Some organics, leaf imprints Bedding 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 0U5-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 SAMP. GRADATIONAL SAMP. DEPTH | SAMPLE NUMBER | SAMPLE GRAIN SIZE 0% 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
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'
CLAYSTONE	98 6'-99 1' Claystone Dark gray (N3) Slightly friable Mod hard Slightly plastic Trace to some silt
NO RECOVERY	No recovery (99 1-102 0').

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	6006 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]317	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71194
EAST [illegible]31634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/23/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST 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 DEPTH / GRADATIONAL 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
					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	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 17	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
					5896	110				
					5895	111				
					5894	112				
					5893	113				
					5892	114				
				5 20 /5 00	5891	115				
					5890	116			CLAYSTONE	115.7'-116.2'. Carbonaceous Claystone
					5889	117			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
					5888	118				
				5 10 /5 00	5887	119				
						120				

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%		5886	120			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
					5885	121				
					5884	122				
					5883	123				
				5 15 /5 00	5882	124				
					5881	125				
					5880	126				
					5879	127				
					5878	128			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
				5 10 /5 00	5877	129				
						130				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5306 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA THSS 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	

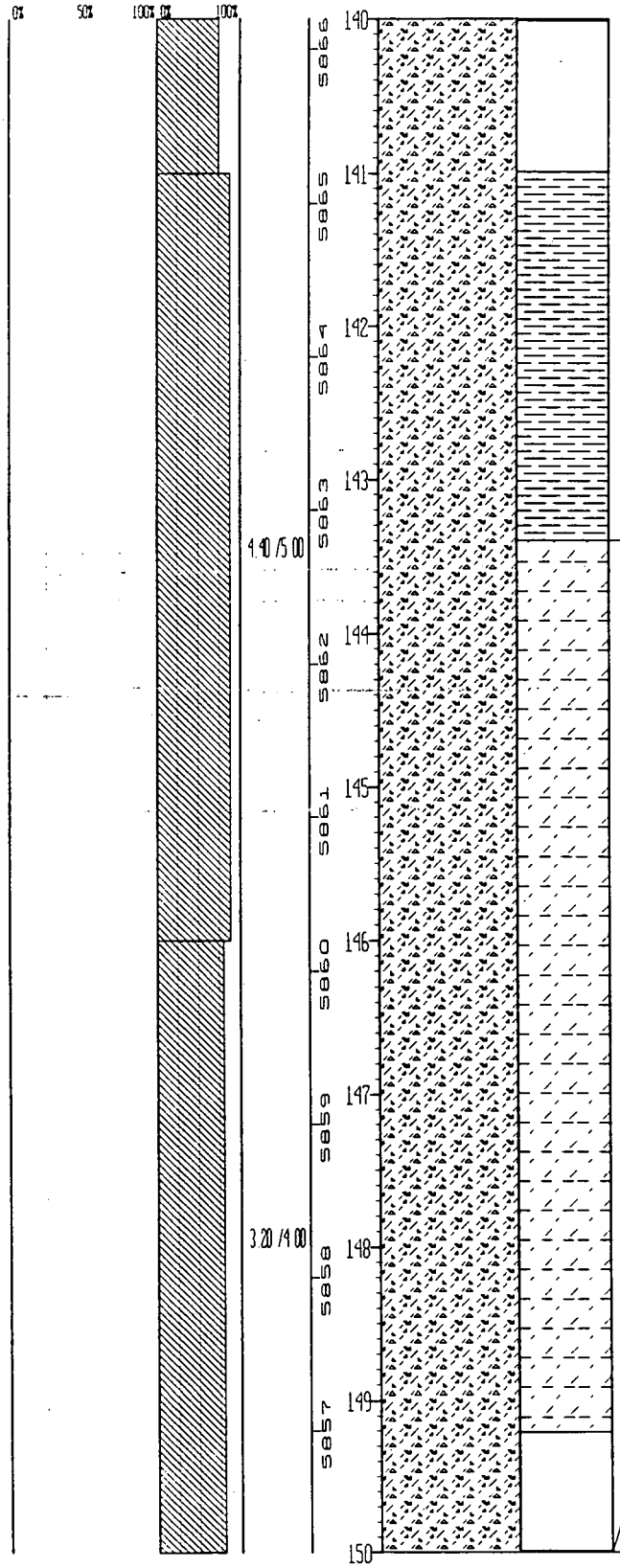
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL, L A HOST, P J JORDAN 71194 IS 6 0' SOUTH OF 59794
REFER TO LOG OF 59794 FOR 9 0'-25 2' ADDITIONAL CENTRALIZERS AT 51 65'-52 79' 72 21'-73 38' AND 97 90'-99 07', 139.3'-150 0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	59676				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
	59675				131				
	59674				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.
	59673				133				No recovery (140 0'-141 0')
	59672			5 00 /5 00	134				
	59671				135				
	59670				136				
	59669				137				
	59668				138				
	59667			3 00 /4 00	139				
					140				

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



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 53
Bottom of Filter Pack: 100 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 34 30	GROUND ELEVATION (FT) 5934 40	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	749578	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 5933	0–1			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	5932 5931	2–3			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 No recovery (5.1-6.0')
				1 10 /2 00	5930 5929	4–5				
	BH00204AS			2.00 /2.00	5928	6–7			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.
	BH00205AS			2.00 /2.00	5927 5926 5925	7–10			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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34 30	GROUND ELEVATION (FT)	[illegible] 90	PROJECT NUMBER	OU5-RFI/RI
NORTH: 747578	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
EAST 2082835	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	02/01/95

LOG OF BORING NUMBER 71294

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'-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
	BH0026AS			1.70 /2.00	5924	11				
					5923	12				
				1.30 /1 50	5922					No recovery (11.7-12 0'), (13.3-13 5') and (14.4-14 5')
						13				No recovery (15.3-15 5')
					5921					
	BH0027AS			0 90 /1.00		14				
					5920					
				0 80 /1.00		15				
					5919				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				
	BP0022AS				5917	17				
				1 00 /1 00		18				
					5916	19				
				2 00 /2 00	5915	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)
	BH0020HS			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'
					5912	22				
				2 00 /2 00	5911	23				
					5910	24				
				2 00 /2 00	5909	25				
	BH0020HS				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.
				2.00 /2 00	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	115-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	12/01/95	

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
		0% 50%	100% 0% 100%			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
					5904					
						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)
					5903					
				1 90 /2.00						
						32				No recovery (31.8-32.8')
					5902					
						33				
	GH0210AS			1 50 /1.50	5901					
						34				
					5900					Total Depth Drilled: 34 30
						35				
					5899					
						36				
					5898					
						37				
					5897					
						38				
					5896					
						39				
					5895					
						40				

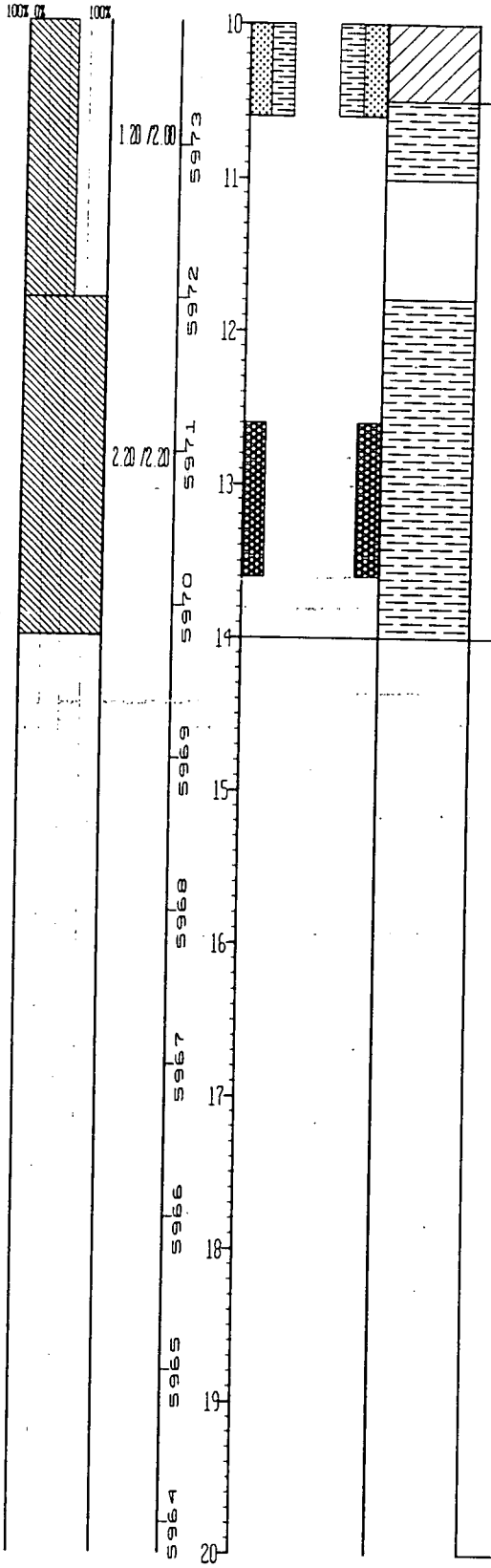
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 5983 80	PROJECT NUMBER 905-RFI/RI	LOG OF BORING NUMBER
NORTH	747027	AREA '	CASING DIAMETER (IN) 2 00	GEOLOGIST A R AGLIARDO	71394
EAST	2080265	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6 30	DATE DRILLED 02/20/95	
REMARKS	DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO				

CHEMICAL SAMPLE GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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 85 /1.80	5983	1			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	5982 / 5981	2 / 3				
	BH00245AS			1 60 /2 00	5980 / 5979	4 / 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	5978 / 5977	6 / 7				
				0 00 /2 00	5976 / 5975	8 / 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 GRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 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	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 GUS-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 /4 00	5996	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.
	GH002*0AS			1 50 /1 50	5993	5				
	GP000*2AS GP000*3AS				5991	7				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48 10	GROUND ELEVATION (FT)	5997 70	PROJECT NUMBER	905-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
		0% 50% 100%	0% 100%							
					5987	10				
					5986	11				
					5985	12				
					5984	13				
					5983	14				
					5982	15				
					5981	16				
				0 00 /23 50	5980	17				
					5979	18				
					5978	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 43 10	GROUND ELEVATION (FT) 5997 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	74882	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
		0% 50% 100%	0% 100%		5977	20				
					5976	21				
					5975	22				
					5974	23				
					5973	24				
					5972	25				
					5971	26				
					5970	27				
	GP00045AS				5969	28				
				0 70 /0 70	5968	29	03/16/95 ▽		SANDSTONE	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')
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48 10	GROUND ELEVATION (FT) 5997 70	PROJECT NUMBER 005-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	

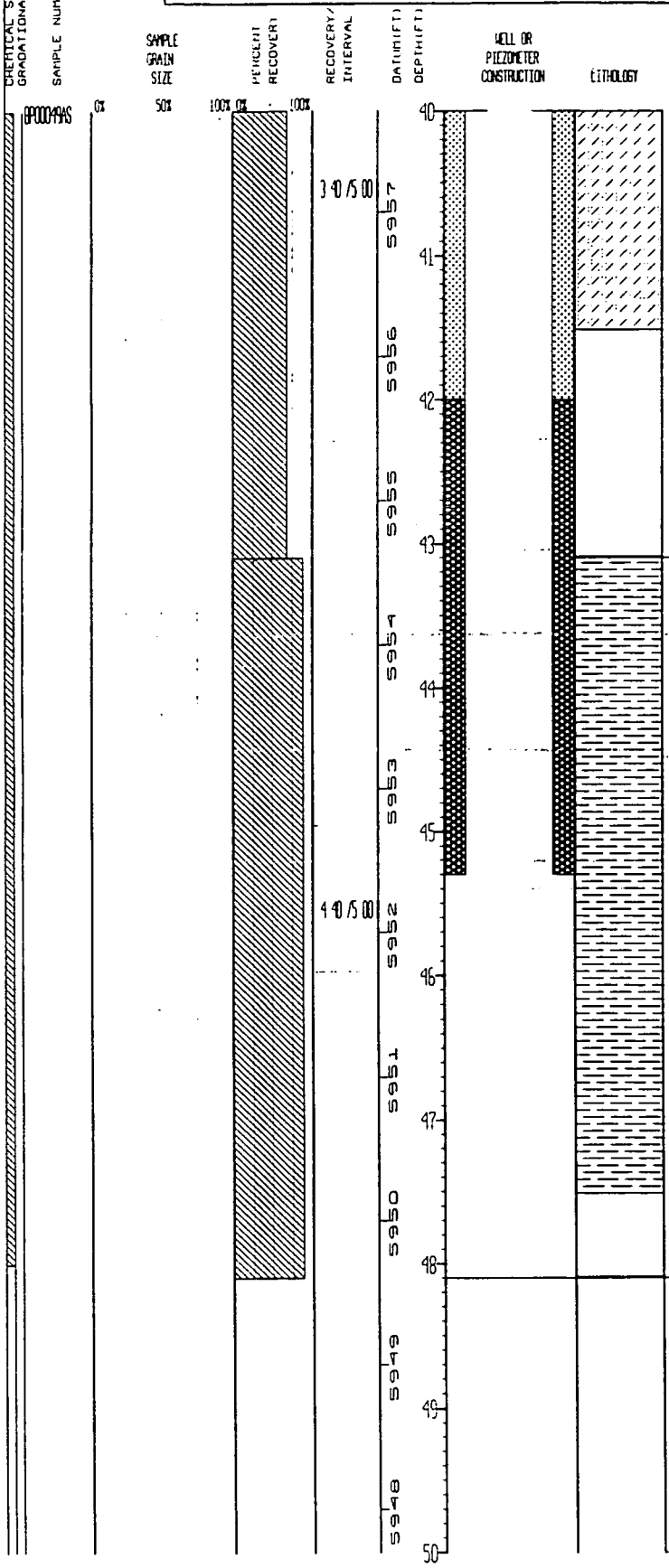
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL. 45 3-48.1' IS NATURAL MATERIAL (BOREHOLE CAVE IN)

CHEMICAL BY 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
					5967	30				30 0'-33 1' Grout from surface casing installation
						31				
				0.00 /3.10	5966		02/15/95 ▽			
						32				
					5965	33				
					5964	34			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.
					5963	35				
				5 10 /5 00	5962	36			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
					5961	37				
					5960	38			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 indurated.
					5959	39				No recovery (41.5-43.1')
					5958	40				

GP00049AS

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)



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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. No recovery (47.5-48.1').

Total Depth Drilled 48 10 Total Depth Casing 42 00
Bottom of Filter Pack 42.00

APPENDIX C

SUMMARY OF WATER-LEVEL MEASUREMENTS

APPENDIX C

SUMMARY OF WATER-LEVEL MEASUREMENTS

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	6036.49
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

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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

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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

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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

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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

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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

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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

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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

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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

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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

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.

Duffield, G. M. and Rumbaugh, III, J. O., 1989. *Geraghty & Miller's AQTESOLV Aquifer Test Solver, Version 1.00, Documentation*, Geraghty & Miller Modeling Group, Reston, VA, October 17, 1989.

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

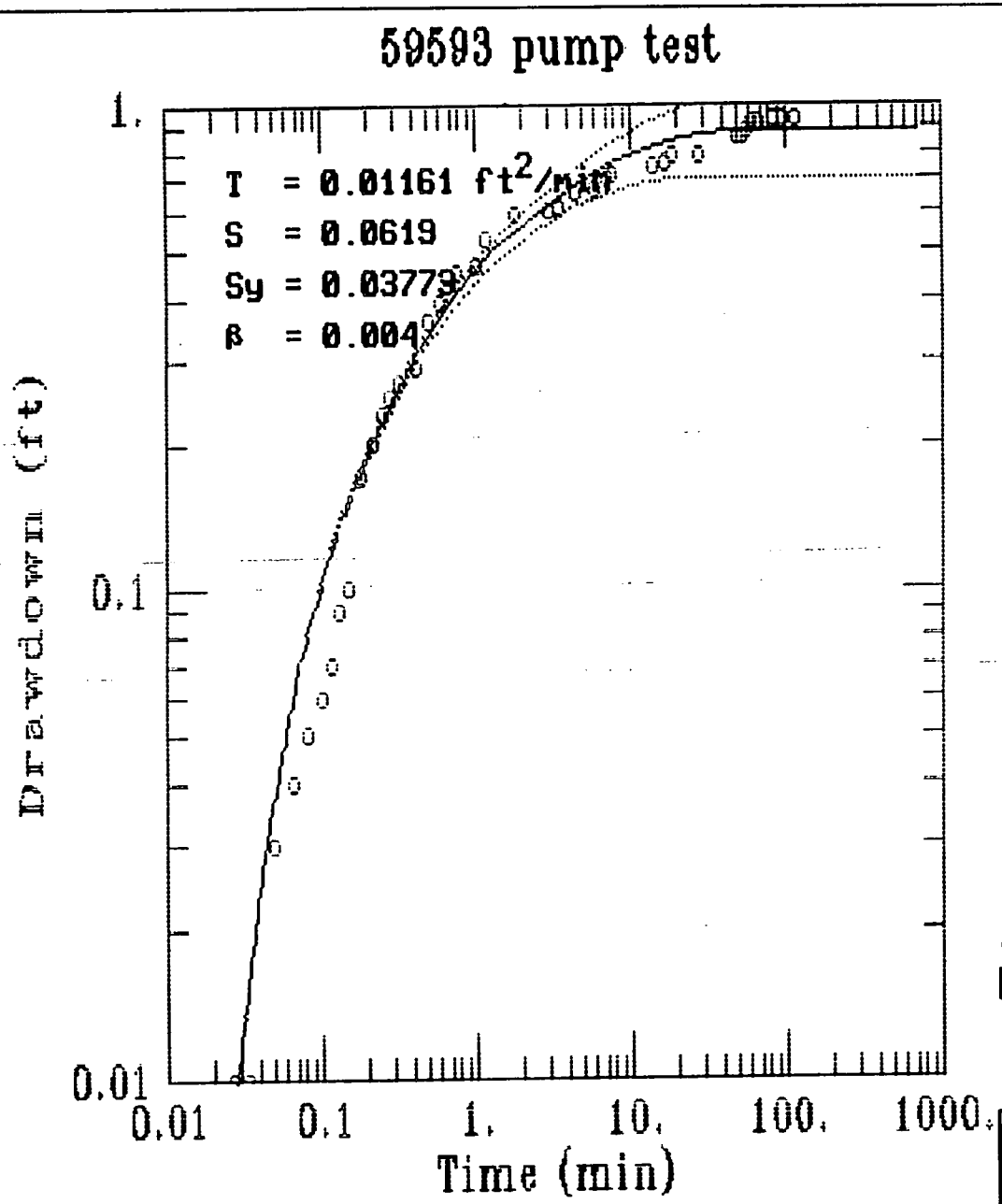
58793 PUMPING TEST DATA
(Continued)

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



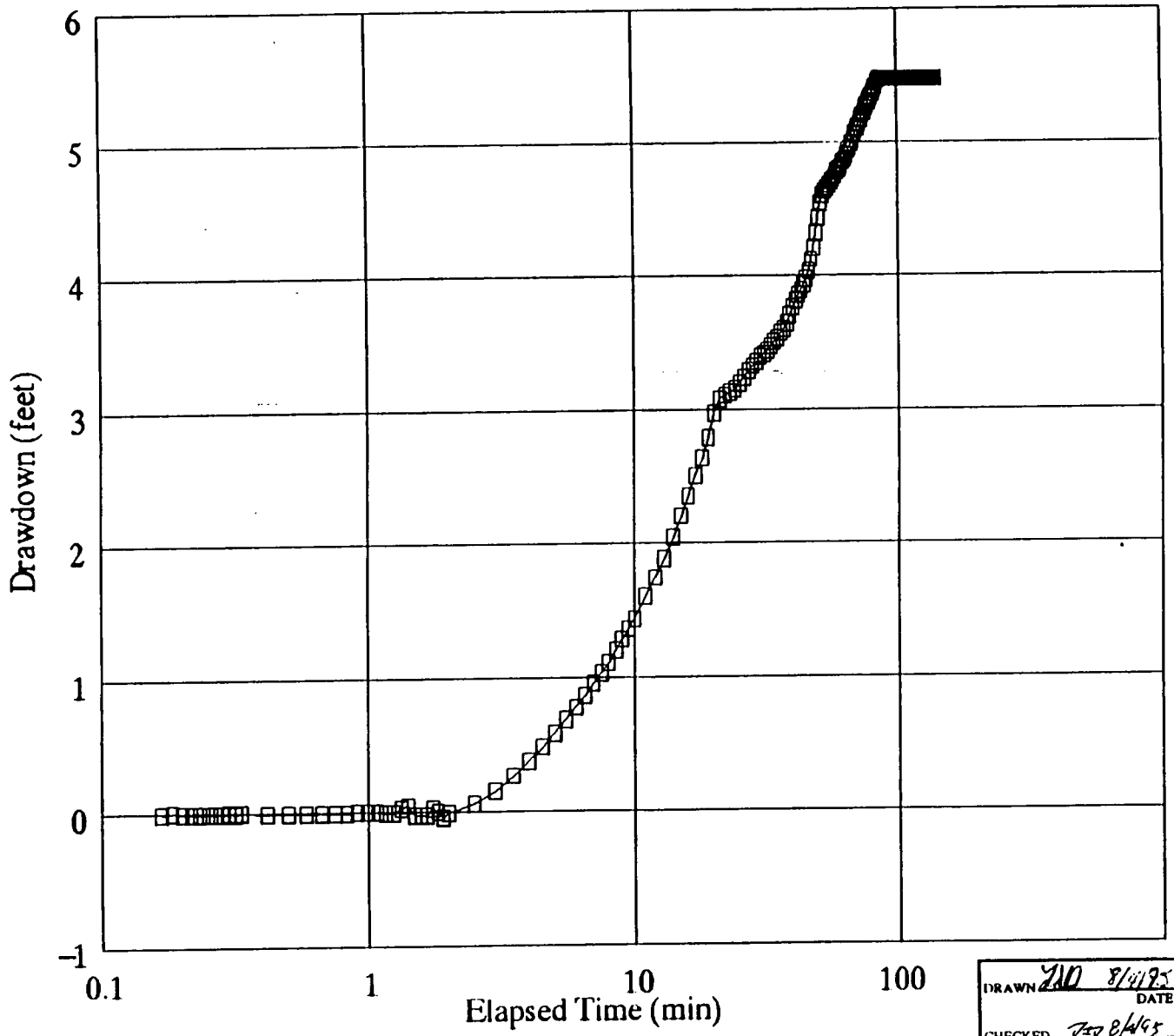
AQTESOLV

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
P6-2.DRW	RFI/RI REPORT
	FIGURE D-1

58793 Pumping Test – Hermit Data



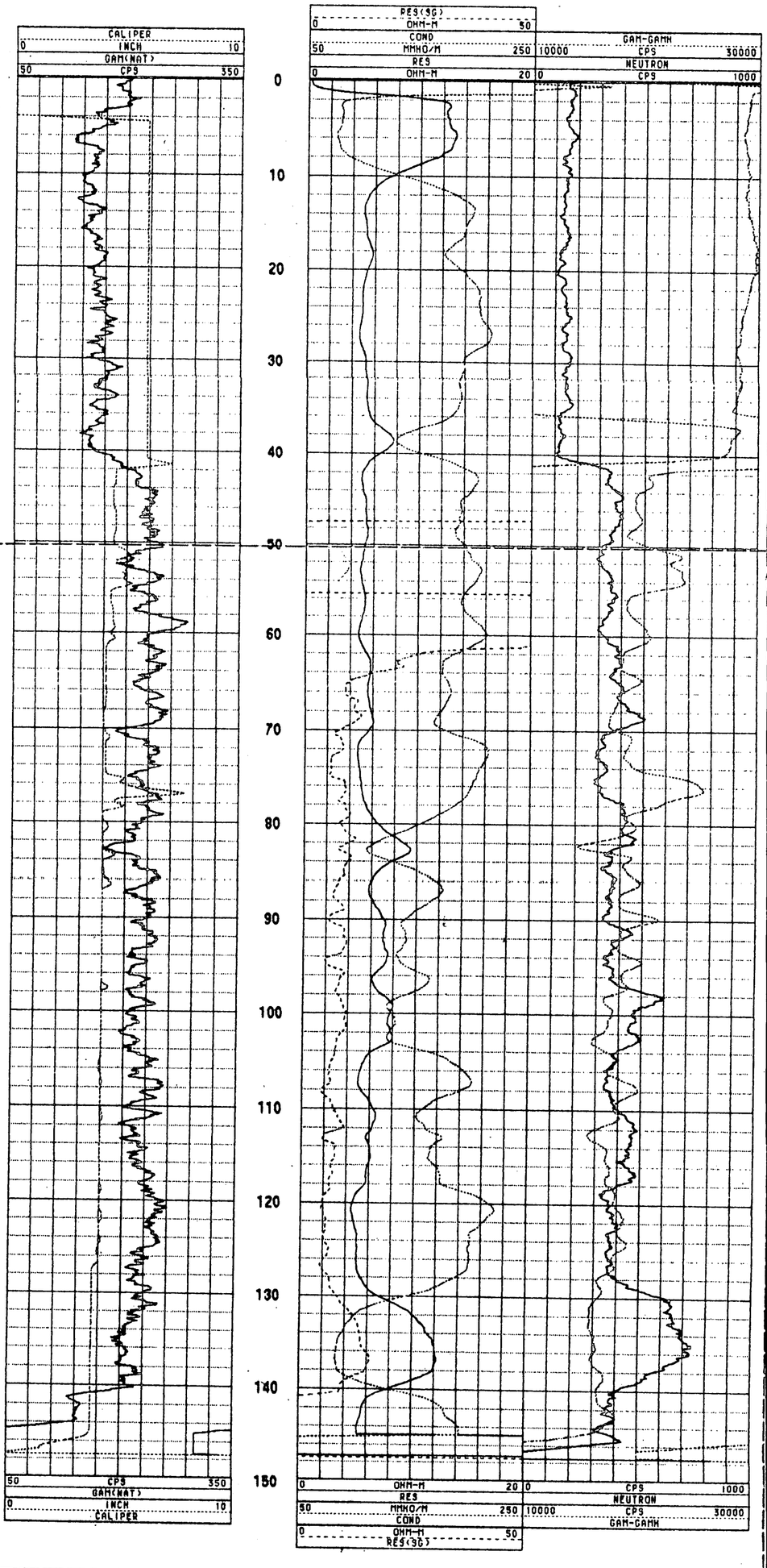
DRAWN [illegible] 8/4/95 DATE	58793 AQUIFER TEST DRAWDOWN VS TIME
CHECKED [illegible] 8/4/95 DATE	ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
APPROVED _____ DATE	OU5 - WOMAN CREEK PRIORITY DRAINAGE
F6-2.DRW	RFI/RI REPORT
	FIGURE D-2

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

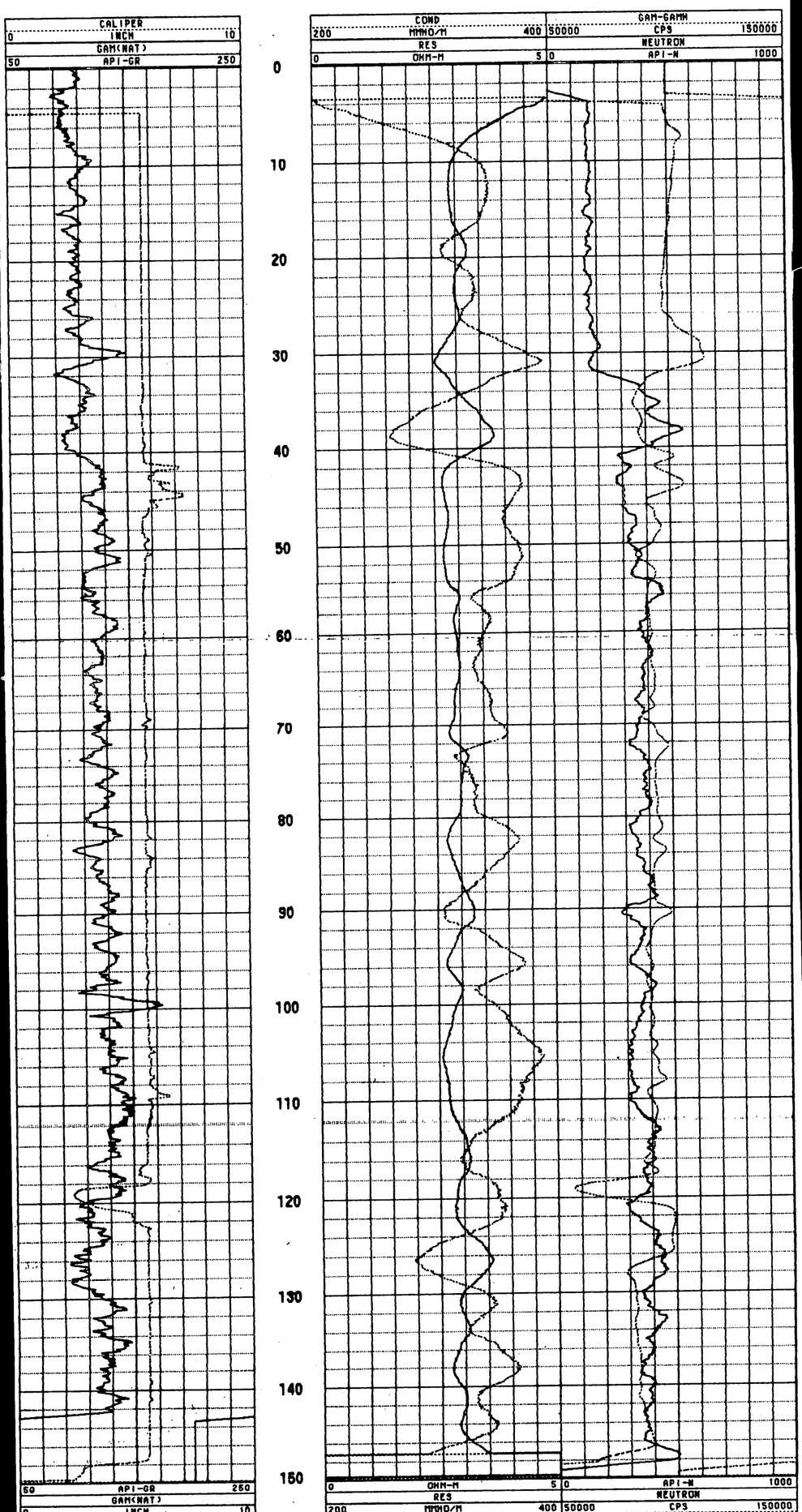

CALIPER
0 INCH 10
GAM(NAT)
50 CPS 350
RES(SG)
0 OHM-M 50
COND
50 MMHO/M 250
RES
0 OHM-M 20
GAM-GAMM
10000 CPS 30000
NEUTRON
0 CPS 1000
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150

Century GEOPHYSICAL CORP.

57194

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 57194			RES	
LOCATION/FIELD	: OU-5			DENSITY	
COUNTY	: JEFFERSON			CALIPER	
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	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

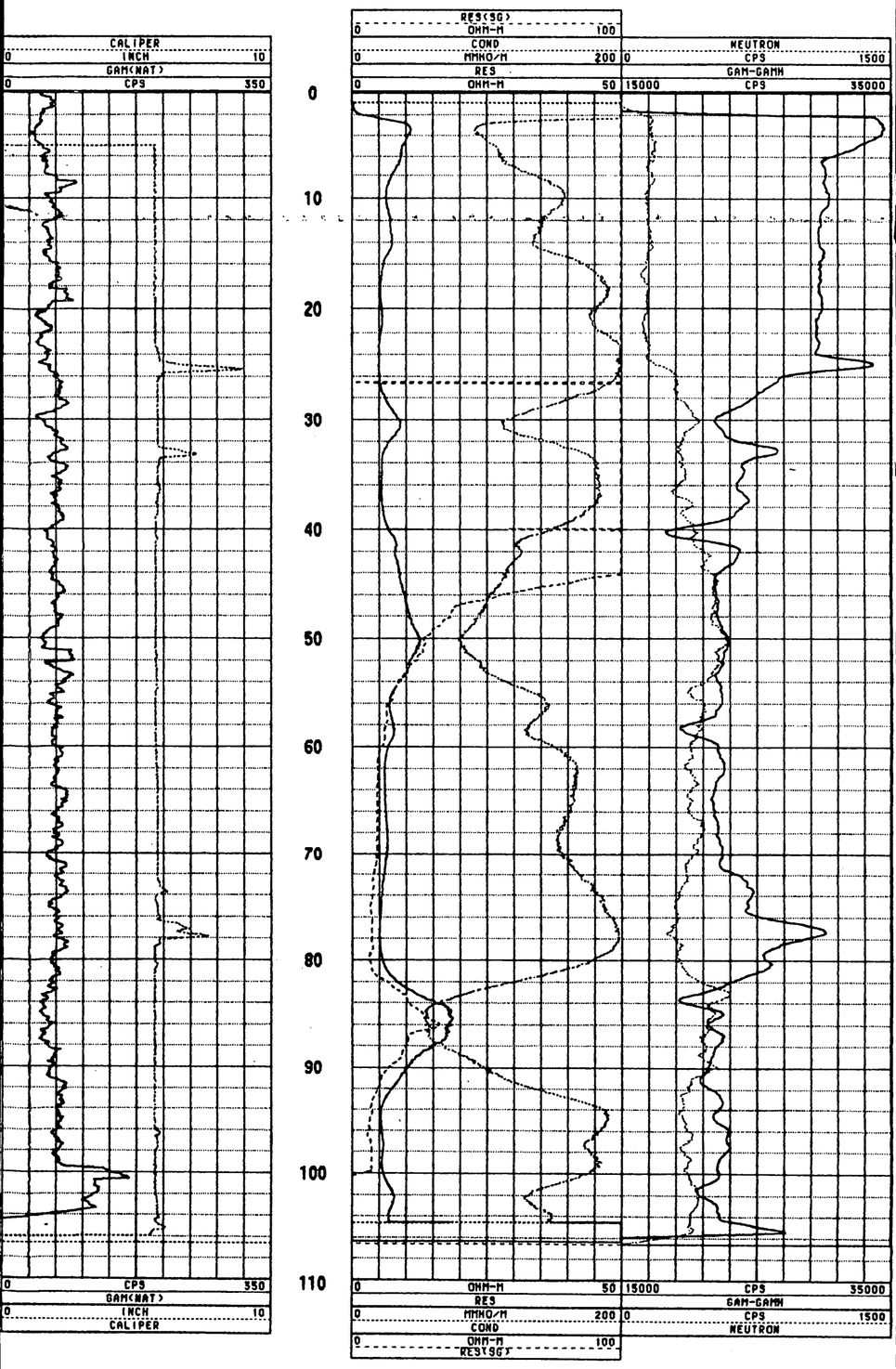

CALIPER
0 INCH 10
GAM(NAT)
50 API-GR 250
COND
200 MMHO/M 400
RES
0 OHM-M 5
GAM-GAMM
50000 CPS 150000
NEUTRON
0 API-N 1000
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150

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


CALIPER
0 INCH 10
GAM(NAT)
0 CPS 350
0
10
20
30
40
50
60
70
80
90
100
110
0 CPS 350
GAM(NAT)
0 INCH 10
CALIPER
RES(SG)
0 OHM-M 100
COND
0 MMHO/M 200
RES
0 OHM-M 50
0 OHM-M 50
RES
0 MMHO/M 200
COND
0 OHM-M 100
RES(SG)
NEUTRON
0 CPS 1500
GAM-GAMM
15000 CPS 35000
15000 CPS 35000
GAM-GAMM
0 CPS 1500
NEUTRON

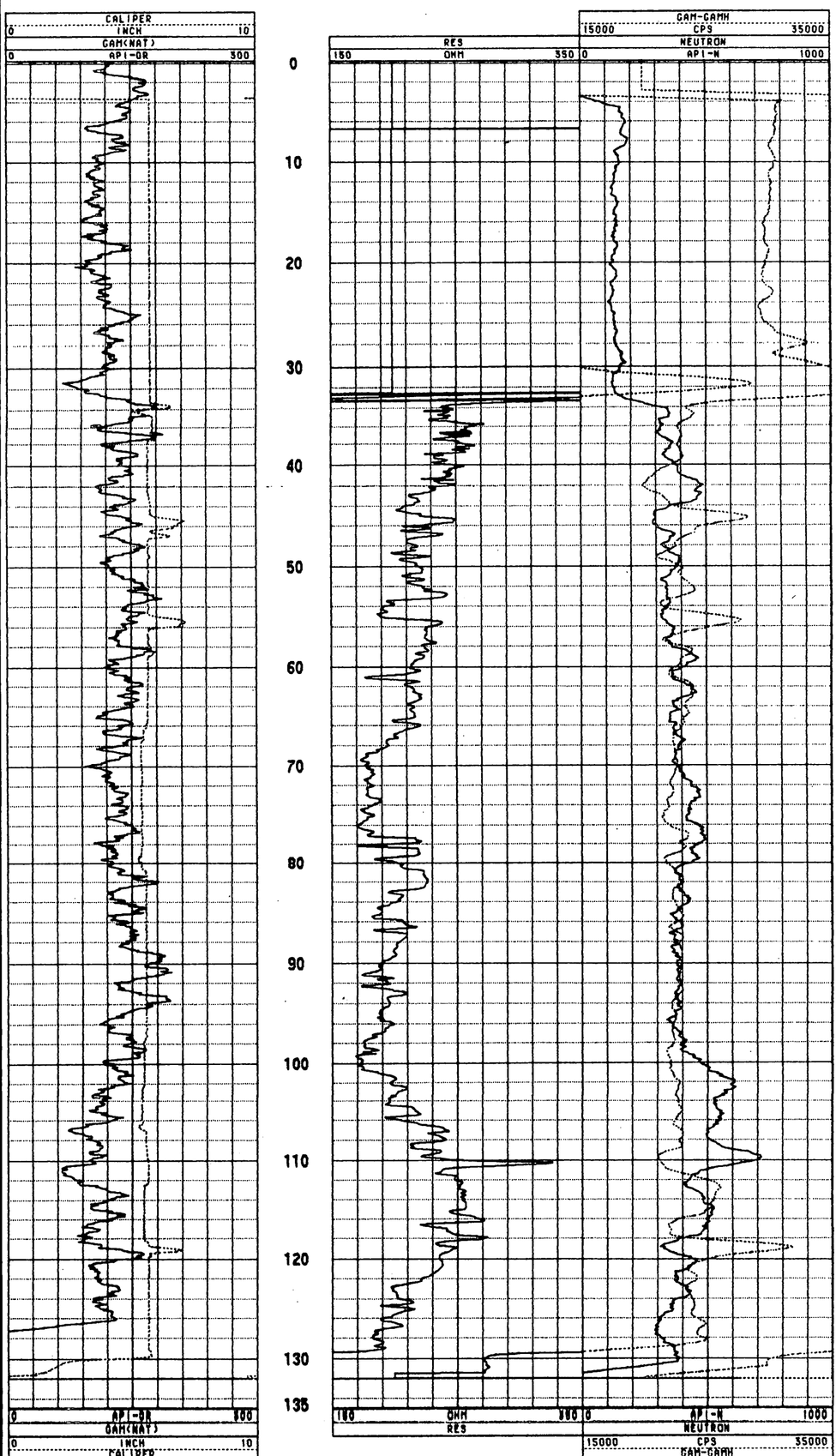
Century GEOPHYSICAL CORP.

59894

COMPANY	: A.S.I.				
WELL	: 59894				
LOCATION/FIELD	: OU-5				
COUNTY	: JEFFERSON				
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	:				

OTHER SERVICES:
RES
DENSITY
CALIPER

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS


CALIPER
0 INCH 10
GAM(NAT)
0 API-GR 300
RES
150 OHM 350
GAM-GAMM
15000 CPS 35000
NEUTRON
0 API-N 1000
0
10
20
30
40
50
60
70
80
90
100
110
120
130
135
0 API-GR 300
GAM(NAT)
0 INCH 10
CALIPER
150 OHM 350
RES
0 API-N 1000
NEUTRON
15000 CPS 35000
GAM-GAMM

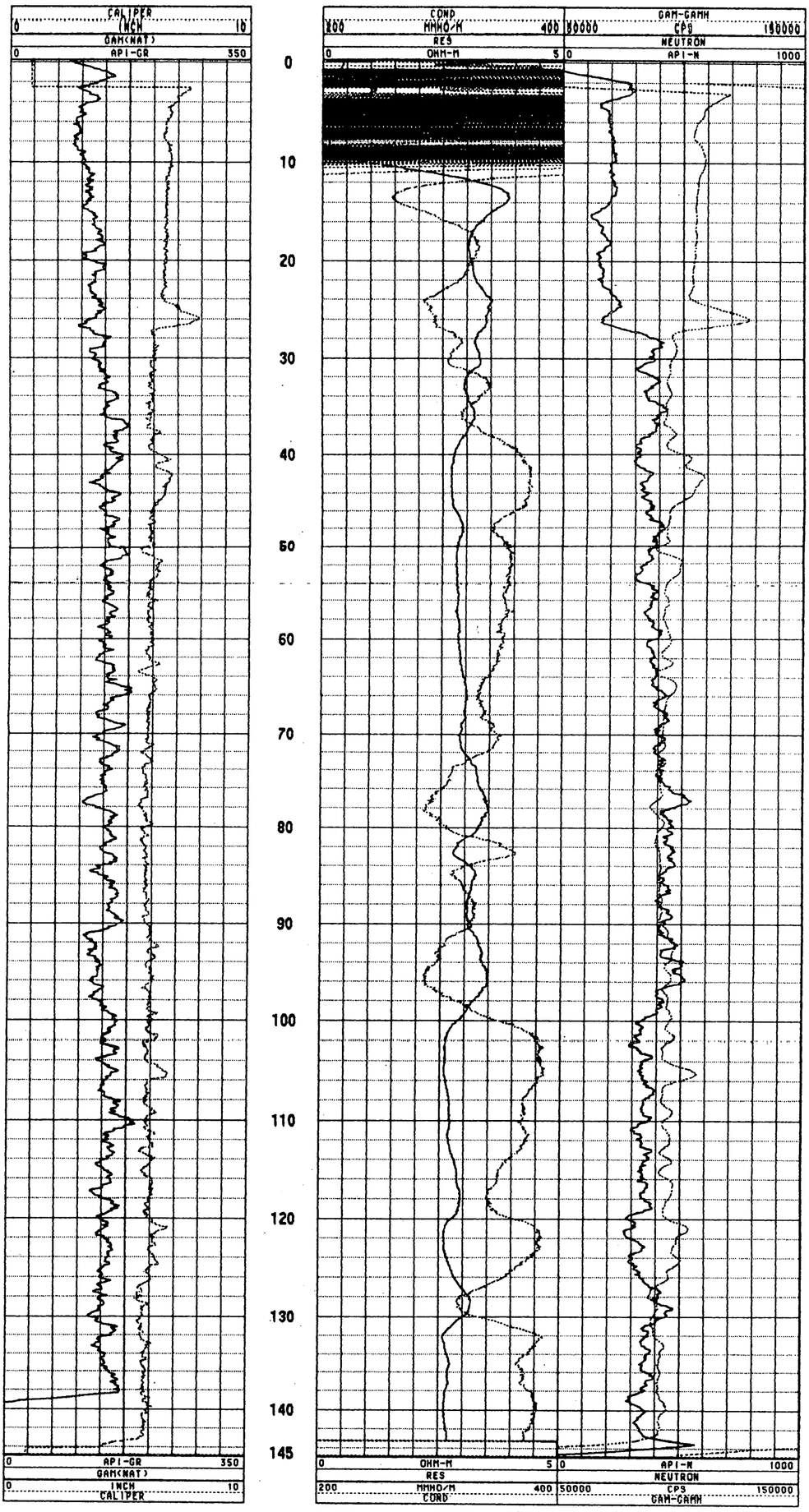
Century GEOPHYSICAL CORP.

71194

COMPANY	: A.S.I.				
WELL	: 71194				
LOCATION/FIELD	: OU-5				
COUNTY	: JEFFERSON				
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	: H2O	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	:				

OTHER SERVICES:
RES
DENSITY
CALIPER

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS


CALIPER
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GAM(NAT)
0 API-GR 350
COND
200 MMHO/M 400
RES
0 OHM-M 5
GAM-GAMM
50000 CPS 150000
NEUTRON
0 API-N 1000
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
145
0 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