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

PHASE I RFI/RI REPORT

WOMAN CREEK PRIORITY DRAINAGE OPERABLE UNIT NO. 5

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE, COLORADO

APPENDICES B - D

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

• Environmental Restoration •
Rocky Flats Environmental Technology Site

Prepared For:

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

October 1995

A-OU05-000549

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October 1995

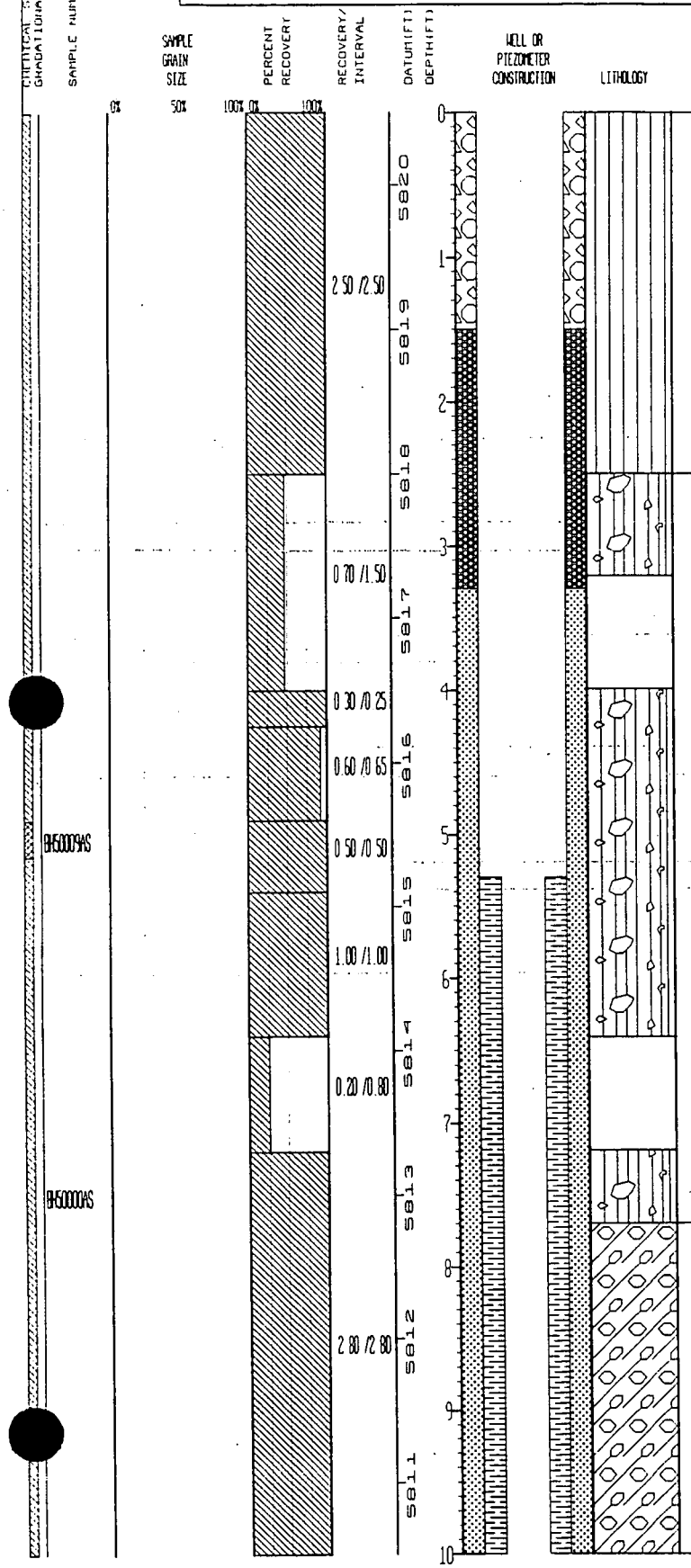
APPENDIX B

GEOLOGIC LOGS

GEOLOGIC LOGS FOR 1992 AND 1993 BOREHOLES

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

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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
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 No recovery (3.2-4 0'), and (6.4-7 2')
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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 80	GROUND ELEVATION (FT) 5820 50	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-17587	AREA IHSS 142 10 C-1 POND	CASING DIAMETER (IN) 2 00	GEOLOGIST T S DRILLING	50092
EAST	2086417	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 11/03/92	

REMARKS: DRILLING EQUIPMENT CME 75. ASI RIG GEOLOGIST THERESA SANTANGELO DRILLING 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
	GH50002AS	0% 50% 100%	0% 100%	0 40 /0 40	5810	10			CLAYSTONE	10 2'-12 6' Top of Bedrock at 10 2' Claystone with some Silt and trace Sand Light brown (5 YR 5/6) and light gray (N7) Mottled, with some silt and trace of f g sand. Argillaceous, non-calcareous, massive bedding but with carbonaceous material, tan and orange FeOx stained, moist Wavy laminations at 10 4', apparently drilling induced. 1% sand, 15% silt, 84% clay
				1.00 /1 00	5809	11				
				2 00 /2 00	5808	12				
					5807	13			SILTY CLAYSTONE	12 6'-12.8' Silty Claystone with trace Sand Sandy appearing zone of interval contains sand, sub-rounded to rounded, f g , well sorted, 0 16 mm avg diameter, quartz Porosity 10%, mod argillaceous, cemented, mod friable, no apparent bedding 3% sand, 27% silt, 70% clay
				1.20 /1 40	5806	14			CLAYSTONE	12.8'-14.6' Claystone Same as above, (reference interval 10 2' to 12.6') Wavy laminations at 13 4' apparently drilling induced, 2 degree-dip in bedding at 13 5' No recovery (14 6-14 8')
					5805	15				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	F S DRILLING	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-DRILLING 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%	1 20 /2.50	5745	0			CL	0 0'-1 2' Silty Clay with some Sand and Gravel Dusky brown (5 YR 2/2) Non-calcareous. Mod. well cemented Dry, weathered, mod plasticity Roots throughout interval Some coarse gravel (quartzite) to 1-3/8 in Sand poorly graded, pred. sub-angular quartz in coarse fraction. Angular to sub-angular quartz in fine fraction <10% gravel, 15% sand, 30% silt, 45% clay No recovery (1.2-2.5')
					5744	2				
				3 30 /1.50	5743	3			SC	2 5'-4 0' Clayey Sand with some Silt and Gravel. Color change to pred. mod yellowish brown (10 YR 5/4) with some dark yellowish brown (10 YR 4/2) and white (N9) caliche lenses. Entire interval slightly calcareous. Sample dry, weathered. Some iron oxide. Low plasticity, hard and well cemented (argillaceous/some calcareous) when dry. Some coarse gravel at top of interval (to 1-3/4 in. quartzite) Becomes finer in lower part of interval Sand mod well graded. Pred. sub-angular to angular quartz. (sc-ml) 7% gravel, 41% sand, 21% silt, 31% clay Note: 1.8' extra core recovery.
					5742	4				
				0.90 /1.00	5741	5			GW	4 0'-7 0' Sandy Gravel with some Silt and trace Clay Gravel well graded. Matrix grayish orange (10 YR 7/4) to mod yellowish brown (10 YR 5/4). Gravel pred. quartzite Some schist and granitic fragments Coarse gravel to cobbles at top of interval. Pred sub-angular sand Mod well graded. Pred. c.g. to m.g. sub-angular quartz. Some feldspar Trace mica. Interval weathered. Very low plasticity Dry, slightly cemented. Non-calcareous. (gw-gm) 70% gravel, 22% sand, >6% silt, <2% clay No recovery (7 0-7 5')
	BH50004AS			0 50 /0 50	5740	6				
				1 50 /2.00	5739	7				
	BH50005AS				5738	8			GM	7 5'-8.2' Sandy Gravel with some Silt and Clay Very pale orange (10 YR 8/2) (dry) to mod. yellowish brown (10 YR 5/4) when damp Unconsol., low plasticity Dry, weathered Gravel well graded, pred. quartzite, angular to sub-angular Sand well graded, same as sand in above interval (reference interval 4 0' to 7 0'). (gm-sm) 40% gravel, 39% sand, 13% silt, 8% clay
				1.90 /2.00	5737	9			GW	8 2'-9 8' Sandy Gravel with some Silt and trace Clay Same as above (reference interval 4 0' to 7 0')
				0 50 /0 50	5736	10				

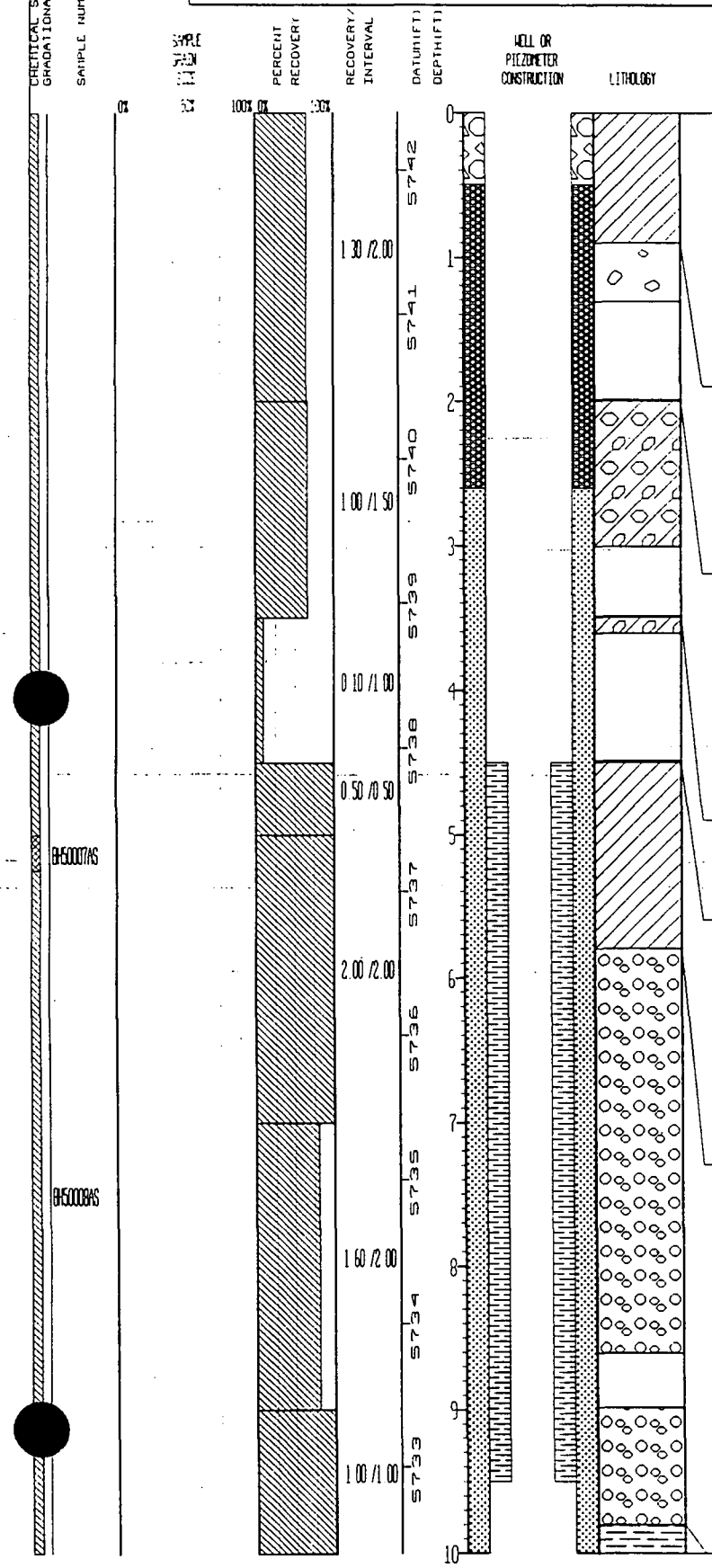
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 10	GROUND ELEVATION (FT)	5745 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747533	AREA IHSS 142 11 C-2 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	50192
EAST	2089222	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	11/05/92	

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 / 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
	B5001DAS	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 70 / 0 70	5734	11				
				1 40 / 1 40	5733	12				
				1 50 / 1 50	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
					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	GU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7328	AREA IHSS 142 11 C-2 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	50292
EAST	2089313	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	11/06/92	

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



CL 0.0'-0 9' Sandy Clay with some Gravel and Silt Yellowish brown (10 YR 5/4) Mod plasticity, dry, well cemented Gravel mod. well graded, max coarse gravel size 1.5 in Sub-angular, dom. lithology quartzite Sand mod well graded. C g. fraction quartz, some quartzite, feldspar and trace mica, sub-angular F g fraction pred quartz, trace feldspar and mica, sub-angular. Sample weathered, roots throughout interval 20% gravel, 30% sand, 15% silt, 35% clay.

GP 0.9'-1.3' Gravel or Cobbles with trace Sand, Clay and Silt Poorly graded Matrix mod. yellowish brown (10 YR 5/4) Apparent cobble zone Dom lithology quartzite Sample dry, weathered 90% gravel, 4% sand, <2% silt, >4% clay.
No recovery (1.3-2.0')

GC 2.0'-3.0' Clayey Gravel with some Sand and Silt Mod. yellowish brown (10 YR 5/4). Gravel well graded, max coarse gravel size 2.5 in sand, poorly graded, pred. m g (70%), pred. quartz, some quartzite and feldspar, trace mica, sub-angular. Med. plasticity weathered, dry, well cemented when dry Some Fe staining. Clayey zone at bottom of interval 40% gravel, 22% sand, 11% silt, 27% clay
No recovery (3.0-3.5')

GC 3 5'-3.6' Clayey Gravel with some, Sand and Silt Same as above; (reference interval 2 0' to 3 0')
No recovery (3.6-4.5')

CL 4 5'-5.8' Sandy Clay with some Gravel and Silt Dark yellowish brown (10 YR 4/2) Sample dry and hard (well cemented when dry), med plasticity, weathered. Gravel to 1 75 (at base of interval), pred. quartzite. Sand mod well graded, pred. quartz, some quartzite and feldspar in c g and m.g. fraction, sub-angular F.g. fraction 95% quartz, sub-angular to angular
15% gravel, 30% sand, 11% silt, 44% clay.

GW 5 8'-9 8' Sandy Gravel with trace Silt and Clay Matrix light brownish gray (5 YR 6/1) to pale yellowish brown (10 YR 6/2). Gravel well graded, max. coarse gravel size to 2 5 in Lithology quartzite, granite fragments and schist fragments, sub-angular Some clasts drilling fractured Interval dry, matrix low plasticity, weathered Some intervals contain higher percentage of clay Lower 0 3' of interval consists of reworked bedrock (Claystone with Gravel). 70% gravel, 23% sand, 4% silt, 3% clay
No recovery (8 6-9 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 50	GROUND ELEVATION (FT)	5742 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747328	AREA IHSS 142 11 C-2 POND	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING	50292
EAST	2089313	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	11/06/92	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	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	005-RFI/RI	LOG OF BORING NUMBER
NORTH 749088		AREA SURF DIST E OF 115	CASING DIAMETER (IN)		GEOLOGIST	T S. DREILING	50392
EAST 2082630		LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN)	2 00	DATE DRILLED	12/03/92	

REMARKS: DRILLING EQUIPMENT: CME 75 AUGER ASI RIG GEOLOGIST T SANTANGELO-DREILING NOTE LOSS OF CORE (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%							
					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				
	BH50018AS			0 80 /0 80	6021	2			GW	0 6'-8 4' Sandy Gravel with some Cobbles and Silt, trace Clay. Grayish brown (5 YR 3/2) to light brown (5 YR 5/6). Cobbles >3 in., sub-rounded, feldspathic and quartzitic Gravel sub-rounded, quartzitic, well graded. Sand sub-angular, feldspathic, muscovite, quartzose and quartzitic, pred. m.g Silt with trace phlogopite Mod plastic, fines, dry, no obvious bedding. Upper 0 6' of interval mixed with roots, dusky brown (5 YR 2/2). Interval from 0.8' to 4.4' mod well limonite cemented. (low-gm) 20% cobbles, 42% gravel, 31% sand, 6% silt, 1% clay.
	BH50012AS			0 00 /0.20	6020	3				No recovery (7 5-8.0')
				1.50 /1 50	6019	4				
	019AS			1.20 /1.30	6018	5				
				0.00 /0.20	6017	6				
	BH50020AS			1 50 /2.00	6016	7				
					6015	8			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
	BH50021AS									
	BH50013AS			2.00 /2 00	6014	9				
						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	50392
EAST	2982630	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 2 00	DATE DRILLED 12/03/92	

REMARKS DRILLING EQUIPMENT CME 75 AUGER ASI RIG GEOLOGIST T SANTANGELO-DREILING NOTE LOSS OF CORE (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50022AS			2 00 /2 00	6012	11				
	BH50023AS			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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT)	6023.00	PROJECT NUMBER	005-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
	BH50027AS				6003	20				
	BH50015AS			2.00 /2.00	6002	21				
	BH50029AS				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.
	BH50029AS				5999	24			CLAYSTONE	24.0'-25.7' Top of Bedrock at 24 0' Claystone Grayish orange (10 YR 7/4) and light olive gray (5 YR 6/1) Argilloceous 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				
	BH50030AS				5997	26				No recovery (25 7-26 0').
	BH50016AS			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 35-RFI/RI	LOG OF BORING NUMBER
NORTH	7-8077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50492
EAST	2082461	LOCATOR NUMBER 3	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
		0% 50% 100%	0% 100%		6025	0			SC	0 0'-13 3' Gravelly Sand with some Clay and Silt, trace Cobbles NOTE This description covers lithology from 0 0' to 17 3' unless otherwise noted Light brown (5 YR 5/6) to yellowish brown (10 YR 5/4) Cobbles sub-rounded, granitic, quartzitic, crushed by drill bit, >3 0 in diameter. Gravel sub-rounded to rounded, f - c quartzitic, well graded, avg 0 75 in diameter Sand pred. m g., sub-angular to sub-rounded, biotite, muscovite, feldspar, and quartz Silt muscovite and quartz. Clay and silt mod. plasticity, massive bedding, moist to damp Limonite oxidation throughtout finer silt and clay portions Roots present from 0 0' to 1 5' within clay rich top of interval The two clay zones within contact of the sandy clay zones of this interval may represent claystone cobbles, and reworked bedrock Therefore sediment section may be classified as colluvium. 5% cobbles, 25% gravel, 48% sand, 9% silt, 13% clay No recovery (1 4-2.0'), (3 5-4 0'), and (5 35-6 0') No recovery (7 5-8.0')
				1 40 /2 00	6024	1				
	BH50049AS				6023	2				
	BH50037AS			1 50 /2 00	6022	3				
	BH50044AS				6021	4				
				1 35 /2 00	6020	5				
	BH50045AS				6019	6				
				1 45 /1 50	6018	7				
	BH50046AS			0 00 /0 50	6017	8				
	BH50038AS BH50036AS			2 00 /2 00	6016	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT) 6025 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-6077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/07/92	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50047AS				6015	10				
				2 00 /2.00	6014	11				
	BH50049AS				6013	12				
				1 80 /2 00	6012	13				
									CL	13.3'-13.7' Clay with some Silt and trace Sand Yellowish gray (5 Y 7/2) Sand f.g., rounded, muscovite, quartz Fines muscovite, quartz, and clay of med. plasticity Trace of MnO2 and limonite staining, no distinct bedding, damp. Trace of carboniferous material within clay rich zone from 13 3' to 13.7' 5% sand, 10% silt, 85% clay.
	[illegible]AS				6011	14				
				2.00 /2.00	6010	15			SC	13 7'-17 3' Gravelly Sand. Continuation of interval described in 0.0' to 13.3'
	BH50050AS				6009	16				
				2 00 /2.00	6008	17			CL	17 3'-19.5' Clay with trace Silt and Sand Pale olive (10 Y 6/2) to light olive gray (5 Y 5/2) Trace muscovite and phlogopite, <1%, f g. Trace of silt, abundt high plasticity clay No apparent bedding, moist, pervasive mottled limonite is discordant to laminae, trace MnO2 <1% sand, 4% silt, 95% clay
	BH50051AS				6007	18			GC	19 5'-20 1' Sandy Gravel with some Clay, Cobbles, and Silt Light olive gray (5 Y 6/1) to light brown (5 YR 5/6) Cobbles sub-rounded, quartzite, >3 0 in diameter Gravel sub-rounded aplite, quartzite, well graded. Sand rounded to sub-rounded, mica, feldspar, quartzite, quartz, well graded pred m g Silt and clay mod plastic, massive bedding, moist and wet at base Clay zone within gravelly clay interval at 20.0' may define base of colluvium 7% cobbles, 38% gravel, 38% sand, 6% silt, 11% clay
				2 00 /2.00	6006	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT)	5625 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	748077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/07/92	

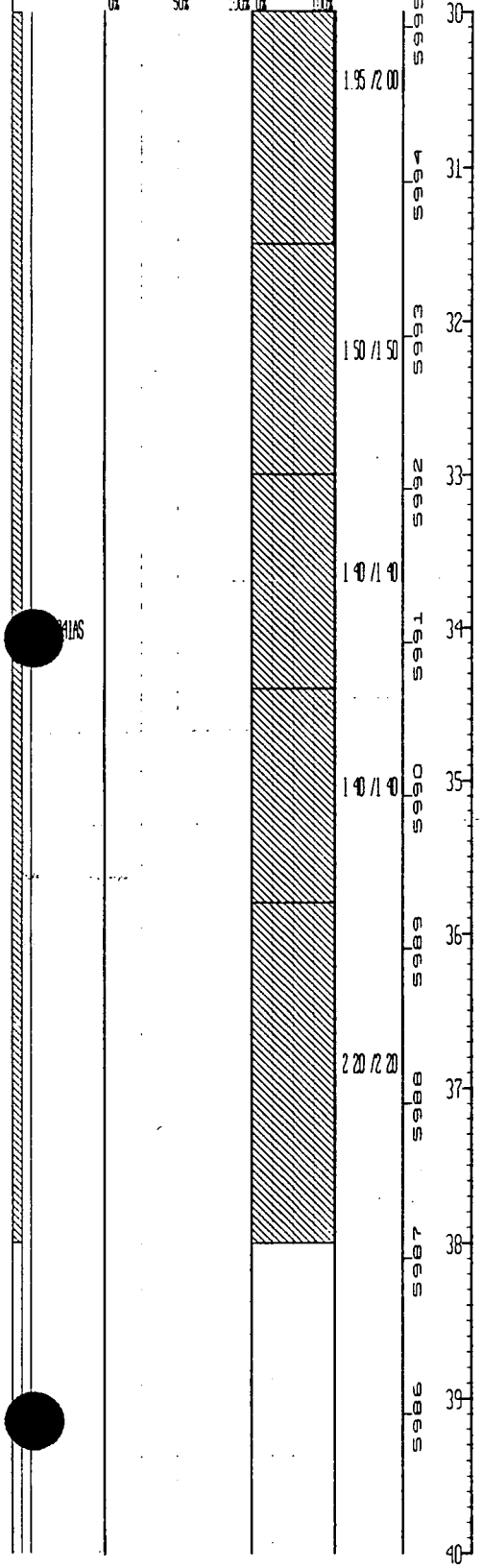
REMARKS DRILLING EQUIPMENT CME 75 RIG GEOLOGIST THERESA SANTANGELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/08/92 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50052AS				6005	20			CL	20 1'-20 9' Clay Continuation of interval described in 17 3' to 19 5' Except with gravel, but no MnO2
	BH50040AS			2 00 /2 00	6004	21			GC	20.9'-27 2' Sandy Gravel Continuation of interval described in 19.5' to 20.1' Oxidation indicated by pervasive staining with limonite and some hematite at 25 0'
	BH50053AS				6003	22				
				2 00 /2 00	6002	23				
	BH50054AS				6001	24				
				2.00 /2 00	6000	25				
	BH50055AS				5999	26	12/07/92 ▽			
				1 90 /2 00	5998	27				
	BH50056AS				5997	28			CLAYEY SILTSTONE	27 2'-31 1' Top of Bedrock at 27 2' Clayey Siltstone with some Sand Yellowish gray (5 Y 7/2) with some f g sand, sub-rounded, well sorted, 0 08 mm to 0 25 mm. avg 0 16 mm. Poorly sorted, wavy laminations with discontinuous 1 0 mm thick clay layers. Small trace carbonaceous grains, mica, chert, feldspar, quartz, with trace of limonite nodules and limonite staining, moist 21% sand, 47% silt, 32% clay
				1.40 /1 50	5996	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 38 00	GROUND ELEVATION (FT)	6025 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-8077	AREA SURF DIST E OF 115	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	50492
EAST	2082461	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/07/92	

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

CHEMICAL SA[illegible] DEPTH
GRADATIONA[illegible] E 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
CLAYEY SANDSTONE	31.1'-31 5' Clayey Sandstone with some Silt Grayish yellow (5 Y 8/4). F g, 0 2 mm avg., poorly sorted, sub-angular Thin olive gray clay interbeds (1 0 - 2 0mm), 20% porosity Slightly argillicly cemented, mod friable, muscovite, feldspar, quartz, with limonite oxidation, damp 10 degree bedding angle 38% sand, 25% silt, 37% clay
CLAYEY SILTSTONE	31.5'-31 8' Clayey Siltstone Similar to interval 27 2 to 31.1'.
SILTY SANDSTONE	31 8'-33 0' Silty Sandstone with some Clay Dark yellowish orange (10 YR 6/6) to very pale orange (10 YR 8/2) F g, 0 2 mm avg., poorly sorted, sub-rounded, 20% porosity, very weakly argillicly cemented, friable, chert, muscovite, quartz, feldspar Wavy, thin laminations, with trace MnO2, but common limonite oxidation, damp 53% sand, 26% silt, 21% clay
CLAYEY SILTSTONE	33 0'-34 0' Clayey Siltstone with abundt. Sand Yellowish (5 Y 7/2) with f.g. sand, sub-rounded, well graded, chert, feldspar, quartz, with carbon trash. Poorly sorted, mod. argillicly cemented, mod friable, laminated, distorted, oxidized, moist. 27% sand, 40% silt, 33% clay
SANDY SILTSTONE	34 0'-34 5': Sandy Siltstone with some Clay Light gray (N7), with f g. sand, and some clay, poorly sorted, 10% porosity, weakly argillicly cemented, friable, muscovite, feldspar, chert, quartz, and carbon trash. Bedding disrupted by bioturbation with worm fossil at 34 1', damp. 30% sand, 55% silt, 15% clay.
SILTY CLAYSTONE	34 5'-35.2' Silty Claystone with abundt Sand. Light gray (N7) Silty claystone at top, gradational to Sandy Claystone at base, moist 26% sand, 35% silt, 39% clay
SANDY SILTSTONE	35 2'-35 6': Sandy Siltstone with some Clay. Yellowish gray (5 Y 7/2) F g. in biomodal sizes: 25% 0.24 mm, and 75% 0 08 mm, poorly sorted, rounded to sub-rounded, 10% porosity, weakly argillicly cemented, friable, muscovite, feldspar, quartz, chert, and carbon trash. Some limonitic oxidaiton, wavy thin laminations, damp 38% sand, 43% silt, 19% clay
CLAYEY SILTSTONE	35 6'-36 2' Clayey Siltstone with abundt Sand. Yellowish gray (5 Y 7/2), f g. sand (0.16mm avg. diameter, rounded), poorly sorted, 10% porosity, mod. argillicly cemented, mod friable, biotite, chert, muscovite, feldspar, quartz, wavy laminations with selective 25% bleaching along laminae and 50 degree fractures, 75% limonitic oxidation, with small trace of carbonized wood, moist 26% sand, 41% silt, 33% clay
SILTY SANDSTONE	36 2'-38 0' Silty Sandstone with some Clay Yellowish gray (5 Y 7/2) F g, 0 16 mm avg. Poorly sorted, rounded, 10% to 25% porosity, mod argillicly cemented, mod. friable Chert, carbon trash, feldspar, quartz, thinly laminated with trough cross-stratification forset beds at 25 degrees overlying wavy laminations Selective limonitic oxidation, damp, 3 degree bedding angle, fracture at 50 degrees 44% sand, 42% silt, 14% clay
	Total Depth Drilled: 38 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT) 6027 30	PROJECT NUMBER 605-RFI/RI	LOG OF BORING NUMBER	
NORTH 7-9051	AREA SURF DIST E OF 115	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 2082358	LOCATOR NUMBER J8	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/15/92		50592

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

CRITICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER: 0H5006SAS, 0H5006ZAS, 0H5006YAS, 0H5007QAS, 0H5007IAS, 0H5006JAS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 00 /2.00; 1 50 /2.00; 1 80 /2.00; 1.80 /2.00; 2 00 /2.00

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

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

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0 0'-1.0' Gravelly Sand with some Silt and trace Clay Mod brown (5 YR 4/4) Gravel fine, well graded, sub-angular to sub-rounded, aplitic and quartzitic Sand very well graded, sub-angular to sub-rounded, biotite, muscovite, chert, feldspar, aplite, and quartzite. No obvious bedding Contains roots and traces of ferromagnetic metals, probably drill bit chips Mod FeOx cemented, moist. 32% gravel, 50% sand, 16% silt, 2% clay
GW	1 0'-3 5' Sandy Gravel (abundt Cobbles) with some Silt and trace Clay Light brown (5 YR 6/4) to gray orange (10 YR 7/4) Cobbles crushed by drill bit, arkose and granite Gravel coarse to fine, well graded, sub-rounded, aplite, gneiss, and quartzite Sand c g to f g, well graded, aplite, schist, quartzite, muscovite, feldspar, and quartz Bedding not apparent Mod. FeOx cemented in upper part 38% cobbles, 24% gravel, 30% sand, 7% silt, 1% clay.
	No recovery (3 5-4 0')
GW	4 0'-11.6' Sandy Gravel (abundt Cobbles) with some Silt and trace Clay Continuation of interval described from 1 0' to 3.5' above Caliche cemented at 6 4' and with caliche from 9 8' to 11 6' Nearly dry Matrix fines are pale olive (10 Y 6/2) over zone from 8 0' to 10 5'

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT) 6027 30	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	748051	AREA SUBF 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
	BH50072AS			1 60 /2.00	6017 6016	10 11			NO RECOVERY	No recovery (11.6-12 0')
	BH50073AS			2.00 /2.00	6015 6014	12 13			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
	BH50064AS			2 00 /2.00	6013 6012	14 15			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
	BH50066AS BH50075AS			2 00 /2.00	6011 6010	16 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			2 00 /2.00	6009 6008	18 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 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
	BH50077AS	0% 50% 100%	0% 100%		6007	20				
	BH50065AS			2 00 /2 00	6006	21				
	BH50078AS				6005	22			SM	21 9'-26 0' Silty Sand with some Gravel and Clay Dark yellowish orange (10 YR 6/6) to pale olive (10 Y 6/2) Gravel trace coarse, pred fine, well graded, sub-angular to rounded Sandstone arkose, aplite, quartz, and quartzite Sand c.g to f g., well graded, sub-angular to sub-rounded, aplite, phologopite, muscovite, chert, feldspar, and quartz No apparent bedding, weathered with hematite and limonite oxidation non-calcareous, moist. 16% gravel, 36% sand, 34% silt, 14% clay
				2 00 /2 00	6004	23				
	BH50079AS				6003	24				
				2 00 /2 00	6002	25				
									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, phologopite, 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
	BH50080AS				6001	26				
				2.00 /2 00	6000	27				
	BH50081AS				5999	28				
				2.00 /2 00	5998	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT) 5927 30	PROJECT NUMBER 095-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 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%	2.00 /2.00	5997 5996 5995 5994 5993 5992 5991 5990 5989 5988	30 31 32 33 34 35 36 37 38 39 40				Total Depth Drilled 32 00

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

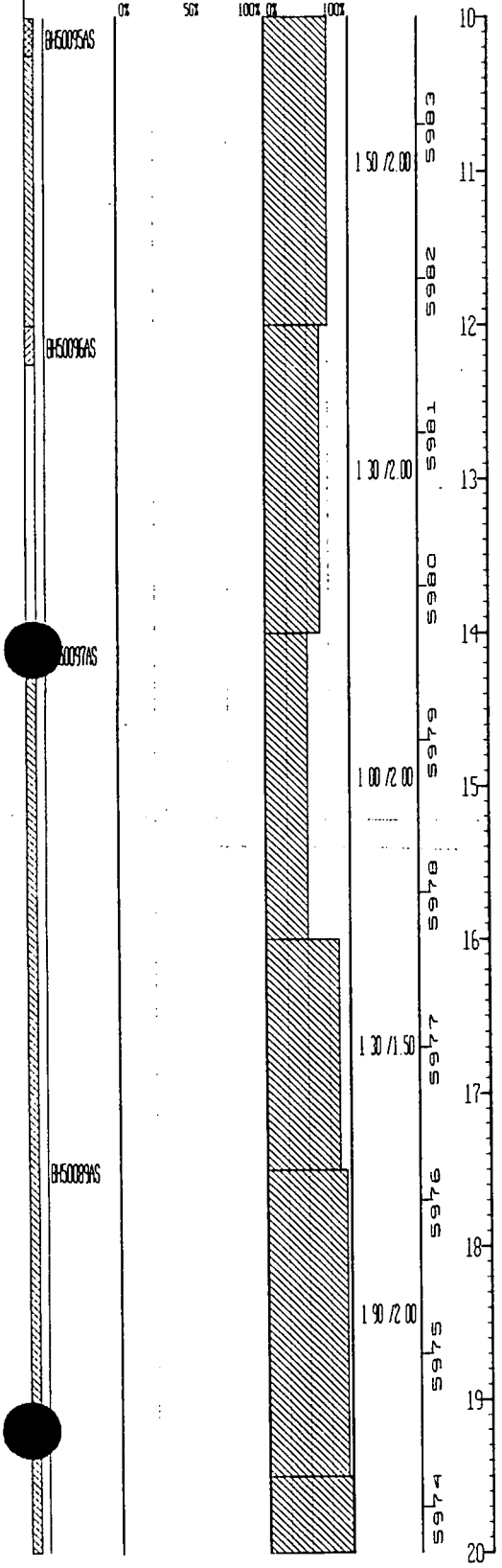
Sample number	Recovery/interval	Unified soils classification or rock type	Description
		ML	0 0'-0.6' Clayey Silt with some Gravel and Sand Dusky yellowish brown (10 YR 2/2), gravel coarse to fine, sub-angular; quartz and quartzite, max 1 2 in Sand c g to m g, sub-rounded; quartzite Silt and clay fines of low to med. plasticity Well graded, not obviously bedded, very moist, roots common 24% gravel, 15% sand, 35% silt, 26% clay
	1 50 /2.00	GM	0 6'-3.3' Sandy Gravel with some Silt, trace Clay. Dark yellowish brown (10 YR 4/2). Well graded Gravel coarse to fine, sub-angular to sub-rounded, 1 2 in max. size; aplite and quartzite Sand pred f g, sub-angular to sub-rounded, quartz and quartzite, trace of charred wood. Fines of low plasticity, bedding not apparent, trace roots, damp. 40% gravel, 34% sand, 23% silt, 3% clay
0H50091AS			
0H50087AS	1 30 /2.00		No recovery (1.5-2.0')
		NO RECOVERY	No recovery (3 3-4.0')
0H50092AS		CL	4 0'-5 7' Clayey Sand with some Silt and Gravel, trace Cobbles. Mod. yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/2). Well graded. Cobbles indicated by remnant chips of granite, aplite, and sandstone crushed by drill bit Coarse gravel is sub-rounded, max size 2.0 in, granite and quartzite Fine gravel is sub-rounded to sub-angular; granite and quartzite sand sub-rounded to rounded, pred f g; magnetite, muscovite, phlogopite, calcite, feldspar, quartzite, and quartz. Fines of low plasticity, well graded, no obvious bedding, moist This interval contains colluvial material from 4 2' to 8 6', consisting of limonitic oxidized claystone, pale brown (5 YR 5/2). Material internal consistency within this interval to 8 6', below it diminishes and likely forms part of the matrix of the soil materials <5% cobbles, 10% gravel, 34% sand, 22% silt, 29% clay
	1.70 /2.00		
0H50093AS	2.00 /2.00		No recovery (5 7-6 0')
		CL	6 0'-9 2' Clayey Sand with some Silt and Gravel, trace Cobbles Continuation of interval described from 4 0' to 5 7' Interval from 6.3' to 6 5' contains black granular material consisting of totally charred wood with traces of cream white, porous, non-calcareous scale. Probably represents anthropogenic wastes.
0H50094AS			
0H50088AS	1 20 /2.00		No recovery (9 2'-10.0')

Depth scale: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

Datum (FT): 5993, 5992, 5991, 5990, 5989, 5988, 5987, 5986, 5985, 5984

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 21 00	GROUND ELEVATION (FT)	5993 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747914	AREA SURF DIST E OF 115	CASING DIAMETER (IN)		GEOLOGIST	L HOST/T DREILING	50692
EAST	2082505	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/08/92	

REMARKS: DRIVE SAMPLER 2.5 IN MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGISTS: LAURIE HOST, AND THERESA SANTANG ELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/09/92. NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN.



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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')
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
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 SUBDIST C OF 115	CASING DIAMETER (IN)	GEOLOGIST	L HOST/T DREILING	
EAST	2082505	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 3 00	DATE DRILLED	12/08/92	5692

REMARKS DRIVE SAMPLER 2 5 IN MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGISTS LAURIE HOST, AND THERESA SANTANG ELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/09/92 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

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

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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

1 50 /1 50

DATUM (FT): 5973, 5972, 5971, 5970, 5969, 5968, 5967, 5966, 5965, 5964

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT)	5993 20	PROJECT NUMBER	OU5-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 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%		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
				1.60 /2.00	5992	1				
	BH50108AS				5991	2			GM	1.4'-7.5'. Sandy Gravel with some Silt and Cobbles, trace Clay Light brown (5 YR 5/6) Cobbles (broken by drill bit) sub-rounded, quartzite Gravel, coarse to fine, max. diameter 1.75 in, well graded, aplite, quartz, and quartzite Sand c.g to f g, well graded, magnetite, aplite, quartz, and quartzite Abundt fines, trace of calcite and roots in upper half Pervasive limonite oxidation cement, locally containing MnO2. Few ferromagnetic fragments to 2 mm Contact with underlying bedrock sharp. Moist. Top part of interval from 1.4' to 2.5' is somewhat finer grained (lacking cobbles and coarse gravel) and appears more consolidated. 10% cobbles, 35% gravel, 26% sand, 24% silt, 5% clay
	BH50104AS			1.80 /2.00	5990	3				
	109AS				5989	4				No recovery (1.6-2.0'), and (5.5-6.0').
				1.50 /2.00	5988	5				
	BH50110AS				5987	6			CLAYSTONE	7.5'-16.0' Top of Bedrock at 7.5' Claystone with some Silt, trace Sand Light olive gray (5 Y 5/2). Sand f g, well sorted, sub-angular, muscovite, feldspar, limonite, and quartz. Less than 10% porosity, argillic cement, slightly friable, no obvious bedding Ironstone (limonite) nodules to 1.0 in diameter from 11.5' to 16.0', calcareous from 7.5' to 9.7' Moist Structural features within interval are 8.0' to 8.5'- slough of overlying alluvium containing drill fractured gravel in vertical contact with bedrock claystone negate a contact at 8.5', 9.7'- limonite on 10 degree open fracture, calcite on 50 degree fracture; 10.7'- limonite on 5 and 10 degree fractures. 11.4'- limonite on 5 and 80 degree fractures near local carbonaceous material, 14.2'- MnO2 on 20 degree fracture; 14.3'- limonite on 35 degree fracture <1% sand, 15% silt, 85% clay
				2.00 /2.00	5986	7				
	BH50105AS				5985	8				
	BH50111AS									
				2.00 /2.00	5984	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00		GROUND ELEVATION (FT)	5993 20	PROJECT NUMBER	1.5-RFI/RI
NORTH	7-7886	AREA SURF DIST E OF 115		CASING DIAMETER (IN)		GEOLOGIST	GREILING
EAST	2082384	LOCATOR NUMBER J7		BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/11/92

LOG OF BORING NUMBER 50792

REMARKS DRILLING EQUIPMENT CME 750 ATV WITH CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST THERESA SANTANGELO-GREILING. 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 GRADN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50112AS	0% 50%	100% 0% 100%	2.00 /2.00	5983	10				
					5982	11				
				2.00 /2.00	5981	12				
					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	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 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			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				5995	1			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 70 /2 00	5994	2				
	126AS				5993	3				No recovery (3.7-4 0')
				1 80 /2 00	5992	4				
	BH50127AS				5991	5				
				1 70 /2 00	5990	6				
	BH50128AS				5989	7			NO RECOVERY	No recovery (7 7-8 0')
	122AS			2.10 /2 00	5988	8			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
					5987	9				
						10				

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 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: BH50129AS, BH50123AS, BH50130AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 10 /2 00; 2 10 /2 00; 1 90 /2 00

DATUM (FT): 5986, 5985, 5984, 5983, 5982, 5981, 5980, 5979, 5978, 5977

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

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

CLAYSTONE

10 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

Total Depth Drilled: 16 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT)	5991.70	PROJECT NUMBER	35-RFI/RI	LOG OF BORING NUMBER
NORTH	747843	AREA IHSS 196	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	50992
EAST	2081536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/18/92	

REMARKS DRIVE SAMPLER 2 5 IN MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING BOREHOLE ABANDONED AND GROUTED ON 12/18/94 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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'-1.0' Silty Sand with some Gravel and trace Clay Brownish black (5 YR 2/1) Gravel fine, max. 0 6 in diameter, mod graded, sub-angular to sub-rounded, aplite and quartzite. Sand c.g to f g, well graded, sub-angular to sub-rounded; muscovite, phlogopite, aplite, quartz and quartzite Non-calcareous, roots common, traces of graphite, moist 8% gravel, 57% sand, 33% silt, 2% clay
	BH50147AS			2 00 /2 00	5991	1			GW	1.0'-4 25' Sandy Gravel with some Cobbles and Silt, trace Clay Dark gray (N3) to grayish black (N7) Cobbles (broken by drill bit) sub-rounded; aplite and quartzite. Gravel coarse to fine, max diameter 2.0 in, well graded, sub-rounded; schist and quartzite Sand c.g. to f g, pred m g., well graded, sub-angular; no apparent bedding, calcareous, slightly moist. Anthropogenic materials include flat glass, ceramic, shingles, nails, metal cuttings, and 60% graphite in #4 mesh (gw-gm) 20% cobbles, 40% gravel, 33% sand, 6% silt, 1% clay
	BH50138AS			0 70 /2.00	5990	2				
	[illegible]42AS				5989	3				No recovery (2.7-4 0')
				2.00 /2.00	5988	4			SM	4.25'-6 0' Silty Sand with some Gravel and Clay Dark yellowish brown (10 YR 4/2) Gravel coarse to fine, well graded, sub-rounded; schist and quartzite. Calcareous, no apparent bedding. Anthropogenic materials include nails, and 2% graphite 25% gravel, 38% sand, 28% silt, 9% clay
	BH50143AS			1 00 /2 00	5987	5	12/18/92 ▽		SM	6 0'-12 5' Silty Sand with some Gravel and trace Clay Mod. brown (5 YR 3/4) to dusky brown (5 YR 2/2) Gravel coarse to fine, max. diameter 2 0 in, sub-angular to sub-rounded; aplite, gneiss and quartzite. Sand c g to f g, well graded, rounded to sub-angular; muscovite, aplite, gneiss, quartz and quartzite Trace of graphite from upper interval. Base of fill approx. 7 0 ft No apparent bedding, saturated (water level measured during drilling at 6 0')
	BH50144AS				5986	6				
	[illegible]139AS [illegible]140AS BH50145AS			1 50 /2 00	5985	7				No recovery (7 0-8 0'), (9 5-10 0'), and (10 5-12 0')
					5984	8				
					5983	9				
					5982	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT) 5991 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747843	AREA IHSS 196	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	50992
EAST	2081536	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 12/18/92	

REMARKS DRIVE SAMPLER 2 5 IN MODIFIED CALIFORNIA SPLIT SPOON ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING. BOREHOLE ABANDONED AND GROUTED ON 12/18/94 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 50 /2 00	5985	10–11				
					5980	11–12				
				1 00 /2 00	5975	12–13			SANDY CLAYSTONE	12 5'-14 2' Top of Bedrock at 12.5'. Sandy Claystone with some Silt Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 5/2) Sand trace m g, pred. f g, well sorted, sub-rounded to rounded, biotite, muscovite, chert, feldspar and quartz, with trace limonite nodules Weak argillic cemented, 20% porosity, friable Thinly bedded with 40 degree foreset crossbeds, intensely weathered and oxidized. Gravel slough at top, clay rich at base, saturated. 39% sand, 19% silt, 42% clay
	BH50146AS				5970	13–14				No recovery (13 0-14 0')
				1.30 /2 00	5965	14–15			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
	BH50148AS				5960	15–16				No recovery (15 3-16 0')
				1.50 /2 00	5955	16–17			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
					5950	17–18				No recovery (17 5-18 0')
				1 00 /1 00	5945	18–19			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
					5940	19–20				Total Depth Drilled 19.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	5991 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747769	AREA IHSS 196	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	51092
EAST	2081497	LOCATION NUMBER I7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	12/21/92	

REMARKS DRILLING EQUIPMENT CME 75 ATV WITH CALIFORNIA SPLIT SPOONS ASI RIG GEOLOGIST THERESA SANTANGELO-DREILING BORE HOLE ABANDONED AND GROUTED ON 12/21/92 NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50157AS			1 40 /2 00	5991 5990				GM	0 0'-3 1' Cobbly Sand with some Silt, Gravel and Clay Dark yellowish brown (10 YR 4/2) Cobbles (broken by drill bit) sub-angular, quartzite Gravel fine to coarse, 1.5 in. max. diameter, well graded, sub-angular to sub-rounded; aplite and quartzite Sand f.g. to c.g., well graded, sub-rounded to rounded; trace magnetite, muscovite, feldspar, quartz, aplite, gneiss, and quartzite, with approx. 1% graphite in #40 mesh. Roots common at top, no apparent bedding Moist. 24% Cobbles, 12% gravel, 34% sand, 18% silt, 12% clay
					5989					No recovery (1 4-2 0')
	BH50158AS BH50159AS			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 BH50159AS				5985					
				2 00 /2.00	5984				SANDY SILTSTONE	6 2'-7.8' Top of Bedrock at 6 2' Sandy Siltstone with some Clay Dark yellowish orange (10 YR 6/2) to pale yellowish brown (10 YR 6/2) Sand f g, avg. diameter 0 12 mm, well sorted, rounded, muscovite, feldspar and quartz, with small trace calcareous, and carbonaceous materials 15% porosity except to 30% in some 5 mm thick f g sandy zones Weakly argillicly cemented, highly friable Laminated to very thinly bedded, bedding dip to 12 degrees inferred at 7 0' at weathered parting At 6 8' roots follow open dessication fractures dipping 85 degrees containing, in part, pink clay and calcareous infilling. Bedrock contact especially weathered with pervasive limonitic oxidation Very moist near top to moist at bottom of interval 28% sand, 51% silt, 21% clay.
	BH50160AS				5983					
				2 00 /2 00	5982					

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5991.10	PROJECT NUMBER	GU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747769	AREA: IHSS 196	CASING DIAMETER (IN)		GEOLOGIST	T. S. DREILING	51092
EAST	2081497	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	12/21/92	

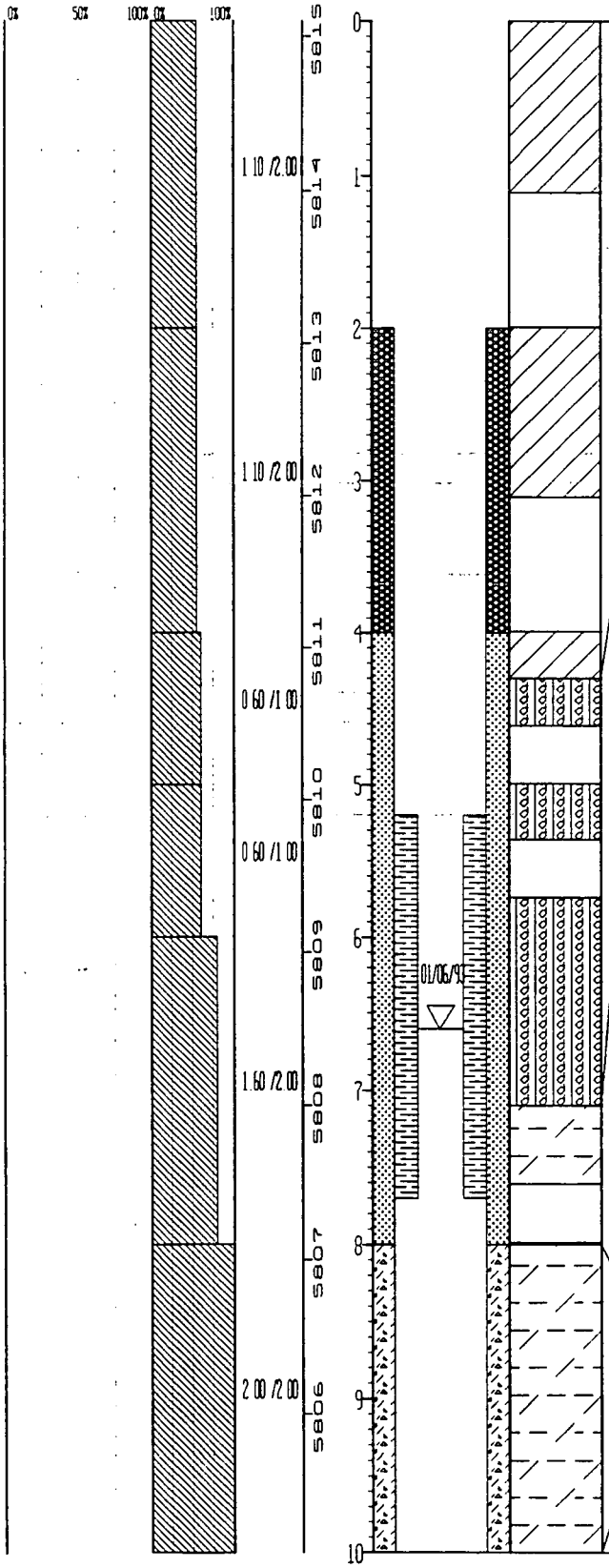
REMARKS: DRILLING EQUIPMENT: CME 750 ATV WITH CALIFORNIA SPLIT SPOONS. ASI RIG GEOLOGIST: THERESA SANTANGELO-DREILING. BORE HOLE ABANDONED AND GROUTED ON 12/21/92. NOTE: CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN.

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

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

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

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



CL

0 0'-4 3' Gravelly Clay with some Silt, Sand, and Cobbles Grayish brown (5 YR 3/2) near top, interval mainly dark yellowish brown (10 YR 4/2). Cobbles (crushed by drill bit) quartzite Gravel c. - f , 2.0 in max diameter, poorly graded, sub-rounded. Sand c g. to f g , pred f g , sub-angular; aplite, quartzite, muscovite, feldspar, and quartz Fines of med. plasticity, calcareous, with roots, no apparent bedding, moist to very moist
7% cobbles, 16% gravel, 14% sand, 15% silt, 58% clay

No recovery (1 1-2.0'), and (3.1-4.0')

SM

4 3'-7.1' Gravelly Sand with some Silt and trace Clay Grayish brown (5 YR 3/2). Gravel c - f , poorly graded, avg. diameter 2.0 in., sub-rounded; gneiss, aplite, and quartzite Sand c.g. to f g , pred. m g , sub-angular to sub-rounded; gneiss, quartzite, muscovite, feldspar and quartz Fetid odor, no apparent bedding. Saturated, water level at 6 6' on 01/06/93.
30% gravel, 55% sand, 12% silt, 3% clay

No recovery (4 6-5 0'), and (5 35-5 75')

SILTY CLAYSTONE

7 1'-8 0' Top of Bedrock at 7 1'
Silty Claystone with trace Sand. Dom light brown (5 YR 5/6) with med. gray (N5). Sand f.g., 0 14 mm avg. diameter, well sorted, sub-rounded to rounded; muscovite, chert, and quartz 10% porosity, cement is argillic with some limonite, friable. Locally with carbonaceous material and calcite. Laminated locally as indicated by 1 mm, f g sand layers, weathered, moist Structural features at 8 5'- fractures at 80, and 85 degrees, calcite and limonite filled; 9.2'- bedding approx. 5 degrees, 9 4'- fracture at 75 degrees with limonite surfaces; 9 6'- fracture at 40 degrees with limonite and MnO2 surfaces.
5% sand, 35% silt, 60% clay

No recovery (7 6-8 0')

SILTY CLAYSTONE

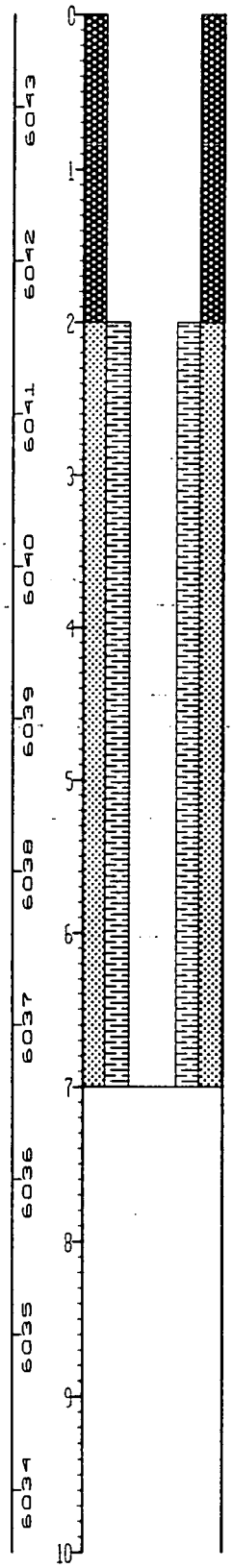
8 0'-10 0' Silty Claystone with trace Sand Termination of interval begun at 7 1' Upper contact of weathered bedrock sharp with overlying alluvium. Weathered interval from 7 1' to 8 4' with 1 mm wide concordant and discordant calcareous fillings, relatively broken, and light gray (N7) with mottled yellowish brown (10 YR 5/4)

Total Depth Drilled 10.00 Total Depth Casing 10 00
Bottom of Filter Pack 8 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 7 00	GROUND ELEVATION (FT)	6043 60	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747247	AREA WOMAN CK W OF 133	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	51293
EAST	2078315	LOCATOR NUMBER: F7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/03/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

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



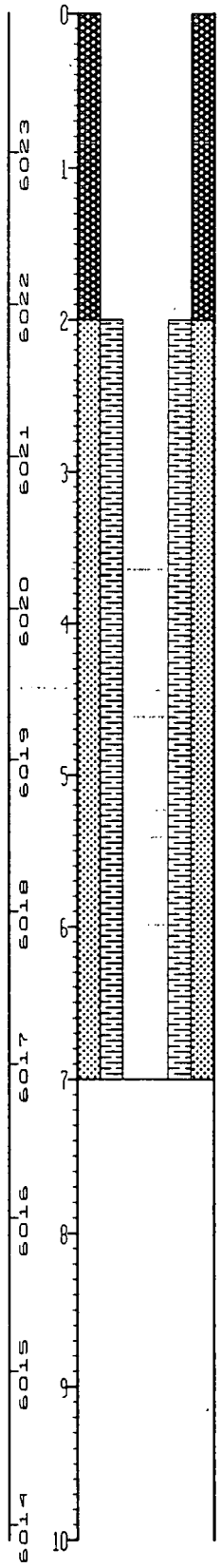
Total Depth Drilled 7.00
Bottom of Filter Pack 7 00

Total Depth Casing 7 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 7 00	GROUND ELEVATION (FT)	6023 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER:
NORTH	7-7314	AREA WOMAN CK S OF 133 6	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	51393
EAST	2079057	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

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

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



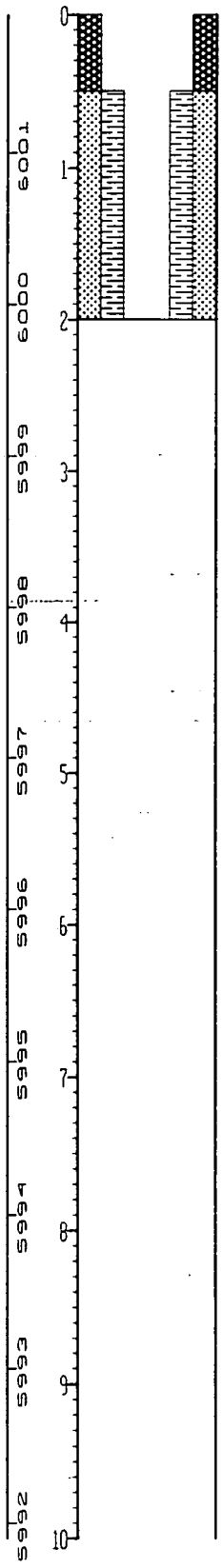
Total Depth Drilled 7 00
Bottom of Filter Pack 7 00

Total Depth Casing 7 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 2 00	GROUND ELEVATION (FT)	6001 90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747283	AREA WOMAN CK S OF 133 4	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DRILLING	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) 6001 6000 5999 5998 5997 5996 5995 5994 5993 5992
DEPTH (FT) 0 1 2 3 4 5 6 7 8 9 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 2 00 Total Depth Casing 2.00
Bottom of Filter Pack 2 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4 50	GROUND ELEVATION (FT)	5990 00	PROJECT NUMBER:	OU5-RFI/RI
NORTH [illegible]360	AREA WOMAN CK S OF 133 3	CASING DIAMETER (IN)	3 30	GEOLOGIST:	T S DREILING
EAST 1390102	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED:	02/03/93

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

LOG OF BORING NUMBER 51593

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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
Bottom of Filter Pack: 4 50

Total Depth Casing 4 50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5997 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747147	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	51693
EAST	2080102	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

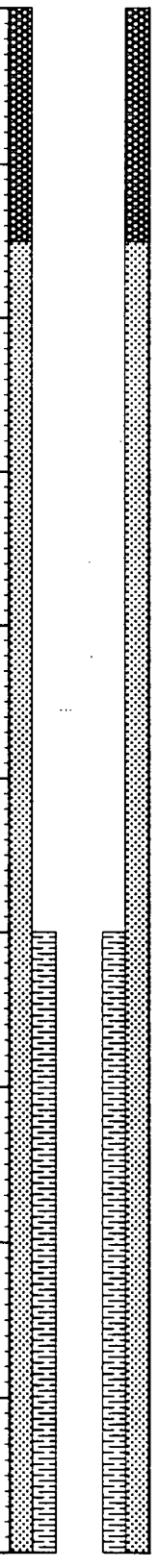
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5997	0				
					5996	1				
					5995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

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	105-RFI/RI	LOG OF BORING NUMBER
NORTH	747166	AREA SOUTH OF THSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	F S DRILLING	51793
EAST	2080104	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	12/03/93	

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) 5999 5998 5997 5996 5995 5994 5993 5992 5991 5990
DEPTH (FT) 0 1 2 3 4 5 6 7 8 9 10
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



Total Depth Drilled 11.00 Total Depth Casing 11.00
Bottom of Filter Pack 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 THSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S GREILING	51793
EAST	2080104	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

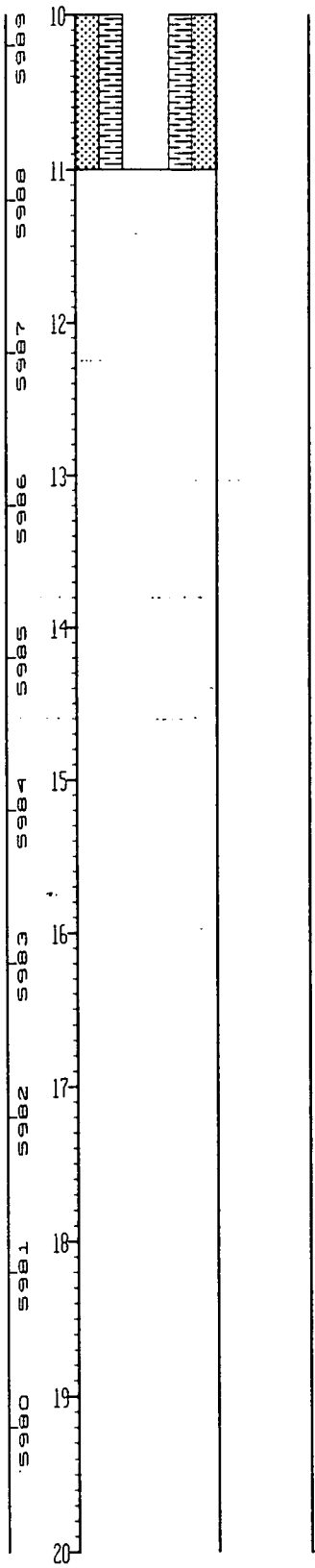
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100%

PERCENT RECOVERY 0% 100%

RECOVERY INTERVAL

DATUM (FT) / DEPTH (FT)



WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	6000 90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747185	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	51893
EAST	2080105	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

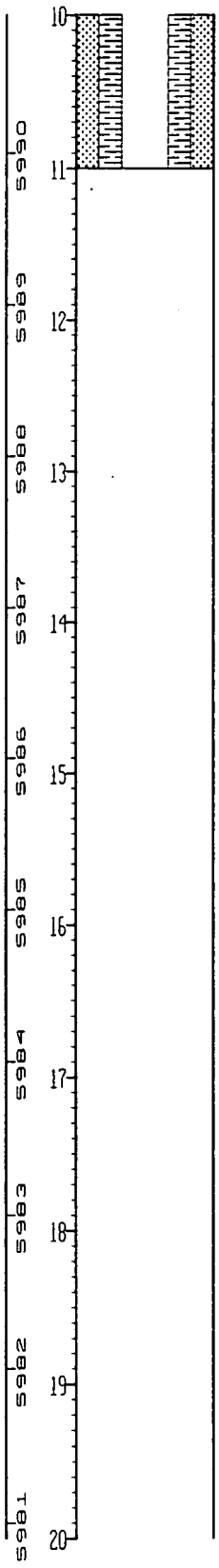
REMARKS: DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING.

CHEMICAL 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
					6000	0				Total Depth Drilled 11 00 Total Depth Casing 11.00
										Bottom of Filter Pack 11 00
					5999	1				
					5998	2				
					5997	3				
					5996	4				
					5995	5				
					5994	6				
					5993	7				
					5992	8				
					5991	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 00	GROUND ELEVATION (FT)	6000 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7195	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	51893
EAST	2080105	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

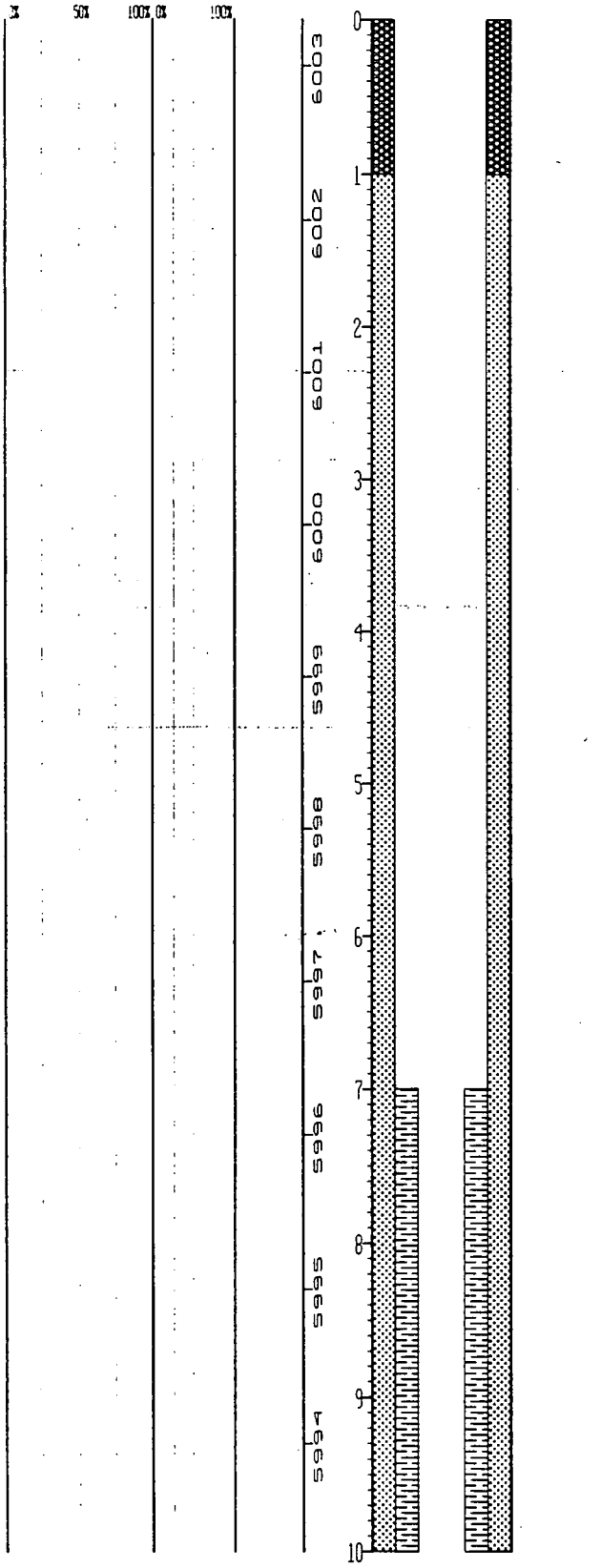
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6003.30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747205	AREA SOUTH OF THSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING	51993
EAST	2080103	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93	

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

CHEMICAL STUDY 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

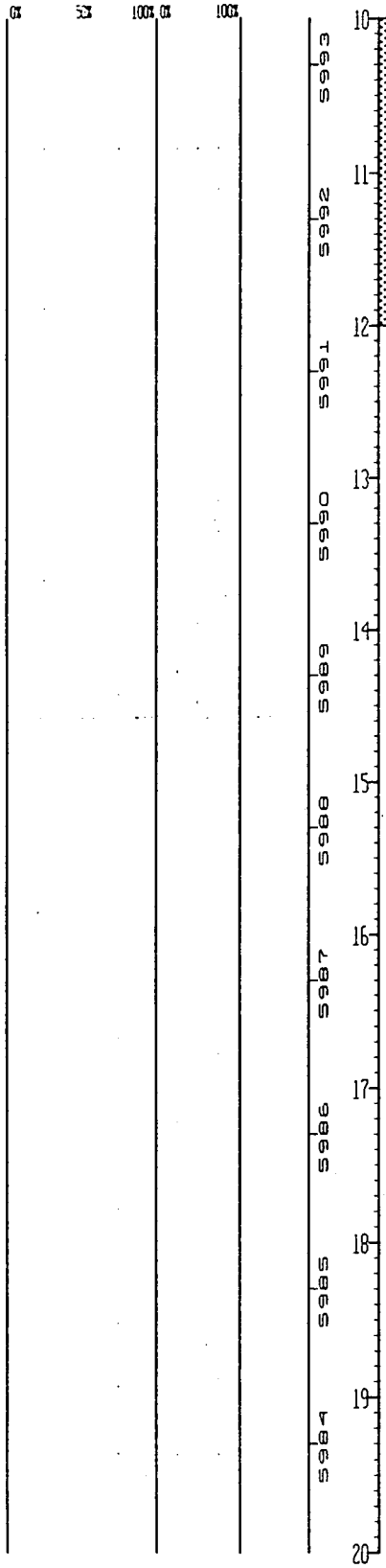


Total Depth Drilled: 12.00 Total Depth Casing: 12.00
Bottom of Filter Pack: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6003 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747205	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DRILLING	51993
EAST	2080103	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

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

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

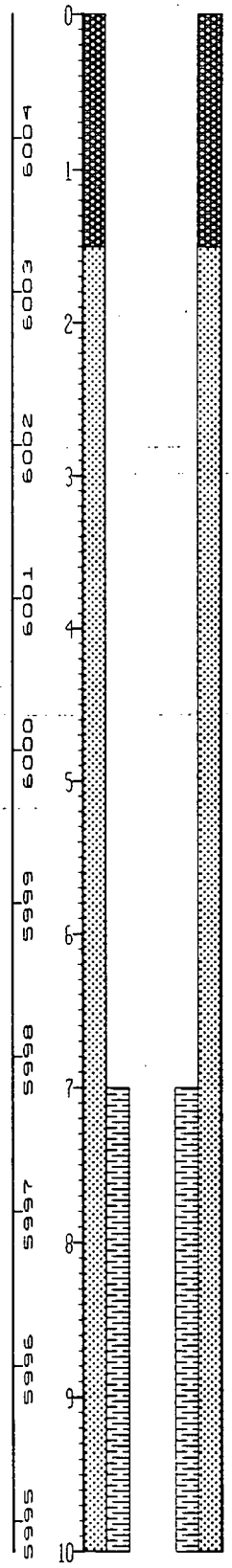


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	6004.80	PROJECT NUMBER:	OU5-RFI/RI
NORTH: 747225	AREA SOUTH OF THSS 133.3	CASING DIAMETER (IN)	0.30	GEOLOGIST	T.S. DREILING
EAST: 2080103	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/03/93

LOG OF BORING NUMBER: 52093

REMARKS: DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

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

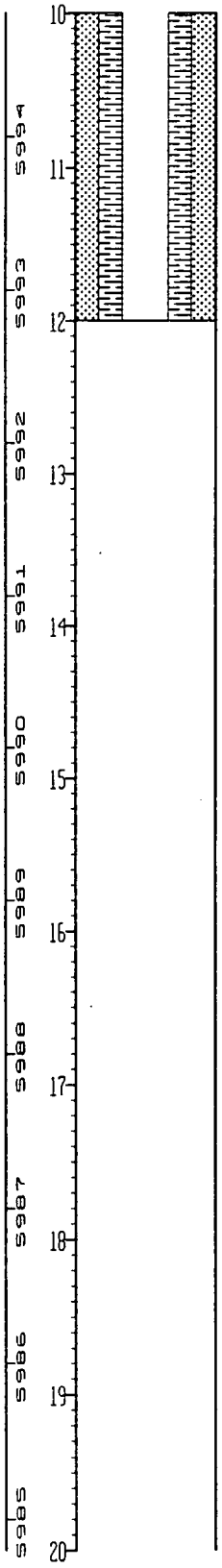


Total Depth Drilled: 12.00 Total Depth Casing 12.00
Bottom of Filter Pack: 12.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	5004 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747225	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	52093
EAST	2080103	LOCATOR NUMBER: H7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/03/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

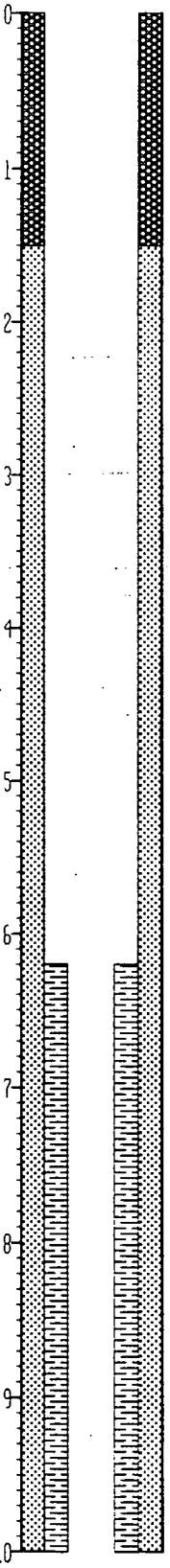
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 50% 100%)
PERCENT RECOVERY (0% 100%)
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 20	GROUND ELEVATION (FT)	6006 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747245	AREA: SOUTH OF 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%		6006 6005 6004 6003 6002 6001 6000 5999 5998 5997				



Total Depth Drilled 11 20 Total Depth Casing: 11.20
Bottom of Filter Pack 11 20

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 20	GROUND ELEVATION (FT)	5006 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-72-5	AREA SOUTH OF IHSS 133 3	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S BREILING	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
		50%	100% 0%	100%	5996	10				
					5995	11				
					5994	12				
					5993	13				
					5992	14				
					5991	15				
					5990	16				
					5989	17				
					5988	18				
					5987	19				
						20				

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

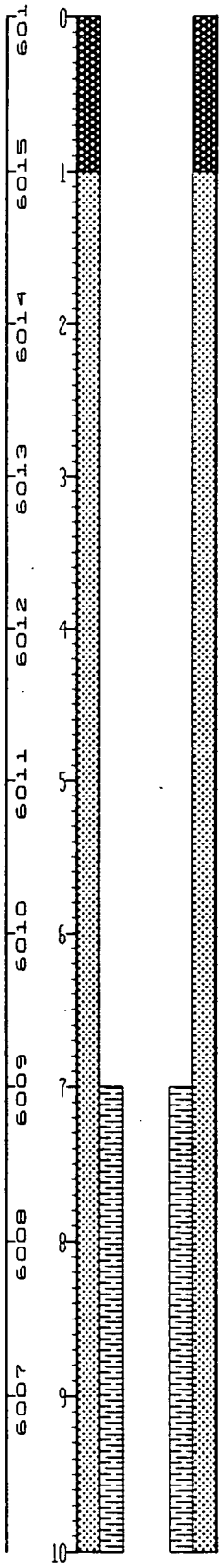
CHEMICAL SAMPLE	GRADATIONAL SAMPLE	DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0% 50% 100%	0% 100%		5990	0				
							5989	1				
							5988	2				
		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

Total Depth Drilled 4.00 Total Depth Casing 4 00
Bottom of Filter Pack 4 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6016 00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	746490	AREA S FORK OF WOMAN CK	CASING DIAMETER (IN)	2 30	GEOLOGIST	T S DREILING	52393
EAST	2079702	LOCATOR NUMBER 66	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

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

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



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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	746490	AREA S FORK OF WOMAN CK	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	52393
EAST	2079702	LOCATOR NUMBER 66	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

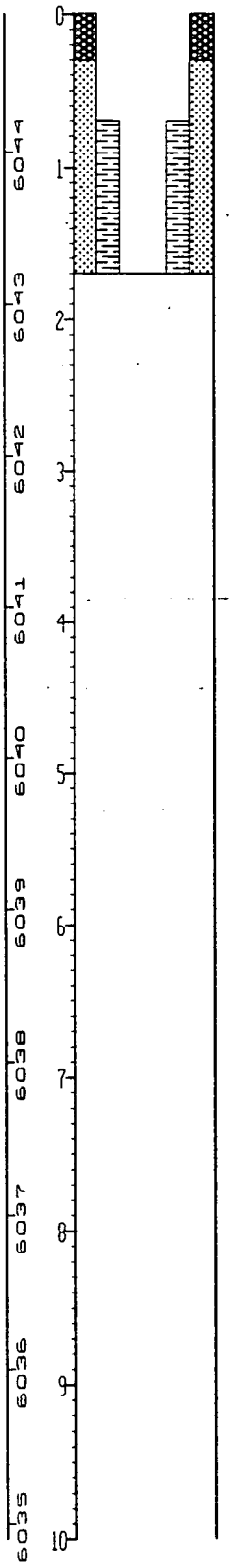
CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		6006	10				
						6005	11				
						6004	12				
						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
NORTH: 74213	AREA S FORK OF WOMAN CK.	CASING DIAMETER (IN)	0 30	GEOLOGIST:	T S BREILING
EAST 2078977	LOCATOR NUMBER F6	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/04/93

LOG OF BORING NUMBER: 52493

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 SA[illegible] DEPTH
GRADATIONAL [illegible] DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100%

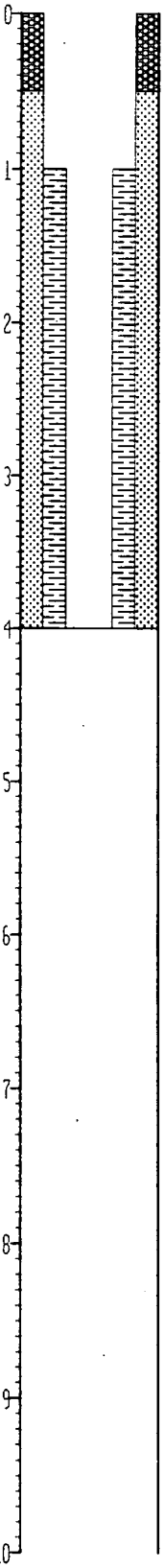
PERCENT RECOVERY 0% 100%

RECOVERY/INTERVAL

DATUM (FT) 5972 5971 5970 5969 5968 5967 5966 5965 5964 5963

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

WELL OR PIEZOMETER CONSTRUCTION



LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

DESCRIPTION

Total Depth Drilled 4 00 Total Depth Casing 4 00
Bottom of Filter Pack 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5951 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747544	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T S DRILLING	52693
EAST	2081505	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

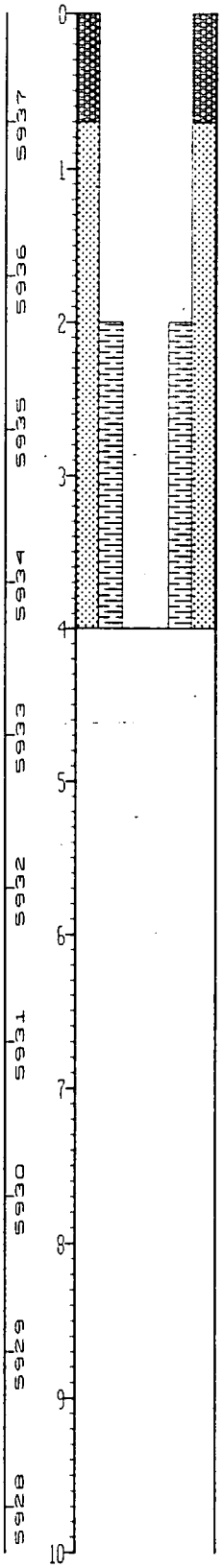
REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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%		5951	0				Total Depth Drilled 6 00 Total Depth Casing 6 00
					5950	1				Bottom of Filter Pack 6 00
					5949	2				
					5948	3				
					5947	4				
					5946	5				
					5945	6				
					5944	7				
					5943	8				
					5942	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH [illegible] 4.00	GROUND ELEVATION (FT)	5937.70	PROJECT NUMBER	[illegible]5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]42	AREA OU5	CASING DIAMETER (IN)	0.30	GEOLOGIST	T S DREILING	52793
EAST	[illegible]2003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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



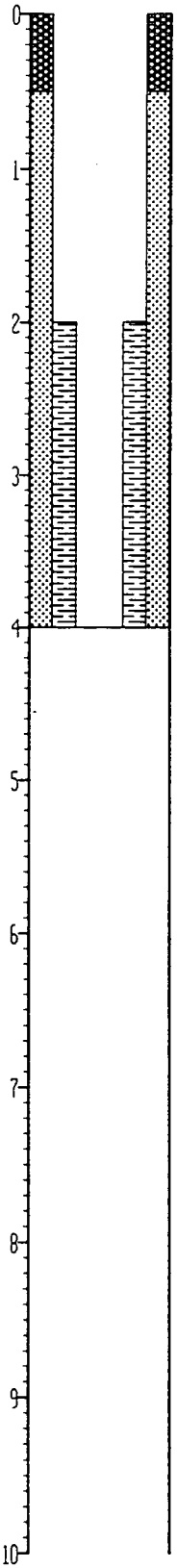
Total Depth Drilled [illegible]
Bottom of Filter Pack [illegible]

Total Depth Casing 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4 00	GROUND ELEVATION (FT)	5938 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747518	AREA WOMAN CK S OF 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	52893
EAST	2082002	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

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

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



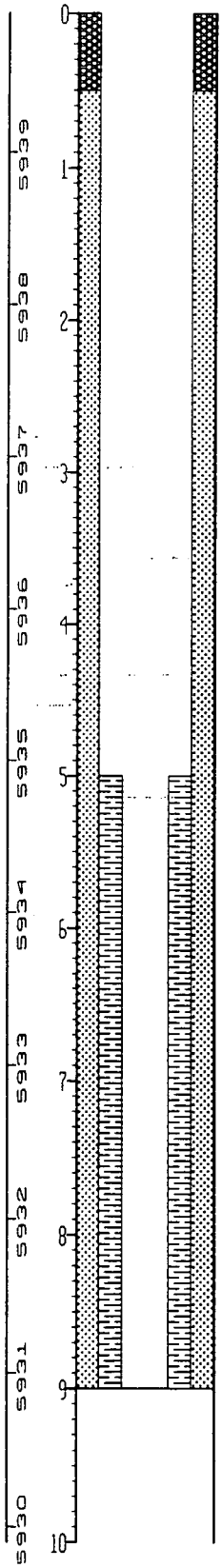
Total Depth Drilled 4 00
Bottom of Filter Pack 4 00
Total Depth Casing 4 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT)	5939.90	PROJECT NUMBER	OU5-RFI/RI
NORTH 7-7553	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0.30	GEOLOGIST	T S OREILING
EAST 2092002	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93

LOG OF BORING NUMBER 52993

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

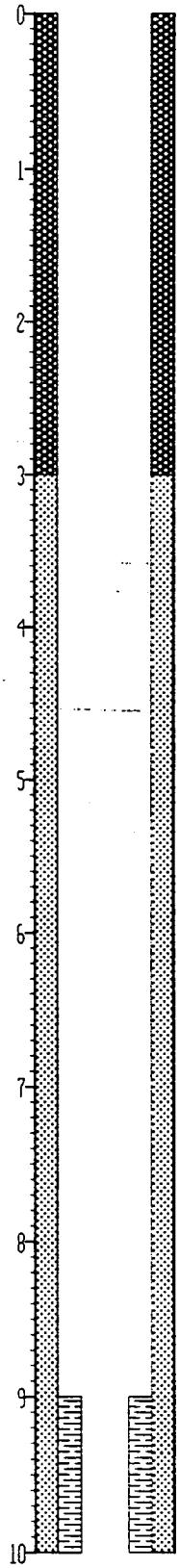
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00		GROUND ELEVATION (FT)	5950 50	PROJECT NUMBER	OU5-RFI/RI
NORTH	747594	AREA OU5, IHSS 115		CASING DIAMETER (IN)	0 30	GEOLOGIST	T S. DREILING
EAST	2082005	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

LOG OF BORING NUMBER

53093

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 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	OU5-RFI/RI
NORTH 747594	AREA OU5, 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

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

LOG OF BORING NUMBER 53093

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%		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
NORTH 47613	AREA OU5, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DRILLING
EAST 1082003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93

LOG OF BORING NUMBER 53193

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
					5953	0				Total Depth Drilled 15 00 Total Depth Casing 15 00 Bottom of Filter Pack 15 00
					5952	1				
					5951	2				
					5950	3				
					5949	4				
					5948	5				
					5947	6				
					5946	7				
					5945	8				
					5944	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT)	5953 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747613	AREA 005, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	53193
EAST	2082003	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

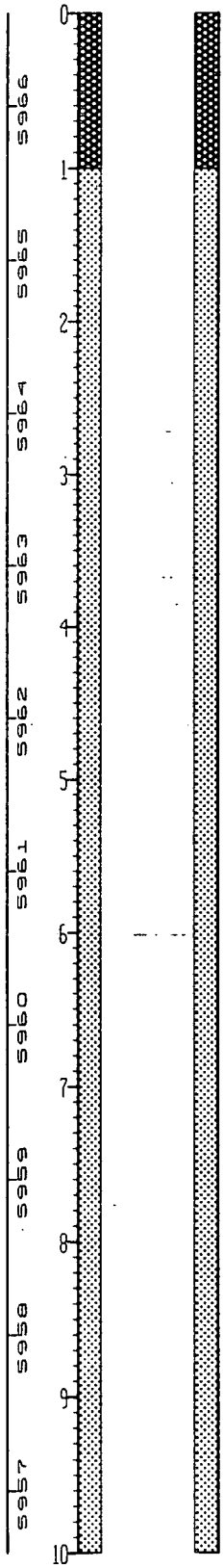
REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERED (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5943	10				
					5942	11				
					5941	12				
					5940	13				
					5939	14				
					5938	15				
					5937	16				
					5936	17				
					5935	18				
					5934	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 00	GROUND ELEVATION (FT)	5966 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747657	AREA OU5, [illegible]SS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DRILLING	53293
EAST	2082004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS: DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

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

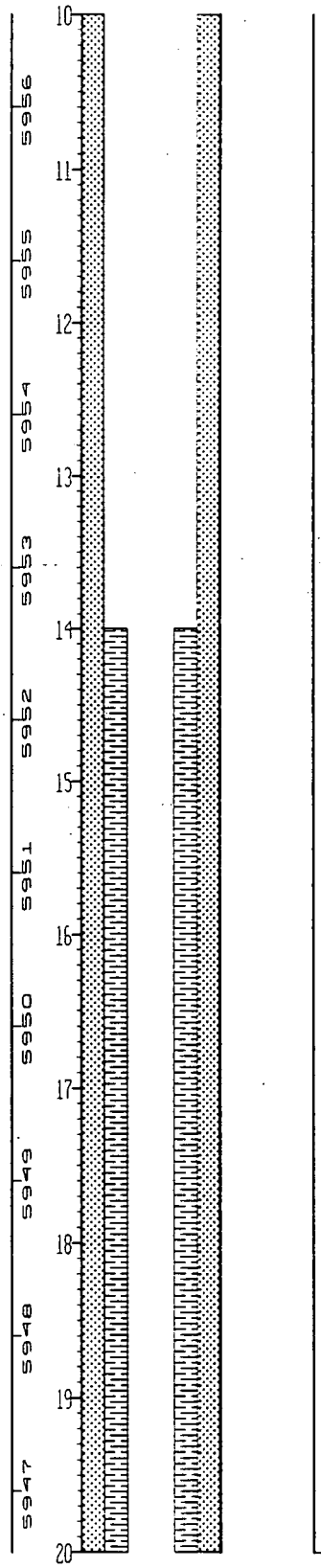


Total Depth Drilled 24 00 Total Depth Casing 24 00
Bottom of Filter Pack 24 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 00	GROUND ELEVATION (FT)	5966 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	749657	AREA 005, IHSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	53293
EAST	2082004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/08/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

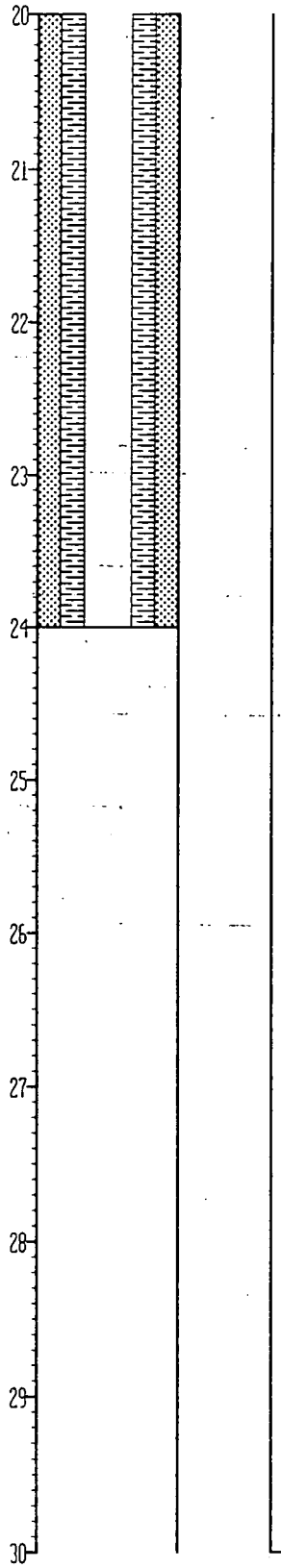
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE 0% 50% 100%
PERCENT RECOVERY 0% 100%
RECOVERY/INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE
DESCRIPTION



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 24 00	GROUND ELEVATION (FT)	5966 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747657	AREA OU5, THSS 115	CASING DIAMETER (IN)	0 30	GEOLOGIST:	T S OREILING	53293
EAST	2082004	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED:	02/08/93	

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

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



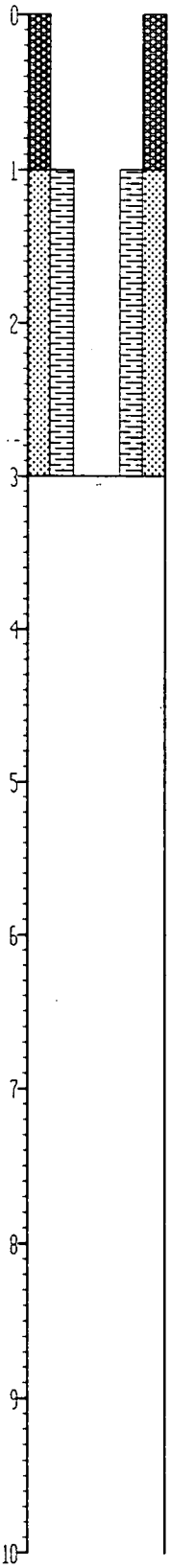
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 3.00	GROUND ELEVATION (FT)	5917.50	PROJECT NUMBER	005-RFI/RI
NORTH 747500	AREA WOMAN CK SC 115	CASING DIAMETER (IN)	3.30	GEOLOGIST	T S DREILING
EAST 2082736	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.29	DATE DRILLED	02/04/93

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



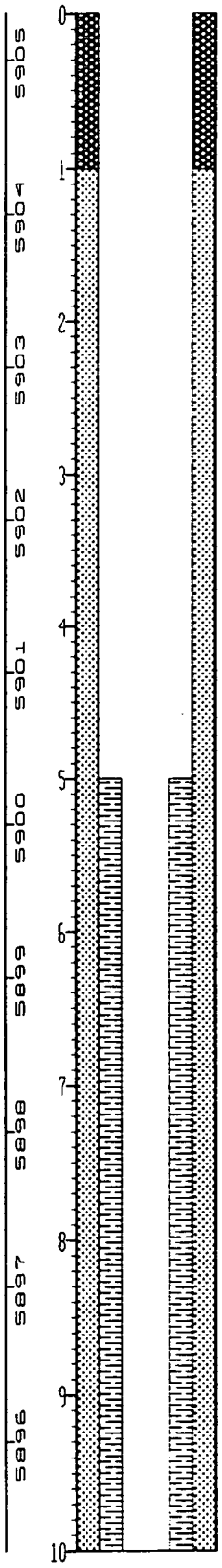
Total Depth Drilled: 3.00
Bottom of Filter Pack: 3.00

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 SC 115	CASING DIAMETER (IN) 0 30	GEOLOGIST T S DRILLING	53493
EAST	2083174	LOCATOR NUMBER K7	BOREHOLE DIAMETER (IN) 1 00	DATE DRILLED 02/04/93	

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

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

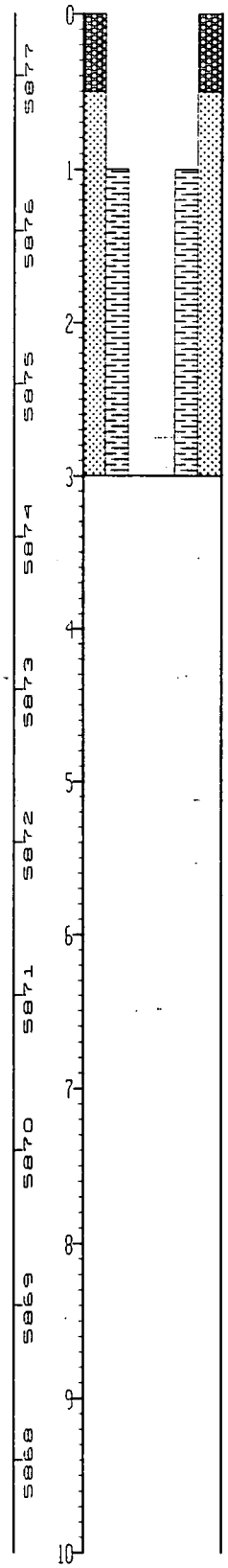


Total Depth Drilled: 10 00 Total Depth Casing: 10 00
Bottom of Filter Pack: 10.00

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 0U5	CASING DIAMETER (IN)	GEOLOGIST	[illegible] GREILING	53593
EAST 2083950	LOCATOR NUMBER K7	BOREHOLE DIAMETER (IN) 0.30	DATE DRILLED	[illegible]/04/93	

REMARKS WELLPOINT INSTALLED WITH GEOPROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE 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%							

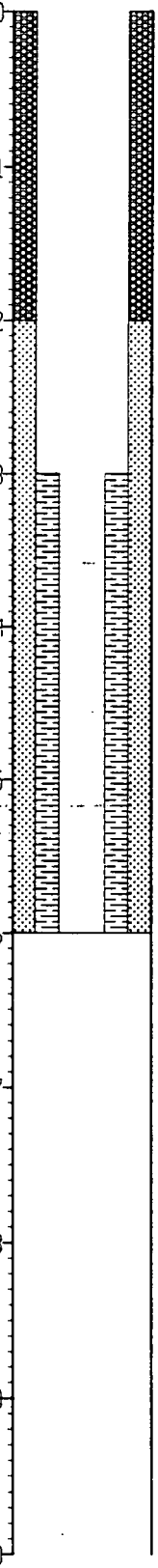


Total Depth Drilled 3.00 Total Depth Casing 3.00
Bottom of Filter Pack 3.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5884 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]	AREA 005	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	53693
EAST	2083397	LOCATOR NUMBER K7	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	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%		5884	0				
					5883	1				
					5882	2				
					5881	3				
					5880	4				
					5879	5				
					5878	6				
					5877	7				
					5876	8				
					5875	9				
						10				

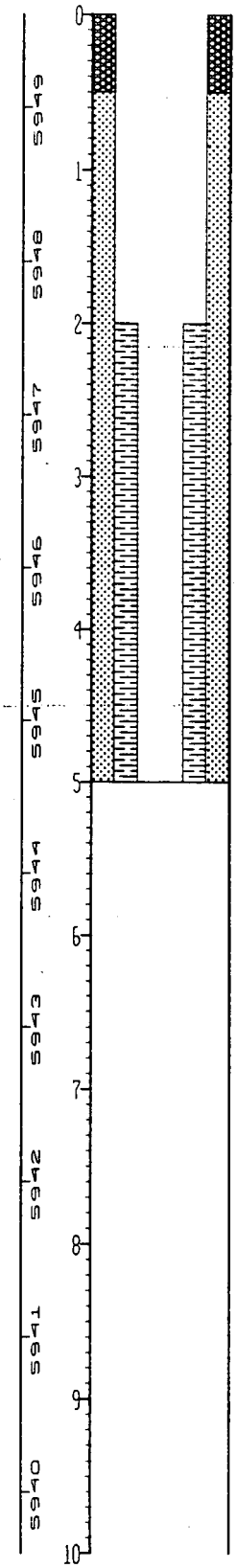


Total Depth Drilled 6 00 Total Depth Casing 6 00
Bottom of Filter Pack 6 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 5 00	GROUND ELEVATION (FT)	5949 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	742071	AREA ANTELOPE SPRINGS CK.	CASING DIAMETER (IN)	0 30	GEOLOGIST	TSD	53793
EAST	2082801	LOCATOR NUMBER J6	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

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



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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 3 00	GROUND ELEVATION (FT) 5667 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747387	AREA OU5	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
					5667	0				Total Depth Drilled 3 00 Total Depth Casing 3 00
					5666	1				Bottom of Filter Pack 3 00
					5665	2				
					5664	3				
					5663	4				
					5662	5				
					5661	6				
					5660	7				
					5659	8				
					5658	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5852 50	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747614	AREA WOMAN CK W C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S 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

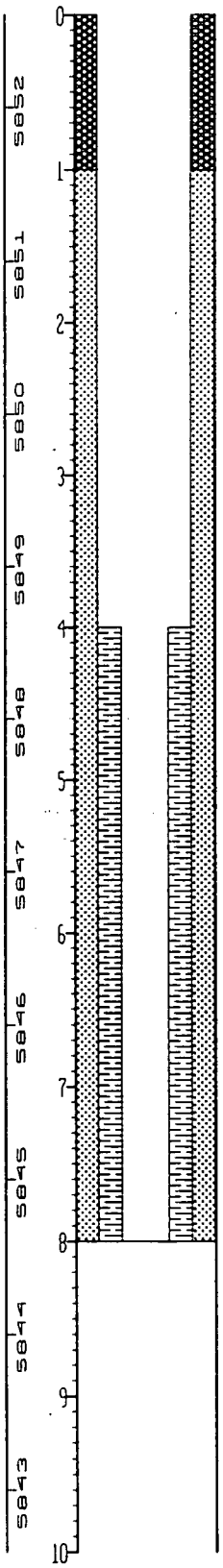
CHEMICAL SAMPLE DEPTH	GRADATIONAL	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						5852	0				
						5851	1				
						5850	2				
						5849	3				
						5848	4				
						5847	5				
						5846	6				
						5845	7				
						5844	8				
						5843	9				
							10				

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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	5852 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747642	AREA OU5, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	54093
EAST	2085052	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

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



Total Depth Drilled 8 00 Total Depth Casing 8 00
Bottom of Filter Pack 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 2.00	GROUND ELEVATION (FT)	5853.90	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%		5858	0				
					5857	1				
					5856	2				
					5855	3				
					5854	4				
					5853	5				
					5852	6				
					5851	7				
					5850	8				
					5849	9				
						10				

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 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747689	AREA 005, W OF C-1 POND	CASING DIAMETER (IN) 0 30	GEOLOGIST T S DREILING	54293
EAST	2085040	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN) 1 00	DATE DRILLED 02/04/93	

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

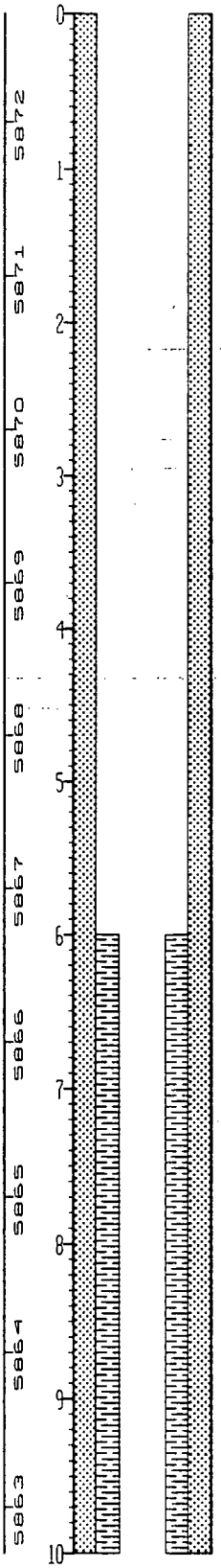
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5866	0				
					5865	1				
					5864	2				
	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

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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	5872 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747709	AREA 005, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	54393
EAST	2085034	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

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

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

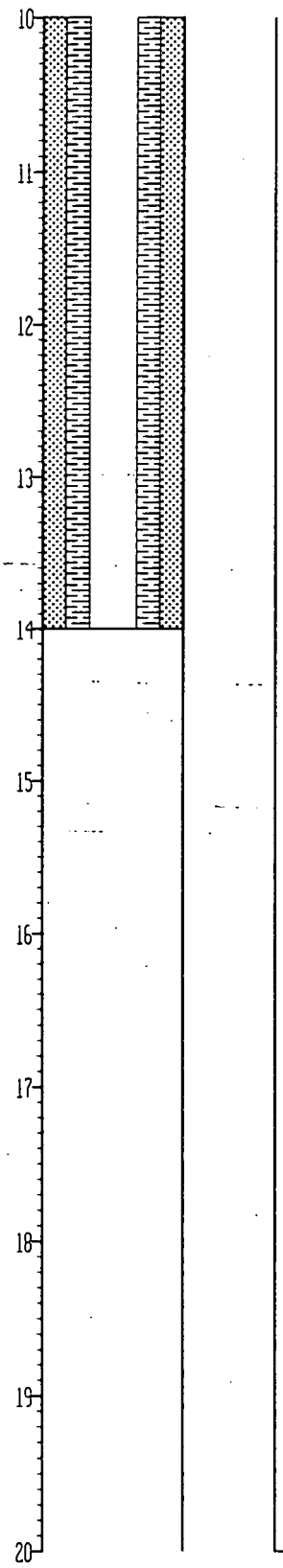


Total Depth Drilled 14 00 Total Depth Casing 14 00
Bottom of Filter Pack 14.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	5872 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747709	AREA OU5, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	54393
EAST	2085034	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

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



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.00	GROUND ELEVATION (FT)	5881.80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747742	AREA 005, W OF C-1 POND	CASING DIAMETER (IN)	0.30	GEOLOGIST	T S DREILING	54493
EAST	2085025	LOCATION NUMBER M7	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	02/04/93	

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

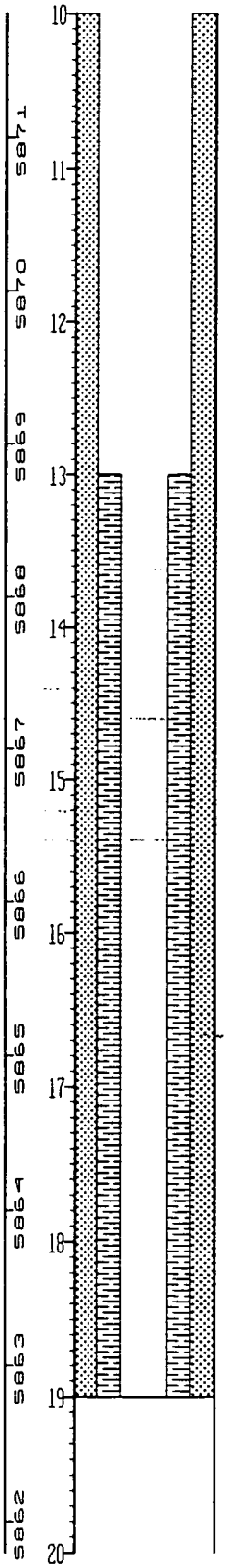
PIT DEPTH	CRITICAL SAMPLE	GRADATIONAL	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				% 50% 100%	0% 100%		5881	0				
							5880	1				
							5879	2				
					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

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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT)	5881 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747742	AREA OU5, W OF C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING	54493
EAST	2085025	LOCATOR NUMBER M7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93	

REMARKS DRIVEN WELLPOINT INSTALLED. NO CORE WAS COLLECTED FOR LOGGING

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

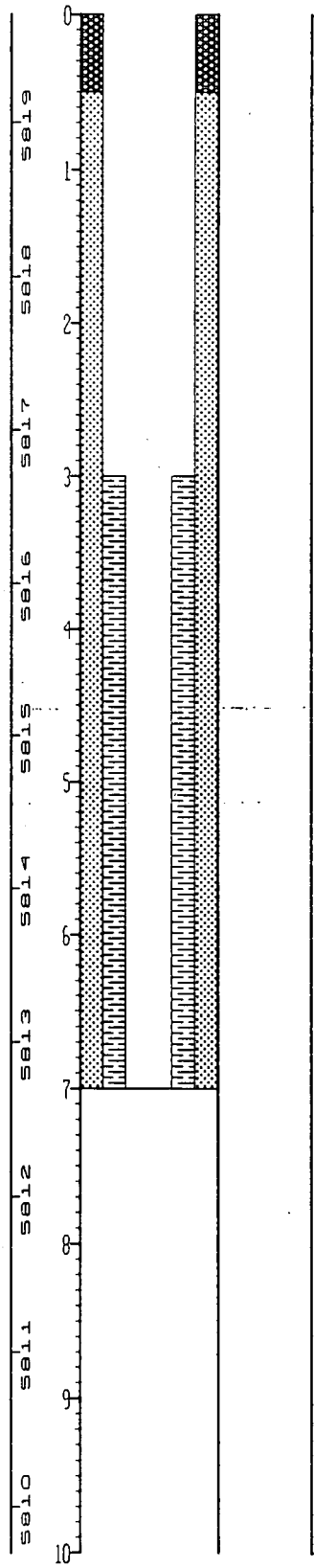


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 7 00	GROUND ELEVATION (FT)	5819 70	PROJECT NUMBER	OU5-RFI/RI
NORTH 747845	AREA WOMAN CK AT C-1 POND	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S DREILING
EAST 2086378	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN)	1 00	DATE DRILLED	02/04/93

LOG OF BORING NUMBER 54593

REMARKS DRIVEN WELLPOINT INSTALLED NO CORE WAS COLLECTED FOR LOGGING

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



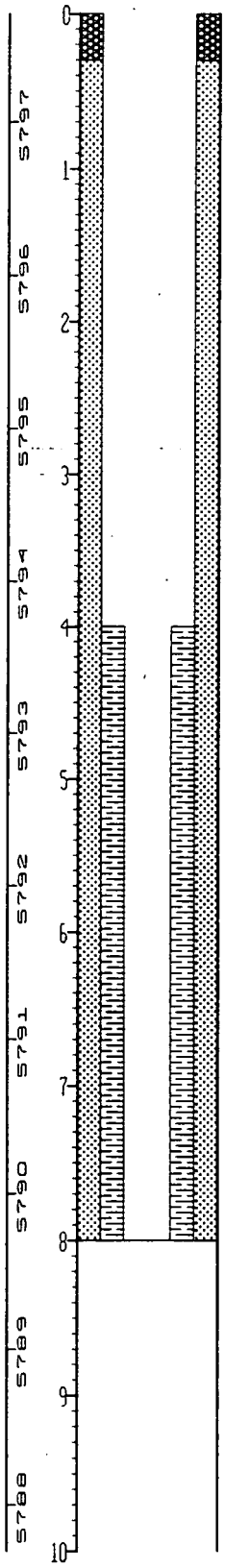
Total Depth Drilled 7 00
Bottom of Filter Pack 7.00

Total Depth Casing 7 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT) 5797 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747937	AREA 005, E OF POND C-1	CASING DIAMETER (IN) 0 30	GEOLOGIST T S DREILING	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

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



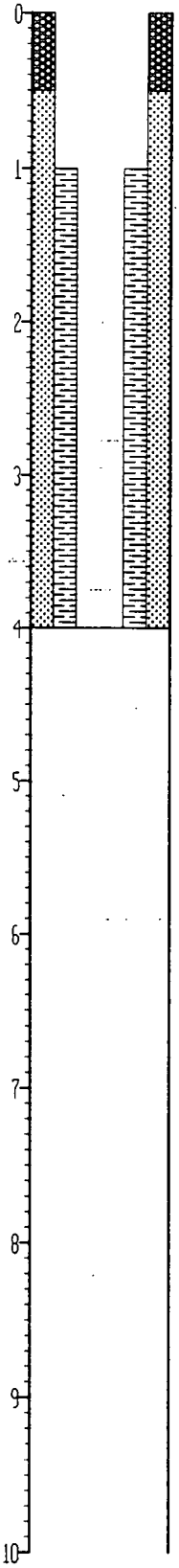
Total Depth Drilled 8 00
Bottom of Filter Pack 8 00

Total Depth Casing 8 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 4 00	GROUND ELEVATION (FT)	5774 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747844	AREA OU5, W OF POND C-2	CASING DIAMETER (IN)	0 30	GEOLOGIST	T S BREILING	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.

CRITICAL 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%		5774 5773 5772 5771 5770 5769 5768 5767 5766 5765	0 1 2 3 4 5 6 7 8 9 10				



Total Depth Drilled: 4 00
Bottom of Filter Pack: 4 00

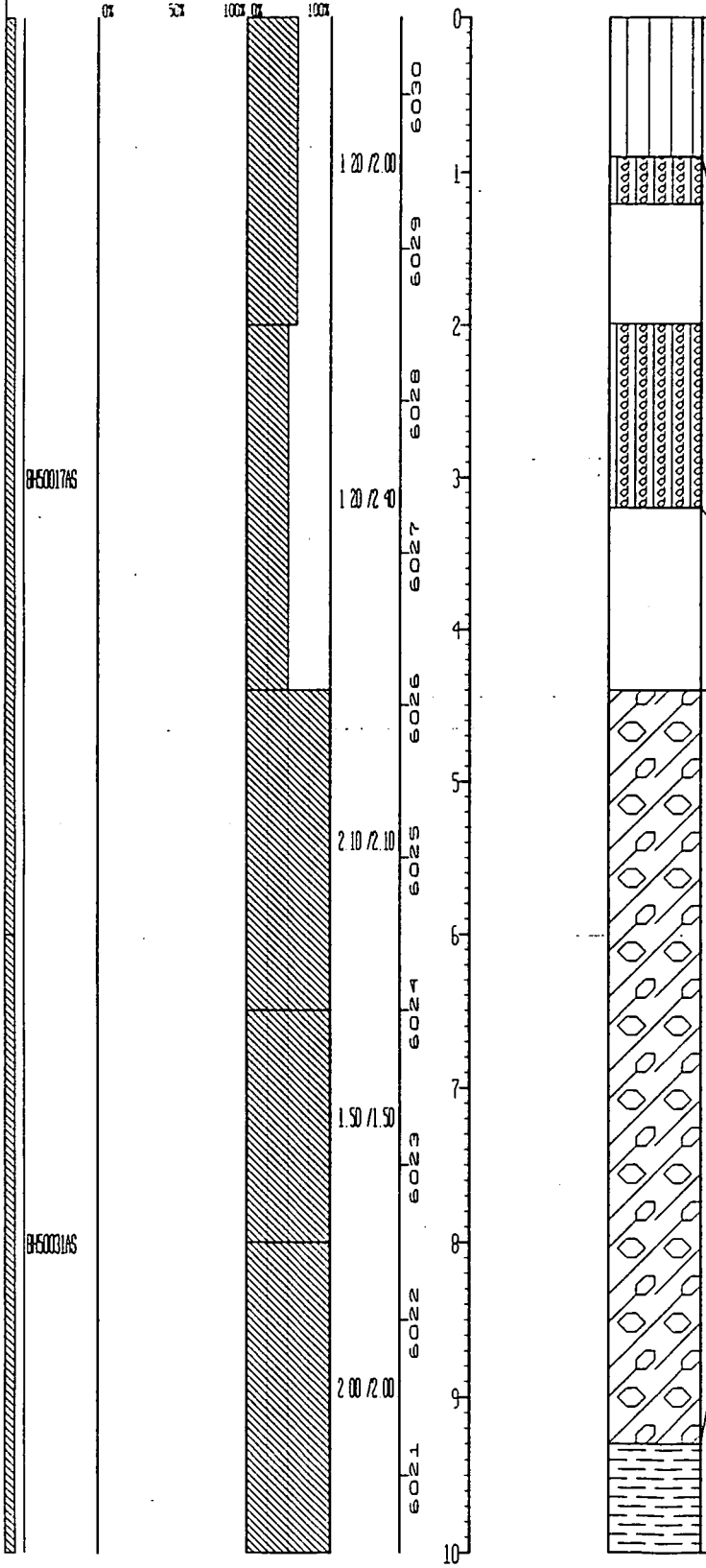
Total Depth Casing: 4.00

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 OU5, 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%



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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
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 No recovery (1.2-2.0')
NO RECOVERY	No recovery (3 2-4 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
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 sluff 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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 15 00	GROUND ELEVATION (FT) 6030.50	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747366	AREA OU5, IHSS 133 6	CASING DIAMETER (IN)	GEOLOGIST: T S OREILING	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 OREILING 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	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 OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747332	AREA OU5 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	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'-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. quartzite. 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			2.00 /2 00	6016	9			SILTY CLAYSTONE	8 2'-10 0' Top of Bedrock at 8 2' Silty Claystone with some Sand. Med light gray (N6) to med. gray (N5). Weathered, iron staining (10 YR 6/6) throughout as mottles. No apparent bedding. Interval very slightly calcareous Trace carbonaceous material Sand f g, mod. to well sorted, pred quartz, trace mica Moist 10-20% sand, 30% silt, 50% clay.
					6015	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT) 6024 60	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747332	AREA OU5, 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 AST RIG GEOLOGIST T SANTANGELO-DREILING NOTE CORE LOSS (NO RECOVERY) LESS THAN 0 2' NOT shown

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%						SLUFF	10 0'-10 4' Sluff from above (gravelly sand and clay)
		2 00 /2.00	6014 6013	10 11 12			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
		2 00 /2.00	6012 6011	13 14				
			6010 6009 6008 6007 6006 6005	15 16 17 18 19 20				Total Depth Drilled: 14 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14 50	GROUND ELEVATION (FT) 6020 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH 747348	AREA OU5, IHSS 133 6	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 2079206	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
						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
				2.00 /2.00	6020	1				
					6019	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	03/04/94 ▽			No recovery (5.0-6.0')
				1.00 /2.00	6015	6				No recovery (6 0-8 0'). Hydropunch sampled from 6 0 to 8 0 ft for a water sample.
					6014	7				No recovery (8 0-8.6'). Drilled through to 8 6' to collect tip and screen and to get beyond disturbed zone
				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 747348	AREA 005, IHSS 133 6	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55093
EAST 2079206	LOCATOR NUMBER G7	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 / 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%			10				
						6010				SLUFF	10 7'-11 0' Sluff from above
							11			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
					2 50 /2 50	6009	12				
						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 DRILLING	55193
EAST 2079232	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/08/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST T S DRILLING. 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%	1 50 /2.00	6047	0			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
					6046	1			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
					6045	2				
	BH50090AS			2 00 /2.00	6044	3				No recovery (1.5-2.0')
					6043	4			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
				1 20 /2.00	6042	5				
										No recovery (5 2-6 0').
					6041	6			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.
	BH50099AS			2.00 /2.00	6040	7				
					6039	8				
				2 00 /2.00		9				
					6038	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT)	6047 50	PROJECT NUMBER	005-RFI/RI
NORTH 747597	AREA 005, IHSS 133 5	CASING DIAMETER (IN)	-	GEOLOGIST	T S DREILING
EAST 2079232	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/08/93

LOG OF BORING NUMBER 55193

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	OU5-RFD/RI	LOG OF BORING NUMBER
NORTH	7-7619	AREA OU5 DHSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	55293
EAST	2979429	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/08/93	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 30 /2 00	6048 6047	0 1 2			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')
	6H50106AS			1 70 /2 00	6046 6045	3 4			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')
				1 50 /2 00 1 10 /2 00	6044 6043 6042 6041	5 6 7			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')
	6H50107AS			2 00 /2 00	6040 6039	8 9 10			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	LOG OF BORING NUMBER
NORTH	747619	AREA 005 IHSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	55293
EAST	2079429	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/08/93	

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

CHEMICAL GRAIN 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%			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	OU5-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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 30 /2 00	6081 6080	0 1			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')
	BH50163AS			2 00 /2 00	6079 6078	2 3				
				2 00 /2 00	6077 6076	4 5			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
				1 20 /2 00	6075 6074	6 7			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')
	BH50164AS			2 00 /2 00	6073 6072	8 9 10			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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33 55	GROUND ELEVATION (FT) 5681 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747764	AREA 005 IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING		
EAST 2079234	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/11/93	55393	

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

CHEMICAL SAMPLE / 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%			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')
				2 00 /2 00	6071	11				
				0 85 /0 85	6070	12				
				0 00 /1 05	6069	13				
	BH5016SAS BH5018SAS			2 00 /2 00	6068	14				
				0 25 /1 25	6067	15				
				0 00 /1 05	6066	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 90 /0 90	6065	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 00 /0 20	6064	18				
				0 65 /0 70	6063	19				
					6062	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT)	6081 60	PROJECT NUMBER	005-RFI/RI
NORTH	1-7764	AREA 005 (HSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST	2079234	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/11/93

LOG OF BORING NUMBER **55393**

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

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33 30	GROUND ELEVATION (FT)	6381 60	PROJECT NUMBER	065-RFI/RI
NORTH 747764	AREA 005 IHSS 133 5	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING
EAST 2079234	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	03/11/93

LOG OF BORING NUMBER **55393**

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

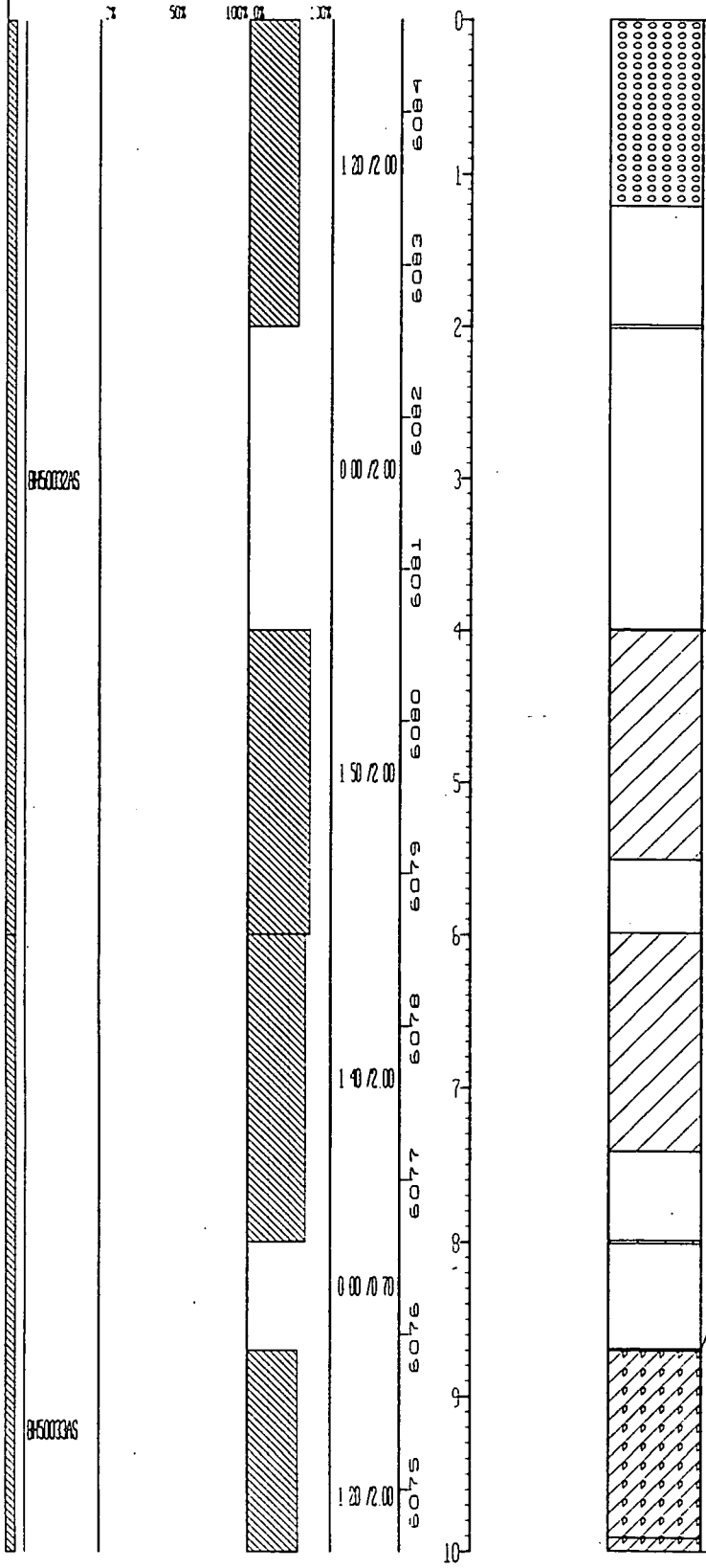
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	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				
			6050	31				
		1 70 /2 00	6049	32				
				33			NO RECOVERY	No recovery (33 0-33 3')
			6048					Total Depth Drilled 33 30
				34				
			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	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



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

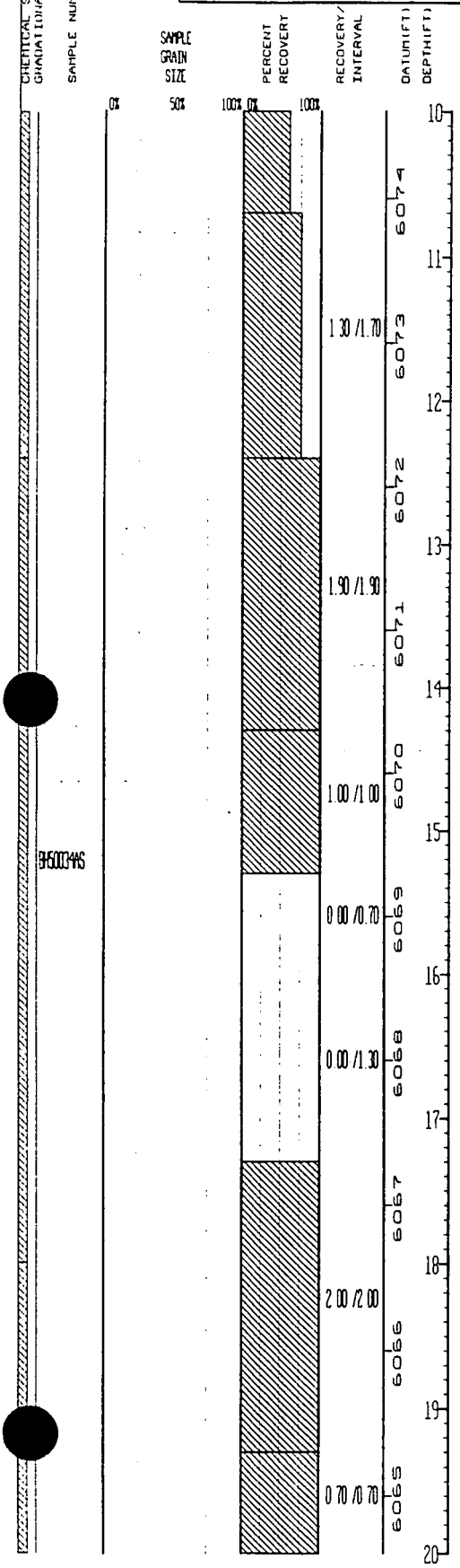
No recovery (5 5-6 0'), (7 4-8 0'), and (8 0-8 7')

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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747714	AREA 005, IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55493
EAST	2079354	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED: 03/09/93	

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



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 OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747714	AREA OU5, IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST T S DREILING	55493
EAST	2079354	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/09/93	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50166AS			1 50 /1 50	6064	20, 21			SM	20 0'-21 5' Gravelly Sand with some Silt and Clay Matrix mod brown (5 YR 4/4) Same as above, reference interval 12.4 to 15 3 ft Zone of possible ash residue near top of interval, approx 2.0 inches wide. Unable to confirm with microscope Possible traces of asbestos residue also. Moist. 20-30% gravel, -40% sand, 18% silt, 17% clay
				0 00 /0 80	6063	22				No recovery (21 5-22.3')
				2 00 /2 00	6062, 6061	23, 24			GC	22 3'-25 2' Sandy Gravel with some Clay and Silt Matrix mottled, primarily mod brown (5 YR 4/4) to mod yellowish brown (10 YR 5/4) Some patchy zones of mod orange pink (10 YR 7/4), silt to f g. sand Gravel angular, mod. to well graded gravel and cobbles. Sand well graded, f g to c g., sub-rounded to angular, mostly quartz. Interval non-calcareous, bedding not evident Moist 50% gravel, 28% sand, 6% silt, 16% clay
				0 90 /0 90	6060	25				No recovery (25.2-27 0')
				0.00 /0 30	6059	26				
				0 00 /1 50	6058	27				
	BH50169AS			2 00 /2 00	6057, 6056	28, 29			GC	27 0'-30.2' Gravelly Sand with some Clay and Silt Mod brown (5 YR 4/4) to light brown (5 YR 5/6) Sand mod graded, f g. to c g., mostly f g , angular to sub-angular, mostly quartz. Gravel mod. to well graded, angular to sub-angular (broken from drilling), f g. to cobbles Bedding not evident Non-calcareous Interval moist 25% gravel, 43% sand, 13% silt, 19% clay
				1 20 /1 20	6055	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 20	GROUND ELEVATION (FT) 6084 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7714	AREA OU5, IHSS 133 5	CASING DIAMETER (IN)	GEOLOGIST	T S GREILING	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 GREILING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%
PERCENT RECOVERY: 0% 100%
RECOVERY/INTERVAL: 2 00 /2 00; 2 00 /2 00; 2 00 /2 00
DATUM (FT): 6054, 6053, 6052, 6051, 6050, 6049, 6048, 6047, 6046, 6045
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
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, 25% silt, 50% clay
CL	32 2'-32 8' Silty Clay with some Sand and trace Gravel Same as above, reference interval 30 2 to 32 2 ft Increase in gravel content and size, decrease in sand and silt content Gravel rounded to angular (broken from drilling) Non-calcareous <5% gravel, 20% sand, 25% silt, 50% clay
CLAYSTONE	32 8'-36 2' Top of Bedrock at 32.8 ft Claystone with trace Silt. Light olive gray (5 YR 6/1) with some dark yellowish orange staining: Weathered, friable, bedding not evident, trace carbonaceous material Some iron nodules toward bottom of interval Interval moist, noncalcareous. >96% clay, <4% silt.
	Total Depth Drilled 36.20

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT) [illegible] 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7474197	AREA 005 [illegible] 133 4	CASING DIAMETER (IN)	GEOLOGIST	L HOST	55593
EAST 2079379	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED	03/09/93	

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

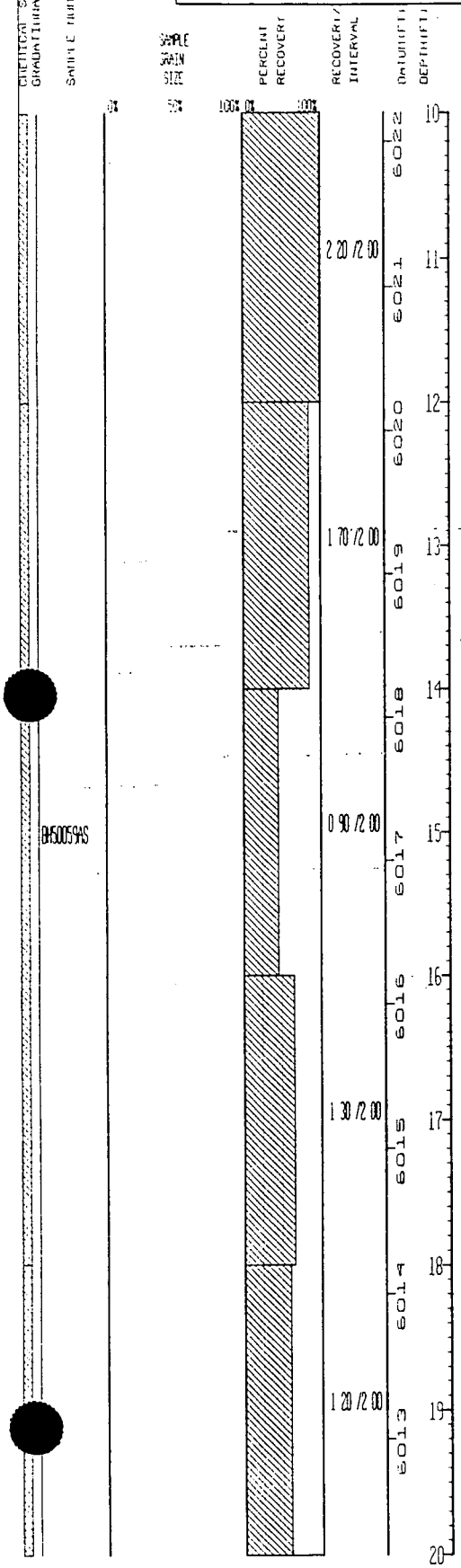
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%		6032	0			ML	0 0'-3 0' Clayey Silt with some 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	6031	1				
					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				

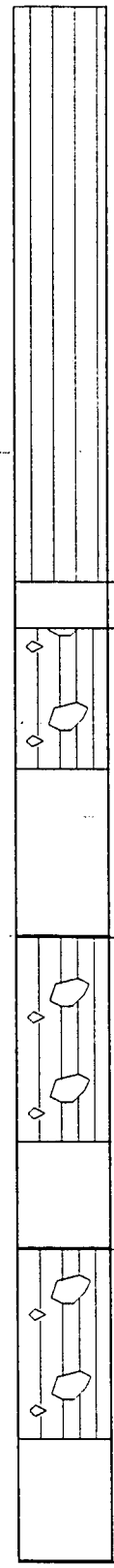
STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	[illegible]32 20	PROJECT NUMBER	[illegible]5-RFI/RI
NORTH [illegible]74197	AREA OU5 IHSS 133 [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] HOST
EAST 2079379	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible] 30	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

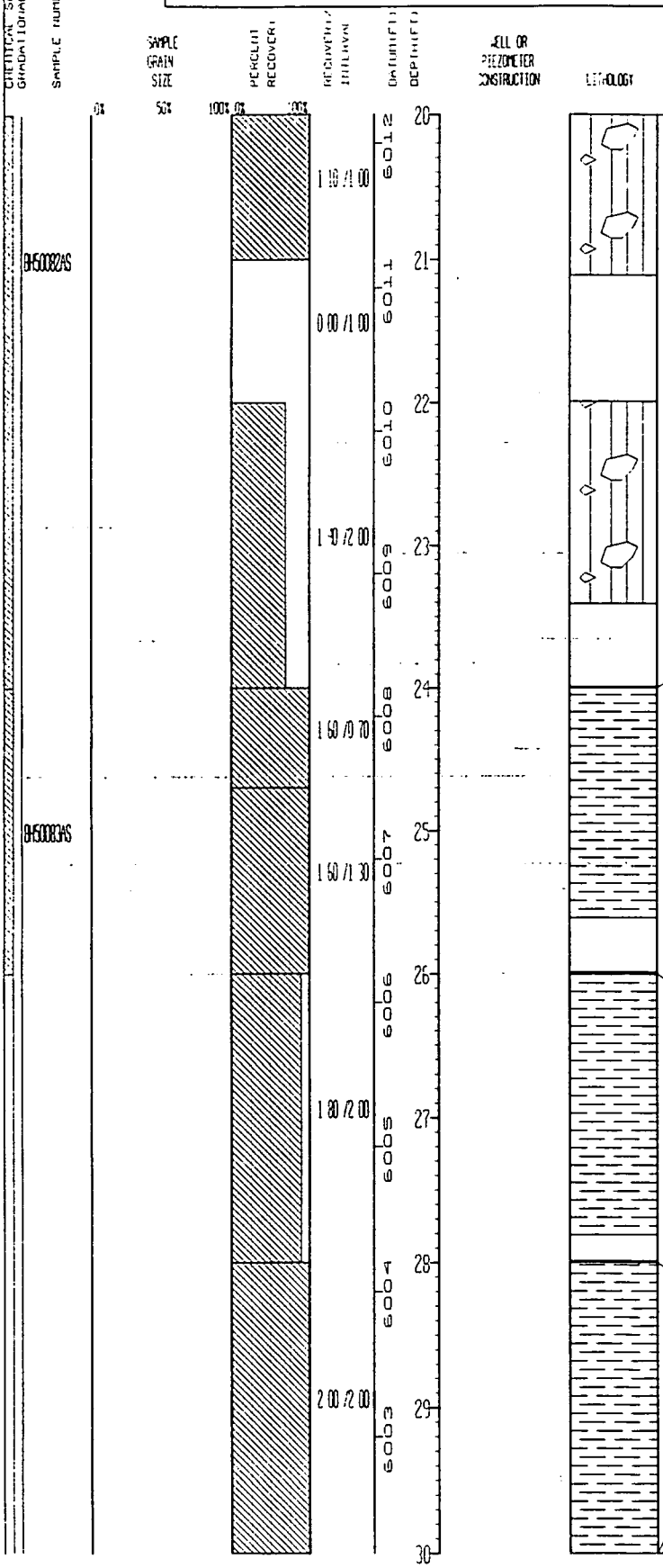




UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
NO RECOVERY	No recovery (13 7-14 0')
GM	14 0'-14 9' Silty Gravel with some Clay and Sand Matrix mod brown (5 YR 4/4) Gravel well graded, fine to coarse to 2 0 in , angular to sub-rounded, broken from drilling Sand mod graded, f g to m g , sub-angular 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 [illegible]% 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 30	DATE DRILLED	33/09/93	

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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')
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')
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 95% clay, 15% silt
	Total Depth Drilled 30 00

STATE PLANE COORDINATE		TOTAL DEPTH OF HOLE 29 50	GROUND ELEVATION [illegible]	6633 30	PROJECT NUMBER	365-[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA 905 CASS [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]	55693
EAST	1379425	LOCATION NUMBER 57	BOREHOLE DIAMETER (IN)	8 50	DATE DRILLED	10/11/92	

REMARKS DRILLING EQUIPMENT CME 750 ATV AST RIG GEOLOGIST L HOST NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' 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
			1 50 /2 00	6093 / 1			ML	0 0'-1 5' Clayey Silt with some Sand Mod brown (5 YR 3/4) to grayish brown (5 YR 3/2) Some root material at top of interval, trace throughout Sand poorly graded, f g, sub-angular Mildy calcareous Low plasticity, bedding massive, slightly damp 18% sand, 42% silt, 40% clay No recovery (1 5-2 0')
			1 70 /2 00	6092 / 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')
SAMPLE			1 60 /2 00	6091 / 3			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	6090 / 4				
				6089 / 5				
				6088 / 6				
			2 10 /2 00	6087 / 7			CL	7 0'-9 0' Silty Clay with some Sand and trace Gravel Same as above, reference interval 4 0 to 5 6 ft Less gravel Slightly more MnOx and FeOx staining Low plasticity Some areas mottled with light olive gray (5 Y 6/1) Interval damp 5% gravel, 16% sand, 39% silt, 40% clay No recovery (9 0-10 0')
				6086 / 8				
SAMPLE			0 00 /1 00	6085 / 9				
				6084 / 10				

STATE PLANE COORDINATE | TOTAL DEPTH OF HOLE 20 0' | GROUND ELEVATION FT | PROJECT NUMBER | LOG OF BORING NUMBER

NORTH | AREA 305 CASS CO | CASING DIAMETER (IN) | GEOLOGIST L A HOST | 55693

EAST | LOCATION NUMBER 67 | BOREHOLE DIAMETER (IN) 6 0 | DATE DRILLED

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 Taken	Percent Recovery	Recovery Interval	Blows per 6 in	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
			1 70 / 2 00	5 / 6 / 9 / 9	10 / 11			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')
			1 30 / 2 00	7 / 9 / 9 / 9	12 / 13			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')
9450102NS			1 50 / 1 50	6 / 8 / 9 / 9	14 / 15			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')
			0 00 / 1 50	8 / 9 / 9 / 9	16 / 17				
			1 00 / 1 00	9 / 9 / 9 / 9	17 / 18			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')
			0 00 / 0 50	9 / 9 / 9 / 9	18 / 19				
			1 40 / 2 00	9 / 9 / 9 / 9	19 / 20			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')

STATE PLANE COORDINATE	TOTAL DEPTH FT 29.00	GROUND ELEVATION (FT) 6033.30	PROJECT NUMBER 105 RFD RI	LOG OF BORING NUMBER
NORTH 747429	AREA 105 CASS 133.4	CASING DIAMETER (IN)	GEOLOGIST L. A. HOST	
EAST 2079435	LOCATOR NUMBER 37	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED 03/11/93	55693

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH50113AS			1.40/2.00	6013, 6012	20, 21, 22			GM	20.5'-21.9' Sandy Gravel with some Silt and Clay. Some broken cobbles in interval. Low plasticity. All else same as above (reference interval 18.5' to 19.9 ft.) 40% gravel, 36% sand, 13% silt, 11% clay. No recovery (21.9-22.5')
				2.20/2.00	6011, 6010	23, 24			GM	22.5'-23.0' Gravelly Sand with some Silt and Clay. Same as above, (reference interval 18.5 to 19.9 ft.) 25% gravel, 45% sand, 17% silt, 13% clay
				1.70/2.00	6009, 6008	25, 26			CLAYSTONE	23.0'-24.5' Top of Bedrock at 23.0'. Claystone with some Silt. Light olive gray (5 YR 6/1). Light brown to dark yellowish orange iron staining (5 YR 5/6 to 10 YR 6/6). Low porosity. Weathered, slightly friable. Bedding not visible, possibly massive, damp. Healed fractures with iron staining. Trace MnO2 staining. Small ironstone nodules at bottom. 90% clay, 10% silt
				2.30/1.75	6007, 6006	27, 28			CLAYSTONE	24.5'-26.2' Claystone with some Silt. Light brownish gray to brownish gray (5 YR 6/1 to 5 YR 4/1). Slighty damp. Bedding appears massive. Trace MnO2 staining. Gravel at top of interval is likely sluff from above. Becomes siltier at bottom of interval. 85% clay, 15% silt. No recovery (26.2-26.5')
				0.75/0.75	6005, 6004	29, 30			CLAYSTONE	26.70'-29.00' Claystone with trace of Silt. Light brownish gray to brownish gray (5 YR 6/1 to 5 YR 4/1). Relatively unweathered. Very stiff. Trace dark yellowish orange, iron staining. Top 0.5' sluff from above. Bedding appears massive, very slightly damp. 95% clay
										Total Depth Drilled 29.00

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 10.00 | GROUND ELEVATION (FT) 6000.00 | PROJECT NUMBER 15-PF0141 | LOCATION DRILLING NUMBER

NORTH 1[illegible] | AREA 305 CASS COUNTY | CASING DIAMETER (IN) - | GEOLOGIST L. A. HOST

EAST 1079441 | LOCATION NUMBER 67 | BOREHOLE DIAMETER (IN) 8.00 | DATE DRILLED 10/16/93

55693A

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 PAN USE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.90/2.00	6033	1			CL	0.0'-0.9' Silty Clay with some Sand. Light to med. brown (5 YR 5/6 to 5 YR 4/4). Very moist. Grass and topsoil at very top. Abundt roots throughout. No recovery (0.9-2.0')
				1.10/2.00	6031	3			CL	2.0'-3.1' Silty Clay with some Sand. Dark yellowish brown (10 YR 4/2). Small to tiny localized areas of f.g. to m.g. sand. Trace to some root material. Mod. damp to moist. No recovery (3.1-4.0')
				1.00/2.00	6029	5			CL	4.0'-5.0' Sandy Clay with some Silt and Gravel. Mod. brown (5 YR 4/4). Zone in middle (approx. 1 in. thick) may be ash residue. Interval damp to moist. Gravel fine to approx. 0.5 in., rounded. No recovery (5.0-6.0')
				2.00/2.00	6027	7			CL	6.0'-8.0' Sandy Clay with trace to some Gravel. Mod. brown (5 YR 4/4) with dark yellowish orange iron staining as mottles. Sand v.f.g. to m.g. Some carb. staining. Trace root material. Gravel fine to large, poorly graded. Some angular broken (from drilling) gravel at top of interval. Rest is sub-angular. Core damp
				1.30/2.00	6025	9			CL	8.0'-9.3' Sandy Clay with some Gravel as above. More iron stain. Broken gravel at bottom of interval. No recovery (9.3-10.0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18.00	GROUND ELEVATION (FT) 6033.00	PROJECT NUMBER 015-8F1.R1	LOG OF BORING NUMBER	
NORTH [illegible]	HOLE DIP 90 BEARING [illegible]	CASING DIAMETER (IN)	GEOLOGIST L. A. HOST	55693A	
EAST [illegible]	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 10/16/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV HSA 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	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	100%	1.50/2.00	10			QL	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')
		1.70/2.00	12			QL	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')
		1.60/2.00	14			QL	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	16			QL	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')
			18				Total Depth Drilled 18.00
			19				
			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] DREILING	55793
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	[illegible]/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	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH5000GAS		1 70 /2 00	0–2			CL	0 0'-2 2' Silty Clay with some Sand Dark yellowish brown (10 YR 3/2) Trace gravel up to 0 5 in F g to c g, well graded, sub-rounded quartzose sand Some roots No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 23% sand, 23% silt, 54% clay No recovery (1 7-2 0')
BH5000TAS		1 60 /2 00	2–4			CL	2 2'-3 6' Sandy Clay with some Silt Mod yellowish brown (10 YR 4/4) Trace gravel up to 0 75 in Pred f g, sub-rounded quartzose sand with some m g and c g sand Trace ironstone nodules up to 2 mm Some whitish mottling of caliche, trace roots No apparent bedding or fractures Moist, low plasticity, highly calcareous 39% sand, 9% silt, 52% clay No recovery (3 6-4 0')
		1 70 /2 00	4–6			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 60 /2 00	6–8			SC	6 0'-7 6' Clayey Sand with some Silt and trace Gravel Mod yellowish brown (5 YR 4/6) Sub-angular gravel up to 1 0 in Pred f g and m g, some c g, sub-rounded quartzose sand No apparent bedding or fractures Moist low to mod plasticity fines, non-calcareous Some carbonaceous material at 6 4 ft 5% gravel, 48% sand, 7% silt, 40% clay No recovery (7 6-8 0')
BH5000BAS		2 00 /2 00	8–10			SC	8 0'-11 4' Gravelly Sand with some Clay and Silt Mod yellowish brown (10 YR 5/6) Fine to coarse, sub-rounded gravel up to 2 5 in, possibly broken cobbles F g to c g well graded, sub-rounded quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous [illegible]% gravel, 36% sand, 6% silt, 23% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 0		GROUND ELEVATION (FT)	6025 30	PROJECT NUMBER	305-NF0-A1
NORTH	1[illegible]99	AREA 305 BASS [illegible]		CASING DIAMETER (IN)		GEOLOGIST	F G DREELING
EAST	1[illegible]506	LOCATOR NUMBER		BOREHOLE DIAMETER (IN)	3 00	DATE DRILLED	04/20/93

BORING NUMBER **55793**

REMARKS DRILLING EQUIPMENT CME 750 ATV ASST RIG GEOLOGIST T DREELING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN
EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF PASTE OR TRENCH

DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	ELEVATION	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		1 40 /2 00	6024	11				
							NO RECOVERY	No recovery (11 4-12 4')
		0 00 /0 40	6023	12				
							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	6022	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
			6021	14				
			6020	15				No recovery (15 9-16 4')
		1 50 /2 00	6019	16				
		2 00 /2 00	6018	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
			6017	18				
		1 00 /2 00	6016	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 56% gravel, 16% sand, 5% silt, 21% clay
				20			NO RECOVERY	No recovery (19 4-20 4')

STATE PLANE COORDINATES | TOTAL DEPTH (FT) 25.90 | GROUND ELEVATION (FT) 6035.00 | PROJECT NUMBER | BORING NUMBER

NORTH 747429 | AREA (SQ FT) 133.4 | CASING DIAMETER (IN) | GEOLOGIST T. S. DREELING

EAST 2579506 | LOCATOR NUMBER | BOREHOLE DIAMETER (IN) 8.00 | DATE DRILLED 04/20/93

55793

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DESIGNATION	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
3500045			2.00/2.00	6014	20			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
			2.00/2.00	6013	21				
			1.50/1.50	6012	22				
				6011	23				
				6010	24				
				6009	25				
				6008	26				Total Depth Drilled 25.90
				6007	27				
				6006	28				
					29				
					30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT) 6034.70	PROJECT NUMBER	115 RFD/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 115 [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

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				
					6029	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	6028	6				
					6027	7			NO RECOVERY	No recovery (7.0-10.0')
				0.00/3.00	6026	8				
					6025	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 12.00	GROUND ELEVATION (FT) 6034.70	PROJECT NUMBER 105-RFI/RI	LOG OF BORING NUMBER	
NORTH 7[illegible]	AREA 105 [illegible]	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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				
					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) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS, [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible] BAUGHN	55793B
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED [illegible]	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] BAUGHN ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

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) trace silt, low plasticity, trace of moisture Augered 0-5' with no split spoon sample
		0 00 /5 00	6034, 6033, 6032, 6031, 6030	1, 2, 3, 4				
		1 10 /2 00	6029, 6028	5, 6			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, 8, 9, 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 305 CHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	55793B
EAST [illegible]	LOCATOR NUMBER 77	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 (%)	PERCENT RECOVERY (%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		50%	100%	100%		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
				1.00/2.00	6024	11				No recovery (11.2-12.0')
					6023	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 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

SAMPLE GRAIN SIZE (0% 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	OUS-RFI-RI	LOG OF BORING NUMBER
NORTH 747444	AREA OU5 CHSS 133.4	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	55793C
EAST 2079507	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/24/93	

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			1.50/2.00	6021	10			CL	10.0'-11.5' Gravelly Clay, mod brown (5 YR 4/4), trace silt, some gravel, angular, poorly sorted, clay fraction has mod plasticity, trace moisture No recovery (11.5-12.0')
				6023	11				
				6022	12				Total Depth Drilled 12.00
				6021	13				
				6020	14				
				6019	15				
				6018	16				
				6017	17				
				6016	18				
				6015	19				
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	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 1079514	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

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')
			6030	6				
		1.00/2.00	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 (HSS 133.4)	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	55793D
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	03/24/93	

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

DRAFT

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	PROJECT NUMBER	HOLE NUMBER
NORTH	AREA CODE CASS CODE	CASING DIAMETER (CM)	GEOLOGIST	P. JORDAN
EAST	LOCATOR NUMBER	BOREHOLE DIAMETER (CM) 5.00	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

55893

DRAFT

Sample Number	Sample Interval	Percent Recovery	Recovery/Interval	Datum (ft)	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
9601415			1.40/2.00	6037	1			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 (calichi). 3% sand, 27% silt, 70% clay. No recovery (2.4-2.0')
9601416			1.40/2.00	6035	3			ML	2.3'-3.4' Clayey Silt with some Sand. Mottled color ranges from grayish orange (10 YR 7/4) to dusky brown (5 YR 2/2). Trace to some root material. Sand is f-g, well sorted, sub-rounded. Sand is mod. porous, argillaceous cement. Mod. friable, pred. quartz with some plagioclase feldspar (approx. 10%). Faint irregular bedding with near horizontal orientation visible in some zones. Dry to moist. Non-calcareous. 16% sand, 44% silt, 40% clay. No recovery (3.4-4.0')
			1.00/2.00	6033	5			ML	4.0'-4.2' Clayey Silt with some Sand. Same as above reference interval 2.3 to 3.4 ft. Top of interval contains trace of gravel. 16% sand, 44% silt, 40% clay
			1.80/2.00	6031	7			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')
				6030	8			CLAYEY SILTSTONE	6.0'-7.8' Clayey Siltstone with some Sand. Mottled dark yellowish orange and light olive gray (10 YR 6/6) and (5 Y 6/1). Sand v.f-g, well sorted, sub-rounded, primarily quartz. Mod. to mod. high porosity. Argillaceous cement. Mod. friable. Dry to moist. Mod. weathered. Some calcareous (calichi) 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 (7.8-8.0')
				6028	10				Total Depth Drilled 8.00

[illegible]	[illegible]	GROUND ELEVATION [illegible]	[illegible]	PROJECT NUMBER	[illegible]	LOCATION NUMBER
NORTH	[illegible]	HEAD [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible]	55993
EAST	[illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	10/30/93	

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

DRAFT

Sample Number	Sample Taken	Recovery	Recovery/Interval	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
3H5016946				0			CL	0.0'-1.1' Sandy Clay with some Silt. Mod. brown (5 [illegible] 3/6). Trace gravel, pred. f.g., sub-rounded quartzose sand with abundant 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')
3H5016945			1.10/2.00	1				
				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.
3H5016945			1.00/2.00	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')
				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	5				
				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 [illegible] 5/6). Trace silt, mod. plasticity, trace moisture
			1.60/1.25	7				
3H5016945							CL	7.3'-8.7' Clay as above and Ash as above commingled. Irregular layer of ash from 8.3 to 8.7 ft. No recovery (8.7'-9.3')
			1.40/2.05	8				
				9				
				10			CL	9.3'-10.0' Clay. Light brown (5 YR 5/6). Trace [illegible] abundant gravel at 10.7 ft. Mod. plasticity, trace moisture

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	20.00	GROUND ELEVATION (FT)	6037.80	PROJECT NUMBER	305-FD-91
NORTH	1[illegible]498	HEAD 305 BASS [illegible]		CASING DIAMETER (IN)		GEOLOGIST	D.C. BAUGHN
EAST	1[illegible]541	LOCATOR NUMBER	67	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	03/30/93

55993

REMARKS DRILLING EQUIPMENT CME 750 ATV ASST 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 / DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.90/1.70	10			CL	10.0'-11.0' Clay Same as above, reference interval 9.3 to 10.0 ft Light brown (5 YR 5/6) Trace silt, sound gravel at 10.7 ft Mod plasticity, trace moisture
				2.00/2.00	11			SC	11.0'-14.3' Gravelly Sand with some Clay and trace Silt Mod brown (5 Y 4/4) Fine to coarse, sub-rounded to rounded quartzite gravel Max size greater than 2 in Broken cobble from 12.2 to 12.4 ft F g to c g, well graded, sub-rounded, quartzose sand, trace mica No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous Below approx 12.9 ft gravel content appears to decrease 11.0 - 12.5 ft 40% gravel, 45% sand, 2% silt, 13% clay 12.5 - 13.4 ft 40% gravel, 44% sand, 2% silt, 14% clay 13.4 - 14.3 ft 25% gravel, 56% sand, 5% silt, 14% clay
	BH5018716			1.90/2.00	14			CLAYSTONE	14.3'-16.7' Top of Bedrock at 14.3 ft Claystone with trace Silt Pred light olive gray (5 Y 6/1), 2 in cobble at 14.9 ft has been pushed there from above No apparent bedding, some microfractures with Mn coatings and some carbonaceous material <5% silt; >95% clay No recovery (16.7'-17.0')
				1.70/2.00	16				
				1.70/2.00	18			CLAYSTONE	17.0'-20.0' Claystone with trace Silt Same as above reference interval 14.3 to 14.7 ft Some Fe staining below approx 18.0 ft, Fe stained with some Mn staining Fracture at approx 10 to 15 degrees Approx 0.25 in ironstone piece at 18.7 ft No recovery (18.7'-19.0')
				1.40/2.00	20				

STATE PLANE COORDINATE	TOTAL DEPTH FT 21.00	GROUND ELEVATION FT 6037.30	PROJECT NUMBER	DUS PFI/RI	LOG OF BORING NUMBER
NORTH 747498	AREA DUS CASS 133 4	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	55993
EAST 1079541	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 6.00	DATE DRILLED	03/30/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1.40/2.00		20			CLAYSTONE	20.0'-20.4' Claystone with trace Silt Same as above, reference interval 19.0 to 20.0 ft Abunat Fe stained fractures and microfractures in bottom 0.2 ft
					6017	21				No recovery (20.4'-21.0')
										Total Depth Drilled 21.00
					6016	22				
					6015	23				
					6014	24				
					6013	25				
					6012	26				
					6011	27				
					6010	28				
					6009	29				
					6008	30				

STATE PLANE COORDINATE	TOTAL DEPTH FT 15.00	GROUND ELEVATION FT 4007.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER IN	GEOLOGIST	[illegible] BAUGHN	
EAST [illegible]	LOCATION 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

56093

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	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				
9H5027LAS			0.00 / 0.75	6032	6				
			1.20 / 1.20	6031	7			SC	6.0'-8.9' Sandy Clay with some Gravel and Silt Mod brown (5 YR 4/4) Sub-angular to sub-rounded gravel [illegible] >2 in Pred f g sand, some m g, trace c g, sub-rounded pred quartzose sand Trace c g sand No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 20 % gravel, 30% sand, 18% silt, 32% clay No recovery (7.2-8.0')
			0.00 / 0.80	6030	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 [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible] BAUGHN	56093
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	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

GRAPHICAL 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 [illegible]) 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 tahn 1 mm in thickness Some v f g sub-roounded 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 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747503		AREA 005, THSS 133 4	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	56093A
EAST 2079607		LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/25/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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%	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				
				0 00/4 50	6036	2				
					6035	3				
					6034	4				
					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').
				1 10/2.00	6032	6				
					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.
				0 00/3 00	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]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER IN	GEOLOGIST	D. C. BAUGHN	56093B
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 3.00	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

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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'-5.0' 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, 6036, 6035, 6034, 6033	1, 2, 3, 4, 5			CL	Clay, mod brown (5 YR 4/4), trace silt, low plasticity, trace moisture
			1.80/2.00	6032, 6031	6, 7			CL	7.0'-10.0' As above
			0.00/3.00	6030, 6029, 6028	8, 9, 10				

STATE PLANE COORDINATE	TOTAL DEPTH FT. 12.00	GROUND ELEVATION FT. 6037.80	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 CHSS 133-4	CASING DIAMETER (IN)	GEOLOGIST	D. C. BAUGHN	56093B
EAST [illegible]	LOCATOR NUMBER 47	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 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'-11.3' 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 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747490	AREA 005, IHSS 133 4	CASING DIAMETER (IN)	GEOLOGIST D C. BAUGHN	56093C
EAST 2079607	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 03/26/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRADIN SIZE (0% 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 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747490	AREA OUS CASS 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

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%	1.60 /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) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible] DREILING	56193
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED 04/14/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH50176AS			1.40/2.00	6074	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	6073, 6072, 6071	2–4			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	4–7			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	8–10			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 14.00	GROUND ELEVATION FT 6074.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA DUS N OF CASS 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DREILING	56193
EAST [illegible]	LOCATOR NUMBER 57	BOREHOLE DIAMETER (IN) 9.00	DATE DRILLED	[illegible]/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 ELEV	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				
	BH50003AS			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) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 W OF DASS 133	CASING DIAMETER (IN)	GEOLOGIST [illegible]	56193
EAST [illegible]	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED 04/14/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] DRILLING 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
					20				
3H5001HS			1 50 /2 00	6054	21			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')
				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				
3H5005HS			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				
			2 00 /2 00	6046	29			CLAYSTONE	28 0'-31 8' Claystone with some Silt Light olive gray (5 5/2) Abundt iron staining Some carbonaceous matter dry, non to slightly friable, mod weathered 15% silt, 85% clay
				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 CUS 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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00/1.30	6044	30				
					6043	31				
						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 6035.50	PROJECT NUMBER	015-RFI-RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 015 CASS 133.1	CASING DIAMETER (IN)	GEOLOGIST	DCB	56293
EAST [illegible]	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	6030	0			GM	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')
					6034	1				
	BH50206AS			0.70 / 1.00	6033	2			GM	2.0'-2.7' Sluff at top 0.2 to 0.3 ft of interval. Not enough sample to positively identify but gravel seems to indicate part of interval from 4.6 to 6.3 ft (gm-sm). No recovery (2.7-3.0'), and (3.0-4.0')
				0.00 / 1.00	6032	3				
				0.30 / 1.20	6031	4			GM	4.0'-6.3' Sandy Gravel with some Silt and trace Clay. Light brown (5 YR 4/4) to mod. yellowish brown (10 YR 5/4). Pred. fine, sub-rounded, quartzitic gravel. Some coarse gravel up to 2.5 in., probable broken cobbles. Trace cobbles. F.g. to m.g., sub-rounded quartzose sand with some c.g. sand. No apparent bedding of fractures. Moist, low plasticity fines, non-calcareous. 40% gravel, 36% sand, 19% silt, 5% clay. No recovery (4.8-5.2'), and (5.2-6.0')
				0.00 / 0.90	6030	5				
				1.10 / 2.00	6029	6			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				6028	7				
				1.30 / 2.00	6027	8				
					6026	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 14.00	GROUND ELEVATION FT 6025.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	56293
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

DRAFT

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 12 30	GROUND ELEVATION (FT) 6022 70	PROJECT NUMBER	105-FT/RI	105 OF BORING NUMBER
NORTH 147509	AREA 105 - OASS 133 1	CASING DIAMETER (IN)	GEOLOGIST	P J JORGAN	56393
EAST 2080003	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 6 30	DATE DRILLED	04/06/93	

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

DRAFT

Sample Number	Sample Drain Size	Percent Recovery	Recovery/Interval	Elevation (Feet)	Depth (Feet)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
345036AS	0% 50% 100%	0% 100%			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')
345011AS			1 20 /2 00	6032	1				
				6031	2				
			0 60 /2 00	6030	3			SM	2 0'-4 4' Silty Sand with some Clay Varicolored, mod yellowish brown (10 YR 5/4) Fine to med sand with glass, burned material and rust (possible ash material) Wet to saturated No recovery (2 6-4 0')
				6029	4				
345012AS									
			1 40 /2 00	6028	5			CL	4 4'-4 8' Silty Clay Yellowish gray (5 Y 7/2) Wet, low plasticity
								CL	4 8'-5 2' Silty Clay with some Sand Dark yellowish brown (10 YR 4/2)
				6027	6			CL	5 2'-5 4' Silty Clay Same as above (reference interval 4 4 to 4 8 ft) No recovery (5 4-6 0')
			1 30 /2 00	6026	7			CL	5 4'-6 9' Clay with abundt Sand and some Gravel Olive gray (5 Y 4/1) Plastic limit exceeded Abundt moisture from 6 0 to 6 9 ft NOTE Water sample taken with Hydropunch from 6 0 to 8 0 ft
345013AS				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) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	P. J. JORDAN	56393
EAST 1080003	LOCATOR NUMBER 47	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%			10			CLAYSTONE	10.0'-12.0' Claystone Same as above (reference interval 6.3 to 7.3 ft) May contain some slough from above
			2.00/2.00	6022	11				
				6021	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	[illegible]	

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
			0.00 /5.00	6032, 6031, 6030, 6029, 6028	0, 1, 2, 3, 4			CL	0.0'-5.0' Silty Clay (looks like bedrock) Spin augers
			1.70 /2.00	6027, 6026, 6025, 6024, 6023	5, 6, 7, 8, 9, 10			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')
									Total Depth Drilled 7.00

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	[illegible]	CASING DIAMETER [illegible]	GEOLOGIST	P. J. JORDAN	56393B
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	DATE DRILLED	[illegible]	

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00 / 3.00	6030	0			CL	0.0'-3.0' Cuttings are Silty Clay, looks like bedrock but augers are chattering like gravel and cobbles
					6029	1				
					6028	2				
				1.80 / 2.00	6027	3			SILTY CLAYSTONE	3.0'-4.8' Silty Claystone, varicolored grayish orange (10 YR 6/5), moist, some fine sand. No visible bedding
					6026	4				No recovery (4.8-5.0')
					6025	5				Total Depth Drilled 5.00
					6024	6				
					6023	7				
					6022	8				
					6021	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.00	GROUND ELEVATION (FT) 6032.50	PROJECT NUMBER	105-RFD-RI	LOG OF BORING NUMBER
NORTH 7-7507	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 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'-3.0' Cuttings are Silty Clay. Looks like weathered bedrock but augers are scratching or chattering like cobbles
		0.00/3.00	6032, 6031, 6030	1, 2	04/05/93			
		0.70/2.00	6029, 6028	3, 4			SC	3.0'-3.7' Sand with burnt wood fragments. Fine to med sand, some silt, wet to saturated No recovery (3.7-5.0')
			6027, 6026, 6025, 6024, 6023	5, 6, 7, 8, 9, 10				Total Depth Drilled 5.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	6032.50	PROJECT NUMBER	1054-NFLAT	LOG OF BORING NUMBER
NORTH	1-75516	AREA 005 1-95 100 1	CASING DIAMETER (IN)		GEOLOGIST	D. C. BAUGHN	56493
EAST	1380111	LOCATOR NUMBER -7	BORE-HOLE DIAMETER (IN)	6.00	DATE DRILLED	3/12/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV HSA 8.25 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	PERCENT RECOVERY	RECOVERY / INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.50 / 2.00	6032	0			OL	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 fine piece approx 1.0 ft No recovery (0.5-2.0')
	BH5022AS				6031	1				
				1.90 / 2.00	6030	2			OL	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				
	BH5021AS				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 COORDINATES		TOTAL DEPTH (FT) 10 10		GROUND ELEVATION (FT)	6030 0	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH	1[illegible]457	AREA DUS LOCS 100 1		CASING DIAMETER (IN)		GEOLOGIST	L A HOST
EAST	3079916	LOCATION NUMBER	57	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	3/08/93

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

5653

DRAFT

CHEMICAL 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
B50221AS			1 30 /2 00	6030	0			CL	0 0'-2 6' Sandy Clay with some Silt, trace Gravel and Cobbles Dusky yellowish brown (10 YR 2/2) Some roots Fine to coarse, sub-rounded gravel with max size greater than 2", possibly broken cobbles Abundt f g, sub-rounded quartzose sand, some m g and c g sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 5% gravel, 34% sand, 15% silt, 46% clay No recovery (1 0-2 0')
B50222AS			1 50 /2 00	6029	1			SC	2 6'-4 5' Clayey Sand with some Gravel, Cobbles and Silt Mod brown (5 YR 4/6) Some sub-rounded, fine to coarse gravel with max size greater than 2 in, possibly cobbles F g to m g sub-rounded, quartzose sand with trace mafic mineral grains, trace c g sand No apparent bedding or fractures Moist, low to mod plasticity fines, non-calcareous 20% gravel, 35% sand, 7% silt, 38% clay No recovery (3 6-4 0')
			1 50 /1 80	6028	2			CL	4 5'-7 7' Sandy Clay with some Silt Light brown (5 YR 5/6), brown (5 YR 4/4) with white caliche patches F g to c g sand, pred f g, sub-rounded quartz sand No apparent bedding or fractures Caliche throughout interval Moist, highly calcareous (caliche) 36% sand, 6% silt, 58% clay No recovery (5 6-5 8'), (5 8-6 0'), and (7 7-8 0')
			0 00 /0 20	6027	3				
			1 70 /1 80	6026	4				
			0 00 /0 20	6025	5				
			1 20 /1 30	6024	6				
B50223AS			0 50 /1 30	6023	7			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')
				6022	8				
				6021	9				
					10				

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 19.00 | GROUND ELEVATION (FT) 6033.40 | PROJECT NUMBER | BORING NUMBER

NORTH 1[illegible]87 | AREA 305 (SS 133 3) | BORING DIAMETER (IN) | GEOLOGIST L. A. HOST | 56593

EAST 1379916 | LOCATION NUMBER 67 | BOREHOLE DIAMETER (IN) 8.00 | DATE DRILLED 04/08/93

REMARKS DRILLING EQUIPMENT CME 750 ATV AST RIG GEOLOGIST LARRIE HOST 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
				10			NO RECOVERY	No recovery (10 6-12 0') and (12 0-13 0')
			0.00/1.00	11				
			0.00/1.00	12				
			1.00/2.00	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
0502245				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
				15				No recovery (14 4-15 0')
			1.30/2.00	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
				17				No recovery (16 3-17 0')
			2.00/2.00	18			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
				19				Total Depth Drilled 19 00
				20				

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 9.00	GROUND ELEVATION (FT) 4027.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER	
NORTH	[illegible]	HEAD DIS (MSS 103 3)	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	56693	
EAST	1086010	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/08/93		

REMARKS DRILLING EQUIPMENT CME 750 ATV ASST 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 (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
3562246			1.00/2.00	4026	1			CL	0.0'-2.5' Silty Clay with some Sand Dusky brown (5 YR 2/2) top (topsoil) to pale yellowish brown (10 YR 6/2) Sand f g , poorly graded, sub-rounded, pred quartz Bedding not evident Very moist Mod plasticity Trace to some roots, trace calcareous material Trace gravel - 1 piece, 1.0 in , sub-rounded 9% sand, 18% silt, 73% clay No recovery (1.0-2.0')
3562276			2.00/2.00	4024	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
			2.00/2.00	4022	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
			0.90/2.00	4020	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')
			0.60/1.00	4018	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) 6025.00	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible]	56693A
EAST 1080012	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED [illegible]	

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
GEOTECHNICAL 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

Unified Soils Classification or Rock Type	Description
NO RECOVERY	No recovery 10 0-2 0' Drilled out
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
	Total Depth Drilled 4 00

Recovery/Interval: 0.00/2.00; 2.00/2.00

Elevation: 6026, 6025, 6024, 6023, 6022, 6021, 6020, 6019, 6018, 6017

Depth (ft): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4.00	GROUND ELEVATION (FT) 6025.10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747427	AREA OU5 CHSS 133.3	CASING DIAMETER (IN)	GEOLOGIST	L. A. HOST	56693B
EAST 2080013	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/08/93	

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

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

RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	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 OUS CHSS 133.3	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

RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	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'-3.5' Claystone Light olive gray with some iron staining Damp Grass and roots in very top of interval
1.50/2.00	6023	3		No recovery (3.5-4.0')
	6022	4		Total Depth Drilled 4.00
	6021	5		
	6020	6		
	6019	7		
	6018	8		
	6017	9		
		10		

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 CASS [illegible]	CASING DIAMETER (IN)	GEOLOGIST D C BAUGHN	
EAST [illegible]0113	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6 00	DATE DRILLED [illegible]/12/93	56793

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 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
	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 9 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)	ELEV 0	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 305 SASS 133 3	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	56793
EAST 3080113	LOCATION NUMBER H7	BOREHOLE DIAMETER (IN)	6 00	DATE DRILLED	04/12/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	9602245			2 10/2 00	6012	10–11			SC	10 0'-10 9' Clayey Sand with some Silt, trace Gravel Same as above reference interval 8 0 to 9 3 ft Note Due to discrepancy on field log, this logger logged the core as if interval from 10 0 to 12 0 ft was sampled with most of the core lost and then resampled with the core retained
				2 10/2 00	6011	11–12			CLAYSTONE	10 9'-12 8' Top of Bedrock at 10 9 ft Claystone with trace Silt Light olive gray (5 YR 5/2) Some caliche, some on possible fractures, some Fe staining, trace carbonaceous material No apparent bedding highly calcareous From approx 11 7 to 12 3 ft color changes to pred light olive brown (5 Y 5/6) Dry to moist <5% silt, >95% clay
				1 90/2 00	6009	13–14			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 No recovery (16.9-18 0')
				0.90/2.00	6005	17–18				
					6003	19–20				Total Depth Drilled 18 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24.00	GROUND ELEVATION (FT) 6027.40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7557	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	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
BH50236AS			1.80/2.00	6027, 6026	0, 1			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			1.30/2.00	6025, 6024	2, 3			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			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	6, 7			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			SC	8.8'-10.6' Sandy Gravel with some Clay and Silt. Mod. yellowish brown (10 YR 5/2). Fine to coarse, well graded, sub-rounded gravel up to 1.5 in. Well graded, sub-rounded, pred. quartzose sand, some silt. No apparent bedding or fractures. Moist, mod. plasticity, non-calcareous. (Bottom of Trench at approx. 8.8') 50% gravel, 28% sand, 9% silt, 13% clay. No recovery (10.0-10.3')
			1.70/2.00	6018	9, 10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24 30	GROUND ELEVATION (FT) 6027 40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]7557	AREA 005 [illegible] 133 2	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	56893
EAST 2080475	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	03/31/93	

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

DRAFT

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				
	BH5023AS			2 00 /2 00	6017 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
				2 00 /2 00	6015 6014	12 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 (gc-gw) 60% gravel, 30% sand, 2% silt, 8% clay
					6011	16				No recovery (15 9-16.4'), and (17 8-18 2')
	BH5240AS BH5229AS			1.40 /1.40	6010	17				
				0 00 /0 40		18			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	6009 6008	19			NO RECOVERY	No recovery (19 8-20 3')
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24 30	GROUND ELEVATION (FT) 6007 40	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7557	AREA OU5 IHSS 133 2	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	56893
EAST 0380475	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 DEPTH / GRADATION SAMPLE DEPTH

SAMPLE NUMBER

SAMPLE GRAIN SIZE 0% 50% 100%

PERCENT RECOVERY 0% 100%

RECOVERY/INTERVAL: 1 50 /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

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

No recovery (21 8-22 3')

Total Depth Drilled 24 30

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) 6025.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	56993
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 9.50	DATE DRILLED	[illegible]	

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	Recovery / Interval	Depth (ft)	Unified Soils Classification or Rock Type	Description
P50133AS		0	GM	0.0'-1.8' Gravelly Silt with abundant Sand and some Clay. Mod. brown (5 YR 4/4) and grayish brown (5 YR 3/2). Gravel poorly graded, to 2.0 in., sub-rounded to angular. Sand well graded, f.g. to c.g., angular to sub-angular. Low plasticity, no apparent bedding, non-calcareous. Minimal root material. 30% gravel, 27% sand, 33% silt, 11% clay. No recovery (1.8-2.0')
BH50198AS	1.80 / 2.00	1		
BH50199AS	1.10 / 2.00	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')
	0.00 / 0.90	4		
	0.20 / 3.20	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.
		7		8.1'-8.4' Charcoal, fibrous material, styrofoam and gray in a clayey material. Recovery taken for sample, this description from field log.
BH50200AS	2.00 / 2.00	8	GM	8.4'-10.1' Silty Gravel with some Sand and Clay. Matrix mod. light brown (5 YR 4/4 to 5 YR 5/6). Gravel mod. to well graded, fine to coarse gravel to 2.5 in., sub-rounded to angular, mostly angular, (broken from drilling). Sand well graded, f.g. to c.g., pred. angular, pred. quartz, some to trace feldspar. Bedding not visible, slightly moist, low plasticity, non-calcareous. Ash material present at approx. mid interval. Traces of styrofoam at top. 50% gravel, 19% sand, 23% silt, 8% clay.

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 6005.00	PROJECT NUMBER	[illegible]	HOLE OR BORING NUMBER	
NORTH	[illegible]	HPCA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	56993	
EAST	[illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	10/22/93		

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

DRAFT

Depth (ft)	Elevation (ft)	Sample Number	Sample Interval	Lithology	Unified Soils Classification or Rock Type	Description
10	6015				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	6014	BH5020AS	1.30/1.30			
12	6013					
13	6012		0.20/2.00			
14	6011		0.30/0.30			
15	6010				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')
16	6009		1.50/2.00			
17	6008				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')
18	6007	BH5020CAS	1.50/2.00			
19	6006		1.70/2.70		ML	18.3'-20.0' Sandy Silt with abundant 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 5/6). Gravel poorly graded, mostly fine, angular to sub-rounded. Sand mod. graded, f.g. to c.g., pred. f.g., pred. quartz. Matrix moist, low plasticity, bedding not evident. Interval non-calcareous. 5% gravel, 31% sand, 35% silt, 29% clay
20						

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]		PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA 305 [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]
EAST 1280547	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN)	6 00	DATE DRILLED	10/22/93

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

56993

DRAFT

Sample Depth	Sample Chain Size	Percent Recovery	Blows/Interval	Elevation	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				6003	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
				6002	21			ML	20 7'-22 1' Sandy Silt with some Clay and trace Gravel Light greenish gray (5 GY 6/1) to pale yellowish brown (10 Y R 6/2) Gravel poorly graded, sub-rounded, 2 0 to 2 5 in Sand mod graded, c g to f g, pred f g, pred quartz Bedding not evident Moist, low plasticity, non-calcareous 5% gravel, 30% sand, 52% silt, 13% clay
			1 10 /2 00	6001	22				No recovery (22 1-22 7')
				6000	23			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
9450204HS			2 00 /2 00	5999	24				
				5998	25			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 7% gravel, 41% sand, 33% silt, 22% clay
			2 00 /2 00	5997	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
			0 70 /1 60	5996	27				No recovery (27 3-28 3')
				5995	28			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
			0 90 /2 00	5994	29				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] DRILLING	56993
EAST [illegible]80547	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	[illegible]/22/93	

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
	0% 50% 100%	0% 100%			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')
				5992	33				Total Depth Drilled 32 30
				5991	34				
				5990	35				
				5989	36				
				5988	37				
				5987	38				
				5986	39				
					40				

STATE PLANE COORDINATE	TOTAL DEPTH FT 37.00	GROUND ELEVATION FT 6000.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER IN.	GEOLOGIST	[illegible] DRILLING	
EAST 1080616	LOCATOR NUMBER 47	BOREHOLE DIAMETER IN. 5.00	DATE DRILLED	03/25/93	57093

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

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			1.0 /2.00	6023	1			SC	0.0-3.8' Clayey Sand with some Silt and trace Gravel Dusky brown (5 YR 2/2) grading to dark yellowish brown (10 YR 4/2) Trace sub-angular gravel up to 1/2 in. F.g. to m.g. sand, sub-rounded, quartzose and rock fragments. Trace roots. No apparent bedding or fractures. Moist, low to mod. plasticity, non-calcareous 54% sand, 7% silt, 39% clay No recovery (1.4-2.0'), and (3.8-4.0')
3H50242AS			1.90 /2.00	6022	2				
				6021	3				
				6020	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')
			1.90 /2.00	6019	5				
				6018	6				
			2.00 /2.00	6017	7			SC	6.5'-10.3' Gravelly Sand with some Clay and Silt. Mod. yellowish brown (10 YR 5/4) F.g. to c.g., well graded, sub-rounded, quartzose sand. Sub-angular gravel up to 2.0 in. (probably cobbles broken by drilling). Some silt, no apparent bedding or fractures. Moist, low to mod. plasticity, non-calcareous 20% gravel, 50% sand, 12% silt, 18% clay No recovery (8.0-8.2')
			0.00 /0.20	6016	8				
3H50243AS			2.10 /2.10	6015	9				
				6014	10				

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 22.10 | GROUND ELEVATION (FT) 4122.38 | PROJECT NUMBER | LAB PROJECT | LOG OF BORING NUMBER

NORTH 177567 | AREA (SQ FT) 0.000 | CASING DIAMETER (CM) | GEOLOGIST | TYPE OF DRILLING

EAST 1060616 | LOCATOR NUMBER H7 | BOREHOLE DIAMETER (CM) 8.00 | DATE DRILLED 03/25/93

57093

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

DRAFT

SAMPLE NUMBER	SAMPLE PAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				10				
			2.00/2.00	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 1.9 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	12				
			1.80/2.00	13			SC	12.6'-16.2' Gravelly Sand with some Clay and trace Silt Mod yellowish brown (10 YR 5/6) Sub-angular, well graded gravel, max size greater than 2-1/2 in (larger pieces are possible broken cobbles, fine to coarse) Well graded, sub-rounded quartzose sand, some silt No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 30% gravel, 50% sand, 8% silt, 12% clay No recovery (14.4-14.6'), and (16.2-16.6')
			1.50/2.00	14	03/25/93 ▽			
				15				
			2.00/2.00	16				
				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
			1.80/1.80	18				
				19				
				20				

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STATE PLANE COORDINATE		TOTAL DEPTH (FT)		GROUND ELEVATION (FT)	5993.30	PROJECT NUMBER	SUBMITTAL	LOG OF BORING NUMBER
NORTH	[illegible]	HPA GWS LOSS (GPM)		CASING DIAMETER (CM)		GEOLOGIST	T G DECELLING	57093
EAST	1055616	LOCATION NUMBER	NT	BOREHOLE DIAMETER (CM)	8.30	DATE DRILLED	10/25/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GEOTECHNICAL SAMPLE DEPTH	SAMPLE TYPE	SAMPLE TYPE	PENETRATION RESISTANCE (BLOWS/6 IN)	RECOVERY (FT)	RECOVERY INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					1.30/1.60	6003	21				
B6025AS						6002	22			NO RECOVERY	No recovery (21.7-22.0')
					2.00/2.00	6001	23			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 23.4 ft
						6000	24			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
					1.40/2.00	5999	25				
						5998	26				No recovery (25.4-26.0'), (27.1-28.0'), and (28.0-28.7')
					1.10/2.00	5997	27				
B6027SAS						5996	28				
					0.00/0.70						
						5995	29			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
					2.30/2.00	5994	30				

DATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	[illegible]	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	[illegible]	57093
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER [illegible] 6 00	DATE DRILLED	[illegible]	

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

DRAFT

CHEMICAL SAMPLE NUMBER	GRADATIONAL SAMPLE DEPTH	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM ELEVATION	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0H50276AS				1 00 / 1 00	5965	30				
					5964	31				
				2 00 / 2 00	5962	32				
					5961	33				
					5960	34			CLAYEY SANDSTONE	34 1'-35 4' Top of Bedrock at 34 1 ft Clayey Sandstone with abundt Silt Dark yellowish orange (10 YR 6/6) Pred v f g quartz sand with some f g sand Sand is rounded to sub-rounded Sand is whitish and mottled with clayey matrix Mod to highly friable, weathered Fe content increases near base as evident by Fe stains and possible limonite stains No apparent bedding or fractures Moist 36% sand, 32% silt, 32% clay
				2 00 / 2 00	5959	35				
					5958	36			CLAYSTONE	35 4'-37 1' Claystone with trace Silt Mod olive gray (5 Y 4/2) Mod to highly friable, slightly calcareous Slightly weathered, no apparent bedding or fractures Dry 5% silt, 95% clay
				1 00 / 1 00	5957	37				
					5956	38				Total Depth Drilled 37 10
					5955	39				
					5954	40				

STATE PLANE COORDINATE	TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT	[illegible]	PROJECT NUMBER	[illegible]	[illegible] BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]		GEOLOGIST	[illegible] DRILLING	
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER IN.	[illegible]	DATE DRILLED	[illegible]/08/93	

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

57193

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
3H50246AS			1.10/2.00	6018 6017	1			CL	0.0'-1.1' Sandy Clay with some Silt Dusky brown (5 YR 2/6) F g sub-rounded sand, trace m g sand poorly graded pred quartz grains, trace mica, some roots No recognized bedding or fractures Moist, low to mod plasticity, non-calcareous 20% fine sand, 8% silt, 72% clay No recovery (1.1-2.0')
9H50247AS			1.60/2.00	6016 6015	2 3			CL	2.0'-2.6' Sandy Clay with trace Silt Mod brown (5 YR 4/4) Sub-rounded f g sand with trace m g sand Poorly graded, pred quartz grains, trace mica and roots Clump of carbonaceous material near base No recognized bedding or fractures Moist, low to mod plasticity, non-calcareous Piece of calcite cemented sandstone approx 2 in at 2.5 ft 38% sand, 3% silt, 59% clay
			0.30/1.50	6014 6013	4 5			GC	2.6'-4.9' Sandy Gravel with some Clay, trace Silt Mod yellowish brown (10 YR 5/4) Sub-rounded, f-c gravel max size greater than 2 in Sub-rounded f g to c g, well graded sand, primarily quartz fragments, with some igneous and metamorphic rock fragments No recognized bedding or fractures Moist, low to mod plasticity, non-calcareous Possible broken cobble at 14.5 ft 60% gravel, 28% sand, 1% silt, 11% clay No recovery (3.6-4.0')
			0.00/1.50	6012	6			NO RECOVERY	No recovery (4.9-5.5')
								NO RECOVERY	No recovery (5.5-7.0') Not sampled Drilled through rocks
			2.00/2.00	6011 6010 6009	7 8 9 10			SC	7.0'-11.0' Gravelly Sand with some Clay, trace Silt Mod yellowish brown (10 YR 5/4) F g to c g, pred f g, well graded, sub-rounded, primarily quartz sand Sub-rounded igneous and metamorphic f-c gravels up to 1.5 in No recognized bedding or fractures Moist, low to mod plasticity, non-calcareous 30% gravel, 56% sand, 4% silt, 10% clay
			2.00/2.00						

STATE PLANE COORDINATE | TOTAL DEPTH FT 18 50 | GROUND ELEVATION FT [illegible] | PROJECT NUMBER [illegible] | [illegible]

NORTH [illegible] | PIPE DIS [illegible] | CASING DIAMETER (IN) | GEOLOGIST [illegible] | TYPE OF DRILLING [illegible]

EAST [illegible] | LOCATION NUMBER [illegible] | BORE-HOLE DIAMETER (IN) 6 00 | DATE DRILLED [illegible]/98/93

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

5719 3

DRAFT

Sample Depth	Sample Number	Sample Type	Percent Recovery	Recovery Interval	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
9-5525AS			2 00/2 00		10				
					11			SC	11 0'-12 2' Clayey Sand with trace gravel and Silt Mod yellowish brown (10 YR 5/4) F g to c g, well graded sub-rounded, quartzose sand Trace sub-rounded fine gravel up to 1 in No recognized bedding or fractures Moist mod plasticity, non-calcareous 5% gravel, 73% sand, 3% silt, 19% clay
			2 00/2 00		12			SC	12 2'-12 5' Clayey Sand with some Silt, trace gravel Mod yellowish brown (10 YR 5/4) F g and m g, sub-rounded, quartzose sand Trace sub-rounded fine gravel up to 0 5 in No recognized bedding or fractures Moist, mod plasticity 2% gravel, 51% sand, 12% silt, 35% clay
			2 00/2 00		13			CLAYSTONE	12 5'-18 5' Top of Bedrock at 12 5 ft Claystone Pred light olive gray (5 Y 6/1), grades to pred dark yellowish orange (10 YR 6/6) between 14 5 and 15 5 ft Some Fe staining Trace rounded ironstone nodules up to 0 25 in from 14 0 to 15 0 ft No apparent bedding Some Fe stained sub-horizontal fractures, trace sub-vertical Possible Mn staining on fractures Trace carbonaceous material Dry to moist, highly to mod friable, weathered non-calcareous From 17 0 to 17 2 ft mod to slightly friable 5% silt, 95% clay
			2 00/2 00		14				
					15				
			2 00/2 00		16				
					17				
			1 50/1 50		18				
					19				Total Depth Drilled 18 50
					20				

STATE PLANE COORDINATES | TOTAL DEPTH FT 10 00 | GROUND ELEVATION FT 6016 50 | PROJECT NUMBER | LOG OF BORING NUMBER

NORTH 1 7516 | HOLE DIP DEG 0000 0 | CASING DIAMETER (IN) | GEOLOGIST | DRILLING 5729 3

EAST 10805-2 | LOCATION NUMBER 47 | BOREHOLE DIAMETER (IN) 6 00 | DATE DRILLED 04/05/93

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE PAN TYPE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT) / DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	9H6025US			1 20 /2 00	6015			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')
	9H6025US			1 50 /2 00	6013			CL	2 5'-3 6' Clayey Sand with some Silt Light brown (5 YR 5/6) F g, sub-rounded quartzose sand, Trace m g and c g sand No apparent bedding or fractures Moist, low to mod plasticity, slightly calcareous 47% sand, 11% silt, 42% clay No recovery (3 6-4 0')
				1 80 /2 00	6011			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	6009				
	9H6025US			2 00 /2 00	6007				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30 30	GROUND ELEVATION (FT) 6016 50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57293
EAST 1380542	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN) 8 30	DATE DRILLED	04/05/93	

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
	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	11				
				6005	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	13				
				6003	14				
				6002	15				
BH5025MS			2 00 /2 00	6001	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')
				6000	17				
			1 40 /2 00	5999	18				
				5998	19				
			0 00 /2 00	5997	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT)	6016.50	PROJECT NUMBER	015 PFC PI	LOG OF BORING NUMBER
NORTH	747546	AREA 115 CASING 133 2	CASING DIAMETER (IN)		GEOLOGIST	T. S. DREILING	57293
EAST	2080542	LOCATOR NUMBER 47	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	04/05/93	

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

DRAFT

FIELD 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%			20				
				2.00/2.00	5996	21			SM	21.0'-23.6' Silty Sand with some Clay and trace Gravel. Light olive gray (5 Y 5/2). Sub-rounded, pred. quartzite gravel. F-c gravel to greater than 2.5 in. F g to m g, sub-rounded quartzose sand with abundt mafic sand grains. No apparent bedding or fractures. Moist, low to mod plasticity fines, non-calcareous. Possible broken quartzite cobbles at 21.0 and 23.4 ft. Possible decomposed rock fragment with abundt dark minerals. 5% gravel, 55% sand, 24% silt, 16% clay. No recovery (23.6-24.0')
					5995	22				
					5994					
	8H50255AS			1.60/2.00	5993	23				
						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
					5992					
				2.00/2.00		25				
					5991				SC	25.0'-26.9' Clayey Sand with some Silt. Mod olive gray (5 Y 4/2). Pred F g, some m g and c g, well graded, sub-rounded quartz sand. No apparent bedding or fractures. Moist, low to mod plasticity fines, non-calcareous. Matrix is possibly reworked bedrock, sub-rounded quartzite gravel at 25.8 ft. 77% sand, 9% silt, 14% clay
					5990	26				
				2.00/2.00		27			CLAYSTONE	26.9'-27.6' Top of Bedrock at 26.9 ft. Claystone with trace Silt. Pred light olive gray (5 Y 5/2), mottled with dark yellowish orange (10 YR 6/6). Fe staining, mod friable, trace carbonaceous material. No apparent bedding or fractures. Moist. <5% silt, >95% clay
	8H50292AS				5989					
						28				
					5988				CLAYSTONE	27.6'-30.0' Claystone with trace Silt. Same as above (reference interval 26.9 to 27.6 ft.) but changes to olive gray (5 YR 4/2), and changes to olive gray (5 YR 3/2) below 28.7 ft with some black carbonaceous streaks and pieces below 29.5 dt. Few near vertical to 85 degree fractures at approx 29.4 ft. Fractures are clean with no coatings. Microfractures have Fe coatings or stains. <5% silt, >95% clay
				2.00/2.00		29				
					5987					
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.80	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER	
NORTH [illegible]	AREA CUS CHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST [illegible] DRILLING		
EAST 1080542	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED [illegible]		

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

57293

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50%	100% 0% 100%	0.30/0.30	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-R1	LOG OF BORING NUMBER	
NORTH 7[illegible]5	AREA 005 CHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST T. S. DREILING		
EAST 1080545	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/05/93		

57293A

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

EXPLORATORY BOREHOLE TO IDENTIFY PRESENCE OF WASTE OR TRENCH

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible] CHSS 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	57293A
EAST 2080545	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 SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0.00/2.00	6006	10			CL	10.0'-12.0' Sandy clay, light brown (5 YR 5/6)
					6005	11				
					6004	12				Total Depth Drilled 12.00
					6003	13				
					6002	14				
					6001	15				
					6000	16				
					5999	17				
					5998	18				
					5997	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	57293B
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	[illegible]	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST [illegible] DRILLING 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, CASS 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 UNIT DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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 005 [illegible] 133.2	CASING DIAMETER (IN)	GEOLOGIST	T. S. [illegible]	57293C
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/05/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6015	0			NO RECOVERY	No recovery (0.0-5.0') Drilled out
					6014	1				
						2				
				0.00/5.00	6013					
						3				
					6012	4				
					6011	5			CL	5.0'-7.0' Sandy Clay, light brown (5 [illegible] 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) 6013.80	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 74536	AREA 305 CASS 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 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
					0.00/2.00	6005	10			CL	10.0'-12.0' Sandy Clay, light brown (5 YR 5/6)
						6004	11				
						6003	12				Total Depth Drilled 12.00
						6002	13				
						6001	14				
						6000	15				
						5999	16				
						5998	17				
						5997	18				
						5996	19				
							20				

STATE PLANE COORDINATE		TOTAL DEPTH FT		GROUND ELEVATION FT		PROJECT NUMBER	LOG OF BORING NUMBER
NORTH		AREA		CASING DIAMETER (IN)		GEOLOGIST	
EAST		LOCATOR NUMBER		BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	57393

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

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0			CL	0.0'-1.6' Sandy Clay with some Silt. Dark yellowish brown (10 YR 3/2). F.g., sub-rounded quartz sand, trace roots. No apparent bedding or fractures. Moist, low to mod plasticity, mod calcareous. 20% sand, 19% silt, 60% clay. No recovery (1.6-2.0')
3H50256AS		1.60/2.00	1				
			2			CL	2.0'-10.0' Clayey Sand with some Silt. Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6). Pred f.g. quartz sand, some m.g. quartzose sand, trace c.g. quartzose sand, sand is sub-rounded. Some Fe staining, trace carbonaceous material. No apparent bedding or fractures. Moist, low to mod plasticity, slightly to mod calcareous. Non- to slightly calcareous from 4.6 to 6.3 ft. Non-calcareous from 6.6 to 10.0 ft. 45% sand, 19% silt, 36% clay. No recovery (3.4-4.0'), (4.0-4.6'), and (6.3-6.6')
3H50257AS		1.40/2.00	3				
		0.00/0.60	4				
		1.70/2.00	5				
			6				
		1.60/1.60	7				
			8				
3H50258AS		2.00/2.00	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	F S CREILING	57393
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	04/07/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST F CREILING 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%			10			CL	10 0'-15 0' Sandy Clay with some Silt Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) Trace gravel starting at 13 6 ft f g, sub-rounded quartz sand, trace m g and c g sand Some Fe staining, trace carbonaceous material No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 36% sand, [illegible]% silt, 42% clay
			1 90 /1 90	6004 6003	11				
				6002	12				
			2 00 /2 00	6001	13				
				6000	14				
BH50259AS			2 00 /2 00	5999	15			CL	15 0'-23 2' Sandy Clay with some Silt and Gravel Mod yellowish brown (10 YR 5/4) Sub-rounded fine to coarse gravel f g to c g sand, pred f g, sub-rounded, quartz sand No apparent bedding or fractures Moist, low to mod plasticity, non-calcareous 8% gravel, 30% sand, 25% silt, 37% clay
				5998	16				
			2 00 /2 00	5997	17				
				5996	18				
			2 00 /2 00	5995	19				
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	57393
EAST [illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	04/07/93	

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

DRAFT

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
					5994	20				
	BH50260AS			2.00/2.00	5993	21				
					5992	22				
				2.00/2.00	5991	23			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
					5990	24				
	BH50291AS			2.00/2.00	5989	25			CL	24.3'-24.8' Silty Clay with trace Sand. Mod. yellowish brown (10 YR 5/4) mottled with light olive gray (5 Y 5/2). Trace sub-angular c.g. sand. Some Fe staining, trace carbonaceous material. No apparent bedding, fractures, or slickensides. Moist, mod. to high plasticity, non-calcareous. 1% sand, 29% silt, 70% clay
					5988	26			CLAYSTONE	24.8'-27.0' Top of Bedrock at 24.8'. Claystone with some Silt. Mod. olive gray (5 Y 4/2). Some Fe staining, mod. to highly friable, some carbonaceous material. No apparent bedding or fractures. Dry to moist. 10% silt, 90% clay
				2.00/2.00	5987	27			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
					5986	28				
				2.10/2.10	5985	29				
						30				

STATE PLANE COORDINATE	TOTAL DEPTH FT 30 20	GROUND ELEVATION FT [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	GEOLOGIST	T S DREILING	57393
EAST [illegible]	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) [illegible]	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

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 50%)	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 HOLE (ft)	GROUND ELEVATION (ft)	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH [illegible]	APPROX. [illegible]	BORING DIAMETER (in)	GEOLOGIST	F. G. S. DRILLING
EAST 1030819	LOCATION NUMBER [illegible]	BORE-HOLE DIAMETER (in) 6.00	DATE DRILLED	04/12/93

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

57493

DRAFT

Sample Number	Sample Depth (ft)	Recovery Interval	Unit	Lithology	USCS / Rock Type	Description
9450251AS	1.30 / 2.00		6020		CL	0.0'-1.9' Sandy Clay with some Silt and trace Gravel. Dusky brown (5 YR 2/2) to approx. 1.4 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')
9450252AS	1.50 / 2.00		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		6025			
	2.00 / 2.00		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. 30% gravel, 56% sand, 17% silt, 7% clay
9450253AS	2.00 / 2.00		6022		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, 1% silt, 5% clay
			6021			

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 20 0 | GROUND ELEVATION (FT) 6009 0 | PROJECT NUMBER | LOG OF BORING NUMBER

NORTH [illegible] | HSA 8 25 CASS 123 | CASING DIAMETER (IN) | GEOLOGIST T G S DRILLING

EAST 1290819 | LOCATOR NUMBER HT | BOREHOLE DIAMETER (IN) 8 00 | DATE DRILLED 04/12/93

57493

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

DRAFT

Chemical Analysis	Sample Number	Sample Depth Feet	Percent Recovery	Recovery Interval	Blows/6 in	Depth (Ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				2 00 /2 00	6020 6019	10 11			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 00 /2 00	6018 6017	12 13			SC	12 0'-13 0' Gravelly Sand with some Clay, trace Silt Light brown (5 YR 5/6), below 13 0 ft grayish orange (10 YR 7/4) Gravel fine to coarse, sub-rounded, max size up to 2 0 in Sand f g to c g , well graded, sub-rounded quartzose No apparent bedding or fractures, low plasticity fines, non-calcareous Moist 25% gravel, 56% sand, 5% silt, 14% clay
									SC	13 0'-13 8' Clayey Sand with trace Silt and Gravel Dark yellowish orange (10 YR 6/6) Gravel fine, sub-angular Sand f g to c g , well graded, sub-rounded quartzose No apparent bedding or fractures, low plasticity fines, non-calcareous Moist 5% gravel, 74% sand, 4% silt, 17% clay
	3502548			1 20 /2 00	6016 6015	14 15			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 60 /2 00	6014 6013	16 17			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')
	3502554			1 70 /2 00	6012 6011	18 19 20			SANDY CLAYSTONE	18 6'-19 7' Top of Bedrock at 18 6' Sandy Claystone with some Silt Pred light olive brown (5 Y 5/6) Sand v f g , sub-rounded to rounded, quartzose Sand is typically whitish Some near vertical fractures coated with carbonaceous material Abundt Fe stained layers and areas, non-calcareous Dry to moist 30% sand, 7% silt, 63% clay No recovery (19 7-20 0')

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	DRILLING ELEVATION [illegible]	PROJECT NUMBER	[illegible]	[illegible]
NORTH [illegible]	[illegible]	CASING ELEVATION [illegible]	GEOLOGIST	[illegible] DRILLING	57493
EAST 1280819	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	04/12/93	

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

DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		2 00 /2 00	21			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 sandy layer (0 5 in thick) at approx 21 3 ft 63% sand, 4% silt, 33% clay
			22			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	23			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	04/12/93 ▽			
		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 m of screen at 27 7 ft
		0 00 /1 30	27				
		2 20 /2 70	29			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 calcite Dry to moist 13% sand, 9% silt, 78% clay No recovery (29 9-30 4')
			30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.40	GROUND ELEVATION (FT) 6030.40	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005 [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DREILING	
EAST 1080819	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	[illegible]/12/93	57493

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

DRAFT

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
				6000	30				Total Depth Drilled 30.40
				5999	31				
				5998	32				
				5997	33				
				5996	34				
				5995	35				
				5994	36				
				5993	37				
				5992	38				
				5991	39				
					40				

STATE PLANE COORDINATES	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6020.70		PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 1977.6	AREA OF [illegible]	CASING DIAMETER (IN)		GEOLOGIST D. BAUGHN	57593
EAST 1003885	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6.00		DATE DRILLED 04/13/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRAVITATIONAL 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
	9602998			1.00/2.00	6020	0			SM	0.0'-4.5' Gravelly Sand with some Silt and Clay, trace Cobbles. Sand and gravel angular to sub-rounded, well graded, f g to c g, pred f g, quartzose. Low to med plasticity. Dry. 38% gravel, 44% sand, 11% silt, 7% clay. No recovery (1.1'-2.0'), (3.1'-4.0')
					6019	1				
	9602999			1.00/2.00	6018	2				
					6017	3				
					6016	4				
				1.00/2.00	6015	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	6014	6				
				0.00/1.25	6013	7				
	9602998 9602000			1.20/2.00	6012	8				
					6011	9				
					6010	10				

STATE PLANE COORDINATES	TOTAL DEPTH (FT) 18.00	GROUND ELEVATION (FT)	DATUM	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 1[illegible]76	PAGE 1 OF 1	CASING DIAMETER (IN)		GEOLOGIST	57593
EAST 1260885	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6.00		DATE DRILLED 04/13/93	

REMARKS DRILLING EQUIPMENT CME 750 ATV ASI RIG GEOLOGIST DAN GAUGHAN NOTE (CORE LOSS AND RECOVERY) INTERVALS LESS THAN OR EQUAL TO 0.2 ft not shown

DRAFT

Sample Number	Sample Depth	Sample Drain Size	Percent Recovery	Recovery Interval	Datum Elevation	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
					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
				1.30/2.00	6014	11				
					6013	12			SANDY CLAYSTONE	11.7'-13.3' Top of Bedrock at 11.7 ft. Sandy Claystone with some Silt. Mottled light olive gray (5 YR 6/1) and light brown (5 YR 5/6). Sand is well sorted, sub-rounded to rounded, quartzose. Occasional layers of clay throughout interval. Trace carbonaceous material, some Fe staining. Med. plasticity, mod. friable. Dry. 27% sand, 8% silt, 65% clay
B6000US				1.30/2.00		13				
					6012	14			SANDY CLAYSTONE	13.3'-16.6' Sandy Claystone with some Silt. Mottled light olive gray (5 YR 6/1) and light brown (5 YR 5/6). Sand is well sorted, sub-rounded to rounded, quartzose. Bedrock is laminated with some Fe staining. Low plasticity, highly friable. Dry. 41% sand, 15% silt, 44% clay
				1.30/1.75	6011	15				
				0.30/0.25	6010	16				
				1.90/1.90	6009	17			CLAYSTONE	16.6'-18.0' Claystone with some Sand and Silt. Mottled light olive gray (5 Y 6/1) and light brown (5 YR 5/6). Some Fe staining. Some f.g. quartzose sand and silt. Trace carbonaceous material. Interbedded with f.g. to m.g., rounded sand. 12% sand, 13% silt, 75% clay
				0.00/0.10	6008	18				Total Depth Drilled 18.00
					6007	19				
					6006	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA SURF COST [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]	57693
EAST	1085298	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN)	5.00	DATE DRILLED	09/27/93	

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

DRAFT

Graphical Sample Depth	Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Unconfined Strength	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	BH6002546			1.30/2.00	5.55			CLAYSTONE	0.0'-1.3' Top of Bedrock at 0.0 ft Claystone, with trace Silt. Pred. light olive gray (5Y 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')
	BH6001946			1.20/2.00	5.52			CLAYSTONE	2.0'-4.5' Claystone. Same as above, reference interval 0.0 to 1.3 ft except some microfractures that are Fe stained. Weathering decreases with depth. No recovery (3.2'-4.0')
				1.30/2.00	5.50			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')
					5.46				Total Depth Drilled 6.00
					5.48				
					5.47				
					5.46				
					5.45				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.50	GROUND ELEVATION (FT)	6070.30	PROJECT NUMBER	305 0F0.01	LOG OF BORING NUMBER
NORTH	74635	AREA SURF DIST S OF 123	CASING DIAMETER (IN)		GEOLOGIST	F G DREELING	5793
EAST	1380225	LOCATOR NUMBER H6	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 EHSS 123

DRAFT

Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Elevation (ft)	Depth (ft)	Lithology	Unified Soils Classification or Rock Type	Description
36002MS			1.10-2.00	6070	1		SC	0.0'-1.1' Gravelly Sand with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Some broken cobbles Gravel fine to coarse, well graded, sub-rounded Sand f g to c g, well graded, sub-rounded, quartzose with some rock fragments and mica, some roots Low plasticity fines mod to highly calcareous Dry 40% gravel, 43% sand, 2% silt, 15% clay No recovery (1.1-2.0')
36002MS 36000MS			1.00-2.00	6069 6068	2 3		SC	2.0'-5.4' Gravelly Sand with some Clay and trace Silt Same as above, (reference interval 0.0 to 1.1 ft) except no roots No recovery (3.0-4.0')
36000MS			1.40-1.75	6067 6066	4 5			
			0.00-0.55	6065	6		NO RECOVERY	No recovery (5.4-6.3')
			1.60-2.00	6064	7		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
36002MS				6063	8		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')
36002MS			2.00-2.00	6062 6061	9 10			

STATE PLANE COORDINATE		TOTAL DEPTH FT [illegible]	GROUND ELEVATION FT	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]6235	AREA SURF DIST [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible] DRILLING	57793
EAST	[illegible]80235	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	[illegible]/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 [illegible]

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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
BH5032MS, BH5033MS					10				
			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
				6057	14			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
			1.80/2.00	6056	15				No recovery (13.2-13.5'), and (15.3-15.5')
BH5032MS				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
			1.75/1.75	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
BH5035MS			0.60/1.00	6053	18				No recovery (17.85-18.25'), and (18.25-18.85')
			0.00/0.60	6052	19				
			0.75/0.75						
BH5036MS			0.00/0.40	6051	20			NO RECOVERY	No recovery (19.6-20.0') Drilled through rock

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 33.30	GROUND ELEVATION (FT) 6070.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 746295	AREA SURF DIST S OF 133	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	57793
EAST 2080235	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	04/29/93	

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

SAMPLE NUMBER	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH5032MS, BH5035MS	1.30/2.00	6050	20–21	SC	20.0'-24.1' Gravelly Sand with some Clay and trace Silt. Light brown (5 YR 5/6). Gravel sub-rounded and broken up to approx 2.0 in. Sand f.g. to c.g., well graded, sub-rounded, quartzose. No apparent bedding or fractures. Low plasticity fines, non-calcareous. Dry. 40% gravel, 46% sand, 1% silt, 13% clay. No recovery (21.3-22.0'), (22.0-23.0'), and (24.1-24.4'). No recovery (24.4-24.9'). Drilled through rocks
	0.00/1.00	6049	22		
	1.10/1.40	6048	23		
BH5035MS	0.00/0.50	6047	24		
	1.50/2.00	6046	25–26	SC	24.9'-26.4' Clayey Sand with some Silt. Light brown (5 YR 5/6), mottled with light olive gray (5 Y 6/1). Sand pred f.g., some m.g. and c.g., sub-rounded, quartzose. No apparent bedding or fractures. Low plasticity fines, non-calcareous. Moist. 65% sand, 7% silt, 28% clay. No recovery (26.4-26.9')
BH5035MS, BH5038MS		6045	26		
	1.70/2.00	6044	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.)
BH5035MS	2.00/2.00	6043	28–30	CL	28.0'-28.6' Sandy Clay with trace Silt. Light brown (5 YR 5/6). Trace gravel, fine grained, sub-rounded. Sand pred f.g. to c.g., sub-rounded, quartzose. Some carbonaceous material, trace 1.0 mm ironstone nodules (less than 1.0 mm). No apparent bedding or fractures. Low to mod plasticity, non-calcareous. Moist. Note: Upper 0.3 or 0.4 ft of core in box is sluff. 47% sand, 5% silt, 48% clay. No recovery (28.6-28.9')
		6042	29		
		6041	30		

STATE PLANE COORDINATE	TOTAL DEPTH FT 33 90	GROUND ELEVATION FT	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA SURF DIST S OF 133	CASING DIAMETER IN		GEOLOGIST	[illegible] DRILLING
EAST [illegible]	LOCATOR NUMBER 46	BOREHOLE DIAMETER IN	[illegible]	DATE DRILLED	04/29/93

LOG OF BORING NUMBER **57793**

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

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SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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
		2 00 /2 00	31			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
		1 30 /1 00	33				
			34				Total Depth Drilled 33 90
			35				
			36				
			37				
			38				
			39				
			40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.0	GROUND ELEVATION (FT)	6062.30	PROJECT NUMBER	105-F01-F2	LOG OF BORING NUMBER
NORTH	7[illegible]6251	PRE-SURF DIST B/T 133	CASING DIAMETER (IN)		GEOLOGIST	T.S. Dreiling	57893
EAST	2080038	LOCATOR NUMBER 46	BOREHOLE DIAMETER (IN)	8.0	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

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Sample Number	Recovery/Interval	Depth	Unified Soils Classification or Rock Type	Description
06105546	1.0/2.0	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')
06105545	2.0/2.0	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
06105544	1.8/2.0	6059	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')
06105543	1.8/2.0	6057		
06105542	1.8/2.0	6056		
06105541	0.0/0.0	6055	NO RECOVERY	No recovery (7.8-8.0')
			NO RECOVERY	No recovery (8.0-8.4') Overdrilled
06105540	1.5/2.0	6054	SC	8.4'-9.1' Gravelly Sand with some Clay and Silt Yellowish gray (5 Y 7/2) Gravel sub-rounded, max size up to 1.5 in Sand f.g. to c.g., well graded, quartz No apparent bedding or fractures Low plasticity fines, non-calcareous Dry 15% gravel, 63% sand, 9% silt, 13% clay
06105539		6053	SM	9.1'-9.7' Silty Sand with some Gravel and Clay (note is above reference interval 6.0 to 7.4 ft.) Based on [illegible] being taken for samples.

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH [illegible]	[illegible]	CASING DIAMETER [illegible]	GEOLOGIST	57893
EAST 1380038	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	DATE DRILLED 05/03/93	

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

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Physical Sample Depth / Analytical Sample Number	Sample Grain Size	Percent Recovery	Recovery / Interval	Datum / Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				10			SC	9.7'-13.4' Clayey Sand with some gravel, trace Silt. Light brown (5 YR 5/6). Gravel fine, sub-rounded. Sand f.g. to c.g., well graded, sub-rounded, quartzose. No apparent bedding or fractures. Possible broken cobble 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')
			1.30/2.00	6052 11				
9-5036JS				6051 12				
				6050 13				
			1.50/2.00					
				6049 14			SC	13.4'-17.75' Clayey Sand with some Gravel, trace Silt. Mod. yellowish brown (10 YR 4/4). Gravel sub-rounded, f-c, max. size up to approx. 1.0 in. Sand pred. f.g. to m.g., trace c.g., sub-rounded, quartzose with some mica. No apparent bedding or fractures, non-calcareous. Low plasticity fines. Dry to moist. 15% gravel, 52% sand, 3% silt, 29% clay. No recovery (14.0'-14.4'), (14.4'-16.8'), and (16.8-17.75')
9-5035JS								
				6048 15				
9-5034JS			1.50/1.60					
				6047 16				
9-5033JS								
			1.75/1.75	6046 17				
9-5032JS								
				6045 18			NO RECOVERY	No recovery (17.75-18.7') Drilled through rocks
			0.00/0.95					
				6044 19			SC	18.7'-19.1' Clayey Sand with trace Gravel and Silt. [illegible] brown (5 YR 4/6). Gravel sub-angular, fine, max. size [illegible] 0.5 in. Sand pred. f.g. to m.g., trace c.g., sub-rounded quartz. No apparent bedding or fractures, non-calcareous. Low plasticity fines. Dry to moist. 5% gravel, 53% sand, 4% silt, 38% clay
			1.50/1.50					
				6043 20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.40	GROUND ELEVATION (FT)	6062.30	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER	
NORTH 76257	AREA SURF DIST (FT) OF 133	CASING DIAMETER (IN)		GEOLOGIST	[illegible]		57893
EAST 1380338	LOCATION NUMBER H6	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	15/03/93		

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.

DRAFT

Sample Number	Sample Span (ft)	Percent Recovery	Recovery/Interval	Datum (ft)	Depth (ft)	Lithology	Unified Soils Classification or Rock Type	Description
SH5003545	5.0	100.0% / 100%			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.
			0.30/0.90	6041	22			No recovery (20.9'-21.1'), and (21.1'-22.0')
SH5003420S			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
SH5003665S			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-calcareous. 52% sand, 20% silt, 28% clay.
SH5003675S				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 SG	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 746257	AREA SURF DIST S OF 133	CASING DIAMETER (IN) *	GEOLOGIST	T S CREILING	57893
EAST 0380338	LOCATOR NUMBER H6	BOREHOLE DIAMETER (IN) 6 30	DATE DRILLED	05/03/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Creiling 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
						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) 10.00	GROUND ELEVATION (FT) 6081.50	PROJECT NUMBER		HOLE NUMBER	
NORTH [illegible]	HOLE DIAM 0.00 TO 10.00	CASING DIAMETER (CM)	GEOLOGIST		DRILLING	
EAST [illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (CM) 8.00	DATE DRILLED	04/28/93		57993

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

DRAFT

Sample Number	Sample Drawn	Percent Recovery	Recovery/Interval	Elevation	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
9450040			1.30/2.00	6089			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 of 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')
9450020NS			1.60/2.00	6088				
9450027NS				6087				
				6086				
			1.60/2.00	6085			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')
9450029NS				6084				
			1.70/2.00	6083			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')
				6082				
			2.00/2.00	6081				
				6080			SW	9.8'-10.0' Sand with trace Silt and Clay. Well graded sand composed of decomposed granite rock, with sub-angular to rounded quartz grains, some mafic sand, micas and hornblende. Clay non-plastic, non-calcareous. 90% sand, 5% clay, 5% silt

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 4589.50	PROJECT NUMBER	DESIGNATION OF DRILLING NUMBER		
NORTH 1[illegible]738	AREA SURF DISTURB (SQ FT)	CASING DIAMETER (IN)	GEOLOGIST	DATE STARTED		57993
EAST 2[illegible]225	LOCATION NUMBER 35	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/29/93			

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

DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		2.00/2.00	10			SC	10.0'-11.0' Gravelly Sand with some Clay and trace Silt. Same as above (reference interval 6.0 to 9.3 ft.) 35% gravel, 46% sand, 2% silt, 17% clay
		2.00/2.00	11			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 abundant mafic sand (greden, mica and hornblende). No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. 28% gravel, 56% sand, 5% silt, 19% clay
		2.00/2.00	13			SC	13.00'-14.00' Clayey Sand with trace Gravel and Silt. Light brown (5 YR 5/6). Sub-rounded gravel up to approx. 0.5 in. F.g. to m.g. and some c.g., sub-rounded quartz sand. No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. 5% gravel, 72% sand, 2% silt, 21% clay
		2.00/2.00	14			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	15			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	16				No recovery (16.8-18.5')
		2.00/2.00	18			SC	18.5'-20.0' Gravelly Sand with some Clay and trace Silt. Light brown (5 YR 5/6). Sub-rounded gravel, fine 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 SURF DIST S OF [illegible]	CASING DIAMETER (IN)	GEOLOGIST	T. S. [illegible]	57993
EAST [illegible]9225	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	[illegible]/93	

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

DRAFT

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			1.40/1.50	6069	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
				6068	21				
				6067	22				Total Depth Drilled 22.00
				6066	23				
				6065	24				
				6064	25				
				6063	26				
				6062	27				
				6061	28				
				6060	29				
					30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 30	GROUND ELEVATION (FT) 6035 30	PROJECT NUMBER 305-RFETR	LOG OF BORING NUMBER	
NORTH 74748	AREA 305 DASS 133	CASING DIAMETER (IN)	GEOLOGIST		58093
EAST 207688	LOCATION NUMBER 67	BOREHOLE DIAMETER (IN) 8 30	DATE DRILLED 04/22/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologists T Santangelo-Drerling 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 GRADATION TEST	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	SW01105			1 50 /2 00	6035	0			CL	0 0'-1 5' Clay with some Gravel and Sand Mod brown (5 YR 4/4) Some roots Trace to some cobbles Moist No recovery (1 5-2 0')
					6034	1				
						2			CL	2 0'-3 0' Gravelly Clay with some Sand and Cobbles Mod brown Ash mixed in clay at bottom of sample No recovery (3 0-4 0'), (4 0-4 5'), and (4 5-6 0')
				1 00 /2 00	6033	3				
	SW01106				6032	4				
				0 00 /0 50						
					6031	5	04/22/93 ▽			
				0 00 /1 50						
					6030	6				
					6029	7			WASTE/FILL	6 0'-6 6' Asbestos, rusted materials Sand and clay, oshy material, some gravel Wet Some metal pieces and glass Hydropunch from 8 0 - 10 ft Drilled out No recovery (6 6-8 0'), and (8 0-10 0')
				0 00 /2 00						
					6028	8				
				0 00 /2 00	6027	9				
					6026	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6035.30	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 747478	AREA 305, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST F.S. GREILING	58093
EAST 2073688	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED 04/22/93	

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologists T Santangelo-Greiling, 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	DUS-RFI-PI	LOG OF BORING NUMBER
NORTH 747479	AREA DUS, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	T. S. DREILING	58093A
EAST 2079630	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 9.00	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	105-RFI/RI	LOG OF BORING NUMBER	
NORTH	[illegible]	AREA 005, CASS 115	CASING DIAMETER (IN)	GEOLOGIST	F.S. DREILING		
EAST	2081652	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	05/12/93		58393

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/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) 5009.60	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7929	AREA GUS, IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	T.S. GREILING	58393
EAST 1081652	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 9.00	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 SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH60421AS			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 (FT) 14.00	GROUND ELEVATION (FT)	6008.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA [illegible]	CASING DIAMETER (IN)		GEOLOGIST	[illegible]	58493
EAST	[illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/13/93	

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

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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
		0% 50% 100%	0% 100%							
				1.00/2.00	6008 6007 6006	0 1 2			SC	0.0'-2.5' Gravelly Sand with some Clay and trace Silt. Mod brown (5 YR 4/4). Angular to sub-angular, f-c gravel up to 2 in. F.g. to c.g., well graded, sub-rounded Quartz sand with abundt mafic sand, trace roots. No apparent bedding or fractures, dry to moist, low plasticity, slightly calcareous. 40% gravel, 43% sand, 3% silt, 14% clay. No recovery (1.0'-2.0')
	BH50345AS BH50422AS			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')
	BH50423AS			1.40/2.00	6004 6003	4 5				4.0'-5.4' Graphite. Grayish black (N2). Dry, some broken glass and other debris. No recovery (5.4'-6.0')
	BH50424AS			1.00/2.00	6002 6001	6 7				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')
	BH50346AS BH50426AS			1.70/2.00	6000 5999	8 9 10			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
									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')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.90	GROUND ELEVATION (FT)	HOLE DIP	PROJECT NUMBER	DATE-REVISED	LOG OF BORING NUMBER
NORTH 1-7395	PAGE 1 OF 1 SHEET 1 OF 1	CASING DIAMETER (IN)		GEOLOGIST	T G DREILING	58493
EAST 1381653	LOCATION NUMBER	BOREHOLE DIAMETER (IN)	6.00	DATE DRILLED	05/13/93	

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

DRAFT

Vertical Sample Depth (ft)	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	9.95	10			CLAYSTONE	10.0'-12.0' Claystone with trace Silt Same as above (reference interval 9.4 to 9.7 ft) Pred light olive gray (5 Y 4/2) with some Fe staining, dry No apparent bedding or fractures, slightly calcareous Trace black carbonaceous material
					9.95	11				
				2.00/2.00	9.95	12			CLAYSTONE	12.0'-13.5' Claystone as from interval 10.0 to 12.0 ft, but abundt black carbonaceous material Occurs as both pieces as between 12.0 to 12.3 ft and layers at approx 30 degrees as at 13.4 ft High angle Fe stained fracture at approx 13.5 ft, possible slickensides at approx 12.6 ft at approx 30 degrees
					9.95	13				
				0.90/0.90	9.95	14			SANDY CLAYSTONE	13.5'-14.9' Sandy Claystone with trace Silt Light olive gray (5 Y 4/2) V f g to f g, sub-rounded, quartzose sand Non-calcareous No apparent bedding or fractures, except fracture at approx 14.7 ft at approx 70 degrees is coated with crystals of (gypsum) clear to white Dry 24% sand, 4% silt, 72% clay
					9.95	15				Total Depth Drilled 14.90
					9.95	16				
					9.95	17				
					9.95	18				
					9.95	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	4106.10	PROJECT NUMBER		LOG OF BORING NUMBER
NORTH	1-7912	AREA 305 CASS 105	CASING DIAMETER (IN)		GEOLOGIST	T G GREELING	
EAST	1281652	LOCATOR NUMBER	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	05/14/99	58593

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

DRAFT

Sample Number	Recovery Interval	Depth (ft)	Lithology	Unified Soils Classification or Rock Type	Description
0-60-27AS	1.20/2.00	0–1.2		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')
0-60-47AS 0-60-42AS 0-60-29AS	1.40/2.00	2–3.2		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
0-60-29AS	0.90/2.00	3.2–4.9		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')
0-60-35AS	1.20/2.00	6–7.2		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
				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')
0-60-40AS 0-60-66AS	1.40/2.00	8–10		SC	8.0'-9.4' Clayey Sand with some Gravel and Silt Light brown (5 YR 5/6) Sand is pred f g to m g, angular to sub-rounded, quartz, trace mafic minerals and mica, low to mod plasticity, moist 5% gravel, 63% sand, 11% silt, 20% clay No recovery (9.4'-10.0'), (10.0'-10.5')

STATE PLANE COORDINATE | TOTAL DEPTH OF HOLE | GROUND ELEVATION | PROJECT NUMBER | LOG OF BORING NUMBER

NORTH [illegible] | HOLE SIZE 0.5 TO 55 0.15 | CASING DIAMETER (IN) | GEOLOGIST [illegible] | 58593

EAST 1391632 | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER (IN) [illegible] | DATE DRILLED [illegible]

REMARKS DRILLING EQUIPMENT CME 750 ATV ASTM D6 GEOLOGIST [illegible] DRILLING NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0.2' NOT SHOWN

DRAFT

Critical Sample Depth / Geotechnical Sample Number	Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Drilling Time	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				0.00 / 0.50	5:55				
				1.00 / 2.00	5:55 5:54			SC	10.5'-14.9' Clayey Sand with some Silt and Gravel possible broken cobbles Light brown (5Y 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')
	B-50069AS								
	B-50070AS			0.60 / 1.60	5:55 5:55				
	B-50071AS			0.80 / 2.00	5:52 5:51				
	B-50104AS								
				1.50 / 2.00	5:50 5:49			CLAYSTONE	16.1'-17.6' Top of Bedrock at 16.1 ft Claystone with some Silt Light olive gray (5Y 5/2), some carbonaceous and iron staining trace of calcareous material 10% silt, 90% clay No recovery (17.6'-18.1')
	B-50072AS								
				2.00 / 2.00	5:48 5:47			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

STATE PLANE COORDINATE	TOTAL DEPTH FT 21.10	GROUND ELEVATION (FT) 6006.10	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DREILING	58593
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	05/14/93	

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	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) 10.30	GROUND ELEVATION (FT)	5999.50	PROJECT NUMBER	115-RC/91	LOG OF BORING NUMBER
NORTH	1[illegible]944	AREA BUS 1[illegible]55 115	CASING DIAMETER (IN)		GEOLOGIST	D. C. BAUGHN	58693
EAST	1[illegible]1534	LOCATION NUMBER [illegible]7	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 / Analytical Sample Number	Sample Grain Size	Percent Recovery	Recovery/Interval	Saturation Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
BH50044WS			0.30/2.30	5995.7 5995.8			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 grained to fine grained. No recovery (0.3'-2.0')
BH50048WS BH50037WS			1.10/2.00	5995.7 5995.6			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')
			0.60/2.00	5995.5 5995.4			WASTE/FILL	4.0'-4.6' Landfill Waste: Large cobble with fine powdery material at 4.4 ft. Grayish black (N2). This material does not appear to be soil. (Description is taken from field log) No recovery (4.6'-6.2')
BH50037WS			0.80/2.00	5995.3 5995.2			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')
BH50017WS			0.00/2.00	5995.1 5995.0				

START PLANE COORDINATES	TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 1969.50	PROJECT NUMBER 305-PCB-RI	LOG OF BORING NUMBER	
NORTH [illegible]	HOLE SIZE 2.25	CASING DIAMETER (IN)	GEOLOGIST [illegible] Baughn	58693	
EAST 1081584	LOCATION NUMBER [illegible]	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

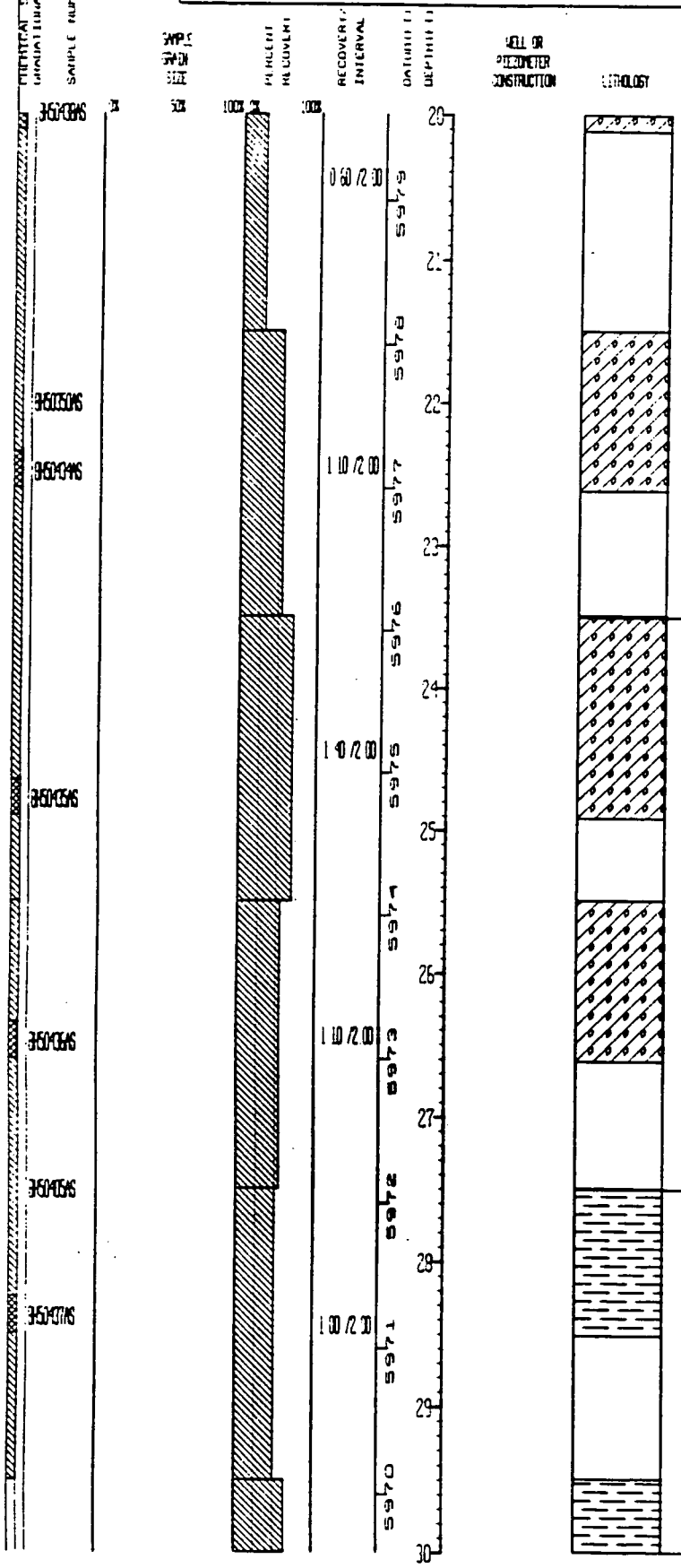
DRAFT

Sample Number	Percent Recovery	Recovery Interval	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
B5G07496		0.30/1.70	10			ASTO/FILL	10.3'-11.1' Sand and gravel size granite (grayish black (N2) and other tar like materials appear to be coated with asbestos (originated from a building?)
			11				No recovery (11.1'-12.0'), (12.0'-15.5')
			12				
		0.30/3.50	13				
			14				
			15				
B5G07496 B5G07596		1.50/2.00	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')
			17				
		1.30/2.00	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, highly weathered. 17% gravel, 36% sand, 12% silt, 35% clay. No recovery (18.8'-19.5'), (20.1'-21.5'), and (22.6'-[illegible])
			19				
			20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 30.30	GROUND ELEVATION (FT) 5999.60	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	GEOLOGIST	D.C. BAUGHN	58693
EAST 1081584	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 5.00	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



SC

23.5'-26.6' Clayey Sand with some Gravel and Silt. Pale brown (5 YR 5/2). Gravel is pred. fine, and angular to sub-angular. Sand is well graded, pred. f.g., angular to sub-rounded and quartzose with some mica. Low plasticity, wet, and highly weathered.
20% gravel, 40% sand, 13% silt, 27% clay

No recovery (24.9'-25.5'), (26.6'-27.5')

CLAYSTONE

27.5'-30.4' Top of Bedrock between 26.6 and 27.5 ft. Claystone with some Silt with trace Sand. Med. to light gray (N6). Sand is f.g. Some carbonaceous material. Mod. plasticity, low friability, dry.
2% sand, 18% silt, 80% clay

No recovery (28.5'-29.5'), (30.4'-30.9')

STATE PLANE COORDINATE	TOTAL DEPTH FT 30 90	GROUND ELEVATION FT	5999 90	PROJECT NUMBER	105-RFI/RI
NORTH	AREA 105 CASE 115	CASING DIAMETER INC		GEOLOGIST	D C BAUGHN
EAST	LOCATOR NUMBER 17	BOREHOLE DIAMETER INC	8 00	DATE DRILLED	05/17/93

LOG OF BORING NUMBER

58693

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist Dan Baughn NOTE Core loss no recovery 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 30 / 1 40		30				
					5969				NO RECOVERY	No recovery (30 4-30 9')
						31				Total Depth Drilled 30 90
					5968					
						32				
					5967					
						33				
					5966					
						34				
					5965					
						35				
					5964					
						36				
					5963					
						37				
					5962					
						38				
					5961					
						39				
					5960					
						40				

STATE PLANE COORDINATE	TOTAL DEPTH FT 28 40	GROUND ELEVATION FT	6012 60	PROJECT NUMBER	005-RFI/RI
NORTH 747512	AREA 005 CHSS 133 2	CASING DIAMETER (IN)	2 00	GEOLOGIST	T S DREILING
EAST 1080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	05/20/93

LOG OF BORING NUMBER **58793**

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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			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')
	BH50406AS			0 80 /2 00	6011	1			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 prea 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	6010	2			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	6009	3			SC	4 9'-5 6' Gravelly Sand with abundt Clay and some Silt Mod yellowish brown (10 YR 5/4) mottled with light brown (5 YR 5/6) Well graded, sub-rounded gravel up to approx 2 0 in F g. to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Dry, low plasticity fines, non-calcareous 30% gravel, 37% sand, 6% silt, 27% clay No recovery (5 6-6 1')
				1 10 /2 00	6008	4			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
	BH50407AS			1 60 /1 90	6007	5			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')
					6006	6				
					6005	7				
					6004	8				
					6003	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29.40	GROUND ELEVATION (FT)	6012.60	PROJECT NUMBER	115-RFD/RI	LOG OF BORING NUMBER
NORTH 7[illegible]12	AREA OU5 CHSS 133.2	CASING DIAMETER (IN)	0.00	GEOLOGIST	T. S. DREILING	58793
EAST 0080605	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	05/20/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / 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			GC	10.0'-11.5' Sandy Gravel with some Clay and trace Silt. Dark yellowish brown (10 YR 4/2). Fine to coarse, well graded, sub-angular gravel up to cobble size. Cobbles are broken. F.g. to c.g., well graded, sub-rounded quartz sand with trace mica. No apparent bedding or fractures. Moist, wet at 11.3 ft. Low plasticity fines, non-calcareous. 50% gravel, 37% sand, 4% silt, 9% clay. No recovery (11.5'-12.0')
				1.50/2.00	6002	11	05/20/93			
					6001	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). No recovery (13.4-14.0')
				1.40/2.00	6000	13				
					5999	14				
					5998					
	BH5040BMS			2.00/2.00		15			GC	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
					5997	16				
				2.00/2.00	5996	17				
					5995					
						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. No recovery (19.1'-20.0')
				1.10/2.00	5994	19				
					5993	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 28.40	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] DREILING	58793
EAST	[illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	05/20/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / 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
	9H50409AS			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 apparent bedding 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				
	9H50410AS			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 [illegible]
Bottom of Filter Pack 24.00

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

NORTH [illegible] | HPA [illegible] | CASING DIAMETER (IN) | GEOLOGIST [illegible]

EAST [illegible] | LOCATOR NUMBER [illegible] | BOREHOLE DIAMETER (IN) [illegible] | DATE DRILLED 6/10/93

58893

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

DRAFT

Sample Number	Sample Depth	Sample Length	Sample Grain Size	Percent Recovery	Recovery Interval	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
				100%	1.0/2.0	1			CL	0.0'-1.2' Sandy Clay with some Silt. Mod. yellowish brown (10 YR 5/4). Trace sub-rounded gravel, f-c, up to [illegible] fined f.g., sub-rounded, quartz sand. Trace roots. No coherent bedding or fractures, dry, low to mod. plasticity, non-calcareous 25% sand, 8% silt, 67% clay No recovery (1.2-2.0')
				100%	0.8/2.0	2			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')
36046MS						3				
						4				
					1.0/2.0	5			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
									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 5/6). Mod. friable, occas. [illegible] ironstone nodule. Trace carbonaceous material. No coherent bedding or fractures 20% silt, 80% clay No recovery (5.3-6.0')
					1.0/2.0	6				
						7			CLAYSTONE	6.3'-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')
						8				
36049MS					1.0/2.0	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 12.00	GROUND ELEVATION FT 6031.50	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) 10.00	DATE DRILLED	06/10/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.0/2.00	6021	10				
					6020	11				
					6019	12				Total Depth Drilled 12.00
					6018	13				
					6017	14				
					6016	15				
					6015	16				
					6014	17				
					6013	18				
					6012	19				
						20				

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

NORTH [illegible] — HOLE DIP [illegible] — CASING DIAMETER [illegible] — GEOLOGIST D C GAUGHAN

EAST [illegible] — LOCATION NUMBER [illegible] — BOREHOLE DIAMETER [illegible] — DATE DRILLED 06/13/93

58993

REMARKS DRILLING EQUIPMENT CME 750 ATV ASE RIG GEOLOGIST DAN GAUGHAN 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	Depth	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
36G6-47AS				0 70 /2 00	6032	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 abundant 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')
36G6-48AS 36G6-48AS (DUP)				1 90 /2 00	6030	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
				1 10 /2 40	6028	5			CL	3 9'-5 1' Silty Clay with trace Sand Pred light olive gray (5 YR 6/1) Some Fe staining, trace carbonaceous material, mod weathered Trace ironstone nodules (less than 1 mm), non-calcareous No apparent fractures Appears to be reworked Claystone 6% silt, 94% clay
									NO RECOVERY	5 1'-6 4' No recovery Approx 0 2 ft of slough in corebox at 6 4 ft
				1 70 /1 90	6026	7			CL	6 4'-8 7' Silty Clay with trace Sand Same as above (reference interval 4 0 to 5 1 ft) Layer of sandy material at approx 7 2 ft , med to coarse grained, sub-angular sand No recovery (8 1'-8 3')
36G6-49AS (DUP)					6025	8			CL	8 7'-12 0' Silty Clay with trace Sand Pred light olive gray (5 Y 6/1) Abundant 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')
36G6-50AS				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 [illegible]	CASING DIAMETER (IN)	GEOLOGIST	[illegible] BAUGHN	58993
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 12.00	DATE DRILLED	[illegible]	

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

DRAFT

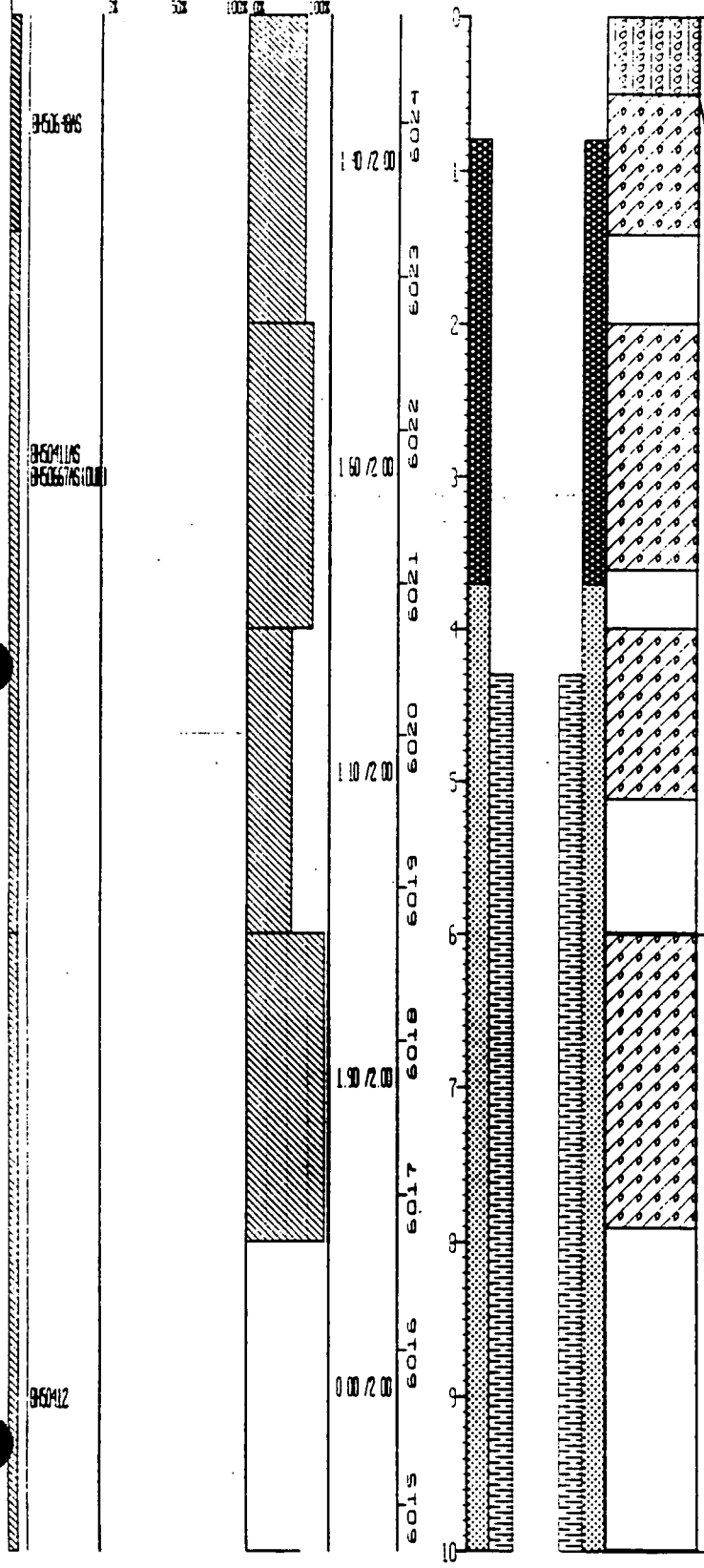
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		6023	10				
				1.60/1.60	6022	11				
					6021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

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	13.40	GROUND ELEVATION (FT)	6024.70	PROJECT NUMBER	105-[illegible]
NORTH	[illegible]	AREA	105 [illegible]	CASING DIAMETER (IN)	2.00	GEOLOGIST	D C BAUGHN
EAST	2079327	LOCATOR NUMBER	57	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/02/93

LOG OF BORING NUMBER **59093**

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SM	0.0'-0.5' Sandy Silt with some Gravel and Clay. Dark yellowish brown (10 YR 4/2). Gravel is angular to sub-rounded, pred coarse. Sand is well graded, pred f g, angular to sub-rounded, quartzose with some mafic sand. Abundt roots. Non-calcareous, mod plasticity, dry. 20% gravel, 32% sand, 34% silt, 14% clay
SC	0.5'-5.1' Clayey Sand with some Silt. Mod brown (5 YR 4/4). Sand is poorly graded, pred f g, angular to sub-rounded, quartzose, some mica. Low plasticity, slightly calcareous, dry, some Fe staining. 55% sand, 15% silt, 30% clay No recovery (1.4-2.0'), (3.6-4.0'), and (5.1-6.0')
SC	6.0'-7.9' Clayey Sand with some Silt and Gravel. Same as above (reference interval 0.5 to 5.1 ft). Gravel is poorly graded, pred f and sub-rounded. 10% gravel, 49.5% sand, 13.5% silt, 27% clay No recovery (7.9-10.0')

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 18.40 | GROUND ELEVATION (FT) 6024.00 | PROJECT NUMBER [illegible] | WELL OR BORING NUMBER

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

EAST [illegible] | LOCATION NUMBER [illegible] | BOREHOLE DIAMETER (IN) 10.00 | DATE DRILLED [illegible]

59093

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

Depth	Sample Grain Size	Recovery	Blows/6"	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
10						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')
11			1.30/2.00	6017 6013			
12						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
13			1.80/2.00	6012			
14				6011		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			1.70/2.00	6010		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')
16				6009			
17			2.10/2.10	6008		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
18				6007			
19				6006			Total Depth Drilled 18.40 Total Depth Casing [illegible] Bottom of Filter Pack 14.30
20				6005			

Chemical Sample Depth | Geotechnical Sample Depth | Sample Number

8H50413G

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5960.50	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]	AREA 005 DHSS 115	CASING DIAMETER (IN)		GEOLOGIST	F. S. DREILING	59193
EAST	1081251	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/09/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	5960	0			NO RECOVERY	0.0'-0.3' No recovery The following description is from field log Clayey Sand Grayish-brown (5 YR 3/2) Abundant roots, dry No recovery (0.30'-2.0')
				0.40/2.00	5979	1			SM	2.0'-2.4' Silty Sand with some Clay and trace Gravel Dusky yellowish brown (10 YR 2/2) Abundt roots Sand is pred f g, angular to sub-rounded, quartz and mafic sand grains Gravel is fine, angular to sub-angular Low plasticity, non-calcareous, dry 3% gravel, 45% sand, 32% silt, 20% clay No recovery (2.4'-4.0')
	BH50457AS BH50671AS(DUP)			1.60/2.00	5978	2			CLAYEY SILTSTONE	4.0'-5.6' Top of Bedrock between 2.4 and 4.0 ft Clayey Siltstone with some f g quartzose Sand Light olive gray (5 Y 6/1) Some calcareous material occuring in pockets Trace iron staining, massively bedded Moist, slightly friable 6% sand, 52% silt, 42% clay No recovery (5.6'-6.0')
	BH50463AS				5977	3				
				2.00/2.00	5976	4			SLUFF	6.0'-6.7' Sluff
					5975	5			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	5974	6			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')
					5973	7				
					5972	8				
					5971	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5980.50	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH 747569	AREA CUS IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	T.S. DREILING	59193
EAST 2081261	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED	06/09/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				
					5970					Total Depth Drilled 10.00
						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)	5946 10	PROJECT NUMBER	005-PFD/RI	LOG OF BORING NUMBER
NORTH	747584	AREA 005 CASS 115	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN	59293
EAST	2082143	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	10 30	DATE DRILLED	06/04/93	

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

DRAFT

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 90	GROUND ELEVATION (FT) 5946 10	PROJECT NUMBER	OUS-RFS/RI	LOG OF BORING NUMBER
NORTH 747584	AREA OUS, IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	D C BAUGHN	59293
EAST 1082143	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED	06/04/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5936	10				
				2 00 /2 00	5935	11			CLAYSTONE	10 3'-12 0' Reworked Claystone Block Pred pale yellowish brown (10 YR 6/2) Slightly to non-friable, no apparent bedding trace ironstone nodules Some Fe staining Micro-fractures indicate reworked material Moist, slightly calcareous <5% silt, >95% clay
	BH50449AS				5934	12				
				1 90 /2 00	5933	13			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 No recovery (13 8-14 0')
	BH50450AS				5932	14				
					5931	15			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
	BH50441AS			2 90 /2 90	5930	16				
					5929	17			CLAYSTONE	16 9'-18 5' Top of Bedrock at 16 9 ft Claystone with trace Silt Dark yellowish orange (10 YR 6/6) Slightly to non-friable, some Fe staining trace carbonaceous material No apparent bedding, occasional healed Fe stained fractures with random orientation Moist non-calcareous <5% silt, >95% clay No recovery (18 5-18 9')
				1 60 /2 00	5928	18				
	BH50451AS				5927	19				Total Depth Drilled 18 90
						20				

STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER [illegible]	[illegible]	GEOLOGIST	[illegible]
EAST [illegible]	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER [illegible]	[illegible]	DATE DRILLED	[illegible]

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

59393

DRAFT

Sample Number	Sample Grain Size	Recovery	Recovery Interval	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
36049SAS			1.00/2.00	1			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, 26% clay
				2			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')
36050TSAS							GP	2.0'-2.9' Broken Cobbles. Quartzite with some micaceous and feldspathic partings. 100% cobbles
36050TSAS 36050GAS			1.00/2.00	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')
				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
36050TSAS			1.00/2.00	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')
36050TSAS			2.00/2.00	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
36050TSAS			2.00/2.00	9			CLAYSTONE	7.5'-8.5' Top of Bedrock at 7.5 ft. Claystone with trace Silt and Sand. Pred. light olive gray (5 Y 5/4), mottled with Fe stained blotches. Trace calcite patches. Slightly carbonaceous, moist to wet, trace [illegible] in 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] cm around. <5% sand, 5% silt, >90% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.40		GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA [illegible]		CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] DRILLING
EAST	[illegible]	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/10/93

LOG OF BORING NUMBER **59393**

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

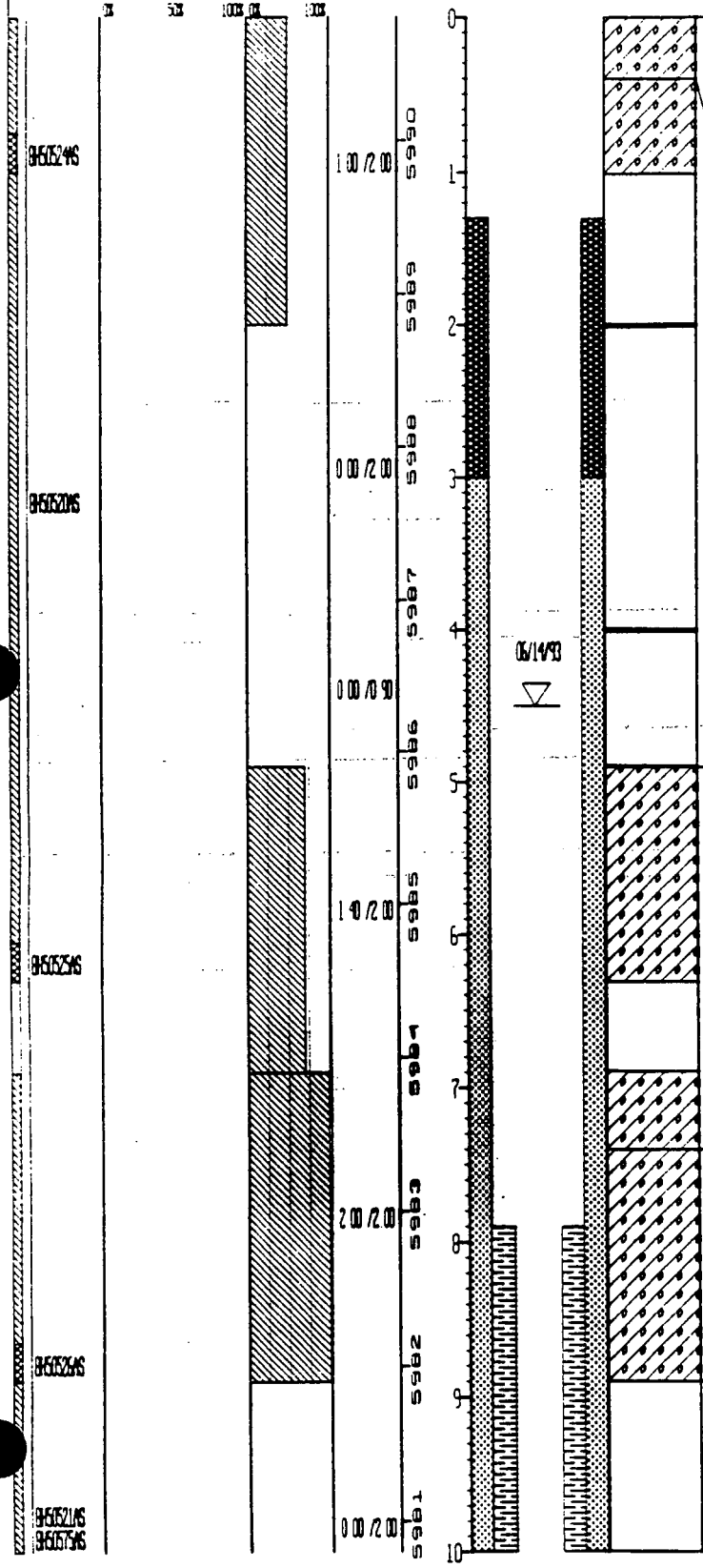
DRAFT

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
		0% 50%	100% 0%	100%		10			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
				1.50/2.40	5942	11				
					5941	12				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')
					5940	13				Total Depth Drilled 12.40 Total Depth Casing 10.00 Bottom of Filter Pack 7.30
					5939	14				
					5938	15				
					5937	16				
					5936	17				
					5935	18				
					5934	19				
					5933	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19.30	GROUND ELEVATION (FT)	5990.30	PROJECT NUMBER	05-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]24	AREA 0U5, IHSS 115 & 196	CASING DIAMETER (IN)	2.00	GEOLOGIST	T. S. DREILING	59493
EAST	1081536	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/14/93	

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

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0.0'-0.4' Description from field log due to insufficient quality and quantity of sample. Clayey Sand. Dark yellowish brown (10 YR 4/2). Abundt gravel, some roots. Dry
SC	0.4'-1.0' Description from field log due to insufficient quality and quantity of sample. Same as above, reference interval 0.0 to 0.4 ft, but grayish black (N2), some Fe staining NOTE: From field geologist's log 2.0-4.0 ft cuttings were black, wet. Contained large metal pieces. Probable graphite also No recovery (1.0-2.0'), (2.0-4.0') and (4.0-4.9')
SC	4.9'-7.4' Gravelly Sand with some Silt and trace Clay. Olive black (5 Y 2/1). Sub-rounded to rounded gravel up to approx. 1 in. F.g. to c.g., well graded, sand. Pred graphite with some to abundt quartz, some wood pieces/chips. No apparent bedding or fractures. Wet, low plasticity fines, non-calcareous 20% gravel, 63% sand, 12% silt, 5% clay No recovery (6.3-6.9')
SC	7.4'-8.9' Gravelly Sand with some Silt and Clay. Light brown (5 YR 5/6). Sub-angular gravel up to 2 in., possible broken cobbles. F.g. to c.g., sub-rounded quartz sand. No apparent bedding or fractures. Wet, low plasticity fines, non-calcareous 25% gravel, 55% sand, 8% silt, 12% clay
	8.9'-10.9' From field log "Sample kept falling out. To rectify problem, driller drove the sampler approx. 4 in. and let it set for approx. 15 min. Sample was recovered."

STATE PLANE COORDINATES		TOTAL DEPTH (FT) 19.30	GROUND ELEVATION (FT) 5990.30	PROJECT NUMBER [illegible]		LOG OF BORING NUMBER	
NORTH	1[illegible]224	HEA 305 DHSS 115 & 136	CASING DIAMETER (IN) 2.00	GEOLOGIST [illegible]			59493
EAST	1061536	LOCATION NUMBER [illegible]	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 10/14/93			

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

DRAFT

ELEVATION	DEPTH	USCS	DESCRIPTION
	10.9'-12.9'	SM	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
	12.9'-14.1'	SC	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
	14.1'-16.6'	SANDY CLAYSTONE	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')
	17.8'-19.0'	CLAYSTONE	Claystone with trace Silt. Olive black (5 Y 2/1). Trace to some carbonaceous material. 2 cm seam of carbonaceous material at approx 18.1 ft. No apparent bedding or fractures. Mod weathered, moist, non-calcareous. <5% silt, >95% clay. No recovery (19.0-19.3')

Total Depth Drilled 19.30 Total Depth Casing [illegible]
Bottom of Filter Pack 12.90

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 30	GROUND ELEVATION (FT)	5951 30	PROJECT NUMBER	305-NCSUR	LOG OF BORING NUMBER
NORTH	74577	PFEA 305 DESS 305	CASING DIAMETER (IN)	2 00	GEOLOGIST	F G DECLING	59593
EAST	1361786	LOCATION NUMBER 37	BOREHOLE DIAMETER (IN)	10 30	DATE DRILLED	06/15/93	

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	Recovery/Interval	Depth (ft)	Unified Soils Classification or Rock Type	Description
		0	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
06/15/93	1 00 /2 00	1		No recovery (1 0-2 0')
06/15/93	1 20 /2 00	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
06/15/93	1 00 /2 00	4	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
06/15/93	1 00 /2 00	5		No recovery (3 2-4 0') and (5 0-6 0')
06/15/93	1 20 /2 00	7	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
06/15/93	1 60 /2 00	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
06/15/93		9		No recovery (7 2-8 0') and (9 6-10 0')
		10		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17.90	GROUND ELEVATION (FT) [illegible]		PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	HOLE DIA. 10.5, 8.5, 11.5	CASING DIAMETER (IN) 5.00		GEOLOGIST	F. G. DREELING	59593
EAST	2081786	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 10.00		DATE DRILLED	06/15/93	

REMARKS: Drilling Equipment: CME 750 ATV. ASI Rig Geologist: F. Santangelo-Dreeling. 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)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
0H5E54MS			1.10/2.00	11			SC	10.0'-11.1' Gravelly Sand with some Silt and Clay. Same as above (reference interval 8.0 to 9.5 ft.). Cobble at approx. 10.2 ft. Driller estimates top of Bedrock at 13.0 ft. No recovery (11.1-12.0'), (12.0-14.0'), and (14.0-14.4')
			0.00/2.00	12				
			0.00/0.40	13				
0H5E55MS			1.80/2.00	14			CLAYSTONE	14.4'-16.2' Claystone with trace Silt. Light olive gray (5 Y6/1) mottled with mod. yellowish brown (10 YR 5/4). Some carbonaceous material, some caliche filled random fractures. Micro-fractures indicate possible soft sediment deformation. Wet, highly calcareous No recovery (16.2-16.4')
0H5E56MS			1.30/1.50	15			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')
				16				
				17				Total Depth Drilled 17.90. Total Depth Casing 15.35. Bottom of Filter Pack 13.50
				18				
				19				
				20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 50	GROUND ELEVATION (FT)	6017 50	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER	
NORTH 1-7365	AREA OU5 1-05 103 2	CASING DIAMETER (IN)		GEOLOGIST	R M ZEITLER		
EAST 2079753	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	06/16/93		59693

REMARKS DRILLING EQUIPMENT CME 750 ATV 4x4 F16 GEOLOGIST R ZEITLER NOTE CORE LOSS (NO RECOVERY) INTERVALS LESS THAN 0 2' NOT SHOWN

DRAFT

CHEMICAL GRADATION	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM/FT	DEPTH/FT	ALL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			0			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 fractures 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 00 /2 00	6017 6016	1				
						2				
	B5G580AS (DUP) B5G556AS			1 90 /2 00	6015 6014	3				
						4			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
				2.00 /2 00	6013 6012	5				
						6			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')
				0.40 /2.00	6011 6010	7				
						8			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')
	B5G557AS			0 60 /2 00	6009 6008	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15 50	GROUND ELEVATION (FT) 6017 50	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 7 7365	AREA 305 (HSS 133 3)	CASING DIAMETER (IN)	GEOLOGIST	R M ZEILER
EAST 1279753	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	06/16/93

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

59693

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%	2 00 /2 00	6007	10				
					6006	11			CL	11 0'-13 2' Claystone with trace Silt (Claystone boulder?) Light olive gray (5 Y 5/2) mottled with dark yellowish orange (10 YR 6/6) Mod to highly weathered, slightly to non-friable No apparent bedding or fractures Moist, non-calcareous Interval 12 1 - 13 2'ft is moist to wet <5% silt, >95% clay No recovery (12 0-12 1')
				2 00 /2 00	6005	12				
					6004	13			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
8606586S 8606635S				1.00 /1 00	6003	14				
				0 00 /0 50	6002	15			GC	13 6'-15 0' Sandy Gravel with some Clay and Silt Mod yellowish brown (10 YR 5/4) Pred fine sub-angular gravel with abundt cobbles. F g to c g, well graded, sub-rounded quartzose sand No apparent bedding or fractures Moist, low plasticity fines, non-calcareous NOTE Borehole/Well #63093 is continuation of this borehole/location to depth of 24 8 ft 40% gravel, 33% sand, 8% silt, 19% clay. No recovery (15 0-15 5')
					6001	16				
					6000	17				Total Depth Drilled 15 50
					5999	18				
					5998	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT)	5944.00	PROJECT NUMBER	305-9F6/61	LOG OF BORING NUMBER
NORTH	1475553	AREA 305 DISS 125	CASING DIAMETER (IN)	2.00	GEOLOGIST	F.S. DREELINGO	59793
EAST	1382129	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/11/93	

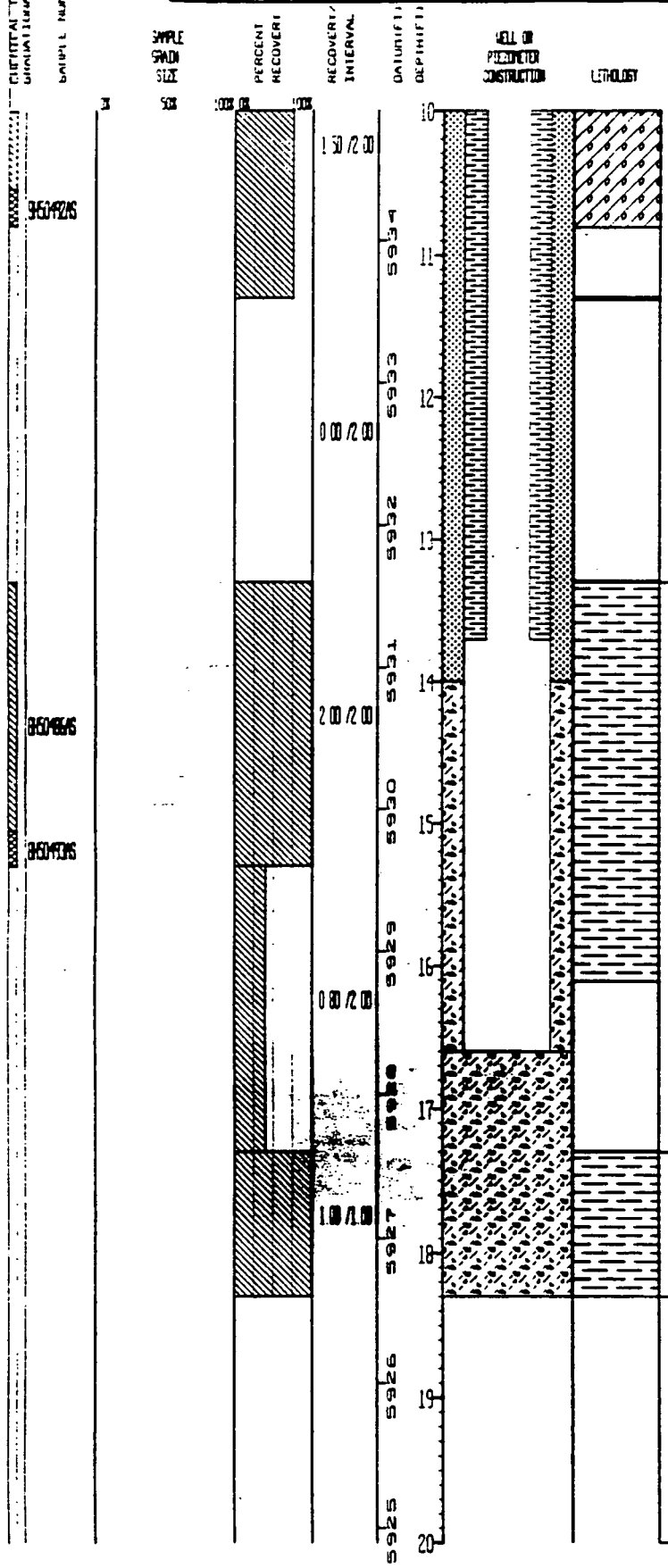
REMARKS: Drilling Equipment CME 750 ATV ASI Rig Geologist Theresa Santangelo-Drexling Note Core loss (no recovery) intervals less than 0.2' not shown

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			CL	0.0'-1.1' No core in box. Description from field. Gray Clay. Dark yellowish brown (10 YR 4/2). Abundant roots. Dry, stiff. No recovery (1.1-2.0')
	9650488S			1.10/2.00	1				
					2			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')
	9650489S 9650490S			1.20/2.00	3				
				0.00/1.30	4				
					5			CL	5.3'-8.7' Sandy Clay with some Silt and trace Gravel. Light olive gray (5 Y 6/1), mottled with light brown (5 YR 5/6). Pred. f.g., sub-rounded, quartz sand. No apparent bedding or fractures. Moist, low to mod. plasticity, slightly calcareous. Pink conglomerate cobble at 8.5 ft. 19% sand, 9% silt, 77% clay No recovery (6.5-7.3') and (8.7-9.3')
	9650490S			1.20/2.00	6				
					7				
				1.40/2.00	8			SC	9.3'-10.8' Clayey Sand with some Silt and trace Gravel. Light olive gray (5 Y 6/1). Rounded f. gravel up to approx. 0.5 in. Pred. f.g. with some m.g. and c.g., sub-rounded, quartz sand. No apparent bedding or fractures. Moist, low plasticity fines, non-calcareous. Rounded cobbles at 10.5 to 10.8 ft. 5% gravel, 59% sand, 7% silt, 29% clay No recovery (10.8-11.3') and (11.3-13.3')
	9650495S 9650496S				9				
					10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 18 30	GROUND ELEVATION (FT) 5944 30	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 747553	AREA 305, IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST	T S DREILINGO	59793
EAST 3082128	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED	06/11/93	

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

DRAFT



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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

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

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P. J. [illegible]	59893
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	06/09/93	

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%			0				
			5946					Total Depth Drilled 14.60 Total Depth Casing 14.60
								Bottom of Filter Pack 14.60
			5945	1				
			5944	2				
			5943	3				
			5942	4				
			5941	5				
			5940	6				
			5939	7				
			5938	8				
			5937	9				
				10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.60	GROUND ELEVATION (FT)	5946.00	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible] CASS 115	CASING DIAMETER (IN)	2.40	GEOLOGIST	P J JORDAN
EAST 0082528	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/09/93

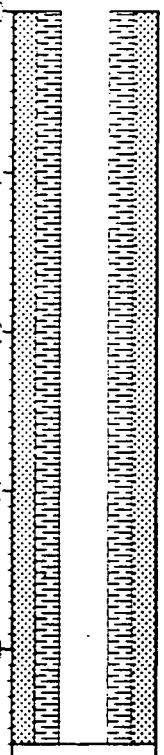
LOG OF BORING NUMBER

59893

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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				

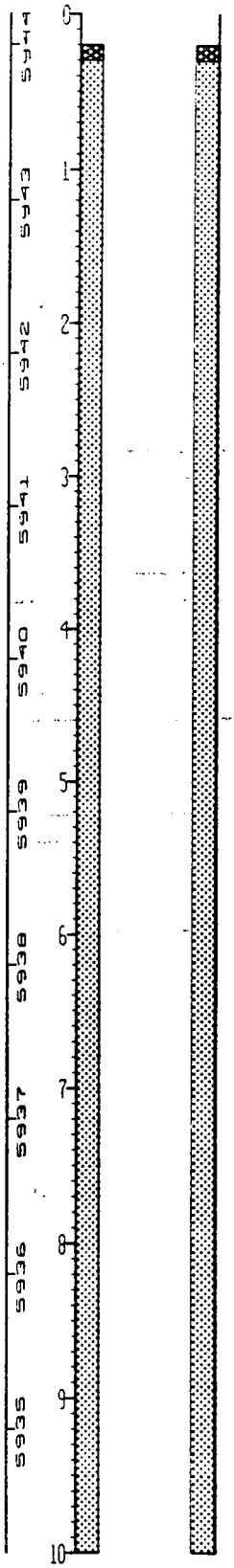


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 30	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	[illegible] OF BORING NUMBER
NORTH [illegible]	AREA OUS IHSS 115	CASING DIAMETER (IN) 0 40	GEOLOGIST	P J JORDAN	59993
EAST 2082132	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1 30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL 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
					5944	0				
					5943	1				
					5942	2				
					5941	3				
					5940	4				
					5939	5				
					5938	6				
					5937	7				
					5936	8				
					5935	9				
						10				



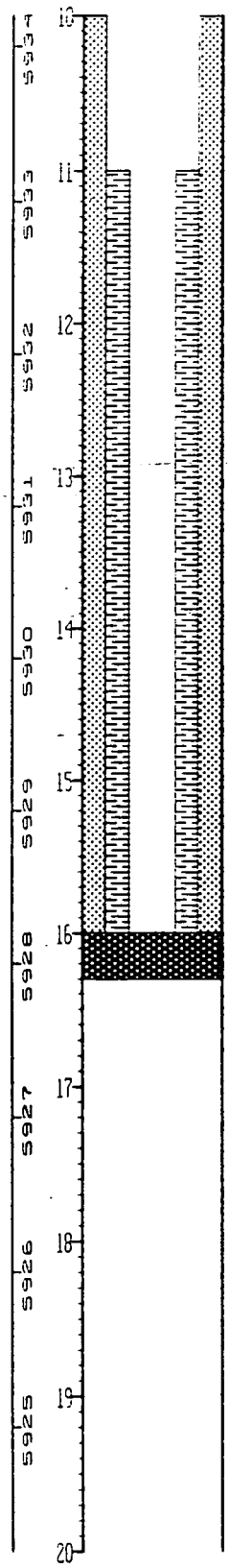
Total Depth Drilled 16 30 Total Depth Casing 16 00
Bottom of Filter Pack 16 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT)	5944.00	PROJECT NUMBER	005-RFI/PI	LOG OF BORING NUMBER
NORTH 7550	AREA 005 IHSS 115	CASING DIAMETER (IN)	1.40	GEOLOGIST	P J JORDAN	59993
EAST 1082132	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	1.00	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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
			0% 50% 100%	0% 100%							

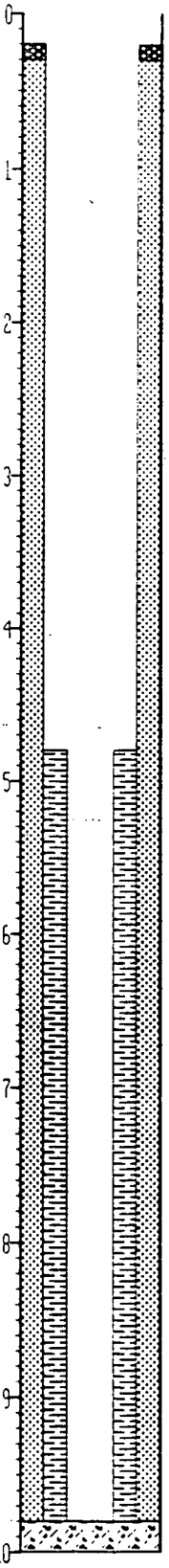


STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5945.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA IHSS 115	CASING DIAMETER (IN)	3.40	GEOLOGIST	[illegible] JORDAN	60093
EAST	1382046	LOCATOR NUMBER 07	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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
					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	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA IRSS 115	CASING DIAMETER IN	0.40	GEOLOGIST	P. J. JORDAN
EAST [illegible]	LOCATOR NUMBER 17	BOREHOLE DIAMETER IN	1.30	DATE DRILLED	06/11/93

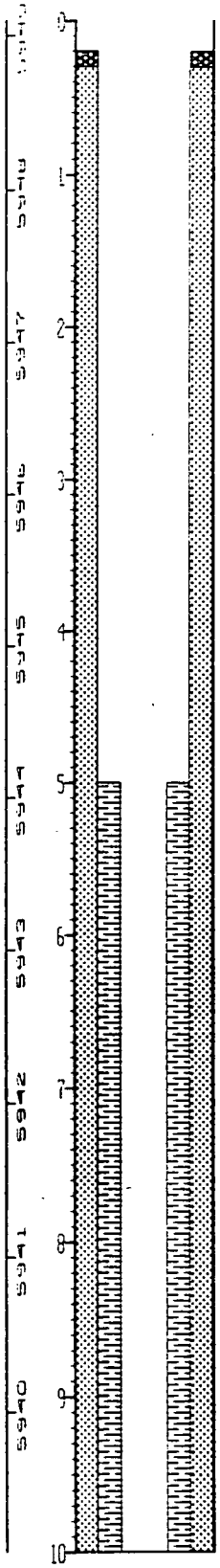
LOG OF BORING NUMBER

60193

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 ID / DEPTH FT	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%						



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 [illegible] 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	60293
EAST 2081847	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
					5948	1				Bottom of Filter Pack 12.00
					5947	2				
					5946	3				
					5945	4				
					5944	5				
					5943	6				
					5942	7				
					5941	8				
					5940	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P. J. JORDAN	60293
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

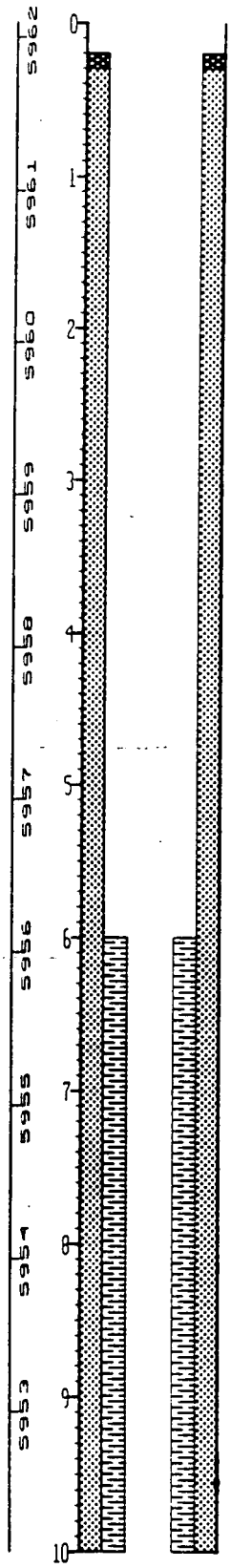
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%			10				
					5939	11				
					5938	12				
					5937	13				
					5936	14				
					5935	15				
					5934	16				
					5933	17				
					5932	18				
					5931	19				
					5930	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	5962.10	PROJECT NUMBER	GUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747619	AREA IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN	60393
EAST	2081539	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93	

REMARKS NO CORE WAS TAKEN FOR LOGGING.

DRAFT

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



Total Depth Drilled 11.00 Total Depth Casing 0.00
Bottom of Filter Pack 11.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	11.00	GROUND ELEVATION (FT)	5962.10	PROJECT NUMBER	[illegible]
NORTH	[illegible]7619	AREA	IHSS 115	CASING DIAMETER (IN)	0.40	GEOLOGIST	P. J. JORDAN
EAST	2081539	LOCATOR NUMBER	I7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93

REMARKS NO CORE WAS TAKEN FOR LOGGING.

LOG OF BORING NUMBER

60393

DRAFT

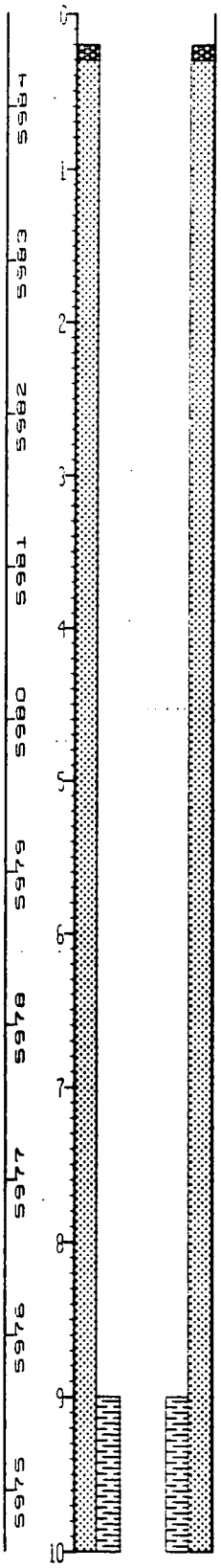
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5952	10				
					5951	11				
					5950	12				
					5949	13				
					5948	14				
					5947	15				
					5946	16				
					5945	17				
					5944	18				
					5943	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5984.60	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA IWSS 115	CASING DIAMETER (IN) 2.40	GEOLOGIST P. J. JORDAN	60493
EAST 1381257	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED 06/11/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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



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

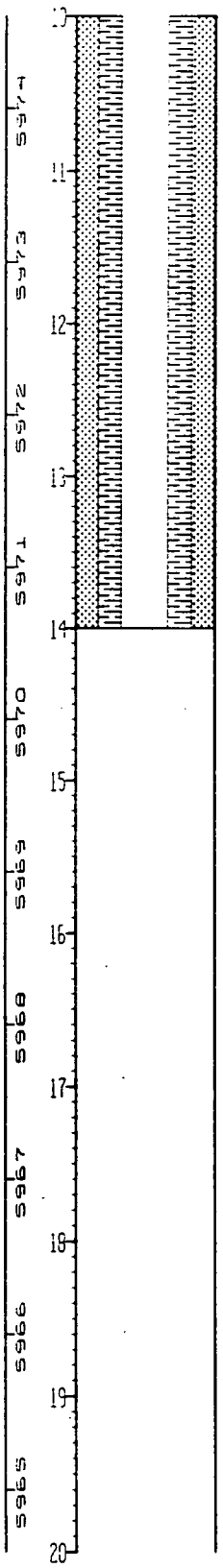
STATE PLANE COORDINATE	TOTAL DEPTH [illegible]	[illegible] ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] JORDAN
EAST [illegible]81257	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/11/[illegible]

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

60493

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 [illegible]	GROUND ELEVATION [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	60593
EAST 0080973	LOCATOR NUMBER [illegible]	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
					6015	0				Total Depth Drilled 15 40 Total Depth Casing 15 40
										Bottom of Filter Pack 15 40
					6014	1				
					6013	2				
					6012	3				
					6011	4				
					6010	5				
					6009	6				
					6008	7				
					6007	8				
					6006	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.40	GROUND ELEVATION (FT)	6015.00	PROJECT NUMBER	0.5-RFI/RI
NORTH 747676	AREA CASS 115	CASING DIAMETER (IN)	3.40	GEOLOGIST	P. J. JORDAN
EAST 1080973	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/11/93

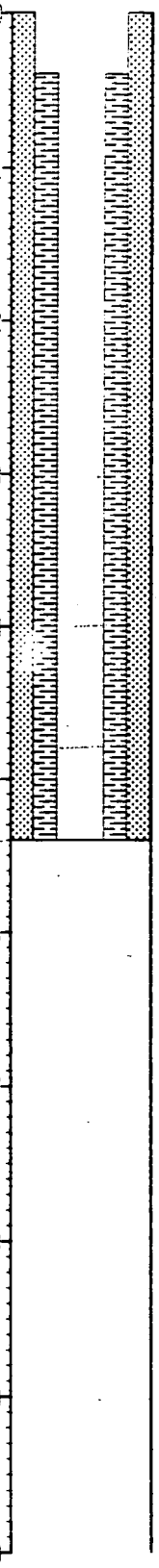
LOG OF BORING NUMBER

60593

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)	6026.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	1[illegible]635	AREA PASS 115	CASING DIAMETER (IN)	3.40	GEOLOGIST	[illegible]	60693
EAST	1308896	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	1[illegible]/09/93	

REMARKS WELLPOINT INSTALLED WITH 3ED PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL & GEOTECHNICAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY INTERVAL	DATUM FT DEPTH FT	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		6023 6022 6021 6020 6019 6018 6017 6016 6015 6014	0 1 2 3 4 5 6 7 8 9 10			Total Depth Drilled 18.00 Total Depth Casing 17.80 Bottom of Filter Pack 17.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	19.00	GROUND ELEVATION (FT)	6003.60	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA BASE 115		CASING DIAMETER (IN)	3.40	GEOLOGIST	P. J. JORGAN
EAST	2080896	LOCATOR NUMBER	H7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/09/93

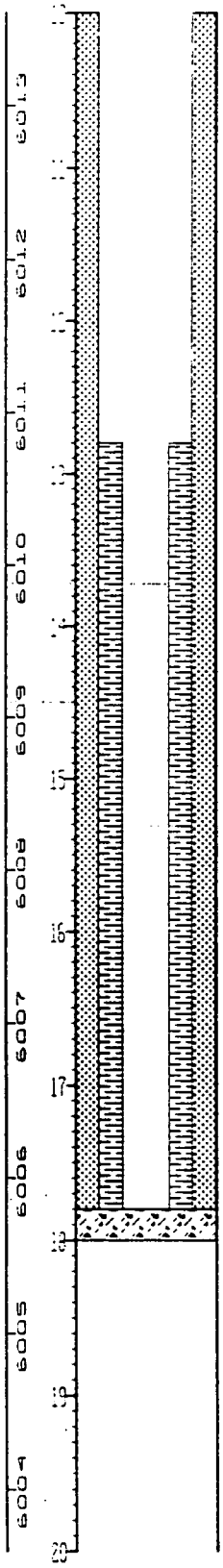
LOG OF BORING NUMBER

60693

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

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



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16.00	GROUND ELEVATION (FT) 6030.00	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

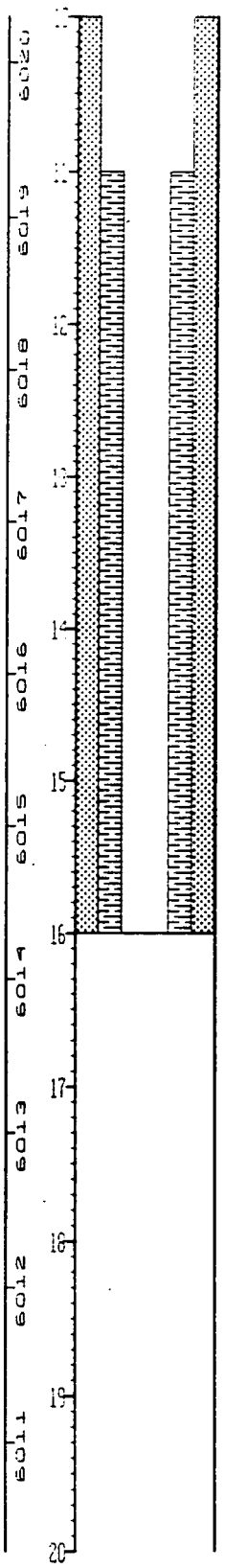
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6030	0				Total Depth Drilled 16.00 Total 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)	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA CASS 115	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	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) 23.00	GROUND ELEVATION (FT) 5999.90	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	P J JORDAN	60893
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	06/14/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CRITICAL 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				Total Depth Drilled 23.00 Total Depth Casing 23.00
					5998	1				Bottom of Filter Pack 23.00
					5997	2				
					5996	3				
					5995	4				
					5994	5				
					5993	6				
					5992	7				
					5991	8				
					5990	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	20.00	GROUND ELEVATION (FT)	5999.00	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA BASE LINE		CASING DIAMETER (IN)	3.40	GEOLOGIST	P.J. JORDAN
EAST	1081565	LOCATION NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	1.00	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	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%		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 [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P J JORDAN
EAST 2081585	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	TOTAL DEPTH FT 8.00	GROUND ELEVATION FT 5985.40	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS [illegible]	CASING DIAMETER IN. 0.50	GEOLOGIST P. JORDAN	60993
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER IN. 1.40	DATE DRILLED [illegible]	

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

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%							
	BH50592AS			1.00/2.00	5985 5984	0 1 2			CL	0.0'-3.9' Sandy Clay with some Gravel Pred light olive brown (5 Y 5/6) Dry 20% Fine- to coarse grained sand Low plasticity No recovery (1.2'-2.0')
	BH50588AS BH50593AS			2.00/2.00	5983 5982	3				
	BH50594AS			2.00/2.00	5981 5980	4 5			CLAYSTONE	3.9'-8.0' Top of Bedrock at approx 3.9 ft Olive Claystone with some Sand and trace Silt Some Fe staining and micro fractures
	BH50595AS			2.00/2.00	5979 5978	6 7				
					5977 5976	8 9 10				Total Depth Drilled 8.00 Total Depth Casing [illegible] Bottom of Filter Pack 8.00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 5970 00	PROJECT NUMBER	CUS-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA CUS, CHSS 115	CASING DIAMETER (IN) 0 50	GEOLOGIST	P J JORDAN	61093
EAST 1081352	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED	06/23/93	

REMARKS Drilling Equipment Scorpion ATV with Kansas Sampler ASI Rig Geologist P Jordan All core was consumed for samples Log is from field descriptions only

DRAFT

CRITICAL 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
					5972	0			SC	0 0'-5 1' Clayey Sand with abundt Gravel and Clay Mod brown (5 YR 4/4) Fine to coarse sand Dry to moist No recovery (0 3-2 0') and (2 6-4 0')
				0 30 /2 00	5971	1				
					5970	2				
	BH50607AS			0 60 /2 00	5969	3				
					5968	4				
	BH50608AS			1 30 /2 00	5967	5			CL	5 1'-6 9' Sandy Clay Olive gray, moist No recovery (5 3-6 0')
					5966	6				
	BH50609AS			2 00 /2 00	5965	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
					5964	8				
	BH50610AS			2 00 /2 00	5963	9			CLAYSTONE	9 00'-10 00' Top of Bedrock at 9 0' Claystone No recovery (10 0-12 0')
	BH50603AS					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. JORDAN	61093
EAST [illegible]	LOCATOR 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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5962	10	06/23/93			
				0.00 / 2.00	5961	11				
					5960	12			CLAYSTONE	12.00'-12.70' Claystone Olive gray, some Fe staining
	BH5061LAS			0.70 / 1.00						No recovery (12.7-13.0')
					5959	13				Total Depth Drilled 13.00 Total Depth Casing: 13.10 Bottom of Filter Pack 13.00
					5958	14				
					5957	15				
					5956	16				
					5955	17				
					5954	18				
					5953	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.0	GROUND ELEVATION (FT) 6023.30	PROJECT NUMBER 115-F0/A1	LOG OF BORING NUMBER
NORTH 7[illegible]49	HEAD 105 [illegible]	CASING DIAMETER (IN)	GEOLOGIST [illegible] BAUGHMAN [illegible]	61193
EAST 1060053	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 16/11/95	

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

DRAFT

Sample Number	Percent Recovery	Recovery/Interval	Depth (ft)	Lithology	USCS	Description
9650649AS		1.20/2.00	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 (scrape) NOTE Interval description from rig geologist field log No recovery (1.2-2.0')
9650650AS		1.10/1.80	1–2		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	2–3		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	3–4			
		0.00/0.20	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')
9650651AS 9650666AS(10.0)		2.00/1.90	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 carbonaceous 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
		1.90/1.90	6–7		CLAYSTONE	8.4'-10.0' Claystone with some Silt Olive gray (5 Y 4/1) Abundt Fe staining with trace Mn and carbonaceous material Slightly friable, mod plasticity, massive bedding Moist 15% silt, 85% clay
			7–8			
			8–9			
			9–10			

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.10	GROUND ELEVATION (FT)	6020.30	PROJECT NUMBER	US-PFI/RI	LOG OF BORING NUMBER
NORTH	747408	AREA OU5 IHSS 133.3	CASING DIAMETER (IN)		GEOLOGIST	D C BAUGHN/R M ZEILER	
EAST	2080053	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	10.30	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

61193

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 Fr able 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) 10.00	GROUND ELEVATION (FT) 5865.00	PROJECT NUMBER 305-HF01-01	JOB OF BORING NUMBER
NORTH 74523	AREA (US) 1265.115	CASING DIAMETER (IN) 2.00	GEOLOGIST F G Greeling	61293
EAST 2081148	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 10.00	DATE DRILLED 06/12/93	

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 Analytical 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
	0H50509HS			1.00/2.00	5864	1			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')
	0H50504HS			1.60/2.00	5863	2			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')
	0H50509HS				5862	3				
					5861	4				
	0H50510HS			1.50/2.00	5860	5				
					5859	6			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
	0H50511HS			1.30/2.00	5858	7			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')
					5857	8				
	0H50506HS			0.00/0.50	5856	9				
				2.00/2.00	5855	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12.00	GROUND ELEVATION (FT)	5985.00	PROJECT NUMBER	005-RFD-RI	LOG OF BORING NUMBER
NORTH	[illegible]	AREA 005, IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	T S DREILING	61293
EAST	0381148	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10.00	DATE DRILLED	06/12/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER	SAMPLE GRAIN SIZE	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%	1.30/1.40	5975 5974 5973 5972 5971 5970 5969 5968 5967 5966	10 11 12 13 14 15 16 17 18 19 20			CLAYSTONE	10.6'-11.3' Claystone with some Sand and trace Silt Light olive gray (5 Y 5/2) V f g, sub-rounded quartzose sand Mod to slightly friable Trace carbonaceous material and Fe stains Near horiz bedding or partings, some Mn staining on randomly oriented fractures Moist, non- to slightly calcareous Bedding angle 0 to 5 degrees 8% sand, 3% silt, 89% clay
								CLAYSTONE	11.3'-11.9' Claystone with some Sand and trace Silt Light olive gray (5 Y 5/2) V f g, sub-rounded quartz sand Slightly to mod friable, trace carbonaceous material in very small pieces (less than 0.1 mm) Near vertical healed Fe stained fracture Moist, non-calcareous Fracture angle 85 to 90 degrees 17% sand, 3% silt, 80% clay No recovery (11.9-12.0')

Total Depth Drilled 12.00 Total Depth Casing 10.85
Bottom of Filter Pack 8.50

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 6020 00	PROJECT NUMBER 105-0[illegible]	LOG OF BORING NUMBER	
NORTH [illegible]	AREA (NO CASS 100 1)	CASING DIAMETER (IN)	GEOLOGIST R M Zeller	61393	
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10 00	DATE DRILLED 06/13/93		

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeller NOTE Core loss (no 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%			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 boulder at base Dry Plant roots and 3 broken cobbles (granite and quartzite) are the only things in the core box No recovery (1 3-2 0')
BH5065OAS			1 30 /2 00	6024	1				
				6023	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
BH5070AS BH5066ZAS(DUP)			2 00 /2 00	6022	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 30	6021	4				
			1 90 /1 80	6020	5			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
				6019	6			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
			1 80 /2 00	6018	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')
			0 00 /0 30	6017	8			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
			2 00 /1 70	6016	9			CLAYSTONE	8 6'-9 0' Claystone with some Silt Same as above (reference interval 4 2 to 6 4 ft)
					10			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 Total Depth Drilled 10 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 6017.50	PROJECT NUMBER 205-RF0[illegible]	LOG OF BORING NUMBER
NORTH [illegible]764		AREA 905 CASS [illegible]	CASING DIAMETER (IN)	GEOLOGIST R.M. Zeller	61493
EAST [illegible]499		LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 10.0	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	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
	BH6065MS			1.50 / 2.00	6017			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
	BH6067MS BH6068MS			0.00 / 1.50	6016			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. 2% gravel, 59% sand, 15% silt, 23% clay. No recovery (1.6-2.0'), and (2.0-3.5')
				2.50 / 2.00	6015				
					6014				
					6013				
					6012			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
				3.50 / 3.00	6011			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
					6010				
					6009			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
	BH6069MS BH6066MS (DUP)				6008				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 15.90	GROUND ELEVATION (FT) 6017.60	PROJECT NUMBER 305-RFDRI	LOG OF BORING NUMBER	
NORTH 74736.4	AREA 305 CLASS 133.3	CASING DIAMETER (IN)	GEOLOGIST R M Zeiler	61493	
EAST 2573749	LOCATION 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

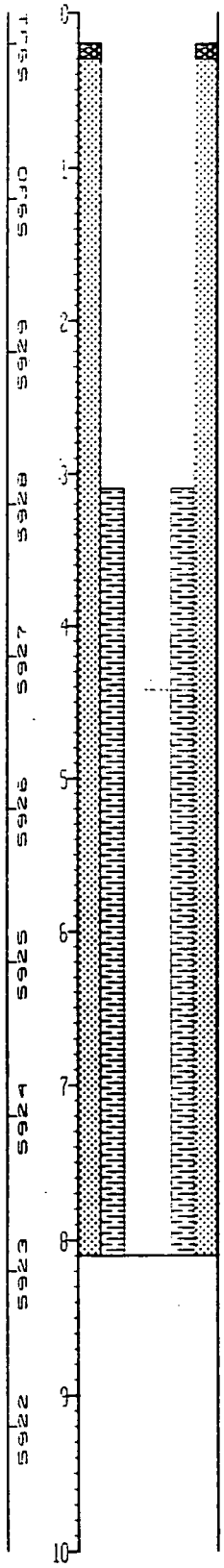
Chemical Sample Depth / Chemical Sample Number	Sample Number	Sample Grain Size	Percent Recovery	Recovery Interval	Datum Elev.	Depth (ft)	Well or Piezometer Construction	Lithology	Unified Soils Classification or Rock Type	Description
			100%	5.00/5.00	6007	10			CL	10.0'-13.3' Clay, appears to be reworked 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
					6006	11				
					6005	12				
					6004	13				
0.0-1.0 FS				0.80/0.80		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					
						16				Total Depth Drilled: 15.90
					6001	17				
					6000	18				
					5999	19				
					5998	20				

STATE PLANE COORDINATE	TOTAL DEPTH FT 8.10	GROUND ELEVATION FT [illegible]	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH 746739	AREA 005	CASING DIAMETER (IN) [illegible]	GEOLOGIST [illegible] JORDAN	61593
EAST 2084341	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED 06/17/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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 8.10 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	005-RFI/RI	LOG OF BORING NUMBER
NORTH 746405	AREA 005	CASING DIAMETER (IN) 0.40	GEOLOGIST	P J JORDAN	61693
EAST 2082687	LOCATOR NUMBER 16	BOREHOLE DIAMETER (IN) 1.00	DATE DRILLED	06/17/93	

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

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

STATE PLANE COORDINATE		TOTAL DEPTH FT	14.90	GROUND ELEVATION FT	5945.50	PROJECT NUMBER	005-RFI/RI
NORTH	746405	AREA	005	CASING DIAMETER (IN)	2.40	GEOLOGIST	P. JORDAN
EAST	0082387	LOCATOR NUMBER	06	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/17/93

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

LOG OF BORING NUMBER

61693

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5935	10				
					5934	11				
					5933	12				
					5932	13				
					5931	14				
					5930	15				
					5929	16				
					5928	17				
					5927	18				
					5926	19				
						20				

STATE PLANE COORDINATE | TOTAL DEPTH (FT) 5.90 | GROUND ELEVATION (FT) [illegible] | PROJECT NUMBER [illegible] | LOG OF BORING NUMBER

NORTH [illegible] | AREA GUS | CASING DIAMETER (IN) [illegible] | GEOLOGIST P. J. JORDAN

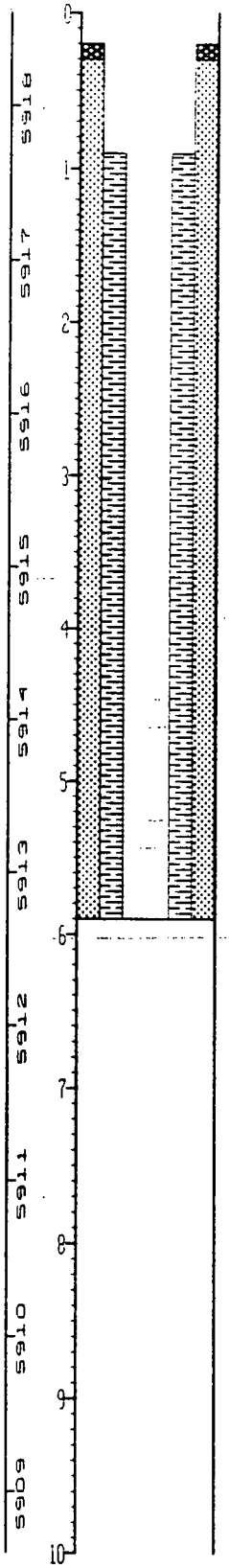
EAST 1382816 | LOCATOR NUMBER 37 | BOREHOLE DIAMETER (IN) [illegible] | DATE DRILLED 06/16/93

61793

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

DRAFT

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



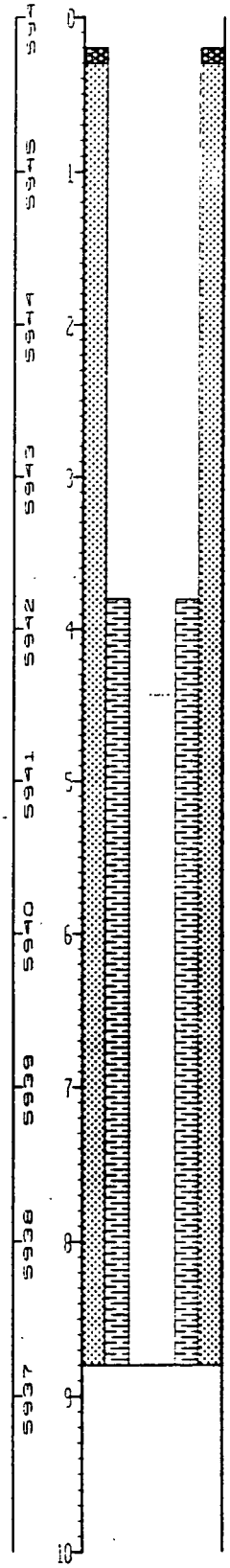
Total Depth Drilled 5.90 Total Depth Casing 5.90
Bottom of Filter Pack 5.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.30	GROUND ELEVATION (FT) 5946.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005	CASING DIAMETER (IN) 0.40	GEOLOGIST	P. J. JORDAN	61893
EAST [illegible]	LOCATOR NUMBER 06	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	PERCENT RECOVERY	RECOVERY INTERVAL	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5946				



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

Total Depth Drilled 6.00
Bottom of Filter Pack 6.00

Total Depth Casing 6.00

DATE DRILLED	03/07/93
DRILLER	NORTHWEST
DRILL METHOD	HSA
BOREHOLE DIAMETER (MIN)	8.00
BOREHOLE DIAMETER (MAX)	8.00
DEPTH WATER FIRST	0.00
DEPTH WATER COMPLETION	0.00
DEPTH TO TOP OF SEAL	0.00
DEPTH TO BOTTOM OF SEAL	0.00
DEPTH TO TOP OF FILTER PACK	0.00
DEPTH TO BOTTOM OF FILTER PACK	6.00
DEPTH TO TOP OF SCREEN	1.00
DEPTH TO BOTTOM OF SCREEN	6.00
SCREEN DIAMETER	2.00
SCREEN SLOT SIZE	0.010
SCREEN MATERIAL	PVC
SAND PACK	20/40
SAND PACK VOLUME	1.0
DRILLING CONTRACTOR	NORTHWEST
DRILLER NUMBER	7
DRILLER NAME	CHRIS
DRILLING EQUIPMENT	HSA

COLORADO SAND PACK ON OUTSIDE WAS COLORED WITH DYE FOR PROBE INSTALLED WITH COLORADO SAND PACK

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION

WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	DEPTH (ft)	DATUM (ft)	RECOVERY INTERVAL	PERCENT RECOVERY	RQD	PID	TYPE	SAMPLE NUMBER
		0	5926						
		1	5927						
		2	5928						
		3	5929						
		4	5930						
		5	5931						
		6	5932						
		7	5933						
		8	5934						
		9	5935						
		10							

CRITICAL SAMPLE DEPTH
SEQUENTIAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE NUMBER

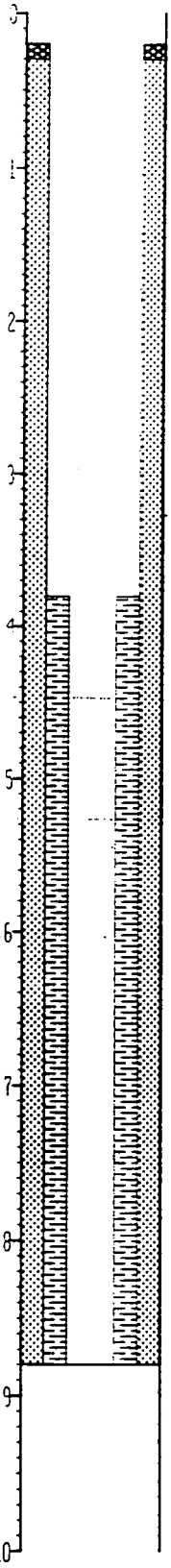
61993

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.80	GROUND ELEVATION (FT) 6011.10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]6620	AREA 005	CASING DIAMETER (IN) 3.40	GEOLOGIST	P.J. JORDAN	62093
EAST 2079975	LOCATOR NUMBER 35	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]

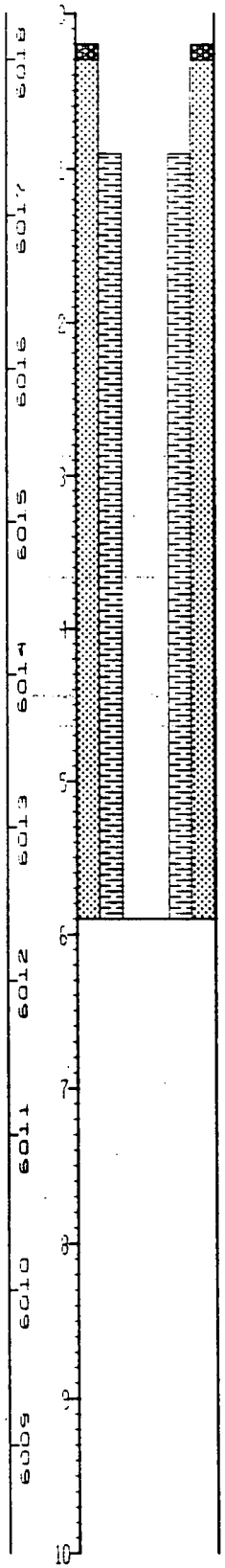
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 5.90	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH 746569	AREA 005	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P J JORDAN
EAST 2079679	LOCATOR NUMBER 66	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/16/93

LOG OF BORING NUMBER

62193

REMARKS WELLPOINT INSTALLED WITH GED 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 5.90 Total Depth Casing 5.90
Bottom of Filter Pack 5.90

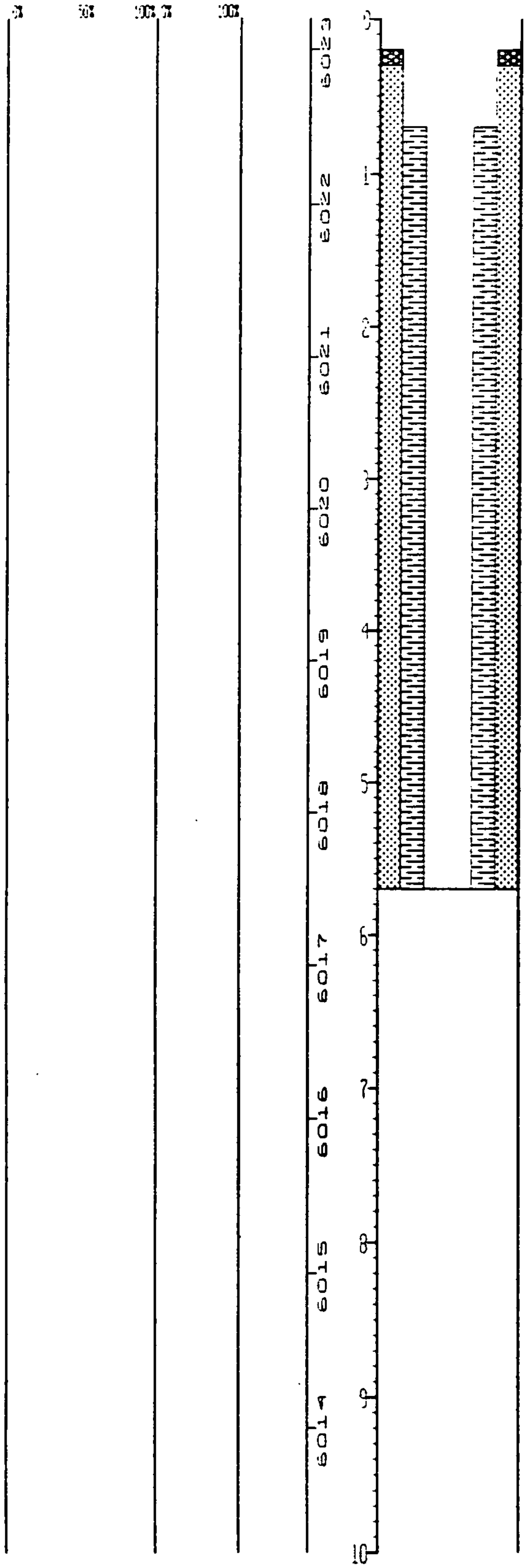
STATE PLANE COORDINATE		TOTAL DEPTH (FT)	5.70	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]457	AREA	305	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	P J JORDAN
EAST	[illegible]3817	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/16/93

LOG OF BORING NUMBER

62293

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

CHEMICAL SAMPLE DEPTH | GRAVITATIONAL 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



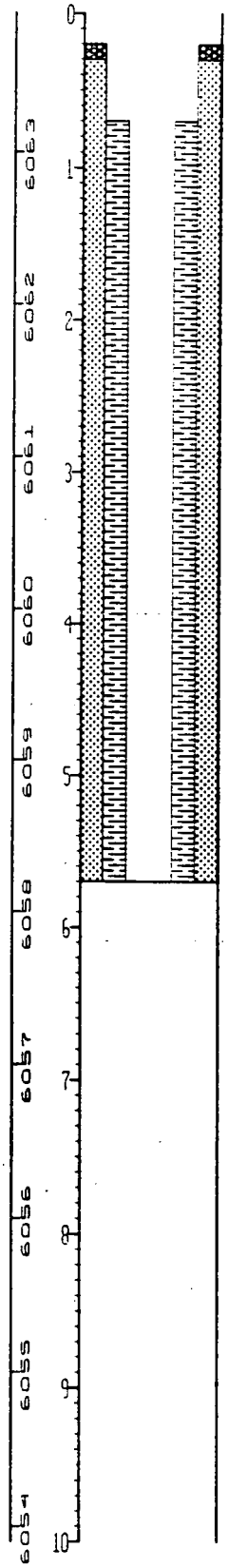
Total Depth Drilled 5.70 Total Depth Casing 5.70
Bottom of Filter Pack 5.70

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

REMARKS WELLPOINT INSTALLED WITH GEO PROBE NO CORE WAS COLLECTED

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%							



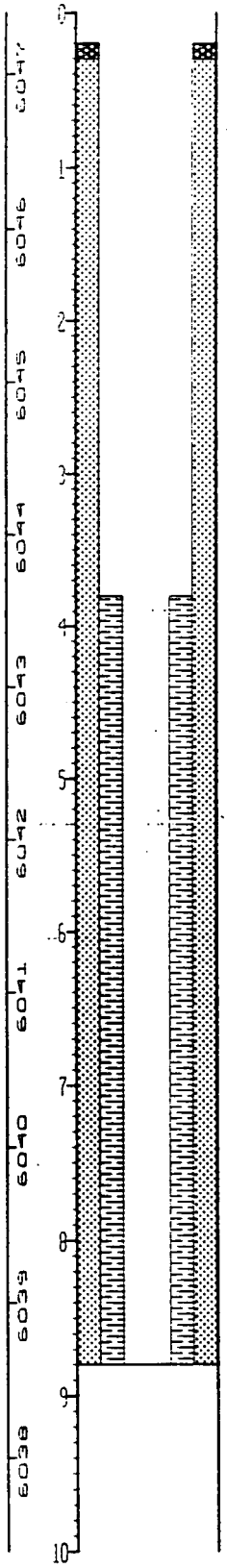
Total Depth Drilled 5.70 Total Depth Casing 5.70
Bottom of Filter Pack 5.70

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.80	GROUND ELEVATION (FT) 6047.40	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA 005	CASING DIAMETER (IN) 3.40	GEOLOGIST P. J. JORDAN	62493
EAST [illegible]	LOCATOR NUMBER F5	BOREHOLE DIAMETER (IN) 1.30	DATE DRILLED 06/16/93	

REMARKS WELLPOINT INSTALLED WITH GED 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
					6047	0				Total Depth Drilled 8.80 Total Depth Casing 8.80
					6046	1				Bottom of Filter Pack 8.80
					6045	2				
					6044	3				
					6043	4				
					6042	5				
					6041	6				
					6040	7				
					6039	8				
					6038	9				
						10				

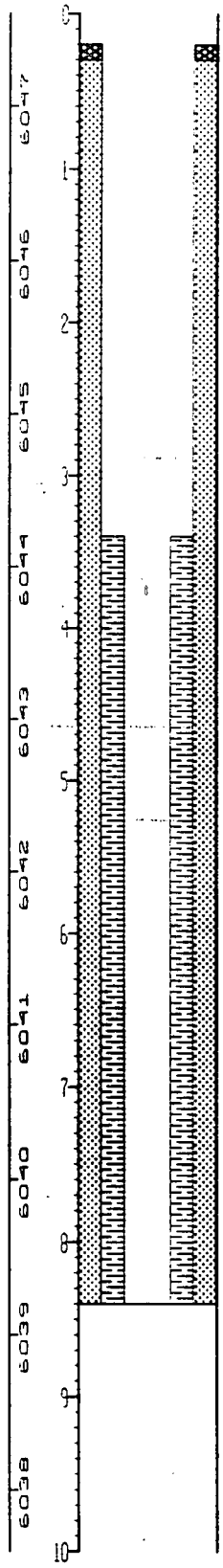


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8.40	GROUND ELEVATION (FT)	6047.60	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA IASS 133.5	CASING DIAMETER (IN)	8.40	GEOLOGIST	P J JORDAN	62593
EAST [illegible]	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED	06/15/93	

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%							

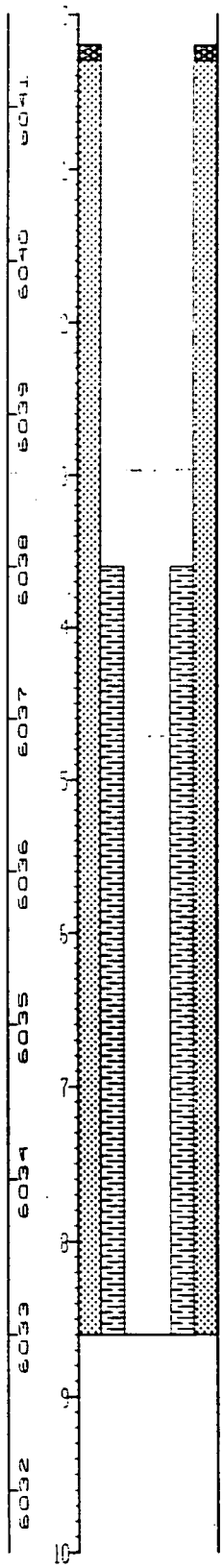


Total Depth Drilled 8.40 Total Depth Casing 8.40
Bottom of Filter Pack 8.40

STATE PLANE COORDINATE	TOTAL DEPTH FT 8.60	GROUND ELEVATION FT 6041.60	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH 747627	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%							



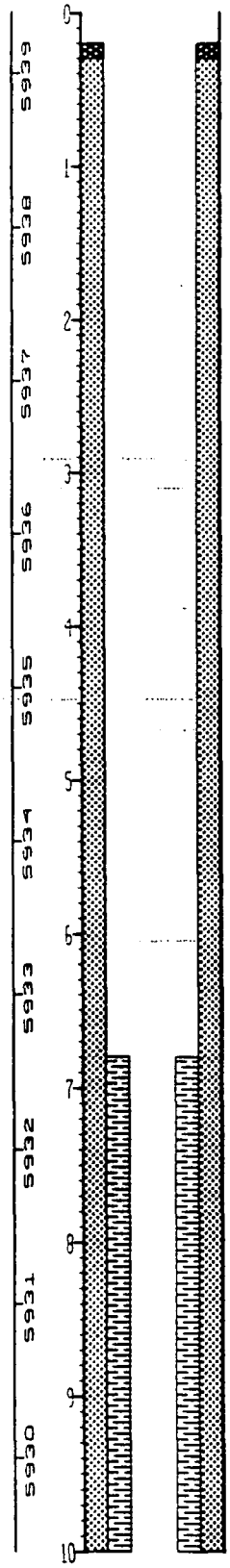
Total Depth Drilled 8.60 Total Depth Casing 8.60
Bottom of Filter Pack 8.60

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 80	GROUND ELEVATION (FT)	5939 40	PROJECT NUMBER	025-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7547	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



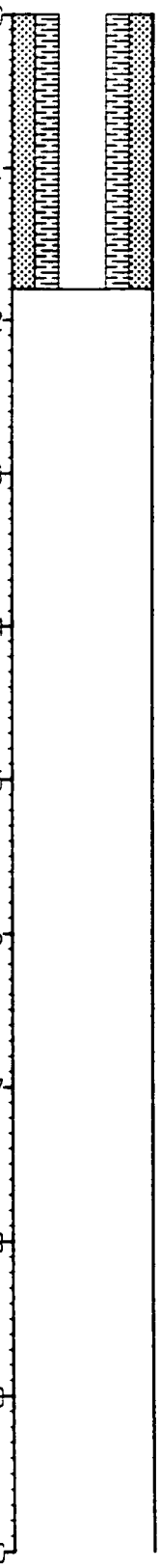
Total Depth Drilled 11 80 Total Depth Casing 0 00
Bottom of Filter Pack 11 80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 11 30	GROUND ELEVATION (FT) 5939 40	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	747547	AREA SW BUFFER ZONE	CASING DIAMETER (IN) 0 40	GEOLOGIST P J JORDAN	62793
EAST	2082304	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1 30	DATE DRILLED 06/21/93	

REMARKS NO CORE WAS TAKEN FOR LOGGING.

DRAFT

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



STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.80	GROUND ELEVATION (FT)	5995.00	PROJECT NUMBER:	OU5-RFI/RI	LOG OF BORING NUMBER	
NORTH: 747964	AREA SW BUFFER ZONE	CASING DIAMETER (IN)	0.40	GEOLOGIST	P.J. JORDAN		
EAST 2082700	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1.30	DATE DRILLED:	06/15/93	62893	

REMARKS: NO CORE WAS TAKEN FOR LOGGING.

DRAFT

CHEMICAL SAMPLE DEPTH	GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50% 100%	0% 100%		5995	0				
						5994	1				
						5993	2				
						5992	3				
						5991	4				
						5990	5				
						5989	6				
						5988	7				
						5987	8				
						5986	9				
							10				

Total Depth Drilled: 14.80 Total Depth Casing: 0.00
Bottom of Filter Pack: 14.80

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 30	GROUND ELEVATION (FT)	5995 00	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7964	AREA SW BUFFER ZONE	CASING DIAMETER (IN)	0 40	GEOLOGIST	P J JORDAN	62893
EAST	1382700	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	1 30	DATE DRILLED:	06/15/93	

REMARKS: NO CORE WAS TAKEN FOR LOGGING.

DRAFT

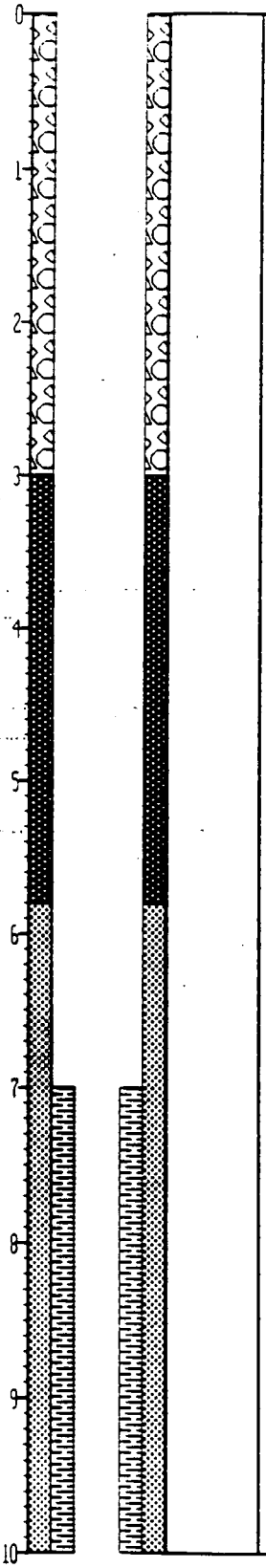
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5985	10				
					5984	11				
					5983	12				
					5982	13				
					5981	14				
					5980	15				
					5979	16				
					5978	17				
					5977	18				
					5976	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 24.80	GROUND ELEVATION (FT) 6019.00	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH 747357	AREA 305, IHSS 133.3	CASING DIAMETER (IN) 2.00	GEOLOGIST	R.M. ZEILER	63093
EAST 2079751	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 8.00	DATE DRILLED	06/16/93	

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

DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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)	[illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA	[illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] ZEILER
EAST	2079751	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	06/16/93

LOG OF BORING NUMBER

63093

REMARKS Drilling Equipment CME 750 ATV ASI Rig Geologist R Zeiler NOTE Core loss (no recovery) interval less than 0 2 ft not shown

DRAFT

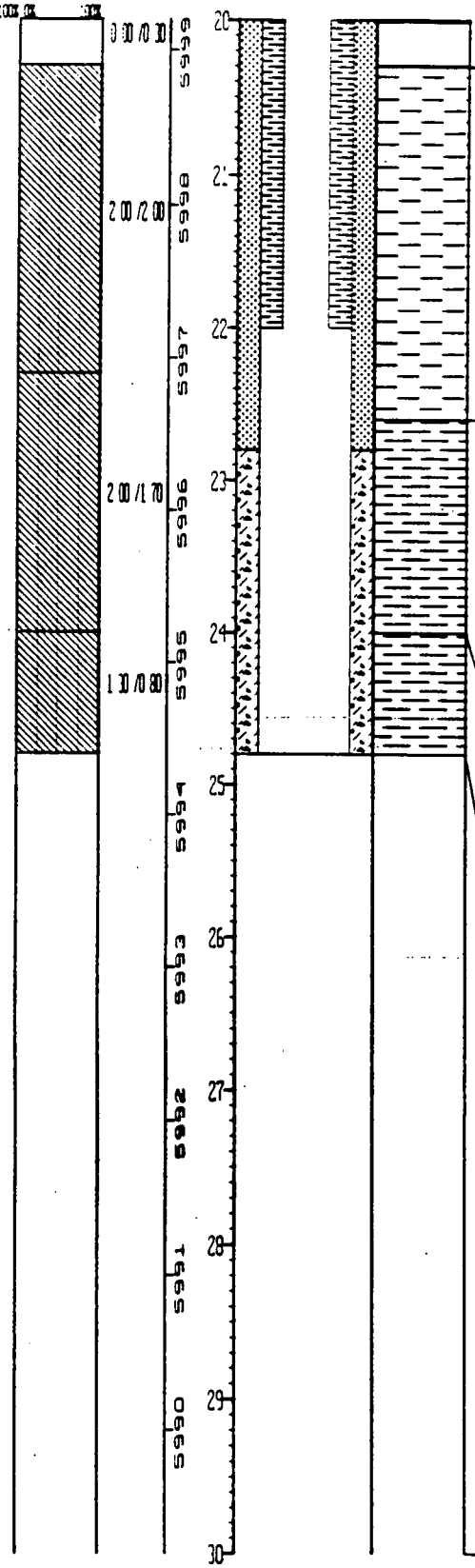
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6009	10				10 0'-15 0' Augered with center bit
					6008	11				
					6007	12				
					6006	13				
					6005	14			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
				0 80 /0 90	6004	15				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 80 /2.10	6002	17				
	3H50559AS								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
					6001	18				
				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]-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible]	CASING DIAMETER (IN) [illegible]	GEOLOGIST	R.M. ZEILER	63093
EAST [illegible]	LOCATOR NUMBER 67	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

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



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) 10.00	GROUND ELEVATION (FT)	5966.50	PROJECT NUMBER	005-RFI-RI	LOG OF BORING NUMBER
NORTH	747537	AREA 005 OHSS 115	CASING DIAMETER (IN)	0.50	GEOLOGIST	P J JORDAN	63193
EAST	2062542	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

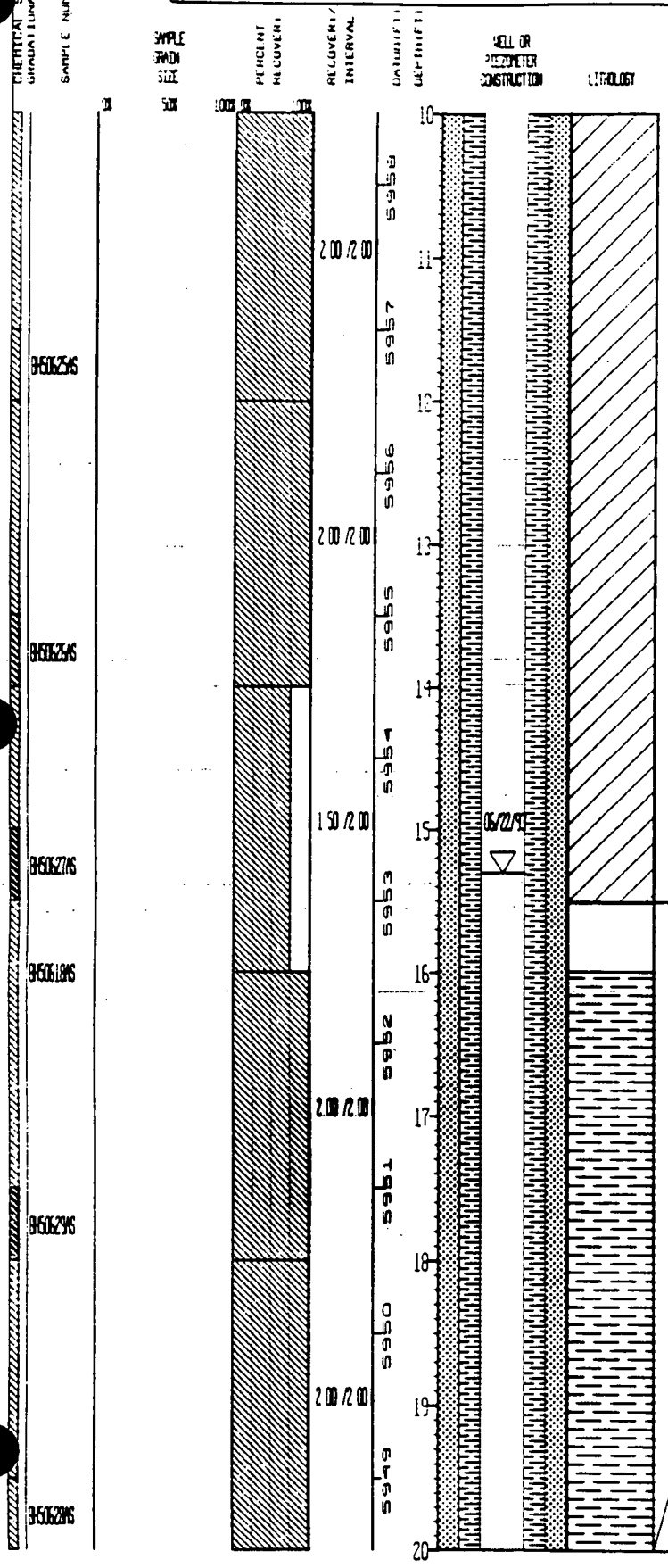
DRAFT

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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%						
	3H50620AS			1.00/2.00	5960			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')
	3H50621AS			1.00/2.00	5967				
	3H50616AS				5966				
					5965				
					5964				
	3H50622AS			1.50/2.00	5963			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')
	3H50623AS			1.50/2.00	5962				
					5961				
	3H50617AS			2.00/2.00	5960				
	3H50624AS				5959				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 20.00	GROUND ELEVATION (FT) 5968.50	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA [illegible] CRSS 115	CASING DIAMETER (IN) 0.50	GEOLOGIST	P. J. JORDAN	63193
EAST 2082542	LOCATOR NUMBER [illegible]	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



CLAYSTONE 15.5'-20.0' Top of Bedrock at 15.5'

No recovery (15.5-16.0')

Claystone with some Silt and trace Sand Fe staining, micro-fractures Moist

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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	5015.60	PROJECT NUMBER	SUBHEADING	LOG OF BORING NUMBER
NORTH	[illegible]	AREA BASE LINE	CASING DIAMETER (IN)	3.50	GEOLOGIST	TGD	63293
EAST	1286575	LOCATOR NUMBER N7	BOREHOLE DIAMETER (IN)	3.00	DATE DRILLED	07/20/93	

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

DRAFT

CRITICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

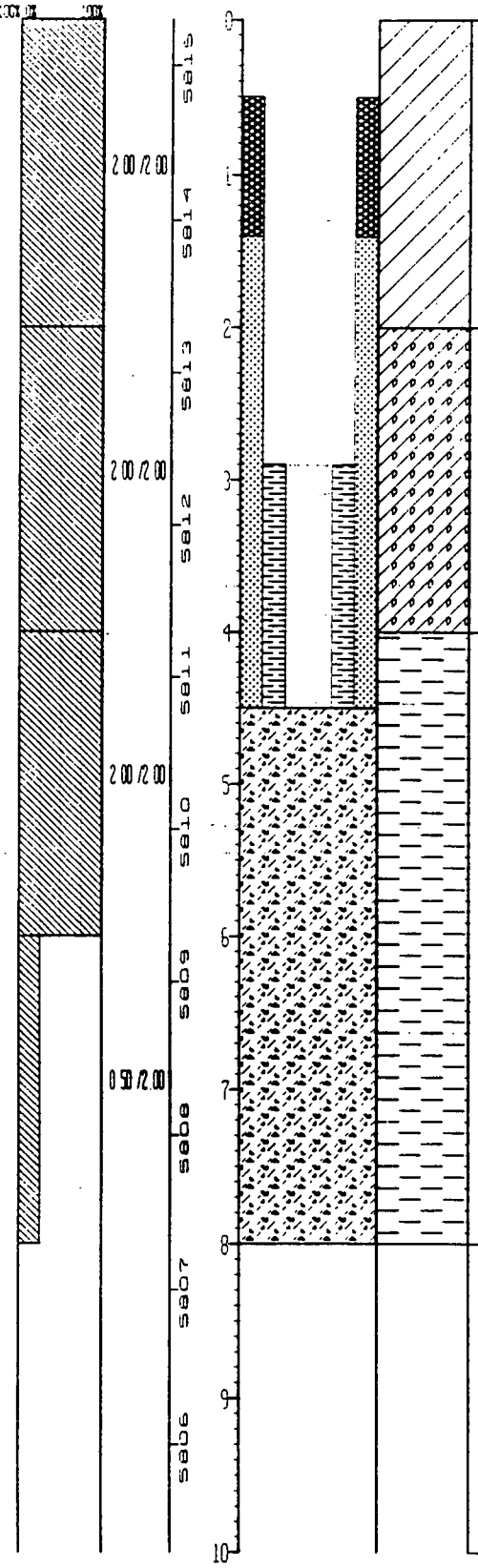
SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	SAMPLE NUMBER	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		2.00/2.00	S105	0–1			CL	0.0'-2.0' Clay Mod yellowish brown (10 YR 5/4) Some fine sand, trace gravel, rounded, poorly graded Moist
		2.00/2.00	S104	1–2				
		2.00/2.00	S103	2–3			CL	2.0'-4.0' Sandy Clay Olive gray (5 Y 4/1) Some roots, trace gravel, poorly graded, sub-rounded Very moist
		2.00/2.00	S102	3–4				
		1.60/2.00	S101	4–5	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
				5–6			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	S100	6–7			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')
			S099	7–8			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
			S098	8–9				Total Depth Drilled 8.00 Total Depth Casing 7.60 Bottom of Filter Pack 7.60
			S097	9–10				
			S096	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8.00	GROUND ELEVATION (FT)	5815.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA (HSS 142.00)	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 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
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 stuff

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 2.50	GEOLOGIST	[illegible]	
EAST 0066365	LOCATOR NUMBER N7	BOREHOLE DIAMETER IN 2.00	DATE DRILLED	07/23/93	

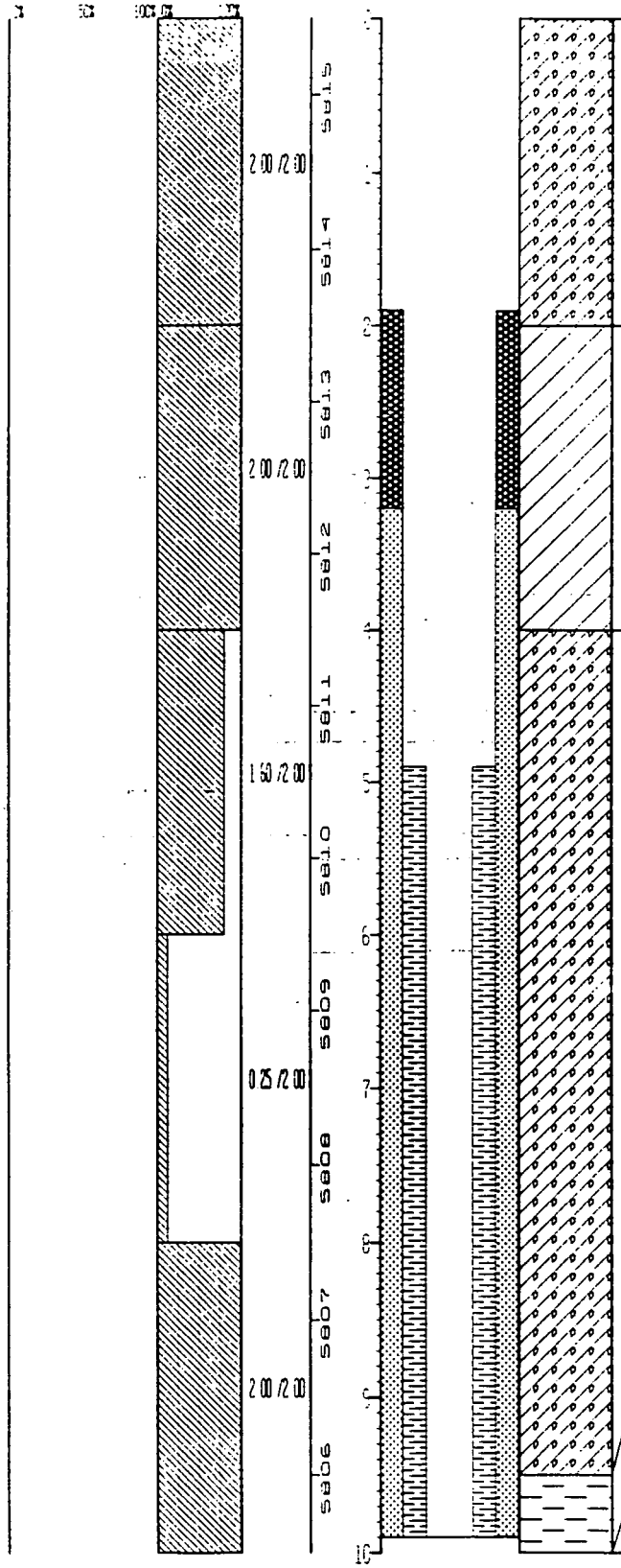
REMARKS WELLPOINT INSTALLED USING KANSAS SAMPLER ALL CORE WAS USED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

63493

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE | PERCENT RECOVERY | RECOVERY INTERVAL | DATUM FT | DEPTH FT | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	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 COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA	[illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] S DRILLING
EAST	2080603	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	07/20/93

LOG OF BORING NUMBER 63593

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

DRAFT

SAMPLE 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'-3 3' Clayey Sand Mod brown (5 YR 4/4) Some gravel, poorly graded, sub-rounded to sub-angular, some roots Dry
		2.00/2.00	6012	1				
			6011	2				
		2.00/2.00	6010	3				
			6009	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
		2.00/2.00	6008	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
			6007	6				
		2.00/2.00	6006	7			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	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
		2.00/2.00	6004	9				
			6003	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 COORDINATES | TOTAL DEPTH [illegible] | GROUND ELEVATION [illegible] | PROJECT NUMBER [illegible] | LOCATION OF BORING NUMBER

NORTH [illegible] | AREA BASE [illegible] | CASING DIAMETER (IN) [illegible] | GEOLOGIST [illegible] | DRILLING [illegible]

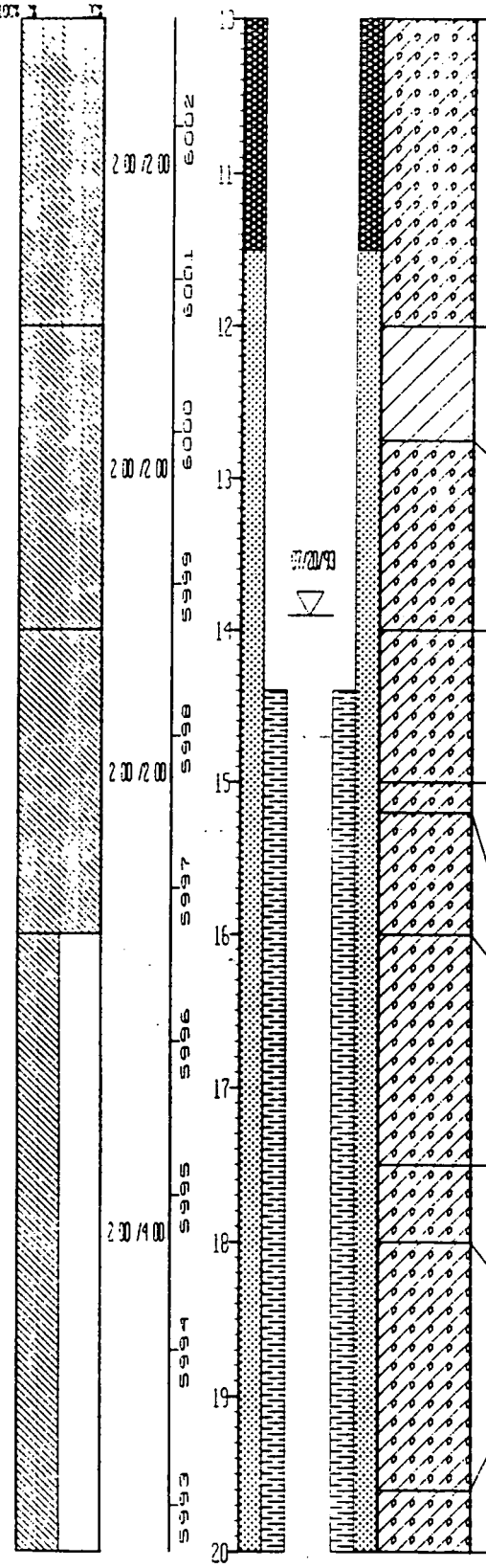
EAST [illegible] | LOCATOR NUMBER [illegible] | BOREHOLE DIAMETER (IN) [illegible] | DATE DRILLED 07/20/93

63593

REMARKS WELL POINT INSTALLED USING KANSAS SAMPLER ALL CORE WASHED FOR ANALYTICAL SAMPLES ALL DESCRIPTIONS BASED ON FIELD GEOLOGIST'S LOG

DRAFT

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PENETRATION RESISTANCE
RECOVERY INTERVAL
ELEVATION OF DEPTH
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY
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 5' 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 5'-20 0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) Well graded, sub-rounded to sub-angular Sand and gravel Very moist

STATE PLANE COORDINATE		TOTAL DEPTH [illegible]	GROUND ELEVATION [illegible]		PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA [illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] DRILLING	63593
EAST	[illegible]0603	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

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	5992	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	5991	21				
		2.00 /2.00	5990	22				
		2.00 /2.00	5989	23				
			5988	24				
			5987	25			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	26				Total Depth Drilled 26.00 Total Depth Casing 24.30 Bottom of Filter Pack 24.30
			5985	27				
			5984	28				
			5983	29				
				30				

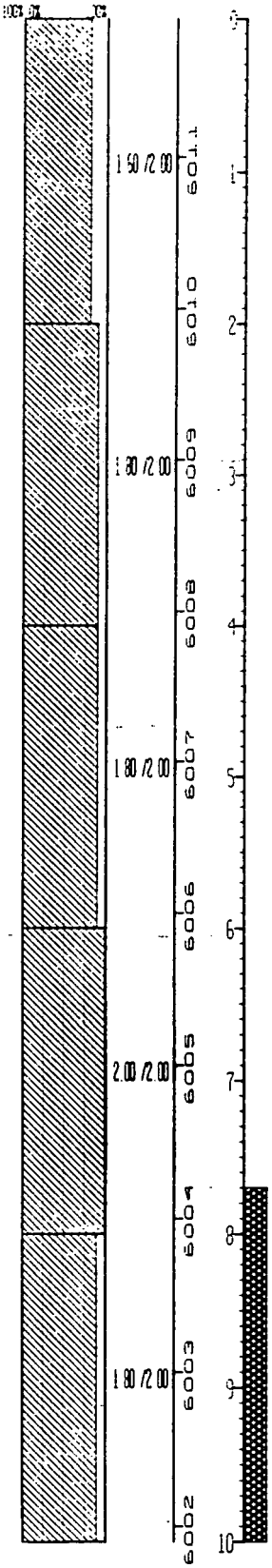
STATE PLANE COORDINATES	TOTAL DEPTH (FT) 11.00	GROUND ELEVATION (FT)	6011.30	PROJECT NUMBER	LOG OF BORING NUMBER
NORTH 1[illegible]592	AREA CHECK 133 2	CASING DIAMETER (IN)	3.50	GEOLOGIST	F. G. DREELING
EAST 1[illegible]608	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	2.50	DATE DRILLED	07/30/93

63693

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

DRAFT

CHEMICAL SAMPLE DEPTH
GEOTECHNICAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
PERCENT RECOVERY
RECOVERY/INTERVAL
ELEVATION
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

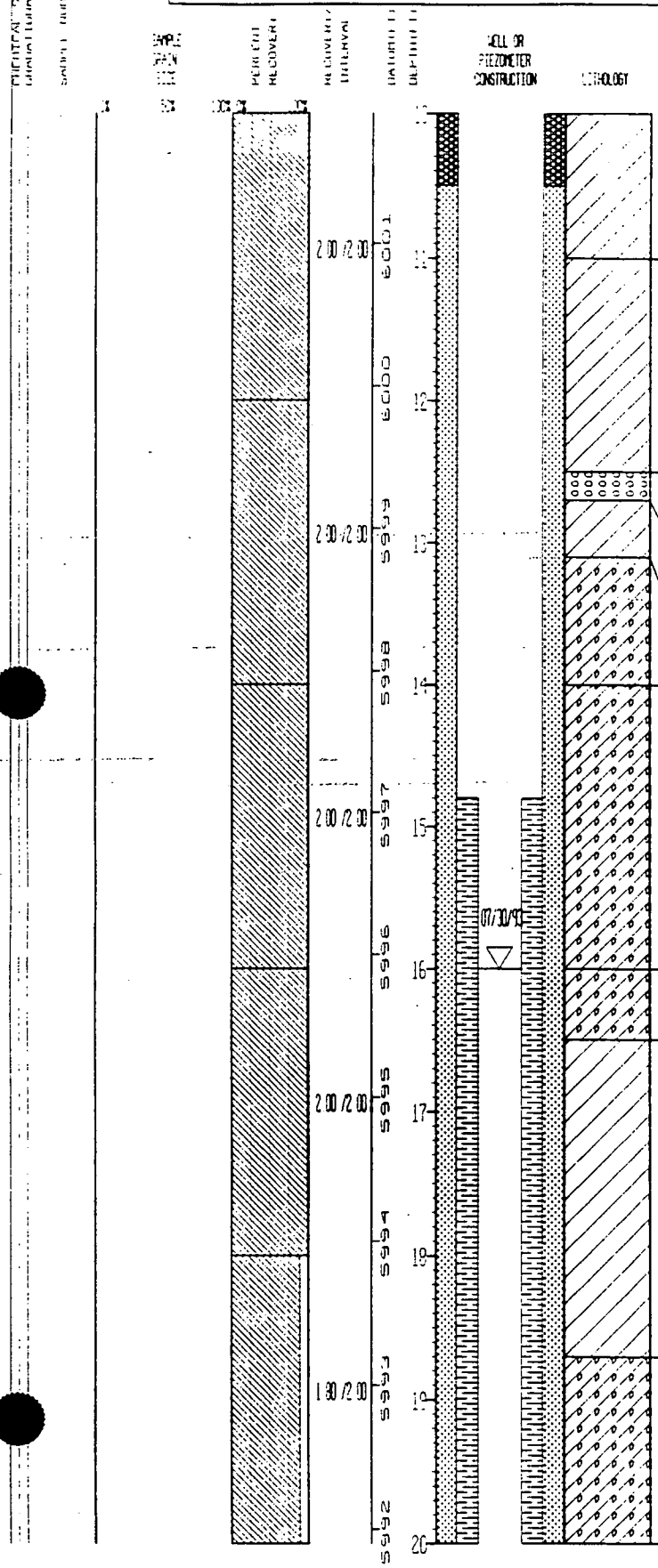


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0.0'-0.5' Sandy Clay. Mod. brown (5 YR 4/4). Abundt roots, trace gravel. Sand pred. f.g., low plasticity, poorly graded. Dry
SW	0.5'-0.9' Gravel and Sand. Pinkish gray (5 YR 8/1). Well graded, angular, dry. (gw-sw)
CL	0.9'-1.6' Sandy Clay. Mod. yellowish brown (10 YR 5/6). Sand pred. f.g., poorly graded, angular to sub-angular, dry No recovery (1.6-2.0')
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
SLUFF	8.0'-8.2' Sluff
SW	8.2'-8.4' Sand and Gravel. Well graded, angular to sub-angular. (sw-gw)
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

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA	[illegible]	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible]
EAST	[illegible]	LOCATOR NUMBER	H7	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

63693



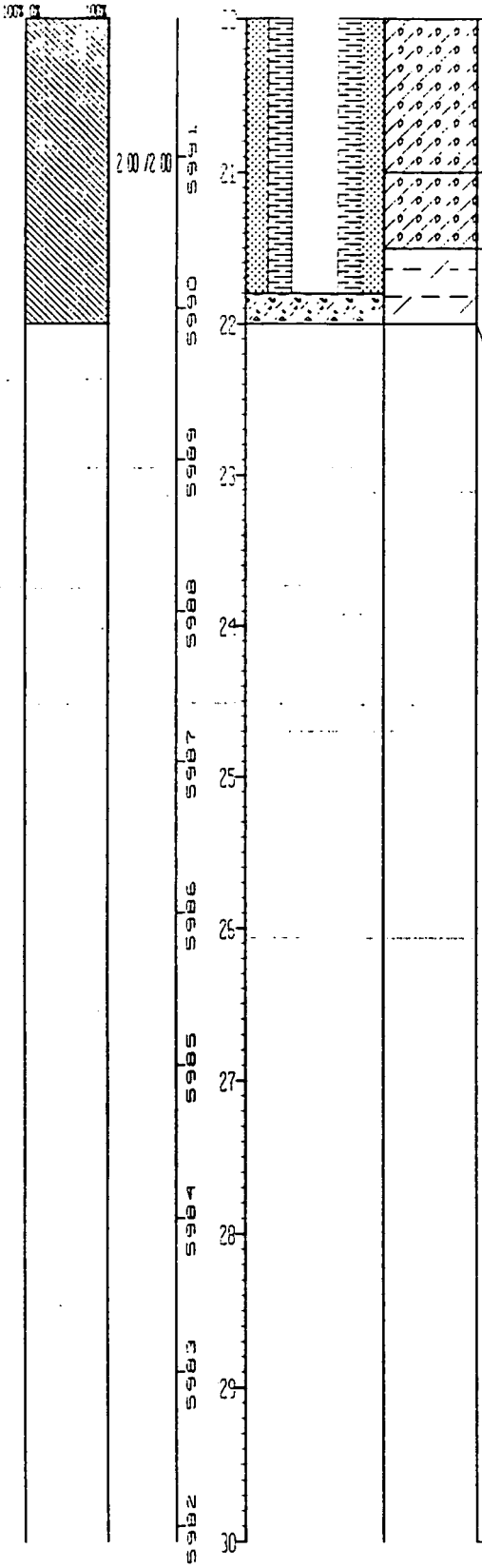
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	11.0'-12.5' Sandy Clay Light brown (5 YR 5/6) some light olive gray (5 Y 6/1) Sand is pred f g, poorly graded, angular to sub-rounded Trace gravel Moist
SW	12.5'-12.7' Sand and Gravel Pinkish gray (5 YR 8/1) Well graded, angular to sub-angular Dry (sw-gw)
CL	12.7'-13.1' Sandy Gravelly Clay Light brown (5 YR 5/6) Well graded, angular to sub-angular, low plasticity Moist
SC	13.1'-14.0' Sandy Clay/Clayey Sand Light brown (5 YR 5/6) M g to f g sand, some gravel Moist
SC	14.0'-16.0' Sandy Clay/Clayey Sand Light brown (5 YR 5/6) Abundt gravel, well graded, angular to sub-rounded Very moist
SC	16.0'-16.5' Clayey Sand and Gravel Light brown (5 YR 5/6) Well graded, angular to sub-angular Wet
CL	16.5'-18.7' Sandy Clay Light brown (5 YR 5/6) Trace gravel, poorly graded, pred f g sand, low plasticity Very moist
SC	18.7'-20.0' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Well graded angular to sub-rounded Increase in clay at bottom 0.3' of interval Moist

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH / SAMPLE NUMBER / SAMPLE GRAIN SIZE (0% 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	20.0'-21.0' Sand and Gravel Mod yellowish brown (10 YR 4/2) abundt clay Sand and gravel are well graded, sub-angular to sub-rounded Wet
SC	21.0'-21.5' Clayey Sand Light olive gray (5 Y 6/1) Sand is pred m g Some Fe staining
SILTY CLAYSTONE	21.5'-22.0' Top of Bedrock at 21.5' Silty Claystone Light olive gray (5 Y 6/1) mottled with dark yellowish orange (10 YR 6/6) Abundt Fe staining, some carbonaceous material Moist

Total Depth Drilled 22.00 Total Depth Casing 21.80
Bottom of Filter Pack 21.80

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 29.00	GROUND ELEVATION (FT) 6012.00	PROJECT NUMBER [illegible]	LOG OF BORING NUMBER	
NORTH [illegible]	AREA (MSS 133.2)	CASING DIAMETER (IN) 2.50	GEOLOGIST [illegible]		
EAST 2080611	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED 09/02/93		

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

63793

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%							
		1.50/2.00	6012	0			CL	0.0'-5.5' Sandy Clay Abundt Silt, trace Gravel Mod brown (5 YR 3/4) Some roots, trace calcium carbonate Sand is well graded, sub-angular to sub-rounded Dry Gravelly zone from 2.0 to 2.3 ft Some to abundt gravel from 4.0 to 5.5 ft
			6011	1				
			6010	2				
		2.00/2.00	6009	3				
			6008	4				
		2.00/2.00	6007	5				
			6006	6			SC	5.5'-6.0' Sand and Gravel, abundt Clay Light brown (5 YR 5/6) Sand and gravel are well graded, angular to sub-rounded, mostly quartz Dry
		0.90/2.00	6005	7			CL	6.0'-8.0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) Sand is pred f g Sand and gravel are angular to sub-rounded Gravel is well graded 1 or 2 small layers of clean (without fines) sand and gravel Dry to slightly moist
			6004	8			SC	8.0'-9.5' Clayey Sand and Gravel Light olive gray (5 [illegible] 6/1) Sand and gravel are well graded, angular to sub-rounded, quartzose Dry
		2.00/2.00	6003	9			CL	9.5'-10.0' Sandy Gravelly Clay Light olive gray (5 [illegible] 6/1) Sand and gravel as above, reference interval 8.0'-9.5' Calcium carbonate? Slightly moist
				10				

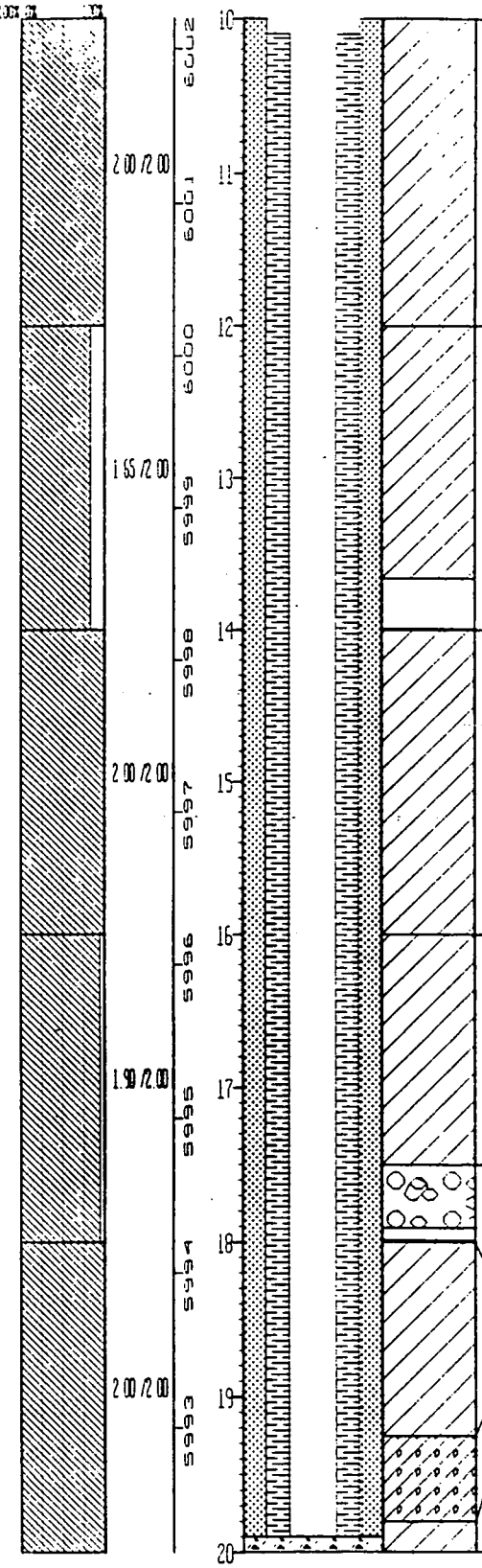
STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA (MSS [illegible])	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible] DRILLING	63793
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	08/02/93	

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

DRAFT

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'-12.0' Sandy Clay, abundt Gravel Light brown (5 YR 5/6) mottled with light olive gray (5 Y 6/1) Sand is pred m g to f g Gravel is well graded, angular to sub-rounded Some calcium carbonate Moist
CL	12.0'-13.65' Sandy Gravelly Clay Light brown (5 YR 5/6) Sand and gravel is well graded, angular to sub-rounded Moist for 1.64' and wet at tip No recovery (13.65-14.0')
CL	14.0'-16.0' Sandy Clay, abundt Gravel Pale yellowish brown (10 YR 6/2) to mod yellowish brown (10 YR 5/4) Sand pred f g Gravel is angular to sub-rounded Moist
CL	16.0'-17.5' Sandy Clay, some Gravel Light brown (5 YR 5/6) Sand is pred f g Gravel is mostly fine, sub-angular to sub-rounded. Moist
GW	17.5'-17.9' Sandy Gravel Angular, pred coarse, size is approx 1 in Dry (SW-GP) No recovery (17.9-18.0')
CL	18.0-19.25' Sandy Clay, some Gravel Mod yellowish brown Sand and gravel are mostly f g, poorly graded, sub-rounded Moist
SC	19.25'-19.8' Clayey Sand and Gravel Mod yellowish brown (10 YR 5/4) Well graded, angular to sub-rounded Wet
CL	19.8'-20.0' Sandy Clay, some Gravel Same as above reference interval 18.0'-19.25'

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 28.00		GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	[illegible]
NORTH	[illegible]	AREA CASS 133 2		CASING DIAMETER (IN)	[illegible]	GEOLOGIST	[illegible]
EAST	[illegible]	LOCATOR NUMBER	47	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	08/02/93

LOG OF BORING NUMBER 63793

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

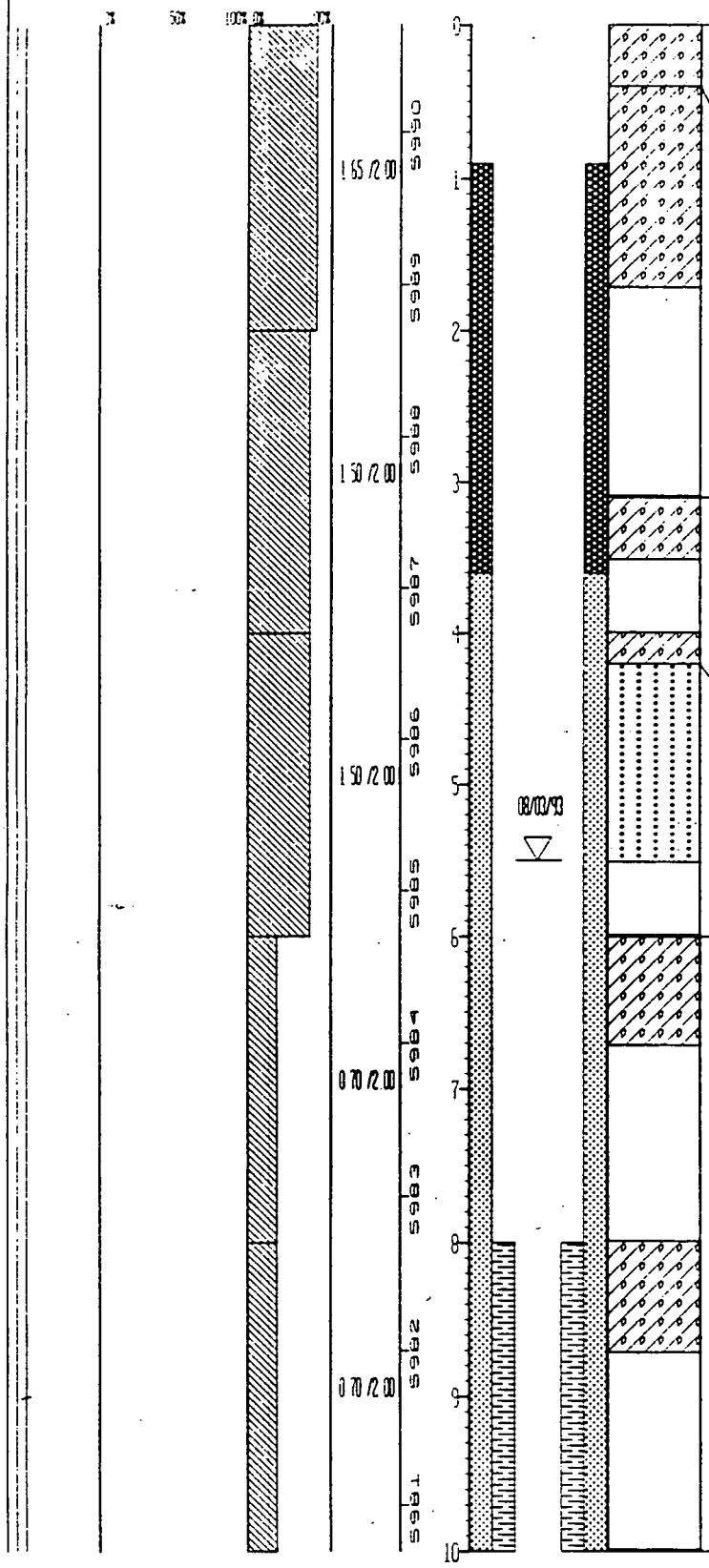
SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	0% 100%			20			CL	20.0'-22.0' Sandy Clay, some to abundant Gravel Mod yellowish brown (10 YR 5/4) to light brown (5 YR 5/6) Sand is mostly f g, poorly graded Gravel is well graded, angular to sub-rounded Moist
		2.00/2.00	5992 5991	21				
			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
		2.00/2.00	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
			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
		1.30/2.00	5985	27				
			5984	28				Total Depth Drilled 28.00 Total Depth Casing 19.90 Bottom of Filter Pack 19.90
			5983	29				
				30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT)	5990.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	[illegible]	AREA IHSS 115/136	CASING DIAMETER (IN)	3.50	GEOLOGIST	T. S. DREILING	63893
EAST	2081536	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN)	2.00	DATE DRILLED	08/03/93	

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

DRAFT

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	0.0'-0.4' Clayey Sand and Gravel, some Silt Mod yellowish brown (5 YR 5/6) Well graded, angular to sub-rounded abundt roots Dry
SC	0.4'-1.7' Sand, abundt Clay, some Gravel Olive black (5 Y 2/1) Some Fe staining, abundt concrete (0.4'-0.8') Sand is pred f g graphite, poorly graded Gravel is mostly med grained, poorly graded, sub-rounded to sub-angular Dry No recovery (1.7-3.1')
SC	3.1'-4.2' Clayey Sand/Sandy Clay Mod yellowish brown (10 YR 5/4) Trace Gravel Sand is pred m g, sub-rounded In center of interval is a clean (without fines), m g, Fe stained sand zone Moist No recovery (3.5-4.0')
SP	4.2'-5.5' Sand, some to trace Gravel Grayish black (N2) Trace clay Sand is m g to f g, sub-rounded, graphite Moist from 4.2 to 5.2 ft to wet at 5.2 to 5.5 ft (sp-sw) No recovery (5.5-6.0')
SC	6.0'-8.7' Sand and Gravel, some Clay Dark yellowish brown (10 YR 4/2) Sand is pred f g to m g Gravel is poorly graded, angular to sub-angular Wet No recovery (6.7-8.0'), and (8.7-10.0')

STATE PLANE COORDINATE	TOTAL DEPTH FT 20.00	GROUND ELEVATION FT 5990.70	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115/136	CASING DIAMETER (IN) 3.50	GEOLOGIST	[illegible]	63893
EAST [illegible]	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED	[illegible]/03/93	

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

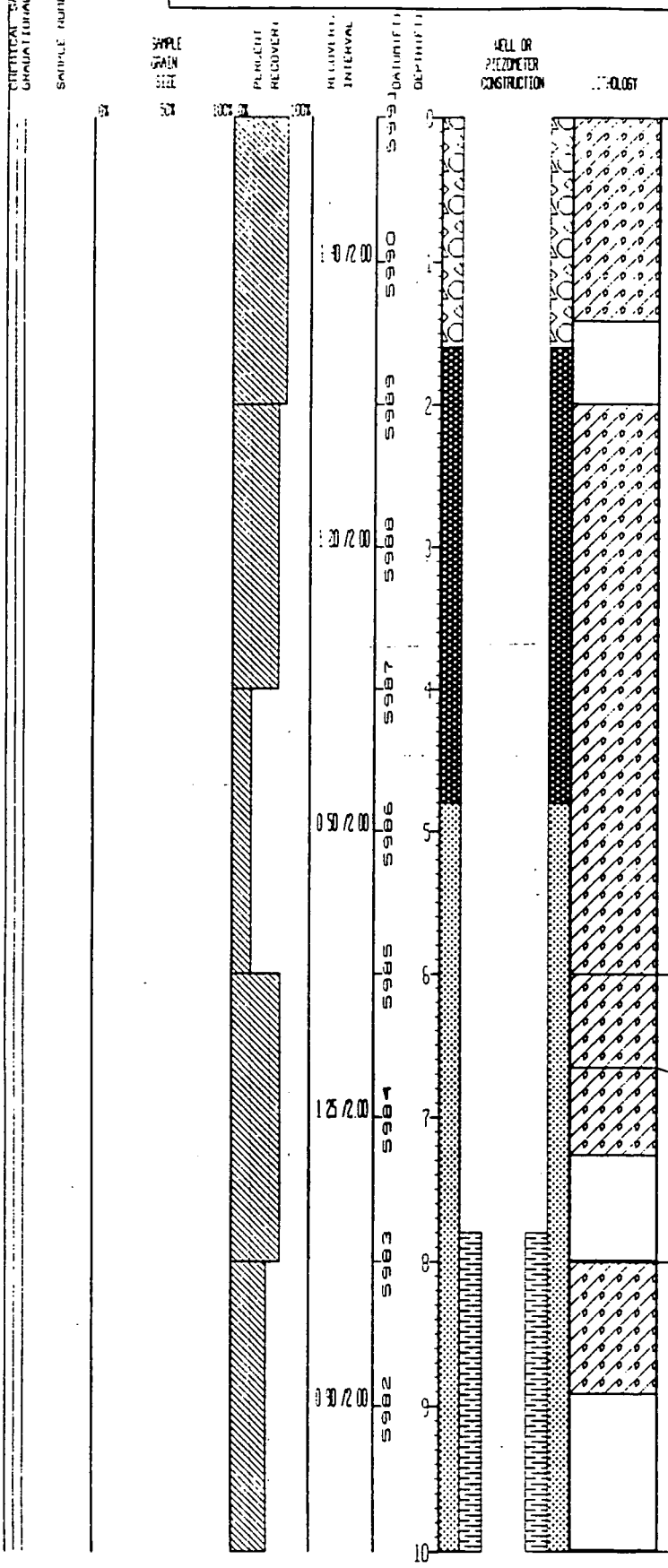
DRAFT

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0.00 /2.00	5980 5979	10 11 12			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')
		1.80 /2.00	5978 5977	13 14			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')
		2.00 /2.00	5976 5975	15 16			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')
		0.00 /2.00	5974 5973	17 18				
		2.00 /2.00	5972 5971	19 20			SILTY CLAYSTONE	19.2'-19.4' Top of Bedrock at approx 19.2' Silty Claytone Dark yellowish orange (10 YR 6/6) [illegible] weathered, very moist
							CLAYSTONE	19.4-20.0' Claystone Med dark gray (N4) Slightly moist
								Total Depth Drilled 20.00 Total Depth Casing [illegible] Bottom of Filter Pack 12.90

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 13.00	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115/196	CASING DIAMETER (IN)	GEOLOGIST	[illegible]	63993
EAST [illegible]	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) [illegible]	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

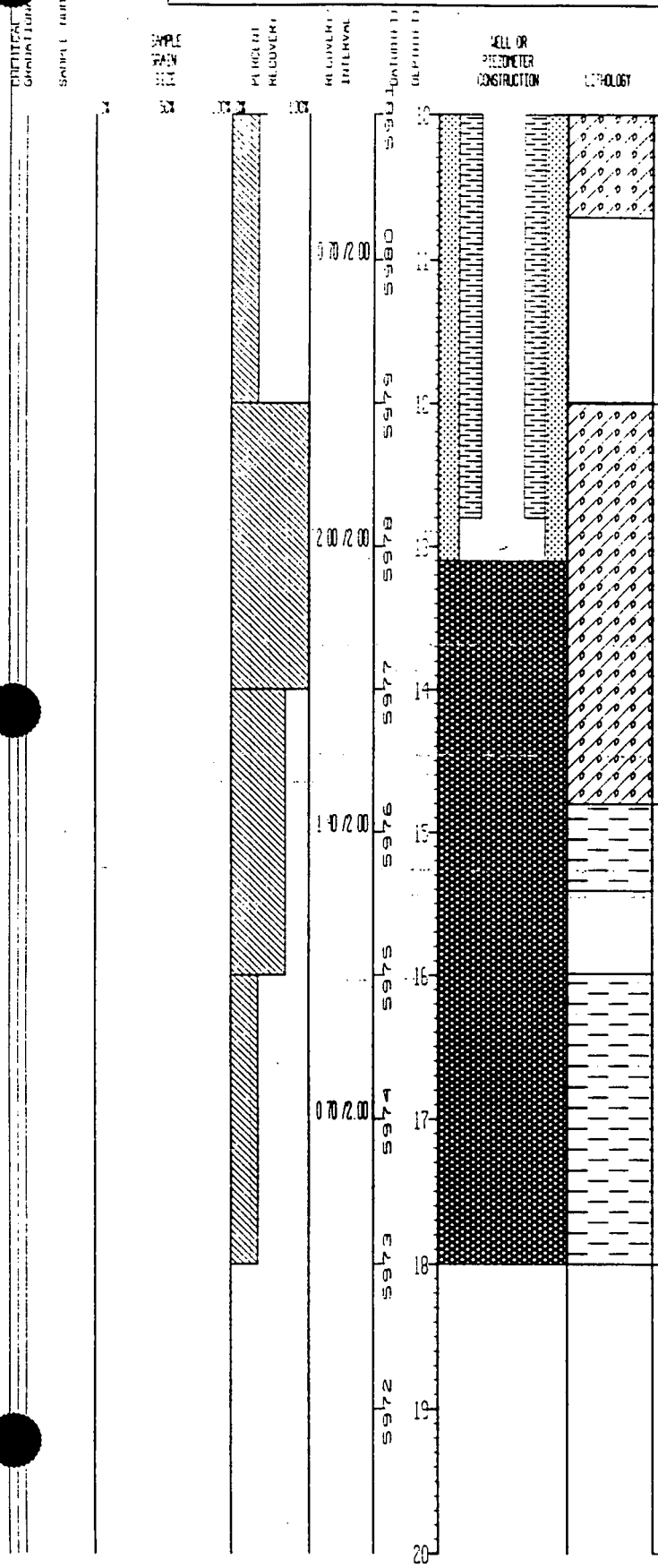


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0.0'-6.0' Sand, abundt Gravel, some to trace Clay Top 0.7 ft is olive gray (5 Y 4/1), color change to grayish black (N2) Sand is m g graphite Gravel is angular to sub-rounded Some roots and glass Dry to moist No recovery (1.4-2.0')
SC	6.0'-6.65' 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 5981.00	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH [illegible]	AREA CASS 115/136	CASING DIAMETER (IN)	GEOLOGIST	[illegible] DRILLING	63993
EAST 2081530	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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	10.0'-10.7' Clayey Sand, trace Gravel Dark yellowish brown (10 YR 4/2) Sand is poorly graded, pred f g Gravel is poorly graded, angular Wet No recovery (10.7-12.0')
SC	12.0'-14.8' Clayey Sand, trace Gravel Dusky yellowish brown (10 YR 2/2) Sand is poorly graded, f g Gravel is poorly graded, angular to sub-angular Wet
SANDY CLAYSTONE	14.8'-18.0' Top of Bedrock at 14.8' Sandy Claystone Mod yellowish brown (10 YR 4/4) Some Fe staining, highly weathered No recovery (15.4-16.0')
	Total Depth Drilled 18.00 Total Depth Casing 13.10 Bottom of Filter Pack 13.10

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10.00	GROUND ELEVATION (FT) 5990.00	PROJECT NUMBER 305-HF01-01	LOG OF BORING NUMBER
NORTH 77919	AREA CLASS 105/106	CASING DIAMETER (IN) 2.00	GEOLOGIST J. S. DEERING	64093
EAST 1381540	LOCATOR NUMBER 17	BOREHOLE DIAMETER (IN) 2.00	DATE DRILLED 06/05/93	

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

CHEMICAL SAMPLE DEPTH | GRADATIONAL SAMPLE DEPTH | SAMPLE NUMBER

SAMPLE TYPE	PENETRATION RESISTANCE	RECOVERY/INTERVAL	ELEVATION (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			5990	0			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.
		1.00/2.00	5989	1			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')
			5988	2			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')
		1.00/2.00	5987	3				
			5986	4			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')
		0.60/2.00	5985	5				
			5984	6			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')
		0.65/2.00	5983	7				
			5982	8			SW	8.0'-8.5'-Sand, some Gravel. Mod. yellowish brown (10 YR 5/4). Well graded, sub-angular to sub-rounded, quartzose. Wet.
		0.80/2.00	5981	9			SC	8.5'-8.8' Clayey Sand. Grayish black (N2). Sand pred. f.-g. Some unknown material. Wet. No recovery (8.8-10.0')
				10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT) 5990.00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747818	AREA [illegible]	CASING DIAMETER (IN) 0.50	GEOLOGIST [illegible] DREILING		
EAST 1081543	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

64093

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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%		5980	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	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 305-PC-01	LOG OF BORING NUMBER	
NORTH 1-7413	AREA 305 MAG ANOMALY 133	CASING DIAMETER (IN)	GEOLOGIST T. S. DREELING	64493	
EAST 1079474	LOCATION NUMBER F7	BOREHOLE DIAMETER (IN) 1.97	DATE DRILLED 07/30/93		

REMARKS: ASI Rig Geologist T. Santangelo-Drilling. 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 TYPE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1.00/2.00	6056	0				0.0'-8.0' Sandy Clay with abundant 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')
	BH60652AS				6055	1				
				1.70/2.00	6054	2				
	BH60630AS				6053	3				
				1.80/2.00	6052	4				
					6051	5				
				2.00/2.00	6050	6				
					6049	7				
				2.00/2.00	6048	8				8.0'-10.0' Sandy Clay with some Silt. Light brown (5 YR 5/6). Sand is pred. f-g. Moist.
	BH60630AS				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 905 MAG ANOMALY 133	CASING DIAMETER (IN)		GEOLOGIST	T S DREILING	64493
EAST	2078474	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN)	1.97	DATE DRILLED	07/30/93	

REMARKS ASI Rig Geologist T Santangelo-Dreiling Note Coreloss, no recovery intervals less than 0.2 ft not shown Located in magnetic anomaly west of THSS 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
						10			CL	10.0'-14.0' Sandy Clay with trace Gravel Light brown (5 YR 5/6) Sand pred f g Moist
				2.00/2.00	6046					No recovery (12.0-14.0')
					6045	11				
					6044	12				
	BH5063ZNS			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		
EAST 2078527	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1.87	DATE DRILLED 07/30/93		

64593

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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747414	AREA OU5 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST	T S DREILING	64593
EAST 2078527	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN) 1.67	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 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'-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				
	BH50636AS			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')
				1.40/2.00	6037	17				
					6036	18				
	BH50637AS			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 005-RFI/RI	LOG OF BORING NUMBER	
NORTH 747414	AREA 005 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 F-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')
	BH506540S			1.65/2.00	6050	1				
					6049	2				
	BH506380S			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				
	BH506390S			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 7414	AREA 105 Mag West of 133	CASING DIAMETER (IN)	GEOLOGIST F S DREILING	64693
EAST 1073579	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 SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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'-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	6041	11				
					6040	12				
				2.00/2.00	6039	13				
					6038	14				
	BH5064DNS			2.00/2.00	6037	15				
					6036	16				Total Depth Drilled 16.00
					6035	17				
					6034	18				
					6033	19				
					6032	20				

GEOLOGIC LOGS FOR 1994 BOREHOLES

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 G7	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%	1 50 /2 00	6046	0			SW	0 0'-1 5' Gravelly Sand with trace Silt and Clay Mod brown (5 YR 4/4) to mod brown (5 YR 3/4) Gravel fine grained. Sand f g to m g, well graded, angular to sub-angular Core is dry 43% gravel, 54% sand, 2% silt, 1% clay
					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'-6 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')
	BH00029AS			1 50 /2 00	6043	3				
					6042	4				
				2.00 /2 00	6041	5				
					6040	6				
				2 00 /2 00	6039	7				
					6038	8				
	BH00029AS			2 00 /2 00	6037	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19 00	GROUND ELEVATION (FT) [illegible] 10	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]7538	AREA [illegible] 33	CASING DIAMETER (IN) [illegible] 50	GEOLOGIST J W HARWELL	55194
EAST 1079113	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) [illegible] 49	DATE DRILLED 09/29/94	

REMARKS DRILLING EQUIPMENT HURRICANE [illegible] 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	6036	10				
					6035	11				
					6034	12				
				1 50 /2 00	6033	13				
									NO RECOVERY	13 5'-14 0' No Recovery
	BH00030AS				6032	14			SC	14 0'-16.1' Most of core taken for sample BH00030AS, not enough core to determine grain size distribution According to Well Site Field Log interval is a Clayey Sand Same as above (reference interval 2.0'-14 0'), with abundt sand and gravel fragments Caliche appears at 15 6'-16 0'
				2 00 /2 00	6031	15				
					6030	16			CLAYSTONE	16 1'-19 0' Top of Bedrock at 16.1' Claystone with some Silt Med. dark gray (N4) to light olive gray (5 Y 6/1) with dark yellowish brown (10 YR 6/6) Bedding massive Traces of carbonaceous material Core is fractured from 17 0-19 0', may be due to lack of moisture in core box 90% clay, 10% silt
				2.00 /2 00	6029	17				
					6028	18				
				1 00 /1 00	6027	19				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	505-RFI/RI	LOG OF BORING NUMBER
NORTH	747537	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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2.00 /2.00	6045	0			SW	0 0'-10 0' Gravelly Sand with trace Clay and Silt Mod yellowish brown (10 YR 5/4) Gravel med and coarse to fine grained, avg size 0 5 in, max 1 5 in, angular, well graded Sand is f g to c g in a Clay matrix, sub-angular Sand is composed of quartz, feldspars, mafic minerals and micaceous minerals. 29% gravel, 67% sand, 1% silt, 3% clay.
					6044	1				
				1 50 /2.00	6043	2				No recovery (3.5-4 0')
	BH00031AS				6042	3				
				2 00 /2.00	6041	4				
					6040	5				
				2.00 /2.00	6039	6				
					6038	7				
				2 00 /2.00	6037	8				
	BH00032AS				6036	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH FT 20 00	GROUND ELEVATION (FT) 6045 30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]7537	AREA IHSS [illegible]	CASING DIAMETER (IN)	GEOLOGIST	J W HARWELL	55294
EAST [illegible]379132	LOCATOR NUMBER [illegible]37	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED	09/30/94	

REMARKS DRILLING EQUIPMENT HURRICANE [illegible] GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH — SAMPLE NUMBER: BH00033AS

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

PERCENT RECOVERY

RECOVERY/INTERVAL: 2 00 /2 00; 1 40 /2 00; 2 00 /2 00; 1 60 /2 00; 2 00 /2 00

DATUM (FT): 6035, 6034, 6033, 6032, 6031, 6030, 6029, 6028, 6027, 6026

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
GW	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 00	GROUND ELEVATION (FT)	6021 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	74297	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

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
	BH00055AS	0% 50% 100%	0% 100%	1 70 /2 00 1 80 /2 00 1 50 /2 00 1 50 /2 00 2 00 /2 00	6021 6020 6019 6018 6017 6016 6015 6014 6013 6012	0 1 2 3 4 5 6 7 8 9 10			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) 3 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: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 00 /2 00

DATUM (FT) DEPTH (FT): 6011, 6010, 6009, 6008, 6007, 6006, 6005, 6004, 6003, 6002

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) 5626 00	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 747331	AREA TASS 133'	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL	55494
EAST 2079449	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN) 1 50	DATE DRILLED 09/28/94	

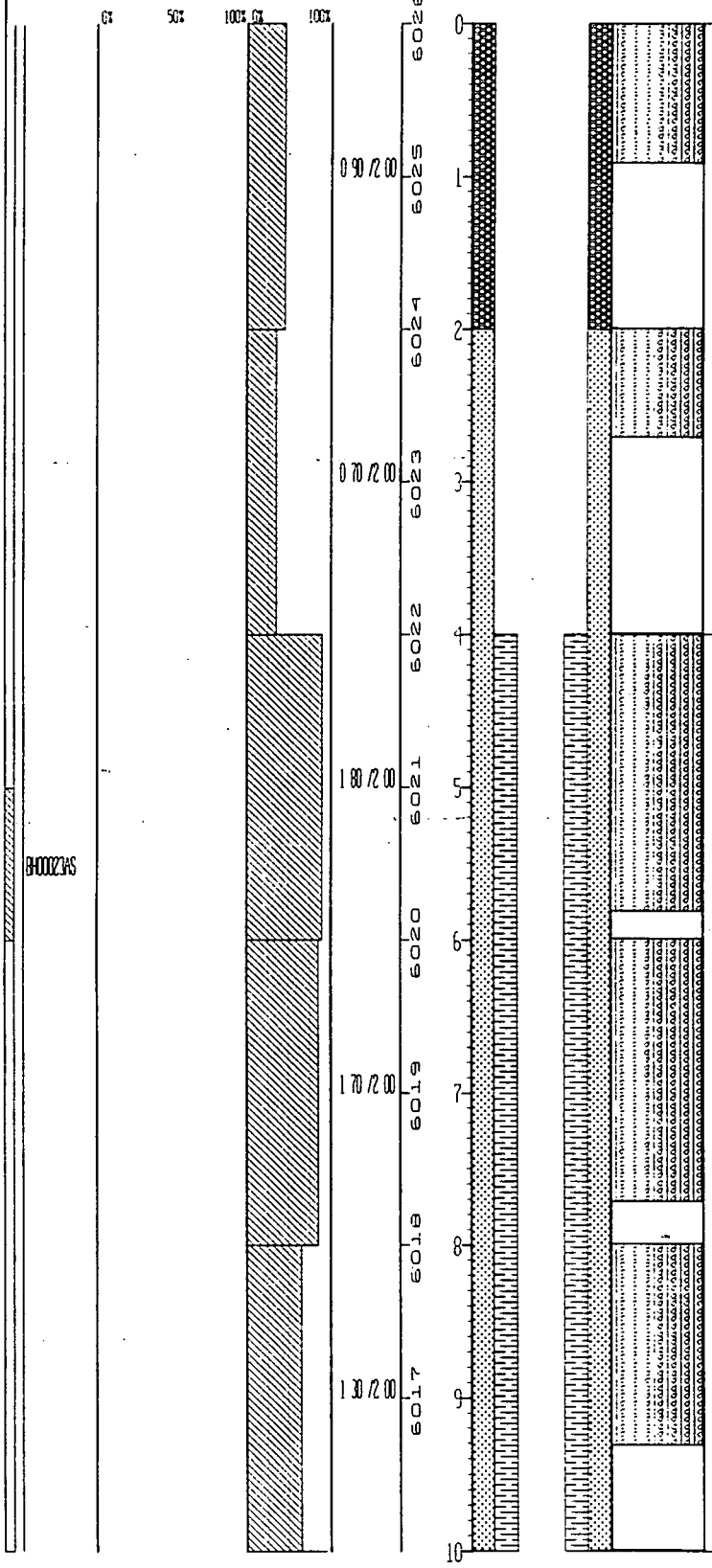
REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL OFFSET OF 55494 COORDINATES ARE ESTIMATED BASED ON WELL 55494

CHEMICAL / 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
				0 30 /2 00	6025	0			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				GM	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	1				
					6020					Total Depth Drilled 6.00
					6019	2				
					6018					
					6017	3				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14.00	GROUND ELEVATION (FT)	6026.00	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747331	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	55494A
EAST	2079448	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1.40	DATE DRILLED	09/28/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH — SAMPLE NUMBER — SAMPLE GRAIN SIZE (0% 50% 100%) — PERCENT RECOVERY (0% 100%) — RECOVERY/INTERVAL — DATUM (FT) — DEPTH (FT) — WELL OR PIEZOMETER CONSTRUCTION — LITHOLOGY — 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 (0.9-2.0') 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 (5.8-6.0'), (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	7-7331	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	55494A
EAST	2079448	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/28/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	94002245	0% 50% 100%	0% 100%	1 90 /2 00	6016 6015	10 11			SC	10 0'-11 4' Clayey Sand with some Gravel Mod yellowish brown (10 YR 5/4) to light brown (5 YR 5/6) Sand is f g to m g, well sorted, sub-rounded. Some caliche Trace carbonaceous material Bedding massive Core dry, low plasticity 9% gravel, 55% sand, 36% clay
				1 60 /2.00	6014 6013	12 13			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
					6012 6011 6010 6009 6008 6007	14 15 16 17 18 19 20			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	LOG OF BORING NUMBER
NORTH	747409	AREA IHSS 133	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	55594
EAST	2079583	LOCATOR NUMBER G7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/28/94	

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	6033	0			CL	0 0'-4 0' Sandy Clay Med 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
	BH0002SAS				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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7491	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL	55694
EAST	2079584	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED 10/05/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL. CORE IS STORED IN HOT CONEX, THEREFORE ALL DESCRIPTIONS ARE TAKEN FROM THE RIG GEOLOGIST'S FIELD LOG

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	ELEVATION	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				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
				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
	910001AS				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
	910002AS				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	365-RFI/RI	LOG OF BORING NUMBER
NORTH	757491	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 (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
				2 00 /2 00	6027	10			SC	10 0'-10 6' Clayey Sand Dark yellowish orange (10 YR 6/6) Trace gravel Some Fe and Mn staining Some carbonaceous material Massive Dry to moist
				2 00 /2 00	6026	11			CLAYSTONE	10 6'-16 0' Claystone Yellowish gray (5 Y 7/2) to light olive gray (5 Y 6/1) Trace Fe staining, trace carbonaceous material Massive Dry to moist At 13 6', color grades to dark yellowish orange (10 YR 6/6)
				2 00 /2 00	6025	12				
				2 00 /2 00	6024	13				
				2 00 /2 00	6023	14				
					6022	15				
					6021	16				Total Depth Drilled 16 00
					6020	17				
					6019	18				
					6018	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	6007 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747311	AREA THSS 133	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	55794
EAST	2079711	LOCATOR NUMBER G7	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
	BH00578S	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 67	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/03/94	

REMARKS DRILLING EQUIPMENT HURRICANE [illegible] RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 40 /2 00	6040	0			SM	0 0'-2 3' Silty Sand with some Gravel Following sample description has been taken from the Well Site Field Log Core for this interval was taken for sample Mod yellowish brown (10 YR 5/4) Massive bedding Dry F g sand Unconsolidated to weakly consolidated No recovery (1 4-2 0')
					6039	1				
						2				
	BH00036AS			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)	5[illegible] 70	PROJECT NUMBER	OU5-RFI/RI
NORTH 747538	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST 2079716	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	10/03/94

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

LOG OF BORING NUMBER 55894

CHEMICAL GRADATION	DEPTH SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE RAIN	PERCENT RECOVERY	RECOVERY/ INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			0% 50%	100% 0% 100%	2 00 /2 00	6030 6029 6028 6027 6026 6025 6024 6023 6022 6021	10 11 12 13 14 15 16 17 18 19 20				Total Depth Drilled 12 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 6040 30	PROJECT NUMBER	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 10/30/94	

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 SPACING	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					6040	0				0 0'-0 9' Silty Sand Mod yellowish brown (10 YR 5/4) Massive Dry Roots
				1 10 /2 00	6039	1				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'), cpm (2 3-4 0')
					6038	2				
	GH0003HS			0 30 /2 00	6037	3				
					6036	4				
				1 10 /2 00	6035	5				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				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				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				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
	GH0005HS			2 00 /2 00	6031	9				8 5'-8 9' Silty (ashy) Sand Sand f g Grayish orange (10 YR 7/4) Some gravel up to 0 75 in
						10				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	305-RFI/RI
NORTH 747547	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST 2079762	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/30/94

LOG OF BORING NUMBER 55994

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 (0% 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	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	1				
					6037	2				
				0 10 /2 00	6036	3				
	BH00037AS				6035	4				
				1 40 /2 00	6034	5			ML	4 0'-4 6' Sandy Silt Waste/Fill Metallic Waste/Ash multicolored dark yellowish orange (10YR 6/6), light brown (5YR 5/6), black (N1), yellowish gray (5Y 8/1) and white (N9), dry, glass fragments, fill/waste material, silt to sand size ash
					6033	6			CL	4 6'-10 0' Sandy Clay with some carbon/ash material massive, dry to moist, some Mn and Fe staining, silt to sand size ash material; f-c sand, sub-angular to sub-rounded 8 0'-10.0' Some fragments of yellowish gray (5Y 7/2) clay No recovery (5 4-6 0') and (7 3-8 0')
				1 30 /2.00	6032	7				
					6031	8				
	BH00038AS			2 00 /2 00	6030	9				
					6029	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 22 00	GROUND ELEVATION (FT) 6038 70	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH 747548	AREA OUC CLASS 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 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'-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 20 /2 00	6028	11				
					6027	12				
				1 50 /2 00	6026	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')
	BH00039AS			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	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747548	AREA OU5, IHSS 133	CASING DIAMETER (IN)	GEOLOGIST	JEFF HARWELL	56094
EAST 2079818	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1 00	DATE DRILLED	02/23/95	
REMARKS CONTINUOUS CORE, 1 INCH					

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	0H0004DAS	0% 50% 100%	0% 100%	2 00 /2 00	6018 6017	20 21 22			CL	20 0'-22 0' Sandy Clay with some gravel to Clayey Sand (Cl/Sc) dark yellowish orange (10YR 6/6) to mod yellowish brown (10YR 5/4) f-c sand (quartz), f-c gravel
					6016 6015 6014 6013 6012 6011 6010 6009	23 24 25 26 27 28 29 30				Total Depth Drilled 22 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT)	6074 70	PROJECT NUMBER	065-RFI/RI	LOG OF BORING NUMBER
NORTH	747751	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56194
EAST	2079691	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	10/27/94	

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

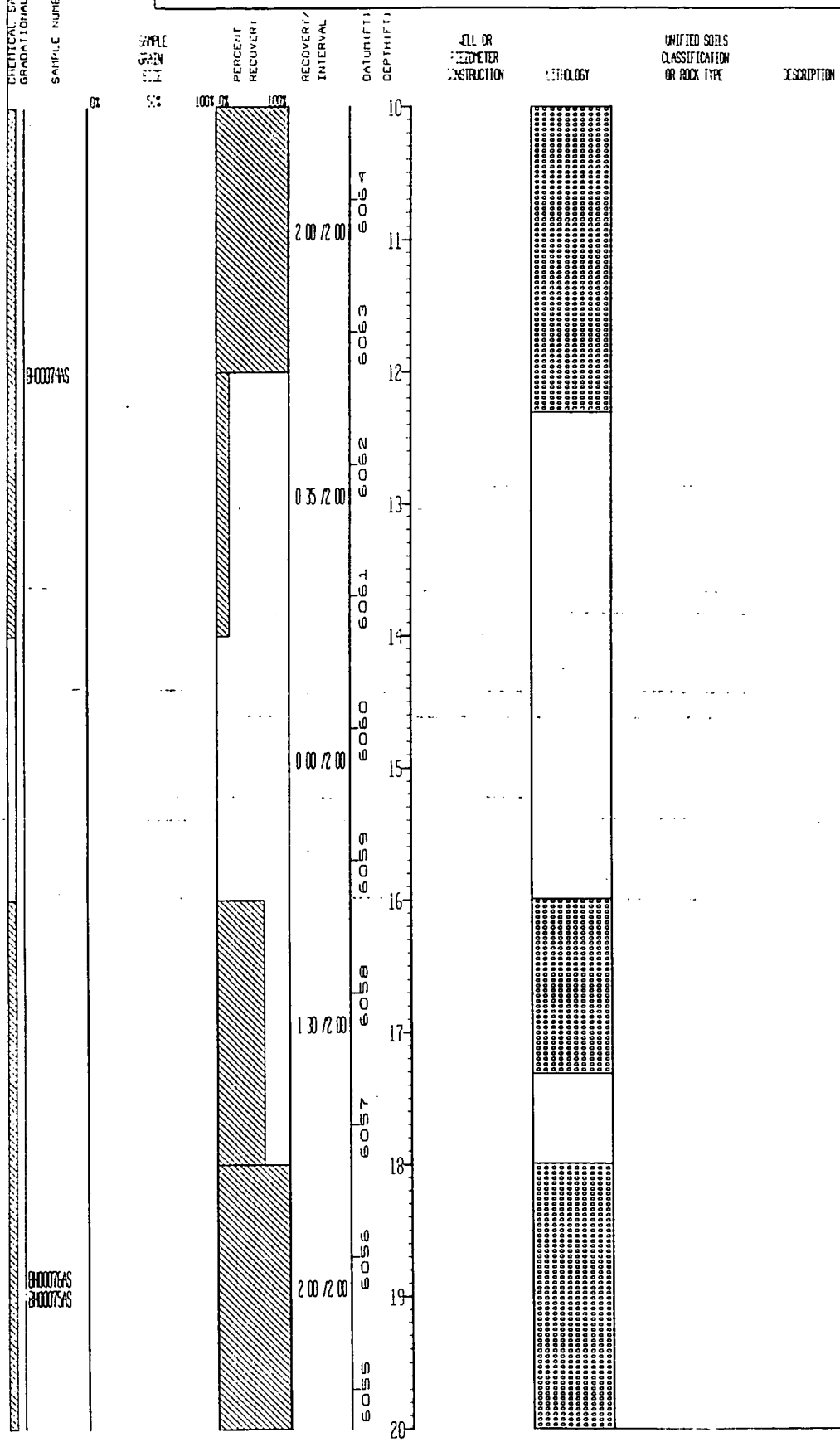
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							0 0'-28 0' Gravelly Sand with some Clay 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
	BH00072AS			1 50 /2.00	6074	0				
					6073	1				
				0 70 /2.00	6072	2				No recovery (1 5-2.0'), (2 7-4 0') and (5 4-6 0') No recovery (6 6-8 0'), (9 4-10.0') and (12 3-16 0') No recovery (17 3-18 0') and (25 0-26.0')
				1 40 /2.00	6071	3				
					6070	4				
				0 65 /2.00	6069	5				
	BH00073AS				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	OU5-RFI/RI
NORTH	747751	AREA INSS		CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST	2079691	LOCATOR NUMBER	G7	BOREHOLE DIAMETER (IN)	8.00	DATE DRILLED	10/27/94

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

LOG OF BORING NUMBER

56194



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 30 00	GROUND ELEVATION (FT)	6074 70	PROJECT NUMBER	0.5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]7751	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56194
EAST	[illegible]379691	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				
				2 00 /2 00	6052	22				
					6051	23				
				1 00 /1 00	6050	24				
	BH00077AS			0 00 /1 00	6049	25				
				2 00 /2 00	6048	26				
					6047	27				
				2 00 /2 00	6046	28				
					6045	29				
						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
35% sand, 5% silt, 60% clay

Total Depth Drilled 30 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT) 6074 70	PROJECT NUMBER	[illegible]	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%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						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	6074	1			CL	0 7'-1 5' Gravelly Clay Mod brown (5 YR 4/4) to light brown (5 YR 5/6) Gravel up to 1 0 in in diameter Yellowish white powdery coating (ash or rock flour possibly) Heavy FeO staining Massive, dry
					6073	2			NO RECOVERY	1 5'-4 0' No recovery
	BH0004DAS			0 00 /2 00	6072	3				
					6071	4			SW	4 0'-5 6' Gravelly Sand Pale brown (5 YR 5/2) Gravel up to 0 50 in in diameter Abundt rock flour No recovery (5 6-6 0')
				1 50 /2 00	6070	5				
					6069	6			NO RECOVERY	6 0'-8 0' Complete refusal
				0 00 /2 00	6068	7				
					6067	8				Total Depth Drilled 8.00
					6066	9				
					6065	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT)	5983 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7401	AREA IHSS 133	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	56294
EAST	2080135	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/29/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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 No recovery (1.6-2 0')
				1 60 /2 00	5983	1				
					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 No recovery (3 4-4 0') and (7.9-8 0')
				1 40 /2 00	5981	3				
					5980	4				
				2.00 /2 00	5979	5				
	BH0028AS				5978	6				
				1.90 /2 00	5977	7				
					5976	8			SANDY CLAYSTONE	8 9'-12 0' Top of Bedrock at 8 95 Sandy Claystone Light olive gray (5 Y 5/2) Some caliche Dry, dense, indurated. Bedding massive Sand f g, sub-rounded, non-friable 40% sand, 60% clay No recovery (9 6-10 0')
				1 60 /2 00	5975	9				
					5974	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 16 00	GROUND ELEVATION (FT) 5963 60	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747401	AREA IHSS 123	CASING DIAMETER (IN) 0 50	GEOLOGIST	J W HARWELL	56294
EAST 2080135	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1 50	DATE DRILLED	09/29/94	

REMARKS DRILLING EQUIPMENT HURRICANE 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
	BH00276S	0% 50% 100%	0% 100%	2 00 /2 00	5973 5972	10 11				
				2 00 /2 00	5971 5970	12 13			SILTY CLAYSTONE	12 0'-16 0' Silty Claystone Dark gray (N3) Some Fe staining, especially along fractures Bedding massive Dry, dense and indurated Some carbonaceous material 24% silt, 76% clay
				2 00 /2 00	5969 5968	14 15				
					5967 5966 5965 5964	16 17 18 19 20				Total Depth Drilled 16.00 Total Depth Casing 16 00 Bottom of Filter Pack 16 00

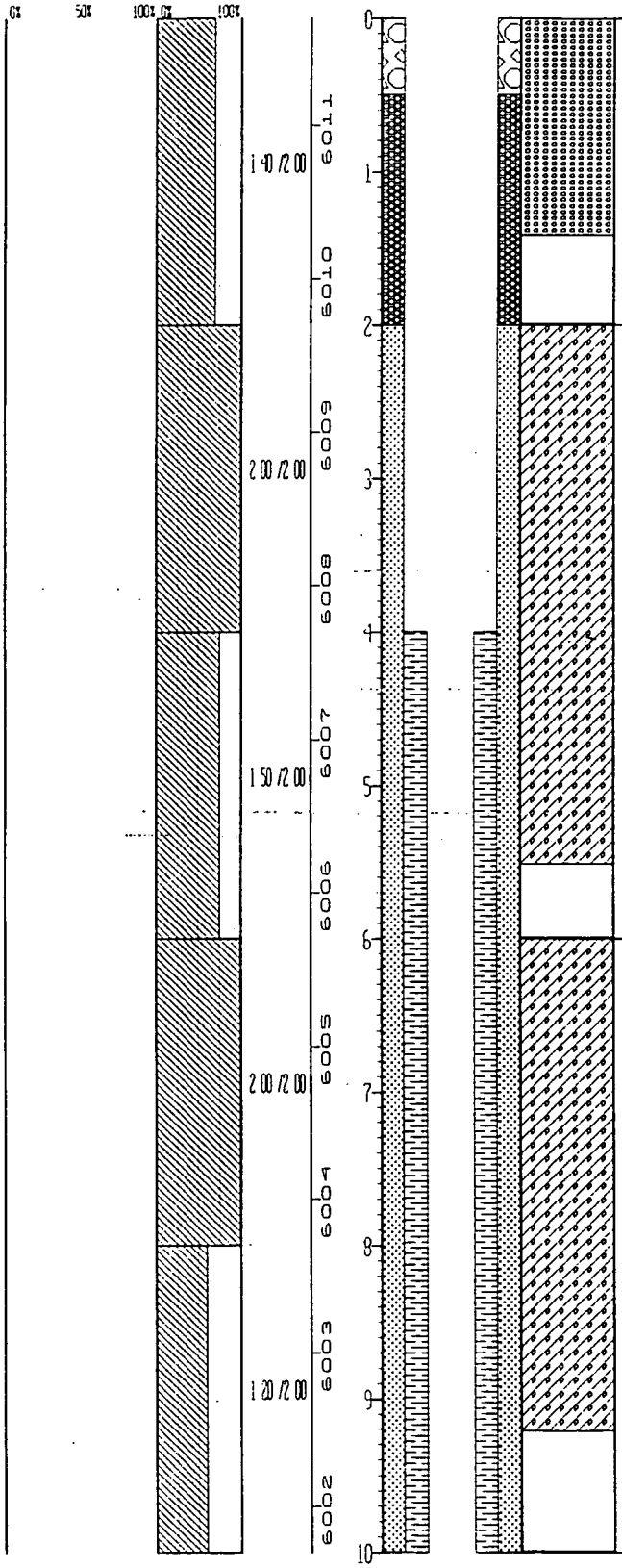
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 6 00	GROUND ELEVATION (FT)	5983 60	PROJECT NUMBER	1.5-RFI/RI	LOG OF BORING NUMBER
NORTH	747026	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56394
EAST	2080268	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	13/11/94	

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
		0% 50% 100%	0% 100%			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.
				2 00 /2 00	5983	1				
					5982					
					5981	2				No recovery (3 5-4 0')
				1 50 /2.00		3				
					5980					
	BH0005GAS				5979	4				
				2 00 /2 00		5				
					5978					
						6				Total Depth Drilled 6 00
					5977	7				
					5976	8				
					5975	9				
					5974	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	6011 70	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7585	AREA THSS 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



GH00026AS

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) 6011 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747585	AREA IHSS 133	CASING DIAMETER (IN) 6 50	GEOLOGIST J W HARWELL	56494
EAST 2080703	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED 09/28/94	

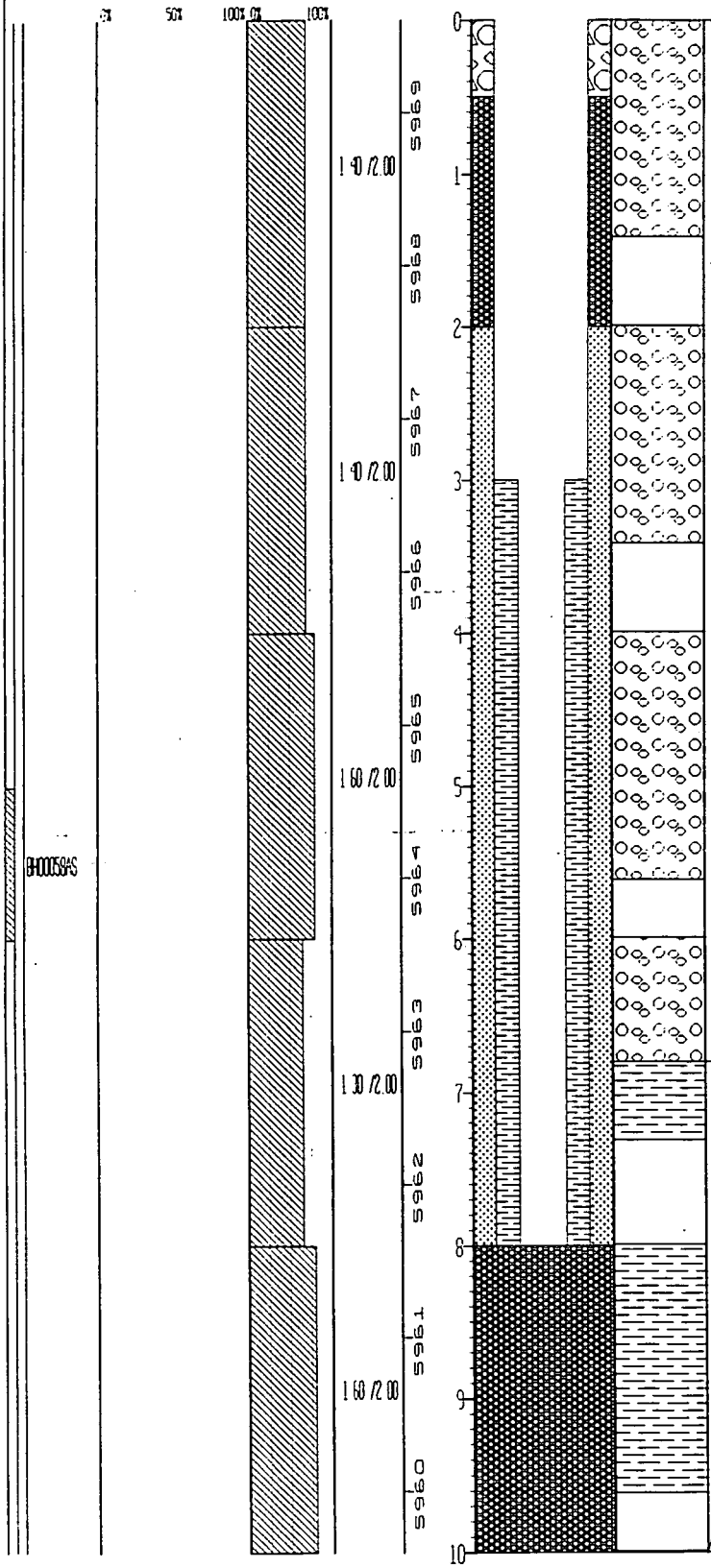
REMARKS DRILLING EQUIPMENT HURRICANE. ASI RIG GEOLOGIST J W HARWELL.

CHEMICAL DEPTH / GRADATION DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM(FT)	DEPTH(FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	GH00022AS	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 No recovery (13.8-14.0')
					6000	11				
				1.80 /2.00	5999	12				
					5998	13				
					5997	14				Total Depth Drilled: 14.00 Total Depth Casing: 14.00 Bottom of Filter Pack: 14.00
					5996	15				
					5995	16				
					5994	17				
					5993	18				
					5992	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5969 60	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747175	AREA IHSS 133	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	56594
EAST	2080804	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/11/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J . 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) 15.0 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	OU5-RFI/RI
NORTH 7-7718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J. W HARWELL
EAST 1382723	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
				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.
	BH00092AS				5961	2				
	BH00095AS BH00096AS			2.20/2.00	5960	3				
	BH00093AS				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.
	BH00094AS				5957	6				
				2.40/2.00	5956	7				No recovery (8.25-10.0')
	BH00098AS				5955	8				
				0.25/2.00	5954	9				
					5953	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56694
EAST	2092723	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	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			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 20 /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 20 /2 00	5940	23				
					5939	24				
				2 20 /2 00	5938	25				
					5937	26				
				2 20 /2 00	5936	27				
					5935	28				
				2 20 /2 00	5934	29				
					5933	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	150 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	105-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
REMARKS	DRILLING EQUIPMENT	MOBILE DRILL B-57	ASI RIG GEOLOGIST	J W HARWELL			

LOG OF BORING NUMBER 56694

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 /2 00	5932	31				
			5931	32				
		0 30 /2 00	5930	33				
			5929	34			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
		2 20 /2 00	5928	35				
			5927	36			CLAYSTONE	36 0'-37 75' Claystone Olive gray (5 Y 4/1) Minor Fe staining along fractures
		2 00 /2 00	5926	37				
			5925	38			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
		2 20 /2 00	5924	39				
			5923	40				

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

Recovery/Interval	Datum (FT)	Depth (FT)
		40
	5922	41
	5921	42
1 40 /5.70	5920	43
	5919	44
	5918	45
	5917	46
	5916	47
4 50 /5 00	5915	48
	5914	49
	5913	50

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')

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 005-RFI/RI	LOG OF BORING NUMBER
NORTH 7-7718	AREA THSS 115	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL	56694
EAST 2392723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 11/14/94	

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

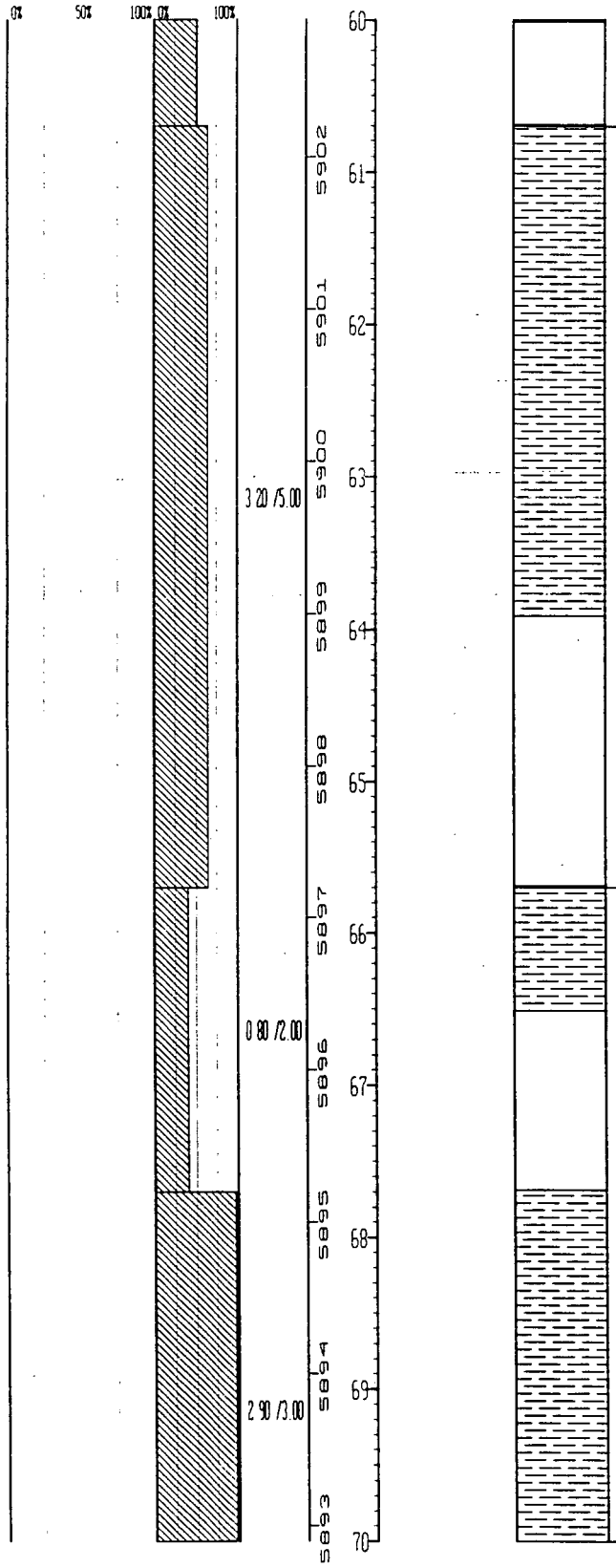
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	SAMPLE NUMBER	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50% 100%	0% 100%			50				
			S912	51			CLAYSTONE	50 7'-58 25' Claystone Dark gray (N3) Hard, massive, trace laminations Dry to moist Trace carbonaceous material.
			S911	52				No recovery (58 25-60 0') and (60 0-60 7')
		5 20 /5 00	S910	53				
			S909	54				
			S908	55				
			S907	56				
			S906	57				
		2 55 /5 00	S905	58				
			S904	59				
			S903	60				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT) 5352 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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	60.7'-63.9' Claystone Same as above (reference interval 50.7'-58.25') Amount of organics increases with depth, leaf imprints. Around 62.2' slickensides, approx 45 degrees. Thin laminae of silt, mottled in appearance Around 63.9', material appears to be lignite. No recovery (63.9-65.7')
CLAYSTONE	65.7'-70.6' Claystone Same as above (reference interval 50.7'-58.25') Some organics, not as abundt as 60.7'-63.9' Minor siltstone laminae, otherwise bedding massive. No recovery (66.5-67.7') and (70.6-70.7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/14/94	

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

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
50%	100% 0% 100%			70				
			5892	71			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)
			5891	72				No recovery (73 4-75 7') and (79 95-80 7')
		2 70 /5 00	5890	73				
			5889	74				
			5888	75				
			5887	76				
			5886	77				
		4 25 /5 00	5885	78				
			5884	79				
			5883	80				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70		GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	OU5-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

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

LOG OF BORING NUMBER 56694

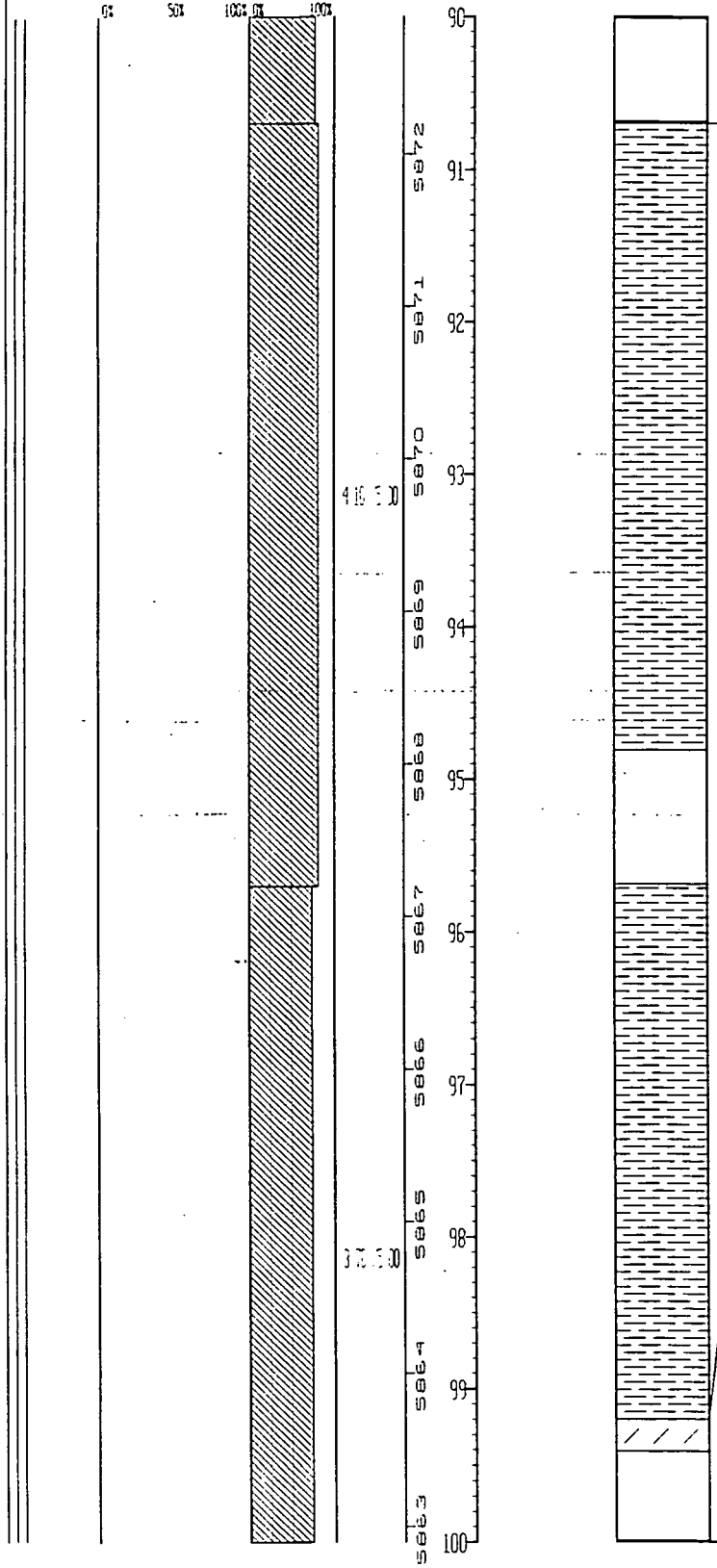
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE WHEN SEEN	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'
			5881	82				No recovery (84.7-85.7')
		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)
			5876	87				No recovery (89 6-90.0') and (90.0-90.7').
		3 90 /5 00	5875	88				
			5874	89				
			5873	90				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT)	5962 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747718	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56694
EAST	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/14/94	

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

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



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')

SILTSTONE

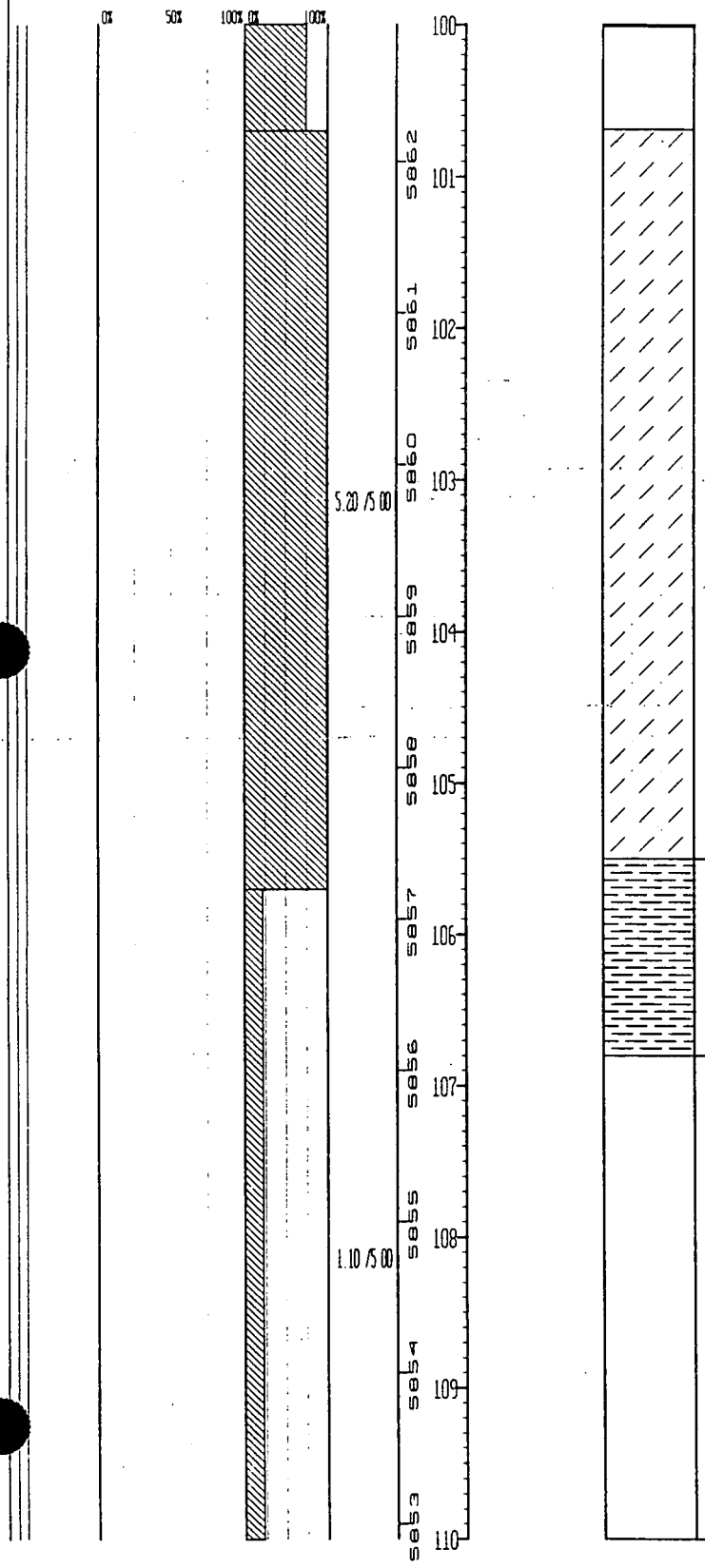
99 2'-105 5' Siltstone with trace Clay Olive gray (5 Y 4/1) to mod yellowish brown (10 YR 5/4) Slumping of silty/clayey beds (soft sediment deformation), appears mottled Slightly friable Cross bedded to thinly laminated claystone interbeds Core hard Some carbonaceous material Trace fossils (burrows) 97% silt, 3% clay

No recovery (99 4-100 0') and (100 0-100 7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT)	5962.90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH:	747718	AREA: IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL	56694
EAST	2082723	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN):	5.60	DATE DRILLED:	11/14/94	

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

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

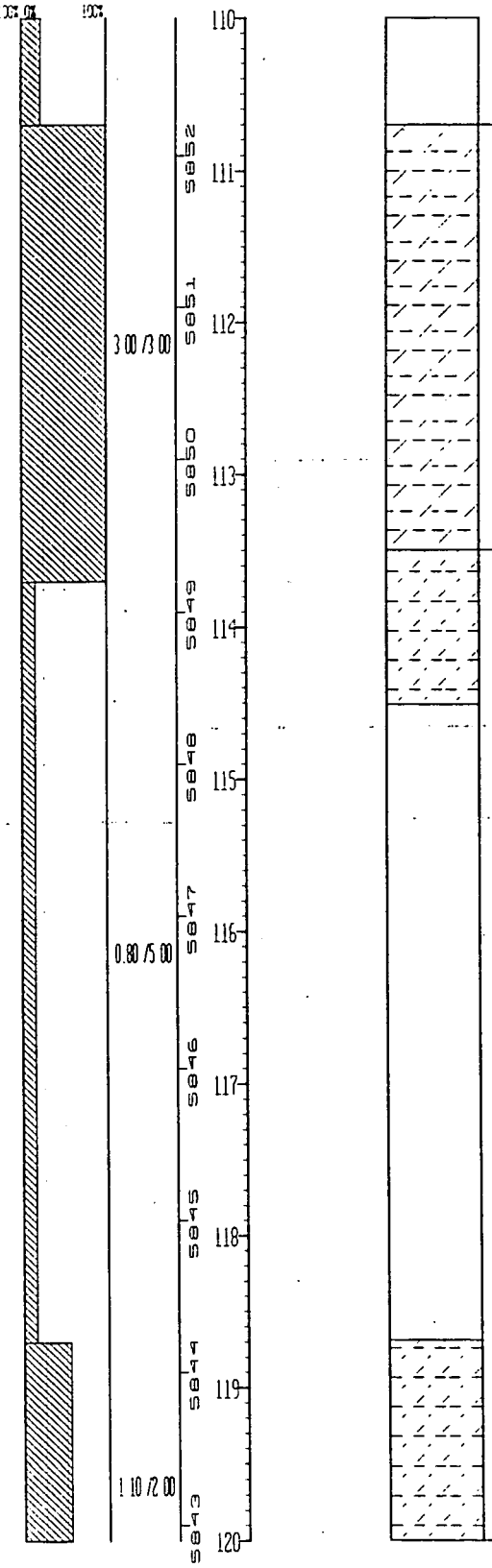


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	105.5'-106.8': Claystone. Light olive gray (5 Y 5/2) Abundt. organics, more leaf and wood imprints. Bedding massive to horizontal. From 105.7'-106.8' amount of organics decreases to trace amount.
NO RECOVERY	No recovery (106.8-110.7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 70	GROUND ELEVATION (FT)	5352 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	2082723	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	11/14/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST 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



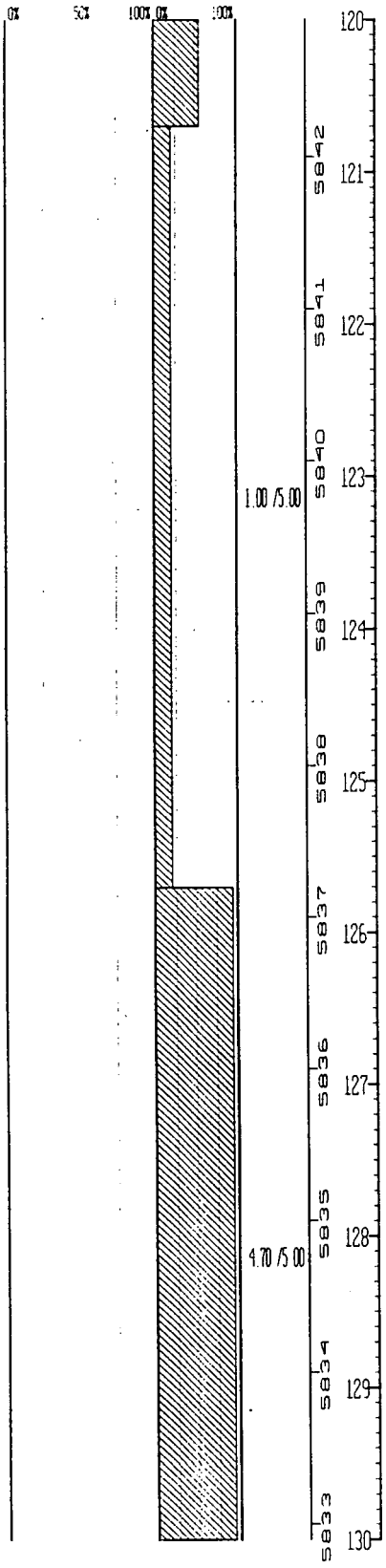
SILTY CLAYSTONE 110 7'-113 5' Silty Claystone Same as above (reference interval 105 5-106 8')

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

No recovery (114 5-118.7') and (120 0'-120 7')
No recovery (121 7-124 9')

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	1082723	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



WELL OR PIEZOMETER CONSTRUCTION

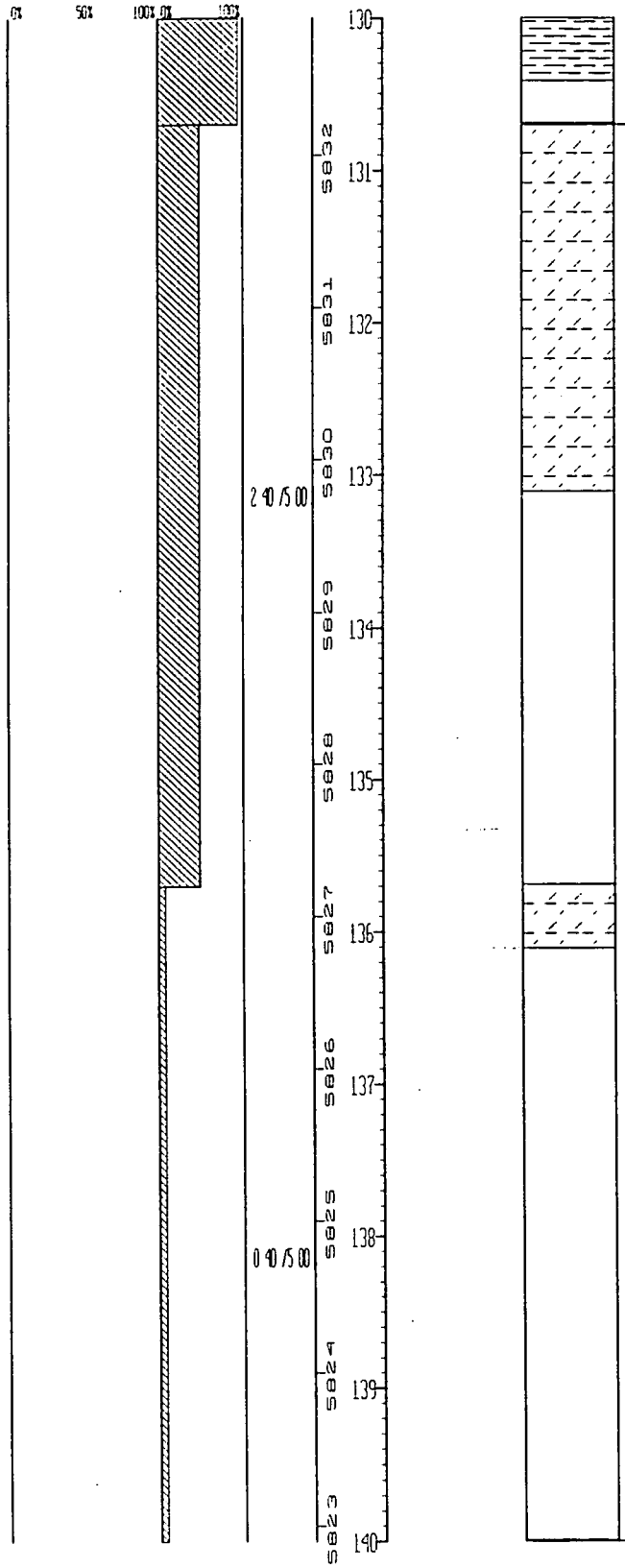
LITHOLOGY

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 005-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 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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	130 7'-146 5' Clayey Siltstone with some Sand Med dark gray (N4) Massive Well cemented Very hard Dry Some carbonaceous/lignite material, especially along fractures Slickensides at 132 0' approx 40 degrees with lignite Sand is v f g, sub-rounded, predom quartz Note according to the geophysical log for 56694 the siltstone grades to claystone at approx 142 0' to 144 0' Lithologic log apears to be about 2 ft deeper than the geophysical log 16% sand, 50% silt, 34% clay No recovery (133 1-135 7') and (136 1-140 0') No recovery (140 0-140 7') and (140 95-145 7')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.70	GROUND ELEVATION (FT)	5962.90	PROJECT NUMBER	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
		0% 50% 100%	0% 100%			140				
					5822	141				
					5821	142				
				0.25/5.00	5820	143				
					5819	144				
					5818	145				
					5817	146				
					5816	147			NO RECOVERY	No recovery (146.5-150.7')
				0.80/5.00	5815	148				
					5814	149				
					5813	150				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT)	5995 20	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	747921	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	56794
EAST	2082450	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	[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%						GW	0 0'-1 1' Sandy Gravel with trace Silt and Clay Grayish brown (5 YR 3/2) to dark yellowish orange (10 YR 6/6) Gravel is angular to sub-angular, max size 2 0 in, avg size 0 50 in -0 75 in Sand is c g to f g, angular to sub-angular Micaceous material present Low plasticity Core loose Core dry 48% gravel, 47% sand, 4% silt, 1% clay No recovery (1 1-2 0')
				1 10 /2 00	5995 5994	0 1			CL	2 0'-3 5' Silty Clay with some Sand and trace Gravel Some caliche Core for this interval was taken for sample Sample description is taken from Well Site Field Log No recovery (3 5-4 0')
	BH00228AS			1 50 /2 00	5993 5992	2 3			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
				2 00 /2 00	5991 5990	4 5				
	BH00227AS BH00232AS				5989	6				
	BH00229AS			1 40 /2 00	5988	7				
					5987	8				
				2 00 /2 00	5986	9 10				
	BH00230AS									

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT) 5995 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747921	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	56794
EAST	2082450	LOCATOR NUMBER 37	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/07/95	

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

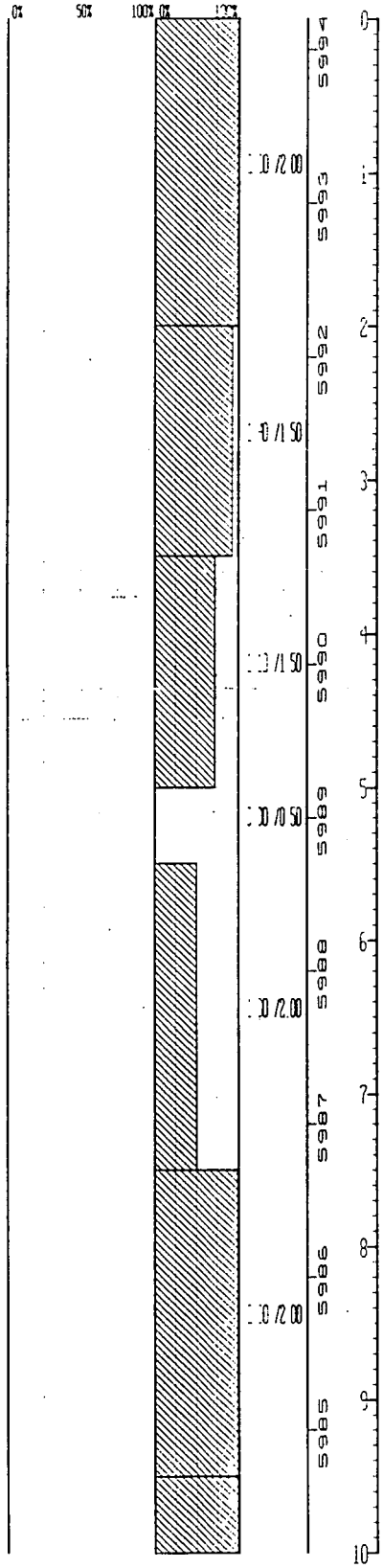
CHEMICAL & GRADATIONAL DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
						10			SC	10 0'-14 0' Sand with some Clay and trace Silt Same as above (reference interval 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 No recovery (15 1-16 0') and (16 8-17 0')
				1 10 /2 00	5980	15				
					5979	16				
				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 No recovery (22 4-23 0')
				2.00 /2 00	5976	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 00	GROUND ELEVATION (FT)	5935 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
	BH0023045			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:	OU5-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



SC

0 0'-4 6' Gravelly Sand with some Clay and trace Silt
Dark yellowish brown (10 YR 4/2) to mod yellowish brown (10 YR 5/4) Gravel is coarse to fine, sub-angular, max 3 0 in Abundt pulverized rock Sand is c g to f g, sub-angular, well graded. Bedding massive Low plasticity
37% gravel, 51% sand, 10% clay, 2% silt

No recovery (3 4-3 5'), (4 6-5 0'), and (5 0-5 5')

SC

5 5'-6 5' Gravelly Sand with some Clay and trace Silt
Same as above (reference interval 0 0'-3 4') Dark yellowish orange (10 YR 6/6) Fragments of siltstone, mod. red (5 R 4/6). Core badly broken, can't determine bedding

No recovery (6 5-7 5')

SANDY SILTSTONE

7 5'-8 0' Top of Bedrock at 7 5'
Sandy Siltstone with some Clay Dark yellowish orange (10 YR 6/6) to med gray (N5) Traces Mn staining and carbonaceous material. Low plasticity Sand is v f g
35% sand, 42% silt, 23% clay

CLAYSTONE

8 0'-10.0' Claystone with some Silt Med dark gray (N4) Abundt carbonaceous material Trace Fe staining Mod hardy Severely weathered. Plastic
20% silt, 80% clay

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 33 00	GROUND ELEVATION (FT) 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	LOCATION 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
						10			NO RECOVERY	10 0'-11 5' Core taken for sample
	BH00218S			2 00 /2 00	5985					
					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				
	BH00219S									
					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	045-RFI/RI
NORTH	747855	AREA IHSS 133		CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
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			

LOG OF BORING NUMBER

56894

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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	5974	20				
	GH0220HS				5973	21				
				2 00 /2 00	5972	22				
					5971	23				
				2 00 /2.00	5970	24				
					5969	25				
				2.00 /2 00	5968	26				
					5967	27				
	GH0221HS			0 70 /0.70						
					5966	28				
				1 30 /1 30						
					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	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	5964	30			CLAYSTONE	30 0'-33 0' Claystone with some Silt and Sand Same as above (reference interval 11 5'-30 0') Dark gray (N3) to dark yellowish orange (10 YR 6/6) Some Fe staining Core dense Indurated Slightly friable in silty zones Dry Some slumping of thin beds of sand. Becomes unweathered at 31 0'
					5963	31				
				2 00 /2 00	5962	32				
	BH00222AS									
					5961	33				Total Depth Drilled 33 00
					5960	34				
					5959	35				
					5958	36				
					5957	37				
					5956	38				
					5955	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT)	6019 80	PROJECT NUMBER	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 (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 10 /2 00	6019	0–1			GM	0 0'-7 9' Sandy Gravel with some Silt and trace Clay (Waste/fill material) Mod yellowish brown (10 YR 5/4) to black (N1) asphalt fragments Gravel is coarse to fine, sub-angular, consists of quartzite and granite Fragments of large gravel at 1 1', broken due to drilling Sand is c g. to f g, sub-angular to sub-rounded, well graded. No apparent bedding. From 2:0'-4 6' asphalt debris material is abundt. 56% gravel, 26% sand, 16% silt, 2% clay No recovery (1.1-2.0'), (3 6-4 0'), and (4 6-6 0') No recovery (6.9-7 9') and (7 9-9 0') Note Soil classification changed from Sw to Gm on the basis of mechanical sieve and hydrometer results of BH00188AS.
					6018	2				
	BH00185AS			1 60 /2 00	6017	3				
					6016	4				
				0 60 /2.00	6015	5				
	BH00188AS				6014	6				
	BH00186AS			0 90 /1.90	6013	7				
					6012	8			GM	9 0'-10 6' Sandy Gravel with some Silt and trace Clay Very dusky red (10 R 2/2) Fine to coarse gravel, angular to sub-angular. Sand is f g. to c g, 17% coarse, 45% med, 38% fine, rounded to sub-angular Mod plastic clay matrix No apparent bedding, high porosity (possible alluvium) 45% gravel, 41% sand, 10% silt, 4% clay. No recovery (10 6-11 0').
				0 80 /1.10	6011	9				
				1 60 /2 00	6010	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT)	6019 80	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7987	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	56994
EAST	1382009	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/16/95	

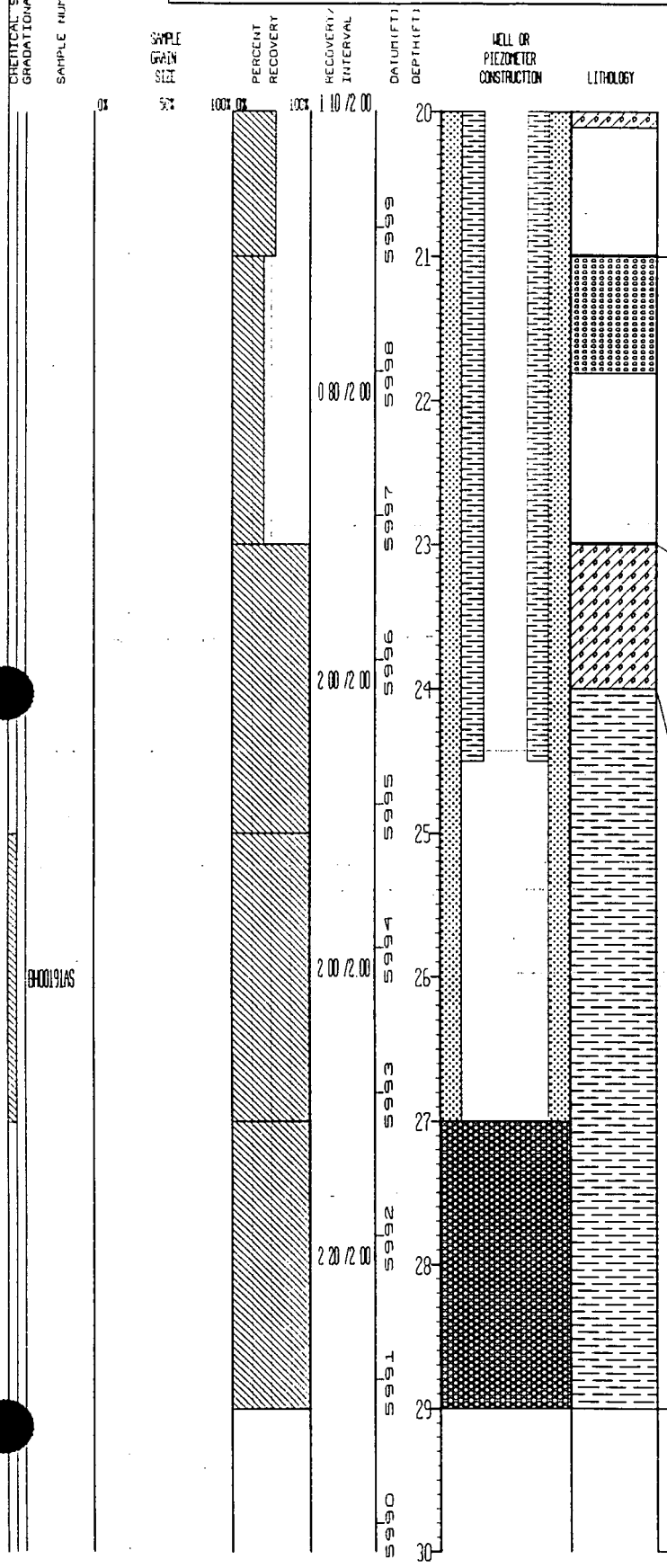
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL

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%	1 60 /2 00	6009	10				
					6008	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	6007	12				
					6006	13				
	BH00187AS			2 00 /2 00	6005	14				
					6004	15				
	BH00189AS			2 00 /2 00	6003	16	01/17/95			
					6002	17				
	BH00190AS			1 70 /2 00	6001	18				
					6000	19				
				1 10 /2 00		20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	29.00	GROUND ELEVATION (FT)	6019.80	PROJECT NUMBER	OU5-RFI/RI
NORTH	747997	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 005-RFT/RI	LOG OF BORING NUMBER
NORTH 7-7719	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST L A HOST	57094
EAST 1081996	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	MODIFIED 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				
					5968	2				
					5967	3				
				1 40 /2 00	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				6 0'-8 5' Silty Sand with some Gravel (fill) Sample modified from the Rig Geologist's Well Site Field Log Core taken for sample BH00138AS Dark brown to black Moist Dense to very dense (Sm/Sc) 20% gravel, 41% sand, 29% silt, 10% clay No recovery (7 6-8 0')
	BH00138AS			1 60 /2.40	5963	7				
					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)	5970 20	PROJECT NUMBER	GUS-RFI/RI	LOG OF BORING NUMBER
NORTH	747719	AREA TASS 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

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
	BH00140AS				5960	10				
	BH00141AS			0 80 /2 00	5959	11			CL	10.5'-14.0' Sandy Clay with some Silt and Gravel Same as above (reference interval 8 5'-10.5') Note: no claystone fragments 9% gravel, 28% sand, 24% silt, 39% clay No recovery (11.3-12.5')
					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: BH00148AS, BH00145AS

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 1 90 /2 00; 1 80 /2 00; 1 10 /2.00; 2 00 /2 00; 2 50 /2 50

DATUM (FT): 5950, 5949, 5948, 5947, 5946, 5945, 5944, 5943, 5942, 5941

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

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')

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')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 40 00		GROUND ELEVATION (FT)	5970 20	PROJECT NUMBER	305-RFI/RI
NORTH	747719	AREA IHSS 115		CASING DIAMETER (IN)	2 00	GEOLOGIST	L A HOST
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

LOG OF BORING NUMBER **57094**

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				
					5940					
						31				
				2.00 /2.00	5939					
						32				
					5938					
						33				
				1.20 /1.50	5937					
						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
					5936					
	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) 599 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]885	AREA IHSS 115	CASING DIAMETER (IN) 2 30	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 [illegible]WELL, 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	598	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	597 596 595	1 2 3				
				1 70 /2.00	594 593	4 5			CLAYSTONE	3.4'-5 3' Claystone Mottled med gray (N5) to mod yellowish brown (10 YR 5/4) Distinct dark gray (N3) clay filled slide plane at 4 0', dips 10 degrees with slickensides. No apparent bedding Interval appears very disturbed/brecciated with abundt FeO2 and caliche disseminated throughout Some roots from 4 1'-4 7' Trace MnO2 from 5 0'-5 3' (landslide material) No recovery-(4 7-5 0')
				1 50 /2.00	592 591	6 7			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')
	BH00192AS			1 70 /1 90	590 589	8 9				
				1 40 /1 40		10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	GU5-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. 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
	BP00015AS				5988	10				
				0 90 /1 70	5987	11				11 0'-11 9' Bag sample Core not available. Same as above (reference interval 5 3'-11.0') according to Well Site Field Log.
	BH00193AS									
				0 40 /1 00	5986	12			CLAYSTONE	12 0'-12.4': Claystone. Same as above (reference interval 5 3'-11.0') No recovery (12.4-13 0')
					5985	13			CLAYSTONE	13 0'-17 0': Claystone with some Silt Same as above (reference interval 5.3'-11.0') Trace iron nodules Indurated. Core broken up from Moss sampler Appears laminated where intact Becomes less fractured and becomes mod. weathered. Trace to some iron oxide staining Some gypsum from 13.0'-15.0'.
				2 00 /2 00	5984	14				
					5983	15				
	BP00014AS			2.00 /2 00	5982	16				
					5981	17			SILTY CLAYSTONE	17 0'-22 0' Silty Claystone Olive gray (5 Y 4/1) to mod yellowish brown (10 YR 5/4) FeO staining heavy in fractures and along laminae Trace carbonceous material Horizontal thin laminations of siltstone from 18 0'-20 0' Core damp to dry. Core indurated. Slightly friable Abundt FeO2 staining from 20 0'-21.0' 20% silt, 80% clay
	BH00194AS			1.00 /1 00	5980	18				
				2 00 /2 00	5979	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH	7-47885	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] GEOLOGIST A R AGLIARDO, J W HARWELL, L A HOST

ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129 9-131 0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	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				
	BH001955AS				5974	24				
				2 00 /2 00	5973	25				
	BP000165AS				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 09	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	745535	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2052008	LOCATOR NUMBER J7	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', 130 129 8-131 0'

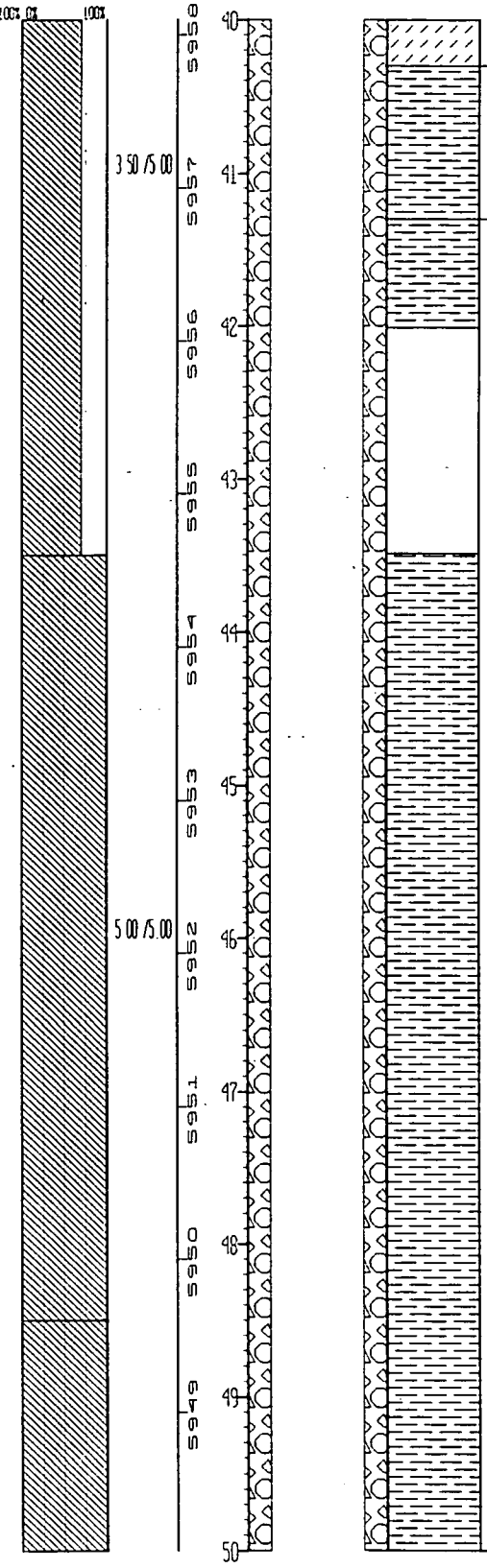
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00196AS			2 00 /2 00	5968	30				
					5967	31				
					5966	32				
				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. No recovery (36 6-38 5')
					5961	37				
					5960	38				
					5959	39			SANDY SILTSTONE	39 5'-40 3' Sandy Siltstone Light olive gray (5 Y 6/1) Non-calcareous. Thin bedded Sharp contact at 40 3' with silty claystone. Sand f g, well rounded quartz.
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	[illegible] 10	PROJECT NUMBER	0U5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN)	[illegible]	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 [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 0-84 9', 113 9-115 1', AND 129 8-131 0'

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	40 3'-41 3' Claystone. Dark gray (N3) to grayish black (N2) Siltstone laminae and nodules Thin bedded to laminated Some organic laminae Trace calcareous, m g sand size nodules Slightly weathered
CLAYSTONE	41 3'-55 3' Claystone Olive gray (5 Y 4/1) Trace carbonaceous material Core damp to moist Some thin siltstone laminae at 48 0' No FeO, unweathered Trace calcareous material Thinly laminated to massive Slightly friable Slightly plastic Mod indurated At 48 5' color grades to dark greenish gray (5 GY 4/1) No recovery (42 0-43 5')

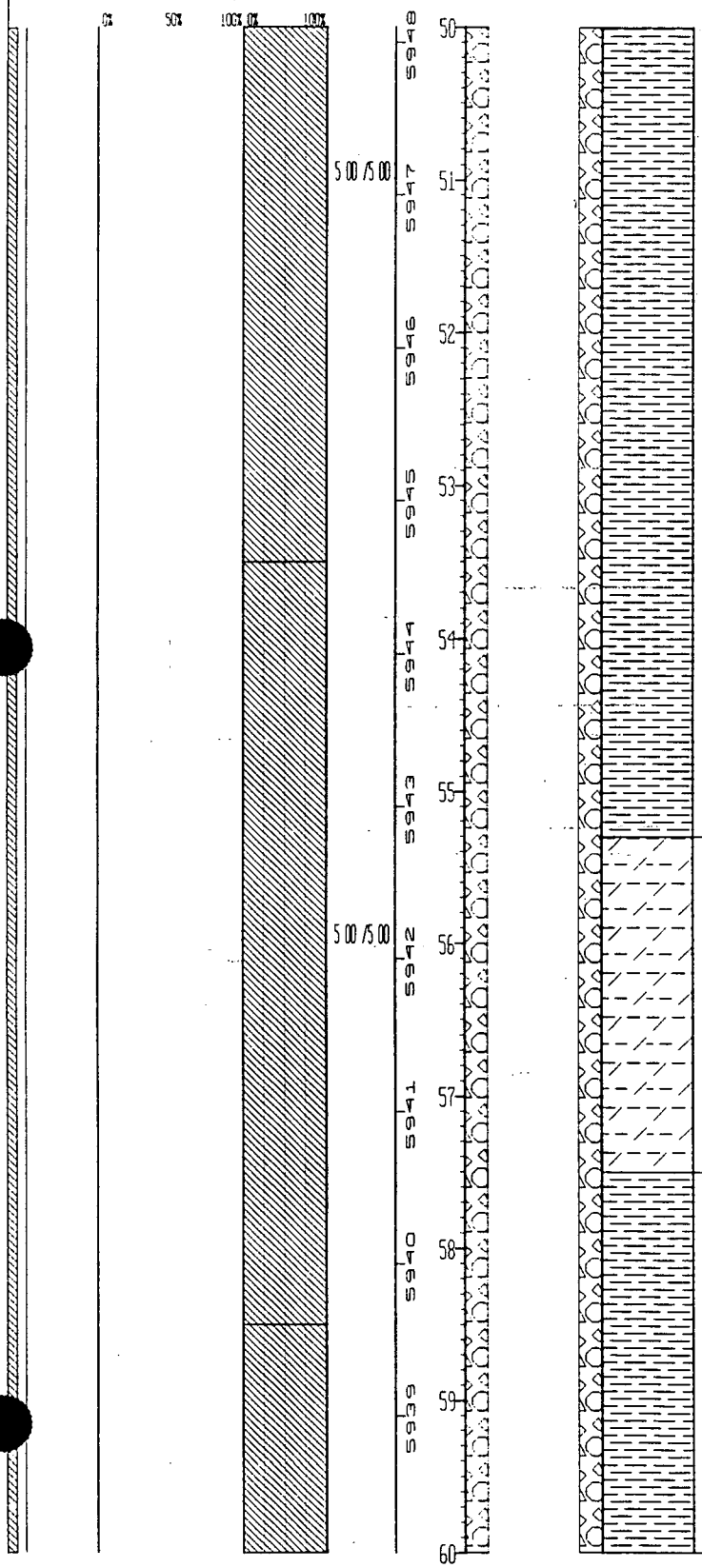
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150.00		GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	OU5-RFI/RI
NORTH	747885	AREA [illegible] 115		CASING DIAMETER (IN)	[illegible]	GEOLOGIST	A R AGLIARDO
EAST	2082008	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	[illegible]	DATE DRILLED	01/19/95

LOG OF BORING NUMBER **57194**

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

ADDITIONAL CENTRALIZERS 84.0-[illegible]', 113.9-115.1', AND 129.8-131.0'

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



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	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA	IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/19/95	

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

ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129 8-131 0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE
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

Depth (ft)	Unified Soils Classification or Rock Type	Description
63 5'-63 8'	SILTY CLAYSTONE	Silty Claystone Light olive gray (5 Y 5/2) Mod. hard. Mod friable Laminated.
63 8'-64 7'	CLAYEY SILTSTONE	Clayey Siltstone Light olive gray (5 Y 5/2) Thin bedded to laminated
64 7'-66 0'	SILTY CLAYSTONE	Silty Claystone Same as above (reference interval 63 5'-63 8')
66 0'-68 5'	CLAYSTONE	Claystone with some Silt Same as above (reference interval 57 5'-63 5')
68 5-72 0'	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	095-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

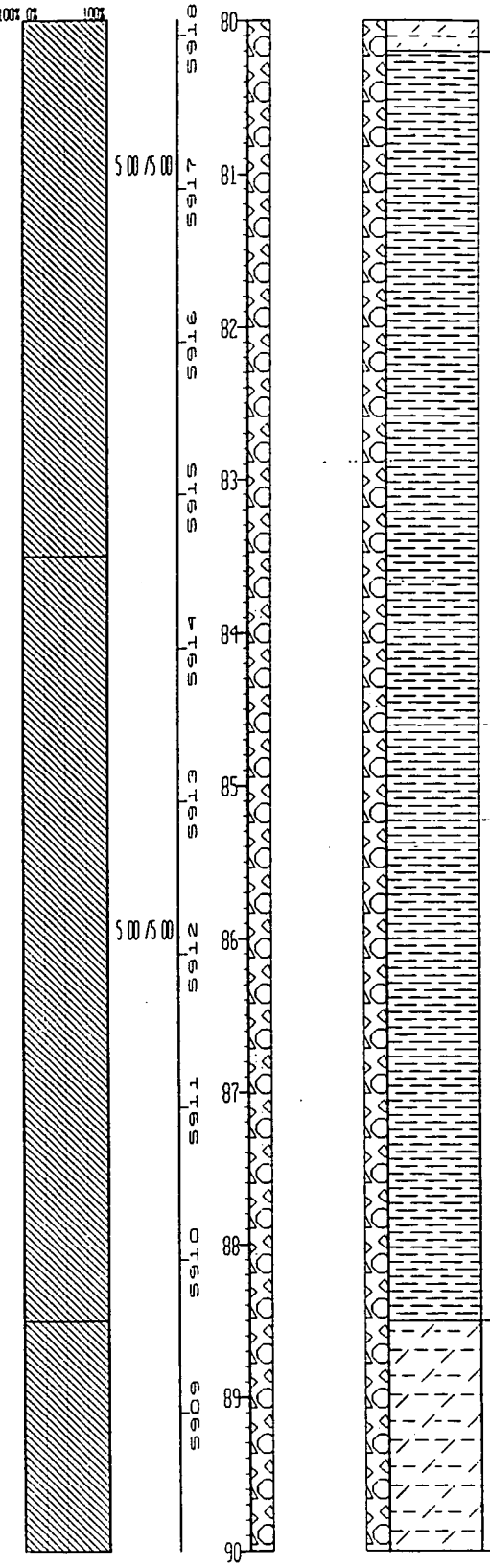
ADDITIONAL CENTRALIZERS 84 0-84 9', 113.9-115 1', AND 129 8-131 0'

CHEMICAL 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%		5928	70				
				3 50 /5 00	5927	71				
					5926	72				
					5925	73				
					5924	74			CLAYSTONE	73 5'-74.4' Claystone Light olive gray (5 Y 3/2) Little silt Some organics. Trace FeO staining. Increase in carbonaceous material to 74 4'
	BP0002945				5923	75			COAL	74 4'-75 0' Lignite/Coal. Black (N1) with thin laminae of claystone. Olive gray (5 Y 4/1). Appears subbituminous locally, otherwise predom. clayey (disseminated).
				5 00 /5 00	5922	76			SILTY CLAYSTONE	75 0'-79 2'. Silty Claystone Light olive gray (5 Y 5/2) to dark gray (N3) Interbedded silty claystone and claystone Thin bedded to laminated. Mod. hard Mod friable. Low porosity. Some to trace carbonaceous material.
					5921	77				
					5920	78				
					5919	79			CLAYEY SILTSTONE	79 2'-80 2' Clayey Siltstone with some Sand. Light olive gray (5 Y 5/2) Sand is v f g, well rounded quartz [illegible] bedded Mod porosity Mod hard to hard Mod friable Trace carbonaceous material
						80				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5958 10	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 01/19/95	

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

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



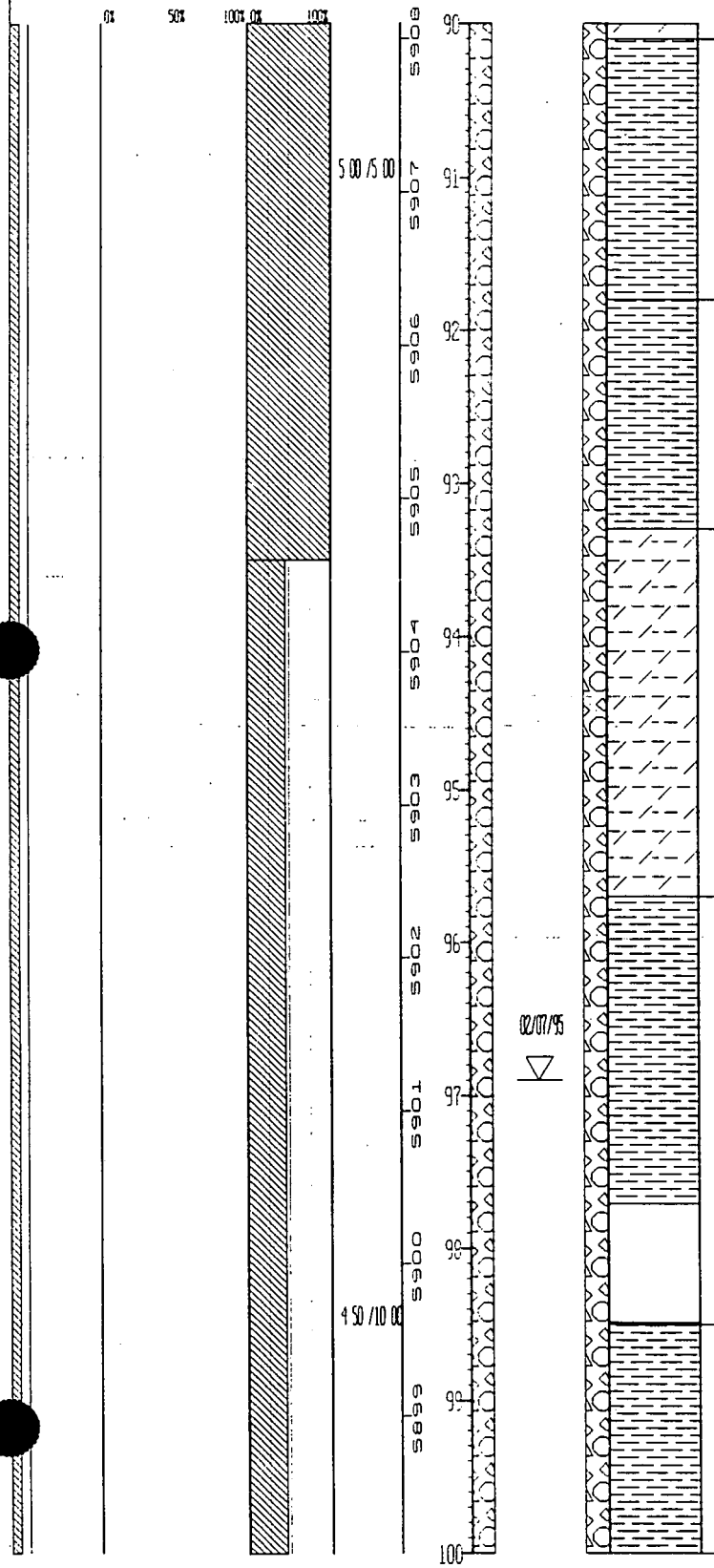
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	80 2'-88 5' Claystone with some Silt Dark gray (N3) to light olive gray (5 Y 6/1) Bedding massvie with some laminations and thin beds. Soft to mod hard Friable to slightly friable. Trace carbonaceous material Core moist
SILTY CLAYSTONE	88 5'-90 1' Silty Claystone. Light olive gray (5 Y 5/2) to olive gray (5 Y 4/1) Thinly laminated Friable to slightly friable. Low porosity Mod. hard

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA 3-SS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATER 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 0-94 9', 113 9-115 1', AND 129 8-131.0'

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	90 1'-91.8' Claystone with some Silt Same as above (reference interval 88 5'-90 1'), with less silt
CLAYSTONE	91 8'-93 3' Claystone Med dark gray (N4) to grayish black (N2). Laminated to thin bedded. Carbonaceous material disseminated and as laminae. Mod friable Slightly plastic
SILTY CLAYSTONE	93 3'-95 7' Silty Claystone Olive gray (5 Y 4/1) Mottled with 5% disseminated carbonaceous material Mod hard. Mod. friable. Low porosity Slightly calcareous
CLAYSTONE	95 7'-97 7' Claystone. Dark gray (N3) Trace carbonaceous material Mod hard Non-friable. Mod. indurated. No recovery (97 7-98 5')
CLAYSTONE	98 5'-100 0' Claystone with some Silt Olive gray (5 Y 4/1) to med dark gray (N4) Massive to thinly laminated (siltstone laminae) Mod hard Mod friable Slightly to mod calcareous Trace to some carbonaceous material

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/19/95	

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

ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129 8-131 0'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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	5998 5997 5996 5995 5994 5993 5992 5991 5990 5989	100 101 102 103 104 105 106 107 108 109 110			CLAYSTONE	100 0'-107 0' Claystone with trace Silt Olive gray (5 Y 4/1) No visible laminae Some carbonaceous material Massive to laminated Slightly friable Slightly calcareous Mod hard 2% silt, 98% clay No recovery (103 0-103 5')
									CLAYSTONE	107 0'-108.5' Claystone with trace Silt Same as above (reference interval 100.0'-107 0') Color changes to dark gray (N3) Appears slightly plastic, with no silt Non-calcareous.
									CLAYSTONE	108 5'-113 5' Claystone Same as above (reference interval 100 0'-107 0) Increase in Silt content from 112.5'-113.5'

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) [illegible] 10	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	A R AGLIARDO	57194
EAST 2092058	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) [illegible]	DATE DRILLED	01/19/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST A F AGLIARDO, J W HARWELL, L A HOST

ADDITIONAL CENTRALIZERS 84 0-84 9', 113.9-115 1', AND 129 8-131 5'

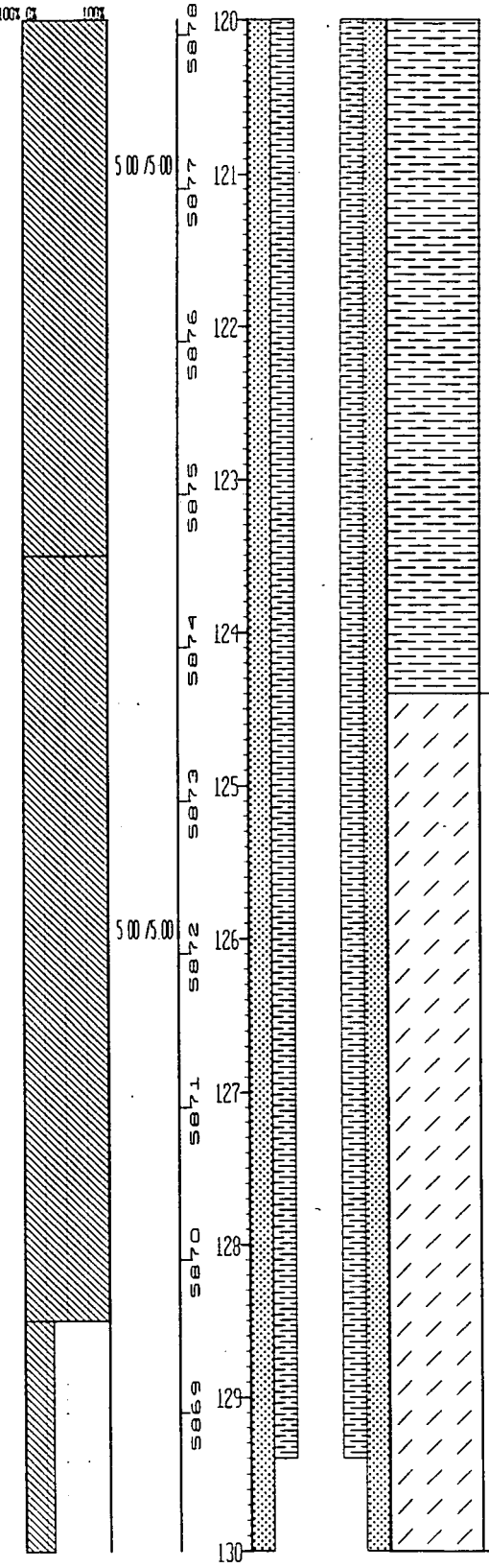
CHEMICAL SAMPLE / GRADATIONAL DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%							
				5 00 /5 00	5888	110				
					5887	111				
					5886	112				
					5885	113				
					5884	114			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.
					5883	115				
				5 00 /5 00	5882	116				
					5881	117				
					5880	118			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
					5879	119			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
						120				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 5299 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED	01/19/95	

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

ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129 8-131 0'

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



SILTSTONE

124 4'-130 2' Siltstone with some Clay. Olive gray (5 Y 4/1) to mod yellowish brown (10 YR 5/4) Trace FeO nodules Laminae slumped, soft sediment deformation structures as well as horizontal (0 to 5 degrees) Trace crossbedding. Thin bedded to laminated. Mod hard to hard Locally very hard Well indurated Slightly friable Mod porosity Upward fining, silt content increases with depth Some to trace leaf and wood imprints (carbonaceous material) Non-calcareous. Some thin claystone interbeds with conchoidal fractures observed from 129 4'-130 0' Trace iron staining
78% silt, 22% clay

No recovery (130 2-133 5')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	095-RFI/RI	LOG OF BORING NUMBER
NORTH	747885	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	57194
EAST	2082008	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/19/95	

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

ADDITIONAL CENTRALIZERS 84 0-84 9', 113 9-115 1', AND 129.8-131 0'

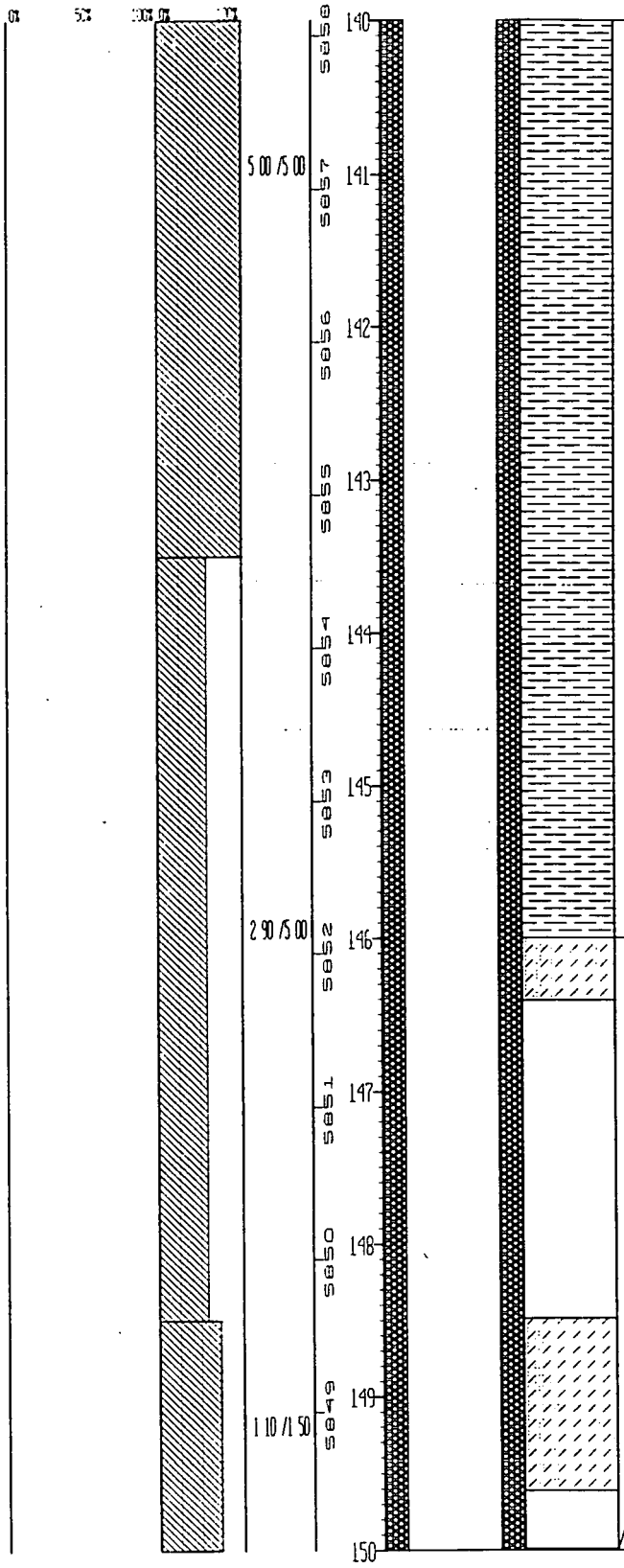
CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				1 70 /5.00	5968	130				
					5967	131				
					5966	132				
					5965	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?)
					5963	135			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')
				3.80 /5 00	5962	136				
					5961	137				
					5960	138				
					5959	139				
						140				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5998 10	PROJECT NUMBER	OU5-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 H 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



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'

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')

Total Depth Drilled 150 00 Total Depth Casing [illegible]
Bottom of Filter Pack 131 40

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT)	6027 40	PROJECT NUMBER	005-RFT/RI
NORTH 747659	AREA 005, 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
	BH00090AS				6027, 6026, 6025, 6024, 6023, 6022, 6021, 6020, 6019, 6018	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10				4 0-8 0' Composite/bulk sample BH00090AS Sample lithology refer to borehole 56893
										Total Depth Drilled 8 00

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT) 5332 20	PROJECT NUMBER	GW5-RFI/RI	LOG OF BORING NUMBER
NORTH 147479	PROJECT SS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57394
EAST 3081988	LOCATION NUMBER 17	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	12/01/94	

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

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

BLOWS/6" INTERVAL: 1 50 / 2 00; 1 00 / 1 00; 0 50 / 1 00; 1 40 / 1 40; 1 00 / 2 00; 1 30 / 2 50

WELL OR PIEZOMETER CONSTRUCTION: 12/01/94

LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	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')
	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
	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, 12% sand, 80% clay No recovery (6 4-7 4')
	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

BH0123HS

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	[illegible]-RFI/RI	LOG OF BORING NUMBER
NORTH 747479	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57394
EAST 2081988	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	[illegible]/01/94	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH00124S			1 90 /2 10	5928 5927	10 11			CLAYSTONE	10 0'-11 9' Claystone with trace Silt Same as above (reference interval 7 4'-10 0') Grayish brown (5 YR 3/2) Dry Trace organics Bedding not apparent No recovery (11 9-12 0')
				2 00 /2 00	5926 5925	12 13			CLAYSTONE	12 0'-16 0' Claystone with trace Silt Same as above (reference interval 7 4-10 0') Slightly to mod weathered Dry Trace organics, carbonaceous material Bedding massive
				2 00 /2 00	5924 5923	14 15				
				1 70 /2 00	5922 5921	16 17			CLAYSTONE	16 0'-17 7' Claystone Dusky yellowish brown (10 YR 2/2) Slightly weathered Dry Thinly laminated to thinly bedded No recovery (17 7-18 0')
				1 80 /2 00	5920 5919	18 19 20			CLAYSTONE	18 0'-19 8' Claystone Olive gray (5 Y 4/1) Becomes unweathered at 19 5' Slightly friable Thinly laminated soft sediment deformation structures (18 0-19 8') No recovery (19 8-20 0')

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 23 00	GROUND ELEVATION (FT)	5938 20	PROJECT NUMBER	005-RFI/RI
NORTH [illegible]479	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
EAST [illegible]1988	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	12/01/94

LOG OF BORING NUMBER 57394

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

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
					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	095-RFI/RI	LOG OF BORING NUMBER
NORTH	1-7711	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 & 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					
					5967	4				
				1 20 /2 00		5				
					5966					
					5965	6			SC	6 0'-7 4' Clayey Sand with some Gravel and trace Silt Mod. yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) At 6 8' color changes to dark yellowish brown (10 YR 4/2) No Fe staining Sand is m g to f g, sub-rounded Gravel is medium to fine, sub-angular Core moist, stiff Low plasticity Bedding not apparent Some Fe nodules from 6.0'-6 8' 14% gravel, 49% sand, 2% silt, 34% clay. No recovery (7 4-8 0')
				1 40 /2 00		7				
					5964					
					5963	8				8 0'-10 5' Silty Clay with trace sand Mod yellowish brown (10YR 5/4) to dark yellowish brown (10YR 4/2) F g sand High plasticity Stiff 4% sand, 46% silt, 50% clay Note Soil classification based on mechanical sieve and hydrometer results from BH00175AS
	BH00175AS			2 40 /2 50		9				
					5962	10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 35 50	GROUND ELEVATION (FT) 5971 40	PROJECT NUMBER	105-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57494
EAST 1082227	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	01/05/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASST 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'-13 [illegible] Top of Bedrock at 10 5' Claystone Core taken for sample According to Well Site Field Log weathered Claystone
				5960	11				
BH00176AS			2 50 /2 50						
				5959	12				
					13			CLAYSTONE	13 0'-16 [illegible] Claystone with some Silt Dark yellowish brown (10 YR 4/2) to med dark gray (N4) to dark yellowish orange (10 YR 6/6) where Fe stained Mod friable Abundt Fe staining including nodules of FeO Trace calcareous material Intact core dense Fragments fissile 90% clay, 10% silt
			1 50 /1 50	5958					
				5957	14				No recovery (16 0-16 5')
					15				
			1 50 /2 00	5956					
				5955	16				
								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
				5954	17				
			2 00 /2 00						
				5953	18				
									No recovery (22 0-22 5')
					19				
BH00177AS			1 50 /2 00	5952					
					20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	5971 40	PROJECT NUMBER	305-RFI/RI
NORTH [illegible]	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN
EAST 1082227	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/05/95

LOG OF BORING NUMBER **57494**

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

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	ELEVATION	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
			5947	24				No recovery (24 0-24 5')
		1 50 /2 00	5946	25			CLAYSTONE	24 5'-26 0' Claystone with some Silt Med 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
			5945	26				No recovery (26 0-26 5')
		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
			5943	28				No recovery (28 2-28 5')
		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 IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57494
EAST	1082227	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%)
PENCENT RECOVERY (0% 100%)
RECOVERY / INTERVAL
DATUM (FT)
DEPTH (FT)
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	30 0'-30 5' Claystone Well defined contact with overlying sediments
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
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
	Total Depth Drilled 36.50

Recovery / Interval: 2 00 /2 00; 2 00 /2 00; 2 00 /2 00

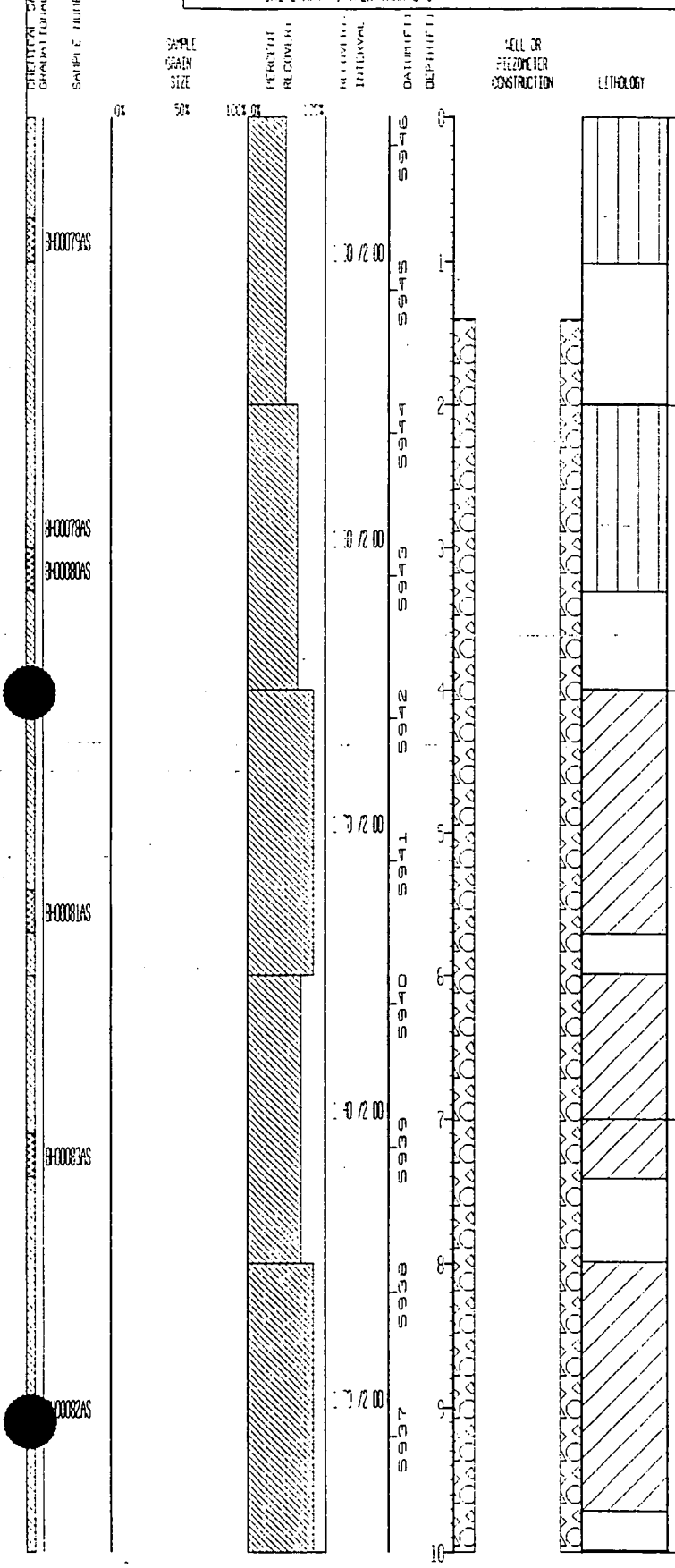
Depth (FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

Datum (FT): 5941, 5940, 5939, 5938, 5937, 5936, 5935, 5934, 5933, 5932

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	[illegible]	PROJECT NUMBER	005-RFI/RI
NORTH	[illegible]	AREA IHSS 115		CASING DIAMETER (IN)	[illegible]	GEOLOGIST	J W HARWELL
EAST	[illegible]	LOCATOR NUMBER	[illegible]	BOREHOLE DIAMETER (IN)	[illegible]	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 AN: FURTHER THAN 0 3'



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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	365-RFI/RI	LOG OF BORING NUMBER
NORTH	74590	AREA THSS 115	CASING DIAMETER (IN)	5 00	GEOLOGIST	J W HARWELL	57594
EAST	2082153	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 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	5936	10			CL	10 0'-13 5' Clay with some Silt Mottled pale olive gray (10 Y 6/2), dusky brown (5 YR 2/2) and dark yellowish orange (10 YR 6/6) Strongly brecciated with claystone fragments, fine to coarse gravel size, angular with some angular ironstone clasts, trace organics and caliche 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
					5935	11				
				1 70 /2 00	5934	12				
					5933	13				
				2 00 /2 00	5932	14			CL	13 5'-14 25' Gravelly Clay Mottled dark yellowish orange (10 YR 6/6), mod yellowish brown (10 YR 5/4) and light olive gray (5 Y 6/1) Soft to stiff Wet to saturated Fine to coarse gravel, angular to sub-rounded F g to c g sand, sub-rounded to sub-angular, predom metamorphic gneiss and quartzite 27% gravel, 10% sand, 9% silt, 54% clay No recovery (13 7-14 0')
					5931	15				
									CL	14 25'-16 0' Clay, (landslide breccia) Same as above (reference interval 10 0'-13 5')
	3H00084S				5930	16			CL	16 0'-16 5' Gravelly Clay Same as above (reference interval 13 5'-14 25') Possible slough
				2 10 /2 00	5929	17			CLAYSTONE	16 5'-20 0' Top of Weathered Bedrock at 16 5' Claystone Mod weathered Some dark yellowish orange (10 YR 6/6), predom yellow gray (5 Y 7/2) to med gray (N5) Some carbonaceous material Bedding massive Hard Mod indurated Moist 80 degree open fractures with MnO2 and FeO2 from 16 75' to 17 8' and 17 8' to 19 25' 60 degree fracture, open from 19 25' to 19 75' 0 degree horizontal fracture at 19 9'
					5928	18				
				2 00 /2 00	5927	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	[illegible]	GROUND ELEVATION (FT)	5946.20	PROJECT NUMBER	[illegible]
NORTH	747590	AREA (HSS)	[illegible]	CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	1082153	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 ASSIGNED GEOLOGIST J. W. HARWELL PROTECTIVE CASING LENGTH 3.0' GROUND WAS TO HARD TO DRIVE ANY FURTHER THAN 0.3'

SAMPLE NUMBER	SAMPLE DRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH00085AS				5926	20				20.0'-20.6' Core in box is grout from setting surface casing
				5925	21			NO RECOVERY	No recovery (20.6-24.9')
			0.60/4.90	5924	22				
				5923	23				
				5922	24				
				5921	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 No recovery (28.0-30.0')
				5920	26				
			3.10/5.00	5919	27				
				5918	28				
				5917	29				
					30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104 90	GROUND ELEVATION (FT)	5946 20	PROJECT NUMBER	[illegible]	LOG OF BORING NUMBER
NORTH	1-7590	AREA (MSS) 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	1382153	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'

CRITICAL SAMPLE DEPTH (GRADATION)	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PENETRATION RESISTANCE	RECOVERY / INTERVAL	DRILLING TIME (MIN/FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 50%			30			CLAYSTONE	30 0'-37 7' Claystone Same as above (reference interval 24 9'-28 9') Med dark gray (N4) Slickensides at 33 5', approx 60 degrees At 33 7' amount of organics decreases to trace amount Fractured Very stiff Slightly friable Massive
				4 20 / 5 00	5 9 1 1	31				No recovery (34 1-34 9'), and (37 9-40 0')
					5 9 1 2	32				
					5 9 1 3	33				
					5 9 1 4	34				
					5 9 1 5	35				
					5 9 1 6	36				
				3 00 / 5 00	5 9 6 5	37				
					5 9 6 6	38				
					5 9 6 7	39				
						40				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 104.90	GROUND ELEVATION (FT) 5046.20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH 747590	AREA IAGS 115	CASING DIAMETER (IN) 2.00	GEOLOGIST	J W HARWELL	57594
EAST 1082153	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 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			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
					5906					
					5905	41				
				3.40/5.00	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')

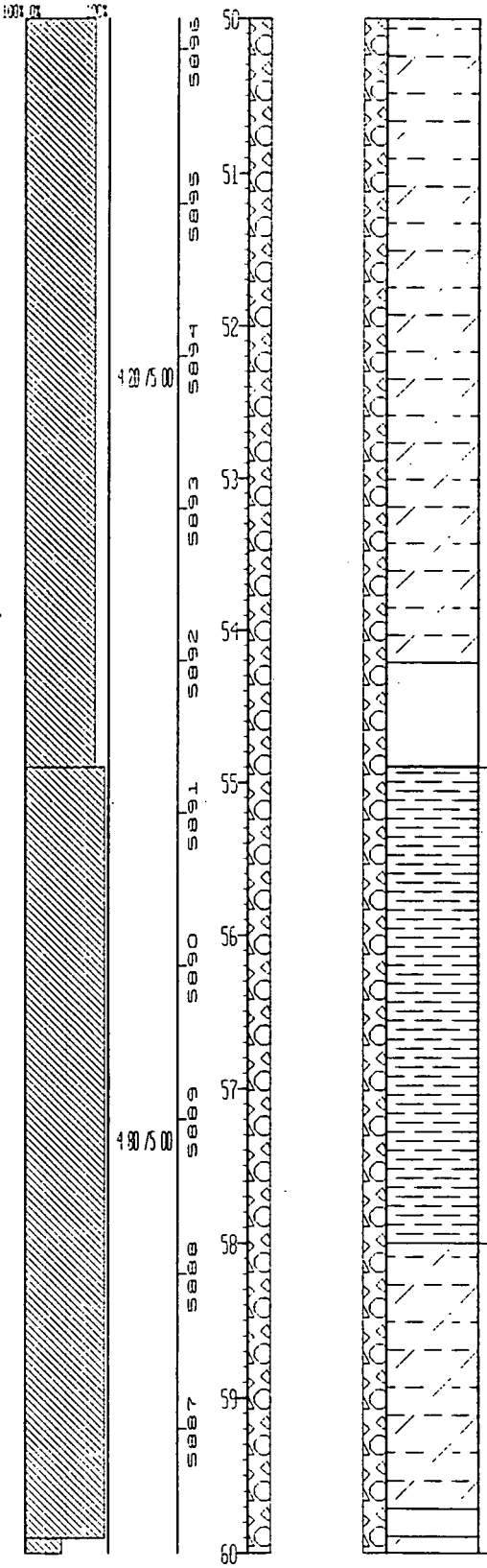
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 104.90		GROUND ELEVATION (FT)	5946.20	PROJECT NUMBER	OU5-RFI/PI
NORTH	747590	AREA THSS 115		CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	2082153	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5.50	DATE DRILLED	11/08/94

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'

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%

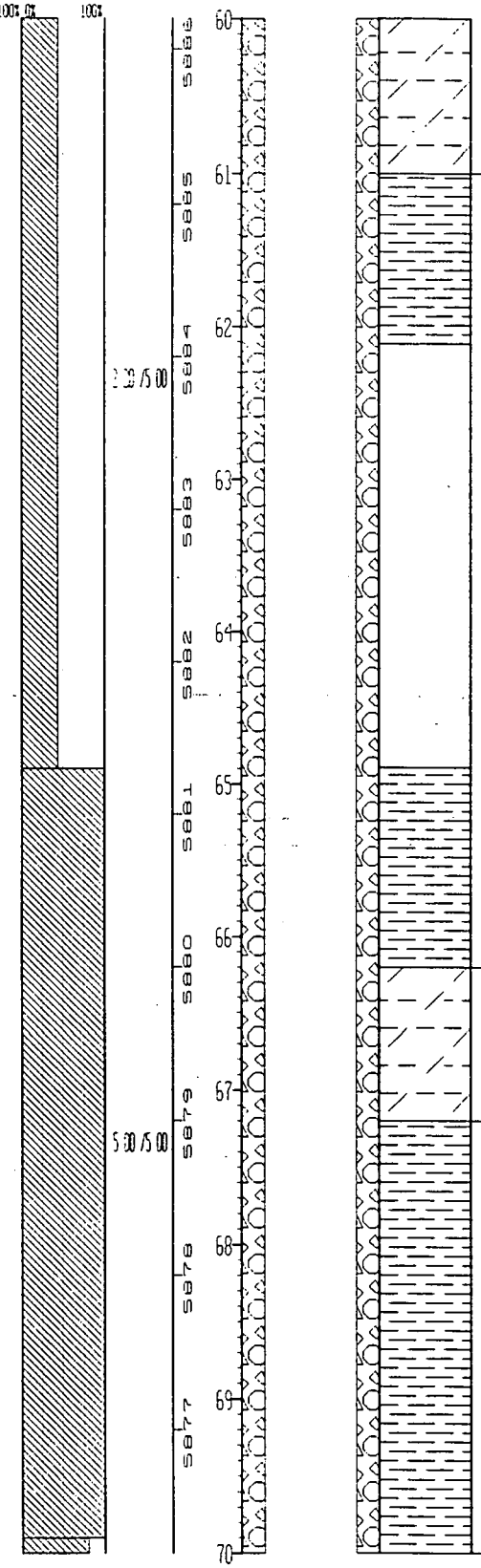


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	54.9'-58.0' Claystone Med dark gray (N4) Unweathered Sediments appear slightly disturbed Slickensides abundt through interval at 55.5', 55.7' and 56.3', almost vertical at 80 degrees (approx.)
SILTY CLAYSTONE	58.0'-61.0' Silty Claystone 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)	554 20	PROJECT NUMBER	115-RFI/RI	LOG OF BORING NUMBER
NORTH	747590	AREA BASS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	57594
EAST	2082153	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 20	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 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



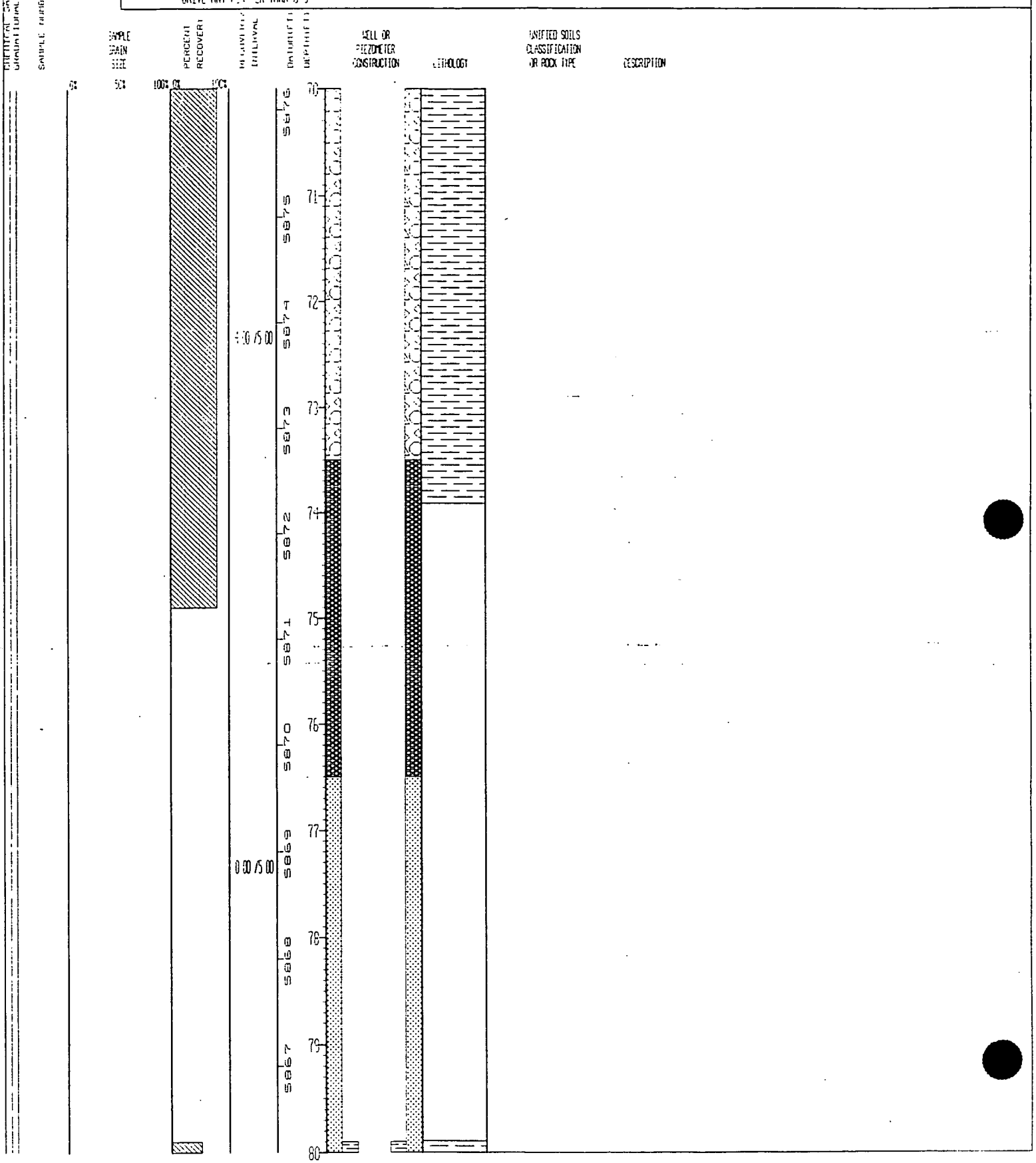
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	61 0'-66 2' Claystone Same as above (reference interval 54 9'-58 0') No recovery (62 1-64 9')
SILTY CLAYSTONE	66 2'-67 2' Silty Claystone Same as above (reference interval 50 0'-54 2')
CLAYSTONE	67 2'-80 7' Claystone Same as above (reference interval 54 9'-58 0') Some fractures Sand on outside of core due to the addition of sand to the borehole to aid in the retrieval of drill rod (see WSFL) Massive to thinly bedded in areas Slickensides at 69 2', approx 80 degrees Some organics Exhibits conchoidal fracture No recovery (73 9-79 9'), and (80 7-81 4')

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	104.93	GROUND ELEVATION (FT)	5946.20	PROJECT NUMBER	005-RFI/RI
NORTH	747590	AREA	IASS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J W HARWELL
EAST	0082153	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) 134.30	GROUND ELEVATION (FT) 5946.20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 745590	AREA DASS 115	CASING DIAMETER (IN) 2.90	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 ASI GIS 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
0% 50% 100%	0% 100%	0.80 / 1.50	5966	80				
			5965	81				
			5964	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	5963	83				
			5962	84				
			5961	85			CLAYEY SANDSTONE	84.9'-90.0' Clayey Sandstone Med dark gray (N4) Sand is v f g, rounded to sub-rounded, well sorted Massive to laminated Well cemented Local crossbedding Exhibits conchoidal fracture at 87.8', 89.2' and 89.8' in thin claystone laminae and thin claystone interbeds, nearly horizontal
			5960	86				
		5.00 / 5.00	5959	87				
			5958	88				
			5957	89				
				90				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) [illegible]	GROUND ELEVATION (FT) [illegible]	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH [illegible]590	AREA EHSS 115	CASING DIAMETER (IN) [illegible]	GEOLOGIST	J W HARWELL	57594
EAST 1282153	LOCATOR NUMBER [illegible]	BOREHOLE DIAMETER (IN) 5 50	DATE DRILLED	11/08/94	

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'

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			5856	90			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')
			5855	91				
		5 00 /5 00	5854	92				
			5853	93				
			5852	94				
			5851	95				
			5850	96				
		4 30 /5 00	5849	97				
			5848	98				
			5847	99				
				100				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 104.90	GROUND ELEVATION (FT)	5846.20	PROJECT NUMBER	[illegible]
NORTH 747590	AREA IHSS 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'

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				4.30/5.00	5846	100			CLAYSTONE	100.0'-104.2' Claystone with trace silt. Same as above (reference interval 90.0'-99.2'). Visible silty interbeds and laminae. Thinly bedded to massive. Some organics. Dry. Well consolidated, very hard. Some calcareous material. Some clasts of clay. No recovery (140.2-104.9')
					5845	101				
					5844	102				
					5843	103				
					5842	104				
					5841	105				Total Depth Drilled 104.90 Total Depth Casing 92.20 Bottom of Filter Pack 92.20
					5840	106				
					5839	107				
					5838	108				
					5837	109				
						110				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	[illegible] 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747595	[illegible] THSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	57694
EAST	2082495	[illegible] NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/27/95	

REMARKS DRILLING EQUIPMENT MOBILE [illegible] B-57 ASI RIG GEOLOGIST P J JORDAN

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	SC	0 0'-3 9' Clayey Sand with some Gravel and trace Silt Dark yellowish brown (10 YR 4/2) to mod yellowish brown (10 YR 5/4) Sand is m g to f g, angular to sub-angular, poorly graded Gravel is predom fine, trace coarse, angular, avg size 0 50 in Core is moist according to Well Site Field Log Dry, dense and indurated Low plasticity 6% gravel, 60% sand, 2% silt, 32% clay No recovery (3 9-4 0')
	BH00197AS			1 90 /2 00		
				1 30 /2 00	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			2 00 /2 00	CLAYSTONE	6 0'-10 0' Claystone. Same as above (reference interval 4 0'-5 3') Becomes mod weathered claystone Some Fe stained fractures Core is dry (Interval description taken from Well Site Field Log- all core was taken for sample) Note Atlerberg limit/plasticity data for BH00199AS for 8 0-10 0' interval indicates material is ch
	BH00199AS			2 00 /2 00		

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT) 5946 20	PROJECT NUMBER 615-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7595	AREA THSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57694
EAST	2382495	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 01/27/95	

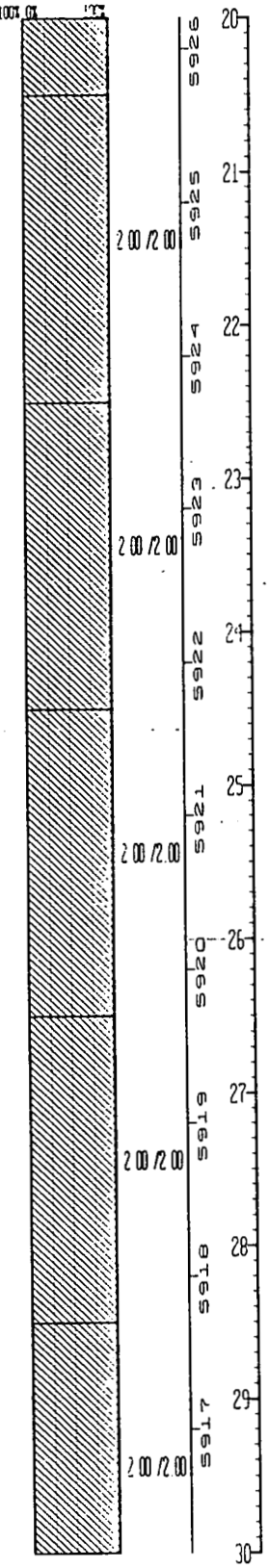
REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST P J JORDAN.

CHEMICAL DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE SPAN	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	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
					5935	11				No recovery (11.5-12.0')
				2 00 /2 00	5934	12			CLAYSTONE	12 0'-17 3' Claystone Dark gray (N3) to grayish black (N2) Dry to moist Slightly friable Stuff from 14 0' to 14 25' Some black carbonaceous material at 14 9' Mod fractured at 14 9' to 15 1' Slickensides, 35 degress (approx.); with FeO2 staining at 16 5'
	BH00200AS				5933	13				No recovery (17 3-18.5')
				2 00 /2.00	5932	14				
	BH00201AS				5931	15				
				1.30 /1.50	5930	16				
					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 [illegible]	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST P J JORDAN	57694
EAST 2082395	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 01/27/95	

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

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER
SAMPLE GRAIN SIZE (0% 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	22 5'-24 5' Claystone Mod yellowish brown (10 YR 5/4) Mod to highly weathered. Trace Fe nodules up to 3mm Strongly disturbed from Moss Sampler
CLAYSTONE	24 5'-28.5' Claystone. Olive gray (5 Y 4/1) Non- to slightly weathered Trace FeO2 staining. Strongly disturbed from Moss Sampler. Claystone becomes mod to slightly weathered at 26 5' Trace FeO2 and MnO2 staining
SILTY CLAYSTONE	28 5'-32.4' Silty Claystone. Dark yellowish brown (10 YR 4/2) Mod weathered Some Fe staining and siltstone or Fe nodules up to 1 cm Indurated From 28.5' to 29 5' core more highly disturbed from Moss Sampler From 29 5' to 30 5' less disturbed and thin to thick laminae with FeO2 staining along silty laminae

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 36 50	GROUND ELEVATION (FT)	[illegible] 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747595	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	57694
EAST	2082495	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/27/95	

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

CHEMICAL S[illegible] DEPTH
GRADATIONAL [illegible] DEPTH

SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 2 00 /2 00; 1 50 /2 00; 2 00 /2 00

DATUM (FT): 5916, 5915, 5914, 5913, 5912, 5911, 5910, 5909, 5908, 5907

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

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYSTONE	32.4'-33 5' Claystone Black (N1) Some lignite/carbonaceous material Slightly to non- weathered Core mod. disturbed from Moss Sampler Slickensides, approx. 30 degrees, at 33 5' Dry
CLAYSTONE	33 5'-36.5' Claystone. Dark gray (N3) - Appears laminated where not strongly disturbed by Moss Sampler No recovery (34.0-34.5').
	Total Depth Drilled 36 50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 29 00	GROUND ELEVATION (FT) 5985 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747509	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	57794
EAST	2081114	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED	12/06/94	

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

CHEMICAL SAMPLE DEPTH (MANUFACTURING LABORATORY)	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	5985 5984	0 1 2			CL	0 0'-2 5' Sandy Clay with trace Silt Dark yellowish brown (10 YR 4/2) to grayish brown (5 YR 3/2) Sand is f g to v f g, sub-rounded to rounded, poorly graded. Abundt caliche from 1.0'-2 0', med grained nodules Lots of roots Dry Dense. Stiff Low to med plasticity 38% sand, 2% silt, 60% clay
	BH00129AS			2 00 /2.00	5983 5982	3 4			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
	BH00129AS			1 50 /2.00	5981 5980	5 6				
				1.60 /2.00	5979 5978	7 8			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')
	BH00130AS			2 50 /2.50	5977 5976	9 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 DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 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

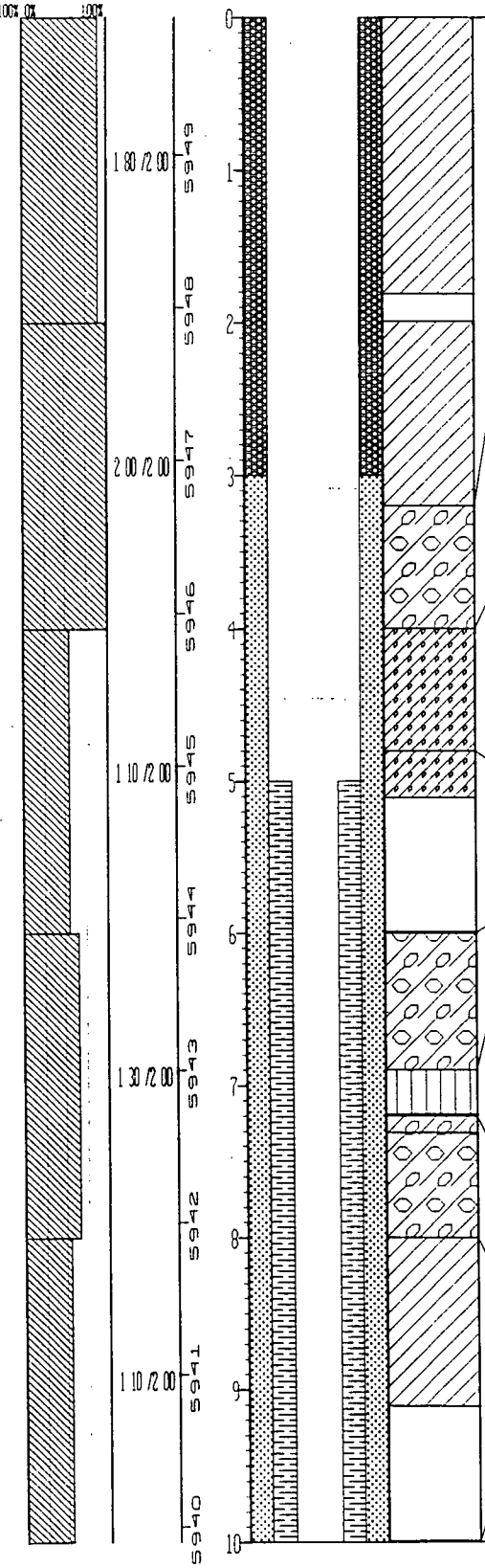
CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0% 50%	100% 0% 100%	2.00 /2.00		20			CLAYSTONE	20 0'-27 0' Claystone with some Silt Same as above (reference interval (18 0'-20 0') At 23 0' horizontal layer, 0 25 in thick of black organic material Disturbed sedimetation At 24 0' nodules of Fe oxide Abundt Fe staining Fractures, 80 degrees, Fe stainind Disturbed sedimentation Mottled appearance At around 26 0', slumping appears to show some crossbedding to 27 0'
			5965	21				
		2 00 /2 00	5964	22				
			5963	23				
		2 00 /2.00	5962	24				
			5961	25				
		2.00 /2.00	5960	26				
			5959	27			CLAYSTONE	27 0'-29 0' Unweathered Claystone Dark gray (N3) to med gray (N5) Trace Fe staining at 27 0' Some silty lenses Some disturbed sedimentation to 28 0'. At 28 0' bedding massive to 29 0' 100% clay
		2 00 /2 00	5958	28				
			5957	29				Total Depth Drilled 29 00
			5956	30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT)	5949 90	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747565	AREA IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	57894
EAST	2081741	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	09/27/94	

REMARKS: DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL AND L A HOST

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	0 0-3 2' Sandy Clay with trace Gravel Pale yellowish brown (10 YR 6/2) and dark yellowish orange (10 YR 6/6) grades to dark yellowish brown (10 YR 4/2) Some Mn staining and FeO staining Sand is f g, well sorted, sub-angular Bedding massive. Low plasticity Core is stiff and dry. 2% gravel, 22% sand, 76% clay No recovery (1.8-2 0')
GC	3 2'-4 0' Sandy Gravel with some Clay Matrix is pale yellowish brown (10 YR 6/2) Sand is m g to f g, well graded, sub angular to sub-rounded Gravel is coarse to fine, max 0.50 in, sub-angular. Core massive Low plasticity. Dry 53% gravel, 36% sand, 11% clay
SC	4 0'-4 8' There is no core in core box representing this interval. Sample description taken from the Well Site Field Log. Sand. Very pale orange (10 YR 8/2) to grayish orange (10 YR 7/4) grading to mod. yellowish brown (10 YR 5/4) at 4 4'.
SC	4 8'-5 1' Clayey Sand. Sand is sub-angular to sub-rounded, well sorted throughout interval No recovery (5.1-6 0')
GC	6 0'-6 9' Sandy Gravel Same as above (reference interval 3 2'-4 0')
ML	6 9'-7 2' Sandy Silt with trace Gravel and some Clay Brownish black (5 YR 2/1). Gravel is fine, sub-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 [illegible]
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	74547	AREA THSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	57994
EAST	2082266	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/07/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL.

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

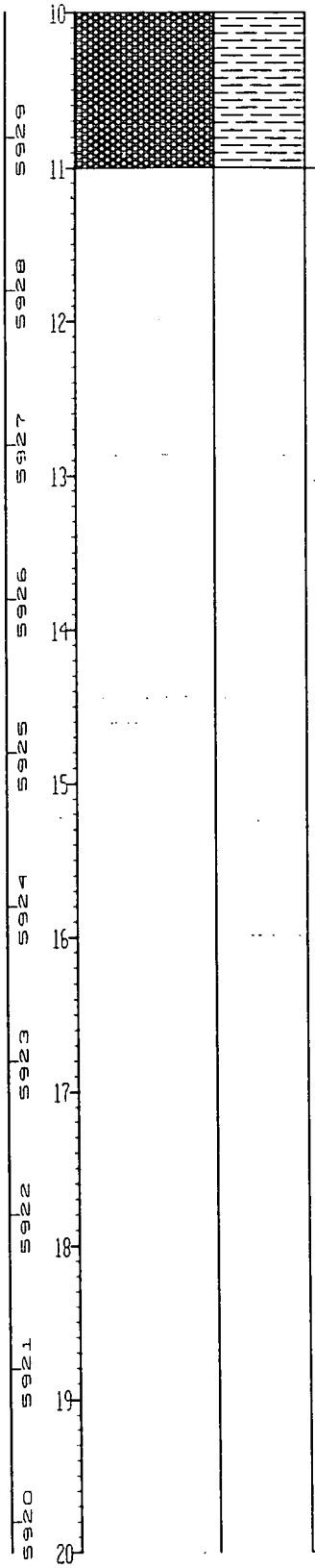
SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			1 00 /1 00	5939	0			SM	0 0'-0 5' Silty Sand with abundt. Gravel Dark yellowish brown (10 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
GH00044AS			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')
GH00047AS				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')
GH00049AS			1 00 /2 00	5936	4				
				5935	5				
GH00046AS			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	LOG OF BORING NUMBER
NORTH	745547	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



Total Depth Drilled 11 00 Total Depth Casing 7 00
Bottom of Filter Pack 7 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 12 00	GROUND ELEVATION (FT) 5929 60	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747452	AREA IHSS 115	CASING DIAMETER (IN) 2 50	GEOLOGIST L A HOST	58094
EAST	2082247	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED 10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST L A HOST

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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')
	GH0006IAS			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 IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	L A HOST	58094
EAST	2082247	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/12/94	

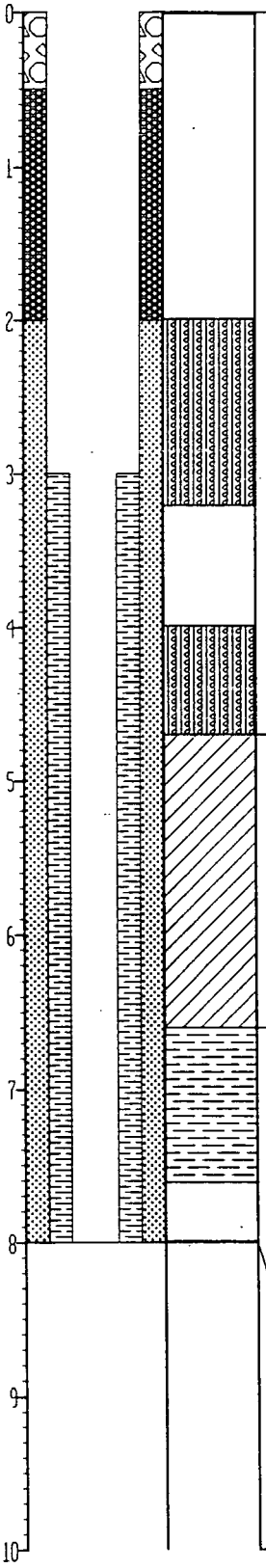
REMARKS DRILLING EQUIPMENT HURRICANE RIG GEOLOGIST L A HOST

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 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	005-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]-7493	AREA IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	58194
EAST	[illegible]382380	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL.

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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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

BH00062AS

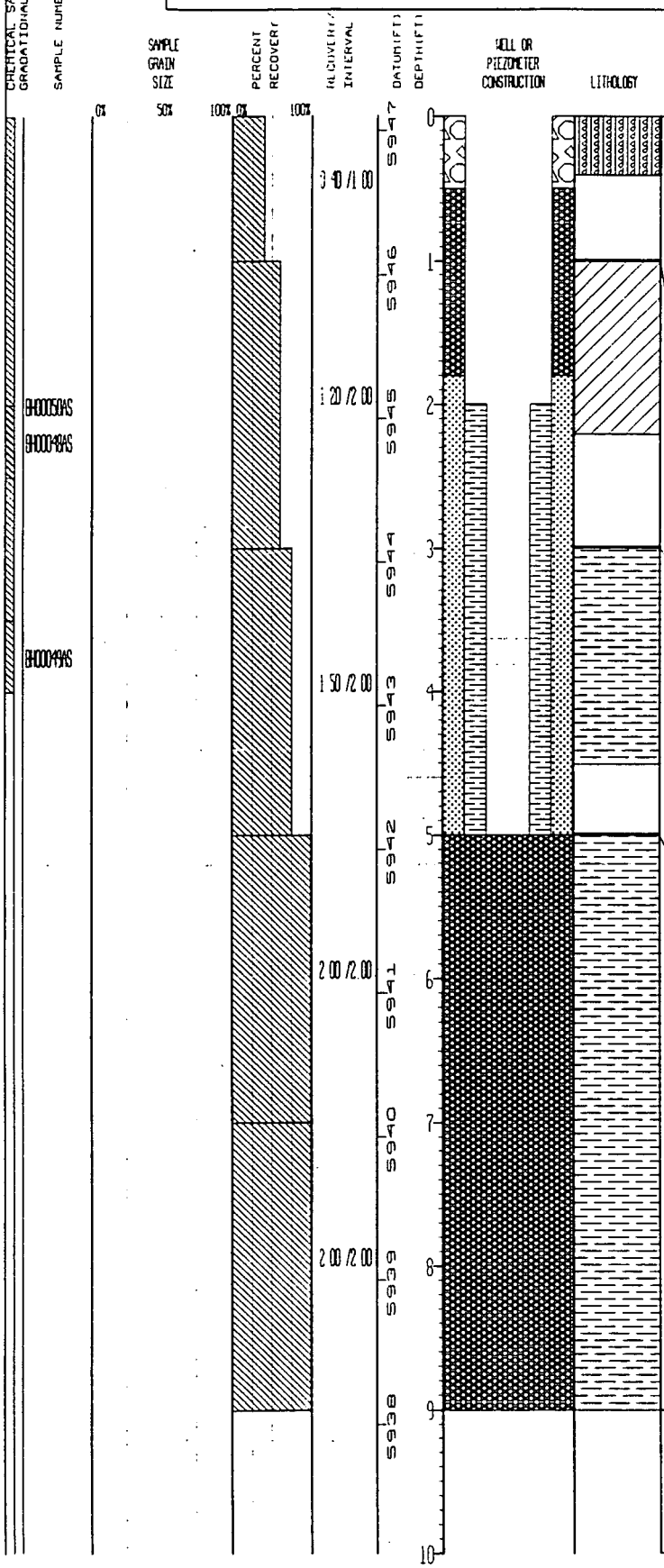
STATE PLANE COORDINATE	TOTAL DEPTH (FT) 4 00	GROUND ELEVATION (FT) 5928 60	PROJECT NUMBER	[illegible]5-RFI/RI	LOG OF BORING NUMBER
NORTH 747493	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	L A HOST	58194A
EAST 2082380	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED	10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST L A HOST OFFSET HOLE FROM LOCATION 58194

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (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 50 /2 00	5928, 5927	0, 1			[illegible]	0 0'-1 5' Silty Sand and Gravel Very pale orange (10 YR 8/2) Pulverized rock Trace topsoil Note Sample description taken from Well Site Field Log No recovery (1 5-2 0')
	BH00062AS			0 80 /2 00	5926, 5925	2, 3			[illegible]	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	4, 5			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	6, 7, 8, 9, 10				Total Depth Drilled 4.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9 00	GROUND ELEVATION (FT)	5947 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747566	AREA IHSS 115	CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL	58294
EAST	2082404	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/07/94	

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL



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 747981	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST	J W HARWELL	58394
EAST 2082009	LOCATION 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

SAMPLE NUMBER	RECOVERY/INTERVAL	ELEVATION (FT)	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
BH00223AS	1 00 /1 40	5997	GC	0 0'-2 9' Gravelly Sand with Clay Dark yellowish brown (10 YR 4/2) to pale yellowish brown (10 YR 6/2) with some dark yellowish orange (10 YR 6/6) where Fe stained. Massive. Dry Some glass shards and rusted metallic debris along with several cobbles (fill material) (gc-sc) No recovery (1 0-1 4') and (2 9-3 8')
BH00224AS	1 50 /1 50	5996 5995		
	0 00 /0 40 0 00 /0.50	5994		
BH00225AS	0 50 /1.60	5993	GC NO RECOVERY	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' 4 3'-5 5' Estimated Top of weathered Bedrock at 5 3' from 57194 No recovery (4 3-5 5')
	0 00 /0 10	5992		
BH00226AS	1 75 /2 00	5991	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 5989 5988	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')

Total Depth Drilled: 9 50 Total Depth Casing 7 45
Bottom of Filter Pack 7 40

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT) 5994 80	PROJECT NUMBER 005-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	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	5994	0 1			SC	0 0'-1 75' No core in core box representing this interval Sample description has been taken from the Well Site Field Log. Clayey Sand Moderate yellowish brown (10 YR 5/4) Sand is c g to f g Massive, dry Some gravel (crushed rock at 0 6 in) Color grades to moderate brown (5 YR 3/4) at 0 6 in Low plasticity
	BH00065AS			1 30 /2 00	5993	2			CL	1 75'-2.3' Sandy Clay with trace Gravel Pale yellowish brown (10 YR 6/2), trace dark reddish brown (10 YR 3/4) staining Trace carbonaceous material Sand is m g to f g , well graded, sub-angular to sub-rounded Low plasticity Core stiff Dense Bedding massive Some micaceous material No recovery (2 3-3 0')
	BH00068AS				5992	3			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')
	BH00066AS			1 80 /2 00	5991	4				
					5990	5			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')
	BH00067AS			1.70 /2.00	5989	6			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')
					5988	7				
	BH00071AS			1 70 /2 00	5987	8			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
	BH00069AS				5986	9	11/21/94			
	BH00070AS			2 00 /2 00	5985	10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 13 00	GROUND ELEVATION (FT)	5994 80	PROJECT NUMBER	005-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 90	DATE DRILLED	10/13/94	

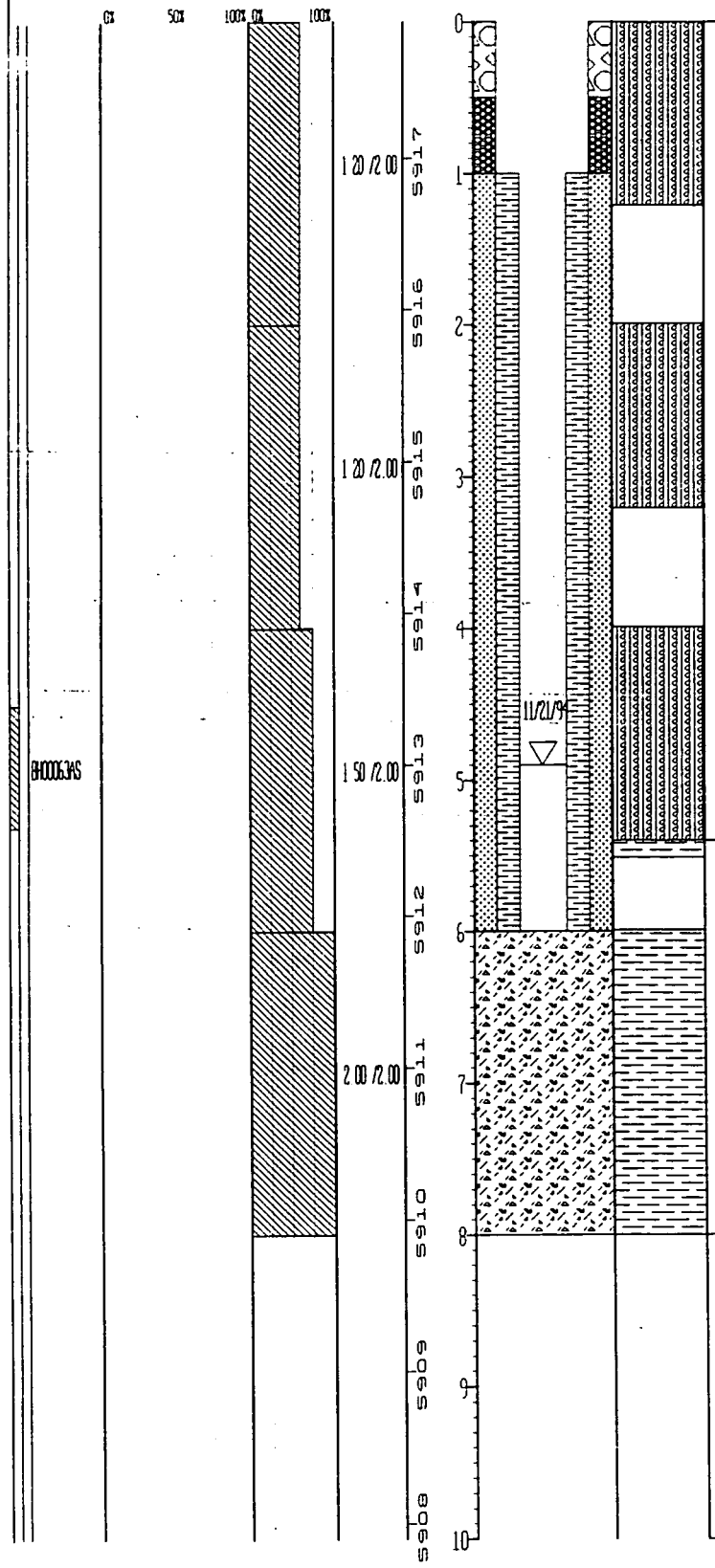
REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL.

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	5984	10				
					5983	11				
				2 00 /2 00	5982	12			SC	12.25'-12 75' Sandy Clay
					5981	13			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.
					5980	14				Total Depth Drilled 13.00 Total Depth Casing 10 00 Bottom of Filter Pack 10 00
					5979	15				
					5978	16				
					5977	17				
					5976	18				
					5975	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 8 00	GROUND ELEVATION (FT) [illegible] 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] 50	DATE DRILLED	10/12/94	

REMARKS DRILLING EQUIPMENT HURRICANE [illegible]ST 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



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 Stuff 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

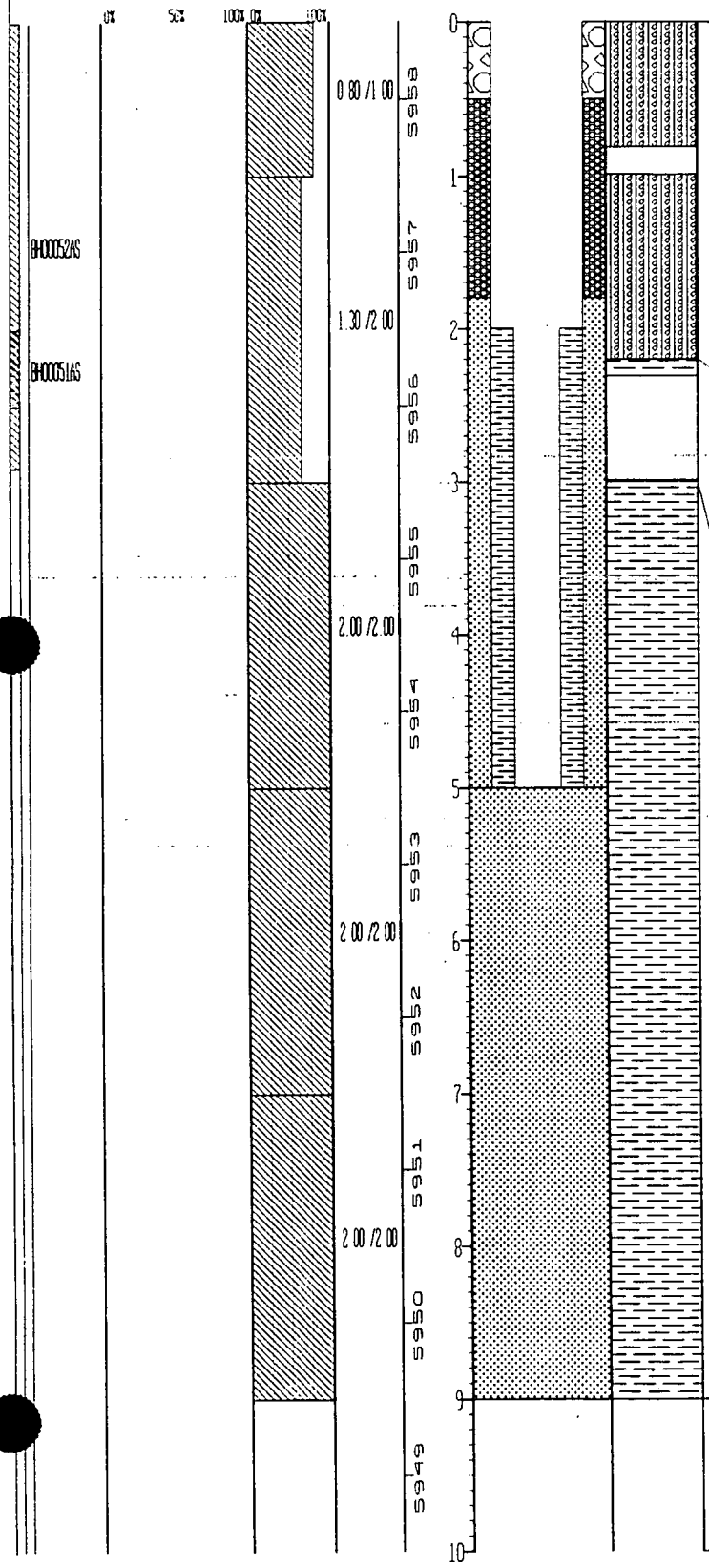
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9 00		GROUND ELEVATION (FT)	5958 50	PROJECT NUMBER	OU5-RFI/RI
NORTH	747670	AREA IHSS 115		CASING DIAMETER (IN)	0 50	GEOLOGIST	J W HARWELL
EAST	2082718	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/07/94

LOG OF BORING NUMBER

58694

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 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')
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')
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

Total Depth Drilled 9 00 Total Depth Casing 5 00
Bottom of Filter Pack 5 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 9 00	GROUND ELEVATION (FT) 5957 60	PROJECT NUMBER 905-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
		0% 50% 100%	0% 100%					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
	BH00549S			1 00 /1 00	5957				
					5956				
	BH00539S			1 60 /2 00				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
					5955				No recovery (2 6-3 0')
					5954			CLAYSTONE	3 0'-9 0' Claystone Same as above (reference interval 1 95'-2.6') Core is indurated. At 8 0' core is highly weathered. FeO along almost vertical fracture from 8 25'-8 75' Some caliche Bedding massive Color grades to more med. gray (N5). Slough at 5 0-5 1' and 7 0'-7 25' 100% claystone.
				2.00 /2 00					
					5953				
					5952				
				2.00 /2.00					
					5951				
					5950				
				2 00 /2 00					
					5949				
					5948				

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
NORTH 747419	AREA IHSS 133	CASING DIAMETER (IN)		GEOLOGIST	J W HARWELL
EAST 2078777	LOCATOR NUMBER F7	BOREHOLE DIAMETER (IN)	1 40	DATE DRILLED	10/13/94

LOG OF BORING NUMBER **58894**

REMARKS DRILLING EQUIPMENT HURRICANE ASI RIG GEOLOGIST J W HARWELL. CORE FROM 0 0'-2 7' WAS TAKEN FOR SAMPLES, THEREFORE ALL DESCRIPTIONS ARE BASED ON WELL SITE FIELD LOG

CHEMICAL SAMPLE DEPTH / GRADATION 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
	BH00064S			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				
					6035	9				Total Depth Drilled 8.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT)	5952 10	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747523	AREA THSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	58994
EAST	2081476	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	12/05/94	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5952	0			GC	0 0'-4 5' Sandy Gravel with some Clay and trace Silt Dark yellowish brown (10 YR 4/2) Gravel max 2 0 in , avg 0 75 in fine to coarse, sub-angular to sub-rounded Sand is c g to f g., well graded, sub-angular to sub-rounded Upper 0 2 in , top soil, roots Low plasticity Dense Becomes wet at 4 4', perched water on top of bedrock 51% gravel, 38% sand, 9% clay, 2% silt No recovery (0 5-2 0'), (2 0-3 0'), and (3.5-4 3')
				0 50 /2 00	5951	1				
					5950	2				
				0 00 /1 00						
					5949	3				
				0 50 /1 00						
				0 00 /0 30	5948	4				
					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')
				1 00 /2.00						
					5946	6				
					5945	7				
	BH0012GAS			1 60 /2.50						
					5944	8				
				0 00 /0 50	5943	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 19 30	GROUND ELEVATION (FT) 5952 10	PROJECT NUMBER 305-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	

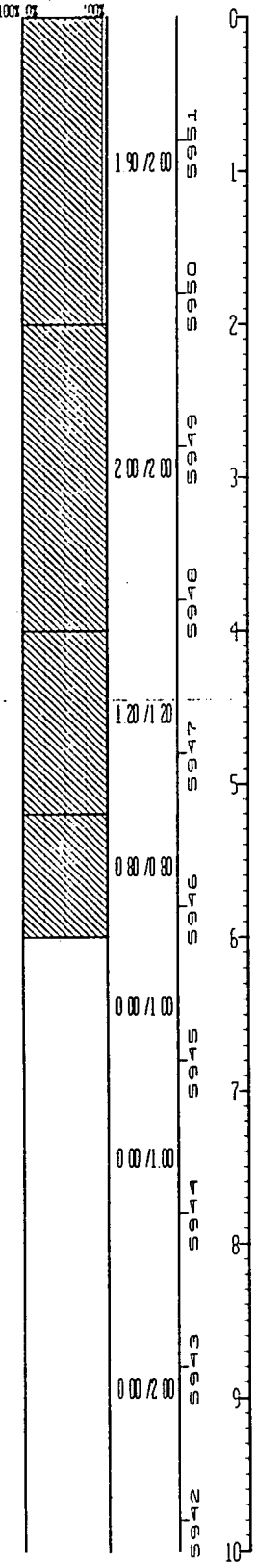
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN

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 No recovery (12 4-13.3'), and (14 6-14 8')
					5941	11				
				1 30 /1 30	5940	12				
				0 00 /0 90	5939	13				
				0 80 /1 00	5938	14				
				2 00 /2.00	5937	15				
					5936	16				
				1 50 /2.00	5935	17			SILTY CLAYSTONE	16 3'-19.3' Top of Unweathered Bedrock at 16 3' Silty Claystone. Olive gray (5 Y 4/1) Very hard Broken and disturbed from Moss sampler Damp Hard No recovery (17 8-18 3')
					5934	18				
				1 00 /1 00	5933	19				
						20				Total Depth Drilled 19 30

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 17 00	GROUND ELEVATION (FT) 5951 80	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH 7565	AREA IHSS 115	CASING DIAMETER (IN)	GEOLOGIST	P J JORDAN	59094
EAST 381609	LOCATOR NUMBER E7	BOREHOLE DIAMETER (IN) 8 00	DATE DRILLED	01/30/95	

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

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

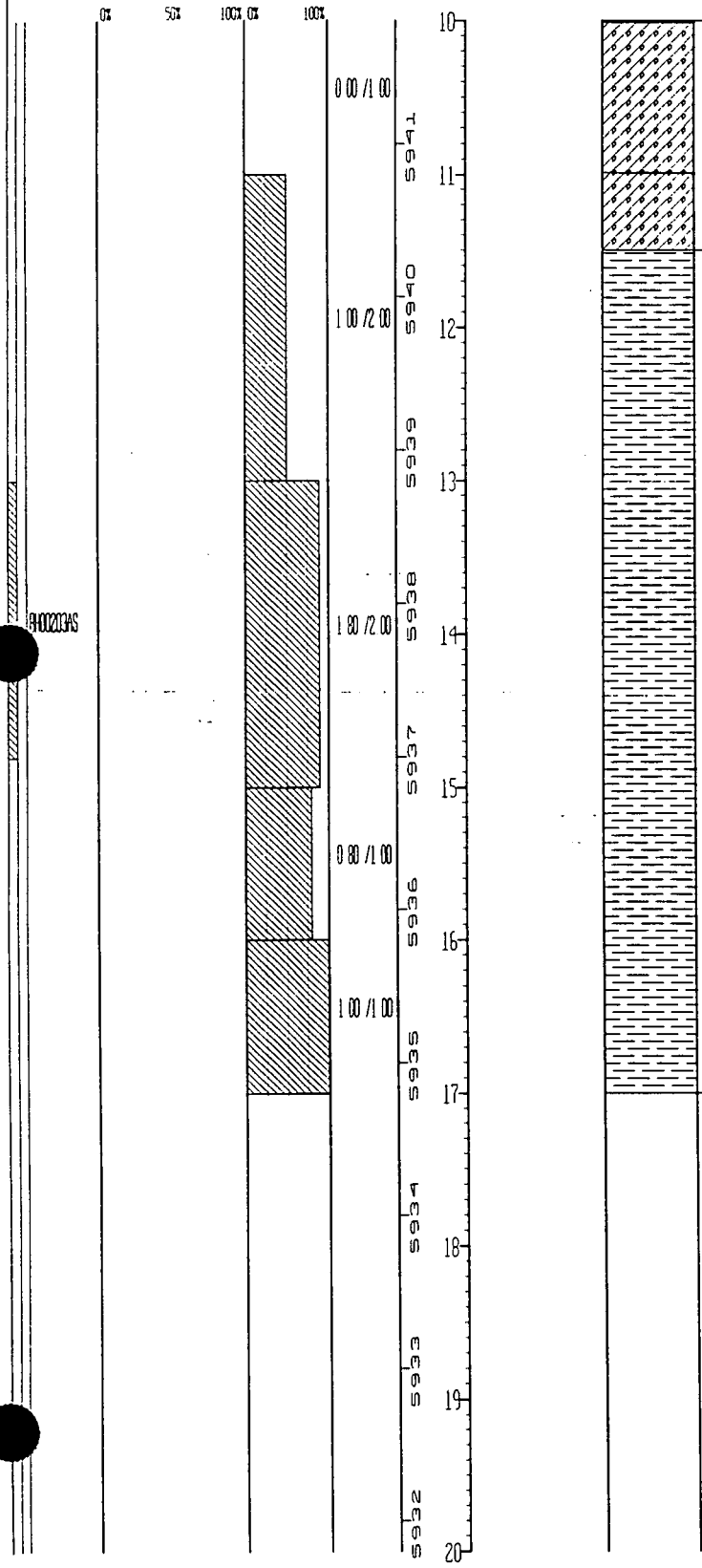


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	0 0'-2 2' Gravelly Sand with some Clay and trace Silt Mod brown (5 YR 3/4) to pale yellowish orange (10 YR 8/6) Grades to pale olive (10 Y 6/2) matrix with some mod yellowish brown (10 YR 5/4) at 1 0' Gravel is fine to coarse, max 3 0 in, avg 0.50 in., well graded. Sand is c g to f g, well graded, sub-angular to sub-rounded Low plasticity Abundt micaceous material Some rock flour and pulverized rock 38% gravel, 45% sand, 4% silt, 13% clay No recovery (1 9-2 0')
SANDY CLAY	2 2'-4 0' Sandy Clay with trace Silt (landslide material) Dark yellowish orange (10 YR 6/6) to light olive gray (5 Y 6/1) to med. gray (N5) Highly weathered Sand is m g to v f g, well sorted, well rounded Low plasticity Trace caliche. Indications of disturbed sediments, locally brecciated. Mod. to high porosity Trace roots 36% sand, 4% silt, 61% clay
SC	4 0'-5.2' Gravelly Sand with some Clay Same as above (reference interval 0.0'-1 9') Dark yellowish brown (10 YR 4/2) Core taken for Shelby tube, sample description taken from Well Site Field Log.
SC	5 2'-6 0' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 0.0'-1 9') Dark yellowish brown (10 YR 4/2) Trace cobbles 30% gravel, 47% sand, 5% silt, 18% clay No recovery (6 0'-10 0') and (10 0-11.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 17 00	GROUND ELEVATION (FT)	5951 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747565	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	59094
EAST	2081609	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	8 00	DATE DRILLED	01/30/95	

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

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



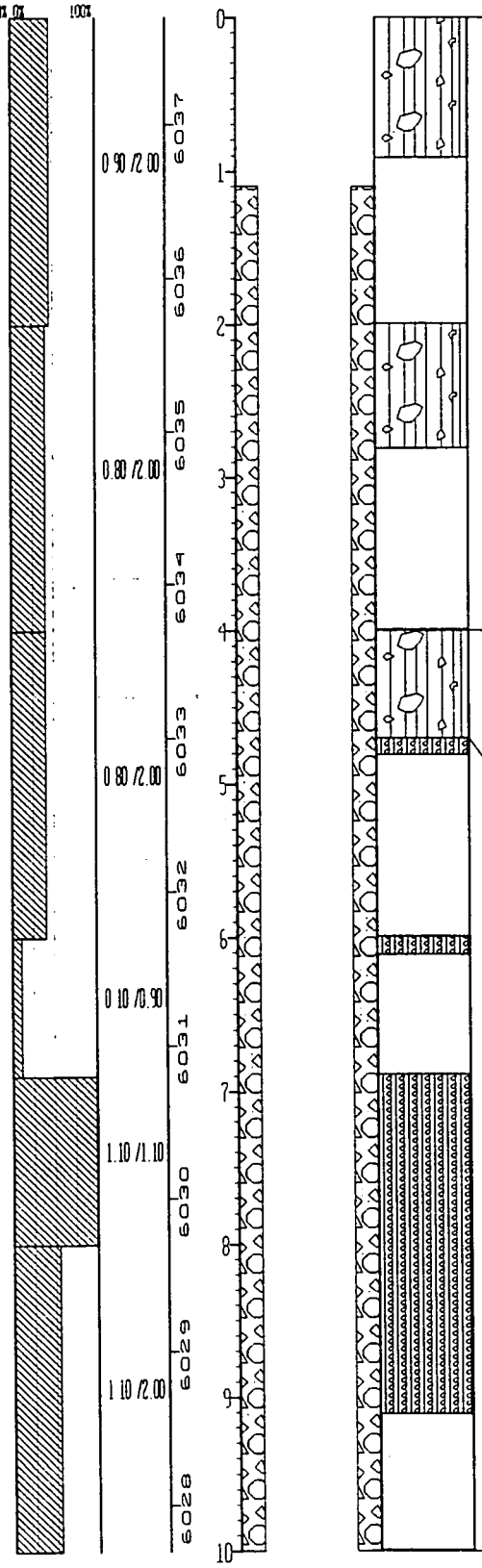
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SC	11 0'-11 5' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 0 0'-1.9')
CLAYSTONE	11 5'-17 0' Top of Bedrock at 11.5'. Claystone with some f g Sand. Dark yellowish brown (10 YR 4/2) grades to olive gray (5 Y 4/1) 11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

RH00203AS

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46 00	GROUND ELEVATION (FT) 6037 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747997	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST P J JORDAN	59194
EAST	2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/08/95	

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

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



GM — 0 0'-2 8' Gravelly Sand with some Silt and trace Clay (fill) Grayish brown (5 YR 3/2) to dark yellowish brown (10 YR 4/2) to dusky yellowish brown (10 YR 2/2) Gravel is well graded, max 2 2 in, avg 0 50-0 75 in, sub-rounded. Sand is c.g. to f g, well graded, sub-rounded. Micaceous, silty matrix Low plasticity Dry
40% gravel, 45% sand, 10% silt, 5% clay

No recovery (0 9-2.0'), and (2.8-4.0')

GM — 4 0'-4 7' Gravelly Sand with some Silt and trace Clay (fill). ame as above (reference interval 0 0'-2 8') Graphite in bottom of sample shoe

SM — 4 7'-10.5' Gravelly Sand with some Silt and Gravel (waste/fill material) Grayish black (N2) to black (N1) Gravel is fine to coarse, sub-rounded to sub-angular Sand is f g. to c g. (18% c.g., 41% m g., 28% f g) Fine grained sand to silt size metallic particles, glass, graphite Fine to c g. sand size ceramic fragments, angular Waste/fill material. At 8.9' core is wet. Increase in clay content at 10 0'
22% gravel, 68% sand, 10% silt

No recovery (4 8-6 0'), (6.1-6.9'), and (9.1-10 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46 00	GROUND ELEVATION (FT) 6037 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7997	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 AST RIG GEOLOGIST P J JORDAN OPEN HOLE INSTALLATION

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

0% 50% 100% 0% 100%

1 00 /2 00
2 00 /2 00
1 00 /1 00
1 00 /1 00
1 50 /2 00
2 00 /2 00

6027 6026 6025 6024 6023 6022 6021 6020 6019 6018

10 11 12 13 14 15 16 17 18 19 20

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')

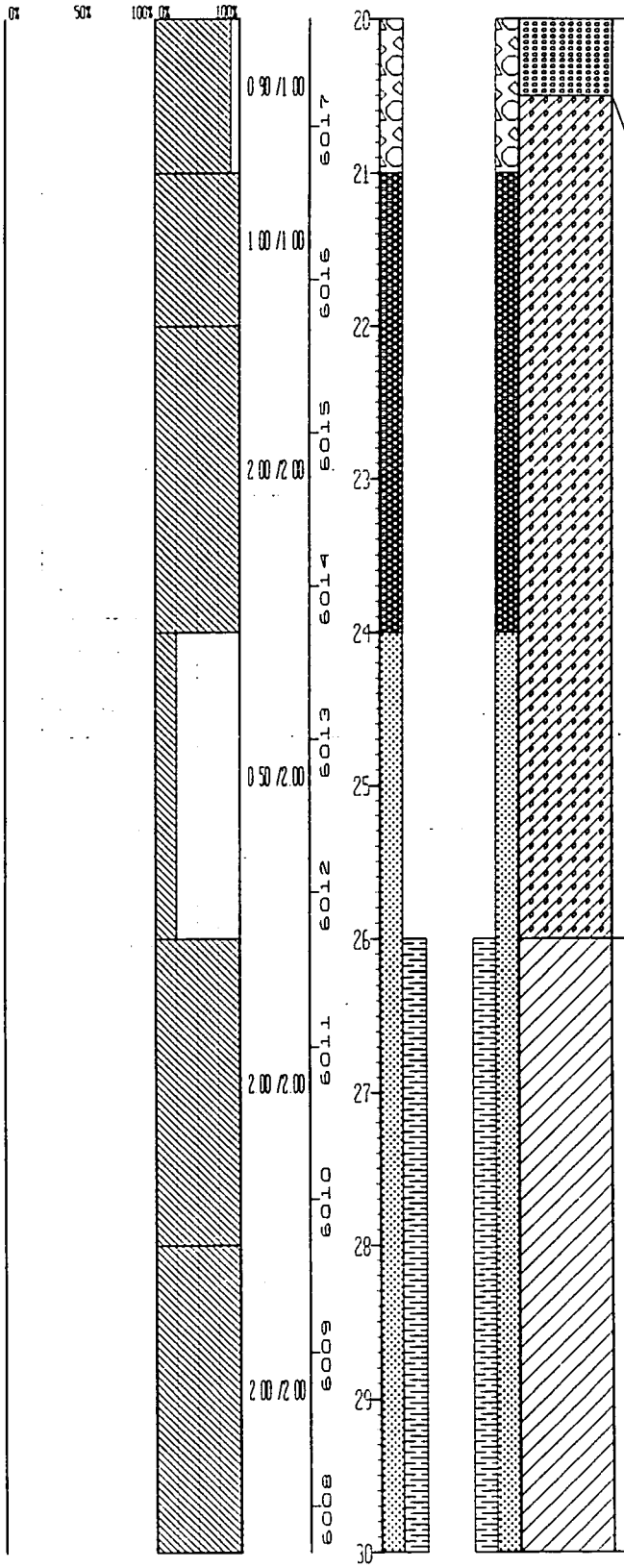
GH0238AS

GH0239AS

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

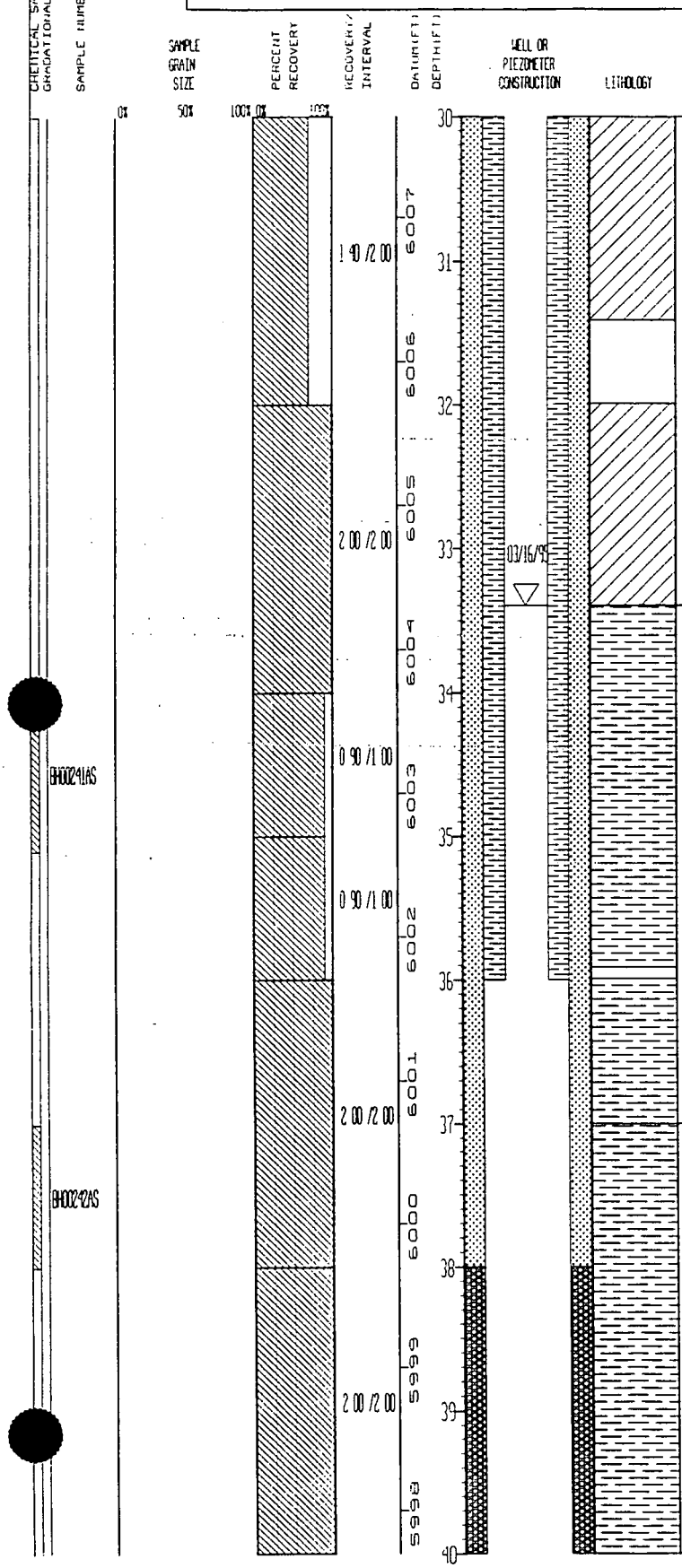


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SW	20 0'-20 5' Sand with some Clay and trace Silt Dark yellowish orange (10 YR 6/6) Sand is m g to f g, well sorted, sub-rounded Moist to wet Low plasticity
SC	20 5'-26 0' Gravelly Sand with some Clay and trace Silt Same as above (reference interval 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

BH0240S

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]7397	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



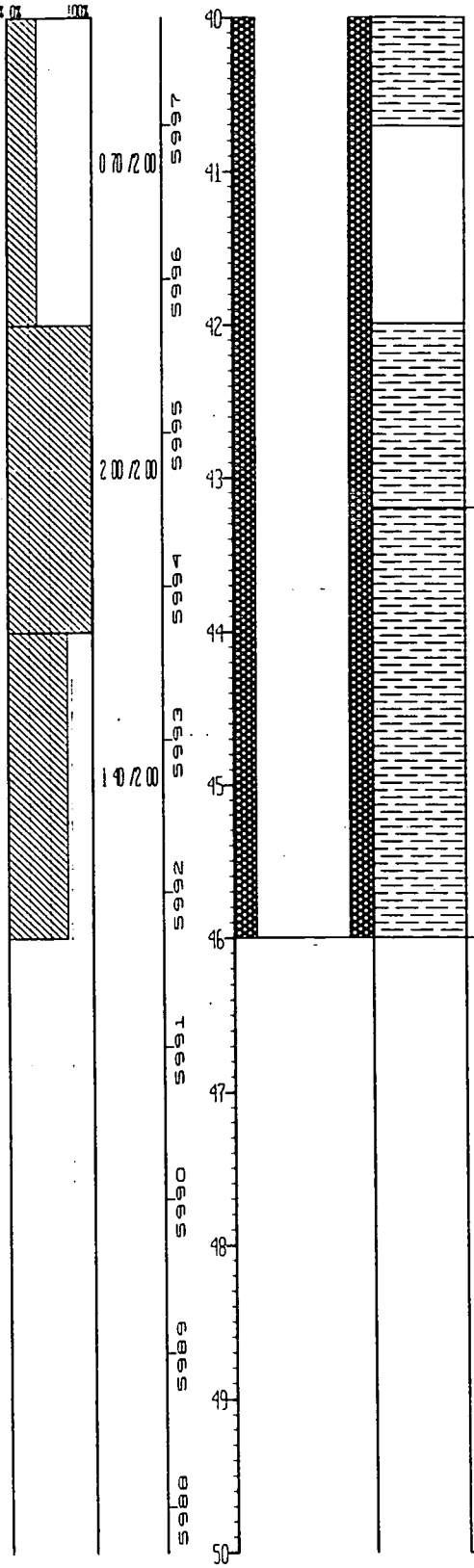
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CL	30 0'-33 4' Gravelly Clay Mottled mod orange pink (10 R 7/4) and grayish orange (10 YR 7/4) to mod yellowish brown (10 YR 5/4) Gravel is fine to coarse, granite, gneiss and sandstone clasts, sub-rounded to sub-angular Some rock flour and pulverized 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')
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')
CLAYSTONE	37 0'-43 2' Claystone Dark gray (N3) At 37 0' slickensides 40 degrees (approx) Disturbed core from moss sampler Mod to slightly weathered Some laminations otherwise massive Dry to moist Slightly friable No recovery (40 7-42 0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 46 00	GROUND ELEVATION (FT) 6037 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747997	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST P J JORDAN	59194
EAST	2081690	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/08/95	

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

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE 50% | PERCENT RECOVERY 100% 0% 100% | RECOVERY/INTERVAL 0 70 /2 00, 2 00 /2 00, 1 40 /2 00 | DATUM (FT) 5997 5996 5995 5994 5993 5992 5991 5990 5989 5988 | DEPTH (FT) 40 41 42 43 44 45 46 47 48 49 50 | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



CLAYSTONE

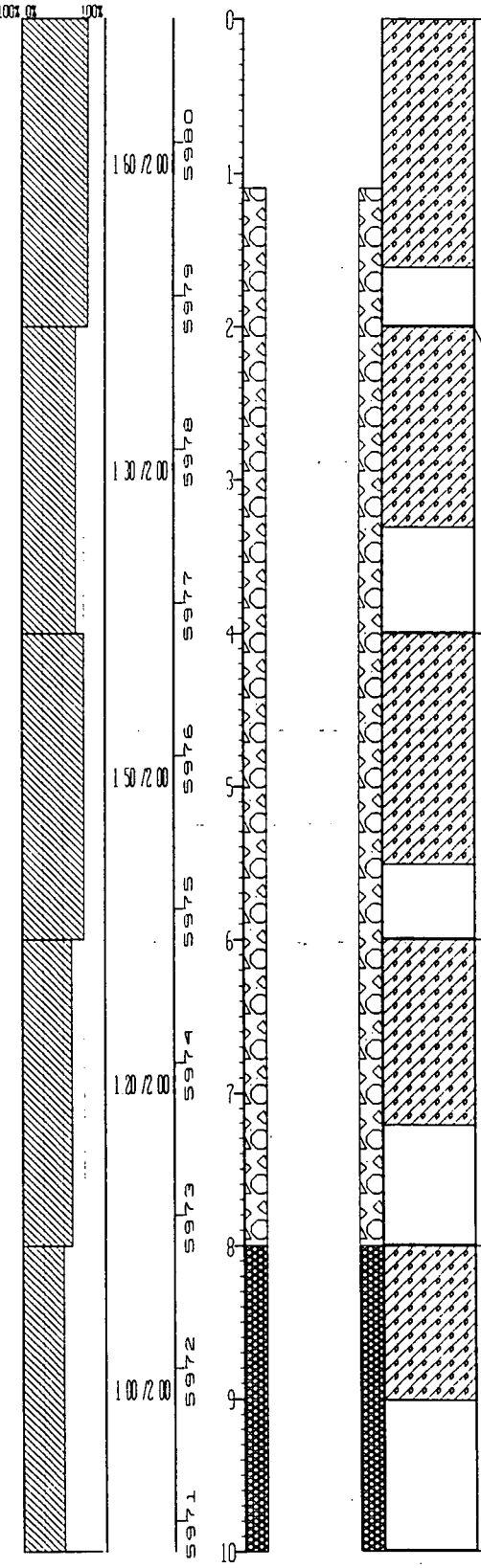
43 2'-46 0' Top of Unweathered Bedrock at 43 2'
Claystone Dark gray (N3) Core indurated. Hard. Disturbed sediments from Moss Sampler Fractures both natural and drilling induced. Trace FeO2 staining on occasional fractures Thin to thick laminations Some silty laminae.

Total Depth Drilled 46.00 Total Depth Casing 38 00
Bottom of Filter Pack 38.00

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	32 00	GROUND ELEVATION (FT)	5980 80	PROJECT NUMBER	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



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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT) 5980 80	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747691	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST L A HOST	59294
EAST	2081620	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 12/21/94	

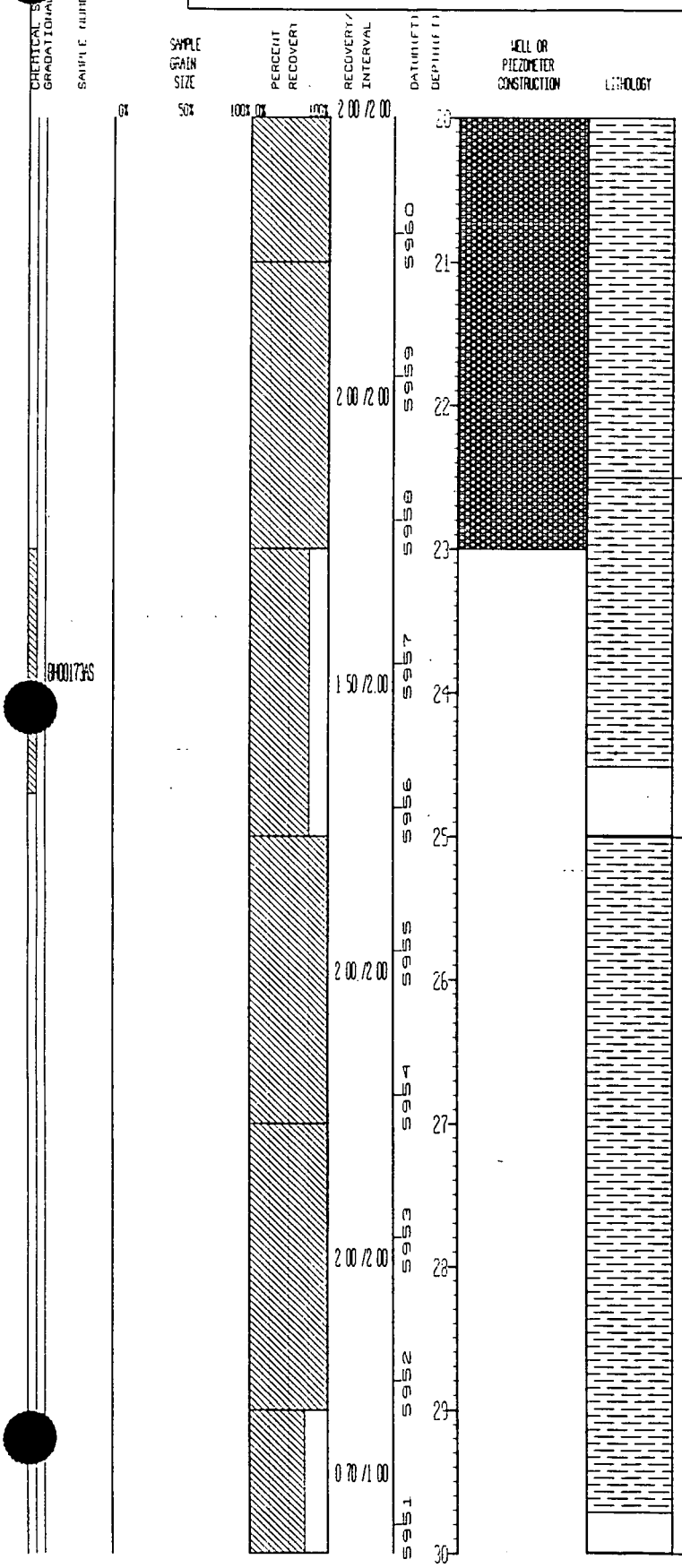
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST L A HOST OPEN HOLE INSTALLATION CAVE IN FROM 23 0' TO 32 0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH

SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% – 50% – 100%)	PERCENT RECOVERY (0% – 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 No recovery (11 9-12 0'), and (13 2-14 0') Note Classification and percentages changed based in mechanical sieve and hydrometer results from BH00170AS
				5969	11				
					12				
BH00171AS			1 20 /2 00	5968	13				
				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 No recovery (15 9-16 0'), (17.1-18 0'), and (18 8-19 0')
BH00172AS			1 10 /2 00	5964	17				
				5963	18				
			0 80 /1 00	5962	19			CLAYSTONE	19 0'-22.5' Claystone Same as above (reference interval 15 4-18 8') Core indurated Heavily Fe stained throughout core Fe stained bands alternating with unweathered claystone
			2 00 /2 00	5961	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT)	5980 80	PROJECT NUMBER	OU5-RFI/RI	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'



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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')
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')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 32 00	GROUND ELEVATION (FT)	5980 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7691	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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	5950	30			CLAYSTONE	30 0'-32 0' Claystone Unweathered Olive gray (5 Y 4/1) Core indurated. Bedding horizontal where apparent Thin laminae of f g sand or silt
					5949	31				
					5948	32				Total Depth Drilled 32 00 Total Depth Casing 19 00 Bottom of Filter Pack 19 00
					5947	33				
					5946	34				
					5945	35				
					5944	36				
					5943	37				
					5942	38				
					5941	39				
						40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5955 30	PROJECT NUMBER	205-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 DEPTH	GRADATION DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
			50%	100% 0%	100%	5965 5964 5963 5962 5961 5960 5959 5958 5957 5956	0 1 2 3 4 5 6 7 8 9 10				Refer to geologic log of 56694

Total Depth Drilled 89 50 Total Depth Casing 89 50
Bottom of Filter Pack 89 50

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89.50	GROUND ELEVATION (FT)	5965.30	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]-7725	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL	59394
EAST	1082699	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
					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
NORTH	7[illegible]725	AREA IHSS 115		CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	2082699	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	12/12/94

LOG OF BORING NUMBER

59394

REMARKS: DRILLING EQUIPMENT: MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL OTHER CENTRALIZERS AT [illegible] 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	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	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)	5955 30	PROJECT NUMBER	005-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 CONTRALIZERS 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

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
					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 IHSS 115		CASING DIAMETER (IN)	0.00	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 OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7[illegible]725	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/12/94	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5916 5915 5914 5913 5912 5911 5910 5909 5908 5907 5906	50 51 52 53 54 55 56 57 58 59 60				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 59.50		GROUND ELEVATION (FT)	1355.30	PROJECT NUMBER	005-RFI/RI
NORTH	74705	AREA IHSS 115		CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL
EAST	1062599	LOCATOR NUMBER	J7	BOREHOLE DIAMETER (IN)	7.50	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

PENETRATION RESISTANCE (BLOWS/6 INCHES)	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%			60				
					5905					
						61				
					5904					
						62				
					5903					
						63				
					5902					
						64				
					5901					
						65				
					5900					
						66				
					5899					
						67				
					5898					
						68				
					5897					
						69				
					5896					
						70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89 50	GROUND ELEVATION (FT)	5965 30	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7725	AREA IASS 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	

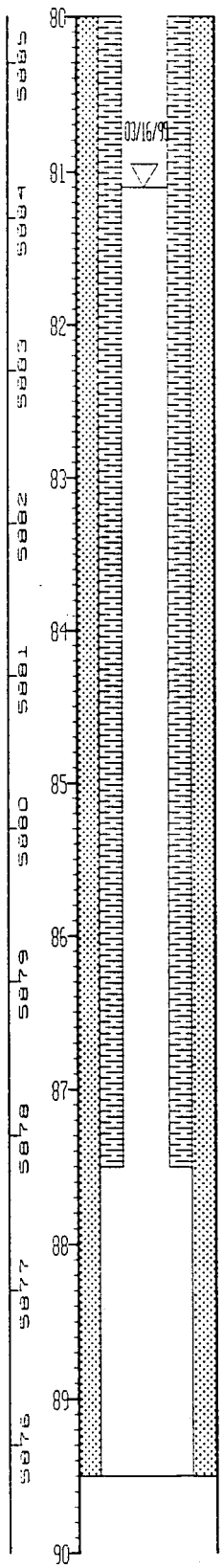
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL OTHER CENTRALIZERS AT 55 0' AND 73 0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

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
		50%	100% 0%	100%	5895	70				
					5894	71				
					5893	72				
					5892	73				
					5891	74				
					5890	75				
					5889	76				
					5888	77				
					5887	78				
					5886	79				
						80				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 89.50	GROUND ELEVATION (FT)	5965.30	PROJECT NUMBER	115-RFI/RI	LOG OF BORING NUMBER
NORTH	747725	AREA IHSS 115	CASING DIAMETER (IN)	2.00	GEOLOGIST	J. W. HARWELL	59394
EAST	2082699	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5.60	DATE DRILLED	12/12/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J. W. HARWELL OTHER CENTRALIZERS AT 55.0' AND 73.0' CORE WAS NOT LOGGED FOR 59394 WELL IS REPLACEMENT FOR 56694 WHICH WAS ABANDONED CORE WAS NOT LOGGED SEE LOG FOR 56694 FOR CORE DESCRIPTION

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



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 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%		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')
				0 70 / 1 90	6025	1				
					6024	2			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			1 40 / 2 00	6023	3				
	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	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
					6016	10				
				0 80 /2 00	6015	11				
	BH00154AS									
					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
				2 10 /2 00	6013	13				
	BH00156AS									No recovery (16 3-17.9') and (17 9-19 9')
					6012	14				
	BH00159AS BH00160AS			2.10 /2.00	6011	15				
	BH00157AS									
					6010	16				
				0 40 /2.00	6009	17				
	BH00158AS									
					6008	18				
				0 00 /2 00	6007	19				
						20				Total Depth Drilled 19 90

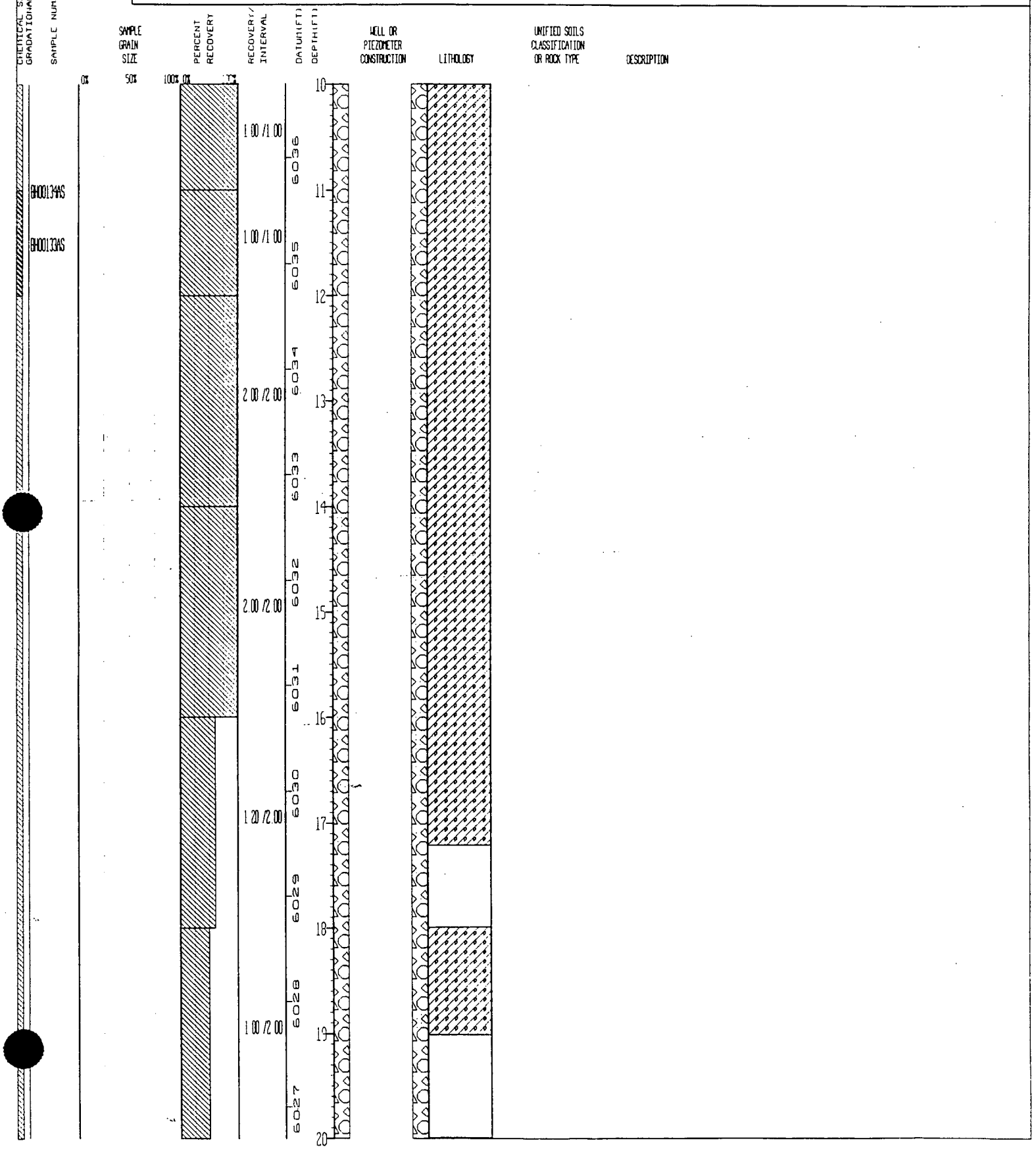
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 41 00	GROUND ELEVATION (FT)	6046 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747981	AREA EXSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	L A HOST	59594
EAST	2081244	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	10 00	DATE DRILLED	12/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST L A HOST

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	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)
					6044	2				No recovery (3.5-4 0')
				1 30 /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)
					6042	4				No recovery (5.3-6 0')
				1 50 /2.00	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
					6040	6				
				0 00 /0 50	6039	7				No recovery (7 5-8.5'), (17 2-18 0') and (19 0-20 0')
				0 50 /0 40	6038	8				No recovery (21.0-22.0')
	BH00132AS			1 10 /1 10	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 THSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	L A HOST	59594
EAST	[illegible]1244	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

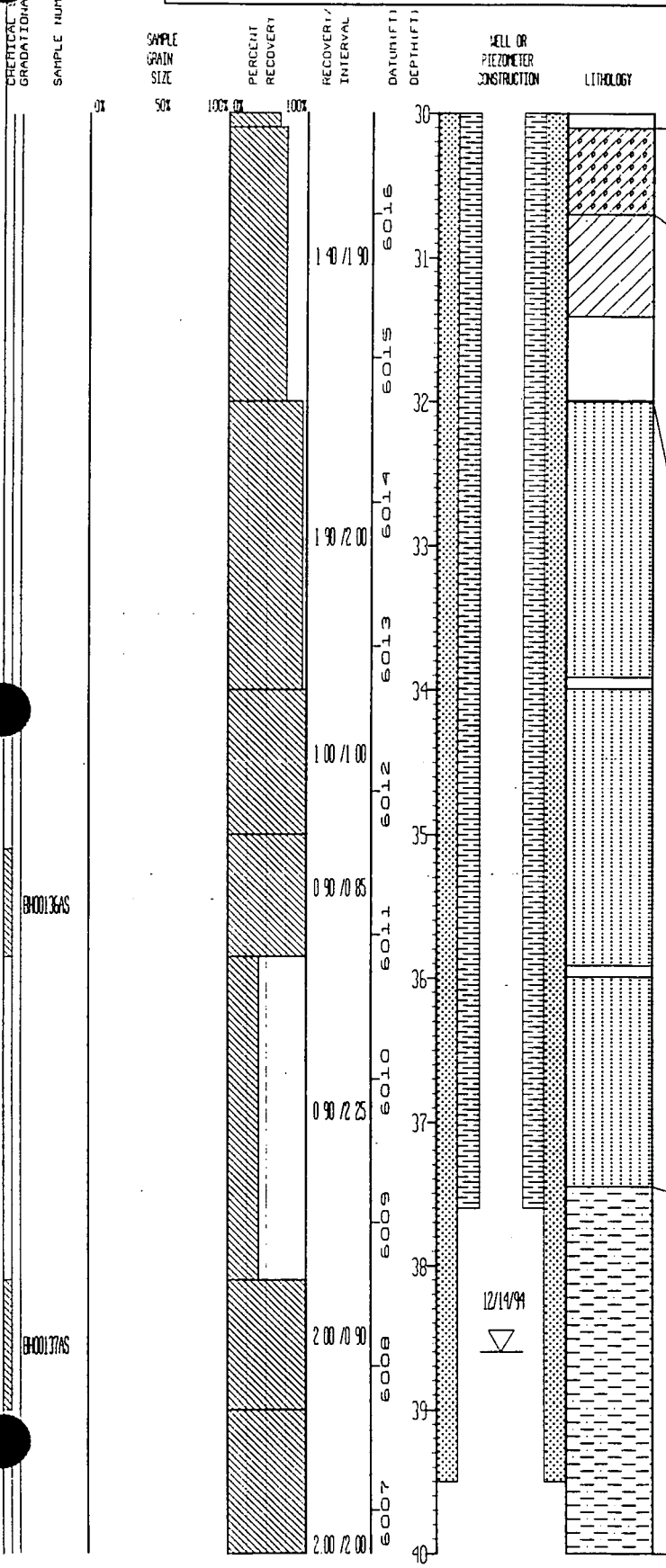


STATE PLANE COORDINATE	TOTAL DEPTH (FT) 41 00	GROUND ELEVATION (FT) 1145 70	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH 747981	AREA IHSS 115	CASING DIAMETER (IN) 10	GEOLOGIST L A HOST	59594
EAST 2081244	LOCATION NUMBER E7	BOREHOLE DIAMETER (IN) 10 30	DATE DRILLED 12/08/94	
REMARKS DRILLING EQUIPMENT 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				
						21				
					6025	22			CL	22 0'-29 4' Sandy Clay with some silt and trace gravel Dark yellowish orange (10 YR 6/6) to yellowish gray (5 Y 8/1) mottled. Core is highly weathered. Trace carbonaceous material Sand is c g. to f g, sub-rounded to rounded, 5% coarse, 15% med, 45% fine, predom quartz Trace calcareous material (caliche) Trace magnetite Core is dense. Moist Trace Mn staining Low to med plasticity Bedding not apparent, massive From 24 0-26 0' 1% gravel 34% sand, 23% silt, 42% clay No recovery (26 4-26 5') Note Classification and percentages changed based on mechanical sieve and hydrometer results from BH00135AS
				2 00 /2 00	6024	23				
					6023	24				
					6022	25				
	BH00135AS			2 40 /2 50	6021	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 [illegible]/08/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST L A HOST



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 AST 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%	2 00 /2 00	6006	41				
					6005	42				Total Depth Drilled 41 00 Total Depth Casing 39 60 Bottom of Filter Pack 39.50
					6004	43				
					6003	44				
					6002	45				
					6001	46				
					6000	47				
					5999	48				
					5998	49				
					5997	50				

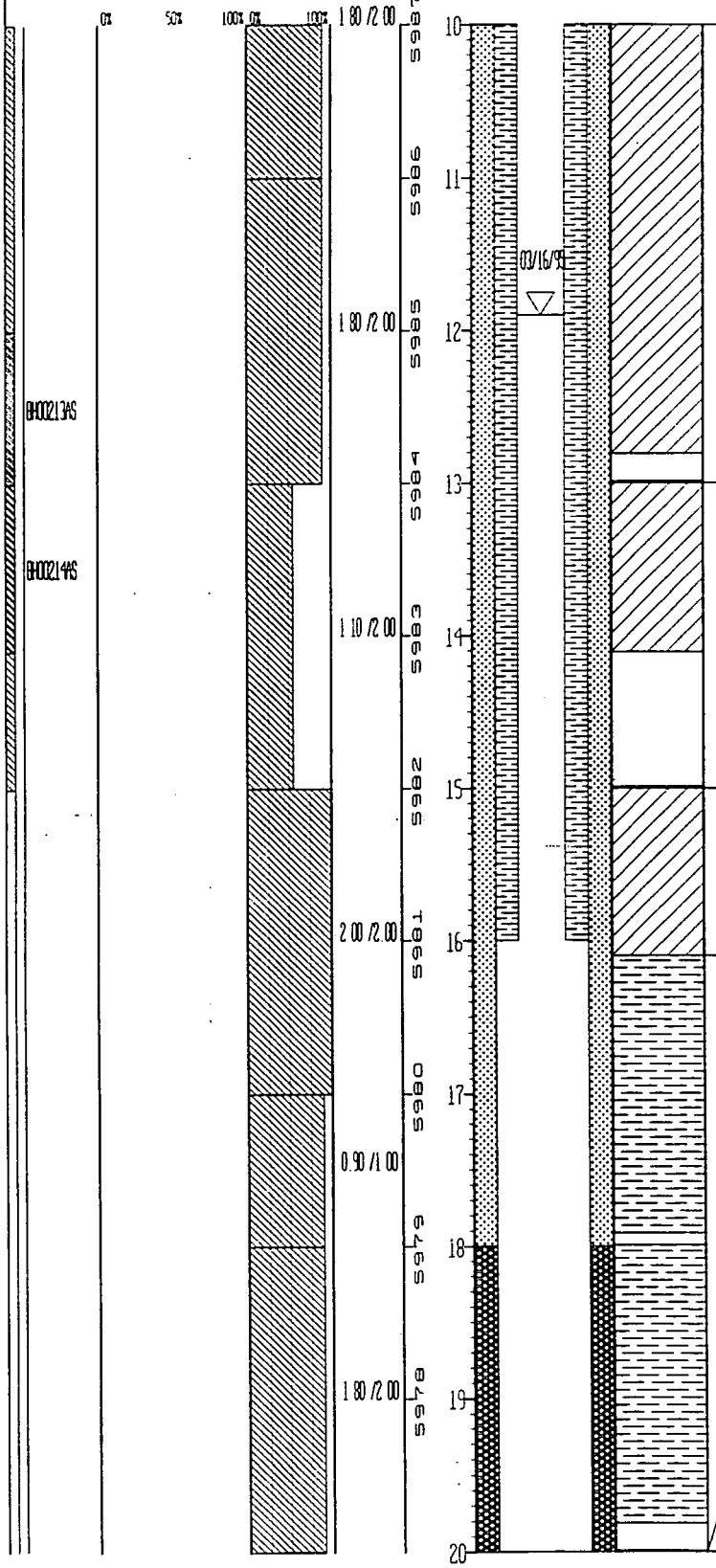
STATE PLANE COORDINATE		TOTAL DEPTH (FT) 20 00	GROUND ELEVATION (FT) 5997 00	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747760	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST P J JORDAN	59694
EAST	2081356	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 6 50	DATE DRILLED 02/03/95	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY / INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				2 00 /2 00	5996	1			SC	0.0'-4 0' Clayey Sand with some Gravel Olive gray (5 Y 3/2) to olive gray (5 Y 4/1) Waste/fill material, damp, dense Gravel is fine to coarse, sub-angular, max 2 0 in, avg. 0 50 in. Sand c g to f g., sub-rounded, well graded Some pulverized cobbles. Low plasticity Core dry 23% gravel, 51% sand, 26% clay No recovery (2 5-3 0')
				0 50 /1.00	5995	2				
	BH00211AS			1.60 /2 00	5994	3				
					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 OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747760	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST P J JORDAN	59694
EAST	2081356	LOCATOR NUMBER 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



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
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 sa, Silty Sand with some clay and gravel, 12% Gravel, 40% Sand, 29% Silt, and 19% Clay. Based on mechanical sieve and hydrometer results
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')
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
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')

Total Depth Drilled 20 00 Total Depth Casing 18 00
Bottom of Filter Pack 18 00

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 20	GROUND ELEVATION (FT)	6006 40	PROJECT NUMBER:	005-RFI/RI	LOG OF BORING NUMBER
NORTH:	747922	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	P J JORDAN	59794
EAST	2081635	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/09/95	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%	1 00 /1.30	6006	0			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')
				0 00 /0 70	6005	1			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.
				2 00 /2.00	6004	2			ML	3.5'-3.9': Sandy Silt. Waste/Fill material. Black Graphite Glass shards. Fill material
				0 50 /2.00	6003	3			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')
				1 00 /2.00	6002	4			ML	6.0'-8.5': Sandy Silt Waste/Fill material Black Graphite Shards of glass. No recovery (7 0-8.0')
				2 00 /2.00	6001	5			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.
					6000	6			ML	9 0'-9 5' Sandy Silt Waste/Fill material Black Graphite Shards of glass.
					5999	7			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.
					5998	8				
					5997	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 20	GROUND ELEVATION (FT)	6006 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747922	AREA IHSS 115	CASING DIAMETER (IN)	[illegible]	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

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				10 0'-11 0' Sandy Silt Waste/fill material Black Graphite Fill Abundt glass fragments
			2 00 /2.00	5996	11				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 20 /0 50	5995	12				
			0 00 /0 50	5994					
			2 00 /2 00	5993	13			SC	13 0'-15 0' Clayey Sand with some Silt and trace Gravel Light brown (5 YR 5/6), trace olive gray (5 Y 6/1) Sand is f g to m g, sub-rounded. Some micaceous material, sub-angular Trace Mn staining Bedding not apparent Dry Low plasticity 66% sand, 10% silt, 24% clay
				5992	14				
			2 00 /2 00	5991	15			SC	15 0'-15 5' Clayey Sand with trace Gravel Dark yellowish orange (10 YR 6/6) and pale yellowish orange (10 YR 8/6) and light brown (5 YR 5/6) From 14 8' to 15 5' claystone clasts Low plasticity Bedding not apparent Dry 5% gravel, 62% sand, 1% silt, 23% clay
				5990	16			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
BH00178AS			1 00 /1 00	5989	17				
			0 80 /0 80	5988	18				
			2 00 /2 20	5987	19				
					20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 25 20	GROUND ELEVATION (FT)	6006 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747922	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	P J JORDAN	59794
EAST	2081635	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	01/09/95	

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

CHEMICAL SAMPLE DEPTH / 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
	BH001794S	0% 50% 100%	0% 100%	2 00 /2 00	5986	20			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
					5985	21				
					5984	22				
				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
	BH001804S			0 70 /0 70	5981	25			SILTY CLAYSTONE	24 0'-25 2' Gray Silty Claystone Fine partings that are horizontal Core breaks easy along silty bedding planes Few near vertical Fe stained fractures. Core disturbed by drilling and sampling 22% silt, 78% clay
					5980	26				Total Depth Drilled 25.20 Total Depth Casing 23 00 Bottom of Filter Pack 23.00
					5979	27				
					5978	28				
					5977	29				
						30				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT)	6025 70	PROJECT NUMBER	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 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%	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)	225 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 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%		6015 6014 6013 6012 6011 6010 6009 6008 6007 6006	10 11 12 13 14 15 16 17 18 19 20				
	BH00162AS			1 60 /2 00						
	BH00161AS									

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.

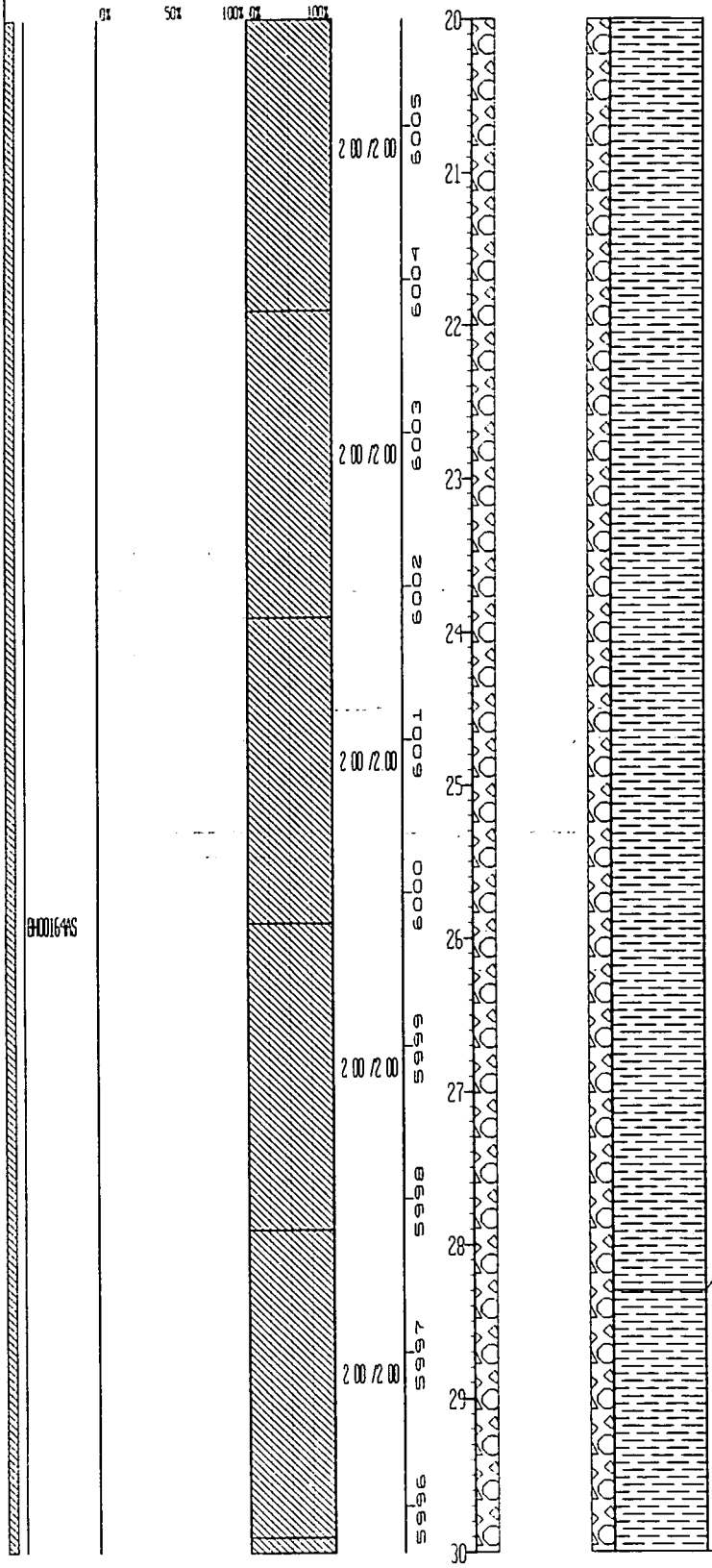
No recovery (18.5-19 9').

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, 88% clay.

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	132 50	GROUND ELEVATION (FT)	6005 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA	IHSS 115	CASING DIAMETER (IN)	0 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



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

No recovery (31 9-33 9')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 6025 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	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	5965	30				
					5964	31				
				0 00 /2.00	5963	32				
					5962	33				
					5961	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.
					5960	35				
				5 00 /5.00	5959	36				
					5958	37				
					5957	38				
					5956	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	7[illegible]728	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59894
EAST	2080724	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'

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%

5985 5984 5983 5982 5981 5980 5979 5978 5977 5976

40 41 42 43 44 45 46 47 48 49 50

5 00 /5 00

01/14/95

5 00 /5 00

03/16/95

1 40 /1 50

CLAYEY SILTSTONE 40 5'-42 8' Clayey Siltstone Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1) Core dense, stiff Trace carbonaceous material Thinly bedded to thinly laminated. Trace crossbedding. Some thin interbeds of claystone Well cemented
80% silt, 20% clay

CLAYSTONE 42 8'-48 6' Claystone Grayish black (N2) Slightly FeO stained, mod. reddish brown (10 R 4/6) Some organics Trace calcareous thin interbeds and thin laminations of siltstone. Iron nodule at 45 0'

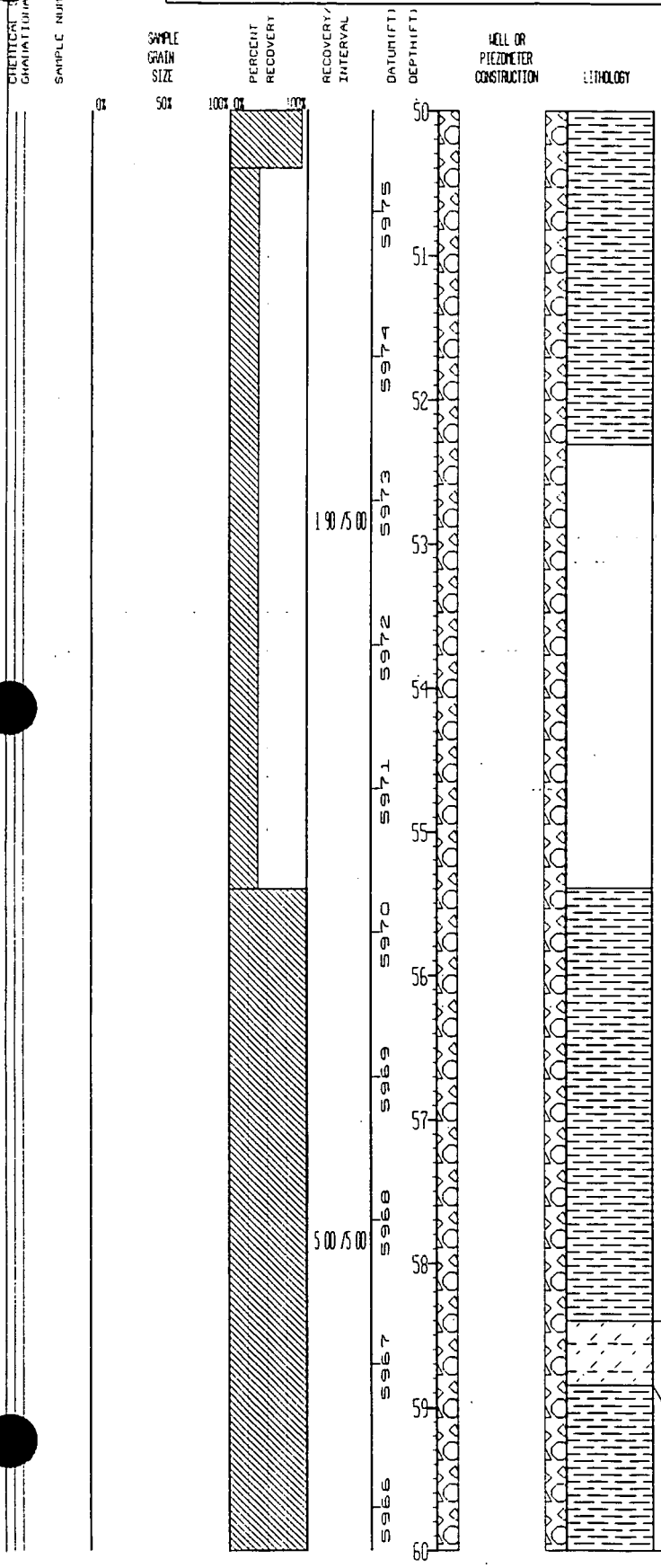
CLAYEY SILTSTONE 48 6'-48 9' Clayey Siltstone. Same as above (reference interval 40 5'-42 8') Some FeO staining, weathered

CLAYSTONE 48 9'-58 4' Claystone Same as above (reference interval 42 8'-48 6') Bedding becomes massive between 50 4'-52 3'

No recovery (52 3-55 4')

STATE PLANE COORDINATE		TOTAL DEPTH (FT)	132 50	GROUND ELEVATION (FT)	6025 70	PROJECT NUMBER	CU5-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'



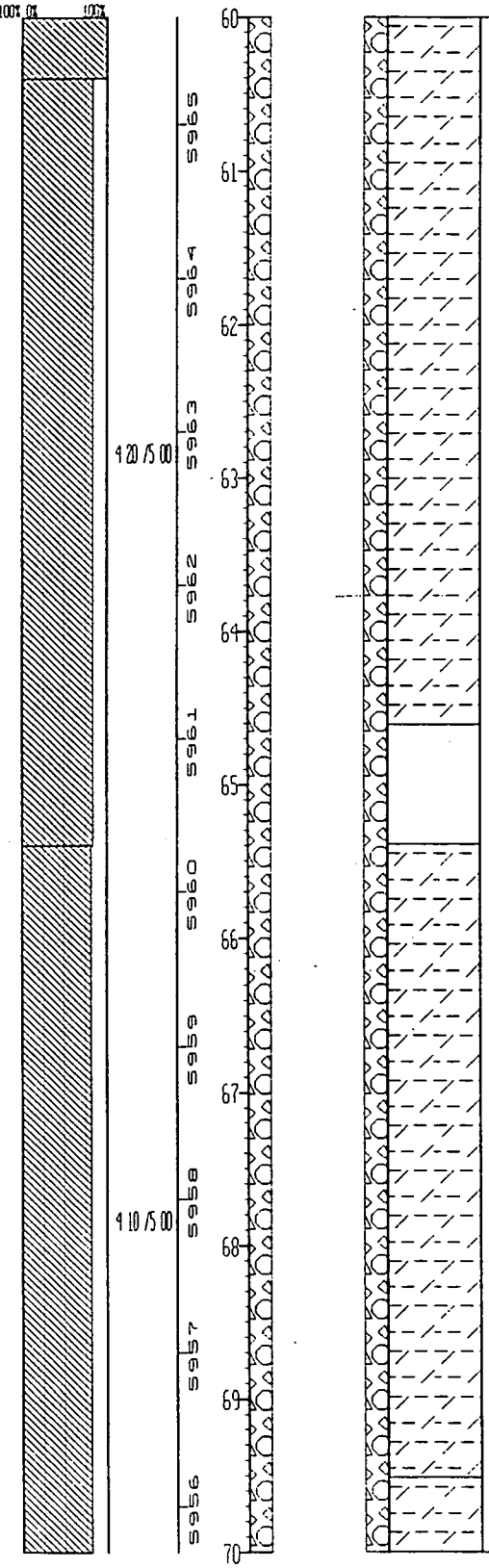
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	58 4'-58 85' Clayey Siltstone interbed Med dark gray (N4) to light olive gray (5 Y 6/1) Bedding massive Well cemented. Trace fossil (root cast or burrow)
CLAYSTONE	58 85'-60 0' Claystone Same as above (reference interval 42 8'-48 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 H7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/16/94	

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

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

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



SILTY CLAYSTONE 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) 5625 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	7-728	AREA IHSS 115	CASING DIAMETER (IN) 2 50	GEOLOGIST	J W HARWELL	59894
EAST	1380724	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: 0% 50% 100%

PERCENT RECOVERY: 0% 100%

RECOVERY/INTERVAL: 5 00 /5 00; 4.20 /5 00

DATUM (FT): 5955, 5954, 5953, 5952, 5951, 5950, 5949, 5948, 5947, 5946

DEPTH (FT): 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80

WELL OR PIEZOMETER CONSTRUCTION

LITHOLOGY

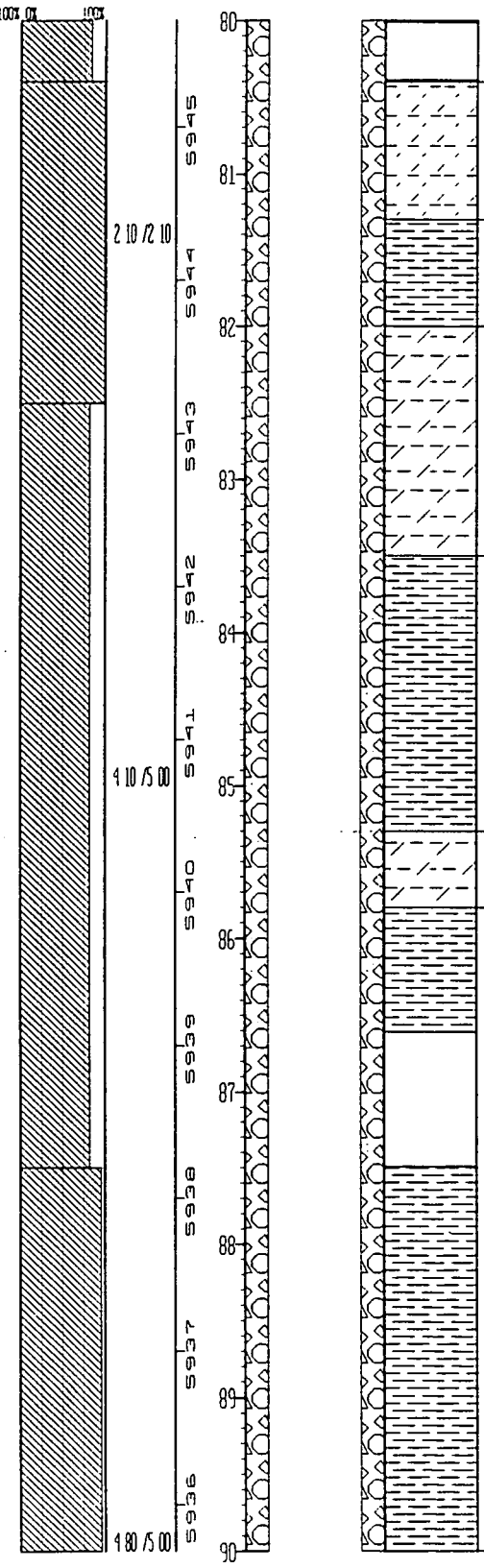
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	70.7'-79 6' Clayey Siltstone Med dark gray (N4) to light olive gray (5 Y 6/1) Massive to thinly laminated horizontal bedding. Core dense. Well cemented Some slumped and crossbedding structures Amount of silt decreases at 75.4' 87% 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)	6025 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 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 (0% 50% 100%) | PERCENT RECOVERY (0% 100%) | RECOVERY/INTERVAL | DATUM (FT) | DEPTH (FT) | WELL OR PIEZOMETER CONSTRUCTION | LITHOLOGY | UNIFIED SOILS CLASSIFICATION OR ROCK TYPE | DESCRIPTION



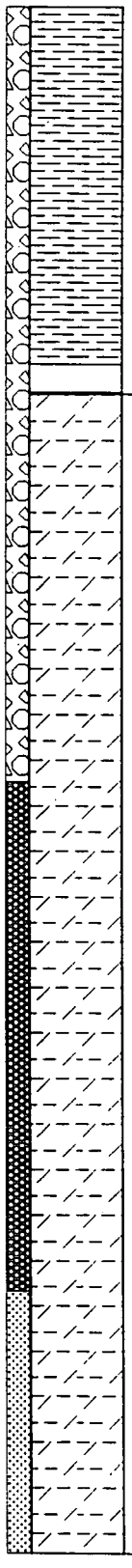
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
CLAYEY SILTSTONE	80 4'-81 3' Clayey Siltstone Same as above (reference interval 70.7'-79 6')
CLAYSTONE	81 3'-82 0' Claystone Olive gray (5 Y 4/1) Massive Mod hard
SILTY CLAYSTONE	82 0'-83 5' Silty Claystone Olive gray (5 Y 4/1) Thinly laminated. Trace soft sedimet deformation structures Trace claystone fine gravel clasts
CLAYSTONE	83 5'-85 3' Claystone. Same as above (reference interval 81 3'-82.0')
SILTY CLAYSTONE	85 3'-85 8' Silty Claystone Same as above (reference interval 82 0'-83 5')
CLAYSTONE	85 8'-92 3' Claystone Dark gray (N3) to olive black (5 Y 2/1) Mod hard Massive to thinly bedded. Trace silty claystone interbeds. At 91.8' fracture in core at 75 degrees, smooth clay in filling No recovery (86 6-87 5') and (92 3-92.5')

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

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL. ADDITIONAL CENTRALIZERS AT 75 0', 95 0' AND 121 0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50%
PERCENT RECOVERY: 100% 0% 100%
RECOVERY/INTERVAL: 4 80 /5 00; 5 00 /5 00; 3 90 /5 00
DATUM (FT): 5935, 5934, 5933, 5932, 5931, 5930, 5929, 5928, 5927, 5926
DEPTH (FT): 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
WELL OR PIEZOMETER CONSTRUCTION
LITHOLOGY



UNIFIED SOILS CLASSIFICATION OR ROCK TYPE

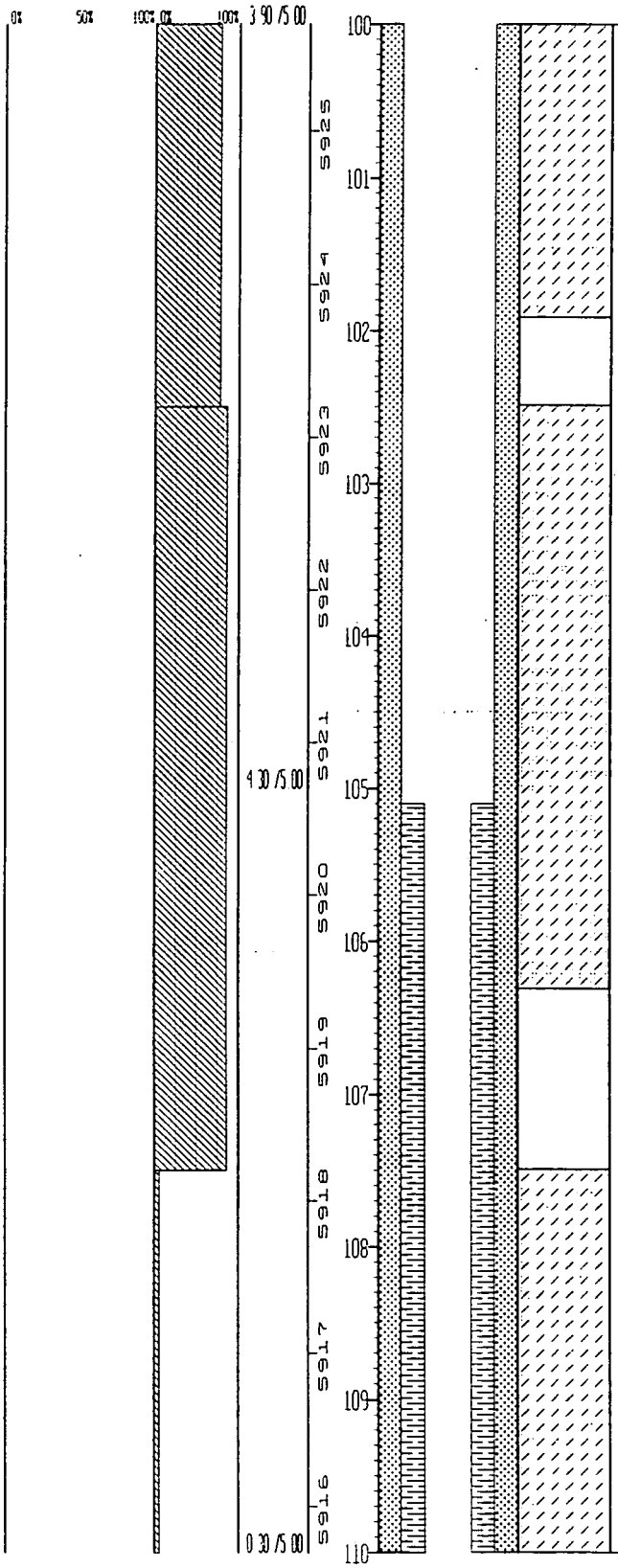
DESCRIPTION

SILTY CLAYSTONE 92 5'-100 0' Silty Claystone Olive gray (5 Y 4/1) Mod. hard Massive to laminated Trace carbonaceous material Some clayey siltstone interbeds. Conchoidal fracture at 97 7' Increase in silt and v f g sand content at 98 5'

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 5625 70	PROJECT NUMBER OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747728	AREA THSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59894
EAST	2080724	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 12/16/94	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL ADDITIONAL CENTRALIZERS AT 75 0', 95 0' AND 121 0'

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE DEPTH
SAMPLE NUMBER

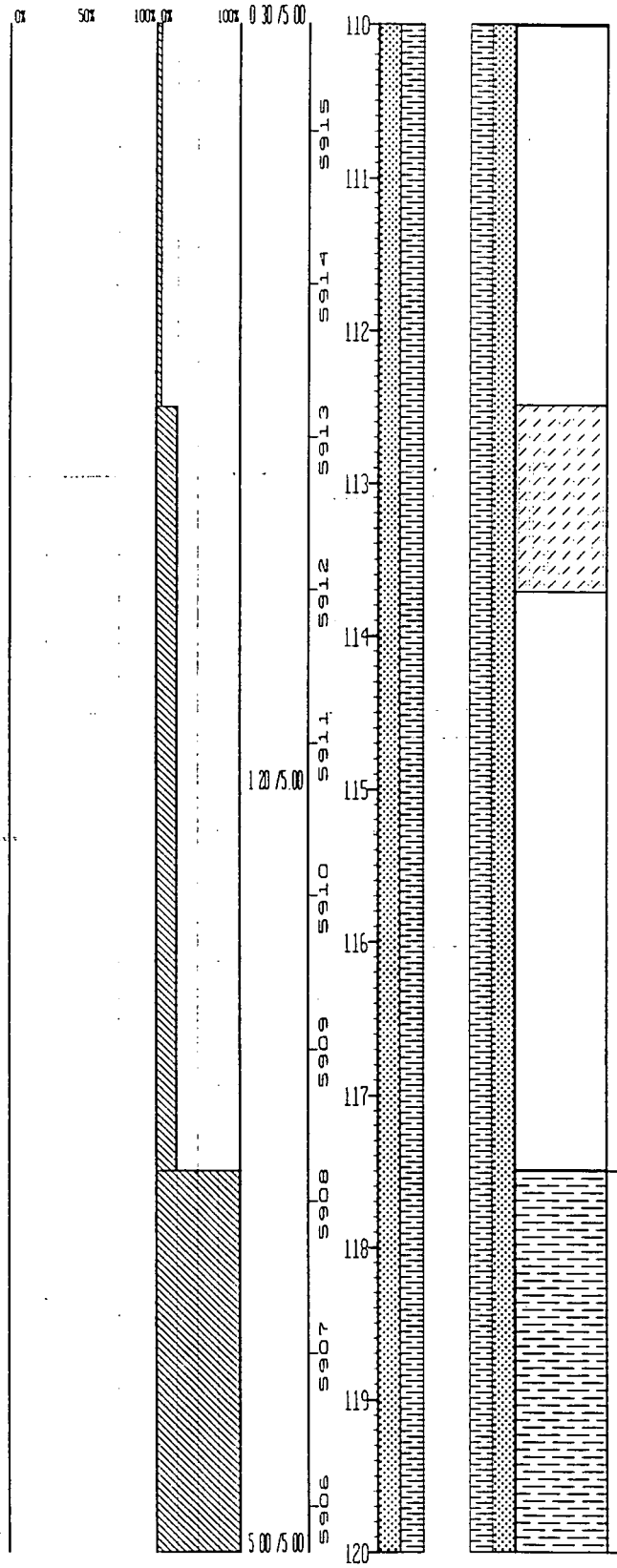


UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
SANDY SILTSTONE	100 0'-113 7' Sandy Siltstone with trace Clay Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1) Some organics Hard to mod hard Sand is v f g , rounded, mod cemented, mod porosity, well sorted Thinly laminated Trace soft sediment deformation and trace fossils (burrows) Crossbedded 17% sand, 78% silt, 5% clay No recovery (101 9-102 5'), (106 3-107 5') and (107 8-110 0') No recovery (110 0-112 5') and (113 7-117 5')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 132 50	GROUND ELEVATION (FT) 6025 70	PROJECT NUMBER 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



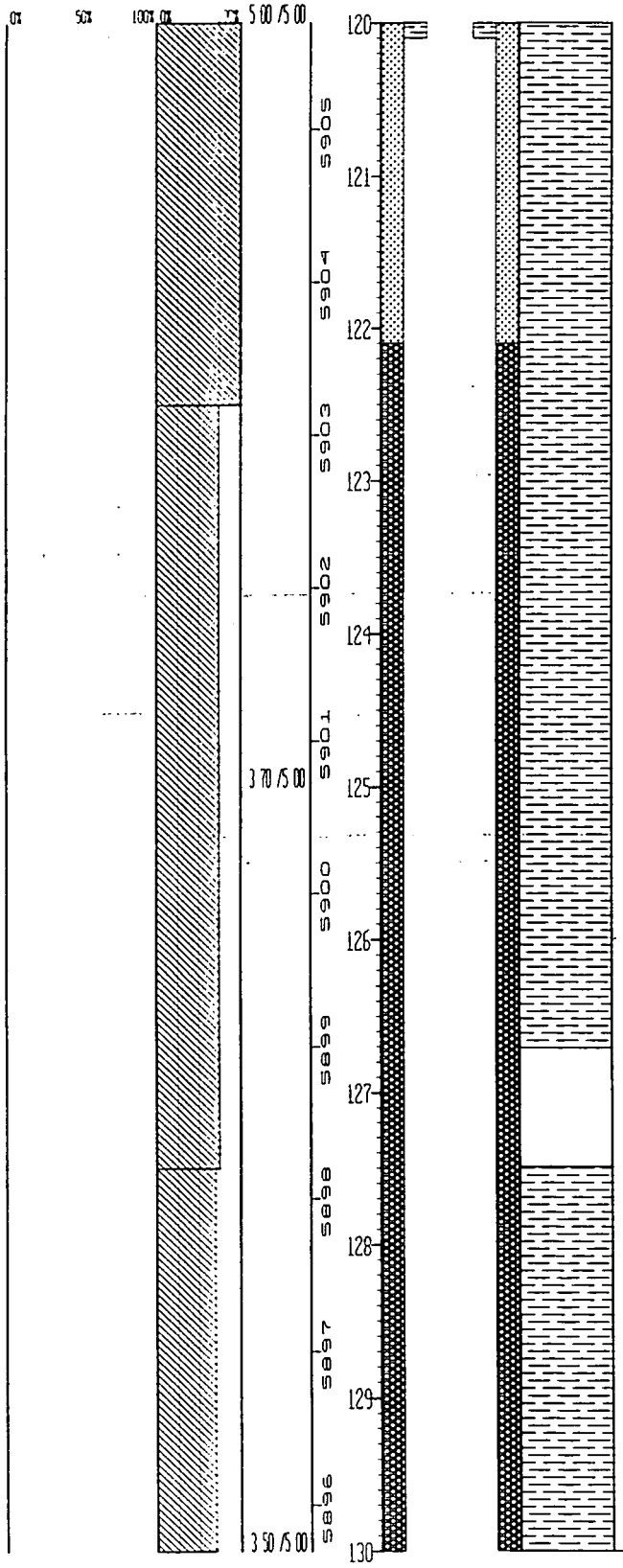
CLAYSTONE	117 5'-131 0' Claystone. Olive gray (5 Y 4/1) to grayish black (N2) Trace carbonaceous material Massive Interval from 120.0'-126.7' contains some organics, especially along thin fractures. Thin bedding (horizontal) Some areas bedding massive. At 129.5'-131 0' some Fe stained siltstone clasts 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) 5025 70	PROJECT NUMBER 305-RFI/RI	LOG OF BORING NUMBER
NORTH	7728	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	59894
EAST	1350724	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



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'

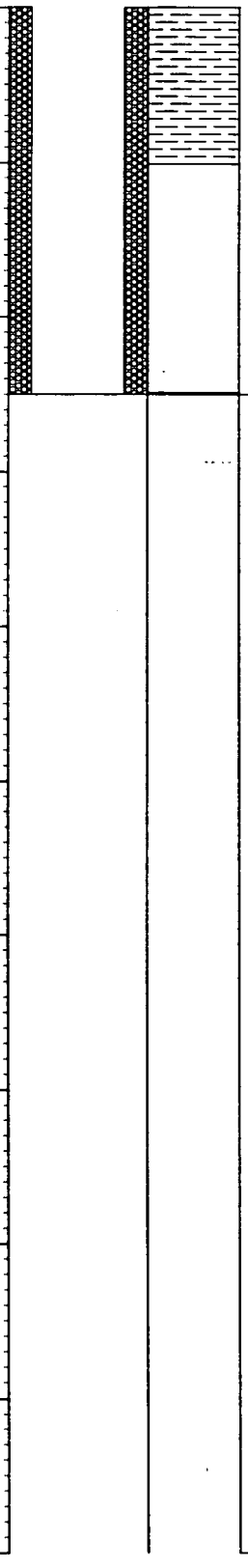
CHEMICAL DEPTH
GRADATION SAMPLE DEPTH
SAMPLE NUMBER

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 0	GROUND ELEVATION (FT)	6043 20	PROJECT NUMBER	305-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7528	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			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				6041	2				
				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 005-RFI/RI	LOG OF BORING NUMBER
NORTH 7[illegible]	AREA IHSS 133	CASING DIAMETER (IN)	GEOLOGIST J W HARWELL	59994
EAST 2079159	LOCATOR NUMBER 67	BOREHOLE DIAMETER (IN) 1 40	DATE DRILLED 11/09/94	

REMARKS DRILLING EQUIPMENT HURRICANE. ASI RIG GEOLOGIST J W HARWELL

CHEMICAL DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
0%		50%	100% 0% 100%	1 80 /2 00	6033	10			ML	10 0'-10.7' Sandy Silt Ash Waste/fill material Same as above (reference interval 0.7'-0 9'). Large 1 0 in fragments of possible asbestos Trace gravel Some glass
					6032	11			CL	10 7'-11 8' Clay. Same as above (reference interval 5 3-6.0' (waste/fill material)) No recovery (11.8-12.0')
					6031	12				Total Depth Drilled: 12.00
					6030	13				
					6029	14				
					6028	15				
					6027	16				
					6026	17				
					6025	18				
					6024	19				
						20				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 10 00	GROUND ELEVATION (FT) 562 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 50	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%	0 50 /2 00	6042	0 1			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	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')
	BH0008945			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 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 SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /11.00	6006, 6005, 6004, 6003, 6002, 6001, 6000, 5999, 5998, 5997	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10				0 0'-10 0' Refer to log of 59794 for 0.0'-25 2' No recovery (10.0-11.0')

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 6006 20	PROJECT NUMBER 395-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%			10				
					5996					
					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
				0 00 /0 70						
	BP00008AS			0 50 /1 00	5993	13				No recovery (12.3-13.0'), and (13 5-14 0')
					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')
					5990	16				
	BH00184AS			1 20 /1.20	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 /5 80	5986	20				
					5985	21				
	GP00009AS				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)	5006 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	74917	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 [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
		0% 50% 100%	0% 100%		5465	30				
					5465	31				
					5465	32			SILTY CLAYSTONE	32 0'-34 3' Silty Claystone Med dark gray (N4) Core moist Bedding massive Some fractures Some FeO concretions Possibly slickensides at approx 32 8' Visible lenses of silt Slightly to mod friable No recovery (34.3-37 0')
					5465	33				
					5465	34				
				2 30 /5 00	5465	35				
					5465	36				
					5465	37			SILTY CLAYSTONE	37 0'-40 5' Silty Claystone Same as above (reference interval 32 0'-34 3'). Some nodules of siltstone Some brown mottling of siltstone laminae from 37 3'-37 6' Competancy varies from very soft to very hard (taken from Well Site Field Log) No recovery (40 5-42 0')
					5465	38				
					5465	39				
				3 50 /5 00	5465	40				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	6006 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	[illegible]7917	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71194
EAST	[illegible]91634	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
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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
		0% 50% 100%	0% 100%		5966	40				
					5965	41				
					5964	42			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')
					5963	43				
				2 60/5 00	5962	44				
					5961	45				
					5960	46				
					5959	47			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
					5958	48				
					5957	49				
				5 10/5 00		50				

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

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CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5956	50			CLAYSTONE	50 0'-52.0' Claystone with some Silt Same as above (reference interval 47 0'-50 0') Dark gray (N3) to olive gray (5 Y 4/1)
					5955	51				
					5954	52			CLAYSTONE	52.0'-53 0' Claystone Med dark gray (N4) Massive Very soft Plastic. Wet
					5953	53			SILTY CLAYSTONE	53 0'-60 9' Silty Claystone. Dark gray (N3) to olive gray (5 Y 4/1) Core hard to very hard. Slickensides at approx 58 5', 75 degrees, possibly drilling induced. At approx 58 8', visible laminations of siltstone Some carbonaceous material, and nodules of siltstone. Thin bedded to laminated.
				1 70 /5 00	5952	54				No recovery (53.7-57 0').
					5951	55				
					5950	56				
					5949	57				
					5948	58				
				4 25 /5 00	5947	59				
						60				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	5606 20	PROJECT NUMBER	905-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 50	DATE DRILLED	01/23/95	

REMARKS GRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL, L A HOST, P J JORDAN 71194 IS 6 0' SOUTH OF 59794

REFER TO LOG OF 59794 FOR 0 0'-25 2' ADDITIONAL CENTRALIZERS AT 51 65'-52 79', 72 21'-73 38' AND 97 90'-99 07', 139 3'-150 0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
		0% 50% 100%	0% 100%		5946	60				
					5945	61			CLAYSTONE	60 9'-61 5' Silty Claystone Same as above (reference interval 53 0'-60 9'). Some FeO staining along fractures Layers of lignite at approx 61 0' Increase in silt content with soft sediment deformation of laminae Core dense. No recovery (61 5-62 0')
					5944	62			CLAYSTONE	62 0'-62 9' Claystone Same as above (reference interval 53 0-60 9') Becomes light olive gray (5 Y 5/2)
					5943	63			CLAYEY SILTSTONE	62 9'-63 7' Clayey Siltstone Med. dark gray (N4) Bedding laminated. Some fractures filled with carbonaceous material Core well cemented Mod. hard. Slighly to mod friable. 72% silt, 28% clay No recovery (63.7-66.0')
				1 70 /4 00	5942	64				
					5941	65				
				1 00 /1 00	5940	66			SILTY CLAYSTONE	66 0'-70 0' Silty Claystone Light olive gray (5 Y 5/2) to olive gray (5 Y 4/1) Thin interbeds of siltstone and claystone Some organics Lignite at 67 5' At approx 68 4' increase in organics, leaf and stem imprints Trace FeO staining along siltstone laminae Trace crossbedding 40% silt, 60% clay
					5939	67				
					5938	68				
				5 10 /5 00	5937	69				
						70				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 6606 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	

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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
0% 50% 100%	0% 100%		5936	70			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
			5935	71				
			5934	72			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
			5933	73				
		5 00 /5 00	5932	74				
			5931	75				
			5930	76				
			5929	77			CLAYEY SILTSTONE	76 5'-77 5' Calcareous Clayey Siltstone Olive gray (5 Y 4/1) Thinly laminated to thinly bedded Hard Trace carbonaceous material
			5928	78			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
		0 30 /5 00	5927	79				
				80			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

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CHEMICAL 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
					5926	80				
					5925	81				
					5924	82			CLAYSTONE	82.0'-83.2' Claystone, slough. Predom. washed in from above mixed with alluvial gravel. No recovery (83.2-87 0')
					5923	83				
					5922	84				
				1 20 /5 00						
					5921	85				
					5920	86				
					5919	87			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'
					5918	88				
					5917	89				
				5 10 /5 00						
						90				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT) 6006 20	PROJECT NUMBER 005-RFI/RI	LOG OF BORING NUMBER
NORTH	7-7917	AREA THSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	71194
EAST	2281634	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.
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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
		0% 50%	100% 0% 100%	5 10/5 00 2 10/5 00	5916 5915 5914 5913 5912 5911 5910 5909 5908 5907	90 91 92 93 94 95 96 97 98 99 100			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 OU5-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	

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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
0% 50%	100% 0% 100%		5906	100				
			5905	101				
			5904	102			CLAYSTONE	102.0'-115.7' Claystone Same as above (reference interval 98 6'-99 1') Med. dark gray (N4) to dark gray (N3), mottled. Some organics, little silt Thin bedded to laminated. Core reacts with HCl, calcareous material present. At approx. 108.3' more organics, stem and leaf imprints. Fractures at approx. 106.5' and 106.8' are approx. 70-80 degrees, exhibits slickensides, possibly drilling induced (core run from 102.0'-107.0' appears to be disturbed from sample barrel) Color changes to olive gray (5 Y 4/1) from 106.9 to 108.0' then back to dark gray (N3) with med. dark gray (N4) interbeds More organics at 110.0'.
			5903	103				
		5 10 /5 00	5902	104				
			5901	105				
			5900	106				
			5899	107				
			5898	108				
		5 15 /5 00	5897	109				
				110				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	6006 20	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	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 (0% 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				
				5 20 /5 00	5892	114				
					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 005-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 01/23/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL, L. A HOST, P J JORDAN 71194 IS 6 0' SOUTH OF 59794
REFER TO LOG OF 59794 FOR 0 0'-25 2' ADDITIONAL CENTRALIZERS AT 51 65'-52 79', 72 21'-73 38' AND 97 90'-99 07', 139 3'-150 0' BACKFILLED WITH NATIVE MATERIAL

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					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			SILISTONE	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) 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 E HOST, P J JORDAN 71194 IS 6 0' SOUTH OF 59794
REFER TO LOG OF 59794 FOR 3 0'-25 2' ADDITIONAL CENTRALIZERS AT 51 65'-52 75' 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%						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
					5876	130				
					5875	131				
					5874	132			CLAYSTONE	131 8'-143 4' Claystone. Dark gray (N3) Massive to thin bedded. Mod hard to soft Slightly friable Moist Some organic/carbonaceous material At 137 0'-137 6' some iron stained, coarse sand size siltstone clasts No recovery (140 0'-141 0')
					5873	133				
				5 00 /5 00	5872	134				
					5871	135				
					5870	136				
					5869	137				
					5868	138				
				3 00 /4 00	5867	139				
						140				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 150 00	GROUND ELEVATION (FT)	6006 20	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747917	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71194
EAST	2081634	LOCATOR NUMBER I7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	01/23/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL, L. A HOST, P J. JORDAN. 71194 IS 6 0' SOUTH OF 59794

REFER TO LOG OF 59794 FOR 0 0'-25 2' ADDITIONAL CENTRALIZERS AT 51 65'-52 79', 72 21'-73.38' AND 97 90'-99 07', 139 3'-150.0' BACKFILLED WITH NATIVE MATERIAL

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%		5866	140				
					5865	141				
					5864	142				
					5863	143				
				4 40 /5 00	5862	144				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').
					5861	145				
					5860	146				
					5859	147				
				3 20 /4 00	5858	148				
					5857	149				
						150				

Total Depth Drilled 150.00 Total Depth Casing 99 57
Bottom of Filter Pack 100 00

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
				2.00 /2.00	5934	0			ML	0 0'-2 0' Sandy Silt with some Gravel and Clay Mod yellowish brown (10 YR 5/4) to dark yellowish orange (10 YR 6/6) where FeO stained Core indurated Bedding not apparent Trace micaceous material Some FeO concretions Trace roots Sand predom f g, trace m g and c g, well sorted, rounded. Gravel is fine, sub-angular to sub-rounded. Dry to moist Mod. plasticity Stiff 23% gravel, 31% sand, 32% silt, 14% clay
				2.00 /2.00	5933	1				
				2.00 /2.00	5932	2			CL	2 0'-5.1' Sandy Clay with some Silt and trace Gravel Olive gray (5 Y 4/1) to dark yellowish orange (10 YR 6/6) where FeO stained, to mod yellowish brown (10 YR 5/4) Bedding not apparent Trace roots. Low plasticity Trace Mn staining. Sand is m g to f g. Gravel 4-5% predom fine, trace coarse granite clasts. Dry Some calcareous material Trace carbonaceous material Some small FeO concretions. At 5 0'-5 1' small slide surface between claystone and alluvium, approx 80 degrees 5% gravel, 34% sand, 12% silt, 49% clay
				2.00 /2.00	5931	3				
				1.10 /2.00	5930	4				No recovery (5.1-6 0')
					5929	5				
	BH00204S			2.00 /2.00	5928	6			CL	6.0'-7.2' Sandy Clay to Clayey Sand with some Gravel Core dry to moist. All core was used for sample, therefore the description is taken from Well Site Field Log.
	BH00205AS			2.00 /2.00	5927	7			CLAYSTONE	7 2'-10.0' Top of Bedrock at 7 2' Claystone. Brecciated Mod. to strongly weathered Trace caliche Some fresh claystone clasts in with crushed clay matrix. Dry Fe stained Sample description taken from Well Site Field Log. Core taken for sample BH00205AS
				2.00 /2.00	5926	8				
					5925	9				
						10				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34 30	GROUND ELEVATION (FT) [illegible]	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) [illegible]	DATE DRILLED	02/01/95	
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST P J JORDAN					

CHEMICAL'S / 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
	BH0026AS			1.70 /2.00	5924	10			CLAYSTONE	10.0'-15.3' Claystone. Light olive gray (5 Y 6/1) to olive gray (5 Y 4/1). Grades to pale yellowish brown (10 YR 6/2). Some dark yellowish orange (10 YR 6/6) where FeO stained. Claystone fractured. FeO staining along fractures, trace MnO2 staining. Some organics. Some Fe concretions at 12.4'. Fractures angle around 10 to 80 degrees. Slightly friable. Dry. Massive. Trace caliche. Mod weathered. Increase in Mn staining at 13.2'. Core appears to become platy at 13.2'. At 14.75' caliche in filling of 45 degree fracture. 100% clay.
				1.30 /1.50	5923	11				No recovery (11.7-12.0'), (13.3-13.5') and (14.4-14.5')
					5922	12				
	BH0027AS			0.90 /1.00	5921	13				No recovery. (15.3-15.5')
				0.80 /1.00	5920	14				
					5919	15				
				2.00 /2.00	5918	16			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.
	BP0028AS				5917	17				
				1.00 /1.00	5916	18				
				2.00 /2.00	5915	19				
						20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 34 30	GROUND ELEVATION (FT)	5934 40	PROJECT NUMBER	005-RFI/RI	LOG OF BORING NUMBER
NORTH	747578	AREA IHSS 115	CASING DIAMETER (IN)		GEOLOGIST	P J JORDAN	71294
EAST	2082835	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	6 50	DATE DRILLED	02/01/95	

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

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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 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)
	BH0208AS			1.00 /1 00	5913	21			CLAYSTONE	21 0'-26 0' Claystone Light olive gray (5 Y 6/1) Some pale reddish brown (10 R 5/4) oxide, mottled Fractures heavily oxidized. Becomes damp to moist at 22.0'
				2 00 /2 00	5912	22				
					5911	23				
				2 00 /2 00	5910	24				
	BH0209AS				5909	25				
				2.00 /2.00	5908	26			SILTY CLAYSTONE	26 0'-28.0' Silty Claystone Light olive gray (5 Y 5/2) to dark yellowish orange (10 YR 6/6). Laminated. Soft sediment deformation structures Mod. weathered. Abundt organics, mostly leaf imprints, stems Leaf imprints FeO oxidized to 30 0' Core cleaves easily, breaking horizontally Find leaf imprints on fracture surfaces where core cleaves (breaks) along laminations. Both shades of FeO appear mottled (10 YR 6/6 and 10 R 5/4) Some siltstone laminae from 27.0'-27.8. Slightly friable. Becomes damp to moist.
					5907	27				
				0 80 /0 80	5906	28			SILTSTONE	28 0'-28.8' Siltstone. Mod brown (5 YR 3/4) to mod yellowish brown (10 YR 5/4) Strongly weathered. Iron cemented Possibly brecciated Wet at top of interval dry at bottom Hard. Dusky brown (5 YR 2/2) iron staining along fractures
				2.00 /2.00	5905	29			SILTY CLAYSTONE	28 8'-30.0' Silty Claystone Olive gray (5 Y 4/1) Trace Fe staining. Trace carbonaceous material Hard Slightly to mod. weathered.
						30				

STATE PLANE COORDINATE	TOTAL DEPTH (FT) 34 30	GROUND ELEVATION (FT) 5934 40	PROJECT NUMBER	15-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 (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
					5904	30			SILTY CLAYSTONE	30 0'-30 8' Silty Claystone Same as above (reference interval 28.8'-30.0') Becomes massive Slightly weathered. Core disturbed by Moss sampler
				1 00 /2 00	5903	31			CLAYSTONE	30 8'-34 3' Claystone. Dark gray (N3) Unweathered Trace lignite Damp to dry Indurated. Core broken by Moss sampler. Slightly friable to friable Massive (Very hard drilling)
					5902	32				No recovery (31.8-32 8')
	BH02L10AS			1.50 /1.50	5901	33				
					5900	34				Total Depth Drilled: 34 30
					5899	35				
					5898	36				
					5897	37				
					5896	38				
					5895	39				
						40				

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	LOCATION NUMBER H7	BOREHOLE DIAMETER (IN) 6 30	DATE DRILLED	02/20/95	

REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	PERCENT RECOVERY	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	BH0025AS			0 85 /1 80 0 90 /2 00 1 60 /2 00 1 20 /2 00 0 00 /2 00	5983 5982 5981 5980 5979 5978 5977 5976 5975 5974	1 2 3 4 5 6 7 8 9 10			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')
									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')
									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

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 14 00	GROUND ELEVATION (FT)	5393 80	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747027	AREA '	CASING DIAMETER (IN)	2 00	GEOLOGIST	A R AGLIARDO	71394
EAST	2080265	LOCATOR NUMBER H7	BOREHOLE DIAMETER (IN)	6 30	DATE DRILLED	02/20/95	
REMARKS	DRILLING EQUIPMENT	MOBILE DRILL B-57 ASI RIG GEOLOGIST A R AGLIARDO					

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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				
				1.20 /2.00	5973	11			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.
					5972	12				
				2.20 /2.20	5971	13				No recovery (11.0-11.8')
					5970	14				Total Depth Drilled: 14.00 Total Depth Casing 12.60 Bottom of Filter Pack: 10.60
					5969	15				
					5968	16				
					5967	17				
					5966	18				
					5965	19				
					5964	20				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48 10	GROUND ELEVATION (FT)	5997 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747882	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71494
EAST	2082014	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	02/14/95	

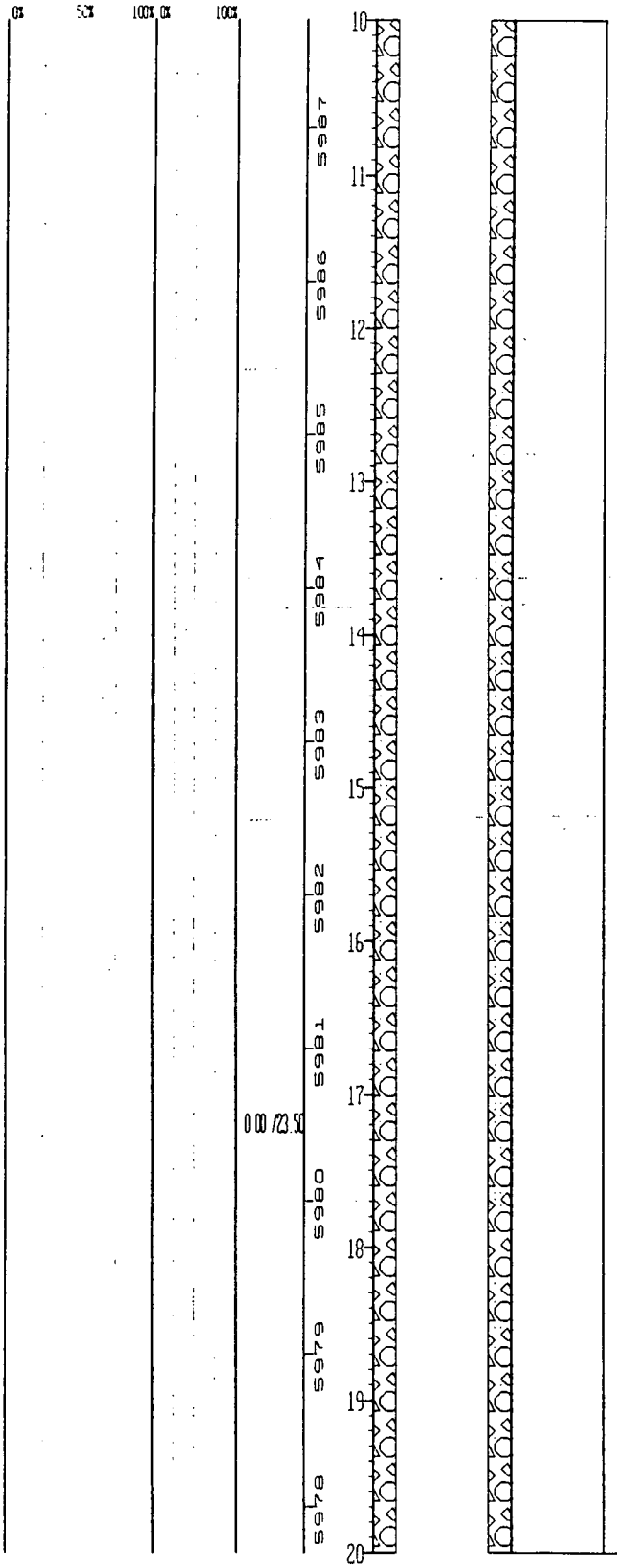
REMARKS DRILLING EQUIPMENT MOBILE DRILL B-57 AST RIG GEOLOGIST J W HARWELL 45 3-48 1' IS NATURAL MATERIAL (BOREHOLE CAVE IN)

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE (0% 50% 100%)	PERCENT RECOVERY (0% 100%)	RECOVERY/INTERVAL	DATUM (FT)	DEPTH (FT)	WELL OR PIEZOMETER CONSTRUCTION	LITHOLOGY	UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
				0 00 /4 00	5997	0				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
					5996	1				
					5995	2				
					5994	3				
				1 50 /1.50	5993	4				
	BH0249AS				5992	5				
					5991	6				
	BP0004QAS BP0004GAS				5990	7				
					5989	8				
					5988	9				
						10				

STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48 10	GROUND ELEVATION (FT)	5997 70	PROJECT NUMBER	OU5-RFI/RI	LOG OF BORING NUMBER
NORTH	747882	AREA IHSS 115	CASING DIAMETER (IN)	2 00	GEOLOGIST	J W HARWELL	71494
EAST	2082014	LOCATOR NUMBER: J7	BOREHOLE DIAMETER (IN)	5 60	DATE DRILLED	02/14/95	

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL 45 3-48 1' IS NATURAL MATERIAL (BOREHOLE CAVE IN)

CHEMICAL SAMPLE DEPTH / GRADATIONAL SAMPLE DEPTH	SAMPLE NUMBER	SAMPLE GRAIN SIZE	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				
					5987	11				
					5986	12				
					5985	13				
					5984	14				
					5983	15				
					5982	16				
					5981	17				
				0 00 /23.50	5980	18				
					5979	19				
	000044AS				5978	20				



STATE PLANE COORDINATE		TOTAL DEPTH (FT) 48 10	GROUND ELEVATION (FT)	5997 70	PROJECT NUMBER	005-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 GRADE 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				
		P0004SAS				5969	28				
				0 70 / 0 70		5968	29	03/16/95		CLAYSTONE	29 0'-29 7' Claystone Med. dark gray (N4) to olive gray (5 Y 4/1) Unweathered. Laminated. Core dry Core cleaves easily, breaks horizontally Imprint (unrecognizable) at 29 5' Trace fe along fractures Sediments appear disturbed.
							30				No recovery (29 7-30 0')

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 THSS 115	CASING DIAMETER (IN) 2 00	GEOLOGIST J W. HARWELL	71494
EAST	2082014	LOCATOR NUMBER J7	BOREHOLE DIAMETER (IN) 5 60	DATE DRILLED 02/14/95	

REMARKS: DRILLING EQUIPMENT MOBILE DRILL B-57 ASI RIG GEOLOGIST J W HARWELL. 45 3-48 1' IS NATURAL MATERIAL (BOREHOLE CAVE IN)

CHEMICAL SAMPLE DEPTH
GRADATIONAL SAMPLE NUMBER

SAMPLE GRAIN SIZE: 0% 50% 100%
PERCENT RECOVERY: 0% 100%
RECOVERY/INTERVAL: 0 00 /3.40; 5 10 /5.00
DATUM (FT): 5967, 5966, 5965, 5964, 5963, 5962, 5961, 5960, 5959, 5958
DEPTH (FT): 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40
WELL OR PIEZOMETER CONSTRUCTION: 02/15/95
LITHOLOGY

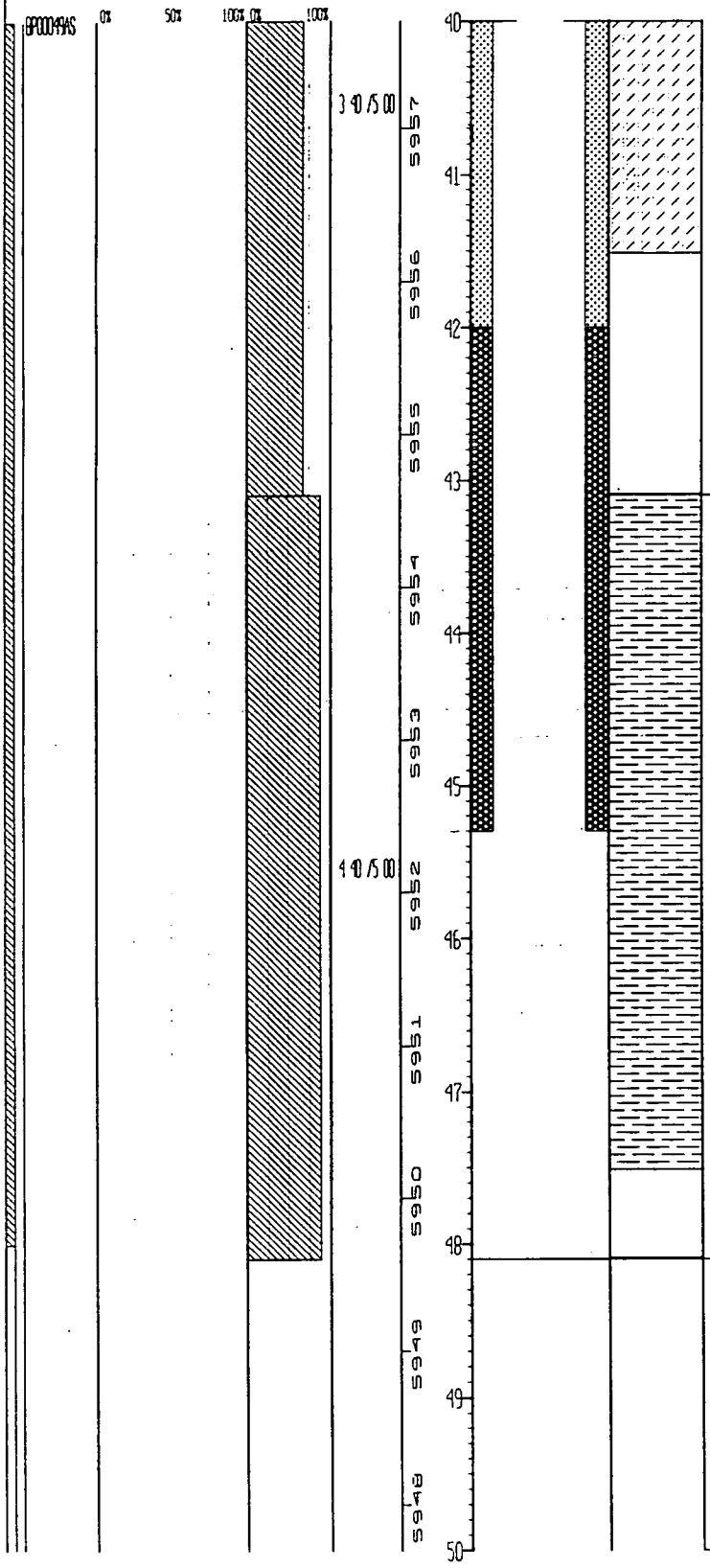
UNIFIED SOILS CLASSIFICATION OR ROCK TYPE	DESCRIPTION
	30 0'-33 1' Grout from surface casing installation
CLAYSTONE	33 1'-35 5' Claystone with some Silt Med. dark gray (N4). Thin bedded to laminated. Vertical fracture at 33 2'-33.5'. Hard. Indurated from 33.7'-35.5' Some hard siltstone nodules, sub-rounded, coarse to fine gravel size in claystone matrix Trace to some calcareous cement 10% silt, 90% clay.
SANDY SILTSTONE	35 5'-37 7' Calcareous Sandy Siltstone. Pale olive gray (10 Y 6/2) to olive gray (5 Y 4/1). Thin bedded to laminated Mod hard to hard. Well cemented from 35 5'-36 3' (calcareous) Slightly weathered. Mod cemented and mod. hard, slightly friable to 37 7' with increasing clay content. Crossbedded from 36.0'-36 3' Increase in clay content from 36.5'-37.7' with soft sediment deformation structures. Sand, f g., well rounded quartz
SANDY SILTSTONE	37 7'-41 5' Sandy Siltstone (non-calcareous) Olive gray (5 Y 4/1) Slightly weathered Thin bedded to laminated Trace hard siltstone nodules. Trace calcareous cemented lamnae and thin beds. Mod. hard Mod. friable Mod indurated No recovery (41.5-43.1')

GP00048AS

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 BASS 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



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

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
57094	Dec-94	NOT INSTALLED/DEVELOPED	NA
57094	Mar-95	34.97	5937.15
57094	Apr-95	34.40	5937.72
57094	May-95	34.82	5937.30
57094	Jun-95	35.24	5936.88
57094	Jul-95	34.19	5937.93
57094	Aug-95	*	*
57194	Sep-94	NOT INSTALLED/DEVELOPED	NA
57194	Oct-94	NOT INSTALLED/DEVELOPED	NA
57194	Nov-94	NOT INSTALLED/DEVELOPED	NA
57194	Dec-94	NOT INSTALLED/DEVELOPED	NA
57194	Jan-95	NOT INSTALLED/DEVELOPED	NA
57194	Feb-95	NOT INSTALLED/DEVELOPED	NA
57194	Mar-95	123.46	5876.56
57194	Apr-95	124.01	5876.01
57194	May-95	127.90	5872.12
57194	Jun-95	99.83	5900.19
57194	Jul-95	100.04	5899.98
57194	Aug-95	*	*
57594	Sep-94	NOT INSTALLED/DEVELOPED	NA
57594	Oct-94	NOT INSTALLED/DEVELOPED	NA
57594	Nov-94	NOT INSTALLED/DEVELOPED	NA
57594	Dec-94	NOT INSTALLED/DEVELOPED	NA
57594	Jan-95	NOT INSTALLED/DEVELOPED	NA
57594	Feb-95	NOT INSTALLED/DEVELOPED	NA
57594	Mar-95	3.20	5945.23
57594	Apr-95	7.45	5940.98
57594	May-95	7.90	5940.53
57594	Jun-95	7.09	5941.34
57594	Jul-95	8.75	5939.68
57594	Aug-95	*	*
57894	Sep-94	NOT INSTALLED/DEVELOPED	NA
57894	Oct-94	5.59	5944.42
57894	Nov-94	6.04	5943.97
57894	Jan-95	5.81	5944.20
57894	Feb-95	5.82	5944.19
57894	Mar-95	5.97	5944.04
57894	Apr-95	5.35	5944.66
57894	May-95	5.55	5944.46
57894	Jun-95	5.59	5944.43
57894	Jul-95	6.81	5943.20
57894	Aug-95	*	*
57994	Sep-94	NOT INSTALLED/DEVELOPED	NA
57994	Oct-94	7.30	5933.97
57994	Nov-94	6.39	5934.88
57994	Dec-94	5.74	5935.53
57994	Jan-95	5.48	5935.79

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
57994	Feb-95	5.48	5935.79
57994	Mar-95	5.67	5935.60
57994	Apr-95	5.43	5935.84
57994	May-95	5.48	5935.79
57994	Jun-95	5.00	5936.27
57994	Jul-95	6.16	5935.11
57994	Aug-95	*	*
58094	Sep-94	NOT INSTALLED/DEVELOPED	NA
58094	Oct-94	5.00	5925.91
58094	Nov-94	4.21	5926.70
58094	Dec-94	4.16	5926.75
58094	Jan-95	4.00	5926.91
58094	Feb-95	4.00	5926.91
58094	Mar-95	4.13	5926.78
58094	Apr-95	4.04	5926.87
58094	May-95	4.19	5926.72
58094	Jun-95	4.39	5926.52
58094	Jul-95	5.09	5925.82
58094	Aug-95	*	*
58194	Sep-94	NOT INSTALLED/DEVELOPED	NA
58194	Oct-94	DRY	NA
58194	Nov-94	DRY	NA
58194	Jan-95	6.57	5924.06
58194	Feb-95	6.57	5924.06
58194	Mar-95	5.93	5924.70
58194	Apr-95	5.39	5925.24
58194	May-95	4.38	5926.25
58194	Jun-95	4.37	5926.26
58194	Jul-95	6.86	5923.77
58194	Aug-95	*	*
58294	Sep-94	NOT INSTALLED/DEVELOPED	NA
58294	Oct-94	DRY	NA
58294	Nov-94	DRY	NA
58294	Jan-95	DRY	NA
58294	Feb-95	DRY	NA
58294	Mar-95	DRY	NA
58294	Apr-95	DRY	NA
58294	May-95	DRY	NA
58294	Jun-95	DRY	NA
58294	Jul-95	DRY	NA
58294	Aug-95	*	*
58394	Sep-94	NOT INSTALLED/DEVELOPED	NA
58394	Oct-94	NOT INSTALLED/DEVELOPED	NA
58394	Nov-94	NOT INSTALLED/DEVELOPED	NA
58394	Dec-94	NOT INSTALLED/DEVELOPED	NA
58394	Jan-95	NOT INSTALLED/DEVELOPED	NA
58394	Feb-95	NOT INSTALLED/DEVELOPED	NA

APPENDIX C
SUMMARY OF WATER LEVEL MEASUREMENTS
IMPLEMENTATION OF TM15

WELL NUMBER	MONTH	DEPTH TO WATER (ft)	WATER TABLE ELEVATION (ft. above mean sea level)
58394	Mar-95	8.72	5990.82
58394	Apr-95	8.91	5990.63
58394	May-95	8.91	5990.63
58394	Jun-95	5.87	5993.67
58394	Jul-95	6.87	5992.67
58394	Aug-95	•	•
58494	Sep-94	NOT INSTALLED/DEVELOPED	NA
58494	Oct-94	DRY	NA
58494	Nov-94	8.68	5987.70
58494	Dec-94	7.95	5988.43
58494	Jan-95	7.59	5988.79
58494	Feb-95	7.59	5988.79
58494	Mar-95	7.08	5989.30
58494	Apr-95	6.39	5989.99
58494	May-95	2.52	5993.86
58494	Jun-95	2.54	5993.84
58494	Jul-95	5.97	5990.41
58494	Aug-95	•	•
58594	Sep-94	NOT INSTALLED/DEVELOPED	NA
58594	Oct-94	NOT INSTALLED/DEVELOPED	NA
58594	Nov-94	4.97	5915.17
58594	Dec-94	4.97	5915.17
58594	Jan-95	4.88	5915.26
58594	Feb-95	4.88	5915.26
58594	Mar-95	4.80	5915.34
58594	Apr-95	4.71	5915.43
58594	May-95	4.85	5915.29
58594	Jun-95	4.97	5915.17
58594	Jul-95	5.24	5914.90
58594	Aug-95	•	•
58694	Sep-94	NOT INSTALLED/DEVELOPED	NA
58694	Oct-94	DRY	NA
58694	Nov-94	DRY	NA
58694	Jan-95	DRY	NA
58694	Feb-95	DRY	NA
58694	Mar-95	DRY	NA
58694	Apr-95	DRY	NA
58694	May-95	DRY	NA
58694	Jun-95	DRY	NA
58694	Jul-95	DRY	NA
58694	Aug-95	•	•
58793	Sep-94	16.65	5997.55
58793	Oct-94	17.22	5996.98
58793	Nov-94	17.50	5996.70
58793	Dec-94	17.51	5996.69
58793	Jan-95	17.64	5996.56
58793	Feb-95	17.72	5996.48

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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

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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	*	*

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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

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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	*	*

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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

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

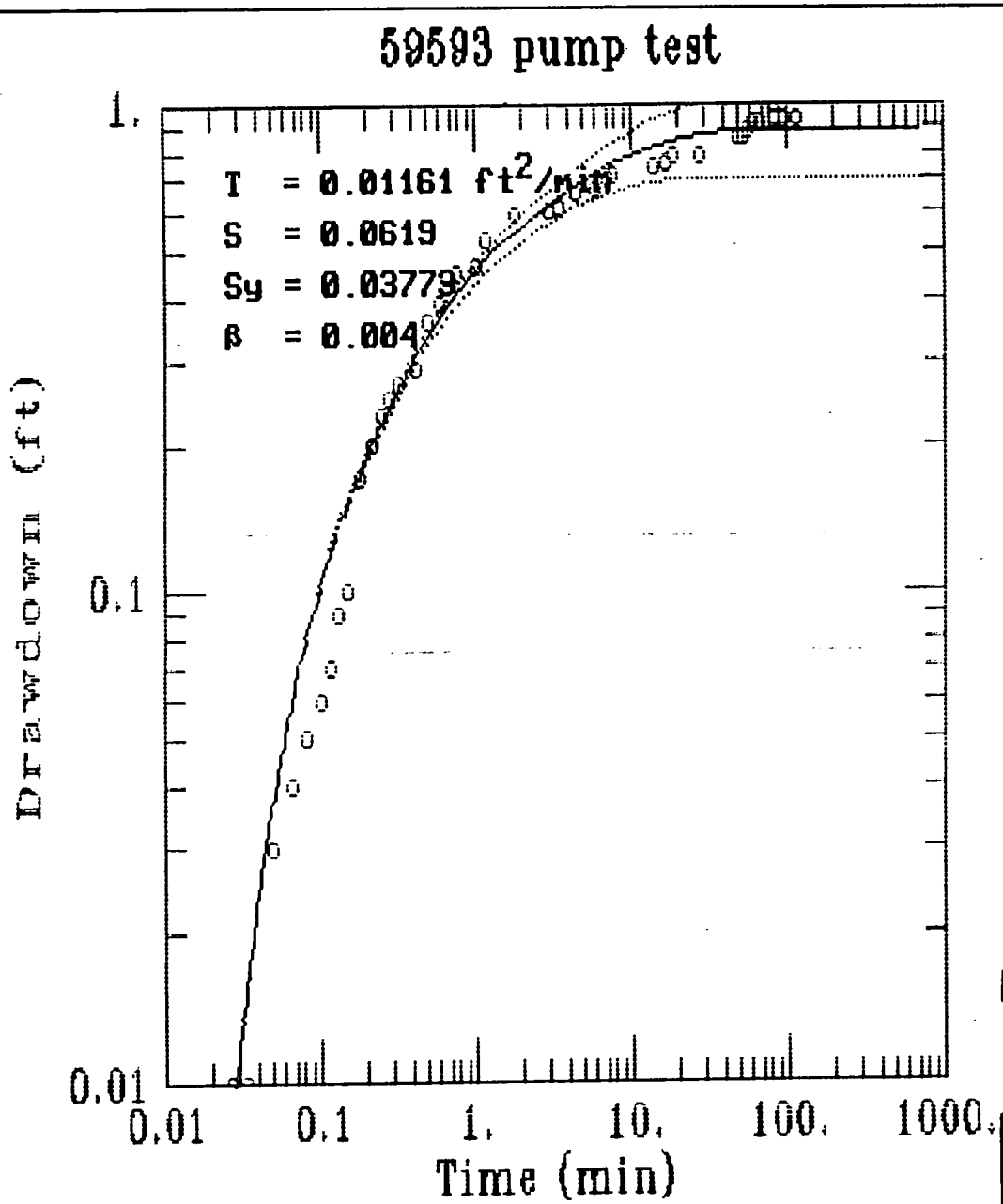
58793 PUMPING TEST DATA
(Continued)

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



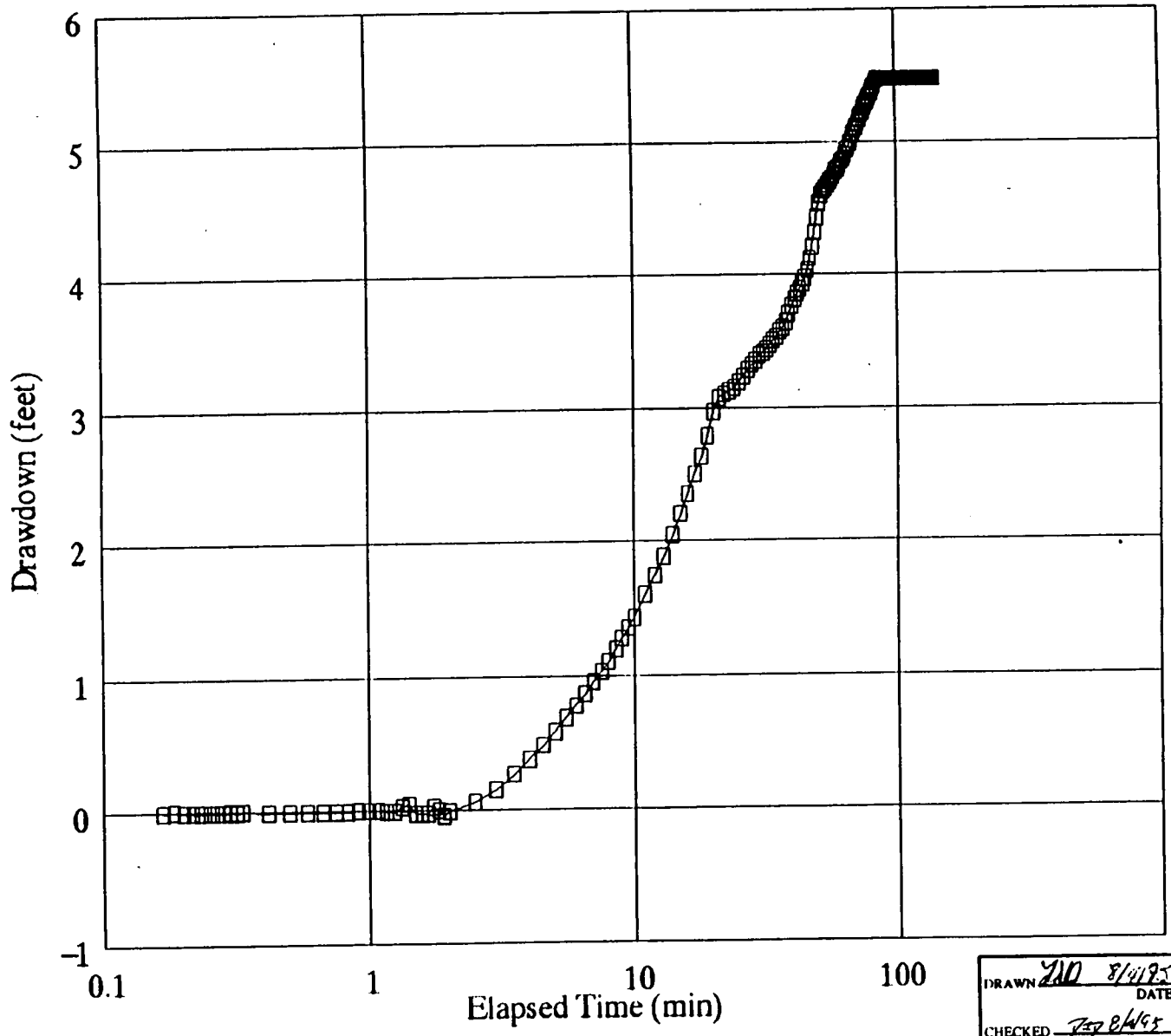
AQTESOLV

GERAGHTY & MILLER, INC.

Modeling Group

DRAWN 8/14/95 DATE	59593 AQUIFER TEST DRAWDOWN VS TIME
CHECKED 8/14/95 DATE	ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
APPROVED DATE	OU5 - WOMAN CREEK PRIORITY DRAINAGE
F6-2.DRW	RFI/RI REPORT
	FIGURE D-1

58793 Pumping Test – Hermit Data



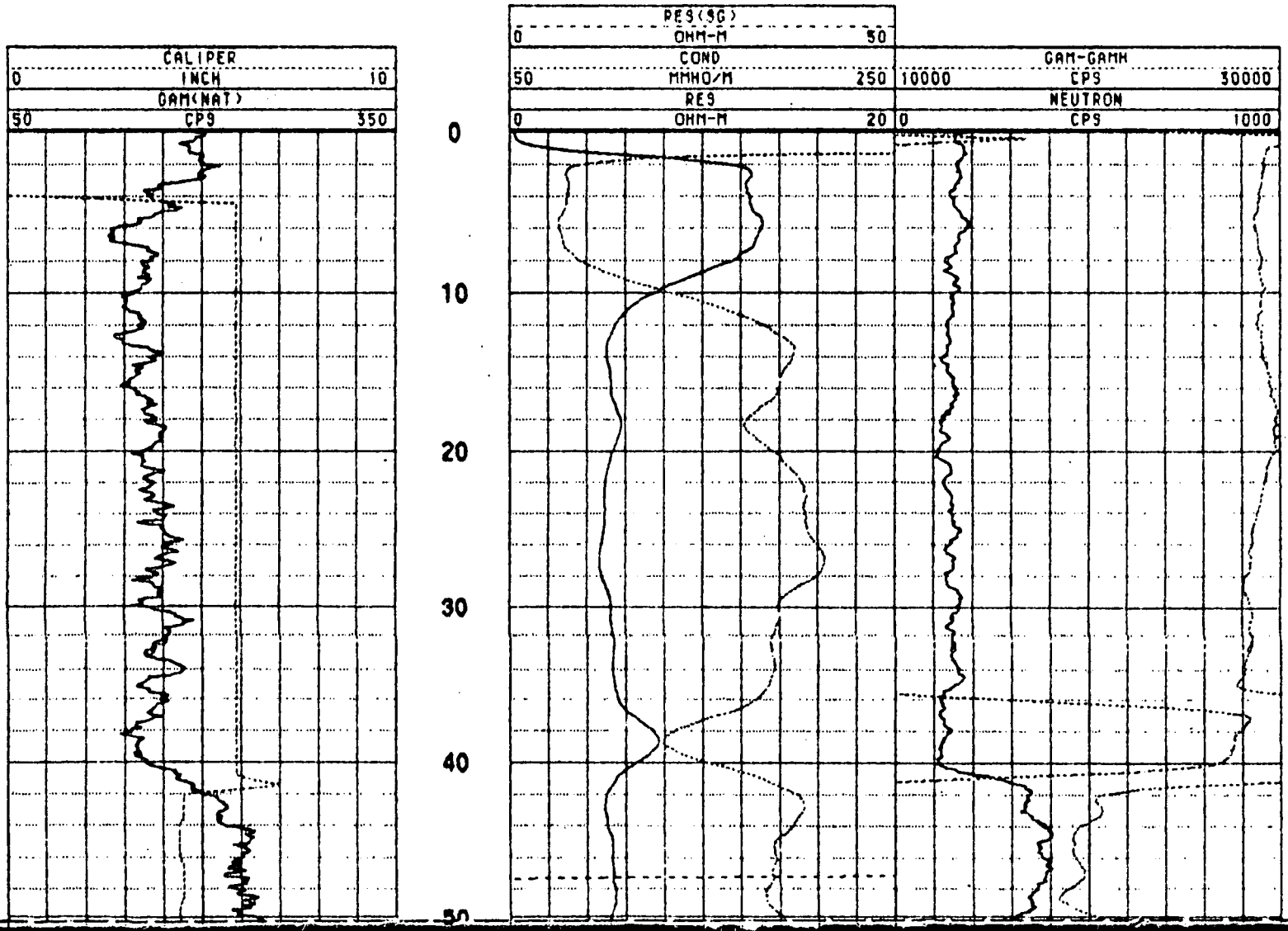
DRAWN ZLD 8/4/95 DATE	58793 AQUIFER TEST DRAWDOWN VS TIME
CHECKED RSP 8/4/95 DATE	ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
APPROVED ____ DATE	OU5 - WOMAN CREEK PRIORITY DRAINAGE
F6-2.DRW	RFI/RI REPORT
	FIGURE D-2

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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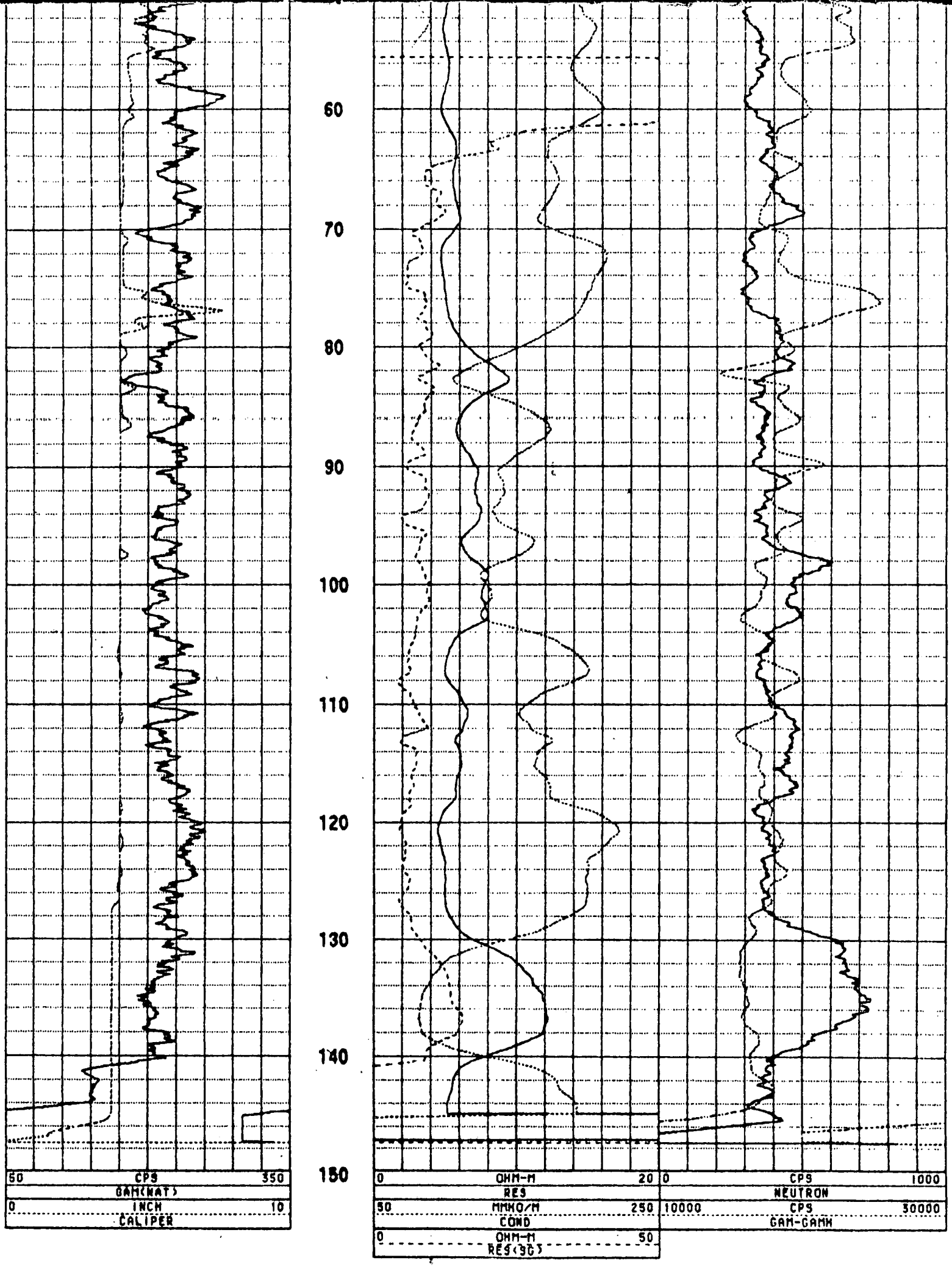
50 CPS 350
RES(SG)
0 OHM-M 50
COND
50 MMHO/M 250
RES
0 OHM-M 20
GAM-GAMM
10000 CPS 30000
NEUTRON
0 CPS 1000
0
10
20
30
40
50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70
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100
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120
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140
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CALIPER
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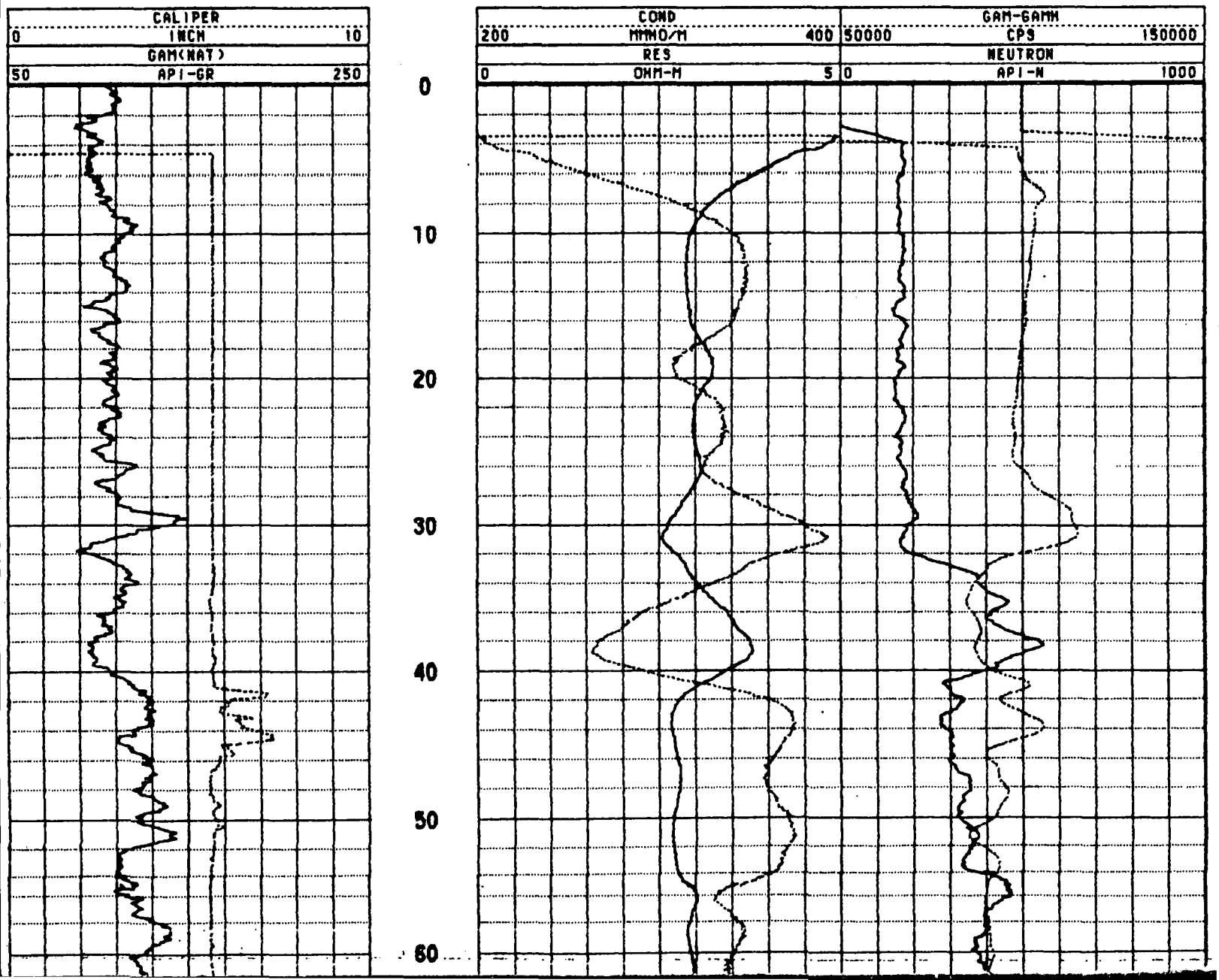
RES
50 MMHO/M 250
COND
0 OHM-M 50
RES(SC)
0 CPS 1000
NEUTRON
10000 CPS 30000
GAM-GAMM

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	: H20	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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COND
200 MMHO/M 400
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GAM-GAMM
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NEUTRON
0 API-N 1000
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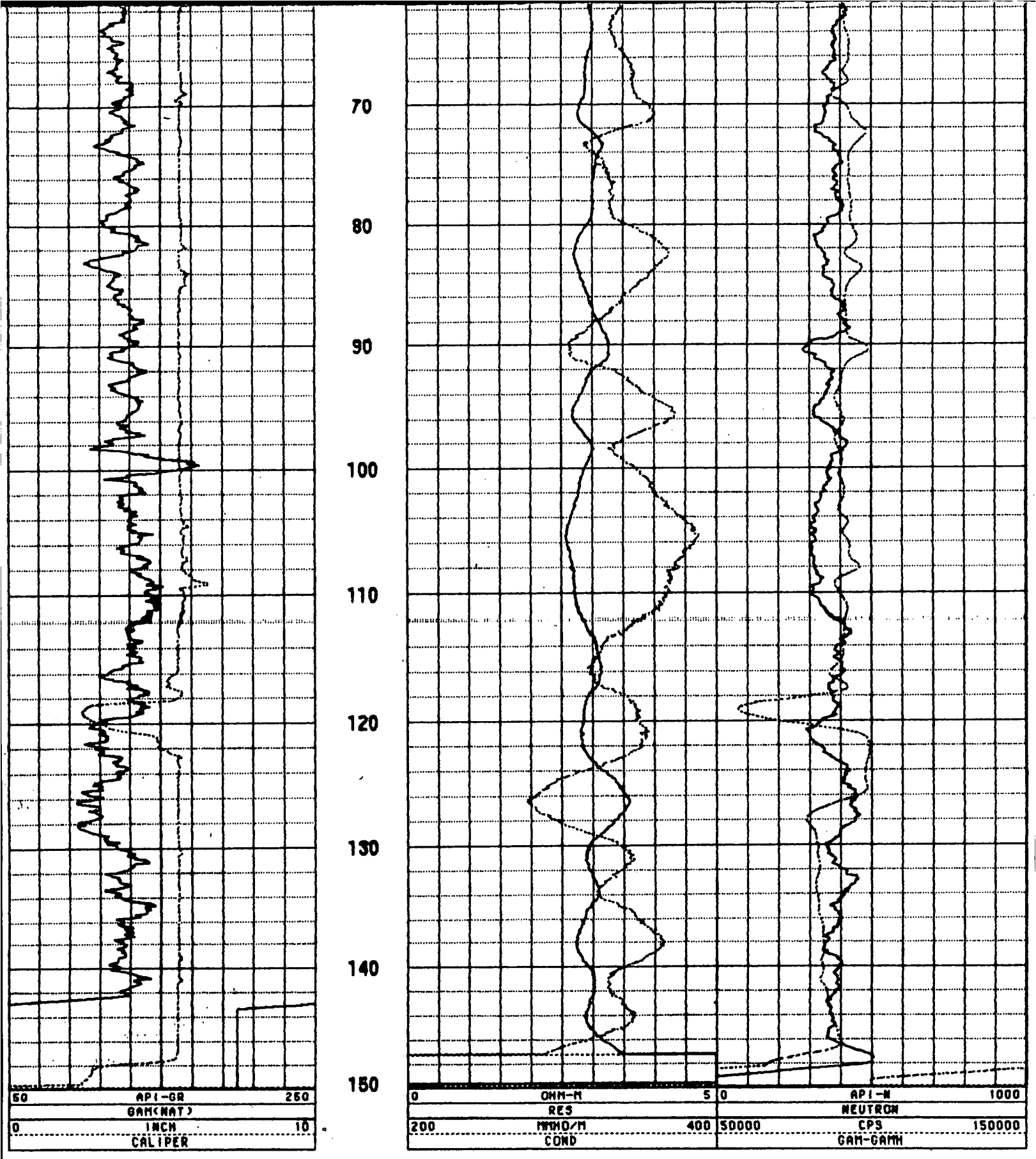
20
30
40
50
60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90
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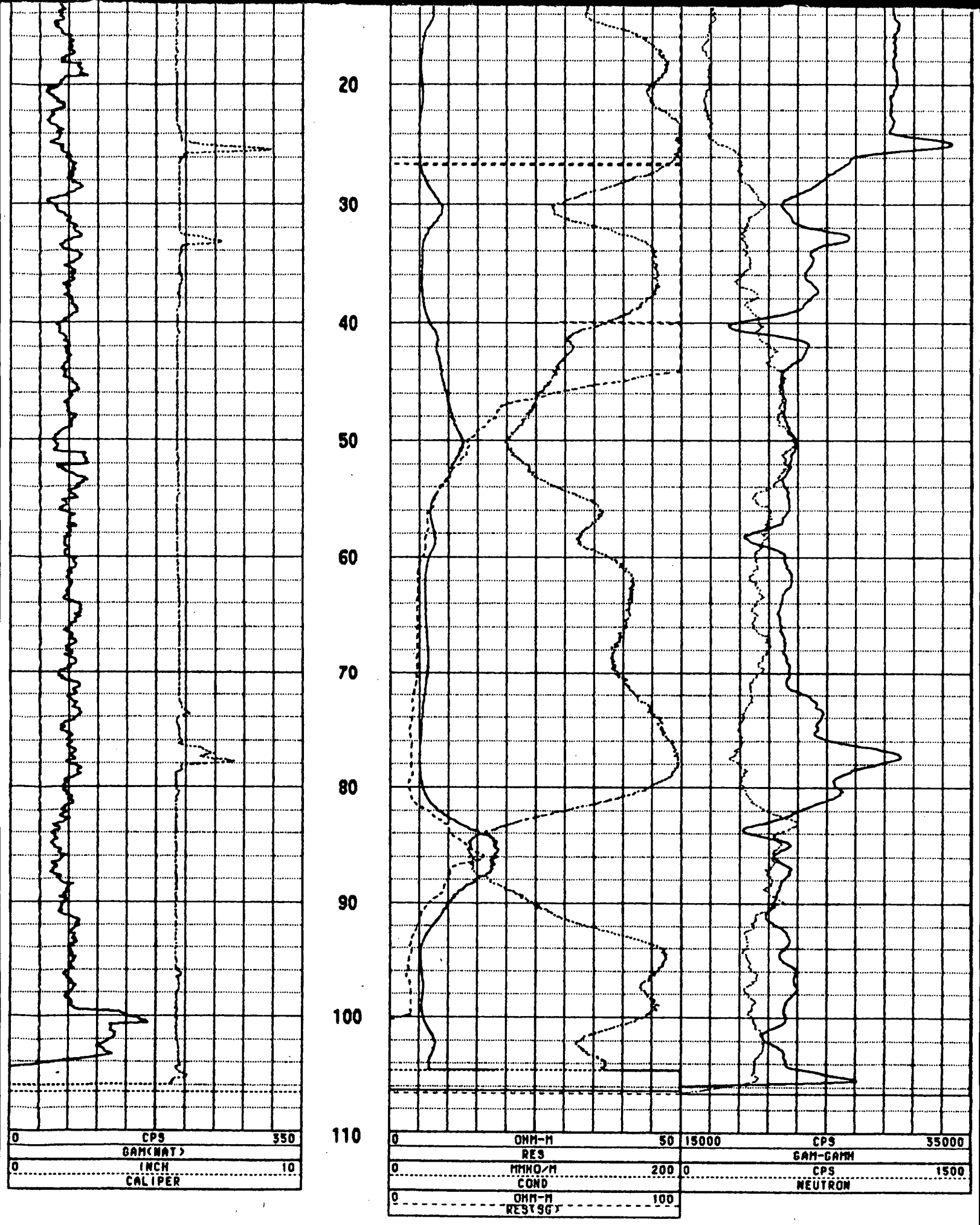
GAM(NAT)
0
INCH
10
CALIPER
0
OHM-M
5
RES
200
MMHO/M
400
COND
0
API-N
1000
NEUTRON
50000
CPS
150000
GAM-GAMM

Century GEOPHYSICAL CORP.

57594

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 57594				
LOCATION/FIELD	: OU 5				
COUNTY	: JEFFERSON				
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 11/11/94	PERMANENT DATUM	:	ELEVATIONS	
DEPTH DRILLER	: 105	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 106.70	LOG MEASURED FROM	: G.L.	DF	:
LOG TOP	: -4.20	DRL MEASURED FROM	: G.L.	GL	:
CASING DRILLER	: 24	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .25	RECORDED BY	: R.FEDERWISCH		
BIT SIZE	: 5.6	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 13	RM	: 48.59	TYPE	: 9067C
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 0
FLUID DENSITY	: 1	MATRIX DELTA T	: 1	PLOT	: ROCKY 5
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: 1	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS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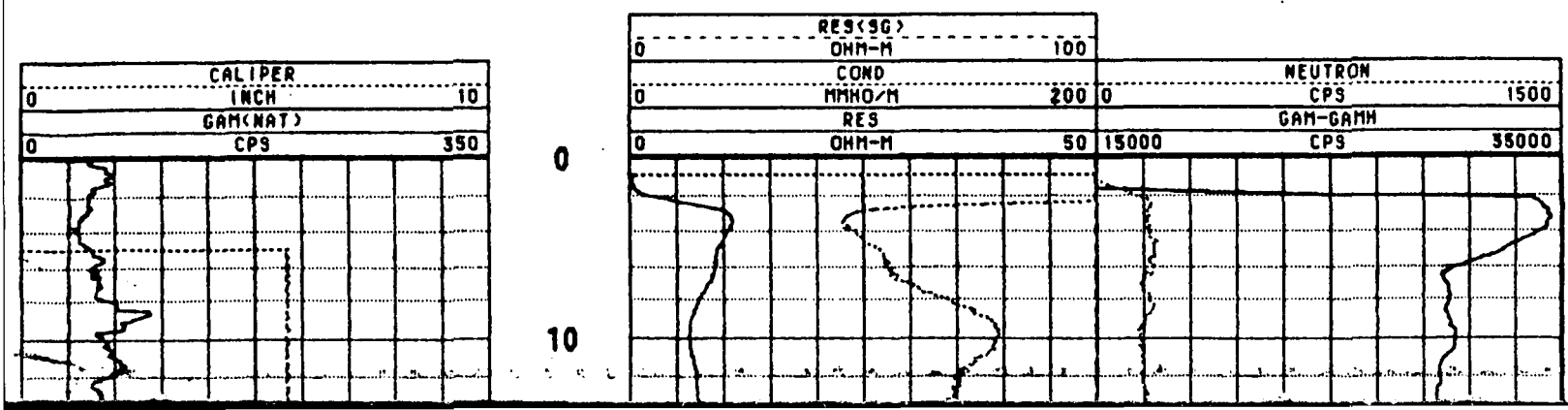
40
50
60
70
80
90
100
110
0 CPS 350
GAM(NAT)
0 INCH 10
CALIPER
0 OHM-M 50
RES
0 MMHO/M 200
COND
0 OHM-M 100
RES(SG)
15000 CPS 35000
GAM-GAMM
0 CPS 1500
NEUTRON


CALIPER
0 INCH 10
GAM(NAT)
0 CPS 350
0
10
RES(SG)
0 OHM-M 100
COND
0 MMHO/M 200
RES
0 OHM-M 50
NEUTRON
0 CPS 1500
GAM-GAMM
15000 CPS 35000

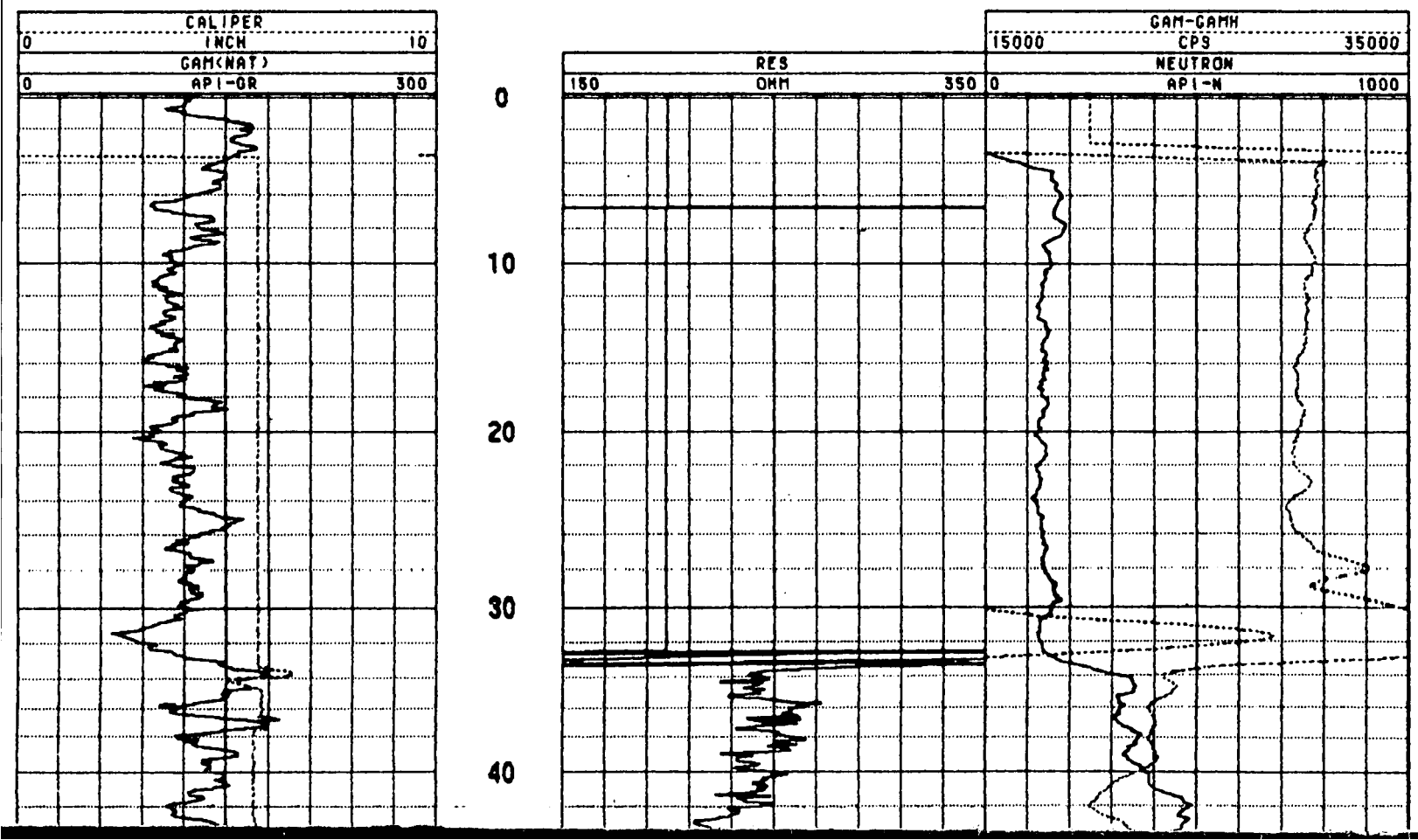
Century GEOPHYSICAL CORP.

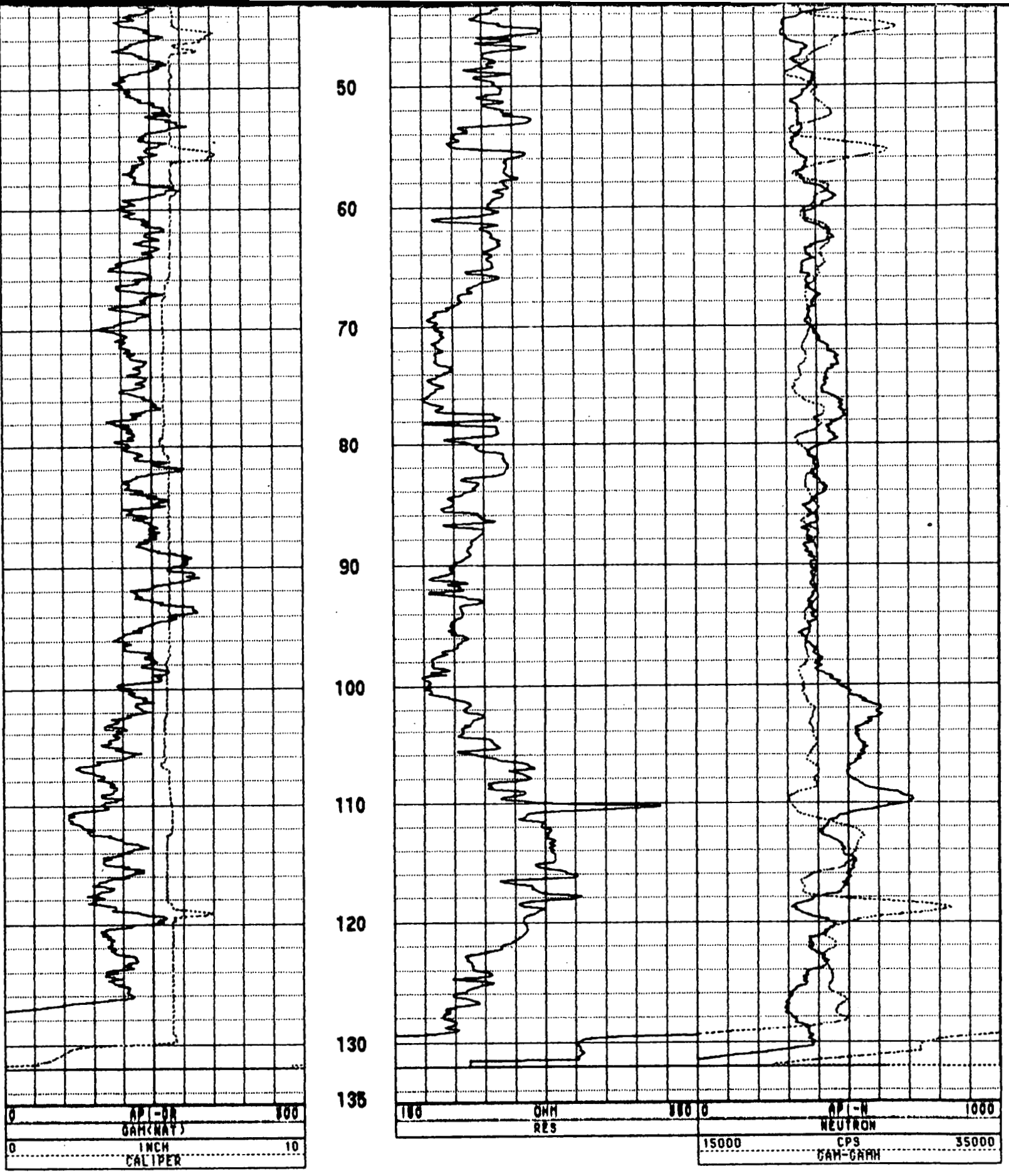
59894

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 59894			RES	
LOCATION/FIELD	: OU-5			DENSITY	
COUNTY	: JEFFERSON			CALIPER	
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 01/13/95	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 132.5	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 132.10	LOG MEASURED FROM	: T.O.C.	DF	:
LOG TOP	: -2.50	DRL MEASURED FROM	: GL	GL	:
CASING DRILLER	: 32	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .5	RECORDED BY	: D.STEWART		
BIT SIZE	: 5.625	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 11	RM	: -	TYPE	: 9067A
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 0
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: RF 0
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: -	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

M


CALIPER
0
INCH
10
GAM(NAT)
0
API-GR
300
0
10
20
30
40
RES
150
OHM
350
GAM-GAMM
15000
CPS
35000
NEUTRON
0
API-N
1000

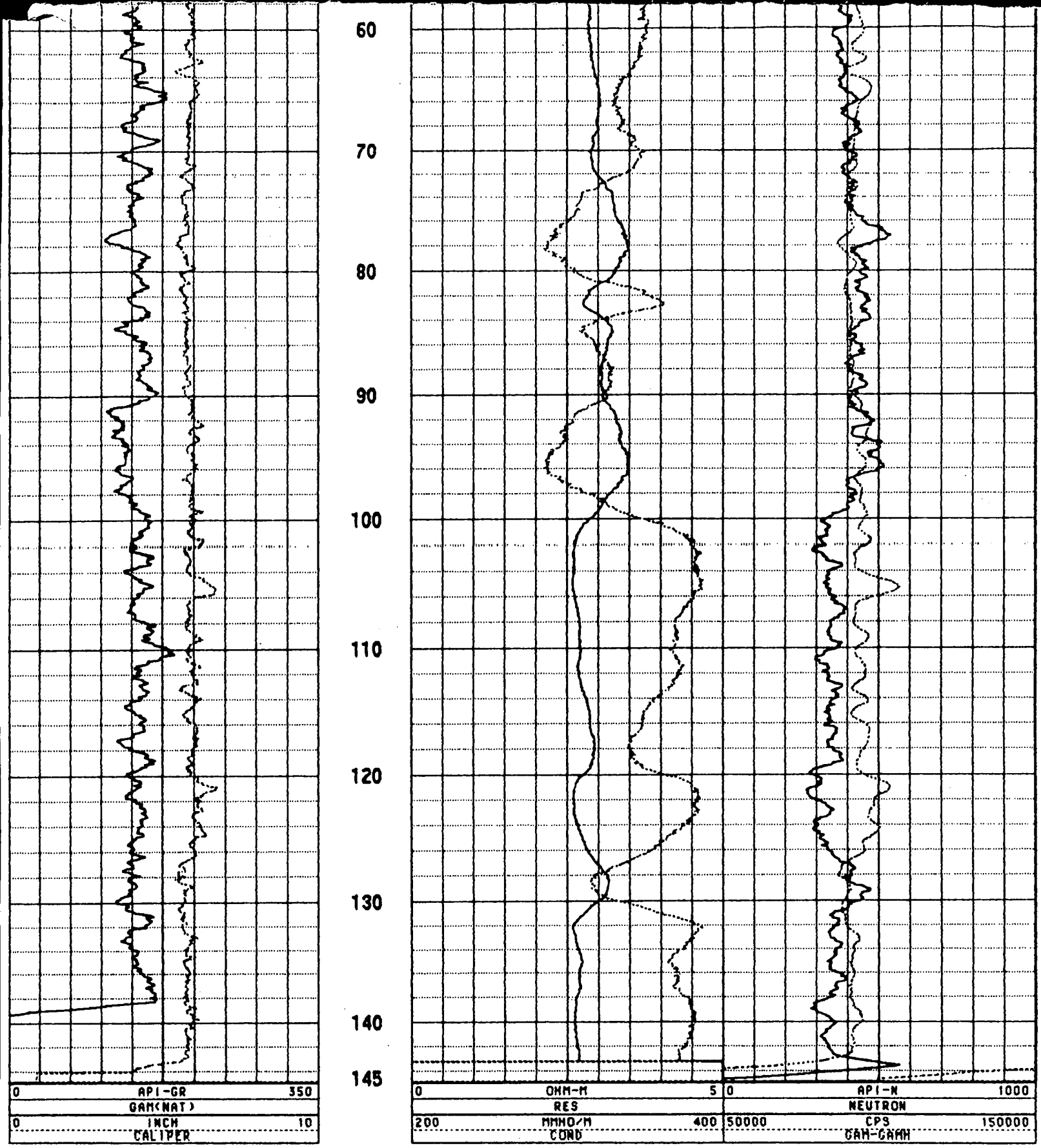

50
60
70
80
90
100
110
120
130
135
0
API-GR
300
GAM(NAT)
0
INCH
10
CALIPER
100
OHM
300
RES
0
API-N
1000
NEUTRON
15000
CPS
35000
GAM-GAMM

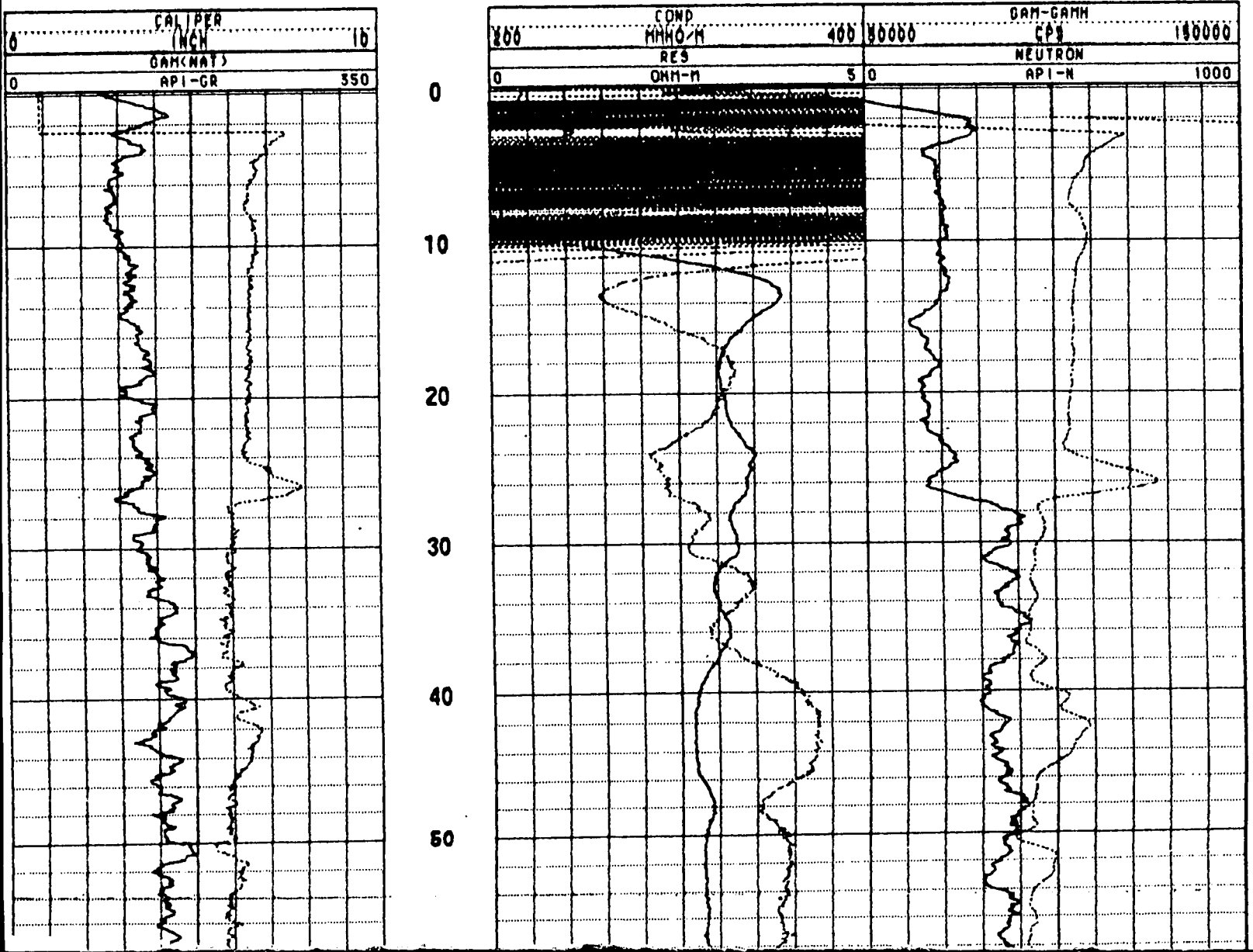
Century GEOPHYSICAL CORP.

71194

COMPANY	: A.S.I.			OTHER SERVICES:	
WELL	: 71194			RES	
LOCATION/FIELD	: OU-5			DENSITY	
COUNTY	: JEFFERSON			CALIPER	
STATE	: COLORADO				
SECTION	:	TOWNSHIP	:	RANGE	:
DATE	: 01/24/95	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 150.0	ELEV. PERM. DATUM	:	KB	:
LOG BOTTOM	: 145.40	LOG MEASURED FROM	: T.O.C.	DF	:
LOG TOP	: -7.80	DRL MEASURED FROM	: GL	GL	:
CASING DRILLER	: 26	LOGGING UNIT	: 9302		
CASING TYPE	: PVC	FIELD OFFICE	: LAS VEGAS		
CASING THICKNESS	: .5	RECORDED BY	: D.STEWART		
BIT SIZE	: 5.625	BOREHOLE FLUID	: H20	FILE	: PROCESSED
MAGNETIC DECL.	: 11	RM	: -	TYPE	: 9510A
MATRIX DENSITY	: 1	RM TEMPERATURE	: -	LOG	: 5
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: RF 1
NEUTRON MATRIX	: SANDSTONE	FLUID DELTA T	: -	THRESH	: 500000
REMARKS	:				

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS


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


CALIPER
0
INCH
10
GAM(NAT)
0
API-GR
350
0
10
20
30
40
50
COND
MMHO/M
400
RES
0
OHM-M
5
GAM-GAMM
CPS
150000
NEUTRON
0
API-N
1000