APPENDIX C:
BORING LOGS AND INCLINOMETER DATA — 1972–1976

P 744

FORM 81-734-3030

OREGON STATE HIGHWAY DIVISION
INTER-OFFICE CORRESPONDENCE

FILE:

Jan. 9, 1979

FROM: Robert H. West

SUBJECT: Johnson Cr. Slide
HWY #9 - MP. 133.3
Lincoln County

TO: Memo to File

The slope meter tubes on the above slide have fulfilled their need & have been abandoned. The following chart gives the basic data obtained from the tubes.

Grnd. ele.	Tube No.	Elev. of Slip Plane	Elev. of Water Table
+ 78.77'	72-1	45'	20' (-53') below Slope
+ 67.0'	73-1 Pinched off at -55'	15'	--
+ 70.98'	76-1	37'	60' (-11') " "
+ 83.0'	76-2 ok (Pinched off at -64')	~~6'~~ (+12')	34' (-49') " "
+ 85.0'	76-3	7' ?	18' (-66')
+ 87.0'	76-4	2'	48' (-39') " "

72 37 34

73 105 28'

76-2 83 12 71'

83 36 47

73 10'

Figure C1. Oregon State Highway Division January 9, 1979, memorandum regarding Johnson Creek slide slope meter tubes.

Oregon State Highway Division
SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CREEK SLIDE Date FEB. 24, 1972
Highway OREGON COAST - #9 County LINCOLN
Hole Location WEST SIDE OF EXISTING HWY Prefix 21-4419-144
Engineer H.H. PATTERSON Driller R. PRODZINSKI Recorder R. WEST
Equipment Used 4" MOBILE AUGER & 2" SPLIT-TUBE SAMPLER
Depth 70' Station "L" 15+01 ± 19' RT. of STAKES Ground Elev. APP. 73
Purpose of Work SLIP PLANE Water Level at Completion ____
Drive sampler OD 2" ID ____ Hammer wt 140# Fall 30" Hole No. 72-1

Depth Sampled From	Depth Sampled To	Driving Resistance Blows/6 in.	% Moisture	% Recovery	Depth FT.	Description (Color, Plastic, Wet-Dry, Soft-Hard, % Water Return; Fresh-Weathered, Joints, Spacing, Broken, % Gravel, Sand, Silt and Clay)
					0	COARSE TAN BEACH SAND.
					3	
4	6	3-2-3-3	87	100		PEAT
					13	
15	17	2-2-2-2	30	100		SOFT, WEATHERED SHALE AND UNCONSOLIDATED SAND WITH CLAY BINDER. MOSTLY FELDSPAR WHICH IS WEATHERING TO KAOLINITE. ($Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$)
					17	RUST COLORED SANDY CLAY. MOIST TO DRY.
					23	FIRM DRY GRAY SHALE WITH LENSES OF RUST.
					49	
						HARD DRY GRAY SANDY SHALE.
					70	

Figure C2. Oregon State Highway Division soils and geological exploration log 72-1.

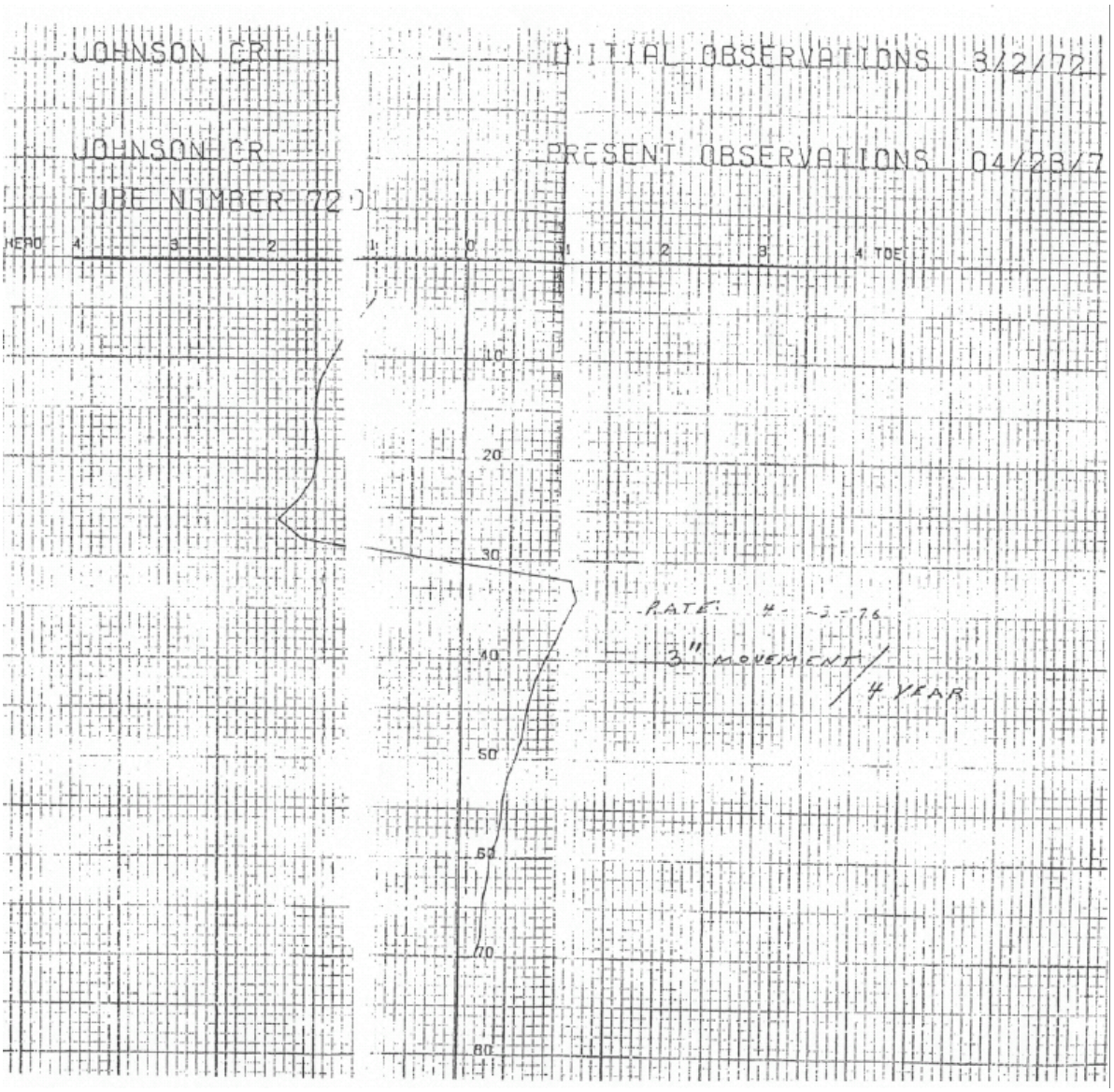

Figure C2. continued.

1973; pinched off at 55' when read at 1976 re/log. Inclin. gu
Lost.

Oregon State Highway Division
SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CREEK SLIDE Date MAR. 20, 1973
Highway OREGON COAST County LINCOLN
Hole Location WEST SIDE of HWY Prefix 21-4419-144
Engineer K.H. PATTERSON Driller PRODZINSKI Recorder PRODZINSKI
Equipment Used 4" MOBILE RUGER
Depth 95' Station M.P. 133.26 Ground Elev.
Purpose of Work SLIP PLANE Water Level at Completion
Drive sampler OD ID Hammer wt Fall Hole No. 73-1

Depth Sampled From	Depth Sampled To	Driving Resistance Blows/__in.	% Moisture	% Recovery	Depth Ft.	Description: Color, Plastic, Wet-Dry, Soft-Hard, % Water Return; Fresh-Weathered, Joints, Spacing, Broken, % Gravel, Sand, Silt and Clay
					0	BROWN - GRAY MOIST CLAY.
					5	BROWN - BUFF BEACH SAND. WET AT 10'.
					16	GRAY PEATY PLASTIC SANDY CLAY.
					21	FIRMER SANDY CLAY. PLASTIC - BROWN - GRAY.
					28	FIRM GRAY CLAY.
					42	HARD GRAY CLAY.
					95	END OF HOLE

Figure C3. Oregon State Highway Division soils and geological exploration log 73-1.

Purpose of work SLIP PLANE & MAT'L TYPE.
Engineer FRETWELL — Depth to free water
Driller PRODZINSKI — Water level at completion
Recorder WEST
Test: ☐ Auger depth — ☒ Diamond core barrel depth 0' - 70'
☐ Split barrel sampler: 2" O.D., 144# Hammer, 30" Fall; Depth
☐ Miniature pile: 5' Probe, 400# Hammer, 30" Fall; Depth

H. D. Sheet No. — Test: — Hole No. 76-1

DEPTH TESTED From / To	DRIVING RESISTANCE BLOWS/ in.	% MOISTURE	MEASURED RECOVERY (FT.)	LENGTH OF CORE RUN (FT.)	% CORE RECOVERY	DEPTH (Ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION
								COLOR / PLASTICITY / WET-DRY / SOFT-HARD — FRESH-WEATHERED / JOINTS-BROKEN / SAND-SILTY-CLAY / ORGANIC CONTENT
0 - 19			1	1,9		0'		MULTICOLOR CLAYEY FINE SAND.
						19		
19 - 25			0	6				GRAY CLAY SHALE, BROKEN, NO RECOVERY.
						25		
25-30			1	5				GRAY CLAY SHALE, BADLY FRACTURED SHORT PIECES, SHALES ARE OF ASTORIA FORMATION TYPE.
-35			4	5				
						34		SAME MAT'L. CRUSH ZONE.
						35		
35- 40			4.6	5				SAME MAT'L. BROKEN ZONE.
						36		
								SAME MAT'L. CRUSH ZONE.
						38		
								SAME MAT'L. BROKEN ZONE.
						39		
								SAME MAT'L. CLAY ZONE.
						41		
40. 45			5	5	100			SAME MAT'L. BROKEN ZONE.
						43		
								SAME MAT'L. CLAY ZONE.
						45		
45-50			5	5	100			SAME MAT'L. BROKEN ZONE.
						48		
								HARD, SOLID GRAY CLAY SHALE. THIN CLAY SEAMS AT 52' & 54'. NO OTHER PROBLEMS.
50-55			5	5	100			
						58		
								SAME MAT'L. THIN CLAY SEAMS AND CRUSHED ZONE.
			5	5	100	60		
55-60								

Figure C4. Oregon State Highway Division soils and geological exploration log 76-1.

OREGON STATE HIGHWAY DIVISION

SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CR. SLIDE — Date 7-13-76
Highway 18 - OREGON COAST — County LINCOLN — Bridge No.
Hole Location 100' EAST of HWY — Prefix 21-#419-181
Station — Ground Elev. — Depth 70'
Purpose of work SLIP PLANE & MAT'L TYPE
Engineer FRETWELL — Depth to free water
Driller PRADZINSKI — Water level at completion
Recorder WEST
Test: ☐ Auger depth ☒ Diamond core barrel depth 0 - 70'
☐ Split barrel sampler: 2" O.D., 144# Hammer, 30" Fall; Depth
☐ Miniature pile: 5' Probe, 400# Hammer, 30" Fall; Depth

H. D. Sheet No. — Test: — Hole No. 76-1 CON'T

DEPTH TESTED From / To	DRIVING RESISTANCE BLOWS/___ in.	% MOISTURE	MEASURED RECOVERY (FT.)	LENGTH OF CORE RUN (FT.)	% CORE RECOVERY	DEPTH (Ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION
						60		SAME MAT'L. SOLID CORE.
						64		
60-65			5	5	100			SAME MAT'L. CRUSHED ZONE.
						67		SAME MAT'L. SOLID CORE BUT WITH SLICKENSIDES ON FRACTURES AT 69' AND 70' DEPTHS.
65-70			5	5	100	70		END OF HOLE

COLOR — FRESH-WEATHERED
PLASTICITY — JOINTS-BROKEN
WET-DRY — SAND-SILTY-CLAY
SOFT-HARD — ORGANIC CONTENT

Figure C4. continued.

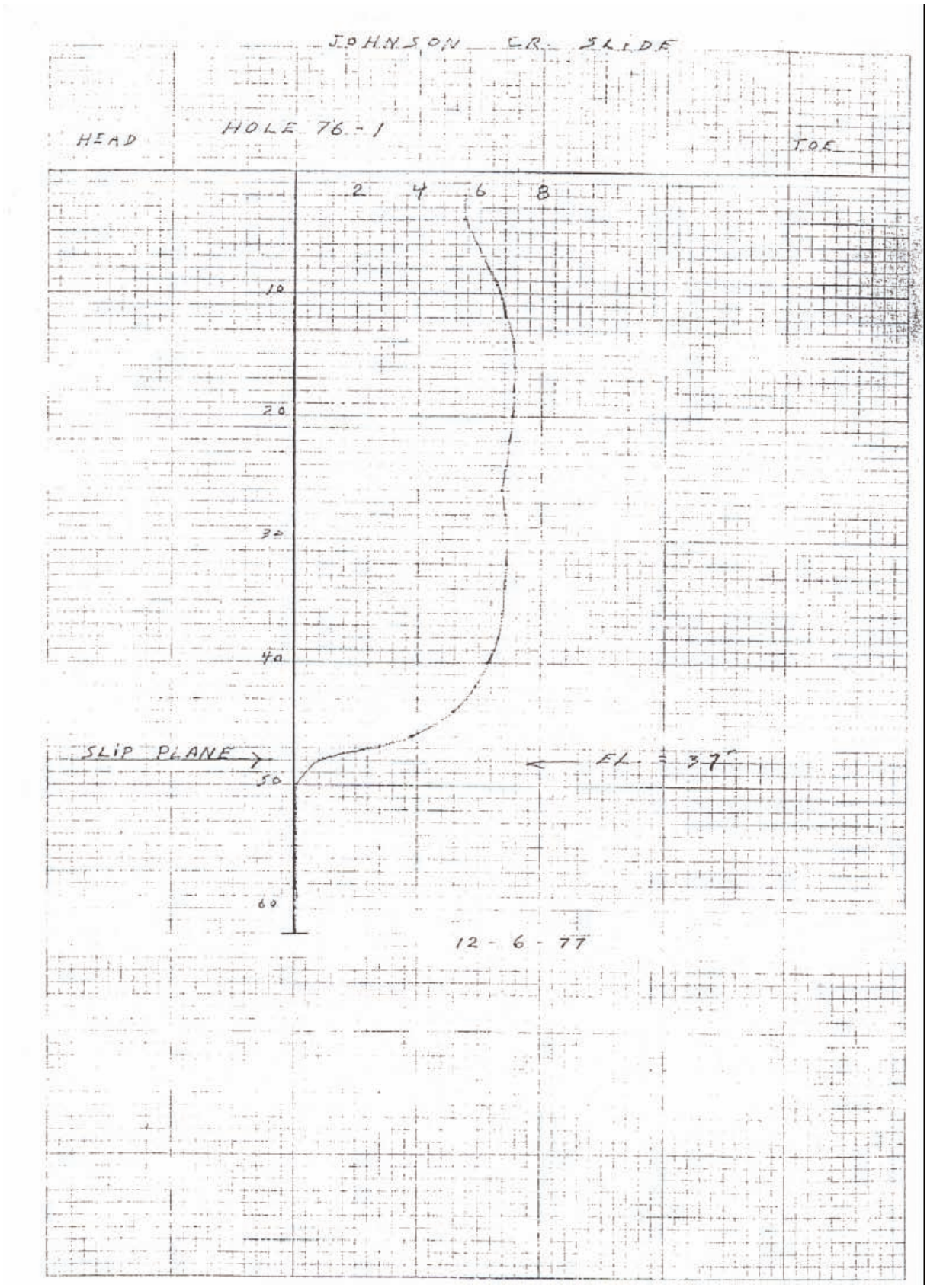

Figure C4. continued.

OREGON STATE HIGHWAY DIVISION
SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CREEK SLIDE M.P. 133.3 Date 7-15-76
ghway #7 - OREGON COAST County LINCOLN Bridge No.
Hole Location ON OLD 101 Prefix ZI-4419-181
Station Ground Elev. Depth 70'
Purpose of work SLOPE METER TUBE
Engineer FREIWEH Depth to free water
Driller PRODZINSKI Water level at completion DRY
Recorder PRODZINSKI,
Test: ☒ Auger depth 20 - 70' ☐ Diamond core barrel depth
☒ Split barrel sampler: 2" O.D., 144# Hammer, 30" Fall; Depth 0 - 20'
☐ Miniature pile: 5' Probe, 400# Hammer, 30" Fall; Depth

H. D. Sheet No. Test: Hole No. 76-2

DEPTH TESTED From / To Ft.	DRIVING RESISTANCE BLOWS/6 in.	% MOISTURE	MEASURED RECOVERY (FT.)	LENGTH OF CORE RUN (FT.)	% CORE RECOVERY	DEPTH (Ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION
						0		A/C AND ROCK.
						1		RUSTY COLORED MOIST SANDY CLAY. PLASTICITY INCREASE WITH DEPTH.
						6		
8½-10	11-17-24							BROWN-GRAY MULTICOLOR SANDY CLAY. MOIST & FIRM.
						10		
14-15	17-25							VERY FIRM MOIST GRAY FINE SANDY CLAY SHALE. TO FIRM TO SPLIT-TUBE
19-20	25-25/4"							
						70		END of HOLE

Figure C5. Oregon State Highway Division soils and geological exploration log 76-2.

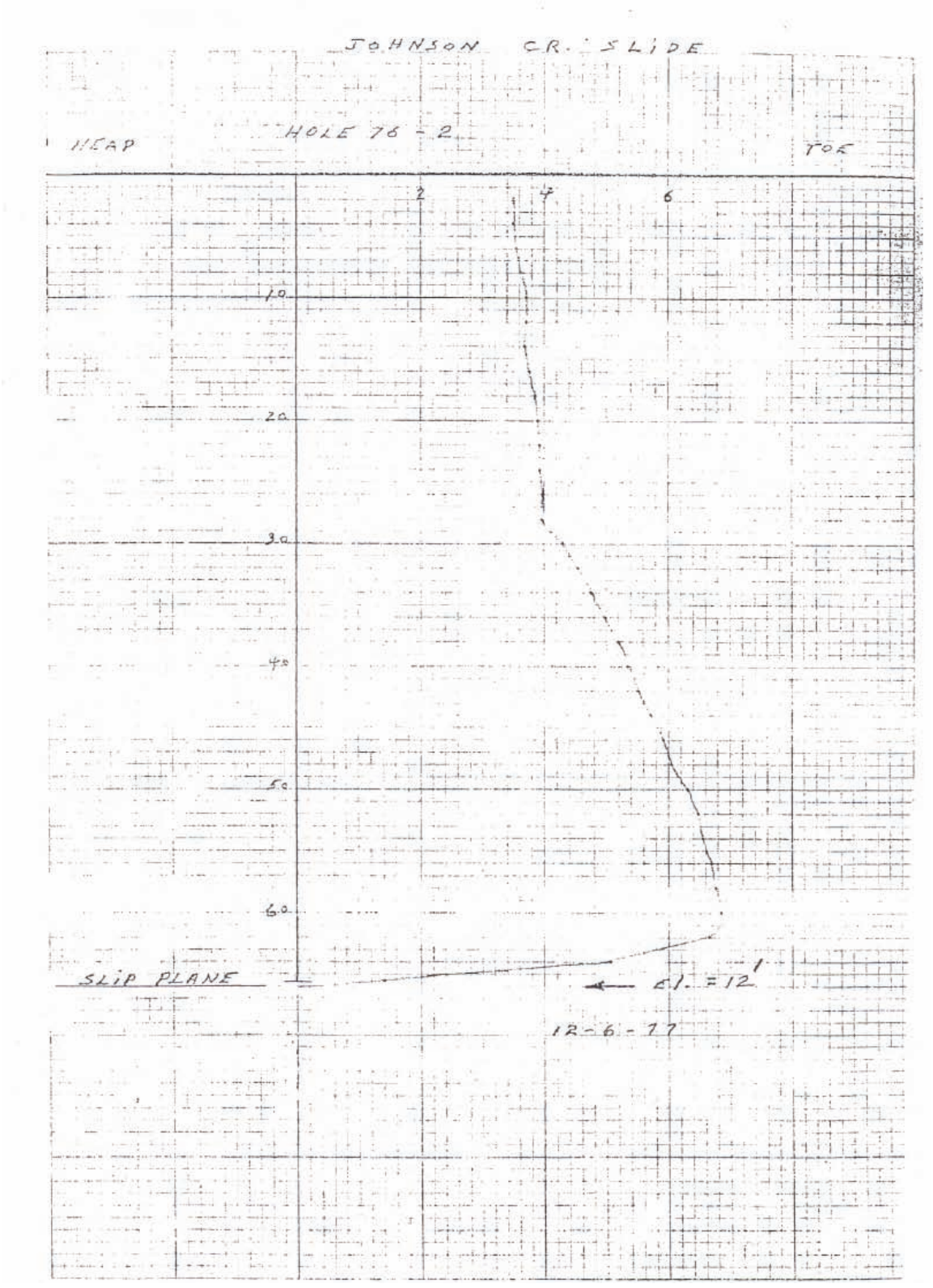

Figure C5. continued.

OREGON STATE HIGHWAY DIVISION
SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CR. SLIDE M.P. 133.3 Date 9-20-76
Highway #9 - OREGON COAST County LINCOLN Bridge No.
ole Location CENTER of SLIDE on EAST SHOULDER Prefix 21-419-181
otation Ground Elev. Depth 80'
Purpose of work SLIP PLANE & MAT'L TYPE
Engineer FRETWELL Depth to free water
Driller PRODZINSKI Water level at completion
Recorder PRODZINSKI
Test: ☒ Auger depth 0 - 86' ☐ Diamond core barrel depth
☐ Split barrel sampler: 2" O.D., 144# Hammer, 30" Fall; Depth
☐ Miniature pile: 5' Probe, 400# Hammer, 30" Fall; Depth

H. D. Sheet No. Test: Hole No. 76 -3

DEPTH TESTED From / To	DRIVING RESISTANCE BLOWS/____ in.	% MOISTURE	MEASURED RECOVERY (FT.)	LENGTH OF CORE RUN (FT.)	% CORE RECOVERY	DEPTH (Ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION
						0		MOIST BEACH SAND.
						6		MOIST TO DAMP DIRTY BROWN SANDS.
						17		RUSTY-COLORED MOIST LAYERS of SLAY & SAND.
						19		GRAY SANDY CLAY, DAMP BECOMING MOIST AND FIRM WITH DEPTH. NEVER DRY, NOR HARD. MAT'L DRILLED EASILY.
						86		END of HOLE

COLOR FRESH-WEATHERED
PLASTICITY JOINTS-BROKEN
WET-DRY SAND-SILTY-CLAY
SOFT-HARD ORGANIC CONTENT

Figure C6. Oregon State Highway Division soils and geological exploration log 76-3.

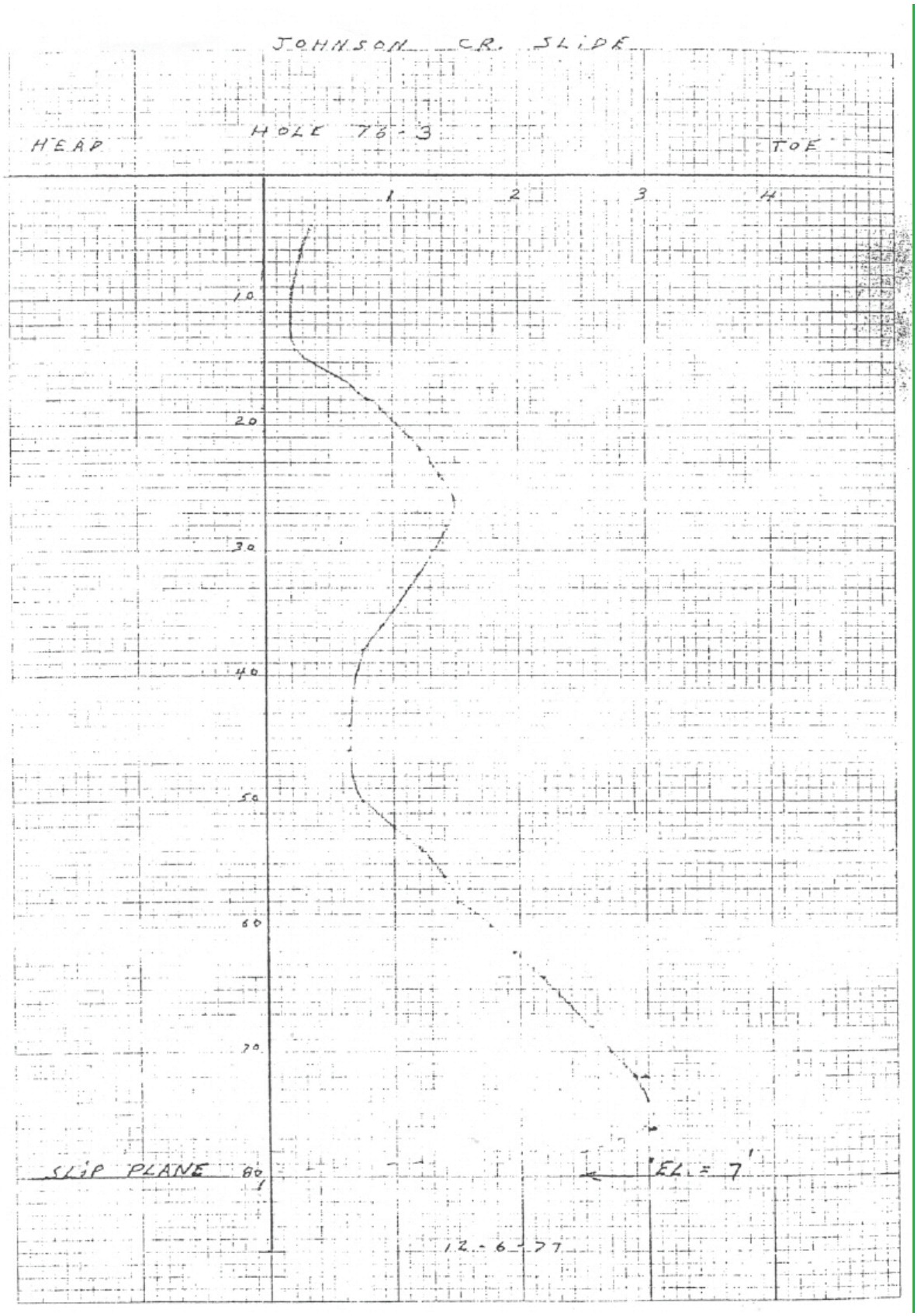

Figure C6. continued.

SOILS AND GEOLOGICAL EXPLORATION LOG

Project JOHNSON CR. SLIDE M.P. 133.3 Date 8-23-76
Highway #9 - OREGON COAST County LINCOLN Bridge No.
Hole Location No. END of SLIDE & IN WEST SHOULDER Prefix 21-4419-181
...tion Ground Elev. Depth 85'
Purpose of work SLIP PLANE & MAT'L TYPE
Engineer EBERLEIN Depth to free water
Driller PRODZINSKI Water level at completion
Recorder WEST
Test: ☒ Auger depth 0 - 25 ☒ Diamond core barrel depth 25' - 85'
☐ Split barrel sampler: 2" O.D., 144# Hammer, 30" Fall; Depth
☐ Miniature pile: 5' Probe, 400# Hammer, 30" Fall; Depth

H. D. Sheet No. Test: Hole No. 76-4

DEPTH TESTED From / To	DRIVING RESISTANCE BLOWS/____ in.	% MOISTURE	MEASURED RECOVERY (FT.)	LENGTH OF CORE RUN (FT.)	% CORE RECOVERY	DEPTH (Ft.)	GRAPHIC LOG	MATERIAL DESCRIPTION
								COLOR / PLASTICITY / WET-DRY / SOFT-HARD — FRESH-WEATHERED / JOINTS-BROKEN / SAND-SILTY-CLAY / ORGANIC CONTENT
						0		WET, PLASTIC FINE SANDY CLAY. VERY SOFT. BUFF TO TAN.
						11		WET WHITE COARSE SAND. SOFT.
						14		MOIST TO DAMP, LIGHT BROWN, MEDIUM-GRAINED BEACH SAND.
						23		RUSTY-COLORED FIRM SANDY CLAY.
						25		SOFT GRAY SILTSTONE AND CLAYSTONE. THE CORE CRUMBLES EASILY. ALSO, THE SHALE IS BADLY BROKEN THROUGHOUT AND EXHIBITS CRUSHED ZONES. ONE PIECE OF CORE IS 22" LONG, BUT THE AVERAGE IS ABOUT 1 - 1½ INCHES.
						85		END OF HOLE

Figure C7. Oregon State Highway Division soils and geological exploration log 76-4.

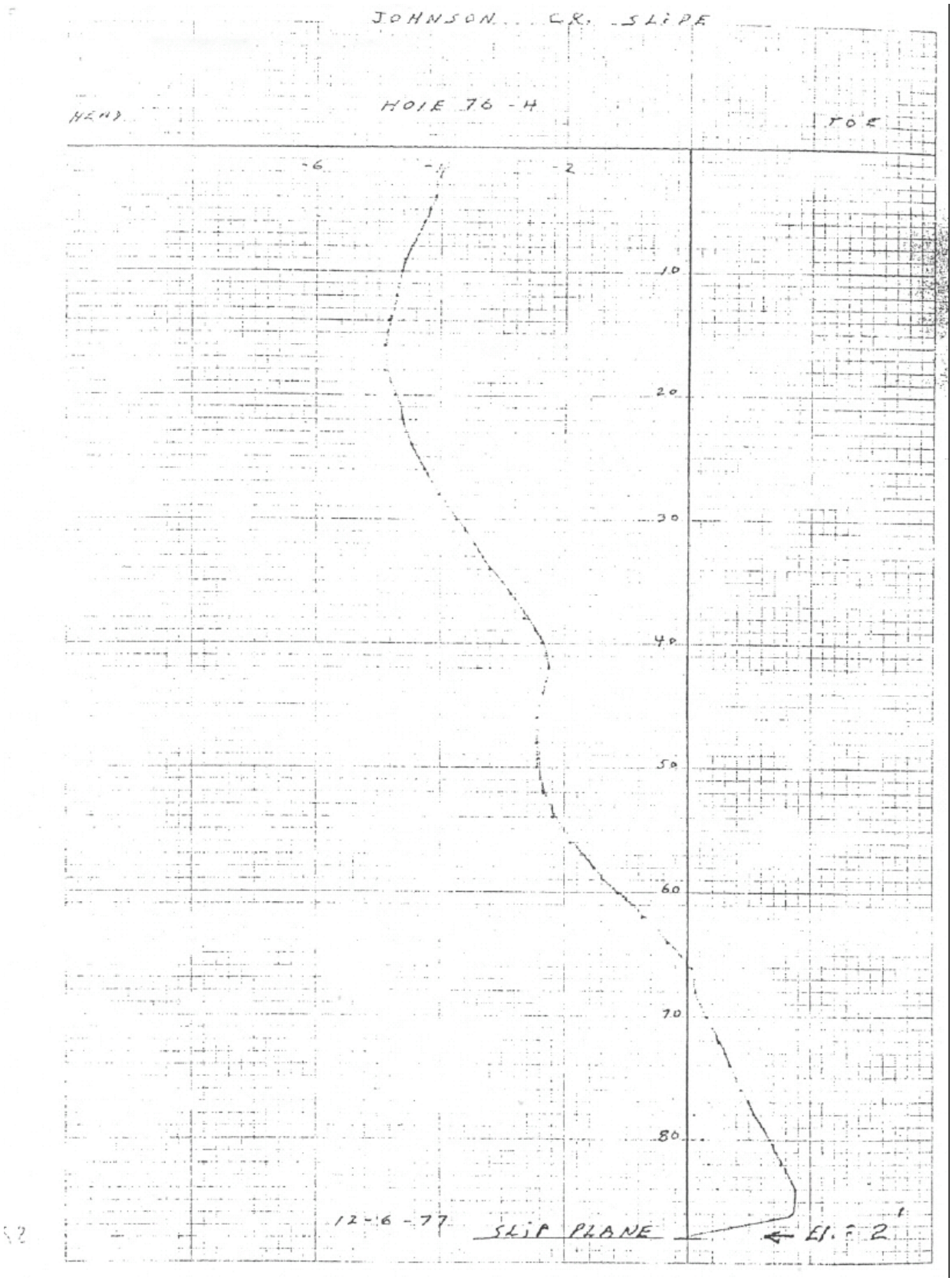

Figure C7. continued.