

TABLE 1  
SUMMARY OF SUBSOIL CONDITIONS

SWAMP NO.	LOCATION	NO. OF TEST HOLES	TOPSOIL/PEAT THICKNESS (m)	DEPTH TO BOTTOM OF CLAY (m)	DEPTH TO PROBABLE BEDROCK (m)	NOTES AND/OR SOIL PROFILE
501	Sta. 17+000 to 17+060 Township of Servos	15	0.1 – 0.5	1.4 – 3.7	1.4 – 5.8 (El. 225.8 – 231.8)	Peat present in most boreholes overlies non-plastic silt and/or cohesive silty clay / clayey silt underlain in 5 boreholes by cohesionless sandy/gravelly soils extending to bedrock
502	Sta. 17+440 to 17+640 Township of Servos	43	0.1 – 0.4	0.3 – 4.3	0.0 – 4.3 (El. 218.2 – 233.1)	Exposed bedrock in 5 boreholes. Peat present in most boreholes overlies cohesive silty clay / clayey silt and/or cohesionless silt / silty sand extending to bedrock
503	Sta. 18+020 to 18+180 Township of Servos	38	0.1 – 0.6	0.5 – 1.7	0.0 – 7.9 (El. 210.5 – 228.7)	Exposed bedrock in 7 boreholes. Topsoil or peat overlies cohesive clayey silt and/or cohesionless silty/sandy soils extending to bedrock
504	Sta. 18+240 to 18+510 Township of Servos	34	0.1 – 0.8	0.9 – 6.6	0.0 – 13.9 (El. 199.4 – 229.1)	Exposed bedrock in 2 boreholes. Topsoil or peat overlies cohesive silty clay / clayey silt and/or cohesionless silty/sandy soils extending to bedrock
505	Sta. 18+720 to 19+000 Township of Servos	32	0.1 – 0.5	0.8 – 11.0	0.2 – 14.0 (El. 196.0 – 220.6)	Fill encountered in 2 boreholes to depths of 0.3 and 0.9 m. Topsoil or peat overlies a cohesive deposit of clayey silt, silty clay and clay underlain by cohesionless silt / sand extending to bedrock
506	Sta. 19+040 to 19+450 Township of Servos	45	0.1 – 5.1	1.5 – 18.9	0.1 – 20.5 (El. 188.2 – 220.7)	Topsoil or peat (and organic clayey soils in 5 boreholes) overlies cohesionless silty/sandy soils or a cohesive deposit of clayey silt, silty clay and clay underlain by non-plastic silt extending to bedrock
507	Sta. 19+840 to 20+100 Township of Servos	28	0.1 – 0.6	1.4 – 15.0	0.3 – 25.1 (El. 188.1 – 213.1)	Topsoil or peat overlies a cohesive deposit of clayey silt, silty clay, clay and cohesionless silty/sandy soils extending to bedrock

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508	Sta. 20+100 to 20+680 Township of Servos	62	0.1 – 0.7	4.3 – 15.0	0.0 – 27.8 (El. 185.8 – 221.1)	Exposed bedrock in 7 boreholes. Topsoil or peat over silt / sandy silt overlies a cohesive deposit of clayey silt, silty clay and clay underlain by cohesionless silty/sandy soils extending to bedrock
509	Sta. 20+850 to 20+970 Township of Servos	27	0.2 – 0.6	1.7 – 3.3	0.5 – 10.8 (El. 207.8 – 220.4)	Topsoil or peat overlies cohesive silty clay / clayey silt and/or non-plastic silt extending to bedrock
510	Sta. 21+175 to 21+380 Township of Servos	36	0.1 – 0.5	0.4 – 5.8	6.7 – 11.6 (El. 210.0 – 217.2)	Fill encountered in 9 boreholes to depths of 0.9 to 4.6 m. Peat overlies cohesive silty clay / clayey silt and/or non-plastic silt / sandy silt extending to bedrock
511	Ramp E/W-N Highway 637 Interchange Township of Servos	30	0.1 – 0.8	0.8 – 6.3	0.1 – 7.6 (El. 223.0 – 232.6)	Topsoil or peat (and organic clayey soils in 2 boreholes) overlies cohesive silty clay / clayey silt and/or cohesionless silty/sandy soils extending to bedrock
512	Burwash Access Road Township of Servos	7	0.2 – 1.0	3.6 – 5.7	> 4.5 – 8.2 (El. < 208.8 – 213.0)	Fill encountered in all boreholes to depths of 1.8 to 4.0 m. Topsoil or organic clayey silt overlies cohesive silty clay underlain by cohesionless silty/sandy soils

NOTES:

1. Test holes include boreholes and dynamic cone penetration tests.
2. Thickness of topsoil / peat and depth to bottom of cohesive deposits is based on borehole data only.
3. Depth to probable bedrock is based on both borehole and dynamic cone penetration test data.



**TABLE 2**  
**LIST OF MOISTURE CONTENT AND ATTERBERG LIMITS RESULTS**

SWAMP NO.	SOIL TYPE	BOREHOLE NO.	SAMPLE NO.	MOISTURE CONTENT (%)	LIQUID LIMIT (W <sub>L</sub> )	PLASTIC LIMIT (W <sub>P</sub> )	PLASTICITY INDEX (PI)
501	Silty Clay	501-2	2	30	45	20	25
		501-4	2	26	43	21	22
	Clayey Silt	501-2	4	32	25	16	9
		501-7	3	29	28	16	12
502	Silty Clay	502-22	3	26	36	22	14
		502-24	2	29	38	21	17
		502-36	2	31	42	22	20
		502-40	2	30	40	21	19
	Clayey Silt	502-15	2	23	29	19	10
		502-18	3	35	32	21	11
		502-19	4	26	29	18	11
		502-40	4	36	28	19	9

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504	Clayey Silt	504-8	3	30	30	23	7
		504-9	3	31	30	20	10
		504-11	3	39	33	22	11
		504-11	5	37	28	22	6
		504-13	3	30	30	20	10
	Silt	504-9	4	27	24	21	3
505	Clay	505-11	4	31	58	23	35
		505-12	7	47	50	22	28
		505-16	4	55	70	25	45
		505-17	4	52	64	25	39
		505-17	6	52	55	24	31
		505-19	3	40	54	23	31
		505-21	3	40	51	21	30
		505-21	5	67	67	25	42
	Silty Clay	505-11	6	49	42	22	20
		505-16	7	56	43	23	20
		505-19	6	56	49	23	26
		505-22	2	33	42	20	22
		505-22	5	49	40	23	17

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505	Silty Clay	505-27	2	32	37	22	15
		505-27	4	34	36	22	14
	Clayey Silt	505-11	2	26	27	17	10
		505-12	3	36	32	20	12
		505-16	2	29	33	19	14
		505-17	5	29	29	22	7
506	Clay	506-21	7	54	55	21	34
		506-24	10	53	58	22	36
		506-24	12	50	50	22	28
		506-27	10	61	64	23	41
		506-30	10	-	57	23	34
		506-31	10	56	52	21	31
		506-39	3	69	54	23	31
	Silty Clay	506-7	2	33	42	23	19
		506-10	3	43	44	24	20
		506-11	3	36	41	22	19
		506-19	5	43	37	20	17



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506	Silty Clay	506-19	7	45	37	23	14
		506-23	7	44	38	20	18
		506-24	8	45	40	20	20
		506-27	8	46	39	21	18
		506-27	12	50	42	23	19
		506-29	10	61	47	19	28
		506-29	13	47	38	22	16
		506-30	7	48	38	20	18
		506-35	8	55	41	23	18
		506-35	9	49	41	21	20
		506-37	7	54	46	19	27
	Clayey Silt	506-9	2	27	30	21	9
		506-13	4	32	31	23	8
		506-20	3	34	26	18	8
		506-21	12	31	29	23	6
		506-25	6	34	24	17	7



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SWAMP NO.	SOIL TYPE	BOREHOLE NO.	SAMPLE NO.	MOISTURE CONTENT (%)	LIQUID LIMIT (W <sub>L</sub> )	PLASTIC LIMIT (W <sub>P</sub> )	PLASTICITY INDEX (PI)
506	Clayey Silt	506-25	7	44	31	18	13
		506-29	7	41	31	20	11
		506-31	8	27	31	18	13
		506-37	5	33	27	17	10
507	Clay	507-24	6	50	53	20	33
		507-26	6	68	66	24	42
	Silty Clay	507-2	6	40	39	22	17
		507-4	5	52	39	19	20
		507-5	6	51	45	22	23
		507-6	3	28	37	21	16
		507-6	6	29	35	21	14
		507-6	11	-	44	23	21
		507-10	7	56	48	21	27
		507-10	10	48	39	24	15
		507-12	6	41	35	21	14
		507-12	8	44	41	19	22



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SWAMP NO.	SOIL TYPE	BOREHOLE NO.	SAMPLE NO.	MOISTURE CONTENT (%)	LIQUID LIMIT (W <sub>L</sub> )	PLASTIC LIMIT (W <sub>P</sub> )	PLASTICITY INDEX (PI)
507	Silty Clay	507-15	7	55	41	19	22
		507-15	9	44	45	19	26
		507-16	6	64	41	19	22
		507-20	6	56	47	20	27
	Clayey Silt	507-16	2	28	26	19	7
		507-16	11	38	34	22	12
		507-19	2	26	30	18	12
		507-20	10	36	29	22	7
		507-26	8	33	31	22	9
	Silt	507-5	9	26	Non-plastic		
		507-6	6	39	24	20	4
		507-8	10	24	28	23	5
		507-15	13	27	Non-plastic		
		507-19	12	24	Non-plastic		
		507-22	5	21	Non-plastic		
		507-24	10	26	Non-plastic		
		507-26	3	31	Non-plastic		





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508	Clay	508-14	6	72	64	22	42
		508-37	9	61	52	21	31
	Silty Clay	508-11	4	30	36	20	16
		508-12	3	32	37	17	20
		508-16	4	50	44	18	26
		508-16	6	52	39	24	15
		508-18	3	36	41	23	18
		508-28	5	50	39	19	20
		508-31	7	46	37	16	21
		508-37	8	38	38	17	21
		508-40	7	66	49	21	28
		508-42	6	52	39	20	19
		508-42	7	52	39	24	15
		508-46	5	58	40	17	23
	Clayey Silt	508-6	3	26	35	23	12



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508	Clayey Silt	508-6	5	24	31	22	9
		508-8	3	27	26	16	10
		508-8	4	-	34	22	12
		508-14	3	27	25	19	6
		508-16	3	26	25	16	9
		508-21	5	36	26	15	11
		508-22	3	26	25	18	7
		508-26	2	26	25	21	4
		508-26	6	66	31	23	9
		508-30	11	33	32	23	9
		508-36	4	41	29	19	10
		508-37	5	40	33	21	12
		508-40	5	41	33	20	13
		508-41	4	39	28	19	9
		508-44	8	27	25	21	4



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508	Silt	508-2	5	21	Non-plastic		
		508-11	9	18	24	21	3
		508-17	8	10	Non-plastic		
		508-20	8	21	Non-plastic		
		508-22	11	28	Non-plastic		
		508-24	10	22	22	21	1
		508-28	9	23	27	23	4
		508-31	10	24	Non-plastic		
		508-32	9	15	Non-plastic		
		508-36	11	26	Non-plastic		
		508-38	10	16	22	20	2
		508-41	12	12	Non-plastic		
		508-46	2	22	22	16	6
		508-47	8	24	23	19	4
		508-56	2	23	Non-plastic		
		508-58	2	18	Non-plastic		
		508-58	5	19	Non-plastic		

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509	Silty Clay	509-16	2	26	36	20	16
		509-18	2	22	43	22	21
		509-20	2	28	49	25	24
		509-27	2	29	40	21	19
	Clayey Silt	509-21	3	27	33	17	16
		509-26	3	23	31	19	12
	Silt	509-2	3	20	29	24	5
		509-4	3	17	Non-plastic		
		509-7	4	17	Non-plastic		
		509-10	4	15	Non-plastic		
		509-14	3	18	Non-plastic		
		509-17	2	16	Non-plastic		
		509-17	4	16	Non-plastic		



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510	Silty Clay	510-1	3	26	40	19	21
	Clayey Silt	510-8	6	23	29	14	15
		510-9	3	30	33	21	12
	Clayey Silt	510-16	3	28	31	19	12
		510-16	4	21	23	19	4
		510-17	2	26	29	21	8
		510-23	3	25	29	15	14
		510-24	3	19	22	16	6
		510-28	2	25	27	20	7
	Silt	510-1	5	21	Non-plastic		
		510-8	7	18	Non-plastic		
		510-12	4	18	Non-plastic		
		510-19	7	20	Non-plastic		
		N19-5	3	18	Non-plastic		

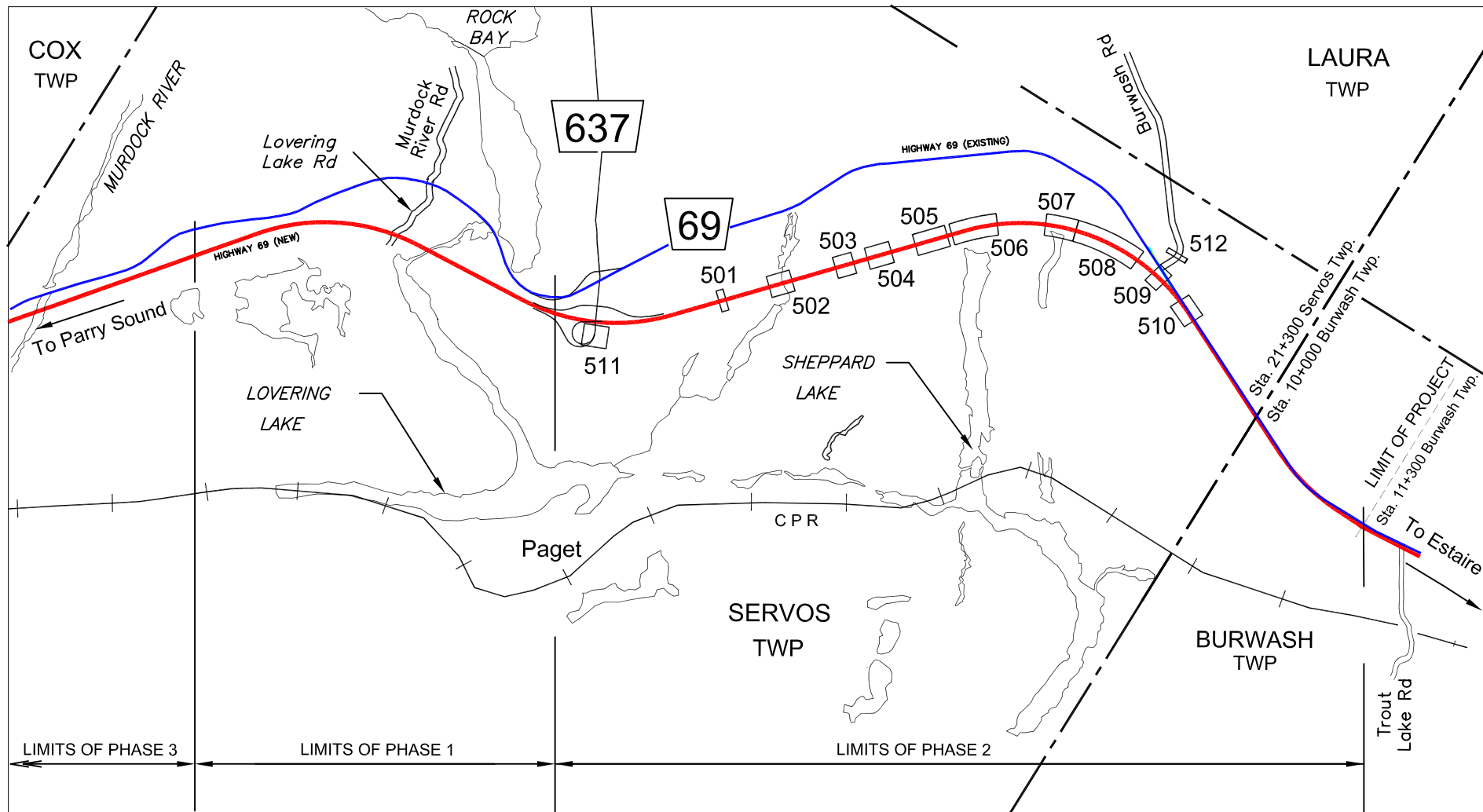
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**LIST OF MOISTURE CONTENT AND ATTERBERG LIMITS RESULTS**

SWAMP NO.	SOIL TYPE	BOREHOLE NO.	SAMPLE NO.	MOISTURE CONTENT (%)	LIQUID LIMIT (W <sub>L</sub> )	PLASTIC LIMIT (W <sub>P</sub> )	PLASTICITY INDEX (PI)
511	Silty Clay	511-2	1	31	48	24	24
		511-3	2	23	36	20	16
		511-3	3	29	40	20	20
		511-7	2	29	47	24	23
		511-12	2	31	44	24	20
		511-15	4	34	36	21	15
		511-18	4	32	36	21	15
		511-21	2	25	43	22	21
		511-21	3	26	41	21	20
		511-23	2	19	36	21	15
	Clayey Silt	511-7	4	24	31	19	12
		511-18	6	23	26	16	10
		511-19	2	24	34	19	15
512	Silty Clay	512-1	6	20	42	23	19
		512-2	3	24	35	16	19
	Clayey Silt (Fill)	512-1	3	25	33	18	15



TABLE 3  
LIST OF CONSOLIDATION TEST RESULTS

SOIL TYPE	SWAMP NO.	BOREHOLE NO.	SAMPLE NO.	INITIAL VOID RATIO $e_0$	EFFECTIVE PRESSURE $P'_0$ (kPa)	PRECONSOLIDATION PRESSURE $P'_c$ (kPa)	COMPRESSION INDEX $C_c$	RECOMPRESSION INDEX $C_r$
Clayey Silt	504	504-11	5	0.99	30	210	0.27	0.03
Silty Clay	505	505-11	6	1.31	75	220	0.49	0.04
	506	506-30	7	1.33	25	200	0.52	0.06
	507	507-10	7	1.51	70	250	0.86	0.07
		507-20	6	1.37	50	230	0.63	0.07
	508	508-16	6	1.48	45	110	0.53	0.05
Clay	505	505-17	4	1.30	50	500	0.81	0.04
	506	506-24	10	1.40	75	230	0.66	0.06
	507	507-24	6	2.03	40	230	1.27	0.09

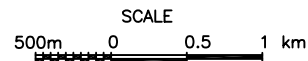


### KEY PLAN LEGEND:

- HWY 69 (EXISTING)
- HWY 69 (NEW)
- 512 SWAMP LOCATION

### KEY PLAN

HIGHWAY 69 FOUR-LANING FOR 21.5 km  
 From 4.5 km North of Highway 64 to  
 8.7 km North of Highway 637  
 District 54, Sudbury



**METRIC**



PRIME CONSULTANT  
**TSH**  
 TOTTEN SIMS HUBICKI ASSOCIATES

GWP 5218-06-00



**DRAWING**  
 1





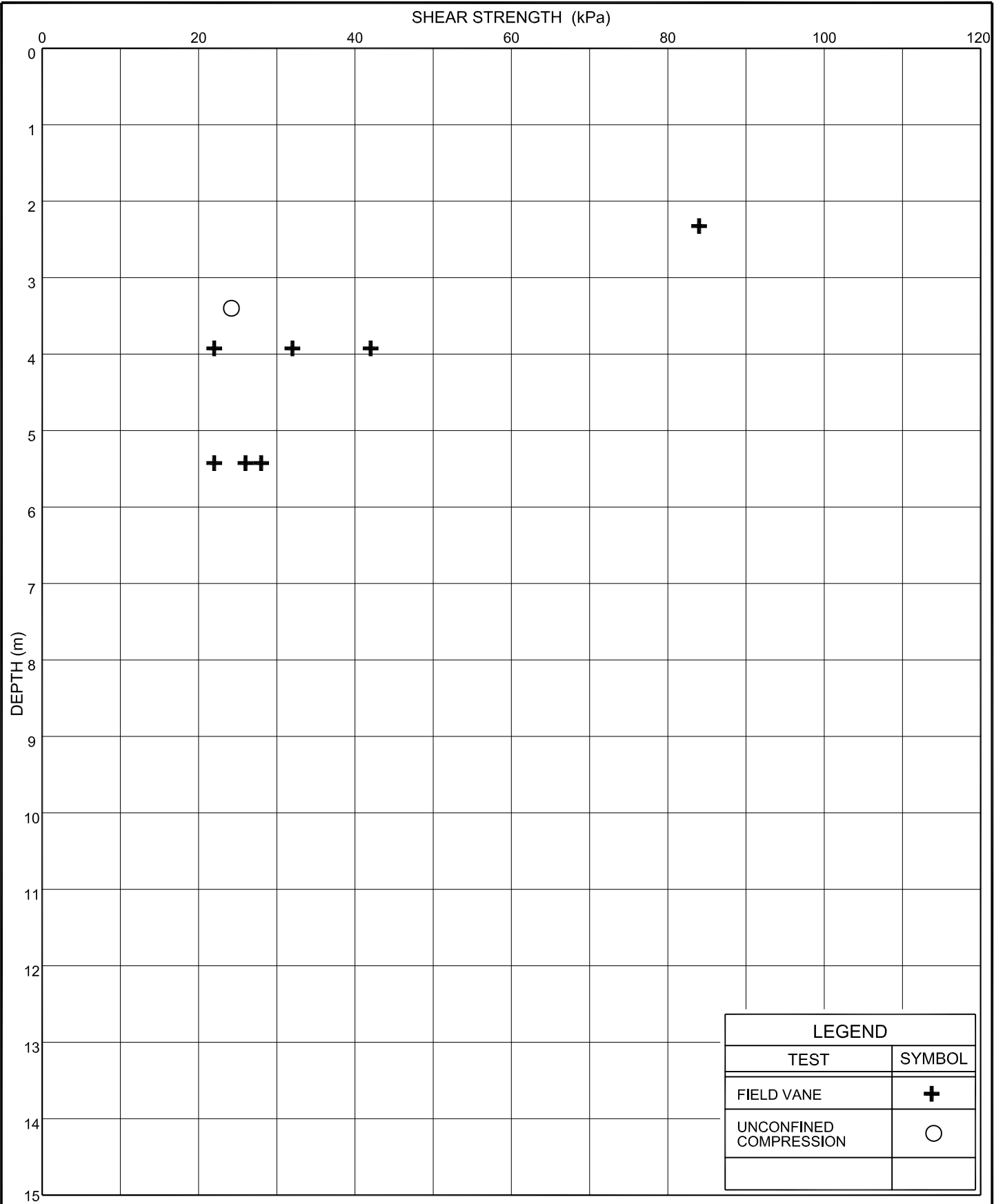
## APPENDIX A

Figures 504-SS-1 to 508-SS-1, 510-SS-1 to 512-SS-1 – Shear Strength Profiles

Figures 501-PC-1 to 502-PC-2, 504-PC-1 to 512-PC-2– Plasticity Charts

Figures 501-GS-1 to 512-GS-6 – Results of Grain Size Distribution Analyses

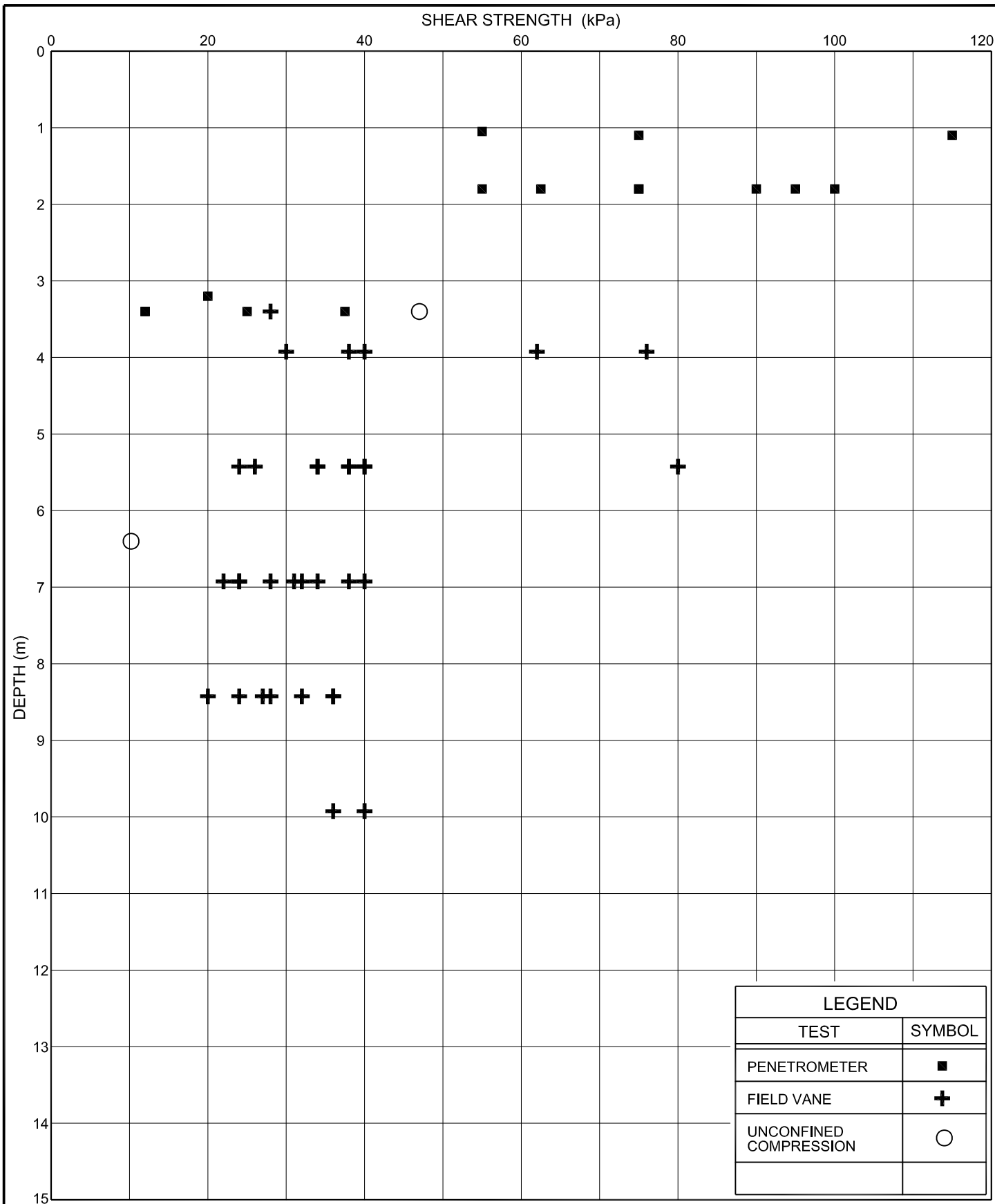
Figures 504-C-1 to 508-C-1 – Results of Consolidation Testing



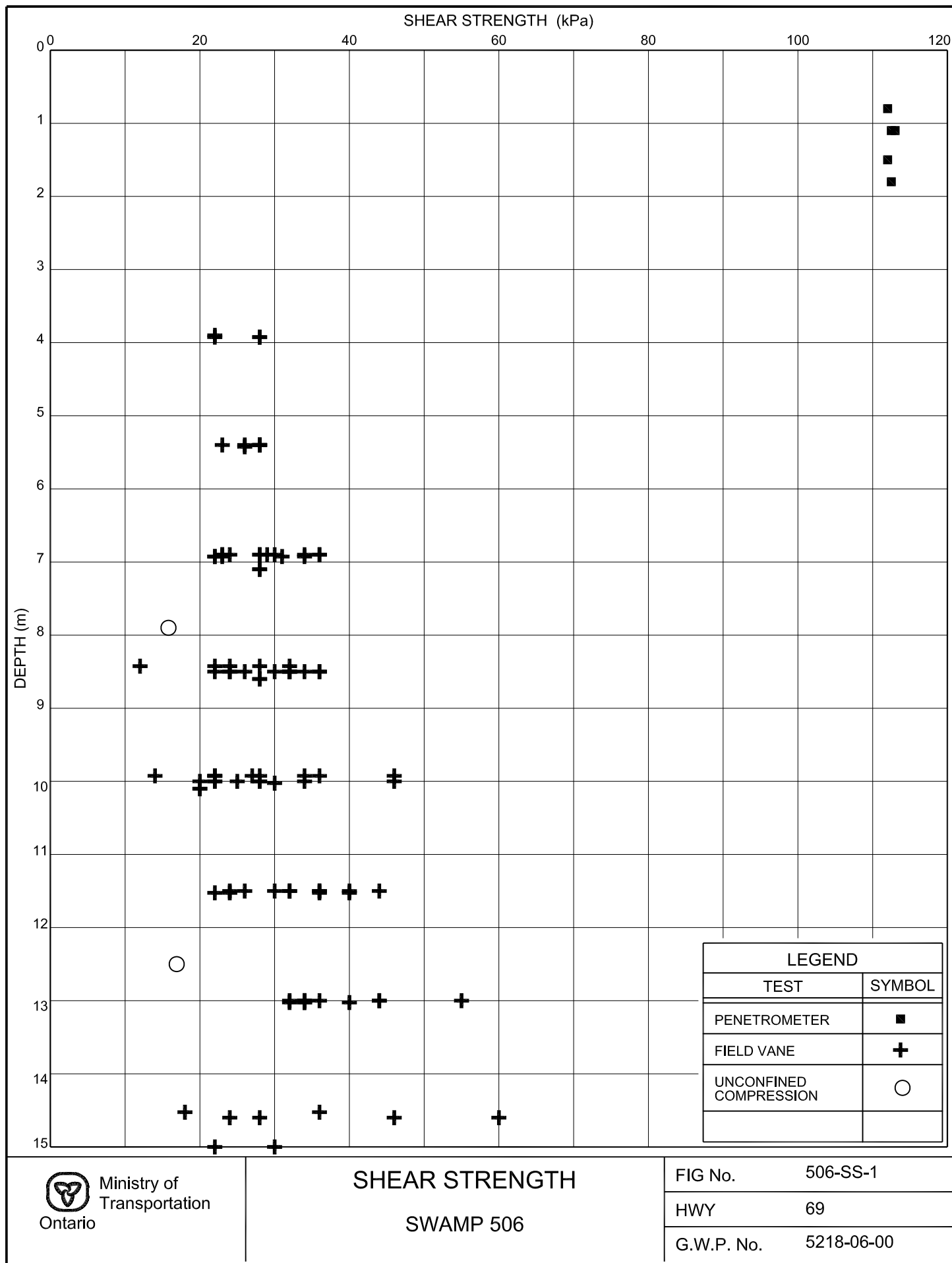
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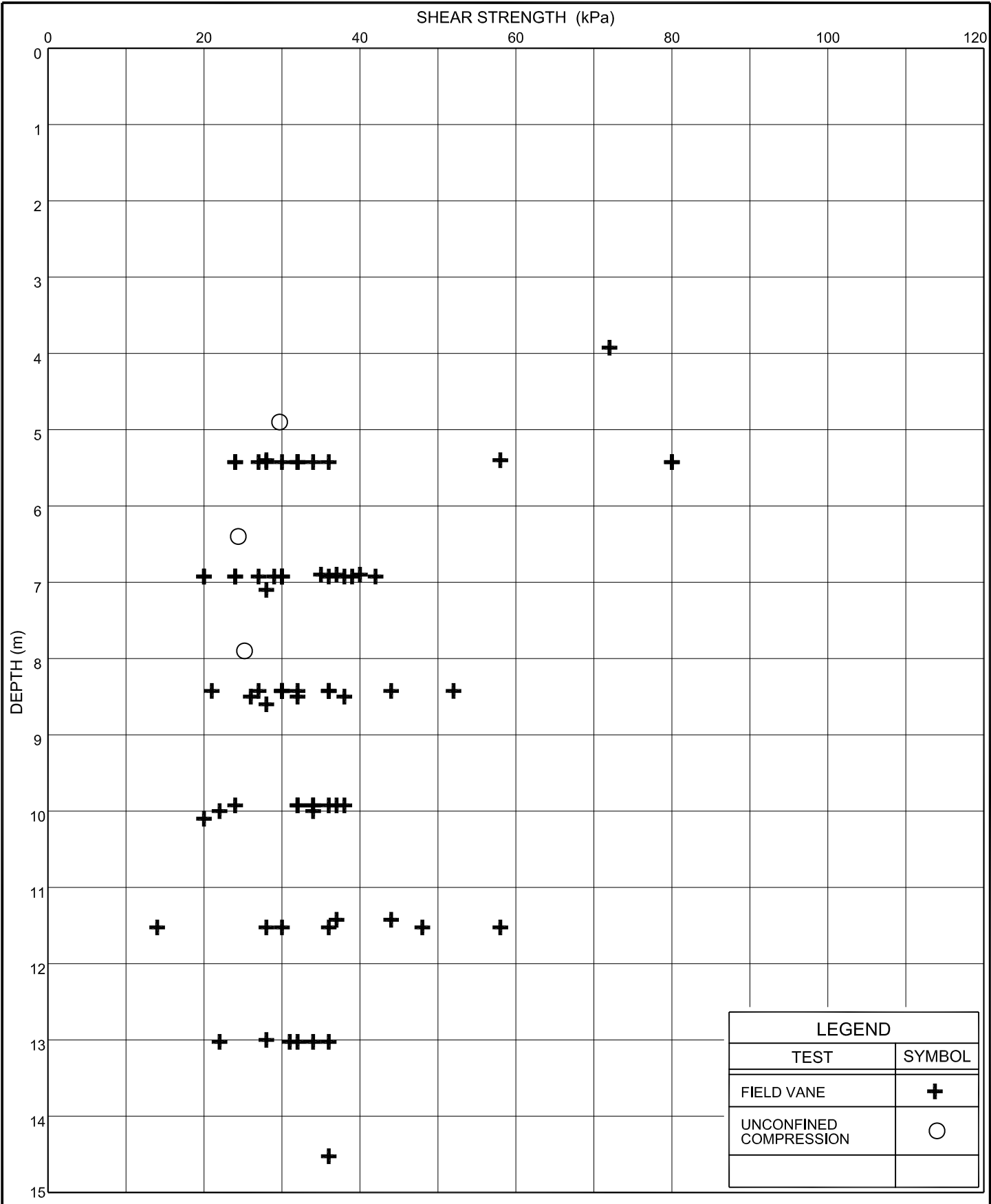
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SWAMP 504

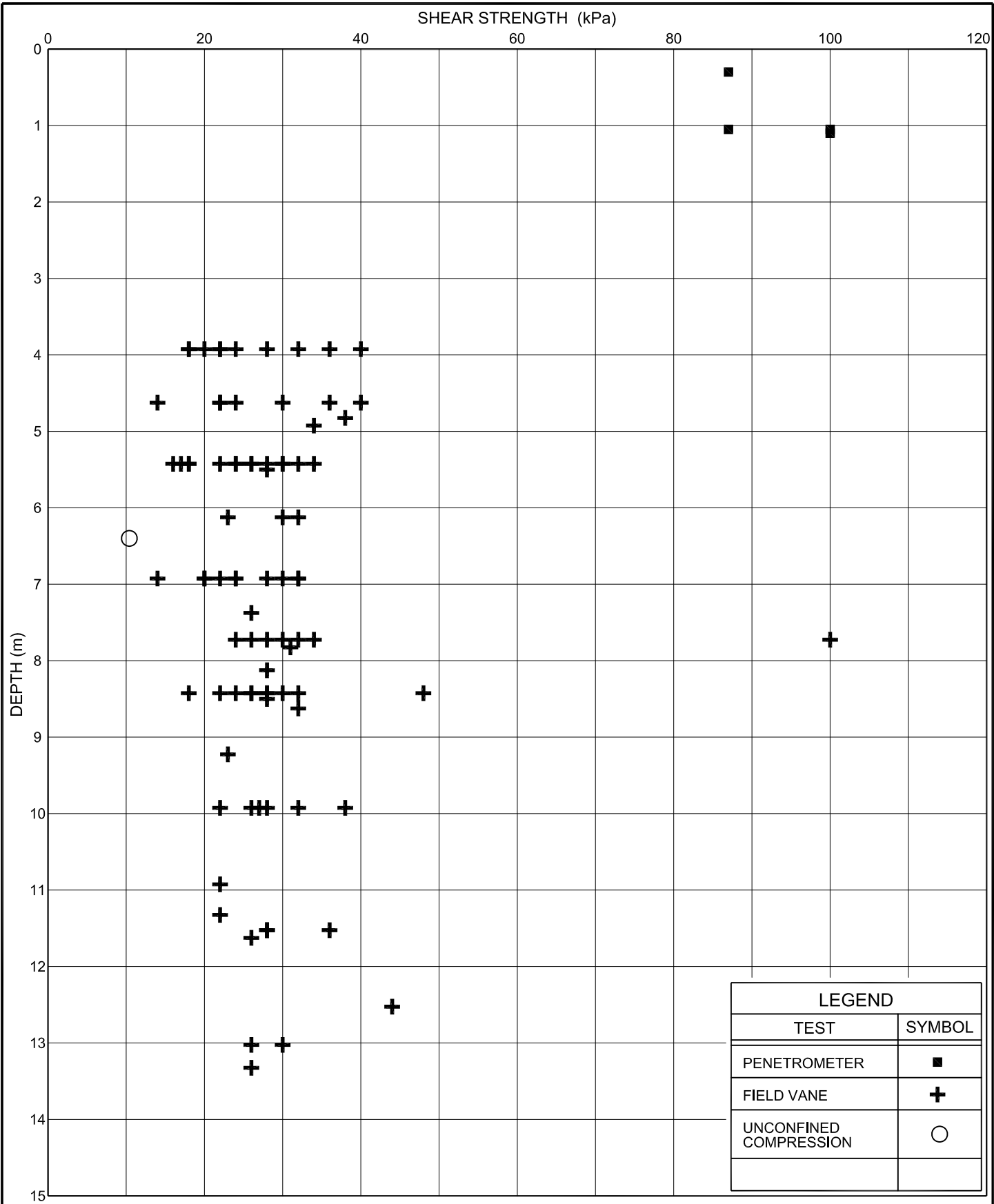
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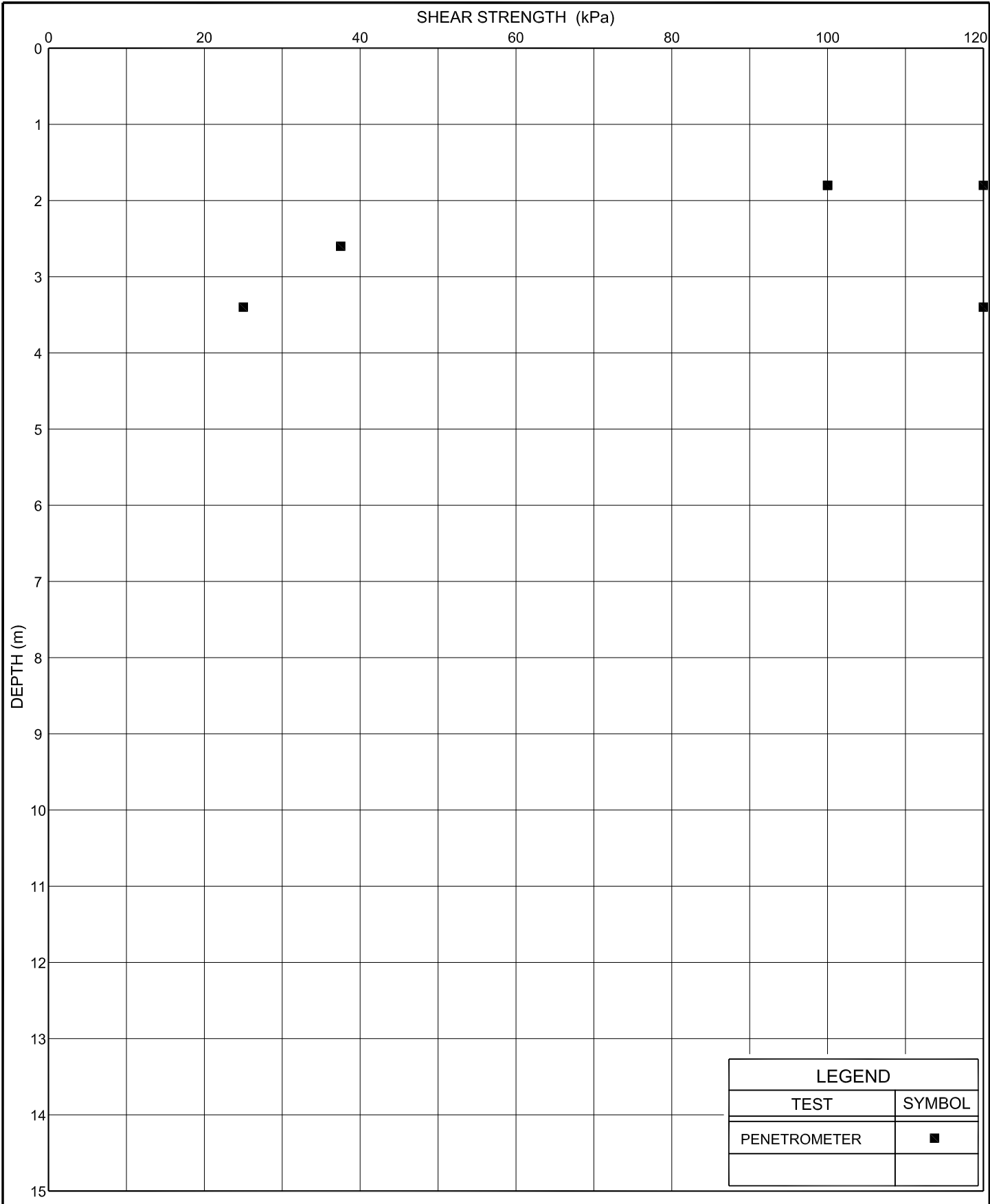


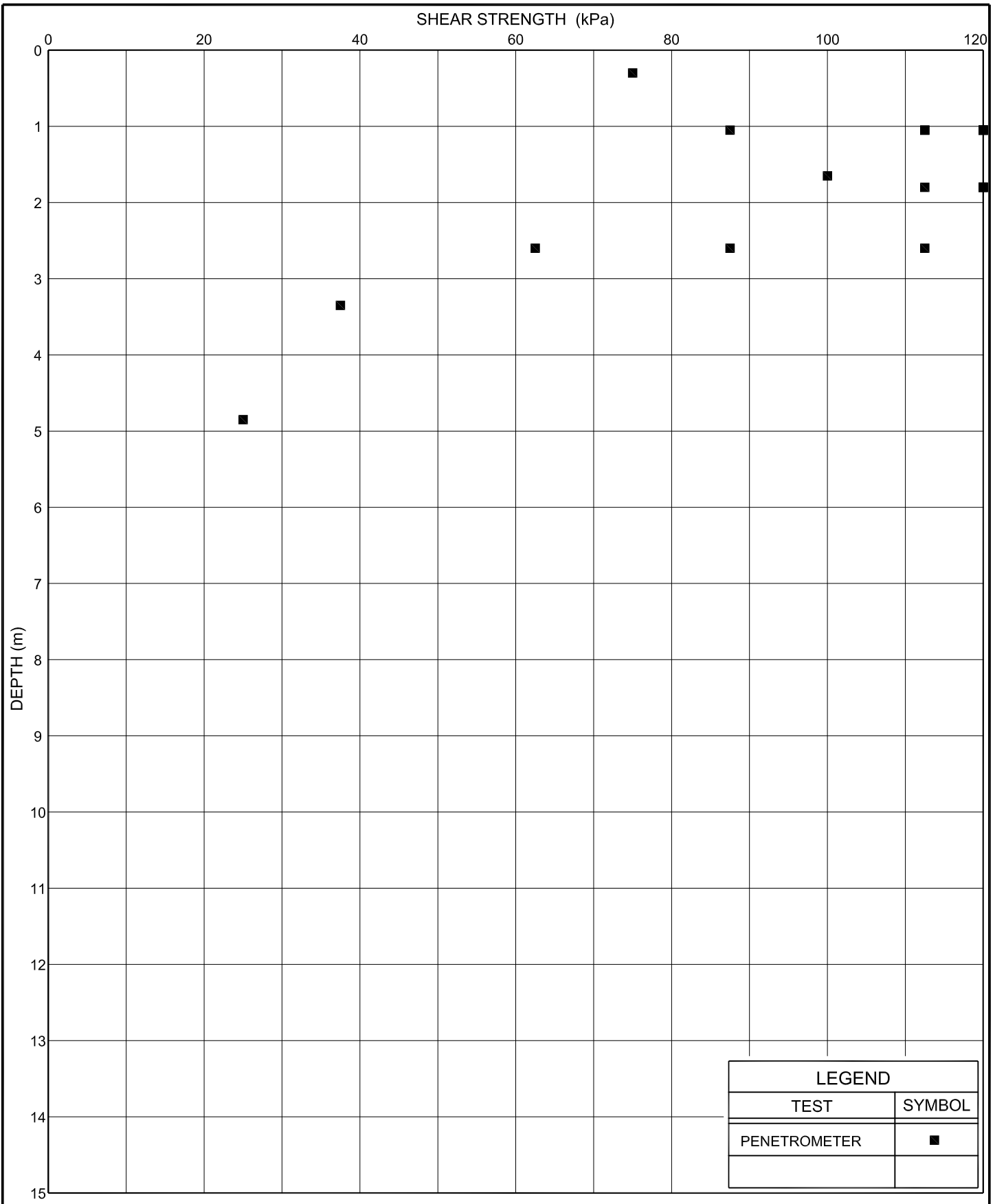
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TEST	SYMBOL
PENETROMETER	■
FIELD VANE	+
UNCONFINED COMPRESSION	○



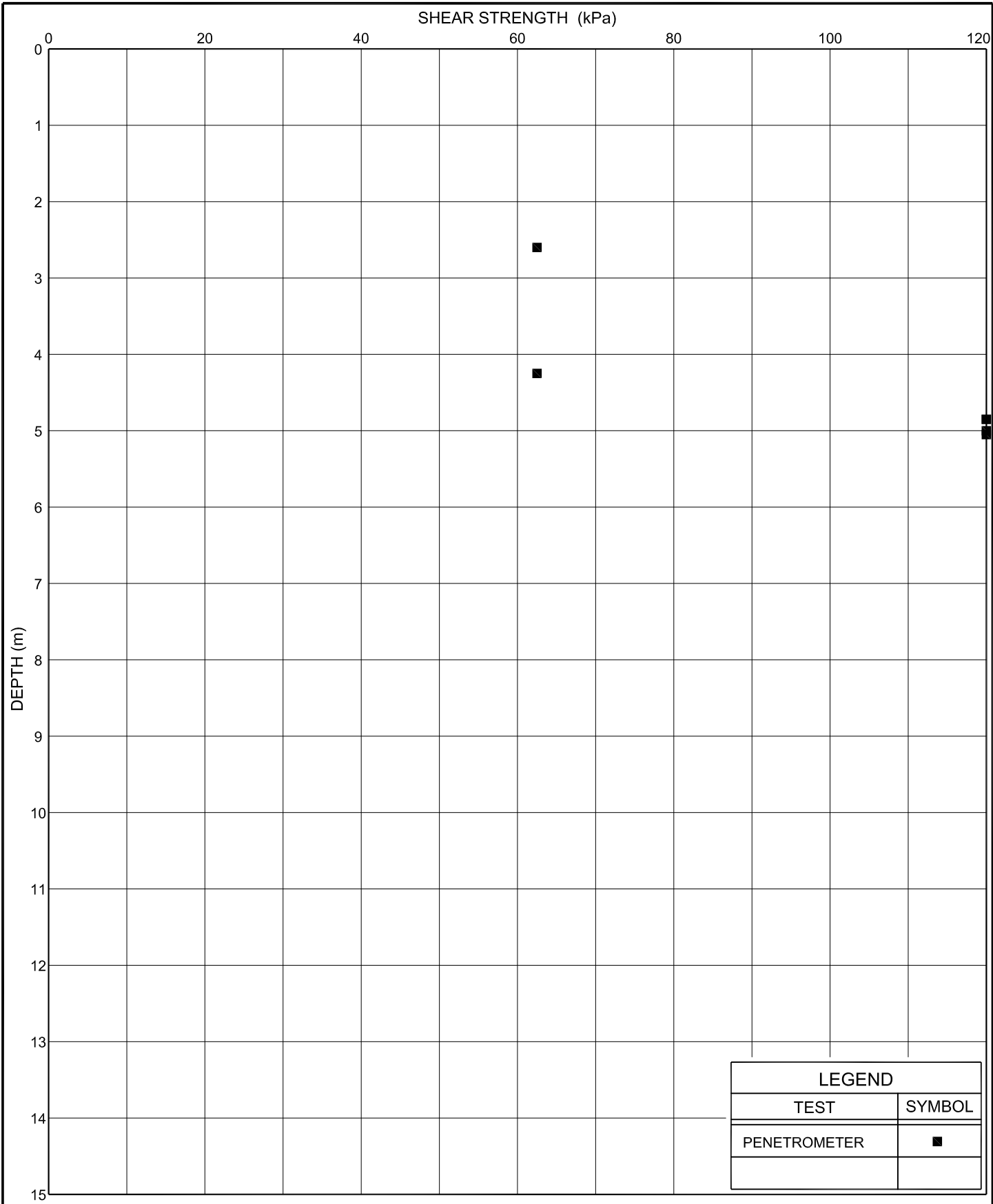


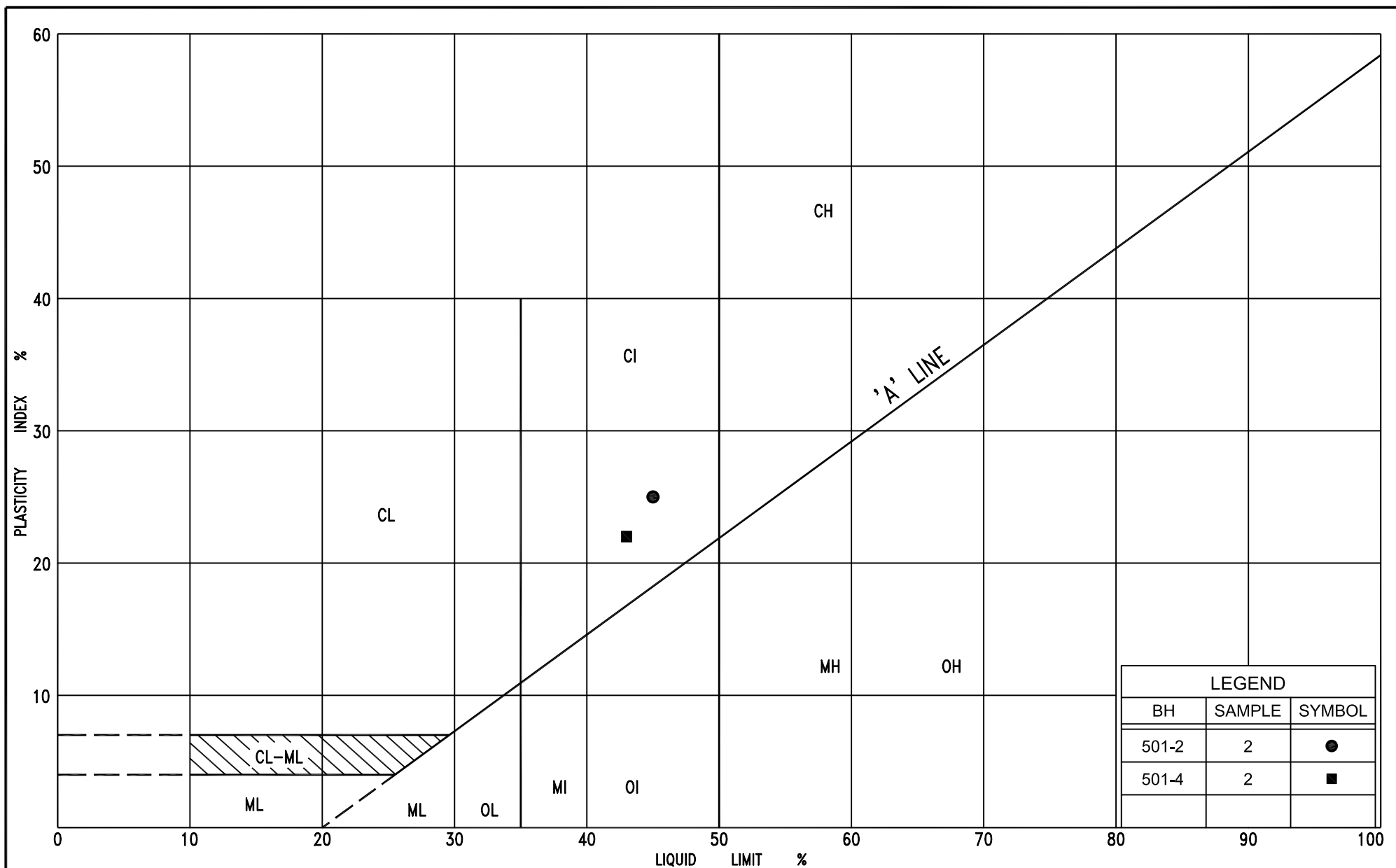


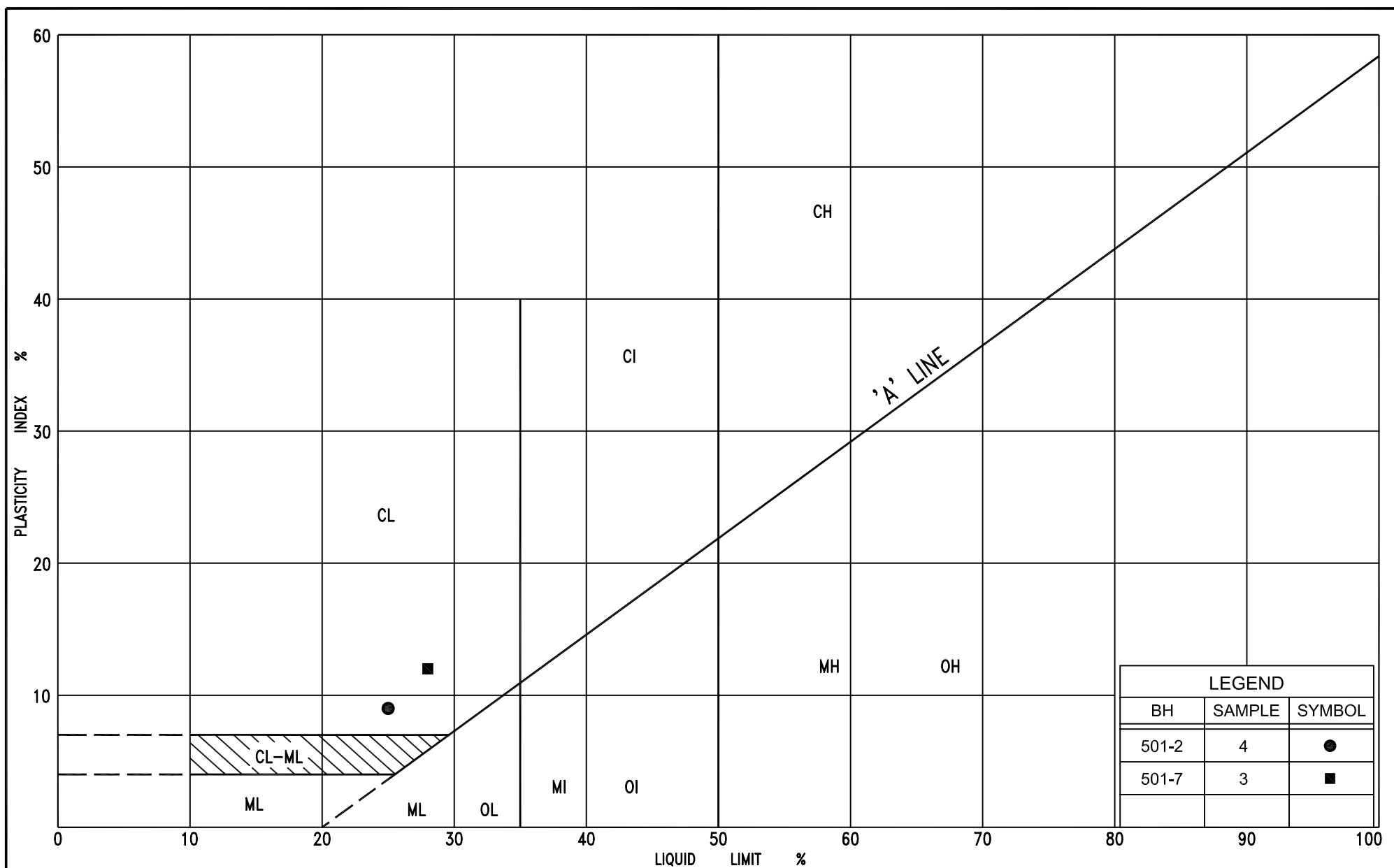


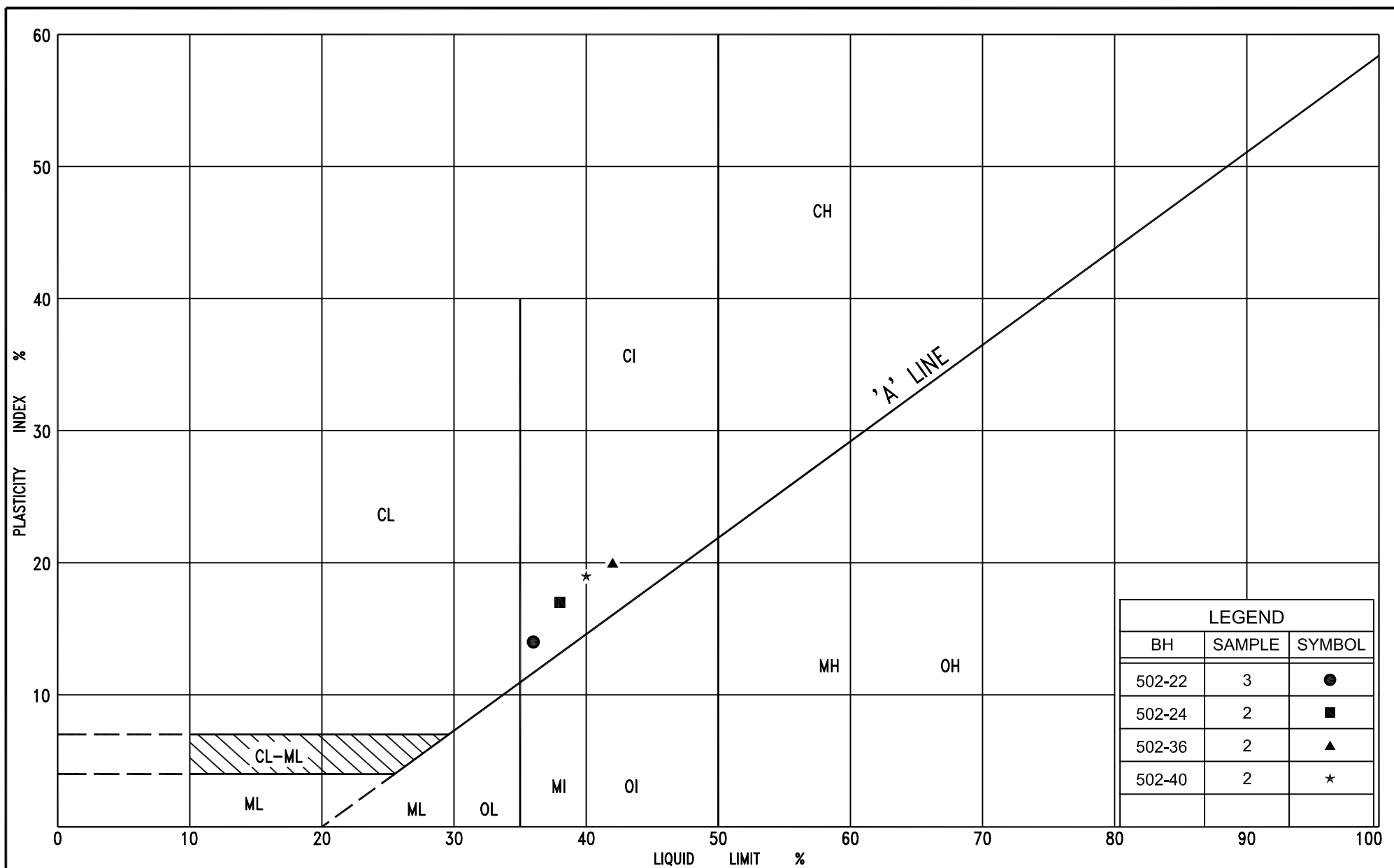


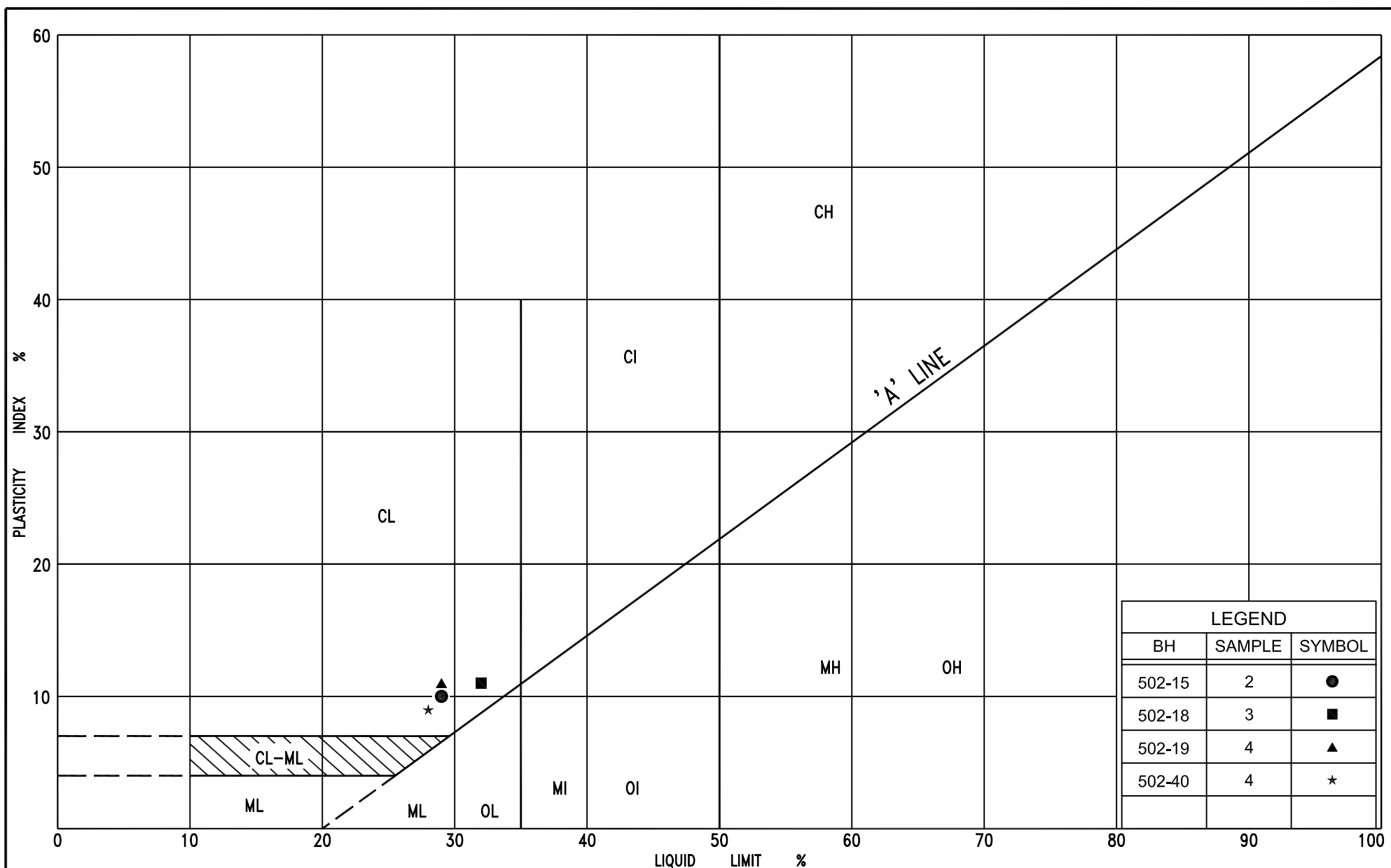


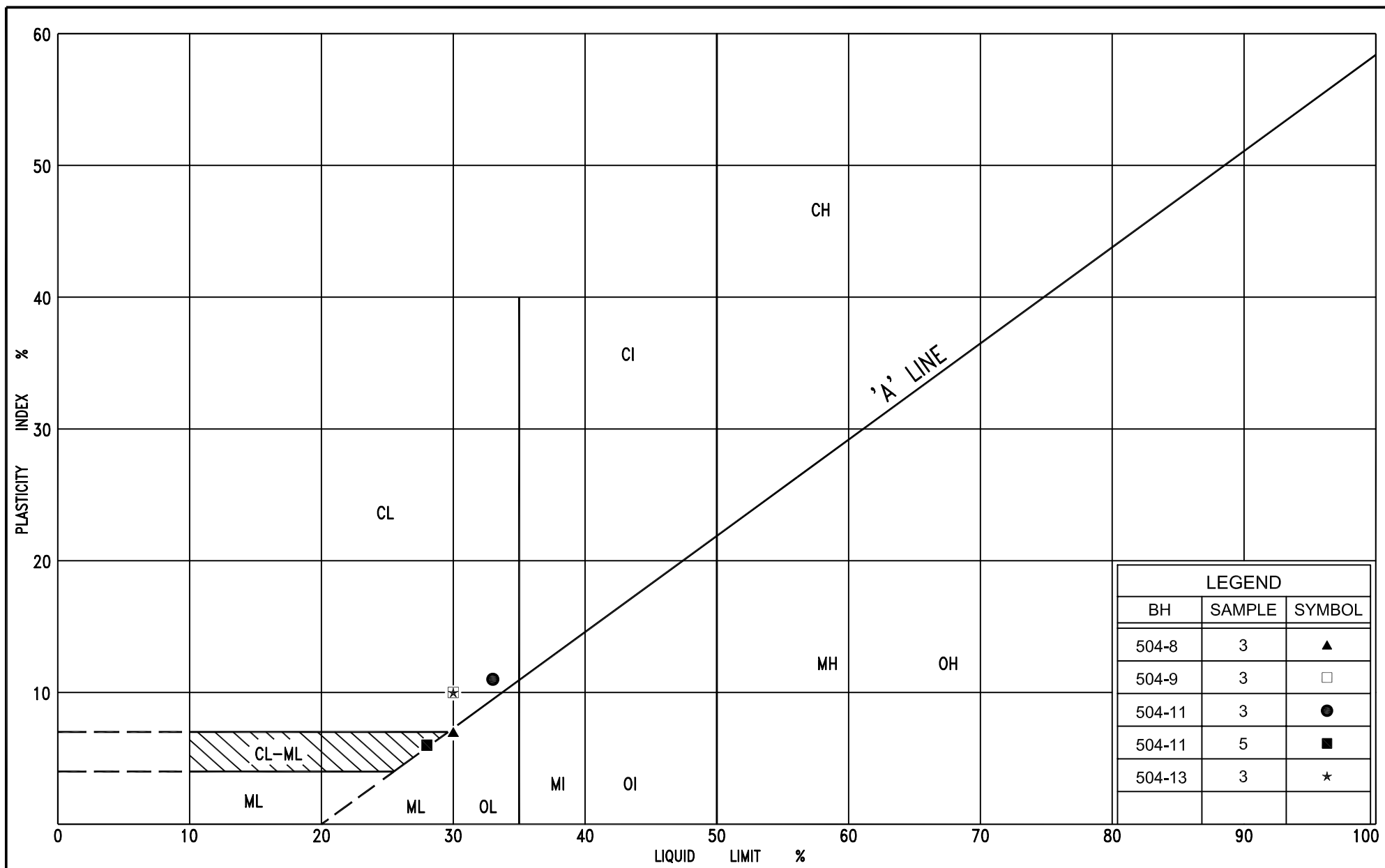


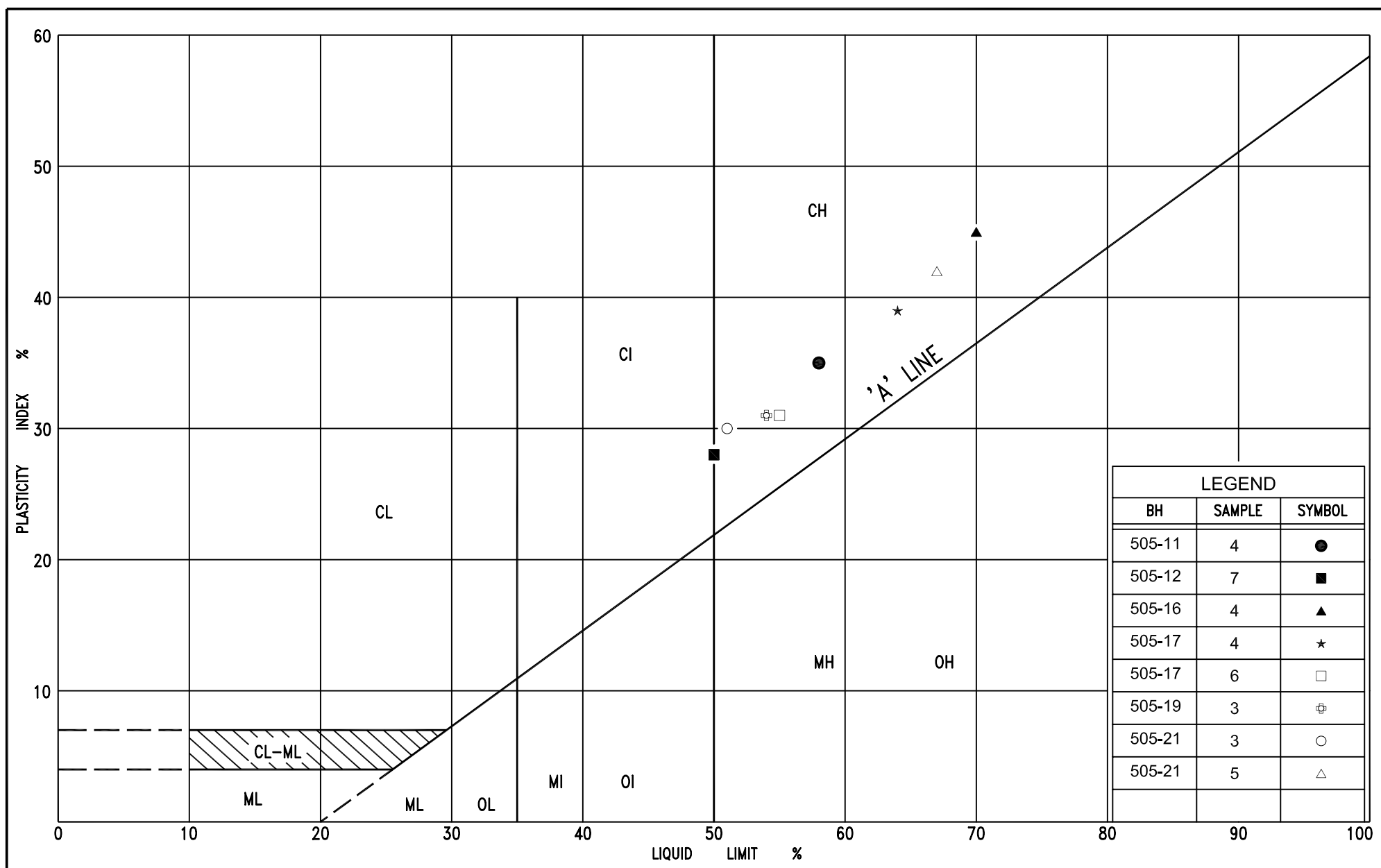


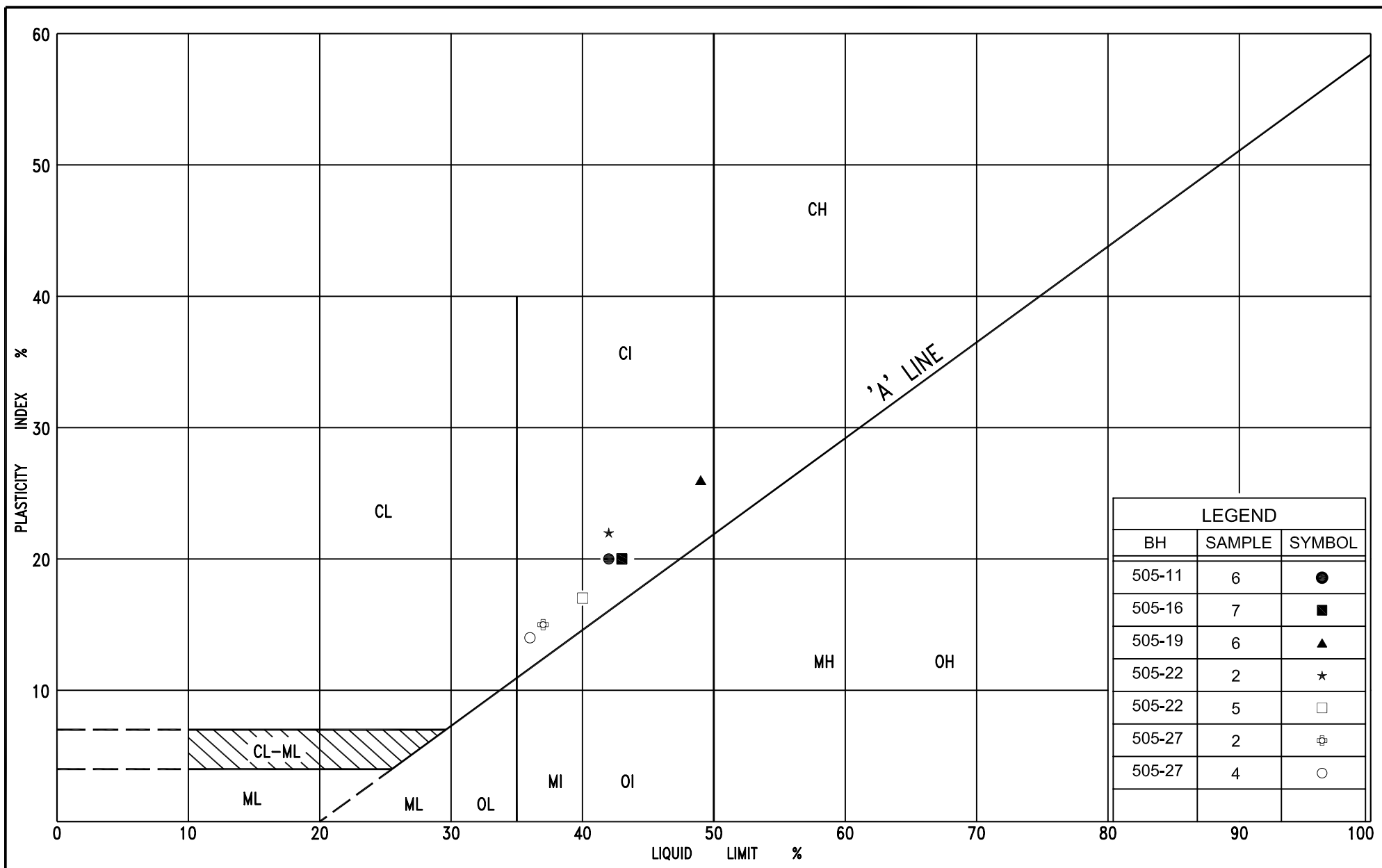




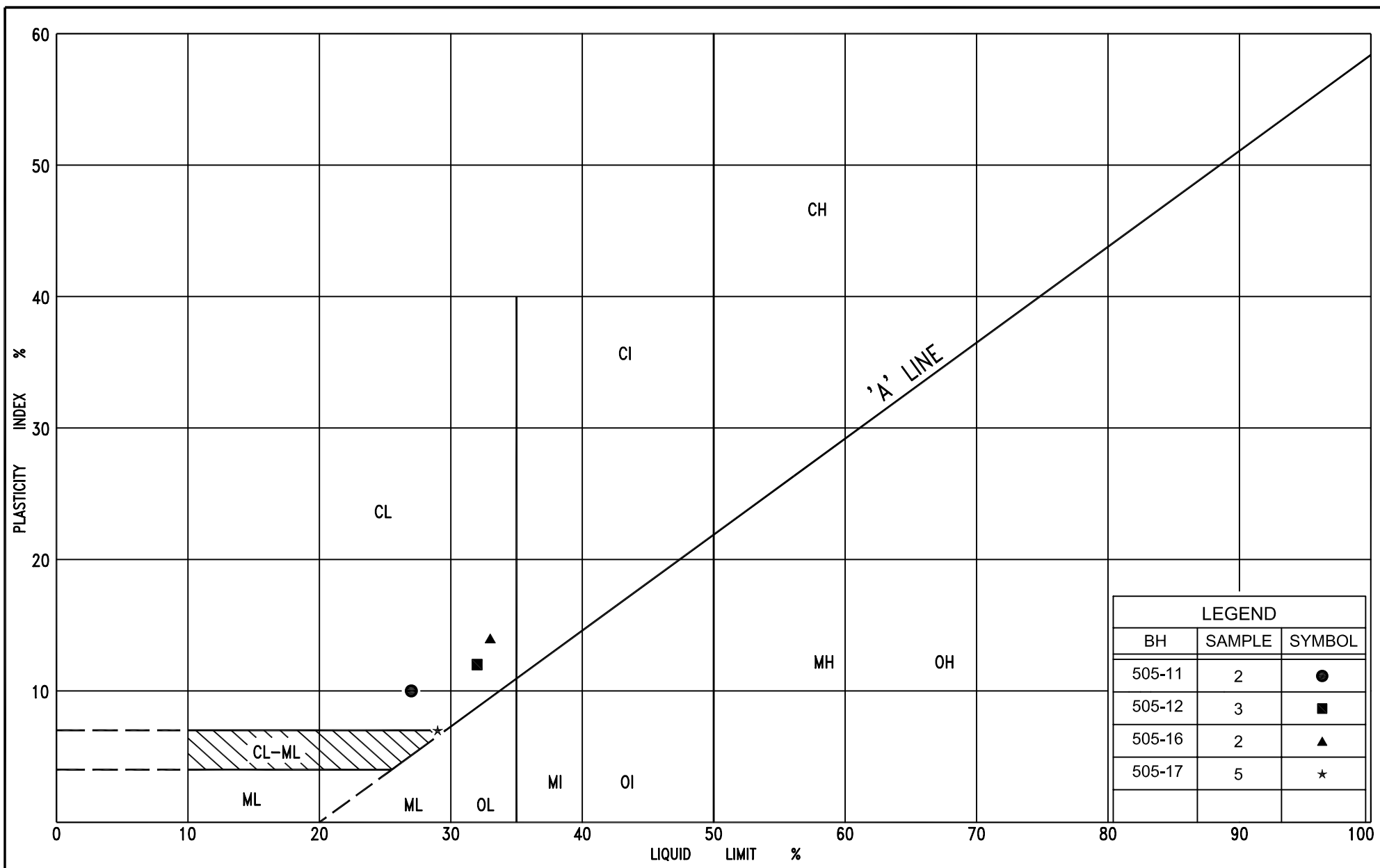


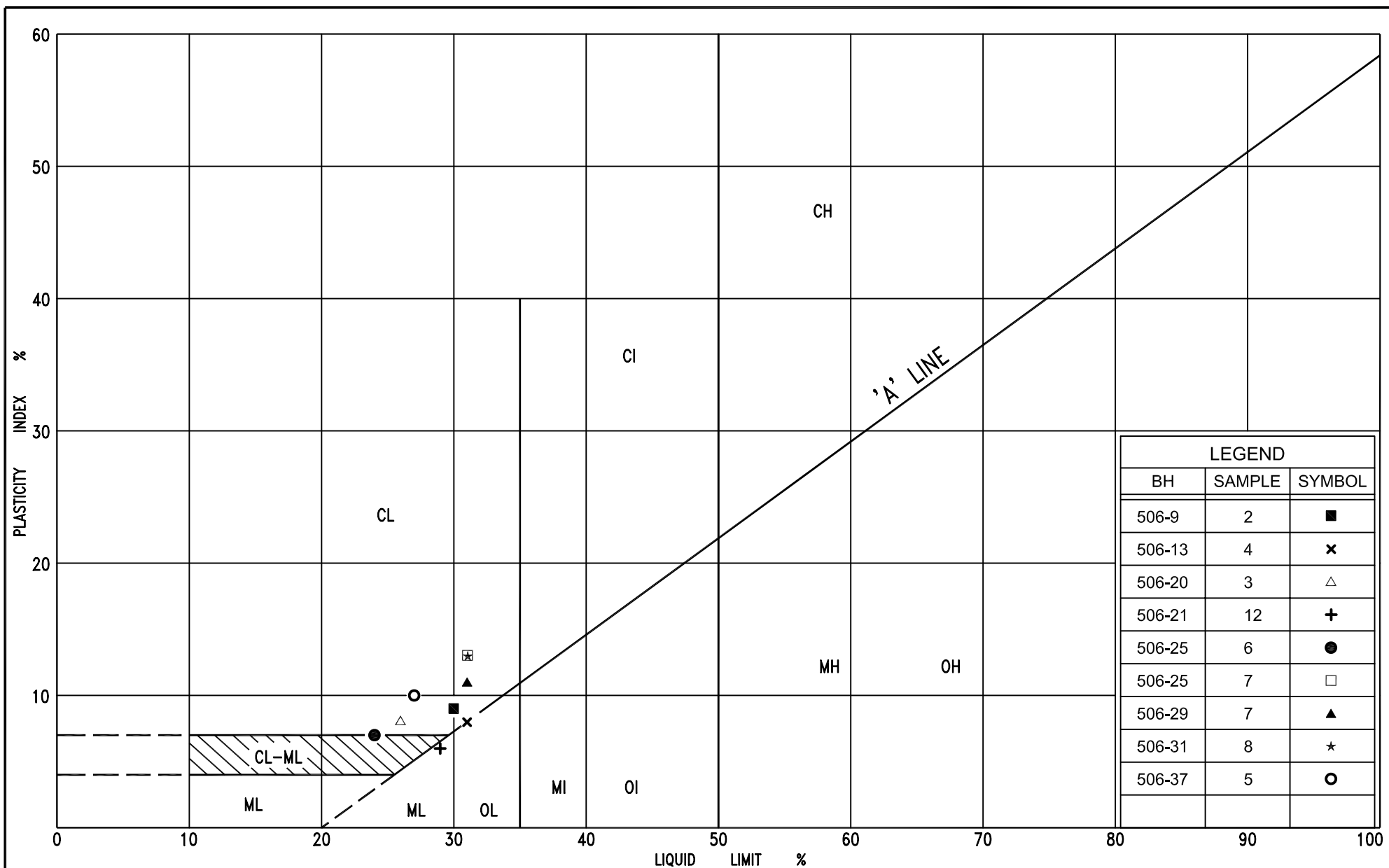


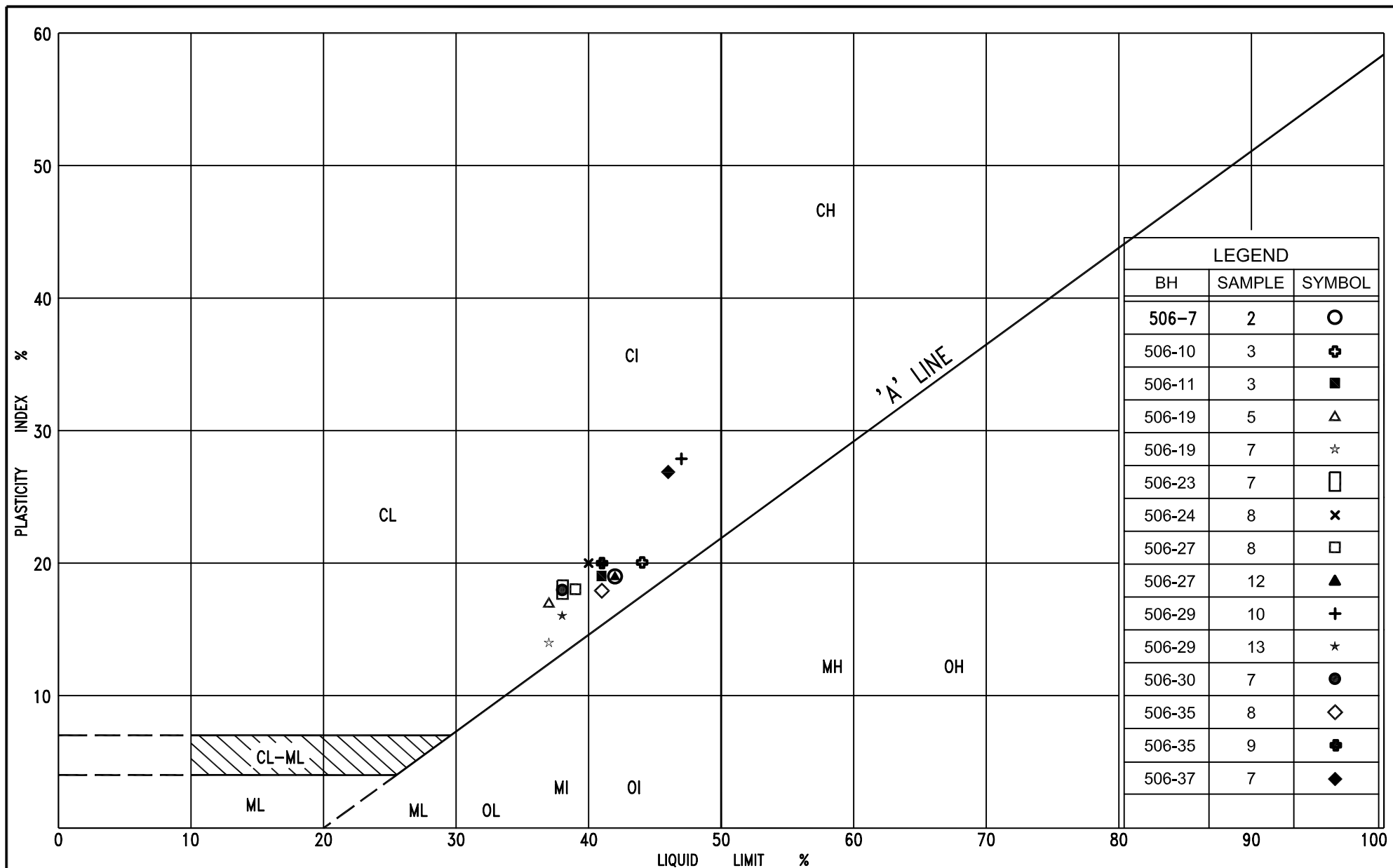


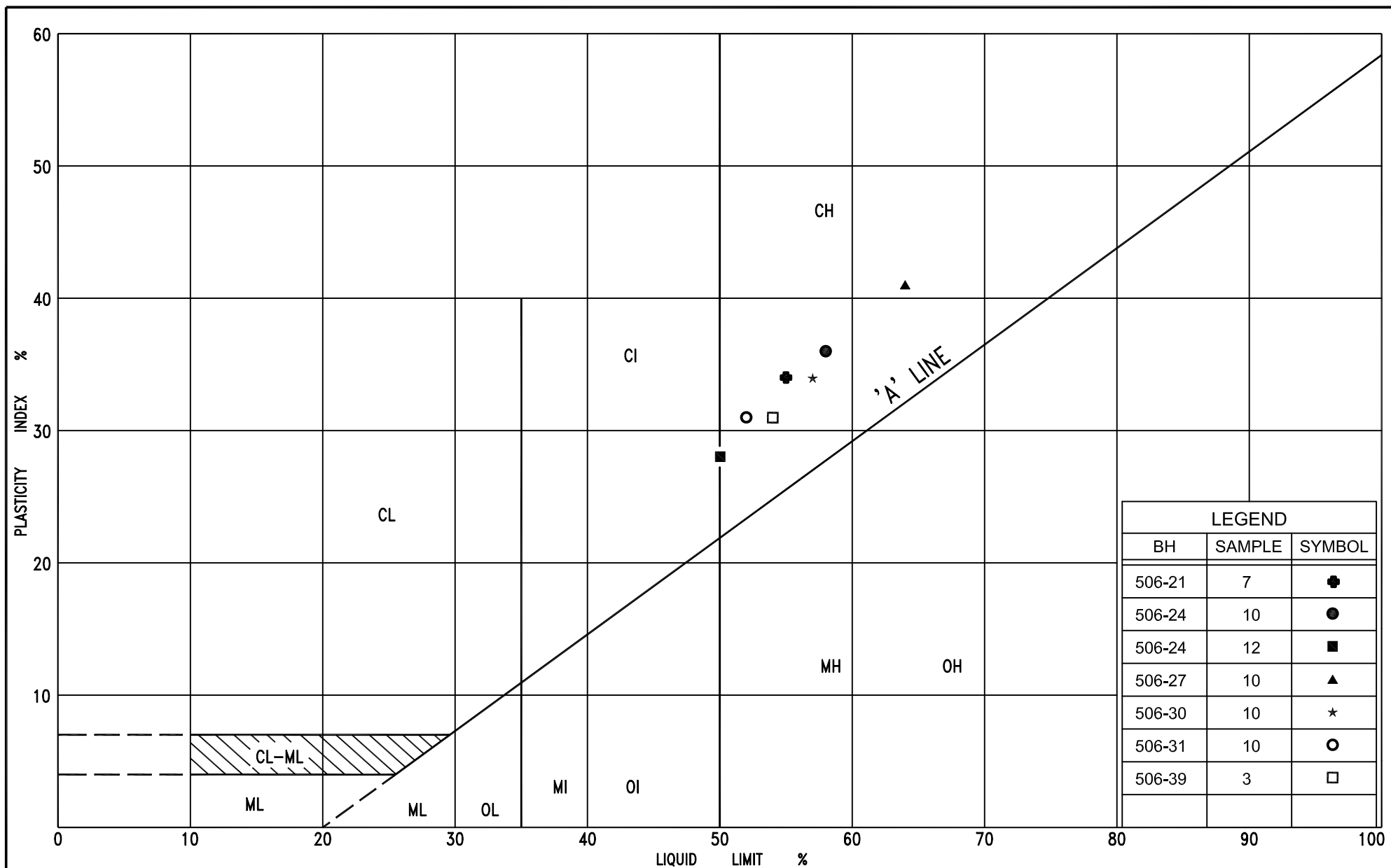


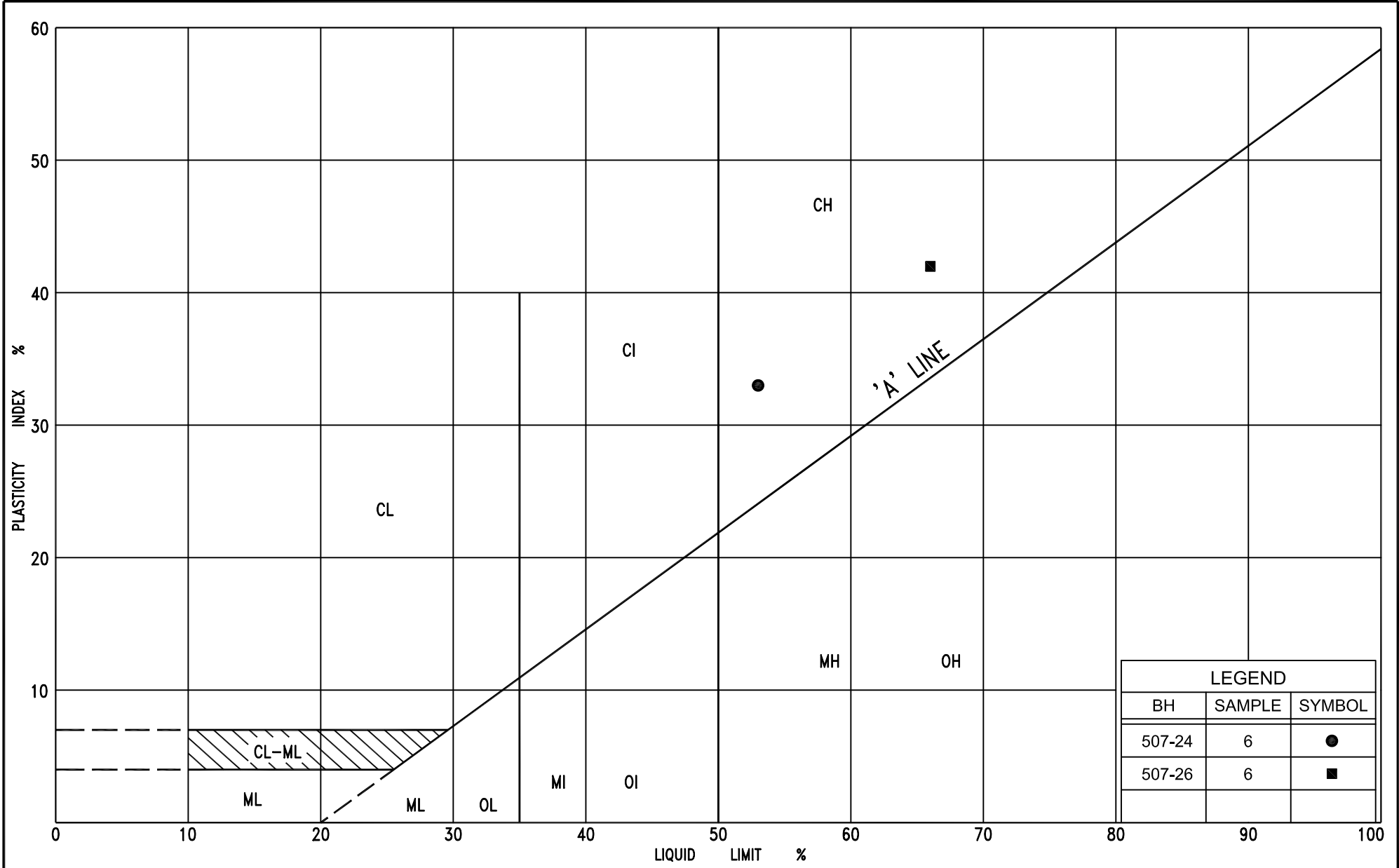


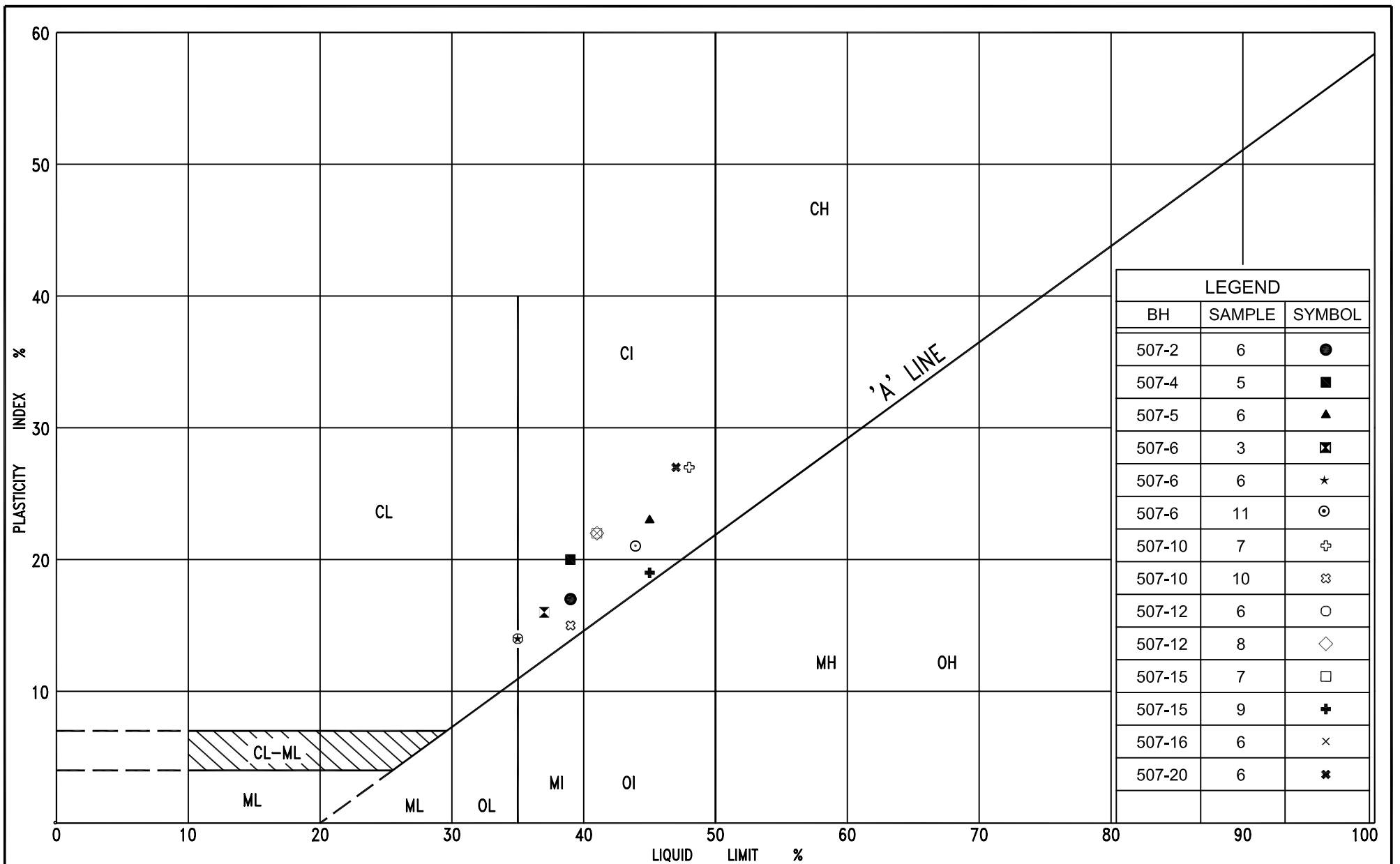


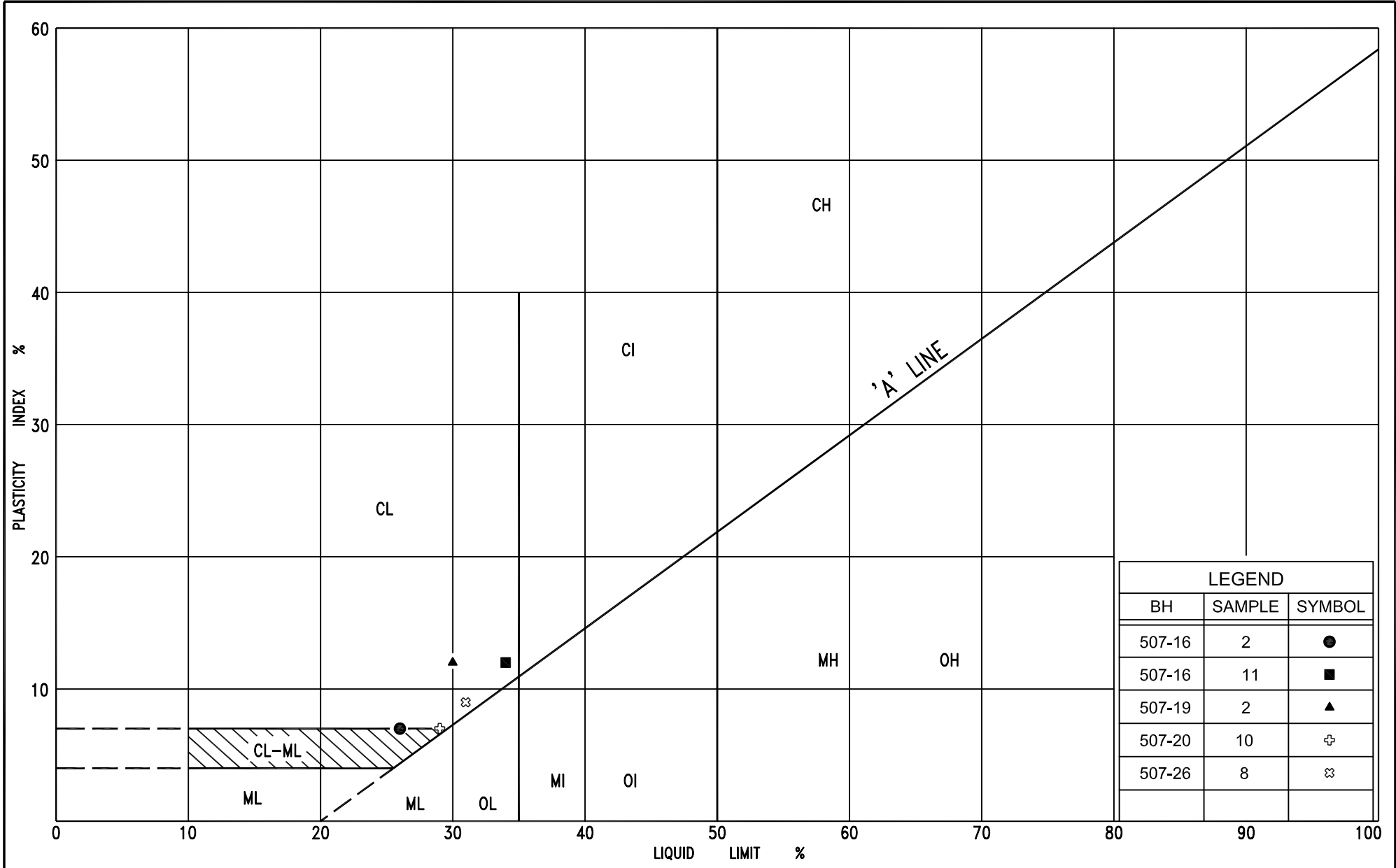


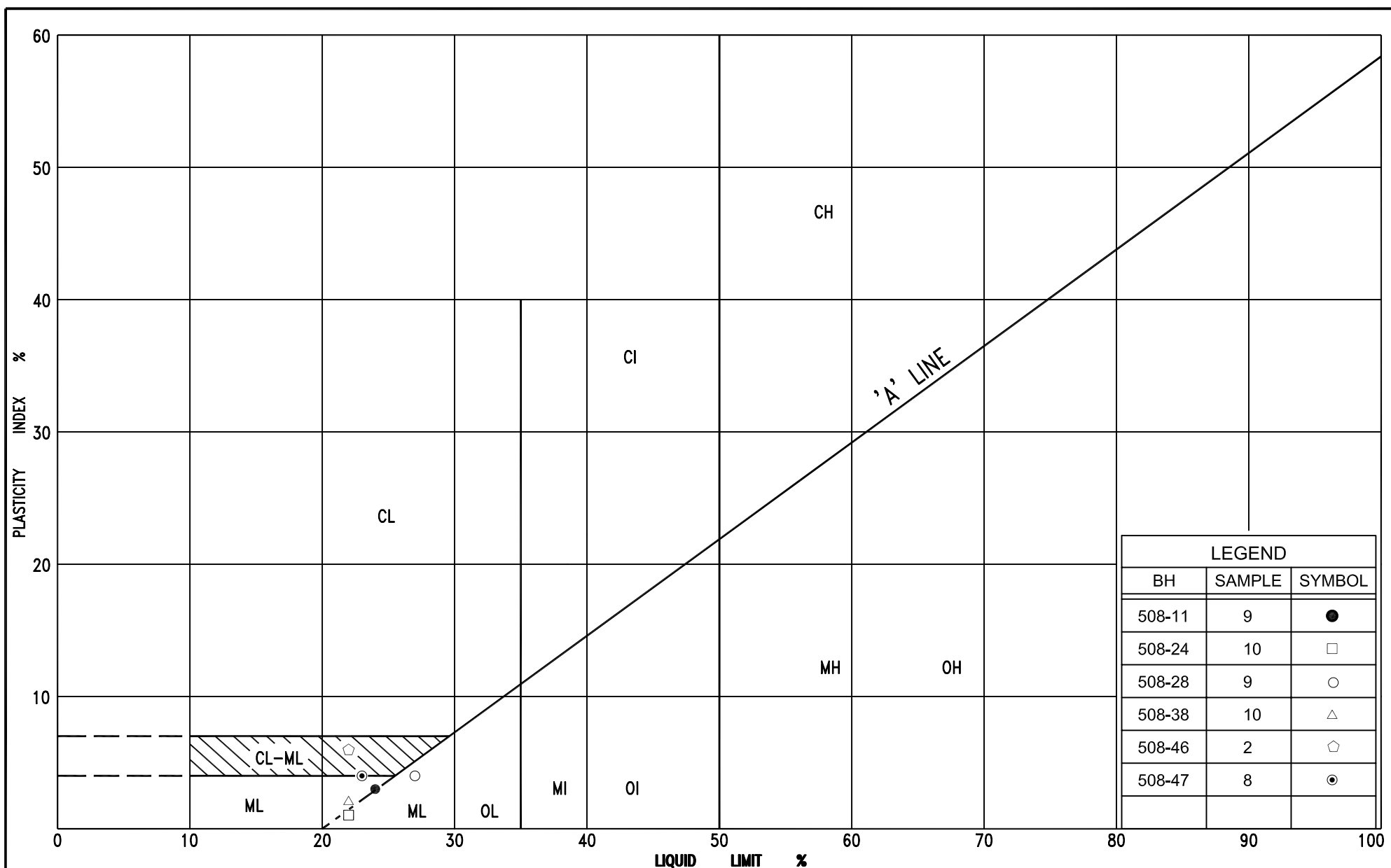




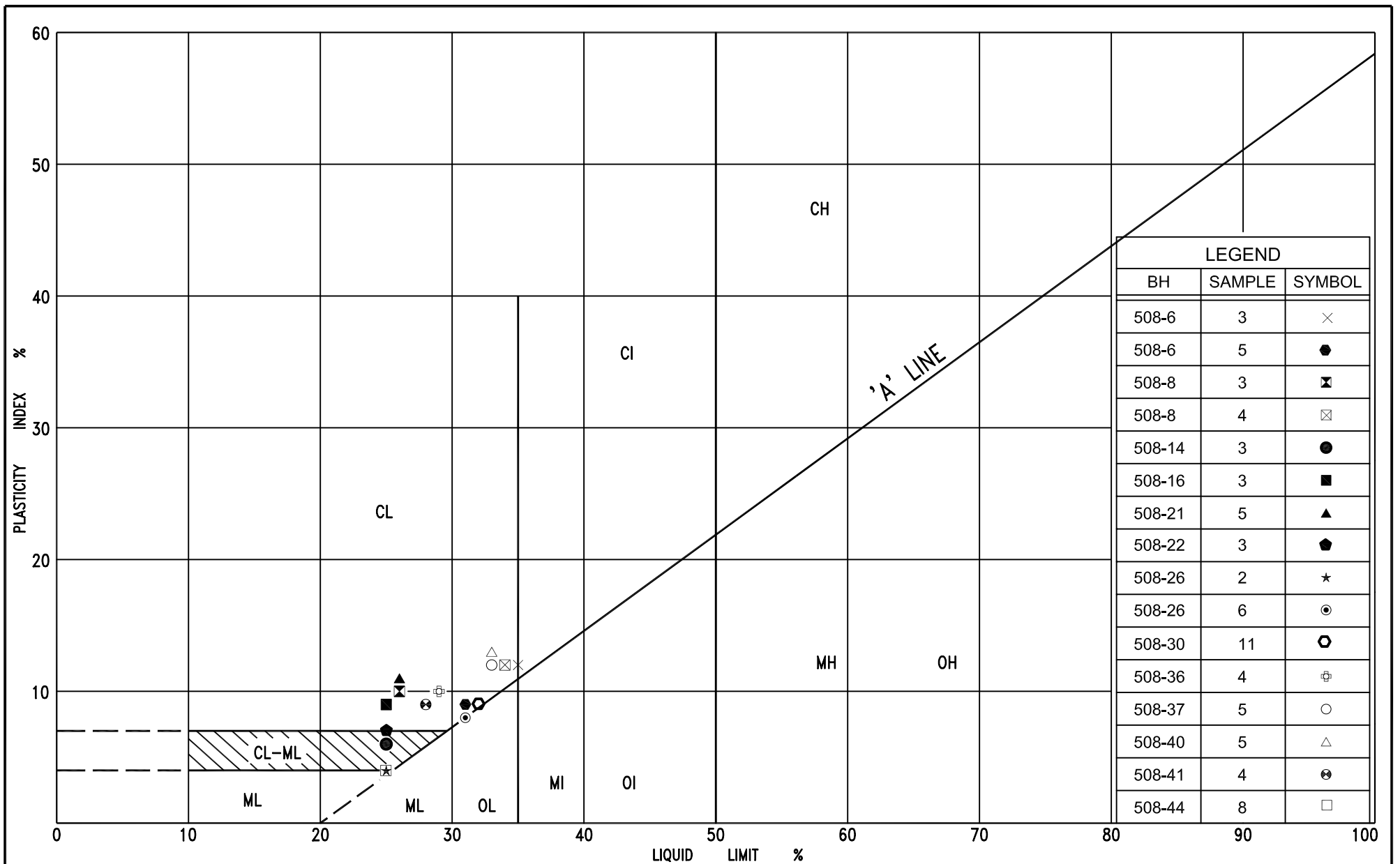


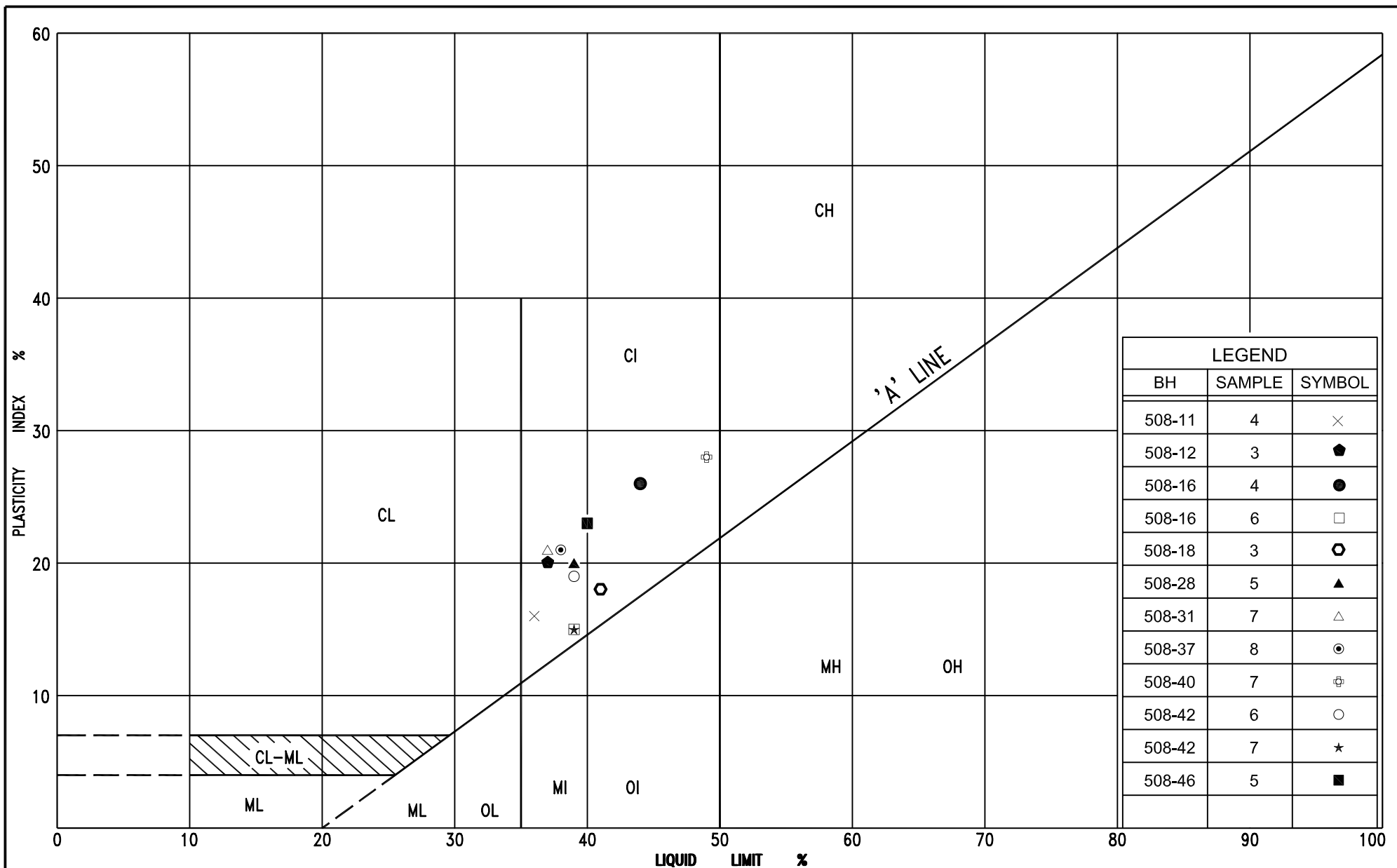












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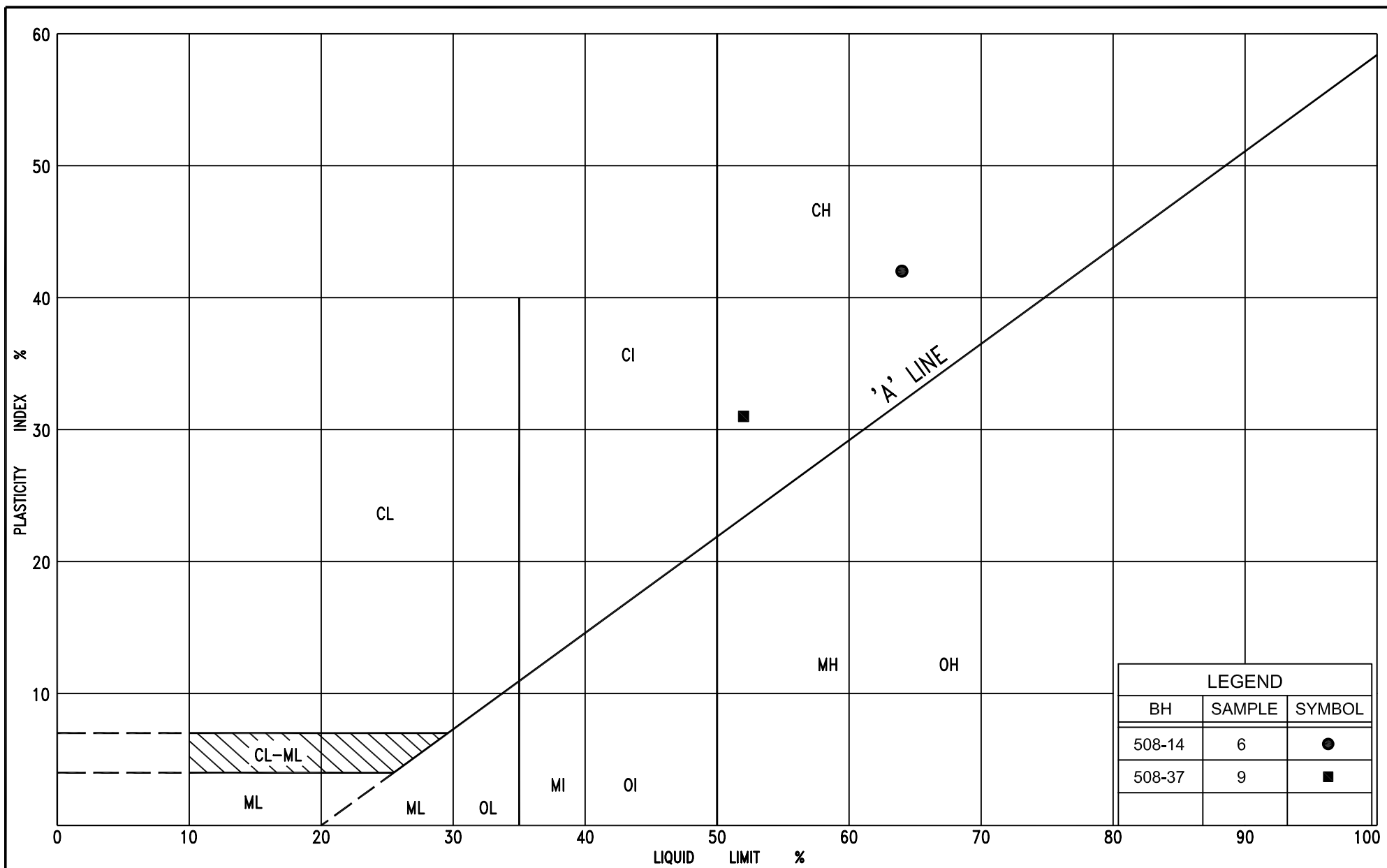
## PLASTICITY CHART

SILTY CLAY, trace to some sand

FIG No. 508-PC-3

HWY: 69

G.W.P. No. 5218-06-00



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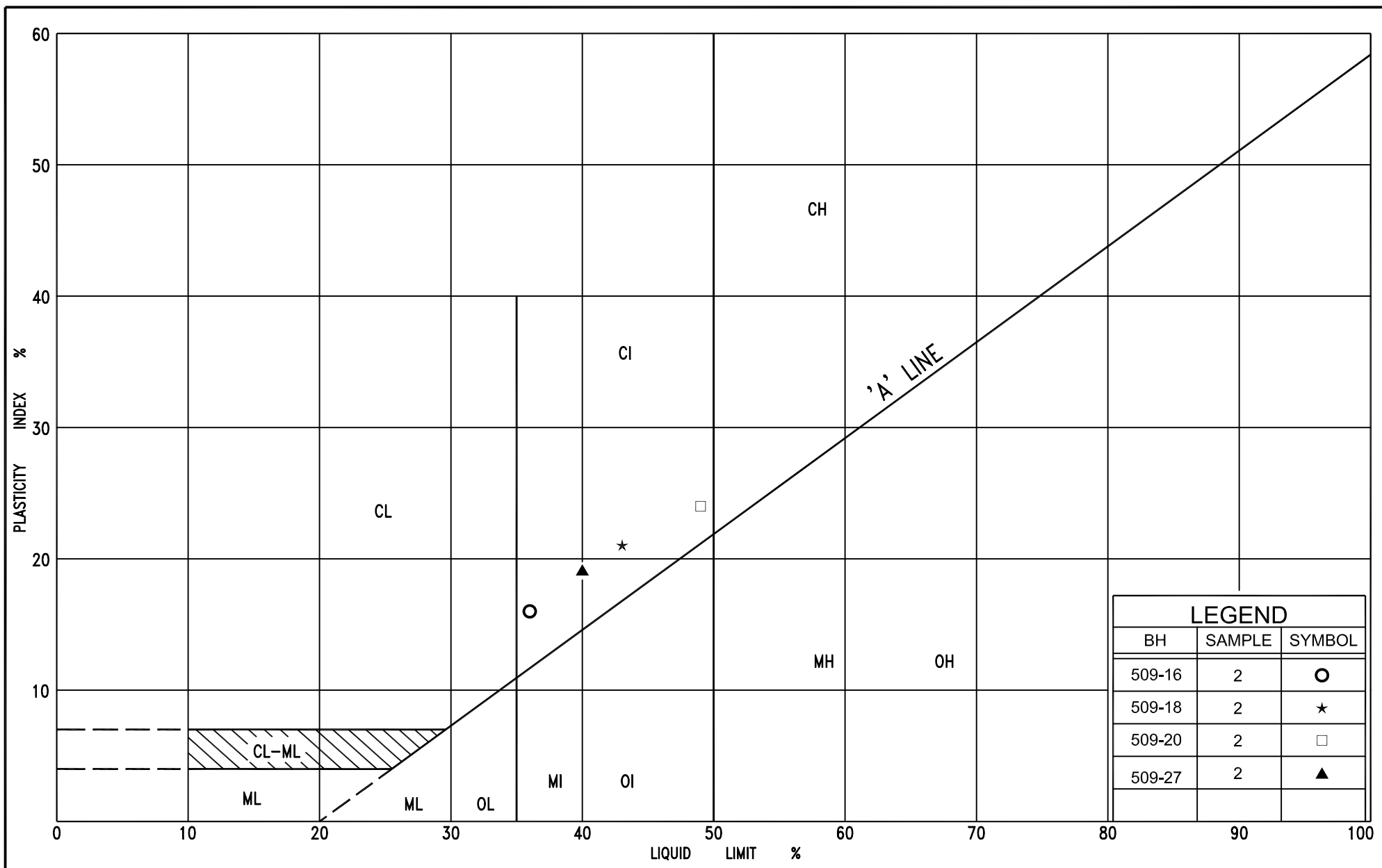
## PLASTICITY CHART

CLAY, trace sand

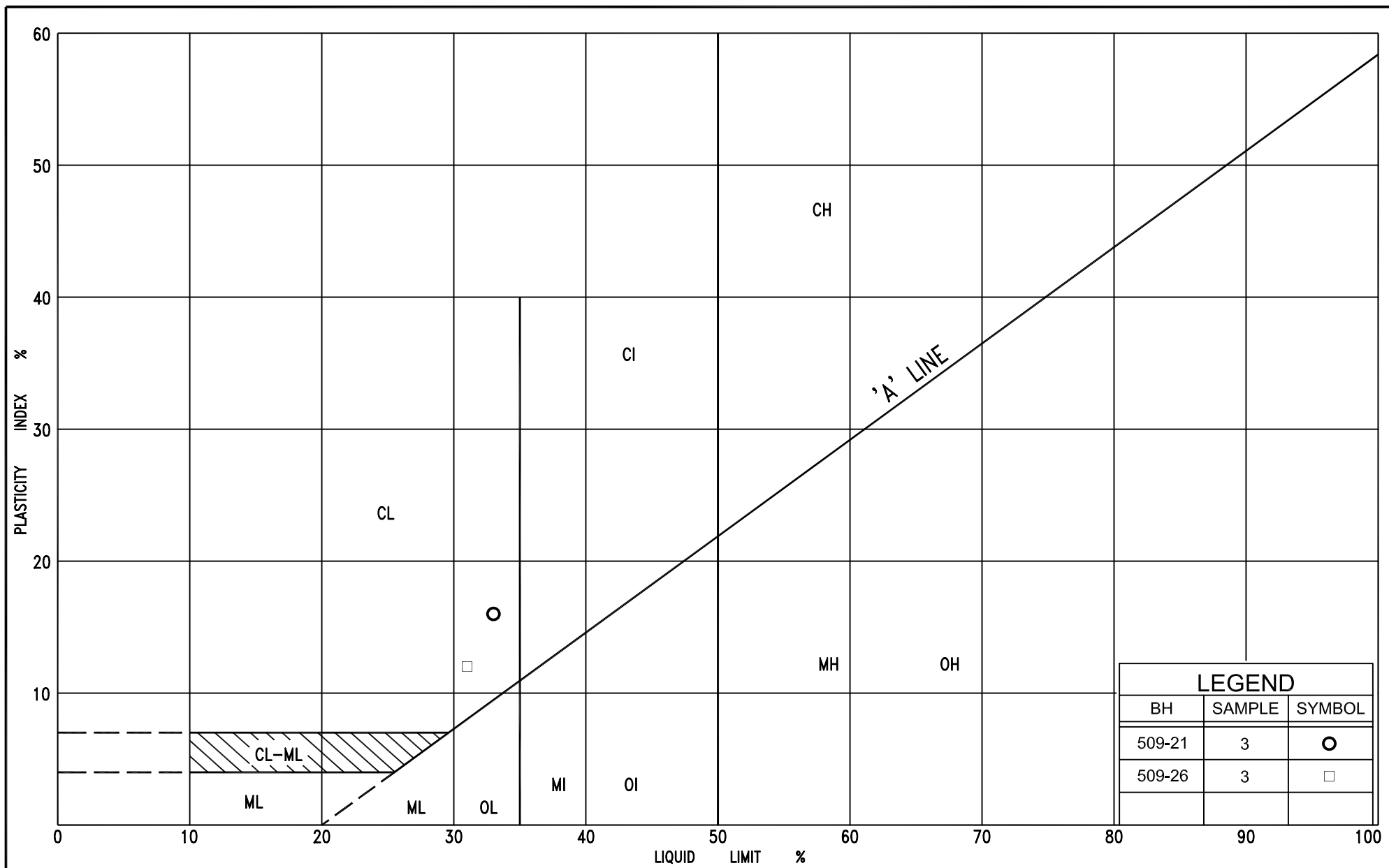
FIG No. 508-PC-4

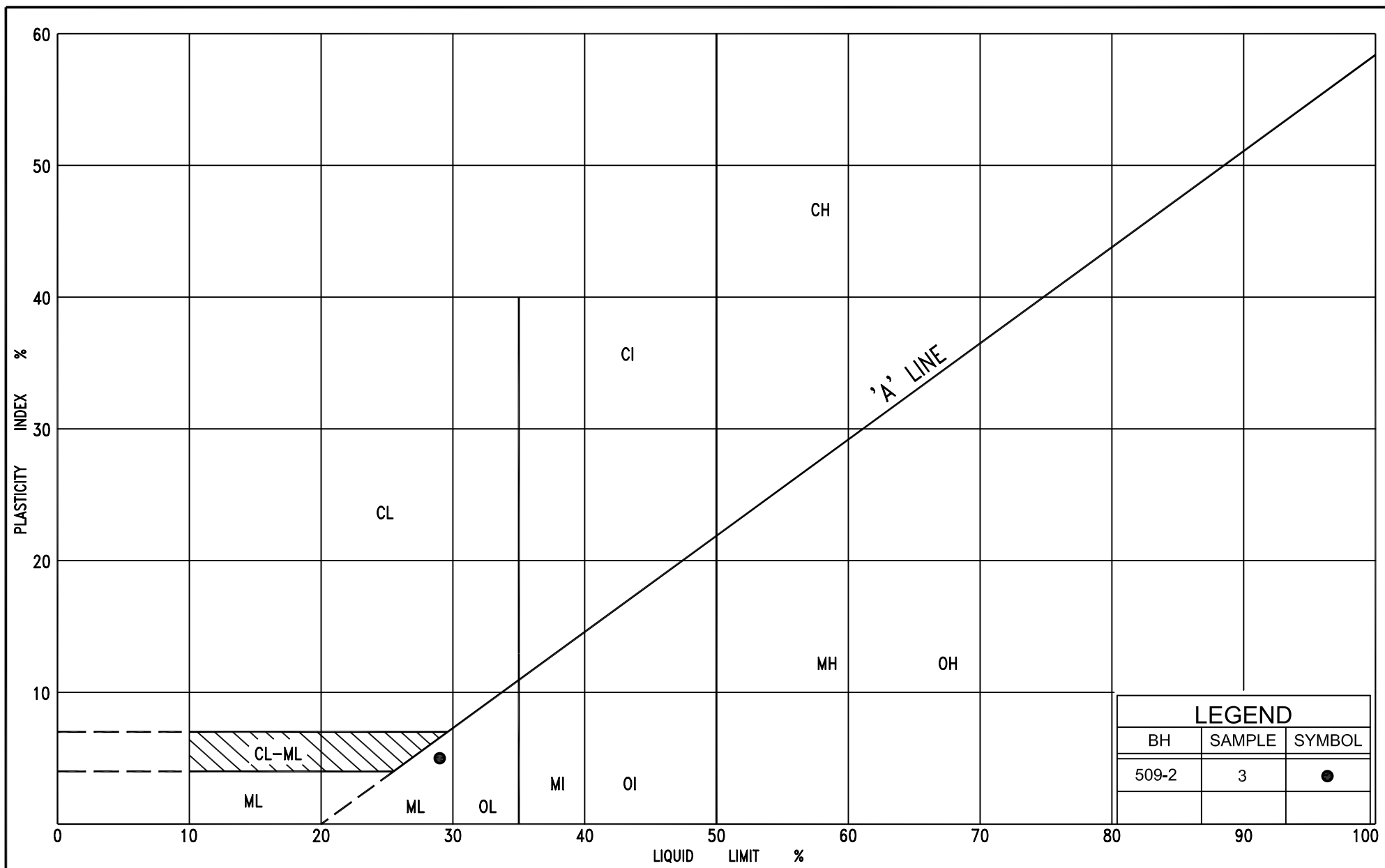
HWY: 69

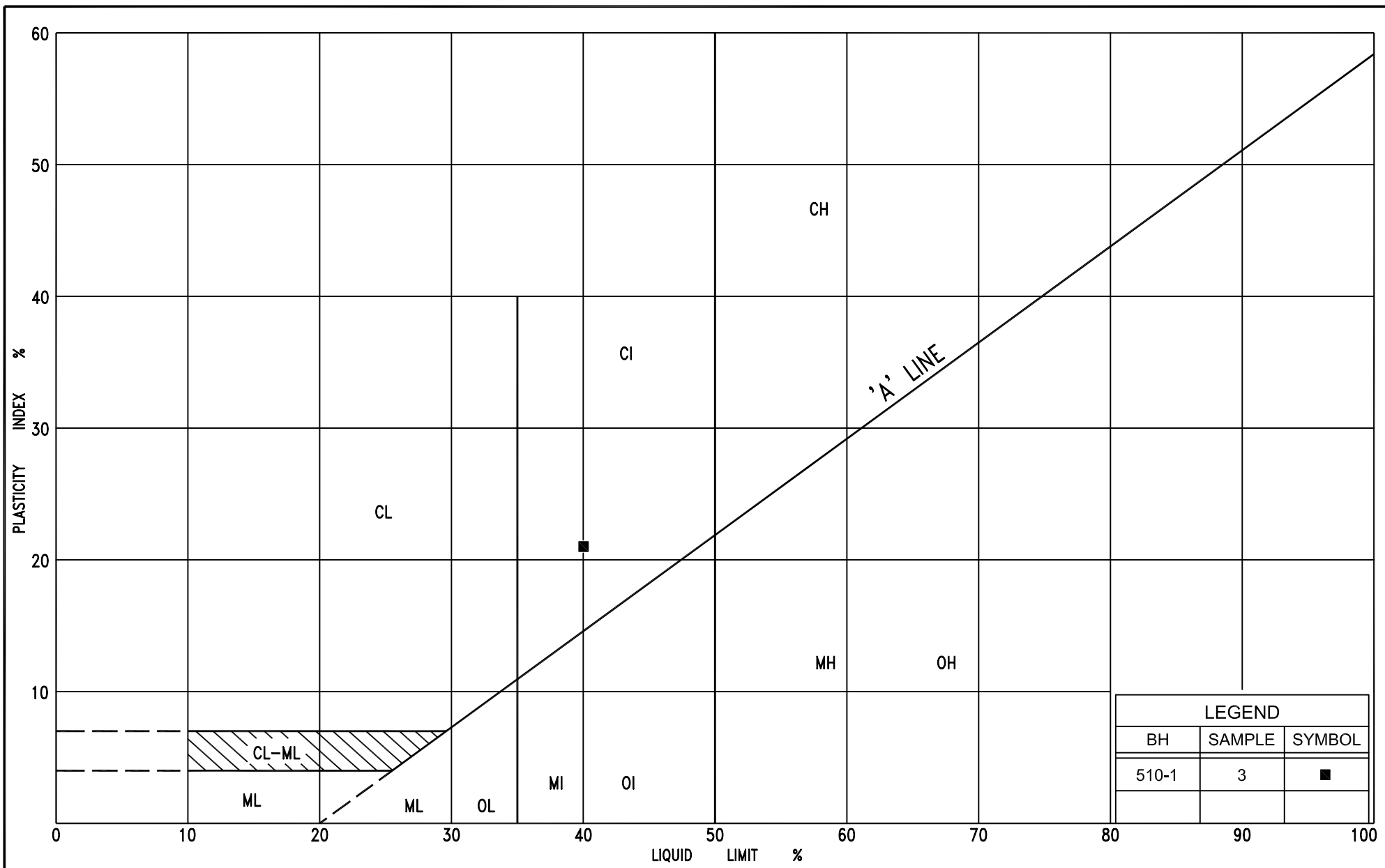
G.W.P. No. 5218-06-00



LEGEND		
BH	SAMPLE	SYMBOL
509-16	2	○
509-18	2	★
509-20	2	□
509-27	2	▲







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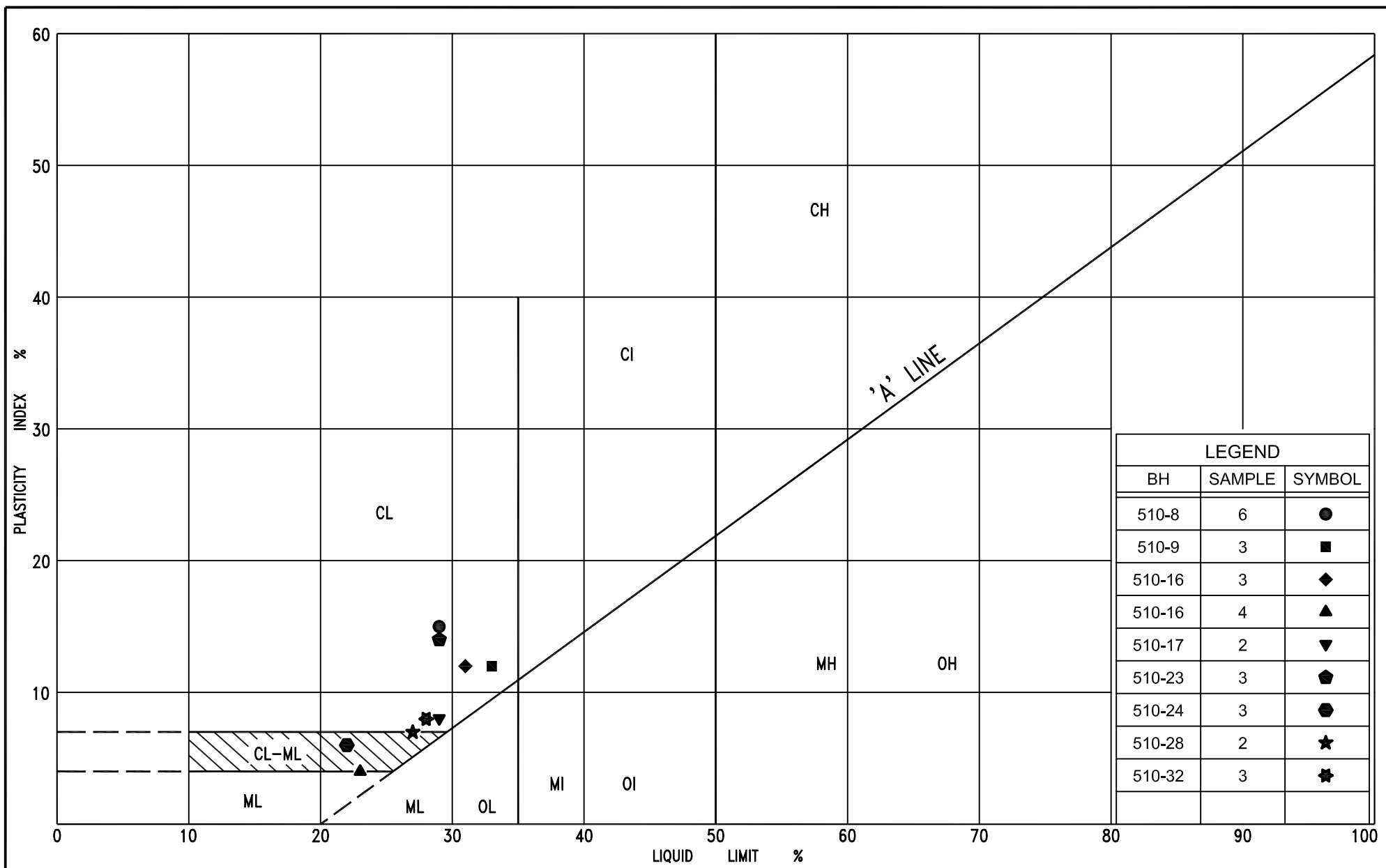
PLASTICITY CHART

SILTY CLAY, trace sand

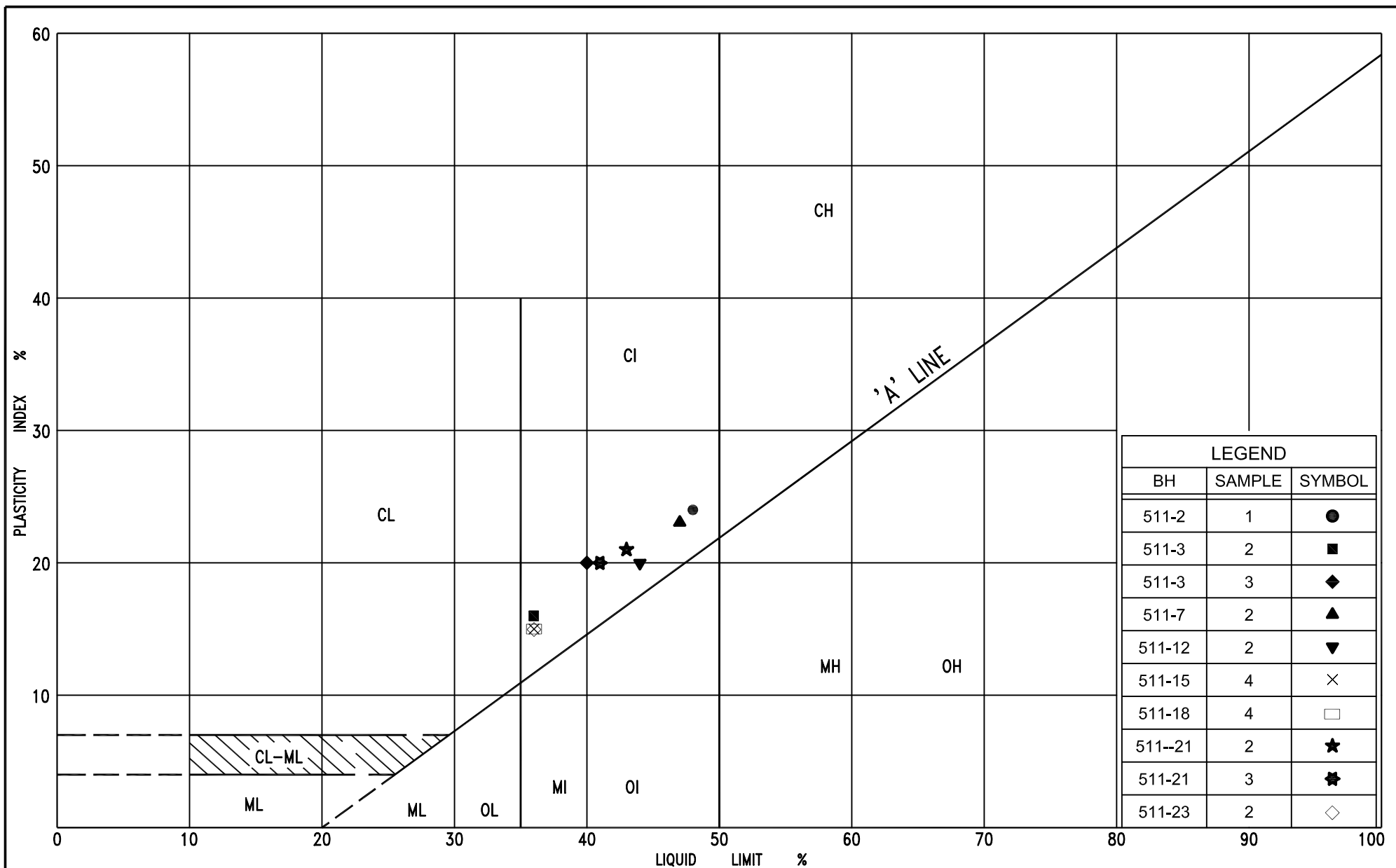
FIG No. 510-PC-1

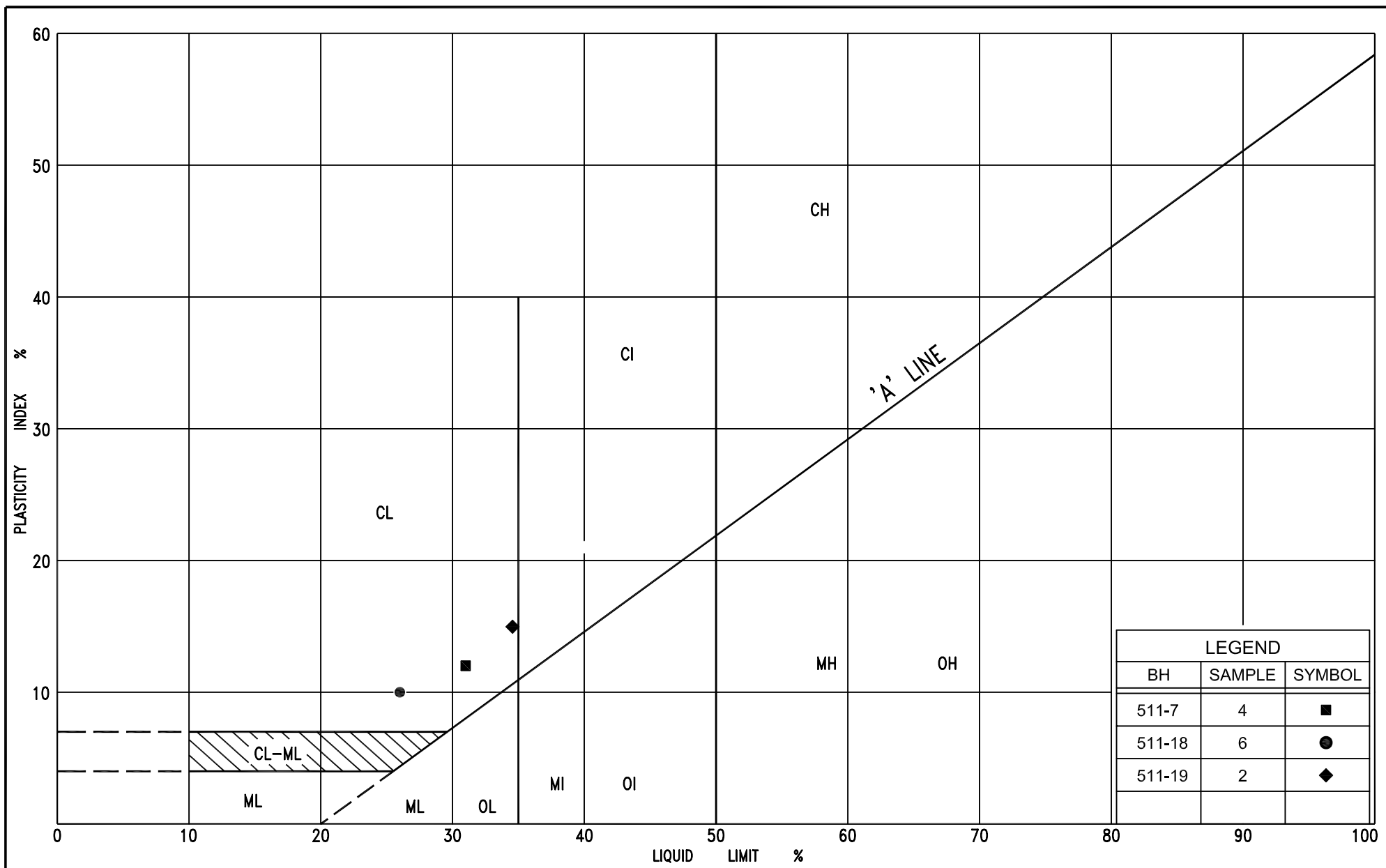
HWY: 69

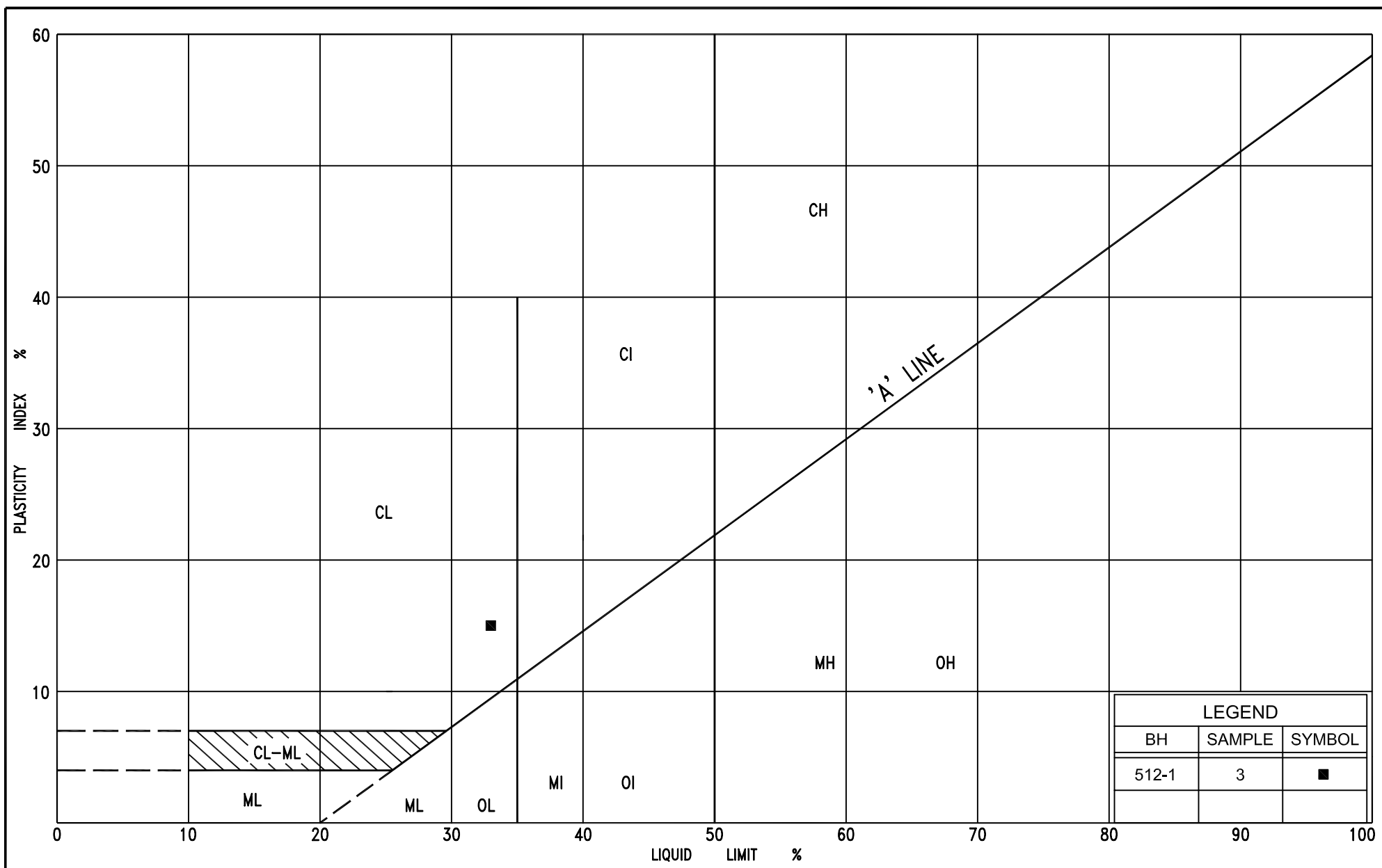
G.W.P. No. 5218-06-00











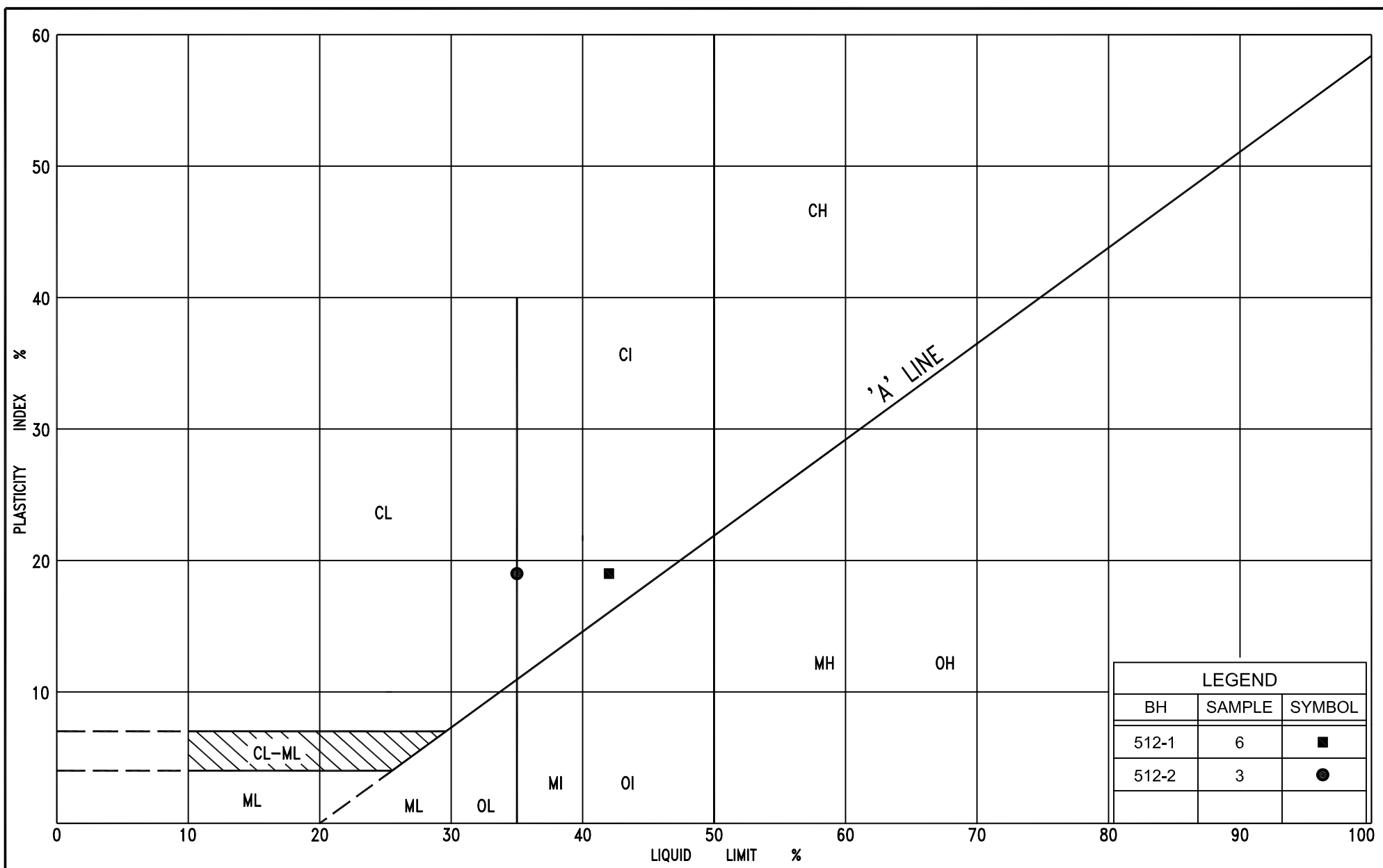
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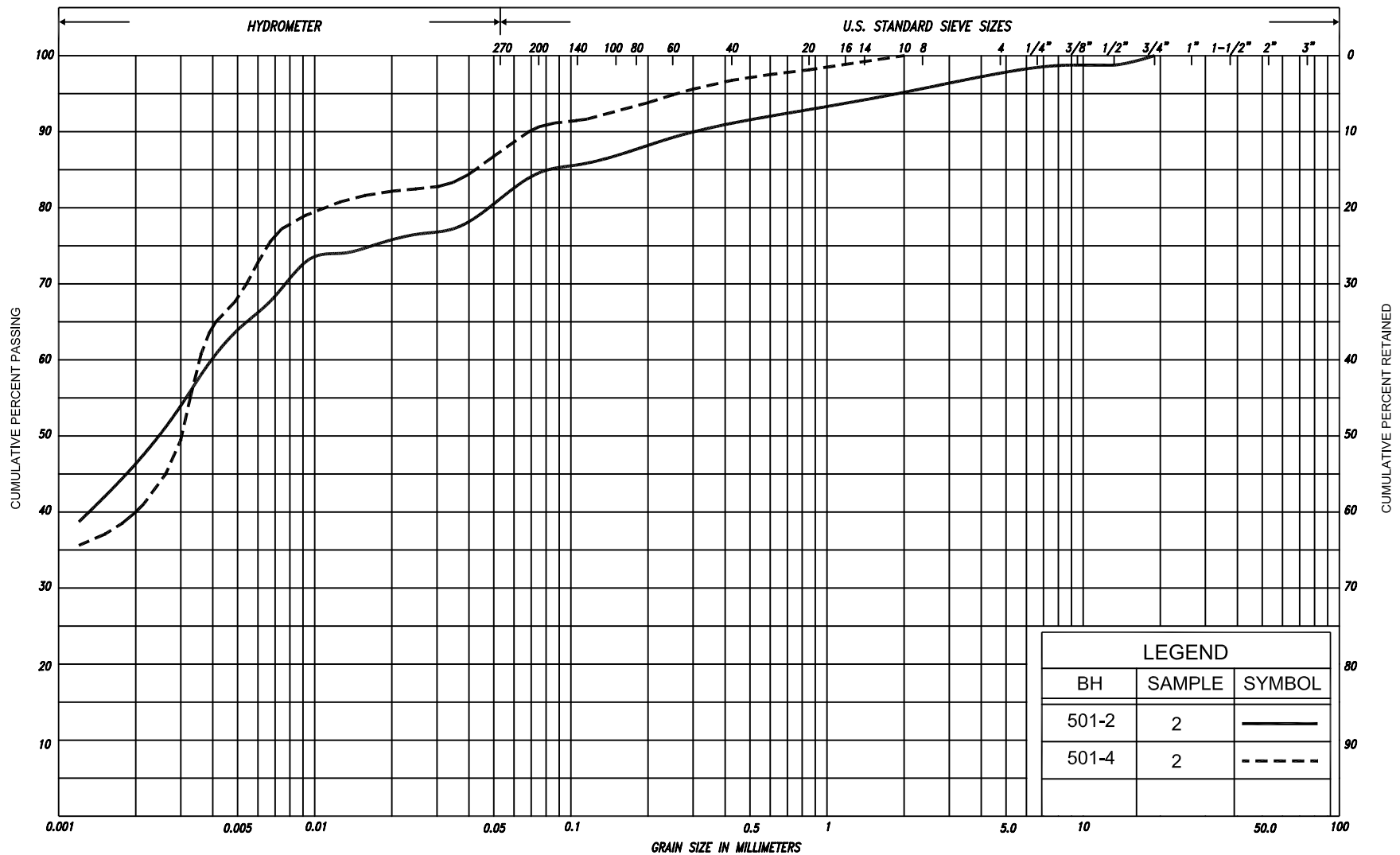
# PLASTICITY CHART CLAYEY SILT, trace sand (FILL)

FIG No. 512-PC-1

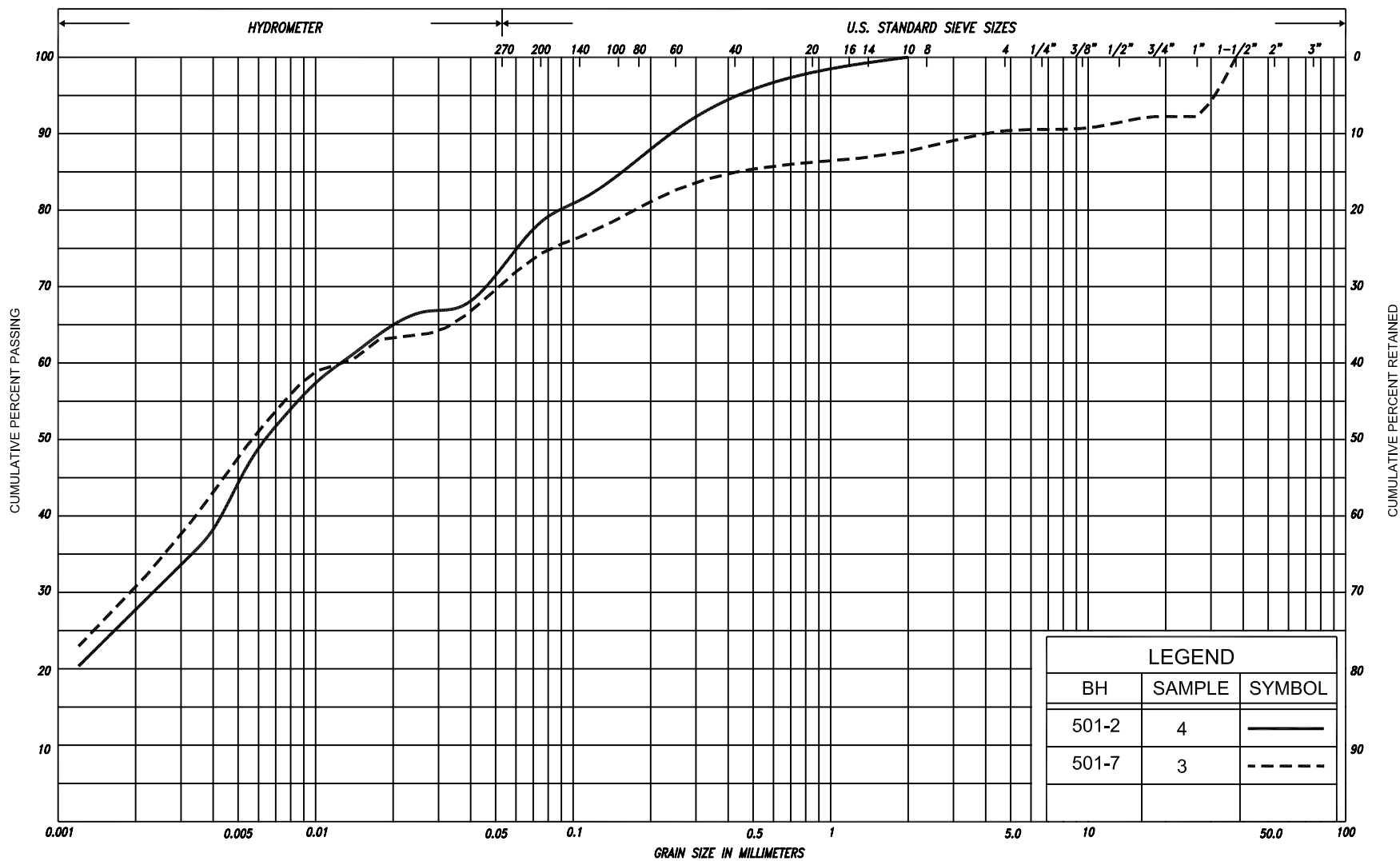
HWY: 69

G.W.P. No. 5218-06-00

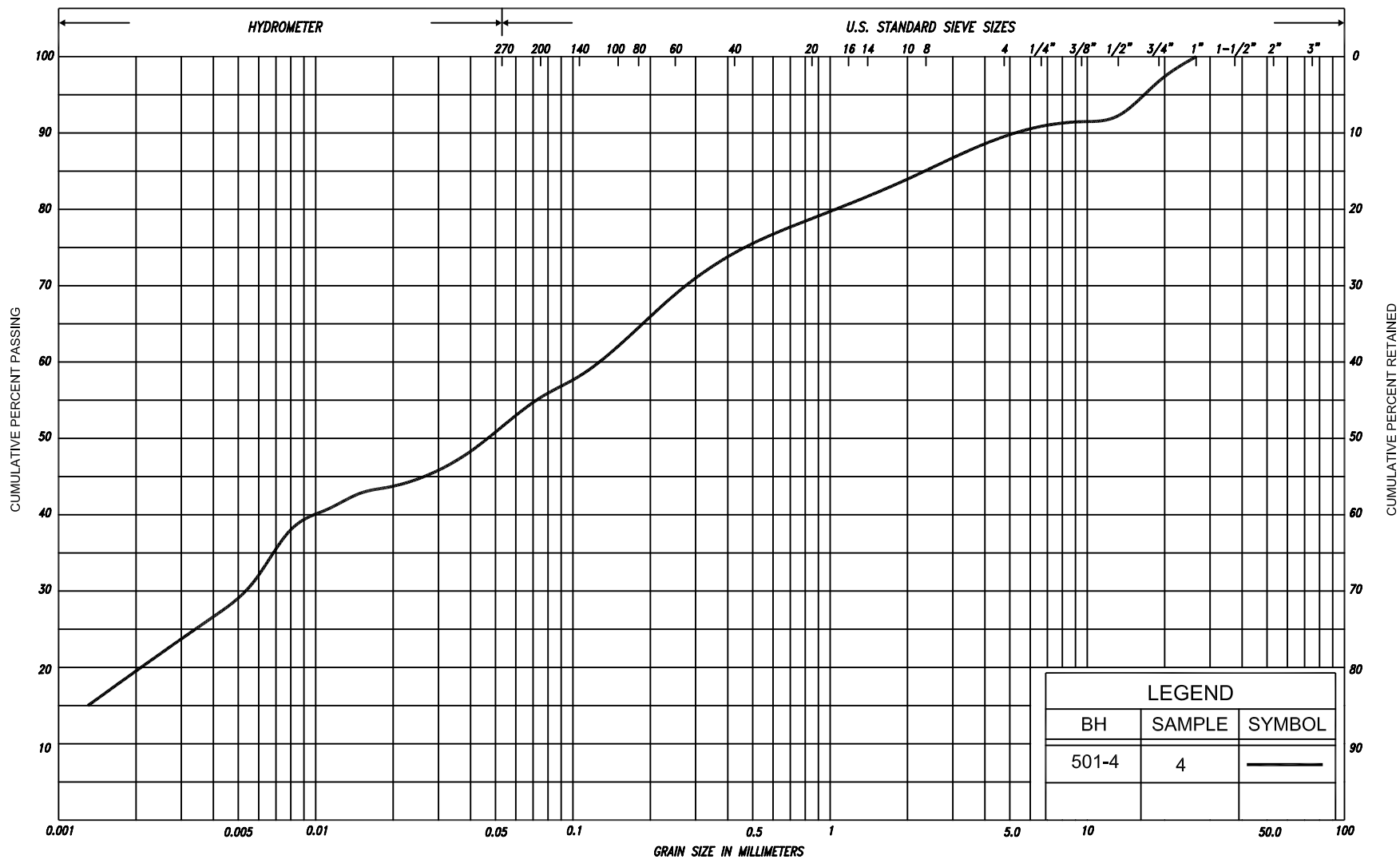




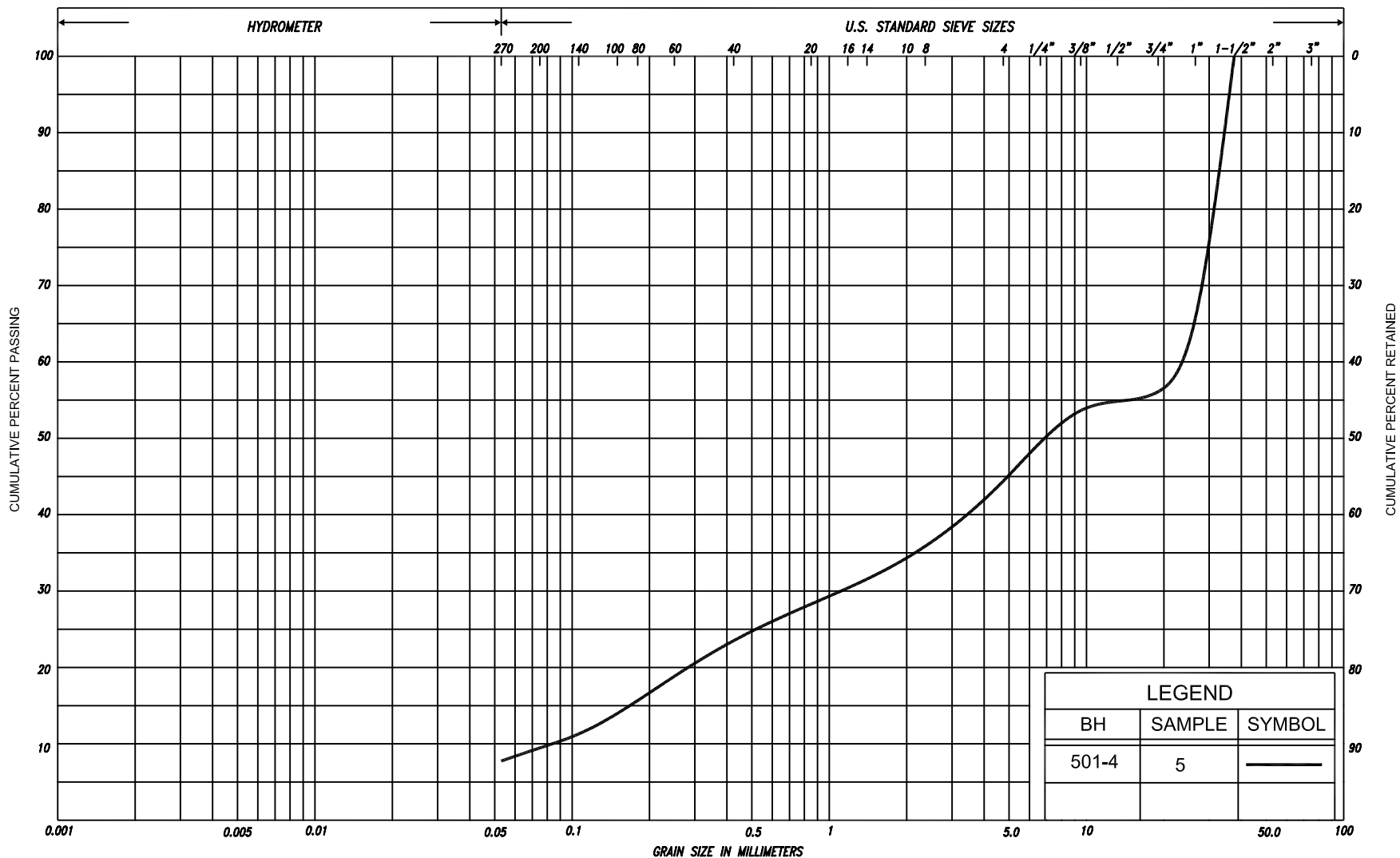
SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL				COBBLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT				SAND		SAND		SAND		SAND		SAND		SAND	SAND
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU	



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED			
				SAND													
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.	
	SILT						SAND										
CLAY			SILT			V. FINE		FINE		MED.		COARSE		GRAVEL			U.S. BUREAU
						SAND											



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
					SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT																
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU	
					SAND												



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED					
					SAND															
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.			
	SILT																			
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL								U.S. BUREAU		
					SAND															



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## GRAIN SIZE DISTRIBUTION

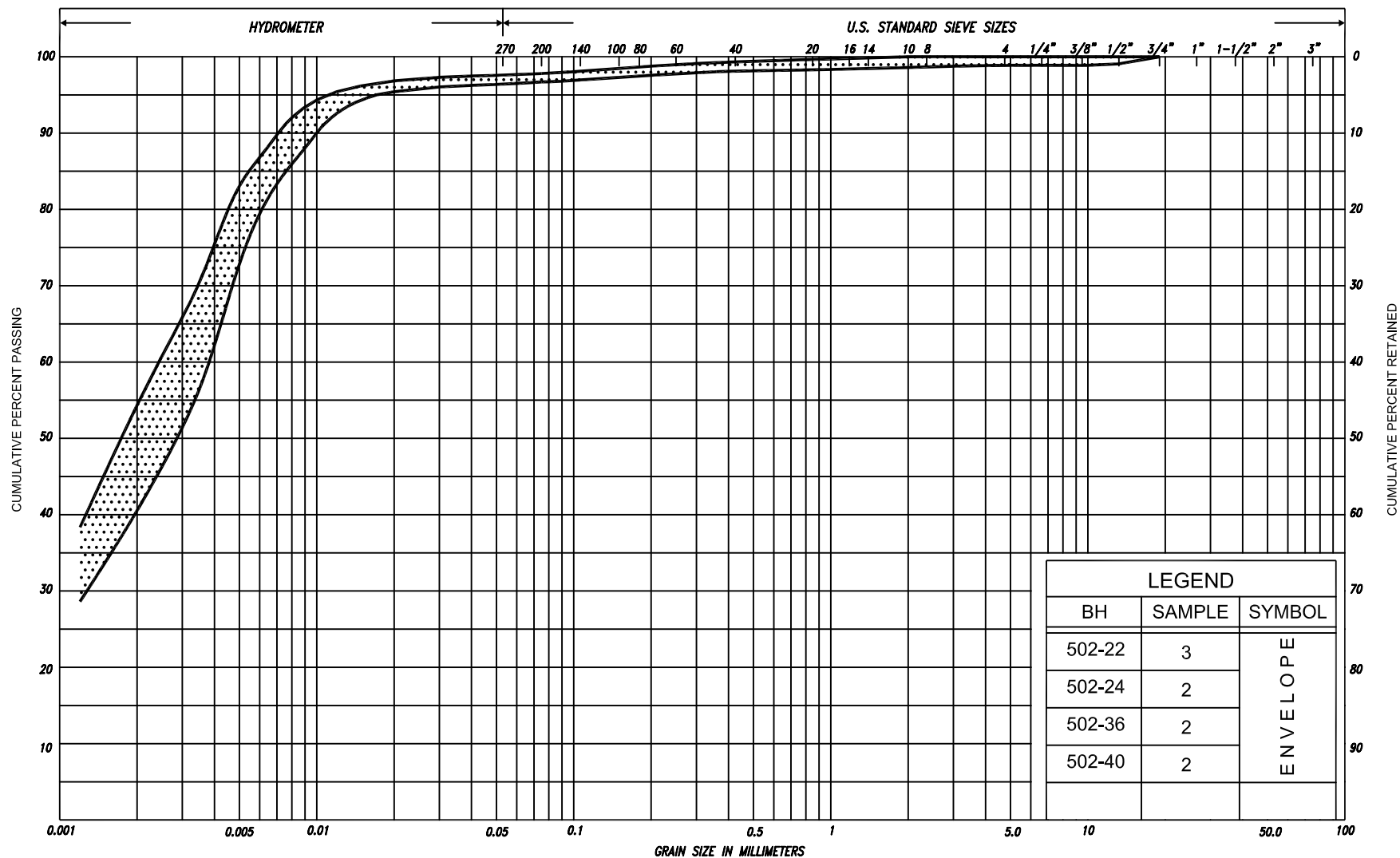
SANDY GRAVEL, trace silt

FIG No. 501-GS-4

HWY: 69

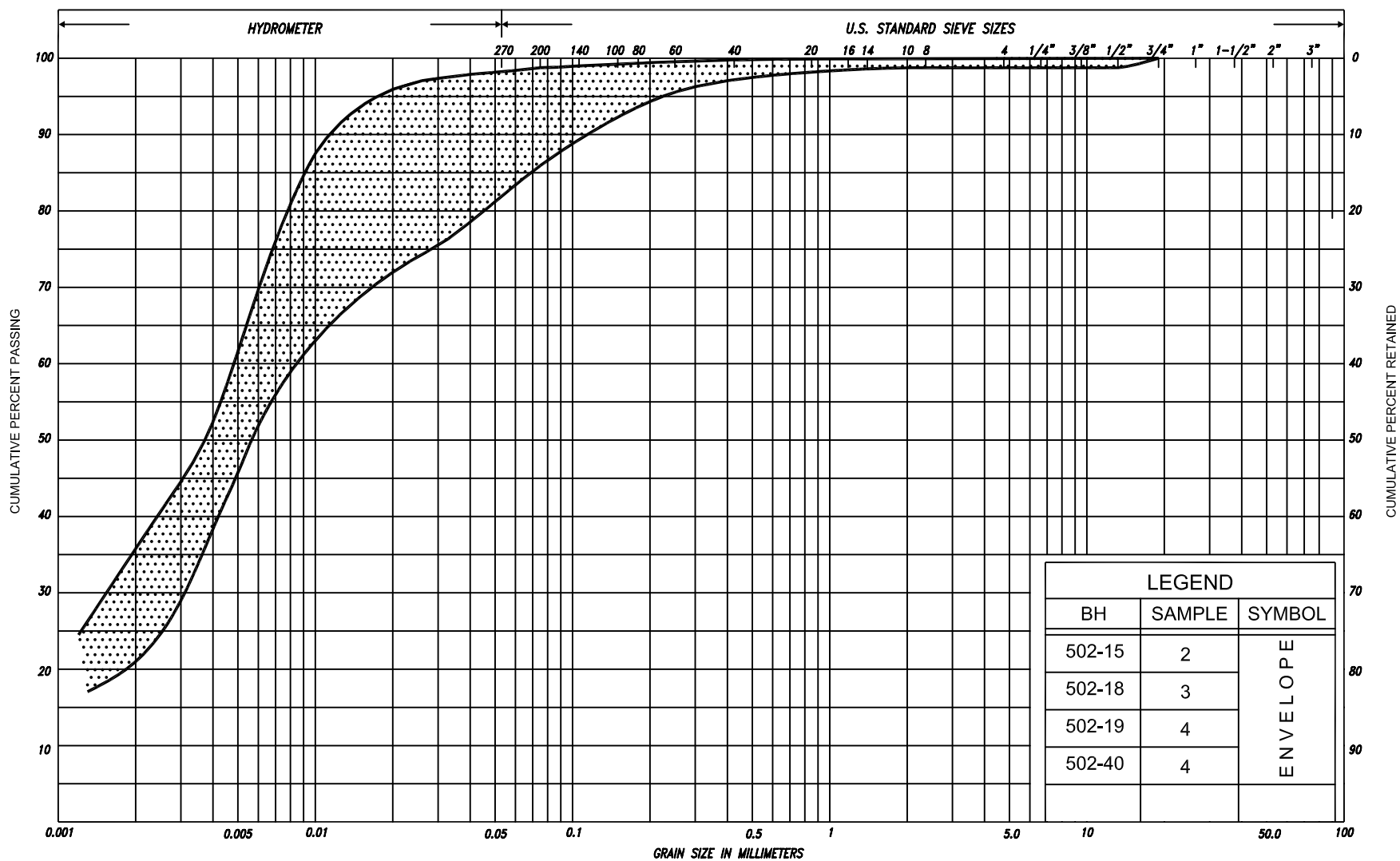
G.W.P. No. 5218-06-00



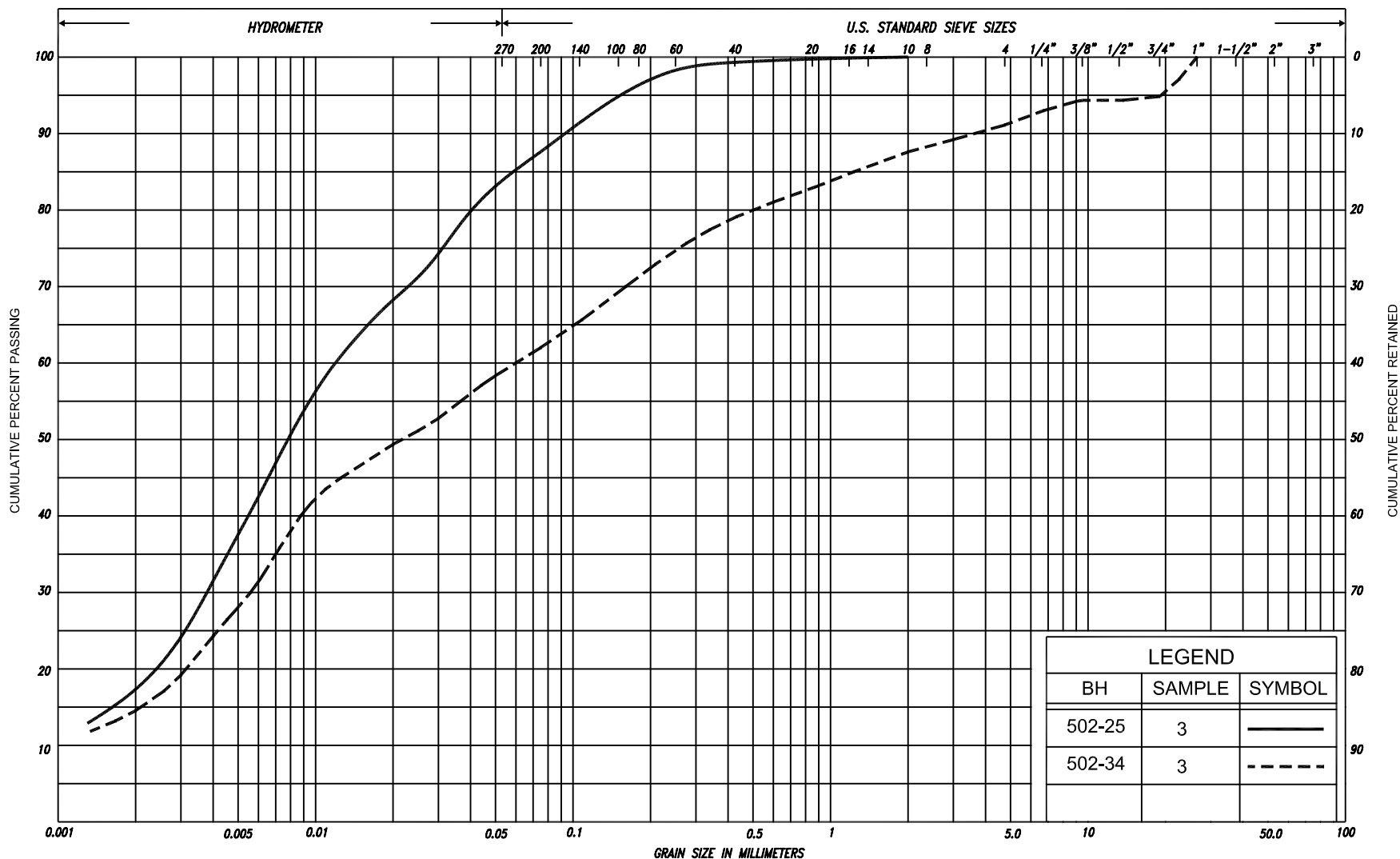


LEGEND		
BH	SAMPLE	SYMBOL
502-22	3	ENVELOPE
502-24	2	
502-36	2	
502-40	2	

SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL		COBBLES	UNIFIED	
				SAND										
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.	
	SILT				SAND									
CLAY		SILT		V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU
				SAND										



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED	
					SAND											
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT															
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU
					SAND											

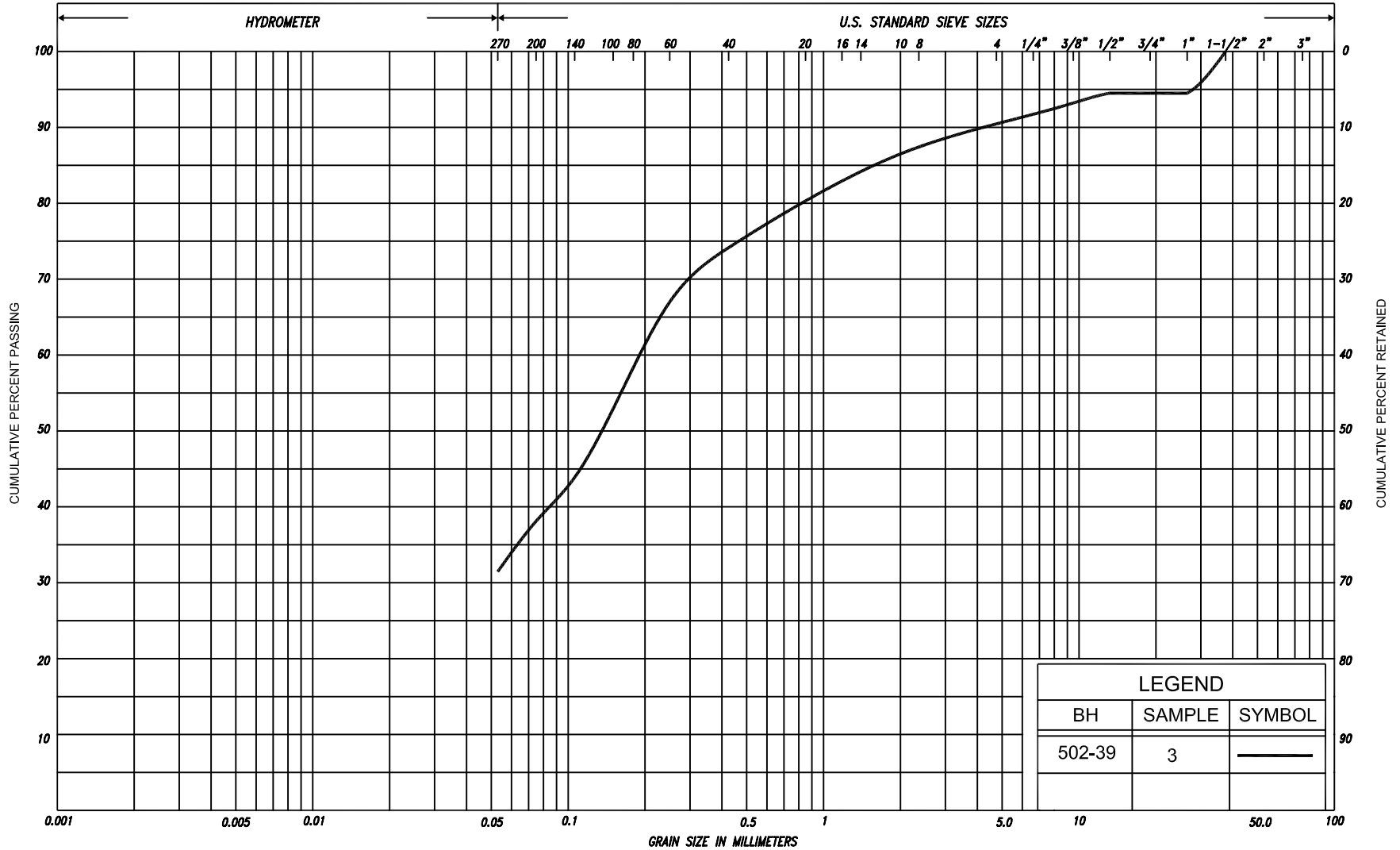


SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT				V. FINE	FINE	MED.	COARSE	GRAVEL					U.S. BUREAU	
CLAY		SILT				SAND				GRAVEL					

## GRAIN SIZE DISTRIBUTION

SILT, some to with sand  
 some clay, trace gravel

FIG No. 502-GS-3  
 HWY: 69  
 G.W.P. No. 5218-06-00

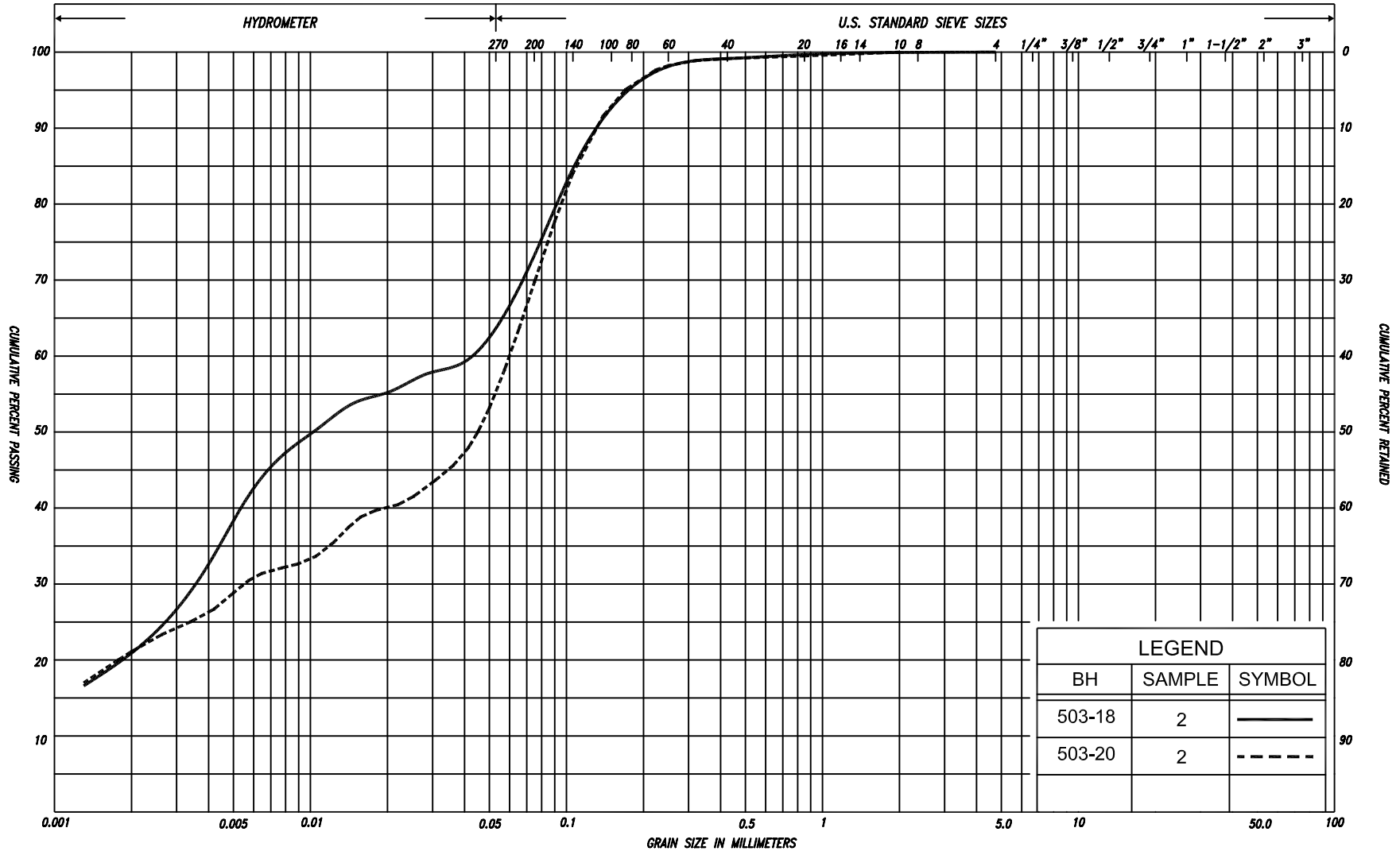


SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL				COB BLES	UNIFIED			
				SAND														
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL				COBBLES	M.I.T.
	SILT																	U.S. BUREAU
CLAY		SILT		V. FINE		FINE		MED.		COARSE		GRAVEL						
				SAND														

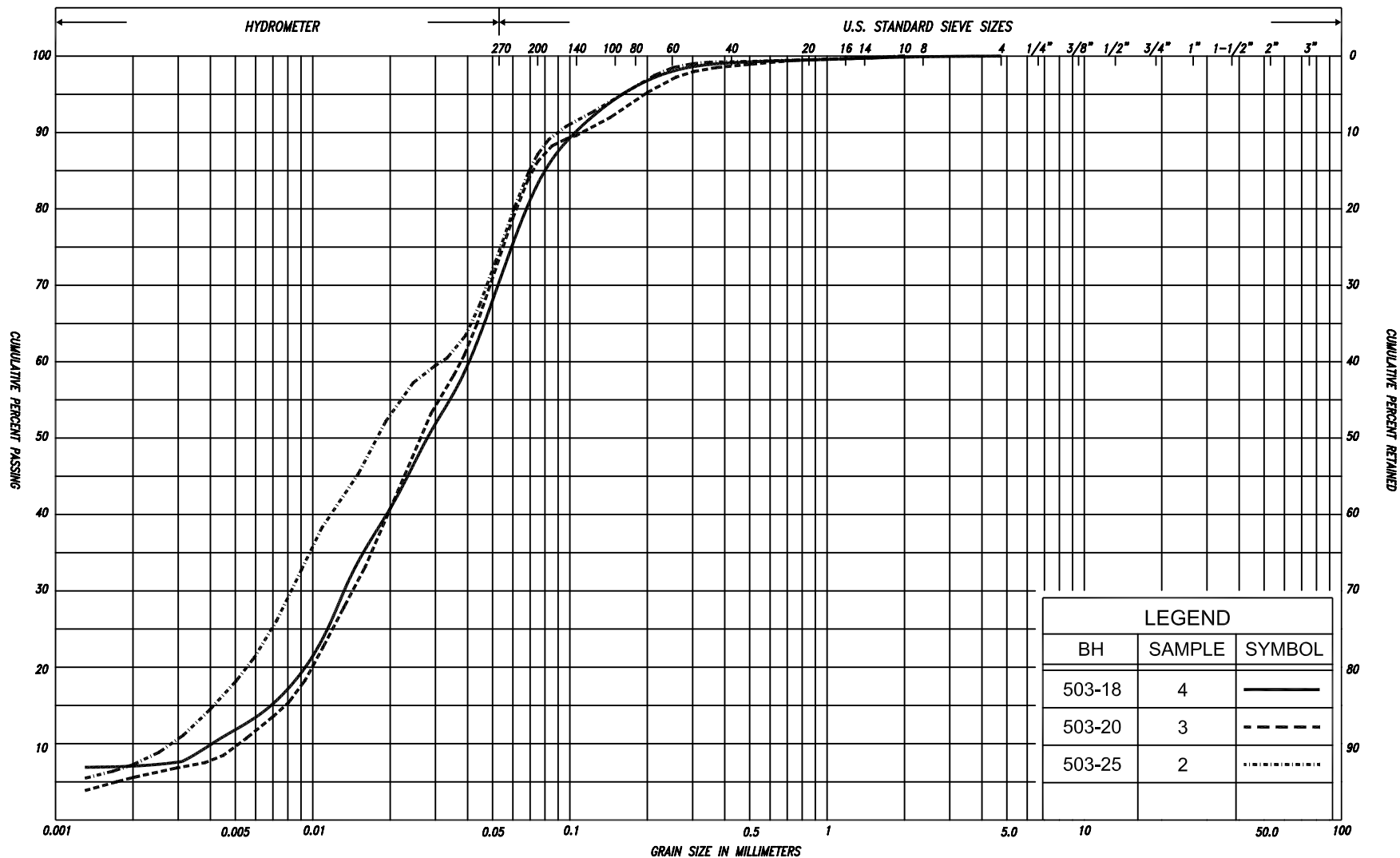
## GRAIN SIZE DISTRIBUTION

SILTY SAND, trace gravel

FIG No. 502-GS-4  
 HWY: 69  
 G.W.P. No. 5218-06-00



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL				COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE		SAND				GRAVEL				COBBLES	M.I.T.
	SILT				FINE		MEDIUM		COARSE							
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL						U.S. BUREAU



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
				SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT						SAND									
CLAY		SILT			V. FINE		FINE		MED.		COARSE		GRAVEL			U.S. BUREAU
					SAND											

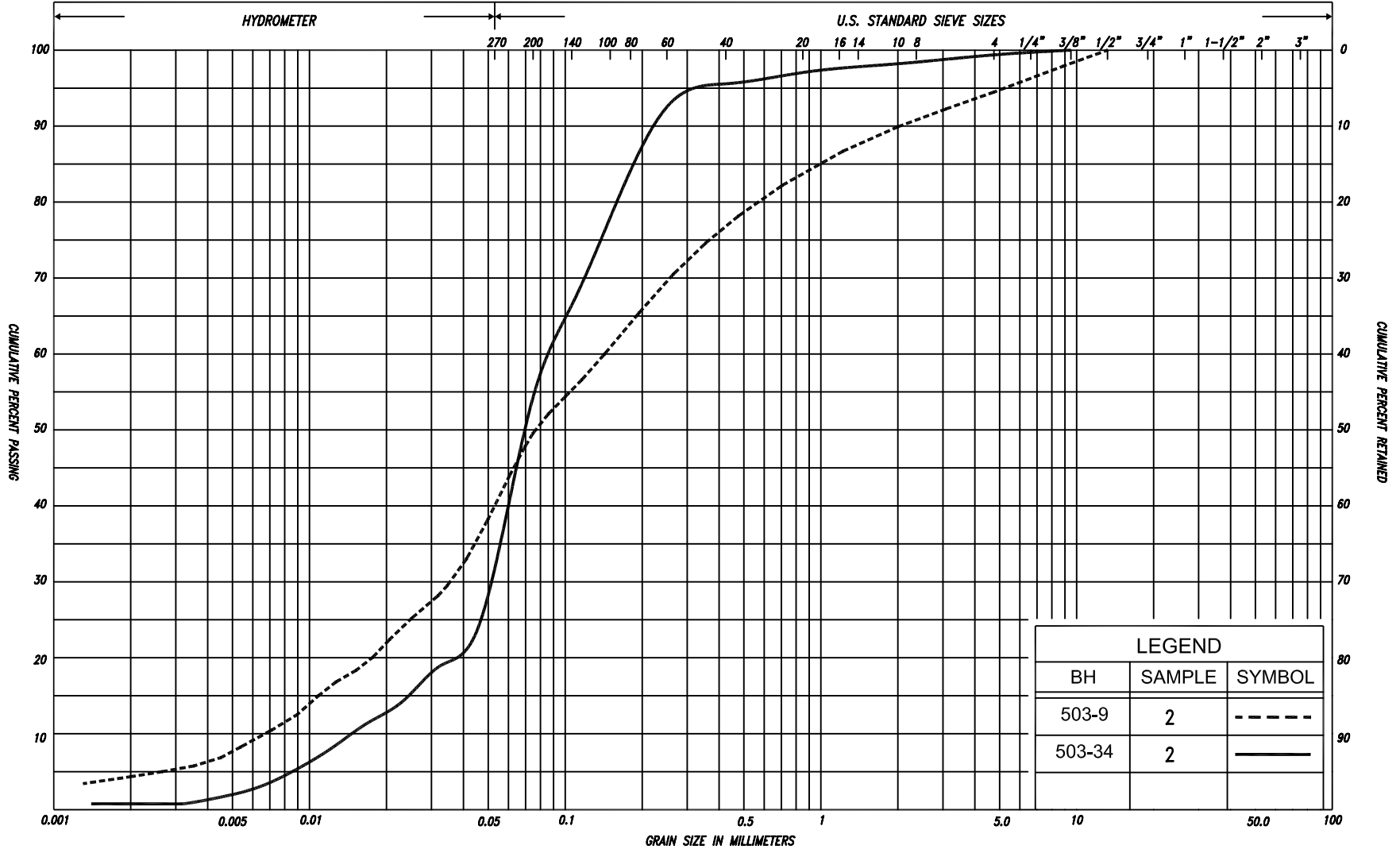
## GRAIN SIZE DISTRIBUTION

SILT, some sand, trace clay

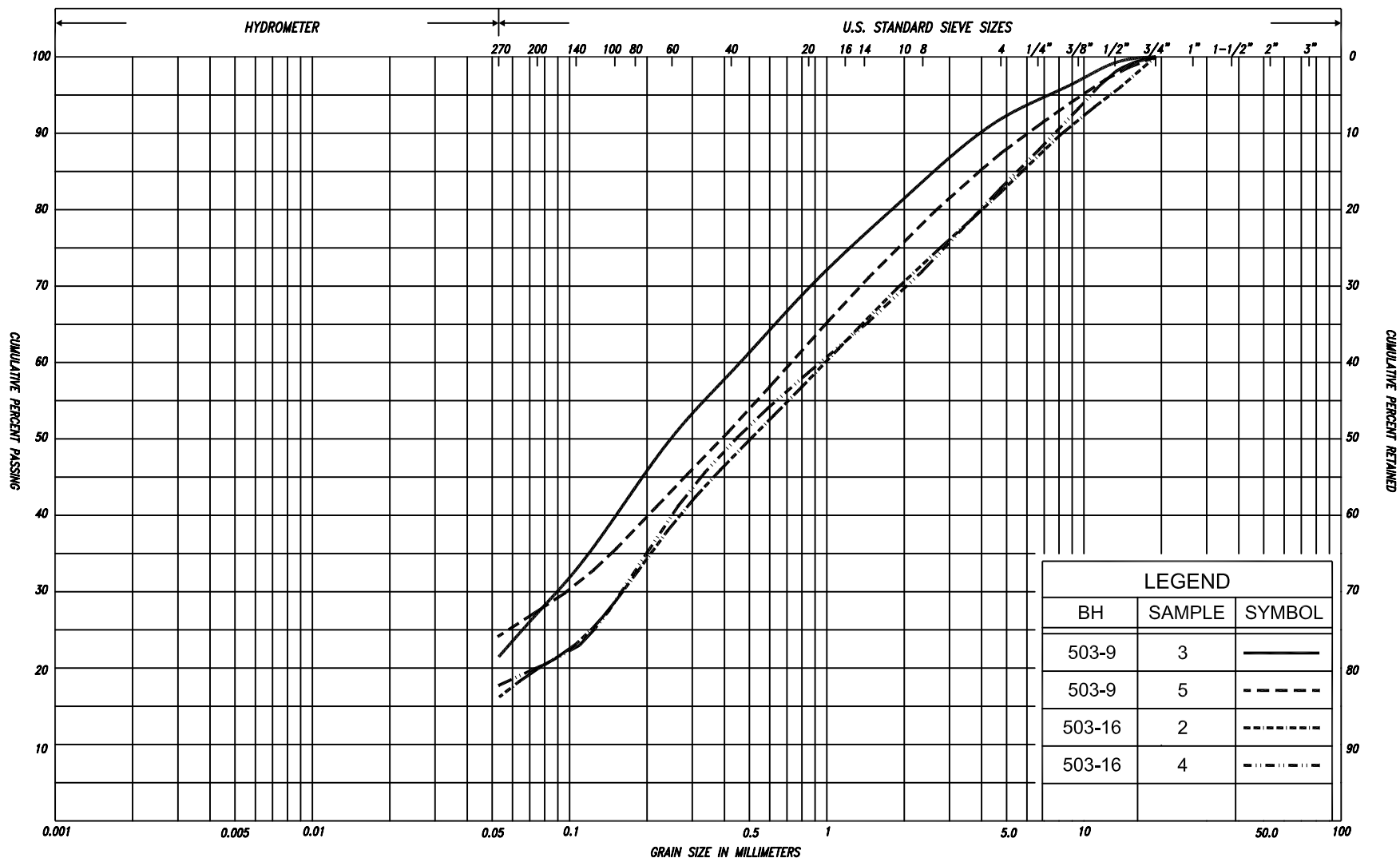
FIG No. 503-GS-2

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL				COB BLES	UNIFIED				
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL				COBBLES	M.I.T.		
	SILT																			
CLAY			SILT			V. FINE	FINE	MED.	COARSE		GRAVEL							U.S. BUREAU		
									SAND											



SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED		
					SAND											
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.	
	SILT															
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU
					SAND											

## GRAIN SIZE DISTRIBUTION

SAND, some to with silt  
trace to some gravel

FIG No. 503-GS-4

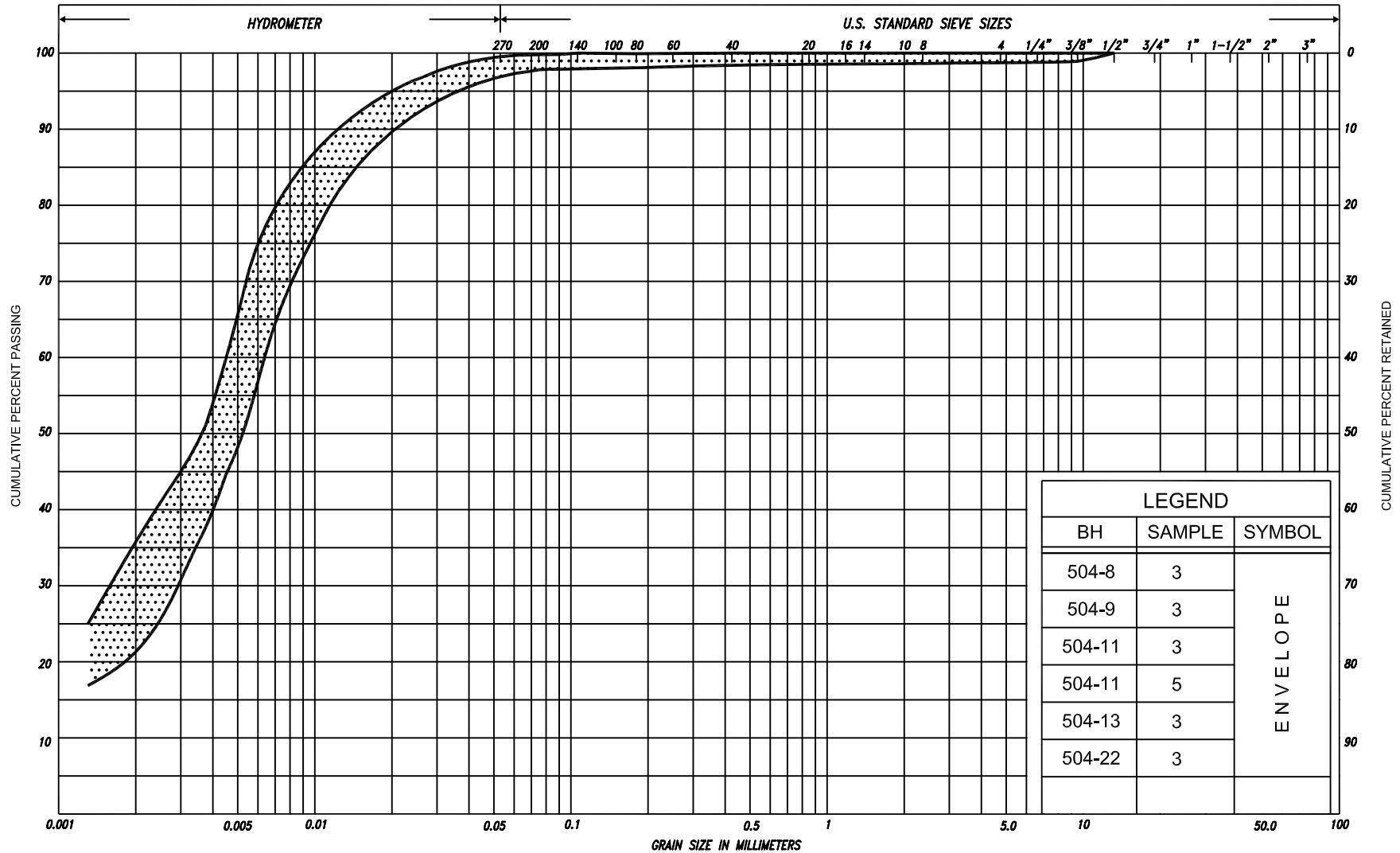
HWY: 69

G.W.P. No. 5218-06-00

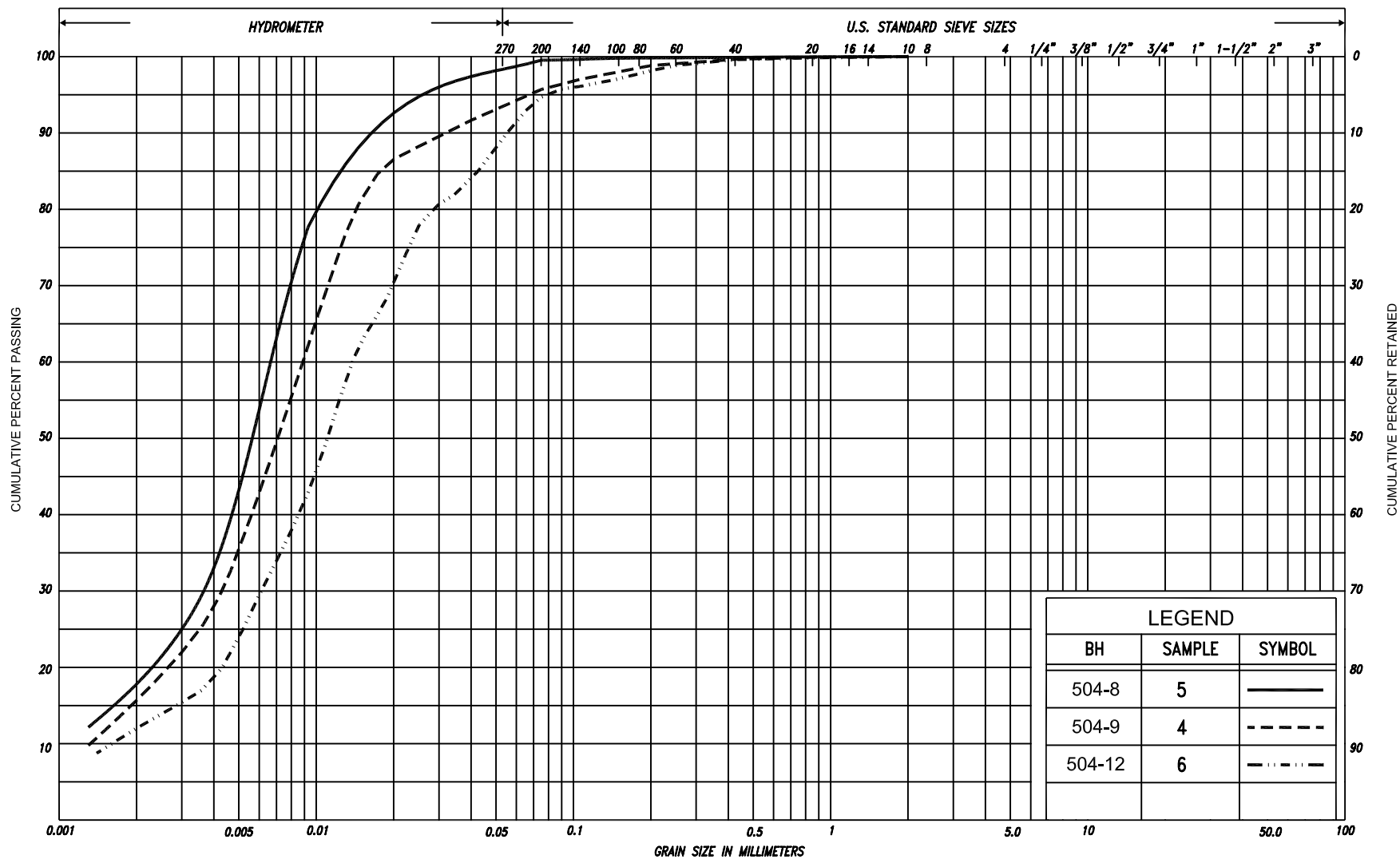


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SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY			FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
						V. FINE			FINE			MED.				
									COARSE							
									SAND							



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT					SAND		SAND		SAND		GRAVEL			COBBLES	U.S. BUREAU
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU

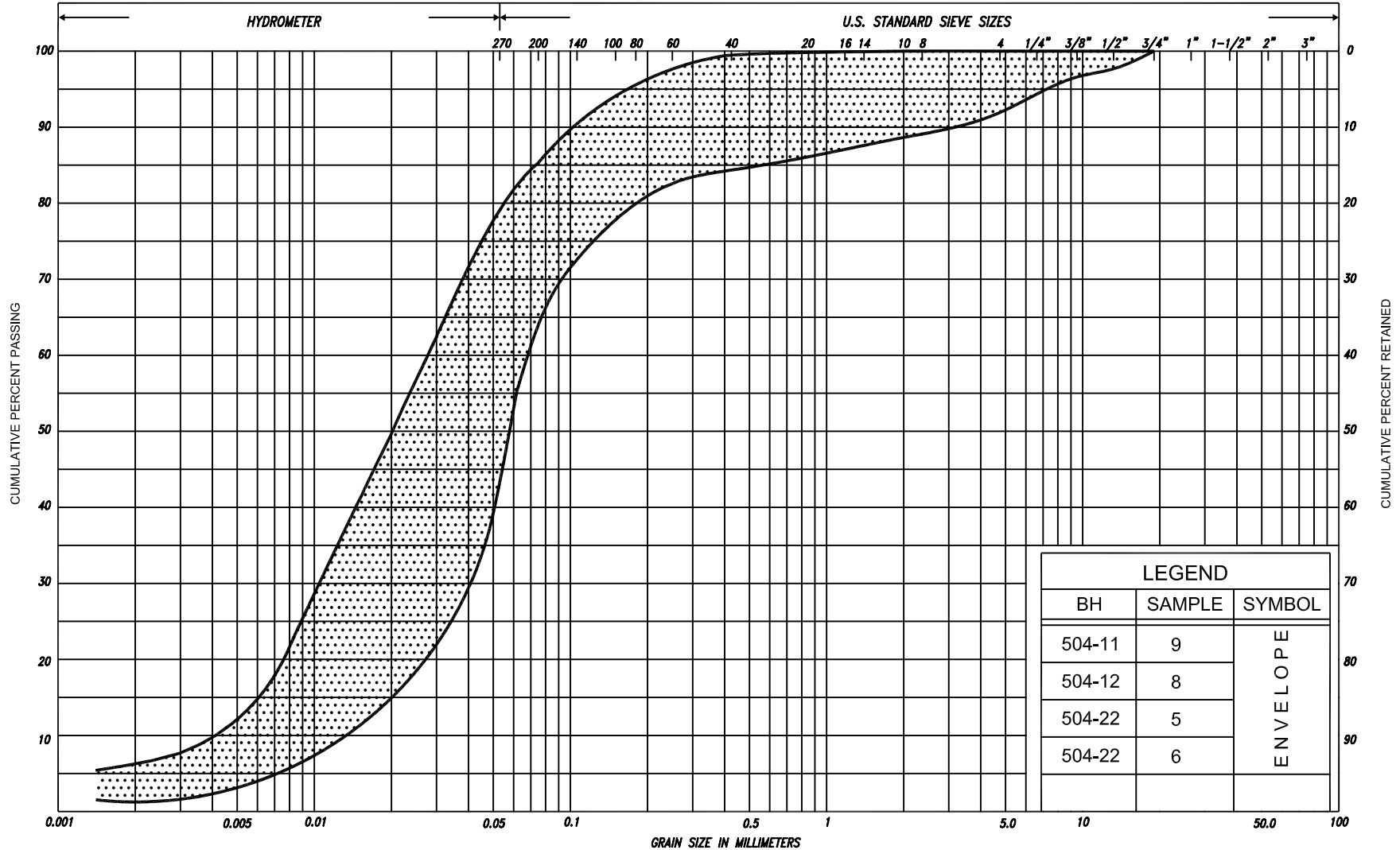
## GRAIN SIZE DISTRIBUTION

SILT, some clay, trace sand

FIG No. 504-GS-2

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL				COB BLES	UNIFIED		
					SAND												
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL					COBBLES
	SILT							SAND									
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL				U.S. BUREAU				
					SAND												

## GRAIN SIZE DISTRIBUTION

SILT, some to with sand  
trace clay, trace gravel

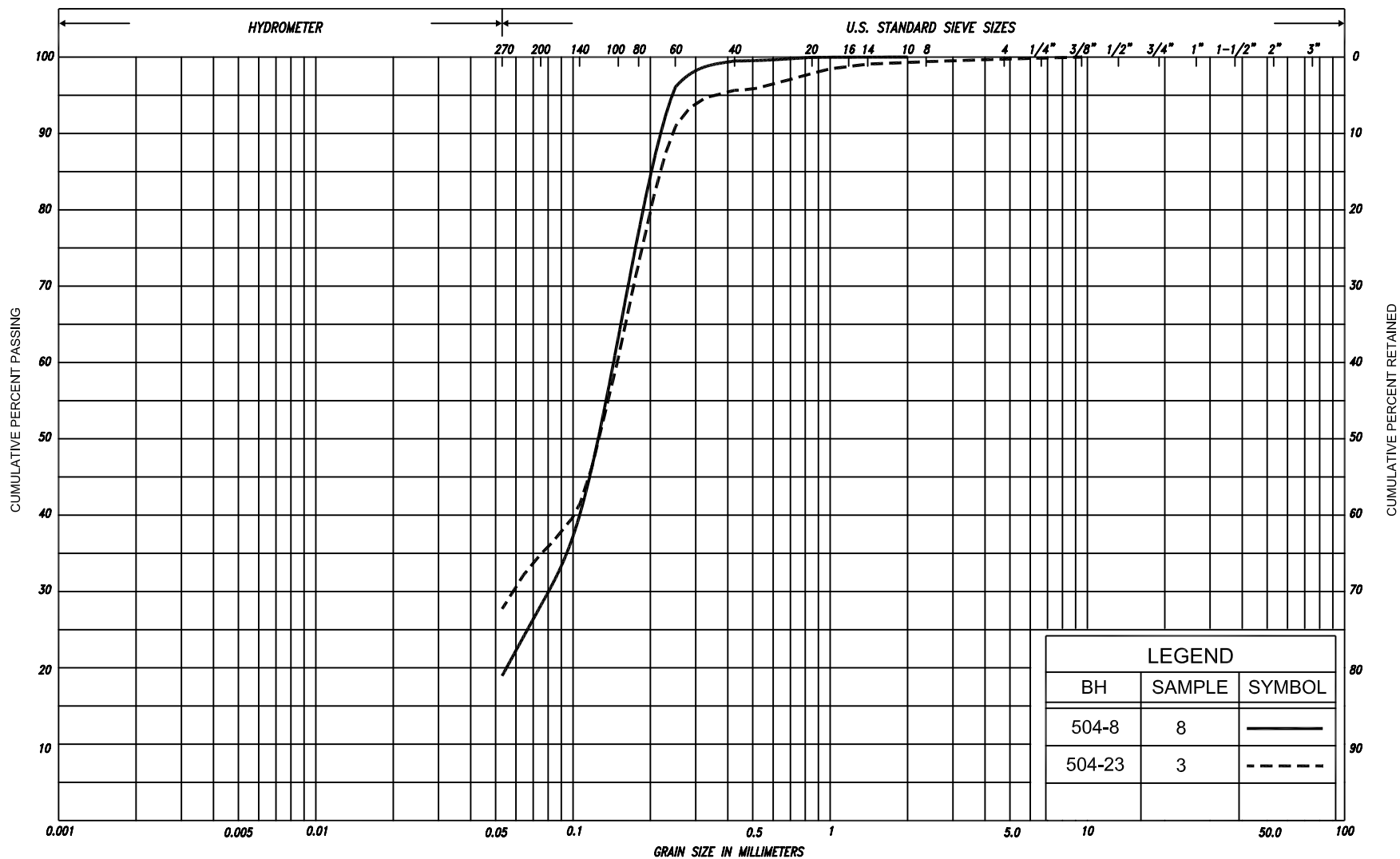
FIG No. 504-GS-3

HWY: 69

G.W.P. No. 5218-06-00



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SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE		SAND		GRAVEL			COBBLES		M.I.T.	
	SILT				FINE		MEDIUM		COARSE		GRAVEL			COBBLES	
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU

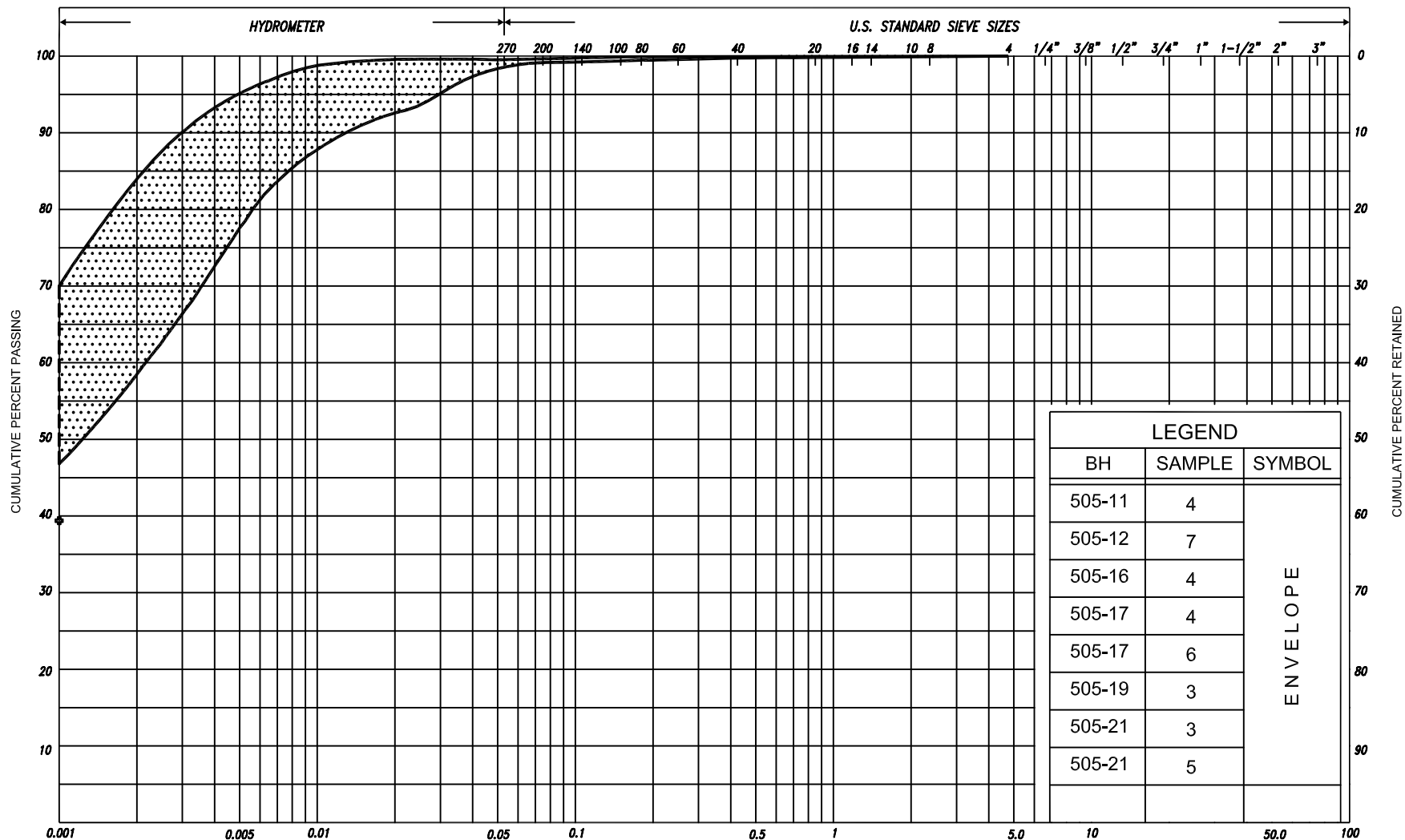
## GRAIN SIZE DISTRIBUTION

SAND, with silt to silty

FIG No. 504-GS-4

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY				GRAIN SIZE IN MILLIMETERS			GRAVEL		COB BLES	UNIFIED
				FINE	MEDIUM	COARSE				
				SAND						
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	GRAVEL		COBBLES	M.I.T.
				SILT						
				V. FINE	FINE	MED.	COARSE	GRAVEL		U.S. BUREAU
				SAND						

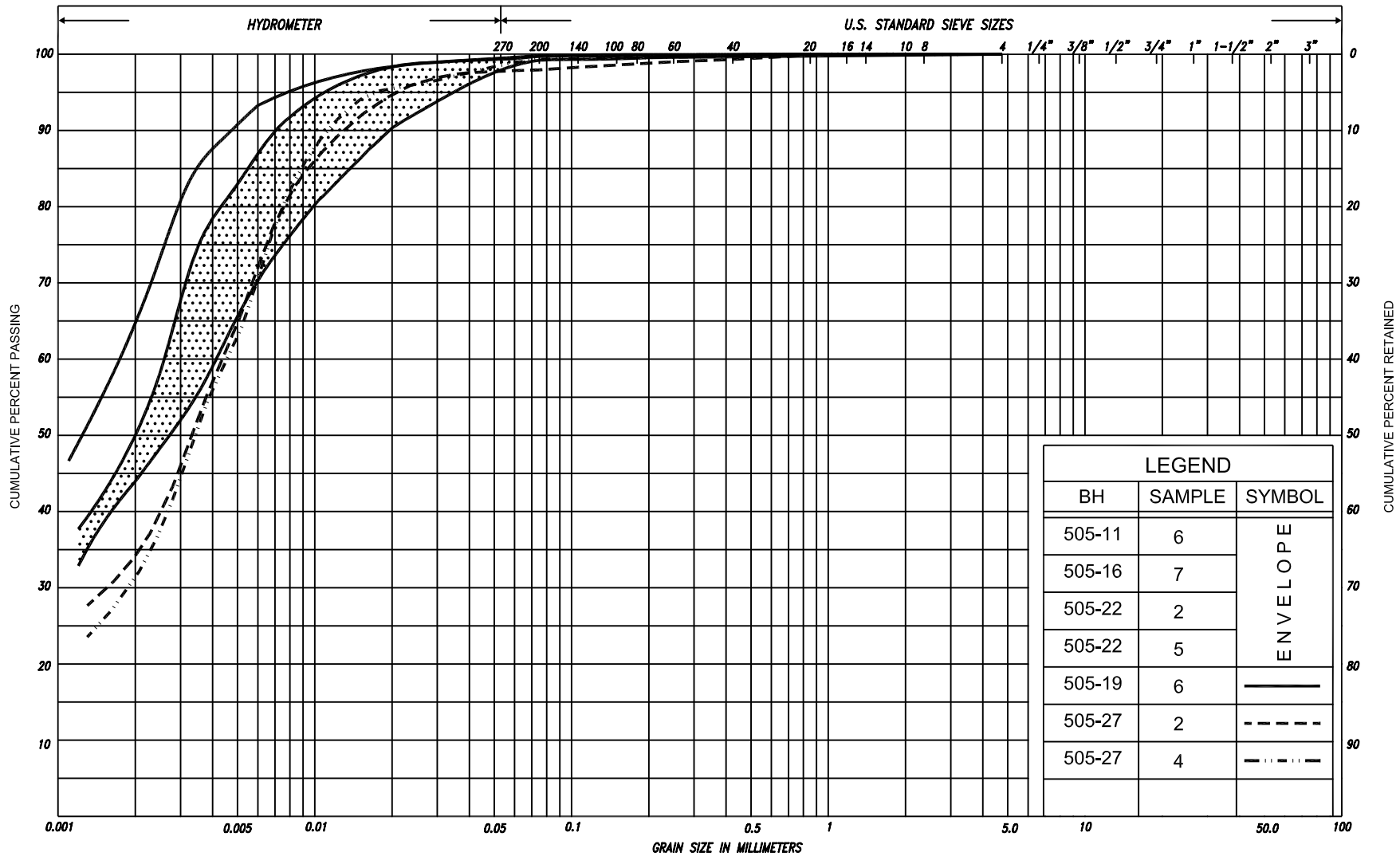
## GRAIN SIZE DISTRIBUTION

CLAY, trace sand

FIG No. 505-GS-1

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY				FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED	
				SAND										
CLAY	FINE		MEDIUM	COARSE	FINE		MEDIUM	COARSE	GRAVEL			COBBLES	M.I.T.	
	SILT													
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL					U.S. BUREAU
					SAND									

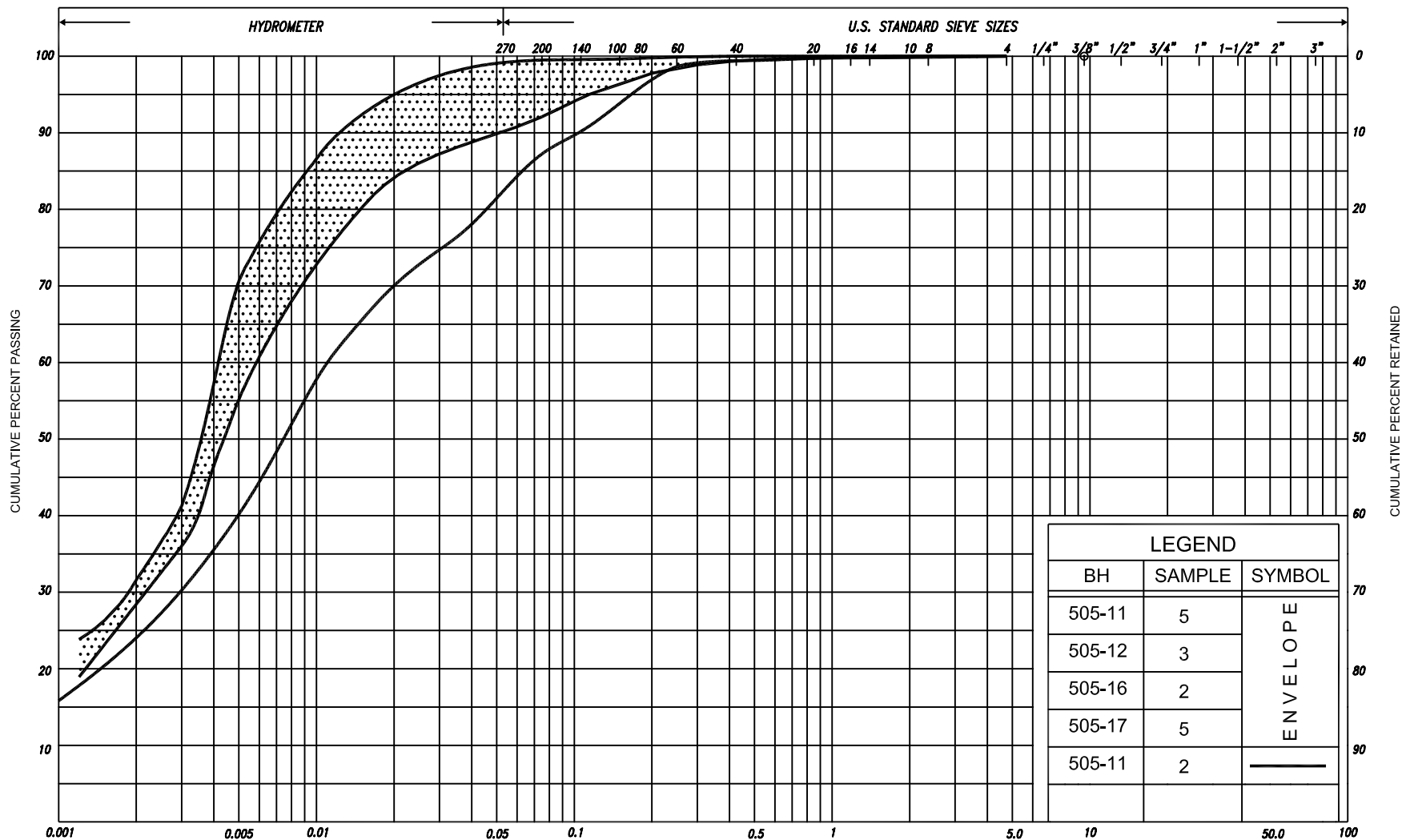
## GRAIN SIZE DISTRIBUTION

SILTY CLAY, trace sand

FIG No. 505-GS-2

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY				GRAIN SIZE IN MILLIMETERS			GRAVEL		COB BLES	UNIFIED
				FINE	MEDIUM	COARSE				
				SAND						
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	GRAVEL		COBBLES	M.I.T.
				SILT						
				V. FINE	FINE	MED.	COARSE	GRAVEL		U.S. BUREAU
				SAND						

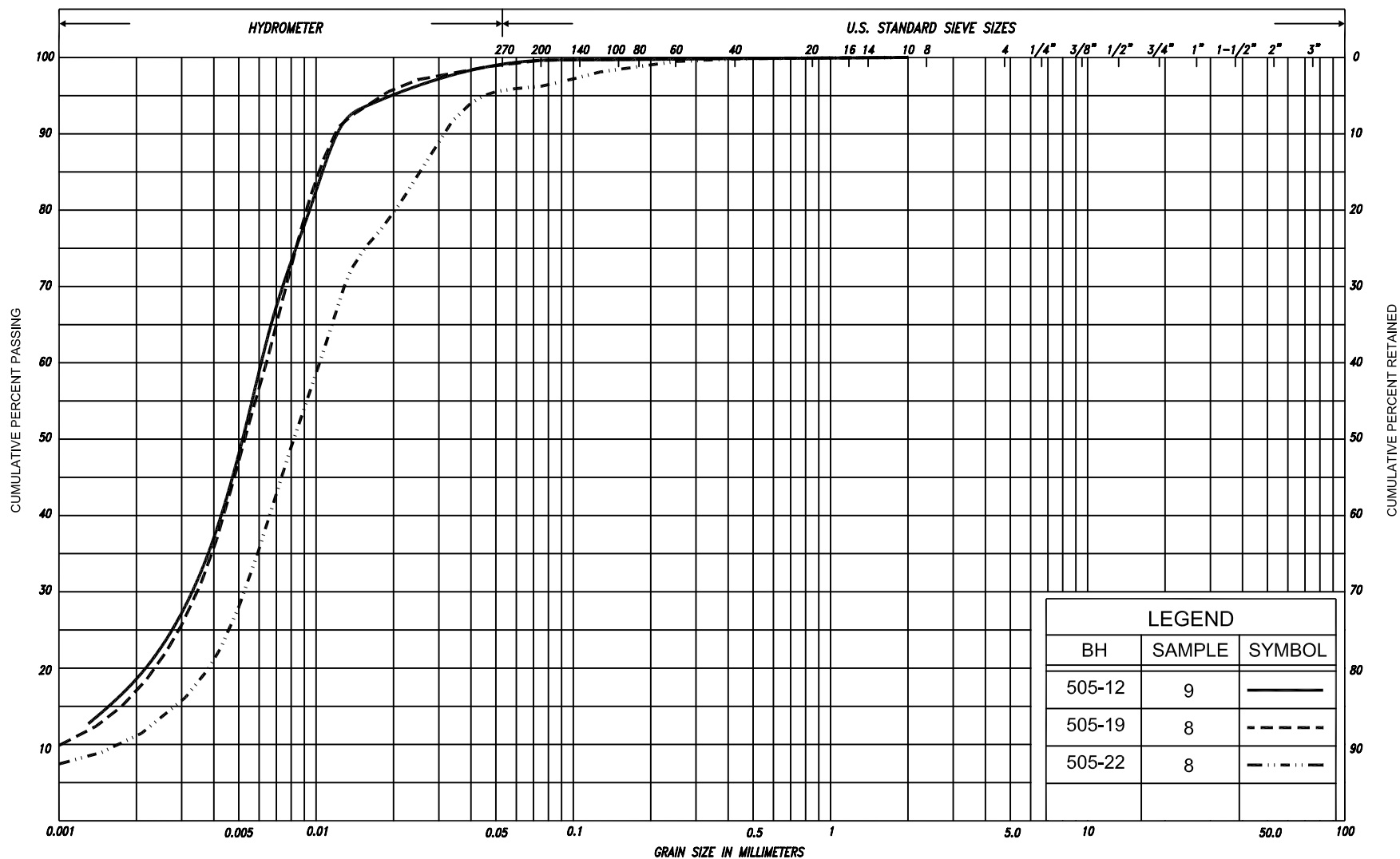
## GRAIN SIZE DISTRIBUTION

CLAYEY SILT, trace to some sand

FIG No. 505-GS-3

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE	SAND			GRAVEL			COBBLES		M.I.T.		
	SILT				FINE	SAND		COARSE		GRAVEL			COBBLES		U.S. BUREAU	
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL					U.S. BUREAU	

## GRAIN SIZE DISTRIBUTION

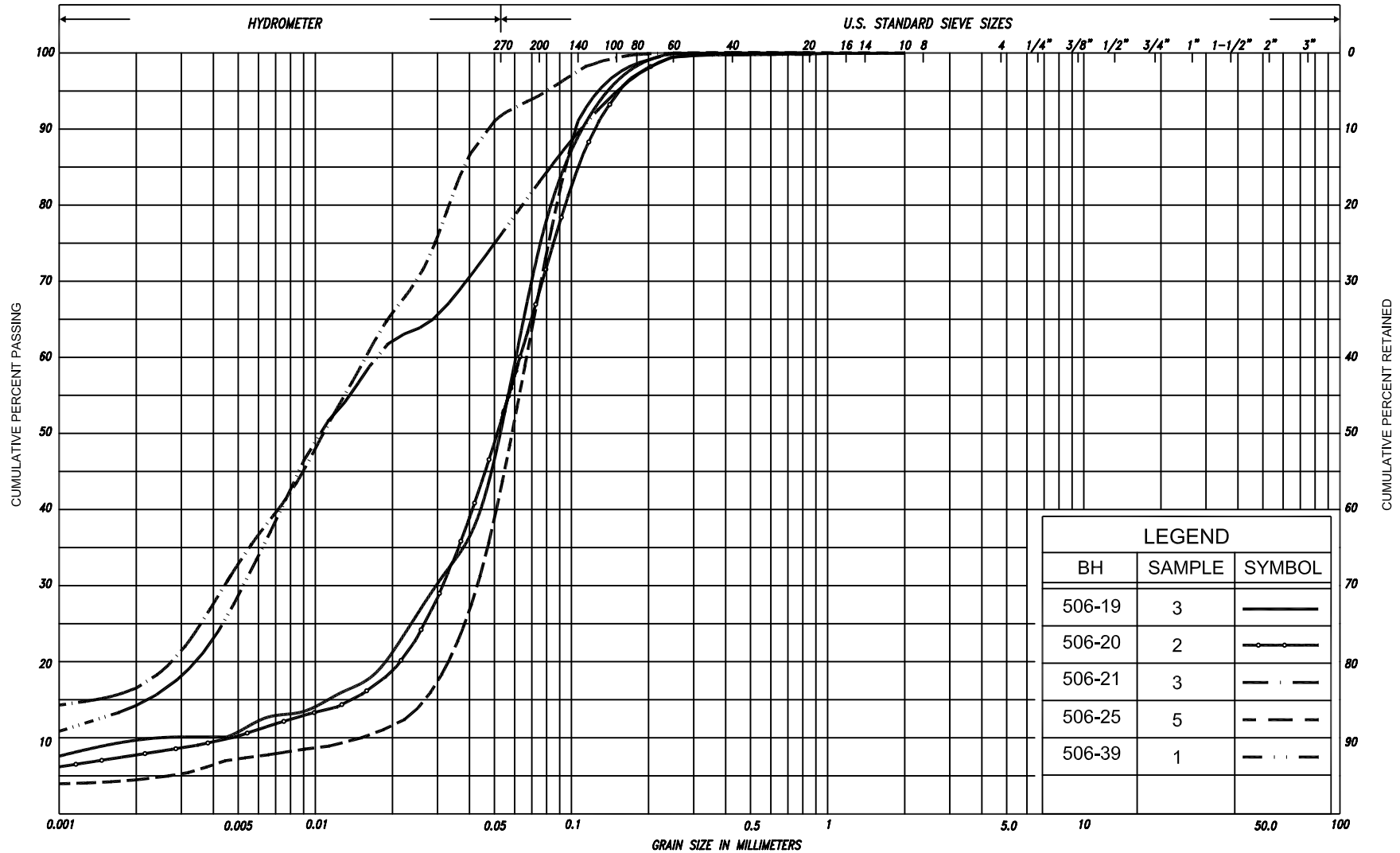
SILT, some clay, trace sand

FIG No. 505-GS-4

HWY: 69

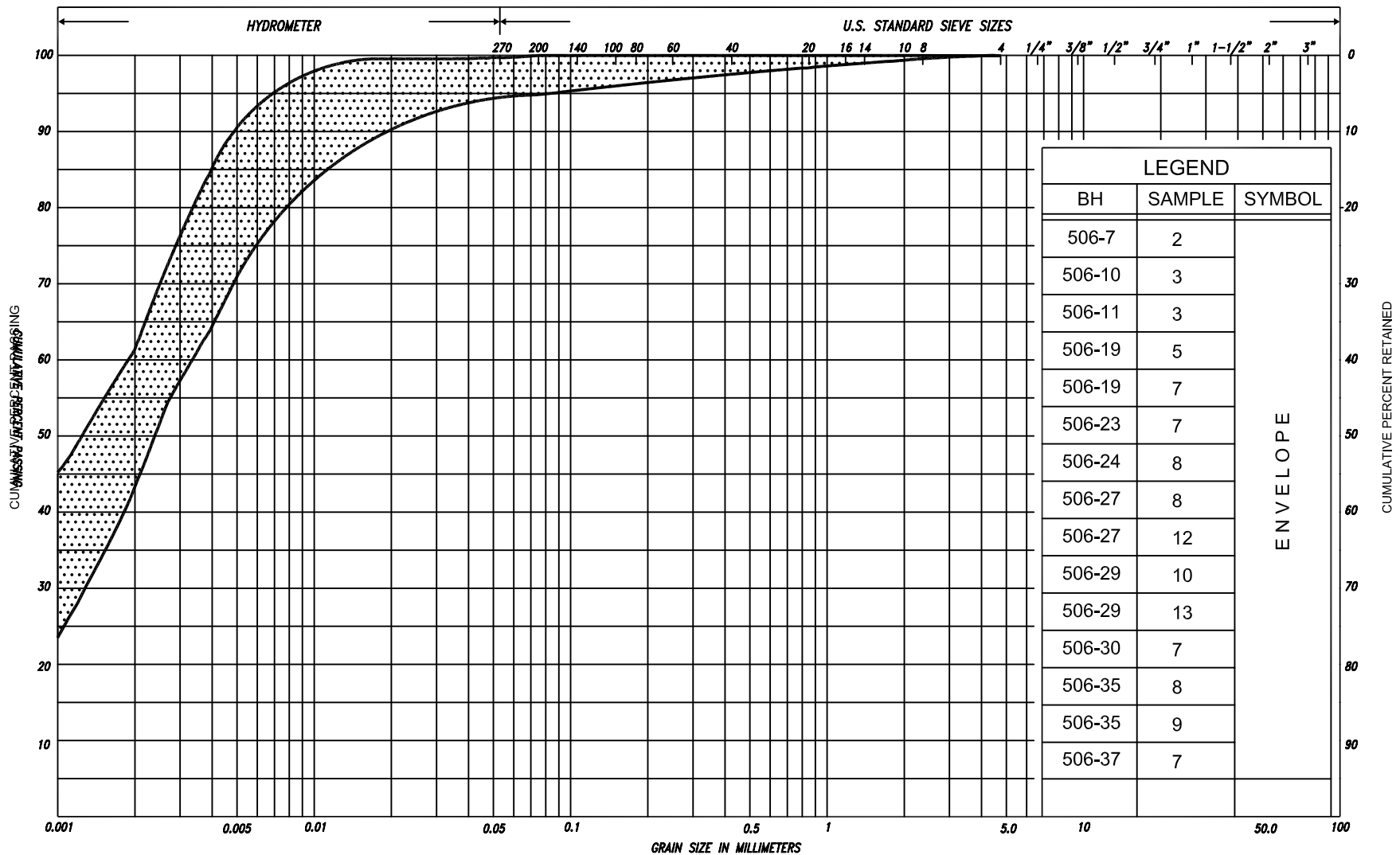
G.W.P. No. 5218-06-00





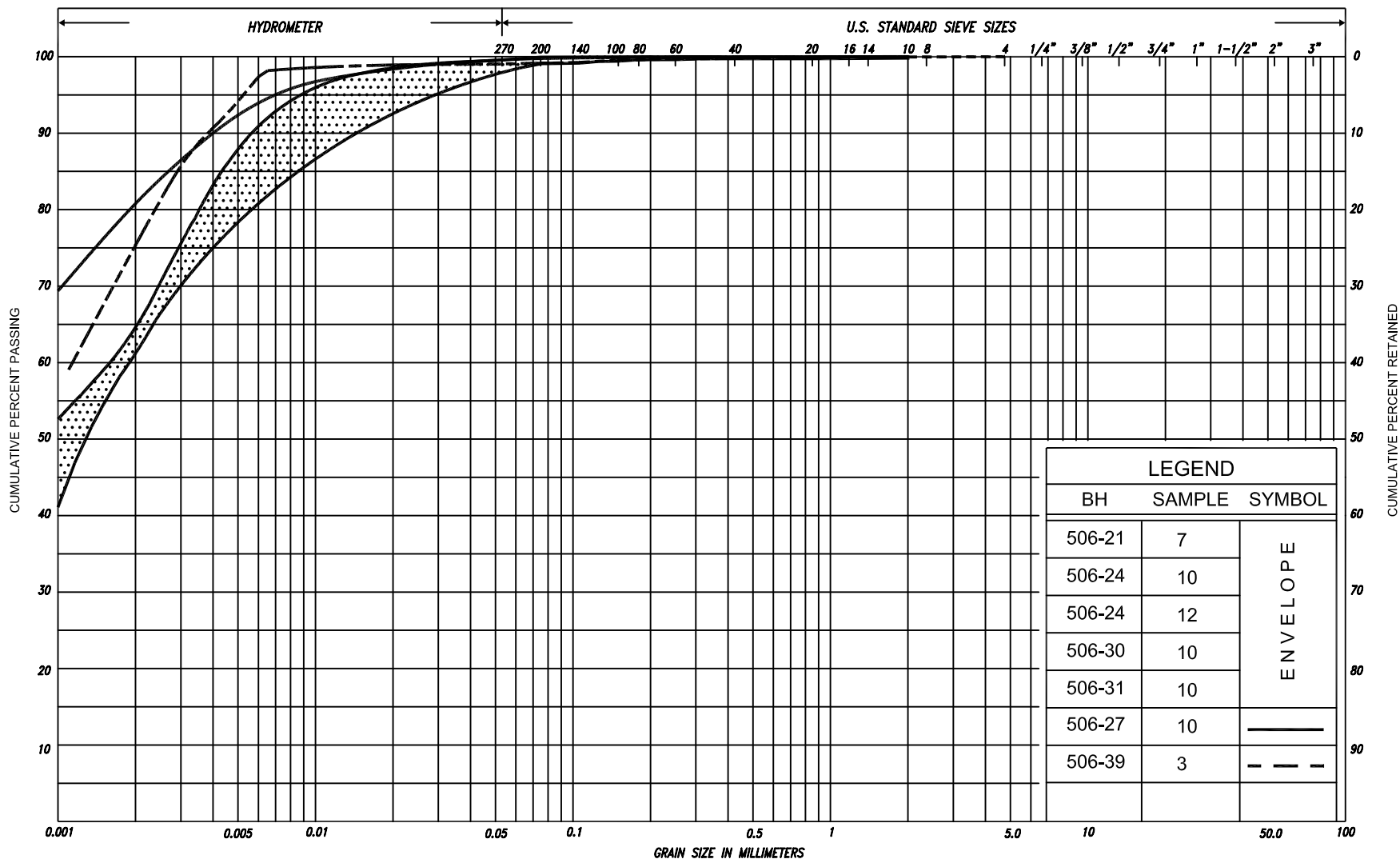
SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED		
					SAND											
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT															
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU	
					SAND											



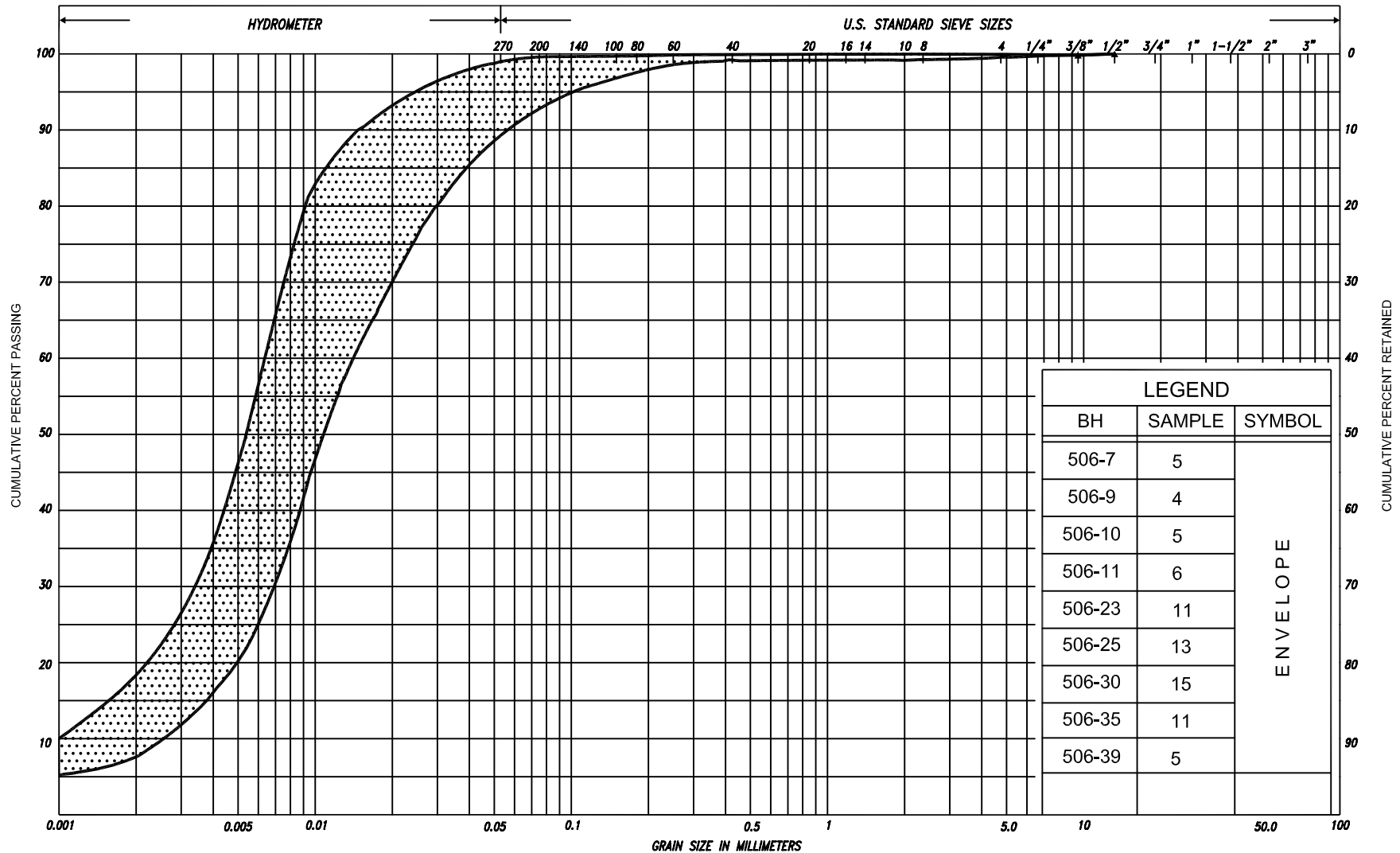


LEGEND		
BH	SAMPLE	SYMBOL
506-7	2	ENVELOPE
506-10	3	
506-11	3	
506-19	5	
506-19	7	
506-23	7	
506-24	8	
506-27	8	
506-27	12	
506-29	10	
506-29	13	
506-30	7	
506-35	8	
506-35	9	
506-37	7	

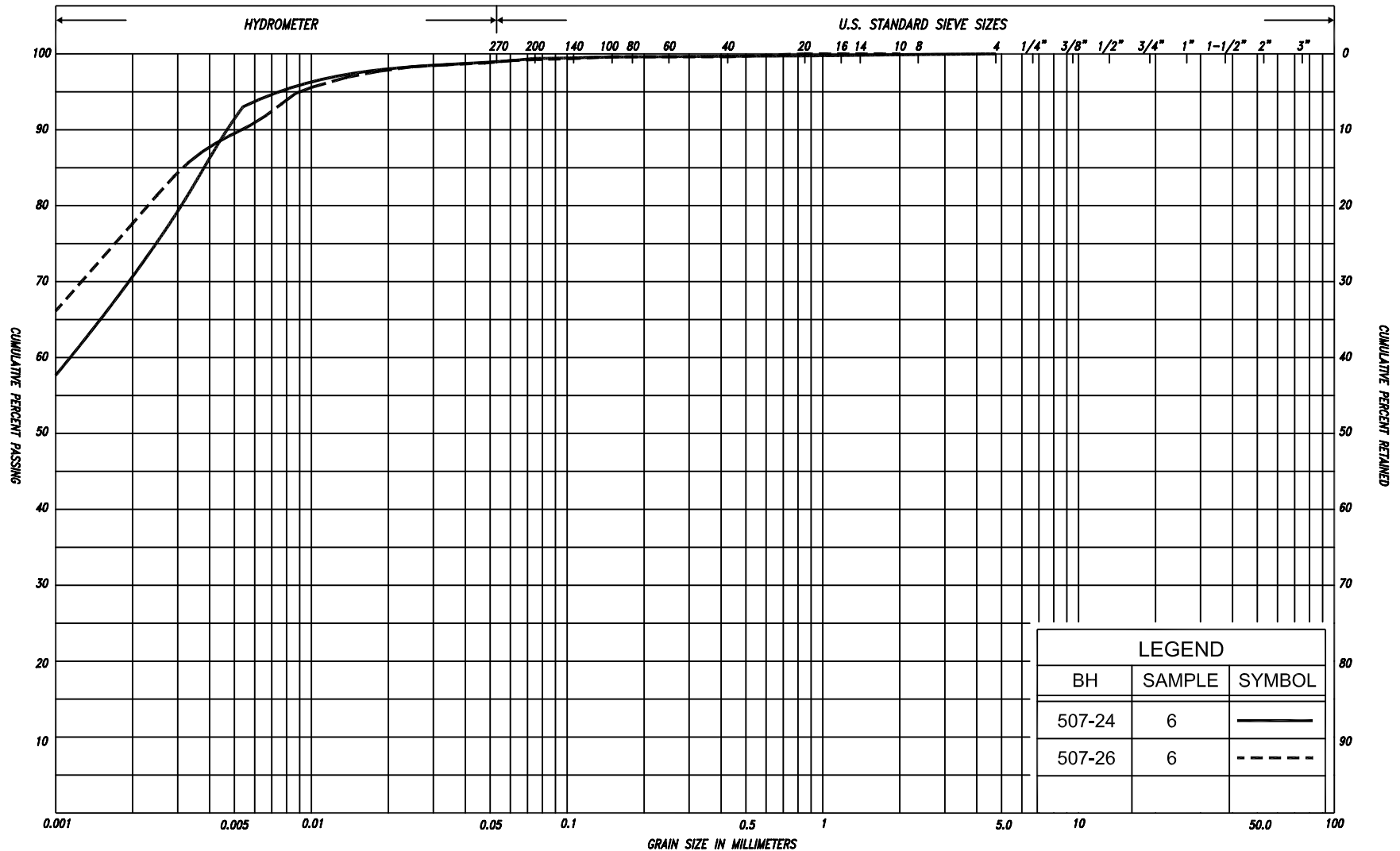
SILT & CLAY				GRAVEL			COBBLES	UNIFIED
FINE				MEDIUM			COBBLES	M.I.T.
SAND				COARSE			COBBLES	U.S. BUREAU
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	GRAVEL	COBBLES
SILT				V. FINE	FINE	MED.	COARSE	GRAVEL
SAND				GRAVEL				



SILT & CLAY				FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED
CLAY	SAND			FINE		MEDIUM		COARSE	GRAVEL			COBBLES	M.I.T.
	SILT			V. FINE		FINE		MED.	COARSE	GRAVEL			U.S. BUREAU



SILT & CLAY				FINE		MEDIUM		COARSE	GRAVEL		COBBLES	UNIFIED
CLAY	SAND			FINE		MEDIUM		COARSE	GRAVEL		COBBLES	M.I.T.
	SILT			V. FINE		FINE	MED.	COARSE	GRAVEL			U.S. BUREAU



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL				COB BLES	UNIFIED		
				SAND													
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT																
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU		
					SAND												

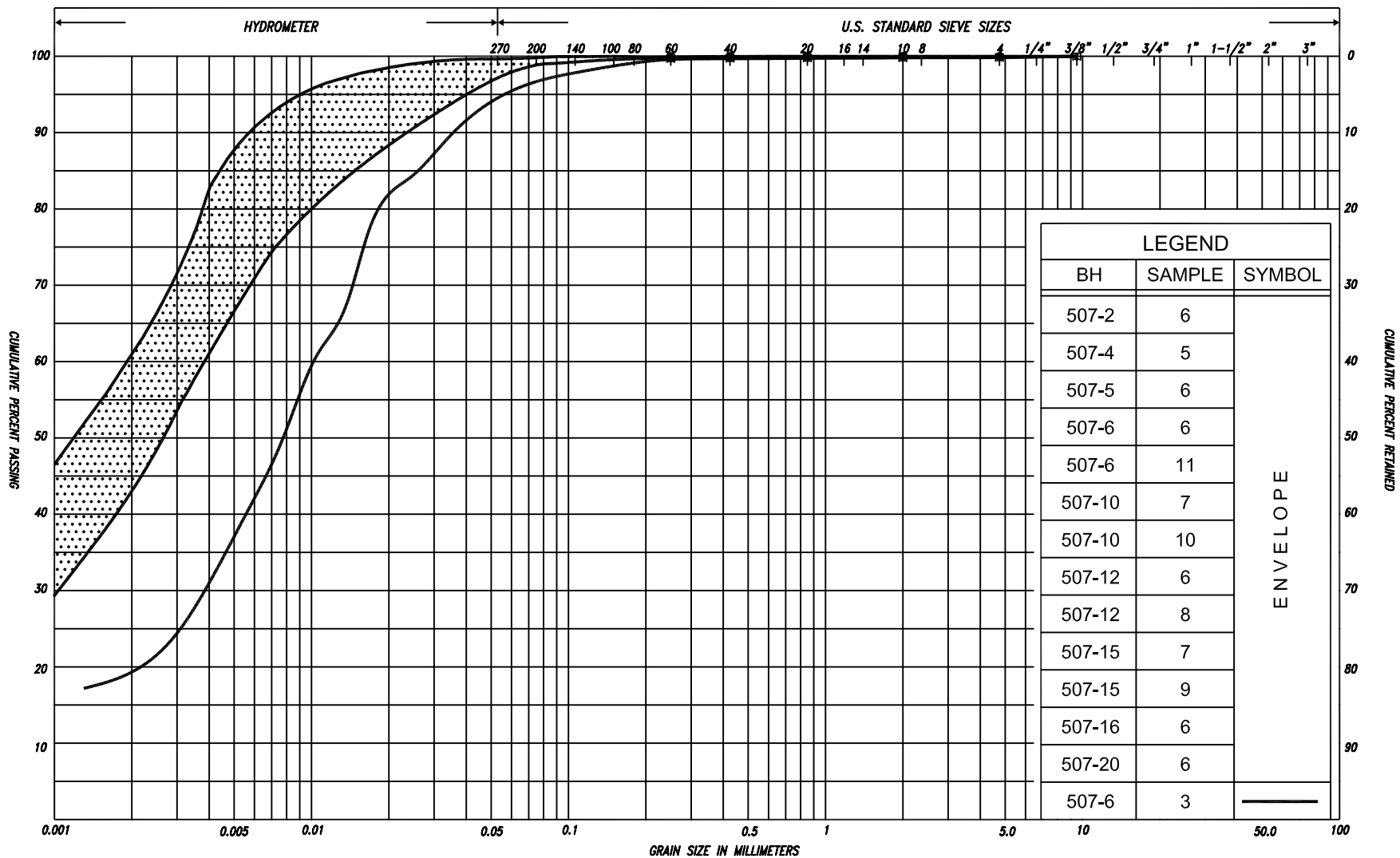
## GRAIN SIZE DISTRIBUTION

CLAY, trace sand

FIG No. 507-GS-1

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT				V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU	
SAND	SAND	SAND	SAND	SAND		SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND	SAND

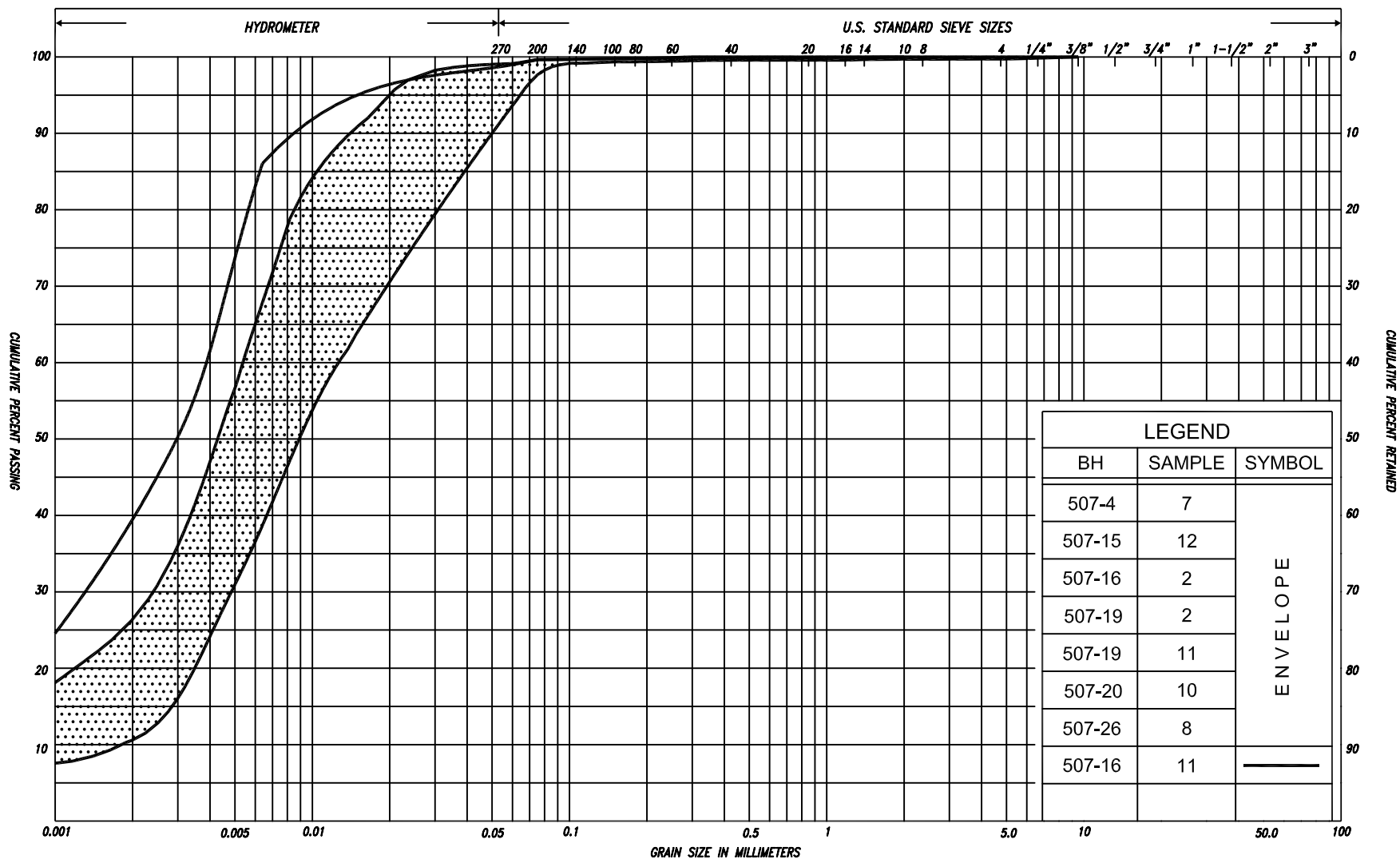
## GRAIN SIZE DISTRIBUTION

SILTY CLAY, trace sand

FIG No. 507-GS-2

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY	FINE			MEDIUM			COARSE			GRAVEL			COBBLES			M.I.T.
	SILT			SAND			SAND			GRAVEL			COBBLES			U.S. BUREAU
CLAY			SILT			SAND			SAND			GRAVEL				
						V. FINE			FINE			MED.				
									COARSE							

## GRAIN SIZE DISTRIBUTION

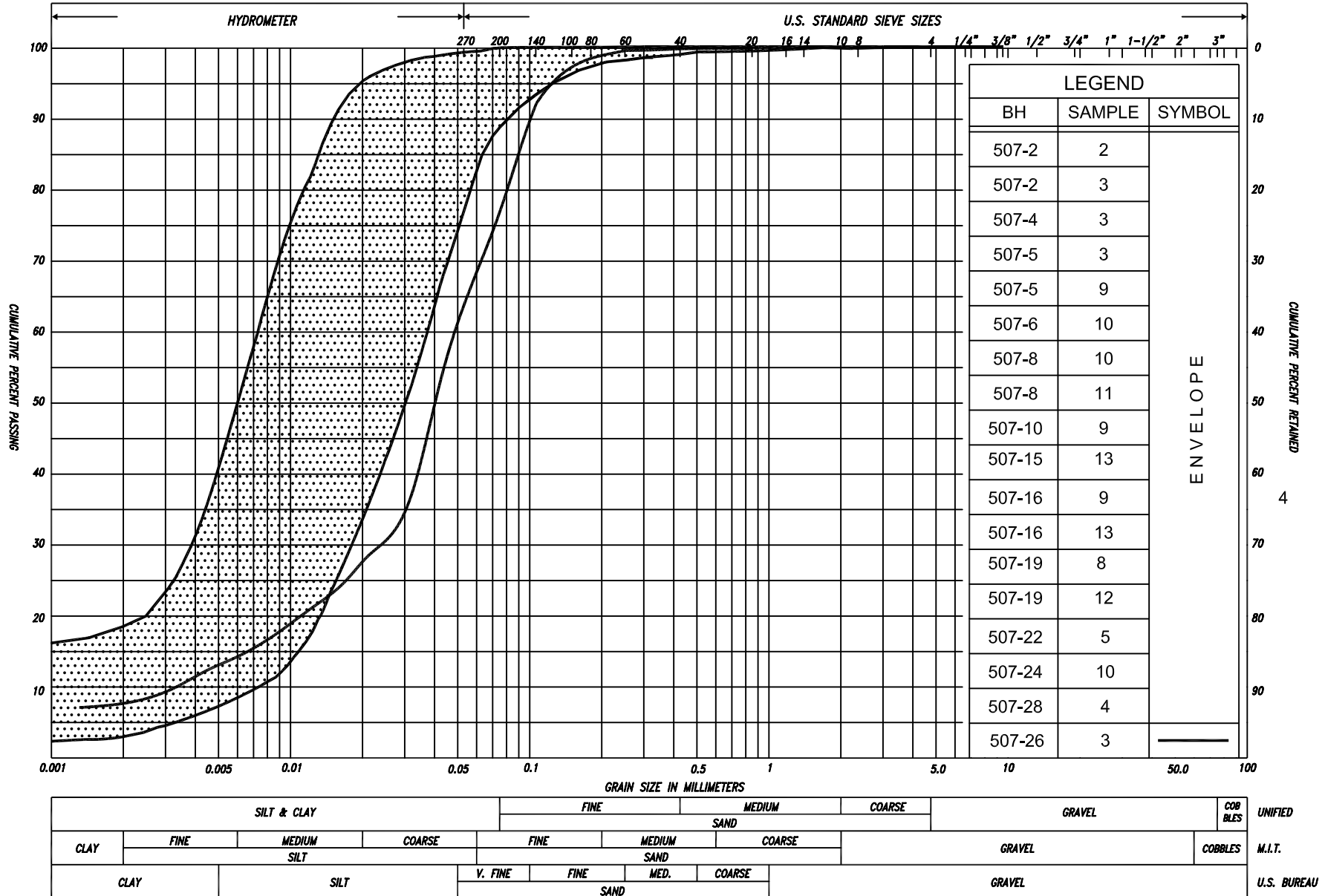
CLAYEY SILT, trace sand

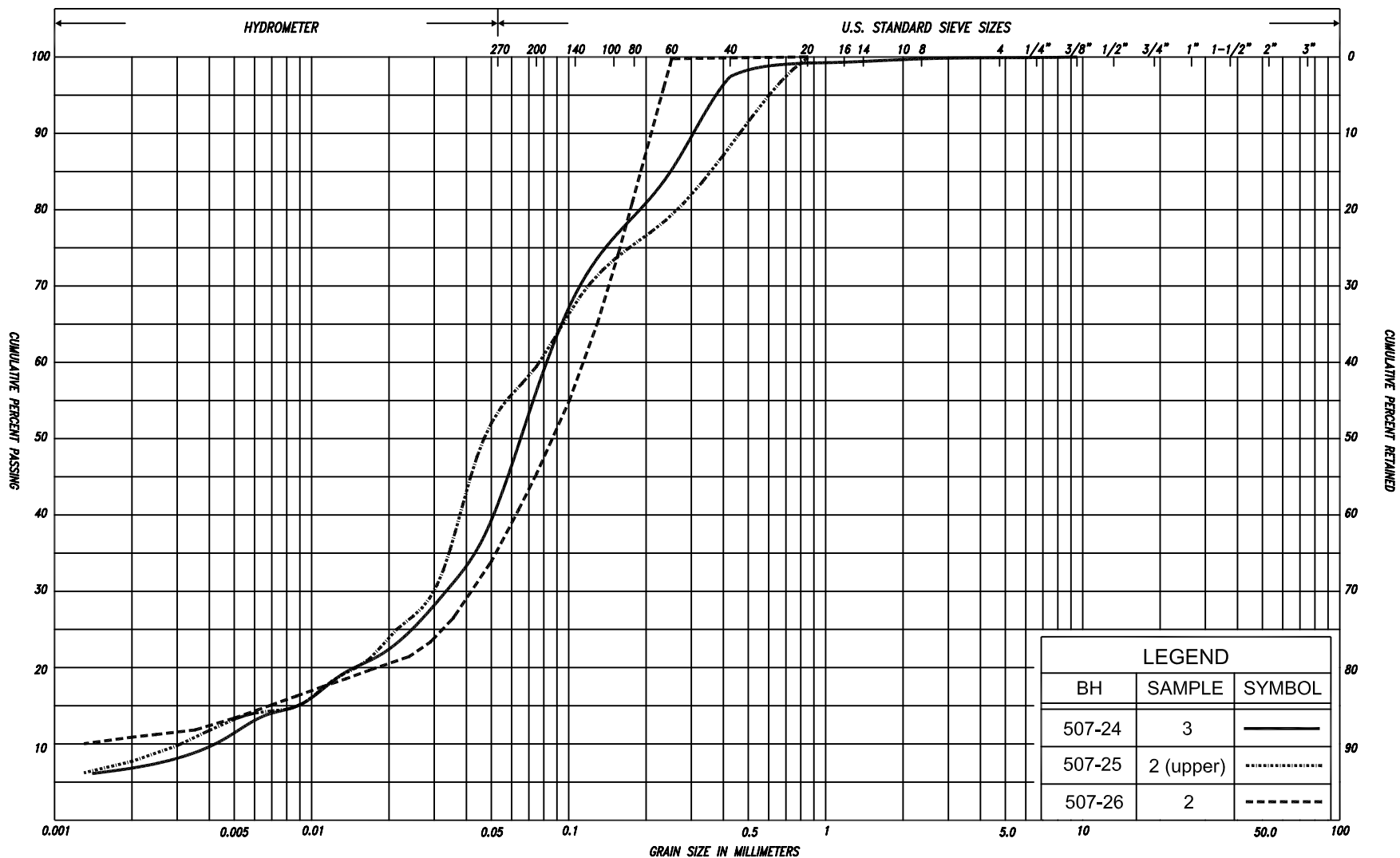
FIG No. 507-GS-3

HWY: 69

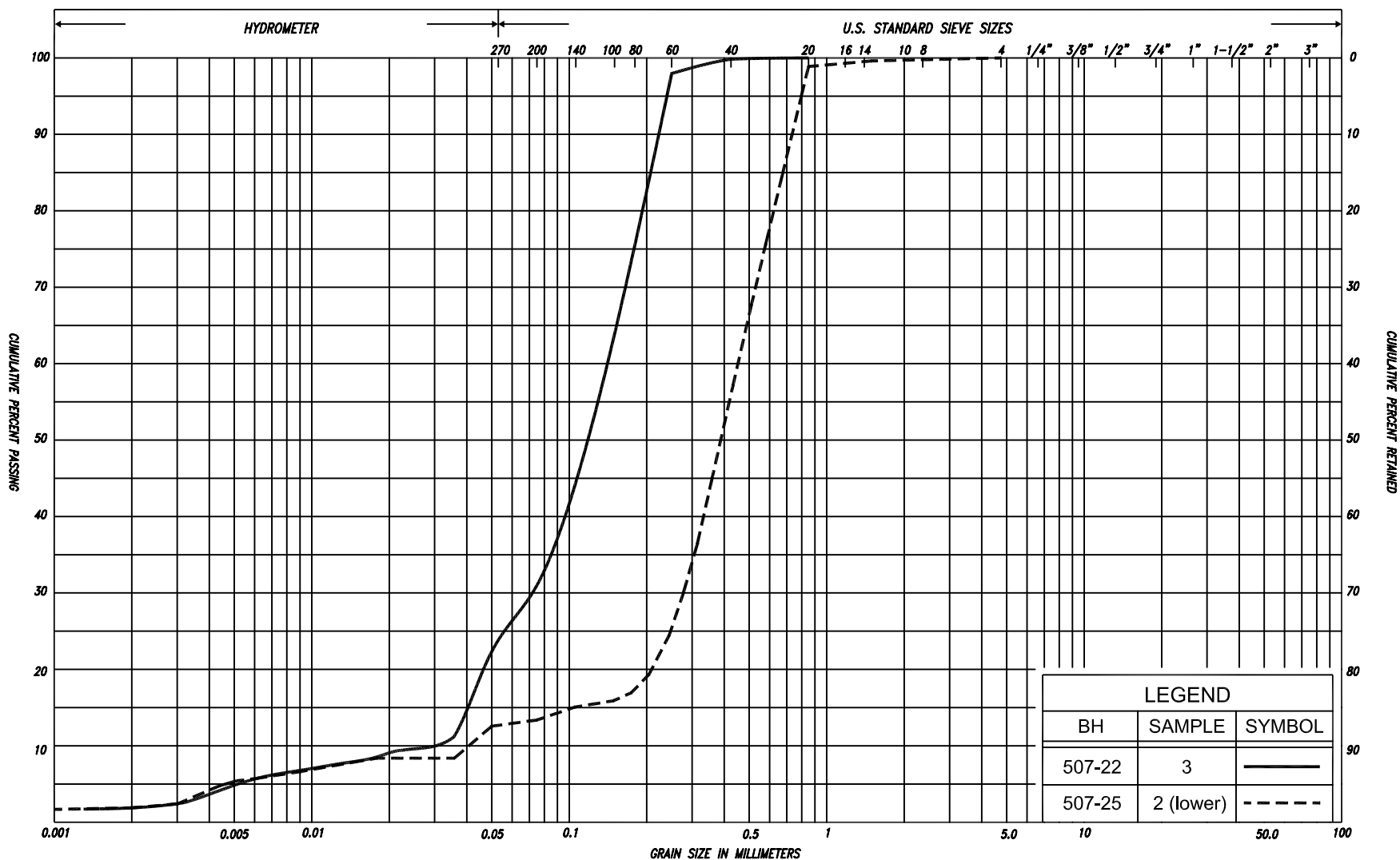
G.W.P. No. 5218-06-00







SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT				SAND						GRAVEL				U.S. BUREAU	



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
					SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT							SAND									
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL						U.S. BUREAU	
					SAND												

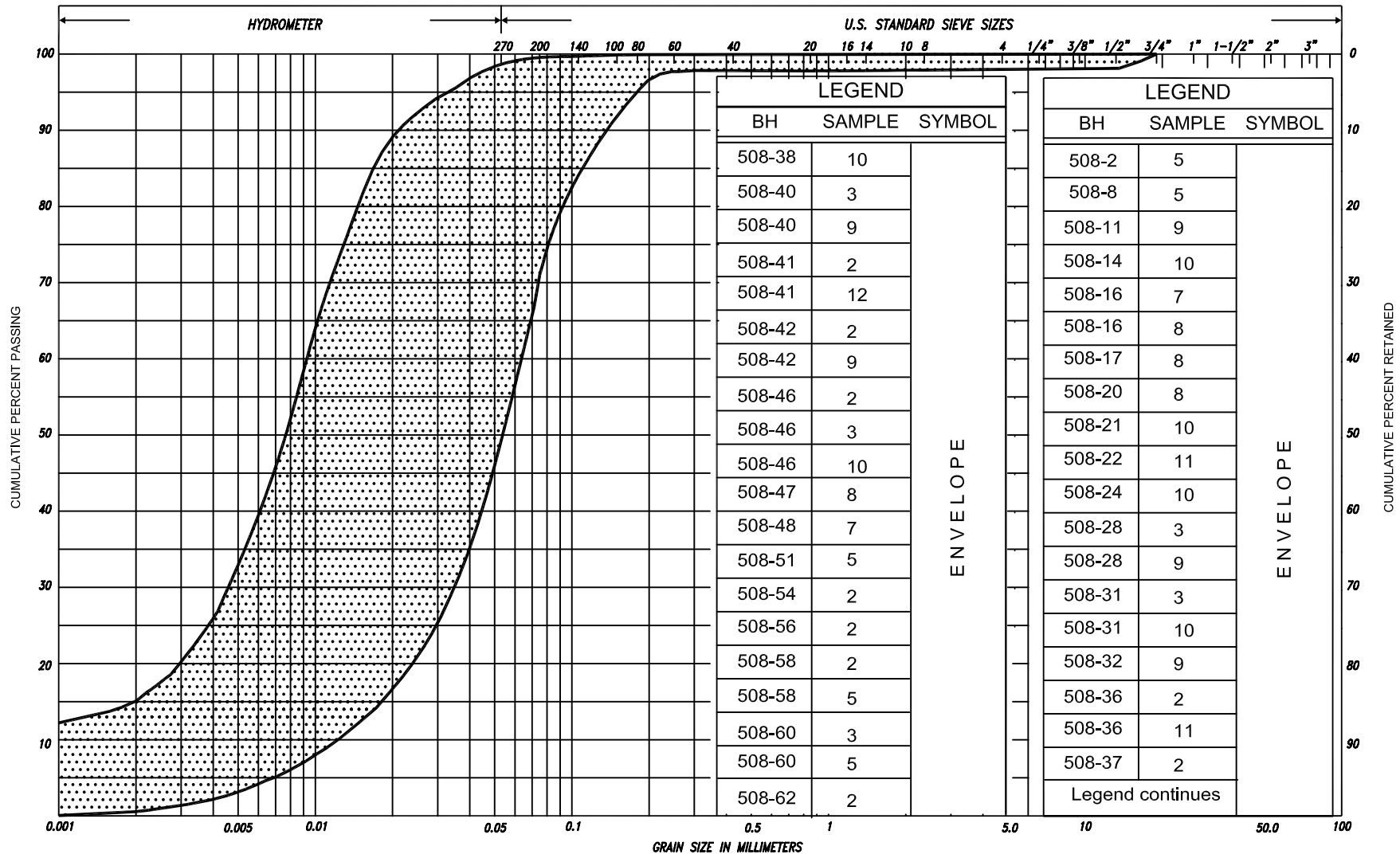
## GRAIN SIZE DISTRIBUTION

SAND, some to with silt, trace clay

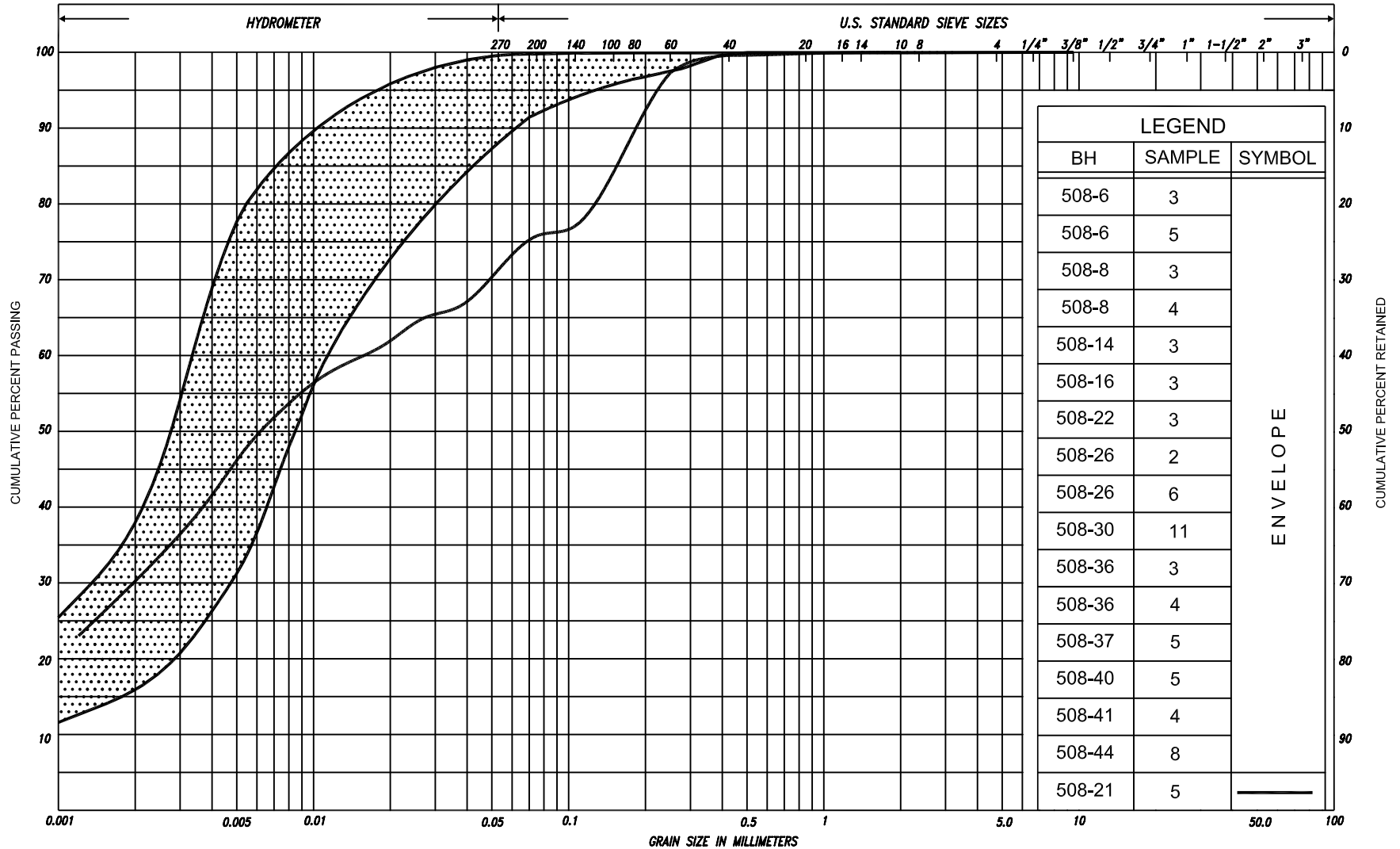
FIG No. 507-GS-6

HWY: 69

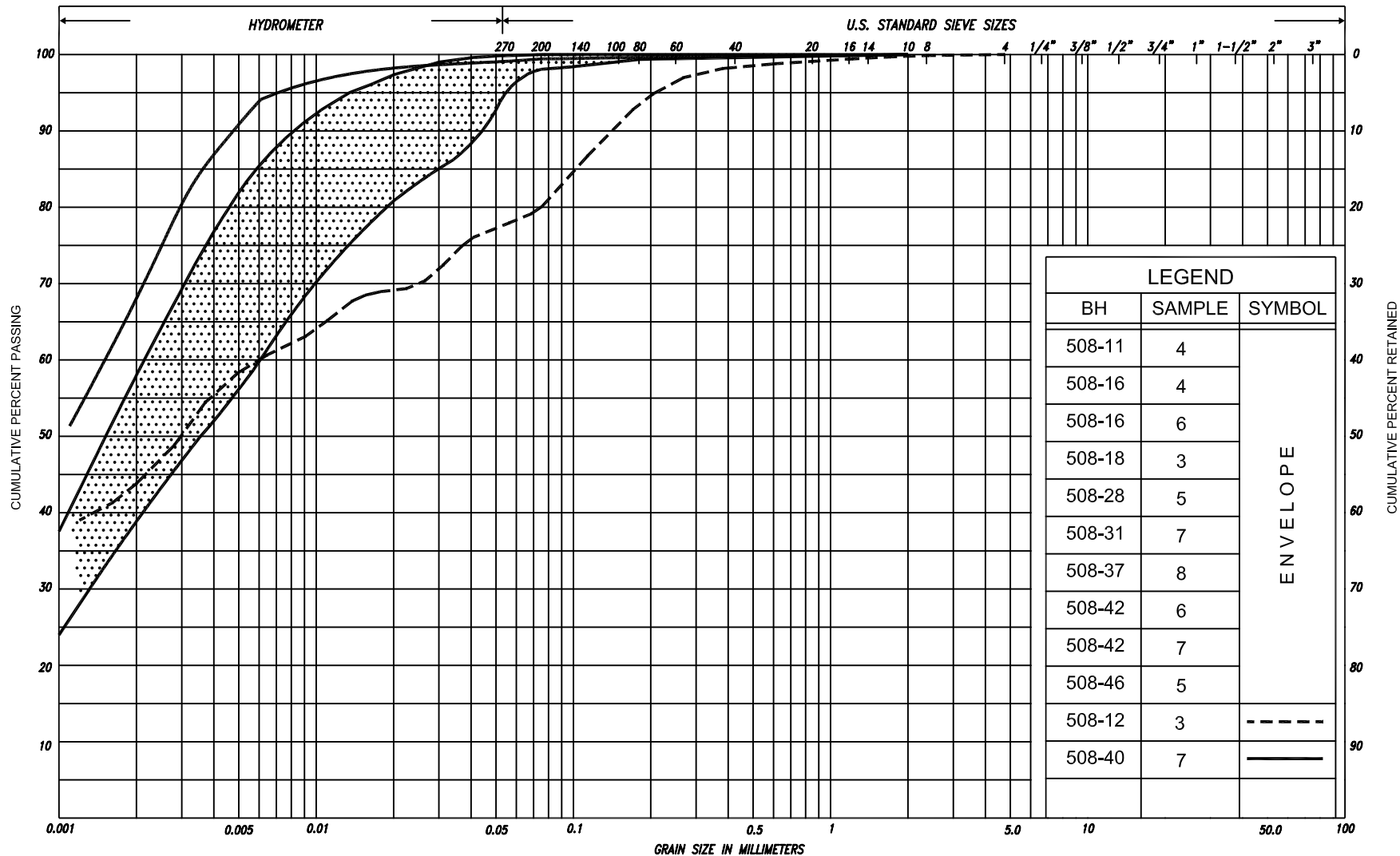
G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
					SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT																
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU	
					SAND												



SILT & CLAY				FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY				FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY				SILT			SAND			SAND			GRAVEL			COBBLES	U.S. BUREAU
CLAY				SILT			SAND			SAND			GRAVEL			COBBLES	U.S. BUREAU



SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
					SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT											GRAVEL				U.S. BUREAU	
CLAY		SILT		V. FINE		FINE		MED.		COARSE							
SAND																	

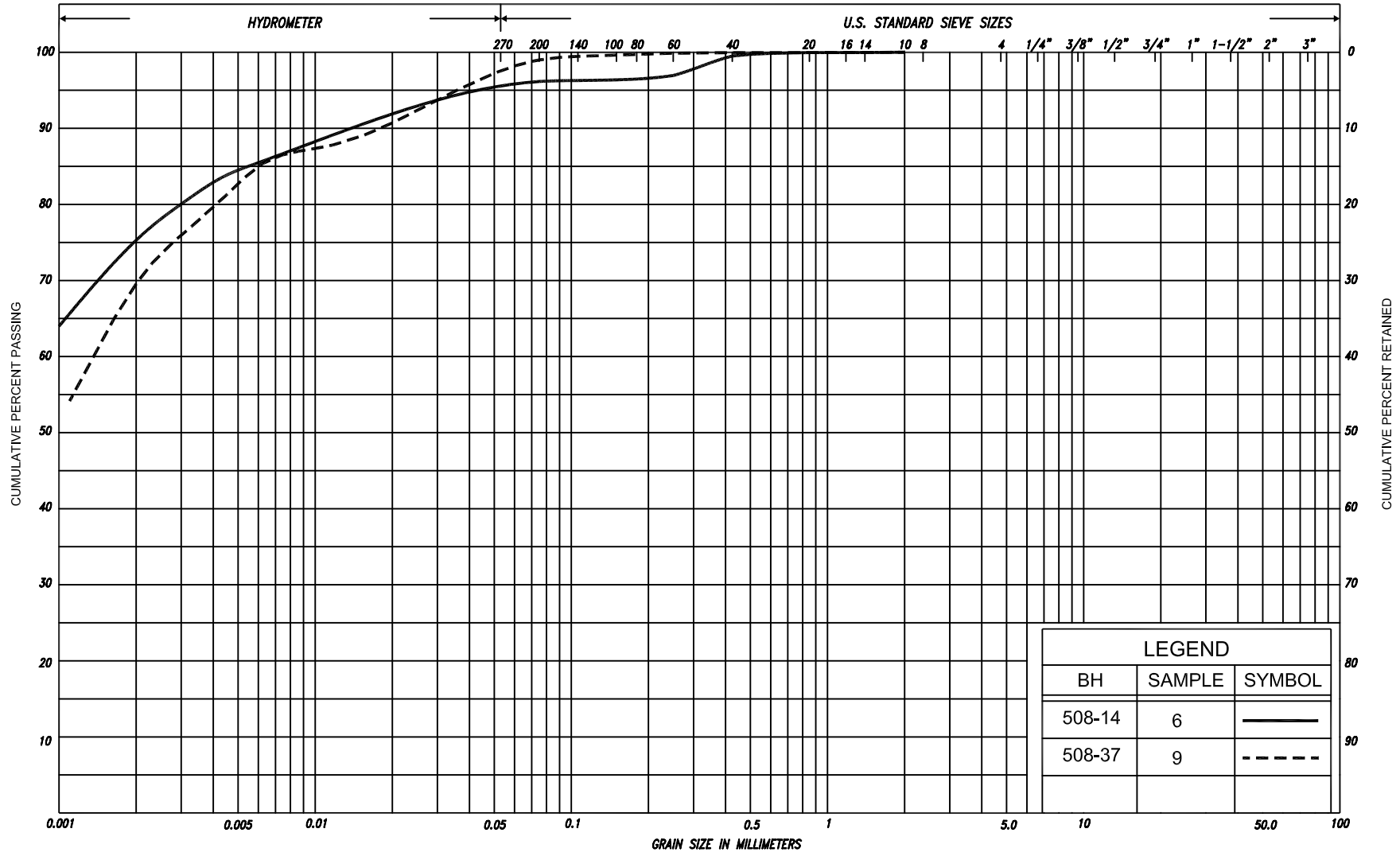
## GRAIN SIZE DISTRIBUTION

SILTY CLAY, trace to some sand

FIG No. 508-GS-3

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY			FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	

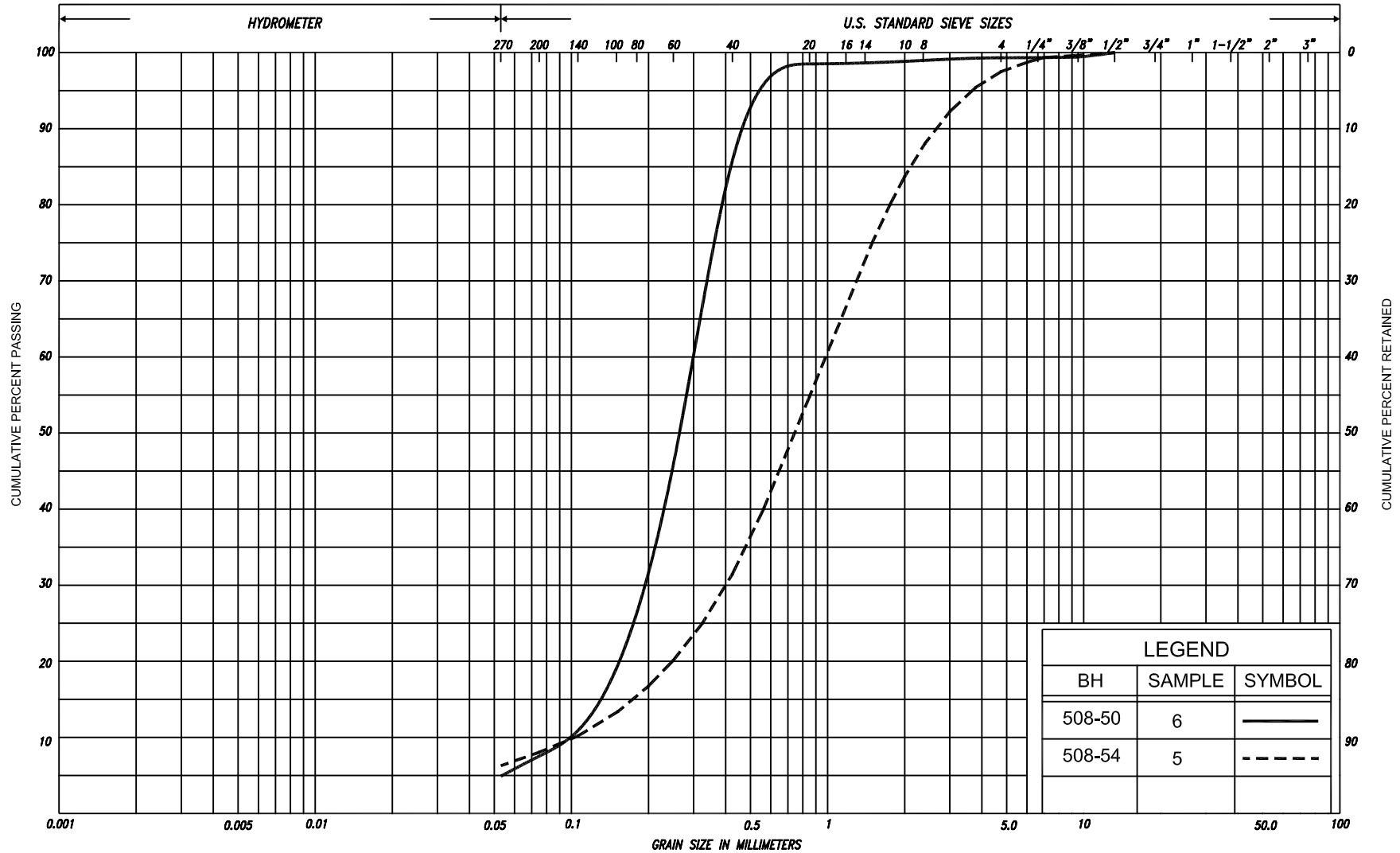
## GRAIN SIZE DISTRIBUTION

CLAY, trace sand

FIG No. 508-GS-4

HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY			FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	

## GRAIN SIZE DISTRIBUTION

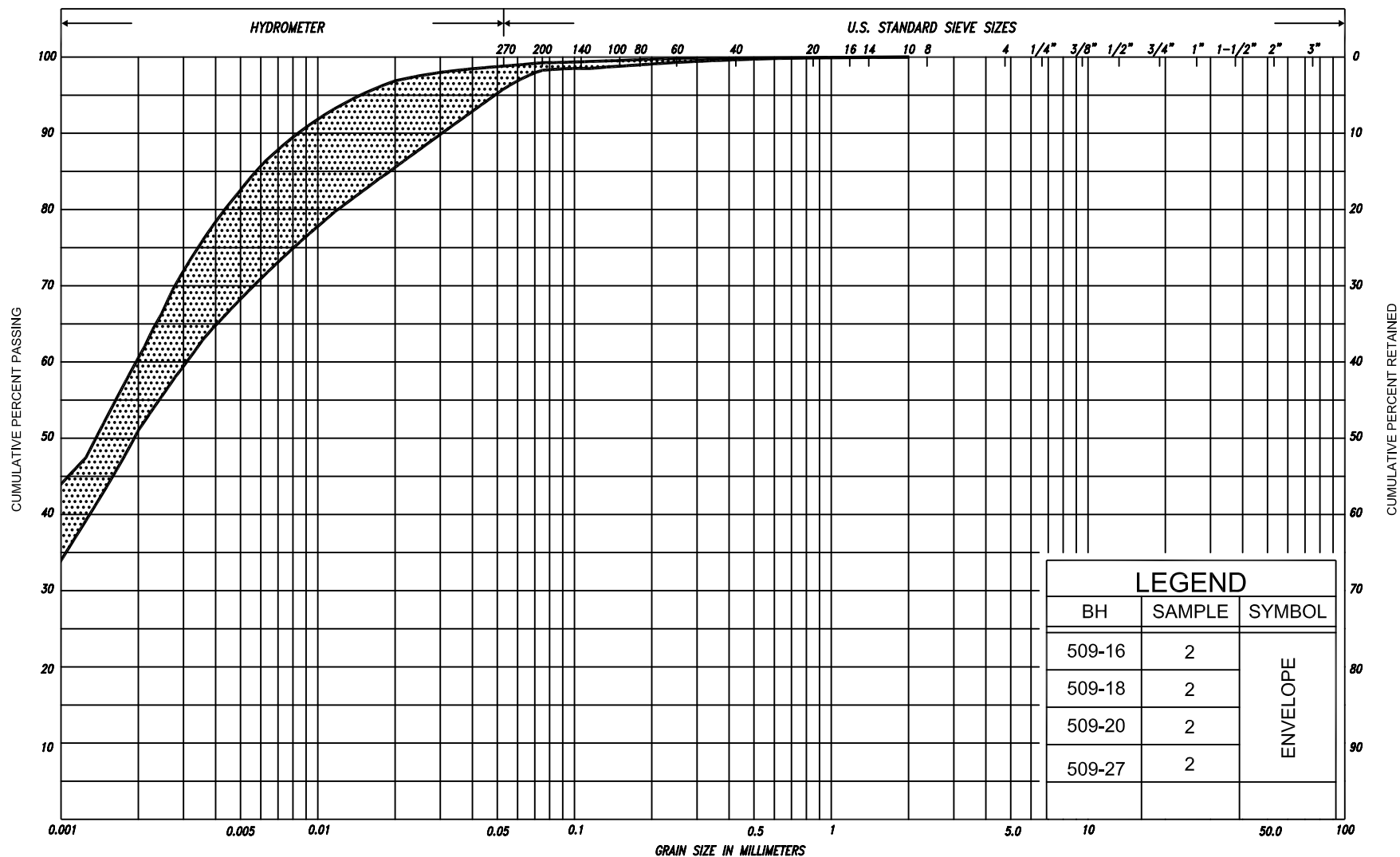
SAND, trace silt, trace gravel

FIG No. 508-GS-5

HWY: 69

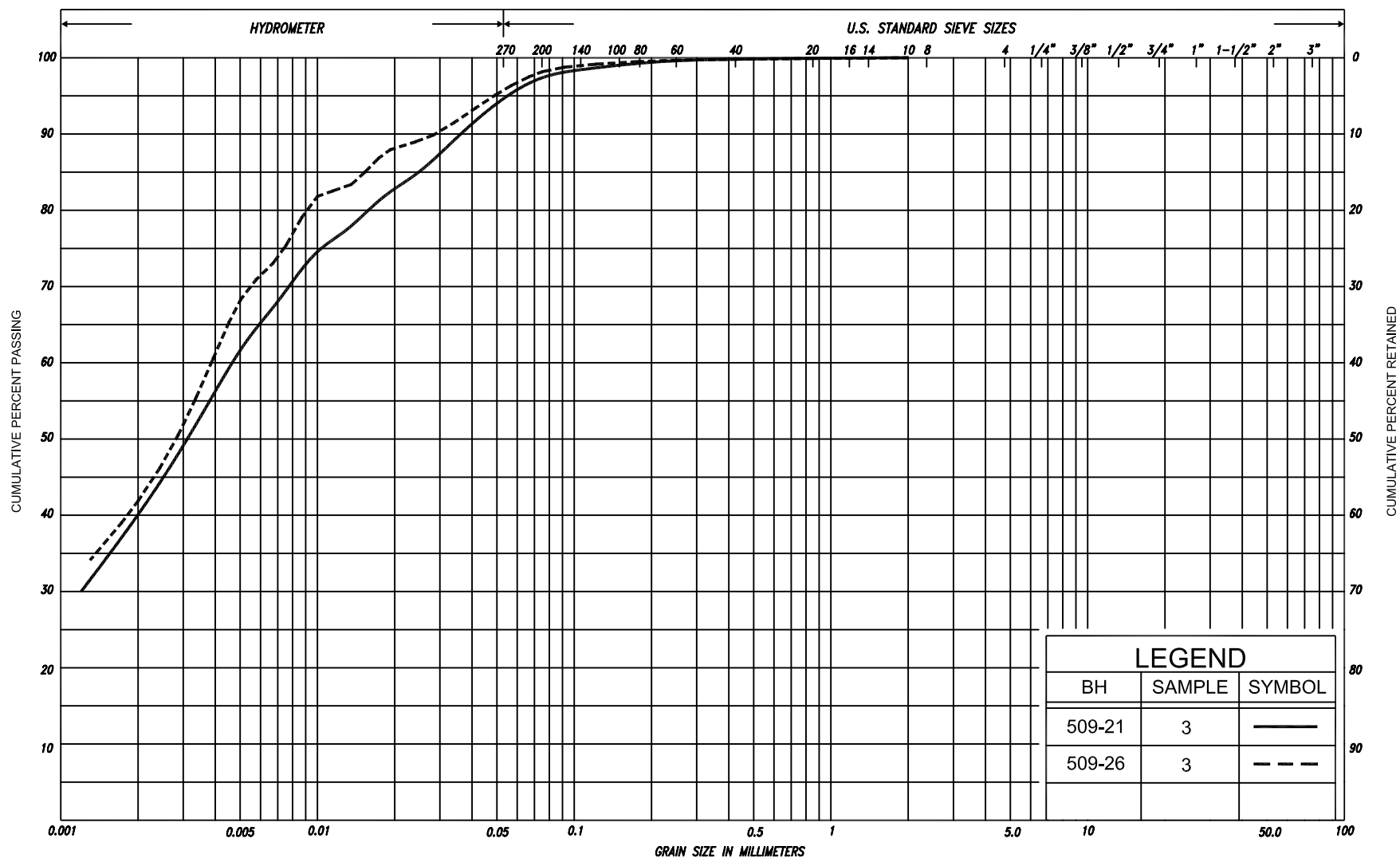
G.W.P. No. 5218-06-00



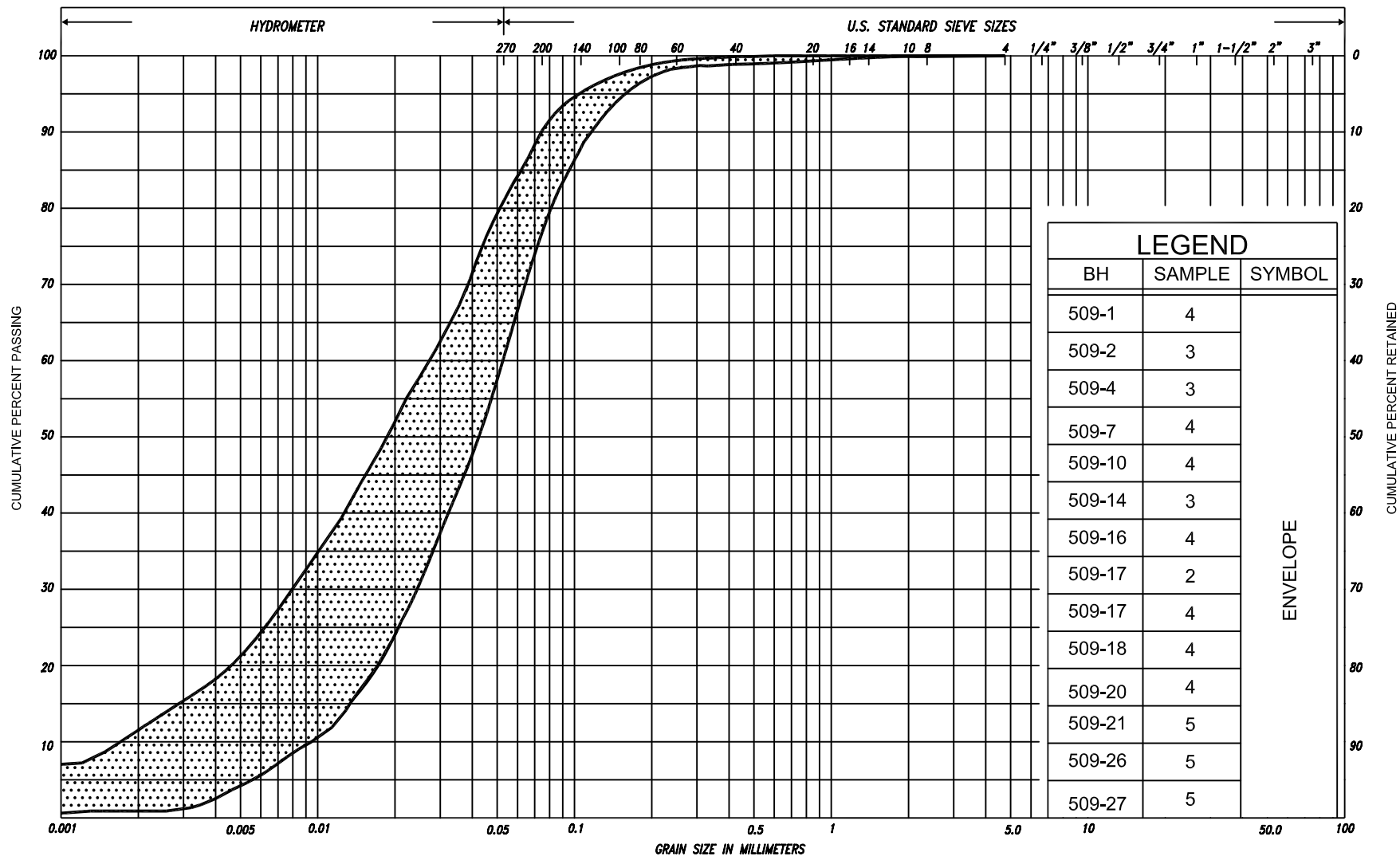


LEGEND		
BH	SAMPLE	SYMBOL
509-16	2	ENVELOPE
509-18	2	
509-20	2	
509-27	2	

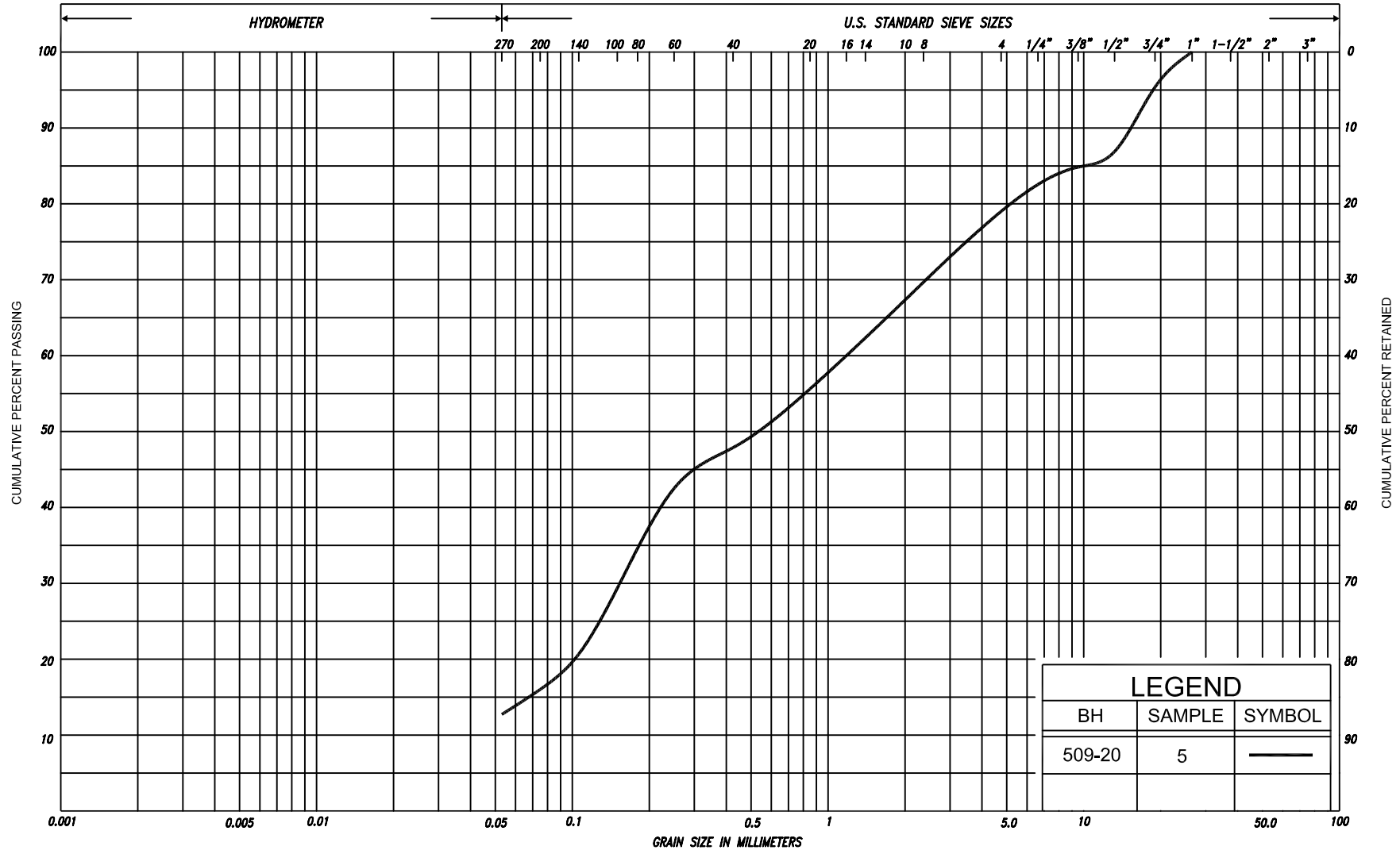
SILT & CLAY				FINE SAND			MEDIUM SAND		COARSE SAND		GRAVEL		COBBLES	UNIFIED
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	COBBLES	M.I.T.
CLAY	SILT			V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU



SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY			FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY			SILT			SAND			GRAVEL			GRAVEL			U.S. BUREAU	



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED	
				SAND											
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL	COBBLES	M.I.T.
	SILT														
CLAY		SILT				V. FINE	FINE	MED.	COARSE	GRAVEL					U.S. BUREAU
						SAND									

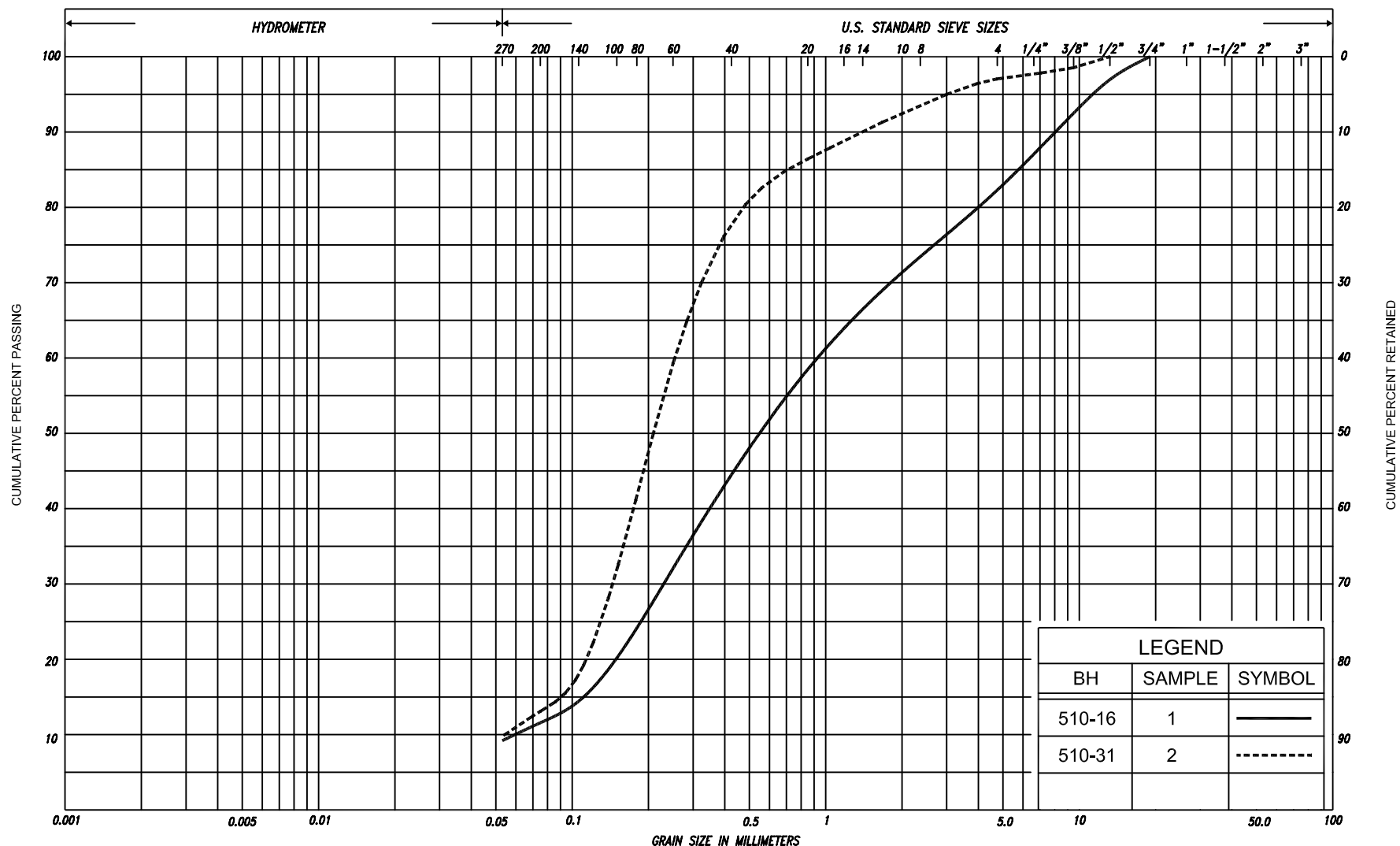


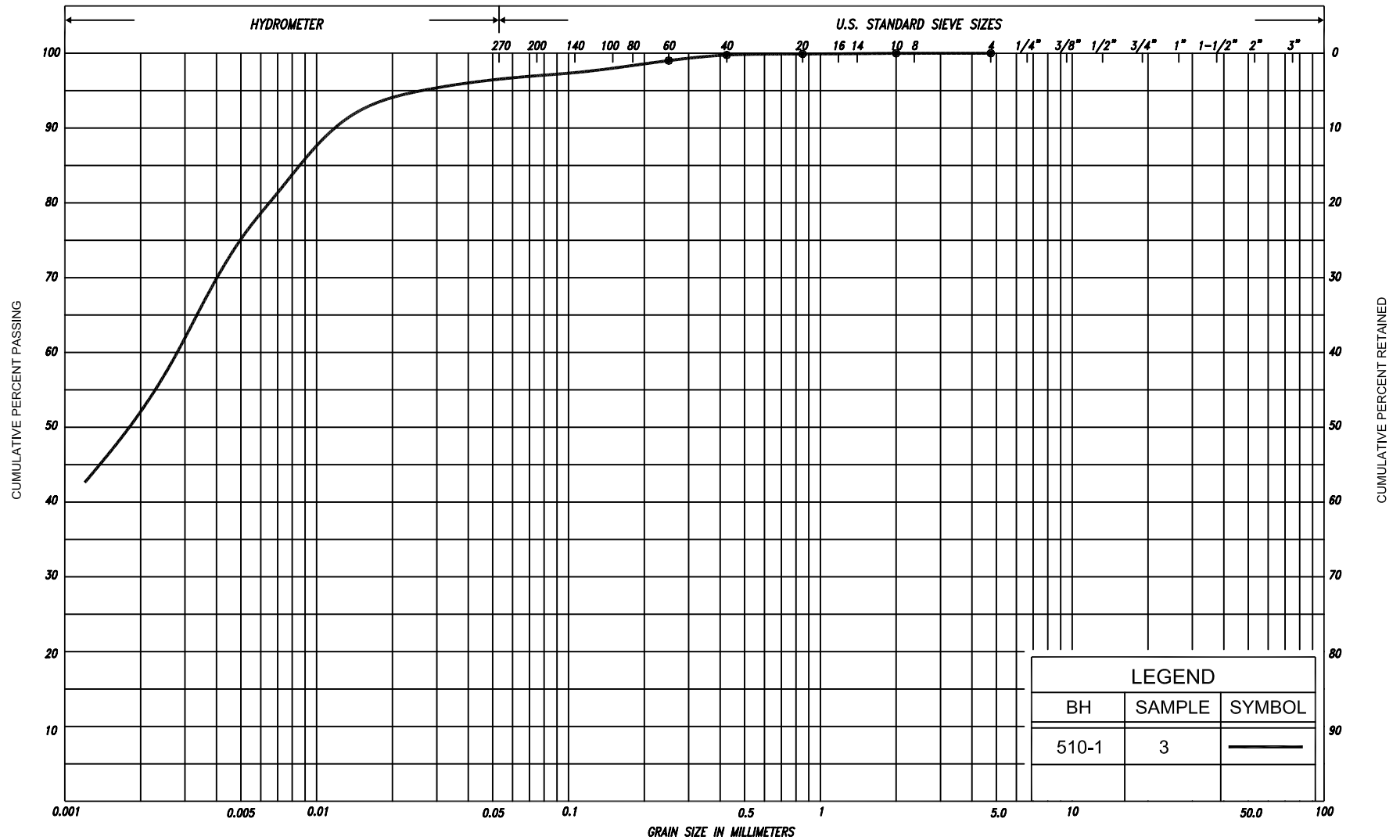
SILT & CLAY			FINE			MEDIUM			COARSE			GRAVEL			COBBLES	UNIFIED
						SAND										
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE	GRAVEL				COBBLES	M.I.T.
		SILT						SAND								
CLAY				SILT		V. FINE	FINE	MED.	COARSE	GRAVEL						U.S. BUREAU
						SAND										

## GRAIN SIZE DISTRIBUTION

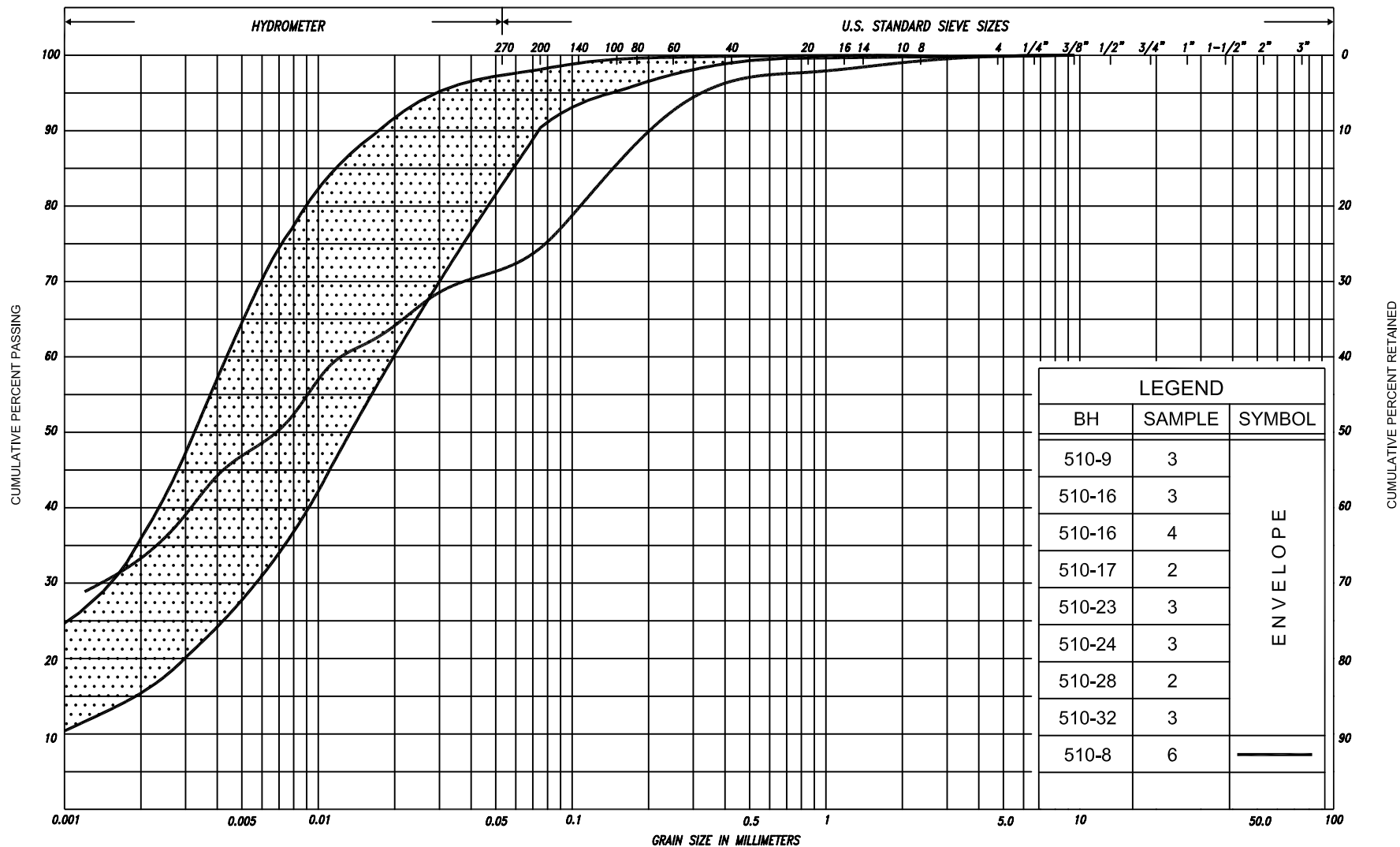
SAND, with gravel, some silt

FIG No.	509-GS-4
HWY	69
G.W.P. No.	5218-06-00

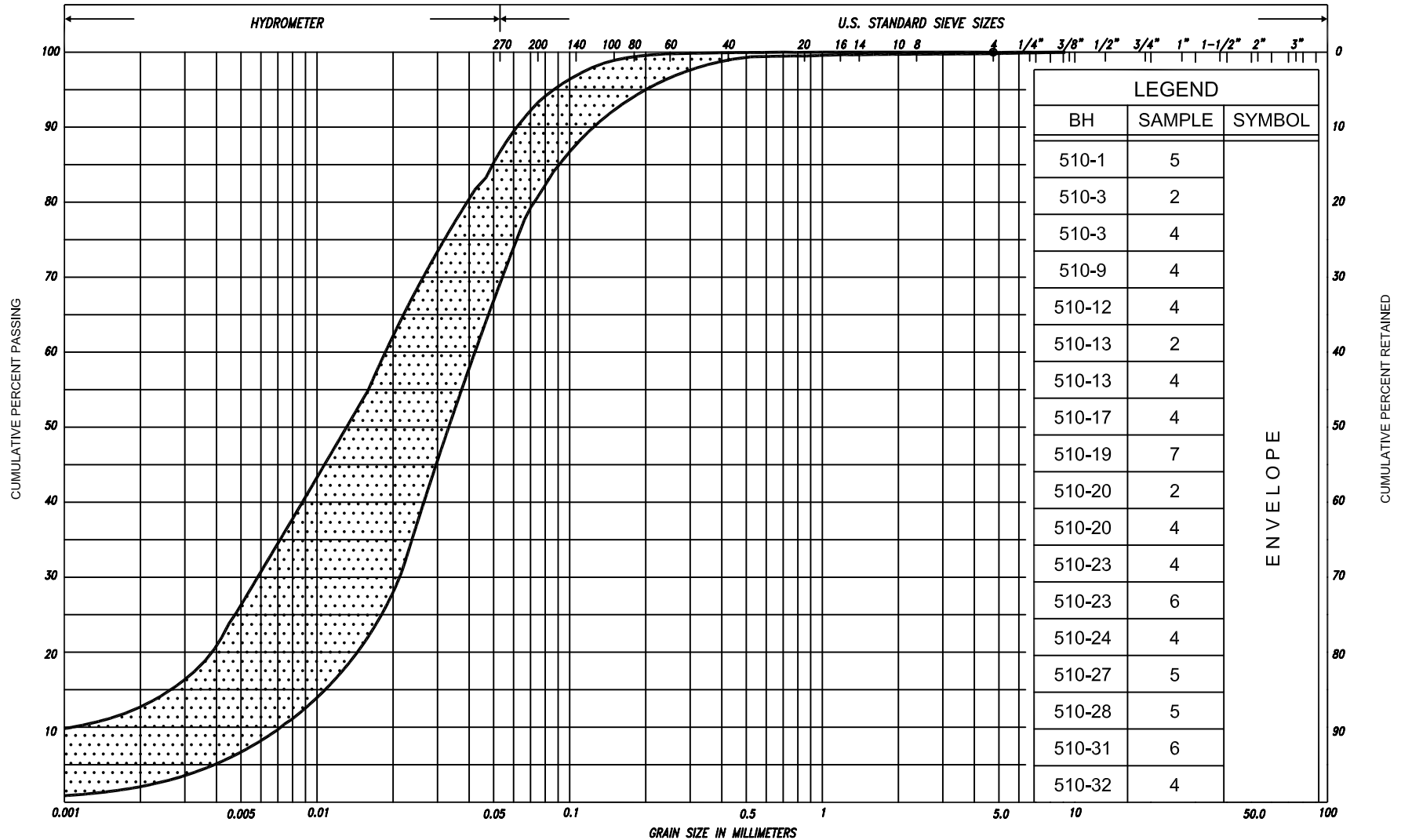




SILT & CLAY				FINE		MEDIUM		COARSE	GRAVEL		COB BLES	UNIFIED
				SAND								
CLAY	FINE		MEDIUM	COARSE	FINE		MEDIUM	COARSE	GRAVEL		COBBLES	M.I.T.
	SILT				SAND							
CLAY		SILT		V. FINE	FINE	MED.	COARSE	GRAVEL				U.S. BUREAU
				SAND								

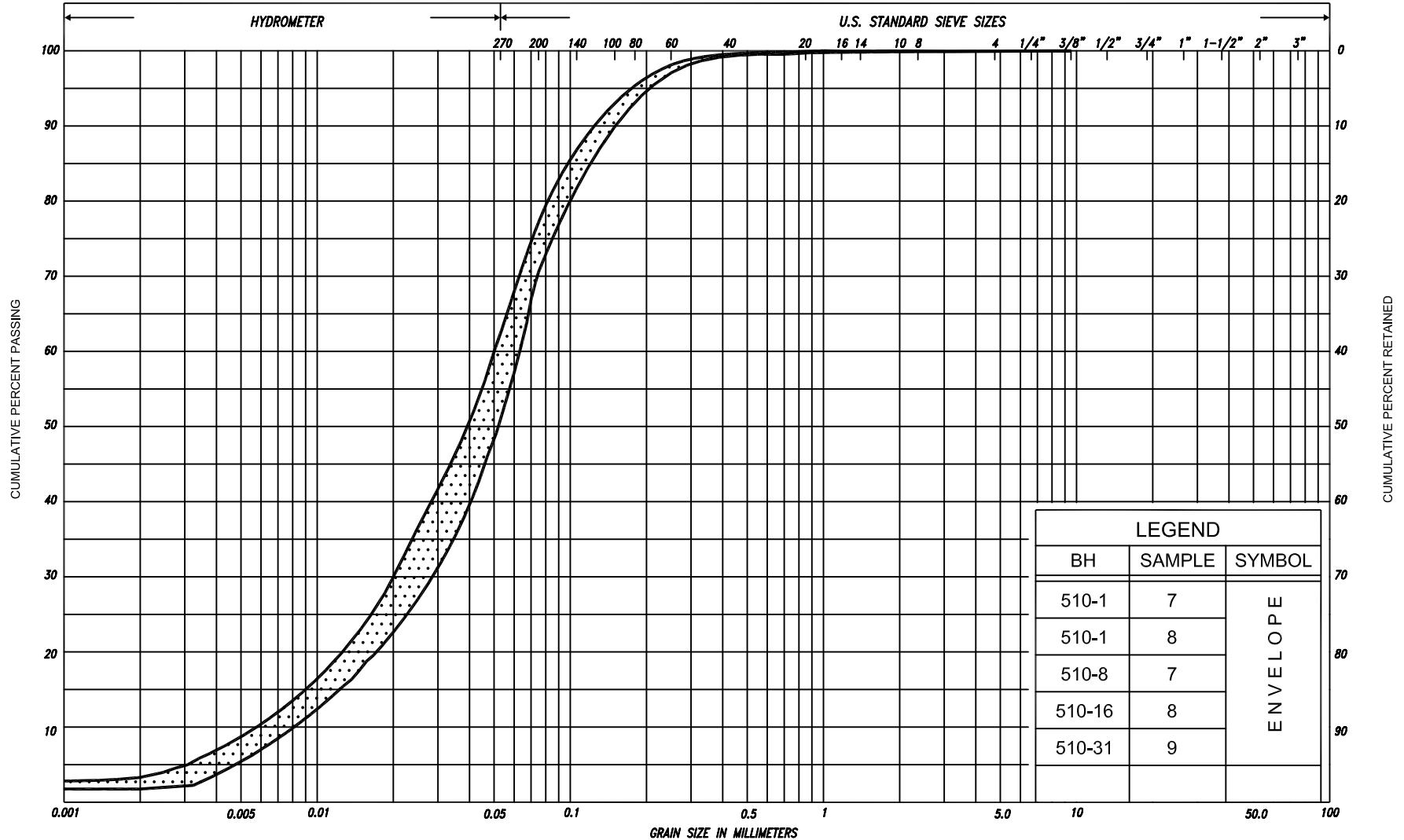


SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED			
				SAND													
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.	
	SILT																
CLAY			SILT			V. FINE		FINE		MED.		COARSE		GRAVEL			U.S. BUREAU
						SAND											

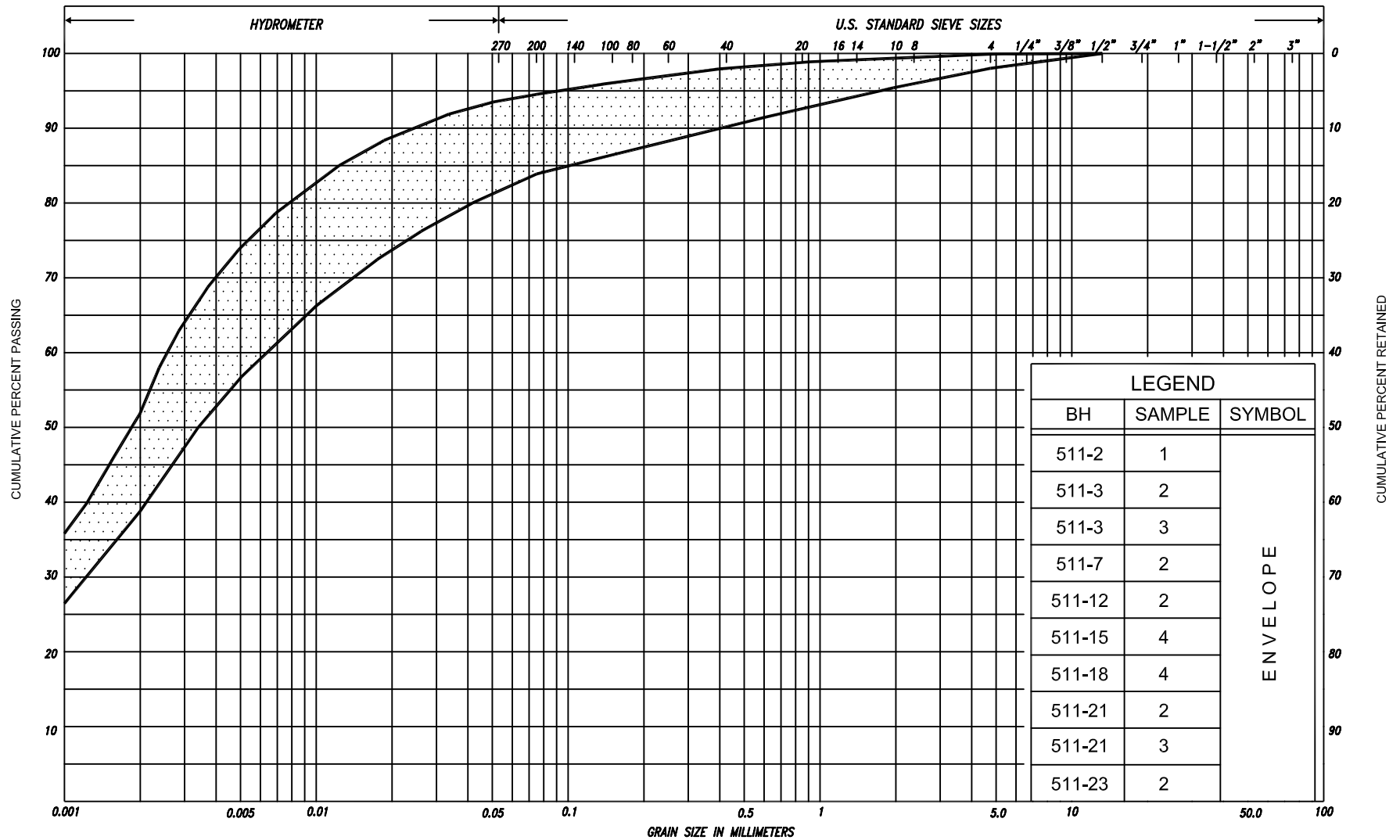


SILT & CLAY				FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED
CLAY				FINE			MEDIUM			COARSE			GRAVEL			COBBLES	M.I.T.
CLAY				SILT			SAND			SAND			GRAVEL			U.S. BUREAU	
							V. FINE			FINE			MED.				

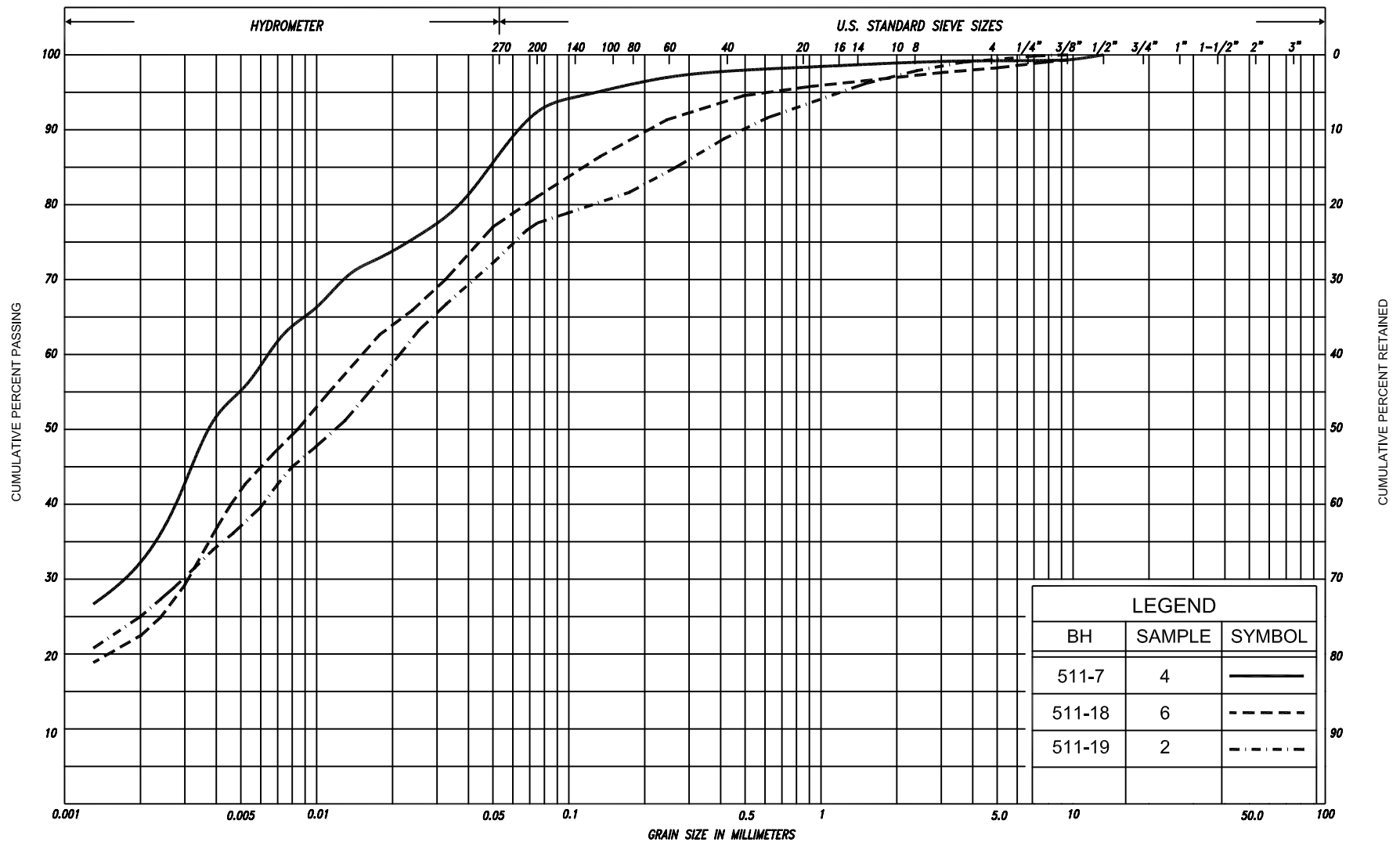




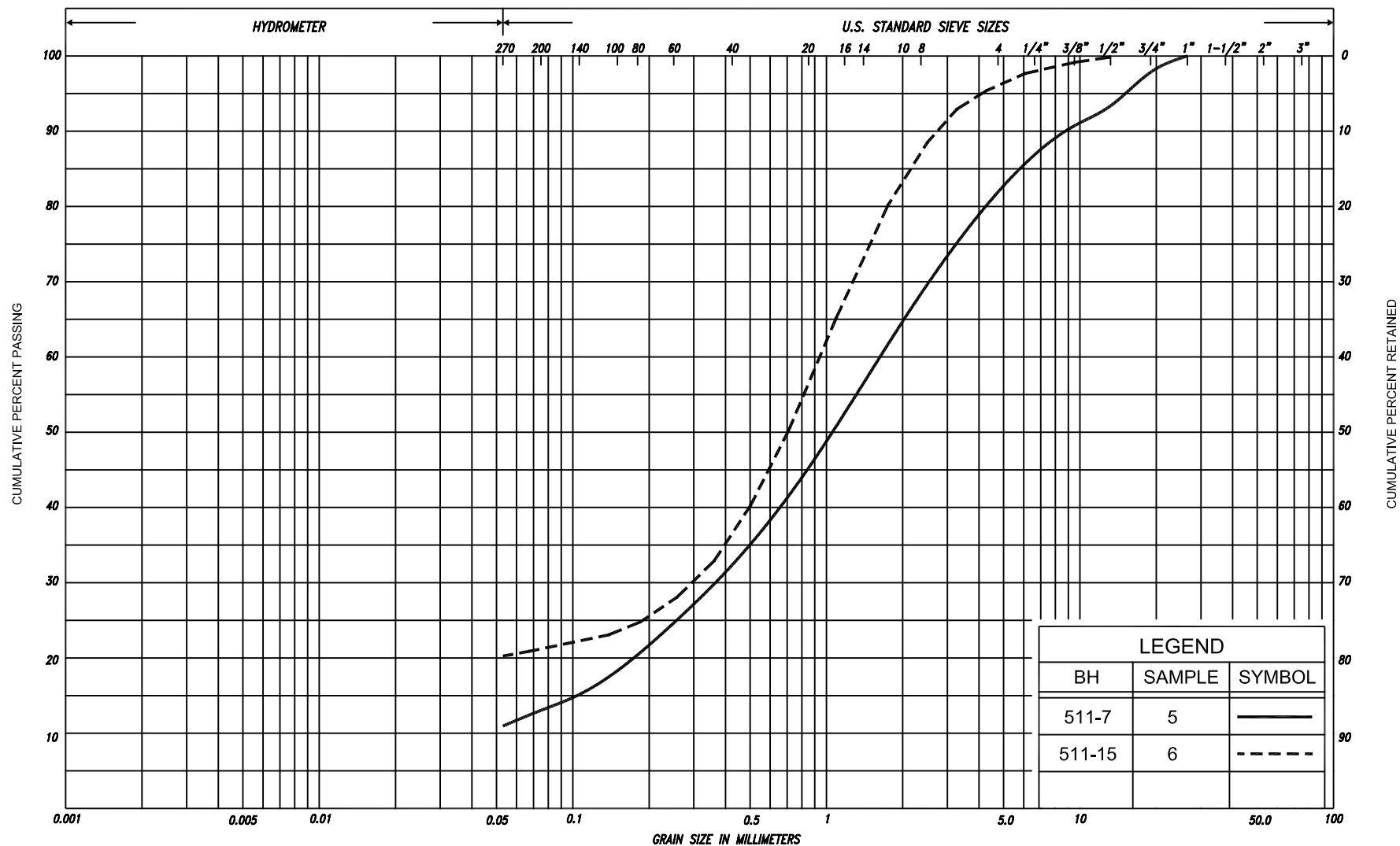
SILT & CLAY				FINE			MEDIUM			COARSE			GRAVEL			COB BLES	UNIFIED



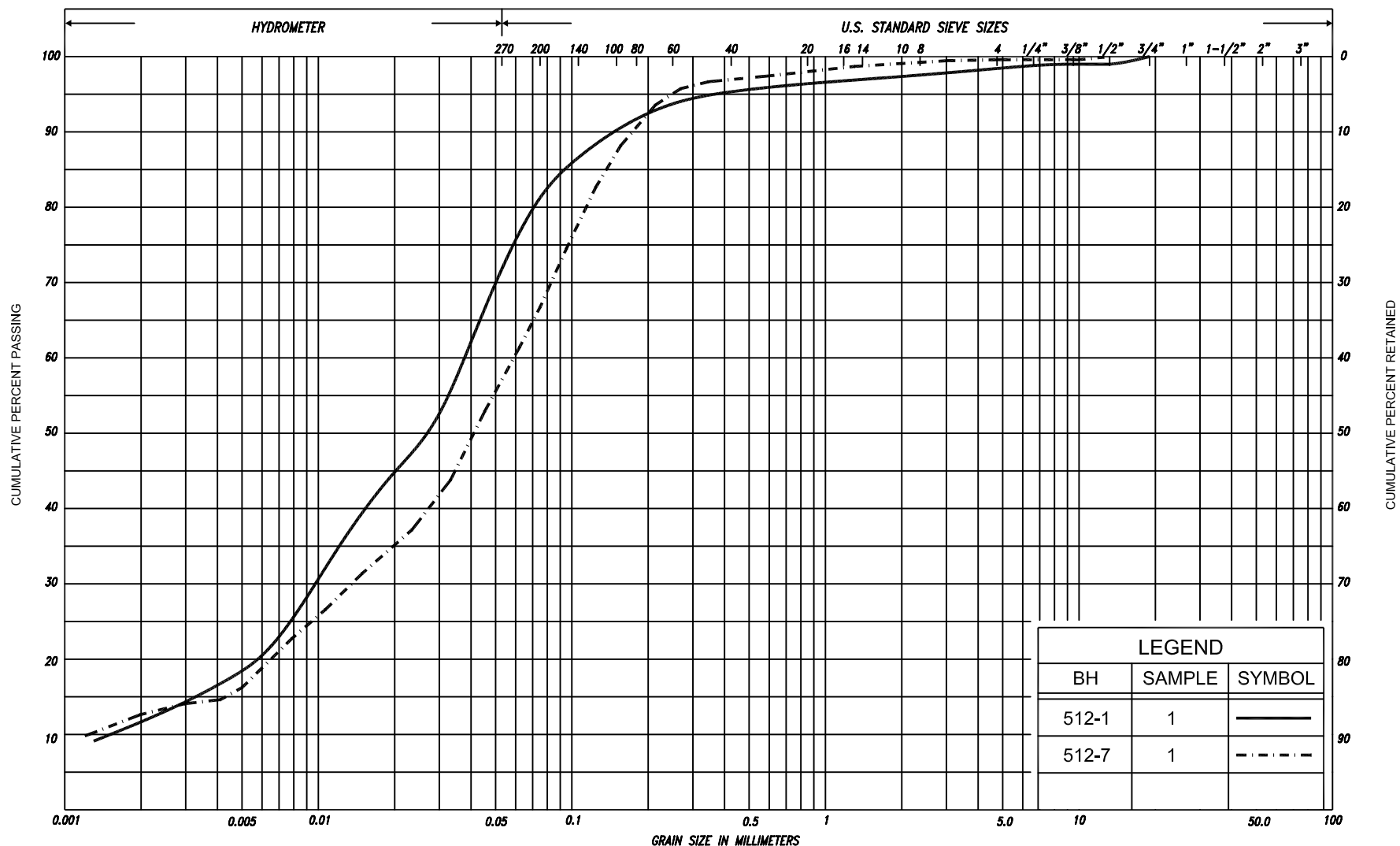
SILT & CLAY				FINE	MEDIUM	COARSE	GRAVEL		COBBLES	UNIFIED
				SAND						
CLAY	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	GRAVEL		COBBLES	M.I.T.
				SAND						
CLAY		SILT		V. FINE	FINE	MED.	COARSE	GRAVEL		U.S. BUREAU
				SAND						



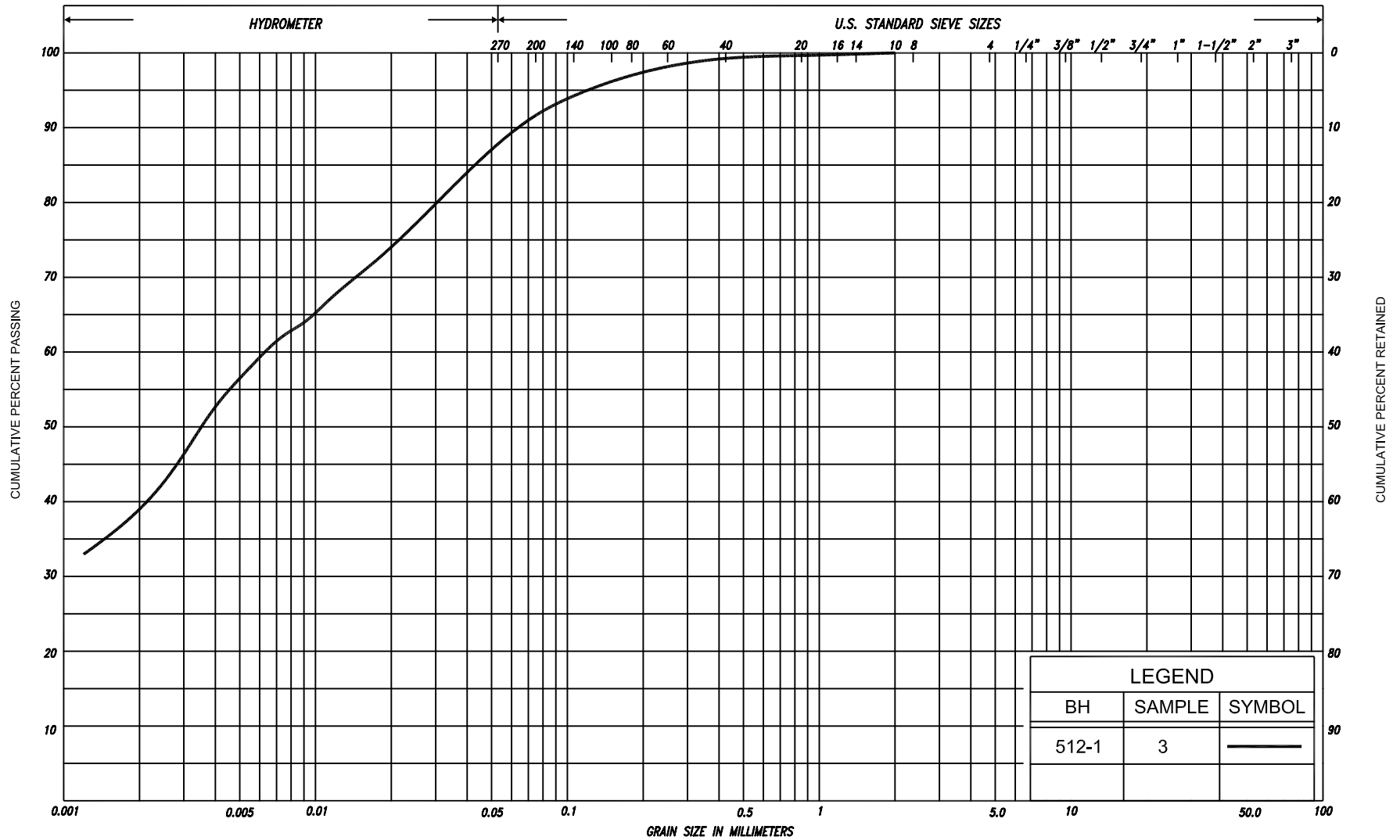
SILT & CLAY				FINE		MEDIUM		COARSE	GRAVEL			COBBLES	UNIFIED	
CLAY	FINE		MEDIUM		COARSE		SAND			GRAVEL			COBBLES	M.I.T.
	SILT				FINE		MEDIUM		COARSE		GRAVEL			
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL					U.S. BUREAU



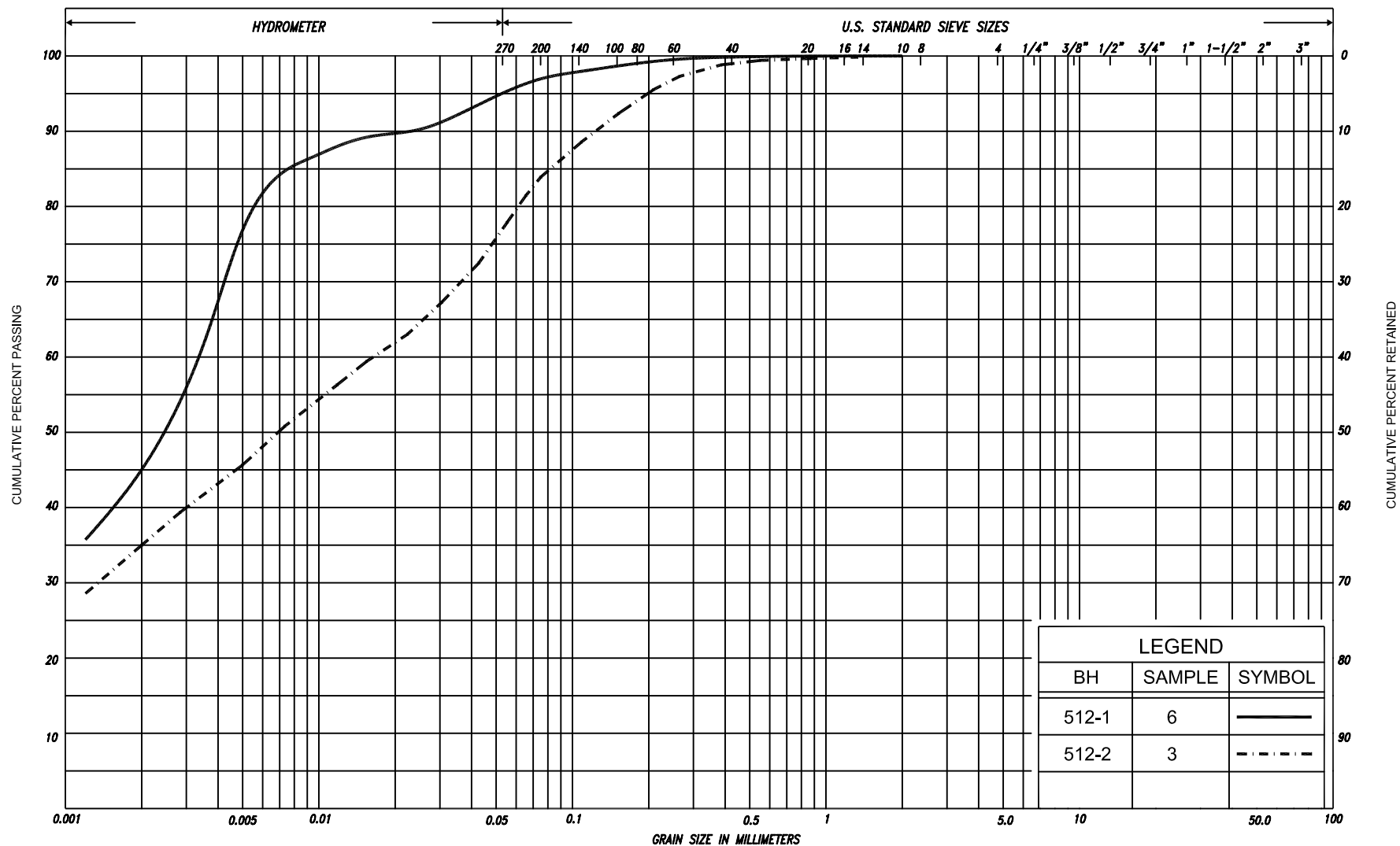
SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL			COBBLES	UNIFIED		
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.	
	SILT							SAND								U.S. BUREAU	
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL							
					SAND												



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED		
				SAND												
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL		COBBLES	M.I.T.
	SILT						SAND									
CLAY		SILT			V. FINE	FINE	MED.	COARSE		GRAVEL						U.S. BUREAU
					SAND											



SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL				COB BLES	UNIFIED		
CLAY	FINE		MEDIUM		COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.	
	SILT							SAND									
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU	
					SAND												



SILT & CLAY				FINE		MEDIUM		COARSE		GRAVEL			COB BLES	UNIFIED
CLAY	FINE	MEDIUM	COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.
	SILT			V. FINE		FINE	MED.	COARSE	GRAVEL					COBBLES

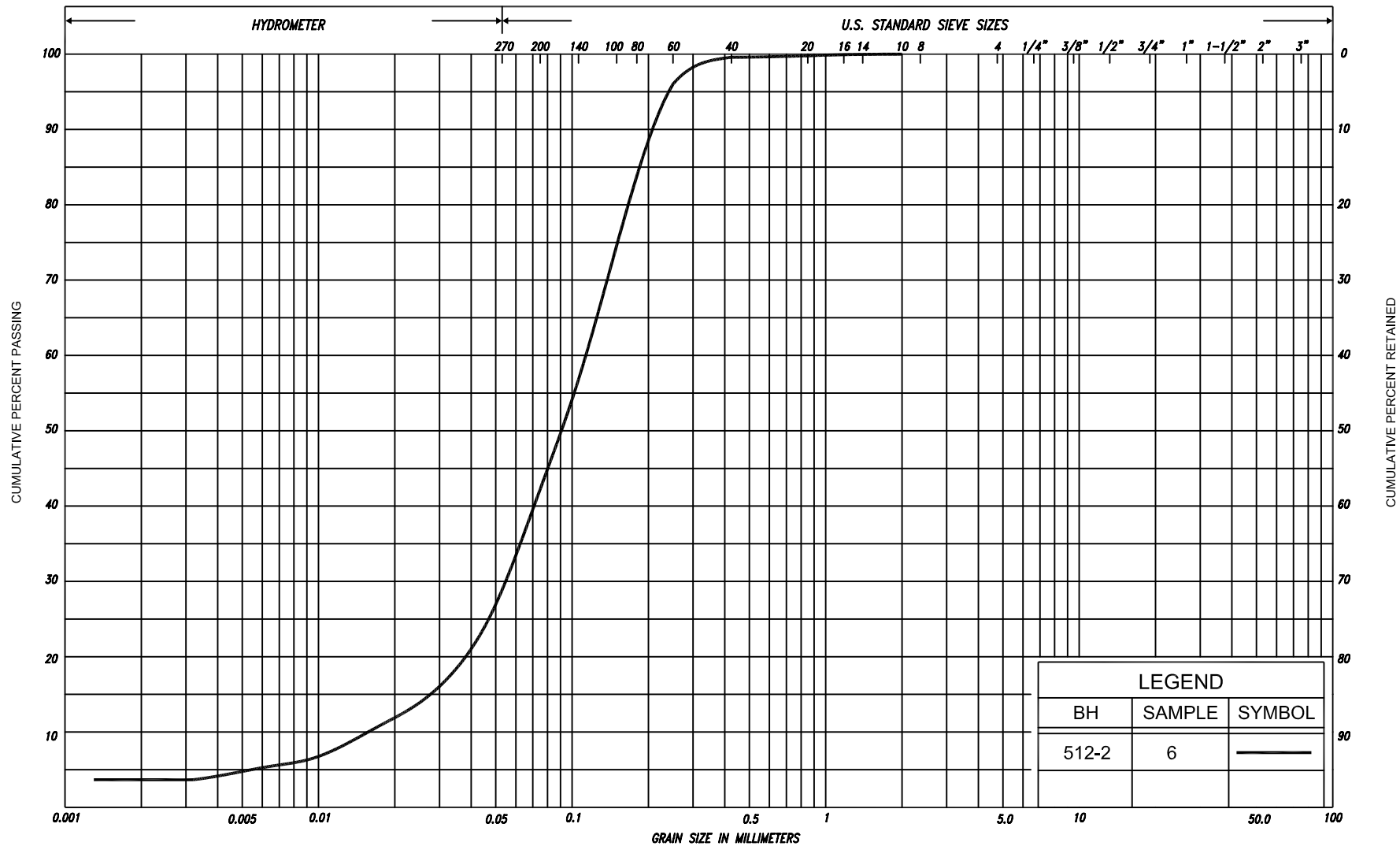
## GRAIN SIZE DISTRIBUTION

SILTY CLAY, trace to some sand

FIG No. 512-GS-3

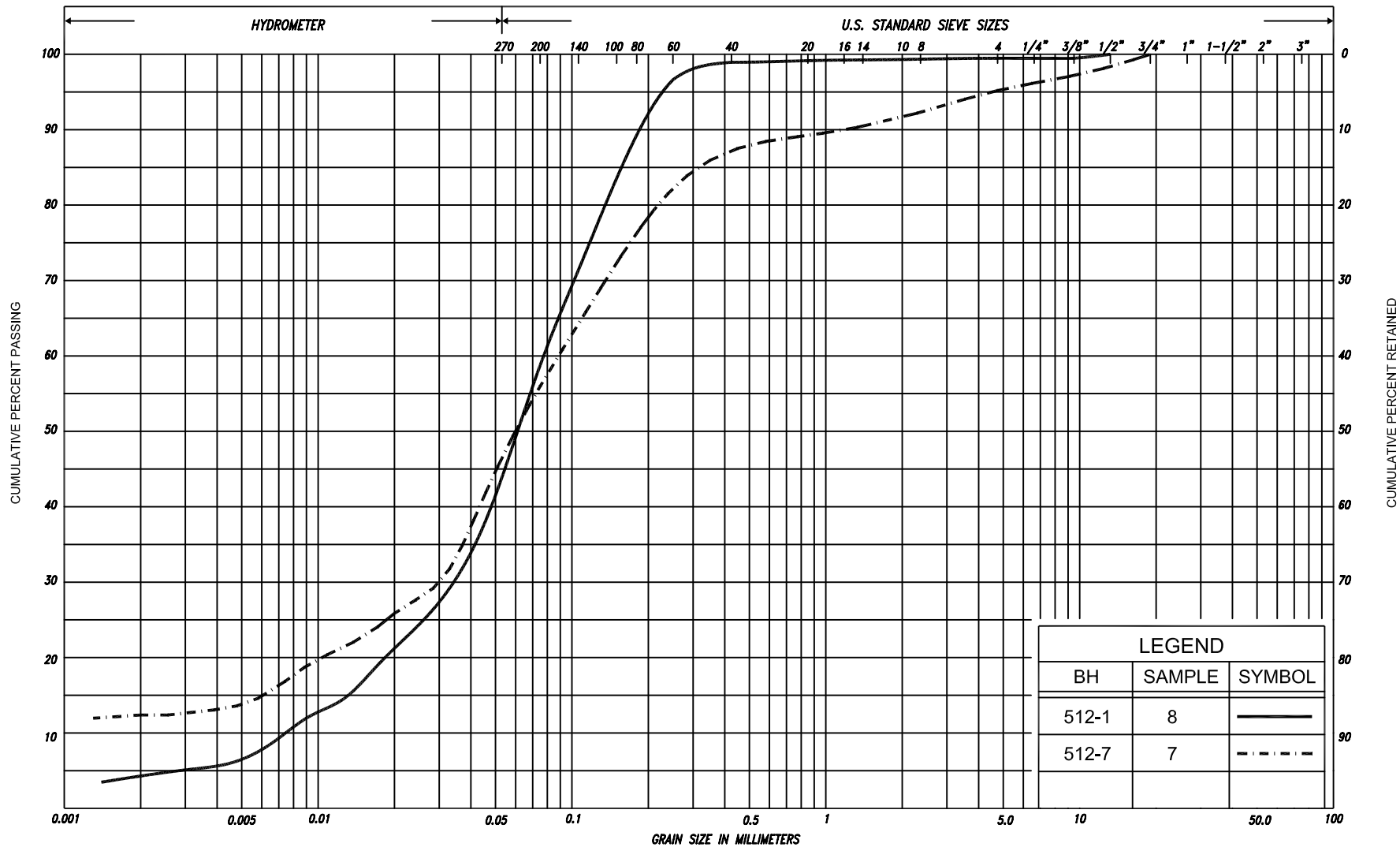
HWY: 69

G.W.P. No. 5218-06-00



SILT & CLAY					FINE		MEDIUM		COARSE	GRAVEL			COR BLES	UNIFIED		
					SAND											
CLAY	FINE		MEDIUM	COARSE	FINE		MEDIUM		COARSE		GRAVEL			COBBLES	M.I.T.	
	SILT															
CLAY		SILT			V. FINE	FINE	MED.	COARSE	GRAVEL							U.S. BUREAU
					SAND											





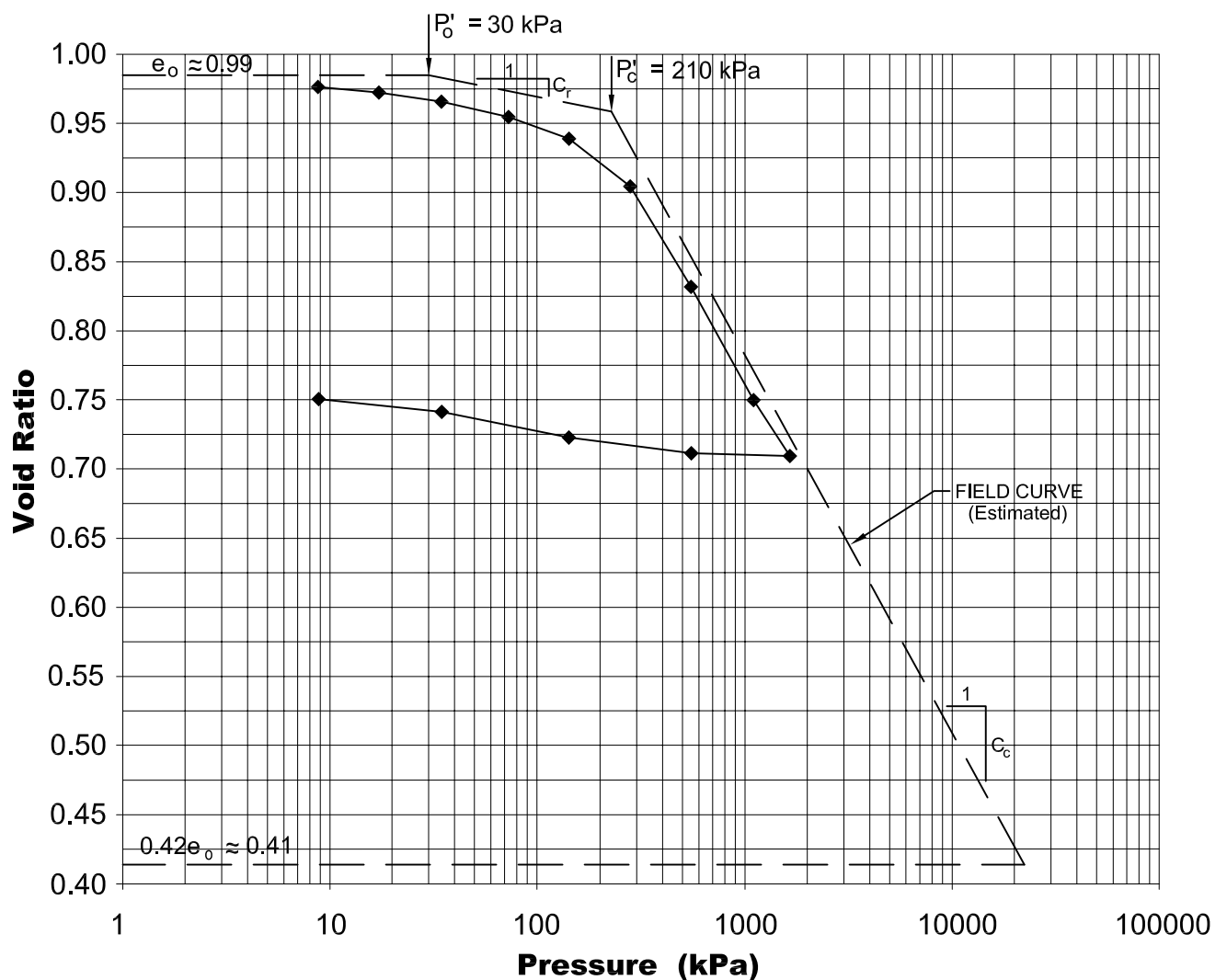
SILT & CLAY					FINE		MEDIUM		COARSE		GRAVEL				COB BLES	UNIFIED		
					SAND													
CLAY	FINE		MEDIUM		COARSE		FINE		MEDIUM		COARSE		GRAVEL				COBBLES	M.I.T.
	SILT																	
CLAY			SILT			V. FINE	FINE	MED.	COARSE		GRAVEL						U.S. BUREAU	
					SAND													



### Laboratory Consolidation Test Results

Swamp 504, Borehole 504-11, Sample 5  
Location 18+375, 40.0 m Rt., Depth 3.0 - 3.6 m

### Void Ratio versus Log of Pressure



SOIL TYPE: CLAYEY SILT, trace sand

$e_o = 0.99$

$W_o = 32\%$

$\gamma = 18.8 \text{ kN/m}^3$

$P'_o = 30 \text{ kPa}$

$P'_c = 210 \text{ kPa}$

$C_c = 0.27$

$C_r = 0.03$

$W_L = 28$

$W_p = 22$

$PI = 6$

FIGURE No: 504-C-1

HIGHWAY: 69

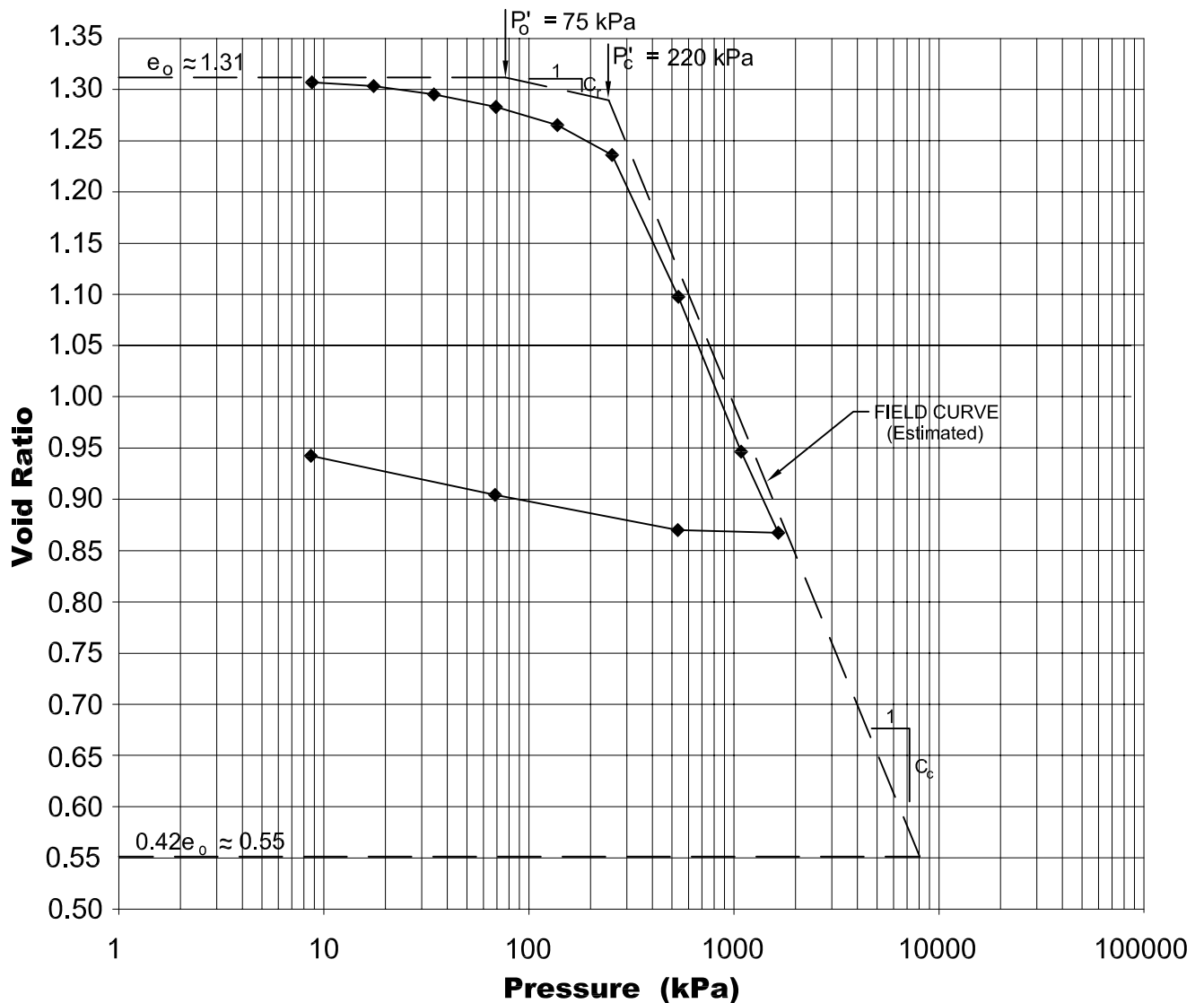
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 505, Borehole 505-11, Sample 6  
Location 18+800, 18.75 m Lt., Depth 6.1 - 6.7 m

### Void Ratio versus Log of Pressure



SOIL TYPE: SILTY CLAY

$e_0 = 1.31$   
 $W_0 = 48\%$   
 $\gamma = 17.4 \text{ kN/m}^3$

$P'_0 = 75 \text{ kPa}$   
 $P'_c = 220 \text{ kPa}$   
 $C_c = 0.49$   
 $C_r = 0.04$

$W_L = 42$   
 $W_P = 22$   
 $PI = 20$

FIGURE No: 505-C-1

HIGHWAY: 69

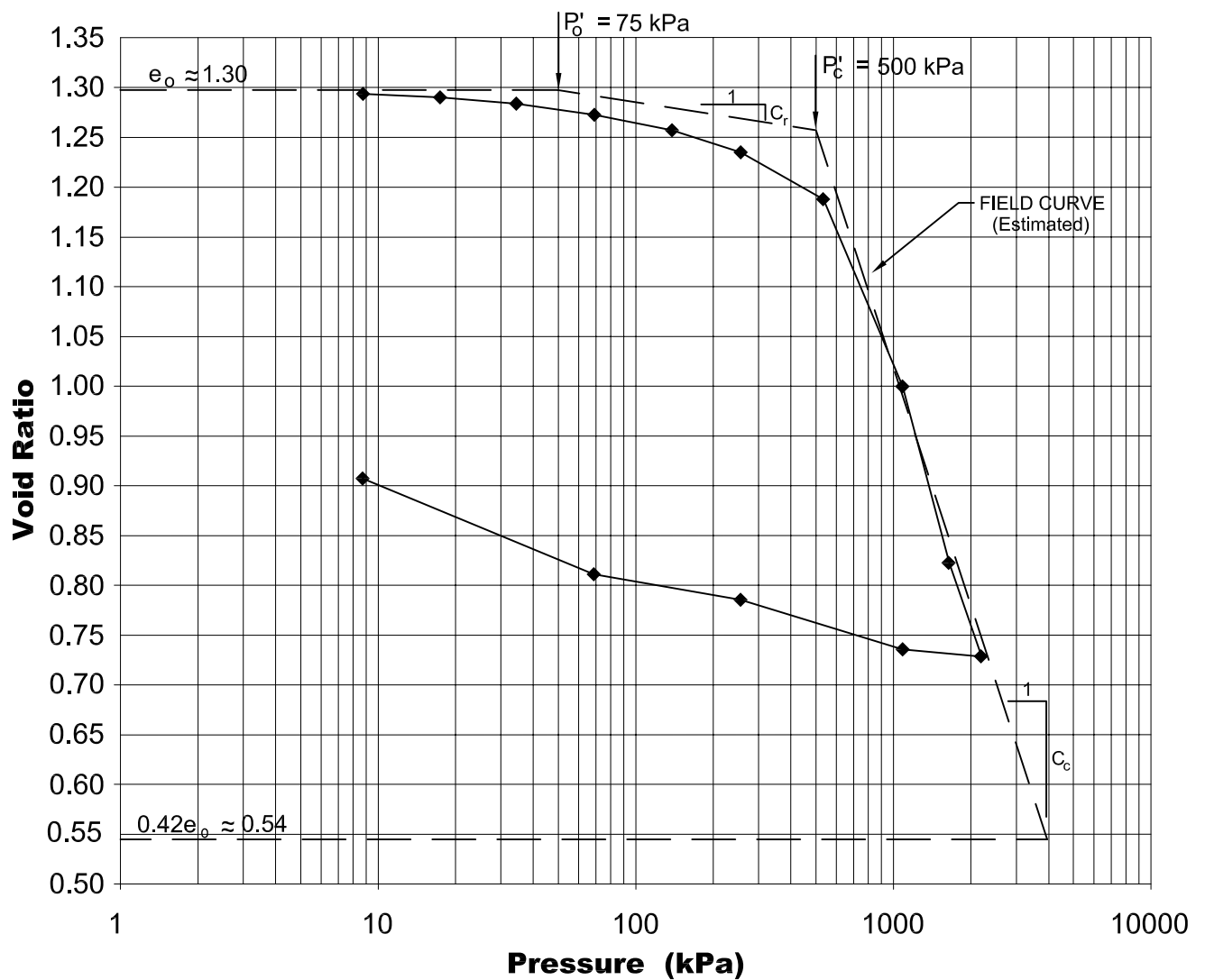
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 505, Borehole 505-17, Sample 4  
Location 18+850, 18.75 m Rt., Depth 3.0 - 3.6 m

### Void Ratio versus Log of Pressure



SOIL TYPE: CLAY, trace sand

$e_o = 1.30$

$W_o = 56\%$

$\gamma = 16.6 \text{ kN/m}^3$

$P'_o = 50 \text{ kPa}$

$P'_c = 500 \text{ kPa}$

$C_c = 0.81$

$C_r = 0.04$

$W_L = 64$

$W_p = 25$

$PI = 39$

FIGURE No: 505-C-2

HIGHWAY: 69

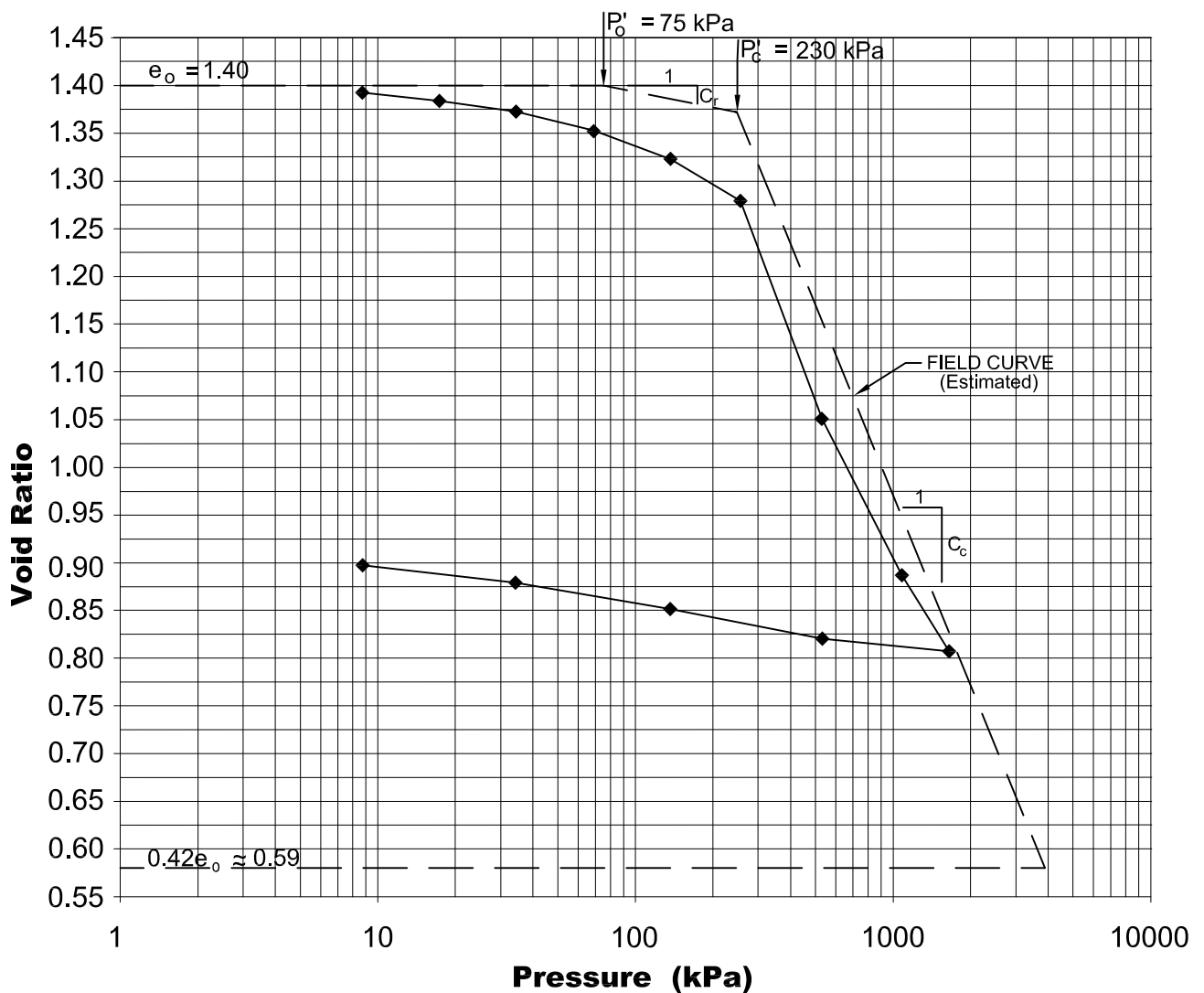
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 506, Borehole 506-24, Sample 10  
Location 19+250, 18.8 m Lt., Depth 12.2 - 12.8 m

### Void Ratio versus Log of Pressure



SOIL TYPE: CLAY

$e_o = 1.40$

$W_o = 53\%$

$\gamma = 17.2 \text{ kN/m}^3$

$P'_o = 75 \text{ kPa}$

$P'_c = 230 \text{ kPa}$

$C_c = 0.66$

$C_r = 0.06$

$W_L = 58$

$W_p = 22$

$PI = 36$

FIGURE No: 506-C-1

HIGHWAY: 69

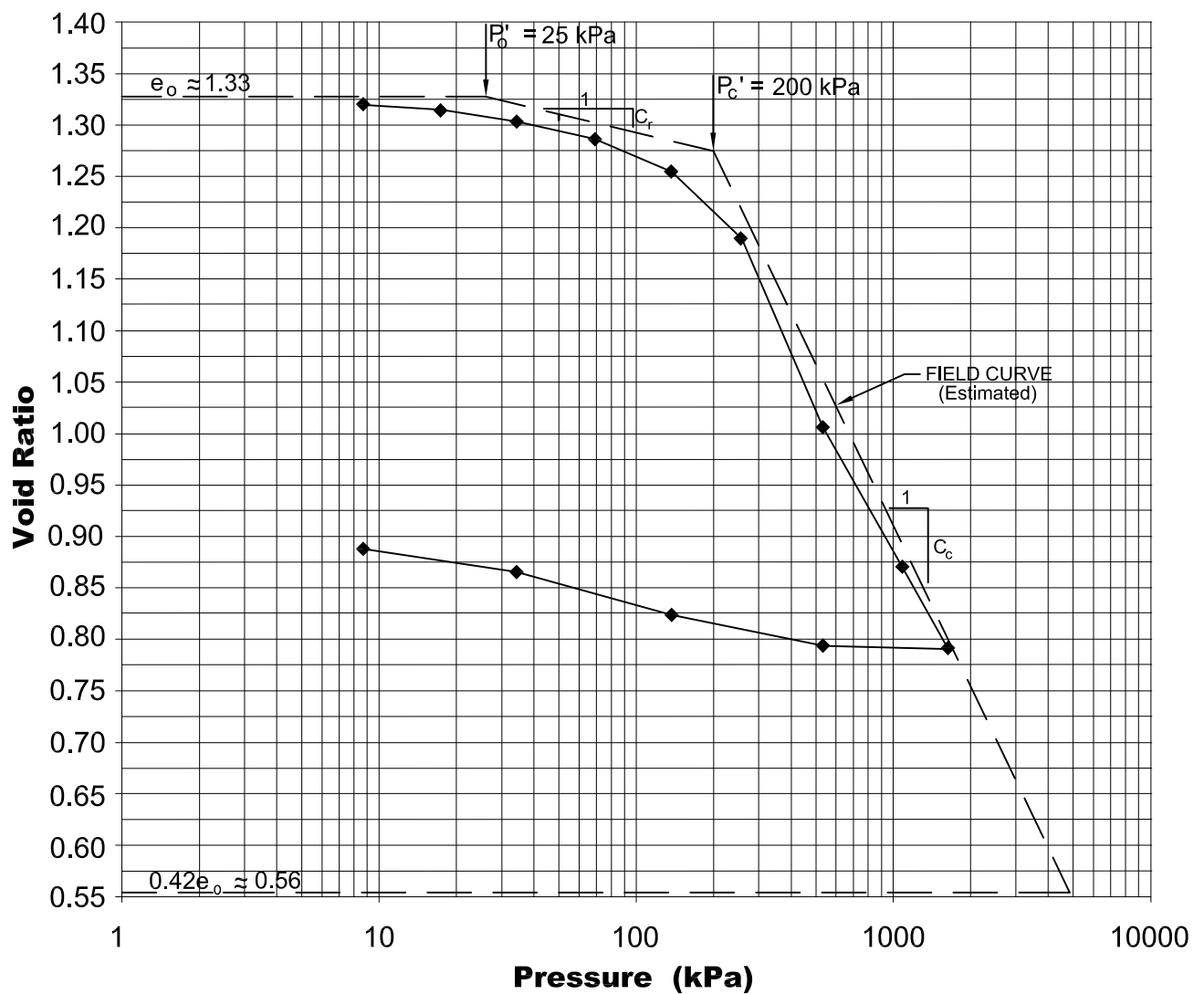
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 506, Borehole 506-30, Sample 7  
Location 19+300, 18.8 m Rt., Depth 7.6 - 8.2 m

### Void Ratio versus Log of Pressure



SOIL TYPE: SILTY CLAY

$e_o = 1.33$

$W_o = 46\%$

$\gamma = 17.5 \text{ kN/m}^3$

$P'_o = 25 \text{ kPa}$

$P'_c = 200 \text{ kPa}$

$C_c = 0.52$

$C_r = 0.06$

$W_L = 38$

$W_p = 20$

$PI = 18$

FIGURE No: 506-C-2

HIGHWAY: 69

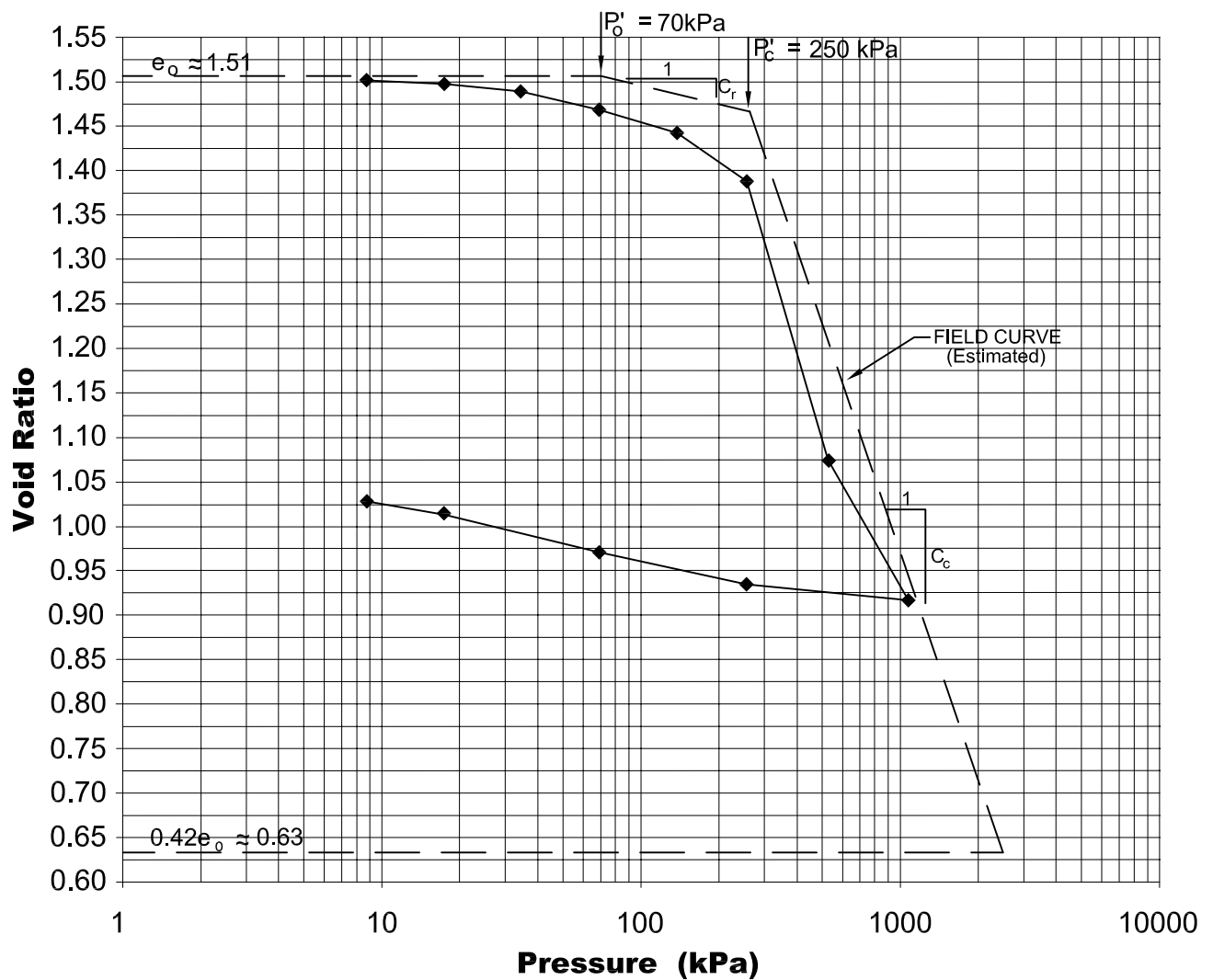
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 507, Borehole 507-10, Sample 7  
Location 19+900, 18.8 m Rt., Depth 7.6 - 8.2 m

### Void Ratio versus Log of Pressure



SOIL TYPE: SILTY CLAY, trace sand

$e_0 = 1.51$

$W_0 = 59\%$

$\gamma = 16.4 \text{ kN/m}^3$

$P'_0 = 70 \text{ kPa}$

$P'_c = 250 \text{ kPa}$

$C_c = 0.86$

$C_r = 0.07$

$W_L = 48$

$W_p = 21$

$PI = 27$

FIGURE No: 507-C-1

HIGHWAY: 69

TOWNSHIP: SERVOS

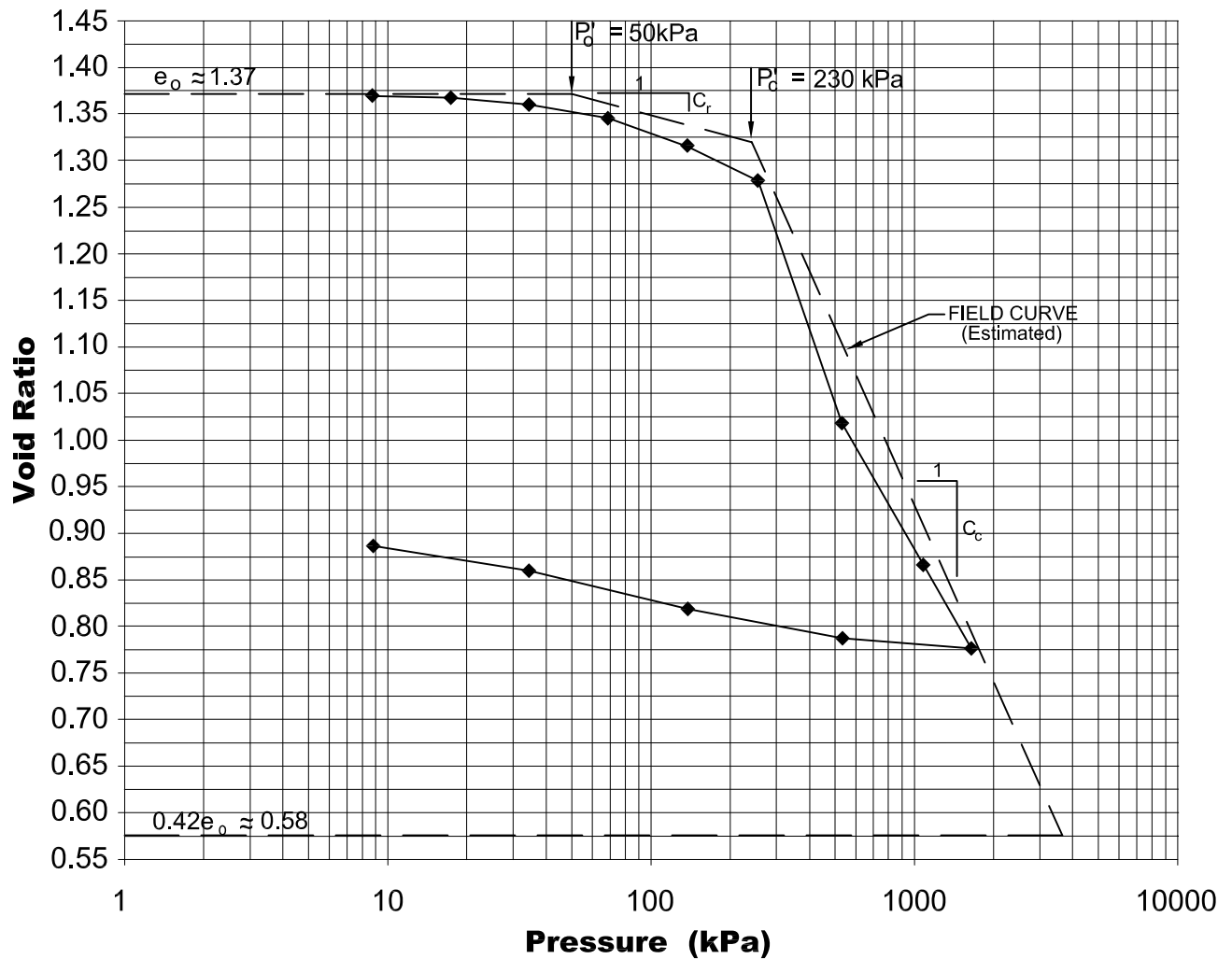
G.W.P. 5218-06-00



### Laboratory Consolidation Test Results

Swamp 507, Borehole 507-20, Sample 6  
Location 20+000, 18.8 m Rt., Depth 6.1 - 6.7 m

### Void Ratio versus Log of Pressure



SOIL TYPE: SILTY CLAY

$e_o = 1.37$

$W_o = 53\%$

$\gamma = 16.9 \text{ kN/m}^3$

$P'_o = 50 \text{ kPa}$

$P'_c = 230 \text{ kPa}$

$C_c = 0.63$

$C_r = 0.07$

$W_L = 47$

$W_p = 20$

$PI = 27$

FIGURE No: 507-C-2

HIGHWAY: 69

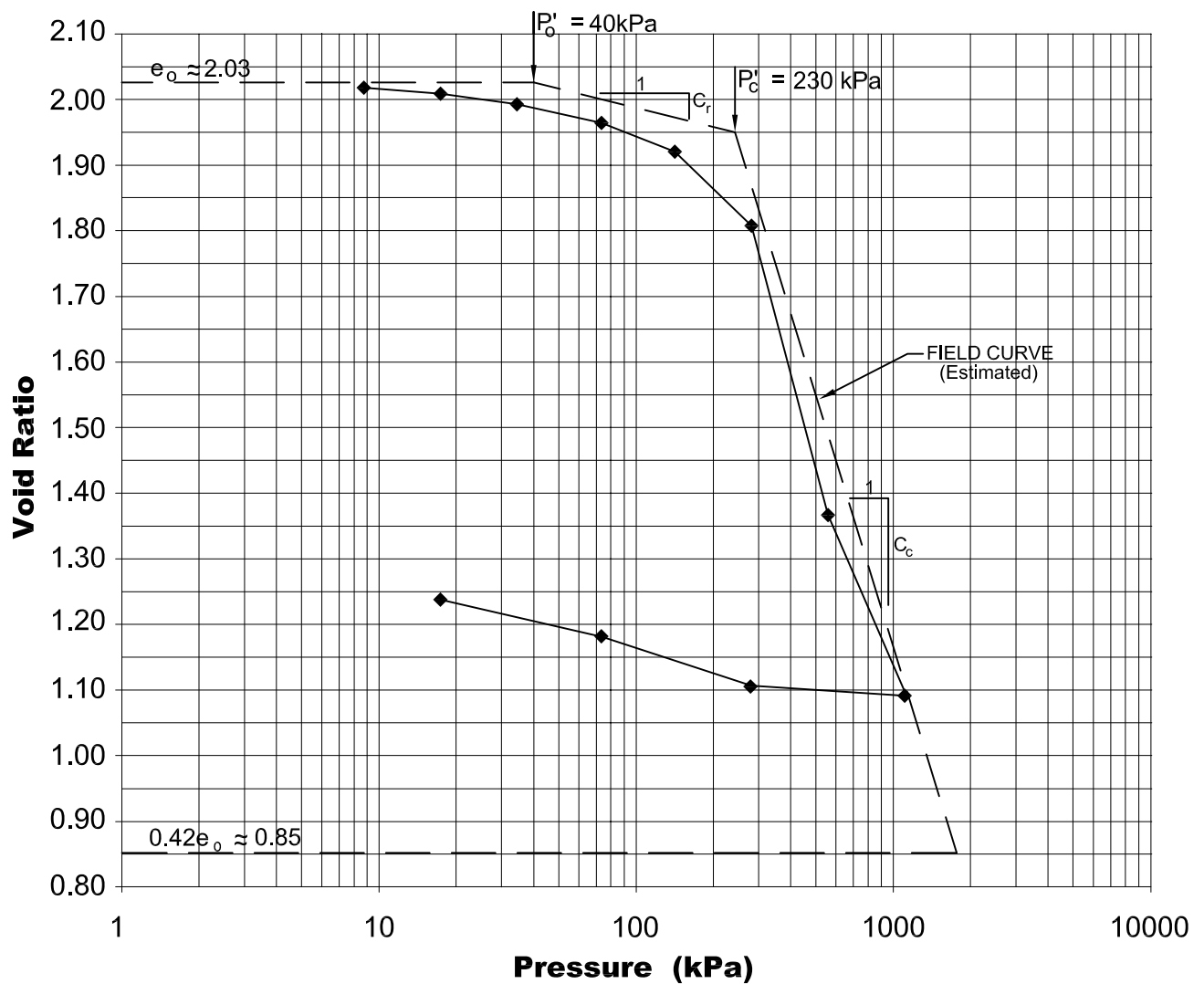
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 507, Borehole 507-24, Sample 6  
Location 20+050, 18.8 m Lt., Depth 4.6 - 5.2 m

### Void Ratio versus Log of Pressure



SOIL TYPE: CLAY, trace sand

$e_o = 2.03$

$W_o = 72\%$

$\gamma = 15.7 \text{ kN/m}^3$

$P'_o = 40 \text{ kPa}$

$P'_c = 230 \text{ kPa}$

$C_c = 1.27$

$C_r = 0.09$

$W_L = 53$

$W_P = 20$

$PI = 33$

FIGURE No: 507-C-3

HIGHWAY: 69

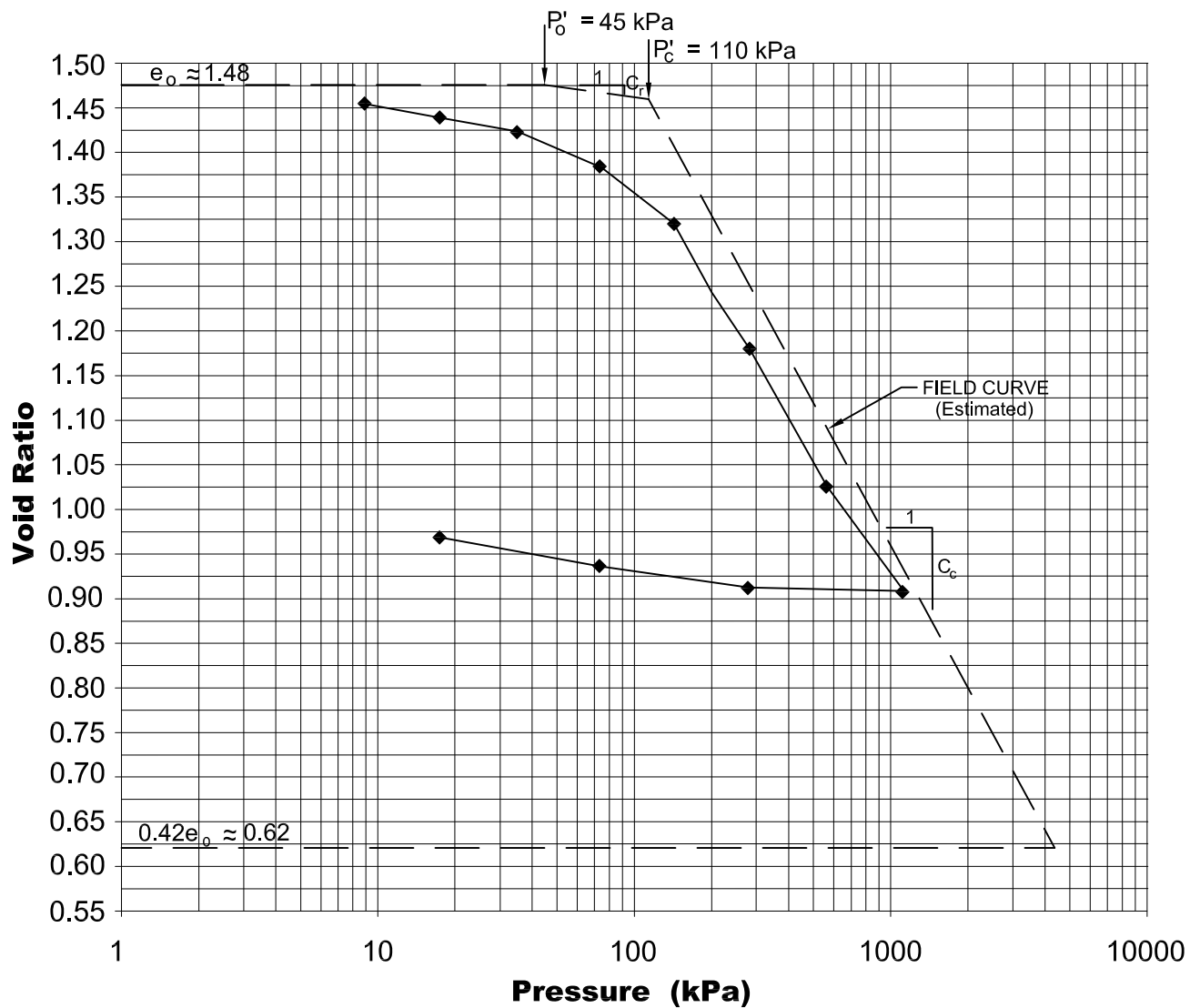
TOWNSHIP: SERVOS

G.W.P. 5218-06-00

### Laboratory Consolidation Test Results

Swamp 508, Borehole 508-16, Sample 6  
Location 20+250, 18.8 m Lt., Depth 6.1 - 6.7 m

### Void Ratio versus Log of Pressure



SOIL TYPE: SILTY CLAY, trace sand

$e_o = 1.48$

$W_o = 51\%$

$\gamma = 17.5 \text{ kN/m}^3$

$P'_o = 45 \text{ kPa}$

$P'_c = 110 \text{ kPa}$

$C_c = 0.53$

$C_r = 0.05$

$W_L = 39$

$W_p = 24$

$PI = 15$

FIGURE No: 508-C-1

HIGHWAY: 69

TOWNSHIP: SERVOS

G.W.P. 5218-06-00