

Granular Resources Inventory
- Mackenzie Valley -
Aklavik - 107 B E $\frac{1}{2}$
- Addendum -



D002983



GRANULAR RESOURCE INVENTORY - MACKENZIE

AKLAVIK E₂¹-ADDENDUM

NTS 107B E₂¹

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For: Department of Indian and
Northern Affairs

AKLAVIK E $\frac{1}{2}$ ADDENDUM

Field work carried out during July and August 1972 enables a review of the evaluation of granular resources of the Aklavik E $\frac{1}{2}$ map area.

Granular deposits were visited, evaluated and soil samples were collected and tested (see grain size curves which accompany this addendum). Reference to samples, from which the textural data were derived, are given by station and sample number. Cross reference with the "Tabular summary" of the Aklavik E $\frac{1}{2}$ Granular Resources Inventory and U.T.M. grid system is included so that location of textural data can be established on the 1:125,000 scale Granular Resources map and on a 1:250,000 scale topographical map.

As previously reported in Granular Resource Inventory Report, good granular material exists in the area surrounding Eskimo Lakes (Granular Resource map area VII, VIII, IX, X, XI, XIV, XV) and in the northwest portion of the map area (area XII, XIII). These large coarse granular deposits have less than 20% silt and clay material. The deposits have relatively high relief and low ground ice content. The granular deposits of the southern part of the map area are smaller and have a high proportion of sand-sized and fine grained material than the northern deposits.

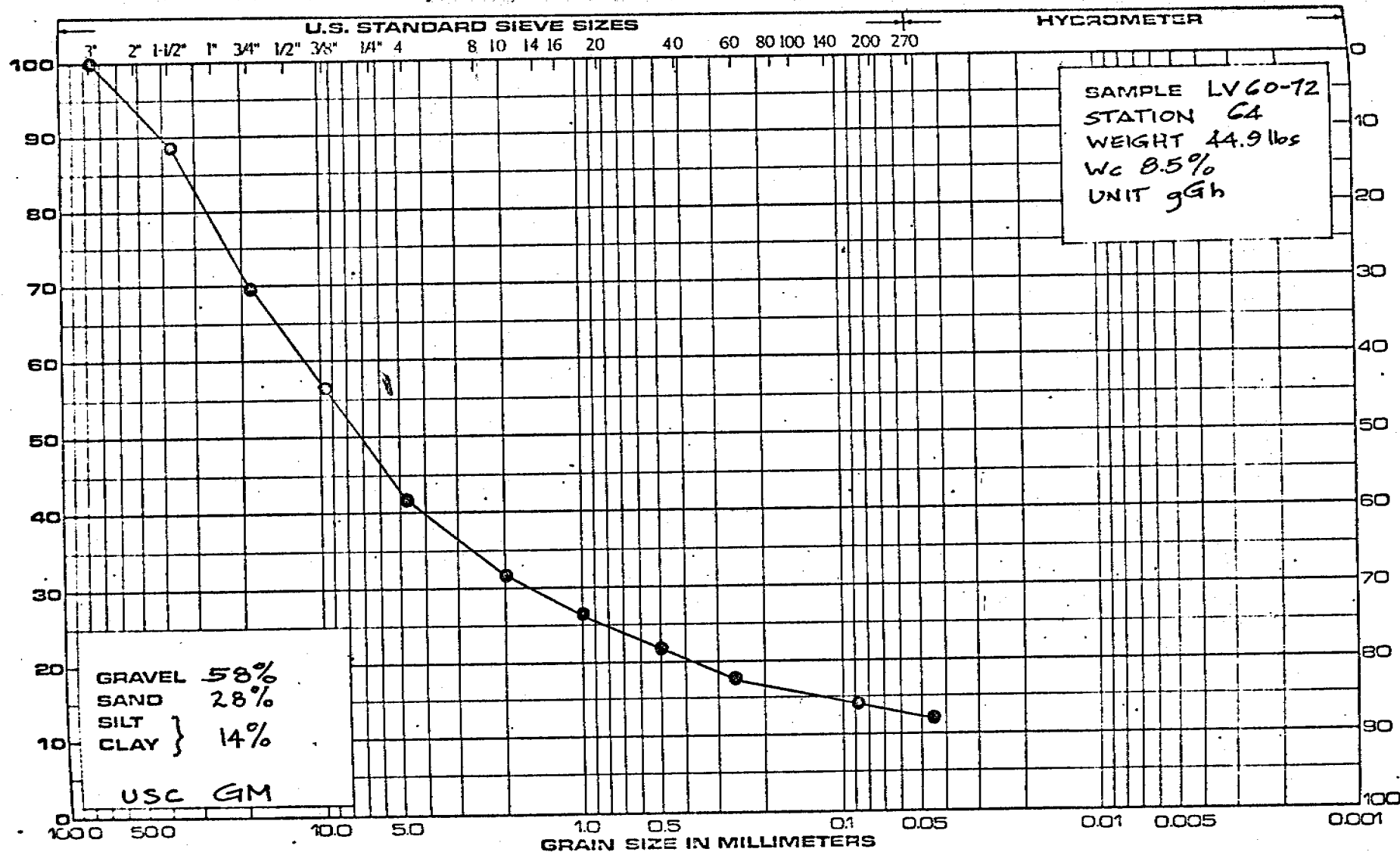
The morainal deposits in the middle of the map area consist of till with more than 70% silt and clay-sized material. These deposits would provide poor construction material because of the large amount of fines and the high ground ice content.

South of Inuvik, bedrock consists of carbonate and shale suitable for aggregate and subgrade material as was used on the Inuvik Airport runway and the Mackenzie Highway for the first few miles south of Inuvik.

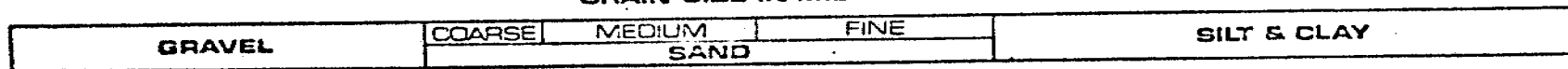
Station	Sample	Tabular Summary		Grid Refer U.T.M.	Comments
		Area	Unit		
64	LV60-72	III(c)	gCh	PL000567	boulders up to 3 feet in diameter on the surface
76	LV69-72	II	sCh	NL640582	predominantly silt instead of sand as previously reported
77	LV70-72	IV	sgG	NL809786	finer grained material than previously reported
78	LV71-72	IV(e)	Gm	NL938875	1½ feet gravel over sand and gravel
81	LV73-72	V	unmapped	NL976943	permafrost at 2 feet, cobbles up to 2" in diameter
82	LV74-72	V	unmapped	PM000012	kame or broken esker, sands and gravel at 2 feet
84	LV75-72	VIII(d)	kames	NM965249	kames on morainal till
85	LV76-72	-	unconsolidated Cretaceous material	NM410105	1½ feet pea gravel over silty sand
87	LV77-72	XIII(b)	gGp	NM334318	boulders up to 2 feet in diameter on surface
90	LV78-72	XIII(b)	gGpk	NM258408	
91	LV79-72	XIII(b)	gGp	NM192451	small cobbles frost sorted at the surface
95	LV83-72	XV	Mm	NM593077	morainal till
96	LV84-72	XV	Mm	NM620134	morainal till
97	LV85-72	XV	gGpk	NM690248	excellent gravel
99	LV86-72	XI(d)	gGk	NM594445	excellent gravel
119	LV106-72	XIII(a)	gGk	NM345491	good gravel
125	LV110-72	I(a)	gsGp	NL536833	Inuvik gravel pit

CUMULATIVE PERCENT PASSING

CUMULATIVE PERCENT RETAINED



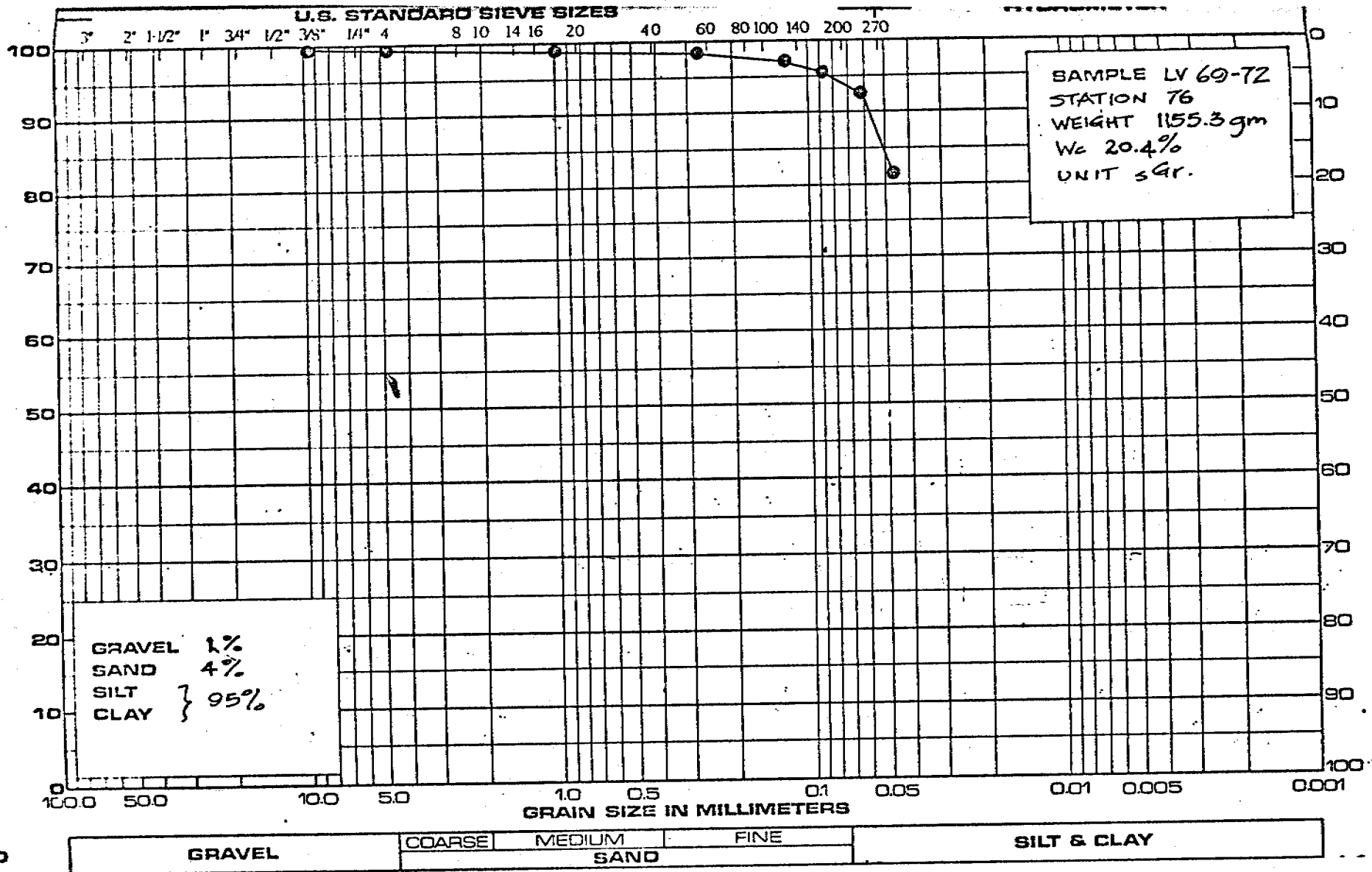
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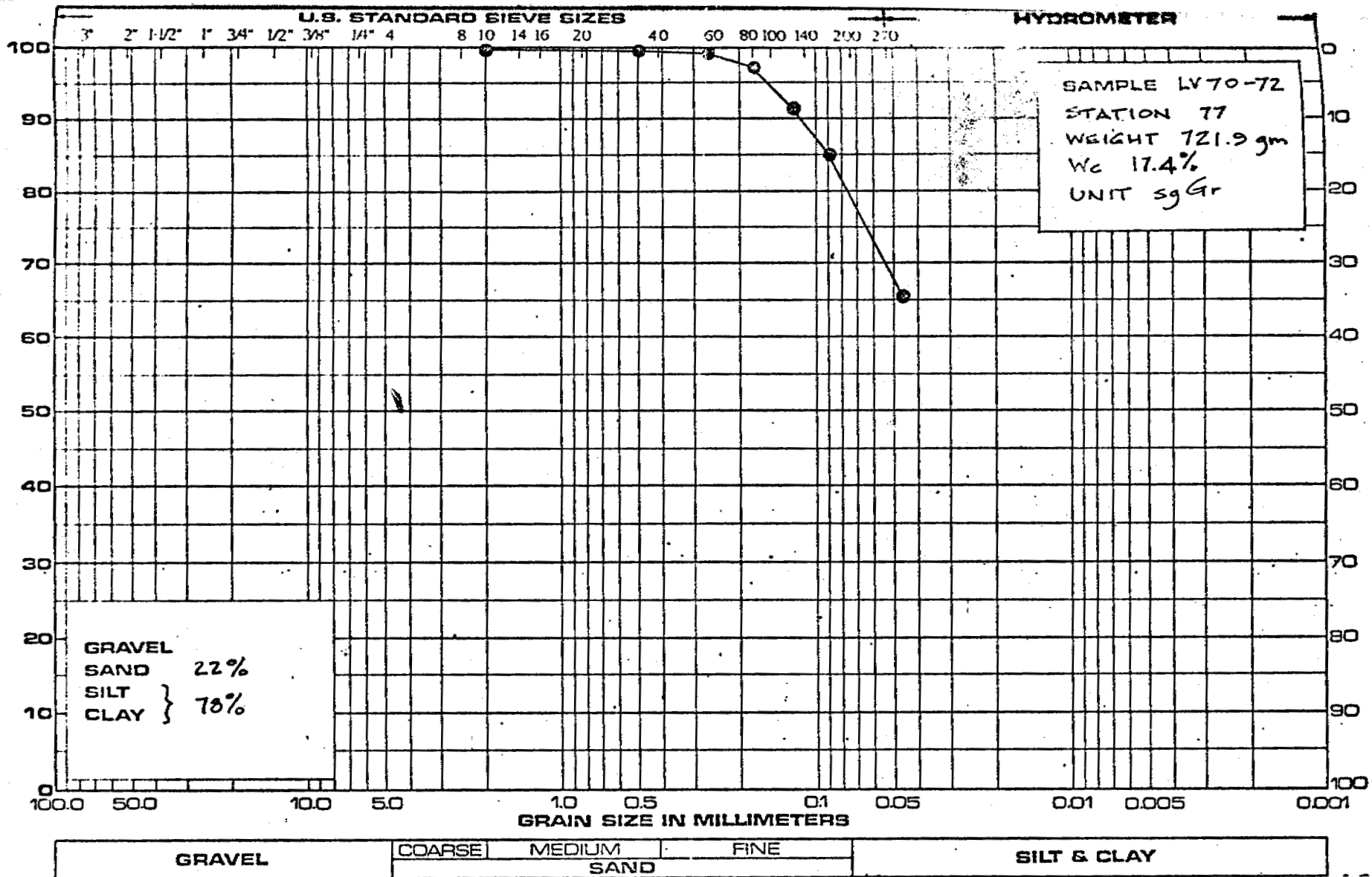


GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

PARTICLE SIZE DISTRIBUTION

CUMULATIVE PERCENT RETAINED





U.S. STANDARD SIEVE SIZES

HYDROMETER

CUMULATIVE PERCENT PASSING

CUMULATIVE PERCENT RETAINED

PARTICLE SIZE DISTRIBUTION

SAMPLE LV 71-72
STATION 78
WEIGHT 1267.6 gm
W_c 2.6%
UNIT Gm

GRAVEL 1%
SAND 75%
SILT } 24%
CLAY }

U.S.C. SM-SC

GRAIN SIZE IN MILLIMETERS

GRAVEL

COARSE

MEDIUM

FINE

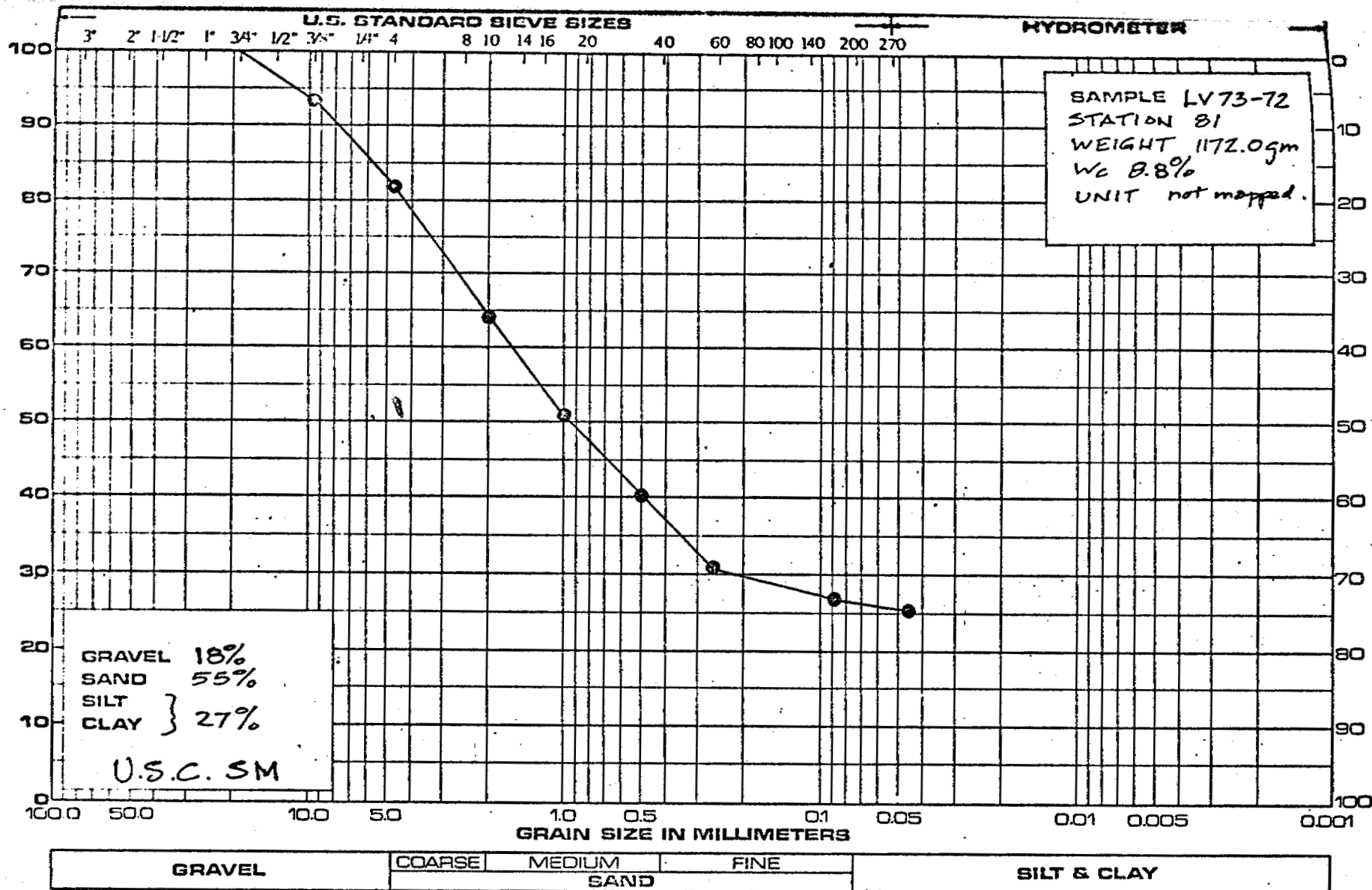
SAND

SILT & CLAY

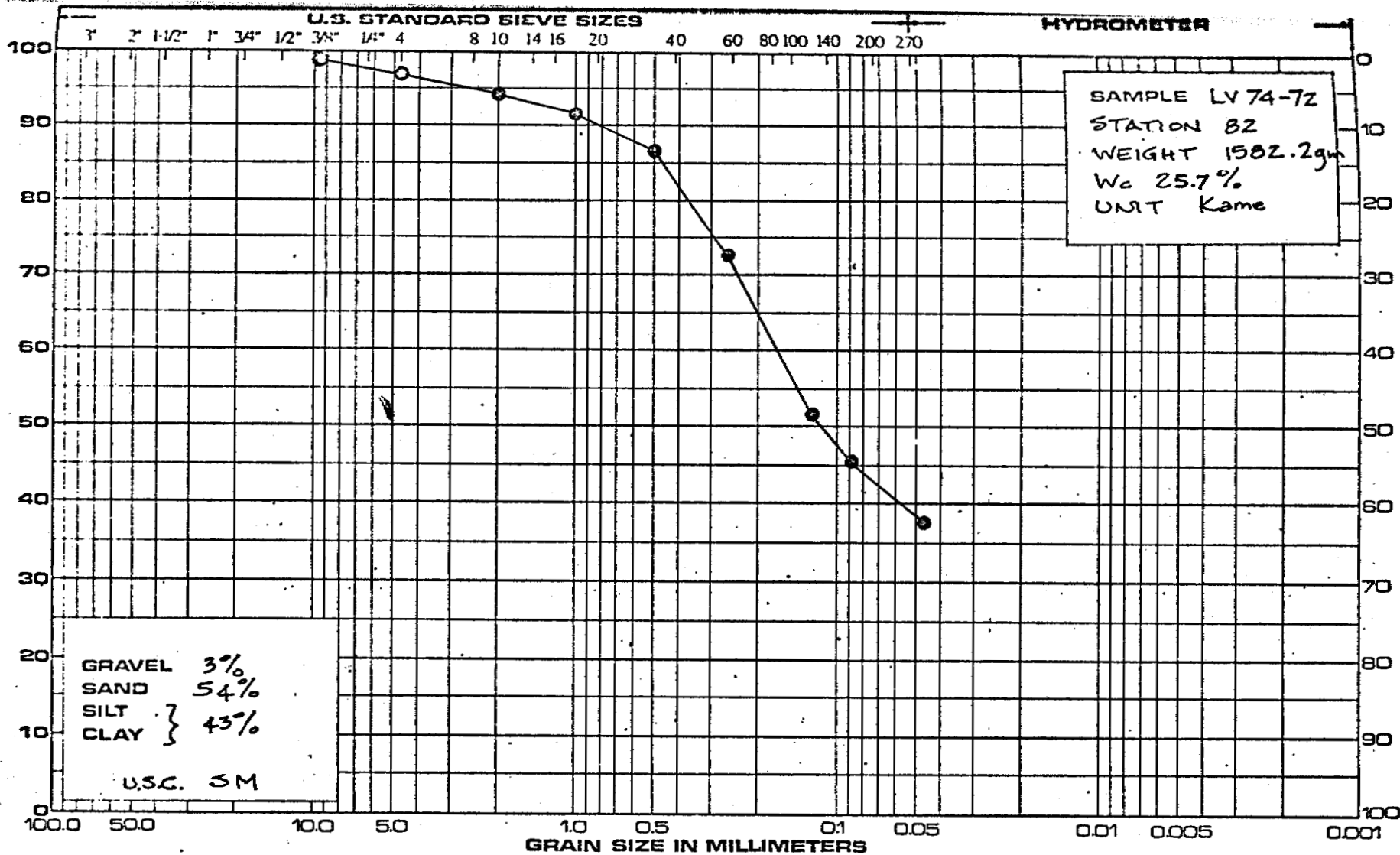


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GRAVEL	COARSE	MEDIUM	FINE	SILT & CLAY
	SAND			

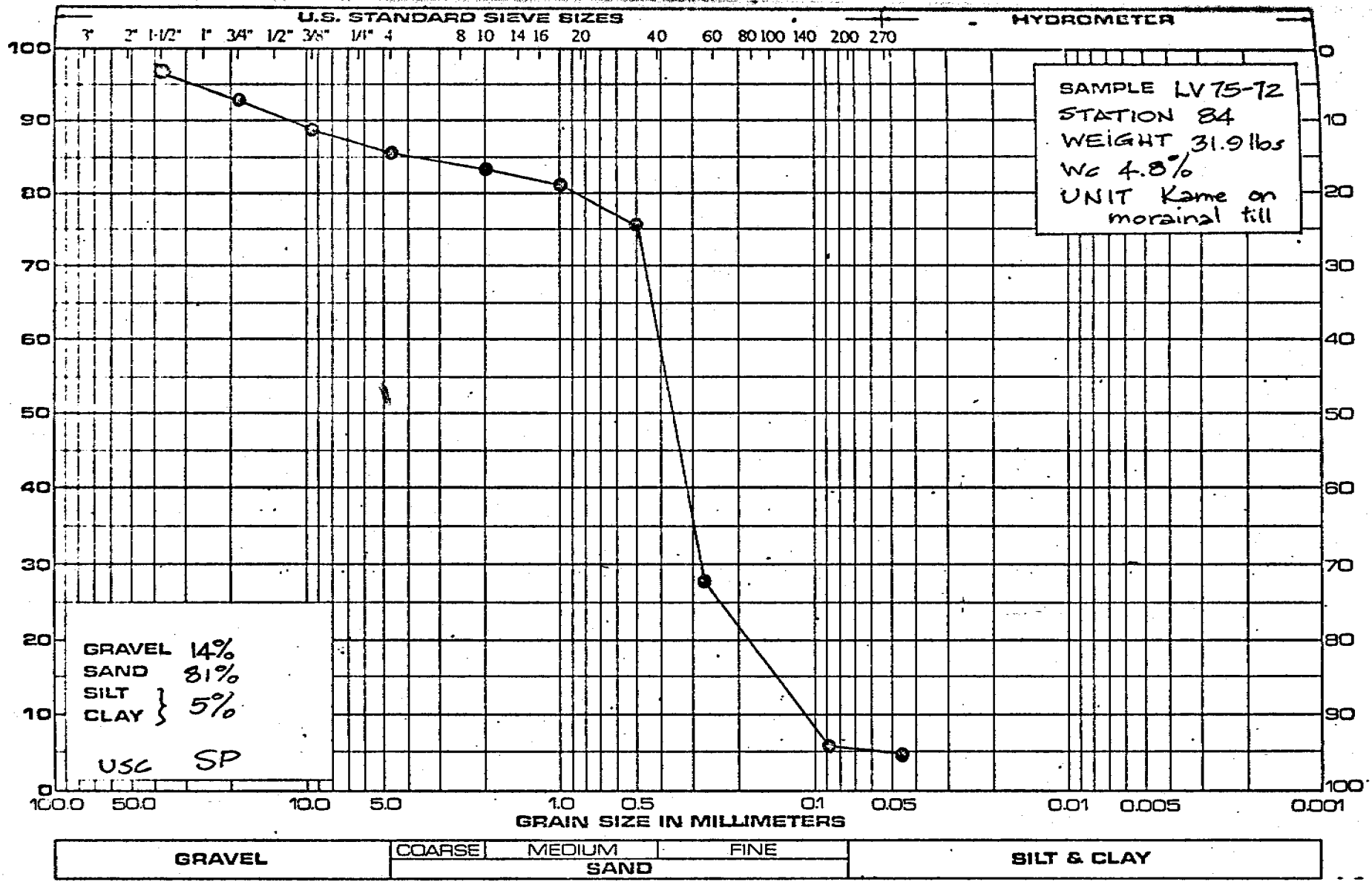


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PARTICLE SIZE DISTRIBUTION

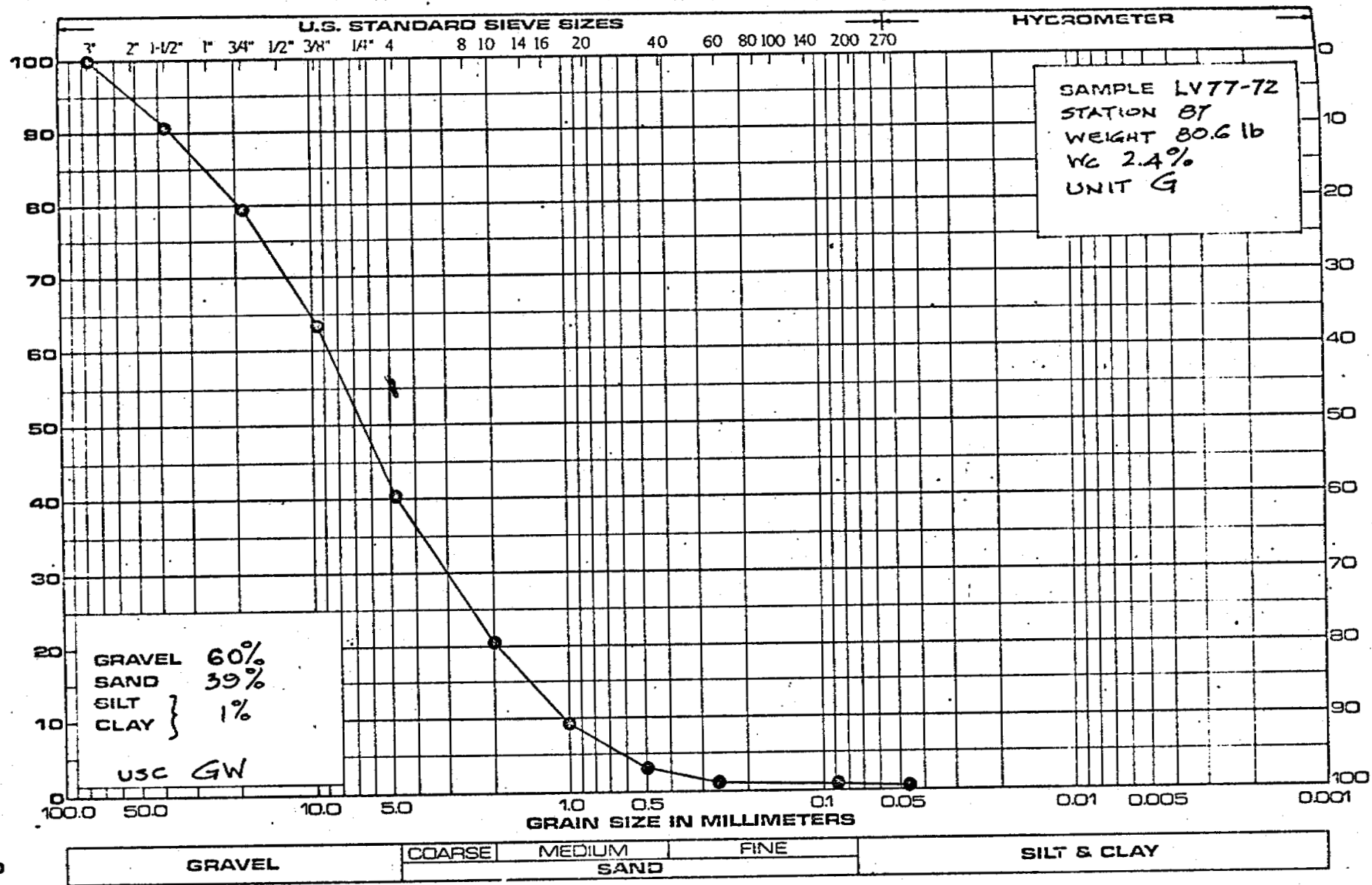
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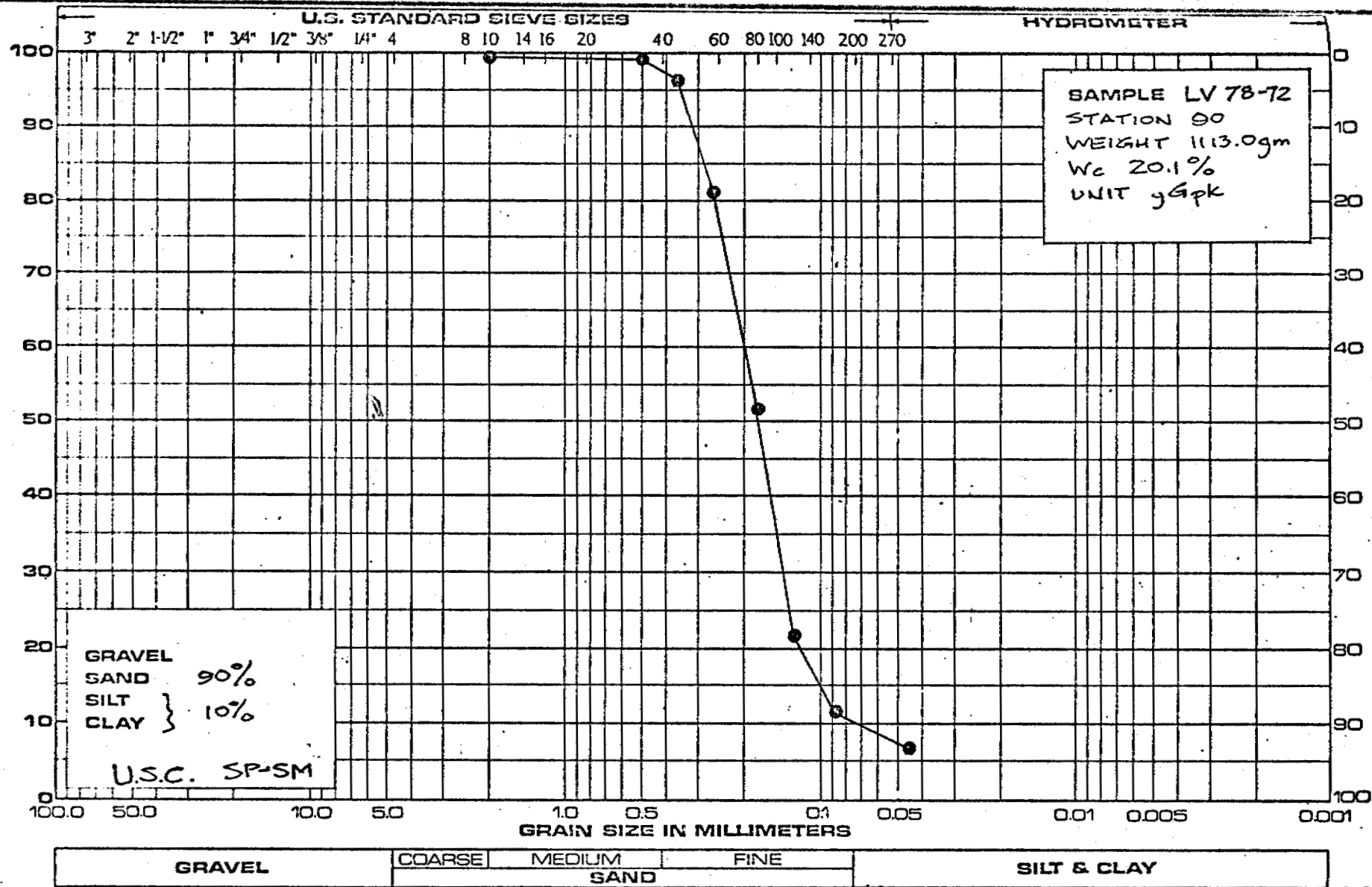
CUMULATIVE PERCENT RETAINED



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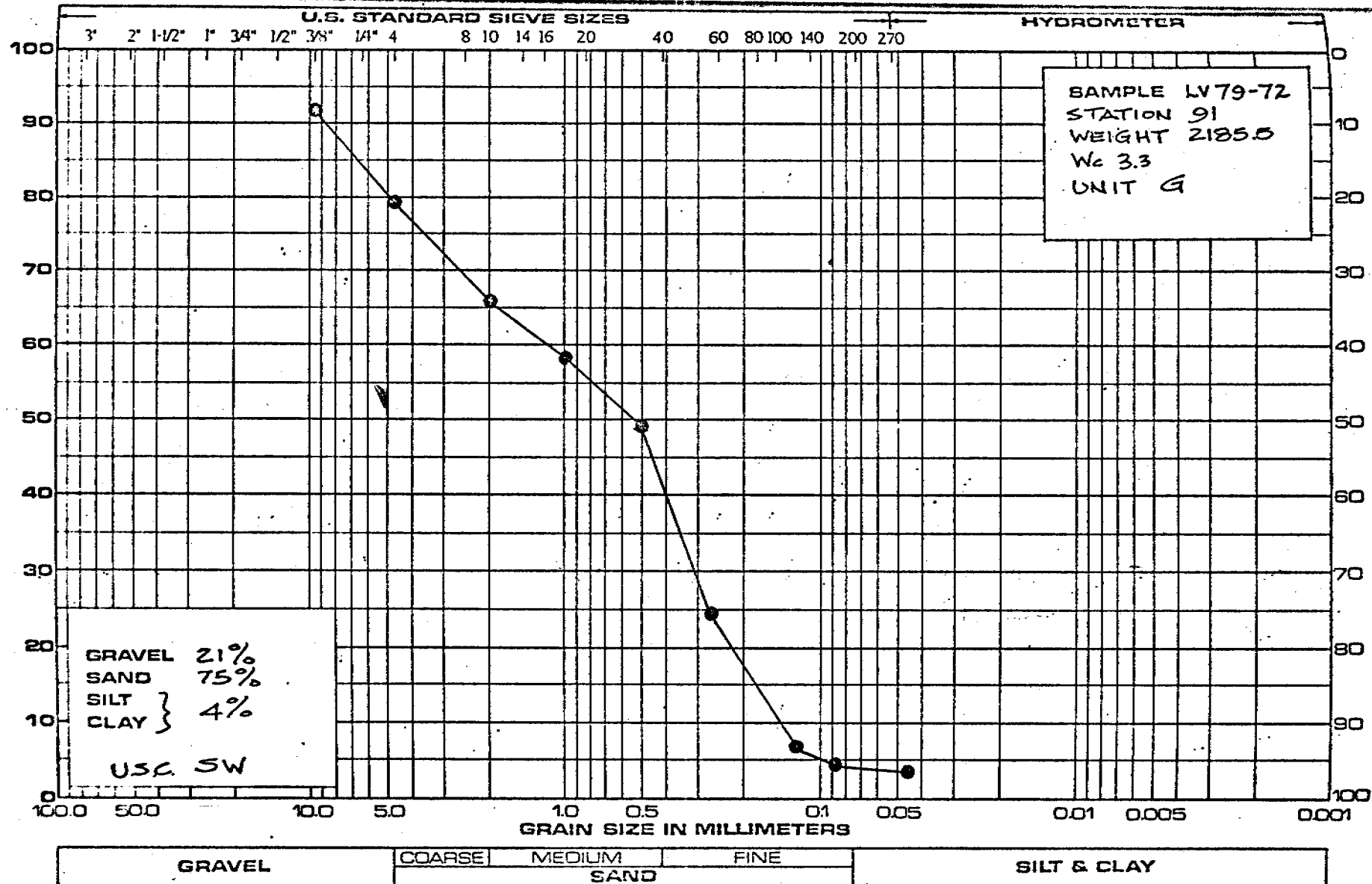
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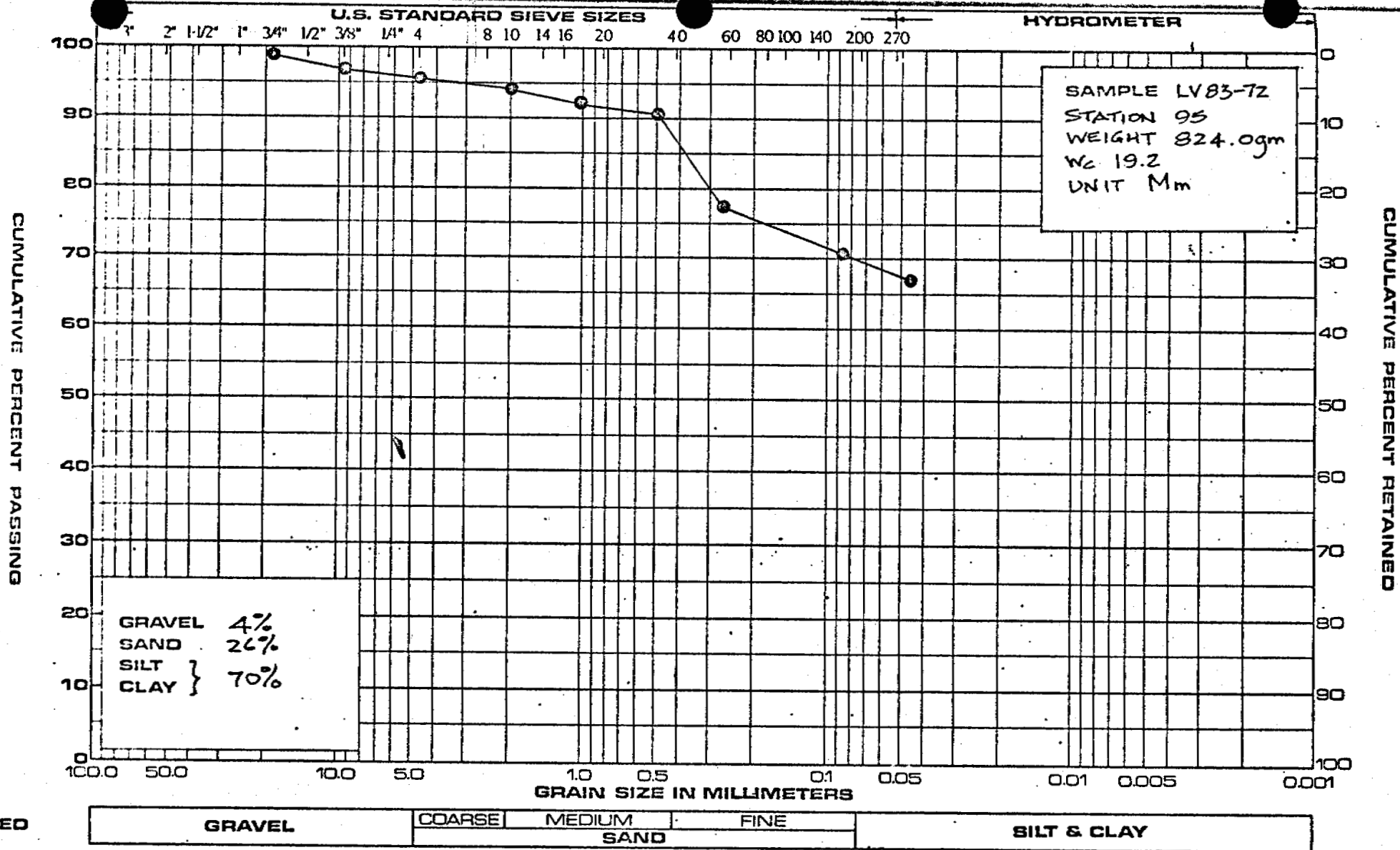
CUMULATIVE PERCENT PASSING

PARTICLE SIZE DISTRIBUTION
CUMULATIVE PERCENT RETAINED



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107B



CUMULATIVE PERCENT PASSING

CUMULATIVE PERCENT RETAINED

HYDROMETER

U.S. STANDARD SIEVE SIZES

3" 2" 1-1/2" 1" 3/4" 1/2" 3/8" 1/4" 4 8 10 14 16 20 40 60 80 100 140 200 270

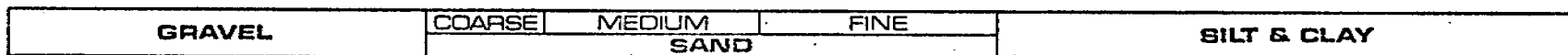
SAMPLE LV 84-72
STATION 96
WEIGHT 925.5 gm
W_c 34.7%
UNIT till

GRAVEL 1%
SAND 7%
SILT } 92%
CLAY }

GRAIN SIZE IN MILLIMETERS

100.0 50.0 10.0 5.0 1.0 0.5 0.1 0.05 0.01 0.005 0.001

UNIFIED



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U.S. STANDARD SIEVE SIZES

HYDROMETER

PARTICLE SIZE DISTRIBUTION

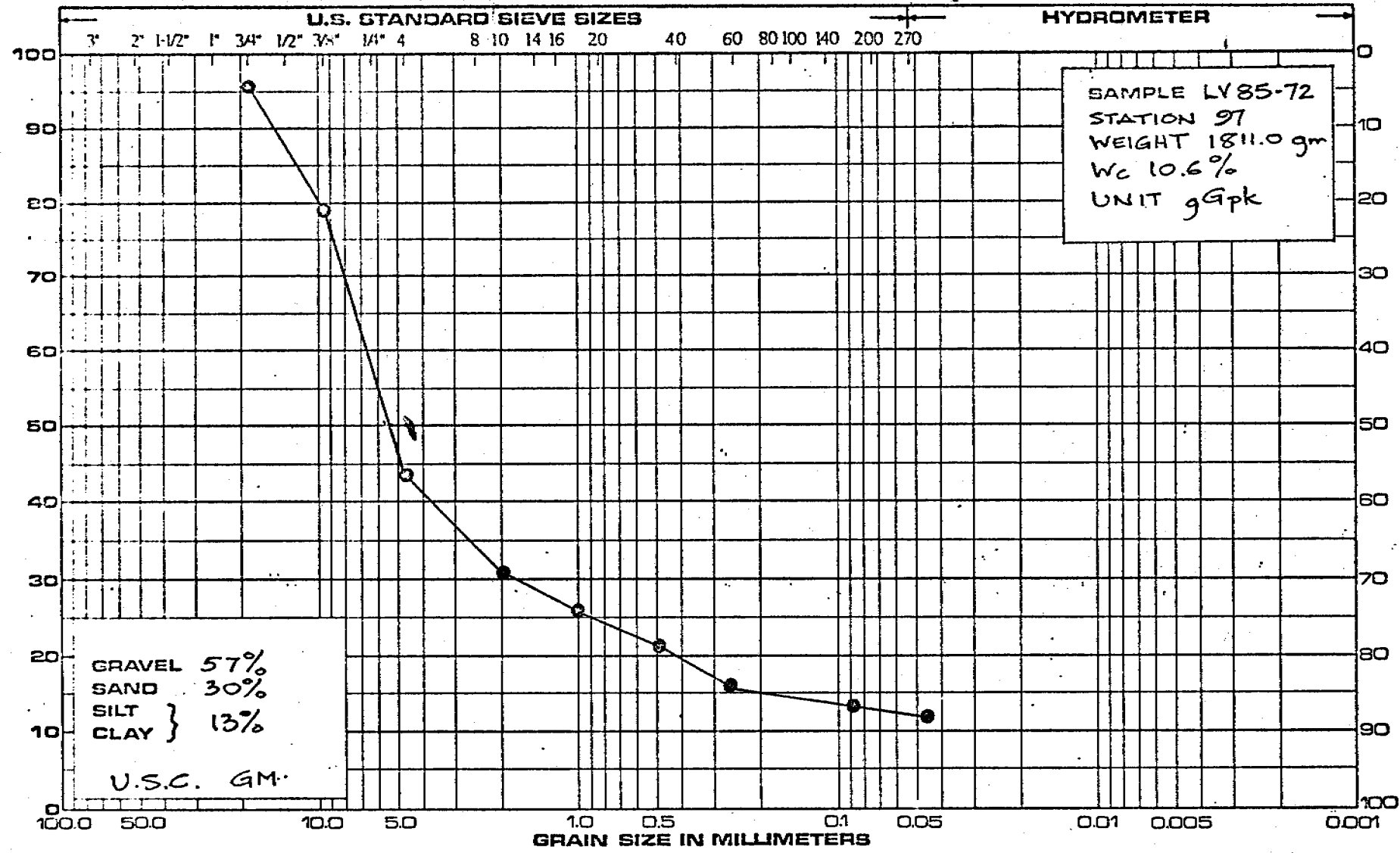
CUMULATIVE PERCENT RETAINED

SAMPLE LV85-72
STATION 97
WEIGHT 1811.0 gm
W_c 10.6%
UNIT gGpk

CUMULATIVE PERCENT PASSING

GRAVEL 57%
SAND 30%
SILT } 13%
CLAY }

U.S.C. GM.

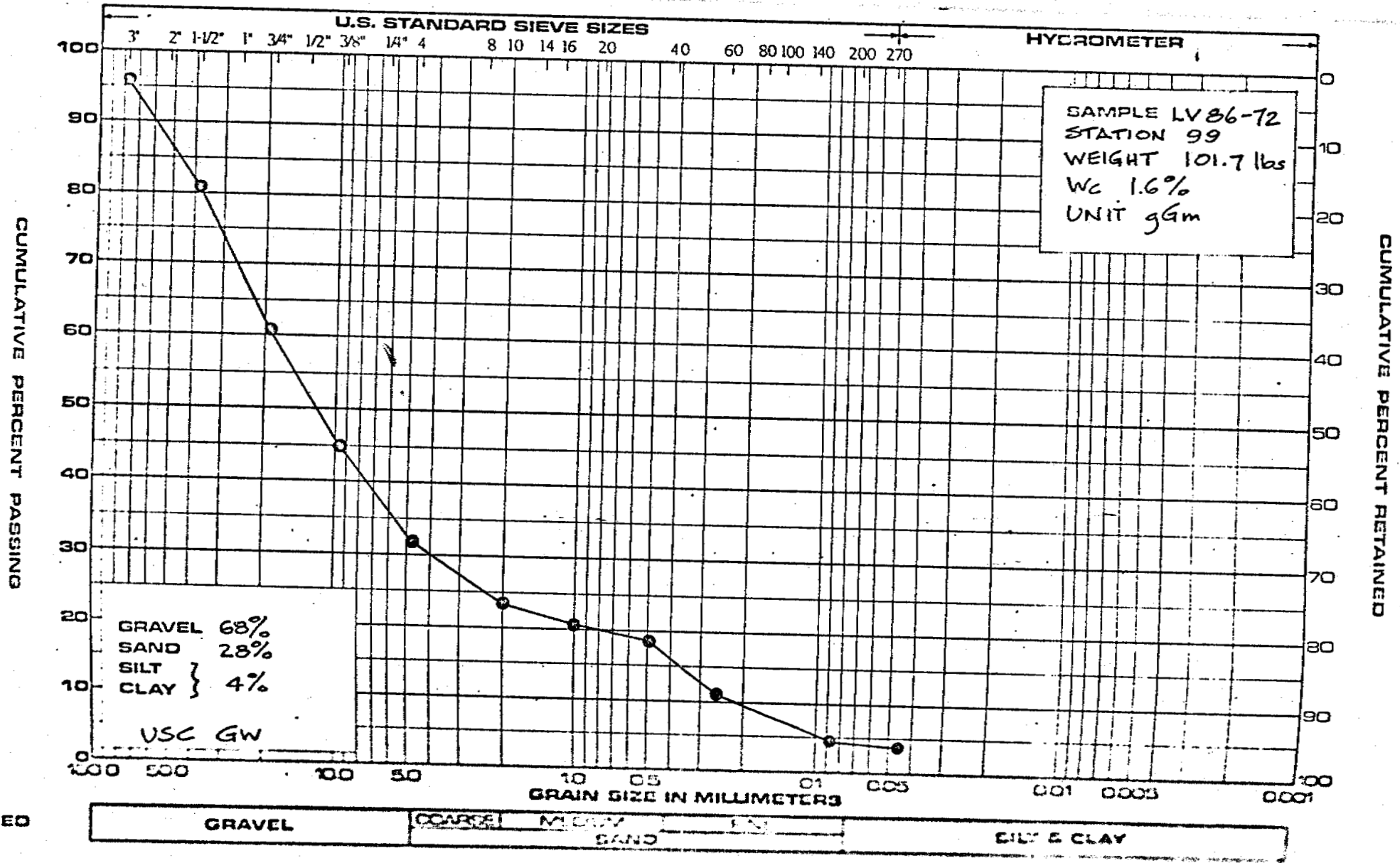


GRAVEL	COARSE	MEDIUM	FINE	SILT & CLAY
	SAND			



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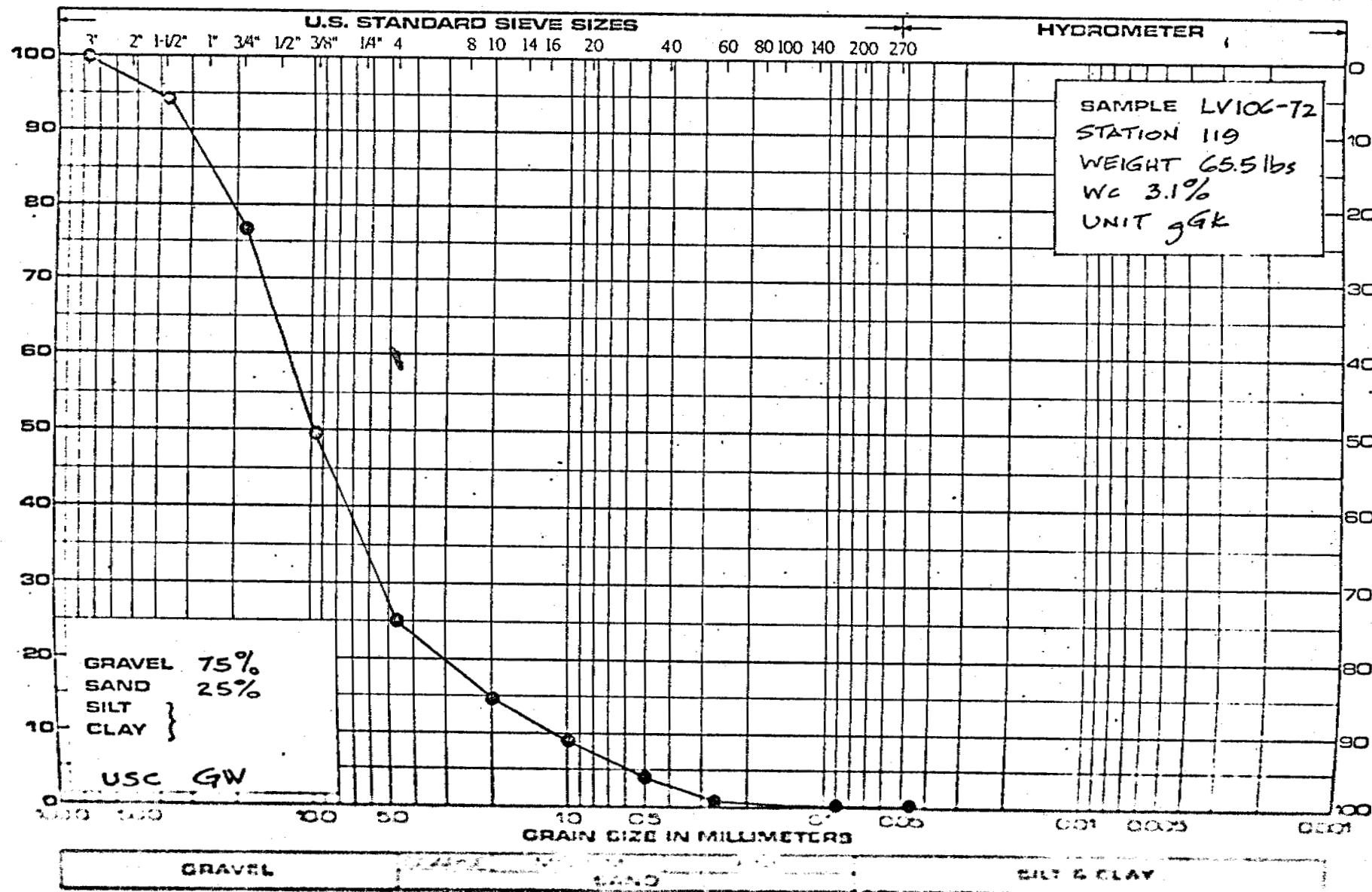
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PARTICLE SIZE DISTRIBUTION

CUMULATIVE PERCENT PASSING

CUMULATIVE PERCENT RETAINED



PARTICLE SIZE DISTRIBUTION

CUMULATIVE PERCENT RETAINED

