

**GRANULAR RESOURCE INVENTORY - MACKENZIE**

**FORT NORMAN ADDENDUM**

**NTS 96Z C**

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**For: Department of Indian  
and Northern Affairs**



## FORT NORMAN NTS 96C ADDENDUM

Field work carried out during July and August 1972 enables some revision of the evaluation of granular resources of the Fort Norman map area. Although no major re-evaluation is warranted, the accompanying grain size curves permit reappraisal of some deposits and support the initial evaluation of others.

### Glaciofluvial Deposits, G

The glaciofluvial deposits east of the Mackenzie River and in the middle of the Fort Norman map area (area XVII, XIX) are predominantly sand and silt as opposed to the "abundant sand and gravel" previously reported (see grain size curves LV 12a, b, c - 72, LV 14-72). In the northwest and southeast corners of the map (area I, II, XIII, XV) the glaciofluvial deposits are coarse as previously reported (see grain size curves LV 25-72, LV 113-72). Sand and gravel, overlain by till and silt was found in the southeast corner of the map area at a depth of 70 feet.

The eskers consist of more sand and silt than previously reported (see grain size curves LV 11-72, LV 26b-72).

### Fluvial Deposits, F

The two fluvial deposits sampled (one at the mouth of the Redstone River and one 12 miles downstream from the Redstone River on the Mackenzie River, area X) are very coarse grained (see grain size curves LV 13-72, LV 15-72). From this information and other field observations, the material along the lower reaches of the Keele and Redstone Rivers and the material downstream from those rivers on the Mackenzie River could be used as sources of granular material. These deposits are relatively easily accessible during the winter.

**Eolian Deposits, E**

As reported previously, and as found with other eolian deposits of the Mackenzie Valley, the eolian deposits of the Fort Norman map area (area XXV, XXVI) are composed of poorly graded, fine sand (see grain size curves LV 9-72, LV 10-72).

An aerial reconnaissance of the west of the map area (area VI) verified that the Tertiary Hills area is a good source of granular material. The distance from the Mackenzie River (approximately 30 miles) and from areas of proposed construction activity limit the potential of the Tertiary Hills as a resource area.

TEXTURAL DATA

Samples, from which textural data were derived, were gathered during the summer of 1972 when spot checking of surficial and bedrock sources of granular materials was carried out.

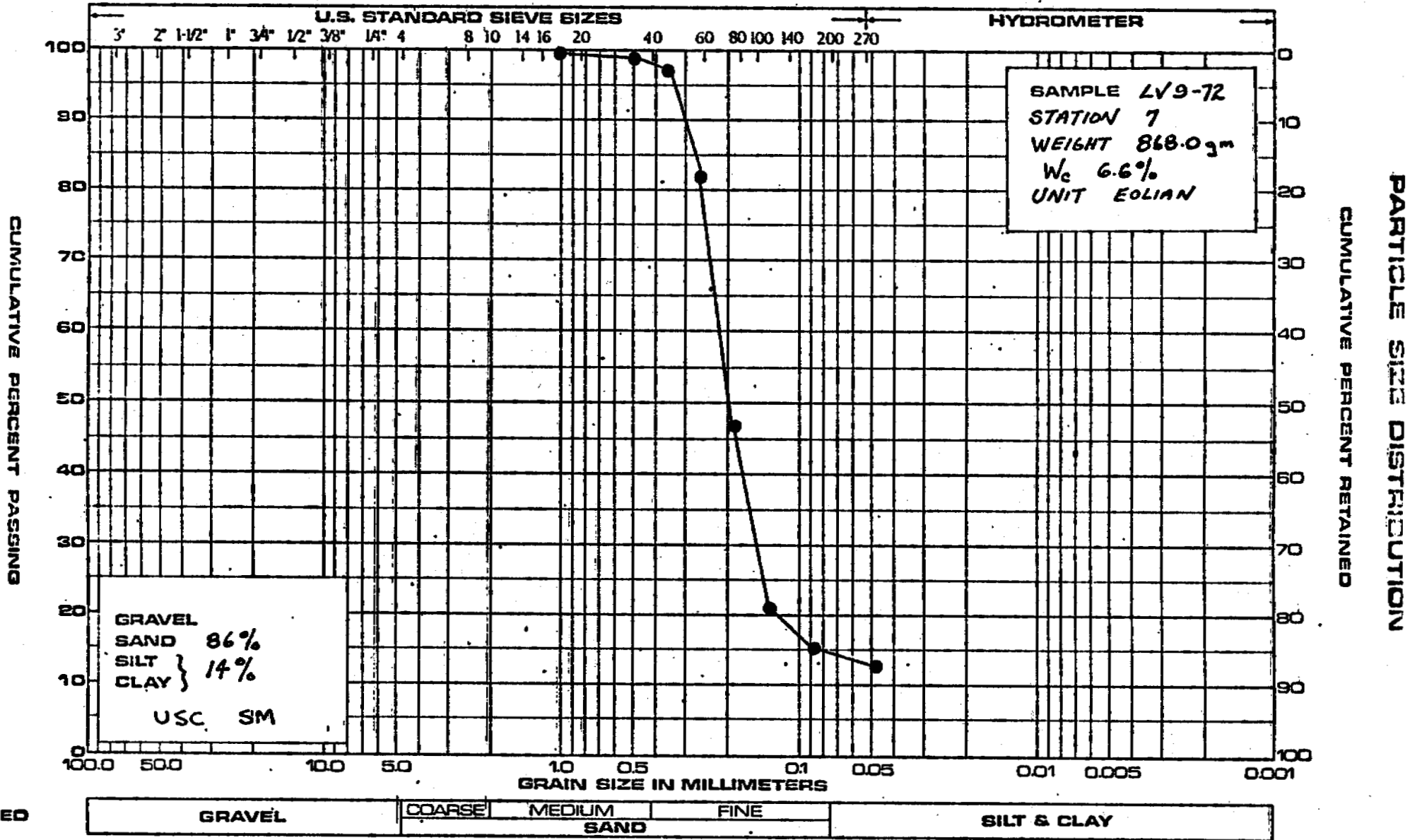
References to samples are by station and sample number.

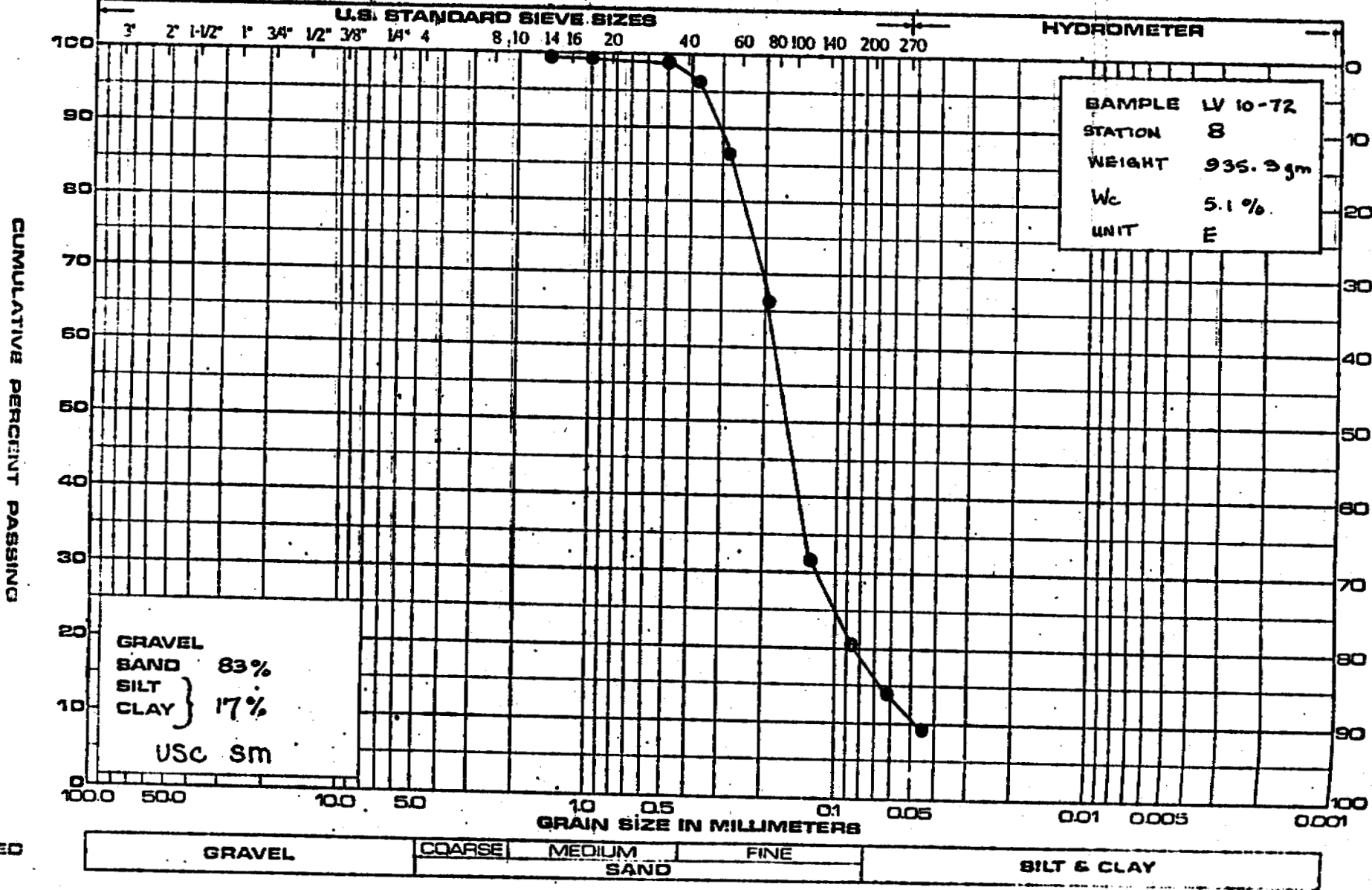
Cross reference with the "Tabular Summary" of the original Fort Norman Report and U.T.M. grid is included so that location of data on the 1:125,000 scale Granular Resource Map and on the 1:250,000 scale Topographical Map may be established.

SAMPLE LOCATIONS

FORT NORMAN REVISION

STA	SAMPLE	TABULAR AREA	SUMMARY UNIT	GRID REFER UTM
7	LV 9-72	XXVI	colian	CH918030
8	LV 10-72	XXVI	colian	DG000992
9	LV 11-72	XXI (b)	esker	DG193626
10	LV 12a-72	XIX (a)	Gfc	DG206494
10	LV 12b-72	XIX (a)	Gfc	DG206494
10	LV 12c-72	XIX (a)	Gfc	DG206494
11	LV 13-72	X	Fa	DG156393
12	LV 14-72	XVII (a)	Gfc	DG215336
13	LV 15-72	X	Fp	DG248300
24	LV 25-72	I (a)	Gf	CH695078
25	LV 26b-72	I (c)	esker	CH678058
128	LV 113-72	XIII	Gfc	DG322052



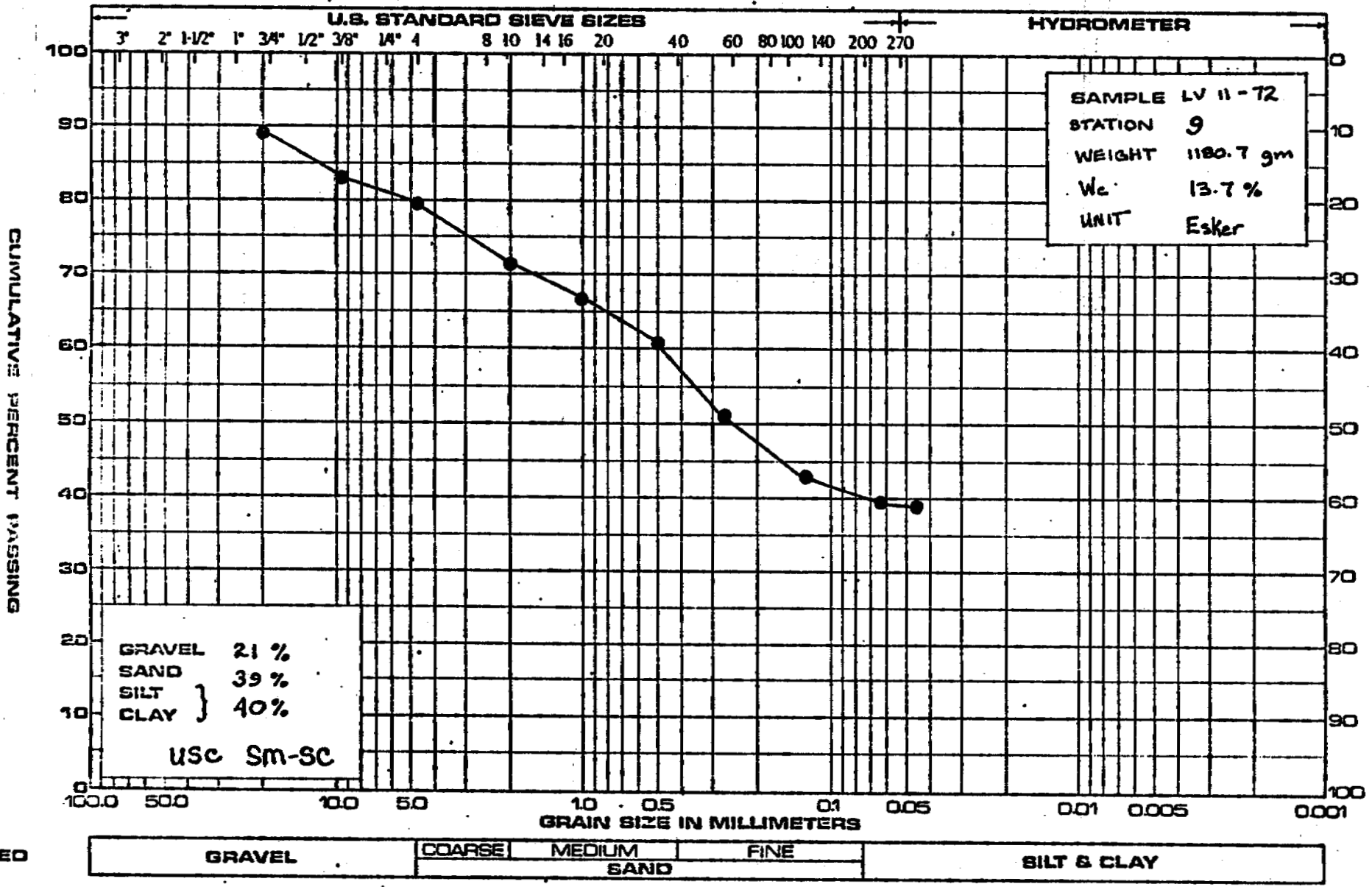


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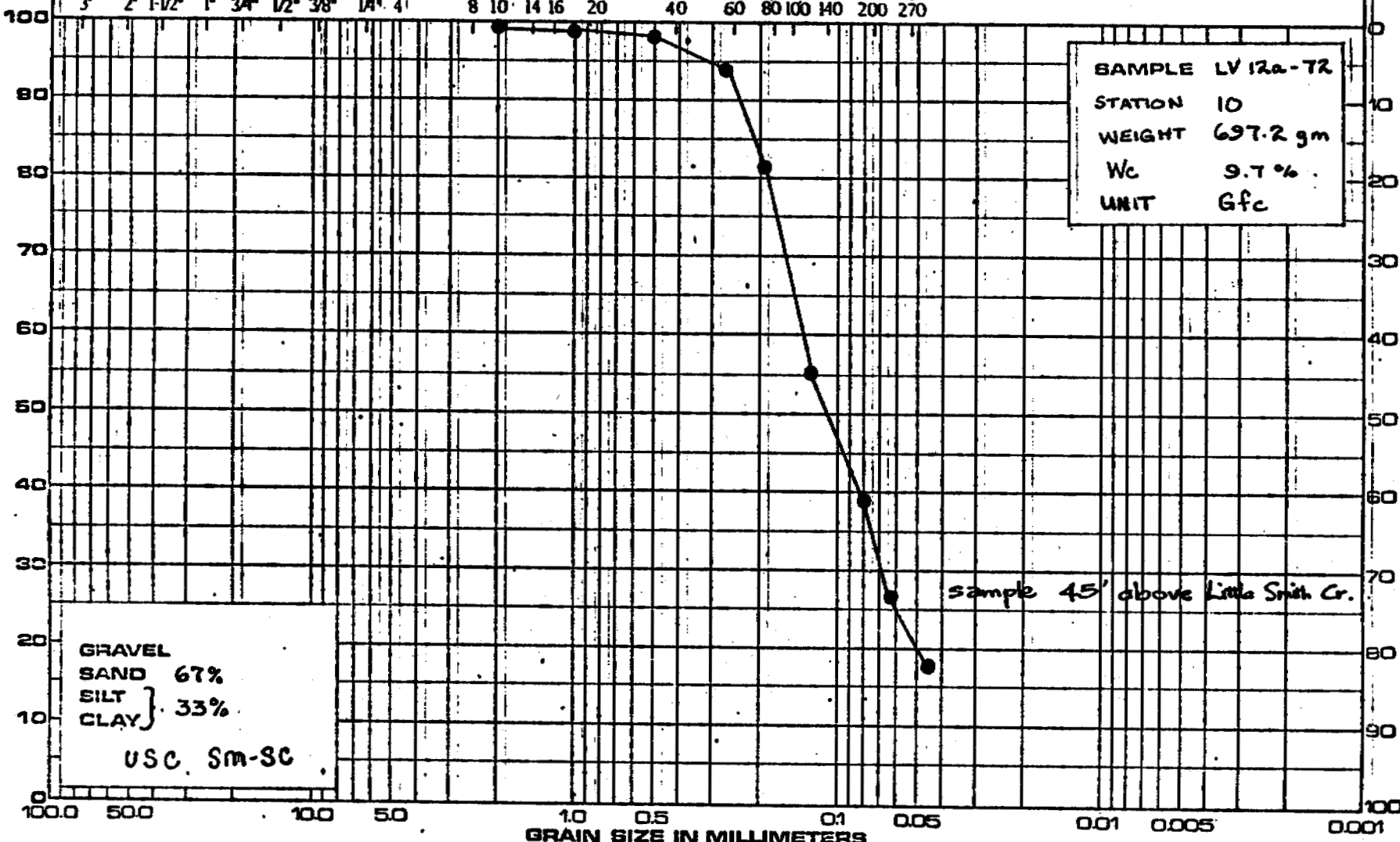
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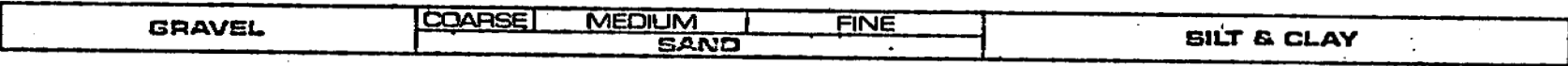
HYDROMETER



SAMPLE LV 12a-72  
 STATION 10  
 WEIGHT 697.2 gm  
 Wc 9.7%  
 UNIT Gfc

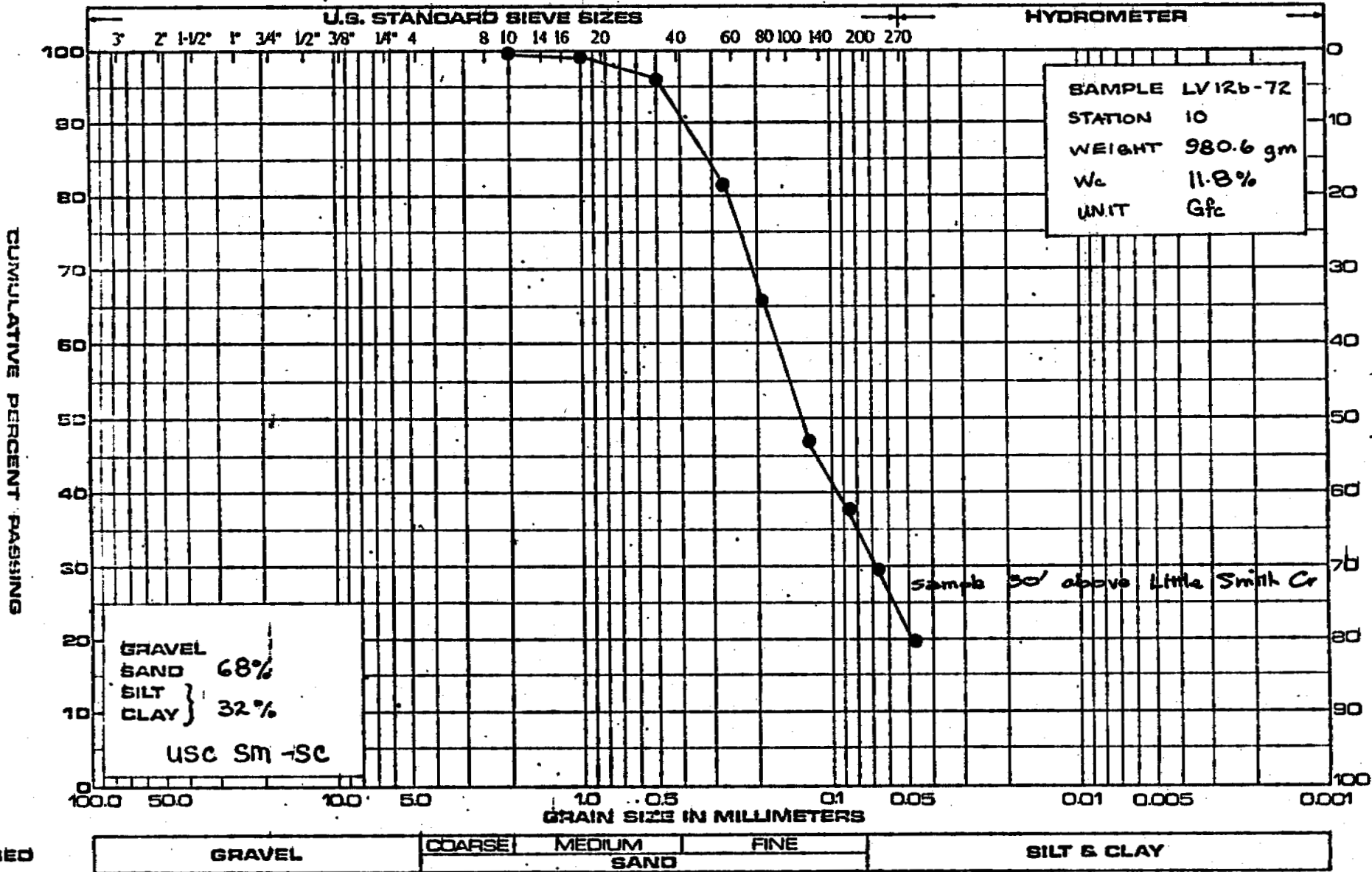
GRAVEL  
 SAND 67%  
 SILT } 33%  
 CLAY }  
 USC Sm-SC

sample 45' above Little Smith Cr.



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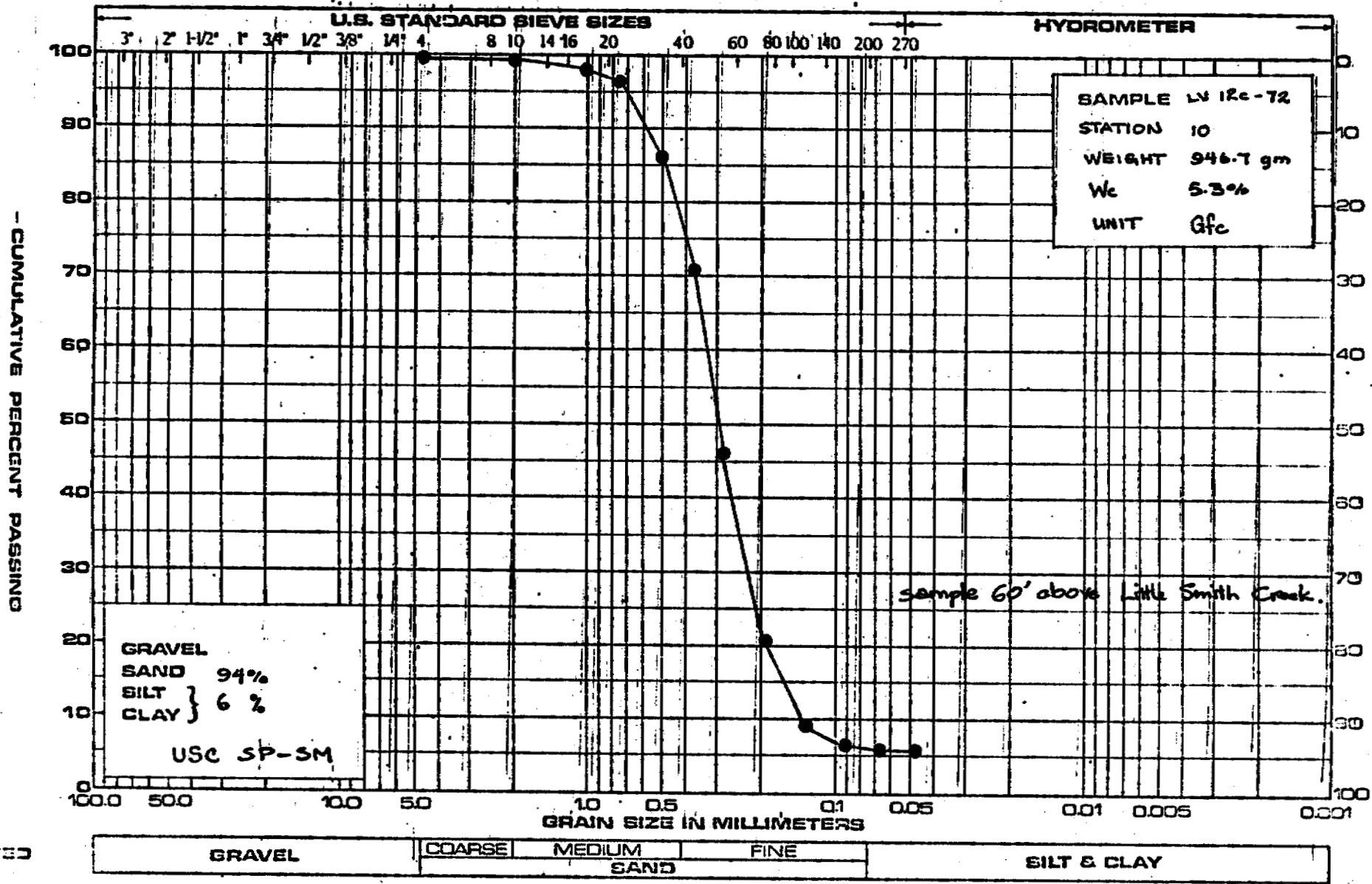


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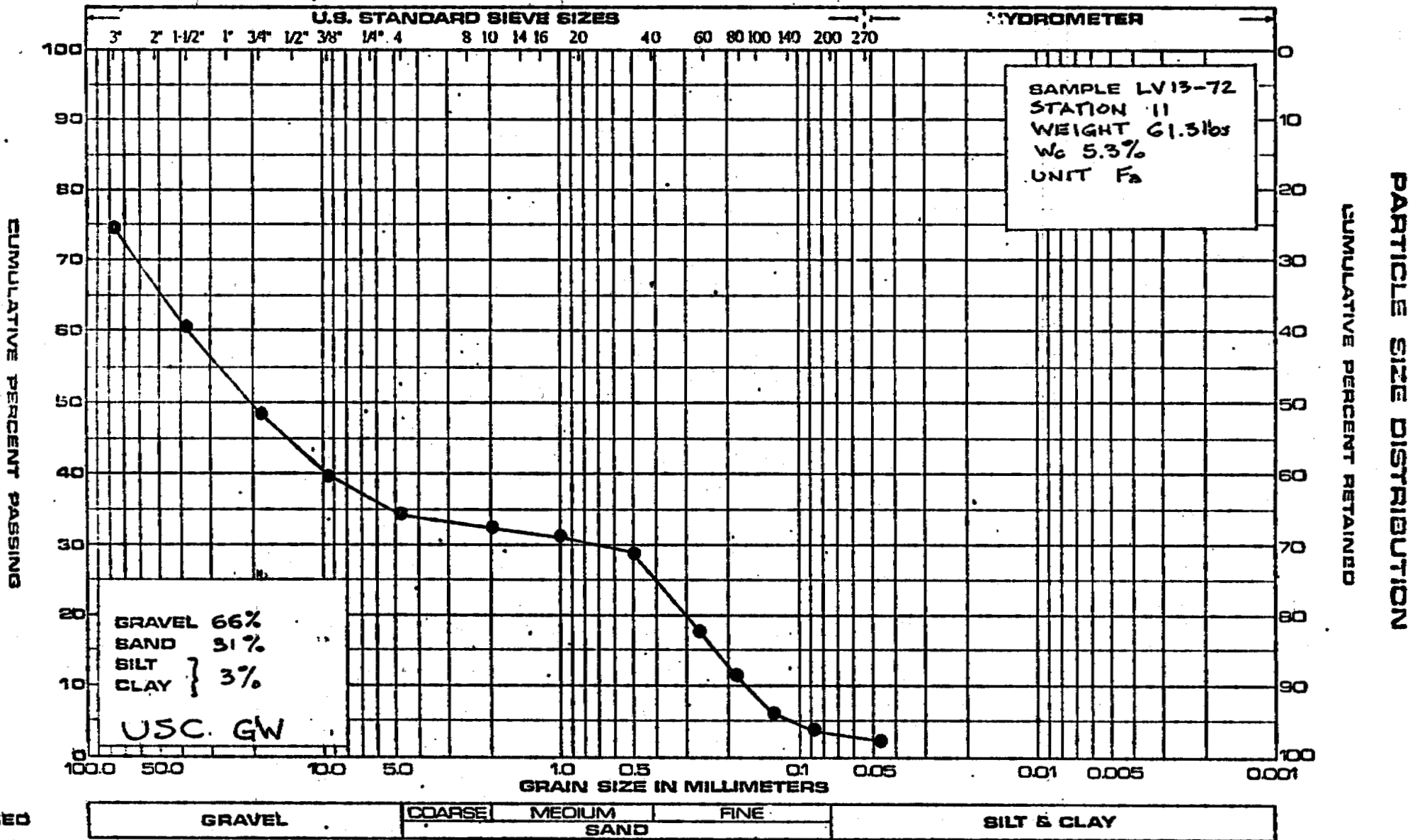
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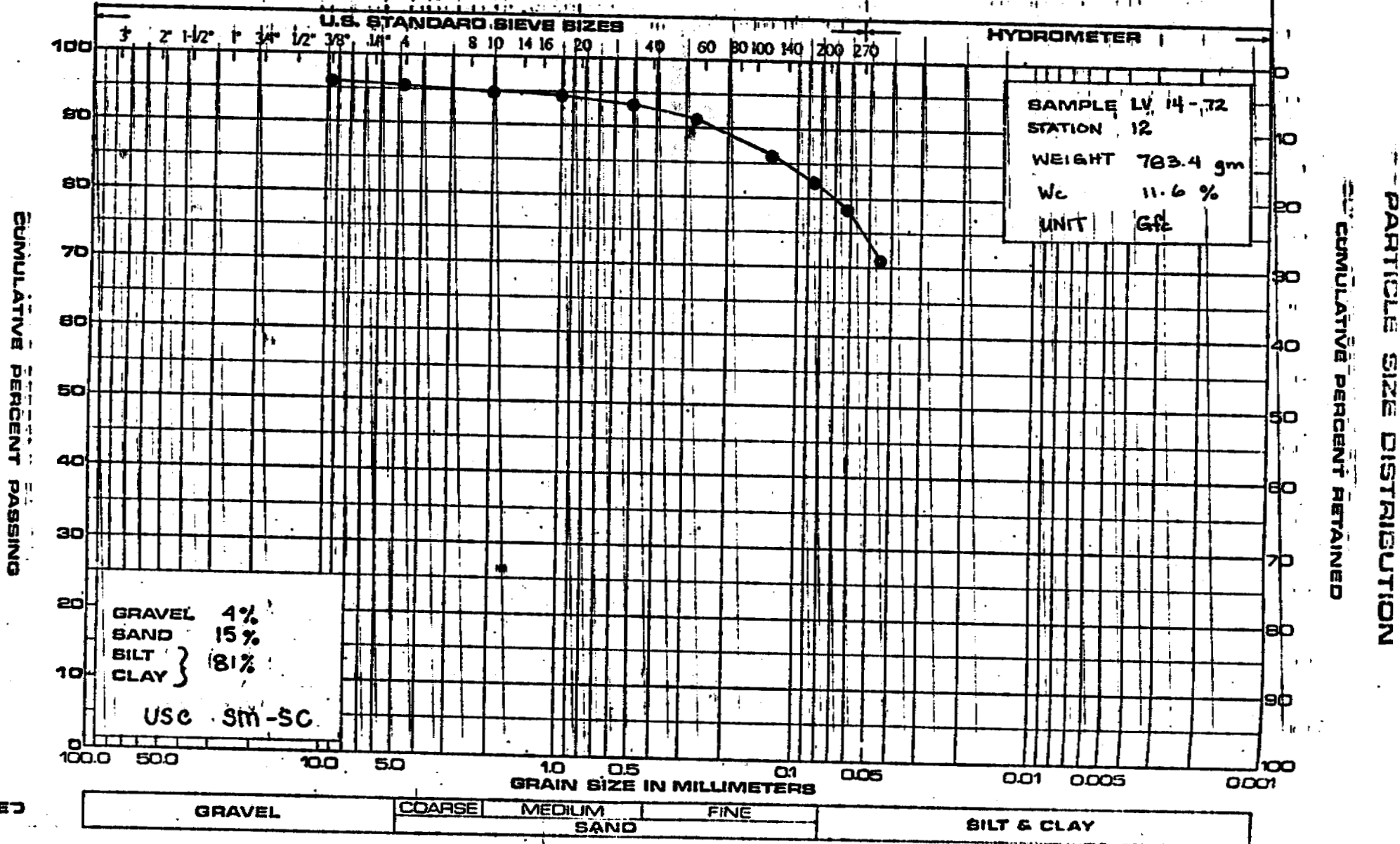


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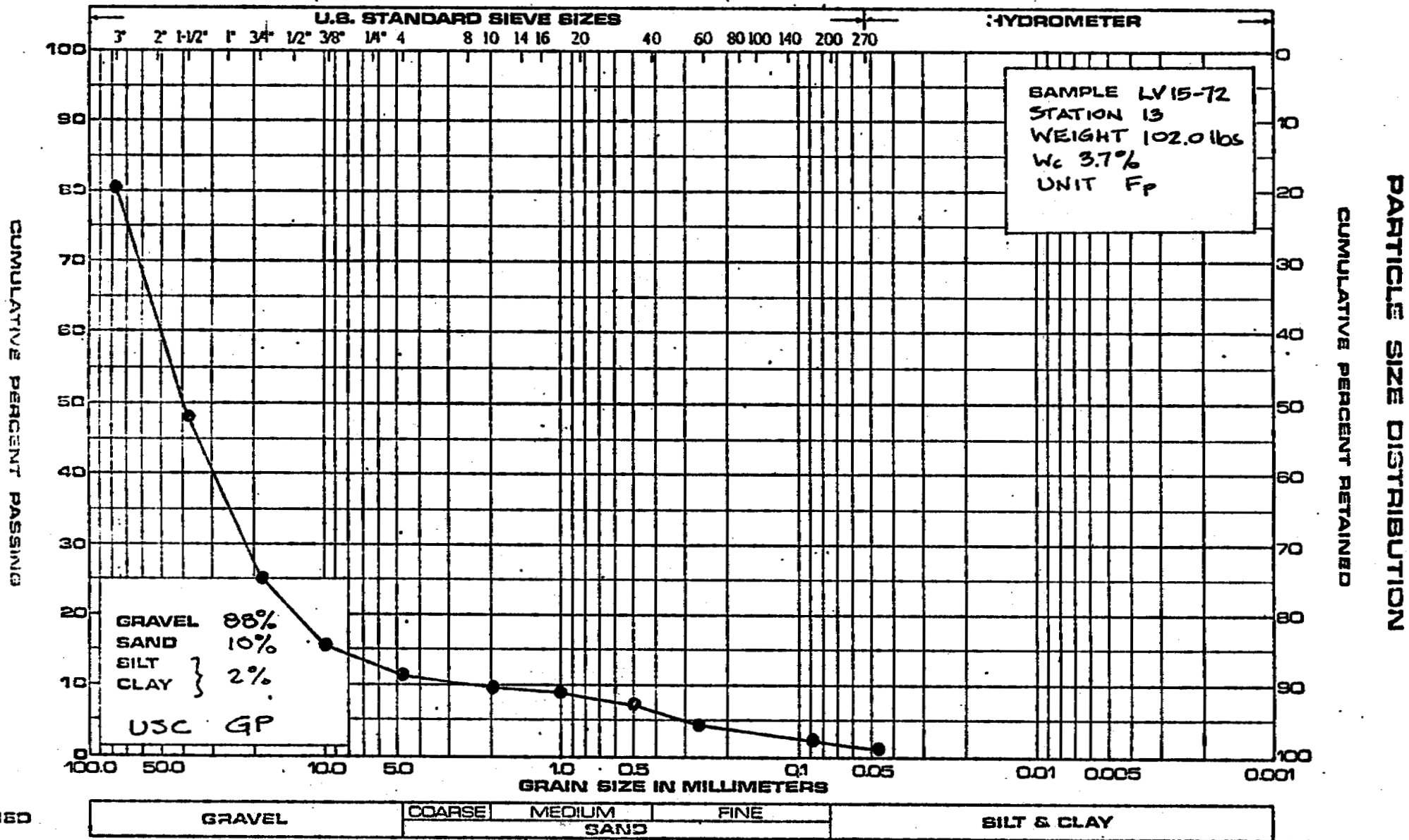


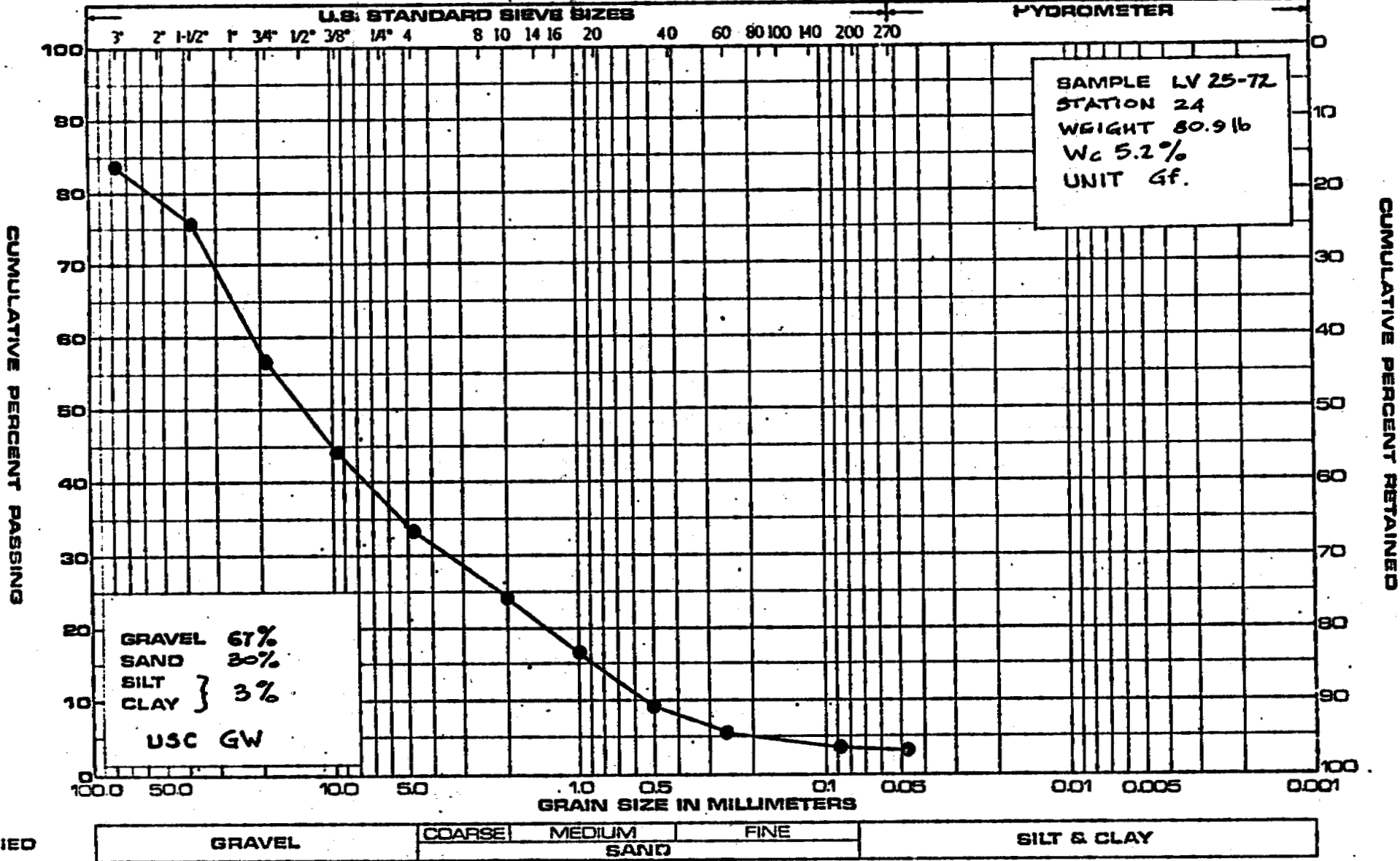
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