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M.L.V.

# State Department of Geology and Mineral Industries

1069 State Office Building  
Portland 1, Oregon

*Coos County*

## ANALYSIS OF DUNE SANDS NEAR HAUSER, OREGON

Samples were taken in four areas from a depth of 1 foot below the surface. Locations of the samples are as follows:

- (1) NE $\frac{1}{4}$  sec. 15, T. 24 S., R. 13 W.
- (2) Center west sec. line, sec. 10, T. 24 S., R. 13 W.
- (3) West  $\frac{1}{2}$  SE $\frac{1}{4}$  sec. 34, T. 23 S., R. 13 W.
- (4) Center S $\frac{1}{2}$  sec. 15, T. 24 S., R. 13 W.

The samples were split in the laboratory and carefully weighed out to 500 g. each and screened in a "Rotap" shaker using standard U.S. sieve series.

Identification and percentage counts of minerals were made using the binocular and petrographic microscopes. In addition, a staining method was employed to distinguish orthoclase, plagioclase, and quartz. Moderately to highly stained quartz and feldspars were not individually identified but tabulated as stained minerals.

The individual grains range in shape from subrounded to subangular with the majority subrounded. Slight frosting is apparent on most of the grains, and some pitting on a few grains. The feldspars frequently show fractures along cleavage planes, and in the stained varieties the staining is along cleavages. The amber stained quartz is mostly agate. Some of the quartz contains inclusions of rod-shaped minerals, probably tourmaline, rutile, and apatite. Some of the feldspars are clouded and zoned.

Sieve analyses show sorting to a high degree. Only traces to a fraction of a percent were caught on the #40 screen, and less than 2 $\frac{1}{2}$  percent passed the #100 screen. In all cases, over 90 percent of the sand was caught on the #60 and #80 screens.

Mineral counts made on material retained on screens other than the #60 and #80 screen sizes indicated no appreciable variation in mineralogy.

Conclusions

The number of grains counted in each sample ranged from 100 to 150. Spot checks made of several of the samples varied within 5 percent. Variation was partly due to the limited number of grains counted. The average of the four samples therefore is believed to be nearly the actual analysis of the sand dune area in the vicinity of the sampling. (See Table 2.)

Table 1  
SIEVE ANALYSIS OF DUNE SAND NEAR HAUSER, OREGON  
U.S. Standard Sieve Designations

Material Retained on Screens

<u>Screen No.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
40	Trace	1.08	0.18	0.58
60	24.34	63.40	41.96	84.06
80	66.22	32.06	52.30	14.26
100	7.26	2.90	4.70	0.90
140	1.56	0.46	0.74	1.12
200	0.16	0.06	0.08	0.06
Pass 200	<u>0.06</u>	<u>0.04</u>	<u>0.04</u>	<u>0.02</u>
Total	100.00	100.00	100.00	100.00

Accumulative

<u>Accumulative Screen No.</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
40	Trace	1.08	0.18	0.58
60	24.34	64.48	42.14	84.64
80	90.56	96.54	94.44	98.90
100	97.82	99.44	99.14	99.80
140	99.38	99.90	99.88	99.92
200	99.54	99.96	99.96	99.98
Pass 200	100.00	100.00	100.00	100.00

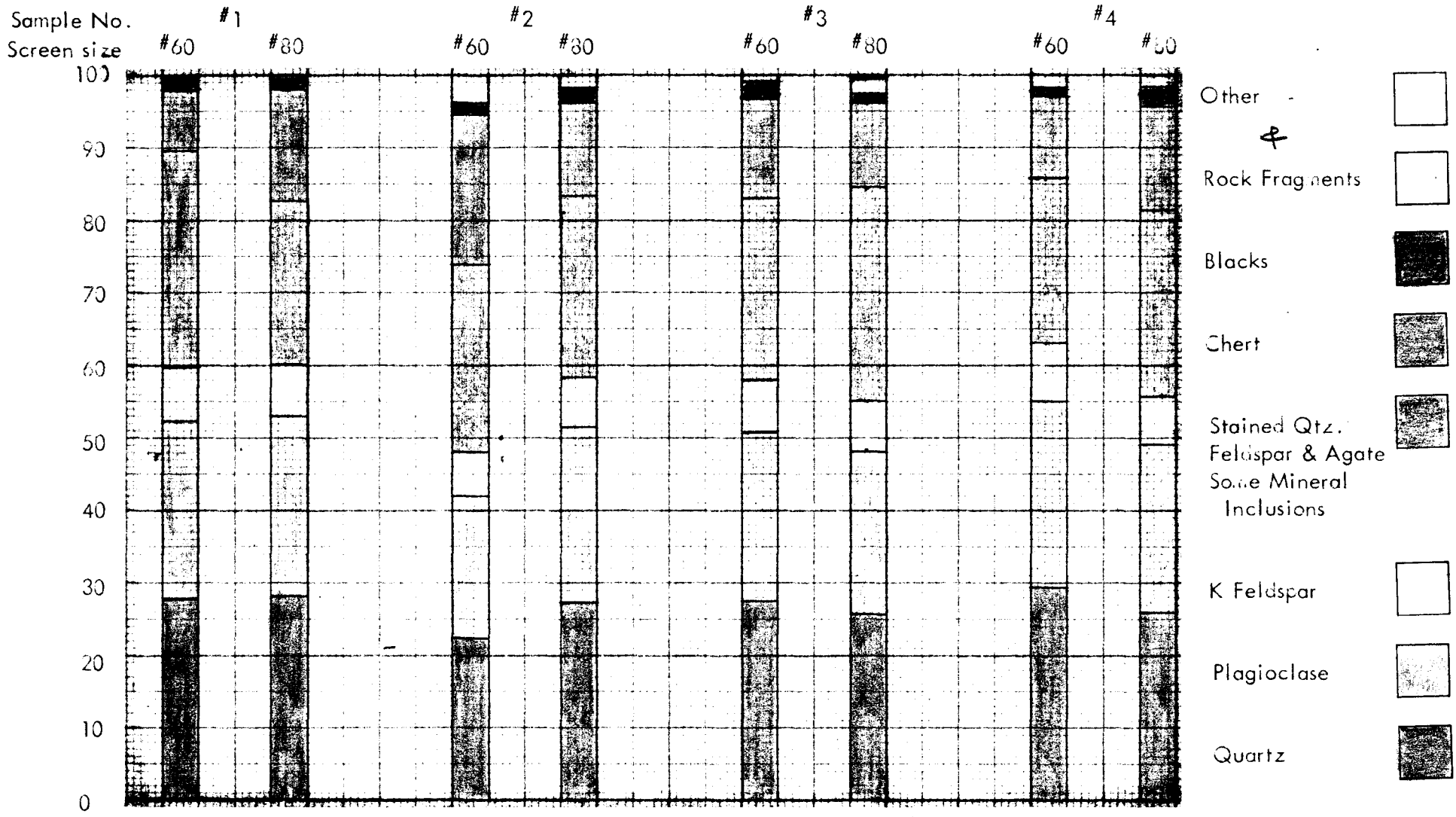
Table 2  
 PERCENTAGE COUNTS OF THE VARIOUS MINERALS  
 RETAINED ON THE #60 AND #50 SCREENS

No.	Quartz	Plagio- class	K-Feld- spar	Stained crystals	Chert	Black	Other & Rock frags.	Total
1-60	27.8	24.5	7.1	30.0	8.2	2.4	- -	100.00
1-80	28.2	25.0	7.2	22.6	15.1	2.0	- -	100.00
2-60	22.3	19.6	5.7	25.9	20.6	1.6	4.2	99.9
2-80	27.2	24.1	7.0	25.1	12.8	1.9	1.9	100.0
3-60	27.5	23.3	7.1	25.3	13.6	0.6	1.8	99.2
3-80	25.8	22.8	6.6	29.5	11.8	1.3	2.0	99.8
4-60	29.4	26.0	7.6	22.5	11.5	1.1	1.7	99.8
4-80	26.0	23.0	6.7	26.3	14.4	2.6	1.3	100.3
Total	214.2	188.3	55.0	207.2	107.0	13.5	12.9	
Average	26.8	23.6	6.9	25.9	13.4	1.7	1.6	99.9

Report by: Herbert G. Schlicker  
 December 1960

Table 3  
Mineral Percentages  
of

Dune Sands Near Hauser, Oregon

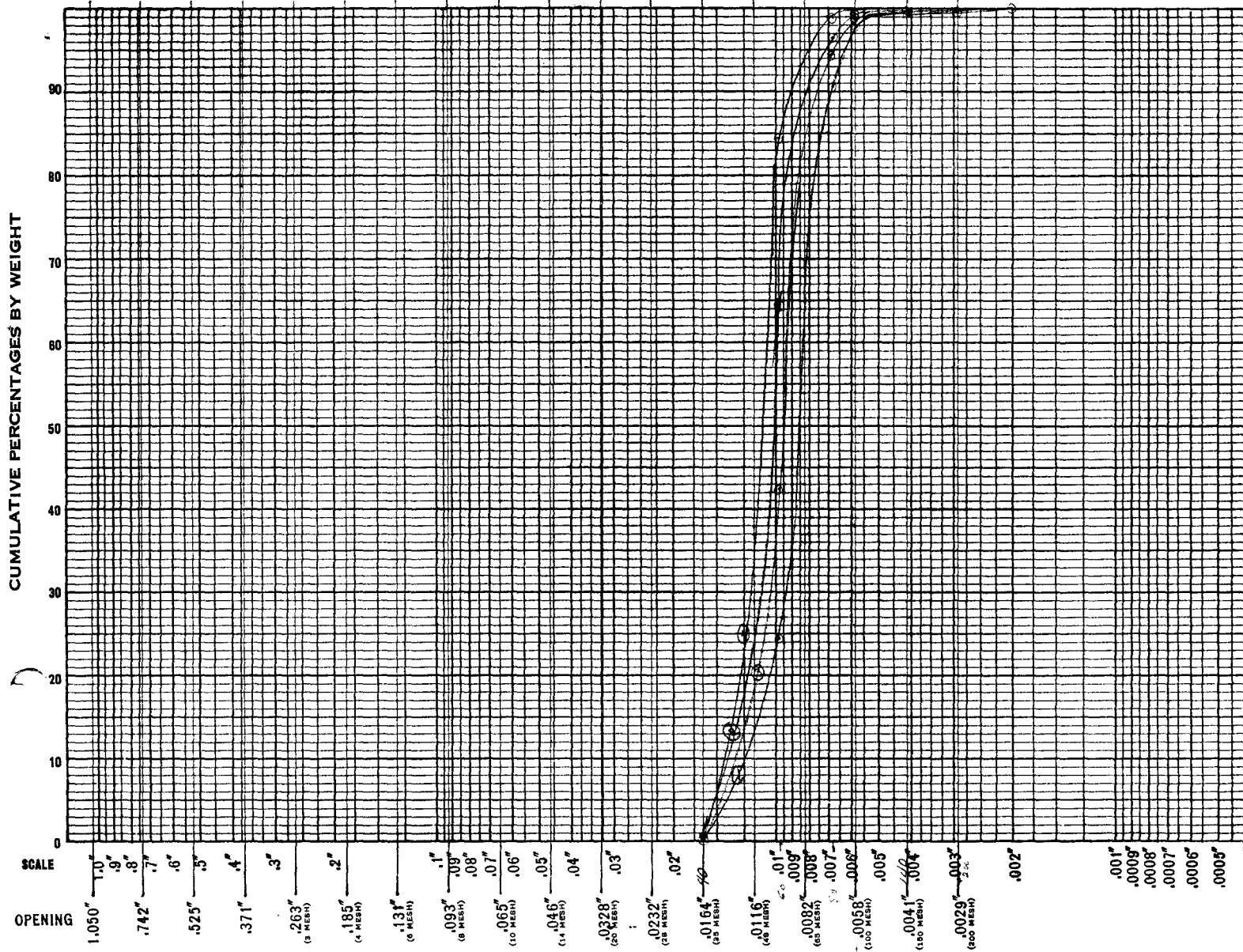


# The Tyler Standard Screen Scale

Form No. L-5  
Please mention above  
when ordering

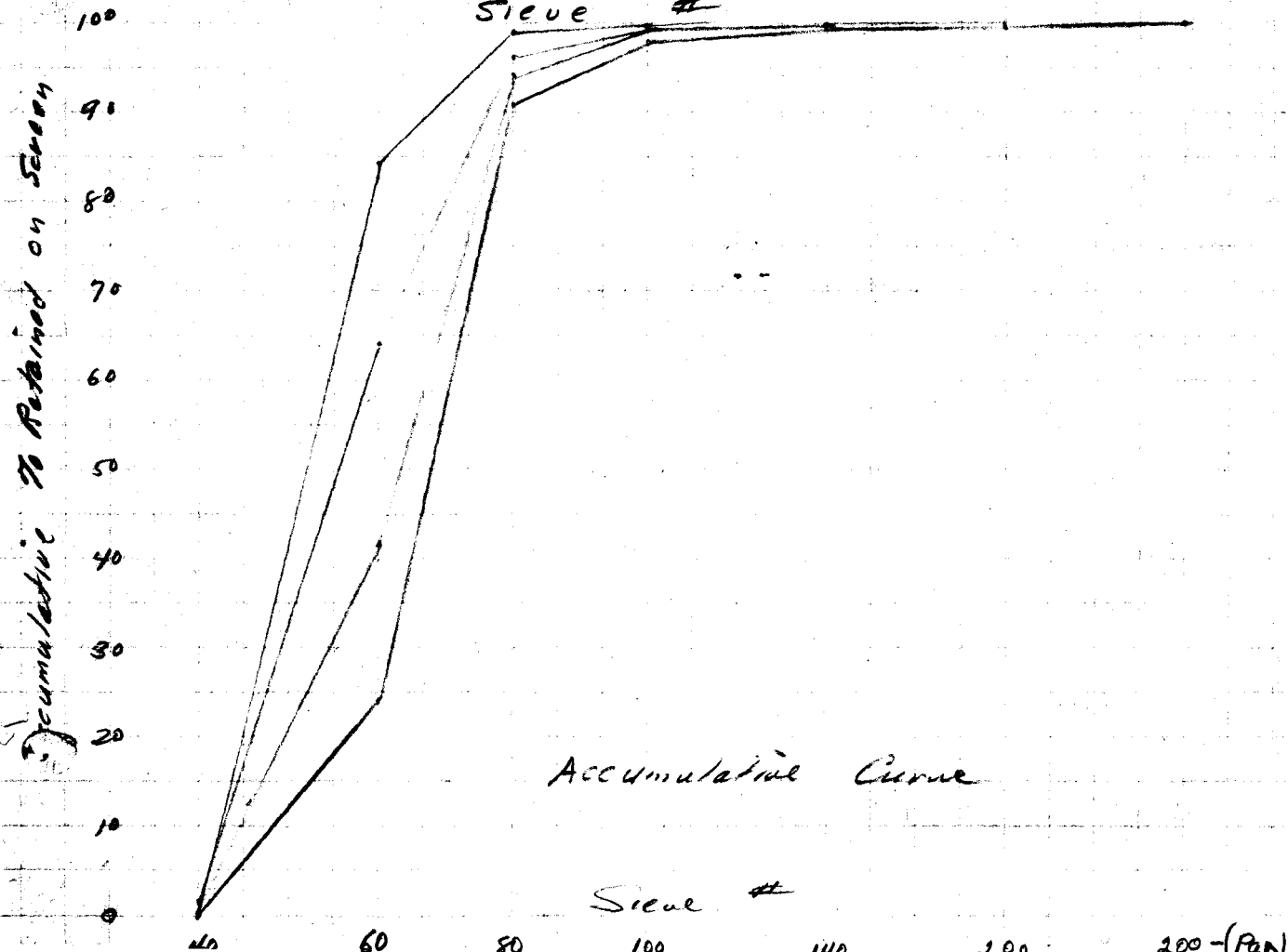
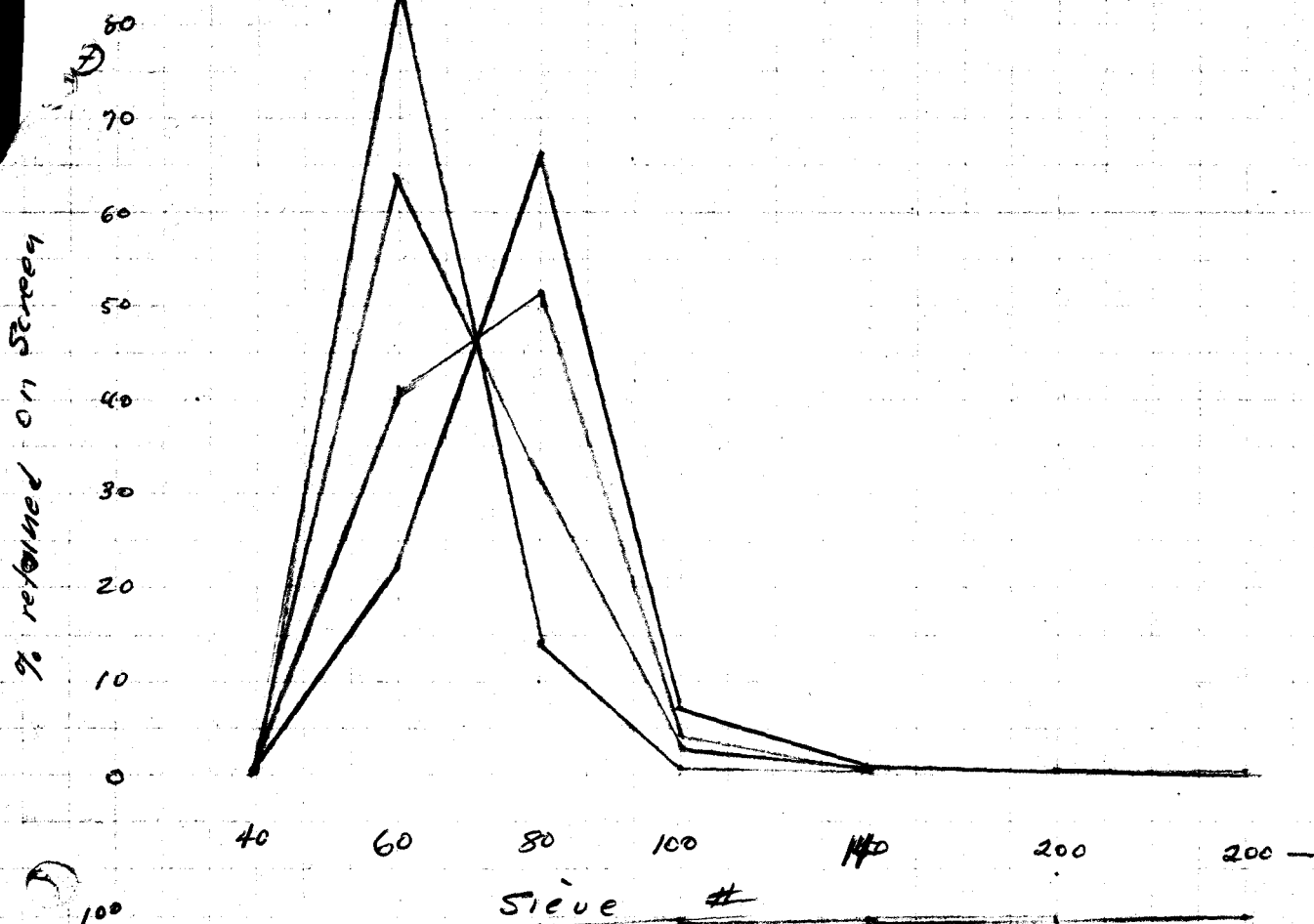
Cumulative Logarithmic Diagram of Screen Analysis on Sample of \_\_\_\_\_

Name \_\_\_\_\_ Date \_\_\_\_\_



Indicate the Screen Crushed through and also First Retaining Screen	SCREEN SCALE RATIO 1.414				WEIGHTS			ASSAYS		CONTENTS		% of Total Conte
	Openings		Mesh	Diameter Wire Inches	Sample Weights	Per Cent	Per Cent Cumulative Weights					
	Inches	Milli-meters										
.....	1.050	26.67		.149								
.....	.742	18.85		.135								
.....	.525	13.33		.105								
.....	.371	9.423		.092								
.....	.263	6.680	3	.070								
.....	.185	4.699	4	.065								
.....	.131	3.327	6	.036								
.....	.093	2.362	8	.032								
.....	.065	1.651	10	.035								
.....	.046	1.168	14	.026								
.....	.0328	.833	20	.0172								
.....	.0232	.589	28	.0125								
.....	.0164	.417	35	.0122								
.....	.0116	.295	48	.0092								
.....	.0082	.208	65	.0072								
.....	.0058	.147	100	.0042								
.....	.0041	.104	150	.0026								
.....	.0029	.074	200	.0021								
Pass.....	.0029	.074	200	.0021								
			Totals,									

# Sieve Analyses Table V



Accumulative Curve

# State Department of Geology and Mineral Industries

702 Woodlark Building  
Portland 5, Oregon

HAUSER SILICA SAND

Coos Bay District

Coos County

During World War II dune sand near Hauser in northern Coos County, a few miles north of Coos Bay was shipped to foundries in Portland for moulding sand. Tonnages shipped were not large and it is understood that the movement ceased after the war. Legal description is T. 24 S., R. 13 W.

R. S. Mason  
2-11-52