Texas Department of Transportation

Form 1748
(Rev. 6/92)
(GSD-EPC)

Worksheet for Test Method Tex-104-E
Determining Liquid Limit of Soils

3 Point Method

Technician: _____

Sample No. _____

Date: _____

Dish No.

_____ W.W. - D.W. _____ D.W. - T.W. _____ No. of Blows _____

_____ ÷ _____ x 100 = Moisture Content: _____

_____ W.W. - D.W. _____ D.W. - T.W. _____ No. of Blows _____

_____ ÷ _____ x 100 = Moisture Content: _____

_____ W.W - D.W. _____ D.W. - T.W. _____ No. of Blows: _____

_____ ÷ _____ x = 100 Moisture Content: _____

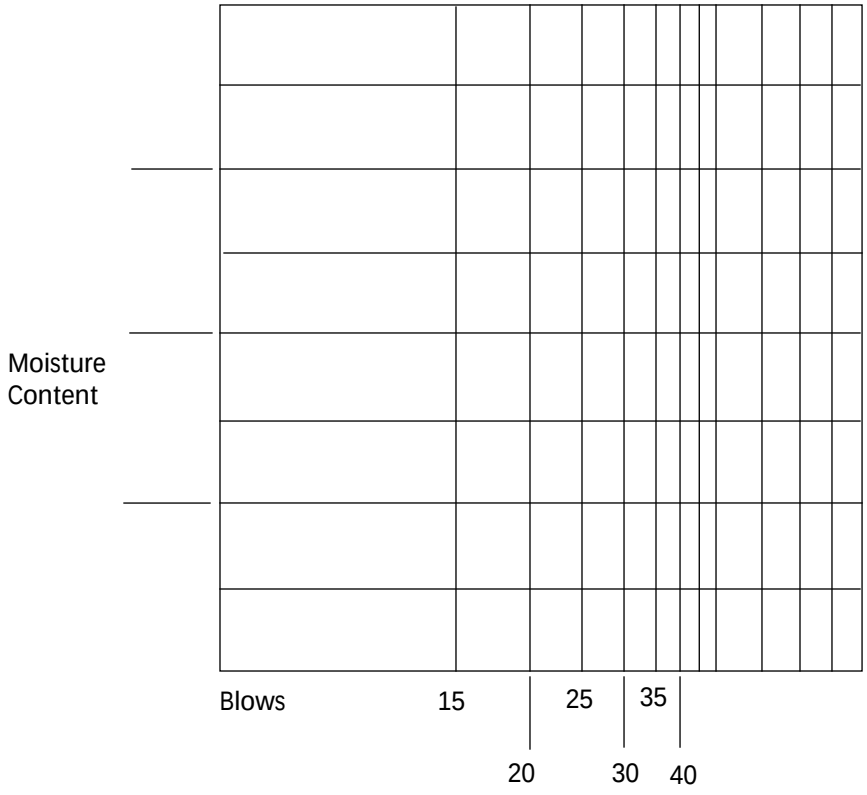
Liquid Limit at 25 Blows: _____

_____ W.W. - D.W. _____ D.W. - T.W. _____

_____ ÷ _____ x 100 = Plastic Limit: _____

Plasticity Index: _____

W.W. = Wet Weight of Soil
D.W. = Dry Weight of Soil
T.W. = Tare Weight of Pan



Worksheet for Test Method Tex-104-E
Determining Liquid Limit of Soils

1 Point Method

Technician: _____

Sample No.: _____

Date: _____

Dish No.

W.W. - D.W. _____ D.W. - T.W. _____

_____ ÷ _____

No. of Blows _____

x 100 = Moisture Content: _____

ε Liquid Limit: _____

W.W. - D.W. _____ D.W. - T.W. _____

_____ ÷ _____

x 100 = Plastic Limit: _____

Plasticity Index: _____

ε Calculations

Determine the liquid limit for each water content specimen using one of the following equations:

$$LL = W_N \left(\frac{N}{25}\right)^{0.121} \quad or$$

$$LL = K \left(\frac{W}{N}\right)$$

where:
N = the number of blows causing closure of the groove at water content
W_N = water content, and
K = a factor given in Table 1.

TABLE 1 Factors for Obtaining Liquid Limit from Water Content and number of Drops Causing Closure of Groove.

N (Number of Drops)	K (Factor for Liquid Limit)
20	0.974
21	0.979
22	0.985
23	0.990
24	0.995
25	1.000
26	1.005
27	1.009
28	1.014
29	1.018
30	1.022

1 Blow Method

Technician: _____

Sample No.: _____

Date: _____

Dish No.

W.W. - D.W. _____ D.W. - T.W. _____

_____ ÷ _____

No. of Blows _____

x 100 = Moisture Content: _____

*Liquid Limit: _____

W.W. - D.W. _____ D.W. - T.W. _____

_____ ÷ _____

x 100 = Plastic Limit: _____

Plasticity Index: _____

*0.8 x Moisture Content + 1 = L.L.

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