SM96-4BK.ASM
SM96-4BKO

```
HEADING
SIMS BAYOU, DM#8, SLOPE STABILITY ANALYSIS,STA. 980+60:44' rt.
BORING NO. 96-4; RIGT.BANK LOOKING UPSTREAM,ZAHID,JOHN'S,NO MAT ON SIDE SLP.
CONSTRUCTION CONDITION;28JAN. 1997,SAND & SILT FOUNDATION. COMPACTED CLAY
PROFILE LINE
1 1
54 44.5
93 57.5
200 57.5

2 2
20 36.5
23 37.5
44 44.5
54 44.5

3 3
0 36.5
20 36.5
30 36.5
54 44.5
200 44.5


MATERIAL PROPERTIES
1 CLAY,CH, STF.
124 SATURATED UNIT WT,PCF
CONVENTIONAL
1250 0
NO PORE PRESSURE
2 CLAY,COMPACTED CLAY,CH
130
CONV
1250 0
NO PORE PRESSURE
3 SILTY SAND SM,MED. DNS.
120
CONV
0 32
P L
1

PIEZOMETRIC LINE DATA
1 63
-200 37.5 23 37.5
93 39.5 200 39.5


SURFACE PRESSURE
0 36.5 63 0
20 36.5 63 0
23 37.5 0 0
93 39.5 0 0
200 39.5 0 0

ANALYSIS COMPUTATION
CIRCULAR SEARCH
48 77 .5 -20
TANGENT
27
```

Arc 1

x = 41.50
Y = 100.50
R = 75.50
F.S = 2.65

CRACK
2
PROCEDURE
SPENCER

PLOT
COMPUTE

SM964BKL.ASM
SM964BKLO

```
HEADING
SIMS BAYOU, DM#8, SLOPE STABILITY ANALYSIS,STA. 980+60:44' rt.
BORING NO. 96-4; RIGT.BANK LOOKING UPSTREAM,ZAHID,JOHN'S,NO MAT ON SIDE SLP.
LONG TERM    CONDITION;28JAN. 1997,SAND & SILT FOUNDATION. COMPACTED CLAY
PROFILE LINE
1 1
54 44.5
93 57.5
200 57.5

2 2
20 36.5
23 37.5
44 44.5
54 44.5

3 3
0 36.5
20 36.5
30 36.5
54 44.5
200 44.5


MATERIAL PROPERTIES
1 CLAY,CH, STF.
124 SATURATED UNIT WT,PCF
CONVENTIONAL
0 23
NO PORE PRESSURE
2 CLAY,COMPACTED CLAY,CH
130
CONV
0 23
NO PORE PRESSURE
3 SILTY SAND SM,MED. DNS.
120
CONV
0 32
P L
1

PIEZOMETRIC LINE DATA
1 63
-200 37.5 23 37.5
93 39.5 200 39.5


SURFACE PRESSURE
0 36.5 63 0
20 36.5 63 0
23 37.5 0 0
93 39.5 0 0
200 39.5 0 0

ANALYSIS COMPUTATION
CIRCULAR SEARCH
48 77 .5 -20
TANGENT
27
```

PROCEDURE
SPENCER

PLOT
COMPUTE

EL. 57.5

Sta. 980+60
INV EL. 36.46

Project: Sims Bayou
Houston, Texas
Contract No. DACW64-95-D-0007 Delivery Order No. 0005

SUMMARY OF LABORATORY TEST RESULTS

El 1 54
37

Boring No. 96-4

S #	Depth (ft)	P P (tsf)	SPT Blows per Foot	Visual Classification	U S C	Mc (%)	Dry Unit Wt (pcf)	Wet Unit Wt (pcf)	L L (%)	PL (%)	Mechanical Analysis % Passing #4	#10	#40	#100	#200	Torvane Shear Strength (tsf)	q u (tsf)
1	0 - 2	1.25		Clay,w/roots,Stiff,Yellowish gray	C H	26.3											
2	2 - 4	1.50		Clay,w/ferrous stains,Slickensided,Stiff, Dark gray	C H	27.6	97.5	124.4	66.0	26.0							
3	4 - 6	2.50		Clay,w/calcareous nodules & ferrous stains, Very stiff,Dark gray	C H	18	103		71	17							
4	6 - 8	1.50		Clay,w/calcareous nodules & ferrous stains, Stiff,Gray & Yellowish gray	C H	22	100		73	17							
5	8 - 10	1.50		Clay,w/calcareous nodules & ferrous stains, Stiff,Gray & Yellowish gray	C H	26.0	97.6	123.0	65.0	26.0	100.0	99.9	99.9	99.8	99.7		1.32
6	10 - 12	1.75		Clay,w/calcareous nodules & ferrous stains, Slickensided,Stiff,Gray & Yellowish gray	C H	29.8											
7	12 - 14			Silty Sand,Medium dense,Gray	S M						100.0	100.0	99.6	74.8	49.3		
8	14-15.5		13	Silty Sand,Medium dense,Gray	S M												
9	16 - 18	1.25		Sandy Clay,w/ferrous stains sand seams & sand layer,Stiff,Gray & Yellowish gray	C L	25.2	98.1	122.8	35.0	18.0	100.0	99.8	98.8	85.5	57.9		
10	18 - 20			Silty Sand,Medium dense,Gray&Yellowish gray	S M												
11	20-21.5		24	Silty Sand,Medium dense,Gray&Yellowish gray	S M						100.0	100.0	96.7	53.0	13.6		
12	25-26.5		22	Silty Sand,Medium dense,Gray	S M												
13	30-31.5		26	Silty Sand,Medium dense,Gray	S M												
14	35-36.5		34	Silty Sand,Dense,Gray	SP-SM						100.0	100.0	100.0	53.8	10.8		
15	38-40	3.25		Silty Clay,w/calcareous nodules&ferrous stains, Very stiff,Gray	C L	17.2	107.7	126.2	37.0	18.0							
16	40-42	3.75		Silty Clay,w/calcareous nodules&ferrous stains, Very stiff,Gray	C L	18.0											
17	42-44	4.25		Silty Clay,w/calcareous nodules&ferrous stains, Hard,Gray & Yellowish gray	C L	18.6											

S # : Sample Number, P P : Pocket Penetrometer Reading, U S C : Unified Soil Classifcation, M c : Moisture Content
q u : Uncogined Compressive Strength, W O H : Weight of hammer, W O P : Weight of Pipe