

ATTERBERG LIMITS DETERMINATION

Project GWADAR MINI PORT
 Location of Project GWADAR, PAKISTAN
 Date of Testing Nov. 21, 1979

Project No. _____
 Boring No. B-10

Sample No., Depth No. 5/10 ~ 70 Bottom (8.25m - 8.55m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1	44	64.90	1	28.50
2	30	66.27	2	28.92
3	28	66.79	3	28.26
4	20	67.21	Average	28.64
5	15	68.68		
6	10	71.04		
Liquid limit	Plastic limit	Plasticity index	Flow index	
66.0 %	28.6 %	37.4		

Remarks

Sample No., Depth No. (m - m)

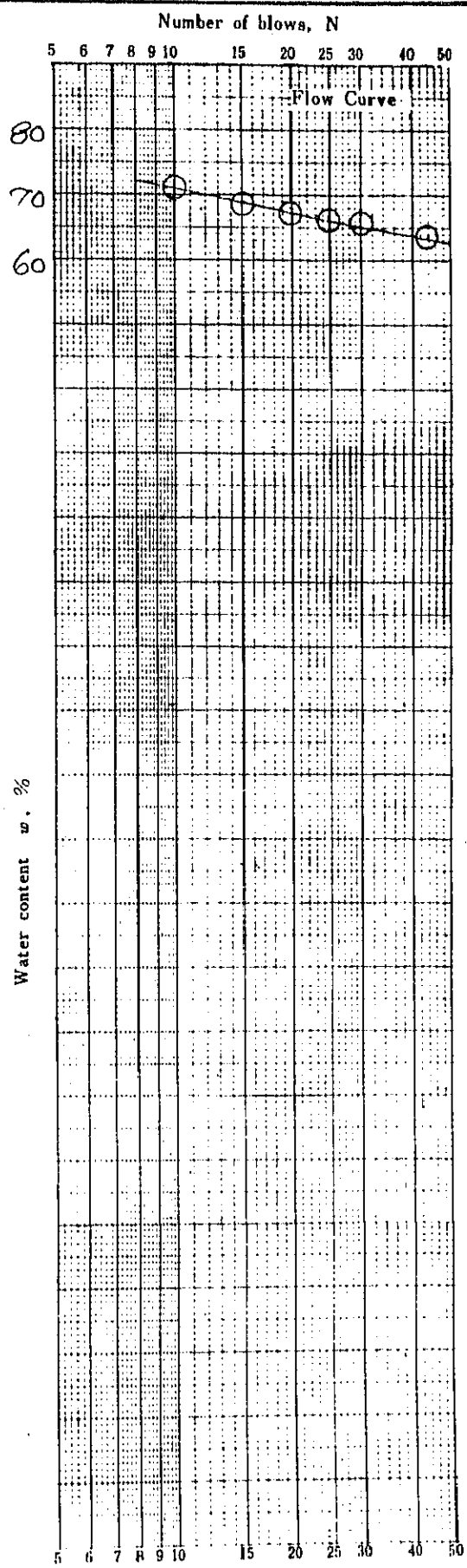
Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1			1	
2			2	
3			3	
4			Average	
5				
6				
Liquid limit	Plastic limit	Plasticity index	Flow index	
%	%			

Remarks

Sample No., Depth No. (m - m)

Liquid limit test			Plastic limit test	
Test No.	No. of blows	Water content %	Test No.	Water content %
1			1	
2			2	
3			3	
4			Average	
5				
6				
Liquid limit	Plastic limit	Plasticity index	Flow index	
%	%			

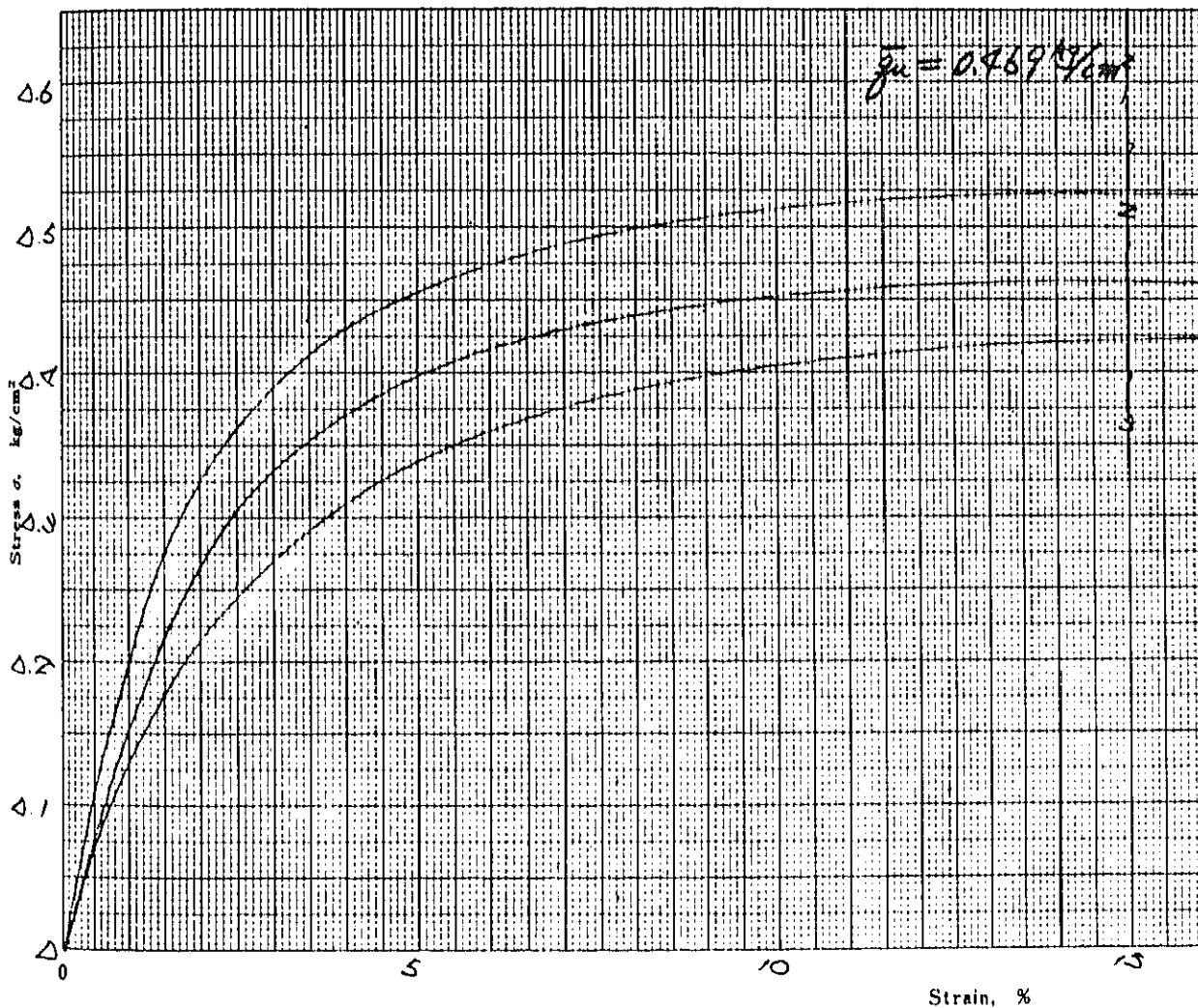
Remarks



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

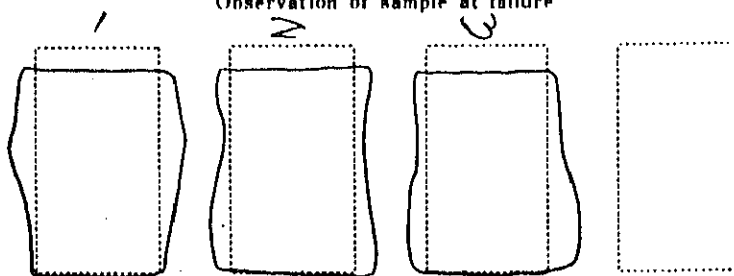
Project GWADAR MINT PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-3' Sample No. S3'-3
 Date of testing Nov. 23, 1979 Depth of Sample 4.00m - 4.88m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	7.03	3.52	26.5	2.09	0.523	19	(15)	—
2	"	7.10	3.53	27.6	2.03	0.462	12	(15)	—
3	"	7.10	3.53	27.8	2.02	0.423	11	(15)	—



Remarks.

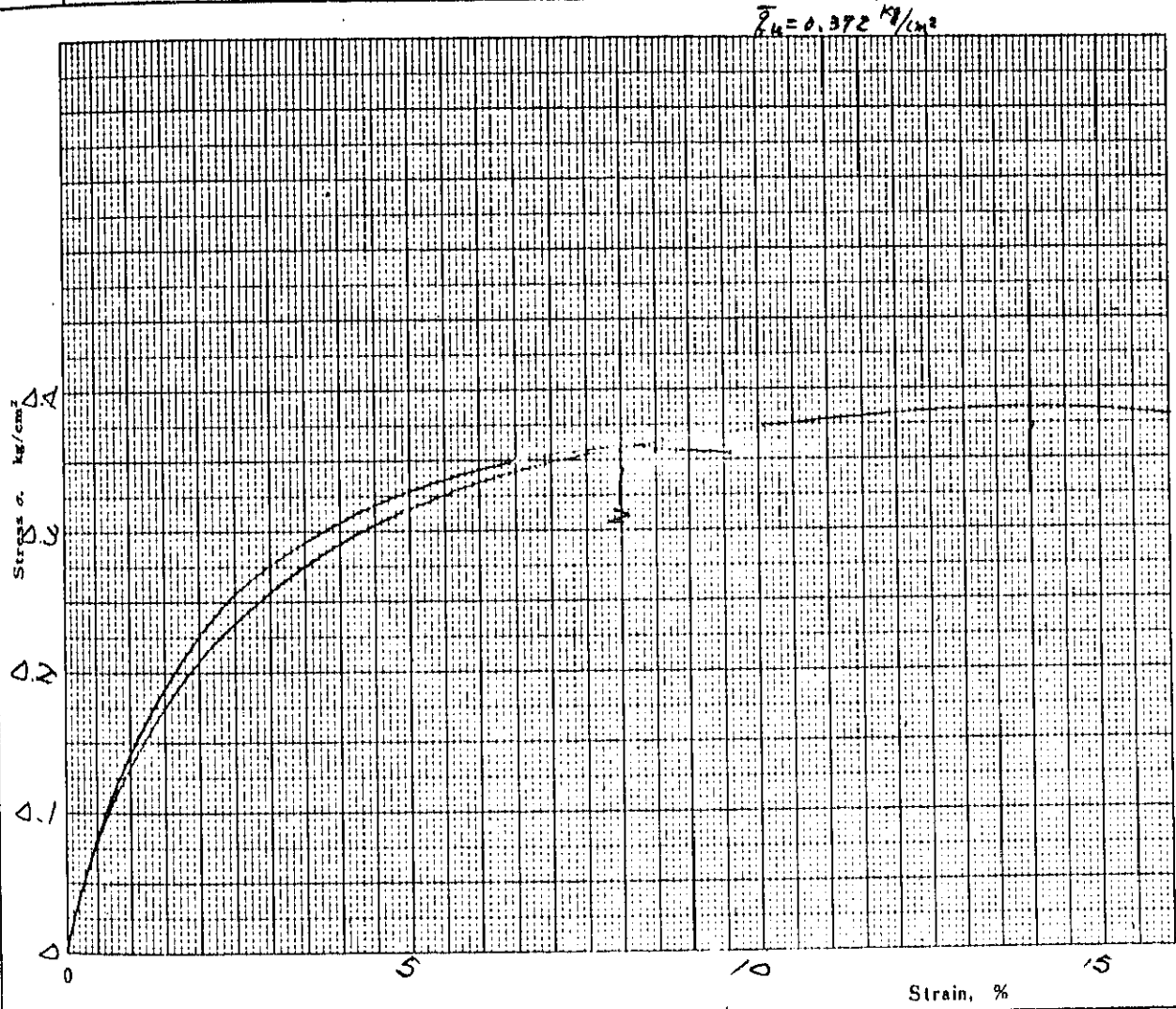
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-4 Sample No. S4-3
 Date of testing Nov. 5, 1979 Depth of Sample 4.00m - 4.85m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	6.97	3.48	28.7	1.99	0.386	11	12	—
2	"	6.95	3.51	28.0	1.99	0.358	13	80	—



Remarks. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Observation of sample at failure

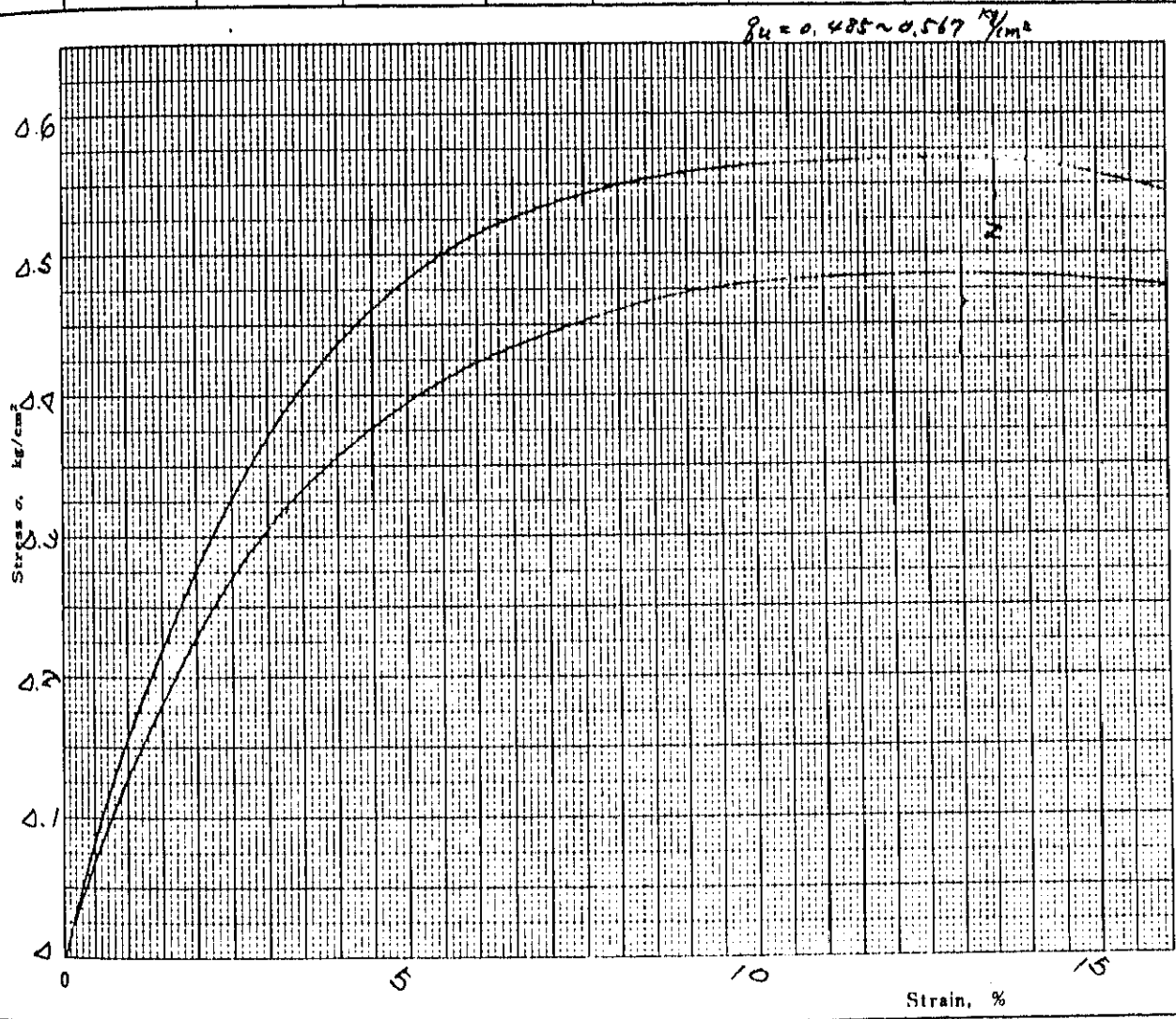
1

2

UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

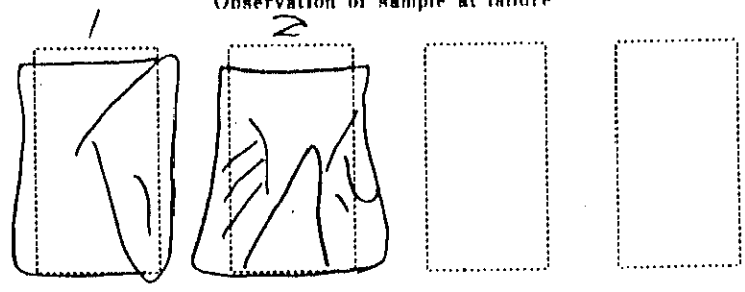
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-4 Sample No. S4-4 Top
 Date of testing Nov. 5, 1979 Depth of Sample 5.00m - 5.50m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	6.99	3.48	26.1	2.03	0.485	11	13	—
2	"	6.98	3.49	25.6	2.04	0.567	14	13.5	—



Remarks.

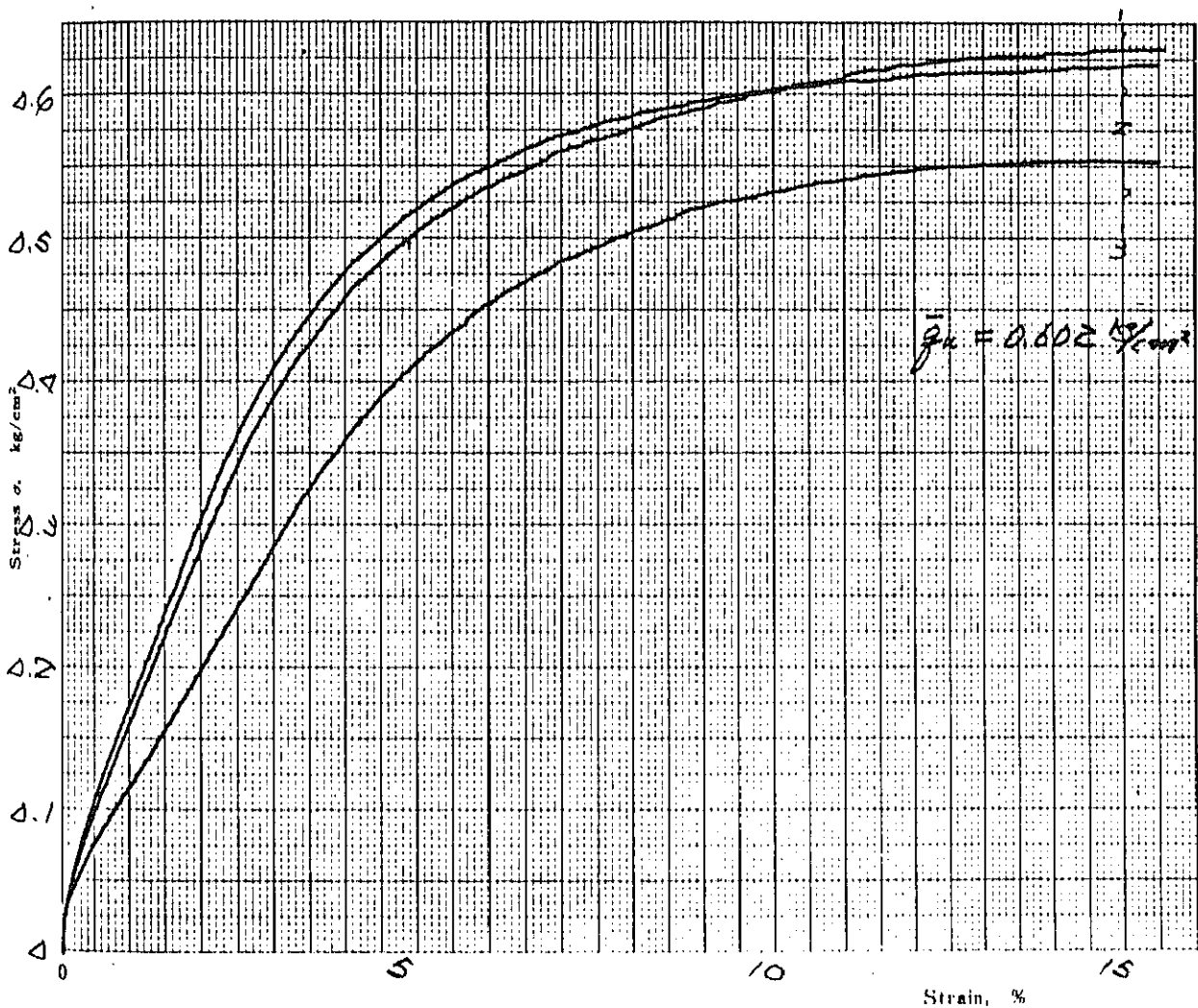
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

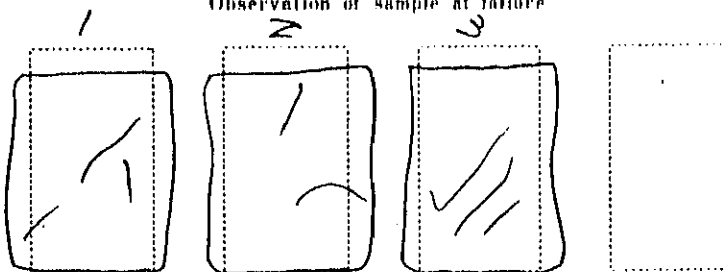
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-4 Sample No. S4-5 Top
 Date of testing Nov. 5, 1979 Depth of Sample 8.00m - 8.35m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	7.01	3.52	25.5	2.02	0.621	12	(15)	—
2	"	7.00	3.48	25.6	2.02	0.620	15	(15)	—
3	"	6.99	3.49	26.9	2.03	0.555	10	(15)	—



Remarks.

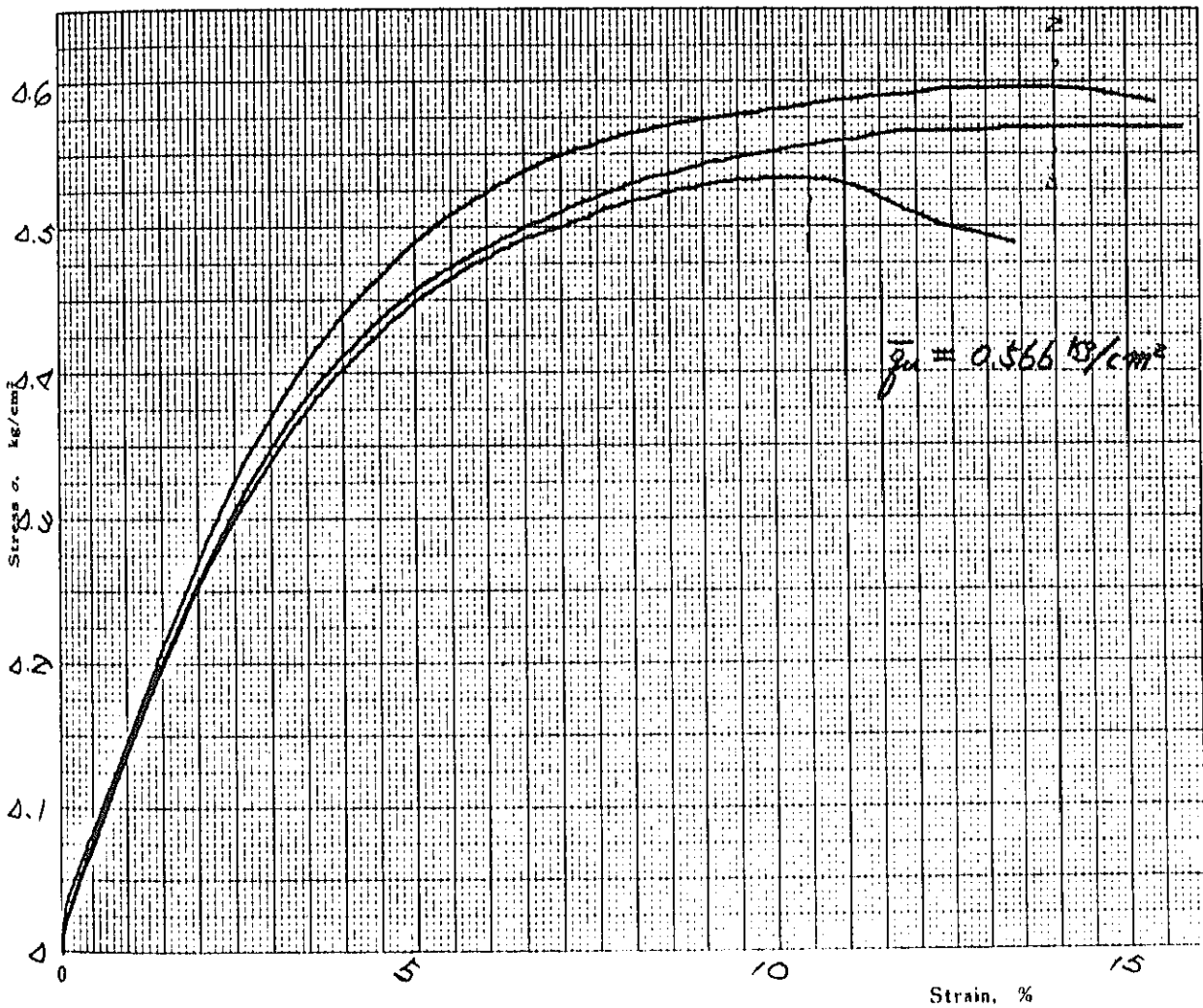
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

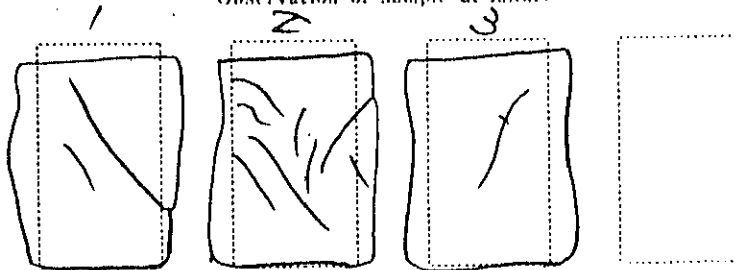
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-4 Sample No. S4-5 Bottom
 Date of testing Nov. 5, 1979 Depth of Sample 8.35m - 8.80m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E _{so} kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	6.98	3.46	23.5	2.08	0.534	13	10.5	—
2	"	6.98	3.43	24.1	2.08	0.595	13	14.0	—
3	"	6.98	3.46	24.4	2.07	0.570	12	14.0	—



Remarks.

Observation of sample at failure

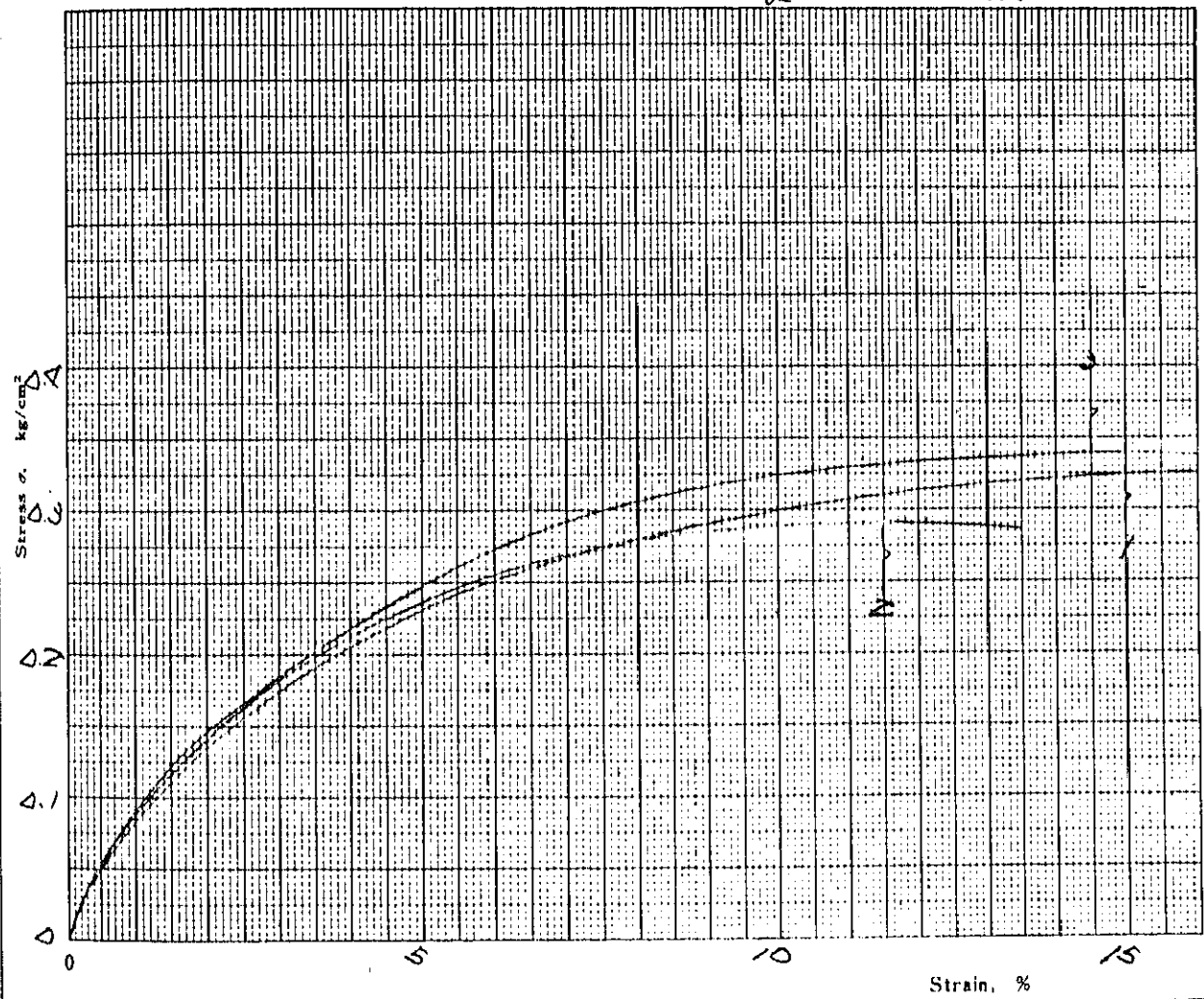


UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-5 Sample No. S5-1
 Date of testing Nov. 6, 1979 Depth of Sample 3.00m - 3.74m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	6.98	3.76	30.8	1.97	0.325	6	(15)	—
2	"	7.00	3.77	31.6	1.95	0.291	8	11.5	—
3	"	7.10	3.75	30.3	1.97	0.340	7	12.5	—

$\sigma_u = 0.291 \sim 0.340 \text{ kg/cm}^2$



Remarks. Observation of sample at failure

1

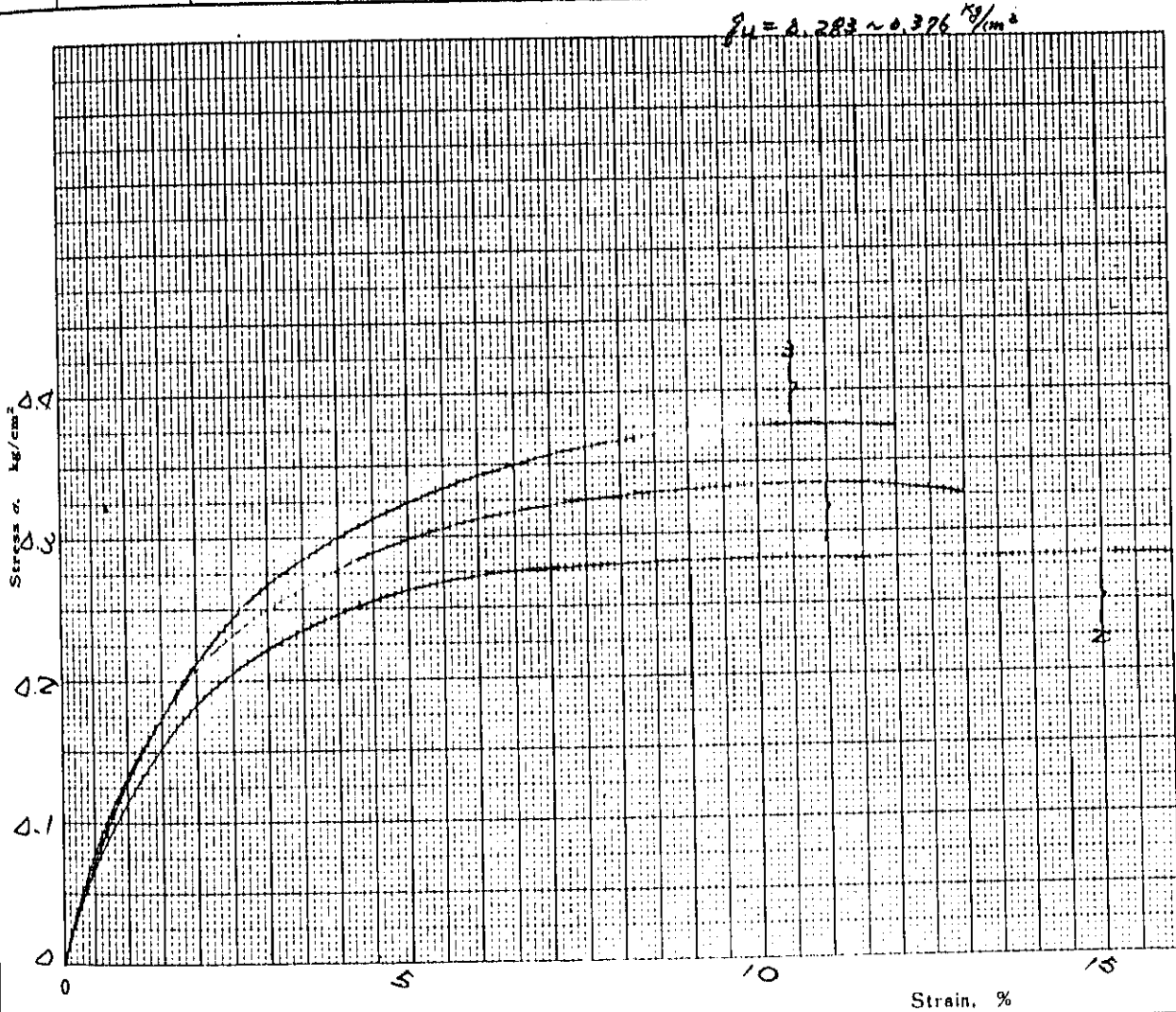
2

3

UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

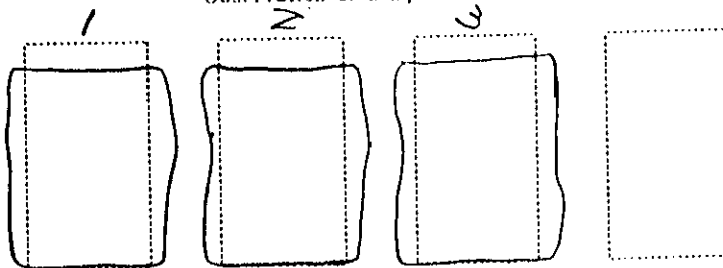
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-7 Sample No. S7-1
 Date of testing Nov. 6, 1979 Depth of Sample 3.00m - 3.78m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	6.99	3.46	30.5	1.98	0.335	12	11	—
2	"	7.02	3.48	30.8	1.95	0.283	10	(15)	—
3	"	6.99	3.48	29.7	1.97	0.376	11	10.5	—



Remarks.

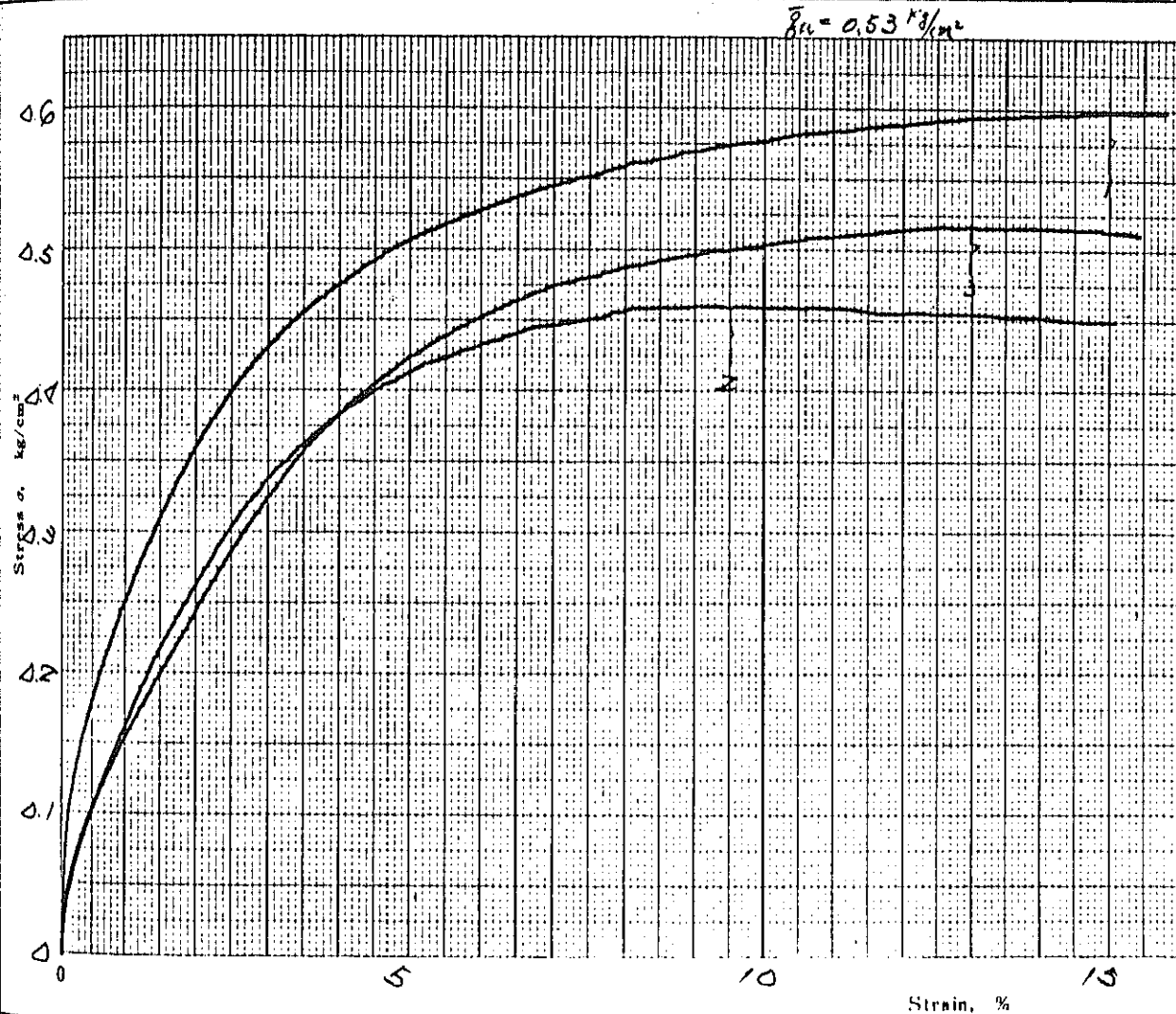
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

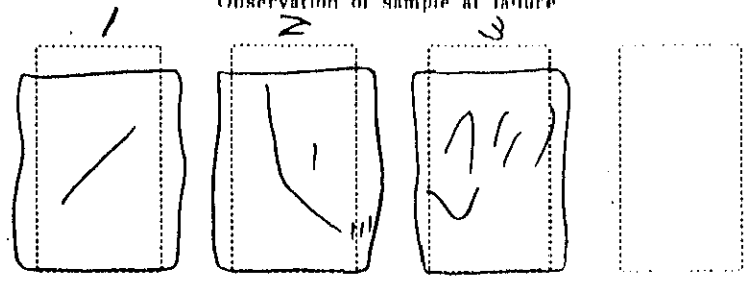
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-7 Sample No. S7-3
 Date of testing Nov. 7, 1979 Depth of Sample 7.00m - 7.82m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	7.00	3.49	30.7	1.95	0.599	21	(15)	—
2	"	7.00	3.49	30.0	1.96	0.460	14	9.5	—
3	"	7.00	3.49	30.4	1.96	0.517	12	13.0	—



Remarks.

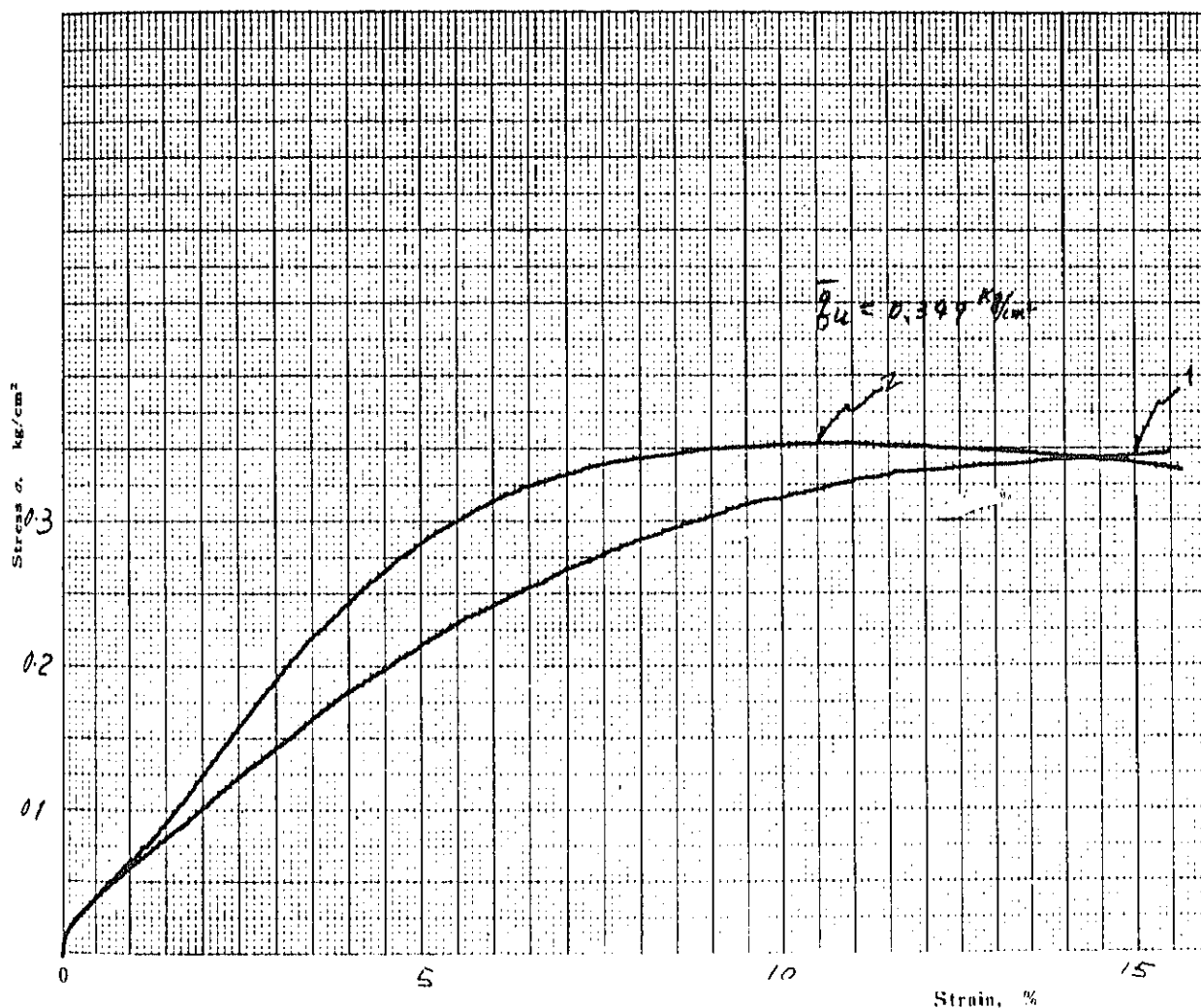
Observation of sample at failure



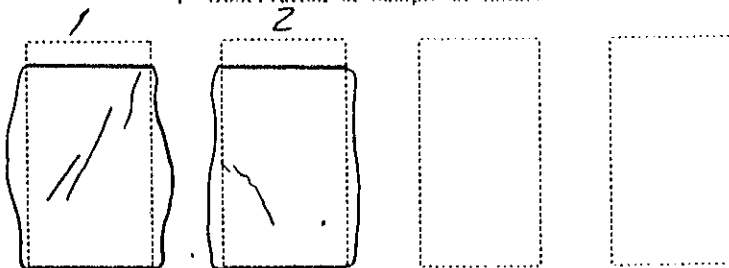
UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-10 Sample No. S10-2
 Date of testing Oct. 23, 1979 Depth of Sample 2.50m - 3.31m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²		Strain at failure %	Sensitivity ratio
		Height	Diameter							
1	<i>Undisturbed</i>	7.00	3.50	31.3	1.94	0.345	5	(15)	-	
2	"	7.00	3.50	30.7	1.96	0.353	6	10.5	-	



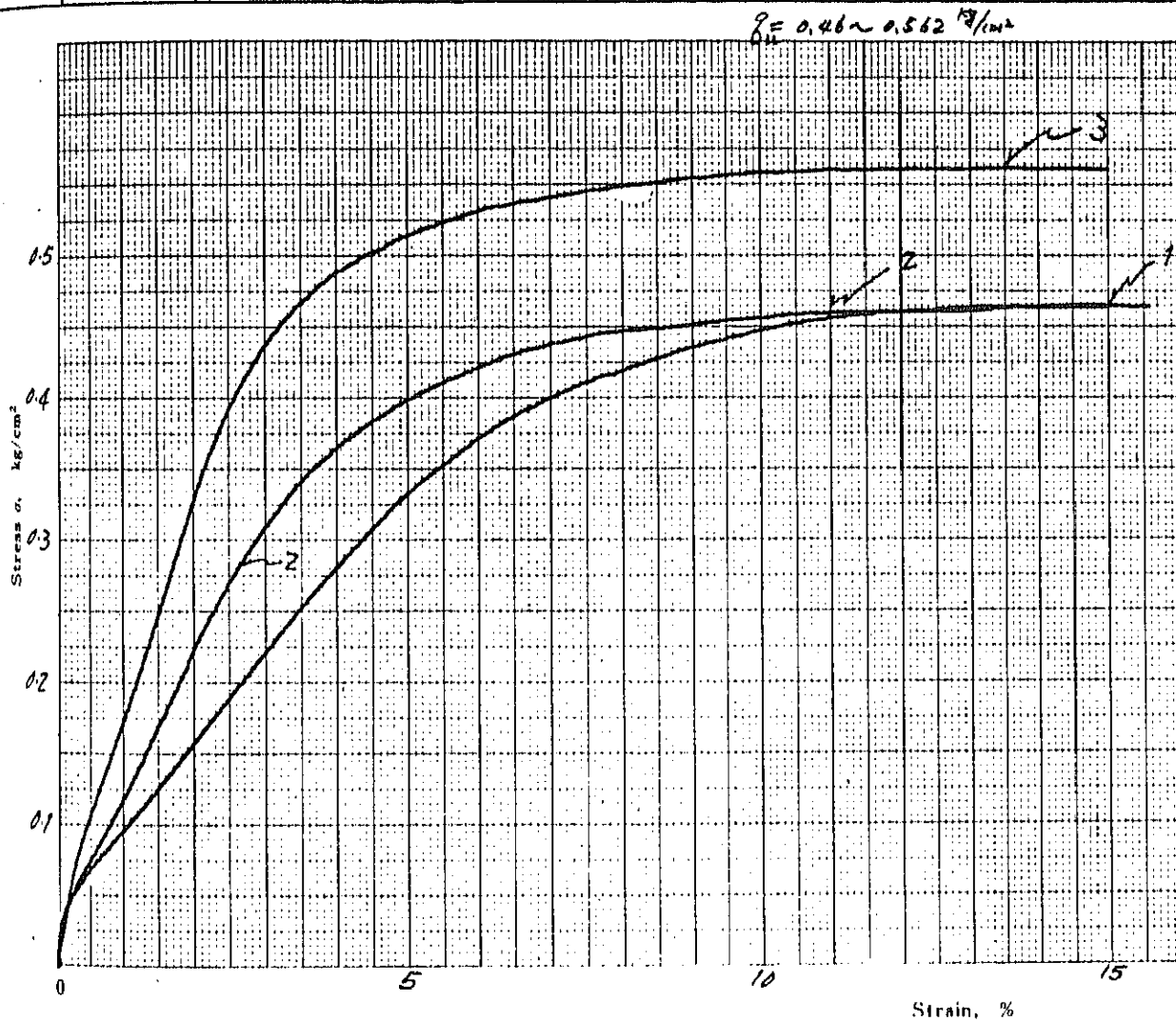
Remarks. Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

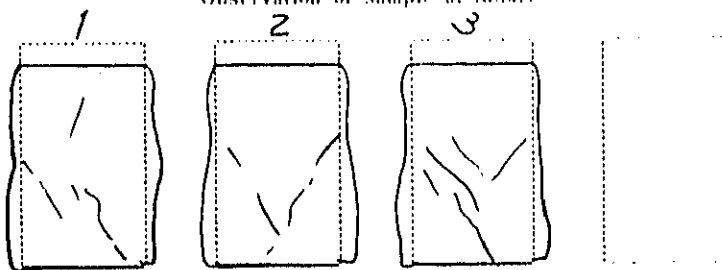
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-10 Sample No. S10-4
 Date of testing Oct. 23, 1979 Depth of Sample 4.80m - 5.61m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	<i>Undisturbed</i>	6.97	3.50	28.4	2.00	0.465	7	(15)	—
2	"	7.00	3.50	28.0	2.00	0.460	11	11	—
3	"	6.98	3.50	27.2	2.01	0.562	16	13.5	—



Remarks.

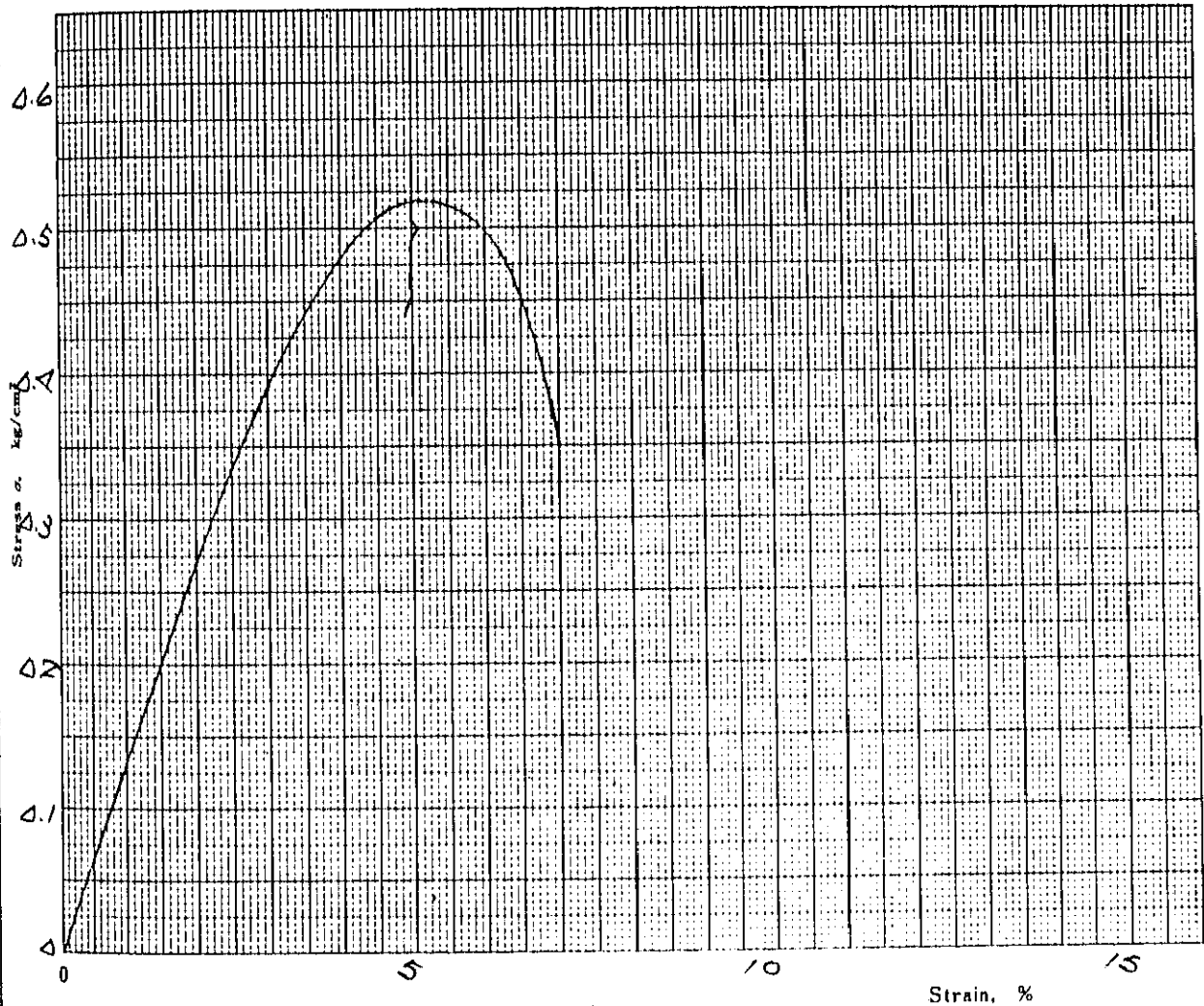
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

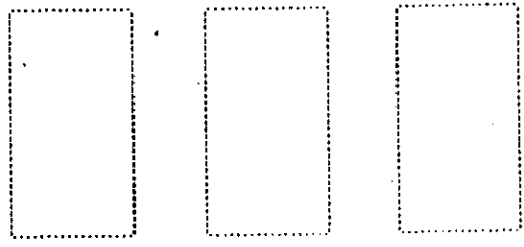
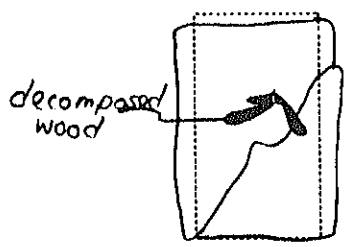
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-10 Sample No. S10-7D Middle
 Date of testing Oct. 23, 1979 Depth of Sample 8.30m - 8.40m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E _{so} kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	7.00	3.50	23.5	2.04	0.519	14	5.0	—



Remarks.

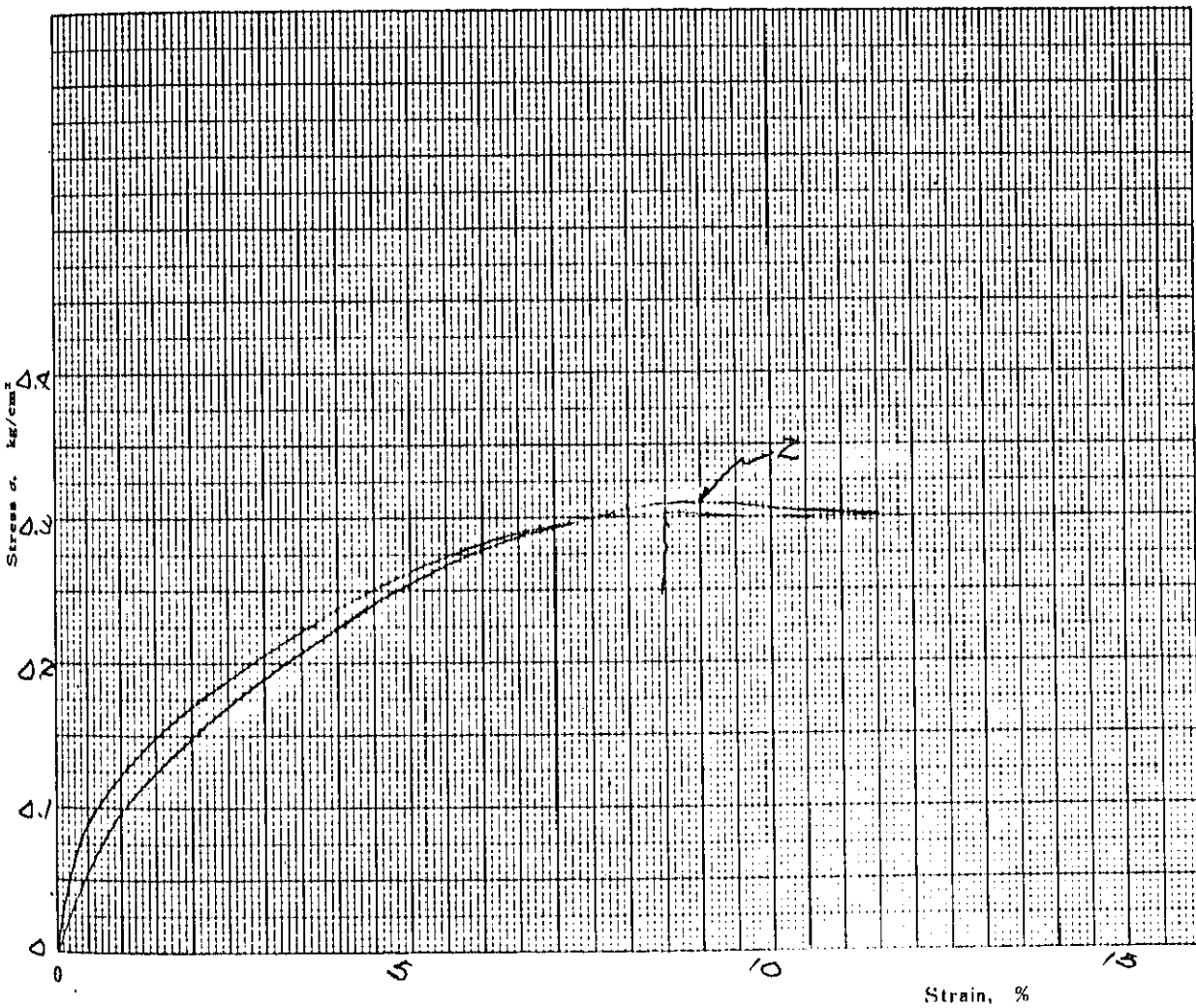
Observation of sample at failure



UNCONFINED COMPRESSION TEST (Stress-Strain Curves)

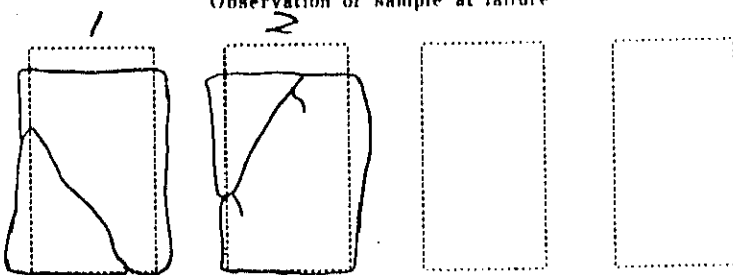
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-10 Sample No. S10-7D Bottom
 Date of testing Oct. 23, 1979 Depth of Sample 8.40m - 8.55m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	Undisturbed	7.00	3.50	55.3	1.68	0.304	10	8.5	—
2	"	6.98	3.50	55.2	1.70	0.311	7	9.0	—



Remarks.

Observation of sample at failure



UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____

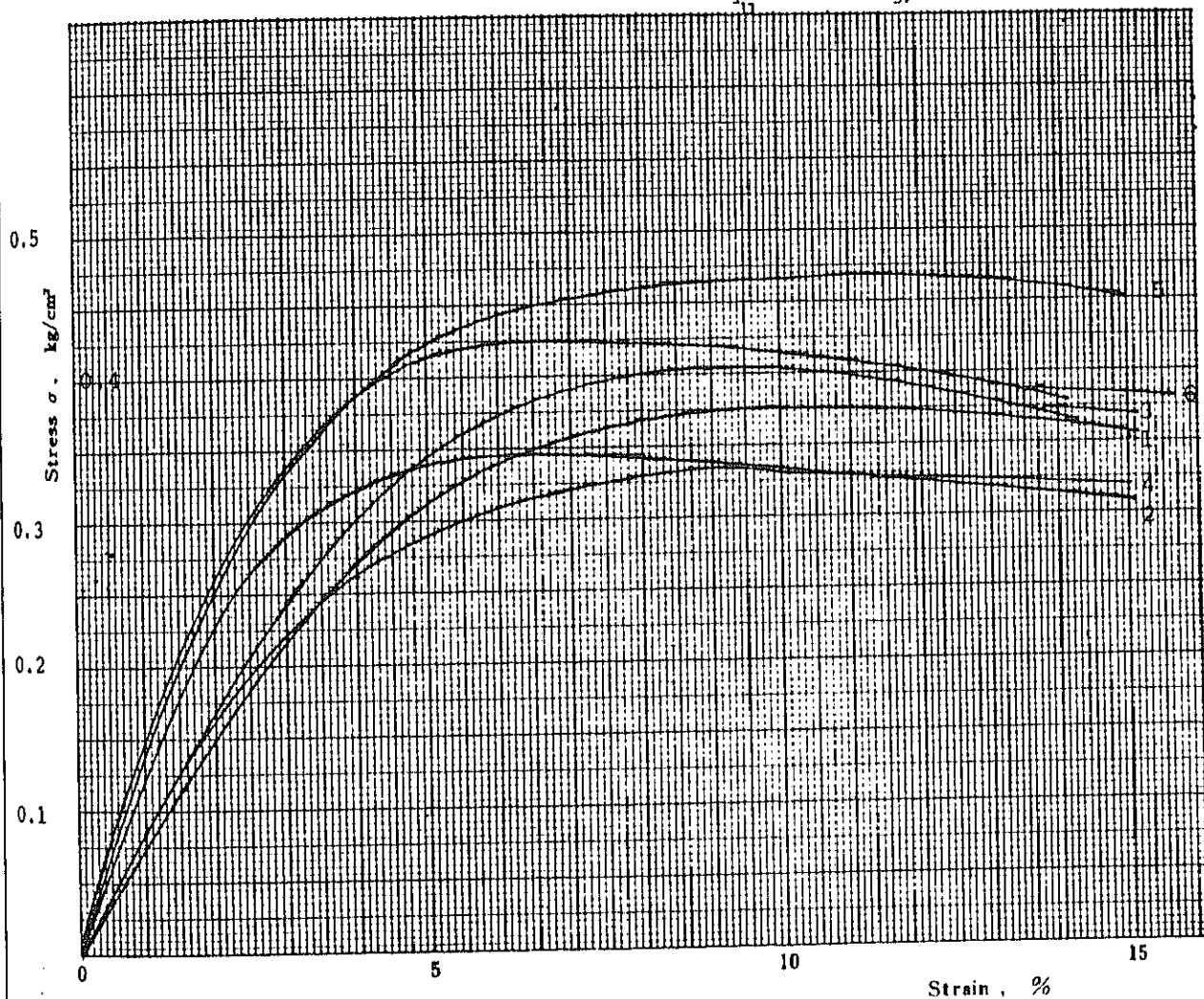
Location of Project GWADAR, PAKISTAN Boring No. B-1 Sample No. S1-1

Date of testing 2nd Nov., 1979 Depth of Sample 2.00 ~ 2.80m

Strain Rate 1 %/min.

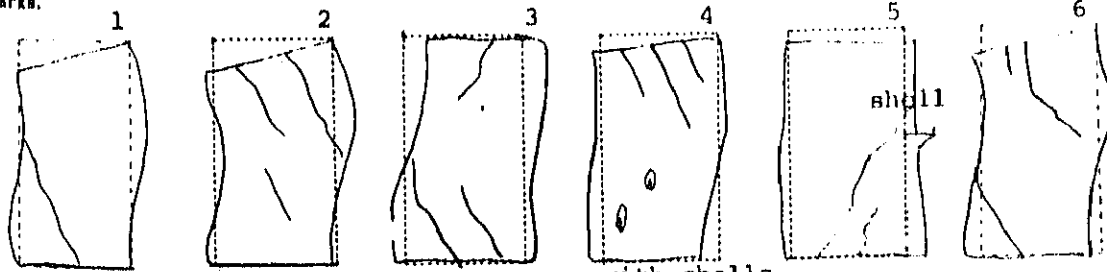
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²		Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter							
1	UD	8.0	3.55 3.51	30.8	1.93	0.376	0.344	-	10 7	-
3	UD	8.0	3.53 3.48		1.92	0.405	0.333	-	9 9	-
5	UD	8.0	3.51 3.51		1.92	0.468	0.425	-	11 6	-

$\bar{q}_u = 0.39 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure



with shells

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____

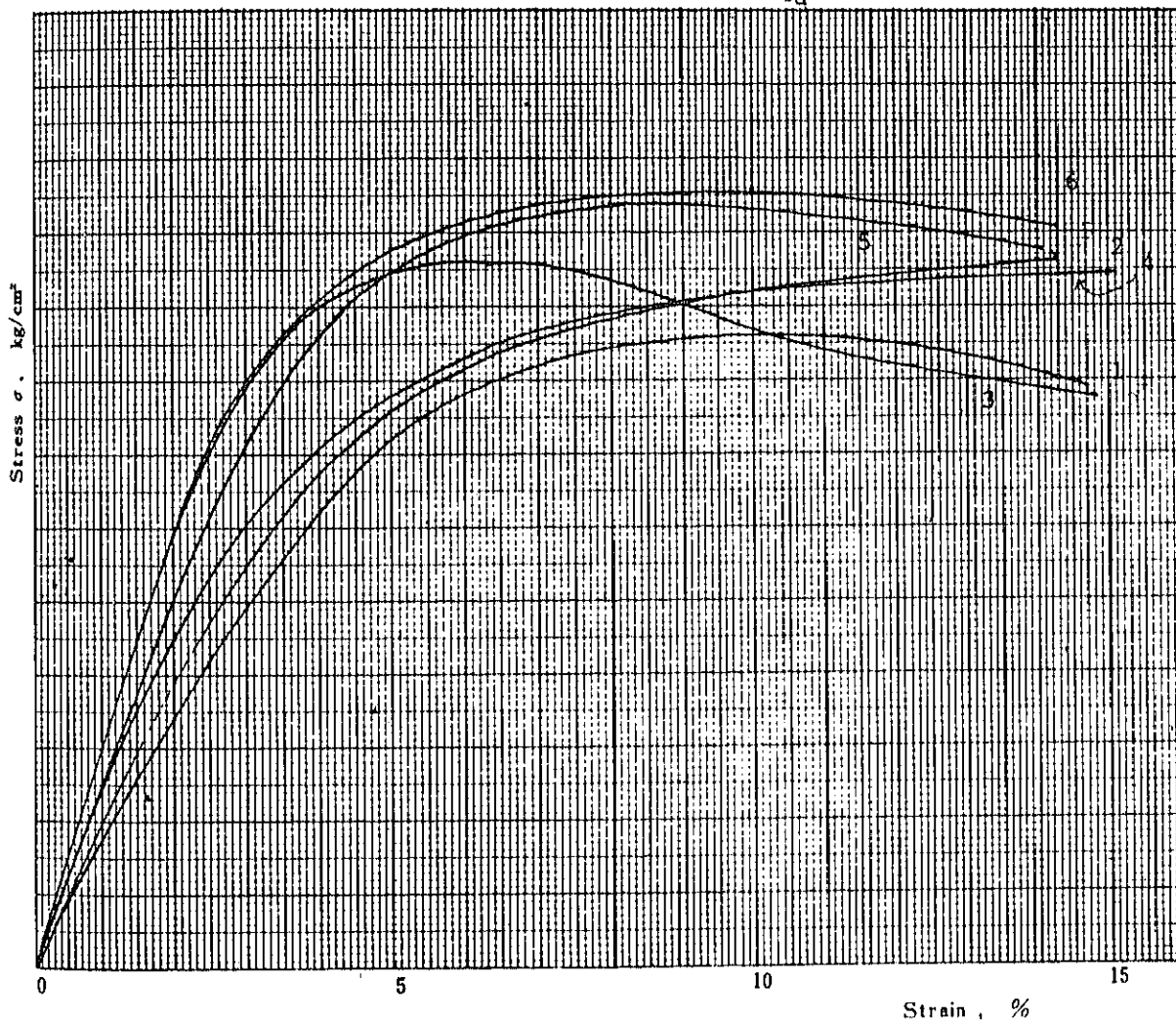
Location of Project GWADAR Boring No. B - 1 Sample No. S1-2

Date of testing 2nd Nov., 1979 Depth of Sample 4.00 ~ 4.80m

Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²		Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter							
1	UD	8.0	3.51	28.1	1.99	0.43	0.52	-	11	8
2	UD	8.0	3.52		1.99	0.48	0.47 +	-	6	(15)
3	UD	8.0	3.53		2.00	0.48	0.53	-	14	10
4	UD	8.0	3.47							
5	UD	8.0	3.52							
6	UD	8.0	3.53							

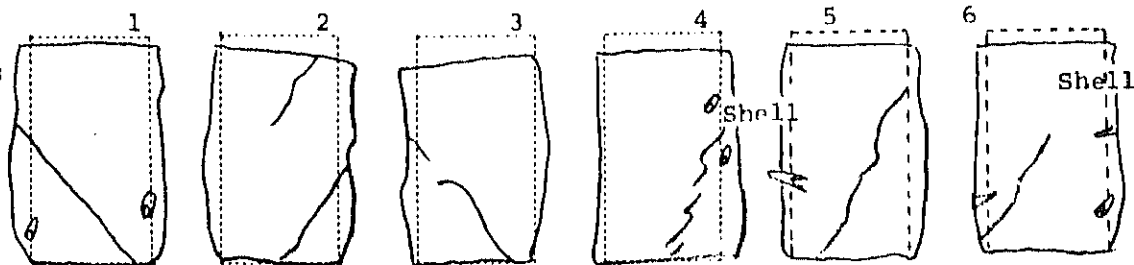
$\bar{\sigma}_{u1} = 0.49 \text{ kg/cm}^2$



Remarks.

Observation of sample at failure

Note :
Sample of 6 was difficult to trim.



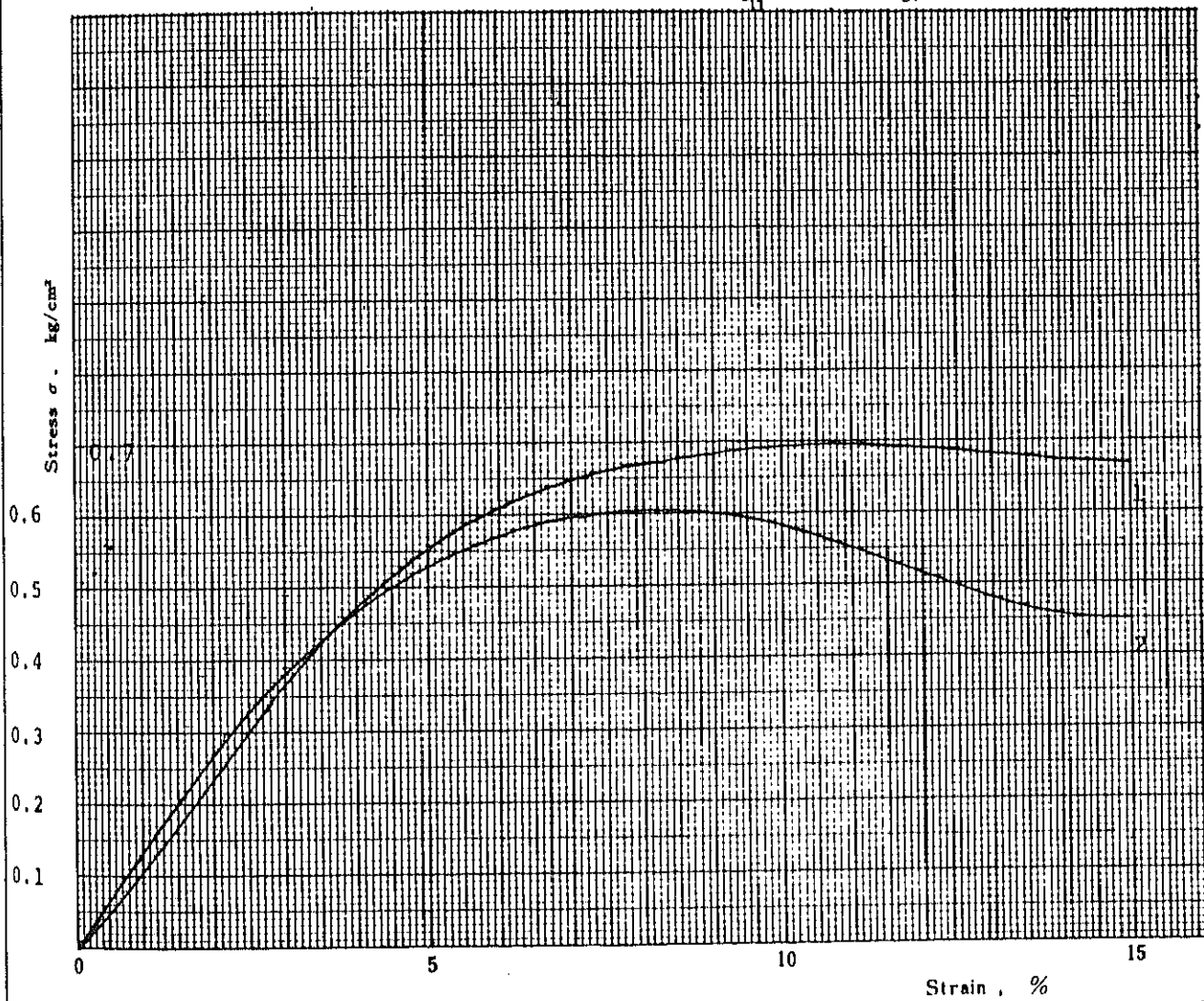
Specimens 1 & 2, 3 & 4, and 5 & 6 cut from the same level of the same sample.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B - 1 Sample No. S1-3
 Date of testing 2nd Nov., 1979 Depth of Sample 6.00 ~ 6.77 m
 Strain Rate 1 %/min.

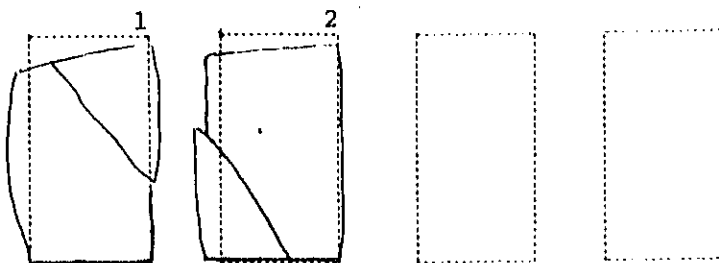
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.54	20.7	2.10	0.61	—	9.0	—
2	UD	8.0	3.56		2.12	0.70	—	11.0	—

$\bar{q}_u = 0.66 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

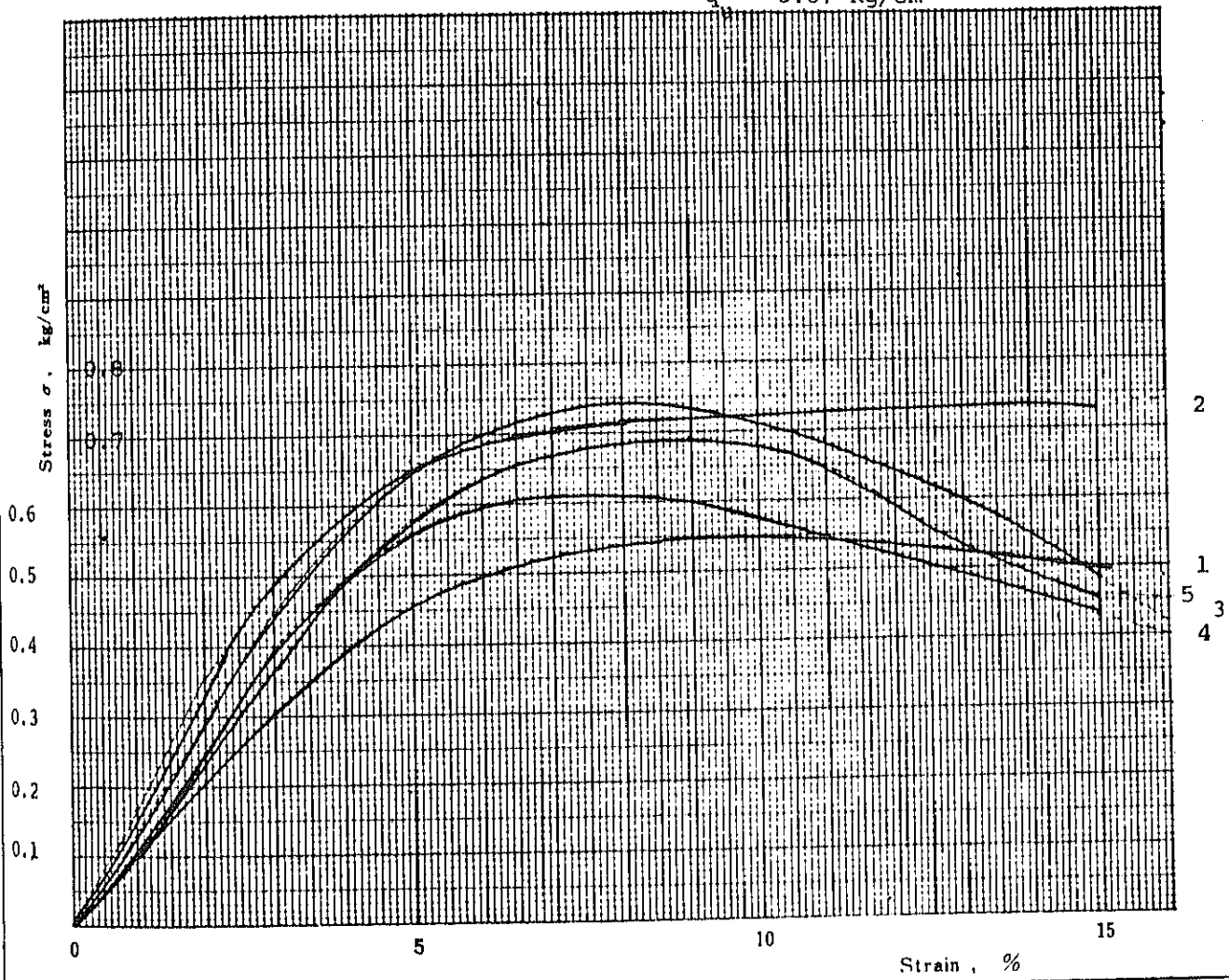


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B - 1 Sample No. S1-4
 Date of testing 3rd NOV., 1979 Depth of Sample 9.00 - 9.84 m
 Strain Rate 1 %/min.

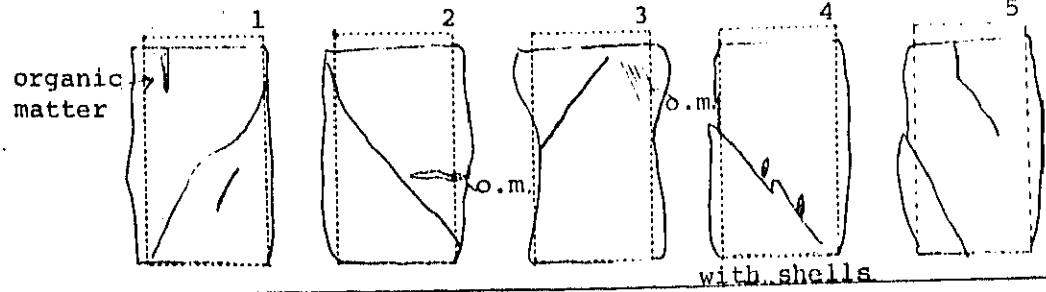
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²		Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter							
1	2	UD	8.0	3.51	28.6	1.96	0.55	-	9	-
				3.49	1.97	0.75			8	
3	4	UD	8.1	3.53	27.1	1.96	0.73	-	14	-
				3.49	1.98	0.61			7	
5		UD	8.0	3.54	27.1	1.94	0.69	-	9	-

$\bar{q}_c = 0.67 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

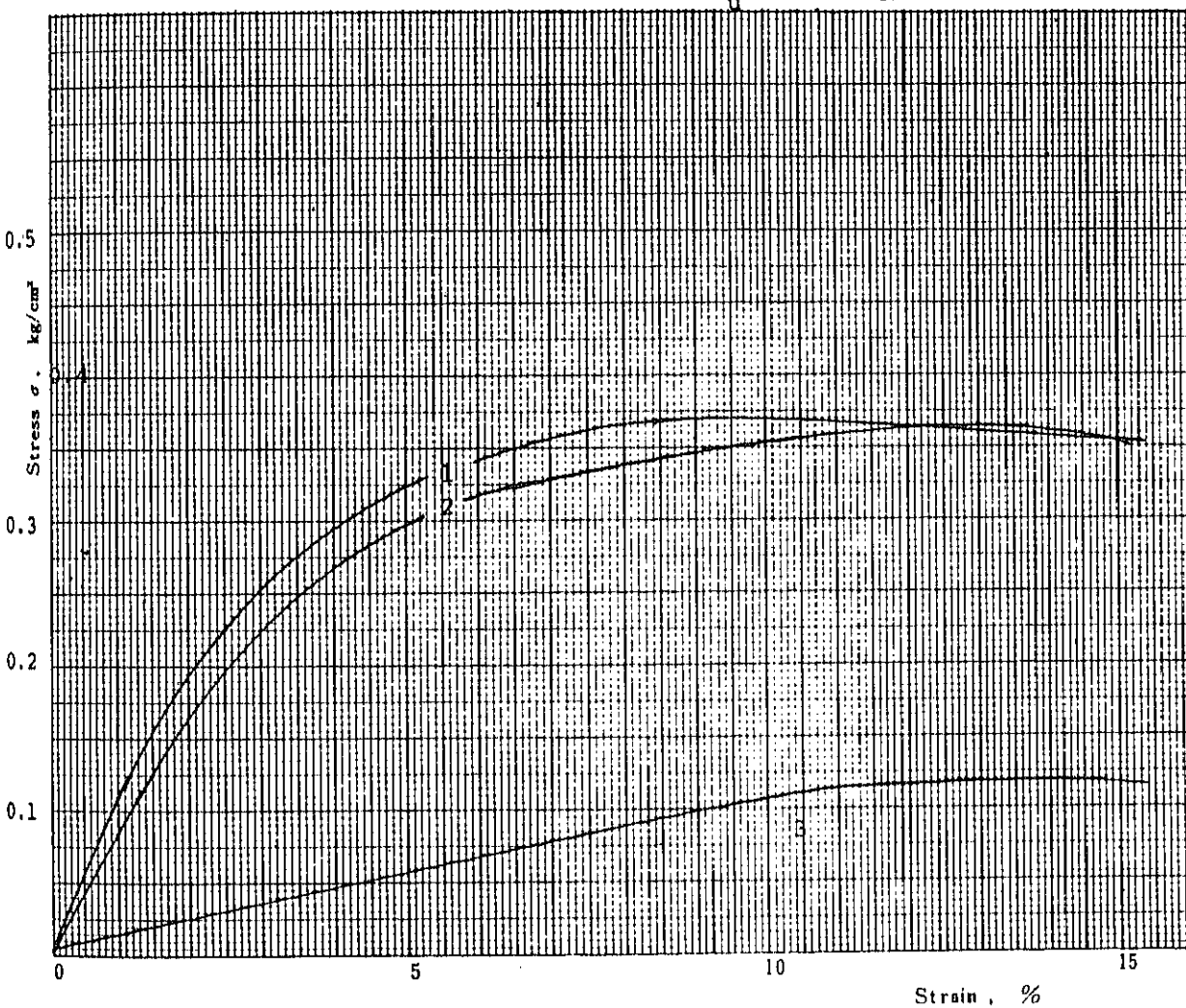


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B - 2 Sample No. S2-1
 Date of testing 8. Oct. 1979 Depth of Sample 2.50*3.20 m
 Strain Rate _____ %/min.

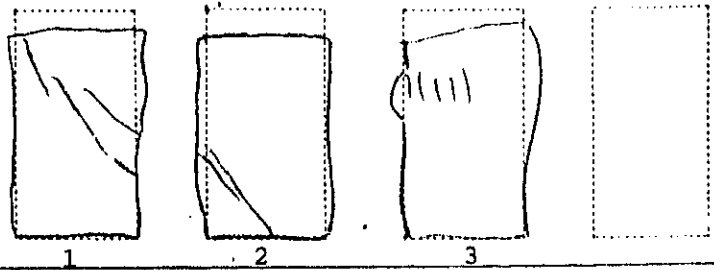
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8	3.52	30.4	1.94	0.37	—	9.0	—
2	UD	8	3.51			0.36	—	13.0	—
3	Remolded	8	3.73			0.12	—	(15)	3.0

$\bar{q}_u = 0.37 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

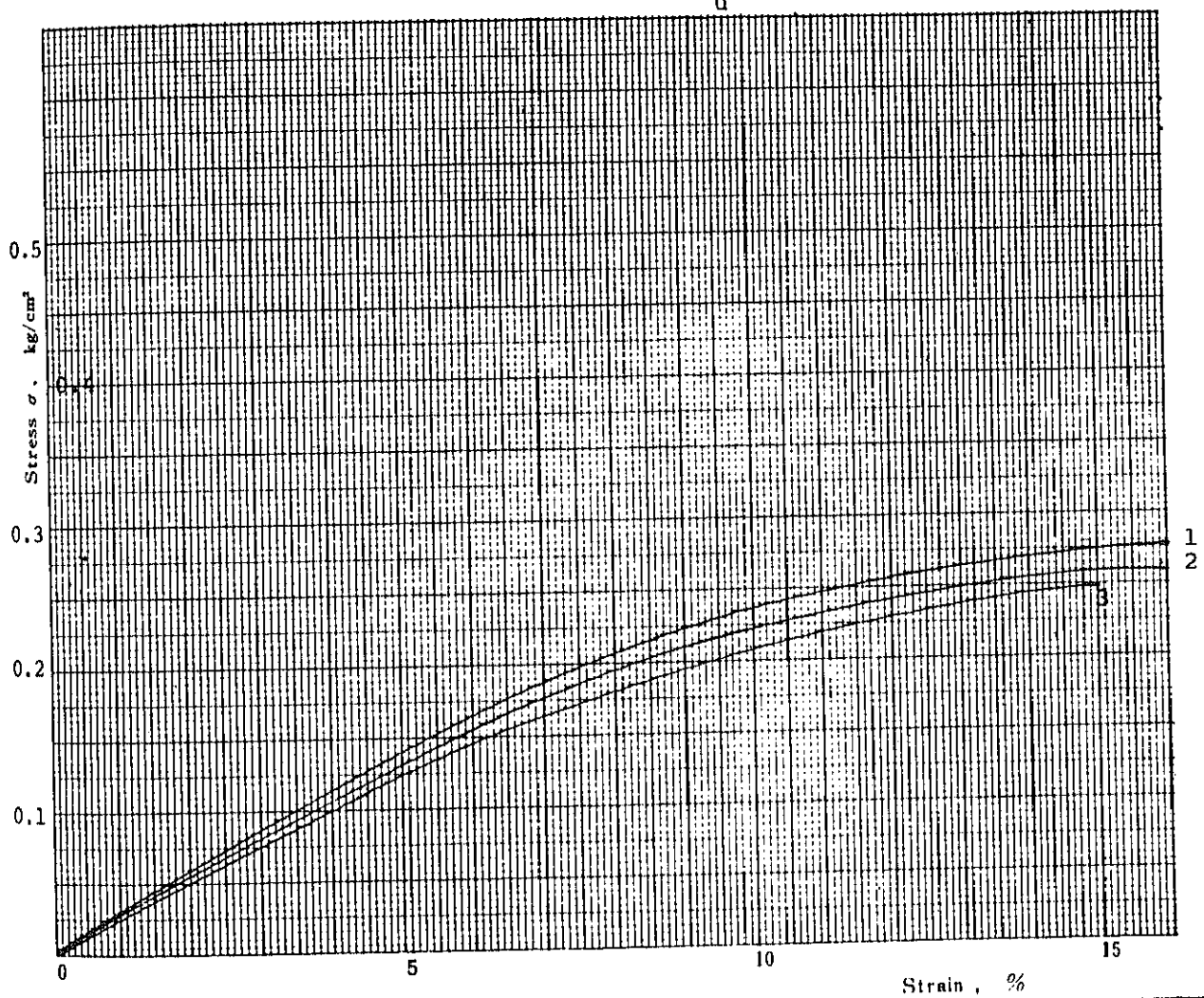


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B - 2 Sample No. S2-2
 Date of testing 30, Sep. 1979 Depth of Sample 4.0 ~ 4.7 m
 Strain Rate 1 %/min.

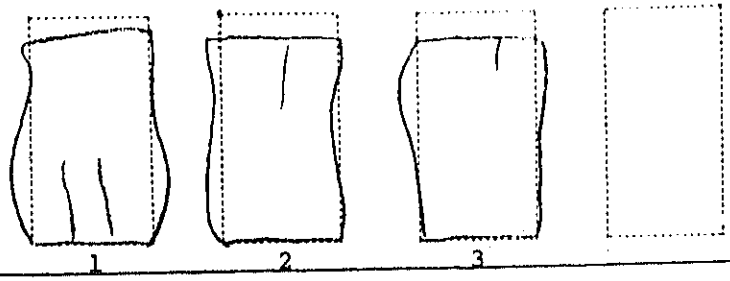
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	7.05	3.51	27.2	-	0.28 +	-	(16)	-
2	UD	8	3.54		-	0.26 +	-	(16)	-
3	UD	8	3.46		-	0.25 +	-	(16)	-

$q_u = 0.26 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure



UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

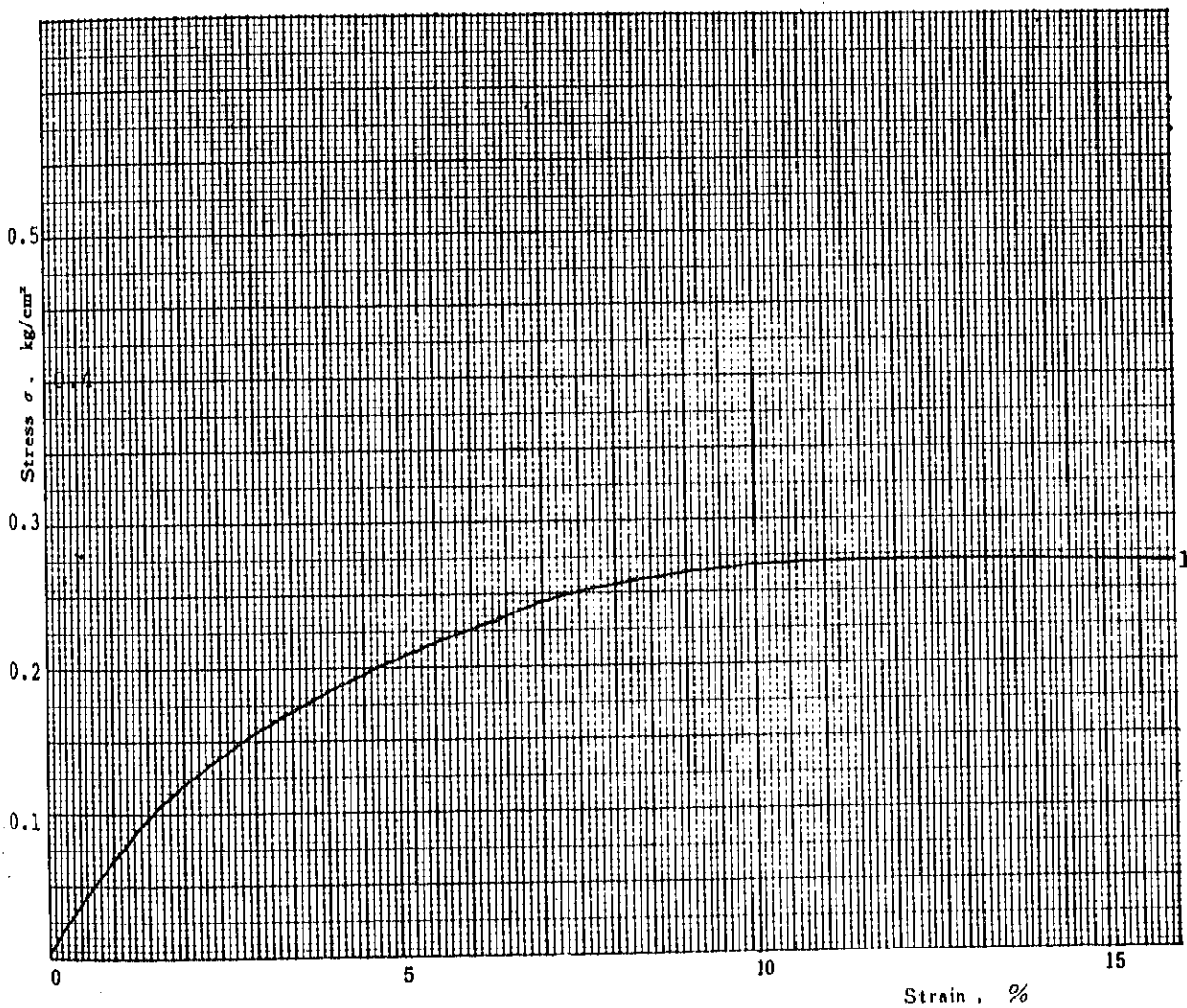
Project GWADAR MINI PORT Job No. _____

Location of Project GWADAR Boring No. B - 2 Sample No. S2-3D

Date of testing 9th, Oct. 1979 Depth of Sample 7.0 ~ 7.8 m

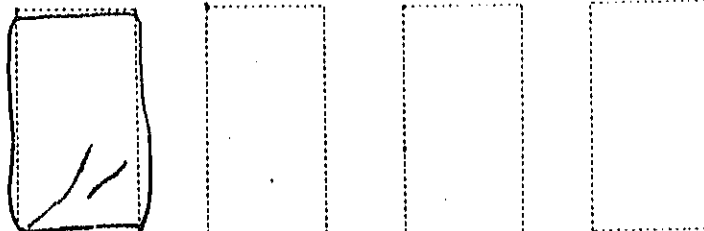
Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.66	22	2.07	0.27	-	10 - 14	-



Remarks.

Observation of sample at failure

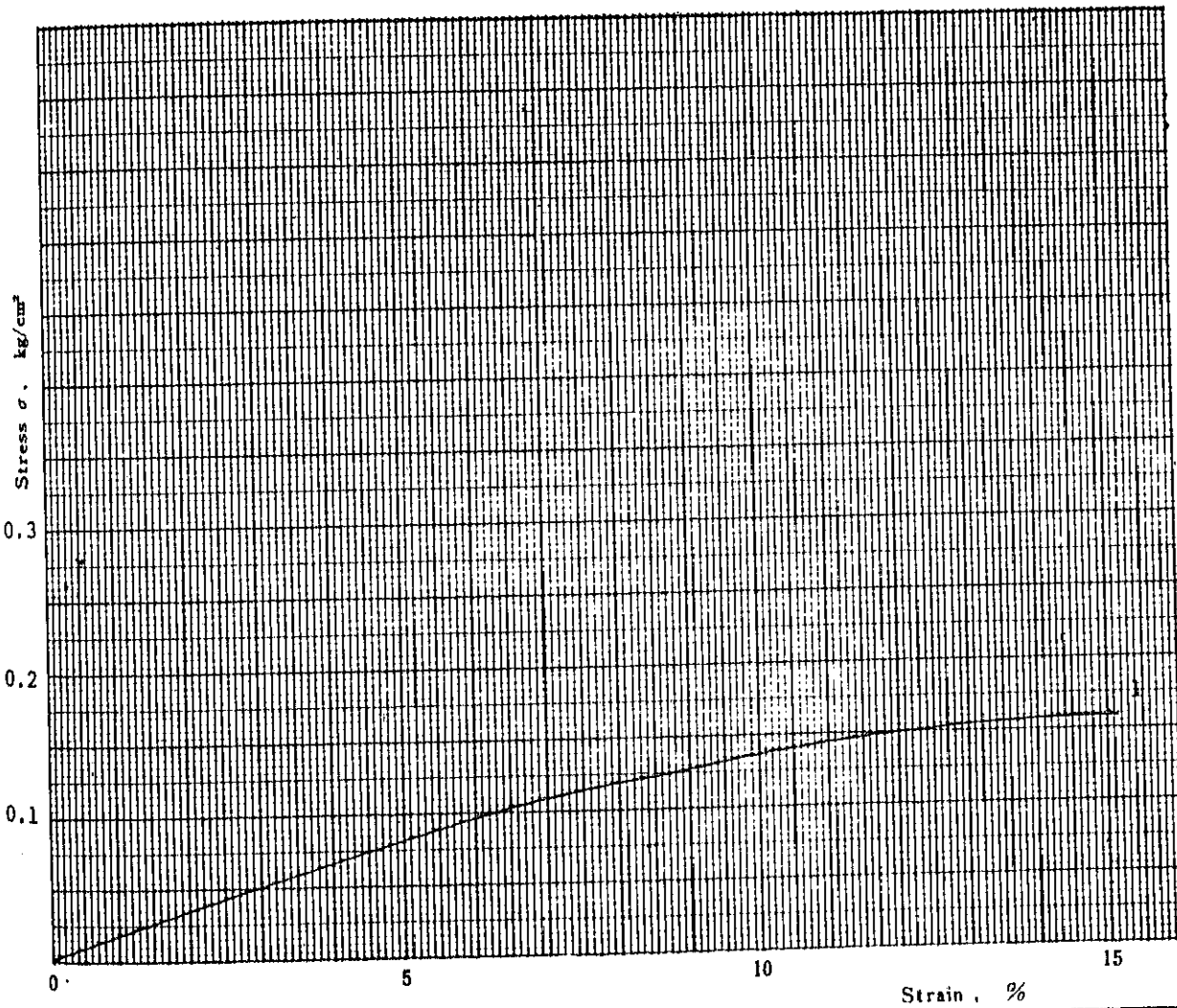


Difficult to trim due to shell.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

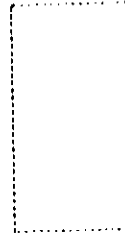
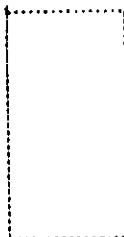
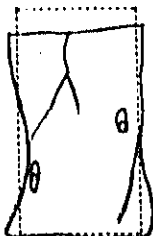
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B - 3 Sample No. S3-1
 Date of testing 8 Oct. 1979 Depth of Sample 1.6 ~ 2.3m
 Strain Rate 1%/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	7.10	3.53	30.9		0.16 +	-	(15)	-



Remarks.

Observation of sample at failure



Difficult to trim due to shell.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____

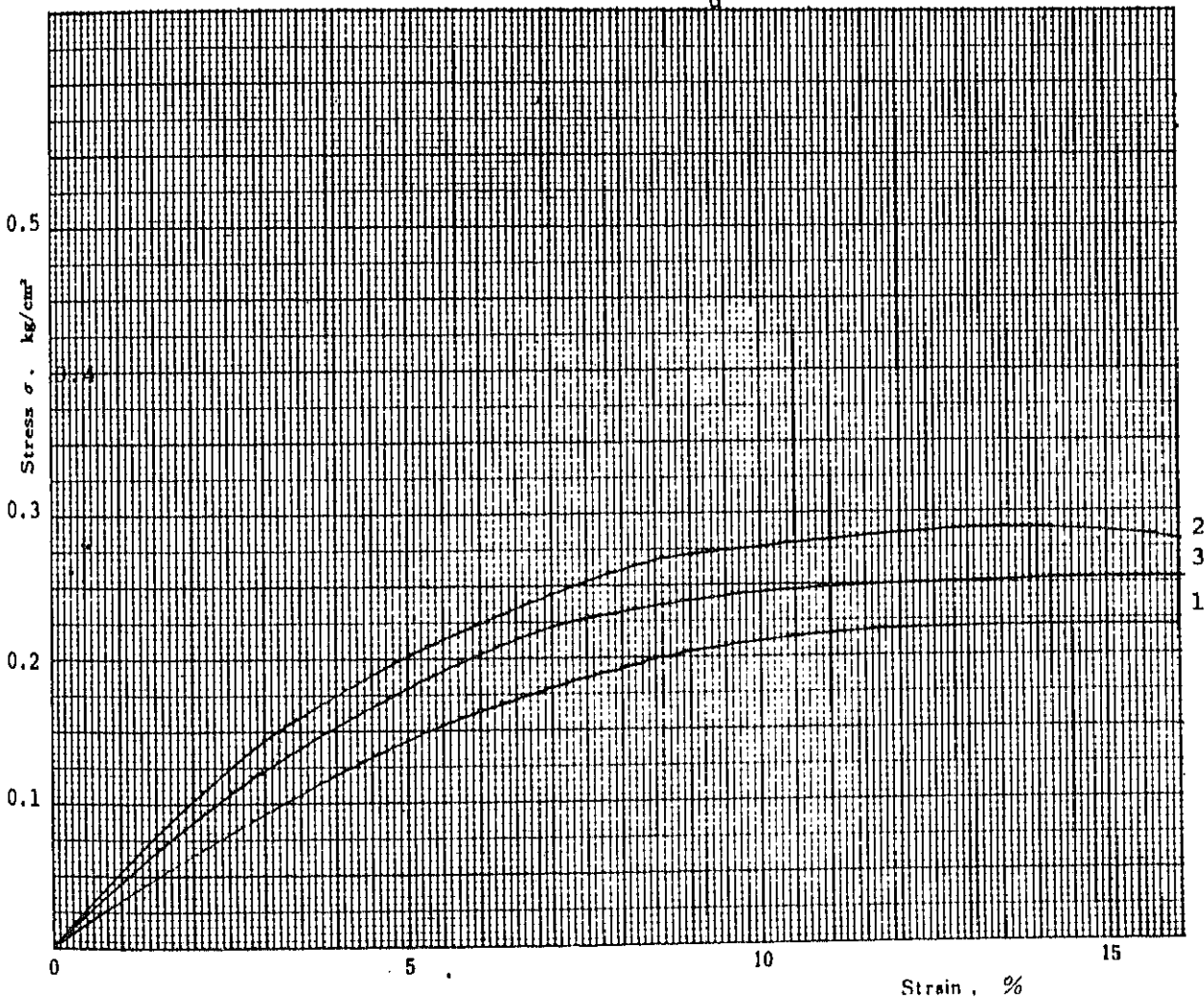
Location of Project GWADAR Boring No. B - 3 Sample No. S3-2

Date of testing 8 Oct. 1979 Depth of Sample 3.0 ~ 3.8m

Strain Rate 1 %/min.

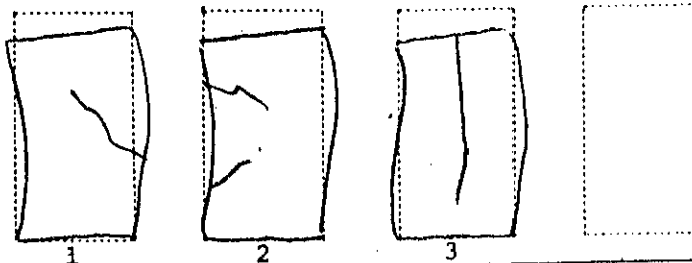
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8	3.52	30.4	1.89	0.22	-	13	-
2	UD	8	3.51		1.96	0.29	-	13	-
3	UD	8	3.52		1.94	0.25	-	13	-

$\sigma_u = 0.25 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

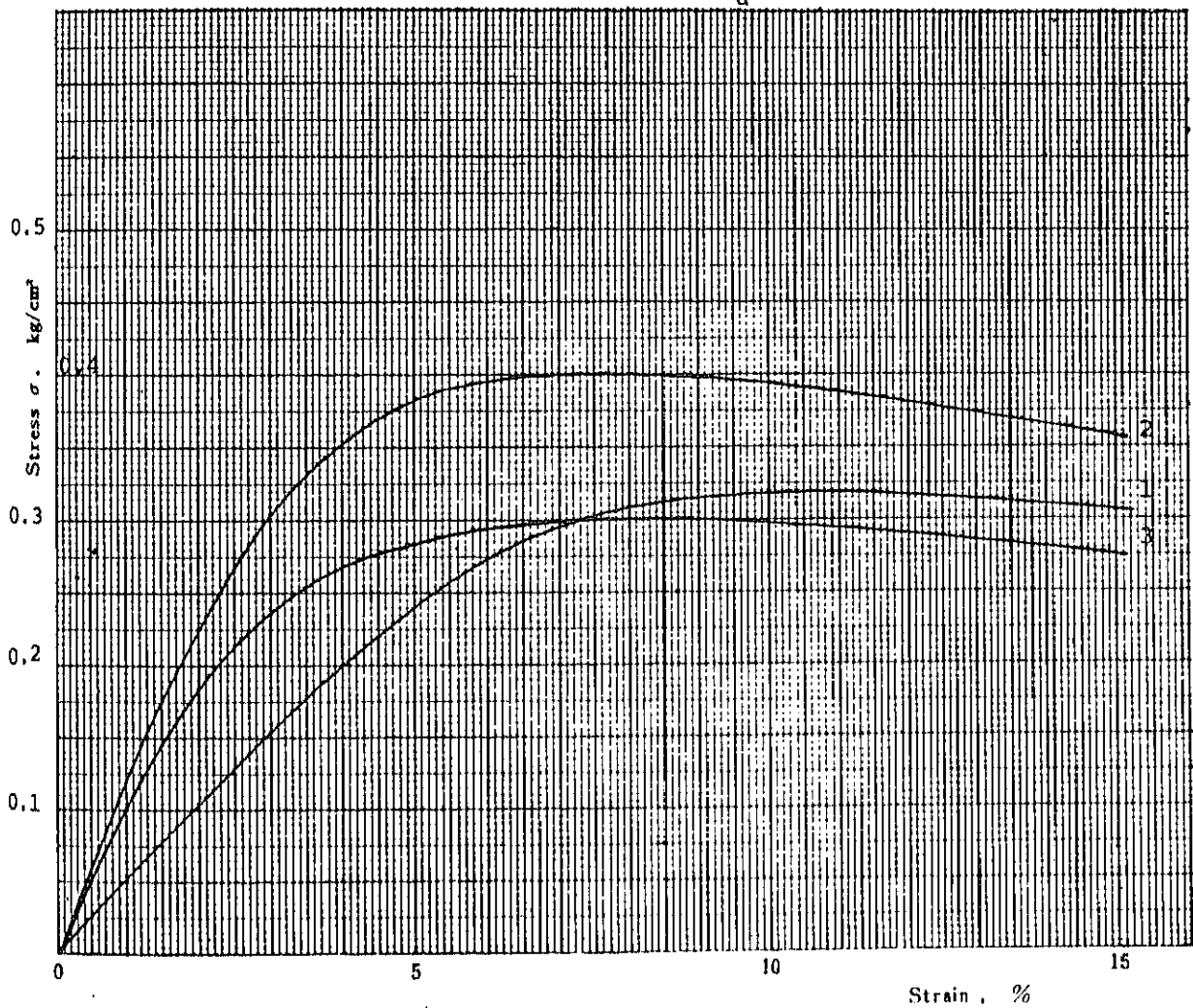


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B - 3 Sample No. S3-3
 Date of testing 8 Oct., 1979 Depth of Sample 5.0 ~ 5.82m
 Strain Rate 1 %/min.

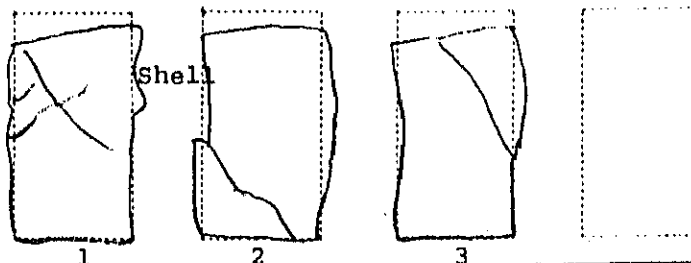
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8	3.54	25.7	1.98	0.32	-	10.0	-
2	UD	8	3.52		2.02	0.40	-	7.0	-
3	UD	8	3.52		2.02	0.30	-	7.0	-

$\bar{\sigma}_u = 0.34 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

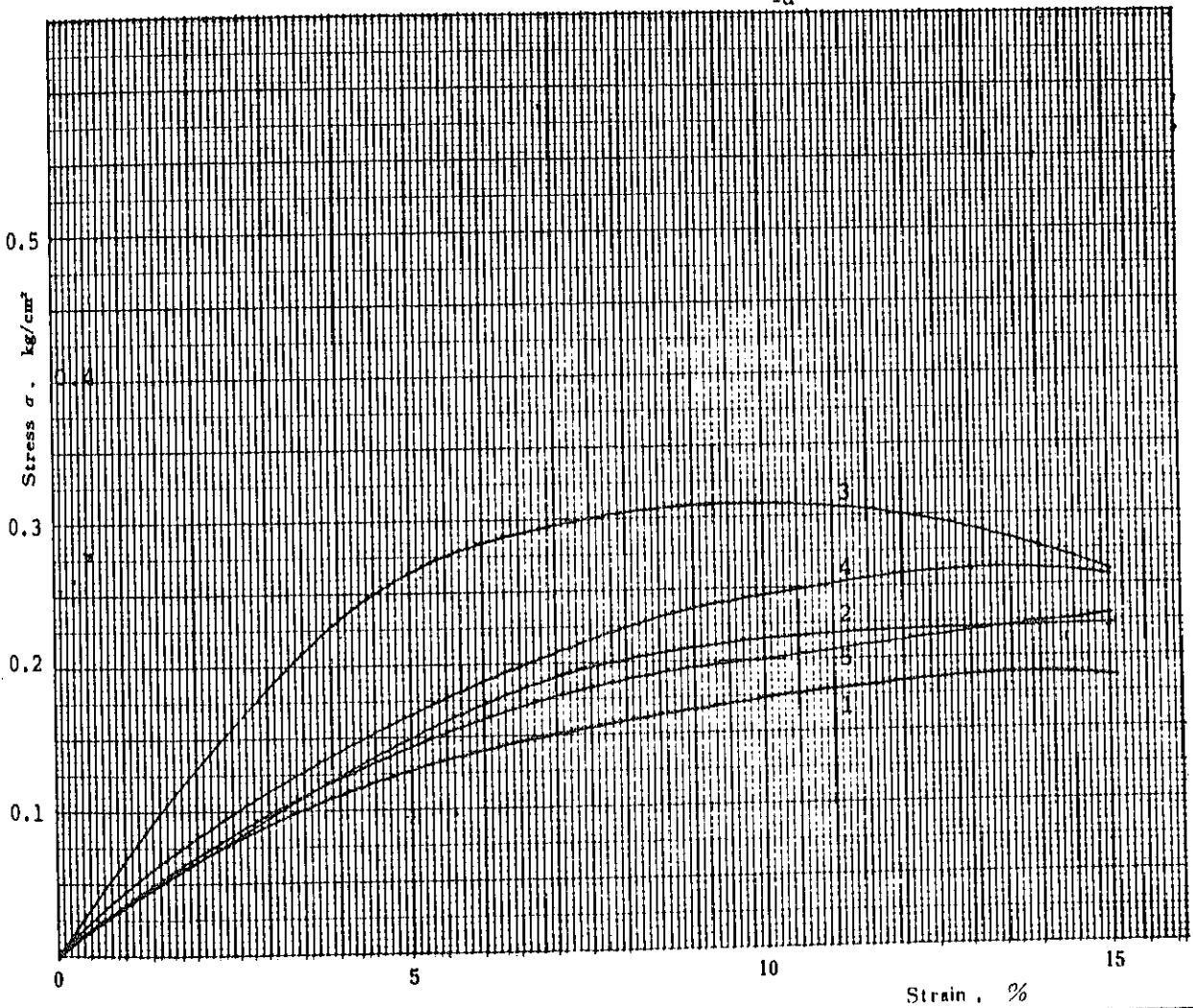


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B - 3' Sample No. S3'-1
 Date of testing 5th, Nov., 1979 Depth of Sample 2.00 ~ 2.73m
 Strain Rate 1 %/min.

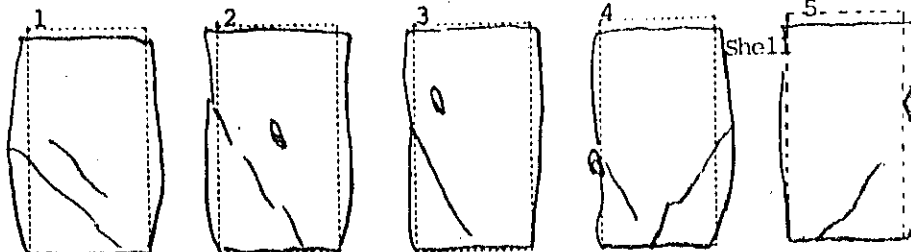
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.49	30.8	1.95	0.19	-	14	-
2	UD	8.0	3.50	30.8	1.95	0.22 +	-	(15)	-
3	UD	8.0	3.49	30.8	1.95	0.31	-	10	-
4	UD	8.0	3.50	30.8	1.93	0.26	-	13	-
5			3.51		1.93	0.22			

$q_u = 0.19 - 0.31 \text{ kg/cm}^2$



Remarks.

Observation of sample at failure



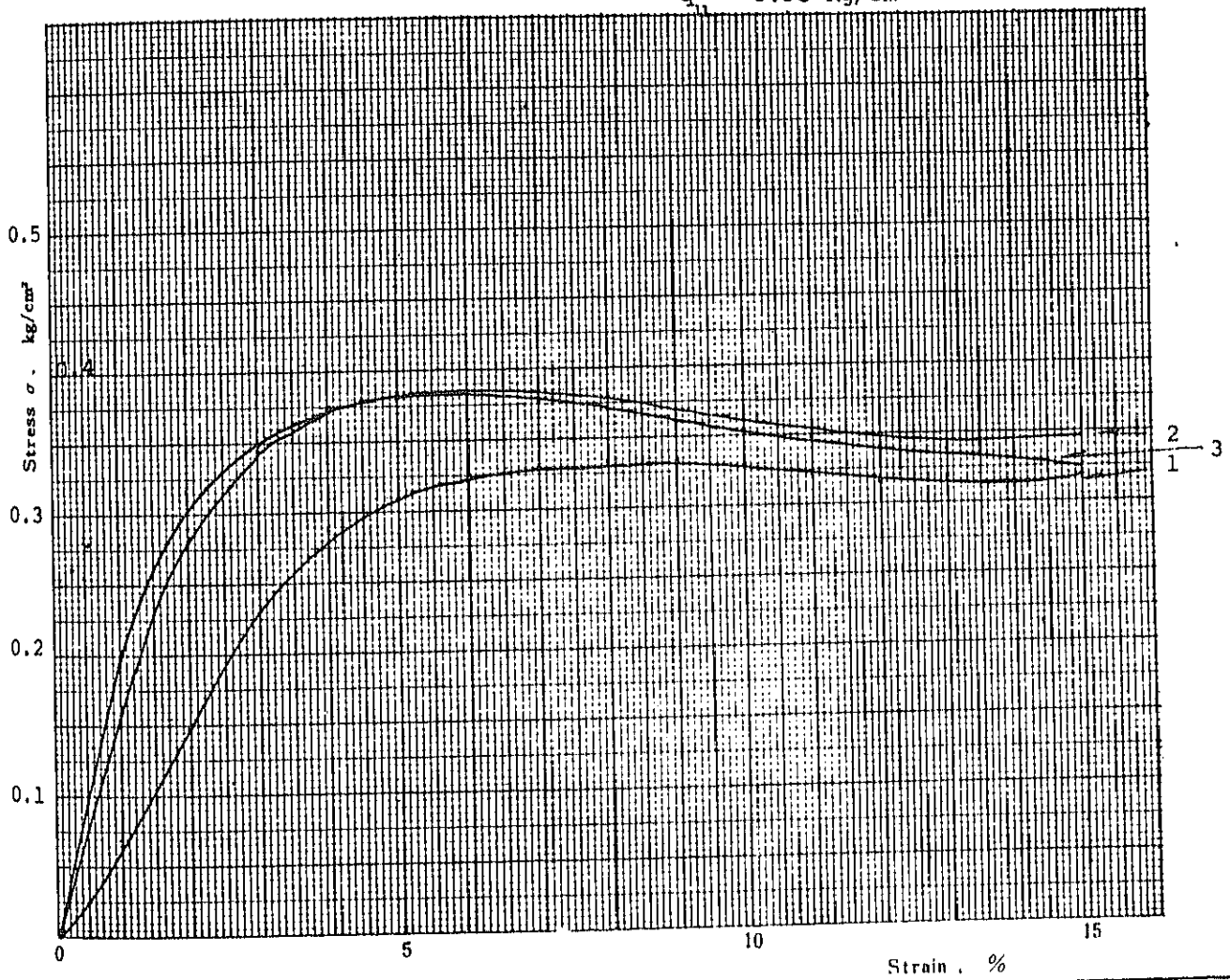
Note
 Due to many shell fragments, trimmi was very difficult.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B - 3' Sample No. S3'-2
 Date of testing 5th, Nov., 1979 Depth of Sample 3.00 ~ 3.84 m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.51	29.6	1.96	0.33	-	8	-
2	UD	8.0	3.51	29.6	1.96	0.38	-	7	-
3	UD	8.0	3.51	29.6	1.96	0.38	-	5	-

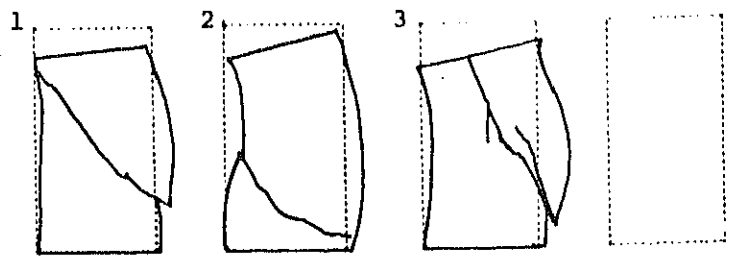
$\bar{q}_1 = 0.36 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

Specimens 2 & 3 cut from the same level of the same sample.

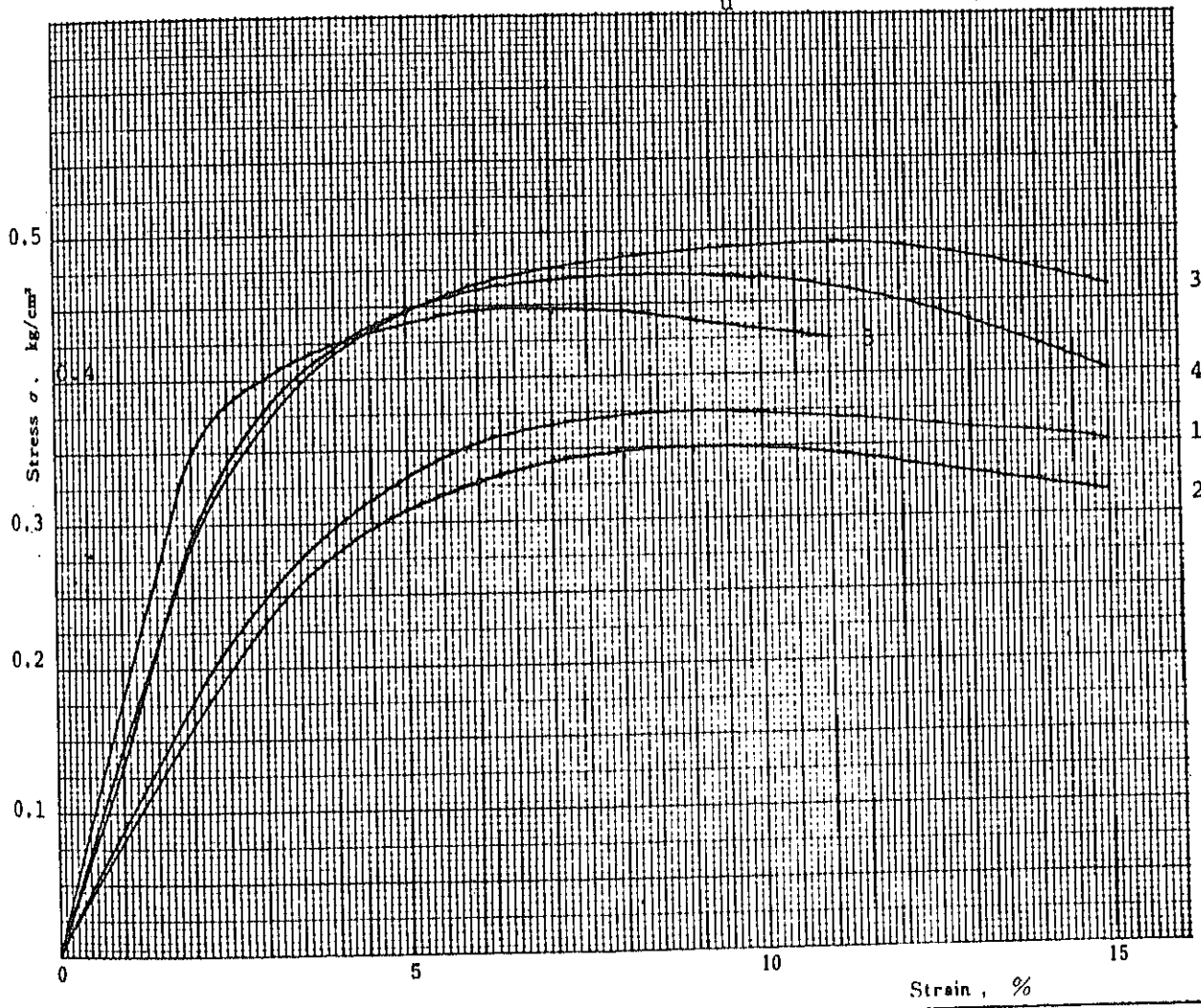


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B - 3' Sample No. S3'-3
 Date of testing 6th Nov., 1979 Depth of Sample 4.00 - 4.88 m
 Strain Rate 1 %/min.

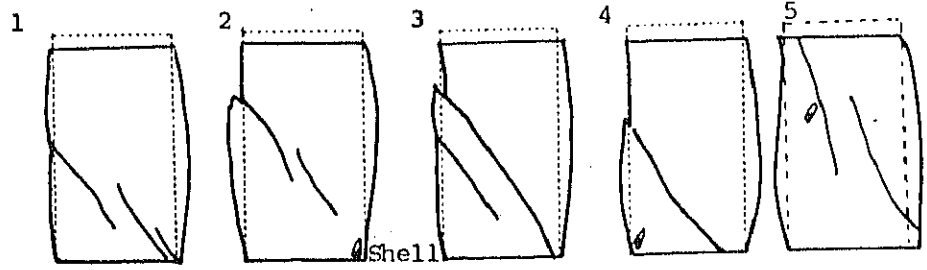
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.50	26.7	2.01	0.38	-	8	-
2	UD	8.0	3.49	26.7	2.01	0.39	-	10	-
3	UD	8.0	3.44	26.7	2.02	0.49	-	9	-
4	UD	8.0	3.50	26.7	2.00	0.47	-	8	-
5	UD	8.0	3.52						

$\sigma_u = 0.38 - 0.49 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure



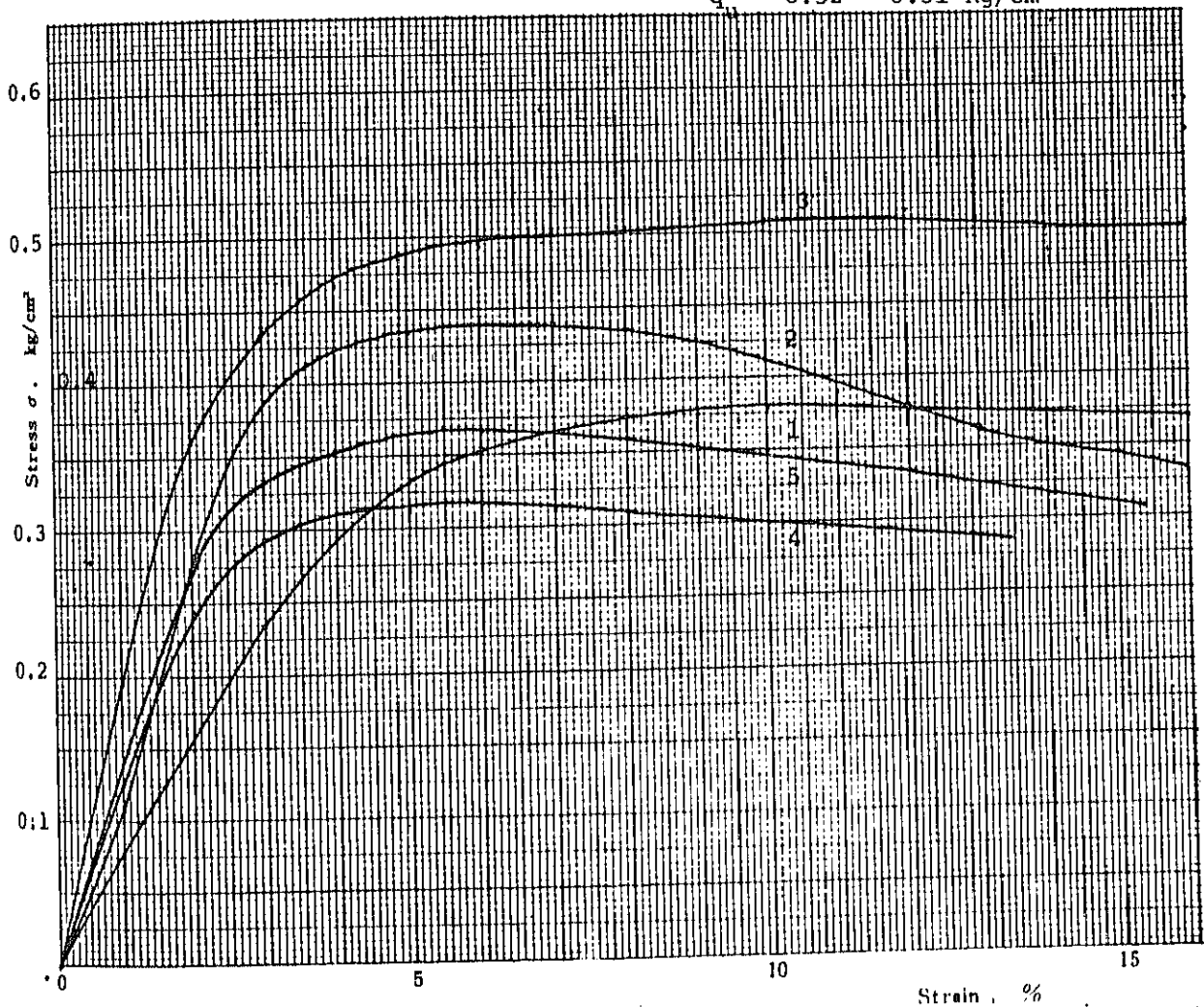
Specimens 1 & 2 and 4 & 5 cut from the same level of the same sample.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

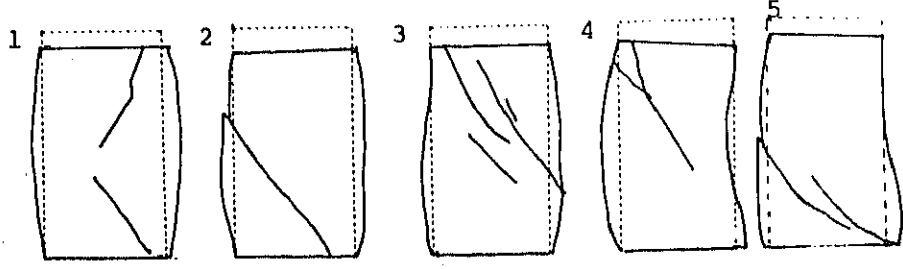
Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B - 3' Sample No. S3'-4
 Date of testing 6th Nov., 1979 Depth of Sample 5.00 ~ 5.85m
 Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²		Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter			0.32	0.37			
1	UD	8.0	3.50	25.7	2.01	0.38	-	-	11	-
2	UD	8.0	3.51	25.7	2.02	0.44	-	-	6	-
3	UD	8.0	3.51	25.7	2.01	0.51	-	-	9	-
4	UD	8.0	3.50	25.7	2.01	0.32	-	-	6	-
5	UD	8.0	3.51	25.7	2.01	0.37	-	-	5.5	-

$\bar{q}_c = 0.32 - 0.51 \text{ Kg/cm}^2$



Remarks. Observation of sample at failure



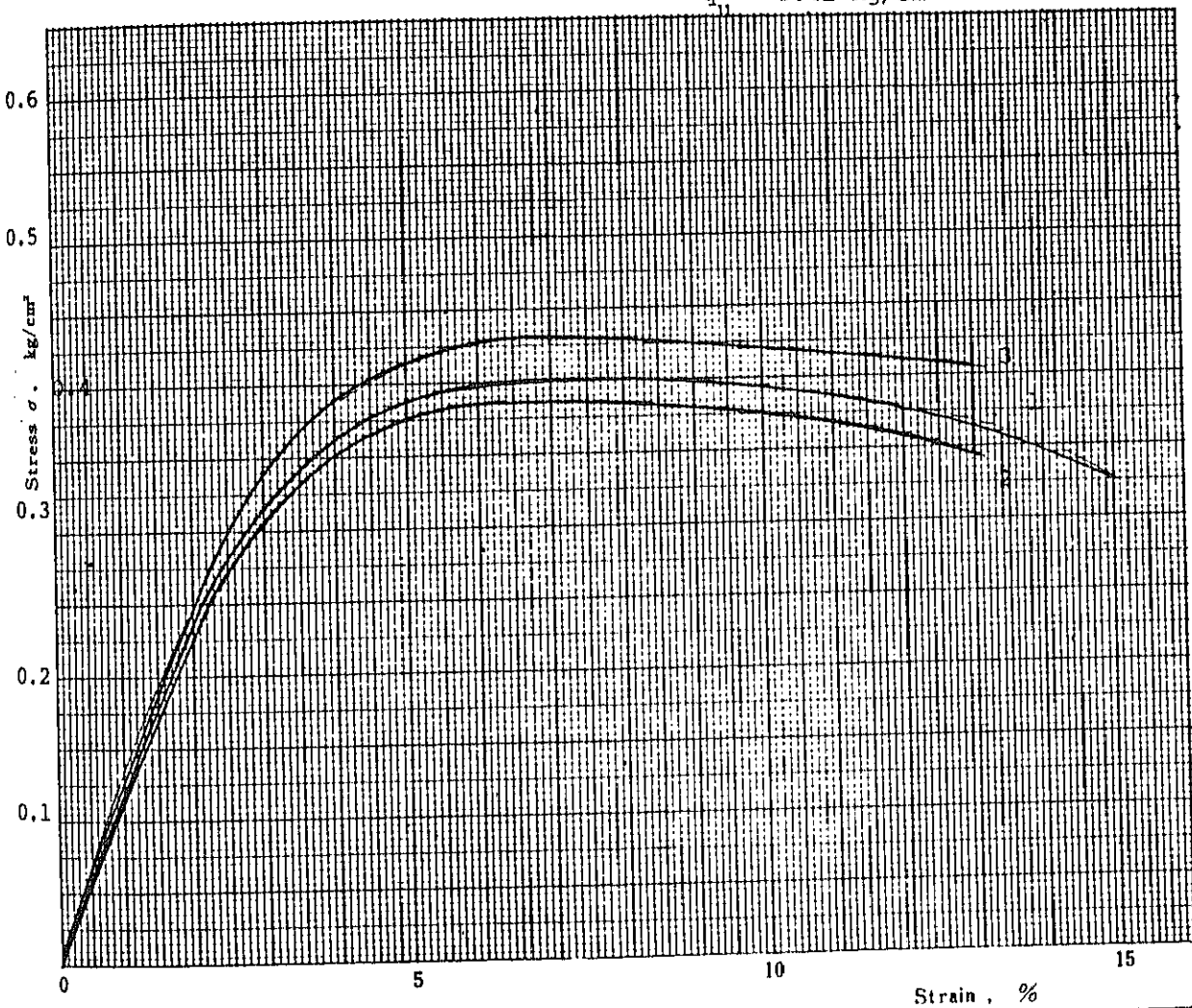
Specimens 2 & 3 and 4 & 5 cut from the same level of the same sample.

UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR Boring No. B-4 Sample No. S4-2
 Date of testing 23 Oct., 1979 Depth of Sample 3.00 ~ 3.85m
 Strain Rate 1 %/min.

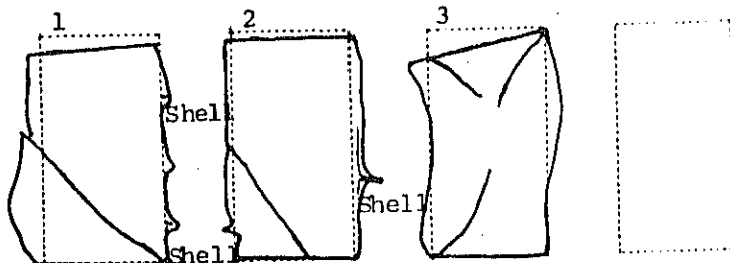
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8	3.51	28.3	1.96	0.402		8.0	-
2	UD	8	3.51		1.93	0.388		7.5	-
3	UD	8	3.52		1.97	0.430		6.5	-

$$\bar{q}_u = 0.41 \text{ Kg/cm}^2$$



Remarks.

Observation of sample at failure

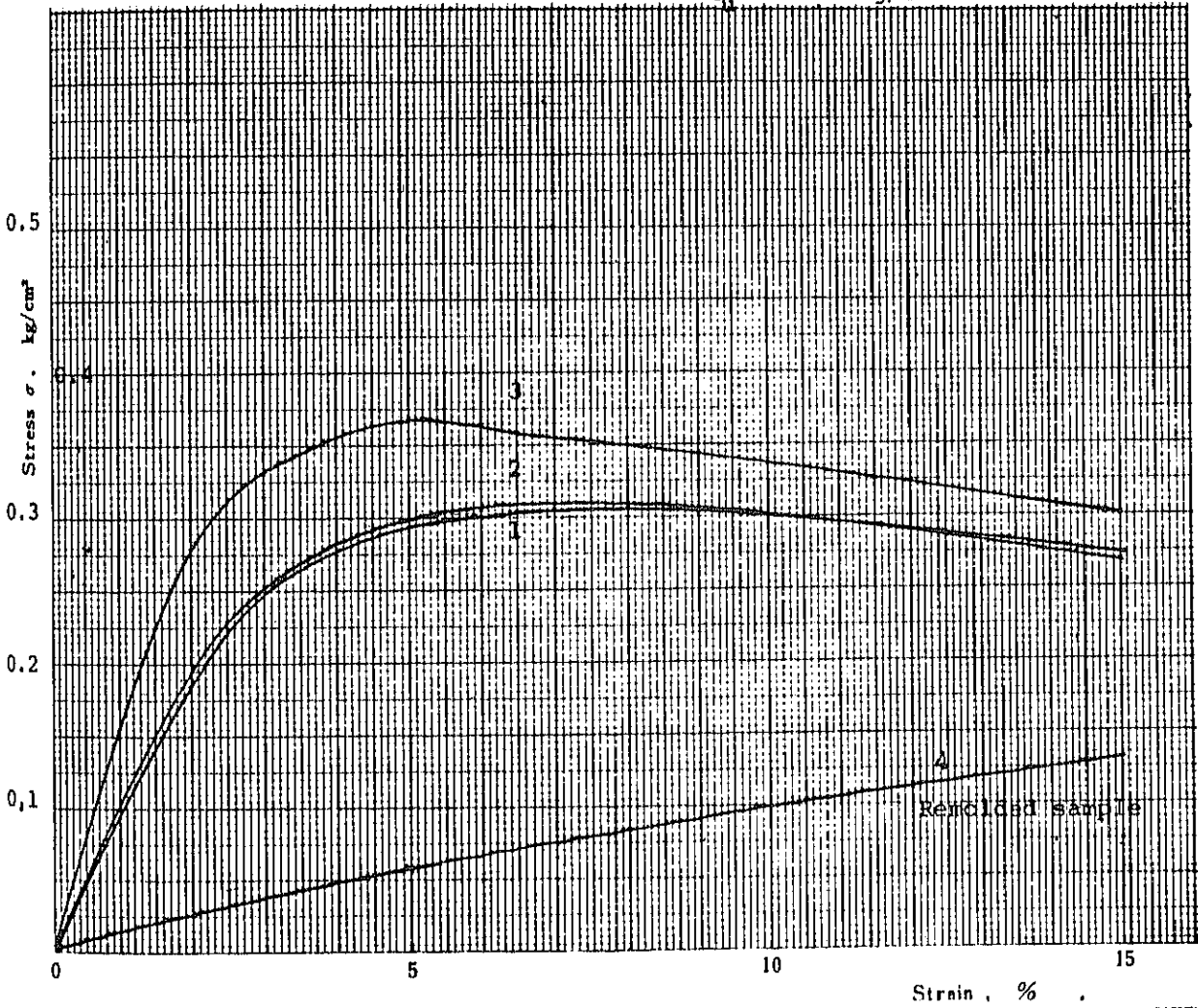


UNCONFINED. COMPRESSION TEST (Stress-Strain Curves)
 TRIAXIAL

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PALISTAN Boring No. B-6 Sample No. S6-1
 Date of testing 4th Nov., 1979 Depth of Sample 2.00 ~ 2.87m
 Strain Rate 1 %/min.

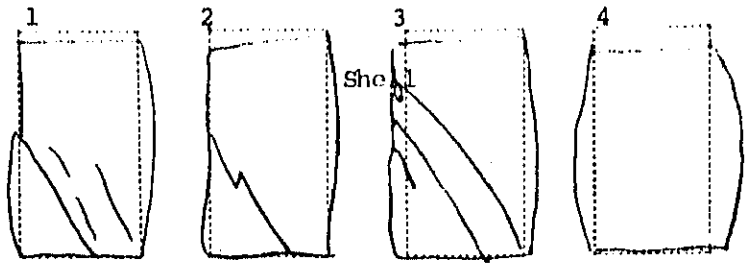
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.51	31.2	1.99	0.31	-	8	-
2	UD	8.0	3.50		1.98	0.31	-	8	-
3	UD	8.0	3.50		1.97	0.37	-	5	-
4	Remolded	8.0	3.63			0.13 +	-	(15)	2.4~2.8

$\bar{q}_u = 0.33 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

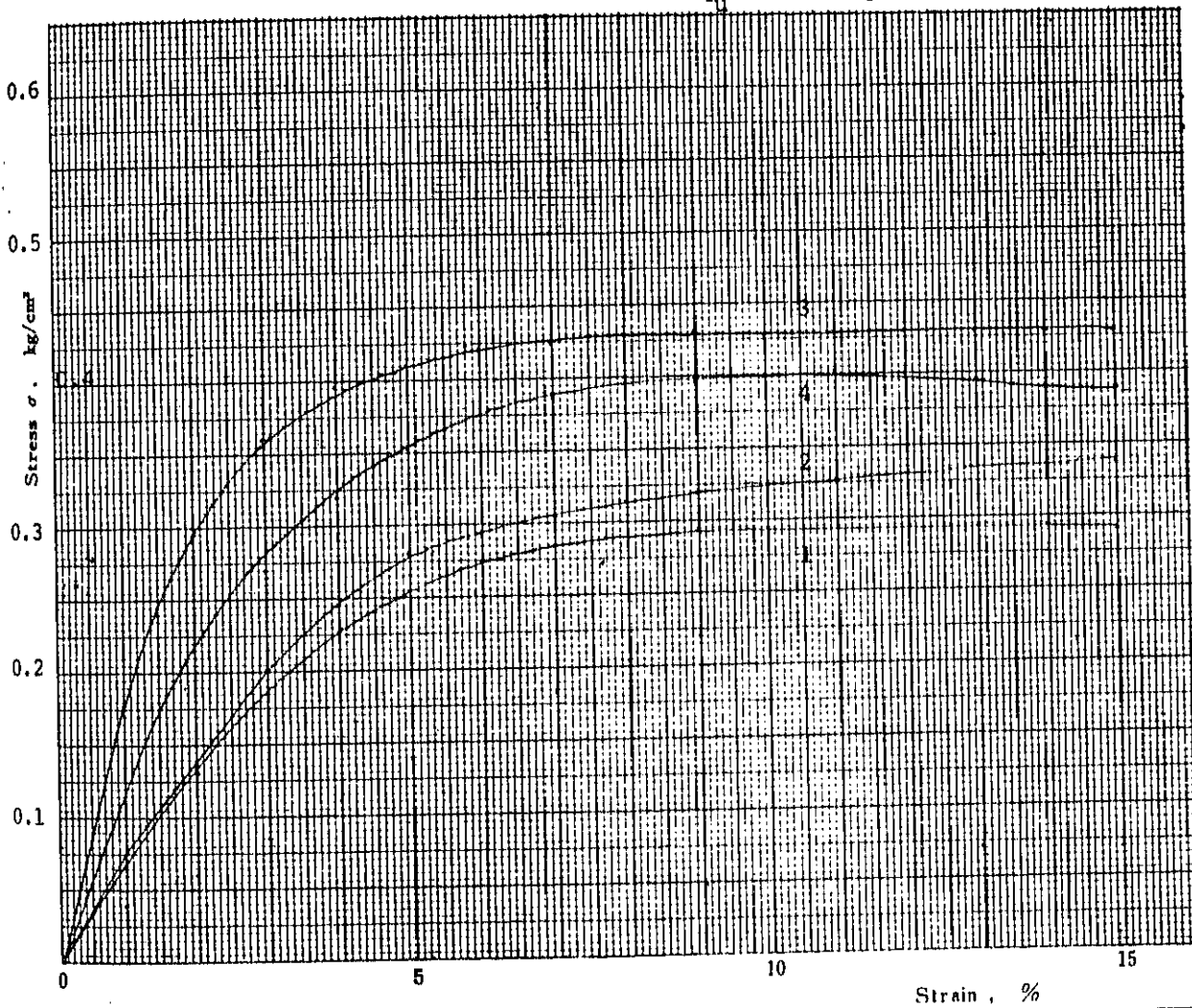


UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____
 Location of Project GWADAR, PAKISTAN Boring No. B-6 Sample No. S6-2
 Date of testing 4th Nov., 1979 Depth of Sample 4.00 ~ 4.78m
 Strain Rate 1 %/min.

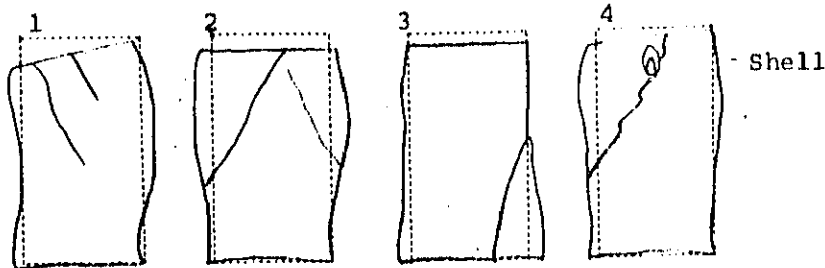
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.51	33.1	1.93	0.30	-	12	-
2	UD	8.0	3.50	33.1	1.93	0.34 +	-	(15)	-
3	UD	8.0	3.50	33.1	1.94	0.43	-	9	-
4	UD	8.0	3.51	33.1	1.94	0.40	-	11	-

$\bar{\sigma}_u = 0.37 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure



UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

GWADAR MINI PORT

Project _____ Job No. _____

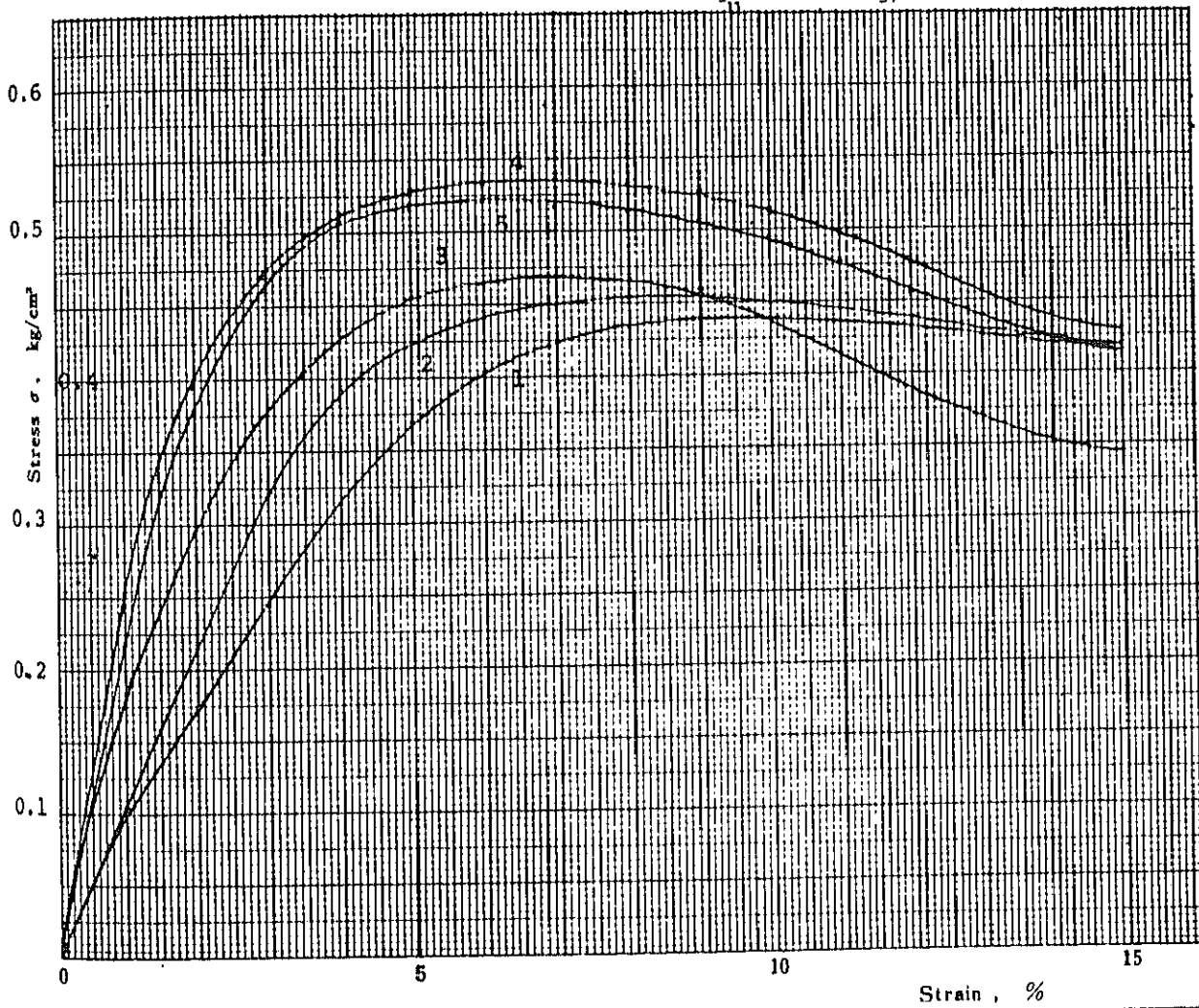
Location of Project GWADAR, PAKISTAN Boring No. B-6 Sample No. S6-3

Date of testing 4th Nov., 1979 Depth of Sample 6.00 ~ 6.86m

Strain Rate 1 %/min.

Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²		Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter			0.54	0.52			
1	UD	8.0	3.51	30.0	1.94	0.44	-	-	10	-
2	UD	8.0	3.51	30.0	1.96	0.46	-	-	8	-
3	UD	8.0	3.52	30.0	1.96	0.47	-	-	7	-
4	UD	8.0	3.51	30.0	1.97	0.54	0.52	-	7	-
5	UD	8.0	3.52	30.0	1.97	0.54	0.52	-	6	-

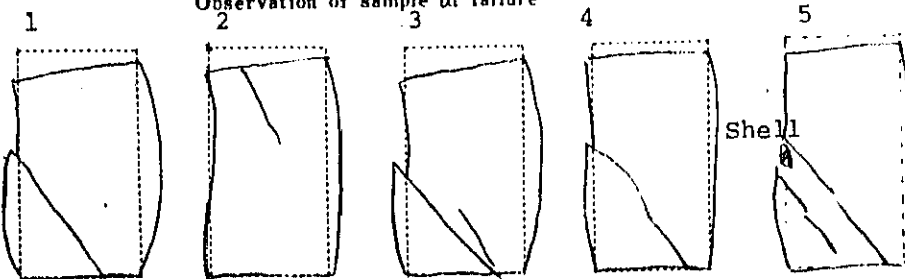
$\bar{q}_c = 0.49 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure

Specimens 2 & 3 and 4 & 5 cut from the same level of the same sample.



UNCONFINED TRIAXIAL COMPRESSION TEST (Stress-Strain Curves)

Project GWADAR MINI PORT Job No. _____

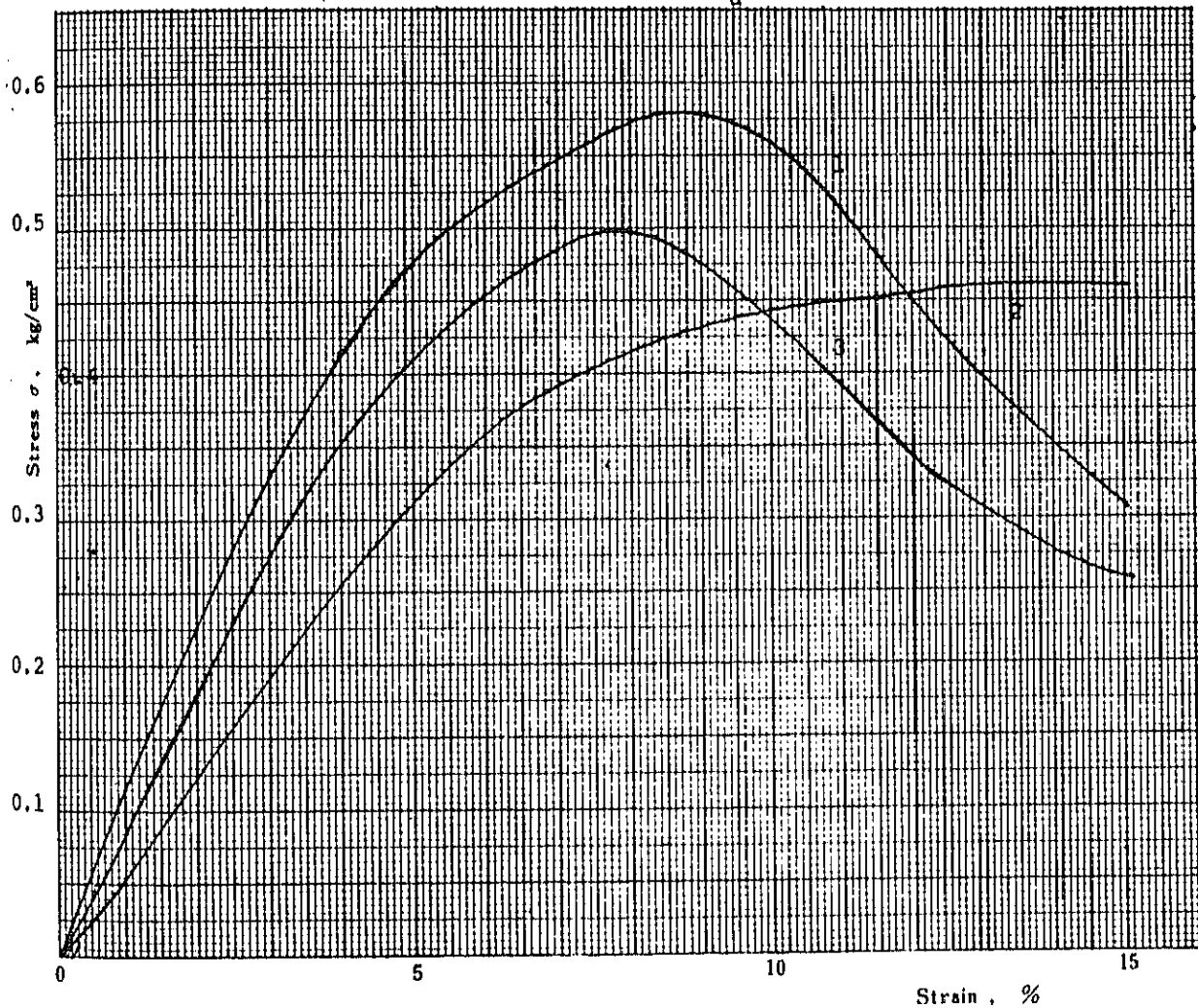
Location of Project GWADAR, PAKISTAN Boring No. B-6 Sample No. S6-4

Date of testing 4th Nov., 1979 Depth of Sample 9.00m ~ 9.87m

Strain Rate 1 %/min.

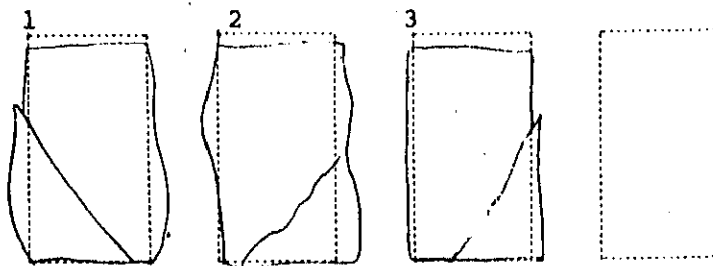
Specimen No.	Condition of sample	Size of specimen, cm.		Natural water content %	Wet density g/cm ³	Unconfined compressive strength kg/cm ²	Coefficient of deformation E ₅₀ kg/cm ²	Strain at failure %	Sensitivity ratio
		Height	Diameter						
1	UD	8.0	3.50	25.7	2.02	0.58	-	9	-
2	UD	8.0	3.51	25.7	2.02	0.46	-	14	-
3	UD	8.0	3.50	25.7	2.02	0.50	-	8	-

$\bar{\sigma}_u = 0.54 \text{ Kg/cm}^2$



Remarks.

Observation of sample at failure



Note :
Alternation layer of
sandy silt and silty
sand.