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Soil Moisture

March 1982

A COMPARISON OF SOIL MOISTURE CHARACTERISTICS PREDICTED
BY THE ARYA-PARIS MODEL WITH LABORATORY-MEASURED DATA

L. M. Arya, J. C. Richter, and S. A. Davidson

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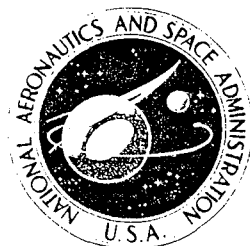
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16. Abstract Soil moisture characteristics predicted by the Arya-Paris model were compared with the laboratory-measured data for 181 New Jersey soil horizons. For a number of soil horizons, the predicted and the measured moisture characteristic curves are almost coincident; for a large number of other horizons, despite some disparity, their shapes are strikingly similar. Uncertainties in the model input and laboratory measurement of the moisture characteristic are indicated, and recommendations for additional experimentation and testing are made.			
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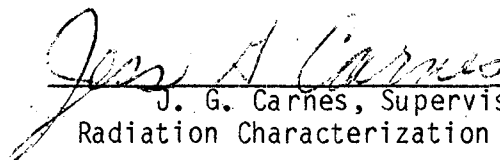
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This report describes Profile Modeling activities of the
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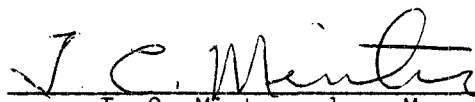
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LOCKHEED ENGINEERING AND MANAGEMENT SERVICES COMPANY, INC.

Under Contract NAS 9-15800

For

Earth Resources Research Division
Space and Life Sciences Directorate
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER
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March 1982

PREFACE

The Agriculture and Resources Inventory Surveys Through Aerospace Remote Sensing is a multiyear program of research, development, evaluation, and application of aerospace remote sensing for agricultural resources, which began in fiscal year 1980. This program is a cooperative effort of the U.S. Department of Agriculture, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration (U.S. Department of Commerce), the Agency for International Development (U.S. Department of State), and the U.S. Department of the Interior.

The work which is the subject of this document was performed by the Earth Resources Research Division, Space and Life Sciences Directorate, Lyndon B. Johnson Space Center, National Aeronautics and Space Administration and Lockheed Engineering and Management Services Company, Inc. The tasks performed by Lockheed Engineering and Management Services Company, Inc., were accomplished under Contract NAS 9-15800.

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1. INTRODUCTION

The Arya-Paris model (ref. 1) predicts the moisture characteristic of a soil from its particle-size distribution and bulk density in the natural state of packing. The prediction is essentially a translation of the particle-size distribution curve into a moisture characteristic curve. In the process, both the volumetric water content and the soil water pressure are predicted. Initial tests of the model were made on a limited data set and consisted of comparisons of predicted curves with experimentally determined curves (ref. 1). Visually, the agreement between the two types of data appeared to vary widely. Since the model predicts both the soil water pressure and the soil water content, a computed data pair has uncertainty in both quantities. The measured data, on the other hand, consist of water content values for preset soil water pressures; thus, they exhibit uncertainty in one dimension only. This lack of correspondence between the measured and the predicted data pairs made an objective statistical comparison of the two difficult.

While the need for an objective procedure to test the performance of the model continues to exist, it is hoped that a subjective comparison of the predicted-versus-measured curves for a large number of soil materials will provide insight into the efficacy of the model.

This document presents the predicted and measured moisture characteristics for 181 New Jersey soil horizons. Also included in this document are a brief outline of the model, an example of the computational procedure, and a Fortran program for processing large data sets.

2. THE MODEL

The Arya-Paris model of the soil moisture characteristic is based on the assumption that a soil moisture characteristic curve is essentially a pore-size distribution curve. It also contends that the pore-size distribution in a soil material is determined primarily by the particle-size distribution and bulk density of the sample. Thus, given the particle-size distribution and bulk density data, the following steps are used to translate a particle-size distribution curve into a moisture characteristic curve.

The cumulative particle-size distribution curve (see fig. 1 for an example) is divided into n -size intervals, and the solid mass W_i for each size interval is computed. The differences in cumulative percentages corresponding to successive particle sizes divided by 100 result in values of W_i such that the sum of all W_i is unity. The pore volume associated with each size fraction is then computed by

$$V_{v_i} = (W_i/\rho_p)e \quad ; \quad i = 1,2,\dots,n \quad (1)$$

where V_{v_i} is the pore volume associated with the solid mass in the i^{th} particle-size range, ρ_p is the particle density, and e is the void ratio given by

$$e = (\rho_p - \rho_b)/\rho_b \quad (2)$$

where ρ_b is the measured bulk density of the natural-structure sample.

The pore volumes V_{v_i} generated by each size fraction are progressively accumulated and considered filled with water. The volumetric water content is then computed by

$$\theta_{v_i} = \sum_{j=1}^{j=i} V_{v_j} / V_b \quad ; \quad i = 1,2,\dots,n \quad (3)$$

where θ_{v_i} is the volumetric water content represented by a pore volume for which the largest size pore corresponds to the upper limit of the i^{th} particle-size range, and V_b is the sample bulk volume given by

$$V_b = 1/\rho_b \quad (4)$$

An average volumetric water content corresponding to the midpoint of a given particle-size range is given approximately (if size intervals are small) by

$$\bar{\theta}_{v_i} = (\theta_{v_i} + \theta_{v_{i+1}})/2 \quad (5)$$

The pore radius r_i for the assemblage formed by the particles in the i^{th} particle-size range is given by

$$r_i = R_i \left[4en_i^{(1-\alpha)} / 6 \right]^{1/2} \quad (6)$$

where r_i is the mean pore radius, R_i is the mean particle radius, and n_i is the number of spherical particles given by

$$n_i = 3W_i / 4\rho_p \pi R_i^3 \quad (7)$$

The parameter α in equation (6) is an empirical constant with an average value of about 1.38. (See reference 1.)

Once the pore radii are obtained, they are converted to equivalent soil water pressures by the equation of capillarity,

$$\psi_i = 2\gamma \cos \delta / \rho_w g r_i \quad (8)$$

where ψ_i is the soil water pressure, γ is the surface tension of water, δ is the contact angle, ρ_w is the density of water, g is the acceleration due to gravity, and r_i is the pore radius.

3. NEW JERSEY SOILS DATA

Particle-size distribution, bulk density, and measured moisture characteristic data for 181 New Jersey soil horizons were obtained from Soil Survey Investigations Report No. 26 (ref. 2). The particle density for all soils was assumed to be constant at a value of 2.65 grams per cubic centimeter. An example of the New Jersey soils data and the laboratory methods used in data collection are given in tables 1 and 2, respectively. All 181 soil horizons are serially listed and described in table 4.

TABLE 1.- AN EXAMPLE OF THE SOIL SURVEY INVESTIGATIONS REPORT CONSISTING OF PARTICLE-SIZE DISTRIBUTION, BULK DENSITY, LABORATORY-MEASURED MOISTURE CHARACTERISTICS, AND OTHER SOILS DATA

[From reference 2; water retention data are based on gravimetric measurements.]

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

PEDON CLASSIFICATION: Aquic Hapludult; fine-loamv, mixed, mesic
SOIL Mattapex taxadjunct SOIL Nos. 858NJ-12-2

LOCATION Middlesex County, New Jersey

SOIL SURVEY LABORATORY Beltsville, Maryland

LAB. Nos. 59263 - 59268

Depth (in.)	Horizon	181b Size class and particle diameter (mm) 3A1													3B2 Cm	3B1 Coarse fragments		
		Total		Sand					Silt			3B2	3B1					
		Sand (2-0.05)	Silt (0.05-0.002)	Clay (= 0.002)	Very coarse (2-1)	Coarse (1-0.5)	Medium (0.5-0.25)	Fine (0.25-0.1)	Very fine (0.1-0.05)	Int. III (0.05-0.02)	Int. II (0.02-0.002)		Int. I (0.2-0.1)	2-2 > 2 < 76		2-19	19-76	
0-10	Ap	31.6	55.5	12.9	2.2	6.6	7.1	8.3	7.4	27.2	28.3	38.7	24.2	0.97	5			
10-13	B21t	21.5	58.4	20.1	1.7	3.9	4.5	5.5	5.9	24.9	33.5	33.6	15.6	0.95	9			
13-20	B22t	24.7	51.7	23.6	2.2	4.3	5.2	6.6	6.4	23.2	28.5	33.1	18.3	0.92	14			
20-24	B23t	28.2	54.9	16.9	1.6	3.6	5.1	8.3	9.6	28.2	26.7	42.6	18.6	0.94	9			
24-31	B24t	24.9	58.6	16.5	1.2	3.1	4.1	7.0	9.5	28.9	29.7	42.2	15.4	0.97	4			
31-39	TIc1	75.0	20.9	4.1	4.0	10.5	16.7	27.5	16.3	13.1	7.8	44.1	58.7	0.81	26			

Depth (in.)	6A1a Organic carbon Pct.	6B2a Nitrogen Pct.	C/N	6C1a Ext. iron, as Fe Pct.	Analyses by New Jersey Agr. Exp. Sta., Rutgers University a/										pH			
					Bulk density g/cc	Water retained at suction of								Avail-able water in/in		Field capacity Pct.	8C1c (1:1) KCl	8C1e (1:1) H2O
						0.02 bar	0.06 bar	0.10 bar	0.33 bar	1 bar	2 bar	6 bar	15 bar					
0-10	1.02			1.1	1.41	24.0	21.4	20.1	19.0	17.6	11.8	8.0	5.6	0.20	19.5	4.8		
10-13	0.17			1.5	1.54	22.3	21.4	20.8	20.2	19.4	14.2	10.2	7.4	0.20	19.5	4.8		
13-20	0.28			1.3	1.51	23.1	22.1	21.5	20.9	20.5	15.5	12.1	9.7	0.18	20.3	4.8		
20-24	0.08			2.0	1.69	20.4	19.6	18.0	18.0	17.0	13.2	9.7	8.0	0.22	20.6	4.7		
24-31	0.07			1.8	1.65	20.9	20.1	19.5	19.0	18.2	14.1	9.9	8.1	0.21	20.9	4.6		
31-39	0.02			1.2	1.78	12.9	9.4	8.4	7.4	6.7	3.8	2.7	2.3	0.18	12.0	4.8		

Depth (in.)	Extractable bases 5B1e					6H2e Ext. acidity	CEC		6G1d Ext. Al	Ratios to clay 8D1			8D3 Ca/Mg	Base saturation	
	6H2a Ca	6B2b Mg	6P2e Na	6Q2e K	Sum		SA3a Sum cations	Ext. Al		CEC Sum	Ext. iron	15-bar water		5C3 Sum cations Pct.	5C1 NH4OAc Pct.
	meq/100 g														
0-10	2.2	0.5	0.1	0.4	3.2	9.8	13.0			1.01	0.09	0.43		25	
10-13	1.9	0.7	0.1	0.3	3.0	8.0	11.0			0.55	0.07	0.37		27	
13-20	2.9	0.8	0.2	0.4	4.3	8.4	12.7			0.54	0.08	0.41		27	
20-24	2.8	0.4	0.1	0.2	3.5	6.7	10.2			0.60	0.12	0.47		34	
24-31	2.6	0.3	0.1	0.1	3.1	6.3	9.7			0.59	0.11	0.49		35	
31-39	1.0	0.1	0.1	0.1	1.3	2.9	4.2			1.02	0.29	0.56		31	

Depth (in.)	Clay Fraction Analysis 7A1b-d								Analyses by New Jersey Agr. Exp. Sta., Rutgers University a/					Methods referenced on methods code sheet.
	Mt.	Chl.	Vm.	Ml.	Int.	Qtz.	Ill.	Gibbsite	Hydraulic conductivity in/hr	Porosity		Plastic index	Aggregate stability Pct.	
										Hydraulic conductivity in/hr	Non-capillary Pct.			
0-10									0.4	12.6	28.6	41.2	45	
10-13									0.3	8.7	32.8	41.5	24	
13-20									0.3	7.6	33.3	40.9	22	
20-24									0.01	4.0	33.0	37.0	8	
24-31									0.02	4.2	33.0	37.2	6	
31-39									2.1	12.1	17.2	29.3	25	

TABLE 1.- Concluded.

Pedon Classification: Aquic Hapludult; fine-loamy, mixed, mesic
 Soil: Mattapex taxadjunct ^{1/}
 Soil No.: S58NJ-12-2
 Location: Middlesex County, New Jersey. 1 mile east of Plainsboro, south of Plainsboro-Cranbury Road, west of crossing of high tension line distance of 13 utility poles, in field about 225 feet; Britton farm.
 Vegetation and land use: Cropped for potatoes for over 15 years and then, the last 6 years, for potatoes alternating with wheat. Wheat stubble plowed under during past autumn.
 Slope and land form: 1 percent.
 Drainage: Moderately well drained.
 Permeability: Moderately slow.
 Parent material: Silty and very fine sandy materials on broad, upland, very gently sloping sections of the coastal plain.
 Described by: G. Quakenbush

Horizon and
 Beltsville
 Lab. No.

Ap 59263	0 to 10 inches. Dark brown (10YR 4/3) silt loam; massive breaking to weak fine granular structure friable; abrupt smooth boundary. 8 to 10 inches thick.
B21t 59264	10 to 13 inches. Strong brown (7.5YR 4/6) silt loam; weak thin to medium platy structure, also vertical irregular jointing of undetermined spacing; friable; concentration of fine roots in joints; clay films on peds; clear wavy boundary. 7 to 13 inches thick.
B22t 59265	13 to 20 inches. Strong brown (7.5YR 4/6) silt loam; weak or moderate medium or coarse subangular blocky structure; friable, slightly sticky; clay films are weak; clear wavy boundary. 7 to 13 inches thick.
B23t 59266	20 to 24 inches. Strong brown (7.5YR 4/6) silt loam; few to common fine faint mottles; massive breaking to weak coarse subangular blocks; firm in place; slight clay films; clear wavy boundary. 4 to 10 inches thick.
B24t 59267	24 to 31 inches. Strong brown (7.5YR 5/6) silt loam; common or many distinct light brownish gray (10YR 6/2) matter; weak coarse subangular blocky structure; firm in place, friable removed; sand constituent is fine or very fine; clear wavy boundary. 6 to 8 inches thick.
IIC1 59268	31 to 39 inches. Dark brown (7.5YR 4/4) gravelly loamy sand; weakly stratified; firm to loose.
IIC2 Not sampled	39 inches plus. Strong brown (7.5YR 5/6) gravelly sand; weakly stratified; loose.

Notes: Colors refer to moist soil.

^{1/}This pedon is a taxadjunct because its family particle size class is fine-loamy, as opposed to fine-silty for the Mattapex series.

TABLE 2.- METHODS OF ANALYSES USED BY THE SOIL SURVEY LABORATORIES

[From reference 2]

METHODS CODE SYMBOLS, SOIL SURVEY LABORATORIES

1. SAMPLE COLLECTION AND PREPARATION
 - A. Field sampling
 1. Site selection
 2. Soil sampling
 - a. Stony soils
 - B. Laboratory preparation
 1. Standard (airdry)
 - a. Square-hole 2-mm sieve
 - b. Round-hole 2-mm sieve
 2. Field moist
2. CONVENTIONS
 - A. Size-fraction base for reporting
 1. <2-mm
 2. < size specified
 - B. Data sheet symbols

tr: trace, not measurable by quantitative procedure used or less than reportable amount

- : analysis run but none detected

blank: analysis not run

nd: analysis not run

< : less than reported amount or none present
3. PARTICLE-SIZE ANALYSES
 - A. Particles <2-mm (pipet method)
 1. Airdry samples
 - a. Carbonate and noncarbonate clay
 2. Moist samples
 - a. Carbonate and noncarbonate clay
 - B. Particles ≥2-mm
 1. Weight estimates
 - a. By field and laboratory weighing
 4. FABRIC-RELATED ANALYSES
 - A. Bulk density
 1. Saran-coated clods
 - a. Field state
 - b. Airdry
 - f. 1/3-bar desorption III
 - g. 1/10-bar desorption
 - h. Owendry
 3. Cores
 - a. Field moist
 - B. Water retention
 1. Pressure-plate extraction
 4. FABRIC RELATED ANALYSES (con.)
 - (1/3 or 1/10-bar)
 - a. Sieved samples
 - b. Soil pieces
 - c. Natural clods
 - d. Cores
 2. Pressure membrane extraction (15-bars)
 - a. Field-moist samples
 4. Field state
 - C. Water-retention difference
 1. 1/3-bar to 15-bars
 2. 1/10-bar to 15-bars
 - D. Linear extensibility
 1. Dry to moist
 5. ION-EXCHANGE ANALYSES
 - A. Cation-exchange capacity
 1. NH₄OAc, pH 7.0
 - a. Direct distillation
 - b. Displacement distillation
 3. Sum of cations
 - a. Acidity by BaCl₂-TEA, pH 8.2; bases by NH₄OAc, pH 7.0
 - B. Extractable bases
 1. NH₄OAc extraction
 - a. Uncorrected
 4. NH₄OAc, pH 7.0 (modified)
 - a. Uncorrected
 - C. Base saturation
 3. Sum of cations
 6. CHEMICAL ANALYSES
 - A. Organic carbon
 1. Acid-dichromate digestion
 - a. FeSO₄ titration
 - B. Nitrogen
 1. Kjeldahl digestion
 - a. Ammonia distillation
 2. Semimicro Kjeldahl
 - a. Ammonia distillation
 - C. Iron
 1. Dithionite extraction
 - a. Dichromate titration
 5. Sodium pyrophosphate extraction
 - a. Atomic absorption
 - E. Calcium carbonate
 1. HCl treatment
 - a. Gas volumetric
 6. CHEMICAL ANALYSES (con.)
 - c. Weight loss
 - G. Aluminum
 5. Sodium pyrophosphate extraction
 - a. Atomic absorption
 - H. Extractable acidity
 1. BaCl₂-triethanolamine I
 - a. Back-titration with HCl
 2. BaCl₂-triethanolamine II
 - a. Back-titration with HCl
 - N. Calcium
 2. NH₄OAc extraction
 - b. Oxalate-permanganate I
 - d. Oxalate-cerate
 - O. Magnesium
 2. NH₄OAc extraction
 - a. EDTA-alcohol separation
 - b. Phosphate titration
 - c. Gravimetric, Mg₂P₂O₇
 - P. Sodium
 2. NH₄OAc extraction
 - a. Flame photometry
 - Q. Potassium
 2. NH₄OAc extraction
 - a. Flame photometry
 7. MINERALOGY
 - A. Instrumental analysis
 1. Preparation
 - b. Organic-matter removal
 - c. Iron removal
 - d. Particle-size fractionation
 2. X-ray diffraction
 - a. Thin film on glass solution
 3. Differential thermal analysis
 8. MISCELLANEOUS
 - C. pH
 1. Soil suspensions
 - a. Water dilution
 - b. Saturated paste
 - c. KCl
 - e. CaCl₂
 - D. Ratios and estimates
 1. To total clay
 3. Ca to Mg (extractable)

UNCODED METHODS, RUTGERS UNIVERSITY

Property	Units	Method	Ref.--Am. Soc. of Agron., No. 9, Methods of Soil Analysis
Bulk density	g/cc	Soil cores, 3x3 in. taken at or slightly below field capacity as in 4A3a above.	Part 1, Chapter 40
Water retention bars or atmos.	Pct. oven dry (105° C) wt.	Saturated soil cores equilibrated at indicated suction.	Part 1, Chapters 8 and 21
0.02,0.06,0.10,0.33		On tension table using asbestos membrane. In pressure membrane apparatus.	Part 1, Chapter 8
1.0		Saturated crushed soil sample equilibrated at indicated suction.	
2.0,6.0,15		In pressure membrane apparatus.	Part 1, Chapter 8
Available water	In. of water per in. of soil	(Pct. water at field capacity — Pct. water at 15 bar) x bulk density	Part 1, Chapter 19
Field capacity	Pct. (wt.)	Water content of field samples 24 to 48 hrs. after wetting of whole soil profile by rainfall.	Part 1, Chapter 19
Hydraulic conductivity	In. per hr.	Constant head (1 in. water) "permeameter" using saturated cores and 30 min. measurement periods until rate (V/T) becomes constant.	Part 1, Chapter 19
Porosity: Noncapillary	Pct. (vol.)	Pct. (vol.) total pore space—pct. (vol.) water at 0.06 bar tension	Part 1, Chapter 21
Capillary		Pct. (vol.) total pore space—pct. (vol.) non-capillary porosity	
Total		Pct. (vol.) water retained at 0 bars suction: saturated	
Aggregate stability		Yoder method, 0.5 mm lower limit	Soil Sci. 1949. Vol. 68(1)

TABLE 4.- NEW JERSEY SOILS FOR WHICH MEASURED AND PREDICTED MOISTURE CHARACTERISTIC DATA ARE COMPARED

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
1	Ap	0-9	Not designated	10-11	S59NJ-13-1	Monmouth
2	B1t	9-12				
3	B21t	12-18				
4	B22t	18-25				
5	B31t	25-29				
6	B32	29-35				
7	C	35-81				
8	Ap	0-10	Not designated	12-13	S58NJ-3-3	Burlington
9	A2	10-23				
10	B2t	23-30				
11	B3	30-38				
12	C1	38-42				
13	IIC2	42-48				
14	IVC4	52-60				
15	Ap	0-6	Not designated	18-19	S58NJ-8-6	Gloucester
16	A2	6-9				
17	B21t	9-18				
18	IIB22t	18-28				
19	IIB23t	28-60				
20	AB	11-14	Not designated	22-23	S60NJ-11-1	Mercer
21	Ap	0-11				
22	B2t	14-21				
23	B31	21-28				
24	B32, B33	28-34				
25	IIC	34-42				
26	Ap	0-10	Downer sandy loam	54-55	S58NJ-8-7	Gloucester
27	A2	10-16				
28	B1t	16-23				
29	B2t	23-30				
30	IIC1	30-48				
31	IIC2	48-60				
32	Ap	0-8	Downer loamy sand	56-57	S59NJ-5-1	Cape May
33	A3	15-21				
34	B2t	21-30				
35	B3t	30-34				
36	IIC1	34-37				
37	Ap2	6-11	Downer sandy loam	58-59	S59NJ-6-1	Cumberland
38	A2	11-17				
39	B2t	17-31				
40	B3t	31-37				
41	IIC1	37-46				
42	Ap	0-10	Not designated	6-7	S60NJ-4-2	Camden
43	A2	10-18				
44	B1t	18-22				
45	B2t	22-28				
46	B3t	28-33				

TABLE 4.- Continued.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
47	Ap	0-10	Matapeake silt loam	84-85	S58NJ-12-1	Middlesex
48	A2, B1	10-12				
49	B21t	12-21				
50	B22t	21-27				
51	IIC1	27-34				
52	IIIC2	34-40				
53	Ap	0-9	Mattapex taxadjunct	88-89	S57NJ-12-2	Middlesex
54	A2	9-12				
55	B21t	12-19				
56	B3	22-28				
57	IIC1	28-34				
58	Ap	0-10	Mattapex taxadjunct	92-93	S58NJ-12-2	Middlesex
59	B21t	10-13				
60	B22t	13-20				
61	B23t	20-24				
62	B24t	24-31				
63	IIC1	31-39				
64	A11, A12	0-4	Galestown loamy sand	100-101	S58NJ-3-1	Burlington
65	A2	4-26				
66	B1t	26-32				
67	B2t	32-40				
68	IIC1	40-62				
69	A11, A12	0-5	Galestown loamy sand	102-103	S58NJ-3-2	Burlington
70	A2	5-27				
71	B1t	27-36				
72	B2t	36-48				
73	C	48-60				
74	A'2	3-14	Evesboro sand	24-25	S58NJ-5-3	Cape May
75	A1, A2, B2	0-3				
76	B'1	14-25				
77	B'2	25-36				
78	C	36-48				
79	A1, A2	0-7	Colts Neck taxadjunct	34-35	S59NJ-13-4	Monmouth
80	B1	7-18				
81	B2t	18-27				
82	B3t	27-33				
83	C	33-48				
84	A2	1-3	Colts Neck taxadjunct	36-37	S59NJ-13-3	Monmouth
85	B1	3-8				
86	B21t	8-17				
87	B22t	17-25				
88	C1	25-48				
89	A'2	0-1.5	Aura taxadjunct	38-39	S58NJ-8-1	Gloucester
90	A1, A2, B	1.5-11				
91	B'21t	11-16				
92	B'22t	16-30				
93	IIIB'24t	30				

TABLE 4.- Continued.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
94	A1	0-4.5	Freehold taxadjunct	40-41	S56NJ-3-1	Burlington
95	A2	4.5-12				
96	B1	12-20				
97	B2t	20-30				
98	B3t	30-36				
99	IIC2	38-42				
100	IIIC3	42-63				
101	A11, A12, A13	0-5	Matapeake taxadjunct	42-43	S57NJ-12-1	Middlesex
102	A2	5-13				
103	B21t	13-21				
104	B22tg	21-31				
105	IIC	31-63				
106	A'2	0.5-1	Downer sandy loam	44-45	S57NJ-8-1	Gloucester
107	A2	1.5-11				
108	B'21t	11-18				
109	B'22t	18-25				
110	B'23t	25-32				
111	A1	0-1.5	Downer sandy loam	46-47	S57NJ-8-2	Gloucester
112	A'2	1.5-14				
113	B'21t	14-24				
114	B'22t	24-32				
115	IIC2	32-66				
116	A'2	4-13	Downer loamy sand	48-49	S57NJ-8-3	Gloucester
117	B't	13-24				
118	IIC2	30-46				
119	A2	2-13	Downer loamy sand	50-51	S58NJ-5-1	Cape May
120	A3	13-19				
121	B1	19-21				
122	B2t	21-28				
123	B3t	28-32				
124	C1	32-38				
125	C2	38-43				
126	AP1, AP2	0-7				
127	A2	7-16				
128	B1	16-19				
129	B2t	19-27				
130	B3t	27-37				
131	A1	0-3	Sassafras taxadjunct	60-61	S58NJ-6-1	Cumberland
132	A2	3-12				
133	B1	12-23				
134	B2t	23-33				
135	B3	33-37				
136	IIC	37-48				
137	B1t	17-23	Westphalia taxadjunct	62-63	S59NJ-4-1	Camden
138	B2t	23-34				

TABLE 4.- Concluded.

Soil horizon		Depth, in.	Soil series	Page numbers in ref. 2	Soil survey code	Location, county
Number	Name					
139	A'2	2-9	Aura coarse sandy loam	64-65	S58NJ-8-2	Gloucester
140	A1, A2, B	0-2				
141	B'1t	9-13				
142	IIB'21t	13-19				
143	A'2	4-10	Aura sandy loam	66-67	S58NJ-8-3	Gloucester
144	B'1	10-15				
145	B'21t	15-22				
146	A1, A2, B	0-4				
147	IIB'22t	22-27				
148	A1	0-5	Freehold sandy loam	74-75	S56NJ-3-2	Burlington
149	A2	5-14				
150	B1	14-21				
151	B2t	21-34				
152	B3t	34-41				
153	IIC	41-108				
154	A'21	1-8				
155	A'22	8-13				
156	A'3	13-16				
157	B'21t	16-23				
158	B'22t	23-28				
159	B'3t	28-38				
160	IIC1	38-44				
161	A1	0-3	Matapeake taxadjunct	80-81	S57NJ-11-1	Mercer
162	A2	3-13				
163	B1	13-16				
164	B21t	16-20				
165	B22t	20-25				
166	B3t	25-29				
167	IIC	29-40				
168	A1	0-4				
169	A2	4-11				
170	B1t	11-18				
171	B2t	18-28				
172	IIC1	28-38				
173	IIC2	38-50				
174	A1	0-4	Westphalia taxadjunct	94-95	S59NJ-8-1	Gloucester
175	A21	4-17				
176	A22	17-26				
177	Bt	26-36				
178	A1	0-5	Westphalia taxadjunct	96-97	S59NJ-3-2	Burlington
179	A2	5-23				
180	B2t	23-31				
181	B3t	31-39				

4. COMPUTATIONAL PROCEDURE

An example of the computational steps involved in the application of the Arya-Paris model is given in table 3. The soil sample used in the example represents horizon B23t (20- to 24-inch depth) of a New Jersey soil described in table 1. Particle-size distribution and bulk density data for this horizon are given in figure 1. Measured and predicted moisture characteristics are compared in figure 2.

A Fortran program was developed to carry out the computational procedure using the New Jersey soils data. A listing of the program and the execute file are given in appendix A. The program utilizes the International Mathematical and Statistical Libraries (IMSL) subroutine IQHSCU to fit a quasi-cubic Hermite polynomial to the particle-size data. The model is then used to compute soil water pressure and water content. The program output is given in appendix B.

TABLE 3.- AN EXAMPLE^a OF THE COMPUTATIONAL PROCEDURE FOR THE ARYA-PARIS MODEL OF THE MOISTURE CHARACTERISTIC

$$\left[\begin{array}{l} V_b = 0.5917 \text{ cm}^3; e = 0.56805; \gamma = 72.0 \text{ dynes/cm}; \cos \delta = 1; \\ \rho_w = 1.0 \text{ g/cm}^3; g = 980 \text{ cm/sec}^2; \alpha = 1.38 \end{array} \right]$$

Particle-diameter interval, μm	W_i , g	V_{V_i} , cm^3	$\sum_{j=1}^{j=i} V_{V_j}$, cm^3	θ_{V_i} , cm^3/cm^3	$\bar{\theta}_{V_i}$, cm^3/cm^3	n_i	$n_i^{(1-\alpha)}$	r_i , cm	ψ_i , -cm
0-1	0.140	0.03001	0.03001	0.051					
1-2	0.030	0.00643	0.03644	0.062	0.057	6.41×10^9	1.88×10^{-4}	6.33×10^{-7}	2.32×10^5
2-5	0.074	0.01586	0.05230	0.088	0.075	1.24×10^9	3.50×10^{-4}	2.01×10^{-6}	7.31×10^4
5-10	0.076	0.01629	0.06859	0.116	0.102	1.30×10^8	8.25×10^{-4}	6.63×10^{-6}	2.22×10^4
10-20	0.115	0.02465	0.09324	0.158	0.137	2.46×10^7	1.55×10^{-3}	1.82×10^{-5}	8.07×10^3
20-30	0.120	0.02572	0.11896	0.201	0.180	5.54×10^6	2.74×10^{-3}	4.03×10^{-5}	3.65×10^3
30-50	0.160	0.03430	0.15326	0.259	0.230	1.80×10^6	4.20×10^{-3}	7.98×10^{-5}	1.84×10^3
50-100	0.100	0.02144	0.17470	0.295	0.277	1.71×10^5	1.03×10^{-2}	2.34×10^{-4}	6.28×10^2
100-200	0.065	0.01393	0.18863	0.319	0.307	1.39×10^4	2.66×10^{-2}	7.53×10^{-4}	1.95×10^2
200-500	0.070	0.01501	0.20364	0.344	0.332	1.20×10^3	6.76×10^{-2}	2.80×10^{-3}	5.25×10^1
500-700	0.020	0.00429	0.20793	0.351	0.348	1.00×10^2	1.74×10^{-1}	7.70×10^{-3}	1.91×10^1
700-1000	0.015	0.00322	0.21115	0.357	0.354	1.76×10^1	3.36×10^{-1}	1.52×10^{-2}	9.67×10^0
1000-2000	0.015	0.00322	0.21437	0.362	0.360	3.20×10^0	6.43×10^{-1}	3.70×10^{-2}	3.97×10^0

^aThe example is for soil horizon B23t of a New Jersey soil described in table 1. Input data are shown in figure 1.

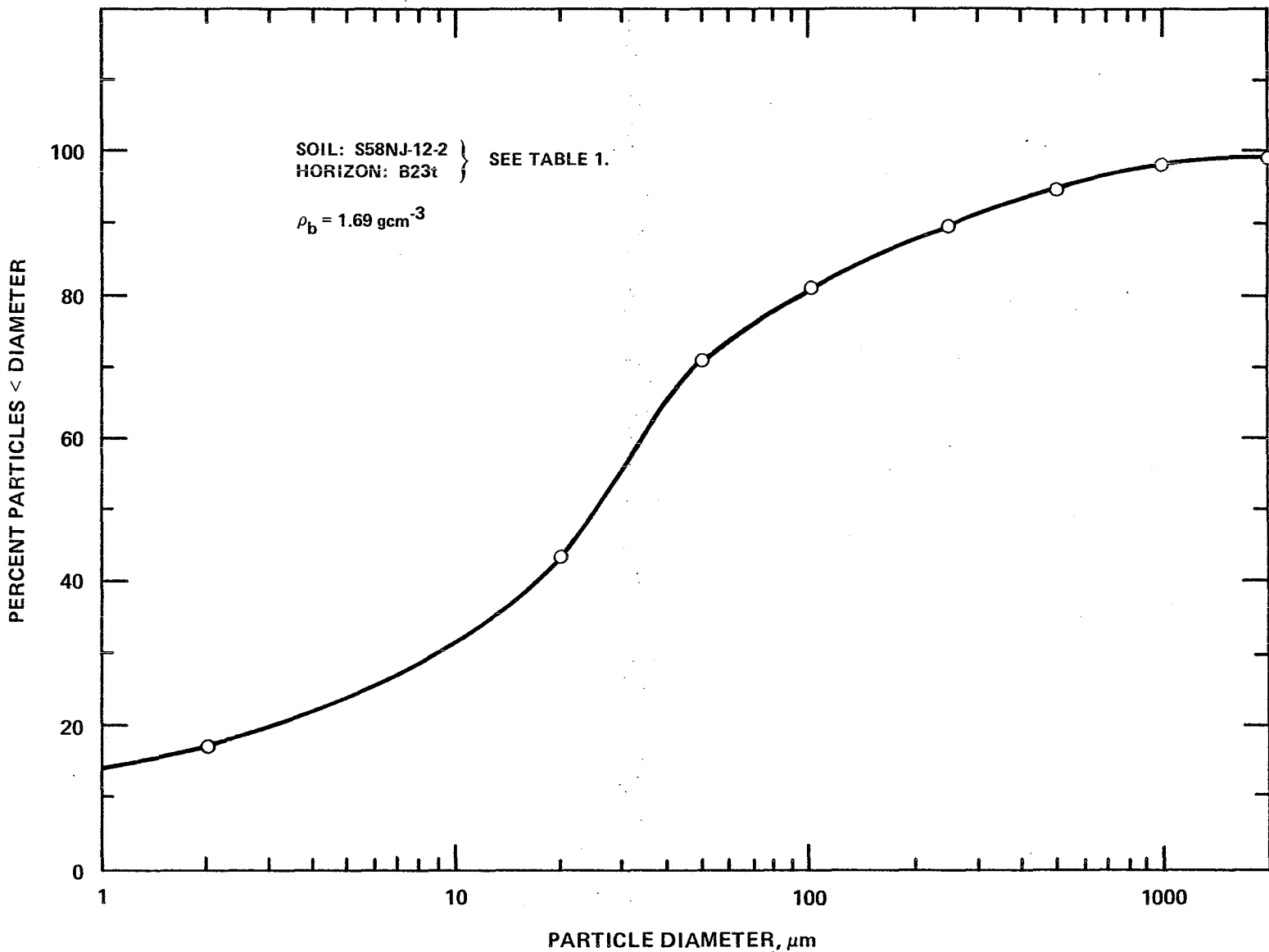


Figure 1.- Particle-size distribution curve and bulk density data for a soil horizon (B23t) of a New Jersey soil described in table 1.

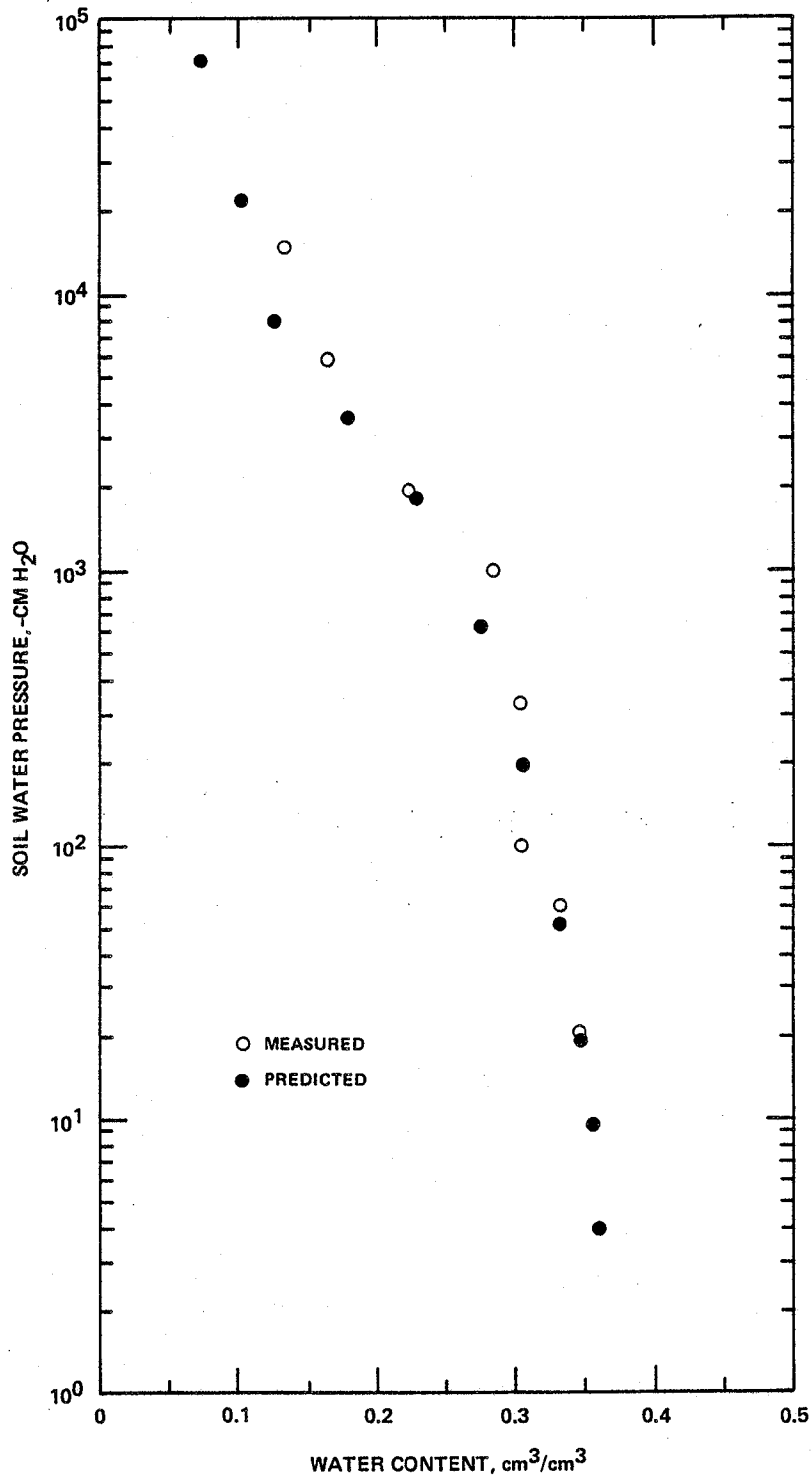


Figure 2.- A comparison between measured and predicted moisture characteristics for a New Jersey soil described in figure 1.

5. MOISTURE CHARACTERISTICS OF NEW JERSEY SOILS

Measured and predicted moisture characteristics for 181 New Jersey soil horizons (listed in table 3) are compared in appendix B. For any given horizon, the input and output data are listed on one page and the measured and predicted moisture characteristics are plotted on the facing page. Pressure is plotted on a logarithmic scale. The cycles on the logarithmic scale are separated by the symbol I and are designated by the powers of 10. Within a given cycle, there are two rows of numbers, the upper and the lower. A pair of upper and lower numbers constitute the two significant digits to the right of the decimal point. Thus, a point represented by $\begin{pmatrix} 2 \\ 5 \end{pmatrix}$ on a cycle of 10^2 is to be read as 0.25×10^2 . Each plot also shows the sum of absolute differences of the logarithms of the measured and predicted soil water pressures.

A limited resolution is inherent in the printer plots presented in appendix B. This limitation results in the jagged portions of the computed curve in some plots. The plots are adequate, however, for a visual comparison of the measured and the computed data.

6. DISCUSSION

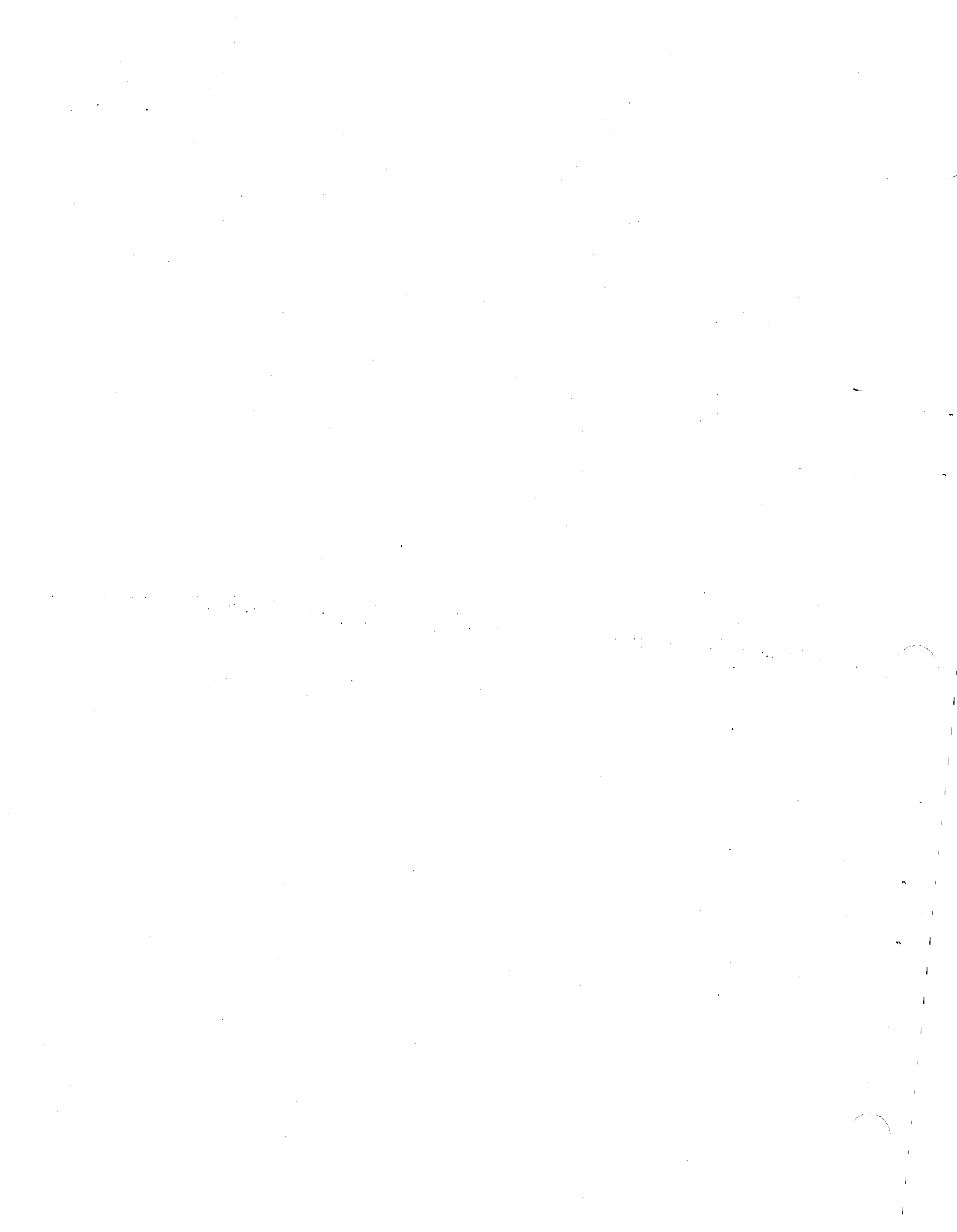
The data presented in appendix B show that for a large number of soil horizons the predicted and the measured moisture characteristic curves are in close agreement. For several soil materials, however, the agreement between the two curves appears somewhat marginal. A wide disagreement between the two types of data is also evident in some cases. The disagreements between the measured and the predicted data could be a result of limitations in the model under certain specific conditions. On the other hand, they could be a result of uncertainties in the inputs to the model. Also, they could result from errors in the measured moisture characteristic data. While an uncertainty of ± 5 percent in the particle-size distribution and ± 0.1 gram per cubic centimeter in the bulk density data may not be uncommon, additional disparity between the measured and the predicted data may result from variable laboratory procedures. The method of measuring water retention by the New Jersey Agricultural Experiment Station is given in table 2. A tension table in the pressure range from 0.02 to 0.33 bar and a pressure membrane apparatus from 1 to 15 bars were employed. Results from these two methods may not always be compatible. In several instances, the measured curves show a somewhat discontinuous pattern from 0.33 to 2 bar pressure. (See soil horizons 15, 26, 27, 32, 79, 90, and 174 for examples.) In other cases, errors in the measured data are obvious. (See soil horizons 46, 51, 52, 122, 133, and 142 for examples.) Additionally, some variability around each of the measured data points should be expected; however, variability associated with the New Jersey data cannot be ascertained because of the total lack of replication. This is especially the case where bias in determining the equilibrium moisture content is present.

Thus, some disparity between the predicted and the measured data must be expected. From the point of view of testing the predictive ability of the Arya-Paris model, however, the similarity between the shapes of the measured and the predicted curves would seem to be of greater significance. This model is based on the contention that the particle-size distribution is the primary determinant of the pore-size distribution. Therefore, provided the capillarity equation is valid over the range of the moisture content considered, the

similarity between the shapes of the predicted and the measured curves should support the above contention. The data presented in appendix B show that for several soil horizons the predicted and the measured curves are almost coincident; for a large number of other horizons, despite some disparity, their shapes are strikingly similar.

7. RECOMMENDATIONS

The results of the evaluations carried out and reported in this document, though encouraging, are not conclusive because of the uncertain nature of the model inputs and measured moisture characteristic data. The authors strongly recommend that detailed particle-size distribution, bulk density, and moisture characteristic data of high quality be obtained to test the Arya-Paris model. It is important that replication be used to obtain a measure of natural variability. Measurement bias resulting from poor laboratory techniques must be checked and eliminated. Also, experiments must be designed to test the effects of variations in specific soil parameters, such as bulk density, particle-size distributions for a given textural class, organic matter, and mineral composition. Additional experiments to examine the nature of the model parameter α should lead to an improved formulation of the relationship between pore and particle sizes.



8. REFERENCES

1. Arya, L. M.; and Paris, J. F.: A Physicoempirical Model to Predict the Soil Moisture Characteristic From Particle-Size Distribution and Bulk Density Data. *Soil Sci. Soc. America J.*, vol. 45, no. 6, November-December 1981, pp. 1023-1030.
2. Soil Survey Laboratory Data and Descriptions for Some Soils of New Jersey. Soil Survey Investigations Report No. 26, U.S. Department of Agriculture (Soil Conservation Service) and New Jersey Agricultural Experiment Station (Rutgers Univ., New Brunswick), 1974.

APPENDIX A

A LISTING OF THE FORTRAN PROGRAM USED TO GENERATE APPENDIX B

APPENDIX A

A LISTING OF THE FORTRAN PROGRAM USED TO GENERATE APPENDIX B

This appendix contains the computer listing of the SMOD3 program, which was used to generate appendix B. Additionally, the file for executing this program on the Earth Observations Division Laboratory (EODL) System is provided.


```

C SPECIFICATION OF INPUT PARAMETERS
C
C   WRITE(16,944)
944  FORMAT(' ENTER ALPHA:')
C   READ(16,383)ALPHA
383  FORMAT(F10.1)
      NP=29
      PD=2.65
      ISKIP=0
      IANS=0
      WRITE(16,141)
141  FORMAT(' SHOULD ALL SOILS BE USED? 1 FOR YES, 0 FOR NO ')
      READ(15,142)IANS
142  FORMAT(I1)
C
C   SUBROUTINE HERMIT IS CALLED TO READ IN THE DATA AND TO
C   COMPUTE A HERMITE POLYNOMIAL CURVE FIT.
C
C   DO 1 NNS=1,280
      CALL HERMIT(DU,CUMPER,THEOB,BD,S,H,IEOF,ISKIP,IANS)
      IF(IEOF.EQ.1)GO TO 999
C
C   THESE STATEMENTS PRINT OUT THE INPUT DATA.
C
C   WRITE(11,9001)NNS,(S(I),I=1,8),(H(I),I=1,8)
9001  FORMAT(13,1X,16A1)
      WRITE(6,810)NNS
810  FORMAT('1',,////.4X,'SOIL HORIZON NUMBER ',13,5X,
$ '( SEE TABLE 4 FOR IDENTIFICATION )')
      WRITE(6,720)BD
720  FORMAT(' ',,////.5X,'DENSITY DATA:',,/,5X,'BULK DENSITY =',
$F5.2,1X,'G/CM**3',,/,5X,'PARTICLE DENSITY = 2.65 G/CM**3',
$ ' ASSUMED CONSTANT')
      WRITE(6,811)
811  FORMAT(' ',,////.5X,'MEASURED MOISTURE CHARACTERISTIC DATA:')
      WRITE(6,8111)
8111  FORMAT('0',.4X,'SOIL WATER CONTENT',2X,'SOIL WATER PRESSURE')
      WRITE(6,8112)
8112  FORMAT(' ',10X,'(CC/CC)',13X,'(-CM H2O)',/)
C
C   THESE STATEMENTS COMPUTE THE PREDICTED WATER CONTENT VERSUS
C   TENSION RELATIONSHIP USING THE ARYA-PARIS MODEL.
C
C   DO 812 I=1,8
      IF(THEOB(I).LE.0.0)GO TO 812
      THEOB(I)=THEOB(I)/100.0
812  WRITE(6,813)THEOB(I),TENOR(I)
813  FORMAT(' ',11X,F5.3,14X,E9.3)
      PL=0
      DO 20 I=1,NP
        PU=CUMPER(I)
        W(I)=(PU-PL)/100.0
20    PL=PU
        RL=0.
        DO 21 I=1,NP
          RUCM(I) = DU(I)*0.00005
          RMEAN(I)=0.5*(RUCM(I) + RL)
          RL=RUCM(I)
21    CONTINUE
          PI=3.1415927
          E=(PD - BD)/BD
          THEL=0.
          DO 22 I = 2,NP
            VSUM(I)=(CUMPER(I)*E)/(100.*PD)
            THEVC(I)=VSUM(I)*BD
            THAVVC(I)=0.5*(THEL + THEVC(I))
            THEL=THEVC(I)
            XN=3.*W(I)/(4.*PI*PD*RMEAN(I)**3)
            EPI=1. - ALPHA
            CAPRAD(I)=SQRT(4.*(XN**EPI)*E*(RMEAN(I)**2)/6.)
            PSI(I) = -0.14694/ CAPRAD(I)
22    ALGTEN(I)=ALOG10(-PSI(I))
C
C   THESE STATEMENTS PRINT OUT THE ARYA-PARIS MODEL OUTPUT.
C
C   WRITE(6,2001)
2001  FORMAT(' ',,////.17X,'PARTICLE SIZE DISTRIBUTION DATA',26X,
$ 'PREDICTED MOISTURE CHARACTERISTIC DATA')

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SM000800
SM000810
SM000820
SM000830
SM000840
SM000850
SM000860
SM000870
SM000880
SM000890
SM000900
SM000910
SM000920
SM000930
SM000940
SM000950
SM000960
SM000970
SM000980
SM000990
SM001000
SM001010
SM001020
SM001030
SM001040
SM001050
SM001060
SM001070
SM001080
SM001090
SM001100
SM001110
SM001120
SM001130
SM001140
SM001150
SM001160
SM001170
SM001180
SM001190
SM001200
SM001210
SM001220
SM001230
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SM001560
SM001570
SM001580

```

WRITE(6,800)
800 FORMAT('0',4X,'UPPER PARTICLE DIAM.',3X,'PERCENT PARTICLES',
$3X,'INTERVAL FRACTION',8X,'SOIL WATER CONTENT',3X,
$'SOIL WATER PRESSURE',)
WRITE(6,801)
801 FORMAT(' ',6X,'( MICROMETERS )',8X,'LESS THAN DIAM.',
$8X,'( G/G )',17X,'( CC/CC )',12X,'( -CM H2O )',/)
WRITE(6,203)DU(1),CUMPER(1),W(1)
DO 24 I = 2, NP
TENI=-PSI(I)
24 WRITE(6,203)DU(I),CUMPER(I),W(I),THAVVC(I),TENI
203 FORMAT(9X,F7.2,16X,F5.1,16X,F5.3,20X,F5.3,14X,E12.5)
WRITE(6,901)
901 FORMAT(' ',///,5X,'ALPHA = 1.38')
SUM=0.
ALIM=0.0001
DO 2 MIN=1,6
ICLK=(-PSI(29)/(ALIM*10.0))
IF(ICKL.GT.10.0)GO TO 2
NMIN=MIN-3
2 CONTINUE

THIS SUBROUTINE SETS UP THE PLOT AXIS, PLOTS THE DATA AND
PRINTS IT OUT.

CALL PIMAGE(THAVVC,PSI,NMIN,NP,THEOB,TENOB)

THESE STATEMENTS CALCULATE AND PRINTOUT THE SUM OF DIFFERENCES
BETWEEN THE OBSERVED AND COMPUTED DATA.

DO 60 I=1,9
IF(THEOB(I).LE.0.0)GO TO 1
IF(THEOB(I).LE.THAVVC(1))GO TO 60
DO 61 J=1,NP
61 IF(THAVVC(J).GE.THEOB(I))GO TO 600
GO TO 60
600 JM1=J - 1
X0=THAVVC(JM1)
X1=THAVVC(J)
Y0=ALGTEN(JM1)
Y1=ALGTEN(J)

THIS SUBROUTINE CALCULATES INTERPOLATED VALUES OF WATER CONTENT
FOR USE IN CALCULATING THE SUM OF DIFFERENCES BETWEEN THE MEASURED
AND COMPUTED DATA.

CALL INTERP(X0,X1,Y0,Y1,THEOB(I),Y)
ALGT0B=ALOG10(TENOB(I))
SUM=SUM + ABS(ALGT0B - Y)
60 CONTINUE
WRITE(6,703)MNS,SUM
703 FORMAT(' ',///,10X,'SOIL HORIZON NUMBER',I4,15X,'O MEASURED',
$' ',PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = ',E12.5)
1 CONTINUE
999 CONTINUE
STOP
END
SUBROUTINE INTERP(X0,X1,Y0,Y1,X,Y)
B=(Y1-Y0)/(X1-X0)
A=Y1-B*X1
Y=A + B*X
RETURN
END

THIS SUBROUTINE CONSTRUCTS THE PLOT AXIS AND PLOTS THE PREDICTED
AND MEASURED DATA.

SUBROUTINE PIMAGE(THAV,PSI,NMIN,NP,THEOB,TENOB)
DIMENSION THAV(100),PSI(100),N(6),THEOB(8),TENOB(8)
INTEGER*2 AIMAGE(58,131)
INTEGER*2 H/' ',0/'-'/,A1/'I'/,A2/'/'/,A3/'/'/,A4/'/'/,A5/'/'/,A6/'/'/
1A1/'1'/,A2/'2'/,A3/'3'/,A4/'4'/,A5/'5'/,A6/'6'/,A7/'7'/,
INTEG*2 AD/'0'/,BW/'W'/,BA/'A'/,BT/'T'/,BE/'E'/,
3BR/'R'/,BC/'C'/,BO/'O'/,BN/'N'/,BSL/'/'/,'RPL/'/'/,'BRP/'/'/
REAL*8 AW1/'11111122'/,AW2/'22334455'/,
1AW4/'01346802'/,AW5/'58250506'/
REAL*4 AW3/'6778'/,AW6/'3199'/

THESE STATEMENTS SETUP THE PLOT AXIS.

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SM001590
SM001600
SM001610
SM001620
SM001630
SM001640
SM001650
SM001660
SM001670
SM001680
SM001690
SM001700
SM001710
SM001720
SM001730
SM001740
SM001750
SM001760
SM001770
SM001780
SM001790
SM001800
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SM001830
SM001840
SM001850
SM001860
SM001870
SM001880
SM001890
SM001900
SM001910
SM001920
SM001930
SM001940
SM001950
SM001960
SM001970
SM001980
SM001990
SM002000
SM002010
SM002020
SM002030
SM002040
SM002050
SM002060
SM002070
SM002080
SM002090
SM002100
SM002110
SM002120
SM002130
SM002140
SM002150
SM002160
SM002170
SM002180
SM002190
SM002200
SM002210
SM002220
SM002230
SM002240
SM002250
SM002260
SM002270
SM002280
SM002290
SM002300
SM002310
SM002320
SM002330
SM002340
SM002350
SM002360
SM002370


```

C
DO 30 I=1,58
DO 31 J=1,131
AIMAGE(I,J)=B
31 CONTINUE
30 CONTINUE
DO 32 J=11,131
AIMAGE(2,J)=D
32 AIMAGE(58,J)=D
DO 33 I=2,58
AIMAGE(I,11)=D
33 AIMAGE(I,131)=D
DO 34 J=11,131,20
AIMAGE(2,J)=A1
34 AIMAGE(58,J)=A1
AIMAGE(2,8)=A0
AIMAGE(10,8)=A1
AIMAGE(18,8)=A2
AIMAGE(26,8)=A3
AIMAGE(34,8)=A4
AIMAGE(42,8)=A5
AIMAGE(50,8)=A6
AIMAGE(58,8)=A7
AIMAGE(23,4)=RW
AIMAGE(24,4)=RA
AIMAGE(25,4)=RT
AIMAGE(26,4)=RE
AIMAGE(27,4)=RR
AIMAGE(30,4)=RC
AIMAGE(31,4)=RO
AIMAGE(32,4)=RN
AIMAGE(33,4)=RT
AIMAGE(34,4)=RE
AIMAGE(35,4)=RN
AIMAGE(36,4)=BT
DO 386 M=3,7
386 AIMAGE(38,M)=RC
AIMAGE(38,2)=BLP
AIMAGE(38,8)=RRP
AIMAGE(38,5)=RSL
DO 60 K=2,58,8
60 AIMAGE(K,7)=AP
AIMAGE(K,9)=A0
SM002380
SM002390
SM002400
SM002410
SM002420
SM002430
SM002440
SM002450
SM002460
SM002470
SM002480
SM002490
SM002500
SM002510
SM002520
SM002530
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SM002570
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SM002590
SM002600
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SM002680
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SM002700
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SM002790
SM002800
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SM002840
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SM002860
SM002870
SM002880
SM002890
SM002900
SM002910
SM002920
SM002930
SM002940
SM002950
SM002960
SM002970
SM002980
SM002990
SM003000
SM003010
SM003020
SM003030
SM003040
SM003050
SM003060
SM003070
SM003080
SM003090
SM003100
SM003110
SM003120
SM003130
SM003140
SM003150
SM003160
C
C THESE STATEMENTS PLOT THE PREDICTED DATA.
C
LOWER=NMIN
DO 70 I=2,NP
IX=(ALOG10(-PSI(I)) - FLOAT(LOWER))*20. + 0.5
IX=IX + 11
IY=(THETA(I))*80. + 0.5
IY=IY + 2
70 AIMAGE(IY,IX)=AP
C
C THESE STATEMENTS PLOT THE MEASURED DATA.
C
DO 71 I=1,8
IX=(ALOG10(TENOB(I))-FLOAT(LOWER))*20.0+0.5
IX=IX+11
IY=(THEOB(I))*80.0+0.5
IY=IY+2
IF(AIMAGE(IY,IX).EQ.8)AIMAGE(IY,IX)=AX
71 IF(AIMAGE(IY,IX).NE.8)AIMAGE(IY,IX)=AZ
C
C THESE STATEMENTS WRITE OUT THE AXIS, AXIS LABELS AND THE
C ARRAY CONTAINING THE PLOT
WRITE(6,100)
100 FORMAT(1H1)
WRITE(6,730)
730 FORMAT(' ',//,35X,'SOIL WATER PRESSURE ( PSI ),',
$ ' -CM H2O ( LOG SCALE ),',/)
DO 72 I=1,6
N(I)=NMIN + I
300 WRITE(6,300)(N(I),I=1,6)
FORMAT(3X,6(18X,12))
WRITE(6,301)
301 FORMAT(2X,6(17X,'*10^'))
WRITE(6,200)AW1,AW2,AW3,AW1,AW2,AW3,AW1,AW2,AW3,

```

```

1AW1,AW2,AW3,AW1,AW2,AW3,AW1,AW2,AW3,
2AW4,AW5,AW6,AW4,AW5,AW6,AW4,AW5,AW6,
3AW4,AW5,AW6,AW4,AW5,AW6,AW4,AW5,AW6
200 FORMAT(10X,6(2A8,A4)/10X,6(2A8,A4))
DO 50 I=1,58
50 WRITE(6,101)(AIMAGE(I,J),J=1,131)
101 FORMAT(131A1)
RETURN
END

```

C
C
C
C
C
C

THIS SUBROUTINE READS IN THE INPUT DATA, CHECKS FOR MISSING OR INVALID DATA AND SETS UP THE ARRAYS FOR INPUT TO AN IMSL SUBROUTINE. THE ARRAYS DIMENSIONED AT 10 ARE FOR THE INPUT DATA. THE ARRAYS DIMENSIONED AT 29 ARE FOR THE OUTPUT FROM THE CURVE FITTING ROUTINES.

```

SUBROUTINE HERMIT(PS,CD,THEOB,8D,S,H,IEOF,ISKIP,IAN5)
DIMENSION X(10),Y(10),C(10,3),PS(29),CD(29),THEOB(8),XLOG(10)
DIMENSION PSLOG(29)
LOGICAL*1 S(8),H(8),IDUMMY
DATA X/0.0,2.0,20.0,50.0,100.0,250.0,500.0,1000.0,2000.0,3000.0/
NX=8
TOLERC=-99
IEOF=0
N=NX+1
NX=NX+2
IC=NX
IOPT=3
NIN=0
IF(IAN5.EQ.1)GO TO 24
WRITE(15,20)
20 FORMAT('ENTER SOIL NUMBER..I3 FORMAT..ENTER 999 TO STOP')
READ(15,21)NSOIL
21 FORMAT(I3)
IF(NSOIL.EQ.999)GO TO 999
ISKIP=(NSOIL-1)*3-ISKIP
IF(ISKIP.FQ.0)GO TO 24
DO 22 I=1,ISKIP
22 READ(8,23)IDUMMY
23 FORMAT(A1)
24 ISKIP=ISKIP+3
READ(8,10,END=999)(S(I),I=1,8),(H(I),I=1,8),Y(2),8D,
1Y(9),Y(8),Y(7),Y(6),Y(5),Y(4),Y(3)
10 FORMAT(2X,16A1,2X,F5.1,15X,F5.2,7F5.1)
READ(8,11,END=999)(THEOB(I),I=1,8)
11 FORMAT(20X,F5.1)
READ(8,12,END=999)IDUMMY
12 FORMAT(A1)
DO 801 IL=2,9
801 IF(Y(IL).LE.0.0)GO TO 24
Y(3)=Y(3)+Y(2)
Y(4)=Y(4)+Y(3)
Y(5)=Y(5)+Y(4)
Y(6)=Y(6)+Y(5)
Y(7)=Y(7)+Y(6)
Y(8)=Y(8)+Y(7)
Y(9)=Y(9)+Y(8)
Y(1)=0.
DO 100 K=1,9
100 IF(Y(K).GT.100.00)Y(K)=100.0
DO 101 MN=1,8
IF(THEOB(MN).LE.0.0)GO TO 24
101 THEOB(MN)=THEOB(MN)*8D
Y(NX)=100.
NOUT=10
CALL INTRP(X,XLOG,Y,C,PS,PSLOG,CD,NX,IC,
S IOPT,NIN,NOUT,TOLERC)
DO 404 M=2,29
CDIFF=CD(M)-CD(M-1)
404 IF(CDIFF.LT.0.0)GO TO 24
RETURN
999 IEOF=1
RETURN
END

```

C
C
C
C

THIS SUBROUTINE IS CALLED FROM SUBROUTINE HERMIT. THE IMSL SUBROUTINE CALLS ARE CONTAINED IN THIS SUBROUTINE.

SUBROUTINE INTRP(X,XLOG,Y,C,PS,PSLOG,CD,NX,IC,

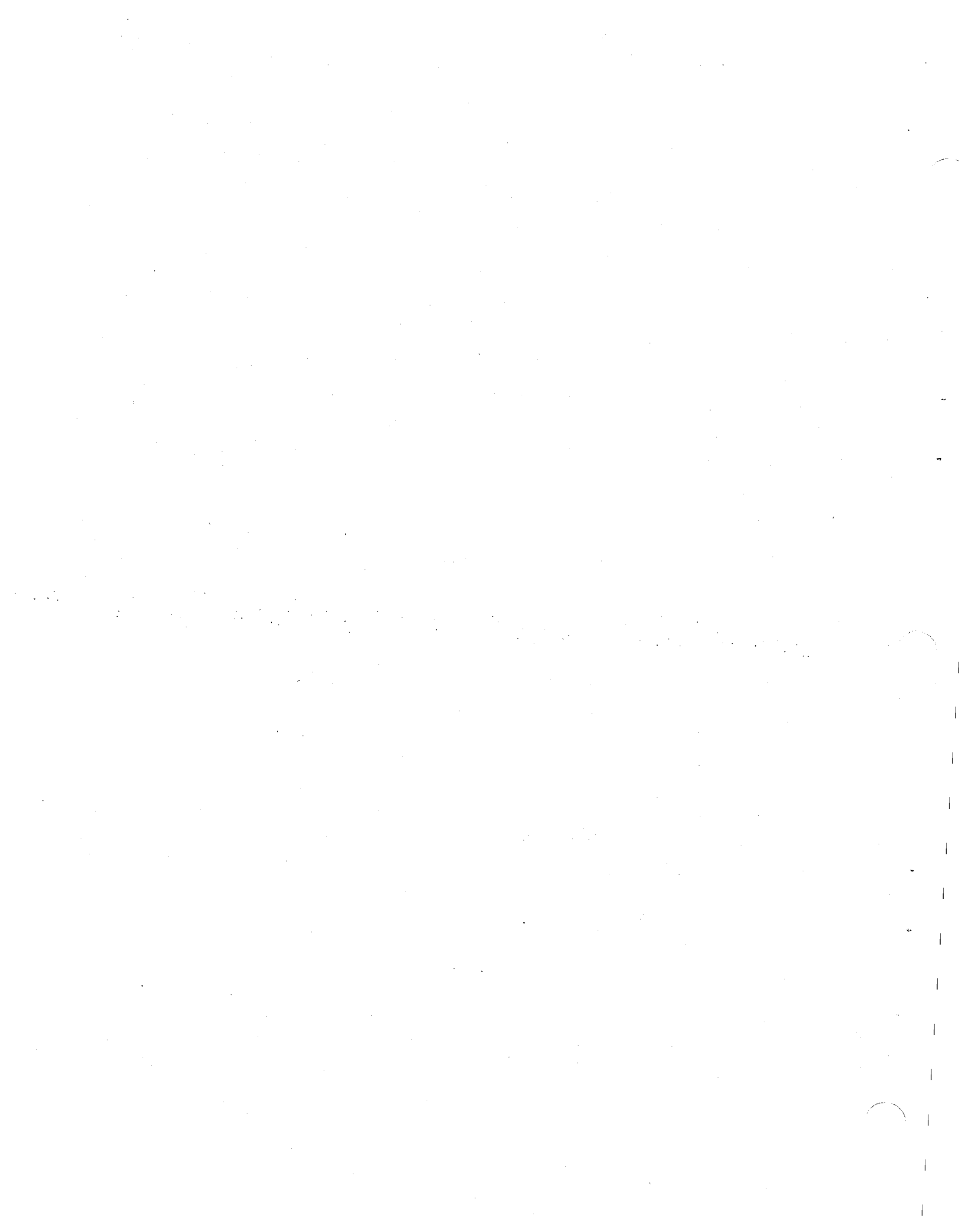
SM003170
SM003180
SM003190
SM003200
SM003210
SM003220
SM003230
SM003240
SM003250
SM003260
SM003270
SM003280
SM003290
SM003300
SM003310
SM003320
SM003330
SM003340
SM003350
SM003360
SM003370
SM003380
SM003390
SM003400
SM003410
SM003420
SM003430
SM003440
SM003450
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SM003470
SM003480
SM003490
SM003500
SM003510
SM003520
SM003530
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SM003590
SM003600
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SM003680
SM003690
SM003700
SM003710
SM003720
SM003730
SM003740
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SM003760
SM003770
SM003780
SM003790
SM003800
SM003810
SM003820
SM003830
SM003840
SM003850
SM003860
SM003870
SM003880
SM003890
SM003900
SM003910
SM003920
SM003930
SM003940
SM003950

FILE: SMOD3 EXEC J EODL / JOHNSON SPACE CENTER

```
&CONTROL OFF
FILEDEF 15 TERM (PERM
FILEDEF 16 TERM (PERM
FILEDEF 6 DISK NJSOIL LISTING D (PERM
FILEDEF 8 DISK SOIL DATA L (PERM
FILEDEF 10 DISK SMOD3 MSGS D (PERM
FILEDEF 11 DISK SOIL TYPE D (PERM RECFM F LRECL 20 BLKSIZE 20
GETDISK IMSL
GLORAL TXTLIB CMSLIB FORTMOD2 SIMSLIB DIMSLIB
LOAD SMOD3 (CLEAR START
&EXIT
```

APPENDIX B

A COMPARISON OF LABORATORY-MEASURED AND MODEL-PREDICTED MOISTURE
CHARACTERISTICS FOR 181 NEW JERSEY SOIL HORIZONS



APPENDIX B

A COMPARISON OF LABORATORY-MEASURED AND MODEL-PREDICTED MOISTURE CHARACTERISTICS FOR 181 NEW JERSEY SOIL HORIZONS

In this appendix, the measured and predicted moisture characteristics for 181 New Jersey soil horizons are compared. The material for each soil horizon is arranged so that the listing of input and output data and the plot of the measured and predicted moisture characteristics appear on facing pages.

SOIL HORIZON NUMBER 1 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.63 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.073	0.150E+05
0.081	0.600E+04
0.109	0.200E+04
0.205	0.100E+04
0.228	0.330E+03
0.256	0.100E+03
0.279	0.600E+02
0.311	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.00	0.065
2.00	0.00	0.012
4.00	0.00	0.009
6.00	0.00	0.008
8.00	0.00	0.008
10.00	0.00	0.008
15.00	0.00	0.007
20.00	0.00	0.007
25.00	0.00	0.007
30.00	0.00	0.061
40.00	0.00	0.062
50.00	0.00	0.053
60.00	0.00	0.036
70.00	0.00	0.021
80.00	0.00	0.015
90.00	0.00	0.013
100.00	0.00	0.013
150.00	0.00	0.014
200.00	0.00	0.156
250.00	0.00	0.120
300.00	0.00	0.125
400.00	0.00	0.076
500.00	0.00	0.038
600.00	0.00	0.023
700.00	0.00	0.014
800.00	0.00	0.007
900.00	0.00	0.003
1000.00	0.00	0.003
2000.00	100.0	0.003

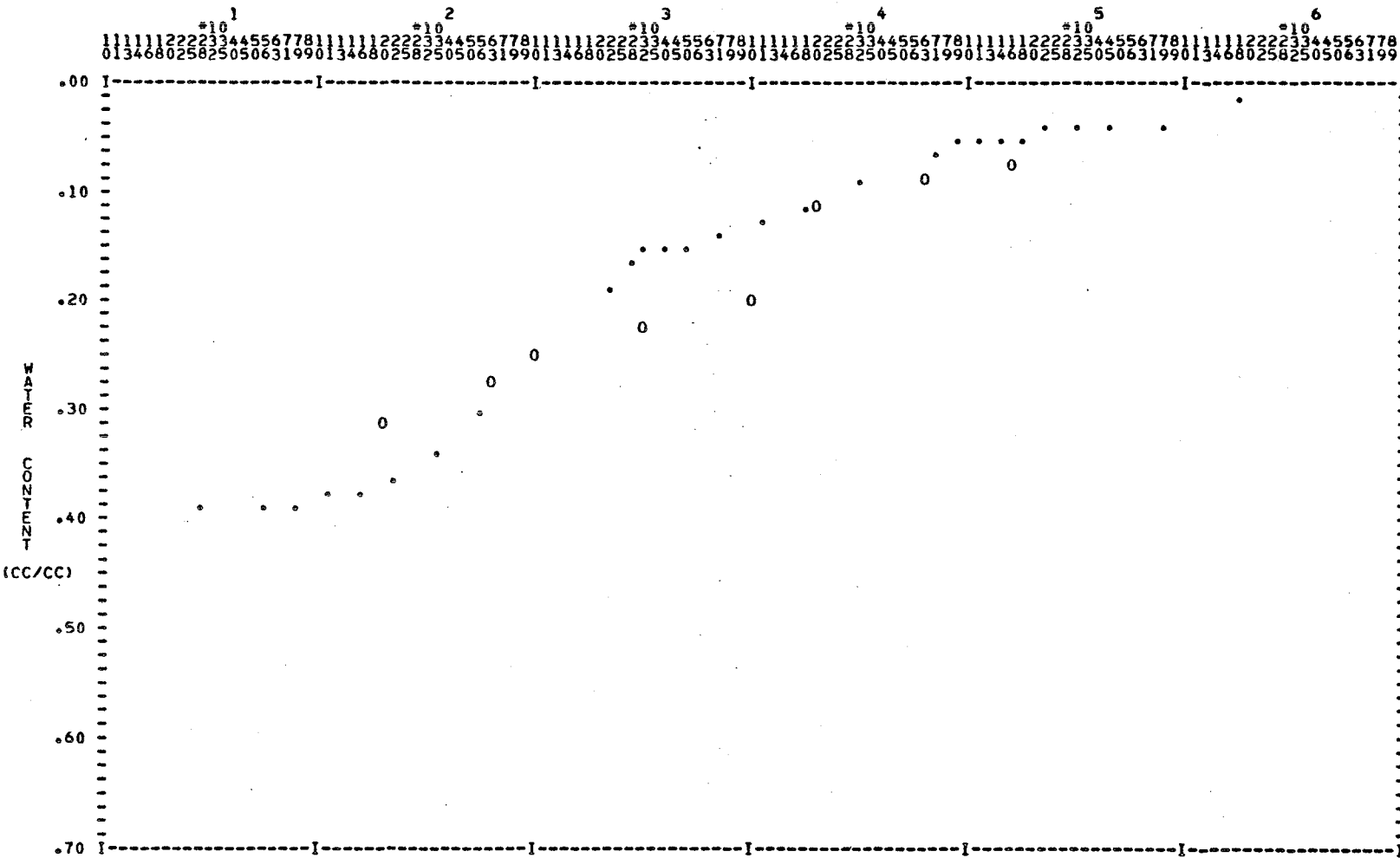
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.18654E+06
0.031	0.78345E+06
0.033	0.45967E+06
0.035	0.30823E+06
0.038	0.22364E+06
0.041	0.17101E+06
0.044	0.13577E+06
0.047	0.11088E+06
0.050	0.92570E+05
0.053	0.64087E+05
0.056	0.30655E+05
0.059	0.17529E+05
0.111	0.10971E+05
0.113	0.72696E+04
0.119	0.51993E+04
0.146	0.40354E+04
0.151	0.33210E+04
0.156	0.28331E+04
0.161	0.21947E+04
0.194	0.94958E+03
0.249	0.55651E+03
0.298	0.34088E+03
0.336	0.21832E+03
0.358	0.15306E+03
0.370	0.11055E+03
0.377	0.80248E+02
0.381	0.55157E+02
0.383	0.27872E+02
0.384	

B-2

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-3

SOIL HORIZON NUMBER 1

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23081E+01

SOIL HORIZON NUMBER 2 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.70 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.141	0.500E+04
0.177	0.200E+04
0.262	0.100E+04
0.277	0.330E+03
0.292	0.100E+03
0.306	0.600E+02
0.330	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.8	0.138
2.00	16.2	0.024
3.00	17.8	0.016
4.00	19.3	0.014
5.00	20.6	0.013
6.00	21.7	0.012
7.00	22.8	0.011
8.00	23.8	0.010
9.00	24.8	0.010
10.00	25.7	0.009
20.00	32.8	0.071
30.00	38.7	0.059
40.00	43.3	0.046
50.00	46.5	0.032
60.00	48.8	0.020
70.00	49.8	0.013
80.00	51.0	0.012
90.00	52.3	0.012
100.00	53.5	0.013
200.00	67.3	0.138
300.00	77.9	0.106
400.00	87.4	0.095
500.00	93.3	0.059
600.00	96.4	0.031
700.00	98.1	0.018
800.00	99.1	0.010
900.00	99.6	0.005
1000.00	99.8	0.002
2000.00	100.0	0.002

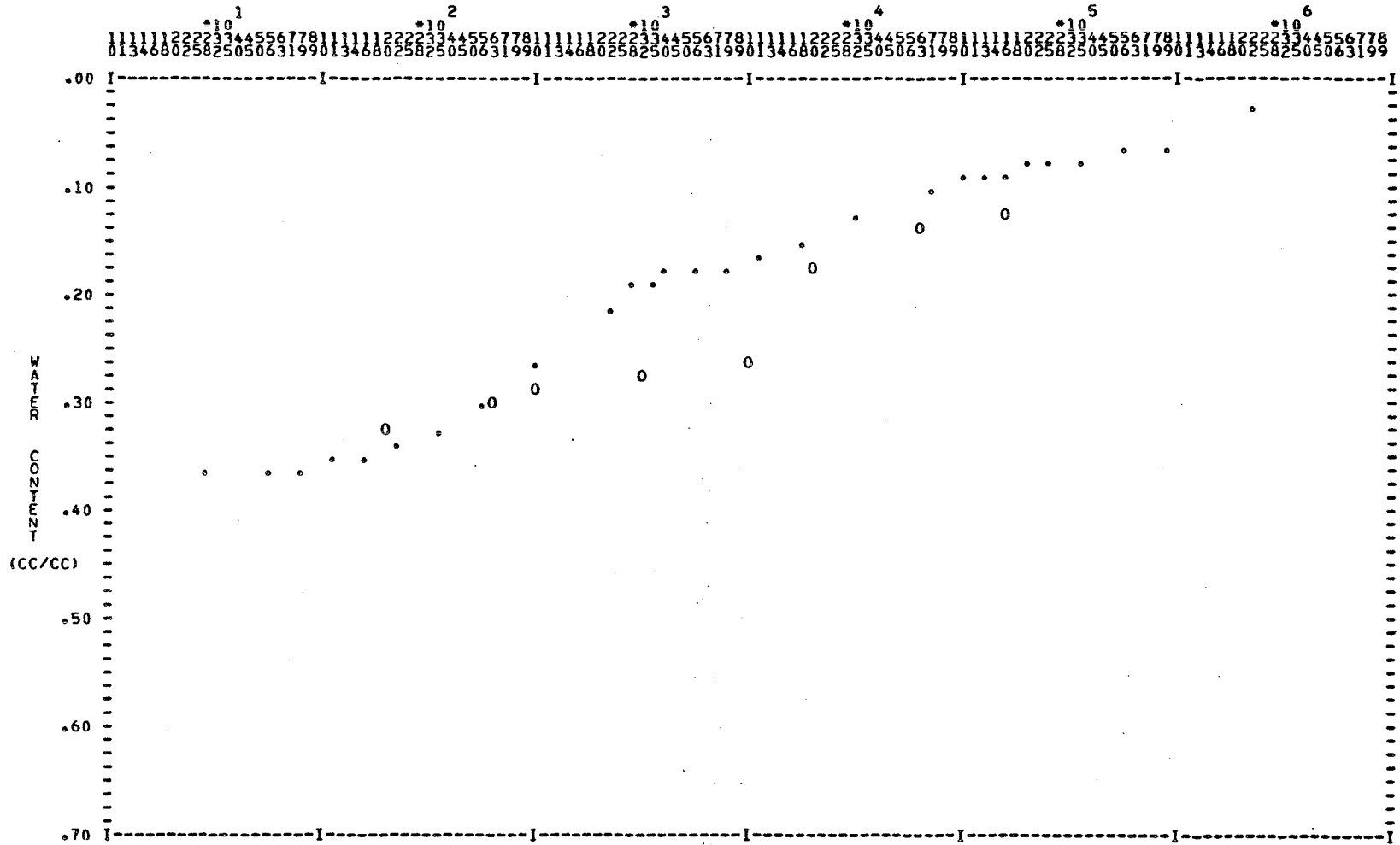
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.029	0.22487E+06
0.061	0.93560E+05
0.066	0.53865E+05
0.071	0.35552E+05
0.076	0.25532E+05
0.080	0.19339E+05
0.084	0.15241E+05
0.087	0.12371E+05
0.091	0.10275E+05
0.105	0.74272E+04
0.128	0.32123E+04
0.147	0.18101E+04
0.161	0.11381E+04
0.170	0.75815E+03
0.176	0.54131E+03
0.181	0.42084E+03
0.185	0.34752E+03
0.189	0.29741E+03
0.217	0.22696E+03
0.260	0.96664E+02
0.296	0.55874E+02
0.324	0.34377E+02
0.340	0.22144E+02
0.349	0.15375E+02
0.354	0.11009E+02
0.356	0.79289E+01
0.357	0.54141E+01
0.358	0.27308E+01

ALPHA = 1.38

B-4

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 3 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.62 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.136	0.150E+05
0.154	0.600E+04
0.186	0.200E+04
0.258	0.100E+04
0.277	0.330E+03
0.296	0.100E+03
0.308	0.600E+02
0.342	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	18.8	0.188
2.00	20.4	0.016
3.00	21.4	0.010
4.00	22.3	0.008
5.00	23.0	0.008
6.00	23.8	0.007
7.00	24.4	0.007
8.00	25.1	0.007
9.00	25.7	0.006
10.00	26.4	0.006
20.00	31.7	0.053
30.00	35.8	0.041
40.00	38.8	0.030
50.00	41.2	0.024
60.00	43.1	0.019
70.00	44.8	0.017
80.00	46.3	0.015
90.00	47.7	0.014
100.00	49.0	0.013
200.00	65.2	0.162
300.00	77.2	0.120
400.00	87.1	0.100
500.00	93.4	0.063
600.00	96.6	0.032
700.00	98.4	0.017
800.00	99.3	0.009
900.00	99.7	0.004
1000.00	99.8	0.001
2000.00	100.0	0.002

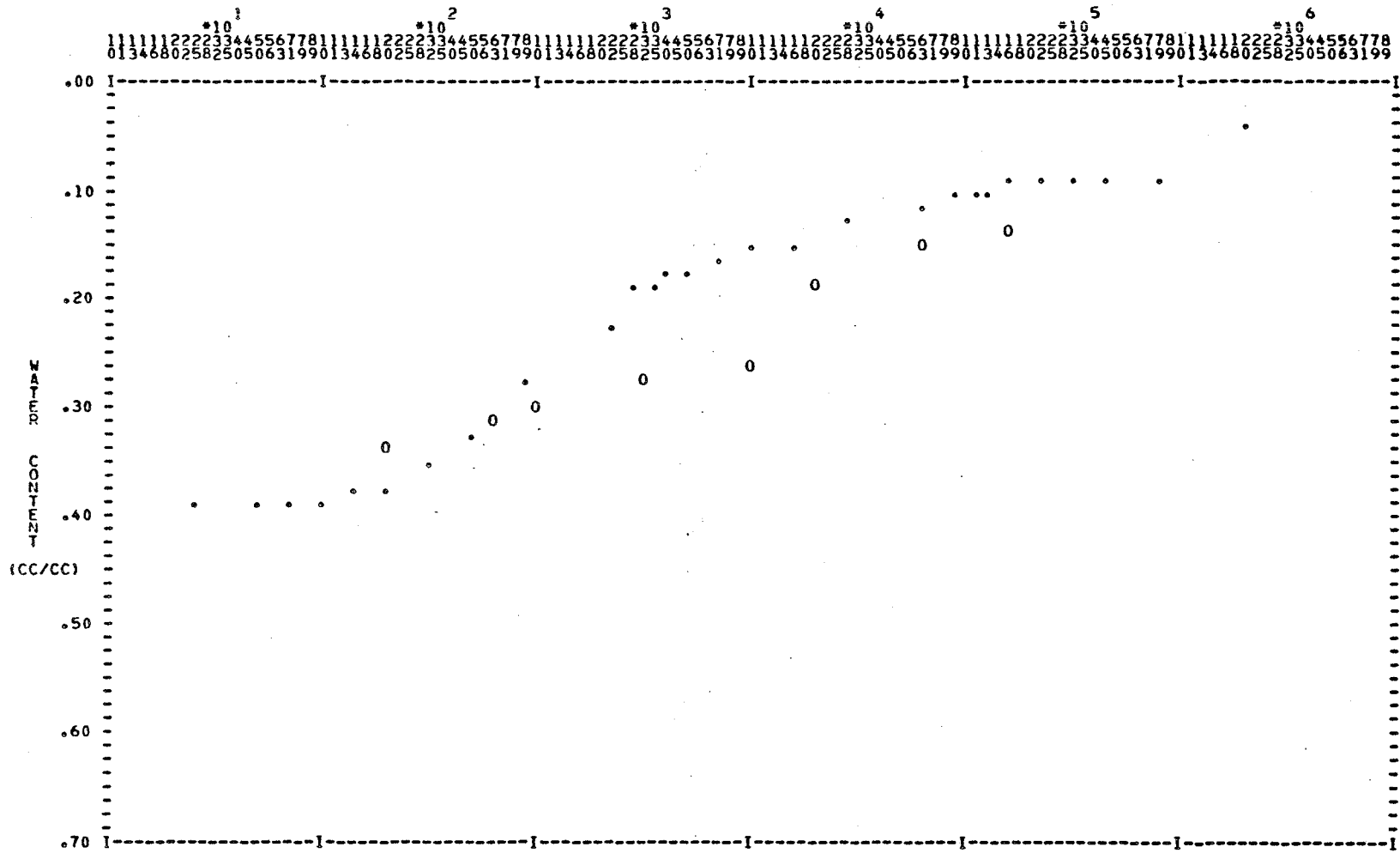
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.19545E+06
0.081	0.80150E+05
0.085	0.45682E+05
0.088	0.30242E+05
0.091	0.21805E+05
0.094	0.16618E+05
0.096	0.13169E+05
0.099	0.10744E+05
0.101	0.89652E+04
0.113	0.65956E+04
0.131	0.28094E+04
0.145	0.15678E+04
0.156	0.10083E+04
0.164	0.70748E+03
0.171	0.52905E+03
0.177	0.41415E+03
0.183	0.33524E+03
0.188	0.27834E+03
0.222	0.21922E+03
0.277	0.92814E+02
0.319	0.52860E+02
0.351	0.32604E+02
0.369	0.20991E+02
0.379	0.14336E+02
0.384	0.10097E+02
0.387	0.71608E+01
0.388	0.48589E+01
0.388	0.25601E+01

ALPHA = 1.38

B-6

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-7

SOIL HORIZON NUMBER 4 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.64 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.133	0.150E+05
0.148	0.600E+04
0.180	0.200E+04
0.253	0.100E+04
0.264	0.330E+03
0.284	0.100E+03
0.297	0.600E+02
0.321	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	18.8	0.188
2.00	19.0	0.011
3.00	19.0	0.006
4.00	19.0	0.004
5.00	19.0	0.004
6.00	19.0	0.005
7.00	19.0	0.005
8.00	19.0	0.005
9.00	19.0	0.006
10.00	19.0	0.006
20.00	33.3	0.061
30.00	35.0	0.050
40.00	38.0	0.036
50.00	41.0	0.028
60.00	43.0	0.020
70.00	45.0	0.019
80.00	47.0	0.017
90.00	48.0	0.015
100.00	49.0	0.013
200.00	66.0	0.166
300.00	76.0	0.120
400.00	83.0	0.067
500.00	88.0	0.061
600.00	94.0	0.030
700.00	97.0	0.015
800.00	98.0	0.007
900.00	99.0	0.003
1000.00	99.0	0.001
2000.00	100.0	0.002

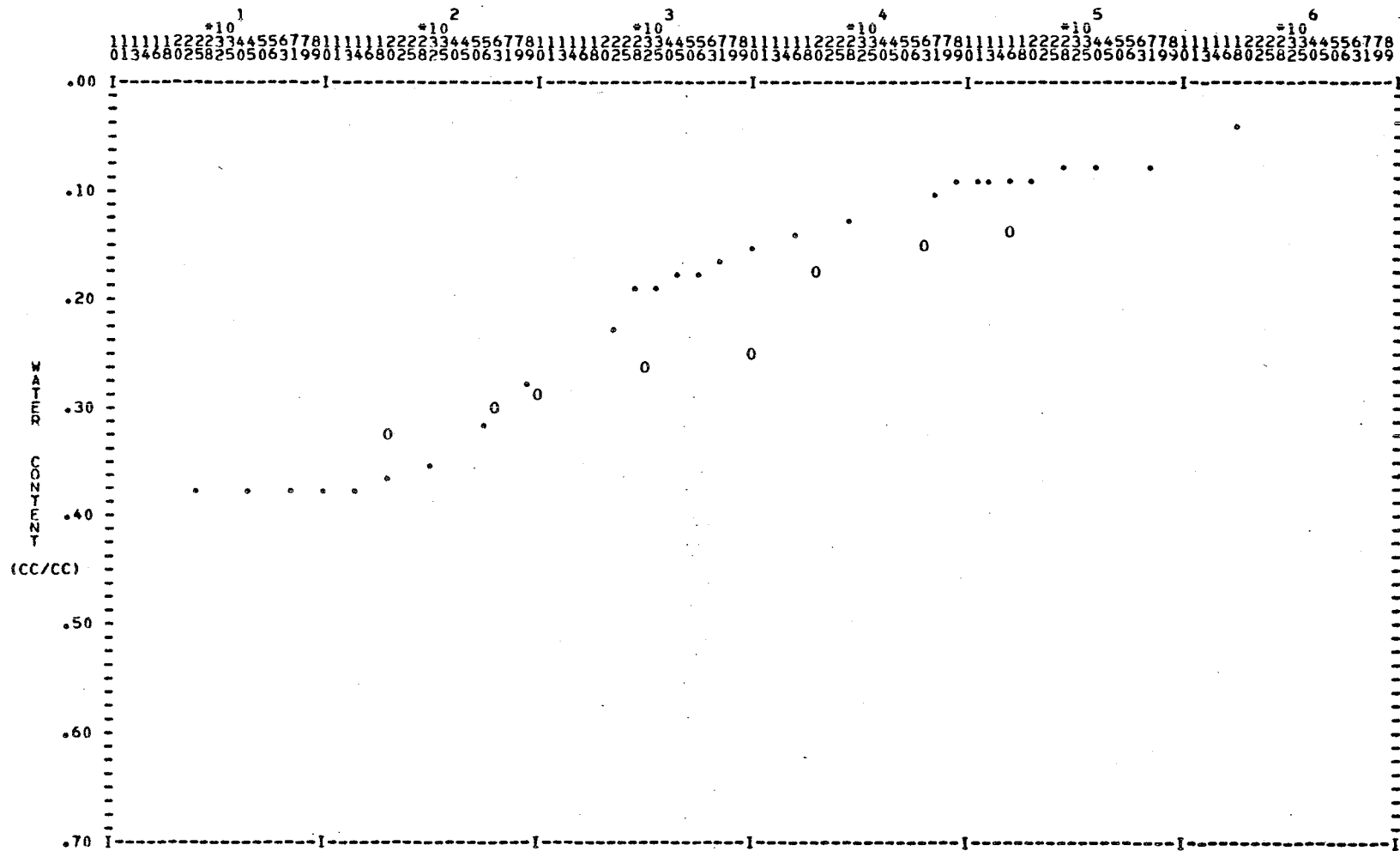
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.038	0.184660E+06
0.077	0.733333E+05
0.079	0.403420E+05
0.088	0.273399E+05
0.088	0.203344E+05
0.088	0.153309E+05
0.088	0.112844E+05
0.088	0.083333E+05
0.090	0.063333E+05
0.103	0.083333E+04
0.124	0.063333E+04
0.144	0.063333E+04
0.159	0.063333E+04
0.166	0.073370E+04
0.176	0.053326E+04
0.177	0.043325E+04
0.188	0.033338E+04
0.188	0.023338E+04
0.220	0.023334E+04
0.276	0.043331E+04
0.311	0.053385E+04
0.347	0.032927E+04
0.365	0.021087E+04
0.373	0.014160E+04
0.378	0.097733E+03
0.379	0.067789E+03
0.380	0.045768E+03
0.381	0.026013E+03

ALPHA = 1.38

B-8

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-9

SOIL HORIZON NUMBER 4

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41251E+01

SOIL HORIZON NUMBER 5 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.082	0.150E+05
0.106	0.600E+04
0.114	0.200E+04
0.194	0.100E+04
0.206	0.330E+03
0.227	0.100E+03
0.242	0.600E+02
0.318	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.0	0.140
2.00	14.2	0.002
3.00	14.4	0.002
4.00	14.6	0.002
5.00	14.7	0.002
6.00	14.9	0.002
7.00	15.1	0.002
8.00	15.3	0.002
9.00	15.5	0.002
10.00	15.7	0.002
20.00	17.2	0.015
30.00	19.1	0.019
40.00	21.0	0.019
50.00	22.4	0.014
60.00	23.6	0.012
70.00	24.7	0.011
80.00	25.8	0.011
90.00	26.9	0.011
100.00	28.0	0.011
200.00	48.0	0.200
300.00	65.2	0.172
400.00	81.1	0.158
500.00	90.4	0.093
600.00	94.8	0.044
700.00	97.4	0.026
800.00	98.9	0.014
900.00	99.6	0.007
1000.00	99.8	0.002
2000.00	100.0	0.002

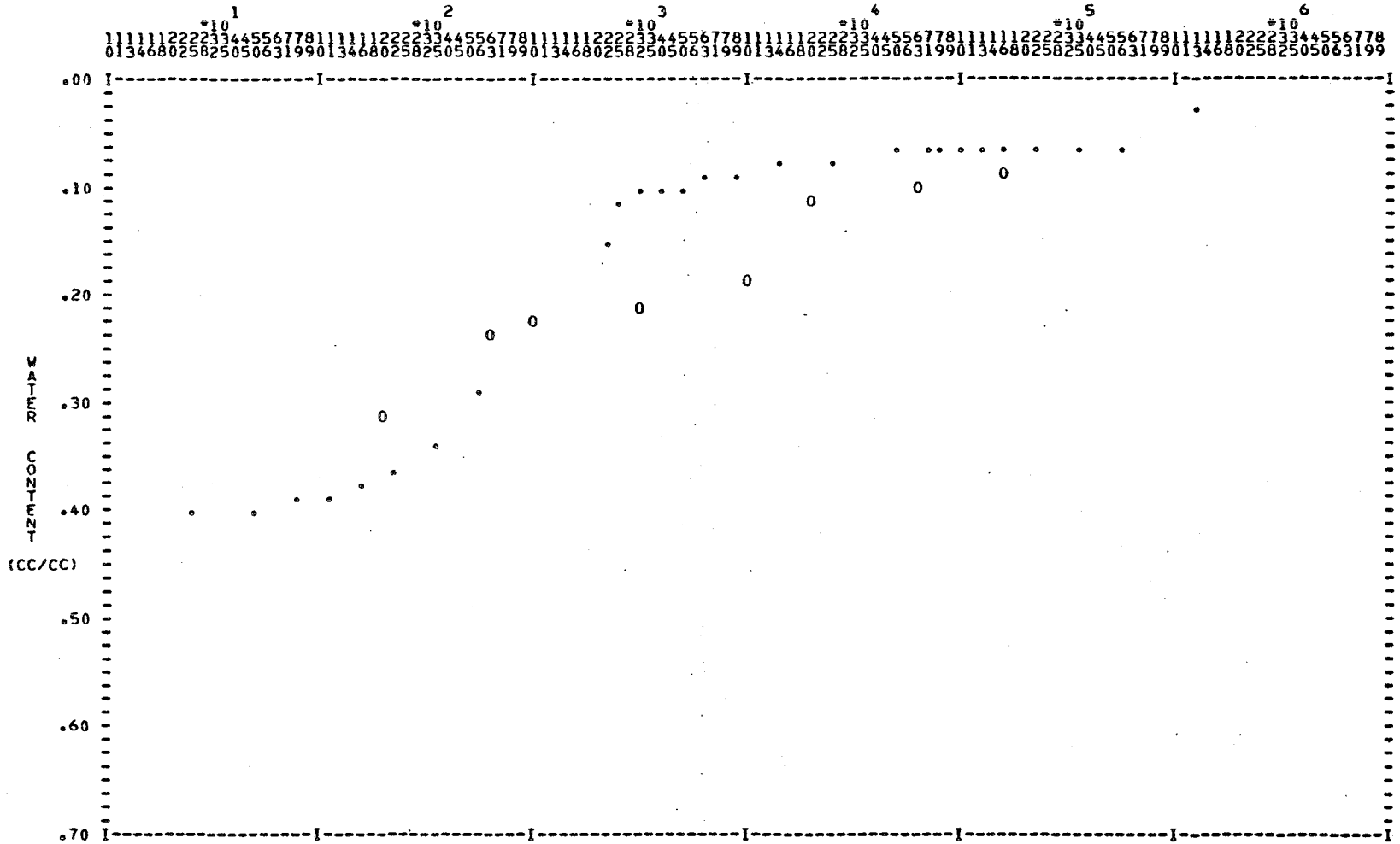
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.13309E+06
0.057	0.56484E+05
0.057	0.33635E+05
0.058	0.22747E+05
0.059	0.16594E+05
0.060	0.12737E+05
0.060	0.10141E+05
0.061	0.82998E+04
0.062	0.69412E+04
0.065	0.51316E+04
0.072	0.23924E+04
0.079	0.14060E+04
0.086	0.90121E+03
0.091	0.63301E+03
0.096	0.48336E+03
0.100	0.38483E+03
0.104	0.31567E+03
0.109	0.26486E+03
0.151	0.22457E+03
0.224	0.97915E+02
0.290	0.56812E+02
0.340	0.34618E+02
0.367	0.21947E+02
0.381	0.15227E+02
0.389	0.10887E+02
0.393	0.78186E+01
0.395	0.52776E+01
0.396	0.25199E+01

ALPHA = 1.38

B-10

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 5

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.50788E+01

B-11

SOIL HORIZON NUMBER 6 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.57 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.083	0.600E+02
0.090	0.200E+04
0.190	0.100E+04
0.207	0.300E+03
0.279	0.100E+03
0.322	0.500E+02
0.326	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.4	0.114
2.00	13.7	0.003
4.00	19.0	0.003
6.00	23.6	0.003
8.00	28.8	0.003
10.00	33.3	0.002
20.00	45.0	0.002
30.00	50.0	0.013
40.00	55.0	0.015
50.00	60.0	0.015
60.00	64.0	0.012
70.00	67.0	0.012
80.00	70.0	0.014
90.00	73.0	0.015
100.00	75.0	0.016
200.00	87.0	0.221
300.00	89.6	0.177
400.00	91.0	0.156
500.00	92.0	0.093
600.00	93.0	0.046
700.00	94.0	0.025
800.00	95.0	0.014
900.00	96.6	0.006
1000.00	98.8	0.002
2000.00	100.0	0.002

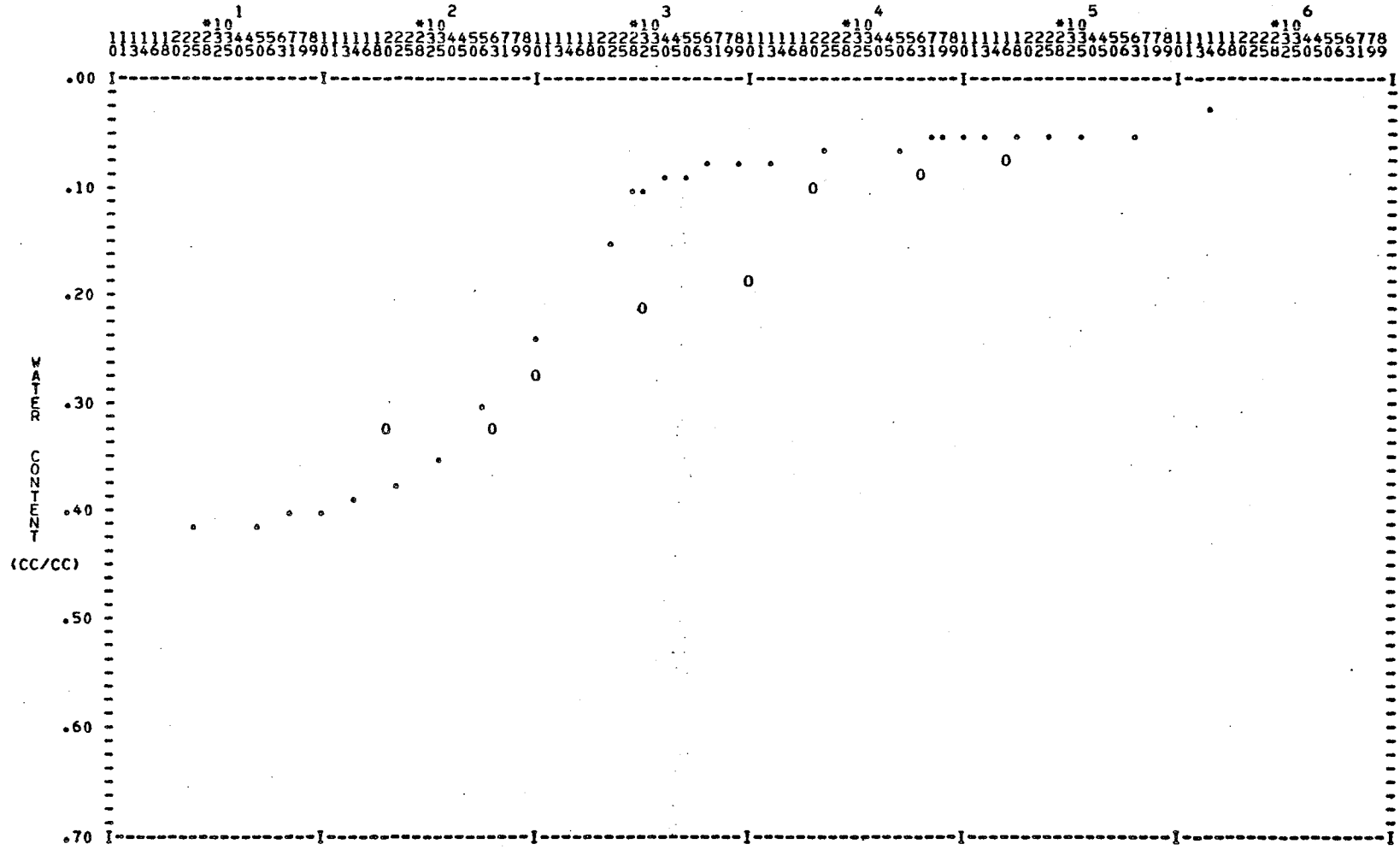
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.13919E+06
0.048	0.60422E+05
0.049	0.35967E+05
0.051	0.23961E+05
0.052	0.17212E+05
0.053	0.13026E+05
0.054	0.10241E+05
0.054	0.82881E+04
0.055	0.68618E+04
0.058	0.48824E+04
0.064	0.22210E+04
0.070	0.13132E+04
0.075	0.84701E+03
0.080	0.60822E+03
0.085	0.47919E+03
0.090	0.39061E+03
0.096	0.32607E+03
0.102	0.27722E+03
0.150	0.22359E+03
0.231	0.96117E+02
0.299	0.55293E+02
0.350	0.33818E+02
0.378	0.21543E+02
0.393	0.14824E+02
0.401	0.10515E+02
0.405	0.74964E+01
0.406	0.50419E+01
0.407	0.24613E+01

ALPHA = 1.38

B-12

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-13

SOIL HORIZON NUMBER 6

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51273E+01

SOIL HORIZON NUMBER 7 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.046	0.150E+05
0.052	0.600E+04
0.067	0.200E+04
0.142	0.100E+04
0.153	0.330E+03
0.176	0.100E+03
0.190	0.600E+02
0.334	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.8	0.078
2.00	8.4	0.006
3.00	8.8	0.004
4.00	9.2	0.004
5.00	9.6	0.004
6.00	9.9	0.003
7.00	10.2	0.003
8.00	10.5	0.003
9.00	10.8	0.003
10.00	11.0	0.003
20.00	13.0	0.020
30.00	14.7	0.017
40.00	16.2	0.015
50.00	17.3	0.011
60.00	18.3	0.010
70.00	19.3	0.010
80.00	20.3	0.010
90.00	21.2	0.009
100.00	22.1	0.009
200.00	40.0	0.179
300.00	57.4	0.174
400.00	74.8	0.173
500.00	85.5	0.107
600.00	91.3	0.058
700.00	95.2	0.039
800.00	97.7	0.025
900.00	99.0	0.014
1000.00	99.5	0.005
2000.00	100.0	0.005

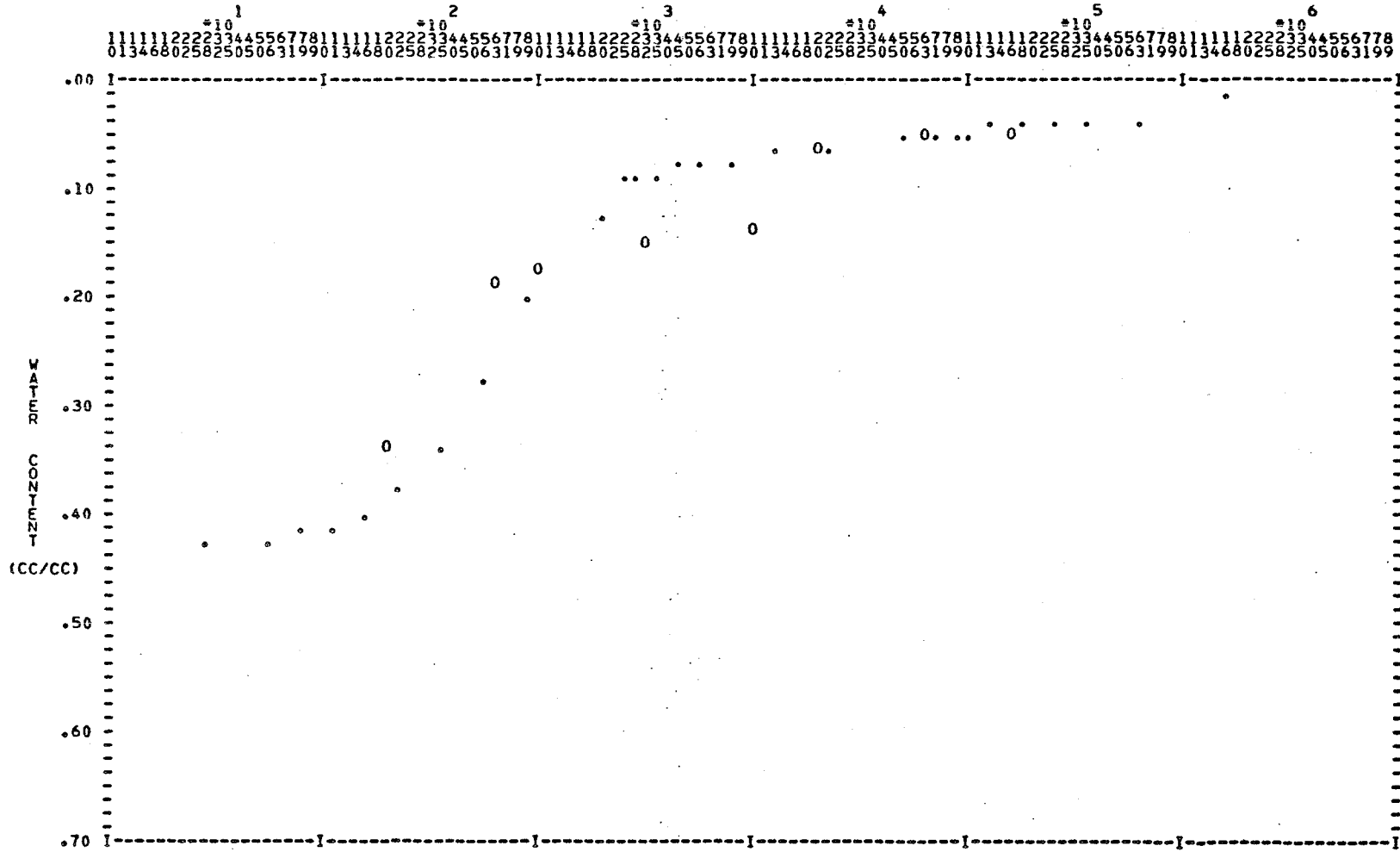
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.15061E+06
0.036	0.63278E+05
0.038	0.36788E+05
0.040	0.24387E+05
0.041	0.17517E+05
0.043	0.13281E+05
0.044	0.10468E+05
0.045	0.84956E+04
0.046	0.70542E+04
0.051	0.50899E+04
0.059	0.22217E+04
0.065	0.12713E+04
0.071	0.81659E+03
0.075	0.58166E+03
0.079	0.44472E+03
0.084	0.35536E+03
0.088	0.28993E+03
0.092	0.24149E+03
0.131	0.20821E+03
0.206	0.92889E+02
0.339	0.54725E+02
0.374	0.33668E+02
0.394	0.21864E+02
0.408	0.15591E+02
0.416	0.11410E+02
0.420	0.83681E+01
0.422	0.57825E+01
	0.28397E+01

B-14

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) , -CM H2O (LOG SCALE)



B-15

SOIL HORIZON NUMBER 7

0 MEASURED : . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) * 0.23709E+01

SOIL HORIZON NUMBER 8 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.57 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.150E+05
0.039	0.600E+04
0.058	0.200E+04
0.121	0.100E+04
0.138	0.330E+03
0.154	0.100E+03
0.226	0.600E+02
0.349	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	4.3	0.002
3.00	4.5	0.002
4.00	4.7	0.002
5.00	4.9	0.002
6.00	5.1	0.002
7.00	5.3	0.002
8.00	5.4	0.001
9.00	5.6	0.001
10.00	5.7	0.001
20.00	6.6	0.009
30.00	6.8	0.012
40.00	6.9	0.014
50.00	7.0	0.014
60.00	7.1	0.014
70.00	7.2	0.014
80.00	7.4	0.014
90.00	7.7	0.014
100.00	7.7	0.000
200.00	8.1	0.026
300.00	8.5	0.017
400.00	8.7	0.017
500.00	8.9	0.017
600.00	9.3	0.033
700.00	9.5	0.017
800.00	9.6	0.017
900.00	9.8	0.017
1000.00	9.9	0.003
2000.00	100.0	0.007

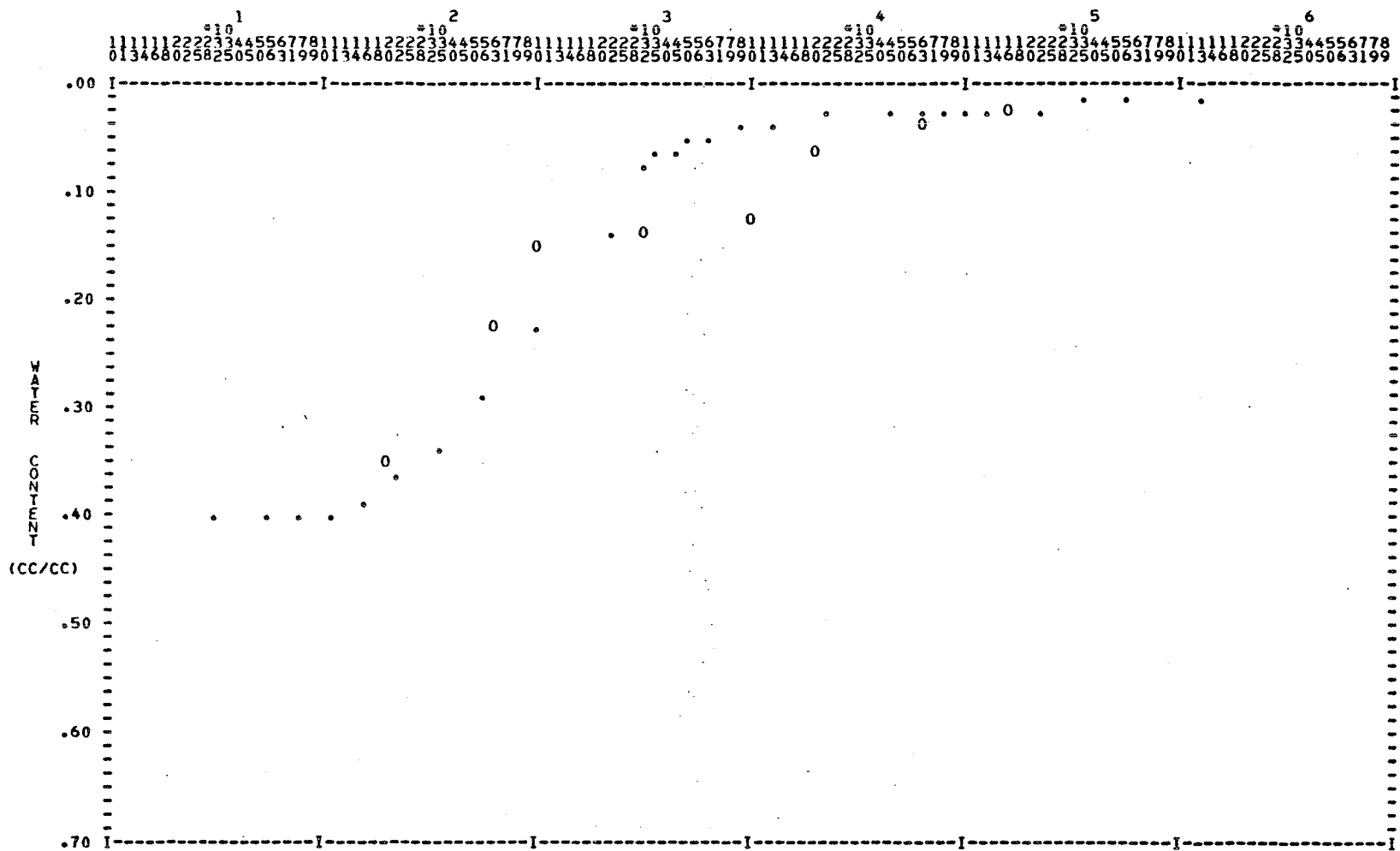
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.12356E+06
0.018	0.058988E+06
0.019	0.0339833E+06
0.020	0.027122E+06
0.020	0.016302E+06
0.021	0.0123311E+06
0.022	0.0095311E+06
0.022	0.0078691E+06
0.022	0.0064886E+06
0.022	0.0045022E+06
0.022	0.0028477E+06
0.022	0.0012036E+06
0.034	0.0084903E+06
0.040	0.0068400E+06
0.044	0.0052269E+06
0.050	0.0045050E+06
0.058	0.0035866E+06
0.068	0.0028650E+06
0.080	0.0023300E+06
0.088	0.0019660E+06
0.141	0.0014100E+06
0.231	0.0009600E+06
0.338	0.0007338E+06
0.400	0.0005360E+06
0.497	0.0003897E+06
0.597	0.0002597E+06
0.702	0.0001702E+06
0.804	0.0001084E+06
0.906	0.0000706E+06
0.906	0.0000227E+06

B-16

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-17

SOIL HORIZON NUMBER 8 0 MEASURED 1 . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37170E+01

SOIL HORIZON NUMBER 9 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.63 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.150E+05
0.034	0.600E+04
0.047	0.200E+04
0.081	0.100E+04
0.091	0.330E+03
0.109	0.100E+03
0.184	0.600E+02
0.342	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.9	0.039
2.00	4.1	0.002
3.00	4.3	0.002
4.00	4.5	0.002
5.00	4.6	0.002
6.00	4.8	0.002
7.00	4.9	0.001
8.00	5.1	0.001
9.00	5.2	0.001
10.00	5.3	0.001
20.00	6.0	0.007
30.00	6.8	0.008
40.00	7.6	0.008
50.00	8.3	0.007
60.00	9.1	0.008
70.00	10.4	0.013
80.00	12.0	0.017
90.00	14.0	0.020
100.00	16.3	0.023
200.00	41.7	0.254
300.00	60.2	0.186
400.00	75.3	0.150
500.00	85.4	0.101
600.00	91.5	0.061
700.00	95.4	0.038
800.00	97.6	0.023
900.00	98.8	0.012
1000.00	99.3	0.005
2000.00	100.0	0.007

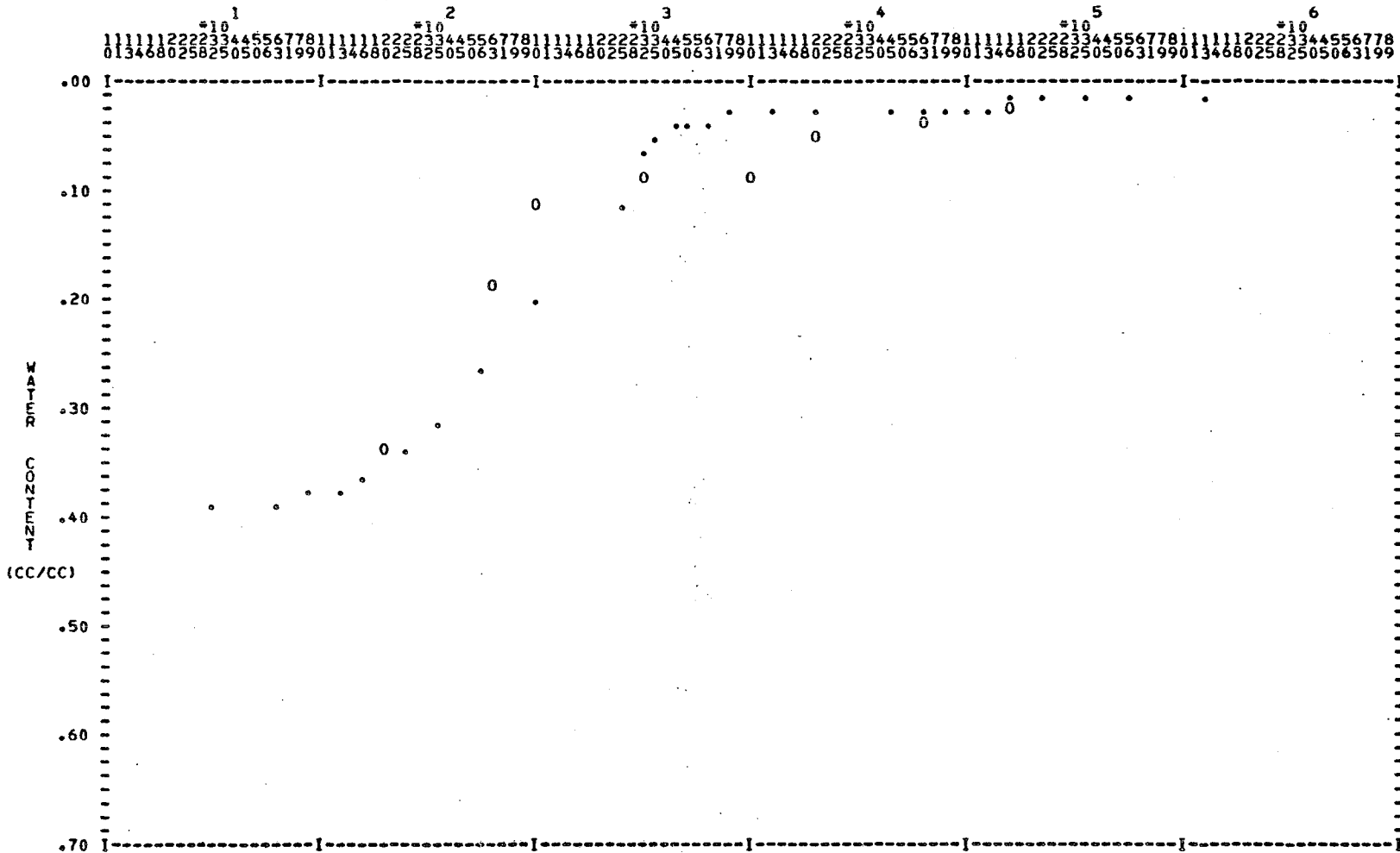
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.13152E+06
0.016	0.57939E+05
0.017	0.34680E+05
0.018	0.23056E+05
0.018	0.16501E+05
0.019	0.12438E+05
0.019	0.97386E+04
0.020	0.78491E+04
0.020	0.64719E+04
0.022	0.45175E+04
0.025	0.20635E+04
0.028	0.12367E+04
0.031	0.80358E+03
0.034	0.60614E+03
0.038	0.50542E+03
0.043	0.42525E+03
0.050	0.36194E+03
0.058	0.31169E+03
0.112	0.24066E+03
0.196	0.10168E+03
0.261	0.57601E+02
0.309	0.36014E+02
0.341	0.23905E+02
0.360	0.16785E+02
0.371	0.12154E+02
0.378	0.88684E+01
0.381	0.62083E+01
0.384	0.32741E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-19

SOIL HORIZON NUMBER 10 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.047	0.150E+05
0.050	0.600E+04
0.073	0.200E+04
0.093	0.100E+04
0.103	0.300E+03
0.115	0.100E+03
0.197	0.600E+02
0.355	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.5	0.075
2.00	7.6	0.001
3.00	7.7	0.001
4.00	7.8	0.001
5.00	7.9	0.001
6.00	8.0	0.001
7.00	8.0	0.001
8.00	8.1	0.001
9.00	8.2	0.001
10.00	8.2	0.001
20.00	8.6	0.004
30.00	9.2	0.006
40.00	10.0	0.008
50.00	10.7	0.007
60.00	11.1	0.004
70.00	11.8	0.007
80.00	13.4	0.016
90.00	16.0	0.026
100.00	19.5	0.035
200.00	49.1	0.296
300.00	67.0	0.179
400.00	79.9	0.129
500.00	89.5	0.096
600.00	95.3	0.058
700.00	97.9	0.026
800.00	98.9	0.010
900.00	99.3	0.004
1000.00	99.4	0.001
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

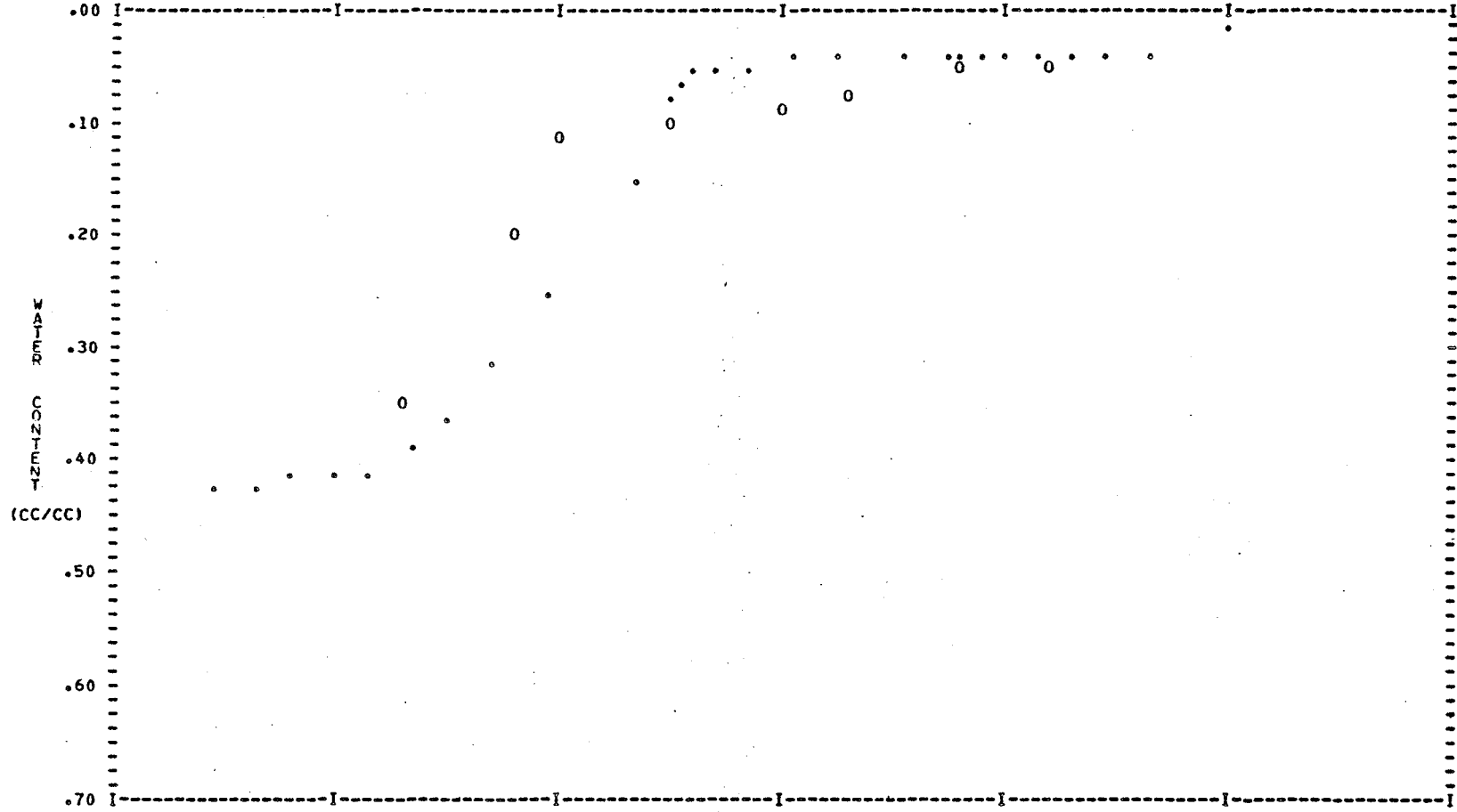
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.016	0.10094E+06
0.032	0.46241E+05
0.033	0.28255E+05
0.033	0.18891E+05
0.033	0.13552E+05
0.034	0.10226E+05
0.034	0.80104E+04
0.034	0.64568E+04
0.035	0.53232E+04
0.036	0.37066E+04
0.038	0.18442E+04
0.041	0.11318E+04
0.044	0.73672E+03
0.046	0.48369E+03
0.048	0.42084E+03
0.053	0.39001E+03
0.062	0.35131E+03
0.075	0.31346E+03
0.145	0.22910E+03
0.245	0.93337E+02
0.310	0.51721E+02
0.358	0.32986E+02
0.390	0.21850E+02
0.408	0.14399E+02
0.416	0.96864E+01
0.419	0.65280E+01
0.420	0.45876E+01
0.421	0.29398E+01

B-20

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-21

SOIL HORIZON NUMBER 10

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.51374E+01

SOIL HORIZON NUMBER 11 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.150E+05
0.042	0.600E+04
0.049	0.200E+04
0.069	0.100E+04
0.077	0.330E+03
0.101	0.100E+03
0.174	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.2	0.052
2.00	5.4	0.002
3.00	5.5	0.001
4.00	5.7	0.001
5.00	5.8	0.001
6.00	5.9	0.001
7.00	6.1	0.001
8.00	6.2	0.001
9.00	6.2	0.001
10.00	6.3	0.001
20.00	6.8	0.005
30.00	7.3	0.005
40.00	7.8	0.005
50.00	8.2	0.004
60.00	8.6	0.004
70.00	9.5	0.009
80.00	11.3	0.018
90.00	14.0	0.027
100.00	17.5	0.035
200.00	50.0	0.325
300.00	68.9	0.189
400.00	81.8	0.129
500.00	90.6	0.088
600.00	95.6	0.050
700.00	97.9	0.023
800.00	98.9	0.010
900.00	99.2	0.004
1000.00	99.4	0.002
2000.00	100.0	0.006

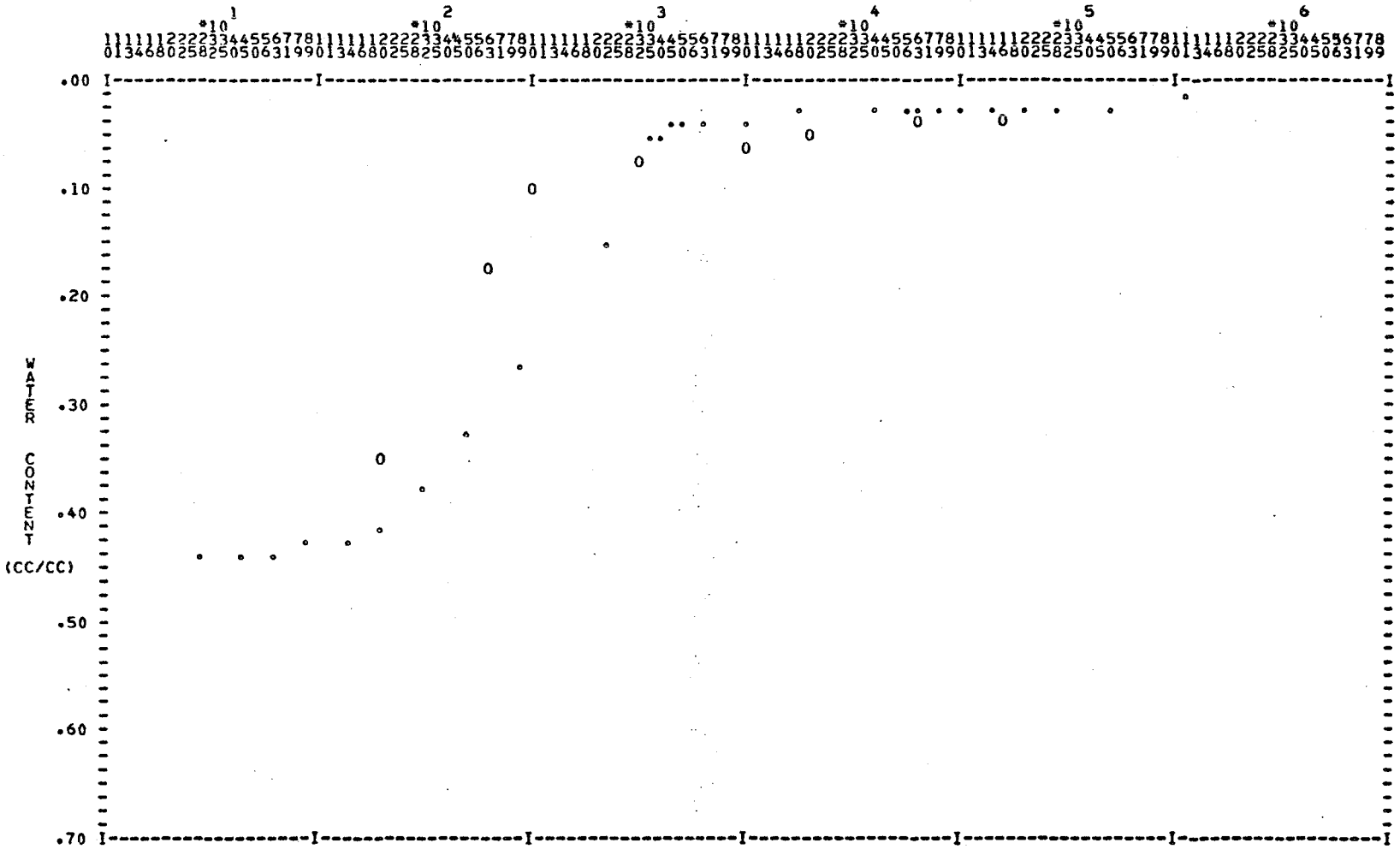
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.012	0.11549E+06
0.024	0.50096E+05
0.025	0.29648E+05
0.025	0.19619E+05
0.026	0.14000E+05
0.027	0.10530E+05
0.027	0.82294E+04
0.027	0.66223E+04
0.027	0.54526E+04
0.029	0.37837E+04
0.031	0.16895E+04
0.033	0.10070E+04
0.035	0.65451E+03
0.037	0.47318E+03
0.040	0.42862E+03
0.046	0.38683E+03
0.055	0.34314E+03
0.069	0.30343E+03
0.148	0.22616E+03
0.260	0.91483E+02
0.330	0.50131E+02
0.377	0.31448E+02
0.408	0.20621E+02
0.424	0.13663E+02
0.431	0.92747E+01
0.434	0.63472E+01
0.435	0.44914E+01
0.436	0.28506E+01

B-22

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-23

SOIL HORIZON NUMBER 11

O MEASURED ;

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51331E+01

SOIL HORIZON NUMBER 12 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.51 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.150E+05
0.035	0.600E+04
0.062	0.200E+04
0.074	0.100E+04
0.089	0.330E+03
0.121	0.100E+03
0.213	0.600E+02
0.326	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	4.4	0.003
4.00	4.4	0.000
8.00	4.9	0.005
15.00	5.3	0.004
30.00	5.6	0.003
60.00	6.0	0.004
100.00	6.2	0.002
200.00	7.1	0.008
400.00	8.1	0.009
800.00	8.8	0.007
1000.00	9.6	0.008
2000.00	10.8	0.013
4000.00	12.8	0.020
8000.00	15.4	0.026
10000.00	18.7	0.033
20000.00	47.1	0.284
30000.00	65.0	0.179
40000.00	78.3	0.133
50000.00	87.9	0.096
60000.00	93.7	0.058
70000.00	96.7	0.030
80000.00	98.3	0.015
90000.00	98.6	0.007
100000.00	99.2	0.003
200000.00	100.0	0.008

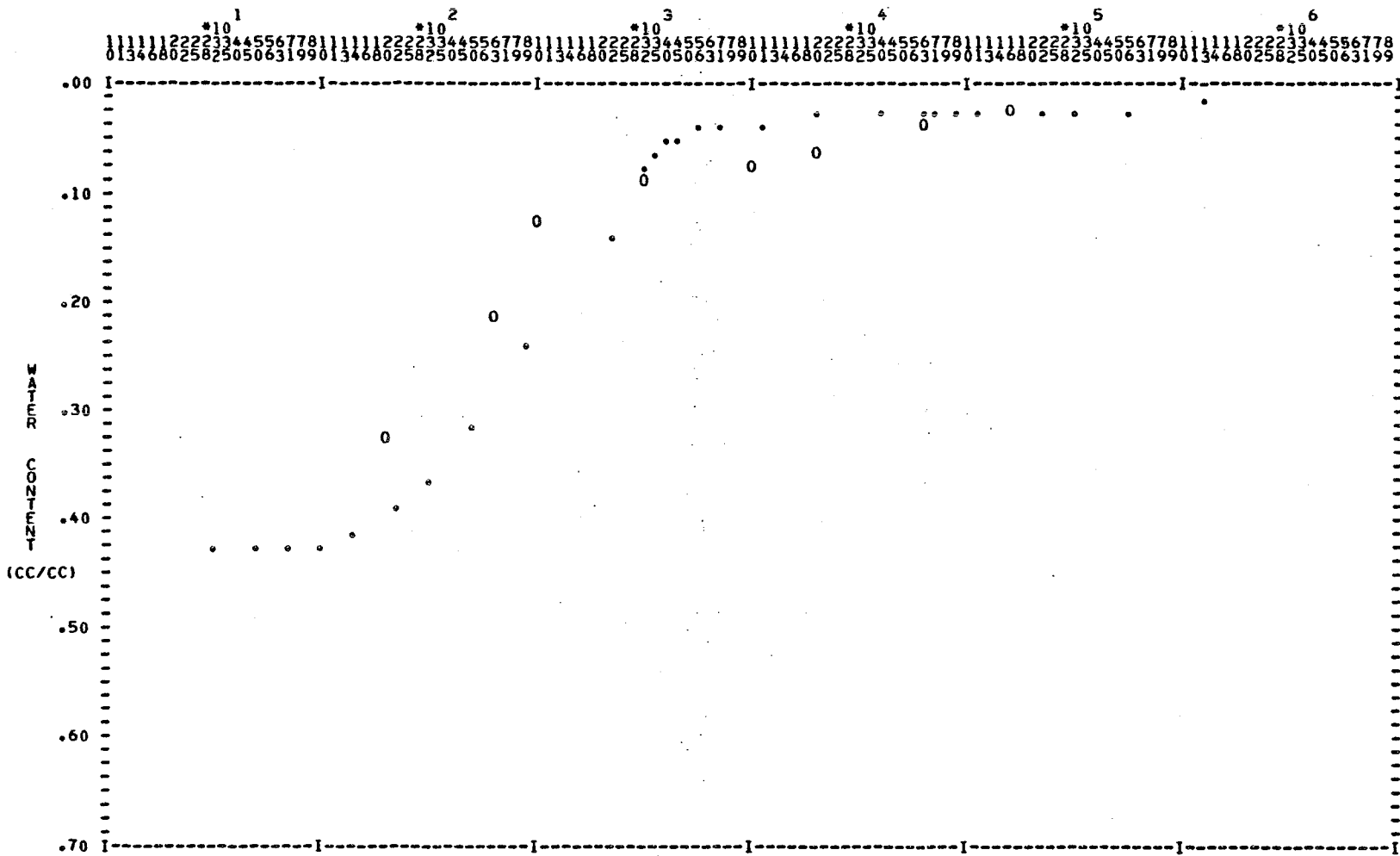
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.12327E+06
0.019	0.56096E+05
0.020	0.32289E+05
0.021	0.21439E+05
0.022	0.15331E+05
0.023	0.11548E+05
0.023	0.90363E+04
0.023	0.72791E+04
0.024	0.59990E+04
0.026	0.41782E+04
0.029	0.18846E+04
0.033	0.11336E+04
0.036	0.74052E+03
0.040	0.54411E+03
0.044	0.46121E+03
0.051	0.39968E+03
0.061	0.34763E+03
0.073	0.30402E+03
0.141	0.22377E+03
0.241	0.91963E+02
0.308	0.51261E+02
0.358	0.32439E+02
0.391	0.21531E+02
0.410	0.14598E+02
0.419	0.10228E+02
0.424	0.72808E+01
0.426	0.51841E+01
0.428	0.30574E+01

B-24

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-25

SOIL HORIZON NUMBER 13 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.068	0.600E+04
0.088	0.200E+04
0.092	0.100E+04
0.122	0.330E+03
0.151	0.100E+03
0.203	0.600E+02
0.313	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.7	0.077
2.00	8.4	0.007
3.00	8.9	0.005
4.00	9.4	0.005
5.00	9.8	0.004
6.00	10.0	0.004
7.00	10.5	0.003
8.00	10.8	0.003
9.00	11.1	0.003
10.00	11.3	0.002
20.00	13.0	0.017
30.00	14.4	0.014
40.00	17.7	0.013
50.00	18.8	0.011
60.00	19.0	0.011
70.00	19.6	0.011
80.00	19.6	0.020
90.00	19.8	0.025
100.00	19.8	0.025
200.00	26.6	0.233
300.00	66.6	0.154
400.00	77.7	0.111
500.00	86.6	0.088
600.00	86.6	0.055
700.00	99.9	0.033
800.00	99.9	0.022
900.00	99.9	0.011
1000.00	99.9	0.005
2000.00	100.0	0.010

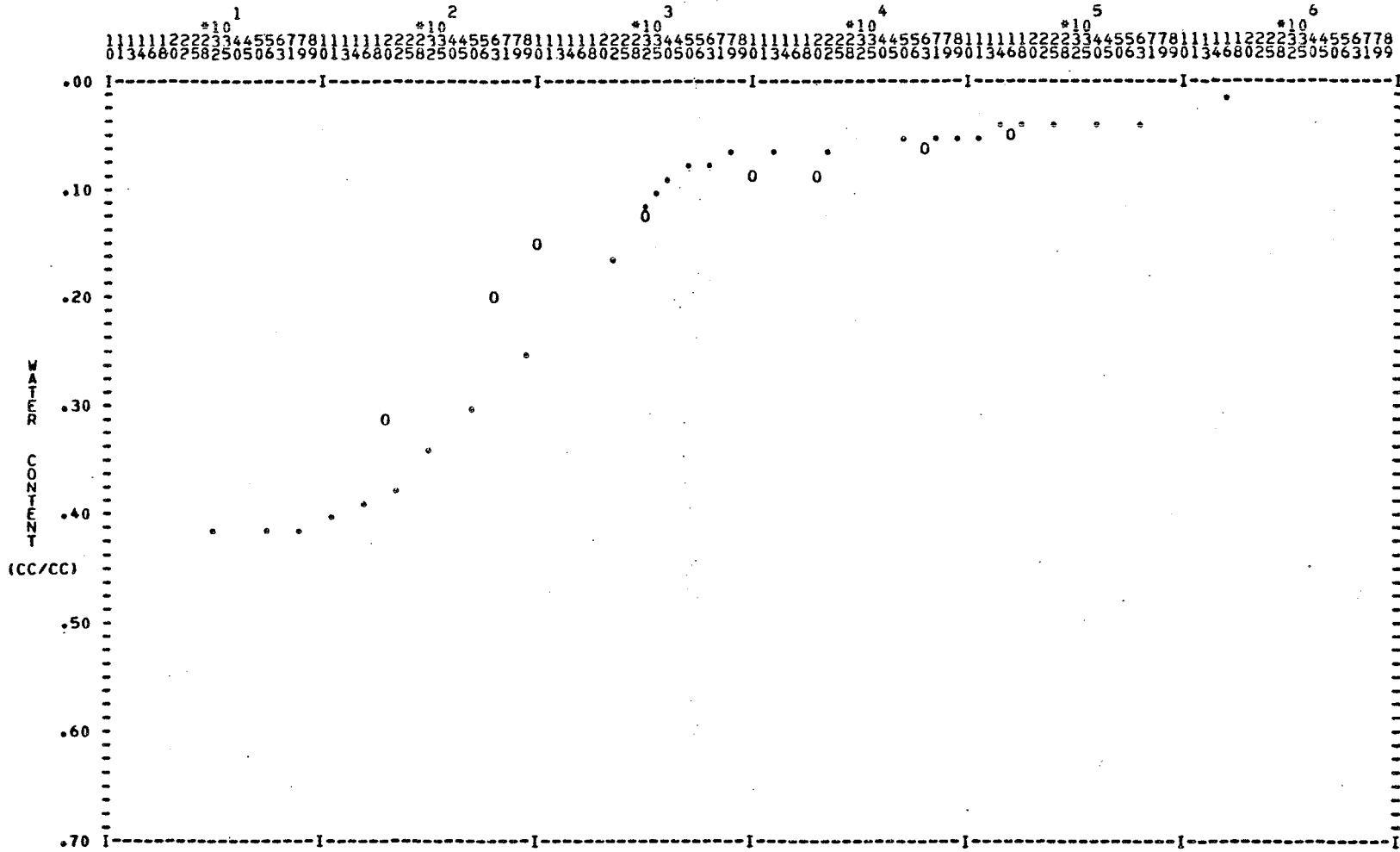
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.155226E+06
0.036	0.600022E+06
0.038	0.385033E+06
0.040	0.253833E+06
0.042	0.180999E+06
0.043	0.136177E+06
0.045	0.106533E+06
0.046	0.858335E+04
0.047	0.707817E+04
0.051	0.495667E+04
0.057	0.214166E+04
0.063	0.125660E+04
0.068	0.820999E+03
0.073	0.604166E+03
0.079	0.491799E+03
0.086	0.411667E+03
0.093	0.350999E+03
0.106	0.281667E+03
0.122	0.224000E+03
0.133	0.210444E+03
0.144	0.213399E+03
0.154	0.229000E+03
0.166	0.154000E+03
0.177	0.111999E+03
0.188	0.823366E+02
0.199	0.592211E+02
0.210	0.426400E+02

B-26

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 13

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PsiM)-LOG(PsiP))) = 0.38096E+01

SOIL HORIZON NUMBER 14 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.026	0.150E+05
0.032	0.600E+04
0.035	0.200E+04
0.052	0.100E+04
0.068	0.330E+03
0.097	0.100E+03
0.160	0.600E+02
0.311	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.9	0.029
2.00	3.0	0.001
3.00	3.1	0.001
4.00	3.2	0.001
5.00	3.3	0.001
6.00	3.4	0.001
7.00	3.4	0.001
8.00	3.5	0.001
9.00	3.6	0.001
10.00	3.6	0.001
20.00	4.0	0.004
30.00	4.5	0.005
40.00	5.1	0.006
50.00	5.7	0.006
60.00	6.7	0.010
70.00	8.3	0.016
80.00	10.2	0.019
90.00	12.3	0.021
100.00	14.5	0.022
200.00	37.9	0.234
300.00	56.2	0.183
400.00	72.2	0.160
500.00	82.7	0.105
600.00	90.0	0.063
700.00	93.2	0.042
800.00	95.9	0.027
900.00	97.4	0.016
1000.00	98.2	0.008
2000.00	100.0	0.018

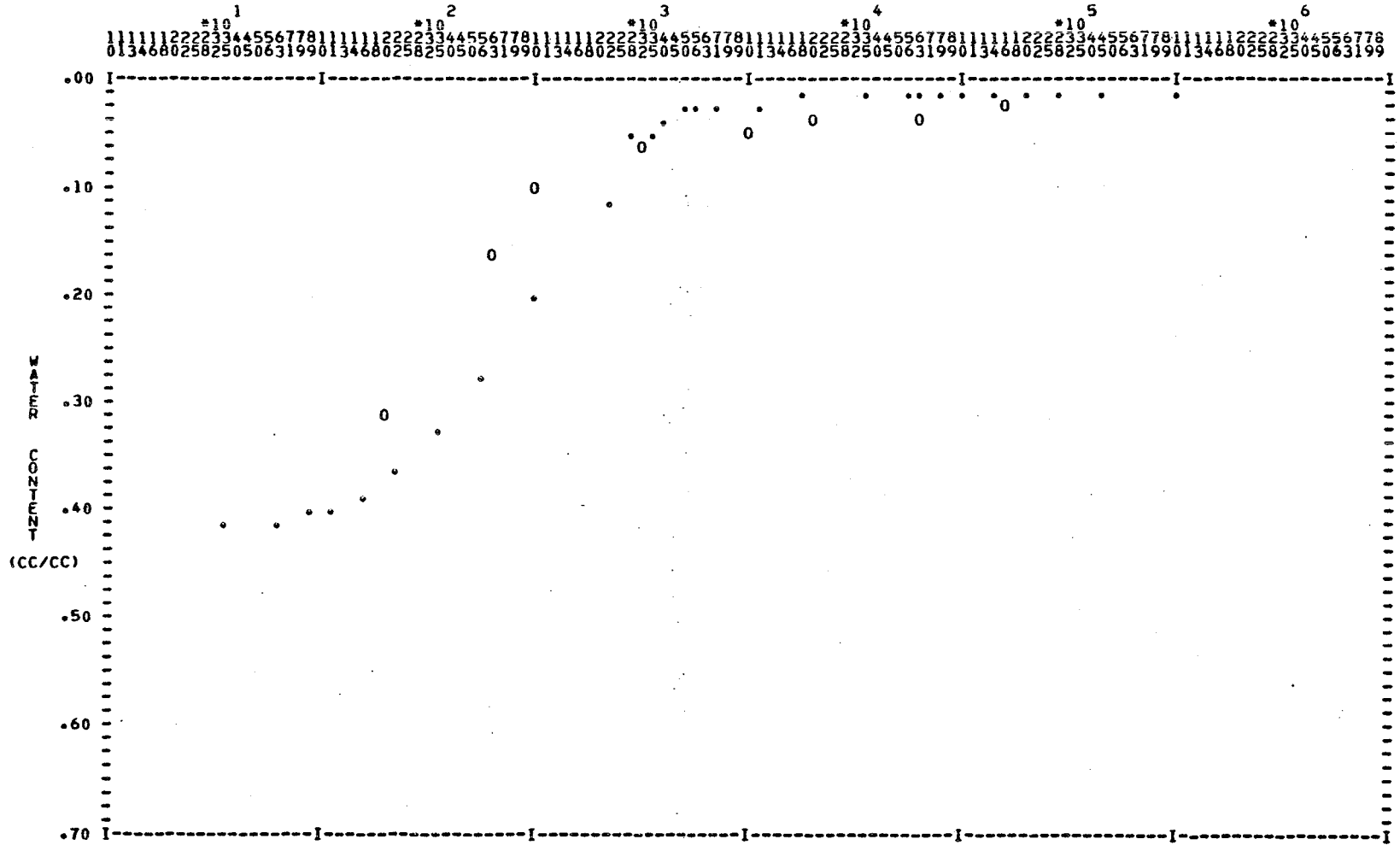
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.10259E+06
0.013	0.46847E+05
0.013	0.28567E+05
0.014	0.19081E+05
0.014	0.13679E+05
0.014	0.10315E+05
0.015	0.80756E+04
0.015	0.65059E+04
0.015	0.53609E+04
0.016	0.37237E+04
0.018	0.17828E+04
0.020	0.10922E+04
0.023	0.71694E+03
0.026	0.58202E+03
0.031	0.49244E+03
0.039	0.40803E+03
0.047	0.34101E+03
0.056	0.28869E+03
0.110	0.22077E+03
0.197	0.94518E+02
0.269	0.54225E+02
0.324	0.33804E+02
0.360	0.22391E+02
0.382	0.15916E+02
0.396	0.11680E+02
0.405	0.86850E+01
0.410	0.63522E+01
0.415	0.36503E+01

B-28

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-29

SOIL HORIZON NUMBER 15 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.52 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.150E+05
0.047	0.600E+04
0.071	0.200E+04
0.175	0.100E+04
0.196	0.330E+03
0.214	0.100E+03
0.231	0.600E+02
0.287	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.8	0.048
2.00	6.2	0.014
3.00	7.1	0.009
4.00	7.9	0.008
5.00	8.6	0.007
6.00	9.3	0.007
7.00	10.0	0.007
8.00	10.7	0.006
9.00	11.3	0.006
10.00	11.9	0.006
20.00	17.0	0.051
30.00	21.1	0.041
40.00	24.4	0.033
50.00	27.0	0.026
60.00	29.2	0.022
70.00	31.2	0.019
80.00	32.9	0.017
90.00	34.5	0.016
100.00	35.9	0.014
200.00	47.7	0.118
300.00	58.7	0.111
400.00	67.3	0.086
500.00	73.9	0.066
600.00	79.3	0.054
700.00	83.8	0.045
800.00	87.7	0.039
900.00	91.1	0.034
1000.00	94.1	0.030
2000.00	100.0	0.059

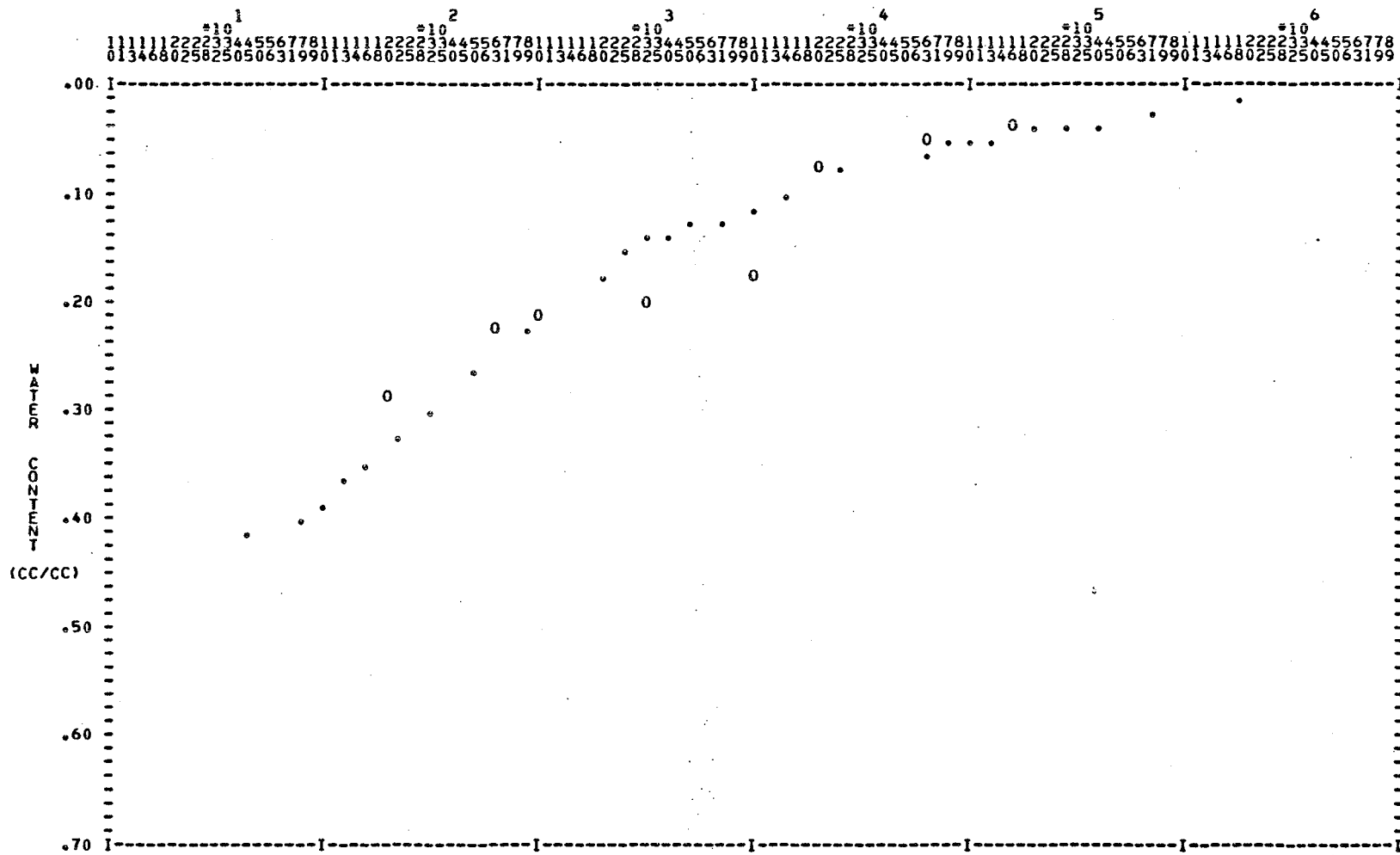
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.17574E+06
0.028	0.72600E+05
0.032	0.41752E+05
0.035	0.27741E+05
0.038	0.20032E+05
0.041	0.15276E+05
0.044	0.12107E+05
0.047	0.98771E+04
0.049	0.82402E+04
0.062	0.60541E+04
0.081	0.26015E+04
0.097	0.14692E+04
0.110	0.95040E+03
0.128	0.67092E+03
0.129	0.59355E+03
0.137	0.53375E+03
0.144	0.51749E+03
0.150	0.26219E+03
0.178	0.19079E+03
0.227	0.84552E+02
0.269	0.47477E+02
0.301	0.30476E+02
0.327	0.21380E+02
0.348	0.15926E+02
0.366	0.12359E+02
0.381	0.98914E+01
0.395	0.81087E+01
0.414	0.45037E+01

B-30

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-31

SOIL HORIZON NUMBER 16 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.75 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.058	0.150E+05
0.075	0.600E+04
0.103	0.200E+04
0.173	0.100E+04
0.199	0.330E+03
0.213	0.100E+03
0.231	0.600E+02
0.269	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.3	0.063
2.00	9.1	0.028
3.00	10.8	0.017
4.00	12.3	0.014
5.00	13.5	0.012
6.00	14.6	0.011
7.00	15.6	0.010
8.00	16.5	0.009
9.00	17.4	0.009
10.00	18.2	0.008
20.00	24.8	0.066
30.00	29.5	0.047
40.00	32.9	0.034
50.00	35.5	0.026
60.00	37.5	0.020
70.00	39.1	0.016
80.00	40.5	0.014
90.00	41.7	0.013
100.00	42.9	0.012
200.00	52.9	0.100
300.00	62.7	0.098
400.00	70.2	0.075
500.00	76.1	0.059
600.00	80.9	0.048
700.00	85.0	0.041
800.00	88.6	0.035
900.00	91.7	0.031
1000.00	94.4	0.027
2000.00	100.0	0.056

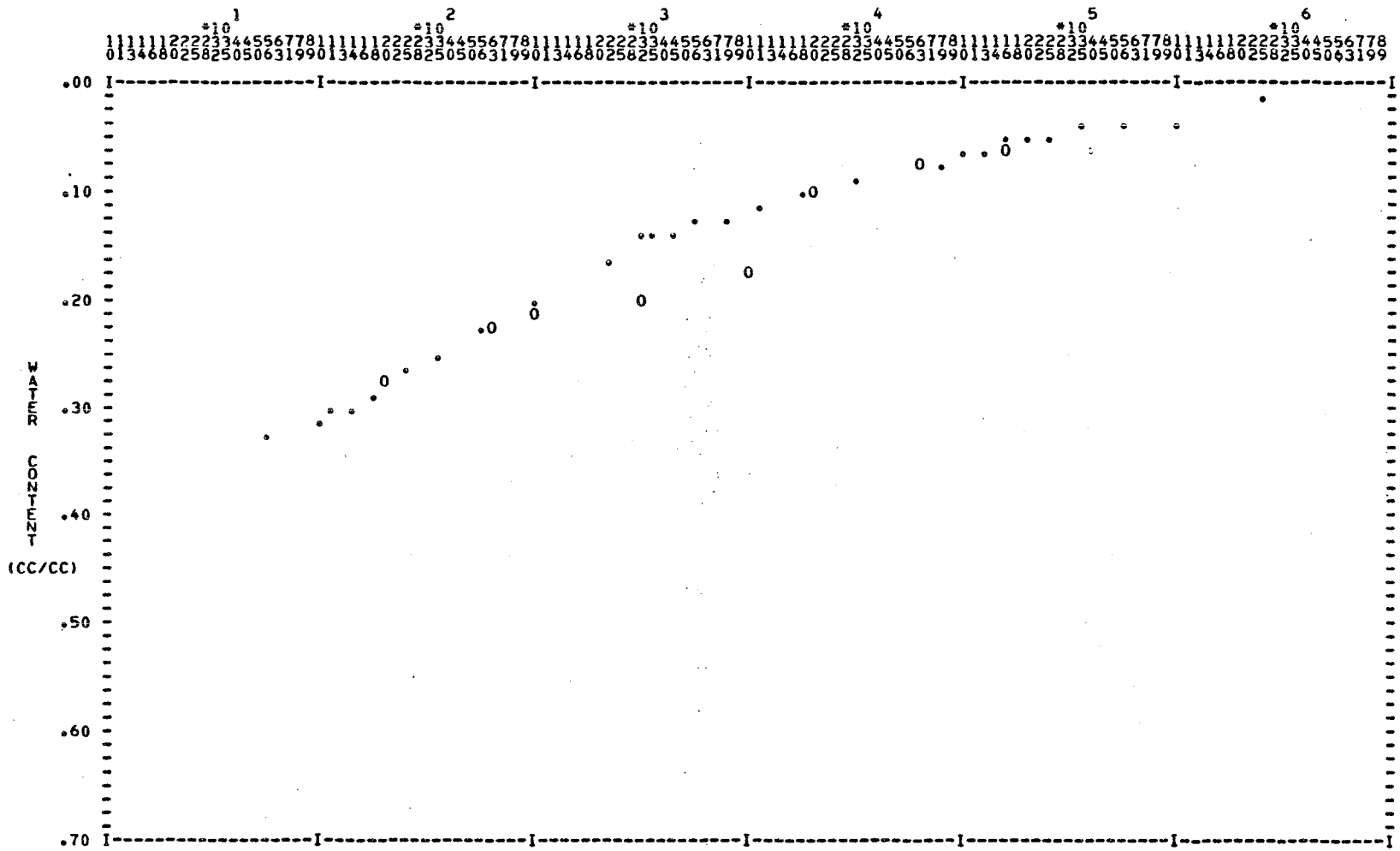
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.24032E+06
0.034	0.98711E+05
0.039	0.55972E+05
0.044	0.36727E+05
0.048	0.26257E+05
0.051	0.19863E+05
0.055	0.15641E+05
0.058	0.12691E+05
0.061	0.10539E+05
0.073	0.76295E+04
0.092	0.32103E+04
0.106	0.17823E+04
0.116	0.11377E+04
0.124	0.79000E+03
0.130	0.58452E+03
0.135	0.45406E+03
0.140	0.36560E+03
0.144	0.30250E+03
0.163	0.22254E+03
0.196	0.99304E+02
0.226	0.55715E+02
0.249	0.35804E+02
0.267	0.25174E+02
0.282	0.18784E+02
0.295	0.14594E+02
0.306	0.11688E+02
0.316	0.95857E+01
0.330	0.53614E+01

B-32

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 16

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.17508E+01

B-33

SOIL HORIZON NUMBER 17 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.70 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.107	0.150E+05
0.114	0.600E+04
0.136	0.200E+04
0.172	0.100E+04
0.189	0.330E+03
0.202	0.100E+03
0.224	0.600E+02
0.267	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.1	0.131
2.00	15.1	0.020
3.00	16.3	0.012
4.00	17.4	0.010
5.00	18.3	0.009
6.00	19.1	0.008
7.00	19.8	0.007
8.00	20.5	0.007
9.00	21.1	0.006
10.00	21.7	0.006
20.00	26.5	0.048
30.00	29.9	0.034
40.00	32.4	0.025
50.00	34.4	0.020
60.00	36.1	0.017
70.00	37.5	0.015
80.00	38.8	0.013
90.00	40.0	0.011
100.00	41.0	0.010
200.00	49.6	0.086
300.00	56.7	0.070
400.00	63.3	0.066
500.00	68.9	0.056
600.00	74.0	0.051
700.00	78.7	0.047
800.00	82.8	0.041
900.00	86.3	0.035
1000.00	89.1	0.028
2000.00	100.0	0.109

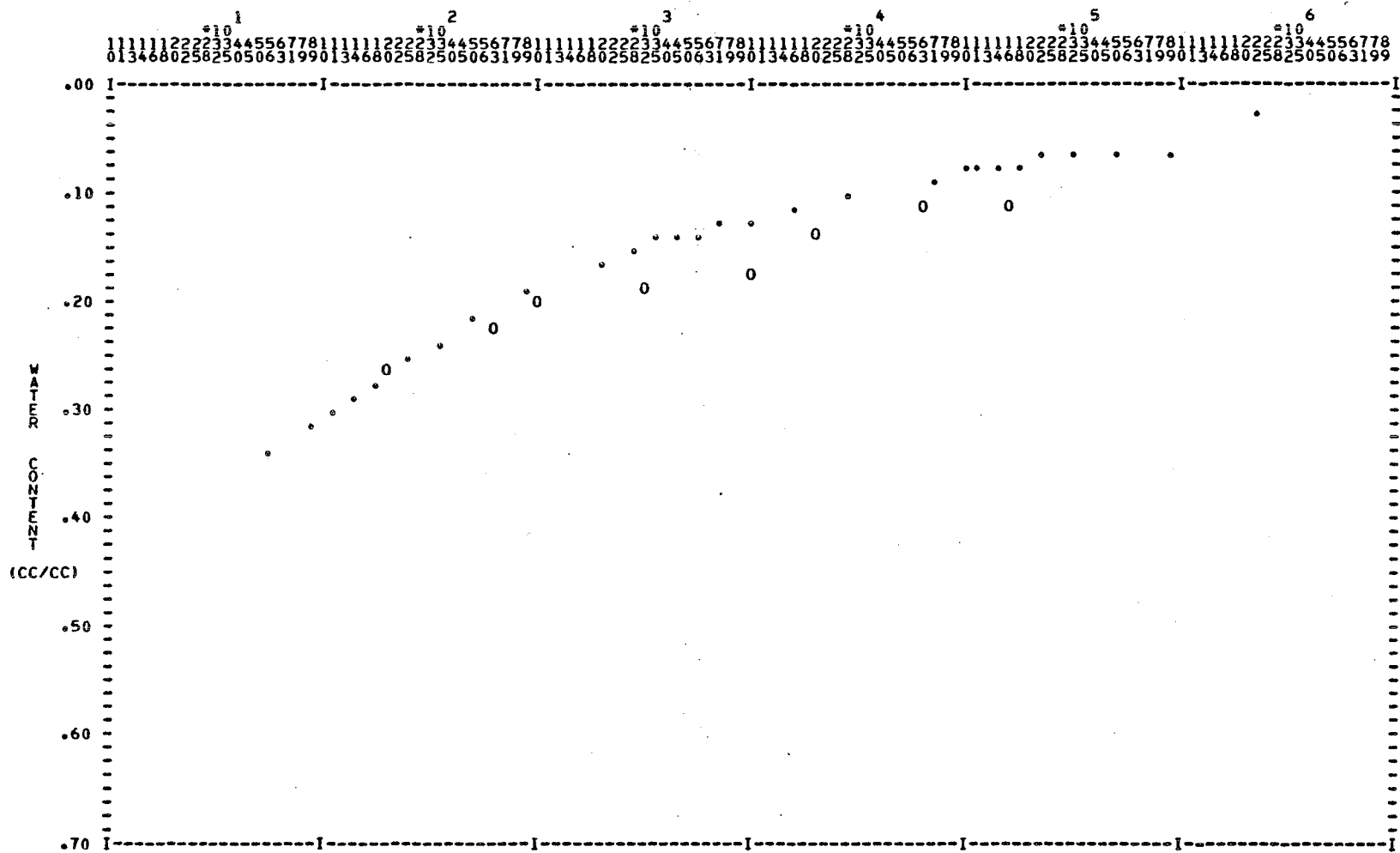
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.027	0.216635E+06
0.056	0.889377E+05
0.060	0.504482E+05
0.064	0.331433E+05
0.067	0.237022E+05
0.070	0.179344E+05
0.072	0.141244E+05
0.075	0.114611E+05
0.077	0.951877E+04
0.080	0.689133E+04
0.101	0.289255E+04
0.111	0.161266E+04
0.120	0.104008E+04
0.126	0.734411E+03
0.133	0.549900E+03
0.137	0.428866E+03
0.144	0.344866E+03
0.149	0.284022E+03
0.160	0.207544E+03
0.191	0.894155E+02
0.211	0.592179E+02
0.225	0.440711E+02
0.256	0.243888E+02
0.277	0.185008E+02
0.288	0.144655E+02
0.303	0.114511E+02
0.314	0.925199E+01
0.339	0.583371E+01

ALPHA = 1.38

B-34

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-35

SOIL HORIZON NUMBER 17

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37935E+01

SOIL HORIZON NUMBER 1A (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.73 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.151	0.150E+05
0.171	0.600E+04
0.190	0.200E+04
0.178	0.100E+04
0.195	0.330E+03
0.211	0.100E+03
0.225	0.600E+02
0.261	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	25.8	0.258
2.00	26.9	0.011
3.00	27.5	0.006
4.00	28.0	0.005
5.00	28.4	0.004
6.00	28.7	0.003
7.00	28.9	0.003
8.00	29.2	0.002
9.00	29.4	0.002
10.00	29.6	0.002
20.00	30.8	0.012
30.00	31.5	0.007
40.00	32.1	0.005
50.00	32.2	0.004
60.00	32.3	0.004
70.00	32.3	0.004
80.00	32.3	0.004
90.00	32.4	0.003
100.00	32.4	0.003
200.00	33.4	0.041
300.00	33.7	0.047
400.00	33.9	0.064
500.00	34.1	0.065
600.00	34.2	0.061
700.00	34.7	0.056
800.00	34.7	0.050
900.00	34.6	0.043
1000.00	34.0	0.036
2000.00	100.0	0.195

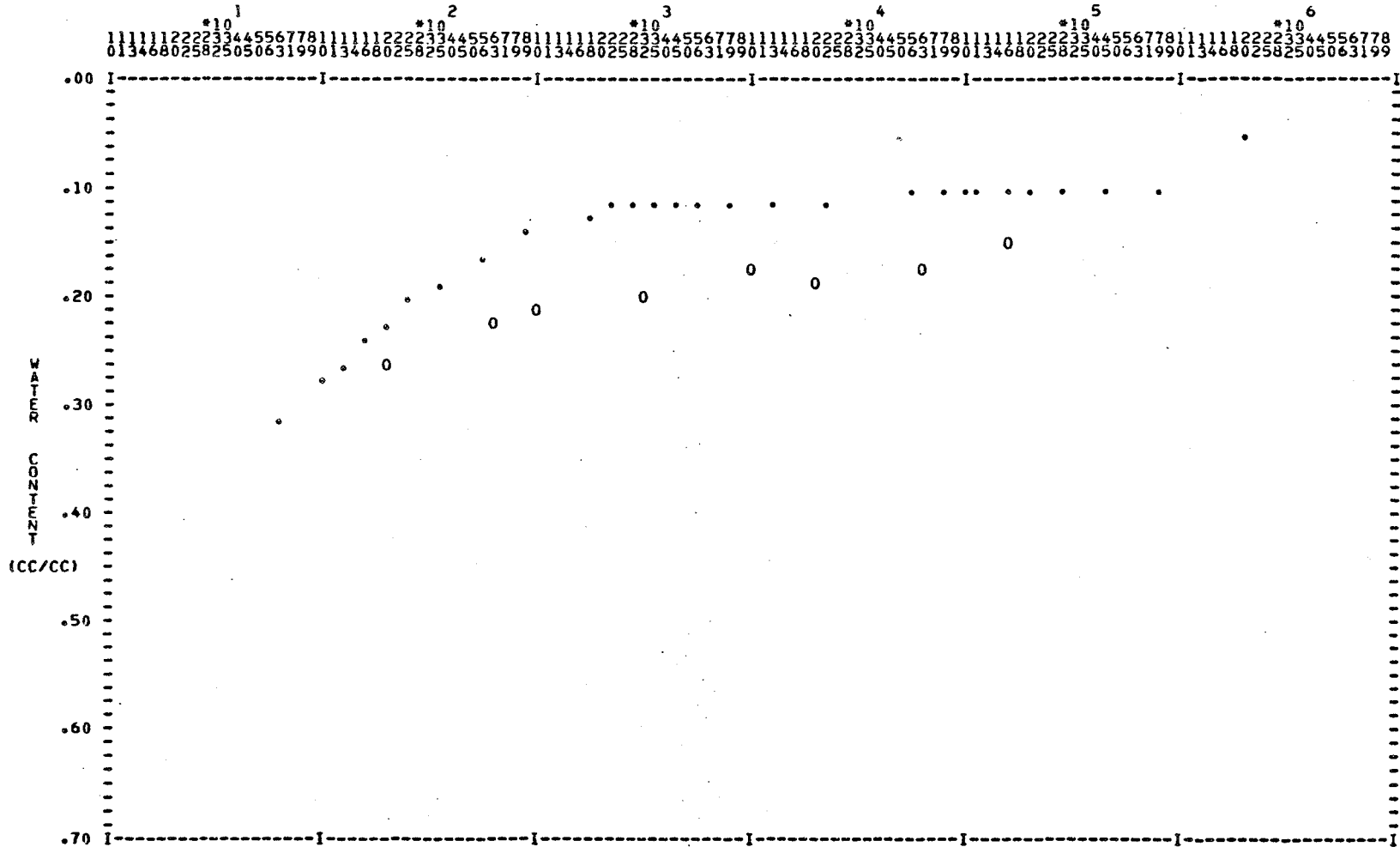
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.047	0.19738E+06
0.094	0.80301E+05
0.096	0.44462E+05
0.098	0.23768E+05
0.099	0.20260E+05
0.100	0.15122E+05
0.101	0.11780E+05
0.103	0.94633E+04
0.105	0.77897E+04
0.108	0.59459E+04
0.110	0.44462E+04
0.112	0.33355E+04
0.115	0.23768E+04
0.117	0.17232E+04
0.120	0.12155E+04
0.125	0.80301E+03
0.130	0.59459E+03
0.140	0.33355E+03
0.150	0.23768E+03
0.160	0.17232E+03
0.170	0.12155E+03
0.180	0.80301E+02
0.190	0.59459E+02
0.200	0.33355E+02
0.210	0.23768E+02
0.220	0.17232E+02
0.230	0.12155E+02
0.240	0.80301E+01
0.250	0.59459E+01
0.260	0.33355E+01
0.270	0.23768E+01
0.280	0.17232E+01
0.290	0.12155E+01
0.300	0.80301E+00
0.310	0.59459E+00

B-36

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-37

SOIL HORIZON NUMBER 18

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.10062E+02

SOIL HORIZON NUMBER 19 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.68 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.163	0.150E+05
0.178	0.600E+04
0.202	0.200E+04
0.192	0.100E+04
0.207	0.330E+03
0.225	0.100E+03
0.244	0.600E+02
0.272	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	28.7	0.287
2.00	29.3	0.006
3.00	29.7	0.004
4.00	30.0	0.003
5.00	30.2	0.002
6.00	30.4	0.002
7.00	30.5	0.002
8.00	30.7	0.001
9.00	30.8	0.001
10.00	30.9	0.001
20.00	31.7	0.008
30.00	32.2	0.005
40.00	32.5	0.003
50.00	32.8	0.003
60.00	33.0	0.002
70.00	33.3	0.002
80.00	33.5	0.002
90.00	33.6	0.002
100.00	33.8	0.002
200.00	35.8	0.020
300.00	38.5	0.027
400.00	44.5	0.059
500.00	51.0	0.065
600.00	58.3	0.073
700.00	65.8	0.075
800.00	72.5	0.067
900.00	78.0	0.055
1000.00	82.2	0.042
2000.00	100.0	0.178

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.17118E+06
0.108	0.69734E+05
0.109	0.38847E+05
0.110	0.25093E+05
0.111	0.17699E+05
0.111	0.13235E+05
0.112	0.10317E+05
0.113	0.82972E+04
0.113	0.68364E+04
0.115	0.48080E+04
0.117	0.19644E+04
0.118	0.10891E+04
0.120	0.70048E+03
0.120	0.49928E+03
0.121	0.37888E+03
0.122	0.29668E+03
0.123	0.23826E+03
0.123	0.19527E+03
0.127	0.15521E+03
0.136	0.73334E+02
0.150	0.50240E+02
0.170	0.34501E+02
0.200	0.25681E+02
0.227	0.19895E+02
0.250	0.15594E+02
0.270	0.12333E+02
0.293	0.98155E+01
0.333	0.63034E+01

B-38

ALPHA = 1.38

SOIL HORIZON NUMBER 20 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.69 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.115	0.150E+05
0.139	0.600E+04
0.189	0.200E+04
0.257	0.100E+04
0.265	0.330E+03
0.282	0.100E+03
0.294	0.600E+02
0.309	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.5	0.115
2.00	15.5	0.036
3.00	17.5	0.024
4.00	19.7	0.021
5.00	21.5	0.019
6.00	23.3	0.017
7.00	24.7	0.015
8.00	25.0	0.014
9.00	27.3	0.013
10.00	28.5	0.012
20.00	37.0	0.085
30.00	44.3	0.073
40.00	49.9	0.056
50.00	53.3	0.031
60.00	54.6	0.016
70.00	55.0	0.011
80.00	56.6	0.009
90.00	57.7	0.009
100.00	58.8	0.009
200.00	64.9	0.066
300.00	70.6	0.057
400.00	76.3	0.057
500.00	81.0	0.047
600.00	85.3	0.043
700.00	89.9	0.041
800.00	92.6	0.034
900.00	94.4	0.026
1000.00	95.0	0.018
2000.00	100.0	0.028

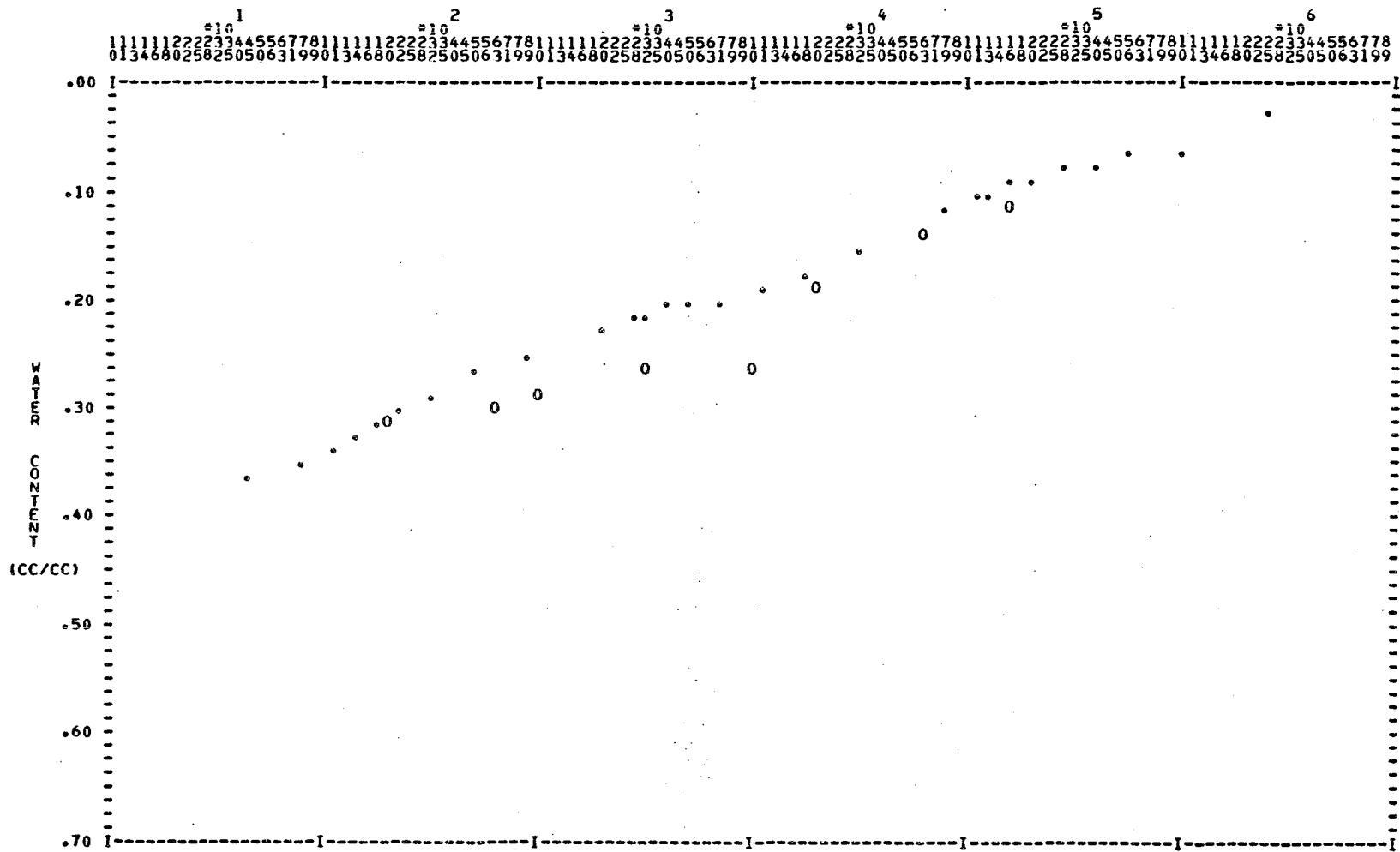
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.027	0.24043E+06
0.059	0.10018E+06
0.077	0.37533E+06
0.075	0.37827E+06
0.081	0.27001E+06
0.087	0.20367E+06
0.097	0.15985E+06
0.101	0.12926E+06
0.119	0.10698E+06
0.147	0.76302E+04
0.171	0.33217E+04
0.186	0.18602E+04
0.186	0.11225E+04
0.185	0.72055E+03
0.190	0.51604E+03
0.203	0.39741E+03
0.209	0.27329E+03
0.233	0.19567E+03
0.240	0.15244E+03
0.249	0.10299E+03
0.260	0.72655E+02
0.268	0.52468E+02
0.274	0.37888E+02
0.279	0.27914E+02
0.284	0.10744E+02
0.283	0.43833E+01
0.287	0.44719E+01

B-40

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 20

0 MEASURED

• PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.35424E+01

B-41

SOIL HORIZON NUMBER 21 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.068	0.150E+05
0.095	0.600E+04
0.152	0.200E+04
0.242	0.100E+04
0.262	0.330E+03
0.280	0.100E+03
0.291	0.600E+02
0.324	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	8.1	0.081
2.00	9.9	0.018
3.00	11.3	0.014
4.00	12.8	0.015
5.00	14.2	0.014
6.00	15.6	0.013
7.00	16.8	0.013
8.00	18.0	0.012
9.00	19.1	0.011
10.00	20.2	0.011
20.00	28.6	0.084
30.00	38.6	0.100
40.00	47.1	0.084
50.00	51.4	0.043
60.00	53.3	0.019
70.00	54.7	0.014
80.00	55.9	0.012
90.00	57.0	0.011
100.00	58.2	0.012
200.00	66.4	0.082
300.00	72.8	0.064
400.00	78.3	0.055
500.00	82.7	0.044
600.00	86.6	0.039
700.00	90.3	0.036
800.00	93.3	0.030
900.00	95.7	0.024
1000.00	97.4	0.017
2000.00	100.0	0.026

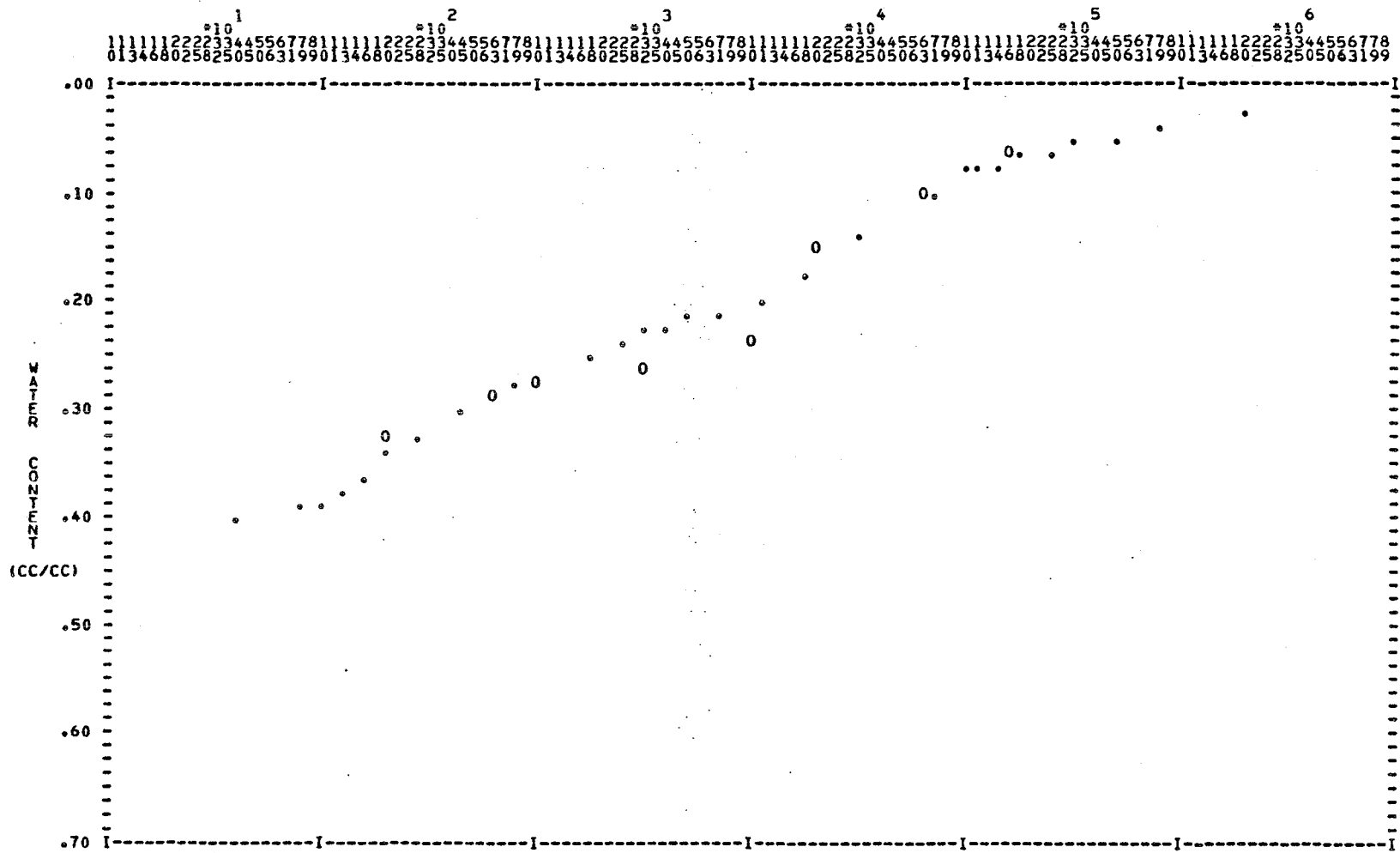
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.020	0.19413E+06
0.043	0.83107E+05
0.049	0.49214E+05
0.055	0.32887E+05
0.060	0.23729E+05
0.065	0.18043E+05
0.070	0.14249E+05
0.075	0.11582E+05
0.079	0.96274E+04
0.099	0.69666E+04
0.136	0.32295E+04
0.173	0.18436E+04
0.199	0.10953E+04
0.211	0.68502E+03
0.218	0.49559E+03
0.223	0.38391E+03
0.228	0.31258E+03
0.233	0.26331E+03
0.252	0.18684E+03
0.281	0.79743E+02
0.305	0.45741E+02
0.325	0.29541E+02
0.342	0.21107E+02
0.357	0.15987E+02
0.371	0.12346E+02
0.381	0.96841E+01
0.390	0.76616E+01
0.399	0.40384E+01

B-42

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-43

SOIL HORIZON NUMBER 21

0 MEASURED ; 0 PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_I))) = 0.15422E+01

SOIL HORIZON NUMBER 22 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.62 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.128	0.150E+05
0.152	0.600E+04
0.188	0.200E+04
0.214	0.100E+04
0.243	0.330E+03
0.269	0.100E+03
0.285	0.600E+02
0.308	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	16.2	0.162
2.00	18.5	0.023
3.00	20.1	0.016
4.00	21.6	0.015
5.00	22.9	0.013
6.00	24.1	0.012
7.00	25.5	0.011
8.00	26.7	0.010
9.00	27.1	0.009
10.00	28.0	0.009
20.00	34.7	0.067
30.00	40.7	0.060
40.00	45.5	0.048
50.00	48.4	0.029
60.00	50.0	0.016
70.00	51.0	0.011
80.00	51.0	0.009
90.00	52.7	0.009
100.00	53.9	0.009
200.00	60.7	0.072
300.00	67.4	0.068
400.00	74.4	0.068
500.00	79.4	0.053
600.00	84.4	0.048
700.00	88.4	0.048
800.00	90.8	0.037
900.00	95.2	0.037
1000.00	97.4	0.028
2000.00	100.0	0.028

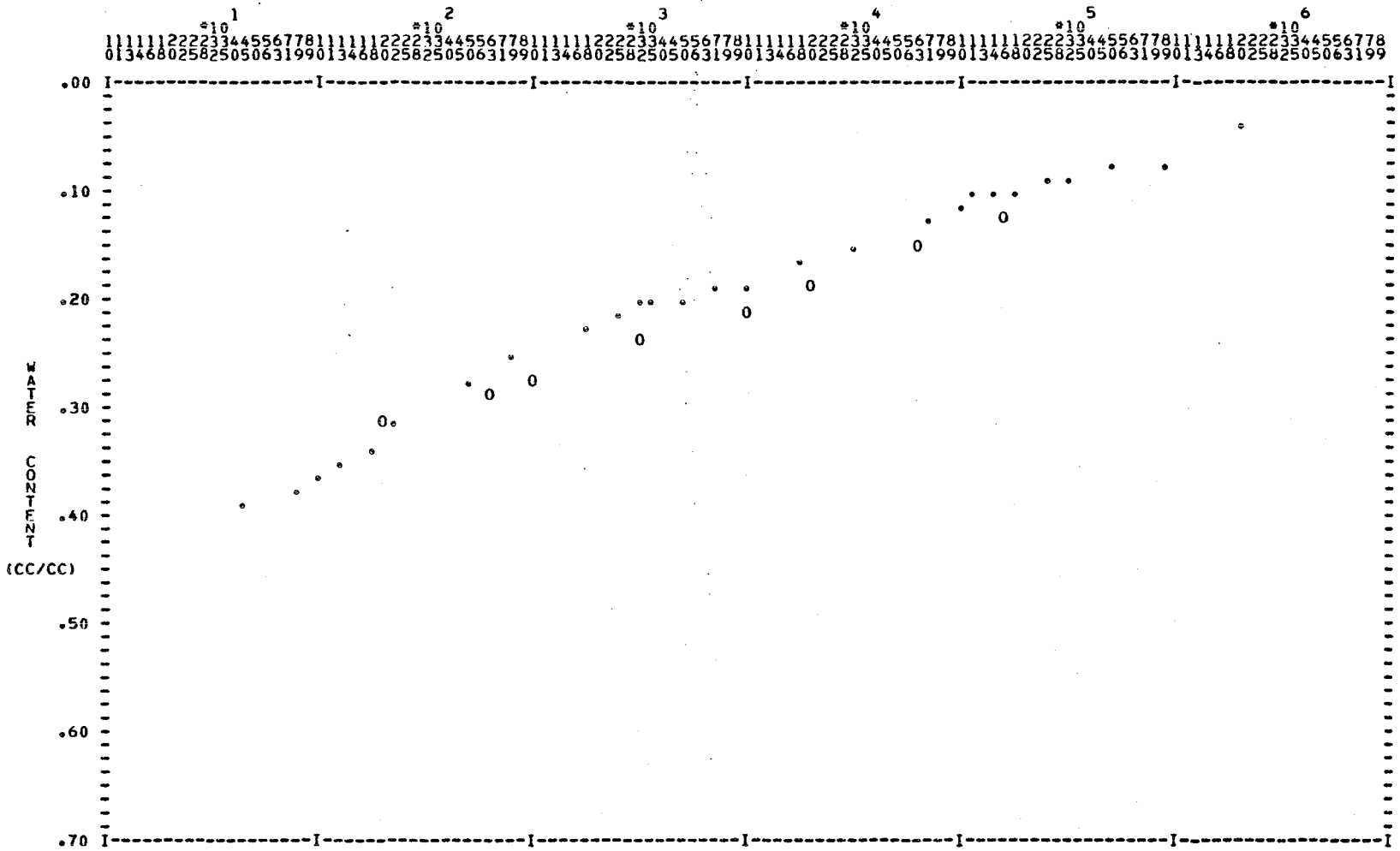
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.20892E+06
0.075	0.87475E+05
0.081	0.50605E+05
0.086	0.33438E+05
0.091	0.23961E+05
0.096	0.18131E+05
0.100	0.14268E+05
0.103	0.11564E+05
0.107	0.95909E+04
0.122	0.68915E+04
0.147	0.30280E+04
0.168	0.17078E+04
0.183	0.10453E+04
0.191	0.68032E+03
0.196	0.48071E+03
0.200	0.37529E+03
0.204	0.29060E+03
0.209	0.22907E+03
0.213	0.18909E+03
0.218	0.14842E+03
0.223	0.11543E+03
0.228	0.88370E+02
0.233	0.67250E+02
0.238	0.51160E+02
0.243	0.41323E+02
0.248	0.31052E+02
0.253	0.24722E+02
0.258	0.18078E+02
0.263	0.14226E+02

B-44

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-45

SOIL HORIZON NUMBER 22

0 MEASURED

0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.28868E+01

SOIL HORIZON NUMBER 23 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.72 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.115	0.150E+05
0.141	0.600E+04
0.167	0.200E+04
0.196	0.100E+04
0.225	0.330E+03
0.244	0.100E+03
0.261	0.600E+02
0.287	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.2	0.142
2.00	15.7	0.015
3.00	16.7	0.010
4.00	17.6	0.009
5.00	18.3	0.008
6.00	19.1	0.007
7.00	19.7	0.007
8.00	20.3	0.006
9.00	20.9	0.006
10.00	21.5	0.006
20.00	25.5	0.044
30.00	28.5	0.037
40.00	32.2	0.029
50.00	35.5	0.020
60.00	38.5	0.013
70.00	41.7	0.009
80.00	44.7	0.008
90.00	47.3	0.007
100.00	49.9	0.007
200.00	55.2	0.075
300.00	58.2	0.070
400.00	60.0	0.082
500.00	62.0	0.072
600.00	63.4	0.072
700.00	63.4	0.070
800.00	63.4	0.060
900.00	63.4	0.042
1000.00	63.4	0.025
2000.00	100.0	0.038

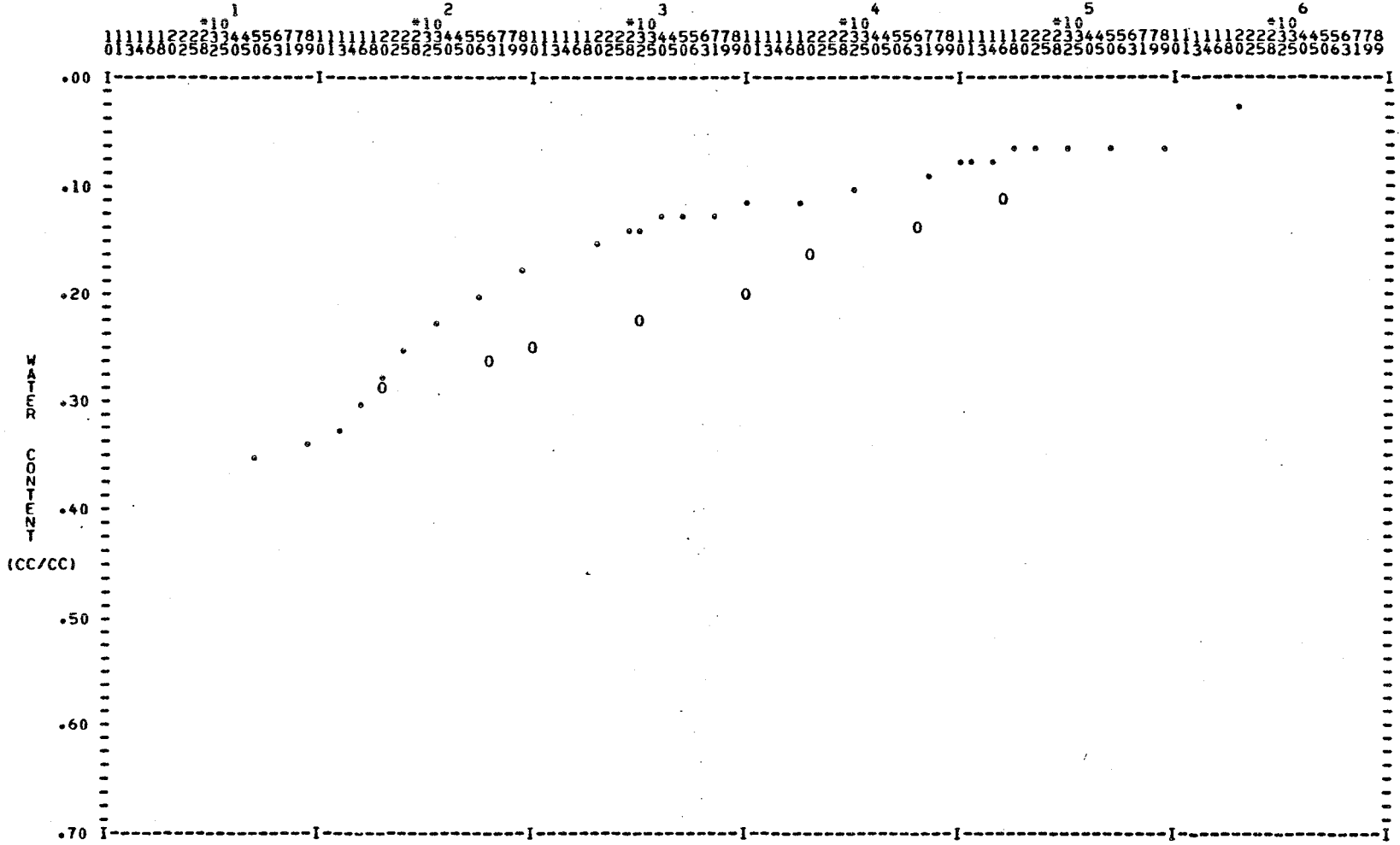
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.20768E+06
0.057	0.86393E+05
0.060	0.49756E+05
0.063	0.32892E+05
0.066	0.23610E+05
0.068	0.17903E+05
0.070	0.14118E+05
0.072	0.11466E+05
0.074	0.95275E+04
0.083	0.68998E+04
0.097	0.29906E+04
0.109	0.16848E+04
0.111	0.10578E+04
0.127	0.71159E+03
0.127	0.44777E+03
0.150	0.30375E+03
0.150	0.22160E+03
0.150	0.18180E+03
0.150	0.15338E+03
0.150	0.12667E+03
0.150	0.10822E+03
0.150	0.94799E+02
0.150	0.84759E+02
0.150	0.74719E+02
0.150	0.64679E+02
0.150	0.54639E+02
0.150	0.44599E+02
0.150	0.34559E+02
0.150	0.24519E+02
0.150	0.14479E+02
0.150	0.48574E+01

B-46

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 23

O MEASURED . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.67647E+01

B-47

SOIL HORIZON NUMBER 24 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.75 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.140	0.600E+04
0.175	0.200E+04
0.194	0.100E+04
0.217	0.330E+03
0.240	0.100E+03
0.248	0.600E+02
0.268	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.5	0.145
2.00	15.7	0.012
3.00	16.5	0.008
4.00	17.3	0.008
5.00	18.1	0.008
6.00	18.8	0.007
7.00	19.5	0.007
8.00	20.2	0.007
9.00	20.8	0.006
10.00	21.4	0.006
20.00	26.4	0.050
30.00	31.4	0.050
40.00	35.5	0.041
50.00	38.2	0.027
60.00	39.8	0.016
70.00	40.9	0.011
80.00	41.9	0.010
90.00	42.8	0.009
100.00	43.8	0.010
200.00	52.8	0.090
300.00	60.6	0.078
400.00	67.9	0.073
500.00	74.0	0.061
600.00	80.0	0.060
700.00	85.8	0.059
800.00	90.7	0.049
900.00	94.2	0.036
1000.00	96.5	0.023
2000.00	100.0	0.035

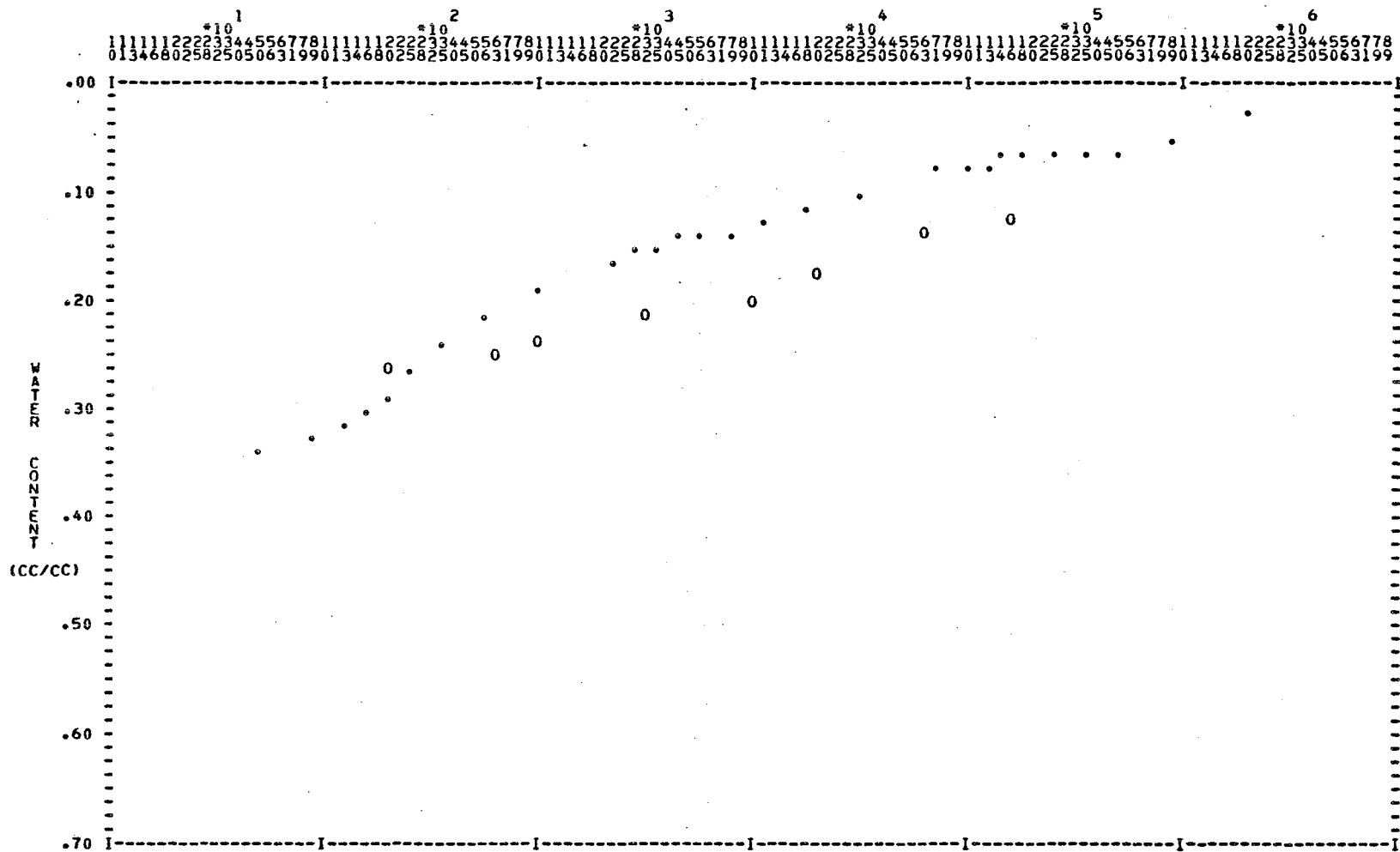
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.027	0.20454E+06
0.055	0.85949E+05
0.058	0.50240E+05
0.060	0.33527E+05
0.063	0.24226E+05
0.065	0.18462E+05
0.067	0.14616E+05
0.070	0.11908E+05
0.072	0.99208E+04
0.081	0.72462E+04
0.098	0.32442E+04
0.114	0.18476E+04
0.125	0.11475E+04
0.132	0.75933E+03
0.137	0.54680E+03
0.141	0.42329E+03
0.144	0.34545E+03
0.147	0.29204E+03
0.164	0.21785E+03
0.192	0.95146E+02
0.218	0.55449E+02
0.241	0.36060E+02
0.261	0.26218E+02
0.282	0.20098E+02
0.300	0.15493E+02
0.314	0.12008E+02
0.324	0.92371E+01
0.334	0.49034E+01

B-48

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 24

O MEASURED . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.58571E+01

B-49

SOIL HORIZON NUMBER 25 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.082	0.150E+05
0.093	0.600E+04
0.112	0.200E+04
0.117	0.100E+04
0.137	0.330E+03
0.153	0.100E+03
0.163	0.600E+02
0.212	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
2.00	7.9	0.006
3.00	8.3	0.004
4.00	8.7	0.004
5.00	9.0	0.003
6.00	9.3	0.003
7.00	9.6	0.003
8.00	9.8	0.002
9.00	10.0	0.002
10.00	10.2	0.002
20.00	11.6	0.014
30.00	12.6	0.010
40.00	13.5	0.009
50.00	14.2	0.007
60.00	14.9	0.007
70.00	15.7	0.008
80.00	16.4	0.007
90.00	17.1	0.007
100.00	17.7	0.006
200.00	25.5	0.078
300.00	40.1	0.145
400.00	56.2	0.162
500.00	68.3	0.121
600.00	77.9	0.096
700.00	86.3	0.083
800.00	92.5	0.063
900.00	96.6	0.041
1000.00	98.6	0.020
2000.00	100.0	0.014

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.016	0.15838E+06
0.033	0.66023E+05
0.034	0.37887E+05
0.036	0.24866E+05
0.037	0.17720E+05
0.038	0.13344E+05
0.039	0.10456E+05
0.040	0.84425E+04
0.041	0.69777E+04
0.044	0.49476E+04
0.049	0.20991E+04
0.053	0.11974E+04
0.056	0.77256E+03
0.059	0.56547E+03
0.062	0.44245E+03
0.065	0.35114E+03
0.068	0.28337E+03
0.070	0.23294E+03
0.087	0.18500E+03
0.132	0.93293E+02
0.194	0.56144E+02
0.251	0.35797E+02
0.295	0.25019E+02
0.331	0.18731E+02
0.361	0.14177E+02
0.382	0.10732E+02
0.394	0.78568E+01
0.401	0.35903E+01

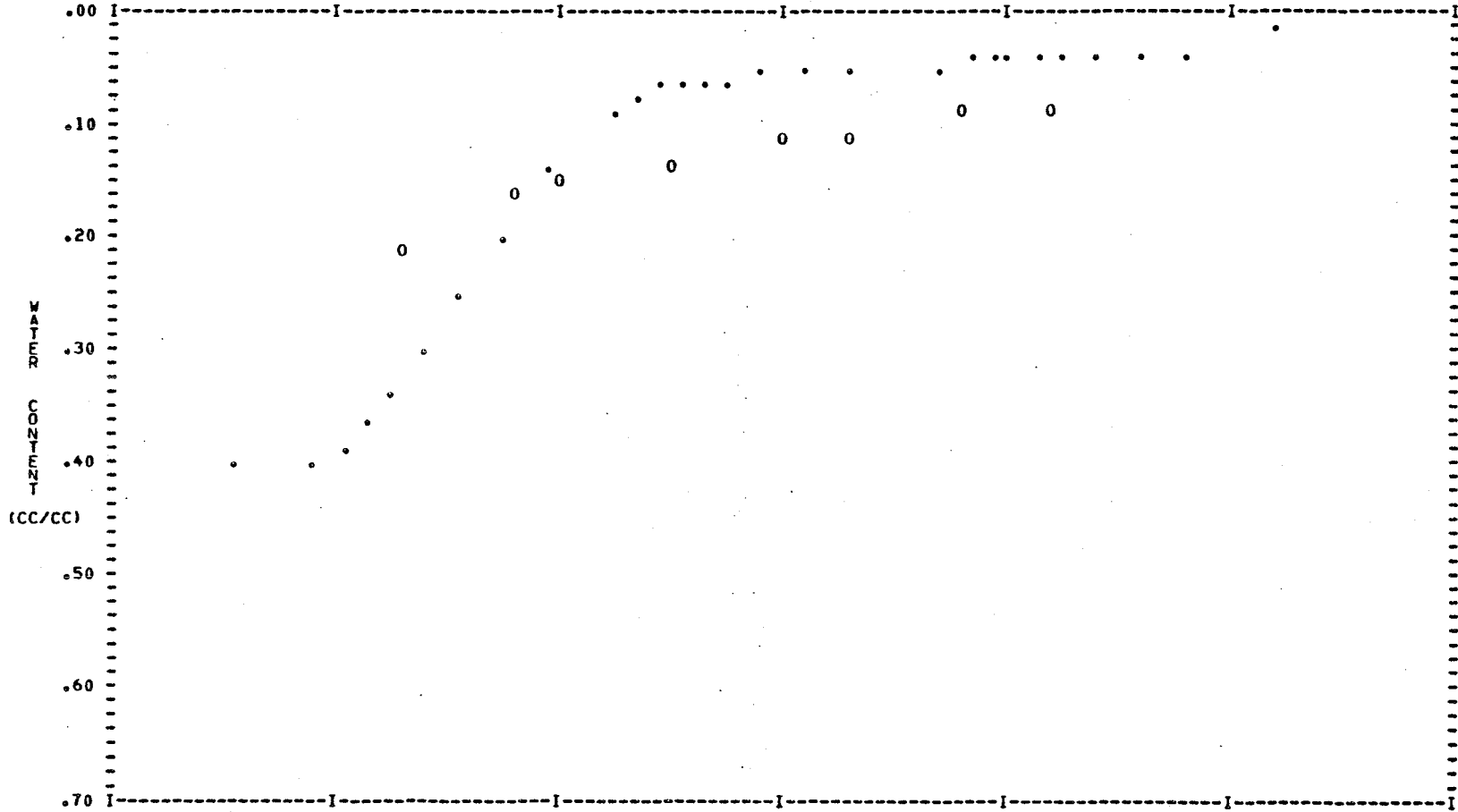
B-50

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

^{*10}1 ^{*10}2 ^{*10}3 ^{*10}4 ^{*10}5 ^{*10}6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199

B-51



SOIL HORIZON NUMBER 25

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.66988E+01

SOIL HORIZON NUMBER 26 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.064	0.150E+05
0.086	0.600E+04
0.122	0.200E+04
0.227	0.100E+04
0.243	0.330E+03
0.253	0.100E+03
0.272	0.600E+02
0.331	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.6	0.046
2.00	7.5	0.029
3.00	9.4	0.019
4.00	11.1	0.017
5.00	13.0	0.019
6.00	15.0	0.020
7.00	17.3	0.023
8.00	19.2	0.019
9.00	21.7	0.025
10.00	23.8	0.021
20.00	31.5	0.076
30.00	36.3	0.048
40.00	39.4	0.031
50.00	41.6	0.022
60.00	43.1	0.015
70.00	44.3	0.012
80.00	44.4	0.001
90.00	44.6	0.002
100.00	44.8	0.002
200.00	46.6	0.018
300.00	51.1	0.045
400.00	57.5	0.064
500.00	61.1	0.036
600.00	65.8	0.047
700.00	69.0	0.032
800.00	70.0	0.010
900.00	70.0	0.000
1000.00	71.1	0.011
2000.00	91.1	0.200
100.00	100.0	0.029

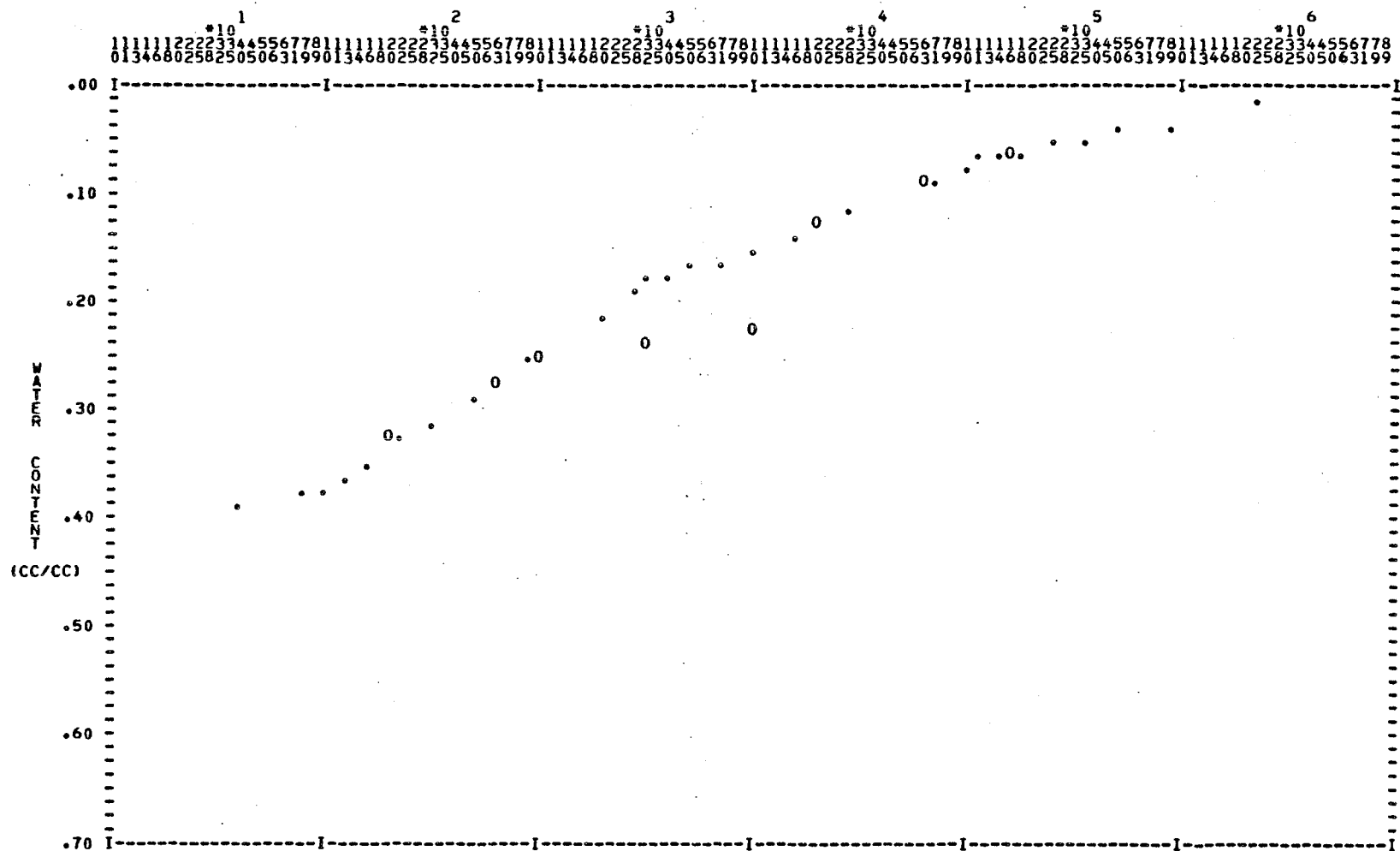
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.214887E+06
0.034	0.891444E+05
0.041	0.510882E+05
0.047	0.336382E+05
0.052	0.240809E+05
0.057	0.182504E+05
0.062	0.143324E+05
0.066	0.116335E+05
0.070	0.963377E+04
0.087	0.797777E+04
0.114	0.670707E+04
0.155	0.510488E+04
0.201	0.403101E+04
0.268	0.350741E+04
0.353	0.303344E+04
0.478	0.222164E+04
0.633	0.177179E+04
0.833	0.120112E+04
1.088	0.873222E+03
1.449	0.649601E+03
1.883	0.531722E+03
2.431	0.422192E+03
3.148	0.316497E+03
4.062	0.212629E+03
5.273	0.168745E+03
6.881	0.128241E+03
8.990	0.941884E+02

B-52

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 26

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.17515E+01

SOIL HORIZON NUMBER 27 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.66 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.150E+05
0.055	0.600E+04
0.076	0.200E+04
0.176	0.100E+04
0.186	0.330E+03
0.196	0.100E+03
0.209	0.600E+02
0.287	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.4	0.044
2.00	6.2	0.018
3.00	7.3	0.011
4.00	8.2	0.009
5.00	9.0	0.008
6.00	9.8	0.008
7.00	10.5	0.007
8.00	11.2	0.007
9.00	11.9	0.007
10.00	12.6	0.007
20.00	18.6	0.060
30.00	23.1	0.045
40.00	26.3	0.032
50.00	28.8	0.025
60.00	30.8	0.020
70.00	32.2	0.017
80.00	33.9	0.015
90.00	35.2	0.013
100.00	36.4	0.012
200.00	50.2	0.138
300.00	62.0	0.118
400.00	71.9	0.100
500.00	79.3	0.074
600.00	84.9	0.056
700.00	89.9	0.045
800.00	92.9	0.035
900.00	95.4	0.025
1000.00	97.0	0.016
2000.00	100.0	0.030

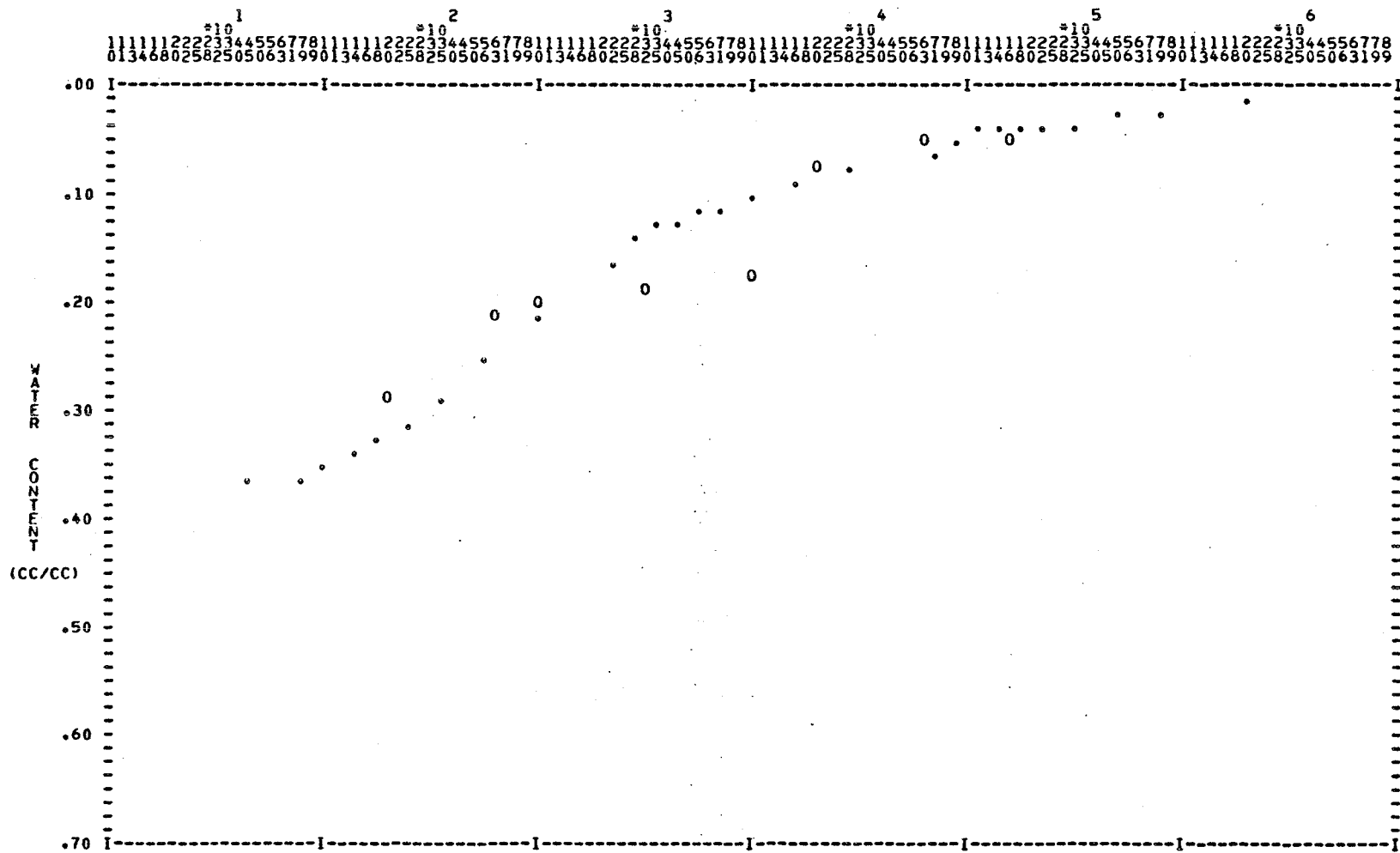
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.012	0.20593E+06
0.025	0.83939E+05
0.029	0.47587E+05
0.032	0.31507E+05
0.035	0.22754E+05
0.038	0.17375E+05
0.041	0.13795E+05
0.043	0.11273E+05
0.046	0.94210E+04
0.058	0.69686E+04
0.078	0.29561E+04
0.092	0.16357E+04
0.103	0.10494E+04
0.111	0.73524E+03
0.118	0.54706E+03
0.124	0.42523E+03
0.129	0.34148E+03
0.134	0.28121E+03
0.166	0.21944E+03
0.200	0.15585E+03
0.250	0.95457E+02
0.288	0.34722E+03
0.300	0.24076E+03
0.326	0.17787E+03
0.344	0.13490E+03
0.355	0.10396E+03
0.359	0.80358E+02
0.368	0.44220E+02

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 27

○ MEASURED ; ● PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.20976E+01

B-55

SOIL HORIZON NUMBER 28 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.62 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.058	0.600E+04
0.076	0.200E+04
0.156	0.100E+04
0.170	0.330E+03
0.180	0.100E+03
0.237	0.600E+02
0.271	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.6	0.056
2.00	7.3	0.017
3.00	8.4	0.011
4.00	9.3	0.009
5.00	10.2	0.008
6.00	10.9	0.008
7.00	11.7	0.007
8.00	12.4	0.007
9.00	13.1	0.007
10.00	13.7	0.006
20.00	19.2	0.055
30.00	23.4	0.042
40.00	26.6	0.032
50.00	29.1	0.025
60.00	31.2	0.021
70.00	33.0	0.018
80.00	34.6	0.016
90.00	36.1	0.015
100.00	37.5	0.014
200.00	42.1	0.046
300.00	46.0	0.039
400.00	49.8	0.038
500.00	51.1	0.013
600.00	56.6	0.055
700.00	61.0	0.044
800.00	64.3	0.033
900.00	66.5	0.022
1000.00	67.8	0.013
2000.00	100.0	0.022

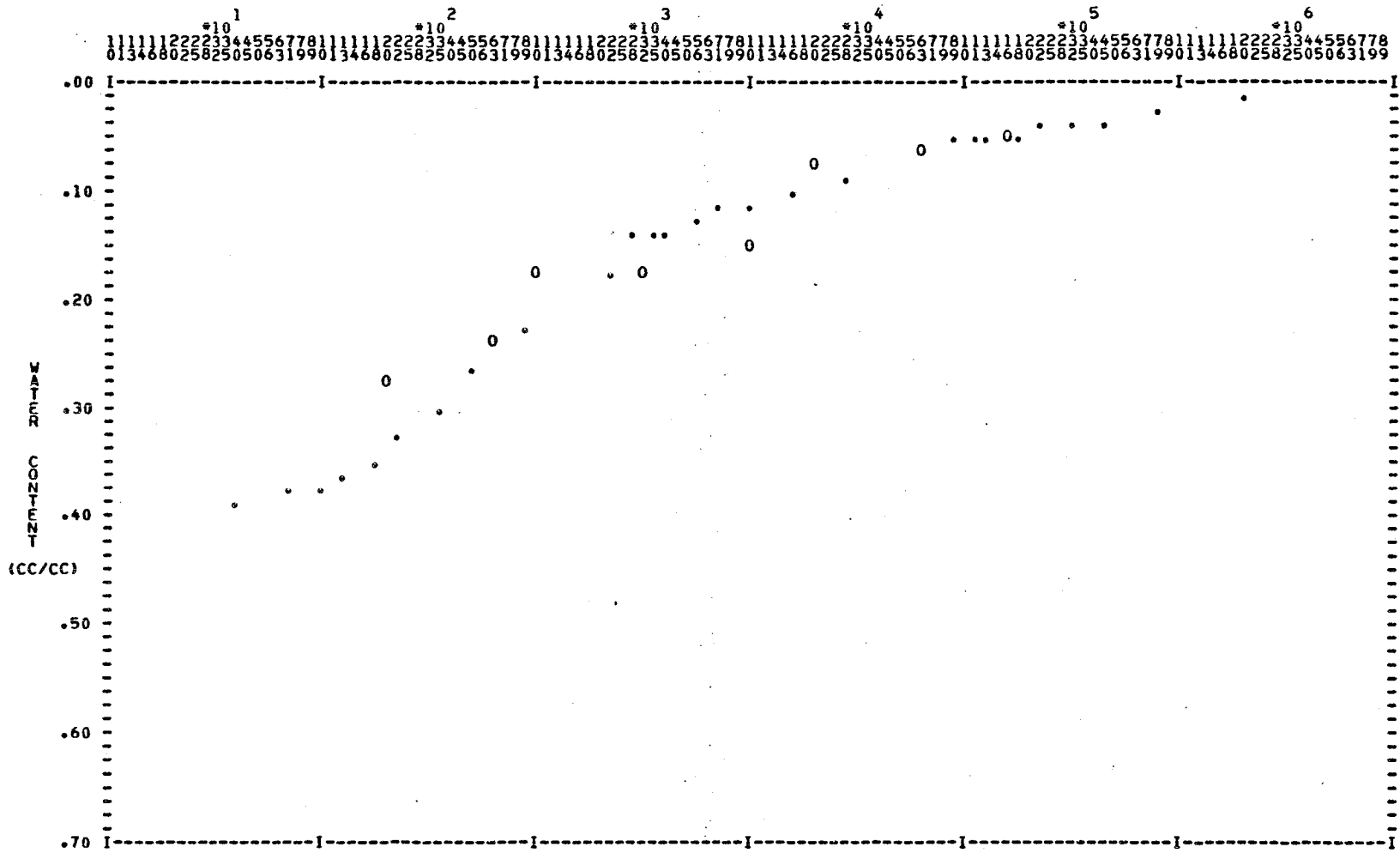
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.014	0.19750E+06
0.030	0.81285E+05
0.034	0.46450E+05
0.038	0.30733E+05
0.041	0.22129E+05
0.044	0.16840E+05
0.047	0.13327E+05
0.049	0.10850E+05
0.052	0.90510E+04
0.064	0.66320E+04
0.083	0.28244E+04
0.097	0.15818E+04
0.108	0.10189E+04
0.117	0.71724E+03
0.125	0.53773E+03
0.131	0.42075E+03
0.137	0.33981E+03
0.143	0.28124E+03
0.174	0.21504E+03
0.226	0.92562E+02
0.268	0.52775E+02
0.301	0.33548E+02
0.326	0.23236E+02
0.345	0.17123E+02
0.360	0.12921E+02
0.371	0.98639E+01
0.378	0.74769E+01
0.384	0.40376E+01

B-56

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 28

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.20906E+01

SOIL HORIZON NUMBER 29 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.65 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.053	0.150E+05
0.063	0.600E+04
0.078	0.200E+04
0.130	0.100E+04
0.142	0.330E+03
0.150	0.100E+03
0.218	0.600E+02
0.251	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7	0.072
2.00	22	0.010
3.00	33	0.007
4.00	40	0.007
5.00	46	0.006
6.00	50	0.006
7.00	53	0.005
8.00	55	0.005
9.00	57	0.005
10.00	58	0.005
20.00	63	0.033
30.00	68	0.028
40.00	71	0.024
50.00	73	0.019
60.00	75	0.017
70.00	76	0.016
80.00	77	0.016
90.00	78	0.015
100.00	79	0.015
200.00	84	0.151
300.00	87	0.127
400.00	89	0.103
500.00	90	0.103
600.00	91	0.077
700.00	92	0.061
800.00	93	0.051
900.00	94	0.039
1000.00	95	0.029
2000.00	99	0.020
	100	0.032

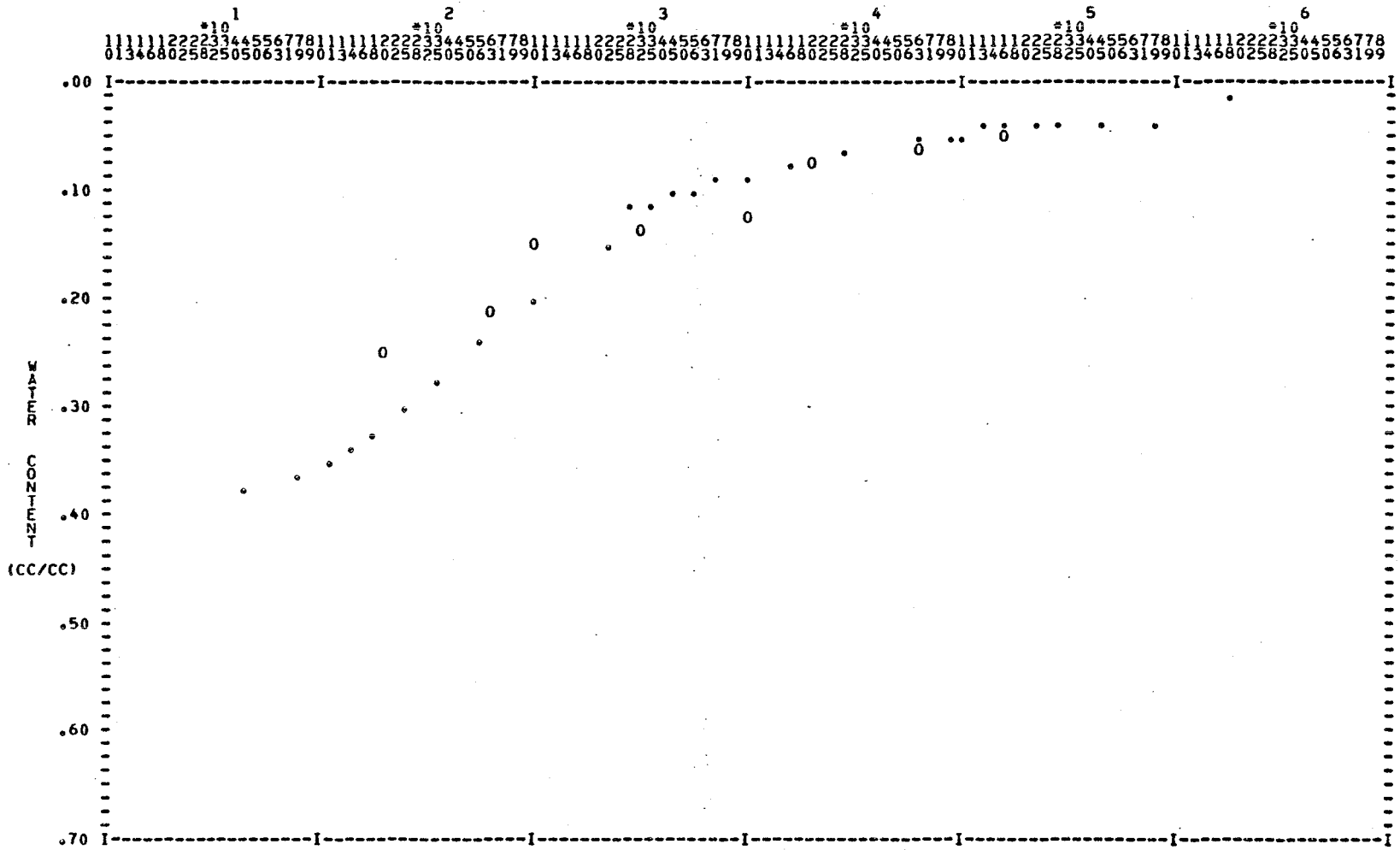
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.18368E+06
0.030	0.77106E+06
0.035	0.44774E+06
0.037	0.29661E+06
0.040	0.21296E+06
0.042	0.16714E+06
0.044	0.12711E+06
0.045	0.90319E+05
0.047	0.65666E+05
0.054	0.51769E+05
0.066	0.26726E+05
0.075	0.15340E+05
0.084	0.99372E+04
0.090	0.70718E+04
0.097	0.53982E+04
0.103	0.42808E+04
0.110	0.34932E+04
0.114	0.29146E+04
0.145	0.22149E+04
0.198	0.96091E+03
0.241	0.54482E+03
0.275	0.34777E+03
0.301	0.24286E+03
0.333	0.18014E+03
0.340	0.13717E+03
0.352	0.10625E+03
0.362	0.82825E+02
0.371	0.44407E+02

B-58

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 29

O MEASURED :

O PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23262E+01

SOIL HORIZON NUMBER 30 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.82 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.150E+05
0.040	0.600E+04
0.045	0.200E+04
0.089	0.100E+04
0.096	0.330E+03
0.106	0.100E+03
0.133	0.600E+02
0.213	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.2	0.042
2.00	4.5	0.003
3.00	4.8	0.003
4.00	5.1	0.003
5.00	5.4	0.003
6.00	5.7	0.003
7.00	6.0	0.003
8.00	6.2	0.003
9.00	6.5	0.002
10.00	6.7	0.002
20.00	8.3	0.016
30.00	10.0	0.017
40.00	12.3	0.023
50.00	15.0	0.027
60.00	17.7	0.027
70.00	20.3	0.026
80.00	22.7	0.024
90.00	24.8	0.021
100.00	26.7	0.019
200.00	39.1	0.124
300.00	49.6	0.105
400.00	58.3	0.087
500.00	65.1	0.068
600.00	70.6	0.055
700.00	75.4	0.047
800.00	79.5	0.041
900.00	83.1	0.036
1000.00	86.3	0.032
2000.00	100.0	0.137

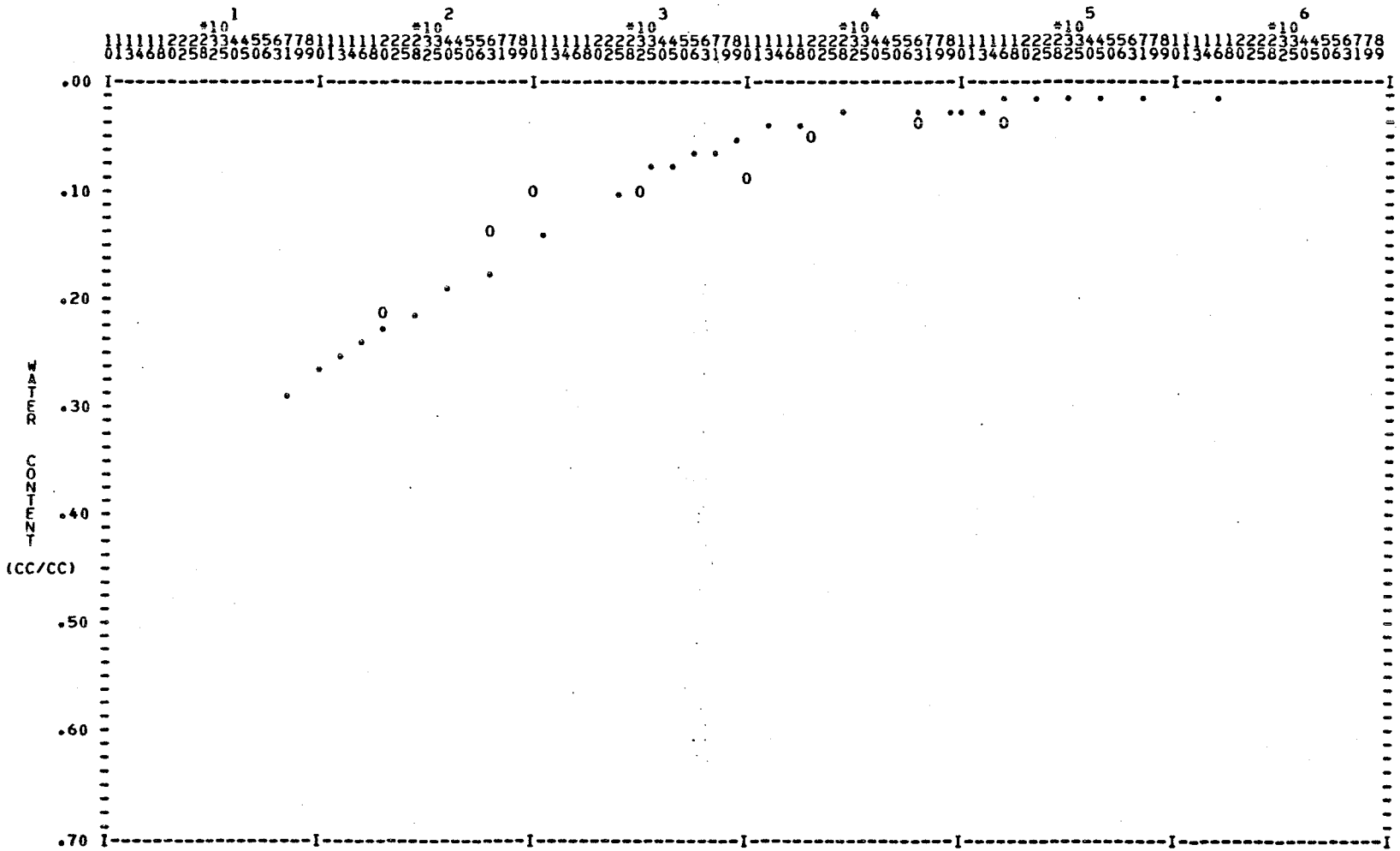
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.007	0.16374E+06
0.015	0.73713E+05
0.015	0.44894E+05
0.016	0.30131E+05
0.017	0.21722E+05
0.018	0.16474E+05
0.019	0.12970E+05
0.020	0.10506E+05
0.021	0.87036E+04
0.023	0.62002E+04
0.026	0.28085E+04
0.035	0.17594E+04
0.043	0.12170E+04
0.051	0.89227E+03
0.060	0.67320E+03
0.067	0.53325E+03
0.074	0.44820E+03
0.081	0.38525E+03
0.103	0.24613E+03
0.130	0.16699E+03
0.160	0.10695E+03
0.190	0.74115E+02
0.220	0.52761E+02
0.250	0.38500E+02
0.274	0.28474E+02
0.292	0.19483E+02
0.292	0.67484E+01

B-60

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 31 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.71 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.029	0.150E+05
0.034	0.600E+04
0.036	0.200E+04
0.046	0.100E+04
0.053	0.330E+03
0.067	0.100E+03
0.101	0.600E+02
0.120	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	4.8	0.004
4.00	8.0	0.003
8.00	11.4	0.003
15.00	15.0	0.003
30.00	20.0	0.002
60.00	26.0	0.001
100.00	31.1	0.001
200.00	36.8	0.007
400.00	47.0	0.002
800.00	57.1	0.001
1000.00	61.3	0.002
2000.00	71.0	0.002
4000.00	78.0	0.003
8000.00	81.0	0.003
10000.00	83.3	0.003
20000.00	89.6	0.092
30000.00	93.0	0.157
40000.00	94.0	0.157
50000.00	96.5	0.115
60000.00	98.0	0.084
70000.00	99.0	0.069
80000.00	99.5	0.056
90000.00	99.6	0.046
100000.00	99.6	0.036
200000.00	100.0	0.104

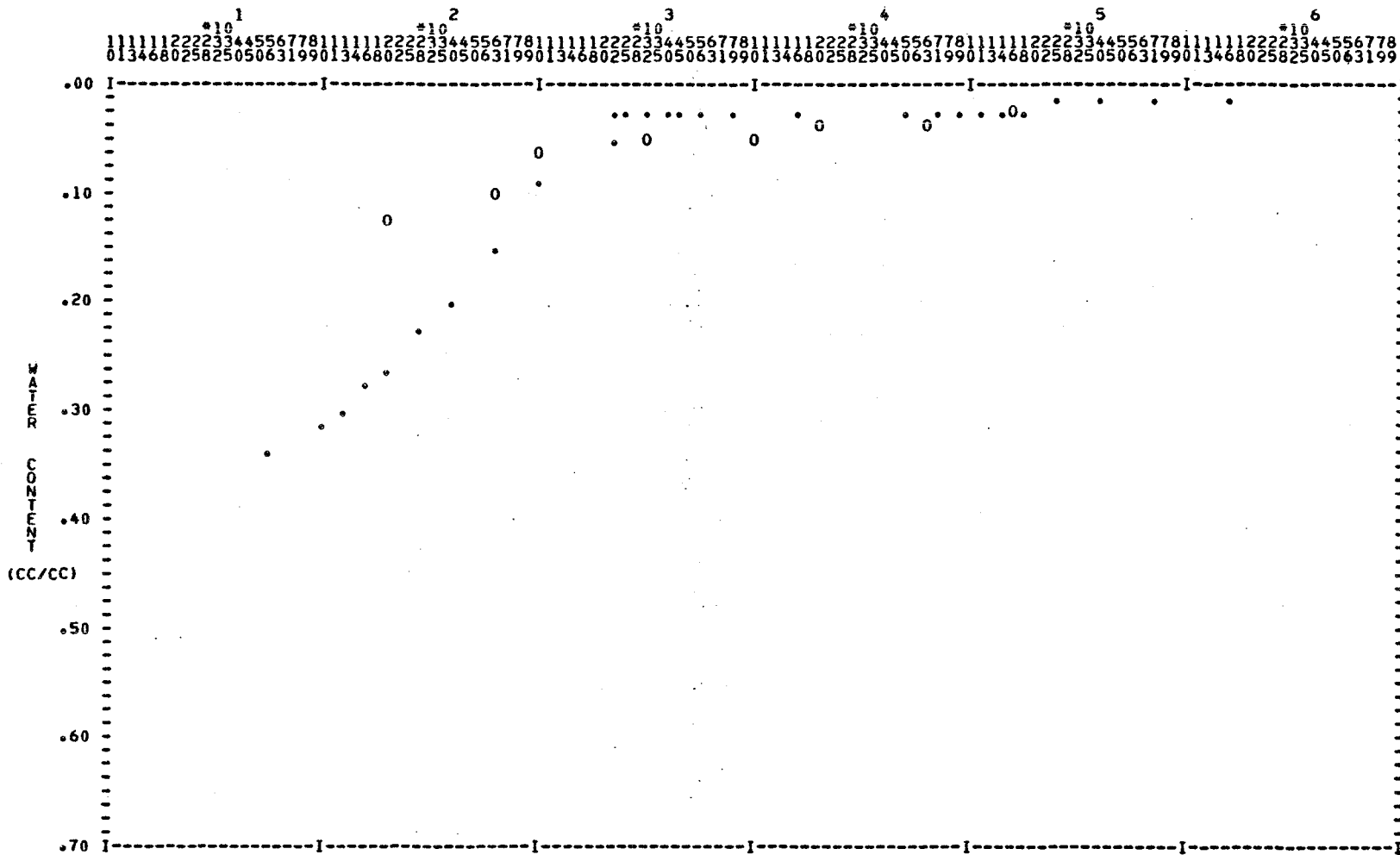
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.16221E+06
0.017	0.68888E+05
0.018	0.39965E+05
0.019	0.26170E+05
0.019	0.18531E+05
0.020	0.13847E+05
0.020	0.10758E+05
0.020	0.86090E+04
0.020	0.70501E+04
0.020	0.47643E+04
0.020	0.16654E+04
0.020	0.79708E+03
0.020	0.54521E+03
0.020	0.47297E+03
0.020	0.39607E+03
0.020	0.32229E+03
0.020	0.26401E+03
0.020	0.21880E+03
0.020	0.21178E+03
0.020	0.10514E+03
0.020	0.61991E+02
0.020	0.39378E+02
0.020	0.27085E+02
0.020	0.20075E+02
0.020	0.15412E+02
0.020	0.12145E+02
0.020	0.97575E+01
0.036	0.58331E+01

ALPHA = 1.38

B-62

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-63

SOIL HORIZON NUMBER 31

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSP))) = 0.61562E+01

SOIL HORIZON NUMBER 32 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.150E+05
0.047	0.600E+04
0.053	0.200E+04
0.246	0.100E+04
0.270	0.330E+03
0.295	0.100E+03
0.310	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.0	0.030
2.00	3.4	0.004
3.00	3.7	0.003
4.00	4.1	0.004
5.00	4.5	0.004
6.00	4.9	0.004
7.00	5.3	0.004
8.00	5.7	0.004
9.00	6.2	0.004
10.00	6.6	0.004
20.00	10.1	0.035
30.00	16.0	0.059
40.00	21.1	0.053
50.00	27.7	0.066
60.00	33.3	0.056
70.00	38.9	0.056
80.00	43.3	0.044
90.00	47.1	0.038
100.00	50.0	0.029
200.00	70.0	0.199
300.00	77.1	0.071
400.00	80.0	0.029
500.00	81.1	0.011
600.00	81.1	0.000
700.00	81.1	0.000
800.00	81.1	0.000
900.00	81.1	0.000
1000.00	81.1	0.000
2000.00	100.0	0.000

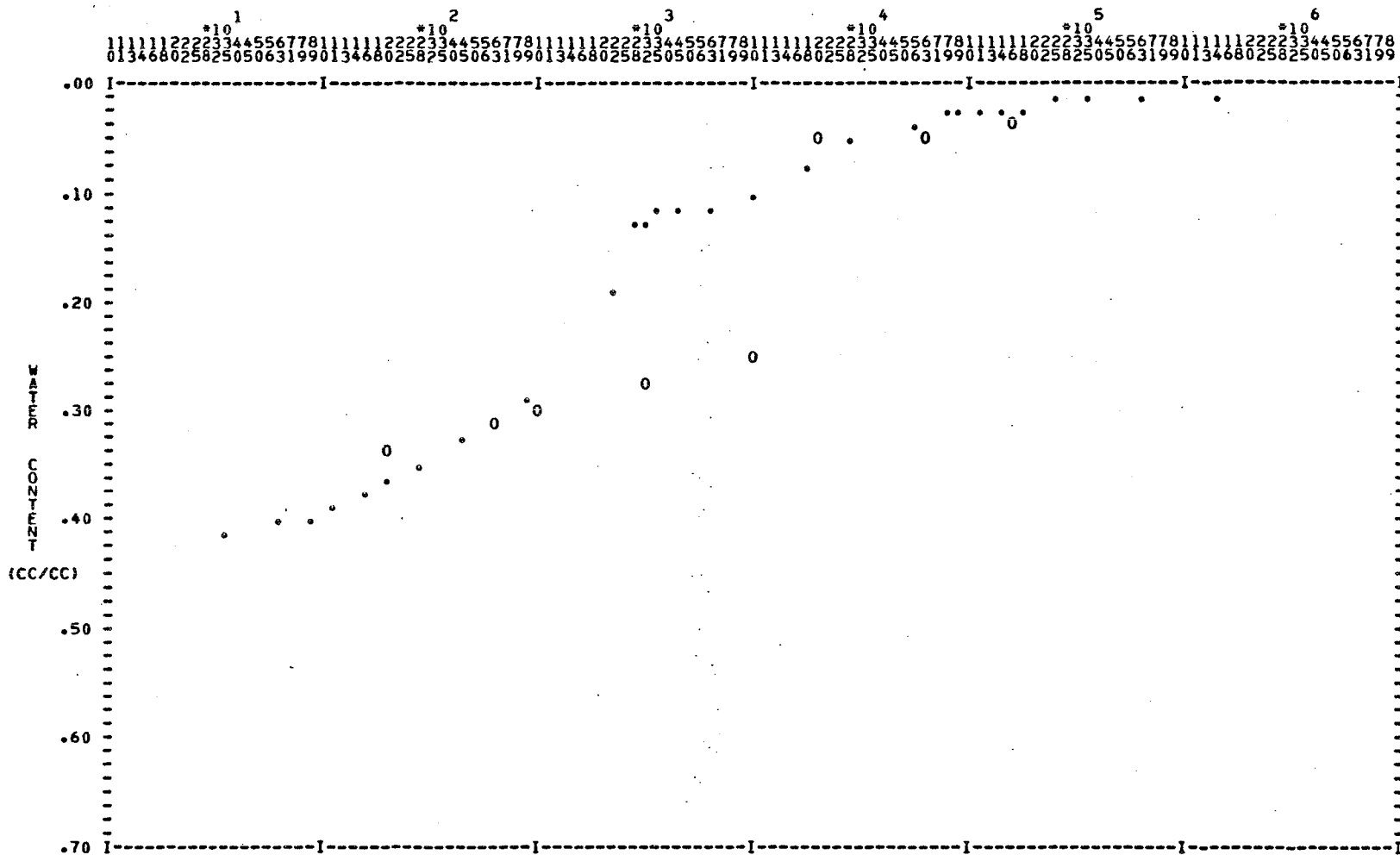
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.007	0.139335E+06
0.015	0.611130E+05
0.016	0.374300E+05
0.018	0.255957E+05
0.019	0.187263E+05
0.021	0.144066E+05
0.023	0.114844E+05
0.024	0.940644E+04
0.026	0.787035E+04
0.034	0.582733E+04
0.054	0.287143E+04
0.078	0.169233E+04
0.098	0.105958E+04
0.110	0.666080E+03
0.115	0.423000E+03
0.117	0.330000E+03
0.126	0.278000E+03
0.133	0.236000E+03
0.150	0.160500E+03
0.170	0.900000E+02
0.180	0.471000E+02
0.190	0.294000E+02
0.200	0.203000E+02
0.250	0.700000E+01
0.300	0.150000E+01
0.400	0.113000E+01
0.500	0.868000E+00
0.600	0.660000E+00
0.800	0.374500E+00
1.000	0.374500E+00

B-64

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 32

O MEASURED ; o PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.26857E+01

B-65

SOIL HORIZON NUMBER 33 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.150E+05
0.049	0.600E+04
0.070	0.200E+04
0.128	0.100E+04
0.144	0.330E+03
0.153	0.100E+03
0.188	0.600E+02
0.278	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.7	0.047
2.00	6.3	0.016
3.00	7.3	0.010
4.00	8.2	0.009
5.00	9.0	0.008
6.00	9.8	0.008
7.00	10.5	0.007
8.00	11.2	0.007
9.00	11.8	0.006
10.00	12.4	0.006
20.00	17.4	0.050
30.00	21.3	0.039
40.00	24.4	0.031
50.00	26.7	0.023
60.00	28.2	0.015
70.00	29.3	0.011
80.00	30.3	0.010
90.00	31.3	0.010
100.00	32.4	0.011
200.00	62.3	0.299
300.00	76.7	0.144
400.00	84.2	0.075
500.00	89.0	0.048
600.00	92.5	0.035
700.00	95.2	0.027
800.00	97.1	0.019
900.00	98.3	0.012
1000.00	98.9	0.006
2000.00	100.0	0.011

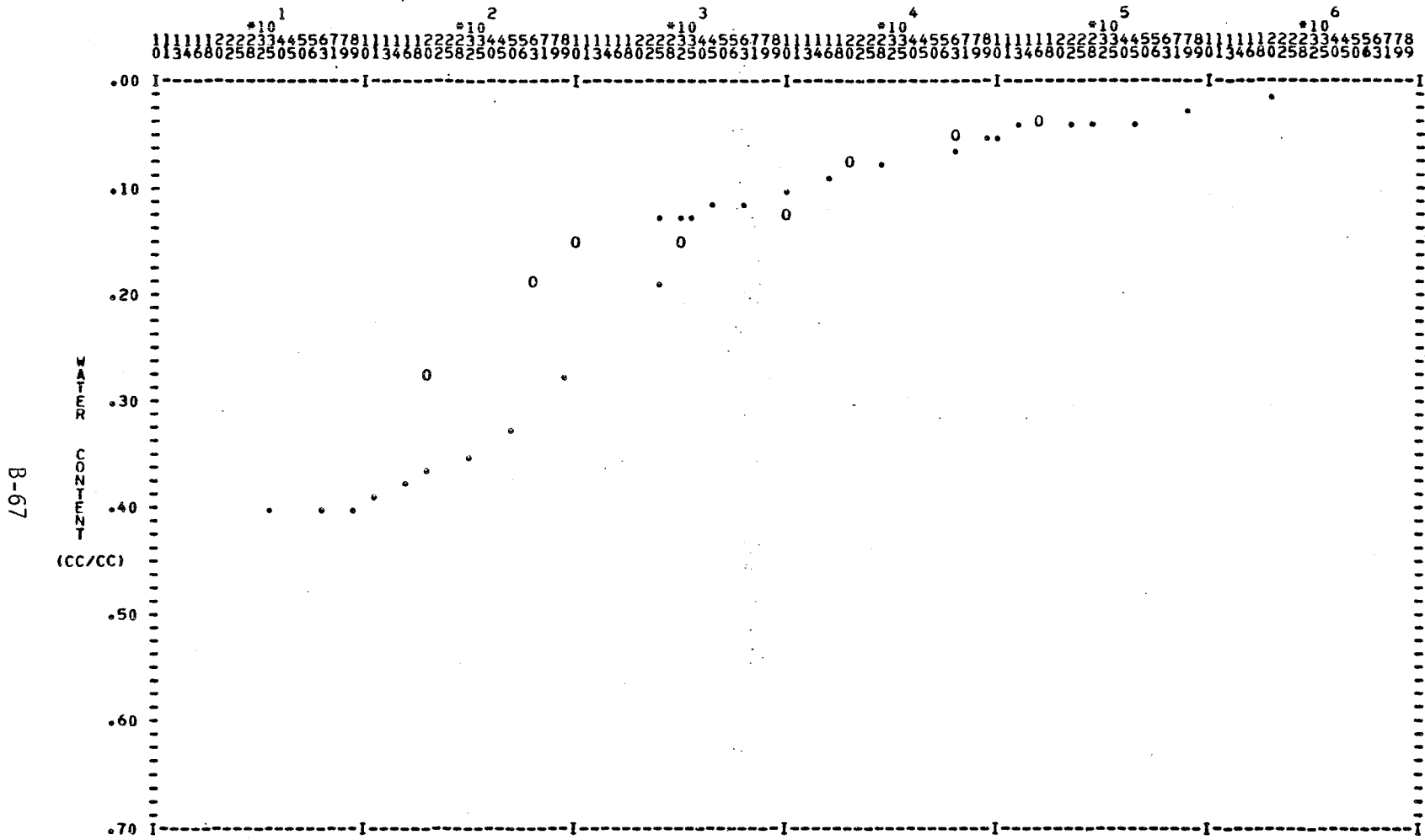
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.18859E+06
0.028	0.77986E+05
0.031	0.44728E+05
0.035	0.29587E+05
0.038	0.21277E+05
0.041	0.16168E+05
0.044	0.12776E+05
0.046	0.10396E+05
0.049	0.86541E+04
0.060	0.63112E+04
0.078	0.27064E+04
0.092	0.15200E+04
0.103	0.97010E+03
0.111	0.65643E+03
0.116	0.47216E+03
0.120	0.36912E+03
0.124	0.30541E+03
0.129	0.26129E+03
0.191	0.23862E+03
0.281	0.93119E+02
0.325	0.48546E+02
0.350	0.30049E+02
0.366	0.20605E+02
0.379	0.15114E+02
0.388	0.11322E+02
0.394	0.85296E+01
0.398	0.62592E+01
0.402	0.34295E+01

ALPHA = 1.38

B-66

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 33

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{IP}))) = 0.30616E+01

SOIL HORIZON NUMBER 34 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.090	0.600E+04
0.115	0.200E+04
0.197	0.100E+04
0.110	0.330E+03
0.210	0.100E+03
0.226	0.600E+02
0.234	0.200E+02
0.284	

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.5	0.125
2.00	14.3	0.018
5.00	15.5	0.012
4.00	16.6	0.011
5.00	17.6	0.010
6.00	18.5	0.009
7.00	19.3	0.008
8.00	20.0	0.008
9.00	20.7	0.007
10.00	21.4	0.007
20.00	26.6	0.052
30.00	30.9	0.042
40.00	34.2	0.034
50.00	36.7	0.025
60.00	38.0	0.013
70.00	38.7	0.007
80.00	39.4	0.007
90.00	40.3	0.009
100.00	41.6	0.013
200.00	65.6	0.240
300.00	78.0	0.124
400.00	85.1	0.071
500.00	89.8	0.047
600.00	93.1	0.033
700.00	95.6	0.025
800.00	97.3	0.017
900.00	98.4	0.011
1000.00	98.9	0.005
2000.00	100.0	0.011

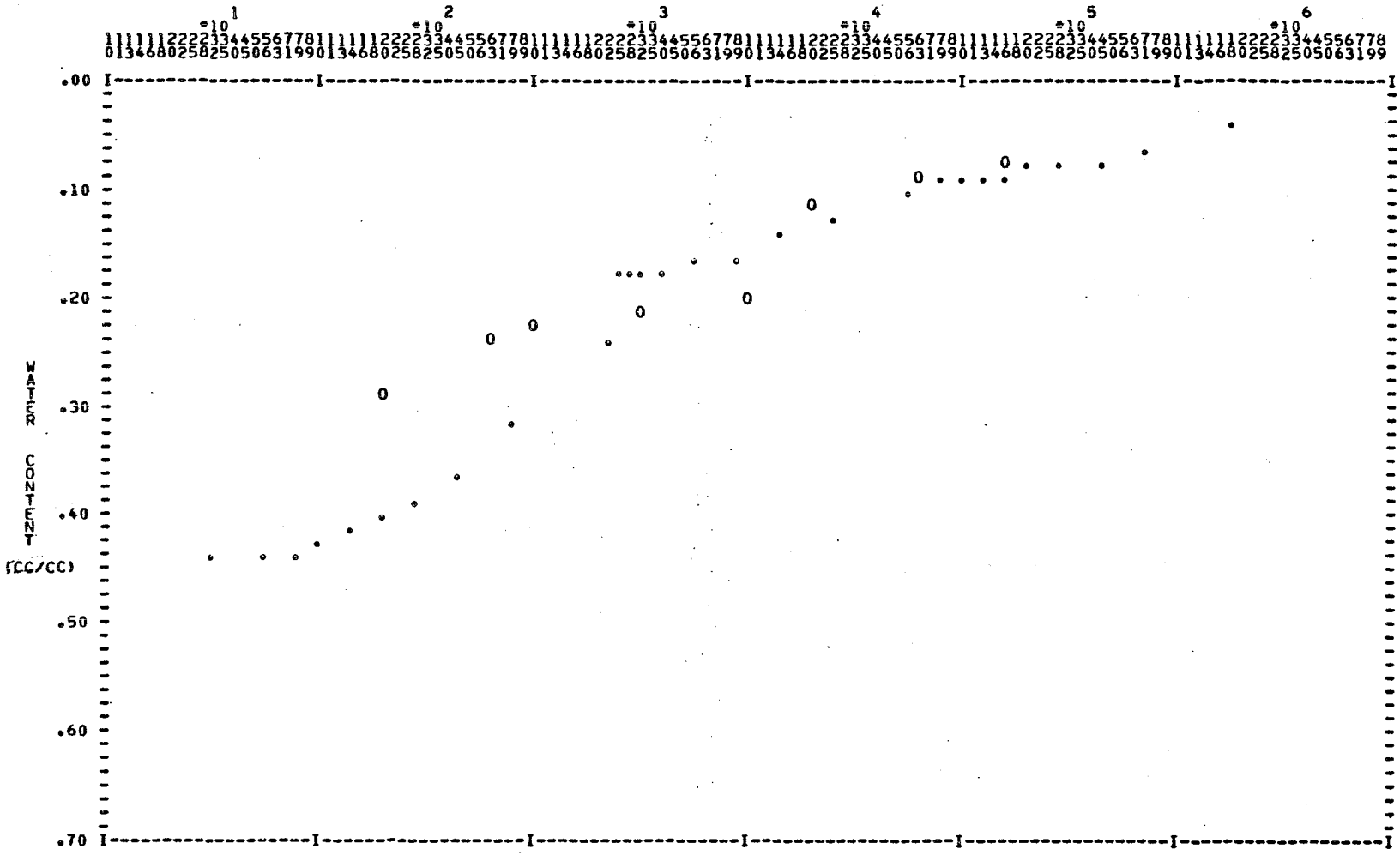
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.17879E+06
0.066	0.74470E+05
0.071	0.42898E+05
0.075	0.28328E+05
0.080	0.20307E+05
0.083	0.15379E+05
0.087	0.12114E+05
0.090	0.98274E+04
0.093	0.81581E+04
0.106	0.58862E+04
0.127	0.25379E+04
0.144	0.14353E+04
0.157	0.91074E+03
0.165	0.59231E+03
0.170	0.40150E+03
0.173	0.31893E+03
0.176	0.27797E+03
0.181	0.24816E+03
0.237	0.21192E+03
0.317	0.83787E+02
0.360	0.44425E+02
0.386	0.27659E+02
0.404	0.18906E+02
0.417	0.13745E+02
0.426	0.10250E+02
0.432	0.77126E+01
0.435	0.56877E+01
0.439	0.31742E+01

B-68

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 34

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.31416E+01

SOIL HORIZON NUMBER 35 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.52 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.065	0.150E+05
0.071	0.600E+04
0.081	0.200E+04
0.117	0.100E+04
0.138	0.330E+03
0.157	0.100E+03
0.172	0.600E+02
0.298	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.3	0.103
2.00	11.0	0.007
3.00	11.4	0.004
4.00	11.8	0.004
5.00	12.1	0.003
6.00	12.5	0.003
7.00	12.8	0.003
8.00	13.2	0.003
9.00	13.5	0.003
10.00	13.8	0.003
20.00	17.1	0.033
30.00	19.8	0.027
40.00	21.8	0.020
50.00	23.4	0.016
60.00	24.5	0.011
70.00	25.4	0.009
80.00	26.2	0.008
90.00	27.0	0.008
100.00	27.8	0.008
200.00	35.2	0.274
300.00	40.9	0.157
400.00	48.1	0.093
500.00	46.4	0.063
600.00	40.7	0.043
700.00	43.8	0.031
800.00	45.9	0.021
900.00	47.2	0.014
1000.00	48.0	0.008
2000.00	100.0	0.020

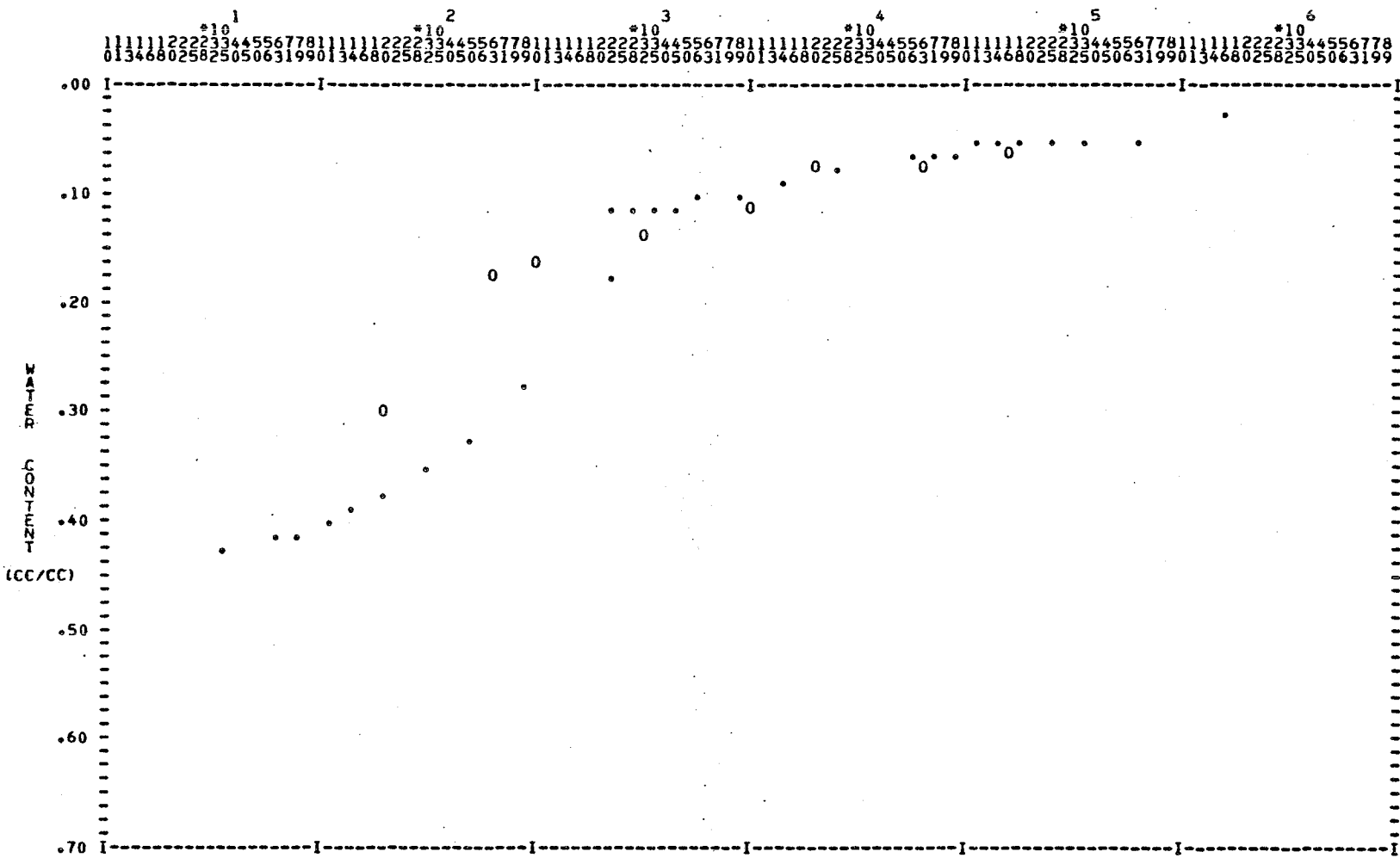
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.023	0.15484E+06
0.048	0.62815E+05
0.049	0.35790E+05
0.051	0.23970E+05
0.052	0.17490E+05
0.054	0.13465E+05
0.055	0.10759E+05
0.057	0.88381E+04
0.058	0.74164E+04
0.066	0.55544E+04
0.079	0.24037E+04
0.089	0.13434E+04
0.096	0.86003E+03
0.102	0.59130E+03
0.107	0.43345E+03
0.110	0.33936E+03
0.113	0.27802E+03
0.117	0.23479E+03
0.177	0.22401E+03
0.269	0.90348E+02
0.322	0.48129E+02
0.355	0.30103E+02
0.378	0.20523E+02
0.393	0.14777E+02
0.404	0.10981E+02
0.412	0.83015E+01
0.416	0.62615E+01
0.422	0.36670E+01

B-70

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 35

O MEASURED . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.28656E+01

B-71

SOIL HORIZON NUMBER 36 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.150E+05
0.025	0.600E+04
0.031	0.200E+04
0.054	0.100E+04
0.068	0.330E+03
0.082	0.100E+03
0.121	0.600E+02
0.232	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.7	0.037
2.00	3.8	0.001
3.00	3.9	0.001
4.00	4.0	0.001
5.00	4.1	0.001
6.00	4.2	0.001
7.00	4.3	0.001
8.00	4.4	0.001
9.00	4.5	0.001
10.00	4.6	0.001
20.00	4.6	0.000
30.00	5.2	0.009
40.00	6.1	0.009
50.00	7.0	0.007
60.00	7.7	0.004
70.00	8.1	0.004
80.00	8.4	0.006
90.00	9.1	0.010
100.00	10.5	0.014
200.00	43.3	0.318
300.00	61.6	0.183
400.00	71.8	0.113
500.00	81.0	0.082
600.00	81.2	0.002
700.00	91.0	0.046
800.00	94.1	0.032
900.00	97.1	0.021
1000.00	98.2	0.011
2000.00	100.0	0.018

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.10915E+06
0.016	0.48559E+06
0.016	0.29441E+06
0.017	0.19880E+06
0.017	0.14380E+06
0.018	0.10895E+06
0.018	0.85704E+05
0.019	0.69546E+05
0.019	0.57771E+05
0.020	0.41411E+05
0.023	0.19844E+05
0.027	0.11847E+05
0.031	0.75588E+04
0.033	0.48788E+04
0.034	0.37333E+04
0.036	0.33333E+04
0.040	0.29997E+04
0.045	0.26795E+04
0.114	0.23587E+04
0.218	0.95199E+03
0.279	0.51200E+03
0.319	0.32499E+03
0.349	0.22480E+03
0.372	0.16366E+03
0.388	0.12219E+03
0.399	0.92088E+02
0.405	0.68120E+02
0.411	0.36787E+02

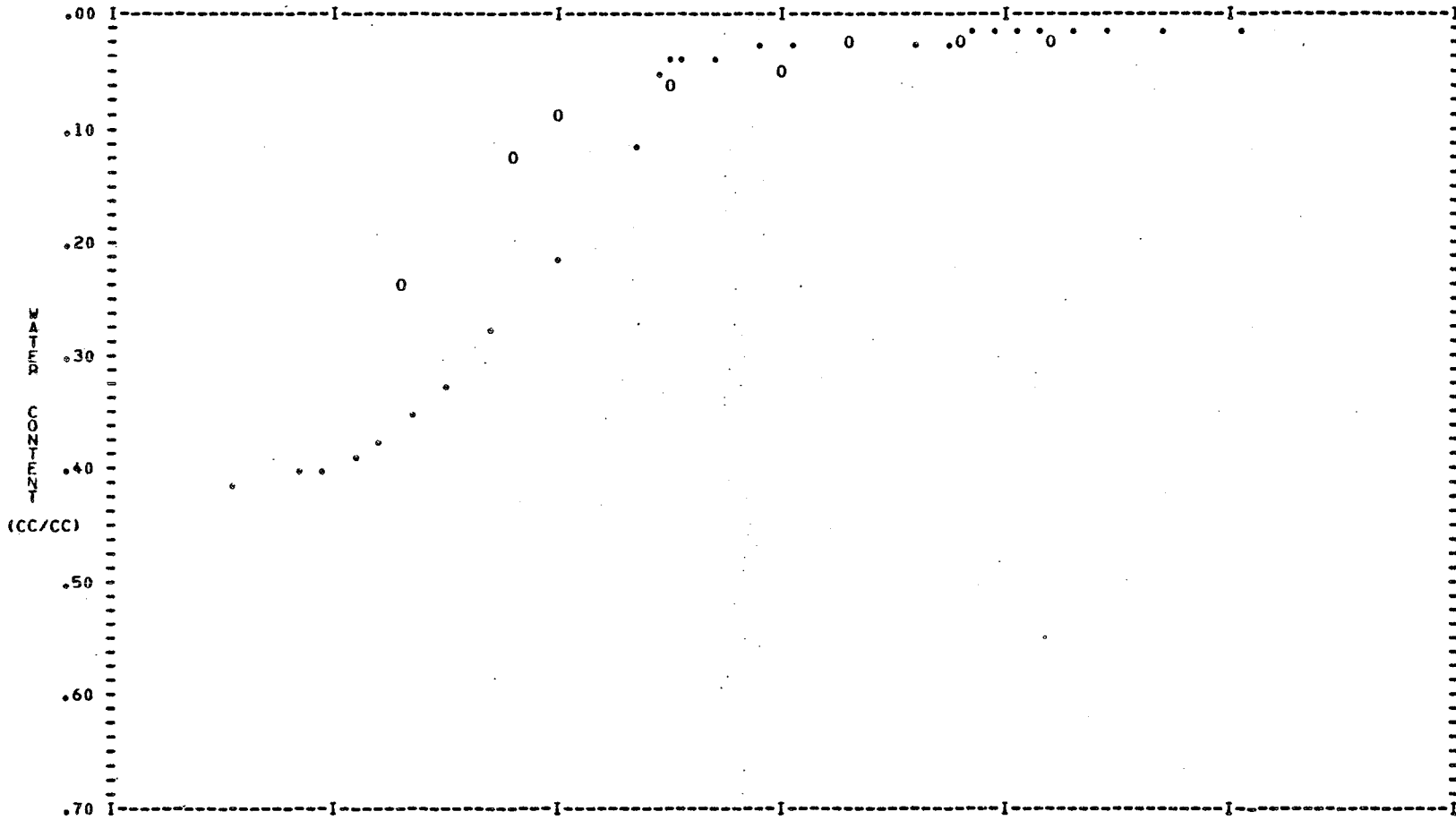
B-72

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199

B-73



SOIL HORIZON NUMBER 36

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{IP}))) = 0.42592E+01

SOIL HORIZON NUMBER 37 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.70 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.070	0.600E+04
0.107	0.200E+04
0.151	0.100E+04
0.172	0.330E+03
0.194	0.100E+03
0.221	0.600E+02
0.279	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.8	0.038
2.00	6.5	0.027
3.00	8.3	0.016
4.00	9.7	0.014
5.00	10.8	0.012
6.00	11.9	0.010
7.00	12.8	0.009
8.00	13.6	0.008
9.00	14.3	0.007
10.00	15.0	0.007
20.00	19.7	0.047
30.00	23.0	0.033
40.00	25.5	0.025
50.00	27.3	0.018
60.00	28.8	0.016
70.00	29.8	0.005
80.00	29.9	0.004
90.00	29.6	0.004
100.00	30.1	0.005
200.00	38.4	0.083
300.00	48.9	0.101
400.00	58.2	0.097
500.00	66.2	0.080
600.00	73.5	0.074
700.00	80.6	0.070
800.00	86.9	0.059
900.00	91.0	0.042
1000.00	94.2	0.032
2000.00	100.0	0.058

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.012	0.23027E+06
0.026	0.94850E+05
0.032	0.53664E+05
0.037	0.34982E+05
0.041	0.24822E+05
0.044	0.18644E+05
0.047	0.14587E+05
0.050	0.11763E+05
0.052	0.97130E+04
0.062	0.68750E+04
0.077	0.28809E+04
0.087	0.16188E+04
0.095	0.10188E+04
0.100	0.66624E+03
0.102	0.44760E+03
0.104	0.33767E+03
0.105	0.22834E+03
0.107	0.14997E+03
0.123	0.82061E+02
0.156	0.55884E+02
0.191	0.36604E+02
0.223	0.26604E+02
0.251	0.19604E+02
0.277	0.15004E+02
0.300	0.11504E+02
0.318	0.94584E+01
0.332	0.84584E+01
0.348	0.51777E+01

B-74

ALPHA = 1.38

SOIL HORIZON NUMBER 38 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.70 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.076	0.600E+04
0.109	0.200E+04
0.160	0.100E+04
0.167	0.330E+03
0.173	0.100E+03
0.192	0.600E+02
0.253	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.8	0.058
2.00	8.9	0.031
3.00	9.9	0.020
4.00	9.4	0.016
5.00	3.7	0.013
6.00	9.9	0.011
7.00	9.8	0.010
8.00	6.8	0.009
9.00	7.7	0.008
10.00	8.3	0.007
20.00	33.3	0.053
30.00	33.3	0.037
40.00	30.0	0.028
50.00	30.0	0.020
60.00	30.0	0.012
70.00	33.3	0.007
80.00	4.4	0.005
90.00	4.4	0.006
100.00	9.9	0.007
200.00	0.0	0.094
300.00	0.0	0.100
400.00	0.0	0.087
500.00	0.0	0.071
700.00	0.0	0.064
800.00	0.0	0.060
900.00	0.0	0.050
1000.00	0.0	0.029
2000.00	100.0	0.050

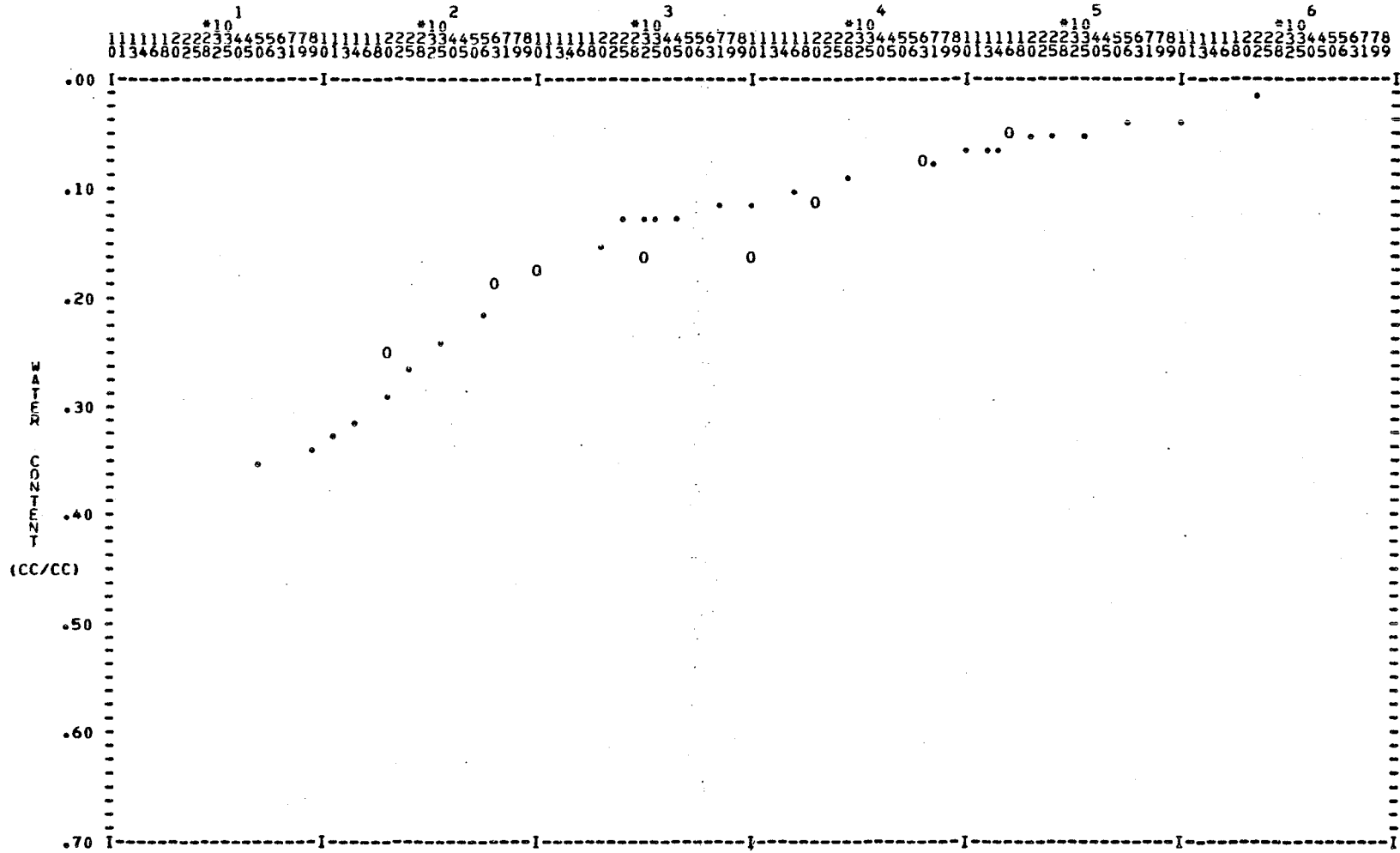
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.016	0.23353
0.033	0.55547
0.047	0.35567
0.051	0.25531
0.055	0.19031
0.058	0.14887
0.062	0.12000
0.064	0.09911
0.065	0.07922
0.071	0.07099
0.073	0.06644
0.077	0.06222
0.080	0.05888
0.083	0.05555
0.087	0.05222
0.094	0.04888
0.100	0.04555
0.107	0.04222
0.111	0.03888
0.113	0.03555
0.116	0.03222
0.120	0.02888
0.122	0.02555
0.127	0.02222
0.130	0.01888
0.133	0.01555
0.137	0.01222
0.140	0.00888
0.144	0.00555
0.147	0.00222
0.150	0.00000

B-76

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-77

SOIL HORIZON NUMBER 38

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.19574E+01

SOIL HORIZON NUMBER 39 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.060	0.150E+05
0.066	0.600E+04
0.095	0.200E+04
0.137	0.100E+04
0.146	0.330E+03
0.157	0.100E+03
0.177	0.600E+02
0.242	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.1	0.061
2.00	8.8	0.027
3.00	10.6	0.018
4.00	12.0	0.015
5.00	13.3	0.012
6.00	14.3	0.011
7.00	15.3	0.010
8.00	16.2	0.009
9.00	17.0	0.008
10.00	17.7	0.007
20.00	23.0	0.053
30.00	26.9	0.039
40.00	29.8	0.030
50.00	31.9	0.021
60.00	33.1	0.012
70.00	33.7	0.006
80.00	34.2	0.005
90.00	34.8	0.006
100.00	35.5	0.007
200.00	45.1	0.096
300.00	55.5	0.105
400.00	64.4	0.089
500.00	71.6	0.072
600.00	78.0	0.064
700.00	83.9	0.059
800.00	88.9	0.049
900.00	92.7	0.039
1000.00	95.6	0.029
2000.00	100.0	0.044

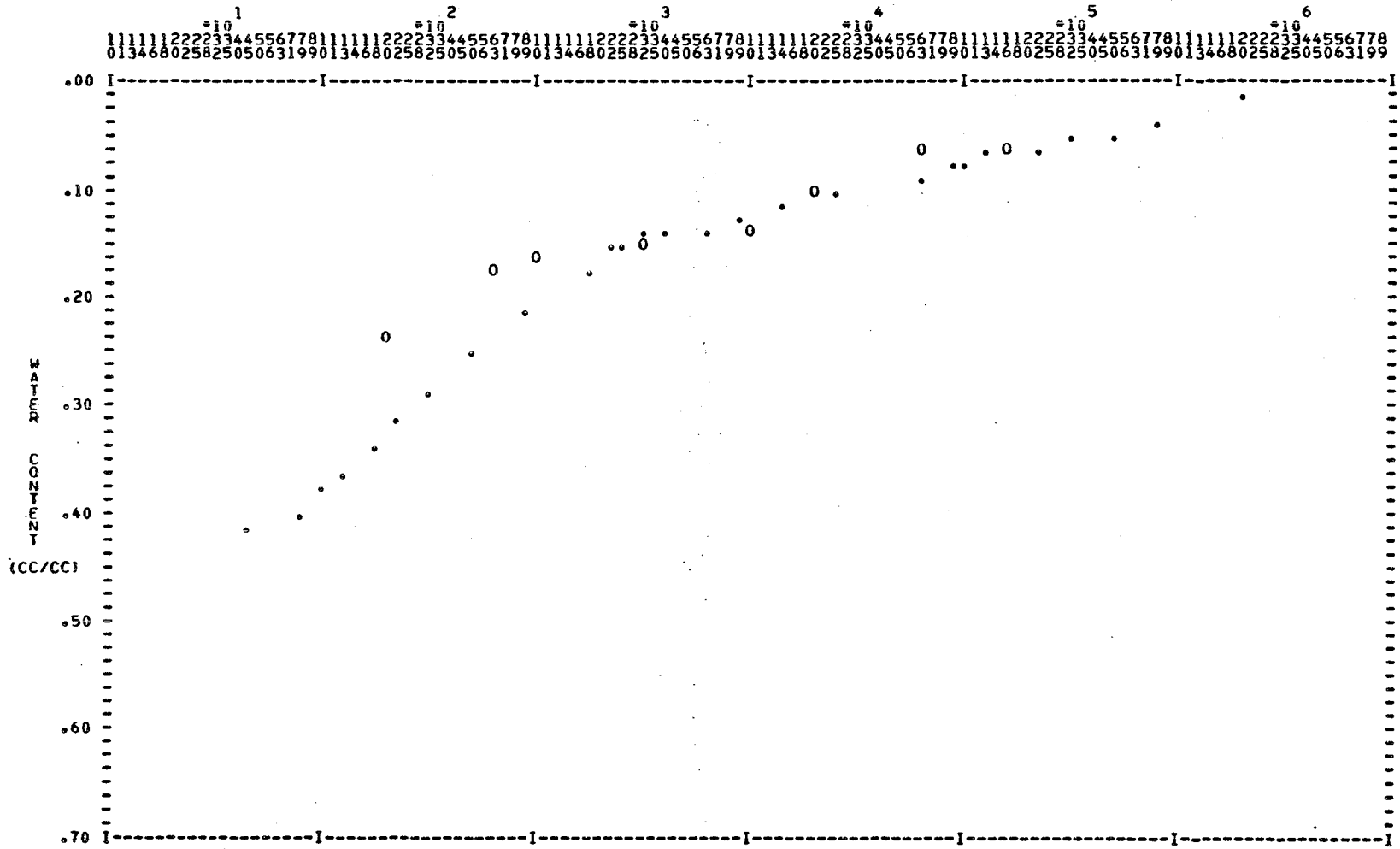
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.20232E+06
0.041	0.83613E+05
0.047	0.47533E+05
0.053	0.31083E+05
0.058	0.22111E+05
0.062	0.16639E+05
0.066	0.13035E+05
0.069	0.10525E+05
0.073	0.87010E+04
0.085	0.61849E+04
0.104	0.26118E+04
0.119	0.14630E+04
0.129	0.92373E+03
0.136	0.60592E+03
0.140	0.41385E+03
0.142	0.31640E+03
0.145	0.26525E+03
0.147	0.23230E+03
0.169	0.18635E+03
0.211	0.84969E+02
0.251	0.48583E+02
0.285	0.31410E+02
0.313	0.22466E+02
0.339	0.17001E+02
0.362	0.13127E+02
0.380	0.10302E+02
0.394	0.81606E+01
0.410	0.43260E+01

B-78

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-79

SOIL HORIZON NUMBER 40 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.63 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.064	0.150E+05
0.073	0.600E+04
0.096	0.200E+04
0.109	0.100E+04
0.121	0.330E+03
0.132	0.100E+03
0.158	0.600E+02
0.238	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.9	0.099
2.00	11.1	0.012
3.00	11.9	0.008
4.00	12.6	0.007
5.00	13.2	0.006
6.00	13.7	0.006
7.00	14.3	0.005
8.00	14.8	0.005
9.00	15.3	0.005
10.00	15.7	0.005
20.00	19.6	0.039
30.00	22.6	0.030
40.00	25.0	0.023
50.00	26.8	0.018
60.00	28.3	0.015
70.00	29.6	0.013
80.00	30.9	0.012
90.00	32.1	0.012
100.00	33.2	0.011
200.00	48.8	0.156
300.00	60.3	0.120
400.00	69.9	0.096
500.00	76.4	0.065
600.00	81.8	0.054
700.00	86.3	0.044
800.00	89.8	0.035
900.00	92.6	0.028
1000.00	94.8	0.022
2000.00	100.0	0.052

PREDICTED MOISTURE CHARACTERISTIC DATA

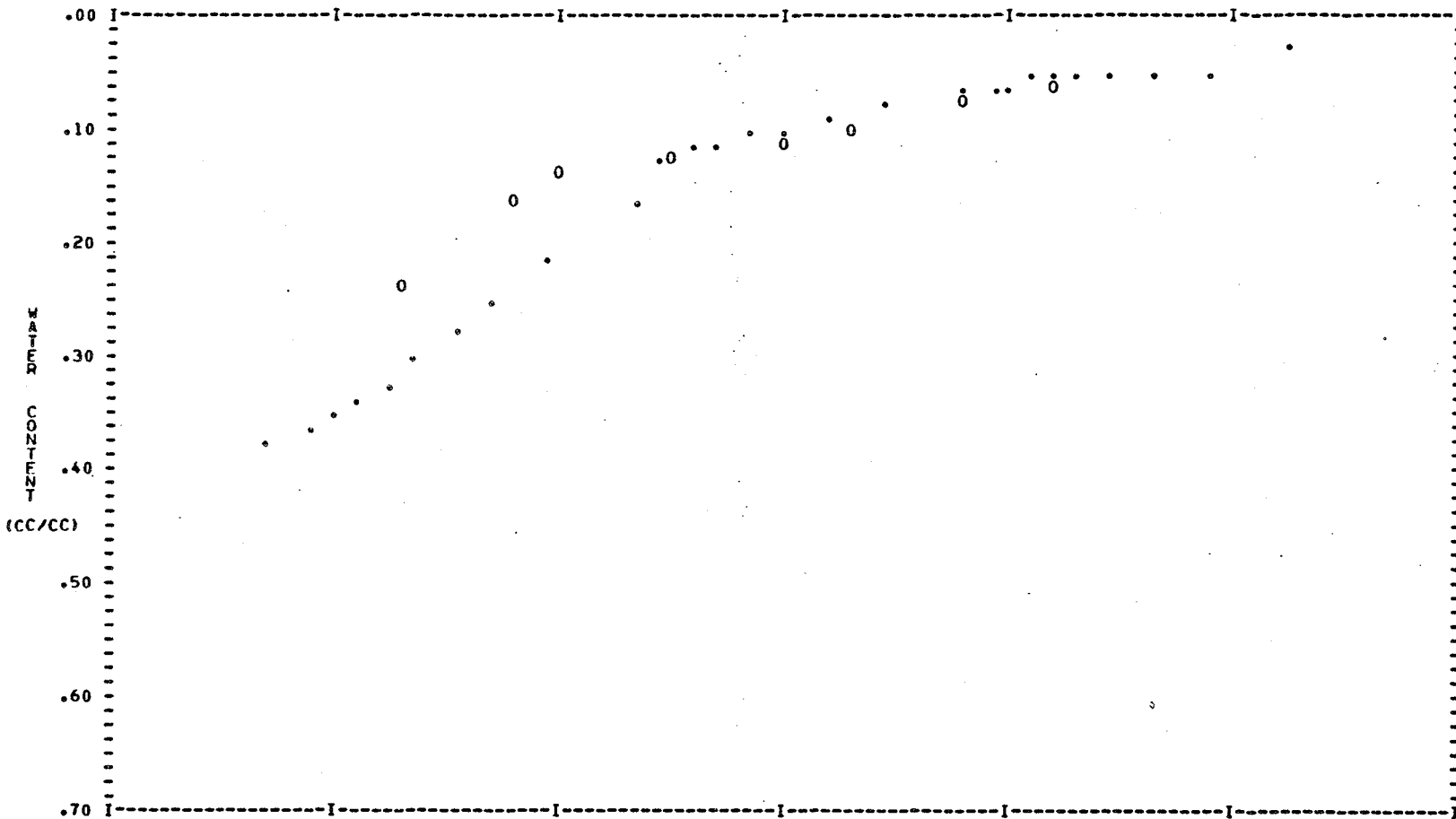
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.18627E+06
0.044	0.76936E+05
0.047	0.44100E+05
0.050	0.29183E+05
0.052	0.20999E+05
0.054	0.15967E+05
0.056	0.12662E+05
0.058	0.10226E+05
0.060	0.85599E+04
0.068	0.62333E+04
0.081	0.26741E+04
0.092	0.15040E+04
0.100	0.96775E+03
0.106	0.66795E+03
0.112	0.51082E+03
0.116	0.44022E+03
0.121	0.38780E+03
0.126	0.34022E+03
0.157	0.22733E+03
0.170	0.17400E+03
0.179	0.15555E+03
0.180	0.15555E+03
0.181	0.15555E+03
0.182	0.15555E+03
0.183	0.15555E+03
0.184	0.15555E+03
0.185	0.15555E+03
0.186	0.15555E+03
0.187	0.15555E+03
0.188	0.15555E+03
0.189	0.15555E+03
0.190	0.15555E+03
0.191	0.15555E+03
0.192	0.15555E+03
0.193	0.15555E+03
0.194	0.15555E+03
0.195	0.15555E+03
0.196	0.15555E+03
0.197	0.15555E+03
0.198	0.15555E+03
0.199	0.15555E+03
0.200	0.15555E+03
0.201	0.15555E+03
0.202	0.15555E+03
0.203	0.15555E+03
0.204	0.15555E+03
0.205	0.15555E+03
0.206	0.15555E+03
0.207	0.15555E+03
0.208	0.15555E+03
0.209	0.15555E+03
0.210	0.15555E+03
0.211	0.15555E+03
0.212	0.15555E+03
0.213	0.15555E+03
0.214	0.15555E+03
0.215	0.15555E+03
0.216	0.15555E+03
0.217	0.15555E+03
0.218	0.15555E+03
0.219	0.15555E+03
0.220	0.15555E+03
0.221	0.15555E+03
0.222	0.15555E+03
0.223	0.15555E+03
0.224	0.15555E+03
0.225	0.15555E+03
0.226	0.15555E+03
0.227	0.15555E+03
0.228	0.15555E+03
0.229	0.15555E+03
0.230	0.15555E+03
0.231	0.15555E+03
0.232	0.15555E+03
0.233	0.15555E+03
0.234	0.15555E+03
0.235	0.15555E+03
0.236	0.15555E+03
0.237	0.15555E+03
0.238	0.15555E+03
0.239	0.15555E+03
0.240	0.15555E+03
0.241	0.15555E+03
0.242	0.15555E+03
0.243	0.15555E+03
0.244	0.15555E+03
0.245	0.15555E+03
0.246	0.15555E+03
0.247	0.15555E+03
0.248	0.15555E+03
0.249	0.15555E+03
0.250	0.15555E+03

B-80

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-81

SOIL HORIZON NUMBER 40 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23753E+01

SOIL HORIZON NUMBER 41 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.75 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.044	0.600E+04
0.054	0.200E+04
0.096	0.100E+04
0.105	0.330E+03
0.112	0.100E+03
0.133	0.600E+02
0.210	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.5	0.055
2.00	5.8	0.003
3.00	6.0	0.002
4.00	6.3	0.003
5.00	6.6	0.003
6.00	6.9	0.003
7.00	7.2	0.003
8.00	7.5	0.003
9.00	7.7	0.003
10.00	8.0	0.003
20.00	10.3	0.023
30.00	13.2	0.029
40.00	16.1	0.029
50.00	18.4	0.023
60.00	20.0	0.016
70.00	21.3	0.013
80.00	22.8	0.016
90.00	24.9	0.020
100.00	27.4	0.025
200.00	47.4	0.200
300.00	59.0	0.117
400.00	67.2	0.082
500.00	73.6	0.064
600.00	78.7	0.051
700.00	82.7	0.041
800.00	86.1	0.034
900.00	88.9	0.029
1000.00	91.4	0.025
2000.00	100.0	0.086

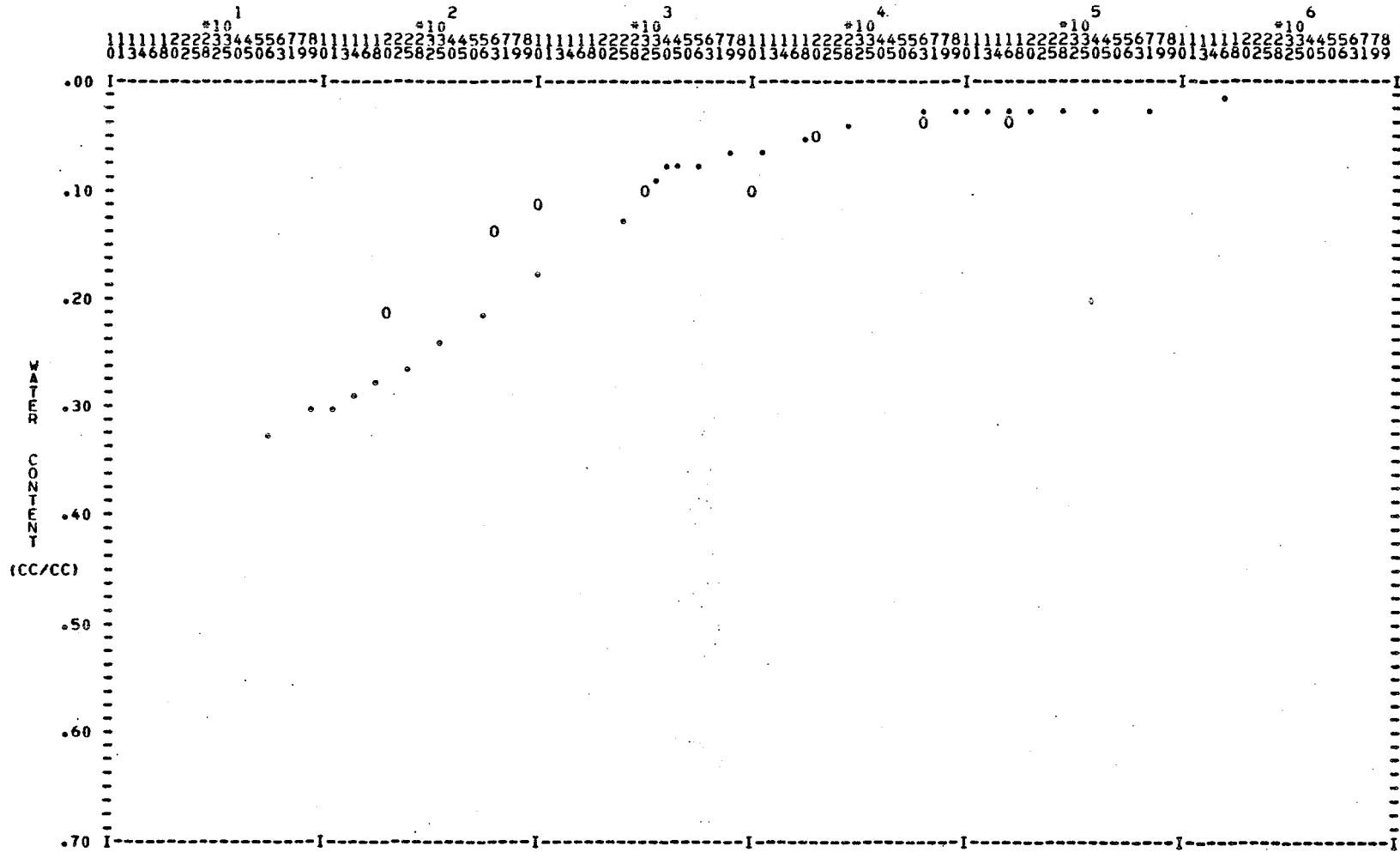
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.15872E+06
0.020	0.68250E+05
0.021	0.41047E+05
0.022	0.27822E+05
0.023	0.20305E+05
0.024	0.15582E+05
0.025	0.12401E+05
0.026	0.10145E+05
0.027	0.84806E+04
0.031	0.62373E+04
0.040	0.29223E+04
0.050	0.17277E+04
0.059	0.11161E+04
0.065	0.75432E+03
0.070	0.56121E+03
0.075	0.46466E+03
0.081	0.40076E+03
0.089	0.35112E+03
0.127	0.25361E+03
0.181	0.18267E+03
0.214	0.13740E+03
0.259	0.10653E+03
0.274	0.93637E+02
0.299	0.75402E+02
0.274	0.13740E+03
0.287	0.14447E+03
0.297	0.11509E+03
0.306	0.94064E+02
0.325	0.58167E+02

B-82

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-83

SOIL HORIZON NUMBER 41 O MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.32013E+01

SOIL HORIZON NUMBER 42 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.46 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.054	0.600E+04
0.073	0.200E+04
0.200	0.100E+04
0.238	0.330E+03
0.331	0.100E+03
0.350	0.600E+02
0.399	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.1	0.061
2.00	6.4	0.003
3.00	6.7	0.003
4.00	7.2	0.004
5.00	7.6	0.004
6.00	8.0	0.004
7.00	8.3	0.003
8.00	8.6	0.003
9.00	8.9	0.003
10.00	9.1	0.002
20.00	10.7	0.016
30.00	11.9	0.012
40.00	14.5	0.025
50.00	18.3	0.038
60.00	25.3	0.070
70.00	34.5	0.092
80.00	43.3	0.088
90.00	50.7	0.074
100.00	56.2	0.055
200.00	87.4	0.312
300.00	93.1	0.057
400.00	94.7	0.016
500.00	95.8	0.011
600.00	96.7	0.009
700.00	97.5	0.008
800.00	98.2	0.007
900.00	98.7	0.005
1000.00	99.1	0.004
2000.00	100.0	0.009

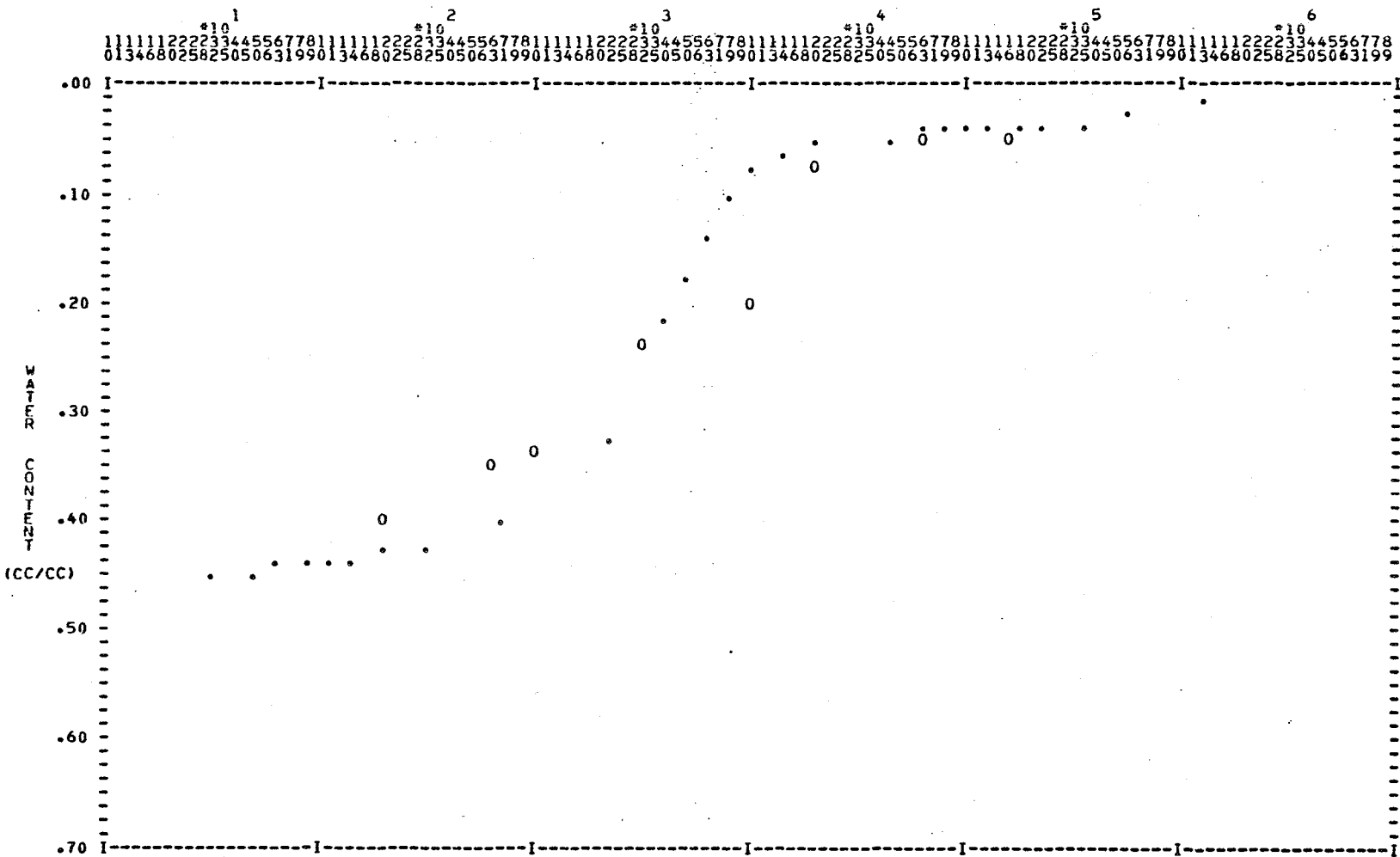
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.014	0.12552E+06
0.030	0.57809E+05
0.031	0.35387E+05
0.033	0.23663E+05
0.035	0.16973E+05
0.036	0.12803E+05
0.038	0.10026E+05
0.039	0.80782E+04
0.040	0.66574E+04
0.044	0.46258E+04
0.051	0.19808E+04
0.059	0.13376E+04
0.074	0.97397E+03
0.098	0.79824E+03
0.134	0.64639E+03
0.175	0.51197E+03
0.211	0.40645E+03
0.240	0.32313E+03
0.322	0.21925E+03
0.405	0.71215E+02
0.422	0.33060E+02
0.428	0.20687E+02
0.432	0.14633E+02
0.436	0.10955E+02
0.439	0.84228E+01
0.442	0.66058E+01
0.444	0.52471E+01
0.447	0.30091E+01

B-84

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 42

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.32144E+01

B-85

SOIL HORIZON NUMBER 43 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.59 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.150E+05
0.032	0.600E+04
0.049	0.200E+04
0.130	0.100E+04
0.186	0.330E+03
0.242	0.100E+03
0.264	0.600E+02
0.323	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	4.7	0.006
3.00	5.3	0.006
4.00	6.0	0.007
5.00	6.6	0.006
6.00	7.2	0.006
7.00	7.7	0.005
8.00	8.1	0.005
9.00	8.5	0.004
10.00	8.9	0.004
20.00	11.3	0.024
30.00	13.4	0.021
40.00	16.3	0.029
50.00	19.8	0.035
60.00	27.6	0.078
70.00	38.7	0.111
80.00	49.2	0.105
90.00	57.6	0.084
100.00	63.3	0.057
200.00	89.4	0.261
300.00	93.5	0.041
400.00	94.8	0.013
500.00	95.8	0.010
600.00	96.7	0.009
700.00	97.5	0.008
800.00	98.2	0.007
900.00	98.7	0.006
1000.00	99.2	0.005
2000.00	100.0	0.008

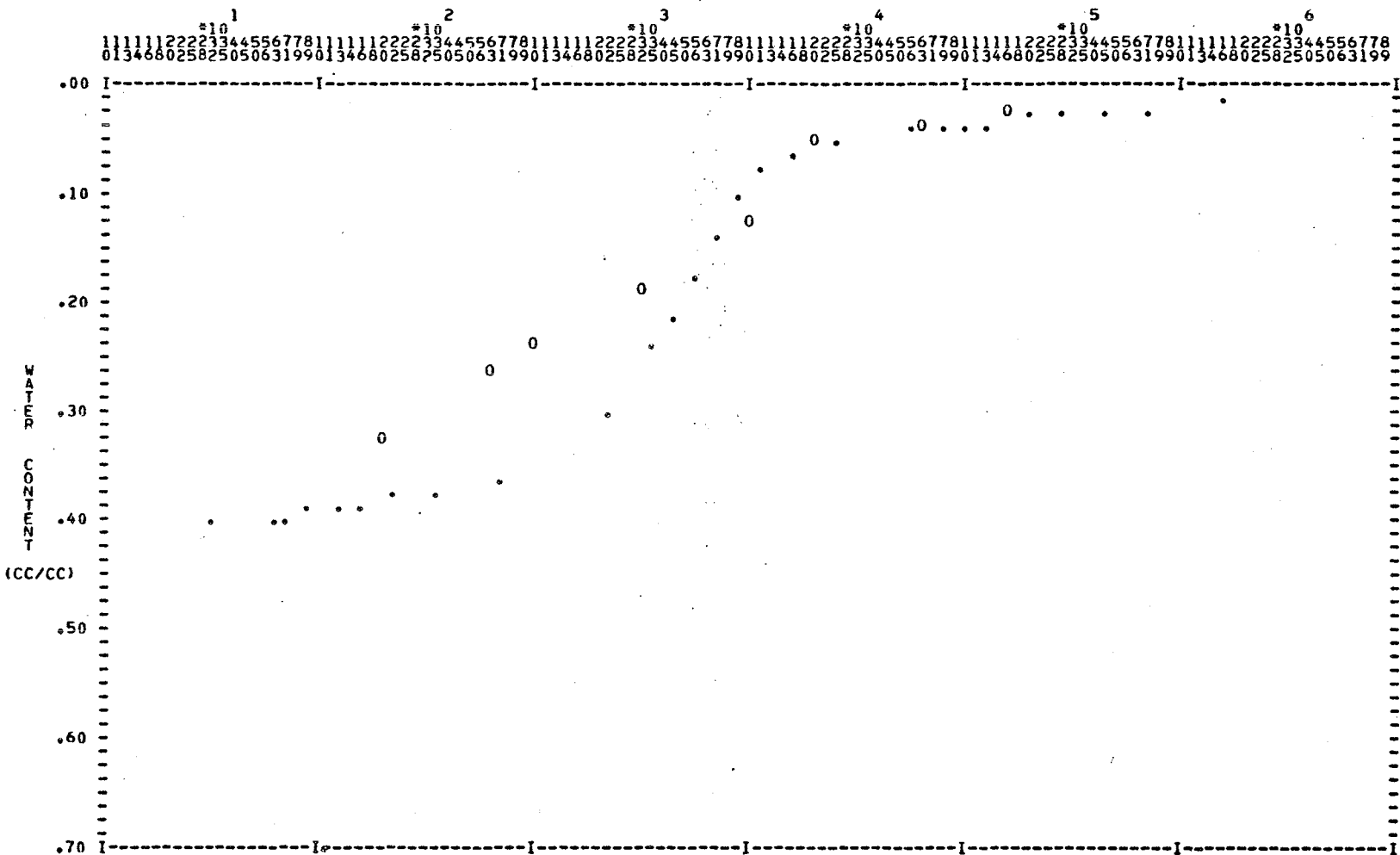
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.15898E+06
0.020	0.70862E+05
0.033	0.42676E+05
0.050	0.28404E+05
0.070	0.20329E+05
0.100	0.15317E+05
0.150	0.11986E+05
0.220	0.96533E+04
0.330	0.79534E+04
0.500	0.55266E+04
0.700	0.24132E+04
0.900	0.15197E+04
0.009	0.10593E+04
0.020	0.89978E+03
0.033	0.74065E+03
0.050	0.58583E+03
0.070	0.46966E+03
0.100	0.35925E+03
0.150	0.23431E+03
0.220	0.17395E+03
0.330	0.95042E+02
0.500	0.22659E+02
0.700	0.16134E+02
0.900	0.12073E+02
0.009	0.93408E+01
0.020	0.74136E+01
0.033	0.60009E+01
0.050	0.32536E+01

B-86

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 43

○ MEASURED ; ● PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.31733E+01

SOIL HORIZON NUMBER 44 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.065	0.150E+05
0.077	0.600E+04
0.095	0.200E+04
0.177	0.100E+04
0.220	0.330E+03
0.262	0.100E+03
0.282	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.0	0.110
2.00	11.6	0.006
3.00	12.1	0.005
4.00	12.7	0.006
5.00	13.3	0.006
6.00	13.8	0.005
7.00	14.3	0.005
8.00	14.7	0.004
9.00	15.0	0.004
10.00	15.4	0.003
20.00	17.5	0.021
30.00	19.3	0.018
40.00	21.0	0.026
50.00	23.2	0.033
60.00	25.3	0.071
70.00	27.7	0.100
80.00	31.0	0.095
90.00	35.4	0.077
100.00	39.7	0.053
200.00	50.5	0.258
300.00	64.4	0.039
400.00	75.5	0.011
500.00	84.4	0.009
600.00	91.1	0.007
700.00	97.8	0.006
800.00	98.3	0.005
900.00	98.8	0.005
1000.00	99.2	0.004
2000.00	100.0	0.008

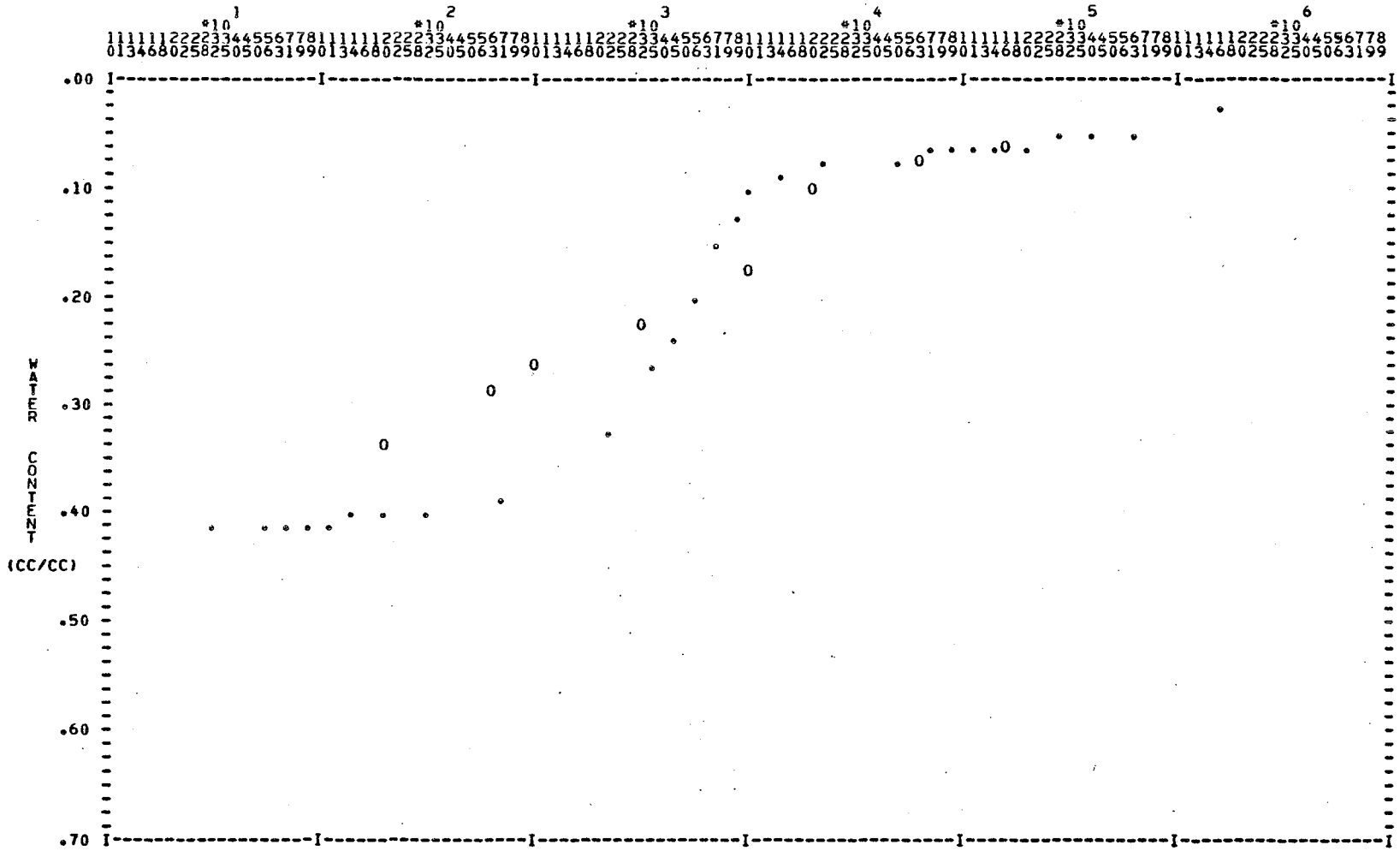
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.14988E+06
0.050	0.66752E+05
0.052	0.40185E+05
0.055	0.26742E+05
0.057	0.19139E+05
0.059	0.14420E+05
0.061	0.11283E+05
0.062	0.90873E+04
0.064	0.74869E+04
0.069	0.52023E+04
0.077	0.22588E+04
0.086	0.14326E+04
0.099	0.10055E+04
0.120	0.84933E+03
0.156	0.69775E+03
0.197	0.55238E+03
0.233	0.43568E+03
0.260	0.34132E+03
0.325	0.22499E+03
0.387	0.17037E+03
0.396	0.32678E+02
0.402	0.21073E+02
0.408	0.14921E+02
0.411	0.11143E+02
0.413	0.86396E+01
0.414	0.68927E+01
0.415	0.56229E+01
0.417	0.31290E+01

B-88

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-89

SOIL HORIZON NUMBER 44

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.35270E+01

SOIL HORIZON NUMBER 45 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150E+05
0.077	0.600E+04
0.090	0.200E+04
0.141	0.100E+04
0.164	0.330E+03
0.223	0.100E+03
0.268	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.2	0.102
2.00	10.8	0.006
3.00	11.3	0.005
4.00	11.9	0.006
5.00	12.4	0.005
6.00	12.9	0.005
7.00	13.3	0.004
8.00	13.7	0.004
9.00	14.1	0.003
10.00	14.4	0.003
20.00	16.4	0.020
30.00	17.8	0.014
40.00	20.1	0.023
50.00	23.3	0.032
60.00	30.0	0.067
70.00	39.4	0.094
80.00	48.4	0.090
90.00	55.9	0.075
100.00	61.3	0.054
200.00	90.5	0.292
300.00	94.8	0.043
400.00	95.8	0.010
500.00	96.6	0.008
600.00	97.3	0.007
700.00	98.0	0.006
800.00	98.5	0.005
900.00	98.9	0.004
1000.00	99.3	0.004
2000.00	100.0	0.007

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.14314E+06
0.049	0.63418E+05
0.051	0.38056E+05
0.054	0.25299E+05
0.056	0.18096E+05
0.058	0.13629E+05
0.060	0.10662E+05
0.061	0.85849E+04
0.063	0.70718E+04
0.068	0.49112E+04
0.076	0.20685E+04
0.084	0.13330E+04
0.096	0.65395E+03
0.118	0.40322E+03
0.153	0.25858E+03
0.194	0.2242E+03
0.230	0.41390E+02
0.259	0.32714E+03
0.335	0.21985E+03
0.409	0.68574E+02
0.421	0.30597E+02
0.425	0.19822E+02
0.428	0.14189E+02
0.431	0.10619E+02
0.434	0.82122E+01
0.436	0.5125E+01
0.438	0.2649E+01
0.440	0.29129E+01

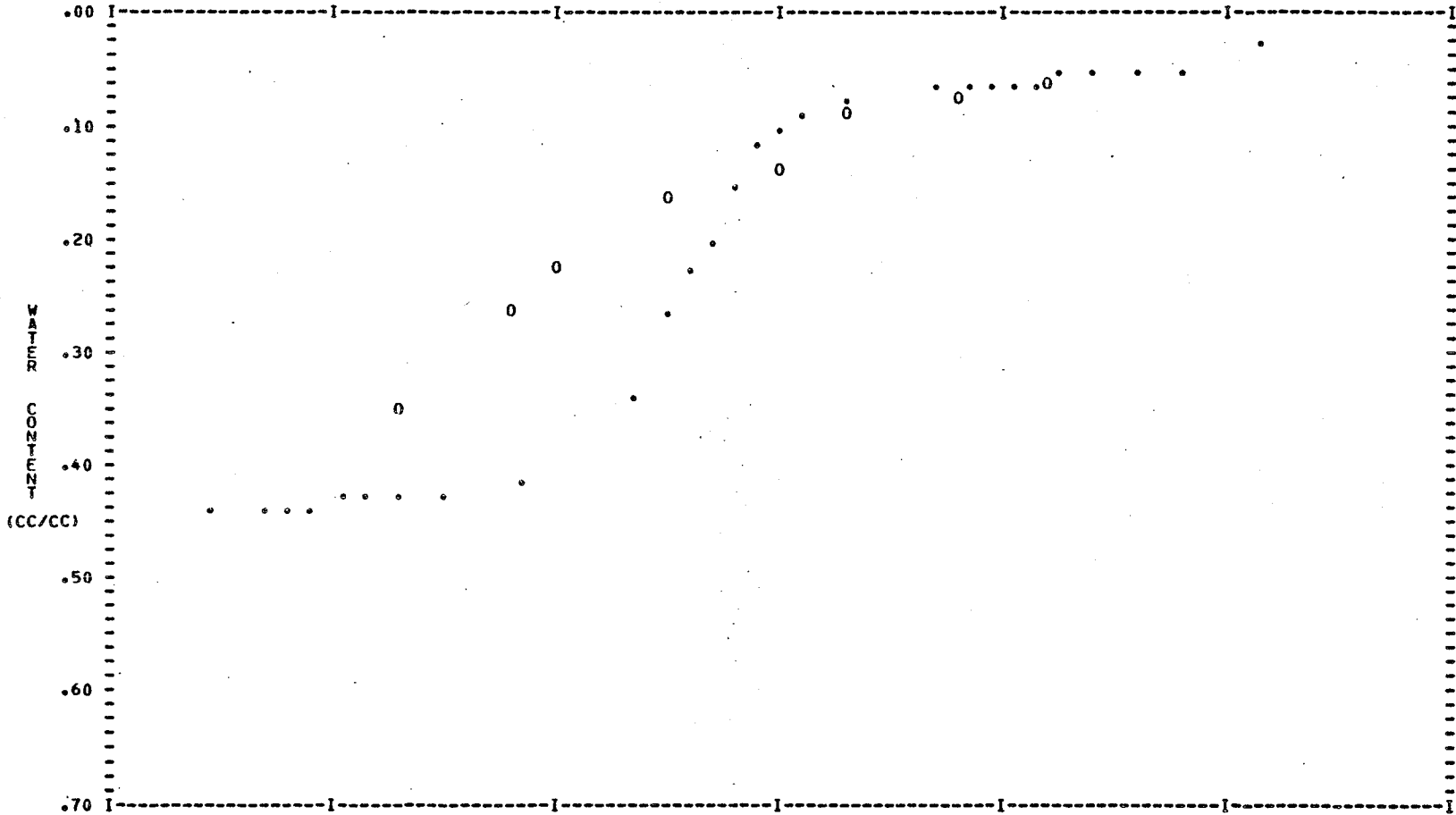
B-90

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

^{*10}1 ^{*10}2 ^{*10}3 ^{*10}4 ^{*10}5 ^{*10}6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199

B-91



SOIL HORIZON NUMBER 45

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.37829E+01

SOIL HORIZON NUMBER 46 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.43 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.070	0.600E+04
0.086	0.200E+04
0.149	0.100E+04
0.176	0.330E+03
0.232	0.100E+03
0.193	0.600E+02
0.320	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.2	0.102
2.00	10.8	0.006
3.00	11.3	0.005
4.00	11.9	0.006
5.00	12.4	0.005
6.00	12.8	0.005
7.00	13.3	0.004
8.00	13.6	0.004
9.00	13.9	0.003
10.00	14.2	0.003
20.00	16.1	0.019
30.00	16.3	0.002
40.00	17.9	0.016
50.00	21.8	0.039
60.00	28.4	0.066
70.00	36.4	0.080
80.00	44.1	0.076
90.00	50.7	0.066
100.00	56.0	0.053
200.00	91.6	0.356
300.00	97.0	0.054
400.00	97.4	0.004
500.00	97.7	0.003
600.00	98.2	0.005
700.00	98.6	0.004
800.00	98.9	0.003
900.00	99.2	0.003
1000.00	99.4	0.002
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

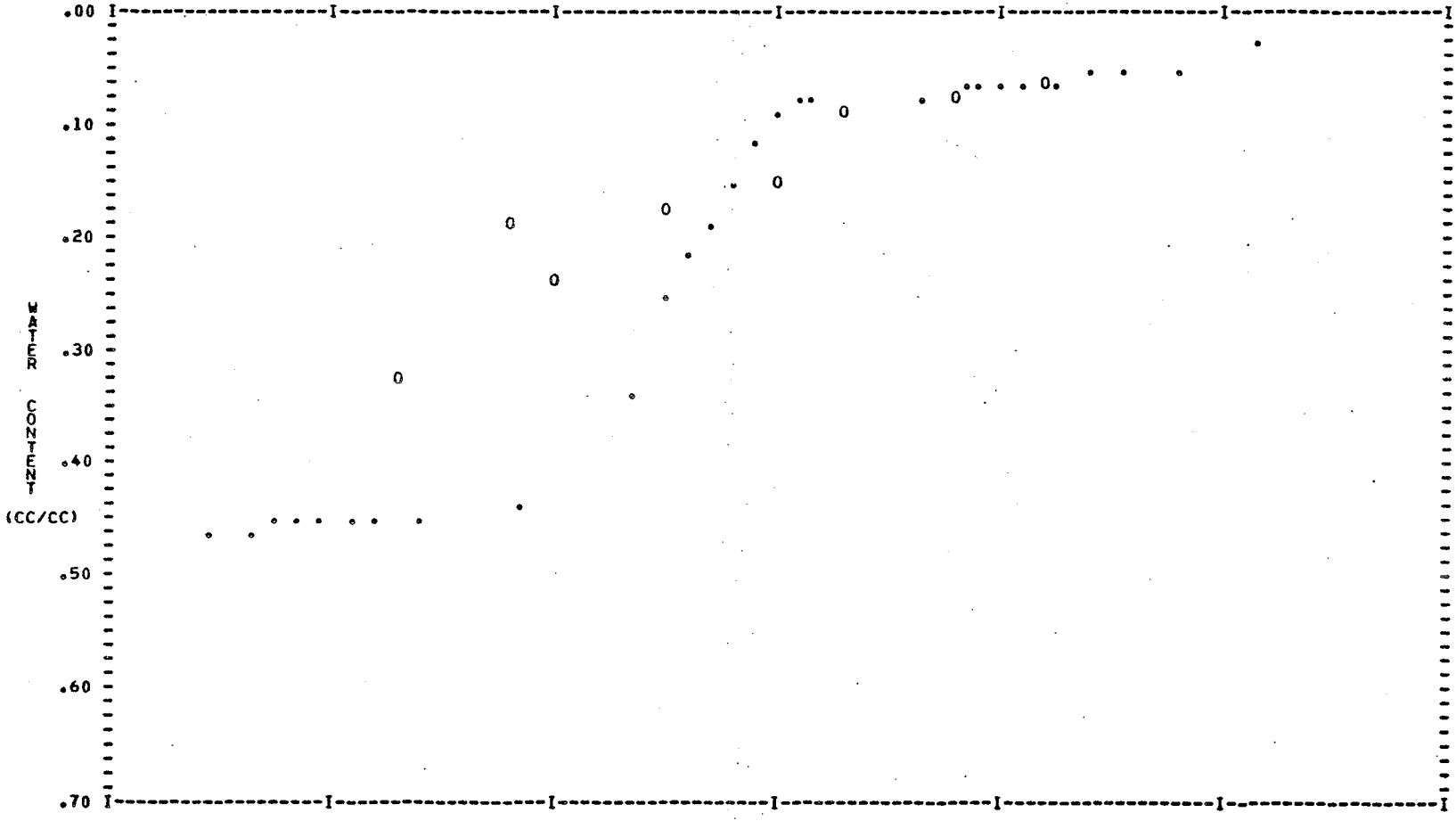
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.13977E+06
0.051	0.61122E+05
0.053	0.36377E+05
0.056	0.24118E+05
0.058	0.17228E+05
0.060	0.12965E+05
0.062	0.10137E+05
0.063	0.81599E+04
0.065	0.67201E+04
0.070	0.46652E+04
0.075	0.14061E+04
0.079	0.11978E+04
0.091	0.95442E+03
0.116	0.77151E+03
0.149	0.61495E+03
0.185	0.48716E+03
0.218	0.38938E+03
0.246	0.31387E+03
0.340	0.21972E+03
0.434	0.68905E+02
0.447	0.24711E+02
0.449	0.16192E+02
0.451	0.12531E+02
0.453	0.93888E+01
0.455	0.72496E+01
0.456	0.57284E+01
0.457	0.46043E+01
0.459	0.27231E+01

B-92

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-93

SOIL HORIZON NUMBER 46

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.33481E+01

SOIL HORIZON NUMBER 47 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.46 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.093	0.150E+05
0.136	0.600E+04
0.229	0.200E+04
0.318	0.100E+04
0.333	0.330E+03
0.371	0.100E+03
0.385	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.6	0.096
2.00	14.3	0.047
3.00	17.7	0.034
4.00	20.8	0.031
5.00	23.6	0.029
6.00	26.2	0.026
7.00	28.6	0.024
8.00	30.8	0.022
9.00	32.9	0.021
10.00	34.8	0.019
20.00	49.4	0.146
30.00	63.4	0.140
40.00	74.6	0.113
50.00	81.1	0.065
60.00	84.7	0.036
70.00	87.3	0.026
80.00	89.1	0.018
90.00	90.2	0.011
100.00	90.8	0.006
200.00	93.4	0.026
300.00	95.0	0.016
400.00	96.1	0.011
500.00	97.0	0.009
600.00	97.7	0.007
700.00	98.3	0.006
800.00	98.7	0.005
900.00	99.1	0.004
1000.00	99.4	0.003
2000.00	100.0	0.006

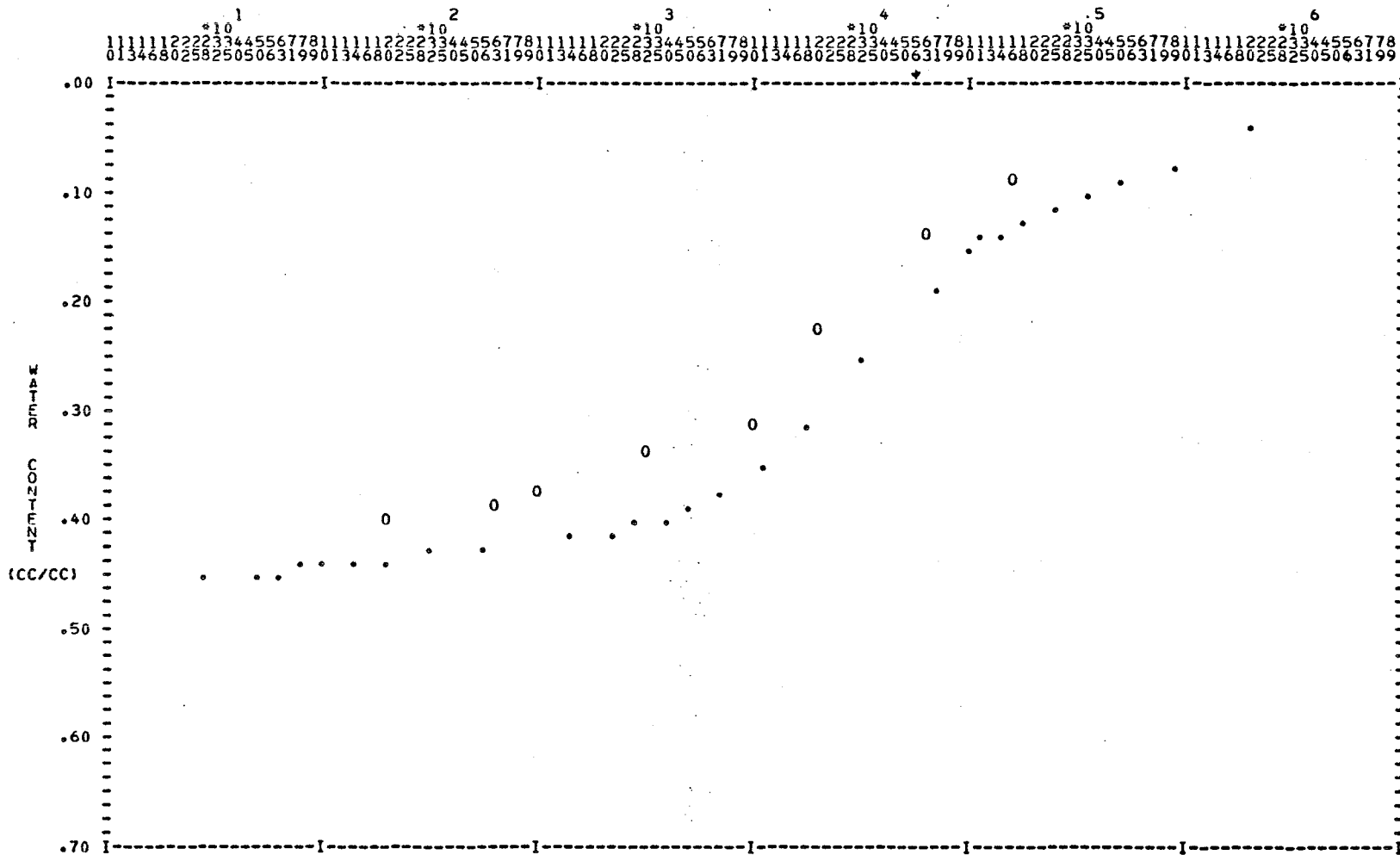
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.21093E+06
0.072	0.88867E+05
0.086	0.51713E+05
0.100	0.34239E+05
0.112	0.24254E+05
0.123	0.18585E+05
0.134	0.14685E+05
0.143	0.11855E+05
0.152	0.98855E+04
0.169	0.70555E+04
0.253	0.31365E+04
0.310	0.17754E+04
0.350	0.10762E+04
0.372	0.70341E+03
0.386	0.50762E+03
0.396	0.37745E+03
0.402	0.28465E+03
0.406	0.21271E+03
0.414	0.13716E+03
0.423	0.55927E+02
0.429	0.30842E+02
0.434	0.19787E+02
0.437	0.13874E+02
0.440	0.10261E+02
0.442	0.78691E+01
0.444	0.61990E+01
0.446	0.49822E+01
0.448	0.27860E+01

B-94

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 47

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.49374E+01

SOIL HORIZON NUMBER 48 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.124	0.150E+05
0.165	0.600E+04
0.253	0.200E+04
0.332	0.100E+04
0.346	0.330E+03
0.361	0.100E+03
0.374	0.600E+02
0.398	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.5	0.145
2.00	20.2	0.057
3.00	24.2	0.040
4.00	27.7	0.036
5.00	30.9	0.032
6.00	33.7	0.028
7.00	36.3	0.026
8.00	38.6	0.023
9.00	40.8	0.022
10.00	42.8	0.020
20.00	57.5	0.147
30.00	70.5	0.130
40.00	80.7	0.102
50.00	86.5	0.058
60.00	89.7	0.032
70.00	91.9	0.022
80.00	93.4	0.014
90.00	94.3	0.009
100.00	94.7	0.004
200.00	96.4	0.017
300.00	97.3	0.009
400.00	97.9	0.006
500.00	98.4	0.005
600.00	98.8	0.004
700.00	99.1	0.003
800.00	99.3	0.002
900.00	99.5	0.002
1000.00	99.6	0.001
2000.00	100.0	0.004

PREDICTED MOISTURE CHARACTERISTIC DATA

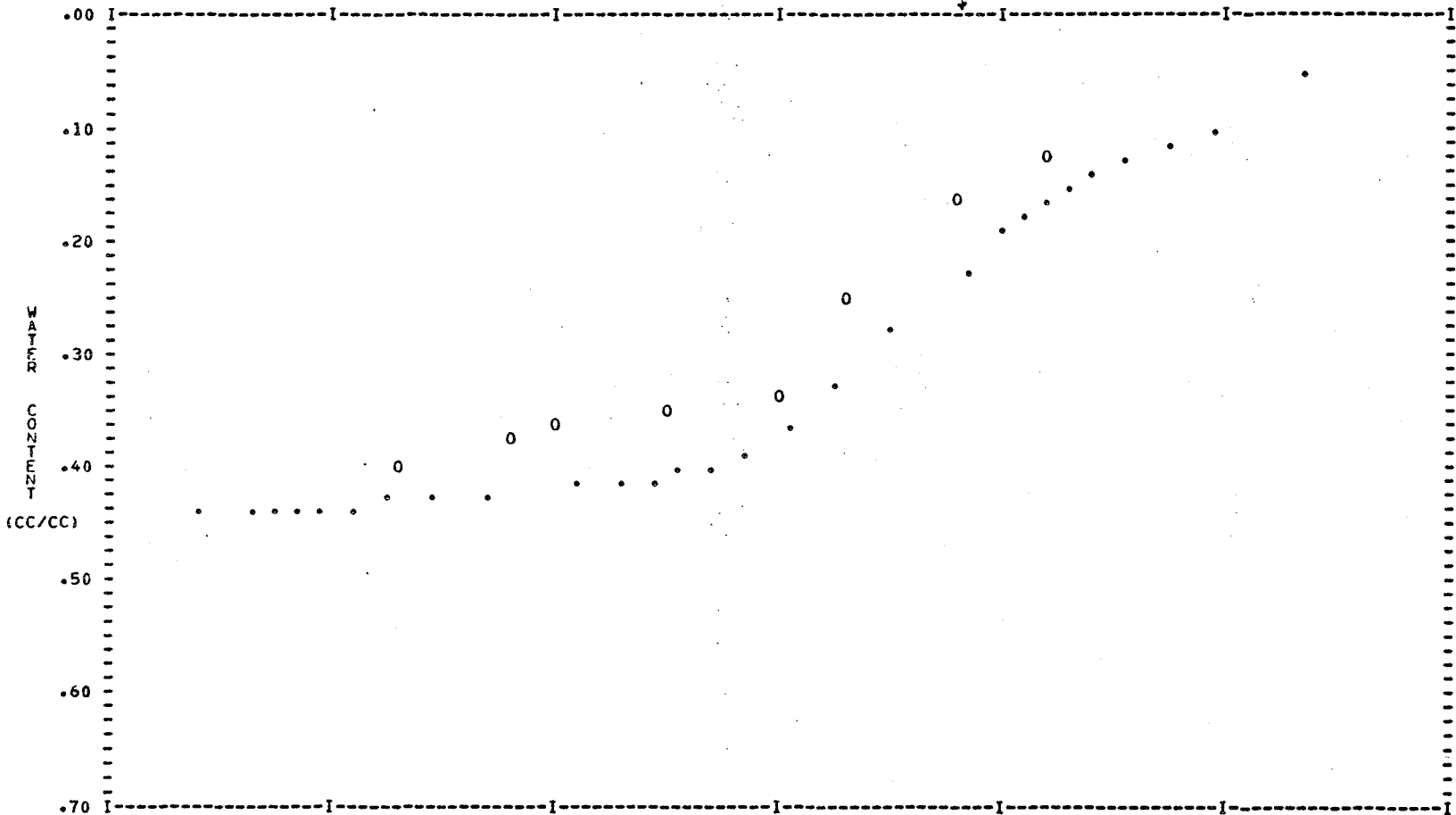
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.2245E+06
0.097	0.9396E+05
0.114	0.5421E+05
0.128	0.3571E+05
0.141	0.2552E+05
0.153	0.1926E+05
0.164	0.1512E+05
0.174	0.1223E+05
0.183	0.1013E+05
0.219	0.7228E+04
0.280	0.3165E+04
0.331	0.1781E+04
0.366	0.1080E+04
0.386	0.7045E+03
0.398	0.5040E+03
0.406	0.3718E+03
0.411	0.2778E+03
0.418	0.2044E+03
0.418	0.1290E+03
0.424	0.5130E+02
0.427	0.2823E+02
0.430	0.1800E+02
0.432	0.1255E+02
0.433	0.9230E+01
0.434	0.7050E+01
0.435	0.5550E+01
0.436	0.4420E+01
0.437	0.2639E+01

B-96

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-97

SOIL HORIZON NUMBER 48 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.57061E+01

SOIL HORIZON NUMBER 49 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.171	0.150E+05
0.195	0.600E+04
0.283	0.200E+04
0.358	0.100E+04
0.364	0.330E+03
0.372	0.100E+03
0.384	0.600E+02
0.405	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	26.9	0.269
2.00	30.1	0.032
3.00	32.5	0.024
4.00	34.7	0.023
5.00	36.9	0.021
6.00	38.9	0.020
7.00	40.7	0.018
8.00	42.4	0.017
9.00	44.1	0.016
10.00	45.6	0.015
20.00	57.6	0.120
30.00	70.0	0.124
40.00	80.4	0.104
50.00	86.5	0.061
60.00	90.1	0.036
70.00	92.7	0.026
80.00	94.5	0.018
90.00	95.6	0.011
100.00	96.1	0.005
200.00	97.8	0.017
300.00	98.5	0.007
400.00	98.9	0.004
500.00	99.2	0.003
600.00	99.4	0.002
700.00	99.6	0.002
800.00	99.8	0.001
900.00	99.8	0.001
1000.00	99.9	0.001
2000.00	100.0	0.001

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.20051E+06
0.137	0.84992E+05
0.147	0.49841E+05
0.157	0.33158E+05
0.166	0.23862E+05
0.174	0.18111E+05
0.182	0.14284E+05
0.189	0.11598E+05
0.196	0.96331E+04
0.226	0.69535E+04
0.279	0.31332E+04
0.329	0.17883E+04
0.365	0.10895E+04
0.386	0.71791E+03
0.400	0.52041E+03
0.410	0.38699E+03
0.416	0.29013E+03
0.419	0.21225E+03
0.424	0.12930E+03
0.430	0.48345E+02
0.432	0.26262E+02
0.434	0.16529E+02
0.435	0.11467E+02
0.436	0.84743E+01
0.436	0.64021E+01
0.437	0.48880E+01
0.437	0.36988E+01
0.438	0.20281E+01

B-98

ALPHA = 1.38

SOIL HORIZON NUMBER 50 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.65 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.147	0.150E+05
0.173	0.600E+04
0.251	0.200E+04
0.330	0.100E+04
0.343	0.330E+03
0.353	0.100E+03
0.365	0.600E+02
0.376	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	15.5	0.155
2.00	18.8	0.033
3.00	21.2	0.024
4.00	23.4	0.023
5.00	25.6	0.021
6.00	27.6	0.020
7.00	29.4	0.019
8.00	31.2	0.018
9.00	32.6	0.017
10.00	34.6	0.016
20.00	47.8	0.132
30.00	60.7	0.129
40.00	71.3	0.107
50.00	78.2	0.069
60.00	82.8	0.046
70.00	86.5	0.036
80.00	89.2	0.027
90.00	91.0	0.018
100.00	92.0	0.010
200.00	95.7	0.037
300.00	97.1	0.013
400.00	97.9	0.009
500.00	98.5	0.006
600.00	98.9	0.004
700.00	99.2	0.003
800.00	99.4	0.002
900.00	99.6	0.002
1000.00	99.7	0.001
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.22947E+06
0.075	0.96520E+05
0.084	0.56370E+05
0.092	0.37548E+05
0.100	0.27043E+05
0.108	0.20607E+05
0.114	0.16292E+05
0.121	0.13257E+05
0.127	0.11034E+05
0.155	0.80292E+04
0.205	0.35816E+04
0.249	0.20370E+04
0.282	0.12626E+04
0.304	0.85558E+03
0.319	0.62868E+03
0.331	0.47342E+03
0.340	0.36076E+03
0.345	0.27278E+03
0.354	0.16983E+03
0.364	0.62701E+02
0.368	0.34061E+02
0.371	0.21146E+02
0.372	0.14409E+02
0.374	0.10582E+02
0.375	0.79981E+01
0.376	0.61507E+01
0.376	0.47503E+01
0.377	0.28322E+01

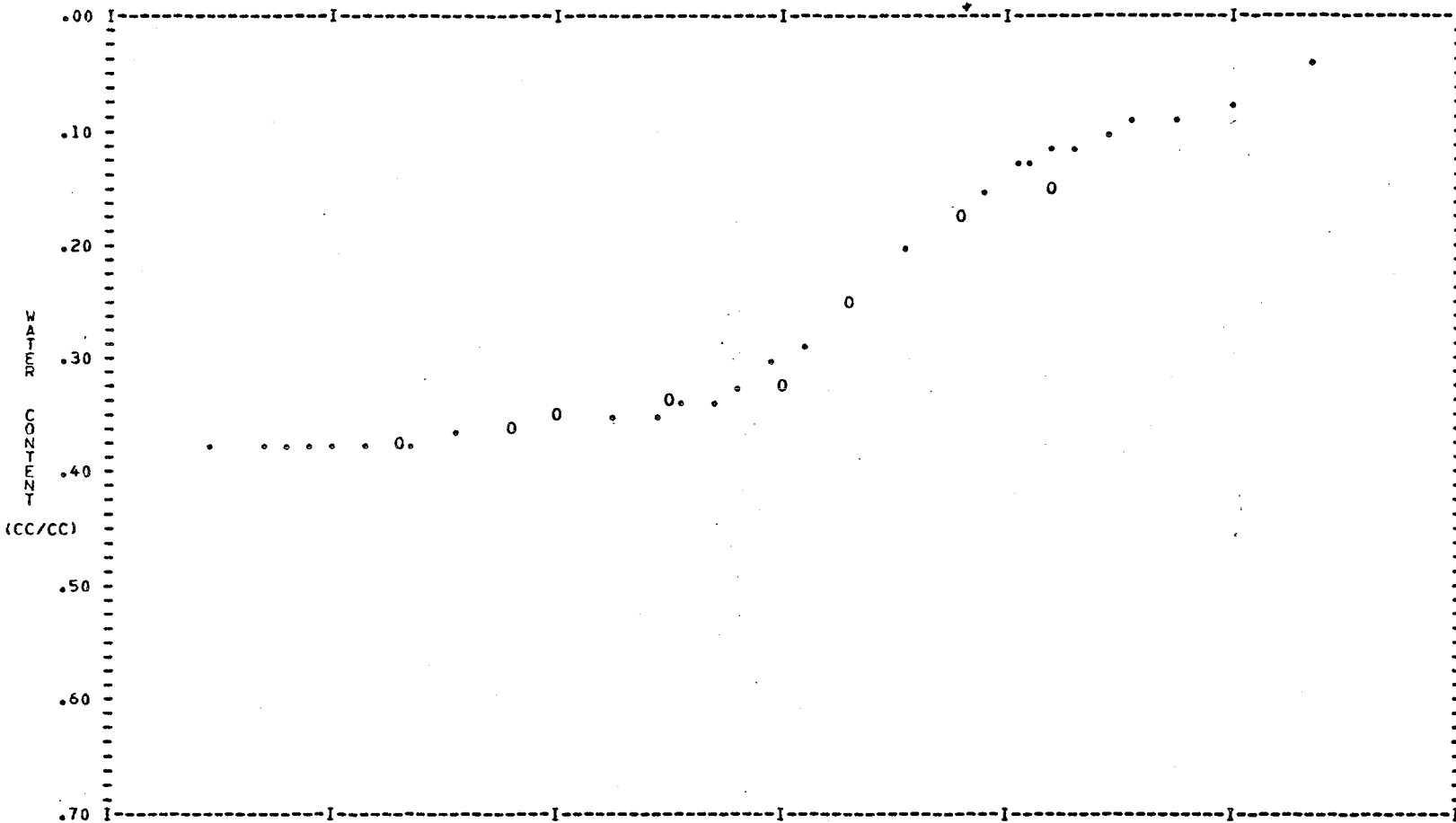
B-100

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199

B-101



SOIL HORIZON NUMBER 50

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.15471E+01

SOIL HORIZON NUMBER 51 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.87 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.118	0.150E+05
0.142	0.600E+04
0.209	0.200E+04
0.206	0.100E+04
0.221	0.330E+03
0.239	0.100E+03
0.249	0.600E+02
0.260	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.6	0.106
2.00	13.0	0.024
3.00	14.6	0.016
4.00	16.1	0.015
5.00	17.6	0.014
6.00	19.0	0.014
7.00	20.3	0.014
8.00	21.6	0.013
9.00	22.9	0.013
10.00	24.2	0.012
20.00	35.1	0.109
30.00	45.5	0.104
40.00	54.0	0.084
50.00	59.6	0.056
60.00	63.6	0.040
70.00	66.9	0.033
80.00	69.6	0.027
90.00	71.7	0.021
100.00	73.4	0.017
200.00	82.7	0.093
300.00	87.2	0.045
400.00	90.1	0.029
500.00	92.2	0.021
600.00	93.8	0.016
700.00	95.0	0.012
800.00	96.0	0.010
900.00	96.7	0.008
1000.00	97.4	0.007
2000.00	100.0	0.026

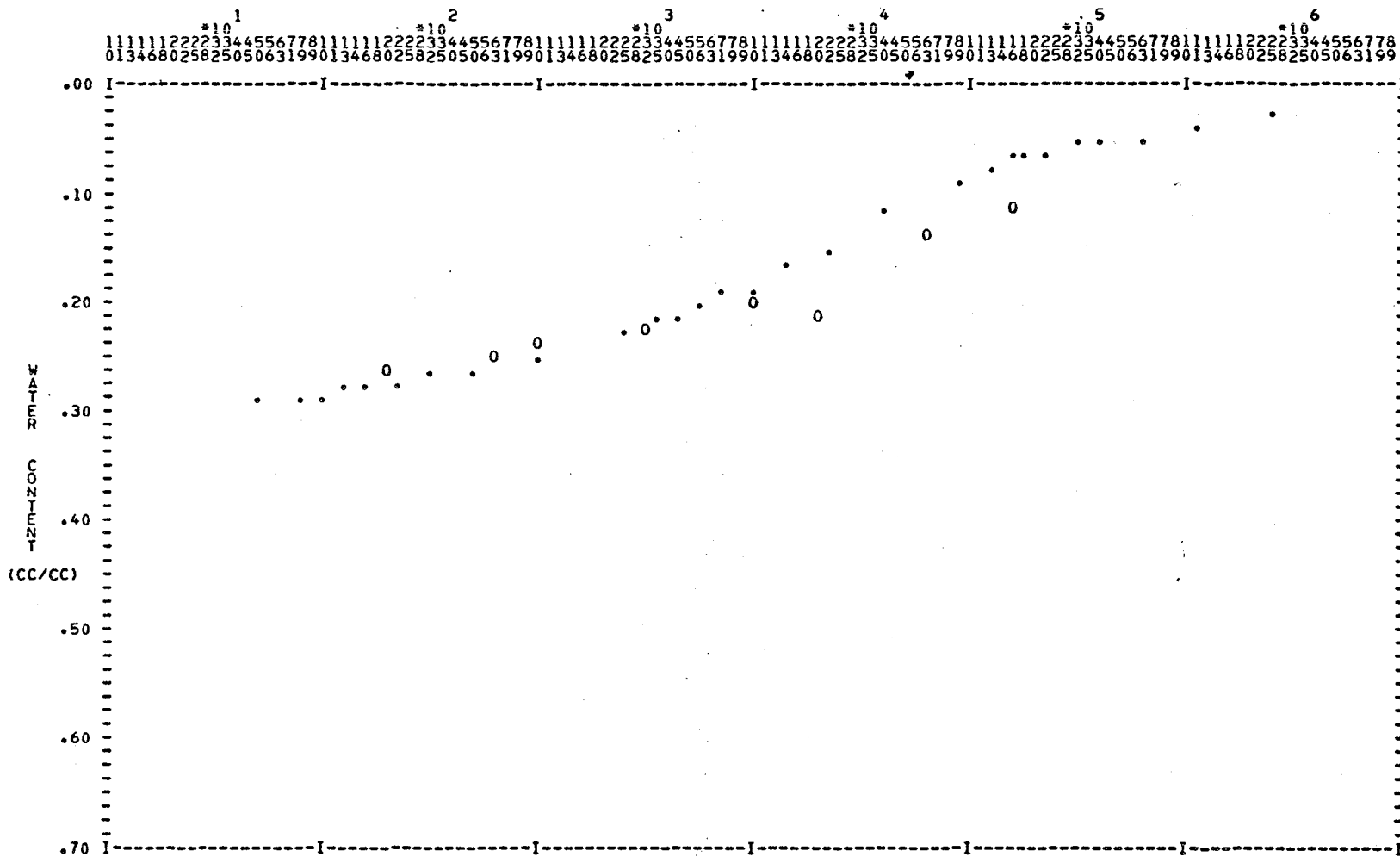
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.25993E+06
0.041	0.10813E+06
0.045	0.62880E+05
0.050	0.42065E+05
0.054	0.30510E+05
0.058	0.23337E+05
0.062	0.18537E+05
0.066	0.15148E+05
0.069	0.12654E+05
0.087	0.93311E+04
0.119	0.41470E+04
0.146	0.23486E+04
0.167	0.14665E+04
0.181	0.10027E+04
0.192	0.74323E+03
0.201	0.57054E+03
0.208	0.44946E+03
0.214	0.36094E+03
0.230	0.24341E+03
0.250	0.95091E+02
0.261	0.51751E+02
0.268	0.32725E+02
0.274	0.22589E+02
0.278	0.16556E+02
0.281	0.12668E+02
0.284	0.10010E+02
0.286	0.81093E+01
0.291	0.51457E+01

B-102

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 51

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(P SIM)-LOG(P SIP))) = 0.27947E+01

B-103

SOIL HORIZON NUMBER 52 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.84 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.132	0.150E+05
0.167	0.600E+04
0.239	0.200E+04
0.140	0.100E+04
0.147	0.330E+03
0.164	0.100E+03
0.180	0.600E+02
0.221	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	18.1	0.181
2.00	21.7	0.036
3.00	24.0	0.023
4.00	25.8	0.018
5.00	27.3	0.015
6.00	28.5	0.013
7.00	29.6	0.011
8.00	30.6	0.010
9.00	31.5	0.009
10.00	32.3	0.008
20.00	37.9	0.056
30.00	41.7	0.038
40.00	44.6	0.028
50.00	46.5	0.019
60.00	47.5	0.010
70.00	48.0	0.004
80.00	48.3	0.003
90.00	48.7	0.004
100.00	49.2	0.005
200.00	55.5	0.063
300.00	61.6	0.061
400.00	67.1	0.054
500.00	71.7	0.046
600.00	75.8	0.041
700.00	79.4	0.036
800.00	82.5	0.031
900.00	85.2	0.027
1000.00	87.6	0.024
2000.00	100.0	0.124

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.27393E+06
0.070	0.11247E+06
0.076	0.63329E+05
0.081	0.41155E+05
0.085	0.29141E+05
0.089	0.21849E+05
0.092	0.17065E+05
0.095	0.13744E+05
0.098	0.11337E+05
0.107	0.79933E+04
0.122	0.33361E+04
0.132	0.18577E+04
0.139	0.11664E+04
0.144	0.75268E+03
0.146	0.49361E+03
0.147	0.36944E+03
0.148	0.31566E+03
0.150	0.28313E+03
0.160	0.22001E+03
0.179	0.98275E+02
0.197	0.56668E+02
0.212	0.37625E+02
0.225	0.26344E+02
0.237	0.19801E+02
0.247	0.15415E+02
0.256	0.12331E+02
0.264	0.10079E+02
0.287	0.67397E+01

B-104

ALPHA = 1.38

SOIL HORIZON NUMBER 53 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.45 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.133	0.150E+05
0.159	0.600E+04
0.203	0.200E+04
0.315	0.100E+04
0.331	0.330E+03
0.337	0.100E+03
0.368	0.600E+02
0.397	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.5	0.085
2.00	12.5	0.039
3.00	17.0	0.028
4.00	18.0	0.027
5.00	20.0	0.025
6.00	22.0	0.023
7.00	24.0	0.021
8.00	26.0	0.018
9.00	30.0	0.017
10.00	33.0	0.017
20.00	57.0	0.036
30.00	68.0	0.010
40.00	74.0	0.058
50.00	77.0	0.030
60.00	79.0	0.022
70.00	80.0	0.016
80.00	82.0	0.012
90.00	83.0	0.009
100.00	88.0	0.054
200.00	91.0	0.030
300.00	93.0	0.021
400.00	95.0	0.016
500.00	96.0	0.012
600.00	97.0	0.009
700.00	97.0	0.007
800.00	98.0	0.005
900.00	98.0	0.004
1000.00	98.0	0.004
2000.00	100.0	0.012

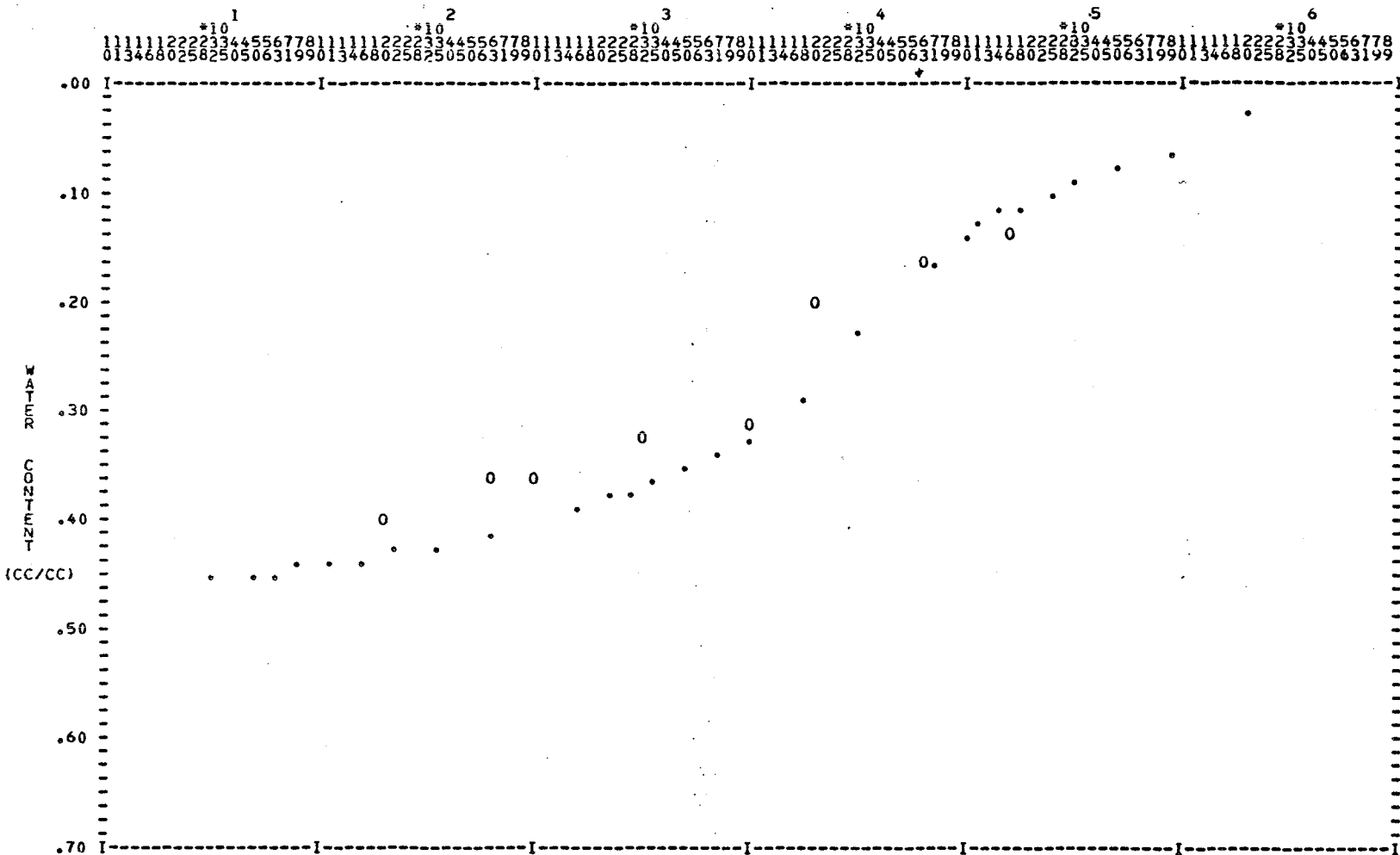
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.20189E+06
0.050	0.89044E+05
0.075	0.49044E+05
0.087	0.33362E+05
0.098	0.33358E+05
0.108	0.18044E+05
0.117	0.14211E+05
0.126	0.11523E+05
0.154	0.95201E+04
0.168	0.68712E+04
0.209	0.30970E+04
0.255	0.17547E+04
0.323	0.10480E+04
0.343	0.67094E+03
0.354	0.48785E+03
0.363	0.36907E+03
0.369	0.28727E+03
0.374	0.22223E+03
0.389	0.15608E+03
0.408	0.62599E+02
0.419	0.34416E+02
0.428	0.21080E+02
0.434	0.15205E+02
0.438	0.11038E+02
0.442	0.83522E+01
0.445	0.60154E+01
0.447	0.51987E+01
0.450	0.31540E+01

B-106

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 53

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SP}))) = 0.31766E+01

SOIL HORIZON NUMBER 54 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT.

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.078	0.150E+05
0.102	0.600E+04
0.154	0.200E+04
0.312	0.100E+04
0.331	0.330E+03
0.349	0.100E+03
0.363	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.1	0.121
2.00	16.6	0.045
3.00	19.9	0.033
4.00	23.0	0.031
5.00	25.7	0.028
6.00	28.3	0.025
7.00	30.6	0.023
8.00	32.7	0.021
9.00	34.7	0.020
10.00	36.6	0.019
20.00	50.5	0.139
30.00	64.3	0.138
40.00	75.3	0.110
50.00	81.0	0.057
60.00	83.8	0.028
70.00	85.7	0.019
80.00	87.1	0.014
90.00	88.1	0.010
100.00	88.8	0.007
200.00	92.8	0.040
300.00	94.8	0.020
400.00	96.1	0.013
500.00	97.1	0.010
600.00	97.8	0.007
700.00	98.4	0.006
800.00	98.9	0.004
900.00	99.2	0.003
1000.00	99.4	0.002
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.23372E+06
0.072	0.98605E+05
0.085	0.57419E+05
0.096	0.38005E+05
0.107	0.27240E+05
0.117	0.20606E+05
0.126	0.16206E+05
0.134	0.13126E+05
0.141	0.10878E+05
0.173	0.77879E+04
0.227	0.34861E+04
0.276	0.19690E+04
0.310	0.11727E+04
0.326	0.74463E+03
0.336	0.53634E+03
0.342	0.40205E+03
0.347	0.30993E+03
0.350	0.24349E+03
0.360	0.16515E+03
0.372	0.65060E+02
0.378	0.35550E+02
0.383	0.22585E+02
0.386	0.15650E+02
0.389	0.11443E+02
0.391	0.86629E+01
0.392	0.67150E+01
0.393	0.52807E+01
0.395	0.31048E+01

B-108

ALPHA = 1.38

SOIL HORIZON NUMBER 55 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.081	0.150E+05
0.108	0.600E+04
0.162	0.200E+04
0.340	0.100E+04
0.362	0.330E+03
0.373	0.100E+03
0.385	0.600E+02
0.417	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	20.5	0.205
2.00	24.0	0.035
3.00	26.6	0.026
4.00	29.1	0.025
5.00	31.4	0.023
6.00	33.5	0.021
7.00	35.5	0.020
8.00	37.3	0.018
9.00	39.1	0.017
10.00	40.7	0.016
20.00	53.0	0.123
30.00	65.9	0.129
40.00	76.5	0.106
50.00	82.2	0.057
60.00	85.1	0.029
70.00	87.1	0.021
80.00	88.6	0.015
90.00	89.7	0.011
100.00	90.4	0.007
200.00	94.3	0.039
300.00	96.1	0.018
400.00	97.2	0.011
500.00	98.0	0.008
600.00	98.6	0.006
700.00	99.1	0.005
800.00	99.5	0.003
900.00	99.7	0.002
1000.00	99.8	0.001
2000.00	100.0	0.002

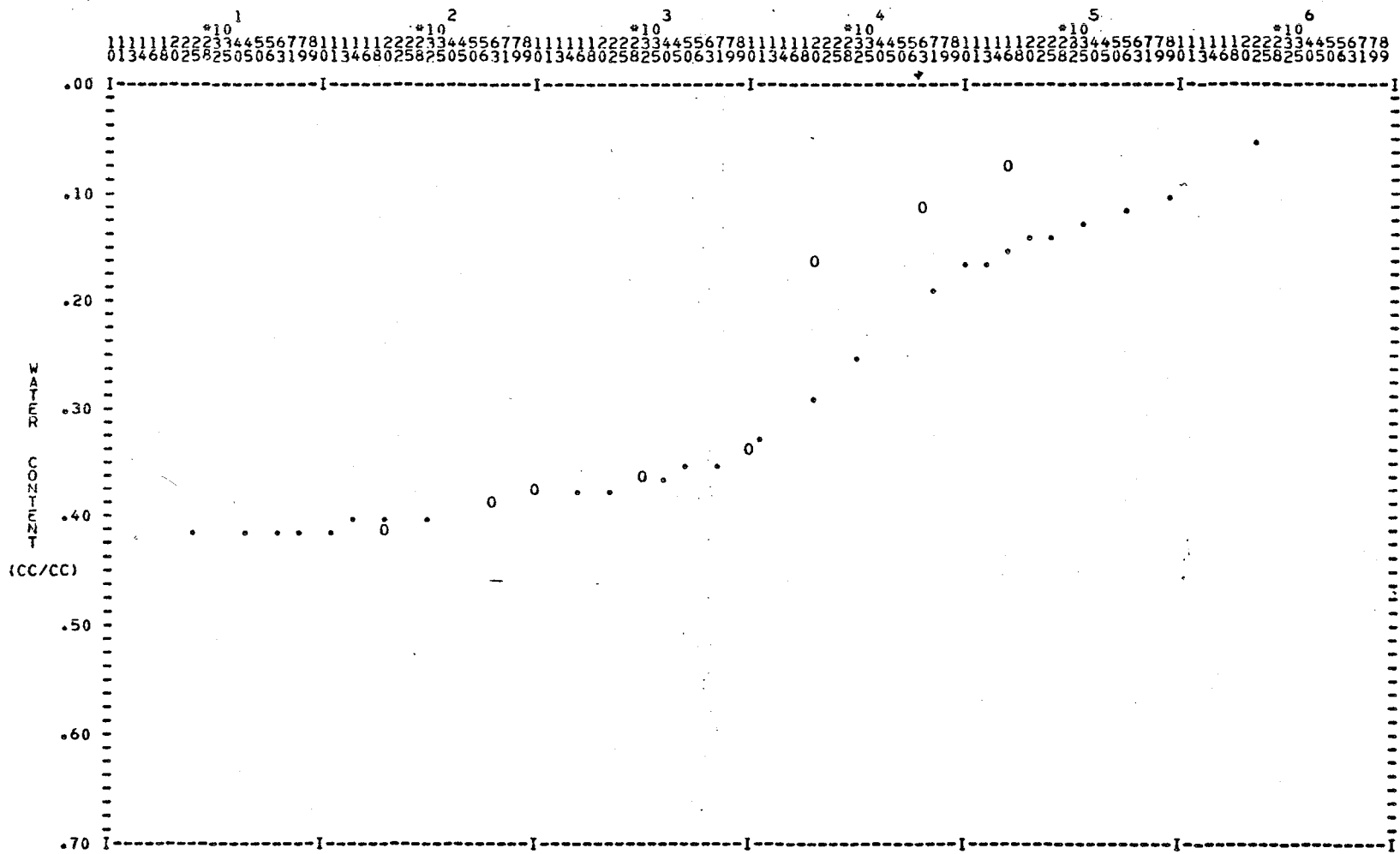
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.21540E+06
0.104	0.93338E+05
0.114	0.53508E+05
0.124	0.35542E+05
0.134	0.25538E+05
0.142	0.19357E+05
0.150	0.15248E+05
0.157	0.12367E+05
0.164	0.10261E+05
0.193	0.73779E+04
0.245	0.33377E+04
0.293	0.18949E+04
0.326	0.11347E+04
0.344	0.72722E+03
0.354	0.52567E+03
0.361	0.39445E+03
0.367	0.30352E+03
0.370	0.23709E+03
0.380	0.15938E+03
0.391	0.61590E+02
0.397	0.33405E+02
0.401	0.21071E+02
0.404	0.14625E+02
0.407	0.10739E+02
0.408	0.80626E+01
0.410	0.61033E+01
0.410	0.45378E+01
0.411	0.24421E+01

ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-1111

SOIL HORIZON NUMBER 56 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.67 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.162	0.150E+05
0.195	0.600E+04
0.247	0.200E+04
0.314	0.100E+04
0.341	0.330E+03
0.351	0.100E+03
0.362	0.600E+02
0.381	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.0	0.130
2.00	14.0	0.024
4.00	15.0	0.018
5.00	16.0	0.018
6.00	17.0	0.017
7.00	18.0	0.016
8.00	19.0	0.015
9.00	20.0	0.014
10.00	21.0	0.014
12.00	22.0	0.012
15.00	23.0	0.010
20.00	24.0	0.008
25.00	25.0	0.007
30.00	26.0	0.006
35.00	27.0	0.005
40.00	28.0	0.004
45.00	29.0	0.003
50.00	30.0	0.003
60.00	31.0	0.002
70.00	32.0	0.002
80.00	33.0	0.001
90.00	34.0	0.001
100.00	35.0	0.001
150.00	36.0	0.001
200.00	37.0	0.001
250.00	38.0	0.001
300.00	39.0	0.001
400.00	40.0	0.001
500.00	41.0	0.001
600.00	42.0	0.001
700.00	43.0	0.001
800.00	44.0	0.001
900.00	45.0	0.001
1000.00	46.0	0.001
2000.00	100.0	0.010

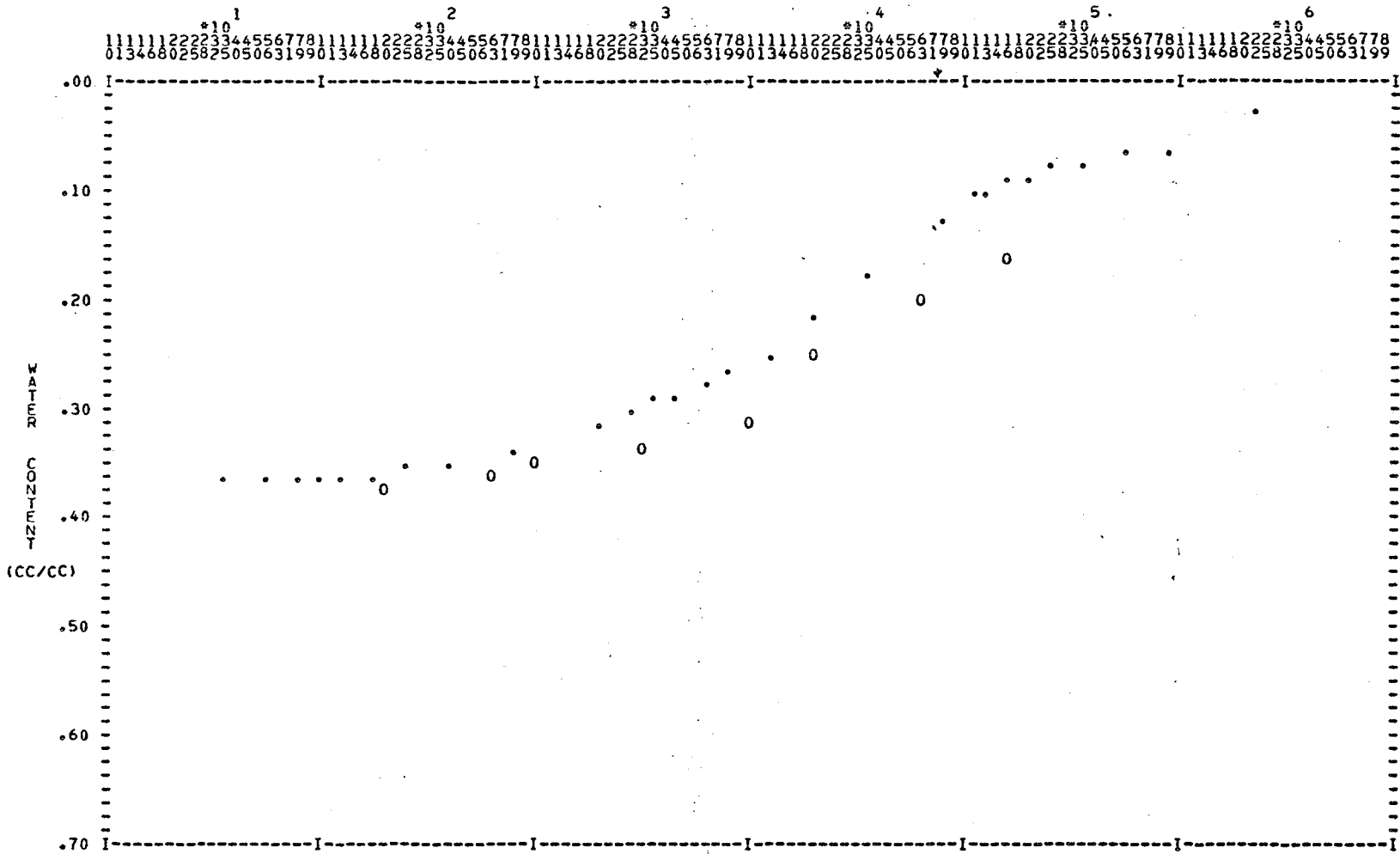
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.21989E+06
0.057	0.53318E+06
0.074	0.55019E+06
0.088	0.36798E+06
0.099	0.26605E+06
0.109	0.20273E+06
0.116	0.16044E+06
0.123	0.13065E+06
0.129	0.10880E+06
0.133	0.79284E+04
0.137	0.36220E+04
0.140	0.20685E+04
0.143	0.12599E+04
0.146	0.82220E+03
0.149	0.61122E+03
0.152	0.45573E+03
0.155	0.36443E+03
0.158	0.29061E+03
0.161	0.19706E+03
0.164	0.76530E+02
0.167	0.41313E+02
0.170	0.25847E+02
0.173	0.17697E+02
0.176	0.12869E+02
0.179	0.97314E+01
0.182	0.75303E+01
0.185	0.59165E+01
0.188	0.36180E+01

B-112

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 56

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.40116E+01

SOIL HORIZON NUMBER 57 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.83 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.093	0.150E+05
0.099	0.600E+04
0.110	0.200E+04
0.167	0.100E+04
0.198	0.330E+03
0.229	0.100E+03
0.238	0.600E+02
0.276	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.0	0.070
2.00	8.1	0.011
3.00	8.8	0.007
4.00	9.6	0.007
5.00	10.3	0.008
6.00	11.2	0.008
7.00	12.0	0.008
8.00	12.8	0.008
9.00	13.7	0.008
10.00	14.5	0.008
20.00	22.6	0.081
30.00	32.3	0.097
40.00	40.7	0.084
50.00	46.1	0.054
60.00	49.5	0.034
70.00	52.2	0.027
80.00	54.5	0.024
90.00	56.7	0.022
100.00	58.8	0.021
200.00	74.2	0.154
300.00	82.7	0.086
400.00	88.2	0.054
500.00	91.0	0.037
600.00	94.5	0.026
700.00	95.2	0.017
800.00	97.3	0.011
900.00	98.0	0.007
1000.00	98.5	0.005
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

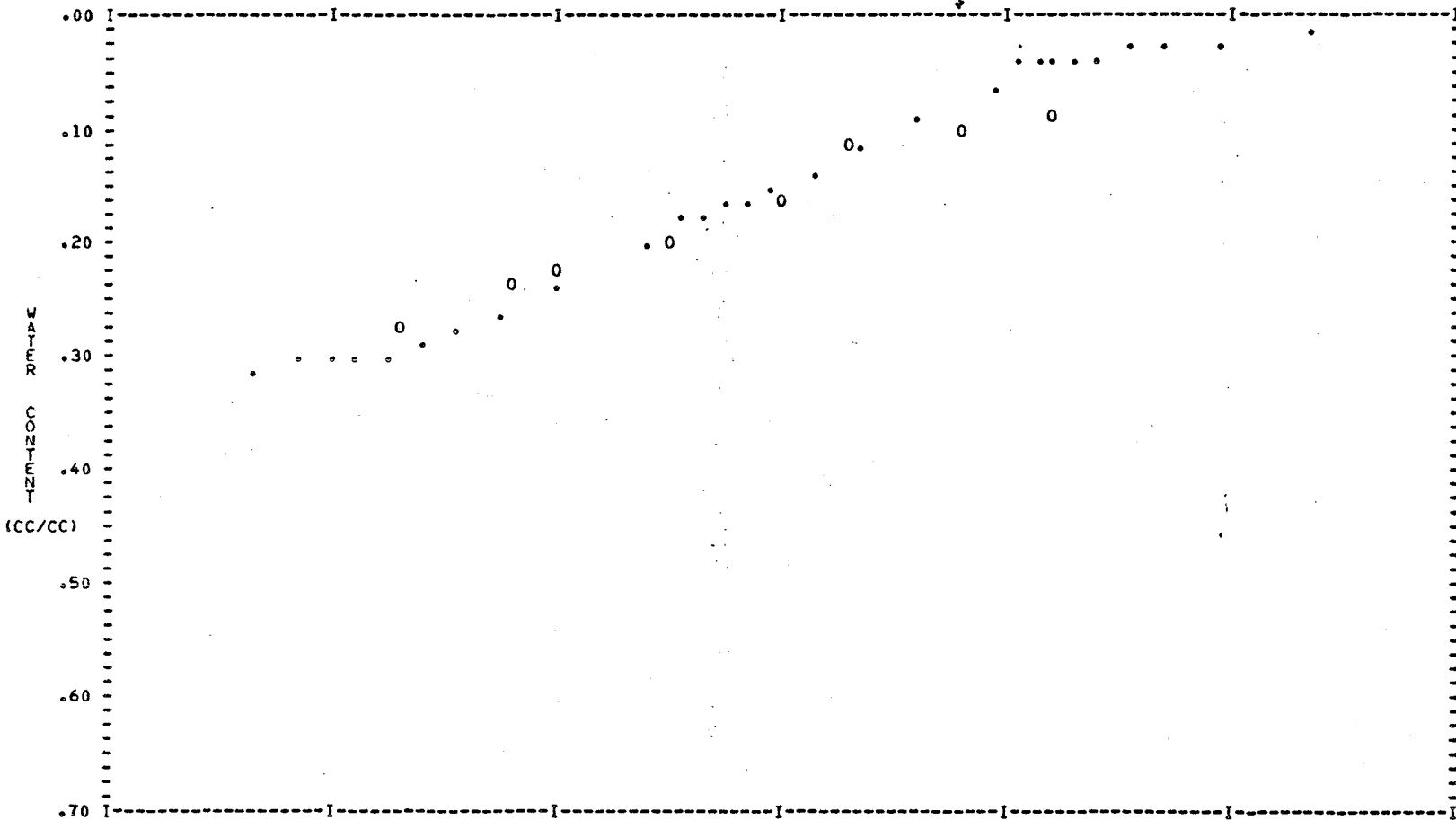
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.21572E+06
0.026	0.89616E+05
0.028	0.52965E+05
0.031	0.36087E+05
0.033	0.26543E+05
0.036	0.20517E+05
0.038	0.16430E+05
0.041	0.13512E+05
0.044	0.11340E+05
0.057	0.84997E+04
0.085	0.39460E+04
0.113	0.22660E+04
0.134	0.14010E+04
0.148	0.93614E+03
0.157	0.69002E+03
0.165	0.53732E+03
0.172	0.43533E+03
0.179	0.36364E+03
0.206	0.25850E+03
0.243	0.10377E+03
0.264	0.56088E+02
0.279	0.35211E+02
0.288	0.23911E+02
0.295	0.17014E+02
0.299	0.12585E+02
0.302	0.95490E+01
0.304	0.73447E+01
0.307	0.44720E+01

B-114

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) . -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-115

SOIL HORIZON NUMBER 57

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21196E+01

SOIL HORIZON NUMBER 58 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.41 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.079	0.150E+05
0.113	0.600E+04
0.166	0.200E+04
0.248	0.100E+04
0.268	0.330E+03
0.283	0.100E+03
0.302	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.4	0.094
2.00	12.9	0.035
3.00	15.5	0.026
4.00	18.0	0.025
5.00	20.3	0.023
6.00	22.4	0.021
7.00	24.3	0.019
8.00	26.1	0.018
9.00	27.8	0.017
10.00	29.3	0.016
20.00	41.2	0.119
30.00	53.6	0.124
40.00	63.6	0.099
50.00	68.4	0.048
60.00	70.6	0.022
70.00	72.3	0.017
80.00	73.7	0.014
90.00	74.8	0.012
100.00	75.8	0.010
200.00	82.0	0.062
300.00	85.9	0.040
400.00	88.9	0.030
500.00	91.2	0.023
600.00	93.0	0.018
700.00	94.6	0.015
800.00	95.8	0.013
900.00	96.9	0.011
1000.00	97.8	0.009
2000.00	100.0	0.022

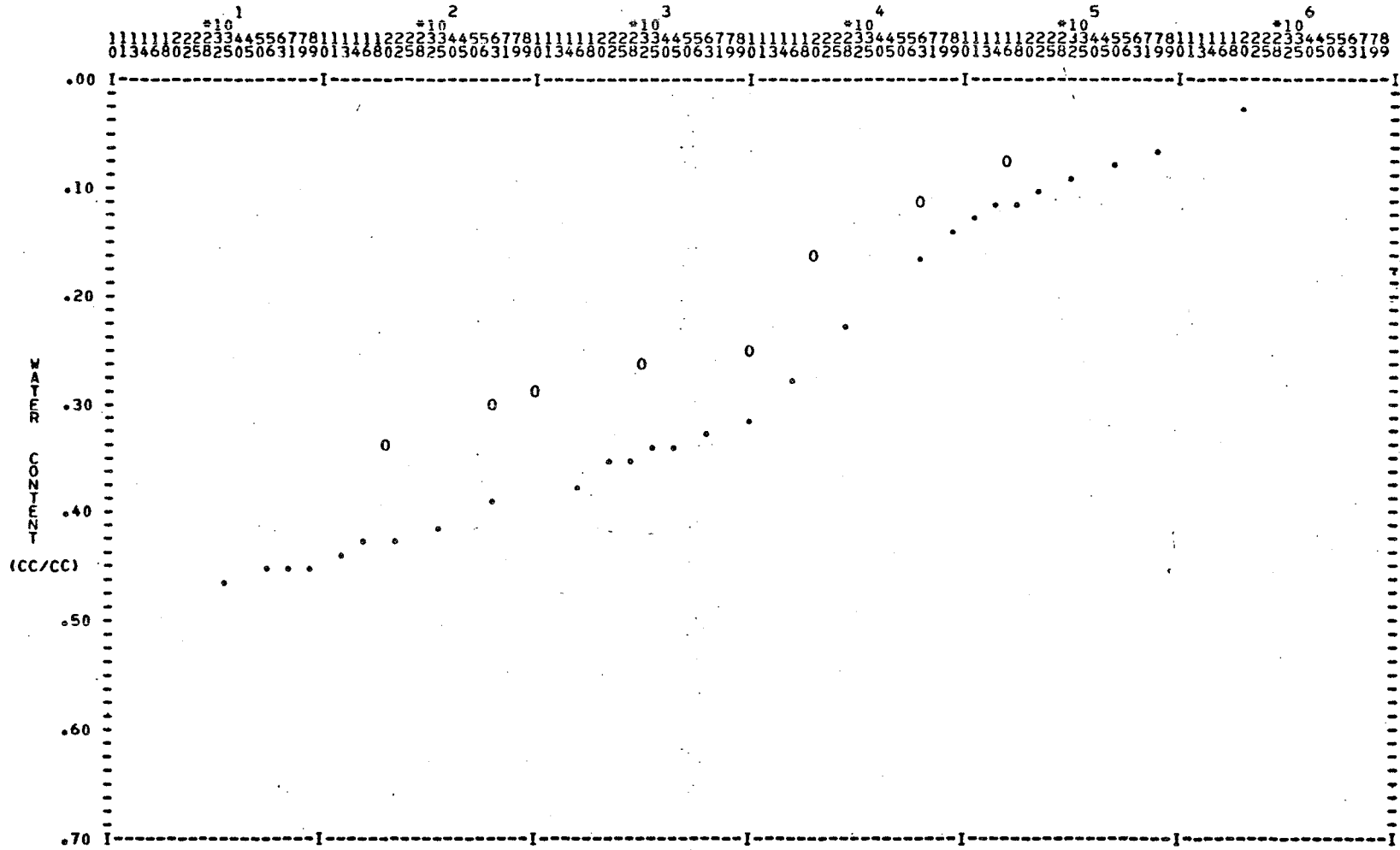
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.19265E+06
0.066	0.81536E+05
0.078	0.47654E+05
0.090	0.31610E+05
0.100	0.22690E+05
0.109	0.17185E+05
0.118	0.13526E+05
0.126	0.10906E+05
0.134	0.90948E+04
0.165	0.65282E+04
0.222	0.29536E+04
0.274	0.16681E+04
0.309	0.98093E+03
0.325	0.61416E+03
0.334	0.45163E+03
0.341	0.34700E+03
0.347	0.27551E+03
0.352	0.22440E+03
0.369	0.15520E+03
0.393	0.63348E+02
0.409	0.35711E+02
0.421	0.22908E+02
0.431	0.16030E+02
0.439	0.11893E+02
0.445	0.91808E+01
0.451	0.73009E+01
0.456	0.59417E+01
0.463	0.34331E+01

B-116

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 58

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.61997E+01

B-117

SOIL HORIZON NUMBER 59 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.114	0.150E+05
0.157	0.600E+04
0.219	0.200E+04
0.299	0.100E+04
0.311	0.330E+03
0.320	0.100E+03
0.330	0.600E+02
0.343	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.7	0.147
2.00	20.1	0.054
3.00	23.8	0.037
4.00	27.1	0.033
5.00	30.0	0.029
6.00	32.5	0.026
7.00	34.9	0.023
8.00	37.0	0.021
9.00	38.9	0.019
10.00	40.7	0.018
20.00	53.6	0.129
30.00	65.3	0.117
40.00	74.1	0.089
50.00	78.5	0.044
60.00	80.4	0.019
70.00	81.8	0.014
80.00	82.9	0.011
90.00	83.7	0.008
100.00	84.4	0.007
200.00	88.5	0.041
300.00	91.1	0.026
400.00	93.0	0.019
500.00	94.4	0.014
600.00	95.5	0.011
700.00	96.4	0.009
800.00	97.2	0.007
900.00	97.8	0.006
1000.00	98.3	0.005
2000.00	100.0	0.017

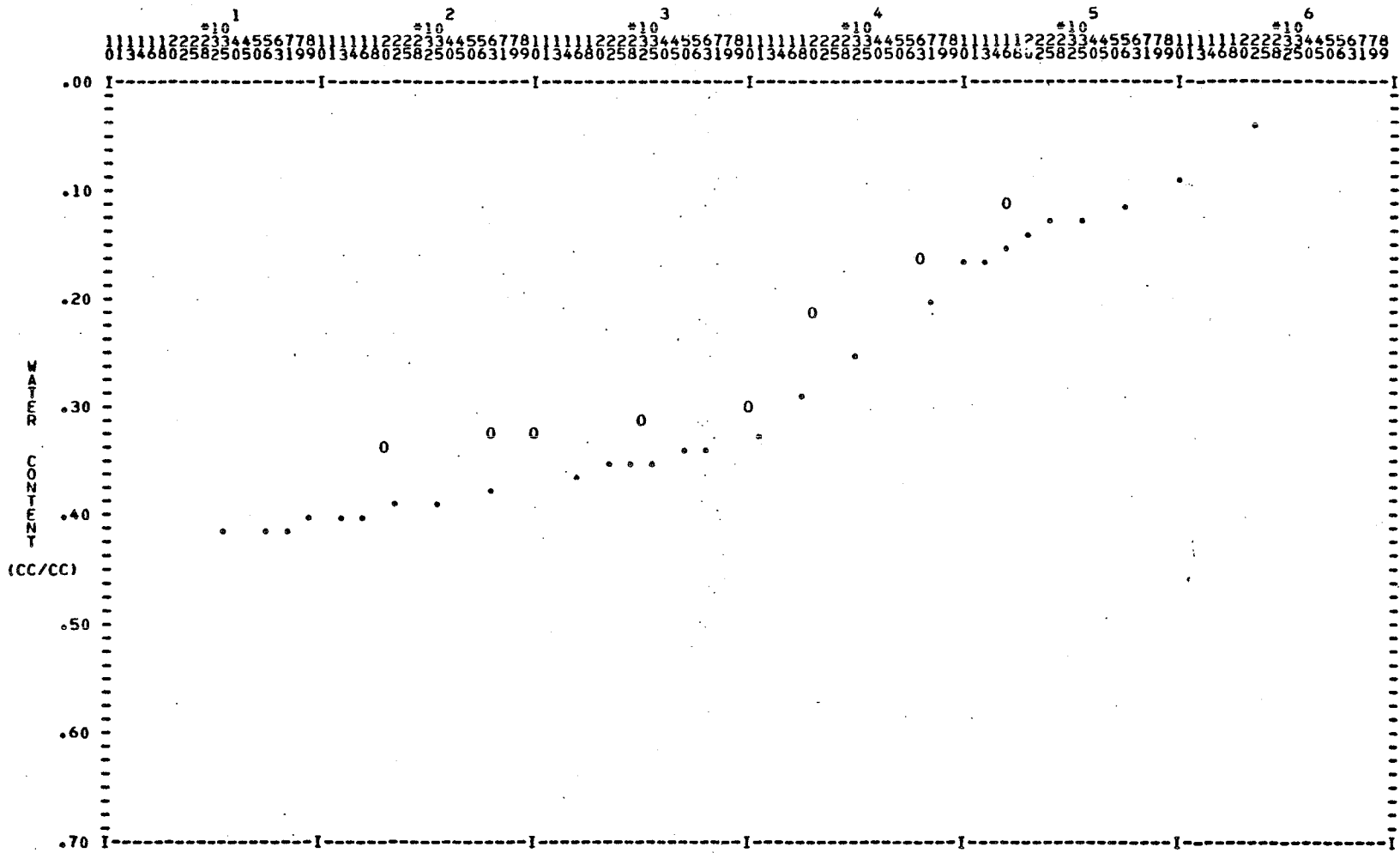
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.042	0.23064E+06
0.092	0.96364E+05
0.107	0.55472E+05
0.120	0.36488E+05
0.131	0.26042E+05
0.141	0.19638E+05
0.150	0.15406E+05
0.159	0.12451E+05
0.167	0.10301E+05
0.197	0.73292E+04
0.249	0.32235E+04
0.292	0.18032E+04
0.320	0.10627E+04
0.333	0.66497E+03
0.340	0.48063E+03
0.345	0.36393E+03
0.349	0.28546E+03
0.352	0.23023E+03
0.362	0.15870E+03
0.376	0.65019E+02
0.385	0.36163E+02
0.392	0.23174E+02
0.398	0.16142E+02
0.402	0.11894E+02
0.405	0.91452E+01
0.408	0.72589E+01
0.411	0.59059E+01
0.415	0.36109E+01

B-118

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-119

SOIL HORIZON NUMBER 59

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.54070E+01

SOIL HORIZON NUMBER 60 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.51 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.146	0.150E+05
0.183	0.600E+04
0.234	0.200E+04
0.310	0.100E+04
0.316	0.330E+03
0.325	0.100E+03
0.334	0.600E+02
0.349	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	19.4	0.194
2.00	23.6	0.042
3.00	26.6	0.030
4.00	29.2	0.027
5.00	31.6	0.024
6.00	33.8	0.022
7.00	35.7	0.020
8.00	37.5	0.018
9.00	39.2	0.017
10.00	40.7	0.015
20.00	52.1	0.114
30.00	62.8	0.107
40.00	71.1	0.083
50.00	75.3	0.042
60.00	77.3	0.020
70.00	78.8	0.015
80.00	80.0	0.012
90.00	80.9	0.010
100.00	81.7	0.008
200.00	86.7	0.050
300.00	89.7	0.030
400.00	91.8	0.022
500.00	93.5	0.017
600.00	94.8	0.013
700.00	95.8	0.010
800.00	96.6	0.008
900.00	97.2	0.007
1000.00	97.8	0.006
2000.00	100.0	0.022

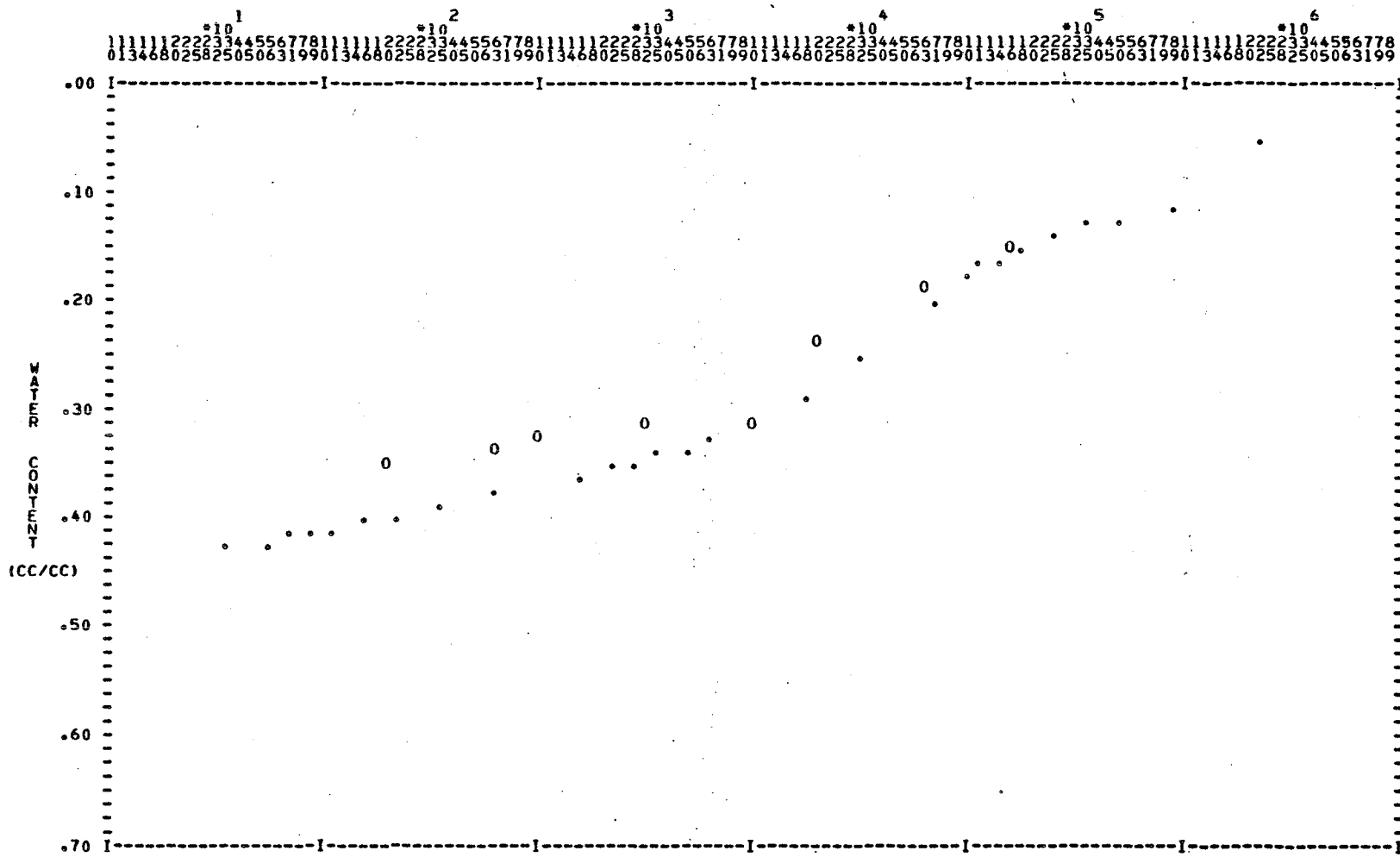
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.21489E+06
0.108	0.90130E+05
0.120	0.52143E+05
0.131	0.34402E+05
0.141	0.24608E+05
0.149	0.18588E+05
0.158	0.14603E+05
0.165	0.11817E+05
0.172	0.97867E+04
0.200	0.69910E+04
0.247	0.30995E+04
0.288	0.17401E+04
0.315	0.10299E+04
0.328	0.65443E+03
0.336	0.47999E+03
0.341	0.33632E+03
0.346	0.28897E+03
0.350	0.23226E+03
0.362	0.16073E+03
0.379	0.65437E+02
0.390	0.33631E+02
0.399	0.23225E+02
0.405	0.16050E+02
0.410	0.11828E+02
0.414	0.90710E+01
0.417	0.72016E+01
0.419	0.58742E+01
0.425	0.37053E+01

ALPHA = 1.38

B-120

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 60

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.40099E+01

B-121

SOIL HORIZON NUMBER 61 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.69 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.135	0.150E+05
0.164	0.600E+04
0.223	0.200E+04
0.287	0.100E+04
0.304	0.330E+03
0.304	0.100E+03
0.331	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.9	0.139
2.00	16.9	0.030
3.00	19.2	0.023
4.00	21.4	0.022
5.00	23.4	0.021
6.00	25.3	0.019
7.00	27.1	0.018
8.00	28.8	0.017
9.00	30.4	0.016
10.00	31.9	0.015
20.00	43.3	0.117
30.00	56.0	0.124
40.00	66.2	0.102
50.00	71.8	0.056
60.00	74.8	0.030
70.00	77.1	0.022
80.00	78.9	0.018
90.00	80.3	0.014
100.00	81.4	0.011
200.00	87.8	0.064
300.00	91.1	0.033
400.00	93.3	0.021
500.00	94.7	0.014
600.00	95.5	0.009
700.00	96.7	0.007
800.00	97.5	0.005
900.00	98.0	0.004
1000.00	98.4	0.004
2000.00	100.0	0.016

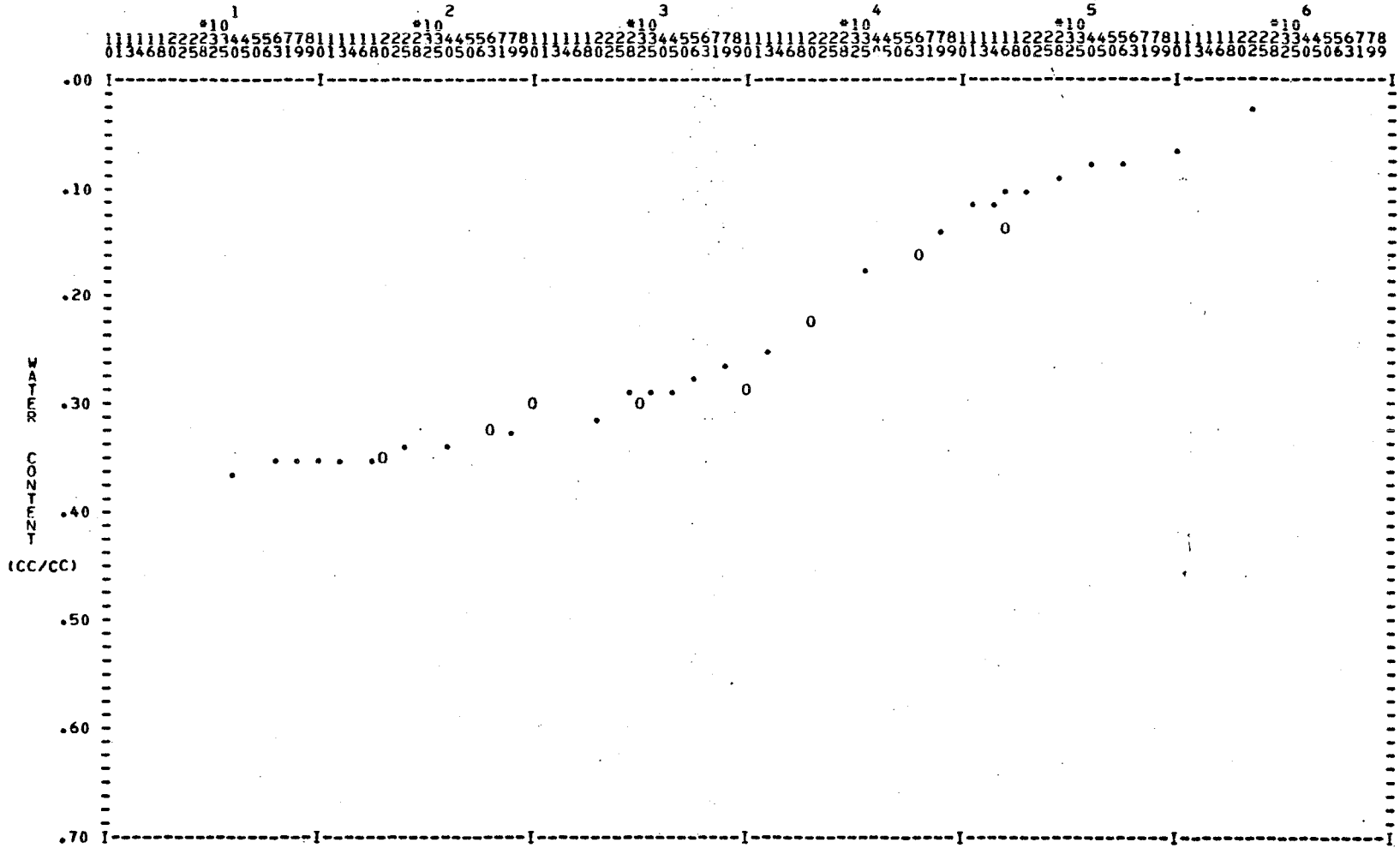
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.23301E+06
0.053	0.98773E+05
0.073	0.57943E+05
0.091	0.38563E+05
0.088	0.27760E+05
0.095	0.21075E+05
0.101	0.16625E+05
0.107	0.13502E+05
0.113	0.11217E+05
0.117	0.91024E+04
0.124	0.67224E+04
0.139	0.20865E+04
0.150	0.12552E+04
0.169	0.81408E+03
0.182	0.59557E+03
0.199	0.45327E+03
0.221	0.35507E+03
0.233	0.28417E+03
0.253	0.19467E+03
0.273	0.76762E+02
0.291	0.41758E+02
0.303	0.26409E+02
0.314	0.18188E+02
0.325	0.13268E+02
0.336	0.10102E+02
0.346	0.79408E+01
0.356	0.63968E+01
0.359	0.40205E+01

B-122

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 61

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.13950E+01

B-123

SOIL HORIZON NUMBER 62 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.65 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.134	0.150E+05
0.163	0.600E+04
0.233	0.200E+04
0.300	0.100E+04
0.313	0.330E+03
0.322	0.100E+03
0.332	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.8	0.128
2.00	16.5	0.037
3.00	19.2	0.027
4.00	21.7	0.026
5.00	24.1	0.024
6.00	26.3	0.022
7.00	28.3	0.020
8.00	30.1	0.019
9.00	31.9	0.017
10.00	33.5	0.016
20.00	46.2	0.127
30.00	59.0	0.128
40.00	69.3	0.104
50.00	75.1	0.058
60.00	78.2	0.031
70.00	80.6	0.023
80.00	82.3	0.018
90.00	83.6	0.013
100.00	84.6	0.010
200.00	90.1	0.055
300.00	92.7	0.026
400.00	94.5	0.017
500.00	95.7	0.012
600.00	96.6	0.009
700.00	97.4	0.007
800.00	98.0	0.006
900.00	98.4	0.005
1000.00	98.8	0.004
2000.00	100.0	0.012

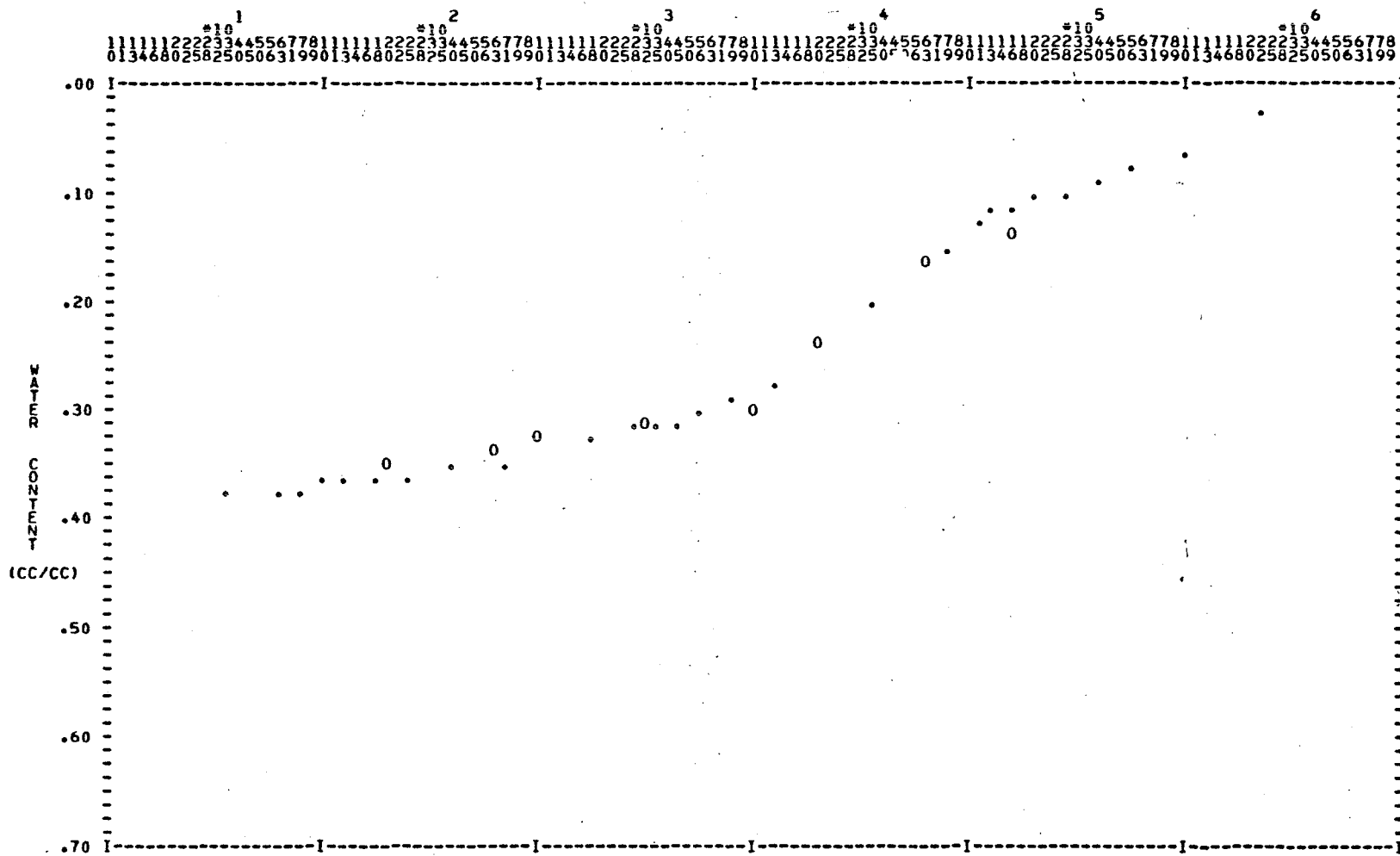
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.23371E+06
0.067	0.98743E+05
0.077	0.57674E+05
0.086	0.38282E+05
0.095	0.27504E+05
0.103	0.20849E+05
0.110	0.16428E+05
0.117	0.13327E+05
0.123	0.11061E+05
0.150	0.79639E+04
0.198	0.35754E+04
0.242	0.20264E+04
0.273	0.12217E+04
0.289	0.79370E+03
0.300	0.57778E+03
0.307	0.43706E+03
0.313	0.33975E+03
0.317	0.26916E+03
0.330	0.18284E+03
0.345	0.71338E+02
0.353	0.38748E+02
0.359	0.24580E+02
0.363	0.17025E+02
0.366	0.12501E+02
0.369	0.95451E+01
0.371	0.75001E+01
0.372	0.60214E+01
0.375	0.36856E+01

B-124

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-125

SOIL HORIZON NUMBER 62

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.18826E+01

SOIL HORIZON NUMBER 63 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.78 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.041	0.150E+05
0.048	0.600E+04
0.068	0.200E+04
0.119	0.100E+04
0.132	0.330E+03
0.150	0.100E+03
0.167	0.600E+02
0.230	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.5	0.035
2.00	4.1	0.006
3.00	4.6	0.005
4.00	5.2	0.006
5.00	5.7	0.006
6.00	6.2	0.005
7.00	6.8	0.005
8.00	7.3	0.005
9.00	7.7	0.005
10.00	8.2	0.005
20.00	11.9	0.037
30.00	16.1	0.042
40.00	20.7	0.046
50.00	25.0	0.043
60.00	28.8	0.038
70.00	32.3	0.035
80.00	35.5	0.032
90.00	38.5	0.030
100.00	41.3	0.028
200.00	62.3	0.210
300.00	73.7	0.113
400.00	80.6	0.070
500.00	85.5	0.049
600.00	89.0	0.035
700.00	91.5	0.026
800.00	93.5	0.019
900.00	94.9	0.014
1000.00	96.0	0.011
2000.00	100.0	0.040

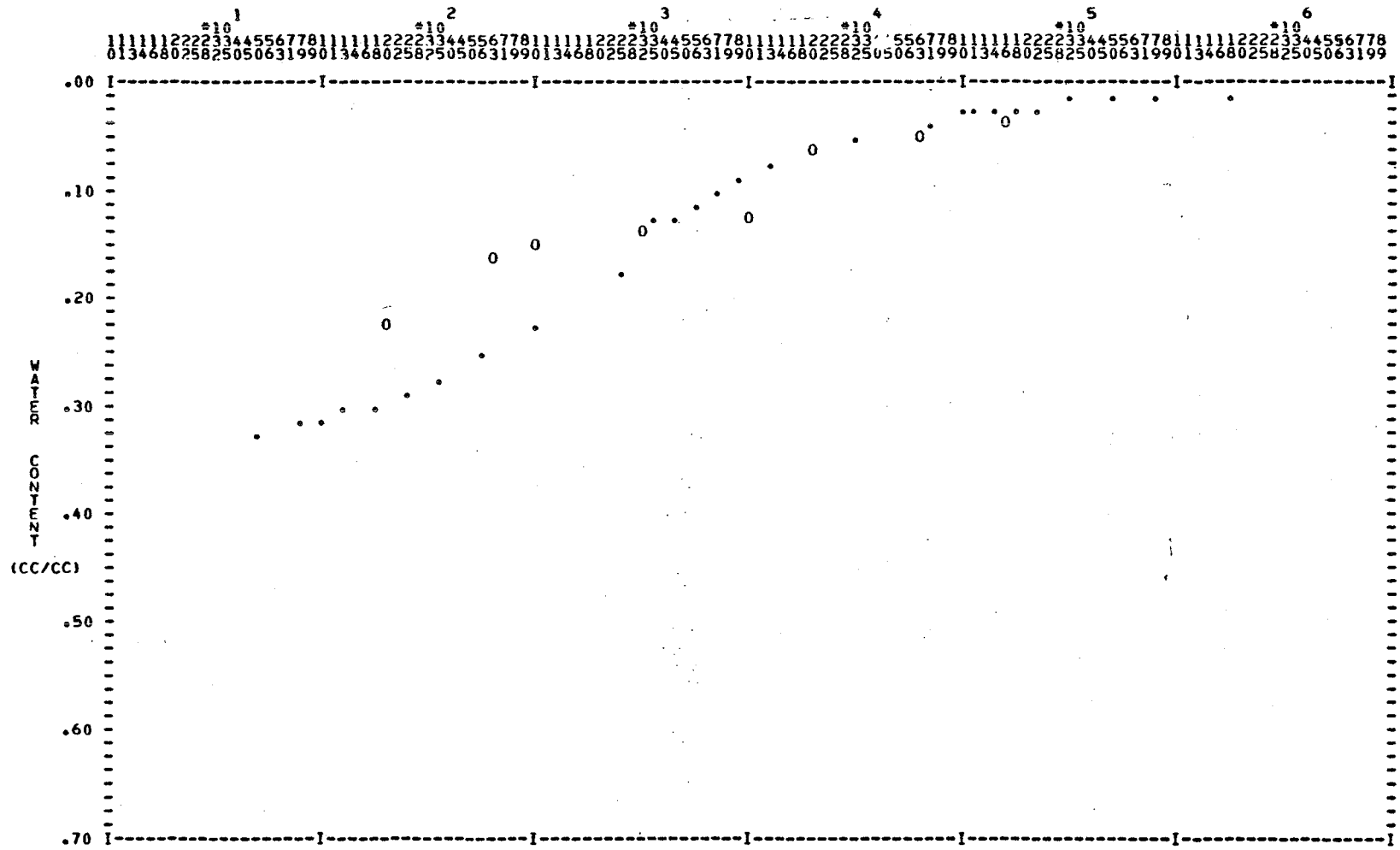
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.00	0.18235E+06
0.014	0.79715E+05
0.016	0.48106E+05
0.018	0.32425E+05
0.020	0.23520E+05
0.021	0.17950E+05
0.023	0.14217E+05
0.025	0.11581E+05
0.026	0.96449E+04
0.033	0.70212E+04
0.046	0.32250E+04
0.060	0.19361E+04
0.075	0.12842E+04
0.088	0.91744E+03
0.100	0.69334E+03
0.111	0.54566E+03
0.121	0.44261E+03
0.131	0.36752E+03
0.170	0.26270E+03
0.223	0.10477E+03
0.253	0.56393E+02
0.273	0.35437E+02
0.286	0.24310E+02
0.296	0.17615E+02
0.304	0.13307E+02
0.309	0.10362E+02
0.313	0.82547E+01
0.322	0.51590E+01

B-126

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-127

SOIL HORIZON NUMBER 63

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.31276E+01

SOIL HORIZON NUMBER 64 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.31 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.072	0.600E+04
0.088	0.200E+04
0.119	0.100E+04
0.144	0.330E+03
0.164	0.100E+03
0.198	0.600E+02
0.406	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.7	0.037
2.00	4.0	0.003
3.00	4.3	0.003
4.00	4.6	0.003
5.00	4.8	0.003
6.00	5.1	0.003
7.00	5.4	0.002
8.00	5.6	0.002
9.00	5.8	0.002
10.00	6.0	0.002
20.00	7.5	0.015
30.00	9.0	0.017
40.00	11.0	0.018
50.00	12.4	0.014
60.00	12.9	0.005
70.00	13.2	0.003
80.00	14.0	0.011
90.00	16.0	0.022
100.00	19.0	0.033
200.00	49.0	0.292
300.00	66.0	0.175
400.00	78.9	0.125
500.00	88.4	0.095
600.00	94.3	0.059
700.00	97.0	0.028
800.00	98.4	0.013
900.00	99.0	0.005
1000.00	99.2	0.002
2000.00	100.0	0.008

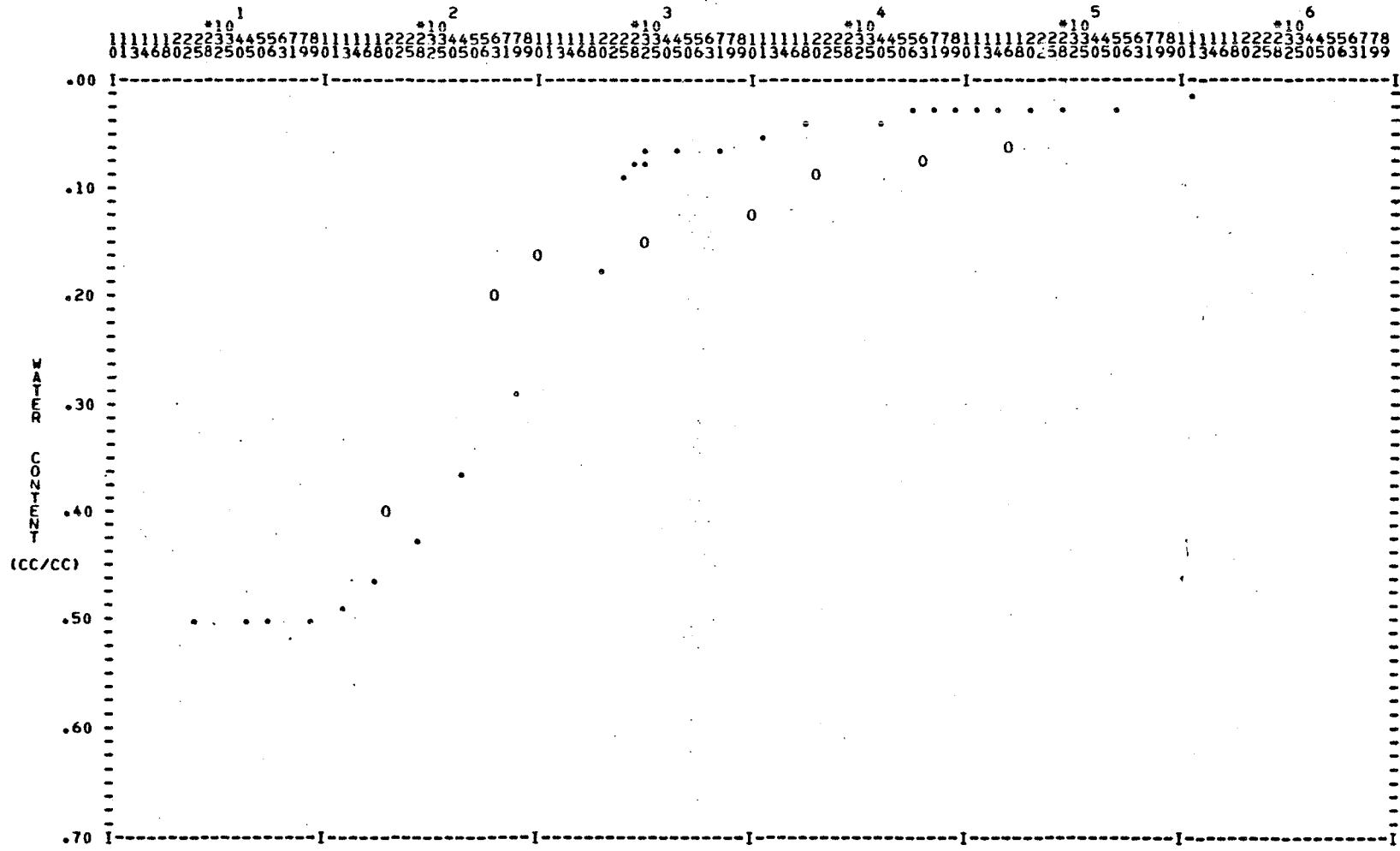
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.11220E+06
0.021	0.49137E+05
0.022	0.29480E+05
0.024	0.19720E+05
0.025	0.14206E+05
0.026	0.10776E+05
0.029	0.84885E+04
0.034	0.68814E+04
0.034	0.57058E+04
0.042	0.48337E+04
0.051	0.18634E+04
0.059	0.11155E+04
0.064	0.71757E+03
0.066	0.42152E+03
0.069	0.30435E+03
0.078	0.30748E+03
0.092	0.28905E+03
0.174	0.26211E+03
0.292	0.19326E+03
0.368	0.78634E+02
0.423	0.43476E+02
0.495	0.27522E+02
0.462	0.18567E+02
0.484	0.12400E+02
0.494	0.85524E+01
0.499	0.59507E+01
0.501	0.42644E+01
0.504	0.26266E+01

B-128

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 64

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.55757E+01

B-129

SOIL HORIZON NUMBER 65 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.47 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.150E+05
0.032	0.600E+04
0.041	0.200E+04
0.072	0.100E+04
0.090	0.330E+03
0.107	0.100E+03
0.140	0.600E+02
0.365	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.3	0.033
2.00	3.4	0.001
3.00	3.6	0.002
4.00	3.7	0.002
5.00	3.9	0.002
6.00	4.1	0.002
7.00	4.2	0.002
8.00	4.4	0.001
9.00	4.5	0.001
10.00	4.8	0.001
20.00	5.4	0.008
30.00	6.6	0.011
40.00	8.1	0.015
50.00	9.3	0.012
60.00	10.4	0.011
70.00	11.3	0.009
80.00	11.9	0.006
90.00	12.6	0.007
100.00	13.3	0.007
200.00	15.5	0.022
300.00	17.7	0.022
400.00	18.8	0.011
500.00	19.0	0.002
600.00	19.8	0.008
700.00	19.8	0.000
800.00	19.3	0.005
900.00	18.6	0.007
1000.00	17.2	0.014
2000.00	10.0	0.000

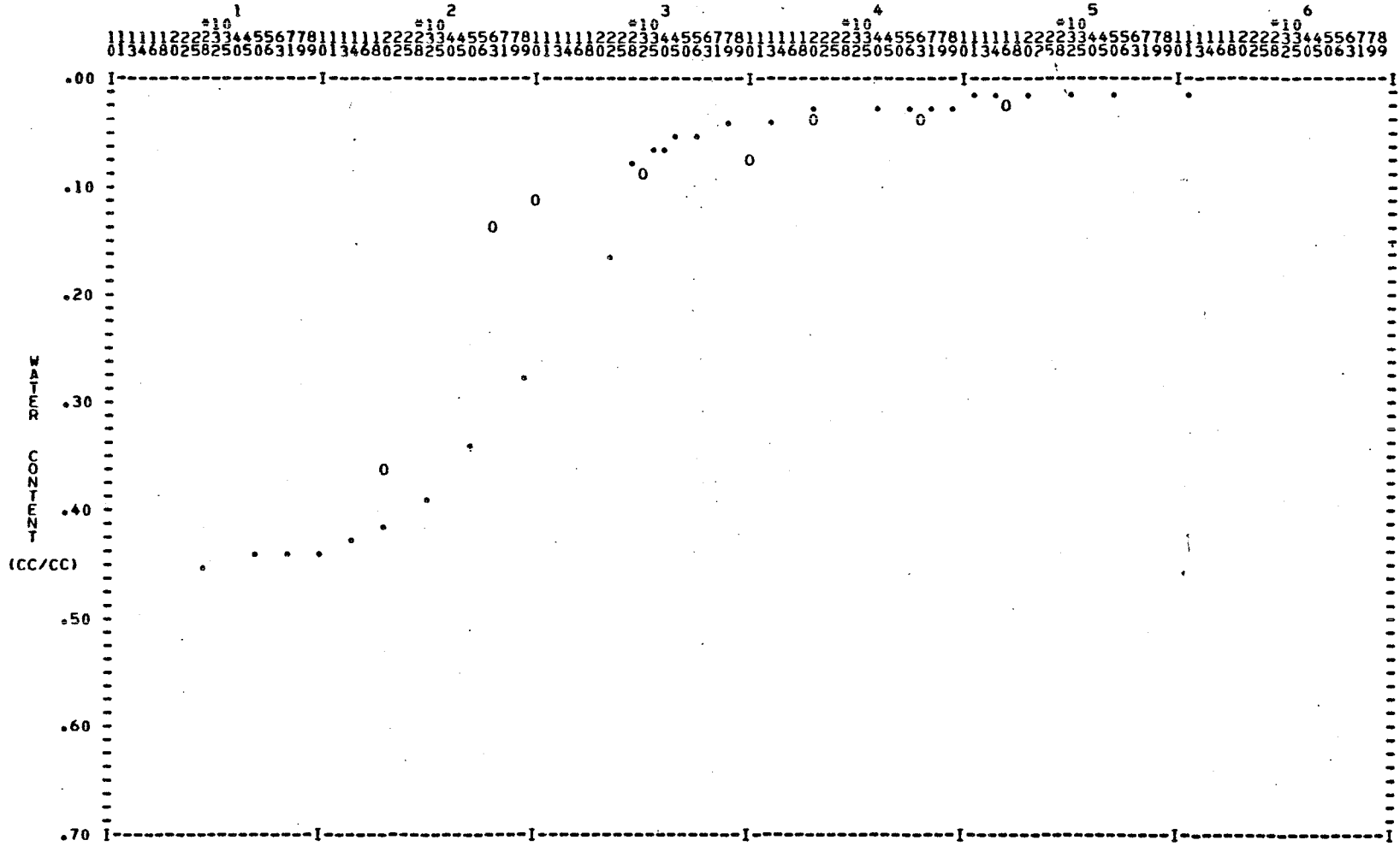
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.10761E+06
0.015	0.49625E+05
0.016	0.30458E+05
0.017	0.20418E+05
0.018	0.14680E+05
0.019	0.11099E+05
0.019	0.87104E+04
0.020	0.70334E+04
0.020	0.58085E+04
0.022	0.46771E+04
0.027	0.19883E+04
0.033	0.12134E+04
0.039	0.79029E+03
0.044	0.56211E+03
0.049	0.45776E+03
0.057	0.39133E+03
0.068	0.33888E+03
0.081	0.29588E+03
0.081	0.22159E+03
0.159	0.89422E+02
0.170	0.48806E+02
0.337	0.30528E+02
0.382	0.20159E+02
0.412	0.13682E+02
0.428	0.95900E+01
0.436	0.68158E+01
0.440	0.48095E+01
0.442	0.28073E+01
0.444	0.444

B-130

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-131

SOIL HORIZON NUMBER 65

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.32245E+01

SOIL HORIZON NUMBER 66 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.150E+05
0.046	0.600E+04
0.052	0.200E+04
0.095	0.100E+04
0.106	0.330E+03
0.139	0.100E+03
0.164	0.600E+02
0.375	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.5	0.055
2.00	5.6	0.001
3.00	5.8	0.002
4.00	6.0	0.002
5.00	6.1	0.002
6.00	6.3	0.002
7.00	6.5	0.002
8.00	6.6	0.001
9.00	6.8	0.001
10.00	6.9	0.001
20.00	7.7	0.008
30.00	9.0	0.013
40.00	10.5	0.016
50.00	11.9	0.014
60.00	13.5	0.016
70.00	15.6	0.022
80.00	18.3	0.026
90.00	21.2	0.030
100.00	24.5	0.033
200.00	57.8	0.333
300.00	75.8	0.180
400.00	86.8	0.110
500.00	92.9	0.061
600.00	96.0	0.031
700.00	97.8	0.018
800.00	98.8	0.010
900.00	99.3	0.005
1000.00	99.5	0.002
2000.00	100.0	0.005

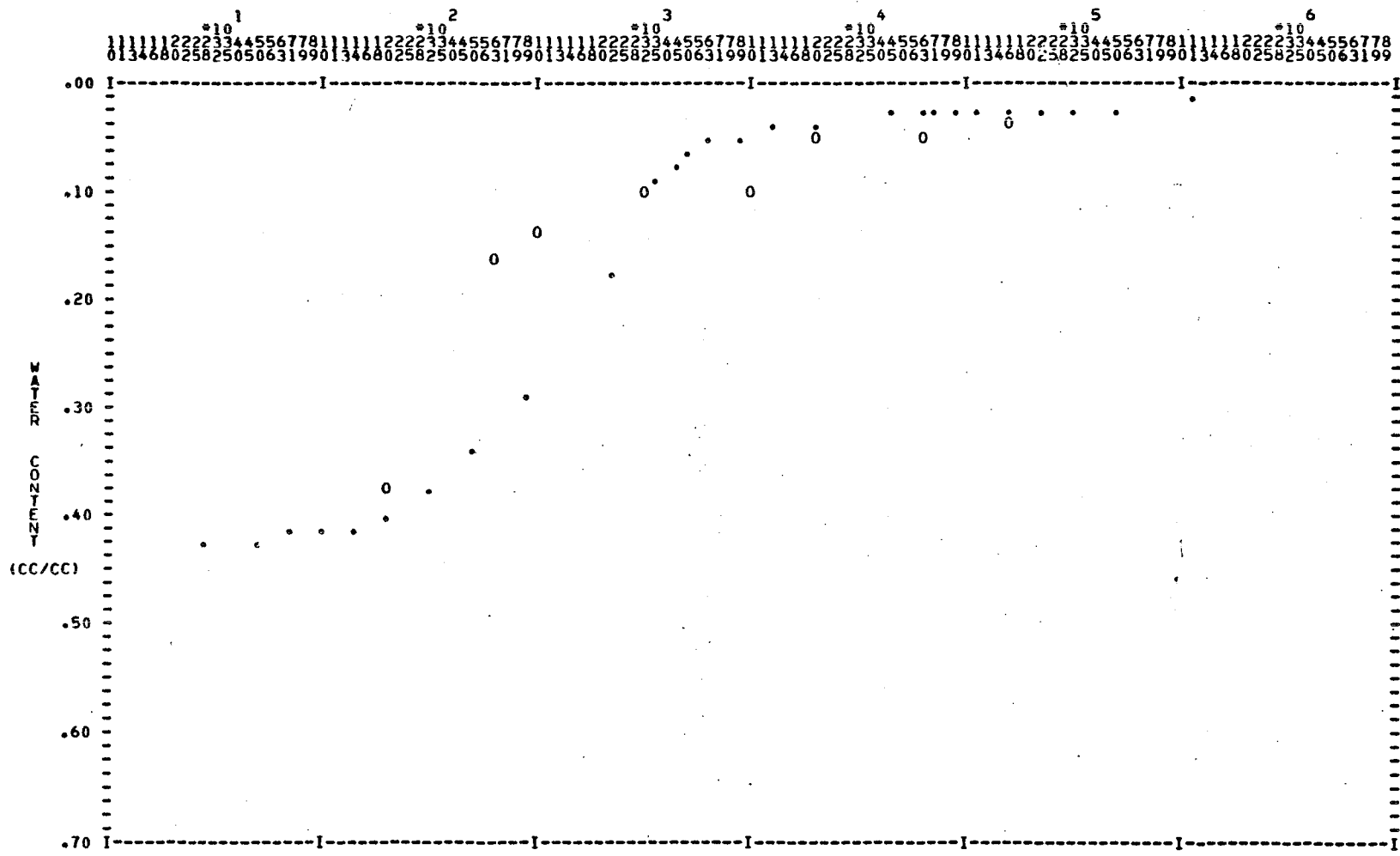
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.012	0.11388E+06
0.024	0.52584E+05
0.025	0.32276E+05
0.026	0.21629E+05
0.026	0.15543E+05
0.027	0.11746E+05
0.028	0.92134E+04
0.028	0.74360E+04
0.029	0.61381E+04
0.031	0.42987E+04
0.035	0.20996E+04
0.041	0.12881E+04
0.047	0.84444E+03
0.054	0.63310E+03
0.061	0.51786E+03
0.072	0.42927E+03
0.083	0.36144E+03
0.097	0.30869E+03
0.174	0.23428E+03
0.282	0.93455E+02
0.344	0.50173E+02
0.380	0.30267E+02
0.399	0.19446E+02
0.410	0.13428E+02
0.415	0.95911E+01
0.419	0.69392E+01
0.420	0.49095E+01
0.422	0.28397E+01

B-132

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 66

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36929E+01

B-133

SOIL HORIZON NUMBER 67 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.51 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.039	0.150E+05
0.051	0.600E+04
0.059	0.200E+04
0.103	0.100E+04
0.113	0.330E+03
0.128	0.100E+03
0.151	0.600E+02
0.374	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.4	0.074
2.00	7.5	0.001
3.00	7.6	0.001
4.00	7.7	0.001
5.00	7.8	0.001
6.00	7.9	0.001
7.00	8.0	0.001
8.00	8.0	0.001
9.00	8.1	0.001
10.00	8.2	0.001
20.00	8.5	0.004
30.00	8.7	0.011
40.00	8.8	0.011
50.00	8.9	0.011
60.00	9.0	0.011
70.00	9.0	0.022
80.00	9.1	0.022
90.00	9.2	0.033
100.00	9.3	0.033
200.00	9.3	0.333
300.00	9.4	0.181
400.00	9.5	0.110
500.00	9.5	0.060
600.00	9.6	0.029
700.00	9.6	0.016
800.00	9.8	0.016
900.00	9.8	0.008
1000.00	9.8	0.004
2000.00	100.0	0.004

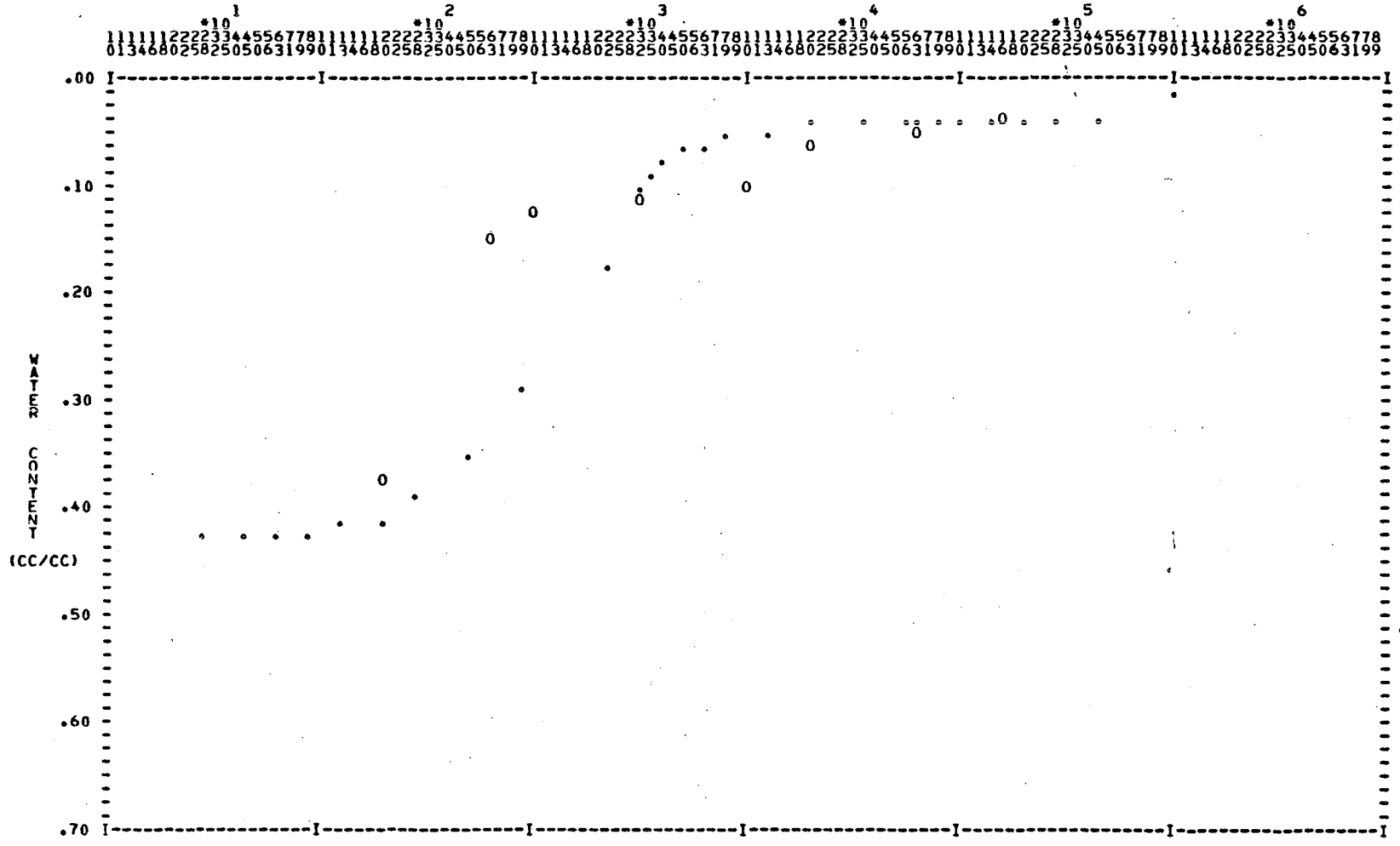
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.016	0.94712E+05
0.032	0.45149E+05
0.033	0.28047E+05
0.033	0.18848E+05
0.034	0.13566E+05
0.034	0.10252E+05
0.034	0.80422E+04
0.035	0.64491E+04
0.035	0.53574E+04
0.036	0.47474E+04
0.039	0.37005E+04
0.045	0.27500E+04
0.051	0.20201E+04
0.057	0.15652E+04
0.064	0.11755E+04
0.074	0.85075E+03
0.086	0.63377E+03
0.109	0.45210E+03
0.181	0.29145E+03
0.290	0.18969E+03
0.353	0.13922E+03
0.399	0.93022E+02
0.418	0.73022E+02
0.424	0.62677E+02
0.427	0.56669E+02
0.428	0.46762E+02
0.428	0.26801E+02

B-134

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 67,

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41897E+01

SOIL HORIZON NUMBER 68 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.027	0.600E+04
0.031	0.200E+04
0.034	0.100E+04
0.064	0.330E+03
0.074	0.100E+03
0.088	0.600E+03
0.107	0.200E+03
0.347	

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.4	0.024
2.00	4.7	0.003
4.00	9.0	0.002
6.00	13.3	0.001
8.00	17.6	0.001
10.00	21.9	0.001
20.00	43.8	0.004
30.00	65.7	0.002
40.00	87.6	0.001
50.00	109.5	0.001
60.00	131.4	0.001
70.00	153.3	0.006
80.00	175.2	0.014
90.00	197.1	0.023
100.00	219.0	0.031
200.00	438.0	0.372
300.00	657.0	0.215
400.00	876.0	0.140
500.00	1095.0	0.082
600.00	1314.0	0.039
700.00	1533.0	0.018
800.00	1752.0	0.007
900.00	1971.0	0.003
1000.00	2190.0	0.001
2000.00	100.0	0.004

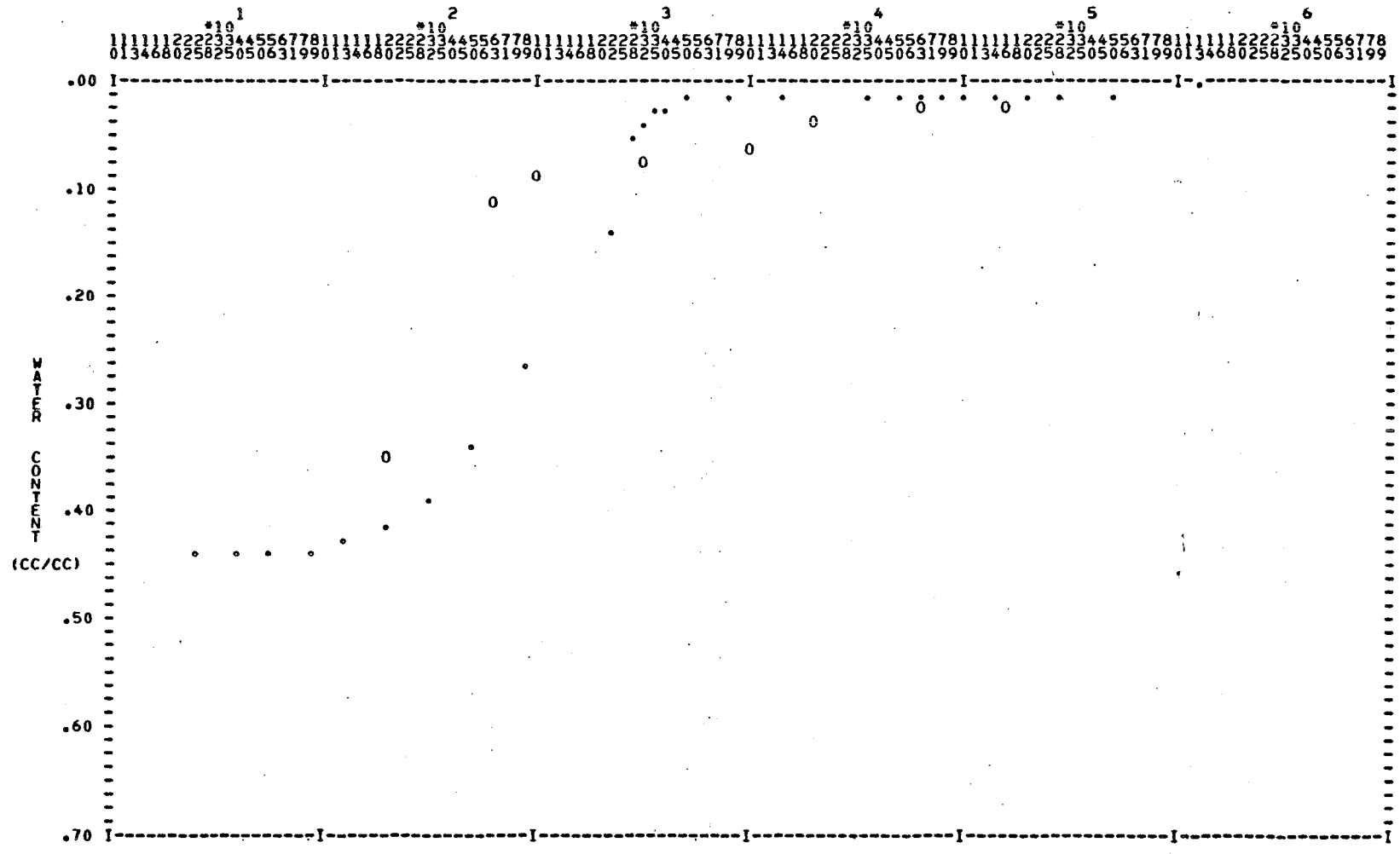
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.12894E+06
0.012	0.52775E+05
0.013	0.29540E+05
0.014	0.19099E+05
0.014	0.13463E+05
0.014	0.10053E+05
0.015	0.78223E+04
0.015	0.62781E+04
0.015	0.51616E+04
0.016	0.35905E+04
0.017	0.14113E+04
0.018	0.76409E+03
0.019	0.49572E+03
0.019	0.37097E+03
0.021	0.39595E+03
0.025	0.37060E+03
0.033	0.33276E+03
0.045	0.29592E+03
0.133	0.23205E+03
0.262	0.93774E+02
0.340	0.50971E+02
0.388	0.31013E+02
0.415	0.19693E+02
0.427	0.13015E+02
0.433	0.87908E+01
0.435	0.59439E+01
0.436	0.41088E+01
0.437	0.26393E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 68

0 MEASURED . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.56120E+01

SOIL HORIZON NUMBER 69 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.30 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.082	0.150E+05
0.086	0.600E+04
0.095	0.200E+04
0.130	0.100E+04
0.146	0.330E+03
0.173	0.100E+03
0.201	0.600E+02
0.409	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.4	0.034
2.00	3.6	0.002
3.00	3.8	0.002
4.00	4.0	0.002
5.00	4.2	0.002
6.00	4.4	0.002
7.00	4.6	0.002
8.00	4.8	0.002
9.00	4.9	0.002
10.00	5.1	0.001
20.00	6.1	0.010
30.00	7.6	0.015
40.00	9.3	0.017
50.00	9.7	0.014
60.00	10.8	0.011
70.00	11.1	0.013
80.00	11.9	0.018
90.00	13.3	0.024
100.00	20.7	0.033
200.00	47.9	0.277
300.00	63.7	0.158
400.00	74.3	0.106
500.00	82.3	0.080
600.00	88.4	0.061
700.00	92.9	0.045
800.00	95.9	0.030
900.00	97.8	0.019
1000.00	98.7	0.009
2000.00	100.0	0.013

PREDICTED MOISTURE CHARACTERISTIC DATA

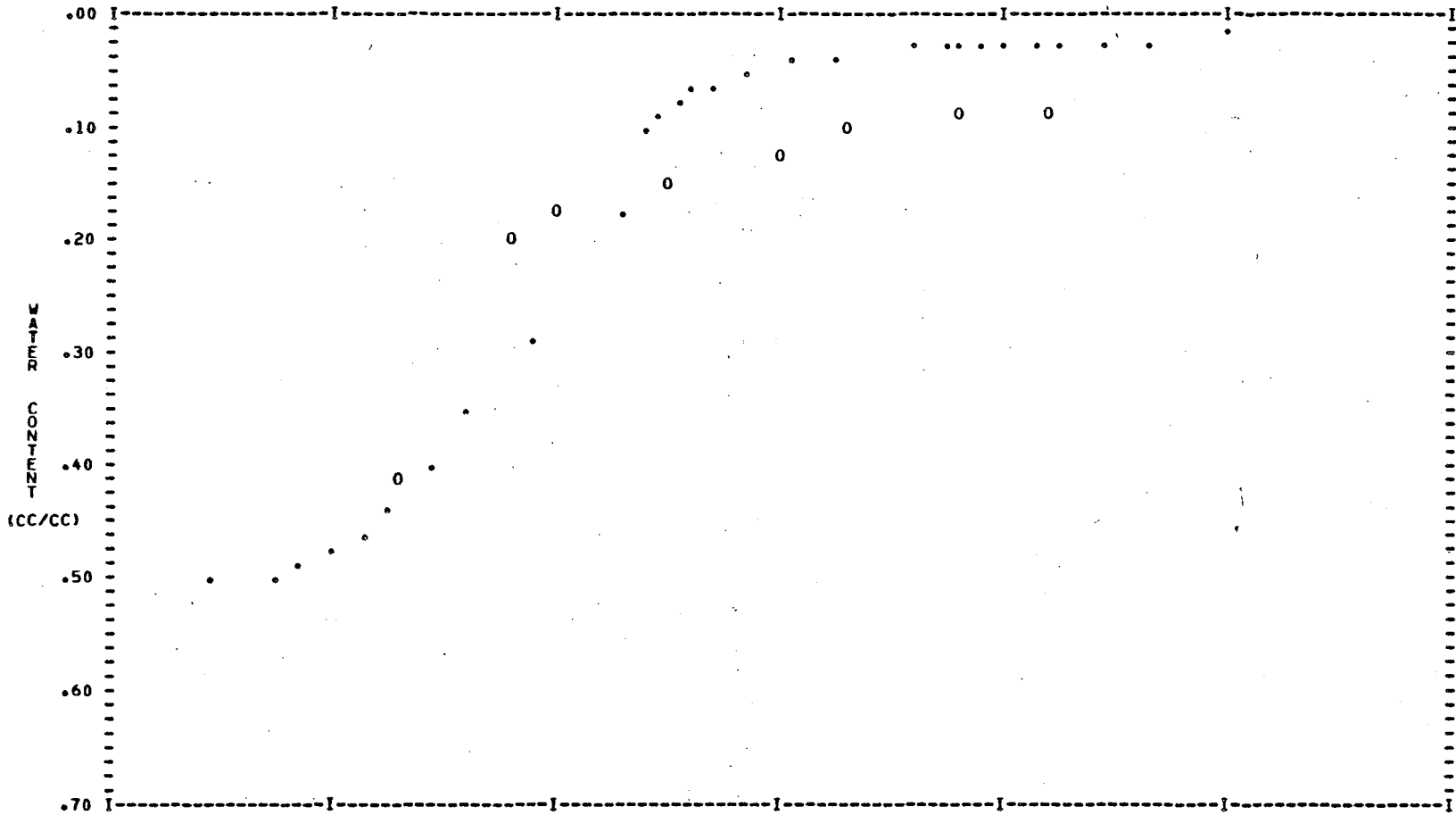
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.995886E+05
0.019	0.453331E+05
0.020	0.277099E+05
0.021	0.185855E+05
0.022	0.133799E+05
0.023	0.101331E+05
0.024	0.796299E+04
0.025	0.644019E+04
0.026	0.532709E+04
0.028	0.376809E+04
0.035	0.181331E+04
0.043	0.109929E+04
0.051	0.714449E+03
0.057	0.495669E+03
0.063	0.393059E+03
0.071	0.333549E+03
0.082	0.291549E+03
0.096	0.255549E+03
0.174	0.189809E+03
0.284	0.765279E+02
0.351	0.418729E+02
0.399	0.267239E+02
0.435	0.185549E+02
0.462	0.134331E+02
0.481	0.997999E+01
0.494	0.747239E+01
0.501	0.545239E+01
0.506	0.285886E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-139

SOIL HORIZON NUMBER 69 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.55346E+01

SOIL HORIZON NUMBER 70 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.47 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.029	0.600E+04
0.034	0.200E+04
0.056	0.100E+04
0.078	0.330E+03
0.101	0.100E+03
0.140	0.600E+02
0.348	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.000	0.035
2.00	0.000	0.000
3.00	0.000	0.000
4.00	0.000	0.000
5.00	0.000	0.000
6.00	0.000	0.000
7.00	0.000	0.000
8.00	0.000	0.000
9.00	0.000	0.000
10.00	0.000	0.000
20.00	0.001	0.001
30.00	0.008	0.008
40.00	0.012	0.012
50.00	0.011	0.011
60.00	0.015	0.015
70.00	0.023	0.023
80.00	0.028	0.028
90.00	0.032	0.032
100.00	0.034	0.034
200.00	0.316	0.316
300.00	0.655	0.655
400.00	0.811	0.811
500.00	0.869	0.869
600.00	0.909	0.909
700.00	0.936	0.936
800.00	0.950	0.950
900.00	0.967	0.967
1000.00	0.983	0.983
2000.00	100.0	0.017

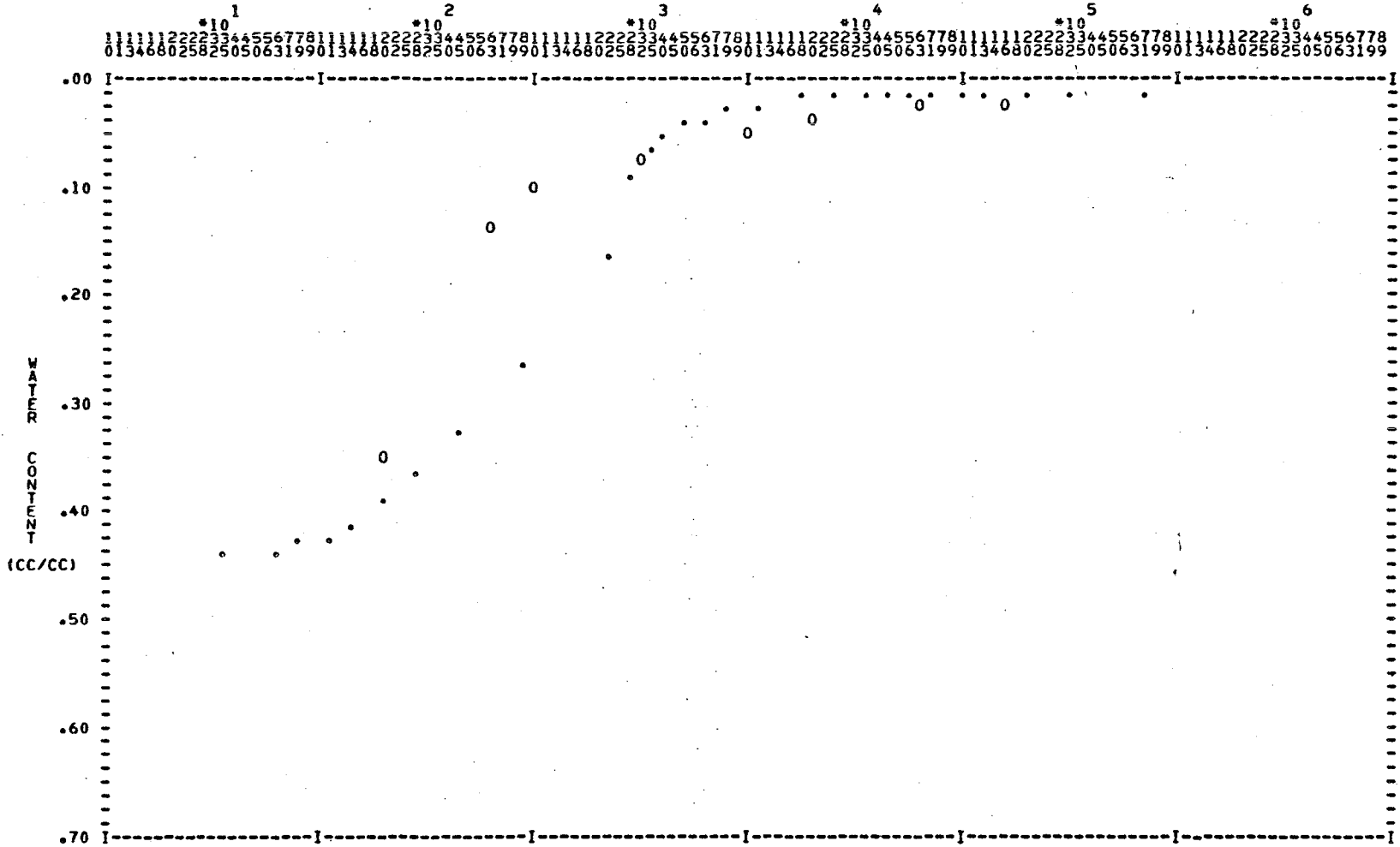
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.682227E+05
0.016	0.320801E+05
0.016	0.198166E+05
0.016	0.132801E+05
0.016	0.954223E+04
0.016	0.720501E+04
0.016	0.564501E+04
0.016	0.455177E+04
0.016	0.375201E+04
0.016	0.261201E+04
0.018	0.181401E+04
0.022	0.116101E+04
0.027	0.772801E+03
0.033	0.603201E+03
0.042	0.502166E+03
0.053	0.416201E+03
0.067	0.349177E+03
0.082	0.296901E+03
0.159	0.221488E+03
0.266	0.877977E+02
0.326	0.471788E+02
0.364	0.295544E+02
0.390	0.202277E+02
0.409	0.146199E+02
0.422	0.108666E+02
0.431	0.817701E+01
0.436	0.606421E+01
0.441	0.342166E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 70

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.41929E+01

SOIL HORIZON NUMBER 71 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.150E+05
0.046	0.600E+04
0.052	0.200E+04
0.087	0.100E+04
0.098	0.330E+03
0.120	0.100E+03
0.167	0.600E+02
0.360	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.9	0.069
2.00	6.9	0.000
3.00	6.9	0.000
4.00	7.0	0.000
5.00	7.0	0.000
6.00	7.1	0.000
7.00	7.1	0.000
8.00	7.1	0.000
9.00	7.2	0.000
10.00	7.2	0.000
20.00	7.4	0.002
30.00	8.1	0.007
40.00	9.1	0.011
50.00	11.0	0.011
60.00	11.0	0.021
70.00	11.5	0.033
80.00	11.9	0.037
90.00	13.3	0.038
100.00	16.6	0.037
200.00	62.5	0.358
300.00	78.0	0.158
400.00	86.0	0.079
500.00	90.0	0.044
600.00	93.0	0.028
700.00	95.0	0.022
800.00	97.0	0.015
900.00	98.0	0.010
1000.00	98.0	0.005
2000.00	100.0	0.013

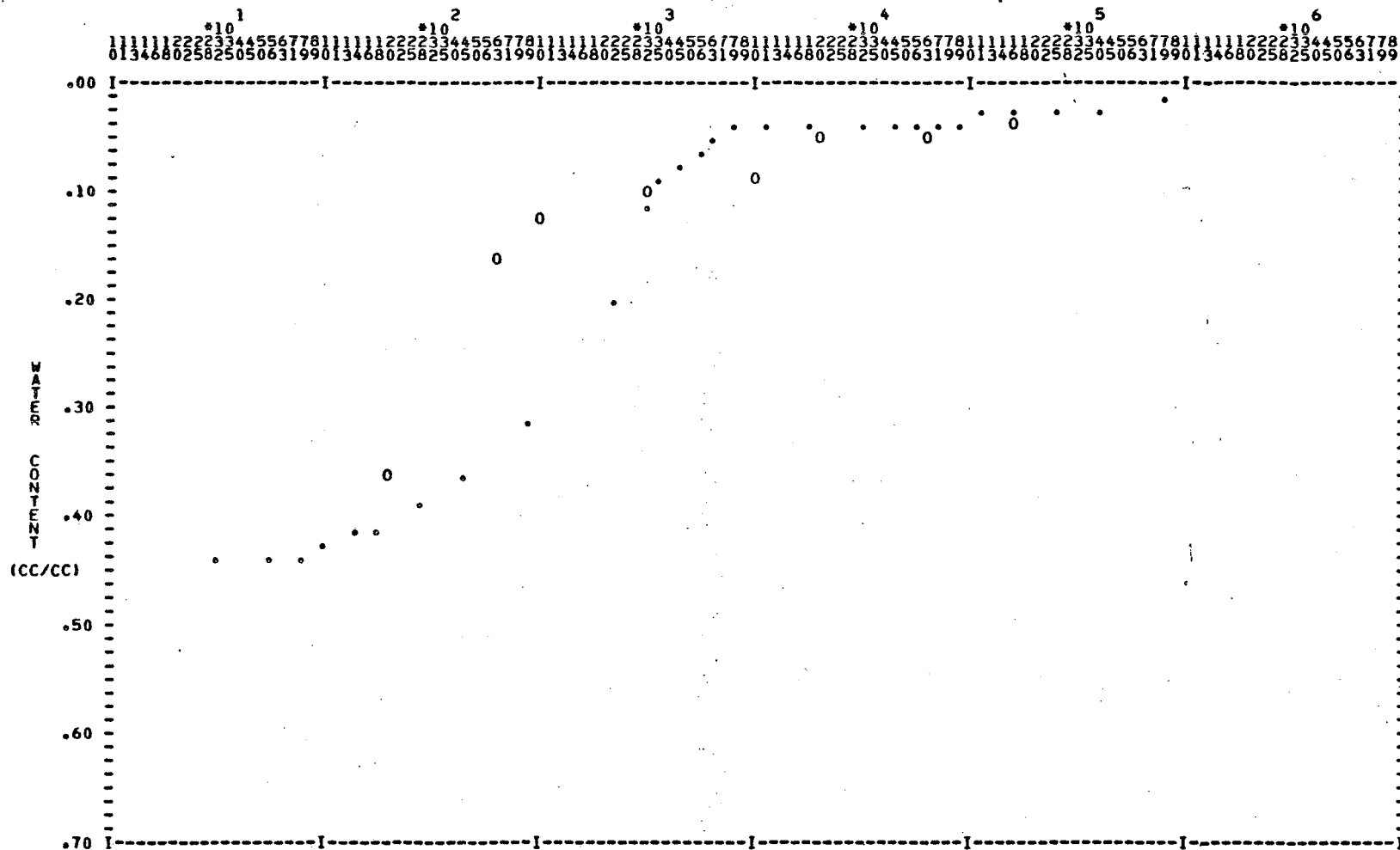
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.816455
0.031	0.285066
0.031	0.238096
0.031	0.159633
0.031	0.114244
0.031	0.867798
0.031	0.546633
0.031	0.450066
0.031	0.312409
0.031	0.170327
0.031	0.115077
0.031	0.773164
0.031	0.641644
0.031	0.538800
0.031	0.441805
0.031	0.363800
0.031	0.308055
0.031	0.228570
0.031	0.877990
0.031	0.453755
0.031	0.273791
0.031	0.183711
0.031	0.134055
0.031	0.100255
0.031	0.756506
0.031	0.560866
0.031	0.443555
0.031	0.327655

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 71

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.45201E+01

SOIL HORIZON NUMBER 72 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.050	0.150E+05
0.061	0.600E+04
0.066	0.200E+04
0.095	0.100E+04
0.106	0.330E+03
0.125	0.100E+03
0.164	0.600E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
1.00	7.3	0.001
2.00	7.4	0.001
3.00	7.6	0.001
4.00	7.7	0.001
5.00	7.8	0.001
6.00	7.9	0.001
7.00	8.0	0.001
8.00	8.0	0.001
9.00	8.0	0.001
10.00	8.4	0.004
15.00	8.9	0.005
20.00	9.4	0.006
30.00	9.9	0.005
40.00	10.0	0.010
50.00	10.0	0.019
60.00	10.0	0.025
70.00	10.0	0.032
80.00	10.0	0.317
90.00	10.0	0.164
100.00	10.0	0.099
200.00	10.0	0.065
300.00	10.0	0.044
400.00	10.0	0.032
500.00	10.0	0.022
600.00	10.0	0.014
700.00	10.0	0.008
800.00	10.0	0.008
900.00	10.0	0.008
1000.00	10.0	0.022

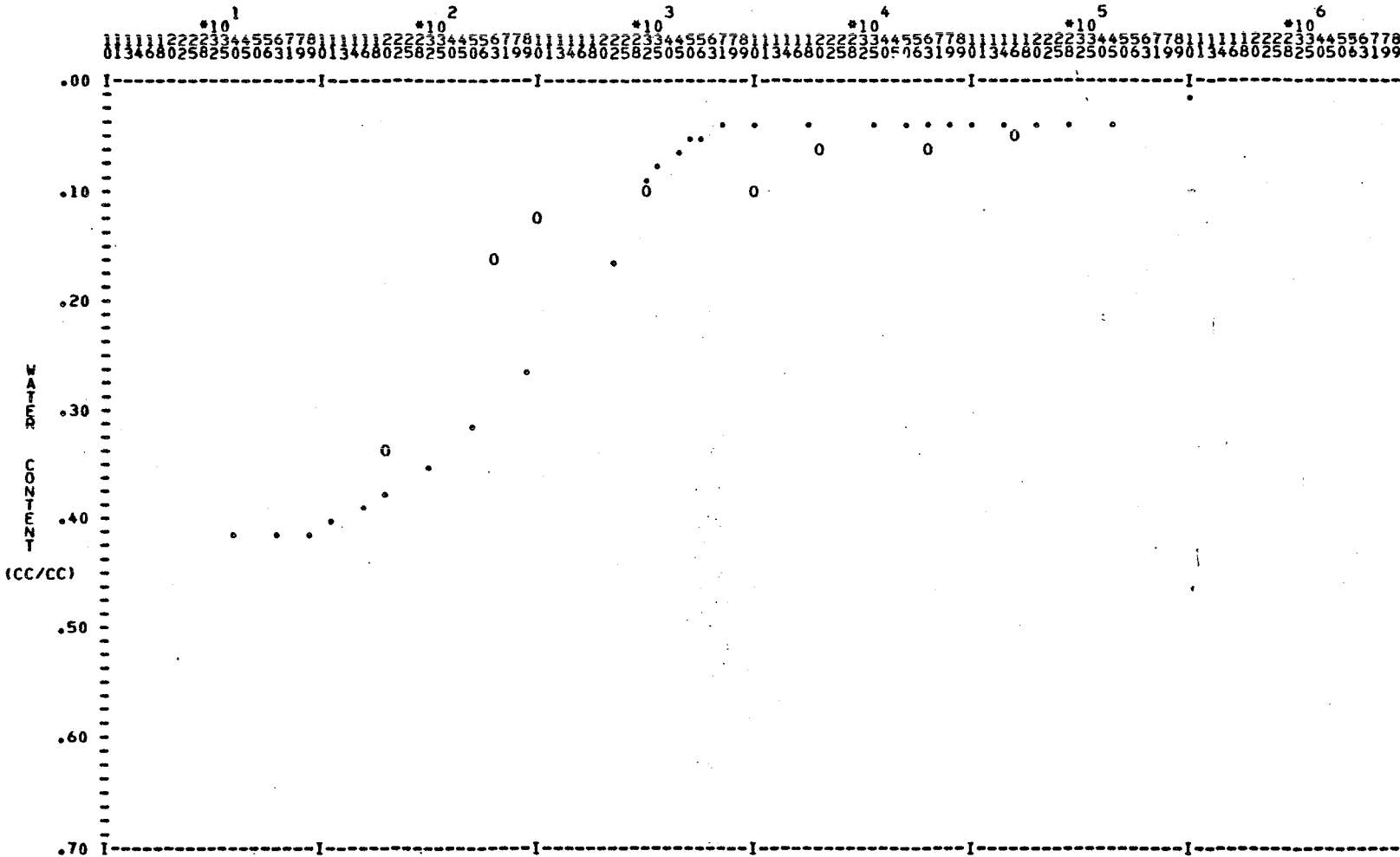
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.016	0.10564E+06
0.031	0.47279E+05
0.032	0.28527E+05
0.032	0.18987E+05
0.033	0.13588E+05
0.033	0.10233E+05
0.033	0.80024E+04
0.034	0.64441E+04
0.034	0.53041E+04
0.035	0.36741E+04
0.036	0.17270E+04
0.039	0.10567E+04
0.041	0.69608E+03
0.044	0.58588E+03
0.050	0.50654E+03
0.060	0.42522E+03
0.071	0.35909E+03
0.084	0.30663E+03
0.157	0.23208E+03
0.259	0.91791E+02
0.314	0.49159E+02
0.349	0.30599E+02
0.372	0.20777E+02
0.388	0.14988E+02
0.399	0.11150E+02
0.407	0.84410E+01
0.412	0.63773E+01
0.418	0.37629E+01

ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 72

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.52099E+01

SOIL HORIZON NUMBER 73 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.150E+05
0.040	0.600E+04
0.045	0.200E+04
0.103	0.100E+04
0.116	0.330E+03
0.140	0.100E+03
0.182	0.600E+02
0.346	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.4	0.044
2.00	4.5	0.001
3.00	4.6	0.001
4.00	4.7	0.001
5.00	4.8	0.001
6.00	4.9	0.001
7.00	5.0	0.001
8.00	5.1	0.001
9.00	5.2	0.001
10.00	5.3	0.001
20.00	5.6	0.004
30.00	5.7	0.001
40.00	5.8	0.010
50.00	5.9	0.010
60.00	6.1	0.021
70.00	6.2	0.053
80.00	6.6	0.073
90.00	6.9	0.073
100.00	7.0	0.061
200.00	7.9	0.044
300.00	8.0	0.122
400.00	8.3	0.073
500.00	8.4	0.044
600.00	9.1	0.033
700.00	9.4	0.026
800.00	9.6	0.010
900.00	9.7	0.010
1000.00	98.1	0.007
2000.00	100.0	0.019

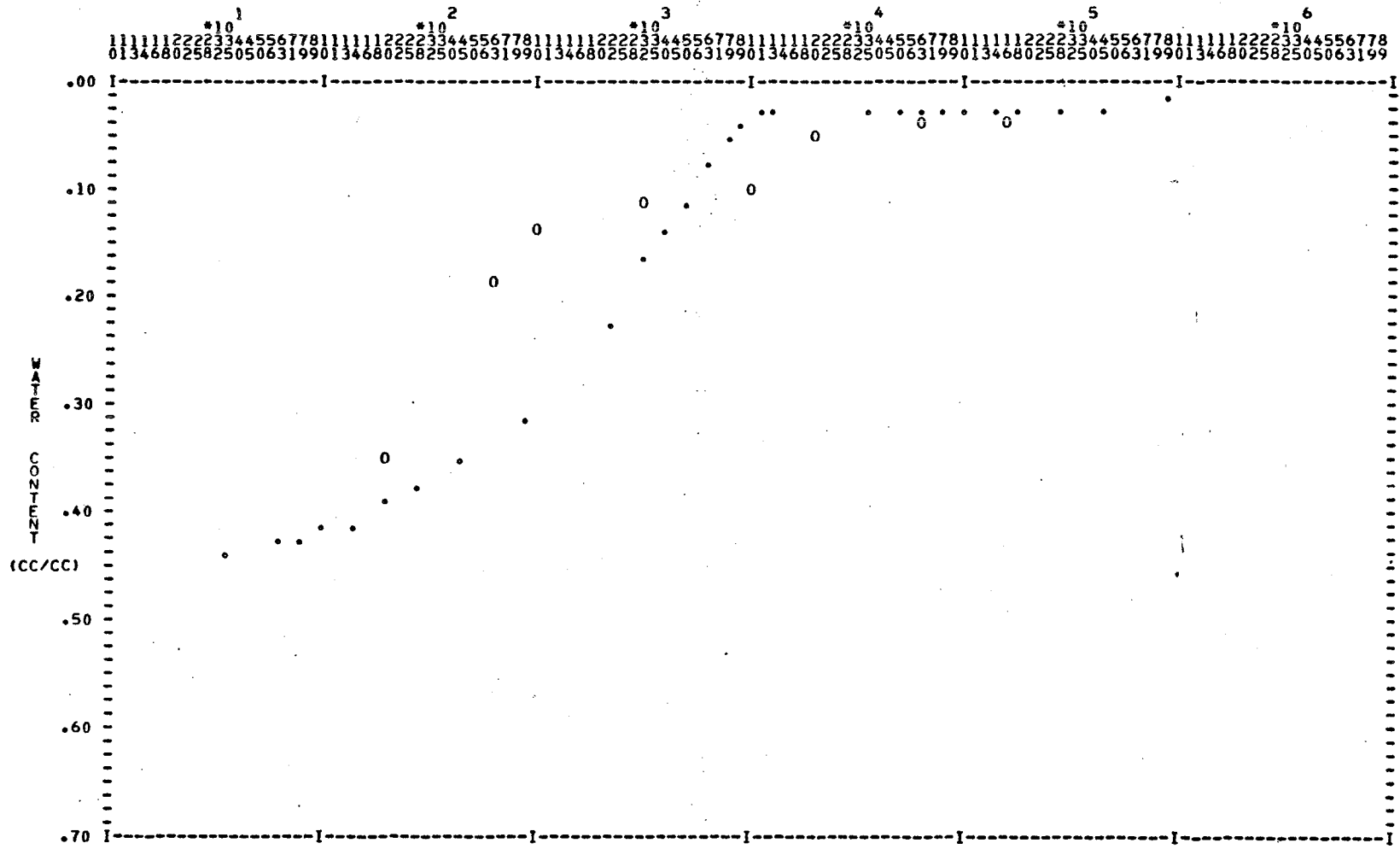
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.93088E+05
0.020	0.44947E+05
0.020	0.27971E+05
0.021	0.18766E+05
0.021	0.13472E+05
0.022	0.10163E+05
0.022	0.79544E+04
0.022	0.64048E+04
0.023	0.52739E+04
0.024	0.36440E+04
0.025	0.12272E+04
0.027	0.11453E+04
0.034	0.89102E+03
0.050	0.77302E+03
0.078	0.63659E+03
0.111	0.50587E+03
0.146	0.40140E+03
0.163	0.31793E+03
0.207	0.21430E+03
0.307	0.84154E+02
0.349	0.44915E+02
0.376	0.28027E+02
0.394	0.19254E+02
0.407	0.13990E+02
0.417	0.10477E+02
0.424	0.79750E+01
0.428	0.60655E+01
0.434	0.35486E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 73

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.45428E+01

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SOIL HORIZON NUMBER 74 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.38 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.150E+05
0.026	0.200E+04
0.033	0.200E+04
0.037	0.100E+04
0.057	0.100E+04
0.103	0.100E+04
0.124	0.100E+04
0.159	0.100E+04
0.384	0.000E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.4	0.014
2.00	0.0	0.000
4.00	0.0	0.000
6.00	0.0	0.000
8.00	0.0	0.000
10.00	0.0	0.000
15.00	0.0	0.000
20.00	0.0	0.000
25.00	0.0	0.000
30.00	0.0	0.000
35.00	0.0	0.000
40.00	0.0	0.000
45.00	0.0	0.000
50.00	0.0	0.000
60.00	0.0	0.000
70.00	0.0	0.000
80.00	0.0	0.000
100.00	0.0	0.000
150.00	0.0	0.000
200.00	0.0	0.000
250.00	0.0	0.000
300.00	0.0	0.000
350.00	0.0	0.000
400.00	0.0	0.000
450.00	0.0	0.000
500.00	0.0	0.000
600.00	0.0	0.000
700.00	0.0	0.000
800.00	0.0	0.000
1000.00	0.0	0.000
2000.00	100.0	0.008

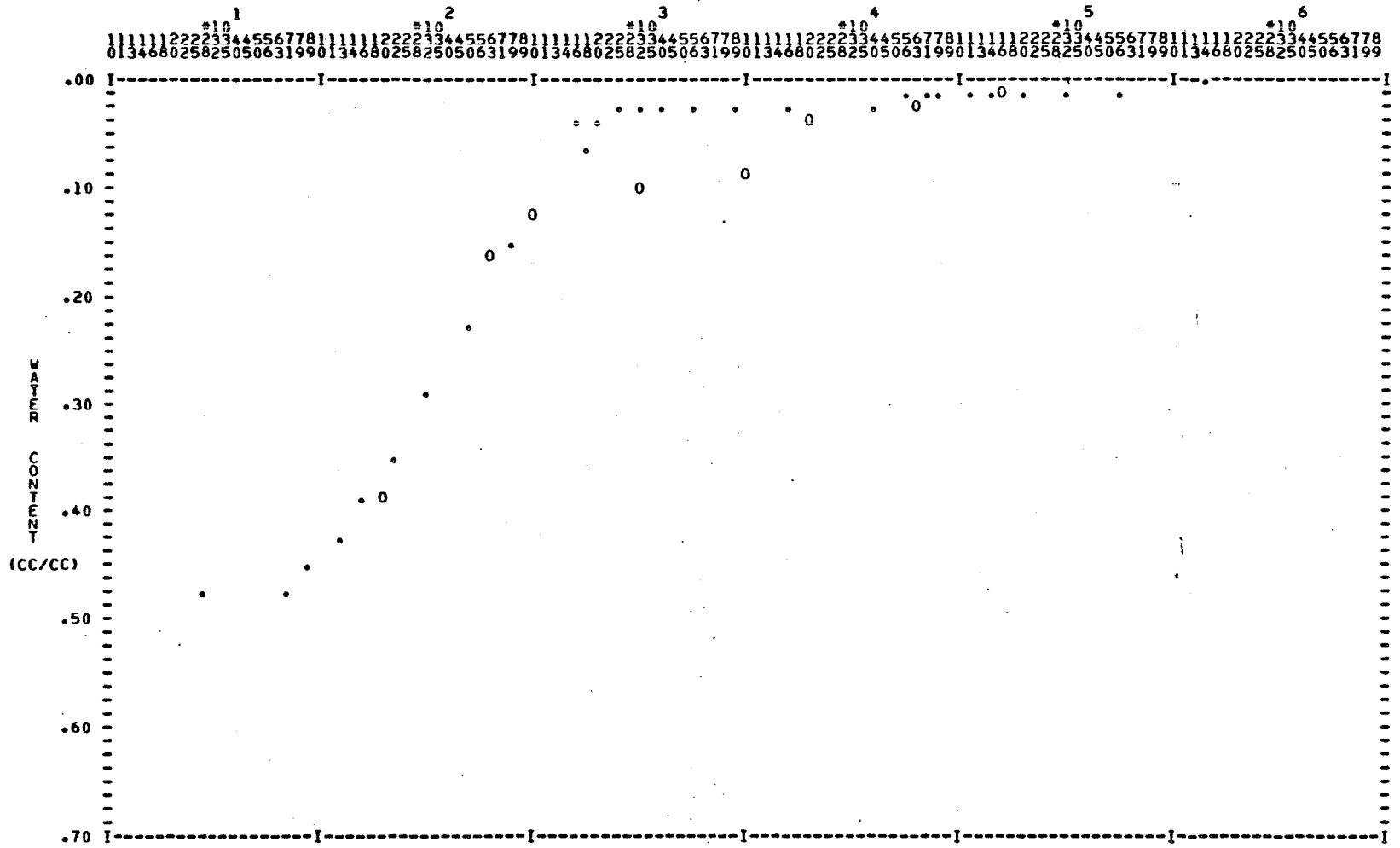
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.005	0.150E+05
0.012	0.200E+04
0.017	0.200E+04
0.021	0.100E+04
0.024	0.100E+04
0.027	0.100E+04
0.030	0.100E+04
0.033	0.100E+04
0.036	0.100E+04
0.039	0.100E+04
0.042	0.100E+04
0.045	0.100E+04
0.048	0.100E+04
0.051	0.100E+04
0.054	0.100E+04
0.057	0.100E+04
0.060	0.100E+04
0.063	0.100E+04
0.066	0.100E+04
0.069	0.100E+04
0.072	0.100E+04
0.075	0.100E+04
0.078	0.100E+04
0.081	0.100E+04
0.084	0.100E+04
0.087	0.100E+04
0.090	0.100E+04
0.093	0.100E+04
0.096	0.100E+04
0.099	0.100E+04
0.102	0.100E+04
0.105	0.100E+04
0.108	0.100E+04
0.111	0.100E+04
0.114	0.100E+04
0.117	0.100E+04
0.120	0.100E+04
0.123	0.100E+04
0.126	0.100E+04
0.129	0.100E+04
0.132	0.100E+04
0.135	0.100E+04
0.138	0.100E+04
0.141	0.100E+04
0.144	0.100E+04
0.147	0.100E+04
0.150	0.100E+04
0.153	0.100E+04
0.156	0.100E+04
0.159	0.100E+04
0.162	0.100E+04
0.165	0.100E+04
0.168	0.100E+04
0.171	0.100E+04
0.174	0.100E+04
0.177	0.100E+04
0.180	0.100E+04
0.183	0.100E+04
0.186	0.100E+04
0.189	0.100E+04
0.192	0.100E+04
0.195	0.100E+04
0.198	0.100E+04
0.201	0.100E+04
0.204	0.100E+04
0.207	0.100E+04
0.210	0.100E+04
0.213	0.100E+04
0.216	0.100E+04
0.219	0.100E+04
0.222	0.100E+04
0.225	0.100E+04
0.228	0.100E+04
0.231	0.100E+04
0.234	0.100E+04
0.237	0.100E+04
0.240	0.100E+04
0.243	0.100E+04
0.246	0.100E+04
0.249	0.100E+04
0.252	0.100E+04
0.255	0.100E+04
0.258	0.100E+04
0.261	0.100E+04
0.264	0.100E+04
0.267	0.100E+04
0.270	0.100E+04
0.273	0.100E+04
0.276	0.100E+04
0.279	0.100E+04
0.282	0.100E+04
0.285	0.100E+04
0.288	0.100E+04
0.291	0.100E+04
0.294	0.100E+04
0.297	0.100E+04
0.300	0.100E+04
0.303	0.100E+04
0.306	0.100E+04
0.309	0.100E+04
0.312	0.100E+04
0.315	0.100E+04
0.318	0.100E+04
0.321	0.100E+04
0.324	0.100E+04
0.327	0.100E+04
0.330	0.100E+04
0.333	0.100E+04
0.336	0.100E+04
0.339	0.100E+04
0.342	0.100E+04
0.345	0.100E+04
0.348	0.100E+04
0.351	0.100E+04
0.354	0.100E+04
0.357	0.100E+04
0.360	0.100E+04
0.363	0.100E+04
0.366	0.100E+04
0.369	0.100E+04
0.372	0.100E+04
0.375	0.100E+04
0.378	0.100E+04
0.381	0.100E+04
0.384	0.100E+04
0.387	0.100E+04
0.390	0.100E+04
0.393	0.100E+04
0.396	0.100E+04
0.399	0.100E+04
0.402	0.100E+04
0.405	0.100E+04
0.408	0.100E+04
0.411	0.100E+04
0.414	0.100E+04
0.417	0.100E+04
0.420	0.100E+04
0.423	0.100E+04
0.426	0.100E+04
0.429	0.100E+04
0.432	0.100E+04
0.435	0.100E+04
0.438	0.100E+04
0.441	0.100E+04
0.444	0.100E+04
0.447	0.100E+04
0.450	0.100E+04
0.453	0.100E+04
0.456	0.100E+04
0.459	0.100E+04
0.462	0.100E+04
0.465	0.100E+04
0.468	0.100E+04
0.471	0.100E+04
0.474	0.100E+04
0.477	0.100E+04

ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 75 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.40 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.022	0.600E+04
0.029	0.200E+04
0.087	0.100E+04
0.101	0.330E+03
0.129	0.100E+03
0.171	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.9	0.009
2.00	1.2	0.003
3.00	4.4	0.002
4.00	11.6	0.002
5.00	17.7	0.002
6.00	29.9	0.001
7.00	30.0	0.001
8.00	30.0	0.001
9.00	30.0	0.001
10.00	30.0	0.008
20.00	30.0	0.007
30.00	30.0	0.005
40.00	30.0	0.004
50.00	30.0	0.002
60.00	30.0	0.001
70.00	30.0	0.001
80.00	30.0	0.001
90.00	30.0	0.001
100.00	30.0	0.001
200.00	30.0	0.009
300.00	30.0	0.190
400.00	30.0	0.159
500.00	30.0	0.122
600.00	30.0	0.106
700.00	30.0	0.094
800.00	30.0	0.074
900.00	30.0	0.054
1000.00	30.0	0.034
2000.00	100.0	0.012

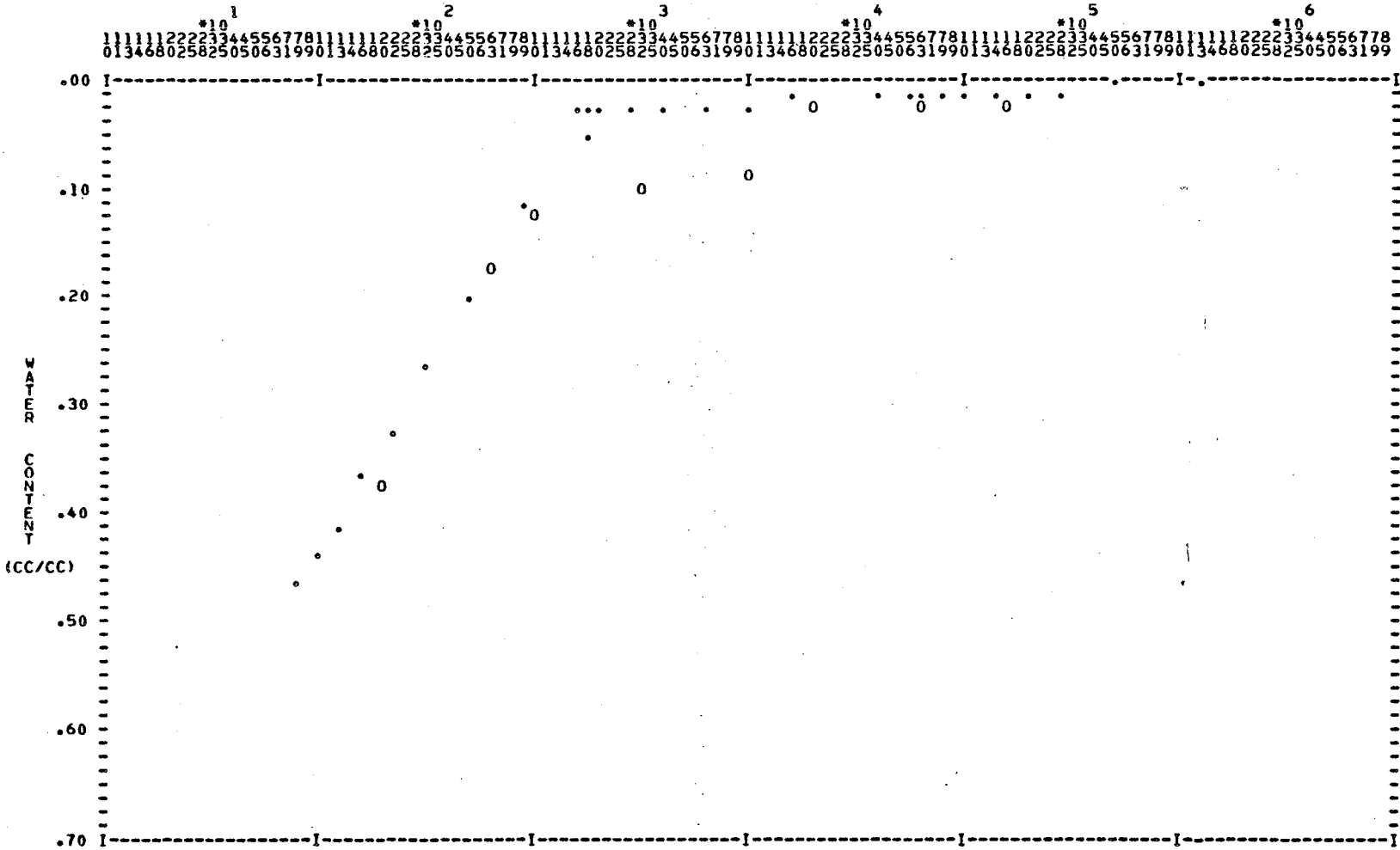
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.003	0.119664E+06
0.006	0.498977E+06
0.007	0.287468E+06
0.008	0.189648E+06
0.009	0.135799E+06
0.009	0.102711E+06
0.010	0.808111E+04
0.010	0.654922E+04
0.011	0.543161E+04
0.013	0.390444E+04
0.017	0.167799E+04
0.019	0.951444E+03
0.022	0.606911E+03
0.023	0.401066E+03
0.024	0.273911E+03
0.025	0.208244E+03
0.025	0.173468E+03
0.026	0.151433E+03
0.049	0.168555E+03
0.118	0.855199E+02
0.100	0.487133E+02
0.220	0.312333E+02
0.320	0.222077E+02
0.367	0.166685E+02
0.407	0.127544E+02
0.437	0.985533E+01
0.458	0.759644E+01
0.469	0.303655E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 75

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51647E+01

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SOIL HORIZON NUMBER 76 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.52 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.023	0.150E+05
0.029	0.600E+04
0.033	0.200E+04
0.046	0.100E+04
0.058	0.330E+03
0.079	0.100E+03
0.115	0.600E+02
0.313	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.0	0.020
2.00	2.8	0.008
3.00	3.3	0.005
4.00	3.7	0.004
5.00	4.0	0.003
6.00	4.2	0.002
7.00	4.4	0.002
8.00	4.6	0.002
9.00	4.8	0.002
10.00	4.9	0.001
20.00	5.9	0.010
30.00	6.5	0.006
40.00	7.0	0.004
50.00	7.3	0.003
60.00	7.6	0.003
70.00	7.9	0.003
80.00	8.3	0.003
90.00	8.6	0.004
100.00	9.0	0.004
200.00	27.6	0.186
300.00	46.1	0.185
400.00	61.1	0.149
500.00	72.1	0.110
600.00	81.1	0.090
700.00	88.6	0.075
800.00	94.1	0.055
900.00	97.5	0.034
1000.00	99.0	0.015
2000.00	100.0	0.010

PREDICTED MOISTURE CHARACTERISTIC DATA

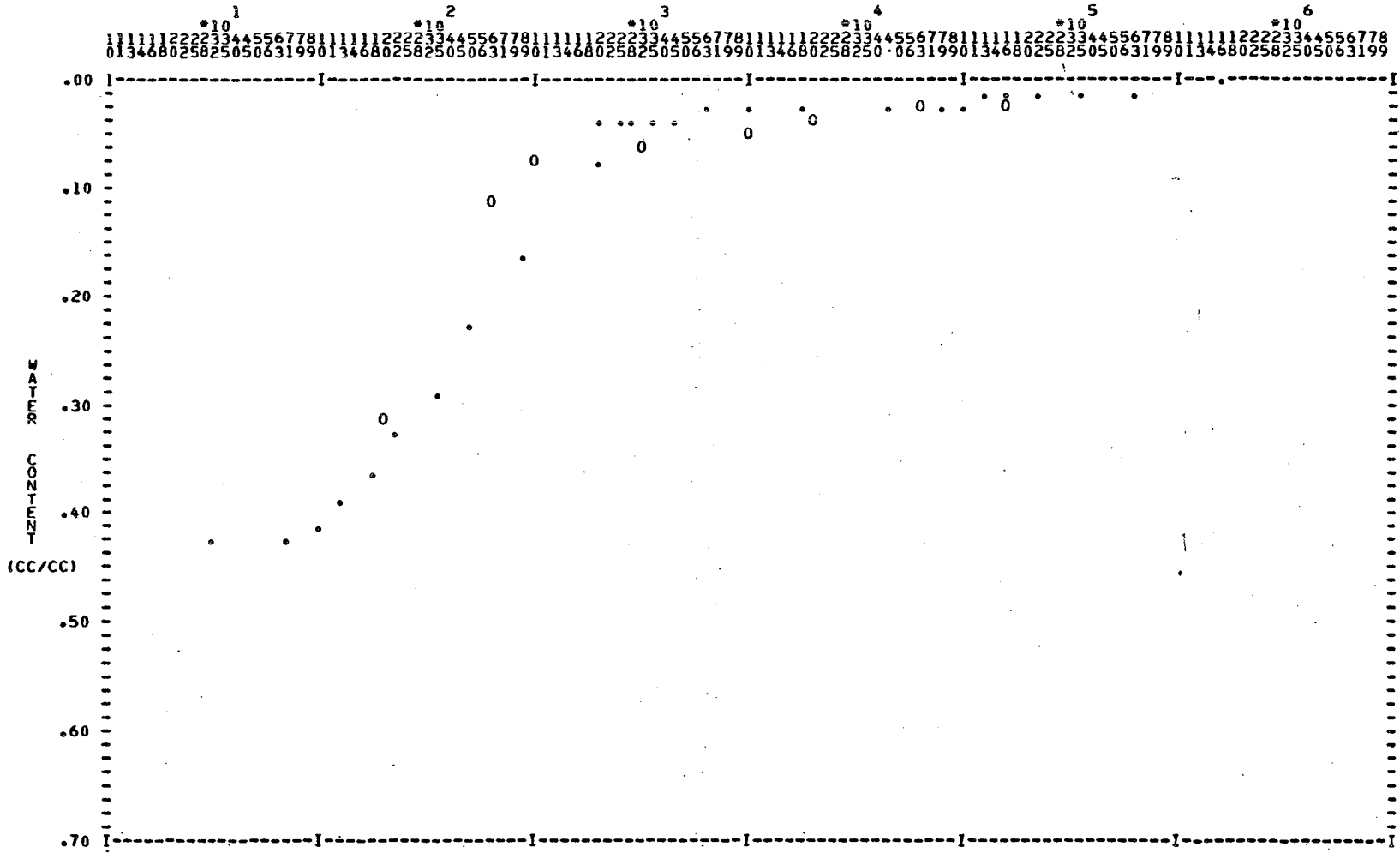
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.15872E+06
0.013	0.64696E+05
0.015	0.36046E+05
0.016	0.23275E+05
0.017	0.16407E+05
0.018	0.12226E+05
0.019	0.95510E+04
0.020	0.76757E+04
0.021	0.63199E+04
0.023	0.44311E+04
0.026	0.18112E+04
0.029	0.10062E+04
0.030	0.64588E+03
0.032	0.46178E+03
0.033	0.35811E+03
0.035	0.28889E+03
0.036	0.23949E+03
0.038	0.20263E+03
0.078	0.20816E+03
0.157	0.93242E+02
0.229	0.52778E+02
0.284	0.33591E+02
0.327	0.23570E+02
0.362	0.17531E+02
0.390	0.13193E+02
0.409	0.99052E+01
0.419	0.70926E+01
0.424	0.32145E+01

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ALPHA = 1.38

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SOIL WATER PRESSURE (PSI): -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 77 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.57 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.150E+05
0.033	0.600E+04
0.039	0.200E+04
0.053	0.100E+04
0.064	0.330E+03
0.075	0.100E+03
0.110	0.600E+02
0.297	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.5	0.035
2.00	4.4	0.009
3.00	5.0	0.006
4.00	5.4	0.004
5.00	5.8	0.004
6.00	6.1	0.003
7.00	6.4	0.002
8.00	6.5	0.002
9.00	6.7	0.002
10.00	6.9	0.002
20.00	7.9	0.010
30.00	8.4	0.005
40.00	8.8	0.004
50.00	9.1	0.003
60.00	9.4	0.003
70.00	9.5	0.002
80.00	9.5	0.002
90.00	9.5	0.002
100.00	9.5	0.002
200.00	10.0	0.053
300.00	25.0	0.179
400.00	43.4	0.147
500.00	53.1	0.111
600.00	62.9	0.111
700.00	78.0	0.153
800.00	86.6	0.081
900.00	92.7	0.061
1000.00	96.7	0.040
2000.00	98.7	0.020
	100.0	0.013

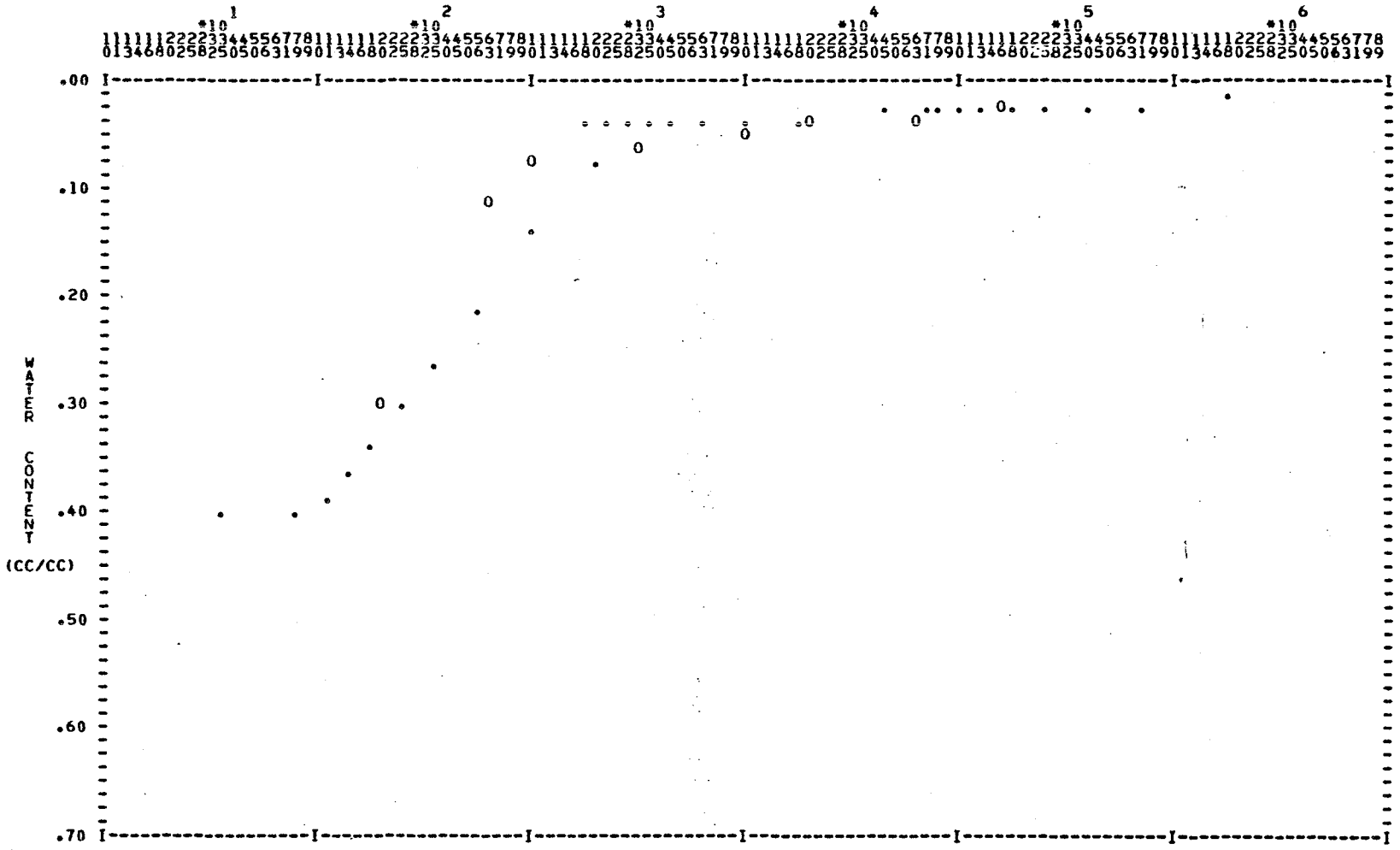
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.005	0.16875E+06
0.019	0.69205E+05
0.021	0.38787E+05
0.023	0.25065E+05
0.024	0.17647E+05
0.025	0.13157E+05
0.026	0.10221E+05
0.027	0.81883E+04
0.028	0.67196E+04
0.030	0.46305E+04
0.033	0.18367E+04
0.035	0.10117E+04
0.036	0.65024E+03
0.038	0.46144E+03
0.039	0.34978E+03
0.040	0.27584E+03
0.040	0.22406E+03
0.041	0.18624E+03
0.073	0.20850E+03
0.141	0.96352E+02
0.177	0.54704E+02
0.207	0.34928E+02
0.259	0.24657E+02
0.301	0.18475E+02
0.337	0.13938E+02
0.335	0.10603E+02
0.386	0.77999E+01
0.398	0.35125E+01
0.405	

B-154

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-155

SOIL HORIZON NUMBER 77

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.33864E+01

SOIL HORIZON NUMBER 78 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.61 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.150E+05
0.016	0.600E+04
0.016	0.200E+04
0.029	0.100E+04
0.039	0.330E+03
0.048	0.100E+03
0.100	0.600E+02
0.306	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.4	0.014
2.00	1.5	0.001
3.00	1.6	0.001
4.00	1.6	0.001
5.00	1.7	0.001
6.00	1.8	0.001
7.00	1.8	0.001
8.00	1.9	0.000
9.00	1.9	0.000
10.00	1.9	0.000
20.00	1.9	0.003
30.00	1.9	0.003
40.00	1.9	0.003
50.00	1.9	0.003
60.00	1.9	0.003
70.00	1.9	0.003
80.00	3.7	0.003
90.00	4.0	0.003
100.00	4.4	0.004
200.00	10.7	0.163
300.00	19.0	0.189
400.00	24.4	0.153
500.00	26.6	0.116
600.00	27.6	0.098
700.00	28.9	0.085
800.00	29.4	0.065
900.00	29.9	0.044
1000.00	29.9	0.024
2000.00	100.0	0.017

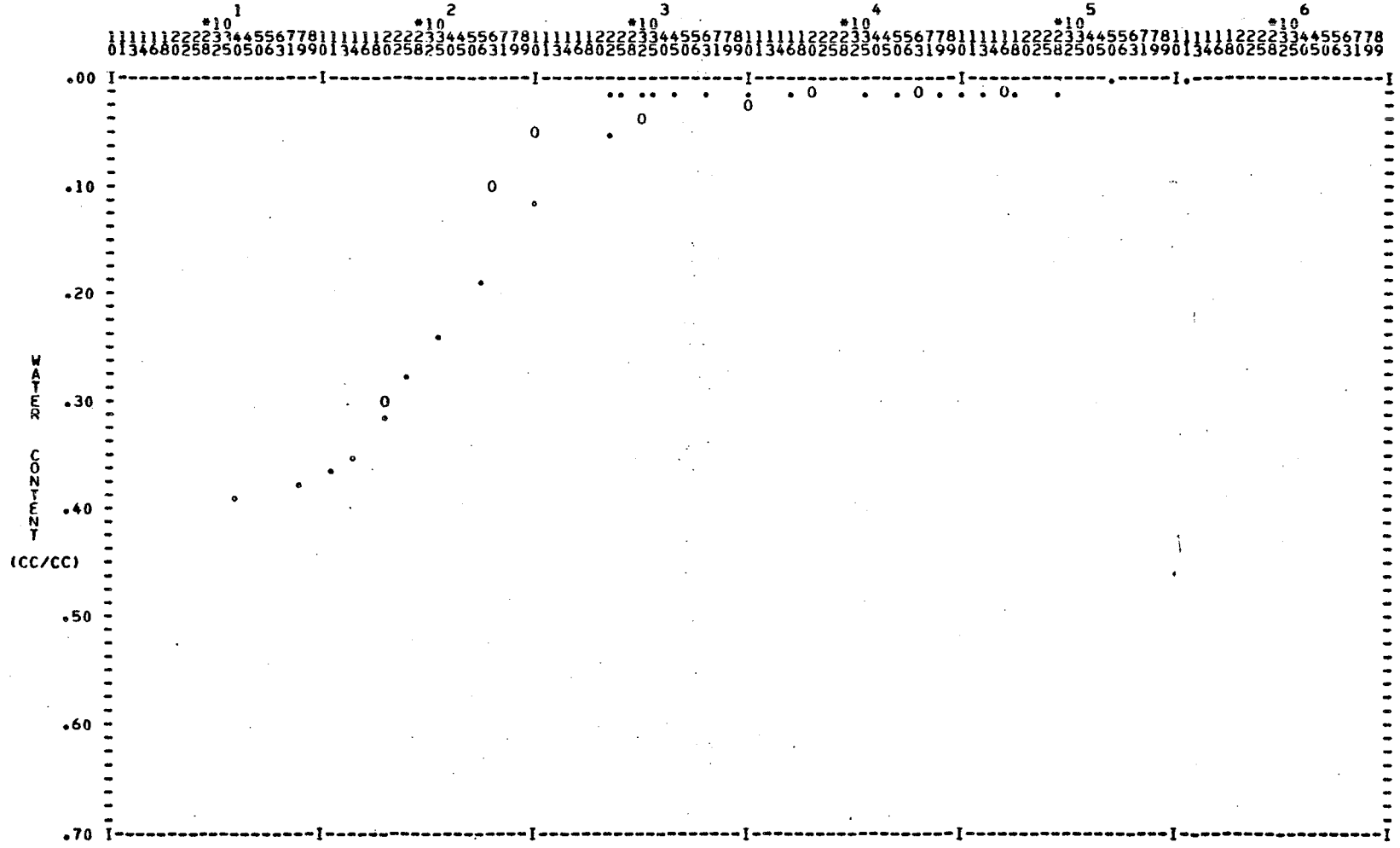
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.003	0.11080E+06
0.006	0.47695E+06
0.006	0.28136E+05
0.007	0.18694E+05
0.007	0.13333E+05
0.007	0.10885E+05
0.007	0.78888E+04
0.007	0.66333E+04
0.008	0.52333E+04
0.008	0.36666E+04
0.009	0.16666E+04
0.010	0.96681E+03
0.011	0.61882E+03
0.011	0.45884E+03
0.013	0.37733E+03
0.014	0.30666E+03
0.017	0.20666E+03
0.040	0.11777E+03
0.118	0.09046E+03
0.189	0.06888E+03
0.153	0.05733E+03
0.116	0.04666E+03
0.098	0.03733E+03
0.085	0.03466E+03
0.065	0.02666E+03
0.044	0.01666E+03
0.024	0.01166E+03
0.017	0.0081E+03
0.017	0.58142E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI) , -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 79 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

RULK DENSITY = 1.08 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.080	0.150E+05
0.099	0.600E+04
0.117	0.200E+04
0.240	0.100E+04
0.264	0.330E+03
0.287	0.100E+03
0.311	0.600E+02
0.446	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.6	0.116
2.00	13.9	0.023
3.00	15.4	0.015
4.00	16.6	0.012
5.00	17.0	0.010
6.00	18.0	0.009
7.00	19.0	0.008
8.00	19.6	0.007
9.00	20.0	0.006
10.00	21.1	0.006
20.00	33.0	0.041
30.00	38.8	0.029
40.00	43.0	0.022
50.00	47.1	0.015
60.00	50.3	0.008
70.00	53.3	0.004
80.00	56.4	0.003
90.00	59.3	0.003
100.00	62.4	0.003
200.00	76.3	0.045
300.00	83.3	0.099
400.00	87.3	0.112
500.00	89.0	0.078
600.00	90.0	0.065
700.00	92.9	0.048
800.00	94.0	0.030
900.00	97.0	0.014
1000.00	98.0	0.014
2000.00	100.0	0.015

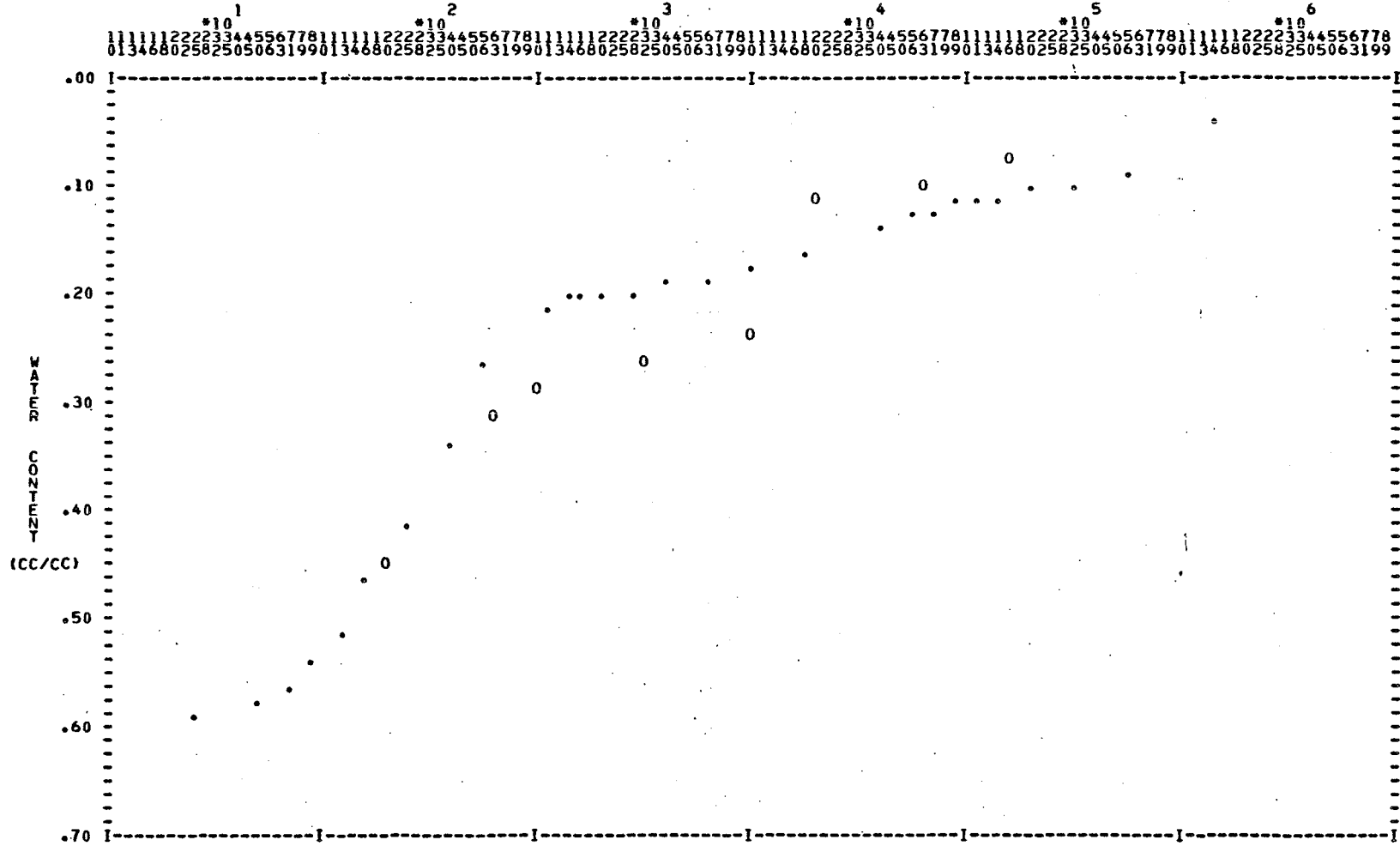
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.041	0.13826E+06
0.087	0.57009E+06
0.095	0.32291E+06
0.101	0.21060E+06
0.101	0.14950E+06
0.112	0.11231E+06
0.126	0.87852E+05
0.126	0.70844E+05
0.126	0.58500E+05
0.126	0.41397E+05
0.126	0.17426E+05
0.158	0.17339E+05
0.173	0.97399E+04
0.184	0.61089E+04
0.191	0.33954E+04
0.191	0.27098E+04
0.191	0.20148E+04
0.200	0.14221E+04
0.215	0.11348E+04
0.257	0.59155E+03
0.332	0.38025E+03
0.411	0.24067E+03
0.467	0.16391E+03
0.510	0.12193E+03
0.543	0.91904E+02
0.566	0.69281E+02
0.579	0.50301E+02
0.588	0.24828E+02

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 79

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PS[M])-LOG(PS[P]))) = 0.42154E+01

SOIL HORIZON NUMBER 80 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.27 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.086	0.150E+05
0.100	0.600E+04
0.131	0.200E+04
0.184	0.100E+04
0.206	0.300E+03
0.222	0.100E+03
0.229	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.3	0.103
2.00	12.6	0.023
3.00	14.1	0.015
4.00	15.1	0.011
5.00	15.5	0.010
6.00	15.8	0.008
7.00	17.7	0.007
8.00	18.3	0.006
9.00	18.9	0.006
10.00	19.4	0.005
20.00	20.1	0.007
30.00	20.6	0.005
40.00	20.8	0.019
50.00	20.8	0.013
60.00	20.6	0.008
70.00	20.0	0.004
80.00	20.4	0.003
90.00	20.7	0.003
100.00	20.0	0.003
200.00	25.3	0.043
300.00	40.3	0.100
400.00	61.6	0.163
500.00	71.3	0.117
600.00	81.5	0.082
700.00	88.4	0.069
800.00	93.5	0.051
900.00	96.7	0.033
1000.00	98.3	0.016
2000.00	100.0	0.017

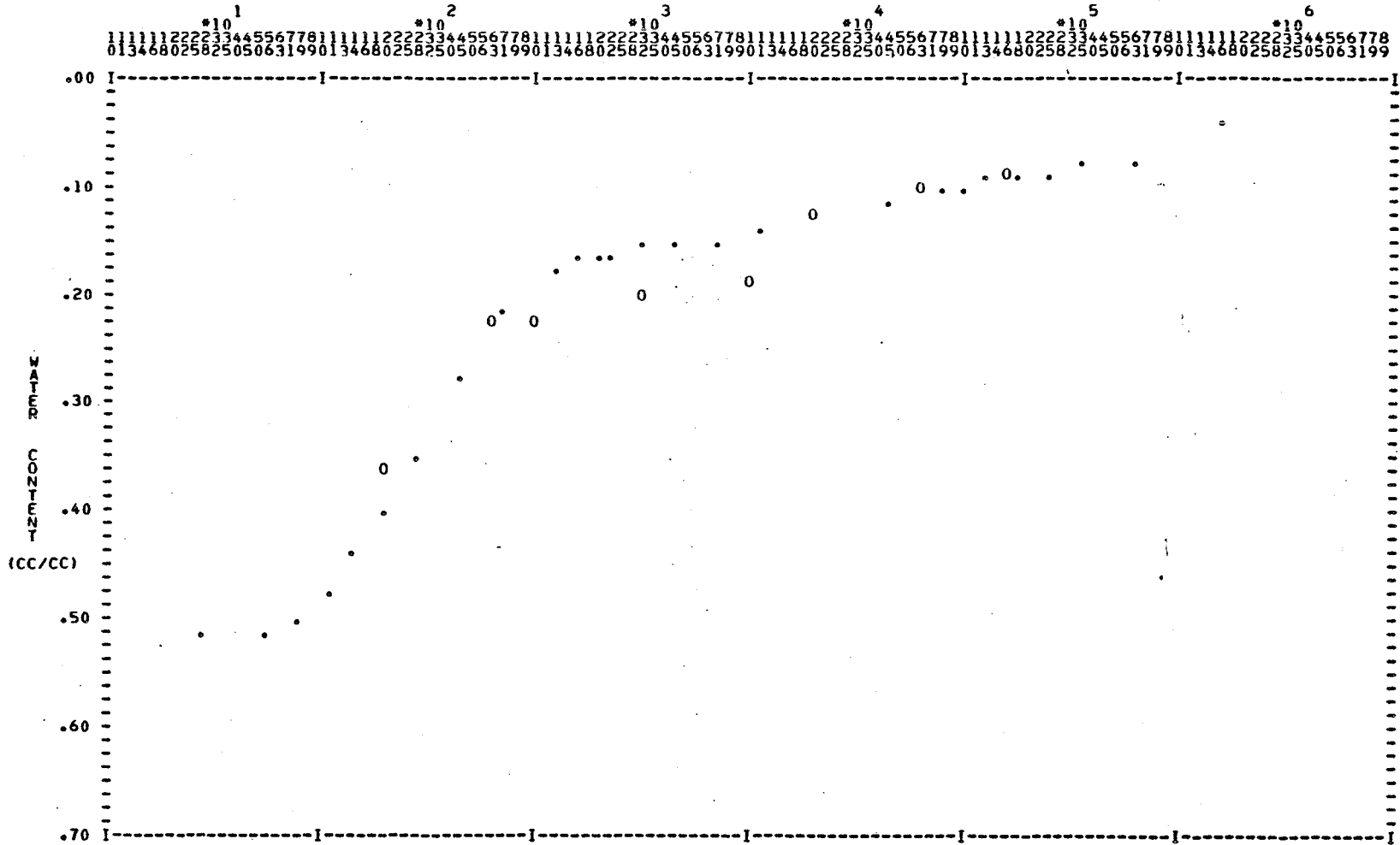
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.15989E+06
0.059	0.65670E+05
0.076	0.37017E+05
0.082	0.24070E+05
0.086	0.17061E+05
0.090	0.12800E+05
0.094	0.10000E+05
0.097	0.80607E+04
0.100	0.66521E+04
0.111	0.46995E+04
0.127	0.19602E+04
0.138	0.10920E+04
0.147	0.68995E+03
0.152	0.45710E+03
0.155	0.31519E+03
0.157	0.23650E+03
0.159	0.19190E+03
0.161	0.16404E+03
0.173	0.13014E+03
0.210	0.68670E+02
0.278	0.44360E+02
0.351	0.28107E+02
0.403	0.19150E+02
0.442	0.14255E+02
0.473	0.10757E+02
0.495	0.81230E+01
0.508	0.59270E+01
0.516	0.29409E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 80

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21206E+01

SOIL HORIZON NUMRER 81 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.36 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.144	0.150E+05
0.162	0.600E+04
0.171	0.200E+04
0.237	0.100E+04
0.254	0.330E+03
0.275	0.100E+03
0.277	0.600E+02
0.369	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	17.1	0.171
2.00	18.5	0.015
3.00	19.5	0.009
4.00	20.3	0.007
5.00	20.9	0.006
6.00	21.4	0.005
7.00	21.8	0.005
8.00	22.2	0.004
9.00	22.6	0.004
10.00	22.9	0.003
20.00	25.3	0.024
30.00	26.9	0.016
40.00	28.0	0.012
50.00	28.9	0.009
60.00	29.5	0.006
70.00	29.9	0.004
80.00	30.2	0.003
90.00	30.5	0.003
100.00	30.8	0.003
200.00	34.3	0.035
300.00	44.4	0.102
400.00	59.7	0.152
500.00	71.0	0.113
600.00	79.3	0.083
700.00	86.4	0.071
800.00	91.8	0.054
900.00	95.5	0.037
1000.00	97.6	0.021
2000.00	100.0	0.024

PREDICTED MOISTURE CHARACTERISTIC DATA

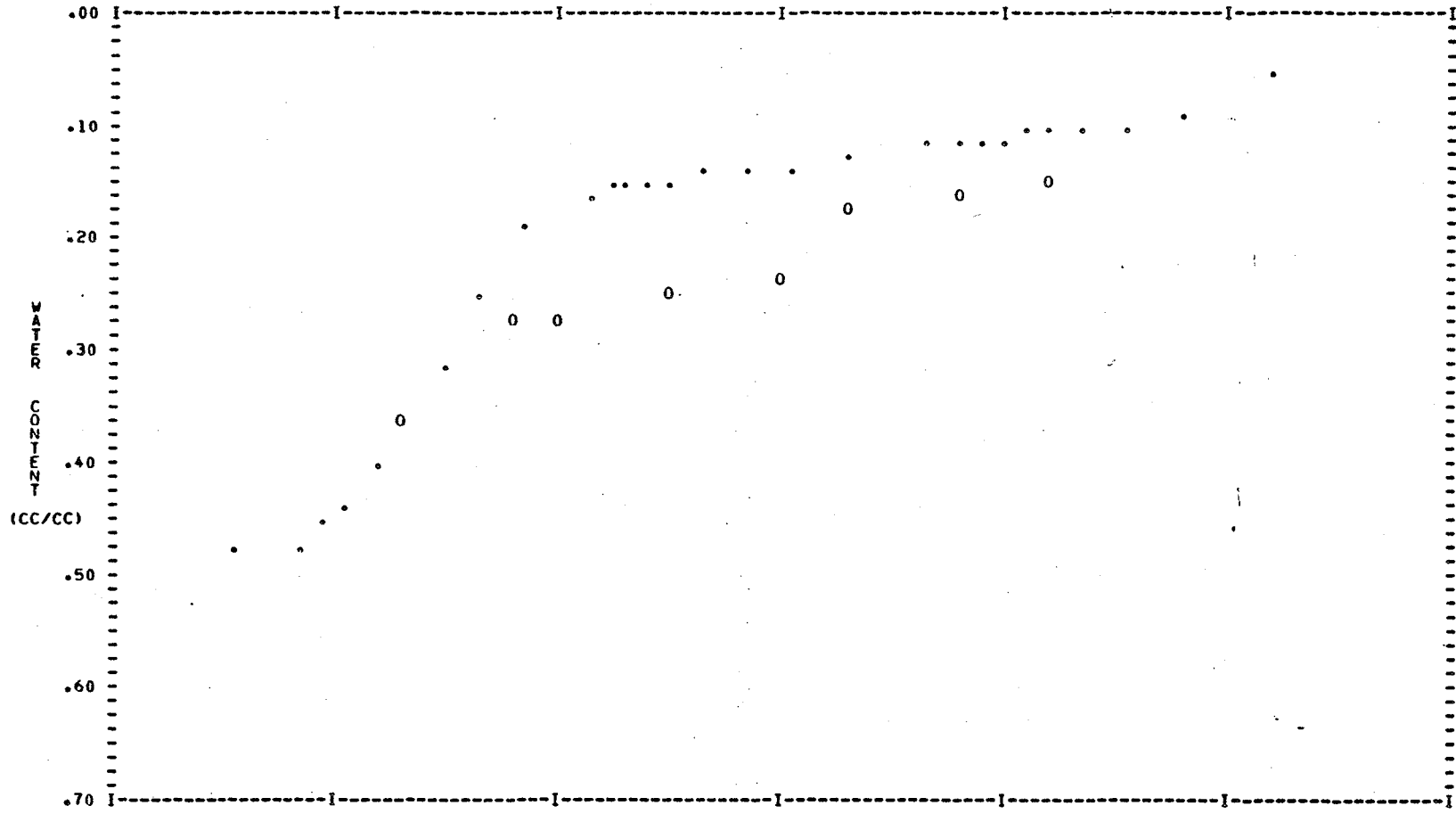
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.15748E+06
0.093	0.64570E+05
0.097	0.36323E+05
0.100	0.23613E+05
0.103	0.16733E+05
0.105	0.12557E+05
0.107	0.98174E+04
0.109	0.79146E+04
0.111	0.65347E+04
0.117	0.46278E+04
0.127	0.19202E+04
0.134	0.10686E+04
0.139	0.68091E+03
0.142	0.46254E+03
0.145	0.33102E+03
0.146	0.25327E+03
0.148	0.20413E+03
0.149	0.17084E+03
0.158	0.13394E+03
0.192	0.73668E+02
0.253	0.46908E+02
0.318	0.29877E+02
0.366	0.20561E+02
0.403	0.15353E+02
0.434	0.11649E+02
0.456	0.88972E+01
0.470	0.66937E+01
0.481	0.33608E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 81 0 MEASURED . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.72877E+01

SOIL HORIZON NUMBER 82 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.38 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.138	0.150E+05
0.149	0.600E+04
0.166	0.200E+04
0.192	0.100E+04
0.218	0.330E+03
0.255	0.100E+03
0.262	0.600E+02
0.368	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.9	0.129
2.00	14.6	0.017
3.00	15.6	0.010
4.00	16.4	0.007
5.00	16.9	0.006
6.00	17.4	0.005
7.00	17.8	0.004
8.00	18.2	0.004
9.00	18.5	0.003
10.00	18.7	0.003
20.00	20.6	0.019
30.00	21.7	0.011
40.00	22.5	0.008
50.00	23.1	0.006
60.00	23.6	0.005
70.00	24.1	0.005
80.00	24.5	0.004
90.00	24.9	0.004
100.00	25.2	0.003
200.00	30.7	0.055
300.00	42.3	0.116
400.00	61.5	0.193
500.00	74.7	0.132
600.00	82.9	0.082
700.00	89.6	0.066
800.00	94.3	0.048
900.00	97.2	0.029
1000.00	98.5	0.013
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

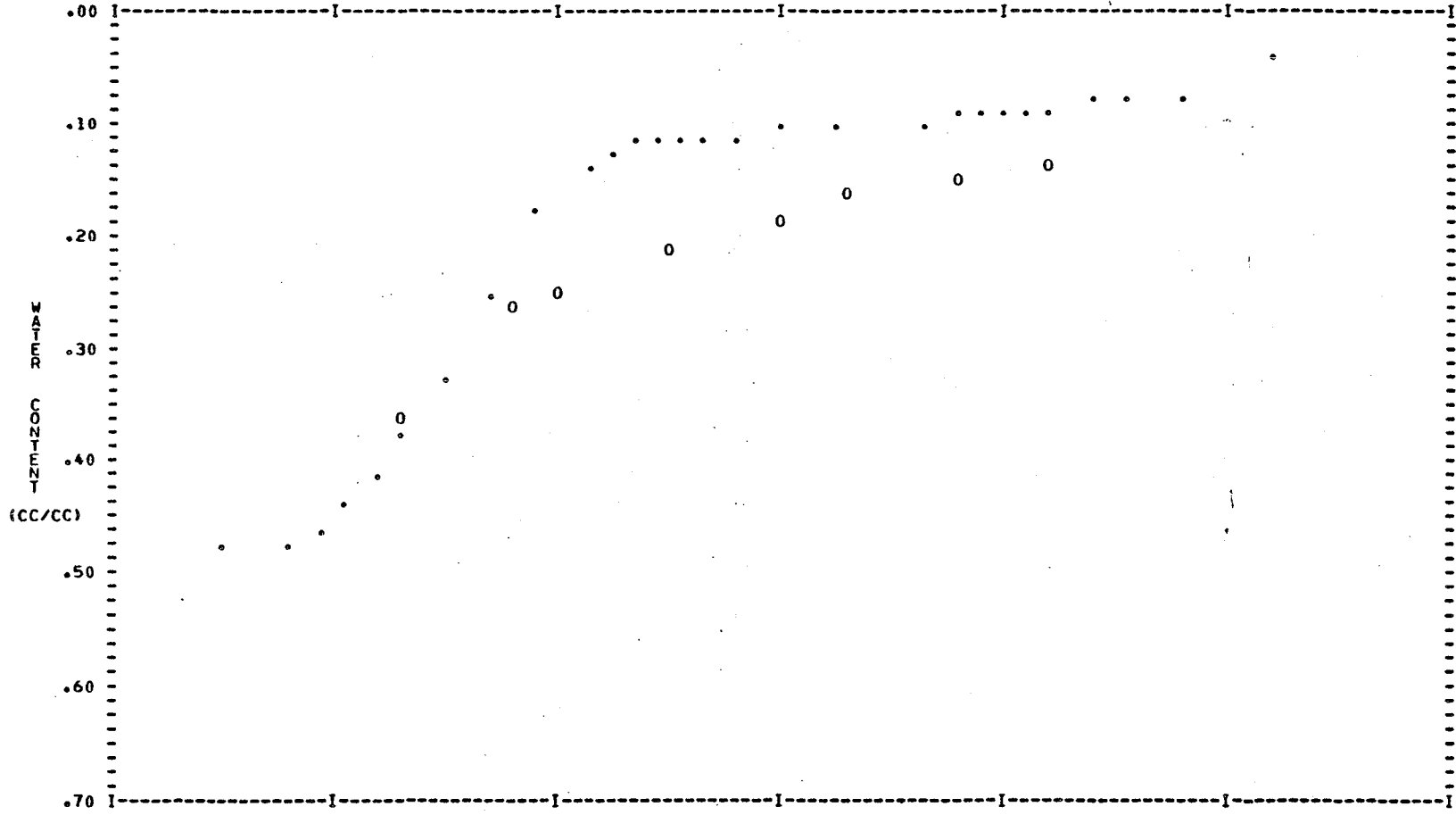
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.16422E+06
0.072	0.66669E+05
0.077	0.36929E+05
0.080	0.23763E+05
0.082	0.16713E+05
0.084	0.12469E+05
0.086	0.97017E+04
0.088	0.77899E+04
0.089	0.64096E+04
0.094	0.44873E+04
0.101	0.18224E+04
0.106	0.10073E+04
0.109	0.64699E+03
0.112	0.45826E+03
0.114	0.34534E+03
0.116	0.26973E+03
0.118	0.21661E+03
0.120	0.17780E+03
0.134	0.14839E+03
0.175	0.76627E+02
0.249	0.49799E+02
0.326	0.31216E+02
0.378	0.20836E+02
0.413	0.15384E+02
0.441	0.11533E+02
0.459	0.86408E+01
0.469	0.61839E+01
0.476	0.31205E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 82

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.74860E+01

SOIL HORIZON NUMBER 83 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.37 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.123	0.150E+05
0.137	0.260E+04
0.145	0.200E+04
0.189	0.100E+04
0.212	0.330E+03
0.240	0.100E+03
0.252	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.7	0.107
2.00	11.4	0.007
3.00	11.9	0.005
4.00	12.2	0.004
5.00	12.5	0.003
6.00	12.7	0.003
7.00	12.9	0.002
8.00	13.1	0.002
9.00	13.3	0.002
10.00	13.5	0.002
20.00	15.0	0.014
30.00	16.0	0.007
40.00	16.7	0.005
50.00	17.4	0.004
60.00	17.9	0.003
70.00	18.3	0.003
80.00	18.7	0.003
90.00	19.0	0.002
100.00	19.3	0.002
200.00	23.3	0.043
300.00	25.5	0.020
400.00	27.4	0.019
500.00	28.8	0.014
600.00	29.7	0.009
700.00	30.6	0.008
800.00	31.2	0.006
900.00	31.7	0.003
1000.00	32.0	0.018
2000.00	100.0	0.021

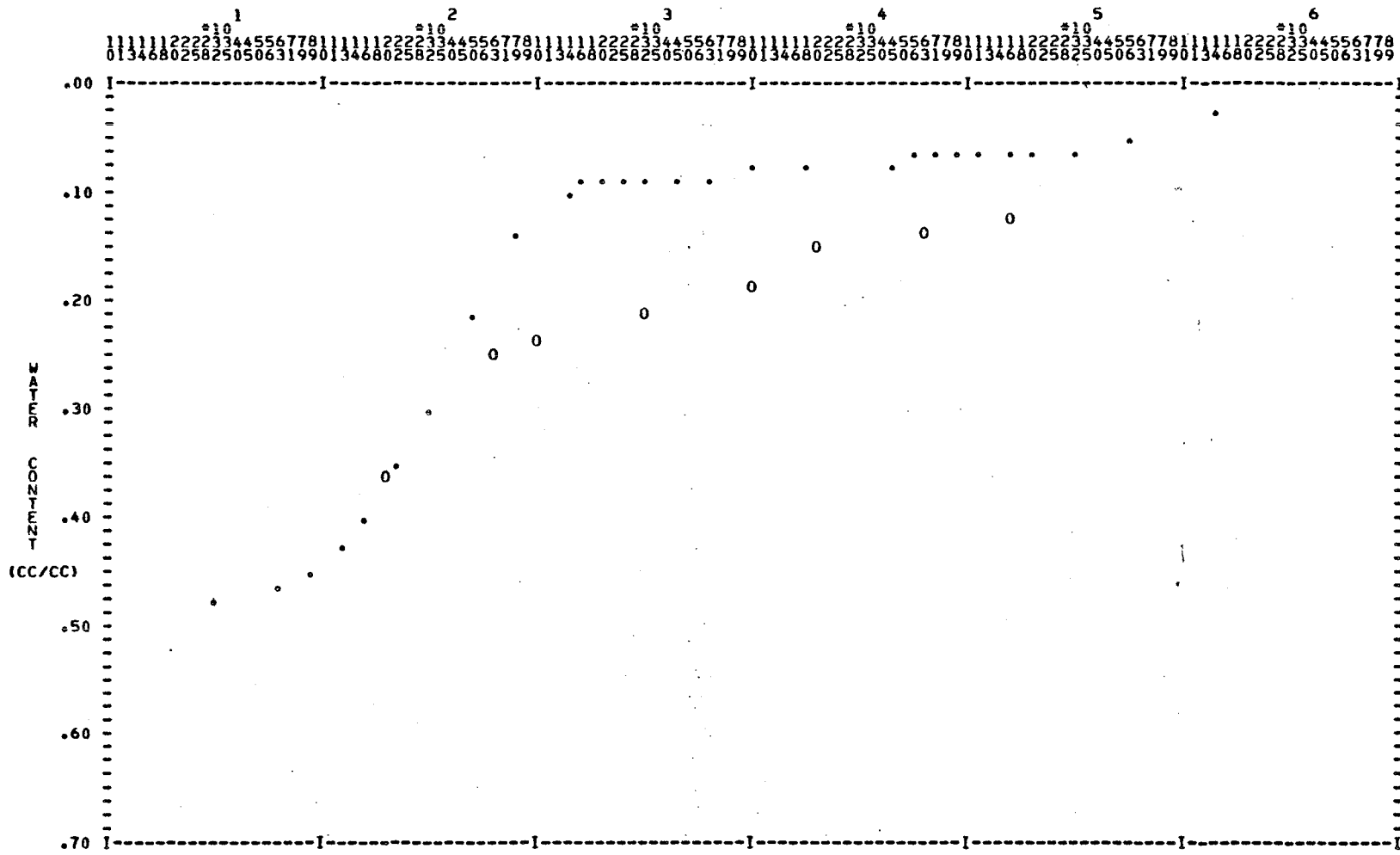
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.13912E+06
0.056	0.57115E+05
0.058	0.32246E+05
0.060	0.21042E+05
0.061	0.14266E+05
0.063	0.11265E+05
0.064	0.88322E+04
0.065	0.71389E+04
0.066	0.59384E+04
0.070	0.42381E+04
0.075	0.17804E+04
0.079	0.97929E+03
0.082	0.62686E+03
0.085	0.43255E+03
0.086	0.31604E+03
0.088	0.24393E+03
0.089	0.19611E+03
0.090	0.16258E+03
0.101	0.14040E+03
0.140	0.76647E+02
0.216	0.49529E+02
0.297	0.31340E+02
0.354	0.21316E+02
0.397	0.15856E+02
0.431	0.11059E+02
0.455	0.90298E+01
0.468	0.65911E+01
0.478	0.33014E+01

ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 83

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.80738E+01

B-167

SOIL HORIZON NUMBER 84 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.17 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.087	0.150E+05
0.096	0.600E+04
0.123	0.200E+04
0.199	0.100E+04
0.225	0.330E+03
0.238	0.100E+03
0.256	0.600E+02
0.438	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.9	0.079
2.00	9.9	0.020
3.00	11.1	0.012
4.00	11.1	0.009
5.00	11.1	0.008
6.00	11.1	0.008
7.00	11.1	0.006
8.00	11.1	0.005
9.00	11.1	0.005
10.00	11.1	0.004
20.00	17.4	0.004
30.00	17.4	0.022
40.00	18.6	0.012
50.00	19.4	0.008
60.00	20.0	0.006
70.00	20.4	0.004
80.00	20.7	0.003
90.00	21.0	0.003
100.00	21.1	0.002
150.00	21.1	0.002
200.00	21.1	0.002
250.00	21.1	0.002
300.00	21.1	0.002
400.00	21.1	0.002
500.00	21.1	0.002
600.00	21.1	0.002
700.00	21.1	0.002
800.00	21.1	0.002
900.00	21.1	0.002
1000.00	21.1	0.002
2000.00	100.0	0.069

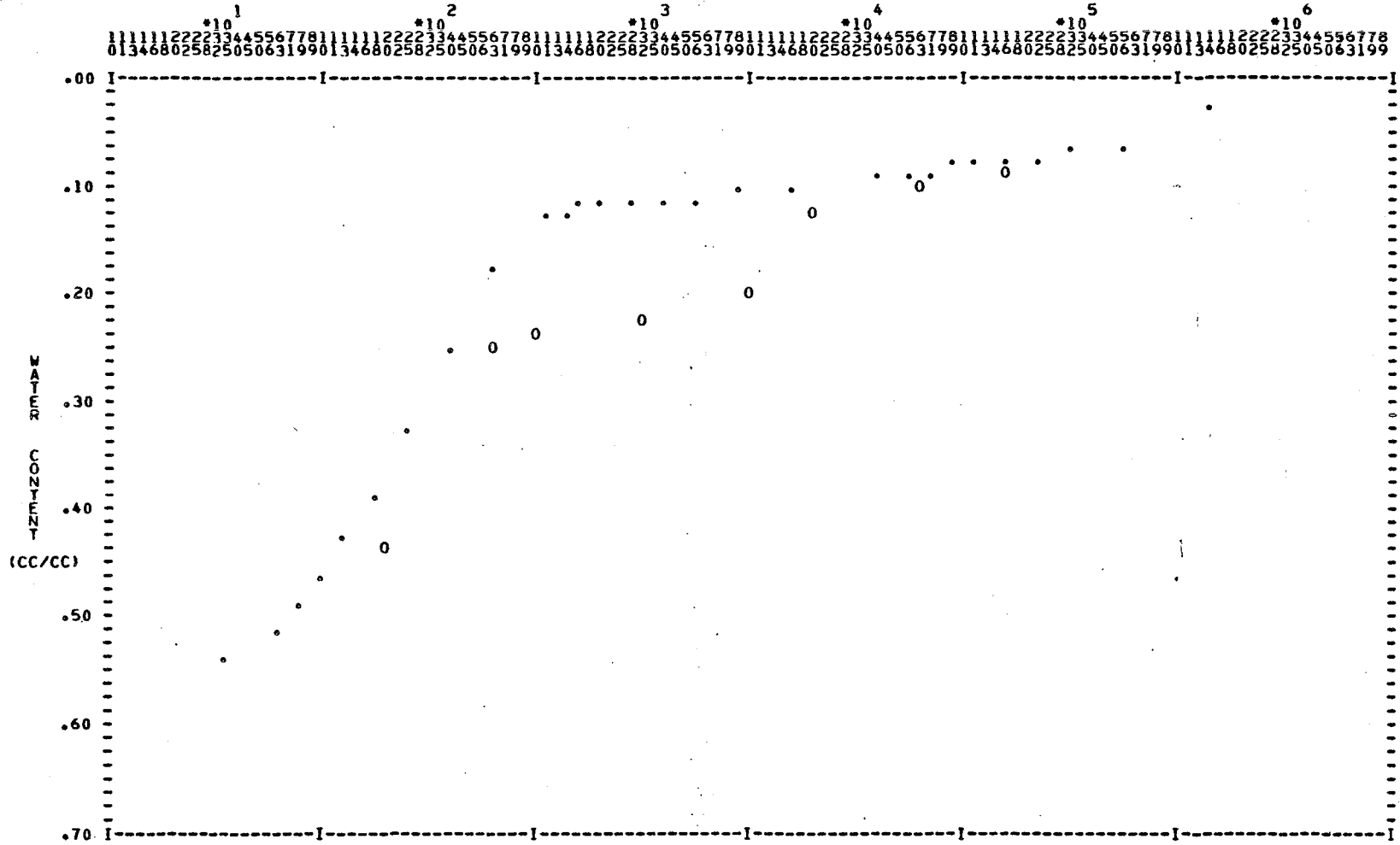
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.14407E+06
0.039	0.59022E+06
0.059	0.33042E+06
0.065	0.21345E+06
0.070	0.15026E+06
0.073	0.11204E+06
0.077	0.87044E+05
0.079	0.69748E+05
0.082	0.57251E+05
0.084	0.39509E+05
0.091	0.15706E+05
0.100	0.86420E+04
0.106	0.55541E+04
0.110	0.37846E+04
0.113	0.27025E+04
0.115	0.20666E+04
0.118	0.16666E+04
0.120	0.13973E+04
0.130	0.11776E+04
0.173	0.65251E+03
0.250	0.41146E+03
0.329	0.26191E+03
0.386	0.17839E+03
0.429	0.13252E+03
0.464	0.10132E+03
0.491	0.79032E+02
0.511	0.62382E+02
0.539	0.35569E+02

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 84

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.48838E+01

B-169

SOIL HORIZON NUMBER 85 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.26 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.091	0.150E+05
0.102	0.600E+04
0.130	0.200E+04
0.213	0.100E+04
0.255	0.330E+03
0.340	0.100E+03
0.352	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.8	0.108
2.00	12.9	0.020
3.00	14.1	0.012
4.00	15.0	0.010
5.00	15.9	0.007
6.00	16.6	0.006
7.00	17.4	0.005
8.00	18.1	0.004
9.00	18.8	0.004
10.00	19.5	0.004
20.00	20.7	0.022
30.00	21.8	0.011
40.00	22.6	0.008
50.00	23.3	0.006
60.00	23.9	0.005
70.00	24.4	0.004
80.00	24.4	0.003
90.00	24.7	0.003
100.00	25.0	0.003
200.00	28.8	0.038
300.00	29.9	0.106
400.00	30.4	0.151
500.00	30.5	0.111
600.00	30.3	0.077
700.00	30.7	0.064
800.00	30.8	0.051
900.00	30.8	0.040
1000.00	31.0	0.031
2000.00	100.0	0.081

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.034	0.15390E+06
0.070	0.63516E+05
0.076	0.35844E+05
0.081	0.23220E+05
0.085	0.16360E+05
0.088	0.12196E+05
0.091	0.94673E+04
0.094	0.75769E+04
0.096	0.62101E+04
0.103	0.42435E+04
0.111	0.16664E+04
0.116	0.91939E+03
0.120	0.59019E+03
0.123	0.41275E+03
0.125	0.30591E+03
0.127	0.23735E+03
0.129	0.19053E+03
0.130	0.15700E+03
0.141	0.12625E+03
0.179	0.68851E+02
0.246	0.43428E+02
0.315	0.27602E+02
0.364	0.18789E+02
0.401	0.13946E+02
0.431	0.10689E+02
0.455	0.83872E+01
0.474	0.66891E+01
0.503	0.39266E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 86 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.29 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.178	0.150E+05
0.191	0.500E+04
0.223	0.200E+04
0.268	0.100E+04
0.298	0.330E+03
0.341	0.100E+03
0.355	0.600E+02
0.384	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	20.4	0.204
2.00	22.0	0.016
3.00	23.1	0.011
4.00	23.9	0.008
5.00	24.6	0.007
6.00	25.2	0.006
7.00	25.7	0.005
8.00	26.1	0.004
9.00	26.5	0.004
10.00	26.8	0.003
20.00	28.7	0.019
30.00	30.6	0.009
40.00	30.2	0.006
50.00	30.7	0.005
60.00	31.2	0.005
70.00	31.6	0.005
80.00	32.1	0.004
90.00	32.5	0.004
100.00	32.8	0.003
200.00	35.5	0.027
300.00	40.0	0.095
400.00	47.0	0.119
500.00	66.0	0.090
600.00	72.6	0.066
700.00	78.1	0.055
800.00	82.8	0.046
900.00	86.7	0.039
1000.00	90.0	0.033
2000.00	100.0	0.100

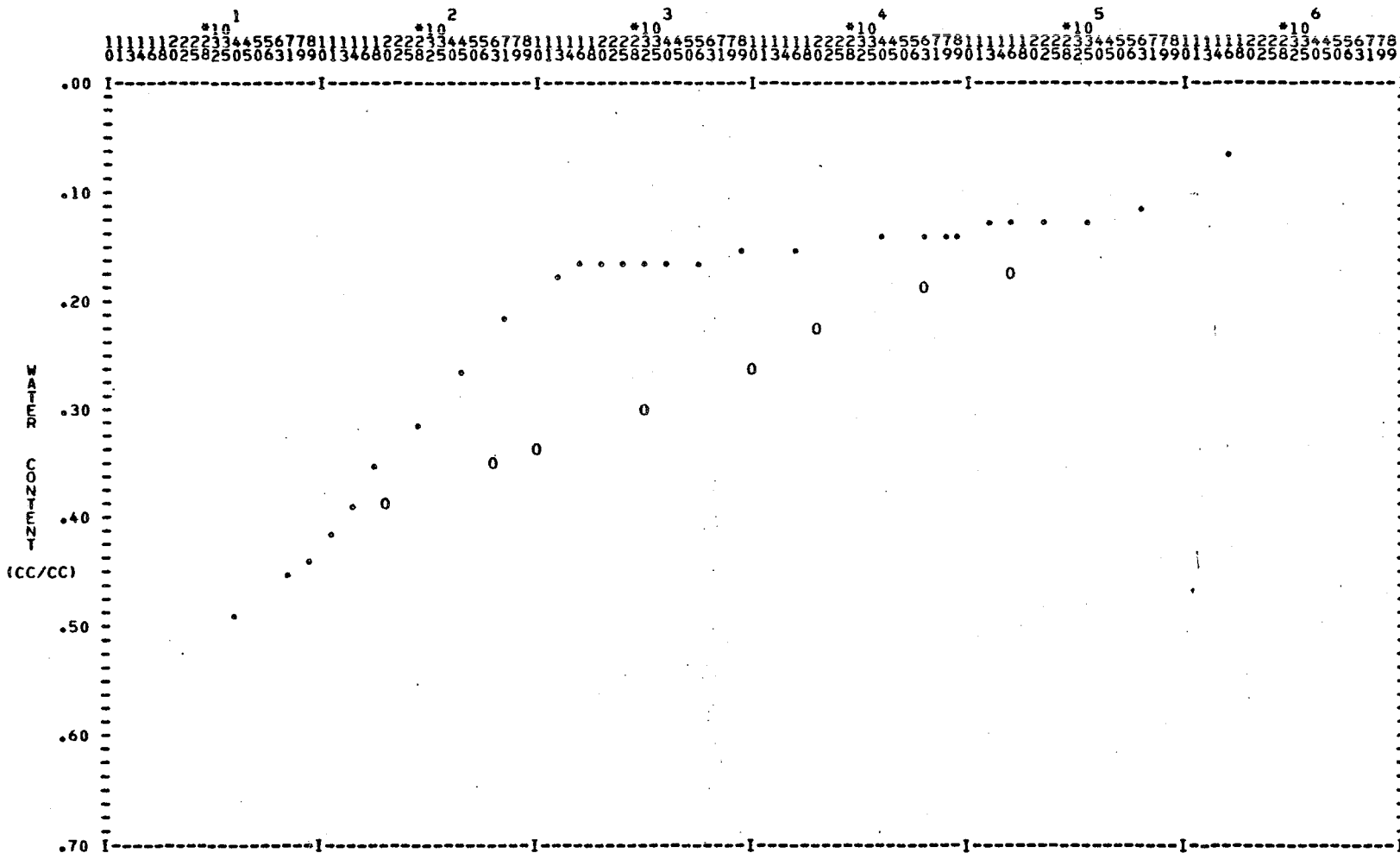
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.056	0.15155E+06
0.116	0.2699E+05
0.120	0.35484E+05
0.124	0.23017E+05
0.128	0.16230E+05
0.130	0.12104E+05
0.133	0.93992E+04
0.135	0.75241E+04
0.137	0.61676E+04
0.142	0.42144E+04
0.150	0.16356E+04
0.153	0.89694E+03
0.156	0.58123E+03
0.159	0.42099E+03
0.161	0.32280E+03
0.164	0.25383E+03
0.166	0.20408E+03
0.167	0.16712E+03
0.175	0.12137E+03
0.207	0.68961E+02
0.262	0.42474E+02
0.315	0.27159E+02
0.356	0.18670E+02
0.387	0.13883E+02
0.413	0.10728E+02
0.435	0.85337E+01
0.453	0.69425E+01
0.488	0.41807E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 86 0 MEASURED 0 PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.91917E+01

SOIL HORIZON NUMBER 87 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.33 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.218	0.150E+05
0.235	0.600E+04
0.255	0.200E+04
0.342	0.100E+04
0.356	0.330E+03
0.370	0.100E+03
0.376	0.600E+02
0.399	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	26.9	0.269
2.00	28.6	0.017
3.00	29.6	0.010
4.00	30.4	0.008
5.00	31.0	0.006
6.00	31.5	0.005
7.00	32.2	0.004
8.00	32.7	0.004
9.00	32.9	0.003
10.00	33.0	0.003
20.00	35.5	0.020
30.00	35.8	0.012
40.00	37.1	0.009
50.00	37.8	0.007
60.00	38.4	0.006
70.00	39.1	0.006
80.00	39.5	0.006
90.00	40.2	0.005
100.00	40.6	0.004
200.00	44.4	0.039
300.00	52.3	0.078
400.00	64.0	0.117
500.00	72.6	0.086
600.00	78.4	0.058
700.00	83.1	0.048
800.00	87.1	0.039
900.00	90.1	0.031
1000.00	92.5	0.024
2000.00	100.0	0.075

PREDICTED MOISTURE CHARACTERISTIC DATA

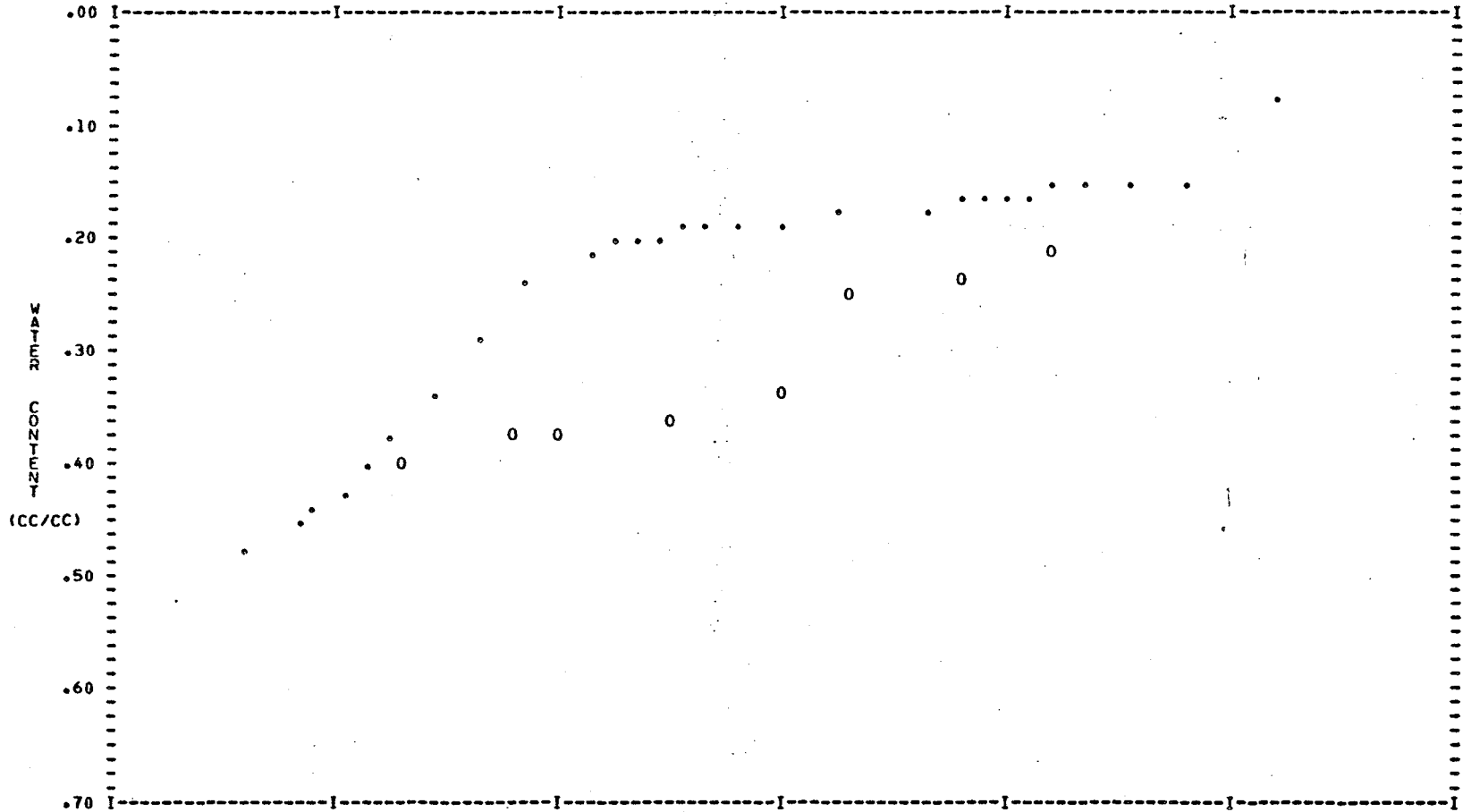
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.071	0.15862E+06
0.145	0.64533E+05
0.195	0.35865E+05
0.231	0.23122E+05
0.266	0.16068E+05
0.300	0.12165E+05
0.347	0.94733E+04
0.394	0.76117E+04
0.439	0.62663E+04
0.483	0.53938E+04
0.527	0.47891E+04
0.571	0.43950E+04
0.615	0.40514E+04
0.659	0.37618E+04
0.703	0.35149E+04
0.747	0.32908E+04
0.791	0.30849E+04
0.835	0.28862E+04
0.879	0.26950E+04
0.923	0.25140E+04
0.967	0.23400E+04
1.011	0.21759E+04
1.055	0.20208E+04
1.099	0.18759E+04
1.143	0.17390E+04
1.187	0.16092E+04
1.231	0.14855E+04
1.275	0.13677E+04
1.319	0.12559E+04
1.363	0.11491E+04
1.407	0.10473E+04
1.451	0.95055E+03
1.495	0.85746E+03
1.539	0.76797E+03
1.583	0.68079E+03

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 87

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.95800E+01

SOIL HORIZON NUMBER 88 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.51 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.214	0.150E+05
0.231	0.600E+04
0.270	0.200E+04
0.337	0.100E+04
0.346	0.330E+03
0.355	0.100E+03
0.361	0.600E+02
0.370	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	21.0	0.210
2.00	22.7	0.017
3.00	23.7	0.010
4.00	24.5	0.007
5.00	25.0	0.006
6.00	25.5	0.005
7.00	25.9	0.004
8.00	26.2	0.003
9.00	26.5	0.003
10.00	26.8	0.003
20.00	28.6	0.018
30.00	29.7	0.011
40.00	30.4	0.008
50.00	31.0	0.006
60.00	31.6	0.006
70.00	32.3	0.007
80.00	33.0	0.007
90.00	33.6	0.006
100.00	34.1	0.005
200.00	38.6	0.045
300.00	47.6	0.090
400.00	60.1	0.125
500.00	69.3	0.092
600.00	75.6	0.063
700.00	80.8	0.052
800.00	85.0	0.042
900.00	88.4	0.034
1000.00	91.2	0.028
2000.00	100.0	0.088

PREDICTED MOISTURE CHARACTERISTIC DATA

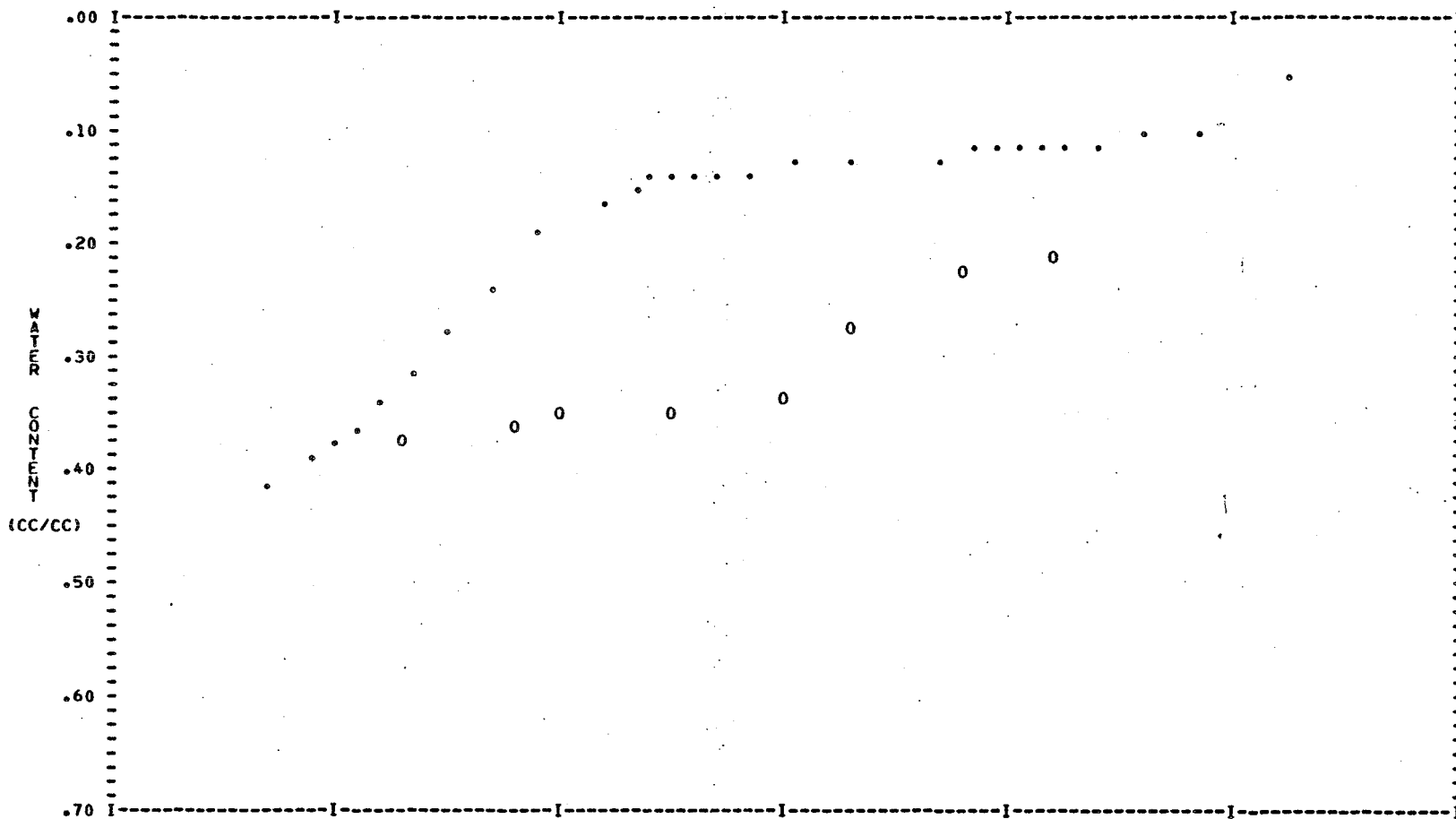
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.18155E+06
0.100	0.36600E+05
0.104	0.40753E+05
0.106	0.26198E+05
0.109	0.18410E+05
0.111	0.13725E+05
0.112	0.10672E+05
0.113	0.85643E+04
0.115	0.70431E+04
0.119	0.49209E+04
0.125	0.19953E+04
0.129	0.11037E+04
0.132	0.70948E+03
0.135	0.52337E+03
0.138	0.44111E+03
0.140	0.33257E+03
0.143	0.26217E+03
0.146	0.21403E+03
0.156	0.15796E+03
0.189	0.80614E+02
0.233	0.50651E+02
0.277	0.32184E+02
0.312	0.21866E+02
0.333	0.16206E+02
0.357	0.12456E+02
0.373	0.98332E+01
0.386	0.79232E+01
0.411	0.48219E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1111112222*10 1 111112222*10 2 111112222*10 3 111112222*10 4 111112222*10 5 111112222*10 6
 0134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199013468025825050631990



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SOIL HORIZON NUMBER 88

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{IP}))) = 0.11273E+02

SOIL HORIZON NUMBER 89 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.23 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.075	0.600E+04
0.100	0.200E+04
0.159	0.100E+04
0.200	0.330E+03
0.244	0.100E+03
0.305	0.600E+02
0.413	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.5	0.065
2.00	8.5	0.023
3.00	10.3	0.018
4.00	11.0	0.007
5.00	12.0	0.012
6.00	13.0	0.011
7.00	14.0	0.010
8.00	15.0	0.009
9.00	16.0	0.009
10.00	17.0	0.008
20.00	33.0	0.064
30.00	39.0	0.051
40.00	33.0	0.040
50.00	35.0	0.028
60.00	37.0	0.018
70.00	38.0	0.013
80.00	40.0	0.011
90.00	41.0	0.011
100.00	42.0	0.013
200.00	55.0	0.106
300.00	66.0	0.086
400.00	74.0	0.063
500.00	81.0	0.047
600.00	85.0	0.037
700.00	89.0	0.028
800.00	92.0	0.021
900.00	94.0	0.015
1000.00	96.1	0.015
2000.00	100.0	0.039

PREDICTED MOISTURE CHARACTERISTIC DATA

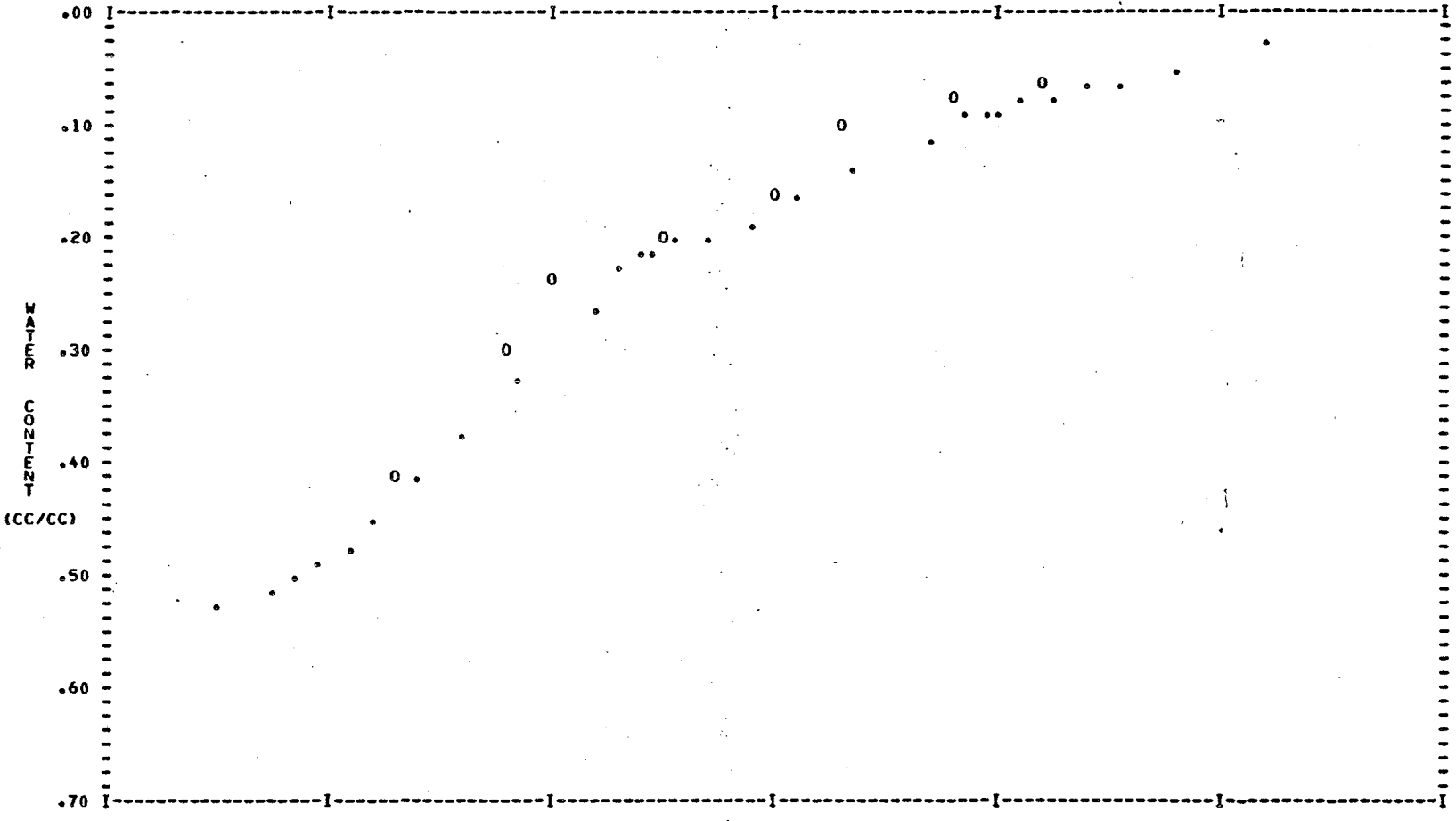
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.02	0.15492E+06
0.051	0.62249E+06
0.059	0.26883E+06
0.066	0.24309E+06
0.072	0.17230E+06
0.077	0.13200E+06
0.082	0.10402E+05
0.087	0.84432E+04
0.091	0.70128E+04
0.091	0.50724E+04
0.111	0.21771E+04
0.166	0.12220E+04
0.184	0.77302E+03
0.197	0.51984E+03
0.205	0.37382E+03
0.210	0.29090E+03
0.218	0.23933E+03
0.224	0.20382E+03
0.263	0.15662E+03
0.277	0.67246E+02
0.378	0.38172E+02
0.418	0.24250E+02
0.448	0.16733E+02
0.470	0.12296E+02
0.488	0.93402E+01
0.501	0.72587E+01
0.511	0.57202E+01
0.525	0.33407E+01

B-178

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 1111122223344556677811111122223344556677811111222233445566778111112222334455667781111122223344556677811111222233445566778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-179

SOIL HORIZON NUMBER 89

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.20857E+01

SOIL HORIZON NUMBER 90 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.09 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.038	0.150E+05
0.043	0.600E+04
0.071	0.200E+04
0.244	0.100E+04
0.276	0.330E+03
0.311	0.100E+03
0.378	0.600E+02
0.464	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.7	0.027
2.00	4.5	0.018
3.00	5.7	0.012
4.00	6.7	0.011
5.00	7.7	0.010
6.00	8.6	0.009
7.00	9.4	0.008
8.00	10.2	0.008
9.00	11.0	0.008
10.00	11.7	0.007
20.00	17.7	0.060
30.00	22.6	0.049
40.00	26.4	0.038
50.00	29.9	0.035
60.00	33.1	0.032
70.00	35.4	0.023
80.00	37.7	0.023
90.00	40.0	0.023
100.00	41.7	0.017
200.00	51.1	0.153
300.00	63.3	0.122
400.00	73.3	0.099
500.00	80.0	0.067
600.00	85.0	0.054
700.00	90.0	0.044
800.00	93.3	0.033
900.00	95.7	0.022
1000.00	97.1	0.014
2000.00	100.0	0.029

PREDICTED MOISTURE CHARACTERISTIC DATA

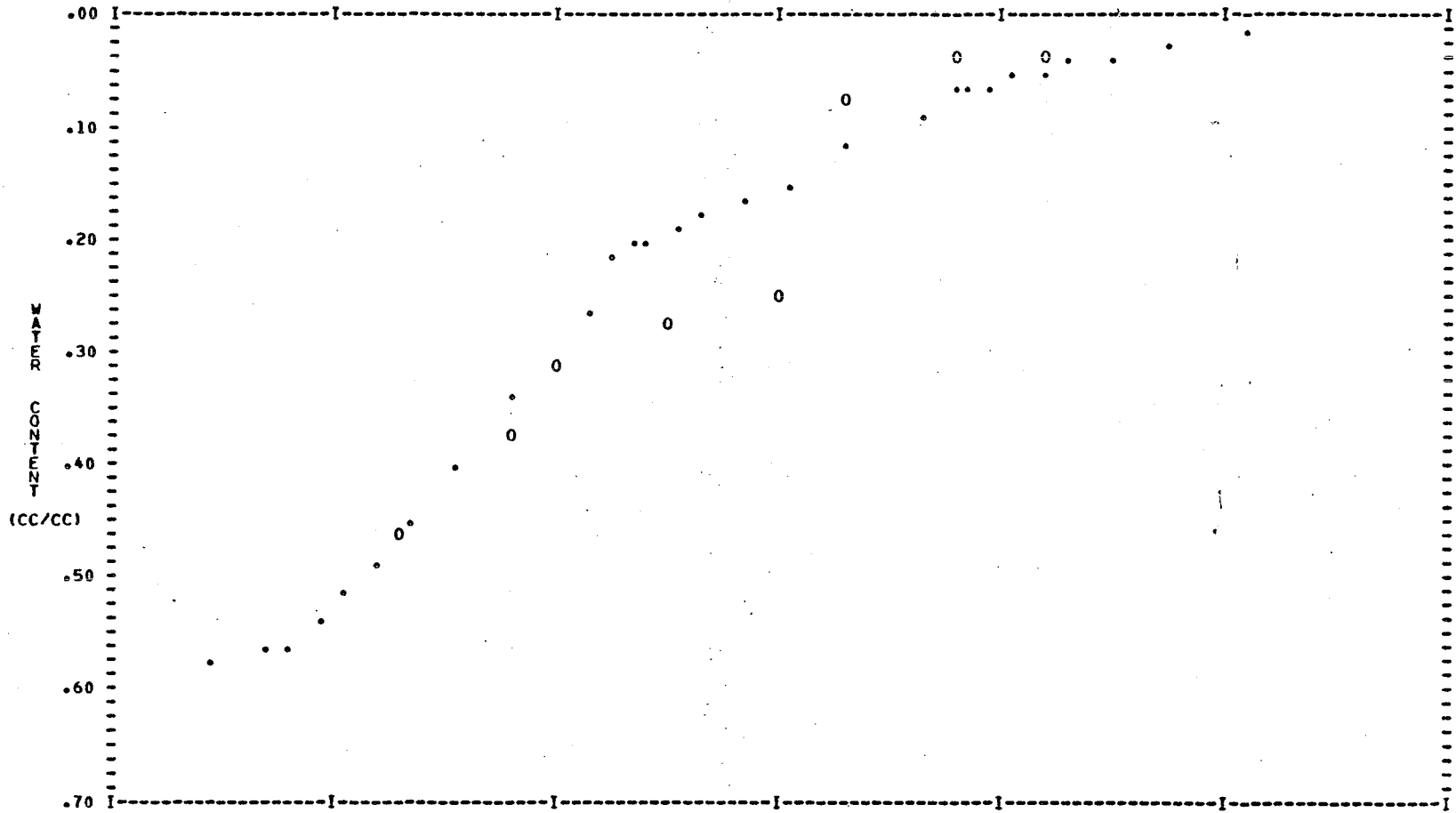
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.13307E+06
0.030	0.55140E+05
0.037	0.31715E+05
0.043	0.21010E+05
0.048	0.15122E+05
0.053	0.11497E+05
0.058	0.90881E+04
0.063	0.73969E+04
0.067	0.61587E+04
0.087	0.44932E+04
0.119	0.19396E+04
0.144	0.10910E+04
0.164	0.69194E+03
0.177	0.46770E+03
0.187	0.33797E+03
0.194	0.26351E+03
0.201	0.21663E+03
0.208	0.18415E+03
0.217	0.14462E+03
0.228	0.12062E+03
0.233	0.10510E+03
0.233	0.82231E+02
0.233	0.65443E+02
0.233	0.51335E+02
0.233	0.35807E+02
0.233	0.25916E+02
0.233	0.20769E+02
0.280	0.28362E+01

B-180

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



SOIL HORIZON NUMBER 90

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.27645E+01

B-181

SOIL HORIZON NUMBER 91 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.51 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.074	0.150E+05
0.098	0.600E+04
0.125	0.200E+04
0.177	0.100E+04
0.202	0.330E+03
0.239	0.100E+03
0.263	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.8	0.098
2.00	12.3	0.025
3.00	14.0	0.017
4.00	15.4	0.014
5.00	16.7	0.013
6.00	17.8	0.011
7.00	18.8	0.010
8.00	19.8	0.009
9.00	20.7	0.009
10.00	21.5	0.008
20.00	27.8	0.063
30.00	32.7	0.049
40.00	36.5	0.038
50.00	39.2	0.027
60.00	40.9	0.017
70.00	42.0	0.011
80.00	43.0	0.010
90.00	43.9	0.010
100.00	45.0	0.011
200.00	56.1	0.111
300.00	65.7	0.096
400.00	73.5	0.078
500.00	79.4	0.059
600.00	84.0	0.046
700.00	87.7	0.038
800.00	90.8	0.031
900.00	93.2	0.025
1000.00	95.2	0.020
2000.00	100.0	0.048

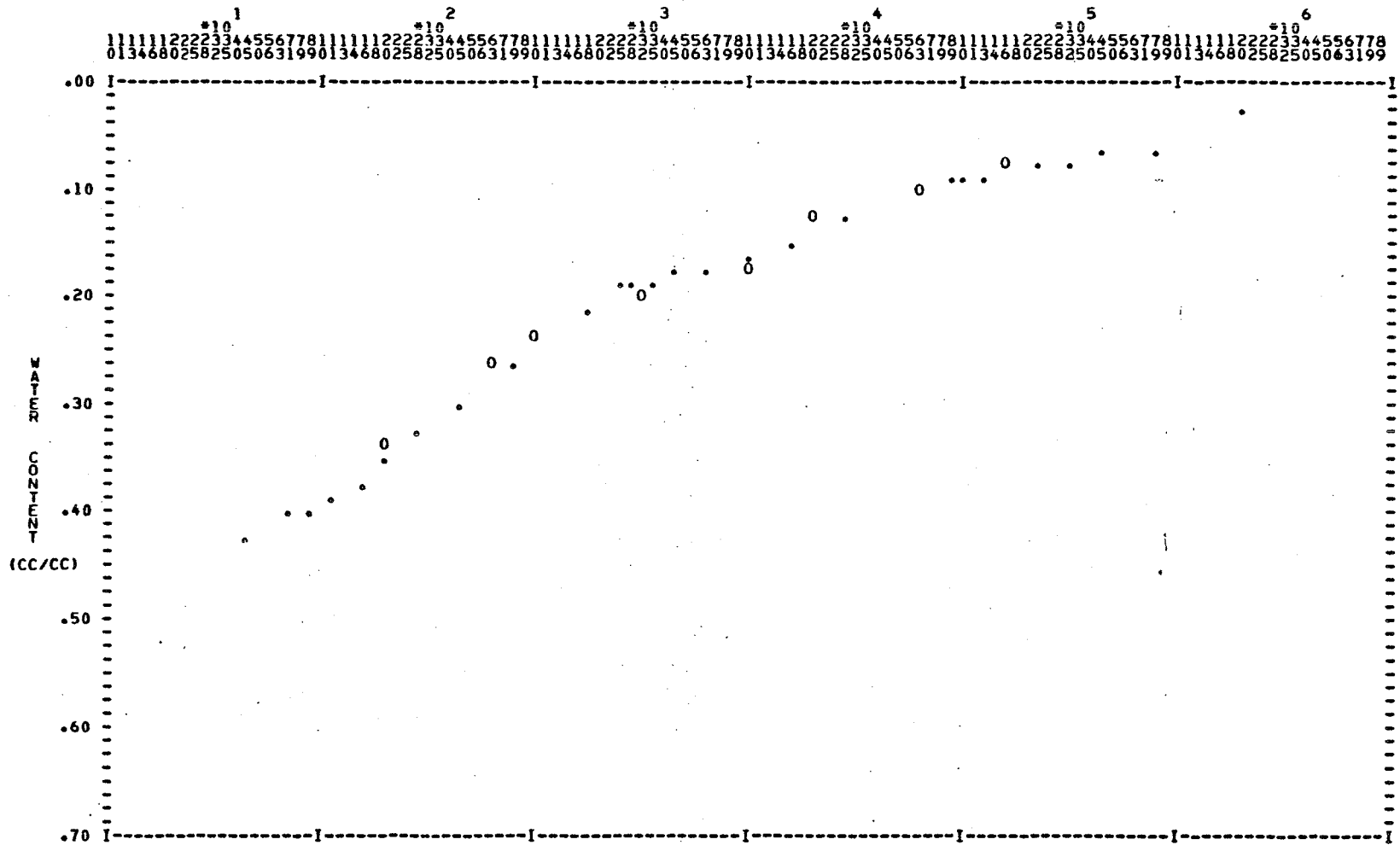
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.026	0.19508E+06
0.057	0.80901E+05
0.063	0.46314E+05
0.069	0.30465E+05
0.074	0.21780E+05
0.079	0.16460E+05
0.083	0.12944E+05
0.087	0.10488E+05
0.091	0.86950E+04
0.106	0.62450E+04
0.130	0.26734E+04
0.149	0.15000E+04
0.163	0.94530E+03
0.178	0.63134E+03
0.183	0.45033E+03
0.187	0.32492E+03
0.191	0.22877E+03
0.197	0.18726E+03
0.212	0.11680E+03
0.220	0.81680E+02
0.230	0.46920E+02
0.239	0.22055E+02
0.249	0.15324E+02
0.259	0.11170E+02
0.266	0.92307E+01
0.274	0.74244E+01
0.280	0.42973E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 91

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.12789E+01

SOIL HORIZON NUMBER 92 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.65 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.081	0.600E+04
0.068	0.200E+04
0.135	0.100E+04
0.160	0.330E+03
0.193	0.100E+03
0.213	0.600E+02
0.317	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	16.4	0.164
2.00	18.3	0.019
3.00	19.5	0.012
4.00	20.5	0.010
5.00	21.5	0.009
6.00	22.4	0.009
7.00	23.2	0.008
8.00	23.9	0.008
9.00	24.6	0.007
10.00	25.3	0.007
20.00	31.0	0.057
30.00	35.5	0.045
40.00	39.0	0.035
50.00	41.5	0.025
60.00	43.2	0.017
70.00	44.6	0.013
80.00	45.7	0.011
90.00	46.8	0.011
100.00	47.9	0.011
200.00	59.4	0.115
300.00	68.8	0.094
400.00	76.7	0.079
500.00	82.5	0.058
600.00	86.9	0.044
700.00	90.5	0.035
800.00	93.2	0.027
900.00	95.2	0.020
1000.00	96.7	0.015
2000.00	100.0	0.033

PREDICTED MOISTURE CHARACTERISTIC DATA

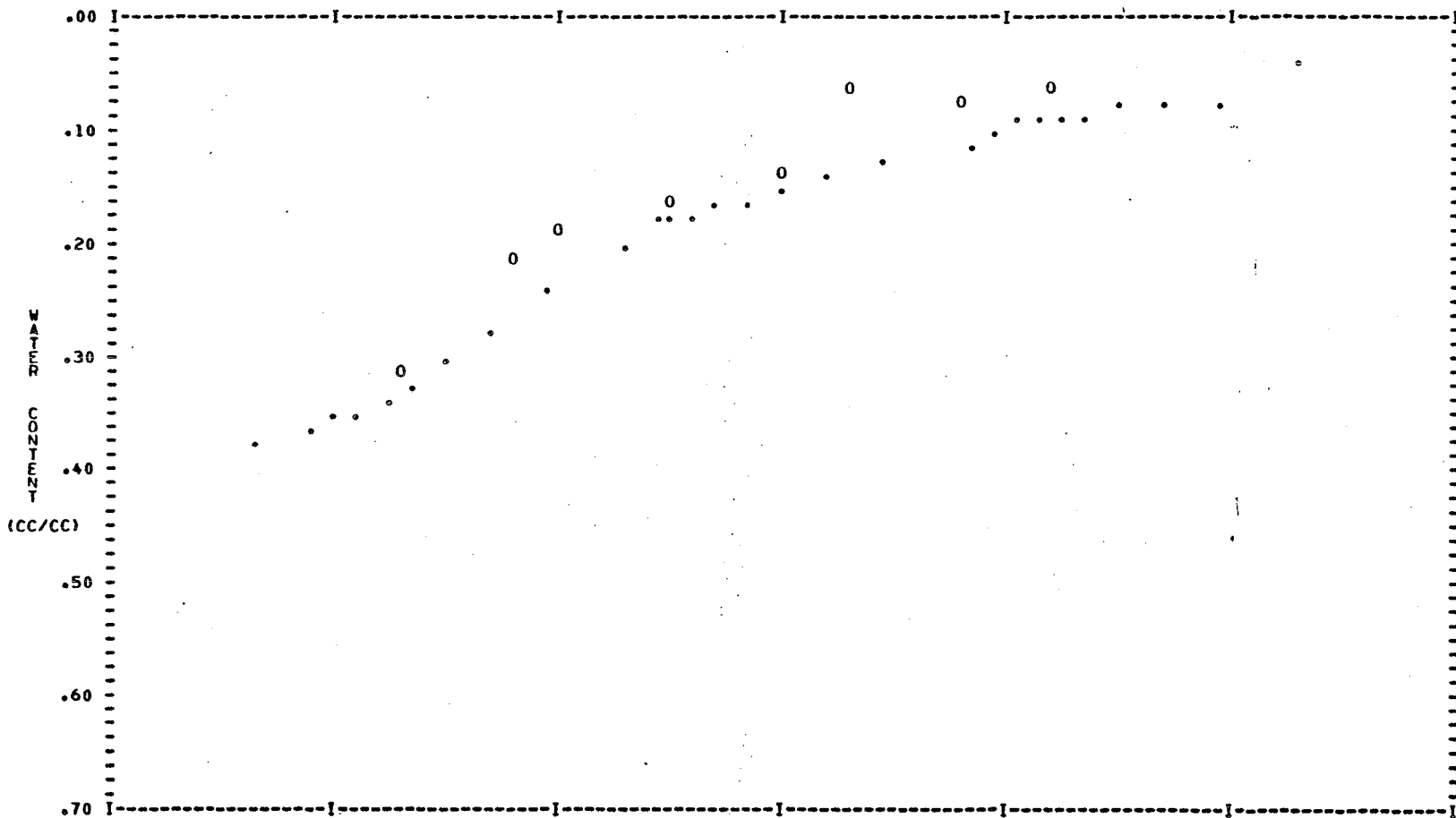
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.20525E+06
0.071	0.84855E+05
0.076	0.48637E+05
0.079	0.32148E+05
0.083	0.23103E+05
0.086	0.17545E+05
0.089	0.13858E+05
0.092	0.11272E+05
0.094	0.93800E+04
0.106	0.68325E+04
0.126	0.29351E+04
0.141	0.16458E+04
0.152	0.10433E+04
0.160	0.71077E+03
0.166	0.51839E+03
0.170	0.40301E+03
0.175	0.32799E+03
0.179	0.27558E+03
0.202	0.21032E+03
0.242	0.90873E+02
0.275	0.51741E+02
0.300	0.32936E+02
0.320	0.22806E+02
0.335	0.16826E+02
0.347	0.12804E+02
0.356	0.99529E+01
0.362	0.78310E+01
0.371	0.44667E+01

B-184

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 2 3 4 5 6
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 0134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-185

SOIL HORIZON NUMBER 92

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.46706E+01

SOIL HORIZON NUMBER 93 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.70 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.146	0.150E+05
0.155	0.600E+04
0.158	0.200E+04
0.170	0.100E+04
0.189	0.330E+03
0.204	0.100E+03
0.250	0.600E+02
0.304	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	26.4	0.264
2.00	27.2	0.008
3.00	27.7	0.005
4.00	28.1	0.004
5.00	28.5	0.004
6.00	28.8	0.003
7.00	29.1	0.003
8.00	29.3	0.003
9.00	29.6	0.002
10.00	29.8	0.002
20.00	31.4	0.016
30.00	32.5	0.011
40.00	33.3	0.008
50.00	34.0	0.007
60.00	34.6	0.006
70.00	35.1	0.005
80.00	35.6	0.005
90.00	36.0	0.004
100.00	36.4	0.004
200.00	43.1	0.067
300.00	53.9	0.104
400.00	64.6	0.111
500.00	72.7	0.081
600.00	78.4	0.057
700.00	83.1	0.047
800.00	86.9	0.038
900.00	89.9	0.030
1000.00	92.3	0.024
2000.00	100.0	0.077

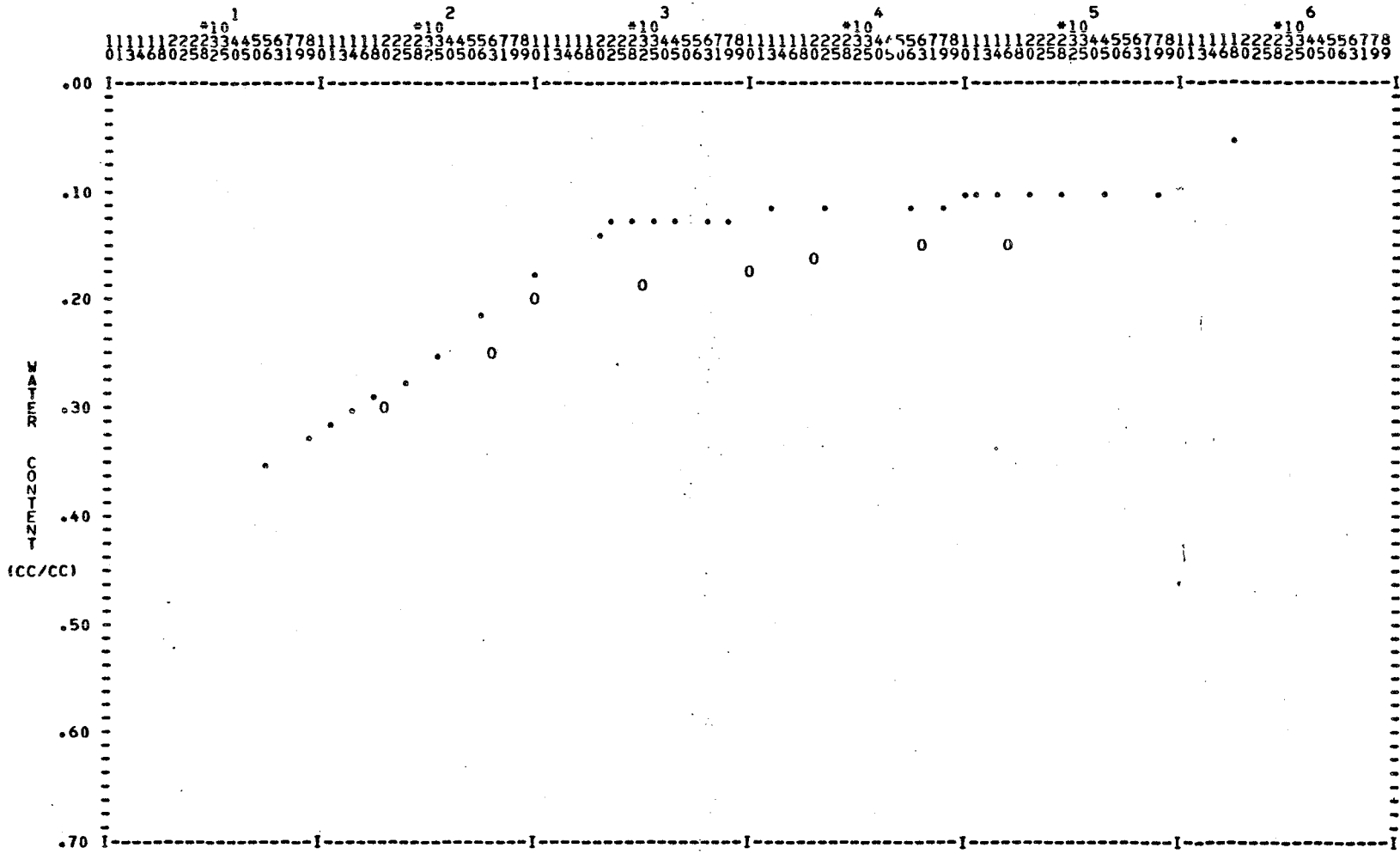
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.183316E+06
0.098	0.753333E+05
0.100	0.422634E+05
0.102	0.278533E+05
0.103	0.198233E+05
0.104	0.149300E+05
0.105	0.117090E+05
0.106	0.946666E+04
0.106	0.783555E+04
0.110	0.560140E+04
0.115	0.234100E+04
0.118	0.130884E+04
0.121	0.840930E+03
0.123	0.597570E+03
0.125	0.453460E+03
0.127	0.355384E+03
0.128	0.286673E+03
0.130	0.236010E+03
0.143	0.197760E+03
0.173	0.964320E+02
0.172	0.575930E+02
0.171	0.368870E+02
0.171	0.249970E+02
0.189	0.184655E+02
0.195	0.141690E+02
0.227	0.111460E+02
0.345	0.891770E+01
0.345	0.546420E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 93 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.68758E+01

SOIL HORIZON NUMBER 94 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 0.91 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.111	0.150E+05
0.125	0.600E+04
0.139	0.200E+04
0.254	0.100E+04
0.289	0.330E+03
0.323	0.100E+03
0.407	0.600E+02
0.509	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.8	0.058
2.00	7.0	0.021
3.00	9.2	0.013
4.00	10.3	0.011
5.00	11.3	0.010
6.00	12.3	0.009
7.00	13.3	0.009
8.00	14.0	0.009
9.00	14.8	0.009
10.00	15.7	0.009
20.00	23.5	0.078
30.00	29.5	0.060
40.00	33.6	0.044
50.00	37.3	0.034
60.00	39.0	0.026
70.00	42.0	0.021
80.00	43.9	0.019
90.00	45.6	0.017
100.00	47.3	0.017
200.00	67.7	0.204
300.00	79.6	0.119
400.00	87.1	0.075
500.00	92.1	0.050
600.00	95.3	0.032
700.00	97.1	0.019
800.00	98.3	0.011
900.00	98.9	0.006
1000.00	99.2	0.003
2000.00	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.026	0.11852E+06
0.056	0.48299E+05
0.064	0.27455E+05
0.070	0.18241E+05
0.077	0.13212E+05
0.083	0.10112E+05
0.089	0.80429E+04
0.095	0.65824E+04
0.100	0.55073E+04
0.129	0.40879E+04
0.174	0.17460E+04
0.208	0.96937E+03
0.234	0.62078E+03
0.253	0.43158E+03
0.269	0.31951E+03
0.282	0.24915E+03
0.294	0.20171E+03
0.305	0.16791E+03
0.378	0.13206E+03
0.484	0.53469E+02
0.547	0.28864E+02
0.588	0.18029E+02
0.615	0.12048E+02
0.632	0.84085E+01
0.642	0.60810E+01
0.647	0.44766E+01
0.650	0.32745E+01
0.654	0.19211E+01

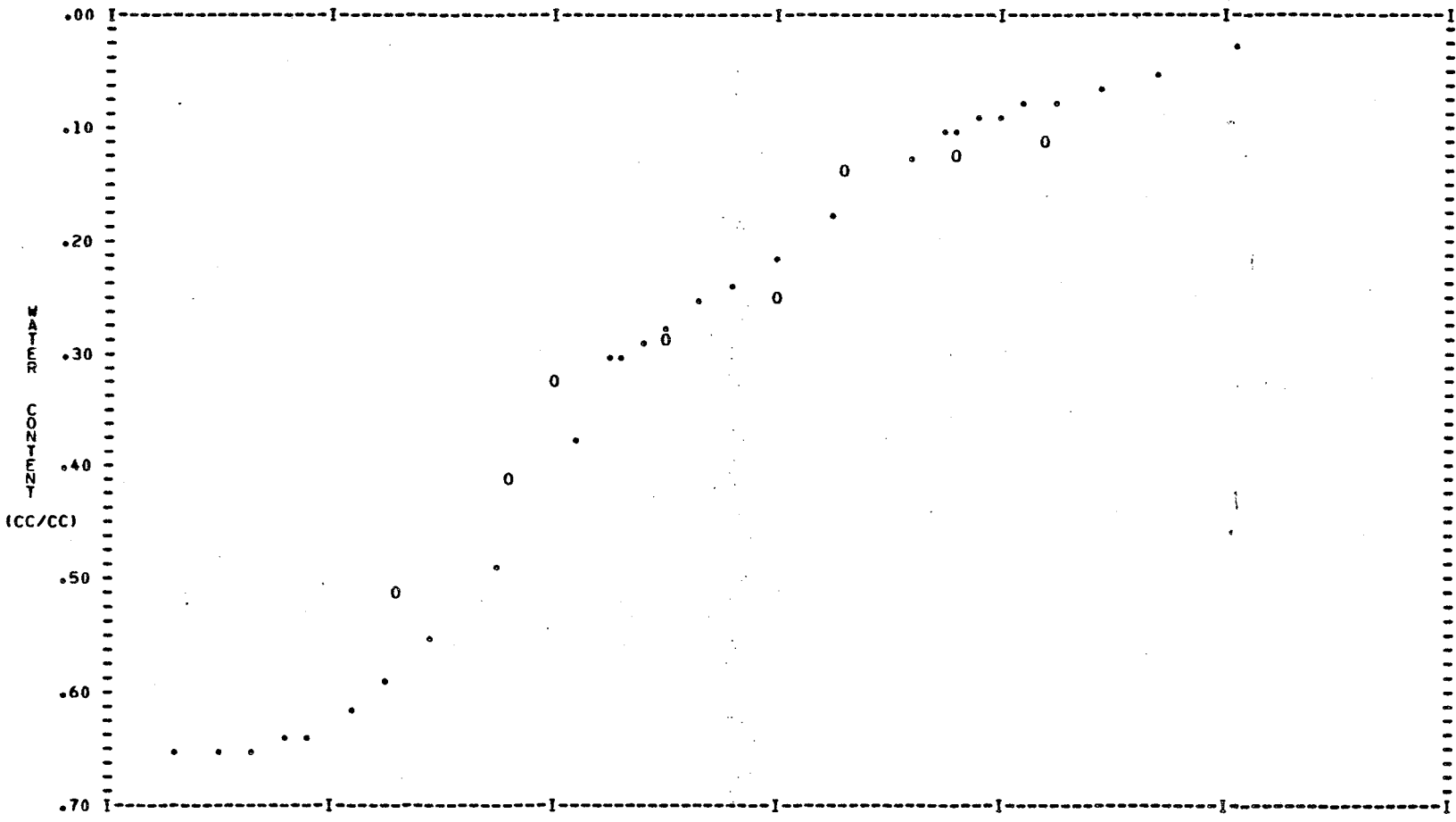
B-188

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199

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SOIL HORIZON NUMBER 94 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.21589E+01

SOIL HORIZON NUMBER 95 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.42 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.061	0.150E+05
0.077	0.600E+04
0.105	0.200E+04
0.190	0.100E+04
0.217	0.330E+03
0.254	0.100E+03
0.311	0.600E+02
0.376	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.6	0.046
2.00	6.1	0.015
3.00	7.2	0.011
4.00	8.2	0.010
5.00	9.1	0.009
6.00	10.0	0.009
7.00	10.8	0.008
8.00	11.6	0.008
9.00	12.4	0.007
10.00	13.1	0.007
20.00	18.9	0.058
30.00	23.9	0.050
40.00	28.3	0.044
50.00	31.9	0.036
60.00	35.0	0.031
70.00	37.7	0.028
80.00	40.4	0.026
90.00	43.0	0.026
100.00	45.5	0.025
200.00	67.9	0.224
300.00	80.3	0.124
400.00	87.9	0.076
500.00	92.7	0.048
600.00	95.7	0.030
700.00	97.5	0.018
800.00	98.5	0.011
900.00	99.1	0.006
1000.00	99.4	0.003
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

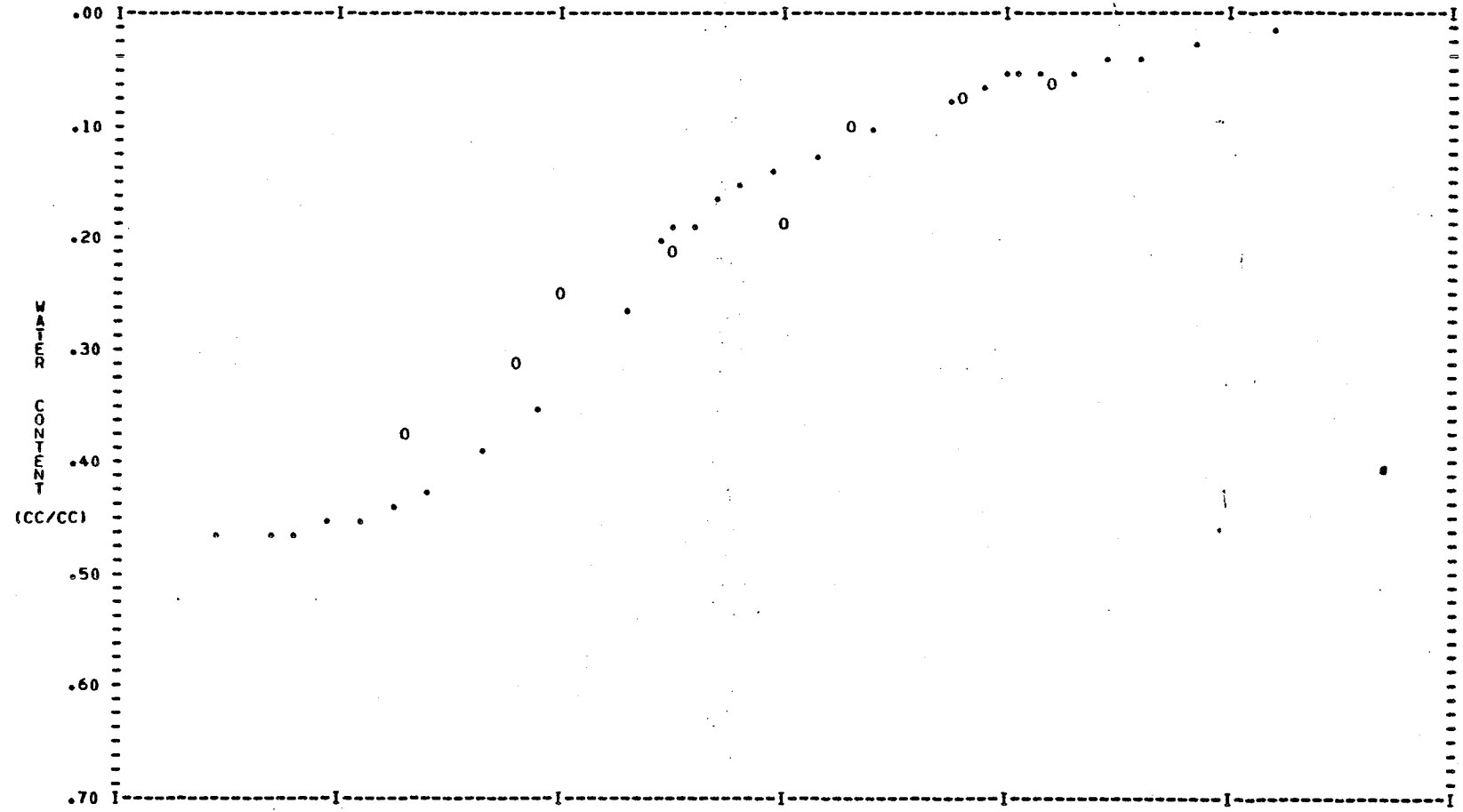
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.014	0.16526E+06
0.031	0.69375E+05
0.036	0.40433E+05
0.040	0.26908E+05
0.044	0.19398E+05
0.048	0.14754E+05
0.052	0.11662E+05
0.056	0.94885E+04
0.059	0.78962E+04
0.074	0.57443E+04
0.099	0.25021E+04
0.121	0.14333E+04
0.140	0.93558E+03
0.155	0.66109E+03
0.169	0.49948E+03
0.181	0.39519E+03
0.193	0.32305E+03
0.205	0.27055E+03
0.263	0.19975E+03
0.344	0.79999E+02
0.390	0.43028E+02
0.419	0.26579E+02
0.437	0.17674E+02
0.448	0.12386E+02
0.455	0.89731E+01
0.459	0.65866E+01
0.461	0.47347E+01
0.463	0.27025E+01

B-190

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-191

SOIL HORIZON NUMBER 95

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19879E+01

SOIL HORIZON NUMBER 96 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.067	0.150E+05
0.081	0.600E+04
0.113	0.200E+04
0.208	0.100E+04
0.234	0.330E+03
0.259	0.100E+03
0.290	0.600E+02
0.377	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.3	0.063
2.00	8.0	0.017
3.00	9.2	0.012
4.00	10.3	0.011
5.00	11.3	0.010
6.00	12.2	0.009
7.00	13.1	0.009
8.00	14.0	0.008
9.00	14.7	0.008
10.00	15.5	0.007
20.00	21.5	0.060
30.00	26.5	0.050
40.00	31.0	0.044
50.00	34.7	0.037
60.00	37.9	0.032
70.00	40.8	0.029
80.00	43.6	0.028
90.00	46.2	0.026
100.00	48.8	0.026
200.00	70.4	0.216
300.00	82.3	0.119
400.00	89.9	0.073
500.00	93.9	0.044
600.00	96.4	0.025
700.00	97.9	0.015
800.00	98.7	0.009
900.00	99.2	0.005
1000.00	99.4	0.002
2000.00	100.0	0.066

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.18577E+06
0.036	0.78015E+05
0.040	0.45419E+05
0.045	0.30177E+05
0.049	0.21722E+05
0.053	0.16500E+05
0.056	0.13027E+05
0.060	0.10588E+05
0.063	0.88036E+04
0.077	0.63838E+04
0.100	0.27685E+04
0.119	0.15938E+04
0.136	0.10393E+04
0.151	0.73703E+03
0.163	0.55725E+03
0.175	0.44007E+03
0.186	0.35867E+03
0.197	0.29939E+03
0.247	0.21915E+03
0.317	0.87733E+02
0.357	0.47108E+02
0.444	0.28808E+02
0.399	0.18910E+02
0.405	0.13155E+02
0.413	0.84793E+01
0.413	0.69454E+01
0.414	0.50398E+01
0.414	0.29857E+01

B-192

ALPHA = 1.38

SOIL HORIZON NUMBER 97 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.118	0.150E+05
0.145	0.600E+04
0.174	0.200E+04
0.250	0.100E+04
0.279	0.330E+03
0.301	0.100E+03
0.331	0.600E+02
0.389	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	15.4	0.154
2.00	16.9	0.015
5.00	17.9	0.010
4.00	18.8	0.009
5.00	19.6	0.009
6.00	20.5	0.008
7.00	21.3	0.008
8.00	22.1	0.008
9.00	22.9	0.008
10.00	23.7	0.008
20.00	30.6	0.069
30.00	36.5	0.059
40.00	41.4	0.049
50.00	45.4	0.040
60.00	48.7	0.033
70.00	51.6	0.029
80.00	54.2	0.026
90.00	56.5	0.024
100.00	58.7	0.022
200.00	76.0	0.173
300.00	85.6	0.096
400.00	91.4	0.058
500.00	95.0	0.036
600.00	97.1	0.021
700.00	98.4	0.013
800.00	99.2	0.007
900.00	99.5	0.004
1000.00	99.7	0.002
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.17483E+06
0.076	0.72111E+05
0.080	0.41662E+05
0.084	0.27875E+05
0.088	0.20250E+05
0.091	0.15518E+05
0.095	0.12349E+05
0.098	0.10107E+05
0.102	0.84550E+04
0.119	0.62664E+04
0.147	0.27257E+04
0.171	0.15499E+04
0.190	0.10053E+04
0.206	0.70820E+03
0.220	0.52996E+03
0.231	0.41451E+03
0.242	0.33495E+03
0.252	0.27751E+03
0.295	0.20062E+03
0.354	0.80455E+02
0.388	0.43105E+02
0.408	0.26479E+02
0.421	0.17525E+02
0.428	0.12229E+02
0.432	0.88132E+01
0.435	0.64167E+01
0.436	0.45221E+01
0.437	0.24989E+01

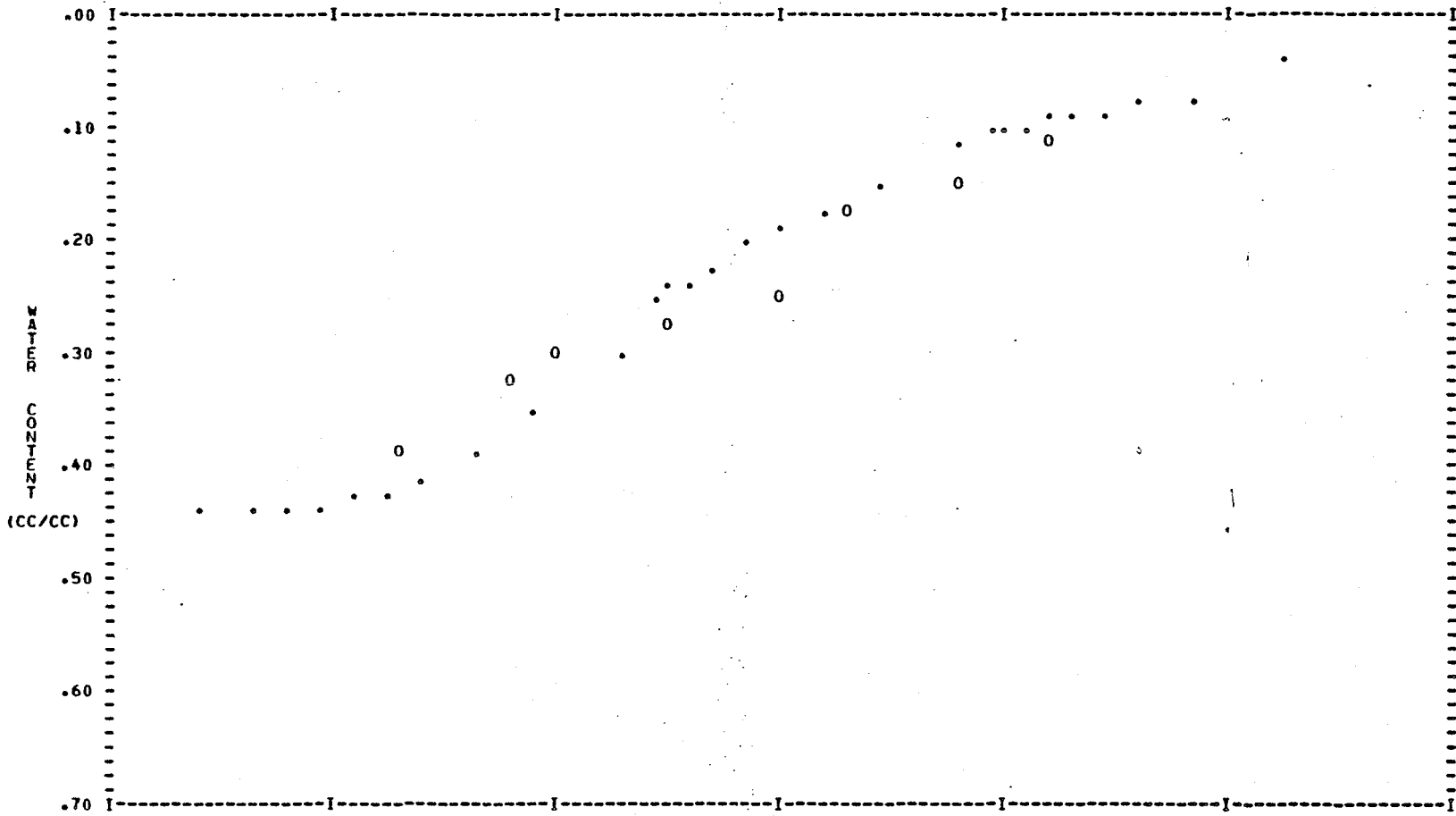
ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10				*10				*10				*10				*10				*10																			
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0	1	3	4	4	5	5	6	0	1	3	4	4	5	5	6	0	1	3	4	4	5	5	6	0	1	3	4	4	5	5	6	0	1	3	4	4	5	5	6

B-195



SOIL HORIZON NUMBER 97 O MEASURED . PREDICTED SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.23978E+01

SOIL HORIZON NUMBER 98 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.66 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.103	0.150E+05
0.124	0.600E+04
0.148	0.200E+04
0.227	0.100E+04
0.249	0.330E+03
0.269	0.100E+03
0.312	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.5	0.125
2.00	13.1	0.006
3.00	13.7	0.006
4.00	14.3	0.006
5.00	14.8	0.006
6.00	15.4	0.005
7.00	15.9	0.005
8.00	16.3	0.004
9.00	16.7	0.004
10.00	17.1	0.004
20.00	19.9	0.028
30.00	22.8	0.029
40.00	26.0	0.032
50.00	28.9	0.029
60.00	31.8	0.029
70.00	34.9	0.031
80.00	38.0	0.031
90.00	41.0	0.031
100.00	44.0	0.030
200.00	69.4	0.254
300.00	82.8	0.134
400.00	90.6	0.078
500.00	94.8	0.042
600.00	97.0	0.022
700.00	98.3	0.013
800.00	99.0	0.008
900.00	99.4	0.004
1000.00	99.6	0.002
2000.00	100.0	0.004

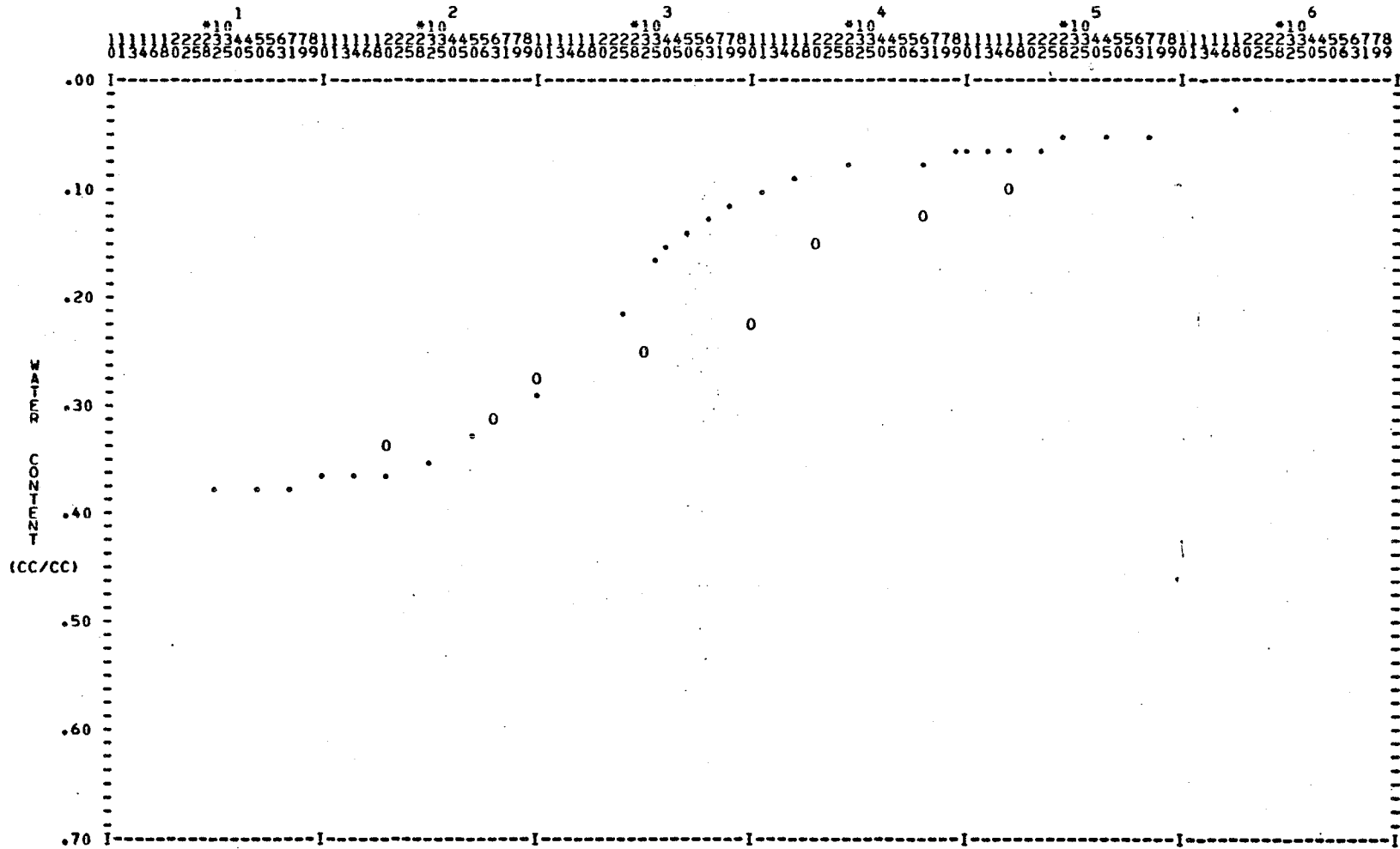
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.16882E+06
0.050	0.73878E+05
0.052	0.44221E+05
0.054	0.29513E+05
0.056	0.21217E+05
0.058	0.16065E+05
0.060	0.12633E+05
0.062	0.10225E+05
0.063	0.84665E+04
0.069	0.60235E+04
0.080	0.27197E+04
0.091	0.16328E+04
0.103	0.10816E+04
0.113	0.78875E+03
0.125	0.61333E+03
0.136	0.49071E+03
0.148	0.40213E+03
0.159	0.33612E+03
0.212	0.24661E+03
0.284	0.97911E+02
0.324	0.52065E+02
0.346	0.31175E+02
0.358	0.20064E+02
0.365	0.14021E+02
0.368	0.10123E+02
0.371	0.73935E+01
0.372	0.52541E+01
0.373	0.30155E+01

B-196

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 98

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41786E+01

B-197

SOIL HORIZON NUMBER 99 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.053	0.150E+05
0.067	0.600E+04
0.075	0.200E+04
0.100	0.100E+04
0.140	0.300E+03
0.183	0.100E+03
0.307	0.600E+02
0.365	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.2	0.072
2.00	7.4	0.000
4.00	7.5	0.000
6.00	7.5	0.000
8.00	7.5	0.000
10.00	7.5	0.000
20.00	7.5	0.000
30.00	7.5	0.000
40.00	7.5	0.000
50.00	7.5	0.000
60.00	7.5	0.000
70.00	7.5	0.000
80.00	7.5	0.000
90.00	7.5	0.000
100.00	7.5	0.000
200.00	6.2	0.308
300.00	7.8	0.162
400.00	8.1	0.095
500.00	9.3	0.052
600.00	9.6	0.028
700.00	97.8	0.017
800.00	98.7	0.010
900.00	99.3	0.005
1000.00	99.5	0.002
2000.00	100.0	0.005

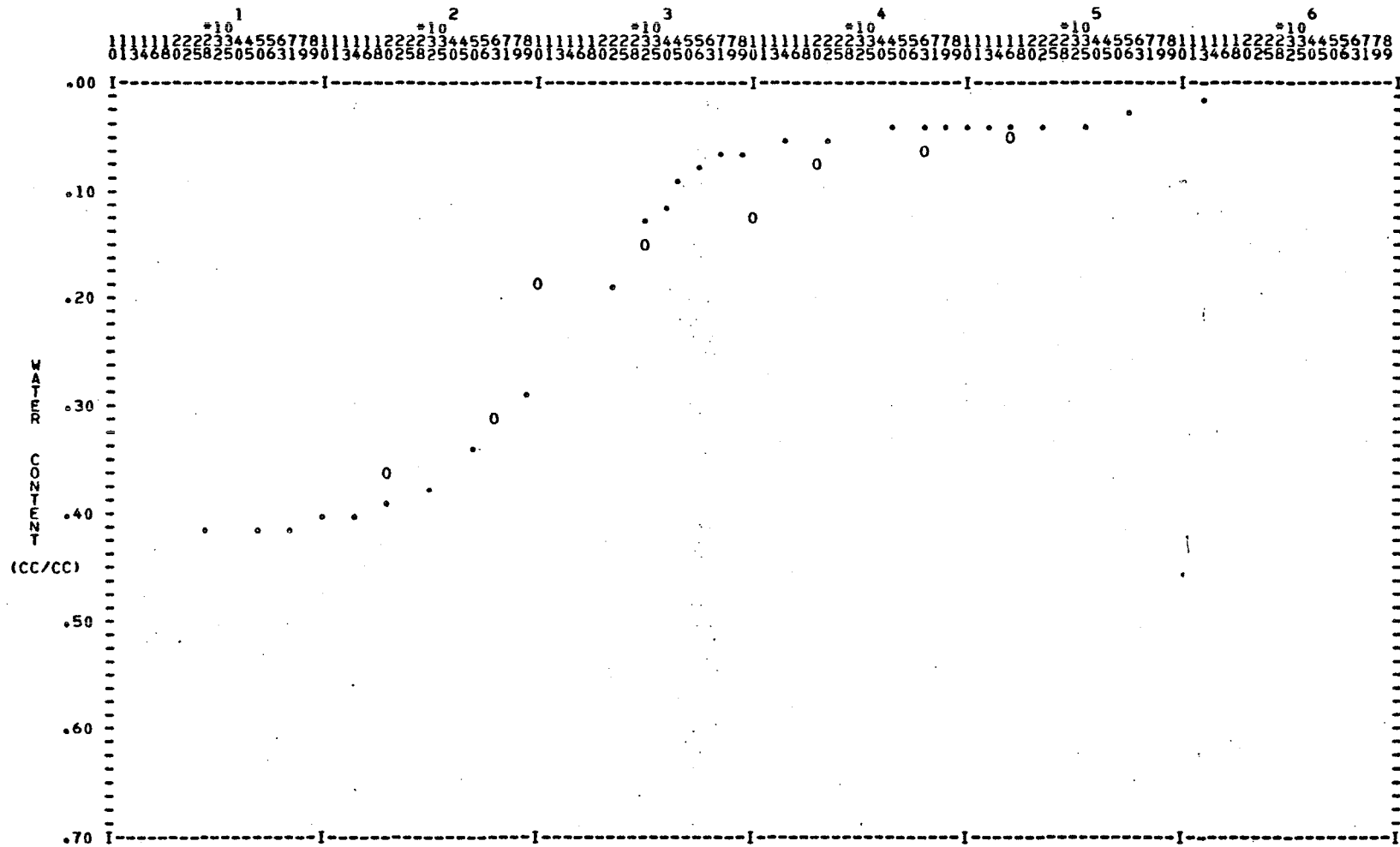
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.12041E+06
0.031	0.55846E+05
0.032	0.34351E+05
0.033	0.23035E+05
0.034	0.16561E+05
0.035	0.12519E+05
0.035	0.98220E+04
0.036	0.79289E+04
0.037	0.65462E+04
0.039	0.45880E+04
0.044	0.22258E+04
0.052	0.13839E+04
0.060	0.92524E+03
0.069	0.70337E+03
0.080	0.56823E+03
0.094	0.46202E+03
0.108	0.38177E+03
0.122	0.32057E+03
0.193	0.23631E+03
0.290	0.13750E+02
0.343	0.50001E+02
0.373	0.30083E+02
0.389	0.19451E+02
0.399	0.13601E+02
0.404	0.98252E+01
0.407	0.71773E+01
0.409	0.50961E+01
0.410	0.29066E+01

B-198

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 99

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36817E+01

B-199

SOIL HORIZON NUMBER 100 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.59 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.083	0.150E+05
0.100	0.600E+04
0.118	0.200E+04
0.207	0.100E+04
0.229	0.330E+03
0.270	0.100E+03
0.328	0.600E+02
0.382	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.7	0.117
2.00	22.0	0.003
3.00	33.3	0.003
4.00	44.7	0.004
5.00	51.1	0.004
6.00	59.5	0.004
7.00	63.8	0.003
8.00	74.1	0.003
9.00	74.4	0.003
10.00	74.7	0.003
20.00	76.6	0.019
30.00	79.0	0.024
40.00	82.2	0.033
50.00	85.7	0.035
60.00	89.4	0.037
70.00	93.3	0.039
80.00	97.0	0.038
90.00	100.6	0.036
100.00	103.9	0.033
200.00	108.9	0.250
300.00	112.1	0.133
400.00	115.8	0.077
500.00	119.4	0.043
600.00	123.5	0.024
700.00	128.0	0.015
800.00	132.9	0.009
900.00	137.4	0.005
1000.00	141.6	0.002
2000.00	100.0	0.004

PREDICTED MOISTURE CHARACTERISTIC DATA

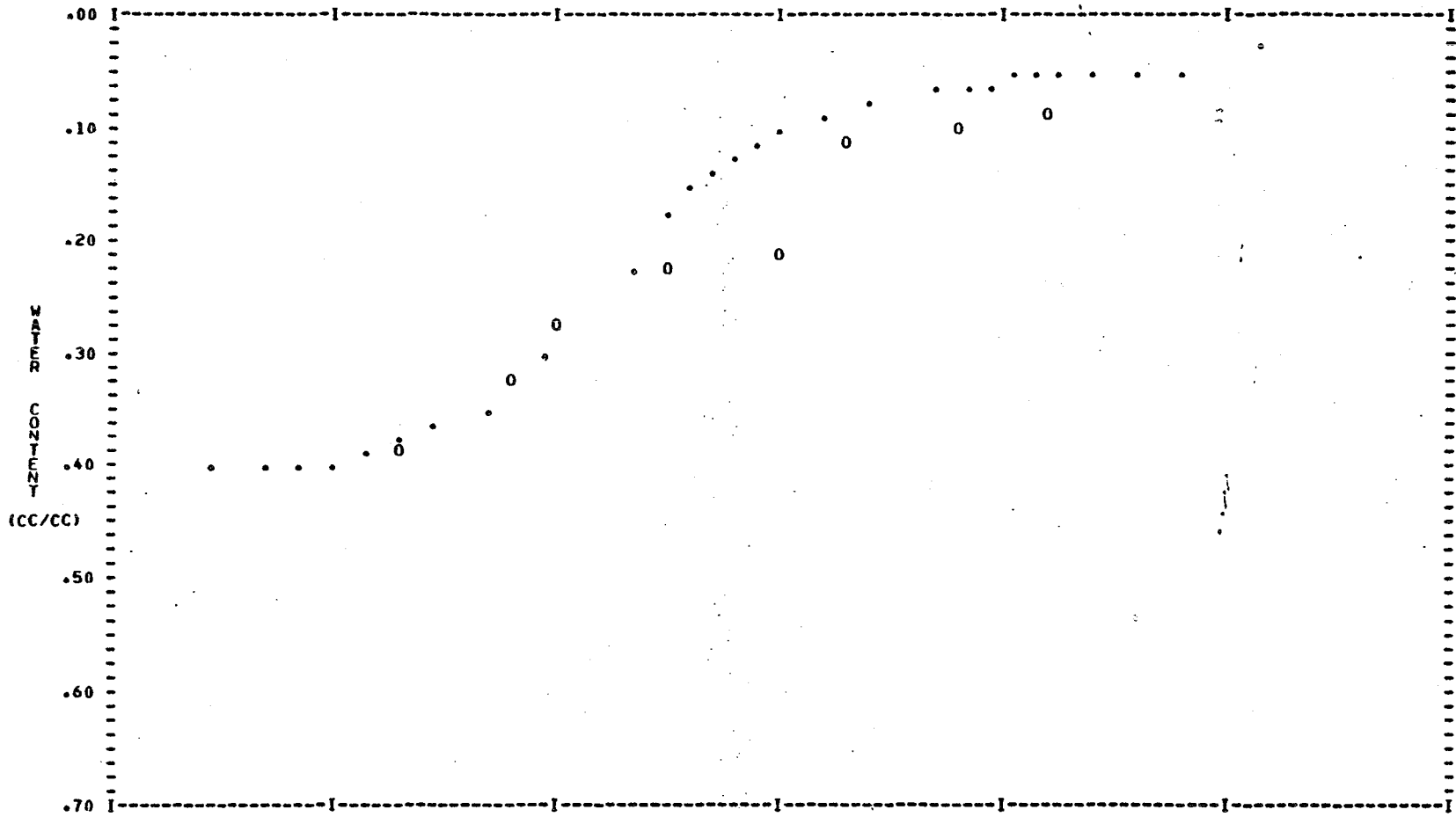
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.13870E+06
0.049	0.63252E+05
0.050	0.38715E+05
0.052	0.25988E+05
0.053	0.18721E+05
0.054	0.14184E+05
0.056	0.11134E+05
0.057	0.90252E+04
0.058	0.74685E+04
0.063	0.52927E+04
0.071	0.24781E+04
0.082	0.15500E+04
0.096	0.10575E+04
0.111	0.78175E+03
0.125	0.60578E+03
0.144	0.48149E+03
0.155	0.39151E+03
0.169	0.32453E+03
0.220	0.23242E+03
0.300	0.92442E+02
0.344	0.49085E+02
0.388	0.29605E+02
0.399	0.13623E+02
0.399	0.93704E+01
0.399	0.72203E+01
0.398	0.51064E+01
0.399	0.23521E+01

B-200

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

¹⁰1 ¹⁰2 ¹⁰3 ¹⁰4 ¹⁰5 ¹⁰6
 1111122223344556778111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-201

SOIL HORIZON NUMRER 100

0 MEASURED :

• PREDICTED

SUM OF (ABS(LOG(P5IM)-LOG(P5IP))) = 0.31722E+01

SOIL HORIZON NUMBER 101 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 0.78 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.043	0.150E+05
0.087	0.600E+04
0.119	0.200E+04
0.324	0.100E+04
0.375	0.330E+03
0.419	0.100E+03
0.452	0.600E+02
0.575	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.5	0.065
2.00	10.7	0.042
5.00	13.7	0.030
10.00	16.6	0.029
20.00	19.2	0.026
40.00	21.6	0.024
60.00	23.0	0.022
80.00	25.0	0.020
100.00	27.0	0.019
200.00	29.6	0.018
300.00	31.1	0.015
400.00	32.6	0.015
500.00	34.1	0.018
600.00	35.0	0.028
700.00	37.0	0.021
800.00	39.0	0.016
900.00	41.0	0.013
1000.00	41.0	0.010
2000.00	48.1	0.062
	51.5	0.033
	53.0	0.022
	55.0	0.017
	56.0	0.013
	57.0	0.010
	58.0	0.008
	59.0	0.005
	59.0	0.004
	59.0	0.004
	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.12055E+06
0.086	0.50879E+05
0.107	0.29660E+05
0.127	0.19653E+05
0.144	0.14100E+05
0.161	0.10675E+05
0.176	0.84021E+04
0.189	0.68098E+04
0.202	0.56471E+04
0.256	0.40529E+04
0.352	0.18180E+04
0.438	0.10269E+04
0.496	0.61180E+03
0.526	0.39063E+03
0.543	0.28476E+03
0.556	0.21649E+03
0.566	0.16979E+03
0.574	0.13636E+03
0.600	0.93928E+02
0.633	0.37389E+02
0.652	0.20437E+02
0.666	0.13038E+02
0.676	0.90954E+01
0.685	0.66706E+01
0.691	0.50475E+01
0.695	0.38972E+01
0.699	0.30370E+01
0.703	0.17157E+01

B-202

ALPHA = 1.38

SOIL HORIZON NUMBER 102 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.20 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.073	0.150E+05
0.094	0.600E+04
0.158	0.200E+04
0.259	0.100E+04
0.283	0.330E+03
0.344	0.100E+03
0.350	0.600E+02
0.442	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.5	0.0065
2.00	11.8	0.0053
3.00	15.6	0.0038
4.00	19.0	0.0035
5.00	22.0	0.0031
6.00	25.0	0.0028
7.00	27.5	0.0024
8.00	29.9	0.0022
9.00	32.1	0.0020
10.00	34.1	0.0019
20.00	49.0	0.0151
30.00	63.0	0.1468
40.00	75.2	0.1211
50.00	81.1	0.0599
60.00	83.8	0.0279
70.00	85.7	0.0199
80.00	87.0	0.0133
90.00	87.9	0.0099
100.00	88.6	0.0078
200.00	92.4	0.0338
300.00	94.4	0.0200
400.00	95.7	0.0133
500.00	96.7	0.0100
600.00	97.5	0.0088
700.00	98.2	0.0077
800.00	98.7	0.0055
900.00	99.1	0.0044
1000.00	99.4	0.0033
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.003	0.17721E+06
0.003	0.74597E+06
0.003	0.43316E+06
0.003	0.28621E+06
0.003	0.20488E+06
0.003	0.15483E+06
0.003	0.12167E+06
0.003	0.10247E+06
0.003	0.98477E+05
0.003	0.93156E+05
0.003	0.89266E+05
0.003	0.85966E+05
0.003	0.83299E+05
0.003	0.80781E+05
0.003	0.78667E+05
0.003	0.76726E+05
0.003	0.74933E+05
0.003	0.73258E+05
0.003	0.71751E+05
0.003	0.70370E+05
0.003	0.69111E+05
0.003	0.67960E+05
0.003	0.66930E+05
0.003	0.66030E+05
0.003	0.65267E+05
0.003	0.64616E+05
0.003	0.64071E+05
0.003	0.63631E+05
0.003	0.63288E+05
0.003	0.63041E+05
0.003	0.62881E+05

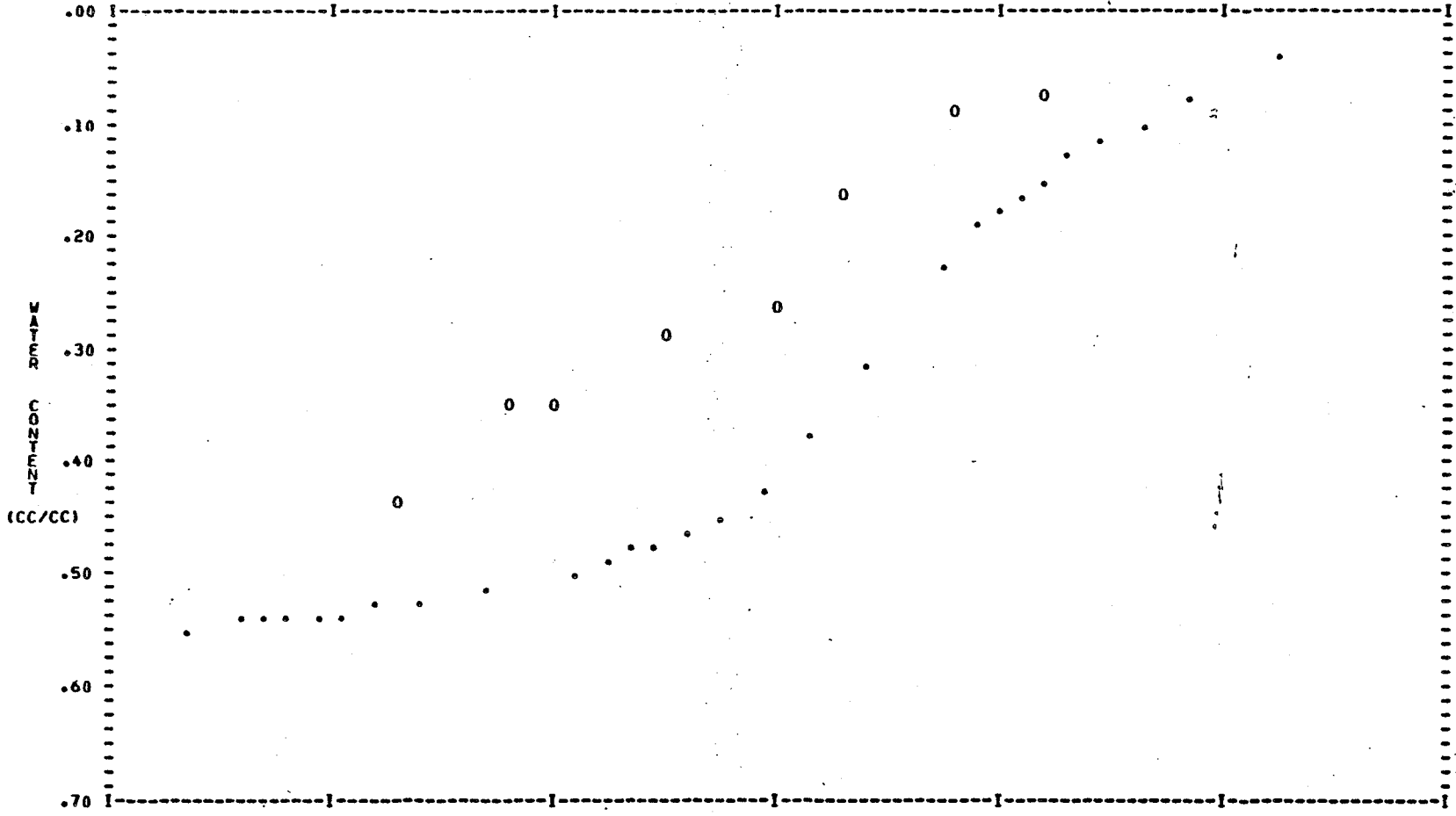
B-204

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 0134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199013468025825050631990

B-205



SOIL HORIZON NUMBER 102

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.82981E+01

SOIL HORIZON NUMBER 103 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.38 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.127	0.150E+05
0.152	0.600E+04
0.213	0.200E+04
0.297	0.100E+04
0.316	0.330E+03
0.342	0.100E+03
0.352	0.600E+02
0.406	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	16.2	0.162
2.00	11.3	0.050
3.00	4.9	0.064
4.00	2.1	0.033
5.00	1.1	0.010
6.00	0.7	0.006
7.00	0.1	0.004
8.00	0.2	0.002
9.00	0.1	0.001
10.00	0.1	0.000
20.00	5.9	0.133
30.00	6.7	0.128
40.00	7.7	0.100
50.00	8.1	0.050
60.00	8.8	0.077
70.00	8.6	0.011
80.00	8.9	0.011
90.00	9.0	0.000
100.00	9.1	0.000
200.00	94.4	0.033
300.00	95.8	0.011
400.00	96.9	0.011
500.00	97.6	0.007
600.00	98.2	0.000
700.00	98.7	0.000
800.00	99.0	0.000
900.00	99.3	0.003
1000.00	99.5	0.000
2000.00	100.0	0.000

PREDICTED MOISTURE CHARACTERISTIC DATA

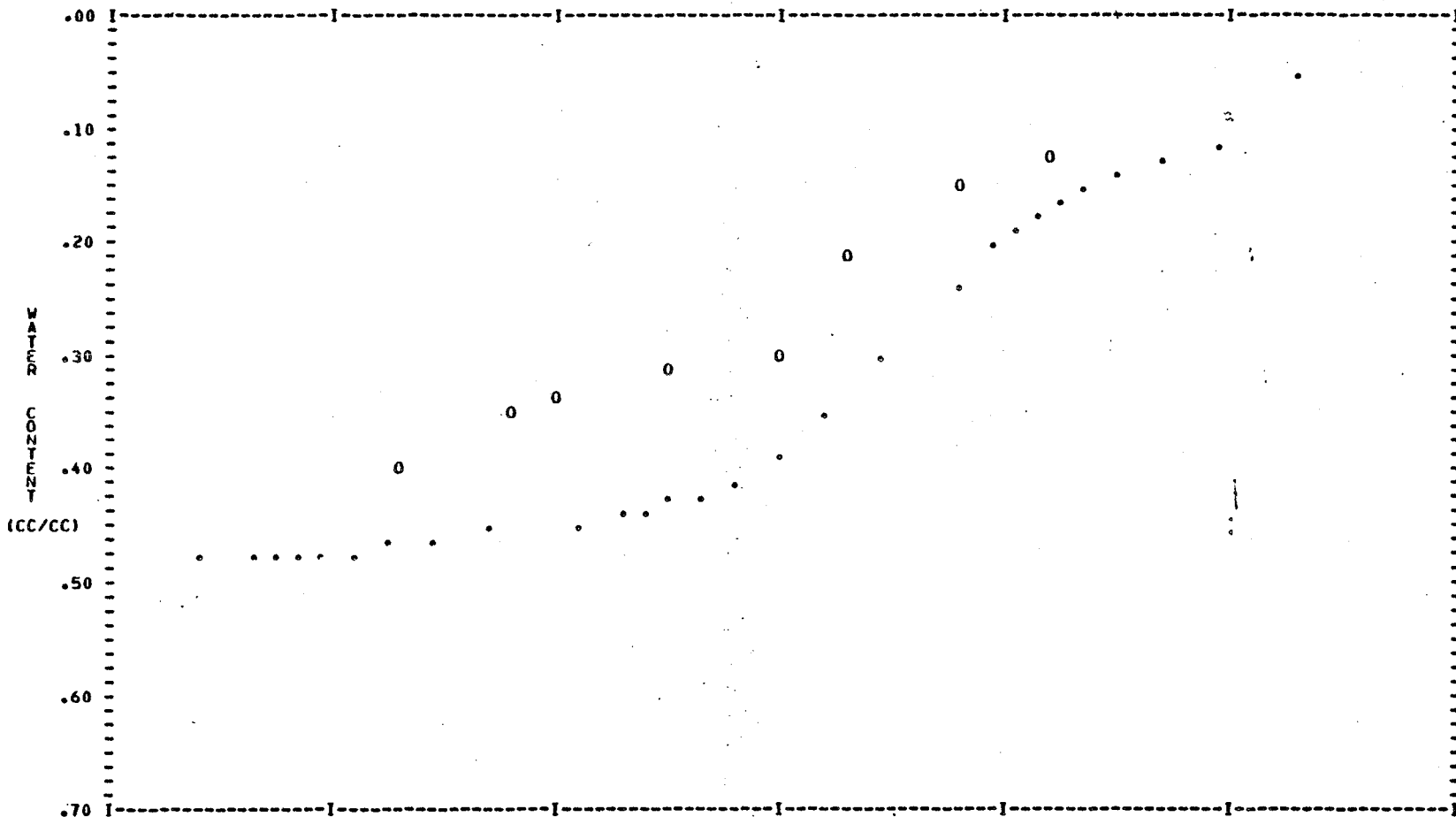
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.00	0.20185E+06
0.01	0.84714E+05
0.02	0.49033E+05
0.03	0.32351E+05
0.04	0.23138E+05
0.05	0.17476E+05
0.06	0.13728E+05
0.07	0.11107E+05
0.08	0.91972E+04
0.09	0.65056E+04
0.10	0.29022E+04
0.15	0.16342E+04
0.20	0.97800E+03
0.25	0.62494E+03
0.30	0.44762E+03
0.35	0.33330E+03
0.40	0.25469E+03
0.45	0.19760E+03
0.50	0.15268E+03
0.55	0.51966E+02
0.60	0.28412E+02
0.65	0.18100E+02
0.70	0.12614E+02
0.75	0.92907E+01
0.80	0.70787E+01
0.85	0.55543E+01
0.90	0.43807E+01
0.95	0.25326E+01
1.00	0.478

B-206

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-207

SOIL HORIZON NUMBER 103

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.73181E+01

SOIL HORIZON NUMBER 104 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.61 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.138	0.150E+05
0.158	0.600E+04
0.209	0.200E+04
0.296	0.100E+04
0.316	0.330E+03
0.335	0.100E+03
0.348	0.600E+02
0.372	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.6	0.126
2.00	15.1	0.025
3.00	16.9	0.018
4.00	18.6	0.017
5.00	20.3	0.016
6.00	21.8	0.015
7.00	23.3	0.015
8.00	24.6	0.014
9.00	26.0	0.013
10.00	27.2	0.013
20.00	37.6	0.104
30.00	48.1	0.105
40.00	56.6	0.085
50.00	61.7	0.051
60.00	64.9	0.032
70.00	67.4	0.026
80.00	69.6	0.021
90.00	71.3	0.018
100.00	72.8	0.015
200.00	82.0	0.092
300.00	86.8	0.048
400.00	90.0	0.032
500.00	92.4	0.024
600.00	94.4	0.020
700.00	96.0	0.016
800.00	97.2	0.012
900.00	98.1	0.009
1000.00	98.8	0.007
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.21097E+06
0.063	0.88744E+05
0.070	0.51868E+05
0.076	0.34579E+05
0.083	0.24960E+05
0.088	0.19003E+05
0.094	0.15032E+05
0.099	0.12238E+05
0.104	0.10190E+05
0.127	0.74254E+04
0.168	0.33346E+04
0.205	0.18914E+04
0.232	0.11564E+04
0.248	0.77065E+03
0.260	0.57008E+03
0.269	0.43884E+03
0.276	0.34803E+03
0.283	0.28245E+03
0.304	0.19519E+03
0.331	0.77526E+02
0.347	0.42217E+02
0.358	0.26975E+02
0.366	0.18952E+02
0.373	0.14012E+02
0.379	0.10673E+02
0.383	0.82970E+01
0.386	0.65220E+01
0.390	0.35700E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 105 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.86 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.080	0.150E+05
0.097	0.600E+04
0.126	0.200E+04
0.171	0.100E+04
0.186	0.330E+03
0.203	0.100E+03
0.212	0.600E+02
0.247	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.4	0.134
2.00	4.8	0.014
3.00	5.9	0.010
4.00	6.7	0.009
5.00	7.4	0.009
6.00	8.0	0.008
7.00	8.5	0.008
8.00	9.0	0.008
9.00	9.5	0.007
10.00	10.0	0.007
20.00	17.4	0.059
30.00	33.4	0.060
40.00	38.3	0.050
50.00	41.5	0.032
60.00	43.4	0.019
70.00	44.7	0.013
80.00	45.8	0.011
90.00	46.9	0.011
100.00	48.1	0.012
200.00	58.2	0.101
300.00	66.5	0.082
400.00	73.3	0.068
500.00	78.4	0.051
600.00	82.2	0.038
700.00	85.4	0.031
800.00	88.0	0.026
900.00	90.2	0.022
1000.00	92.1	0.019
2000.00	100.0	0.079

PREDICTED MOISTURE CHARACTERISTIC DATA

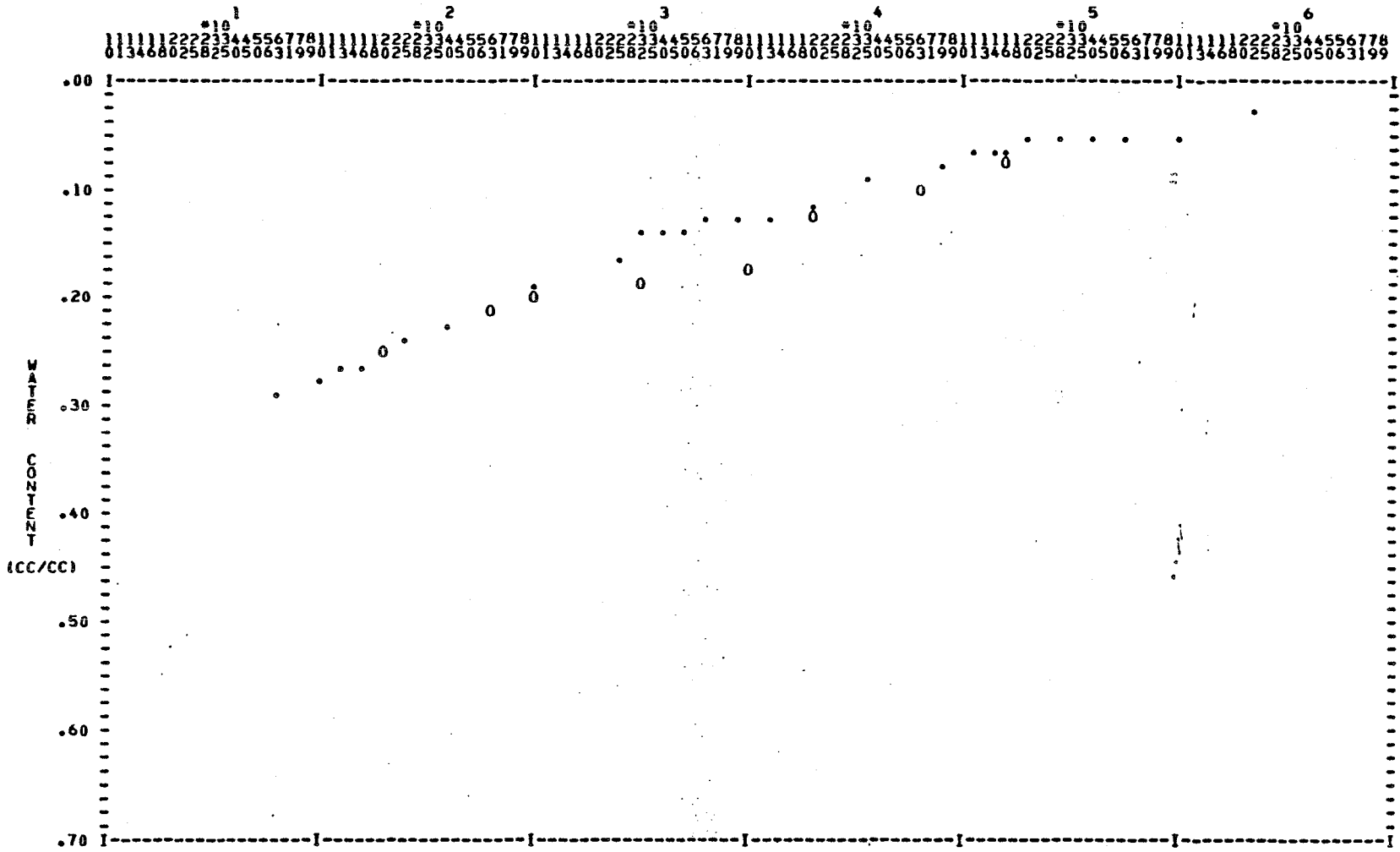
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.022	0.23144E+06
0.046	0.71353E+05
0.088	0.66978E+05
0.111	0.38044E+05
0.154	0.7498E+04
0.206	0.0458E+04
0.259	0.6599E+03
0.311	0.3520E+03
0.363	0.126E+03
0.415	0.2228E+04
0.467	0.5694E+04
0.519	0.1104E+04
0.571	0.303E+04
0.623	0.1199E+04
0.675	0.666E+03
0.727	0.333E+03
0.779	0.444E+03
0.831	0.800E+03
0.883	0.393E+03
0.935	0.334E+03
0.987	0.245E+03
1.039	0.196E+03
1.091	0.151E+03
1.143	0.207E+03
1.195	0.986E+02
1.247	0.629E+02
1.299	0.286E+02

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ALPHA = 1.38

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SOIL WATER PRESSURE (PSI) , -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 105

O MEASURED

. PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PPIP))) = 0.25640E+01

SOIL HORIZON NUMBER 106 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.44 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.042	0.150E+05
0.052	0.600E+04
0.089	0.200E+04
0.128	0.100E+04
0.166	0.330E+03
0.204	0.100E+03
0.226	0.600E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.0	0.030
2.00	4.8	0.018
3.00	5.9	0.011
4.00	6.9	0.010
5.00	7.8	0.009
6.00	8.6	0.008
7.00	9.4	0.008
8.00	10.2	0.008
9.00	11.0	0.008
10.00	11.7	0.007
15.00	18.2	0.065
20.00	23.2	0.050
30.00	26.9	0.038
40.00	29.9	0.030
50.00	32.3	0.024
60.00	34.4	0.021
70.00	36.2	0.018
80.00	37.9	0.017
90.00	39.5	0.016
100.00	53.8	0.143
200.00	64.3	0.104
300.00	71.3	0.076
400.00	77.7	0.059
500.00	82.6	0.049
600.00	86.8	0.042
700.00	90.4	0.036
800.00	93.5	0.031
900.00	96.2	0.027
1000.00	100.0	0.038
2000.00		

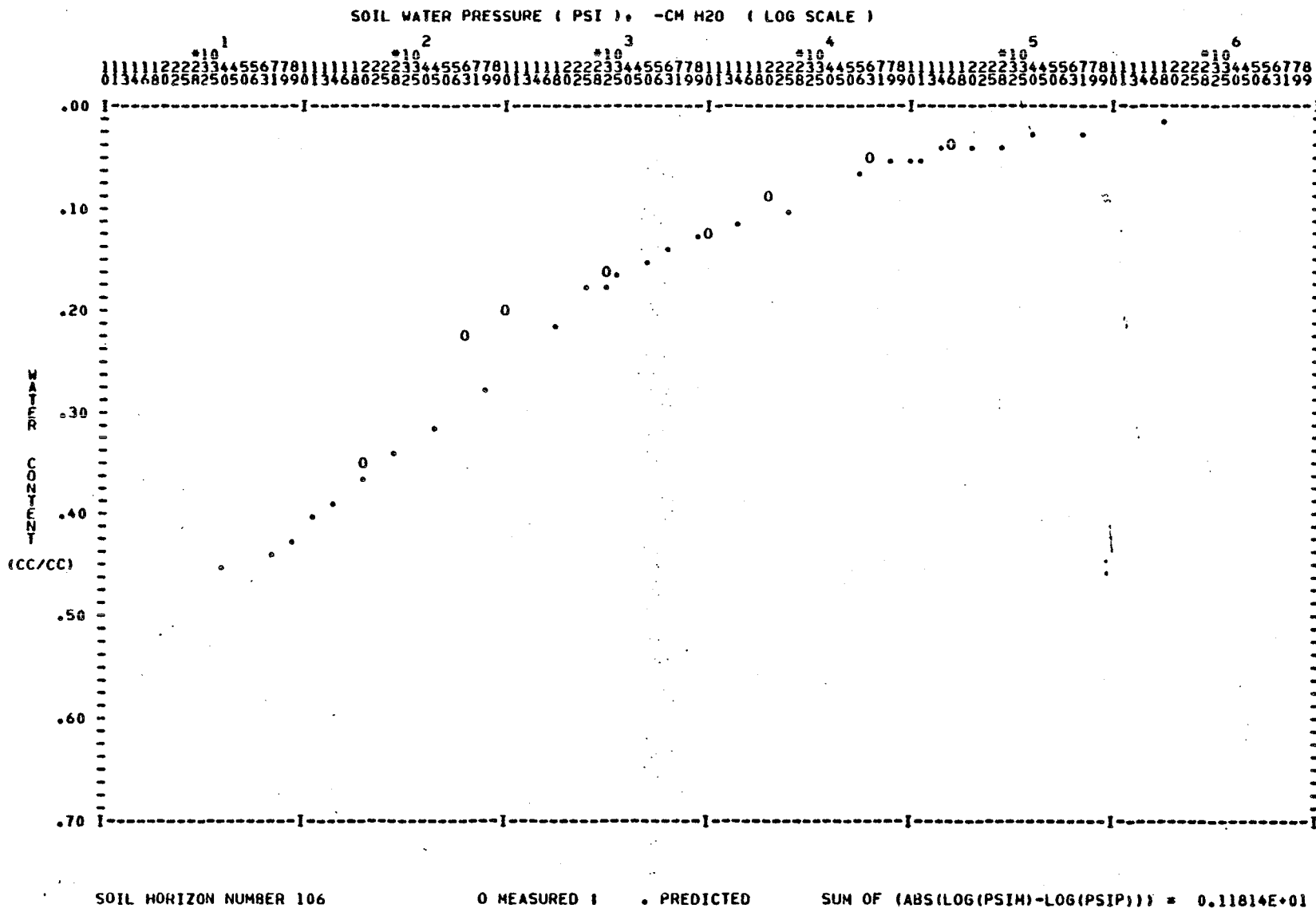
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.17409E+06
0.025	0.71349E+05
0.029	0.40717E+05
0.034	0.27014E+05
0.038	0.19517E+05
0.041	0.14899E+05
0.045	0.11824E+05
0.048	0.96573E+04
0.052	0.80661E+04
0.058	0.59524E+04
0.068	0.25400E+04
0.094	0.14187E+04
0.114	0.91398E+03
0.130	0.64162E+03
0.144	0.47920E+03
0.157	0.37464E+03
0.161	0.30287E+03
0.169	0.25118E+03
0.177	0.18629E+03
0.213	0.78652E+02
0.270	0.43653E+02
0.311	0.28028E+02
0.341	0.19747E+02
0.366	0.14757E+02
0.387	0.11455E+02
0.404	0.91524E+01
0.420	0.74798E+01
0.433	0.38965E+01
0.448	

ALPHA = 1.38

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SOIL HORIZON NUMBER 107 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.21 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.034	0.150E+05
0.042	0.600E+04
0.071	0.200E+04
0.201	0.100E+04
0.237	0.330E+03
0.269	0.100E+03
0.288	0.600E+02
0.390	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.9	0.019
2.00	3.5	0.016
3.00	4.6	0.011
4.00	5.5	0.009
5.00	6.3	0.009
6.00	7.1	0.008
7.00	7.9	0.008
8.00	8.7	0.008
9.00	9.4	0.007
10.00	10.1	0.007
20.00	16.4	0.063
30.00	21.6	0.052
40.00	25.6	0.040
50.00	28.5	0.029
60.00	30.6	0.021
70.00	32.2	0.016
80.00	33.6	0.014
90.00	34.9	0.014
100.00	36.3	0.014
200.00	50.9	0.146
300.00	62.2	0.113
400.00	70.5	0.083
500.00	76.9	0.064
600.00	82.2	0.053
700.00	86.6	0.044
800.00	90.4	0.038
900.00	93.6	0.032
1000.00	96.3	0.027
2000.00	100.0	0.037

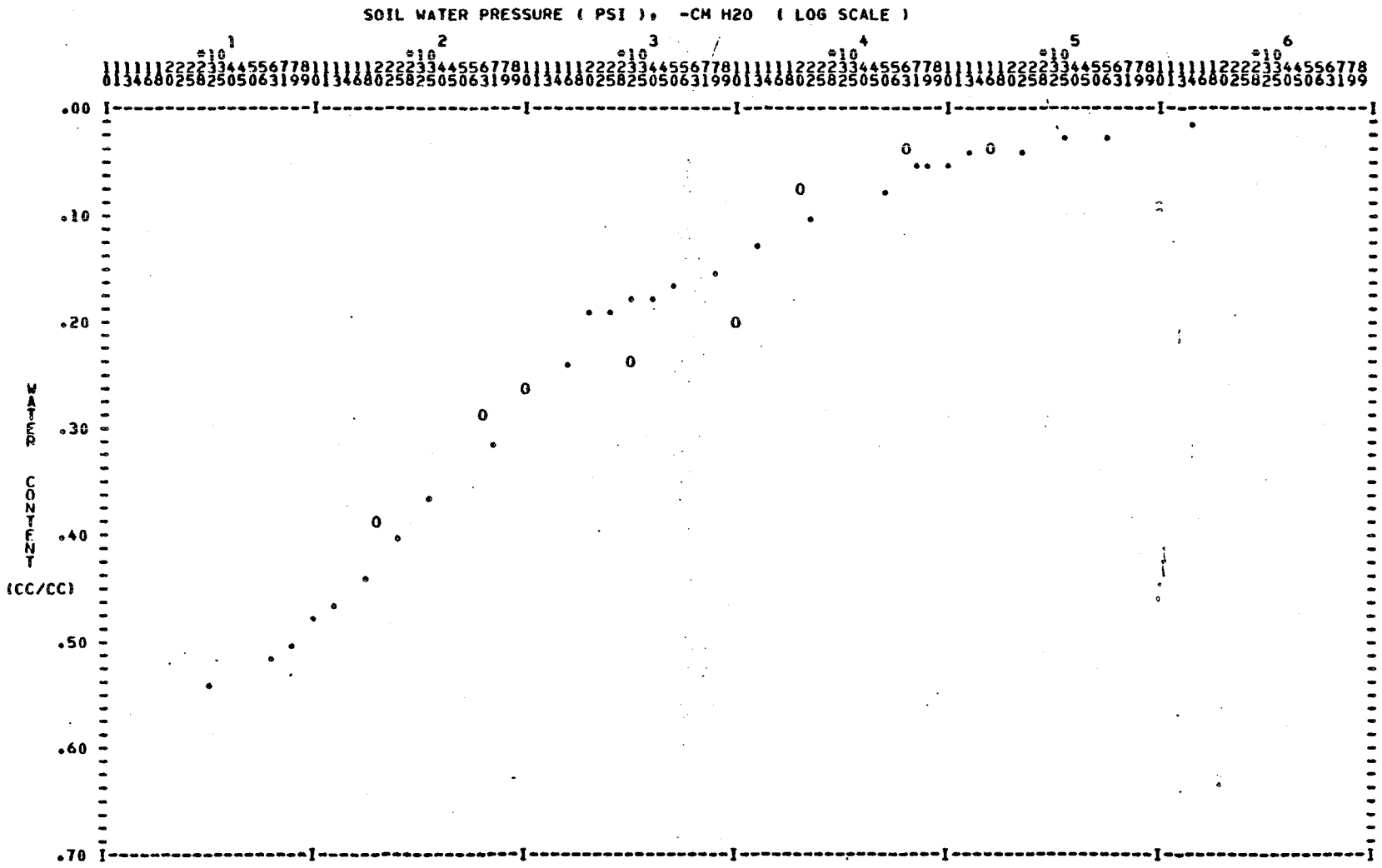
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.14327E+06
0.027	0.59014E+06
0.027	0.33891E+06
0.032	0.22544E+06
0.037	0.16304E+06
0.041	0.12451E+06
0.045	0.98819E+05
0.049	0.80709E+05
0.053	0.67401E+05
0.072	0.49693E+05
0.103	0.21500E+05
0.128	0.12060E+05
0.147	0.76647E+04
0.160	0.52370E+04
0.170	0.38315E+04
0.179	0.29894E+04
0.186	0.24404E+04
0.194	0.20550E+04
0.237	0.15704E+04
0.307	0.67136E+03
0.361	0.37301E+03
0.400	0.23941E+03
0.432	0.16824E+03
0.458	0.12535E+03
0.481	0.97037E+02
0.500	0.77322E+02
0.516	0.63016E+02
0.533	0.32576E+01

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ALPHA = 1.38

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SOIL HORIZON NUMBER 108 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.57 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.150E+05
0.057	0.600E+04
0.099	0.200E+04
0.143	0.100E+04
0.174	0.330E+03
0.198	0.100E+03
0.220	0.600E+02
0.294	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.6	0.046
2.00	7.8	0.020
3.00	8.6	0.012
4.00	8.7	0.010
5.00	8.7	0.009
6.00	8.5	0.009
7.00	8.3	0.008
8.00	8.1	0.008
9.00	7.9	0.008
10.00	7.7	0.008
20.00	11.7	0.074
30.00	26.7	0.056
40.00	30.8	0.041
50.00	34.0	0.032
60.00	36.6	0.026
70.00	38.8	0.022
80.00	40.7	0.019
90.00	42.4	0.017
100.00	44.0	0.016
200.00	58.7	0.147
300.00	68.7	0.100
400.00	76.0	0.073
500.00	81.6	0.056
600.00	86.2	0.046
700.00	90.0	0.038
800.00	93.0	0.030
900.00	95.4	0.024
1000.00	97.2	0.018
2000.00	100.0	0.028

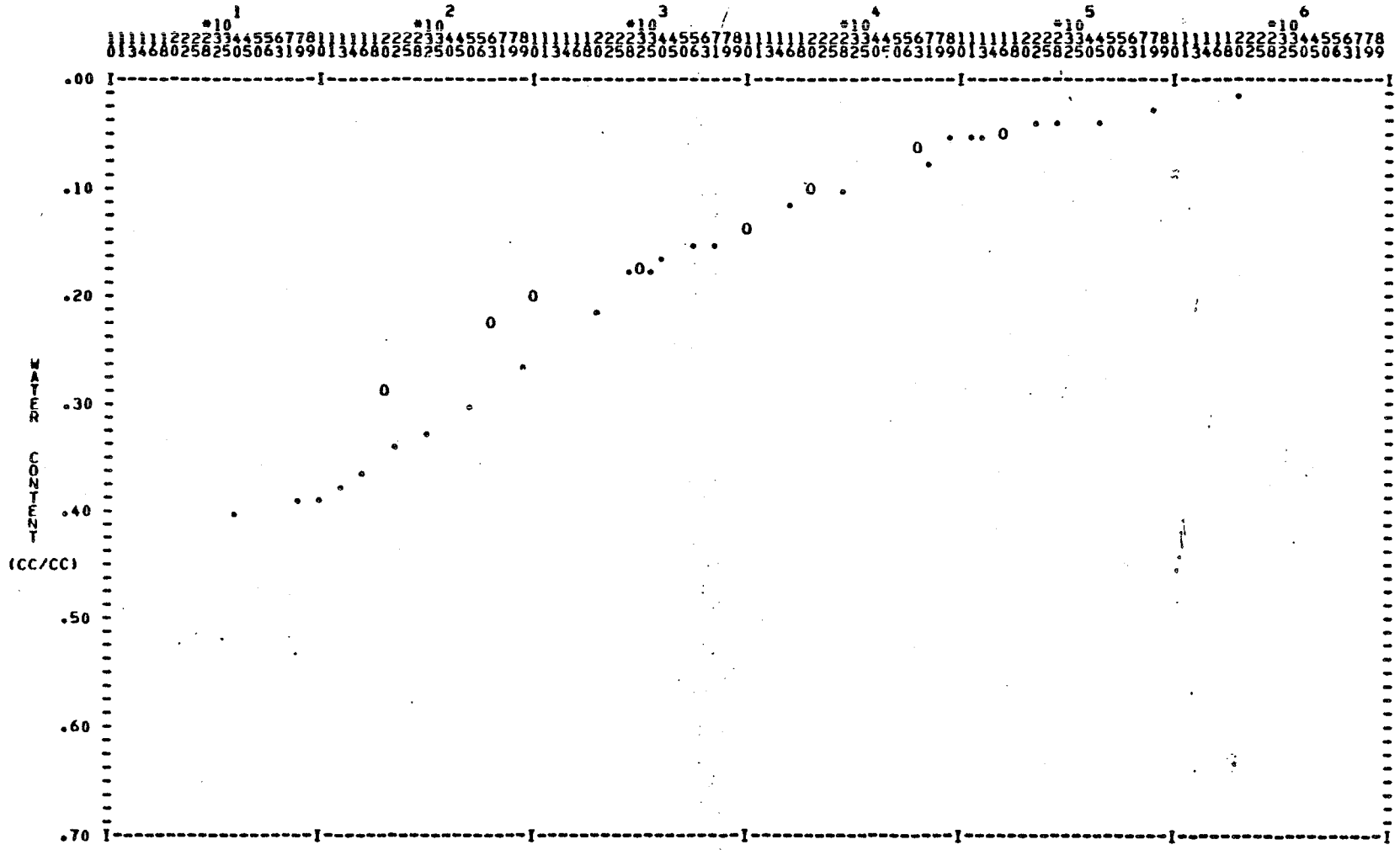
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.194664E+06
0.029	0.791050E+06
0.034	0.448770E+06
0.037	0.448770E+06
0.041	0.229830E+06
0.044	0.216440E+06
0.048	0.165580E+06
0.051	0.132050E+06
0.054	0.108170E+06
0.071	0.905770E+06
0.097	0.674410E+06
0.117	0.287330E+06
0.132	0.159330E+06
0.144	0.102440E+06
0.154	0.718540E+06
0.162	0.535440E+06
0.169	0.441770E+06
0.176	0.333590E+06
0.209	0.227740E+06
0.260	0.206990E+06
0.295	0.862330E+06
0.321	0.478750E+06
0.342	0.306990E+06
0.359	0.215550E+06
0.373	0.168060E+06
0.384	0.122260E+06
0.392	0.961040E+06
0.402	0.764900E+06
	0.406370E+06

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 108

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.17469E+01

SOIL HORIZON NUMBER 109 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.72 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.064	0.150E+05
0.076	0.200E+04
0.110	0.200E+04
0.089	0.100E+04
0.127	0.330E+03
0.153	0.100E+03
0.172	0.600E+02
0.234	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
2.00	8.7	0.014
3.00	9.7	0.010
4.00	10.6	0.009
5.00	11.5	0.009
6.00	12.3	0.008
7.00	13.0	0.007
8.00	13.7	0.007
9.00	14.3	0.006
10.00	15.0	0.006
20.00	19.8	0.048
30.00	23.8	0.040
40.00	27.3	0.035
50.00	30.4	0.031
60.00	33.0	0.026
70.00	35.4	0.024
80.00	37.7	0.023
90.00	39.8	0.021
100.00	42.0	0.022
200.00	57.6	0.156
300.00	67.5	0.099
400.00	74.5	0.071
500.00	80.0	0.055
600.00	84.5	0.045
700.00	88.3	0.038
800.00	91.5	0.033
900.00	94.4	0.029
1000.00	97.0	0.026
2000.00	100.0	0.030

PREDICTED MOISTURE CHARACTERISTIC DATA

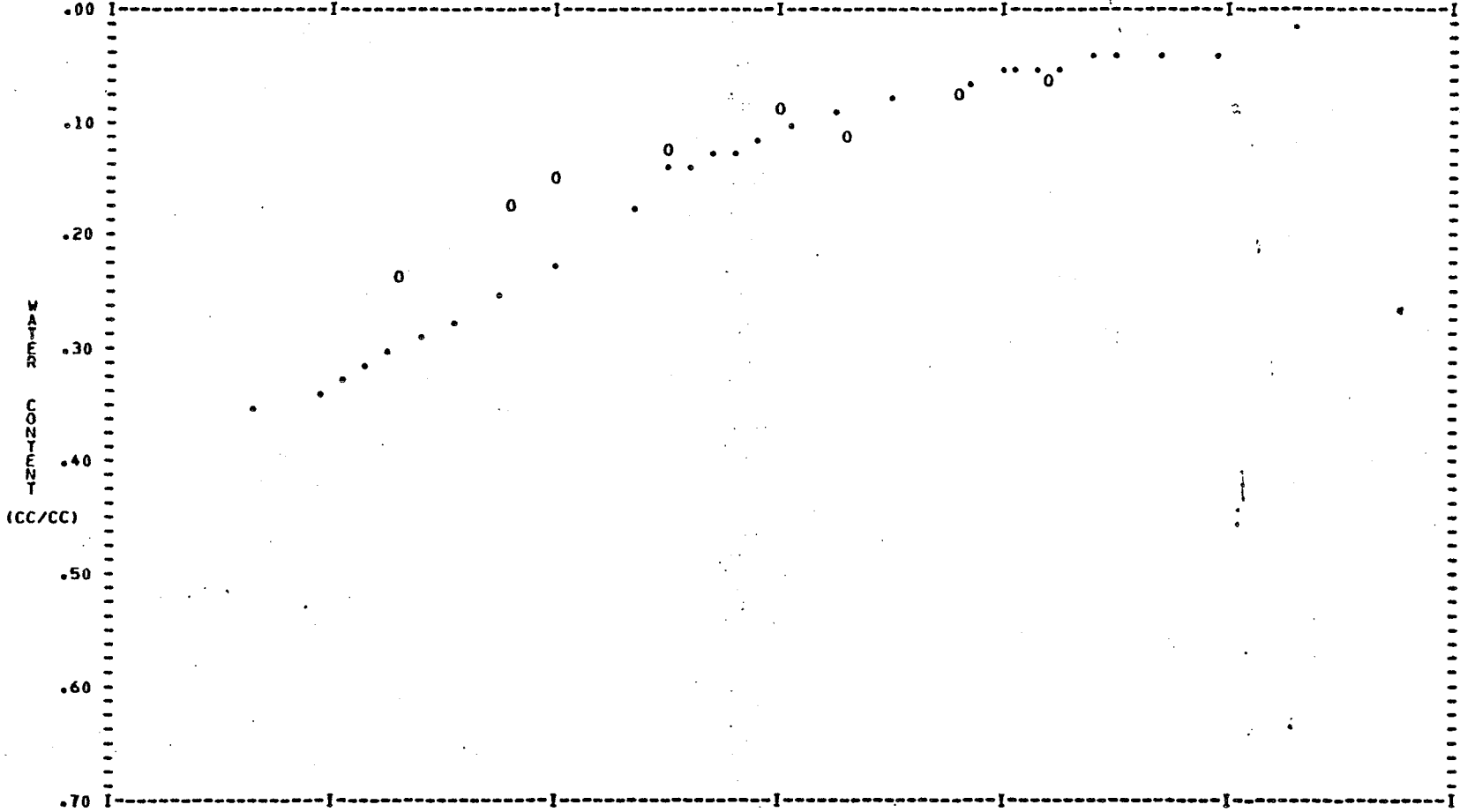
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.20603E+06
0.015	0.86577E+06
0.030	0.59838E+06
0.030	0.33438E+06
0.044	0.24043E+06
0.044	0.18245E+06
0.047	0.14391E+06
0.047	0.11088E+06
0.051	0.97109E+05
0.060	0.70227E+05
0.060	0.30333E+05
0.090	0.17502E+05
0.101	0.11474E+05
0.101	0.81136E+04
0.101	0.61134E+04
0.101	0.48492E+04
0.101	0.33928E+04
0.144	0.33190E+04
0.144	0.23360E+04
0.144	0.96698E+03
0.171	0.53367E+03
0.171	0.34469E+03
0.171	0.24206E+03
0.171	0.18037E+03
0.330	0.14022E+03
0.330	0.11248E+03
0.330	0.92475E+02
0.366	0.46441E+02

B-218

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-219

SOIL HORIZON NUMBER 109

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.31137E+01

SOIL HORIZON NUMBER 110 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.78 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.057	0.600E+04
0.065	0.200E+04
0.082	0.100E+04
0.100	0.330E+03
0.112	0.100E+03
0.126	0.600E+02
0.198	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.2	0.062
2.00	6.4	0.002
3.00	6.6	0.002
4.00	6.9	0.003
5.00	7.1	0.003
6.00	7.4	0.002
7.00	7.6	0.002
8.00	7.8	0.002
9.00	8.0	0.002
10.00	8.2	0.002
20.00	9.7	0.015
30.00	11.8	0.021
40.00	14.3	0.025
50.00	16.7	0.024
60.00	18.9	0.022
70.00	21.1	0.022
80.00	23.2	0.022
90.00	25.4	0.021
100.00	27.5	0.021
200.00	43.4	0.159
300.00	53.3	0.100
400.00	60.8	0.074
500.00	66.7	0.059
600.00	72.6	0.059
700.00	78.4	0.059
800.00	83.5	0.051
900.00	87.7	0.041
1000.00	90.8	0.031
2000.00	100.0	0.092

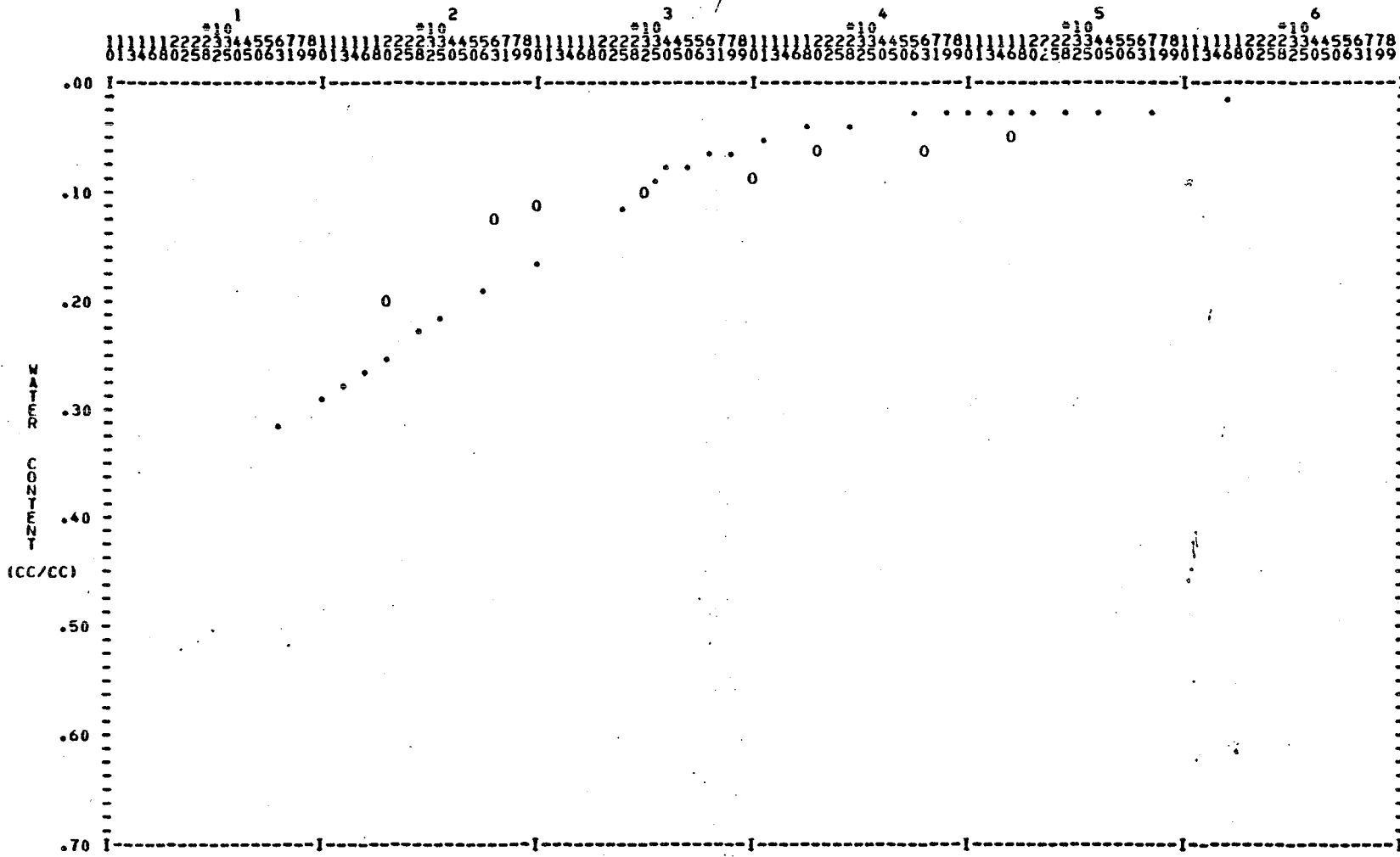
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.14970E+06
0.011	0.67831E+05
0.011	0.41573E+05
0.011	0.28020E+05
0.011	0.20268E+05
0.011	0.15416E+05
0.011	0.12168E+05
0.011	0.98791E+04
0.011	0.82017E+04
0.011	0.58929E+04
0.011	0.28198E+04
0.011	0.17282E+04
0.011	0.11494E+04
0.011	0.82679E+03
0.011	0.63394E+03
0.011	0.50579E+03
0.011	0.41534E+03
0.011	0.34864E+03
0.011	0.24909E+03
0.011	0.10221E+03
0.011	0.97015E+02
0.011	0.33809E+02
0.011	0.26797E+02
0.011	0.20619E+02
0.011	0.16056E+02
0.011	0.12669E+02
0.011	0.10079E+02
0.313	0.60436E+01

B-220

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) , -CM H2O (LOG SCALE)



B-221

SOIL HORIZON NUMBER 110

O MEASURED . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41423E+01

SOIL HORIZON NUMBER 111 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.33 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.065	0.600E+04
0.089	0.200E+04
0.164	0.100E+04
0.192	0.330E+03
0.209	0.100E+03
0.237	0.600E+02
0.354	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.5	0.015
2.00	3.5	0.020
5.00	4.8	0.013
4.00	5.9	0.011
5.00	7.0	0.010
6.00	7.9	0.009
7.00	8.8	0.009
8.00	9.6	0.008
9.00	10.4	0.008
10.00	11.2	0.008
20.00	17.4	0.062
30.00	22.4	0.050
40.00	26.2	0.038
50.00	29.0	0.028
60.00	30.9	0.019
70.00	32.3	0.014
80.00	33.5	0.012
90.00	34.8	0.012
100.00	36.0	0.012
200.00	49.5	0.135
300.00	60.8	0.113
400.00	69.3	0.085
500.00	75.8	0.065
600.00	81.1	0.053
700.00	85.6	0.045
800.00	89.5	0.038
900.00	92.5	0.033
1000.00	95.5	0.028
2000.00	100.0	0.045

PREDICTED MOISTURE CHARACTERISTIC DATA

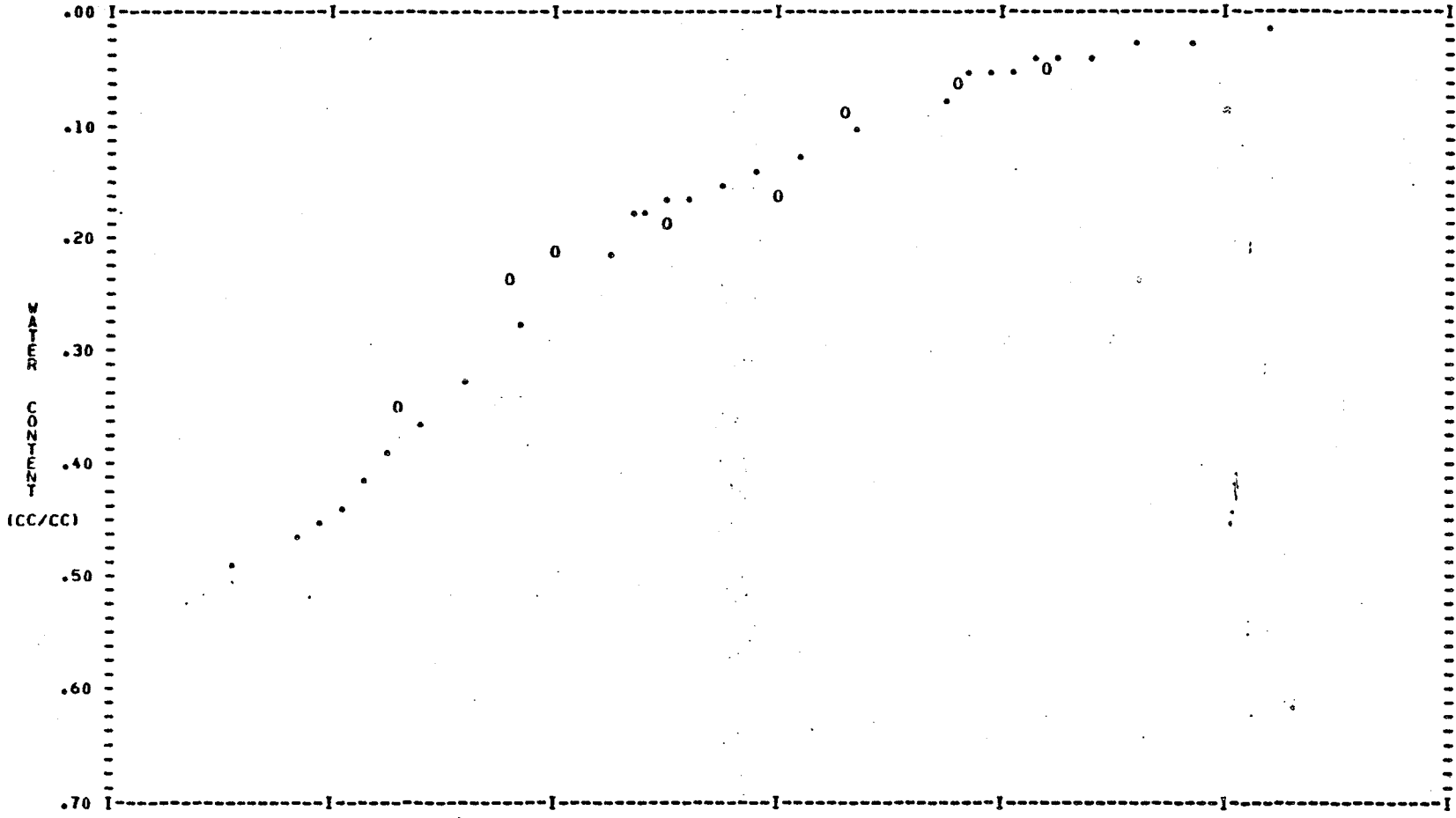
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.16266E+06
0.021	0.67314E+05
0.027	0.38627E+05
0.032	0.25547E+05
0.037	0.18365E+05
0.042	0.13950E+05
0.046	0.11020E+05
0.050	0.89641E+04
0.054	0.74600E+04
0.071	0.54345E+04
0.099	0.23363E+04
0.121	0.13109E+04
0.138	0.83136E+03
0.149	0.56445E+03
0.157	0.41009E+03
0.164	0.31936E+03
0.170	0.26126E+03
0.176	0.22083E+03
0.213	0.16937E+03
0.275	0.73522E+02
0.324	0.41014E+02
0.361	0.26317E+02
0.391	0.18477E+02
0.415	0.13762E+02
0.436	0.10654E+02
0.454	0.84928E+01
0.469	0.69259E+01
0.487	0.37023E+01

B-222

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-223

SOIL HORIZON NUMBER 111

O MEASURED | . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.18310E+01

SOIL HORIZON NUMBER 112 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.37 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.058	0.150E+05
0.070	0.600E+04
0.101	0.200E+04
0.184	0.100E+04
0.195	0.330E+03
0.212	0.100E+03
0.278	0.600E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.3	0.043
2.00	7.1	0.028
3.00	8.8	0.017
4.00	10.2	0.014
5.00	11.4	0.012
6.00	12.5	0.011
7.00	13.6	0.011
8.00	14.6	0.010
9.00	15.5	0.010
10.00	16.5	0.009
20.00	24.3	0.078
30.00	29.8	0.056
40.00	33.0	0.040
50.00	37.0	0.031
60.00	39.5	0.025
70.00	41.7	0.021
80.00	43.5	0.018
90.00	45.1	0.016
100.00	46.8	0.015
200.00	58.2	0.116
300.00	66.6	0.084
400.00	72.9	0.063
500.00	77.9	0.050
600.00	82.1	0.042
700.00	85.8	0.037
800.00	89.0	0.032
900.00	91.7	0.027
1000.00	94.0	0.023
2000.00	100.0	0.060

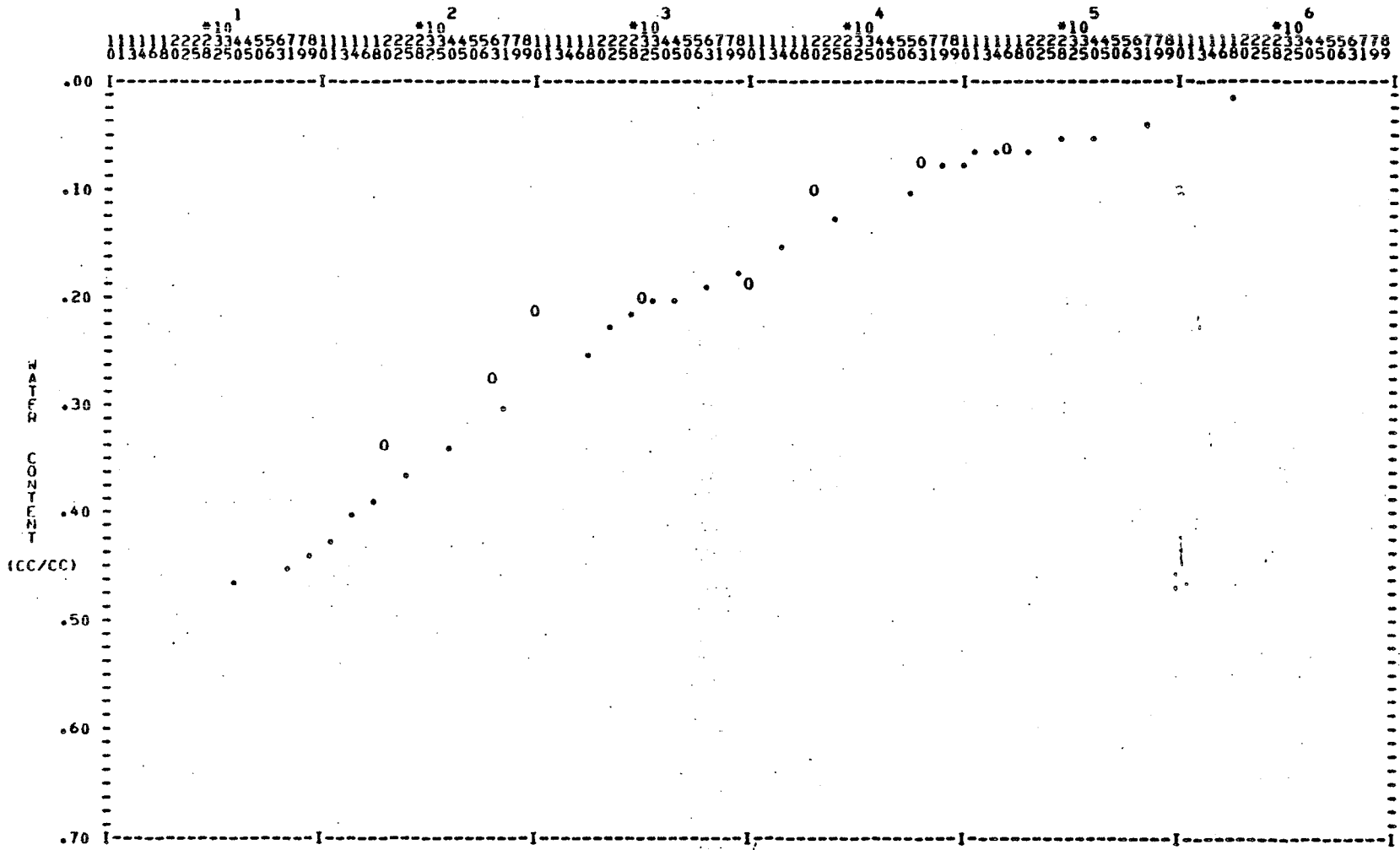
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.17867E+06
0.038	0.72999E+05
0.046	0.41312E+05
0.052	0.27211E+05
0.058	0.19550E+05
0.063	0.14862E+05
0.068	0.11755E+05
0.073	0.95765E+04
0.077	0.79817E+04
0.098	0.58533E+04
0.131	0.24639E+04
0.154	0.13612E+04
0.171	0.87408E+03
0.185	0.61378E+03
0.196	0.45734E+03
0.206	0.35546E+03
0.314	0.20520E+03
0.352	0.23450E+03
0.353	0.16979E+03
0.381	0.71518E+02
0.337	0.43019E+02
0.364	0.25755E+02
0.386	0.18194E+02
0.405	0.13654E+02
0.422	0.10604E+02
0.436	0.84591E+01
0.448	0.68905E+01
0.469	0.40302E+01

B-224

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-225

SOIL HORIZON NUMBER 112

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.22395E+01

SOIL HORIZON NUMBER 113 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.070	0.150E+05
0.101	0.600E+04
0.112	0.200E+04
0.117	0.100E+04
0.119	0.330E+03
0.151	0.100E+03
0.201	0.100E+02
0.209	0.600E+02
0.284	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.6	0.084
2.00	8.9	0.025
3.00	22.3	0.016
4.00	33.3	0.013
5.00	35.0	0.011
6.00	36.7	0.010
7.00	37.0	0.009
8.00	37.8	0.009
9.00	38.1	0.008
10.00	39.7	0.008
20.00	56.4	0.067
30.00	61.9	0.049
40.00	63.3	0.038
50.00	63.8	0.030
60.00	64.0	0.025
70.00	64.2	0.020
80.00	64.3	0.018
90.00	64.5	0.016
100.00	64.8	0.015
200.00	68.0	0.084
300.00	68.9	0.062
400.00	75.1	0.062
500.00	79.9	0.048
600.00	83.9	0.040
700.00	87.4	0.035
800.00	90.5	0.030
900.00	93.1	0.026
1000.00	95.3	0.022
2000.00	100.0	0.047

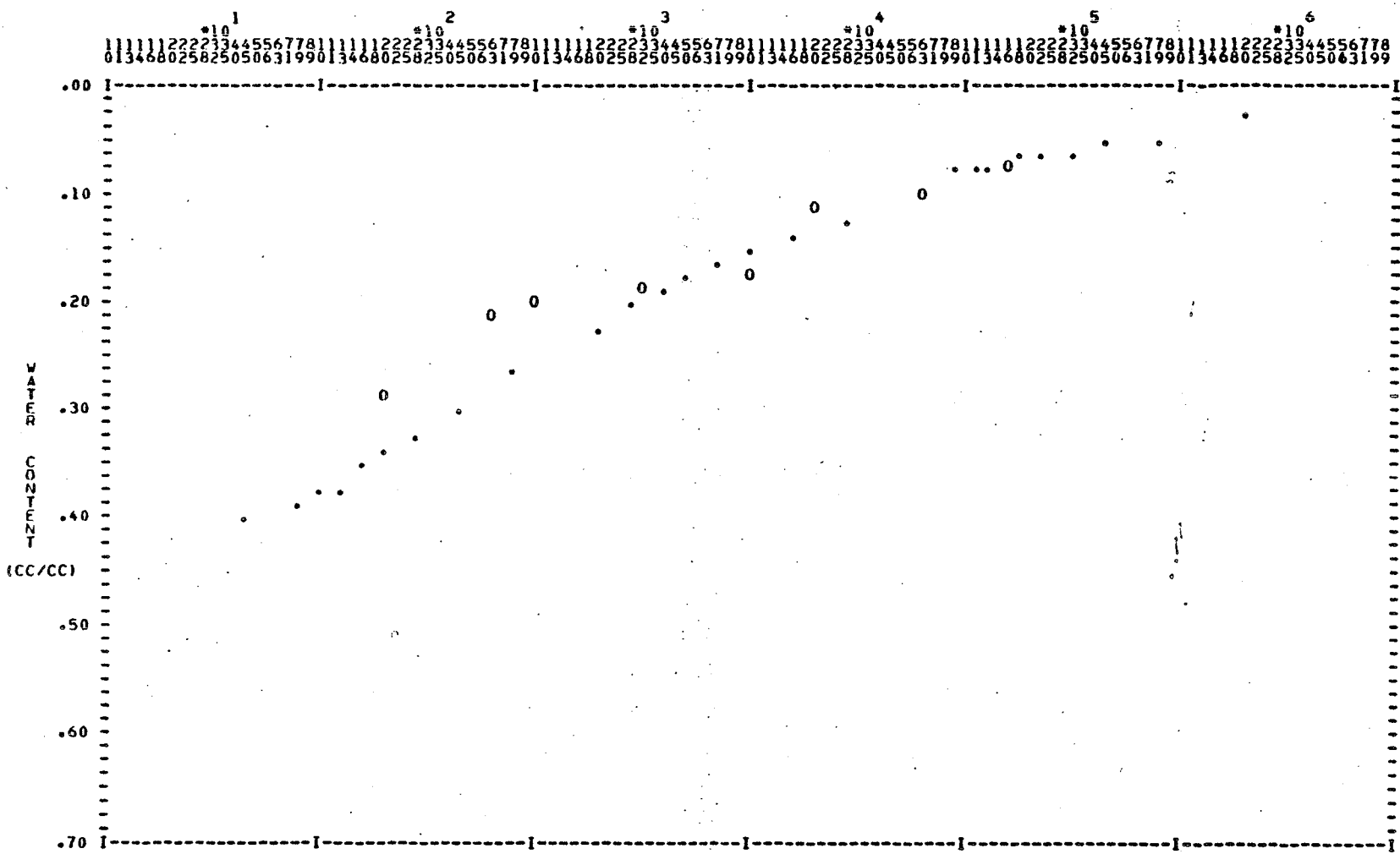
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.023	0.20022E+06
0.049	0.25001E+06
0.055	0.47842E+06
0.060	0.49991E+06
0.064	0.30221E+06
0.069	0.28488E+06
0.073	0.13291E+06
0.076	0.08800E+06
0.080	0.08800E+06
0.086	0.05257E+06
0.090	0.27549E+06
0.096	0.15437E+06
0.100	0.09949E+06
0.104	0.70502E+06
0.108	0.22715E+06
0.112	0.21195E+06
0.116	0.31260E+06
0.120	0.27534E+06
0.124	0.19683E+06
0.128	0.42118E+06
0.132	0.42714E+06
0.136	0.29386E+06
0.140	0.20729E+06
0.156	0.15516E+06
0.169	0.12050E+06
0.181	0.26217E+06
0.191	0.78533E+06
0.405	0.44146E+06

ALPHA = 1.38

B-226

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-227

SOIL HORIZON NUMBER 113

○ MEASURED ; ● PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.20814E+01

SOIL HORIZON NUMBER 114 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.73 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.062	0.600E+04
0.074	0.200E+04
0.080	0.200E+04
0.092	0.300E+03
0.102	0.600E+03
0.138	0.200E+03
0.218	0.200E+03

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.0	0.070
2.00	8.0	0.010
3.00	8.7	0.007
4.00	9.4	0.007
5.00	10.1	0.006
6.00	10.5	0.006
7.00	11.1	0.005
8.00	11.1	0.005
9.00	11.1	0.004
10.00	11.1	0.004
20.00	11.1	0.004
30.00	11.1	0.028
40.00	11.1	0.021
50.00	11.1	0.023
60.00	11.1	0.023
70.00	11.1	0.023
80.00	11.1	0.021
90.00	11.1	0.019
100.00	11.1	0.017
200.00	11.1	0.120
300.00	11.1	0.078
400.00	11.1	0.067
500.00	11.1	0.056
600.00	11.1	0.055
700.00	11.1	0.054
800.00	11.1	0.048
900.00	11.1	0.048
1000.00	11.1	0.032
2000.00	100.0	0.130

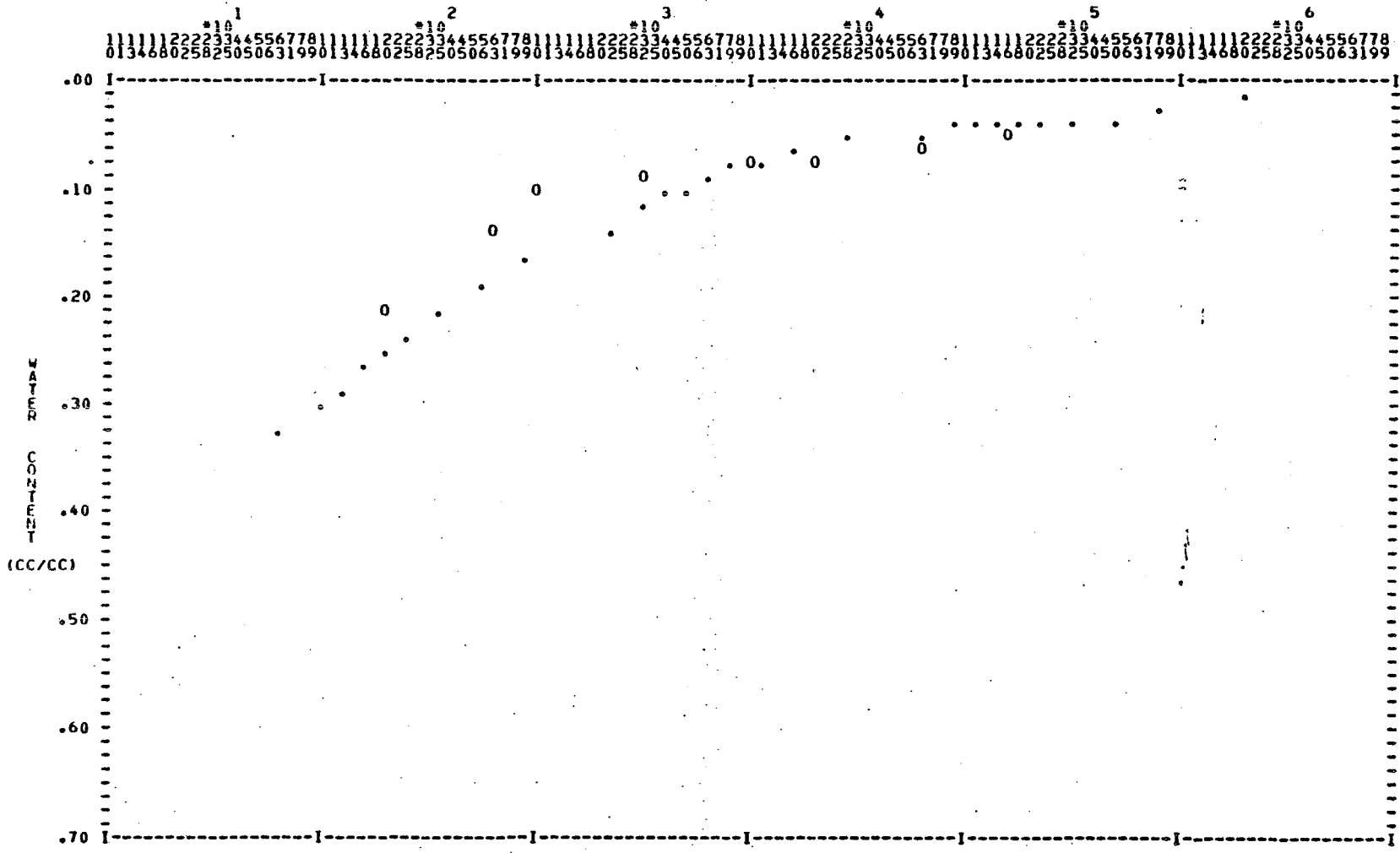
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.014	0.19400E+06
0.029	0.82384E+05
0.032	0.48127E+05
0.034	0.31815E+05
0.036	0.22751E+05
0.038	0.17164E+05
0.039	0.13466E+05
0.041	0.10879E+05
0.042	0.89946E+04
0.046	0.63718E+04
0.056	0.26831E+04
0.063	0.15994E+04
0.071	0.10941E+04
0.079	0.80344E+03
0.087	0.61333E+03
0.095	0.48229E+03
0.102	0.38999E+03
0.108	0.32713E+03
0.132	0.22606E+03
0.166	0.13308E+03
0.191	0.83350E+02
0.253	0.34496E+02
0.325	0.12531E+02
0.448	0.19446E+01
0.551	0.15198E+01
0.669	0.12071E+01
0.996	0.97130E+00
3.25	0.61874E+00

B-228

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-229

SOIL HORIZON NUMBER 114

O MEASURED . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.30919E+01

SOIL HORIZON NUMBER 115 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.77 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.044	0.600E+04
0.055	0.200E+04
0.074	0.100E+04
0.089	0.330E+03
0.094	0.100E+03
0.101	0.600E+02
0.186	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.4	0.044
2.00	4.8	0.004
3.00	5.1	0.003
4.00	5.4	0.003
5.00	5.7	0.003
6.00	6.0	0.003
7.00	6.3	0.003
8.00	6.5	0.002
9.00	6.7	0.002
10.00	7.9	0.002
20.00	8.5	0.016
30.00	9.9	0.014
40.00	11.3	0.015
50.00	12.8	0.015
60.00	14.2	0.014
70.00	15.5	0.013
80.00	16.7	0.012
90.00	17.8	0.011
100.00	18.7	0.009
200.00	25.5	0.068
300.00	30.8	0.054
400.00	38.4	0.076
500.00	46.1	0.077
600.00	53.9	0.078
700.00	61.5	0.076
800.00	68.3	0.068
900.00	74.0	0.057
1000.00	78.6	0.046
2000.00	100.0	0.214

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.008	0.16834E+06
0.016	0.72332E+05
0.017	0.42851E+05
0.019	0.28555E+05
0.019	0.20540E+05
0.020	0.15572E+05
0.021	0.12245E+05
0.022	0.99437E+04
0.023	0.82469E+04
0.026	0.59137E+04
0.031	0.25840E+04
0.035	0.15425E+04
0.040	0.10394E+04
0.045	0.75365E+03
0.049	0.57144E+03
0.054	0.44762E+03
0.057	0.35967E+03
0.061	0.29543E+03
0.073	0.21001E+03
0.093	0.90096E+02
0.115	0.56789E+02
0.140	0.38317E+02
0.166	0.28031E+02
0.192	0.21501E+02
0.216	0.16795E+02
0.236	0.13351E+02
0.253	0.10758E+02
0.297	0.70348E+01

B-230

ALPHA = 1.38

SOIL HORIZON NUMBER 116 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.49 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.150E+05
0.037	0.600E+04
0.055	0.200E+04
0.143	0.100E+04
0.168	0.330E+03
0.213	0.100E+03
0.301	0.600E+02
0.340	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.1	0.031
2.00	4.2	0.011
3.00	5.0	0.008
4.00	5.7	0.007
5.00	6.4	0.007
6.00	7.0	0.006
7.00	7.5	0.006
8.00	8.0	0.005
9.00	8.5	0.005
10.00	9.0	0.005
20.00	12.7	0.037
30.00	15.7	0.030
40.00	18.3	0.025
50.00	20.1	0.020
60.00	21.5	0.016
70.00	23.3	0.015
80.00	25.0	0.015
90.00	26.6	0.016
100.00	28.0	0.016
200.00	46.6	0.187
300.00	60.0	0.136
400.00	70.0	0.103
500.00	78.0	0.077
600.00	84.0	0.060
700.00	89.0	0.047
800.00	93.0	0.036
900.00	95.0	0.025
1000.00	96.0	0.016
2000.00	100.0	0.032

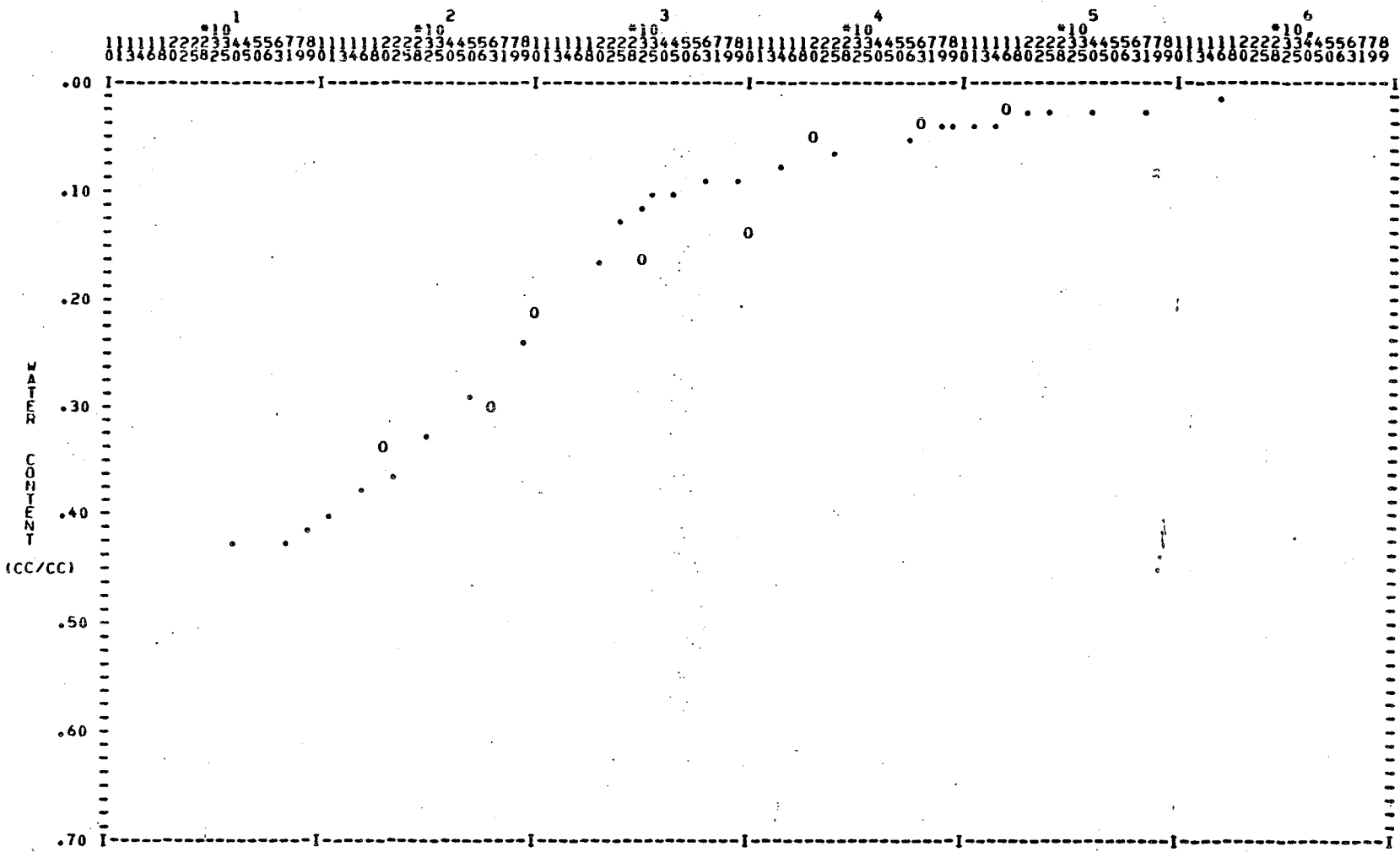
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.16516E+06
0.020	0.69040E+05
0.023	0.39969E+05
0.026	0.26477E+05
0.029	0.19023E+05
0.032	0.14431E+05
0.034	0.11383E+05
0.036	0.92448E+04
0.038	0.76818E+04
0.047	0.55601E+04
0.062	0.24005E+04
0.074	0.13693E+04
0.084	0.88326E+03
0.092	0.61961E+03
0.099	0.46937E+03
0.106	0.37515E+03
0.113	0.31036E+03
0.120	0.26291E+03
0.164	0.20361E+03
0.235	0.45969E+02
0.288	0.48094E+02
0.327	0.30667E+02
0.357	0.21303E+02
0.380	0.15649E+02
0.398	0.11831E+02
0.411	0.91019E+01
0.420	0.70352E+01
0.431	0.39180E+01

B-232

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 116

O MEASURED . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.16787E+01

B-233

SOIL HORIZON NUMBER 117 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.063	0.600E+04
0.085	0.200E+04
0.120	0.100E+04
0.143	0.330E+03
0.156	0.100E+03
0.194	0.600E+02
0.288	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.1	0.071
2.00	8.7	0.016
3.00	9.8	0.011
4.00	10.7	0.009
5.00	11.6	0.008
6.00	12.3	0.007
7.00	12.9	0.006
8.00	13.5	0.006
9.00	14.1	0.006
10.00	14.5	0.005
20.00	18.0	0.033
30.00	20.5	0.025
40.00	22.6	0.021
50.00	24.4	0.018
60.00	26.0	0.016
70.00	27.7	0.017
80.00	29.4	0.018
90.00	31.3	0.018
100.00	33.2	0.019
200.00	50.8	0.176
300.00	63.1	0.123
400.00	72.5	0.094
500.00	79.6	0.071
600.00	85.0	0.054
700.00	89.3	0.043
800.00	92.5	0.033
900.00	94.9	0.024
1000.00	96.5	0.016
2000.00	100.0	0.035

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.18346E+06
0.039	0.76442E+05
0.043	0.43829E+05
0.047	0.28751E+05
0.050	0.20478E+05
0.053	0.15415E+05
0.055	0.12075E+05
0.058	0.97465E+04
0.060	0.80534E+04
0.068	0.57043E+04
0.081	0.24074E+04
0.090	0.13754E+04
0.099	0.89399E+03
0.106	0.64113E+03
0.112	0.49680E+03
0.120	0.40081E+03
0.127	0.33242E+03
0.135	0.28140E+03
0.176	0.20908E+03
0.238	0.87667E+02
0.284	0.49121E+02
0.346	0.31341E+02
0.346	0.21764E+02
0.365	0.15986E+02
0.381	0.12113E+02
0.393	0.93674E+01
0.401	0.73176E+01
0.412	0.41419E+01

B-234

ALPHA = 1.38

SOIL HORIZON NUMBER 118 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.69 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.150E+05
0.027	0.600E+04
0.032	0.200E+04
0.057	0.100E+04
0.076	0.330E+03
0.086	0.100E+03
0.191	0.600E+02
0.274	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.000	0.035
2.00	0.001	0.001
3.00	0.001	0.001
4.00	0.001	0.001
5.00	0.001	0.001
6.00	0.001	0.001
7.00	0.001	0.001
8.00	0.001	0.001
9.00	0.001	0.001
10.00	0.001	0.001
20.00	0.004	0.004
30.00	0.006	0.006
40.00	0.008	0.008
50.00	0.007	0.007
60.00	0.011	0.011
70.00	0.017	0.017
80.00	0.024	0.024
90.00	0.027	0.027
100.00	0.027	0.027
200.00	0.213	0.213
300.00	0.142	0.142
400.00	0.102	0.102
500.00	0.079	0.079
600.00	0.065	0.065
700.00	0.055	0.055
800.00	0.047	0.047
900.00	0.040	0.040
1000.00	0.035	0.035
2000.00	100.0	0.054

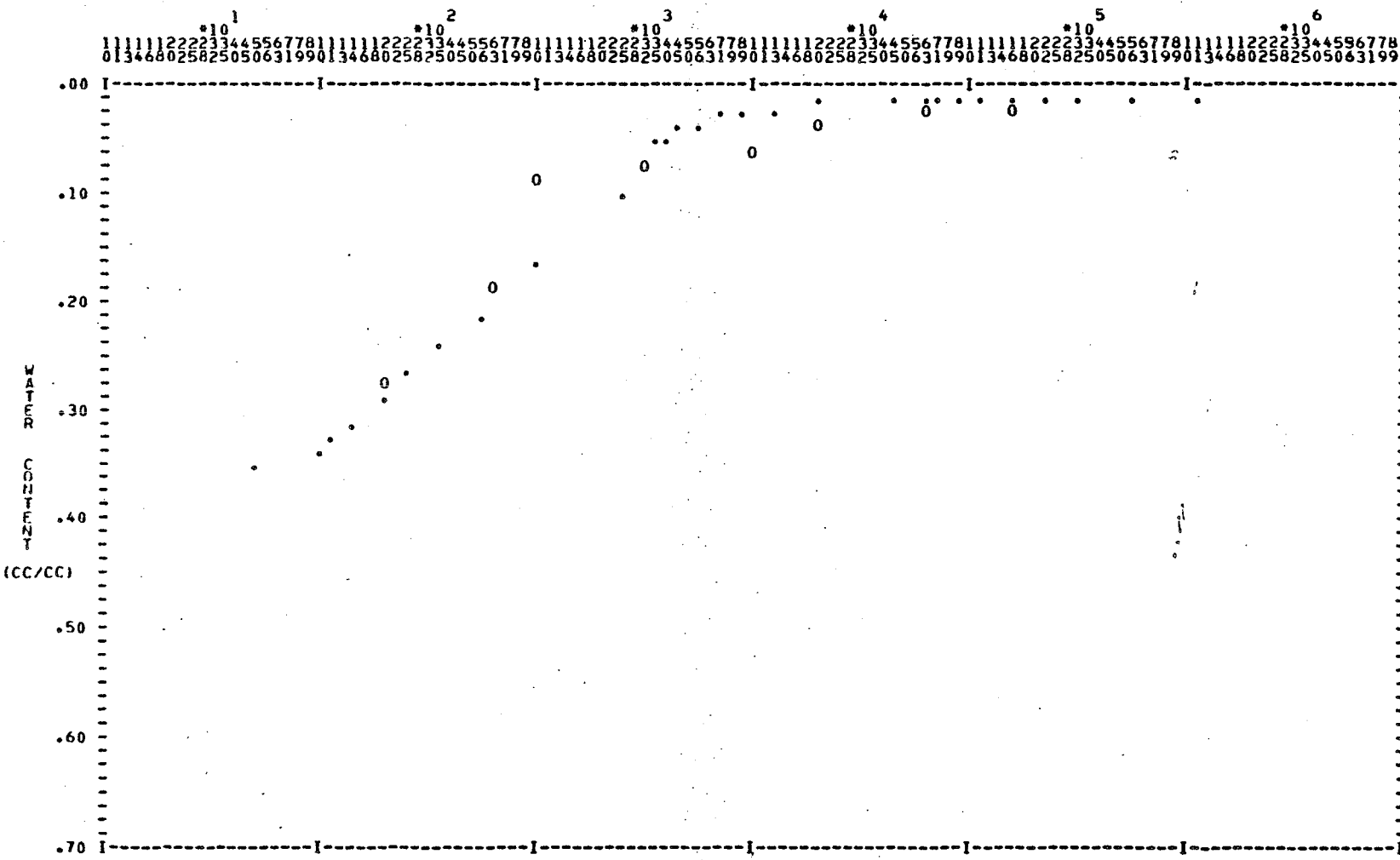
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.007	0.11561E+06
0.013	0.53334E+05
0.014	0.32688E+05
0.014	0.21866E+05
0.014	0.15687E+05
0.015	0.11836E+05
0.015	0.72691E+04
0.015	0.46595E+04
0.015	0.31745E+04
0.016	0.22061E+04
0.021	0.12783E+04
0.023	0.85222E+03
0.027	0.66995E+03
0.032	0.56144E+03
0.039	0.46820E+03
0.047	0.39471E+03
0.056	0.33700E+03
0.099	0.24429E+03
0.164	0.10139E+03
0.208	0.53618E+02
0.244	0.33607E+02
0.267	0.25334E+02
0.288	0.18876E+02
0.307	0.14633E+02
0.323	0.11698E+02
0.336	0.95729E+01
0.352	0.50663E+01

B-236

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) : -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 118

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.39202E+01

B-237

SOIL HORIZON NUMBER 119 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.40 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.150E+05
0.049	0.600E+04
0.071	0.200E+04
0.218	0.100E+04
0.239	0.330E+03
0.256	0.100E+03
0.288	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.8	0.018
2.00	3.7	0.019
3.00	5.0	0.013
4.00	6.2	0.012
5.00	7.3	0.011
6.00	8.2	0.010
7.00	9.1	0.009
8.00	9.9	0.008
9.00	10.6	0.007
10.00	11.3	0.007
20.00	16.6	0.053
30.00	20.9	0.043
40.00	24.4	0.035
50.00	26.9	0.025
60.00	28.0	0.011
70.00	28.3	0.003
80.00	28.7	0.004
90.00	29.6	0.009
100.00	31.0	0.014
200.00	50.3	0.193
300.00	64.0	0.137
400.00	74.2	0.102
500.00	81.8	0.076
600.00	87.5	0.057
700.00	91.8	0.043
800.00	94.9	0.031
900.00	96.9	0.020
1000.00	98.0	0.011
2000.00	100.0	0.020

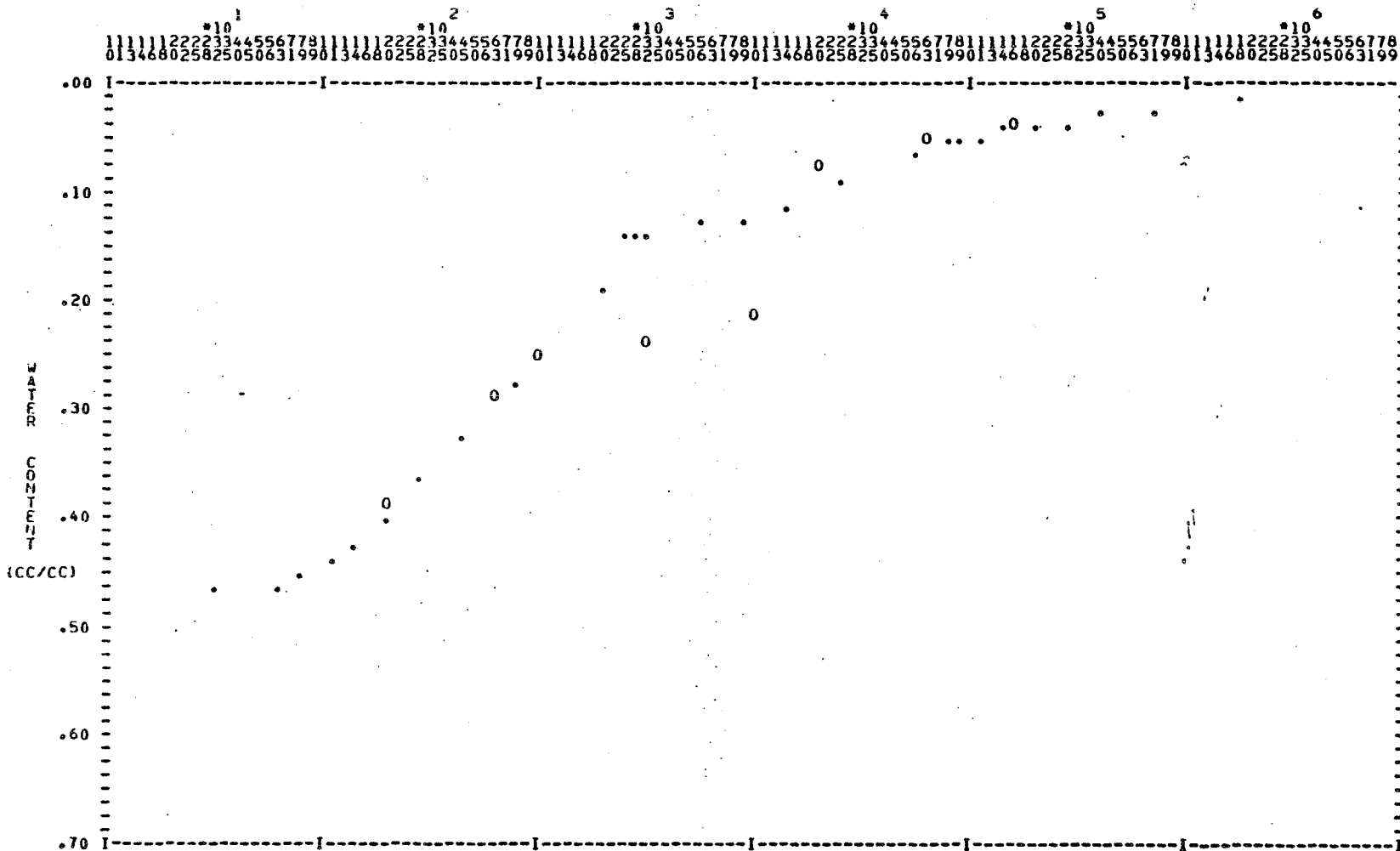
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.009	0.17051E+06
0.021	0.71208E+05
0.027	0.41063E+05
0.032	0.27085E+05
0.037	0.19385E+05
0.041	0.14656E+05
0.045	0.11525E+05
0.048	0.93360E+04
0.052	0.77392E+04
0.066	0.55524E+04
0.088	0.23970E+04
0.107	0.13580E+04
0.121	0.85803E+03
0.129	0.53549E+03
0.133	0.32299E+03
0.134	0.27202E+03
0.137	0.25819E+03
0.143	0.23940E+03
0.192	0.19130E+03
0.270	0.80348E+02
0.326	0.44802E+02
0.368	0.28530E+02
0.399	0.19739E+02
0.423	0.14389E+02
0.440	0.10773E+02
0.452	0.81638E+01
0.460	0.61247E+01
0.467	0.33460E+01

B-238

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-239

SOIL HORIZON NUMBER 119

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.21085E+01

SOIL HORIZON NUMBER 120 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.027	0.150E+05
0.045	0.500E+04
0.078	0.200E+04
0.158	0.100E+04
0.166	0.330E+03
0.194	0.100E+03
0.226	0.500E+02
0.304	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.6	0.026
2.00	4.9	0.023
4.00	6.5	0.016
5.00	7.8	0.013
6.00	9.0	0.012
7.00	10.1	0.011
8.00	11.0	0.010
9.00	11.9	0.009
10.00	13.0	0.008
20.00	23.7	0.057
30.00	33.7	0.045
40.00	41.0	0.036
50.00	49.8	0.026
60.00	51.0	0.012
70.00	51.5	0.005
80.00	52.0	0.005
90.00	52.9	0.009
100.00	54.3	0.014
200.00	62.6	0.183
300.00	65.6	0.130
400.00	75.4	0.097
500.00	82.5	0.072
600.00	88.2	0.056
700.00	92.4	0.042
800.00	95.4	0.030
900.00	97.4	0.020
1000.00	98.4	0.010
2000.00	100.0	0.016

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.20568E+06
0.023	0.85564E+05
0.028	0.49100E+05
0.033	0.32307E+05
0.038	0.25005E+05
0.044	0.17433E+05
0.049	0.13630E+05
0.055	0.11088E+05
0.060	0.91854E+04
0.065	0.65781E+04
0.085	0.28170E+04
0.101	0.15884E+04
0.113	0.10054E+04
0.120	0.63767E+03
0.124	0.40691E+03
0.126	0.33219E+03
0.129	0.30349E+03
0.133	0.27813E+03
0.172	0.22085E+03
0.234	0.92282E+02
0.334	0.51788E+02
0.519	0.32596E+02
0.958	0.22895E+02
1.673	0.16739E+02
3.377	0.12530E+02
6.388	0.94753E+01
11.888	0.70409E+01
0.393	0.37409E+01

B-240

ALPHA = 1.38

SOIL HORIZON NUMBER 121 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.63 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.150E+05
0.054	0.600E+04
0.091	0.200E+04
0.171	0.100E+04
0.181	0.330E+03
0.199	0.100E+03
0.220	0.600E+02
0.302	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	6.8	0.027
3.00	9.6	0.018
4.00	10.1	0.015
5.00	11.4	0.013
6.00	11.5	0.012
7.00	11.5	0.010
8.00	11.4	0.009
9.00	11.4	0.009
10.00	11.3	0.008
20.00	11.3	0.060
30.00	11.2	0.046
40.00	11.0	0.036
50.00	10.9	0.026
60.00	10.7	0.017
70.00	10.4	0.004
80.00	10.0	0.005
90.00	9.5	0.009
100.00	9.4	0.015
200.00	7.9	0.181
300.00	7.1	0.124
400.00	7.1	0.007
500.00	6.0	0.066
600.00	5.0	0.053
700.00	3.1	0.046
800.00	3.1	0.027
900.00	3.0	0.017
1000.00	3.0	0.017
2000.00	100.0	0.009
		0.015

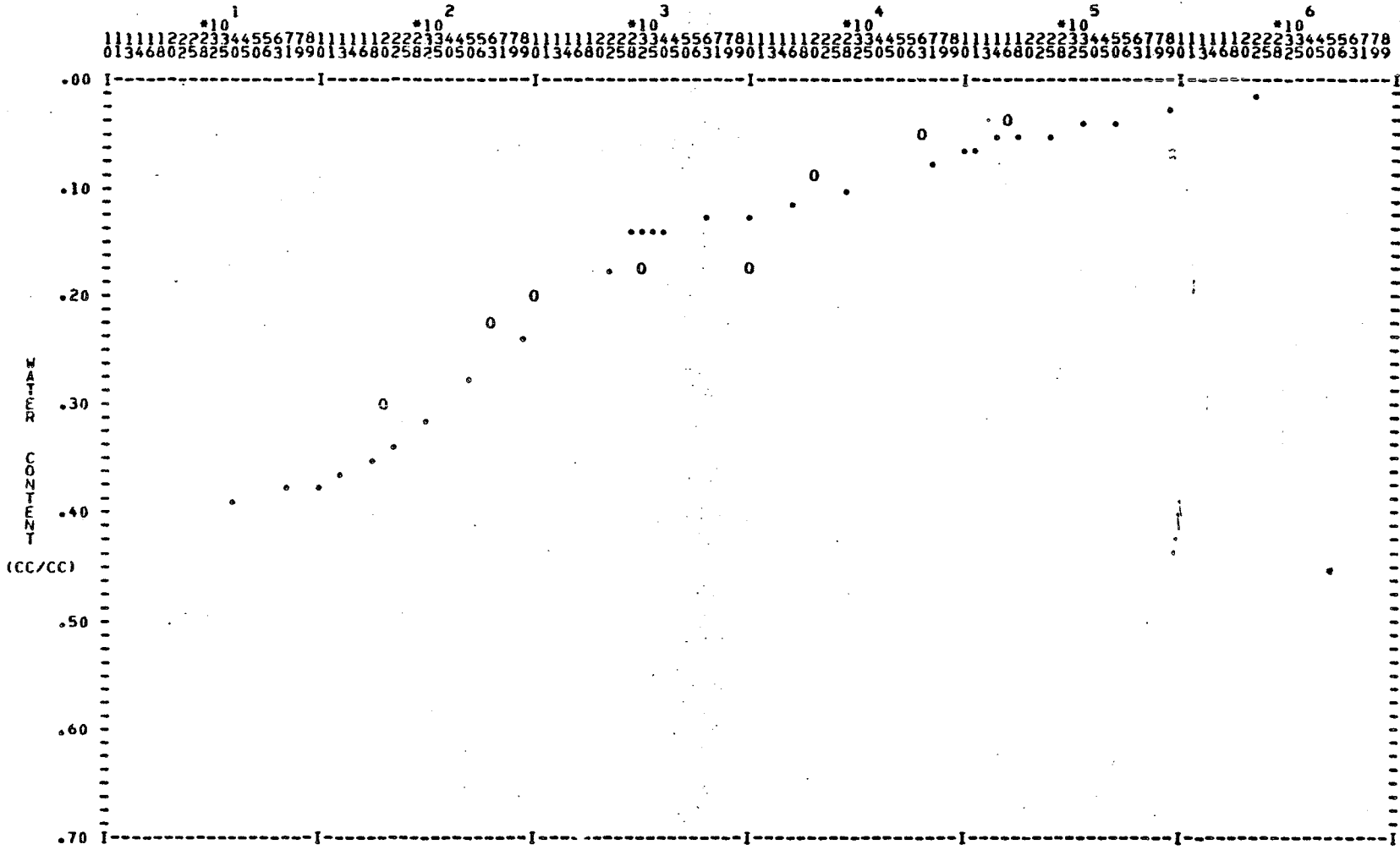
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.21625E+06
0.030	0.89732E+05
0.036	0.51311E+05
0.041	0.33679E+05
0.046	0.24024E+05
0.050	0.18118E+05
0.054	0.14219E+05
0.058	0.11499E+05
0.061	0.95134E+04
0.074	0.67982E+04
0.094	0.28935E+04
0.110	0.16238E+04
0.122	0.10309E+04
0.126	0.65013E+03
0.132	0.40628E+03
0.134	0.33680E+03
0.136	0.31298E+03
0.141	0.28799E+03
0.179	0.22549E+03
0.238	0.94224E+02
0.270	0.52473E+02
0.310	0.33447E+02
0.333	0.23160E+02
0.351	0.16843E+02
0.364	0.12096E+02
0.372	0.95038E+01
0.377	0.70534E+01
0.382	0.37842E+01

B-242

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-243

SOIL HORIZON NUMBER 121

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.26883E+01

SOIL HORIZON NUMBER 122 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

HULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.088	0.150E+05
0.102	0.600E+04
0.134	0.200E+04
0.189	0.100E+04
0.210	0.330E+03
0.226	0.100E+03
0.026	0.600E+02
0.291	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.7	0.137
2.00	15.9	0.022
3.00	17.3	0.014
4.00	18.6	0.012
5.00	19.7	0.011
6.00	20.6	0.010
7.00	21.5	0.009
8.00	22.3	0.008
9.00	23.1	0.007
10.00	23.7	0.007
20.00	29.0	0.053
30.00	33.0	0.040
40.00	36.1	0.031
50.00	38.4	0.023
60.00	39.4	0.010
70.00	39.8	0.003
80.00	40.3	0.005
90.00	41.3	0.010
100.00	43.0	0.017
200.00	61.0	0.180
300.00	72.4	0.115
400.00	80.7	0.082
500.00	86.9	0.062
600.00	91.6	0.047
700.00	94.9	0.033
800.00	97.1	0.022
900.00	98.5	0.013
1000.00	99.1	0.006
2000.00	100.0	0.009

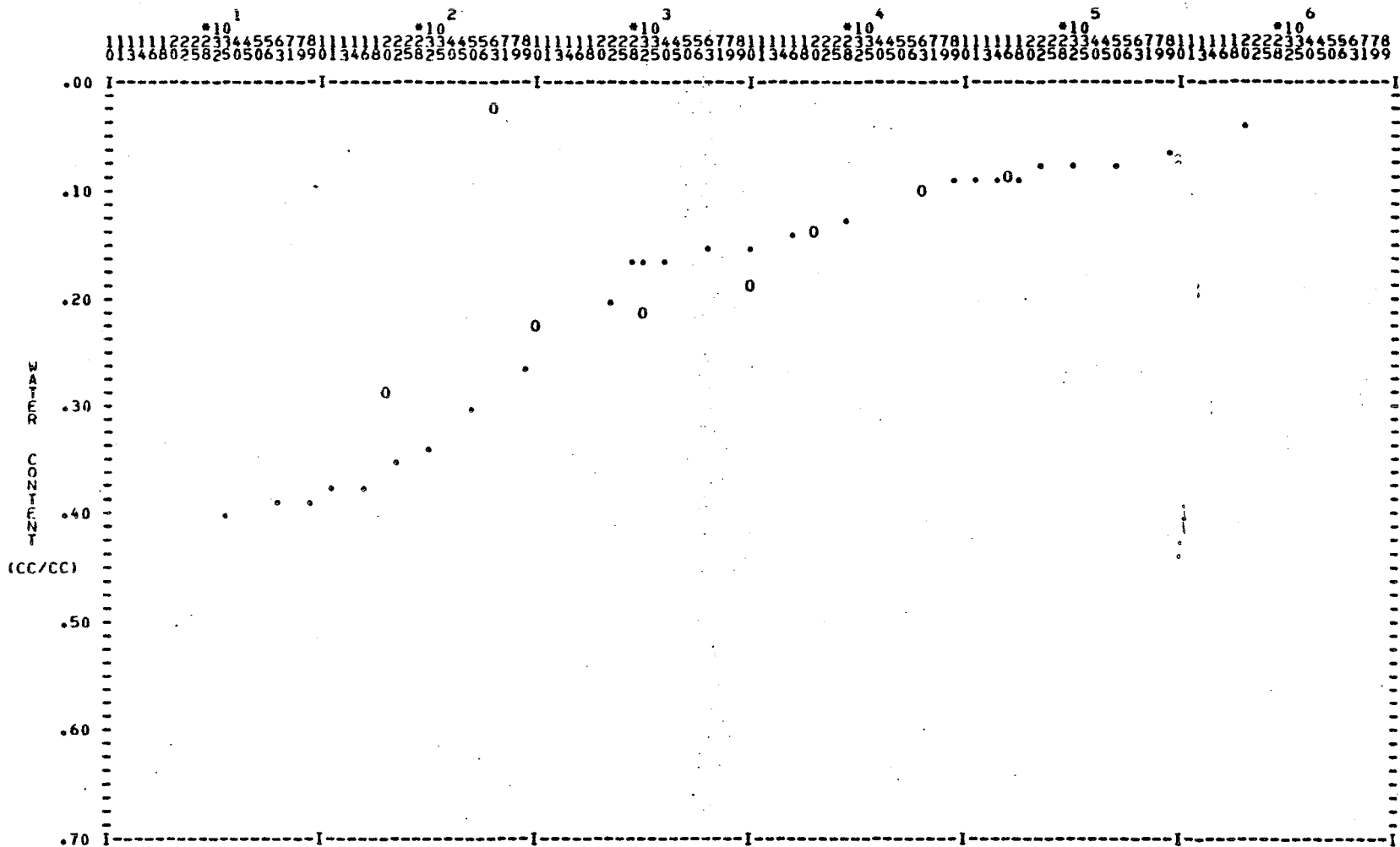
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.20365E+06
0.066	0.84437E+05
0.071	0.48294E+05
0.076	0.31736E+05
0.080	0.22668E+05
0.083	0.17117E+05
0.087	0.13451E+05
0.090	0.10890E+05
0.093	0.90246E+04
0.105	0.64722E+04
0.123	0.27562E+04
0.137	0.15503E+04
0.148	0.98398E+03
0.154	0.61744E+03
0.157	0.38526E+03
0.159	0.33317E+03
0.162	0.31225E+03
0.167	0.28716E+03
0.206	0.22007E+03
0.264	0.90604E+02
0.303	0.50177E+02
0.332	0.32071E+02
0.354	0.22161E+02
0.369	0.15978E+02
0.380	0.11831E+02
0.388	0.88287E+01
0.391	0.64046E+01
0.394	0.33535E+01

B-244

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-245

SOIL HORIZON NUMBER 122

O MEASURED . PREDICTED

SUM OF (ABS(LOG(PSTM)-LOG(PSIP))) = 0.42418E+01

SOIL HORIZON NUMBER 123 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.64 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.079	0.600E+04
0.100	0.200E+04
0.141	0.100E+04
0.157	0.330E+03
0.172	0.100E+03
0.218	0.600E+02
0.303	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.0	0.118
2.00	12.0	0.007
3.00	13.0	0.005
4.00	13.5	0.005
5.00	14.0	0.005
6.00	14.5	0.004
7.00	14.5	0.004
8.00	15.0	0.004
9.00	15.5	0.004
10.00	15.5	0.003
20.00	18.0	0.026
30.00	20.0	0.023
40.00	22.0	0.021
50.00	24.0	0.017
60.00	25.0	0.012
70.00	26.0	0.011
80.00	28.0	0.013
90.00	29.0	0.016
100.00	31.0	0.020
200.00	57.1	0.252
300.00	71.4	0.143
400.00	80.0	0.091
500.00	86.0	0.064
600.00	91.0	0.044
700.00	94.0	0.030
800.00	96.0	0.020
900.00	97.5	0.012
1000.00	98.2	0.007
2000.00	100.0	0.018

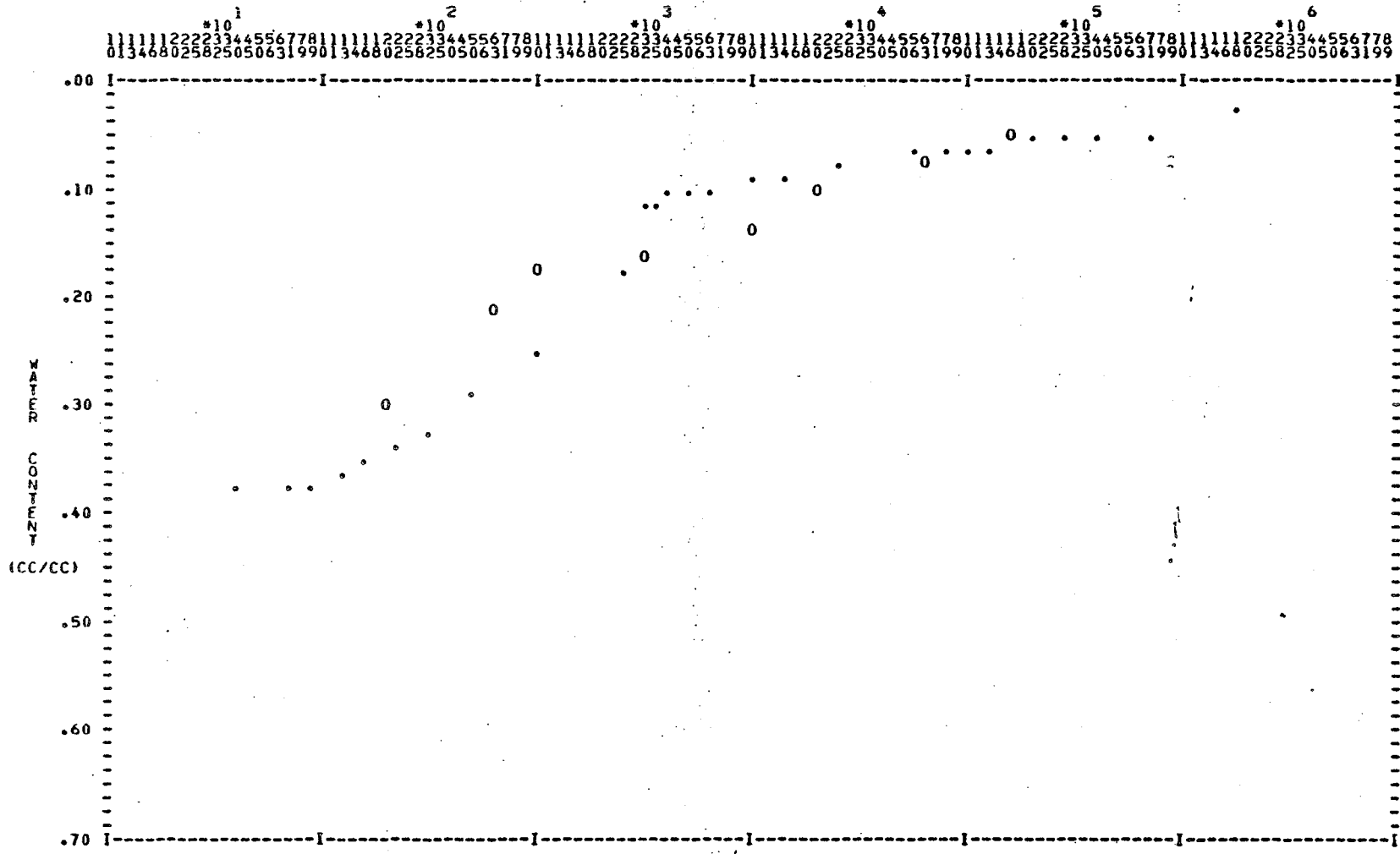
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.17016E+06
0.049	0.72022E+05
0.051	0.42147E+05
0.053	0.28000E+05
0.054	0.20127E+05
0.056	0.15263E+05
0.057	0.12029E+05
0.059	0.97608E+04
0.060	0.80025E+04
0.075	0.50836E+04
0.083	0.25693E+04
0.091	0.14853E+04
0.096	0.95788E+03
0.101	0.65734E+03
0.105	0.49962E+03
0.111	0.41204E+03
0.118	0.33185E+03
0.170	0.20565E+03
0.245	0.12618E+03
0.289	0.95944E+02
0.319	0.80000E+02
0.340	0.71262E+02
0.354	0.62633E+02
0.363	0.56150E+02
0.369	0.51927E+02
0.373	0.49738E+02
0.378	0.67473E+01
	0.39490E+01

B-246

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-247

SOIL HORIZON NUMBER 123

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.32119E+01

SOIL HORIZON NUMBER 124 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.67 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.020	0.150E+05
0.025	0.600E+04
0.032	0.200E+04
0.073	0.100E+04
0.095	0.330E+03
0.135	0.100E+03
0.167	0.600E+02
0.297	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERV. FRACTION (G/G)
1.00	3.8	0.038
2.00	3.8	0.000
3.00	3.9	0.001
4.00	3.9	0.001
5.00	4.0	0.001
6.00	4.1	0.001
7.00	4.1	0.001
8.00	4.2	0.001
9.00	4.2	0.001
10.00	4.2	0.000
20.00	4.4	0.003
30.00	5.5	0.007
40.00	6.6	0.008
50.00	6.6	0.006
60.00	6.6	0.001
70.00	7.0	0.002
80.00	8.0	0.010
90.00	10.0	0.020
100.00	13.0	0.031
200.00	40.0	0.274
300.00	55.0	0.169
400.00	70.0	0.091
500.00	83.0	0.068
600.00	85.0	0.048
700.00	85.0	0.033
800.00	95.0	0.022
900.00	95.0	0.014
1000.00	96.0	0.014
2000.00	100.0	0.032

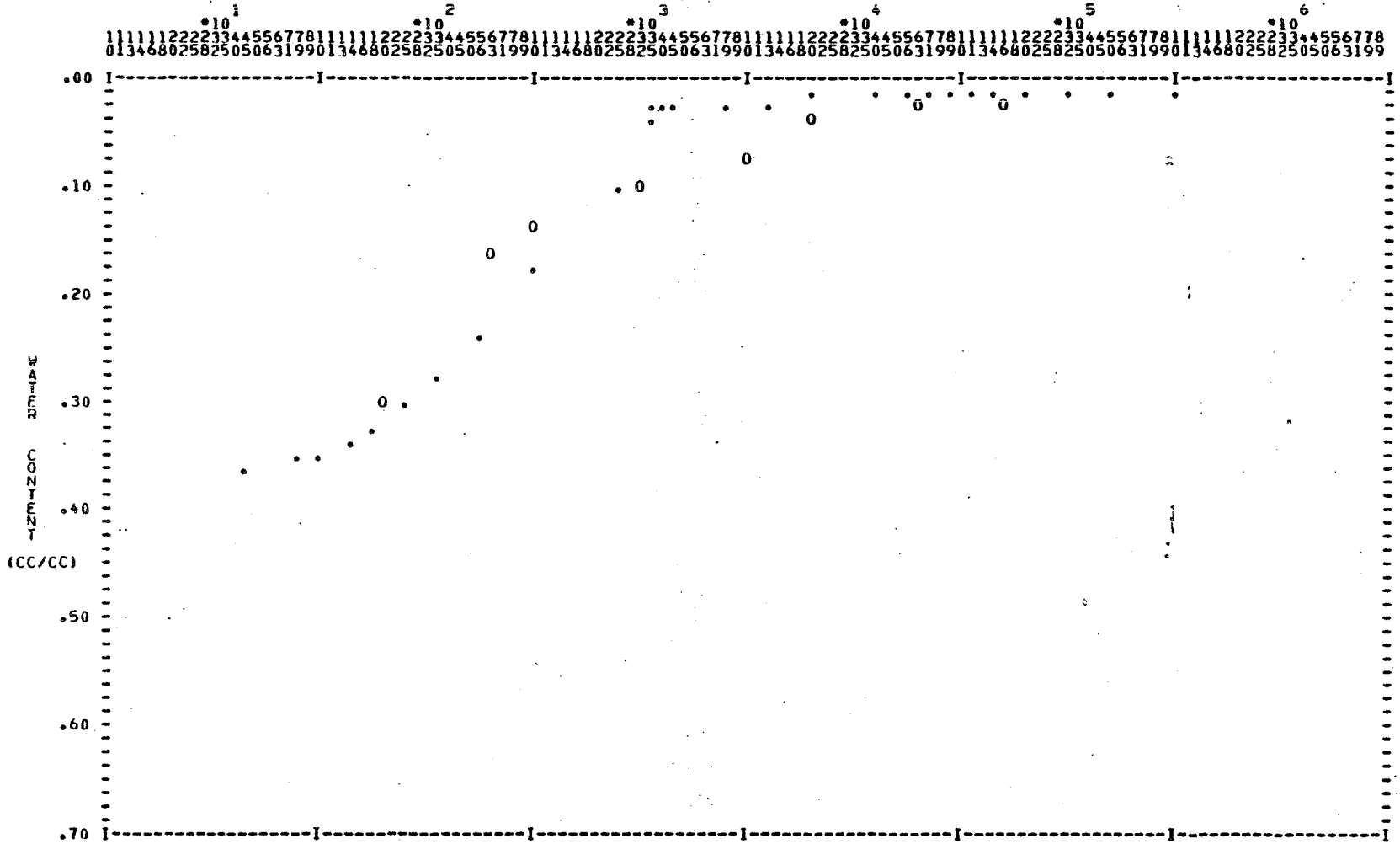
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.007	0.10295E+06
0.014	0.48419E+05
0.014	0.29941E+05
0.015	0.20103E+05
0.015	0.14459E+05
0.015	0.10932E+05
0.015	0.85770E+04
0.016	0.69236E+04
0.016	0.57157E+04
0.016	0.40028E+04
0.018	0.20660E+04
0.021	0.12674E+04
0.024	0.81777E+03
0.025	0.42591E+03
0.026	0.25998E+03
0.028	0.15998E+03
0.034	0.94039E+02
0.039	0.52215E+02
0.048	0.30800E+02
0.051	0.18895E+02
0.051	0.10345E+02
0.052	0.25182E+01
0.052	0.15131E+01
0.052	0.15141E+01
0.052	0.10281E+01
0.055	0.78694E+00
0.055	0.45128E+00
0.064	0.45128E+00

B-248

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-249

SOIL HORIZON NUMBER 124

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.41790E+01

SOIL HORIZON NUMBER 125 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.66 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.013	0.150E+05
0.023	0.600E+04
0.032	0.200E+04
0.143	0.100E+04
0.149	0.330E+03
0.186	0.100E+03
0.217	0.600E+02
0.314	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.0	0.030
2.00	3.2	0.002
3.00	3.3	0.001
4.00	3.3	0.001
5.00	3.4	0.001
6.00	3.6	0.001
7.00	3.7	0.002
8.00	3.9	0.002
9.00	4.2	0.002
10.00	4.4	0.002
20.00	7.0	0.026
30.00	10.8	0.038
40.00	14.6	0.038
50.00	17.5	0.029
60.00	19.7	0.022
70.00	21.6	0.019
80.00	23.4	0.019
90.00	25.3	0.019
100.00	27.3	0.020
200.00	57.2	0.299
300.00	73.7	0.165
400.00	83.5	0.098
500.00	89.7	0.062
600.00	93.6	0.039
700.00	96.2	0.026
800.00	97.0	0.016
900.00	98.8	0.009
1000.00	99.2	0.004
2000.00	100.0	0.008

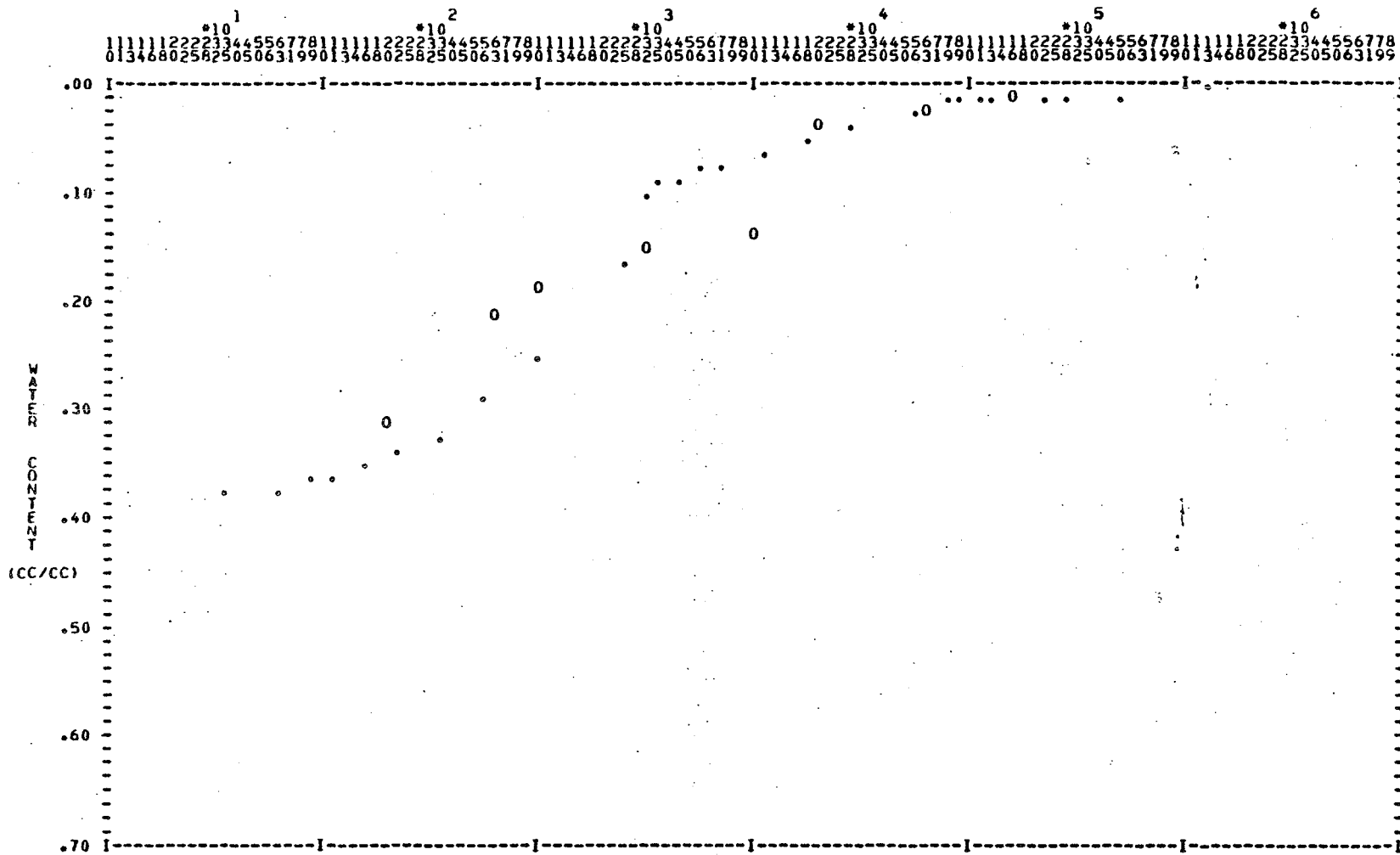
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.13184E+06
0.012	0.49012E+05
0.012	0.28712E+05
0.013	0.21311E+05
0.013	0.16532E+05
0.014	0.13209E+05
0.014	0.10815E+05
0.015	0.90373E+04
0.016	0.76804E+04
0.021	0.59437E+04
0.033	0.28646E+04
0.047	0.16877E+04
0.060	0.10803E+04
0.069	0.74644E+03
0.077	0.56058E+03
0.084	0.44541E+03
0.091	0.36723E+03
0.098	0.31052E+03
0.158	0.25424E+03
0.244	0.10186E+03
0.294	0.54393E+02
0.324	0.33619E+02
0.342	0.22501E+02
0.355	0.15980E+02
0.363	0.11695E+02
0.367	0.86413E+01
0.370	0.61978E+01
0.372	0.34399E+01

B-250

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-251

SOIL HORIZON NUMBER 126 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.17 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.059	0.600E+04
0.070	0.200E+04
0.172	0.100E+04
0.187	0.330E+03
0.229	0.100E+03
0.282	0.600E+02
0.438	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.4	0.014
2.00	4.1	0.027
3.00	5.8	0.017
4.00	7.0	0.013
5.00	8.1	0.010
6.00	8.9	0.009
7.00	9.7	0.008
8.00	10.4	0.007
9.00	11.0	0.006
10.00	11.6	0.006
20.00	15.6	0.040
30.00	18.2	0.026
40.00	20.0	0.018
50.00	21.4	0.014
60.00	22.6	0.012
70.00	23.6	0.010
80.00	24.5	0.009
90.00	25.3	0.008
100.00	26.1	0.008
200.00	64.3	0.382
300.00	79.4	0.150
400.00	85.8	0.064
500.00	89.5	0.037
600.00	92.1	0.026
700.00	94.2	0.021
800.00	95.8	0.016
900.00	97.0	0.012
1000.00	97.7	0.007
2000.00	100.0	0.023

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.15286E+06
0.028	0.62426E+05
0.036	0.34935E+05
0.042	0.22653E+05
0.047	0.16032E+05
0.052	0.12022E+05
0.056	0.93959E+04
0.060	0.75737E+04
0.063	0.62533E+04
0.076	0.44330E+04
0.094	0.18225E+04
0.106	0.10089E+04
0.116	0.64784E+03
0.123	0.45576E+03
0.129	0.34147E+03
0.134	0.26707E+03
0.139	0.21564E+03
0.144	0.17845E+03
0.253	0.18297E+03
0.401	0.68724E+02
0.461	0.34421E+02
0.489	0.20953E+02
0.507	0.14255E+02
0.520	0.10557E+02
0.531	0.80145E+01
0.538	0.61762E+01
0.544	0.47684E+01
0.552	0.28868E+01

B-252

ALPHA = 1.38

SOIL HORIZON NUMBER 127 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT.

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.150E+05
0.038	0.600E+04
0.067	0.200E+04
0.127	0.100E+04
0.141	0.330E+03
0.173	0.100E+03
0.221	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	1.2	0.012
2.00	4.8	0.036
4.00	7.0	0.022
6.00	8.6	0.016
8.00	9.9	0.013
10.00	11.0	0.011
15.00	11.9	0.009
20.00	11.7	0.008
30.00	13.4	0.007
40.00	14.0	0.006
60.00	17.7	0.038
80.00	19.0	0.021
100.00	21.0	0.015
150.00	22.0	0.010
200.00	22.0	0.009
300.00	24.0	0.008
400.00	26.0	0.008
600.00	26.0	0.008
800.00	27.0	0.008
1000.00	27.0	0.008
2000.00	27.0	0.008
4000.00	67.7	0.405
5000.00	82.0	0.149
6000.00	88.0	0.058
7000.00	91.1	0.030
8000.00	94.4	0.033
9000.00	95.4	0.009
10000.00	97.1	0.007
20000.00	100.0	0.029

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.20361E+06
0.026	0.83165E+05
0.034	0.46393E+05
0.041	0.29923E+05
0.046	0.21052E+05
0.050	0.15694E+05
0.054	0.12194E+05
0.057	0.97737E+04
0.060	0.80257E+04
0.070	0.55551E+04
0.083	0.23195E+04
0.091	0.12239E+04
0.097	0.78647E+03
0.101	0.58699E+03
0.106	0.42179E+03
0.109	0.33304E+03
0.113	0.07116E+03
0.117	0.02602E+03
0.208	0.02339E+03
0.330	0.86811E+02
0.376	0.42729E+02
0.55	0.25446E+02
0.406	0.16901E+02
0.433	0.11252E+02
0.439	0.08653E+02
0.424	0.74663E+01
0.427	0.59064E+01
0.435	0.38161E+01

B-254

ALPHA = 1.38

SOIL HORIZON NUMBER 128 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.046	0.150E+05
0.063	0.600E+04
0.096	0.200E+04
0.150	0.100E+04
0.161	0.330E+03
0.199	0.100E+03
0.243	0.600E+02
0.325	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.1	0.051
2.00	8.6	0.035
3.00	10.7	0.021
4.00	12.3	0.016
5.00	13.5	0.013
6.00	14.6	0.010
7.00	15.5	0.009
8.00	16.3	0.008
9.00	17.0	0.007
10.00	17.6	0.006
20.00	22.0	0.044
30.00	24.7	0.027
40.00	26.6	0.019
50.00	28.1	0.015
60.00	29.1	0.010
70.00	29.8	0.007
80.00	30.4	0.006
90.00	31.0	0.006
100.00	31.7	0.007
200.00	67.8	0.361
300.00	81.9	0.141
400.00	87.7	0.058
500.00	90.6	0.029
600.00	92.3	0.017
700.00	93.6	0.014
800.00	94.7	0.011
900.00	95.6	0.009
1000.00	96.3	0.007
2000.00	100.0	0.037

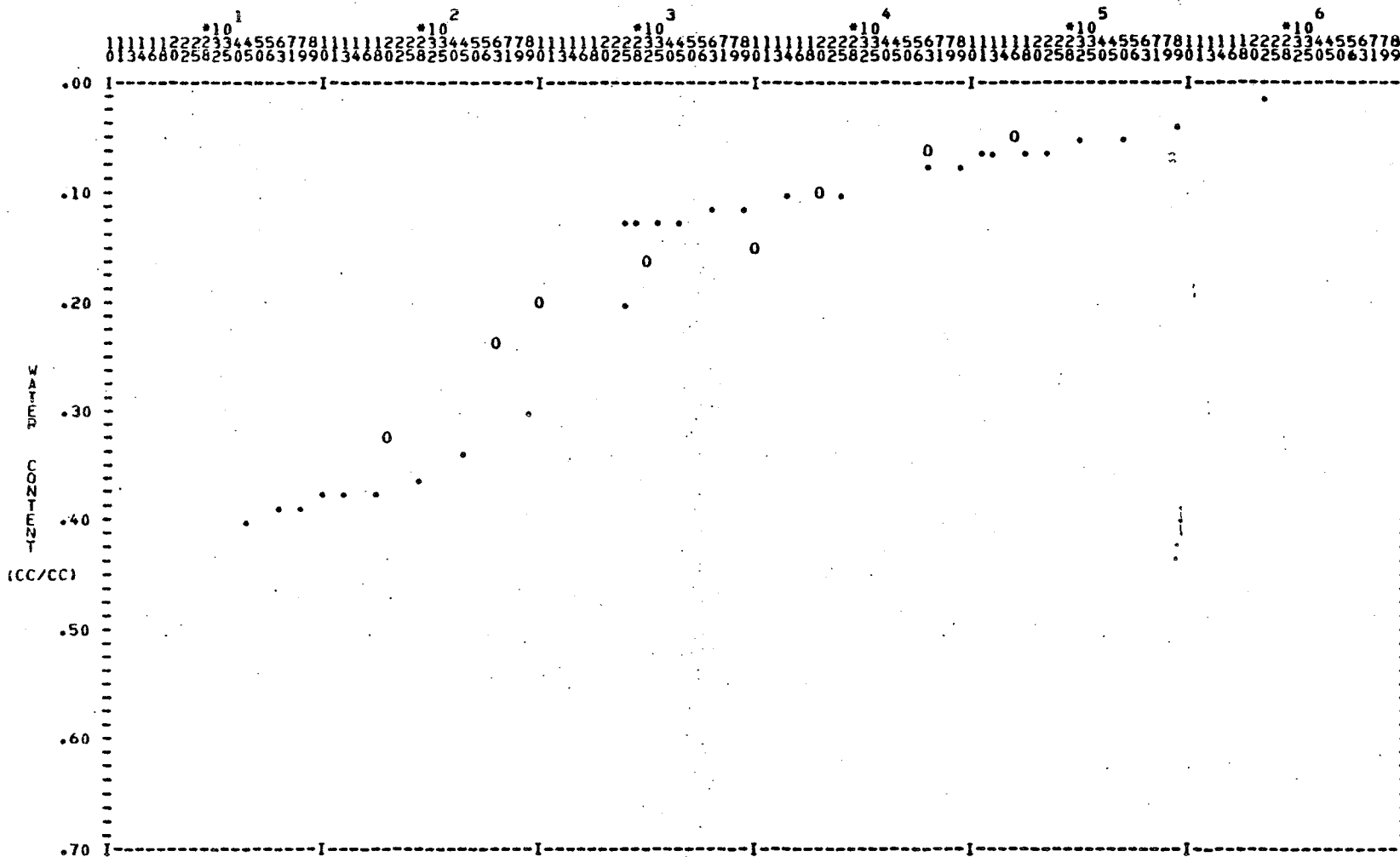
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.21929E+06
0.039	0.89335E+05
0.046	0.49755E+05
0.052	0.32134E+05
0.057	0.22663E+05
0.061	0.16944E+05
0.064	0.13207E+05
0.067	0.10620E+05
0.070	0.87498E+04
0.080	0.61517E+04
0.094	0.25144E+04
0.104	0.13929E+04
0.110	0.89359E+03
0.116	0.60664E+03
0.119	0.43324E+03
0.122	0.33695E+03
0.124	0.27833E+03
0.127	0.23824E+03
0.201	0.24733E+03
0.302	0.92759E+02
0.342	0.46195E+02
0.360	0.27340E+02
0.369	0.17911E+02
0.375	0.13257E+02
0.380	0.10177E+02
0.384	0.80272E+01
0.387	0.64617E+01
0.396	0.43184E+01

B-256

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 128

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.30274E+01

B-257

SOIL HORIZON NUMBER 129 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.101	0.150E+05
0.118	0.600E+04
0.149	0.200E+04
0.167	0.100E+04
0.179	0.330E+03
0.210	0.100E+03
0.262	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	15.3	0.153
2.00	18.1	0.028
3.00	19.8	0.017
4.00	21.1	0.013
5.00	22.1	0.010
6.00	23.0	0.009
7.00	23.8	0.008
8.00	24.4	0.007
9.00	25.0	0.006
10.00	25.6	0.005
20.00	29.3	0.037
30.00	31.6	0.023
40.00	33.3	0.017
50.00	34.6	0.013
60.00	35.5	0.009
70.00	36.1	0.006
80.00	36.7	0.005
90.00	37.2	0.005
100.00	37.8	0.006
200.00	73.1	0.353
300.00	85.9	0.127
400.00	90.6	0.047
500.00	92.9	0.023
600.00	94.2	0.013
700.00	95.3	0.011
800.00	96.2	0.009
900.00	96.9	0.007
1000.00	97.4	0.005
2000.00	100.0	0.026

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.037	0.21041E+06
0.077	0.85829E+05
0.083	0.47907E+05
0.087	0.30988E+05
0.091	0.21881E+05
0.094	0.16376E+05
0.097	0.12775E+05
0.100	0.10280E+05
0.102	0.84745E+04
0.111	0.59716E+04
0.123	0.24473E+04
0.133	0.13566E+04
0.137	0.87020E+03
0.142	0.59285E+03
0.145	0.42568E+03
0.147	0.33076E+03
0.149	0.27187E+03
0.151	0.23145E+03
0.224	0.24635E+03
0.322	0.90962E+02
0.356	0.44422E+02
0.370	0.26175E+02
0.378	0.17154E+02
0.383	0.12721E+02
0.387	0.97492E+01
0.390	0.76537E+01
0.392	0.61117E+01
0.399	0.40384E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 130 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.081	0.150E+05
0.090	0.600E+04
0.110	0.200E+04
0.124	0.100E+04
0.139	0.330E+03
0.160	0.100E+03
0.256	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.6	0.126
2.00	13.5	0.009
3.00	14.1	0.006
4.00	14.5	0.005
5.00	14.9	0.004
6.00	15.2	0.003
7.00	15.5	0.003
8.00	15.7	0.002
9.00	15.9	0.002
10.00	16.1	0.002
20.00	17.4	0.013
30.00	18.2	0.008
40.00	18.9	0.007
50.00	19.4	0.005
60.00	20.0	0.006
70.00	20.7	0.007
80.00	21.6	0.009
90.00	22.5	0.009
100.00	23.5	0.010
200.00	70.5	0.470
300.00	86.9	0.158
400.00	91.6	0.053
500.00	94.1	0.025
600.00	95.5	0.014
700.00	96.6	0.011
800.00	97.5	0.009
900.00	98.1	0.006
1000.00	98.5	0.004
2000.00	100.0	0.015

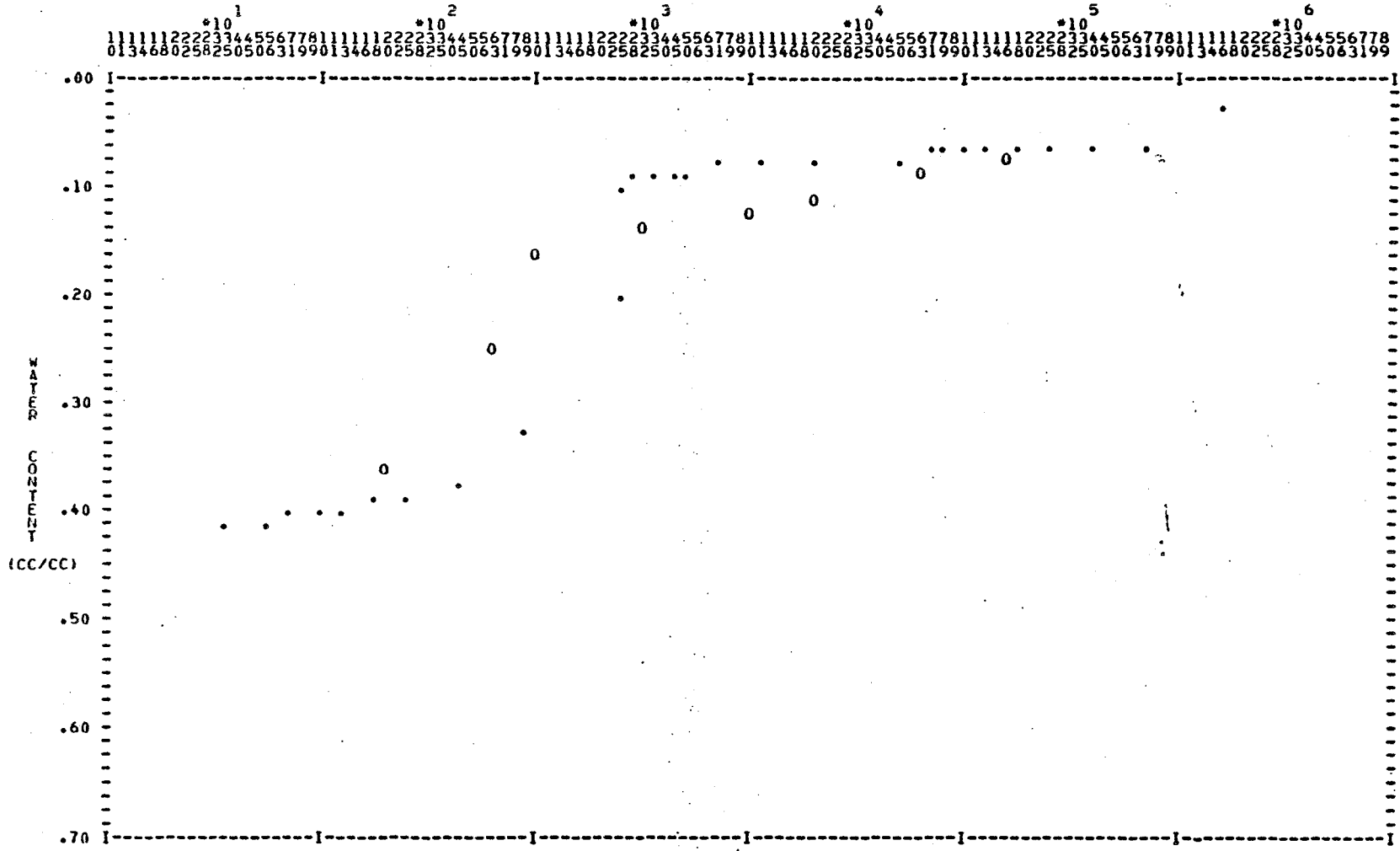
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.028	0.16573E+06
0.057	0.68099E+05
0.059	0.38341E+05
0.061	0.24885E+05
0.062	0.17593E+05
0.064	0.13169E+05
0.065	0.10268E+05
0.066	0.82560E+04
0.067	0.67988E+04
0.070	0.47591E+04
0.074	0.19698E+04
0.077	0.11083E+04
0.079	0.71080E+03
0.082	0.52889E+03
0.084	0.42891E+03
0.088	0.35261E+03
0.091	0.29484E+03
0.095	0.25042E+03
0.195	0.25406E+03
0.325	0.92564E+02
0.369	0.44420E+02
0.385	0.25898E+02
0.393	0.16881E+02
0.399	0.12537E+02
0.403	0.95245E+01
0.406	0.73319E+01
0.408	0.56384E+01
0.412	0.35535E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 131 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.19 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.059	0.600E+04
0.077	0.200E+04
0.174	0.100E+04
0.196	0.330E+03
0.207	0.100E+03
0.363	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.1	0.041
2.00	6.2	0.021
3.00	7.6	0.014
4.00	8.9	0.013
5.00	10.0	0.011
6.00	11.0	0.010
7.00	12.0	0.010
8.00	12.9	0.009
9.00	13.7	0.008
10.00	14.5	0.008
20.00	20.6	0.061
30.00	25.6	0.050
40.00	29.6	0.040
50.00	32.5	0.029
60.00	33.9	0.014
70.00	34.6	0.007
80.00	35.4	0.008
90.00	36.6	0.012
100.00	38.3	0.017
200.00	57.7	0.194
300.00	70.5	0.128
400.00	80.0	0.095
500.00	86.9	0.069
600.00	91.6	0.047
700.00	94.6	0.030
800.00	96.6	0.019
900.00	97.8	0.012
1000.00	98.4	0.006
2000.00	100.0	0.016

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.14758E+06
0.038	0.61494E+05
0.045	0.35442E+05
0.052	0.23413E+05
0.058	0.16789E+05
0.063	0.12718E+05
0.069	0.10019E+05
0.073	0.81296E+04
0.078	0.67497E+04
0.097	0.48725E+04
0.127	0.21044E+04
0.152	0.11891E+04
0.171	0.75203E+03
0.183	0.48163E+03
0.189	0.32008E+03
0.193	0.26156E+03
0.198	0.23428E+03
0.206	0.21175E+03
0.264	0.16329E+03
0.353	0.67680E+02
0.415	0.37683E+02
0.460	0.23928E+02
0.492	0.16230E+02
0.513	0.11487E+02
0.527	0.84236E+01
0.535	0.62969E+01
0.540	0.47028E+01
0.547	0.27359E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 132 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.36 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.041	0.150E+05
0.054	0.600E+04
0.082	0.200E+04
0.175	0.100E+04
0.201	0.330E+03
0.227	0.100E+03
0.291	0.600E+02
0.392	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.6	0.046
2.00	7.0	0.024
3.00	8.6	0.016
4.00	9.9	0.014
5.00	11.1	0.012
6.00	12.2	0.011
7.00	13.3	0.010
8.00	14.2	0.009
9.00	15.1	0.009
10.00	15.0	0.008
20.00	22.3	0.064
30.00	27.4	0.051
40.00	31.3	0.040
50.00	34.2	0.029
60.00	35.5	0.013
70.00	36.0	0.005
80.00	36.8	0.008
90.00	38.2	0.014
100.00	40.4	0.022
200.00	60.4	0.200
300.00	72.5	0.121
400.00	81.2	0.087
500.00	87.8	0.066
600.00	92.4	0.046
700.00	95.2	0.028
800.00	96.9	0.017
900.00	97.9	0.010
1000.00	98.5	0.006
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.17175E+06
0.038	0.71318E+05
0.045	0.40933E+05
0.051	0.26984E+05
0.057	0.19325E+05
0.062	0.14627E+05
0.067	0.11516E+05
0.071	0.93403E+04
0.075	0.77523E+04
0.079	0.55914E+04
0.083	0.23970E+04
0.087	0.13495E+04
0.091	0.85550E+03
0.095	0.53931E+03
0.100	0.34634E+03
0.103	0.29741E+03
0.107	0.27513E+03
0.111	0.25155E+03
0.115	0.18684E+03
0.119	0.76171E+02
0.123	0.42128E+02
0.127	0.26969E+02
0.131	0.18357E+02
0.135	0.12868E+02
0.139	0.93694E+01
0.143	0.69783E+01
0.147	0.52324E+01
0.151	0.30737E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 133 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.198	0.150E+05
0.065	0.500E+04
0.098	0.200E+04
0.157	0.100E+04
0.182	0.330E+03
0.225	0.100E+03
0.277	0.600E+02
0.367	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.8	0.068
2.00	9.4	0.026
3.00	11.1	0.017
4.00	12.6	0.015
5.00	14.0	0.013
6.00	15.2	0.012
7.00	16.3	0.011
8.00	17.3	0.010
9.00	18.2	0.009
10.00	19.1	0.009
20.00	25.7	0.066
30.00	30.9	0.052
40.00	35.1	0.041
50.00	38.0	0.029
60.00	39.4	0.014
70.00	40.0	0.006
80.00	40.7	0.007
90.00	41.9	0.012
100.00	43.8	0.019
200.00	62.3	0.185
300.00	74.0	0.117
400.00	82.5	0.085
500.00	88.8	0.063
600.00	93.1	0.043
700.00	95.7	0.027
800.00	97.4	0.016
900.00	98.3	0.009
1000.00	98.8	0.005
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.19152E+06
0.042	0.79460E+05
0.053	0.45677E+05
0.059	0.30073E+05
0.064	0.21507E+05
0.069	0.16255E+05
0.074	0.12788E+05
0.078	0.10355E+05
0.082	0.85851E+04
0.099	0.61663E+04
0.125	0.28429E+04
0.166	0.14891E+04
0.217	0.94127E+03
0.284	0.59744E+03
0.351	0.38804E+03
0.419	0.32205E+03
0.488	0.29356E+03
0.557	0.26741E+03
0.626	0.20162E+03
0.695	0.82833E+02
0.764	0.45992E+02
0.833	0.29288E+02
0.902	0.19865E+02
0.971	0.13943E+02
1.040	0.10146E+02
1.109	0.75259E+01
1.178	0.55703E+01
1.247	0.32271E+01

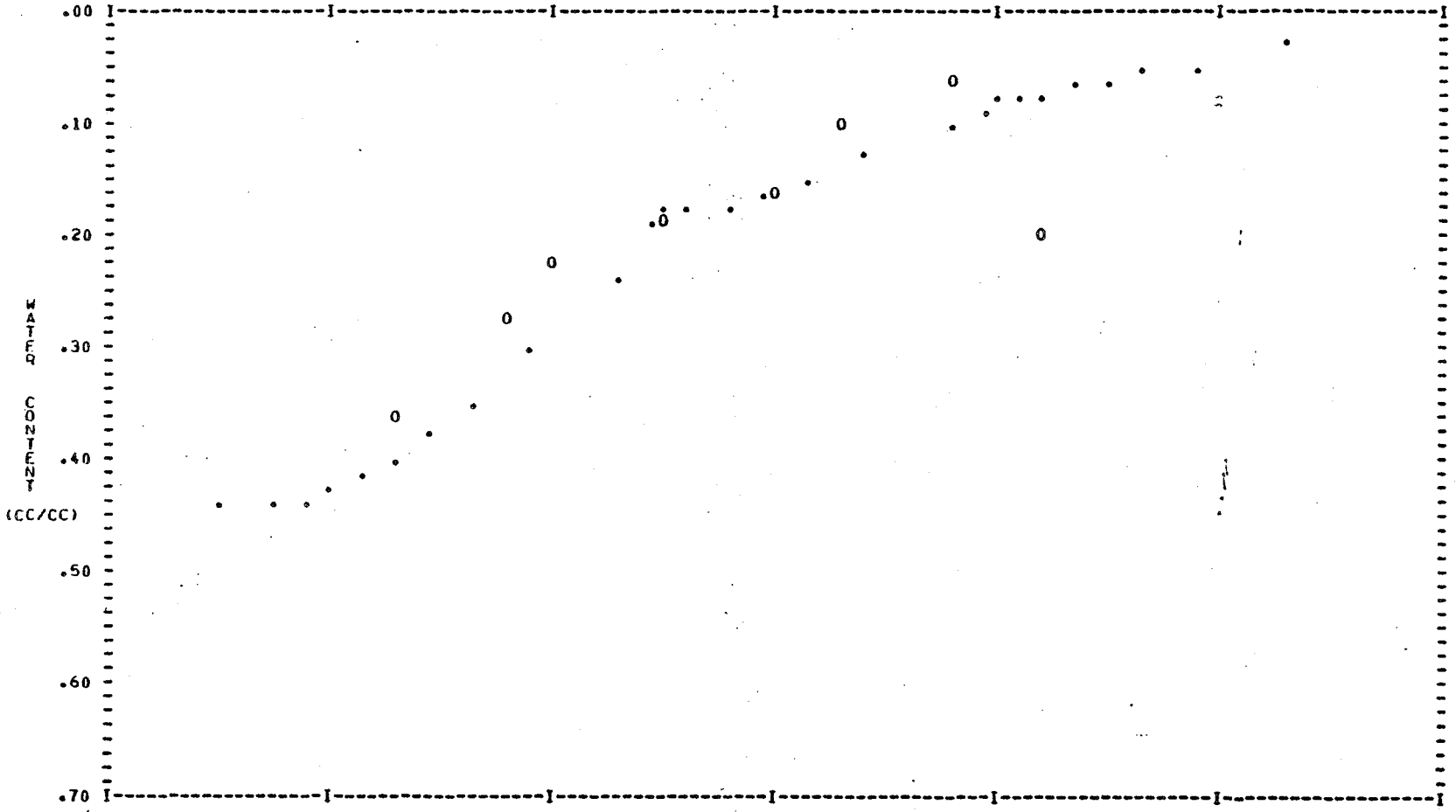
B-266

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) : -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778

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SOIL HORIZON NUMBER 133 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37261E+01

SOIL HORIZON NUMBER 134 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.48 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.092	0.150E+05
0.105	0.600E+04
0.130	0.200E+04
0.198	0.100E+04
0.221	0.330E+03
0.243	0.100E+03
0.283	0.600E+02
0.363	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.4	0.144
2.00	16.5	0.021
3.00	17.9	0.014
4.00	19.2	0.013
5.00	20.4	0.012
6.00	21.5	0.011
7.00	22.4	0.010
8.00	23.4	0.009
9.00	24.2	0.009
10.00	25.0	0.008
20.00	31.3	0.063
30.00	36.5	0.052
40.00	40.7	0.042
50.00	43.7	0.030
60.00	45.2	0.015
70.00	45.9	0.007
80.00	46.6	0.008
90.00	47.8	0.012
100.00	49.6	0.018
200.00	68.4	0.188
300.00	79.2	0.108
400.00	86.4	0.072
500.00	91.5	0.051
600.00	94.9	0.034
700.00	96.9	0.020
800.00	98.1	0.012
900.00	98.8	0.007
1000.00	99.1	0.003
2000.00	100.0	0.009

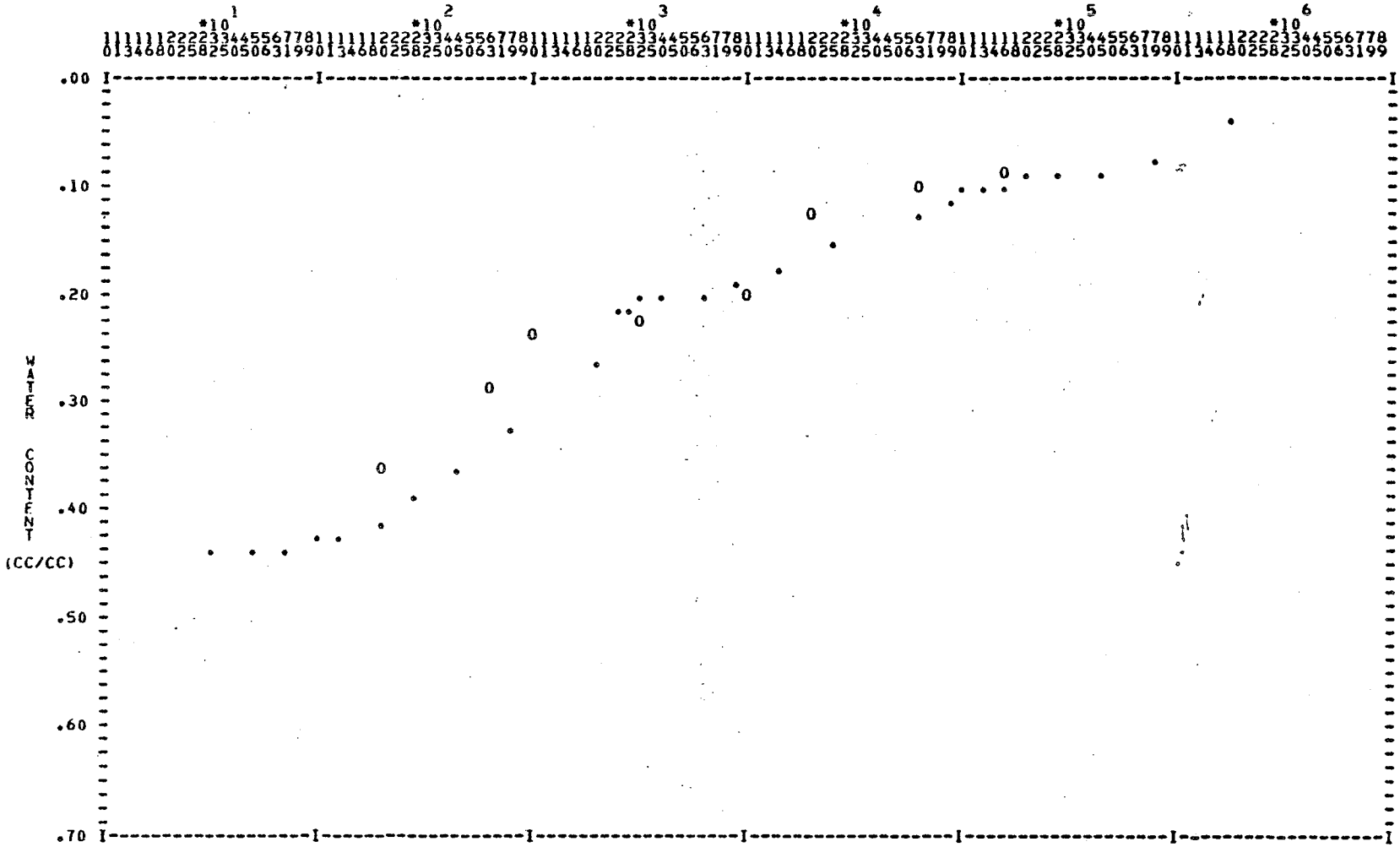
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.18448E+06
0.076	0.76927E+05
0.082	0.44373E+05
0.088	0.29322E+05
0.092	0.21025E+05
0.097	0.15930E+05
0.101	0.12550E+05
0.105	0.10183E+05
0.109	0.84546E+04
0.124	0.61022E+04
0.150	0.26423E+04
0.171	0.14942E+04
0.186	0.94311E+03
0.196	0.60240E+03
0.201	0.40017E+03
0.204	0.32664E+03
0.209	0.29259E+03
0.215	0.26452E+03
0.260	0.20217E+03
0.326	0.81849E+02
0.365	0.44554E+02
0.393	0.28147E+02
0.411	0.18966E+02
0.423	0.13235E+02
0.430	0.95782E+01
0.435	0.70682E+01
0.437	0.52089E+01
0.440	0.30554E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 134

O MEASURED • PREDICTED

SUM OF (ABS(LOG(PSIM))-LOG(PSIP))) = 0.23143E+01

SOIL HORIZON NUMBER 135 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.54 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.068	0.600E+04
0.082	0.200E+04
0.142	0.100E+04
0.157	0.330E+03
0.189	0.100E+03
0.237	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	8.2	0.082
2.00	9.1	0.009
3.00	9.7	0.006
4.00	10.2	0.005
5.00	10.7	0.005
6.00	11.2	0.005
7.00	11.7	0.005
8.00	12.2	0.005
9.00	12.7	0.005
10.00	13.1	0.005
20.00	17.6	0.045
30.00	21.5	0.039
40.00	24.6	0.031
50.00	26.9	0.023
60.00	28.1	0.012
70.00	28.7	0.006
80.00	29.5	0.008
90.00	30.9	0.014
100.00	32.9	0.020
200.00	56.1	0.232
300.00	70.6	0.145
400.00	80.9	0.103
500.00	88.6	0.077
600.00	93.6	0.050
700.00	96.2	0.027
800.00	97.7	0.014
900.00	98.4	0.007
1000.00	98.8	0.004
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.16548E+06
0.039	0.67810E+05
0.042	0.39028E+05
0.044	0.26166E+05
0.046	0.19065E+05
0.048	0.14650E+05
0.050	0.11685E+05
0.052	0.95829E+04
0.054	0.80302E+04
0.064	0.59846E+04
0.082	0.26183E+04
0.097	0.14761E+04
0.108	0.94101E+03
0.115	0.60332E+03
0.119	0.40795E+03
0.123	0.34752E+03
0.126	0.31457E+03
0.134	0.28434E+03
0.186	0.22038E+03
0.265	0.90466E+02
0.317	0.49907E+02
0.355	0.31872E+02
0.383	0.21402E+02
0.398	0.14615E+02
0.406	0.10362E+02
0.411	0.75318E+01
0.413	0.55805E+01
0.416	0.33796E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 136 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.150E+05
0.018	0.500E+04
0.021	0.200E+04
0.024	0.100E+04
0.034	0.330E+03
0.046	0.100E+03
0.063	0.500E+02
0.231	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.0	0.030
2.00	3.0	0.000
3.00	3.0	0.000
4.00	3.0	0.000
5.00	3.0	0.000
6.00	3.0	0.000
7.00	3.0	0.000
8.00	3.0	0.000
9.00	3.0	0.000
10.00	3.0	0.000
20.00	3.1	0.001
30.00	3.5	0.004
40.00	4.0	0.005
50.00	4.4	0.004
60.00	4.6	0.002
70.00	4.6	0.001
80.00	4.7	0.000
90.00	4.7	0.000
100.00	4.8	0.001
200.00	14.2	0.094
300.00	31.2	0.170
400.00	57.9	0.217
500.00	67.5	0.146
600.00	76.7	0.092
700.00	83.9	0.072
800.00	89.2	0.053
900.00	92.8	0.036
1000.00	94.9	0.021
2000.00	100.0	0.051

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.68689E+05
0.013	0.28727E+05
0.013	0.16851E+05
0.013	0.11325E+05
0.013	0.82379E+04
0.013	0.63126E+04
0.013	0.50210E+04
0.013	0.41059E+04
0.013	0.34333E+04
0.013	0.25368E+04
0.014	0.16959E+04
0.016	0.10452E+04
0.018	0.65742E+03
0.019	0.41616E+03
0.020	0.26737E+03
0.020	0.19393E+03
0.020	0.15550E+03
0.020	0.14491E+03
0.040	0.18428E+03
0.096	0.55438E+02
0.178	0.55103E+02
0.254	0.35664E+02
0.305	0.23884E+02
0.339	0.17552E+02
0.389	0.13209E+02
0.389	0.10079E+02
0.397	0.76428E+01
0.412	0.44147E+01

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ALPHA = 1.38

SOIL HORIZON NUMBER 137 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.53 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.060	0.150E+05
0.083	0.600E+04
0.099	0.200E+04
0.118	0.100E+04
0.167	0.330E+03
0.223	0.100E+03
0.277	0.600E+02
0.355	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.2	0.092
2.00	9.8	0.006
3.00	10.3	0.005
4.00	10.8	0.005
5.00	11.3	0.005
6.00	11.8	0.004
7.00	12.2	0.004
8.00	12.5	0.003
9.00	12.8	0.003
10.00	13.1	0.003
20.00	14.9	0.018
30.00	15.4	0.005
40.00	17.0	0.016
50.00	20.3	0.033
60.00	26.5	0.062
70.00	34.4	0.079
80.00	42.0	0.077
90.00	48.6	0.066
100.00	53.8	0.052
200.00	86.8	0.330
300.00	92.4	0.056
400.00	93.7	0.013
500.00	94.8	0.011
600.00	95.8	0.010
700.00	96.6	0.008
800.00	97.3	0.007
900.00	97.9	0.006
1000.00	98.4	0.005
2000.00	100.0	0.016

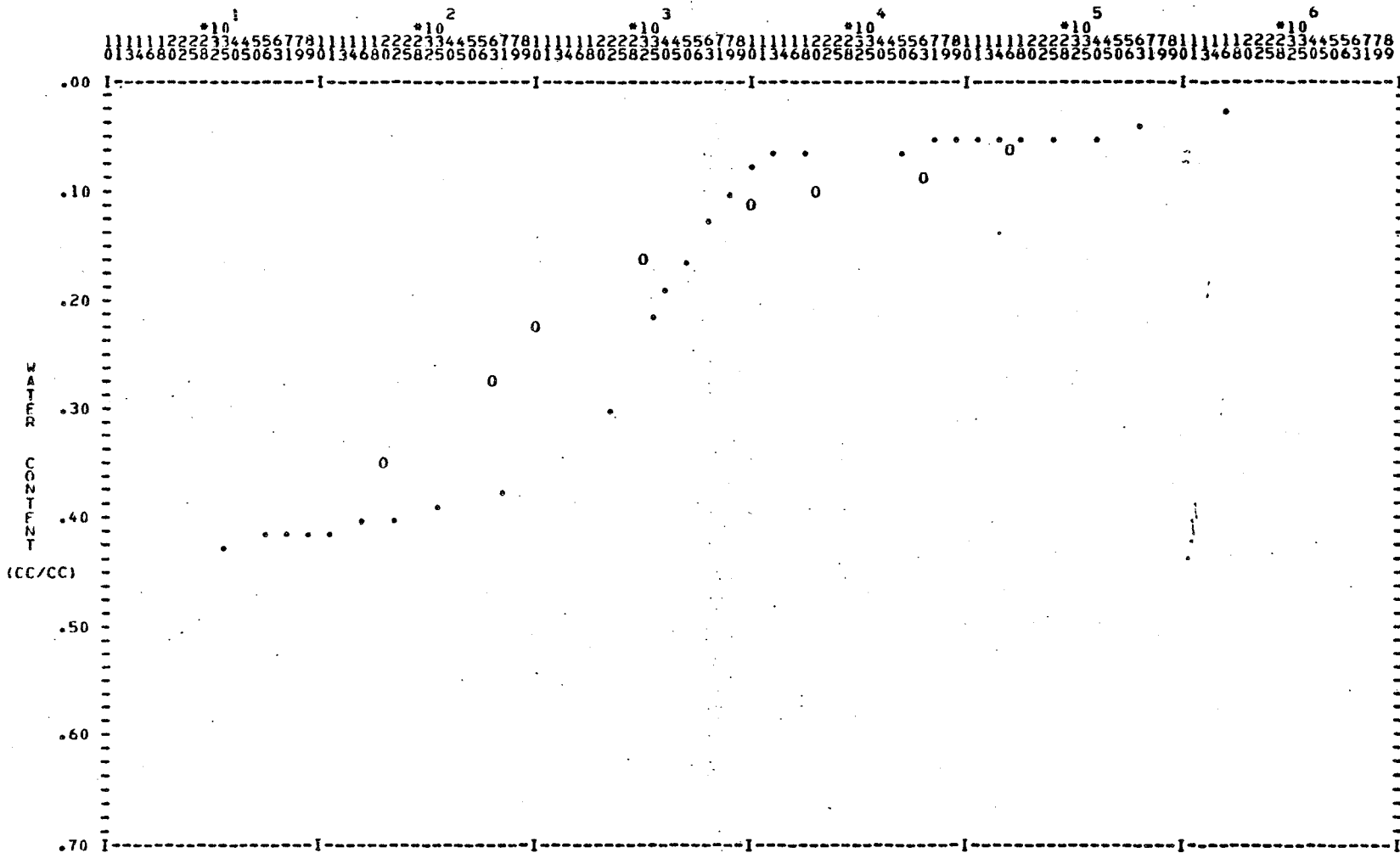
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.15018E+06
0.043	0.65594E+05
0.045	0.39006E+05
0.047	0.25853E+05
0.049	0.18464E+05
0.051	0.13894E+05
0.052	0.10862E+05
0.054	0.87430E+04
0.055	0.71999E+04
0.059	0.49973E+04
0.064	0.17746E+04
0.069	0.12920E+04
0.079	0.99835E+03
0.099	0.82137E+03
0.129	0.66288E+03
0.162	0.52620E+03
0.192	0.41993E+03
0.216	0.33696E+03
0.297	0.23390E+03
0.379	0.74876E+02
0.393	0.33566E+02
0.398	0.21667E+02
0.403	0.15519E+02
0.406	0.11586E+02
0.410	0.89885E+01
0.412	0.71799E+01
0.415	0.58674E+01
0.419	0.35420E+01

B-274

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 137

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.38982E+01

B-275

SOIL HORIZON NUMBER 138 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.57 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.141	0.600E+04
0.159	0.200E+04
0.214	0.100E+04
0.240	0.330E+03
0.261	0.100E+03
0.276	0.600E+02
0.317	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	16.2	0.162
2.00	17.0	0.008
3.00	17.5	0.006
4.00	18.2	0.006
5.00	18.2	0.005
6.00	19.2	0.005
7.00	19.7	0.004
8.00	20.0	0.004
9.00	20.4	0.003
10.00	20.7	0.003
20.00	22.6	0.019
30.00	23.1	0.005
40.00	24.5	0.014
50.00	27.4	0.029
60.00	33.0	0.056
70.00	40.4	0.074
80.00	47.6	0.072
90.00	53.8	0.062
100.00	58.2	0.044
200.00	90.2	0.315
300.00	95.3	0.051
400.00	96.0	0.007
500.00	96.2	0.006
600.00	97.2	0.006
700.00	97.8	0.006
800.00	98.3	0.005
900.00	98.7	0.004
1000.00	99.0	0.003
2000.00	100.0	0.010

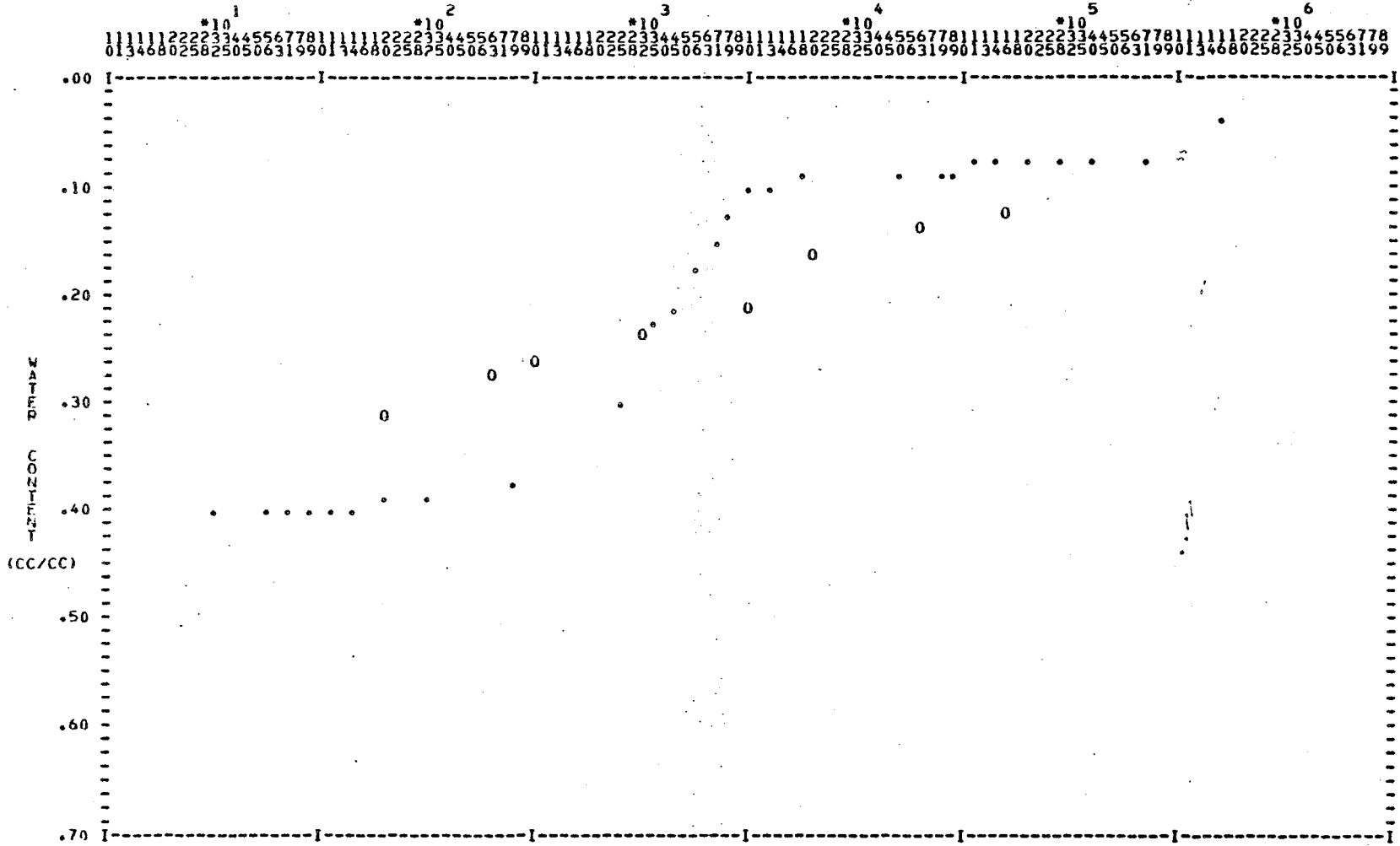
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.16410E+06
0.071	0.70271E+06
0.073	0.41180E+06
0.075	0.27160E+06
0.077	0.19335E+06
0.079	0.14542E+06
0.081	0.11360E+06
0.082	0.91392E+05
0.084	0.75224E+05
0.088	0.52224E+05
0.093	0.18334E+05
0.097	0.12973E+05
0.106	0.10054E+05
0.123	0.83332E+04
0.150	0.66748E+04
0.179	0.53622E+04
0.207	0.42825E+04
0.229	0.34380E+04
0.303	0.23191E+04
0.378	0.75813E+03
0.390	0.30873E+03
0.392	0.20088E+03
0.395	0.14857E+03
0.397	0.11113E+03
0.400	0.86024E+02
0.401	0.68364E+02
0.403	0.55440E+02
0.406	0.33417E+02

B-276

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 138

○ MEASURED ; ● PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.51822E+01

B-277

SOIL HORIZON NUMBER 139 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.42 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150F+05
0.078	0.600F+04
0.095	0.200E+04
0.182	0.100E+04
0.204	0.330E+03
0.244	0.100F+03
0.263	0.600E+02
0.345	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
2.00	10.0	0.027
3.00	11.8	0.018
4.00	13.3	0.015
5.00	14.7	0.013
6.00	15.9	0.011
7.00	16.9	0.011
8.00	17.9	0.010
9.00	18.8	0.009
10.00	19.7	0.008
20.00	26.0	0.063
30.00	31.0	0.050
40.00	34.9	0.038
50.00	37.3	0.024
60.00	38.8	0.015
70.00	39.8	0.011
80.00	40.7	0.009
90.00	41.6	0.008
100.00	41.4	0.008
200.00	46.4	0.070
300.00	54.8	0.054
400.00	60.4	0.056
500.00	65.6	0.052
600.00	70.7	0.051
700.00	75.8	0.052
800.00	80.3	0.045
900.00	84.0	0.037
1000.00	87.0	0.030
2000.00	100.0	0.130

PREDICTED MOISTURE CHARACTERISTIC DATA

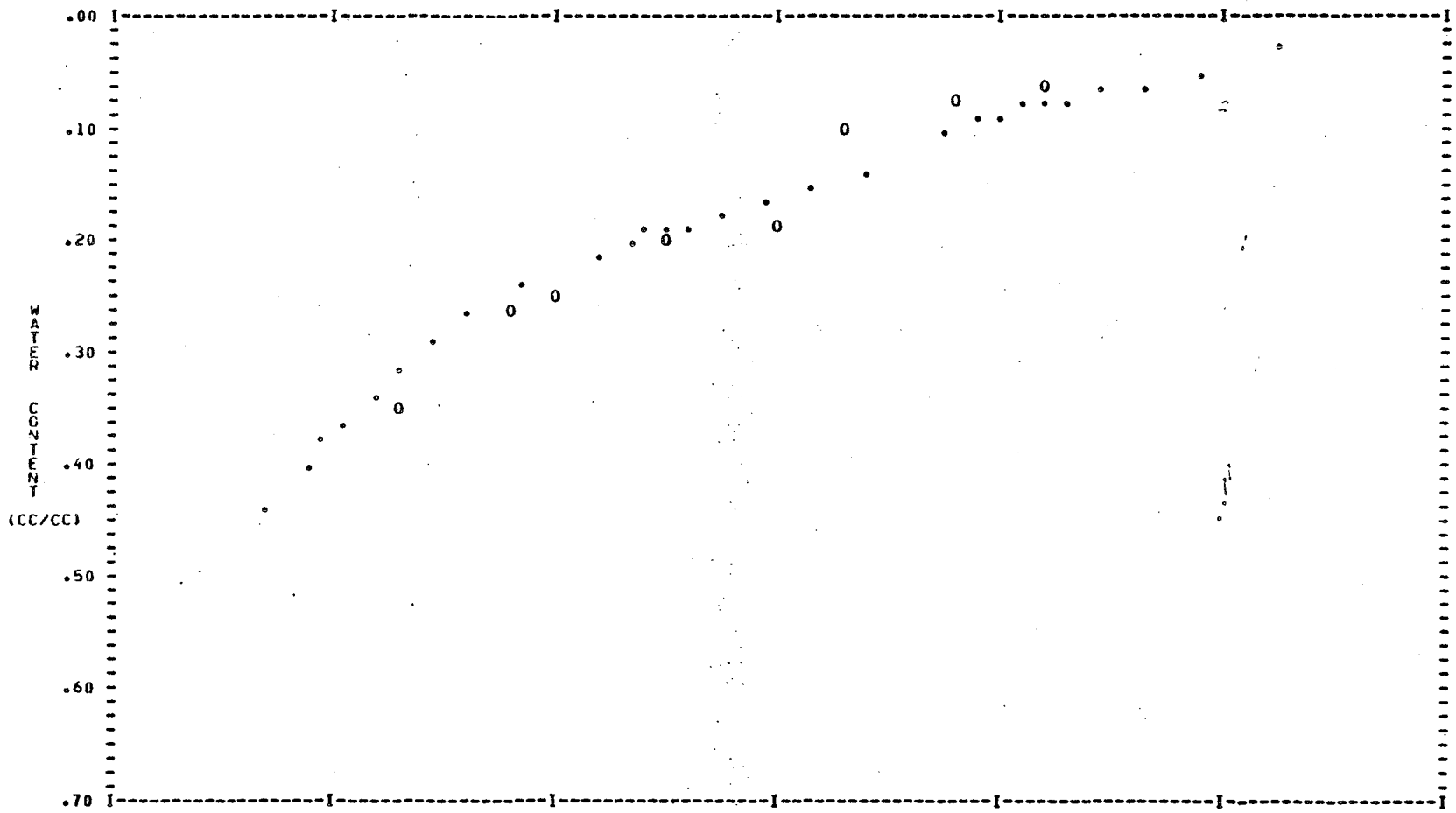
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.023	0.18460E+06
0.051	0.76587E+05
0.058	0.43808E+05
0.065	0.28772E+05
0.071	0.20536E+05
0.076	0.15497E+05
0.081	0.12169E+05
0.085	0.98463E+04
0.089	0.81549E+04
0.106	0.58347E+04
0.132	0.25054E+04
0.153	0.14025E+04
0.167	0.86835E+03
0.177	0.57630E+03
0.182	0.41577E+03
0.187	0.32101E+03
0.191	0.26064E+03
0.195	0.21915E+03
0.213	0.16014E+03
0.243	0.68337E+02
0.267	0.40621E+02
0.282	0.26948E+02
0.316	0.19638E+02
0.344	0.15055E+02
0.366	0.11753E+02
0.389	0.93355E+01
0.434	0.75140E+01
0.434	0.48481E+01

B-278

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-279

SOIL HORIZON NUMBER 139

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.23576E+01

SOIL HORIZON NUMBER 140 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.34 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.048	0.150E+05
0.071	0.600E+04
0.094	0.200E+04
0.122	0.100E+04
0.209	0.330E+03
0.272	0.100E+03
0.299	0.600E+02
0.389	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.1	0.021
2.00	4.2	0.021
3.00	5.7	0.015
4.00	7.1	0.014
5.00	8.4	0.013
6.00	9.5	0.011
7.00	10.6	0.010
8.00	11.5	0.010
9.00	12.4	0.009
10.00	13.2	0.008
20.00	19.3	0.061
30.00	24.8	0.055
40.00	29.2	0.044
50.00	32.0	0.028
60.00	33.2	0.012
70.00	33.7	0.005
80.00	34.1	0.004
90.00	34.6	0.006
100.00	35.5	0.009
200.00	45.2	0.097
300.00	52.7	0.075
400.00	59.2	0.065
500.00	64.8	0.056
600.00	70.6	0.058
700.00	76.5	0.059
800.00	81.6	0.052
900.00	85.8	0.042
1000.00	89.0	0.032
2000.00	100.0	0.110

PREDICTED MOISTURE CHARACTERISTIC DATA

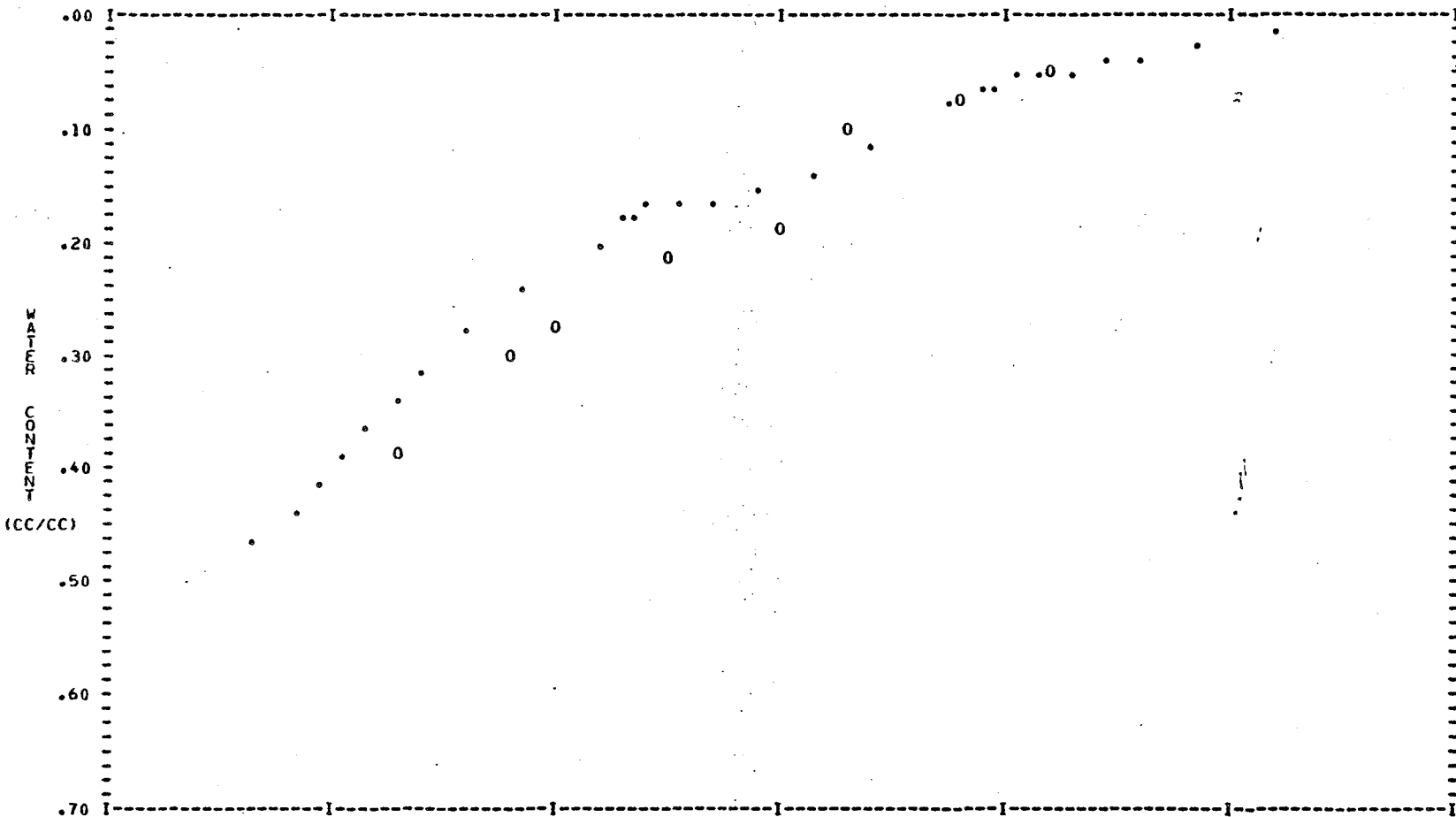
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.010	0.16625E+06
0.025	0.69862E+05
0.032	0.40506E+05
0.038	0.26755E+05
0.044	0.19153E+05
0.050	0.14476E+05
0.055	0.11378E+05
0.059	0.92104E+04
0.063	0.76301E+04
0.080	0.54561E+04
0.109	0.23962E+04
0.133	0.13585E+04
0.151	0.83766E+03
0.161	0.52394E+03
0.165	0.33610E+03
0.168	0.25653E+03
0.170	0.22730E+03
0.173	0.20717E+03
0.199	0.16023E+03
0.242	0.68517E+02
0.276	0.39292E+02
0.306	0.25774E+02
0.335	0.18913E+02
0.364	0.14585E+02
0.391	0.11371E+02
0.414	0.89792E+01
0.432	0.71486E+01
0.467	0.44209E+01

B-280

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

11111122223344556778111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 01346802582505063199013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-281

SOIL HORIZON NUMBER 140

0 MEASURED 1 . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.23619E+01

SOIL HORIZON NUMBER 141 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.64 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.087	0.600E+04
0.138	0.200E+04
0.157	0.100E+04
0.187	0.330E+03
0.215	0.100E+03
0.231	0.600E+02
0.284	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.5	0.135
2.00	15.8	0.023
3.00	17.3	0.015
4.00	18.7	0.013
5.00	19.8	0.012
6.00	20.9	0.010
7.00	21.8	0.009
8.00	22.7	0.009
9.00	23.5	0.008
10.00	24.2	0.008
20.00	30.0	0.058
30.00	34.6	0.046
40.00	38.0	0.035
50.00	40.3	0.023
60.00	41.8	0.015
70.00	43.0	0.012
80.00	44.0	0.010
90.00	44.9	0.009
100.00	45.7	0.008
200.00	52.1	0.064
300.00	57.0	0.048
400.00	62.5	0.055
500.00	67.5	0.050
600.00	72.5	0.050
700.00	77.5	0.050
800.00	81.9	0.044
900.00	85.5	0.036
1000.00	88.4	0.029
2000.00	100.0	0.116

PREDICTED MOISTURE CHARACTERISTIC DATA

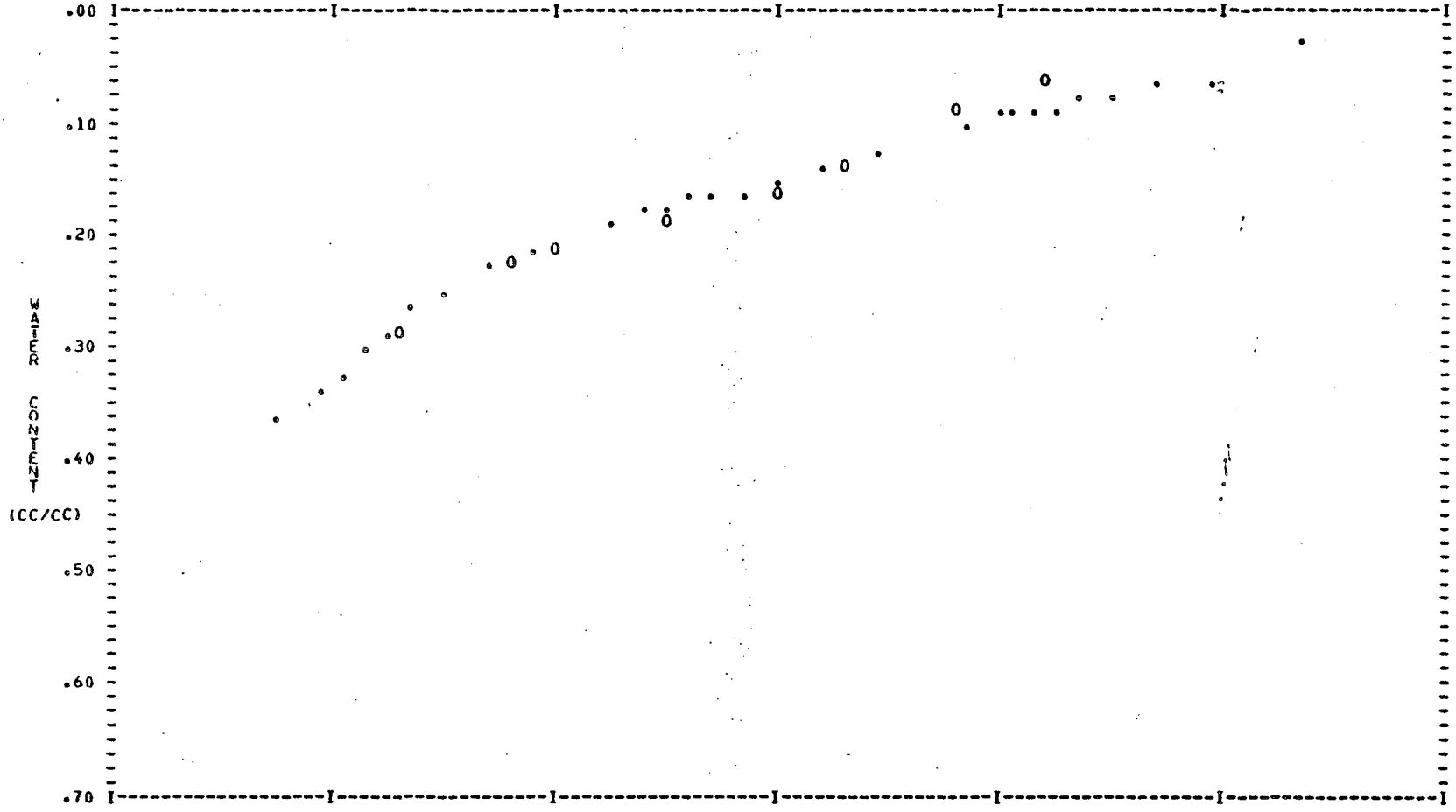
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.21302E+06
0.063	0.88251E+05
0.069	0.50461E+05
0.073	0.33176E+05
0.078	0.23712E+05
0.081	0.17918E+05
0.085	0.14089E+05
0.088	0.11414E+05
0.091	0.94639E+04
0.101	0.68029E+04
0.123	0.29192E+04
0.138	0.16312E+04
0.149	0.10143E+04
0.156	0.68413E+03
0.162	0.50231E+03
0.166	0.38917E+03
0.169	0.31367E+03
0.173	0.26040E+03
0.186	0.18694E+03
0.208	0.79372E+02
0.228	0.47936E+02
0.248	0.31800E+02
0.267	0.23184E+02
0.286	0.17809E+02
0.304	0.13896E+02
0.319	0.11014E+02
0.331	0.88318E+01
0.359	0.56265E+01

B-282

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-283

SOIL HORIZON NUMBER 141

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.20136E+01

SOIL HORIZON NUMBER 142 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.217	0.150E+05
0.231	0.600E+04
0.264	0.200E+04
0.193	0.100E+04
0.215	0.330E+03
0.240	0.100E+03
0.262	0.600E+02
0.314	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	19.3	0.193
2.00	21.7	0.024
3.00	23.2	0.015
4.00	24.5	0.012
5.00	25.5	0.011
6.00	26.4	0.009
7.00	27.3	0.008
8.00	28.0	0.008
9.00	28.7	0.007
10.00	29.3	0.006
20.00	34.1	0.048
30.00	37.6	0.035
40.00	40.1	0.025
50.00	41.8	0.017
60.00	43.0	0.012
70.00	44.0	0.010
80.00	44.9	0.009
90.00	45.6	0.008
100.00	46.3	0.007
200.00	51.2	0.049
300.00	54.6	0.034
400.00	59.0	0.044
500.00	63.7	0.047
600.00	68.6	0.049
700.00	73.4	0.048
800.00	77.7	0.043
900.00	81.4	0.037
1000.00	84.4	0.030
2000.00	100.0	0.156

PREDICTED MOISTURE CHARACTERISTIC DATA

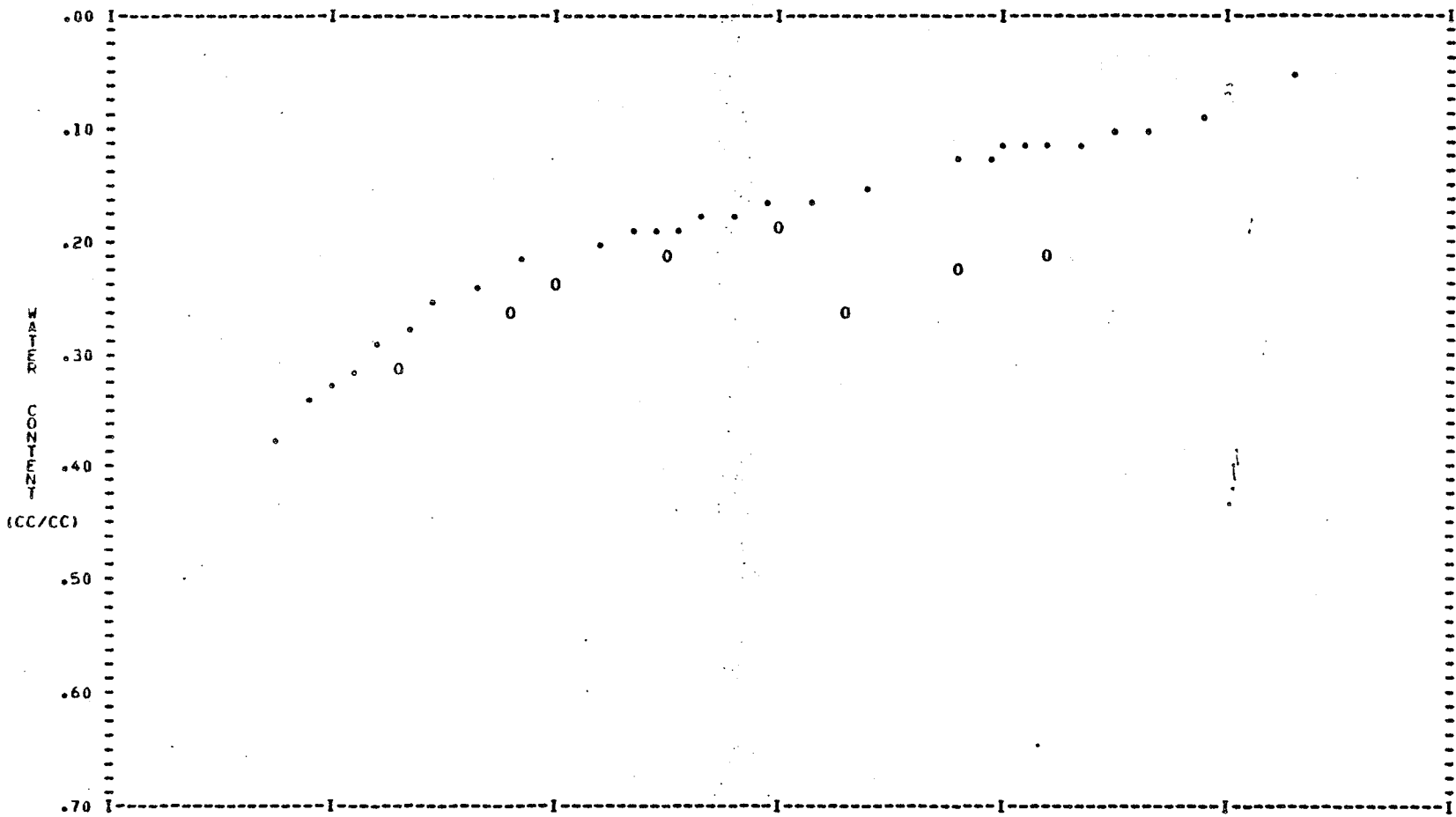
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.20070E+06
0.092	0.82613E+05
0.098	0.46799E+05
0.103	0.30590E+05
0.107	0.21775E+05
0.110	0.16404E+05
0.114	0.12867E+05
0.117	0.10403E+05
0.119	0.86119E+04
0.130	0.61573E+04
0.147	0.25992E+04
0.160	0.14436E+04
0.168	0.90262E+03
0.174	0.61728E+03
0.179	0.45722E+03
0.183	0.35480E+03
0.186	0.28498E+03
0.189	0.23505E+03
0.200	0.16630E+03
0.217	0.69803E+02
0.234	0.43213E+02
0.252	0.29452E+02
0.272	0.21668E+02
0.292	0.16608E+02
0.311	0.12990E+02
0.327	0.10355E+02
0.341	0.83793E+01
0.379	0.55882E+01

B-284

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 *2 *3 *4 *5 *6
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 0134680255825050631990134680255825050631990134680255825050631990134680255825050631990134680255825050631990



B-285

SOIL HORIZON NUMBER 142

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{IP}))) = 0.86505E+01

SOIL HORIZON NUMBER 143 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.45 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.067	0.600E+04
0.107	0.200E+04
0.162	0.100E+04
0.186	0.330E+03
0.226	0.100E+03
0.249	0.600E+02
0.339	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.0	0.050
2.00	8.0	0.030
3.00	10.0	0.020
4.00	11.6	0.017
5.00	13.2	0.015
6.00	14.5	0.014
7.00	15.8	0.013
8.00	17.0	0.012
9.00	18.1	0.011
10.00	19.2	0.011
20.00	27.7	0.085
30.00	34.6	0.069
40.00	39.8	0.052
50.00	43.3	0.035
60.00	45.7	0.024
70.00	47.7	0.020
80.00	49.4	0.017
90.00	50.9	0.015
100.00	52.4	0.015
200.00	62.8	0.104
300.00	69.8	0.070
400.00	75.3	0.055
500.00	79.7	0.044
600.00	83.5	0.038
700.00	86.0	0.034
800.00	88.8	0.029
900.00	92.3	0.025
1000.00	94.3	0.020
2000.00	100.0	0.057

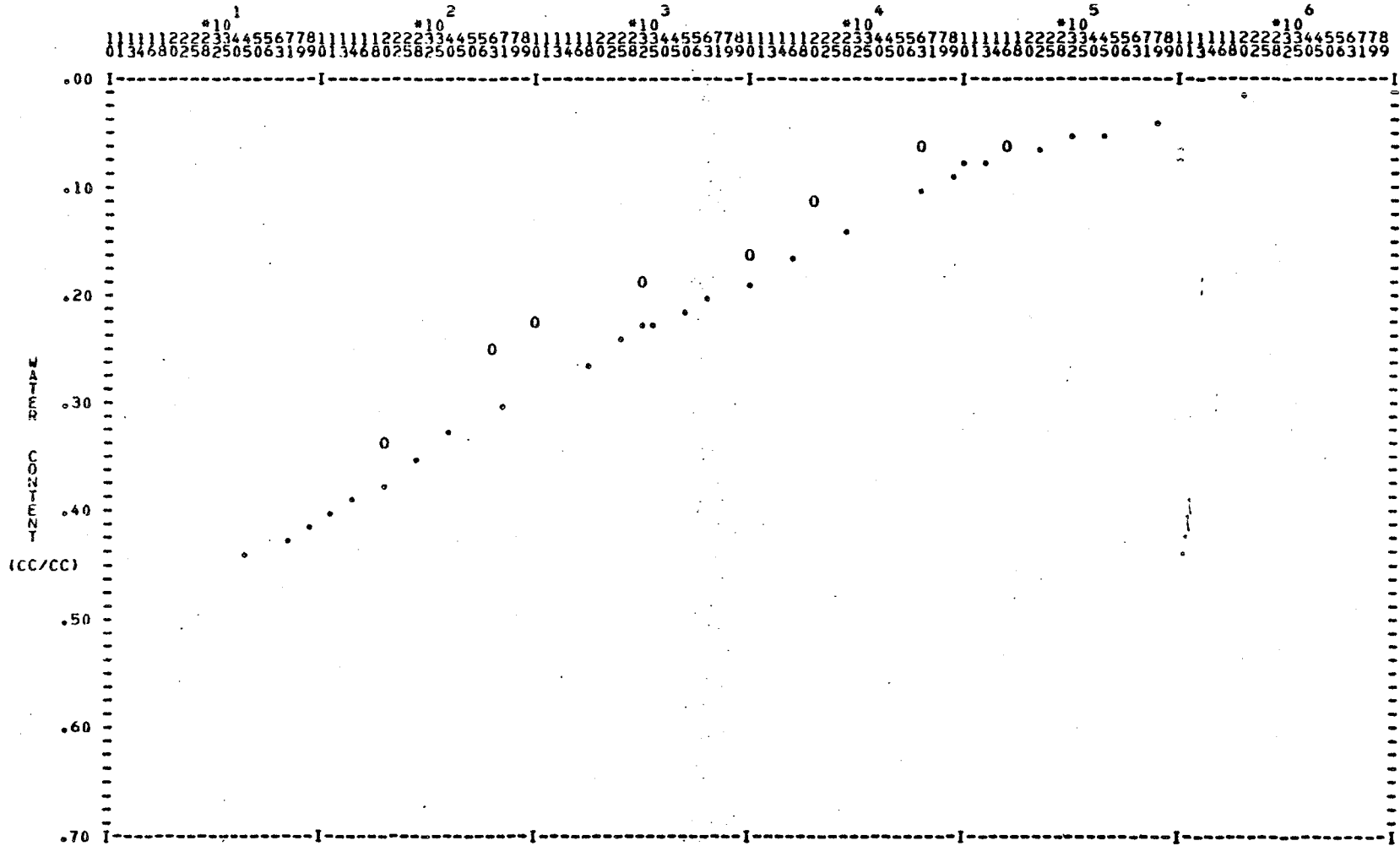
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.018	0.19225E+06
0.041	0.79609E+05
0.049	0.45626E+05
0.056	0.30107E+05
0.063	0.21595E+05
0.069	0.16371E+05
0.074	0.12910E+05
0.080	0.10486E+05
0.084	0.87145E+04
0.106	0.63180E+04
0.141	0.27203E+04
0.168	0.15215E+04
0.188	0.95165E+03
0.202	0.64759E+03
0.212	0.47807E+03
0.220	0.37166E+03
0.227	0.30005E+03
0.234	0.24918E+03
0.261	0.17655E+03
0.300	0.73487E+02
0.329	0.41428E+02
0.351	0.26706E+02
0.369	0.18946E+02
0.386	0.14277E+02
0.400	0.11090E+02
0.412	0.88236E+01
0.422	0.71522E+01
0.440	0.42407E+01

B-286

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 143

O MEASURED • PREDICTED

SUM OF (ABS(LOG(PSIM))-LOG(PPIP))) = 0.3226E+01

B-287

SOIL HORIZON NUMBER 144 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.50 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.076	0.150E+05
0.088	0.600E+04
0.124	0.200E+04
0.168	0.100E+04
0.196	0.330E+03
0.232	0.100E+03
0.249	0.600E+02
0.337	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.9	0.069
2.00	10.2	0.033
3.00	12.4	0.022
4.00	14.2	0.019
5.00	15.9	0.016
6.00	17.3	0.015
7.00	18.7	0.014
8.00	20.0	0.013
9.00	21.2	0.012
10.00	22.3	0.011
20.00	31.2	0.089
30.00	38.3	0.071
40.00	43.6	0.053
50.00	47.2	0.036
60.00	49.7	0.025
70.00	51.6	0.020
80.00	53.4	0.017
90.00	54.9	0.016
100.00	56.4	0.015
200.00	66.7	0.103
300.00	73.6	0.069
400.00	78.9	0.053
500.00	83.0	0.041
600.00	86.4	0.034
700.00	89.4	0.030
800.00	92.0	0.026
900.00	94.2	0.022
1000.00	96.1	0.019
2000.00	100.0	0.039

PREDICTED MOISTURE CHARACTERISTIC DATA

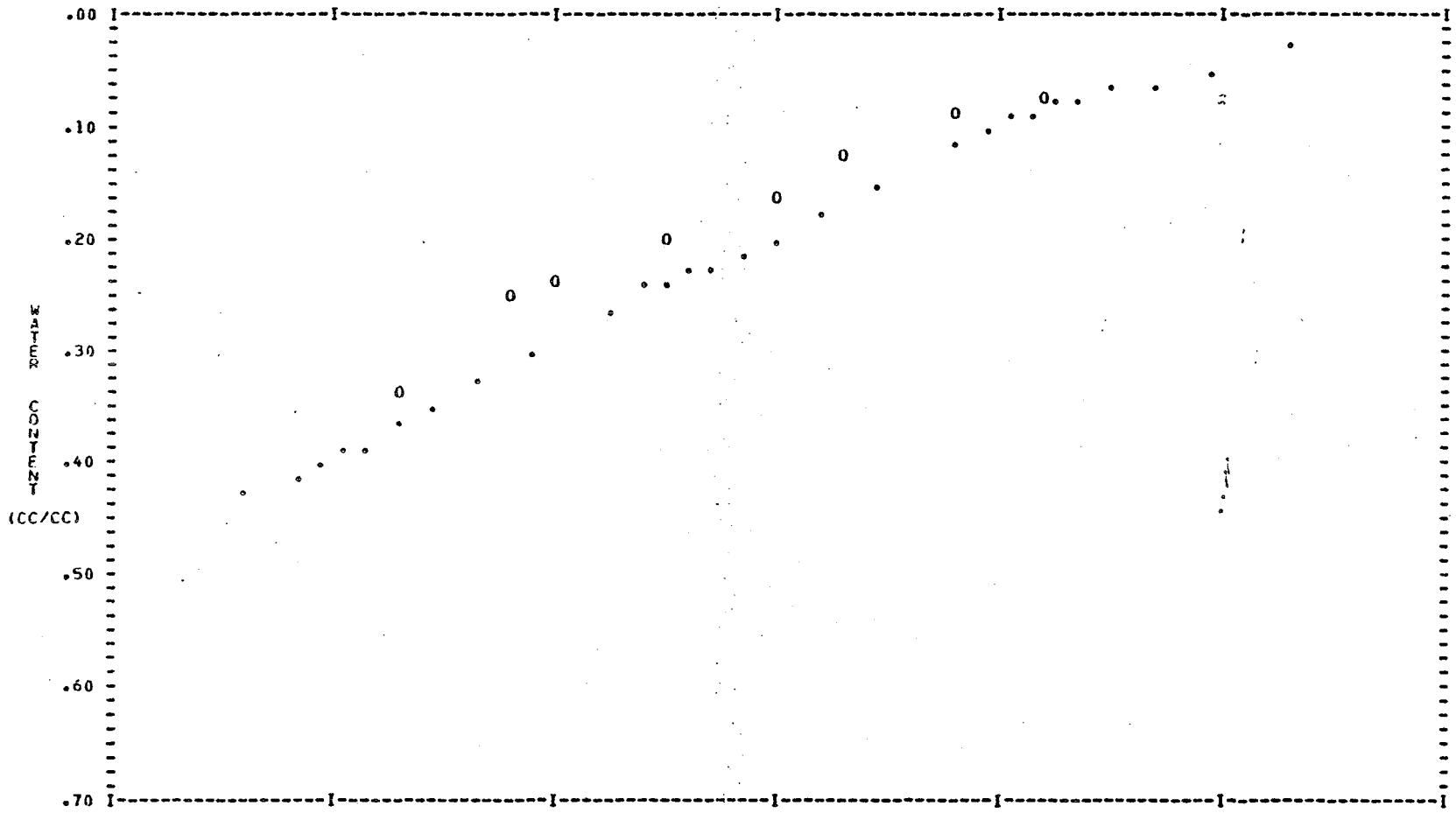
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.022	0.20367E+06
0.049	0.84312E+05
0.058	0.48253E+05
0.065	0.31791E+05
0.072	0.22772E+05
0.078	0.17242E+05
0.084	0.13583E+05
0.089	0.11022E+05
0.094	0.91533E+04
0.116	0.66176E+04
0.151	0.28425E+04
0.178	0.15883E+04
0.197	0.99182E+03
0.210	0.67413E+03
0.220	0.49772E+03
0.228	0.38697E+03
0.235	0.31242E+03
0.242	0.25945E+03
0.267	0.18312E+03
0.304	0.76223E+02
0.331	0.42626E+02
0.351	0.27410E+02
0.368	0.19341E+02
0.382	0.14490E+02
0.394	0.11249E+02
0.404	0.89742E+01
0.413	0.73143E+01
0.426	0.40995E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 144

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.29657E+01

SOIL HORIZON NUMBER 145 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.128	0.150E+05
0.134	0.800E+04
0.159	0.200E+04
0.164	0.100E+04
0.183	0.330E+03
0.222	0.100E+03
0.242	0.600E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.9	0.129
2.00	15.9	0.030
3.00	17.8	0.019
4.00	19.5	0.016
5.00	20.9	0.014
6.00	22.2	0.013
7.00	23.5	0.012
8.00	24.6	0.011
9.00	25.7	0.011
10.00	26.7	0.010
20.00	34.9	0.082
30.00	41.3	0.064
40.00	46.0	0.047
50.00	49.3	0.033
60.00	51.7	0.024
70.00	53.7	0.020
80.00	55.5	0.017
90.00	57.0	0.015
100.00	58.4	0.014
200.00	67.7	0.093
300.00	73.6	0.059
400.00	78.4	0.049
500.00	82.3	0.039
600.00	85.6	0.033
700.00	88.6	0.030
800.00	91.2	0.026
900.00	93.3	0.022
1000.00	95.1	0.018
2000.00	100.0	0.049

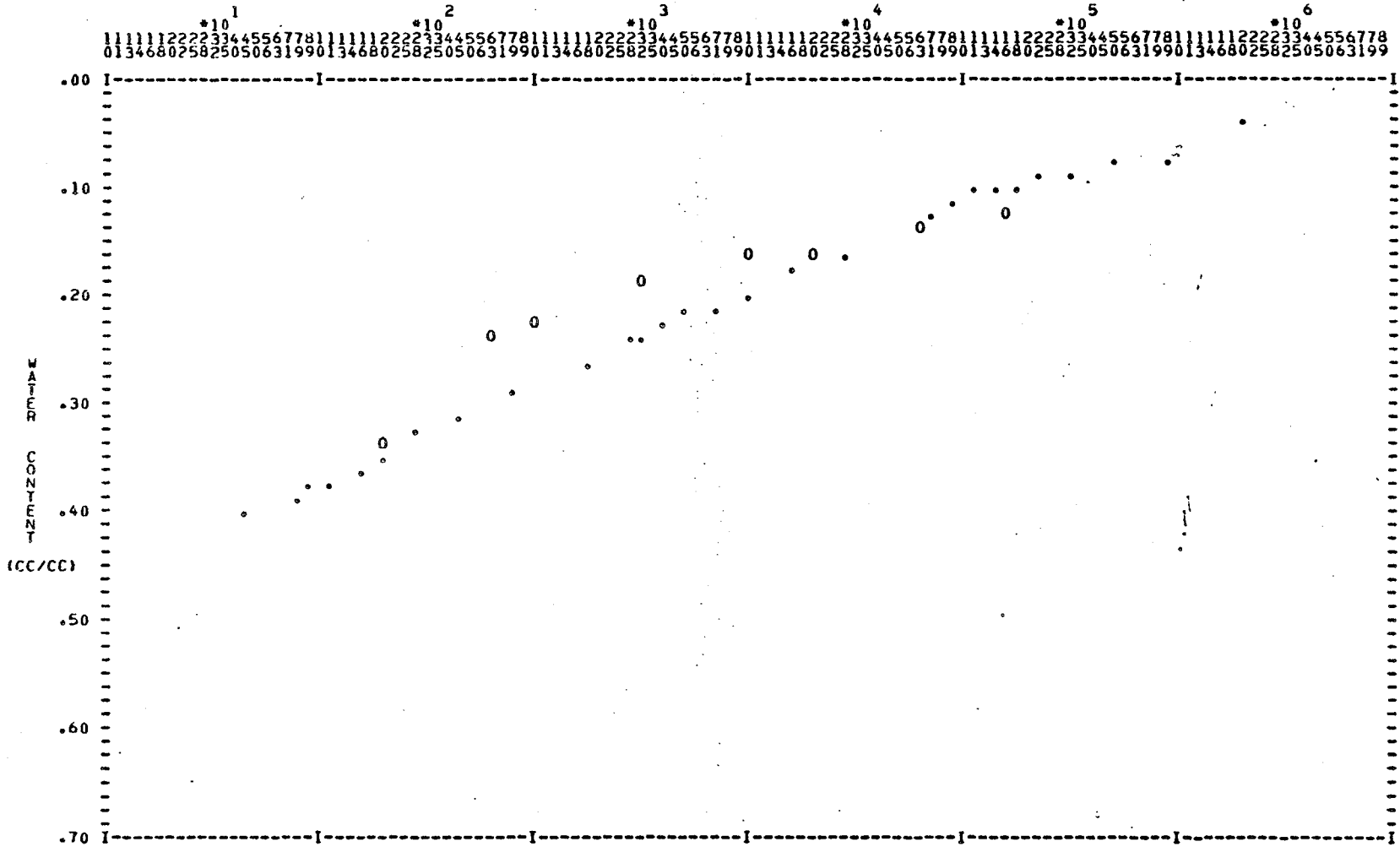
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.033	0.20959E+06
0.069	0.86469E+05
0.077	0.49353E+05
0.083	0.32515E+05
0.089	0.23309E+05
0.094	0.17667E+05
0.099	0.13932E+05
0.103	0.11317E+05
0.108	0.94075E+04
0.127	0.68280E+04
0.157	0.29197E+04
0.180	0.16266E+04
0.196	0.10214E+04
0.208	0.70294E+03
0.217	0.52301E+03
0.225	0.40654E+03
0.231	0.32646E+03
0.237	0.26885E+03
0.259	0.18819E+03
0.291	0.77298E+02
0.313	0.44008E+02
0.331	0.28383E+02
0.345	0.20105E+02
0.358	0.15164E+02
0.370	0.11778E+02
0.379	0.93650E+01
0.387	0.75824E+01
0.401	0.44845E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



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SOIL HORIZON NUMBER 145

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.2980E+01

SOIL HORIZON NUMBER 146 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.19 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.063	0.150E+05
0.064	0.600E+04
0.100	0.200E+04
0.217	0.100E+04
0.245	0.330E+03
0.297	0.100E+03
0.333	0.600E+02
0.447	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.4	0.044
2.00	7.3	0.029
3.00	9.3	0.020
4.00	11.0	0.017
5.00	13.0	0.015
6.00	15.0	0.014
7.00	16.5	0.013
8.00	17.5	0.012
9.00	18.5	0.011
10.00	18.5	0.010
20.00	26.3	0.078
30.00	32.8	0.065
40.00	37.9	0.051
50.00	41.2	0.033
60.00	43.5	0.020
70.00	44.5	0.014
80.00	45.7	0.012
90.00	46.9	0.012
100.00	48.1	0.012
200.00	58.5	0.104
300.00	66.5	0.080
400.00	72.8	0.063
500.00	77.8	0.050
600.00	82.1	0.043
700.00	86.0	0.039
800.00	89.3	0.033
900.00	92.1	0.028
1000.00	94.4	0.023
2000.00	100.0	0.056

PREDICTED MOISTURE CHARACTERISTIC DATA

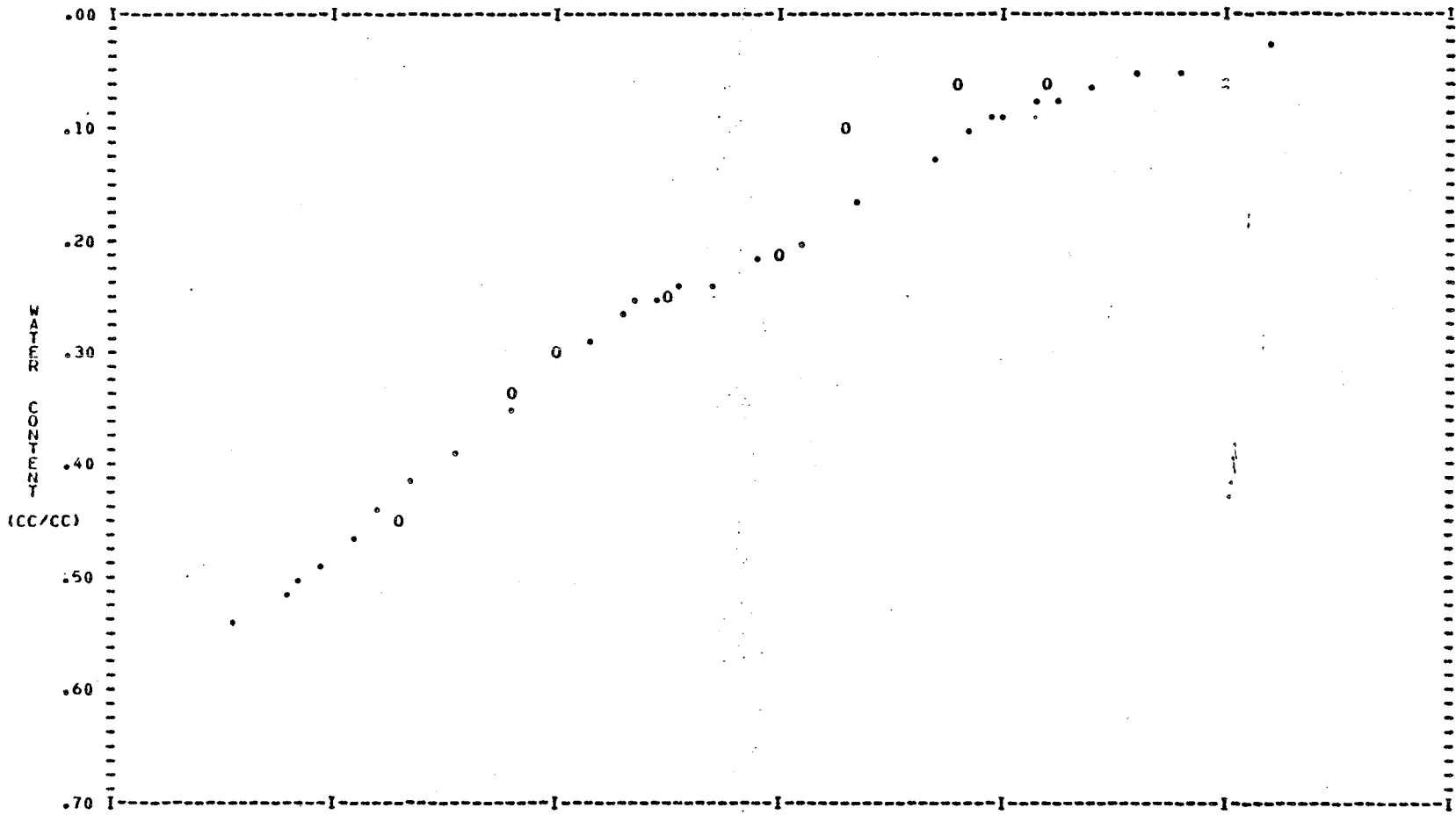
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.020	0.15709E+06
0.046	0.65412E+05
0.056	0.37623E+05
0.065	0.24805E+05
0.075	0.17753E+05
0.087	0.13430E+05
0.087	0.10564E+05
0.093	0.85643E+04
0.099	0.71034E+04
0.123	0.51108E+04
0.163	0.22115E+04
0.195	0.12434E+04
0.233	0.77234E+03
0.284	0.51104E+03
0.333	0.36617E+03
0.384	0.28405E+03
0.441	0.23330E+03
0.483	0.19801E+03
0.500	0.14590E+03
0.536	0.11921E+03
0.536	0.61917E+02
0.536	0.34487E+02
0.536	0.22449E+02
0.536	0.15997E+02
0.536	0.12028E+02
0.536	0.93338E+01
0.536	0.74157E+01
0.536	0.60001E+01
0.536	0.34712E+01

B-292

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 0134680255825050631990134680255825050631990134680255825050631990134680255825050631990134680255825050631990134680255825050631990



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SOIL HORIZON NUMBER 146

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSTM)-LOG(PSIP))) = 0.18965E+01

SOIL HORIZON NUMBER 147 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.65 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.198	0.150E+05
0.201	0.600E+04
0.236	0.200E+04
0.216	0.100E+04
0.229	0.330E+03
0.264	0.100E+03
0.277	0.640E+02
0.332	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	30.6	0.306
2.00	30.9	0.003
3.00	31.1	0.002
4.00	31.3	0.002
5.00	31.4	0.001
6.00	31.6	0.001
7.00	31.7	0.001
8.00	31.8	0.001
9.00	31.9	0.001
10.00	32.0	0.001
20.00	32.7	0.007
30.00	33.3	0.006
40.00	33.5	0.005
50.00	33.7	0.003
60.00	33.8	0.002
70.00	33.9	0.001
80.00	34.0	0.001
90.00	34.1	0.001
100.00	34.2	0.001
200.00	34.7	0.005
300.00	35.0	0.003
400.00	35.1	0.001
500.00	35.3	0.002
600.00	35.5	0.002
700.00	35.6	0.001
800.00	35.7	0.001
900.00	35.8	0.001
1000.00	35.9	0.001
2000.00	100.0	0.151

PREDICTED MOISTURE CHARACTERISTIC DATA

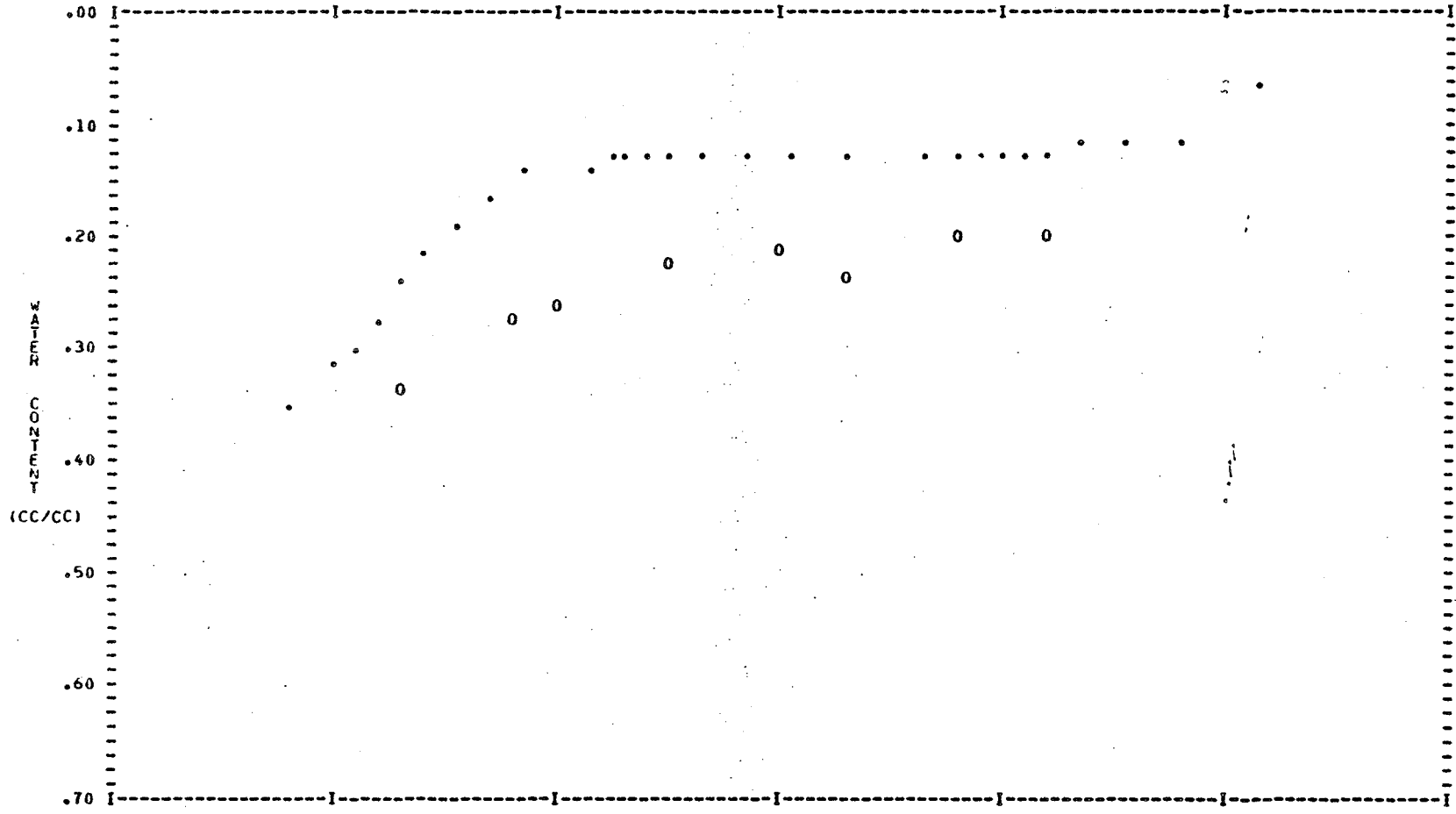
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.058	0.14537E+06
0.117	0.60302E+05
0.118	0.34510E+05
0.118	0.22677E+05
0.119	0.16194E+05
0.119	0.12225E+05
0.120	0.96040E+04
0.120	0.77735E+04
0.121	0.64402E+04
0.122	0.46136E+04
0.125	0.19946E+04
0.127	0.11290E+04
0.128	0.70992E+03
0.129	0.47149E+03
0.130	0.33166E+03
0.130	0.25146E+03
0.130	0.20298E+03
0.131	0.17125E+03
0.134	0.14447E+03
0.142	0.71146E+02
0.159	0.49741E+02
0.184	0.33948E+02
0.211	0.25335E+02
0.270	0.19667E+02
0.304	0.15368E+02
0.313	0.12009E+02
0.349	0.95524E+01
0.349	0.59531E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 147 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.11671E+02

SOIL HORIZON NUMBER 148 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 0.99 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.086	0.150E+05
0.092	0.500E+04
0.107	0.200E+04
0.247	0.100E+04
0.292	0.330E+03
0.374	0.100E+03
0.453	0.500E+02
0.543	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	5.0	0.060
2.00	7.9	0.018
3.00	9.1	0.013
4.00	10.4	0.013
5.00	11.5	0.011
6.00	12.6	0.010
7.00	13.5	0.009
8.00	14.4	0.009
9.00	15.2	0.008
10.00	15.9	0.007
20.00	21.4	0.055
30.00	25.9	0.045
40.00	30.1	0.042
50.00	33.8	0.037
60.00	37.4	0.036
70.00	41.1	0.037
80.00	44.6	0.035
90.00	47.9	0.033
100.00	50.9	0.030
200.00	78.8	0.279
300.00	90.2	0.113
400.00	94.6	0.044
500.00	96.5	0.019
600.00	97.5	0.010
700.00	98.4	0.008
800.00	99.0	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

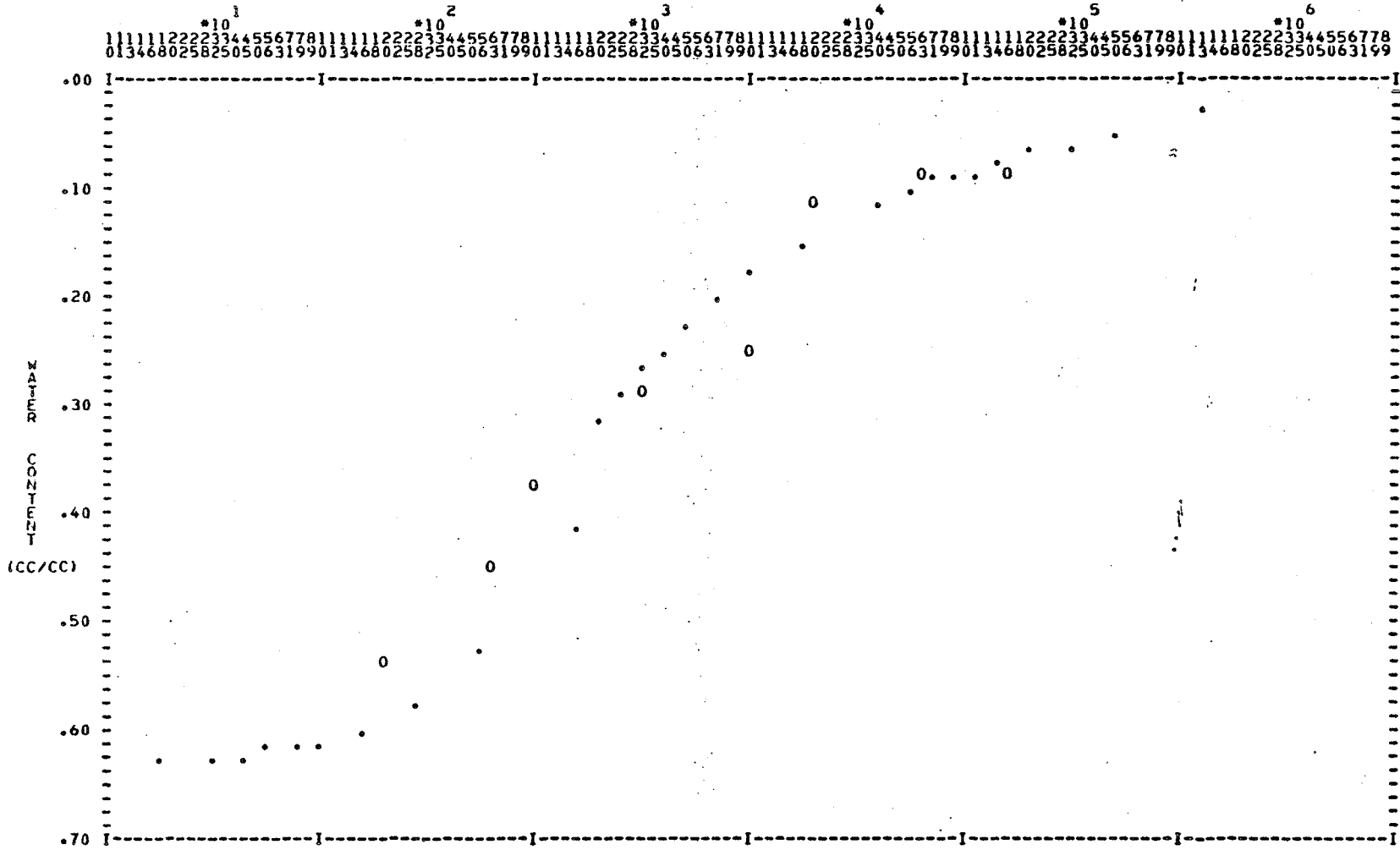
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.12261E+06
0.053	0.51942E+06
0.061	0.30326E+06
0.069	0.20074E+06
0.075	0.14378E+06
0.082	0.10868E+06
0.088	0.85395E+05
0.093	0.69101E+05
0.097	0.57217E+05
0.117	0.40804E+05
0.148	0.17602E+05
0.175	0.10264E+05
0.200	0.67622E+04
0.223	0.49092E+04
0.244	0.37818E+04
0.268	0.29958E+04
0.290	0.24305E+04
0.309	0.20112E+04
0.406	0.14971E+04
0.529	0.56575E+03
0.579	0.27891E+03
0.599	0.16010E+03
0.608	0.10437E+03
0.614	0.76570E+02
0.618	0.57358E+02
0.621	0.43203E+02
0.623	0.31677E+02
0.625	0.18763E+02

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 148

O MEASURED • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.20725E+01

SOIL HORIZON NUMBER 149 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.39 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.051	0.150E+05
0.064	0.600E+04
0.101	0.200E+04
0.167	0.100E+04
0.186	0.330E+03
0.232	0.100E+03
0.281	0.600E+02
0.431	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.5	0.065
2.00	9.0	0.017
4.00	10.7	0.013
6.00	11.1	0.012
8.00	11.8	0.011
10.00	12.2	0.010
15.00	15.5	0.009
20.00	18.2	0.008
30.00	20.5	0.007
40.00	24.3	0.007
50.00	28.1	0.048
60.00	31.6	0.037
70.00	35.4	0.035
80.00	39.3	0.038
90.00	43.3	0.040
100.00	47.7	0.039
200.00	50.3	0.033
300.00	59.3	0.290
400.00	91.0	0.118
500.00	95.4	0.044
600.00	97.2	0.018
700.00	98.0	0.009
800.00	98.9	0.007
900.00	99.4	0.005
1000.00	99.7	0.003
2000.00	99.8	0.001
	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

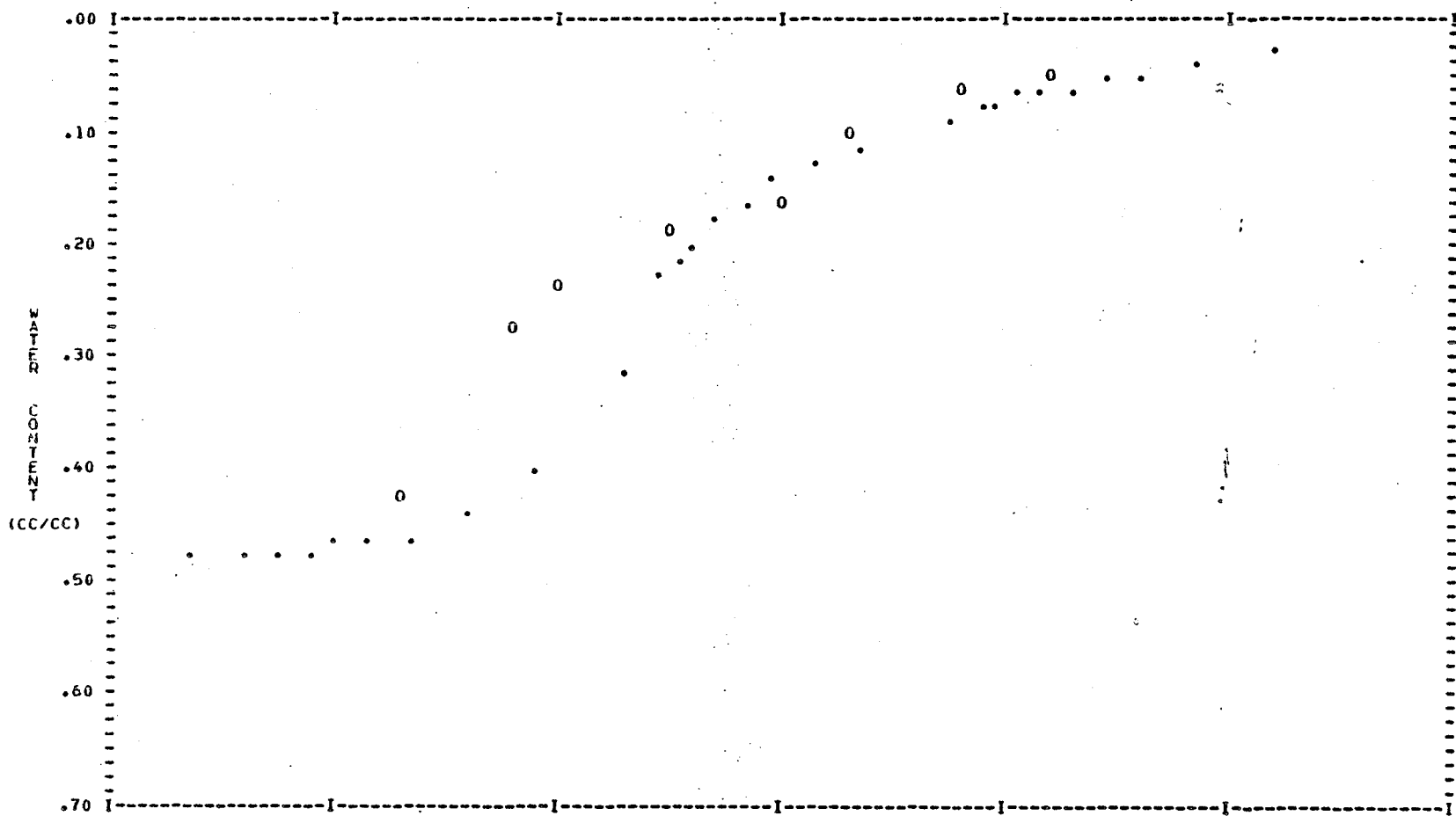
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.16473E+06
0.042	0.70025E+05
0.048	0.40931E+05
0.053	0.27057E+05
0.058	0.19344E+05
0.063	0.14597E+05
0.067	0.11443E+05
0.070	0.92421E+04
0.074	0.76388E+04
0.087	0.54038E+04
0.107	0.23157E+04
0.125	0.13642E+04
0.142	0.60997E+03
0.159	0.67240E+03
0.178	0.52368E+03
0.197	0.41612E+03
0.215	0.33749E+03
0.231	0.27866E+03
0.308	0.20503E+03
0.405	0.77408E+02
0.443	0.37891E+02
0.458	0.21483E+02
0.464	0.13899E+02
0.468	0.10189E+02
0.471	0.75931E+01
0.473	0.59996E+01
0.475	0.21441E+01

B-298

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

#10 1 #10 2 #10 3 #10 4 #10 5 #10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-299

SOIL HORIZON NUMBER 149 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(P5IH)-LOG(P5IP))) = 0.26096E+01

SOIL HORIZON NUMBER 150 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.061	0.150E+05
0.090	0.600E+04
0.123	0.200E+04
0.204	0.100E+04
0.223	0.330E+03
0.255	0.160E+03
0.285	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	8.8	0.088
2.00	10.7	0.017
3.00	11.1	0.004
4.00	12.9	0.012
5.00	14.5	0.011
6.00	14.9	0.009
7.00	15.5	0.008
8.00	16.5	0.008
9.00	17.5	0.007
10.00	17.9	0.006
20.00	22.4	0.044
30.00	25.7	0.034
40.00	29.1	0.034
50.00	32.3	0.032
60.00	35.5	0.036
70.00	39.8	0.039
80.00	43.5	0.038
90.00	47.7	0.036
100.00	50.9	0.033
200.00	78.7	0.262
300.00	90.3	0.116
400.00	94.7	0.044
500.00	96.6	0.019
600.00	97.5	0.010
700.00	98.4	0.008
800.00	99.0	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

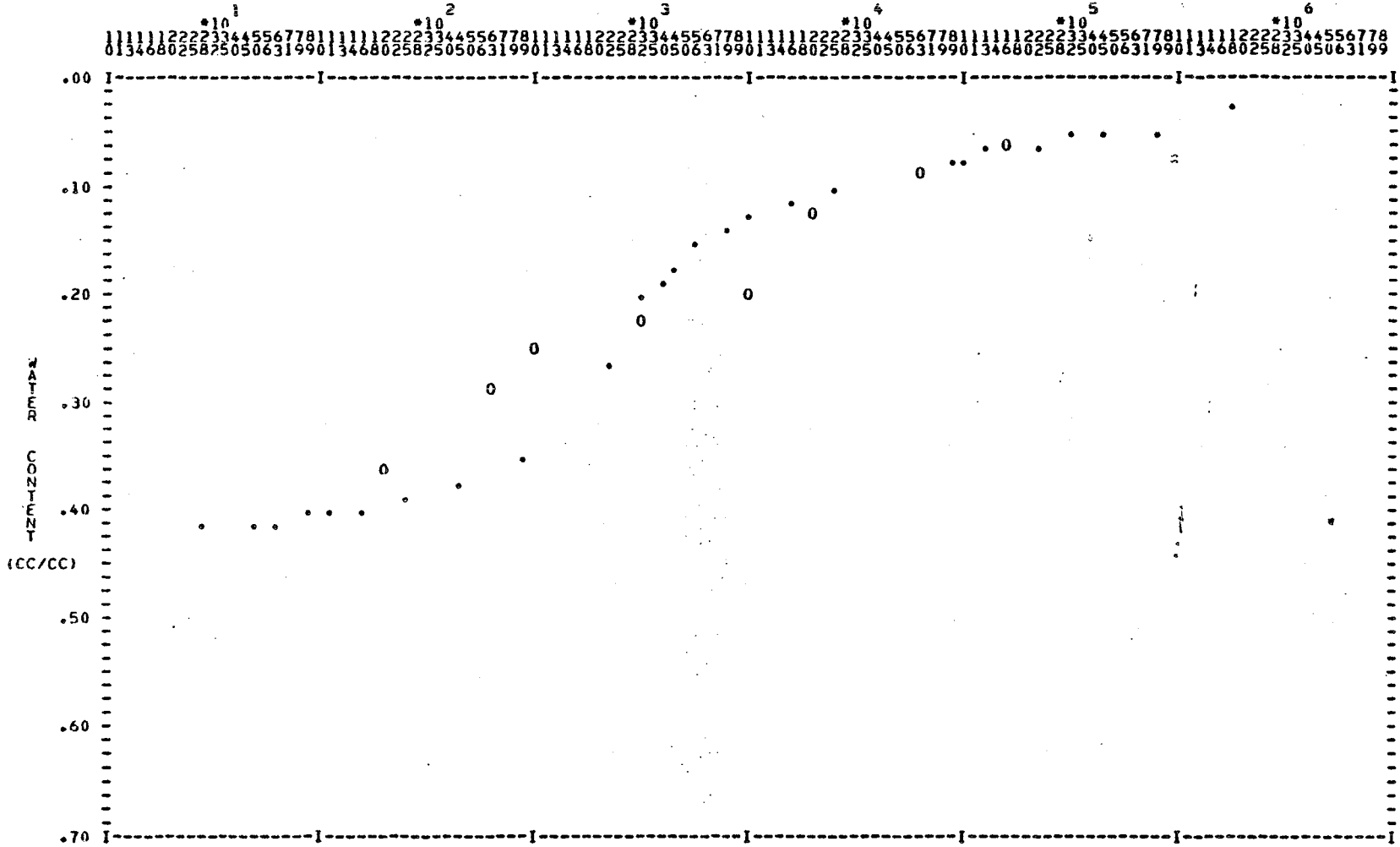
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.022	0.18751E+06
0.046	0.79541E+05
0.051	0.46380E+05
0.055	0.30514E+05
0.059	0.21863E+05
0.063	0.16477E+05
0.066	0.12912E+05
0.069	0.10421E+05
0.072	0.86077E+04
0.075	0.60739E+04
0.099	0.25888E+04
0.113	0.15249E+04
0.126	0.10152E+04
0.140	0.75807E+03
0.156	0.59333E+03
0.172	0.47227E+03
0.187	0.38320E+03
0.201	0.31633E+03
0.266	0.22239E+03
0.348	0.14747E+03
0.381	0.12249E+03
0.394	0.24704E+02
0.399	0.16069E+02
0.403	0.11783E+02
0.406	0.88251E+01
0.408	0.66489E+01
0.409	0.48811E+01
0.410	0.29066E+01

B-300

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 150

O MEASURED . PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.25040E+01

B-301

SOIL HORIZON NUMBER 151 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.61 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.134	0.150E+05
0.161	0.600E+04
0.190	0.200E+04
0.245	0.100E+04
0.261	0.330E+03
0.293	0.100E+03
0.325	0.600E+02
0.362	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	20.0	0.204
2.00	21.3	0.009
3.00	22.0	0.007
4.00	22.7	0.007
5.00	23.4	0.006
6.00	23.9	0.006
7.00	24.4	0.005
8.00	24.9	0.005
9.00	25.3	0.004
10.00	25.7	0.004
20.00	28.3	0.026
30.00	30.0	0.020
40.00	31.6	0.023
50.00	33.1	0.025
60.00	34.2	0.032
70.00	42.0	0.038
80.00	46.0	0.039
90.00	49.6	0.036
100.00	52.9	0.033
200.00	79.6	0.267
300.00	90.4	0.109
400.00	94.6	0.041
500.00	96.4	0.018
600.00	97.2	0.011
700.00	98.3	0.008
800.00	98.9	0.006
900.00	99.3	0.004
1000.00	99.5	0.002
2000.00	100.0	0.005

PREDICTED MOISTURE CHARACTERISTIC DATA

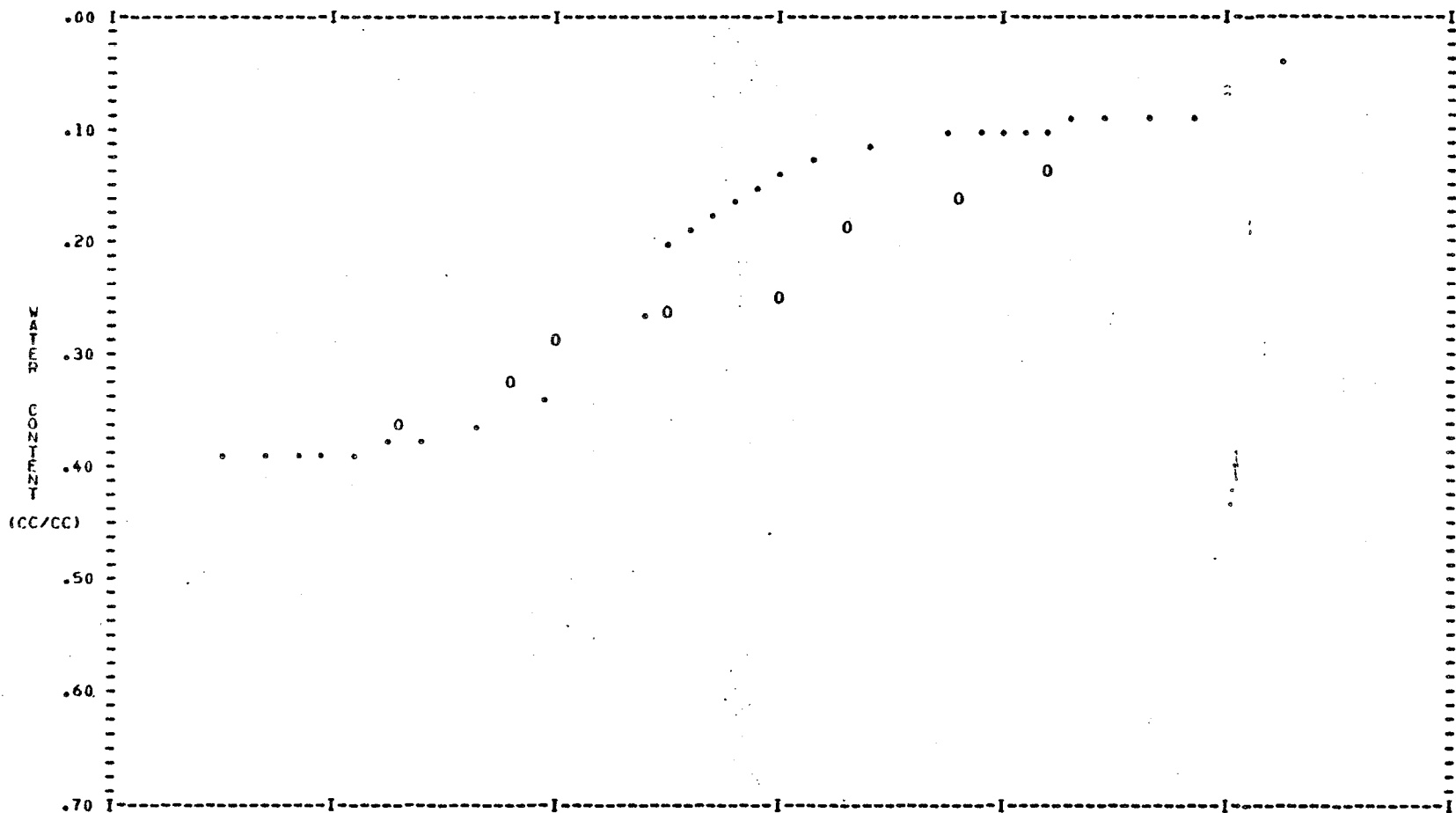
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.042	0.17277E+06
0.085	0.74349E+05
0.088	0.43815E+05
0.090	0.28997E+05
0.093	0.20718E+05
0.095	0.15607E+05
0.097	0.12221E+05
0.099	0.98551E+04
0.100	0.81270E+04
0.106	0.56954E+04
0.115	0.24381E+04
0.123	0.14758E+04
0.133	0.10077E+04
0.144	0.77282E+03
0.158	0.61518E+03
0.173	0.49180E+03
0.188	0.39890E+03
0.201	0.32284E+03
0.260	0.23911E+03
0.334	0.90404E+02
0.363	0.44380E+02
0.375	0.25553E+02
0.380	0.16902E+02
0.384	0.12416E+02
0.387	0.93067E+01
0.389	0.70117E+01
0.390	0.51389E+01
0.391	0.30229E+01

B-302

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1111122223344556778111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025325050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199013468025825050631990



B-303

0 MEASURED 1 PREDICTED SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.44042E+01

SOIL HORIZON NUMBER 152 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.62 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.099	0.150E+05
0.117	0.600E+04
0.143	0.200E+04
0.194	0.100E+04
0.215	0.330E+03
0.244	0.100E+03
0.291	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	15.2	0.152
2.00	15.7	0.005
3.00	16.0	0.004
4.00	16.6	0.005
5.00	17.0	0.004
6.00	17.4	0.004
7.00	17.8	0.003
8.00	18.1	0.003
9.00	18.3	0.003
10.00	18.5	0.002
20.00	20.0	0.016
30.00	21.1	0.013
40.00	23.3	0.022
50.00	25.5	0.022
60.00	28.3	0.028
70.00	33.1	0.046
80.00	37.8	0.047
90.00	42.2	0.044
100.00	46.6	0.043
200.00	78.7	0.325
300.00	91.1	0.125
400.00	95.2	0.043
500.00	97.7	0.025
600.00	98.1	0.009
700.00	98.8	0.007
800.00	99.3	0.005
900.00	99.6	0.003
1000.00	99.7	0.001
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

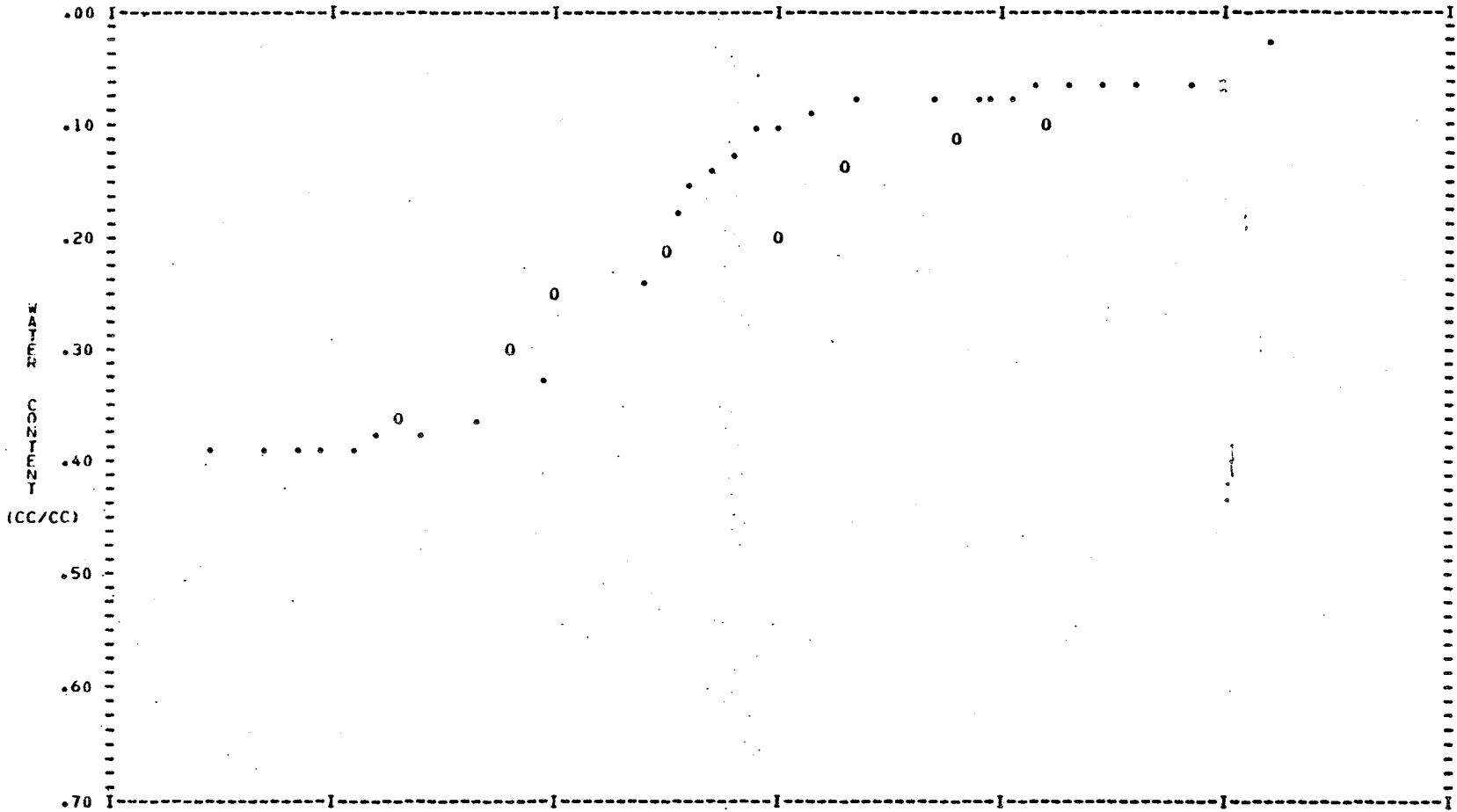
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.15652E+06
0.062	0.68409E+05
0.064	0.40720E+05
0.065	0.27011E+05
0.067	0.19306E+05
0.068	0.14538E+05
0.070	0.11374E+05
0.071	0.91611E+04
0.072	0.75492E+04
0.075	0.52568E+04
0.081	0.32834E+04
0.087	0.14046E+04
0.094	0.97407E+03
0.104	0.78413E+03
0.120	0.64026E+03
0.138	0.51509E+03
0.156	0.41814E+03
0.172	0.34343E+03
0.243	0.25017E+03
0.330	0.19363E+03
0.463	0.14514E+03
0.679	0.10293E+03
0.979	0.76377E+02
1.383	0.51205E+02
1.985	0.39023E+02
2.986	0.27606E+02
4.387	0.14854E+02
6.388	0.27651E+01

B-304

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-305

SOIL HORIZON NUMBER 152

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.44893E+01

SOIL HORIZON NUMBER 153 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.52 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.062	0.150E+05
0.074	0.600E+04
0.084	0.200E+04
0.116	0.100E+04
0.146	0.330E+03
0.172	0.100E+03
0.255	0.600E+02
0.398	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.9	0.099
2.00	10.0	0.003
3.00	10.0	0.003
4.00	10.0	0.003
5.00	10.0	0.003
6.00	10.0	0.003
7.00	10.0	0.003
8.00	10.0	0.002
9.00	10.0	0.002
10.00	10.0	0.002
15.00	10.0	0.002
20.00	10.0	0.011
30.00	10.0	0.011
40.00	10.0	0.013
50.00	10.0	0.013
60.00	10.0	0.028
70.00	10.0	0.043
80.00	10.0	0.047
90.00	10.0	0.046
100.00	10.0	0.042
200.00	10.0	0.399
300.00	10.0	0.141
400.00	10.0	0.047
500.00	10.0	0.016
600.00	10.0	0.007
700.00	10.0	0.005
800.00	10.0	0.004
900.00	10.0	0.002
1000.00	10.0	0.001
2000.00	100.0	0.003

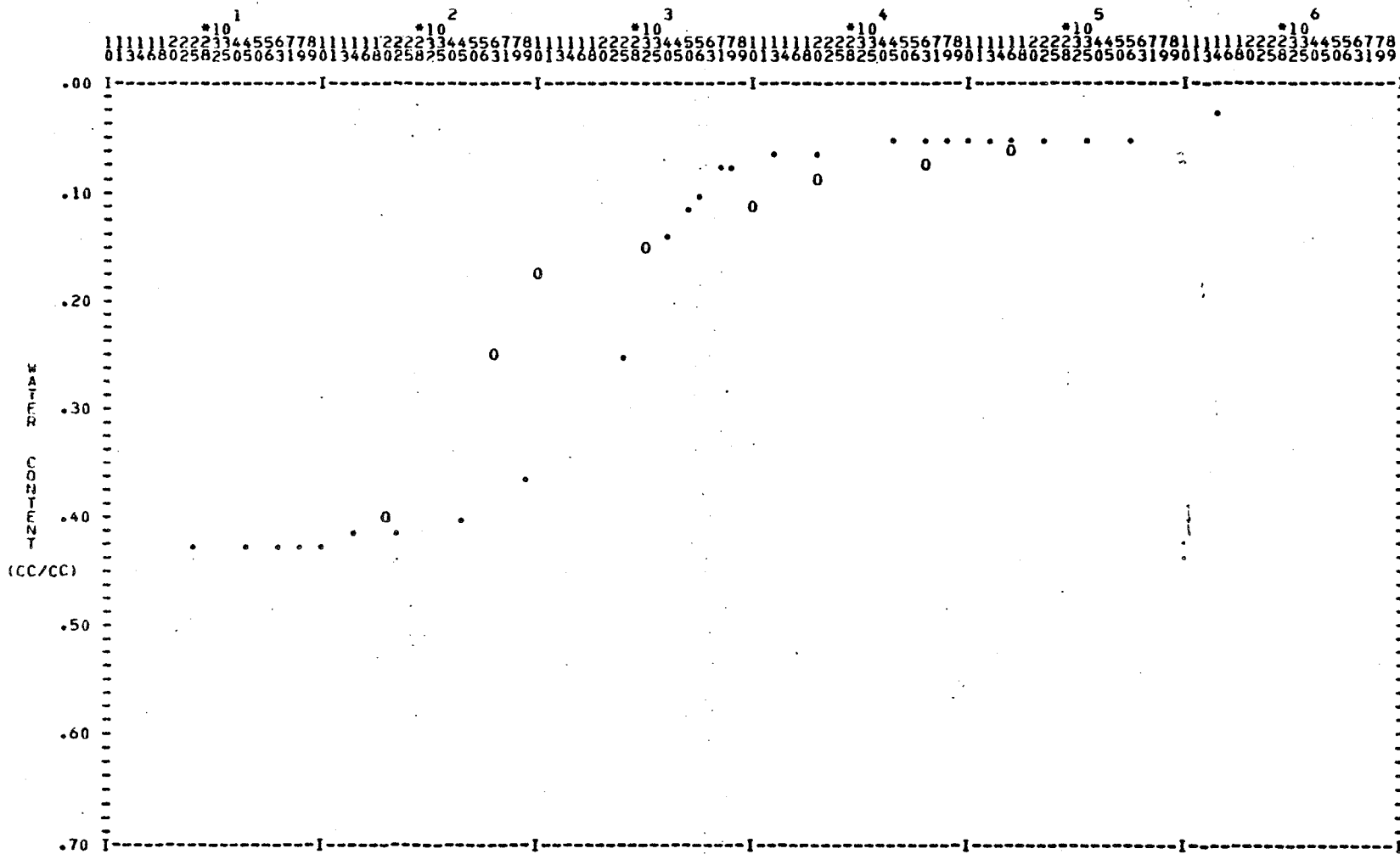
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.022	0.13465E+06
0.044	0.59185E+05
0.046	0.35345E+05
0.047	0.23462E+05
0.048	0.16770E+05
0.049	0.12625E+05
0.050	0.98740E+04
0.051	0.79496E+04
0.052	0.65479E+04
0.055	0.45477E+04
0.059	0.20150E+04
0.064	0.12342E+04
0.070	0.83426E+03
0.079	0.70023E+03
0.094	0.58604E+03
0.113	0.47577E+03
0.133	0.38856E+03
0.151	0.32084E+03
0.245	0.24056E+03
0.360	0.88486E+02
0.400	0.42333E+02
0.414	0.25237E+02
0.418	0.14552E+02
0.421	0.10595E+02
0.423	0.79993E+01
0.424	0.59839E+01
0.425	0.43283E+01
0.426	0.25572E+01

B-306

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-307

SOIL HORIZON NUMBER 154 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 0.95 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.054	0.150E+05
0.071	0.600E+04
0.093	0.200E+04
0.149	0.100E+04
0.193	0.330E+03
0.267	0.100E+03
0.346	0.500E+02
0.511	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	9.3	0.093
2.00	11.0	0.017
3.00	12.2	0.012
4.00	13.3	0.011
5.00	14.4	0.010
6.00	15.3	0.009
7.00	16.2	0.009
8.00	17.0	0.008
9.00	17.8	0.008
10.00	18.5	0.007
20.00	24.2	0.057
30.00	29.3	0.051
40.00	33.4	0.041
50.00	36.2	0.028
60.00	37.9	0.017
70.00	38.9	0.010
80.00	39.7	0.008
90.00	40.6	0.008
100.00	41.5	0.009
200.00	54.4	0.129
300.00	67.5	0.131
400.00	73.4	0.059
500.00	81.1	0.077
600.00	85.2	0.041
700.00	87.4	0.022
800.00	88.3	0.009
900.00	89.3	0.010
1000.00	89.7	0.004
2000.00	100.0	0.003

PREDICTED MOISTURE CHARACTERISTIC DATA

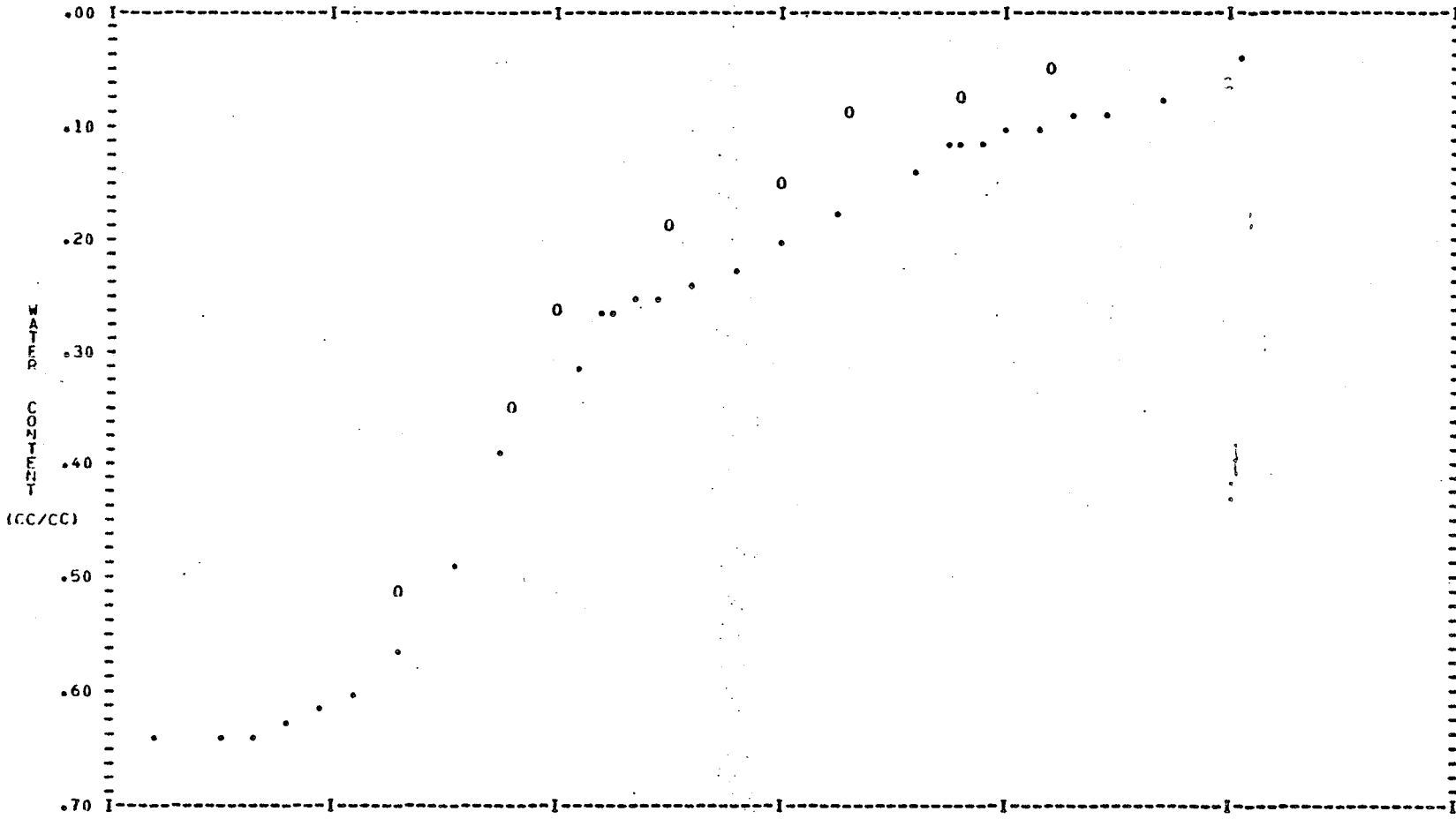
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.035	0.11813E+06
0.074	0.49487E+05
0.082	0.28701E+05
0.089	0.19018E+05
0.095	0.13663E+05
0.101	0.10362E+05
0.106	0.81702E+04
0.111	0.66335E+04
0.116	0.55103E+04
0.137	0.39828E+04
0.171	0.17448E+04
0.201	0.99001E+03
0.223	0.62051E+03
0.238	0.40930E+03
0.246	0.28780E+03
0.252	0.22108E+03
0.258	0.18170E+03
0.263	0.15567E+03
0.308	0.12516E+03
0.391	0.56353E+02
0.483	0.34262E+02
0.561	0.20642E+02
0.600	0.12719E+02
0.618	0.89531E+01
0.639	0.64872E+01
0.656	0.47204E+01
0.639	0.32442E+01
0.641	0.16482E+01

ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-309

SOIL HORIZON NUMBER 154

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) * 0.40616E+01

SOIL HORIZON NUMBER 155 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.36 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.057	0.150E+05
0.075	0.500E+04
0.103	0.200E+04
0.154	0.100E+04
0.182	0.730E+03
0.207	0.100E+03
0.219	0.500E+02
0.344	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.2	0.072
2.00	9.2	0.016
3.00	9.3	0.011
4.00	9.3	0.011
5.00	9.3	0.010
6.00	9.3	0.009
7.00	9.7	0.009
8.00	9.5	0.008
9.00	9.3	0.008
10.00	9.1	0.007
20.00	9.4	0.058
30.00	9.4	0.055
40.00	9.0	0.046
50.00	9.0	0.031
60.00	9.0	0.018
70.00	9.0	0.011
80.00	9.0	0.009
90.00	9.7	0.009
100.00	9.9	0.010
200.00	55.7	0.132
300.00	60.7	0.134
400.00	63.3	0.159
500.00	67.0	0.087
600.00	67.4	0.034
700.00	67.5	0.021
800.00	68.7	0.012
900.00	69.4	0.007
1000.00	69.5	0.002
2000.00	100.0	0.004

PREDICTED MOISTURE CHARACTERISTIC DATA

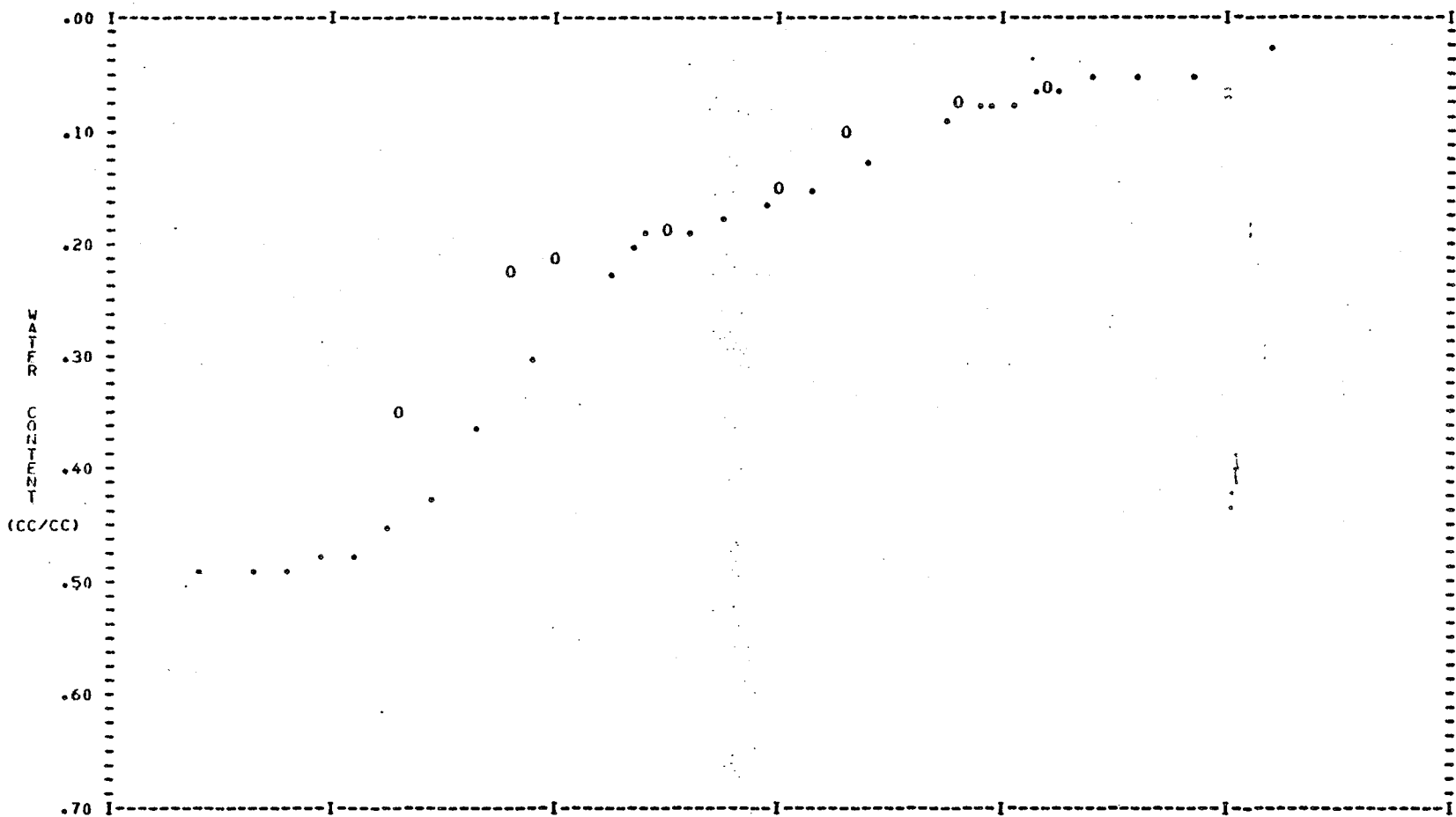
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.15913E+06
0.046	0.66916E+05
0.051	0.39016E+05
0.056	0.25939E+05
0.061	0.18679E+05
0.065	0.14192E+05
0.069	0.11207E+05
0.073	0.91100E+04
0.076	0.75757E+04
0.092	0.54942E+04
0.120	0.24337E+04
0.144	0.13857E+04
0.163	0.86587E+03
0.175	0.56946E+03
0.182	0.40099E+03
0.187	0.30809E+03
0.191	0.25319E+03
0.196	0.21674E+03
0.230	0.17274E+03
0.295	0.17674E+03
0.367	0.17314E+03
0.427	0.28401E+03
0.456	0.17320E+03
0.469	0.12100E+03
0.477	0.88000E+02
0.482	0.64081E+02
0.484	0.44499E+02
0.486	0.23911E+02

B-310

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-311

SOIL HORIZON NUMBER 155

0 MEASURED ;

0 PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19834E+01

SOIL HORIZON NUMBER 156 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.41 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.059	0.150E+05
0.076	0.600E+04
0.109	0.200E+04
0.166	0.100E+04
0.200	0.330E+03
0.214	0.100E+03
0.226	0.600E+02
0.361	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
2.00	9.1	0.018
3.00	10.3	0.012
4.00	11.1	0.011
5.00	12.5	0.010
6.00	13.5	0.010
7.00	14.4	0.009
8.00	15.2	0.009
9.00	16.1	0.008
10.00	16.8	0.008
20.00	23.0	0.062
30.00	28.6	0.056
40.00	33.1	0.045
50.00	36.2	0.031
60.00	38.1	0.019
70.00	39.3	0.012
80.00	40.3	0.010
90.00	41.3	0.010
100.00	42.4	0.011
200.00	55.5	0.131
300.00	69.6	0.131
400.00	84.2	0.156
500.00	92.6	0.084
600.00	95.9	0.033
700.00	97.8	0.020
800.00	99.0	0.012
900.00	99.6	0.006
1000.00	99.8	0.002
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

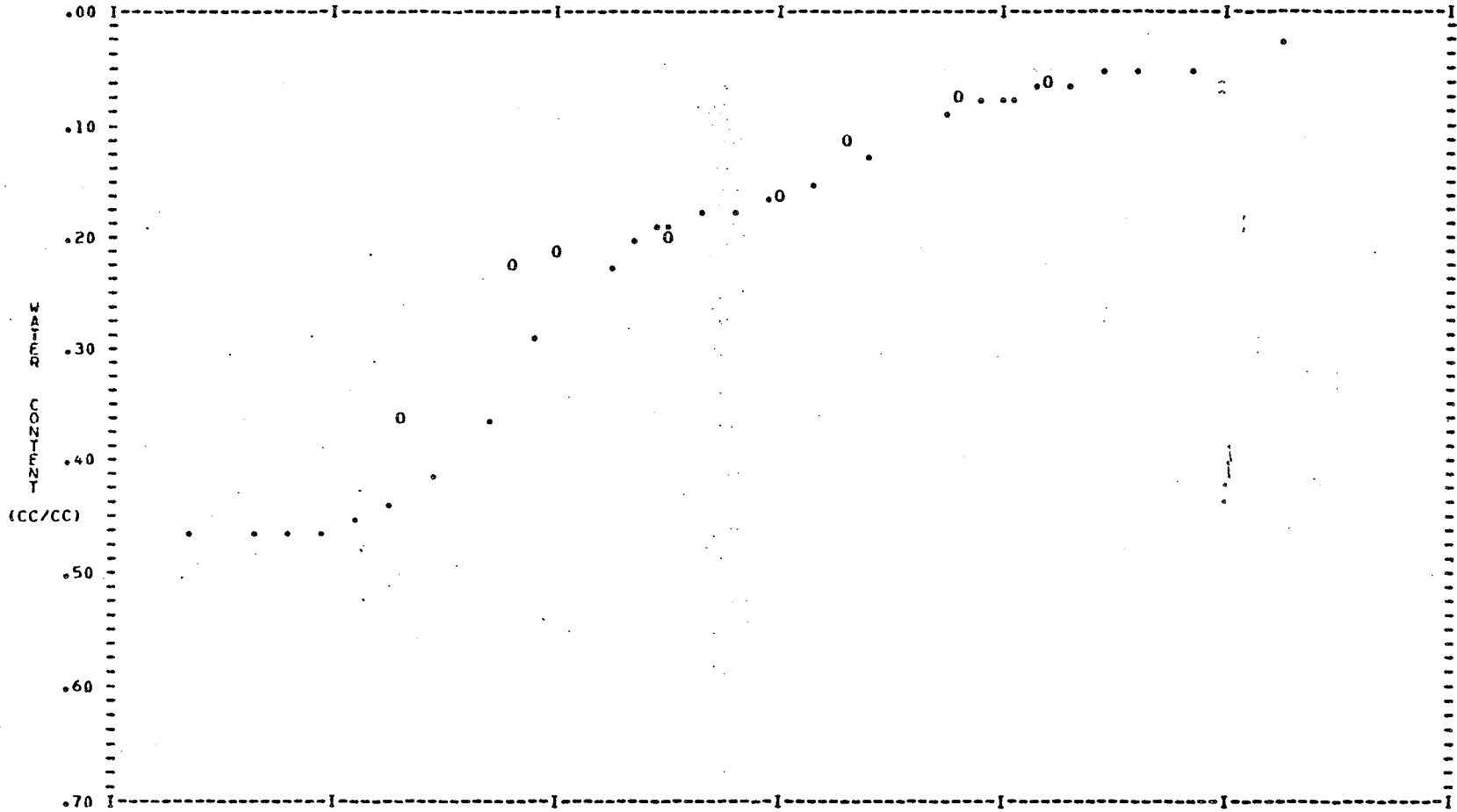
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.16876E+06
0.045	0.70680E+05
0.051	0.41047E+05
0.056	0.27248E+05
0.061	0.19608E+05
0.065	0.14893E+05
0.069	0.11758E+05
0.073	0.95577E+04
0.077	0.79474E+04
0.093	0.57660E+04
0.121	0.25350E+04
0.144	0.14383E+04
0.162	0.90064E+03
0.174	0.59753E+03
0.181	0.42541E+03
0.186	0.32764E+03
0.191	0.26780E+03
0.196	0.22746E+03
0.229	0.17907E+03
0.290	0.80243E+02
0.357	0.48915E+02
0.414	0.29349E+02
0.441	0.17866E+02
0.453	0.12511E+02
0.461	0.90309E+01
0.465	0.65399E+01
0.467	0.44502E+01
0.467	0.21768E+01

B-312

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-313

SOIL HORIZON NUMBER 156

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.20078E+01

SOIL HORIZON NUMBER 157 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.50 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT SOIL WATER PRESSURE
 (CC/CC) (-CM H2O)

0.115	0.150E+05
0.138	0.600E+04
0.169	0.200E+04
0.223	0.100E+04
0.249	0.330E+03
0.270	0.100E+03
0.276	0.600E+02
0.352	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. PERCENT PARTICLES INTERVAL FRACTION
 (MICROMETERS) LESS THAN DIAM. (G/G)

1.00	15.3	0.153
2.00	16.9	0.016
3.00	18.1	0.012
4.00	19.1	0.011
5.00	20.1	0.010
6.00	21.1	0.009
7.00	21.9	0.009
8.00	22.7	0.008
9.00	23.5	0.008
10.00	24.2	0.007
20.00	29.9	0.057
30.00	35.2	0.053
40.00	39.5	0.043
50.00	42.4	0.029
60.00	44.1	0.017
70.00	45.1	0.010
80.00	45.9	0.008
90.00	46.8	0.008
100.00	47.7	0.009
200.00	50.8	0.121
300.00	71.7	0.119
400.00	85.5	0.138
500.00	93.1	0.076
600.00	96.1	0.030
700.00	98.0	0.018
800.00	99.1	0.011
900.00	99.6	0.006
1000.00	99.8	0.002
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT SOIL WATER PRESSURE
 (CC/CC) (-CM H2O)

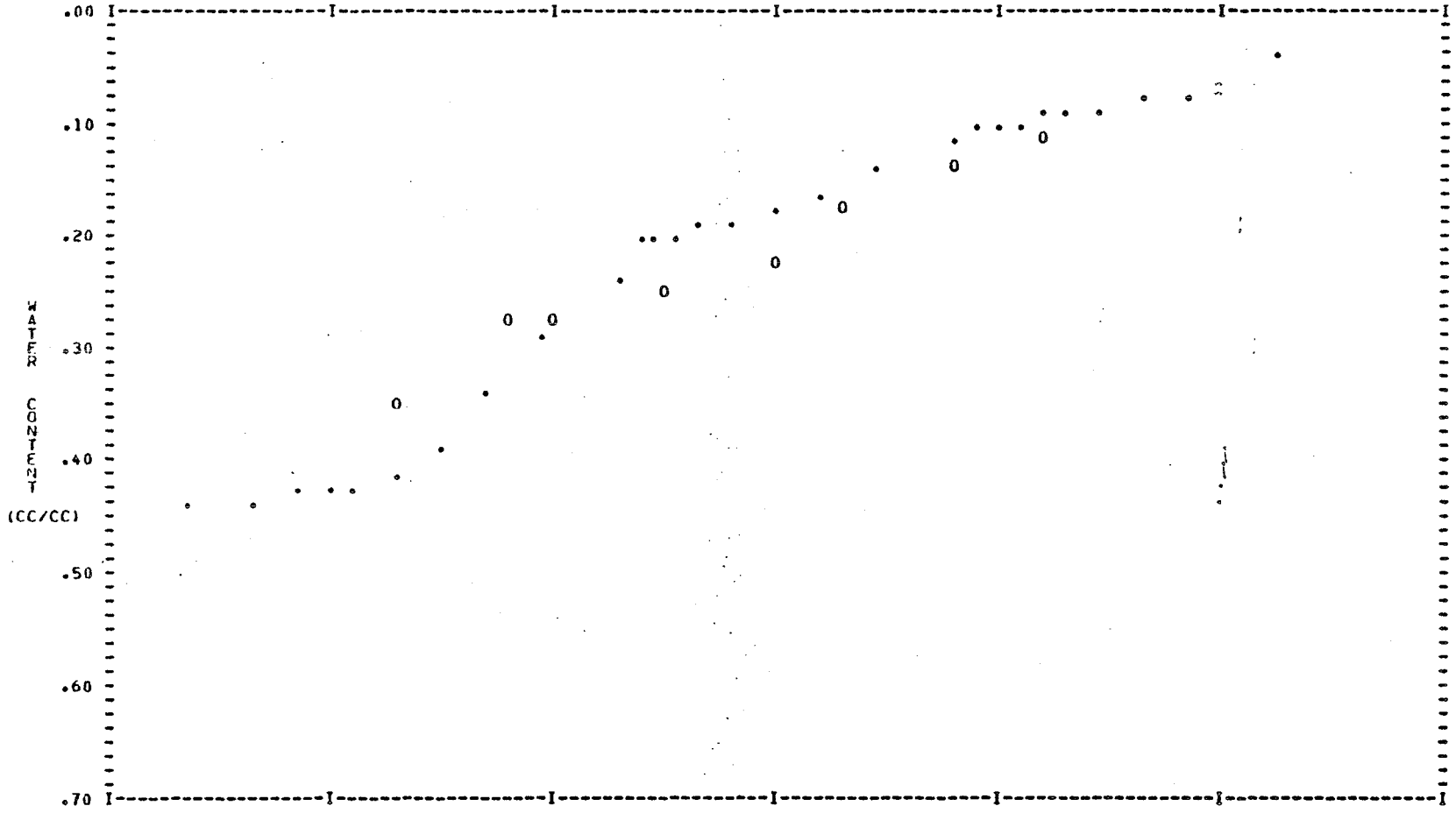
0.037	0.17821E+06
0.076	0.74866E+05
0.081	0.43563E+05
0.085	0.28915E+05
0.089	0.20795E+05
0.093	0.15783E+05
0.097	0.12452E+05
0.100	0.10114E+05
0.103	0.84044E+04
0.117	0.60812E+04
0.141	0.26857E+04
0.162	0.15273E+04
0.178	0.95310E+03
0.188	0.62527E+03
0.193	0.43901E+03
0.197	0.33726E+03
0.201	0.27776E+03
0.205	0.23838E+03
0.233	0.18875E+03
0.285	0.84440E+02
0.341	0.51232E+02
0.388	0.30797E+02
0.411	0.18865E+02
0.421	0.13224E+02
0.427	0.95450E+01
0.431	0.69168E+01
0.433	0.47173E+01
0.434	0.23314E+01

B-314

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-315

SOIL HORIZON NUMBER 157

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SP}))) = 0.25209E+01

SOIL HORIZON NUMRER 158 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.60 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.131	0.150E+05
0.150	0.600E+04
0.182	0.200E+04
0.254	0.100E+04
0.282	0.330E+03
0.294	0.100E+03
0.299	0.600E+02
0.357	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	18.8	0.188
2.00	20.4	0.016
3.00	21.5	0.011
4.00	22.6	0.010
5.00	23.5	0.010
6.00	24.4	0.009
7.00	25.2	0.008
8.00	26.0	0.008
9.00	26.7	0.007
10.00	27.4	0.007
20.00	32.8	0.054
30.00	37.6	0.048
40.00	41.4	0.039
50.00	44.1	0.027
60.00	45.7	0.016
70.00	46.7	0.010
80.00	47.5	0.008
90.00	48.4	0.008
100.00	49.3	0.009
200.00	61.6	0.123
300.00	73.4	0.118
400.00	86.6	0.132
500.00	93.8	0.072
600.00	96.6	0.028
700.00	98.2	0.016
800.00	99.5	0.009
900.00	99.6	0.005
1000.00	99.8	0.002
2000.00	100.0	0.002

PREDICTED MOISTURE CHARACTERISTIC DATA

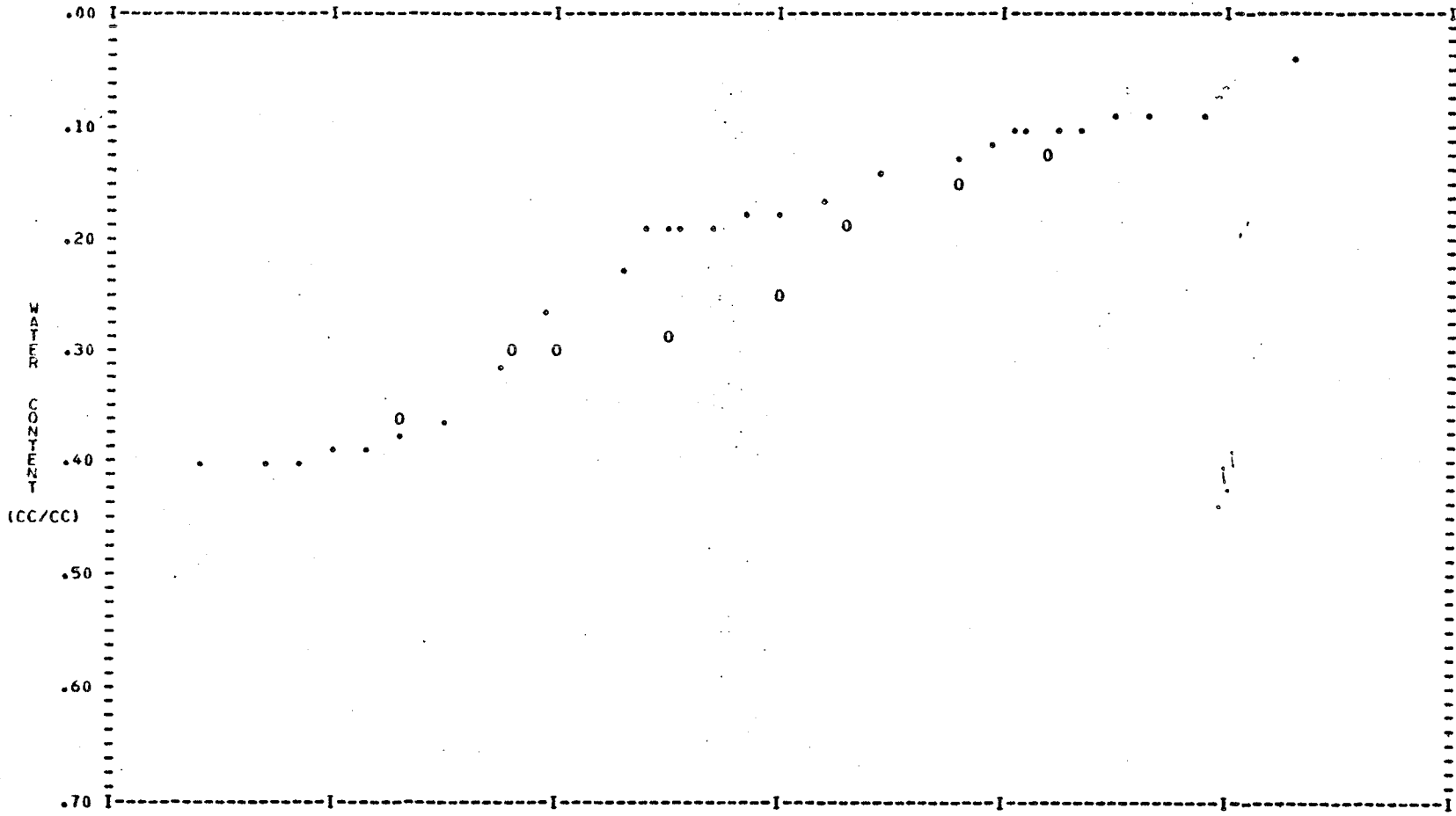
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.19290E+06
0.083	0.80704E+05
0.087	0.46763E+05
0.091	0.30987E+05
0.095	0.22267E+05
0.098	0.16892E+05
0.102	0.13324E+05
0.104	0.10821E+05
0.107	0.89915E+04
0.119	0.65068E+04
0.139	0.28488E+04
0.157	0.16155E+04
0.169	0.10135E+04
0.178	0.67038E+03
0.183	0.47349E+03
0.187	0.36471E+03
0.190	0.29998E+03
0.194	0.25672E+03
0.220	0.20470E+03
0.267	0.91124E+02
0.317	0.56899E+02
0.357	0.32922E+02
0.377	0.20059E+02
0.386	0.13983E+02
0.391	0.10047E+02
0.394	0.72563E+01
0.395	0.49539E+01
0.396	0.25199E+01

B-316

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013488025825050631990134880258250506319901348802582505063199013488025825050631990134880258250506319901348802582505063199



B-317

SOIL HORIZON NUMBER 158

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.36510E+01

SOIL HORIZON NUMBER 159 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.69 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.130	0.150E+05
0.150	0.600E+04
0.177	0.200E+04
0.203	0.100E+04
0.228	0.330E+03
0.270	0.100E+03
0.272	0.600E+02
0.328	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	17.8	0.178
2.00	18.9	0.011
3.00	19.6	0.007
4.00	20.3	0.007
5.00	21.0	0.006
6.00	21.6	0.006
7.00	22.2	0.006
8.00	22.7	0.006
9.00	23.3	0.005
10.00	23.8	0.005
20.00	24.0	0.042
30.00	21.8	0.038
40.00	21.0	0.032
50.00	17.3	0.023
60.00	13.7	0.014
70.00	9.6	0.009
80.00	4.4	0.008
90.00	1.2	0.008
100.00	2.1	0.009
200.00	6.7	0.146
300.00	7.7	0.139
400.00	5.4	0.147
500.00	3.3	0.079
600.00	6.4	0.031
700.00	2.2	0.018
800.00	1.1	0.010
900.00	0.6	0.005
1000.00	0.8	0.002
2000.00	100.0	0.002

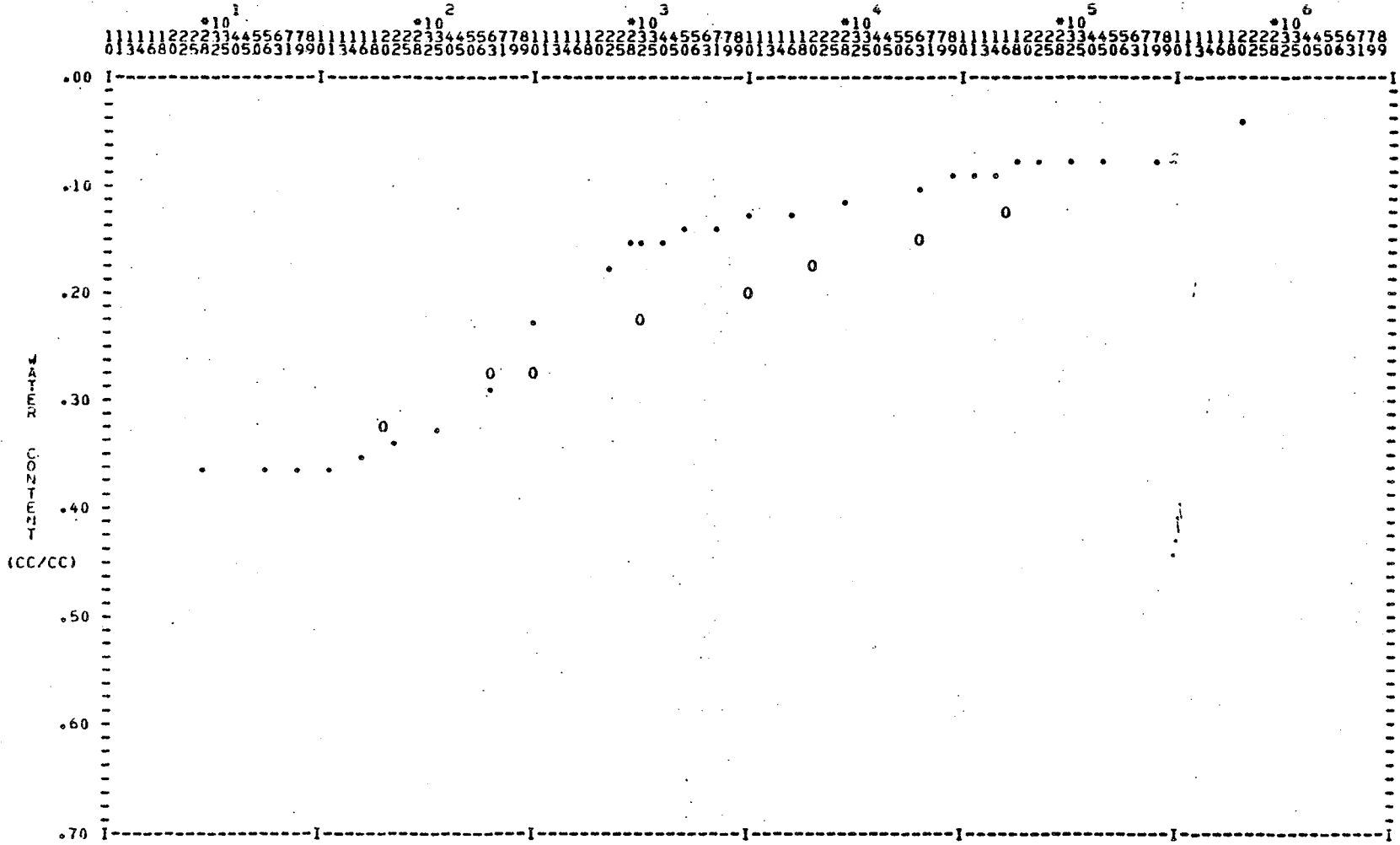
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.034	0.19158E+06
0.070	0.80032E+05
0.072	0.46494E+05
0.075	0.30952E+05
0.077	0.22340E+05
0.079	0.17015E+05
0.081	0.13466E+05
0.083	0.10970E+05
0.085	0.91370E+04
0.094	0.66768E+04
0.108	0.29408E+04
0.121	0.16725E+04
0.131	0.10566E+04
0.138	0.70509E+03
0.142	0.50143E+03
0.145	0.38779E+03
0.148	0.31897E+03
0.151	0.27242E+03
0.179	0.22748E+03
0.231	0.10107E+03
0.283	0.60207E+02
0.324	0.36080E+02
0.344	0.21991E+02
0.362	0.15251E+02
0.357	0.10905E+02
0.360	0.78405E+01
0.361	0.53310E+01
0.362	0.27085E+01

B-318

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-319

SOIL HORIZON NUMBER 159

0 MEASURED ;

• PREDICTED

SUM OF (ABS(LOG(P_{SIH})-LOG(P_{SI}P))) = 0.51310E+01

SOIL HORIZON NUMBER 160 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.073	0.150F+05
0.084	0.600F+04
0.096	0.200F+04
0.082	0.100E+04
0.104	0.330E+03
0.121	0.100F+03
0.132	0.600F+02
0.155	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	11.1	0.111
2.00	11.5	0.004
3.00	11.8	0.003
4.00	12.1	0.003
5.00	12.4	0.003
6.00	12.7	0.003
7.00	13.0	0.003
8.00	13.2	0.003
9.00	13.5	0.002
10.00	13.7	0.002
20.00	15.7	0.020
30.00	17.8	0.021
40.00	19.8	0.020
50.00	21.3	0.015
60.00	22.6	0.013
70.00	23.9	0.013
80.00	25.1	0.013
90.00	26.4	0.012
100.00	27.6	0.012
200.00	47.7	0.201
300.00	65.3	0.176
400.00	82.1	0.168
500.00	91.4	0.093
600.00	95.3	0.039
700.00	97.4	0.021
800.00	98.6	0.012
900.00	99.2	0.006
1000.00	99.4	0.002
2000.00	100.0	0.006

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.024	0.14139E+06
0.048	0.60196E+05
0.050	0.35623E+05
0.051	0.23879E+05
0.052	0.17288E+05
0.053	0.13187E+05
0.054	0.10444E+05
0.055	0.85104E+04
0.056	0.70906E+04
0.061	0.51755E+04
0.070	0.23430E+04
0.078	0.13663E+04
0.085	0.87801E+03
0.091	0.62100E+03
0.096	0.47608E+03
0.102	0.37911E+03
0.107	0.31058E+03
0.112	0.26005E+03
0.156	0.21618E+03
0.235	0.94509E+02
0.306	0.55233E+02
0.360	0.33273E+02
0.387	0.20545E+02
0.400	0.14142E+02
0.407	0.10064E+02
0.410	0.72551E+01
0.412	0.51178E+01
0.414	0.29857E+01

B-320

ALPHA = 1.38

SOIL HORIZON NUMBER 161 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.06 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.099	0.150E+05
0.116	0.600E+04
0.161	0.200E+04
0.312	0.100E+04
0.347	0.330E+03
0.381	0.100E+03
0.398	0.600E+02
0.506	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.2	0.062
2.00	10.4	0.042
3.00	13.5	0.031
4.00	16.3	0.028
5.00	18.9	0.026
6.00	21.2	0.023
7.00	23.3	0.021
8.00	25.2	0.019
9.00	27.0	0.018
10.00	28.7	0.017
20.00	41.2	0.125
30.00	53.8	0.126
40.00	63.6	0.098
50.00	68.1	0.045
60.00	69.8	0.017
70.00	71.2	0.014
80.00	72.3	0.012
90.00	73.4	0.011
100.00	74.4	0.010
200.00	81.1	0.067
300.00	85.4	0.043
400.00	88.5	0.032
500.00	91.0	0.025
600.00	93.0	0.020
700.00	94.7	0.017
800.00	96.1	0.014
900.00	97.4	0.013
1000.00	98.5	0.011
2000.00	100.0	0.015

PREDICTED MOISTURE CHARACTERISTIC DATA

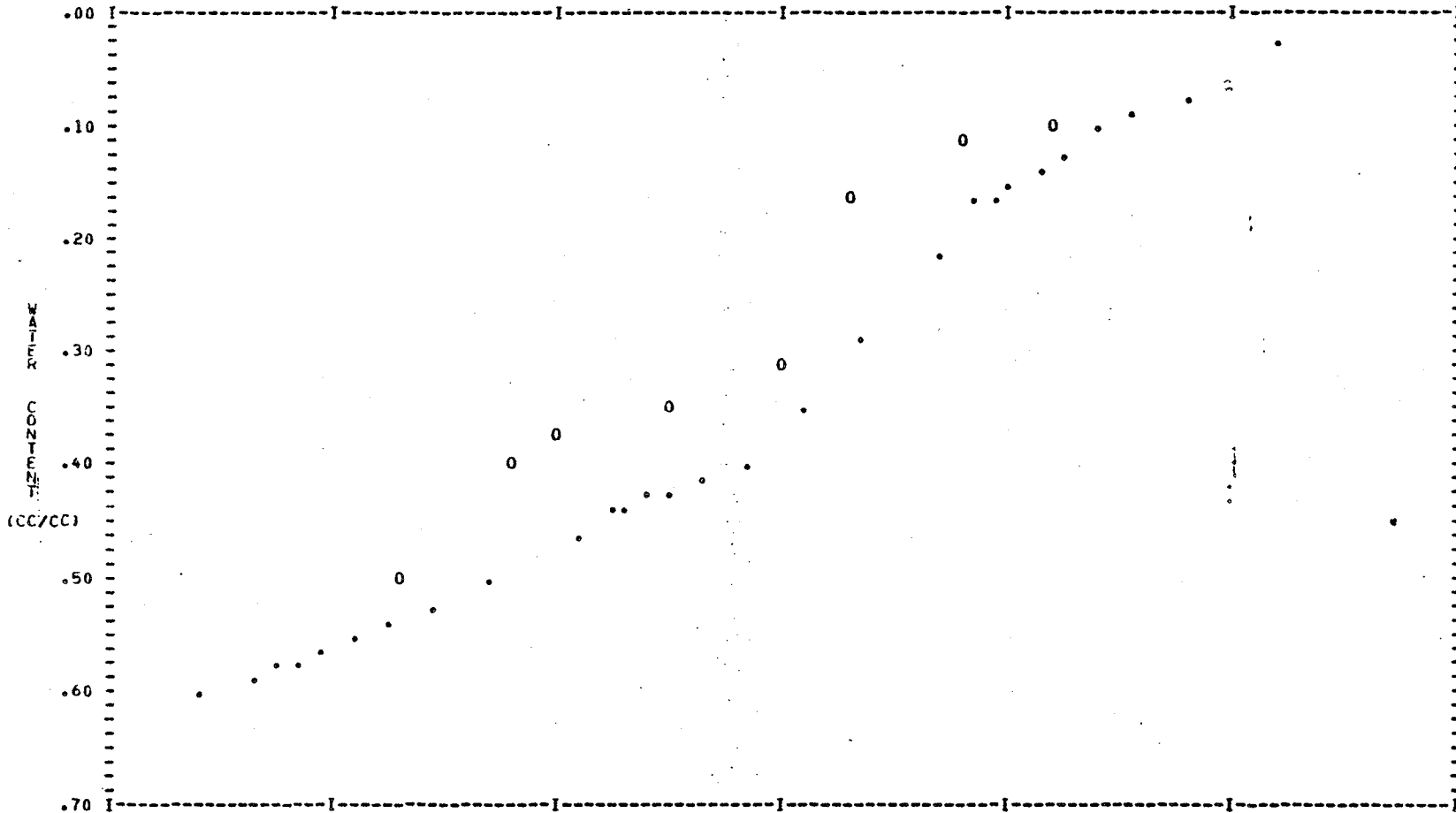
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.15260E+06
0.072	0.64328E+05
0.089	0.37407E+05
0.105	0.24736E+05
0.120	0.17716E+05
0.133	0.13393E+05
0.146	0.10527E+05
0.157	0.85222E+04
0.167	0.70596E+04
0.210	0.50461E+04
0.285	0.22679E+04
0.352	0.12744E+04
0.395	0.73996E+03
0.414	0.45035E+03
0.423	0.33124E+03
0.431	0.25698E+03
0.437	0.20730E+03
0.443	0.17217E+03
0.466	0.12063E+03
0.499	0.49735E+02
0.522	0.27671E+02
0.539	0.17770E+02
0.552	0.12478E+02
0.563	0.92964E+01
0.573	0.72101E+01
0.581	0.57641E+01
0.588	0.47182E+01
0.595	0.24442E+01

B-322

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-323

SOIL HORIZON NUMBER 161

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.46080E+01

SOIL HORIZON NUMBER 162 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.27 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.066	0.150E+05
0.088	0.600E+04
0.147	0.200E+04
0.245	0.100E+04
0.287	0.330E+03
0.319	0.100E+03
0.329	0.600E+02
0.451	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	6.7	0.067
2.00	11.5	0.048
3.00	14.5	0.033
4.00	17.5	0.030
5.00	20.5	0.026
6.00	22.2	0.024
7.00	23.5	0.021
8.00	25.0	0.019
9.00	26.7	0.018
10.00	28.4	0.017
20.00	40.6	0.121
30.00	55.5	0.149
40.00	66.0	0.086
50.00	68.0	0.020
60.00	68.0	0.000
70.00	68.0	0.000
80.00	68.0	0.000
90.00	68.0	0.000
100.00	68.0	0.000
200.00	79.0	0.069
300.00	83.0	0.041
400.00	87.0	0.040
500.00	90.0	0.030
600.00	92.0	0.020
700.00	93.0	0.010
800.00	93.0	0.000
900.00	93.0	0.000
1000.00	93.0	0.000
2000.00	100.0	0.016

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.18364E+06
0.069	0.76894E+05
0.085	0.44377E+05
0.100	0.29231E+05
0.113	0.20882E+05
0.124	0.15758E+05
0.135	0.12369E+05
0.145	0.10001E+05
0.154	0.82777E+04
0.160	0.68974E+04
0.151	0.56071E+04
0.100	0.46000E+04
0.050	0.35575E+04
0.000	0.26275E+04
0.000	0.19279E+04
0.000	0.14288E+04
0.000	0.10360E+04
0.000	0.77744E+03
0.000	0.59220E+03
0.000	0.44220E+03
0.000	0.33110E+03
0.000	0.25000E+03
0.000	0.19000E+03
0.000	0.14000E+03
0.000	0.10000E+03
0.000	0.75000E+02
0.000	0.55000E+02
0.000	0.40000E+02
0.000	0.30000E+02
0.000	0.20000E+02
0.000	0.15000E+02
0.000	0.10000E+02
0.000	0.00000E+01

B-324

ALPHA = 1.38

SOIL HORIZON NUMBER 163 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.40 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.074	0.150E+05
0.101	0.600E+04
0.168	0.200E+04
0.266	0.100E+04
0.288	0.330E+03
0.316	0.100E+03
0.325	0.600E+02
0.423	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.3	0.073
2.00	12.7	0.054
3.00	16.5	0.038
4.00	19.8	0.033
5.00	22.7	0.029
6.00	25.4	0.026
7.00	27.7	0.024
8.00	29.9	0.021
9.00	31.8	0.020
10.00	33.7	0.018
20.00	46.9	0.132
30.00	50.3	0.124
40.00	68.6	0.093
50.00	72.7	0.041
60.00	74.2	0.015
70.00	75.4	0.012
80.00	76.5	0.011
90.00	77.4	0.009
100.00	78.3	0.009
200.00	84.1	0.058
300.00	87.7	0.036
400.00	90.5	0.028
500.00	92.7	0.022
600.00	94.5	0.018
700.00	95.9	0.015
800.00	97.1	0.012
900.00	98.1	0.009
1000.00	98.8	0.007
2000.00	100.0	0.012

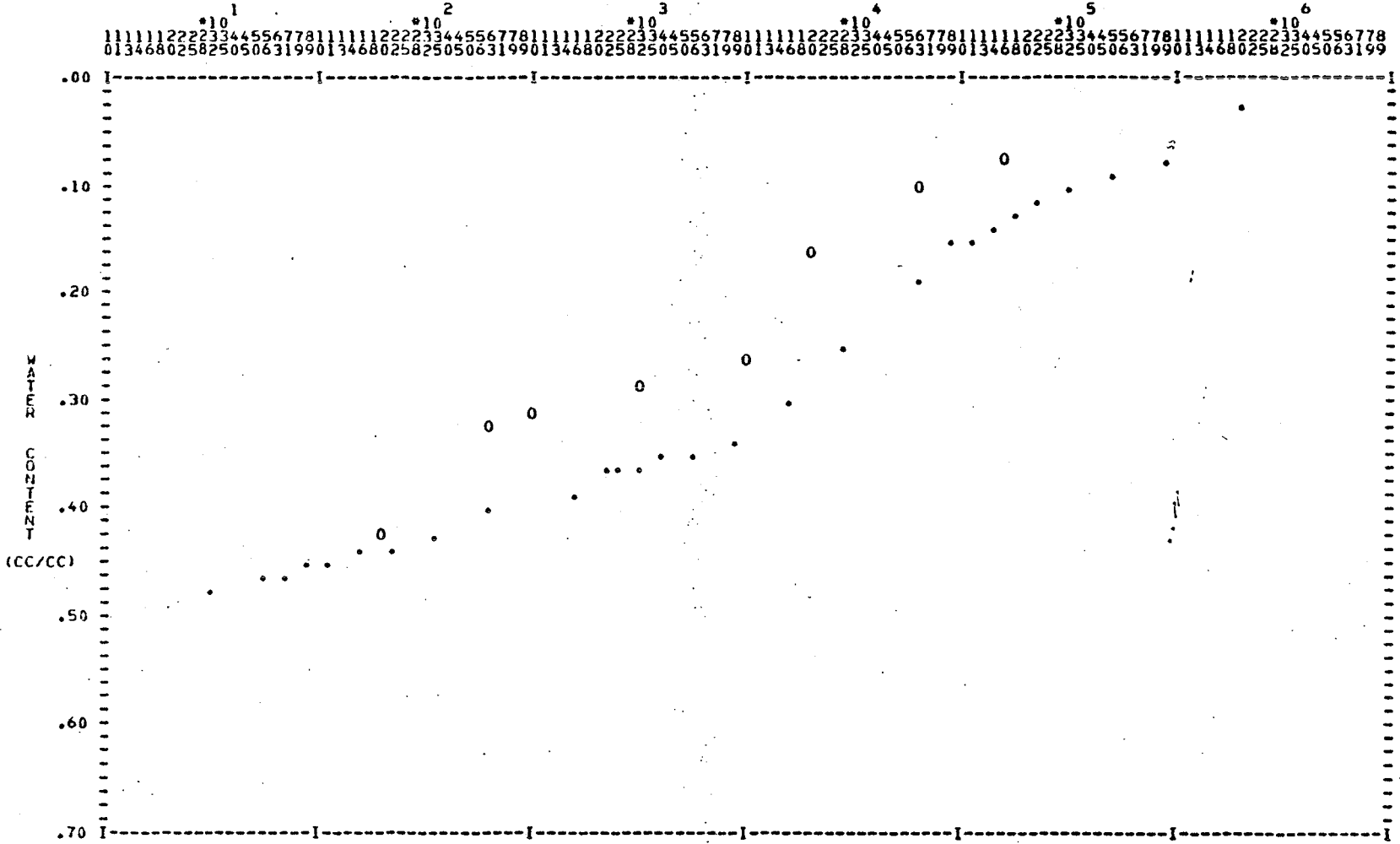
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.030	0.20743E+06
0.069	0.86769E+05
0.086	0.50011E+05
0.100	0.32912E+05
0.113	0.23496E+05
0.125	0.17720E+05
0.136	0.13902E+05
0.146	0.11237E+05
0.155	0.92956E+04
0.190	0.66134E+04
0.251	0.29300E+04
0.302	0.16352E+04
0.333	0.94316E+03
0.346	0.56939E+03
0.353	0.42104E+03
0.358	0.32680E+03
0.363	0.26289E+03
0.367	0.21731E+03
0.383	0.15209E+03
0.405	0.62321E+02
0.420	0.35125E+02
0.432	0.22536E+02
0.441	0.15780E+02
0.449	0.11721E+02
0.455	0.90002E+01
0.460	0.70821E+01
0.464	0.56726E+01
0.469	0.30365E+01

B-326

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) -CM H2O (LOG SCALE)



B-327

SOIL HORIZON NUMBER 163

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.57469E+01

SOIL HORIZON NUMBER 164 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.45 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.110	0.150E+05
0.142	0.600E+04
0.220	0.200E+04
0.303	0.100E+04
0.326	0.330E+03
0.344	0.100E+03
0.355	0.600E+02
0.400	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.0	0.140
2.00	19.4	0.054
4.00	23.3	0.038
6.00	26.6	0.033
10.00	29.9	0.033
15.00	32.2	0.023
20.00	34.4	0.022
30.00	37.7	0.033
40.00	40.4	0.027
50.00	43.3	0.029
60.00	45.5	0.022
70.00	47.7	0.022
80.00	49.9	0.022
90.00	51.1	0.012
100.00	52.2	0.011
200.00	59.9	0.077
300.00	64.4	0.044
400.00	67.7	0.033
500.00	69.9	0.022
600.00	71.1	0.012
700.00	72.2	0.011
800.00	73.3	0.011
900.00	74.4	0.011
1000.00	75.5	0.011
2000.00	100.0	0.010

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.21556E+06
0.096	0.90172E+05
0.113	0.51964E+05
0.127	0.34190E+05
0.139	0.24403E+05
0.151	0.18401E+05
0.161	0.14437E+05
0.170	0.11667E+05
0.179	0.96480E+04
0.183	0.85966E+04
0.190	0.80368E+04
0.200	0.76957E+04
0.219	0.72840E+04
0.249	0.62256E+04
0.268	0.53336E+04
0.273	0.43220E+04
0.276	0.36388E+04
0.280	0.21542E+04
0.291	0.14968E+04
0.297	0.11178E+04
0.318	0.84019E+03
0.322	0.71831E+03
0.326	0.61531E+03
0.337	0.53611E+03
0.441	0.37356E+03
0.444	0.32983E+03
0.447	0.25581E+03
0.451	0.20466E+03

B-328

ALPHA = 1.38

SOIL HORIZON NUMBER 166 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.84 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.121	0.150E+05
0.145	0.600E+04
0.190	0.200E+04
0.243	0.100E+04
0.258	0.530E+03
0.265	0.100E+03
0.272	0.600E+02
0.296	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	13.3	0.133
2.00	16.2	0.029
3.00	18.3	0.021
4.00	20.3	0.020
5.00	22.2	0.018
6.00	23.9	0.017
7.00	25.4	0.016
8.00	26.9	0.015
9.00	28.3	0.014
10.00	29.5	0.013
20.00	39.4	0.099
30.00	49.4	0.100
40.00	57.5	0.081
50.00	61.8	0.043
60.00	63.8	0.020
70.00	65.3	0.014
80.00	66.5	0.012
90.00	67.7	0.012
100.00	69.0	0.013
200.00	78.2	0.092
300.00	83.5	0.053
400.00	87.2	0.037
500.00	90.0	0.028
600.00	92.2	0.022
700.00	93.9	0.017
800.00	95.3	0.014
900.00	96.4	0.011
1000.00	97.3	0.009
2000.00	100.0	0.027

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.025	0.26209E+06
0.053	0.11072E+06
0.059	0.64648E+05
0.065	0.42896E+05
0.070	0.30810E+05
0.075	0.23350E+05
0.080	0.18394E+05
0.084	0.14919E+05
0.088	0.12380E+05
0.105	0.89082E+04
0.136	0.40072E+04
0.163	0.22672E+04
0.182	0.13557E+04
0.192	0.85745E+03
0.197	0.61863E+03
0.201	0.48024E+03
0.205	0.39293E+03
0.209	0.33276E+03
0.225	0.23648E+03
0.247	0.95494E+02
0.261	0.52600E+02
0.271	0.33735E+02
0.278	0.23493E+02
0.285	0.17216E+02
0.289	0.13156E+02
0.293	0.10371E+02
0.296	0.83748E+01
0.302	0.50449E+01

B-332

ALPHA = 1.38

SOIL HORIZON NUMBER 167 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.80 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.088	0.150E+05
0.112	0.600E+04
0.160	0.200E+04
0.193	0.100E+04
0.207	0.330E+03
0.220	0.100E+03
0.232	0.600E+02
0.281	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.000	0.1113
2.00	0.000	0.0033
4.00	0.000	0.0033
5.00	0.000	0.0033
6.00	0.000	0.0033
7.00	0.000	0.0033
8.00	0.000	0.0033
9.00	0.000	0.0033
10.00	0.000	0.0033
20.00	0.000	0.0033
30.00	0.000	0.0033
40.00	0.000	0.0033
50.00	0.000	0.0033
60.00	0.000	0.0033
70.00	0.000	0.0033
80.00	0.000	0.0033
90.00	0.000	0.0033
100.00	0.000	0.0033
200.00	0.000	0.0033
300.00	0.000	0.0033
400.00	0.000	0.0033
500.00	0.000	0.0033
600.00	0.000	0.0033
700.00	0.000	0.0033
800.00	0.000	0.0033
900.00	0.000	0.0033
1000.00	0.000	0.0033
2000.00	100.0	0.061

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.16059E+06
0.038	0.71734E+05
0.039	0.43466E+05
0.039	0.29107E+05
0.040	0.20952E+05
0.041	0.15871E+05
0.042	0.12482E+05
0.043	0.10182E+05
0.043	0.83626E+04
0.046	0.59387E+04
0.051	0.27963E+04
0.057	0.16925E+04
0.064	0.11043E+04
0.069	0.80529E+03
0.075	0.63354E+03
0.082	0.51411E+03
0.089	0.42717E+03
0.096	0.36161E+03
0.137	0.27257E+03
0.193	0.10605E+03
0.221	0.57240E+02
0.241	0.36690E+02
0.256	0.25749E+02
0.269	0.19160E+02
0.280	0.14850E+02
0.289	0.11867E+02
0.297	0.97121E+01
0.311	0.56868E+01

B-334

ALPHA = 1.38

SOIL HORIZON NUMBR 168 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 0.94 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.076	0.150E+05
0.107	0.600E+04
0.155	0.200E+04
0.342	0.100E+04
0.389	0.330E+03
0.433	0.100E+03
0.473	0.600E+02
0.555	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0	0.093
0.85	1	0.053
0.75	2	0.037
0.60	2	0.033
0.50	4	0.030
0.40	5	0.026
0.30	7	0.024
0.25	8	0.022
0.20	9	0.020
0.15	10	0.019
0.10	14	0.015
0.075	20	0.013
0.050	46	0.010
0.030	77	0.008
0.020	77	0.047
0.015	79	0.013
0.010	80	0.011
0.0075	81	0.010
0.0050	82	0.009
0.0030	87	0.0058
0.0020	91	0.0034
0.0015	93	0.0023
0.0010	94	0.017
0.00075	96	0.014
0.00050	97	0.010
0.00030	98	0.008
0.00020	99	0.005
0.00015	99	0.003
0.00010	100	0.007
0.000075	100	0.007

PREDICTED MOISTURE CHARACTERISTIC DATA

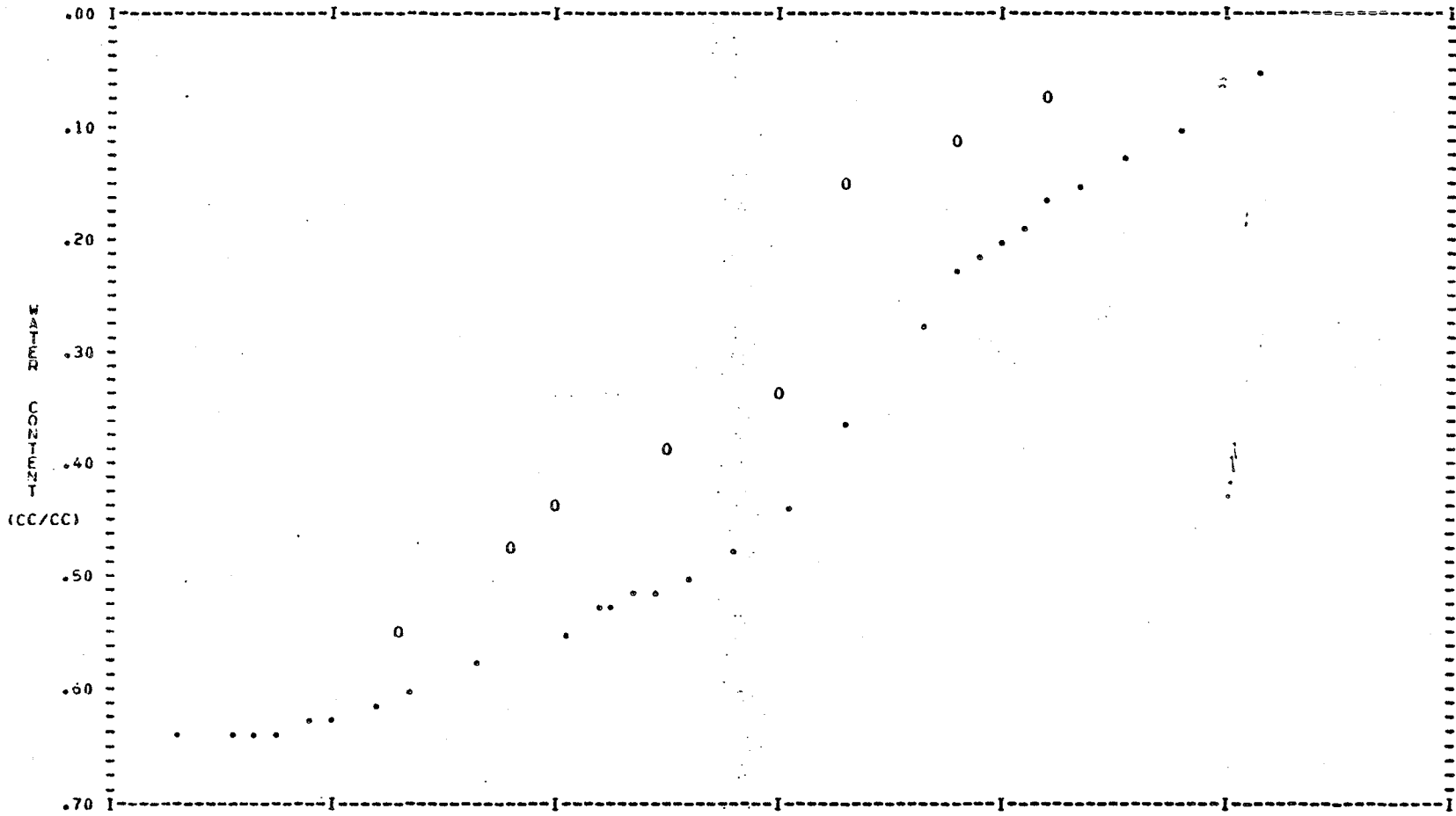
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.047	0.1446E+06
0.066	0.2062E+05
0.082	0.3502E+05
0.106	0.2307E+05
0.129	0.1648E+05
0.149	0.1244E+05
0.167	0.1164E+05
0.184	0.1076E+05
0.198	0.1055E+04
0.212	0.1055E+04
0.227	0.1053E+04
0.244	0.1053E+04
0.260	0.1071E+04
0.277	0.1071E+04
0.293	0.1069E+04
0.309	0.1069E+04
0.326	0.1059E+04
0.342	0.1059E+04
0.358	0.1057E+04
0.374	0.1057E+04
0.390	0.1055E+04
0.406	0.1055E+04
0.422	0.1055E+04
0.437	0.1055E+04
0.453	0.1055E+04
0.469	0.1055E+04
0.484	0.1055E+04
0.500	0.1055E+04
0.516	0.1055E+04
0.531	0.1055E+04
0.547	0.1055E+04
0.562	0.1055E+04
0.578	0.1055E+04
0.593	0.1055E+04
0.609	0.1055E+04
0.624	0.1055E+04
0.640	0.1055E+04
0.643	0.1926E+01

B-336

ALPHA = 1.38

SOIL WATER PRESSURE (PSI) -CM H2O (LOG SCALE)

*10 1 *10 2 *10 3 *10 4 *10 5 *10 6
 111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-337

SOIL HORIZON NUMBER 168

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.66771E+01

SOIL HORIZON NUMBER 169 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.21 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.068	0.150E+05
0.102	0.600E+04
0.166	0.200E+04
0.269	0.100E+04
0.301	0.330E+03
0.327	0.100E+03
0.341	0.600E+02
0.453	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	8.8	0.088
2.00	13.4	0.044
3.00	16.4	0.032
4.00	19.3	0.030
5.00	22.0	0.027
6.00	24.4	0.024
7.00	26.6	0.022
8.00	28.7	0.020
9.00	30.6	0.019
10.00	32.3	0.018
20.00	45.5	0.132
30.00	58.7	0.132
40.00	69.0	0.103
50.00	73.9	0.049
60.00	76.0	0.021
70.00	77.7	0.017
80.00	79.0	0.013
90.00	80.1	0.011
100.00	81.1	0.010
200.00	87.3	0.062
300.00	90.8	0.035
400.00	93.2	0.024
500.00	94.9	0.017
600.00	96.2	0.013
700.00	97.2	0.010
800.00	98.0	0.007
900.00	98.5	0.005
1000.00	98.9	0.004
2000.00	100.0	0.011

PREDICTED MOISTURE CHARACTERISTIC DATA

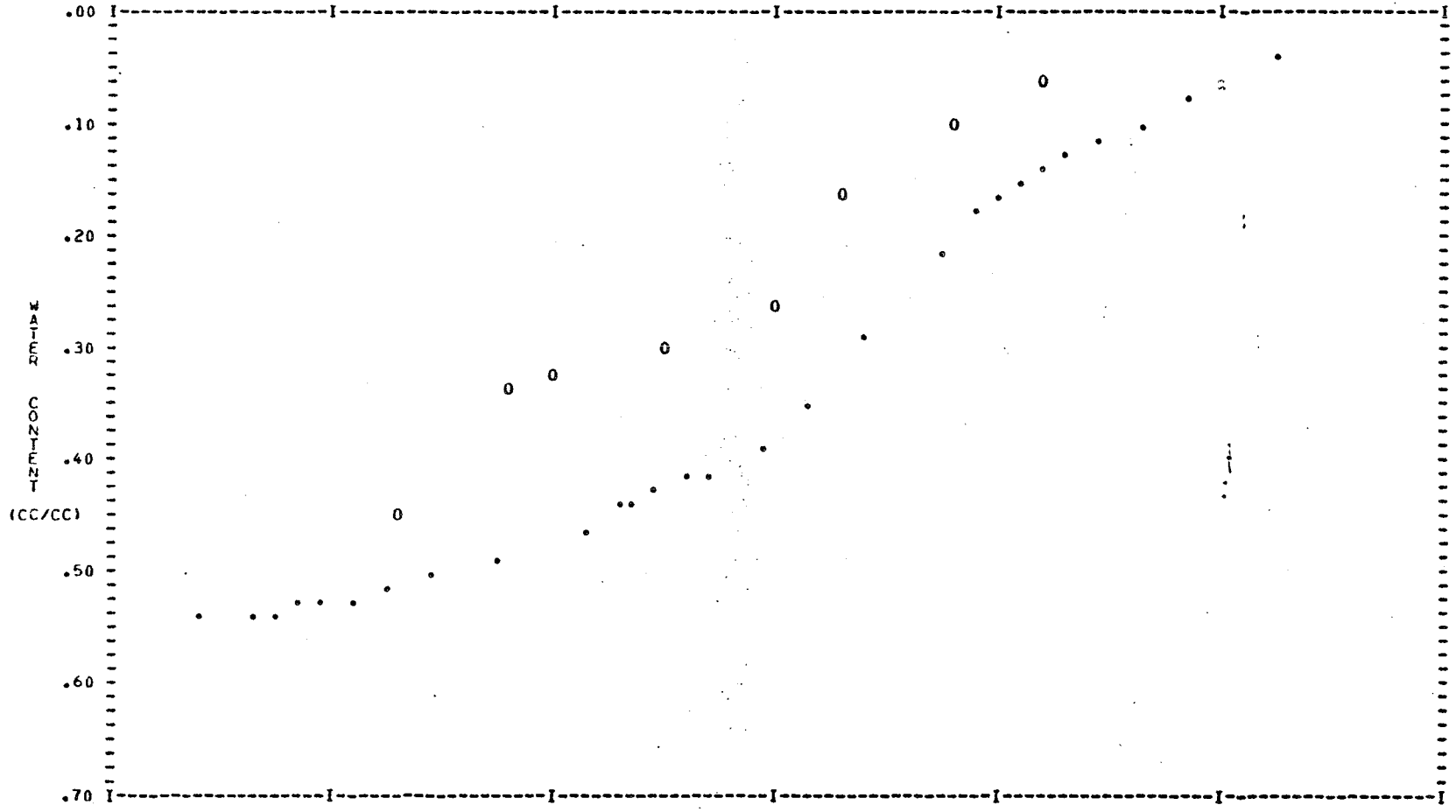
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.036	0.17268E+06
0.080	0.72776E+05
0.097	0.42322E+05
0.112	0.27993E+05
0.126	0.20054E+05
0.139	0.15164E+05
0.150	0.11923E+05
0.161	0.96543E+04
0.171	0.79993E+04
0.211	0.57228E+04
0.284	0.25674E+04
0.347	0.14443E+04
0.388	0.84547E+03
0.407	0.52521E+03
0.417	0.38599E+03
0.426	0.29660E+03
0.433	0.23566E+03
0.439	0.19217E+03
0.458	0.13370E+03
0.484	0.93381E+02
0.500	0.29245E+02
0.511	0.18680E+02
0.519	0.12957E+02
0.526	0.94278E+01
0.530	0.71122E+01
0.534	0.55244E+01
0.536	0.43608E+01
0.540	0.25870E+01

B-338

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-339

SOIL HORIZON NUMBER 169

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.70394E+01

SOIL HORIZON NUMBER 170 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.42 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.088	0.150E+05
0.126	0.600E+04
0.200	0.200E+04
0.284	0.100E+04
0.302	0.330E+03
0.317	0.100E+03
0.324	0.600E+02
0.382	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	12.4	0.124
2.00	16.8	0.044
3.00	19.9	0.031
4.00	22.8	0.029
5.00	25.5	0.026
6.00	27.8	0.024
7.00	30.0	0.022
8.00	32.0	0.020
9.00	33.8	0.018
10.00	35.6	0.017
20.00	48.4	0.128
30.00	61.0	0.126
40.00	70.9	0.099
50.00	75.8	0.049
60.00	78.0	0.022
70.00	79.6	0.017
80.00	81.0	0.013
90.00	82.0	0.011
100.00	82.9	0.009
200.00	88.5	0.056
300.00	91.5	0.030
400.00	93.5	0.020
500.00	95.0	0.015
600.00	96.2	0.012
700.00	97.1	0.009
800.00	97.8	0.007
900.00	98.4	0.006
1000.00	98.8	0.004
2000.00	100.0	0.012

PREDICTED MOISTURE CHARACTERISTIC DATA

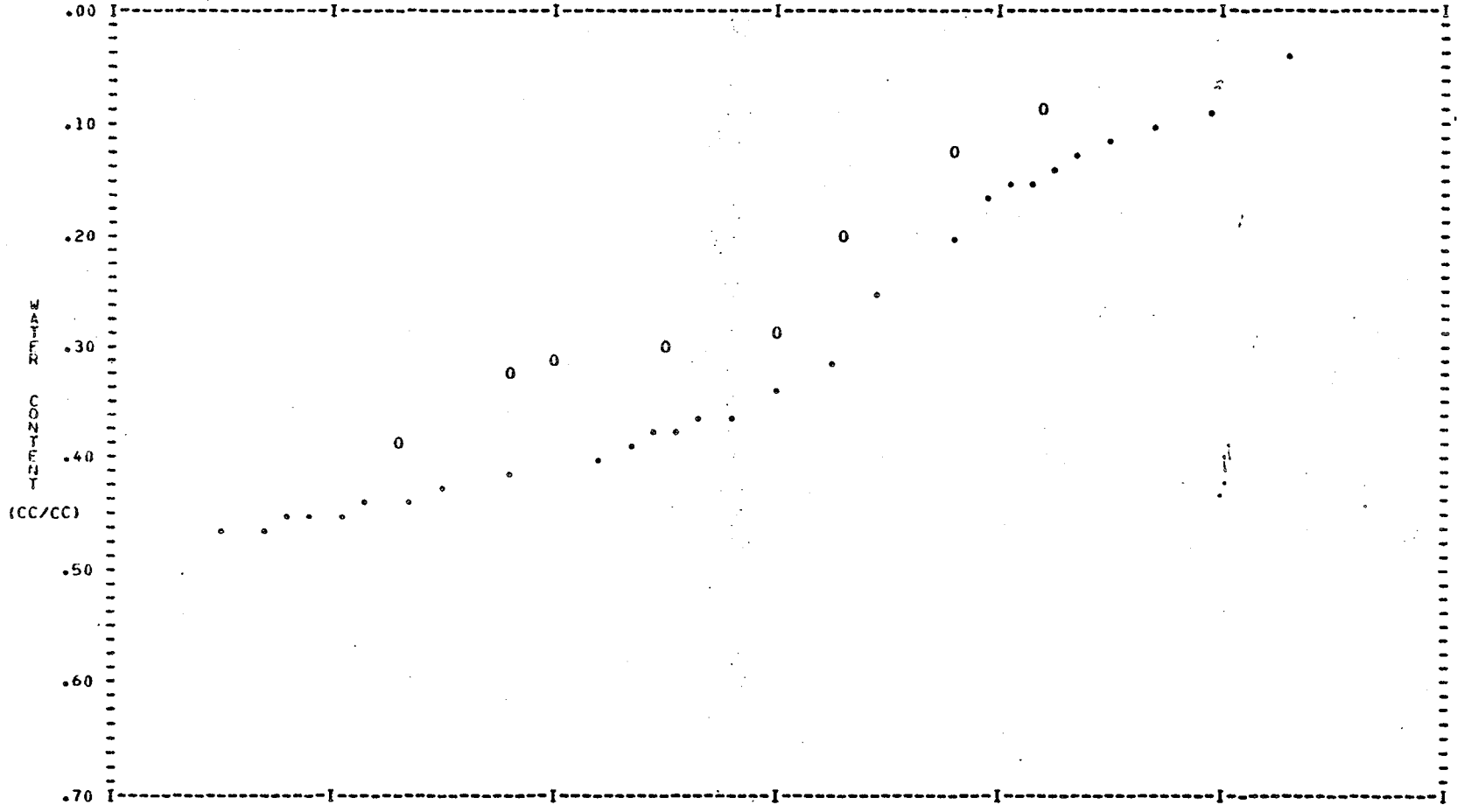
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.039	0.20212E+06
0.085	0.85103E+05
0.099	0.49442E+05
0.112	0.32687E+05
0.124	0.23411E+05
0.134	0.17700E+05
0.144	0.13914E+05
0.153	0.11266E+05
0.161	0.93338E+04
0.195	0.66762E+04
0.254	0.29853E+04
0.306	0.16799E+04
0.341	0.98941E+03
0.357	0.62011E+03
0.366	0.45283E+03
0.373	0.34579E+03
0.378	0.27306E+03
0.383	0.22133E+03
0.398	0.15353E+03
0.418	0.61152E+02
0.429	0.33350E+02
0.437	0.21278E+02
0.444	0.14828E+02
0.449	0.10888E+02
0.452	0.83025E+01
0.455	0.65072E+01
0.458	0.52036E+01
0.461	0.30829E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

1 2 3 4 5 6
 *10 *10 *10 *10 *10 *10
 11111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 01346802582505063199013468025825050631990134680258250506319901346802582505063199013468025825050631990



B-341

SOIL HORIZON NUMBER 170 O MEASURED • PREDICTED SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.63607E+01

SOIL HORIZON NUMBER 171 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.131	0.150E+05
0.175	0.600E+04
0.220	0.200E+04
0.287	0.100E+04
0.306	0.330E+03
0.323	0.100E+03
0.345	0.600E+02
0.381	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	18.1	0.181
2.00	21.4	0.033
3.00	23.8	0.024
4.00	26.1	0.023
5.00	28.3	0.021
6.00	30.2	0.020
7.00	32.0	0.018
8.00	33.7	0.017
9.00	35.3	0.016
10.00	36.7	0.015
20.00	48.0	0.113
30.00	59.9	0.119
40.00	69.4	0.095
50.00	74.1	0.047
60.00	76.3	0.022
70.00	78.0	0.017
80.00	79.4	0.014
90.00	80.6	0.012
100.00	81.6	0.010
200.00	88.1	0.065
300.00	91.4	0.033
400.00	93.4	0.020
500.00	94.9	0.015
600.00	96.0	0.011
700.00	96.9	0.009
800.00	97.6	0.007
900.00	98.2	0.006
1000.00	98.6	0.004
2000.00	100.0	0.014

PREDICTED MOISTURE CHARACTERISTIC DATA.

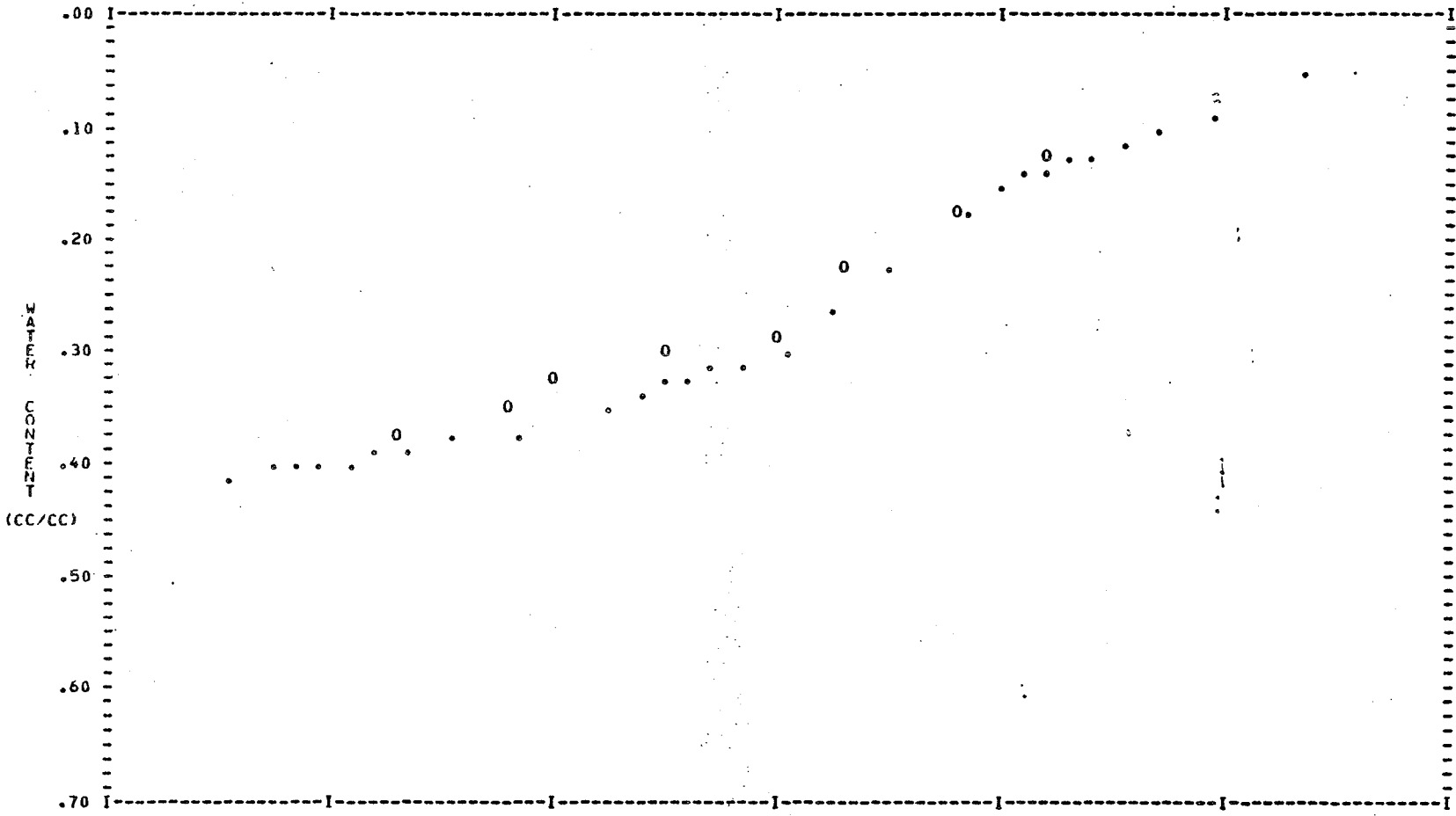
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.044	0.21291E+06
0.093	0.90135E+05
0.103	0.52717E+05
0.112	0.34990E+05
0.120	0.25130E+05
0.128	0.19041E+05
0.135	0.14996E+05
0.142	0.12160E+05
0.148	0.10088E+05
0.174	0.72505E+04
0.222	0.32839E+04
0.266	0.18566E+04
0.295	0.10955E+04
0.309	0.69023E+03
0.317	0.50783E+03
0.324	0.39037E+03
0.329	0.31008E+03
0.334	0.25268E+03
0.349	0.17577E+03
0.369	0.69414E+02
0.380	0.37245E+02
0.387	0.23579E+02
0.393	0.16403E+02
0.397	0.12047E+02
0.400	0.91954E+01
0.403	0.72206E+01
0.405	0.57910E+01
0.408	0.35346E+01

B-342

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

111111222233445567781111112222334455677811111122223344556778111111222233445567781111112222334455677811111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-343

SOIL HORIZON NUMBER 171 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.22138E+01

SOIL HORIZON NUMBER 172 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.82 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.091	0.150E+05
0.120	0.600E+04
0.164	0.200E+04
0.207	0.100E+04
0.229	0.330E+03
0.246	0.100E+03
0.251	0.500E+02
0.289	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.7	0.107
2.00	12.3	0.016
3.00	13.5	0.012
4.00	14.8	0.013
5.00	16.9	0.021
6.00	17.1	0.011
7.00	18.1	0.010
8.00	19.3	0.012
9.00	20.2	0.010
10.00	21.1	0.009
20.00	29.0	0.079
30.00	47.7	0.087
40.00	49.1	0.014
50.00	51.3	0.024
60.00	53.3	0.020
70.00	55.5	0.021
80.00	58.8	0.033
90.00	71.7	0.129
100.00	77.7	0.060
200.00	82.7	0.050
300.00	86.6	0.039
400.00	88.8	0.022
500.00	90.0	0.012
600.00	92.0	0.020
700.00	93.0	0.010
800.00	94.0	0.010
900.00	94.0	0.000
1000.00	94.0	0.000
2000.00	100.0	0.054

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.019	0.23138E+06
0.040	0.98105E+05
0.044	0.57846E+05
0.048	0.38726E+05
0.053	0.28022E+05
0.055	0.21365E+05
0.058	0.16922E+05
0.063	0.13785E+05
0.065	0.11485E+05
0.078	0.83874E+04
0.105	0.38314E+04
0.133	0.21391E+04
0.163	0.11339E+04
0.200	0.86689E+03
0.244	0.63314E+03
0.290	0.48856E+03
0.340	0.34375E+03
0.390	0.24660E+03
0.440	0.09146E+03
0.490	0.54397E+02
0.540	0.33808E+02
0.590	0.17223E+02
0.640	0.85659E+01
0.690	0.55066E+01
0.740	0.35099E+01
0.790	0.25099E+01
0.840	0.15099E+01
0.890	0.95099E+00
0.940	0.55099E+00
0.990	0.35099E+00
1.040	0.25099E+00
1.090	0.15099E+00
1.140	0.95099E-01
1.190	0.55099E-01
1.240	0.35099E-01
1.290	0.25099E-01
1.340	0.15099E-01
1.390	0.95099E-02
1.440	0.55099E-02
1.490	0.35099E-02
1.540	0.25099E-02
1.590	0.15099E-02
1.640	0.95099E-03
1.690	0.55099E-03
1.740	0.35099E-03
1.790	0.25099E-03
1.840	0.15099E-03
1.890	0.95099E-04
1.940	0.55099E-04
1.990	0.35099E-04
2.040	0.25099E-04
2.090	0.15099E-04
2.140	0.95099E-05
2.190	0.55099E-05
2.240	0.35099E-05
2.290	0.25099E-05
2.340	0.15099E-05
2.390	0.95099E-06
2.440	0.55099E-06
2.490	0.35099E-06
2.540	0.25099E-06
2.590	0.15099E-06
2.640	0.95099E-07
2.690	0.55099E-07
2.740	0.35099E-07
2.790	0.25099E-07
2.840	0.15099E-07
2.890	0.95099E-08
2.940	0.55099E-08
2.990	0.35099E-08
3.040	0.25099E-08
3.090	0.15099E-08
3.140	0.95099E-09
3.190	0.55099E-09
3.240	0.35099E-09
3.290	0.25099E-09
3.340	0.15099E-09
3.390	0.95099E-10
3.440	0.55099E-10
3.490	0.35099E-10
3.540	0.25099E-10
3.590	0.15099E-10
3.640	0.95099E-11
3.690	0.55099E-11
3.740	0.35099E-11
3.790	0.25099E-11
3.840	0.15099E-11
3.890	0.95099E-12
3.940	0.55099E-12
3.990	0.35099E-12
4.040	0.25099E-12
4.090	0.15099E-12
4.140	0.95099E-13
4.190	0.55099E-13
4.240	0.35099E-13
4.290	0.25099E-13
4.340	0.15099E-13
4.390	0.95099E-14
4.440	0.55099E-14
4.490	0.35099E-14
4.540	0.25099E-14
4.590	0.15099E-14
4.640	0.95099E-15
4.690	0.55099E-15
4.740	0.35099E-15
4.790	0.25099E-15
4.840	0.15099E-15
4.890	0.95099E-16
4.940	0.55099E-16
4.990	0.35099E-16
5.040	0.25099E-16
5.090	0.15099E-16
5.140	0.95099E-17
5.190	0.55099E-17
5.240	0.35099E-17
5.290	0.25099E-17
5.340	0.15099E-17
5.390	0.95099E-18
5.440	0.55099E-18
5.490	0.35099E-18
5.540	0.25099E-18
5.590	0.15099E-18
5.640	0.95099E-19
5.690	0.55099E-19
5.740	0.35099E-19
5.790	0.25099E-19
5.840	0.15099E-19
5.890	0.95099E-20
5.940	0.55099E-20
5.990	0.35099E-20
6.040	0.25099E-20
6.090	0.15099E-20
6.140	0.95099E-21
6.190	0.55099E-21
6.240	0.35099E-21
6.290	0.25099E-21
6.340	0.15099E-21
6.390	0.95099E-22
6.440	0.55099E-22
6.490	0.35099E-22
6.540	0.25099E-22
6.590	0.15099E-22
6.640	0.95099E-23
6.690	0.55099E-23
6.740	0.35099E-23
6.790	0.25099E-23
6.840	0.15099E-23
6.890	0.95099E-24
6.940	0.55099E-24
6.990	0.35099E-24
7.040	0.25099E-24
7.090	0.15099E-24
7.140	0.95099E-25
7.190	0.55099E-25
7.240	0.35099E-25
7.290	0.25099E-25
7.340	0.15099E-25
7.390	0.95099E-26
7.440	0.55099E-26
7.490	0.35099E-26
7.540	0.25099E-26
7.590	0.15099E-26
7.640	0.95099E-27
7.690	0.55099E-27
7.740	0.35099E-27
7.790	0.25099E-27
7.840	0.15099E-27
7.890	0.95099E-28
7.940	0.55099E-28
7.990	0.35099E-28
8.040	0.25099E-28
8.090	0.15099E-28
8.140	0.95099E-29
8.190	0.55099E-29
8.240	0.35099E-29
8.290	0.25099E-29
8.340	0.15099E-29
8.390	0.95099E-30
8.440	0.55099E-30
8.490	0.35099E-30
8.540	0.25099E-30
8.590	0.15099E-30
8.640	0.95099E-31
8.690	0.55099E-31
8.740	0.35099E-31
8.790	0.25099E-31
8.840	0.15099E-31
8.890	0.95099E-32
8.940	0.55099E-32
8.990	0.35099E-32
9.040	0.25099E-32
9.090	0.15099E-32
9.140	0.95099E-33
9.190	0.55099E-33
9.240	0.35099E-33
9.290	0.25099E-33
9.340	0.15099E-33
9.390	0.95099E-34
9.440	0.55099E-34
9.490	0.35099E-34
9.540	0.25099E-34
9.590	0.15099E-34
9.640	0.95099E-35
9.690	0.55099E-35
9.740	0.35099E-35
9.790	0.25099E-35
9.840	0.15099E-35
9.890	0.95099E-36
9.940	0.55099E-36
9.990	0.35099E-36
10.040	0.25099E-36
10.090	0.15099E-36
10.140	0.95099E-37
10.190	0.55099E-37
10.240	0.35099E-37
10.290	0.25099E-37
10.340	0.15099E-37
10.390	0.95099E-38
10.440	0.55099E-38
10.490	0.35099E-38
10.540	0.25099E-38
10.590	0.15099E-38
10.640	0.95099E-39
10.690	0.55099E-39
10.740	0.35099E-39
10.790	0.25099E-39
10.840	0.15099E-39
10.890	0.95099E-40
10.940	0.55099E-40
10.990	0.35099E-40
11.040	0.25099E-40
11.090	0.15099E-40
11.140	0.95099E-41
11.190	0.55099E-41
11.240	0.35099E-41
11.290	0.25099E-41
11.340	0.15099E-41
11.390	0.95099E-42
11.440	0.55099E-42
11.490	0.35099E-42
11.540	0.25099E-42
11.590	0.15099E-42
11.640	0.95099E-43
11.690	0.55099E-43
11.740	0.35099E-43
11.790	0.25099E-43
11.840	0.15099E-43
11.890	0.95099E-44
11.940	0.55099E-44
11.990	0.35099E-44
12.040	0.25099E-44
12.090	0.15099E-44
12.140	0.95099E-45
12.190	0.55099E-45
12.240	0.35099E-45
12.290	0.25099E-45
12.340	0.15099E-45
12.390	0.95099E-46
12.440	0.55099E-46
12.490	0.35099E-46
12.540	0.25099E-46
12.590	0.15099E-46
12.640	0.95099E-47
12.690	0.55099E-47
12.740	0.35099E-47
12.790	0.25099E-47
12.840	0.15099E-47
12.890	0.95099E-48
12.940	0.55099E-48
12.990	0.35099E-48
13.040	0.25099E-48
13.090	0.15099E-48
13.140	0.95099E-49
13.190	0.55099E-49
13.240	0.35099E-49
13.290	0.25099E-49
13.340	0.15099E-49
13.390	0.95099E-50
13.440	0.55099E-50
13.490	0.35099E-50
13.540	0.25099E-50
13.590	0.15099E-50
13.640	0.95099E-51
13.690	0.55099E-51
13.740	0.35099E-51
13.790	0.25099E-51
13.840	0.15099E-51
13.890	0.95099E-52
13.940	0.55099E-52
13.990	0.35099E-52
14.040	0.25099E-52
14.090	0.15099E-52
14.140	0.95099E-53
14.190	0.55099E-53
14.240	0.35099E-53
14.290	0.25099E-53
14.340	0.15099E-53
14.390	0.95099E-54
14.440	0.55099E-54
14.490	0.35099E-54
14.540	0.25099E-54
14.590	0.15099E-54
14.640	0.95099E-55
14.690	0.55099E-55
14.740	0.35099E-55
14.790	0.25099E-55
14.840	0.15099E-55
14.890	0.95099E-56
14.940	0.55099E-56
14.990	0.35099E-56
15.040	0.25099E-56
15.090	0.15099E-56
15.140	0.95099E-57
15.190	0.55099E-57
15.240	0.35099E-57
15.290	0.25099E-57
15.340	0.15099E-57
15.390	0.95099E-58
15.440	0.55099E-58
15.490	0.35099E-58
15.540	0.25099E-58
15.590	0.15099E-58
15.640	0.95099E-59
15.690	0.55099E-59
15.740	0.35099E-59
15.790	0.25099E-59
15.840	0.15099E-59
15.890	0.95099E-60
15.940	0.55099E-60
15.990	0.35099E-60
16.040	0.25099E-60
16.090	0.15099E-60
16.140	0.95099E-61
16.190	0.55099E-61
16.240	0.35099E-61
16.290	0.25099E-61
16.340	0.15099E-6

SOIL HORIZON NUMBER 173 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.85 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.067	0.150F+05
0.102	0.600F+04
0.126	0.200F+04
0.174	0.100F+04
0.191	0.330F+03
0.207	0.100F+03
0.211	0.600F+02
0.253	0.200F+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	10.0	0.100
2.00	11.5	0.015
3.00	12.6	0.011
4.00	13.6	0.010
5.00	14.5	0.009
6.00	15.4	0.009
7.00	16.3	0.009
8.00	17.1	0.008
9.00	17.9	0.008
10.00	18.5	0.007
20.00	24.9	0.063
30.00	30.8	0.059
40.00	35.7	0.049
50.00	39.0	0.033
60.00	40.9	0.019
70.00	42.1	0.012
80.00	43.2	0.011
90.00	44.5	0.013
100.00	46.2	0.017
200.00	59.9	0.137
300.00	62.3	0.025
400.00	74.4	0.061
500.00	79.1	0.047
600.00	82.7	0.036
700.00	85.6	0.029
800.00	88.0	0.024
900.00	90.1	0.021
1000.00	91.9	0.018
2000.00	100.0	0.081

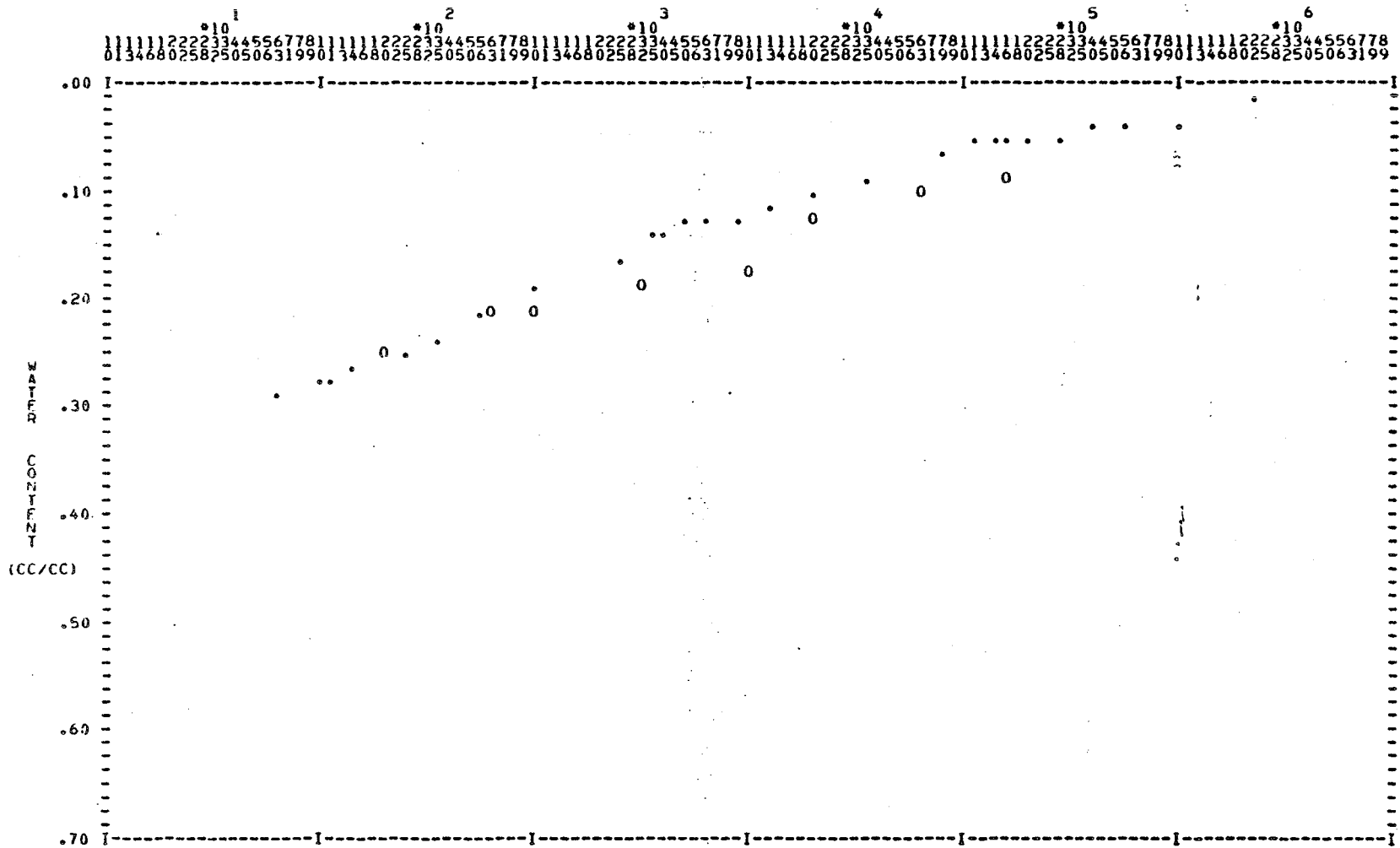
PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.017	0.23454E+06
0.036	0.98141E+05
0.039	0.57153E+05
0.042	0.38103E+05
0.045	0.27528E+05
0.048	0.20981E+05
0.050	0.16614E+05
0.055	0.13539E+05
0.056	0.11284E+05
0.066	0.82522E+04
0.084	0.36588E+04
0.080	0.20784E+04
0.080	0.13066E+04
0.080	0.85158E+03
0.080	0.60191E+03
0.080	0.47665E+03
0.080	0.40420E+03
0.080	0.35306E+03
0.080	0.25735E+03
0.080	0.10537E+03
0.210	0.58371E+02
0.210	0.37406E+02
0.210	0.26019E+02
0.224	0.19159E+02
0.224	0.14776E+02
0.269	0.11798E+02
0.275	0.96761E+01
0.290	0.62716E+01

B-346

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



B-347

SOIL HORIZON NUMBER 173

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(P_{SM})-LOG(P_{SP}))) = 0.30772E+01

SOIL HORIZON NUMBR 174 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.12 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.045	0.150F+05
0.047	0.600E+04
0.053	0.200F+04
0.189	0.100F+04
0.206	0.330F+03
0.242	0.100F+03
0.279	0.600F+02
0.445	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.1	0.021
2.00	2.4	0.003
3.00	2.7	0.003
4.00	3.1	0.004
5.00	3.4	0.003
6.00	3.7	0.003
7.00	4.0	0.003
8.00	4.3	0.002
9.00	4.5	0.002
10.00	4.7	0.002
20.00	5.9	0.012
30.00	5.5	0.006
40.00	7.9	0.014
50.00	10.2	0.023
60.00	16.5	0.063
70.00	26.0	0.095
80.00	35.3	0.093
90.00	43.1	0.078
100.00	48.0	0.058
200.00	80.4	0.315
300.00	87.7	0.073
400.00	88.7	0.010
500.00	90.0	0.013
600.00	92.2	0.022
700.00	94.2	0.020
800.00	95.9	0.017
900.00	97.1	0.012
1000.00	97.9	0.008
2000.00	100.0	0.021

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.007	0.99310E+05
0.015	0.44163E+05
0.017	0.26546E+05
0.019	0.17647E+05
0.021	0.12619E+05
0.022	0.94994E+04
0.024	0.74271E+04
0.025	0.59771E+04
0.026	0.49207E+04
0.031	0.34065E+04
0.036	0.13497E+04
0.042	0.91893E+03
0.052	0.68257E+03
0.077	0.60397E+03
0.123	0.50205E+03
0.177	0.39992E+03
0.227	0.31766E+03
0.266	0.25171E+03
0.373	0.16969E+03
0.485	0.57673E+02
0.509	0.23073E+02
0.516	0.16581E+02
0.526	0.13265E+02
0.538	0.10083E+02
0.549	0.77568E+01
0.557	0.60216E+01
0.563	0.46638E+01
0.571	0.27303E+01

B-348

ALPHA = 1.38

SOIL HORIZON NUMBER 175 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.27 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.032	0.150E+05
0.043	0.600E+04
0.055	0.200E+04
0.099	0.100E+04
0.124	0.330E+03
0.272	0.100E+03
0.321	0.600E+02
0.424	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	3.7	0.037
2.00	4.2	0.005
3.00	4.6	0.004
4.00	5.0	0.004
5.00	5.4	0.004
6.00	5.8	0.003
7.00	6.1	0.003
8.00	6.4	0.003
9.00	6.6	0.002
10.00	6.8	0.002
20.00	8.2	0.014
30.00	8.8	0.006
40.00	10.0	0.012
50.00	12.1	0.021
60.00	14.1	0.020
70.00	17.3	0.031
80.00	21.5	0.042
90.00	23.9	0.024
100.00	29.6	0.057
200.00	41.7	0.121
300.00	49.1	0.074
400.00	49.8	0.007
500.00	90.9	0.011
600.00	92.9	0.019
700.00	94.5	0.017
800.00	96.0	0.014
900.00	97.1	0.011
1000.00	97.8	0.008
2000.00	100.0	0.022

PREDICTED MOISTURE CHARACTERISTIC DATA

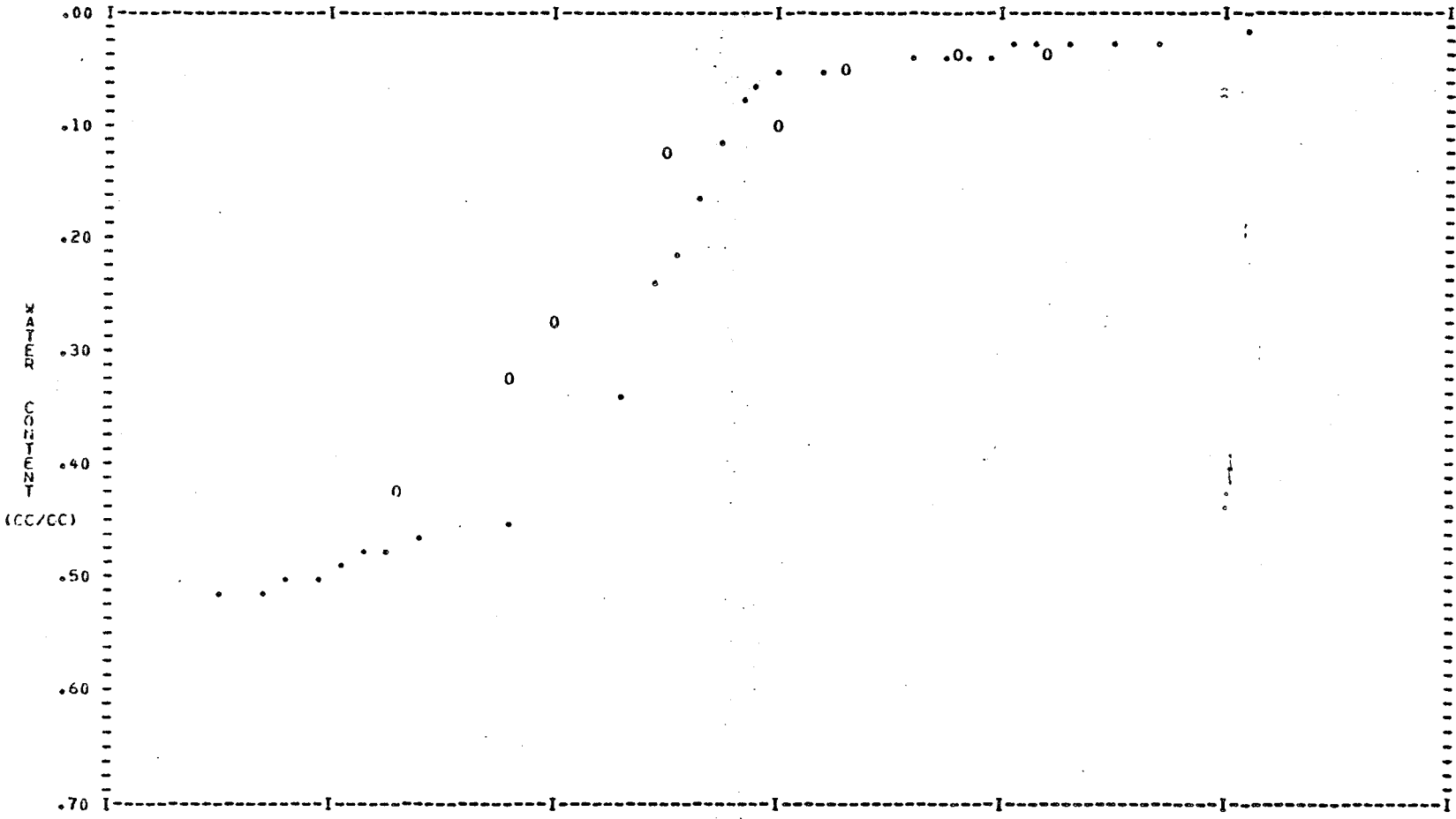
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.011	0.11931E+06
0.023	0.51815E+05
0.025	0.30631E+05
0.027	0.20301E+05
0.029	0.14483E+05
0.031	0.10890E+05
0.032	0.85056E+04
0.034	0.68447E+04
0.035	0.56339E+04
0.039	0.39027E+04
0.044	0.14971E+04
0.049	0.10057E+04
0.058	0.75210E+03
0.079	0.67040E+03
0.118	0.55883E+03
0.165	0.44572E+03
0.209	0.33458E+03
0.243	0.28164E+03
0.322	0.19045E+03
0.445	0.64733E+02
0.466	0.24659E+02
0.471	0.17924E+02
0.473	0.14489E+02
0.488	0.10980E+02
0.495	0.84532E+01
0.503	0.65327E+01
0.507	0.51380E+01
0.515	0.30885E+01

B-350

ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-351

SOIL HORIZON NUMBER 175 O MEASURED ; . PREDICTED SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.30685E+01

SOIL HORIZON NUMBER 176 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.47 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.021	0.150E+05
0.031	0.600E+04
0.041	0.200E+04
0.072	0.100E+04
0.113	0.330E+03
0.209	0.100E+03
0.262	0.600E+02
0.351	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	2.5	0.025
2.00	2.5	0.001
3.00	2.8	0.002
4.00	3.1	0.003
5.00	3.4	0.003
6.00	3.6	0.003
7.00	3.8	0.002
8.00	4.1	0.002
9.00	4.3	0.002
10.00	4.4	0.002
20.00	5.6	0.012
30.00	6.9	0.013
40.00	10.4	0.035
50.00	15.3	0.054
60.00	23.5	0.077
70.00	32.3	0.088
80.00	40.5	0.082
90.00	47.4	0.059
100.00	52.9	0.055
200.00	86.3	0.334
300.00	92.9	0.066
400.00	93.2	0.003
500.00	93.8	0.006
600.00	95.0	0.012
700.00	96.1	0.011
800.00	97.0	0.009
900.00	97.7	0.007
1000.00	98.2	0.005
2000.00	100.0	0.018

PREDICTED MOISTURE CHARACTERISTIC DATA

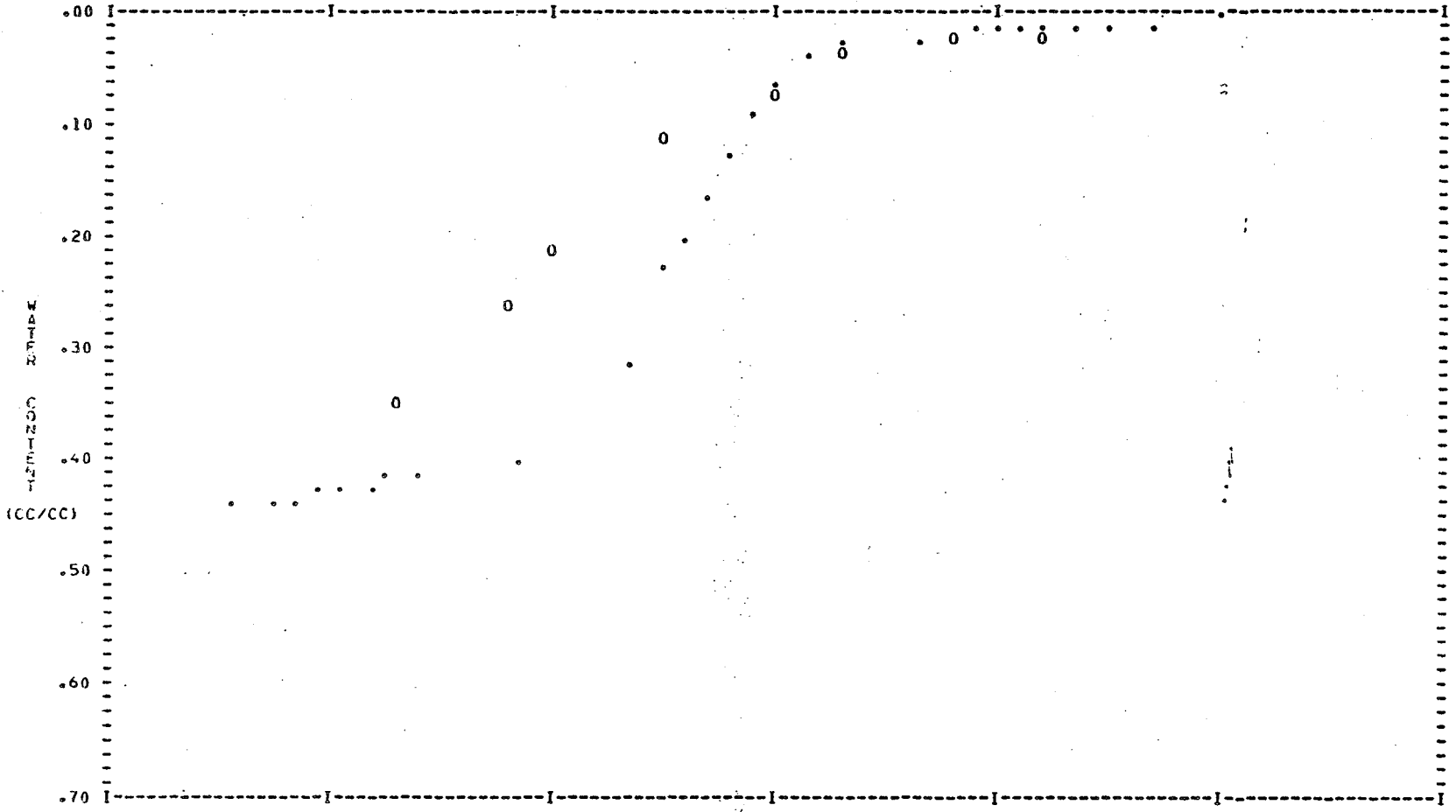
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.006	0.10478E+06
0.012	0.52250E+05
0.013	0.32873E+05
0.014	0.22149E+05
0.015	0.15949E+05
0.017	0.12062E+05
0.018	0.94626E+04
0.019	0.76359E+04
0.019	0.63009E+04
0.022	0.43980E+04
0.023	0.20238E+04
0.039	0.14279E+04
0.058	0.10482E+04
0.088	0.81888E+03
0.124	0.64529E+03
0.162	0.50862E+03
0.196	0.40514E+03
0.223	0.32552E+03
0.310	0.22384E+03
0.399	0.73838E+02
0.414	0.23973E+02
0.416	0.18515E+02
0.420	0.15480E+02
0.425	0.11671E+02
0.430	0.89972E+01
0.433	0.70556E+01
0.436	0.55889E+01
0.441	0.34590E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



B-353

SOIL HORIZON NUMBER 176 0 MEASURED ; . PREDICTED SUM OF (ABS(LOG(P_{SIM})-LOG(P_{SIP}))) = 0.35203E+01

SOIL HORIZON NUMBER 177 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.55 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.107	0.150E+05
0.126	0.600E+04
0.146	0.200E+04
0.135	0.100E+04
0.195	0.330E+03
0.222	0.100E+03
0.274	0.600E+02
0.338	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	14.1	0.141
2.00	14.7	0.006
3.00	15.1	0.004
4.00	15.5	0.004
5.00	15.8	0.003
6.00	16.1	0.003
7.00	16.4	0.003
8.00	16.6	0.002
9.00	16.8	0.002
10.00	17.0	0.002
20.00	18.1	0.011
30.00	18.2	0.001
40.00	18.8	0.006
50.00	20.6	0.018
60.00	26.0	0.054
70.00	34.3	0.082
80.00	42.5	0.083
90.00	49.7	0.072
100.00	55.3	0.056
200.00	91.1	0.358
300.00	97.2	0.062
400.00	97.3	0.000
500.00	97.4	0.001
600.00	97.9	0.005
700.00	98.3	0.004
800.00	98.7	0.004
900.00	99.0	0.003
1000.00	99.2	0.002
2000.00	100.0	0.008

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.031	0.15123E+06
0.062	0.63989E+05
0.064	0.37114E+05
0.065	0.24374E+05
0.066	0.17325E+05
0.067	0.12999E+05
0.068	0.10144E+05
0.069	0.81537E+04
0.070	0.67886E+04
0.073	0.46582E+04
0.075	0.11558E+04
0.077	0.11027E+04
0.082	0.90597E+03
0.097	0.81457E+03
0.125	0.67817E+03
0.159	0.54234E+03
0.191	0.43350E+03
0.218	0.34718E+03
0.304	0.24117E+03
0.391	0.77494E+02
0.404	0.17866E+02
0.404	0.14531E+02
0.405	0.13903E+02
0.407	0.10433E+02
0.409	0.80472E+01
0.410	0.63391E+01
0.411	0.50679E+01
0.413	0.31534E+01

B-354

ALPHA = 1.38

SOIL HORIZON NUMBER 178 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.11 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.038	0.150E+05
0.039	0.600E+04
0.042	0.200E+04
0.213	0.100E+04
0.249	0.330E+03
0.292	0.100E+03
0.315	0.600E+02
0.490	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.9	0.009
2.00	1.5	0.006
3.00	2.1	0.006
4.00	2.8	0.007
5.00	3.5	0.007
6.00	4.1	0.006
7.00	4.7	0.006
8.00	5.2	0.005
9.00	5.7	0.005
10.00	6.1	0.004
20.00	9.0	0.029
30.00	12.0	0.030
40.00	16.2	0.042
50.00	21.1	0.049
60.00	27.9	0.068
70.00	35.8	0.079
80.00	43.1	0.073
90.00	49.0	0.059
100.00	53.4	0.044
200.00	76.4	0.230
300.00	82.8	0.064
400.00	85.9	0.031
500.00	88.5	0.026
600.00	90.9	0.024
700.00	93.1	0.021
800.00	94.9	0.018
900.00	96.3	0.015
1000.00	97.5	0.012
2000.00	100.0	0.025

PREDICTED MOISTURE CHARACTERISTIC DATA

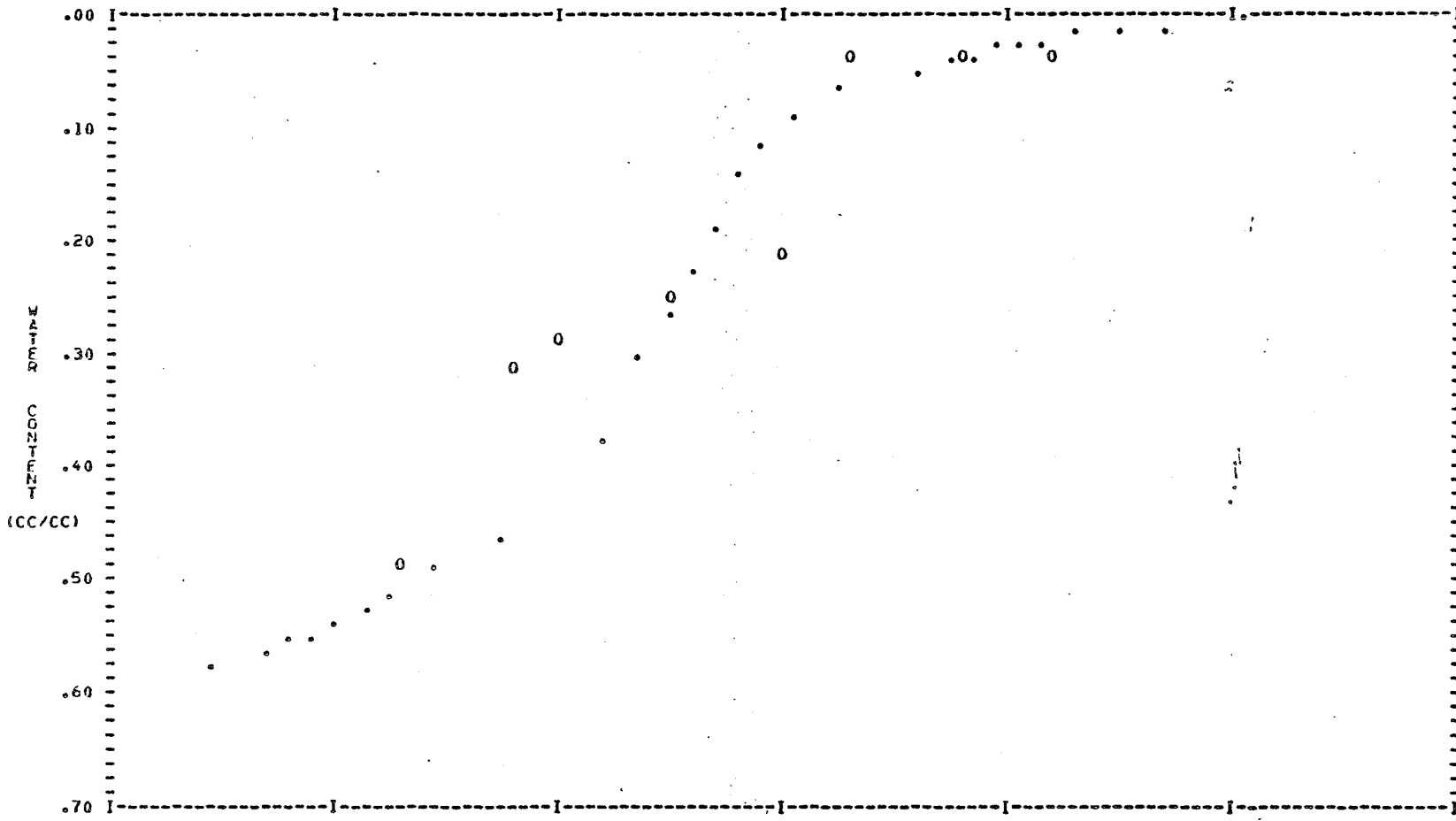
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.004	0.10808E+06
0.010	0.49023E+05
0.014	0.29857E+05
0.018	0.19973E+05
0.022	0.14347E+05
0.025	0.10841E+05
0.029	0.85053E+04
0.031	0.68665E+04
0.034	0.56700E+04
0.044	0.39800E+04
0.061	0.17918E+04
0.082	0.11294E+04
0.108	0.78202E+03
0.142	0.60799E+03
0.185	0.48153E+03
0.229	0.37843E+03
0.268	0.29912E+03
0.298	0.23698E+03
0.377	0.15856E+03
0.462	0.55848E+02
0.490	0.28710E+02
0.507	0.18646E+02
0.521	0.13443E+02
0.535	0.10112E+02
0.546	0.78189E+01
0.556	0.61768E+01
0.563	0.49566E+01
0.574	0.28005E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 178

0 MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.24125E+01

SOIL HORIZON NUMBER 179 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.30 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.040	0.150E+05
0.048	0.600E+04
0.057	0.200E+04
0.195	0.100E+04
0.224	0.330E+03
0.296	0.100E+03
0.311	0.600E+02
0.467	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	4.4	0.044
2.00	4.9	0.005
3.00	5.5	0.006
4.00	6.1	0.007
5.00	6.8	0.007
6.00	7.4	0.006
7.00	8.0	0.006
8.00	8.5	0.005
9.00	8.9	0.005
10.00	9.3	0.004
20.00	12.2	0.029
30.00	15.3	0.031
40.00	19.5	0.043
50.00	24.4	0.048
60.00	30.9	0.065
70.00	38.5	0.075
80.00	45.4	0.069
90.00	50.9	0.056
100.00	55.0	0.041
200.00	75.0	0.209
300.00	82.1	0.062
400.00	85.1	0.031
500.00	87.7	0.026
600.00	90.1	0.024
700.00	92.3	0.022
800.00	94.2	0.019
900.00	95.7	0.015
1000.00	96.9	0.012
2000.00	100.0	0.031

PREDICTED MOISTURE CHARACTERISTIC DATA

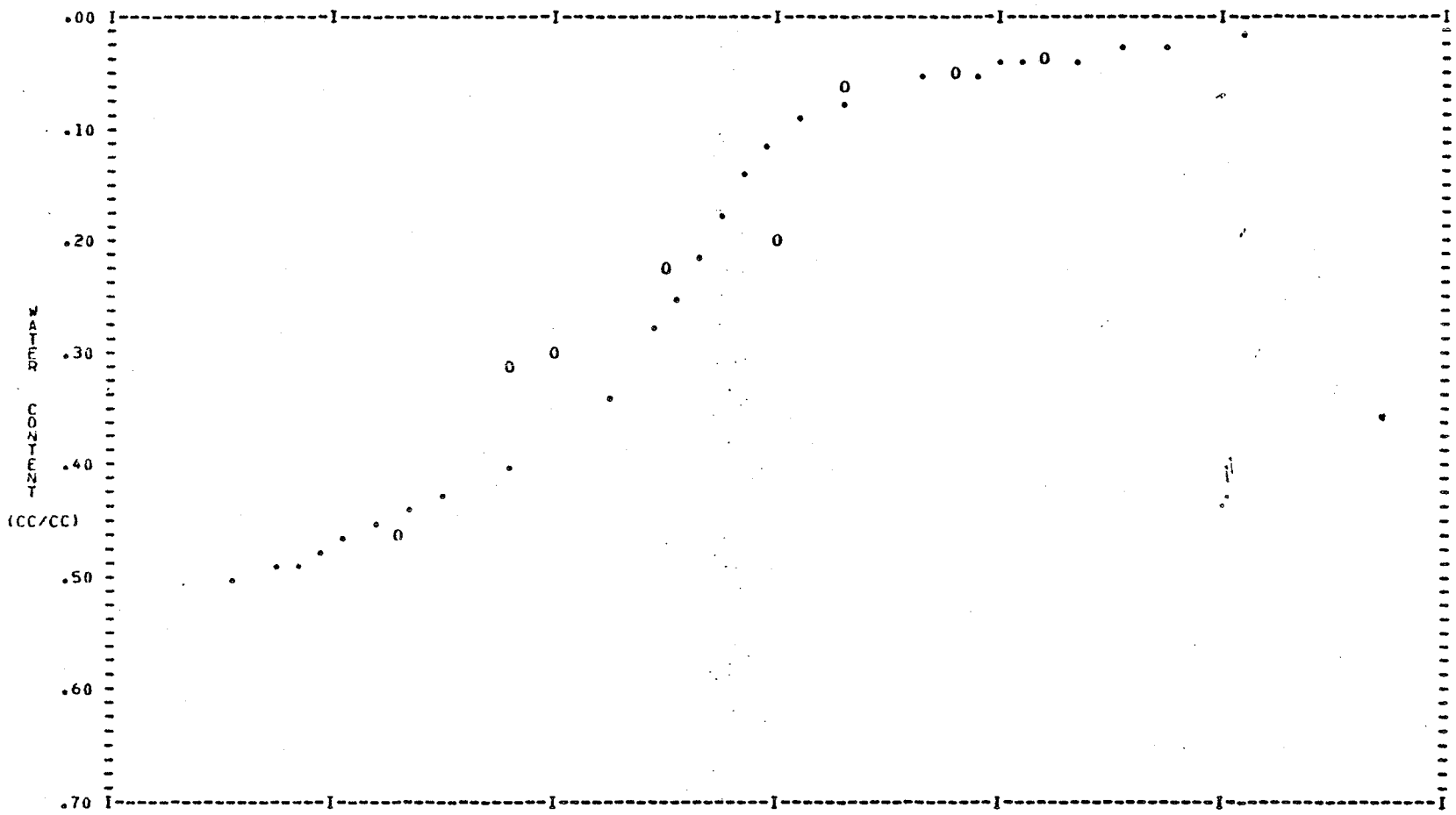
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.012	0.12373E+06
0.026	0.56191E+05
0.030	0.34255E+05
0.033	0.22929E+05
0.036	0.16478E+05
0.039	0.12457E+05
0.042	0.97769E+04
0.044	0.78951E+04
0.046	0.65226E+04
0.055	0.45859E+04
0.070	0.20854E+04
0.089	0.13093E+04
0.112	0.90213E+03
0.141	0.69743E+03
0.177	0.55137E+03
0.214	0.43283E+03
0.245	0.34169E+03
0.270	0.27021E+03
0.333	0.18002E+03
0.402	0.64055E+02
0.426	0.33054E+02
0.440	0.21532E+02
0.453	0.15575E+02
0.465	0.11729E+02
0.475	0.90784E+01
0.484	0.71794E+01
0.491	0.57685E+01
0.502	0.33720E+01

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ALPHA = 1.38

SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)

*10¹ *10² *10³ *10⁴ *10⁵ *10⁶
 111112222334455677811111222233445567781111122223344556778111112222334455677811111222233445567781111122223344556778
 013468025825050631990134680258250506319901346802582505063199013468025825050631990134680258250506319901346802582505063199



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SOIL HORIZON NUMBER 179

O MEASURED ; . PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.19874E+01

SOIL HORIZON NUMBER 180 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.56 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.070	0.150E+05
0.081	0.600E+04
0.095	0.200E+04
0.147	0.100E+04
0.187	0.330E+03
0.226	0.100E+03
0.265	0.600E+02
0.276	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	0.0	0.090
2.00	0.6	0.006
3.00	10.2	0.006
4.00	10.9	0.007
5.00	11.6	0.007
6.00	12.3	0.006
7.00	12.9	0.006
8.00	13.4	0.005
9.00	13.9	0.005
10.00	14.4	0.005
20.00	17.5	0.031
30.00	21.1	0.036
40.00	25.8	0.047
50.00	30.7	0.049
60.00	37.5	0.068
70.00	45.5	0.080
80.00	52.7	0.072
90.00	58.4	0.057
100.00	62.4	0.040
200.00	80.7	0.183
300.00	85.6	0.048
400.00	88.1	0.025
500.00	90.1	0.020
600.00	91.9	0.018
700.00	93.5	0.016
800.00	94.9	0.014
900.00	96.0	0.012
1000.00	97.0	0.010
2000.00	100.0	0.030

PREDICTED MOISTURE CHARACTERISTIC DATA

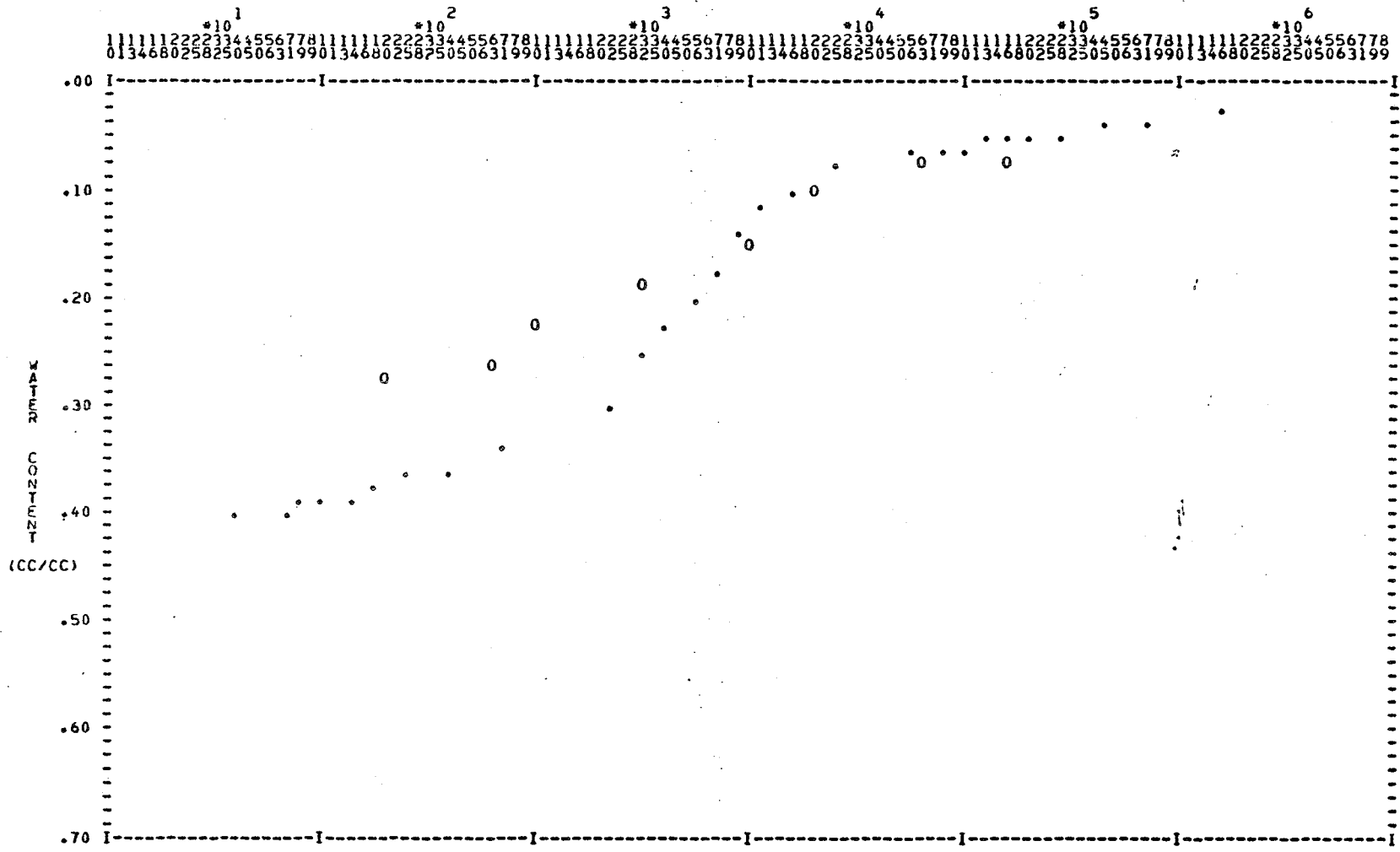
SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.020	0.15351E+06
0.041	0.69537E+05
0.044	0.42349E+05
0.046	0.28345E+05
0.049	0.20372E+05
0.052	0.15405E+05
0.054	0.12043E+05
0.056	0.97684E+04
0.058	0.80711E+04
0.066	0.56810E+04
0.079	0.26123E+04
0.096	0.16238E+04
0.116	0.11050E+04
0.140	0.85668E+03
0.171	0.67974E+03
0.202	0.53273E+03
0.229	0.41850E+03
0.249	0.32763E+03
0.294	0.21407E+03
0.342	0.74540E+02
0.357	0.38745E+02
0.366	0.25138E+02
0.374	0.17959E+02
0.381	0.13458E+02
0.387	0.10437E+02
0.393	0.83111E+01
0.397	0.67557E+01
0.405	0.40853E+01

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ALPHA = 1.38

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SOIL WATER PRESSURE (PSI), -CM H2O (LOG SCALE)



SOIL HORIZON NUMBER 180

O MEASURED ; • PREDICTED

SUM OF (ABS(LOG(PSIM)-LOG(PSIP))) = 0.37464E+01

SOIL HORIZON NUMBER 181 (SEE TABLE 4 FOR IDENTIFICATION)

DENSITY DATA:

BULK DENSITY = 1.58 G/CM**3
 PARTICLE DENSITY = 2.65 G/CM**3 ASSUMED CONSTANT

MEASURED MOISTURE CHARACTERISTIC DATA:

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.049	0.150E+05
0.062	0.600E+04
0.071	0.200E+04
0.144	0.150E+04
0.167	0.330E+03
0.205	0.100E+03
0.229	0.600E+02
0.239	0.200E+02

PARTICLE SIZE DISTRIBUTION DATA

UPPER PARTICLE DIAM. (MICROMETERS)	PERCENT PARTICLES LESS THAN DIAM.	INTERVAL FRACTION (G/G)
1.00	7.2	0.072
2.00	7.5	0.003
3.00	7.8	0.003
4.00	8.3	0.004
5.00	8.7	0.004
6.00	9.1	0.004
7.00	9.4	0.003
8.00	9.7	0.003
9.00	10.0	0.003
10.00	10.3	0.003
20.00	12.0	0.017
30.00	13.8	0.018
40.00	17.0	0.031
50.00	21.0	0.040
60.00	27.3	0.063
70.00	35.0	0.077
80.00	42.2	0.072
90.00	48.1	0.059
100.00	52.4	0.043
200.00	75.4	0.230
300.00	81.9	0.064
400.00	85.0	0.031
500.00	87.6	0.026
600.00	89.9	0.023
700.00	92.0	0.020
800.00	93.7	0.017
900.00	95.2	0.015
1000.00	96.4	0.012
2000.00	100.0	0.036

PREDICTED MOISTURE CHARACTERISTIC DATA

SOIL WATER CONTENT (CC/CC)	SOIL WATER PRESSURE (-CM H2O)
0.015	0.13605E+06
0.031	0.63227E+05
0.033	0.38889E+05
0.034	0.26060E+05
0.036	0.18721E+05
0.037	0.14141E+05
0.039	0.11086E+05
0.040	0.89426E+04
0.041	0.73776E+04
0.045	0.51518E+04
0.052	0.23427E+04
0.062	0.15267E+04
0.077	0.10793E+04
0.097	0.85742E+03
0.126	0.68571E+03
0.156	0.54044E+03
0.182	0.42751E+03
0.203	0.33847E+03
0.258	0.22710E+03
0.318	0.79959E+02
0.337	0.41133E+02
0.349	0.26616E+02
0.358	0.19110E+02
0.367	0.14326E+02
0.375	0.11107E+02
0.381	0.88375E+01
0.387	0.71750E+01
0.397	0.42960E+01

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ALPHA = 1.38

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