Evaluation of seal capacity of selected Cretaceous shales from conventional NPRA core samples from the following wells:

U. S. Navy Meade T. W. No. 1 (600' and 2,366'),

Husky Oil NPR Operations (U. S. Geological Survey) North Kalikpik T. W. No. 1 (6,992.5'), &

Husky Oil NPR Operations (U. S. Geological Survey) Seabee T. W. No. 1 (6,547.6' and 10,882.5').

Received 3 December 2001 Total of 40 pages in report

Alaska Geologic Materials Center Data Report No. 299

Evaluation of Seal Capacity of Selected "Cretaceous Shales" from Conventional Core Samples:

Multiple Wells

North Slope, Alaska

Core Petrophysics, Inc.

Houston, Tx.
10050 W. Gulfbank Rd.
Suite 214
Houston, TX 77040
(713) 896-4499

Maracaibo, Ven.
Avenida Milagro Norte
Sector Santa Rosa de Tierra
Maracaibo, Venezuela
(58)61-483486 / (58)61-480438

Lafayette, La.
1015 North Cruse
Broussard, LA 70518
(318) 837-8616

New Orleans, La.
805 Howard Avenue
New Orleans, LA 70113
(504) 522-2020

Sample List

Multiple Wells
North Slope, Alaska

Depth, feet	Well	Formation	Core Analysis	Seal Capacity, feet	Mercury Inj. Cap. Press.	Thin Section Petrography	SEM Analysis	XRD Analysis
600	USN Meade #1	Nanushuk Shale	k_{air} = 0.0001 md*; por. = 3.03%	2065	X	X	X	X
2366	USN Meade #1	Nanushuk Shale	k_{air} = 0.001 md*; por. = 6.85%	1471	X	X	X	X
6547.6	USGS Seebee #1	Torok Shale	k_{air} = 0.0001 md*; por. = 9.02%	6552	X	X	X	X
6547.6 V	USGS Seebee #1	Torok Shale	k_{air} = 0.005 md; por. = 7.37%	N/A		X		
10882.5	USGS Seebee #1	Fortress Mtn.	k_{air} = 0.145* md; por. = 7.92%	78	X	X	X	X
10882.5 V	USGS Seebee #1	Fortress Mtn.	k_{air} = 0.006 md; por. = 6.88%	N/A		X		
6992.5	USGS N. Kalikpik #1	HRZ	k_{air} = 0.002 md*; por. = 5.80%	1802	X	X	X	X
6992.5	USGS N. Kalikpik #1	HRZ	k_{air} = 0.009 md; por. = 3.56%	N/A		X		
Total Number of Samples Analyzed					5	8	5	5

* K_{air} after Swanson (1981)

\L CAPACITY STUDY
ASKA

Table 3

SEAL CAPACITY SUMMARY

Smpl No.	Depth (feet)	Well	Formation	Kair (mD)*	Por (%)	Grain Density (g/cc)	Reservoir Type	Mercury Injection Capillary Pressure: Density Gradient (psi/ft) HC	Density Gradient (psi/ft) Wtr	Med Pore Radius (µm)	Entry Pressure (psia)	Disp. Pressure (psia)	Seal Capacity (feet)**
1	600.0	USN Meade # 1	Nanushuk	0.0001	3.03	2.853	Oil	0.364	0.445	0.0140	1418	2368	2065
2	2366.0	USN Meade #1	Nanushuk	0.001	6.85	2.773	Oil	0.351	0.434	0.0068	917	1729	1471
3	6547.6	USGS Seebee #1core 2	Torok	0.001	9.02	2.758	Oil	0.354	0.437	0.0075	458	7698	6552
4	10882.5	USGS Seebee #1 core 4	Fortress Mtn.	0.145	7.92	2.775	Oil	0.356	0.439	0.0074	35	90	78
5	6992.5	USGS N Kalikpik # 1	HRZ	0.002	5.80	2.642	Oil	0.354	0.437	0.0047	115	2217	1802

FOOTNOTES

* - After Swanson (1981).

** - Calculated at 10% non wetting phase saturation (Schowalter 1979).

Density gradients determined using data provided by Anadarko & corrected for reservoir temperature and pressure.

Cretaceous Shales
Multiple Wells
North Slope, Alaska

Table 2

X-Ray Diffraction Analysis

Core Petrophysics, Inc.
10050 W. Gulfbank Road
Suite 214
Houston, TX 77040
(713)896-4499

Analyst: BEW.
Date: 12-31-97

Depth, ft. (Well)	Bulk Mineralogy (%)											Clay Mineralogy (%)					
	Quartz	Plagioclase	K-Feldspars	Calcite	Dolomite	Ankerite	Siderite	Pyrite	Barite**	Halite	Total Clay	Kaolinite	Chlorite	Illite	Smectite	MXL I/S*	%I in MXL
600 (Meade #1)	11	3	0	0	54	0	0	0	0	0	32	11	3	18	0	0	-
2366 (Meade #1)	40	9	0	2	4	0	0	0	0	0	45	9	10	26	0	0	-
6547.6 (Seebee #1)	35	8	0	0	0	0	0	0	0	0	57	0	21	36	0	0	-
10882.5 (Seebee #1)	29	6	0	0	0	0	0	0	0	0	65	0	24	41	0	0	-
6992.5 (Kalikpik #1)	34	18	0	0	0	0	0	2	0	0	46	0	13	32	0	0	-

Tr = Trace (< 1%)
*MXL I/S = Mixed-layer illite-smectite
** Drilling mud contamination

Table 4

Standard Core Analysis
One-Inch Diameter Plugs
Used for Acoustic Velocity Tests

Depth, feet	Well	Formation	Porosity (%)	Permeability (md)	Grain Density (g/cc)
6547.6	USGS Seebee No. 1	Torok Shale	7.37	0.005	2.724
10882.5	USGS Seebee No. 1	Fortress Mtn.	6.88	0.006	2.749
6992.5	USGS N. Kalikpik No. 1	HRZ	3.56	0.009	2.586

[redacted].

FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (ft)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.853			Rho h (psi/ft)	0.364
Kair (mD)	0.356	Pc thresh	1417.8	T*Cos Theta Lab	368
Kair (mD)*	0.000	MEDIAN (μm)	0.0140	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
1.00	0.00	106.7200	0.87	0.00	0.00	0.00	3.03	100.00
2.10	0.00	50.8190	1.83	0.00	0.00	0.00	3.03	100.00
3.00	0.00	35.5733	2.62	0.00	0.00	0.00	3.03	100.00
4.00	0.00	26.6800	3.49	0.00	0.00	0.00	3.03	100.00
5.00	0.00	21.3440	4.36	0.00	0.00	0.00	3.03	100.00
6.00	0.00	17.7867	5.23	0.00	0.00	0.00	3.03	100.00
7.00	0.00	15.2457	6.11	0.00	0.00	0.00	3.03	100.00
8.00	0.00	13.3400	6.98	0.00	0.00	0.00	3.03	100.00
8.90	0.00	11.9910	7.76	0.00	0.00	0.00	3.03	100.00
10.00	0.00	10.6720	8.72	0.00	0.00	0.00	3.03	100.00
12.00	0.00	8.8933	10.47	0.00	0.00	0.00	3.03	100.00
13.90	0.00	7.6777	12.12	0.00	0.00	0.00	3.03	100.00
16.00	0.00	6.6700	13.96	0.00	0.00	0.00	3.03	100.00
17.90	0.00	5.9620	15.61	0.00	0.00	0.00	3.03	100.00
20.00	0.00	5.3360	17.44	0.00	0.00	0.00	3.03	100.00
22.00	0.01	4.8509	19.19	0.00	0.00	0.00	3.03	100.00
24.00	0.01	4.4467	20.93	0.00	0.00	0.00	3.03	100.00
25.90	0.01	4.1205	22.59	0.00	0.00	0.00	3.03	100.00
27.90	0.01	3.8251	24.34	0.00	0.00	0.00	3.03	100.00
29.80	0.01	3.5812	25.99	0.00	0.00	0.00	3.03	100.00
34.80	0.01	3.0667	30.35	0.00	0.00	0.00	3.03	100.00
39.80	0.01	2.6814	34.72	0.00	0.00	0.00	3.03	100.00
44.80	0.01	2.3821	39.08	0.00	0.00	0.00	3.03	100.00
49.70	0.01	2.1473	43.35	0.00	0.00	0.00	3.03	100.00
54.70	0.01	1.9510	47.71	0.00	0.00	0.00	3.03	100.00
64.60	0.02	1.6520	56.35	0.00	0.00	0.00	3.03	100.00
74.60	0.02	1.4306	65.07	0.00	0.00	0.00	3.03	100.00

[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (ft)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.853			Rho h (psi/ft)	0.364
Kair (mD)	0.356	Pc thresh	1417.8	T*Cos Theta Lab	368
Kair (mD)*	0.000	MEDIAN (μm)	0.0140	T*Cos Theta Res	26

* Kair after Swanson (1981)

		PORE		SATURATION (nwp)			SATURATION (wp)	
		THROAT		CUM	INC	CUM	CUM	CUM
Pc	J	RADIUS	HEIGHT	Vbulk	Vpore	Vpore	Vbulk	Vpore
(psia)	FUNCTION	(μm)	(ft)	(%)	(%)	(%)	(%)	(%)
84.50	0.02	1.2630	73.71	0.00	0.00	0.00	3.03	100.00
99.70	0.02	1.0704	86.96	0.00	0.00	0.00	3.03	100.00
114.70	0.03	0.9304	100.05	0.00	0.00	0.00	3.03	100.00
129.20	0.03	0.8260	112.69	0.00	0.00	0.00	3.03	100.00
149.60	0.04	0.7134	130.49	0.00	0.00	0.00	3.03	100.00
174.30	0.04	0.6123	152.03	0.00	0.00	0.00	3.03	100.00
199.30	0.05	0.5355	173.84	0.00	0.00	0.00	3.03	100.00
229.30	0.05	0.4654	200.01	0.00	0.00	0.00	3.03	100.00
258.60	0.06	0.4127	225.56	0.00	0.00	0.00	3.03	100.00
300.30	0.07	0.3554	261.94	0.00	0.00	0.00	3.03	100.00
350.20	0.08	0.3047	305.46	0.00	0.00	0.00	3.03	100.00
398.00	0.09	0.2681	347.16	0.00	0.00	0.00	3.03	100.00
458.60	0.11	0.2327	400.01	0.00	0.00	0.00	3.03	100.00
527.00	0.12	0.2025	459.68	0.00	0.00	0.00	3.03	100.00
609.00	0.14	0.1752	531.20	0.00	0.00	0.00	3.03	100.00
695.90	0.16	0.1534	607.00	0.00	0.00	0.00	3.03	100.00
803.40	0.19	0.1328	700.76	0.00	0.00	0.00	3.03	100.00
916.70	0.21	0.1164	799.59	0.00	0.00	0.00	3.03	100.00
1078.80	0.25	0.0989	940.98	0.00	0.00	0.00	3.03	100.00
1222.40	0.29	0.0873	1066.24	0.00	0.00	0.00	3.03	100.00
1417.80	0.33	0.0753	1236.67	0.00	0.13	0.13	3.02	99.87
1597.50	0.37	0.0668	1393.42	0.01	0.16	0.28	3.02	99.72
1790.90	0.42	0.0596	1562.11	0.08	2.44	2.73	2.94	97.27
1992.10	0.47	0.0536	1737.61	0.17	2.83	5.55	2.86	94.45
2192.40	0.51	0.0487	1912.32	0.24	2.44	7.99	2.79	92.01
2439.50	0.57	0.0437	2127.85	0.33	2.83	10.82	2.70	89.18
2911.00	0.68	0.0367	2539.12	0.40	2.44	13.26	2.63	86.74

[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (ft)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.853			Rho h (psi/ft)	0.364
Kair (mD)	0.356	Pc thresh	1417.8	$T^*Cos\ Theta_{Lab}$	368
Kair (mD)*	0.000	MEDIAN (μm)	0.0140	$T^*Cos\ Theta_{Res}$	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
3088.40	0.72	0.0346	2693.85	0.49	2.83	16.09	2.54	83.91
3729.80	0.87	0.0286	3253.31	0.57	2.83	18.91	2.45	81.09
3938.40	0.92	0.0271	3435.27	0.66	2.83	21.74	2.37	78.26
4445.10	1.04	0.0240	3877.23	0.79	4.25	25.99	2.24	74.01
5011.30	1.17	0.0213	4371.10	0.92	4.25	30.24	2.11	69.76
5622.20	1.32	0.0190	4903.96	1.07	4.97	35.21	1.96	64.79
6307.70	1.48	0.0169	5501.89	1.22	4.97	40.18	1.81	59.82
7097.40	1.66	0.0150	6190.70	1.37	4.97	45.15	1.66	54.85
8051.10	1.89	0.0133	7022.56	1.62	8.50	53.65	1.40	46.35
9049.40	2.12	0.0118	7893.33	1.77	4.97	58.62	1.25	41.38
10226.70	2.40	0.0104	8920.23	1.93	4.97	63.59	1.10	36.41
11597.60	2.72	0.0092	10116.00	2.05	4.25	67.84	0.97	32.16
13177.20	3.09	0.0081	11493.80	2.18	4.25	72.09	0.85	27.91
14950.50	3.50	0.0071	13040.56	2.31	4.25	76.33	0.72	23.67
17215.60	4.03	0.0062	15016.29	2.44	4.25	80.58	0.59	19.42
19406.10	4.55	0.0055	16926.95	2.55	3.55	84.13	0.48	15.87
22625.00	5.30	0.0047	19734.63	2.68	4.25	88.38	0.35	11.62
26067.30	6.11	0.0041	22737.18	2.80	4.25	92.63	0.22	7.37
30090.80	7.05	0.0035	26246.67	2.91	3.34	95.96	0.12	4.04
35008.50	8.20	0.0030	30536.13	2.99	2.83	98.79	0.04	1.21
40552.10	9.50	0.0026	35371.53	3.03	1.21	100.00	0.00	0.00
46512.90	10.90	0.0023	40570.83	3.03	0.00	100.00	0.00	0.00
53561.60	12.55	0.0020	46719.06	3.03	0.00	100.00	0.00	0.00
60208.00	14.11	0.0018	52516.37	3.03	0.00	100.00	0.00	0.00

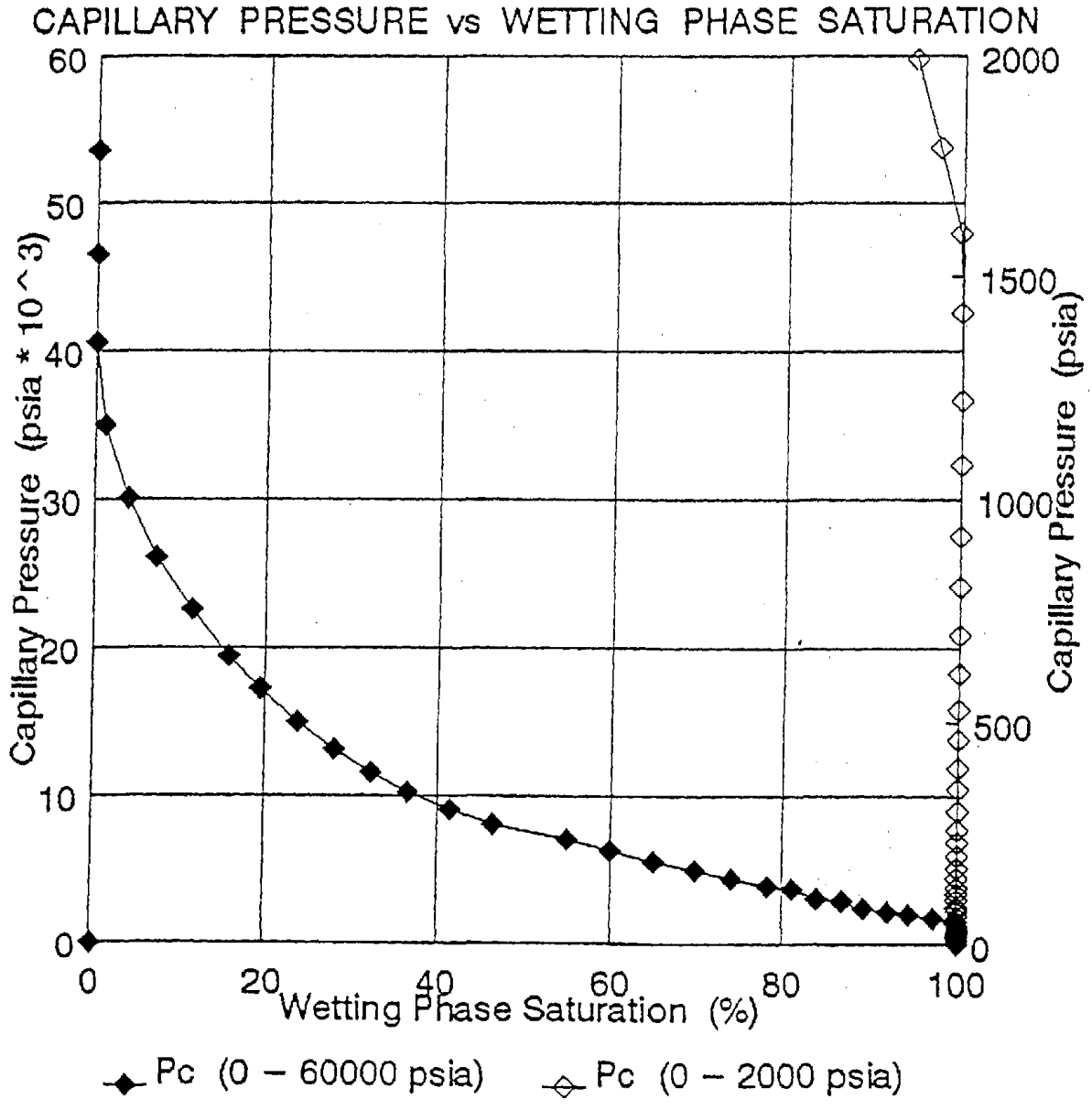
[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (m)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.85			Rho h (psi/ft)	0.364
Kair (mD)	0.356			T*Cos Theta Lab	368
Kair (mD)*	0.000	Pc thresh	1417.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0140		

* Kair after Swanson (1981)



[redacted].

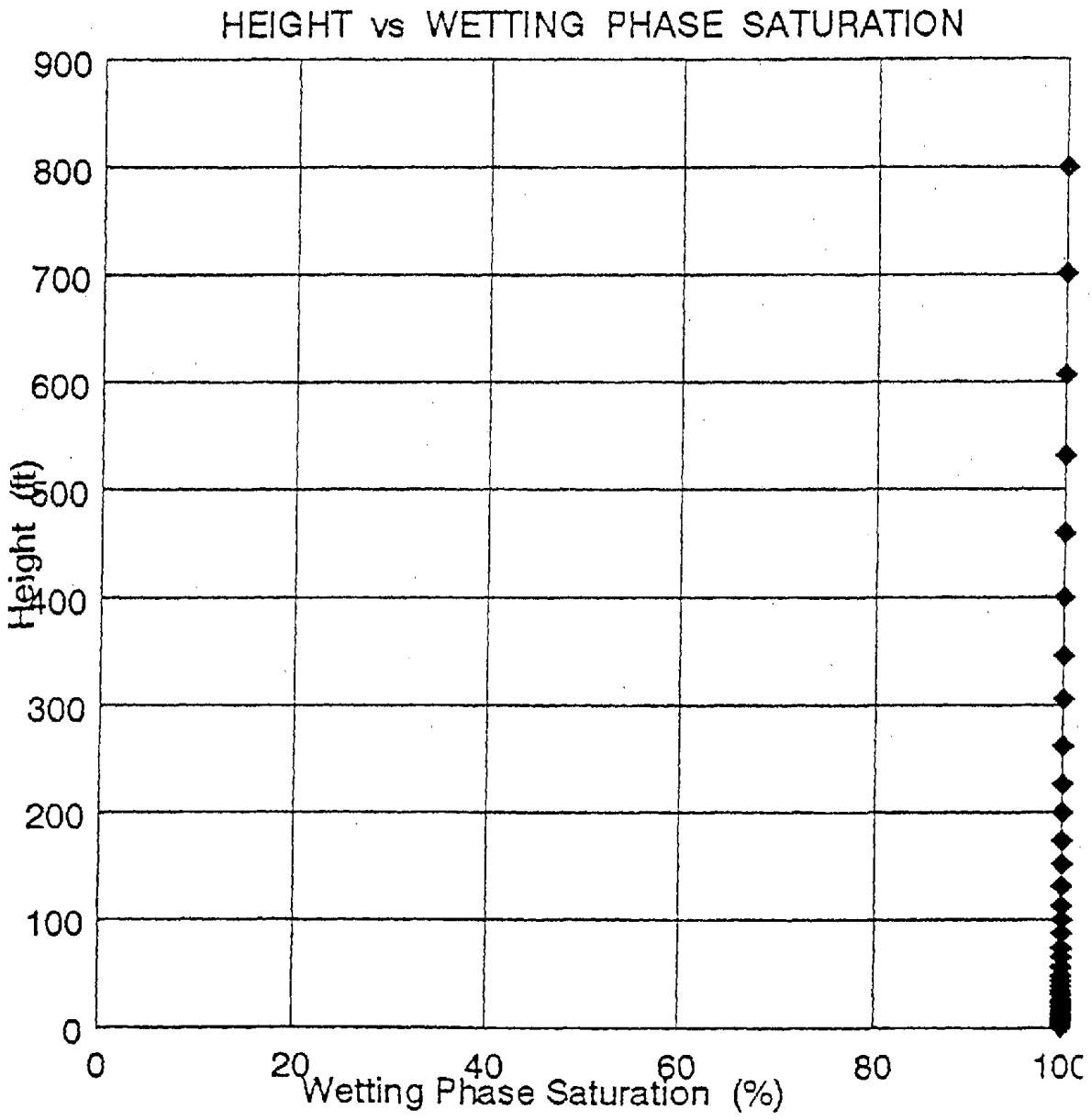
FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (m)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.85			Rho h (psi/ft)	0.364
Kair (mD)	0.356			$T^*Cos\ Theta_{Lab}$	368
Kair (mD)*	0.000	Pc thresh	1417.8	$T^*Cos\ Theta_{Res}$	26
		MEDIAN (μm)	0.0140		

* Kair after Swanson (1981)



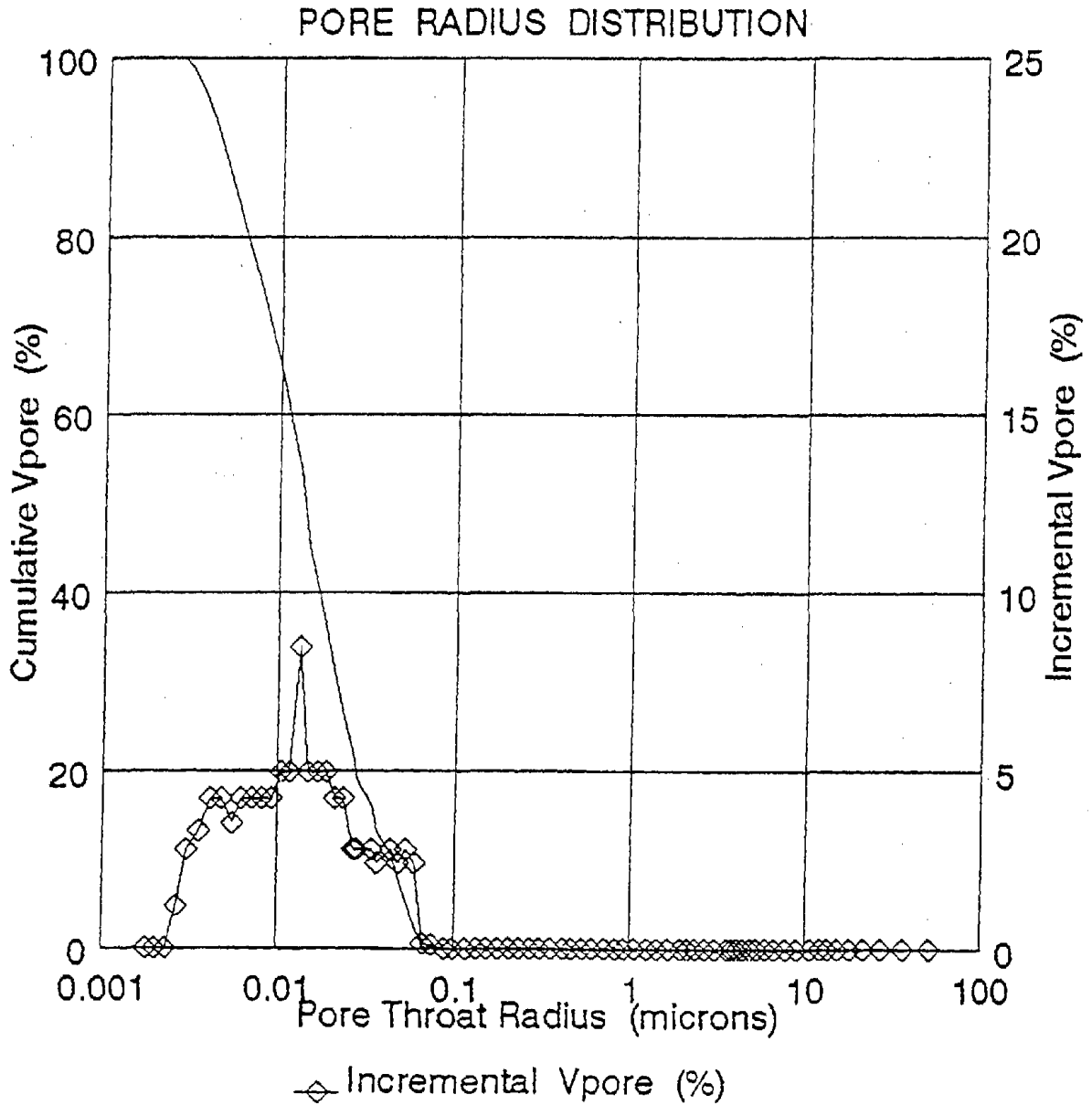
[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (m)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.85			Rho h (psi/ft)	0.364
Kair (mD)	0.356			T*Cos Theta Lab	368
Kair (mD)*	0.000	Pc thresh	1417.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0140		

* Kair after Swanson (1981)



[redacted]

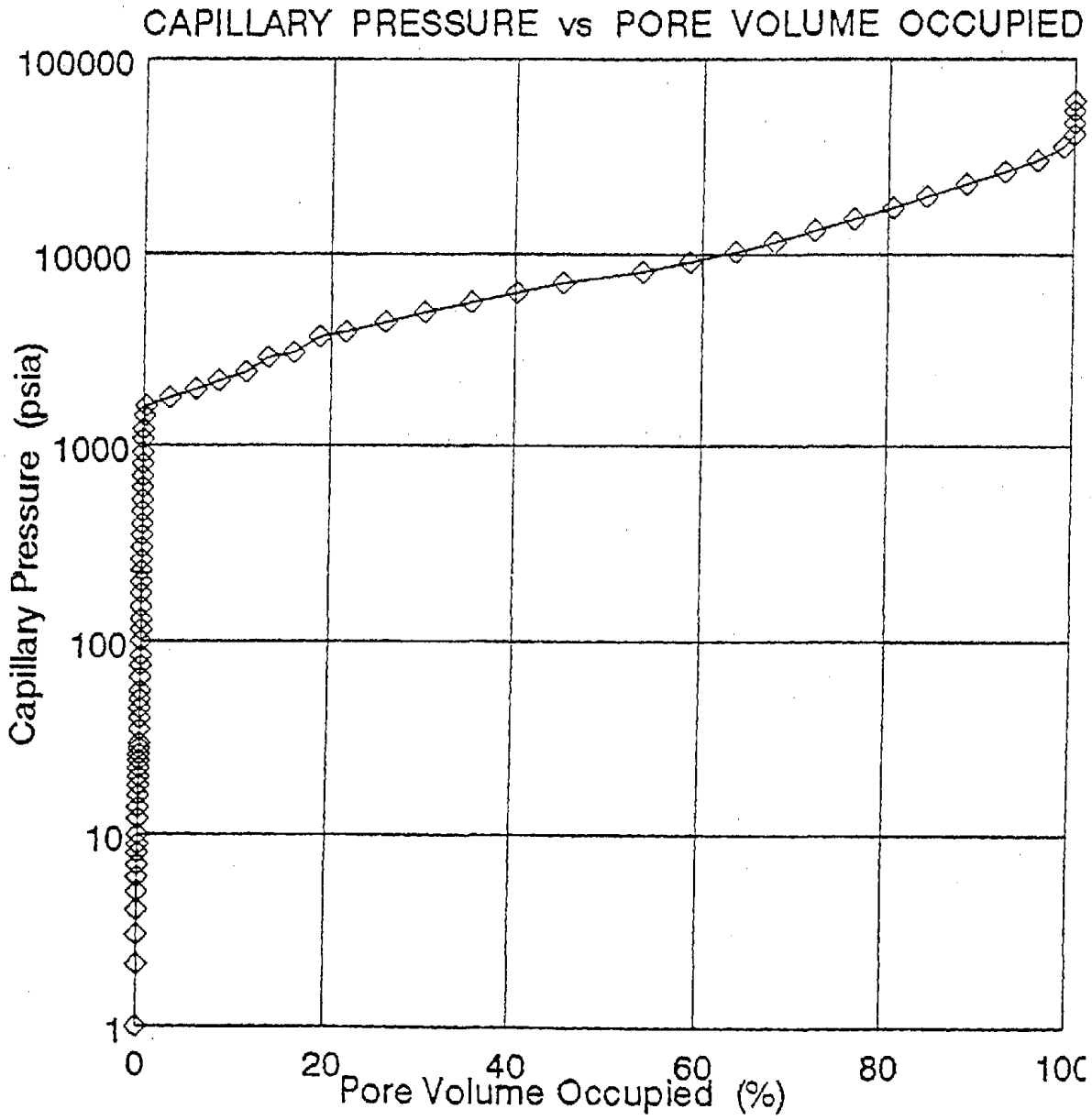
FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	1	DEPTH (m)	600.00		
POR (%)	3.03	POR (%), Hg	3.52	Rho w (psi/ft)	0.445
G DEN (g/cc)	2.85			Rho h (psi/ft)	0.364
Kair (mD)	0.356			T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.000	Pc thresh	1417.8	T*Cos Theta $_{Res}$	26
		MEDIAN (μm)	0.0140		

* Kair after Swanson (1981)



[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (ft)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.773			Rho h (psi/ft)	0.351
Kair (mD)	NA	Pc thresh	916.8	T*Cos Theta Lab	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0068	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
1.00	0.00	106.7200	0.85	0.00	0.00	0.00	6.85	100.00
2.10	0.00	50.8190	1.79	0.00	0.00	0.00	6.85	100.00
3.00	0.00	35.5733	2.55	0.00	0.00	0.00	6.85	100.00
4.00	0.00	26.6800	3.40	0.00	0.00	0.00	6.85	100.00
5.00	0.00	21.3440	4.26	0.00	0.00	0.00	6.85	100.00
6.00	0.00	17.7867	5.11	0.00	0.00	0.00	6.85	100.00
7.00	0.00	15.2457	5.96	0.00	0.00	0.00	6.85	100.00
8.00	0.00	13.3400	6.81	0.00	0.00	0.00	6.85	100.00
8.90	0.00	11.9910	7.58	0.00	0.00	0.00	6.85	100.00
10.00	0.00	10.6720	8.51	0.00	0.00	0.00	6.85	100.00
12.00	0.00	8.8933	10.21	0.00	0.00	0.00	6.85	100.00
13.90	0.00	7.6777	11.83	0.00	0.00	0.00	6.85	100.00
16.00	0.01	6.6700	13.62	0.00	0.00	0.00	6.85	100.00
17.90	0.01	5.9620	15.24	0.00	0.00	0.00	6.85	100.00
20.00	0.01	5.3360	17.02	0.00	0.00	0.00	6.85	100.00
22.00	0.01	4.8509	18.73	0.00	0.00	0.00	6.85	100.00
24.00	0.01	4.4467	20.43	0.00	0.00	0.00	6.85	100.00
25.90	0.01	4.1205	22.05	0.00	0.00	0.00	6.85	100.00
27.90	0.01	3.8251	23.75	0.00	0.00	0.00	6.85	100.00
29.90	0.01	3.5692	25.45	0.00	0.00	0.00	6.85	100.00
34.90	0.01	3.0579	29.71	0.00	0.00	0.00	6.85	100.00
39.90	0.01	2.6747	33.96	0.00	0.00	0.00	6.85	100.00
44.90	0.02	2.3768	38.22	0.00	0.00	0.00	6.85	100.00
49.80	0.02	2.1430	42.39	0.00	0.00	0.00	6.85	100.00
54.90	0.02	1.9439	46.73	0.00	0.00	0.00	6.85	100.00
64.70	0.02	1.6495	55.07	0.00	0.00	0.00	6.85	100.00
74.80	0.03	1.4267	63.67	0.00	0.00	0.00	6.85	100.00

1

[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (ft)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.773			Rho h (psi/ft)	0.351
Kair (mD)	NA	Pc thresh	916.8	T*Cos Theta Lab	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0068	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
84.70	0.03	1.2600	72.10	0.00	0.00	0.00	6.85	100.00
99.80	0.04	1.0693	84.95	0.00	0.00	0.00	6.85	100.00
114.90	0.04	0.9288	97.81	0.00	0.00	0.00	6.85	100.00
129.40	0.05	0.8247	110.15	0.00	0.00	0.00	6.85	100.00
149.70	0.05	0.7129	127.43	0.00	0.00	0.00	6.85	100.00
174.50	0.06	0.6116	148.54	0.00	0.00	0.00	6.85	100.00
199.40	0.07	0.5352	169.74	0.00	0.00	0.00	6.85	100.00
229.50	0.08	0.4650	195.36	0.00	0.00	0.00	6.85	100.00
258.70	0.09	0.4125	220.21	0.00	0.00	0.00	6.85	100.00
300.50	0.11	0.3551	255.79	0.00	0.00	0.00	6.85	100.00
350.30	0.12	0.3047	298.19	0.00	0.00	0.00	6.85	100.00
398.20	0.14	0.2680	338.96	0.00	0.00	0.00	6.85	100.00
458.70	0.16	0.2327	390.46	0.00	0.00	0.00	6.85	100.00
527.10	0.19	0.2025	448.68	0.00	0.00	0.00	6.85	100.00
609.10	0.21	0.1752	518.48	0.00	0.00	0.00	6.85	100.00
696.10	0.24	0.1533	592.54	0.00	0.00	0.00	6.85	100.00
803.50	0.28	0.1328	683.96	0.00	0.00	0.00	6.85	100.00
916.80	0.32	0.1164	780.41	0.03	0.39	0.39	6.83	99.61
1079.00	0.38	0.0989	918.48	0.05	0.32	0.71	6.81	99.29
1222.60	0.43	0.0873	1040.72	0.17	1.75	2.46	6.69	97.54
1417.90	0.50	0.0753	1206.96	0.36	2.85	5.31	6.49	94.69
1597.70	0.56	0.0668	1360.01	0.56	2.83	8.14	6.30	91.86
1791.10	0.63	0.0596	1524.64	0.75	2.75	10.89	6.11	89.11
1992.30	0.70	0.0536	1695.91	0.94	2.80	13.70	5.91	86.30
2192.50	0.77	0.0487	1866.32	1.13	2.80	16.50	5.72	83.50
2439.60	0.86	0.0437	2076.66	1.29	2.29	18.79	5.57	81.21
2911.20	1.02	0.0367	2478.10	1.31	0.32	19.11	5.54	80.89

[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (ft)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.773			Rho h (psi/ft)	0.351
Kair (mD)	NA	Pc thresh	916.8	T*Cos Theta Lab	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0068	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
3088.50	1.08	0.0346	2629.03	1.33	0.29	19.40	5.52	80.60
3730.00	1.31	0.0286	3175.09	1.35	0.34	19.74	5.50	80.26
3938.60	1.38	0.0271	3352.66	1.57	3.19	22.93	5.28	77.07
4445.30	1.56	0.0240	3783.98	1.78	2.97	25.91	5.08	74.09
5011.60	1.76	0.0213	4266.03	1.97	2.78	28.69	4.89	71.31
5622.60	1.97	0.0190	4786.13	1.99	0.32	29.00	4.87	71.00
6308.10	2.22	0.0169	5369.65	2.01	0.29	29.30	4.85	70.70
7097.90	2.49	0.0150	6041.95	2.03	0.34	29.64	4.82	70.36
8051.60	2.83	0.0133	6853.77	2.06	0.37	30.00	4.80	70.00
9050.00	3.18	0.0118	7703.64	2.09	0.49	30.49	4.76	69.51
10227.20	3.59	0.0104	8705.71	2.14	0.76	31.25	4.71	68.75
11598.20	4.07	0.0092	9872.75	2.30	2.32	33.56	4.55	66.44
13177.70	4.63	0.0081	11217.27	2.60	4.36	37.92	4.25	62.08
14951.00	5.25	0.0071	12726.75	3.15	7.97	45.89	3.71	54.11
17215.90	6.05	0.0062	14654.71	4.05	13.14	59.03	2.81	40.97
19406.40	6.82	0.0055	16519.33	4.49	6.43	65.46	2.37	34.54
22625.10	7.95	0.0047	19259.19	5.14	9.53	74.99	1.71	25.01
26067.30	9.16	0.0041	22189.29	5.86	10.55	85.55	0.99	14.45
30090.70	10.57	0.0035	25614.14	6.52	9.53	95.08	0.34	4.92
35008.30	12.30	0.0030	29800.15	6.71	2.83	97.90	0.14	2.10
40551.90	14.24	0.0026	34519.03	6.84	1.95	99.85	0.01	0.15
46512.80	16.34	0.0023	39593.14	6.85	0.15	100.00	0.00	0.00
53561.60	18.81	0.0020	45593.29	6.85	0.00	100.00	0.00	0.00
60208.10	21.15	0.0018	51251.00	6.85	0.00	100.00	0.00	0.00

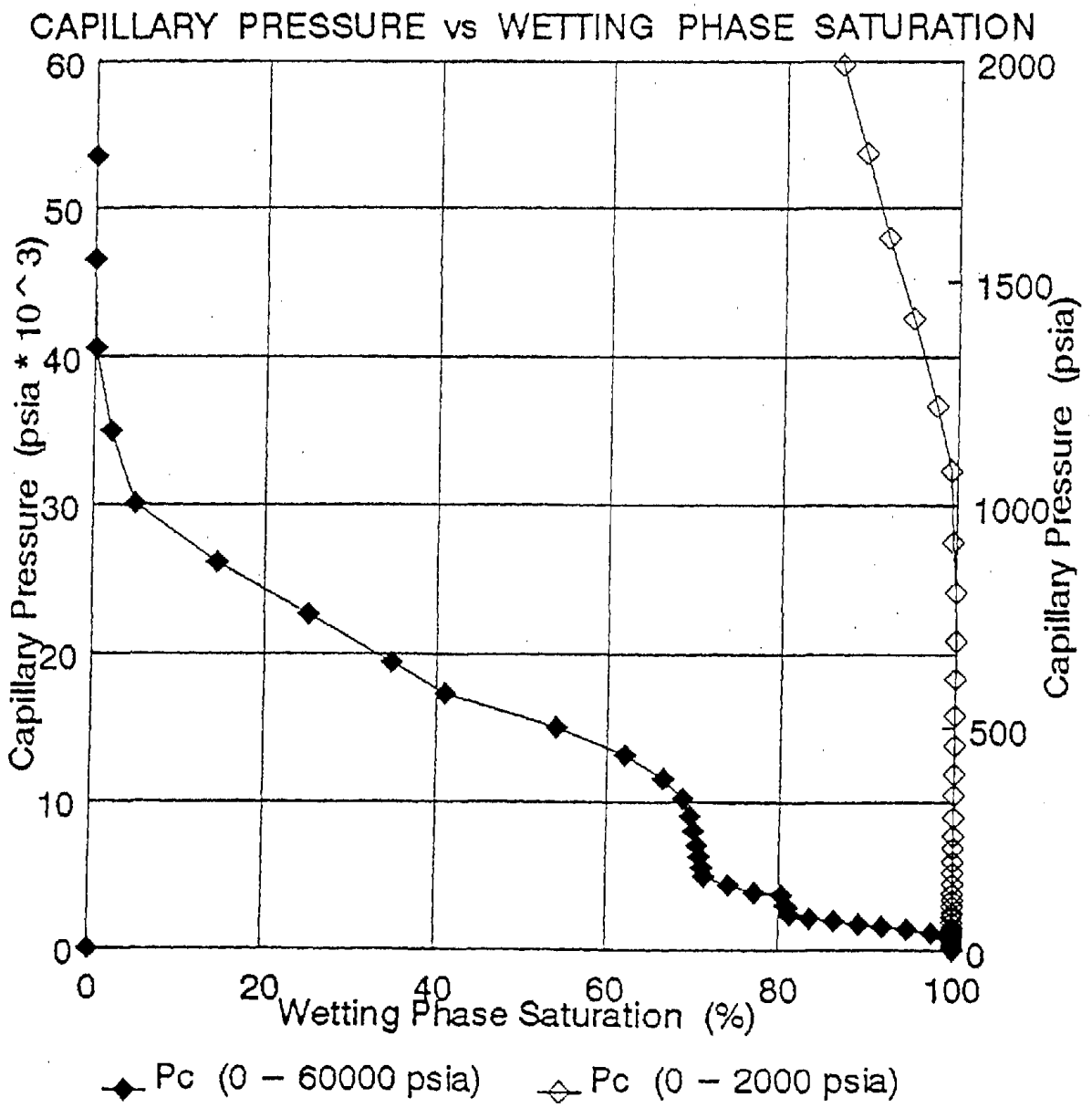
[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (m)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.77			Rho h (psi/ft)	0.351
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	916.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0068		

* Kair after Swanson (1981)



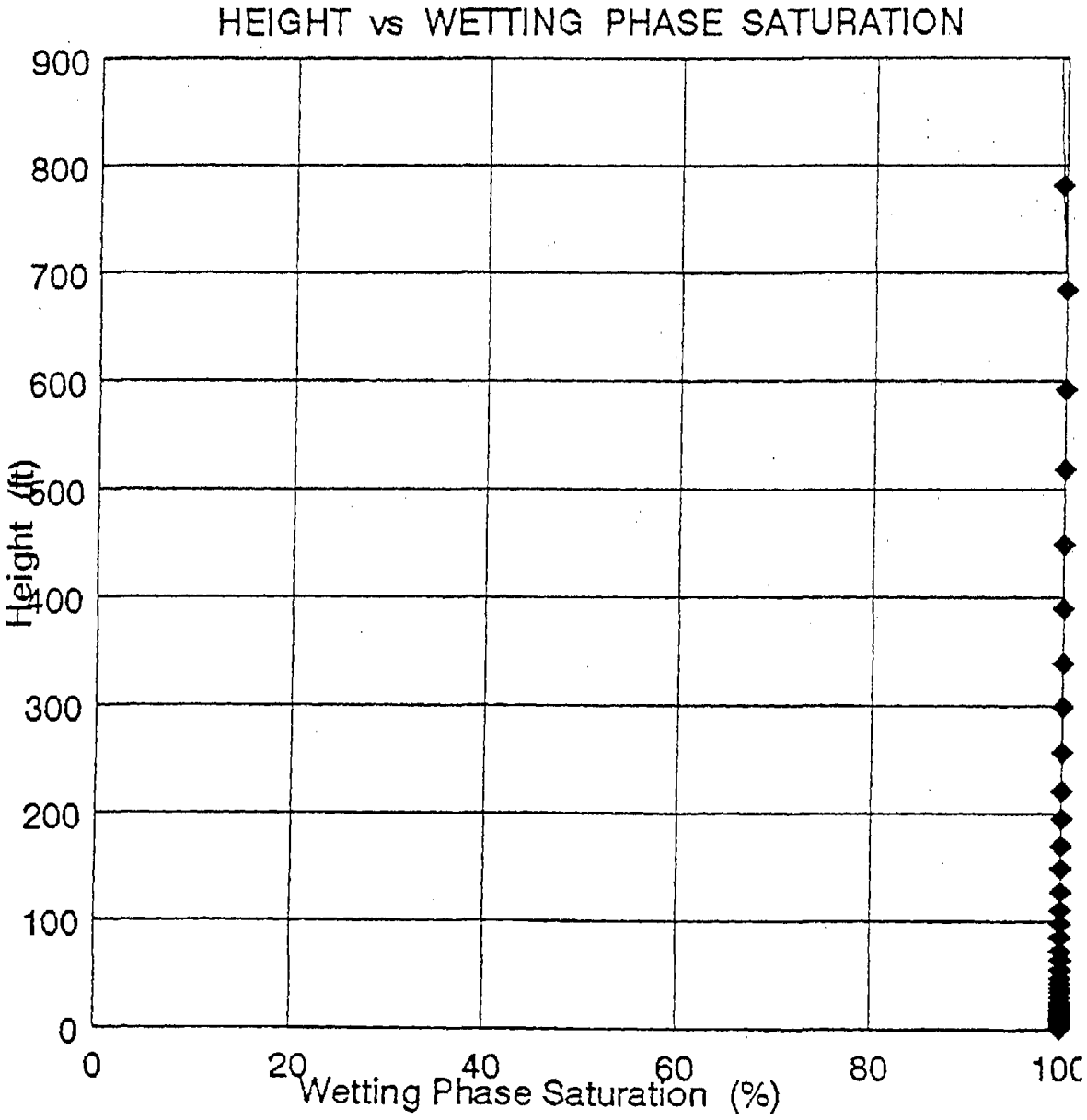
[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (m)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.77			Rho h (psi/ft)	0.351
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	916.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0068		

* Kair after Swanson (1981)



[redacted]

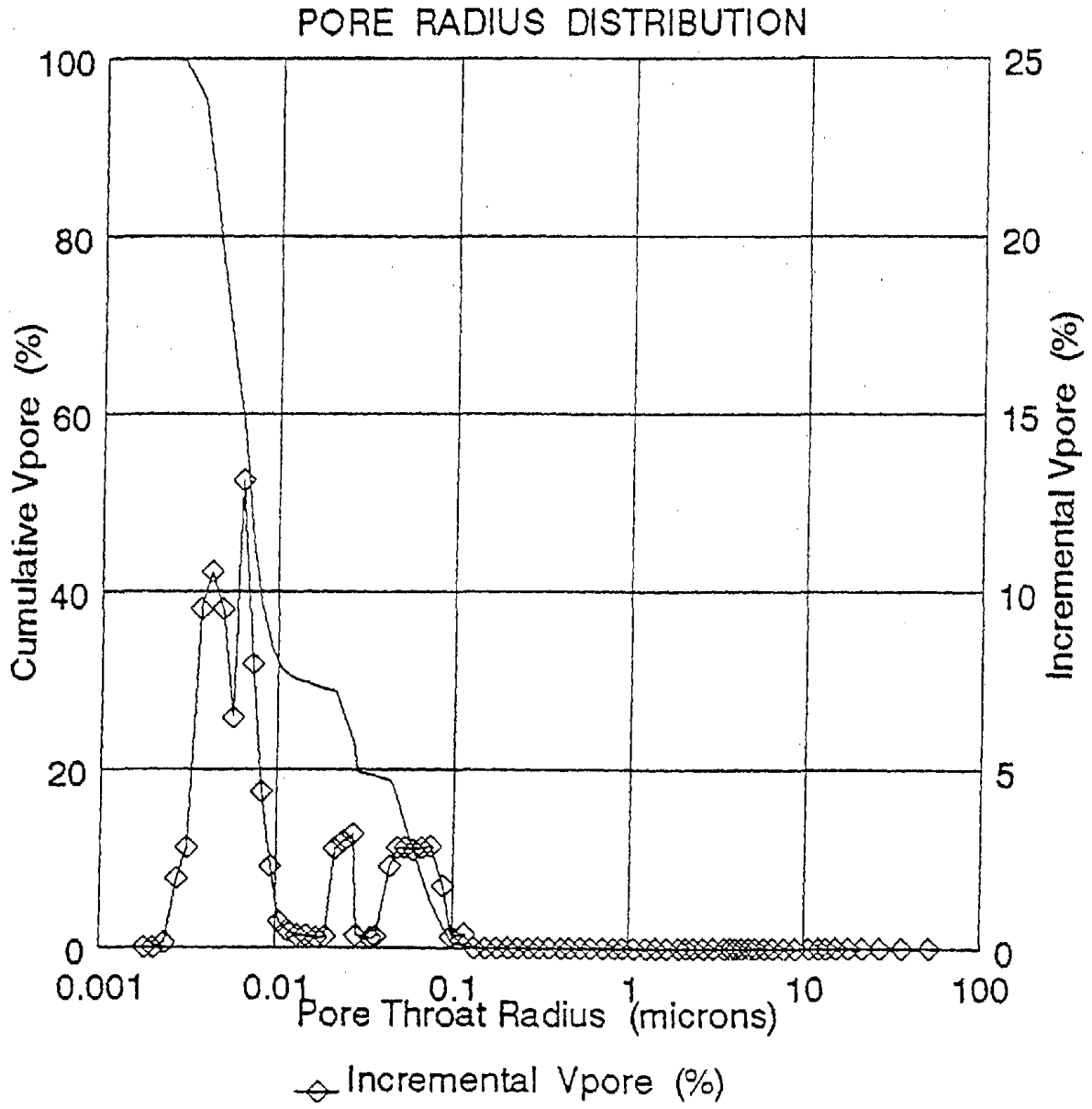
FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (m)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.77			Rho h (psi/ft)	0.351
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	916.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0068		

* Kair after Swanson (1981)



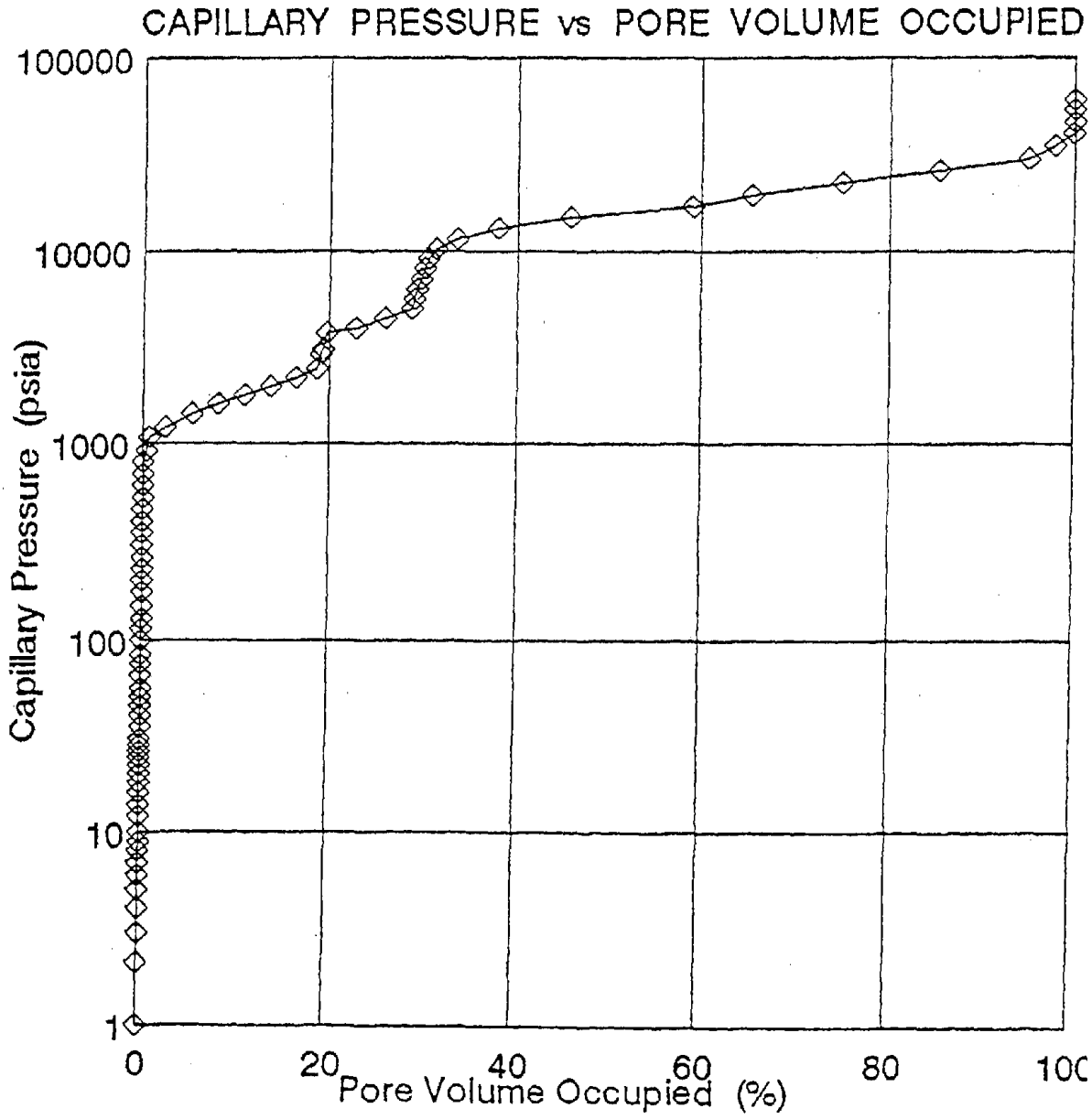
[redacted] FILE NO. : [redacted]

USN MEADE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	2	DEPTH (m)	2366.00		
POR (%)	6.85	POR (%), Hg	6.54	Rho w (psi/ft)	0.434
G DEN (g/cc)	2.77			Rho h (psi/ft)	0.351
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	916.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0068		

* Kair after Swanson (1981)



[redacted]

FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (ft)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.758			Rho h (psi/ft)	0.354
Kair (mD)	NA	Pc thresh	457.7	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0075	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

		PORE		SATURATION (nwp)			SATURATION (wp)	
		THROAT		CUM	INC	CUM	CUM	CUM
Pc	J	RADIUS	HEIGHT	Vbulk	Vpore	Vpore	Vbulk	Vpore
(psia)	FUNCTION	(μm)	(ft)	(%)	(%)	(%)	(%)	(%)
1.00	0.00	106.7200	0.85	0.00	0.00	0.00	9.02	100.00
2.10	0.00	50.8190	1.79	0.00	0.00	0.00	9.02	100.00
3.00	0.00	35.5733	2.55	0.00	0.00	0.00	9.02	100.00
4.00	0.00	26.6800	3.40	0.00	0.00	0.00	9.02	100.00
5.00	0.00	21.3440	4.26	0.00	0.00	0.00	9.02	100.00
6.00	0.00	17.7867	5.11	0.00	0.00	0.00	9.02	100.00
7.00	0.00	15.2457	5.96	0.00	0.00	0.00	9.02	100.00
8.00	0.00	13.3400	6.81	0.00	0.00	0.00	9.02	100.00
8.90	0.00	11.9910	7.58	0.00	0.00	0.00	9.02	100.00
10.00	0.00	10.6720	8.51	0.00	0.00	0.00	9.02	100.00
12.00	0.00	8.8933	10.21	0.00	0.00	0.00	9.02	100.00
13.90	0.00	7.6777	11.83	0.00	0.00	0.00	9.02	100.00
16.00	0.00	6.6700	13.62	0.00	0.00	0.00	9.02	100.00
17.90	0.00	5.9620	15.24	0.00	0.00	0.00	9.02	100.00
20.00	0.00	5.3360	17.02	0.00	0.00	0.00	9.02	100.00
22.00	0.00	4.8509	18.73	0.00	0.00	0.00	9.02	100.00
24.00	0.01	4.4467	20.43	0.00	0.00	0.00	9.02	100.00
25.90	0.01	4.1205	22.05	0.00	0.00	0.00	9.02	100.00
27.90	0.01	3.8251	23.75	0.00	0.00	0.00	9.02	100.00
29.90	0.01	3.5692	25.45	0.00	0.00	0.00	9.02	100.00
34.80	0.01	3.0667	29.62	0.00	0.00	0.00	9.02	100.00
39.80	0.01	2.6814	33.88	0.00	0.00	0.00	9.02	100.00
44.80	0.01	2.3821	38.14	0.00	0.00	0.00	9.02	100.00
49.80	0.01	2.1430	42.39	0.00	0.00	0.00	9.02	100.00
54.70	0.01	1.9510	46.56	0.00	0.00	0.00	9.02	100.00
64.80	0.01	1.6469	55.16	0.00	0.00	0.00	9.02	100.00
74.70	0.02	1.4286	63.59	0.00	0.00	0.00	9.02	100.00

[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (ft)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.758			Rho h (psi/ft)	0.354
Kair (mD)	NA	Pc thresh	457.7	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0075	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
84.70	0.02	1.2600	72.10	0.00	0.00	0.00	9.02	100.00
99.50	0.02	1.0726	84.70	0.00	0.00	0.00	9.02	100.00
114.60	0.03	0.9312	97.55	0.00	0.00	0.00	9.02	100.00
129.50	0.03	0.8241	110.23	0.00	0.00	0.00	9.02	100.00
149.30	0.03	0.7148	127.09	0.00	0.00	0.00	9.02	100.00
174.60	0.04	0.6112	148.62	0.00	0.00	0.00	9.02	100.00
199.10	0.04	0.5360	169.48	0.00	0.00	0.00	9.02	100.00
229.40	0.05	0.4652	195.27	0.00	0.00	0.00	9.02	100.00
259.50	0.06	0.4113	220.89	0.00	0.00	0.00	9.02	100.00
301.40	0.07	0.3541	256.56	0.00	0.00	0.00	9.02	100.00
350.20	0.08	0.3047	298.10	0.00	0.00	0.00	9.02	100.00
398.10	0.09	0.2681	338.88	0.00	0.00	0.00	9.02	100.00
457.70	0.10	0.2332	389.61	0.04	0.43	0.43	8.98	99.57
530.90	0.12	0.2010	451.92	0.04	0.00	0.43	8.98	99.57
612.00	0.14	0.1744	520.95	0.08	0.43	0.85	8.95	99.15
702.80	0.16	0.1518	598.25	0.12	0.43	1.28	8.91	98.72
796.60	0.18	0.1340	678.09	0.12	0.00	1.28	8.91	98.72
920.70	0.21	0.1159	783.73	0.15	0.43	1.71	8.87	98.29
1061.30	0.24	0.1006	903.41	0.19	0.43	2.14	8.83	97.86
1235.20	0.28	0.0864	1051.44	0.23	0.43	2.56	8.79	97.44
1407.10	0.31	0.0758	1197.77	0.23	0.00	2.56	8.79	97.44
1593.70	0.36	0.0670	1356.61	0.23	0.00	2.56	8.79	97.44
1792.90	0.40	0.0595	1526.17	0.23	0.00	2.56	8.79	97.44
2012.70	0.45	0.0530	1713.27	0.31	0.85	3.42	8.71	96.58
2198.30	0.49	0.0485	1871.26	0.31	0.00	3.42	8.71	96.58
2455.20	0.55	0.0435	2089.94	0.39	0.85	4.27	8.64	95.73
2913.20	0.65	0.0366	2479.81	0.39	0.00	4.27	8.64	95.73

[redacted] FILE NO. : 2-[redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (ft)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.758			Rho h (psi/ft)	0.354
Kair (mD)	NA	Pc thresh	457.7	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.001	MEDIAN (μm)	0.0075	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

		PORE		SATURATION (nwp)			SATURATION (wp)	
		THROAT		CUM	INC	CUM	CUM	CUM
Pc	J	RADIUS	HEIGHT	Vbulk	Vpore	Vpore	Vbulk	Vpore
(psia)	FUNCTION	(μm)	(ft)	(%)	(%)	(%)	(%)	(%)
3103.30	0.69	0.0344	2641.63	0.42	0.43	4.70	8.60	95.30
3715.00	0.83	0.0287	3162.32	0.46	0.43	5.13	8.56	94.87
3953.40	0.88	0.0270	3365.26	0.50	0.43	5.56	8.52	94.44
4445.20	0.99	0.0240	3783.89	0.54	0.43	5.98	8.48	94.02
5011.40	1.12	0.0213	4265.86	0.58	0.43	6.41	8.44	93.59
5622.40	1.26	0.0190	4785.96	0.66	0.85	7.26	8.37	92.74
6322.80	1.41	0.0169	5382.16	0.73	0.85	8.12	8.29	91.88
7082.80	1.58	0.0151	6029.10	0.81	0.85	8.97	8.21	91.03
7991.80	1.79	0.0134	6802.87	0.93	1.28	10.26	8.10	89.74
8975.30	2.01	0.0119	7640.05	1.08	1.71	11.97	7.94	88.03
10241.90	2.29	0.0104	8718.22	1.35	2.99	14.96	7.67	85.04
11568.10	2.59	0.0092	9847.13	2.04	7.69	22.65	6.98	77.35
13177.30	2.95	0.0081	11216.93	3.55	16.67	39.32	5.48	60.68
14950.30	3.35	0.0071	12726.16	5.17	17.95	57.26	3.86	42.74
17140.80	3.84	0.0062	14590.78	6.25	11.97	69.23	2.78	30.77
19629.30	4.39	0.0054	16709.07	7.02	8.55	77.78	2.01	22.22
22624.50	5.06	0.0047	19258.68	7.67	7.26	85.04	1.35	14.96
26096.60	5.84	0.0041	22214.24	8.14	5.13	90.17	0.89	9.83
30090.30	6.73	0.0035	25613.80	8.48	3.85	94.02	0.54	5.98
34933.40	7.82	0.0031	29736.39	8.71	2.56	96.58	0.31	3.42
40313.00	9.02	0.0026	34315.68	8.91	2.14	98.72	0.12	1.28
46437.70	10.39	0.0023	39529.21	9.02	1.28	100.00	0.00	0.00
53233.10	11.91	0.0020	45313.67	9.02	0.00	100.00	0.00	0.00
60043.40	13.44	0.0018	51110.80	9.02	0.00	100.00	0.00	0.00

[redacted]

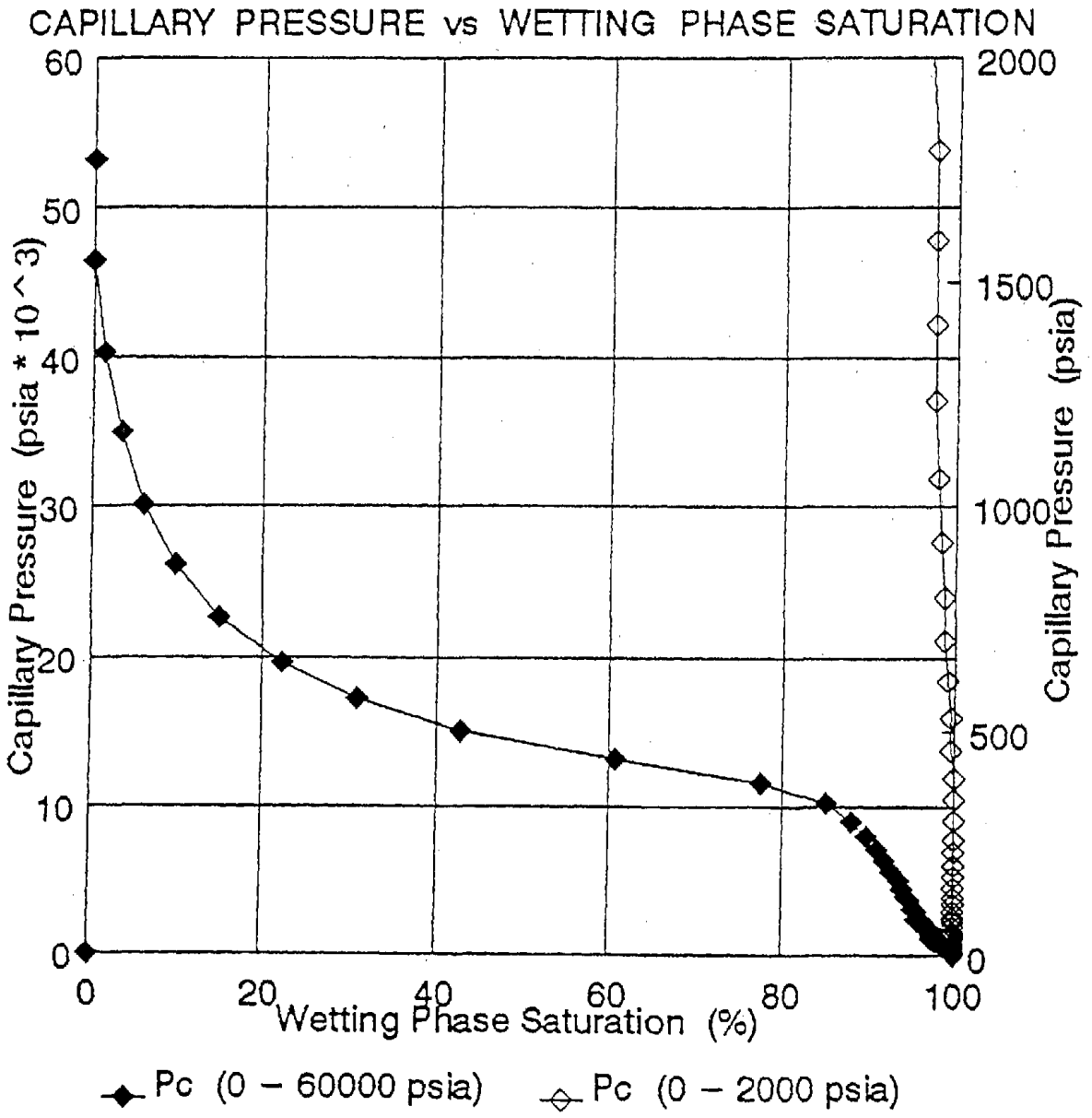
FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (m)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.76			Rho h (psi/ft)	0.354
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	457.7	T*Cos Theta Res	26
		MEDIAN (μm)	0.0075		

* Kair after Swanson (1981)



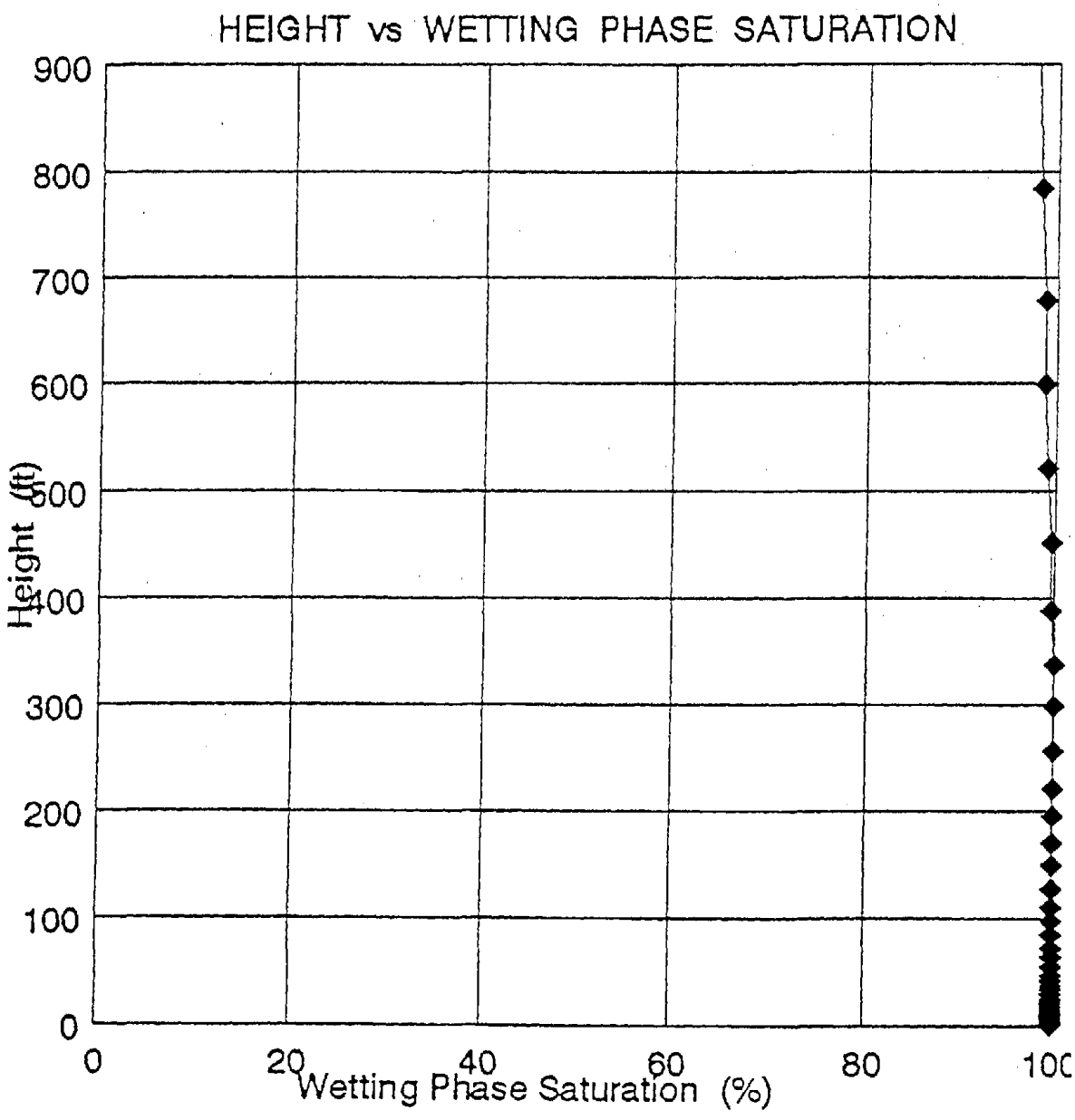
[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (m)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.76			Rho h (psi/ft)	0.354
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	457.7	T*Cos Theta Res	26
		MEDIAN (μm)	0.0075		

* Kair after Swanson (1981)



[redacted]

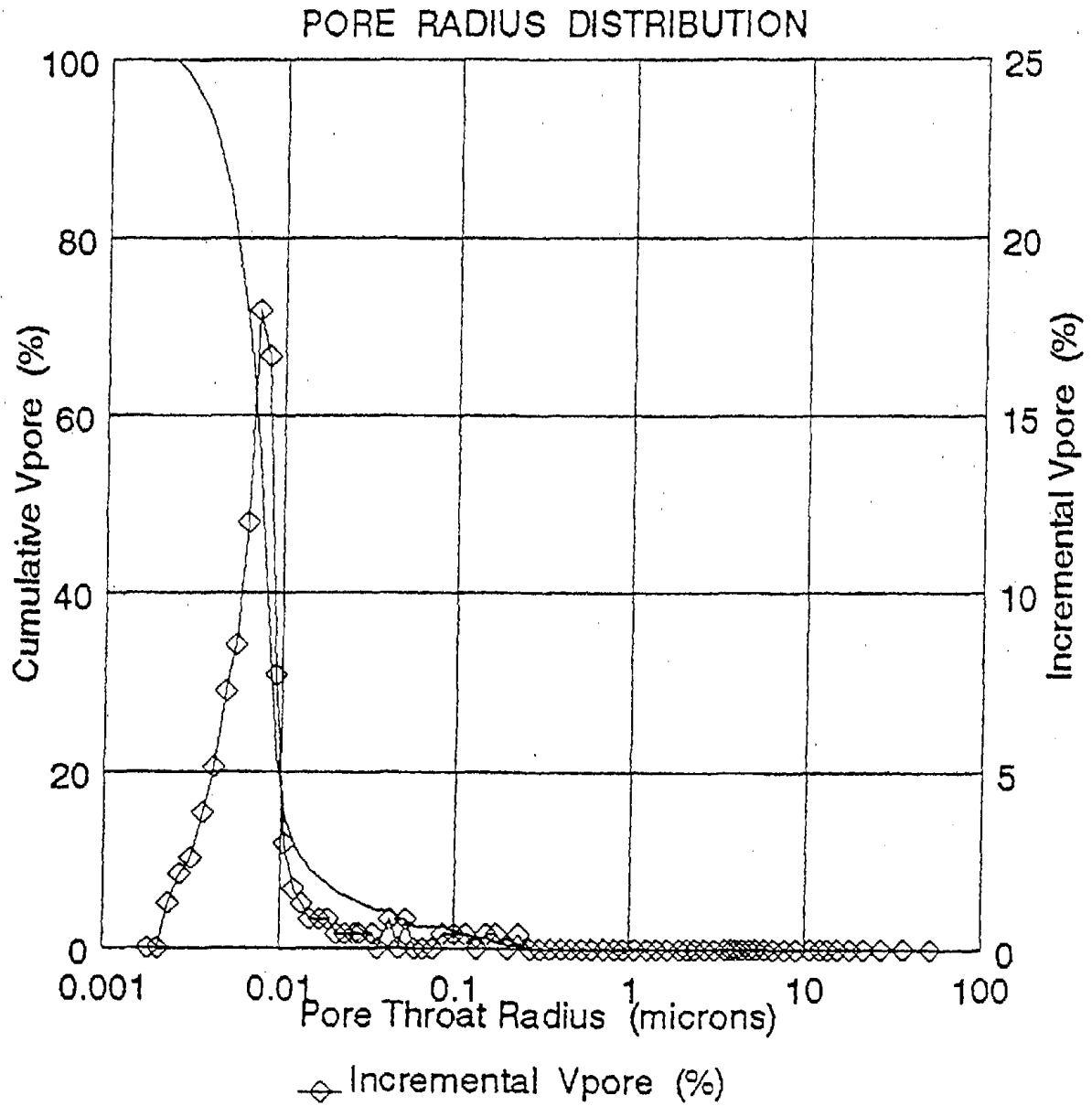
FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (m)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.76			Rho h (psi/ft)	0.354
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	457.7	T*Cos Theta Res	26
		MEDIAN (μm)	0.0075		

* Kair after Swanson (1981)



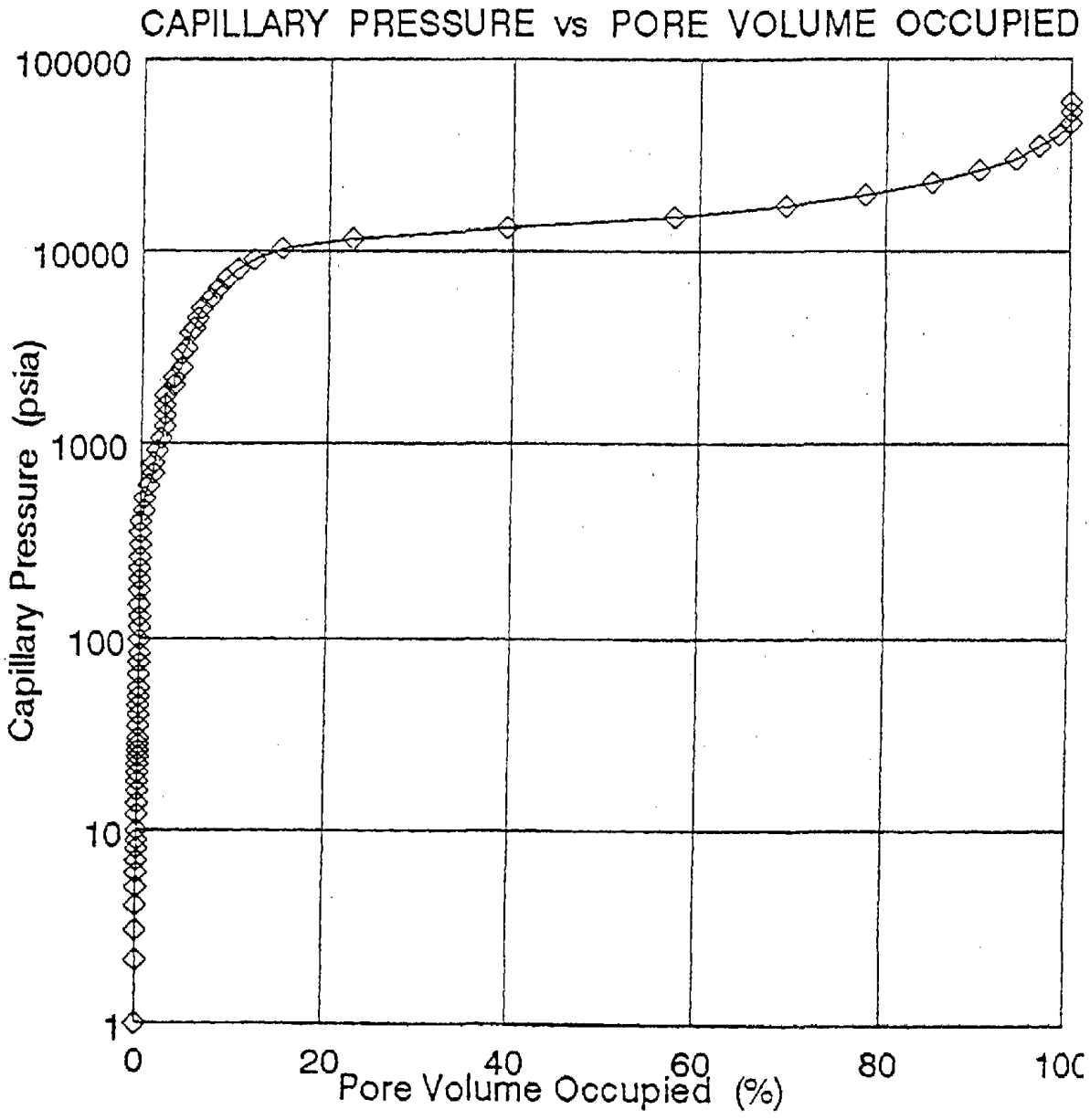
[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	3	DEPTH (m)	6547'7"		
POR (%)	9.02	POR (%), Hg	8.99	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.76			Rho h (psi/ft)	0.354
Kair (mD)	NA			T*Cos Theta Lab	368
Kair (mD)*	0.001	Pc thresh	457.7	T*Cos Theta Res	26
		MEDIAN (μm)	0.0075		

* Kair after Swanson (1981)



[redacted]

FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (ft)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.775			Rho h (psi/ft)	0.356
Kair (mD)	0.039	Pc thresh	34.8	T*Cos Theta Lab	368
Kair (mD)*	0.145	MEDIAN (μm)	0.0074	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
1.00	0.00	106.7200	0.85	0.00	0.00	0.00	7.92	100.00
2.10	0.01	50.8190	1.79	0.00	0.00	0.00	7.92	100.00
3.00	0.01	35.5733	2.55	0.00	0.00	0.00	7.92	100.00
4.00	0.01	26.6800	3.40	0.00	0.00	0.00	7.92	100.00
5.00	0.02	21.3440	4.26	0.00	0.00	0.00	7.92	100.00
6.00	0.02	17.7867	5.11	0.00	0.00	0.00	7.92	100.00
7.00	0.03	15.2457	5.96	0.00	0.00	0.00	7.92	100.00
8.00	0.03	13.3400	6.81	0.00	0.00	0.00	7.92	100.00
8.90	0.03	11.9910	7.58	0.00	0.00	0.00	7.92	100.00
10.00	0.04	10.6720	8.51	0.00	0.00	0.00	7.92	100.00
12.00	0.04	8.8933	10.21	0.00	0.00	0.00	7.92	100.00
13.90	0.05	7.6777	11.83	0.00	0.00	0.00	7.92	100.00
16.00	0.06	6.6700	13.62	0.00	0.00	0.00	7.92	100.00
17.90	0.07	5.9620	15.24	0.00	0.00	0.00	7.92	100.00
20.00	0.07	5.3360	17.02	0.00	0.00	0.00	7.92	100.00
22.00	0.08	4.8509	18.73	0.00	0.00	0.00	7.92	100.00
24.00	0.09	4.4467	20.43	0.00	0.00	0.00	7.92	100.00
25.90	0.10	4.1205	22.05	0.00	0.00	0.00	7.92	100.00
27.80	0.10	3.8388	23.66	0.00	0.00	0.00	7.92	100.00
29.80	0.11	3.5812	25.37	0.00	0.00	0.00	7.92	100.00
34.80	0.13	3.0667	29.62	0.01	0.09	0.09	7.92	99.91
39.70	0.15	2.6882	33.79	0.13	1.49	1.58	7.80	98.42
44.70	0.16	2.3875	38.05	0.24	1.49	3.07	7.68	96.93
49.70	0.18	2.1473	42.31	0.36	1.49	4.56	7.56	95.44
54.60	0.20	1.9546	46.48	0.48	1.49	6.05	7.44	93.95
64.60	0.24	1.6520	54.99	0.60	1.49	7.54	7.33	92.46
74.60	0.27	1.4306	63.50	0.60	0.00	7.54	7.33	92.46

[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (ft)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.775			Rho h (psi/ft)	0.356
Kair (mD)	0.039	Pc thresh	34.8	T*Cos Theta Lab	368
Kair (mD)*	0.145	MEDIAN (μm)	0.0074	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
84.50	0.31	1.2630	71.93	0.75	1.88	9.42	7.18	90.58
99.40	0.37	1.0736	84.61	0.86	1.49	10.91	7.06	89.09
114.40	0.42	0.9329	97.38	0.98	1.49	12.40	6.94	87.60
129.30	0.48	0.8254	110.06	0.98	0.00	12.40	6.94	87.60
149.10	0.55	0.7158	126.92	0.98	0.00	12.40	6.94	87.60
174.40	0.64	0.6119	148.45	1.10	1.49	13.89	6.82	86.11
198.90	0.73	0.5366	169.31	1.22	1.49	15.38	6.70	84.62
229.20	0.84	0.4656	195.10	1.37	1.88	17.26	6.56	82.74
259.30	0.95	0.4116	220.72	1.49	1.49	18.75	6.44	81.25
301.20	1.11	0.3543	256.39	1.60	1.49	20.24	6.32	79.76
350.00	1.29	0.3049	297.93	1.60	0.00	20.24	6.32	79.76
397.90	1.46	0.2682	338.70	1.75	1.88	22.12	6.17	77.88
457.50	1.68	0.2333	389.44	1.76	0.09	22.21	6.16	77.79
530.70	1.95	0.2011	451.75	1.76	0.04	22.25	6.16	77.75
611.80	2.25	0.1744	520.78	1.77	0.13	22.39	6.15	77.61
702.60	2.58	0.1519	598.07	1.78	0.08	22.46	6.14	77.54
796.40	2.93	0.1340	677.92	1.79	0.14	22.61	6.13	77.39
920.50	3.38	0.1159	783.56	1.80	0.13	22.74	6.12	77.26
1061.10	3.90	0.1006	903.24	1.85	0.58	23.32	6.08	76.68
1235.00	4.54	0.0864	1051.27	1.97	1.49	24.81	5.96	75.19
1406.90	5.17	0.0759	1197.60	2.11	1.88	26.69	5.81	73.31
1593.40	5.86	0.0670	1356.35	2.23	1.49	28.18	5.69	71.82
1792.70	6.59	0.0595	1526.00	2.23	0.00	28.18	5.69	71.82
2012.50	7.40	0.0530	1713.10	2.35	1.49	29.67	5.57	70.33
2198.10	8.08	0.0486	1871.09	2.36	0.09	29.76	5.57	70.24
2455.00	9.03	0.0435	2089.77	2.36	0.08	29.84	5.56	70.16
2913.00	10.71	0.0366	2479.64	2.37	0.13	29.97	5.55	70.03

[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (ft)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.775			Rho h (psi/ft)	0.356
Kair (mD)	0.039	Pc thresh	34.8	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.145	MEDIAN (μm)	0.0074	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
3103.20	11.41	0.0344	2641.54	2.39	0.14	30.11	5.54	69.89
3714.80	13.66	0.0287	3162.15	2.39	0.07	30.18	5.53	69.82
3953.20	14.53	0.0270	3365.09	2.40	0.09	30.27	5.52	69.73
4445.00	16.34	0.0240	3783.72	2.52	1.49	31.76	5.41	68.24
5011.30	18.43	0.0213	4265.77	2.52	0.00	31.76	5.41	68.24
5622.20	20.67	0.0190	4785.79	2.63	1.49	33.25	5.29	66.75
6322.60	23.25	0.0169	5381.99	2.66	0.38	33.63	5.26	66.37
7082.60	26.04	0.0151	6028.93	2.66	0.00	33.63	5.26	66.37
7991.60	29.38	0.0134	6802.70	2.96	3.78	37.41	4.96	62.59
8975.10	33.00	0.0119	7639.88	2.96	0.00	37.41	4.96	62.59
10241.80	37.66	0.0104	8718.14	3.08	1.49	38.90	4.84	61.10
11568.10	42.53	0.0092	9847.13	3.20	1.49	40.39	4.72	59.61
13177.40	48.45	0.0081	11217.01	3.47	3.40	43.80	4.45	56.20
14950.60	54.97	0.0071	12726.41	4.19	9.12	52.92	3.73	47.08
17141.00	63.02	0.0062	14590.95	5.19	12.56	65.47	2.74	34.53
19629.40	72.17	0.0054	16709.15	5.94	9.50	74.97	1.98	25.03
22624.50	83.18	0.0047	19258.68	6.78	10.64	85.61	1.14	14.39
26096.60	95.95	0.0041	22214.24	7.35	7.22	92.83	0.57	7.17
30090.20	110.63	0.0035	25613.71	7.68	4.16	96.99	0.24	3.01
34933.40	128.44	0.0031	29736.39	7.92	3.01	100.00	0.00	0.00
40313.10	148.22	0.0026	34315.76	7.92	0.00	100.00	0.00	0.00
46437.90	170.74	0.0023	39529.38	7.92	0.00	100.00	0.00	0.00
53233.20	195.72	0.0020	45313.75	7.92	0.00	100.00	0.00	0.00
60043.80	220.76	0.0018	51111.14	7.92	0.00	100.00	0.00	0.00

[redacted]

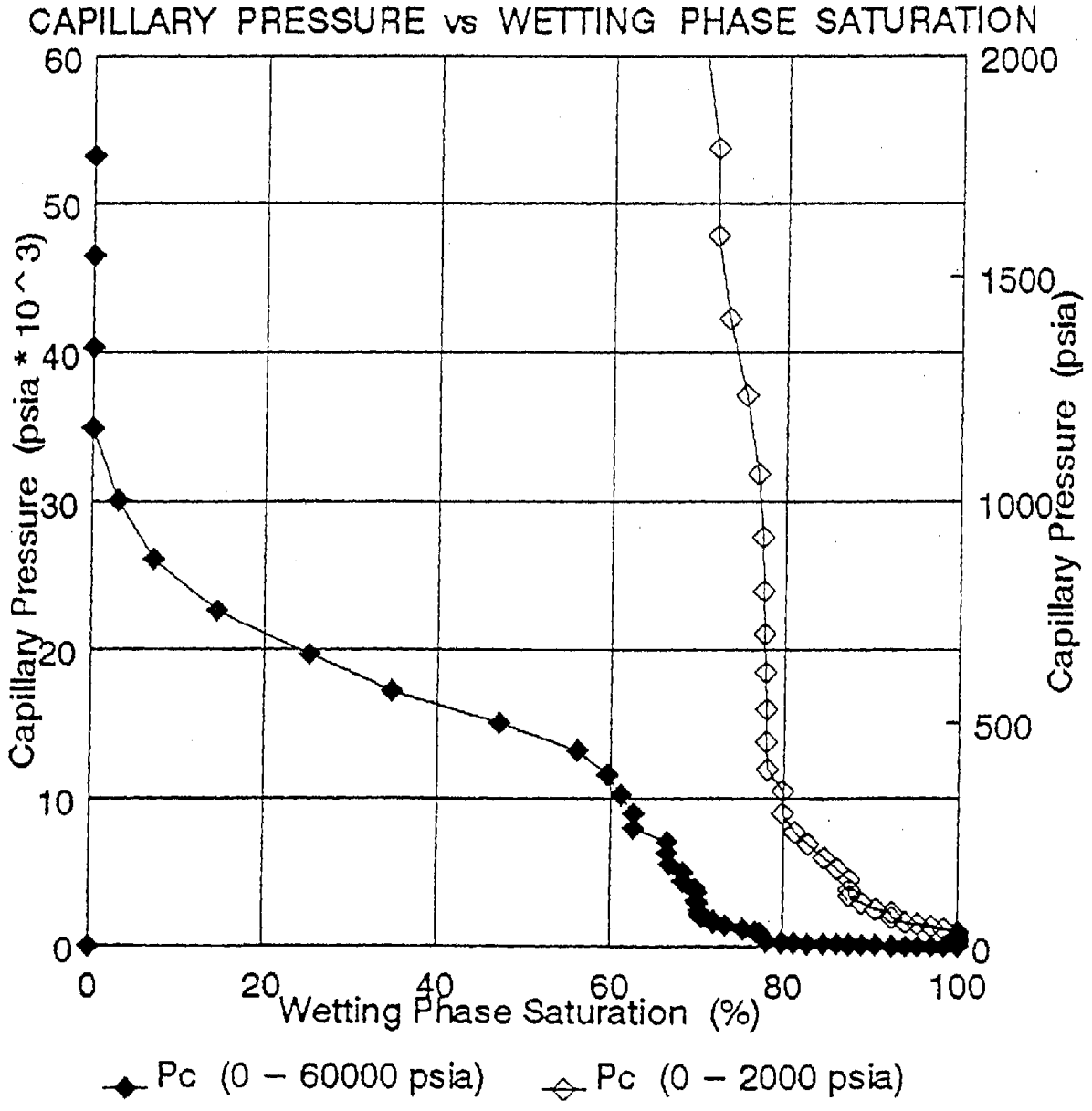
FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (m)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.78			Rho h (psi/ft)	0.356
Kair (mD)	0.039			T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.145	Pc thresh	34.8	T*Cos Theta $_{Res}$	26
		MEDIAN (μm)	0.0074		

* Kair after Swanson (1981)



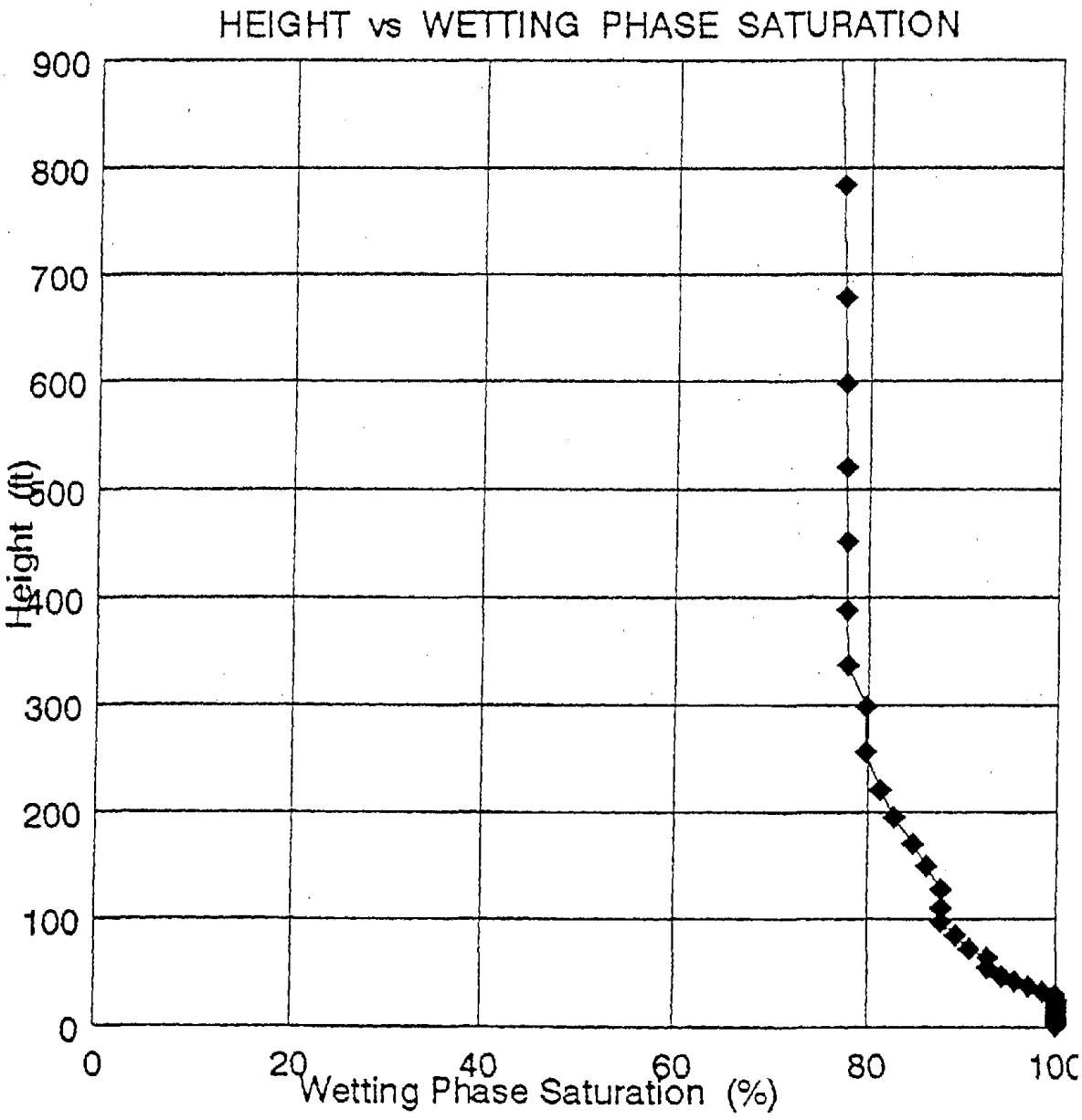
[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (m)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.78			Rho h (psi/ft)	0.356
Kair (mD)	0.039			T*Cos Theta Lab	368
Kair (mD)*	0.145	Pc thresh	34.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0074		

* Kair after Swanson (1981)



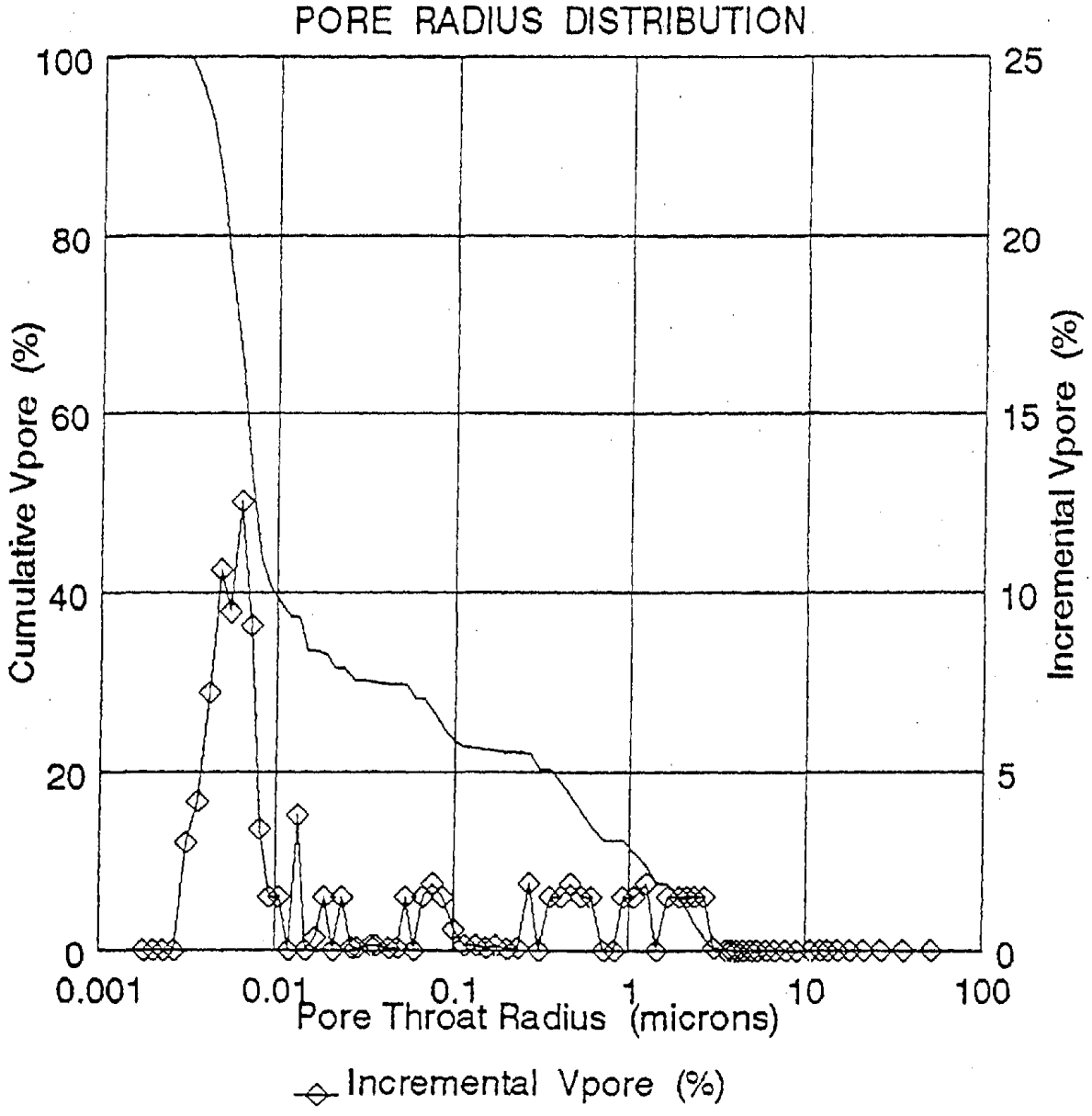
[redacted] FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (m)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.78			Rho h (psi/ft)	0.356
Kair (mD)	0.039			T*Cos Theta Lab	368
Kair (mD)*	0.145	Pc thresh	34.8	T*Cos Theta Res	26
		MEDIAN (μm)	0.0074		

* Kair after Swanson (1981)



[redacted].

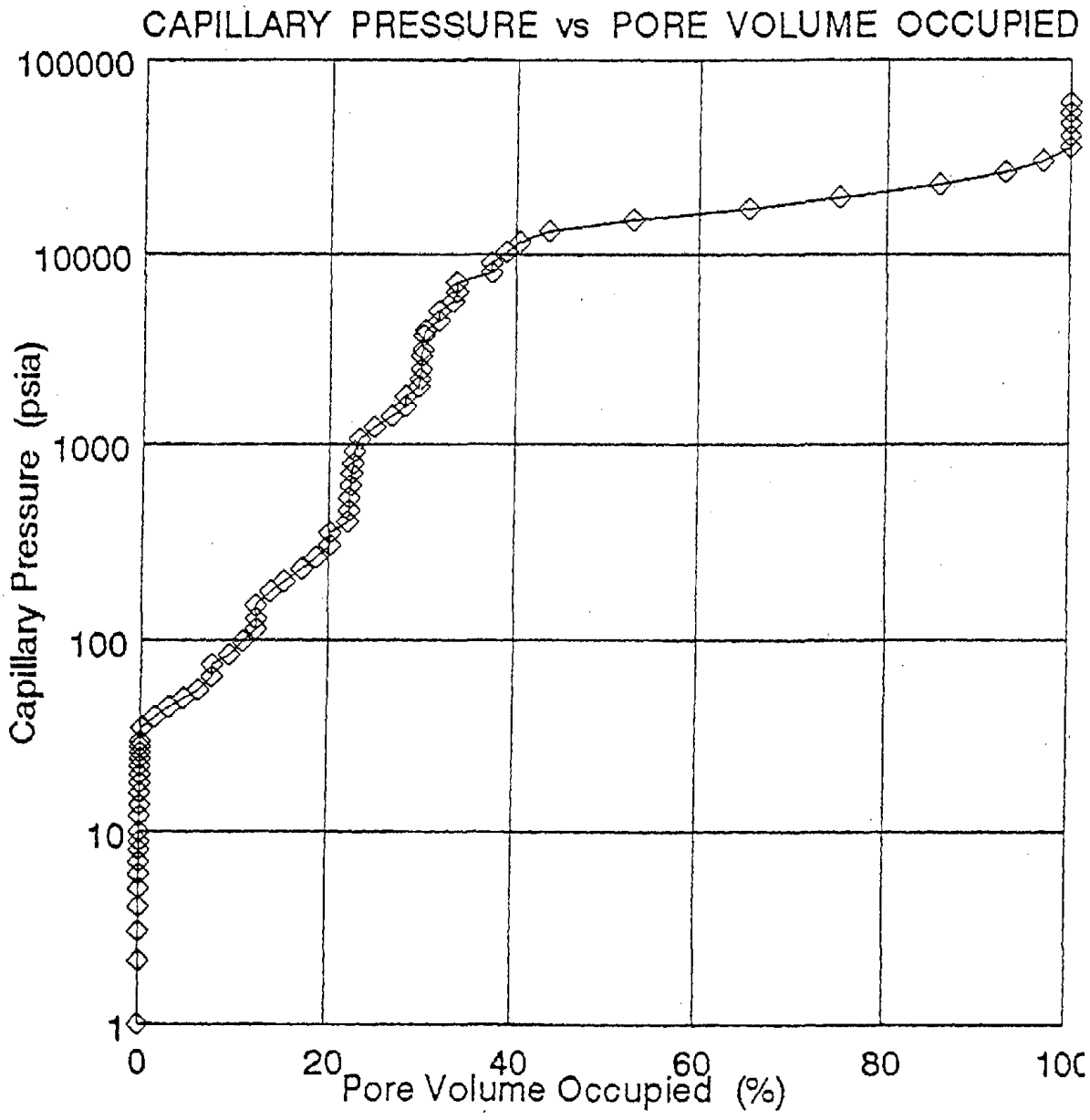
FILE NO. : [redacted]

USGS SEEBEE NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	4	DEPTH (m)	10882.50		
POR (%)	7.92	POR (%), Hg	7.53	Rho w (psi/ft)	0.439
G DEN (g/cc)	2.78			Rho h (psi/ft)	0.356
Kair (mD)	0.039			T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.145	Pc thresh	34.8	T*Cos Theta $_{Res}$	26
		MEDIAN (μm)	0.0074		

* Kair after Swanson (1981)



[redacted]

FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (ft)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.642			Rho h (psi/ft)	0.354
Kair (mD)	<0.001	Pc thresh	114.6	T*Cos Theta Lab	368
Kair (mD)*	0.002	MEDIAN (μm)	0.0047	T*Cos Theta Res	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
1.00	0.00	106.7200	0.85	0.00	0.00	0.00	5.80	100.00
2.10	0.00	50.8190	1.79	0.00	0.00	0.00	5.80	100.00
3.00	0.00	35.5733	2.55	0.00	0.00	0.00	5.80	100.00
4.00	0.00	26.6800	3.40	0.00	0.00	0.00	5.80	100.00
5.00	0.00	21.3440	4.26	0.00	0.00	0.00	5.80	100.00
6.00	0.00	17.7867	5.11	0.00	0.00	0.00	5.80	100.00
7.00	0.00	15.2457	5.96	0.00	0.00	0.00	5.80	100.00
8.00	0.00	13.3400	6.81	0.00	0.00	0.00	5.80	100.00
8.90	0.00	11.9910	7.58	0.00	0.00	0.00	5.80	100.00
9.90	0.00	10.7798	8.43	0.00	0.00	0.00	5.80	100.00
12.00	0.01	8.8933	10.21	0.00	0.00	0.00	5.80	100.00
14.00	0.01	7.6229	11.92	0.00	0.00	0.00	5.80	100.00
15.90	0.01	6.7119	13.53	0.00	0.00	0.00	5.80	100.00
17.90	0.01	5.9620	15.24	0.00	0.00	0.00	5.80	100.00
20.00	0.01	5.3360	17.02	0.00	0.00	0.00	5.80	100.00
22.00	0.01	4.8509	18.73	0.00	0.00	0.00	5.80	100.00
24.00	0.01	4.4467	20.43	0.00	0.00	0.00	5.80	100.00
26.00	0.01	4.1046	22.13	0.00	0.00	0.00	5.80	100.00
28.00	0.01	3.8114	23.83	0.00	0.00	0.00	5.80	100.00
30.00	0.01	3.5573	25.54	0.00	0.00	0.00	5.80	100.00
35.00	0.02	3.0491	29.79	0.00	0.00	0.00	5.80	100.00
40.00	0.02	2.6680	34.05	0.00	0.00	0.00	5.80	100.00
44.90	0.02	2.3768	38.22	0.00	0.00	0.00	5.80	100.00
49.80	0.02	2.1430	42.39	0.00	0.00	0.00	5.80	100.00
54.90	0.03	1.9439	46.73	0.00	0.00	0.00	5.80	100.00
64.90	0.03	1.6444	55.24	0.00	0.00	0.00	5.80	100.00
74.70	0.04	1.4286	63.59	0.00	0.00	0.00	5.80	100.00

[redacted]

FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (ft)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.642			Rho h (psi/ft)	0.354
Kair (mD)	<0.001	Pc thresh	114.6	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.002	MEDIAN (μm)	0.0047	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

				SATURATION (nwp)			SATURATION (wp)	
Pc (psia)	J FUNCTION	PORE THROAT RADIUS (μm)	HEIGHT (ft)	CUM Vbulk (%)	INC Vpore (%)	CUM Vpore (%)	CUM Vbulk (%)	CUM Vpore (%)
84.80	0.04	1.2585	72.18	0.00	0.00	0.00	5.80	100.00
99.80	0.05	1.0693	84.95	0.00	0.00	0.00	5.80	100.00
114.60	0.05	0.9312	97.55	0.00	0.04	0.04	5.80	99.96
129.40	0.06	0.8247	110.15	0.02	0.30	0.33	5.78	99.67
149.40	0.07	0.7143	127.17	0.05	0.59	0.93	5.75	99.07
174.30	0.08	0.6123	148.37	0.09	0.59	1.52	5.72	98.48
199.40	0.09	0.5352	169.74	0.12	0.59	2.11	5.68	97.89
229.00	0.11	0.4660	194.93	0.16	0.59	2.70	5.65	97.30
258.30	0.12	0.4132	219.87	0.17	0.30	3.00	5.63	97.00
300.50	0.14	0.3551	255.79	0.18	0.15	3.15	5.62	96.85
349.30	0.17	0.3055	297.33	0.19	0.15	3.30	5.61	96.70
401.10	0.19	0.2661	341.43	0.21	0.30	3.60	5.59	96.40
457.70	0.22	0.2332	389.61	0.22	0.15	3.75	5.59	96.25
530.00	0.25	0.2014	451.15	0.25	0.59	4.34	5.55	95.66
608.10	0.29	0.1755	517.63	0.29	0.59	4.93	5.52	95.07
696.00	0.33	0.1533	592.46	0.32	0.59	5.52	5.48	94.48
798.60	0.38	0.1336	679.79	0.34	0.30	5.82	5.47	94.18
920.70	0.44	0.1159	783.73	0.37	0.59	6.41	5.43	93.59
1077.00	0.51	0.0991	916.78	0.41	0.59	7.00	5.40	93.00
1228.40	0.58	0.0869	1045.65	0.44	0.59	7.60	5.36	92.40
1412.00	0.67	0.0756	1201.94	0.48	0.59	8.19	5.33	91.81
1611.20	0.77	0.0662	1371.50	0.49	0.30	8.49	5.31	91.51
1798.80	0.86	0.0593	1531.19	0.53	0.59	9.08	5.28	90.92
2009.80	0.96	0.0531	1710.80	0.56	0.59	9.67	5.24	90.33
2207.10	1.05	0.0484	1878.75	0.60	0.59	10.26	5.21	89.74
2464.00	1.17	0.0433	2097.43	0.63	0.59	10.86	5.17	89.14
2960.60	1.41	0.0360	2520.15	0.66	0.59	11.45	5.14	88.55

[redacted] FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (ft)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.642			Rho h (psi/ft)	0.354
Kair (mD)	<0.001	Pc thresh	114.6	T*Cos Theta $_{Lab}$	368
Kair (mD)*	0.002	MEDIAN (μm)	0.0047	T*Cos Theta $_{Res}$	26

* Kair after Swanson (1981)

		PORE		SATURATION (nwp)			SATURATION (wp)	
		THROAT		CUM	INC	CUM	CUM	CUM
Pc	J	RADIUS	HEIGHT	Vbulk	Vpore	Vpore	Vbulk	Vpore
(psia)	FUNCTION	(μm)	(ft)	(%)	(%)	(%)	(%)	(%)
3097.50	1.47	0.0345	2636.69	0.68	0.30	11.75	5.12	88.25
3774.60	1.80	0.0283	3213.06	0.72	0.59	12.34	5.09	87.66
3968.30	1.89	0.0269	3377.94	0.75	0.59	12.93	5.05	87.07
4430.20	2.11	0.0241	3771.12	0.78	0.59	13.52	5.02	86.48
4981.60	2.37	0.0214	4240.49	0.82	0.59	14.11	4.98	85.89
5607.50	2.67	0.0190	4773.28	0.89	1.18	15.30	4.92	84.70
6292.90	2.99	0.0170	5356.71	0.96	1.18	16.48	4.85	83.52
7082.70	3.37	0.0151	6029.01	1.03	1.18	17.67	4.78	82.33
7961.90	3.79	0.0134	6777.42	1.09	1.18	18.85	4.71	81.15
9049.70	4.31	0.0118	7703.39	1.20	1.78	20.63	4.61	79.37
10241.90	4.87	0.0104	8718.22	1.30	1.78	22.41	4.50	77.59
11627.70	5.53	0.0092	9897.86	1.44	2.37	24.78	4.37	75.22
13192.40	6.28	0.0081	11229.78	1.61	2.96	27.74	4.19	72.26
14965.60	7.12	0.0071	12739.18	1.82	3.55	31.29	3.99	68.71
17081.60	8.13	0.0062	14540.39	2.09	4.74	36.03	3.71	63.97
19570.10	9.31	0.0055	16658.68	2.43	5.92	41.95	3.37	58.05
22461.00	10.69	0.0048	19119.50	2.85	7.11	49.06	2.96	50.94
25858.40	12.31	0.0041	22011.47	3.36	8.88	57.95	2.44	42.05
30075.50	14.31	0.0035	25601.20	4.12	13.03	70.98	1.68	29.02
35037.60	16.67	0.0030	29825.09	4.70	10.07	81.05	1.10	18.95
40312.80	19.18	0.0026	34315.51	5.15	7.70	88.75	0.65	11.25
46526.80	22.14	0.0023	39605.06	5.53	6.52	95.26	0.28	4.74
53620.10	25.52	0.0020	45643.09	5.80	4.74	100.00	0.00	0.00
60236.60	28.67	0.0018	51275.26	5.80	0.00	100.00	0.00	0.00

[redacted]

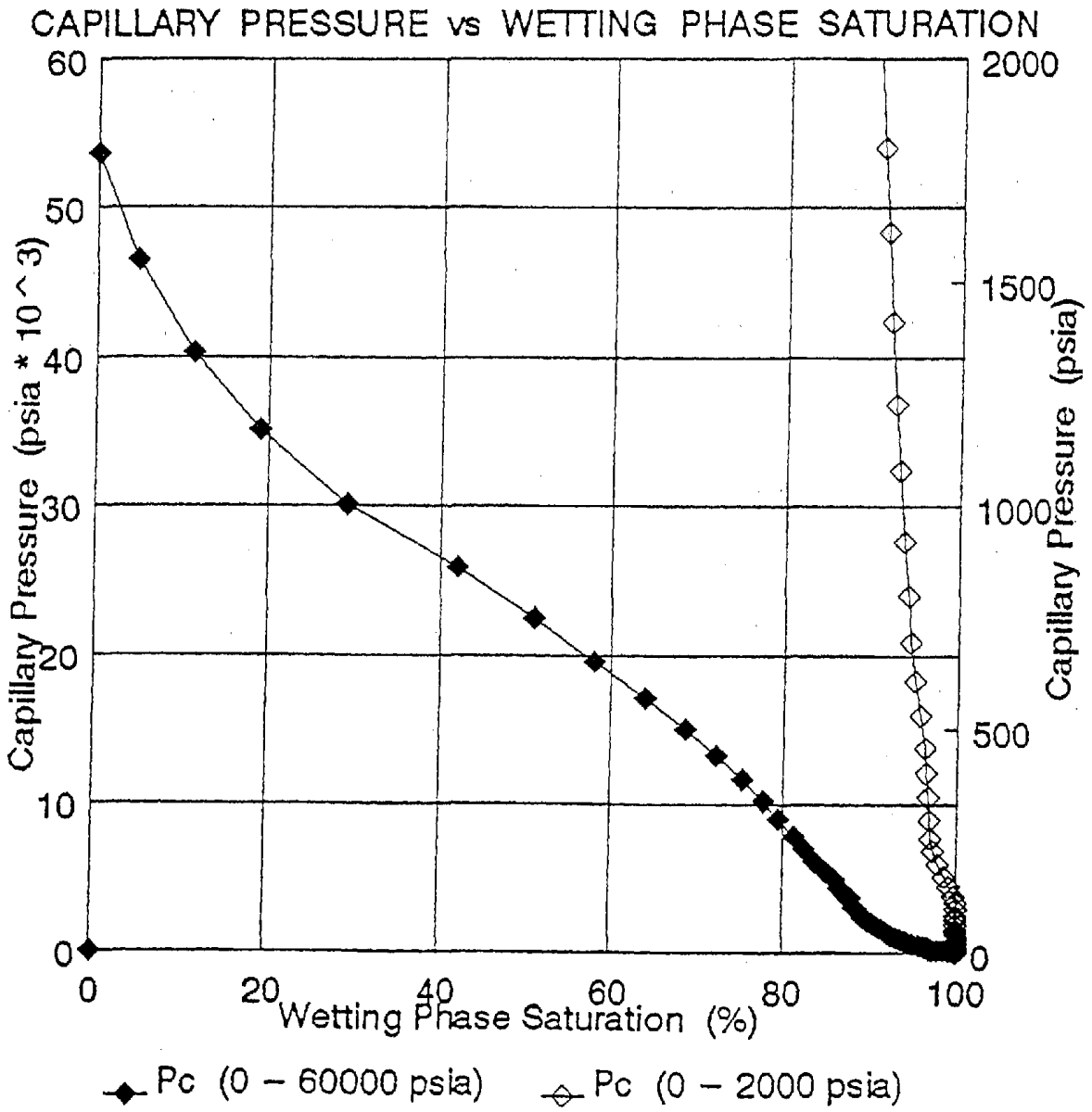
FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (m)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.64			Rho h (psi/ft)	0.354
Kair (mD)	<0.001			T*Cos Theta Lab	368
Kair (mD)*	0.002	Pc thresh	114.6	T*Cos Theta Res	26
		MEDIAN (μm)	0.0047		

* Kair after Swanson (1981)



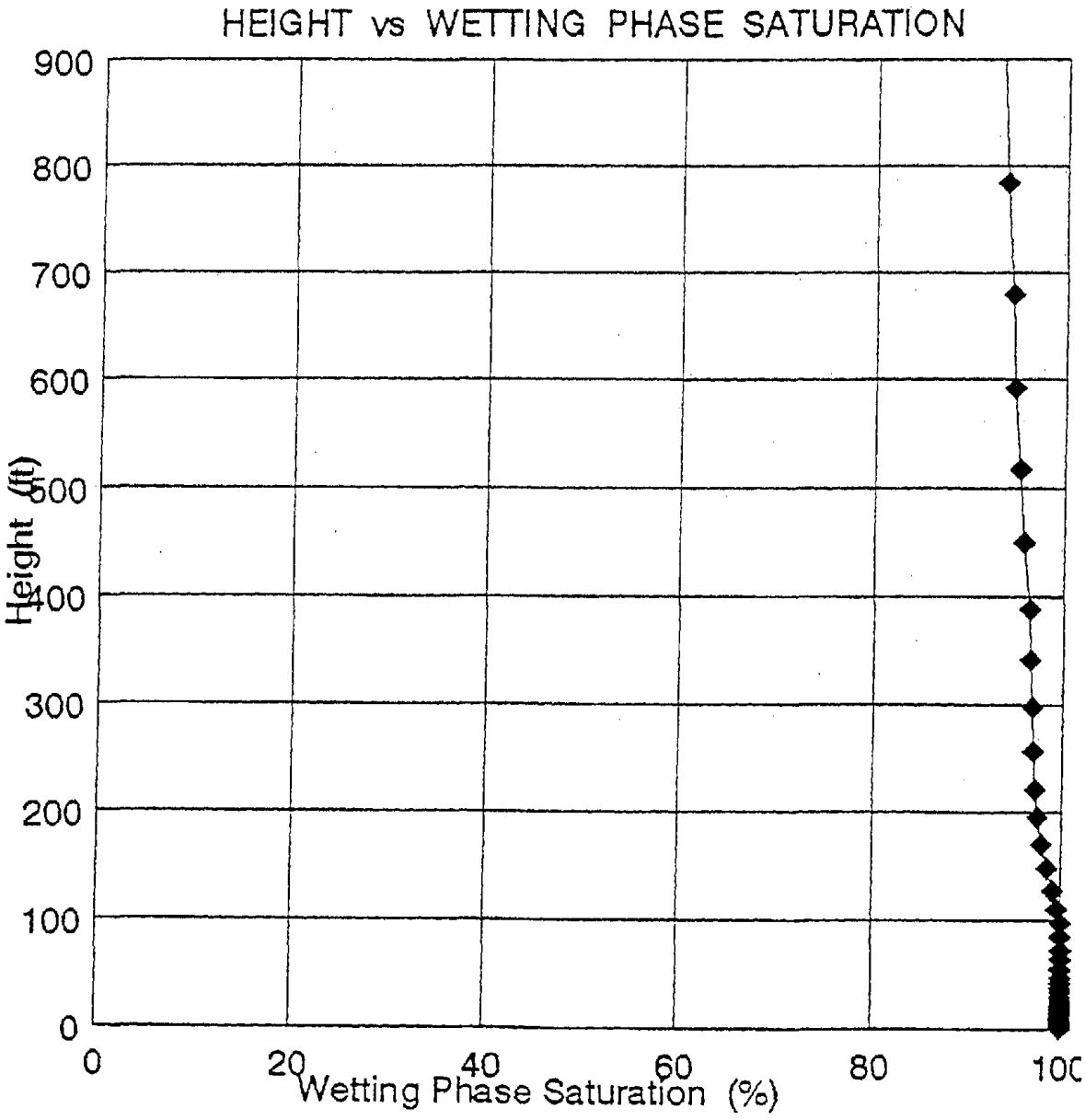
[redacted] FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (m)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.64			Rho h (psi/ft)	0.354
Kair (mD)	<0.001			T*Cos Theta Lab	368
Kair (mD)*	0.002	Pc thresh	114.6	T*Cos Theta Res	26
		MEDIAN (μm)	0.0047		

* Kair after Swanson (1981)



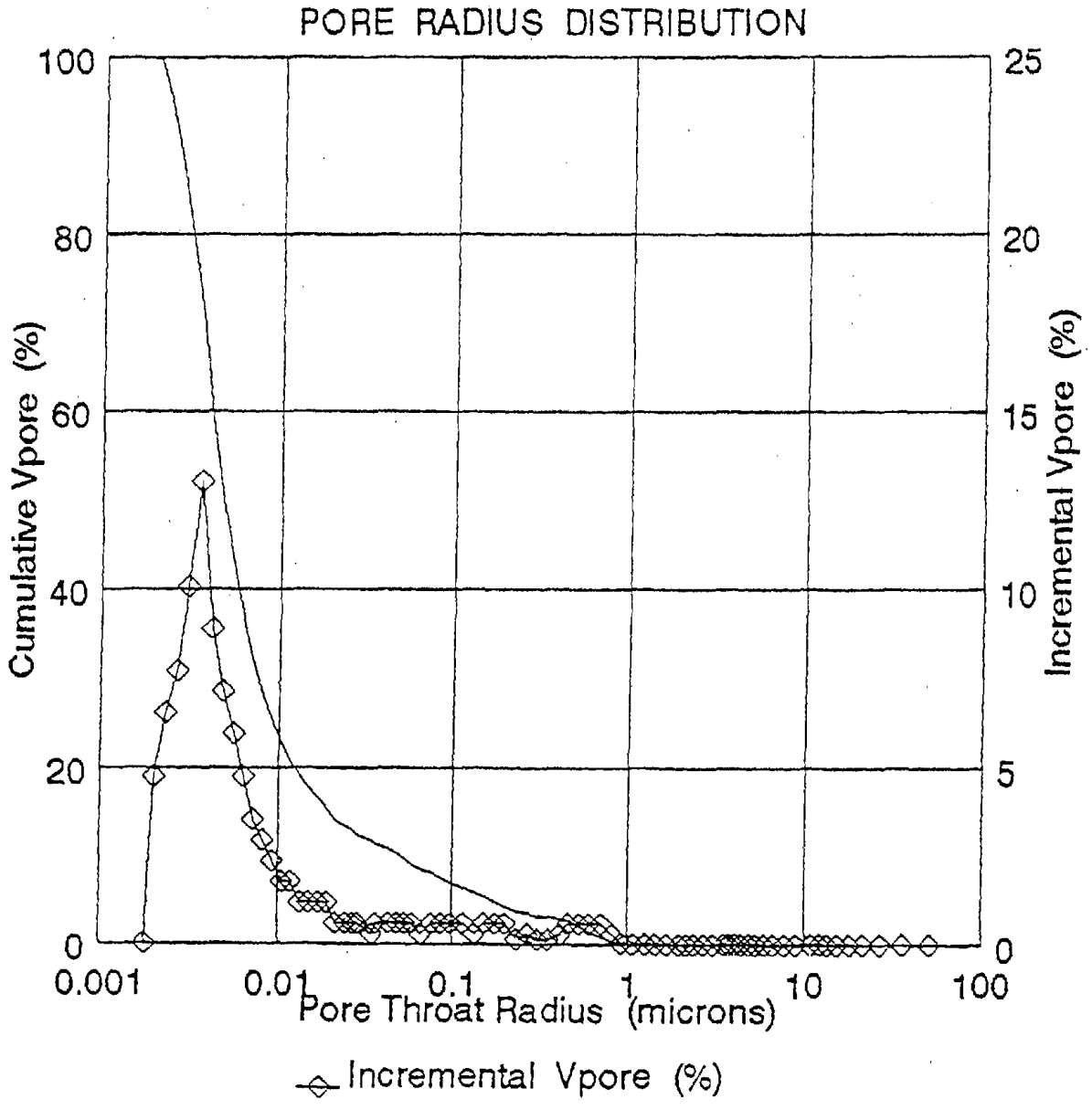
[redacted]. FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (m)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.64			Rho h (psi/ft)	0.354
Kair (mD)	<0.001			T*Cos Theta Lab	368
Kair (mD)*	0.002	Pc thresh	114.6	T*Cos Theta Res	26
		MEDIAN (μm)	0.0047		

* Kair after Swanson (1981)



[redacted]

FILE NO. : [redacted]

USGS N KALIKPIK NO. 1
ALASKA

MERCURY INJECTION CAPILLARY PRESSURE

SAMPLE NO	5	DEPTH (m)	6992.50		
POR (%)	5.80	POR (%), Hg	5.41	Rho w (psi/ft)	0.437
G DEN (g/cc)	2.64			Rho h (psi/ft)	0.354
Kair (mD)	<0.001			T*Cos Theta Lab	368
Kair (mD)*	0.002	Pc thresh	114.6	T*Cos Theta Res	26
		MEDIAN (μm)	0.0047		

* Kair after Swanson (1981)