

SPECIAL CORE ANALYSIS
PELICAN FIELD WELL NO. 1
BASS BASIN, AUSTRALIA
ABB-11-L-RLR-341

188002

T/220

GEOLOGICAL ANALYSIS - CLASTICS / CARBONATES

SINGLE WELL / FIELD / REGIONAL STUDIES

WELL COMPLETION / STIMULATION STUDIES

ROUTINE AND SPECIAL CORE ANALYSIS

RESERVOIRS**Inc.**

1151 - C BRITTMORE ROAD

HOUSTON, TEXAS 77043

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	DEPT. OF MINES			
REF. No.	841985			

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R.R.

This report contains results of Special Core Analysis tests performed on twenty-one Amoco core plugs from Pelican Field Well No. 1, Bass Basin, Australia (ABB-11-L-RLR-341).

A total of twenty-one samples were received for special testing. Formation factor and mercury injection tests were performed on eighteen plugs. Saturation exponents were determined on ten of these samples. Six others had formation factor measured as a function of confining stress. Water sensitivity tests were performed on the remaining three plugs.

The electrical resistivity measurements were made at 5000 psig stress and a nominal 0 psig pore pressure using 21,200 ppm NaCl brine at 70°F.

Water sensitivity tests were conducted using 21,200 ppm NaCl, fresh water and 7 1/2% HCl. Fluids were filtered to .5 micron before testing.

The following should be considered when examining the data sheets and graphs for each sample:

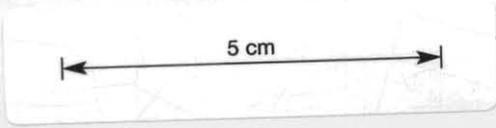
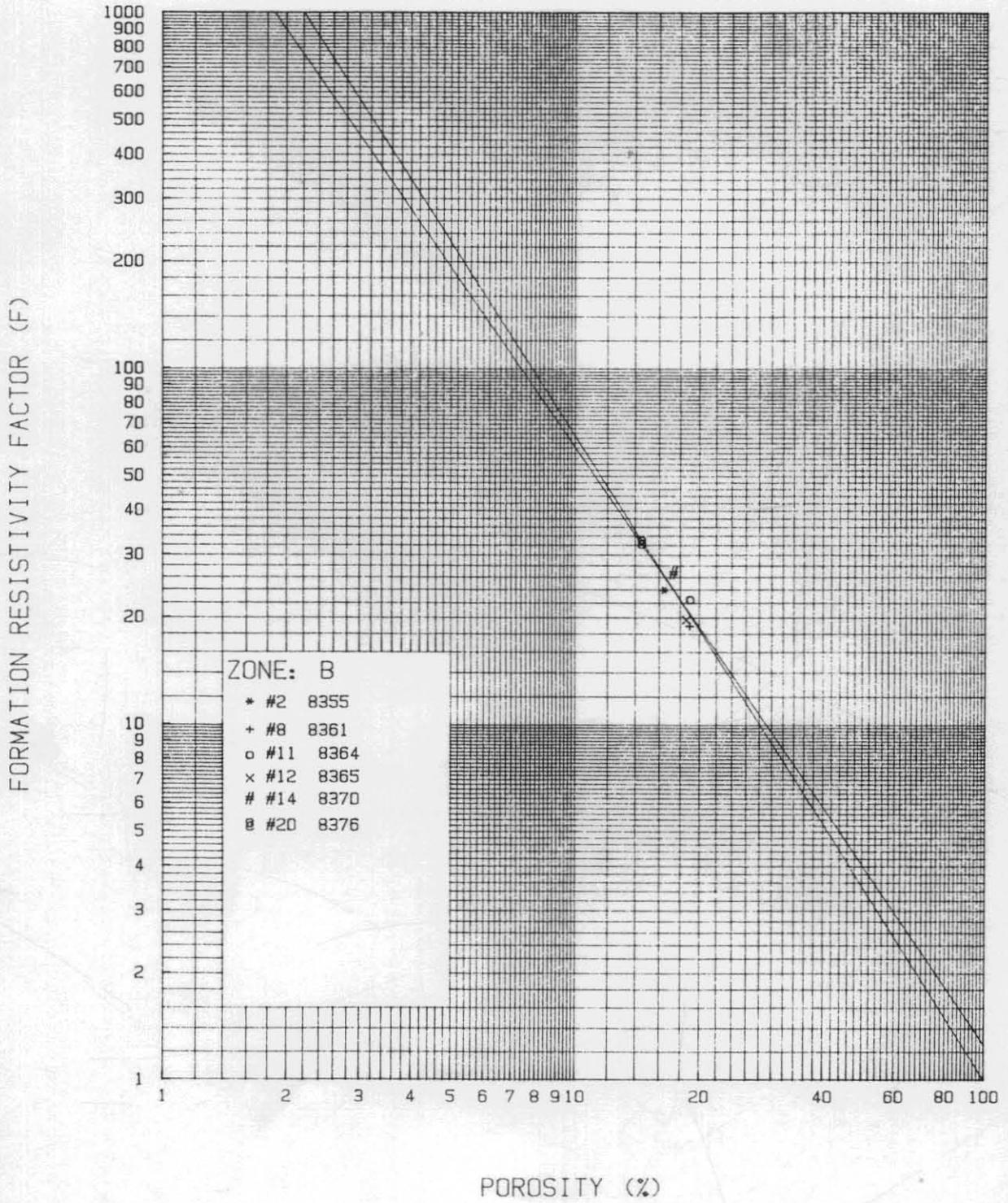
1. All reported gas permeabilities were measured with 500 psi stress.
2. All porosities reported on electrical resistivity data sheets are stressed porosities.
3. All porosities reported on mercury injection and water sensitivity data sheets were measured at ambient conditions.

TABLE 1

Client Plug #	Reservoirs' Plug#	Depth (ft)	F	m	ϕ @ Stress	Zone
2	A-432	8355	23.89	1.76	16.44	B
8	A-433	8361	18.89	1.77	18.94	B
11	A-434	8364	22.76	1.88	19.00	B
12	A-435	8365	19.98	1.78	18.57	B
14	A-436	8370	26.72	1.88	17.36	B
20	A-437	8376	32.57	1.81	14.52	B
22	A-438	8548	17.01	1.78	20.32	C
26	A-439	8552	70.07	2.13	13.63	C
29	A-440	8555	19.20	1.76	18.61	C
46	A-441	9427	51.45	1.75	10.59	F
48	A-442	9429	24.19	1.82	17.30	F
49	A-443	9430	85.04	1.74	7.76	F
51	A-450	9432	Water Sensitivity test			
53	A-444	9434	29.64	1.85	15.93	F
56	A-451	9440	Water Sensitivity test			
57	A-445	9441	30.98	1.97	17.47	F
58	A-664	9442	Water Sensitivity test			
61	A-446	9445	64.23	1.70	8.68	F
69	A-447	10065	39.60	1.83	13.45	G
71	A-448	10067	47.23	1.82	12.06	G
72	A-449	10068	35.56	1.93	15.74	G

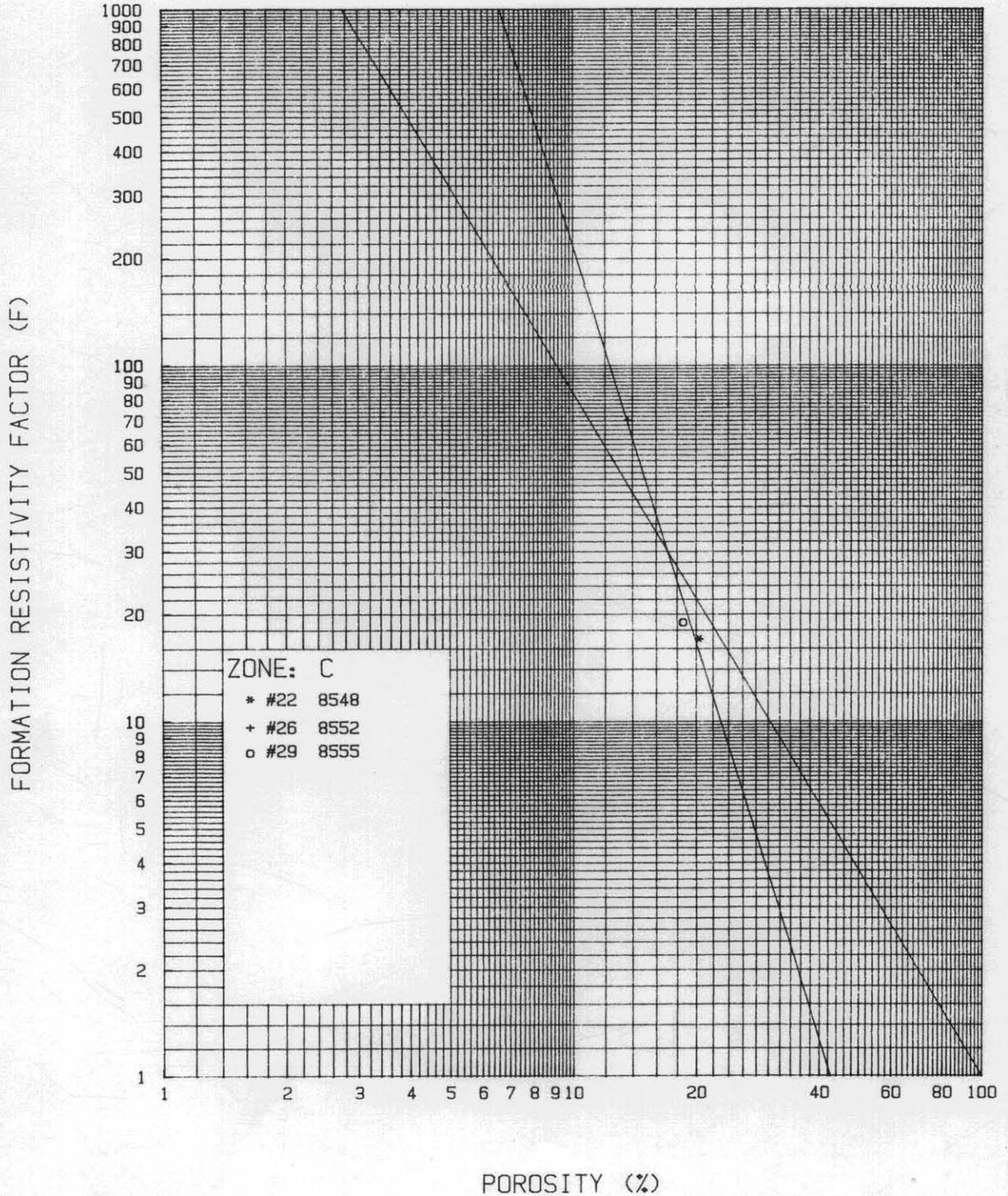
FORMATION RESISTIVITY FACTOR vs POROSITY

Natural fit : $F=1.260^{-1.68}$
 Forced fit : $F=1.000^{-1.81}$



FORMATION RESISTIVITY FACTOR vs POROSITY

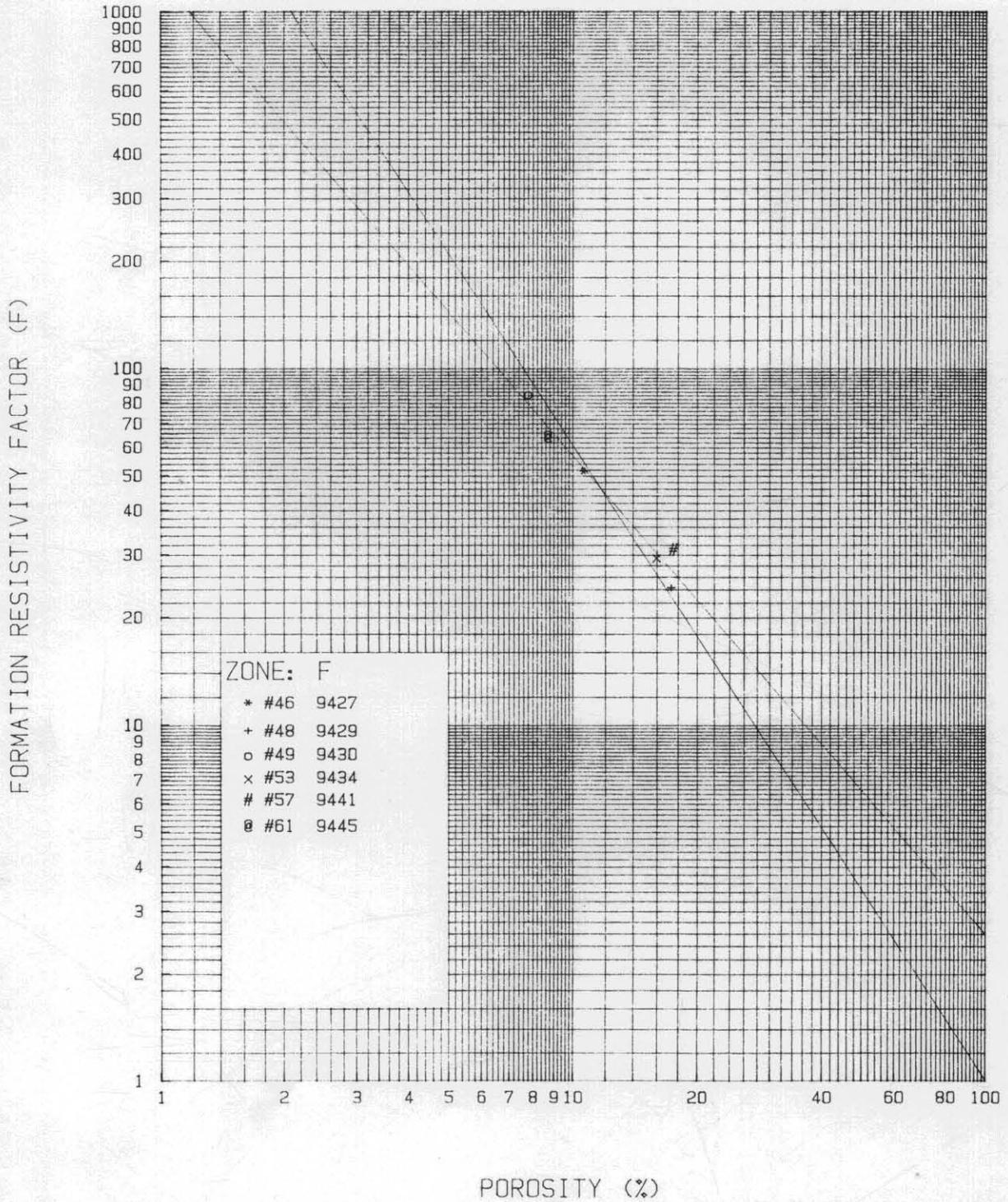
Natural fit : $F = .040^{-3.71}$
 Forced fit : $F = 1.000^{-1.92}$



5 cm

FORMATION RESISTIVITY FACTOR vs POROSITY

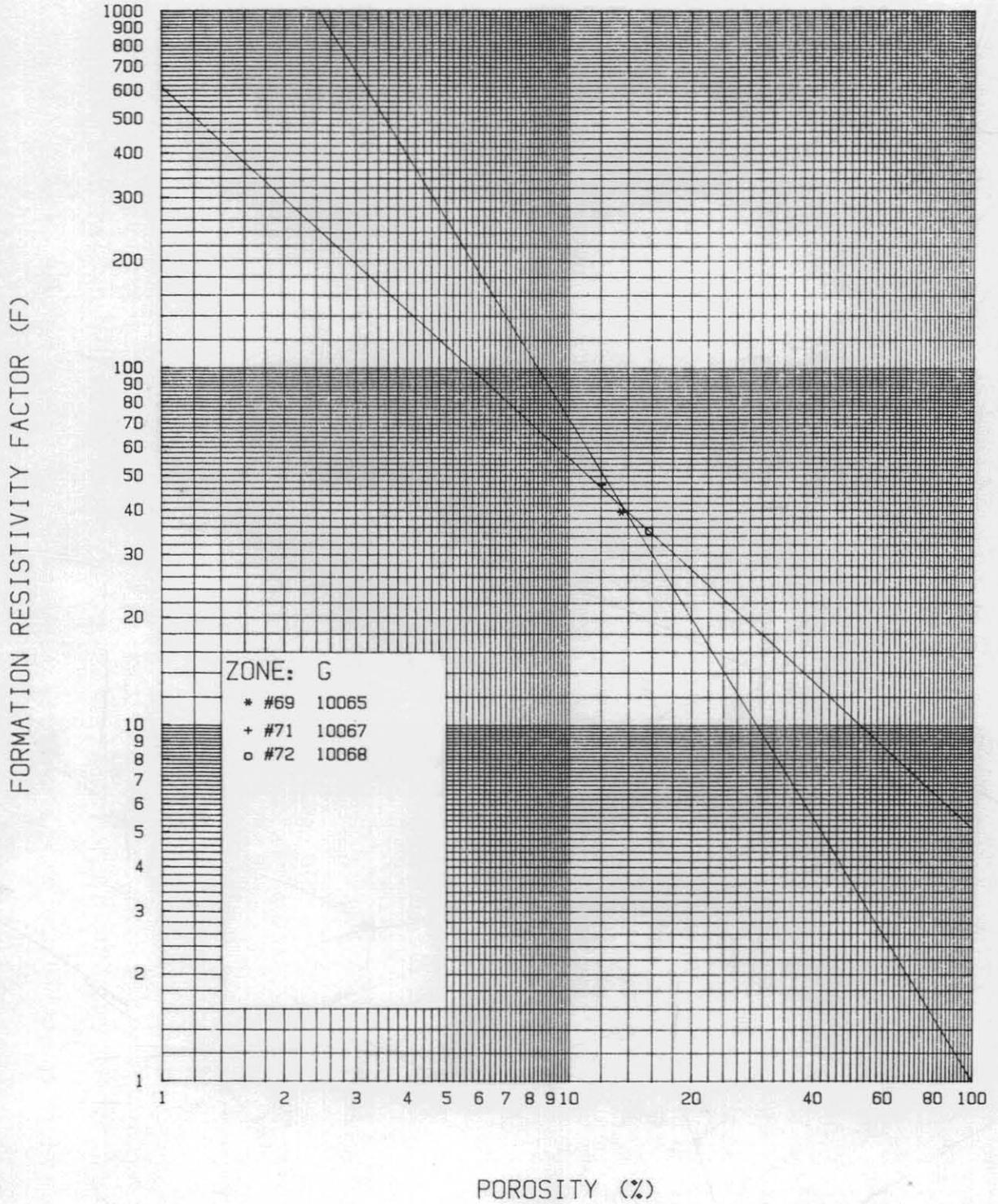
Natural fit : $F=2.580^{-1.34}$
 Forced fit : $F=1.000^{-1.78}$



5 cm

FORMATION RESISTIVITY FACTOR vs POROSITY

Natural fit : $F=5.130^{-1.04}$
 Forced fit : $F=1.000^{-1.86}$



188008

MERCURY INJECTION TEST
 =====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/7/CP
 SAMPLE No. : A-432
 DEPTH : 8355

Porosity = 17.52 % Permeability = 19.60 md
 Pore vol. = 2.08 cc Grain dens. = 2.64 g/cc

TEST RESULTS:
 =====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.91	100.00		
2	3.41	100.00		
3	5.91	100.00		
4	10.91	100.00		
5	15.91	100.00		
6	20.91	100.00		
7	25.91	98.46	4.114	.16
8	30.91	92.27	3.448	.19
9	44.91	72.86	2.373	.28
10	60.91	61.38	1.750	.38
11	74.91	55.33	1.423	.47
12	110.91	47.17	.961	.69
13	160.91	40.68	.662	1.00
14	200.91	36.79	.531	1.25
15	300.91	30.88	.354	1.87
16	400.91	26.75	.266	2.50
17	600.91	21.90	.177	3.74
18	800.91	18.68	.133	4.99
19	1000.91	15.99	.107	6.24
20	1200.91	14.41	.089	7.48
21	1500.91	12.54	.071	9.35
22	2000.91	10.47	.053	12.47

* Wetting Phase Saturation

← 5 cm →

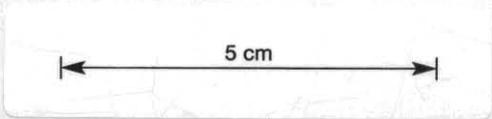
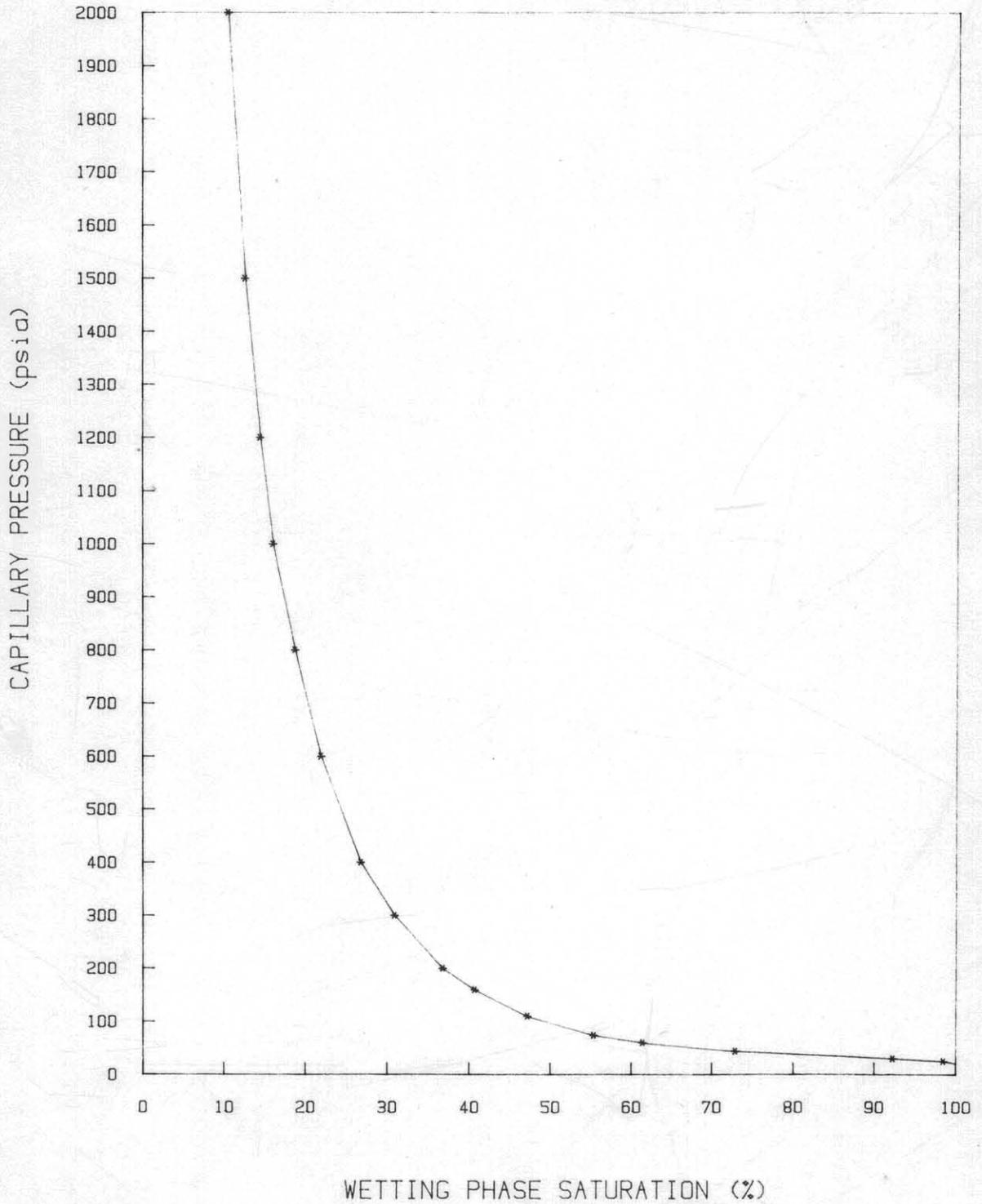
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CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

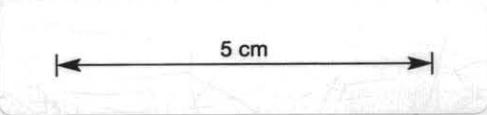
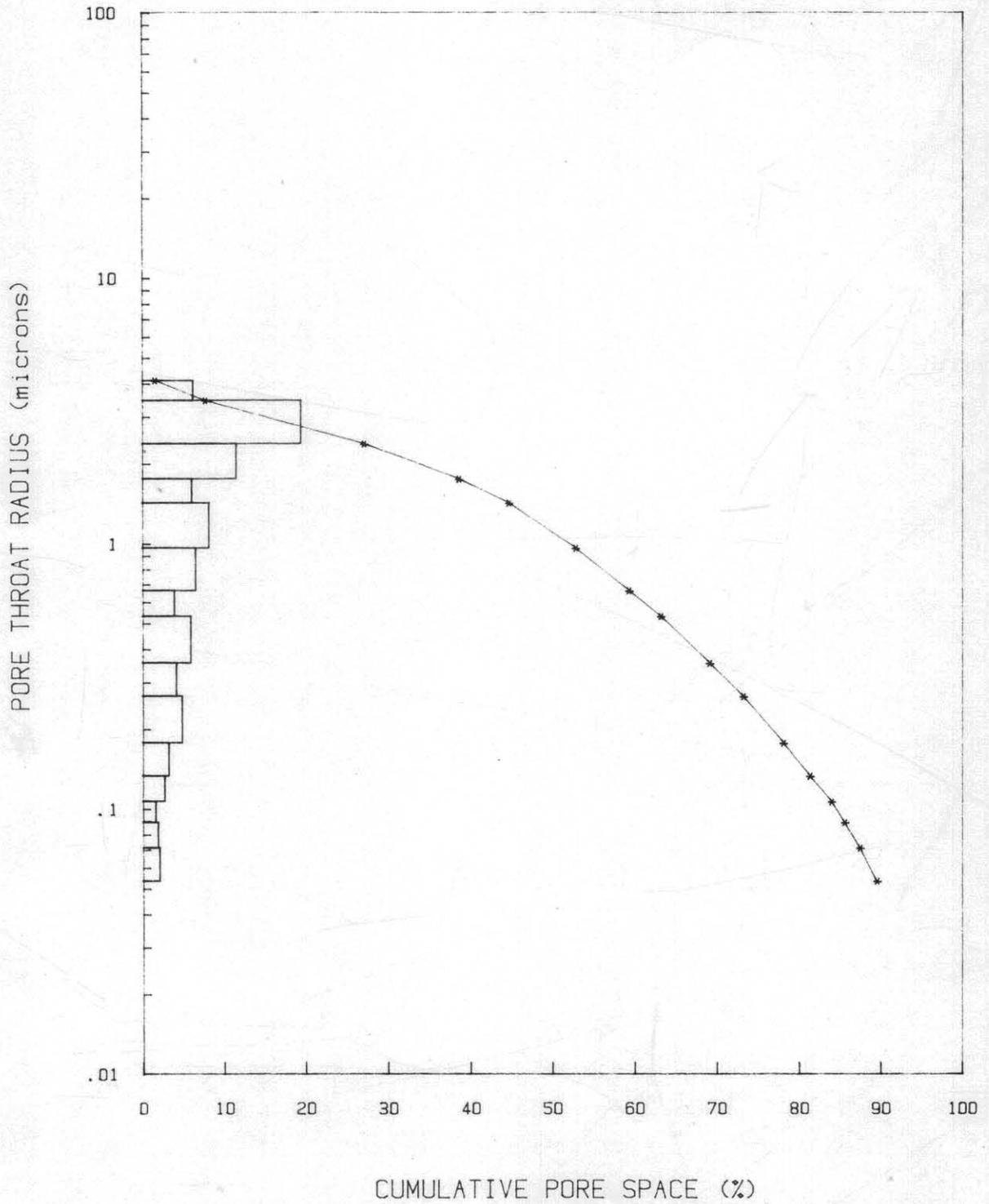
SAMPLE # A-432 DEPTH : 8355



PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-432 DEPTH : 8355



188011

MERCURY INJECTION TEST
 =====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/8/CP
 SAMPLE No. : A-433
 DEPTH : 8361

Porosity = 20.44 % Permeability = 74.47 md
 Pore vol. = 1.98 cc Grain dens. = 2.64 g/cc

TEST RESULTS:
 =====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.87	100.00		
2	3.37	100.00		
3	5.87	100.00		
4	10.87	91.78	9.804	.12
5	15.87	77.56	6.716	.18
6	20.87	62.99	5.107	.23
7	25.87	53.81	4.120	.29
8	30.87	48.61	3.453	.35
9	44.87	40.49	2.376	.50
10	60.87	34.90	1.751	.68
11	74.87	31.67	1.424	.84
12	110.87	26.78	.961	1.25
13	160.87	22.24	.663	1.81
14	200.87	19.97	.531	2.26
15	300.87	15.94	.354	3.38
16	400.87	13.77	.266	4.51
17	600.87	11.20	.177	6.76
18	800.87	9.63	.133	9.00
19	1000.87	8.72	.107	11.25
20	1200.87	8.02	.089	13.50
21	1500.87	7.26	.071	16.87
22	2000.87	6.35	.053	22.50

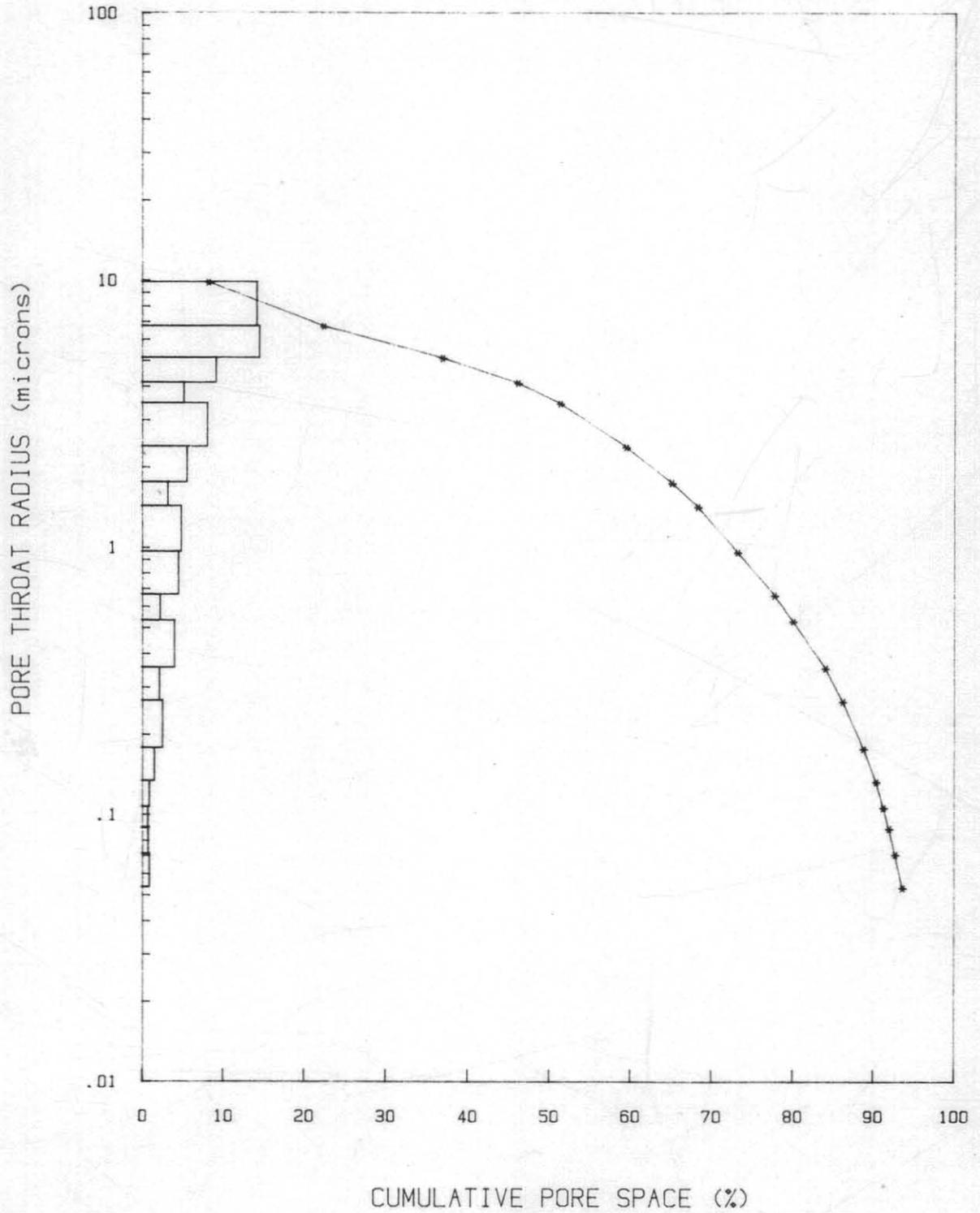
* Wetting Phase Saturation

188012

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-433 DEPTH : 8361



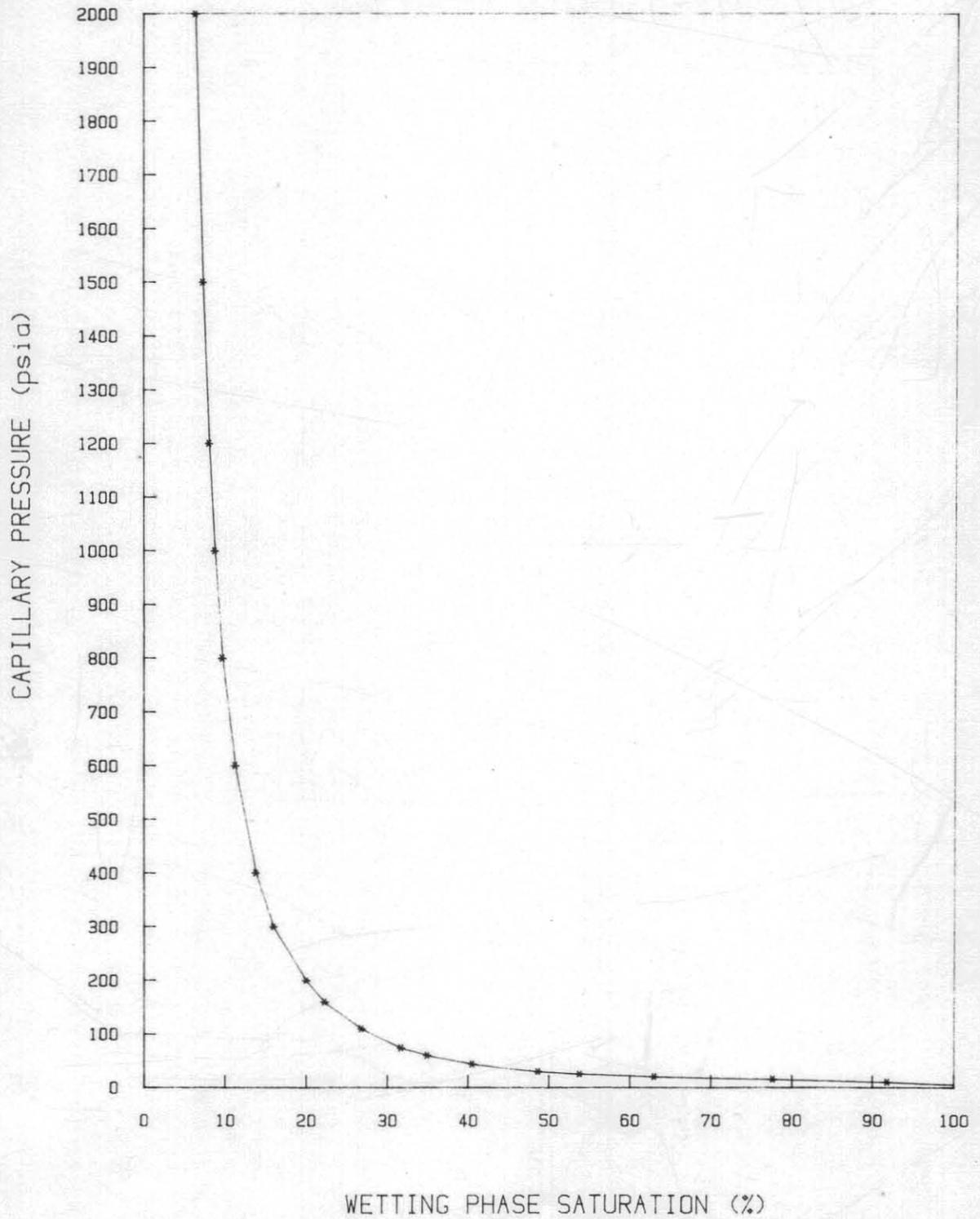
5 cm

188013

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-433 DEPTH : 8361



5 cm

ELECTRICAL RESISTIVITY TEST
=====

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1
FILE NAME : 390/Rx

SAMPLE # : A-434
DEPTH (ft) : 8364

POROSITY : 19.00 % PERMEABILITY : 385.20 md
PORE VOL. : 2.09 cc GRAIN DENSITY : 2.64 g/cc

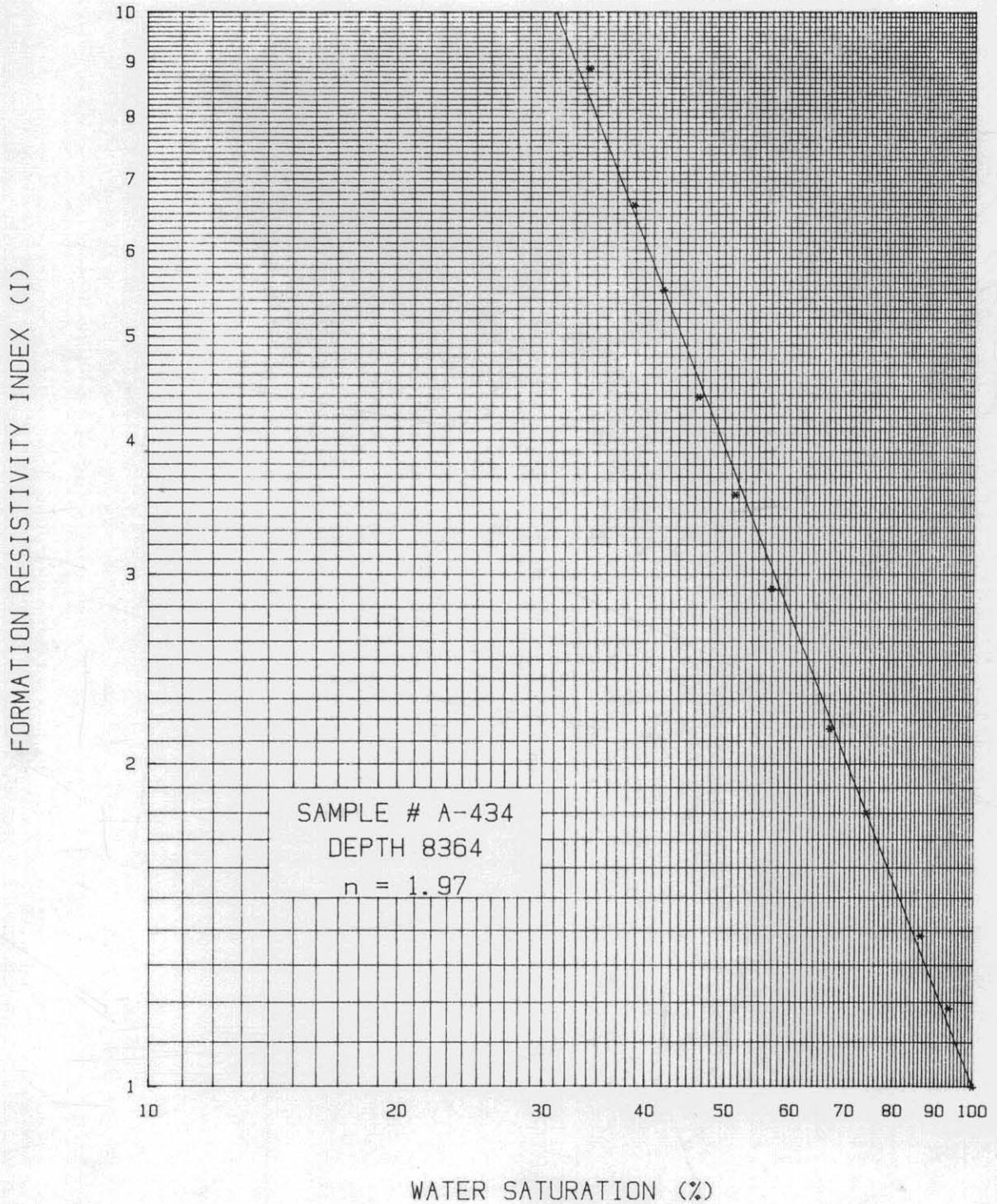
BRINE RESISTIVITY : .3 ohm-meter @ 70 F
CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 22.76
CEMENTATION EXPONENT (m) = 1.88
SATURATION EXPONENT (n) = 1.97

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
93.52	1.18
86.37	1.38
74.20	1.80
67.01	2.16
56.94	2.91
51.43	3.56
46.39	4.39
42.08	5.52
38.72	6.61
34.17	8.87

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

FORMATION FACTOR vs CONFINING PRESSURE
=====

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL No. 1
FILE NAME:SAMPLE # : 11/A-434
DEPTH : 8364TEST RESULTS
=====

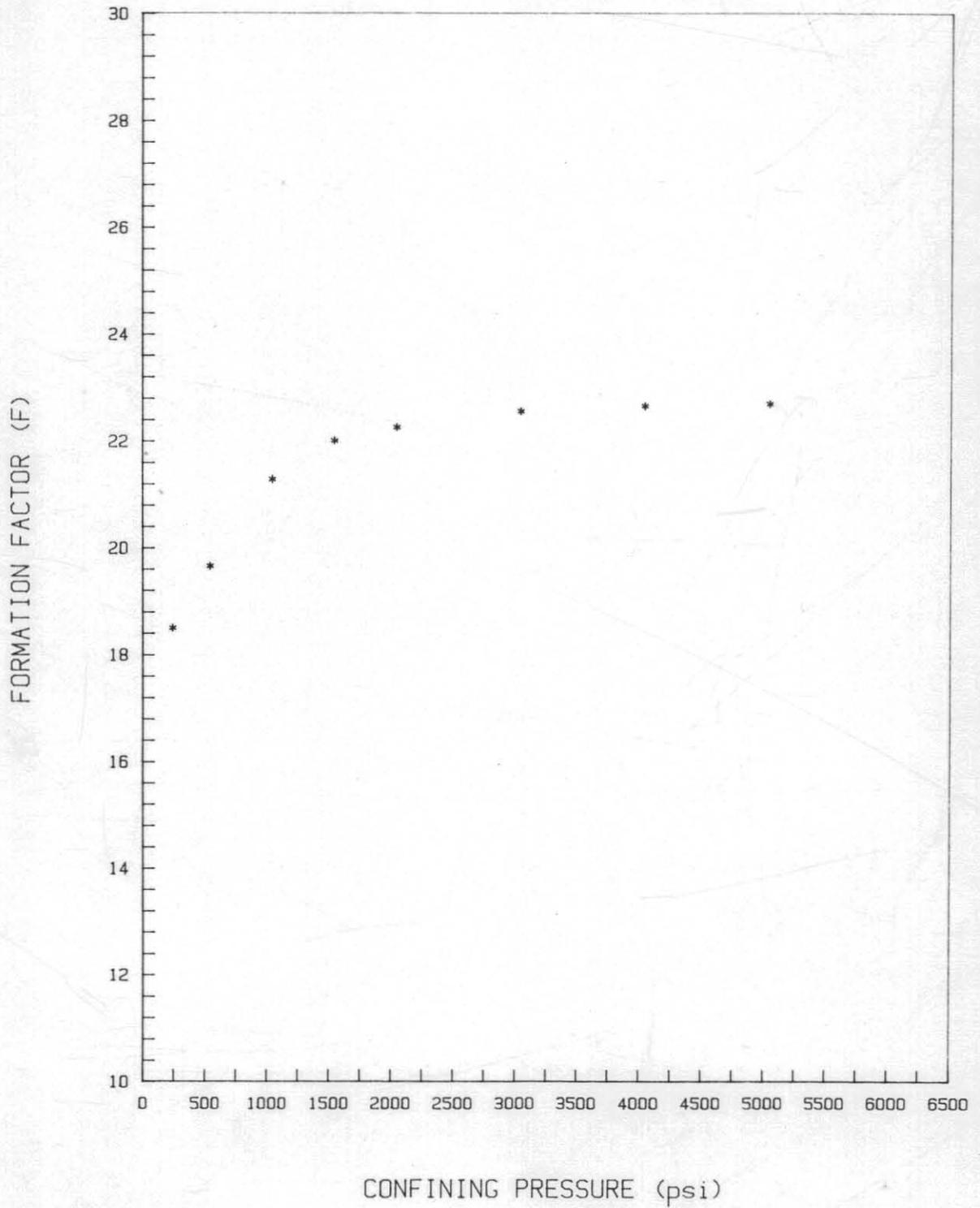
CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)
0	20.43		
200	20.21	18.56	1.83
500	19.87	19.71	1.85
1000	19.58	21.35	1.88
1500	19.45	22.07	1.89
2000	19.36	22.32	1.89
3000	19.20	22.62	1.89
4000	19.09	22.72	1.89
5000	19.00	22.76	1.88

188017

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 11/A-434 DEPTH: 8364



5 cm

POROSITY vs. CONFINING STRESS TEST
=====

COMPANY : AMOCO

WELL NAME:

FILE NAME: 390/PVC/1

SAMPLE # : A-434

DEPTH : 8364 ft.

POROSITY = 20.43 %
PORE VOLUME = 2.28 cc

PERMEABILITY = 385.20 md
GRAIN DENSITY = 2.64 g/cc

TEST RESULTS
=====

CONFINING STRESS (psi)

POROSITY (%)

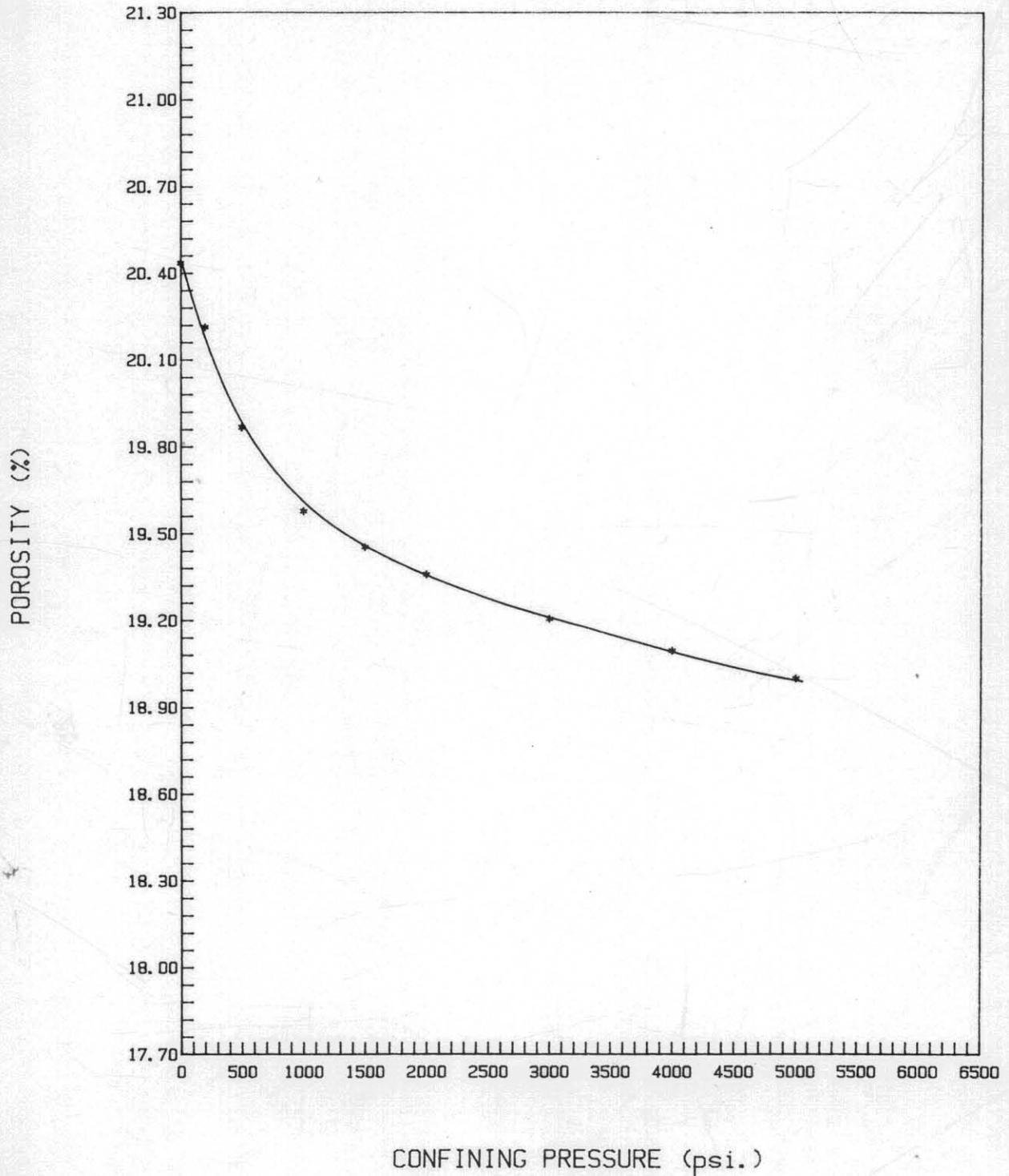
0	20.43
200	20.21
500	19.87
1000	19.58
1500	19.45
2000	19.36
3000	19.20
4000	19.09
5000	19.00

188019

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-434 DEPTH : 8364



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/1/CP

SAMPLE No. : A-434

DEPTH : 8364

Porosity = 20.44 %

Pore vol. = 2.22 cc

Permeability = 385.19 md

Grain dens. = 2.64 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	98.42	21.321	.13
4	10.00	60.79	10.660	.26
5	15.00	46.82	7.107	.38
6	20.00	41.51	5.330	.51
7	25.00	37.99	4.264	.64
8	30.00	35.42	3.553	.77
9	44.00	30.69	2.423	1.13
10	60.00	26.05	1.777	1.53
11	74.00	23.39	1.441	1.89
12	110.00	18.79	.969	2.81
13	160.00	15.50	.666	4.09
14	200.00	13.74	.533	5.11
15	300.00	11.13	.355	7.67
16	400.00	9.60	.267	10.23
17	600.00	7.80	.178	15.34
18	800.00	6.71	.133	20.46
19	1000.00	6.22	.107	25.57
20	1200.00	5.81	.089	30.69
21	1500.00	5.50	.071	38.36
22	2000.00	4.91	.053	51.15

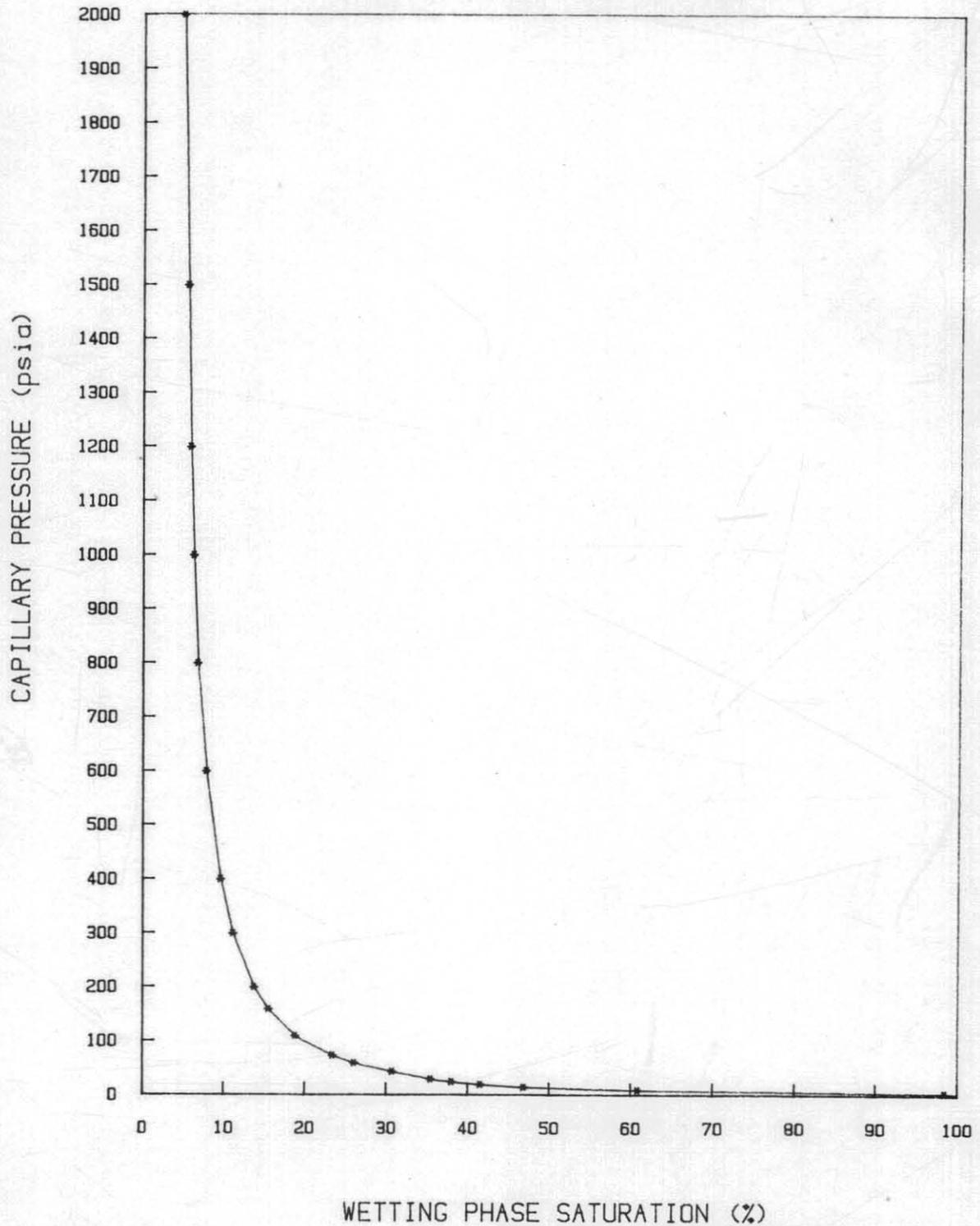
* Wetting Phase Saturation

188021

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-434 DEPTH : 8364



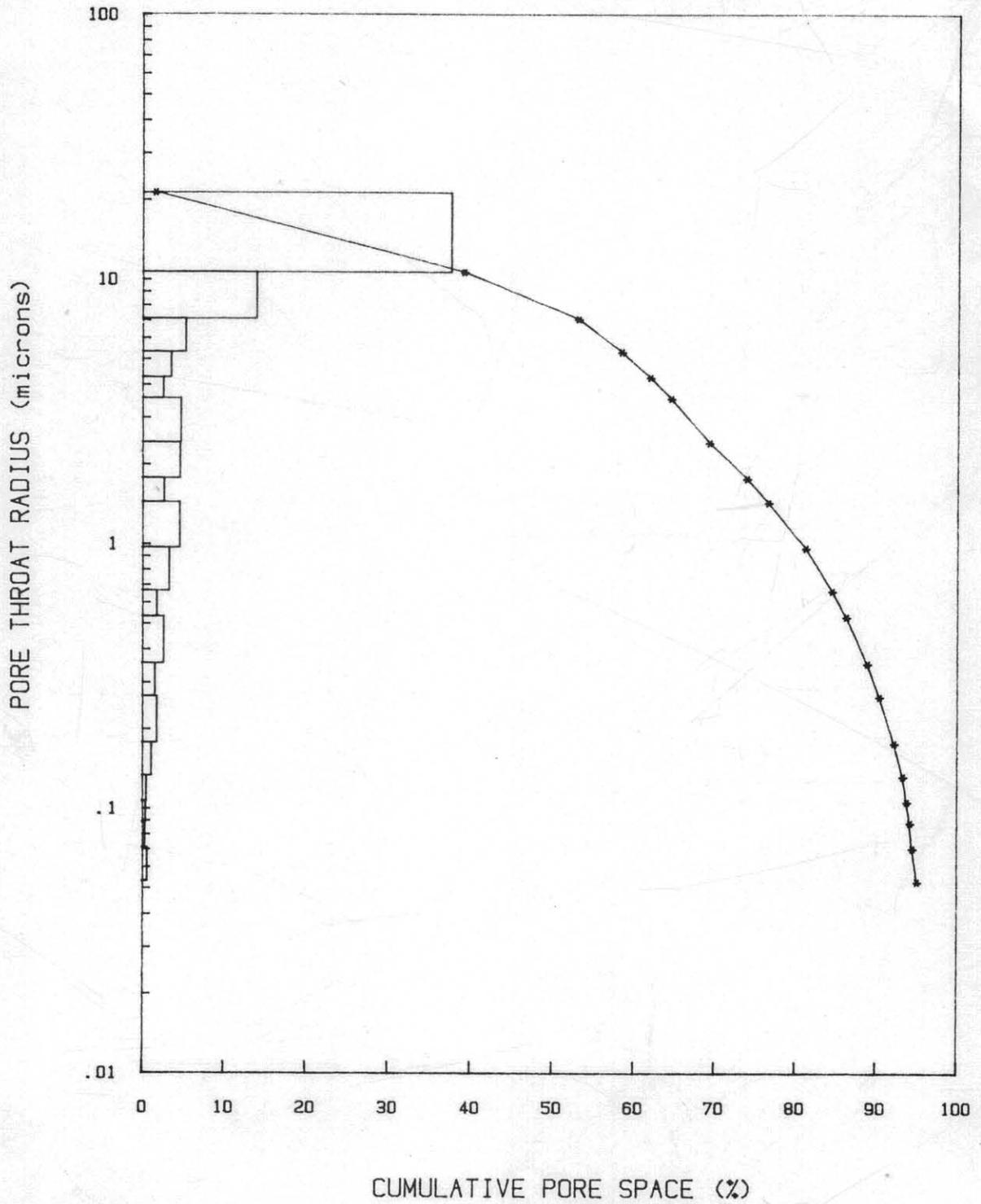
5 cm

188022

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-434 DEPTH : 8364



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/9/CP
SAMPLE No. : A-435
DEPTH : 8365

Porosity = 19.73 % Permeability = 150.99 md
Pore vol. = 2.03 cc Grain dens. = 2.64 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.89	100.00		
2	3.39	100.00		
3	5.89	100.00		
4	10.89	90.82	9.791	.18
5	15.89	72.95	6.710	.26
6	20.89	62.04	5.104	.34
7	25.89	55.13	4.118	.42
8	30.89	50.15	3.451	.50
9	44.89	42.94	2.375	.73
10	60.89	37.51	1.751	.99
11	74.89	34.21	1.424	1.22
12	110.89	29.22	.961	1.81
13	160.89	24.38	.663	2.62
14	200.89	22.01	.531	3.27
15	300.89	17.42	.354	4.90
16	400.89	15.45	.266	6.53
17	600.89	12.54	.177	9.79
18	800.89	10.81	.133	13.05
19	1000.89	9.77	.107	16.31
20	1200.89	8.54	.089	19.57
21	1500.89	7.80	.071	24.46
22	2000.89	6.91	.053	32.61

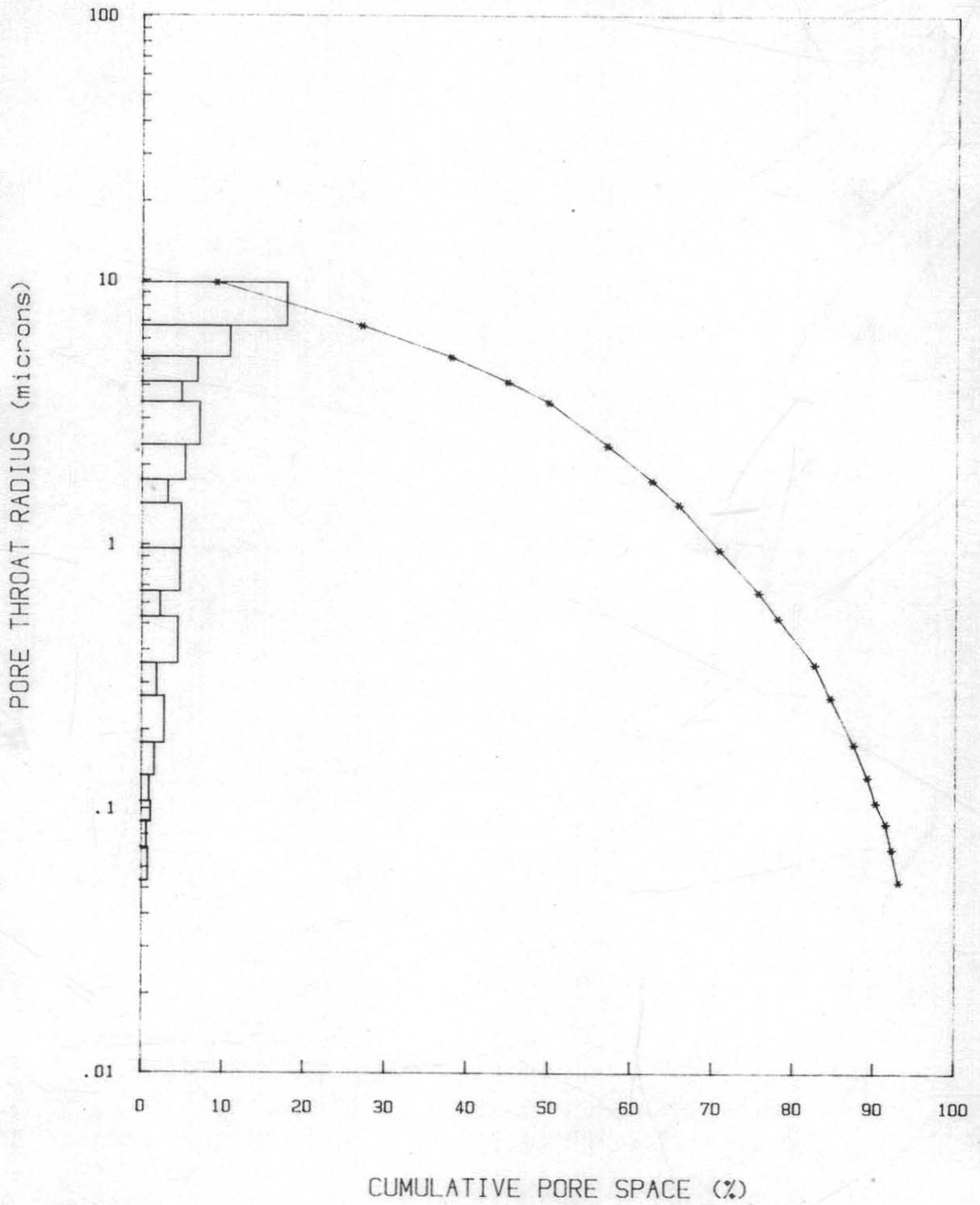
* Wetting Phase Saturation

188024

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

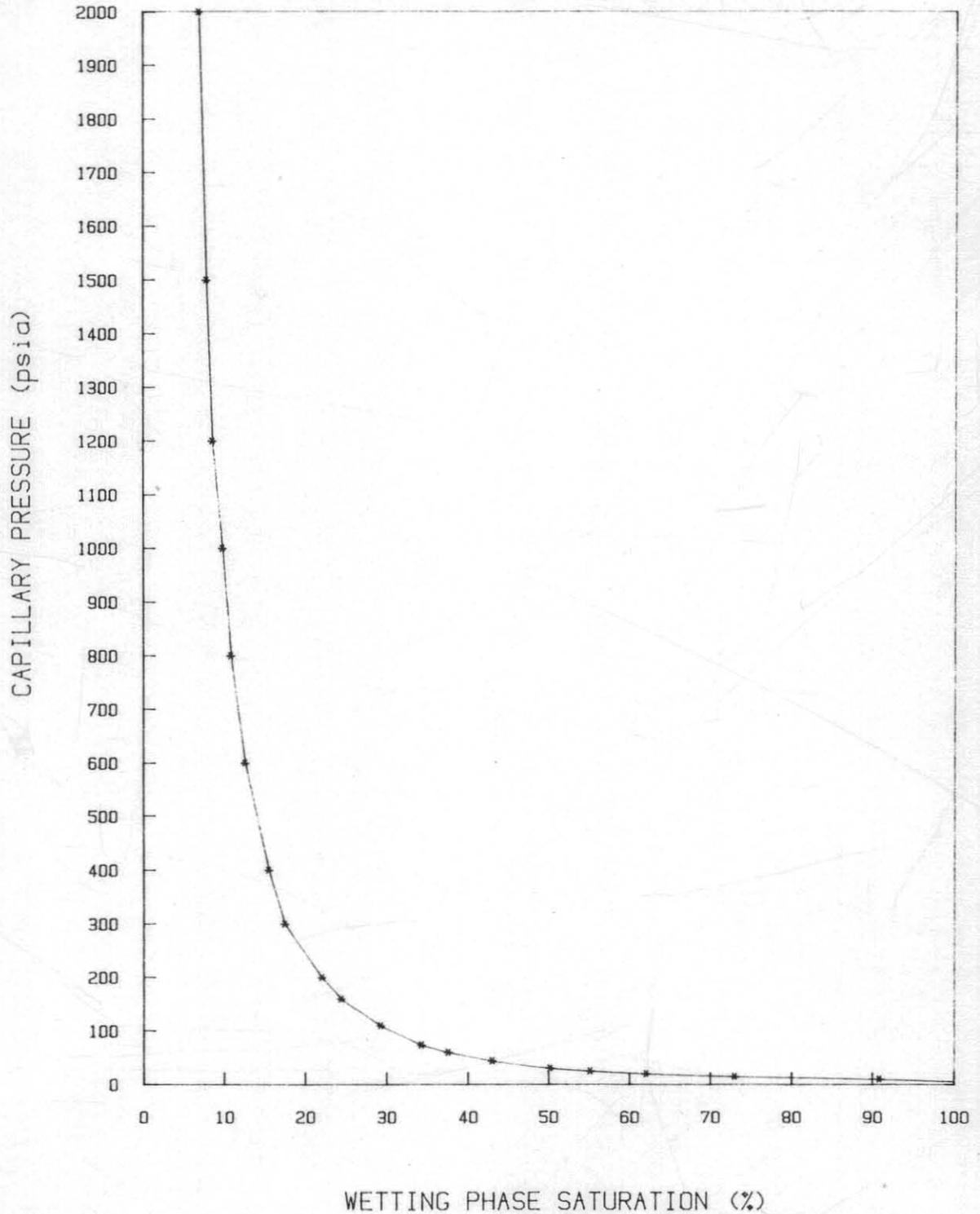
SAMPLE # A-435 DEPTH : 8365



5 cm

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1
SAMPLE # A-435 DEPTH : 8365



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/10/CP
SAMPLE No. : A-436
DEPTH : 8370

Porosity = 18.36 % Permeability = 5.99 md
Pore vol. = 1.78 cc Grain dens. = 2.66 g/cc

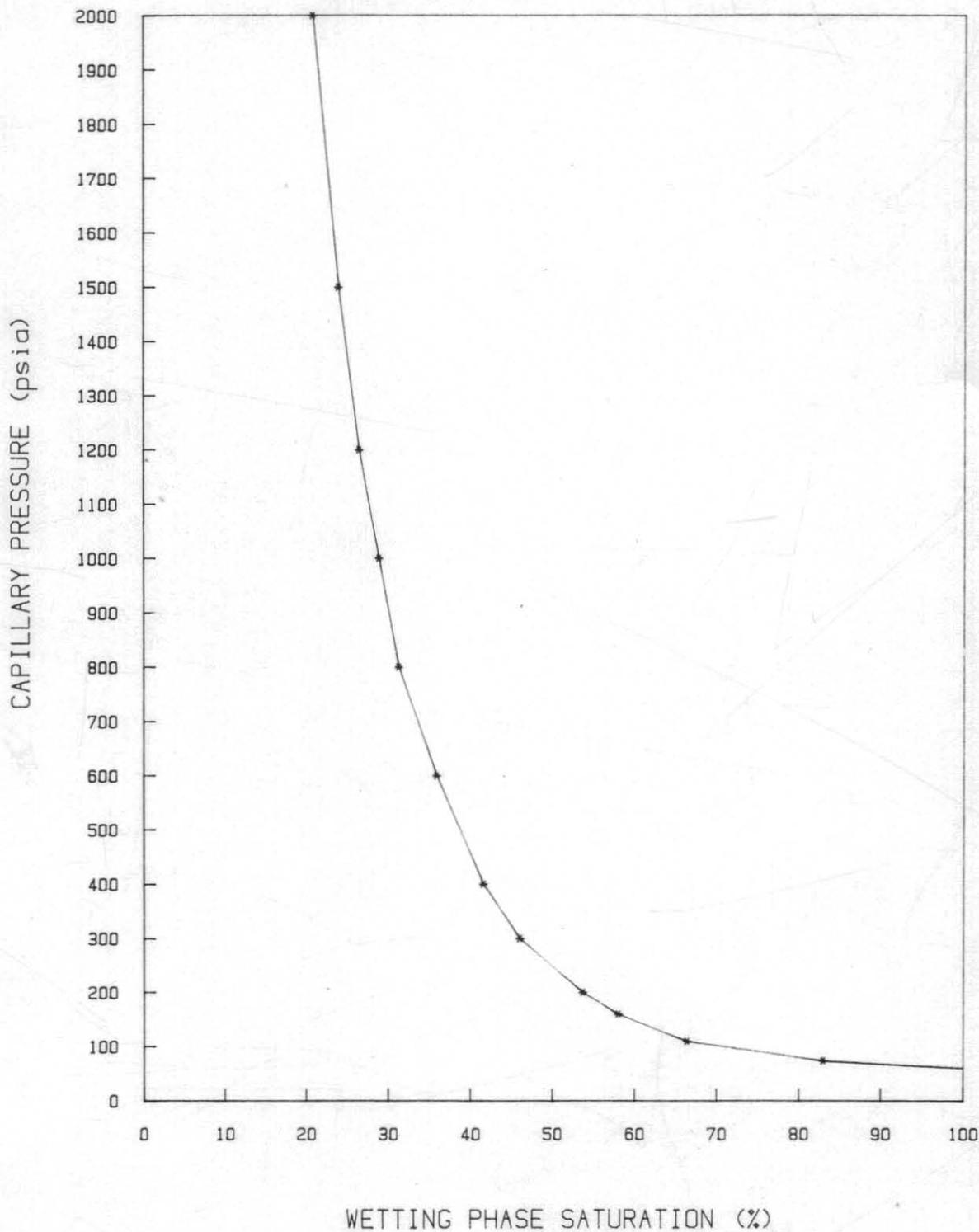
TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.87	100.00		
2	3.37	100.00		
3	5.87	100.00		
4	10.87	100.00		
5	15.87	100.00		
6	20.87	100.00		
7	25.87	100.00		
8	30.87	100.00		
9	44.87	100.00		
10	60.87	100.00		
11	74.87	82.97	1.424	.25
12	110.87	66.39	.962	.37
13	160.87	58.01	.663	.54
14	200.87	53.68	.531	.68
15	300.87	45.98	.354	1.01
16	400.87	41.54	.266	1.35
17	600.87	35.86	.177	2.02
18	800.87	31.25	.133	2.69
19	1000.87	28.84	.107	3.37
20	1200.87	26.42	.089	4.04
21	1500.87	23.89	.071	5.05
22	2000.87	20.74	.053	6.73

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1
SAMPLE # A-436 DEPTH : 8370



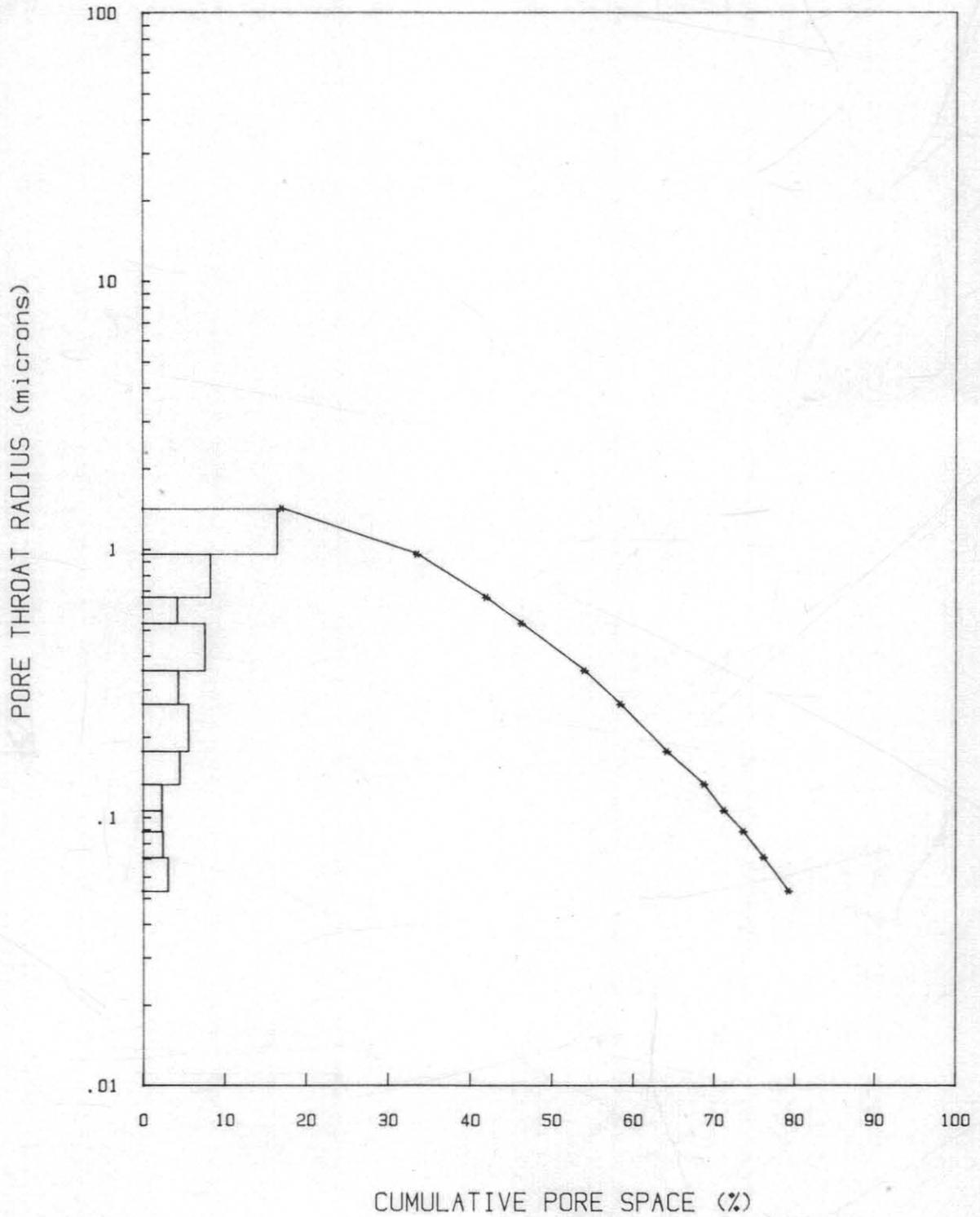
5 cm

188028

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-436 DEPTH : 8370



5 cm

ELECTRICAL RESISTIVITY TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL No. 1
FILE NAME : 390/Rx

SAMPLE # : A-437
DEPTH (ft) : 8376

POROSITY : 14.52 % PERMEABILITY : 1.23 md
PORE VOL. : 1.66 cc GRAIN DENSITY : 2.67 g/cc

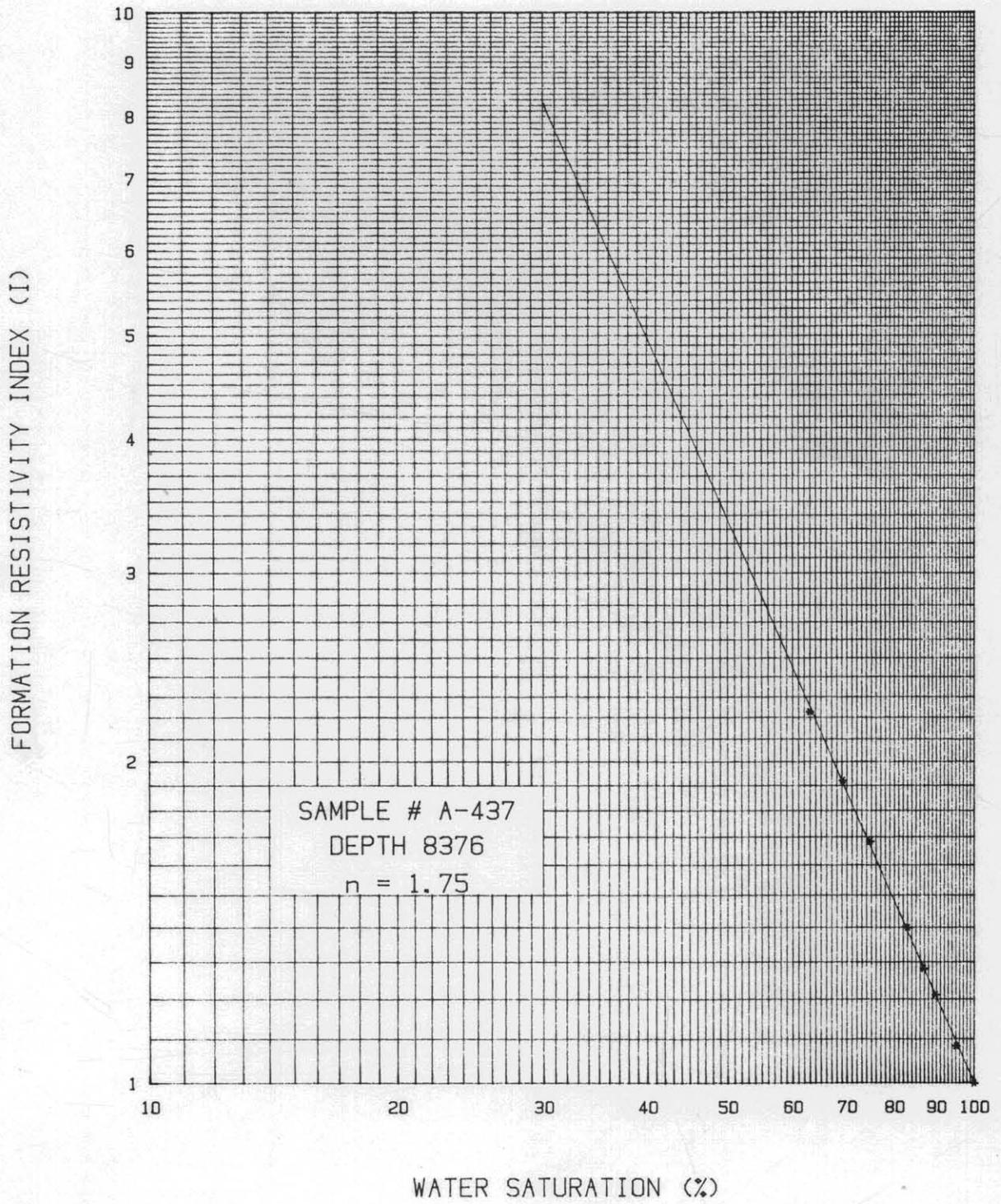
BRINE RESISTIVITY : .3 ohm-meter @ 70 F
CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 32.57
CEMENTATION EXPONENT (m) = 1.81
SATURATION EXPONENT (n) = 1.75

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
95.00	1.08
89.64	1.21
86.75	1.28
82.89	1.40
74.63	1.68
69.09	1.92
62.88	2.23

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

FORMATION FACTOR vs CONFINING PRESSURE
 =====

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL No. 1
 FILE NAME:

SAMPLE # : 20/A-437
 DEPTH : 8376

TEST RESULTS
 =====

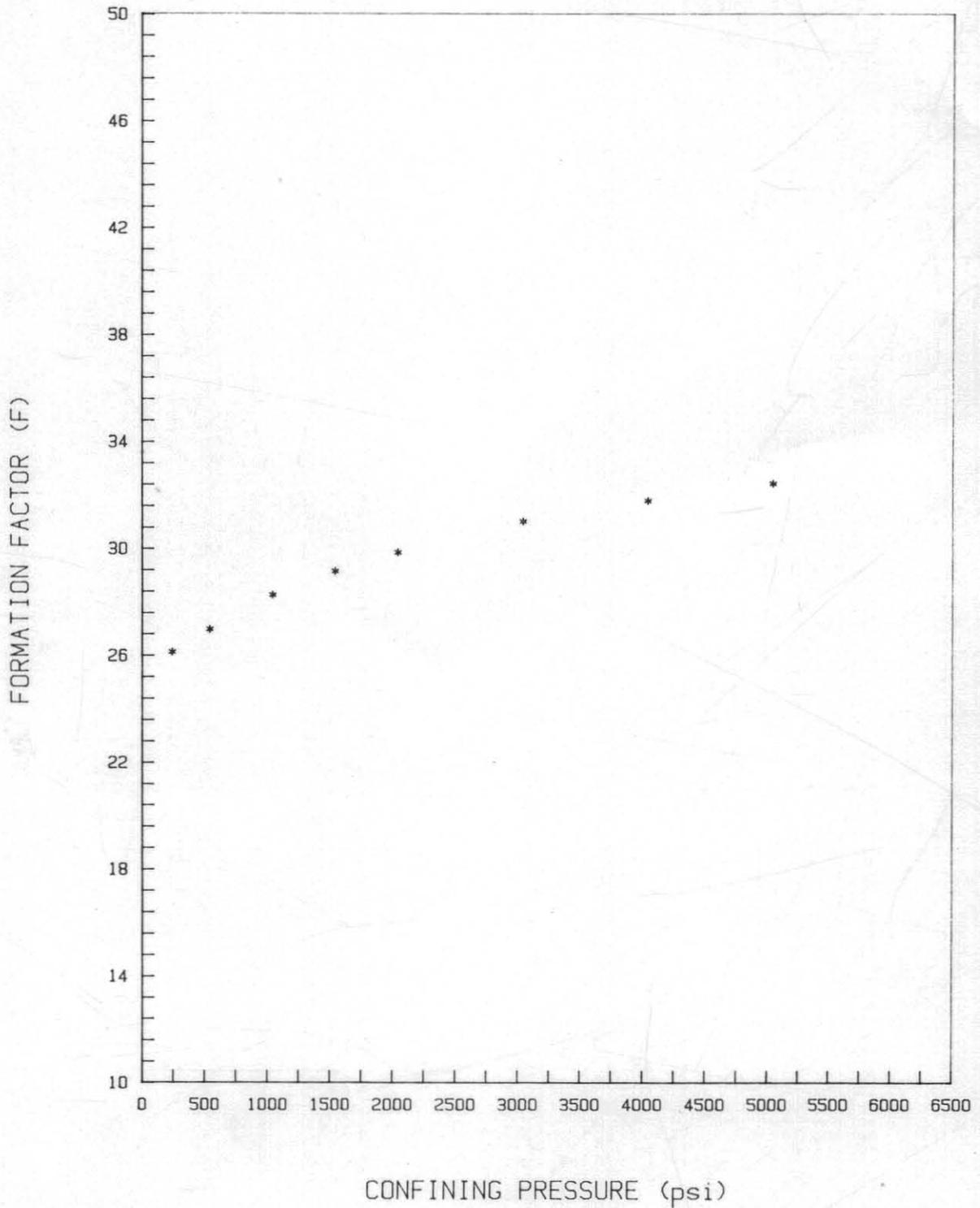
CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)

0	16.27		
200	16.00	26.25	1.78
500	15.39	27.09	1.76
1000	15.15	28.38	1.77
1500	14.96	29.27	1.78
2000	14.86	29.98	1.78
3000	14.72	31.16	1.80
4000	14.60	31.93	1.80
5000	14.52	32.57	1.81

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 20/A-437 DEPTH: 8376



POROSITY vs. CONFINING STRESS TEST
 =====

COMPANY : AMOCO

WELL NAME:

FILE NAME: 390/PVC/1

SAMPLE # : A-437

DEPTH : 8376 ft.

POROSITY = 16.27 %
 PORE VOLUME = 1.90 cc

PERMEABILITY = 1.23 md
 GRAIN DENSITY = 2.67 g/cc

TEST RESULTS
 =====

CONFINING STRESS (psi)

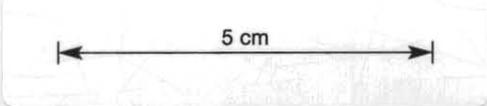
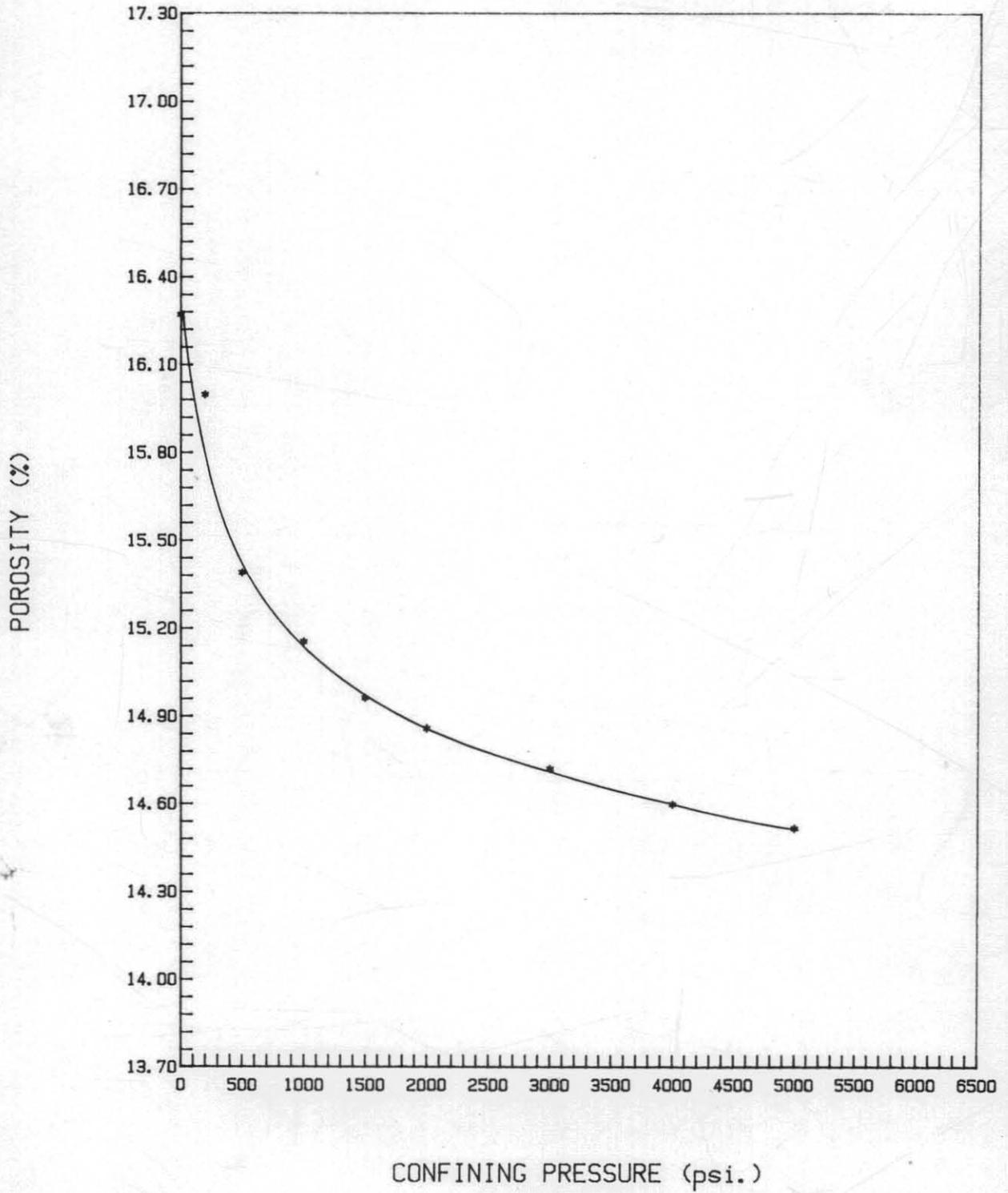
POROSITY (%)

0	16.27
200	16.00
500	15.39
1000	15.15
1500	14.96
2000	14.86
3000	14.72
4000	14.60
5000	14.52

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-437 DEPTH : 8376



MERCURY INJECTION TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/2/CP

SAMPLE No. : A-437

DEPTH : 8376

Porosity = 16.27 %
Pore vol. = 1.84 cc

Permeability = 1.23 md
Grain dens. = 2.67 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	100.00		
4	10.00	100.00		
5	15.00	100.00		
6	20.00	100.00		
7	25.00	100.00		
8	30.00	100.00		
9	44.00	100.00		
10	60.00	100.00		
11	74.00	100.00		
12	110.00	92.68	.969	.18
13	160.00	72.23	.666	.26
14	200.00	61.82	.533	.32
15	300.00	50.05	.355	.48
16	400.00	43.87	.267	.65
17	600.00	36.71	.178	.97
18	800.00	31.51	.133	1.29
19	1000.00	27.60	.107	1.62
20	1200.00	24.46	.089	1.94
21	1500.00	20.77	.071	2.42
22	2000.00	17.79	.053	3.23

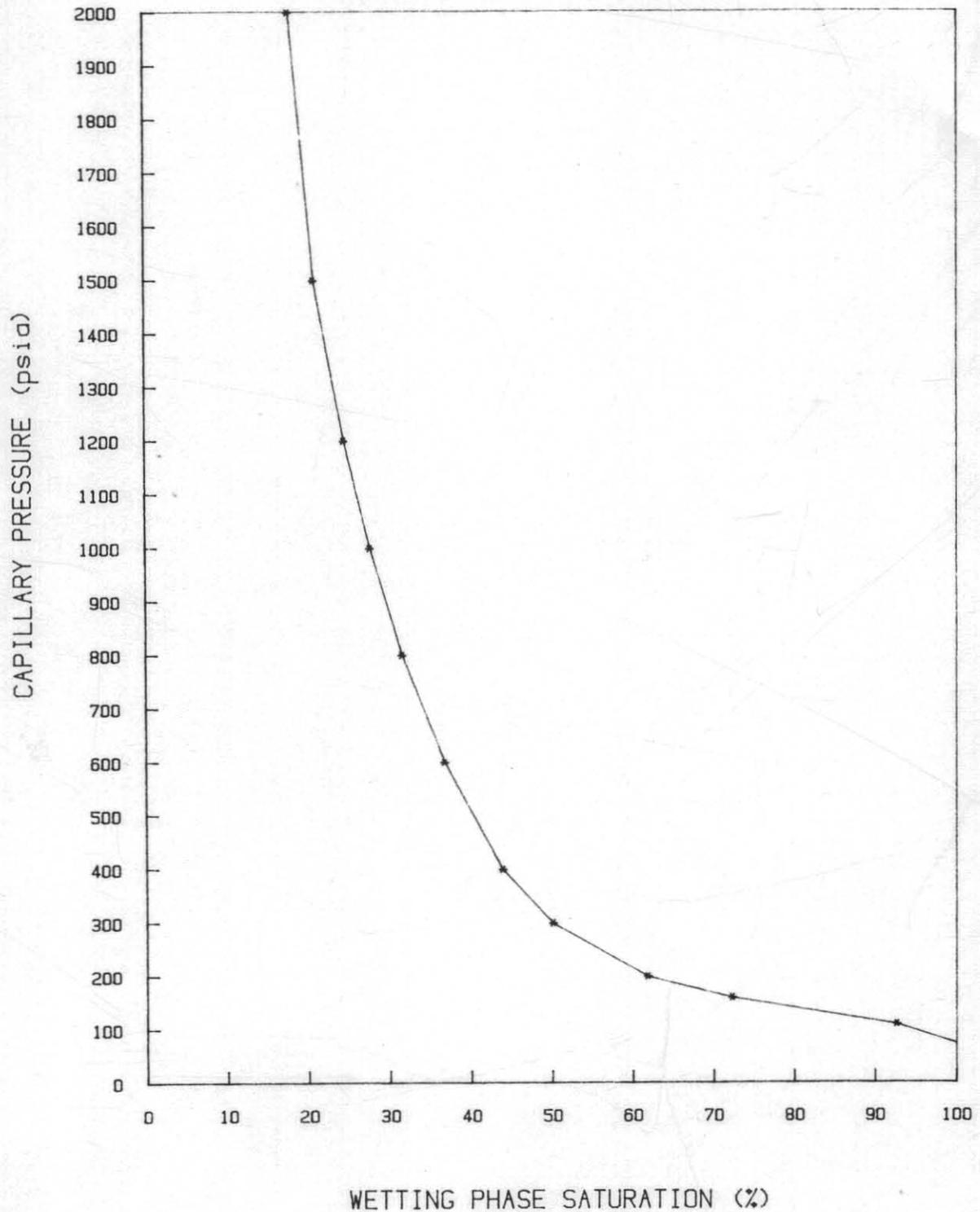
* Wetting Phase Saturation

188036

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-437 DEPTH : 8376



5 cm

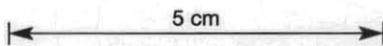
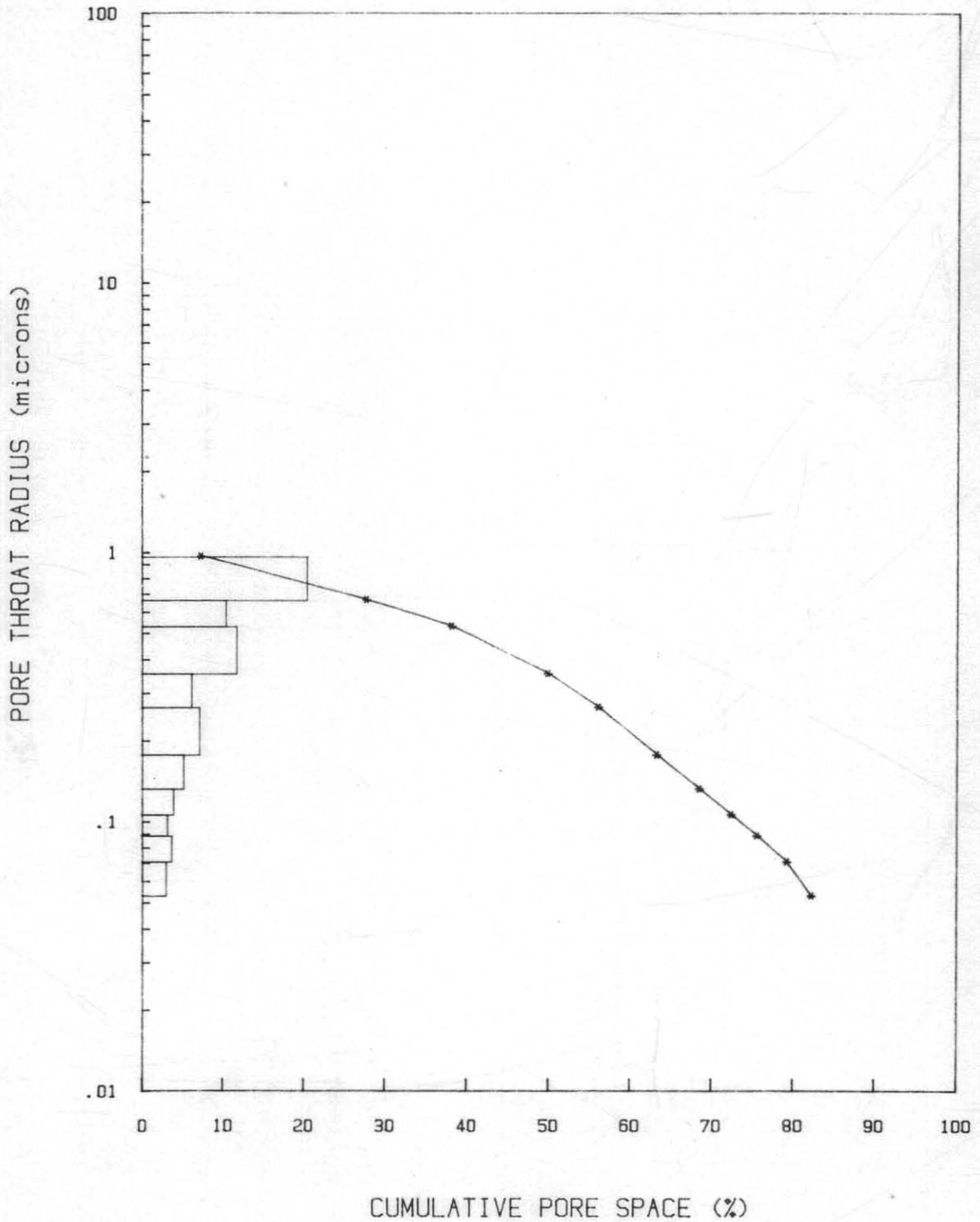
RESERVOIRS

Inc.

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-437 DEPTH : 8376



ELECTRICAL RESISTIVITY TEST
=====

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1
FILE NAME : 390/Rx

SAMPLE # : A-438
DEPTH (ft) : 8548

POROSITY : 20.32 % PERMEABILITY : 126.85 md
PORE VOL. : 2.37 cc GRAIN DENSITY : 2.64 g/cc

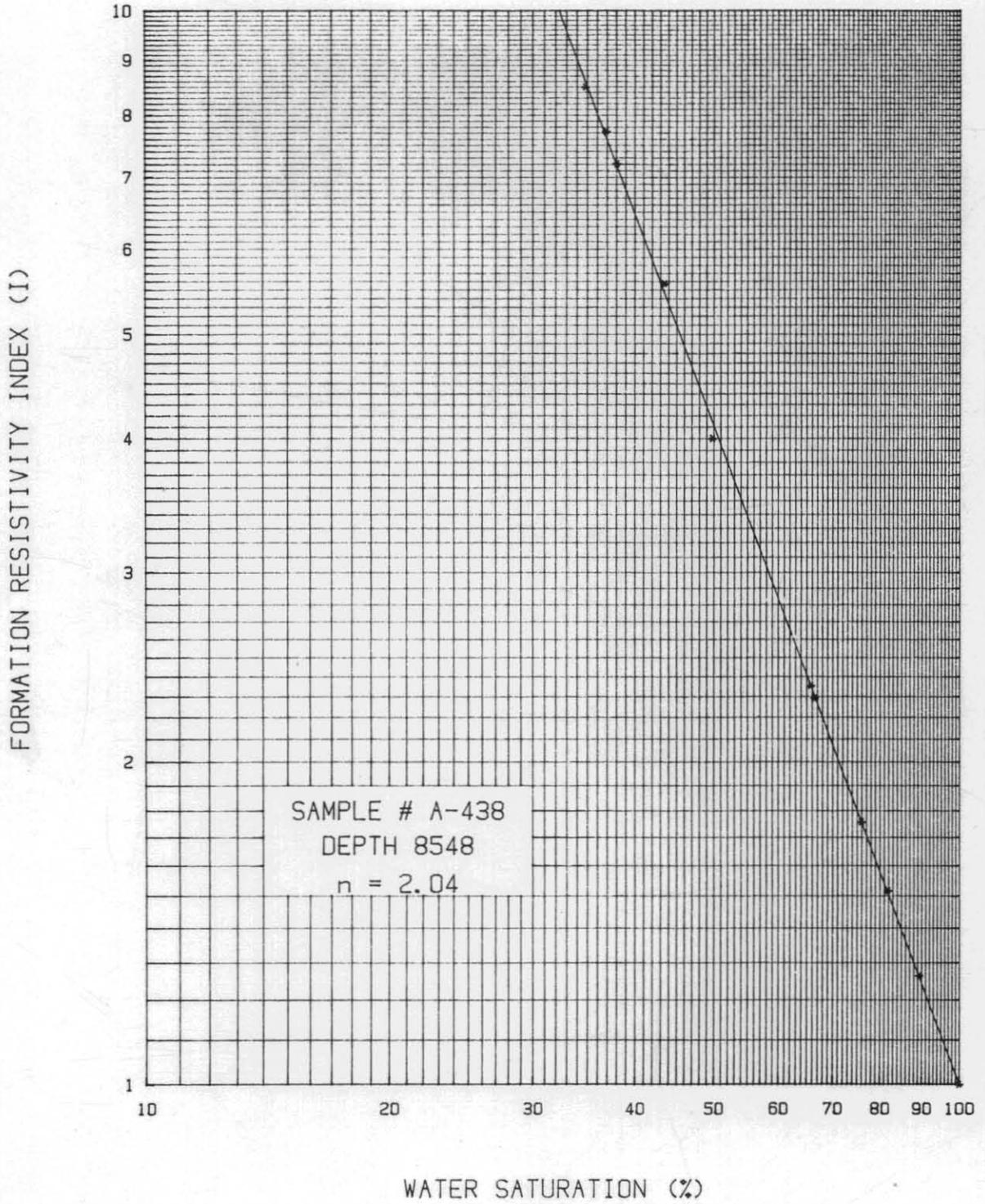
BRINE RESISTIVITY : .3 ohm-meter @ 70 F
CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 17.01
CEMENTATION EXPONENT (m) = 1.78
SATURATION EXPONENT (n) = 2.04

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
89.34	1.26
81.76	1.52
75.86	1.76
66.39	2.29
65.69	2.35
49.78	4.00
43.42	5.57
38.03	7.21
36.89	7.71
34.79	8.49

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/13/CP
 SAMPLE No. : A-438
 DEPTH : 8548

Porosity = 21.73 % Permeability = 126.85 md
 Pore vol. = 2.58 cc Grain dens. = 2.64 g/cc

TEST RESULTS:
 =====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.91	100.00		
2	3.41	100.00		
3	5.91	98.61	18.033	.08
4	10.91	81.44	9.770	.16
5	15.91	61.33	6.700	.23
6	20.91	52.96	5.098	.30
7	25.91	47.77	4.114	.37
8	30.91	44.09	3.449	.44
9	44.91	38.20	2.374	.64
10	60.91	33.40	1.750	.87
11	74.91	30.26	1.423	1.07
12	110.91	24.37	.961	1.58
13	160.91	19.72	.662	2.29
14	200.91	17.09	.531	2.86
15	300.91	13.25	.354	4.28
16	400.91	11.39	.266	5.71
17	600.91	9.26	.177	8.55
18	800.91	8.14	.133	11.40
19	1000.91	7.44	.107	14.25
20	1200.91	6.90	.089	17.09
21	1500.91	6.32	.071	21.36
22	2000.91	5.62	.053	28.48

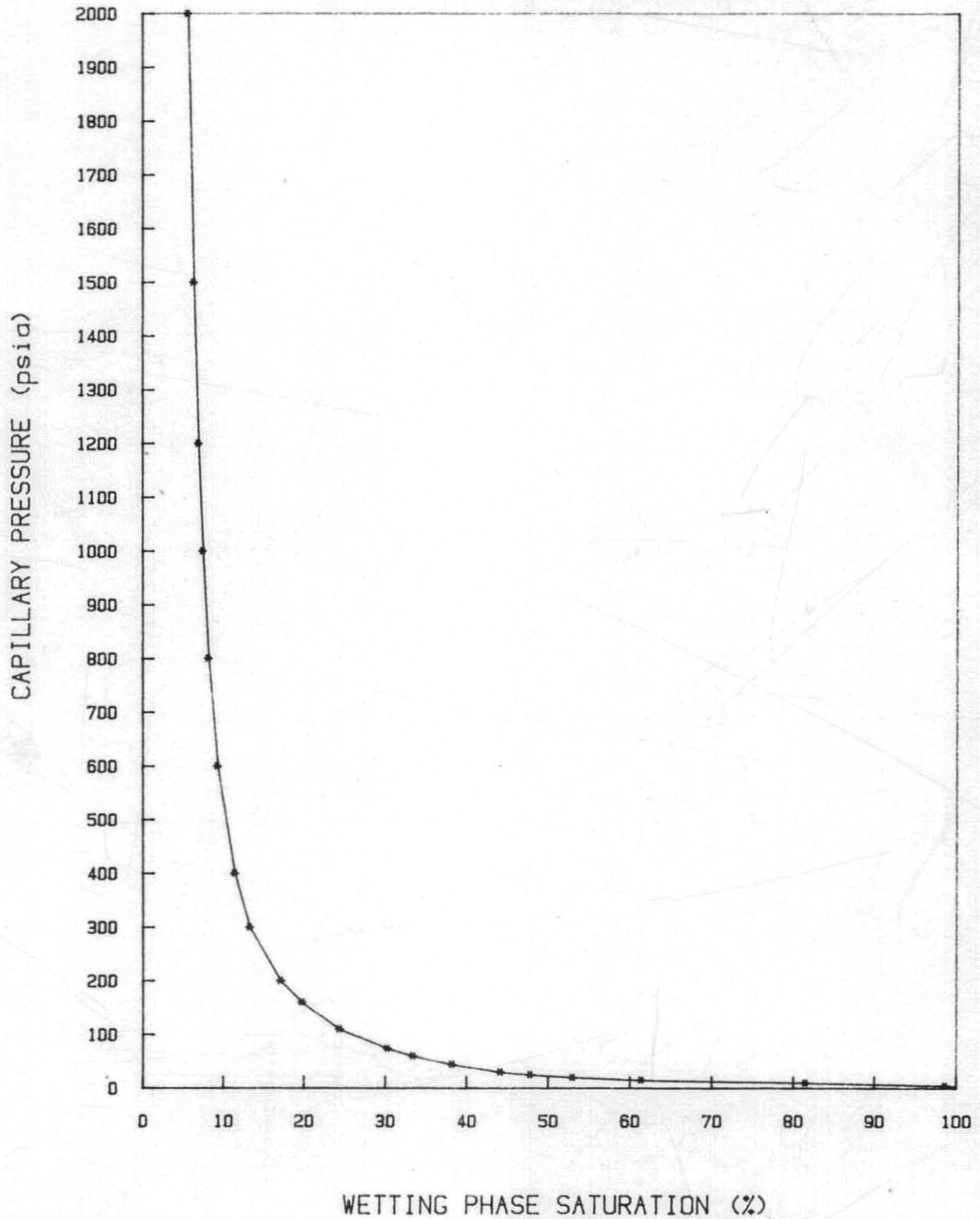
* Wetting Phase Saturation

188041

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-438 DEPTH : 8548



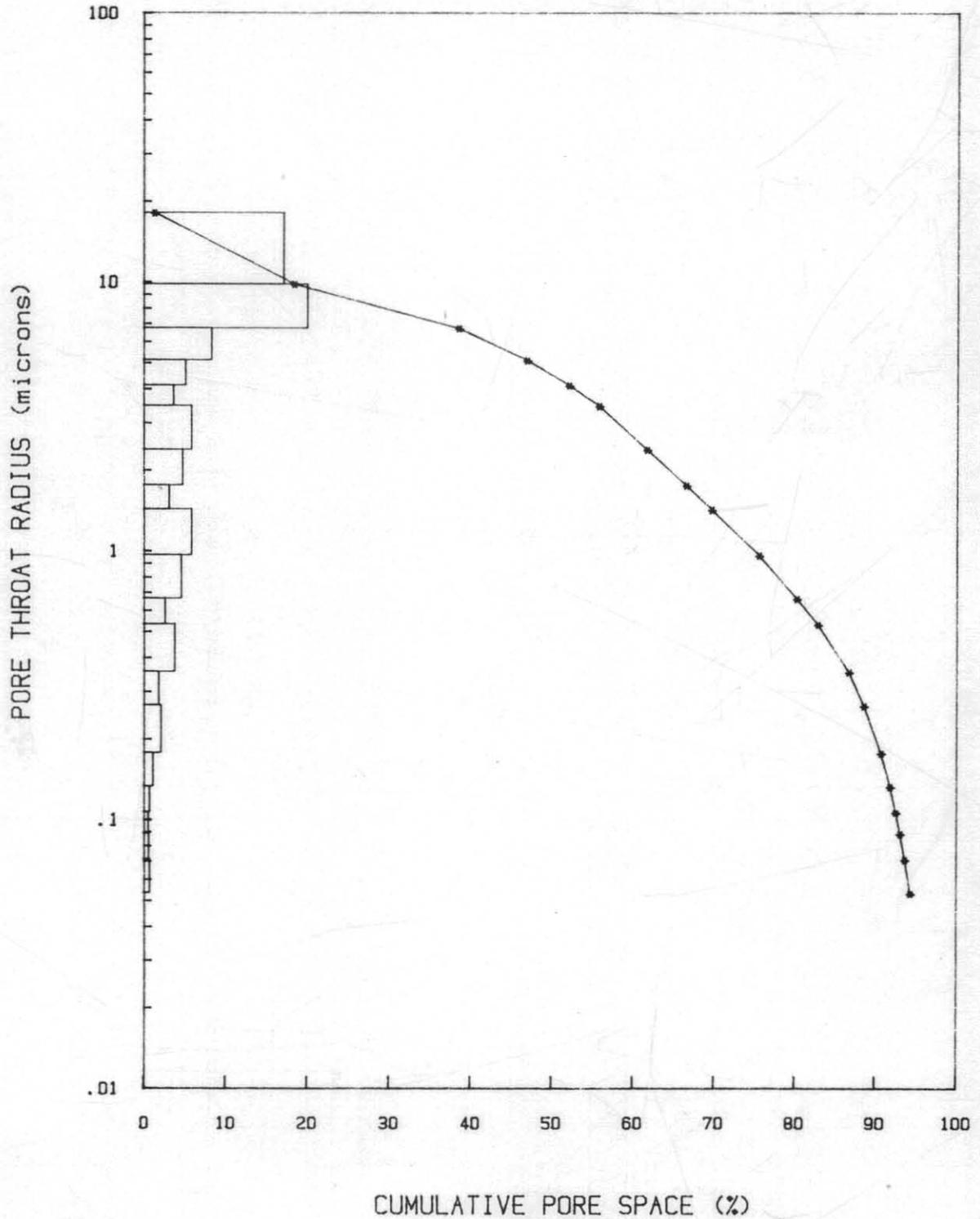
5 cm

188042

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-438 DEPTH : 8548



5 cm

ELECTRICAL RESISTIVITY TEST

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/Rx

SAMPLE # : A-439

DEPTH (ft) : 8552

POROSITY : 13.63 %

PORE VOL. : 1.58 cc

PERMEABILITY : 2.04 md

GRAIN DENSITY : 2.65 g/cc

BRINE RESISTIVITY : .3 ohm-meter @ 70 F

CONFINING STRESS : 5000 psi

TEST RESULTS

FORMATION FACTOR (F) = 70.07

CEMENTATION EXPONENT (m) = 2.13

SATURATION EXPONENT (n) = 1.83

WATER SATURATION (%)

RESISTIVITY INDEX (I)

100.00

1.00

97.69

1.04

88.05

1.23

85.19

1.37

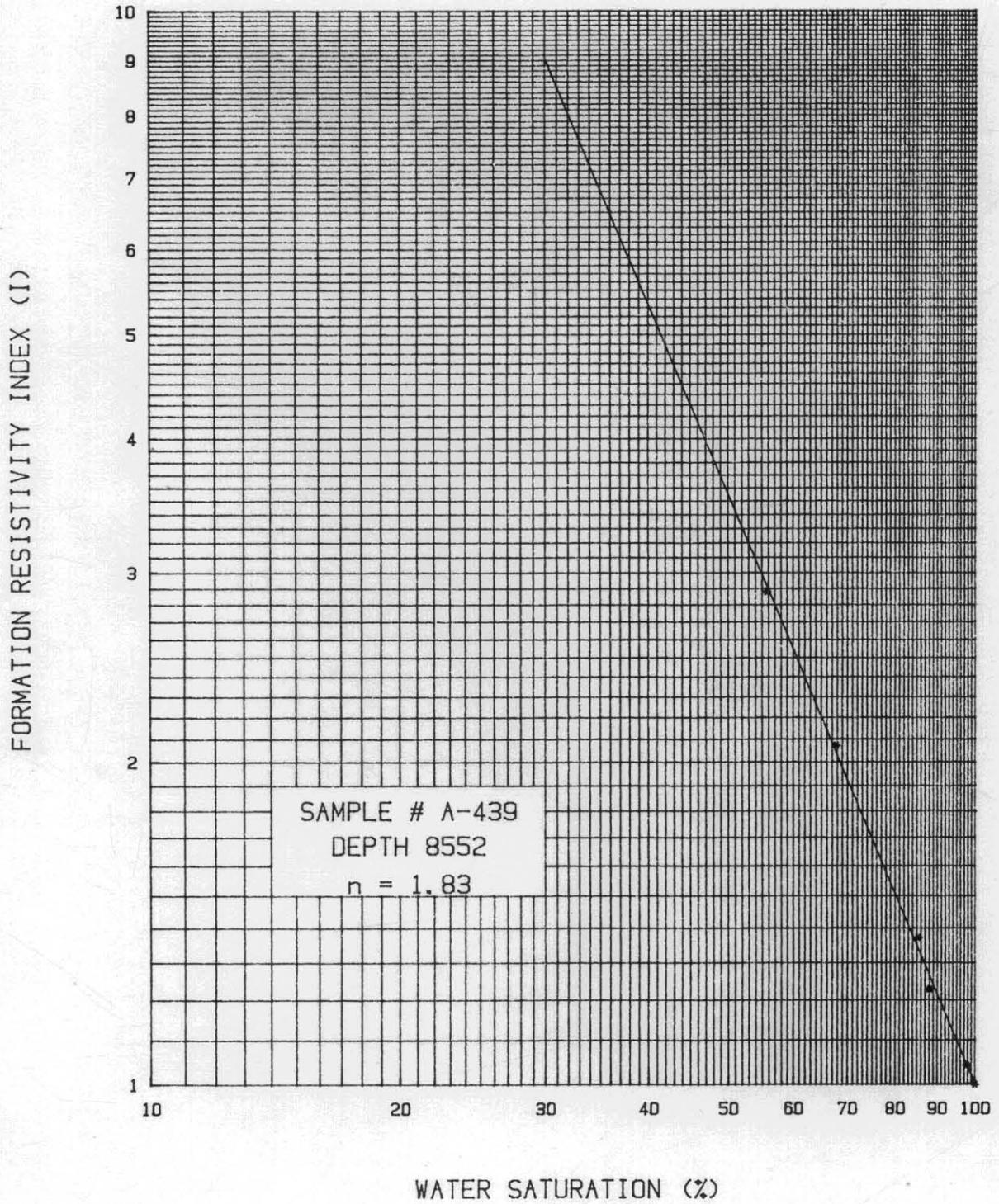
67.74

2.07

55.68

2.88

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/14/CP
 SAMPLE No. : A-439
 DEPTH : 8552

Porosity = 14.92 % Permeability = 2.04 md
 Pore vol. = 1.75 cc Grain dens. = 2.65 g/cc

TEST RESULTS:
 =====

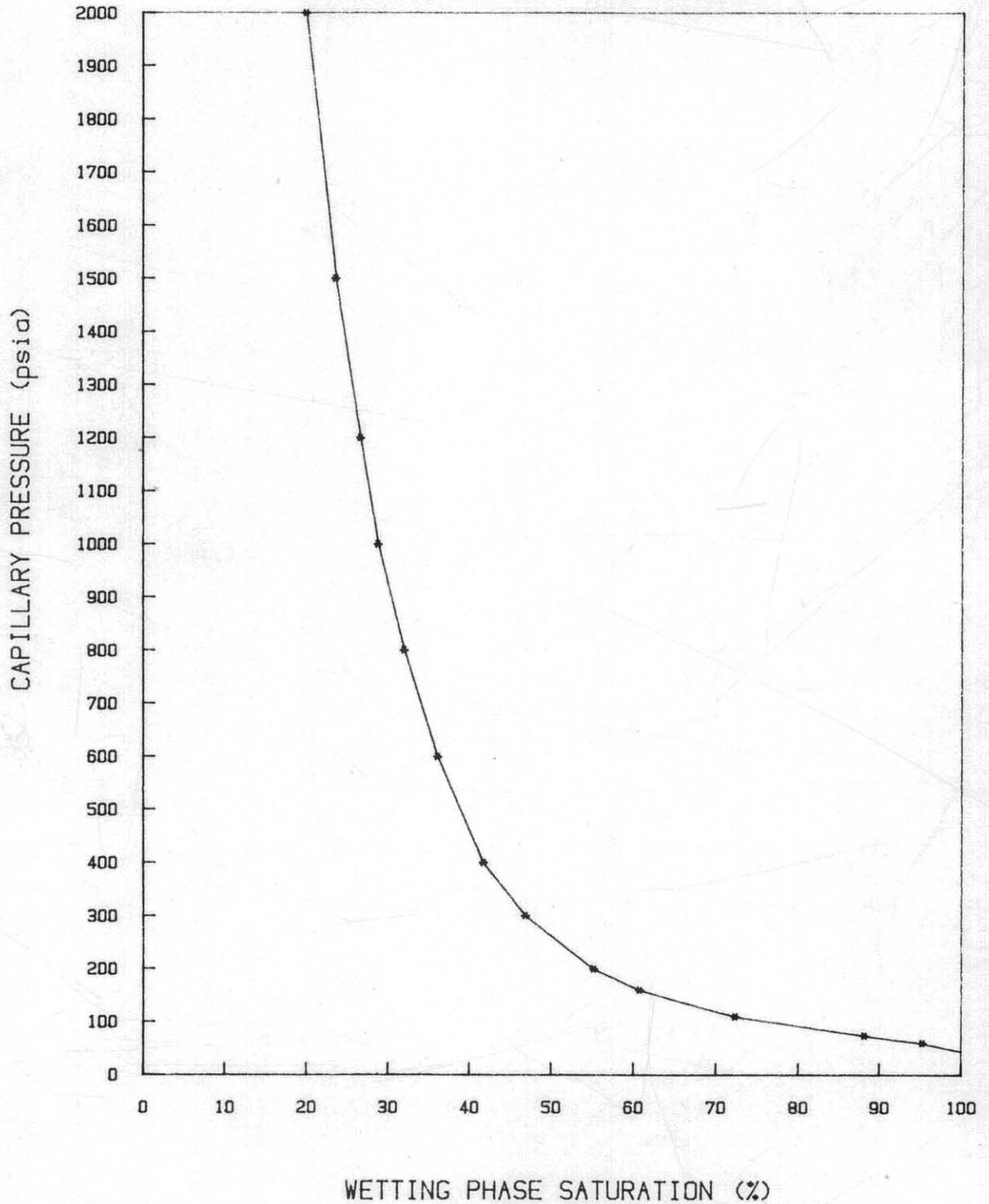
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.91	100.00		
2	3.41	100.00		
3	5.91	100.00		
4	10.91	100.00		
5	15.91	100.00		
6	20.91	100.00		
7	25.91	100.00		
8	30.91	100.00		
9	44.91	100.00		
10	60.91	95.25	1.750	.13
11	74.91	88.16	1.423	.16
12	110.91	72.33	.961	.24
13	160.91	60.78	.663	.35
14	200.91	55.17	.531	.44
15	300.91	46.83	.354	.66
16	400.91	41.68	.266	.87
17	600.91	36.08	.177	1.31
18	800.91	31.96	.133	1.74
19	1000.91	28.76	.107	2.18
20	1200.91	26.59	.089	2.62
21	1500.91	23.56	.071	3.27
22	2000.91	19.95	.053	4.36

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-439 DEPTH : 8552

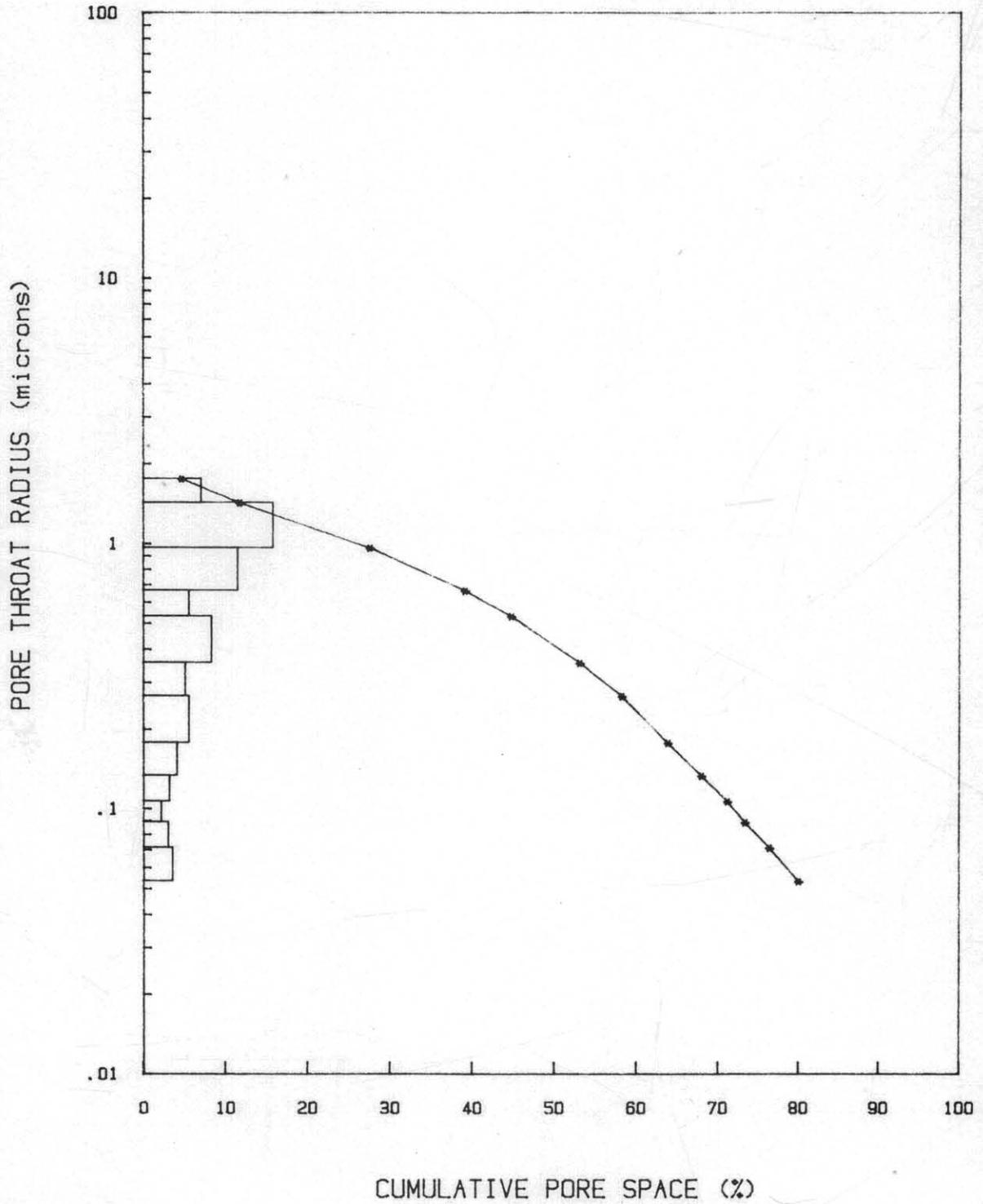


5 cm

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-439 DEPTH : 8552



5 cm

ELECTRICAL RESISTIVITY TEST
=====

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/Rx

SAMPLE # : A-440

DEPTH (ft) : 8555

POROSITY : 18.61 %

PORE VOL. : 2.00 cc

PERMEABILITY : 71.74 md

GRAIN DENSITY : 2.66 g/cc

BRINE RESISTIVITY : .3 ohm-meter @ 70 F

CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 19.20

CEMENTATION EXPONENT (m) = 1.76

SATURATION EXPONENT (n) = 1.98

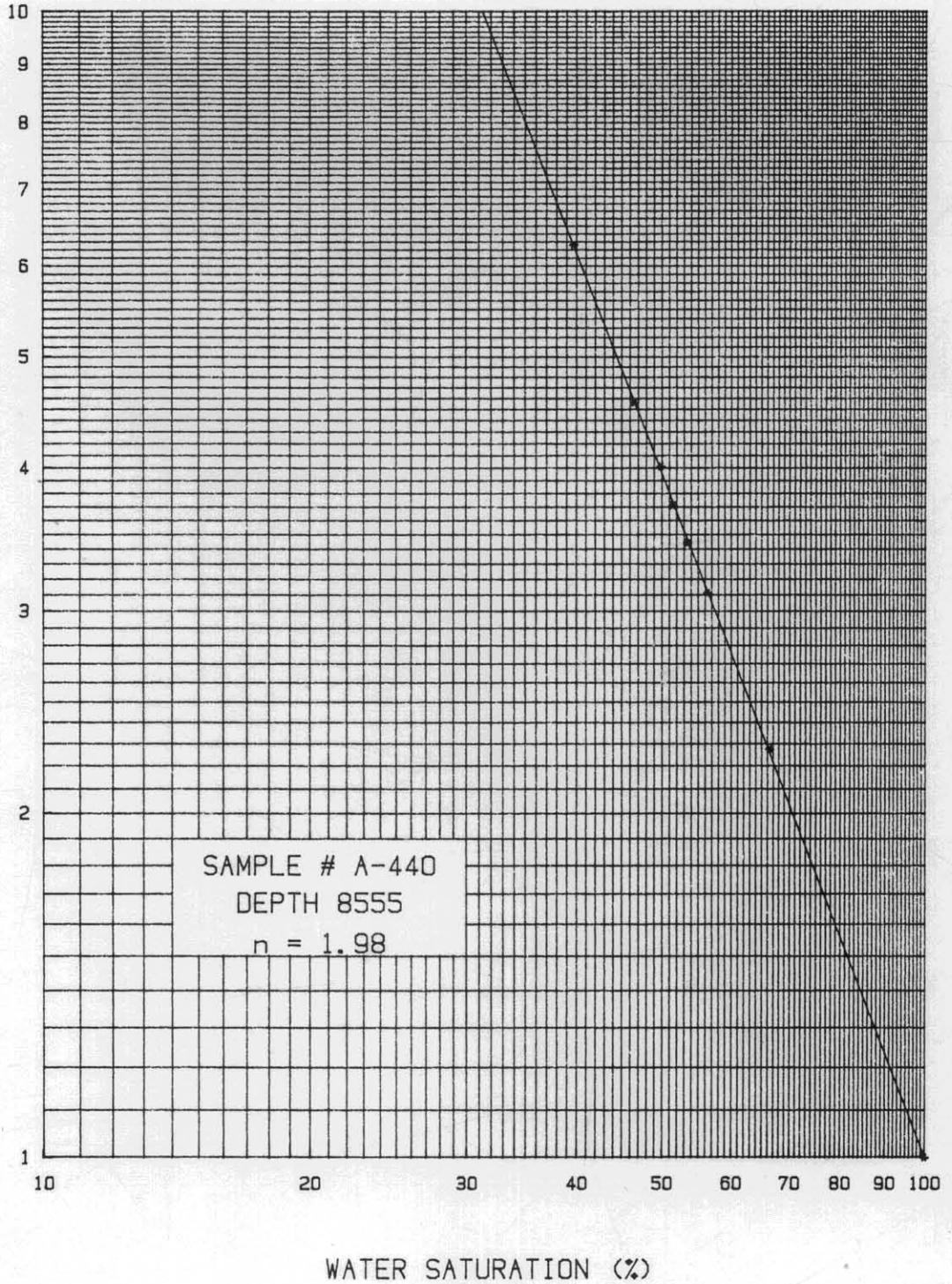
WATER SATURATION (%)

RESISTIVITY INDEX (I)

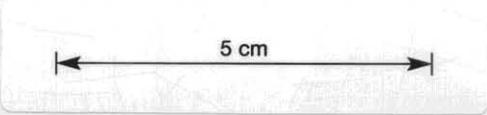
100.00	1.00
66.30	2.27
56.34	3.11
53.44	3.44
51.44	3.71
49.84	4.01
46.48	4.56
39.67	6.26

FORMATION RESISTIVITY INDEX vs SATURATION

FORMATION RESISTIVITY INDEX (FRI)



WATER SATURATION (%)



MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/18/CP
SAMPLE No. : A-440
DEPTH : 8555

Porosity = 19.45 % Permeability = 71.74 md
Pore vol. = 2.11 cc Grain dens. = 2.66 g/cc

TEST RESULTS:
=====

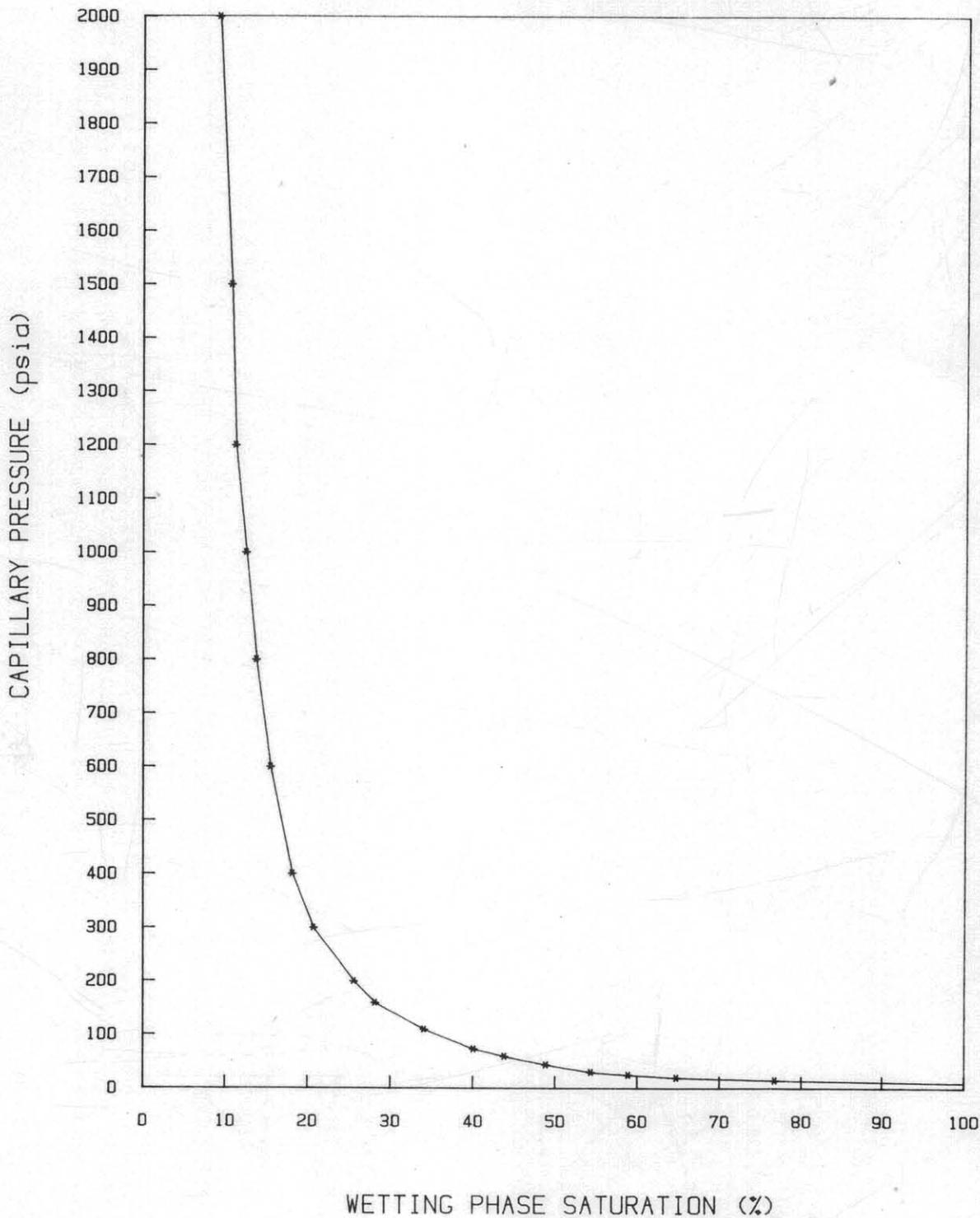
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.89	100.00		
2	3.39	100.00		
3	5.89	100.00		
4	10.89	100.00		
5	15.89	76.74	6.708	.18
6	20.89	64.71	5.103	.24
7	25.89	58.88	4.117	.29
8	30.89	54.33	3.451	.35
9	44.89	48.84	2.375	.51
10	60.89	43.77	1.751	.69
11	74.89	40.03	1.423	.85
12	110.89	34.06	.961	1.25
13	160.89	28.14	.663	1.82
14	200.89	25.58	.531	2.27
15	300.89	20.70	.354	3.40
16	400.89	18.10	.266	4.54
17	600.89	15.44	.177	6.80
18	800.89	13.69	.133	9.06
19	1000.89	12.46	.107	11.32
20	1200.89	11.18	.089	13.59
21	1500.89	10.66	.071	16.98
22	2000.89	9.19	.053	22.64

* Wetting Phase Saturation

188051

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1
SAMPLE # A-440 DEPTH : 8555



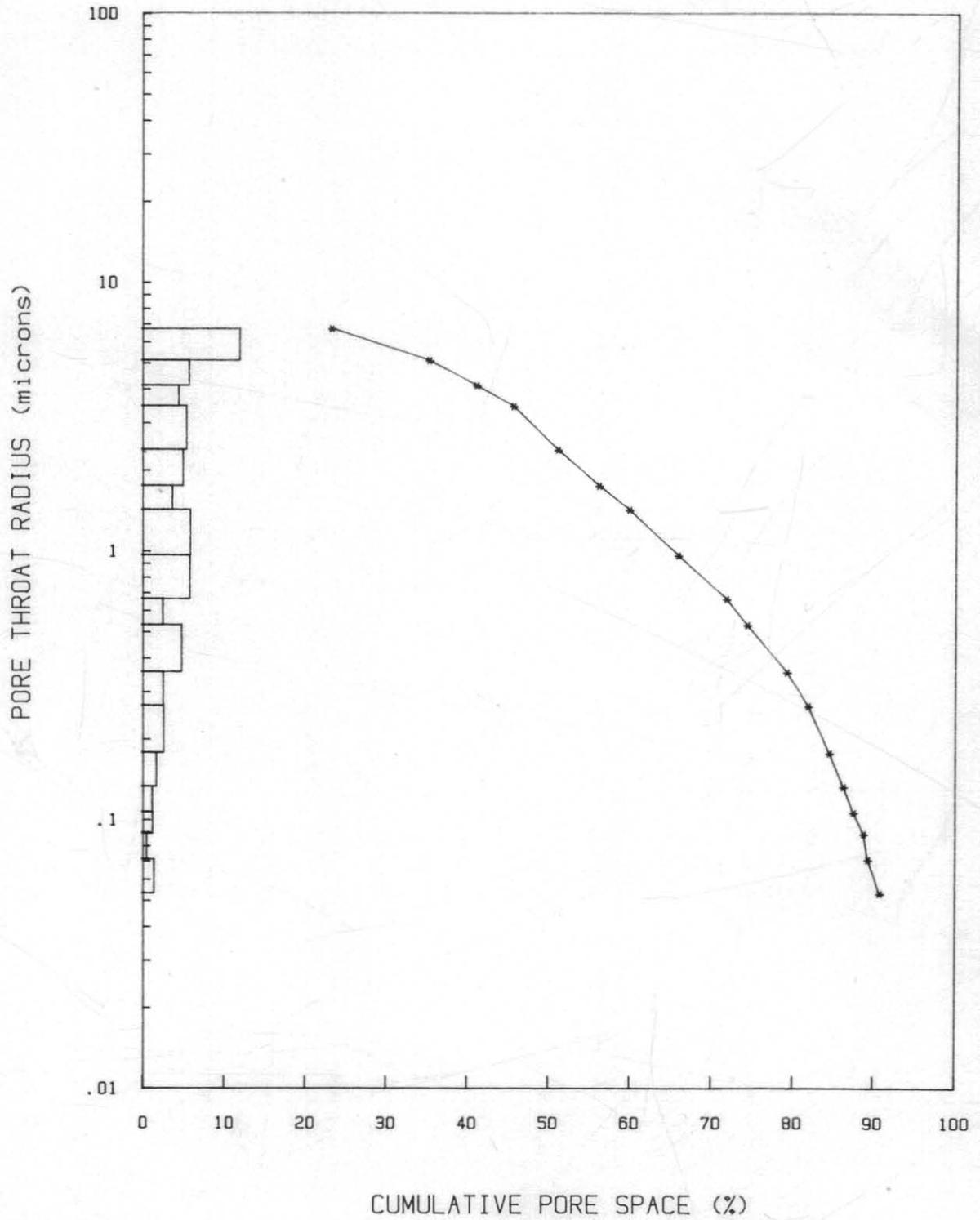
5 cm

188052

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-440 DEPTH : 8555



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL No. 1
 FILE NAME : 390/15/CP
 SAMPLE No. : A-441
 DEPTH : 9427

Porosity = 13.32 % Permeability = .72 md
 Pore vol. = 1.51 cc Grain dens. = 2.67 g/cc

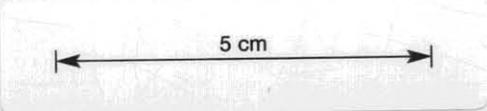
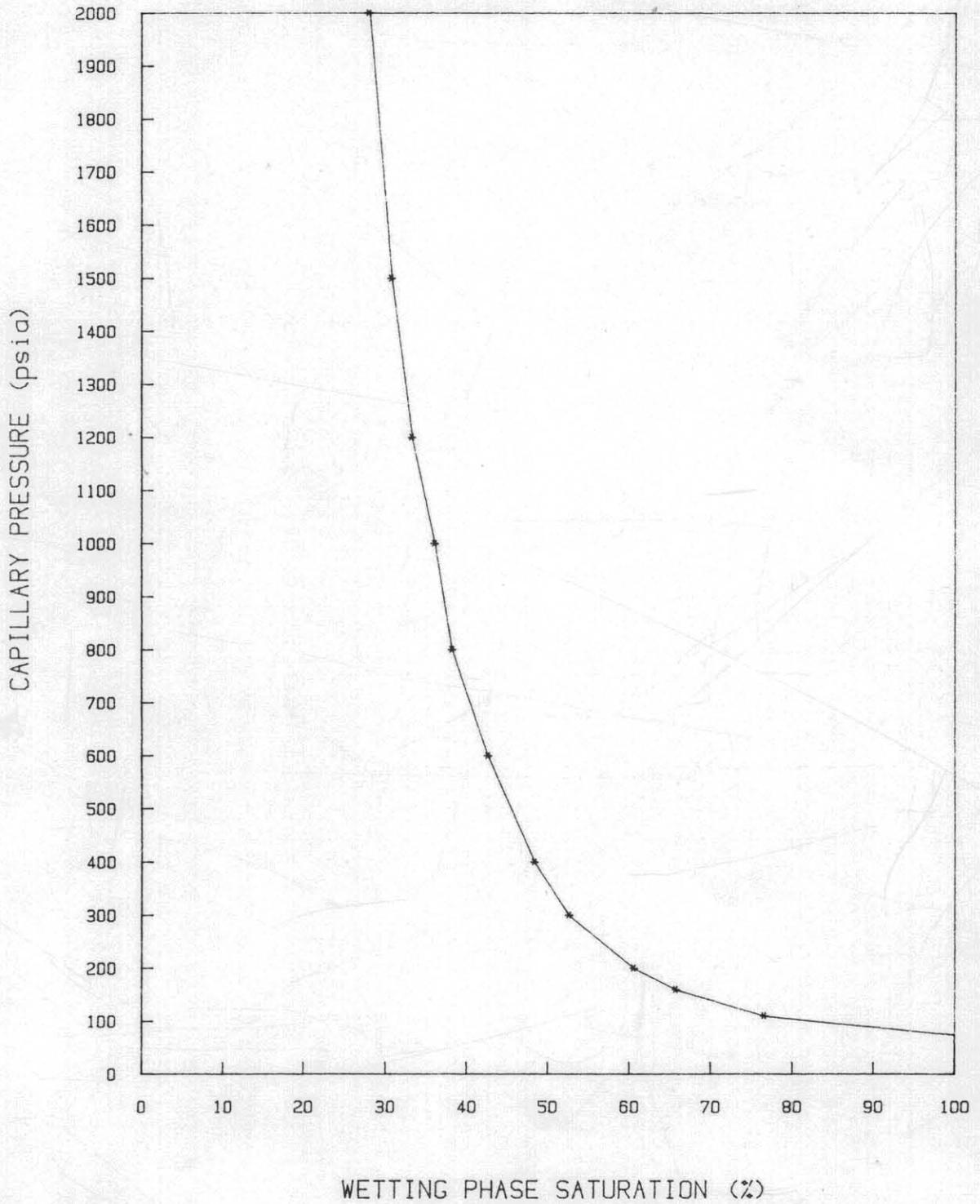
TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.91	100.00		
2	3.41	100.00		
3	5.91	100.00		
4	10.91	100.00		
5	15.91	100.00		
6	20.91	100.00		
7	25.91	100.00		
8	30.91	100.00		
9	44.91	100.00		
10	60.91	100.00		
11	74.91	100.00		
12	110.91	76.56	.961	.15
13	160.91	65.70	.663	.22
14	200.91	60.53	.531	.28
15	300.91	52.58	.354	.41
16	400.91	48.34	.266	.55
17	600.91	42.58	.177	.82
18	800.91	38.15	.133	1.10
19	1000.91	36.03	.107	1.37
20	1200.91	33.18	.089	1.65
21	1500.91	30.66	.071	2.06
22	2000.91	27.95	.053	2.75

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

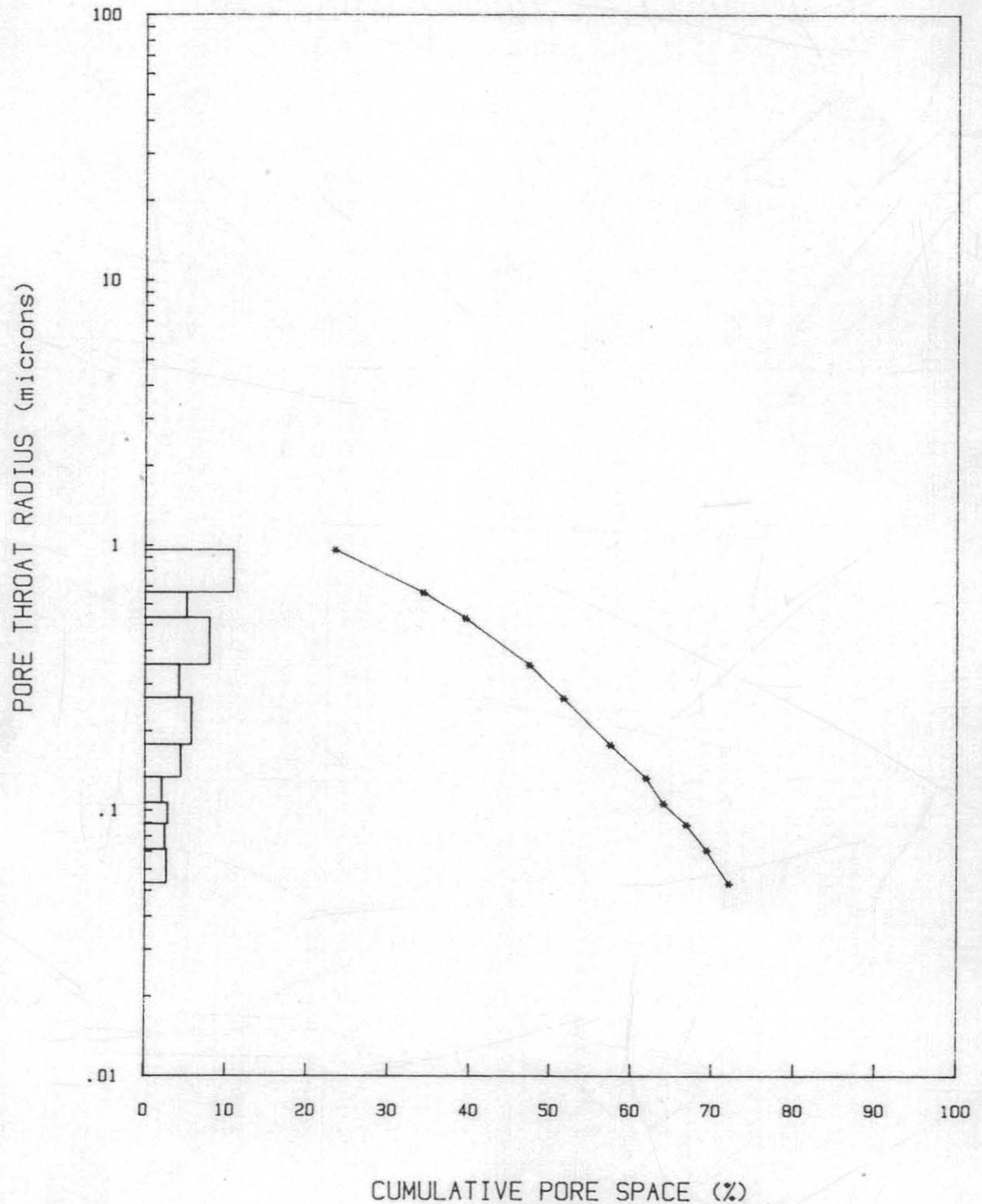
WELL NAME : PELICAN FIELD WELL No. 1
SAMPLE # A-441 DEPTH : 9427



PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL No. 1

SAMPLE # A-441 DEPTH : 9427



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/11/CP
 SAMPLE No. : A-442
 DEPTH : 9429

Porosity = 18.75 % Permeability = 6.01 md
 Pore vol. = 2.02 cc Grain dens. = 2.66 g/cc

TEST RESULTS:
=====

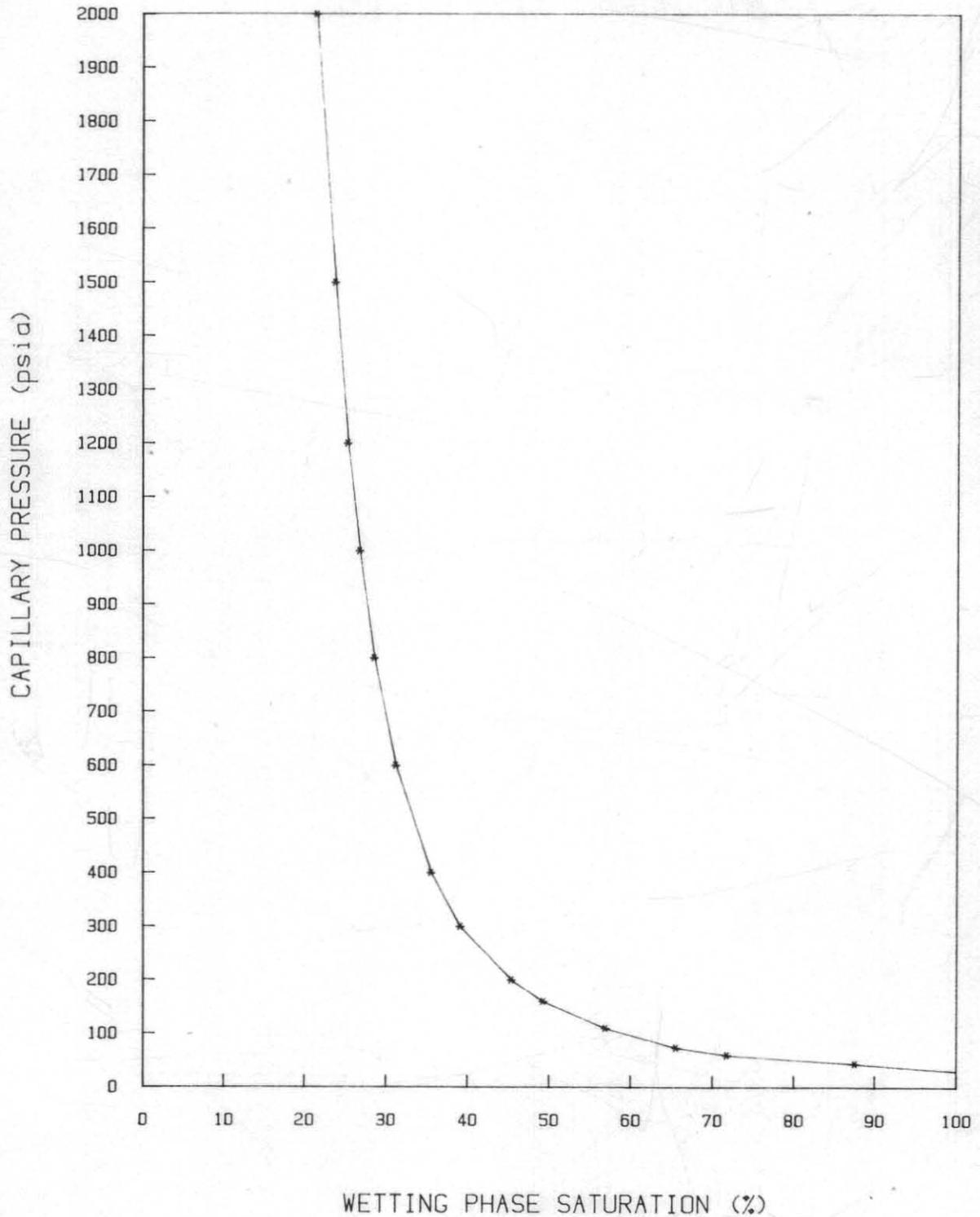
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.90	100.00		
2	3.40	100.00		
3	5.90	100.00		
4	10.90	100.00		
5	15.90	100.00		
6	20.90	100.00		
7	25.90	100.00		
8	30.90	100.00		
9	44.90	87.54	2.374	.15
10	60.90	71.73	1.751	.20
11	74.90	65.50	1.423	.25
12	110.90	56.90	.961	.37
13	160.90	49.23	.663	.54
14	200.90	45.33	.531	.67
15	300.90	39.05	.354	1.00
16	400.90	35.49	.266	1.34
17	600.90	31.14	.177	2.00
18	800.90	28.47	.133	2.67
19	1000.90	26.69	.107	3.34
20	1200.90	25.21	.089	4.00
21	1500.90	23.63	.071	5.01
22	2000.90	21.26	.053	6.67

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-442 DEPTH : 9429



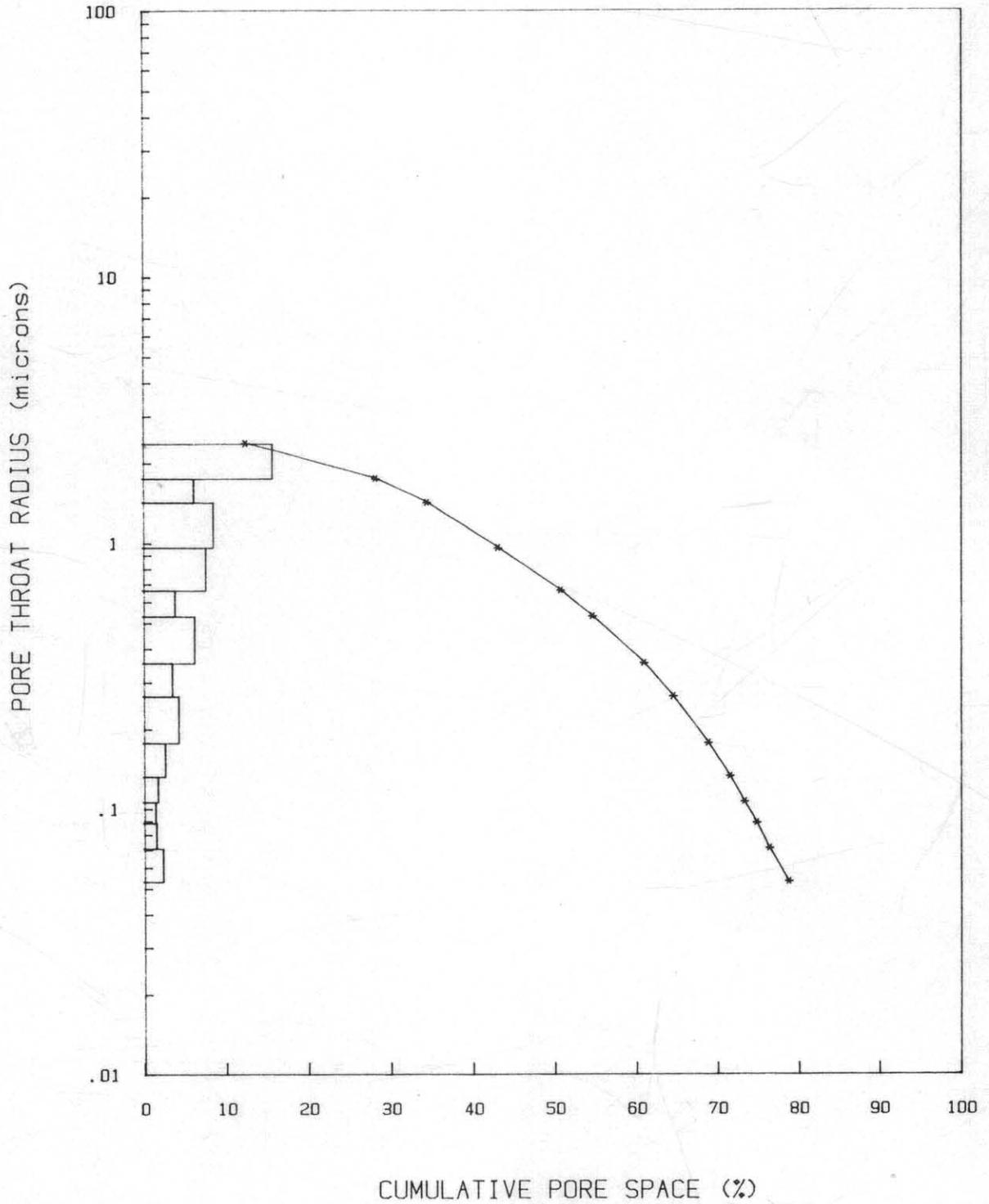
5 cm

188058

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-442 DEPTH : 9429



5 cm

MERCURY INJECTION TEST

=====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/16/CP
 SAMPLE No. : A-443
 DEPTH : 9430

Porosity = 8.43 % Permeability = .07 md
 Pore vol. = .87 cc Grain dens. = 2.68 g/cc

TEST RESULTS:

=====

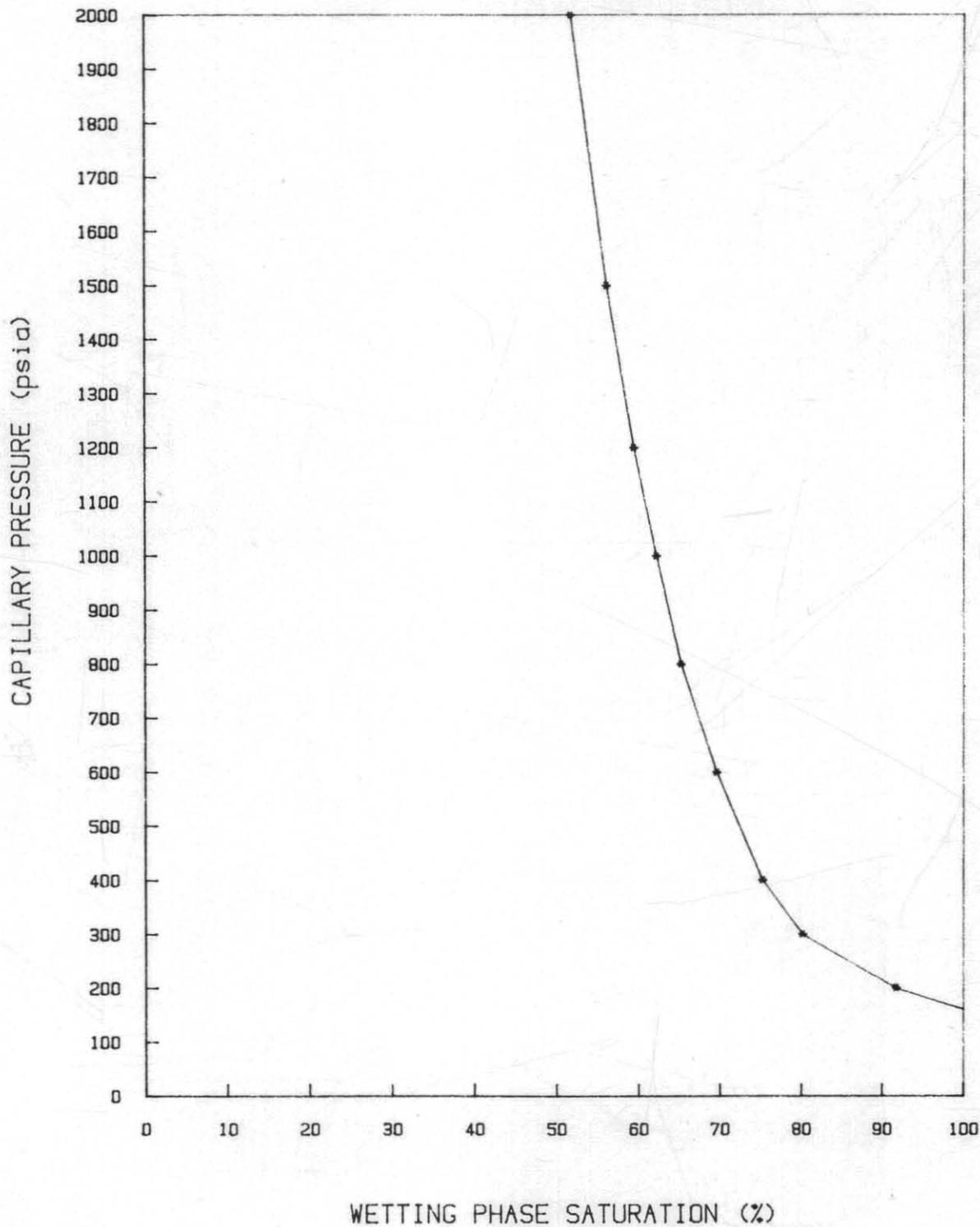
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.88	100.00		
2	3.38	100.00		
3	5.88	100.00		
4	10.88	100.00		
5	15.88	100.00		
6	20.88	100.00		
7	25.88	100.00		
8	30.88	100.00		
9	44.88	100.00		
10	60.88	100.00		
11	74.88	100.00		
12	110.88	100.00		
13	160.88	100.00		
14	200.88	91.72	.531	.11
15	300.88	80.11	.354	.16
16	400.88	75.17	.266	.21
17	600.88	69.54	.177	.32
18	800.88	65.17	.133	.42
19	1000.88	62.18	.107	.53
20	1200.88	59.43	.089	.63
21	1500.88	56.09	.071	.79
22	2000.88	51.72	.053	1.05

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-443 DEPTH : 9430

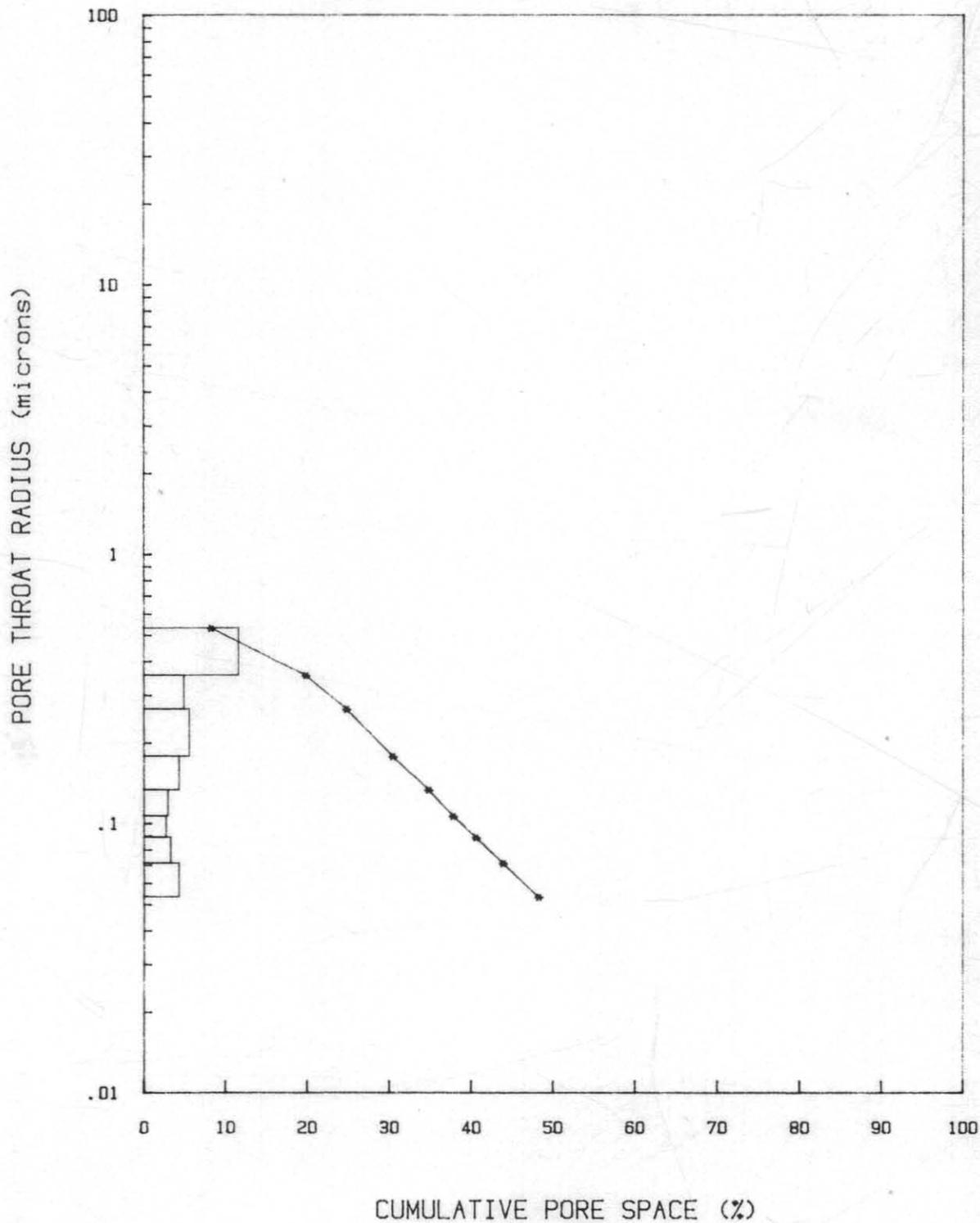


5 cm

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-443 DEPTH : 9430



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO PRODUCTION
WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/12/CP
SAMPLE No. : A-444
DEPTH : 9434

Porosity = 17.39 % Permeability = 2.91 md
Pore vol. = 2.21 cc Grain dens. = 2.66 g/cc

TEST RESULTS:
=====

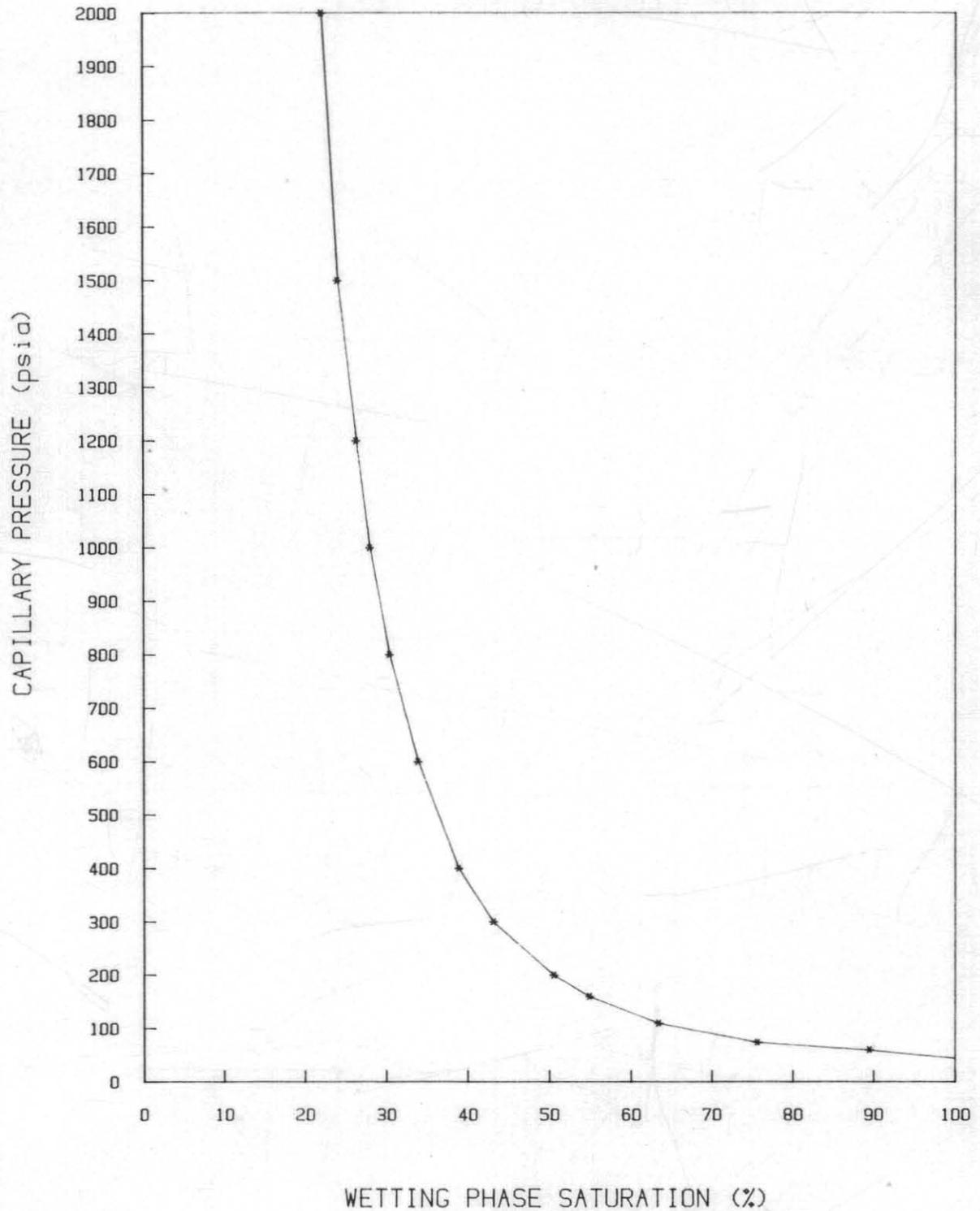
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.93	100.00		
2	3.43	100.00		
3	5.93	100.00		
4	10.93	100.00		
5	15.93	100.00		
6	20.93	100.00		
7	25.93	100.00		
8	30.93	100.00		
9	44.93	100.00		
10	60.93	89.52	1.750	.15
11	74.93	75.60	1.423	.18
12	110.93	63.40	.961	.27
13	160.93	54.90	.662	.39
14	200.93	50.52	.531	.48
15	300.93	43.11	.354	.73
16	400.93	38.86	.266	.97
17	600.93	33.89	.177	1.45
18	800.93	30.37	.133	1.93
19	1000.93	27.97	.107	2.41
20	1200.93	26.30	.089	2.89
21	1500.93	23.99	.071	3.62
22	2000.93	22.01	.053	4.82

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-444 DEPTH : 9434

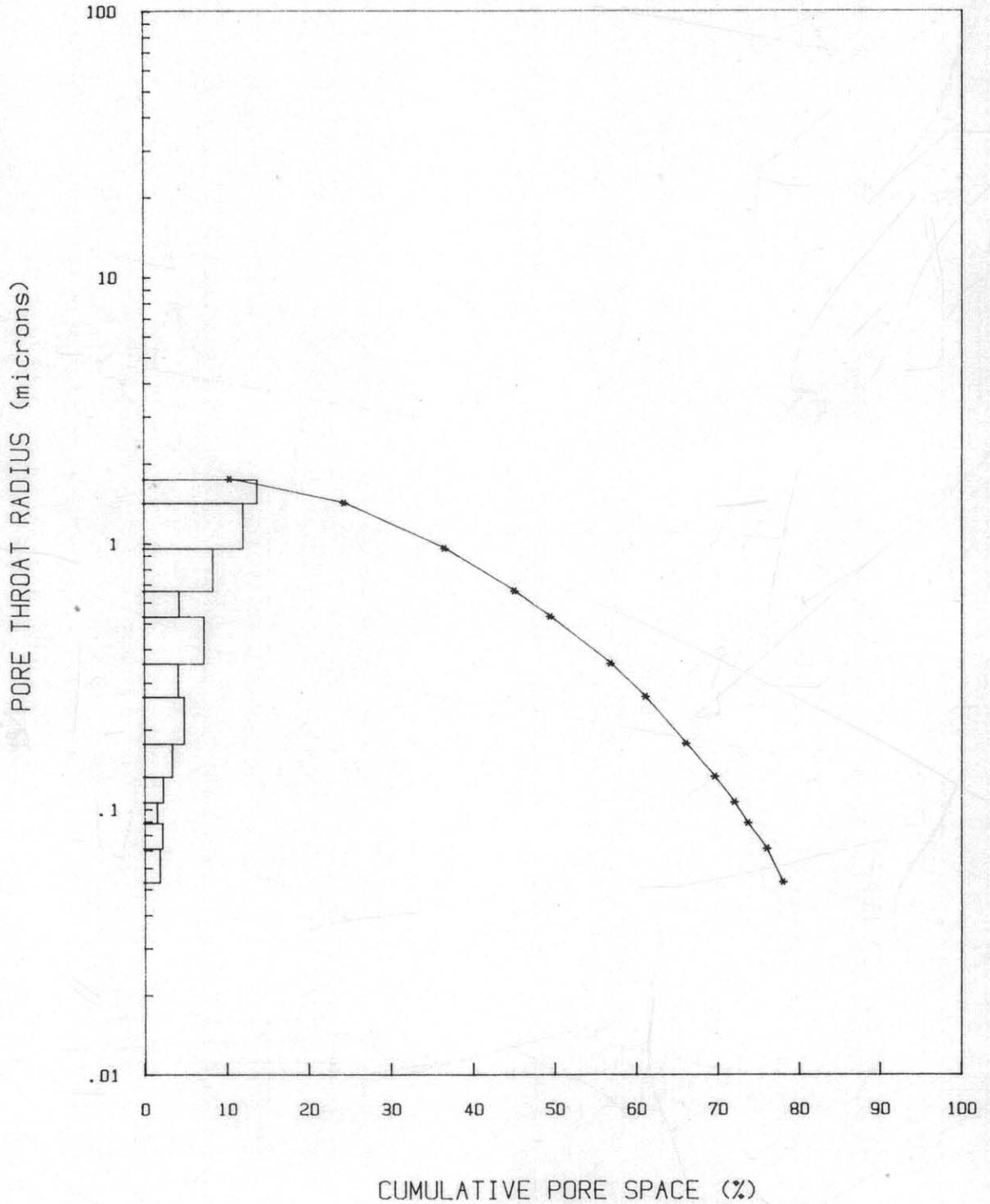


5 cm

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-444 DEPTH : 9434



5 cm

ELECTRICAL RESISTIVITY TEST
=====

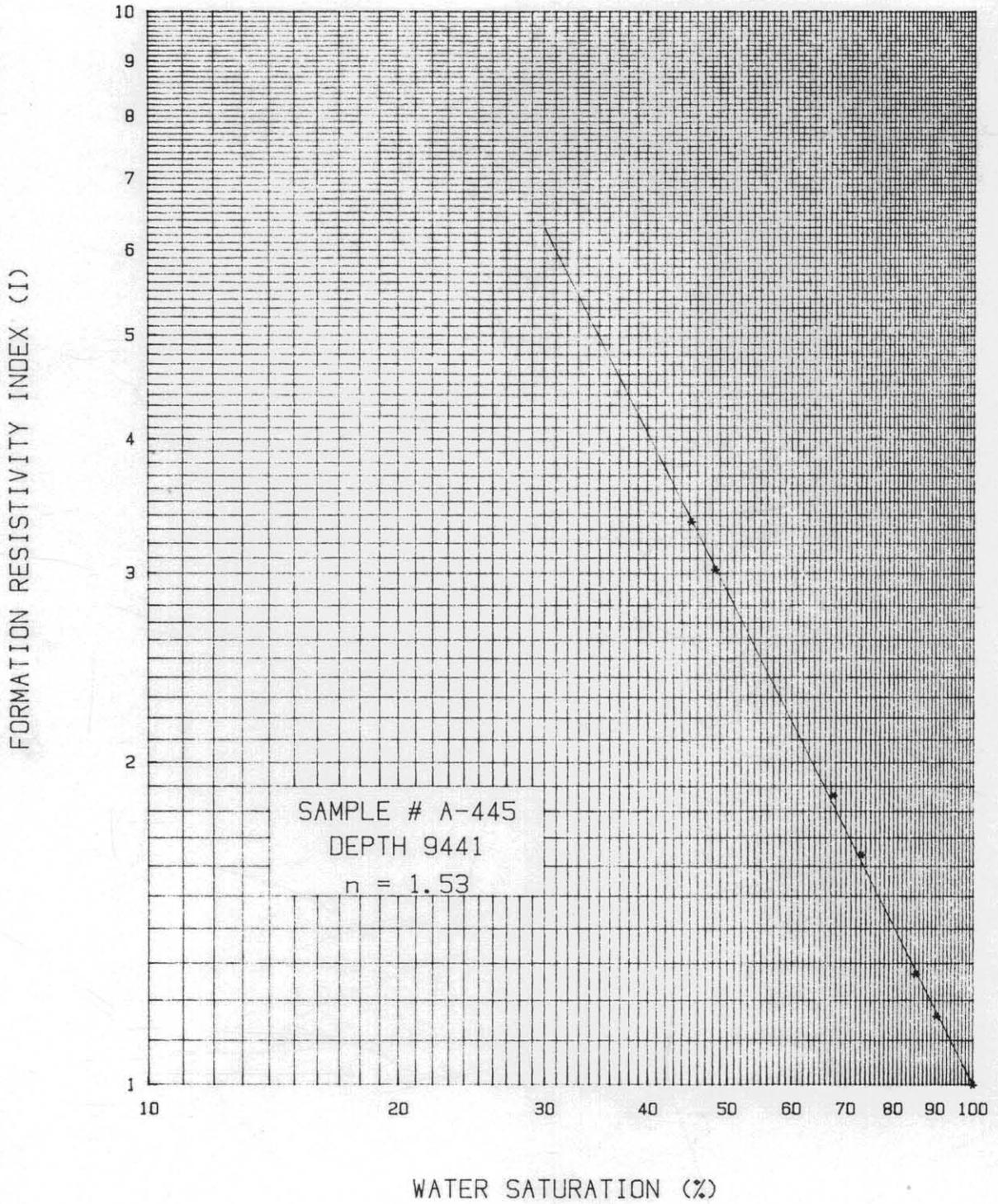
COMPANY : AMOCO
 WELL NAME : PELICAN FIELD WELL No. 1
 FILE NAME : 390/Rx
 SAMPLE # : A-445
 DEPTH (ft) : 9441
 POROSITY : 17.47 % PERMEABILITY : 4.54 md
 PORE VOL. : 2.14 cc GRAIN DENSITY : 2.68 g/cc
 BRINE RESISTIVITY : .3 ohm-meter @ 70 F
 CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 30.98
 CEMENTATION EXPONENT (m) = 1.97
 SATURATION EXPONENT (n) = 1.53

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
90.26	1.16
85.12	1.27
72.97	1.64
67.40	1.86
48.24	3.02
45.15	3.35

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

FORMATION FACTOR vs CONFINING PRESSURE
=====

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL No. 1

FILE NAME:

SAMPLE # : 57/A-445

DEPTH : 9441

TEST RESULTS
=====

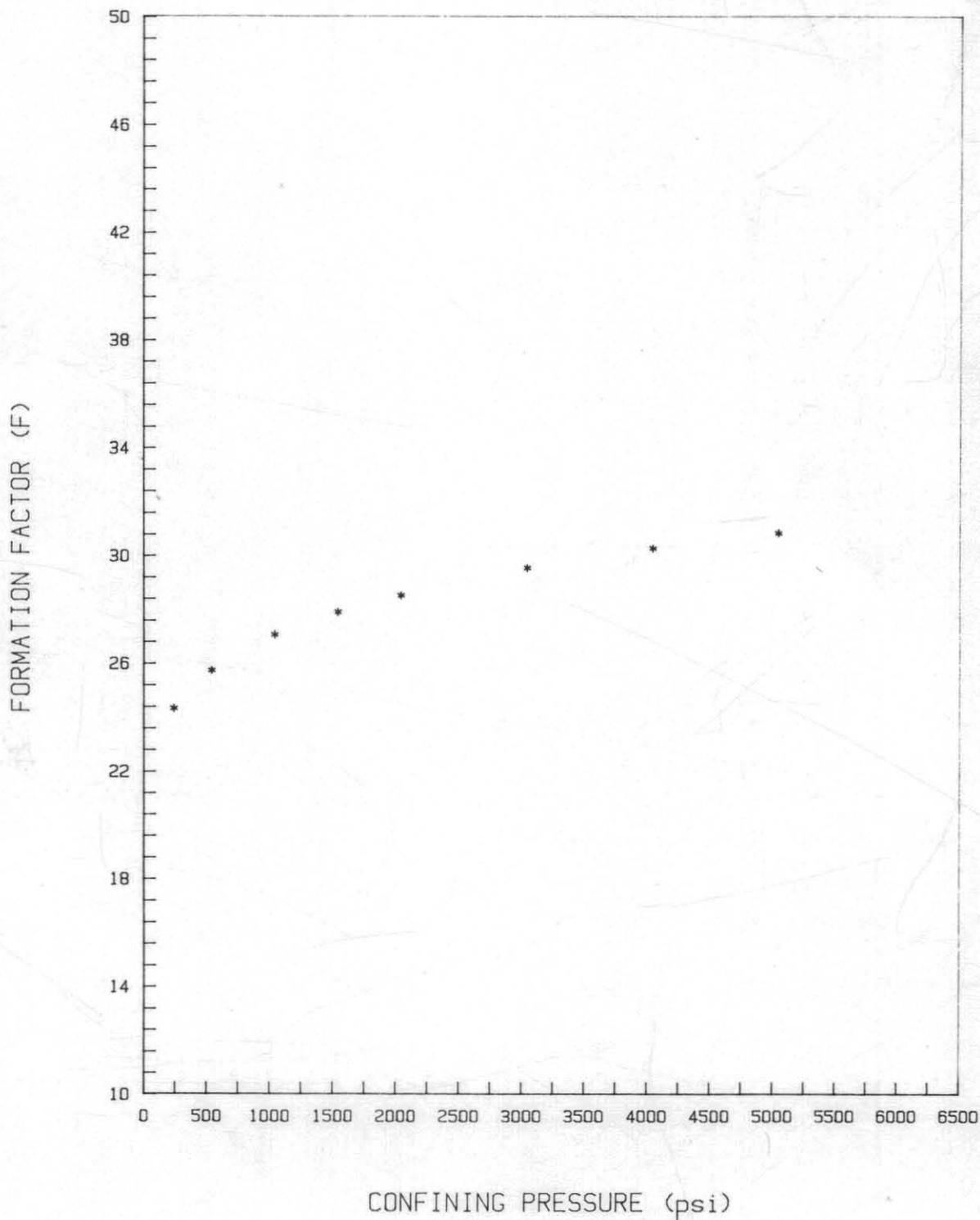
CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)

0	19.02		
200	18.89	24.46	1.92
500	18.48	25.86	1.93
1000	27.18	1.95	1.77
1500	18.02	28.02	1.95
2000	17.90	28.65	1.95
3000	17.70	29.67	1.96
4000	17.58	30.41	1.96
5000	17.47	30.98	1.97

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 57/A-445 DEPTH: 9441



5 cm

POROSITY vs. CONFINING STRESS TEST
 =====

COMPANY : AMOCO

WELL NAME:

FILE NAME: 390/PVC/1

SAMPLE # : A-445

DEPTH : 9441 ft.

POROSITY = 19.02 %
 PORE VOLUME = 2.37 cc

PERMEABILITY = 4.54 md
 GRAIN DENSITY = 2.68 g/cc

TEST RESULTS
 =====

CONFINING STRESS (psi)

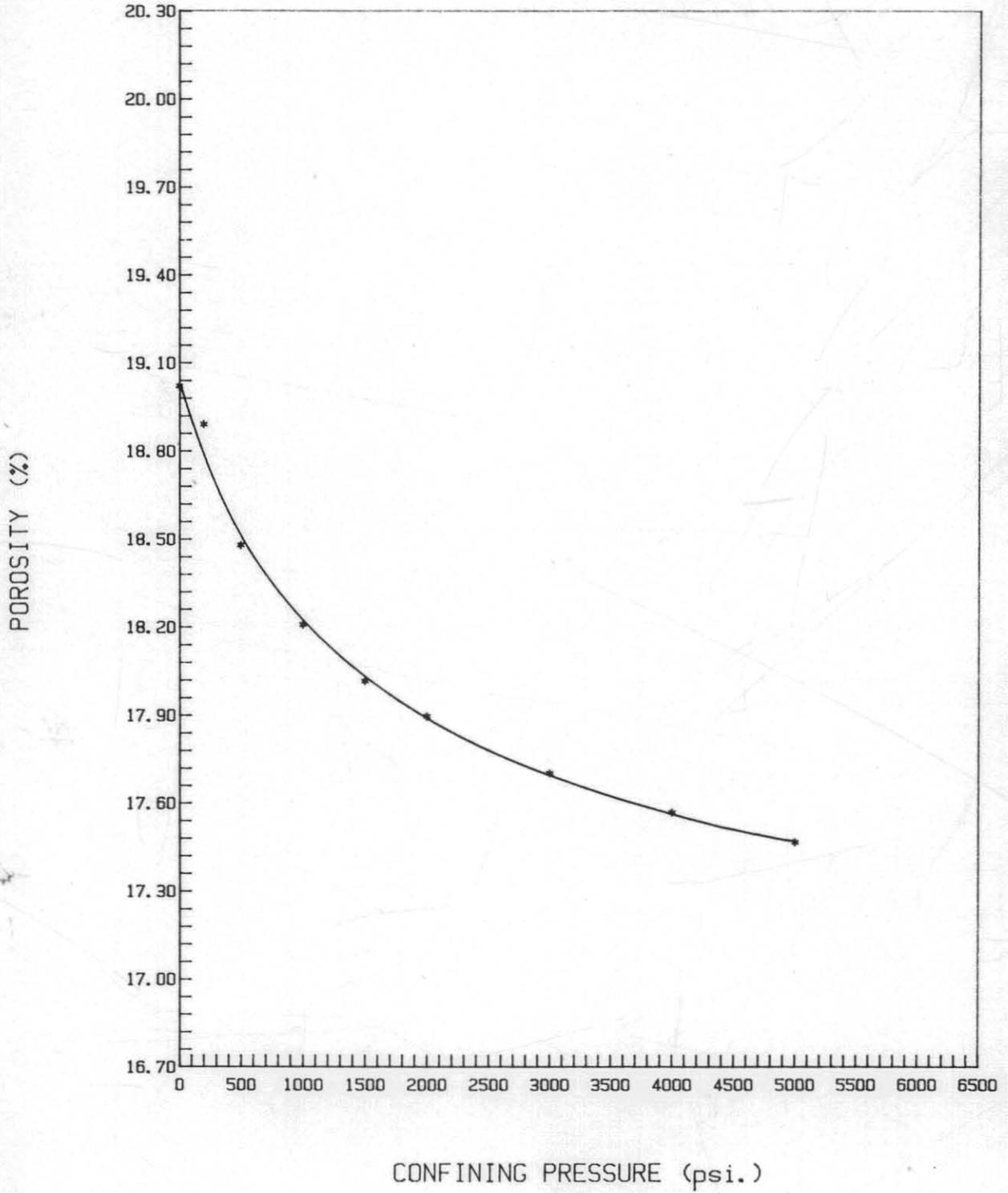
POROSITY (%)

0	19.02
200	18.89
500	18.48
1000	18.21
1500	18.01
2000	17.90
3000	17.70
4000	17.57
5000	17.47

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-445 DEPTH : 9441



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL #1
FILE NAME : 390/3/CP

SAMPLE No. : A-445
DEPTH : 9441

Porosity = 19.02 %
Pore vol. = 2.30 cc

Permeability = 4.54 md
Grain dens. = 2.68 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	100.00		
4	10.00	100.00		
5	15.00	100.00		
6	20.00	100.00		
7	25.00	98.82	4.264	.07
8	30.00	97.08	3.553	.09
9	44.00	79.67	2.423	.13
10	60.00	67.17	1.777	.17
11	74.00	61.25	1.441	.21
12	110.00	52.33	.969	.32
13	160.00	45.49	.666	.46
14	200.00	42.01	.533	.58
15	300.00	36.74	.355	.86
16	400.00	33.09	.267	1.15
17	600.00	28.82	.178	1.73
18	800.00	25.51	.133	2.30
19	1000.00	23.33	.107	2.88
20	1200.00	21.99	.089	3.45
21	1500.00	20.24	.071	4.32
22	2000.00	18.15	.053	5.76

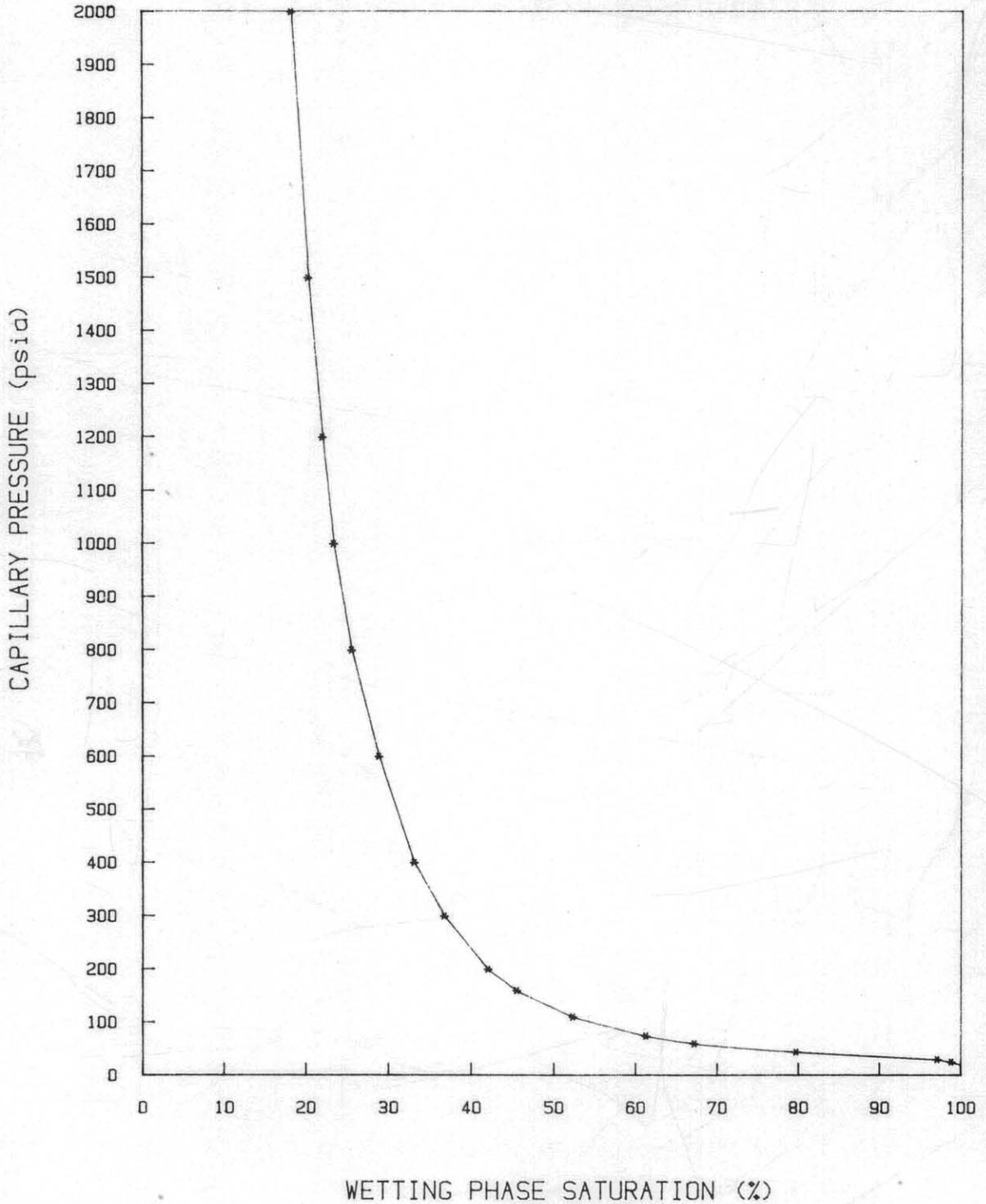
* Wetting Phase Saturation

188072

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-445 DEPTH : 9441



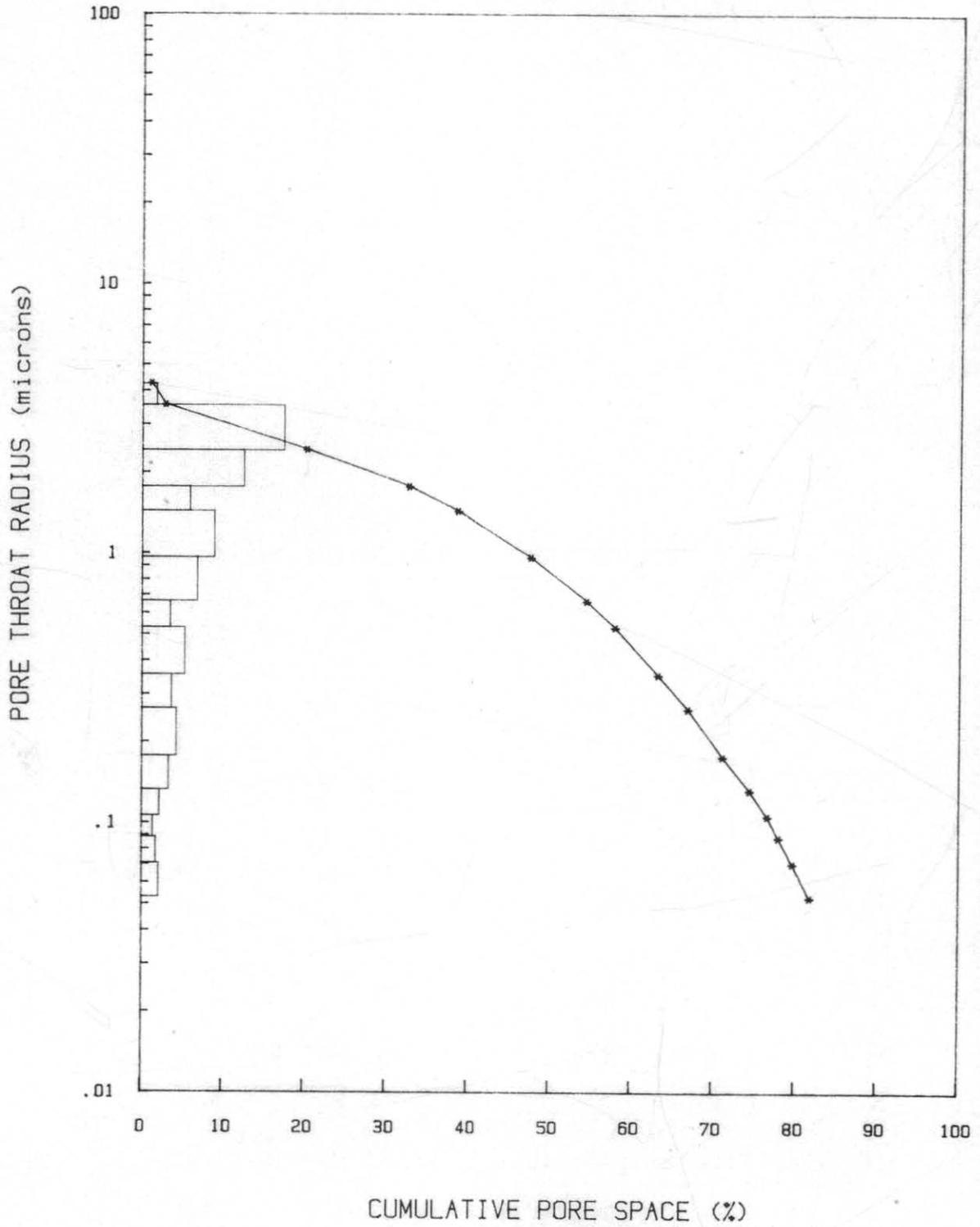
5 cm

188073

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-445 DEPTH : 9441



5 cm

ELECTRICAL RESISTIVITY TEST

=====

COMPANY : AMOCO
 WELL NAME : PELICAN FIELD WELL No. 1
 FILE NAME : 390/Rx
 SAMPLE # : A-446
 DEPTH (ft) : 9445
 POROSITY : 8.68 % PERMEABILITY : .01 md
 PORE VOL. : 1.06 cc GRAIN DENSITY : 2.70 g/cc
 BRINE RESISTIVITY : .3 ohm-meter @ 70 F
 CONFINING STRESS : 5000 psi

TEST RESULTS

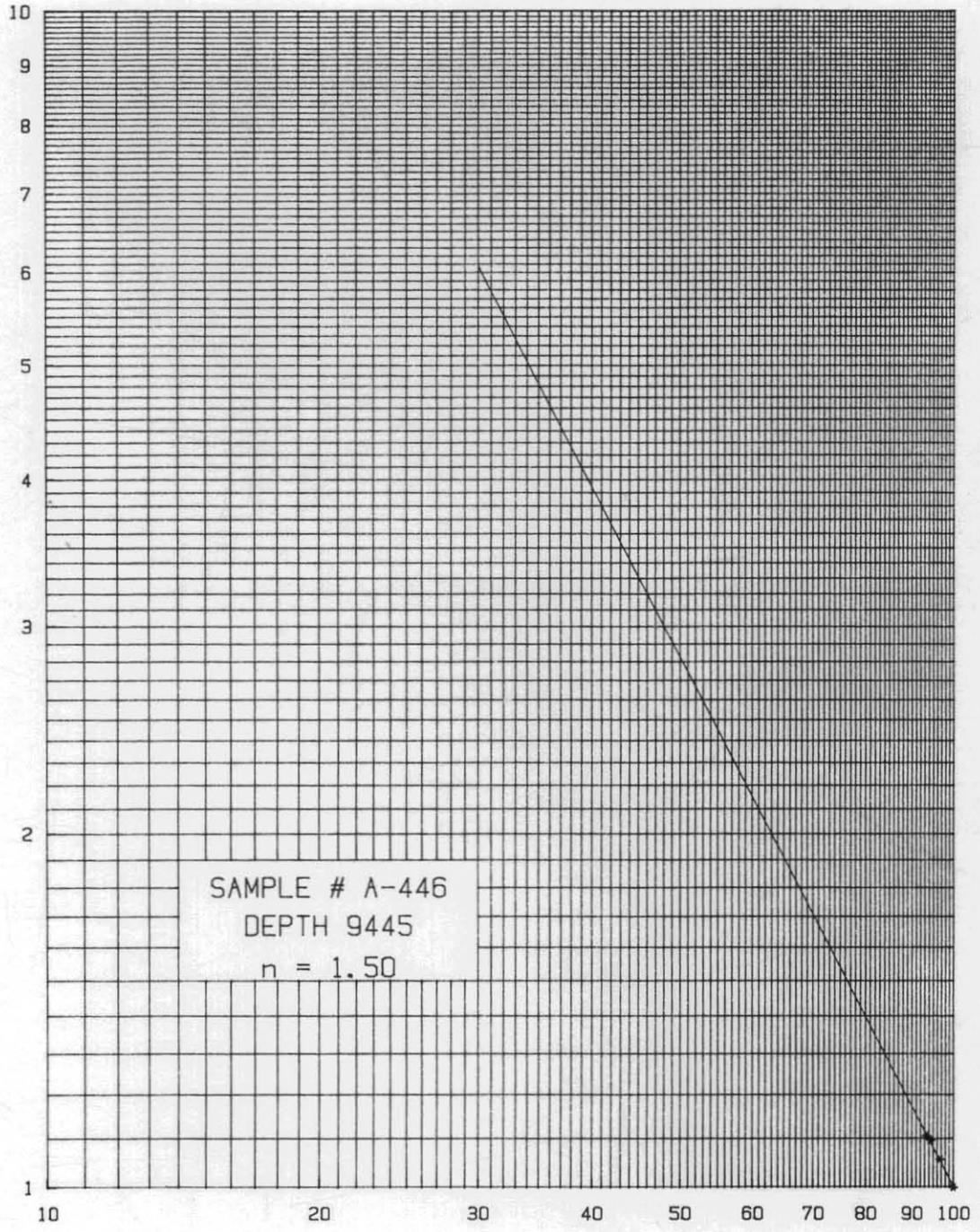
=====

FORMATION FACTOR (F) = 64.23
 CEMENTATION EXPONENT (m) = 1.70
 SATURATION EXPONENT (n) = 1.50

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
96.62	1.06
94.26	1.10
93.32	1.11

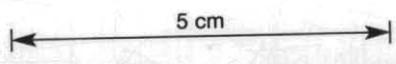
FORMATION RESISTIVITY INDEX vs SATURATION

FORMATION RESISTIVITY INDEX (FRI)



SAMPLE # A-446
DEPTH 9445
 $n = 1.50$

WATER SATURATION (%)



FORMATION FACTOR vs CONFINING PRESSURE

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL No. 1

FILE NAME:

SAMPLE # : 6¹/A-446

DEPTH : 9445

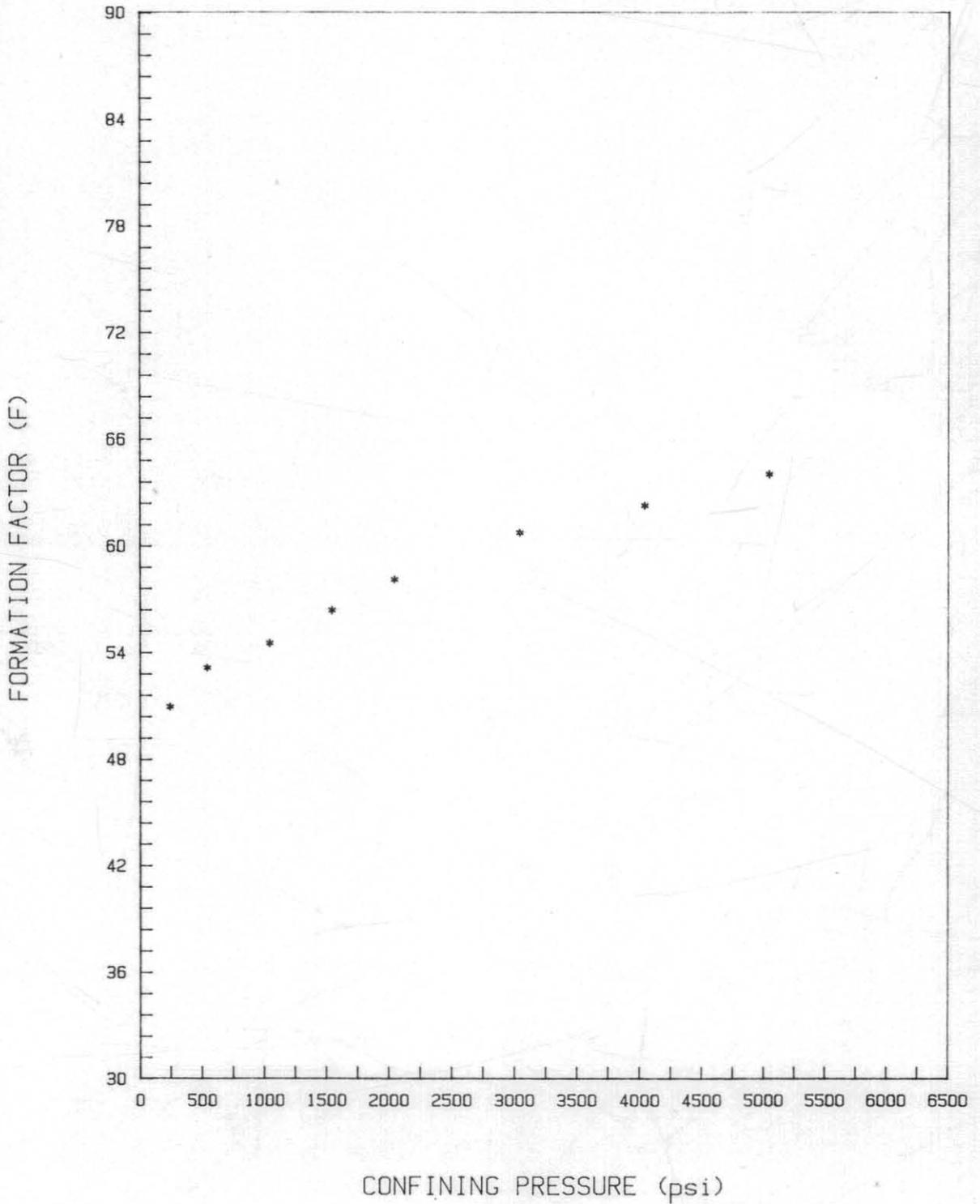
TEST RESULTS

CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)
0	9.79		
200	9.43	51.14	1.67
500	9.34	53.33	1.68
1000	9.17	54.71	1.67
1500	9.05	56.56	1.68
2000	8.96	58.29	1.69
3000	8.80	60.94	1.69
4000	8.72	62.47	1.69
5000	8.68	64.23	1.70

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 61/A-446 DEPTH: 9445



5 cm

POROSITY vs. CONFINING STRESS TEST
 =====

COMPANY : AMOCO

WELL NAME:

FILE NAME: 390/PVC/1

SAMPLE # : A-446

DEPTH : 9445 ft.

POROSITY = 9.79 %
 PORE VOLUME = 1.21 cc

PERMEABILITY = .01 md
 GRAIN DENSITY = 2.70 g/cc

TEST RESULTS.
 =====

CONFINING STRESS (psi)

POROSITY (%)

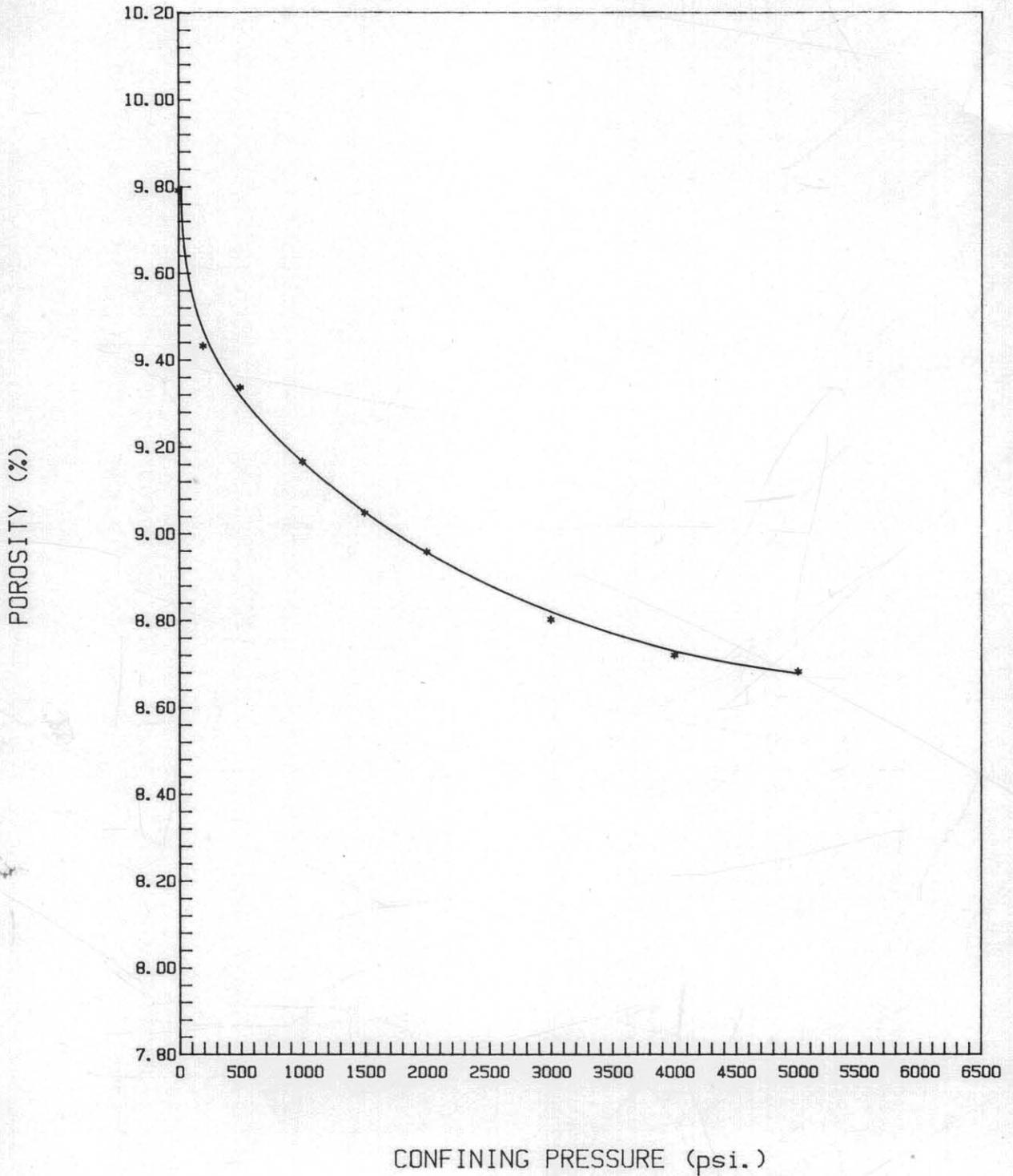
0	9.79
200	9.43
500	9.34
1000	9.17
1500	9.05
2000	8.96
3000	8.80
4000	8.72
5000	8.68

188079

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-446 DEPTH : 9445



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/4/CP

SAMPLE No. : A-446

DEPTH : 9445

Porosity = 9.79 %

Pore vol. = 1.21 cc

Permeability = .01 md

Grain dens. = 2.70 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	100.00		
4	10.00	100.00		
5	15.00	100.00		
6	20.00	100.00		
7	25.00	100.00		
8	30.00	100.00		
9	44.00	100.00		
10	60.00	100.00		
11	74.00	100.00		
12	110.00	100.00		
13	160.00	100.00		
14	200.00	100.00		
15	300.00	100.00		
16	400.00	100.00		
17	600.00	99.01	.178	.13
18	800.00	86.03	.133	.17
19	1000.00	79.59	.107	.21
20	1200.00	75.37	.089	.26
21	1500.00	71.65	.071	.32
22	2000.00	65.12	.053	.43

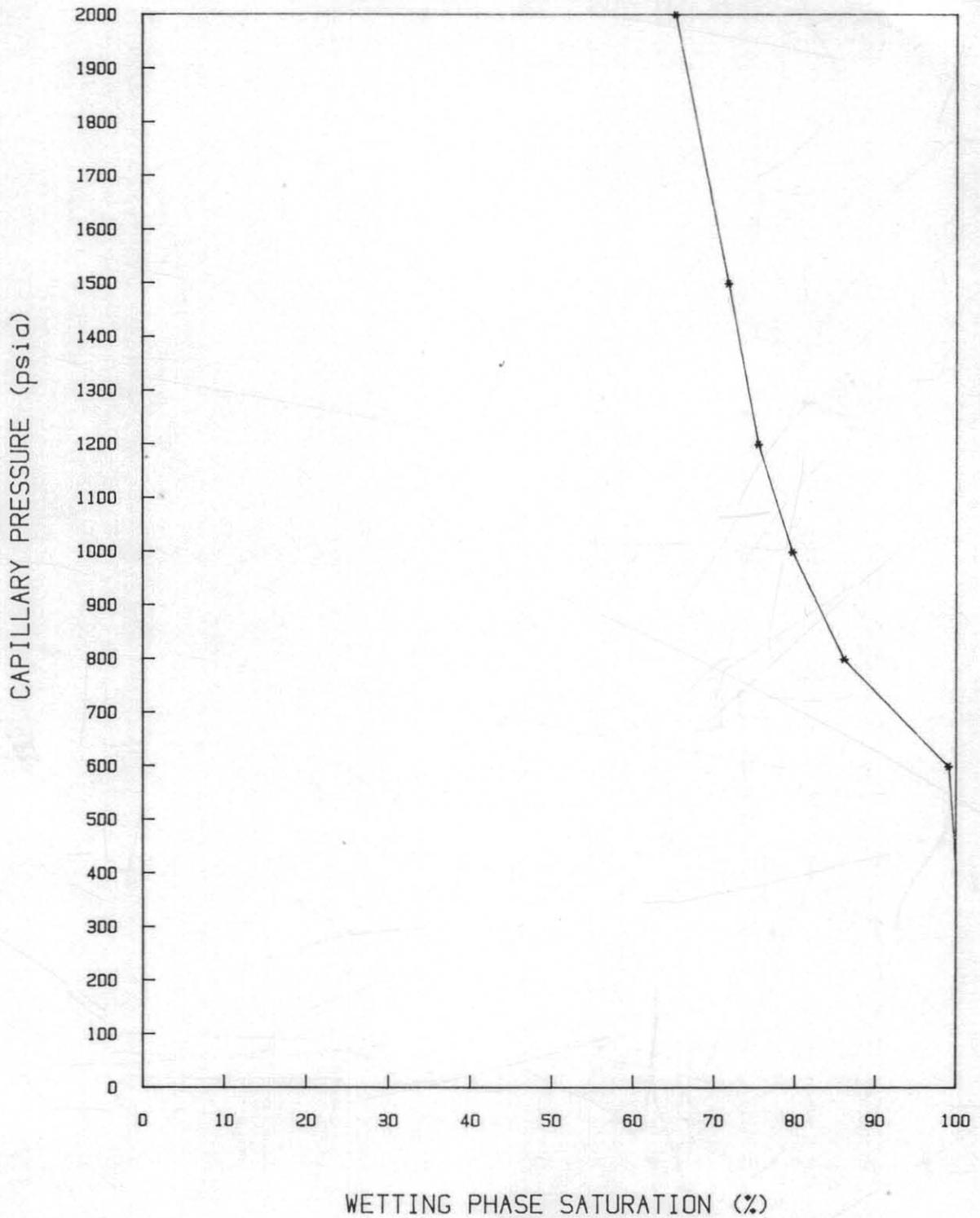
* Wetting Phase Saturation

188081

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-446 DEPTH : 9445

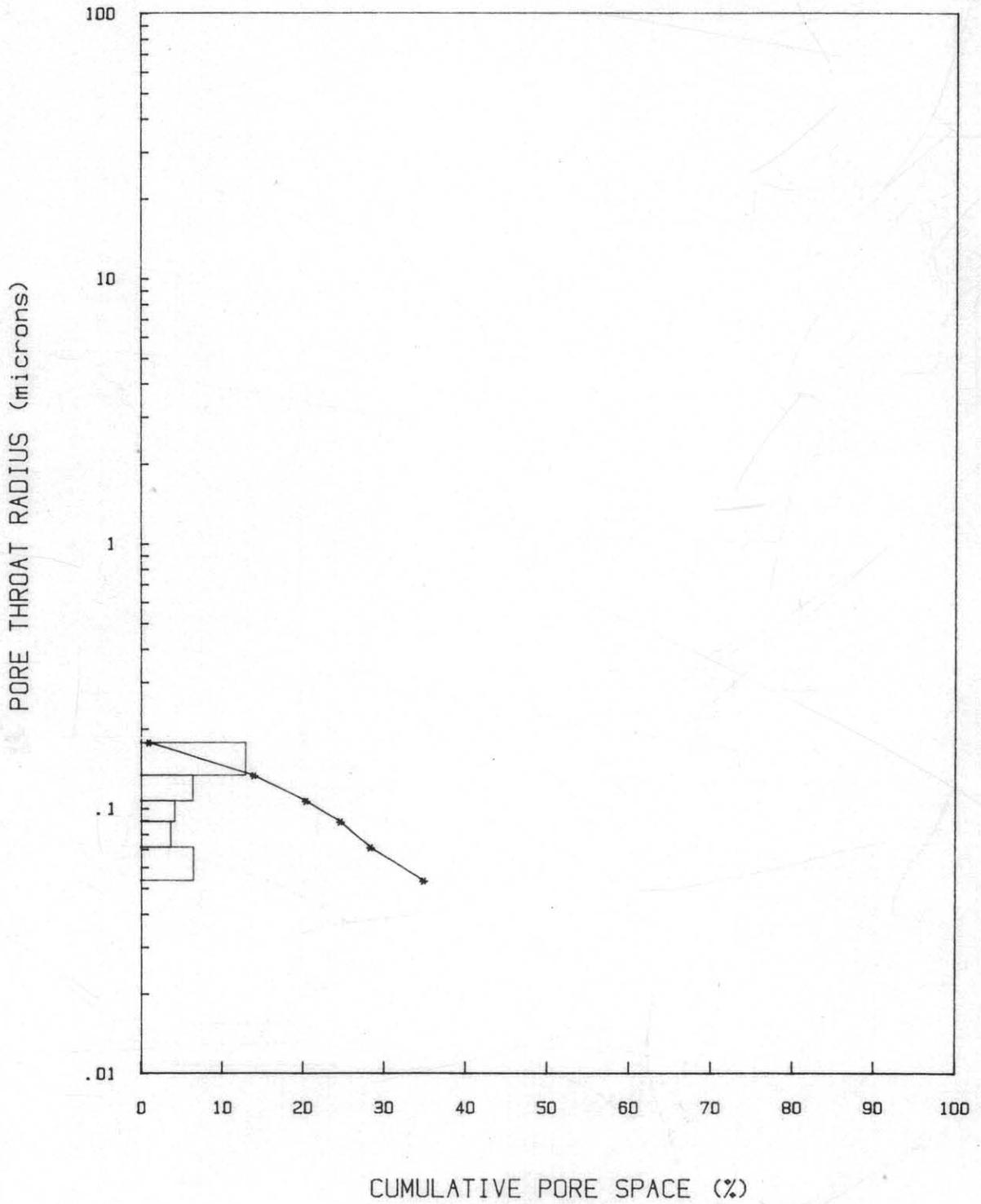


5 cm

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-446 DEPTH : 9445



5 cm

ELECTRICAL RESISTIVITY TEST

=====

COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/Rx

SAMPLE # : A-447

DEPTH (ft) : 10065

POROSITY : 13.45 %

PORE VOL. : 1.52 cc

PERMEABILITY : 154.06 md

GRAIN DENSITY : 2.65 g/cc

BRINE RESISTIVITY : .3 ohm-meter @ 70 F

CONFINING STRESS : 5000 psi

TEST RESULTS

=====

FORMATION FACTOR (F) = 39.60

CEMENTATION EXPONENT (m) = 1.83

SATURATION EXPONENT (n) = 1.56

WATER SATURATION (%)

100.00

99.49

54.80

52.16

49.53

45.57

RESISTIVITY INDEX (I)

1.00

1.01

2.52

2.77

3.01

3.42

MERCURY INJECTION TEST
 =====

COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/17/CP
 SAMPLE No. : A-447
 DEPTH : 10065

Porosity = 15.19 % Permeability = 154.06 md
 Pore vol. = 1.74 cc Grain dens. = 2.65 g/cc

TEST RESULTS:
 =====

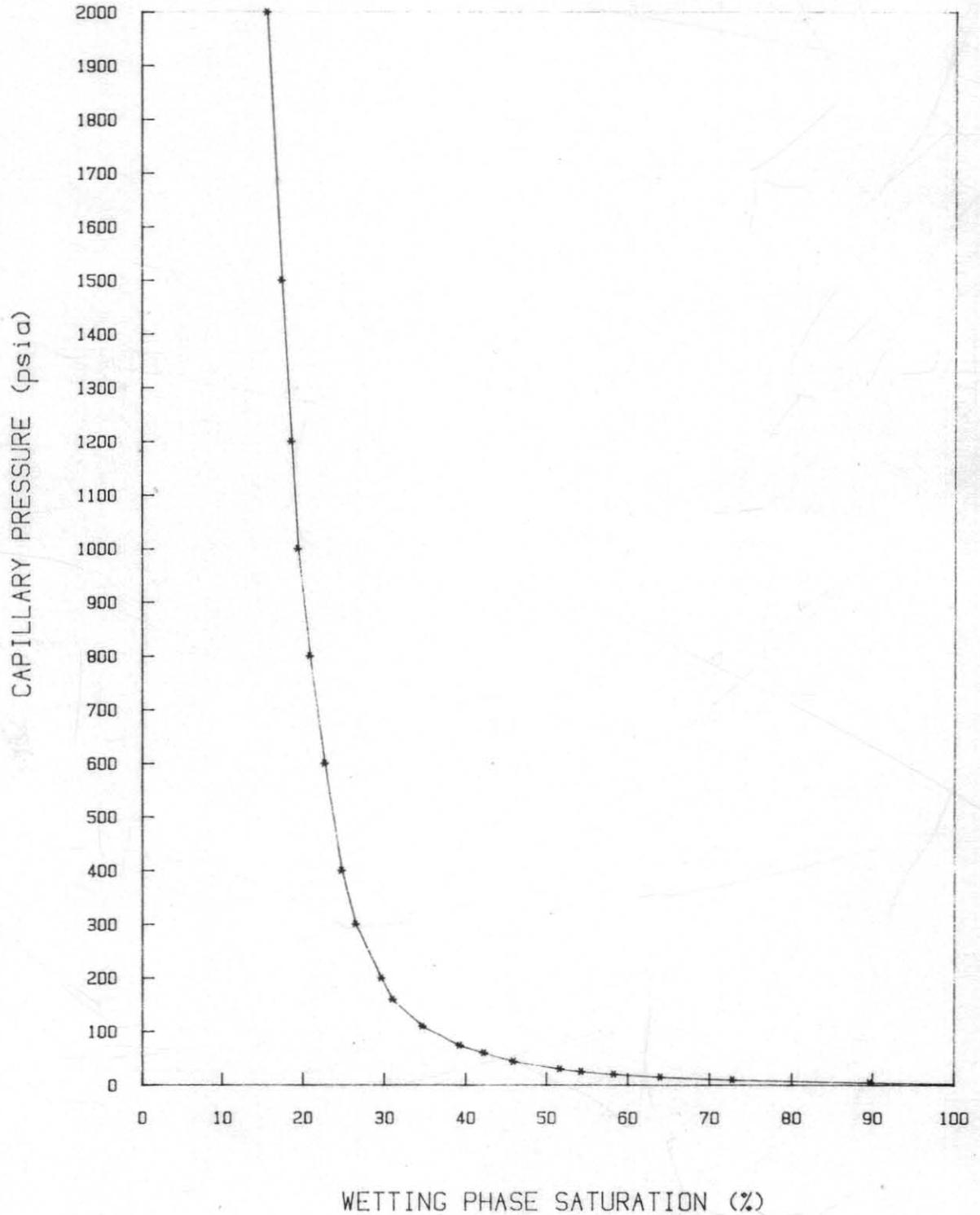
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.90	100.00		
2	3.40	100.00		
3	5.90	89.62	18.056	.11
4	10.90	72.76	9.777	.20
5	15.90	63.93	6.703	.30
6	20.90	58.26	5.100	.39
7	25.90	54.24	4.115	.49
8	30.90	51.61	3.450	.58
9	44.90	45.87	2.374	.84
10	60.90	42.20	1.750	1.14
11	74.90	39.22	1.423	1.41
12	110.90	34.63	.961	2.08
13	160.90	30.96	.663	3.02
14	200.90	29.59	.531	3.77
15	300.90	26.43	.354	5.65
16	400.90	24.71	.266	7.52
17	600.90	22.59	.177	11.27
18	800.90	20.76	.133	15.03
19	1000.90	19.27	.107	18.78
20	1200.90	18.46	.089	22.53
21	1500.90	17.26	.071	28.16
22	2000.90	15.42	.053	37.54

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-447 DEPTH : 10065



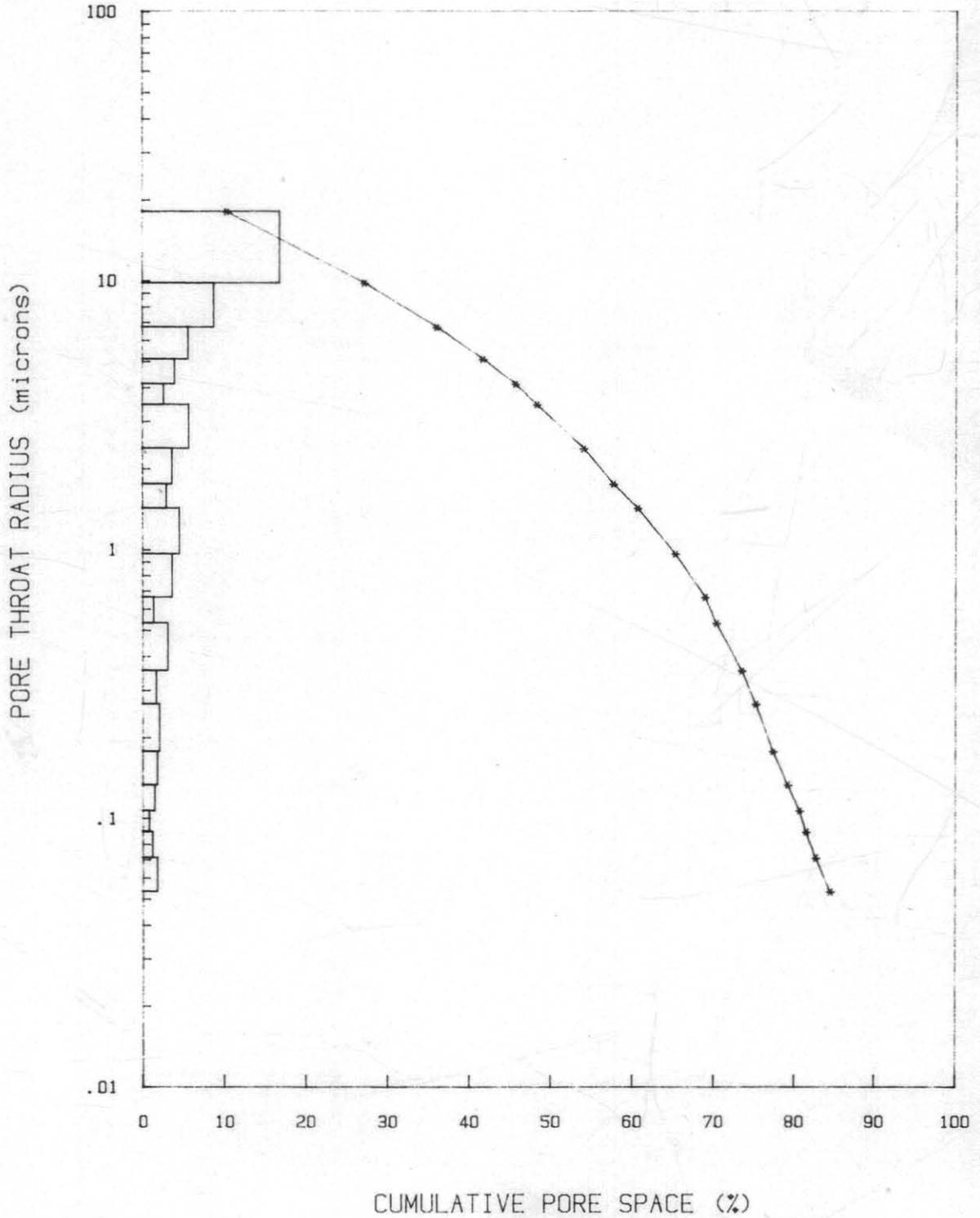
5 cm

188087

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-447 DEPTH : 10065



5 cm

ELECTRICAL RESISTIVITY TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL No. 1
FILE NAME : 390/Rx

SAMPLE # : A-448
DEPTH (ft) : 10067

POROSITY : 12.06 % PERMEABILITY : 12.36 md
PORE VOL. : 1.25 cc GRAIN DENSITY : 2.67 g/cc

BRINE RESISTIVITY : .3 ohm-meter @ 70 F
CONFINING STRESS : 5000 psi

TEST RESULTS
=====

FORMATION FACTOR (F) = 47.23
CEMENTATION EXPONENT (m) = 1.82
SATURATION EXPONENT (n) = 2.18

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
84.85	1.43
81.16	1.58
74.36	1.77
65.95	2.17
47.14	3.44
40.73	4.01
35.93	4.53

FORMATION FACTOR vs CONFINING PRESSURE
 =====

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL No. 1

FILE NAME:

SAMPLE # : 71/A-448

DEPTH : 10067

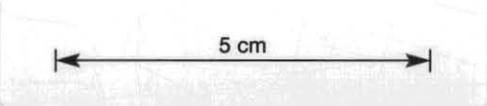
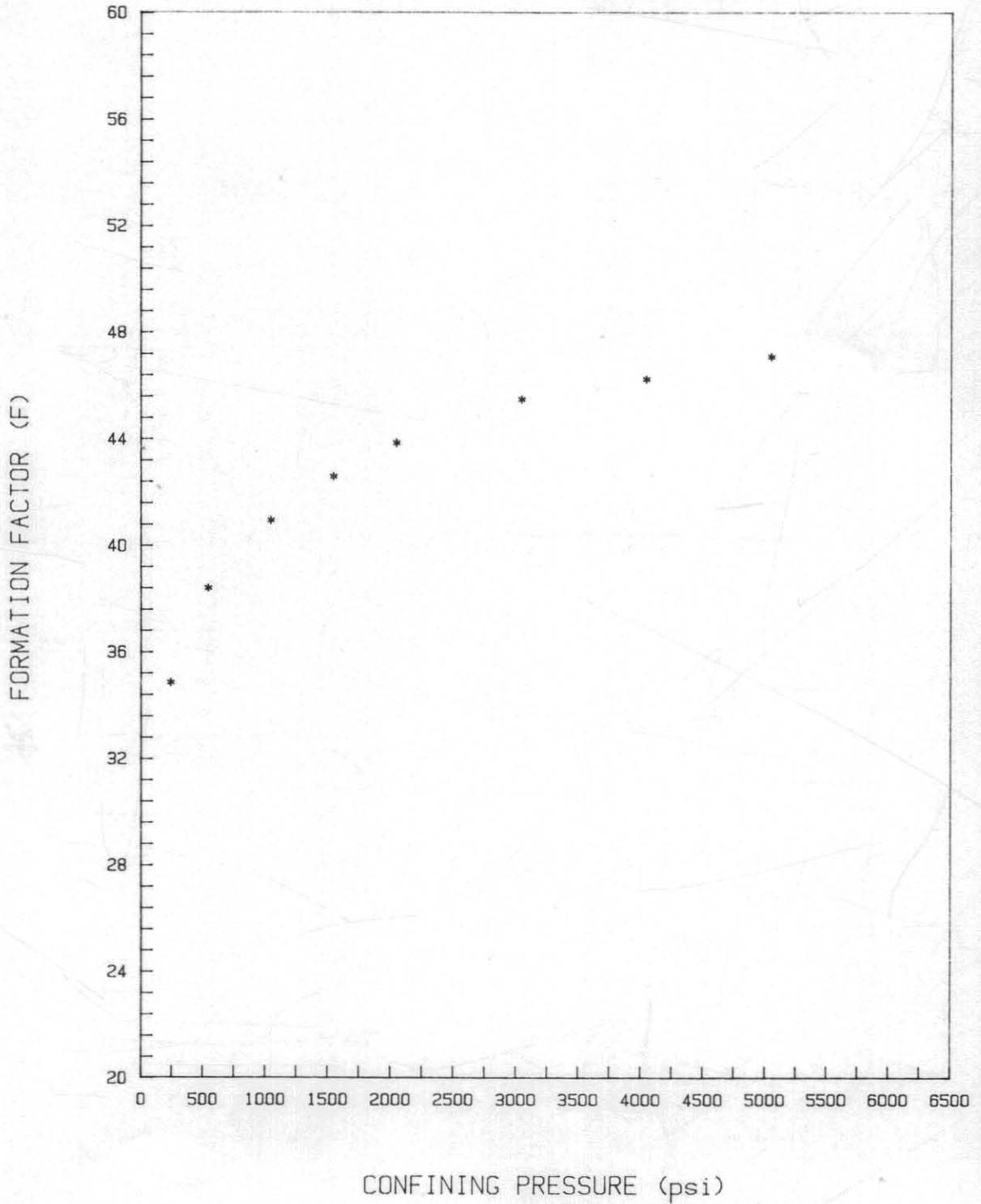
TEST RESULTS
 =====

CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)
0	13.71		
200	13.56	34.97	1.79
500	12.95	38.52	1.79
1000	12.64	41.07	1.80
1500	12.48	42.71	1.80
2000	12.32	43.98	1.81
3000	12.25	45.61	1.82
4000	12.14	46.38	1.82
5000	12.06	47.23	1.82

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 71/A-448 DEPTH: 10067



POROSITY vs. CONFINING STRESS TEST

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL #1

FILE NAME: 390/PVC/1

SAMPLE # : A-448

DEPTH : 10067 ft.

POROSITY = 13.71 %
 PORE VOLUME = 1.56 cc

PERMEABILITY = 12.36 md
 GRAIN DENSITY = 2.69 g/cc

TEST RESULTS

CONFINING STRESS (psi)

POROSITY (%)

0	13.71
200	13.56
500	12.95
1000	12.64
1500	12.48
2000	12.32
3000	12.24
4000	12.14
5000	12.06

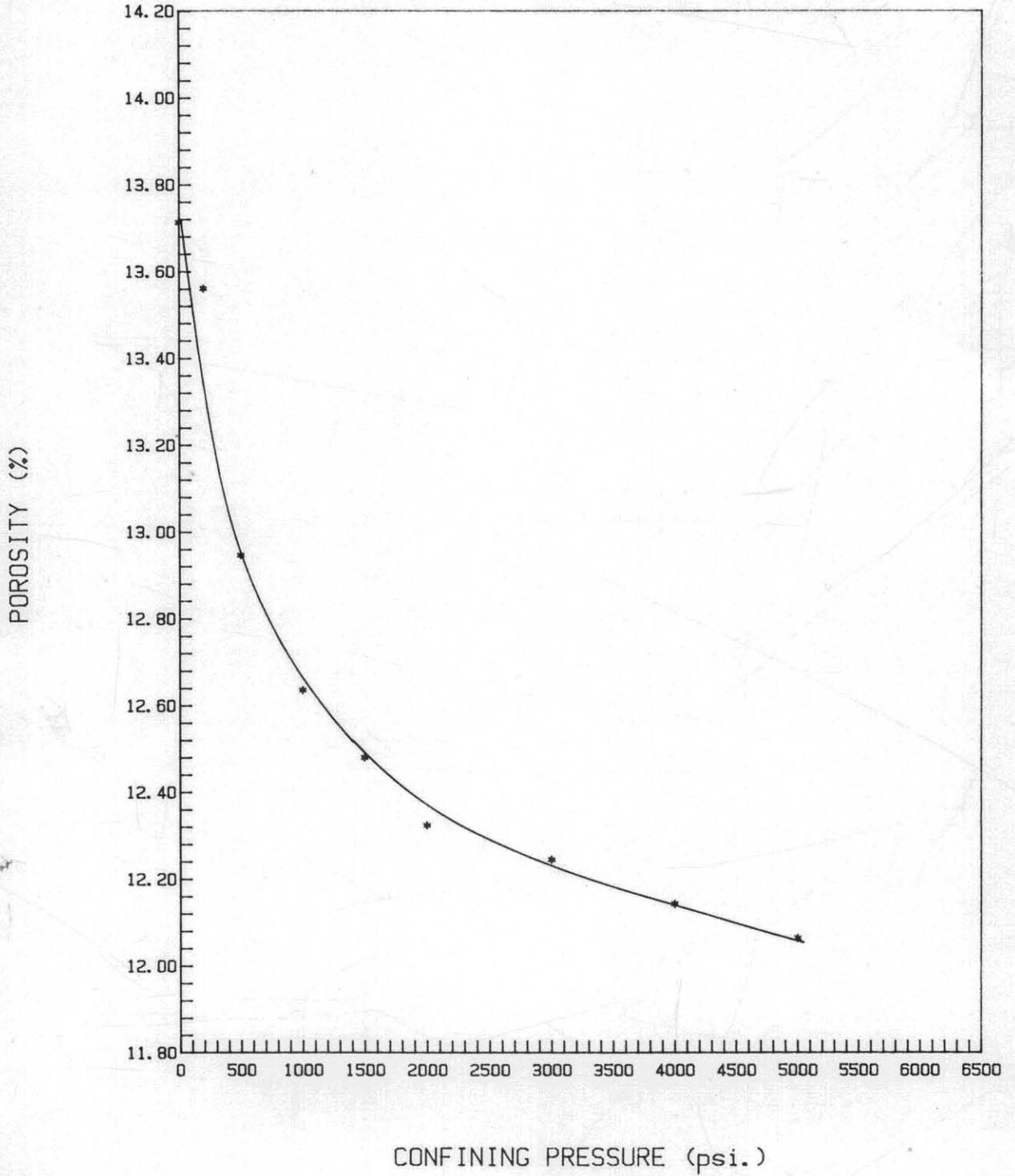
188093

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-448

DEPTH : 10067



5 cm

MERCURY INJECTION TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/5/CP

SAMPLE No. : A-448

DEPTH : 10067

Porosity = 13.71 %

Pore vol. = 1.45 cc

Permeability = 12.36 md

Grain dens. = 2.69 g/cc

TEST RESULTS:
=====

No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	100.00		
4	10.00	95.24	10.660	.06
5	15.00	88.34	7.107	.08
6	20.00	82.54	5.330	.11
7	25.00	77.50	4.264	.14
8	30.00	73.50	3.553	.17
9	44.00	65.08	2.423	.25
10	60.00	58.73	1.777	.34
11	74.00	54.04	1.441	.41
12	110.00	45.96	.969	.62
13	160.00	40.23	.666	.90
14	200.00	37.41	.533	1.12
15	300.00	32.78	.355	1.68
16	400.00	30.43	.267	2.24
17	600.00	27.40	.178	3.36
18	800.00	25.12	.133	4.48
19	1000.00	23.67	.107	5.59
20	1200.00	22.50	.089	6.71
21	1500.00	20.57	.071	8.39
22	2000.00	18.70	.053	11.19

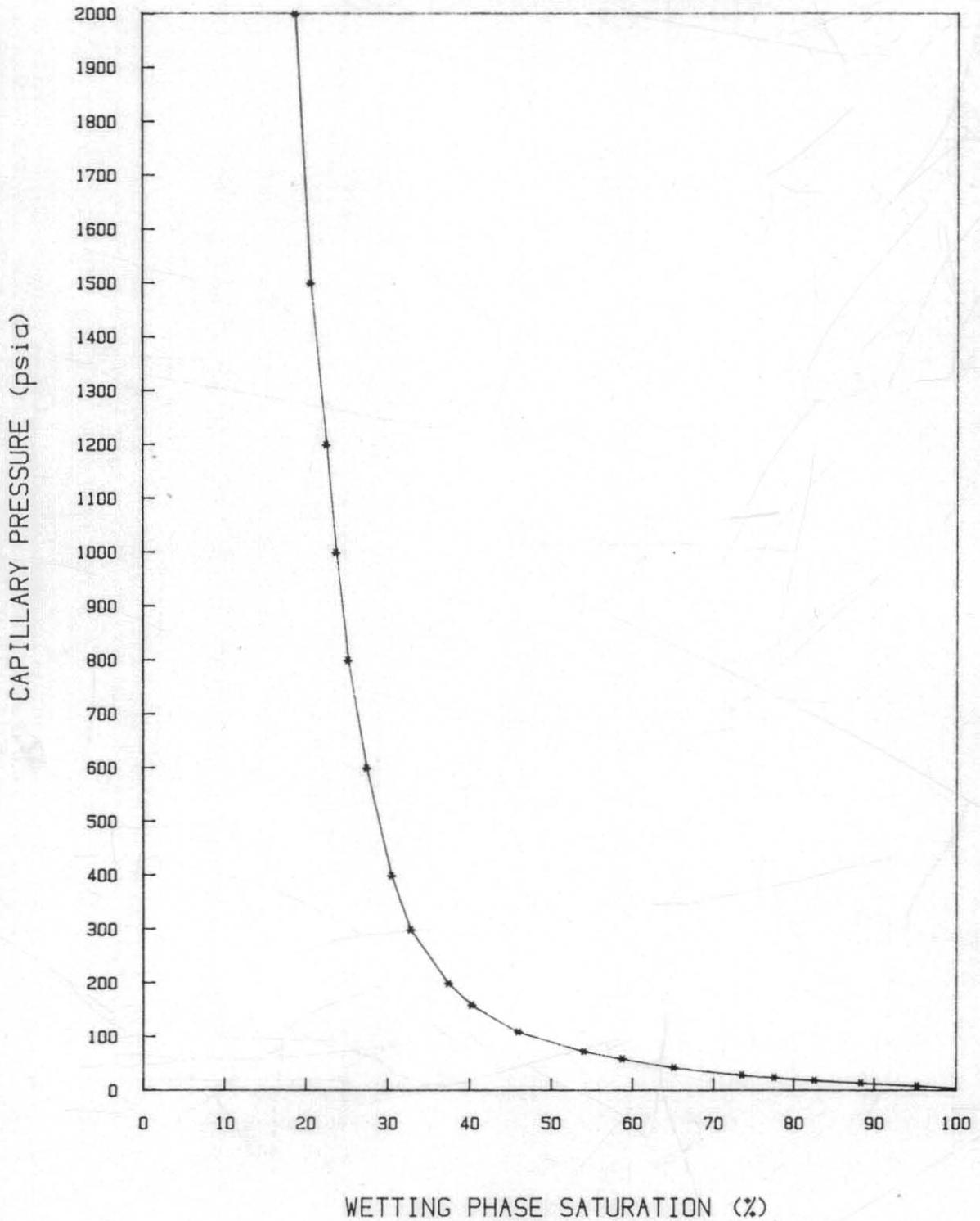
* Wetting Phase Saturation

188095

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-448 DEPTH : 10067

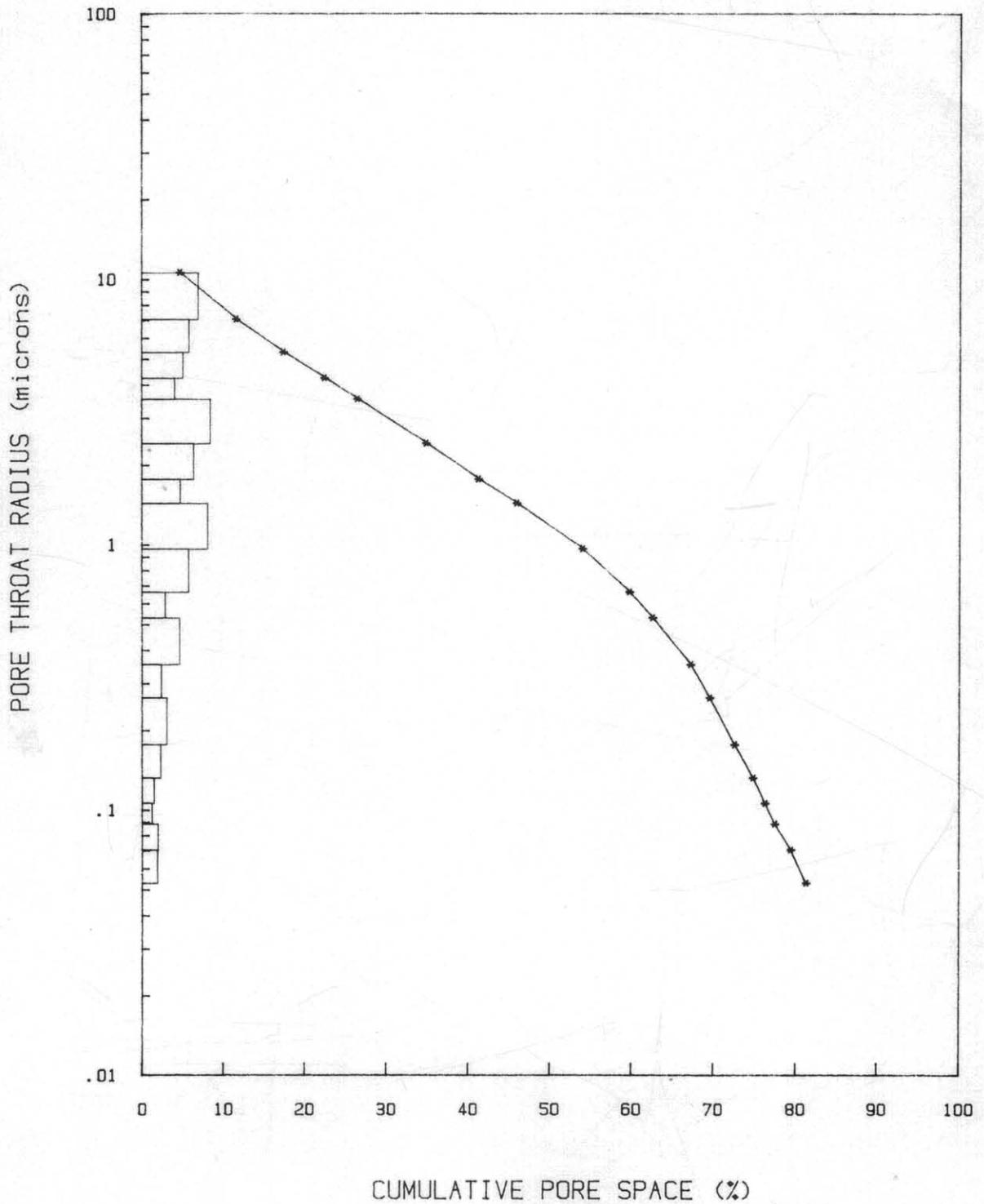


5 cm

PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-448 DEPTH : 10067



5 cm

ELECTRICAL RESISTIVITY TEST

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL No. 1
FILE NAME : 390/Rx

SAMPLE # : A-449
DEPTH (ft) : 10068

POROSITY : 15.74 % PERMEABILITY : 468.31 md
PORE VOL. : 1.67 cc GRAIN DENSITY : 2.65 g/cc

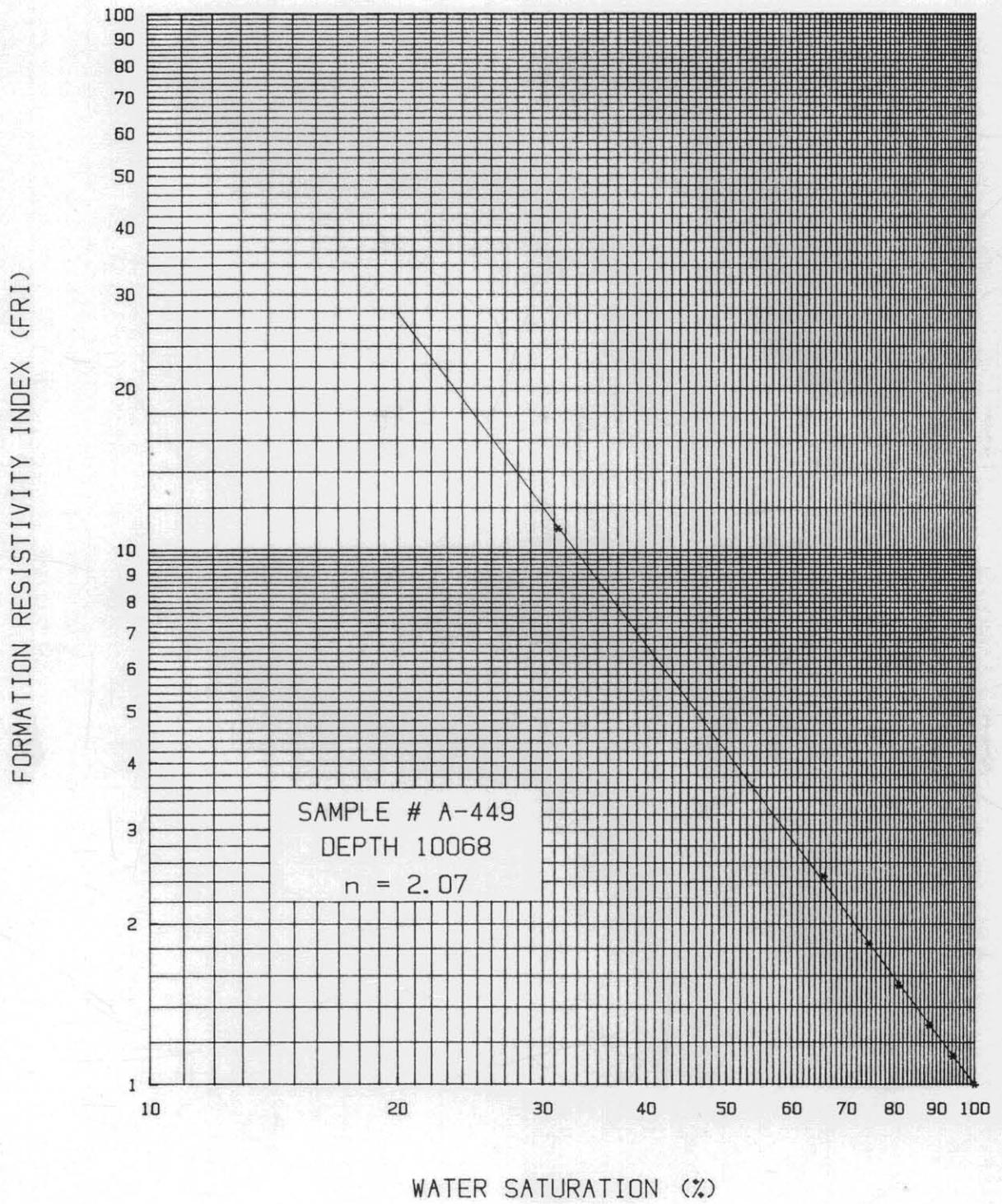
BRINE RESISTIVITY : .3 ohm-meter @ 70 F
CONFINING STRESS : 5000 psi

TEST RESULTS

FORMATION FACTOR (F) = 35.56
CEMENTATION EXPONENT (m) = 1.93
SATURATION EXPONENT (n) = 2.07

WATER SATURATION (%)	RESISTIVITY INDEX (I)
100.00	1.00
94.07	1.13
88.09	1.29
80.91	1.54
74.39	1.84
65.47	2.45
31.30	10.95

FORMATION RESISTIVITY INDEX vs SATURATION



5 cm

FORMATION FACTOR vs CONFINING PRESSURE

COMPANY : AMOCO PRODUCTION
 WELL NAME: PELICAN FIELD WELL No. 1
 FILE NAME:
 SAMPLE # : 72/A-449
 DEPTH : 10068

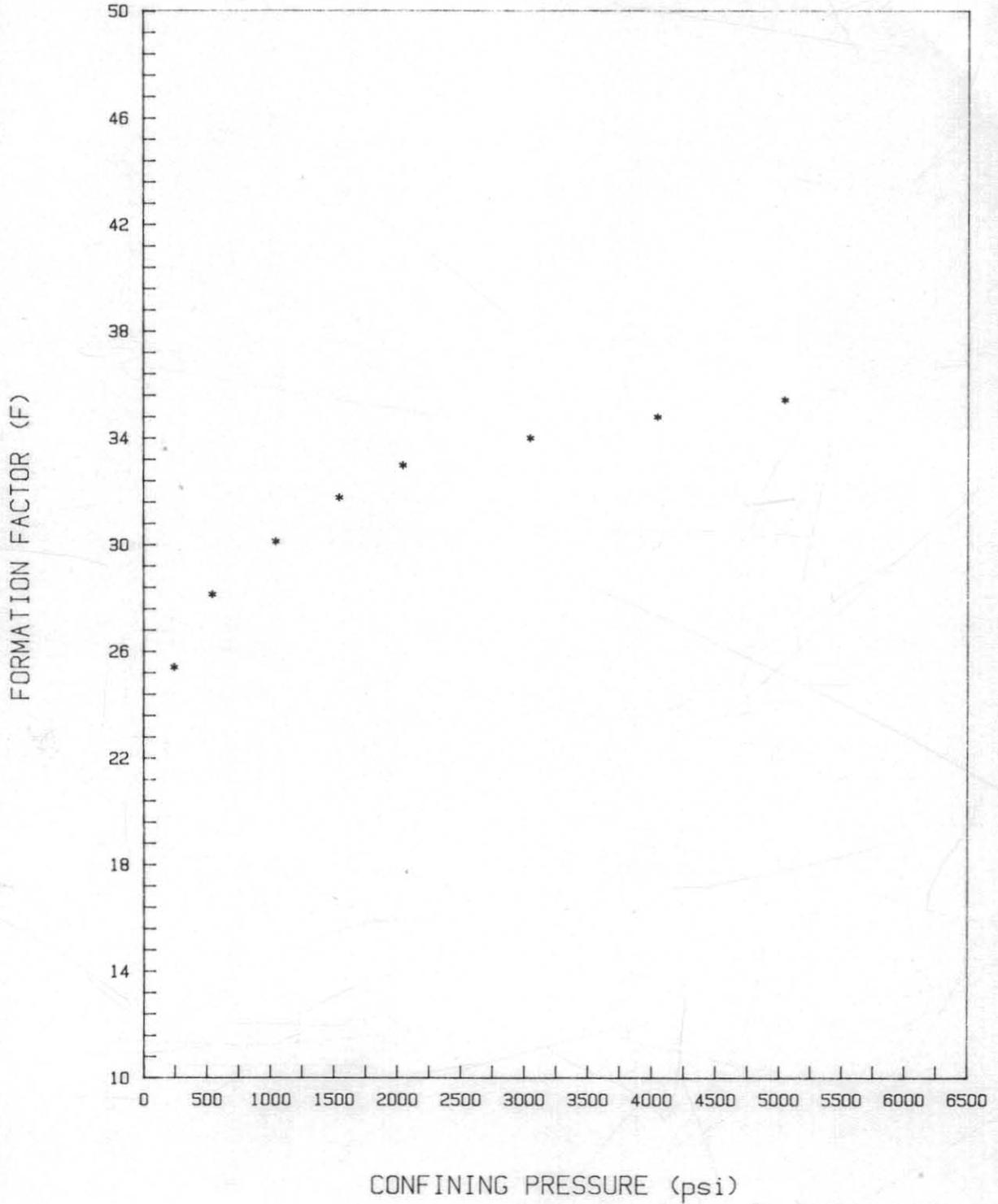
TEST RESULTS

CONFINING PRESSURE (psi)	POROSITY (%)	FORMATION FACTOR (F)	CEMENTATION EXPONENT (m)
0	18.13		
200	17.58	25.52	1.86
500	17.07	28.26	1.89
1000	16.64	30.25	1.90
1500	16.38	31.89	1.91
2000	16.23	33.10	1.93
3000	15.98	34.13	1.93
4000	15.80	34.92	1.93
5000	15.74	35.56	1.93

FORMATION FACTOR vs CONFINING PRESSURE

WELL NAME: PELICAN FIELD WELL No. 1

SAMPLE #: 72/A-449 DEPTH: 10068



5 cm

POROSITY vs. CONFINING STRESS TEST

COMPANY : AMOCO PRODUCTION

WELL NAME: PELICAN FIELD WELL #1
FILE NAME: 390/PVC/1

SAMPLE # : A-449
DEPTH : 10068 ft.

POROSITY = 18.13 %
PORE VOLUME = 2.03 cc

PERMEABILITY = 468.31 md
GRAIN DENSITY = 2.65 g/cc

TEST RESULTS

CONFINING STRESS (psi)

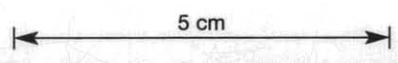
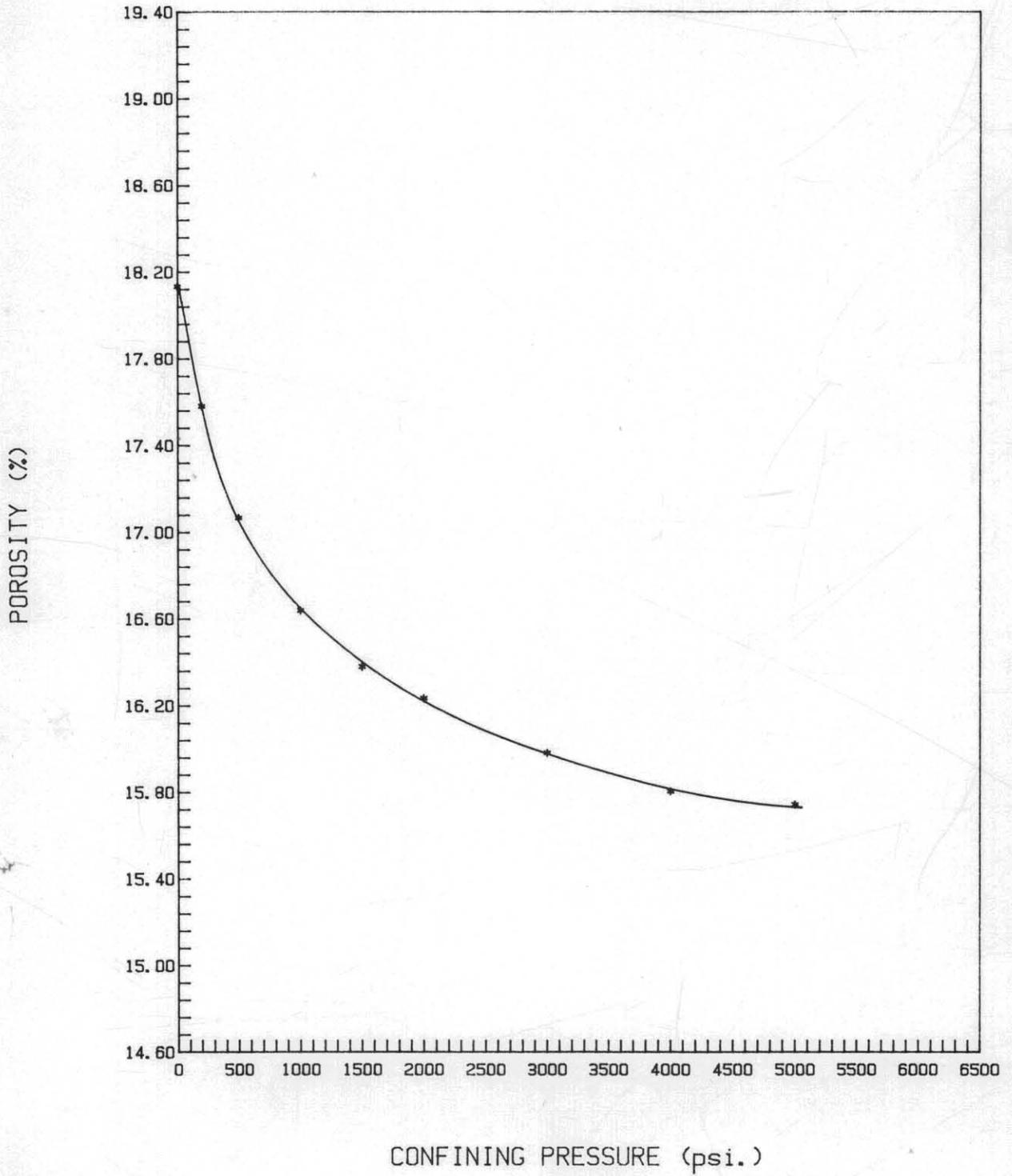
POROSITY (%)

0	18.13
200	17.58
500	17.07
1000	16.64
1500	16.38
2000	16.23
3000	15.98
4000	15.80
5000	15.74

POROSITY vs. CONFINING STRESS

WELL NAME :

SAMPLE # : A-449 DEPTH : 10068



MERCURY INJECTION TEST
=====

COMPANY : AMOCO

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/6/CP

SAMPLE No. : A-449

DEPTH : 10068

Porosity = 18.13 %
Pore vol. = 1.86 cc

Permeability = 468.31 md
Grain dens. = 2.65 g/cc

TEST RESULTS:
=====

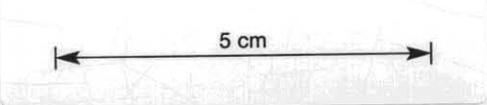
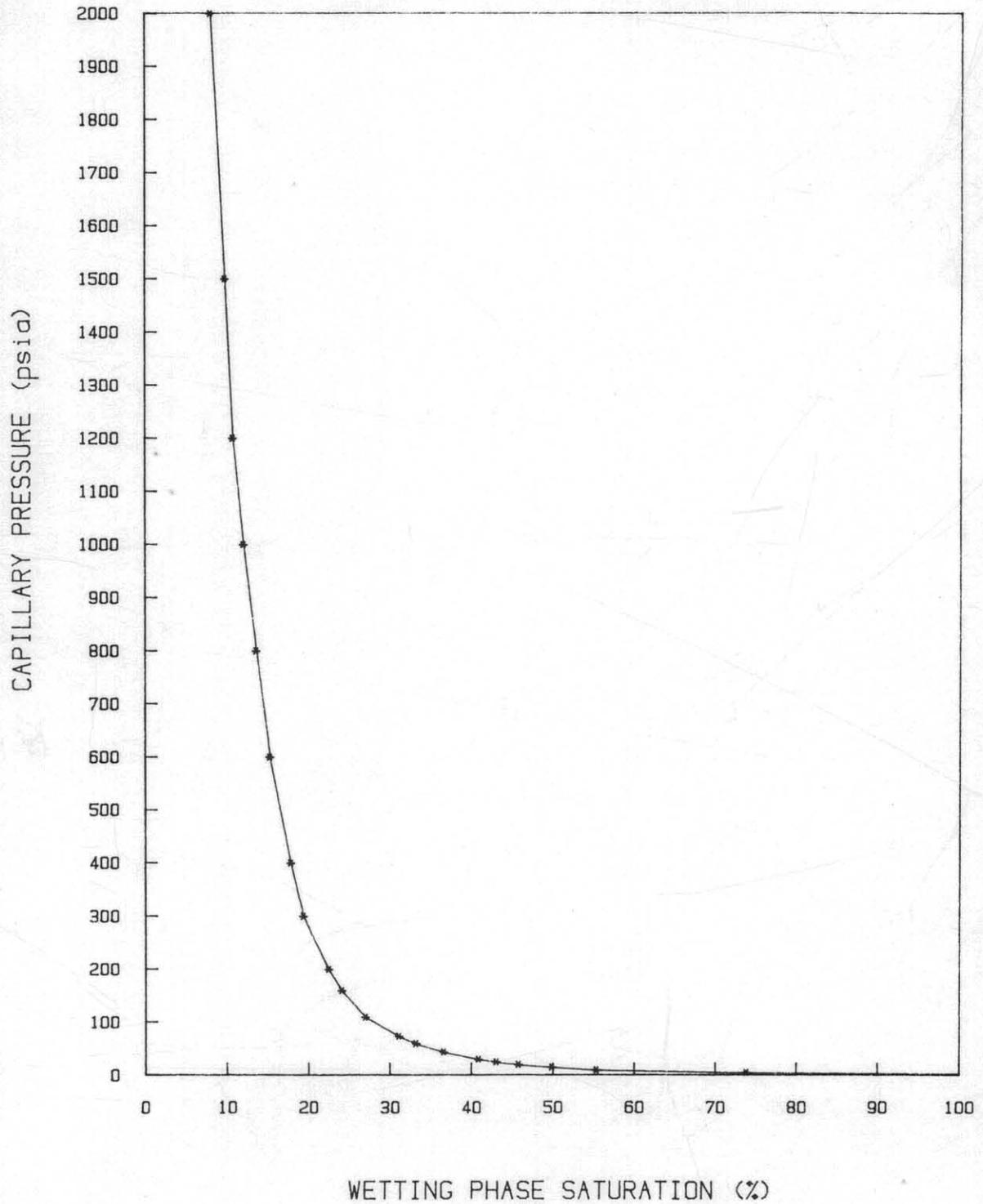
No.	Pressure psia	* Saturation %	Radius microns	J Function -
1	1.00	100.00		
2	2.50	100.00		
3	5.00	73.79	21.321	.15
4	10.00	55.33	10.660	.30
5	15.00	49.84	7.107	.45
6	20.00	45.69	5.330	.60
7	25.00	43.00	4.264	.75
8	30.00	40.85	3.553	.90
9	44.00	36.60	2.423	1.32
10	60.00	33.15	1.777	1.80
11	74.00	31.05	1.441	2.22
12	110.00	26.96	.969	3.29
13	160.00	24.06	.666	4.79
14	200.00	22.44	.533	5.99
15	300.00	19.32	.355	8.98
16	400.00	17.76	.267	11.98
17	600.00	15.23	.178	17.97
18	800.00	13.56	.133	23.95
19	1000.00	12.00	.107	29.94
20	1200.00	10.71	.089	35.93
21	1500.00	9.74	.071	44.91
22	2000.00	8.02	.053	59.88

* Wetting Phase Saturation

CAPILLARY PRESSURE vs SATURATION

WELL NAME : PELICAN FIELD WELL #1

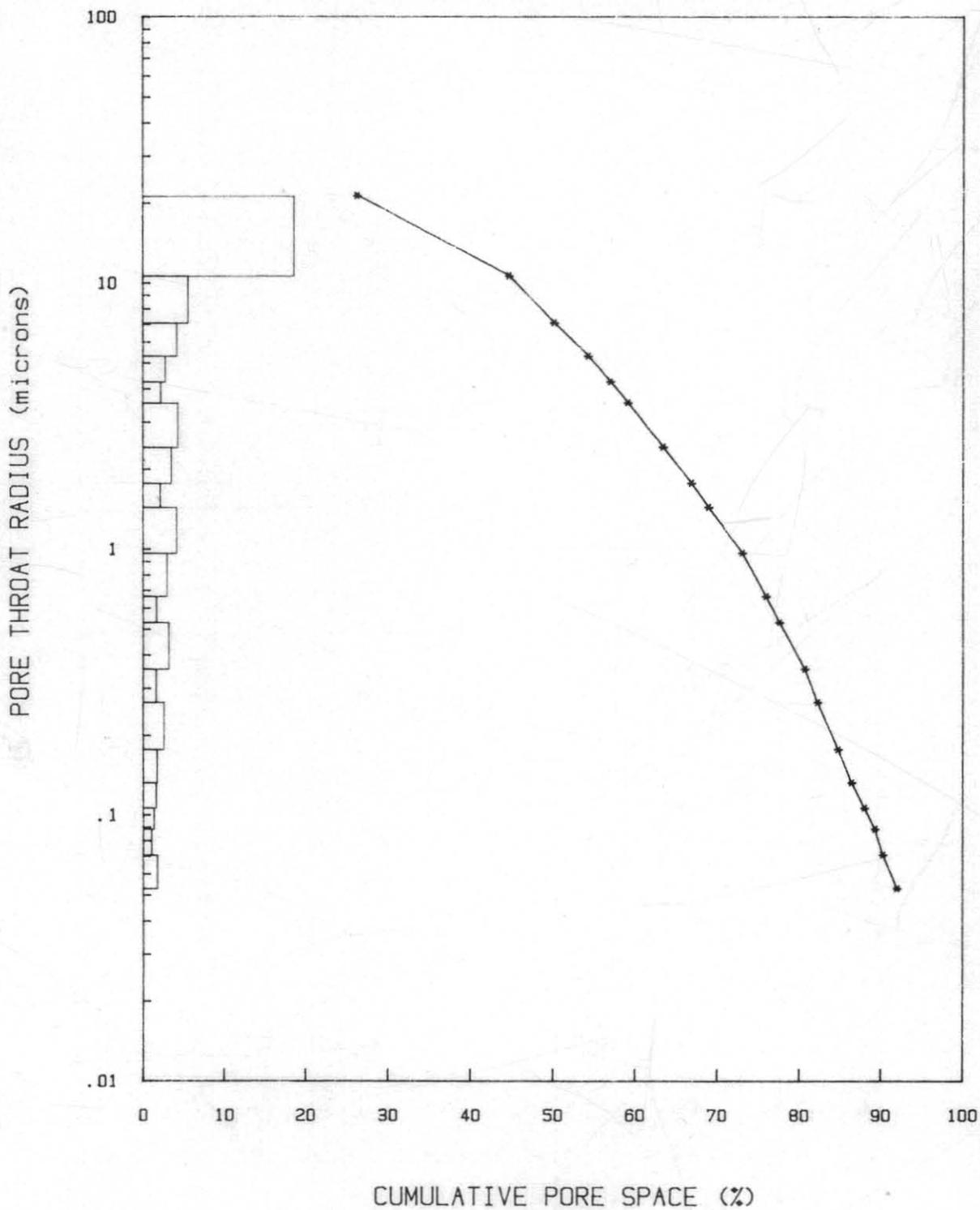
SAMPLE # A-449 DEPTH : 10068



PORE THROAT SIZE DISTRIBUTION

WELL NAME : PELICAN FIELD WELL #1

SAMPLE # A-449 DEPTH : 10068



5 cm

Rock Fluid Compatibility Procedure

Samples were saturated with 21,200 NaCl brine and then displaced with test fluid. Tests were conducted at constant flow rate. Approximately forty pore volumes were injected into the samples. Flow was then reversed for another forty pore volumes. Sample #58 (9442 ft.) was injected with 7 1/2% HCl with 0.2% A-200 (Dowell-Schlumberger) inhibitor. Porosity and permeability for this sample was measured before and after testing. These results follow:

<u>Sample #58</u>	<u>Before Acid Flood</u>	<u>After Acid Flood</u>
Porosity (%)	19.4	19.6
Grain Density (g/cc)	2.66	2.64
Gas Permeability (md)	3.4	2.6

ROCK-FLUID COMPATIBILITY TEST
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COMPANY : AMOCO PRODUCTION
 WELL NAME : PELICAN FIELD WELL #1
 FILE NAME : 390/1/RFC
 SAMPLE No. : A-450
 DEPTH : 9432

Porosity = 20.11 % Permeability = 6.17 md
 Pore Vol. = 3.03 cc Grain Dens. = 2.66 g/cc

DIRECT FLOW

Pore Volumes (-)

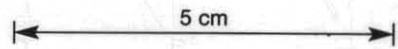
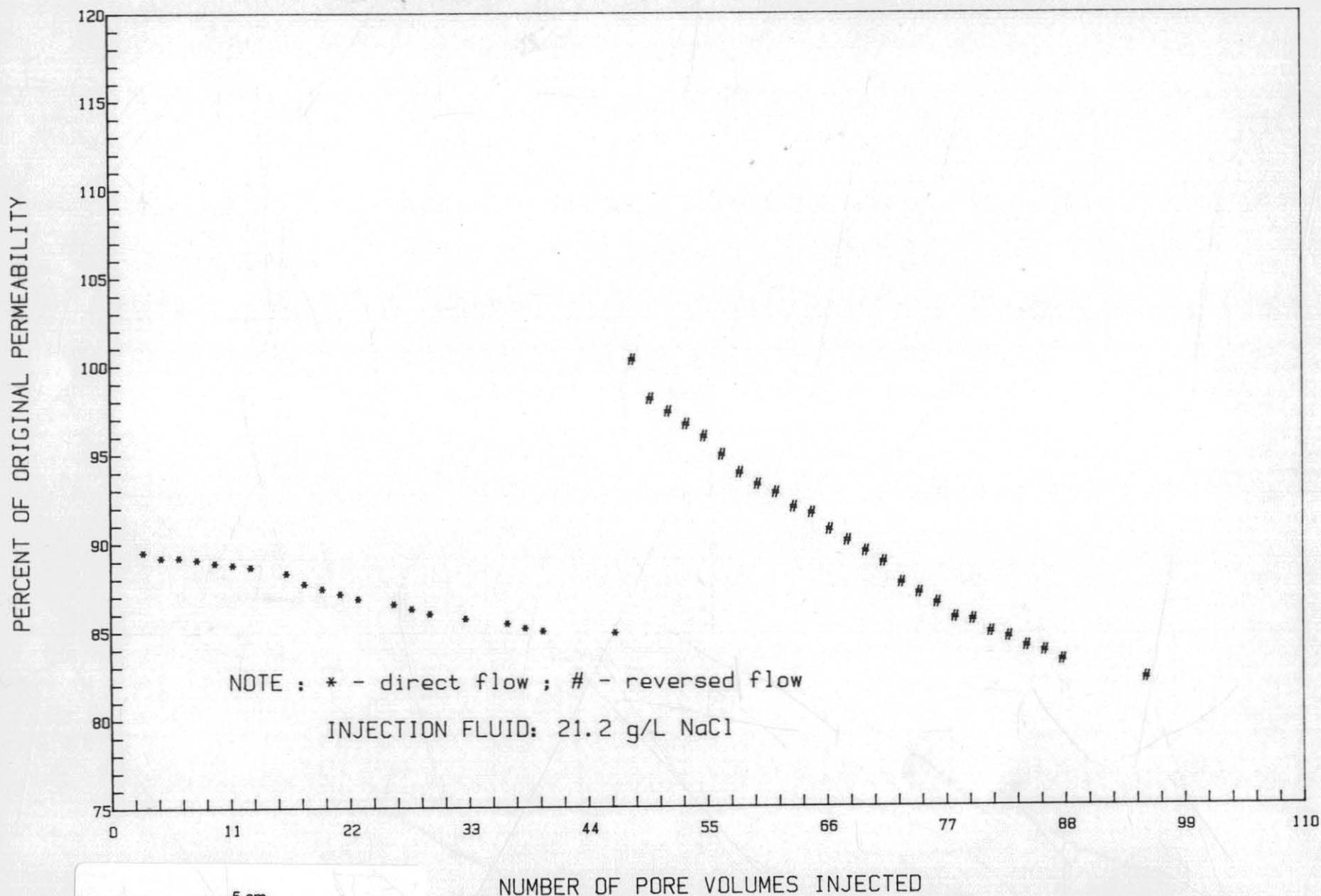
Permeability (md)

3.00	.18
6.30	.18
9.60	.18
12.90	.18
17.85	.18
21.16	.18
26.11	.17
29.41	.17
36.56	.17
39.86	.17

REVERSED FLOW

48.11	.20
53.06	.20
58.01	.19
62.96	.19
67.91	.18
72.86	.18
77.81	.17
82.76	.17
87.71	.17

NOTE: Injection fluid 21.2 g/L NaCl



ROCK-FLUID COMPATIBILITY TEST
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COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/2/RFC

SAMPLE No. : A-451

DEPTH : 9440

Porosity = 19.63 %
Pore Vol. = 2.20 cc

Permeability = 6.46 md
Grain Dens. = 2.66 g/cc

DIRECT FLOW

Pore Volumes (-)

Permeability (md)

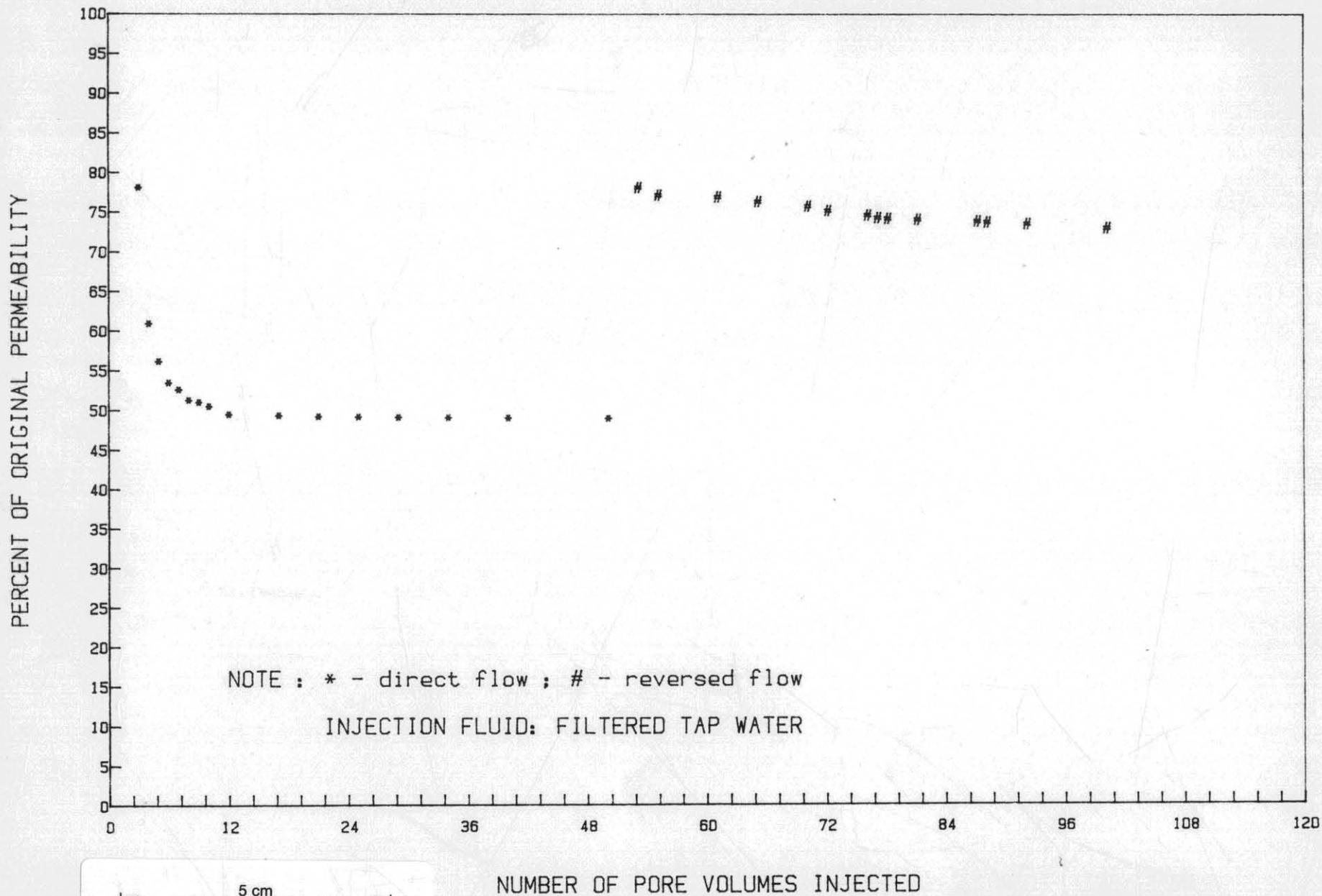
3.01	.42
5.01	.30
7.02	.28
9.02	.28
12.03	.27
21.05	.27
29.07	.27
40.09	.27

REVERSED FLOW

53.12	.42
61.14	.42
70.16	.41
76.17	.40
78.18	.40
87.20	.40
92.21	.40

NOTE: Injection fluid FILTERED TAP WATER

ROCK FLUID COMPATIBILITY TEST ; SAMPLE DEPTH : 9440 188110



5 cm

ROCK-FLUID COMPATIBILITY TEST
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COMPANY : AMOCO PRODUCTION

WELL NAME : PELICAN FIELD WELL #1

FILE NAME : 390/3/RFC

SAMPLE No. : A-664

DEPTH : 9442

Porosity = 19.39 %
 Pore Vol. = 2.88 cc

Permeability = 3.37 md
 Grain Dens. = 2.67 g/cc

DIRECT FLOW

Pore Volumes (-)

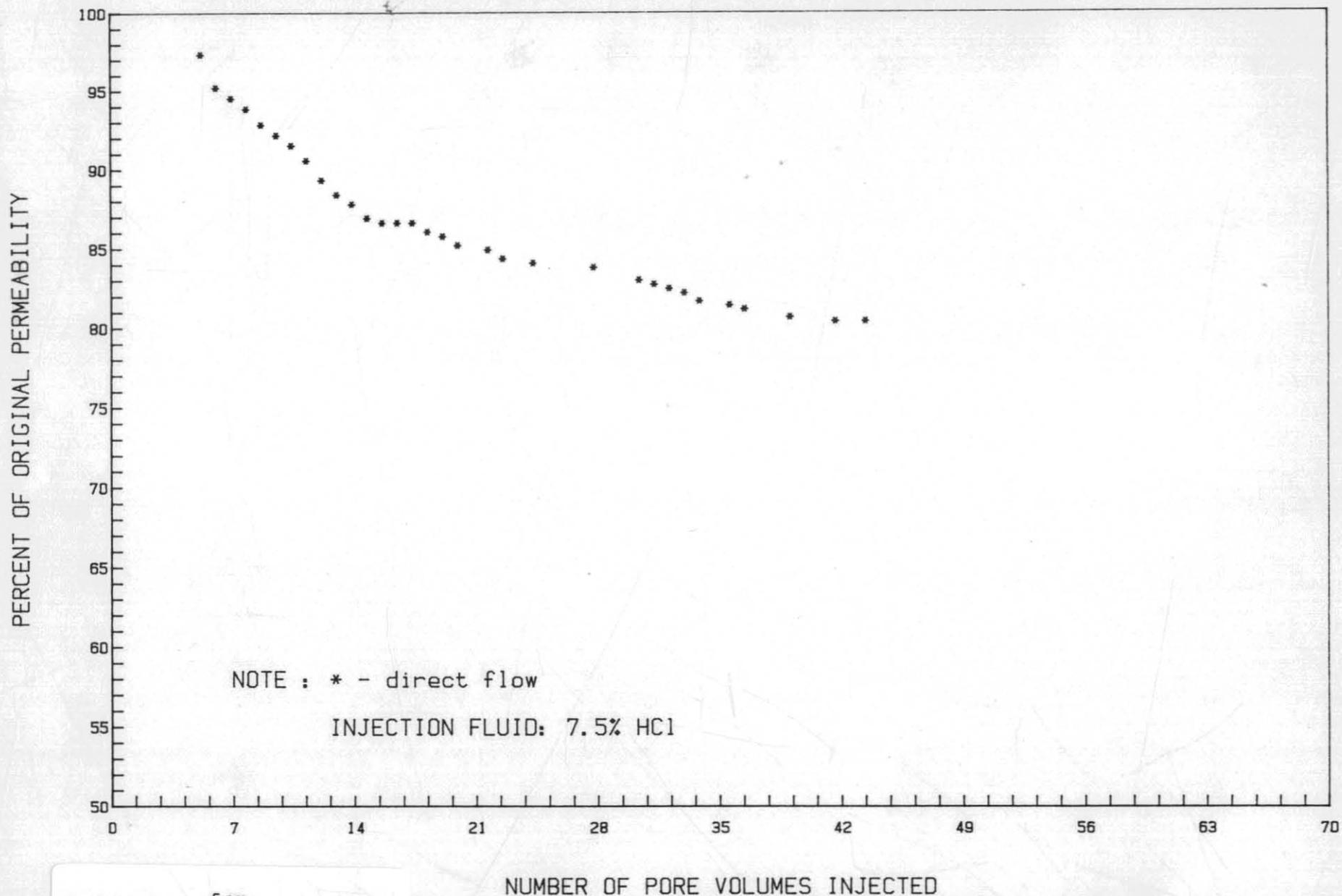
Permeability (md)

5.21	.30
6.94	.29
8.68	.28
10.41	.28
12.15	.27
13.88	.27
15.62	.26
17.36	.26
19.09	.26
21.69	.26
24.30	.26
30.37	.25
32.11	.25
33.84	.25
36.45	.25
41.65	.25

NOTE: Injection fluid 7.5% HCl

ROCK FLUID COMPATIBILITY TEST ; SAMPLE DEPTH : 9442

188112



5 cm