



CORE LABORATORIES AUSTRALIA PTY LTD

447-449 Belmont Ave, Kewdale, Perth WA 6105
Tel : (61 8) 9353 3944 Fax : (61 8) 9353 1369
Email : corelab.australia@corelab.com

A Special Core Analyses Study Of Selected Samples From Well : Casino-4

Australia

Prepared for
SANTOS LIMITED

December 2005

File: PRP-05052A

Rock Properties Group
Core Laboratories Australia Pty. Ltd.
Perth
Australia

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CORE LABORATORIES AUSTRALIA PTY LTD

15th December 2005

SANTOS LIMITED

Santos House
91 King William Street
ADELAIDE, SA 5000

Attention : Ray Spicer

Subject : Special Core Analysis
Well : Casino-4
File : PRP-05052A

Dear Ray,

Presented herein is the final report on the Special Core Analyses conducted on the selected core plug samples from the Casino-4 well.

Thank you for the opportunity to have been of service to Santos Limited. If you have any questions regarding these results or if we can be of any further assistance please do not hesitate to contact us.

Yours sincerely,

CORE LABORATORIES AUSTRALIA PTY LTD

Ajit Singh
Supervisor - Rock Properties Group Perth

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SECTION 1

SUMMARY & INTRODUCTION

SUMMARY OF TESTS AND RESULTS

Electrical Properties

Measurements of formation resistivity factor (FRF) and resistivity index (RI), at net overburden pressure (NOBP), were made on six selected samples. These samples span the porosity and permeability (Kair) range of 18.1 – 23.6% and 2.56 – 1080 md respectively.

Results from the formation resistivity factor measurements are presented in both tabular and graphical formats within SECTION 2 of this report. Cementation exponent (“m”) values range from 1.77 to 1.95 with an average value of 1.88.

Resistivity measurements taken of the partially saturated samples yielded values of resistivity index ranging from 1.38 to 27.88. Saturation exponent (“n”) values range from 1.60 to 2.13. The composite resistivity index plot yields an average “n” of 1.90. Resistivity index results are presented both in tabular and graphical formats within pages 2-3 to 2-9.

Cation exchange capacity (CEC) analysis was conducted on selected sample trim-ends. With the wet chemistry method, the CEC (and therefore Qv) is derived by crushing the samples and exposing all clay surfaces to ion exchange. In turn, these Qv values are generally applied to Waxman-Smiths-Thomas (or other shaly sand) equations, assuming a continuous and homogeneous distribution of conductive clays dispersed throughout the sample matrix. The derived Qv values ranged from 0.135 to 1.005 meq/cm³. CEC results are tabulated in page 2-10.

Nuclear Magnetic Resonance (NMR)

The summary table of NMR data on page 3-1 includes porosity data measured by helium injection on dry samples and the NMR T₂ porosity measured on fully saturated samples (100% Sw). Both data sets show a near perfect match. The NMR porosity is based on saturated samples, and this reflects total porosity at ambient.

T₂ (porosity) distribution curves are presented within SECTION 3.

Centrifuge Air-Brine Capillary Pressure

At the maximum air-brine capillary pressure of 350 psi and ambient conditions, the selected samples yielded immobile water saturations (Swi) values between 11.8% and 46.5% pore volume. Graphical summary of air permeability versus Swi indicate the expected relationship of increasing Swi with decreasing permeability.

Mercury Injection Capillary Pressure

Results from the high pressure mercury injection capillary pressure (drainage) tests indicate mercury saturations ranging from 89.7% to 97.9% pore volume (PV), representing an equivalent S_{wi} range of 10.3% PV to 2.1% PV. Note that clay fabric can be altered by the sheer weight of mercury causing unrepresentative enlargements of pore throats, leading to increased mercury injection at a given capillary pressure, and therefore unrepresentatively low values of equivalent S_w .

From the mercury injection analysis results, pore throat size distribution data is derived. Mercury injection capillary pressure data is presented in both tabular and graphical formats within SECTION 4.

Reservoir Performance

Two types of gas displacement tests were utilised in this study :

- The centrifuge water-displacing-decane relative permeability tests yielded residual gas saturation and gas recoveries ranging from 17.4 to 23,6 % pore volume. Decane was used as a substitute for gas to avoid potential compression and diffusion effects.
- The centrifuge water-displacing-gas tests yielded more optimistic values of residual gas saturation ranging from 8.5 to 13.1 % pore volume representing gas recoveries of 57.6 to 77.0% pore volume.

Results from the centrifuge relative permeability tests are tabulated within SECTION 6.

INTRODUCTION

This report contains the final results of the Special Core Analysis (SCAL) study performed on selected core plug samples from the well Casino-4 by Core Laboratories Australia Pty. Ltd. (CoreLab). This study was conducted on behalf of Santos Limited (Santos).

The final approval and sample selection was received from Ray Spicer in an e-mail message on the 26th July 2005.

The following analyses were selected :

- Porosity and permeability at multiple net overburden pressures
- Formation resistivity factor (FRF) analysis
- Formation resistivity index (RI) analysis
- Cation exchange capacity (CEC) on off-cuts
- Nuclear magnetic resonance (NMR)
- Air-brine drainage capillary pressure by centrifuge
- High pressure (0-50,000 psia) mercury injection capillary pressure
- Water-displacing-decane (end-point) relative permeability by centrifuge
- Water-displacing-gas (end-point) relative permeability by centrifuge

Previously drilled core plugs, used during routine core analysis (RCA), were selected for this SCAL study. A full list of samples which were selected with the corresponding base data (permeability, porosity and grain density values measured at ambient conditions) are listed on page 1-4.

Preliminary results from the completed analyses were reported to Santos as soon as available. Reporting of all preliminary data was completed on 21st November 2005.

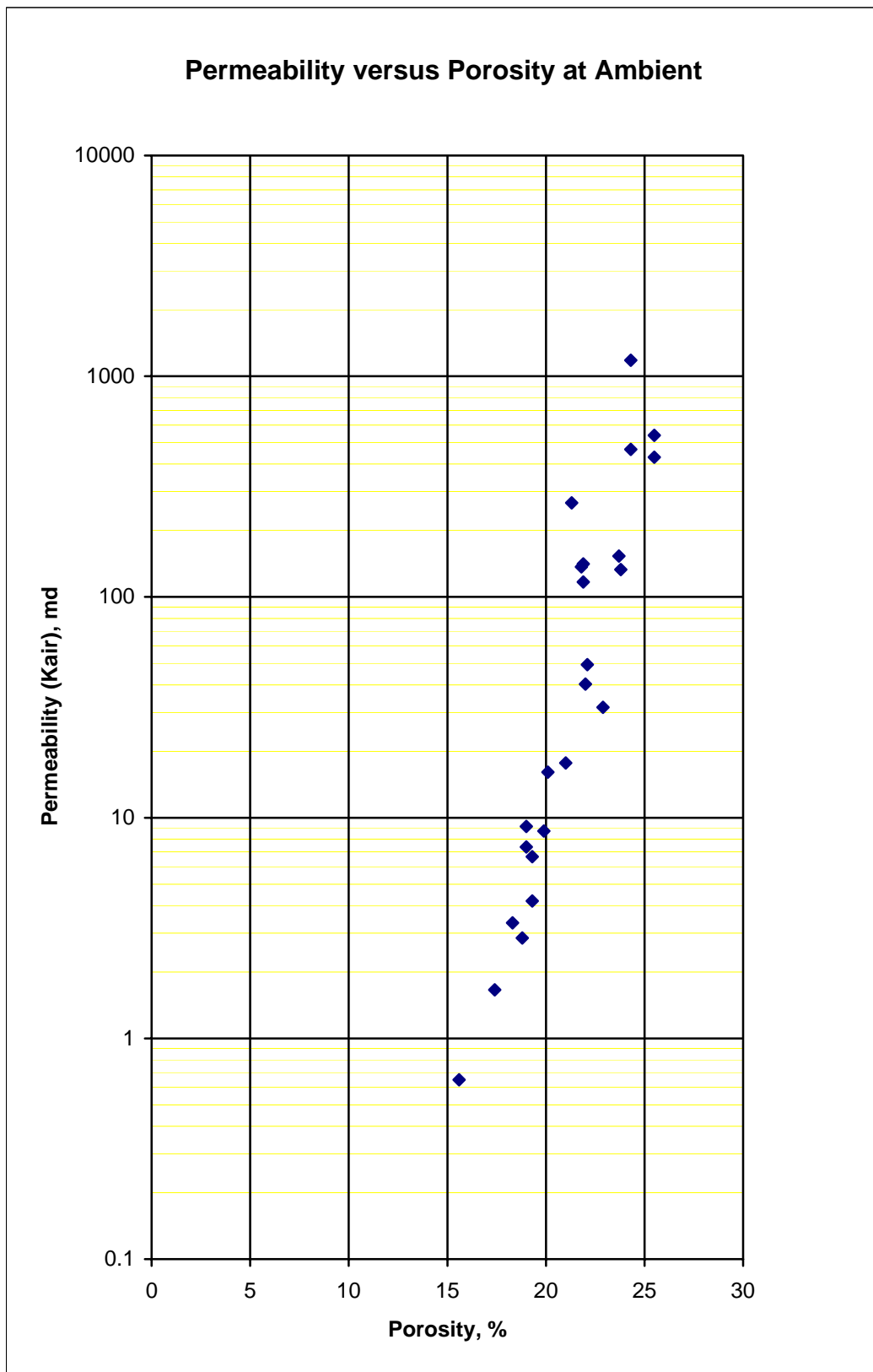
A simulated brine of 15,000 ppm salinity and net overburden pressure (NOBP) of 1900 psi was used during this SCAL study.

COMPANY : SANTOS LIMITED
WELL : CASINO-4

SCAL sample selection and base data

Sample ID	Depth (m)	At Ambient			Grain Density (g/cc)
		Kinf (md)	Kair (md)	Porosity (%)	
11	1761.20	399	430	25.5	2.657
17	1761.80	103	117	21.9	2.688
18	1762.10	1090	1180	24.3	2.687
37	1768.97	2.58	3.34	18.3	2.673
39	1769.63	13.8	16.1	20.1	2.663
40	1769.91	121	137	21.8	2.732
41	1770.15	427	466	24.3	2.701
43	1770.98	1.18	1.66	17.4	2.681
45	1771.60	7.47	9.12	19.0	2.669
9	1773.24	218	267	21.3	2.690
51	1774.20	2.16	2.85	18.8	2.690
60	1776.92	5.40	6.65	19.3	2.662
63	1777.83	44.2	49.3	22.1	2.680
64	1778.10	6.03	7.36	19.0	2.678
65	1778.45	136	153	23.7	2.662
75	1781.40	3.29	4.19	19.3	2.698
78	1782.30	15.3	17.7	21.0	2.675
1	1782.53	35.8	40.3	22.0	2.671
79	1782.90	121	133	23.8	2.668
81	1783.50	504	540	25.5	2.665
85	1784.97	118	141	21.9	2.663
86	1785.30	0.522	0.650	15.6	2.833
98	1789.40	7.15	8.71	19.9	2.680
100	1790.40	27.7	31.6	22.9	2.688

ANALYSIS							
Kphi at NOBP	FRF and RI NOBP	CEC	NMR	Cent. Air-Brine Pc	Cent. Krel		Mercury Injection
					Water-Dec	Water-Gas	
			√		√		√
		√	√	√			√
√	√	√	√	√			√
			√		√		√
√	√	√	√	√			√
			√		√		√
		√	√	√			√
			√		√		√
		√	√	√			√
		√	√	√			√
√	√	√	√	√			√
√	√	√	√	√		√	√
			√		√		√
		√	√	√			√
√	√	√	√	√			√
		√	√	√			√
√	√	√	√	√			√
		√	√	√			√
		√	√	√			√
		√	√	√			√
			√		√		√
		√	√	√			√



Porosity and Permeability at Multiple Net Overburden Pressures (NOBP)

SAMPLE NO.	DEPTH (m)	GRAIN DENSITY (g/cc)	At 800 psi NOBP			At 1000 psi NOBP			At 1500 psi NOBP			At 1900 psi NOBP		
			Permeability		Porosity (%)	Permeability		Porosity (%)	Permeability		Porosity (%)	Permeability		Porosity (%)
			Kinf (md)	Kair (md)		Kinf (md)	Kair (md)		Kinf (md)	Kair (md)		Kinf (md)	Kair (md)	
18	1762.10	2.687	1090	1180	24.3	1040	1140	24.0	1010	1100	23.8	986	1080	23.6
39	1769.63	2.663	13.8	16.1	20.1	13.4	15.7	19.9	13.0	15.1	19.7	12.7	14.8	19.6
51	1774.20	2.690	2.16	2.85	18.8	2.07	2.72	18.4	2.00	2.62	18.2	1.96	2.56	18.1
60	1776.92	2.662	5.40	6.65	19.3	5.40	6.64	19.2	5.26	6.45	19.0	5.15	6.33	18.9
65	1778.45	2.662	136	153	23.7	133	148	23.4	129	144	23.2	126	141	23.1
78	1782.30	2.675	15.3	17.7	21.0	15.1	17.5	20.9	14.6	17.0	20.7	14.4	16.7	20.6

SECTION 2

ELECTRICAL PROPERTIES

Summary of results from electrical properties measurements at NOBP

Brine Concentration : 15,000 ppm

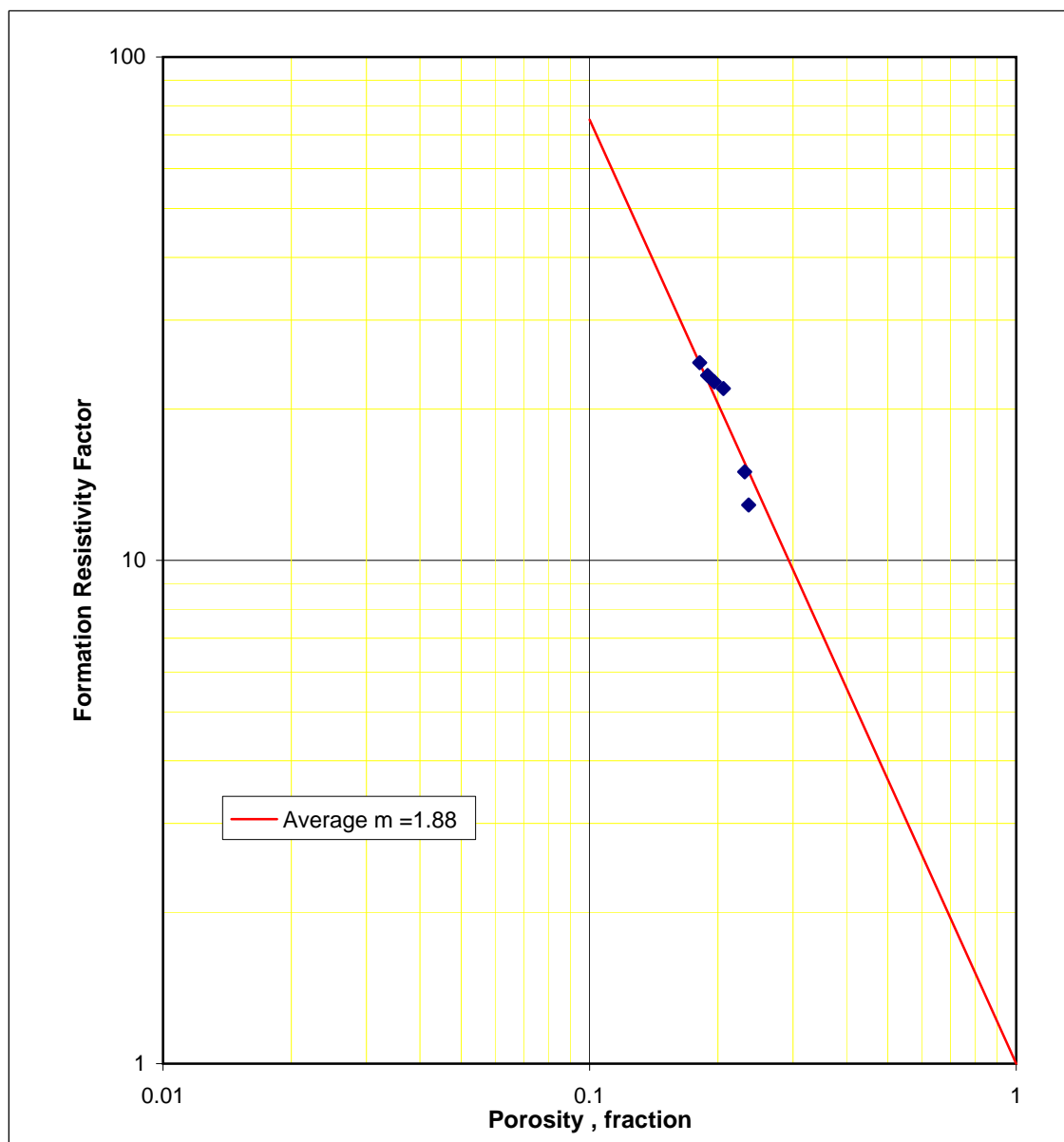
Rw : 0.389 ohm-m at 25°C

Sample No.	Depth (m)	Grain Density (g/cc)	CEC (meq/100 g)	At 1900 psi net overburden pressure (NOBP)					
				Kinf (md)	Kair (md)	Porosity (%)	Formation Factor FRF	Cementation Exponent m	Saturation Exponent n
18	1762.10	2.687	1.62	986	1080	23.6	12.88	1.77	1.89
39	1769.63	2.663	3.05	12.7	14.8	19.6	22.63	1.91	1.86
51	1774.20	2.690	3.48	1.96	2.56	18.1	24.69	1.88	1.90
60	1776.92	2.662	2.59	5.15	6.33	18.9	23.31	1.89	1.90
65	1778.45	2.662	3.62	126	141	23.1	15.00	1.85	1.95
78	1782.30	2.675	3.79	14.4	16.7	20.6	21.94	1.95	1.87
Average								1.88	1.90

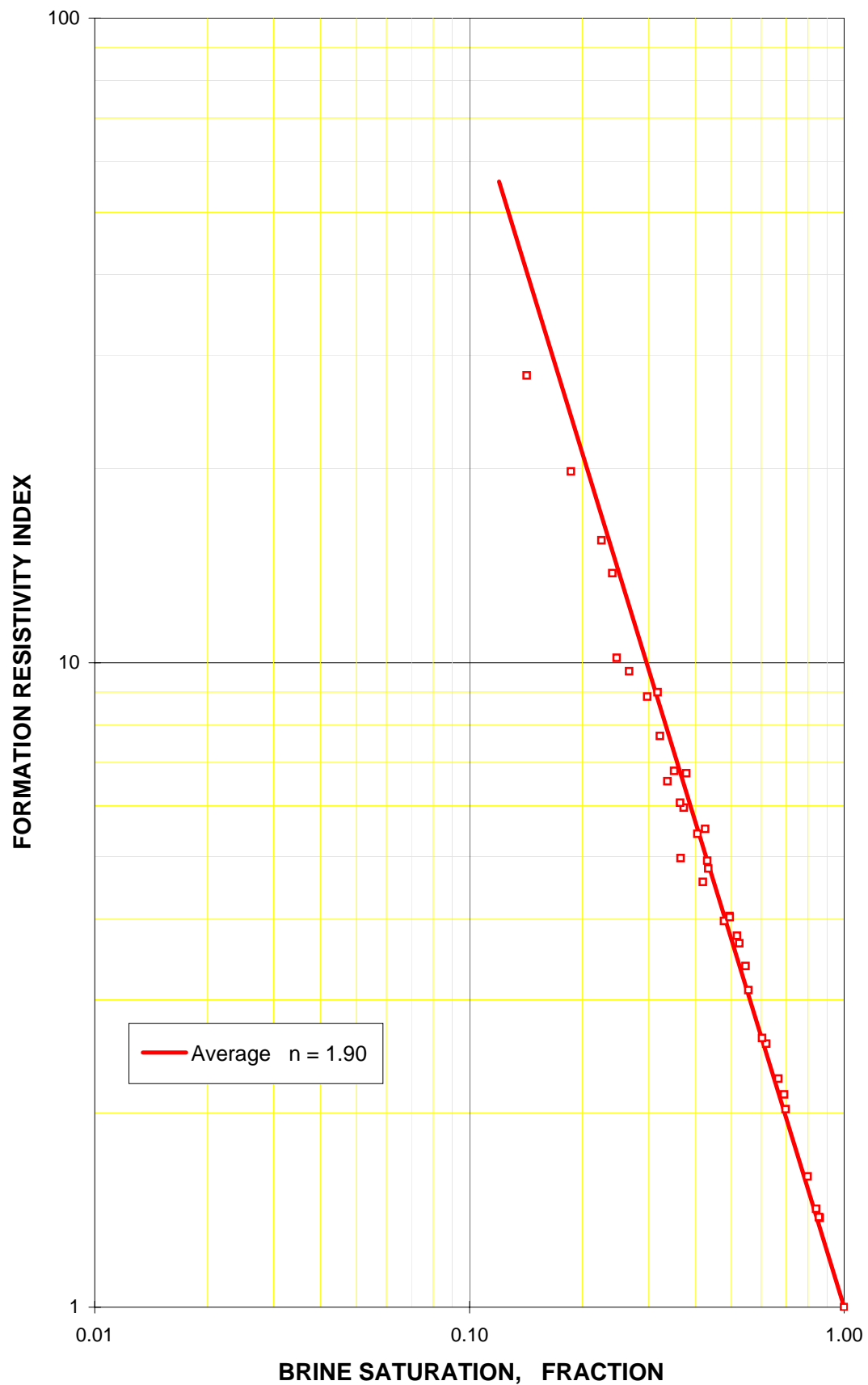
Formation Resistivity Factor (FRF) at 1900 psi NOBP

Sample no.	Depth (m)	K air at NOBP (md)	Porosity at NOBP (%)	FRF at NOBP	Cementation exponent "m"
18	1762.10	1080	23.6	12.88	1.77
39	1769.63	14.8	19.6	22.63	1.91
51	1774.20	2.56	18.1	24.69	1.88
60	1776.92	6.33	18.9	23.31	1.89
65	1778.45	141	23.1	15.00	1.85
78	1782.30	16.7	20.6	21.94	1.95

Average Cementation Exponent "m" (forced regression, a = 1.0) : **1.88**



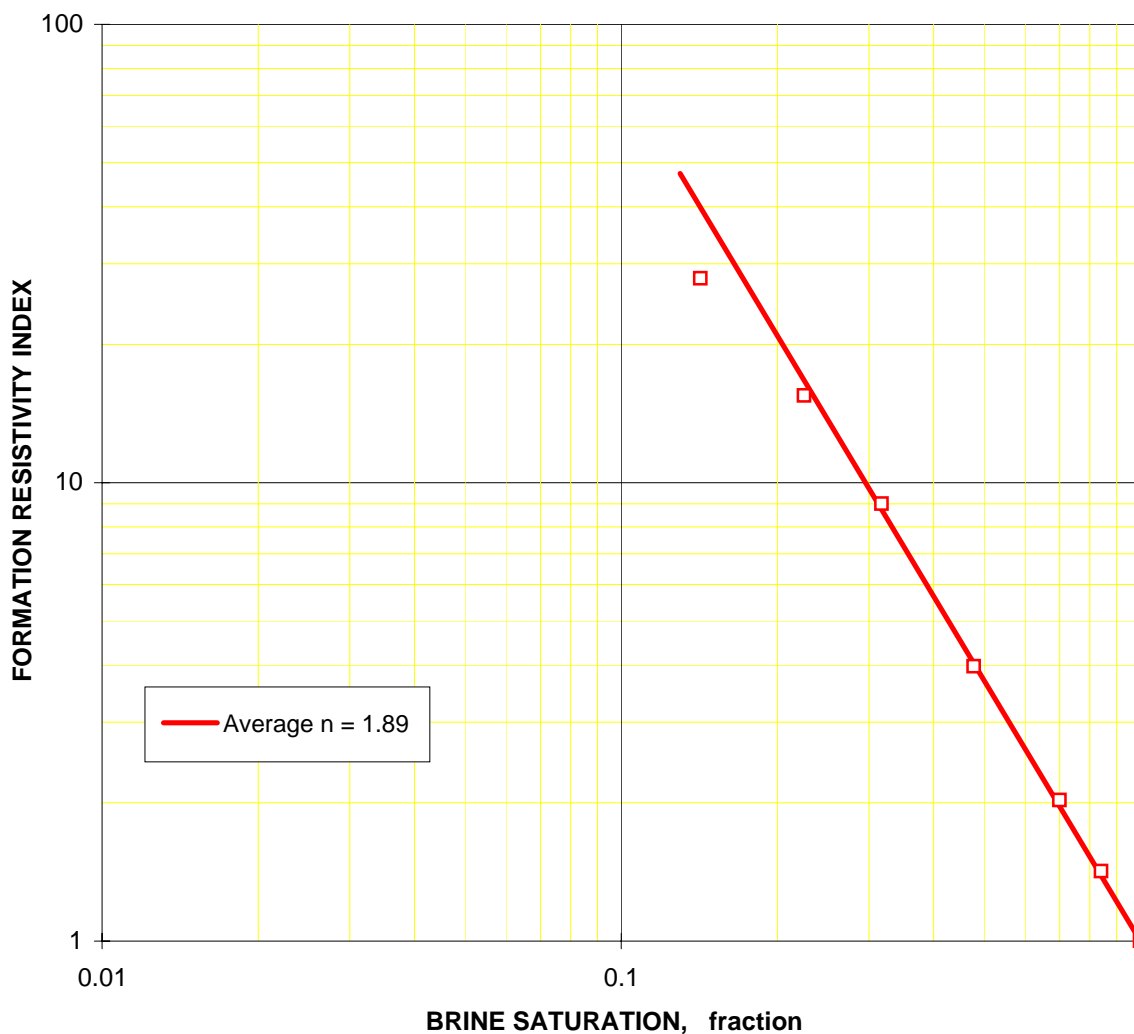
Formation Resistivity Index At 1900 psi NOBP



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
18	1762.10	1080	2.687	23.6	100.0	1.00	-
					84.2	1.42	2.04
					69.8	2.03	1.97
					47.9	3.97	1.87
					31.8	8.99	1.92
					22.5	15.48	1.84
					14.2	27.88	1.71
FRF at NOBP						12.88	
Qv* (meq/cm3)						0.135	
Rw at 25°C, ohm-m						0.389	
Average Exponent							1.89

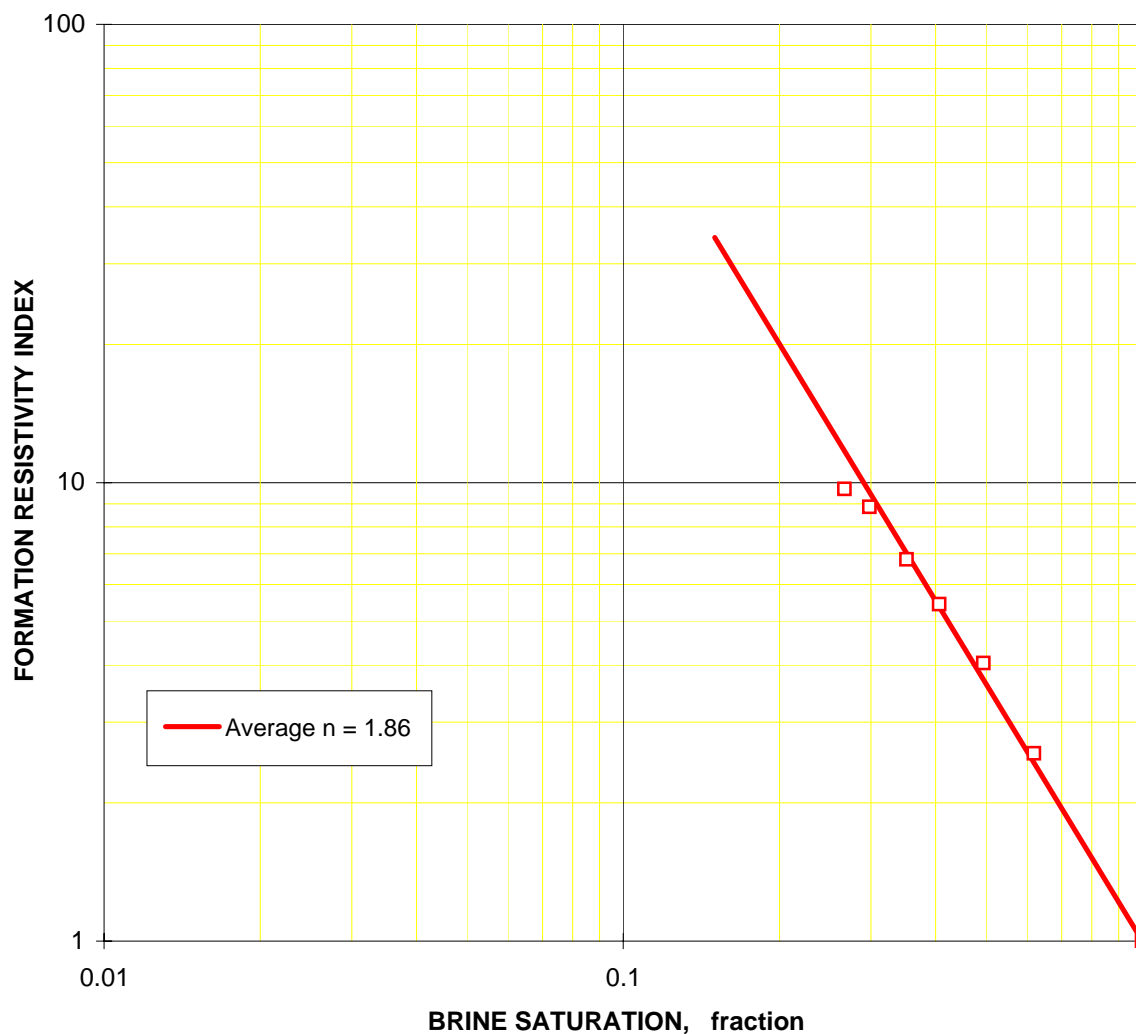
* Qv from wet chemistry CEC.



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
39	1769.63	14.8	2.663	19.6	100.0	1.00	-
					62.0	2.56	1.97
					49.5	4.04	1.98
					40.6	5.42	1.88
					35.2	6.79	1.83
					29.8	8.86	1.80
					26.7	9.69	1.72
FRF at NOBP			22.63				
Qv* (meq/cm3)			0.322				
Rw at 25°C, ohm-m			0.389				
Average Exponent						1.86	

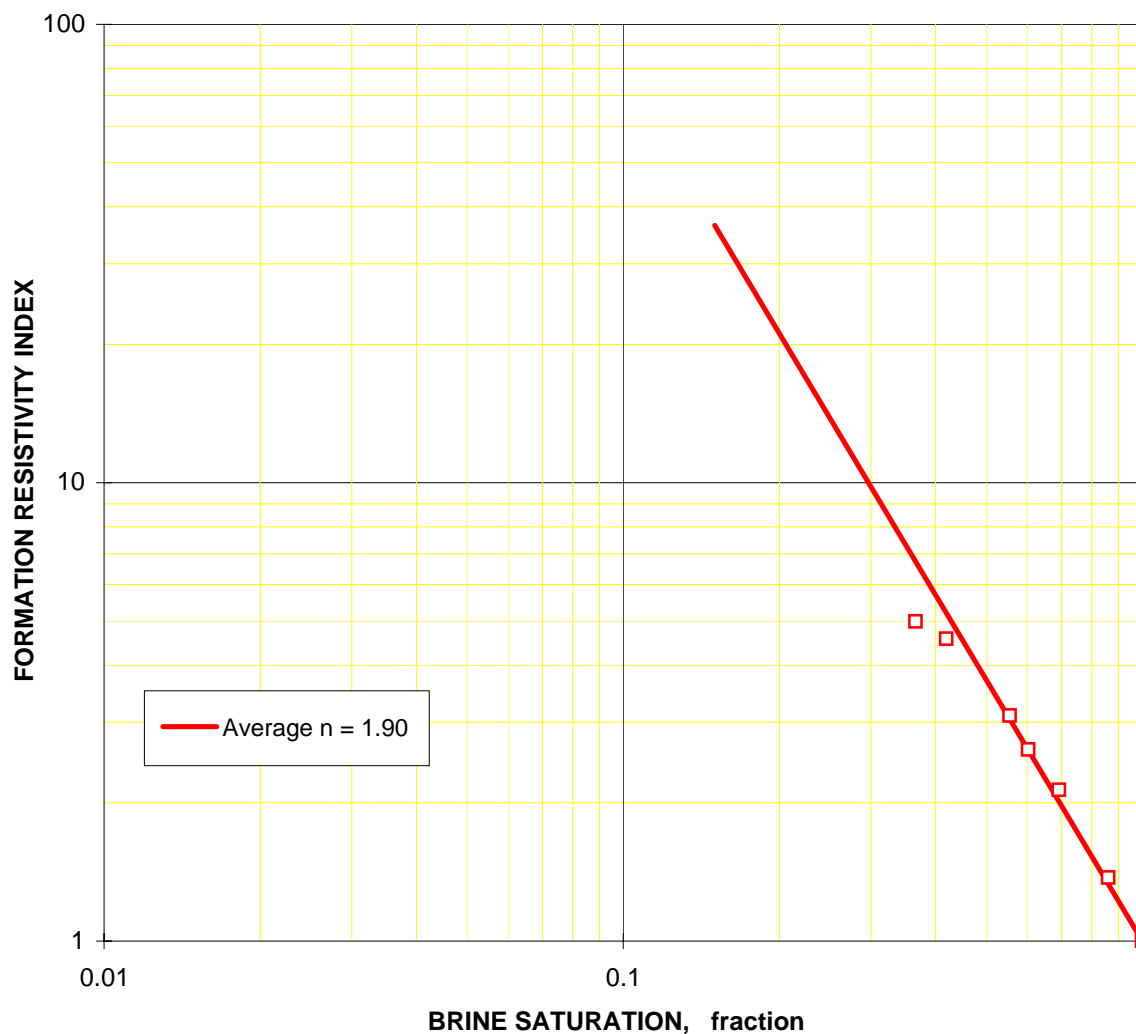
* Qv from wet chemistry CEC.



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
51	1774.20	2.56	2.690	18.1	100.0	1.00	-
					86.1	1.38	2.13
					69.1	2.14	2.06
					60.4	2.62	1.91
					55.5	3.10	1.93
					41.9	4.57	1.75
					36.6	4.97	1.60
FRF at NOBP						24.69	
Qv* (meq/cm3)						0.404	
Rw at 25°C, ohm-m						0.389	
Average Exponent						1.90	

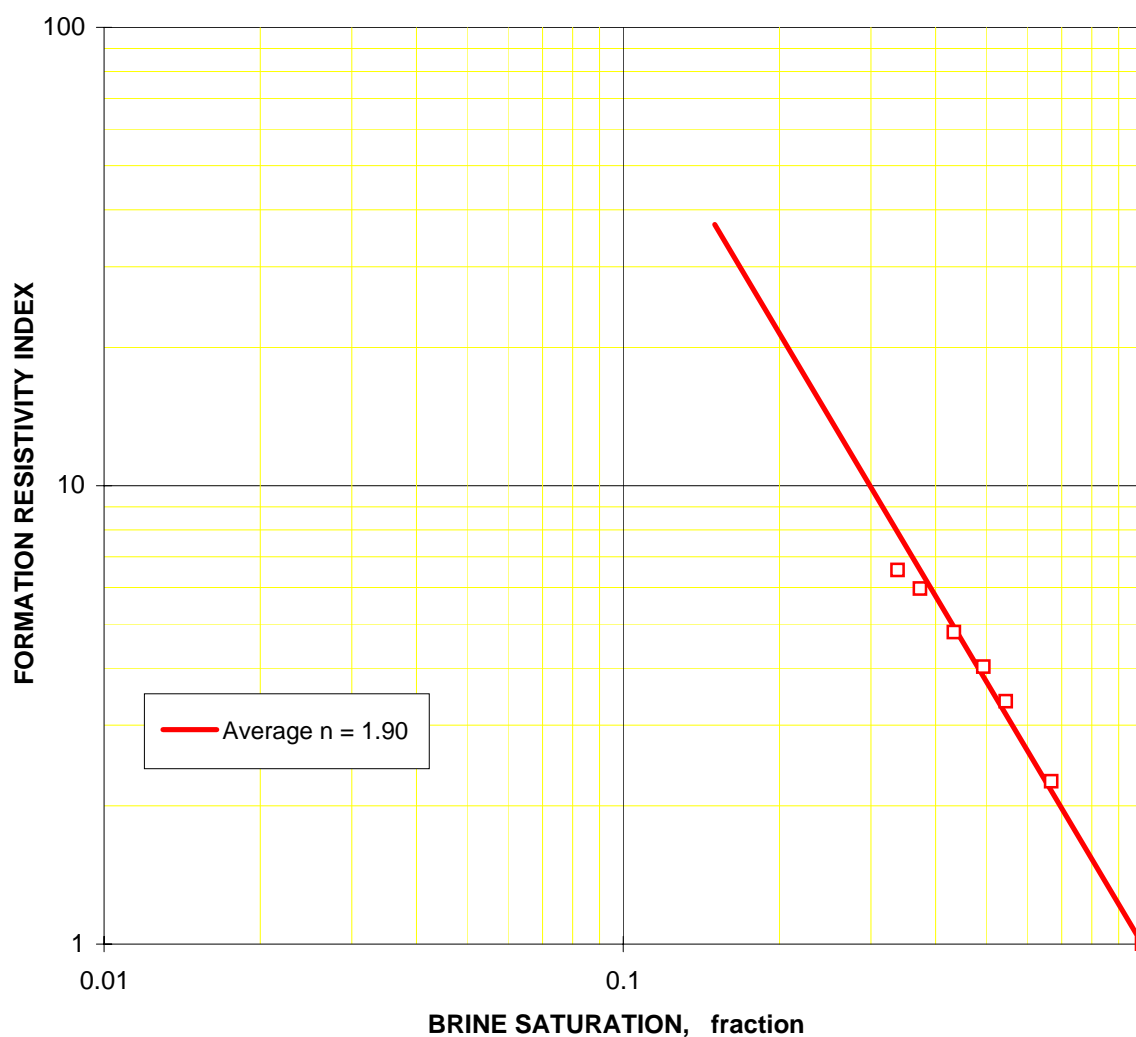
* Qv from wet chemistry CEC.



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
60	1776.92	6.33	2.662	18.9	100.0	1.00	-
					66.7	2.26	2.02
					54.6	3.38	2.01
					49.5	4.03	1.98
					43.4	4.79	1.88
					37.3	5.95	1.81
					33.8	6.54	1.73
FRF at NOBP						23.31	
Qv* (meq/cm3)						0.289	
Rw at 25°C, ohm-m						0.389	
Average Exponent						1.90	

* Qv from wet chemistry CEC.



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
65	1778.45	141	2.662	23.1	100.0	1.00	-
					85.7	1.38	2.09
					51.8	3.77	2.02
					42.6	5.52	2.00
					37.9	6.74	1.97
					24.1	13.76	1.84
					18.7	19.79	1.78
FRF at NOBP						15.00	
Qv* (meq/cm3)						0.310	
Rw at 25°C, ohm-m						0.389	
Average Exponent						1.95	

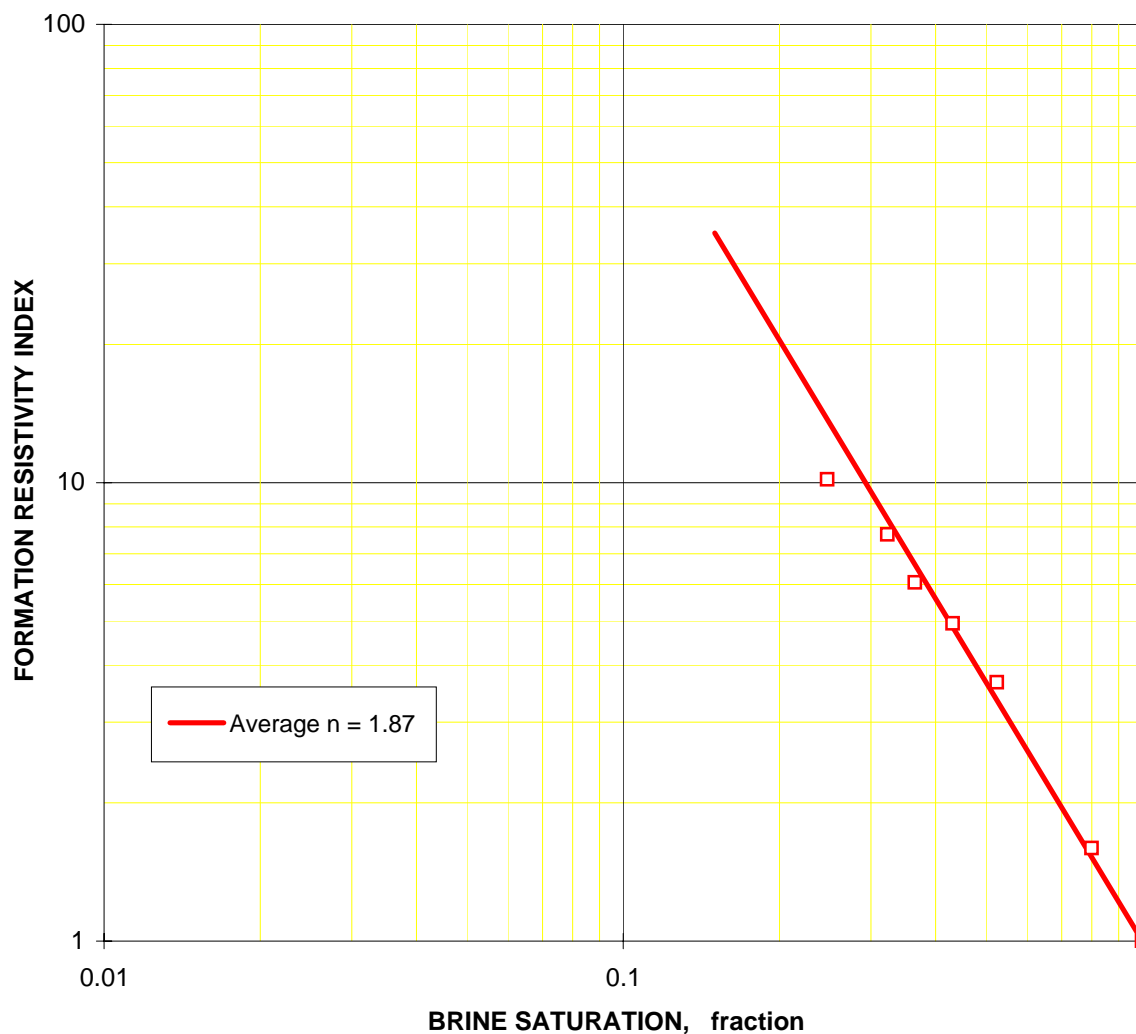
* Qv from wet chemistry CEC.



Formation resistivity index at 1900 psi NOBP

Sample No.	Depth (metres)	Kair at NOBP (md)	Grain Density (g/cc)	Determined at 1900 psi NOBP			
				Porosity (%)	Brine Saturation (%pv)	Resistivity Index	Sat. Exp. n
78	1782.30	16.7	2.675	20.6	100.0	1.00	-
					79.9	1.60	2.08
					52.5	3.67	2.02
					43.1	4.93	1.90
					36.5	6.06	1.79
					32.3	7.70	1.80
					24.7	10.17	1.66
FRF at NOBP						21.94	
Qv* (meq/cm3)						0.382	
Rw at 25°C, ohm-m						0.389	
Average Exponent						1.87	

* Qv from wet chemistry CEC.



Cation Exchange Capacity by Wet Chemistry Method

Sample no.	Depth (m)	At Ambient		Grain density (g/cc)	CEC (meq/100 g)	Qv * from CEC (meq/cm ³)
		Kair (md)	Porosity (%)			
17	1761.80	117	21.9	2.688	2.23	0.214
18	1762.10	1180	24.3	2.687	1.62	0.135
39	1769.63	16.1	20.1	2.663	3.05	0.322
41	1770.15	466	24.3	2.701	2.63	0.222
45	1771.60	9.12	19.0	2.669	4.02	0.458
9	1773.24	267	21.3	2.690	1.95	0.194
51	1774.20	2.85	18.8	2.690	3.48	0.404
60	1776.92	6.65	19.3	2.662	2.59	0.289
64	1778.10	7.36	19.0	2.678	2.99	0.341
65	1778.45	153	23.7	2.662	3.62	0.310
75	1781.40	4.19	19.3	2.698	2.73	0.308
78	1782.30	17.7	21.0	2.675	3.79	0.382
1	1782.53	40.3	22.0	2.671	2.37	0.225
79	1782.90	133	23.8	2.668	2.34	0.200
81	1783.50	540	25.5	2.665	2.69	0.209
85	1784.97	141	21.9	2.663	2.09	0.199
86	1785.30	0.650	15.6	2.833	6.56	1.005
100	1790.40	31.6	22.9	2.688	2.25	0.203

*Assuming B = 3.8 (Theoretical Rw of 0.01 ohm-m at room temperature of 25 °C). See : Waxman , M.H.; Thomas, E.C. : "Electrical Conductivities in Shaly Sands....", JPT , (Feb 1974).

SECTION 3

NUCLEAR MAGNETIC RESONANCE

Explanation of Symbols for Column Headers, page 3-1	
Ka (md)	Measured ambient air permeability, millidarcies
Helium Ø (%)	Helium porosity, percent whole rock
NMR Ø (%)	Porosity from NMR, percent whole rock
FZI (µm)	Flow Zone Indicator, microns (from Ka and He Ø): RQI/Fzh
RQI (µm)	Reservoir Quality Index, microns: 0.0314 √ Ka/He Ø [Ø as fraction]
T ₂ Geom (ms)	Geometric mean of all T ₂ values measured, milliseconds
Fznmr	Porosity group, from NMR data: NMR Ø/1 – NMR Ø [Ø as fraction]
T ₂ Geom (s)	Geometric mean of all T ₂ values measured, seconds
ρ S _{gv} (s ⁻¹)	Product of Relaxivity and Surface Area, reciprocal seconds: Fznmr/T₂Geom (s)
1/ρ S _{gv} (s)	Reciprocal of ρ S _{gv} , seconds

Summary of NMR Data

Te = 0.32ms

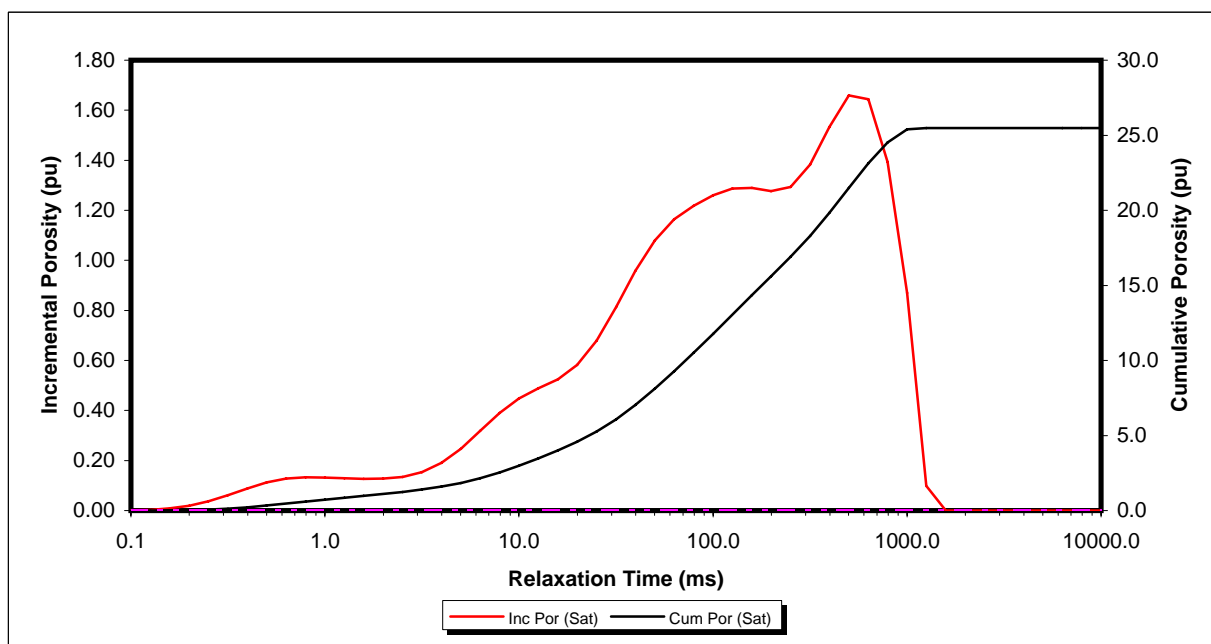
Sample	Depth	K _{air}	Helium ϕ	NMR ϕ	FZI	RQI	T ₂ geom	Fznmr	T ₂ geom	ρ Sgv	1/ ρ Sgv
ID	m	mD	%	%	μ m	μ m	ms		s	s ⁻¹	s
11	1761.20	430	25.5	25.5	3.77	1.289	98.5	0.342	0.099	3.47	0.288
17	1761.80	117	21.9	22.1	2.59	0.726	72.8	0.284	0.073	3.90	0.257
18	1762.10	1180	24.3	24.1	6.82	2.188	118	0.318	0.118	2.69	0.372
37	1768.97	3.34	18.3	18.6	0.60	0.134	37.4	0.229	0.037	6.11	0.164
39	1769.63	16.1	20.1	19.9	1.12	0.281	55.3	0.249	0.055	4.50	0.222
40	1769.91	137	21.8	21.7	2.82	0.787	76.0	0.278	0.076	3.65	0.274
41	1770.15	466	24.3	24.0	4.28	1.375	143	0.316	0.143	2.22	0.451
43	1770.98	1.66	17.4	17.7	0.46	0.097	33.1	0.216	0.033	6.52	0.153
45	1771.60	9.12	19.0	19.3	0.93	0.218	50.3	0.240	0.050	4.77	0.210
9	1773.24	267	21.3	21.7	4.11	1.112	90.7	0.277	0.091	3.05	0.328
51	1774.20	2.85	18.8	19.3	0.53	0.122	31.8	0.239	0.032	7.54	0.133
60	1776.92	6.65	19.3	19.6	0.77	0.184	46.3	0.244	0.046	5.27	0.190
63	1777.83	49.3	22.1	22.2	1.65	0.469	58.8	0.286	0.059	4.86	0.206
64	1778.10	7.36	19.0	19.5	0.83	0.195	42.3	0.242	0.042	5.72	0.175
65	1778.45	153	23.7	23.6	2.57	0.798	109	0.308	0.109	2.83	0.354
75	1781.40	4.19	19.3	19.6	0.61	0.146	38.5	0.244	0.038	6.34	0.158
78	1782.30	17.7	21.0	20.9	1.08	0.288	57.7	0.264	0.058	4.58	0.218
1	1782.53	40.3	22.0	22.2	1.51	0.425	65.1	0.285	0.065	4.37	0.229
79	1782.90	133	23.8	23.6	2.38	0.742	94.8	0.309	0.095	3.26	0.307
81	1783.50	540	25.5	25.5	4.22	1.445	141	0.342	0.141	2.42	0.413
85	1784.97	141	21.9	21.8	2.84	0.797	84.1	0.278	0.084	3.30	0.303
86	1785.30	0.650	15.6	16.7	0.35	0.064	10.5	0.201	0.011	19.11	0.052
98	1789.40	8.71	19.9	19.9	0.84	0.208	33.0	0.249	0.033	7.54	0.133
100	1790.40	31.6	22.9	22.8	1.24	0.369	59.2	0.295	0.059	4.99	0.200

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	11
Depth (m)	1761.20

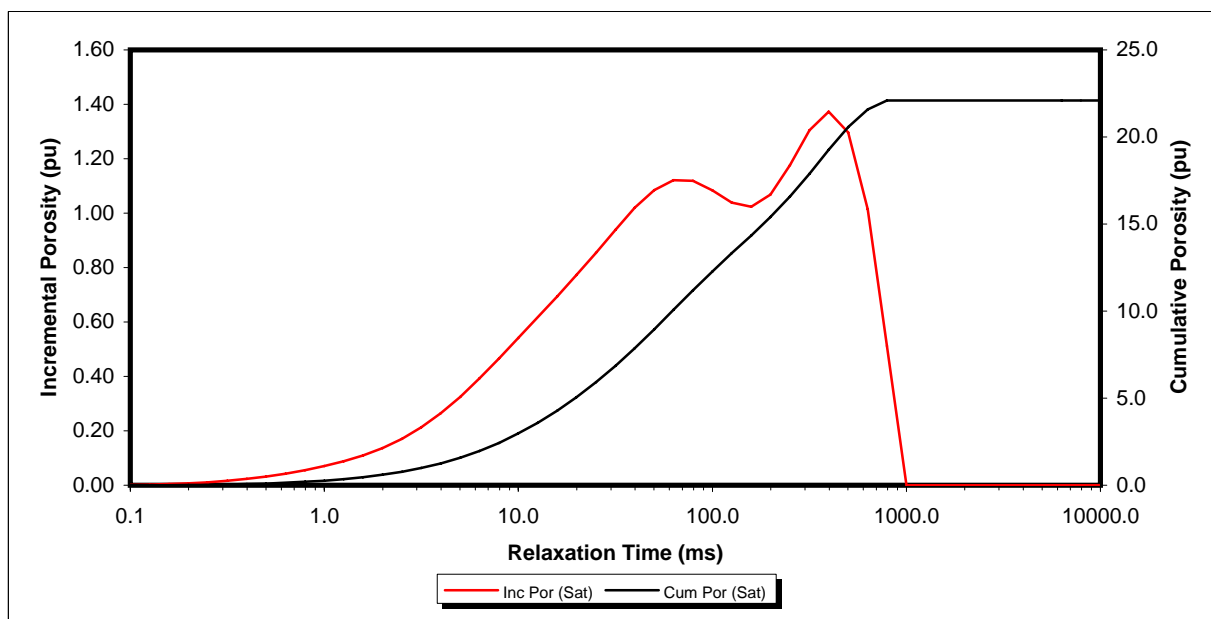
Helium plug porosity (%)	25.5
Permeability (mD)	430



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		25.5	252.4	549.3
				Geo Mean
				98.5

Sample	17
Depth (m)	1761.80

Helium plug porosity (%)	21.9
Permeability (mD)	117



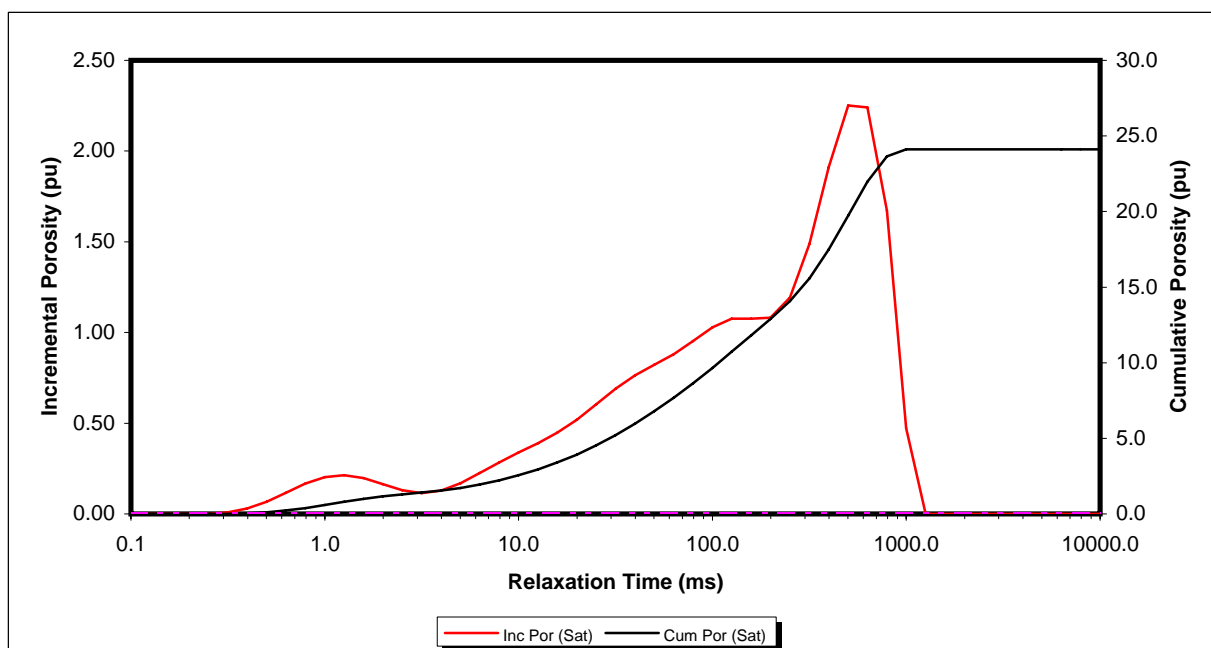
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		22.1	177.6	395.8
				Geo Mean
				72.8

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	18
Depth (m)	1762.10

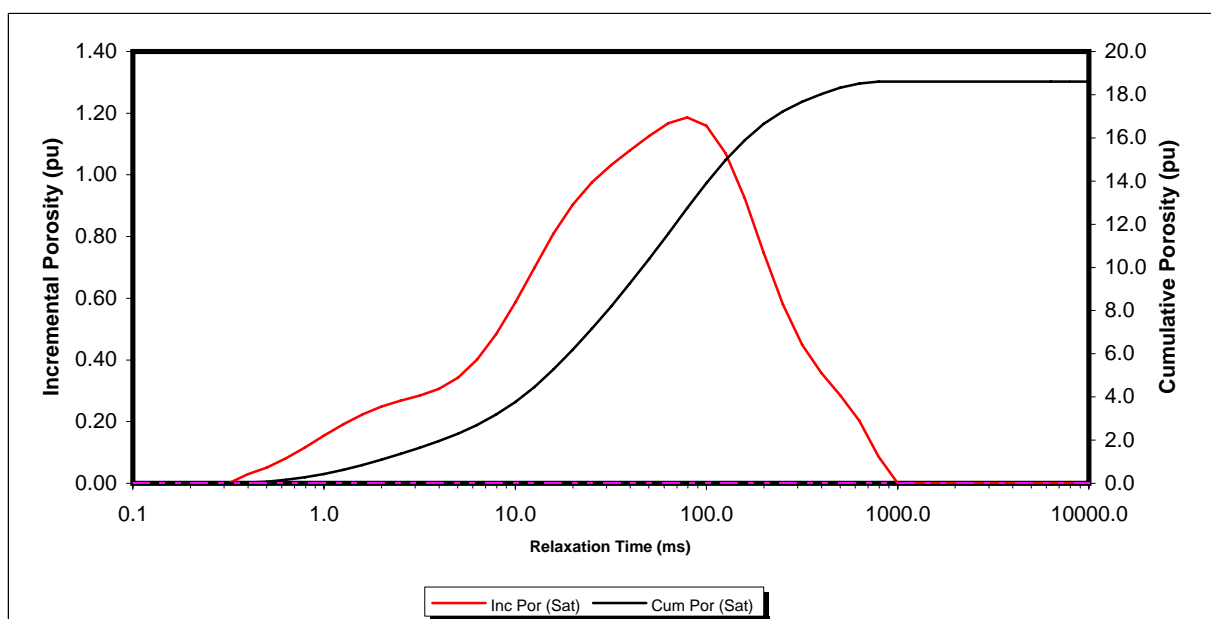
Helium plug porosity (%)	24.3
Permeability (mD)	1180



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		24.1	280.7	558.3
				Geo Mean
				118.2

Sample	37
Depth (m)	1768.97

Helium plug porosity (%)	18.3
Permeability (mD)	3.34



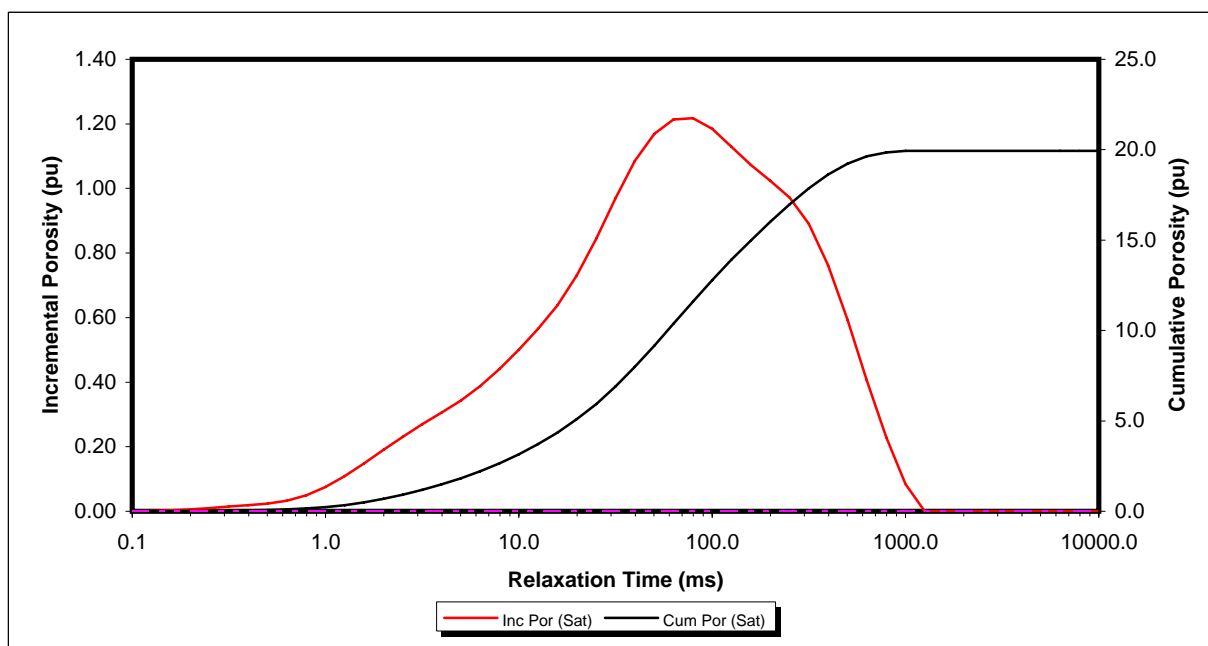
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		18.6	91.3	77.8
				Geo Mean
				37.4

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	39
Depth (m)	1769.63

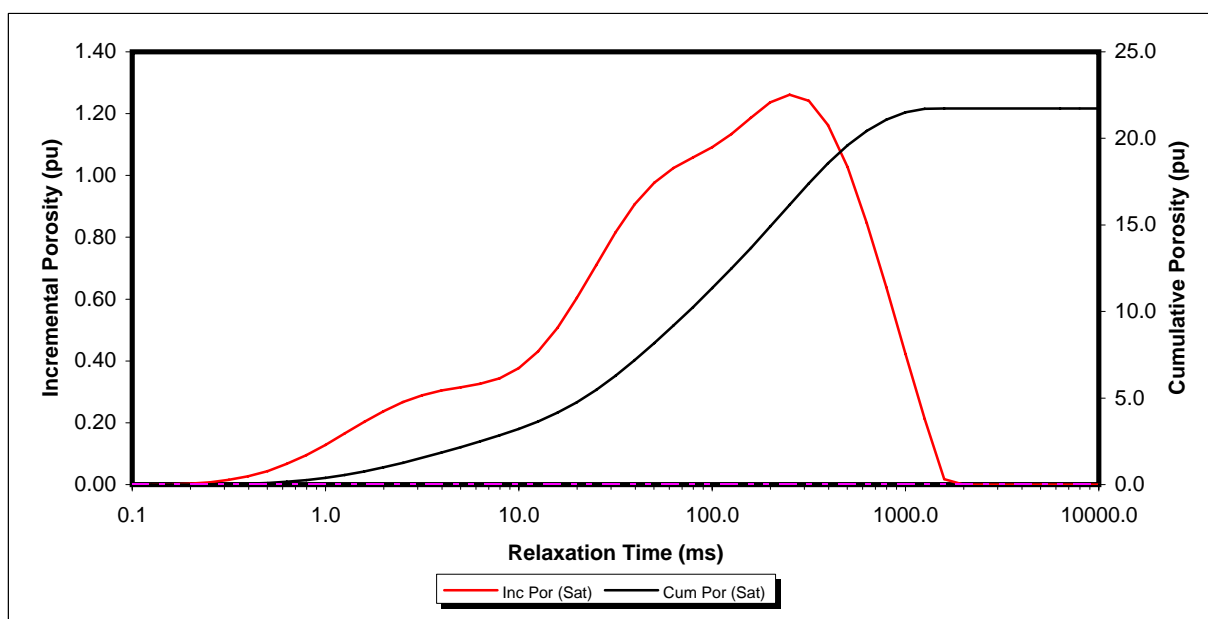
Helium plug porosity (%)	20.1
Permeability (mD)	16.1



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.9	133.3	72.4
				Geo Mean
				55.3

Sample	40
Depth (m)	1769.91

Helium plug porosity (%)	21.8
Permeability (mD)	137



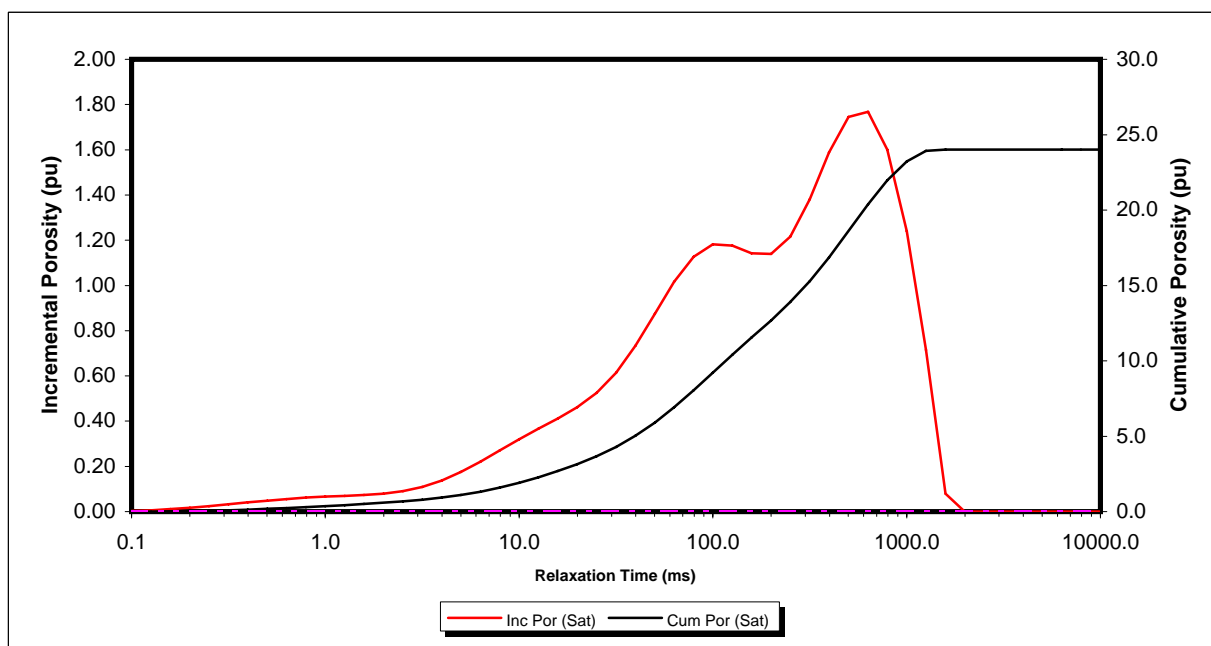
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		21.7	204.8	254.4
				Geo Mean
				76.0

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	41
Depth (m)	1770.15

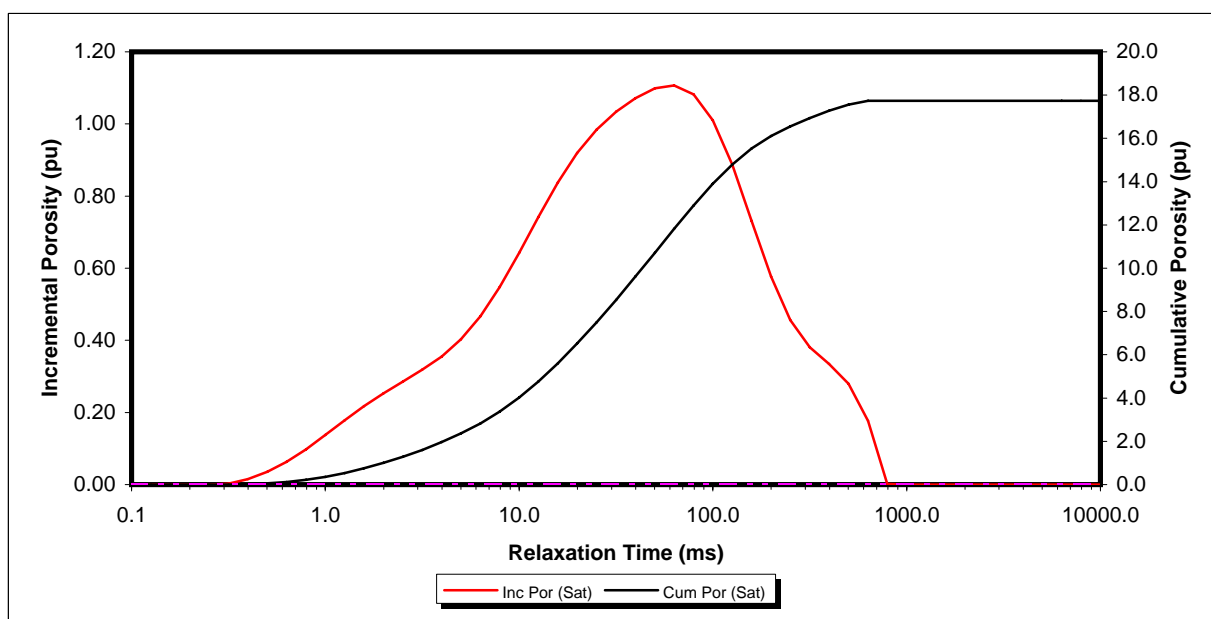
Helium plug porosity (%)	24.3
Permeability (mD)	466



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		24.0	327.5	577.7
				Geo Mean
				142.5

Sample	43
Depth (m)	1770.98

Helium plug porosity (%)	17.4
Permeability (mD)	1.66



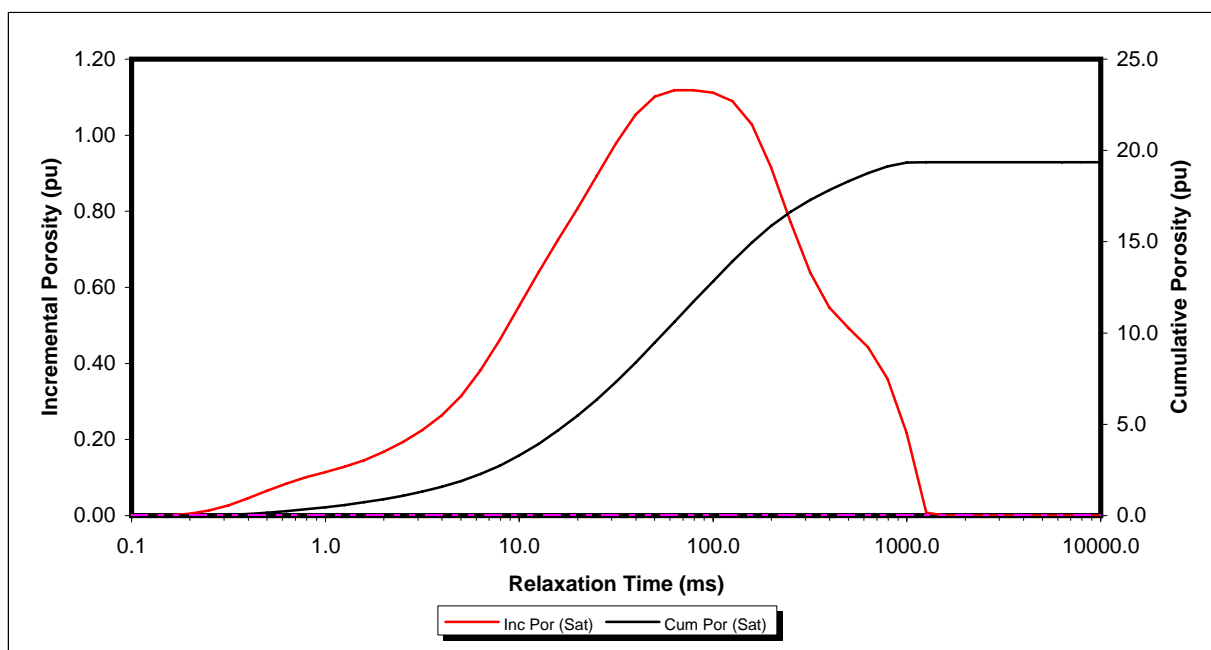
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		17.7	81.0	59.6
				Geo Mean
				33.1

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	45
Depth (m)	1771.60

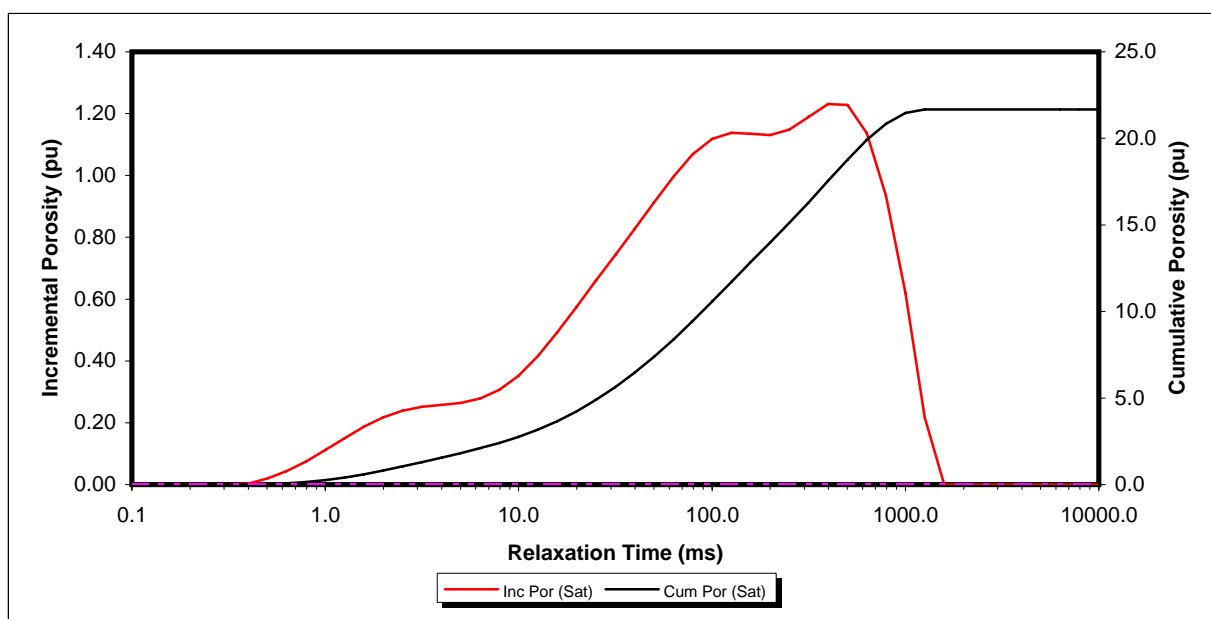
Helium plug porosity (%)	19.0
Permeability (mD)	9.12



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.3	134.7	70.4

Sample	9
Depth (m)	1773.24

Helium plug porosity (%)	21.3
Permeability (mD)	267



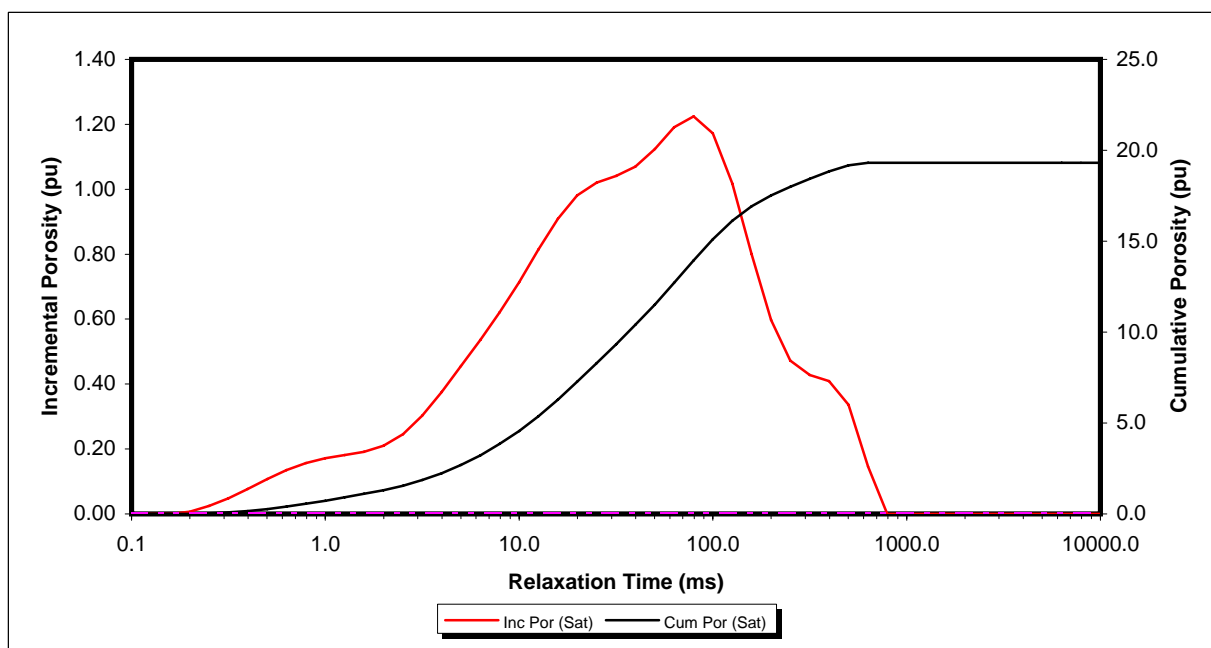
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		21.7	234.7	439.2

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	51
Depth (m)	1774.20

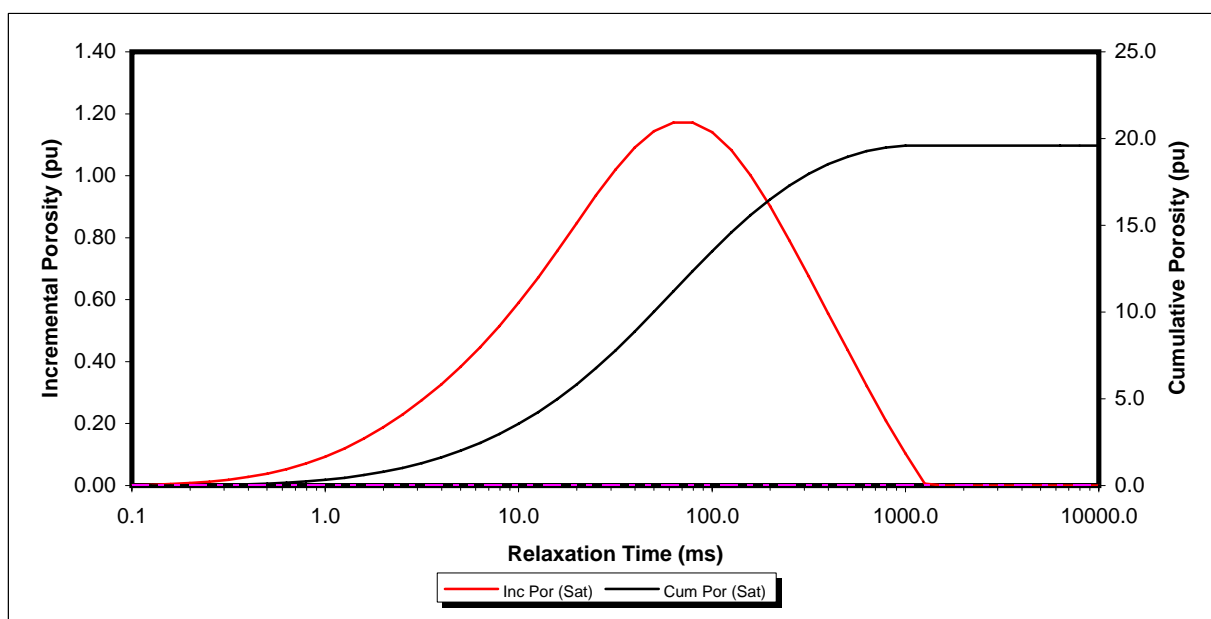
Helium plug porosity (%)	18.8
Permeability (mD)	2.85



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.3	81.0	77.5
				Geo Mean
				31.8

Sample	60
Depth (m)	1776.92

Helium plug porosity (%)	19.3
Permeability (mD)	6.65



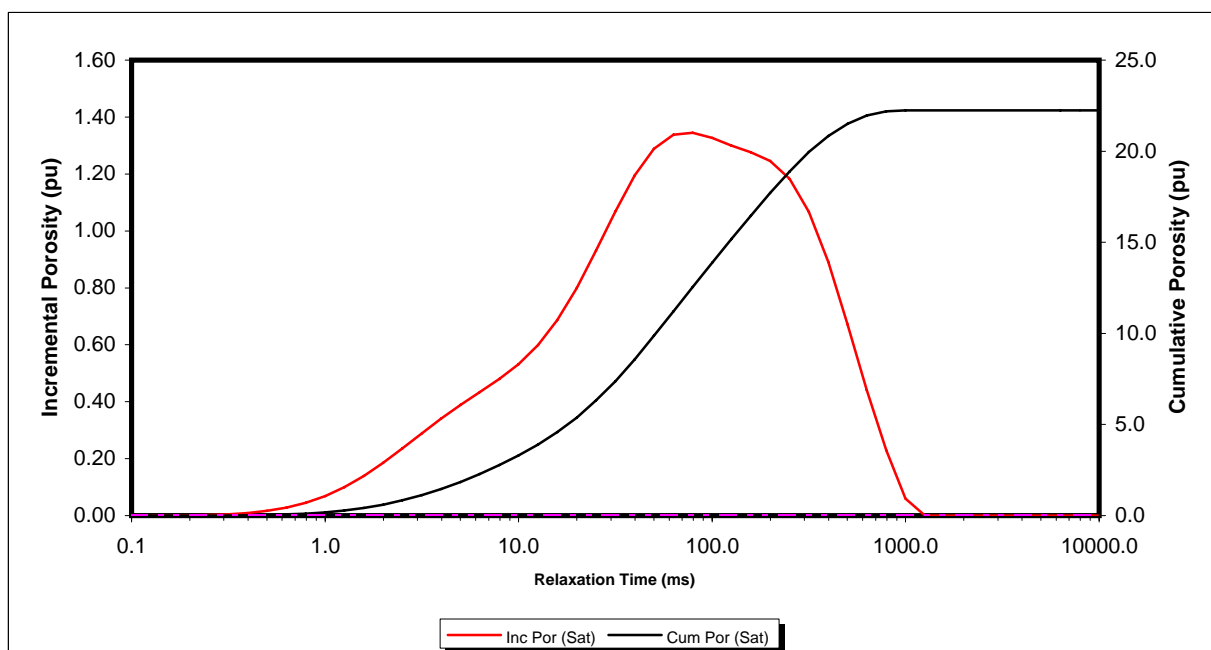
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.6	117.4	70.4
				Geo Mean
				46.3

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	63
Depth (m)	1777.83

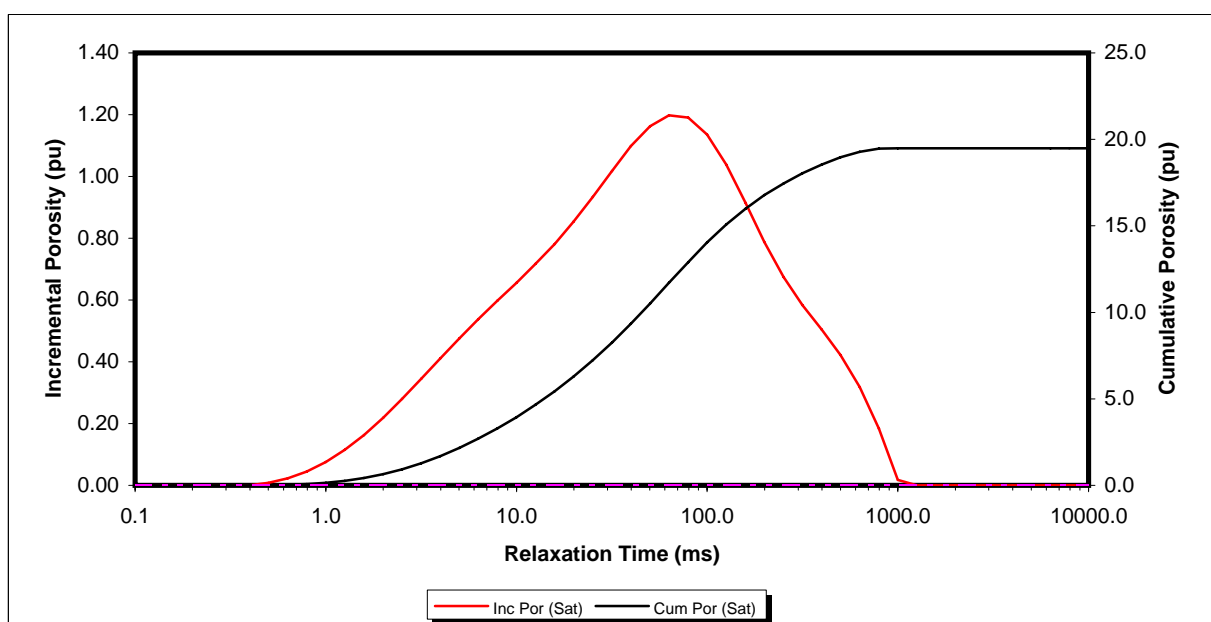
Helium plug porosity (%)	22.1
Permeability (mD)	49.3



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		22.2	135.1	75.7
				Geo Mean
				58.8

Sample	64
Depth (m)	1778.10

Helium plug porosity (%)	19.0
Permeability (mD)	7.36



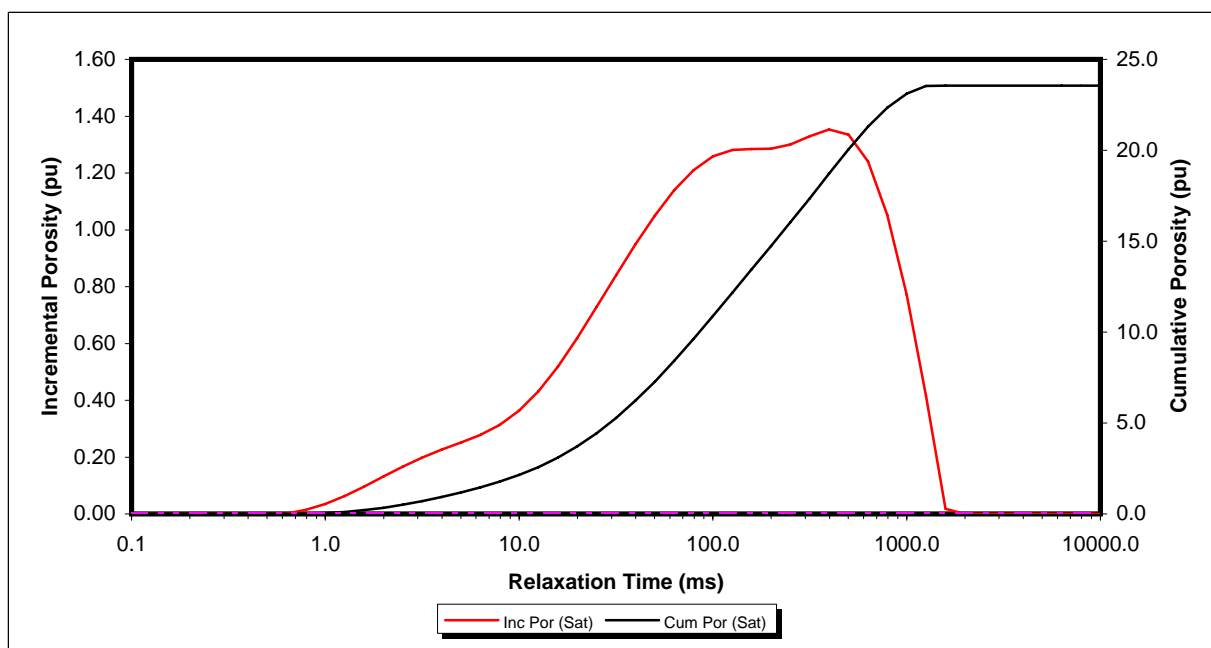
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.5	106.0	68.0
				Geo Mean
				42.3

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	65
Depth (m)	1778.45

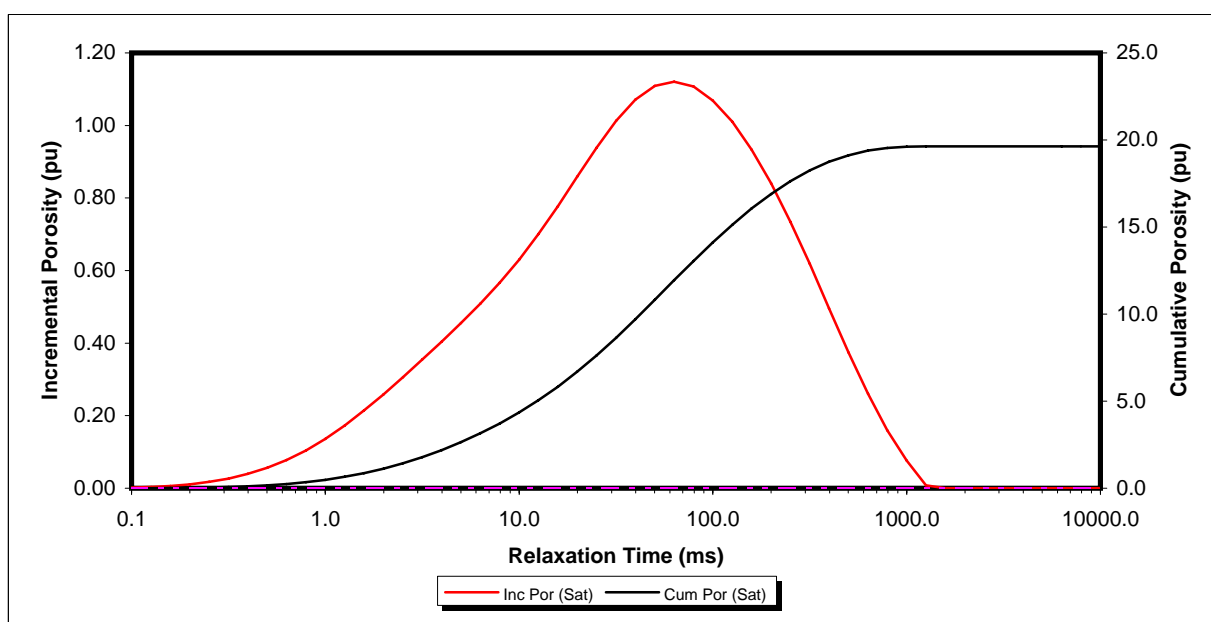
Helium plug porosity (%)	23.7
Permeability (mD)	153



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		23.6	254.1	404.5
				Geo Mean
				109.0

Sample	75
Depth (m)	1781.40

Helium plug porosity (%)	19.3
Permeability (mD)	4.19



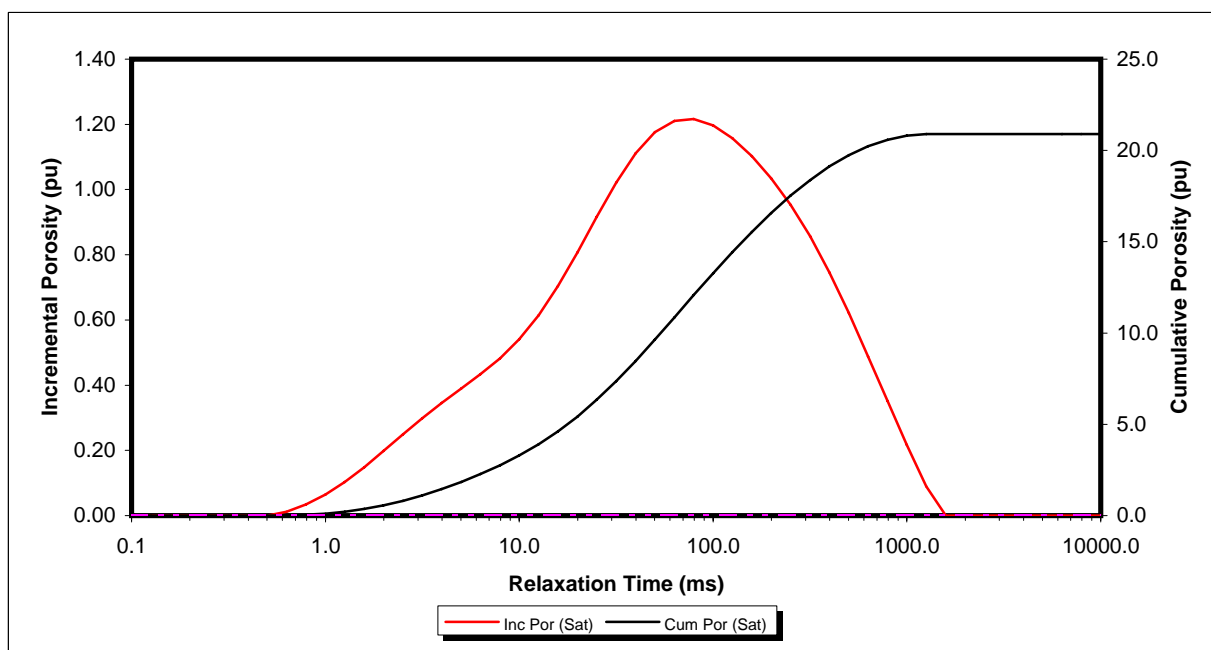
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.6	105.1	62.6
				Geo Mean
				38.5

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	78
Depth (m)	1782.30

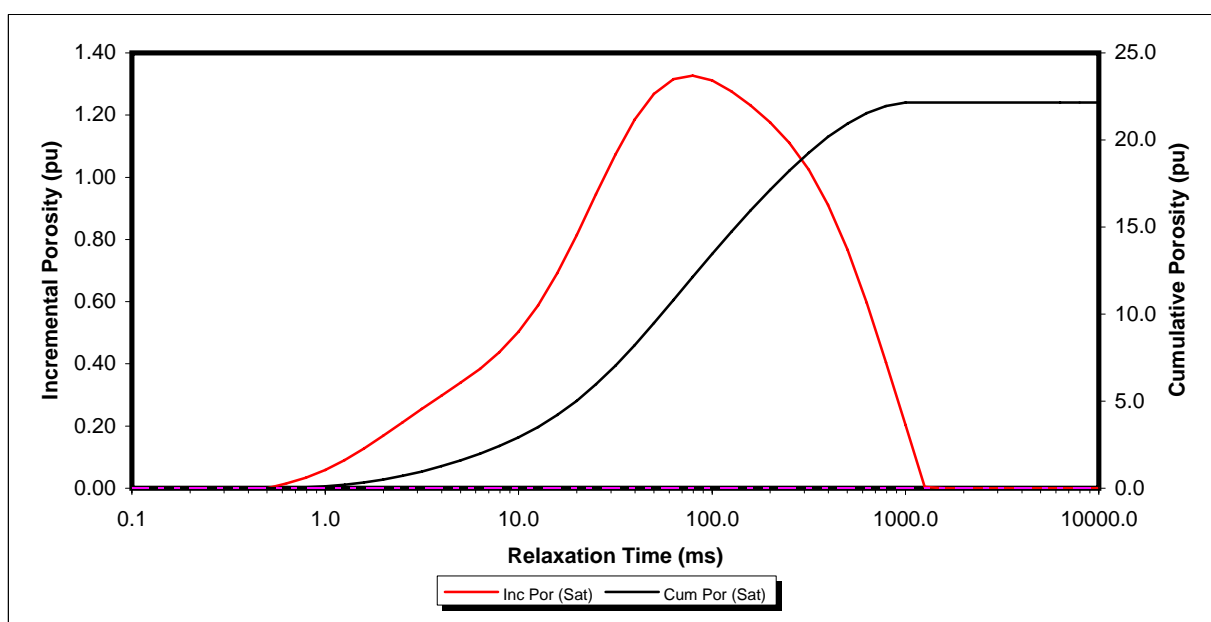
Helium plug porosity (%)	21.0
Permeability (mD)	17.7



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		20.9	146.7	74.5
				Geo Mean
				57.7

Sample	1
Depth (m)	1782.53

Helium plug porosity (%)	22.0
Permeability (mD)	40.3



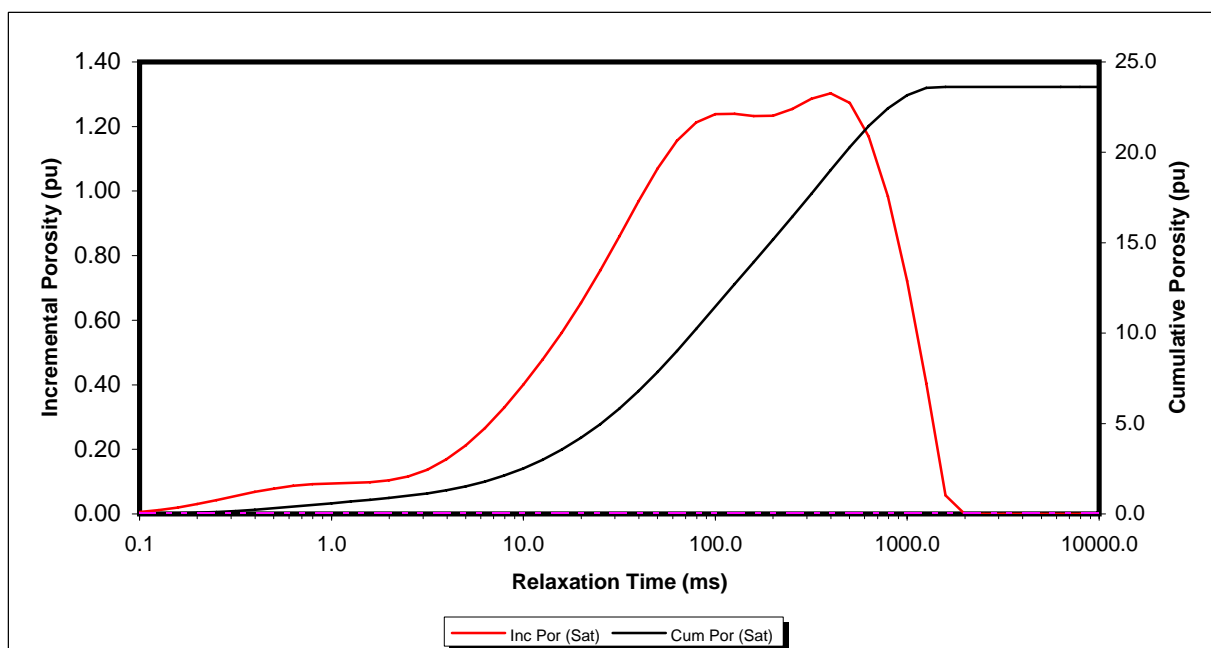
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		22.2	152.8	78.1
				Geo Mean
				65.1

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	79
Depth (m)	1782.90

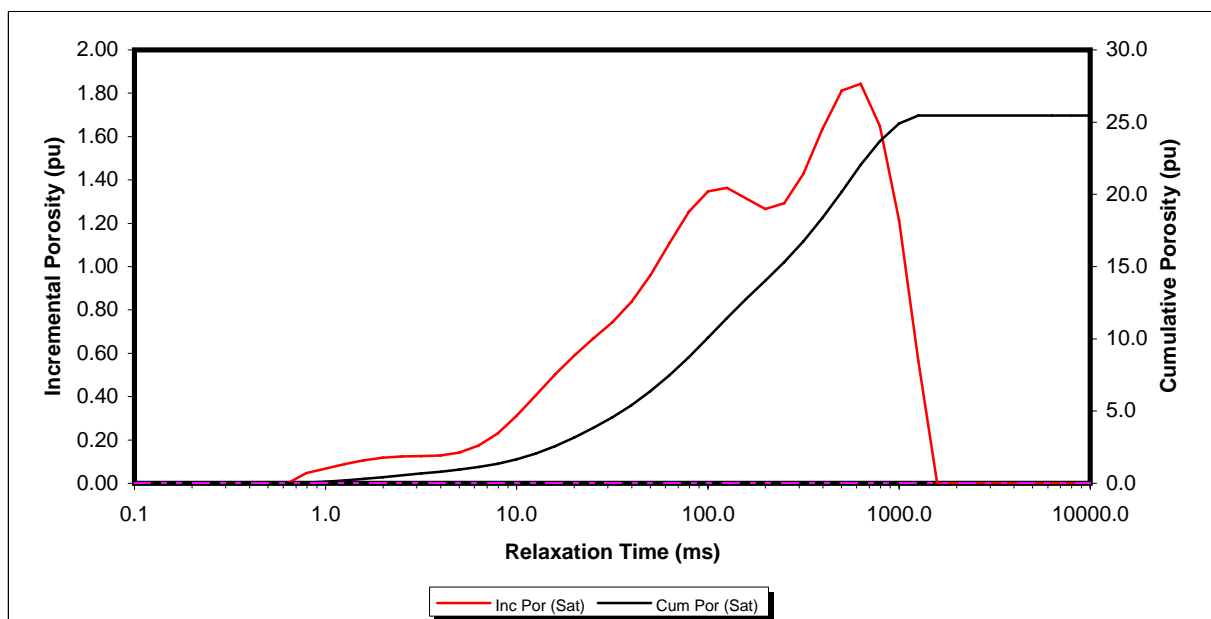
Helium plug porosity (%)	23.8
Permeability (mD)	133



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		23.6	245.0	385.8
				94.8

Sample	81
Depth (m)	1783.50

Helium plug porosity (%)	25.5
Permeability (mD)	540



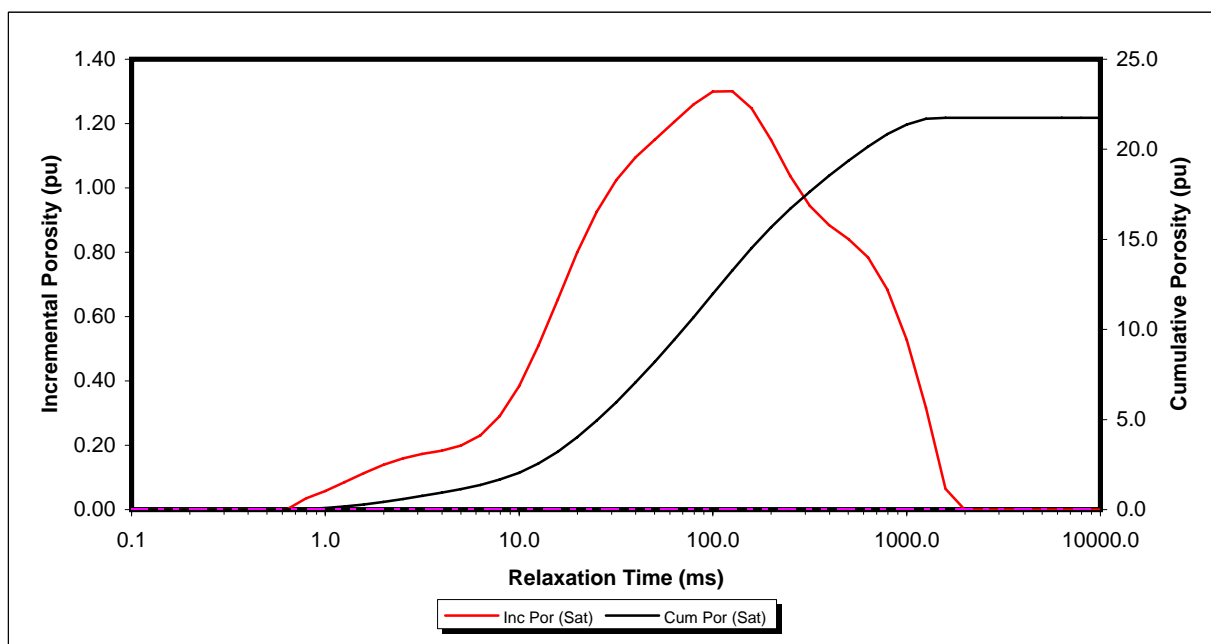
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		25.5	307.3	580.1
				141.1

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	85
Depth (m)	1784.97

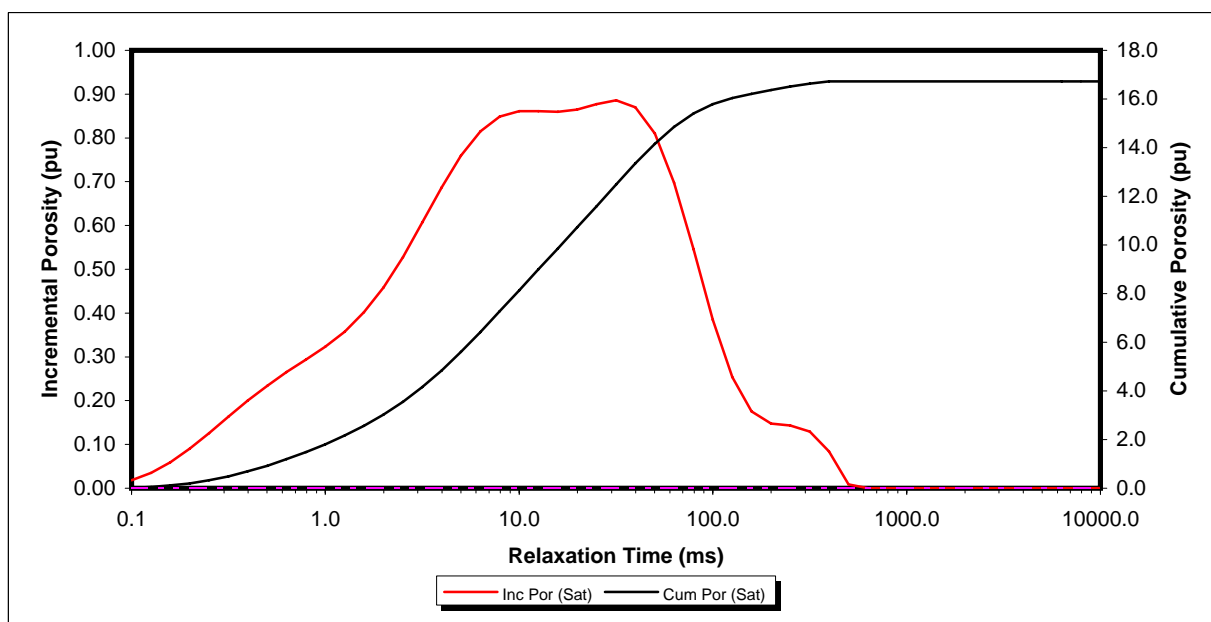
Helium plug porosity (%)	21.9
Permeability (mD)	141



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		21.8	206.7	112.7
				Geo Mean
				84.1

Sample	86
Depth (m)	1785.30

Helium plug porosity (%)	15.6
Permeability (mD)	0.650



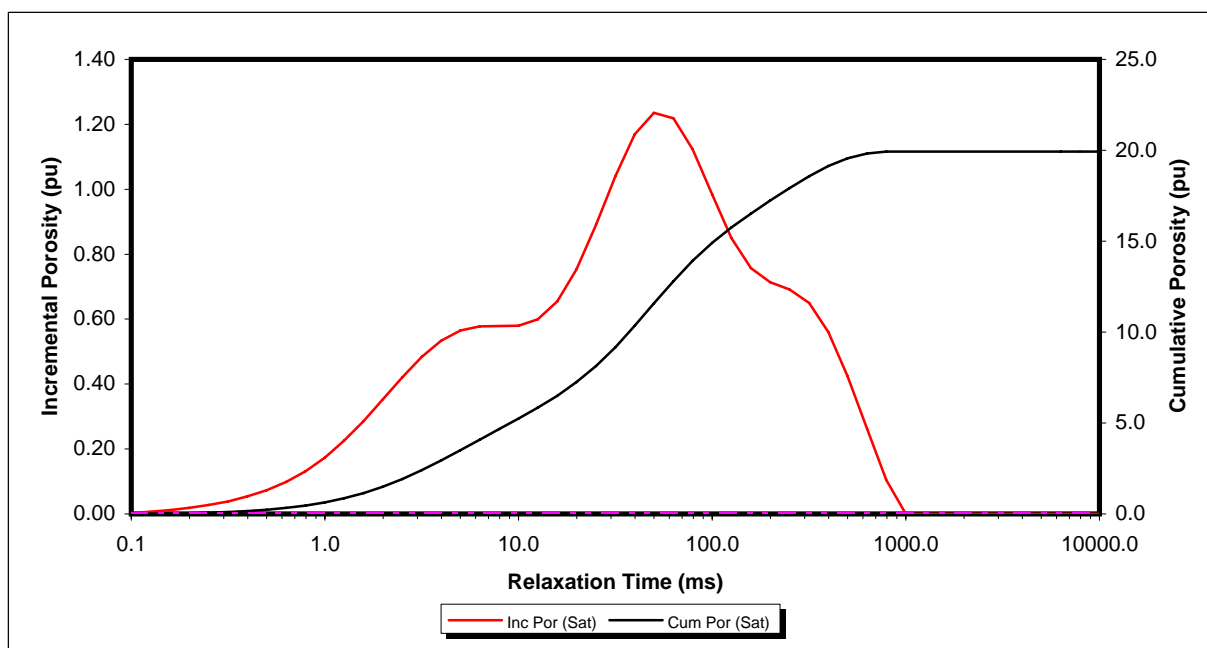
		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		16.7	31.7	30.6
				Geo Mean
				10.5

COMPANY : SANTOS LIMITED
WELL : CASINO-4

Multi-Exponential Relaxation Time Analysis

Sample	98
Depth (m)	1789.40

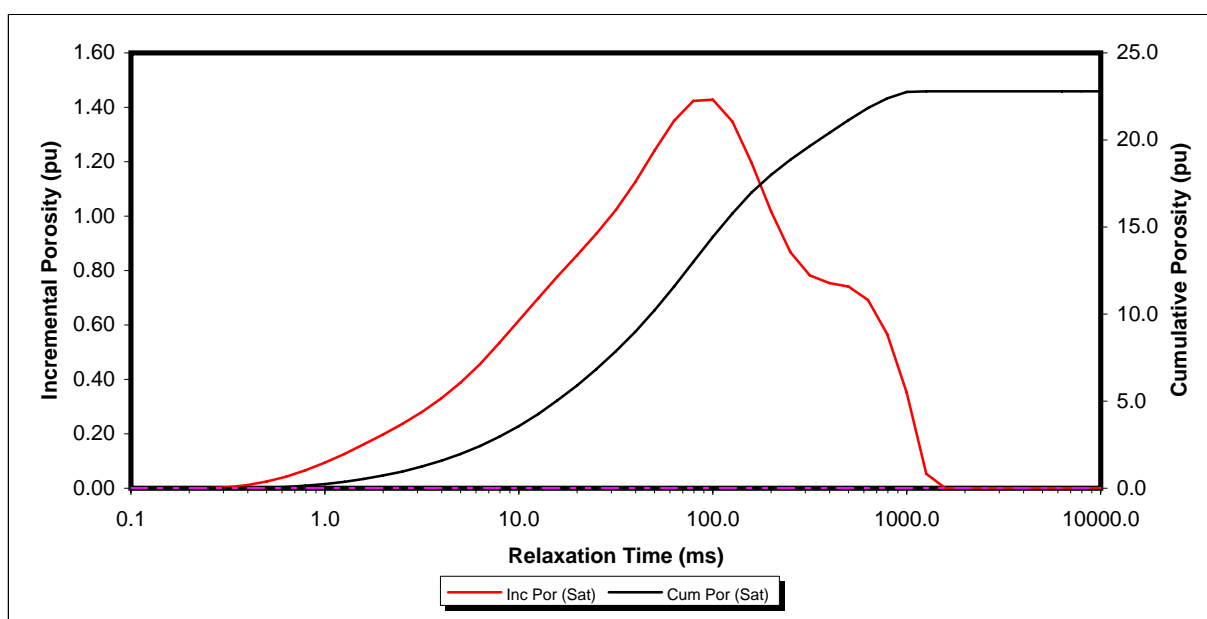
Helium plug porosity (%)	19.9
Permeability (mD)	8.71



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		19.9	96.2	53.6
				Geo Mean
				33.0

Sample	100
Depth (m)	1790.40

Helium plug porosity (%)	22.9
Permeability (mD)	31.6



		Relaxation Time (ms)		
Te (ms)	0.32	Porosity	Arith Mean	Pri Mode
Saturated plug		22.8	156.3	90.3
				Geo Mean
				59.2

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	11	Sample ID	17	Sample ID	18
Depth (m)	1761.20	Depth (m)	1761.80	Depth (m)	1762.10
Porosity (%)	25.5	Porosity (%)	21.9	Porosity (%)	24.3
Kair (md)	430	Kair (md)	117	Kair (md)	1180

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.001	0.100	0.001	0.100	0.00
0.126	0.003	0.126	0.002	0.126	0.00
0.158	0.009	0.158	0.004	0.158	0.00
0.200	0.020	0.200	0.007	0.200	0.00
0.251	0.038	0.251	0.011	0.251	0.00
0.316	0.062	0.316	0.016	0.316	0.01
0.398	0.089	0.398	0.023	0.398	0.03
0.501	0.113	0.501	0.032	0.501	0.07
0.631	0.128	0.631	0.043	0.631	0.12
0.794	0.134	0.794	0.055	0.794	0.17
1.000	0.132	1.000	0.070	1.000	0.20
1.259	0.129	1.259	0.088	1.259	0.21
1.585	0.127	1.585	0.110	1.585	0.20
1.995	0.128	1.995	0.137	1.995	0.16
2.512	0.135	2.512	0.171	2.512	0.13
3.162	0.153	3.162	0.213	3.162	0.12
3.981	0.190	3.981	0.265	3.981	0.13
5.012	0.247	5.012	0.325	5.012	0.17
6.310	0.319	6.310	0.393	6.310	0.23
7.943	0.390	7.943	0.466	7.943	0.28
10.000	0.448	10.000	0.541	10.000	0.34
12.589	0.489	12.589	0.617	12.589	0.39
15.849	0.525	15.849	0.694	15.849	0.45
19.953	0.582	19.953	0.772	19.953	0.52
25.119	0.679	25.119	0.854	25.119	0.60
31.623	0.813	31.623	0.939	31.623	0.69
39.811	0.958	39.811	1.020	39.811	0.76
50.119	1.080	50.119	1.085	50.119	0.82
63.096	1.164	63.096	1.121	63.096	0.88
79.433	1.218	79.433	1.119	79.433	0.95
100.000	1.260	100.000	1.083	100.000	1.03
125.893	1.287	125.893	1.039	125.893	1.08
158.489	1.290	158.489	1.023	158.489	1.08
199.526	1.277	199.526	1.068	199.526	1.08
251.189	1.294	251.189	1.176	251.189	1.19
316.228	1.382	316.228	1.304	316.228	1.49
398.107	1.532	398.107	1.373	398.107	1.91
501.187	1.659	501.187	1.297	501.187	2.25
630.957	1.644	630.957	1.015	630.957	2.24
794.328	1.393	794.328	0.511	794.328	1.67
1000.000	0.870	1000.000	0.000	1000.000	0.47
1258.925	0.099	1258.925	0.000	1258.925	0.00
1584.893	0.000	1584.893	0.000	1584.893	0.00
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	25.5	NMR POROSITY	22.1	NMR POROSITY	24.1

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	37	Sample ID	39	Sample ID	40
Depth (m)	1768.97	Depth (m)	1769.63	Depth (m)	1769.91
Porosity (%)	18.3	Porosity (%)	20.1	Porosity (%)	21.8
Kair (md)	3.34	Kair (md)	16.1	Kair (md)	137

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.000	0.100	0.000	0.100	0.00
0.126	0.000	0.126	0.001	0.126	0.00
0.158	0.000	0.158	0.003	0.158	0.00
0.200	0.000	0.200	0.006	0.200	0.00
0.251	0.000	0.251	0.010	0.251	0.01
0.316	0.000	0.316	0.015	0.316	0.02
0.398	0.029	0.398	0.019	0.398	0.03
0.501	0.051	0.501	0.023	0.501	0.04
0.631	0.081	0.631	0.033	0.631	0.07
0.794	0.116	0.794	0.049	0.794	0.10
1.000	0.154	1.000	0.075	1.000	0.13
1.259	0.191	1.259	0.109	1.259	0.17
1.585	0.224	1.585	0.149	1.585	0.20
1.995	0.249	1.995	0.190	1.995	0.24
2.512	0.268	2.512	0.231	2.512	0.27
3.162	0.284	3.162	0.269	3.162	0.29
3.981	0.306	3.981	0.305	3.981	0.30
5.012	0.343	5.012	0.343	5.012	0.32
6.310	0.401	6.310	0.388	6.310	0.33
7.943	0.483	7.943	0.441	7.943	0.34
10.000	0.586	10.000	0.501	10.000	0.38
12.589	0.700	12.589	0.565	12.589	0.43
15.849	0.809	15.849	0.639	15.849	0.51
19.953	0.903	19.953	0.731	19.953	0.60
25.119	0.976	25.119	0.844	25.119	0.71
31.623	1.032	31.623	0.970	31.623	0.82
39.811	1.080	39.811	1.084	39.811	0.91
50.119	1.126	50.119	1.169	50.119	0.98
63.096	1.168	63.096	1.214	63.096	1.02
79.433	1.187	79.433	1.218	79.433	1.06
100.000	1.159	100.000	1.185	100.000	1.09
125.893	1.070	125.893	1.129	125.893	1.13
158.489	0.923	158.489	1.072	158.489	1.19
199.526	0.747	199.526	1.024	199.526	1.24
251.189	0.580	251.189	0.972	251.189	1.26
316.228	0.450	316.228	0.890	316.228	1.24
398.107	0.358	398.107	0.762	398.107	1.16
501.187	0.285	501.187	0.593	501.187	1.03
630.957	0.203	630.957	0.406	630.957	0.85
794.328	0.086	794.328	0.229	794.328	0.64
1000.000	0.000	1000.000	0.084	1000.000	0.42
1258.925	0.000	1258.925	0.000	1258.925	0.21
1584.893	0.000	1584.893	0.000	1584.893	0.02
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	18.6	NMR POROSITY	19.9	NMR POROSITY	21.7

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	41	Sample ID	43	Sample ID	45
Depth (m)	1770.15	Depth (m)	1770.98	Depth (m)	1771.60
Porosity (%)	24.3	Porosity (%)	17.4	Porosity (%)	19.0
Kair (md)	466	Kair (md)	1.66	Kair (md)	9.12

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.003	0.100	0.000	0.100	0.00
0.126	0.006	0.126	0.000	0.126	0.00
0.158	0.011	0.158	0.000	0.158	0.00
0.200	0.017	0.200	0.000	0.200	0.01
0.251	0.024	0.251	0.000	0.251	0.01
0.316	0.032	0.316	0.002	0.316	0.03
0.398	0.040	0.398	0.015	0.398	0.05
0.501	0.049	0.501	0.035	0.501	0.07
0.631	0.056	0.631	0.063	0.631	0.08
0.794	0.062	0.794	0.098	0.794	0.10
1.000	0.066	1.000	0.137	1.000	0.11
1.259	0.069	1.259	0.178	1.259	0.13
1.585	0.073	1.585	0.217	1.585	0.15
1.995	0.079	1.995	0.253	1.995	0.17
2.512	0.091	2.512	0.286	2.512	0.19
3.162	0.109	3.162	0.318	3.162	0.22
3.981	0.137	3.981	0.355	3.981	0.26
5.012	0.175	5.012	0.403	5.012	0.31
6.310	0.220	6.310	0.467	6.310	0.38
7.943	0.270	7.943	0.548	7.943	0.46
10.000	0.320	10.000	0.643	10.000	0.55
12.589	0.367	12.589	0.742	12.589	0.64
15.849	0.412	15.849	0.837	15.849	0.72
19.953	0.461	19.953	0.919	19.953	0.81
25.119	0.525	25.119	0.984	25.119	0.89
31.623	0.614	31.623	1.034	31.623	0.98
39.811	0.733	39.811	1.072	39.811	1.05
50.119	0.875	50.119	1.099	50.119	1.10
63.096	1.016	63.096	1.107	63.096	1.12
79.433	1.127	79.433	1.082	79.433	1.12
100.000	1.181	100.000	1.010	100.000	1.11
125.893	1.176	125.893	0.887	125.893	1.09
158.489	1.143	158.489	0.732	158.489	1.03
199.526	1.139	199.526	0.577	199.526	0.92
251.189	1.216	251.189	0.456	251.189	0.77
316.228	1.382	316.228	0.381	316.228	0.64
398.107	1.588	398.107	0.335	398.107	0.55
501.187	1.746	501.187	0.280	501.187	0.49
630.957	1.768	630.957	0.177	630.957	0.44
794.328	1.601	794.328	0.001	794.328	0.36
1000.000	1.239	1000.000	0.000	1000.000	0.22
1258.925	0.714	1258.925	0.000	1258.925	0.01
1584.893	0.079	1584.893	0.000	1584.893	0.00
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	24.0	NMR POROSITY	17.7	NMR POROSITY	19.3

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	9	Sample ID	51	Sample ID	60
Depth (m)	1773.24	Depth (m)	1774.20	Depth (m)	1776.92
Porosity (%)	21.3	Porosity (%)	18.8	Porosity (%)	19.3
Kair (md)	267	Kair (md)	2.85	Kair (md)	6.65

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.000	0.100	0.000	0.100	0.00
0.126	0.000	0.126	0.000	0.126	0.00
0.158	0.000	0.158	0.000	0.158	0.00
0.200	0.000	0.200	0.007	0.200	0.01
0.251	0.000	0.251	0.025	0.251	0.01
0.316	0.000	0.316	0.049	0.316	0.02
0.398	0.003	0.398	0.077	0.398	0.03
0.501	0.020	0.501	0.107	0.501	0.04
0.631	0.044	0.631	0.135	0.631	0.05
0.794	0.075	0.794	0.157	0.794	0.07
1.000	0.112	1.000	0.172	1.000	0.09
1.259	0.151	1.259	0.181	1.259	0.12
1.585	0.187	1.585	0.191	1.585	0.15
1.995	0.217	1.995	0.210	1.995	0.19
2.512	0.239	2.512	0.246	2.512	0.23
3.162	0.251	3.162	0.302	3.162	0.28
3.981	0.258	3.981	0.375	3.981	0.33
5.012	0.264	5.012	0.455	5.012	0.38
6.310	0.278	6.310	0.537	6.310	0.45
7.943	0.306	7.943	0.621	7.943	0.51
10.000	0.352	10.000	0.714	10.000	0.59
12.589	0.416	12.589	0.814	12.589	0.67
15.849	0.493	15.849	0.909	15.849	0.76
19.953	0.576	19.953	0.981	19.953	0.85
25.119	0.660	25.119	1.021	25.119	0.94
31.623	0.744	31.623	1.041	31.623	1.02
39.811	0.827	39.811	1.069	39.811	1.09
50.119	0.913	50.119	1.124	50.119	1.14
63.096	0.996	63.096	1.191	63.096	1.17
79.433	1.069	79.433	1.225	79.433	1.17
100.000	1.118	100.000	1.172	100.000	1.14
125.893	1.138	125.893	1.018	125.893	1.08
158.489	1.135	158.489	0.800	158.489	1.00
199.526	1.131	199.526	0.598	199.526	0.90
251.189	1.148	251.189	0.472	251.189	0.79
316.228	1.190	316.228	0.428	316.228	0.68
398.107	1.232	398.107	0.409	398.107	0.56
501.187	1.228	501.187	0.336	501.187	0.44
630.957	1.137	630.957	0.146	630.957	0.32
794.328	0.934	794.328	0.000	794.328	0.21
1000.000	0.620	1000.000	0.000	1000.000	0.10
1258.925	0.218	1258.925	0.000	1258.925	0.01
1584.893	0.000	1584.893	0.000	1584.893	0.00
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	21.7	NMR POROSITY	19.3	NMR POROSITY	19.6

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	63	Sample ID	64	Sample ID	65
Depth (m)	1777.83	Depth (m)	1778.10	Depth (m)	1778.45
Porosity (%)	22.1	Porosity (%)	19.0	Porosity (%)	23.7
Kair (md)	49.3	Kair (md)	7.36	Kair (md)	153

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.000	0.100	0.000	0.100	0.00
0.126	0.000	0.126	0.000	0.126	0.00
0.158	0.000	0.158	0.000	0.158	0.00
0.200	0.001	0.200	0.000	0.200	0.00
0.251	0.002	0.251	0.000	0.251	0.00
0.316	0.005	0.316	0.000	0.316	0.00
0.398	0.009	0.398	0.000	0.398	0.00
0.501	0.016	0.501	0.008	0.501	0.00
0.631	0.028	0.631	0.023	0.631	0.00
0.794	0.045	0.794	0.045	0.794	0.01
1.000	0.069	1.000	0.075	1.000	0.04
1.259	0.100	1.259	0.115	1.259	0.06
1.585	0.139	1.585	0.163	1.585	0.10
1.995	0.185	1.995	0.218	1.995	0.13
2.512	0.236	2.512	0.280	2.512	0.17
3.162	0.288	3.162	0.345	3.162	0.20
3.981	0.340	3.981	0.411	3.981	0.23
5.012	0.389	5.012	0.475	5.012	0.25
6.310	0.435	6.310	0.538	6.310	0.28
7.943	0.480	7.943	0.597	7.943	0.31
10.000	0.532	10.000	0.656	10.000	0.36
12.589	0.599	12.589	0.717	12.589	0.43
15.849	0.687	15.849	0.782	15.849	0.52
19.953	0.799	19.953	0.854	19.953	0.62
25.119	0.931	25.119	0.934	25.119	0.73
31.623	1.070	31.623	1.018	31.623	0.84
39.811	1.195	39.811	1.098	39.811	0.95
50.119	1.288	50.119	1.163	50.119	1.05
63.096	1.338	63.096	1.198	63.096	1.14
79.433	1.345	79.433	1.191	79.433	1.21
100.000	1.327	100.000	1.136	100.000	1.26
125.893	1.300	125.893	1.038	125.893	1.28
158.489	1.276	158.489	0.915	158.489	1.28
199.526	1.245	199.526	0.788	199.526	1.29
251.189	1.183	251.189	0.675	251.189	1.30
316.228	1.067	316.228	0.583	316.228	1.33
398.107	0.890	398.107	0.505	398.107	1.35
501.187	0.671	501.187	0.422	501.187	1.34
630.957	0.440	630.957	0.318	630.957	1.24
794.328	0.229	794.328	0.183	794.328	1.05
1000.000	0.060	1000.000	0.017	1000.000	0.77
1258.925	0.000	1258.925	0.000	1258.925	0.42
1584.893	0.000	1584.893	0.000	1584.893	0.02
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	22.2	NMR POROSITY	19.5	NMR POROSITY	23.6

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	75	Sample ID	78	Sample ID	1
Depth (m)	1781.40	Depth (m)	1782.30	Depth (m)	1782.53
Porosity (%)	19.3	Porosity (%)	21.0	Porosity (%)	22.0
Kair (md)	4.19	Kair (md)	17.7	Kair (md)	40.3

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.002	0.100	0.000	0.100	0.00
0.126	0.003	0.126	0.000	0.126	0.00
0.158	0.006	0.158	0.000	0.158	0.00
0.200	0.011	0.200	0.000	0.200	0.00
0.251	0.017	0.251	0.000	0.251	0.00
0.316	0.027	0.316	0.000	0.316	0.00
0.398	0.039	0.398	0.000	0.398	0.00
0.501	0.056	0.501	0.000	0.501	0.00
0.631	0.078	0.631	0.012	0.631	0.02
0.794	0.104	0.794	0.034	0.794	0.03
1.000	0.136	1.000	0.064	1.000	0.06
1.259	0.173	1.259	0.103	1.259	0.09
1.585	0.214	1.585	0.148	1.585	0.13
1.995	0.259	1.995	0.198	1.995	0.17
2.512	0.306	2.512	0.249	2.512	0.21
3.162	0.354	3.162	0.299	3.162	0.26
3.981	0.404	3.981	0.346	3.981	0.30
5.012	0.455	5.012	0.390	5.012	0.34
6.310	0.509	6.310	0.434	6.310	0.38
7.943	0.567	7.943	0.482	7.943	0.44
10.000	0.630	10.000	0.541	10.000	0.50
12.589	0.700	12.589	0.614	12.589	0.59
15.849	0.777	15.849	0.704	15.849	0.69
19.953	0.859	19.953	0.807	19.953	0.81
25.119	0.939	25.119	0.916	25.119	0.95
31.623	1.013	31.623	1.021	31.623	1.07
39.811	1.071	39.811	1.111	39.811	1.19
50.119	1.109	50.119	1.176	50.119	1.27
63.096	1.121	63.096	1.211	63.096	1.32
79.433	1.107	79.433	1.217	79.433	1.33
100.000	1.069	100.000	1.197	100.000	1.31
125.893	1.010	125.893	1.157	125.893	1.28
158.489	0.933	158.489	1.103	158.489	1.23
199.526	0.841	199.526	1.035	199.526	1.18
251.189	0.735	251.189	0.953	251.189	1.11
316.228	0.618	316.228	0.857	316.228	1.02
398.107	0.496	398.107	0.746	398.107	0.91
501.187	0.374	501.187	0.621	501.187	0.77
630.957	0.260	630.957	0.488	630.957	0.60
794.328	0.160	794.328	0.351	794.328	0.40
1000.000	0.076	1000.000	0.217	1000.000	0.20
1258.925	0.008	1258.925	0.089	1258.925	0.00
1584.893	0.000	1584.893	0.000	1584.893	0.00
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	19.6	NMR POROSITY	20.9	NMR POROSITY	22.2

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	79	Sample ID	81	Sample ID	85
Depth (m)	1782.90	Depth (m)	1783.50	Depth (m)	1784.97
Porosity (%)	23.8	Porosity (%)	25.5	Porosity (%)	21.9
Kair (md)	133	Kair (md)	540	Kair (md)	141

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.006	0.100	0.000	0.100	0.00
0.126	0.012	0.126	0.000	0.126	0.00
0.158	0.020	0.158	0.000	0.158	0.00
0.200	0.031	0.200	0.000	0.200	0.00
0.251	0.043	0.251	0.000	0.251	0.00
0.316	0.056	0.316	0.000	0.316	0.00
0.398	0.068	0.398	0.000	0.398	0.00
0.501	0.079	0.501	0.000	0.501	0.00
0.631	0.087	0.631	0.000	0.631	0.00
0.794	0.092	0.794	0.047	0.794	0.03
1.000	0.094	1.000	0.068	1.000	0.06
1.259	0.096	1.259	0.089	1.259	0.09
1.585	0.098	1.585	0.107	1.585	0.11
1.995	0.104	1.995	0.119	1.995	0.14
2.512	0.116	2.512	0.124	2.512	0.16
3.162	0.137	3.162	0.125	3.162	0.17
3.981	0.169	3.981	0.128	3.981	0.18
5.012	0.212	5.012	0.142	5.012	0.20
6.310	0.266	6.310	0.174	6.310	0.23
7.943	0.329	7.943	0.231	7.943	0.29
10.000	0.400	10.000	0.311	10.000	0.38
12.589	0.477	12.589	0.406	12.589	0.51
15.849	0.562	15.849	0.502	15.849	0.65
19.953	0.653	19.953	0.590	19.953	0.80
25.119	0.753	25.119	0.667	25.119	0.93
31.623	0.860	31.623	0.744	31.623	1.02
39.811	0.969	39.811	0.837	39.811	1.09
50.119	1.071	50.119	0.961	50.119	1.15
63.096	1.156	63.096	1.109	63.096	1.21
79.433	1.213	79.433	1.253	79.433	1.26
100.000	1.238	100.000	1.347	100.000	1.30
125.893	1.240	125.893	1.363	125.893	1.30
158.489	1.232	158.489	1.315	158.489	1.25
199.526	1.234	199.526	1.266	199.526	1.15
251.189	1.254	251.189	1.292	251.189	1.04
316.228	1.286	316.228	1.429	316.228	0.94
398.107	1.303	398.107	1.637	398.107	0.88
501.187	1.273	501.187	1.813	501.187	0.84
630.957	1.169	630.957	1.843	630.957	0.78
794.328	0.983	794.328	1.649	794.328	0.68
1000.000	0.722	1000.000	1.212	1000.000	0.53
1258.925	0.405	1258.925	0.566	1258.925	0.32
1584.893	0.057	1584.893	0.000	1584.893	0.06
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	23.6	NMR POROSITY	25.5	NMR POROSITY	21.8

COMPANY : SANTOS LIMITED
WELL : CASINO-4

T2 NMR TABULAR DATA

Sample ID	86	Sample ID	98	Sample ID	100
Depth (m)	1785.30	Depth (m)	1789.40	Depth (m)	1790.40
Porosity (%)	15.6	Porosity (%)	19.9	Porosity (%)	22.9
Kair (md)	0.650	Kair (md)	8.71	Kair (md)	31.6

Incremental Porosity for the samples at 100 % Sw Te = 0.32ms

T2	Porosity	T2	Porosity	T2	Porosity
0.100	0.018	0.100	0.003	0.100	0.00
0.126	0.035	0.126	0.007	0.126	0.00
0.158	0.059	0.158	0.011	0.158	0.00
0.200	0.090	0.200	0.018	0.200	0.00
0.251	0.126	0.251	0.027	0.251	0.00
0.316	0.163	0.316	0.039	0.316	0.00
0.398	0.200	0.398	0.054	0.398	0.01
0.501	0.234	0.501	0.073	0.501	0.02
0.631	0.265	0.631	0.099	0.631	0.04
0.794	0.294	0.794	0.132	0.794	0.07
1.000	0.323	1.000	0.174	1.000	0.09
1.259	0.358	1.259	0.225	1.259	0.13
1.585	0.402	1.585	0.286	1.585	0.16
1.995	0.459	1.995	0.353	1.995	0.20
2.512	0.528	2.512	0.421	2.512	0.24
3.162	0.607	3.162	0.484	3.162	0.28
3.981	0.687	3.981	0.533	3.981	0.33
5.012	0.760	5.012	0.565	5.012	0.39
6.310	0.815	6.310	0.578	6.310	0.46
7.943	0.849	7.943	0.578	7.943	0.53
10.000	0.861	10.000	0.580	10.000	0.62
12.589	0.861	12.589	0.599	12.589	0.70
15.849	0.859	15.849	0.654	15.849	0.78
19.953	0.865	19.953	0.754	19.953	0.86
25.119	0.877	25.119	0.891	25.119	0.93
31.623	0.886	31.623	1.041	31.623	1.02
39.811	0.870	39.811	1.169	39.811	1.13
50.119	0.810	50.119	1.235	50.119	1.24
63.096	0.697	63.096	1.218	63.096	1.35
79.433	0.545	79.433	1.123	79.433	1.42
100.000	0.385	100.000	0.984	100.000	1.43
125.893	0.253	125.893	0.850	125.893	1.35
158.489	0.175	158.489	0.758	158.489	1.20
199.526	0.147	199.526	0.714	199.526	1.02
251.189	0.143	251.189	0.691	251.189	0.87
316.228	0.129	316.228	0.649	316.228	0.78
398.107	0.084	398.107	0.560	398.107	0.75
501.187	0.008	501.187	0.424	501.187	0.74
630.957	0.000	630.957	0.262	630.957	0.69
794.328	0.000	794.328	0.104	794.328	0.57
1000.000	0.000	1000.000	0.000	1000.000	0.35
1258.925	0.000	1258.925	0.000	1258.925	0.05
1584.893	0.000	1584.893	0.000	1584.893	0.00
1995.262	0.000	1995.262	0.000	1995.262	0.00
2511.887	0.000	2511.887	0.000	2511.887	0.00
3162.278	0.000	3162.278	0.000	3162.278	0.00
3981.072	0.000	3981.072	0.000	3981.072	0.00
5011.873	0.000	5011.873	0.000	5011.873	0.00
6309.573	0.000	6309.573	0.000	6309.573	0.00
7943.282	0.000	7943.282	0.000	7943.282	0.00
10000.000	0.000	10000.000	0.000	10000.000	0.00
NMR POROSITY	16.7	NMR POROSITY	19.9	NMR POROSITY	22.8

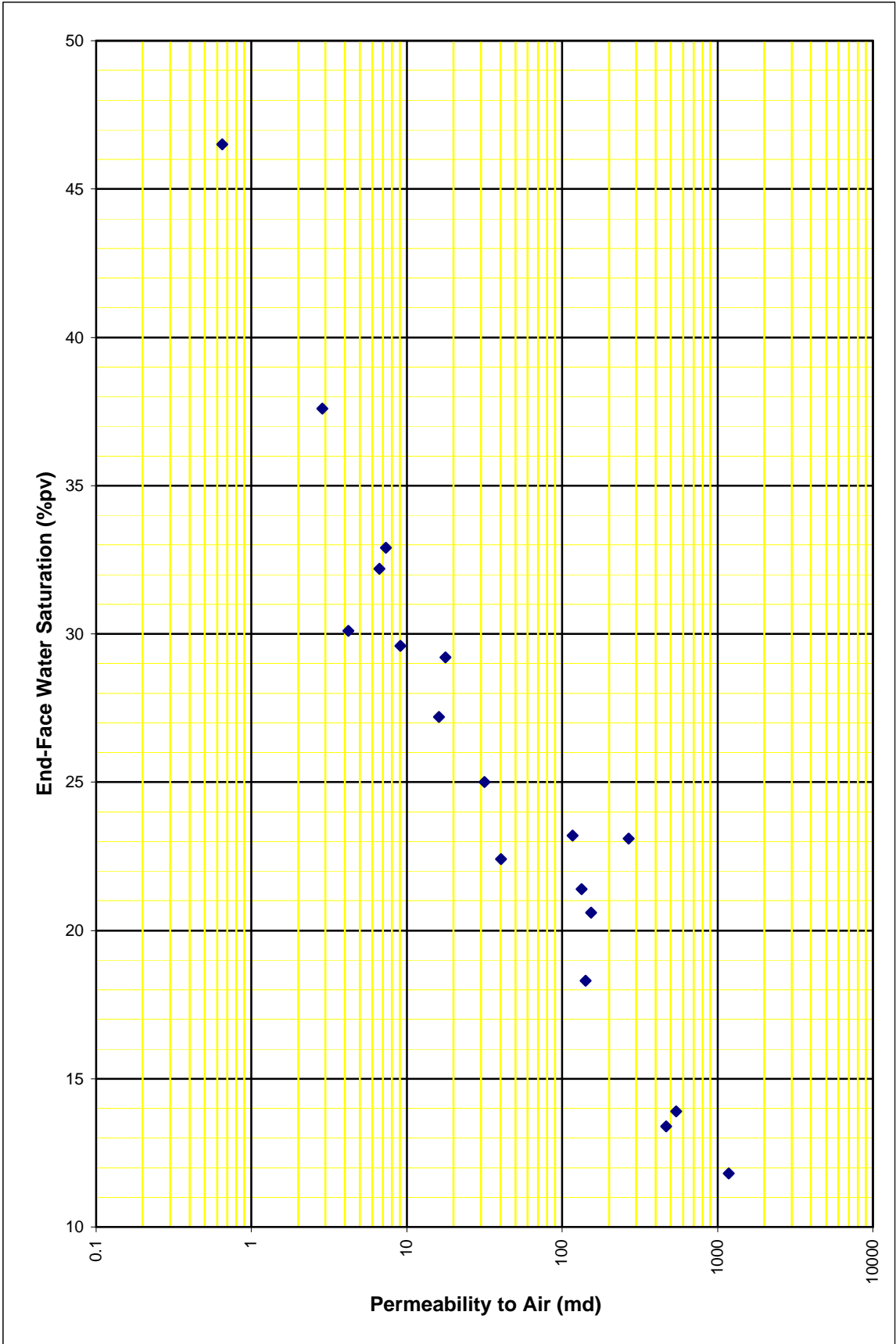
SECTION 4

CAPILLARY PRESSURE

Summary of centrifuge air-brine capillary pressure at ambient

Sample No.	Depth (m)	Kair (md)	Porosity (%)	AIR - BRINE CAPILLARY PRESSURE (psi)								
				0	2	5	10	25	50	100	200	350
				END-FACE WATER SATURATION Sw (%pv)								
17	1761.80	117	21.9	100	87.1	73.8	61.8	50.0	41.2	33.5	26.6	23.2
18	1762.10	1180	24.3	100	61.8	49.7	41.5	31.9	25.3	19.4	14.1	11.8
39	1769.63	16.1	20.1	100	100	89.1	70.3	54.5	45.8	37.6	30.8	27.2
41	1770.15	466	24.3	100	73.9	53.9	43.5	35.1	27.1	18.8	14.5	13.4
45	1771.60	9.12	19.0	100	100	100	85.4	67.3	53.4	43.4	35.8	29.6
9	1773.24	267	21.3	100	82.7	69.5	62.5	51.8	41.6	32.0	26.0	23.1
51	1774.20	2.85	18.8	100	100	100	100	68.8	56.7	46.6	40.1	37.6
60	1776.92	6.65	19.3	100	100	100	80.8	62.4	51.6	42.9	34.6	32.2
64	1778.10	7.36	19.0	100	100	100	90.9	71.3	55.2	44.6	38.0	32.9
65	1778.45	153	23.7	100	92.2	70.6	57.8	44.3	36.2	29.1	23.7	20.6
75	1781.40	4.19	19.3	100	100	100	89.1	72.4	59.7	47.9	37.2	30.1
78	1782.30	17.7	21.0	100	100	100	75.5	55.7	45.3	37.9	32.4	29.2
1	1782.53	40.3	22.0	100	100	83.1	67.5	50.0	39.9	32.1	26.2	22.4
79	1782.90	133	23.8	100	92.0	74.0	52.4	45.0	39.0	29.9	24.7	21.4
81	1783.50	540	25.5	100	72.5	57.4	48.8	37.6	29.9	23.1	17.5	13.9
85	1784.97	141	21.9	100	92.6	71.0	56.1	43.7	35.0	27.8	21.4	18.3
86	1785.30	0.650	15.6	100	100	100	100	94.5	80.5	67.7	53.9	46.5
100	1790.40	31.6	22.9	100	100	84.5	72.1	57.5	47.7	38.7	29.7	25.0

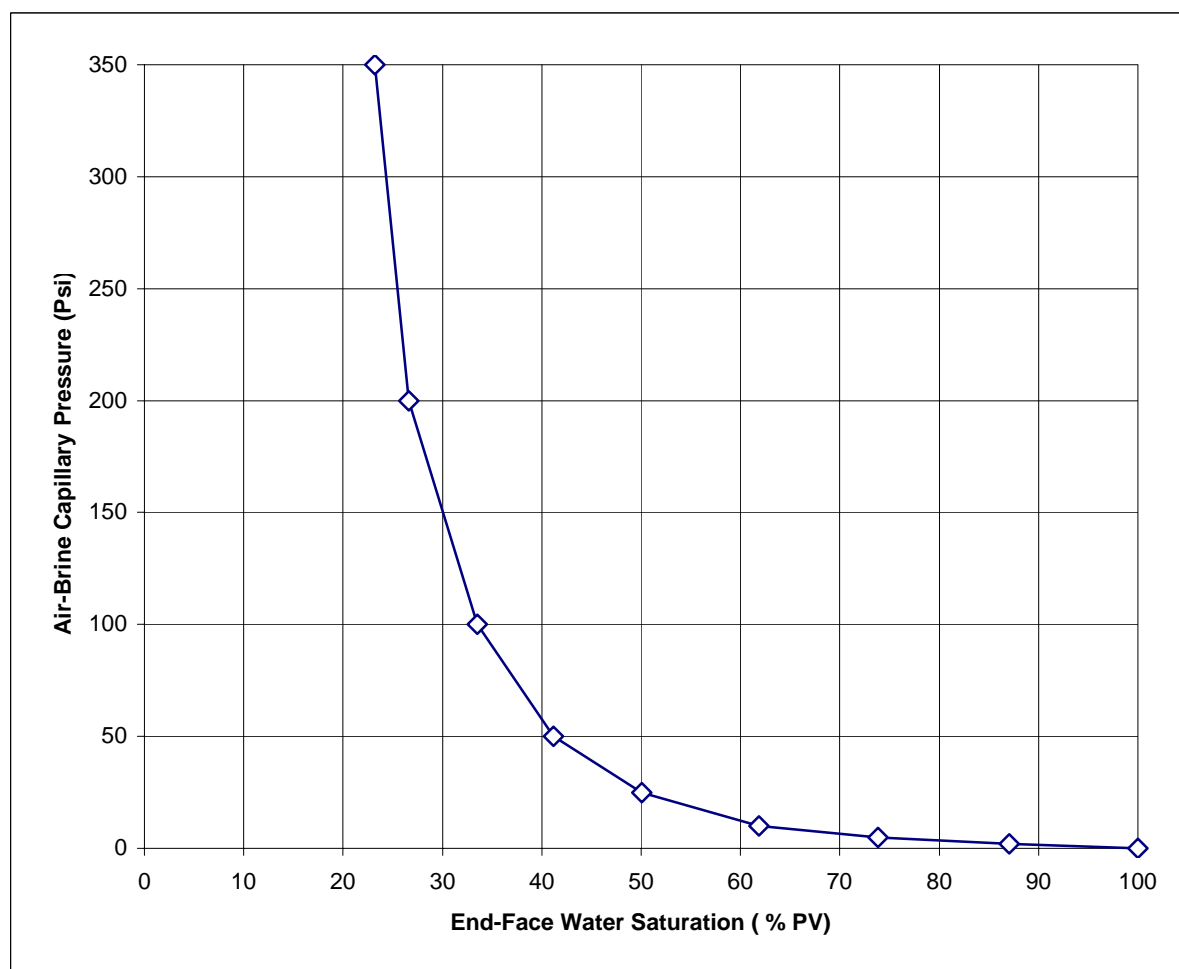
Water saturation (Swi) vs permeability to air



Centrifuge Air-brine Capillary Pressure at Ambient

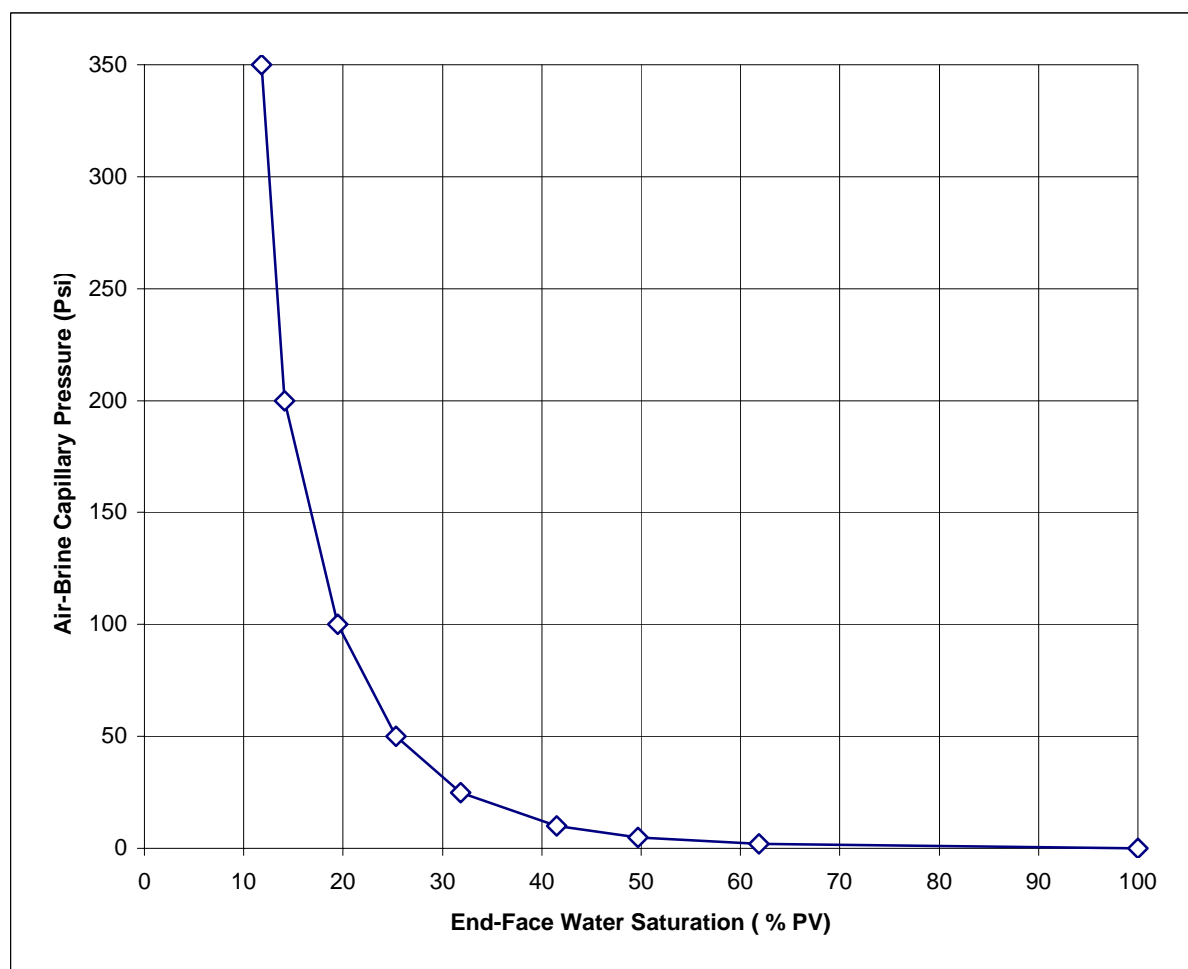
Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)
17	1761.80	117	21.9

Capillary pressure (psi)	End face water saturation (%pv)
0	100
2	87.1
5	73.8
10	61.8
25	50.0
50	41.2
100	33.5
200	26.6
350	23.2



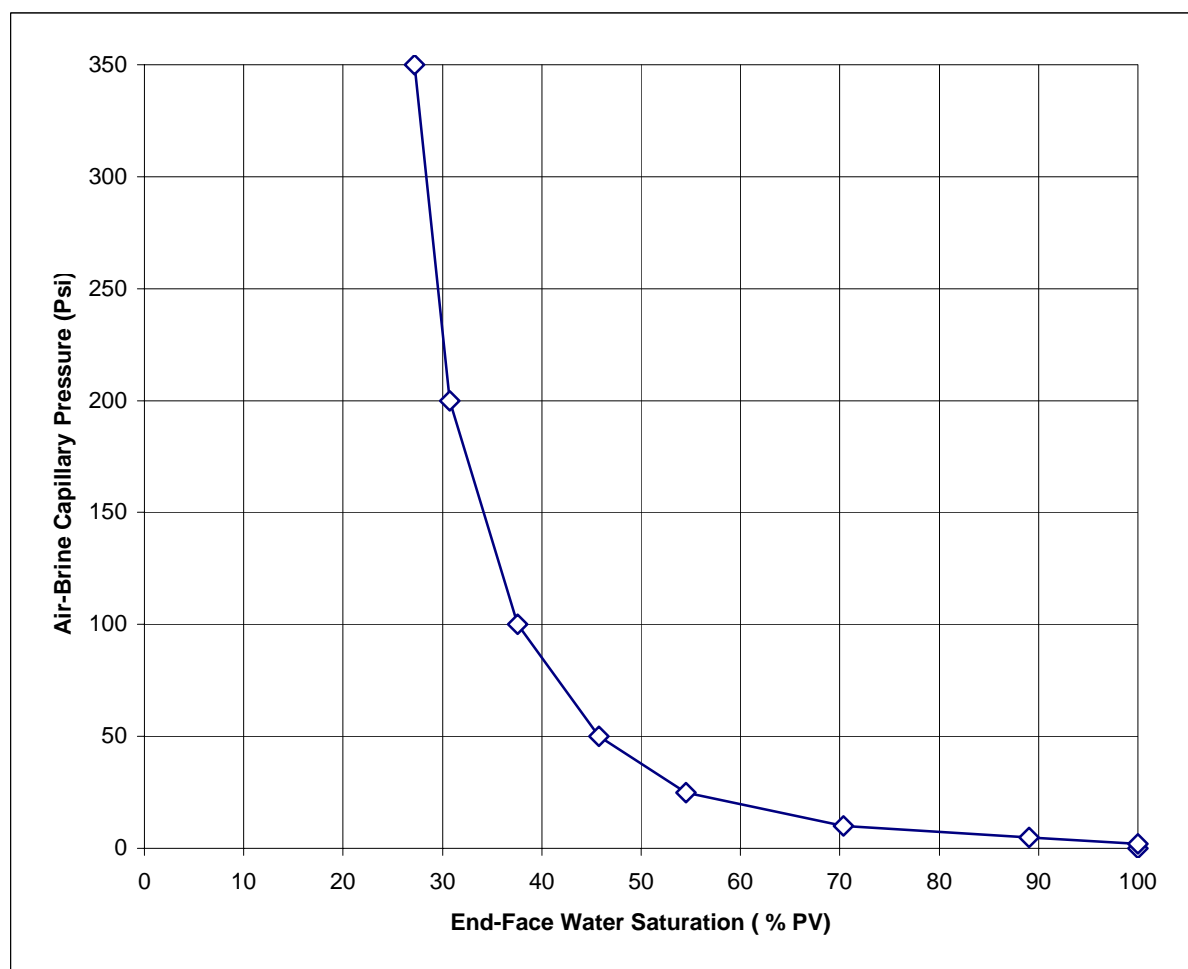
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
18	1762.10	1180	24.3	0	100
				2	61.8
				5	49.7
				10	41.5
				25	31.9
				50	25.3
				100	19.4
				200	14.1
				350	11.8



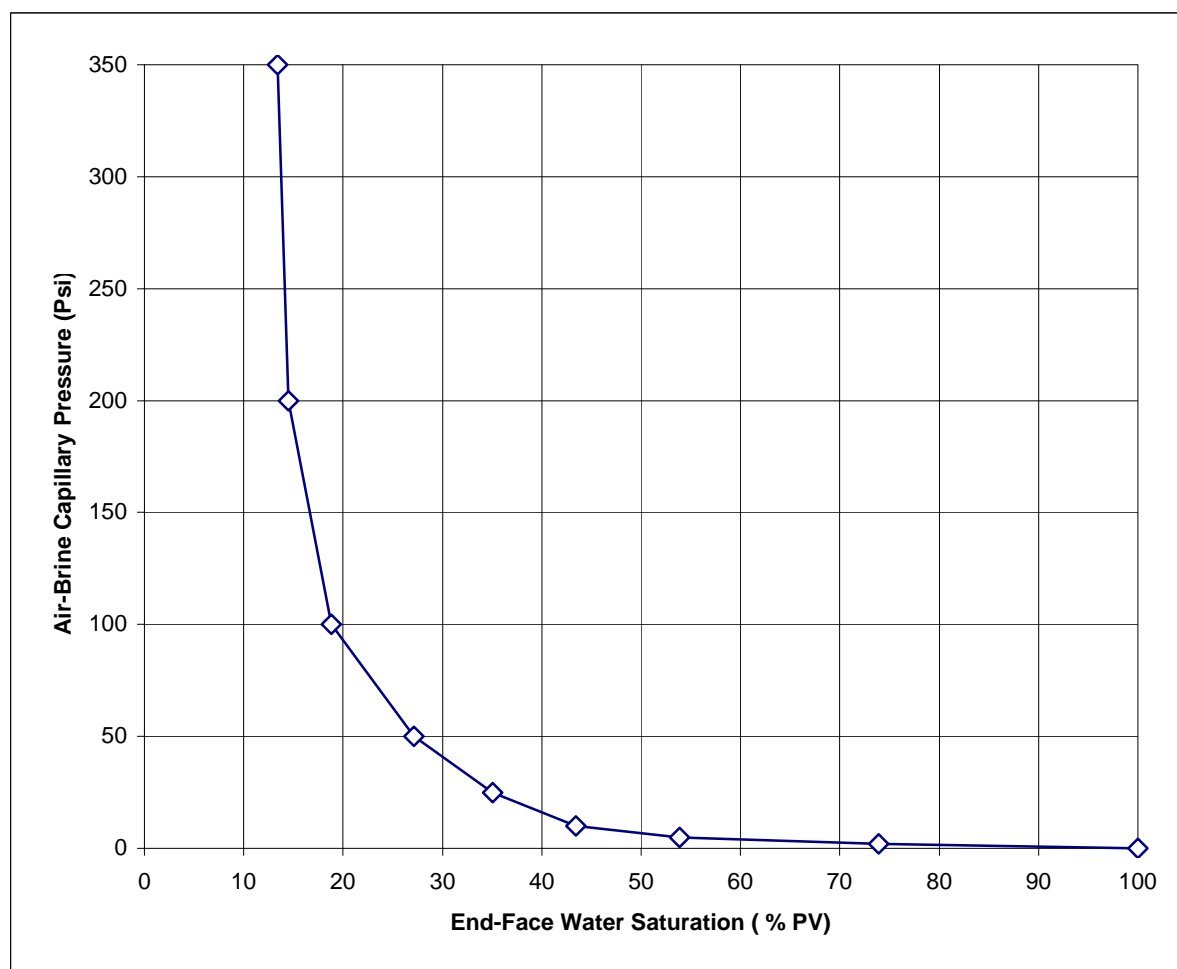
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
39	1769.63	16.1	20.1	0	100
				2	100
				5	89.1
				10	70.3
				25	54.5
				50	45.8
				100	37.6
				200	30.8
				350	27.2



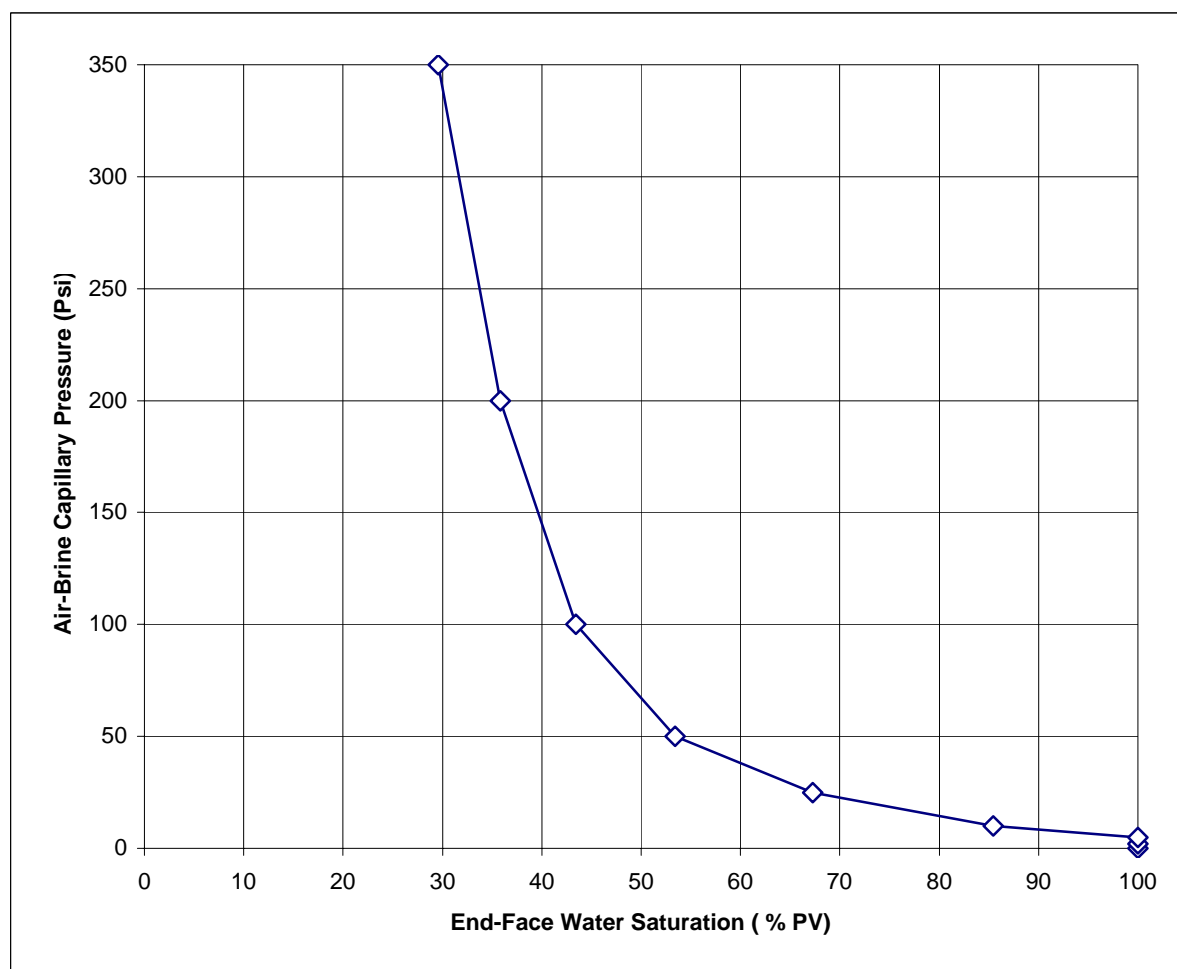
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
41	1770.15	466	24.3	0	100
				2	73.9
				5	53.9
				10	43.5
				25	35.1
				50	27.1
				100	18.8
				200	14.5
				350	13.4



Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
45	1771.60	9.12	19.0	0	100
				2	100
				5	100
				10	85.4
				25	67.3
				50	53.4
				100	43.4
				200	35.8
				350	29.6

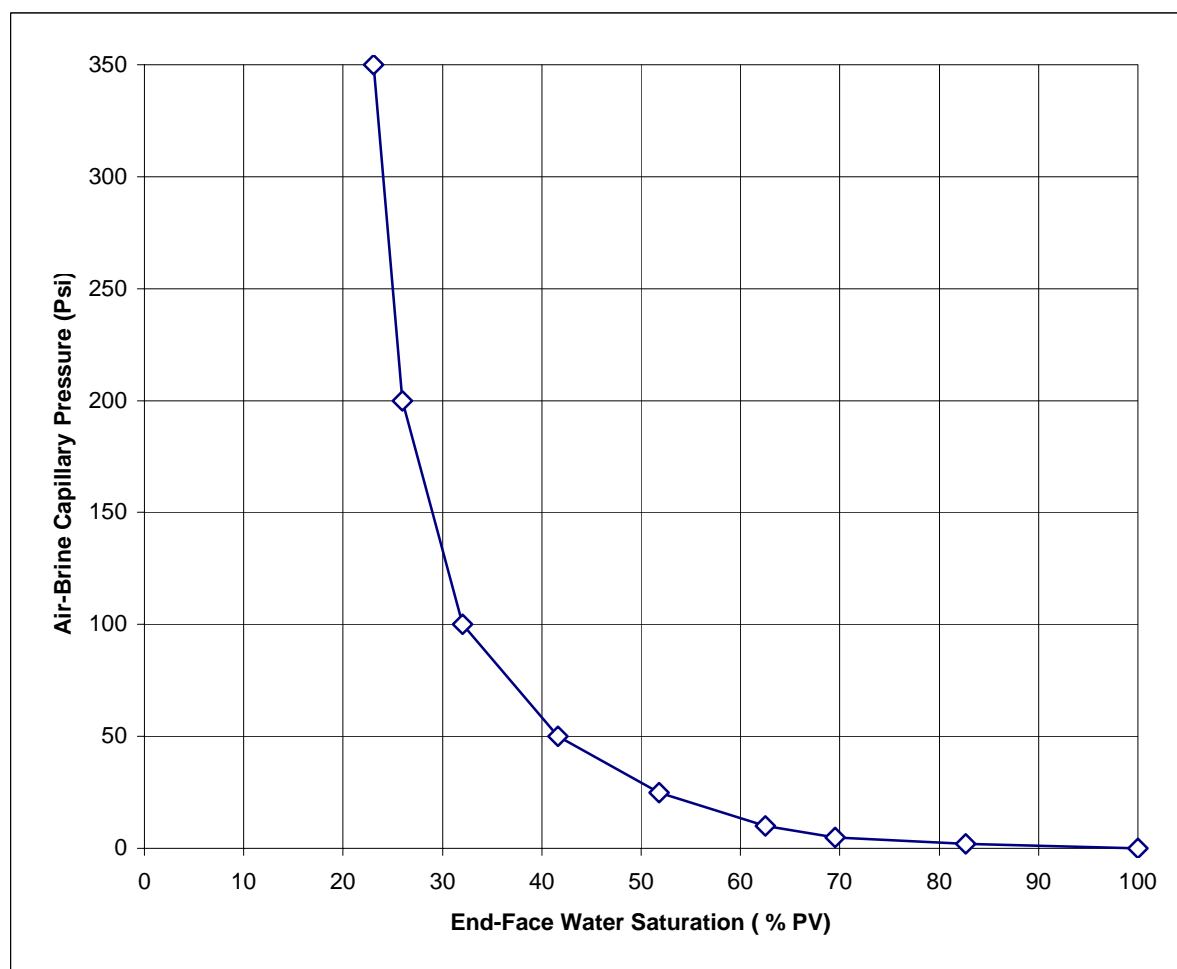


Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)
9	1773.24	267	21.3

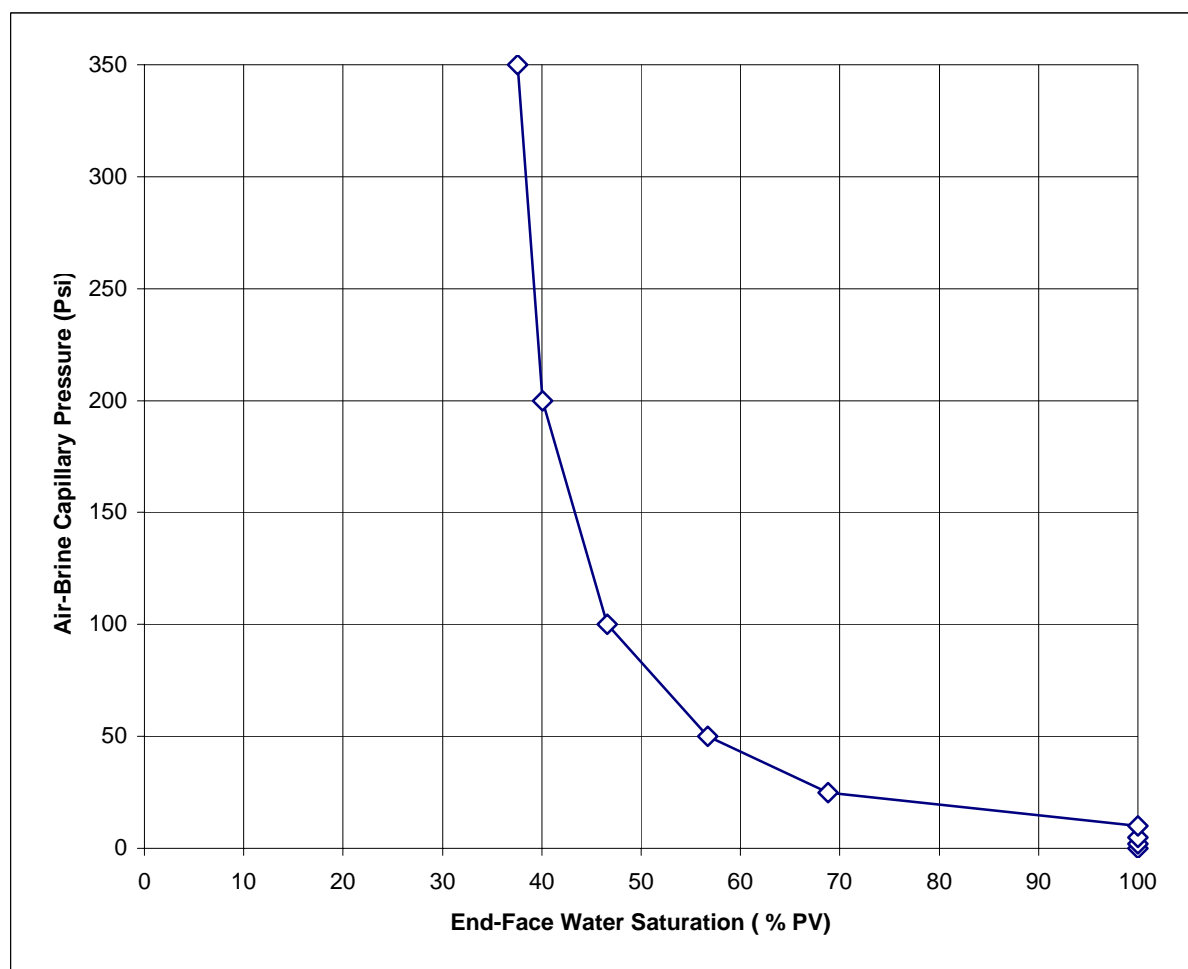
Carbonaceous parting

Capillary pressure (psi)	End face water saturation (%pv)
0	100
2	82.7
5	69.5
10	62.5
25	51.8
50	41.6
100	32.0
200	26.0
350	23.1



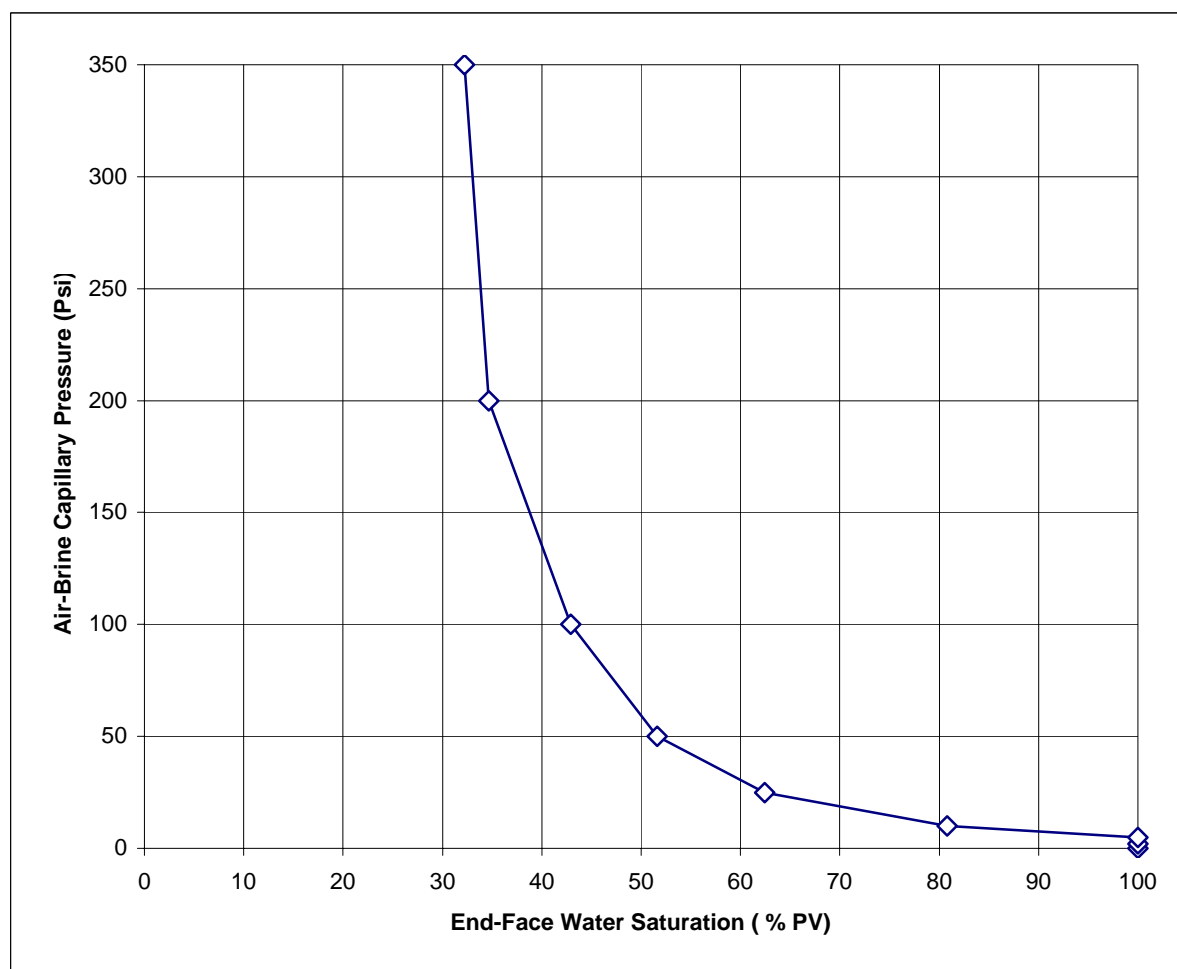
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
51	1774.20	2.85	18.8	0	100
				2	100
				5	100
				10	100
				25	68.8
				50	56.7
				100	46.6
				200	40.1
				350	37.6



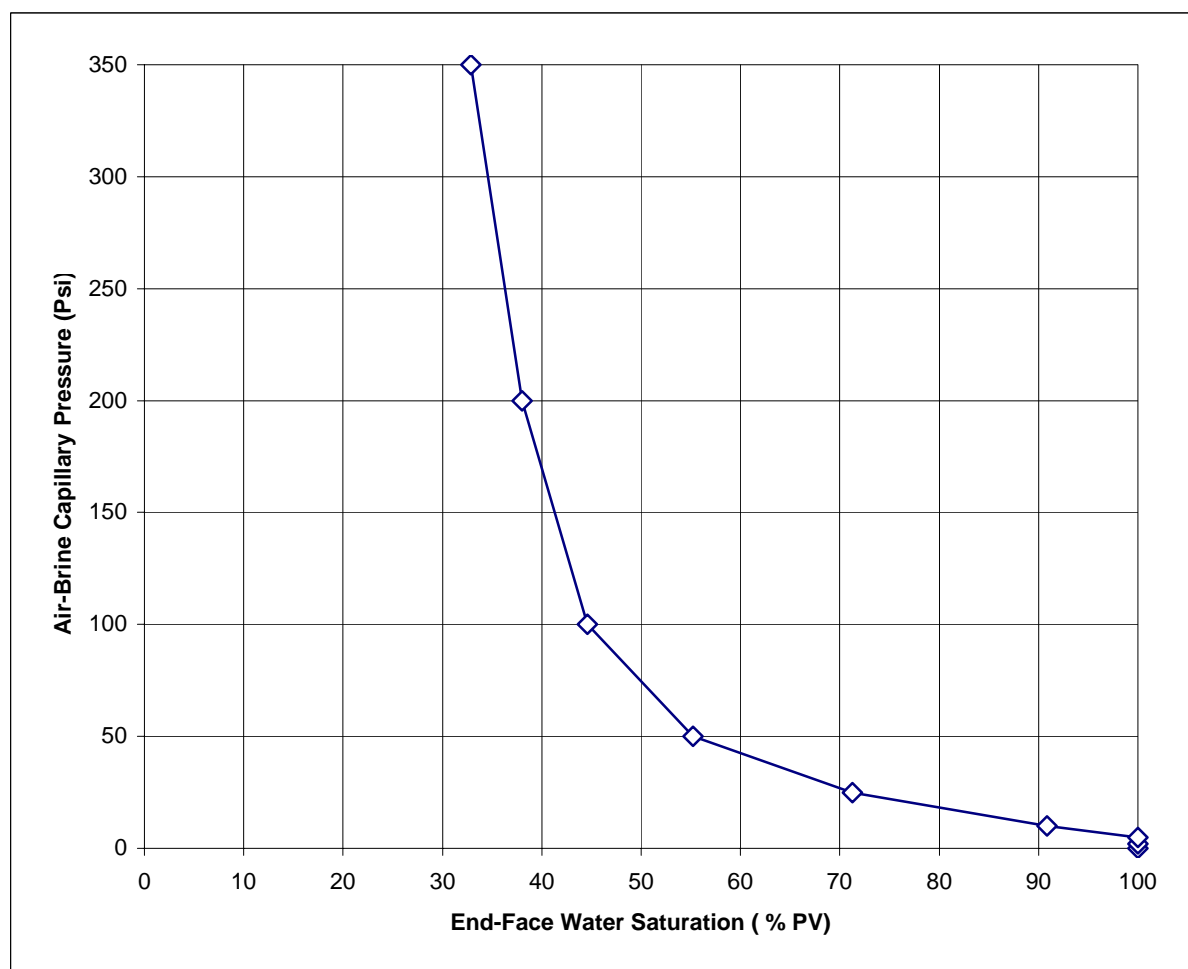
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
60	1776.92	6.65	19.3	0	100
				2	100
				5	100
				10	80.8
				25	62.4
				50	51.6
				100	42.9
				200	34.6
				350	32.2



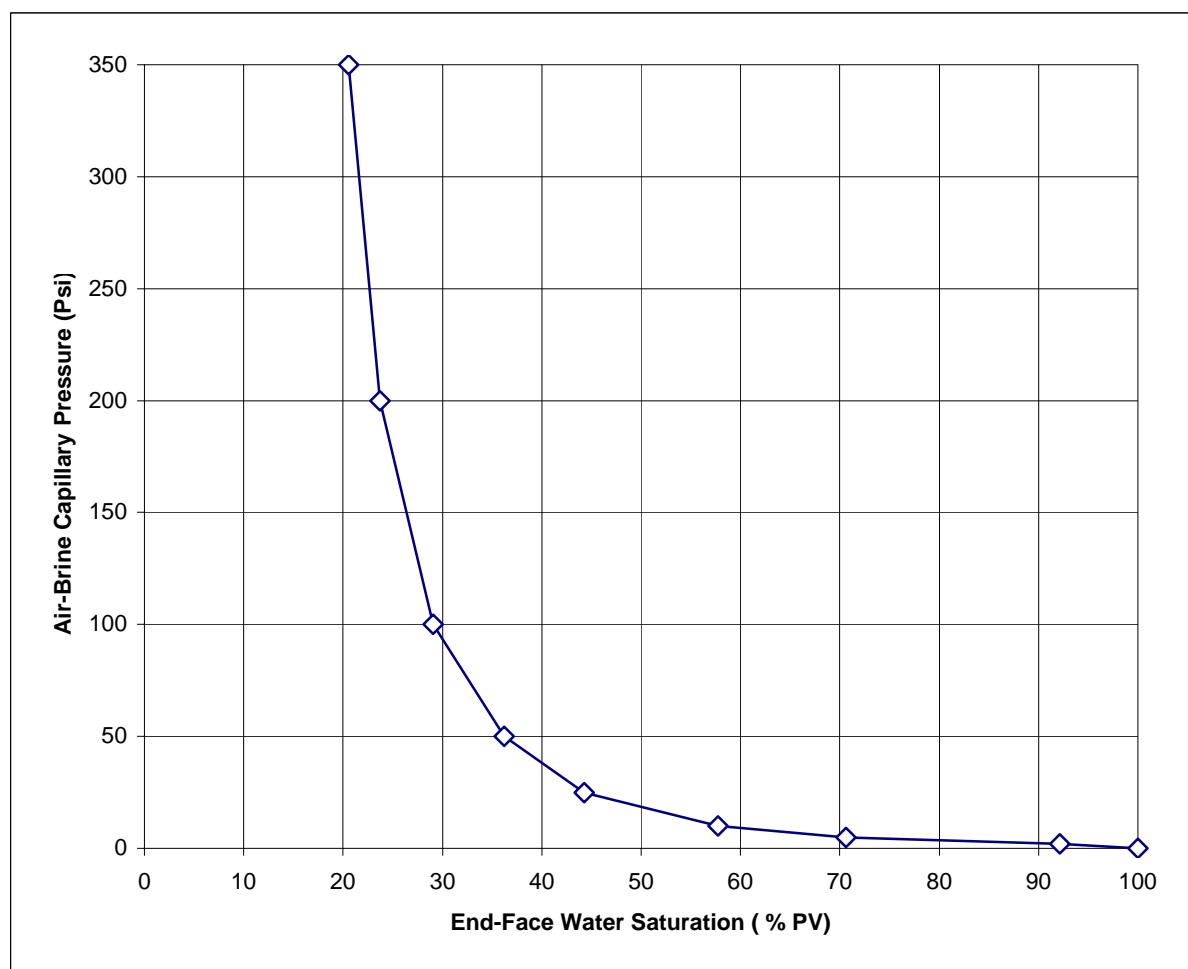
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
64	1778.10	7.36	19.0	0	100
				2	100
				5	100
				10	90.9
				25	71.3
				50	55.2
				100	44.6
				200	38.0
				350	32.9



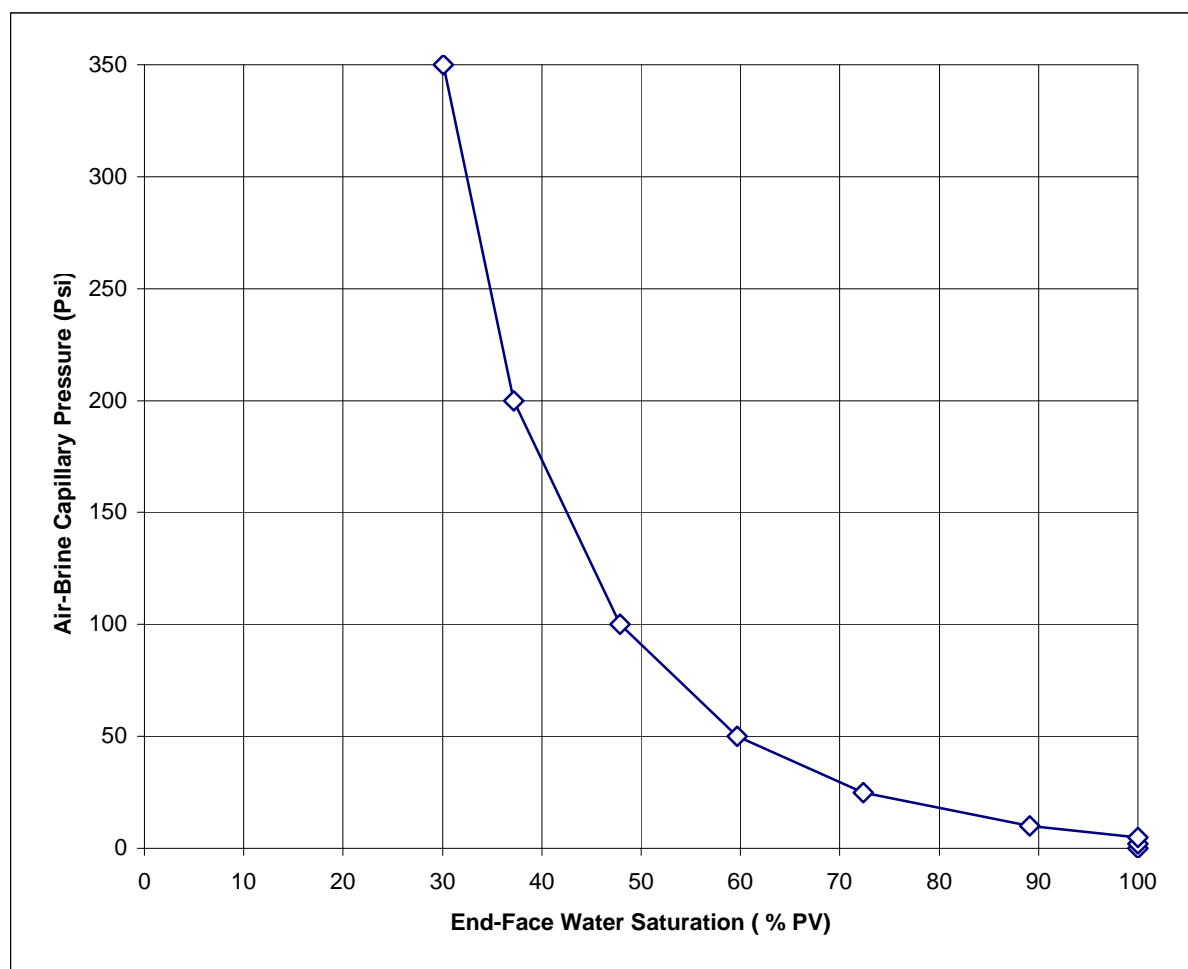
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
65	1778.45	153	23.7	0	100
				2	92.2
				5	70.6
				10	57.8
				25	44.3
				50	36.2
				100	29.1
				200	23.7
				350	20.6



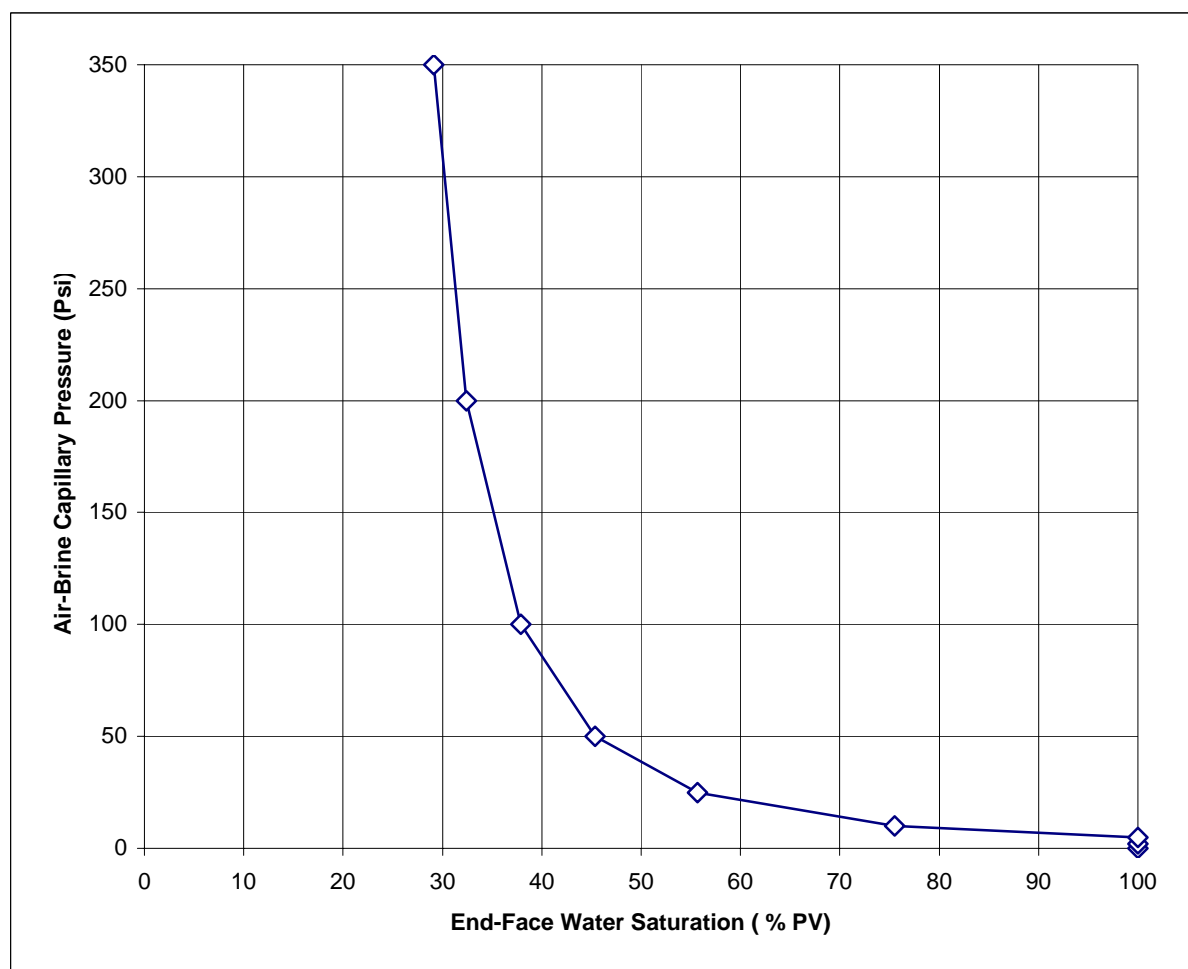
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
75	1781.40	4.19	19.3	0	100
				2	100
				5	100
				10	89.1
				25	72.4
				50	59.7
				100	47.9
				200	37.2
				350	30.1



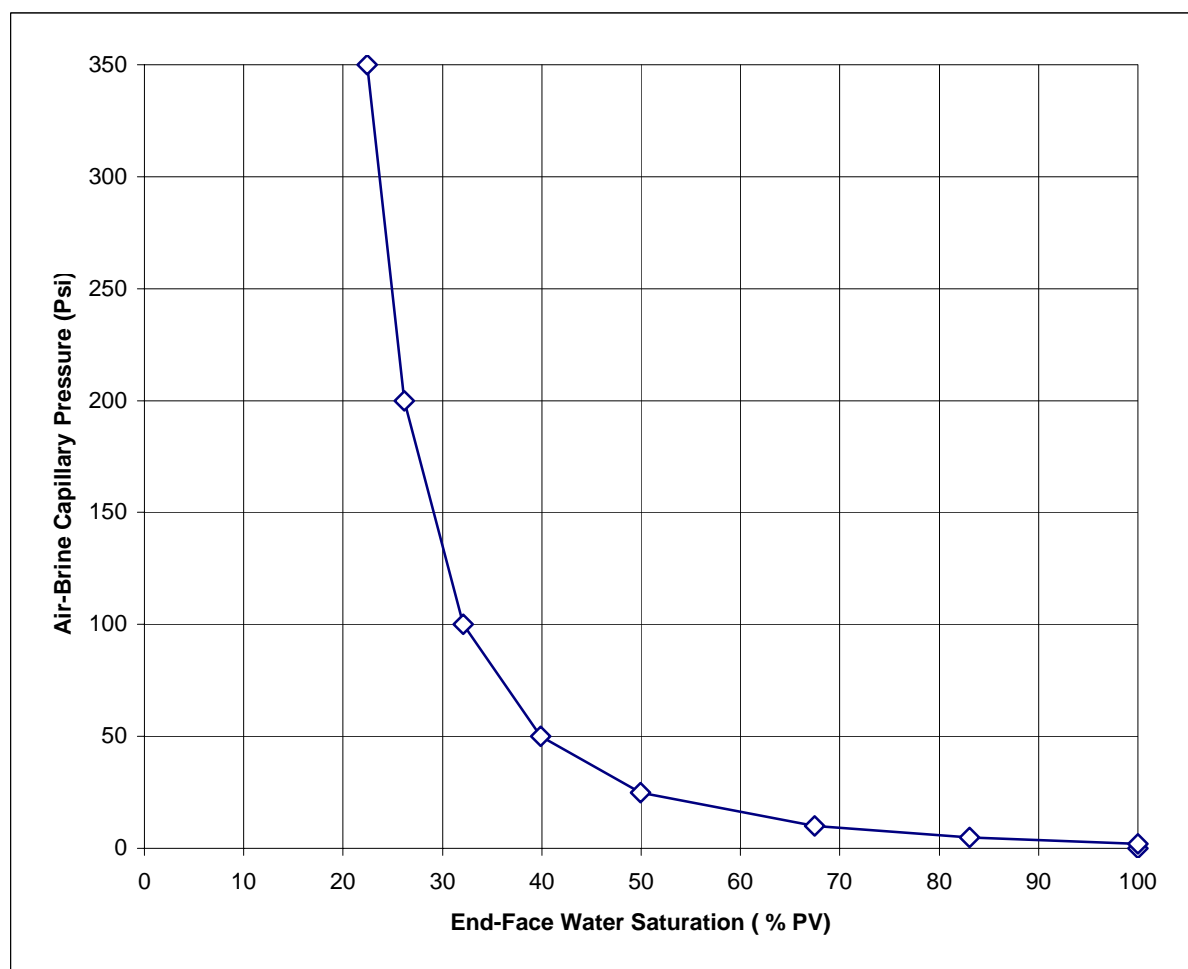
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
78	1782.30	17.7	21.0	0	100
				2	100
				5	100
				10	75.5
				25	55.7
				50	45.3
				100	37.9
				200	32.4
				350	29.2



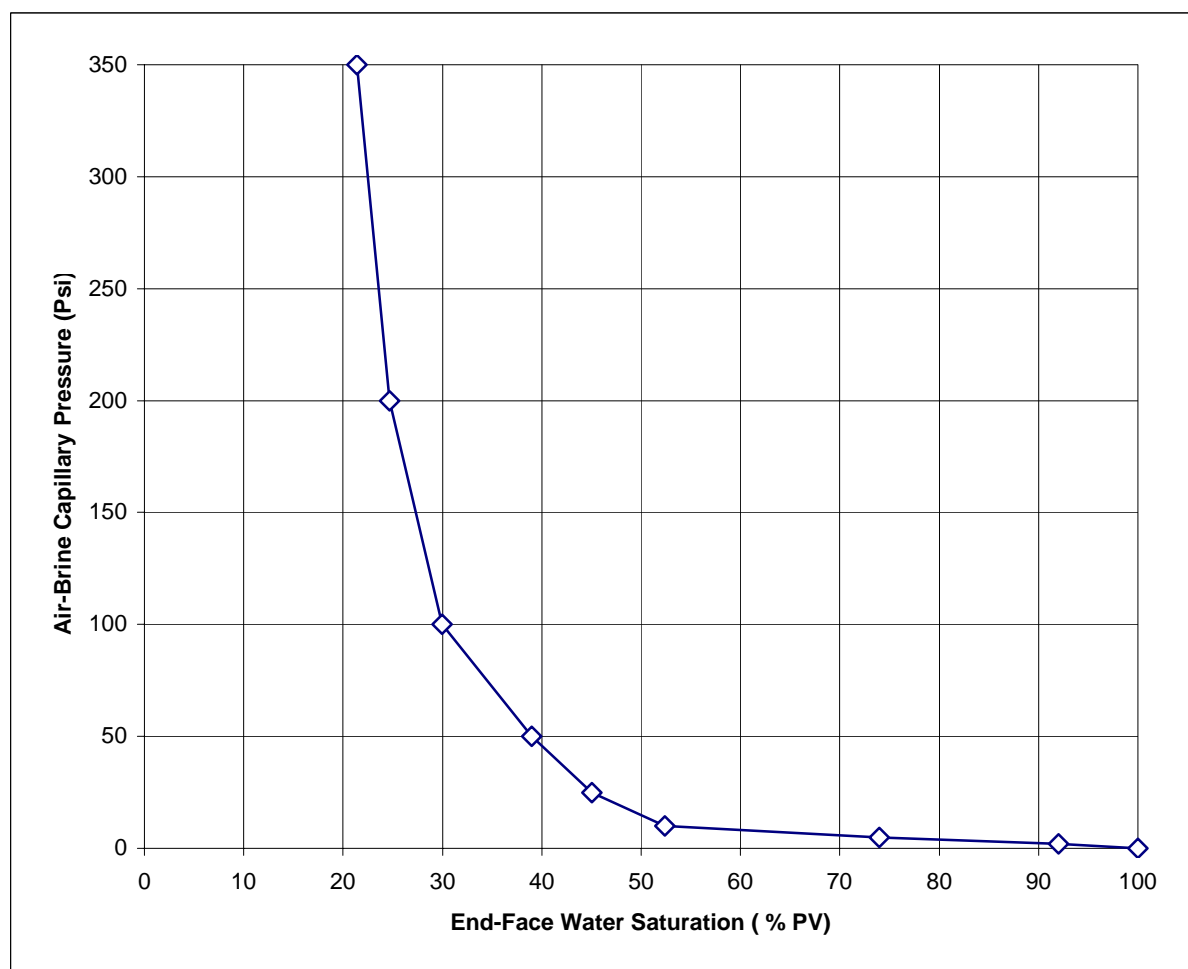
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
1	1782.53	40.3	22.0	0	100
				2	100
				5	83.1
				10	67.5
				25	50.0
				50	39.9
				100	32.1
				200	26.2
				350	22.4



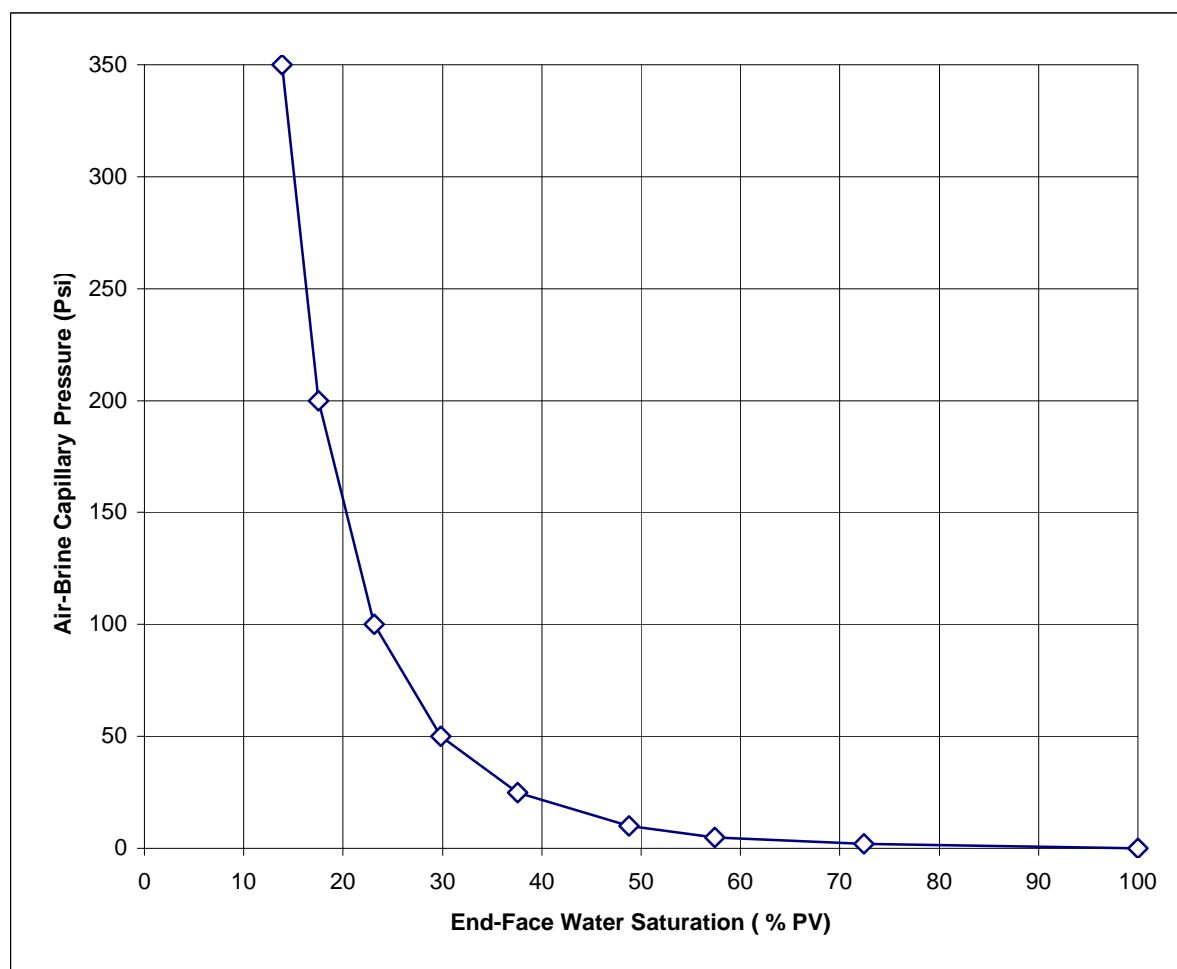
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
79	1782.90	133	23.8	0	100
				2	92.0
				5	74.0
				10	52.4
				25	45.0
				50	39.0
				100	29.9
				200	24.7
				350	21.4



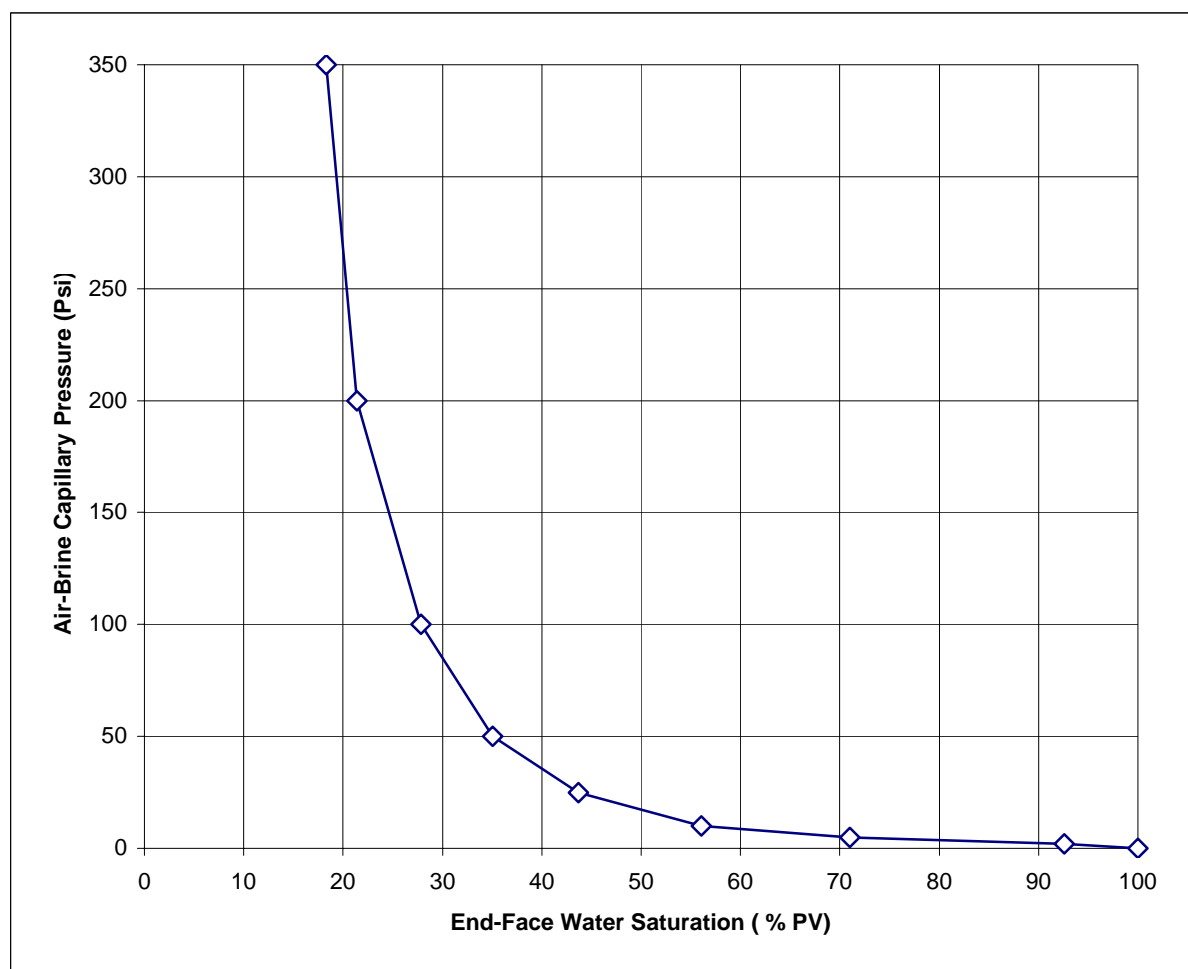
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
81	1783.50	540	25.5	0	100
				2	72.5
				5	57.4
				10	48.8
				25	37.6
				50	29.9
				100	23.1
				200	17.5
				350	13.9



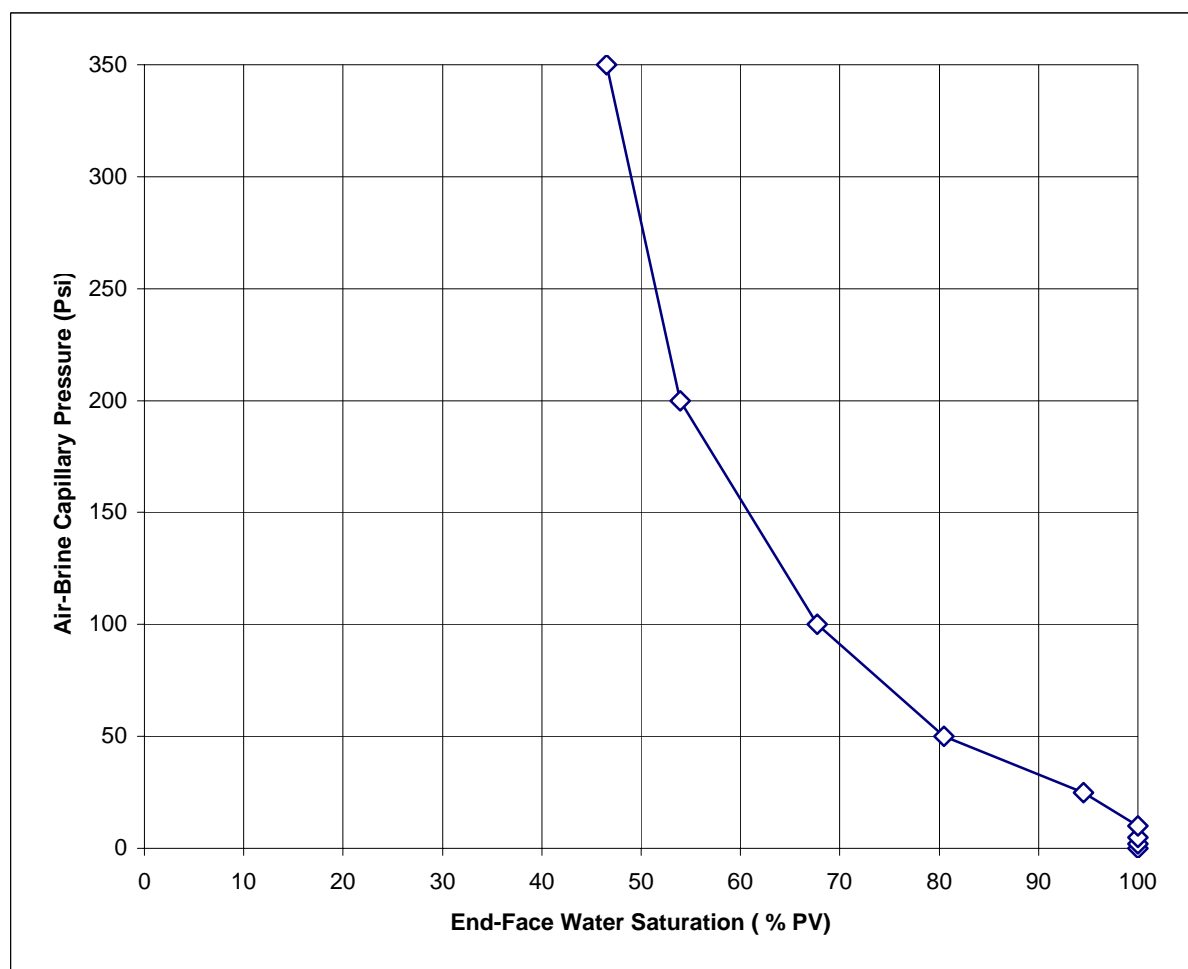
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
85	1784.97	141	21.9	0	100
				2	92.6
				5	71.0
				10	56.1
				25	43.7
				50	35.0
				100	27.8
				200	21.4
				350	18.3



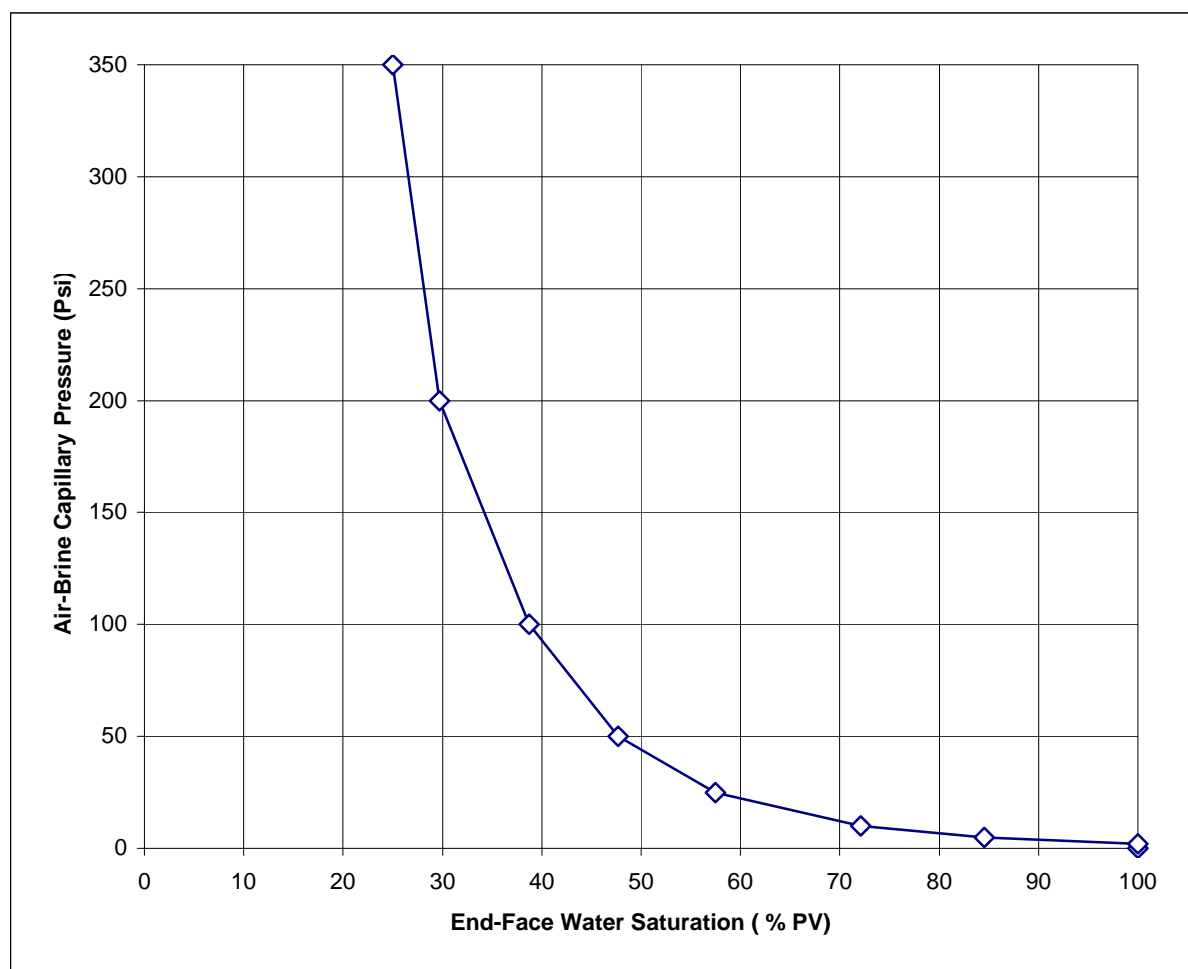
Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
86	1785.30	0.650	15.6	0	100
				2	100
				5	100
				10	100
				25	94.5
				50	80.5
				100	67.7
				200	53.9
				350	46.5



Centrifuge Air-brine Capillary Pressure at Ambient

Sample no.	Depth (m)	Kair at ambient (md)	Porosity at ambient (%)	Capillary pressure (psi)	End face water saturation (%pv)
100	1790.40	31.6	22.9	0	100
				2	100
				5	84.5
				10	72.1
				25	57.5
				50	47.7
				100	38.7
				200	29.7
				350	25.0



SECTION 5

MERCURY INJECTION

Capillary pressure by high pressure mercury injection

Sample ID : 11

Porosity, fraction : 0.255

Depth, m : 1761.20

Kair, md : 430

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	244.883	0.1	0.1	0.0
0.5	0.000	1.000	215.152	0.1	0.1	0.0
1.0	0.000	1.000	108.363	0.2	0.1	0.1
1.5	0.000	1.000	72.639	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.665	0.5	0.3	0.2
3.0	0.000	1.000	36.376	0.6	0.3	0.2
3.5	0.009	0.991	31.235	0.7	0.4	0.2
4.0	0.022	0.978	27.364	0.8	0.5	0.3
4.5	0.040	0.960	24.349	0.9	0.5	0.3
5.0	0.076	0.924	21.846	1.0	0.6	0.3
5.5	0.134	0.866	19.889	1.1	0.6	0.4
6.0	0.176	0.824	18.220	1.2	0.7	0.4
6.5	0.207	0.793	16.815	1.3	0.7	0.5
7.5	0.249	0.751	14.571	1.5	0.8	0.5
8.5	0.281	0.719	12.871	1.6	1.0	0.6
10.0	0.316	0.684	10.940	1.9	1.1	0.7
11.5	0.339	0.661	9.513	2.2	1.3	0.8
13.0	0.359	0.641	8.410	2.5	1.5	0.9
14.5	0.374	0.626	7.543	2.8	1.6	1.0
16.0	0.388	0.612	6.835	3.1	1.8	1.1
18.0	0.403	0.597	6.077	3.5	2.0	1.3
20.0	0.416	0.584	5.465	3.9	2.3	1.4
25.0	0.437	0.563	4.374	4.8	2.8	1.7
27.5	0.447	0.553	3.977	5.3	3.1	1.9
30.0	0.455	0.545	3.645	5.8	3.4	2.1
35.6	0.467	0.533	3.070	6.9	4.0	2.5
40.0	0.476	0.524	2.730	7.8	4.5	2.8
46.0	0.485	0.515	2.373	8.9	5.2	3.2
50.9	0.494	0.506	2.146	9.9	5.8	3.6
54.8	0.507	0.493	1.993	10.6	6.2	3.8
65.5	0.531	0.469	1.667	12.7	7.4	4.6
75.9	0.552	0.448	1.439	14.7	8.6	5.3
86.4	0.571	0.429	1.264	16.7	9.8	6.0

Capillary pressure by high pressure mercury injection

Sample ID : 11

Porosity, fraction : 0.255

Depth, m : 1761.20

Kair, md : 430

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
95.5	0.585	0.415	1.144	18.5	10.8	6.7
111.1	0.607	0.393	0.983	21.5	12.6	7.8
136.0	0.634	0.366	0.803	26.4	15.4	9.5
171.5	0.663	0.337	0.637	33.2	19.4	12.0
217.1	0.692	0.308	0.503	42.1	24.5	15.2
266.4	0.715	0.285	0.410	51.6	30.1	18.6
328.0	0.735	0.265	0.333	63.6	37.1	23.0
415.0	0.758	0.242	0.263	80.4	46.9	29.0
518.9	0.776	0.224	0.210	100.6	58.7	36.3
634.7	0.792	0.208	0.172	123.0	71.8	44.4
797.4	0.808	0.192	0.137	154.5	90.1	55.8
997.9	0.825	0.175	0.109	193.4	112.8	69.8
1198.4	0.839	0.161	0.091	232.3	135.5	83.9
1496.8	0.854	0.146	0.073	290.1	169.2	104.8
1794.8	0.866	0.134	0.061	347.8	202.9	125.6
1995.4	0.872	0.128	0.055	386.7	225.6	139.7
2345.1	0.881	0.119	0.047	454.5	265.1	164.1
2892.8	0.891	0.109	0.038	560.6	327.0	202.5
3592.8	0.901	0.099	0.030	696.3	406.2	251.4
4487.3	0.910	0.090	0.024	869.7	507.3	314.0
5586.8	0.917	0.083	0.020	1082.8	631.6	391.0
6888.2	0.923	0.077	0.016	1335.0	778.7	482.1
8587.5	0.928	0.072	0.013	1664.3	970.9	601.0
10582.3	0.932	0.068	0.010	2051.0	1196.4	740.6
14783.5	0.938	0.062	0.007	2865.2	1671.3	1034.6
19982.5	0.943	0.057	0.005	3872.8	2259.1	1398.5
24992.8	0.947	0.053	0.004	4843.8	2825.6	1749.2
29996.1	0.951	0.049	0.004	5813.5	3391.2	2099.3
34994.0	0.955	0.045	0.003	6782.1	3956.3	2449.1
39998.2	0.958	0.042	0.003	7752.0	4522.0	2799.3
44992.5	0.961	0.039	0.002	8719.9	5086.6	3148.9
49991.9	0.965	0.035	0.002	9688.9	5651.8	3498.8
54992.6	0.968	0.032	0.002	10658.1	6217.2	3848.7

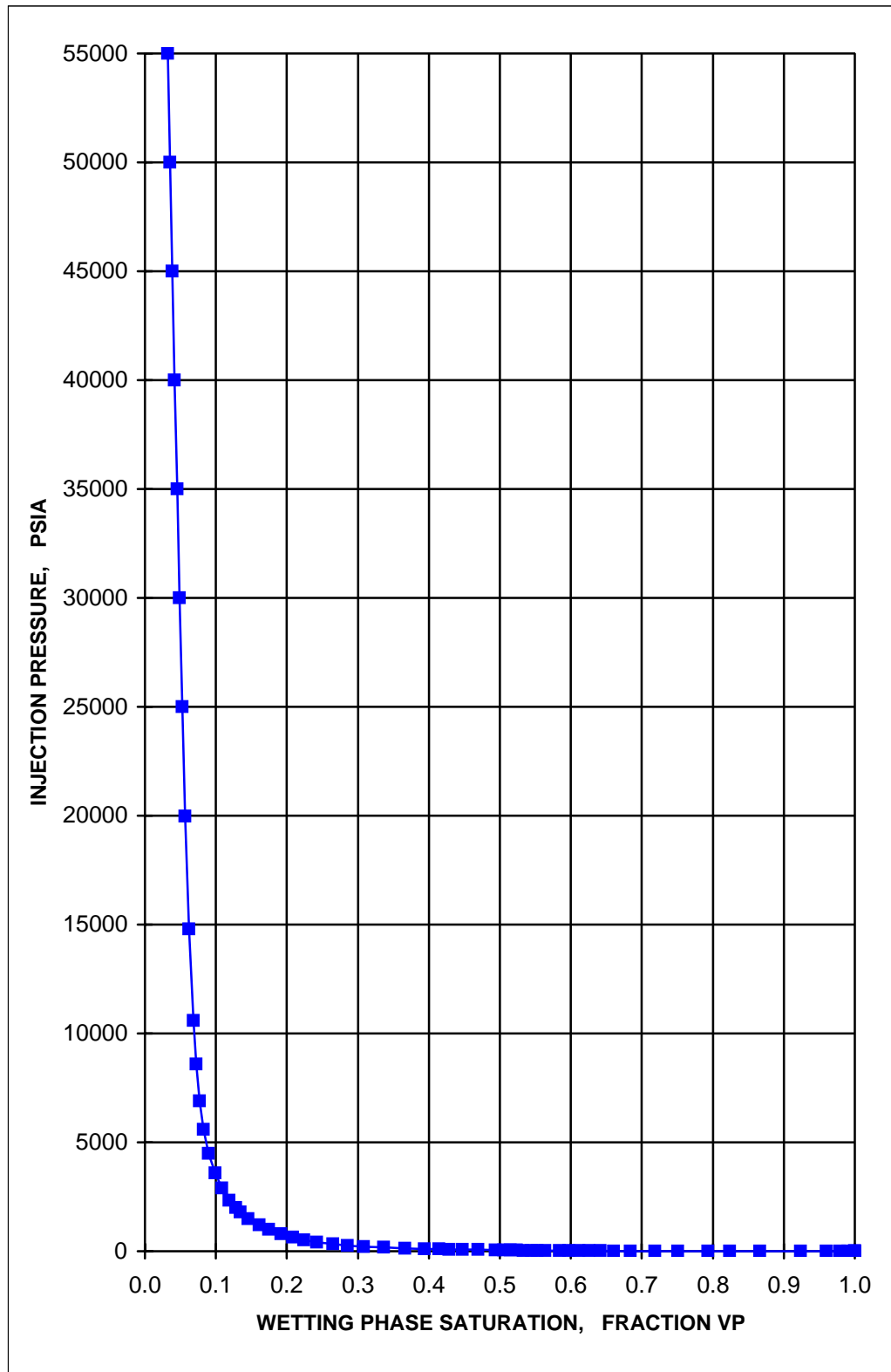
Capillary pressure by high pressure mercury injection

Sample ID : 11

Porosity, fraction : 0.255

Depth, m : 1761.20

Kair, md : 430



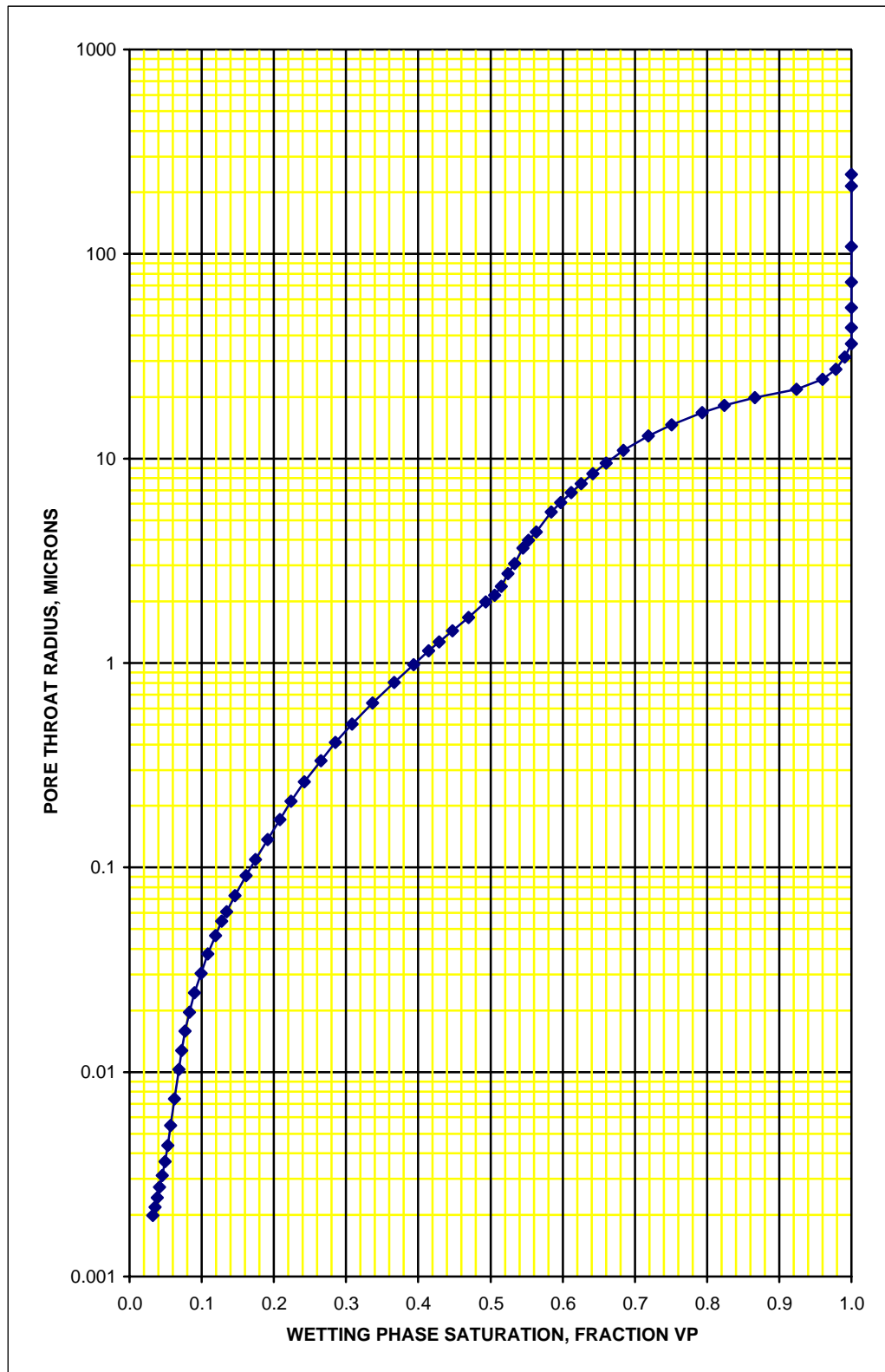
Pore throat size distribution by high pressure mercury injection

Sample ID : 11

Porosity, fraction : 0.255

Depth, m : 1761.20

Kair, md : 430



Capillary pressure by high pressure mercury injection

Sample ID : 17

Porosity, fraction : 0.219

Depth, m : 1761.80

Kair, md : 117

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	244.883	0.1	0.1	0.0
0.5	0.000	1.000	215.152	0.1	0.1	0.0
1.0	0.000	1.000	108.363	0.2	0.1	0.1
1.5	0.000	1.000	72.639	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.665	0.5	0.3	0.2
3.0	0.000	1.000	36.376	0.6	0.3	0.2
3.5	0.000	1.000	31.235	0.7	0.4	0.2
4.0	0.000	1.000	27.364	0.8	0.5	0.3
4.5	0.000	1.000	24.349	0.9	0.5	0.3
5.0	0.000	1.000	21.846	1.0	0.6	0.3
5.5	0.000	1.000	19.889	1.1	0.6	0.4
6.0	0.000	1.000	18.220	1.2	0.7	0.4
6.5	0.000	1.000	16.815	1.3	0.7	0.5
7.5	0.018	0.982	14.571	1.5	0.8	0.5
8.5	0.036	0.964	12.871	1.6	1.0	0.6
10.0	0.074	0.926	10.940	1.9	1.1	0.7
11.5	0.115	0.885	9.513	2.2	1.3	0.8
13.0	0.144	0.856	8.410	2.5	1.5	0.9
14.5	0.163	0.837	7.543	2.8	1.6	1.0
16.0	0.184	0.816	6.835	3.1	1.8	1.1
18.0	0.204	0.796	6.077	3.5	2.0	1.3
20.0	0.227	0.773	5.465	3.9	2.3	1.4
25.0	0.265	0.735	4.374	4.8	2.8	1.7
27.5	0.281	0.719	3.977	5.3	3.1	1.9
30.0	0.293	0.707	3.645	5.8	3.4	2.1
37.0	0.310	0.690	2.949	7.2	4.2	2.6
41.1	0.324	0.676	2.655	8.0	4.7	2.9
46.6	0.335	0.665	2.343	9.0	5.3	3.3
51.6	0.346	0.654	2.117	10.0	5.8	3.6
56.7	0.359	0.641	1.927	11.0	6.4	4.0
66.6	0.384	0.616	1.641	12.9	7.5	4.7
76.5	0.406	0.594	1.429	14.8	8.6	5.4
86.8	0.426	0.574	1.258	16.8	9.8	6.1

Capillary pressure by high pressure mercury injection

Sample ID : 17

Porosity, fraction : 0.219

Depth, m : 1761.80

Kair, md : 117

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.4	0.443	0.557	1.133	18.7	10.9	6.7
110.4	0.467	0.533	0.990	21.4	12.5	7.7
136.3	0.500	0.500	0.801	26.4	15.4	9.5
171.3	0.536	0.464	0.638	33.2	19.4	12.0
216.9	0.571	0.429	0.503	42.0	24.5	15.2
267.3	0.601	0.399	0.409	51.8	30.2	18.7
327.7	0.627	0.373	0.333	63.5	37.0	22.9
416.9	0.657	0.343	0.262	80.8	47.1	29.2
519.7	0.685	0.315	0.210	100.7	58.8	36.4
639.5	0.710	0.290	0.171	123.9	72.3	44.8
795.5	0.735	0.265	0.137	154.2	89.9	55.7
997.5	0.761	0.239	0.109	193.3	112.8	69.8
1199.6	0.782	0.218	0.091	232.5	135.6	84.0
1496.5	0.804	0.196	0.073	290.0	169.2	104.7
1796.6	0.822	0.178	0.061	348.2	203.1	125.7
1997.1	0.832	0.168	0.055	387.1	225.8	139.8
2347.1	0.846	0.154	0.047	454.9	265.4	164.3
2894.1	0.863	0.137	0.038	560.9	327.2	202.5
3593.3	0.878	0.122	0.030	696.4	406.2	251.5
4489.8	0.893	0.107	0.024	870.2	507.6	314.2
5586.1	0.904	0.096	0.020	1082.6	631.5	391.0
6887.5	0.913	0.087	0.016	1334.9	778.7	482.0
8589.4	0.920	0.080	0.013	1664.7	971.1	601.1
10585.0	0.926	0.074	0.010	2051.5	1196.7	740.8
14782.3	0.935	0.065	0.007	2864.9	1671.2	1034.6
19981.7	0.941	0.059	0.005	3872.6	2259.0	1398.4
24992.9	0.946	0.054	0.004	4843.9	2825.6	1749.2
29994.5	0.951	0.049	0.004	5813.2	3391.0	2099.2
34995.4	0.955	0.045	0.003	6782.4	3956.4	2449.2
39993.7	0.959	0.041	0.003	7751.1	4521.5	2799.0
44993.2	0.963	0.037	0.002	8720.1	5086.7	3148.9
49993.1	0.966	0.034	0.002	9689.1	5652.0	3498.8
54992.5	0.970	0.030	0.002	10658.0	6217.2	3848.7

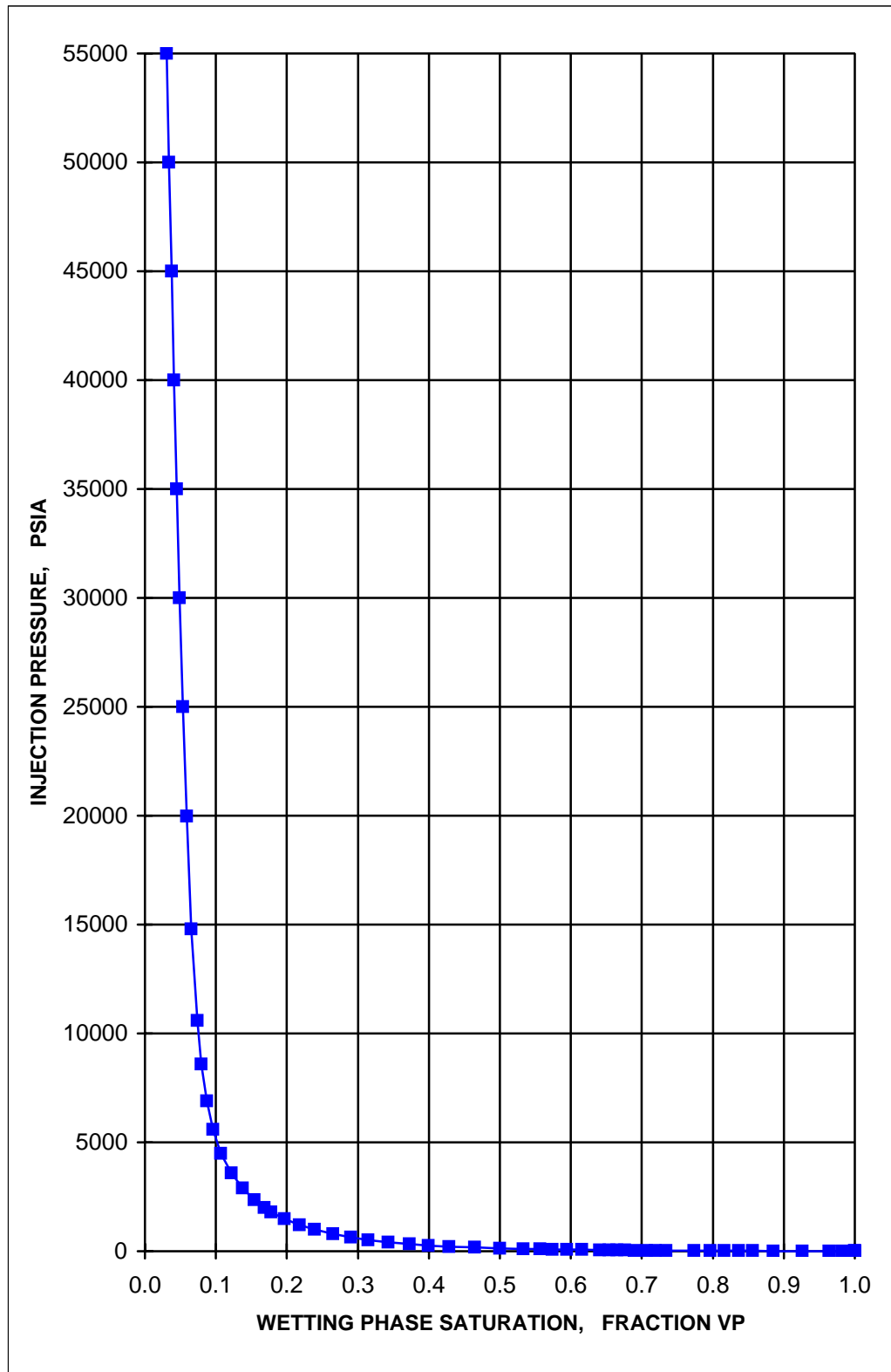
Capillary pressure by high pressure mercury injection

Sample ID : 17

Porosity, fraction : 0.219

Depth, m : 1761.80

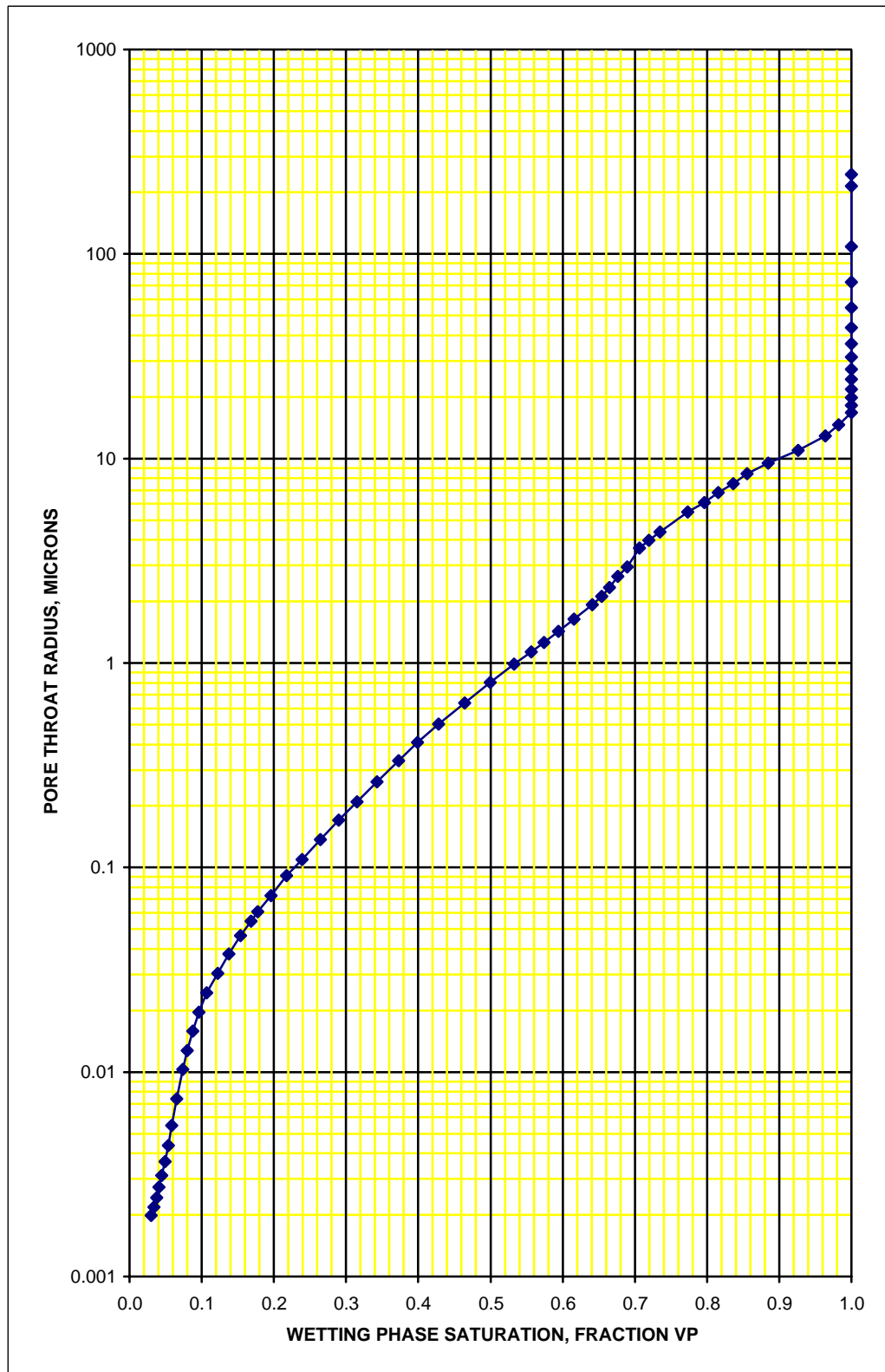
Kair, md : 117



Pore throat size distribution by high pressure mercury injection

Sample ID : 17
Depth, m : 1761.80

Porosity, fraction : 0.219
Kair, md : 117



Capillary pressure by high pressure mercury injection

Sample ID : 18

Porosity, fraction : 0.243

Depth, m : 1762.10

Kair, md : 1180

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	244.883	0.1	0.1	0.0
0.5	0.000	1.000	215.152	0.1	0.1	0.0
1.0	0.000	1.000	108.363	0.2	0.1	0.1
1.5	0.000	1.000	72.639	0.3	0.2	0.1
2.0	0.013	0.987	54.756	0.4	0.2	0.1
2.5	0.029	0.971	43.665	0.5	0.3	0.2
3.0	0.062	0.938	36.376	0.6	0.3	0.2
3.5	0.110	0.890	31.235	0.7	0.4	0.2
4.0	0.167	0.833	27.364	0.8	0.5	0.3
4.5	0.213	0.787	24.349	0.9	0.5	0.3
5.0	0.253	0.747	21.846	1.0	0.6	0.3
5.5	0.285	0.715	19.889	1.1	0.6	0.4
6.0	0.310	0.690	18.220	1.2	0.7	0.4
6.5	0.329	0.671	16.815	1.3	0.7	0.5
7.5	0.360	0.640	14.571	1.5	0.8	0.5
8.5	0.383	0.617	12.871	1.6	1.0	0.6
10.0	0.409	0.591	10.940	1.9	1.1	0.7
11.5	0.428	0.572	9.513	2.2	1.3	0.8
13.0	0.443	0.557	8.410	2.5	1.5	0.9
14.5	0.455	0.545	7.543	2.8	1.6	1.0
16.0	0.467	0.533	6.835	3.1	1.8	1.1
18.0	0.478	0.522	6.077	3.5	2.0	1.3
20.0	0.490	0.510	5.465	3.9	2.3	1.4
25.0	0.506	0.494	4.374	4.8	2.8	1.7
27.5	0.512	0.488	3.977	5.3	3.1	1.9
30.0	0.519	0.481	3.645	5.8	3.4	2.1
31.6	0.522	0.478	3.453	6.1	3.6	2.2
37.1	0.529	0.471	2.945	7.2	4.2	2.6
41.3	0.534	0.466	2.646	8.0	4.7	2.9
46.8	0.540	0.460	2.335	9.1	5.3	3.3
51.8	0.556	0.444	2.110	10.0	5.9	3.6
56.9	0.568	0.432	1.920	11.0	6.4	4.0
66.8	0.588	0.412	1.635	12.9	7.6	4.7
76.7	0.606	0.394	1.424	14.9	8.7	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 18

Porosity, fraction : 0.243

Depth, m : 1762.10

Kair, md : 1180

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.1	0.621	0.379	1.253	16.9	9.9	6.1
96.7	0.634	0.366	1.129	18.8	10.9	6.8
110.7	0.652	0.348	0.986	21.5	12.5	7.7
136.7	0.676	0.324	0.799	26.5	15.5	9.6
171.8	0.700	0.300	0.636	33.3	19.4	12.0
217.5	0.725	0.275	0.502	42.2	24.6	15.2
267.9	0.744	0.256	0.408	51.9	30.3	18.8
328.4	0.760	0.240	0.333	63.6	37.1	23.0
417.6	0.779	0.221	0.262	80.9	47.2	29.2
520.5	0.793	0.207	0.210	100.9	58.8	36.4
640.3	0.805	0.195	0.171	124.1	72.4	44.8
797.1	0.818	0.182	0.137	154.5	90.1	55.8
998.5	0.833	0.167	0.109	193.5	112.9	69.9
1200.5	0.845	0.155	0.091	232.7	135.7	84.0
1497.5	0.859	0.141	0.073	290.2	169.3	104.8
1797.7	0.870	0.130	0.061	348.4	203.2	125.8
1998.2	0.876	0.124	0.055	387.3	225.9	139.8
2348.2	0.885	0.115	0.047	455.1	265.5	164.3
2895.2	0.895	0.105	0.038	561.1	327.3	202.6
3594.5	0.905	0.095	0.030	696.6	406.4	251.6
4490.9	0.915	0.085	0.024	870.4	507.7	314.3
5587.3	0.922	0.078	0.020	1082.9	631.7	391.0
6888.7	0.928	0.072	0.016	1335.1	778.8	482.1
8590.6	0.933	0.067	0.013	1664.9	971.2	601.2
10586.2	0.937	0.063	0.010	2051.7	1196.8	740.9
14783.5	0.943	0.057	0.007	2865.2	1671.4	1034.6
19982.9	0.948	0.052	0.005	3872.9	2259.2	1398.5
24994.2	0.952	0.048	0.004	4844.1	2825.7	1749.3
29995.8	0.956	0.044	0.004	5813.4	3391.2	2099.3
34996.6	0.960	0.040	0.003	6782.7	3956.6	2449.3
39995.0	0.963	0.037	0.003	7751.4	4521.6	2799.1
44994.4	0.967	0.033	0.002	8720.3	5086.9	3149.0
49994.4	0.970	0.030	0.002	9689.4	5652.1	3498.9
54993.8	0.974	0.026	0.002	10658	6217.3	3848.8

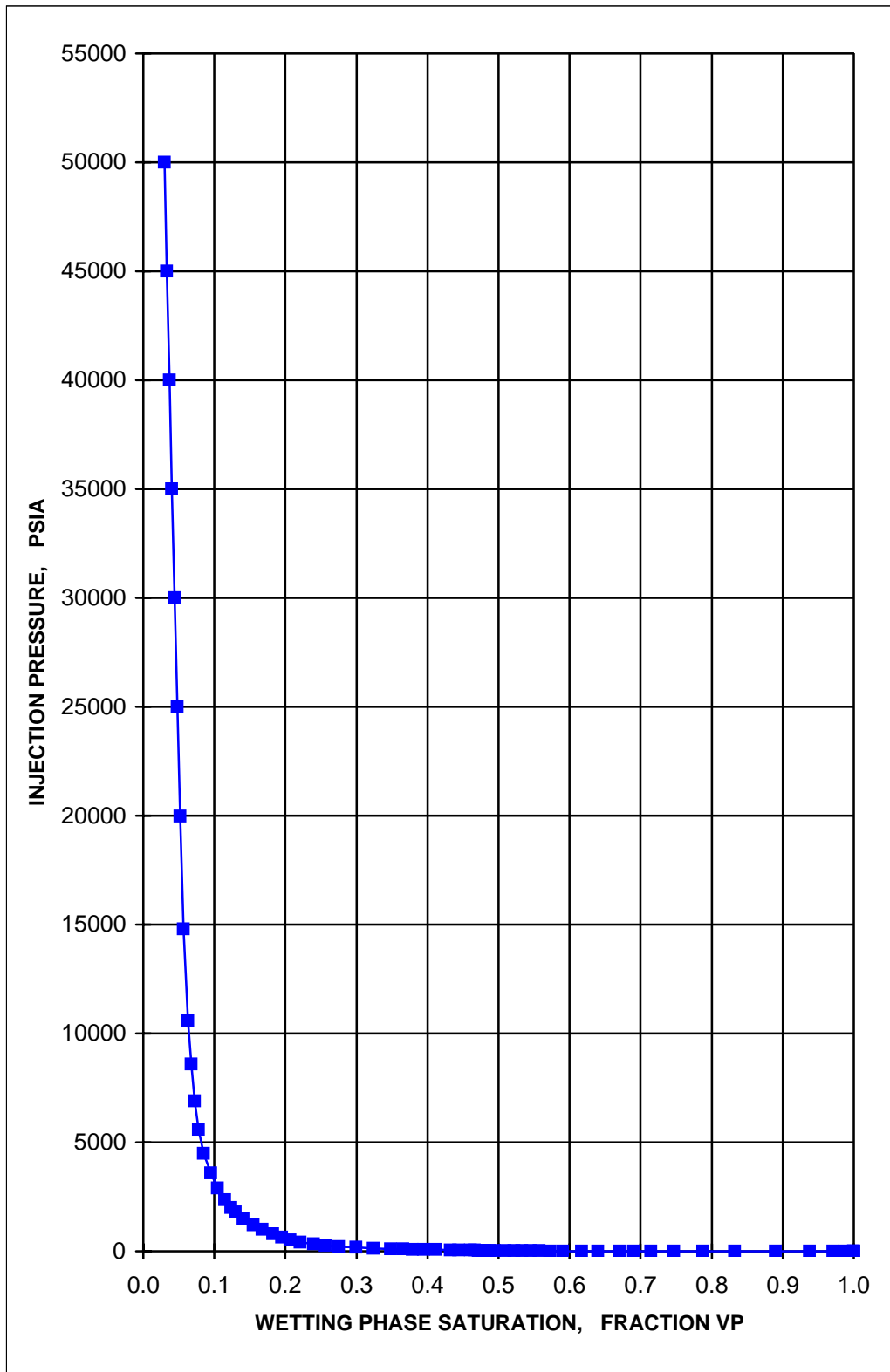
Capillary pressure by high pressure mercury injection

Sample ID : 18

Depth, m : 1762.10

Porosity, fraction : 0.243

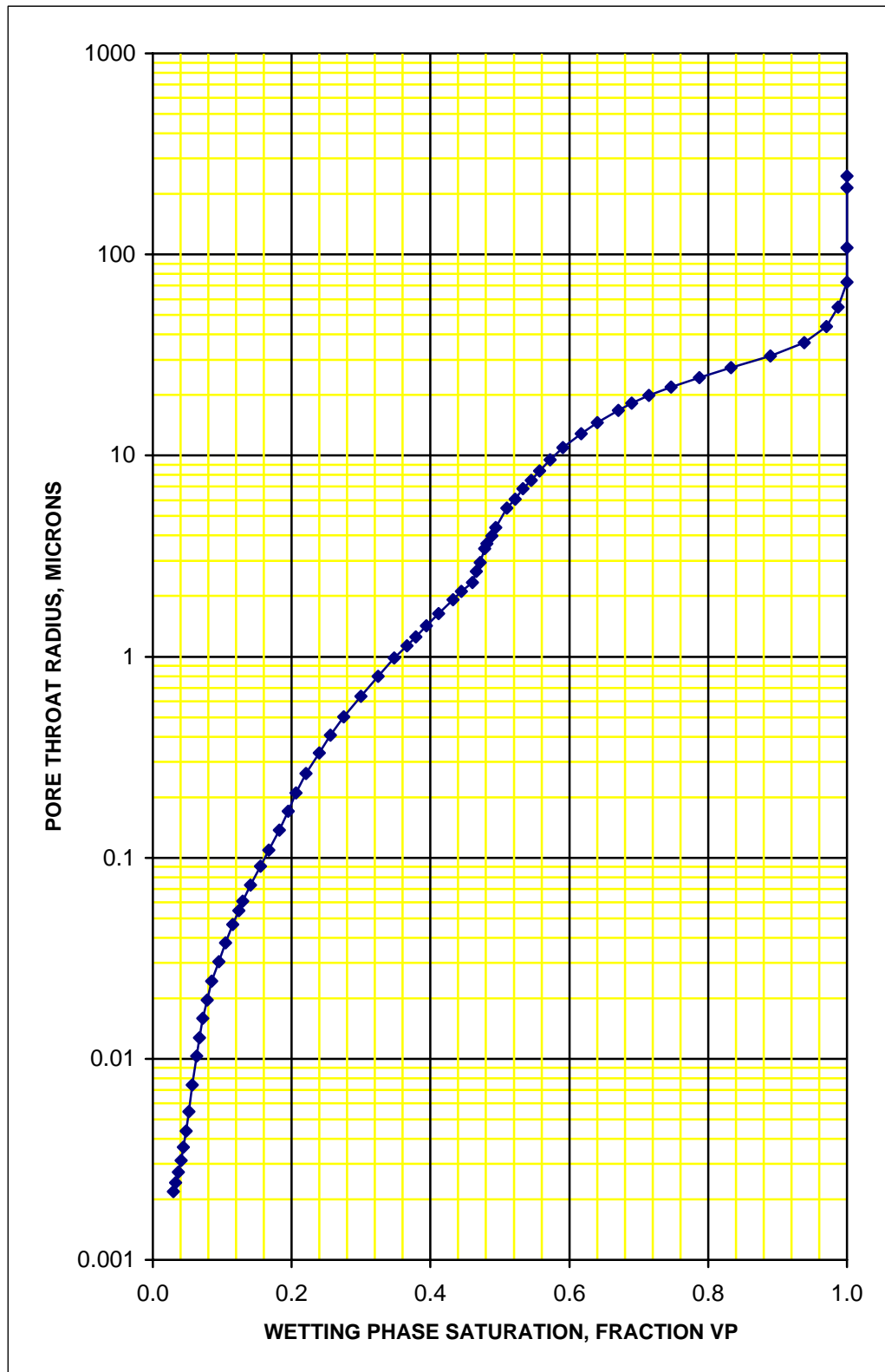
Kair, md : 1180



Pore throat size distribution by high pressure mercury injection

Sample ID : 18
Depth, m : 1762.10

Porosity, fraction : 0.243
Kair, md : 1180



Capillary pressure by high pressure mercury injection

Sample ID : 37

Porosity, fraction : 0.183

Depth, m : 1768.97

Kair, md : 3.34

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.148	0.1	0.1	0.0
0.5	0.000	1.000	213.578	0.1	0.1	0.0
1.0	0.000	1.000	108.992	0.2	0.1	0.1
1.5	0.000	1.000	72.746	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.897	0.5	0.3	0.2
3.0	0.000	1.000	36.445	0.6	0.3	0.2
3.5	0.000	1.000	31.170	0.7	0.4	0.2
4.0	0.000	1.000	27.347	0.8	0.5	0.3
4.5	0.000	1.000	24.351	0.9	0.5	0.3
5.0	0.000	1.000	21.843	1.0	0.6	0.3
5.5	0.000	1.000	19.861	1.1	0.6	0.4
6.0	0.000	1.000	18.218	1.2	0.7	0.4
6.5	0.000	1.000	16.836	1.3	0.7	0.5
7.5	0.000	1.000	14.582	1.5	0.8	0.5
8.5	0.000	1.000	12.868	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.509	2.2	1.3	0.8
13.0	0.000	1.000	8.414	2.5	1.5	0.9
14.5	0.000	1.000	7.543	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.468	3.9	2.3	1.4
25.0	0.000	1.000	4.375	4.8	2.8	1.7
27.5	0.000	1.000	3.976	5.3	3.1	1.9
30.0	0.000	1.000	3.645	5.8	3.4	2.1
31.9	0.000	1.000	3.422	6.2	3.6	2.2
37.6	0.000	1.000	2.902	7.3	4.3	2.6
40.9	0.000	1.000	2.671	7.9	4.6	2.9
46.3	0.000	1.000	2.359	9.0	5.2	3.2
51.7	0.017	0.983	2.114	10.0	5.8	3.6
56.7	0.037	0.963	1.927	11.0	6.4	4.0
66.7	0.083	0.917	1.636	12.9	7.5	4.7
76.6	0.125	0.875	1.427	14.8	8.7	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 37

Porosity, fraction : 0.183

Depth, m : 1768.97

Kair, md : 3.34

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
86.2	0.162	0.838	1.268	16.7	9.7	6.0
95.9	0.192	0.808	1.138	18.6	10.8	6.7
110.8	0.230	0.770	0.986	21.5	12.5	7.8
135.6	0.276	0.724	0.805	26.3	15.3	9.5
171.0	0.323	0.677	0.639	33.1	19.3	12.0
216.7	0.370	0.630	0.504	42.0	24.5	15.2
266.3	0.410	0.590	0.410	51.6	30.1	18.6
326.0	0.448	0.552	0.335	63.2	36.9	22.8
417.8	0.490	0.510	0.261	81.0	47.2	29.2
518.5	0.524	0.476	0.211	100.5	58.6	36.3
639.2	0.554	0.446	0.171	123.9	72.3	44.7
796.7	0.585	0.415	0.137	154.4	90.1	55.8
997.8	0.616	0.384	0.109	193.4	112.8	69.8
1195.1	0.641	0.359	0.091	231.6	135.1	83.6
1497.4	0.670	0.330	0.073	290.2	169.3	104.8
1798.1	0.693	0.307	0.061	348.5	203.3	125.8
1997.4	0.706	0.294	0.055	387.1	225.8	139.8
2347.0	0.725	0.275	0.047	454.9	265.3	164.3
2894.5	0.748	0.252	0.038	561.0	327.2	202.6
3593.3	0.770	0.230	0.030	696.4	406.2	251.5
4489.8	0.794	0.206	0.024	870.2	507.6	314.2
5587.3	0.813	0.187	0.020	1082.9	631.7	391.0
6886.6	0.829	0.171	0.016	1334.7	778.6	482.0
8587.5	0.843	0.157	0.013	1664.3	970.9	601.0
10585.4	0.854	0.146	0.010	2051.5	1196.7	740.8
14784.3	0.869	0.131	0.007	2865.3	1671.4	1034.7
19981.8	0.880	0.120	0.005	3872.7	2259.0	1398.5
24994.3	0.887	0.113	0.004	4844.1	2825.7	1749.3
29996.4	0.893	0.107	0.004	5813.6	3391.3	2099.3
34992.7	0.899	0.101	0.003	6781.9	3956.1	2449.0
39994.1	0.904	0.096	0.003	7751.2	4521.5	2799.0
44991.9	0.908	0.092	0.002	8719.8	5086.6	3148.8
49994.9	0.913	0.087	0.002	9689.5	5652.2	3499.0
54993.4	0.917	0.083	0.002	10658	6217.3	3848.8

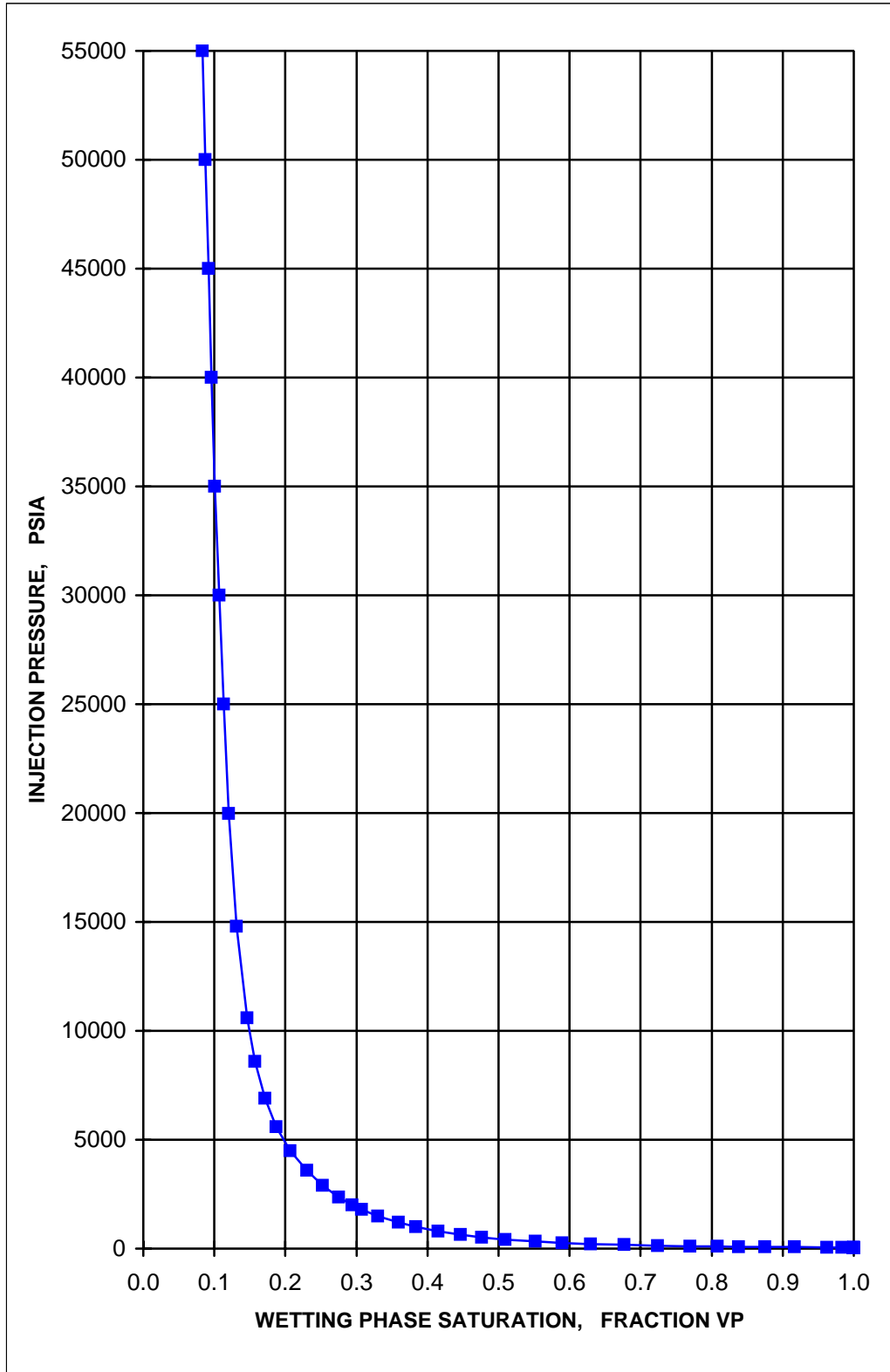
Capillary pressure by high pressure mercury injection

Sample ID : 37

Porosity, fraction : 0.183

Depth, m : 1768.97

Kair, md : 3.34



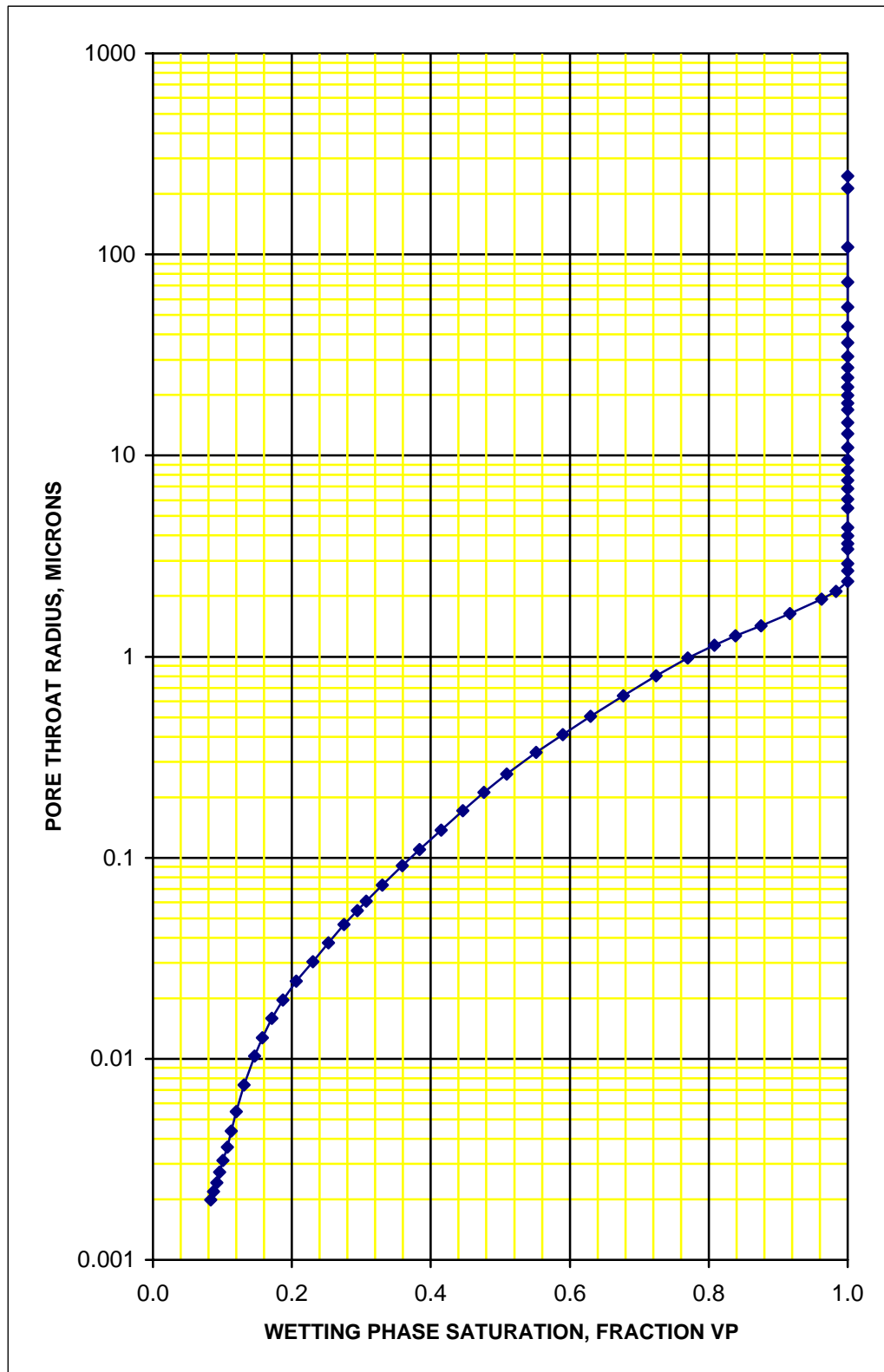
Pore throat size distribution by high pressure mercury injection

Sample ID : 37

Depth, m : 1768.97

Porosity, fraction : 0.183

Kair, md : 3.34



Capillary pressure by high pressure mercury injection

Sample ID : 39

Porosity, fraction : 0.201

Depth, m : 1769.63

Kair, md : 16.1

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.972	0.1	0.1	0.0
0.5	0.000	1.000	213.882	0.1	0.1	0.0
1.0	0.000	1.000	108.601	0.2	0.1	0.1
1.5	0.000	1.000	72.696	0.3	0.2	0.1
2.0	0.000	1.000	54.910	0.4	0.2	0.1
2.5	0.000	1.000	43.584	0.5	0.3	0.2
3.0	0.000	1.000	36.442	0.6	0.3	0.2
3.5	0.000	1.000	31.187	0.7	0.4	0.2
4.0	0.000	1.000	27.297	0.8	0.5	0.3
4.5	0.000	1.000	24.318	0.9	0.5	0.3
5.0	0.000	1.000	21.896	1.0	0.6	0.3
5.5	0.000	1.000	19.825	1.1	0.6	0.4
6.0	0.000	1.000	18.224	1.2	0.7	0.4
6.5	0.000	1.000	16.833	1.3	0.7	0.5
7.5	0.000	1.000	14.570	1.5	0.8	0.5
8.5	0.000	1.000	12.861	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.505	2.2	1.3	0.8
13.0	0.000	1.000	8.415	2.5	1.5	0.9
14.5	0.000	1.000	7.542	2.8	1.6	1.0
16.0	0.000	1.000	6.833	3.1	1.8	1.1
18.0	0.009	0.991	6.076	3.5	2.0	1.3
20.0	0.028	0.972	5.467	3.9	2.3	1.4
25.0	0.083	0.917	4.375	4.8	2.8	1.7
27.5	0.111	0.889	3.976	5.3	3.1	1.9
30.0	0.138	0.862	3.645	5.8	3.4	2.1
32.0	0.170	0.830	3.417	6.2	3.6	2.2
36.5	0.198	0.802	2.995	7.1	4.1	2.6
41.7	0.229	0.771	2.620	8.1	4.7	2.9
46.0	0.252	0.748	2.373	8.9	5.2	3.2
51.1	0.271	0.729	2.137	9.9	5.8	3.6
56.7	0.294	0.706	1.925	11.0	6.4	4.0
67.0	0.324	0.676	1.631	13.0	7.6	4.7
76.3	0.349	0.651	1.432	14.8	8.6	5.3

Capillary pressure by high pressure mercury injection

Sample ID : 39

Porosity, fraction : 0.201

Depth, m : 1769.63

Kair, md : 16.1

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.2	0.372	0.628	1.252	16.9	9.9	6.1
95.9	0.390	0.610	1.139	18.6	10.8	6.7
111.5	0.416	0.584	0.979	21.6	12.6	7.8
136.9	0.452	0.548	0.798	26.5	15.5	9.6
171.0	0.491	0.509	0.639	33.1	19.3	12.0
217.5	0.530	0.470	0.502	42.2	24.6	15.2
265.2	0.562	0.438	0.412	51.4	30.0	18.6
327.4	0.593	0.407	0.334	63.5	37.0	22.9
417.6	0.626	0.374	0.262	80.9	47.2	29.2
519.3	0.652	0.348	0.210	100.6	58.7	36.3
637.2	0.676	0.324	0.171	123.5	72.0	44.6
799.7	0.702	0.298	0.137	155.0	90.4	56.0
999.8	0.726	0.274	0.109	193.8	113.0	70.0
1196.9	0.745	0.255	0.091	232.0	135.3	83.8
1497.9	0.769	0.231	0.073	290.3	169.3	104.8
1797.0	0.788	0.212	0.061	348.3	203.2	125.8
1996.1	0.798	0.202	0.055	386.9	225.7	139.7
2345.6	0.814	0.186	0.047	454.6	265.2	164.2
2895.0	0.833	0.167	0.038	561.1	327.3	202.6
3591.8	0.850	0.150	0.030	696.1	406.1	251.4
4491.6	0.871	0.129	0.024	870.5	507.8	314.4
5588.7	0.885	0.115	0.020	1083.1	631.8	391.1
6893.4	0.899	0.101	0.016	1336.0	779.3	482.4
8585.7	0.910	0.090	0.013	1664.0	970.7	600.9
10587.2	0.918	0.082	0.010	2051.9	1196.9	741.0
14784.0	0.929	0.071	0.007	2865.3	1671.4	1034.7
19983.7	0.936	0.064	0.005	3873.0	2259.3	1398.6
24992.2	0.942	0.058	0.004	4843.7	2825.5	1749.1
29994.1	0.946	0.054	0.004	5813.1	3391.0	2099.2
34991.5	0.951	0.049	0.003	6781.7	3956.0	2448.9
39993.2	0.955	0.045	0.003	7751.0	4521.4	2799.0
44994.5	0.959	0.041	0.002	8720.3	5086.9	3149.0
49993.0	0.963	0.037	0.002	9689.1	5652.0	3498.8
54992.8	0.967	0.033	0.002	10658	6217.2	3848.8

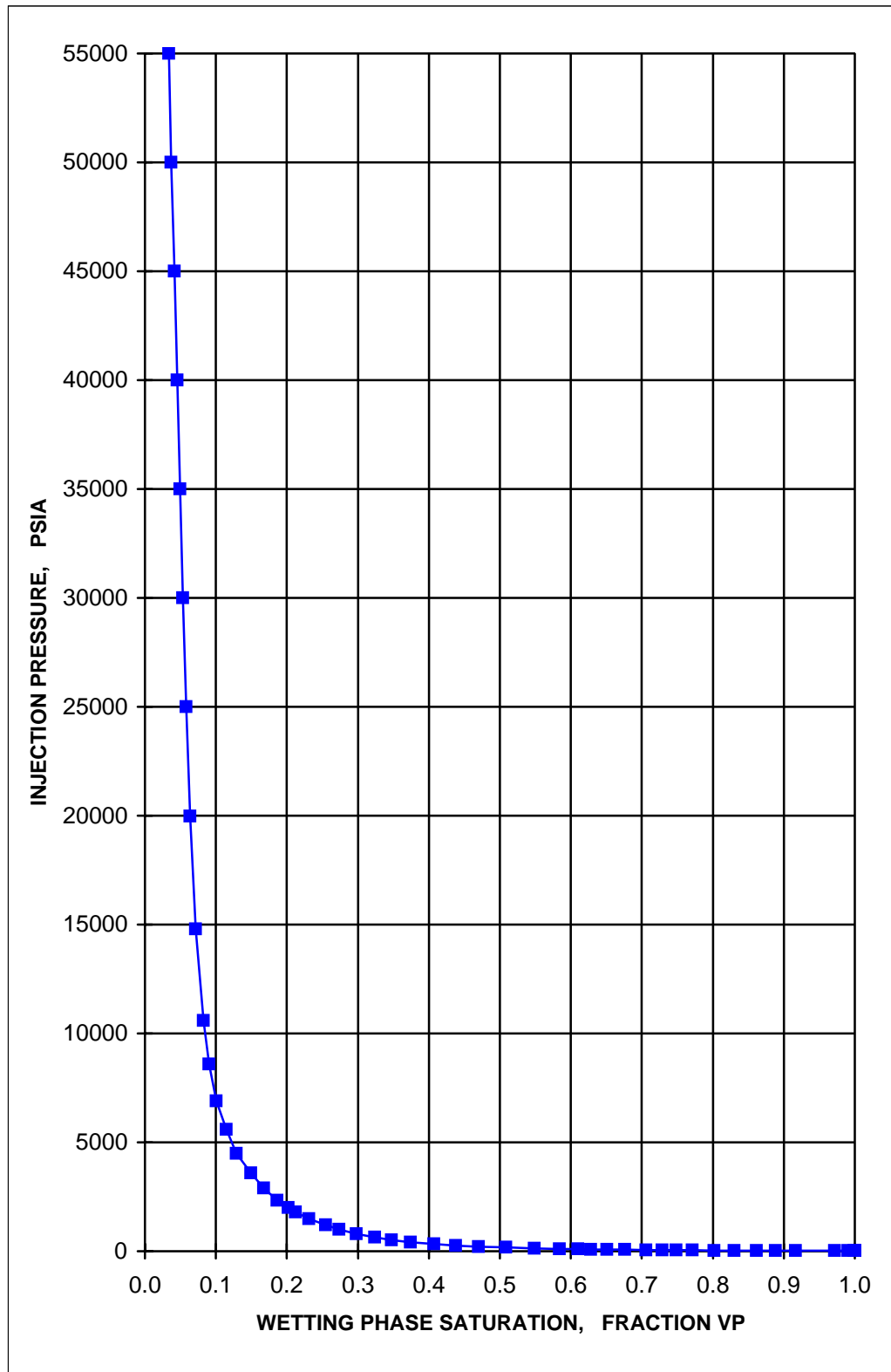
Capillary pressure by high pressure mercury injection

Sample ID : 39

Porosity, fraction : 0.201

Depth, m : 1769.63

Kair, md : 16.1



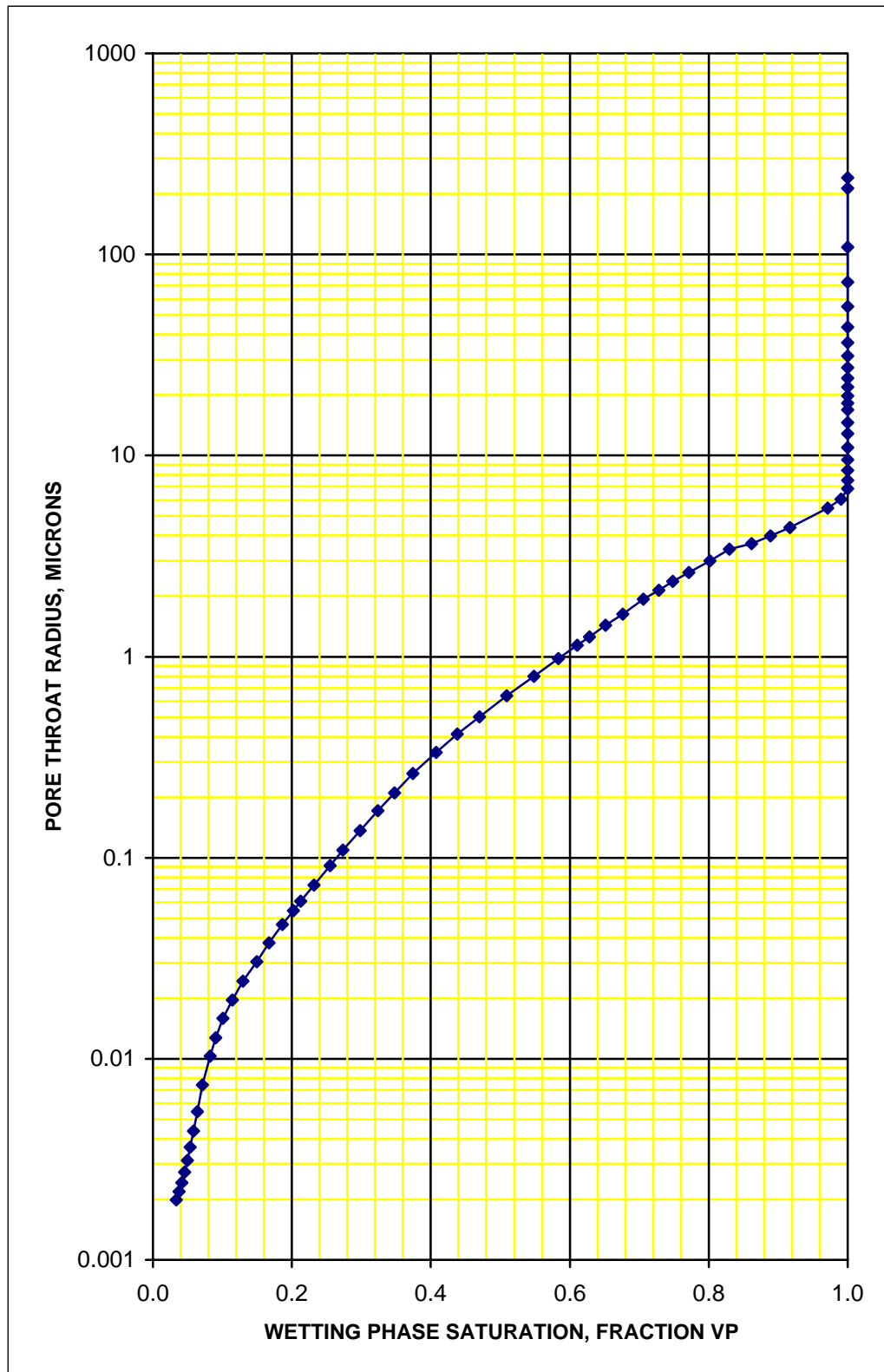
Pore throat size distribution by high pressure mercury injection

Sample ID : 39

Depth, m : 1769.63

Porosity, fraction : 0.201

Kair, md : 16.1



Capillary pressure by high pressure mercury injection

Sample ID : 40

Porosity, fraction : 0.218

Depth, m : 1769.91

Kair, md : 137

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.148	0.1	0.1	0.0
0.5	0.000	1.000	213.578	0.1	0.1	0.0
1.0	0.000	1.000	108.992	0.2	0.1	0.1
1.5	0.000	1.000	72.746	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.897	0.5	0.3	0.2
3.0	0.000	1.000	36.445	0.6	0.3	0.2
3.5	0.000	1.000	31.170	0.7	0.4	0.2
4.0	0.000	1.000	27.347	0.8	0.5	0.3
4.5	0.000	1.000	24.351	0.9	0.5	0.3
5.0	0.000	1.000	21.843	1.0	0.6	0.3
5.5	0.004	0.996	19.861	1.1	0.6	0.4
6.0	0.015	0.985	18.218	1.2	0.7	0.4
6.5	0.028	0.972	16.836	1.3	0.7	0.5
7.5	0.046	0.954	14.582	1.5	0.8	0.5
8.5	0.068	0.932	12.868	1.6	1.0	0.6
10.0	0.094	0.906	10.935	1.9	1.1	0.7
11.5	0.119	0.881	9.509	2.2	1.3	0.8
13.0	0.148	0.852	8.414	2.5	1.5	0.9
14.5	0.170	0.830	7.543	2.8	1.6	1.0
16.0	0.187	0.813	6.837	3.1	1.8	1.1
18.0	0.208	0.792	6.077	3.5	2.0	1.3
20.0	0.226	0.774	5.468	3.9	2.3	1.4
25.0	0.257	0.743	4.375	4.8	2.8	1.7
27.5	0.270	0.730	3.976	5.3	3.1	1.9
30.0	0.281	0.719	3.645	5.8	3.4	2.1
37.4	0.302	0.698	2.923	7.2	4.2	2.6
40.6	0.313	0.687	2.689	7.9	4.6	2.8
46.0	0.324	0.676	2.373	8.9	5.2	3.2
51.4	0.341	0.659	2.124	10.0	5.8	3.6
56.5	0.353	0.647	1.933	11.0	6.4	4.0
66.7	0.376	0.624	1.638	12.9	7.5	4.7
76.8	0.395	0.605	1.422	14.9	8.7	5.4
86.3	0.412	0.588	1.266	16.7	9.8	6.0

Capillary pressure by high pressure mercury injection

Sample ID : 40

Porosity, fraction : 0.218

Depth, m : 1769.91

Kair, md : 137

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.2	0.428	0.572	1.136	18.6	10.9	6.7
111.1	0.446	0.554	0.983	21.5	12.6	7.8
136.1	0.473	0.527	0.803	26.4	15.4	9.5
171.5	0.502	0.498	0.637	33.2	19.4	12.0
217.4	0.531	0.469	0.502	42.1	24.6	15.2
267.0	0.554	0.446	0.409	51.7	30.2	18.7
326.9	0.576	0.424	0.334	63.4	37.0	22.9
418.8	0.599	0.401	0.261	81.2	47.3	29.3
519.5	0.617	0.383	0.210	100.7	58.7	36.4
640.3	0.633	0.367	0.171	124.1	72.4	44.8
797.9	0.650	0.350	0.137	154.6	90.2	55.8
999.0	0.668	0.332	0.109	193.6	112.9	69.9
1196.4	0.682	0.318	0.091	231.9	135.3	83.7
1498.8	0.700	0.300	0.073	290.5	169.4	104.9
1799.5	0.715	0.285	0.061	348.8	203.4	125.9
1998.9	0.725	0.275	0.055	387.4	226.0	139.9
2348.4	0.742	0.258	0.047	455.1	265.5	164.4
2896.0	0.765	0.235	0.038	561.3	327.4	202.7
3594.8	0.792	0.208	0.030	696.7	406.4	251.6
4491.3	0.826	0.174	0.024	870.5	507.8	314.3
5588.9	0.856	0.144	0.020	1083.2	631.8	391.1
6888.2	0.873	0.127	0.016	1335.0	778.7	482.1
8589.2	0.886	0.114	0.013	1664.7	971.0	601.1
10587.0	0.896	0.104	0.010	2051.9	1196.9	740.9
14786.0	0.909	0.091	0.007	2865.7	1671.6	1034.8
19983.5	0.918	0.082	0.005	3873.0	2259.2	1398.6
24996.1	0.923	0.077	0.004	4844.5	2825.9	1749.4
29998.2	0.930	0.070	0.004	5813.9	3391.4	2099.5
34994.5	0.934	0.066	0.003	6782.2	3956.3	2449.1
39995.8	0.939	0.061	0.003	7751.5	4521.7	2799.2
44993.6	0.944	0.056	0.002	8720.2	5086.8	3148.9
49996.6	0.949	0.051	0.002	9689.8	5652.4	3499.1
54995.1	0.953	0.047	0.002	10658.5	6217.5	3848.9

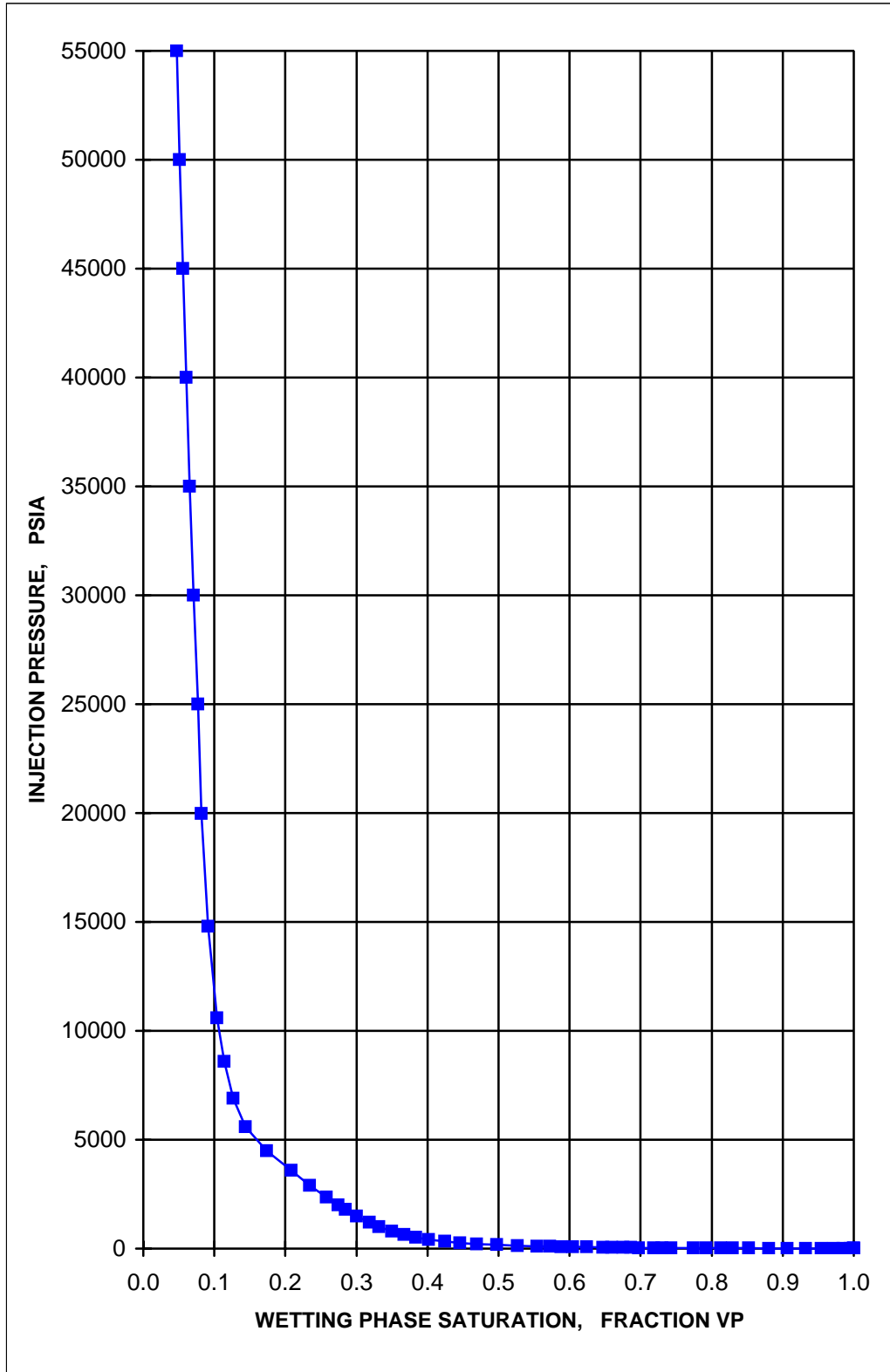
Capillary pressure by high pressure mercury injection

Sample ID : 40

Depth, m : 1769.91

Porosity, fraction : 0.218

Kair, md : 137



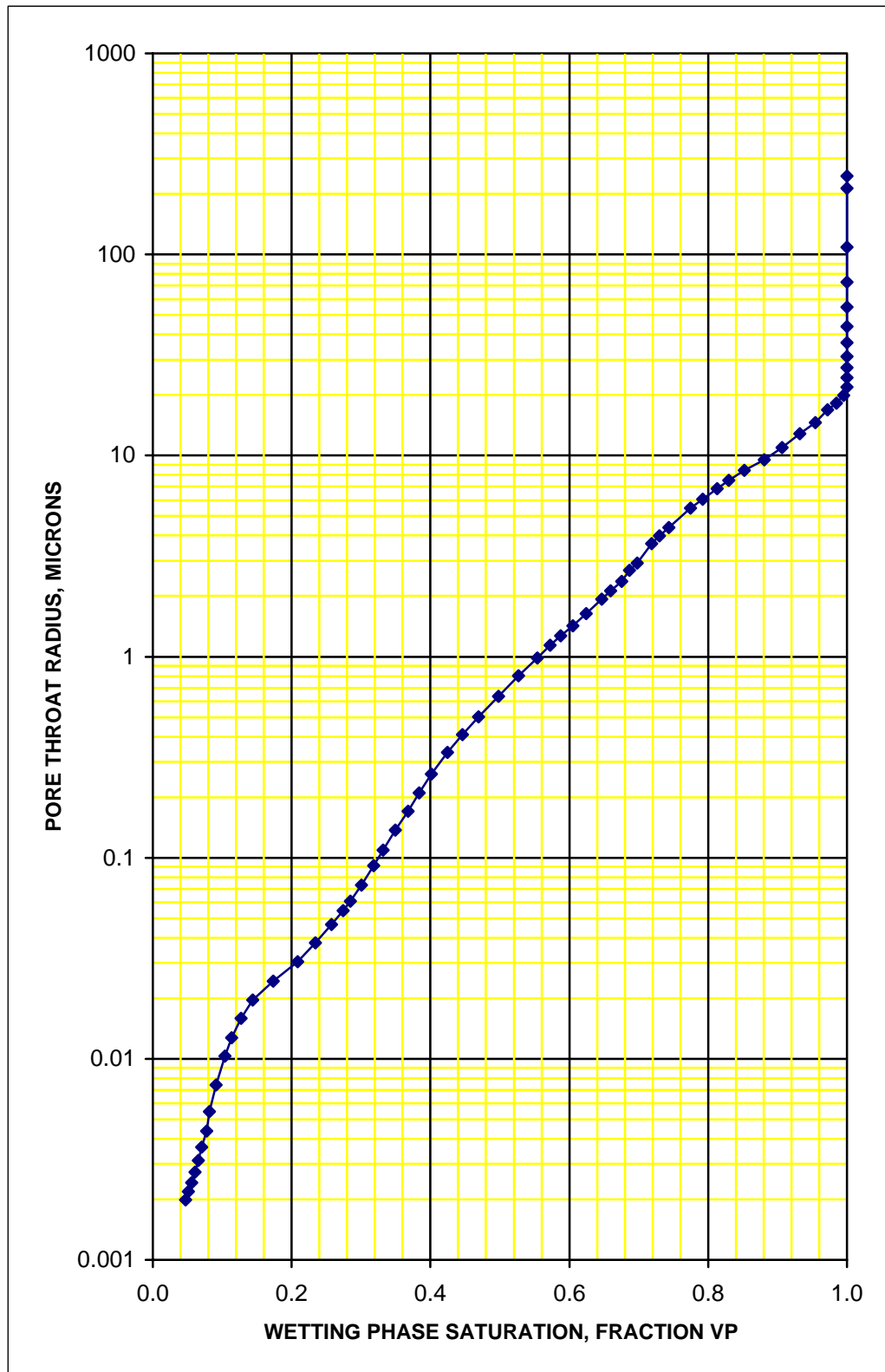
Pore throat size distribution by high pressure mercury injection

Sample ID : 40

Depth, m : 1769.91

Porosity, fraction : 0.218

Kair, md : 137



Capillary pressure by high pressure mercury injection

Sample ID : 41

Porosity, fraction : 0.243

Depth, m : 1770.15

Kair, md : 466

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.972	0.1	0.1	0.0
0.5	0.000	1.000	213.882	0.1	0.1	0.0
1.0	0.000	1.000	108.601	0.2	0.1	0.1
1.5	0.000	1.000	72.696	0.3	0.2	0.1
2.0	0.000	1.000	54.910	0.4	0.2	0.1
2.5	0.000	1.000	43.584	0.5	0.3	0.2
3.0	0.000	1.000	36.442	0.6	0.3	0.2
3.5	0.010	0.990	31.187	0.7	0.4	0.2
4.0	0.025	0.975	27.297	0.8	0.5	0.3
4.5	0.040	0.960	24.318	0.9	0.5	0.3
5.0	0.066	0.934	21.896	1.0	0.6	0.3
5.5	0.104	0.896	19.825	1.1	0.6	0.4
6.0	0.143	0.857	18.224	1.2	0.7	0.4
6.5	0.174	0.826	16.833	1.3	0.7	0.5
7.5	0.218	0.782	14.570	1.5	0.8	0.5
8.5	0.255	0.745	12.861	1.6	1.0	0.6
10.0	0.292	0.708	10.935	1.9	1.1	0.7
11.5	0.322	0.678	9.505	2.2	1.3	0.8
13.0	0.342	0.658	8.415	2.5	1.5	0.9
14.5	0.358	0.642	7.542	2.8	1.6	1.0
16.0	0.373	0.627	6.833	3.1	1.8	1.1
18.0	0.390	0.610	6.076	3.5	2.0	1.3
20.0	0.404	0.596	5.467	3.9	2.3	1.4
25.0	0.434	0.566	4.375	4.8	2.8	1.7
27.5	0.443	0.557	3.976	5.3	3.1	1.9
30.0	0.454	0.546	3.645	5.8	3.4	2.1
32.3	0.461	0.539	3.386	6.3	3.6	2.3
36.5	0.477	0.523	2.991	7.1	4.1	2.6
41.7	0.489	0.511	2.618	8.1	4.7	2.9
46.9	0.502	0.498	2.331	9.1	5.3	3.3
52.3	0.516	0.484	2.089	10.1	5.9	3.7
56.3	0.532	0.468	1.940	10.9	6.4	3.9
66.7	0.558	0.442	1.638	12.9	7.5	4.7
76.3	0.579	0.421	1.431	14.8	8.6	5.3

Capillary pressure by high pressure mercury injection

Sample ID : 41

Porosity, fraction : 0.243

Depth, m : 1770.15

Kair, md : 466

IFT * Cosine Contact Angle			
Lab --->	Air-Brine	Air-Oil	Oil-Brine
Res --->	72	24	42
	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
86.4	0.597	0.403	1.264	16.7	9.8	6.0
95.8	0.613	0.387	1.140	18.6	10.8	6.7
112.2	0.633	0.367	0.974	21.7	12.7	7.9
136.8	0.659	0.341	0.799	26.5	15.5	9.6
170.6	0.686	0.314	0.640	33.1	19.3	11.9
216.5	0.713	0.287	0.505	42.0	24.5	15.2
265.9	0.735	0.265	0.411	51.5	30.1	18.6
328.2	0.755	0.245	0.333	63.6	37.1	23.0
416.5	0.775	0.225	0.262	80.7	47.1	29.1
519.9	0.791	0.209	0.210	100.8	58.8	36.4
637.9	0.806	0.194	0.171	123.6	72.1	44.6
798.0	0.822	0.178	0.137	154.7	90.2	55.9
996.5	0.838	0.162	0.110	193.1	112.7	69.7
1199.0	0.851	0.149	0.091	232.4	135.6	83.9
1499.7	0.865	0.135	0.073	290.6	169.5	105.0
1794.8	0.877	0.123	0.061	347.8	202.9	125.6
1996.9	0.883	0.117	0.055	387.0	225.8	139.8
2347.3	0.891	0.109	0.047	454.9	265.4	164.3
2894.5	0.901	0.099	0.038	561.0	327.2	202.6
3593.0	0.911	0.089	0.030	696.4	406.2	251.5
4488.2	0.921	0.079	0.024	869.8	507.4	314.1
5589.8	0.927	0.073	0.020	1083.3	632.0	391.2
6886.6	0.933	0.067	0.016	1334.7	778.6	482.0
8585.8	0.937	0.063	0.013	1664.0	970.7	600.9
10588.0	0.941	0.059	0.010	2052.1	1197.0	741.0
14783.5	0.947	0.053	0.007	2865.2	1671.4	1034.6
19982.7	0.953	0.047	0.005	3872.8	2259.1	1398.5
24994.6	0.957	0.043	0.004	4844.2	2825.8	1749.3
29992.6	0.961	0.039	0.004	5812.8	3390.8	2099.1
34999.2	0.965	0.035	0.003	6783.2	3956.8	2449.5
39992.0	0.968	0.032	0.003	7750.8	4521.3	2798.9
44992.3	0.972	0.028	0.002	8719.9	5086.6	3148.9
49993.7	0.975	0.025	0.002	9689.2	5652.0	3498.9
54990.4	0.979	0.021	0.002	10658	6217.0	3848.6

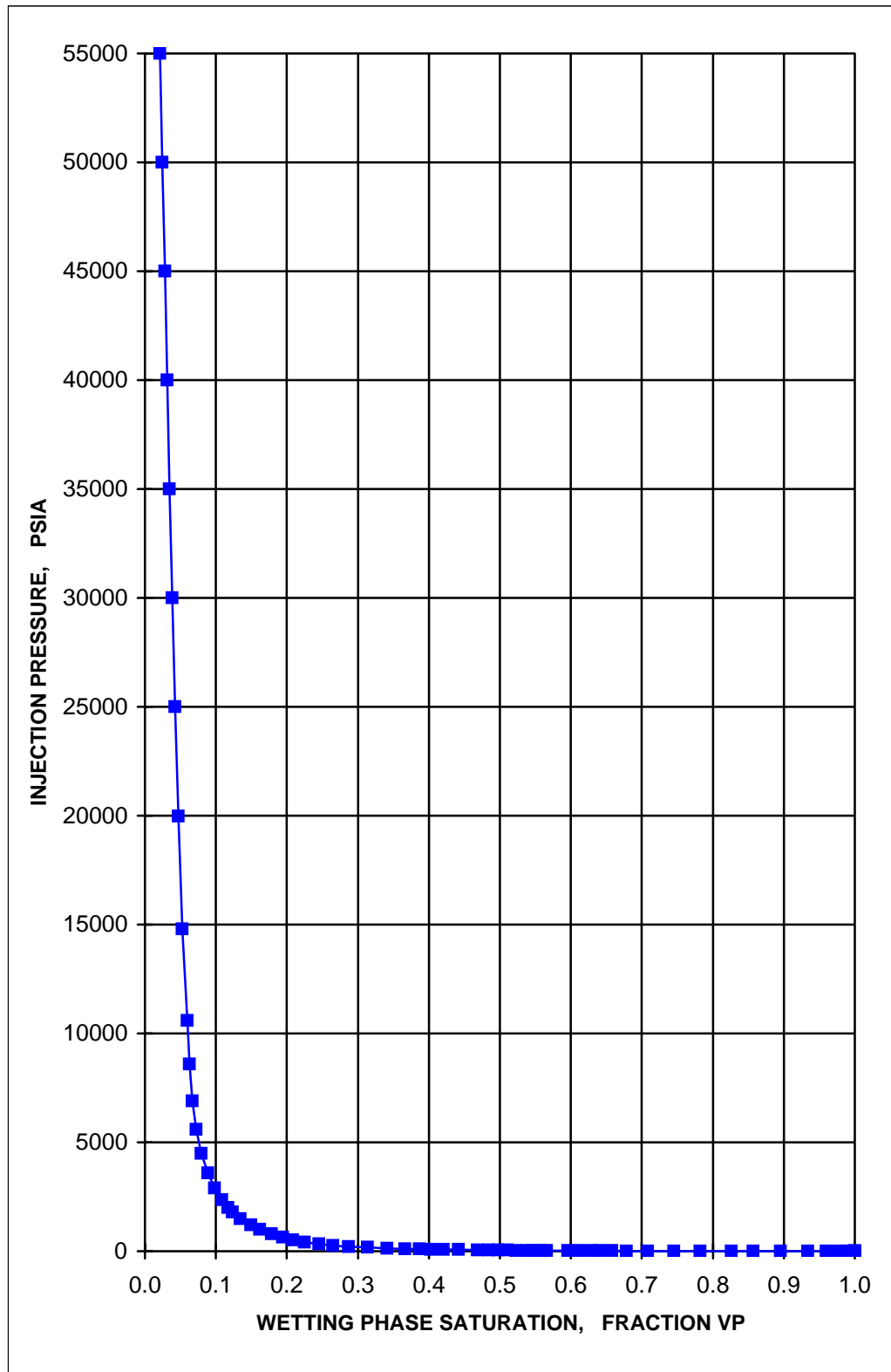
Capillary pressure by high pressure mercury injection

Sample ID : 41

Depth, m : 1770.15

Porosity, fraction : 0.243

Kair, md : 466



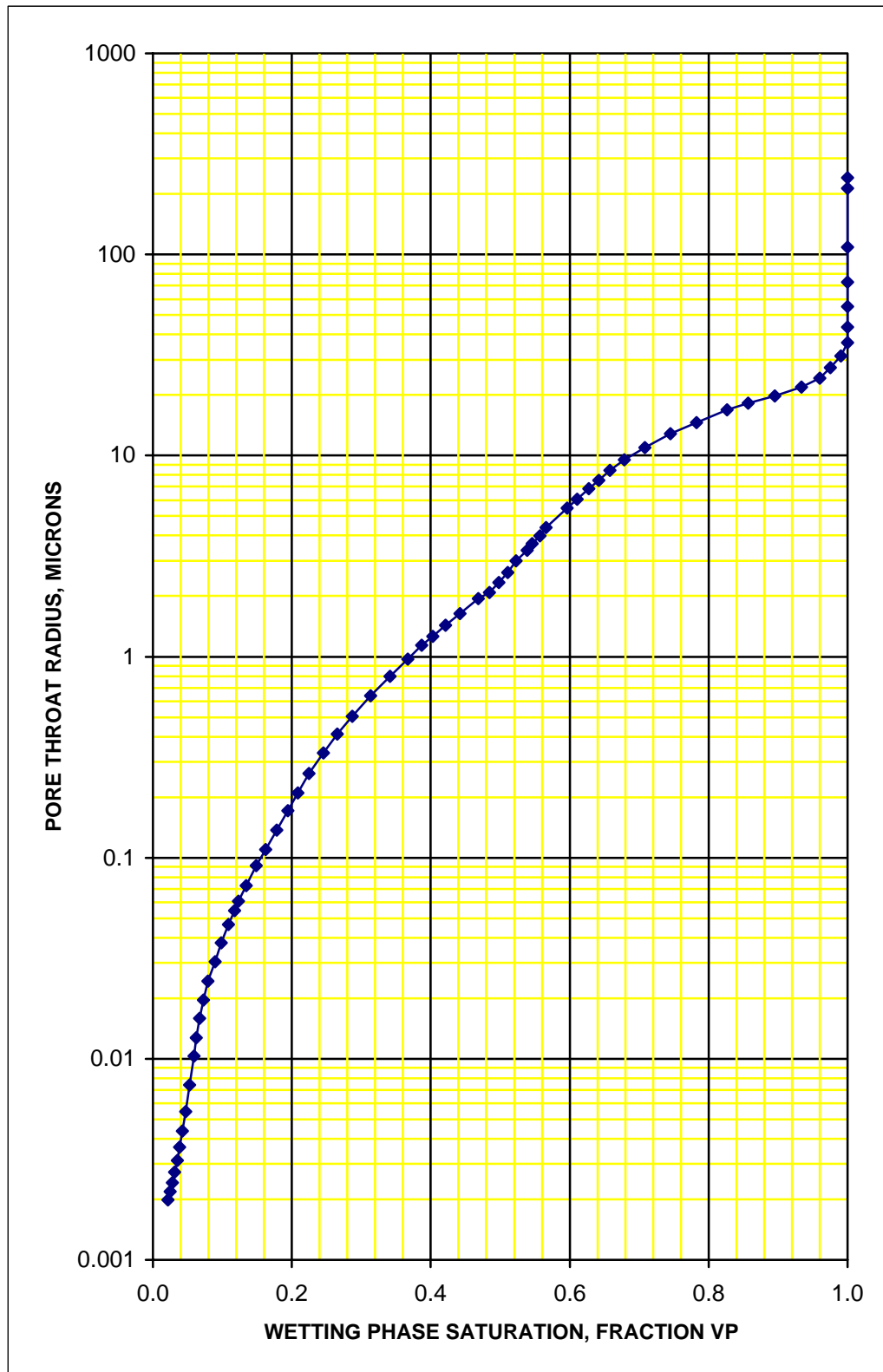
Pore throat size distribution by high pressure mercury injection

Sample ID : 41

Depth, m : 1770.15

Porosity, fraction : 0.243

Kair, md : 466



Capillary pressure by high pressure mercury injection

Sample ID : 43

Porosity, fraction : 0.174

Depth, m : 1770.98

Kair, md : 1.66

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.148	0.1	0.1	0.0
0.5	0.000	1.000	213.578	0.1	0.1	0.0
1.0	0.000	1.000	108.992	0.2	0.1	0.1
1.5	0.000	1.000	72.746	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.897	0.5	0.3	0.2
3.0	0.000	1.000	36.445	0.6	0.3	0.2
3.5	0.000	1.000	31.170	0.7	0.4	0.2
4.0	0.000	1.000	27.347	0.8	0.5	0.3
4.5	0.000	1.000	24.351	0.9	0.5	0.3
5.0	0.000	1.000	21.843	1.0	0.6	0.3
5.5	0.000	1.000	19.861	1.1	0.6	0.4
6.0	0.000	1.000	18.218	1.2	0.7	0.4
6.5	0.000	1.000	16.836	1.3	0.7	0.5
7.5	0.000	1.000	14.582	1.5	0.8	0.5
8.5	0.000	1.000	12.868	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.509	2.2	1.3	0.8
13.0	0.000	1.000	8.414	2.5	1.5	0.9
14.5	0.000	1.000	7.543	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.468	3.9	2.3	1.4
25.0	0.000	1.000	4.375	4.8	2.8	1.7
27.5	0.000	1.000	3.976	5.3	3.1	1.9
30.0	0.000	1.000	3.645	5.8	3.4	2.1
36.7	0.000	1.000	2.973	7.1	4.2	2.6
42.0	0.000	1.000	2.600	8.1	4.8	2.9
46.9	0.000	1.000	2.327	9.1	5.3	3.3
51.5	0.000	1.000	2.122	10.0	5.8	3.6
56.8	0.000	1.000	1.924	11.0	6.4	4.0
65.9	0.020	0.980	1.658	12.8	7.4	4.6
75.2	0.054	0.946	1.452	14.6	8.5	5.3
85.9	0.095	0.905	1.271	16.7	9.7	6.0

Capillary pressure by high pressure mercury injection

Sample ID : 43

Porosity, fraction : 0.174

Depth, m : 1770.98

Kair, md : 1.66

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.4	0.142	0.858	1.133	18.7	10.9	6.7
110.7	0.193	0.807	0.987	21.5	12.5	7.7
136.7	0.249	0.751	0.799	26.5	15.5	9.6
171.9	0.298	0.702	0.635	33.3	19.4	12.0
217.1	0.345	0.655	0.503	42.1	24.5	15.2
267.1	0.386	0.614	0.409	51.8	30.2	18.7
328.1	0.426	0.574	0.333	63.6	37.1	23.0
417.7	0.470	0.530	0.261	81.0	47.2	29.2
517.7	0.505	0.495	0.211	100.3	58.5	36.2
637.2	0.537	0.463	0.171	123.5	72.0	44.6
798.8	0.571	0.429	0.137	154.8	90.3	55.9
1000.5	0.603	0.397	0.109	193.9	113.1	70.0
1197.9	0.627	0.373	0.091	232.2	135.4	83.8
1498.8	0.656	0.344	0.073	290.5	169.4	104.9
1796.9	0.679	0.321	0.061	348.3	203.1	125.8
1996.1	0.692	0.308	0.055	386.9	225.7	139.7
2348.2	0.712	0.288	0.047	455.1	265.5	164.3
2894.7	0.737	0.263	0.038	561.0	327.3	202.6
3593.6	0.761	0.239	0.030	696.5	406.3	251.5
4486.9	0.787	0.213	0.024	869.6	507.3	314.0
5588.0	0.807	0.193	0.020	1083.0	631.8	391.1
6890.0	0.825	0.175	0.016	1335.3	778.9	482.2
8588.4	0.840	0.160	0.013	1664.5	971.0	601.1
10584.9	0.853	0.147	0.010	2051.4	1196.7	740.8
14784.0	0.868	0.132	0.007	2865.3	1671.4	1034.7
19984.5	0.881	0.119	0.005	3873.2	2259.3	1398.6
24991.9	0.889	0.111	0.004	4843.7	2825.5	1749.1
29993.1	0.896	0.104	0.004	5812.9	3390.9	2099.1
34994.5	0.901	0.099	0.003	6782.2	3956.3	2449.1
39988.8	0.906	0.094	0.003	7750.2	4520.9	2798.7
44997.3	0.911	0.089	0.002	8720.9	5087.2	3149.2
49992.5	0.916	0.084	0.002	9689.0	5651.9	3498.8
54993.5	0.920	0.080	0.002	10658.2	6217.3	3848.8

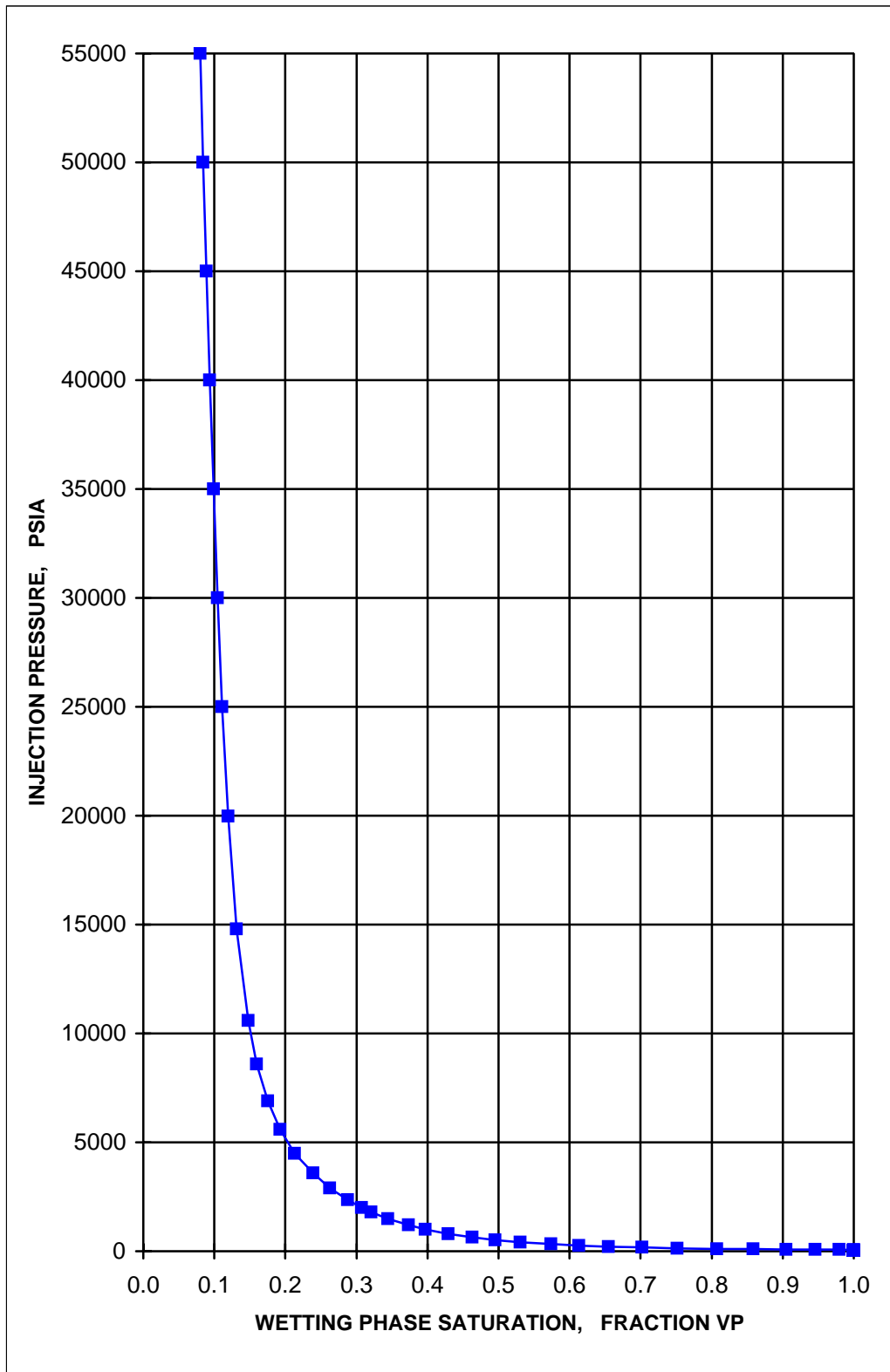
Capillary pressure by high pressure mercury injection

Sample ID : 43

Porosity, fraction : 0.174

Depth, m : 1770.98

Kair, md : 1.66



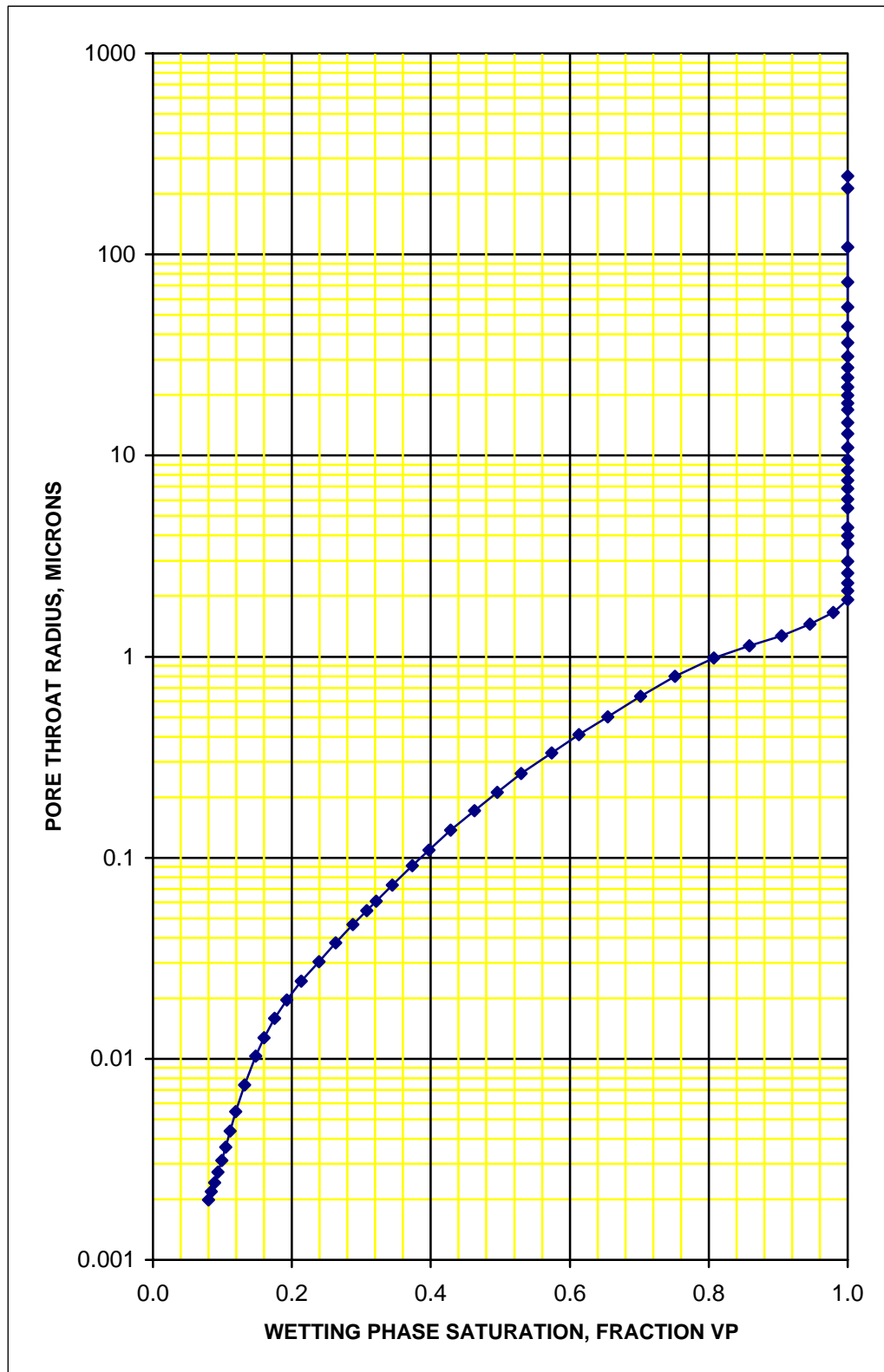
Pore throat size distribution by high pressure mercury injection

Sample ID : 43

Depth, m : 1770.98

Porosity, fraction : 0.174

Kair, md : 1.66



Capillary pressure by high pressure mercury injection

Sample ID : 45

Porosity, fraction : 0.190

Depth, m : 1771.60

Kair, md : 9.12

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.148	0.1	0.1	0.0
0.5	0.000	1.000	213.578	0.1	0.1	0.0
1.0	0.000	1.000	108.992	0.2	0.1	0.1
1.5	0.000	1.000	72.746	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.897	0.5	0.3	0.2
3.0	0.000	1.000	36.445	0.6	0.3	0.2
3.5	0.000	1.000	31.170	0.7	0.4	0.2
4.0	0.000	1.000	27.347	0.8	0.5	0.3
4.5	0.000	1.000	24.351	0.9	0.5	0.3
5.0	0.000	1.000	21.843	1.0	0.6	0.3
5.5	0.000	1.000	19.861	1.1	0.6	0.4
6.0	0.000	1.000	18.218	1.2	0.7	0.4
6.5	0.000	1.000	16.836	1.3	0.7	0.5
7.5	0.000	1.000	14.582	1.5	0.8	0.5
8.5	0.000	1.000	12.868	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.509	2.2	1.3	0.8
13.0	0.000	1.000	8.414	2.5	1.5	0.9
14.5	0.000	1.000	7.543	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.468	3.9	2.3	1.4
25.0	0.000	1.000	4.375	4.8	2.8	1.7
27.5	0.000	1.000	3.976	5.3	3.1	1.9
30.0	0.000	1.000	3.645	5.8	3.4	2.1
36.6	0.000	1.000	2.985	7.1	4.1	2.6
41.8	0.014	0.986	2.611	8.1	4.7	2.9
46.7	0.031	0.969	2.339	9.1	5.3	3.3
51.2	0.051	0.949	2.135	9.9	5.8	3.6
56.4	0.073	0.927	1.937	10.9	6.4	3.9
65.3	0.110	0.890	1.671	12.7	7.4	4.6
74.8	0.145	0.855	1.461	14.5	8.5	5.2
85.5	0.175	0.825	1.277	16.6	9.7	6.0

Capillary pressure by high pressure mercury injection

Sample ID : 45

Porosity, fraction : 0.190

Depth, m : 1771.60

Kair, md : 9.12

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.0	0.203	0.797	1.138	18.6	10.9	6.7
110.4	0.235	0.765	0.989	21.4	12.5	7.7
136.4	0.280	0.720	0.801	26.4	15.4	9.5
171.7	0.328	0.672	0.636	33.3	19.4	12.0
216.8	0.374	0.626	0.504	42.0	24.5	15.2
266.9	0.414	0.586	0.409	51.7	30.2	18.7
327.9	0.452	0.548	0.333	63.5	37.1	22.9
417.5	0.492	0.508	0.262	80.9	47.2	29.2
517.4	0.524	0.476	0.211	100.3	58.5	36.2
636.9	0.553	0.447	0.171	123.4	72.0	44.6
798.6	0.585	0.415	0.137	154.8	90.3	55.9
1000.2	0.617	0.383	0.109	193.9	113.1	70.0
1197.6	0.643	0.357	0.091	232.1	135.4	83.8
1498.5	0.672	0.328	0.073	290.4	169.4	104.9
1796.6	0.694	0.306	0.061	348.2	203.1	125.7
1995.8	0.706	0.294	0.055	386.8	225.6	139.7
2348.0	0.725	0.275	0.047	455.1	265.5	164.3
2894.4	0.748	0.252	0.038	561.0	327.2	202.6
3593.4	0.770	0.230	0.030	696.4	406.3	251.5
4486.6	0.793	0.207	0.024	869.5	507.2	314.0
5587.8	0.811	0.189	0.020	1083.0	631.7	391.1
6889.7	0.826	0.174	0.016	1335.3	778.9	482.2
8588.2	0.839	0.161	0.013	1664.5	970.9	601.1
10584.7	0.849	0.151	0.010	2051.4	1196.6	740.8
14783.8	0.862	0.138	0.007	2865.2	1671.4	1034.7
19984.3	0.873	0.127	0.005	3873.1	2259.3	1398.6
24991.7	0.880	0.120	0.004	4843.6	2825.4	1749.1
29992.9	0.887	0.113	0.004	5812.9	3390.9	2099.1
34994.3	0.892	0.108	0.003	6782.2	3956.3	2449.1
39988.5	0.898	0.102	0.003	7750.1	4520.9	2798.7
44997.1	0.903	0.097	0.002	8720.8	5087.2	3149.2
49992.2	0.907	0.093	0.002	9688.9	5651.9	3498.8
54993.3	0.912	0.088	0.002	10658.2	6217.3	3848.8

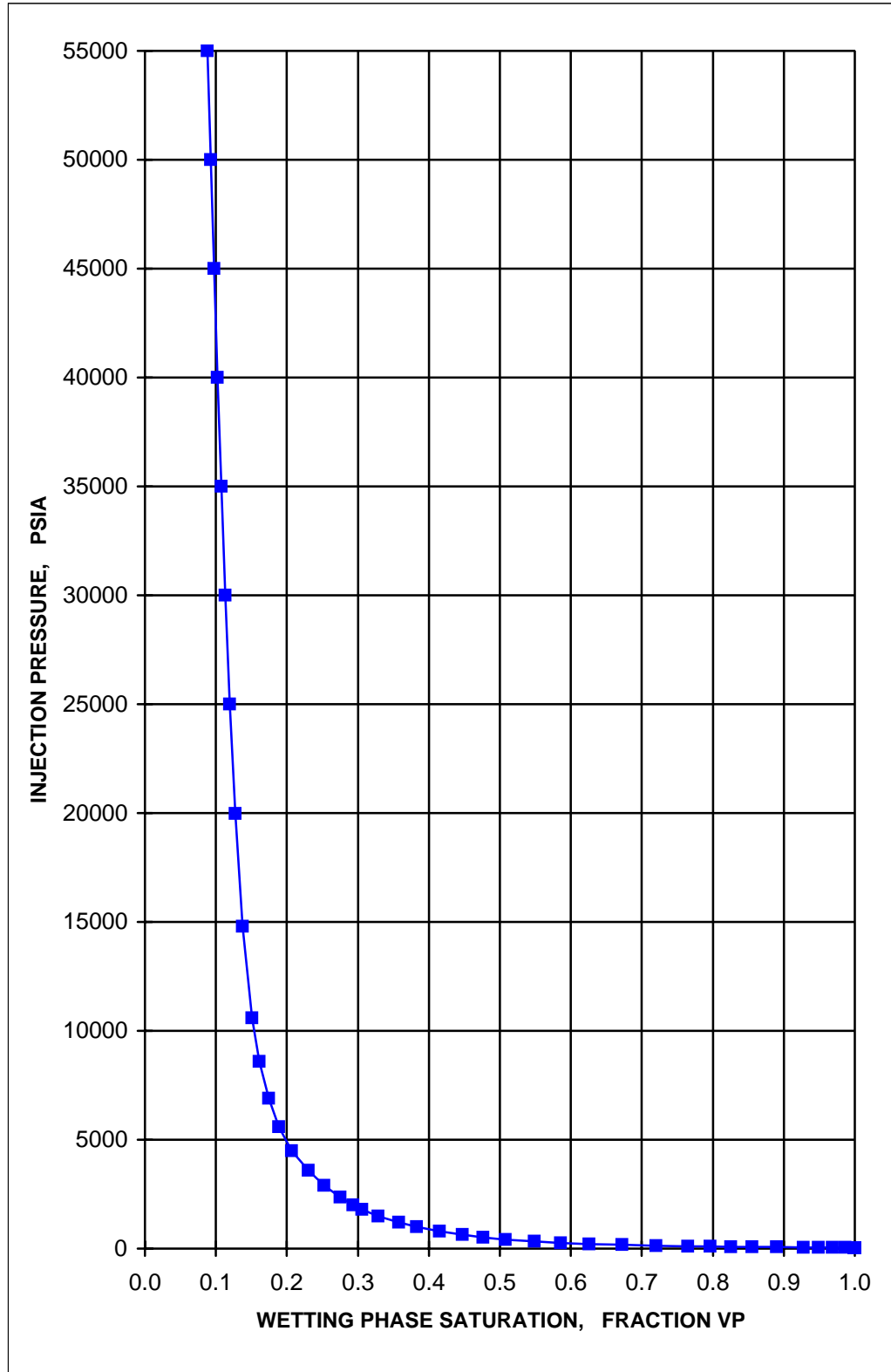
Capillary pressure by high pressure mercury injection

Sample ID : 45

Porosity, fraction : 0.190

Depth, m : 1771.60

Kair, md : 9.12



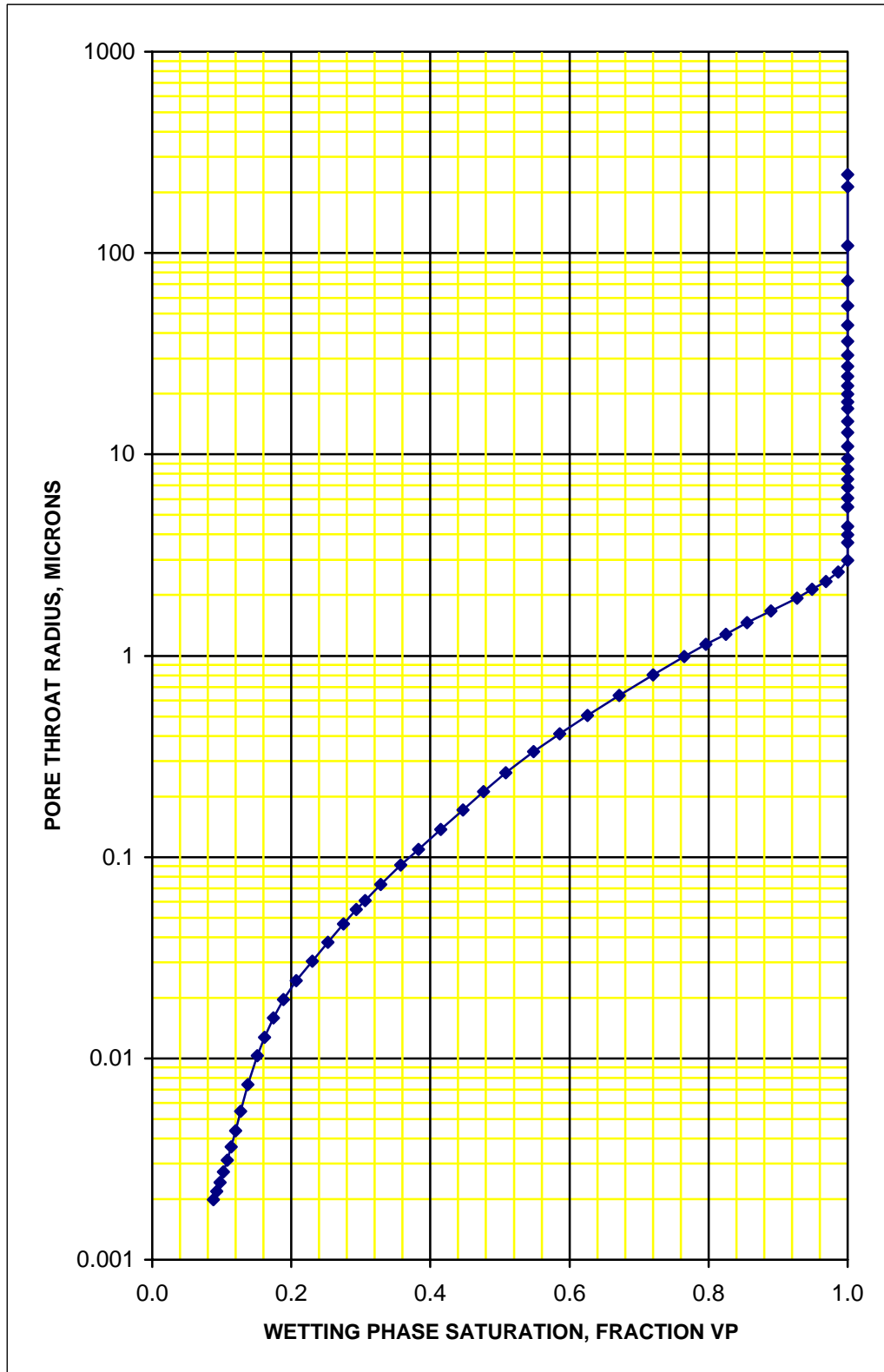
Pore throat size distribution by high pressure mercury injection

Sample ID : 45

Depth, m : 1771.60

Porosity, fraction : 0.190

Kair, md : 9.12



Capillary pressure by high pressure mercury injection

Sample ID : 9

Porosity, fraction : 0.213

Depth, m : 1773.24

Kair, md : 267

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.972	0.1	0.1	0.0
0.5	0.000	1.000	213.882	0.1	0.1	0.0
1.0	0.000	1.000	108.601	0.2	0.1	0.1
1.5	0.000	1.000	72.696	0.3	0.2	0.1
2.0	0.000	1.000	54.910	0.4	0.2	0.1
2.5	0.000	1.000	43.584	0.5	0.3	0.2
3.0	0.000	1.000	36.442	0.6	0.3	0.2
3.5	0.000	1.000	31.187	0.7	0.4	0.2
4.0	0.000	1.000	27.297	0.8	0.5	0.3
4.5	0.000	1.000	24.318	0.9	0.5	0.3
5.0	0.000	1.000	21.896	1.0	0.6	0.3
5.5	0.006	0.994	19.825	1.1	0.6	0.4
6.0	0.021	0.979	18.224	1.2	0.7	0.4
6.5	0.036	0.964	16.833	1.3	0.7	0.5
7.5	0.059	0.941	14.570	1.5	0.8	0.5
8.5	0.082	0.918	12.861	1.6	1.0	0.6
10.0	0.106	0.894	10.935	1.9	1.1	0.7
11.5	0.129	0.871	9.505	2.2	1.3	0.8
13.0	0.146	0.854	8.415	2.5	1.5	0.9
14.5	0.159	0.841	7.542	2.8	1.6	1.0
16.0	0.173	0.827	6.833	3.1	1.8	1.1
18.0	0.190	0.810	6.076	3.5	2.0	1.3
20.0	0.204	0.796	5.467	3.9	2.3	1.4
25.0	0.239	0.761	4.375	4.8	2.8	1.7
27.5	0.257	0.743	3.976	5.3	3.1	1.9
30.0	0.273	0.727	3.645	5.8	3.4	2.1
31.8	0.284	0.716	3.435	6.2	3.6	2.2
36.3	0.303	0.697	3.005	7.0	4.1	2.5
41.6	0.317	0.683	2.625	8.1	4.7	2.9
46.0	0.329	0.671	2.375	8.9	5.2	3.2
51.1	0.340	0.660	2.138	9.9	5.8	3.6
56.7	0.360	0.640	1.926	11.0	6.4	4.0
67.0	0.382	0.618	1.631	13.0	7.6	4.7
76.3	0.407	0.593	1.432	14.8	8.6	5.3

Capillary pressure by high pressure mercury injection

Sample ID : 9

Porosity, fraction : 0.213

Depth, m : 1773.24

Kair, md : 267

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.2	0.426	0.574	1.252	16.9	9.9	6.1
96.0	0.444	0.556	1.138	18.6	10.8	6.7
111.6	0.474	0.526	0.979	21.6	12.6	7.8
136.9	0.509	0.491	0.798	26.5	15.5	9.6
171.2	0.560	0.440	0.638	33.2	19.4	12.0
217.6	0.615	0.385	0.502	42.2	24.6	15.2
265.3	0.645	0.355	0.412	51.4	30.0	18.6
327.6	0.671	0.329	0.333	63.5	37.0	22.9
417.8	0.698	0.302	0.261	81.0	47.2	29.2
519.5	0.719	0.281	0.210	100.7	58.7	36.4
637.4	0.739	0.261	0.171	123.5	72.1	44.6
799.9	0.760	0.240	0.137	155.0	90.4	56.0
1000.1	0.780	0.220	0.109	193.8	113.1	70.0
1197.2	0.795	0.205	0.091	232.0	135.3	83.8
1498.2	0.812	0.188	0.073	290.4	169.4	104.9
1797.3	0.826	0.174	0.061	348.3	203.2	125.8
1996.4	0.834	0.166	0.055	386.9	225.7	139.7
2345.9	0.846	0.154	0.047	454.7	265.2	164.2
2895.3	0.862	0.138	0.038	561.1	327.3	202.6
3592.1	0.876	0.124	0.030	696.2	406.1	251.4
4492.0	0.891	0.109	0.024	870.6	507.8	314.4
5589.0	0.903	0.097	0.020	1083.2	631.9	391.2
6893.8	0.909	0.091	0.016	1336.1	779.4	482.5
8586.1	0.916	0.084	0.013	1664.1	970.7	600.9
10587.5	0.923	0.077	0.010	2052.0	1197.0	741.0
14784.4	0.933	0.067	0.007	2865.3	1671.4	1034.7
19984.1	0.939	0.061	0.005	3873.1	2259.3	1398.6
24992.6	0.948	0.052	0.004	4843.8	2825.5	1749.1
29994.5	0.952	0.048	0.004	5813.2	3391.0	2099.2
34991.8	0.956	0.044	0.003	6781.7	3956.0	2449.0
39993.6	0.960	0.040	0.003	7751.1	4521.5	2799.0
44994.8	0.964	0.036	0.002	8720.4	5086.9	3149.0
49993.3	0.966	0.034	0.002	9689.2	5652.0	3498.9

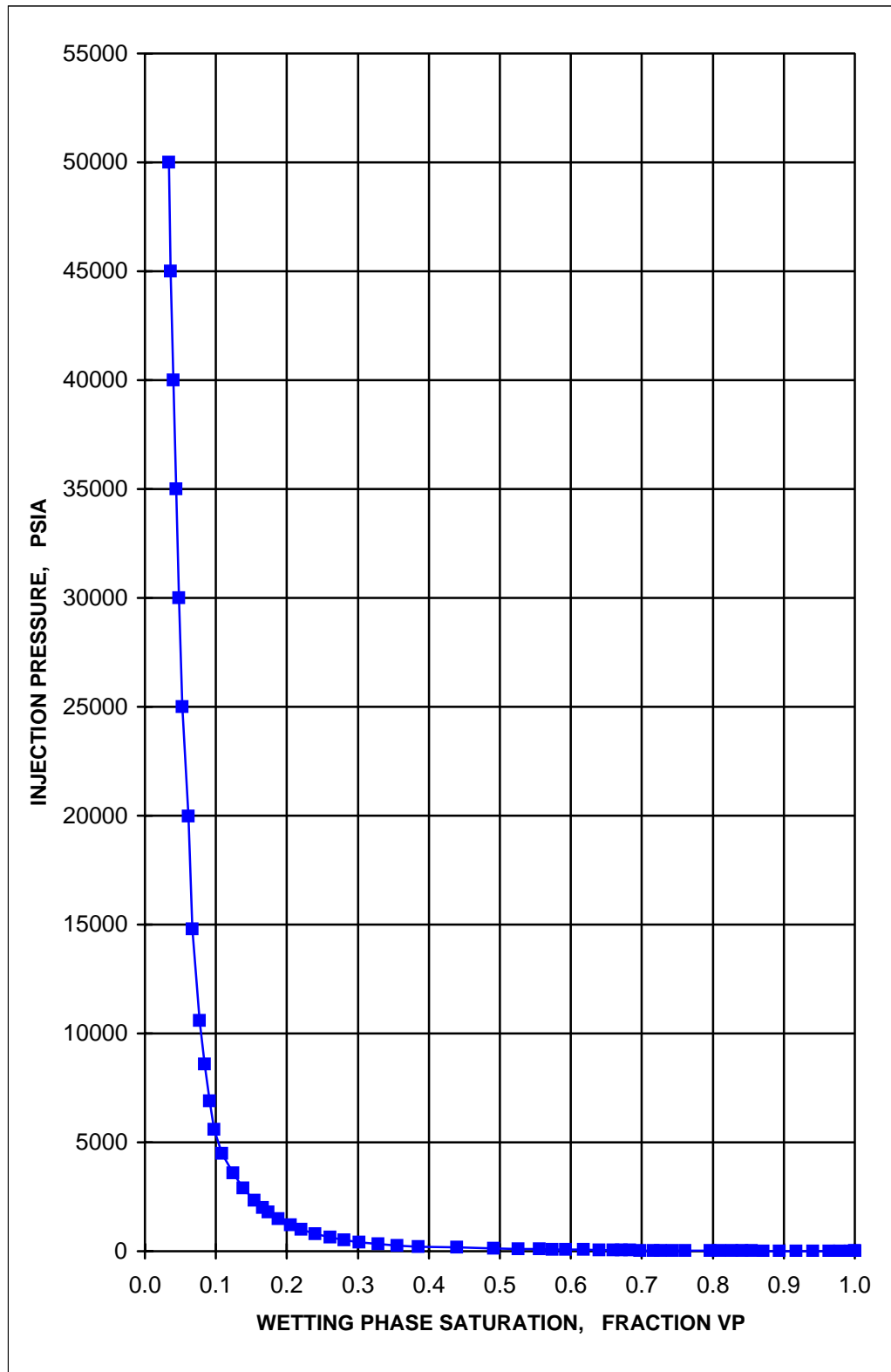
Capillary pressure by high pressure mercury injection

Sample ID : 9

Depth, m : 1773.24

Porosity, fraction : 0.213

Kair, md : 267



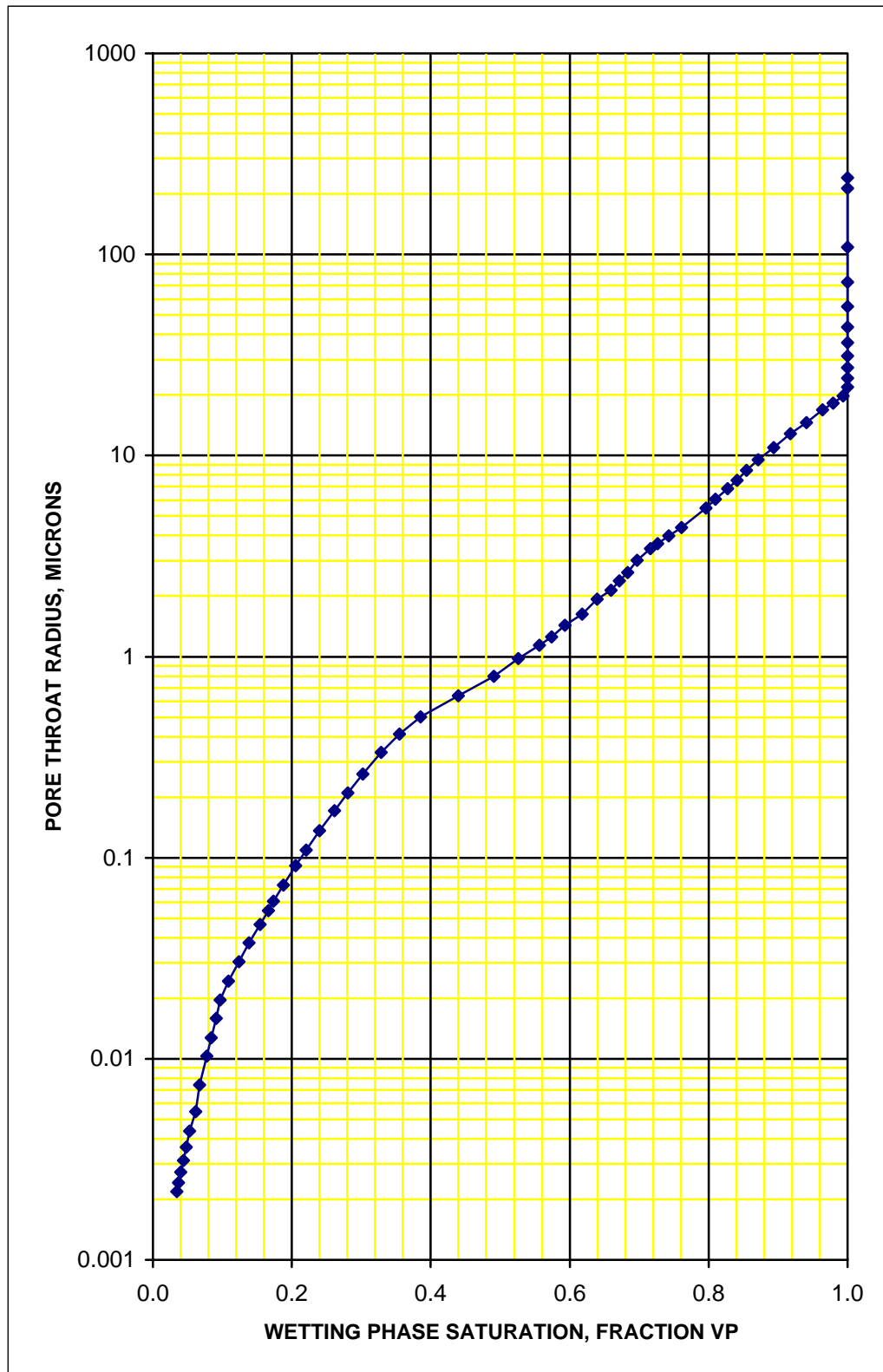
Pore throat size distribution by high pressure mercury injection

Sample ID : 9

Depth, m : 1773.24

Porosity, fraction : 0.213

Kair, md : 267



Capillary pressure by high pressure mercury injection

Sample ID : 51

Porosity, fraction : 0.188

Depth, m : 1774.20

Kair, md : 2.85

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.829	0.1	0.1	0.0
0.5	0.000	1.000	213.661	0.1	0.1	0.0
1.0	0.000	1.000	109.017	0.2	0.1	0.1
1.5	0.000	1.000	72.593	0.3	0.2	0.1
2.0	0.000	1.000	54.736	0.4	0.2	0.1
2.5	0.000	1.000	43.869	0.5	0.3	0.2
3.0	0.000	1.000	36.803	0.6	0.3	0.2
3.5	0.000	1.000	31.166	0.7	0.4	0.2
4.0	0.000	1.000	27.355	0.8	0.5	0.3
4.5	0.000	1.000	24.299	0.9	0.5	0.3
5.0	0.000	1.000	21.932	1.0	0.6	0.3
5.5	0.000	1.000	19.924	1.1	0.6	0.4
6.0	0.000	1.000	18.207	1.2	0.7	0.4
6.5	0.000	1.000	16.853	1.3	0.7	0.5
7.5	0.000	1.000	14.609	1.4	0.8	0.5
8.5	0.000	1.000	12.862	1.6	1.0	0.6
10.0	0.000	1.000	10.946	1.9	1.1	0.7
11.5	0.000	1.000	9.533	2.2	1.3	0.8
13.0	0.000	1.000	8.431	2.5	1.5	0.9
14.5	0.000	1.000	7.554	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.081	3.5	2.0	1.3
20.0	0.000	1.000	5.471	3.9	2.3	1.4
25.0	0.000	1.000	4.375	4.8	2.8	1.7
27.5	0.000	1.000	3.977	5.3	3.1	1.9
30.0	0.000	1.000	3.646	5.8	3.4	2.1
34.9	0.000	1.000	3.128	6.8	3.9	2.4
39.6	0.000	1.000	2.761	7.7	4.5	2.8
44.2	0.000	1.000	2.469	8.6	5.0	3.1
49.4	0.014	0.986	2.211	9.6	5.6	3.5
53.6	0.036	0.964	2.037	10.4	6.1	3.8
59.4	0.061	0.939	1.837	11.5	6.7	4.2
69.7	0.112	0.888	1.568	13.5	7.9	4.9
78.9	0.149	0.851	1.385	15.3	8.9	5.5

Capillary pressure by high pressure mercury injection

Sample ID : 51

Porosity, fraction : 0.188

Depth, m : 1774.20

Kair, md : 2.85

IFT * Cosine Contact Angle			
Lab --->	Air-Brine	Air-Oil	Oil-Brine
Res --->	72	24	42
	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
89.5	0.181	0.819	1.220	17.4	10.1	6.3
99.7	0.205	0.795	1.096	19.3	11.3	7.0
114.2	0.237	0.763	0.957	22.1	12.9	8.0
139.6	0.277	0.723	0.782	27.1	15.8	9.8
174.8	0.318	0.682	0.625	33.9	19.8	12.2
218.5	0.359	0.641	0.500	42.3	24.7	15.3
269.4	0.396	0.604	0.405	52.2	30.5	18.9
327.8	0.431	0.569	0.333	63.5	37.1	22.9
419.5	0.471	0.529	0.260	81.3	47.4	29.4
520.5	0.504	0.496	0.210	100.9	58.8	36.4
639.8	0.534	0.466	0.171	124.0	72.3	44.8
799.0	0.565	0.435	0.137	154.9	90.3	55.9
999.0	0.593	0.407	0.109	193.6	112.9	69.9
1197.4	0.616	0.384	0.091	232.1	135.4	83.8
1499.9	0.644	0.356	0.073	290.7	169.6	105.0
1799.0	0.666	0.334	0.061	348.7	203.4	125.9
1998.3	0.679	0.321	0.055	387.3	225.9	139.9
2350.6	0.698	0.302	0.046	455.6	265.7	164.5
2898.5	0.721	0.279	0.038	561.8	327.7	202.9
3597.3	0.745	0.255	0.030	697.2	406.7	251.8
4497.1	0.771	0.229	0.024	871.6	508.4	314.7
5597.0	0.791	0.209	0.020	1084.7	632.8	391.7
6897.7	0.808	0.192	0.016	1336.8	779.8	482.7
8596.2	0.823	0.177	0.013	1666.0	971.8	601.6
10597.1	0.835	0.165	0.010	2053.8	1198.1	741.7
14796.1	0.849	0.151	0.007	2867.6	1672.8	1035.5
19996.8	0.859	0.141	0.005	3875.6	2260.7	1399.5
24997.2	0.866	0.134	0.004	4844.7	2826.1	1749.5
29997.0	0.872	0.128	0.004	5813.7	3391.3	2099.4
34996.9	0.878	0.122	0.003	6782.7	3956.6	2449.3
39997.4	0.883	0.117	0.003	7751.9	4521.9	2799.3
44996.1	0.888	0.112	0.002	8720.6	5087.0	3149.1
49997.3	0.892	0.108	0.002	9689.9	5652.5	3499.1
54996.6	0.897	0.103	0.002	10658.8	6217.6	3849.0

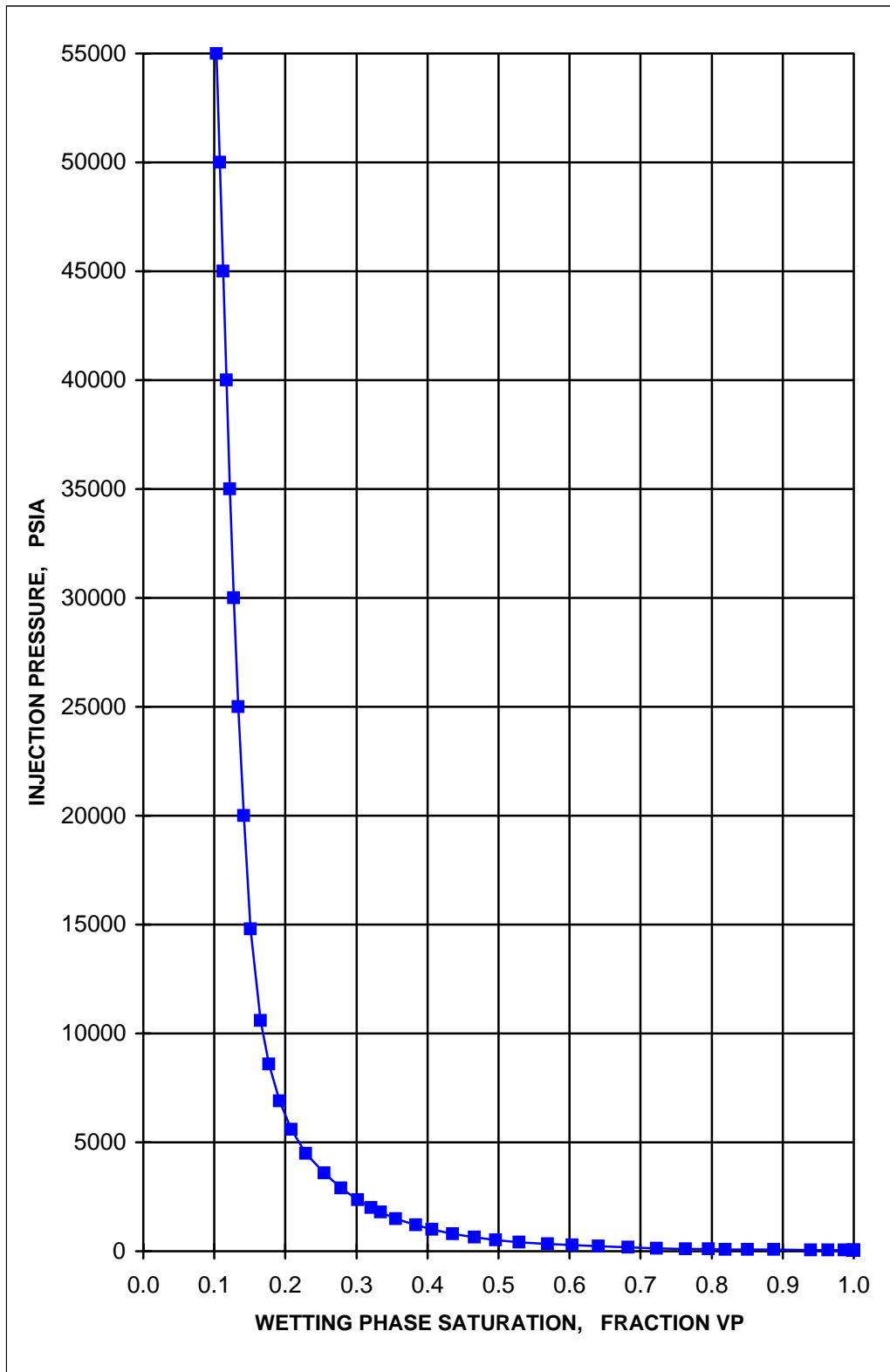
Capillary pressure by high pressure mercury injection

Sample ID : 51

Porosity, fraction : 0.188

Depth, m : 1774.20

Kair, md : 2.85



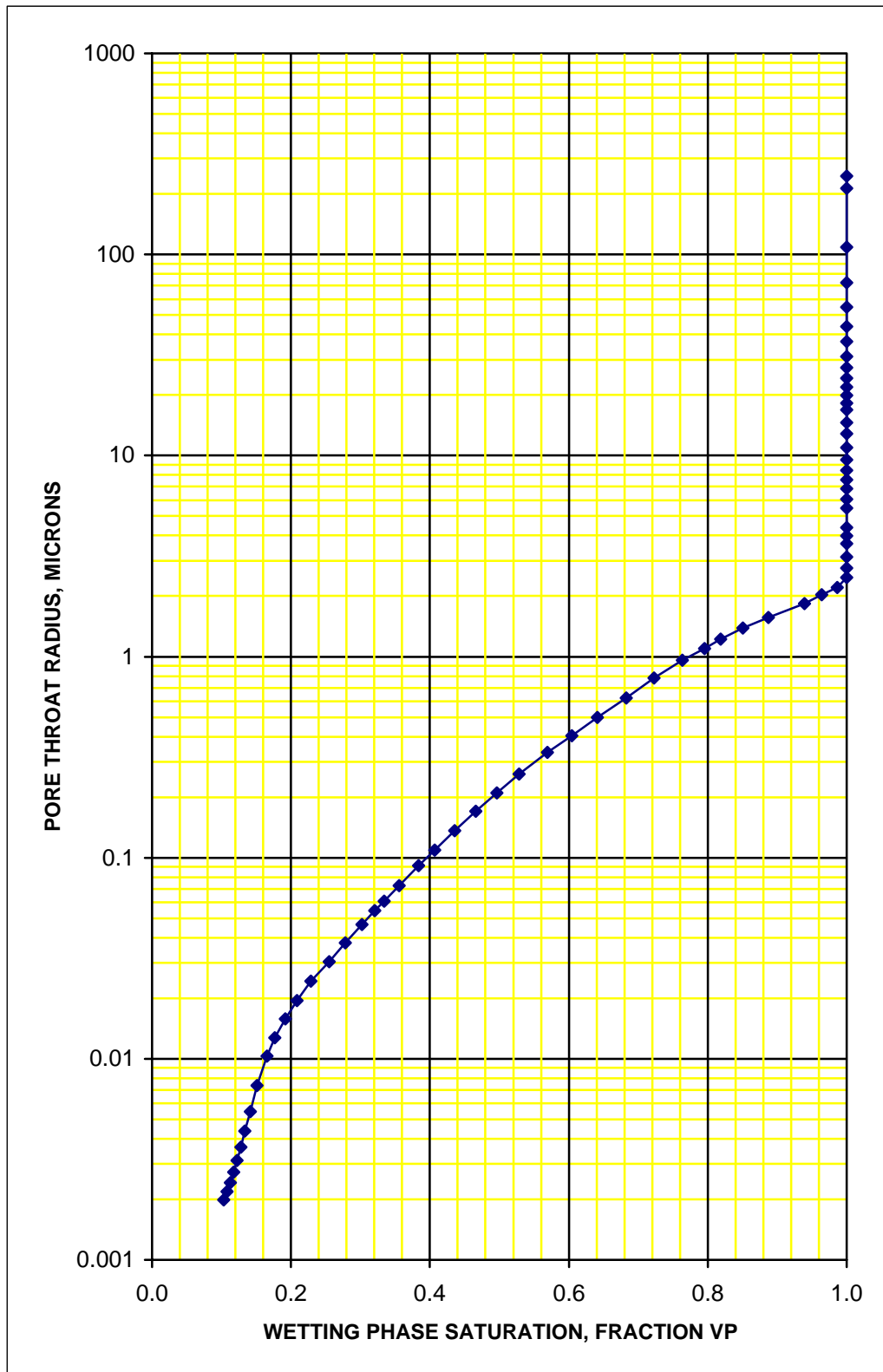
Pore throat size distribution by high pressure mercury injection

Sample ID : 51

Depth, m : 1774.20

Porosity, fraction : 0.188

Kair, md : 2.85



Capillary pressure by high pressure mercury injection

Sample ID : 60

Porosity, fraction : 0.193

Depth, m : 1776.92

Kair, md : 6.65

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.829	0.1	0.1	0.0
0.5	0.000	1.000	213.661	0.1	0.1	0.0
1.0	0.000	1.000	109.017	0.2	0.1	0.1
1.5	0.000	1.000	72.593	0.3	0.2	0.1
2.0	0.000	1.000	54.736	0.4	0.2	0.1
2.5	0.000	1.000	43.869	0.5	0.3	0.2
3.0	0.000	1.000	36.803	0.6	0.3	0.2
3.5	0.000	1.000	31.166	0.7	0.4	0.2
4.0	0.000	1.000	27.355	0.8	0.5	0.3
4.5	0.000	1.000	24.299	0.9	0.5	0.3
5.0	0.000	1.000	21.932	1.0	0.6	0.3
5.5	0.000	1.000	19.924	1.1	0.6	0.4
6.0	0.000	1.000	18.207	1.2	0.7	0.4
6.5	0.000	1.000	16.853	1.3	0.7	0.5
7.5	0.000	1.000	14.609	1.4	0.8	0.5
8.5	0.000	1.000	12.862	1.6	1.0	0.6
10.0	0.000	1.000	10.946	1.9	1.1	0.7
11.5	0.000	1.000	9.533	2.2	1.3	0.8
13.0	0.000	1.000	8.431	2.5	1.5	0.9
14.5	0.000	1.000	7.554	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.081	3.5	2.0	1.3
20.0	0.009	0.991	5.471	3.9	2.3	1.4
25.0	0.026	0.974	4.375	4.8	2.8	1.7
27.5	0.038	0.962	3.977	5.3	3.1	1.9
30.0	0.052	0.948	3.646	5.8	3.4	2.1
34.8	0.075	0.925	3.140	6.7	3.9	2.4
39.4	0.093	0.907	2.773	7.6	4.5	2.8
44.0	0.116	0.884	2.481	8.5	5.0	3.1
49.2	0.141	0.859	2.221	9.5	5.6	3.4
53.4	0.163	0.837	2.045	10.4	6.0	3.7
59.2	0.182	0.818	1.844	11.5	6.7	4.1
69.5	0.219	0.781	1.572	13.5	7.9	4.9
78.7	0.247	0.753	1.387	15.3	8.9	5.5

Capillary pressure by high pressure mercury injection

Sample ID : 60

Porosity, fraction : 0.193

Depth, m : 1776.92

Kair, md : 6.65

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
89.4	0.272	0.728	1.222	17.3	10.1	6.3
99.6	0.291	0.709	1.097	19.3	11.3	7.0
114.0	0.318	0.682	0.958	22.1	12.9	8.0
139.5	0.355	0.645	0.783	27.0	15.8	9.8
174.6	0.397	0.603	0.625	33.8	19.7	12.2
218.3	0.440	0.560	0.500	42.3	24.7	15.3
269.2	0.477	0.523	0.406	52.2	30.4	18.8
327.6	0.512	0.488	0.333	63.5	37.0	22.9
419.3	0.552	0.448	0.260	81.3	47.4	29.3
520.3	0.583	0.417	0.210	100.8	58.8	36.4
639.7	0.613	0.387	0.171	124.0	72.3	44.8
798.9	0.643	0.357	0.137	154.8	90.3	55.9
998.8	0.670	0.330	0.109	193.6	112.9	69.9
1197.2	0.691	0.309	0.091	232.0	135.4	83.8
1499.7	0.718	0.282	0.073	290.7	169.5	105.0
1798.8	0.739	0.261	0.061	348.6	203.4	125.9
1998.1	0.749	0.251	0.055	387.3	225.9	139.8
2350.4	0.770	0.230	0.046	455.5	265.7	164.5
2898.3	0.791	0.209	0.038	561.7	327.7	202.8
3597.2	0.814	0.186	0.030	697.2	406.7	251.8
4496.9	0.838	0.162	0.024	871.5	508.4	314.7
5596.8	0.857	0.143	0.020	1084.7	632.7	391.7
6897.5	0.871	0.129	0.016	1336.8	779.8	482.7
8596.1	0.884	0.116	0.013	1666.0	971.8	601.6
10597.0	0.894	0.106	0.010	2053.8	1198.0	741.6
14795.9	0.906	0.094	0.007	2867.6	1672.8	1035.5
19996.6	0.915	0.085	0.005	3875.5	2260.7	1399.5
24997.1	0.922	0.078	0.004	4844.7	2826.1	1749.5
29996.9	0.928	0.072	0.004	5813.7	3391.3	2099.4
34996.7	0.933	0.067	0.003	6782.7	3956.6	2449.3
39997.3	0.937	0.063	0.003	7751.8	4521.9	2799.3
44996.0	0.941	0.059	0.002	8720.6	5087.0	3149.1
49997.1	0.946	0.054	0.002	9689.9	5652.4	3499.1
54996.4	0.950	0.050	0.002	10658.8	6217.6	3849.0

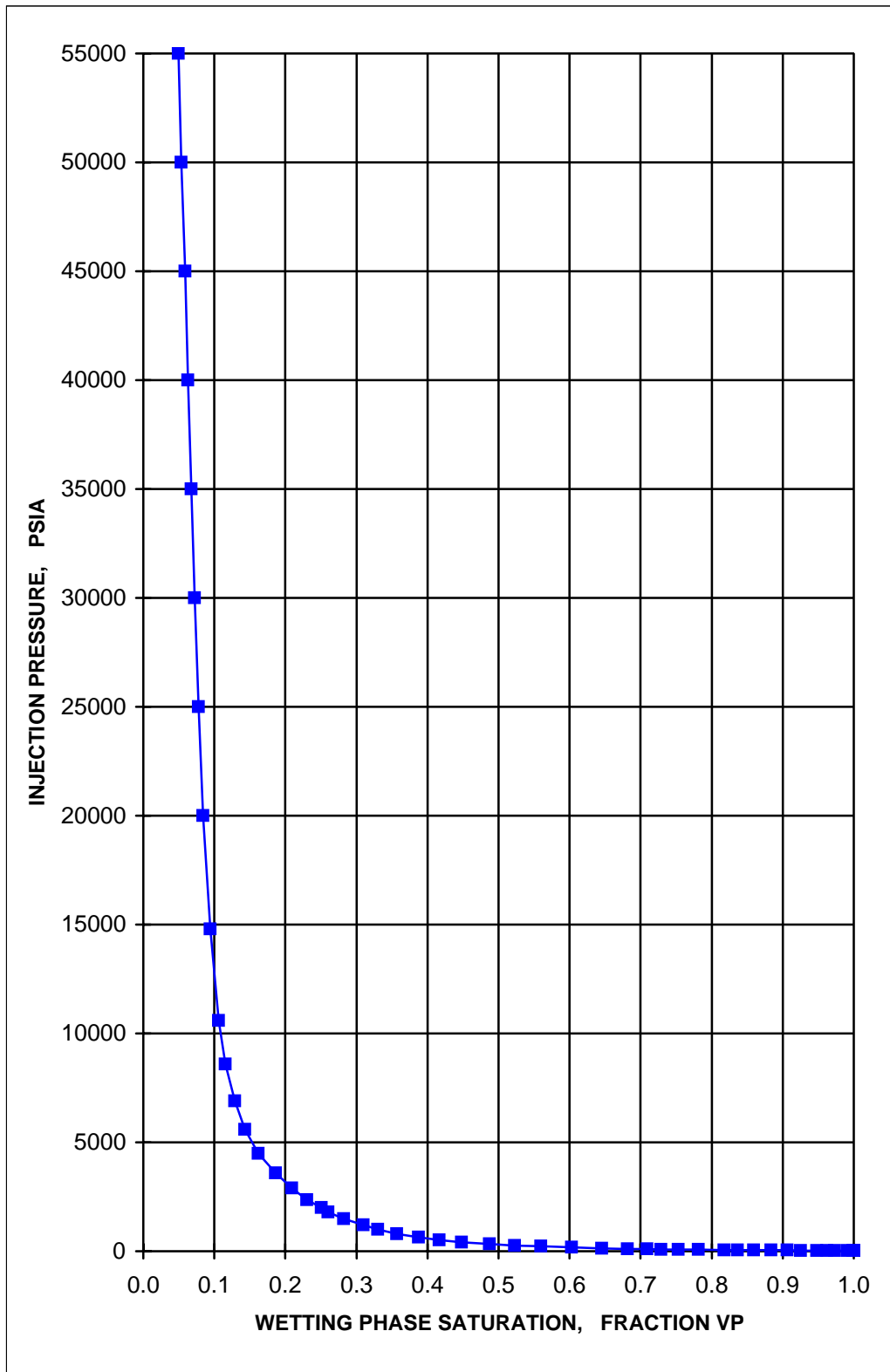
Capillary pressure by high pressure mercury injection

Sample ID : 60

Porosity, fraction : 0.193

Depth, m : 1776.92

Kair, md : 6.65



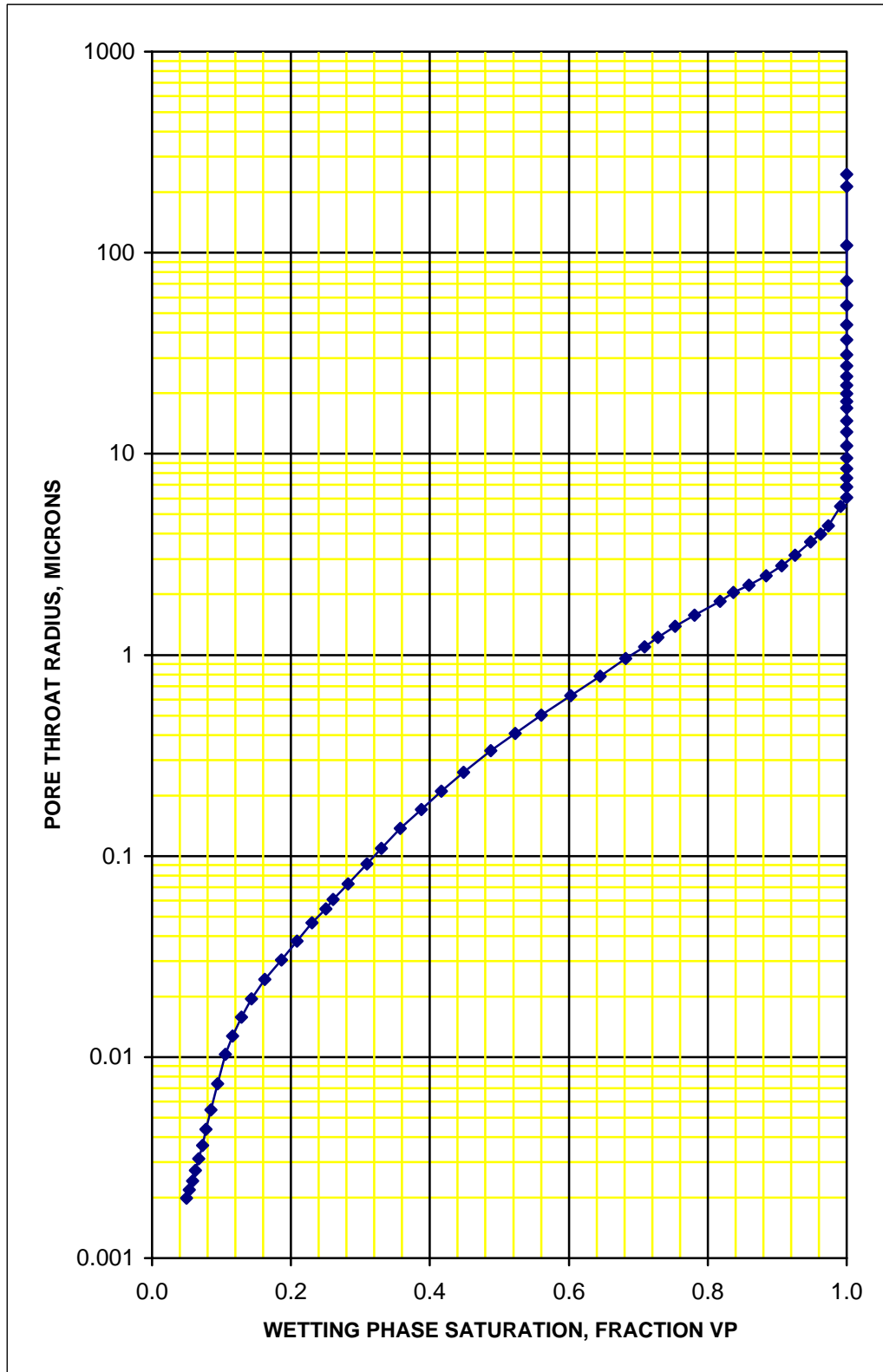
Pore throat size distribution by high pressure mercury injection

Sample ID : 60

Depth, m : 1776.92

Porosity, fraction : 0.193

Kair, md : 6.65



Capillary pressure by high pressure mercury injection

Sample ID : 63

Porosity, fraction : 0.221

Depth, m : 1777.83

Kair, md : 49.3

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.263	0.1	0.1	0.0
0.5	0.000	1.000	215.500	0.1	0.1	0.0
1.0	0.000	1.000	108.453	0.2	0.1	0.1
1.5	0.000	1.000	72.691	0.3	0.2	0.1
2.0	0.000	1.000	54.780	0.4	0.2	0.1
2.5	0.000	1.000	43.600	0.5	0.3	0.2
3.0	0.000	1.000	36.354	0.6	0.3	0.2
3.5	0.000	1.000	31.246	0.7	0.4	0.2
4.0	0.000	1.000	27.321	0.8	0.5	0.3
4.5	0.000	1.000	24.323	0.9	0.5	0.3
5.0	0.000	1.000	21.850	1.0	0.6	0.3
5.5	0.000	1.000	19.850	1.1	0.6	0.4
6.0	0.000	1.000	18.217	1.2	0.7	0.4
6.5	0.000	1.000	16.821	1.3	0.7	0.5
7.5	0.000	1.000	14.569	1.5	0.8	0.5
8.5	0.000	1.000	12.854	1.6	1.0	0.6
10.0	0.012	0.988	10.935	1.9	1.1	0.7
11.5	0.029	0.971	9.512	2.2	1.3	0.8
13.0	0.059	0.941	8.407	2.5	1.5	0.9
14.5	0.103	0.897	7.540	2.8	1.6	1.0
16.0	0.124	0.876	6.837	3.1	1.8	1.1
18.0	0.155	0.845	6.077	3.5	2.0	1.3
20.0	0.179	0.821	5.469	3.9	2.3	1.4
25.0	0.227	0.773	4.374	4.8	2.8	1.7
27.5	0.247	0.753	3.977	5.3	3.1	1.9
30.0	0.264	0.736	3.645	5.8	3.4	2.1
32.5	0.274	0.726	3.365	6.3	3.7	2.3
37.1	0.284	0.716	2.947	7.2	4.2	2.6
41.2	0.291	0.709	2.654	8.0	4.7	2.9
46.3	0.302	0.698	2.361	9.0	5.2	3.2
51.9	0.311	0.689	2.104	10.1	5.9	3.6
56.7	0.324	0.676	1.926	11.0	6.4	4.0
65.7	0.342	0.658	1.663	12.7	7.4	4.6
77.5	0.367	0.633	1.409	15.0	8.8	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 63

Porosity, fraction : 0.221

Depth, m : 1777.83

Kair, md : 49.3

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
86.3	0.385	0.615	1.266	16.7	9.8	6.0
96.7	0.404	0.596	1.129	18.7	10.9	6.8
111.2	0.429	0.571	0.982	21.6	12.6	7.8
135.8	0.464	0.536	0.804	26.3	15.4	9.5
171.7	0.504	0.496	0.636	33.3	19.4	12.0
216.3	0.544	0.456	0.505	41.9	24.5	15.1
267.7	0.577	0.423	0.408	51.9	30.3	18.7
327.6	0.607	0.393	0.333	63.5	37.0	22.9
417.0	0.638	0.362	0.262	80.8	47.1	29.2
519.3	0.664	0.336	0.210	100.6	58.7	36.3
636.8	0.687	0.313	0.172	123.4	72.0	44.6
796.7	0.711	0.289	0.137	154.4	90.1	55.8
999.8	0.733	0.267	0.109	193.8	113.0	70.0
1196.0	0.751	0.249	0.091	231.8	135.2	83.7
1498.9	0.772	0.228	0.073	290.5	169.5	104.9
1798.7	0.789	0.211	0.061	348.6	203.3	125.9
1996.3	0.798	0.202	0.055	386.9	225.7	139.7
2347.8	0.812	0.188	0.047	455.0	265.4	164.3
2893.8	0.828	0.172	0.038	560.9	327.2	202.5
3593.7	0.844	0.156	0.030	696.5	406.3	251.5
4489.0	0.860	0.140	0.024	870.0	507.5	314.2
5588.9	0.872	0.128	0.020	1083.2	631.9	391.1
6887.1	0.881	0.119	0.016	1334.8	778.6	482.0
8588.4	0.890	0.110	0.013	1664.5	971.0	601.1
10585.6	0.897	0.103	0.010	2051.6	1196.8	740.9
14783.9	0.906	0.094	0.007	2865.3	1671.4	1034.7
19983.0	0.914	0.086	0.005	3872.9	2259.2	1398.5
24994.5	0.920	0.080	0.004	4844.2	2825.8	1749.3
29992.8	0.925	0.075	0.004	5812.9	3390.8	2099.1
34993.9	0.929	0.071	0.003	6782.1	3956.2	2449.1
39993.3	0.933	0.067	0.003	7751.1	4521.5	2799.0
44994.7	0.938	0.062	0.002	8720.4	5086.9	3149.0
49993.5	0.942	0.058	0.002	9689.2	5652.0	3498.9
54993.8	0.946	0.054	0.002	10658.3	6217.3	3848.8

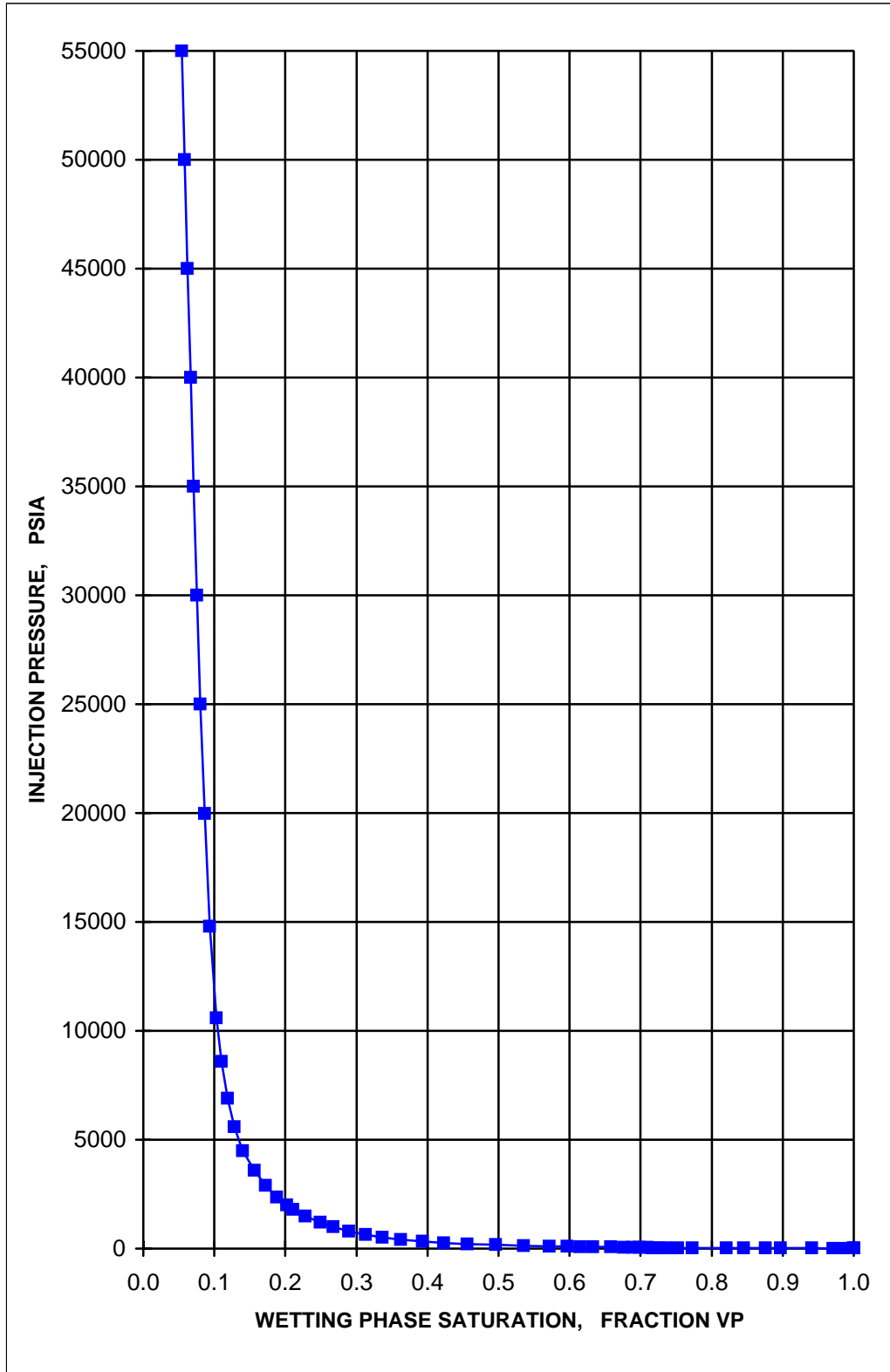
Capillary pressure by high pressure mercury injection

Sample ID : 63

Porosity, fraction : 0.221

Depth, m : 1777.83

Kair, md : 49.3



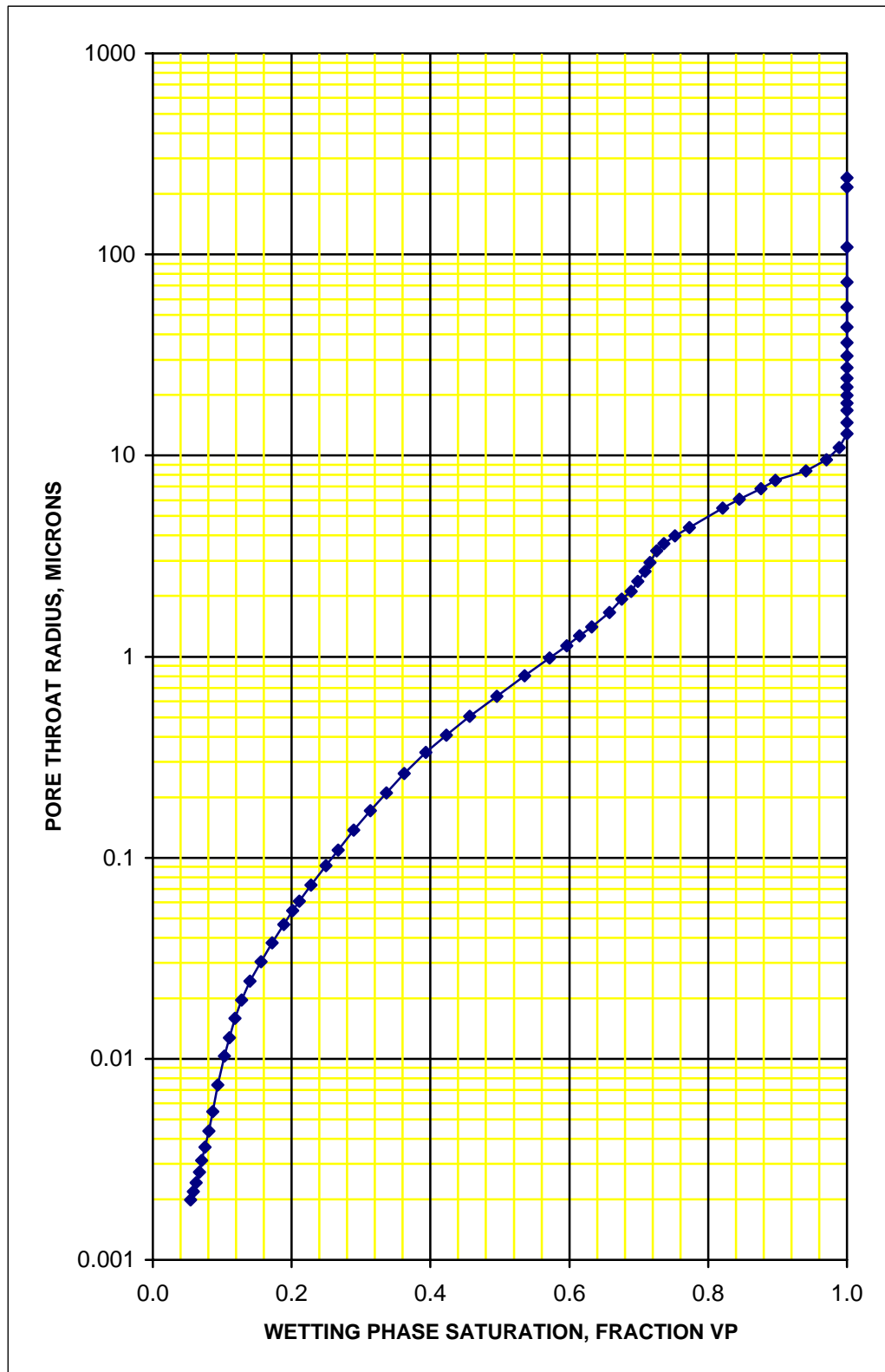
Pore throat size distribution by high pressure mercury injection

Sample ID : 63

Depth, m : 1777.83

Porosity, fraction : 0.221

Kair, md : 49.3



Capillary pressure by high pressure mercury injection

Sample ID : 64

Porosity, fraction : 0.190

Depth, m : 1778.10

Kair, md : 7.36

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.263	0.1	0.1	0.0
0.5	0.000	1.000	215.500	0.1	0.1	0.0
1.0	0.000	1.000	108.453	0.2	0.1	0.1
1.5	0.000	1.000	72.691	0.3	0.2	0.1
2.0	0.000	1.000	54.780	0.4	0.2	0.1
2.5	0.000	1.000	43.600	0.5	0.3	0.2
3.0	0.000	1.000	36.354	0.6	0.3	0.2
3.5	0.000	1.000	31.246	0.7	0.4	0.2
4.0	0.000	1.000	27.321	0.8	0.5	0.3
4.5	0.000	1.000	24.323	0.9	0.5	0.3
5.0	0.000	1.000	21.850	1.0	0.6	0.3
5.5	0.000	1.000	19.850	1.1	0.6	0.4
6.0	0.000	1.000	18.217	1.2	0.7	0.4
6.5	0.000	1.000	16.821	1.3	0.7	0.5
7.5	0.000	1.000	14.569	1.5	0.8	0.5
8.5	0.000	1.000	12.854	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.512	2.2	1.3	0.8
13.0	0.000	1.000	8.407	2.5	1.5	0.9
14.5	0.000	1.000	7.540	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.469	3.9	2.3	1.4
25.0	0.011	0.989	4.374	4.8	2.8	1.7
27.5	0.021	0.979	3.977	5.3	3.1	1.9
30.0	0.033	0.967	3.645	5.8	3.4	2.1
33.1	0.042	0.958	3.295	6.4	3.7	2.3
37.6	0.062	0.938	2.903	7.3	4.3	2.6
41.8	0.080	0.920	2.611	8.1	4.7	2.9
46.9	0.097	0.903	2.327	9.1	5.3	3.3
52.6	0.115	0.885	2.078	10.2	5.9	3.7
57.4	0.134	0.866	1.904	11.1	6.5	4.0
66.4	0.167	0.833	1.646	12.9	7.5	4.6
78.2	0.198	0.802	1.397	15.2	8.8	5.5

Capillary pressure by high pressure mercury injection

Sample ID : 64

Porosity, fraction : 0.190

Depth, m : 1778.10

Kair, md : 7.36

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.0	0.218	0.782	1.256	16.9	9.8	6.1
97.4	0.239	0.761	1.121	18.9	11.0	6.8
111.9	0.268	0.732	0.976	21.7	12.7	7.8
136.5	0.314	0.686	0.800	26.5	15.4	9.6
172.5	0.365	0.635	0.633	33.4	19.5	12.1
217.0	0.412	0.588	0.503	42.1	24.5	15.2
268.5	0.452	0.548	0.407	52.0	30.4	18.8
328.4	0.488	0.512	0.333	63.6	37.1	23.0
417.8	0.527	0.473	0.261	81.0	47.2	29.2
520.1	0.560	0.440	0.210	100.8	58.8	36.4
637.6	0.589	0.411	0.171	123.6	72.1	44.6
797.5	0.621	0.379	0.137	154.6	90.2	55.8
1000.6	0.650	0.350	0.109	193.9	113.1	70.0
1196.8	0.672	0.328	0.091	231.9	135.3	83.8
1499.9	0.699	0.301	0.073	290.7	169.6	105.0
1799.5	0.721	0.279	0.061	348.8	203.4	125.9
1997.1	0.733	0.267	0.055	387.1	225.8	139.8
2348.6	0.751	0.249	0.047	455.2	265.5	164.4
2894.7	0.774	0.226	0.038	561.0	327.3	202.6
3594.5	0.796	0.204	0.030	696.6	406.4	251.6
4489.8	0.820	0.180	0.024	870.2	507.6	314.2
5589.7	0.838	0.162	0.020	1083.3	631.9	391.2
6887.9	0.853	0.147	0.016	1334.9	778.7	482.1
8589.2	0.866	0.134	0.013	1664.7	971.1	601.1
10586.4	0.876	0.124	0.010	2051.7	1196.8	740.9
14784.7	0.888	0.112	0.007	2865.4	1671.5	1034.7
19983.8	0.898	0.102	0.005	3873.0	2259.3	1398.6
24995.3	0.905	0.095	0.004	4844.3	2825.8	1749.3
29993.6	0.911	0.089	0.004	5813.0	3390.9	2099.1
34994.7	0.916	0.084	0.003	6782.3	3956.3	2449.2
39994.1	0.920	0.080	0.003	7751.2	4521.5	2799.1
44995.5	0.925	0.075	0.002	8720.5	5087.0	3149.1
49994.3	0.929	0.071	0.002	9689.3	5652.1	3498.9
54994.6	0.933	0.067	0.002	10658.4	6217.4	3848.9

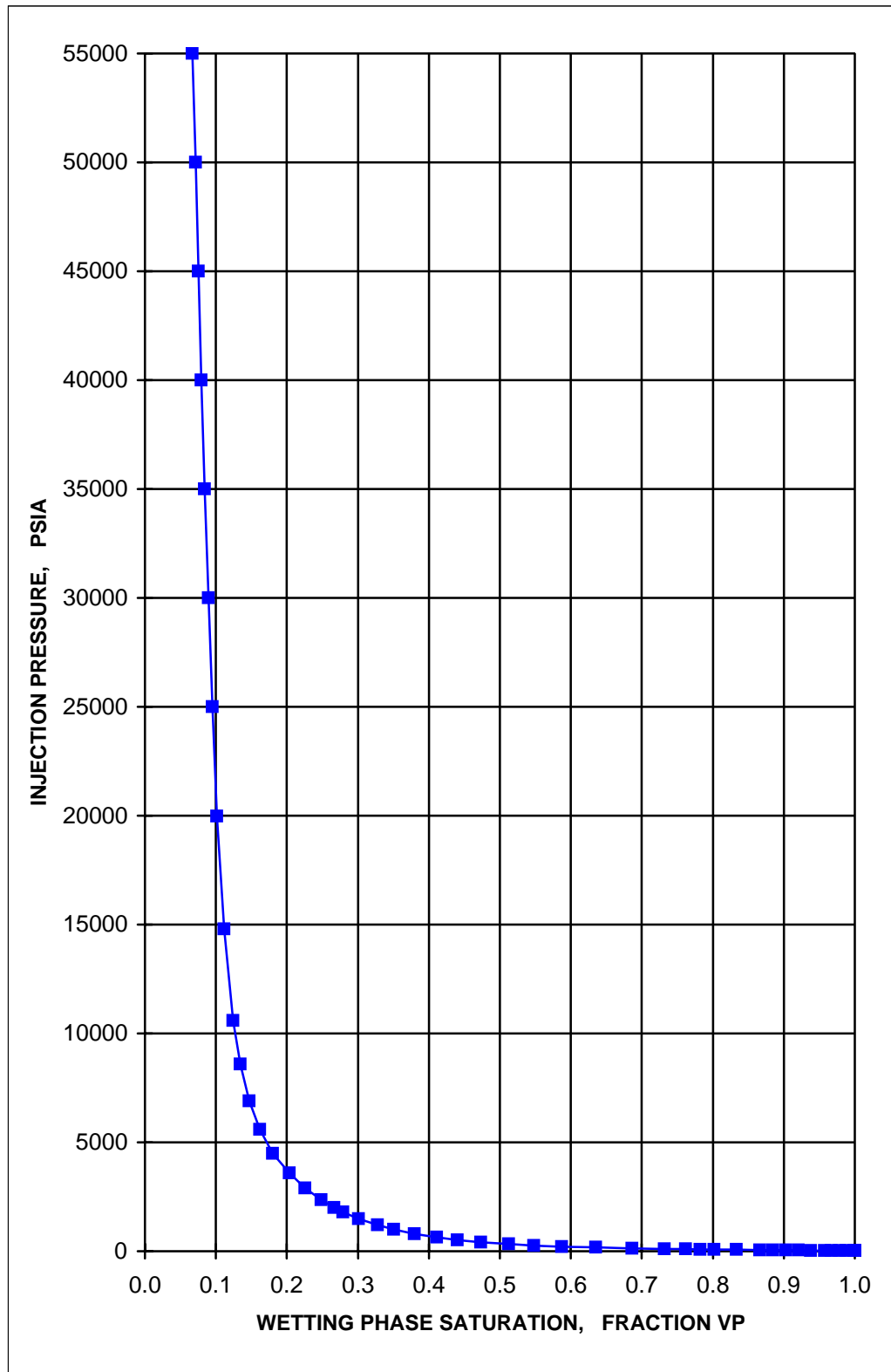
Capillary pressure by high pressure mercury injection

Sample ID : 64

Porosity, fraction : 0.190

Depth, m : 1778.10

Kair, md : 7.36



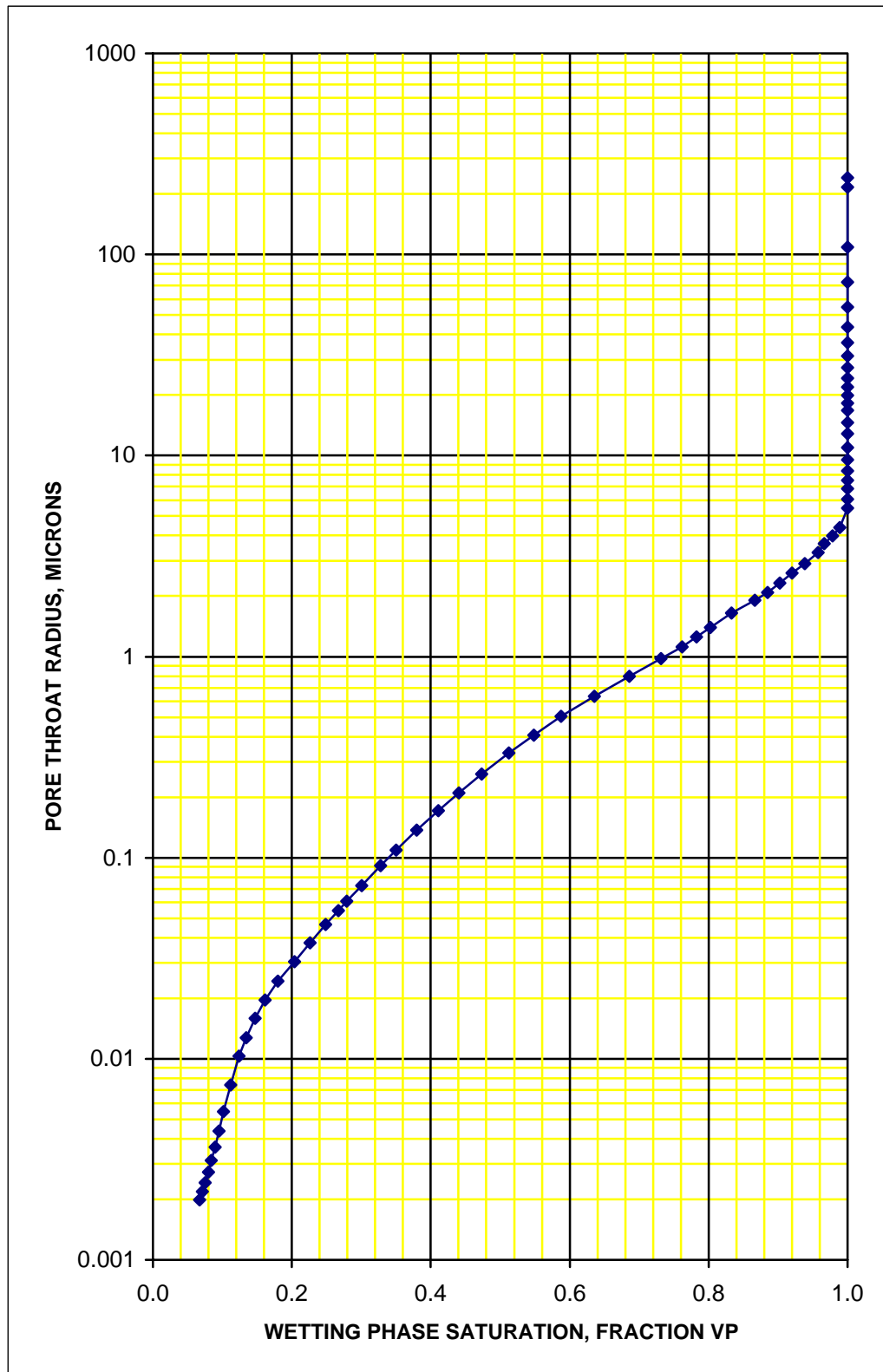
Pore throat size distribution by high pressure mercury injection

Sample ID : 64

Depth, m : 1778.10

Porosity, fraction : 0.190

Kair, md : 7.36



Capillary pressure by high pressure mercury injection

Sample ID : 65

Porosity, fraction : 0.237

Depth, m : 1778.45

Kair, md : 153

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	243.157	0.1	0.1	0.0
0.5	0.000	1.000	216.050	0.1	0.1	0.0
1.0	0.000	1.000	108.714	0.2	0.1	0.1
1.5	0.000	1.000	72.557	0.3	0.2	0.1
2.0	0.000	1.000	54.645	0.4	0.2	0.1
2.5	0.000	1.000	43.905	0.5	0.3	0.2
3.0	0.000	1.000	36.374	0.6	0.3	0.2
3.5	0.000	1.000	31.229	0.7	0.4	0.2
4.0	0.000	1.000	27.369	0.8	0.5	0.3
4.5	0.000	1.000	24.300	0.9	0.5	0.3
5.0	0.000	1.000	21.901	1.0	0.6	0.3
5.5	0.000	1.000	19.923	1.1	0.6	0.4
6.0	0.000	1.000	18.216	1.2	0.7	0.4
6.5	0.000	1.000	16.812	1.3	0.7	0.5
7.5	0.000	1.000	14.614	1.4	0.8	0.5
8.5	0.017	0.983	12.895	1.6	1.0	0.6
10.0	0.050	0.950	10.959	1.9	1.1	0.7
11.5	0.075	0.925	9.522	2.2	1.3	0.8
13.0	0.102	0.898	8.421	2.5	1.5	0.9
14.5	0.128	0.872	7.554	2.8	1.6	1.0
16.0	0.152	0.848	6.834	3.1	1.8	1.1
18.0	0.176	0.824	6.076	3.5	2.0	1.3
20.0	0.197	0.803	5.470	3.9	2.3	1.4
25.0	0.238	0.762	4.374	4.8	2.8	1.7
27.5	0.255	0.745	3.977	5.3	3.1	1.9
30.0	0.271	0.729	3.645	5.8	3.4	2.1
34.6	0.297	0.703	3.156	6.7	3.9	2.4
39.6	0.320	0.680	2.756	7.7	4.5	2.8
44.4	0.340	0.660	2.462	8.6	5.0	3.1
49.4	0.359	0.641	2.212	9.6	5.6	3.5
54.2	0.373	0.627	2.014	10.5	6.1	3.8
58.5	0.388	0.612	1.867	11.3	6.6	4.1
69.6	0.416	0.584	1.570	13.5	7.9	4.9
79.8	0.440	0.560	1.370	15.5	9.0	5.6

Capillary pressure by high pressure mercury injection

Sample ID : 65

Porosity, fraction : 0.237

Depth, m : 1778.45

Kair, md : 153

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
89.4	0.459	0.541	1.221	17.3	10.1	6.3
99.5	0.477	0.523	1.098	19.3	11.2	7.0
114.6	0.501	0.499	0.953	22.2	13.0	8.0
139.6	0.534	0.466	0.782	27.1	15.8	9.8
173.9	0.570	0.430	0.628	33.7	19.7	12.2
219.6	0.606	0.394	0.497	42.6	24.8	15.4
269.0	0.636	0.364	0.406	52.1	30.4	18.8
330.4	0.664	0.336	0.331	64.0	37.4	23.1
419.3	0.694	0.306	0.260	81.3	47.4	29.3
517.7	0.716	0.284	0.211	100.3	58.5	36.2
639.0	0.739	0.261	0.171	123.8	72.2	44.7
799.1	0.762	0.238	0.137	154.9	90.3	55.9
998.1	0.784	0.216	0.109	193.4	112.8	69.9
1200.8	0.802	0.198	0.091	232.7	135.8	84.0
1496.4	0.822	0.178	0.073	290.0	169.2	104.7
1799.0	0.837	0.163	0.061	348.7	203.4	125.9
2000.1	0.846	0.154	0.055	387.6	226.1	140.0
2348.9	0.858	0.142	0.046	455.2	265.6	164.4
2898.8	0.873	0.127	0.038	561.8	327.7	202.9
3598.7	0.886	0.114	0.030	697.5	406.9	251.9
4497.7	0.899	0.101	0.024	871.7	508.5	314.8
5595.2	0.908	0.092	0.020	1084.4	632.6	391.6
6897.9	0.916	0.084	0.016	1336.9	779.8	482.8
8596.7	0.922	0.078	0.013	1666.1	971.9	601.7
10595.4	0.927	0.073	0.010	2053.5	1197.9	741.5
14797.5	0.933	0.067	0.007	2867.9	1672.9	1035.6
19996.4	0.939	0.061	0.005	3875.5	2260.7	1399.5
24996.3	0.945	0.055	0.004	4844.5	2826.0	1749.4
29997.3	0.951	0.049	0.004	5813.7	3391.4	2099.4
34996.2	0.956	0.044	0.003	6782.6	3956.5	2449.3
39996.4	0.962	0.038	0.003	7751.7	4521.8	2799.2
44995.9	0.965	0.035	0.002	8720.6	5087.0	3149.1
49997.3	0.968	0.032	0.002	9689.9	5652.5	3499.1
54998.0	0.971	0.029	0.002	10659.106	6217.812	3849.1217

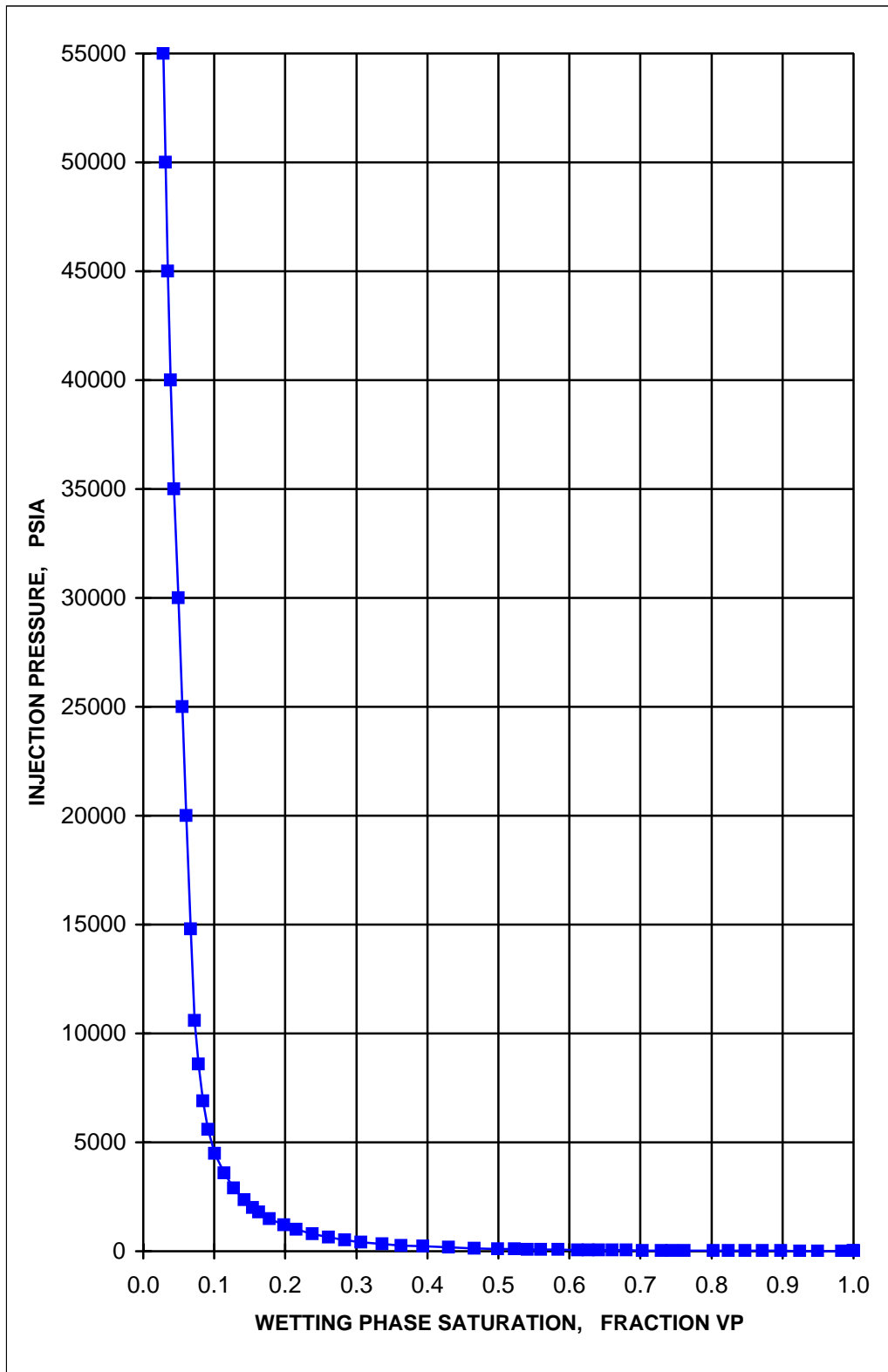
Capillary pressure by high pressure mercury injection

Sample ID : 65

Depth, m : 1778.45

Porosity, fraction : 0.237

Kair, md : 153



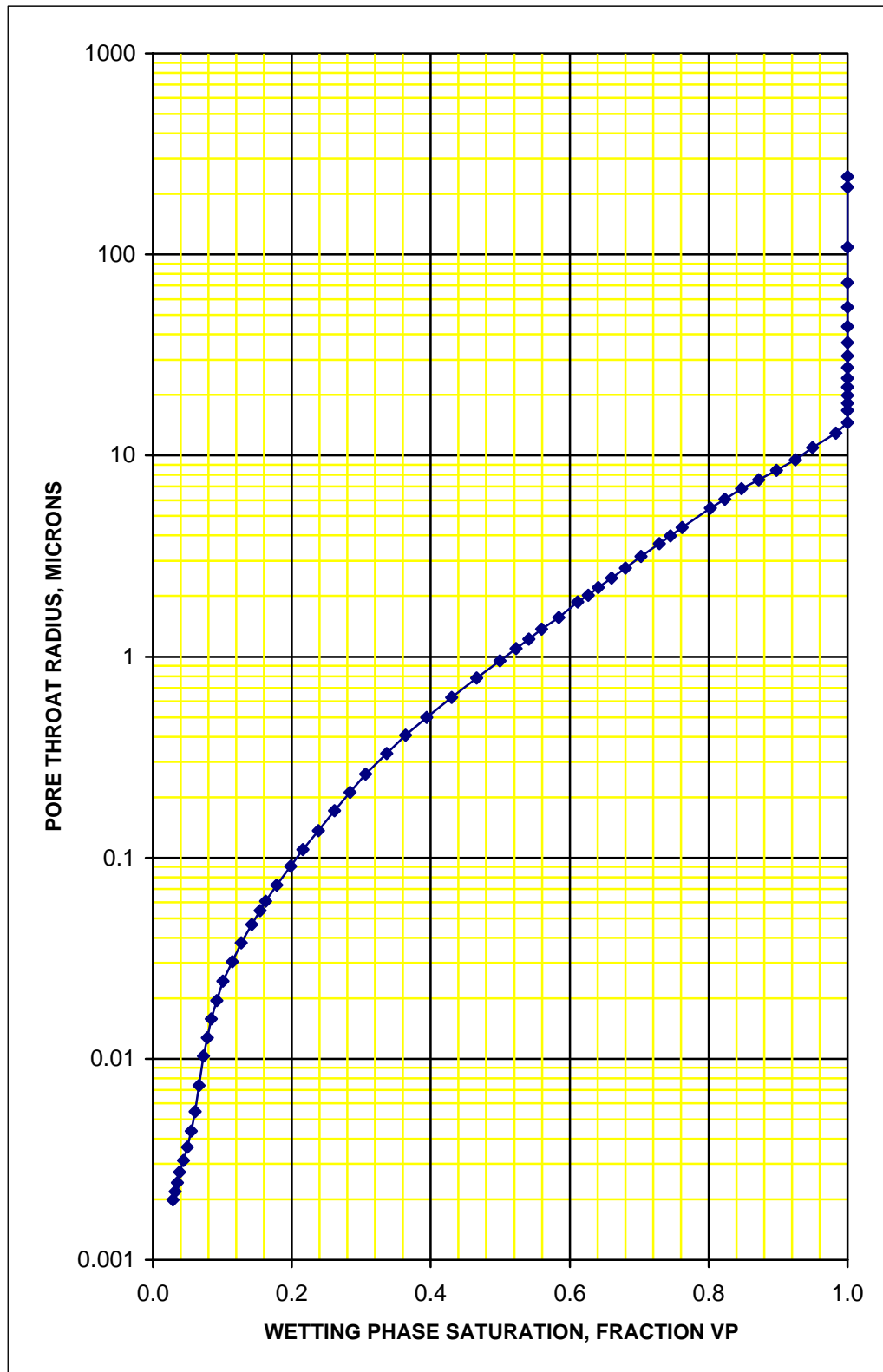
Pore throat size distribution by high pressure mercury injection

Sample ID : 65

Depth, m : 1778.45

Porosity, fraction : 0.237

Kair, md : 153



Capillary pressure by high pressure mercury injection

Sample ID : 75

Porosity, fraction : 0.193

Depth, m : 1781.40

Kair, md : 4.19

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.263	0.1	0.1	0.0
0.5	0.000	1.000	215.500	0.1	0.1	0.0
1.0	0.000	1.000	108.453	0.2	0.1	0.1
1.5	0.000	1.000	72.691	0.3	0.2	0.1
2.0	0.000	1.000	54.780	0.4	0.2	0.1
2.5	0.000	1.000	43.600	0.5	0.3	0.2
3.0	0.000	1.000	36.354	0.6	0.3	0.2
3.5	0.000	1.000	31.246	0.7	0.4	0.2
4.0	0.000	1.000	27.321	0.8	0.5	0.3
4.5	0.000	1.000	24.323	0.9	0.5	0.3
5.0	0.000	1.000	21.850	1.0	0.6	0.3
5.5	0.000	1.000	19.850	1.1	0.6	0.4
6.0	0.000	1.000	18.217	1.2	0.7	0.4
6.5	0.000	1.000	16.821	1.3	0.7	0.5
7.5	0.000	1.000	14.569	1.5	0.8	0.5
8.5	0.000	1.000	12.854	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.512	2.2	1.3	0.8
13.0	0.000	1.000	8.407	2.5	1.5	0.9
14.5	0.000	1.000	7.540	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.469	3.9	2.3	1.4
25.0	0.000	1.000	4.374	4.8	2.8	1.7
27.5	0.000	1.000	3.977	5.3	3.1	1.9
30.0	0.000	1.000	3.645	5.8	3.4	2.1
36.5	0.000	1.000	2.992	7.1	4.1	2.6
40.9	0.006	0.994	2.673	7.9	4.6	2.9
46.3	0.030	0.970	2.358	9.0	5.2	3.2
51.2	0.061	0.939	2.134	9.9	5.8	3.6
56.8	0.090	0.910	1.924	11.0	6.4	4.0
66.9	0.129	0.871	1.633	13.0	7.6	4.7
76.3	0.157	0.843	1.432	14.8	8.6	5.3
87.1	0.188	0.812	1.253	16.9	9.9	6.1

Capillary pressure by high pressure mercury injection

Sample ID : 75

Porosity, fraction : 0.193

Depth, m : 1781.40

Kair, md : 4.19

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
97.7	0.208	0.792	1.118	18.9	11.0	6.8
111.8	0.241	0.759	0.977	21.7	12.6	7.8
137.6	0.280	0.720	0.794	26.7	15.6	9.6
172.2	0.322	0.678	0.634	33.4	19.5	12.1
217.7	0.367	0.633	0.502	42.2	24.6	15.2
266.3	0.405	0.595	0.410	51.6	30.1	18.6
327.7	0.443	0.557	0.333	63.5	37.0	22.9
415.6	0.483	0.517	0.263	80.5	47.0	29.1
518.9	0.517	0.483	0.210	100.6	58.7	36.3
639.2	0.549	0.451	0.171	123.9	72.3	44.7
798.2	0.582	0.418	0.137	154.7	90.2	55.9
996.2	0.613	0.387	0.110	193.1	112.6	69.7
1197.4	0.638	0.362	0.091	232.1	135.4	83.8
1497.6	0.667	0.333	0.073	290.2	169.3	104.8
1795.2	0.690	0.310	0.061	347.9	203.0	125.6
1995.6	0.703	0.297	0.055	386.8	225.6	139.7
2346.9	0.722	0.278	0.047	454.9	265.3	164.3
2892.4	0.746	0.254	0.038	560.6	327.0	202.4
3592.3	0.770	0.230	0.030	696.2	406.1	251.4
4487.7	0.795	0.205	0.024	869.7	507.4	314.1
5589.5	0.816	0.184	0.020	1083.3	631.9	391.2
6888.4	0.833	0.167	0.016	1335.0	778.8	482.1
8586.7	0.849	0.151	0.013	1664.2	970.8	601.0
10589.0	0.861	0.139	0.010	2052.2	1197.1	741.1
14783.4	0.877	0.123	0.007	2865.2	1671.3	1034.6
19983.2	0.889	0.111	0.005	3872.9	2259.2	1398.6
24994.7	0.897	0.103	0.004	4844.2	2825.8	1749.3
29996.1	0.904	0.096	0.004	5813.5	3391.2	2099.3
34994.3	0.910	0.090	0.003	6782.2	3956.3	2449.1
39997.6	0.916	0.084	0.003	7751.9	4521.9	2799.3
44992.1	0.921	0.079	0.002	8719.9	5086.6	3148.8
49995.7	0.926	0.074	0.002	9689.6	5652.3	3499.0
54991.1	0.931	0.069	0.002	10657.8	6217.0	3848.6

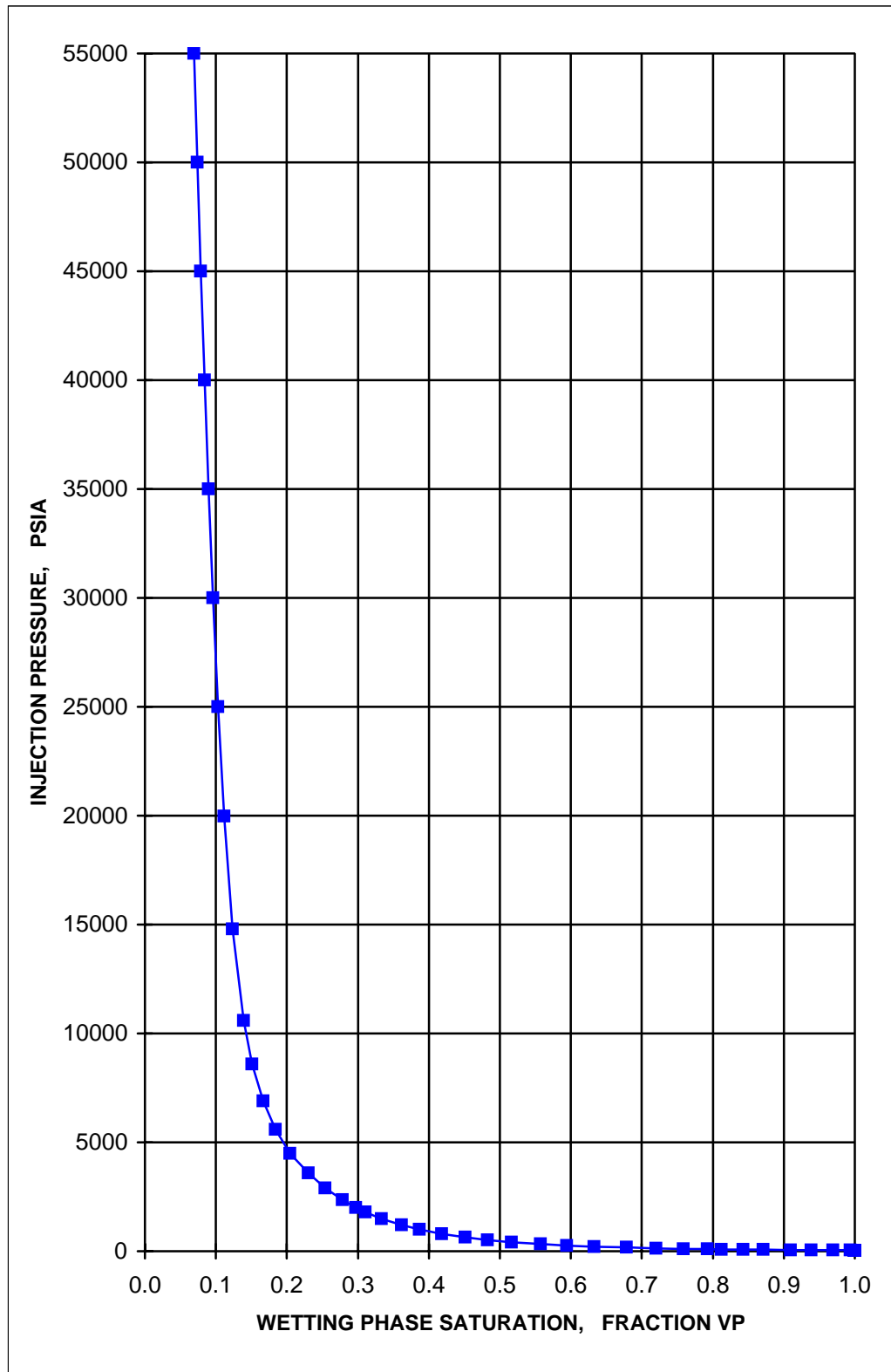
Capillary pressure by high pressure mercury injection

Sample ID : 75

Porosity, fraction : 0.193

Depth, m : 1781.40

Kair, md : 4.19



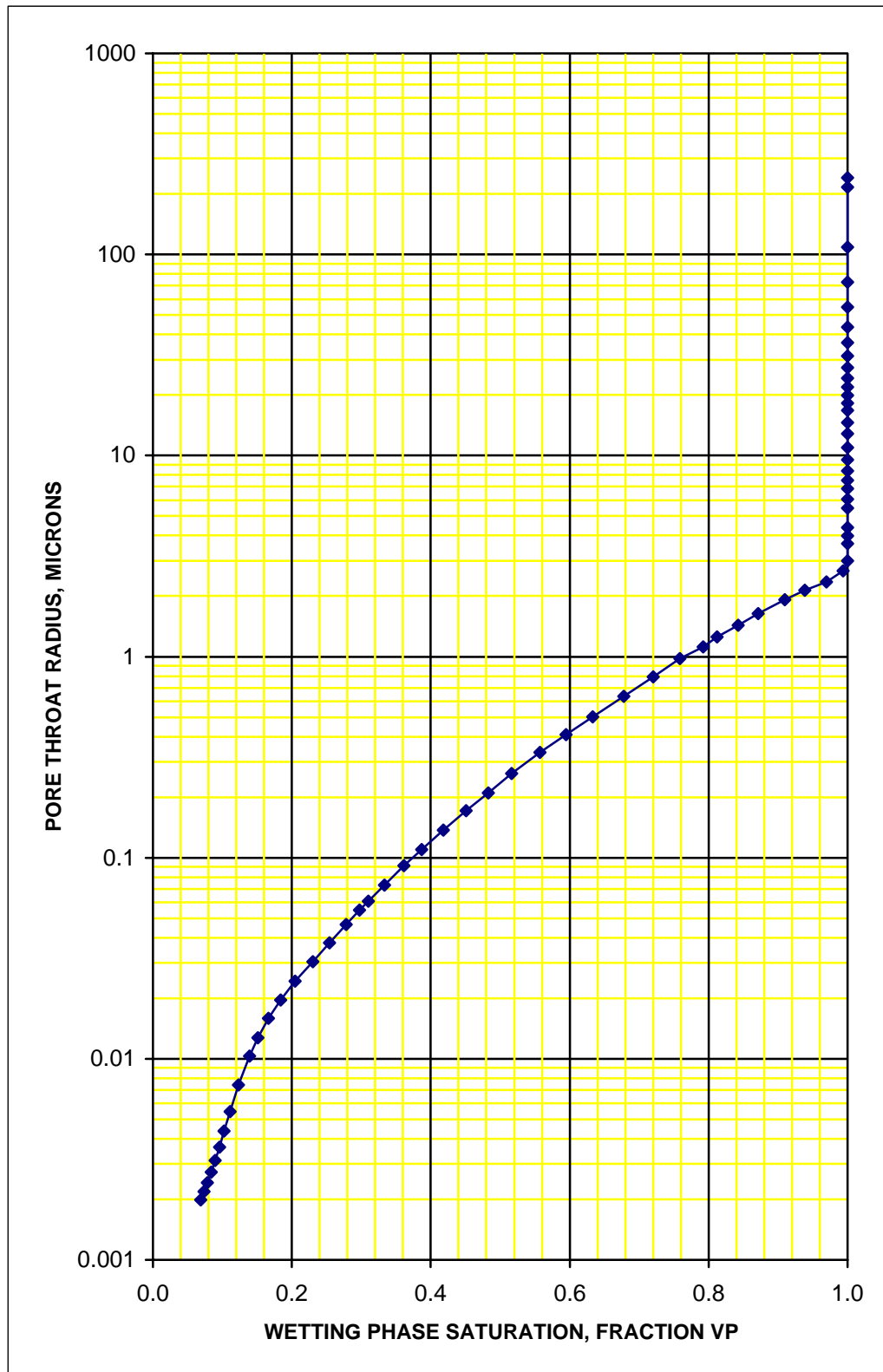
Pore throat size distribution by high pressure mercury injection

Sample ID : 75

Depth, m : 1781.40

Porosity, fraction : 0.193

Kair, md : 4.19



Capillary pressure by high pressure mercury injection

Sample ID : 78

Porosity, fraction : 0.210

Depth, m : 1782.30

Kair, md : 17.7

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	245.829	0.1	0.1	0.0
0.5	0.000	1.000	213.661	0.1	0.1	0.0
1.0	0.000	1.000	109.017	0.2	0.1	0.1
1.5	0.000	1.000	72.593	0.3	0.2	0.1
2.0	0.000	1.000	54.736	0.4	0.2	0.1
2.5	0.000	1.000	43.869	0.5	0.3	0.2
3.0	0.000	1.000	36.803	0.6	0.3	0.2
3.5	0.000	1.000	31.166	0.7	0.4	0.2
4.0	0.000	1.000	27.355	0.8	0.5	0.3
4.5	0.000	1.000	24.299	0.9	0.5	0.3
5.0	0.000	1.000	21.932	1.0	0.6	0.3
5.5	0.000	1.000	19.924	1.1	0.6	0.4
6.0	0.000	1.000	18.207	1.2	0.7	0.4
6.5	0.000	1.000	16.853	1.3	0.7	0.5
7.5	0.000	1.000	14.609	1.4	0.8	0.5
8.5	0.000	1.000	12.862	1.6	1.0	0.6
10.0	0.000	1.000	10.946	1.9	1.1	0.7
11.5	0.000	1.000	9.533	2.2	1.3	0.8
13.0	0.000	1.000	8.431	2.5	1.5	0.9
14.5	0.000	1.000	7.554	2.8	1.6	1.0
16.0	0.000	1.000	6.837	3.1	1.8	1.1
18.0	0.006	0.994	6.081	3.5	2.0	1.3
20.0	0.020	0.980	5.471	3.9	2.3	1.4
25.0	0.069	0.931	4.375	4.8	2.8	1.7
27.5	0.093	0.907	3.977	5.3	3.1	1.9
30.0	0.119	0.881	3.646	5.8	3.4	2.1
34.7	0.157	0.843	3.152	6.7	3.9	2.4
38.7	0.185	0.815	2.822	7.5	4.4	2.7
43.9	0.216	0.784	2.488	8.5	5.0	3.1
48.6	0.240	0.760	2.246	9.4	5.5	3.4
53.2	0.261	0.739	2.051	10.3	6.0	3.7
58.6	0.280	0.720	1.863	11.4	6.6	4.1
69.1	0.309	0.691	1.580	13.4	7.8	4.8
79.4	0.336	0.664	1.376	15.4	9.0	5.6

Capillary pressure by high pressure mercury injection

Sample ID : 78

Porosity, fraction : 0.210

Depth, m : 1782.30

Kair, md : 17.7

IFT * Cosine Contact Angle			
Lab --->	Air-Brine	Air-Oil	Oil-Brine
Res --->	72	24	42
	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
88.4	0.357	0.643	1.236	17.1	10.0	6.2
98.9	0.376	0.624	1.105	19.2	11.2	6.9
113.8	0.402	0.598	0.959	22.1	12.9	8.0
138.9	0.436	0.564	0.786	26.9	15.7	9.7
173.4	0.475	0.525	0.630	33.6	19.6	12.1
217.8	0.515	0.485	0.501	42.2	24.6	15.2
267.9	0.547	0.453	0.408	51.9	30.3	18.7
330.3	0.578	0.422	0.331	64.0	37.3	23.1
418.6	0.617	0.383	0.261	81.1	47.3	29.3
517.6	0.644	0.356	0.211	100.3	58.5	36.2
637.1	0.671	0.329	0.171	123.5	72.0	44.6
798.0	0.698	0.302	0.137	154.7	90.2	55.9
996.3	0.723	0.277	0.110	193.1	112.6	69.7
1197.4	0.747	0.253	0.091	232.1	135.4	83.8
1500.3	0.770	0.230	0.073	290.8	169.6	105.0
1793.9	0.791	0.209	0.061	347.7	202.8	125.5
1996.9	0.802	0.198	0.055	387.0	225.8	139.8
2348.0	0.816	0.184	0.047	455.1	265.5	164.3
2896.8	0.837	0.163	0.038	561.4	327.5	202.7
3598.1	0.856	0.144	0.030	697.3	406.8	251.8
4495.2	0.875	0.125	0.024	871.2	508.2	314.6
5594.4	0.891	0.109	0.020	1084.2	632.5	391.5
6894.3	0.902	0.098	0.016	1336.2	779.4	482.5
8596.3	0.913	0.087	0.013	1666.0	971.9	601.6
10597.7	0.920	0.080	0.010	2053.9	1198.1	741.7
14795.4	0.929	0.071	0.007	2867.5	1672.7	1035.5
19995.2	0.938	0.062	0.005	3875.3	2260.6	1399.4
24995.4	0.943	0.057	0.004	4844.3	2825.9	1749.3
29995.9	0.948	0.052	0.004	5813.5	3391.2	2099.3
34996.5	0.952	0.048	0.003	6782.6	3956.5	2449.3
39997.1	0.957	0.043	0.003	7751.8	4521.9	2799.3
44995.3	0.962	0.038	0.002	8720.5	5087.0	3149.1
49996.1	0.966	0.034	0.002	9689.7	5652.3	3499.1
54995.7	0.970	0.030	0.002	10658.7	6217.6	3849.0

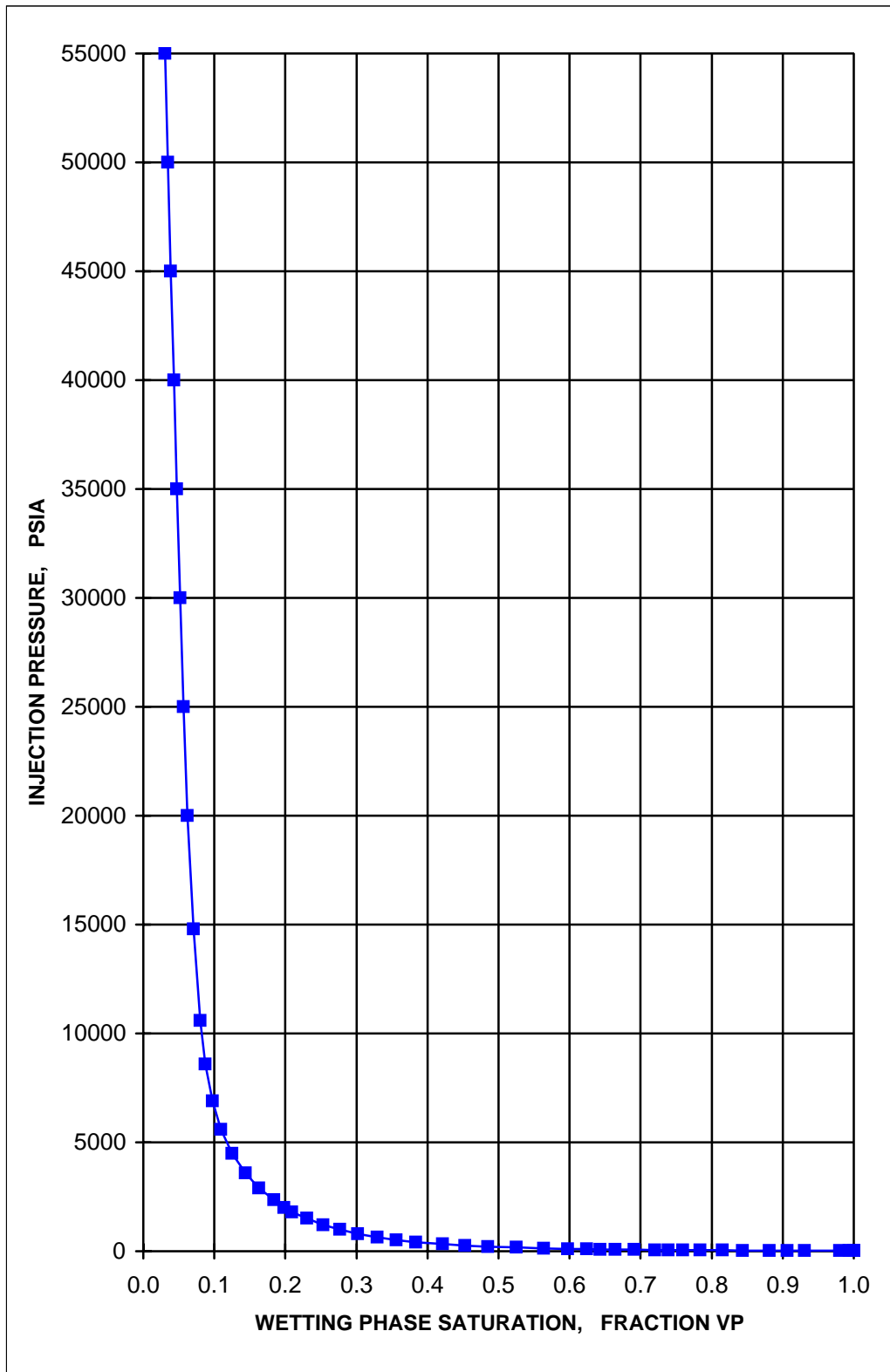
Capillary pressure by high pressure mercury injection

Sample ID : 78

Porosity, fraction : 0.210

Depth, m : 1782.30

Kair, md : 17.7



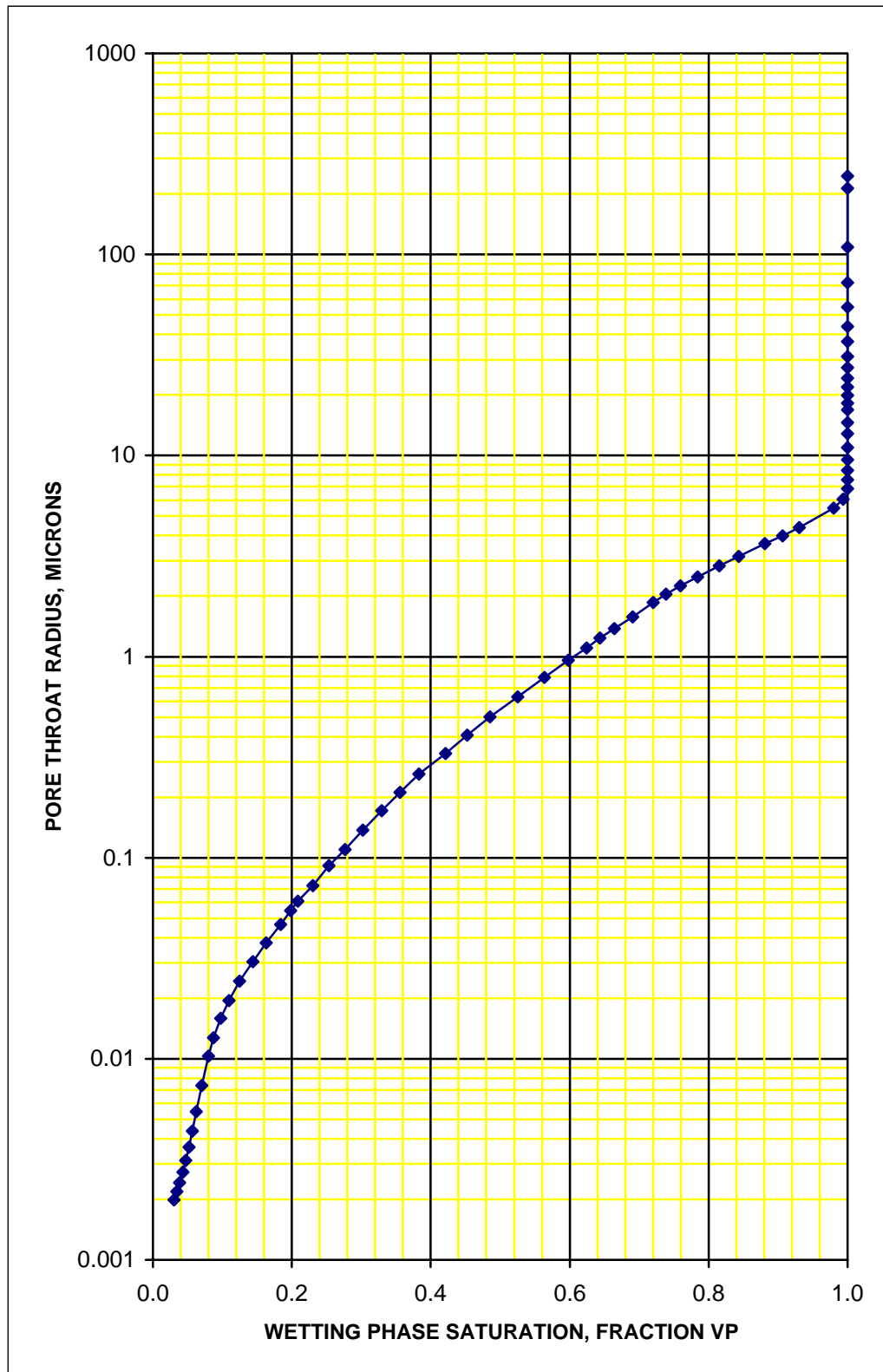
Pore throat size distribution by high pressure mercury injection

Sample ID : 78

Depth, m : 1782.30

Porosity, fraction : 0.210

Kair, md : 17.7



Capillary pressure by high pressure mercury injection

Sample ID : 1

Porosity, fraction : 0.220

Depth, m : 1782.53

Kair, md : 40.3

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	244.883	0.1	0.1	0.0
0.5	0.000	1.000	215.152	0.1	0.1	0.0
1.0	0.000	1.000	108.363	0.2	0.1	0.1
1.5	0.000	1.000	72.639	0.3	0.2	0.1
2.0	0.000	1.000	54.756	0.4	0.2	0.1
2.5	0.000	1.000	43.665	0.5	0.3	0.2
3.0	0.000	1.000	36.376	0.6	0.3	0.2
3.5	0.000	1.000	31.235	0.7	0.4	0.2
4.0	0.000	1.000	27.364	0.8	0.5	0.3
4.5	0.000	1.000	24.349	0.9	0.5	0.3
5.0	0.000	1.000	21.846	1.0	0.6	0.3
5.5	0.000	1.000	19.889	1.1	0.6	0.4
6.0	0.000	1.000	18.220	1.2	0.7	0.4
6.5	0.000	1.000	16.815	1.3	0.7	0.5
7.5	0.000	1.000	14.571	1.5	0.8	0.5
8.5	0.000	1.000	12.871	1.6	1.0	0.6
10.0	0.000	1.000	10.940	1.9	1.1	0.7
11.5	0.000	1.000	9.513	2.2	1.3	0.8
13.0	0.000	1.000	8.410	2.5	1.5	0.9
14.5	0.013	0.987	7.543	2.8	1.6	1.0
16.0	0.036	0.964	6.835	3.1	1.8	1.1
18.0	0.058	0.942	6.077	3.5	2.0	1.3
20.0	0.087	0.913	5.465	3.9	2.3	1.4
25.0	0.145	0.855	4.374	4.8	2.8	1.7
27.5	0.170	0.830	3.977	5.3	3.1	1.9
30.0	0.192	0.808	3.645	5.8	3.4	2.1
31.4	0.201	0.799	3.475	6.1	3.6	2.2
36.4	0.229	0.771	2.998	7.1	4.1	2.6
41.0	0.256	0.744	2.664	7.9	4.6	2.9
46.8	0.279	0.721	2.336	9.1	5.3	3.3
51.7	0.299	0.701	2.111	10.0	5.8	3.6
55.6	0.313	0.687	1.963	10.8	6.3	3.9
66.4	0.344	0.656	1.645	12.9	7.5	4.6
76.8	0.372	0.628	1.423	14.9	8.7	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 1

Porosity, fraction : 0.220

Depth, m : 1782.53

Kair, md : 40.3

IFT * Cosine Contact Angle			
Lab --->	Air-Brine	Air-Oil	Oil-Brine
Res --->	72	24	42
	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.5	0.395	0.605	1.248	17.0	9.9	6.1
96.3	0.412	0.588	1.134	18.7	10.9	6.7
112.0	0.439	0.561	0.975	21.7	12.7	7.8
136.9	0.474	0.526	0.798	26.5	15.5	9.6
172.4	0.516	0.484	0.634	33.4	19.5	12.1
218.0	0.557	0.443	0.501	42.2	24.6	15.3
267.3	0.591	0.409	0.409	51.8	30.2	18.7
328.9	0.622	0.378	0.332	63.7	37.2	23.0
415.9	0.656	0.344	0.263	80.6	47.0	29.1
519.8	0.684	0.316	0.210	100.7	58.8	36.4
635.6	0.710	0.290	0.172	123.2	71.9	44.5
798.3	0.737	0.263	0.137	154.7	90.2	55.9
998.8	0.761	0.239	0.109	193.6	112.9	69.9
1199.3	0.780	0.220	0.091	232.4	135.6	83.9
1497.7	0.802	0.198	0.073	290.3	169.3	104.8
1795.7	0.818	0.182	0.061	348.0	203.0	125.7
1996.3	0.828	0.172	0.055	386.9	225.7	139.7
2346.0	0.842	0.158	0.047	454.7	265.2	164.2
2893.7	0.858	0.142	0.038	560.8	327.1	202.5
3593.7	0.874	0.126	0.030	696.5	406.3	251.5
4488.2	0.891	0.109	0.024	869.8	507.4	314.1
5587.7	0.903	0.097	0.020	1082.9	631.7	391.1
6889.1	0.913	0.087	0.016	1335.2	778.8	482.1
8588.4	0.921	0.079	0.013	1664.5	971.0	601.1
10583.2	0.929	0.071	0.010	2051.1	1196.5	740.7
14784.3	0.938	0.062	0.007	2865.3	1671.4	1034.7
19983.4	0.946	0.054	0.005	3873.0	2259.2	1398.6
24993.7	0.952	0.048	0.004	4844.0	2825.7	1749.2
29996.9	0.956	0.044	0.004	5813.7	3391.3	2099.4
34994.9	0.961	0.039	0.003	6782.3	3956.4	2449.2
39999.1	0.965	0.035	0.003	7752.2	4522.1	2799.4
44993.3	0.969	0.031	0.002	8720.1	5086.7	3148.9
49992.7	0.973	0.027	0.002	9689.0	5651.9	3498.8
54993.5	0.977	0.023	0.002	10658.2	6217.3	3848.8

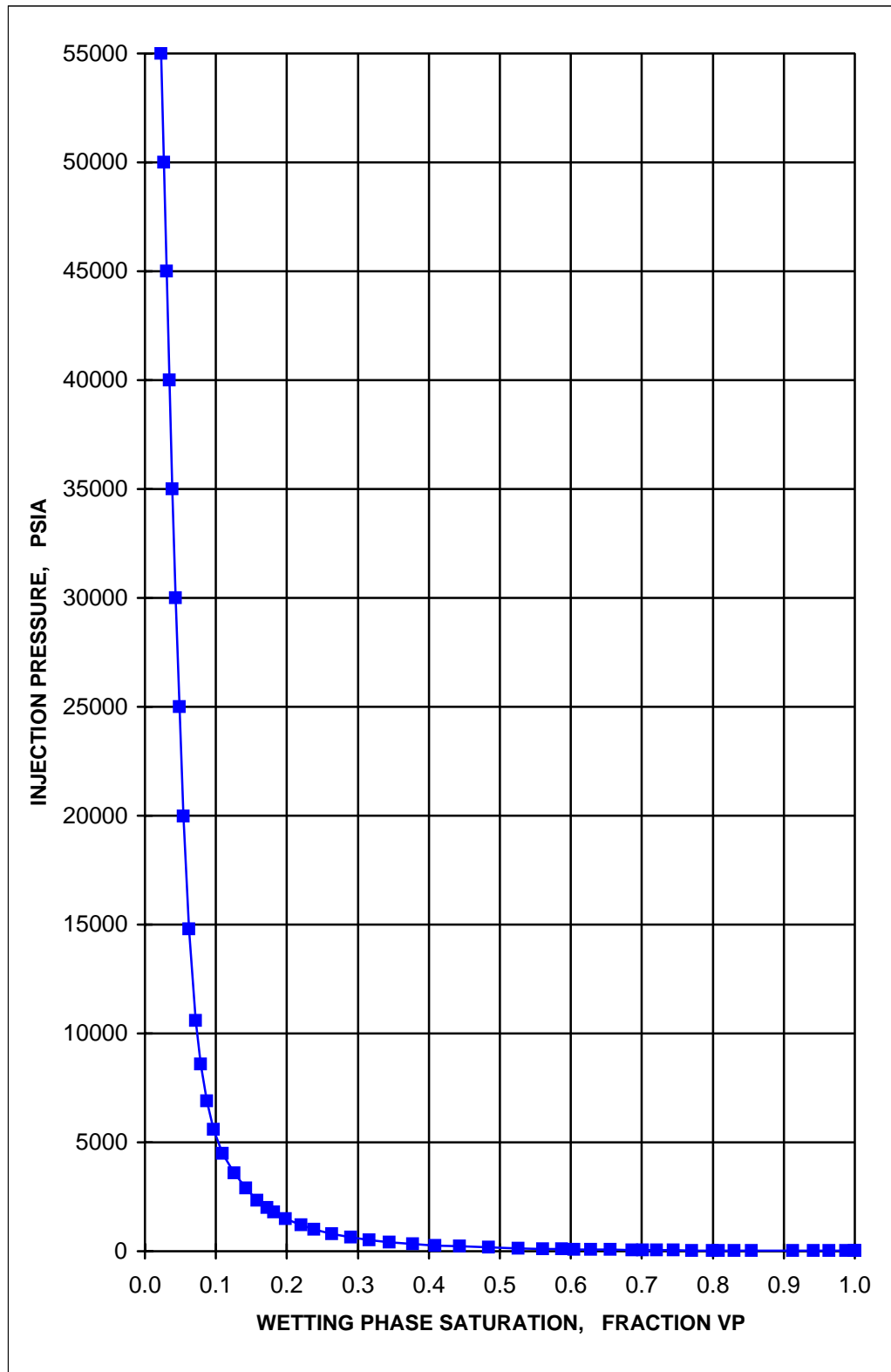
Capillary pressure by high pressure mercury injection

Sample ID : 1

Porosity, fraction : 0.220

Depth, m : 1782.53

Kair, md : 40.3



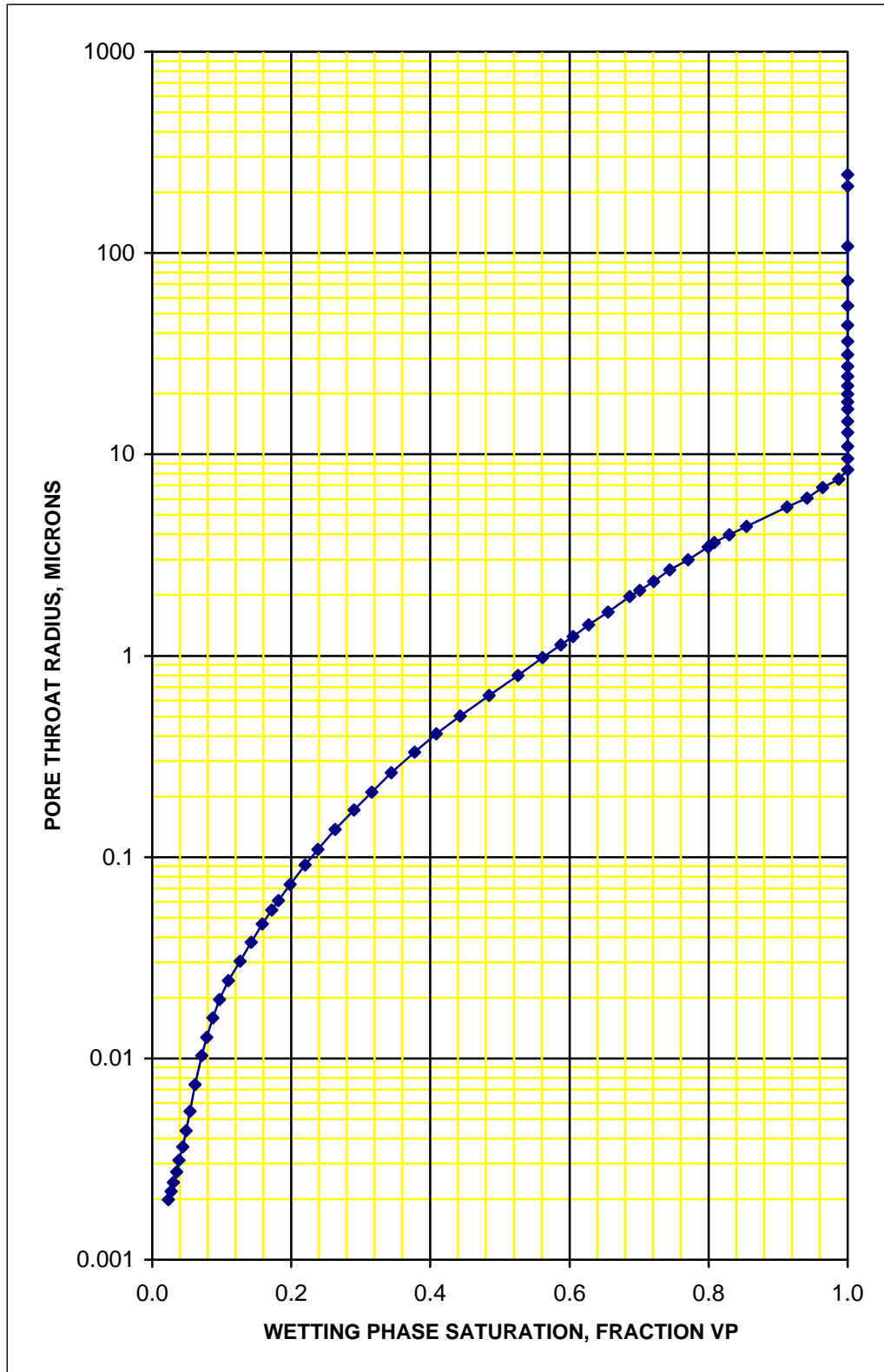
Pore throat size distribution by high pressure mercury injection

Sample ID : 1

Depth, m : 1782.53

Porosity, fraction : 0.220

Kair, md : 40.3



Capillary pressure by high pressure mercury injection

Sample ID : 79

Porosity, fraction : 0.238

Depth, m : 1782.90

Kair, md : 133

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	245.829	0.1	0.1	0.0
0.5	0.000	1.000	213.661	0.1	0.1	0.0
1.0	0.000	1.000	109.017	0.2	0.1	0.1
1.5	0.000	1.000	72.593	0.3	0.2	0.1
2.0	0.000	1.000	54.736	0.4	0.2	0.1
2.5	0.000	1.000	43.869	0.5	0.3	0.2
3.0	0.000	1.000	36.803	0.6	0.3	0.2
3.5	0.000	1.000	31.166	0.7	0.4	0.2
4.0	0.000	1.000	27.355	0.8	0.5	0.3
4.5	0.000	1.000	24.299	0.9	0.5	0.3
5.0	0.000	1.000	21.932	1.0	0.6	0.3
5.5	0.000	1.000	19.924	1.1	0.6	0.4
6.0	0.000	1.000	18.207	1.2	0.7	0.4
6.5	0.000	1.000	16.853	1.3	0.7	0.5
7.5	0.033	0.967	14.609	1.4	0.8	0.5
8.5	0.077	0.923	12.862	1.6	1.0	0.6
10.0	0.133	0.867	10.946	1.9	1.1	0.7
11.5	0.179	0.821	9.533	2.2	1.3	0.8
13.0	0.209	0.791	8.431	2.5	1.5	0.9
14.5	0.229	0.771	7.554	2.8	1.6	1.0
16.0	0.246	0.754	6.837	3.1	1.8	1.1
18.0	0.266	0.734	6.081	3.5	2.0	1.3
20.0	0.282	0.718	5.471	3.9	2.3	1.4
25.0	0.317	0.683	4.375	4.8	2.8	1.7
27.5	0.331	0.669	3.977	5.3	3.1	1.9
30.0	0.339	0.661	3.646	5.8	3.4	2.1
31.3	0.346	0.654	3.152	6.7	3.9	2.4
36.7	0.361	0.639	2.822	7.5	4.4	2.7
41.0	0.371	0.629	2.488	8.5	5.0	3.1
45.9	0.384	0.616	2.246	9.4	5.5	3.4
51.6	0.399	0.601	2.051	10.3	6.0	3.7
56.8	0.410	0.590	1.863	11.4	6.6	4.1
66.5	0.440	0.560	1.580	13.4	7.8	4.8
77.2	0.463	0.537	1.376	15.4	9.0	5.6

Capillary pressure by high pressure mercury injection

Sample ID : 79

Porosity, fraction : 0.238

Depth, m : 1782.90

Kair, md : 133

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
86.9	0.482	0.518	1.236	17.1	10.0	6.2
96.9	0.499	0.501	1.105	19.2	11.2	6.9
111.5	0.520	0.480	0.959	22.1	12.9	8.0
136.0	0.552	0.448	0.786	26.9	15.7	9.7
171.5	0.586	0.414	0.630	33.6	19.6	12.1
217.3	0.620	0.380	0.501	42.2	24.6	15.2
269.2	0.648	0.352	0.408	51.9	30.3	18.7
326.8	0.672	0.328	0.331	64.0	37.3	23.1
415.9	0.697	0.303	0.261	81.1	47.3	29.3
517.1	0.717	0.283	0.211	100.3	58.5	36.2
636.5	0.738	0.262	0.171	123.5	72.0	44.6
797.8	0.761	0.239	0.137	154.7	90.2	55.9
996.9	0.783	0.217	0.110	193.1	112.6	69.7
1197.3	0.800	0.200	0.091	232.1	135.4	83.8
1497.0	0.821	0.179	0.073	290.8	169.6	105.0
1795.8	0.836	0.164	0.061	347.7	202.8	125.5
1995.9	0.843	0.157	0.055	387.0	225.8	139.8
2345.3	0.855	0.145	0.047	455.1	265.5	164.3
2892.0	0.869	0.131	0.038	561.4	327.5	202.7
3594.0	0.882	0.118	0.030	697.3	406.8	251.8
4490.8	0.895	0.105	0.024	871.2	508.2	314.6
5588.6	0.904	0.096	0.020	1084.2	632.5	391.5
6888.4	0.911	0.089	0.016	1336.2	779.4	482.5
8586.8	0.917	0.083	0.013	1666.0	971.9	601.6
10586.7	0.922	0.078	0.010	2053.9	1198.1	741.7
14784.3	0.930	0.070	0.007	2867.5	1672.7	1035.5
19983.4	0.937	0.063	0.005	3875.3	2260.6	1399.4
24992.2	0.942	0.058	0.004	4844.3	2825.9	1749.3
29994.6	0.947	0.053	0.004	5813.5	3391.2	2099.3
34993.9	0.950	0.050	0.003	6782.6	3956.5	2449.3
39996.6	0.954	0.046	0.003	7751.8	4521.9	2799.3
44993.1	0.958	0.042	0.002	8720.5	5087.0	3149.1
49993.4	0.961	0.039	0.002	9689.7	5652.3	3499.1
54993.3	0.965	0.035	0.002	10658.7	6217.6	3849.0

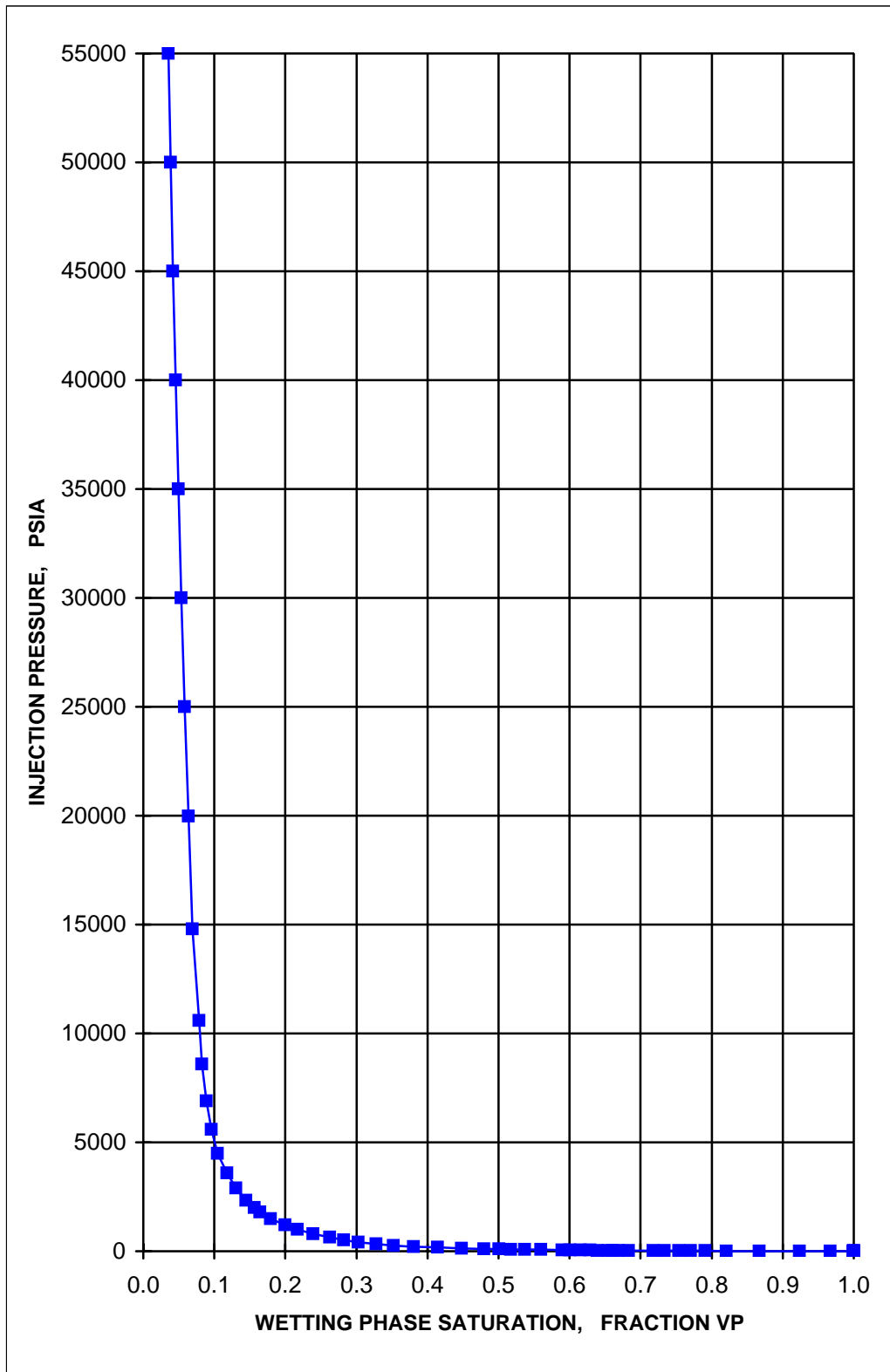
Capillary pressure by high pressure mercury injection

Sample ID : 79

Depth, m : 1782.90

Porosity, fraction : 0.238

Kair, md : 133



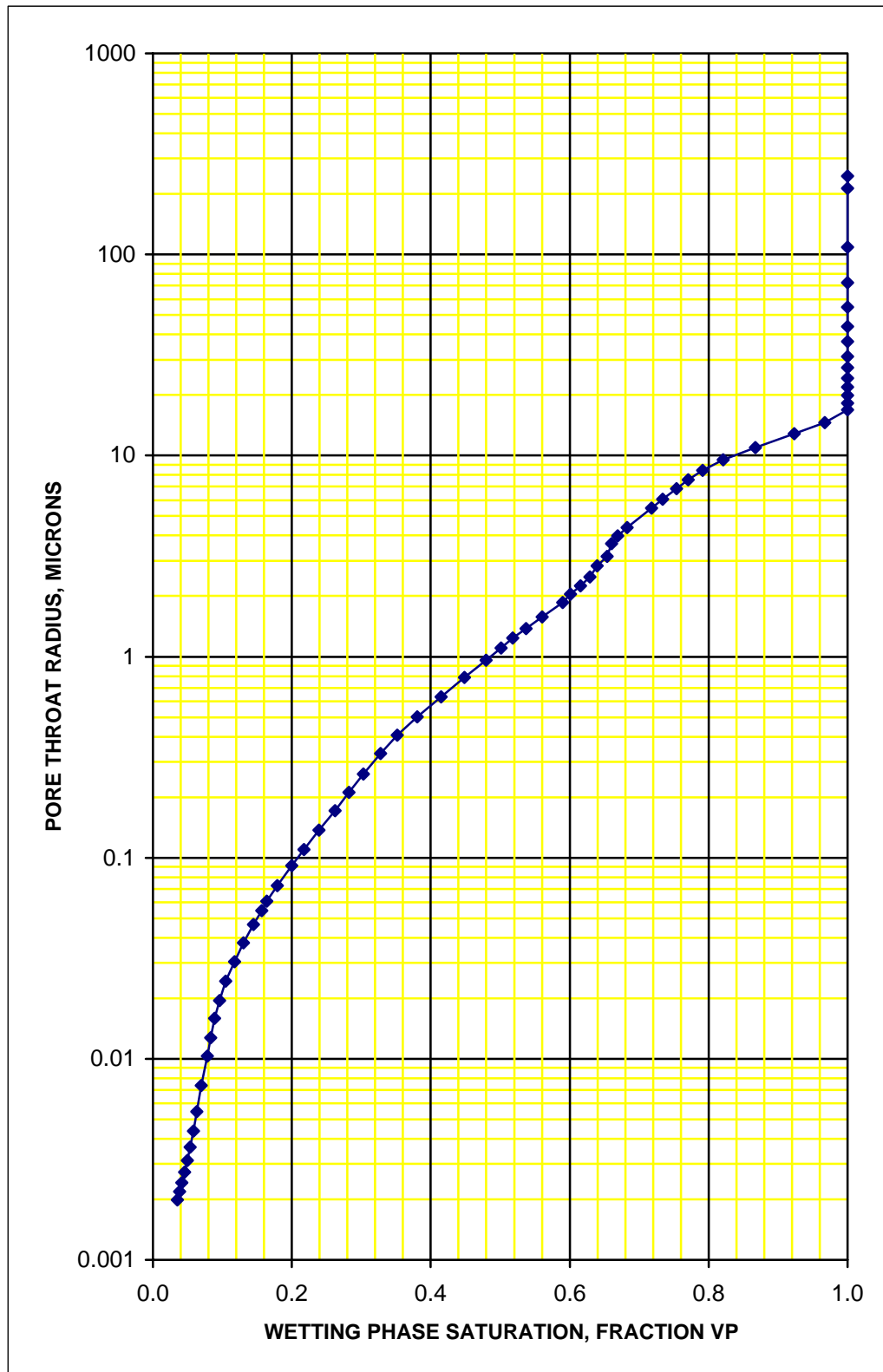
Pore throat size distribution by high pressure mercury injection

Sample ID : 79

Depth, m : 1782.90

Porosity, fraction : 0.238

Kair, md : 133



Capillary pressure by high pressure mercury injection

Sample ID : 81

Porosity, fraction : 0.255

Depth, m : 1783.50

Kair, md : 540

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	241.442	0.1	0.1	0.0
0.5	0.000	1.000	213.556	0.1	0.1	0.0
1.0	0.000	1.000	108.564	0.2	0.1	0.1
1.5	0.000	1.000	72.627	0.3	0.2	0.1
2.0	0.000	1.000	54.685	0.4	0.2	0.1
2.5	0.000	1.000	43.875	0.5	0.3	0.2
3.0	0.000	1.000	36.391	0.6	0.3	0.2
3.5	0.010	0.990	31.237	0.7	0.4	0.2
4.0	0.025	0.975	27.355	0.8	0.5	0.3
4.5	0.047	0.953	24.322	0.9	0.5	0.3
5.0	0.096	0.904	21.813	1.0	0.6	0.4
5.5	0.138	0.862	19.861	1.1	0.6	0.4
6.0	0.183	0.817	18.196	1.2	0.7	0.4
6.5	0.208	0.792	16.841	1.3	0.7	0.5
7.5	0.249	0.751	14.566	1.5	0.8	0.5
8.5	0.277	0.723	12.861	1.6	1.0	0.6
10.0	0.308	0.692	10.937	1.9	1.1	0.7
11.5	0.331	0.669	9.507	2.2	1.3	0.8
13.0	0.350	0.650	8.408	2.5	1.5	0.9
14.5	0.365	0.635	7.542	2.8	1.6	1.0
16.0	0.378	0.622	6.834	3.1	1.8	1.1
18.0	0.394	0.606	6.074	3.5	2.0	1.3
20.0	0.405	0.595	5.468	3.9	2.3	1.4
25.0	0.431	0.569	4.374	4.8	2.8	1.7
27.5	0.442	0.558	3.977	5.3	3.1	1.9
30.0	0.449	0.551	3.645	5.8	3.4	2.1
31.1	0.456	0.544	3.516	6.0	3.5	2.2
36.4	0.470	0.530	2.998	7.1	4.1	2.5
40.9	0.486	0.514	2.671	7.9	4.6	2.9
45.6	0.502	0.498	2.394	8.8	5.2	3.2
51.2	0.518	0.482	2.133	9.9	5.8	3.6
56.5	0.535	0.465	1.932	11.0	6.4	4.0
66.3	0.557	0.443	1.648	12.8	7.5	4.6
76.9	0.580	0.420	1.420	14.9	8.7	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 81

Porosity, fraction : 0.255

Depth, m : 1783.50

Kair, md : 540

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
86.7	0.599	0.401	1.260	16.8	9.8	6.1
96.6	0.614	0.386	1.131	18.7	10.9	6.8
111.2	0.634	0.366	0.982	21.6	12.6	7.8
135.8	0.663	0.337	0.804	26.3	15.4	9.5
171.4	0.691	0.309	0.637	33.2	19.4	12.0
217.2	0.719	0.281	0.503	42.1	24.6	15.2
269.2	0.743	0.257	0.406	52.2	30.4	18.8
326.7	0.761	0.239	0.334	63.3	36.9	22.9
415.8	0.781	0.219	0.263	80.6	47.0	29.1
517.1	0.798	0.202	0.211	100.2	58.5	36.2
636.4	0.815	0.185	0.172	123.3	72.0	44.5
797.8	0.832	0.168	0.137	154.6	90.2	55.8
996.8	0.848	0.152	0.110	193.2	112.7	69.8
1197.2	0.859	0.141	0.091	232.0	135.4	83.8
1497.0	0.872	0.128	0.073	290.1	169.2	104.8
1795.8	0.882	0.118	0.061	348.0	203.0	125.7
1995.9	0.887	0.113	0.055	386.8	225.6	139.7
2345.3	0.896	0.104	0.047	454.5	265.1	164.1
2892.0	0.906	0.094	0.038	560.5	327.0	202.4
3594.0	0.914	0.086	0.030	696.6	406.3	251.5
4490.8	0.923	0.077	0.024	870.4	507.7	314.3
5588.6	0.929	0.071	0.020	1083.1	631.8	391.1
6888.4	0.934	0.066	0.016	1335.0	778.8	482.1
8586.8	0.938	0.062	0.013	1664.2	970.8	601.0
10586.7	0.942	0.058	0.010	2051.8	1196.9	740.9
14784.4	0.947	0.053	0.007	2865.3	1671.4	1034.7
19983.5	0.952	0.048	0.005	3873.0	2259.2	1398.6
24992.3	0.955	0.045	0.004	4843.7	2825.5	1749.1
29994.7	0.959	0.041	0.004	5813.2	3391.1	2099.2
34994.0	0.961	0.039	0.003	6782.1	3956.2	2449.1
39996.6	0.965	0.035	0.003	7751.7	4521.8	2799.2
44993.2	0.969	0.031	0.002	8720.1	5086.7	3148.9
49993.4	0.972	0.028	0.002	9689.2	5652.0	3498.9
54993.3	0.975	0.025	0.002	10658.2	6217.3	3848.8

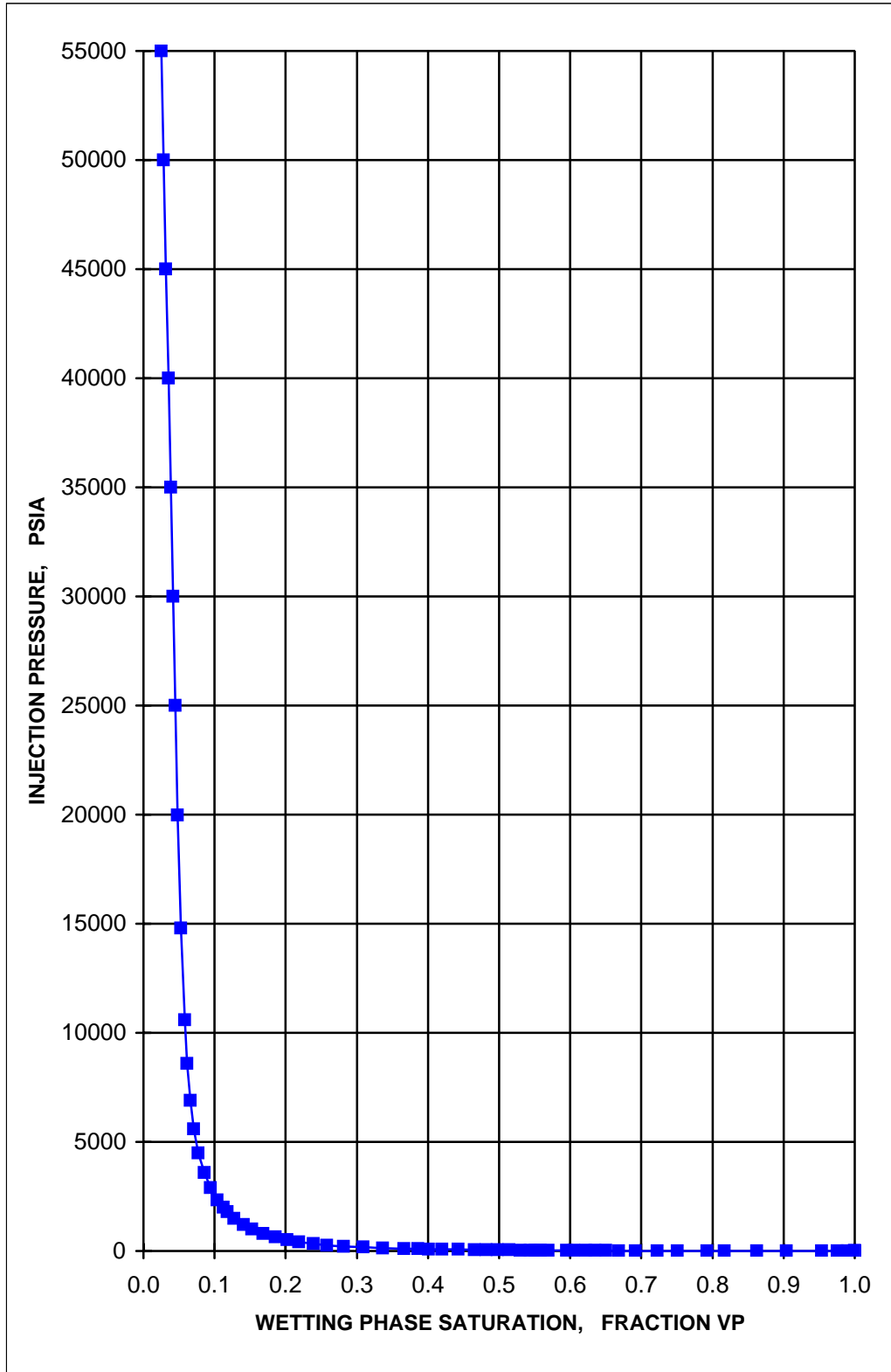
Capillary pressure by high pressure mercury injection

Sample ID : 81

Porosity, fraction : 0.255

Depth, m : 1783.50

Kair, md : 540



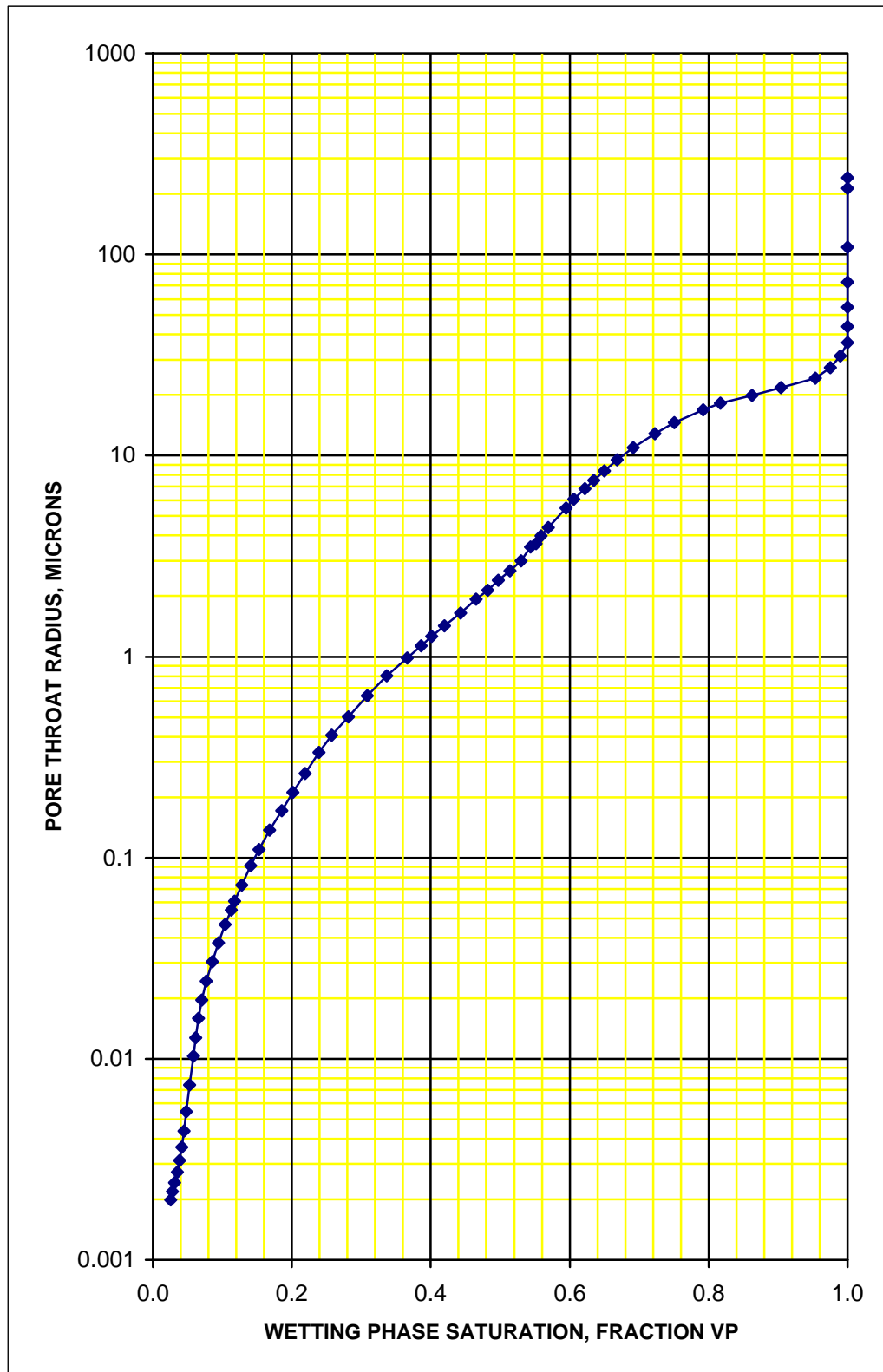
Pore throat size distribution by high pressure mercury injection

Sample ID : 81

Depth, m : 1783.50

Porosity, fraction : 0.255

Kair, md : 540



Capillary pressure by high pressure mercury injection

Sample ID : 85

Porosity, fraction : 0.219

Depth, m : 1784.97

Kair, md : 141

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.4	0.000	1.000	243.157	0.1	0.1	0.0
0.5	0.000	1.000	216.050	0.1	0.1	0.0
1.0	0.000	1.000	108.714	0.2	0.1	0.1
1.5	0.000	1.000	72.557	0.3	0.2	0.1
2.0	0.000	1.000	54.645	0.4	0.2	0.1
2.5	0.000	1.000	43.905	0.5	0.3	0.2
3.0	0.000	1.000	36.374	0.6	0.3	0.2
3.5	0.000	1.000	31.229	0.7	0.4	0.2
4.0	0.013	0.987	27.369	0.8	0.5	0.3
4.5	0.030	0.970	24.300	0.9	0.5	0.3
5.0	0.046	0.954	21.901	1.0	0.6	0.3
5.5	0.060	0.940	19.923	1.1	0.6	0.4
6.0	0.074	0.926	18.216	1.2	0.7	0.4
6.5	0.090	0.910	16.812	1.3	0.7	0.5
7.5	0.114	0.886	14.614	1.4	0.8	0.5
8.5	0.134	0.866	12.895	1.6	1.0	0.6
10.0	0.160	0.840	10.959	1.9	1.1	0.7
11.5	0.185	0.815	9.522	2.2	1.3	0.8
13.0	0.202	0.798	8.421	2.5	1.5	0.9
14.5	0.218	0.782	7.554	2.8	1.6	1.0
16.0	0.232	0.768	6.834	3.1	1.8	1.1
18.0	0.248	0.752	6.076	3.5	2.0	1.3
20.0	0.263	0.737	5.470	3.9	2.3	1.4
25.0	0.293	0.707	4.374	4.8	2.8	1.7
27.5	0.305	0.695	3.977	5.3	3.1	1.9
30.0	0.317	0.683	3.645	5.8	3.4	2.1
34.6	0.333	0.667	3.156	6.7	3.9	2.4
39.6	0.351	0.649	2.756	7.7	4.5	2.8
44.4	0.369	0.631	2.461	8.6	5.0	3.1
49.4	0.384	0.616	2.212	9.6	5.6	3.5
54.2	0.399	0.601	2.014	10.5	6.1	3.8
58.5	0.411	0.589	1.866	11.3	6.6	4.1
69.6	0.436	0.564	1.569	13.5	7.9	4.9
79.8	0.459	0.541	1.369	15.5	9.0	5.6

Capillary pressure by high pressure mercury injection

Sample ID : 85

Porosity, fraction : 0.219

Depth, m : 1784.97

Kair, md : 141

IFT * Cosine Contact Angle			
Lab --->	Air-Brine	Air-Oil	Oil-Brine
Res --->	72	24	42
	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
89.5	0.480	0.520	1.221	17.3	10.1	6.3
99.5	0.496	0.504	1.098	19.3	11.2	7.0
114.6	0.518	0.482	0.953	22.2	13.0	8.0
139.7	0.549	0.451	0.782	27.1	15.8	9.8
174.0	0.581	0.419	0.628	33.7	19.7	12.2
219.7	0.613	0.387	0.497	42.6	24.8	15.4
269.1	0.639	0.361	0.406	52.2	30.4	18.8
330.5	0.661	0.339	0.330	64.1	37.4	23.1
419.5	0.689	0.311	0.260	81.3	47.4	29.4
517.9	0.712	0.288	0.211	100.4	58.5	36.2
639.1	0.734	0.266	0.171	123.9	72.3	44.7
799.2	0.759	0.241	0.137	154.9	90.4	55.9
998.2	0.781	0.219	0.109	193.5	112.9	69.9
1200.9	0.799	0.201	0.091	232.7	135.8	84.0
1496.5	0.819	0.181	0.073	290.0	169.2	104.7
1799.1	0.834	0.166	0.061	348.7	203.4	125.9
2000.3	0.842	0.158	0.055	387.7	226.1	140.0
2349.1	0.854	0.146	0.046	455.3	265.6	164.4
2898.9	0.867	0.133	0.038	561.8	327.7	202.9
3598.9	0.880	0.120	0.030	697.5	406.9	251.9
4497.9	0.892	0.108	0.024	871.7	508.5	314.8
5595.4	0.900	0.100	0.020	1084.4	632.6	391.6
6898.1	0.907	0.093	0.016	1336.9	779.9	482.8
8596.9	0.911	0.089	0.013	1666.2	971.9	601.7
10595.6	0.915	0.085	0.010	2053.5	1197.9	741.6
14797.7	0.920	0.080	0.007	2867.9	1673.0	1035.6
19996.6	0.924	0.076	0.005	3875.5	2260.7	1399.5
24996.5	0.929	0.071	0.004	4844.5	2826.0	1749.4
29997.5	0.934	0.066	0.004	5813.8	3391.4	2099.4
34996.4	0.939	0.061	0.003	6782.6	3956.5	2449.3
39996.6	0.944	0.056	0.003	7751.7	4521.8	2799.2
44996.1	0.949	0.051	0.002	8720.6	5087.0	3149.1
49997.5	0.953	0.047	0.002	9690.0	5652.5	3499.2
54998.2	0.957	0.043	0.002	10659.1	6217.8	3849.1

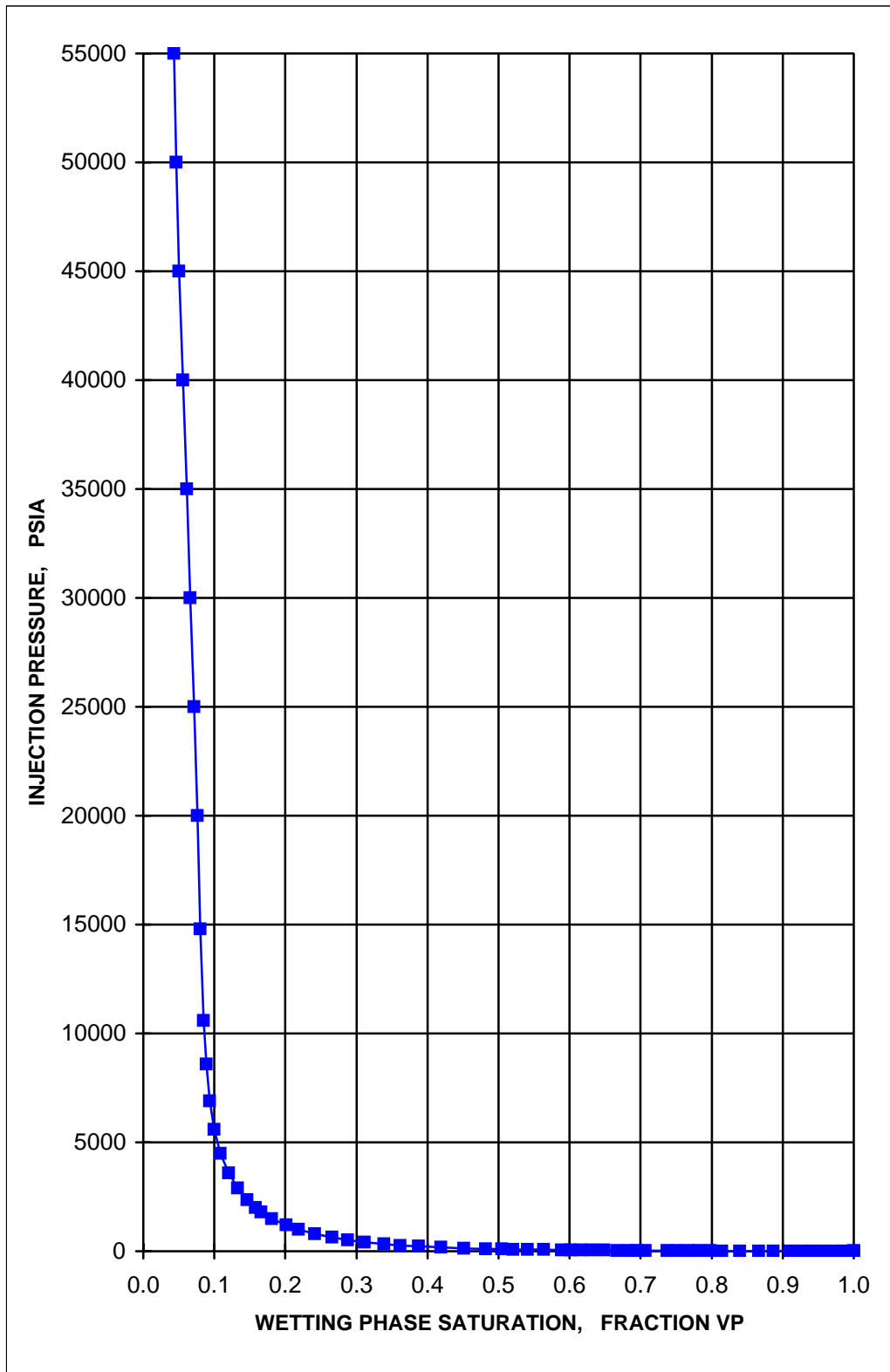
Capillary pressure by high pressure mercury injection

Sample ID : 85

Depth, m : 1784.97

Porosity, fraction : 0.219

Kair, md : 141



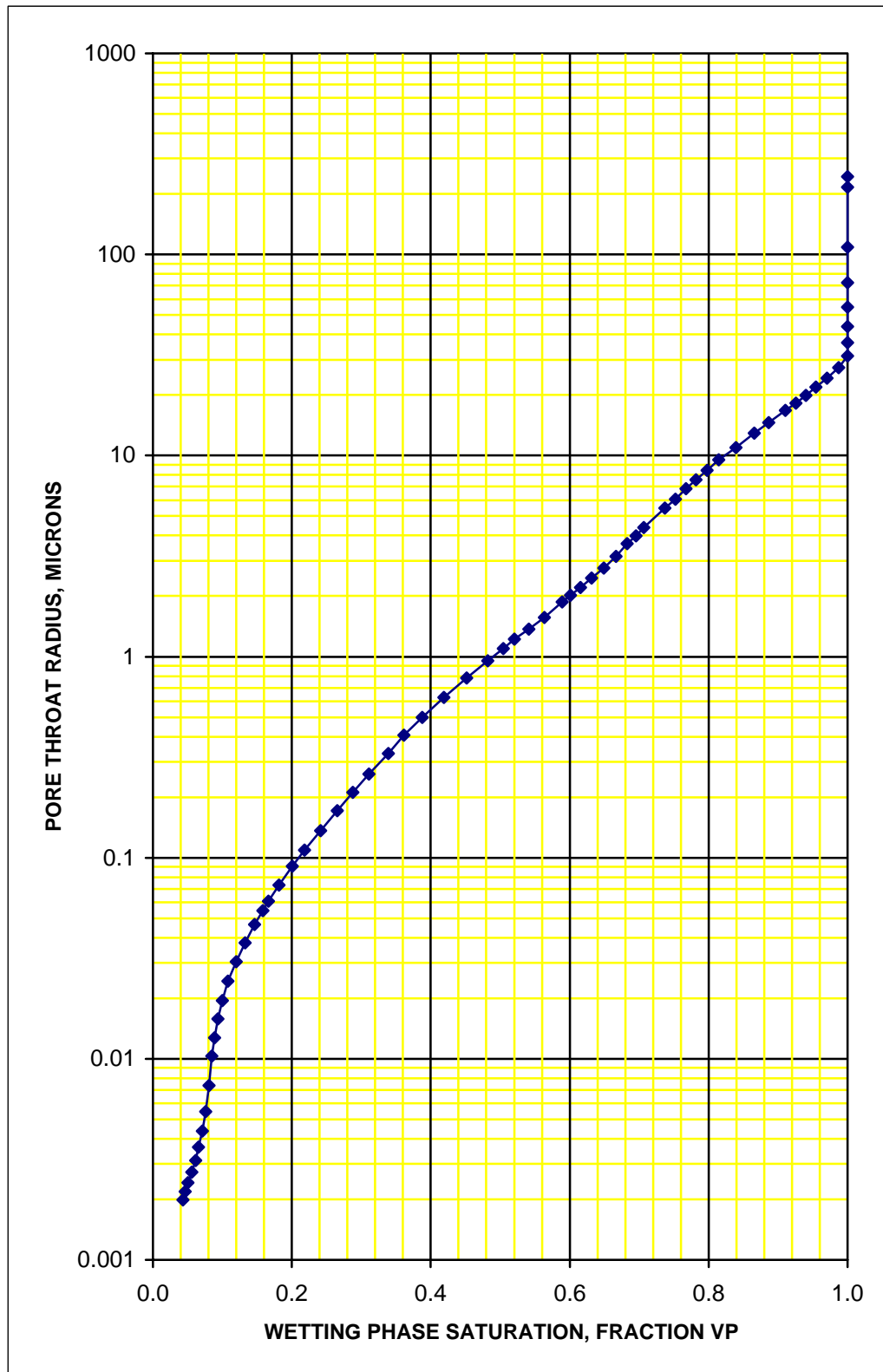
Pore throat size distribution by high pressure mercury injection

Sample ID : 85

Depth, m : 1784.97

Porosity, fraction : 0.219

Kair, md : 141



Capillary pressure by high pressure mercury injection

Sample ID : 86

Porosity, fraction : 0.156

Depth, m : 1785.30

Kair, md : 0.650

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.972	0.1	0.1	0.0
0.5	0.000	1.000	213.882	0.1	0.1	0.0
1.0	0.000	1.000	108.601	0.2	0.1	0.1
1.5	0.000	1.000	72.696	0.3	0.2	0.1
2.0	0.000	1.000	54.910	0.4	0.2	0.1
2.5	0.000	1.000	43.584	0.5	0.3	0.2
3.0	0.000	1.000	36.442	0.6	0.3	0.2
3.5	0.000	1.000	31.187	0.7	0.4	0.2
4.0	0.000	1.000	27.297	0.8	0.5	0.3
4.5	0.000	1.000	24.318	0.9	0.5	0.3
5.0	0.000	1.000	21.896	1.0	0.6	0.3
5.5	0.000	1.000	19.825	1.1	0.6	0.4
6.0	0.000	1.000	18.224	1.2	0.7	0.4
6.5	0.000	1.000	16.833	1.3	0.7	0.5
7.5	0.000	1.000	14.570	1.5	0.8	0.5
8.5	0.000	1.000	12.861	1.6	1.0	0.6
10.0	0.000	1.000	10.935	1.9	1.1	0.7
11.5	0.000	1.000	9.505	2.2	1.3	0.8
13.0	0.000	1.000	8.415	2.5	1.5	0.9
14.5	0.000	1.000	7.542	2.8	1.6	1.0
16.0	0.000	1.000	6.833	3.1	1.8	1.1
18.0	0.000	1.000	6.076	3.5	2.0	1.3
20.0	0.000	1.000	5.467	3.9	2.3	1.4
25.0	0.000	1.000	4.375	4.8	2.8	1.7
27.5	0.000	1.000	3.976	5.3	3.1	1.9
30.0	0.000	1.000	3.645	5.8	3.4	2.1
33.0	0.000	1.000	3.313	6.4	3.7	2.3
37.2	0.000	1.000	2.933	7.2	4.2	2.6
42.5	0.000	1.000	2.573	8.2	4.8	3.0
47.6	0.000	1.000	2.294	9.2	5.4	3.3
53.0	0.000	1.000	2.059	10.3	6.0	3.7
57.1	0.000	1.000	1.914	11.1	6.4	4.0
67.5	0.011	0.989	1.619	13.1	7.6	4.7
77.1	0.024	0.976	1.417	14.9	8.7	5.4

Capillary pressure by high pressure mercury injection

Sample ID : 86

Porosity, fraction : 0.156

Depth, m : 1785.30

Kair, md : 0.650

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
87.2	0.038	0.962	1.253	16.9	9.9	6.1
96.6	0.057	0.943	1.131	18.7	10.9	6.8
112.9	0.088	0.912	0.968	21.9	12.8	7.9
137.4	0.134	0.866	0.795	26.6	15.5	9.6
171.1	0.185	0.815	0.638	33.2	19.3	12.0
216.9	0.235	0.765	0.504	42.0	24.5	15.2
266.2	0.272	0.728	0.410	51.6	30.1	18.6
328.5	0.309	0.691	0.333	63.7	37.1	23.0
416.7	0.350	0.650	0.262	80.8	47.1	29.2
520.0	0.386	0.614	0.210	100.8	58.8	36.4
637.9	0.422	0.578	0.171	123.6	72.1	44.6
798.0	0.459	0.541	0.137	154.7	90.2	55.8
996.4	0.496	0.504	0.110	193.1	112.6	69.7
1198.8	0.525	0.475	0.091	232.3	135.5	83.9
1499.4	0.558	0.442	0.073	290.6	169.5	104.9
1794.5	0.586	0.414	0.061	347.8	202.9	125.6
1996.6	0.602	0.398	0.055	387.0	225.7	139.7
2346.9	0.626	0.374	0.047	454.8	265.3	164.3
2894.0	0.657	0.343	0.038	560.9	327.2	202.5
3592.5	0.687	0.313	0.030	696.3	406.1	251.4
4487.5	0.721	0.279	0.024	869.7	507.3	314.1
5589.0	0.749	0.251	0.020	1083.2	631.9	391.2
6885.7	0.777	0.223	0.016	1334.5	778.5	481.9
8584.9	0.801	0.199	0.013	1663.8	970.6	600.8
10587.1	0.822	0.178	0.010	2051.9	1196.9	741.0
14782.5	0.848	0.152	0.007	2865.0	1671.2	1034.6
19981.7	0.866	0.134	0.005	3872.6	2259.0	1398.4
24993.5	0.877	0.123	0.004	4844.0	2825.7	1749.2
29991.6	0.886	0.114	0.004	5812.6	3390.7	2099.0
34998.2	0.894	0.106	0.003	6783.0	3956.7	2449.4
39990.9	0.900	0.100	0.003	7750.6	4521.2	2798.8
44991.3	0.906	0.094	0.002	8719.7	5086.5	3148.8
49992.6	0.911	0.089	0.002	9689.0	5651.9	3498.8
54989.4	0.914	0.086	0.002	10657.4	6216.8	3848.5

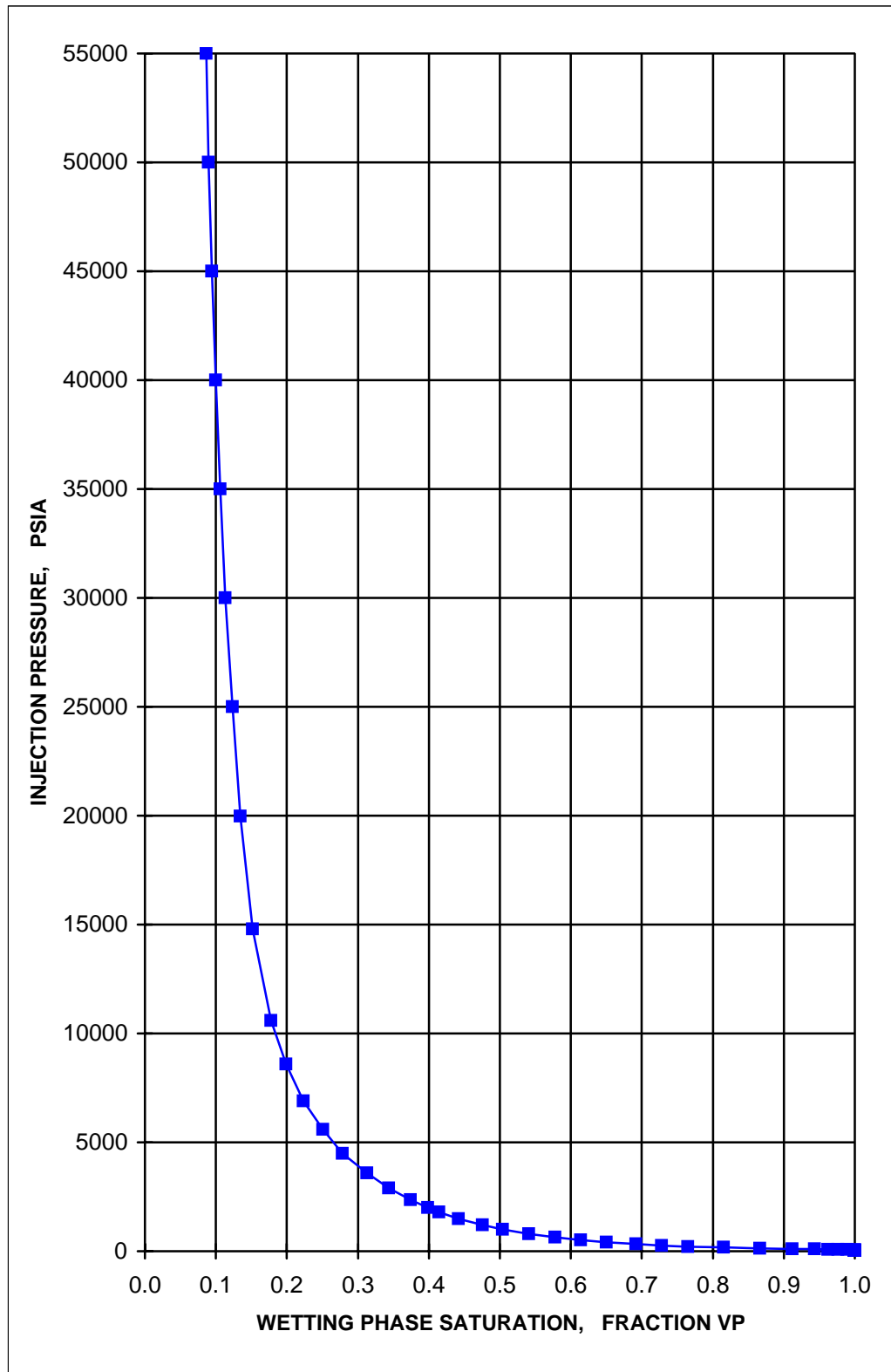
Capillary pressure by high pressure mercury injection

Sample ID : 86

Porosity, fraction : 0.156

Depth, m : 1785.30

Kair, md : 0.650



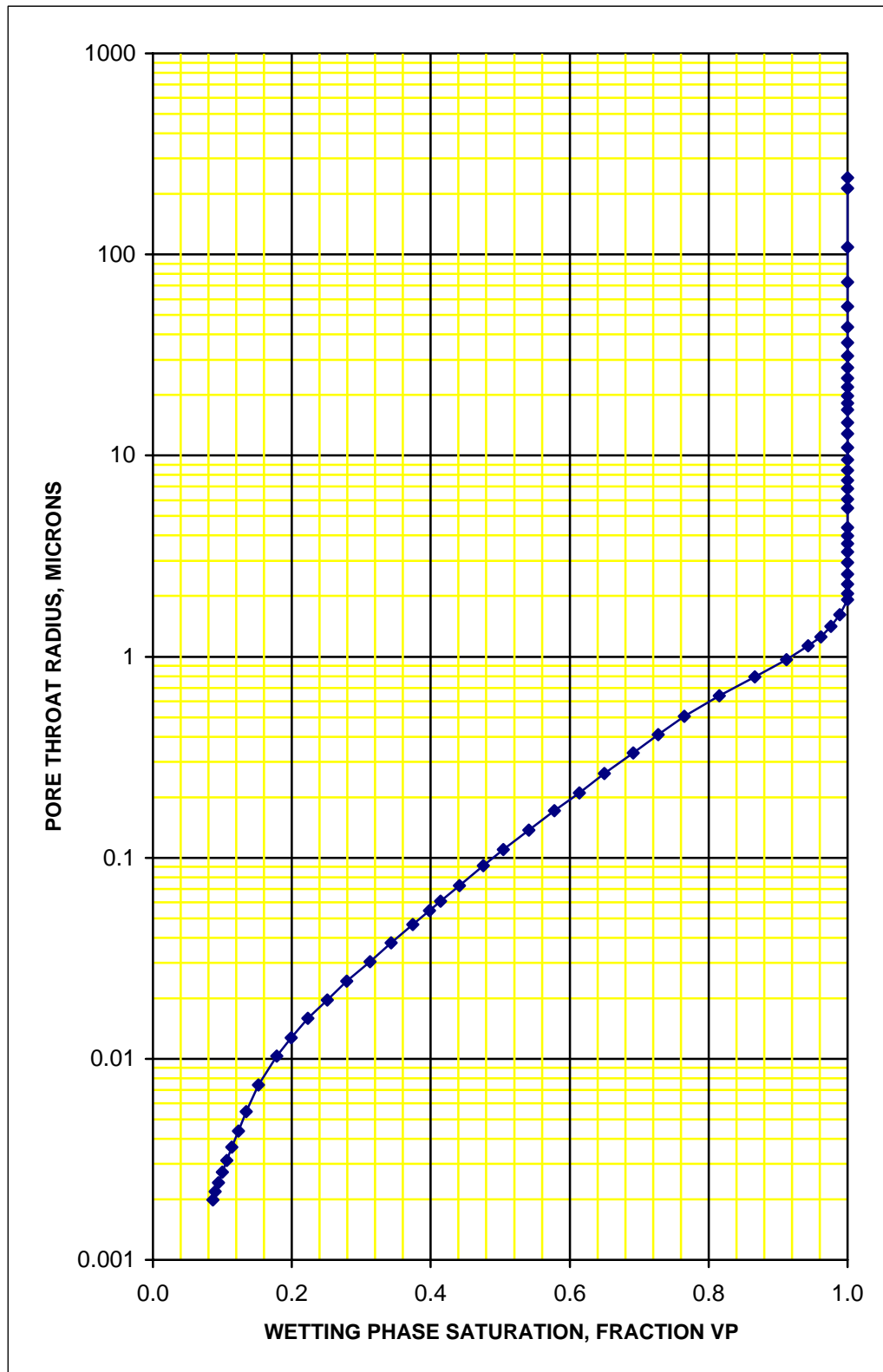
Pore throat size distribution by high pressure mercury injection

Sample ID : 86

Depth, m : 1785.30

Porosity, fraction : 0.156

Kair, md : 0.650



Capillary pressure by high pressure mercury injection

Sample ID : 98

Porosity, fraction : 0.199

Depth, m : 1789.40

Kair, md : 8.71

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.440	0.1	0.1	0.0
0.5	0.000	1.000	215.848	0.1	0.1	0.0
1.0	0.000	1.000	108.439	0.2	0.1	0.1
1.5	0.000	1.000	72.678	0.3	0.2	0.1
2.0	0.000	1.000	54.569	0.4	0.2	0.1
2.5	0.000	1.000	43.904	0.5	0.3	0.2
3.0	0.000	1.000	36.375	0.6	0.3	0.2
3.5	0.000	1.000	31.235	0.7	0.4	0.2
4.0	0.000	1.000	27.377	0.8	0.5	0.3
4.5	0.000	1.000	24.350	0.9	0.5	0.3
5.0	0.000	1.000	21.845	1.0	0.6	0.3
5.5	0.000	1.000	19.874	1.1	0.6	0.4
6.0	0.000	1.000	18.218	1.2	0.7	0.4
6.5	0.000	1.000	16.810	1.3	0.7	0.5
7.5	0.000	1.000	14.578	1.5	0.8	0.5
8.5	0.000	1.000	12.871	1.6	1.0	0.6
10.0	0.000	1.000	10.932	1.9	1.1	0.7
11.5	0.000	1.000	9.506	2.2	1.3	0.8
13.0	0.000	1.000	8.413	2.5	1.5	0.9
14.5	0.000	1.000	7.543	2.8	1.6	1.0
16.0	0.000	1.000	6.836	3.1	1.8	1.1
18.0	0.000	1.000	6.077	3.5	2.0	1.3
20.0	0.000	1.000	5.469	3.9	2.3	1.4
25.0	0.024	0.976	4.375	4.8	2.8	1.7
27.5	0.042	0.958	3.976	5.3	3.1	1.9
30.0	0.055	0.945	3.645	5.8	3.4	2.1
37.1	0.087	0.913	2.942	7.2	4.2	2.6
41.7	0.109	0.891	2.620	8.1	4.7	2.9
46.8	0.127	0.873	2.332	9.1	5.3	3.3
51.3	0.144	0.856	2.128	9.9	5.8	3.6
57.1	0.161	0.839	1.913	11.1	6.5	4.0
67.0	0.191	0.809	1.631	13.0	7.6	4.7
76.1	0.218	0.782	1.436	14.7	8.6	5.3
86.9	0.241	0.759	1.257	16.8	9.8	6.1

Capillary pressure by high pressure mercury injection

Sample ID : 98

Porosity, fraction : 0.199

Depth, m : 1789.40

Kair, md : 8.71

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.4	0.263	0.737	1.133	18.7	10.9	6.7
112.2	0.290	0.710	0.973	21.7	12.7	7.9
136.8	0.326	0.674	0.799	26.5	15.5	9.6
172.9	0.368	0.632	0.632	33.5	19.5	12.1
217.5	0.409	0.591	0.502	42.2	24.6	15.2
266.5	0.444	0.556	0.410	51.7	30.1	18.7
327.6	0.477	0.523	0.333	63.5	37.0	22.9
416.2	0.514	0.486	0.262	80.7	47.1	29.1
517.0	0.547	0.453	0.211	100.2	58.4	36.2
637.5	0.577	0.423	0.171	123.6	72.1	44.6
797.1	0.608	0.392	0.137	154.5	90.1	55.8
999.7	0.636	0.364	0.109	193.8	113.0	70.0
1197.2	0.658	0.342	0.091	232.0	135.3	83.8
1497.5	0.685	0.315	0.073	290.2	169.3	104.8
1795.5	0.707	0.293	0.061	348.0	203.0	125.7
1995.4	0.719	0.281	0.055	386.7	225.6	139.7
2345.6	0.737	0.263	0.047	454.6	265.2	164.2
2893.9	0.759	0.241	0.038	560.9	327.2	202.5
3594.2	0.780	0.220	0.030	696.6	406.3	251.5
4487.8	0.804	0.196	0.024	869.8	507.4	314.1
5588.8	0.821	0.179	0.020	1083.2	631.8	391.1
6887.3	0.836	0.164	0.016	1334.8	778.7	482.0
8588.6	0.847	0.153	0.013	1664.5	971.0	601.1
10586.1	0.857	0.143	0.010	2051.7	1196.8	740.9
14785.5	0.869	0.131	0.007	2865.6	1671.6	1034.8
19983.1	0.878	0.122	0.005	3872.9	2259.2	1398.5
24993.9	0.884	0.116	0.004	4844.0	2825.7	1749.2
29995.8	0.890	0.110	0.004	5813.4	3391.2	2099.3
34994.2	0.894	0.106	0.003	6782.2	3956.3	2449.1
39992.3	0.898	0.102	0.003	7750.9	4521.3	2798.9
44993.7	0.902	0.098	0.002	8720.2	5086.8	3149.0
49993.9	0.906	0.094	0.002	9689.3	5652.1	3498.9
54993.9	0.910	0.090	0.002	10658.3	6217.3	3848.8

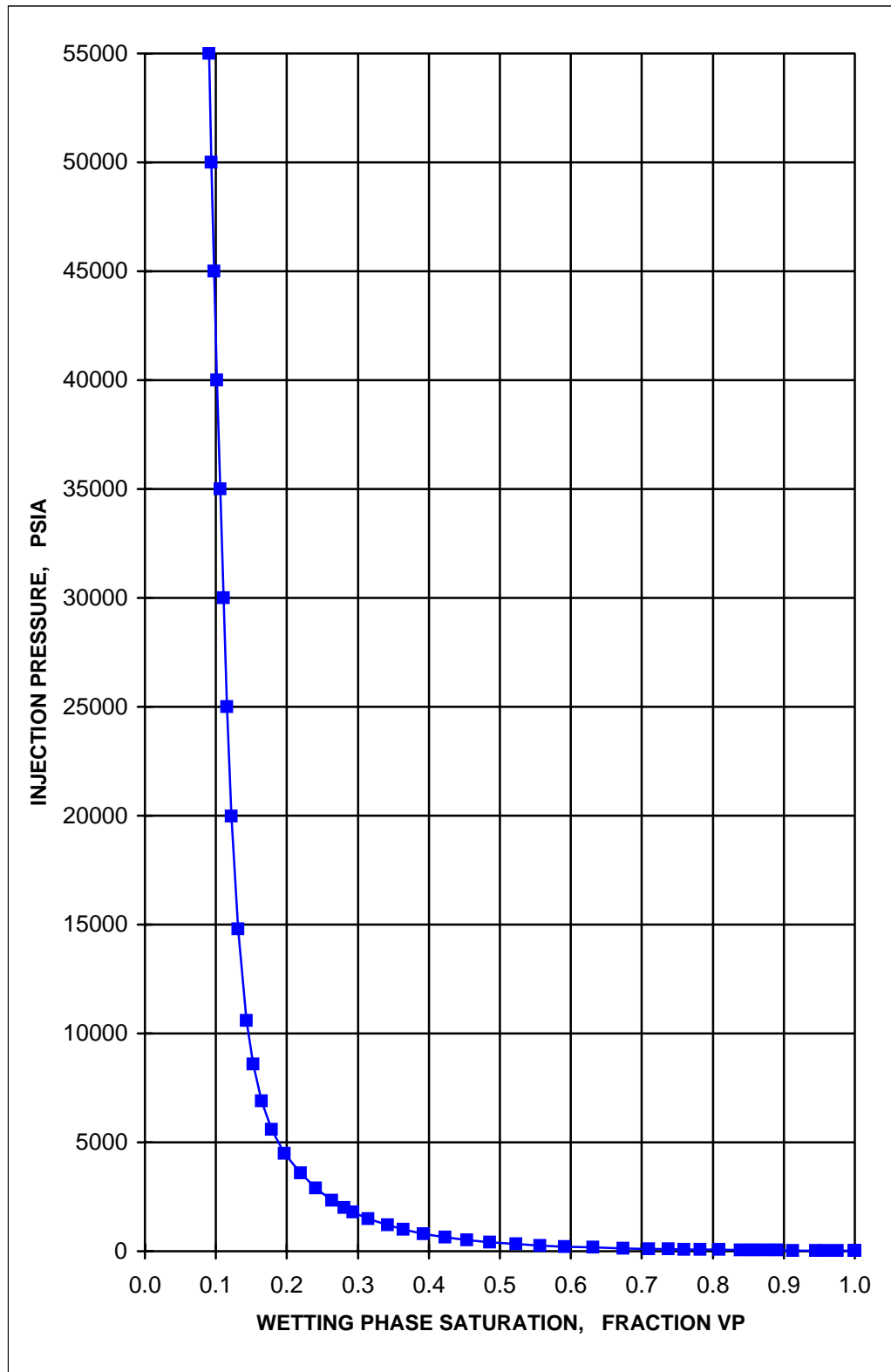
Capillary pressure by high pressure mercury injection

Sample ID : 98

Porosity, fraction : 0.199

Depth, m : 1789.40

Kair, md : 8.71



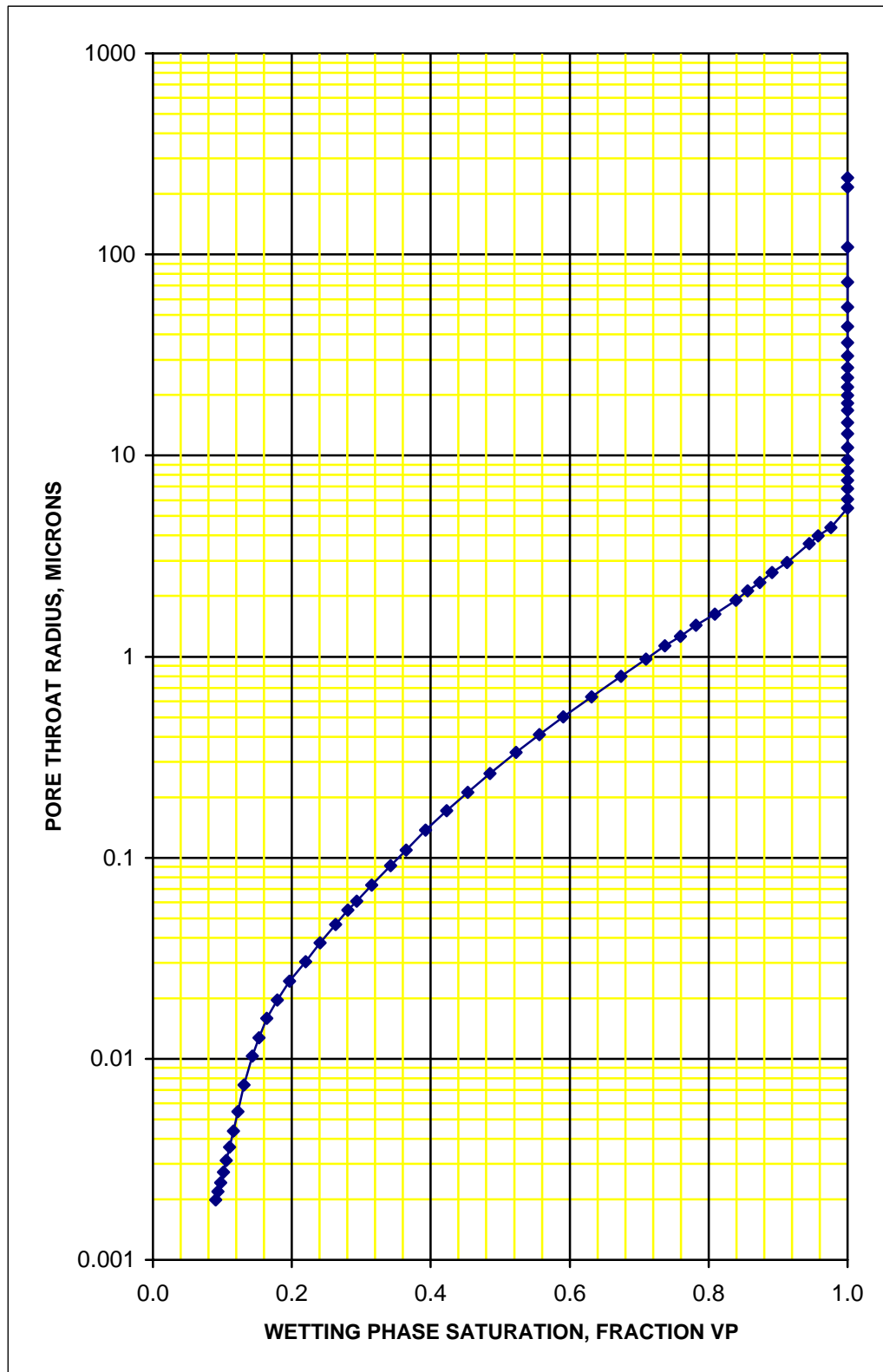
Pore throat size distribution by high pressure mercury injection

Sample ID : 98

Depth, m : 1789.40

Porosity, fraction : 0.199

Kair, md : 8.71



Capillary pressure by high pressure mercury injection

Sample ID : 100

Porosity, fraction : 0.229

Depth, m : 1790.40

Kair, md : 31.6

IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
0.5	0.000	1.000	240.440	0.1	0.1	0.0
0.5	0.000	1.000	215.848	0.1	0.1	0.0
1.0	0.000	1.000	108.439	0.2	0.1	0.1
1.5	0.000	1.000	72.678	0.3	0.2	0.1
2.0	0.000	1.000	54.569	0.4	0.2	0.1
2.5	0.000	1.000	43.904	0.5	0.3	0.2
3.0	0.000	1.000	36.375	0.6	0.3	0.2
3.5	0.000	1.000	31.235	0.7	0.4	0.2
4.0	0.000	1.000	27.377	0.8	0.5	0.3
4.5	0.000	1.000	24.350	0.9	0.5	0.3
5.0	0.000	1.000	21.845	1.0	0.6	0.3
5.5	0.000	1.000	19.874	1.1	0.6	0.4
6.0	0.000	1.000	18.218	1.2	0.7	0.4
6.5	0.000	1.000	16.810	1.3	0.7	0.5
7.5	0.000	1.000	14.578	1.5	0.8	0.5
8.5	0.000	1.000	12.871	1.6	1.0	0.6
10.0	0.000	1.000	10.932	1.9	1.1	0.7
11.5	0.006	0.994	9.506	2.2	1.3	0.8
13.0	0.016	0.984	8.413	2.5	1.5	0.9
14.5	0.029	0.971	7.543	2.8	1.6	1.0
16.0	0.047	0.953	6.836	3.1	1.8	1.1
18.0	0.072	0.928	6.077	3.5	2.0	1.3
20.0	0.095	0.905	5.469	3.9	2.3	1.4
25.0	0.148	0.852	4.375	4.8	2.8	1.7
27.5	0.171	0.829	3.976	5.3	3.1	1.9
30.0	0.188	0.812	3.645	5.8	3.4	2.1
37.1	0.222	0.778	2.942	7.2	4.2	2.6
41.7	0.239	0.761	2.618	8.1	4.7	2.9
46.7	0.253	0.747	2.338	9.1	5.3	3.3
51.4	0.268	0.732	2.124	10.0	5.8	3.6
57.2	0.283	0.717	1.908	11.1	6.5	4.0
67.1	0.309	0.691	1.627	13.0	7.6	4.7
76.3	0.333	0.667	1.432	14.8	8.6	5.3
87.2	0.354	0.646	1.253	16.9	9.9	6.1

Capillary pressure by high pressure mercury injection

Sample ID : 100

Porosity, fraction : 0.229

Depth, m : 1790.40

Kair, md : 31.6

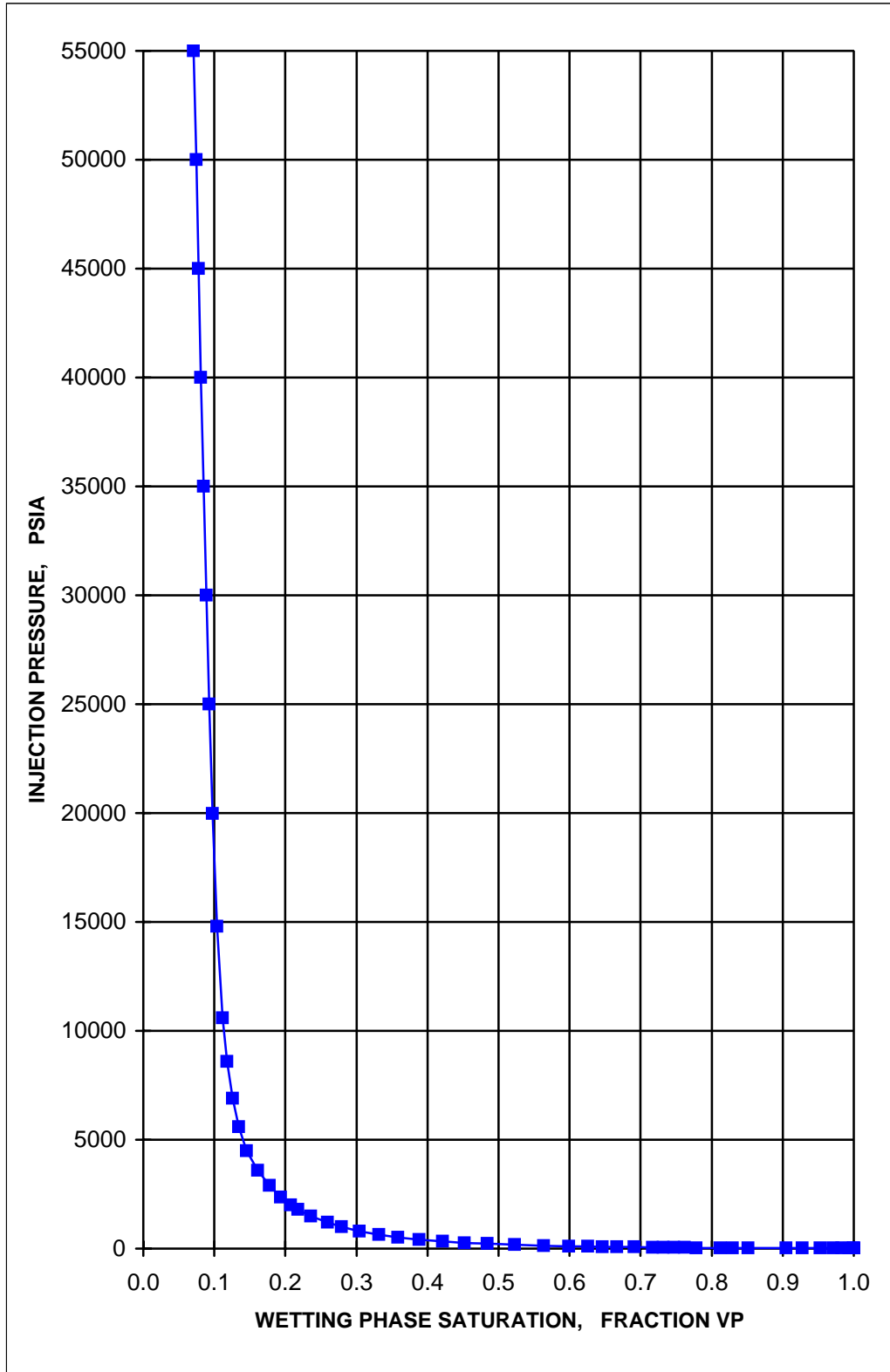
IFT * Cosine Contact Angle			
	Air-Brine	Air-Oil	Oil-Brine
Lab --->	72	24	42
Res --->	50		26

Injection Pressure, psia	Mercury Satn, fraction Vp	Wetting Phase Saturation, fraction Vp	Pore Throat Radius, microns	Equivalent Injection Pressure, psia		
				A/B (Lab)	O/B (Lab)	O/B (Res)
96.7	0.374	0.626	1.129	18.7	10.9	6.8
112.6	0.401	0.599	0.970	21.8	12.7	7.9
137.2	0.436	0.564	0.796	26.6	15.5	9.6
173.4	0.477	0.523	0.630	33.6	19.6	12.1
218.1	0.515	0.485	0.501	42.3	24.7	15.3
267.2	0.548	0.452	0.409	51.8	30.2	18.7
328.3	0.578	0.422	0.333	63.6	37.1	23.0
417.0	0.612	0.388	0.262	80.8	47.1	29.2
517.8	0.641	0.359	0.211	100.4	58.5	36.2
638.4	0.668	0.332	0.171	123.7	72.2	44.7
798.0	0.696	0.304	0.137	154.7	90.2	55.9
1000.7	0.721	0.279	0.109	193.9	113.1	70.0
1198.2	0.740	0.260	0.091	232.2	135.5	83.9
1498.6	0.764	0.236	0.073	290.4	169.4	104.9
1796.6	0.782	0.218	0.061	348.2	203.1	125.7
1996.5	0.792	0.208	0.055	386.9	225.7	139.7
2346.8	0.806	0.194	0.047	454.8	265.3	164.2
2895.1	0.823	0.177	0.038	561.1	327.3	202.6
3595.5	0.839	0.161	0.030	696.8	406.5	251.6
4489.1	0.854	0.146	0.024	870.0	507.5	314.2
5590.1	0.866	0.134	0.020	1083.4	632.0	391.2
6888.8	0.874	0.126	0.016	1335.1	778.8	482.1
8590.0	0.882	0.118	0.013	1664.8	971.1	601.2
10587.6	0.888	0.112	0.010	2052.0	1197.0	741.0
14787.0	0.896	0.104	0.007	2865.9	1671.7	1034.9
19984.5	0.903	0.097	0.005	3873.2	2259.4	1398.6
24995.4	0.907	0.093	0.004	4844.3	2825.9	1749.3
29997.2	0.911	0.089	0.004	5813.7	3391.3	2099.4
34995.7	0.915	0.085	0.003	6782.5	3956.4	2449.2
39993.8	0.919	0.081	0.003	7751.2	4521.5	2799.0
44995.2	0.922	0.078	0.002	8720.5	5086.9	3149.1
49995.4	0.926	0.074	0.002	9689.5	5652.2	3499.0
54995.4	0.929	0.071	0.002	10658.6	6217.5	3848.9

Capillary pressure by high pressure mercury injection

Sample ID : 100
Depth, m : 1790.40

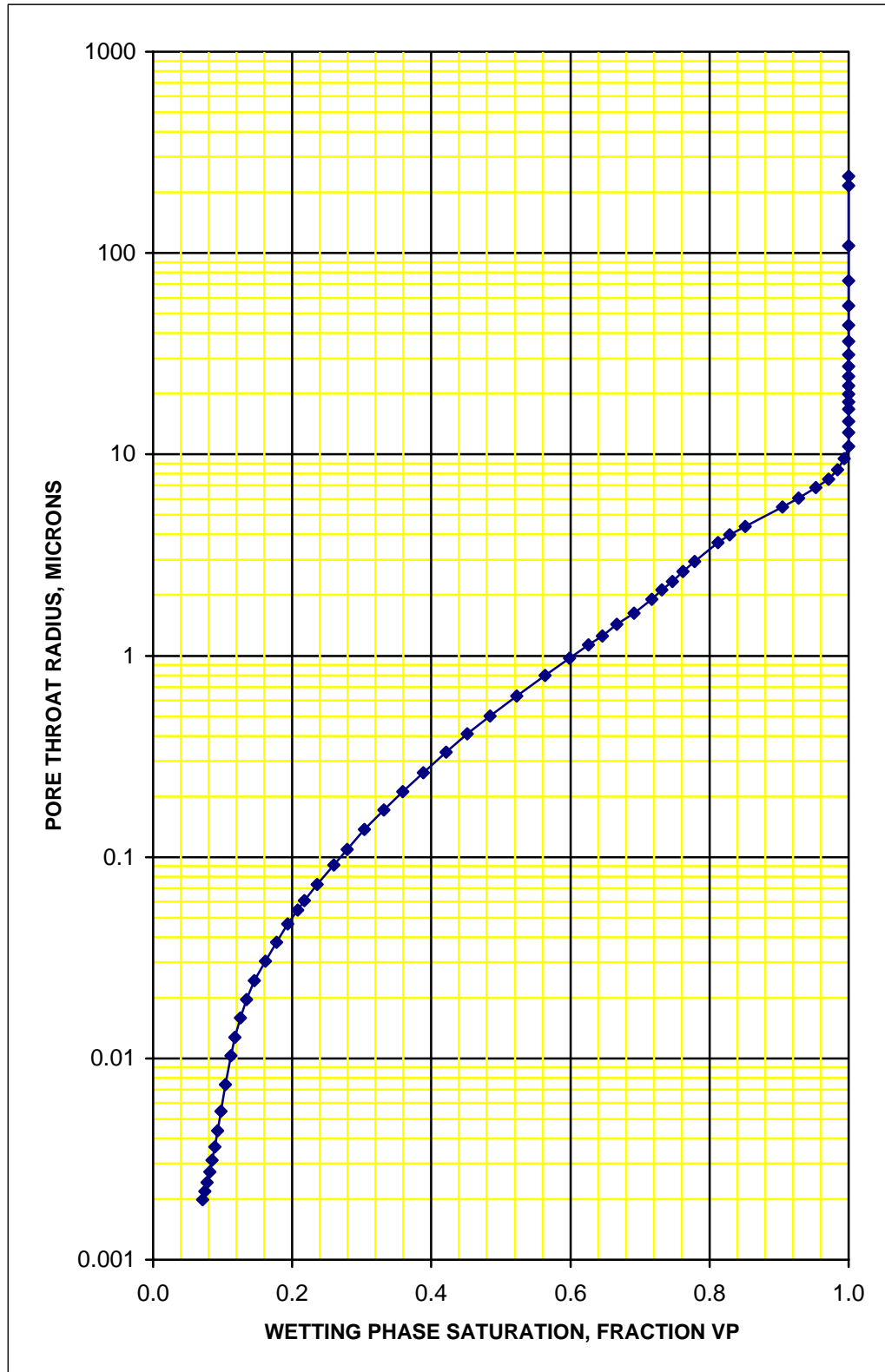
Porosity, fraction : 0.229
Kair, md : 31.6



Pore throat size distribution by high pressure mercury injection

Sample ID : 100
Depth, m : 1790.40

Porosity, fraction : 0.229
Kair, md : 31.6



SECTION 6

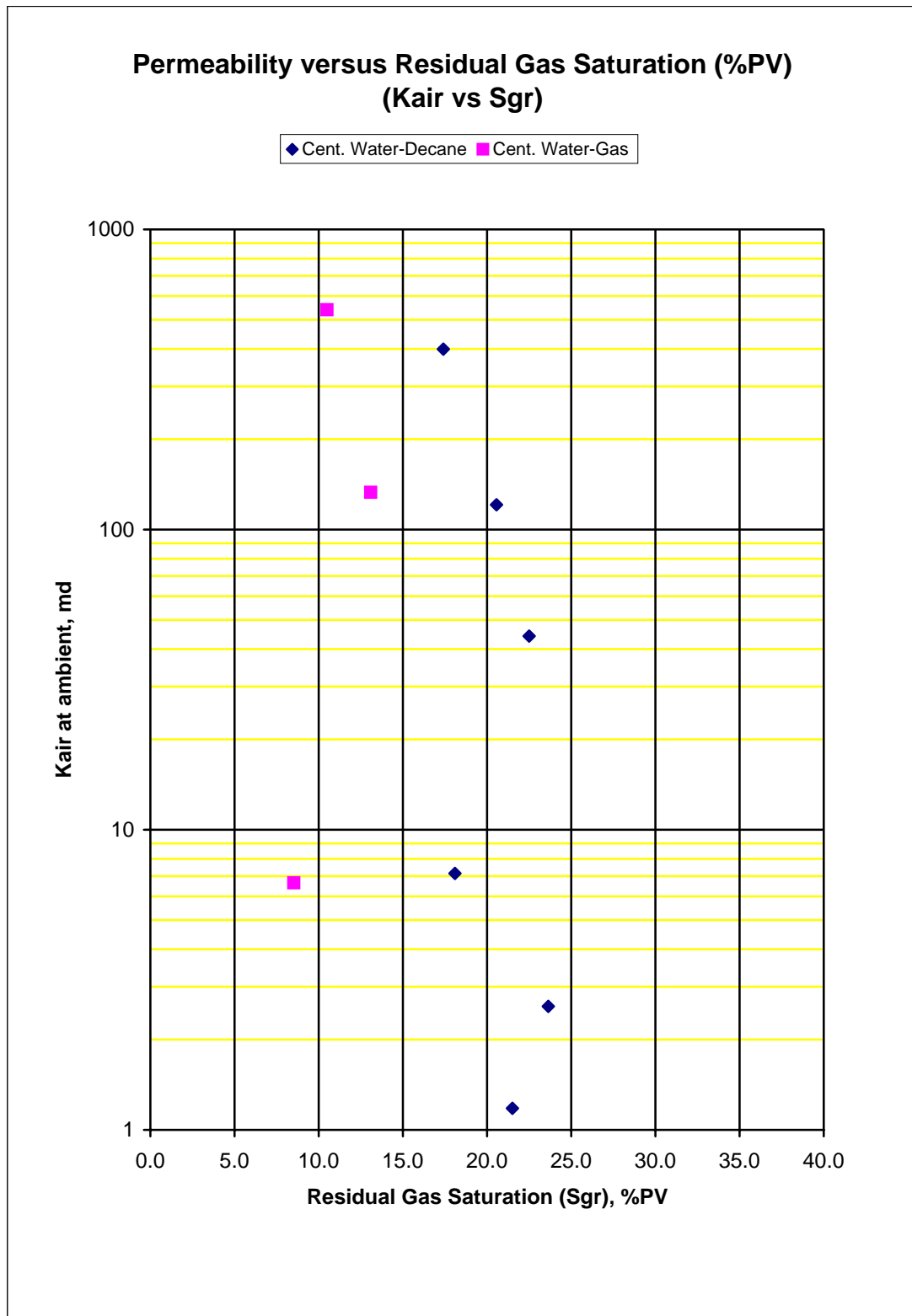
RELATIVE PERMEABILITY

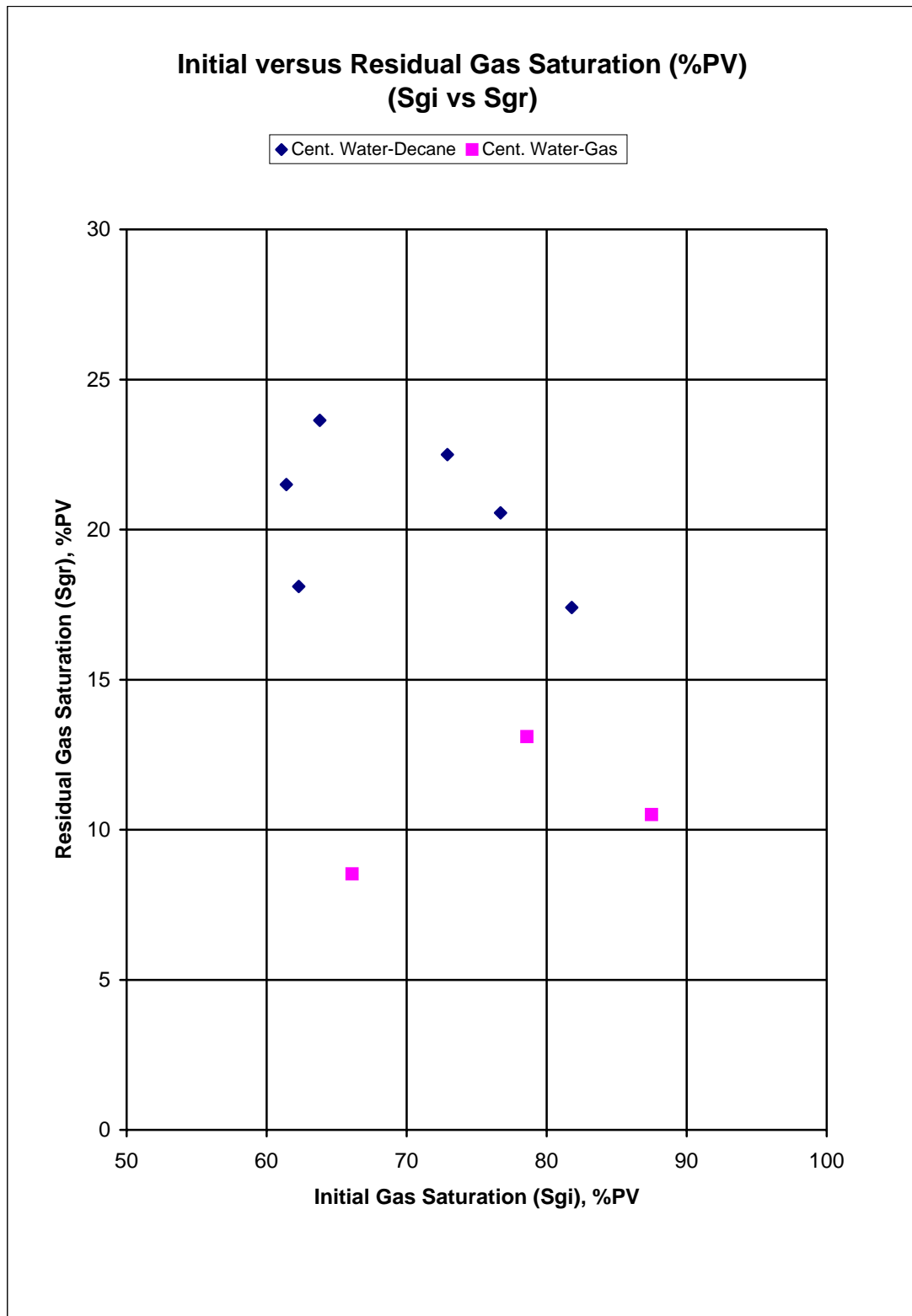
Summary of the centrifuge water-decane (end-point) relative permeability analyses results

Sample no.	Depth (m)	At Ambient			Initial Conditions			End Condition		
		Permeability		Porosity (%)	Initial water sat. (%pv)	Initial dec. in-place (%pv)	K decane at Swi (md)	Water-Displacing-Decane		
		K inf (md)	K air (md)					Residual dec sat. (%pv)	Kw at Srdec (md)	"Gas" relative permeability (%pv)
11	1761.20	399	430	25.5	18.2	81.8	354	17.4	140	64.
37	1768.97	2.58	3.34	18.3	36.2	63.8	2.41	23.6	0.455	40.
40	1769.91	121	137	21.8	23.3	76.7	129	20.6	34.5	56.
43	1770.98	1.18	1.66	17.4	38.6	61.4	1.16	21.5	0.390	39.
63	1777.83	44.2	49.3	22.1	27.1	72.9	45.1	22.5	9.10	50.
98	1789.40	7.15	8.71	19.9	37.7	62.3	6.82	18.1	0.83	44.
* Decane (dec) used as the non-wetting phase to simulate the gas phase.										

Summary of the centrifuge water-gas (end-point) relative permeability analyses results

Sample no.	Depth (m)	At Ambient			Initial Conditions			End Condition		
		Permeability		Porosity (%)	Initial water sat. (%pv)	Initial gas in-place (%pv)	K gas at Swi (md)	Water-Displacing-D		
		K inf (md)	K air (md)					Residual gas sat. (%pv)	Kw at Sgr (md)	Ga (% p
60	1776.92	5.40	6.65	19.3	33.9	66.1	5.26	8.5	1.66	57.
79	1782.90	121	133	23.8	21.4	78.6	125	13.1	25.1	65.
81	1783.50	504	540	25.5	12.5	87.5	510	10.5	200	77.





APPENDIX

APPENDIX-1

SUMMARY OF LABORATORY PROCEDURES

SUMMARY OF LABORATORY PROCEDURES

Initial Sample Selection and Preparation

A Special Core Analysis (SCAL) study was performed on samples selected from the Casino-4 well.

A total of twenty-four samples were selected for electrical properties, nuclear magnetic resonance (NMR), capillary pressure, and relative permeability analyses. All selected samples had previously undergone routine core analyses measurements (reference our Final RCA Report, File : PRP-05052).

All samples were screened visually, to determine if they were suitable for analysis. Following screening, the samples were re-dried at 95°C and porosity, permeability, grain density values re-checked and compared to originally measured values.

A complete list of the selected samples with the corresponding base data, measured at ambient conditions, is given on page 1-4.

Formation Resistivity

Formation resistivity measurements were conducted on six selected samples.

Each sample was evacuated and pressure saturated with the 15,000 ppm brine (comprising 80% NaCl and 20% KCl). All samples were weighed after saturation to check measured pore volumes. The brine saturated (100% Sw) samples were each loaded into individual core holders at net overburden pressure (1900 psi).

Electrical resistivities of the fully saturated samples were measured on consecutive days until they were stable, indicating ionic equilibrium in the pore spaces. Formation resistivity factor (FRF) and cementation exponent ("m") values were then calculated.

Each sample was then de-saturated at incrementally increasing pressures using humidified air as the displacing medium. Electrical resistivities of each sample were measured at the incrementally decreasing partial saturations. When each sample had attained electrical equilibrium at each incremental desaturation stage, values of resistivity index (RI) and saturation exponent ("n") were calculated.

Data from electrical properties measurements are presented in SECTION 2.

Cation Exchange Capacity (CEC)

In addition to the trim-ends of the plugs which underwent FRF and RI measurements, twelve other sample trim-ends, were subjected to determinations of cation exchange capacity (CEC) using the ammonium acetate wet chemistry technique. These CEC values are used to calculate idealised “m*” and “n*” values using Waxman-Smiths-Thomas equations.

Results from the CEC analysis and values of Qv derived from these data are presented in SECTION 2.

Nuclear Magnetic Resonance (NMR)

The six selected samples were 100% brine saturated with the simulated formation brine. NMR T₂ (Sw=1.00) measurements were conducted at an interecho spacing of 0.32 ms at zero overburden pressure.

The measurements were made in a Corespec-1000 (registered mark of Numar) operating under a homogeneous magnetic field using 1 MHz frequency pulses at the chosen interecho spacing with no applied magnetic field gradient. The test yields magnetisation amplitude versus recovery time data, which are then processed separately using Numar's MAP II software to give the transverse relaxation time (T₂) distribution curves and subsequently the NMR porosity. Care was taken to keep a good signal-to-noise ratio (SNR) during calibration and measurements (generally better than 200).

NMR porosity data are presented in SECTION 3 of the report.

Air-Brine Capillary Pressure

The brine saturated (100% Sw) samples were loaded into individual centrifuge core holders. Samples were spun at incremental rotational speeds effecting a maximum equivalent air-brine capillary pressure of 350 psi. Each speed (RPM) was maintained for a minimum of twenty-four hours until production was stable. Volumes of brine produced were monitored as the samples achieved capillary equilibrium at each incremental pressure. The speed was then raised to the next speed.

The samples were unloaded and the weights recorded. Capillary pressure and end-face saturation data were then calculated from the raw data using data reduction techniques developed by Hassler-Brunner and later modified by other workers (e.g Rajan). These end-face saturation data are presented within SECTION 4 of this report.

High pressure mercury injection capillary pressure

Twenty-four samples were selected for high pressure mercury injection analysis. The selected samples were reamed down to 1" X 1" size, re-cleaned, re-dried and sample grain volume re-determined. Samples were then each loaded into the high pressure mercury injection apparatus. Initially, the sample bulk volume was determined at ambient and the porosity value calculated.

Mercury was then injected into the core at increasing incremental pressures from 0.5 to 55,000 psia. Mercury saturation data were monitored at every stage through the test and from these the air-mercury capillary pressure curves and pore size distribution data were calculated. Results are presented within SECTION 5 of this report.

Centrifuge Water-Decane (Gas) Relative Permeability

The six selected samples were initially saturated with the simulated formation brine of 15,000 ppm salinity. Saturated weights were checked to verify pore volume data obtained by helium injection on the dry samples.

Each sample was loaded into individual centrifuge core holders and were desaturated to immobile water saturation (S_{wi}), using the centrifuge, at an equivalent air-brine capillary pressure of 350 psi. The volume of brine displaced was monitored and the samples' S_{wi} established gravimetrically.

Each sample was then flushed under back-pressure with analytical grade decane to dispel air and permeabilities to decane at immobile water saturation ($K_{dec} @ S_{wi}$) measured. Decane was used in preference to gas to avoid the potential effects of gas compression and diffusion into the brine phase.

Brine-filled centrifuge cups were attached to each centrifuge core holder. The core holders were returned to the centrifuge and spun at a single pre-selected RPM within the limitations of the Bond number. Decane volumes produced were monitored against time. From the RPM, time and production data, the decane relative permeability ($K_{r-decane}$) curve was determined.

On completion of the brine displacing decane relative permeability tests, each sample was removed from the centrifuge and the sample weight recorded. The sample was next loaded into a hydrostatic core holder and permeability to brine at irreducible decane saturation (S_{dr}) was then determined. Samples were finally submitted to Dean-Stark extraction to confirm residual fluids saturation.

The centrifuge water-displacing-decane relative permeability (end-point) data are presented on page 6-1.

Centrifuge Water-Gas Relative Permeability

In a later request (email from Blake Hodson, Santos, dated 23rd September '05), three samples (#60, #79 and #81) were selected to undergo centrifuge water-displacing-gas tests.

The 100% brine saturated samples were spun to immobile water saturation (S_{wi}) at a single speed effecting an equivalent 350 psi air-brine capillary pressure. Effluent water volumes were monitored and the samples' S_{wi} 's calculated and confirmed gravimetrically.

Each sample was removed from the centrifuge core holder, weighed and loaded into a hydrostatic core holder. Humidified gas was flowed through each sample and the permeability to gas (K_{gas} at S_{wi}) determined.

Water-gas relative permeability tests were then performed in the centrifuge with water displacing gas at constant speed (equivalent to constant pressure). When gas production had stabilised, the individual core holders were removed from the centrifuge and water permeability at residual gas saturation (K_{rg} at S_{wr}) measured. The samples were finally submitted to Dean-Stark extraction for confirmation of residual fluid saturations.

Results from the water-displacing-gas relative permeability (end-point) data are presented on page 6-2.