File name: S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_18-2019c.144

SOLID REPORTING

Company name:	BAM - FB 1.3
Operator:	C. Prinz

TEST INFORMATION

Test date:	20-06-16
Sample name:	D_18 Anhydrid Estrich [5612]
Comment:	
Sample mass (g):	0,9886
Sample skeleton density (g/cm³):	2,18
Test file name:	S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_18-2019.P44
Combined with file (140):	S:...\Solid\Data\BAM 8.2 Kruschwitz\2016-P52\D_18-2019.P14
Mercury surface tension (N/m):	0,48
Mercury contact angle (°):	140,0
Test filling volume (mm³):	448,0 at P < 1 Pa
Starting hydr. press. of test (MPa):	0,0124
(Dil+Hg+Sample) weight (g):	170,49
Corrected weight (Dil.+Hg+Sample) (g):	170,869

ANALYTICAL CONDITIONS

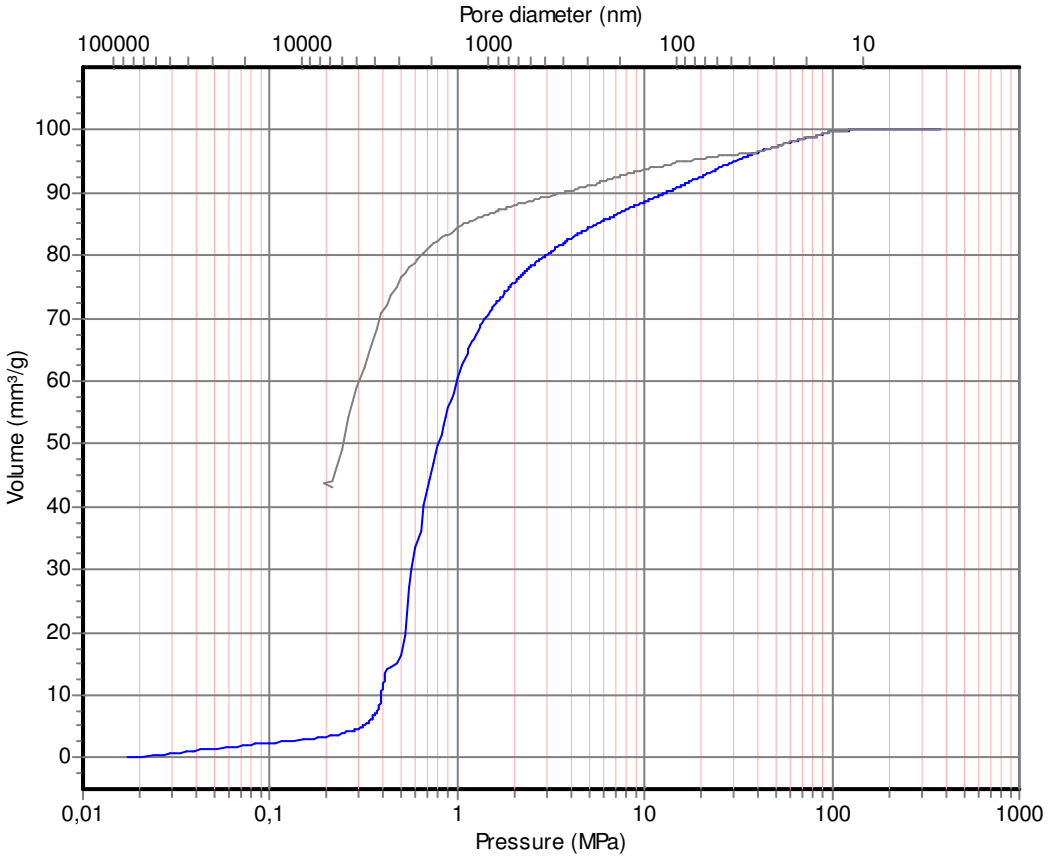
Maximum test pressure (MPa):	400
Increase speed:	5 - 17 MPa/min
Increase method:	Pascal Stepwise
Decrease speed:	5 - 17 MPa/min
Decrease method:	Pascal Stepwise
Temperature of test (°C):	23,7
Mercury density @ test (g/cm³):	13,5372

BLANK & DILATOMETER INFORMATION (Data from Pascal 440 file)

Blank date:	26-02-15
Blank filename:	S:\Archiv\Mess-Files\Pascal140-440\Solid\Blank\Dil184-CD3N\Dil184-400-3.P44
Comment	Hochdruckbereich
Blank Max pressure (MPa):	400
Blank Increase speed:	5 - 17 MPa/min
Blank Increase method:	Pascal
Blank Decrease speed:	5 - 17 MPa/min
Blank Decrease method	Pascal
Dil. number:	25
Dil. type:	CD3P
Dil. Cone length (mm):	25
Dil. Electrode gap (mm):	5
Dil. stem radius (mm):	1,5
Dil. weight (g):	58,7117
Temperature of blank (°C):	22,7
Mercury density @ blank (g/cm³):	13,5396
Blank filling volume (mm³):	476 at P < 1 Pa
Starting hydr. blank press. (MPa):	0,012977
(Dil+Hg) weight (g):	175,91

SAMPLE RESULTS

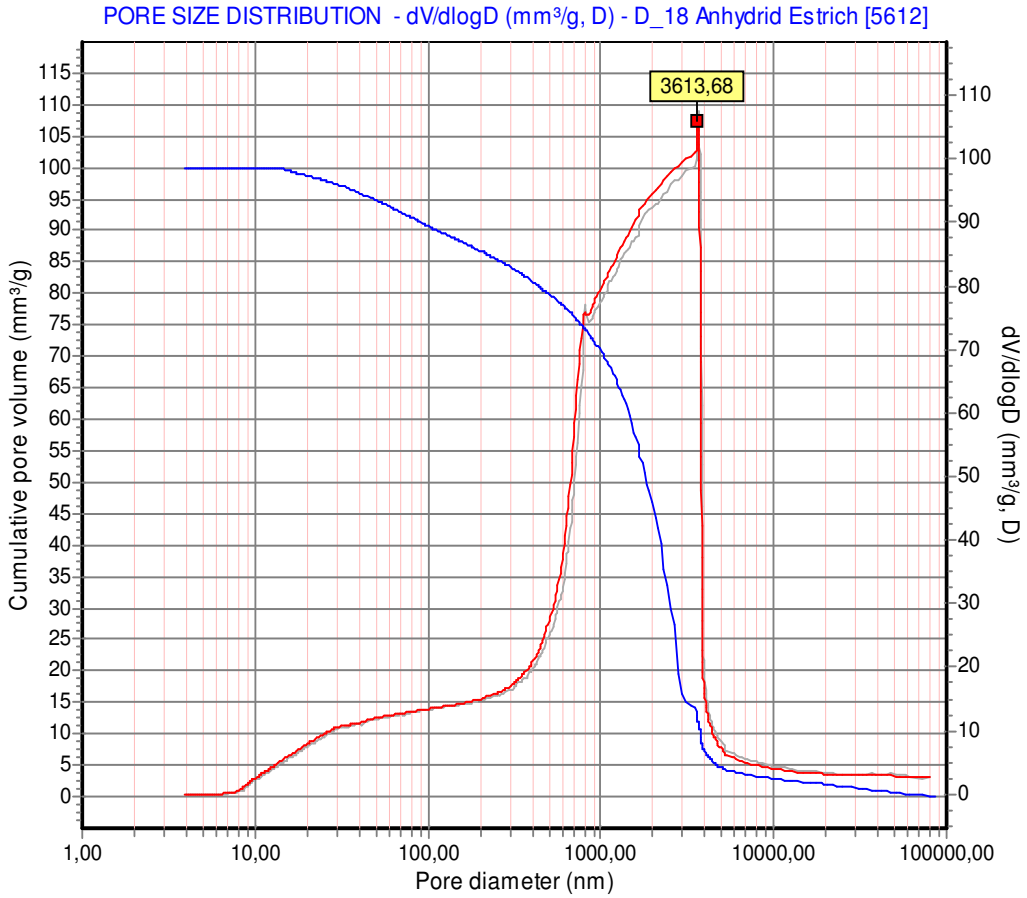
Inc / Dec - D_18 Anhydrid Estrich [5612]



RESULTS WITHOUT COMPRESSIBILITY CORRECTION

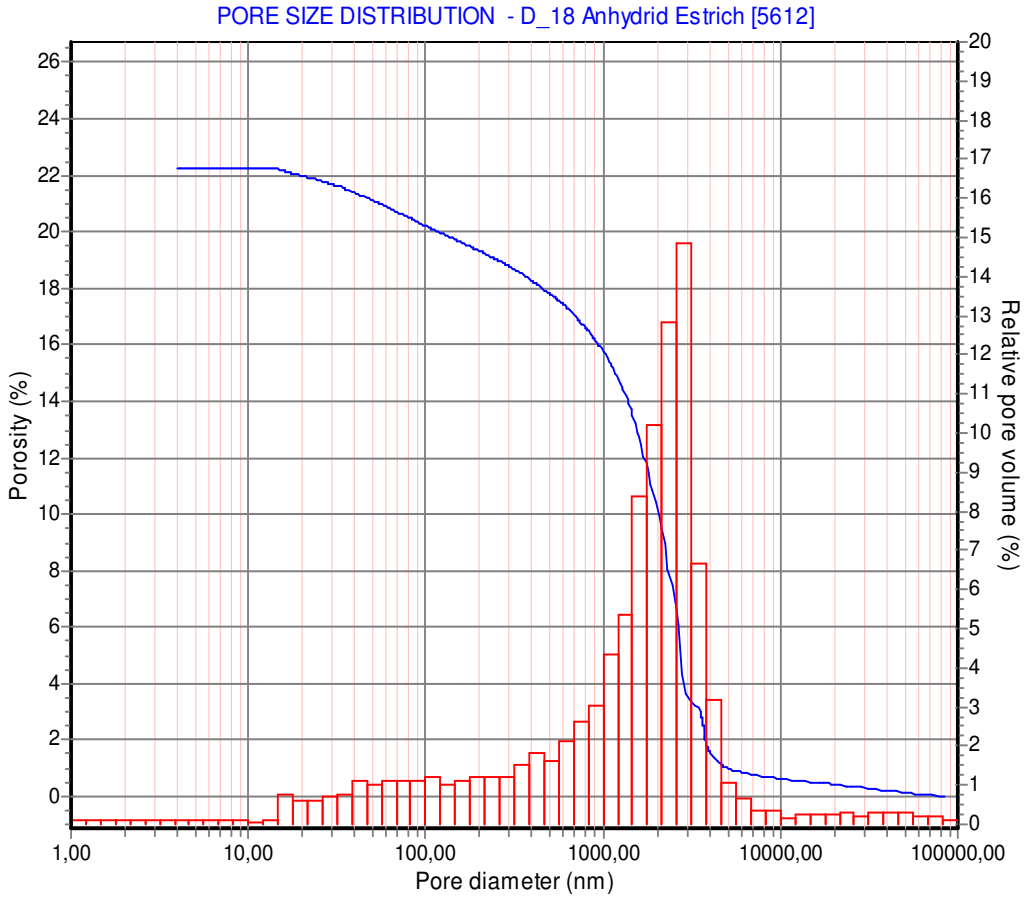
Total intruded volume (mm³)	98,85		
Total intruded volume (mm³/g):	99,99	at pressure of MPa:	374,4105
Spec. Vol. by skeleton dens. (mm³/g) Vd:	-9,72		
Bulk density (g/cm³):	2,2272		
Envelope density (g/cm³):	2,2273	at pressure of MPa:	0,017 Diam.(nm) 85264,1
Apparent density (g/cm³):	2,8653	at pressure of MPa:	374,4105 Diam.(nm) 3,9
Porosity by skeleton density (%):	-2,17	Calculated by skeleton density of	2,18 g/cm³
Porosity by Hg intrusion (%):	22,27		
Inaccessible porosity (%):	-24,43		

TOTAL PORE SIZE

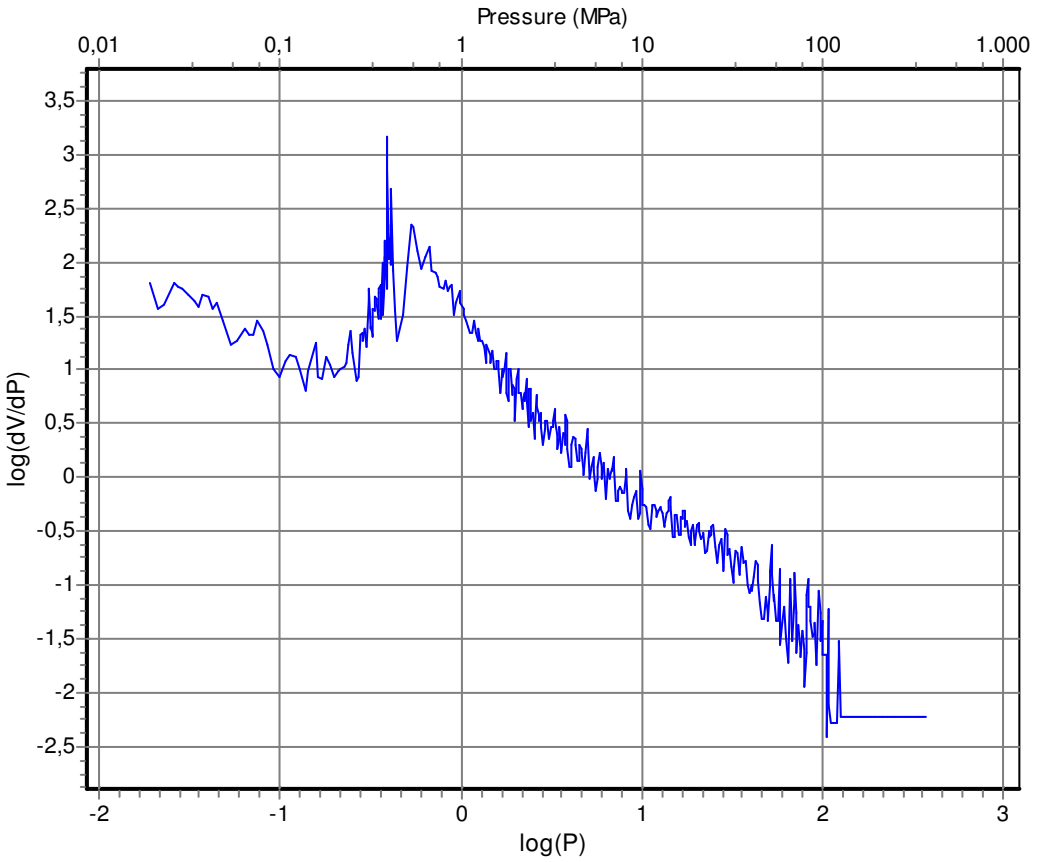


Derivative calculated with			
Moving average points:	99		
Smoothing factor:	0,80		
Calc. press. range (MPa):	0.0 to 374,41		
Total pore volume (mm³/g):	99,99		
Total pore surface area (m²/g):	1,418	with model :	Cylindrical and Plate
Average pore diameter (nm):	281,97	Hydraulic (4V/A)	
Median pore diameter (nm):	1846,98	at (mm³/g) :	49,99
Modal pore diameter (nm):	3613,68	at dV/dlogD (mm³/g, D) :	105,99
Span:	0,00	at Min. Vol. (%) 0,0	at Max. Vol. (%) 0,0

TOTAL PORE SIZE HISTOGRAM



FRACTAL DIMENSION OVERALL - D_18 Anhydrid Estrich [5612]



Calc. press. range (MPa)::	0,0 to 374,4
Fractal dimension overall:	2,72

OTHER CALC.

RESULTS OF TORTUOSITY:

Surface area model:	Cylindrical and Plate
Tortuosity (Carniglia):	1,978
Tortuosity extended calculated:	from Customer choice area
Customer choice area:	1,0
Exponent cylindrical pore:	1,754
Tortuosity extended (Carniglia):	0,795

RESULTS OF PERMEABILITY:

Cylindrical pores permeability (µm²):	553,3E-4
General permeability calculated:	from Tortuosity
General permeability (µm²):	559,35E-4