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622.276.6

INFLUENCE OF GELLING AGENTS ON FILTRATION CHARACTERISTICS  
OF HYDROCHLORIC ACID

S. M. Antonov, O. V. Andreev, K. V. Kiselev

*Key words: carbonate rocks, gelling agents, flow properties, kinetic curves, acid compositions filtration*

[1]. — -  
[2].  
[3].  
[1]. [4], -  
[1]. [4, 5], -  
( $C_{HCl} = 12\%$  ), (1–10 % ), -  
(0,5–3 % ),  
(1+3 % , 2+4 % , 2+7 % ), 17-  
(0,1–1000 / ), (12–260 ° )  
( 13,9 ).

[6].

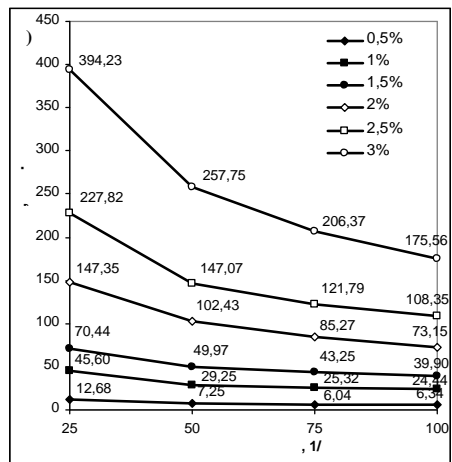
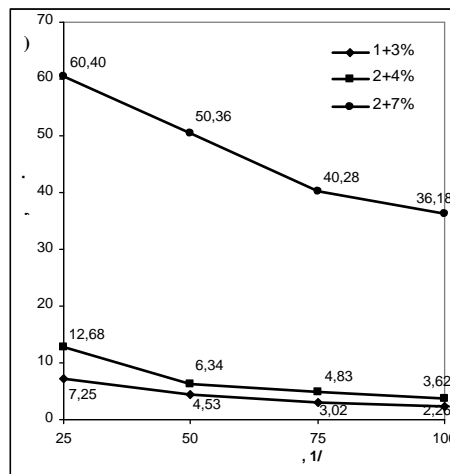
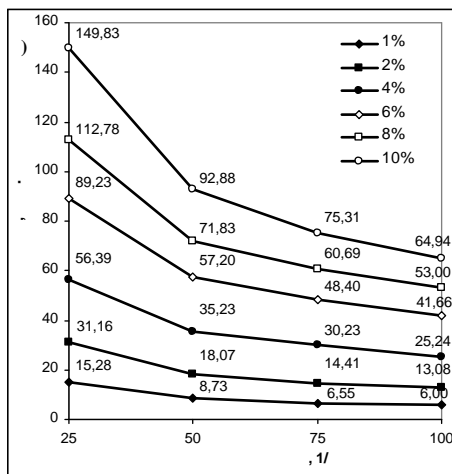
$$\alpha = 1 - \exp(-k\tau^n)$$

,  $n$  — ,  $k$  —

( $C_{HCl} = 12\%$  ) ( )

[7].

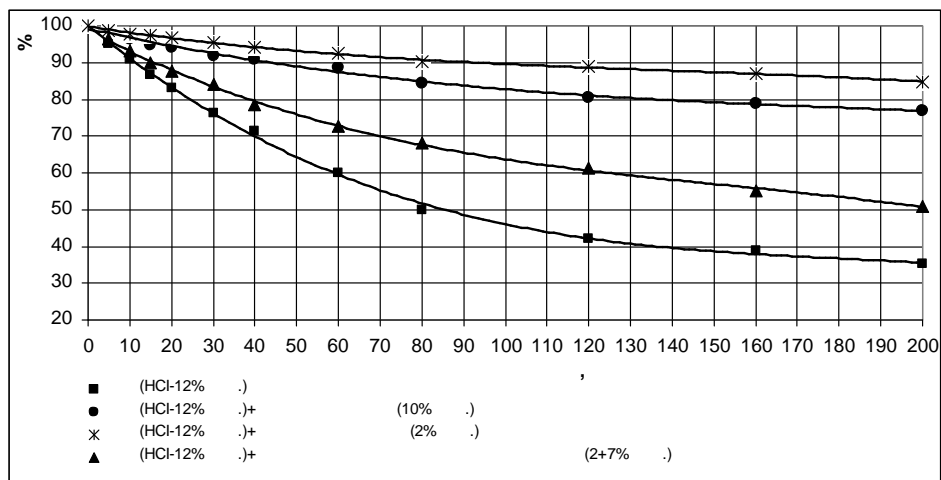
(149,63–64,94 = 25–100<sup>-1</sup>)  
10% ( . 1 ).



. 1.

( $t = 12^0$  ,  $l = 10$  ):  
) ;  
) ;  
)

( , )  
 12 %-  
 ( .1 ),  
 [1]  
 ( 0,5 % )  
 ( 3 % )  
 ( .1 ) (147,35-73,5  
 = 25-100<sup>-1</sup>).  
 2.  
 2  
 (10 % ) O<sub>2</sub> (2 % ), 12 %- HCl,  
 H<sup>+</sup> 1,9 3,2 ( .2) ( 12 %-  
 HCl). + (7 % + 2 % ), HCl,  
 — HCl.



. 2.

4 : 1)  
 ( HCl = 12 % .); 2) - (10 % .);

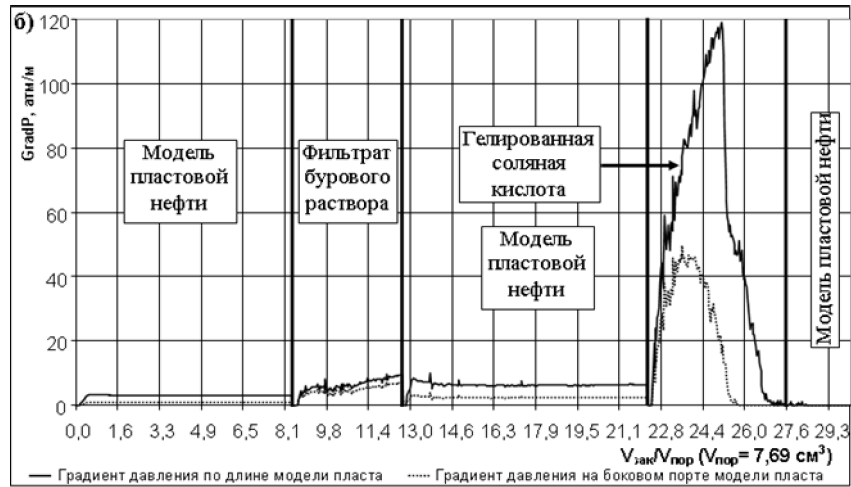
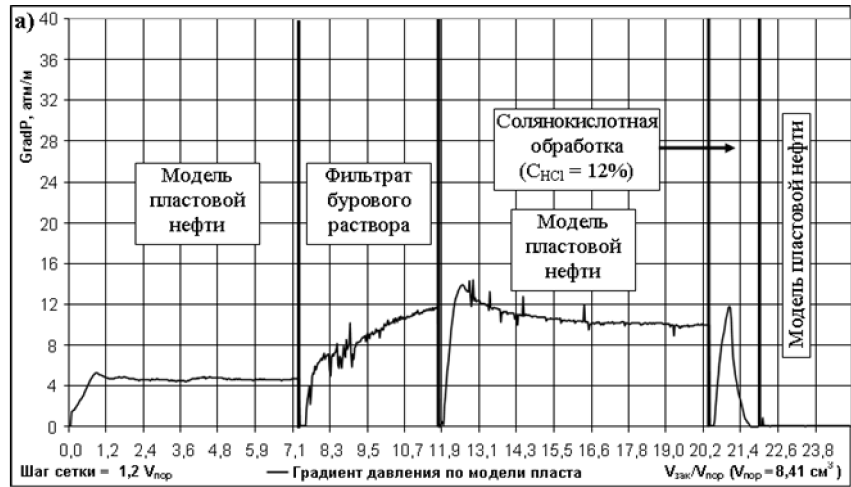
3) - , (7 %) +  
 (2 % .); 4) - , (2 % .).

( . 3 ).

HCl

1,2 V ( )

[8].



. 3.  
 : ) (12 % .);  
 ) - (2 % .)

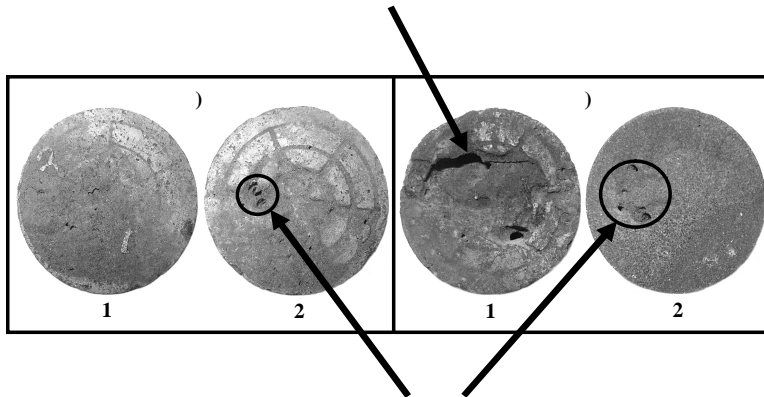
( . 3 ),

2-4

5,3 ( . 4 ),  
4,4 V ( ).

	%	$2 \cdot 10^{-3}$		V	3/
1	15,10	29,80	>1 000	1,12	15
2	10,68	35,04	>1 000	5,29	15
3	13,85	76,94	>1 000	6,59	15
4	12,46	81,29	>1 000	4,42	15

+ (7 % + 2 % ) 6,59 V ,  
( . 4 ).



. 4. (1) (2)  
(10 % ); (7 % ) (2 % )  
(C = 10 % )  
2 %

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## GROWTH OF GAS HYDRATES IN THE WATER/OIL EMULSIONS ACCORDING TO METHOD DIFFERENTIAL THERMAL ANALYSIS

... , ... , ... , ... ,  
 ...  
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*Key words: water/oil emulsion, gas hydrates, DTA method*

[1].

( 1-4)

[2, 3].