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APPLICATION OF METHODS OF ASSOCIATED PETROLEUM GAS  
UTILIZATION FOR THE EASTERN SIBERIA

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*Key words: associated petroleum gas; downhole pregathering*

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- « » — ;
- «GTL — gastoli- quids»:
- 

1 200 °C.

70–75 °C,

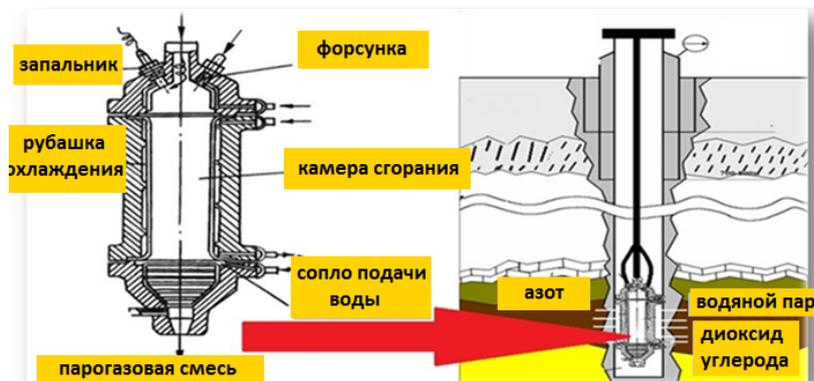
150–200

( )

1 000

1 000

( ),





70–80 °

[1],

$\varphi^{\text{объемн}}$ , % ( ).

		%
	CH <sub>4</sub>	76
	C <sub>2</sub> H <sub>6</sub>	11
	C <sub>3</sub> H <sub>8</sub>	13

$$V_B^{\text{теор}} = \frac{\beta_1 \cdot \varphi_1 + \beta_2 \cdot \varphi_2 + \beta_3 \cdot \varphi_3 + \dots - \varphi(O_2)}{21} * V_{\text{ГГ}},$$

$\beta_1, \beta_2, \beta_3$  —

( );  $\varphi_1, \varphi_2, \varphi_3$  — ( %);  $\varphi(O_2)$  — ( %);  $V_{\text{ГГ}}$  — ( )

[2]

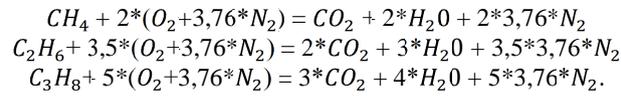
$$V_B^{\text{прак}} = V_B^{\text{теор}} * \alpha,$$

$\alpha$  —

$$V = \frac{22,4 * P_0 * T}{T_0 * P},$$

$T_0 = 101,3$  ;  $T_0 = 273,15$  ;  $T$  ;  $P$  —

( )



$$V(CO_2) = 1 * \frac{\varphi(CH_4)^{0.6}}{100} + 2 * \frac{\varphi(C_2H_6)^{0.6}}{100} + 3 * \frac{\varphi(C_3H_8)^{0.6}}{100} + \frac{\varphi(CO_2)^{0.6}}{100}.$$

1<sup>3</sup>

$$V(H_2O) = 2 * \frac{\varphi(CH_4)^{0.6}}{100} + 3 * \frac{\varphi(C_2H_6)^{0.6}}{100} + 4 * \frac{\varphi(C_3H_8)^{0.6}}{100}.$$

1<sup>3</sup>

$$V(N_2) = 2 * 3,76 * \frac{\varphi(CH_4)^{0.6}}{100} + 3,5 * 3,76 * \frac{\varphi(C_2H_6)^{0.6}}{100} + 5 * 3,76 * \frac{\varphi(C_3H_8)^{0.6}}{100}.$$

$$V_{\text{ПГ}}^0 = V_{CO_2} + V_{H_2O} + V_{N_2}.$$

0,1<sup>3</sup>

1<sup>3</sup>

8,2<sup>3</sup>

9,2<sup>3</sup>

: N<sub>2</sub> — 6,3<sup>3</sup>

— 1,1<sup>3</sup>

2 ( )

— 1,8<sup>3</sup>.

(SAGD).

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