

# OPEN FLOW TEST DATA

Date: SEPTEMBER 16, 1959

Operator: MOUNTAIN STATE PETROLEUM CO.

Lease: FITTS #1

Location: 31 - 25N - 1E

County: DE WASH State: OK

Formation: P.D.

Pool: ARTESIAN

Casing: 5 1/2 " Set @ 3687

Tubing:        " Set @       

Pay Zone: 3594 To: 3608

Total Depth: 3670 ft.

Choke Size: 3/4

" Choke Constant = C = 14.1605

Stimulation Method:        Flow Through: Casing        Tubing X

Shut-in Pressure Casing: 913 psig / 12 = 325 psia (Shut-in 7 days)

Shut-in Pressure Tubing:        psig / 12 =        psia

Flowing Pressure: P : 31 psig / 12 = 50 psia

Working Pressure: P<sub>w</sub> : 327 psig / 12 = 339 psia

Temperature: T : 119 °F / 460 = 519 °Absolute

F<sub>pv</sub> (from tables) : 1.002 Gravity .870 sp. gr. n .85

$$\text{Choke Volume} = Q = C \times P_t \times F_t \times F_g \times F_{pv}$$

$$14.1605 \times 30 \times 1.0107 \times .943 \times 1.002$$

$$Q = \underline{\hspace{2cm}} \text{ MCF/D}$$

Open Flow - Aof = Q

Aof =

$$\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n$$

$$\left[ \frac{925.625}{746.784} \right]^n$$

= 1.134

Aof =

772

MCF/D

Tested By: W. L. ELLIS

Witnessed By:       



100-443887-100

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The concentration of the *Agrobacterium* suspension was 10<sup>6</sup> cells/ml (A), 10<sup>7</sup> cells/ml (B), 10<sup>8</sup> cells/ml (C), and 10<sup>9</sup> cells/ml (D). The concentration of the *Agrobacterium* suspension was 10<sup>6</sup> cells/ml (A), 10<sup>7</sup> cells/ml (B), 10<sup>8</sup> cells/ml (C), and 10<sup>9</sup> cells/ml (D). The concentration of the *Agrobacterium* suspension was 10<sup>6</sup> cells/ml (A), 10<sup>7</sup> cells/ml (B), 10<sup>8</sup> cells/ml (C), and 10<sup>9</sup> cells/ml (D). The concentration of the *Agrobacterium* suspension was 10<sup>6</sup> cells/ml (A), 10<sup>7</sup> cells/ml (B), 10<sup>8</sup> cells/ml (C), and 10<sup>9</sup> cells/ml (D).

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

100-443888-100

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
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