

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION
GAS WELL TEST DATA SHEET — SAN JUAN BASIN

FORM C-122-A
(EL PASO - 2-1-61)

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, CHACRA, FARMINGTON
& ALL DAKOTA EXCEPT BARKER DOME STORAGE AREA & UTE DOME.)

Pool El Paso Formation El Paso County El Paso
Well Name San Juan 30-3 No. 35
Unit S 7 T 30 R 5 Pay Zone 5300 To 5500 Flow String Casing
Casing O D 2-7/8 Wt 6.4 Set at 5300 Tubing O D None Wt None L None Top Perf.
Operator EL PASO NATURAL GAS COMPANY Purchasing Pipeline EL PASO NATURAL GAS COMPANY

Date Flow Press. Meas. None Period of test flow From 09-28-61 To 10-06-61 SIP Measured 6-28-61

Deadweight Flowing Pressure, psia Flowing Pressure psia
Casing None (a) Tubing None (b) Meter None (c) Chart None (d)

Deadweight Shut-in Pressures, psia Meter Error Friction Loss
Casing 1000 (j) Tubing None (k) None (e) None (f)

7 Day Avg. Flowing Pres., psia
Chart 476 (g) Corrected 476 (h) P_i 476 (i) Gravity .997

G. L. = 3170 $1-e^{-s} =$.206 $(F_c Q)^2 =$ 8.992

$(1-e^{-s})(F_c Q)^2 = R^2 =$ 1770 $P_i^2 =$ 226576 $P_w^2 =$ 220546

$Q = \frac{208}{(\text{integrated})} \times \left[\sqrt{\frac{(c)}{(d)}} \right] = 208$

$D = Q \times \left(\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)} \right)^N = \frac{208 \times .802}{.9156} = 405$



SUMMARY

$P_c =$ <u>1000</u> psia	Company <u>EL PASO NATURAL GAS COMPANY</u>
$Q =$ <u>208</u> MCF/D	By <u>L. L. [Signature]</u>
$P_w =$ <u>476</u> psia	Title <u>Dr. Eng. Engineer</u>
$P_d =$ <u>604</u> psia	Witnessed By <u>None</u>
$D =$ <u>405</u> MCF/D	Company <u>None</u>

NEW MEXICO COMMISSION
GAS-FLUID TEST DATA - SAN JUAN BASIN

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 08-19-2010 BY 60322 UCBAW/SAB

SECRET

10-10-1964

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УПРАВЛЕНИЕ ЗАДЪРЖАТЕЛНИТЕ СИЛИ	1999 г. 10.10.1999 г.	УПРАВЛЕНИЕ ЗАДЪРЖАТЕЛНИТЕ СИЛИ	1999 г. 10.10.1999 г.
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$$\ln \left(\frac{1}{1 - \exp(-\lambda)} \right) = \ln \left(\frac{1}{1 - \exp(-\lambda_0)} \right) + \ln \left(\frac{1 - \exp(-\lambda_0)}{1 - \exp(-\lambda)} \right)$$

Figure 1. The effect of the concentration of the polymer solution on the surface free energy of the polymer film. The surface free energy of the polymer film decreased with increasing the concentration of the polymer solution.

[illegible][illegible]

Figure 1. The effect of the concentration of the H_2O_2 solution on the amount of the released H_2O from the H_2O_2 -loaded hydrogel. The amount of the released H_2O was measured by the weight change of the hydrogel. The concentration of the H_2O_2 solution was 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, and 1.0 wt. %.

Table 1. *Continued*

Figure 1 consists of six line graphs arranged horizontally, each representing a different age group of children. The y-axis for all graphs is 'Percentage of correct responses' ranging from 0 to 100. The x-axis for all graphs is 'Condition' with categories A, B, C, D, and E. The age groups are: 1. 10-12 years, 2. 13-15 years, 3. 16-18 years, 4. 19-21 years, 5. 22-24 years, and 6. 25-27 years. The graphs show that performance generally increases with age, with the 25-27 year group showing the highest performance across all conditions.

100

10012

[illegible][illegible]

1. The first step is to identify the variables involved in the problem. In this case, the variables are the number of hours worked (H) and the number of hours of leisure (L). The total number of hours available is 24 hours per day.

2. The second step is to write down the objective function, which is the function that we want to maximize or minimize. In this case, the objective function is the total utility (U), which is a function of the number of hours worked (H) and the number of hours of leisure (L).

3. The third step is to write down the constraints, which are the conditions that must be satisfied. In this case, the constraints are:

- The total number of hours worked (H) must be less than or equal to 24 hours.
- The total number of hours of leisure (L) must be less than or equal to 24 hours.
- The total number of hours worked (H) plus the total number of hours of leisure (L) must be equal to 24 hours.

4. The fourth step is to solve the problem using the method of Lagrange multipliers. This involves writing down the Lagrangian function, which is a function of the variables H and L, and the Lagrange multipliers λ_1 and λ_2 . The Lagrangian function is then differentiated with respect to H and L, and the resulting equations are solved for H and L.

5. The fifth step is to check the solution to make sure that it satisfies all the constraints. In this case, the solution is H = 16 hours and L = 8 hours, which satisfies all the constraints.

6. The sixth step is to interpret the results. In this case, the results show that the individual should work 16 hours and have 8 hours of leisure to maximize their utility.

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