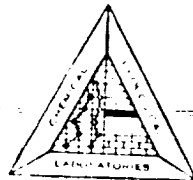


Copy for Mr. Arnold

CHEMICAL & GEOLOGICAL LABORATORIES

CHEMISTS CORE ANALYSTS ENGINEERS



P. O. BOX 279
CASPER, WYOMING

Bolack #10
Horseshoe - Gallup

December 29, 1958

Barrels flowed determined by actual tank gauges as follows:

8:15 A.M. through 10:15 A.M. Swab and Flow

0 to 10'-3" = 205 Bbls.
0 to 10'-3" = 205 "
0 to 2'-7" =
0 to 2'-10" = 109 Bbls.

519 Bbls.



10:15 to 10:45 A.M.

Open Flow 10'-3" to 11' 10 1/2" = 32 1/2 Bbls.
10'-3" to 11' 10 1/2" = 32 1/2 Bbls.

130 Bbls/Hr.

10:45 to 11:15 A.M.

Open Flow 11' 10 1/2" to 13' 7 1/2" = 35 Bbls.
11' 10 1/2" to 13' 7 1/2" = 35 Bbls.

140 Bbls/Hr.

11:15 to 11:45 A.M.

Open Flow 13' 7 1/2" to 14' 11 1/2" = 27 Bbls.
13' 7 1/2" to 14' 11 1/2" = 27 Bbls.

108 Bbls/Hr.

11:45 to 12:15 P.M.

Open Flow 14' 11 1/2" to 16' 6" = 31 Bbls.
14' 11 1/2" to 16' 6" = 31 Bbls.

124 Bbls/Hr.

12:15 to 12:45 P.M.

Avg. @ 126 Bbls/Hr. = 3,024 Bbls/Day

Restricted Flow 16' 6" to 17' 5" = 18 Bbls.
16' 6" to 17' 5" = 18 Bbls.

72 Bbls/Hr.

12:45 to 1:15 P.M.

Restricted Flow 17' 5" to 18' 3" = -133 Bbls.
17' 5" to 18' 3" = -140 Bbls.
18' 10" to 18' 3" = +150 Bbls.
18' 7" to 18' 3" = +153 Bbls.

60 Bbls/Hr.

Productivity index determined as follows:

Bbls/day (3024)
Static Psi (255) - Flow. Psi (163)

(32.87)
= P. I.

Calculated absolute open flow potential:

Bbls/day = P. I. (32.87)

Static Psi (255) - Flow. Psi (0)

Calculated absolute open flow potential = 8,382 Bbls/per day

Witnessed by

[Signatures]