

Initial
Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 19 77

Form C122-A
Revised 1-1-68

POOL NAME Blanco	POOL SLOPE n = .75	FORMATION Mesa Verde	COUNTY San Juan
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Meter No. 89654-01

COMPANY Union Texas Petroleum			WELL NAME AND NUMBER Johnston Federal #8-A		
UNIT LETTER 0	SECTION 7	TOWNSHIP 31N	RANGE 9W	PURCHASING PIPELINE El Paso	
CASING O.D. - INCHES 7.000 4.500	CASING I.D. - INCHES 4.052	SETBACK DEPTH - FEET 3658 5030	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 5989
GAS PAY ZONE FROM 5380 TO 5983		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .673	GRAVITY X LENGTH 4031
DATE OF FLOW TEST FROM 6-20-77 TO 6-28-77			DATE SHUT-IN PRESSURE MEASURED 5-9-77		

PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWt)	(b) Flowing Tubing Pressure (DWt)	(c) Flowing Meter Pressure (DWt)	(d) Flow Chart Static Reading	(e) Meter Error (Item c - Item d)	(f) Friction Loss (a-c) or (b-c)	(g) Average Meter Pressure (Integr.) 236
(h) Corrected Meter Pressure (g+e) 236	(i) Avg. Wellhead Press. $P_i = (h+f)$ 236	(j) Shut-in Casing Pressure (DWt) 676	(k) Shut-in Tubing Pressure (DWt) 664	(l) $P_c =$ higher value of (j) or (k) 676	(m) Del. Pressure $P_d = \frac{80}{540} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D 1163	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ -----	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ -----	Corrected Volume Q = 1163 MCF/D
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WORKING PRESSURE CALCULATION

$(1-e^{-s})$ 0.254	$(F_c Q_m)^2 (1000)$ 119,564	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$ 30,369	P_t^2 55,696	$P_w^2 = P_t^2 + R^2$ 86,065	$P_w = \sqrt{P_w^2}$ 293
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DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \underline{1163} \left[\frac{165,376}{370,911} \right]^n = \left(\frac{.4459}{.5456} \right)^n = \underline{.5456} = \underline{635} \text{ MCF/D}$$

REMARKS: Initial test only.
4.500 10.5 # liner set from 3469 to 6030

SUMMARY

Item h **236** ✓ Psia
P_c **676** ✓ Psia
Q **1163** MCF/D
P_w **293** Psia
P_d **540** ✓ Psia
D **635** MCF/D

Company **Union Texas Petroleum**
By **Elledge Consulting & Prod. Co.**
Title **Agent**
Witnessed By _____
Company _____


