

NEW MEXICO OIL CONSERVATION COMMISSION
WELL DELIVERABILITY TEST REPORT FOR 19 68Form C122-A
Revised 1-1-68

POOL NAME Basin	POOL SLOPE n = .75	FORMATION Dakota	COUNTY Rio Arriba
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COMPANY El Paso Natural Gas Company			WELL NAME AND NUMBER Johnston "A" No. 13		
UNIT LETTER G	SECTION 36	TOWNSHIP 27	RANGE 6	PURCHASING PIPELINE El Paso Natural Gas Co.	
CASING O.D. - INCHES 4.500	CASING I.D. - INCHES 4.052	SET AT DEPTH - FEET 7735	TUBING O.D. - INCHES 2.375	TUBING I.D. - INCHES 1.995	TOP - TUBING PERF. - FEET 7406
GAS PAY ZONE FROM 7424 TO 7660		WELL PRODUCING THRU CASING TUBING X		GAS GRAVITY .678	GRAVITY X LENGTH 5021 ✓
DATE OF FLOW TEST FROM 11-21-68 TO 11-29-68			DATE SHUT-IN PRESSURE MEASURED 8-27-68		

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.)
				0	0	505
(h) Corrected Meter Pressure (g+a)	(i) Avg. Wellhead Press. $P_w = (h+f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k)	(m) Del. Pressure $P_d = \frac{50}{1320} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
505	505 ✓	2635	2639	2639 ✓	1320 ✓	

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D	Quotient of $\frac{\text{Item c}}{\text{Item d}}$	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$	Corrected Volume
731	1.0000	1.0000	Q = 731 MCF/D

WORKING PRESSURE CALCULATION

$(1-e^{-s})$	$(F_c Q_m)^2 (1000)$	$R^2 = (1-e^{-s}) (F_c Q_m)^2 (1000)$	P_t^2	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.306	47235	14454	255025	269479	519 ✓

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{731}{\left[\frac{5221921}{6694842} \right]^n} = \frac{.7799}{.8298} = 607 \text{ MCF/D}$$

REMARKS: New well first delivered 10-23-68.

SUMMARY

Item h 505 ✓ Psia
 P_c 2639 ✓ Psia
 Q 731 MCF/D
 P_w 519 Psia
 P_d 1320 ✓ Psia
 D 607 ✓ MCF/D

Company EL PASO NATURAL GAS COMPANY
 By H. L. Kendrick
 Title Regional Well Test Engineer
 Witnessed By _____
 Company _____

