

NEW MEXICO OIL CONSERVATION COMMISSION INITIAL WELL DELIVERABILITY TEST REPORT FOR 19 67

Form C122-A
Revised 1-1-66

POOL NAME <u>Antec</u>	POOL SLOPE n= <u>.85</u>	FORMATION <u>Pictured Cliffs</u>	COUNTY <u>San Juan</u>
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COMPANY <u>El Paso Natural Gas Company</u>			WELL NAME AND NUMBER <u>Lackey A No. 4</u>		
UNIT LETTER <u>K</u>	SECTION <u>11</u>	TOWNSHIP <u>29</u>	RANGE <u>10</u>	PURCHASING PIPELINE <u>El Paso Natural Gas Company</u>	
CASING O.D. - INCHES <u>2.875</u>	CASING I.D. - INCHES <u>2.441</u>	SET AT DEPTH - FEET <u>2349</u>	TUBING O.D. - INCHES <u>NO TUBING</u>	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
GAS PAY ZONE FROM <u>2210</u> TO <u>2282</u>		WELL PRODUCING THRU CASING <u>X</u> TUBING		GAS GRAVITY <u>.658</u>	GRAVITY X LENGTH <u>1474</u> ✓
DATE OF FLOW TEST FROM <u>10-30-67</u> TO <u>11-7-67</u>			DATE SHUT-IN PRESSURE MEASURED <u>8-10-67</u>		

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.)
						<u>221</u>
(h) Corrected Meter Pressure (g + e)	(i) Avg. Wellhead Press. $P_t = (h + f)$	(j) Shut-in Casing Pressure (DWt)	(k) Shut-in Tubing Pressure (DWt)	(l) P_c = higher value of (j) or (k)	(m) Del. Pressure $P_d = \frac{80}{526} \% P_c$	(n) Separator or Dehydrator Pr. (DWt) for critical flow only
<u>221</u> ✓	<u>221</u> ✓	<u>658</u>		<u>658</u>		

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
<u>523</u>	<u>1.0000</u>	<u>1.0000</u>	Q = <u>523</u> ✓ 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
<u>.101</u> ✓	<u>8427</u> ✓	<u>851</u> ✓	<u>48841</u> ✓	<u>49692</u> ✓	<u>223</u> ✓

DELIVERABILITY CALCULATION

$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n =$	<u>523</u>	$\left[\frac{156288}{383272} \right]^n =$	<u>.4077</u> ✓	$=$	<u>.4663</u> ✓	$=$	<u>244</u> ✓ MCF/D
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REMARKS:

New Well. First Delivered 10-11-67.

SUMMARY

Item h 221 ✓ Psia
 P_c 658 ✓ Psia
 Q 523 ✓ MCF/D
 P_w 223 ✓ Psia
 P_d 526 ✓ Psia
 D 244 ✓ MCF/D

Company El Paso Natural Gas Company
 By H. L. Kendrick
 Title Regional Well Test Engineer
 Witnessed By _____
 Company _____

