Init. Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 70

Form C122-A
Revised 1-1-68

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Aztec	n = .85	Pictured Cliffs	San Juan

87-138

COMPANY			WELL NAME AND NUMBER		
El Paso Natural Gas Company			Herrin No. 1-Y		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
K	13	29	10	El Paso Natural Gas Company	
CASING O.D. - INCHES	CASING I.D. - INCHES	SET AT DEPTH - FEET	TUBING O.D. - INCHES	TUBING I.D. - INCHES	TOP - TUBING PERF. - FEET
2.875	2.441	2360	No Tubing		
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 2244 TO 2278		CASING XX	TUBING	.656	1472
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 3-28-70 TO 4-5-70			1-5-70		

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	215
(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**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
215	215	644	---	644	P_d= 80 %P_c = 515	

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
408	1.0000	1.0000	Q = 408 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.101	5129	518	46225	46743	216

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 408 \left(\frac{149511}{367993}\right)^n = (.4063)^n = .4651 = 190 \text{ MCF/D}$$

REMARKS: New Well, first delivered 2-19-70.

SUMMARY

Item h	215	Psia
P_c	644	Psia
Q	408	MCF/D
P_w	216	Psia
P_d	515	Psia
D	190	MCF/D

Company EL PASO NATURAL GAS COMPANY
By D. E. McGuire
Title
Witnessed By
Company

RECEIVED
APR 16 1970
OIL CON. COM.
DIST. 3

OK