Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 69

Form C122-A
Revised 1-1-68

POOL NAME	POOL SLOPE	FORMATION	COUNTY
Undesignated	n = 0.75	Chacra	Rio Arriba

COMPANY			WELL NAME AND NUMBER		
J. Gregory Merrion & Robert L. Bayless			Fields Com #1		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
F	31	26N	6W	El Paso Natural Gas Co.	
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	3325	-	-	-
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 3170 TO 3190		CASING X TUBING		0.728	2308
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 11-19-69 TO 11-27-69			8-22-69		

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.)
205	-	199	199	-	6	199
(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**
199	205	739	-	739	P_d= 80 %P_c = 591	--

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
1116	--	--	Q = 1116 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
0.154	38.377	5.910	42.025	47.935	219

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 1116 \left[\left(\frac{196,840}{498,160}\right)^n = (0.39513)^n = 0.4984\right] = 556 \text{ MCF/D}$$

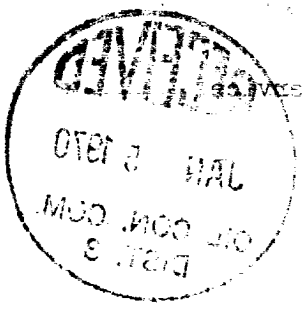
REMARKS: Tubingless completion.

SUMMARY

Item h	199	Psia
P_c	739	Psia
Q	1116	MCF/D
P_w	219	Psia
P_d	591	Psia
D	556	MCF/D

Company J. Gregory Merrion & Robert L. Bayless
By J. Gregory Merrion
Title Operator
Witnessed By Merle Ellsaesser
Company Fizz's Pumping Service

RECEIVED
JAN 5 1970
OIL CON. COM.
DIST. 3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