Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 68

Form C-122-A
Revised 1-1-68

POOL NAME	POOL SLOPE	FORMATION	COUNTY
UNDESIGNAT	n=.85	PC	SJ

75-754

COMPANY			WELL NAME AND NUMBER		
EL PASO NATURAL GAS CO			ROELOFS A #5		
UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE	
M	14	29	8	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	3422	0.000	0.000	0
GAS PAY ZONE		WELL PRODUCING THRU		GAS GRAVITY	GRAVITY X LENGTH
FROM 3436 TO 3450		CASING X	TUBING	0.658	2252
DATE OF FLOW TEST			DATE SHUT-IN PRESSURE MEASURED		
FROM 04/07/68 TO 04/15/68			12/06/67		

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	0	0	0	0	477
(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= 80 %P_c**	**(n) Separator or Dehydrator Pr. (DWt) for critical flow only**
477	477	1002	0	1002	802	

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
234	1.0000	1.0000	Q = 234 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.151	1,687	255	227529	USE PT2	477

DELIVERABILITY CALCULATION

$$D = Q\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 234 \left(\frac{360800}{776475}\right)^n = (0.4646)^n = 0.5212 = 122 \text{ MCF/D}$$

REMARKS: New Well First Delivered 3-8-68.

OK

RECEIVED
MAY 7 1968
OIL CON. COM.
DIST. 3

SUMMARY

Item h	477	Psia
P_c	1002	Psia
Q	234	MCF/D
P_w	477	Psia
P_d	802	Psia
D	122	MCF/D

Company EL PASO NATURAL GAS
By A B Grant
Title
Witnessed By
Company

Initial Deliverability

NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 68

Form C-122-A
Revised 1-1-55

POOL NAME	POOL SLOPE	FORMATION	COUNTY
[illegible]	n = [illegible]	[illegible]	SJ

75-754

COMPANY	WELL NAME AND NUMBER
EL PASO NATURAL GAS CO.	[illegible] A #5

UNIT LETTER	SECTION	TOWNSHIP	RANGE	PURCHASING PIPELINE
	14	25	8	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
4.475	[illegible]	[illegible]	1.900	[illegible]	

GAS PAY ZONE	WELL PRODUCING THRU	GAS GRAVITY	GRAVITY X ...
FROM 2456 TO [illegible]	CASING / TUBING	[illegible]	2256

DATE OF FLOW TEST	DATE SHUT-IN PRESSURE MEASURED
FROM 04/04/68 TO 04/[illegible]/68	12/ 6/67

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.)
						472

(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 = ___ % P_c	(n) Separator or Dehydrator Pr. (Dwt) For critical flow only
472	472	1003				

FLOW RATE CORRECTION (METER ERROR)

Integrated Volume – MCF/D	Quotient of Item c / Item d	$\sqrt{\text{Item c} / \text{Item d}}$	Corrected Volume
224	1.[illegible]	1.[illegible]	Q = 224 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	$P_w^2 = P_t^2 + R^2$	$P_w = \sqrt{P_w^2}$
.151	1.[illegible]	[illegible]	22[illegible]	[illegible]	472

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2}\right]^n = 224 \left(\frac{[illegible]}{776[illegible]}\right)^n = (.4640)^n = [illegible] \text{ MCF/D}$$

REMARKS: New Well First Delivered 3-8-68.

SUMMARY

Item h	472	Psia
P_c	1003	Psia
Q	224	MCF/D
P_w	472	Psia
P_d		Psia
D	[illegible]	MCF/D

Company EL PASO NATURAL GAS CO.
By [illegible]
Title
Witnessed By
Company

75-754 1637