

OIL CONSERVATION COMMISSION

BOX 1980

HOBBS, NEW MEXICO

NOTICE OF GAS CONNECTION

DATE September 26, 1972

This is to notify the Oil Conservation Commission that connection for
the purchase of gas from the El Paso Natural Gas Co. Shell State #14
Operator. Lease

H 3-20S-37E Eumont El Paso Natural Gas Company
Well Unit S.T.R. Pool Name of Purchaser

was made on September 21, 1972

El Paso Natural Gas Company
Purchaser

T. R. Elliott
Representative

T. R. Elliott

Gas Production Status Analyst
Title

cc: To operator
Oil Conservation Commission - Santa Fe
Oil Conservation Commission - Artesia (2)
Proration
H. P. Logan
T. J. Crutchfield
E. J. Coel
File

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-6-72					
Company EL PASO NATURAL GAS COMPANY						Connection None					
Pool Eumont						Formation Queen					
Completion Date 7-15-59			Total Depth 3961			Plug Back TD 3744		Elevation 3574 GL		Farm or Lease Name Shell State	
Csg. Size 5 1/2		Wt. 15.5		Set At 3913		Perforations: From 3583 To 3710				Well No. 14	
Thq. Size 2"		Wt.		Set At 3739		Perforations: From Open ended To				Unit Soc. Twp. Rge. H 3 20-S 37-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		County Lea			
Producing Thru Csg.		Reservoir Temp. °F 6		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico			
L		H		G _g .674 (Assumed)		% CO ₂		% N ₂		% H ₂ S	
								Prover 2"		Meter Run	
										Taps	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							90		205		
1.	2	x	3/32	179		82	90	82	179	82	1 hr.
2.	2	x	1/8	159		84	90	84	159	84	1 hr.
3.	2	x	3/16	124		82	90	82	124	82	1 hr.
4.	2	x	7/32	102		82	90	82	102	82	1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.1410		192.2	.9795	1.218	1.019	33
2	.2648		172.2	.9777	1.218	1.017	55
3	.6082		137.2	.9795	1.218	1.014	101
4	.8393		115.2	.9795	1.218	Nil	115
5							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio <u>Too small to measure</u> Mcf/bbl.
1.	.29	542	1.42	.963	A.P.I. Gravity of Liquid Hydrocarbons _____ Deq.
2.	.26	544	1.42	.967	Specific Gravity Separator Gas <u>.674 (Assumed)</u> XXXXXXXXXX
3.	.21	542	1.42	.972	Specific Gravity Flowing Fluid XXXXXX
4.	.17	542	1.42	Nil	Critical Pressure <u>669</u> P.S.I.A. P.S.I.A.
5.					Critical Temperature <u>382</u> R R

P _c <u>218.2</u>	P _c ² <u>47.0</u>	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.388$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.388$	
NO.	P _t ²	P _w	P _w ²
1			36.9
2			29.7
3			18.8
4			13.3
5			34.3

Absolute Open Flow <u>160</u> Mcfd @ 15.025		Angle of Slope θ <u>45°</u>	Slope, n <u>1.000</u>
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Remarks: <u>On last rate, well started making small amount of oily mist. When prover was pulled, it contained large amount of oil. Tubing is loaded with fluid. Pressure did not change throughout test.</u>	
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Approved By Commission: 	Conducted By: Reggie Reston Randy Kiker	Calculated By: Randy Kiker	Checked By:
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EL PASO NATURAL GAS CO.

SHELL STATE # 14.

$P_0^2 - P_w^2$ (TNSDS.)

Q_2 50 = LOG 2.69897

Q_1 5 = LOG 1.69897

$n = 1.000$

46 7200
LOGARITHMIC
2 X 2 CYCLES
MADE IN U.S.A.
KEUFFEL & ESSER CO.

$\theta = 45^\circ$
 $N = 1.000$

AOI-160M

Q_1

Q_2

$Q - MCF/DAY$