NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 10-17-86	
Company: SHELL WESTERN E&P INC.	Connection: SHELL WESTERN E&P INC.			
Pool: ANTELOPE RIDGE ATOKA	Formation: ATOKA		Unit: ANTELOPE RIDGE UNIT	
Completion Date: 10-17-86	Total Depth: 13,574'	Plug Back TD: 12,865'	Elevation: 3471' GR	Farm or Lease Name: ANTELOPE RIDGE
Csg. Size: 5" LNR / Wt.: 18# / d: --- / Set At: 13,574'	Perforations: From ___ To ___			Well No.: 7
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: 2.441 / Set At: 11,454'	Perforations: From 12,119' To 12,626'			Unit: G / Sec.: 27 / Twp.: 23S / Rge.: 34E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: 11,352'		County: LEA
Producing Thru: TBG	Reservoir Temp. °F: 68° @ 11,454'	Mean Annual Temp. °F: 82	Baro. Press. – P_a: 13.2	State: NM

L	H	G_g	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.680	0.10	1.12	---		2.900	

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI	2.900 X 0.750	168 HRS SI			4982	54			
1.	" "	390	32	80	3410	65			1 HR
2.	" "	390	59	82	3327	66			"
3.	" "	390	79	72	2941	68			"
4.	" "	600	90	80	2190	66			"
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.675	113.59	403.2	.9813	1.213	1.040	379
2	"	154.24	403.2	.9795	"	1.041	510
3.	"	178.47	403.2	.9887	"	1.043	597
4.	"	234.92	613.2	.9813	"	1.057	791
5.							

NO.	P_t	Temp. °R	T_f	Z
1.	6.35	496	1.29	.832
2.	.60	540	1.40	.932
3.	.60	542	1.41	.925
4.	.60	532	1.38	.919
5.	.92	540	1.40	.885

Gas Liquid Hydrocarbon Ratio: 893 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 52.6 @ 60 Deg.
Specific Gravity Separator Gas: 680 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 767
Critical Pressure: 669 P.S.I.A. 667 P.S.I.A.
Critical Temperature: 385 R 411 R

P_c 4995.2 P_c^2 24952

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			11719.9	13232
2			11159.6	13792
3			8731.0	16221
4			4860.0	20092
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.886$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.886$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 961$

Absolute Open Flow: 961 Mcfd @ 15.025 Angle of Slope θ: 45 Slope, n: 1.000

Remarks:

NOV 1 8 1986

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT I SUPERVISOR

Approved By: New Mexico Oil Conservation Commission	Conducted By: D. E. ASHMORE	Calculated By: D. E. ASHMORE	Checked By: