NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

MAY 2000 RECEIVED OCD - ARTESIA

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 3/22/1999	
Company: Yates Petroleum Corp		Connection: Agave Energy / Dynegy Midstream SerBig Dog South		
Pool: Big Dog South		Formation: Strawn	Unit	
Completion Date: 9/7/1999	Total Depth: 11659	Plug Back TD: 11608	Elevation: 3990	Farm or Lease Name: SHELL LUSK ANB
Csg. Size: 7.000 / Wt.: 26.000 / d: 6.276	Set At: 11659	Perforations: From 11374 To 11445		Well No.: 2
Tbg. Size: 2.375 / Wt.: 4.600 / d: 1.995	Set At: 11305	Perforations: From 11374 To 11445	Unit: E / Sec.: 11 / Twp.: 16S / Rge.: 35E	
Type Well: G.O. Multiple		Packer Set At: 11307	County: Lea	
Producing Thru: Tubing	Resv. Temp. °F: 172 @ 11250	Mean Temp. °F: 62	Baro. Press. - Pa: 13.2	State: New Mexico

L	H	Gg	$\%CO_2$	$\%N_2$	$\%H_2S$	Prover	Meter Run	Taps
11659	11659	0.716	0.465	3.372	0.000	0.000	2.000	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI.	0.000	x	0.000	0	0.0	0	1210	0			0
1.	2.067	x	1.000	310	172.0	60	1000	60			24
2.	2.067	x	1.000	310	464.0	60	770	60			24
3.	2.067	x	1.000	310	726.0	60	540	60			24
4.	2.067	x	1.000	310	914.0	60	310	60			24
5.		x									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	4.946	235.8	323.2	1.0000	1.182	1.037	1429
2.	4.946	387.3	323.2	1.0000	1.182	1.037	2347
3.	4.946	484.4	323.2	1.0000	1.182	1.037	2936
4.	4.946	543.5	323.2	1.0000	1.182	1.037	3294
5.							

NO.	Pr	Temp °R	Tr	Z
1.	0.49	520	1.35	0.930
2.	0.49	520	1.35	0.930
3.	0.49	520	1.35	0.930
4.	0.49	520	1.35	0.930
5.				

Gas Liquid Hydrocarbon Ratio	0 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.	
Specific Gravity Separator Gas	0.716	xxxxxxxxx
Specific Gravity Flowing Fluid	xxxxxxxxx	0.716
Critical Pressure	664 P.S.I.A.	664 P.S.I.A.
Critical Temperature	384 °R	384 °R

Pc 1223.2 Pc^2 1496.2

NO.	Pt^2	Pw	Pw^2	$Pc^2 - Pw^2$
1.	1026.6	1047.6	1097.4	398.8
2.	613.4	901.2	812.2	684.0
3.	306.0	792.9	628.6	867.6
4.	104.5	723.7	523.7	972.5
5.				

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = 2.187$ (2) $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 2.063$

AOF = Q $\left[\frac{Pc^2}{Pc^2 - Pw^2}\right]^n = 4841$

Absolute Open Flow: 4841 Mcfd @ 15.025 | Angle of Slope θ: 43 | Slope, n: 0.925

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Rocky Harper	Katie Brunson	Pinson McWhorter