

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator General Atlantic Resc., Inc.						Lease or Unit Name Burton Flats Deep Unit #41					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3/14/94		Well No. 41			
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr. - Sec. - TWP - Rge.			
Csg. Size	Wt.	d	Set At	Perforations: From: 10,779 To: 10,794				County Eddy			
Tbg. Size 2 7/8"	Wt. 6.5	d 2.441	Set At 10,600	Perforations: From: To:				Pool			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10,600		Formation Atoka			
Producing Thru tubing		Reservoir Temp. °F 180 @ 10,600		Mean Annual Temp. °F 60		Baro. Press - P 13.2		Connection			
L 10,600	H 10,600	Gg .650	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run 4.026	Taps flg.		

FLOW DATA						TUBING DATA			CASING DATA			Duration of Flow
NO.	Prover Line 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							3120		pkc		72 hr.	
1.	4	X	1.5000	150	4.50	15	2830		pkc		1 hr.	
2.	4	x	1.5000	150	18.00	35	2400		pkc		1 hr.	
3.	4	X	1.5000	150	24.00	54	1900		pkc		1 hr.	
4.	4	X	1.5000	150	24.00	63	1810		pkc		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 Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	10.84	27.10	163.2	1.046	1.240	1.030	392
2.	10.84	54.20	163.2	1.025	1.240	1.020	762
3.	10.84	62.58	163.2	1.006	1.240	1.018	862
4.	10.83	62.58	163.2	.9971	1.240	1.016	852
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.24	445	1.18	.943	82.4	
2.	.24	595	1.32	.962		
3.	.24	514	1.37	.965		
4.	.24	523	1.39	.968		
5.						

P _c 3133.2 P _c ² 9816.9				A.P. I Gravity of Liquid Hydrocarbons 52.5 @ 60		Deg.	
				Specific Gravity Separator Gas .650		XXXXXXXXXX	
				Specific Gravity Flowing Fluid XXXXX		G mix = .687	
				Critical Pressure 670		P.S.I.A. 669	
				Critical Temperature 375		R 385	

NO.	p _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.694$	2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.428$
1.		2843.5	8085.5	1731.4		
2.		2414.5	5829.8	3987.1		
3.		2005.2	4020.7	5796.2		
4.		1825.3	3331.8	6485.1		
5.						

AOE = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.232$

Absolute Open Flow	1,231	Mcf/d @ 15.025	Angle of Slope θ	56	Slope, n	.6757
--------------------	-------	----------------	------------------	----	----------	-------

Remarks: Well made 1.45 BBLs. of 52.5 API Gravity condensate

Approved By Division	Conducted By: Omega Production Services	Calculated By: BM	Checked By: BM
----------------------	--	----------------------	-------------------