

OCT 15 1992

Form C-122
Revised 10-1-78

dst
file

1992

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 10-6-92	
Company BARBARA FASKEN		Connection FLARE	
Pool EDDY UNDESIGNATED <i>Indian Basin Strawn</i>		Formation STRAWN	
Completion Date 9-30-92		Total Depth 10356	Plug Back TD 9714
Elevation 4139 GL		Farm or Lease Name SKELLY FED	
Coq. Size 4 5	Wt. 11.6	d 4.000	Set At 10145
Perforations: From 9082 To 9088		Well No. #1	
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 8469
Perforations: From - To -		Unit M	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple SINGLE (GAS)		Packer Set At 8429	County EDDY
Producing Thru TBC (GAS)	Reservoir Temp. °F 150 @ 9085	Mean Annual Temp. °F 60	State NM
L 9085	H 9085	G _a 0.631	% CO ₂ 0.276
% N ₂ 0.929	% H ₂ S 0.000	Prover 0	Meter Run 4.0
Taps FLG.			

FLOW DATA					TUBING DATA		BHP DATA		Duration of Flow	
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
SI						2739		3462	150	72 hr.
1.	4.0	x 1.25	300	18	60	2455	85	3084	150	1
2.	4.0	x 1.25	310	38	60	2240	85	2826	150	1
3.	4.0	x 1.25	310	35	60	2133	85	2692	150	1
4.	4.0	x 1.75	300	31	60	1366	85	1767	150	1
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	7.469	75.08	313.2	1.000	1.259	1.039	734
2	7.469	110.82	323.2	1.000	1.259	1.040	1084
3	7.469	106.54	323.2	1.000	1.259	1.040	1040
4	14.93	98.54	313.2	1.000	1.259	1.039	1924
5							

NO.	R _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.602	520	1.425	0.927	398.5		0.631		669	365
2	0.622	520	1.425	0.925						
3	0.622	520	1.425	0.925						
4	0.602	520	1.425	0.927						
5										

NO.	P ₁	P _w	R _w ²	P _e ² - R _w ²
1	3097.2	9593	2484	
2	2839.2	8061	4016	
3	2705.2	7318	4759	
4	1780.2	3169	8908	
5				

(1) $\frac{P_e^2}{P_e^2 - R_w^2} = 4.86$ (2) $\left[\frac{P_e^2}{P_e^2 - R_w^2} \right]^n = 3.24$

AOG = Q $\left[\frac{P_e^2}{P_e^2 - R_w^2} \right]^n = 2320$

Absolute Open Flow	2320	Mcf @ 15.025	Angle of Slope @	Slope, n	0.743
--------------------	------	--------------	------------------	----------	-------

Remarks: CHOKE SIZES = 1st rate 8/64. 2nd. 10/64. 3rd. 13/64. 4th. 17/64

Approved By Division	Conducted By: KELTIC SERVICES	Calculated By: JIM SMITH	Checked By:
----------------------	----------------------------------	-----------------------------	-------------