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O. C. C.
ARTESIA, OFFICE

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: 11/5/70

Company: BYRON M. McKNIGHT	Connection: Pending		
Pool	Formation: Atoka		Unit: --
Completion Date: 11/15/70	Total Depth: ?	Plug Back TD: ?	Elevation: ?
Farm or Lease Name: Grandi Ranch			
Csg. Size: 5 1/2" / Wt.: 20 / d: 4.778 / Set At: ? --	Perforations: From 10,608 To 10,618		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7 / d: 1.995 / Set At: ?	Perforations: From 10,658 To 10,671		Unit: J / Sec.: 19 / Twp.: 23S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 10,500		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2 / State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
14,500 ?		.612	.60	.56	0	2"		

FLOW DATA / TUBING DATA / CASING DATA

NO	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							864	60	Packer		15 days
1.	2.00	x	3/32	~~849~~	~~.37~~	73	849	60	"		1 hour
2.	2.00	x	3/16	~~823~~	~~.75~~	76	823	60	"		"
3.	2.00	x	1/4	~~761~~	~~1.21~~	73	761	60	"		"
4.	2.00	x	5/16	~~704~~	~~1.62~~	70	704	60	"		"
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	.1410	~~7.73~~	410.2	.9877	~~1.278~~ 1.260	1.037 34	~~207~~ 75
2.	.6082	~~15.75~~	426.2	.9850	"	1.036 37	~~414~~ 337
3	1.087	~~25.24~~	410.2	.9887	"	1.037 37	~~666~~ 592
4.	1.672	~~33.73~~	410.2	.9905	"	1.037 36	~~890~~ 811
5.							

NO.	P_r	Temp. °R	T_r	Z
1	.61	533	~~1.451~~ 1.48	~~.930~~ 5
2.	~~.63~~ .64	536	~~1.46~~ 1.47	~~.929~~ 5
3.	.61	533	1.45 1.48	.930 5
4.	.61	530	~~1.45~~ 1.47	.930 2
5				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 615 P.S.I.A. _____ P.S.I.A.
Critical Temperature 360 R _____ R

P_c 1143.2 P_c^2 1306.9

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	Used	1124.2	1263.8	43.1
2	Amerada	1090.2	1188.5	118.4
3	Bomb	1008.2	1016.5	290.4
4		937.2	878.3	428.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.049$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.341$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2104$

Absolute Open Flow ~~1,790~~ 2100 Mcfd @ 15.025 — Angle of Slope θ ~~56.5~~ — Slope, n 763 ~~.662~~

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	?	?	