

STATE OF KANSAS - CORPORATION COMMISSION
MULTIPOINT BACK PRESSURE TEST

FORM CG-1

TYPE TEST: Initial Annual Special TEST DATE: 7/16/90

COMPANY: [REDACTED] LEASE: Rollins WELL NO.: 3-9

COUNTY: Edwards LOCATION: NE SE SW SECTION: 9 TWP: 24S RNG: 17W ACRES: [REDACTED]

FIELD: Massey West RESERVOIR: Miss-Kinderhook PIPELINE CONNECTION: None

COMPLETION DATE: 6/21/90 PLUG BACK TOTAL DEPTH: [REDACTED] PACKER SET AT: None

CASING SIZE: 4.5" WT. [REDACTED] ID [REDACTED] SET AT: 4459' PERF.: 4336' TO: 4379'

TUBING SIZE: 2.375" WT. [REDACTED] ID [REDACTED] SET AT: 4312' PERF.: Open TO: [REDACTED]

TYPE COMPLETION (Describe): Single-gas TYPE FLUID PRODUCTION: Water

PRODUCING THRU: Tubing RESERVOIR TEMPERATURE F: [REDACTED] BAR PRESS - P_a: 14.4 Psia

GAS GRAVITY - G_g: .633 % CARBON DIOXIDE: .11 % NITROGEN: 8.14 API GRAVITY OF LIQUID: [REDACTED]

VERTICAL DEPTH (H): [REDACTED] TYPE METER CONN.: None (METER RUN) (PROVER) SIZE: 2"

REMARKS: [REDACTED]

OBSERVED DATA

DURATION OF SHUT-IN 576 HR.

RATE No.	ORIFICE SIZE in.	(METER) (PROVER) PRESSURE psig	DISP. (h _w) (h _d)	FLOWING TEMP. t	WELL-HEAD TEMP. t	CASING WELLHEAD PRESS.		TUBING WELLHEAD PRESS.		DURATION HOURS	LIQUID PROD. Bbls.
						psig	(P _w)(P _i)(P _o) psia	psig	(P _w)(P _i)(P _c) psia		
SHUT IN						1300	1314.4	1200	1214.4	576	
1	.500	37		74°		1259	1273.4	1169	1183.4	1	0
2	.500	87		66°		1230	1244.4	1135	1149.4	1	0
3	.500	137		60°		1177	1191.4	1060	1074.4	1	0
4	.500	191		70°		1100	1114.4	850	864.4	1	1.67
5											

RATE OF FLOW CALCULATIONS

RATE NO.	COEFFICIENT (F _i)(F _p) Meid	(METER) (PROVER) PRESSURE psia	EXTENSION $\sqrt{P_m x h_w}$	GRAVITY FACTOR F _g	FLOWING TEMP FACTOR F _t	DEVIATION FACTOR F _{pv}	RATE OF FLOW Q Meid	GOR	G _m
1	4.388	51.4		1.257	.9868		280		
2	4.388	101.4		1.257	.9943		556		
3	4.388	151.4		1.257	1.000	1.012	845		
4	4.388	205.4		1.257	.9905	1.014	1138		
5									

PRESSURE CALCULATIONS

RATE NO.	P _i psia	P _o psia	P _w psia	(P _o) ² THOUSANDS	(P _w) ² THOUSANDS	PLOTING POINTS		100 $\frac{P_w - P_a}{P_c - P_a}$
						(P _c) ² - (P _w) ² THOUSANDS	Q Meid	
1	1183.4	1314.4	1273.4	1727.6	1621.5	106.1	280	96.8
2	1149.4	1314.4	1244.4	1727.6	1548.5	179.1	556	94.6
3	1074.4	1314.4	1191.4	1727.6	1419.4	308.2	845	90.6
4	864.4	1314.4	1114.4	1727.6	1241.9	485.7	1138	84.8
5								

INDICATED WELLHEAD OPEN FLOW 3000 Meid @ 14.65 psia "n" = .711

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Executed this the 7th day of August, 1990.

Witness (if any)
For Commission

Rick Hughes-PGTC
For Company
GLM
Checked by

WELL PRESSURE BUILDUP REPORT

WELL NAME Rollins 3-9
PRODUCER NAME F.G. Holl
LOCATION NE SE SW 9-24S-17W
DATE RECORDED 7/16/90

TBG. (PSIG) CSG. (PSIG)
INITIAL S.I. PRESS. 1200 1300
FINAL FLOW PRESS. 850 1100

PRESS. BUILDUP

.5 Min.	<u>900</u>	<u>1110</u>
1.0 Min.	<u>920</u>	<u>1115</u>
1.5 Min.	<u>930</u>	<u>1125</u>
2.0 Min.	<u>935</u>	<u>1130</u>
3.0 Min.	<u>948</u>	<u>1142</u>
4.0 Min.	<u>960</u>	<u>1150</u>
5.0 Min.	<u>970</u>	<u>1157</u>
6.0 Min.	<u>978</u>	<u>1165</u>
7.0 Min.	<u>988</u>	<u>1175</u>
8.0 Min.	<u>991</u>	<u>1175</u>
9.0 Min.	<u>1000</u>	<u>1180</u>
10.0 Min.	<u>1010</u>	<u>1185</u>
15.0 Min.	<u>1040</u>	<u>1205</u>
20.0 Min.	<u>1060</u>	<u>1215</u>
25.0 Min.	<u>1080</u>	<u>1225</u>
30.0 Min.	<u>1095</u>	<u>1230</u>

COMMENTS: Pressures Recorded Following Four-Point Test