

OTIS ENGINEERING CORPORATION

A HALLIBURTON Company

	PREPARED FOR	COMPANY	TELEPHONE	DATE
	<u>Woody Marshall</u>	<u>Marshall Pipe Supply</u>		<u>1/25/88</u>
	FIELD NAME	WELL NAME	COUNTY	STATE
		<u>SPEIGHT #1</u>	<u>Rogers</u>	<u>OK</u>
	CASING SIZE <u>5 1/2</u>	WEIGHT	GRADE	THREAD DEPTH
	LINER SIZE	WEIGHT	GRADE	THREAD DEPTH
	TUBING SIZE UT <u>2 3/4</u> MT LT THREAD <u>Prd</u>			
	DESCRIPTION	I.D.	O.D.	LENGTH ESTIMATE OR DEPTH
15)	←→ 15) ONE Joint 2 3/4 tbg.	1.901	2.375	39.82 G/L
14)	←→ 14) Eight Foot Pup Joint	1.901	2.375	8.12 30.83
13)	←→ 13) 2-16 Joints 2 3/4 tbg (6729.16)	1.901	2.375	6729.16 38.95
12)	←→ 12) Blast Joint	1.901	3.00	19.86 6768.11
11)	←→ 11) Six Foot Pup Joint 2 3/4	1.901	2.375	6.35 6787.97
10)	←→ 10) Eight Foot Pup Joint 2 3/4	1.901	2.375	8.04 6794.32
9)	←→ 9) Eight Foot Pup Joint 2 3/4	1.901	2.375	8.00 6802.36
8)	←→ 8) Two Joints 2 3/4 tbg	1.901	2.375	61.49 6810.36
7)	←→ 7) 2" X.O Skewer	1.875	3.09	2.88 6871.85
6)	←→ 6) THREE Joints 2 3/4 tbg	1.901	2.375	92.57 6874.73
5)	←→ 5) Blast Joint	1.901	3.00	19.90 6967.30
4)	←→ 4) Two Joints 2 3/4 tbg.	1.901	2.375	61.30 6987.20
3)	←→ 3) 2" N-Wipple 1.875 packing Bore 1.791 align	1.791	2.37	1.05 7048.50
2)	←→ 2) I Latch Seal assembly	2.00	3.00	.48 7049.55
1)	←→ 1) 5 1/2 W.B Packer 3.00 Bore (Loaded tbg 6,000# compression)	3.00	4.64	2.96 7050.00
		TOTAL ESTIMATE 7052.96		
	PREPARED BY	OFFICE	TELEPHONE	
	<u>Tommy Hinderliter</u>	<u>Gainesville TX</u>	<u>665-4419</u>	

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HOBBS OFFICE



LTR



Job separation sheet

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-29-88	
Company Marshall Pipe & Supply		Connection None	
Pool Tule-Penn		Formation Penn	
Completion Date		Total Depth 7200	Plug Back TD 7200
		Elevation 4388 GL	
Casing Size 5 1/2"		Well No. 1	Form or Lease Name Speight
Well Size 2 3/8"		Unit Sec. Twp. Rge. S 22 2 S 29 E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Dual		Packer Set At 7050	
Producing Thru Casing		Reservoir Temp. °F 142° 6770	Mean Annual Temp. °F 60°
		Baro. Press. - P _g 13.2	State N.M.
L 6770	H 6770	G _g .662	% CO ₂ .384
		% N ₂ 4.534	% H ₂ S 0
Prover		Meter Run 4"	Taps Flange

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
1.	4	x	1.250	495	14.00	66°	G.G. Dual		1990	CHOKE	48 Hrs.
2.	4	x	1.250	500	29.00	74	G.G. Dual		1897	10/64	1 Hr.
3.	4	x	1.250	500	64.00	74	G.G. Dual		1812	12/64	1 Hr.
4.									1673	14/64	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	7.469	84.35	508.2	.9943	1.229	1.046	805
2.	7.469	122.00	513.2	.9868	1.229	1.047	1,157
3.	7.469	181.23	513.2	.9868	1.229	1.047	1,719
4.							
5.							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	127.8	Mcf/bbl.
1.	.77	526	1.45	.914	A.P.I. Gravity of Liquid Hydrocarbons	69.7 @ 60°	Deg.
2.	.78	534	1.47	.912	Specific Gravity Separator Gas	.662	XXXXXXX
3.	.78	534	1.47	.912	Specific Gravity Flowing Fluid	XXXXX	6 Mix = .682
4.					Critical Pressure	*661	P.S.I.A. *660
5.					Critical Temperature	*364	R *371

F _c 2003.2		F _c 4012.8	
NO.	P ₁ ²	P _w	P _w ²
1			3649.3
2			3332.4
3			2845.5
4			
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.438$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.234$	
AOF = 0		$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.840$	

Absolute Open Flow	3,840	Mcf @ 15.025	Angle of Slope @	56.9	Slope, n	.651
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Remarks: * Corrected to 4.53% N₂
Made 1.80 bbls condensate

APPROVED BY: <u>JOHN J. TON</u> DISTRICT SUPERVISOR	CONDUCTED BY: <u>W.S.</u>	CALCULATED BY: <u>B.M.</u>	CHECKED BY: <u>B.M.</u>
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FEB 22 1988