

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

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Melzer Exploration Company					Lease or Unit Name Amerada Wise					
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3/12/92		Well No. 2E			
Completion Date 4/10/92		Total Depth 3225		Plug Back TD 3222		Elevation 3616.5 KB		Unit Ltr. - Sec. - TWP - Rge. E 14-T20S-R38E		
Csg. Size 4 1/2"	Wt. 10.5	d	Set At 3222	Perforations: From: 3048 To: 3133			County Lea			
Tbg. Size 2 3/8"	Wt. 4.6	d	Set At 3026	Perforations: From: To:			Pool Southwest House Yates/7 Rivers			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single				Packer Set At none			Formation Yates/7 Rivers			
Producing Thru tubing		Reservoir Temp. °F 86 @ 3078GL		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2			Connection	
L 3078	H 3078	Gg .778	% CO ₂ 0	% N ₂ 30	% H ₂ S 0	Prover 2" orifice well		Meter Run tstr	Taps	

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							1505	71	1668	86	336 hrs SI
1.	1.94 x 1.25				163.3	40	1343	70	1486	86	1 hr.
2.	1.94 x 1.25				326.6	37	960	75	1088	86	1 hr.
3.	1.94 x 1.25				489.9	56	478	66	649	86	1 hr.
4.	1.94 x 1.25				408.2	64	298	70	456	86	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.	10.96	46.43	13.2	1.0198	1.1337	1.004	591.00
2.	10.96	65.66	13.2	1.0229	1.1337	1.0041	838.00
3.	10.96	80.42	13.2	1.0039	1.1337	1.0036	1007.00
4.	10.96	73.40	13.2	.9962	1.1337	1.0034	912.00
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.02	500	1.61	.993	A.P. L. Gravity of Liquid Hydrocarbons	Deg.
2.	.02	497	1.60	.993	Specific Gravity Separator Gas	.778
3.	.02	516	1.66	.993	Specific Gravity Flowing Fluid	XXXXXX
4.	.02	524	1.69	.993	Critical Pressure	598
5.					Critical Temperature	311

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²
1.		1363	1857	473
2.		1003	1006	1324
3.		605	366	1964
4.		430	185	2146
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1865$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0893$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1097$

P_c^2

P_w^2

$P_c^2 - P_w^2$

Absolute Open Flow	1097	Mcf/d @ 15.025	Angle of Slope Θ	63	Slope, n	1.000
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Remarks: Test was run using a 2" orifice well tester vented to atmosphere.

Approved By Division	Conducted By: Arc Pressure Data Inc.	Calculated By: Scott Snodgrass	Checked By: Scott Snodgrass
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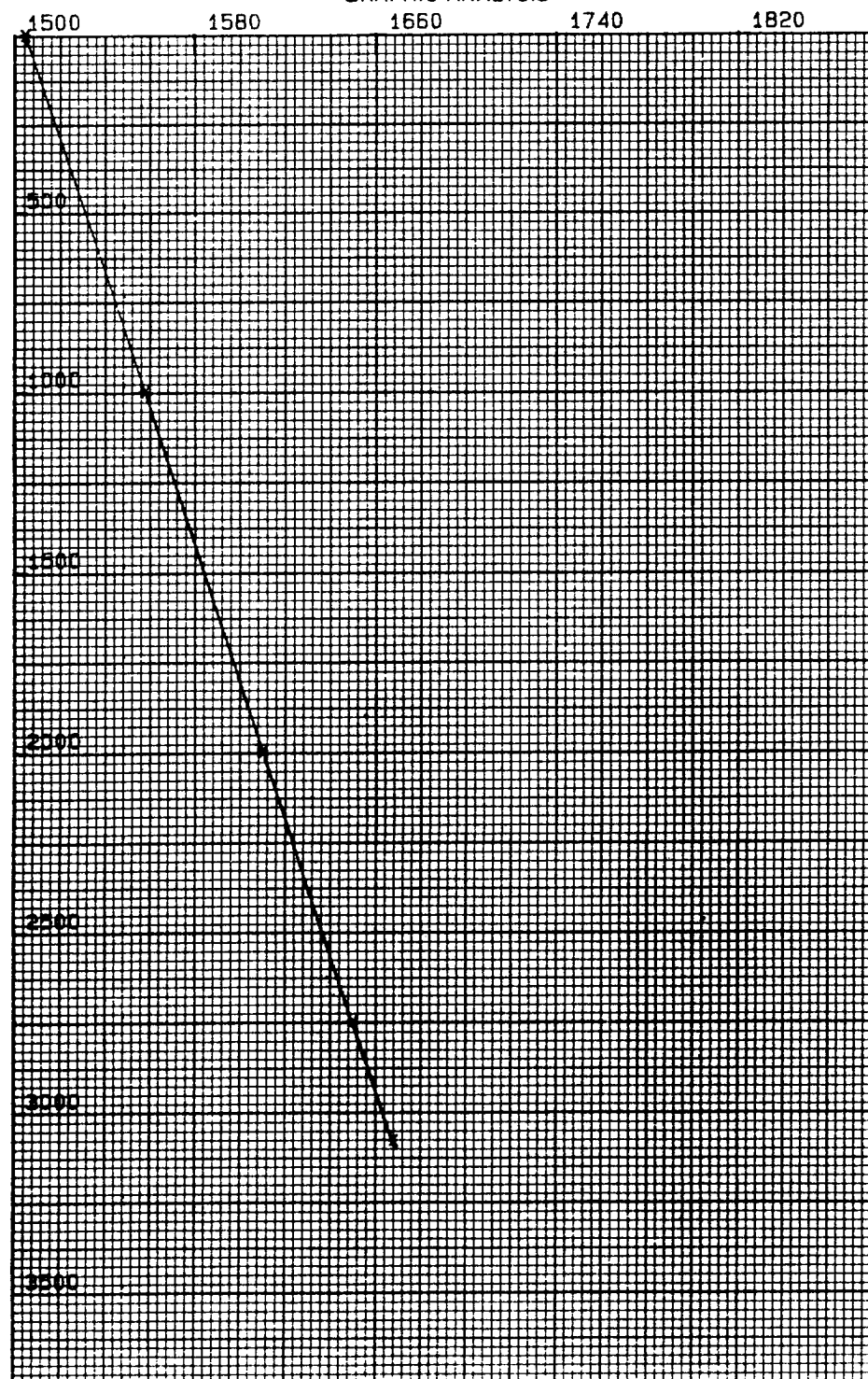


915/563-2371 • P. O. Box 13268 • Odessa, Texas 79768-3268

ARC PRESSURE DATA, INC. INDIVIDUAL WELL DATA SHEET

COMPANY MELZER EXPLORATION LEASE AMERADA WISE WELL NO. 2 E
 FIELD SOUTH HOUSE COUNTY LEA STATE NM
 TEST DATE 3/12/92 TIME 09:42 STATUS OF WELL SHUT-IN SHUT IN 17:35
3/10/92

GRAPHIC ANALYSIS

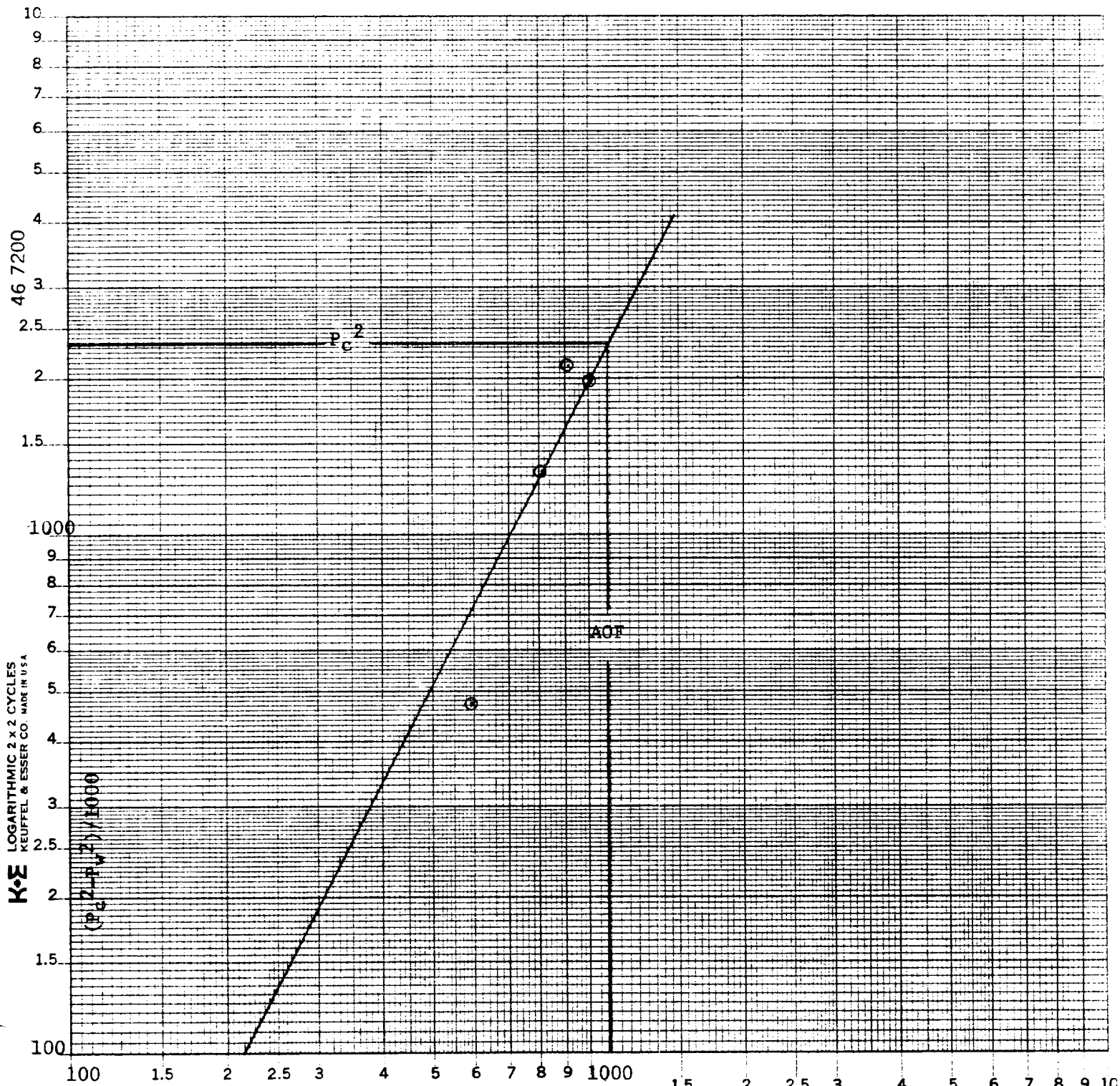


Depth Feet (G.L.)	Pressure Lbs. Sq. In. GAUGE	*Gradient Lbs./Ft.
0	1505	
		.053
1000	1558	
		.052
2000	1610	
		.053
2750	1650	
		.054
3078 R.D.	1668	

ELEV. K.B. 3617 (+ 13') GR. 3604
 PRESSURE DATUM 3078 GL
 TOP OF PAY
 TUBING 2 3/8 DEPTH 3026
 S.N. PACKER 3026
 CASING 4 1/2 DEPTH
 PERF. 3048-3133
 TOTAL DEPTH 3141
 FORMATION YATFS - SEVEN RIVERS
 CASING PRESS. PKR
 TUBING PRESS. 1504 - DWG
 TOP OF FLUID
 TOP OF WATER
 HRS.-SHUT IN 10 FLOWING
 TEMP. @ 3078 GL = 86 °F
 LAST TEST DATE
 PRESS. LAST TEST
 B. H. P. CHANGE
 INSTRUMENT NO. 041382
 RUN BY ORVILLE TURNER
 CALCULATED BY SCOTT SNODGRASS

PRESSURE

MELZER EXPLORATION
 Amerada Wise #2 E
 Lea County, New Mexico
 March 12, 1992



Q, MCFD
 ● = 63°
 n = .50
 AOF = 1097 mcf/day