

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-15-78	
Company Coquina Oil Co.				Connection None			
Pool Antelope Ridge				Formation Atoka		Unit	
Completion Date 11-15-78		Total Depth 14,465		Plug Back TD 13,200		Elevation KB 3538	
Farm or Lease Name Alexander		Well No. 1					
Csq. Size 5"	Wt. 18#	Set At 14,464	Set At	Perforations: From 13022 To 13054			
Tbg. Size 2 3/8	Wt. 4.7	Set At 12,912	Set At	Perforations: From To		Unit Sec. Twp. Rge. 10 24S 34E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 12,912		County Lea	
Producing Thru Tubing		Reservoir Temp. °F 195@ 13,038		Mean Annual Temp. °F 68		Baro. Press. - P _a 13.2	
State New Mexico							
L 12,912	H 12,912	Gg .646	% CO ₂ None	% N ₂ None	% H ₂ S None	Prover X	Meter Run 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	
SI							4846				
1.	6.065		3.0	300	4	60	4340	65			120 Min.
2.	6.065		3.0	300	8	72	4115	65			120 Min.
3.	6.065		3.0	310	14	60	3727	65			120 Min.
4.	6.065		3.0	340	18	57	3377	65			120 Min.
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	44.51	35.39	313.2	1.0000	1.244	1.031	2020
2	44.51	50.06	313.2	.9887	1.244	1.031	2825
3	44.51	67.27	323.2	1.0000	1.244	1.032	3844
4	44.51	79.73	353.2	1.0030	1.244	1.035	4583
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 17 Mcf/bbl.
1	.47	520	1.39	.941	A.P.I. Gravity of Liquid Hydrocarbons 56.6 Deg.
2	.47	532	1.42	.941	Specific Gravity Separator Gas .646 X X X X X X X X
3	.48	520	1.39	.939	Specific Gravity Flowing Fluid X X X X X
4	.53	517	1.38	.933	Critical Pressure 670 P.S.I.A. P.S.I.A.
5					Critical Temperature 375 R R

P _c 6712.2 P _c ² 45054				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		6354.2	40375	4679
2		6065.2	36787	8267
3		5685.2	32321	12733
4		5340.2	28518	16536
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.7246}{1} = 2.7246$$

$$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8993$$

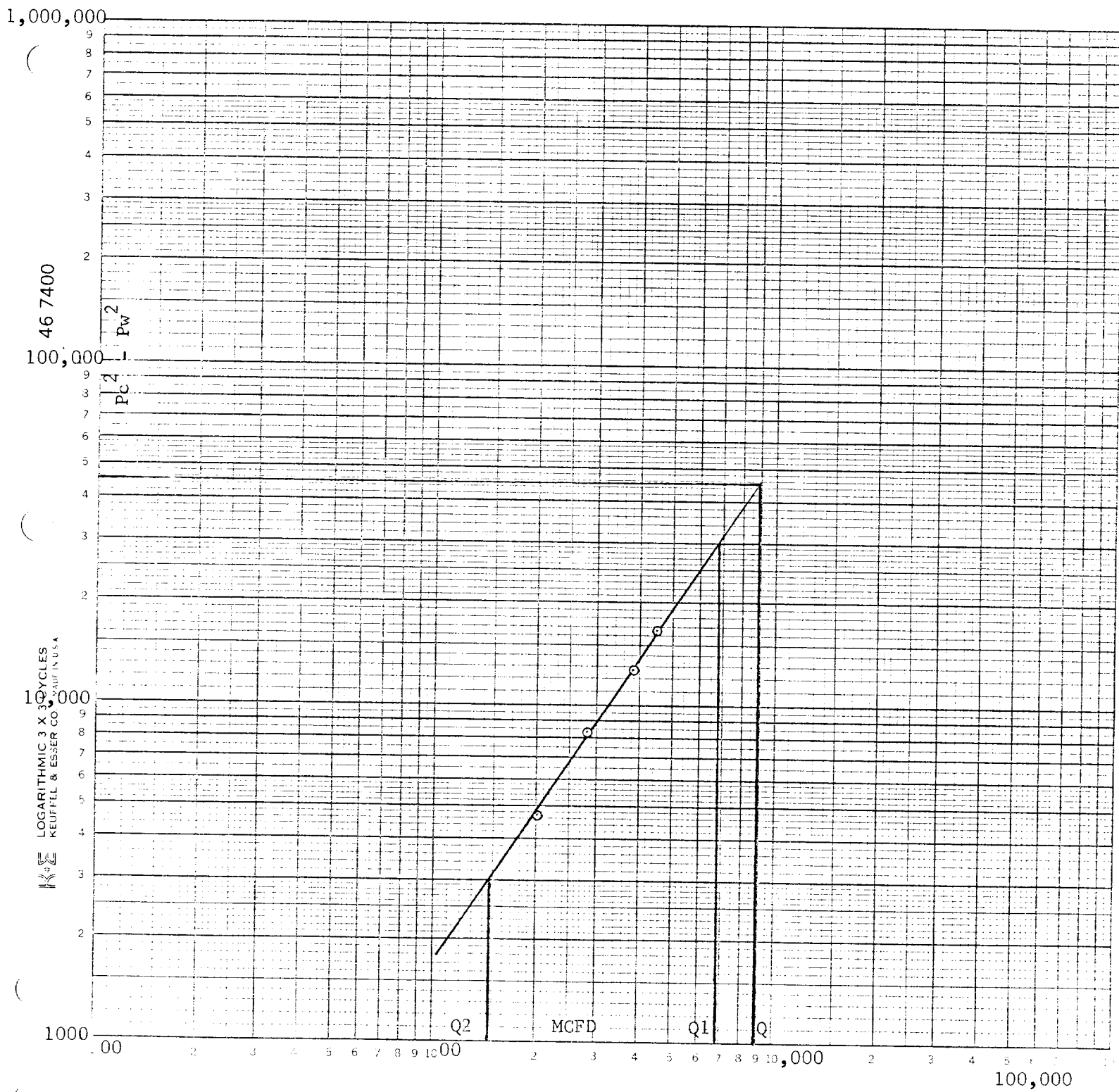
$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.9623$$

Absolute Open Flow 8993 Mcfd @ 15.025	Angle of Slope 56	Slope, n .67
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Remarks: P_w substituted for P_r - Measured with Amerada Instrument No. 34044 - 0-10000#

Approved By Commission:	Conducted By: B. J. Pyle	Calculated By: J. Spruell	Checked By: B. J. Pyle
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COQUINA OIL CORPORATION
A. Sander No. 1
Absolute Open Flow Test
11-15-78



$$Q_1 = 6900$$

$$\text{Log } Q_1 = 3.83885$$

$$Q_2 = 1475$$

$$\text{Log } Q_2 = 3.16879$$

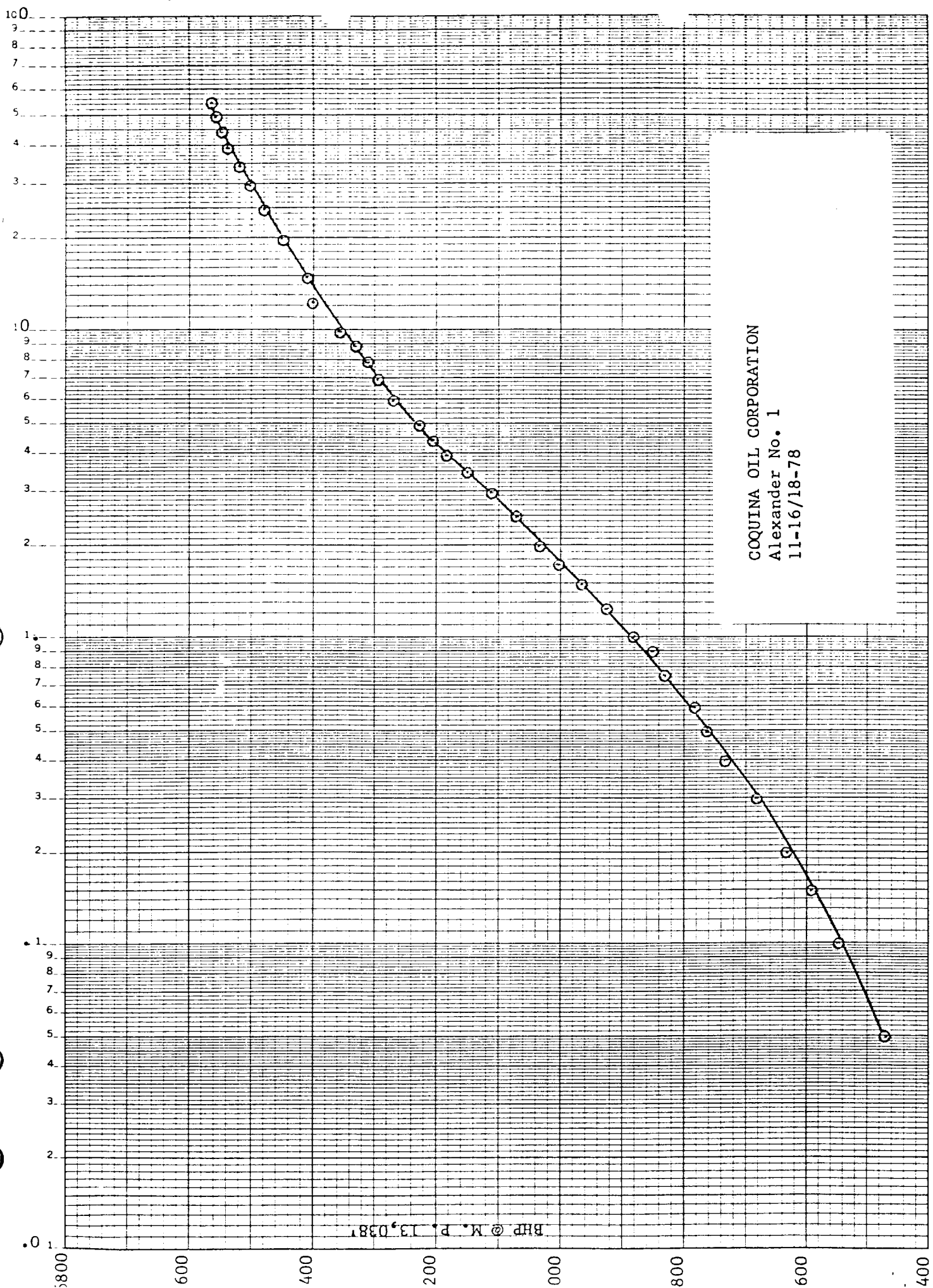
N = .67006

Q = 8993

46 6010

SEMI-LOGARITHMIC 4 CYCLES X 70 DIVISIONS
KEUFFEL & ESSER CO. MADE IN U.S.A.

K-E



LOG CUMULATIVE SHUT IN TIME: HOURS



JOHN KUYKENDALL WIRELINE SERVICE Co., Inc.

P. O. Box 184 / A/C 915 337-5241 / ODESSA, TEXAS 79760

STATIC-FLOWING-B. H. PRESSURES

COMPANY Coquina Oil Corp. Well & No. Alexander No. 1

FIELD Antelope Ridge Date 11-15/18-78 Instrument No. 34044 0 to 10,000

DATE	STATUS	SERV. TIME	ELAPSED TIME		D. W. T. TP	BHP PSIG @
			HRS.	MIN		
11-15-78	Instruments on Bottom	12:30	96	30		6699
	Shut In	13:30	97	30		6699
		14:30	98	00		6699
		15:00	98	30		6699
	Opened on 12/64	15:00	00	00		
	Shut In to repair separator	15:30	00	30		
	Opened on 12/64	18:00	00	00		6608
	Flowing 1st Rate	18:30	00	30		6455
		19:00	01	00		6393
		19:30	01	30		6359
	Flowing 2020 MCFD	20:00	02	00		6341
	Opened on 16/64	20:00	00	00		
	Flowing 2nd Rate	20:30	00	30		6174
		21:00	01	00		6114
		21:30	01	30		6081
	Flowing 2825 MCFD	22:00	02	00		6052
	Opened on 18/64	22:00	00	00		
	Flowing 3rd Rate	22:30	00	30		5831
		23:00	01	00		5766
		23:30	01	30		5707
	Flowing 3844 MCFD	24:00	02	00		5672
	Opened on 20/64	24:00	00	00		
		00:30	00	30		5499
		01:00	01	00		5428
		01:30	01	30		5350
	Flowing 4583 MCFD	02:00	02	00		5327



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FIELD Antelope Ridge Date 11-15/18-78 Instrument No. 34044 0 to 10,000

DATE	STATUS	SERV. TIME	ELAPSED TIME		D. W. T. TP	BHP PSIG @
			HRS.	MIN		
11-16-78	Shut Well In	02:00	00	00		
		02:03	00	03	3751	5470
		02:06	00	06	3830	5552
		02:09	00	09	3890	5594
		02:12	00	12	3923	5636
		02:18	00	18	3975	5685
		02:24	00	24	4020	5738
		02:30	00	30	4049	5765
		02:36	00	36	4112	5785
		02:45	00	45	4158	5832
		02:54	00	54	4208	5857
		03:00	01	00	4236	5883
		03:15	01	15	4208	5928
		03:30	01	30	4236	5966
		03:45	01	45	4266	6006
		04:00	02	00	4298	6039
		04:30	02	30		6075
		05:00	03	00		6117
		05:30	03	30		6149
		06:00	04	00		6185
		06:30	04	30		6203
		07:00	05	00	4478	6231
		08:00	06	00		6273
		09:00	07	00		6299
		10:00	08	00		6318
		11:00	09	00		6338



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FIELD Antelope Ridge Date 11-15/18-78 Instrument No. 34044 0 to 10,000

DATE	STATUS	SERV. TIME	ELAPSED TIME		D. W. T. TP	BHP PSIG @
			HRS.	MIN		
11-16-78		12:00	10	00		6361
		14:30	12	30		6403
		17:00	15	00		6416
		22:00	20	00		6455
11-17-78		03:00	25	00		6481
		08:00	30	00		6507
		13:00	35	00		6520
		18:00	40	00		6540
		23:00	45	00		6553
11-18-78		04:00	50	00		6559
	Pulled Instruments	09:00	55	00		6564

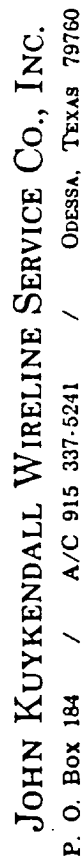


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OPEN FLOW PRODUCTION DATA

Company Coquina Oil Corporation Field Antelope Ridge Atoka
Well Alexander No. 1 Pay Atoka S.G. (Liquid) S. G. (Gas)
Meter Run 6.065 Orifice Size 3" Coefficient of Orifice

Date	Time	WELL HEAD INFO.			SEPARATOR INFO.		METER RUN			FLUID MEASUREMENTS			
		TBG Pres.	CSG Pres.	Temp.	Temp.	Choke	Pres.	Diff.	Volume	Inches Per Hr.	Oils Per Hr.	Water Per Day	Per mMCF
11-15-78	15:00	4846		Shut In									
	15:00	Repairing Separator											
	15:30												
	18:00	4660		Started 1st Rate		12/64							
	18:30	4560		65	69	12/64	300	4"					
	19:00	4450		65	68	12/64	300	4"					
	19:30	4360		65	60	12/64	300	4"					
	20:00	4340		65	60	12/64	300	4"	2020		96	780	
	20:00			Opened on		16/64							
	20:30	4150		65	60	16/64	300	8"					
	21:00	4135		65	70	16/64	300	8"					
	21:30	4130		65	70	16/64	300	8"					
	22:00	4115		65	72	16/64	300	8"	2825		72	96	
	22:00			Opened on		18/64							
	22:30	3835		65	62	18/64	310	14					
	23:00	3810		65	60	18/64	310	15					



OPEN FLOW PRODUCTION DATA

Company	Field
Coquina Oil Corporation	Antelope Ridge Atoka

Well	No.	Pay	S.G. (Liquid)	S.G. (Gas)
Alexander	1	Atoka		

Meter Run	6.065	Orifice Size	3"	Coefficient of Orifice	
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