



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

JERRY APODACA
GOVERNOR

NICK FRANKLIN
SECRETARY

September 5, 1978

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

RECEIVED

SEP - 7 1978

Inexco Oil Company
1100 Milam Building
Houston, Texas 77002

O. C. C.
ARTESIA, OFFICE

Attention: Bill Hightower

Re: Form C-115, Operator's Monthly
Report

Dear Mr. Hightower:

The Federal 10 Com Well No. 1 in Section 10, Township 21 South, Range 26 East is downhole commingled in the Avalon-Upper Pennsylvanian Gas Pool and Avalon Strawn Gas Pool. Please utilize these pool names in reporting production from the well and list the well in the "Commingled" section of the report in accordance with paragraph C.1. of Memorandum OMR-1. A copy of this memorandum is enclosed for your convenience. Further, the location of the Arroyo Federal well on the last page of the report is erroneously shown as Section 10 rather than Section 26.

Very truly yours,

R. L. STAMETS
Technical Support Chief

RLS/dr

cc: Bill Gressett

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

Form C-127
Revised 9-65

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Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8/24-27/77		DEC 1 1977	
Company Inexco Oil Company				Connection El Paso Natural Gas Company		Unit O.C.C.	
Pool Avalon (Upper Penn)				Formation Upper Penn & Strawn		Unit NA	
Completion Date 6/27/77		Total Depth 11,100		Plug Back TD 10,235'		Elevation 3249 GR	
Csg. Size 5-1/2"		Wt. 15.5 & 17		Set At 11,099'		Perforations: Upper Penn From 9456' To 9469'	
Thg. Size 2-7/8"		Wt. 6.5		Set At 9,082'		Perforations: Strawn From 9682' To 9686'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Conventional				Packer Set At 9,082'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 186 @ 9500' est		Mean Annual Temp. °F 70°		Baro. Press. - P _a 13.2	
L 9456		H 9456		G _g 0.60		% CO ₂ nil	
				% N ₂ nil		% H ₂ S nil	
				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
SI	4 x 1.000						2062		packer		48 hr.
1.	4 x 1.000			410	3.3	68	1631	73	packer		24 hr.
2.	4 x 1.000			410	6.3	70	1517	75	packer		24 hr.
3.	4 x 1.000			423	10.2	70	1305	75	packer		23 hr.
4.	4 x 1.000			410	16.0	71	1146	77	packer		24 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	4.87	37.42	424.4	0.9924	1.2910	1.0361	242
2.	4.87	51.71	424.4	0.9905	1.2910	1.0355	334
3.	4.87	66.79	424.4	0.9905	1.2910	1.0365	432
4.	4.87	82.40	424.4	0.9896	1.2910	1.0352	531
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	31.3 Mcf/bbl.
1.	0.63	528	1.47	0.932	A.P.I. Gravity of Liquid Hydrocarbons	63.8 Deg.
2.	0.63	530	1.48	0.933	Specific Gravity Separator Gas	0.60
3.	0.65	530	1.48	0.931	Specific Gravity Flowing Fluid	X X X X X
4.	0.63	531	1.48	0.933	Critical Pressure	672 P.S.I.A.
5.					Critical Temperature	358 R

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4535$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4535$ $AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 772$
1	2703	1635	2673	1595	
2	2342	1521	2313	1955	
3	1738	1312	1720	2547	
4	1344	1154	1332	2936	
5					

Absolute Open Flow		772 Mcfd @ 15.025	Angle of Slope °	45	Slope, n	1.00
Remarks:						
Approved By Commission:		Conducted By:		Calculated By:		Checked By:
		M. Morris		computer		