

CHARLES B. READ
PRESIDENT

Read & Stevens, Inc.

Oil Producers

P. O. Box 1518

Roswell, New Mexico 88202



November 29, 1999

New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210-2834

RE: Harris Federal #11
Section 26 T15S-R27E
Chaves County, New Mexico
De Novo Case #11514
Order #R10622

Ladies & Gentlemen:

Enclosed please find Form C-122-C for the subject well. Per the subject order number, Read & Stevens, Inc. is required to conduct a deliverability test into the pipeline on the subject well. The deliverability test was performed November 14, 1999 and the Artesia OCD office was advised of the date and time of the test.

Please note on the Form C-122-C that the stabilized test rate into the pipeline was 1,050 MCF, and the calculated deliverability at pipeline pressure using the "n" from the Multipoint Back Pressure Test was 1,646 MCFD. Taking the deliverability of 1,646 MCFD times fifty percent (50%) would yield an allowable of 823 MCFD for the subject well.

If you have any questions, please advise.

Sincerely,

READ & STEVENS, INC.


John C. Maxey, Jr.
Operations Manager

JCM/sr/jcmltrs/ocdha11L4.wpd

Enclosure
xc: File, Partners

DELIVERABILITY TEST REPORT

Type Test <input type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test Date 11-14-99			
Company Read & Stevens, Inc.				Connection GPM Gas Corporation				
Pool Buffalo Valley				Formation Morrow				Unit
Completion 4-19-97		Total Depth 9050'		Plug Back TD 8998'		Elevation 3492' GR		Farm or Lease Name Harris Federal
Csg. Size 5 1/2"	Wt. 17#	d 4.892	Set At 9040'	Perforations: From 8654' To 8678'		Well No. 11		
Tbg. Size 2 3/8"	Wt. 4.6#	d 1.995	Set At 8546'	Perforations: From To		Unit Sec. Twp. Rge. N 26 15S 27E		
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single					Packer Set At 8546'		County Chaves	
Producing thru Tubing		Reservoir Temp. °F 157 @ 8660'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico
L 8666	H 8666	Gg. 0.634	% CO ₂ 0.3	% N ₂ 1.20	% H ₂ S	Prover	Meter Run	Taps
FLOW DATA					TUBING DATA		CASING DATA	
NO.	Prover Line Size	X Choke Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.
SI	Total Flow Meter				50	350		
1.					64	200		
NO.	Coefficient (24-Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor Fpv	Rate of Flow Q, Mcfd
1.					0.9962	1.256	1.020	1050
NO.	P _r	Temp. R.	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Dry _____ Mcl/bbl.			
	0.413	524	1.54	0.962	A.P.I. Gravity of Liquid Hydrocarbons _____ Dry _____ Deg.			
					Specific Gravity Separator Gas _____ 0.634		XXXXXXXXXX	
P _d	59.2				Specific Gravity Flowing Fluid _____ XXXXX			
P _d ²	3.50				Critical Pressure _____ 670 _____ p.s.i.a. _____ p.s.i.a.			
P _c	350.0 P _c ² 131.9				Critical Temperature _____ 370 _____ R _____ R			
					P _f _____ P _i ² _____			
NO.	P _i	P _i ²	P _c ² - P _i ²	P _w	P _w ²	P _c ² - P _w ²	P _s	P _s ²
	213	45.5	167.5	282.3	79.7	52.2	339.8	115.4

$$\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = \left[\frac{131.9 - 3.50}{131.9 - 79.7} \right] = 2.458$$

$$\text{Log} \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = 0.3906$$

$$\left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = 1.568$$

$$n \text{ Log} \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right] = 0.195$$

$$\text{Deliv.} = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n$$

Division _____

Deliv. 1646 Mcfd

Company Read & Stevens, Inc.

n 0.50

Others _____

Multi Point Back Pressure Test
(Source of n)

