



STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DIVISION
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

sec. 33 - T26N-R12W

December 27, 1990

Kevin H. McCord
Robert L. Bayless
P. O. Box 168
Farmington, NM 87499

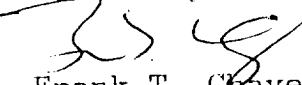
Re: Downhole Commingled Allocation for the Inez #1

Dear Mr. McCord:

Your recommended allocation of the commingled production from the referenced well is hereby approved as follows:

Fruitland Coal	62%
Pictured Cliffs	38%

Sincerely,


Frank T. Chavez, District Supervisor

cc: Transporters
File
Santa Fe

ROBERT L. BAYLESS

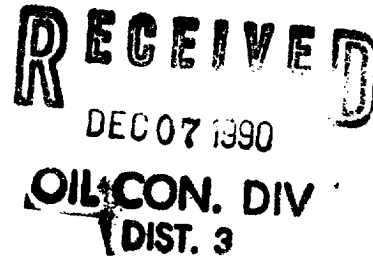
P. O. BOX 168
FARMINGTON, NM 87499

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(505) 326-6911

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December 6, 1990

New Mexico Oil Conservation Division
1000 Rio Brazos
Aztec, NM 87410



ATTN: Mr. Frank Chavez

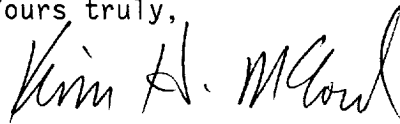
RE: Administrative Order #DHC-721
Inez #1
Sec. 33, T26N, R12W
San Juan County, NM
WAW Fr.-PC/Basin Fr. Coal

Gentlemen:

In response to a telephone request today from Alice Dugger, enclosed please find our test data used to determine allocation of the referenced downhole commingled production. We have used these percentages, 38% to the Pictured Cliffs and 62% to the Fruitland Coal, since June 1989 production on our C-115's.

If there is any further information you need in order to make your determination, please advise.

Yours truly,


KEVIN H. McCORD
Petroleum Engineer

KHM/eh

Enclosures: C-122, 5/23/89 Pictured Cliffs
C-122, 6/6/89 Fruitland Coal/Pictured Cliffs

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6/6/89	
Company Robert L. Bayless			Connection EPNG		
Pool WAW Fruitland/P.C.			Formation Fruitland Coal - Pictured Cliffs		Unit
Completion Date 5/25/89		Total Depth 1250'	Plug Back TD 1219'	Elevation 6126' GL	Form or Lease Name Inez
Csg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 1241	Perforations: From 1088' To 1109'	Well No. 1
Tub. Size none	Wt.	d	Set At	Perforations: From To	Unit Sec. Twp. Rye. B 33 26N 12W
Type Well - Single - Brdenhead - G.G. or G.O. Multiple single				Packer Set At none	County San Juan
Producing Thru casing		Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. - P _a 12.0 psi (est.)	State New Mexico
L	H	G _g .60	% CO ₂	% N ₂	% H ₂ S Prover Meter Run 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	12 days								107	60°	
1.	2 inch x .250								24	60°	3 hrs.
2.									16	60°	24 hrs.
3.											
4.											
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	1.087		36	1.000	1.291	1.000	51
2.			28	1.000	1.291	1.000	39
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas-Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.05	(3 hr)	1.45	1.000	P.L. Gravity of Liquid Hydrocarbons	Deq.
2.	0.04	(24 hr)	1.45	1.000	Specific Gravity of Gas	X X X X X X X X
3.					Specific Gravity of Liquid	X X X X X
4.					Critical Pressure P.S.I.A.	P.S.I.A.
5.					Critical Temperature °R	°R

P _c 119	P _c ² 14,161				
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	
1		36	1296	12,865	
2		28	784	13,377	
3		(calculated)			
4					
5					

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.1007 \text{ 3 hr}}{1.0586 \text{ 24 hr}}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.0850 \text{ 3 hr}}{1.0496 \text{ 24 hr}}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{55 (\text{ 3 hr})}{41 (\text{ 24 hr})}$

Absolute Open Flow	55 (3 hr) 41 (24 hr)	Mcf @ 15.025	Angle of Slope @	Slope, n .85
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Remarks: Test run after Fruitland Coal was perforated. P.C. = 21 MCFD 38%
Subtracting test before Fruitland Coal was perforated Fruitland Coal = 34 MCFD 62%
allocates production as follows: TOTAL = 55 MCFD

Approved By Division Conducted By: Albert Aranda Calculated By: Kevin H. McCord Checked By:

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☐ Initial ☐ Annual ☒ Special					Test Date 5/23/89				
Company Robert L. Bayless				Connection EPNG					
Pool WAW Fruitland/P.C.				Formation Pictured Cliffs				Unit	
Completion Date 2/25/80		Total Depth 1250'		Plug Back TD 1219'		Elevation 6126 GL		Farm or Lease Name Inez	
Csg. Size 2 7/8"	Wt. 6.5#	d 2.441	Set At 1241'	Perforations: From 1102' To 1109'			Well No. 1		
Tqg. Size none	Wt.	d	Set At	Perforations: From To			Unit Sec. Twp. Rye. B 33 26N 12W		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single					Packer Set At none		County San Juan		
Producing Thru casing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a 12.0 psi (est.)		State New Mexico	
L	H	Gg .60	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run	Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	3 months								91		
1.	2 inch x .250								3		3 hrs.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.087		15	1.000	1.291	1.000	21
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _r	Z	Q, Liquid Hydrocarbon Res. Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity of Gas	Specific Gravity Flowing Fluid	P.S.I.A.	P.S.I.A.	Critical Temperature °R
1	0.02		1.45	1.00							
2.											
3.											
4.											
5.											

NO.	P _i ²	P _w ²	P _w ²	P _c ² - P _w ²
1		15	225	10,384
2		(calculated)		
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0217$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 21$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0184$

Absolute Open Flow	21	Mcfd @ 15.025	Angle of Slope @	Slope, n .85
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Remarks: Test run before Fruitland Coal was perforated--Pictured Cliffs only!

Approved By Division	Conducted By: Albert Aranda	Calculated By: Kevin H. McCord	Checked By:
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