

Post Petroleum Company, Inc.



March 11, 1981

State of New Mexico Oil and Gas Conservation Division P.O. Box 1980 Hobbs, New Mexico 88240

Re: Request for Exception to Statewide Rule 303-A Llano 31 Federal #1 Lea County, New Mexico

## Dear Sirs:

Post Petroleum Company, Inc. respectfully requests an Exception to Statewide Rule 303-A to commingle down-hole the oil production on the Post-Llano 31 Federal #1 located in Section 31-20S-39E, Lea County, New Mexico.

Enclosed please find documents submitted for approval of this down-hole commingling application.

If further information is needed, please advise.

Sincerely,

Betty Aollrah Production Clerk

Enclosure

cc: United States Department of the Interior Geological Survey P. O. Box 1157 Hobbs, New Mexico 88240

SUITE 1000 COLCORD BUILDING 15 NORTH ROBINSON OKLAHOMA CITY, OKLAHOMA 73102 405/272-0681 Attachment #1 Application to Commingle Exception to Rule 303-A

## PROGNOSTICATION OF FUTURE PRODUCTION

EFFECTIVE JANUARY 1, 1981

POST PETROLEUM C 15 North Robinsc Oklahoma City, C	on, Suite 100	0	Section	31 FEDERAL 31-205-3 2nty, New	39E
East Terre BLINEBRY	Ч		· · ·	D-K A	30
14.59BBLS 30%/Year	(Oil Prod	te of Producti uction Per Day ate of Decline	<b>?</b> )	<b>8.0</b> 0BBLS <b>30%/</b> Yea	
•	-Produc	tion Forcast- YEAR	· · · ·	•	
5325		-1-	•	<b>29</b> 20	
3727		-2-		2044	•
2606		-3-		<b>14</b> 31	
1821		-4-	·	<b>10</b> 00	
1274		-5-		697	
891		-6-	• • • • • •	485	
621	<b>6</b>	-7-		339	
16,265BBLS	-Total Ult	imate Recovery	/-	8,916BBLS	3

•				
1. S.				P. O. BOX 643
A	WOLF I	PEIR()	LAB. INC.	ODESSA, TEXAS
	DIAL 915/366-9701		2411 WEST 42ND STREET	
	DIAL 915/366-7171			79760
				Post
		HYDROCARBON	ANALYSIS	Charge Petroleum
Attachment #2		LABORATORY	DEDODT	Test No. WPL-80-1064
Application to Co	mmingle	LADORATORI	REFORT	Data of Burn 10-24-80
Exception to Rule				Date Received 10-23-80
Exception to Rule	505 A			Date Received
A Sample of	Crude Oil from	Llano 31-Fed	eral Well No. 1 (	(Aho townation)
Secured from				
At	Lea County New	Mexico	Se	
				Time 6 p.m.
-				Time Opens
Sampling Conditions		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
	······································	· · · · · · · · · · · · · · · · · · ·		
DIST	ILLATION		ASTM OR SPECIA	L TESTING
IBP	112 1			
5%	A*A		imbers	
10%	230 ·]			
20%				
30%	360 .	F Carbon Residue	on 10% Residue	
40%	<u>450</u> • 7	F Cloud and Pour	Point to *F	
50%		F Doctor Test		·
60%		F Flash Point (op	en or closed)	-
70%	E C C			
75%	694	F Gravity, A. P. I	. Hydrometer 37.00	8 60 <sup>0</sup> r.
80%	<b>* • •</b>	F Hydrogen Sulfi	de (Crude Oil)	
85%			rude Oil)	
90%				59 % By Weight
95%	738 -			
55%		• • • • • • • • • • • • • • • • • • • •		
End Point % Mag Residue	3.25	-		
		-		
% Recovery				
Color			« No.)	
	22.25		( 190.)	
Gasoline 300°F	C 00			
Gasoline 350°F	~ ~~	-		
Gasoline 400°F	34 60	70		
Total Gasoline	<b>N m m m</b>			
Kerosene 525°F		-		
Diesel Fuel 650°F	20.00	%		
<b></b>		_	·	
Run by: <b>J</b> .	WOLI Chec	ked by:J	Wolf Approved	:
Adition	al Data and Remarks	·	•	COPIES
			· · · · · · · · · ·	
1 - Mr. David			5 - Post Petrol	eum
	and Associates		Suite 730	
	Tower, West			ted Life Building
Midland, 1	lexas 79701		Midland, Te	Xab 79701
			l - File	

March 11, 1981

## APPLICATION TO COMMINGLE

(Exception to Rule 303-A)

OPERATOR:	Post Petroleum Company, Inc.	LEASE: LLANO 31 FEDERAL #1
1000000		WELL
ADDRESS:	15 North Robinson, Suite 1000 Oklahoma City, Oklahoma 73102	LOCATION: Unit F: 1980' FNL; 1980' FWL Section 31-205-39E
	ORTAHOMA CICY, ORTAHOMA /5102	Section 31 205 394

FEDERAL LEASE NO.: NM-17252

COUNTY/STATE: LEA COUNTY, NEW MEXICO

The following facts are sub	mitted in this application to UPPER ZONE	commingle:
a)Name of Reservoir	East Terry BLINEBRY	D-K ABO
b)Perforation record	6055-6061';6067-6073'; 6077-6087';6101-6117'. (Perfed w/1HPF-Total of 38 holes)	7450-7462';7468-7476';7482-7490'; 7498-7510';(Perfed w/2HPF-Total 80holes 7310',7318',7324',7339',7346',7352', 7362',7369',7377',7389',7392',7402', 7407'.(Perfed w/1HPF-Total 13 holes)
c)Description of Acid and Fracture Treatments	Acidized w/3000gals 15% HCl w/30ball sealers from 6055-6087'. Fraced w/42,000gals Terra Frac w/ 20/40sand & 20 ball sealers from 6055- 6087'.	Acidized w/2000gals 20%HCl & Acid- Fraced w/8000gals 20% HCl w/120 ball sealers from 7450-7510'. Acidized with 2000gals 20% HCl w/25 ball sealers and Fraced with 300 bbls Terra Frac w/ 20/40 sand and 10/20 sand from 7310-7407'.
d)Latest Test Data by Zone	2-17-81: Pumping on l" choke. Total 40.44BF (10.44BO & 30BSW) Gas TSTM. 24hr test. 15 <sup>1M</sup>	11-29-80: Total 24BF (8BO & 16BSW) Gas-TSTM. 24hr test. 757M
e)Bottom-Hole Pressure	2450psi.	2600psi /

Reason for Commingling:

Commingling of these two zones is required due to mechinical restrictions which will not allow us to conventionally dual both zones. Both zones are required to be pumped.

List of offset operators and others who have been notified of this application:

United States Department of the Interior Geological Survey P.O. Box 1157 Hobbs, New Mexico 88240

Other attachments made a part of this application:

1.Prognostication of future production from each zone.

2.Description of the fluid characteristics of each zone.

3.Computation that the value of the commingled production will not be less than the sum of the values of the individual streams.

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Attachment #3-A Application to Commingle Exception to Rule 303-A

Computation that the value of the commingled production will not be less than the sum of the values of the individual streams.

In order to effectively deplete the reserves in both the Blinebry and D-K Abo formations, these two zones will require conventional beamtype pumping equipment. If these two zones are commingled at once, they can both be depleted under current pumping conditions without increasing operating expenses. However, if the Blinebry interval is produced separately to depletion (approximately 7 years), and then the well reworked to produce the D-K Abo to depletion, an additional 7 years of operating expenses will be incurred, which will make the discounted value of the commingled production greater than the sum of the discounted values of the individual streams. (See attached computations.) Attachment #3-B Application to Commingle Exception to Rule 303-A

Year	Production (BBLS)	Oil Price (\$/BBL)	Oil Value (\$)	Oper.Exp. (\$)	Net Value (\$)	Discounted Net Value (\$)
1	8,245	34.69	286,019	9,600	276,419	251,290
2	5,771	37.71	217,624	10,560	207,064	171,128
3	4,037	42.37	171,047	11,616	159,431	119,783
4	2,821	47.35	133,574	12,778	120,796	82,505
5	1,971	52.82	104,108	14,055	90,053	55,916
6	1,376	58.63	80,674	15,461	65,213	36,811
7	960	65.16	62,553	17,007	45,546	23,373
Total	25,181					740,806
			SEPARATE PROD	UCTION		
1	5,325	34.69	184,724	9,600	175,124	159,203
2	3,727	37.71	140,545	10,560	129,985	107,426
3	2,606	42.37	110,416	11,616	98,800	74,229
4	1,821	47.35	86 <b>,</b> 224	12 <b>,</b> 778	73,446	50,164
5	1,274	52.82	67,292	14,055	53,237	33,057
6	891	58.63	52,239	15,461	36,778	22,836
7	621	65.16	40,464	17,007	23,451	12,037
8*	2,920	72.35	211,262	18,708	192,554	89 <b>,</b> 828
9	2,044	80,36	164,255	20,578	143,677	60,934
10	1,431	89.28	127 <b>,</b> 759	22,636	105,123	40,530
11	1,000	99.16	99,160	24,900	74,260	26,027
12	697	109.93	76,621	27,390	49,231	15,684
13	485	121.64	58,995	30,129	28,866	8,361
14	339	134.37	45,551	33,142	12,409	3,268

Total 25,181

703,584

## OIL CONSERVATION DIVISION DISTRICT I



OIL CONSERVATION DIVISION	•	DATE March 17,	1981
P. O. BOX 2088			
SANTA FE, NEW MEXICO 87501	•	RE: Proposed MC	
	•	Proposed DH	C <u>X</u>
and the second	•	Proposed NS	L
· · · · ·		Proposed NS	
• · · ·	, <b>•</b>	Proposed SW	U
		Proposed WF Proposed PM	×
	•	rropused rn	^
Gentlemen:			
I have examined the application	on for the:	•	
Post Petroleum Co., Inc.	•	Federal No. 1-	
Operator Le	ease and Well No	o. Unit, S - T	- R
and my recommendations are as	follows:		
<u>0.KJ.S.</u>	· · · · · · · · · · · · · · · · · · ·		
East Derr	y Blenel	~ ) AG	· · ·
+ OK Abi	$\langle \cdot \cdot \rangle$	<u> </u>	
•		• .	
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Yours very truly,			
$\Delta = \sqrt{2}$			•
Jun Siston	•		•
Imc			•
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