

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 Mollrah 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 COMPANY, INC. 15 North Robinson, Suite 1000 Oklahoma City, Oklahoma LLANO 31 FEDERAL #1 Section 31-20S-39E Lea County, New Mexico

East Terry BLINEBRY D-K ABO 14.59BBLS -Initial Rate of Production-8.00BBLS (Oil Production Per Day) 30%/Year -Annual Rate of Decline-30%/Year -Production Forcast-YEAR 5325 -1-**29**20 3727 2044 1431 2606 1000 1821 1274 697 891 485 621 339 16,265BBLS -Total Ultimate Recovery-8,916BBLS



P. O. BOX 643 ODESSA, TEXAS

79760

HYDROCARBON ANALYSIS

Attachment #2
Application to Commingle
Exception to Rule 303-A

DIAL 915/366-7171

LABORATORY REPORT

Post
Charge Petroleum
Test No. WPL-80-1064
Date of Run 10-24-80
Date Received 10-23-80

A Sample of	Crude Oil	from Ll	ano 31-Federal Well No. 1 (Abo formation)
Secured from			
At	Lea County	New Me:	
Purpose			Date 10-23-80 Time 6 p.m.
Sampling Conditions _			
		···	
•			
DIS	STILLATION		ASTM OR SPECIAL TESTING
IBP		112 °F	Ash Content
5%		167 °F	Acid or Base Numbers
10%		230 ·F	B. S. & W. (Centrifuge)
20%		286 ·F	Carbon Residue
30%		360 ·F	Carbon Residue on 10% Residue
40%		450 °F	Cloud and Pour Point to°F
50%		<u>515</u> F	Doctor Test
60%		<u>607</u> • _F	Flash Point (open or closed)
70%		<u>656</u> • _F	Fire Point
75%		684 _{°F}	Fire Point 37.00 @ 60°P.
80%		697_ •ғ	Hydrogen Sulfide (Crude Oil)
85%		720 ∘ F	Salt Content (Crude Oil)
90%		731 °F	Sulfur (lamp method) .60759 % By Weight
95%		738 _{°F}	Vapor Pressure (Reid)
End Point		742_°F	Vapor Pressure (N.G.A.A.)
% was Residu	ue 3	.25	Vapor Pressure (Lean Oil)
% Recovery	96	.75	Viscosity (Saybolt) 100°F
Color			Viscosity (SayLolt) 210°F
Color	YIELD		Viscosity (Index No.)
Gasoline 300°F		.25 %	
Gasoline 350°F		.00 %	
Gasoline 400°F		.25 %	
Total Gasoline	3.4	•50 %	
Kerosene 525°F		.50 %	
Diesel Fuel 650°F		.00 %	
Diesei Fuel ow F			
Bun but	. Wolf	Checked	by:
Run by:	 	OHOUNEU	. W Approved.

Additional Data and Remarks

1 - Mr. David Moore Brockman and Associates 1007 Gihls Tower, West Midland, Texas 79701 COPIES

5 - Post Petroleum Suite 730 Western United Life Building Midland, Texas 79701

l - File

. March 11, 1981

APPLICATION TO COMMINGLE

(Exception to Rule 303-A)

OPERATOR: Post Petroleum Company, Inc.

LEASE: LLANO 31 FEDERAL #1

WELL

ADDRESS:

15 North Robinson, Suite 1000

LOCATION: Unit F: 1980' FNL; 1980' FWL

Oklahoma City, Oklahoma 73102

Section 31-20S-39E

FEDERAL LEASE NO.: NM-17252

COUNTY/STATE: LEA COUNTY, NEW MEXICO

	_		
UPPER ZONE	LOWER ZONE		
East bry BLINEBRY	D-K ABO		
6055-6061';6067-6073';	7450-7462';7468-7476';7482-7490';		
6077-6087';6101-6117'.	7498-7510'; (Perfed w/2HPF-Total 80holes		
(Perfed w/lHPF-Total of	7310',7318',7324',7339',7346',7352',		
38 holes)	7362',7369',7377',7389',7392',7402',		
	7407'.(Perfed w/lHPF-Total 13 holes)		
Acidized w/3000gals 15%	Acidized w/2000gals 20%HCl & Acid-		
HCl w/30ball sealers	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		
6087.	sand from 7310-7407'.		
2-17-81: Pumping on 1"	11-29-80: Total 24BF (8BO & 16BSW) Gas-TSTM. 24hr test. 75 1 M		
choke. Total 40.44BF	Gas-TSTM. 24hr test. 15 TW		
(10.44BO & 30BSW)			
Cac memm 24by toct 457"			
	Gost Emy BLINEBRY 6055-6061';6067-6073'; 6077-6087';6101-6117'. (Perfed w/1HPF-Total of 38 holes) 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'. 2-17-81: Pumping on 1" choke. Total 40.44BF		

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

COMMINGLED PRODUCTION

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
1 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
,	300	03.10	02,333	17,007	45/510	23,313
Total	25,181					740,806
			SEPARATE PRODU	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	86,224	12,778	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	89,828
9	2,044	80,36	164,255	20,578	143,677	60,934
10	1,431	89.28	127,759	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, 1	981
P. O. BOX 2088				
SANTA FE, NEW MEXICO 87501			oposed MC	
			oposed DHC_	X
			oposed NSL_	
			oposed NSP_	
	•		oposed SWD	
•			oposed WFX	•
	•	Pro	oposed PMX	
· ,	•		_	
Gentlemen:	•	•		
I have examined the application	for the:		•	
Post Petroleum Co., Inc.	Llano 31	Federal	No. 1-F	31-20-3
	se and Well N			
and my recommendations are as fo	ollows:			
0.KJ.S.				
East Derre	Blevel	2	110	• .
· Y OK ARS		<u> </u>		
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•		 		
Yours very truly,			•	
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