

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980  
DISTRICT II  
811 South First St., Artesia, NM 88210-2835  
DISTRICT III  
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

Form C-107-A  
New 3-12-96

APPROVAL PROCESS:  
\_\_\_ Administrative \_\_\_ Hearing  
EXISTING WELLBORE  
X YES \_\_\_ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Arch Petroleum Inc. Address 300 North Marienfeld, Suite 600 Midland, Texas 79701  
Lease Plains Knight Well No. 2 Unit Ltr. - Sec - Twp - Rge N-23-24S-37E Lea  
OGRID NO. 000962 Property Code 14923 API NO. 30-025-11208 Spacing Unit Lease Types: (check 1 or more) Federal \_\_\_ , State \_\_\_ , (and/or) Fee X

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Fowler (Upper Yeso)	Fowler (Tubb, South)	Fowler (Abo)
2. Top and Bottom of Pay Section (Perforations)	5164-5590	5847-6145	6307-6396
3. Type of production (Oil or Gas)	Oil	Oil	Oil
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift	Artificial Lift	Artificial Lift
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 850#	a. 1100#	a. 1200#
	b. (Original)	b.	b.
6. Oil Gravity (°API) or Gas BTU Content	39.5	34.4	40.1
7. Producing or Shut-in?	Shut-in	Shut-in	Producing
Production Marginal? (yes or no)  * If Shut-In, give date and oil/gas/ water rates of last production  Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data  * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Yes	Yes	Yes
	Date: 01/91 Rates: 3 BO, 12 BW, 26 MCF	Date: 07/99 Rates: 3 BO, 2 BW, 31 MCF	Date: Rates:
	Date: Rates:	Date: Rates:	Date: 09/15/99 Rates: 5 BO, 50 BW, 15 MCF
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 27 % Gas: 37 %	Oil: 27 % Gas: 43 %	Oil: 46 % Gas: 20 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.
10. Are all working, overriding, and royalty interests identical in all commingled zones? X Yes \_\_\_ No  
If not, have all working, overriding, and royalty interests been notified by certified mail? X Yes \_\_\_ No  
Have all offset operators been given written notice of the proposed downhole commingling? X Yes \_\_\_ No
11. Will cross-flow occur? \_\_\_ Yes X No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. \_\_\_ Yes \_\_\_ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other? X Yes \_\_\_ No
13. Will the value of production be decreased by commingling? \_\_\_ Yes X No (If Yes, attach explanation)
14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. \_\_\_ Yes \_\_\_ No
15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). DHC-1277
16. ATTACHMENTS:  
\* C-102 for each zone to be commingled showing its spacing unit and acreage dedication.  
\* Production curve for each zone for at least one year. (If not available, attach explanation.)  
\* For zones with no production history, estimated production rates and supporting data.  
\* Data to support allocation method or formula.  
\* Notification list of all offset operators.  
\* Notification list of working, overriding, and royalty interests for uncommon interest cases.  
\* Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Robin S. McCarley TITLE Production Tech. DATE 10/20/99  
TYPE OR PRINT NAME Robin S. McCarley TELEPHONE NO. ( 915 ) 685-8100