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Arch Petroleum Inc.

March 5, 1996

Application for Administrative Approval of Eight Unorthodox Well Locations Lea County, New Mexico

William J. LeMay, Director
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Dear Mr. LeMay:

Arch Petroleum Inc. hereby seeks administrative approval pursuant to the provisions of Division Rule 104 F(2) adopted on January 18, 1996, of the unorthodox well locations listed on attached Exhibit A.

Exhibit B is lease Base Map showing the proposed locations. These locations do encroach on immediately adjacent existing spacing units in the same pool. These adjacent spacing units are in the same lease as the subject wells and are also operated by Arch in all cases. Therefore, there are no affected parties to whom notice is required pursuant to the NMOCD rules.

Exhibit B also shows the first seven infill wells drilled as Phase I wells pursuant to OCD Order #R-10453. The initial potential tests from the NMOCD Form C-105 are listed on Exhibit C. The results have been encouraging to date although it is too early to project an estimated ultimate recovery.

These unorthodox locations in the Blinebry formation are necessary for geological reasons. Exhibit D is a porosity isopach map of the Blinebry. It shows the areal extent of the porosity development in the field. This development is made up of thin porosity stringers that are very discontinuous between wellbores. This discontinuity, coupled with the low average porosity of five to eight percent and low average permeability of 0.5 millidarcies causes low ultimate recoveries and inadequate drainage of the field based on current 40 acre locations.

Exhibit E is a Drainage Map showing the areas estimated to be drained by the existing wells in the Blinebry. The drainage areas shown were calculated and are listed on Exhibit F. The parameters used to make these calculations are also shown. On average, it is seen that the

existing wells are expected to drain a little over 13 acres per well. It is therefore necessary to drill the subject well to avoid waste and efficiently recover the available reserves.

Your attention to this request is appreciated.

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Very truly yours,

this M. Begner

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Chris N. Bezner, P. E. Engineer

CNB/

Attachments

cc: Mr. Jerry Sexton, District Supervisor Oil Conservation Division

Mr. William F. Carr

Attorney for Arch Petroleum Inc.

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Proposed Well #	Acreage	Footages .	Unit	Section	Township	Range]
C E Lamunyon 57	Federal	2310' FNL 1200' FWL	E	27	23S	37E	1/
C E Lamunyon 58	Federal	2310' FNL 1340' FEL	G	28	23S	37E	V.
C E Lamunyon 59	Federal	330' FNL 1300' FWL	D	21	23S	37E	11
C E Lamunyon 60	Federal	1300' FSL 1340' FWL	N	22	23S	37E	1
E C Hill A 5	Fee	1340' FSL 1980' FEL	J	27	23S	37E	r
E.C.Hill B 6	Fee	1340' FSL 2310' FWL	K	27	23S	37E	1
M K Stewart 8	Federal	1340' FSL 330' FEL	I	28	23S	37E	11,
M K Stewart 9	Federal	1490' FSL 1340' FEL	J	28	23S	37E	//

PROPOSED INFILL WELLS - TEAGUE BLINEBRY - ARCH PETROLEUM INC. 8 UNORTHODOX LOCATIONS

14-8-96 Note To File: Quersized Exhibits B', D' and "E" are concluded as the Alministration Outor file for the E. C. H: 11 "A" UN/ 16. 5 (5-28-235-37E) officiation

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SALTMOUNT #3

	INITIAL POTENTIAL TEST (C-105)						
WELL NAME	DATE	BOPD	BWPD	MCFPD			
C. E. LAMUNYON #51	10/22/95	115	102	706			
C. E. LAMUNYON #52	11/09/95	127	10	222			
C. E. LAMUNYON #53	11/19/95	180	142	802			
C. E. LAMUNYON #55	02/13/96	162	93	709			

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TEAGUE BLINEBRY - INFILL WELLS

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EXHIBIT C

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	TEAGUE BLINEBRY FIELD - INFILL WELLS Estimated Ultimate Recovery-Drainage Radius								
ļ	Net Pay, Est. Ult. Prim. Drainage								
	Current Well	h net, ft.	Rec., MSTB	Acres	Drainage Radius, ft.				
1	GG Travis 2	126	151.3	21.4	545				
2	GG Travis 3	137	112.7	14.7	451				
3	Lamunyon 14	90	73.8	14.6	450				
4	Lamunyon 20	143	58.9	7.3	319				
5	Lamunyon 21	125	111.7	15.9	470				
6	Lamunyon 22	86	46.8	9.7	367				
7	Lamunyon 23	101	76.5	13.5	433				
8	Lamunyon 24	101	55.0	9.7	367				
9	Lamunyon 25	119	134.0	20.1	528				
10	Lamunyon 26	106	69.1	11.6	402				
11	Lamunyon 27	168	177.2	18.8	511				
12	Lamunyon 28	118	86.6	13.1	426				
13	Lamunyon 29	119	95.1	14.3	445				
14	Lamunyon 30	90	109.7	21.7	549				
15	Lamunyon 33	148	114.9	13.9	438				
16	Lamunyon 34	113	137.7	21.7	549				
17	Lamunyon 35	84	37.7	8.0	333				
18	Lamunyon 36	96	59.9	11.1	393				
19	Lamunyon 37	113	184.6	29.1	636				
20	Lamunyon 39	110	1.6	0.3	60				
21	Lamunyon 40	179	158.9	15.8	469				
22	Lamunyon 42	137	124.3	16.2	474				
23	Lamunyon 43	104	24.8	4.3	243				
24	Lamunyon 44	213	135.7	11.4	397				
	Lamunyon 50*	123	64.6	9.4	360				
	Elk State 2	119	138.4	20.8	536				
27	W H Elson 1	113	94.8	15.0	456				
	E C Hill A 2	110	67.7	11.0	390				
	E C Hill A 3	115	3.4	0.5	86				
	E C Hill B 2	120	39.0	5.8	284				
	E C Hill B 3	115	59.0	9.2	356				
	E C Hill C 1	120	73.1	10.9	388				
	E C Hill C 2	120	78.1	11.6	401				
	M K Stewart 2	109	87.2	14.3	445				
	M K Stewart 3	103	42.9	7.4	321				
	M K Stewart 4	120	66.7	9.9	371				
	M K Stewart 5	109	70.7	11.6	401				
	Saltmount 1	168	124.7	13.2	429				
	Saltmount 2	119	73.2	11.0	390				
40	Seeton 1	187	221.9	21.2	542				
	Total/Average	4,896	3,643.9	13.3	429				
	Assumes: Swi=18% Recovery * First 20-Acre Infill E	Factor=15%	r=7.4%, Boi≈1.26 F	<в/stb					

EXHIBIT F



GOVERNOR

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION, DIVISION HOBBS DISTRICT OFFICE

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POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

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OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

RE: Proposed:

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Gentlemen:

I have examined the application for the:

roller m -ch Well No. Unit Operator & Lease

and my recommendations are as follows:

Yours very truly,

Jerry Sexton / Supervisor, District 1

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