



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST • TULSA, OKLAHOMA 74114

November 8, 1996

State of New Mexico
Energy, Minerals and Natural Resources Dept.
Oil Conservation Division
District 1
P.O. Box 1980
Hobbs, New Mexico 88240

Re: Application for Downhole Commingling
Graham 7-5
Sec. 7-18S-32E
Lea Co., New Mexico

Gentlemen:

Enclosed for your information is a copy of the downhole commingling application packet mailed to the Oil Conservation Division Santa Fe Office on November 8, 1996.

Please call me at (918) 742-5531 if you have any questions.

Respectfully,

Chuck Coday

NCC:lb

ncc03

Enclosures

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

111 South First St., Artesia, NM 88210

DISTRICT III

000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☐ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Helmerich & Payne, Inc. Address 1579 E. 21st Tulsa, OK 74114

Base R.E. Graham Well No. 7-5 Unit Ltr. - Sec - Twp - Rge K 7-18S-32E Lea Lea County Lea

GRID NO. 010319 Property Code 005123 API NO. 30-025-30786 Spacing Unit Lease Types (check 1 or more) ☒ Federal ☐ State ☐ (and/or) Fee ☒

| The following facts are submitted in support of downhole commingling: | Upper Zone | Intermediate Zones | Lower Zone |
|--|-----------------------------------|--------------------|--------------------------------|
| 1. Pool Name and Pool Code | Young Bone Spring, North 65350 | | Young Wolfcamp, North 65590 |
| 2. Top and Bottom of Pay Section (Perforations) | 8556-8868 | | 10353-10362 |
| 3. Type of production (Oil or Gas) | Oil | | Oil |
| 4. Method of Production (Flowing or Artificial Lift) | Artificial lift | | Artificial lift |
| 5. Bottomhole Pressure | a. (Current) | a. | a. |
| Oil Zones - Artificial Lift: Estimated Current | 500 psi est. | | 400 psi est |
| Gas & Oil - Flowing: Measured Current | b. (Original) | b. | b. |
| All Gas Zones: Estimated Or Measured Original | 2909 psi | | 3462 psi |
| 6. Oil Gravity ($^{\circ}$ API) or Gas BTU Content | 37.2 | | 38.3 |
| 7. Producing or Shut-In? | Prod. | | SI |
| Production Marginal? (yes or no) | No | | Yes |
| * If Shut-In, give date and oil/gas/ water rates of last production | Date: | Date: | Date: 2-28-95 |
| | Rates: | Rates: | Rates: 9 BOPD, 9 MCFPD, 2 BWPD |
| 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) | Date: 8-31-96 | Date: | Date: |
| | Rates: 33 BOPD, 23 MCFPD, 16 BWPD | Rates: | Rates: |
| 8. Fixed Percentage Allocation Formula - % for each zone | Oil: 79 % Gas: 72 % | Oil: % Gas: % | Oil: 21 % Gas: 28 % |

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.

0. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☐ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☐ Yes ☐ No1. Will cross-flow occur? ☐ Yes ☒ 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)2. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No3. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)4. 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

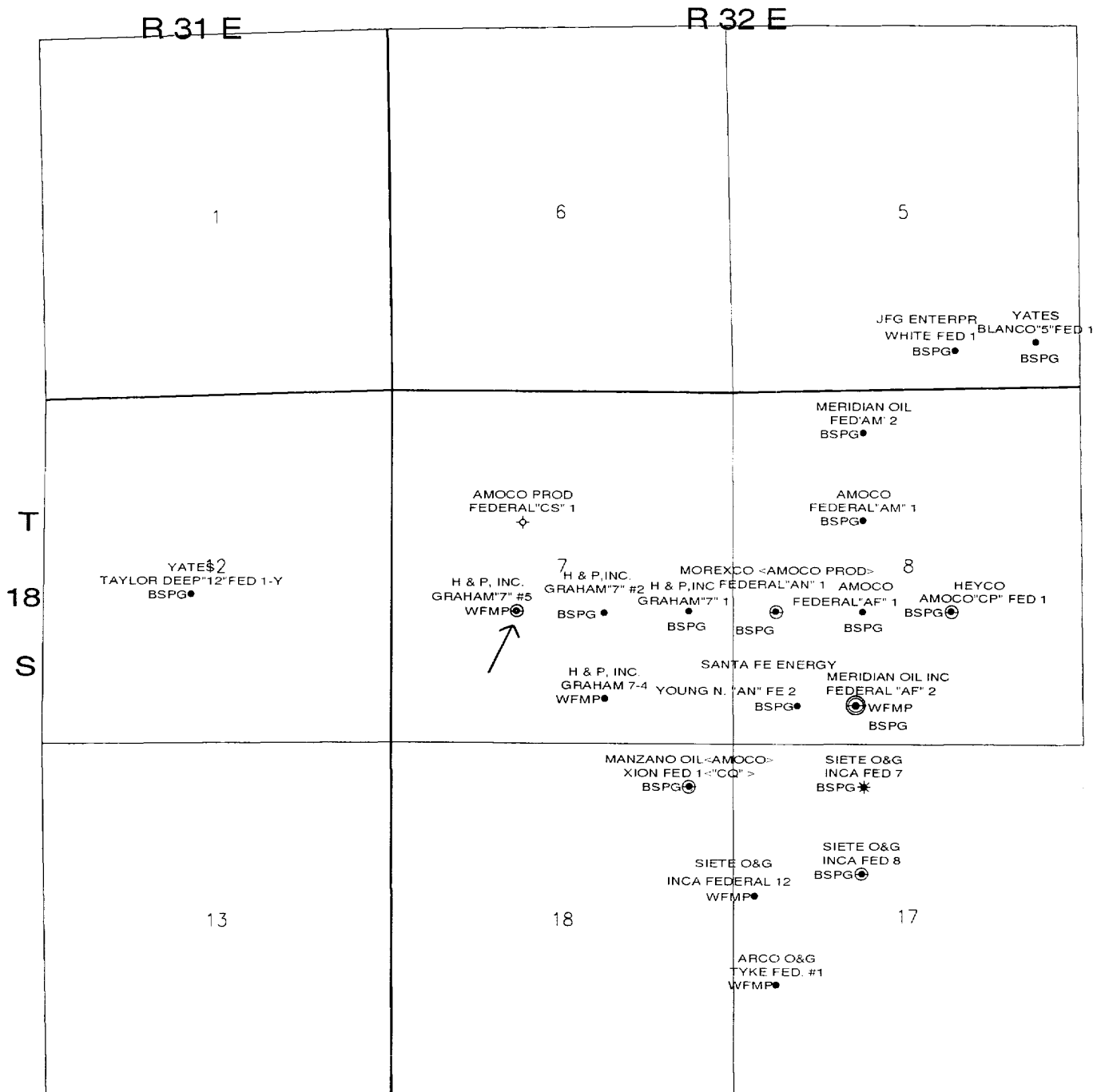
5. NMOCD Reference Cases for Rule 303(C) Exceptions: ORDER NO(S). _____

6. ATTACHMENTS:

- * C-102 for each zone to be commingling 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.

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

SIGNATURE Chuck Coday TITLE Sr. Prod. Engr. DATE October 2, 1996TYPE OR PRINT NAME Chuck Coday TELEPHONE NO. (918) 742-5531



| | | |
|--|-------|---------|
| Helmerich and Payne | | |
| Lea Co. New Mexico Young, North Field | | |
| C. Cody | | 10/4/96 |
| | Scale | |

Graham 7-5
sec 7-18S-32E
Lea County, NM

CURRENT WELLBORE

COMINGLED Wellbore

13 3/8 48# J55 STC @ 650'
cmt'd w/ 650sx to surf

8 5/8 32# J55 STC @ 3103
cmt'd w/ 875sx to surf

2 7/8 65# N80 EUE TUBING

DV TOOL @ 6976 cmt'd w/ 885sx

Est TOC @ 7400'

@ 8544' ← Tubing anchor catcher @ + 8544 →

2nd Bone Springs Sd. 8556 - 8868

CI BP @ 10,010 w/ 20' cmt (PBTD 9990)

Wolfcamp 10,353 - 10,362

5 1/2 20# N80 LTC @ 10696 cmt'd w/ 745sx
PBTD @ 10,575

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS



District I
PO Box 1900, Hobbs, NM 88241-1900

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-1

District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Revised February 10, 15
Instructions on b
Submit to Appropriate District Off
State Lease - 4 Cop
Fee Lease - 3 Cop

☐ AMENDED REPOI

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|----------------------------------|--|--------------------|---------------------------------------|
| APL Number 30-025-20786-30786 | | Pool Code 65350 | Pool Name Young Bone Spring, North |
| Property Code 005123 | Property Name R. E. Graham "7" | | Well Number 5 |
| OGRID No. 010319 | Operator Name Helmerich & Payne, Inc. | | Elevation 3775.7 |

10 Surface Location

| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| K | 7 | 18S | 32E | | 1980 | South | 1910 | West | LEA |

11 Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------|---------|-----------------|-------|--------------------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| Dedicated Acres | | Joint or Infill | | Consolidation Code | | Order No. | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | | |
|---|---|--|
| <p>16</p> <p>←1353.0'→</p> <p>←1910'→</p> <p>1980'</p> <p>←1350.4'→</p> | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Carolyn Martin</i></p> <p>Signature Carolyn Martin Printed Name District Production Clerk Date 03-28-95</p> | |
| | <p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey Signature and Seal of Professional Surveyor: Certificate Number</p> | |

OIL CONSERVATION DIVISION

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Denver DD, Artesia, NM 88210

DISTRICT III

1000 Rio Bravo Rd., Aztec, NM 87410

P.O. Box 2088

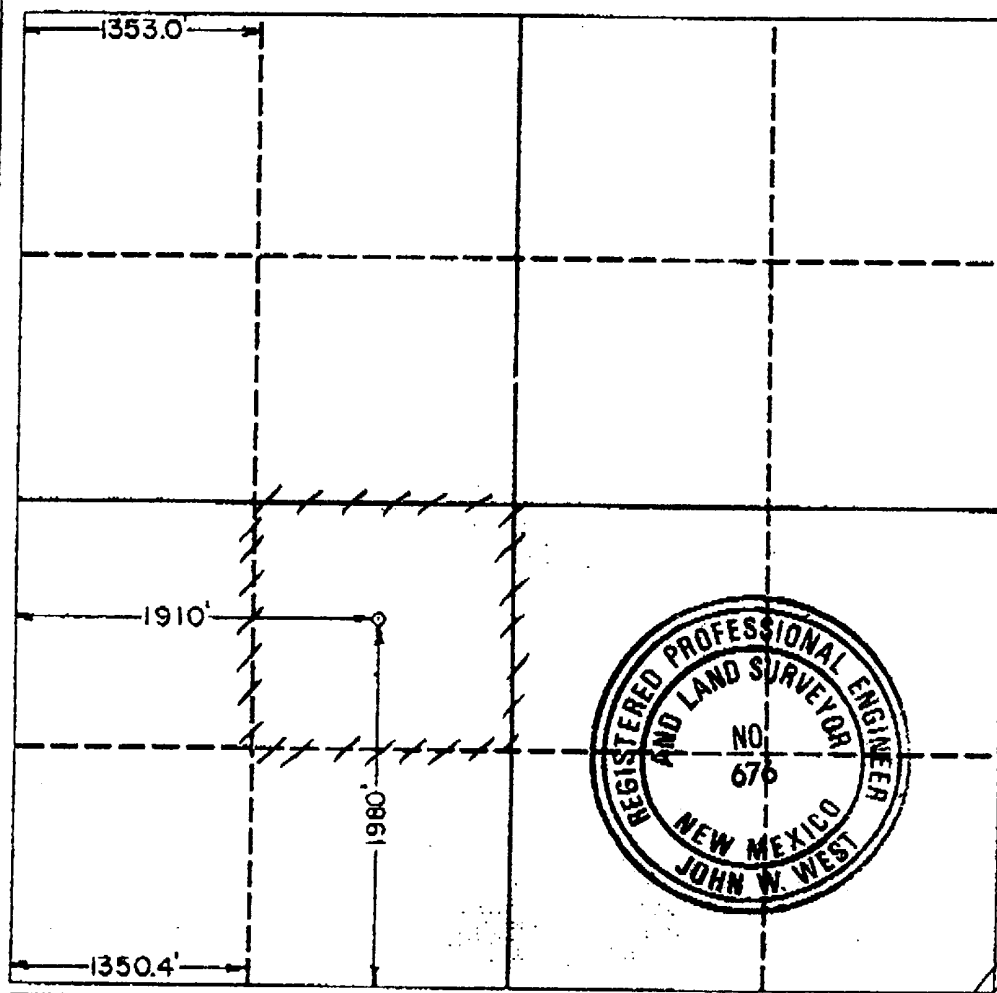
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | | | |
|--|--|-----------------------------|----------------------------------|---------------------------------------|----------------------|
| Operator HELMERICH & PAYNE INC. | | | Lease R. E. GRAHAM "7" | | Well No. 5 |
| Unit Letter K | Section 7 | Township 18 South | Range 32 East | County NMNM Lea | |
| Actual Footage Location of Well: 1980 feet from the South line and 1910 feet from the West line | | | | | |
| Ground level Elev. 3775.7 | Producing Formation WOLFCAMP | | Pool N. YOUNG WOLFCAMP | Dedicated Acreage: 40 Acres | |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____
 If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)
 No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature
Roger G. Bureau
 Printed Name
ROGER G. BUREAU
 Position
DRILLING SUPT.
 Company
HELMERICH & PAYNE, INC.
 Date
01/19/90

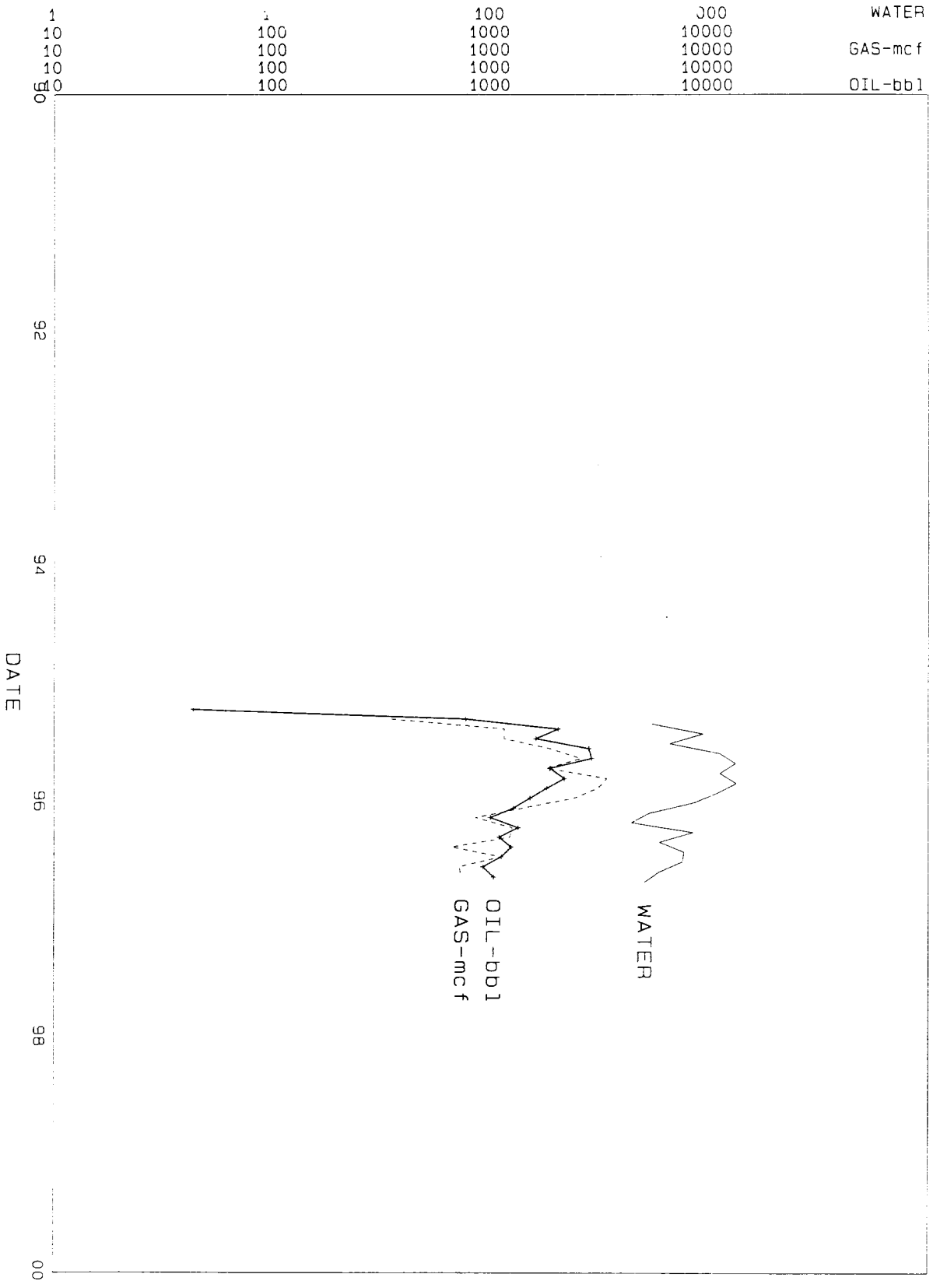
SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

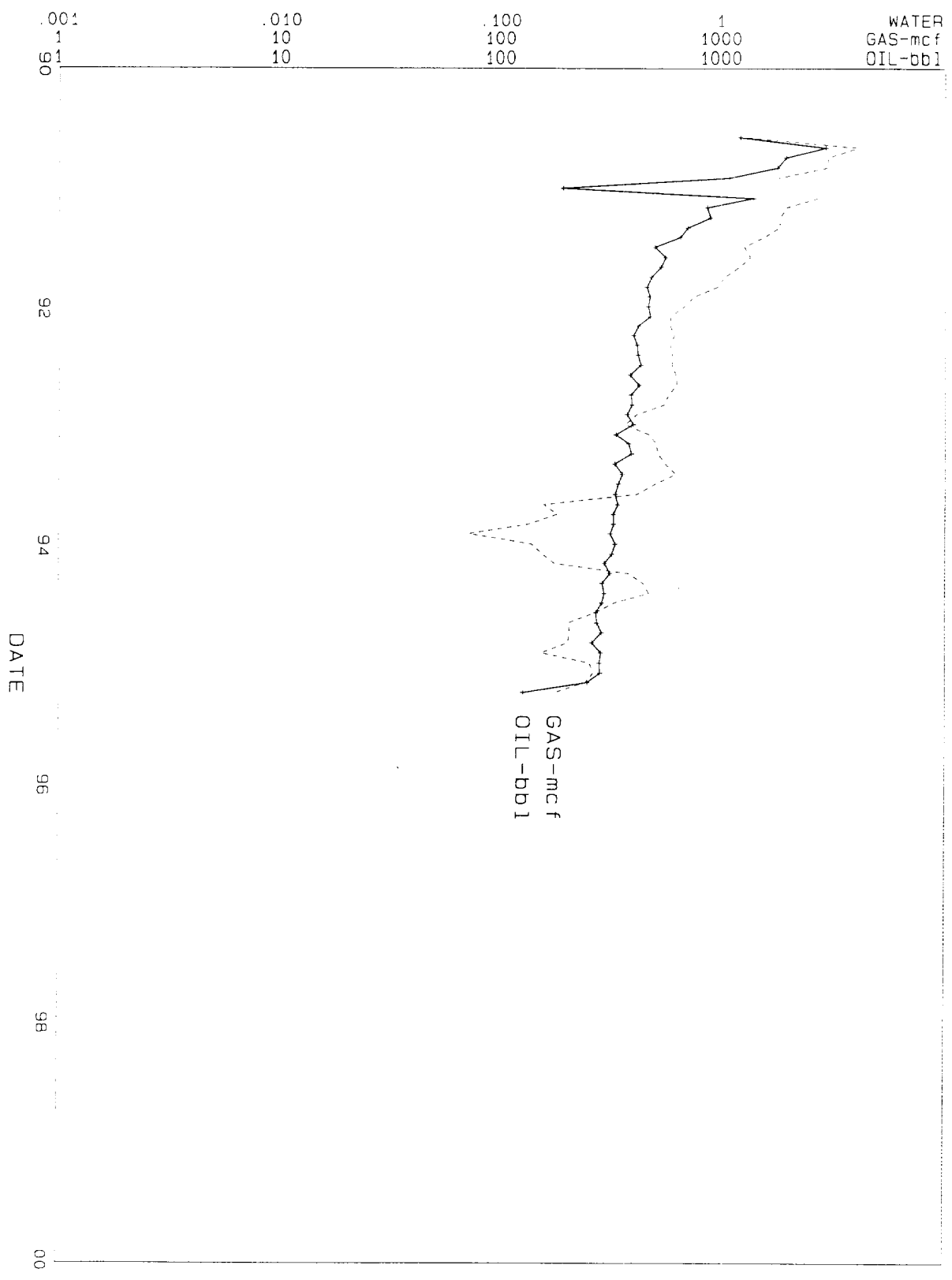
Date Surveyed
January 6, 1990

Signature & Seal of Professional Surveyor

John W. West
 Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239



LEASE : GRAHAM, R. E. 7-5 (BONES)
FIELD : YOUNG, NORTH
COUNTY : LEA
STATE : NM



| | |
|----------|---------------------------|
| LEASE : | GRAHAM, R. E. 7-5 (WOLF C |
| FIELD : | YOUNG, NORTH |
| COUNTY : | LEA |
| STATE : | NM |



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST - TULSA, OKLAHOMA 74114

October 4, 1996

Manzano Oil Corporation
PO Box 2107
Roswell, NM 88202-2107

Re: Downhole Commingle Application
Young North Field
Graham 7-5
Sec. 7-18S-32E
Lea County, NM

Gentlemen:

Helmerich & Payne, Inc. is filing an application to downhole commingle the 2nd Bone Springs Sd and the Wolfcamp zone in the subject well. Please indicate your approval or objection below and return this letter in the enclosed addressed envelope at your earliest convenience.

If you have any questions, please contact me at (918) 742-5531.

Sincerely,

A handwritten signature in cursive script that reads 'Chuck Coday'.

Chuck Coday

NCC:sal

✓ Approve

 Disapprove

A handwritten signature in cursive script that reads 'D.E. Brown'.

Name D.E. Brown, VP Engineering

10/10/96

Date

Manzano Oil Corporation
Company



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST • TULSA, OKLAHOMA 74114

October 4, 1996

Morexco, Inc.
PO Box 481
301 W. Texas
Artesia, NM 88211-0481

Re: Downhole Commingle Application
Young North Field
Graham 7-5
Sec. 7-18S-32E
Lea County, NM

Gentlemen:

Helmerich & Payne, Inc. is filing an application to downhole commingle the 2nd Bone Springs Sd and the Wolfcamp zone in the subject well. Please indicate your approval or objection below and return this letter in the enclosed addressed envelope at your earliest convenience.

If you have any questions, please contact me at (918) 742-5531.

Sincerely,

Chuck Coday

NCC:sal

☒ Approve

☐ Disapprove

Name

Morexco, Inc.
Company

10-14-96
Date



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST • TULSA, OKLAHOMA 74114

October 4, 1996

Santa Fe Energy
550 W. Texas, Suite 1330
Midland, TX 79701

Re: Downhole Commingle Application
Young North Field
Graham 7-5
Sec. 7-18S-32E
Lea County, NM



Gentlemen:

Helmerich & Payne, Inc. is filing an application to downhole commingle the 2nd Bone Springs Sd and the Wolfcamp zone in the subject well. Please indicate your approval or objection below and return this letter in the enclosed addressed envelope at your earliest convenience.

If you have any questions, please contact me at (918) 742-5531.

Sincerely,

Chuck Coday

Chuck Coday

NCC:sal

☒ Approve

☐ Disapprove

2001 J. D. Delano
Name

10/9/96
Date

SANTA FE ENERGY RESOURCES, INC.
Company

ROSWELL DISTRICT COPY



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST • TULSA, OKLAHOMA 74114

October 4, 1996

Bureau Of Land Management
620 E. Greene St.
Carlsbad, NM 88220

Re: Downhole Commingle Application
Young North Field
Graham 7-5
Sec. 7-18S-32E
Lea County, NM

RECEIVED
OCT 7 10 16 AM '96
BLM
Gentlemen:

Helmerich & Payne, Inc. is filing an application to downhole commingle the 2nd Bone Springs Sd and the Wolfcamp zone in the subject well. Please indicate your approval or objection below and return this letter in the enclosed addressed envelope at your earliest convenience.

If you have any questions, please contact me at (918) 742-5531.

Sincerely,

Chuck Coday

NCC:sal

☒ Approve

☐ Disapprove

Carroll D. Gray
Name

10/10/96
Date

BLM
Company



HELMERICH & PAYNE, INC. UTICA AT TWENTY-FIRST • TULSA, OKLAHOMA 74114

October 28, 1996

Harvey E. Yates
PO Box 1933
Roswell, NM 88202-1933
Attn: Melissa Randle

Re: Downhole Commingle Application
Young North Field
Graham 7-5
Sec. 7-18S-32E
Lea County, NM

Dear Melissa:

Helmerich & Payne, Inc. is filing an application to downhole commingle the 2nd Bone Springs Sd and the Wolfcamp zone in the subject well. Please indicate your approval or objection below and return this letter in the enclosed addressed envelope at your earliest convenience.

If you have any questions, please contact me at (918) 742-5531.


Sincerely,

Chuck Coday

NCC:sal

☒ Approve

☐ Disapprove


Name George M. Yates, President *MR*

Harvey E. Yates Company
Company

November 4, 1996
Date