

DATE IN <u>9/20/99</u>	SUSPENSE <u>10/12/99</u>	ENGINEER <u>DC</u>	LOGGED <u>W</u>	TYPE <u>DHC</u>
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
 [DD-Directional Drilling] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS-Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION - Check Those Which Apply for [A]**

[A] Location - Spacing Unit - Directional Drilling
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[2] **NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☒ Does Not Apply**

- [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application if One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding**

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Lee R. White
 Print or Type Name

Lee R. White
 Signature

Engineering Manager
 Title

9/16/99
 Date



September 16, 1999

Attn: David Catanach
State of New Mexico – Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

**Re: Application to Amend Downhole Commingle Order R-7537
Southland Royalty A No. 1
Blinebry Oil and Gas (Oil) Pool (06660)
Tubb Oil and Gas (Oil) Pool (60240)
Drinkard Pool (19190)
Wantz Abo Pool (62700)
Lea County, New Mexico**

Apache Corporation would like to request administrative approval to amend Downhole Commingle Order No. R-7537, currently consisting of the Blinebry, Tubb and Drinkard pools, to include the Wantz Abo pool in the referenced well.

To support this request we submit the following:

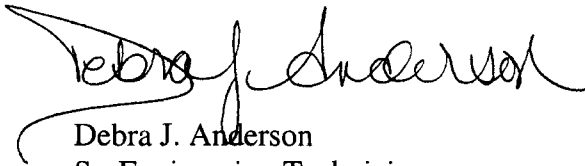
- 1) New Mexico – OCD Form C-107A
- 2) New Mexico – OCD Form C-102 for Blinebry Oil and Gas Pool
- 3) New Mexico – OCD Form C-102 for Tubb Oil and Gas Pool
- 4) New Mexico – OCD Form C-102 for Drinkard Pool
- 5) New Mexico – OCD Form C-102 for Wantz Abo Pool

- 6) Production curves for the referenced well in the Blinebry-Tubb-Drinkard pools combined and the Wantz Abo pool
- 7) Explanation of method for determining Allocation formula
- 8) Apache Corporation operates all wells within a one-half mile radius of the Southland Royalty A No. 1
- 9) Map of location with one-half mile radius marked
- 10) Well Bore Diagrams of current completion and proposed completion

If you have any questions or require additional information regarding this application, please contact me at 713-296-6338. Thank you.

Sincerely,

APACHE CORPORATION



Debra J. Anderson
Sr. Engineering Technician

Attachments

cc: New Mexico Oil Conservation Division
District I
1625 N. French Drive
Hobbs, New Mexico 88240

DISTRICT I

1625 N. French Drive, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 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-107A
New 3-12-96**APPROVAL PROCESS:**☒ Administrative☐ Hearing**EXISTING WELLBORE**☒ Yes ☐ No**APPLICATION FOR DOWNHOLE COMMINGLE****Apache Corporation**

Operator

2000 Post Oak Blvd., Suite 100 - Rm 365A, Houston, Texas 77056-4400

Address

Southland Royalty A

1

G / 9 / 21S / 37E**Lea**

Lease

Well No.

Unit Ltr.-Sec-Twp-Rgn

County

Spacing Unit Lease Types: (one or more)

☐ Federal☐ State☒ Fee

OGRID NO.

000873

Property Code

23112 API No.

30-025-06442

The following facts are submitted in support of downhole commingling:

	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	DHC Order R7537- See Attachment A		Wantz Abo (62700)
2. Top and Bottom of Pay Section (Perforations)	5664 - 6660		6822 - 6843
3. Type of production (Oil or Gas)	Oil		Gas
4. Method of Production (Flowing or Artificial Lift)	Artificial Lift		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current	a. (Current) 600	a.	a.
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated or Measured Original			2925
6. Oil Gravity (*API) or Gas BTU Content	36.3		1000
7. Producing or Shut-In?	Producing		Producing
Production Marginal? (Yes or No)	Yes		Yes
° If Shut-In, give date and oil/gas/ water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
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 80 days)	Date: 8/31/99 Rates: 7 x 68 x 1	Date: Rates:	Date: 8/31/99 Rates: 0 x 127 x 0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 100% Gas: 34%	Oil: Gas:	Oil: 0% Gas: 66%

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?

☒ 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 ☐ No

11. Will cross-flow occur?

☐ Yes ☒ No

If yes, are fluids compatible, will the formations be undamaged, will any cross-flow 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?

☒ Yes ☐ No

13. Will the value of production be decreased by commingling?

☐ Yes☒ 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(C) Exceptions:

Order No.s

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



TITLE

Sr. Engineering Technician

DATE

9/16/99

TYPE OR PRINT NAME

Debra J. Anderson

TELEPHONE NO.

713-296-6338

District I
1625 N. French Drive, Hobbs, NM 88240

District II
P O Drawer DD, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505

Form C-102
Revised October 18, 1994
Instruction on Back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-06442	² Pool Code 06660	³ Pool Name Blinebry Oil and Gas (Oil)
⁴ Property Code 23112	⁵ Property Name Southland Royalty A	⁶ Well Number 1
⁷ OGRID No. 000873	⁸ Operator Name Apache Corporation	⁹ Elevation 3488

¹⁰ Surface Location

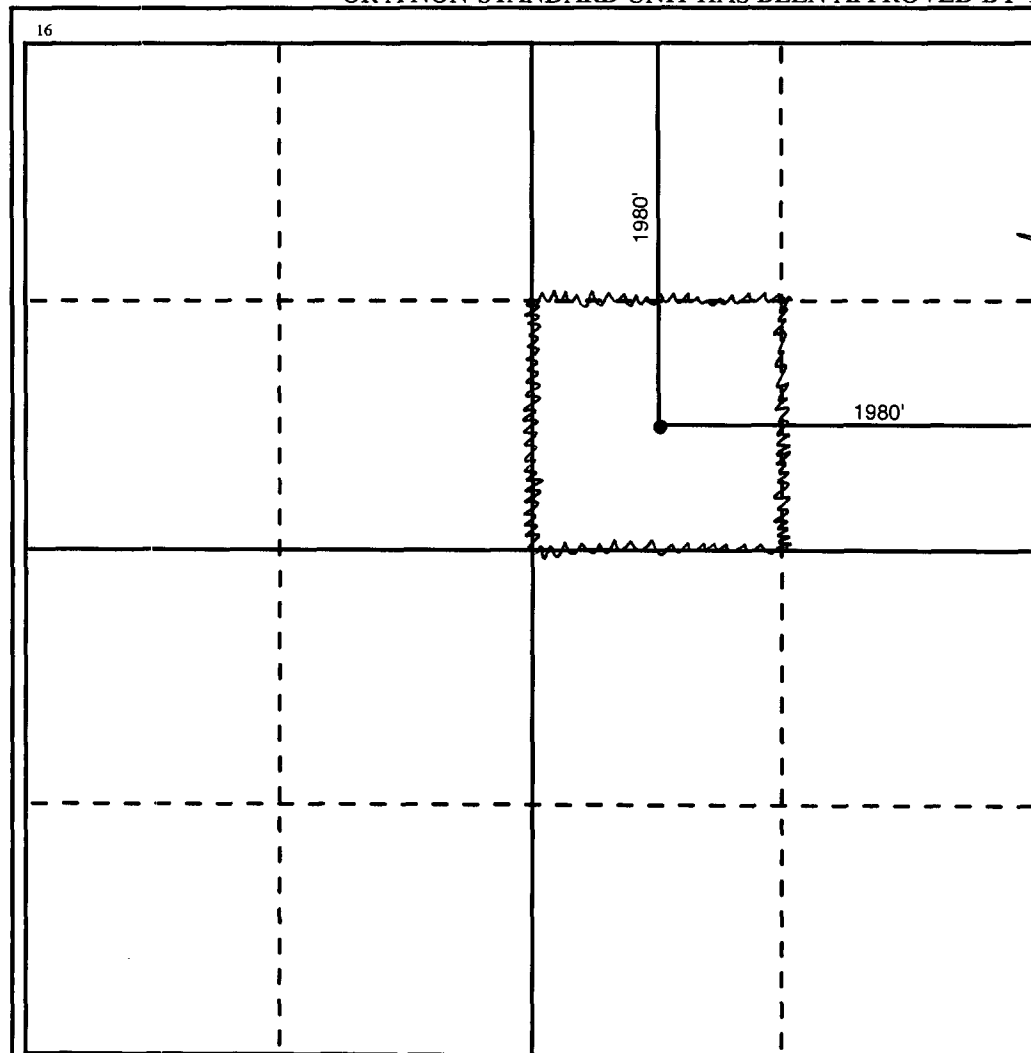
UL or Lot No. G	Section 9	Township 21S	Range 37E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 1980	East/West line East	County Lea
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¹¹ Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁴ Order No.
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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



¹⁷ OPERATOR CERTIFICATION

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

Signature

Printed Name

Debra J. Anderson

Title

Sr. Engineering Technician

Date

9/16/99

¹⁸ 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 belief.

Date Surveyed

Signature and Seal of Professional Surveyor

Certificate Number

District I
1625 N. French Drive, Hobbs, NM 88240

District II
P O Drawer DD, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-06442	² Pool Code 60240	³ Pool Name Tubb Oil and Gas (Oil)
⁴ Property Code 23112	⁵ Property Name Southland Royalty A	⁶ Well Number 1
⁷ OGRID No. 000873	⁸ Operator Name Apache Corporation	⁹ Elevation 3488

¹⁰ Surface Location

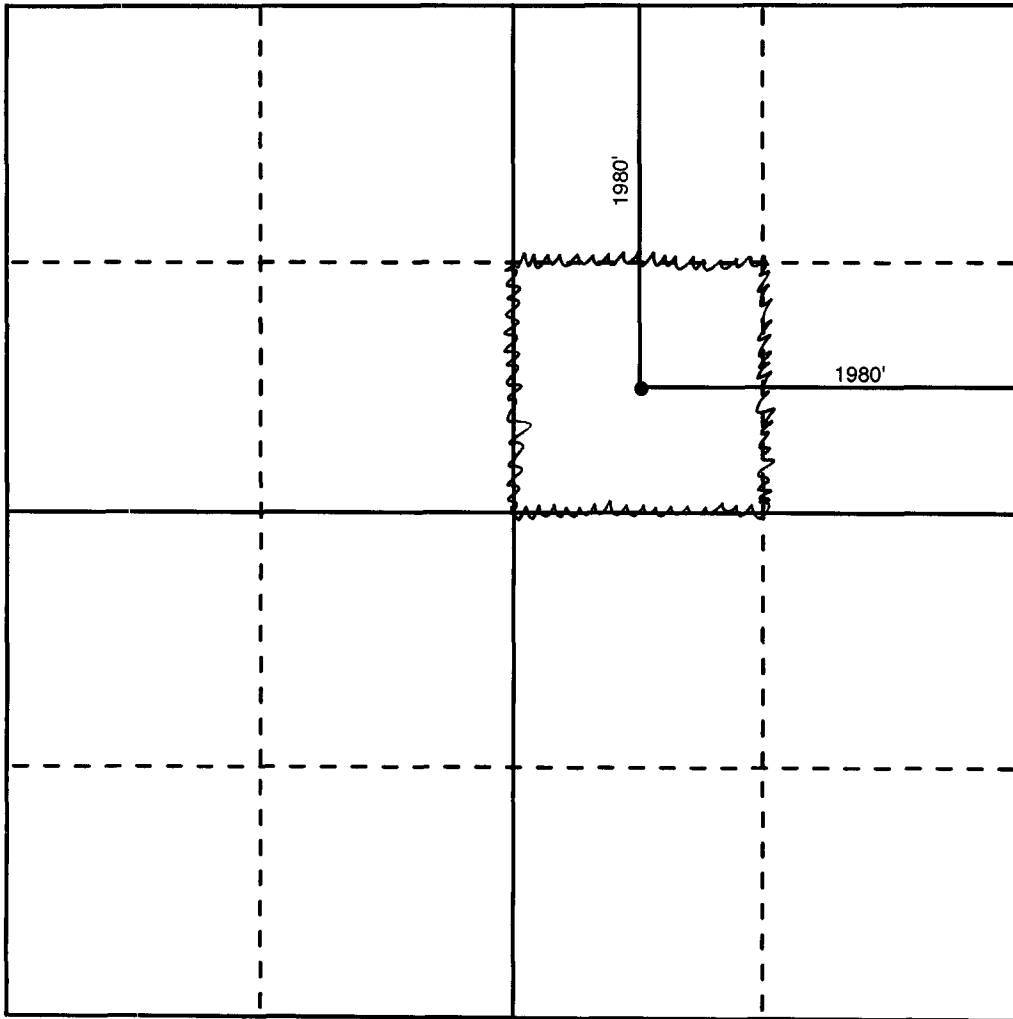
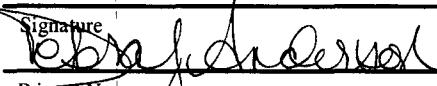
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¹¹ Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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<p>¹⁶</p> 	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i></p> <p>Signature </p> <p>Printed Name Debra J. Anderson</p> <p>Title Sr. Engineering Technician</p> <p>Date 9/16/99</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>Date Surveyed</p> <p>Signature and Seal of Professional Surveyor</p> <p>Certificate Number</p>
---	--

District I
1625 N. French Drive, Hobbs, NM 88240

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1000 Rio Brazos Rd., Aztec, NM 87410

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2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-06442	² Pool Code 19190	³ Pool Name Drinkard
⁴ Property Code 23112	⁵ Property Name Southland Royalty A	⁶ Well Number 1
⁷ OGRID No. 000873	⁸ Operator Name Apache Corporation	⁹ Elevation 3488

¹⁰ Surface Location

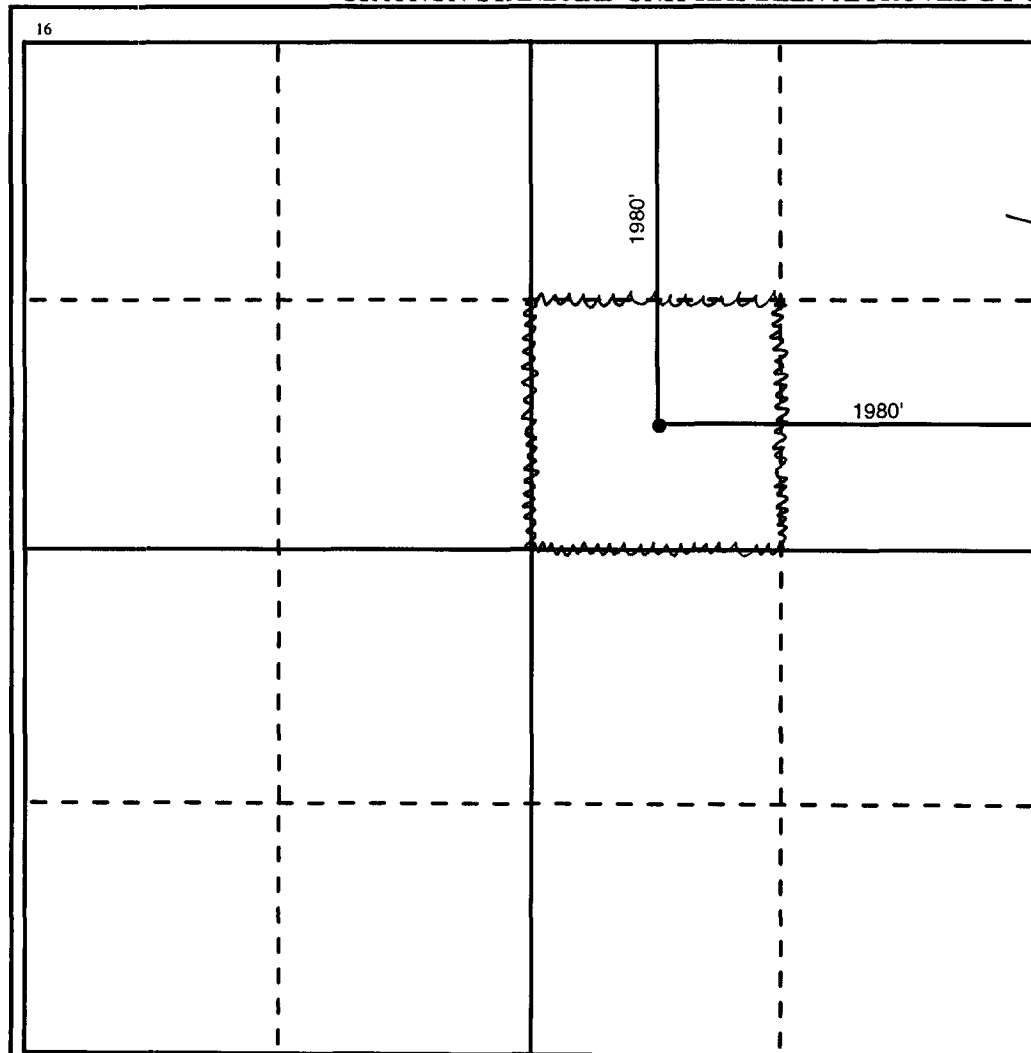
UL or Lot No. G	Section 9	Township 21S	Range 37E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 1980	East/West line East	County Lea
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¹¹ Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁴ Order No.
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¹⁷ OPERATOR CERTIFICATION

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

Signature
Debra J. Anderson

Printed Name
Debra J. Anderson

Title
Sr. Engineering Technician

Date
9/16/99

¹⁸ 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 belief.

Date Surveyed

Signature and Seal of Professional Surveyor

Certificate Number

District I
1625 N. French Drive, Hobbs, NM 88240

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-06442	² Pool Code 62700	³ Pool Name Wantz Abo
⁴ Property Code 23112	⁵ Property Name Southland Royalty A	⁶ Well Number 1
⁷ OGRID No. 000873	⁸ Operator Name Apache Corporation	⁹ Elevation 3488

¹⁰ Surface Location

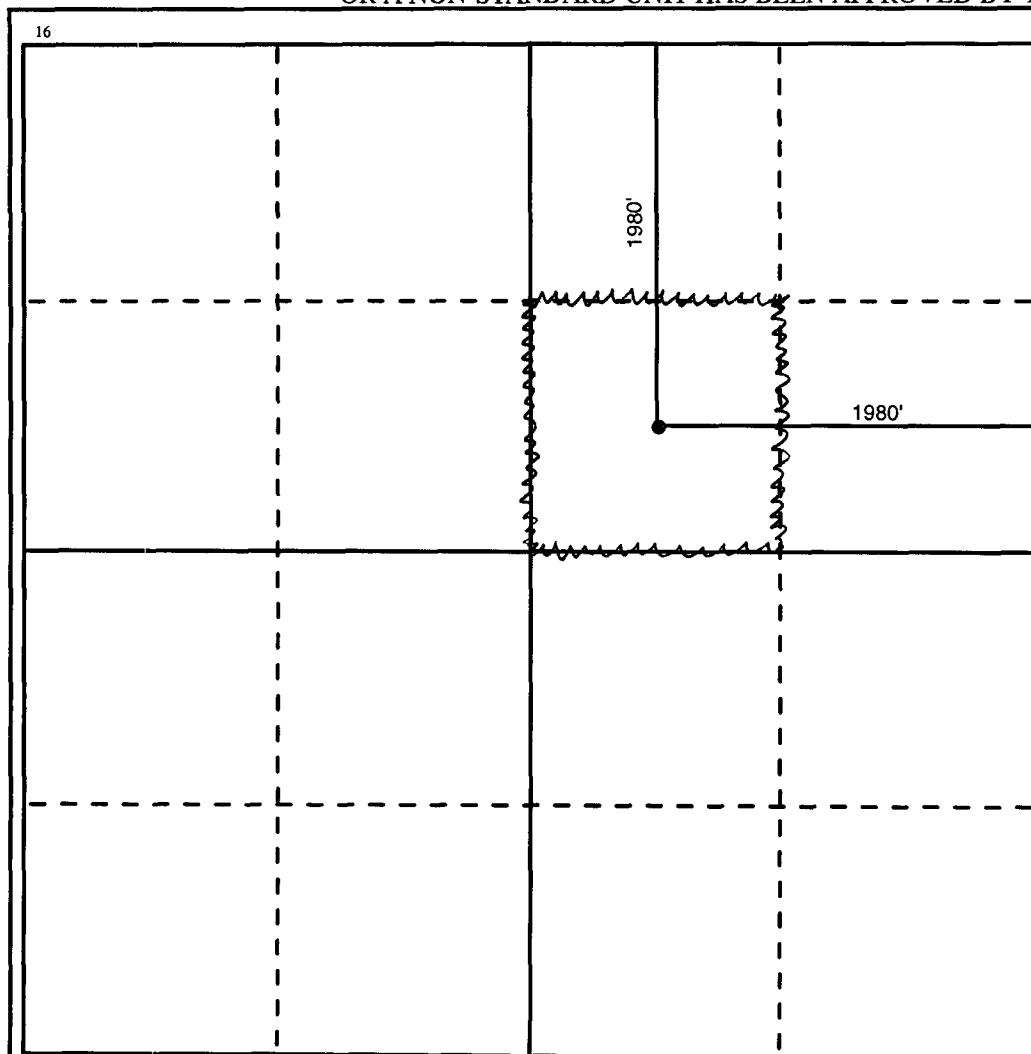
UL or Lot No. G	Section 9	Township 21S	Range 37E	Lot Idn	Feet from the 1980	North/South line North	Feet from the 1980	East/West line East	County Lea
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¹¹ Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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Signature

Printed Name

Debra J. Anderson

Title

Sr. Engineering Technician

Date

9/16/99

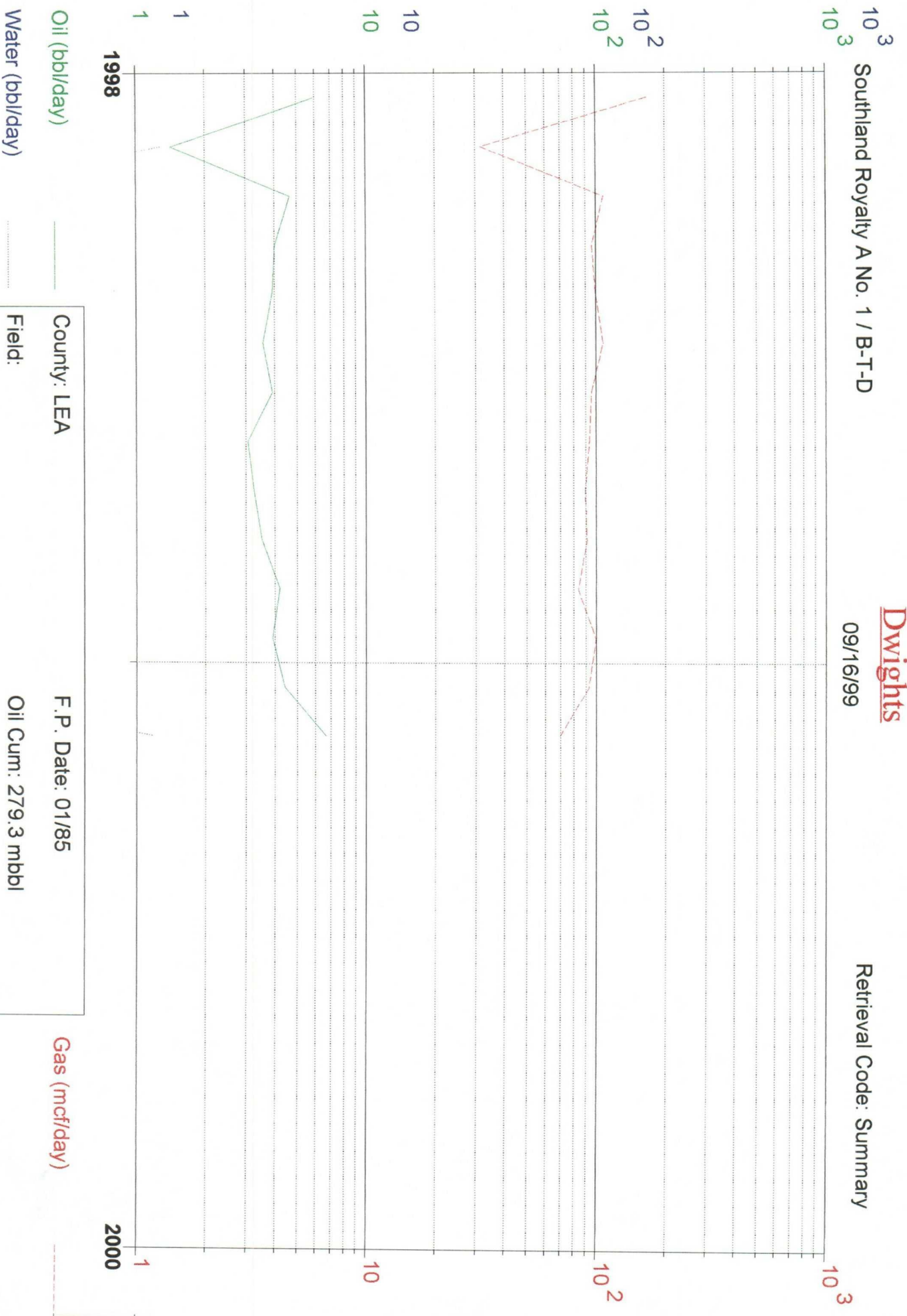
¹⁸ SURVEYOR CERTIFICATION

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Date Surveyed

Signature and Seal of Professional Surveyor

Certificate Number



County: LEA	F.P. Date: 01/85
Field:	Oil Cum: 279.3 mbbl
Reservoir:	Gas Cum: 4180 mmcf
Operator: APACHE CORP	Location: 9G 21S 37E



Oil (bbl/day)

Water (bbl/day)

Gas (mcf/day)

County: LEA	F.P. Date: 03/82
Field: WANTZ (ABO) AB	Oil Cum: 9381 bbl
Reservoir: ABO	Gas Cum: 3191 mmcf
Operator: APACHE CORP	Location: 9G 21S 37E

Attachment A Allocation Formula Explanation

The Southland Royalty A # 1 well is currently dually completed. The upper completion consists of the downhole commingling of the Blinebry Oil & Gas (06660), Tubb Oil & Gas (60240) and Drinkard (19190) pools. NMOCD Order R-7537, dated 5/21/84, authorized this downhole commingling. These pools are produced by artificial lift. The lower completion is in the Wantz Abo (62700) pool which is currently flowing. Apache Corporation proposes to add the Wantz Abo pool to the existing downhole commingling order R-7537 and produce by artificial lift

The following is the current allocation formula for the Blinebry-Tubb-Drinkard downhole commingle.

Pool	Oil	Gas
Blinebry	44.5%	44.8%
Tubb	13.0%	33.6%
Drinkard	42.5%	21.6%
Total	100.0%	100.0%

(see 8/8/81)

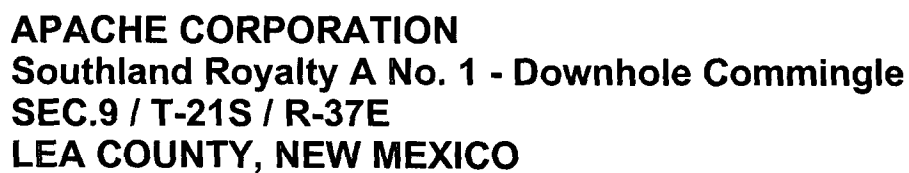
Current Average Daily Production

Pool	Oil	Gas
Blinebry	3 BOPD	30 MCFD
Tubb	1 BOPD	23 MCFD
Drinkard	3 BOPD	15 MCFD
Wantz Abo	0 BOPD	127 MCFD
Total	7 BOPD	195 MCFD

Allocated based on original formula
Allocated based on original formula
Allocated based on original formula

Proposed Allocation Formula to include the Wantz Abo pool

Pool	Oil	Gas
Blinebry	44.0%	15.0%
Tubb	13.0%	12.0%
Drinkard	43.0%	7.0%
Wantz Abo	0.0%	66.0%
Total	100.0%	100.0%



APACHE CORPORATION
Southland Royalty A No. 1 - Downhole Commingle
SEC.9 / T-21S / R-37E
LEA COUNTY, NEW MEXICO

Well: Southland Royalty A No. 1

Field: Multiple Completion
Blinebry-Tubb-Drinkard (DHC Order No. R-7537)
Wantz Abo

Location: 1980' FSL, 1980' FEL
Unit G, Section 9, Township 21S, Range 37E

API#: 30-025-06442

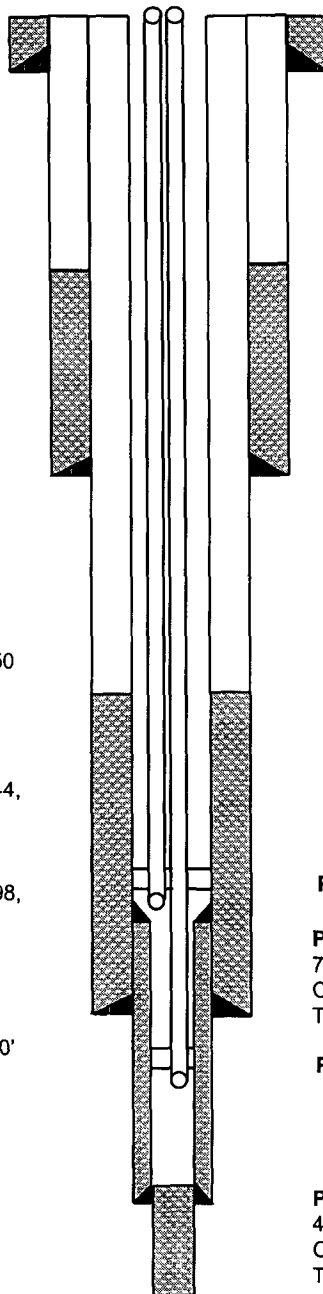
Current Status: Multiple Completion
Blinebry-Tubb-Drinkard / Oil & Gas
Wantz Abo / Gas

Blinebry Perfs:
1962 5814-16, 38-40, 68-70, 5902-04, 48-50
1972 5664-78, 88-94, 5704-06, 15, 22-24,
36-44, 56-58
1982 **Cement squeezed (5664 - 5950) w /**
400 sx
1984 5664-78, 88-94, 5704-06, 22-24, 34-44,
56-58

Tubb Perfs:
1984 6150-60, 6210-28, 42-55, 65-75, 92-98,
6347-53, 80-95

Drinkard Perfs:
1947 6555-6610, 40-75
1961 **Cement squeezed w / 200 sx**
1962 Sandril Slot in Casing @ 6585' & 6660'
1973 6508-32, 60-70, 75-77, 80-90, 94-96,
6600-10
1982 **Cement squeezed w / 575 sx**
1984 6450-70, 6508-32, 6640-60

Wantz Abo Perfs:
1982 6822-28, 34-43



Surface Casing: 17-1/2" Hole
13-3/8" 48# Armco CSA 237'
Cement w / 300 sx
Circulated to Surface

Intermediate Casing: 12-1/4" Hole
9-5/8" 36# CSA 3860'
Cement w / 1500 sx
TOC @ 2050' (Temp Svy)

Parallel Tubing Anchor @ 6300'

Production Casing: 8-3/4" Hole
7" 23# N-80 & J-55, CSA 6683'
Cement w / 600 sx
TOC @ 5175' (Temp Svy)

Packer @ 6750'

Production Liner: 6-1/8" Hole
4-1/2" 11.6# K-55, LSA 7000'
Cement w / 144 sx
TOL @ 6385'

TD @ 7569'
PBTD @ 6980'

Well: Southland Royalty A No. 1

Field: Multiple Completion
Blinebry-Tubb-Drinkard (DHC Order No. R-7537)
Wantz Abo

Location: 1980' FSL, 1980' FEL
Unit G, Section 9, Township 21S, Range 37E

API#: 30-025-06442

Proposed Status: Downhole Commingle
Blinebry-Tubb-Drinkard / Oil & Gas
Wantz Abo / Gas

Blinebry Perfs:

1962 5814-16, 38-40, 68-70, 5902-04, 48-50
1972 5664-78, 88-94, 5704-06, 15, 22-24,
36-44, 56-58
1982 **Cement squeezed (5664 - 5950) w /
400 sx**
1984 5664-78, 88-94, 5704-06, 22-24, 34-44,
56-58

Tubb Perfs:

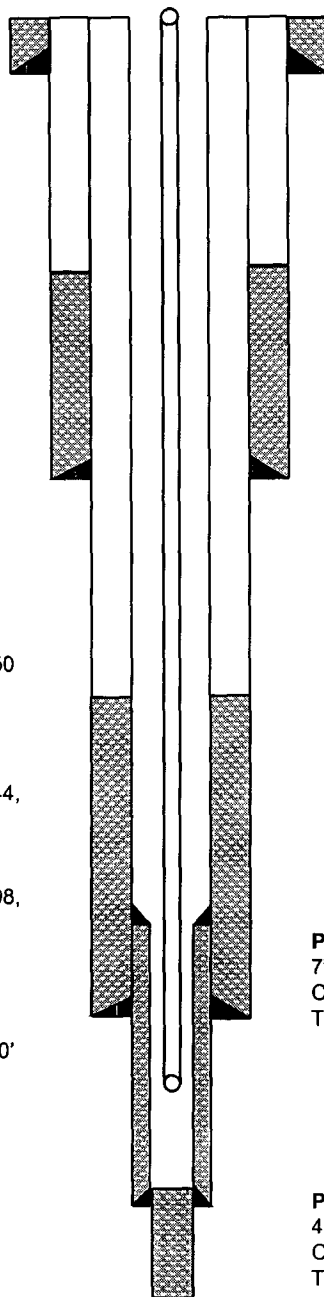
1984 6150-60, 6210-28, 42-55, 65-75, 92-98,
6347-53, 80-95

Drinkard Perfs:

1947 6555-6610, 40-75
1961 **Cement squeezed w / 200 sx**
1962 Sandril Slot in Casing @ 6585' & 6660'
1973 6508-32, 60-70, 75-77, 80-90, 94-96,
6600-10
1982 **Cement squeezed w / 575 sx**
1984 6450-70, 6508-32, 6640-60

Wantz Abo Perfs:

1982 6822-28, 34-43



Surface Casing: 17-1/2" Hole
13-3/8" 48# Armco CSA 237'
Cement w / 300 sx
Circulated to Surface

Intermediate Casing: 12-1/4" Hole
9-5/8" 36# CSA 3860'
Cement w / 1500 sx
TOC @ 2050' (Temp Svy)

Production Casing: 8-3/4" Hole
7" 23# N-80 & J-55, CSA 6683'
Cement w / 600 sx
TOC @ 5175' (Temp Svy)

Production Liner: 6-1/8" Hole
4-1/2" 11.6# K-55, LSA 7000'
Cement w / 144 sx
TOL @ 6385'

TD @ 7569'
PBTD @ 6980'