

## 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 87505-6429Form C-107-A  
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

## APPLICATION FOR DOWNHOLE COMMINGLING

Conoco Inc.

10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Jicarilla 22

Lease

8

Well No

Section 16, T-25-N, R-4-W, 1

Unit Ltr Sec Twp Rge

Rio Arriba

County

OGRID NO. 005073

Property Code

003203

API NO.

30-039-21280

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 Zone	Lower Zone
1. Pool Name and Pool Code	Blanco Mesaverde 72319		Lindrith Gallup-Dakota, West 39189
2. TOP and Bottom of Pay Section (Perforations)	5656-5832'		6836-7947'
3. Type of production (Oil or Gas)	Gas		Oil
4. Method of Production (Flowing or Artificial Lift)	To be pumped		Artificial Lift
5. Bottomhole Pressure	a (Current) 583	a. 860	a.
Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	b (Original) 1314	b. 2644	b.
6. Oil Gravity (*API) or Gas BT Content	1269		1269
7. Producing or Shut-In?	To be Completed		Producing
Production Marginal? (yes or no)	Yes		Yes
• If Shut-In give date and oil/gas/water rates of last production <small>Note For new zones with no production history applicant shall be required to attach production estimates and supporting data</small>	Date Rates	Date Rates	Date Rates
• If Producing, date and oil/gas/water rates of recent test (within 60 days)	Production to be allocated by subtraction - See Attached table	Date Rates	Est 7/98 61 MCFD, 1.2 BOPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % of each zone	% Gas %	% Gas %	% Gas %

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?  
If not, have all working, overriding, and royalty interests been notified by certified mail?X Yes \_\_\_ No  
\_\_\_ Yes \_\_\_ No  
\_\_\_ Yes \_\_\_ No11. 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. X Yes \_\_\_ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each others ☒ 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(D) 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

Kay Maddox

TITLE

Regulatory Agent

DATE

Feb 16, 1998

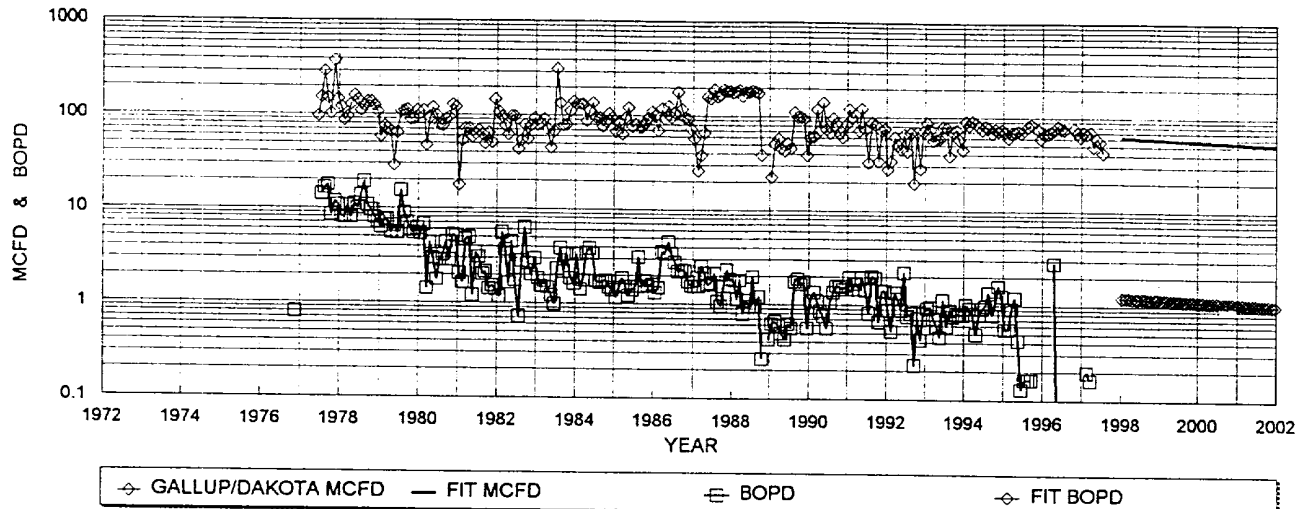
TYPE OR PRINT NAME Kay Maddox

TELEPHONE NO.

(915)

686-5798

**JICARILLA 22 NO. 8 GALLUP/DAKOTA PRODUCTION  
SECTION 16I-25N-04W**



**GALLUP DAKOTA HISTORICAL DATA: 1ST PROD: 11/76**

OIL CUM: 18.90 MBO  
 GAS CUM: 664.0 MMCF  
 CUM OIL YIELD: 0.0285 BBL/MCF  
 OIL YIELD: 0.0104 BBL/MCF, LAST 6 YRS  
 AVG. USED: 0.0195 BBL/MCF

**PROJECTED DATA**

7/1/98 Qi: 61 MCFD  
 DECLINE RATE: 4.6% (EXPONENTIAL)

**PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION**

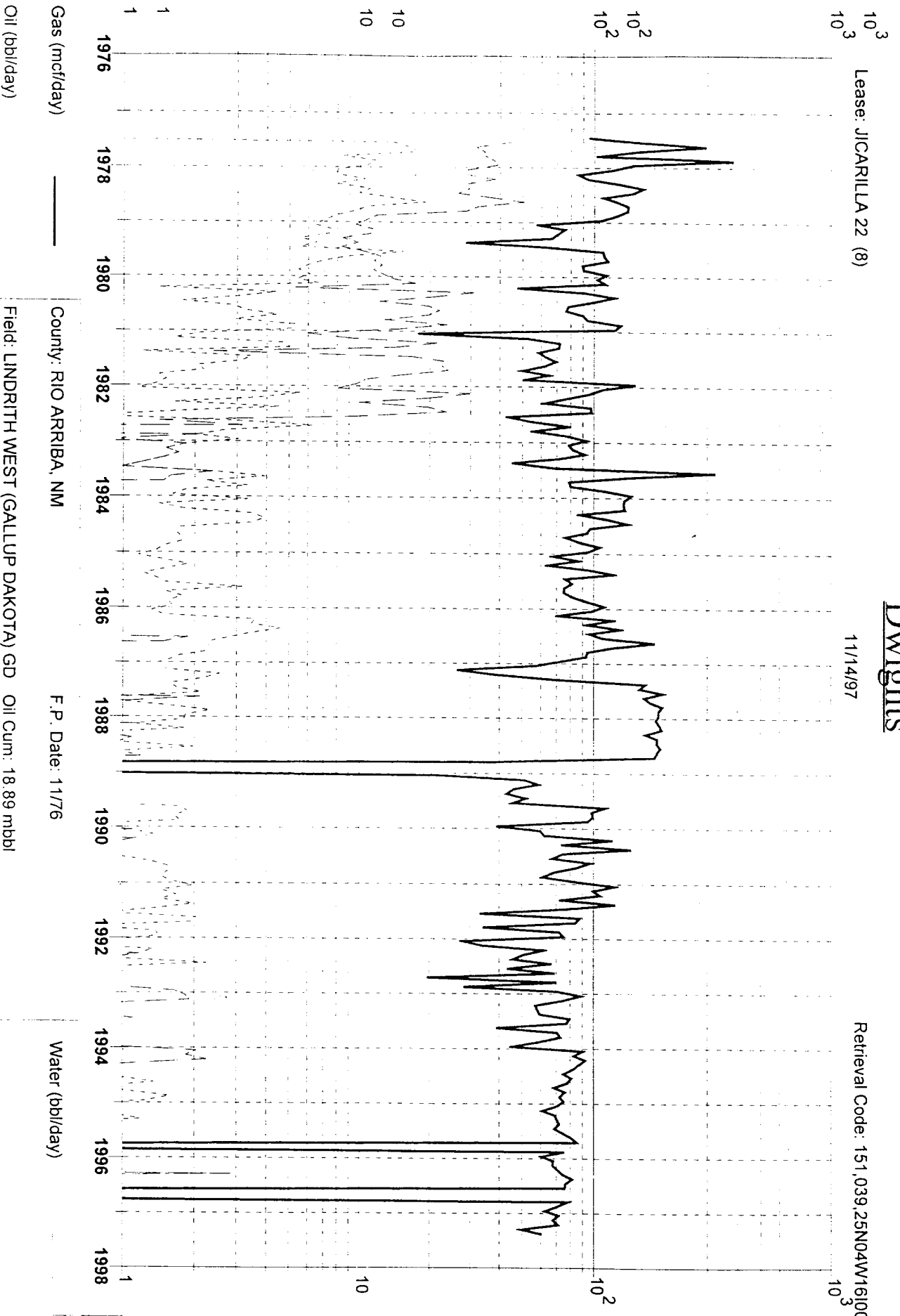
YEAR	MID-YEAR	MID-YEAR
	AVG. MCFD	AVG. BOPD
1998	60	1.2
1997	58	1.1
1998	55	1.1
1999	53	1.0
2000	50	1.0
2001	48	0.9
2002	46	0.9
2003	44	0.8
2004	42	0.8
2005	40	0.8
2006	38	0.7
2007	36	0.7
2008	34	0.7
2009	33	0.6
2010	31	0.6
2011	30	0.6
2012	28	0.6
2013	27	0.5
2014	26	0.5
2015	25	0.5
2016	24	0.5
2017	23	0.4
2018	21	0.4
2019	20	0.4
2020	20	0.4
2021	19	0.4
2022	18	0.3
2023	17	0.3
2024	16	0.3
2025	15	0.3
2026	15	0.3
2027	14	0.3
2028	13	0.3
2029	13	0.2
2030	12	0.2

# Dwights

Lease: JICARILLA 22 (8)

11/14/97

Retrieval Code: 151,039,25N04W16100GD



District IV  
PO Box 2088, Santa Fe. NM 87504-2088

PO Box 2088  
Santa Fe, NM 87504-2088

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-039-21280		2 Pool Code 72319	3 Pool Name Blanco Mesaverde
4 Property Code 003203	5 Property Name Jicarilla 22		6 Well Number #8
7 OGRID No. 005073	8 Operator Name Conoco Inc., 10 Desta Drive, Ste. 100W, Midland, TX 79705-4500		9 Elevation 7103' GL

## 10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	16	25N	4W		1795	South	1080	East	Rio Arriba

## 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
12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code		15 Order No.					
320									

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

[illegible]

File

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator <b>CONTINENTAL OIL COMPANY</b>		Lease <b>JICARILLA 22</b>		Well No <b>8</b>
Unit Letter <b>I</b>	Section <b>16</b>	Township <b>25 NORTH</b>	Range <b>4 WEST</b>	County <b>RIC ARriba</b>
Actual Footage Location of Well: <b>1795</b> feet from the <b>SOUTH</b> line and <b>1080</b> feet from the <b>EAST</b> line				
Ground Level Elev. <b>7103</b>	Producing Formation		Pool	Dedicated Acreage:  Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

( ) Yes ( ) No If answer is "yes," type of consolidation .....

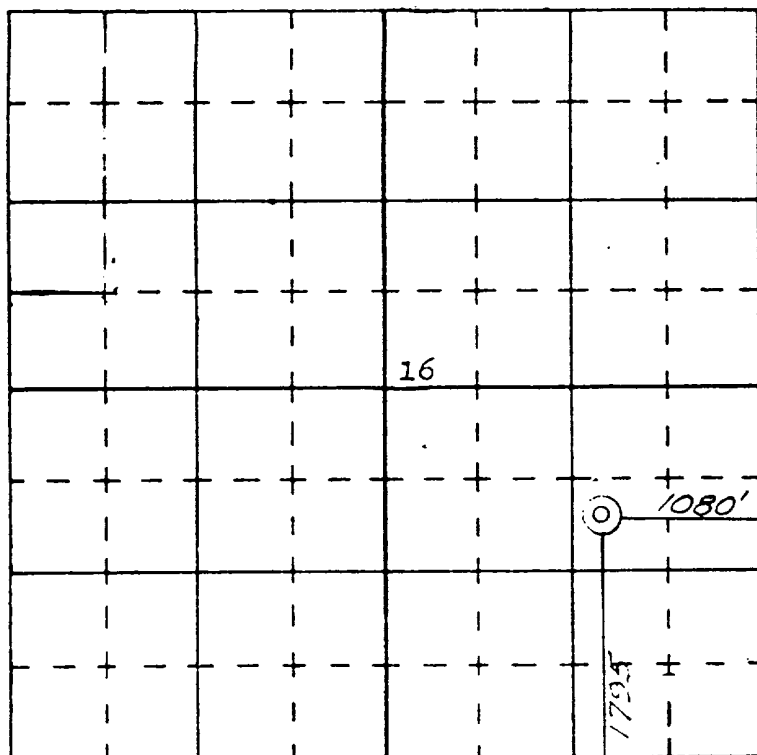
If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this Form if necessary.) .....

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 interests, has been approved by the Commission.

CERTIFICATION

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

Name \_\_\_\_\_  
Position \_\_\_\_\_  
Company \_\_\_\_\_  
Date \_\_\_\_\_



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 **27 July 1976**  
  
Registered Professional Engineer  
and/or Land Surveyor **James P. Leese**

Certificate No. **1463**

Conoco, Inc.  
Jicarilla 22 #8  
Section 16, T-25-N, R-4-W,I  
Rio Arriba County, New Mexico

Re: Application for Downhole Commingling

Offset Operators:

Burlington Resources Oil & Gas  
PO Box 4289  
Farmington, New Mexico 87499

Robert L. Bayless  
PO Box 168  
Farmington, New Mexico 87499



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501


DIRECTOR  
JOE D. RAMEY

LAND COMMISSIONER  
PHIL R. LUCERO

September 2, 1976

Continental Oil Company  
P. O. Box 460  
Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson



<b>RECEIVED</b>	
<b>HOBBS DIVISION</b>	
SEP 7 76	
STATE GEOLOGIST EMERY C. ARNOLD	
Div. Manager	
Div. Engr.	
Cons'v. Coord.	✓
Sup. Prod. Eng.	
Sup. Resv. Eng.	
Prod. Supt.	
Adm. Supv.	
Sys. Supv.	
Coord. Env. Afr.	
Div. O.f. Mgr.	
WAR	✓
DEB	✓
File	✓

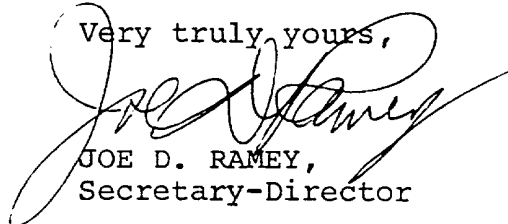
Administrative Order NSL-790

Gentlemen:

Reference is made to your application for approval of a non-standard location for your Jicarilla 22 Well No. 8, located 1795 feet from the South line and 1080 feet from the East line of Section 16, Township 25 North, Range 4 West, NMPM, West Lindrith-Dakota Pool, Rio Arriba County, New Mexico.

By authority granted me under the provisions of Rule 5 of Order No. R-4314, the above-described unorthodox location is hereby approved.

Very truly yours,

  
JOE D. RAMEY,  
Secretary-Director

JDR/JEK/dr

cc: Oil Conservation Commission - Aztec  
Oil & Gas Engineering Committee - Hobbs

CONDITIONS OF APPROVAL FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Well Name Jicarilla 22 #8

1. The individual production zones will be tested every three years, or more often if production rates indicate a change to allocation factors, to verify that the allocation factors and methods remain proper.
2. Production from downhole commingled wells are to be reported with an alpha character, "C" (ie C1, C2, etc).
3. The following modifications to your downhole commingling program are to be made :

None



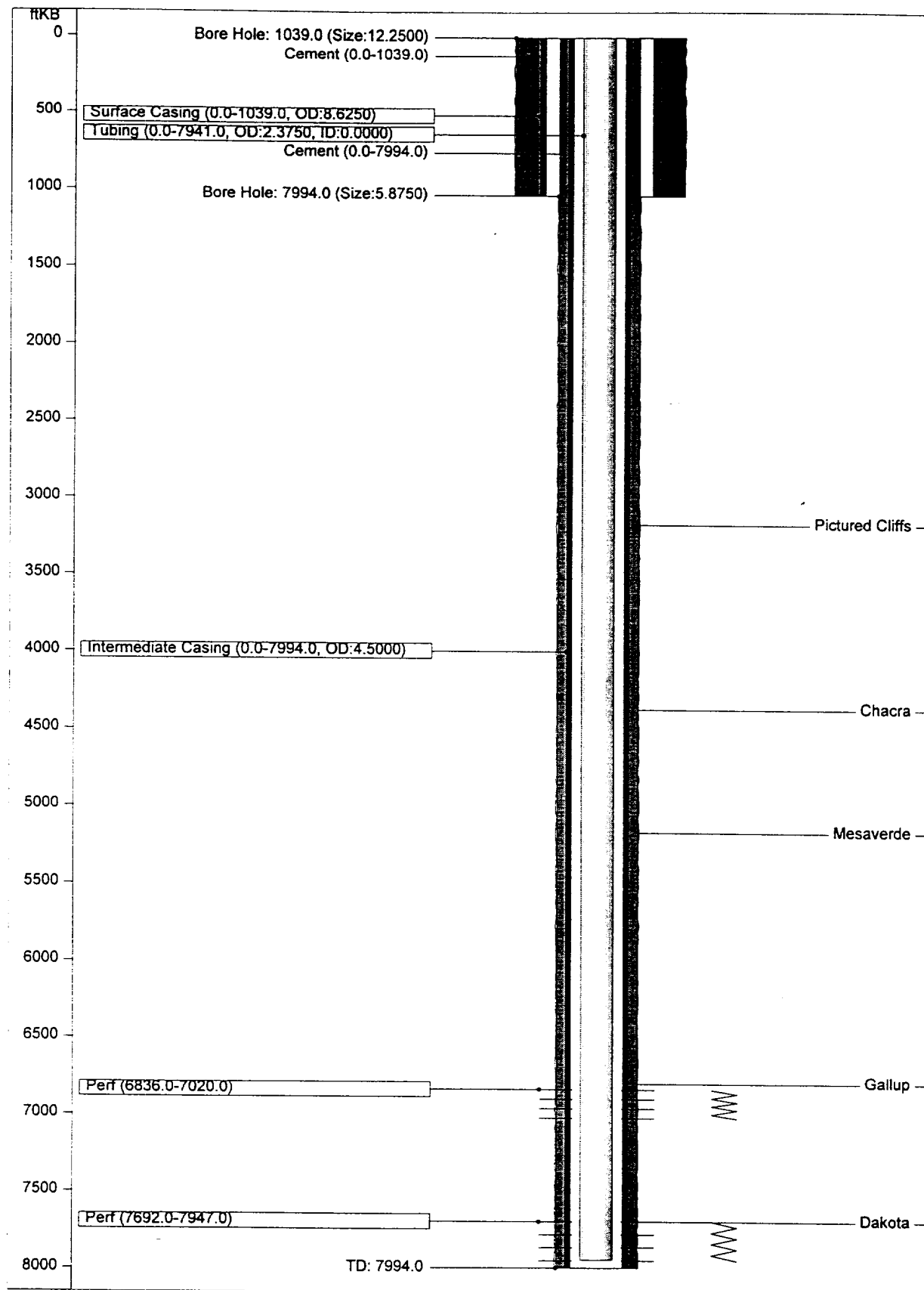
## **Jicarilla #22-8**

### **Economic Evaluation**

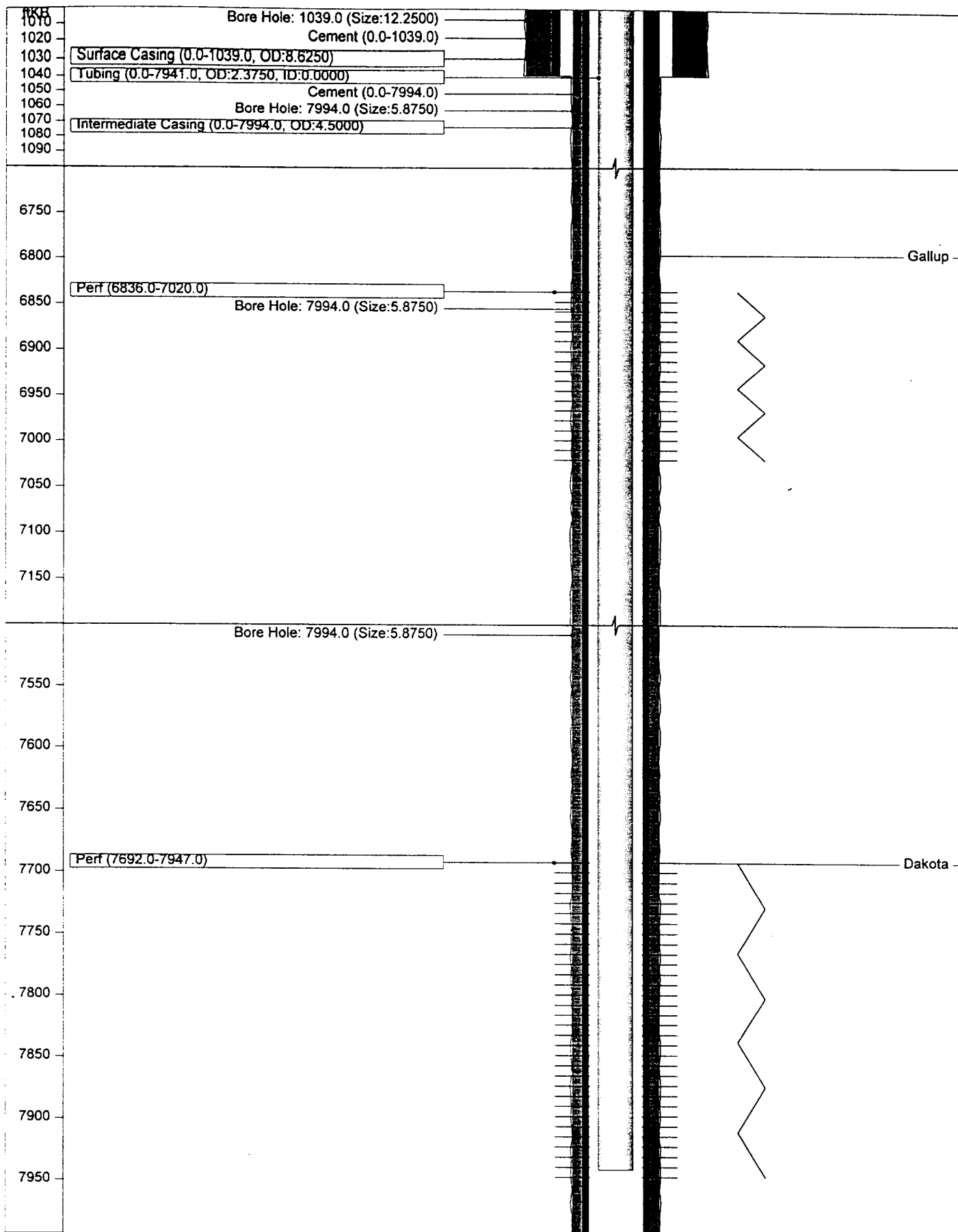
The subject wellbore has 4.5" casing (ID of 3.957"). It is physically impossible to install 2 strings of tubing in the wellbore to produce each zone separately.

Production from each of the two zones (Gallup/Dakota & Mesa Verde) is marginal and artificial lift equipment (plunger lift) will be required to remove fluids from the wellbore in order to produce the well at the most efficient rate. The use of 2.375" tubing is the preferred size of tubing to install and operate plunger lift systems in.

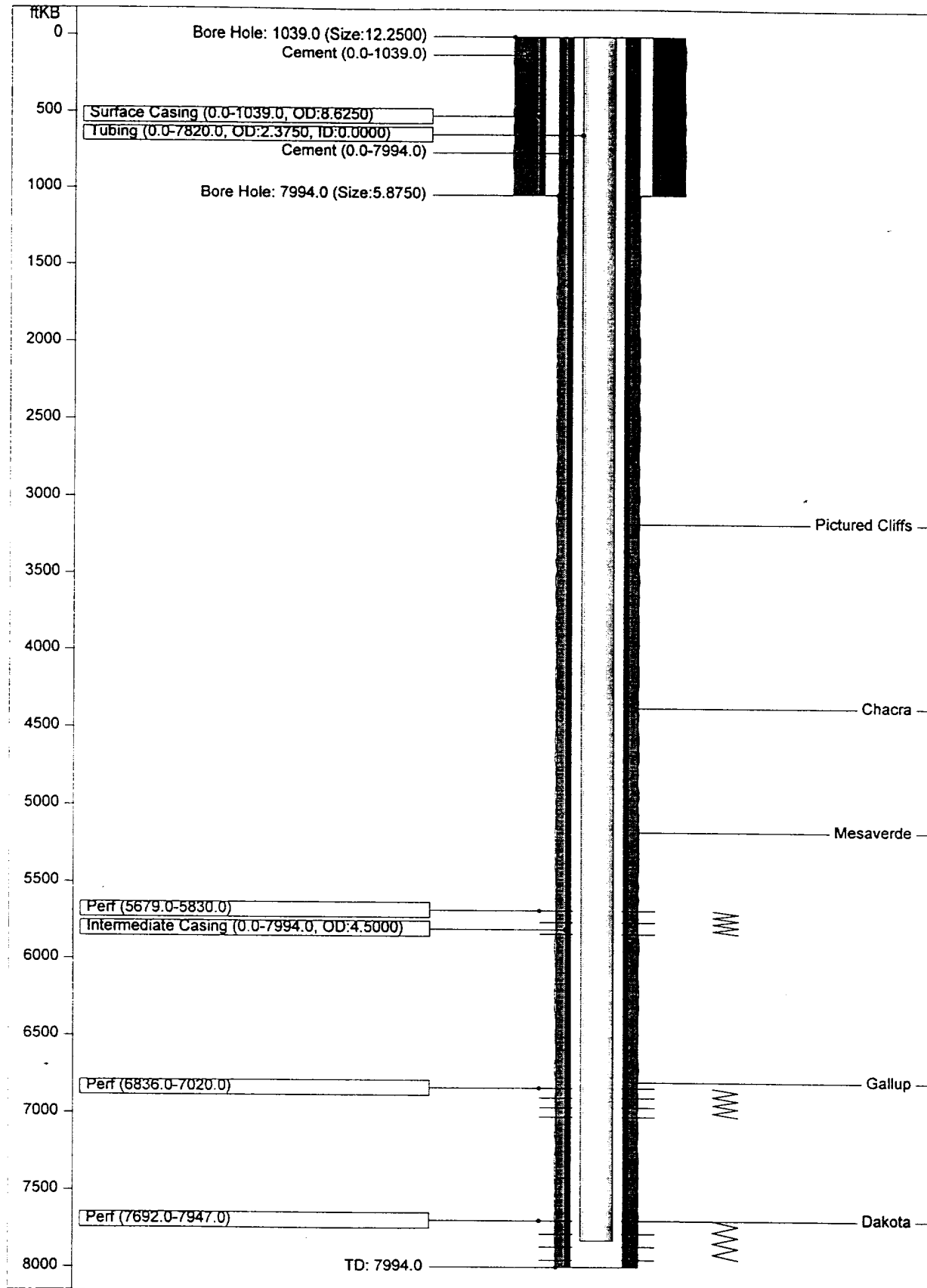
# JICARILLA 22 8



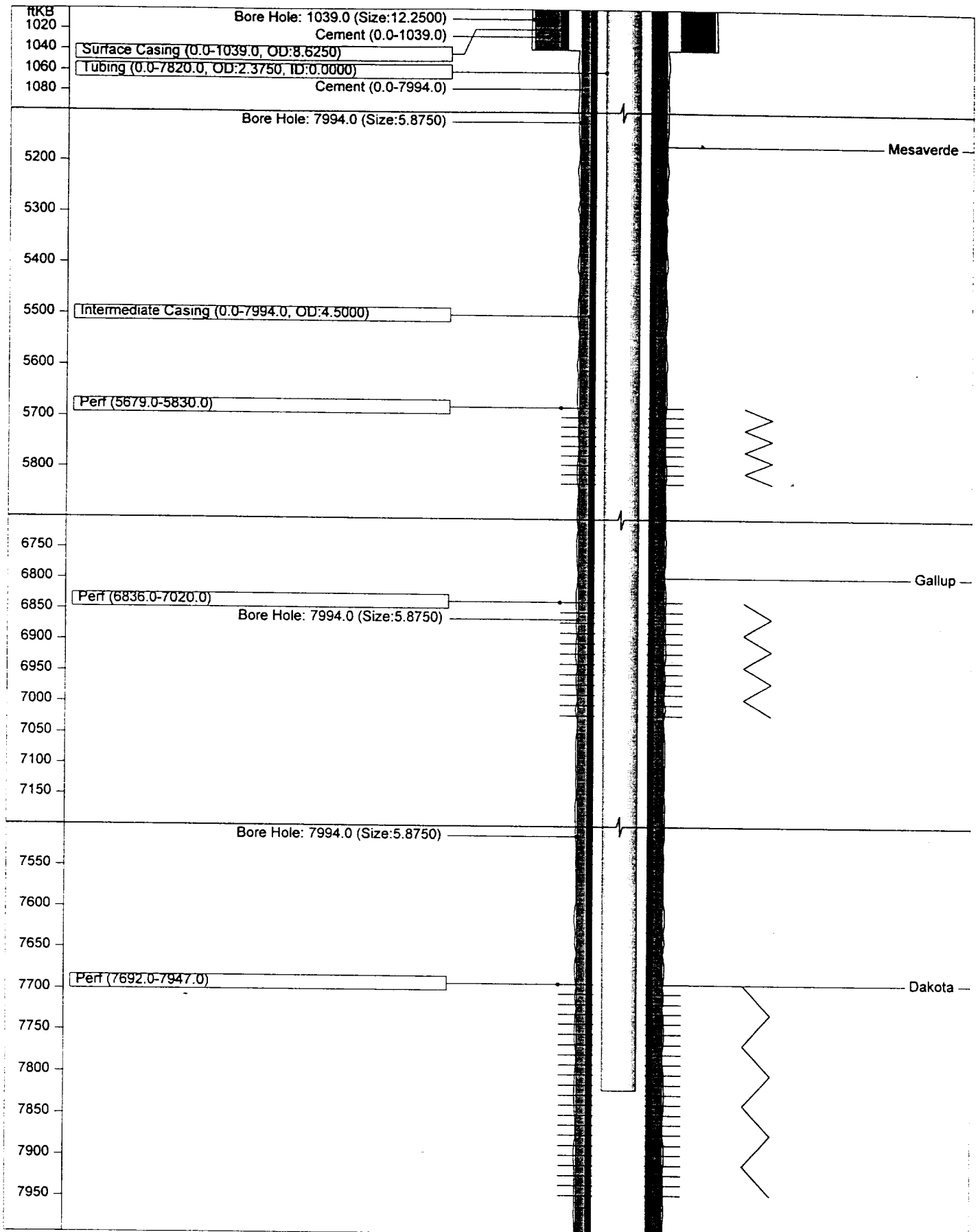
# JICARILLA 22 8



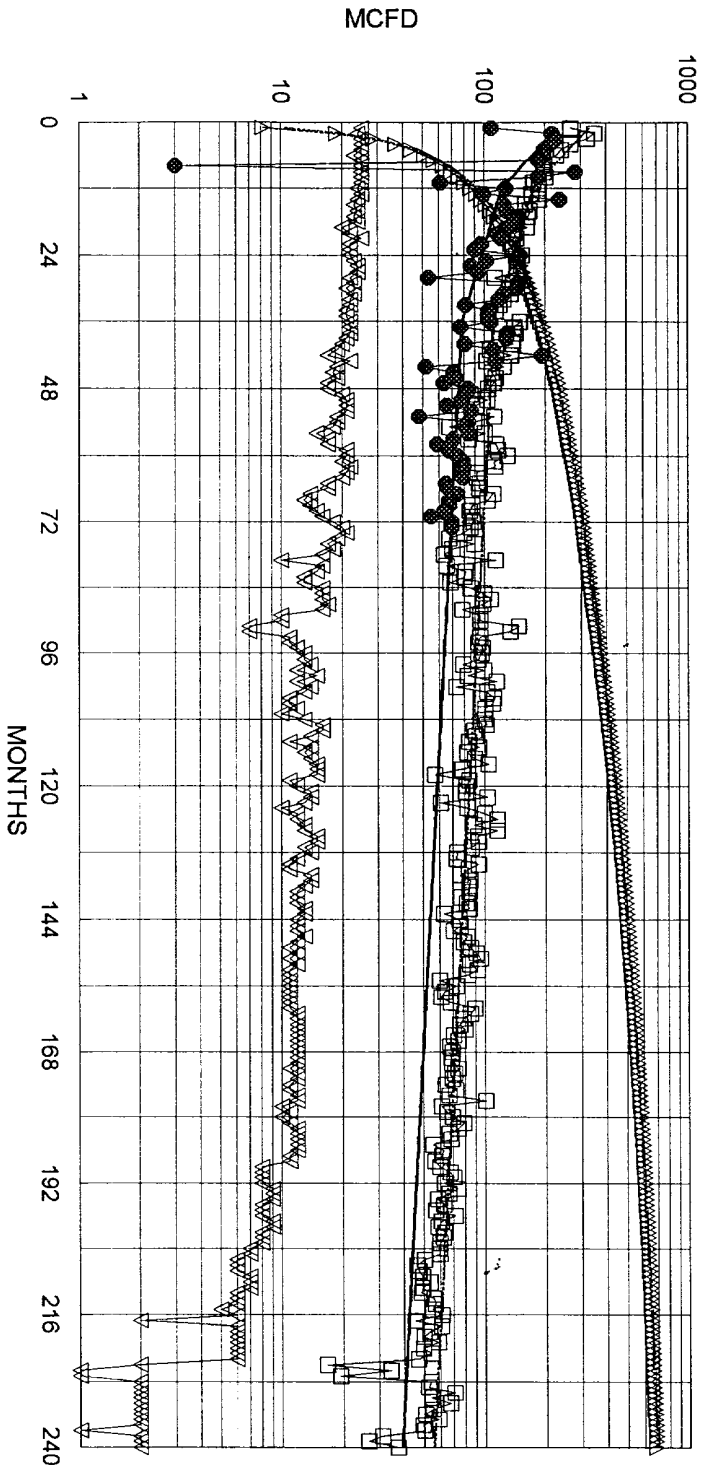
# JICARILLA 22 8 - Proposed



# JICARILLA 22 8 - Proposed



25N 4W NORMALIZED MESAVERDE PRODUCTION  
25 WELLS SINCE 1975: AXI APACHE M.N.O AND OLD JICARILLA LEASES



NORMALIZED AVG:

1018 MMCF EUR  
698 MMCF IN 20 YRS  
20 MCFD E.L.  
0.0084 bbl/mcf oil yield

RISKED AVG:

30% RISK

659 MMCF EUR  
489 MMCF IN 20 YR  
20 MCFD E.L.  
0.0084 bbl/mcf oil yield

30% RISK

245 MCFD IP  
50.0% DECLINE, 1ST 12 MONTHS  
20.0% DECLINE, NEXT 24 MONTHS  
4.0% FINAL DECLINE

## **Economic/Rate Justification (Generic)**

Approval is requested to recomplete the subject well to the Blanco Mesaverde and commingle with existing producing horizons. Expected rate and recovery from the Mesaverde is illustrated on the attached "Normalized Mesaverde Production" plot. This plot (attached to C107A form) is constructed from the more recent offset Mesaverde production data and provides a good estimate of the performance of the subject well. Clearly, the expected risked reserves are not sufficient to justify drilling a new, grass roots well. To prevent waste, these reserves must be accessed by the subject wellbore.

Production from the existing zones is established by ample production history. A production plot is attached that shows past and best-fit projections of future production for the existing zones. A table showing estimated future production for each existing zone is attached. This table (attached to C107A form) will be used to allocate commingled production to the new Mesaverde zone by the subtraction method (existing production shown on the table attached to the C107A will be subtracted from total metered production after adding the Mesaverde zone; the balance will be reported as Mesaverde production).