

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241 1980
DISTRICT II
811 South First St. Artesia NM 88210 2635
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 3-12-88

APPROVAL PROCESS:
☒ Administrative ☐ Hearing
EXISTING WELLBORE
☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Address 10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Lease Jicarilla D Well No #13 Section 32, T-26-N, R-3-W, A Rio Arriba, NM
Unit Ltr Sec Twp Rge County

OGRID NO. 005073 Property Code 18021 API NO. 30-039-20627 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	Tapacito Pictured Cliffs 85920		Blanco Mesaverde 72319
2. TOP and Bottom of Pay Section (Perforations)	3844-3870'		5942-6012'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	330		575
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1175		1315
6. Oil Gravity (*API) or Gas BT Content	1278		1265
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, date and oil/gas/water rates of recent test (within 60 days)	Date Rates 4/99 31 MCFD, 0 BOPD, 0 BWPD	Date Rates 4/99 41 MCFD, 3 BOPD, 3 BWPD	Date Rates
8. Fixed Percentage Allocation Formula - % for each zone	Oil 0 % Gas 18 %	Oil % Gas %	Oil 100 % Gas 82 %

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 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 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 June 2, 1999
TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

◆ MV - Actual ■ MV - Forecast PC - Actual × PC - Forecast

MESAVERDE		PICTURED CLIFFS	
Historical Data:	1st Prod - Feb-74	Historical Data:	1st Prod - Feb-74
Oil Cum:	3.184 Mbo	Oil Cum:	- Mbo
Gas Cum:	721.5 MMcf	Gas Cum:	182.92 MMcf
Oil Yield:	0.00441 Bbl/Mcf	Oil Yield:	- Bbl/Mcf
Projected Data:	1/99 Qi:	Projected Data:	1/99 Qi:
Decline Rate:	4.8 %	Decline Rate:	4.8 %
	42.2 Mcfd		9.5 Mcfd

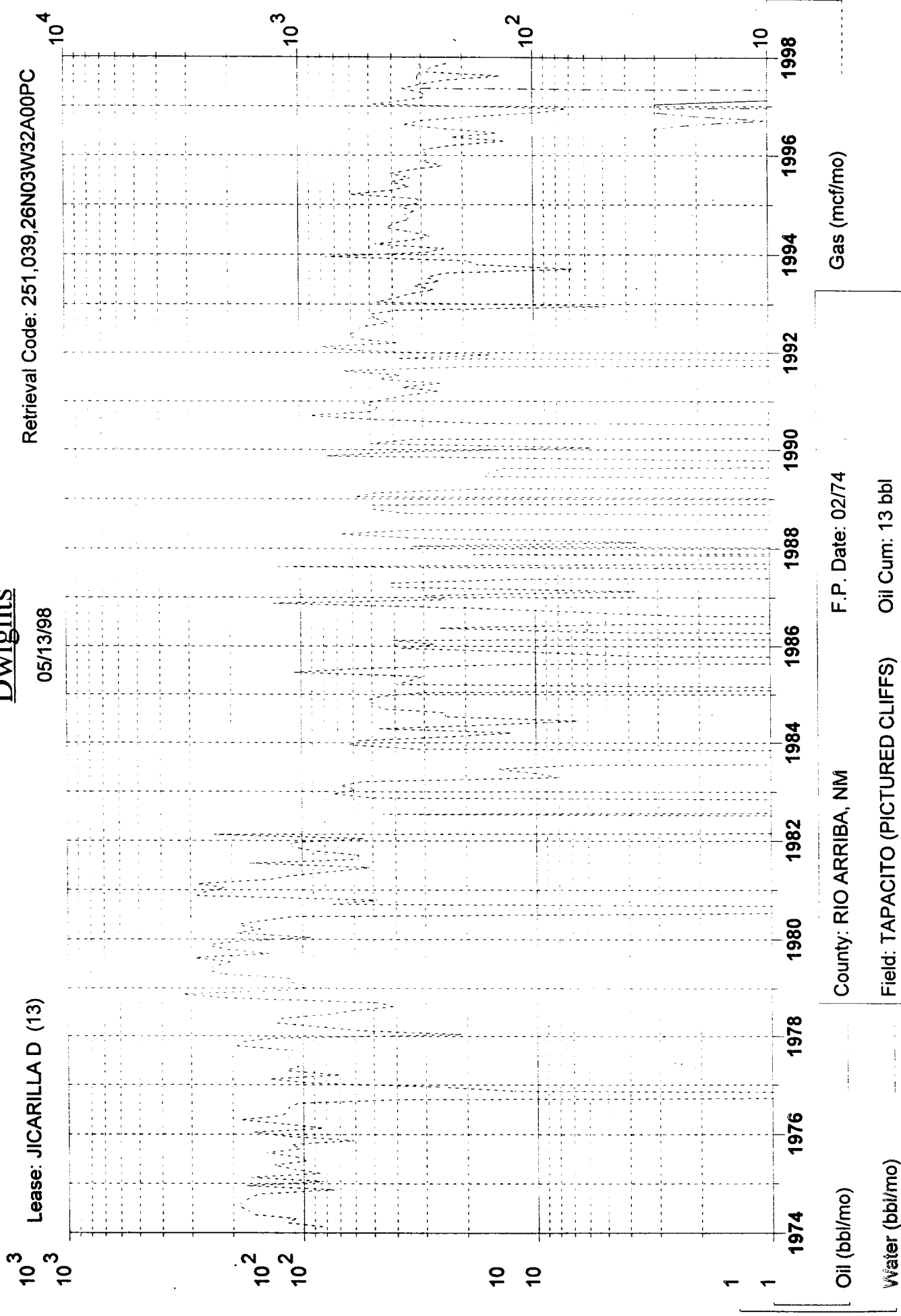
Fixed Commingle Allocation Factors:		
	GAS	OIL
Mesaverde	81.6%	100.0%
Pictured Cliffs	18.4%	0.0%

Dwights

Lease: JICARILLA D (13)

Retrieval Code: 251,039,26N03W32A00PC

05/13/98



Oil (bbl/mo)

County: RIO ARRIBA, NM

F.P. Date: 02/74

Gas (mcf/mo)

Water (bbl/mo)

Field: TAPACITO (PICTURED CLIFFS)

Oil Cum: 13 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 179.8 mmcf

Operator: CONOCO INC

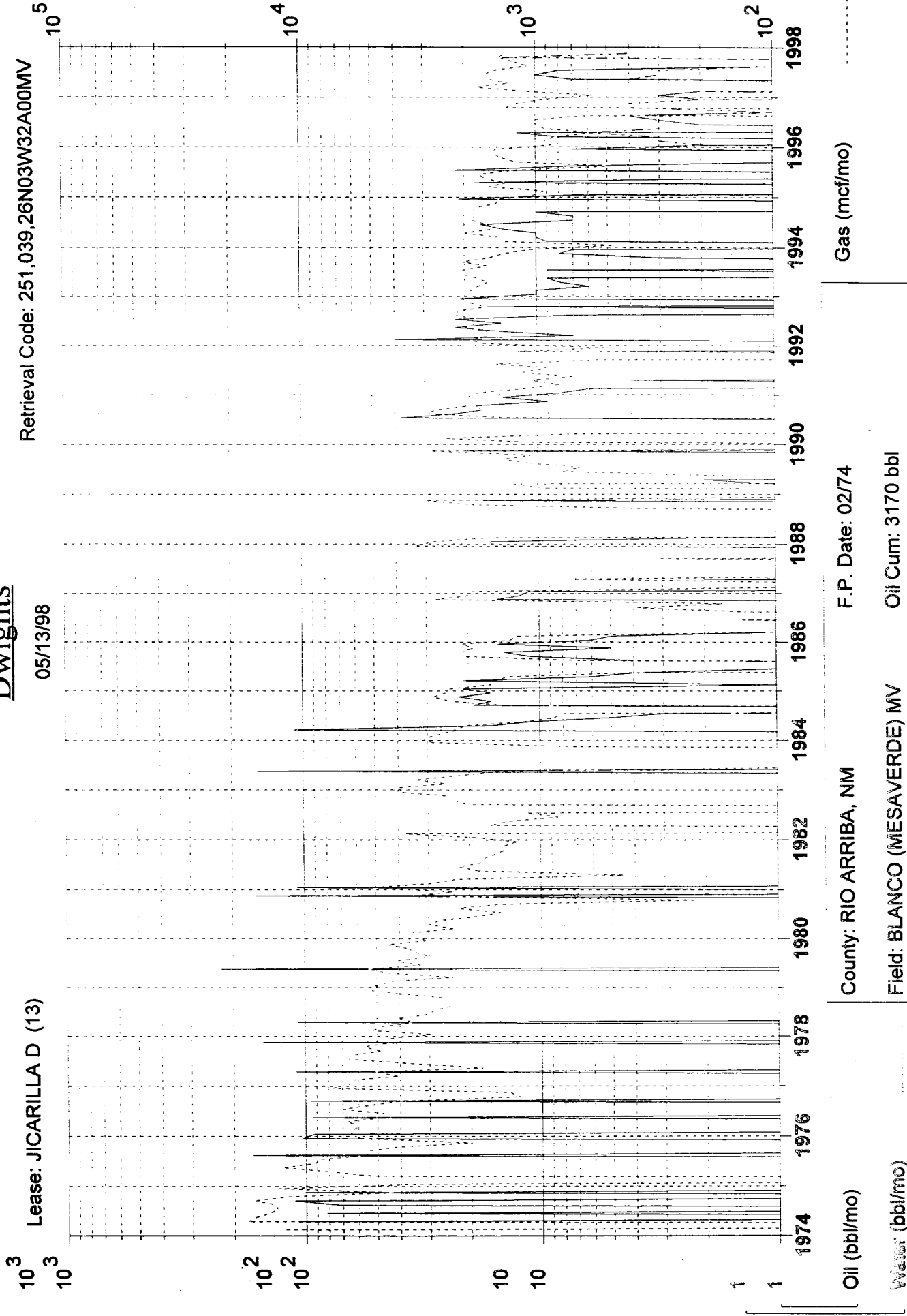
Location: 32A 26N 3W

Dwights

Lease: JICARILLA D (13)

05/13/98

Retrieval Code: 251,039,26N03W32A00MV



Oil (bbl/mo)

Gas (mcf/mo)

County: RIO ARriba, NM

F.P. Date: 02/74

Field: BLANCO (MESAVARDE) MV

Oil Cum: 3170 bbl

Reservoir: MESAVARDE

Gas Cum: 706.9 mmcf

Operator: CONOCO INC

Location: 32A 26N 3W

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACERAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section

Operator SOUTHERN UNION PRODUCTION CO.		Lease JICARILLA		D		Well No. 13	
Unit Letter A	Section 32	Township 26 NORTH	Range 3 WEST	County RIO ARriba			
Actual Footage Location of Well: 915 feet from the NORTH line and 860 feet from the EAST line							
Ground Level Elev 7214.0	Producing Formation PICTURED CLIFFS MESAVERDE		Pool TAPACITO PICTURED CLIFFS BLANCO MESAVERDE		Dedicated Acreage: P.C. 160 M.V. 320		

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 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.

_____ DEDICATED PICTURED CLIFFS AGERAGE

_____ DEDICATED MESAVERDE AGERAGE

CERTIFICATION

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

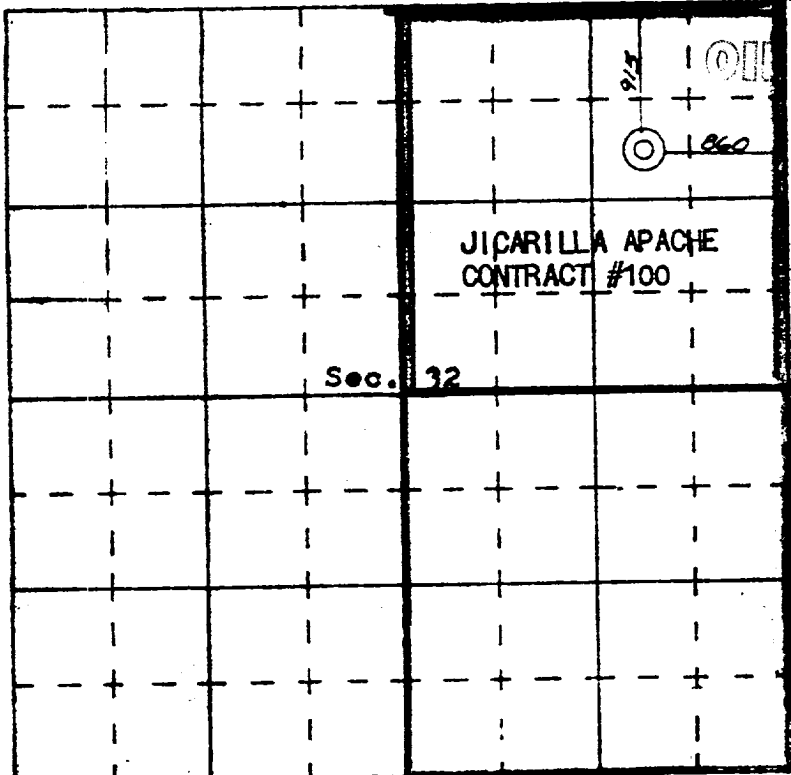
JUN - 4 1999

OIL CON. DIV
DATE

Original signed by
 Name GILBERT D. NOLAND, JR.
 Position GILBERT D. NOLAND, JR.
DRILLING SUPERINTENDENT
 Company SOUTHERN UNION PRODUCTION
 Date MAY 8, 1973

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 APR 1973
 Registered Professional Engineer
 and/or Land Surveyor
JAMES H. LESSE
 Certificate No. 10000



SCALE—4 INCHES EQUALS 1 MILE

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

June 2, 1999

Jicarilla D #13
Section 32, T-26-N, R-3-W, A
API # 30-039-20627
Rio Arriba, NM

RE: Application to Downhole Commingle (C107A)

Notification of Offset Operators:

Burlington Resources
PO Box 4289
Farmington, NM 87499

Dugan Producing Corp.
PO Box 420
Farmington, NM 87499-0420

Beartooth Oil & Gas
PO Box 2564
Billings, MT 59103-2564

John E. Schalk
PO Box 25825
Albuquerque, NM 87125

Minel Inc.
309 Washington SE
Albuquerque, NM 87108

Taurus Exp.
2101 6th Ave N
Birmingham, AL 35203-2784

Standard Silver Corp.
12801 Stemmons Fwy STE 829
Farmers Branch, TX 75234

A copy of the C-107A Application has been sent to the above listed parties.

Jicarilla D 13

Economic/Rate Justification for Down Hole Commingling

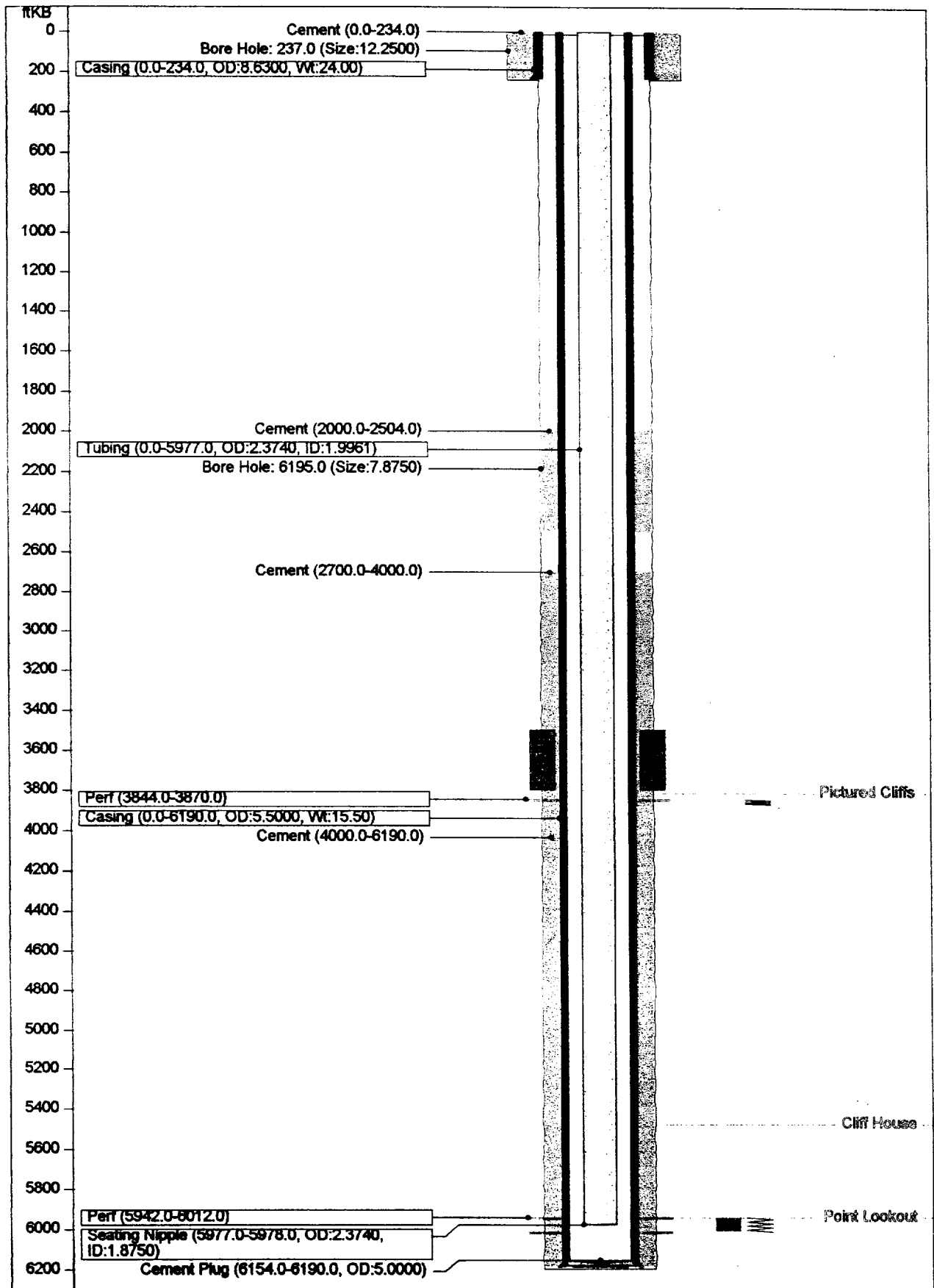
Approval is requested to down hole commingle the existing zones in the subject well. The Jicarilla D 13 has 5 1/2" production casing. It is dually completed using a 1.9" tubing string for the Picture Cliffs and a 1.9" tubing string for the Mesa Verde. Both zones produce some liquids and are producing well below the minimum critical rate required to unload liquids from the well bore. These low rates allow liquids to accumulate in the wellbore, thereby preventing maximum production from this well. To optimize production it is recommended to pull the existing equipment from the well, and produce it using plunger lift in a single 2 3/8" tubing string. The expected production increase is estimated at 30 MCFD.

The single larger tubing string will not only allow for more efficient plunger operation, but will eliminate the cost to install a second plunger lift system and save approximately \$2000 per year in plunger lift operating expenses.

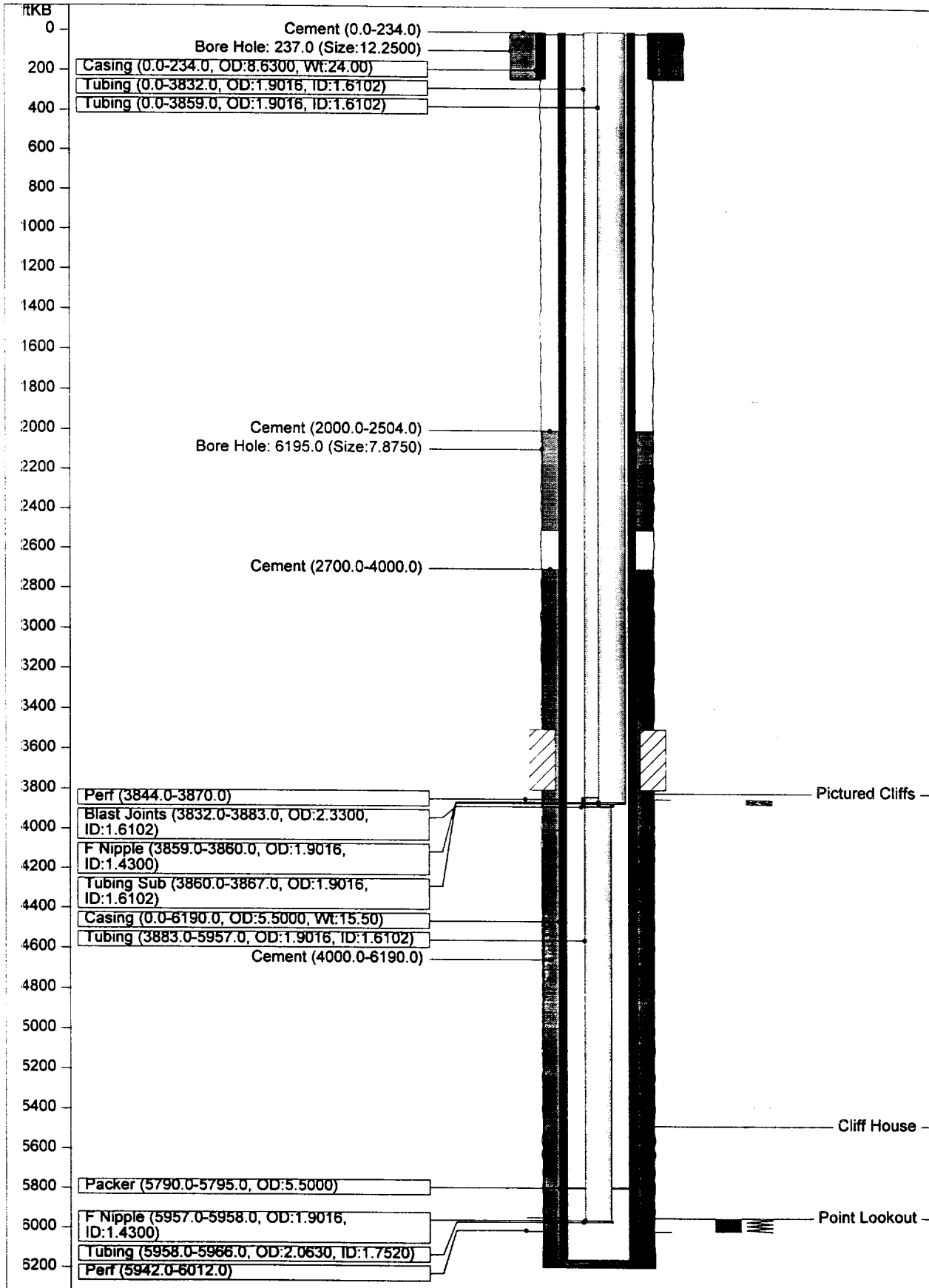
Production from these zones is established by ample production history. A production plot is attached showing best fit projections of future production for each zone. Form 107A shows the fixed percentage formula for allocation of production from each zone.

JICARILLA D 13 (Post DHC Work)

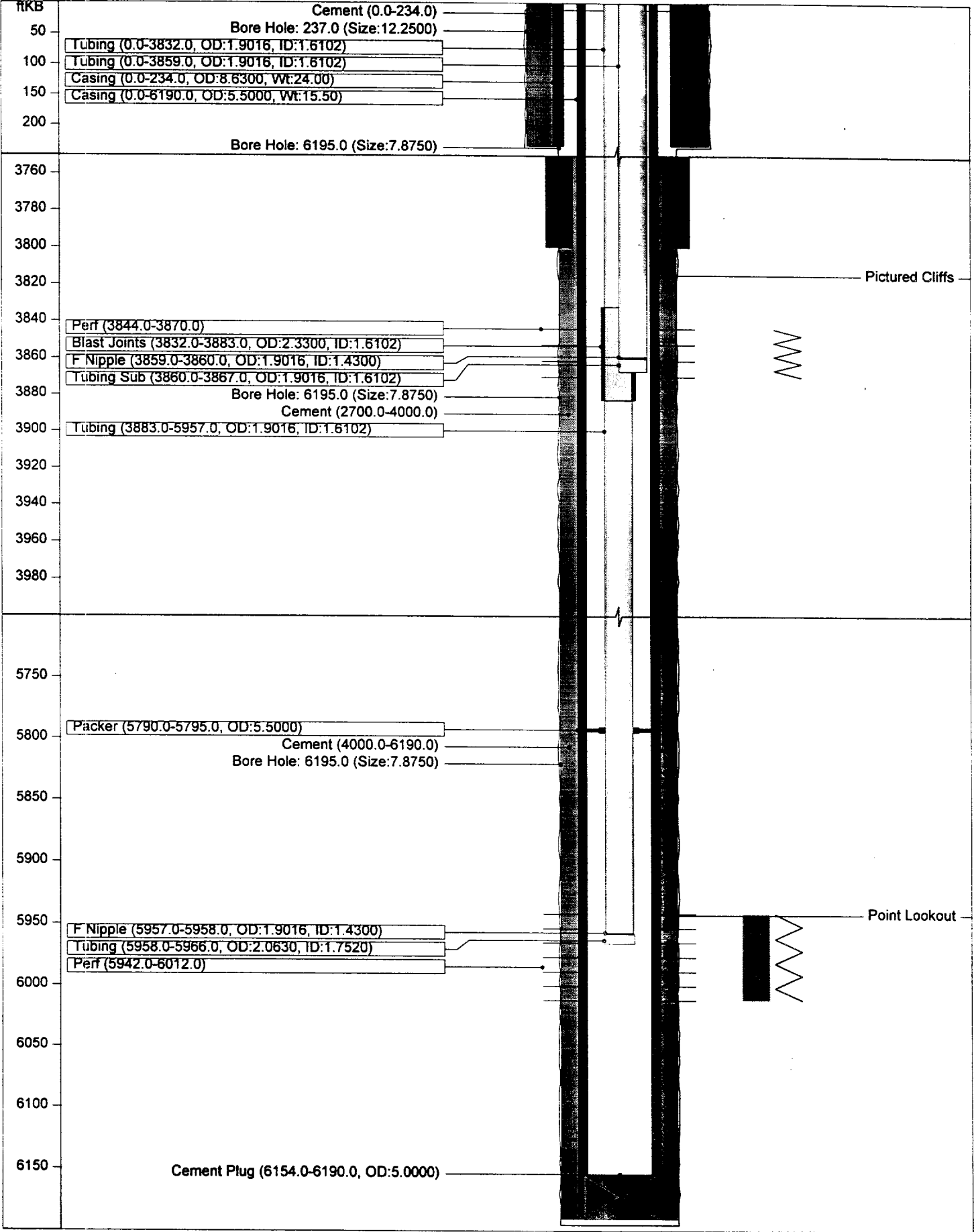
4/24/99



JICARILLA D 13 (GMH 8/13/97)



JICARILLA D 13 (GMH 8/13/97)



JICARILLA D 13 (GMH 8/13/97)

JICARILLA D 13 (GMH 8/13/97)								
API Code	300392062700			Field Code	676380663			
TD	6195.0 ftKB			Basin	SAN JUAN BASIN			
PBTD	6154.0 ftKB			Basin Code	580			
State	New Mexico			Permit	15-May-73			
County	RIO ARriba			Spud	14-Aug-73			
District	San Juan O.U.			Finish Dri	05-Sep-73			
Permit No.				Completion	19-Oct-73			
TD Measured	6195 ftKB			Abandon				
Reservoir	Mesaverde/Pictured Cliffs							
Field	BLANCO MV/PC							
Location								
Meridian	NM			Top Latitude	36.44812			
Twnship	26N			Top Longitude	107.1616			
Range	3W			Top NS Distance	915.0 ft N			
Section	32			Top EW Distance	860.0 ft E			
Quarter	NE NE			Bottom Latitude	0			
				Bottom Longitude	0			
				Btm NS Distance	0.0 ft			
				Btm EW Distance	0.0 ft			
Elevations								
K3	7225.0 ft			Cas Fing	0.0 ft			
Grd	7214.0 ft			Tub Head	0.0 ft			
KB-Grd	11.0 ft							
Bore Hole Data								
	Depth (ftKB)				Size (in)			
	237.0				12.2500			
	6195.0				7.8750			
Casing String - Surface Casing								
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments	
8.6300 in Casing	234.0	7	8.1000	24.00	K-55	8rd		
Casing String - Production Casing								
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments	
5.5000 in Casing	6190.0	190	4.9500	15.50	K-55	8rd		
5.5000 in Packer	5795.0		2.6880	0.00		8rd	Baker Model D Packer	
Casing Cement								
Casing String	Top (ftKB)	Amount (sx)	Comments					
Surface Casing	0.0	150	Cement circ					
Production Casing	2000.0	450	TOC by CBL DV @ 2504'					
Production Casing	2700.0	150	TOC by CBL DV @ 4000'					
Production Casing	4000.0	350	TOC by CBL					
Other (plugs, equip., etc.) - Plug Backs								
Date	Item	Int (ftKB)	Comments					
13-Oct-73	Cement Plug	6154.0 - 6190.0						
Perforations								
Date	Int	Shots (ft)	Type	Comments				
14-Oct-73	5942.0 - 6012.0	1.0		56-.48" EHD @ 5942-84, 6000-12				
15-Oct-73	3844.0 - 3870.0	2.0		52-.4" EHD				
Stimulations & Treatments								
Date	Type	Zone	Int	Fluid	Comments			
13-Oct-73	Cement Squeeze	Production Casing	3500.0 - 3800.0	Cement	Shoot 1 sqz hole @ 3795'. Sqz w/ 100 sxbelow a pkr to 3000#. DO, run CBL.			
15-Oct-73	Fracture	Pictured Cliffs	3844.0 - 3870.0	Water	60,500 G w/ 20,000# 20/40 & 40,000# 10/20. ATP=1650# @ 60 bpm, ISIP=0#. Drop 7 stgs of 5 BS, slight action.			
15-Oct-73	Acid Squeeze	Mesaverde	5942.0 - 6012.0	7 1/2% HCl	BD @ 2000#. Acidize w/ 500 G.			
15-Oct-73	Fracture	Mesaverde	5942.0 - 6012.0	Water	96,600 G w/ 40,000# 20/40 & 50,000# 10/20. ATP=2000# @ 60 bpm, ISIP=vac. Drop 7 stgs of 5 BS, slight action.			
Tubing String - Tubing (MV)								
Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
1.9016 in Tubing	0.0	3832.0	110	1.6102	2.90	JCW-55	10rd EUE	
2.3300 in Blast Joints	3832.0	51.0		1.6102	0.00		10rd EUE	
1.9016 in Tubing	3883.0	2074.0	71	1.6102	2.90	JCW-55	10rd EUE	Seal assembly 5790-95
1.9016 in F Nipple	5957.0	1.0		1.4300	0.00	JCW-55	10rd EUE	
2.0630 in Tubing	5958.0	8.0		1.7520	3.25	JCW-55	10rd EUE	

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPL

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☐ Other _____

b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. DESVR. ☐ Other _____

2. NAME OF OPERATOR
SOUTHERN UNION PRODUCTION COMPANY

3. ADDRESS OF OPERATOR
P. O. Box 888, FARMINGTON, NEW MEXICO 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface **915 FT./NORTH LINE & 860 FT./EAST LINE.**
At top prod. interval reported below **SAME AS ABOVE.**
At total depth **SAME AS ABOVE.**

14. PERMIT NO. _____ DATE ISSUED _____

5. LEASE DESIGNATION AND SERIAL NO.

CONTRACT #100

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

JICARILLA APACHE

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

JICARILLA "D"

9. WELL NO.

13

10. FIELD AND POOL, OR WILDCAT
**TAPACITO PICTURED CLIFFS
BLANCO MESAVENDE**

11. SEC., T. R., M., OR BLOCK AND SURVEY OR AREA
**SEC. 32, T-26N, R-3W
N.M.P.M.**

12. COUNTY OR PARISH
RIO ARriba

13. STATE
NEW MEXICO

15. DATE SPUDDED **8-14-73** 16. DATE T.D. REACHED **9-4-73** 17. DATE COMPL. (Ready to prod.) **10-19-73** 18. ELEVATIONS (DF, REB, RT, GR, ETC.)* **7225 FT. R.K.B.** 19. ELEV. CASINGHEAD **7214 FT.**

20. TOTAL DEPTH, MD & TVD **6195 FT. R.K.B.** 21. PLUG, BACK T.D., MD & TVD **6154 FT. R.K.B.** 22. IF MULTIPLE COMPL., HOW MANY* **2** 23. INTERVALS DRILLED BY **0-6195 FT.** ROTARY TOOLS CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
3844-3870 FT. MD & TVD - TAPACITO PICTURED CLIFFS
5942-6012 FT. MD & TVD - BLANCO MESAVENDE 25. WAS DIRECTIONAL SURVEY MADE **No**

26. TYPE ELECTRIC AND OTHER LOGS RUN
E.S. INDUCTION, GAMMA-RAY DENSITY, GAMMA-RAY CORRELATION & CEMENT BOND 27. WAS WELL CORED **No**

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24.0#	234 FT.	12-1/4"	150 SACKS	
5-1/2"	15.50#	6190 FT.	7-7/8"	STAGE COLLARS SET AT 2504	FT. & 4000 FT.
1ST STAGE CEMENTED W/570 CU.FT. CMT.			2ND STAGE CEMENTED W/420 CU.FT. CEMENT.		
3RD STAGE CEMENTED W/700 CU.FT. CEMENT.					

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					1 1/2" I.J.	3867 FT. (PICTURED CLIFFS)	
					1 1/2" EUE	5965 FT.	5790 FT. (M.V.)

31. PERFORATION RECORD (Interval, size and number)
PICTURED CLIFFS: 2 SHOTS/FT. 3844-3870 FT.
TOTAL OF 52 HOLES. 0.48" HOLE SIZE.
MESAVENDE: 1 SHOT/FT. 5942-5984 FT. & 6000-6012 FT. TOTAL OF 56 HOLES. 0.48" HOLE SIZE.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3844-3870	60,000# SAND & 60,500 GALLONS OF WATER (PICTURED CLIFFS)
5942-6012	90,000# SAND & 96,600 GALLONS OF WATER (MESAVENDE)

33. PRODUCTION

DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) _____ WELL STATUS (Producing or shut-in) **SHUT-IN**

DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD'N. FOR TEST PERIOD	OIL—BSL.	GAS—MCF.	WATER—BSL.	GAS-OIL RATIO
12-4-73	3 HOURS	3/4"			175 - MESAVENDE		
12-11-73	8 HOURS	3/4"			23 PICTURED CLIFFS		
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BSL.	GAS—MCF.	WATER—BSL.	OIL GRAVITY-API (CORR.)	
108	PACKER			1401 - MESAVENDE			
3	97			185 - PICTURED CLIFFS			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

VENTED

TEST WITNESSED BY
KENNETH E. RODDY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

Original signed by

SIGNED **Dan R. Collier** TITLE **OFFICE MANAGER** DATE **DECEMBER 13, 1973**

*(See Instructions and Spaces for Additional Data on Reverse Side)