

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2377

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

JUN - 4 1999

Check One Only for [B] and [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 is 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 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.

Kay Maddox
Print or Type Name

Signature

Kay Maddox

Title

Regulatory Agent

Date

6/2/99

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241 1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-A
New 3-12-96

DISTRICT II
811 South First St. Artesia NM 88210 2835

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410 1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

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

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

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 4/99 41 MCFD, 3 BOPD, 3 BWPD
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

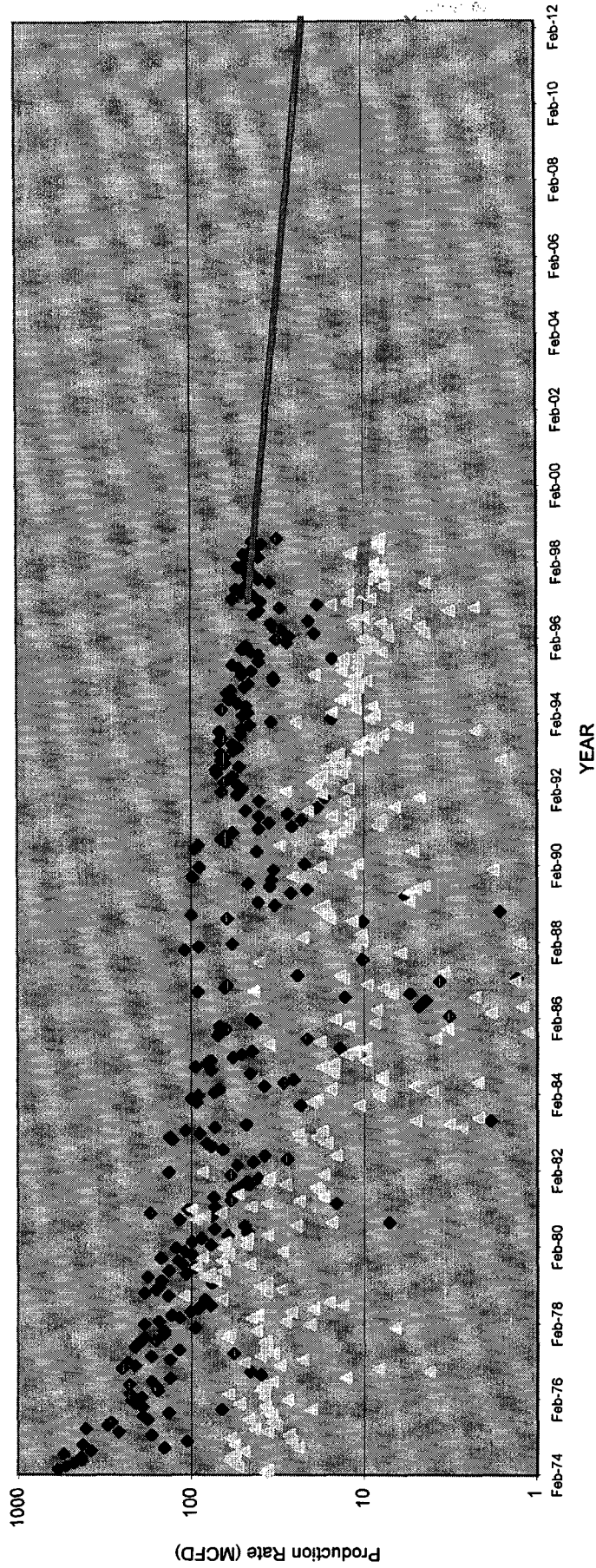
- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation 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

JICARILLA D 13 - MV / PC DHC
26N-3W-32A, Rio Arriba County, New Mexico



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

MESAVERDE

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

PICTURED CLIFFS

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

Fixed Commingle Allocation Factors:

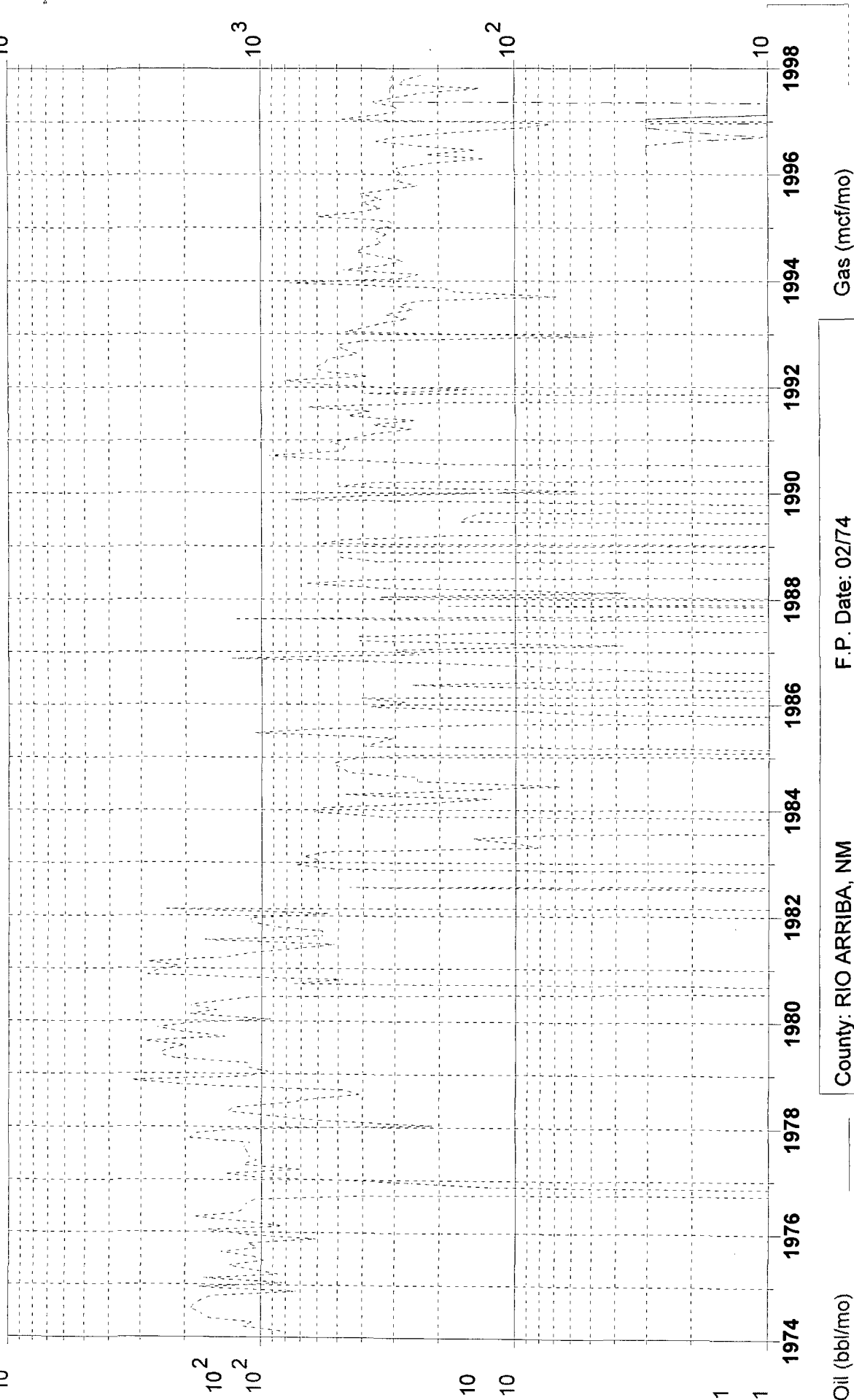
	GAS	OIL
Mesaverde	81.6%	100.0%
Pictured Cliffs	18.4%	0.0%

Dwights

Lease: JICARILLA D (13)

05/13/98

Retrieval Code: 251,039,26N03W32A00PC



County: RIO ARriba, NM F.P. Date: 02/74

Field: TAPACITO (PICTURED CLIFFS) Oil Cum: 13 bbl

Reservoir: PICTURED CLIFFS Gas Cum: 179.8 mmcf

Operator: CONOCO INC Location: 32A 26N 3W

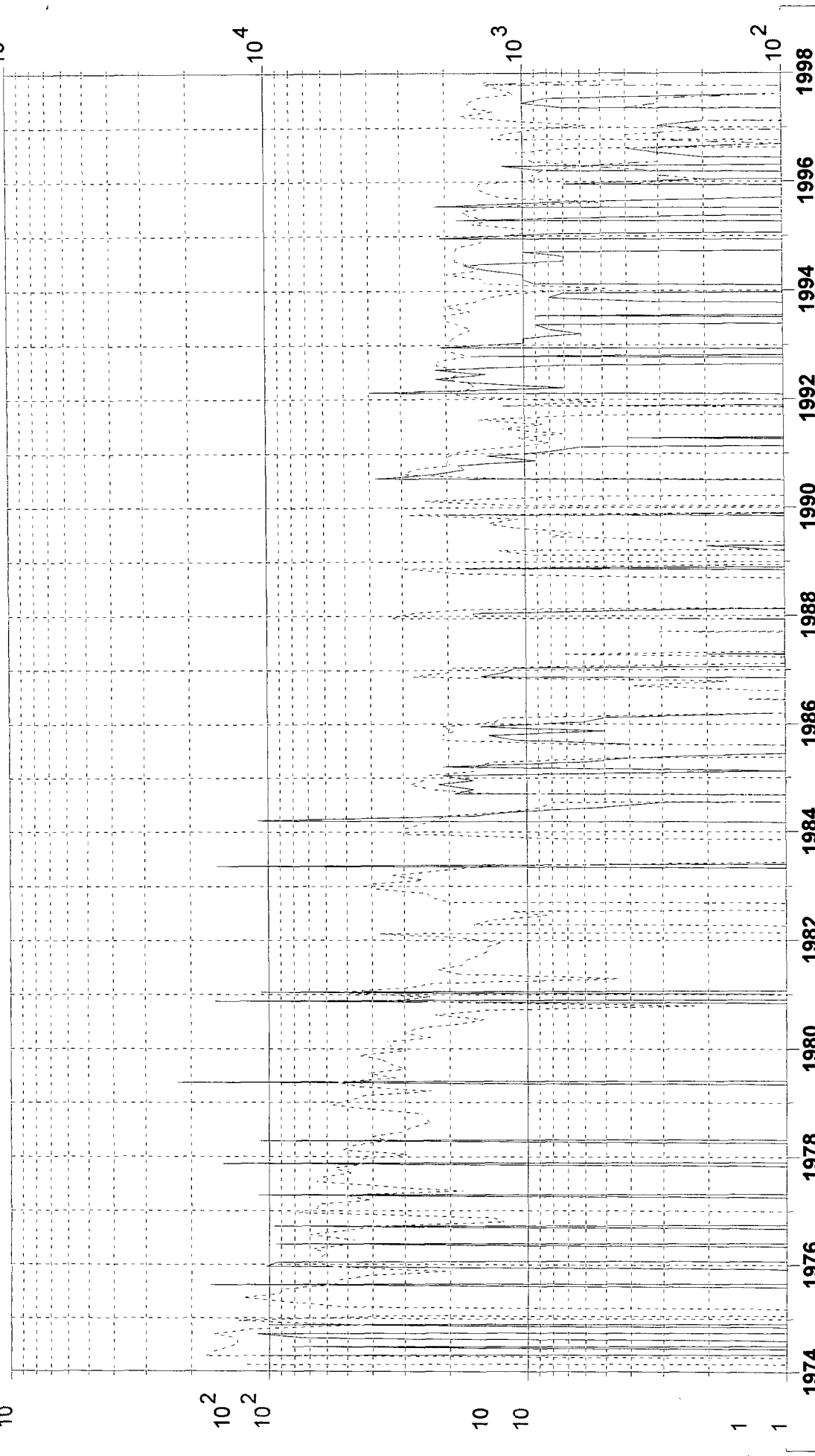
Dwights

Lease: JICARILLA D (13)

Retrieval Code: 251,039,26N03W32A00MV

05/13/98

10^3
 10^3
 10^3



Gas (mcf/mo)

Oil (bbl/mo)

Water (bbl/mo)

F.P. Date: 02/74

County: RIO ARRIBA, NM

Field: BLANCO (MESAVERDE) MV Oil Cum: 3170 bbl

Gas Cum: 706.9 mmcf

Reservoir: MESAVERDE

Location: 32A 26N 3W

Operator: CONOCO INC

**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 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?

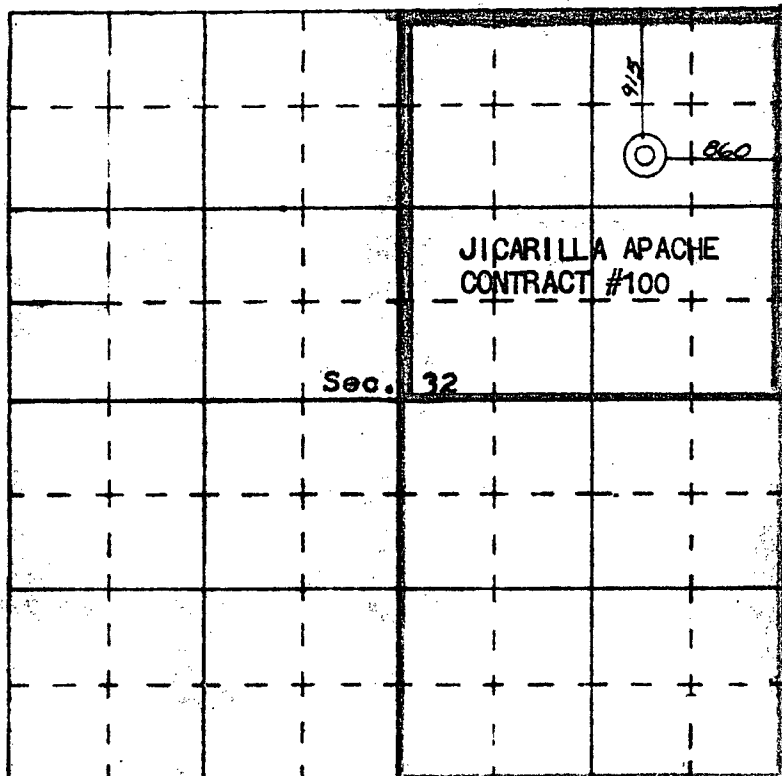
() Yes () No If answer is "yes," type of consolidation _____

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.

_____ DEDICATED PICTURED CLIFFS ACERAGE

_____ DEDICATED MESAVERDE ACERAGE



SCALE—4 INCHES EQUALS 1 MILE

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

CERTIFICATION

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

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 May 8, 1973
Registered Professional Engineer
and/or Land Surveyor
JAMES B. LEESE
106210
Certificate No. _____

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

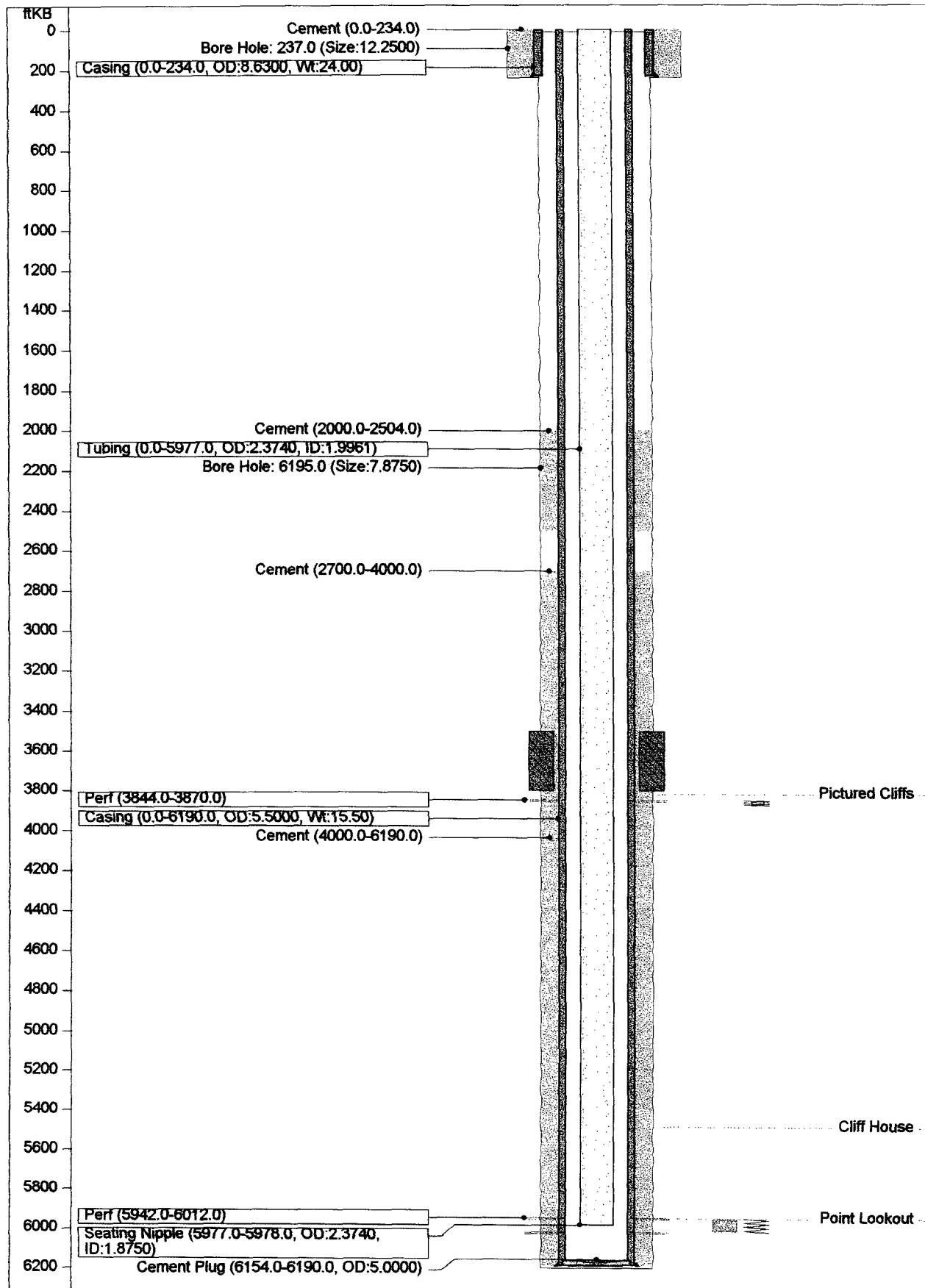
Approval is requested to down hole commingle the existing zones in the subject well. The Jicarilla D 13 has 5 1/2" production casing. It is dually completed using a 1.9" tubing string for the Picture Cliffs and a 1.9" tubing string for the Mesa Verde. Both zones produce some liquids and are producing 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.

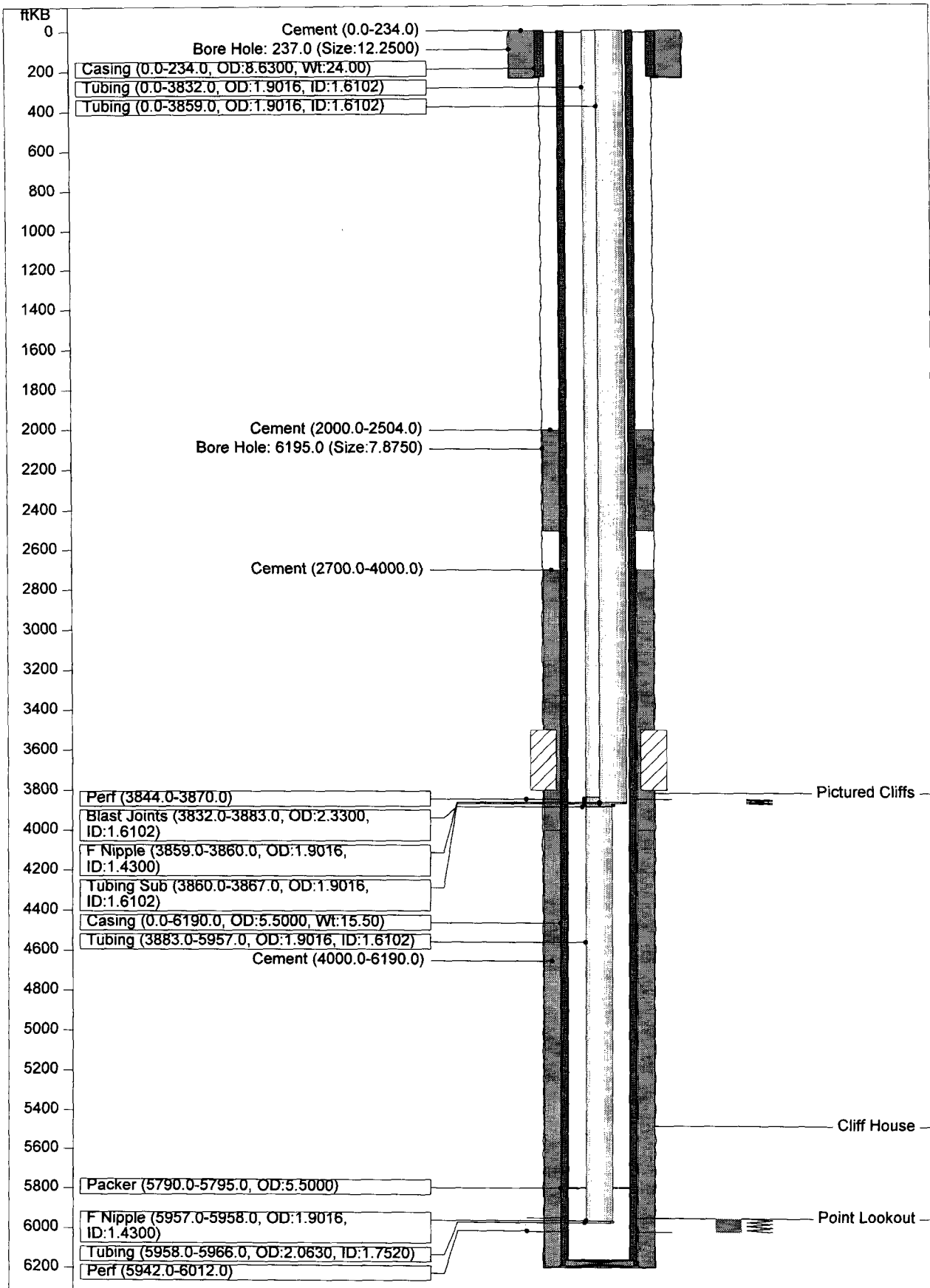
Production from these zones is established by ample production history. A production plot is attached showing best fit projections of future production for each zone. Form 107A shows the fixed percentage formula for allocation of production from each zone.

JICARILLA D 13 (Post DHC Work)

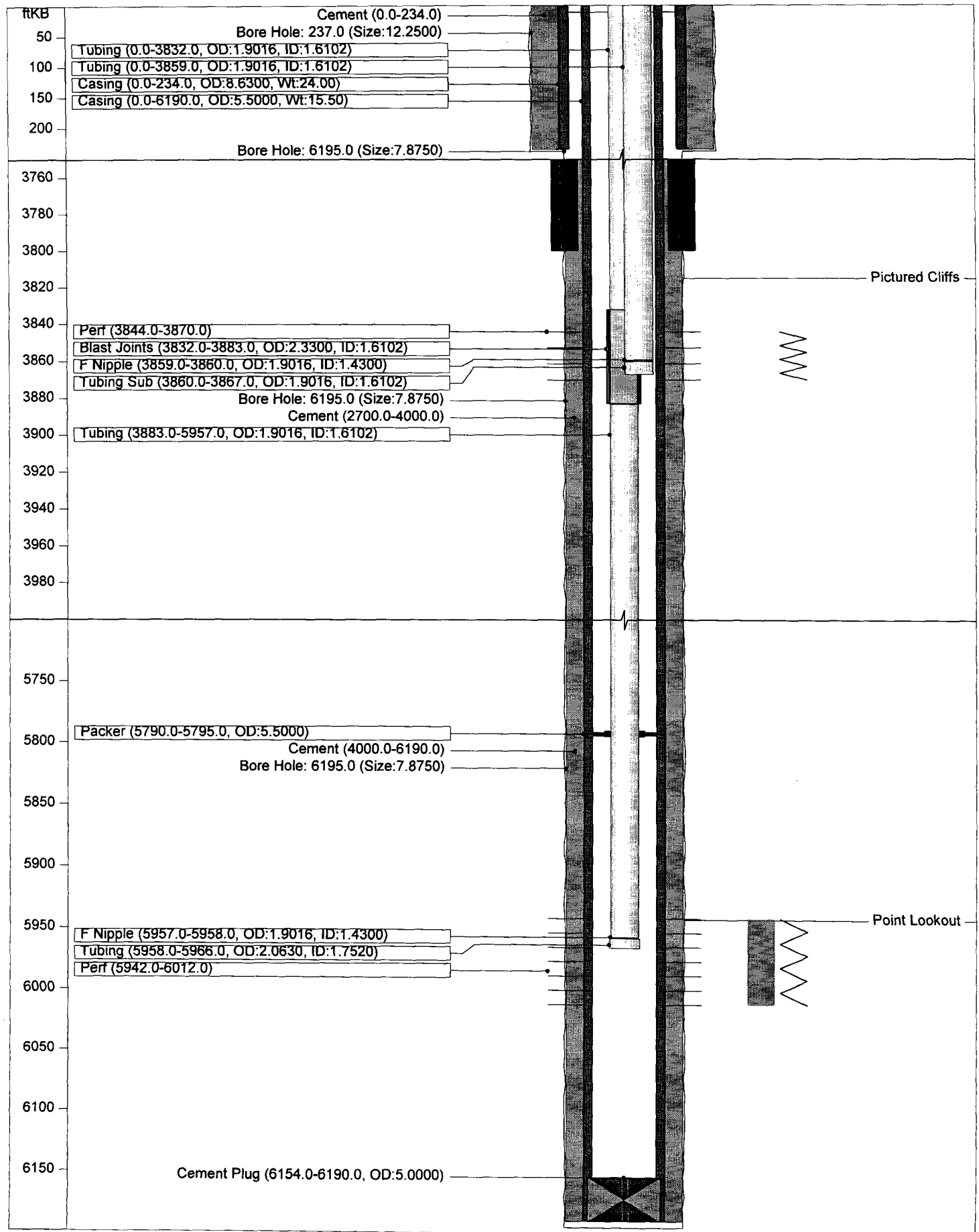
4/24/99



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					
Twntship	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								
KB	7225.0 ft	Cas Flng	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	

JICARILLA D 13 (GMH 8/13/97)

Tubing String - Tubing (PC)								
Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
1.9016 in Tubing	0.0	3859.0	151	1.6102	2.76	PCW-55	IJ	
1.9016 in F Nipple	3859.0	1.0		1.4300	0.00	PCW-55	IJ	
1.9016 in Tubing	3860.0	7.0		1.6102	2.76	PCW-55	IJ	
Sub								
Completions & Workovers								
Date	Reason for Workover	Reason for Failure	Summary					
13-Oct-73	Squeeze Casing	Cement Squeeze	Squeeze Casing - Shoot 1 sqz hole @ 3795'. Sqz w/ 100 sx below a pkr to 3000#. DO, run CBL.					
Formation/Horizon Tops								
Top (ftKB)		Formation						
3815.0		Pictured Cliffs						
5480.0		Cliff House						
5943.0		Point Lookout						
Logs Run								
Date	Type	Int	Company	Comments				
05-Sep-73	IND	233.0 - 6190.0	Atlas					
05-Sep-73	DEN	3650.0 - 6193.0	Atlas					
13-Oct-73	GR-CBL	0.0 - 0.0	Blue Jet					
General Notes								
Date	Note							
19-Oct-73	Initial Potential: Mesaverde; 1401 MCFGPD on 3/4 ck, TP 108; Pictured Cliffs; 1185 MCFGPD, 3/4 ck CP 97 TP 3							

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPL

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input type="checkbox"/>	Other _____		
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>	DIFF. RESVR. <input type="checkbox"/>	Other _____
2. NAME OF OPERATOR SOUTHERN UNION PRODUCTION COMPANY						5. LEASE DESIGNATION AND SERIAL NO. CONTRACT #100	
3. ADDRESS OF OPERATOR P. O. Box 808, FARMINGTON, NEW MEXICO 87401						6. IF INDIAN, ALLOTTEE OR TRIBE NAME JICARILLA APACHE	
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.						7. UNIT AGREEMENT NAME	
14. PERMIT NO.						DATE ISSUED	
15. DATE SPUNDED 8-14-73						16. DATE T.D. REACHED 9-4-73	
17. DATE COMPL. (Ready to prod.) 10-19-73						18. ELEVATIONS (DF, REB, BT, GR, ETC.)* 7225 FT. R.K.B.	
19. ELEV. CASINGHEAD 7214 FT.						10. FIELD AND POOL, OR WILDCAT TAPACITO PICTURED CLIFFS BLANCO MESAVERDE	
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.	
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 MESAVERDE						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	
8-5/8"		24.0#		234 FT.		12-1/4"	
5-1/2"		15.50#		6190 FT.		7-7/8"	
1ST STAGE CEMENTED W/570 CU.FT. CMT.		2ND STAGE CEMENTED W/420 CU.FT. CEMENT.		3RD STAGE CEMENTED W/700 CU.FT. CEMENT.		AMOUNT PULLED	
29. LINER RECORD		30. TUBING RECORD		31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
SIZE		TOP (MD)		BOTTOM (MD)		SACKS CEMENT*	
1 1/2"		1. J.		3887 FT. (PICTURED CLIFFS)		60,000# SAND & 60,000 GALLONS OF WATER (PICTURED CLIFFS)	
1 1/2"		EUE		5965 FT.		90,000# SAND & 96,000 GALLONS OF WATER (MESAVERDE)	
33. PRODUCTION		34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)		35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records	
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)		WELL STATUS (Producing or shut-in) SHUT-IN		GAS-OIL RATIO	
DATE OF TEST 12-4-73 12-11-73		HOURS TESTED 3 HOURS 2 HOURS		CHOKED SIZE 3/4" 3/4"		PROD'N. FOR TEST PERIOD 175 - MESAVERDE 23 PICTURED CLIFFS	
FLOW. TUBING PRESS. 108		CASING PRESSURE PAKER		CALCULATED 24-HOUR RATE 1401 - MESAVERDE 185 - PICTURED CLIFFS		OIL GRAVITY-API (CORR.)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) VENTED		35. LIST OF ATTACHMENTS		36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records		TEST WITNESSED BY KENNETH E. RODDY	
SIGNED DAN R. COLLIER		TITLE OFFICE MANAGER		DATE DECEMBER 13, 1973			

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