

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2376

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

Kay Maddox
 Signature

Regulatory Agent
 Title

4/6/99
 Date

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 87505-6429

Form 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
Operator Address

Jicarilla D #11 Section 29, T-26-N, R-3-W, A Rio Arriba, NM
Lease Well No Unit Ltr Sec Twp Rge County

OGRID NO. 005073 Property Code 18021 API NO. 30-039-20566 Spacing Unit Lease Types: (check 1 or more)
Federal ☒ State ☐ (and/or) Fee ☐

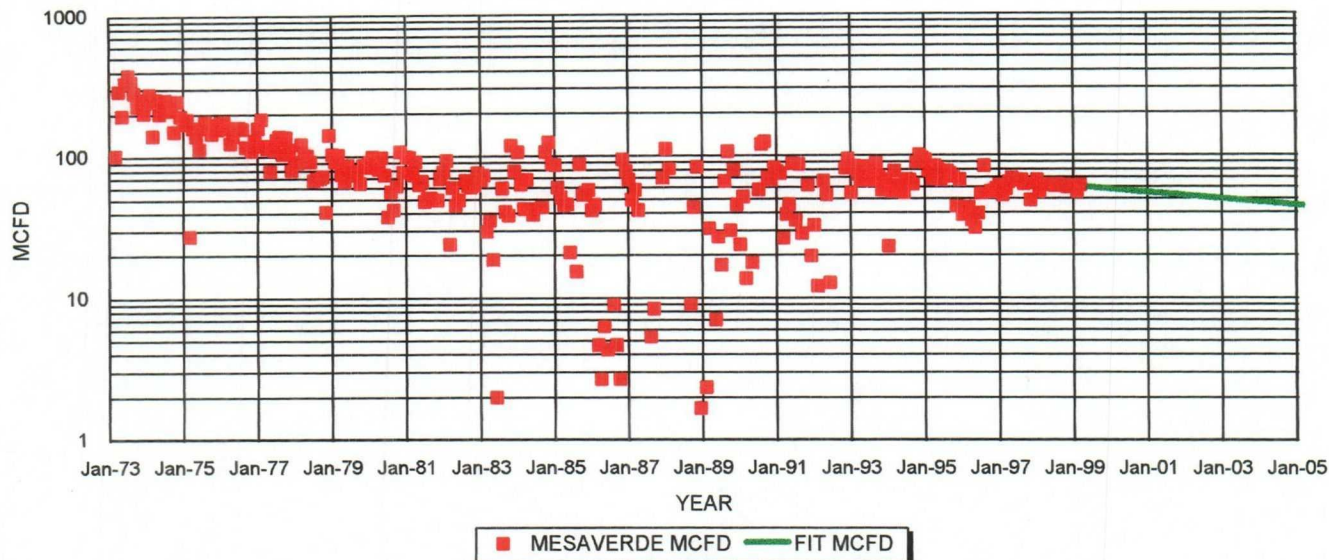
The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	Tapacito Pictured Cliffs 85920		Blanco Mesaverde 72319
2. TOP and Bottom of Pay Section (Perforations)	3820-3840'		5942-6024'
3. Type of production (Oil or Gas)	Gas		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 54 MCFD, 0 BOPD, 31 BWPD	Date Rates 4/99	Date Rates 4/99 59 MCFD, 3 BOPD, 3 BWPD
8. Fixed Percentage Allocation Formula -% or each zone	oil: 0 % Gas 46 %	oil: % Gas %	oil: 100 % Gas 54 %

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-11 MESAVERDE PRODUCTION
SECTION 29A-26N-03W, RIO ARRIBA COUNTY, NEW MEXICO**



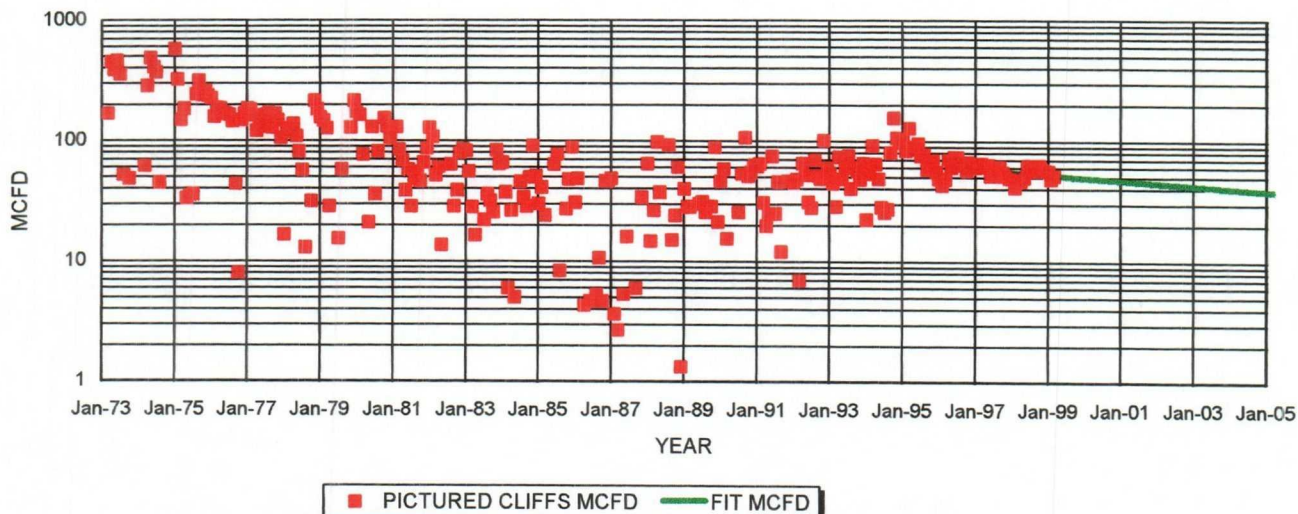
MESAVERDE HISTORICAL DATA: 1ST PROD: 03/73

OIL CUM:	3.85	MBO
GAS CUM:	724.6	MMCF
OIL YIELD:	0.0053	BBL/MCF

MESAVERDE PROJECTED DATA

1/1/98 Qi:	64	MCFD
DECLINE RATE:	5.0%	(EXPONENTIAL)

**JICARILLA D-11 PICTURED CLIFFS PRODUCTION
SECTION 29A-26N-03W, RIO ARRIBA COUNTY, NEW MEXICO**



PICT. CLIFFS HISTORICAL DATA: 1ST PROD: 03/73

OIL CUM:	0.0	MBO
GAS CUM:	684.5	MMCF
OIL YIELD:	0.000	BBL/MCF

PICTURED CLIFFS PROJECTED DATA

1/1/98 Qi:	55	MCFD
DECLINE RATE:	5.0%	(EXPONENTIAL)

FIXED COMMINGLE ALLOCATION FACTORS:

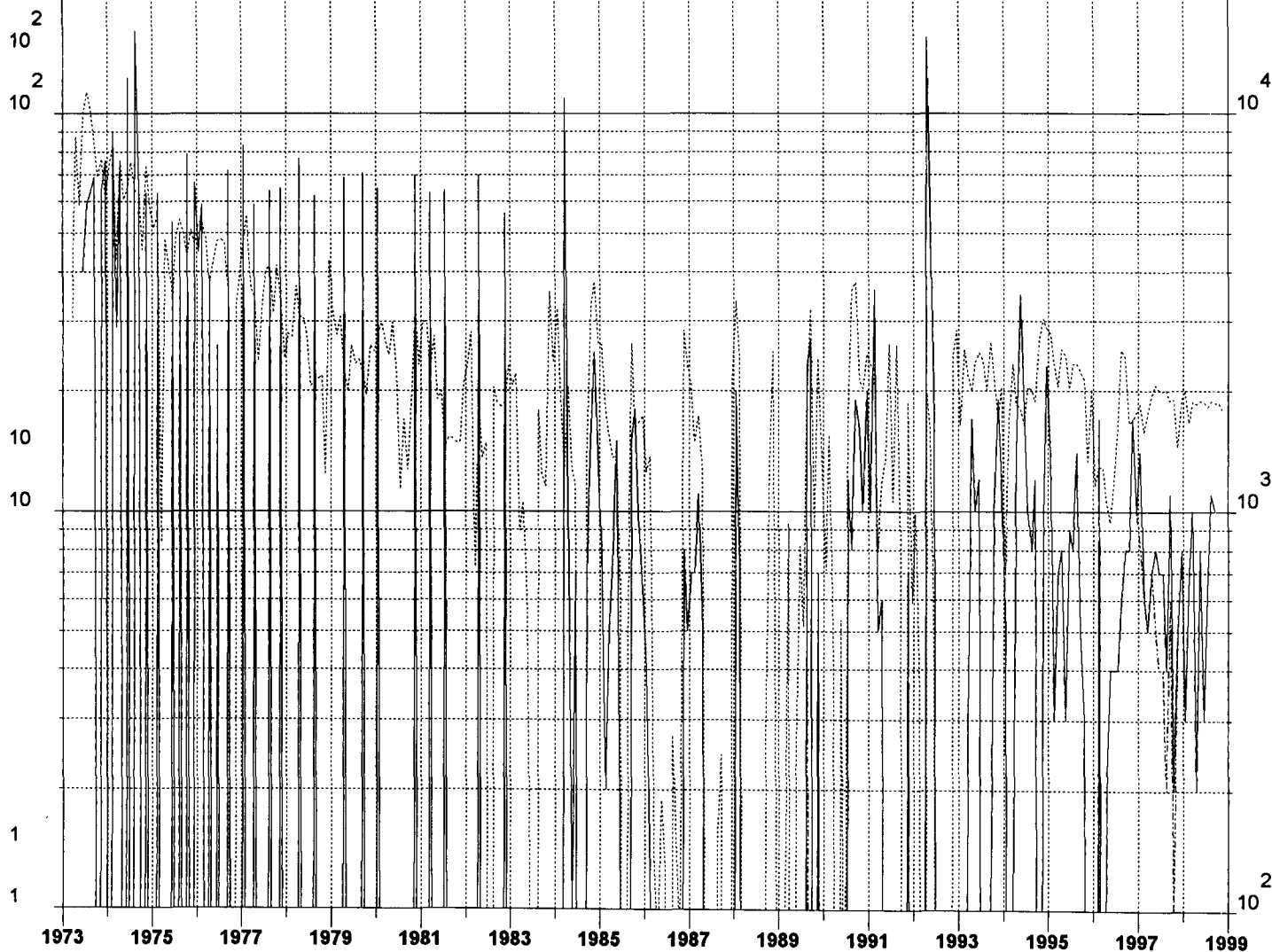
	GAS	OIL
MESAVERDE	54%	100%
PICT. CLIFFS	46%	0%

NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGYDATA

$$\begin{array}{r} 10^3 \\ 10^3 \end{array}$$

04/06/99

10 5



F.P. Date: 03/73

Oil Cum: 3773 bbl

Gas Cum: 719.7 mmcf

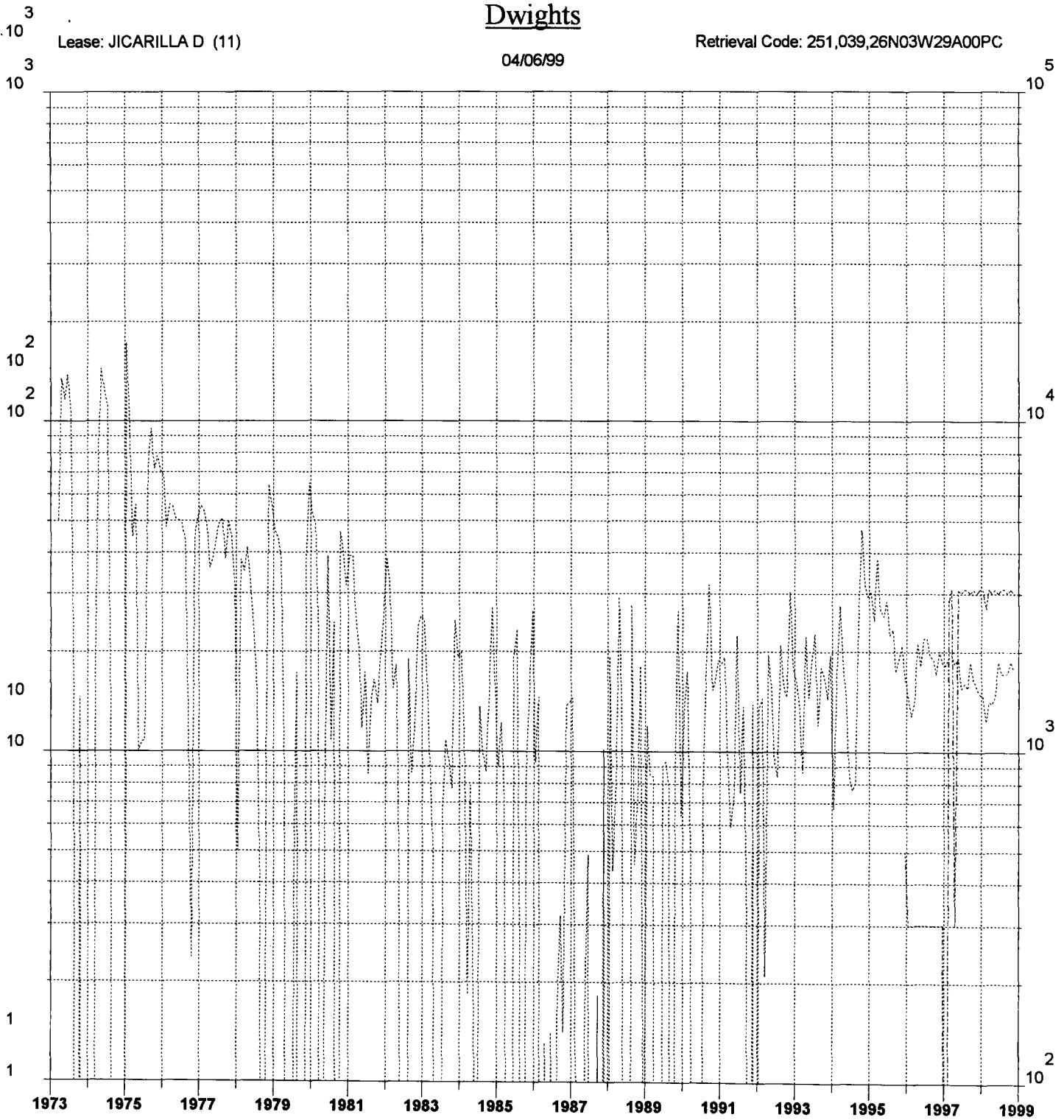
Location: 29A 26N 3W

Dwights

Lease: JICARILLA D (11)

Retrieval Code: 251,039,26N03W29A00PC

04/06/99



Oil (bbl/mo)

F.P. Date: 03/73

Gas (mcf/mo)

Water (bbl/mo)

County: RIO ARRIBA, NM

Field: TAPACITO (PICTURED CLIFFS)

Oil Cum: 5 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 678.1 mmcf

Operator: CONOCO INC

Location: 29A 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 COMPANY			Lease JICARILLA		Well No. 11-D
Unit Letter A	Section 29	Township 26 NORTH	Range 3 WEST	County RIO ARriba	

Actual Footage Location of Well:
1190 feet from the **NORTH** line and **1190** feet from the **EAST** line

Ground Level Elev. 7145.0	Producing Formation PICTURED CLIFFS	Pool JICARILLA APACHE CONTRACT #100	Dedicated Acreage: P.E. 160 M.V. 320	Acres
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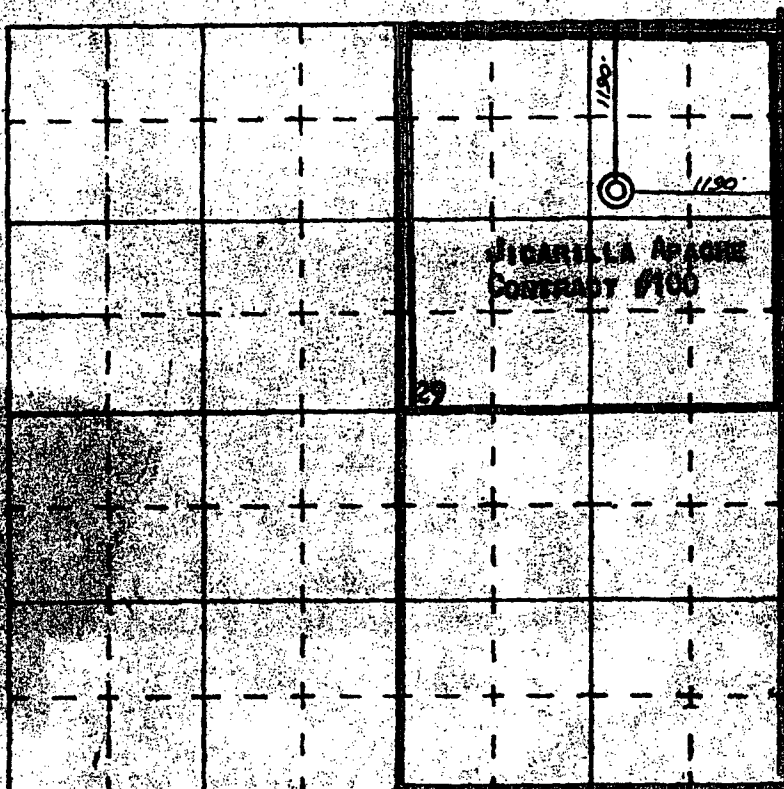
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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 MESAVERTHE ACERAGE
 ———DEDICATED PICTURED CLIFFS 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.**
GILBERT D. NOLAND, JR.
 Position
DRILLING SUPERINTENDENT
 Company
SOUTHERN UNION PRODUCTION Co.
 Date
SEPTEMBER 27, 1972

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 this same is true and correct to the best of my knowledge and belief.

Date **26 Sept. 1972**
 Registered Professional Engineer
 and/or Licensed Surveyor
NEW MEXICO
 Certificate No. **1268**

Jicarilla D # 11
Section 29, T-26-N, R-3-W, A
Rio Arriba, NM
API # 30-039-20566

RE: Downhole Commingle Application (C107A)

Notification of Offset Operators:

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

Dugan Production Corp,
PO Box 420
Farmington, NM 87499-0420

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

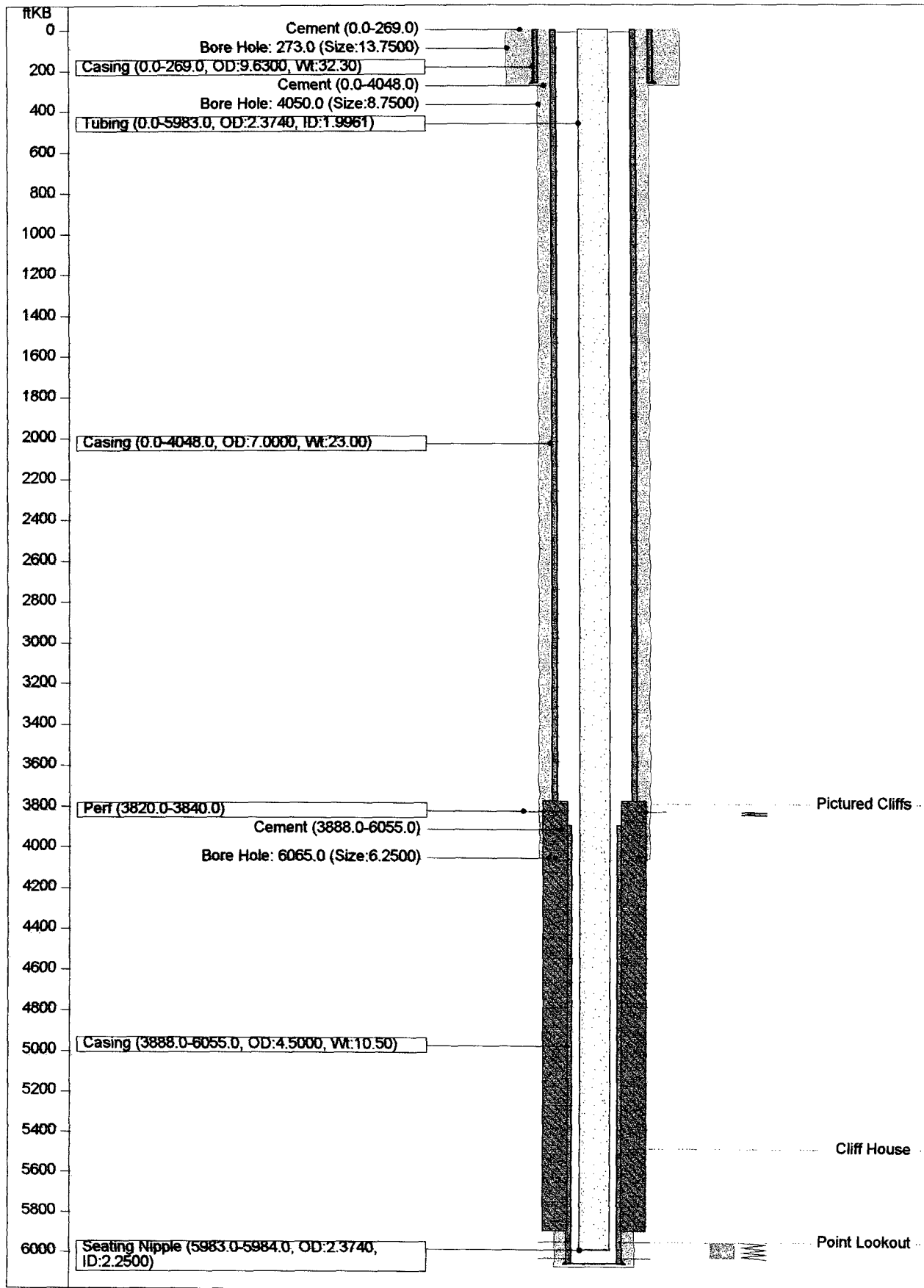
Jicarilla D 11

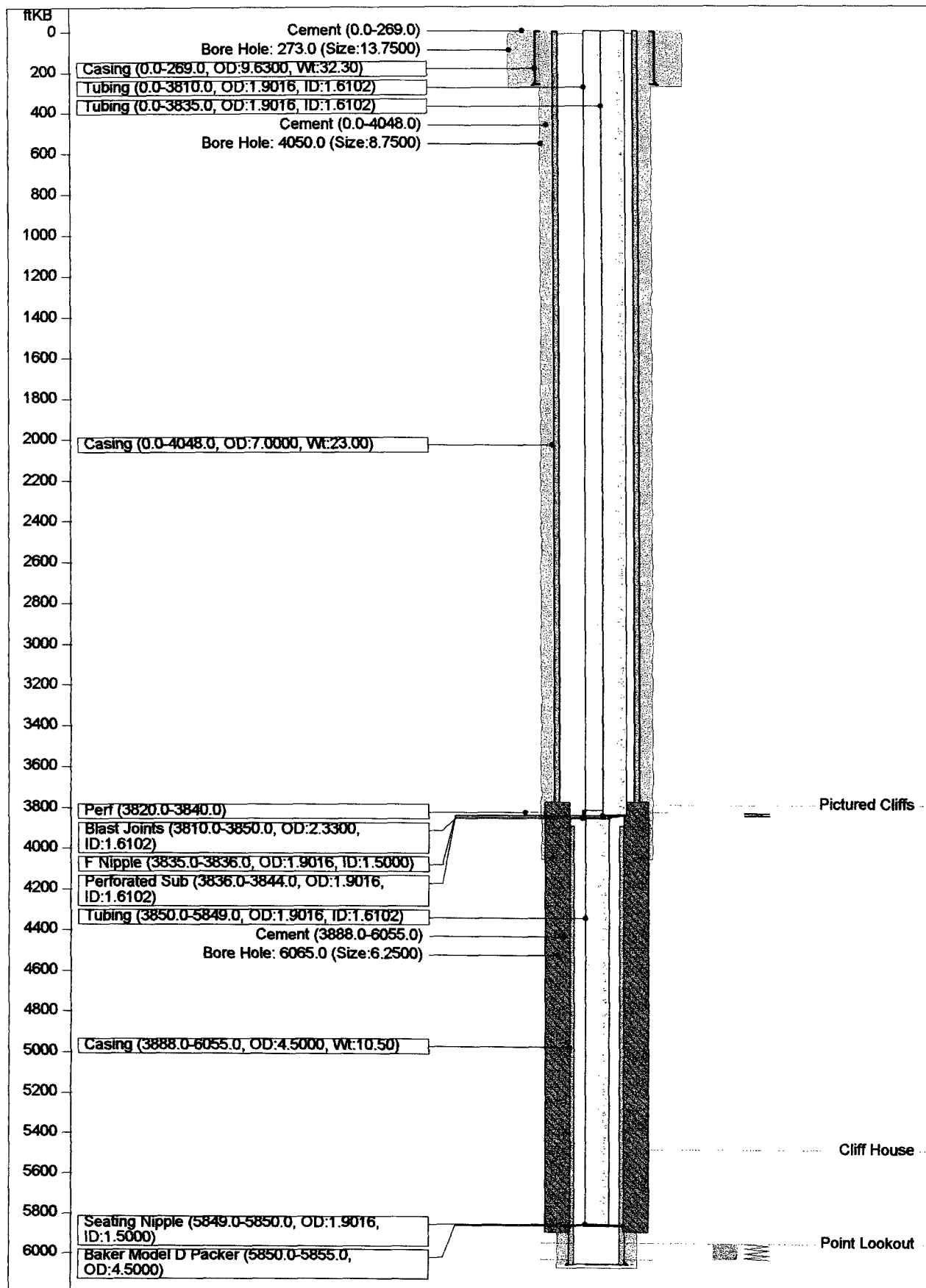
Economic/Rate Justification for Down Hole Commingling

Approval is requested to down hole commingle the existing zones in the subject well. The Jicarilla D11 has a 4.5" production liner installed in 7" production casing. It is dually completed in the Mesa Verde and Picture Cliffs using two 1.9" tubing strings. 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, along with the position of the tubing relative to the Mesa Verde perforations (87' above the perfs) allows 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 50 MCFD.

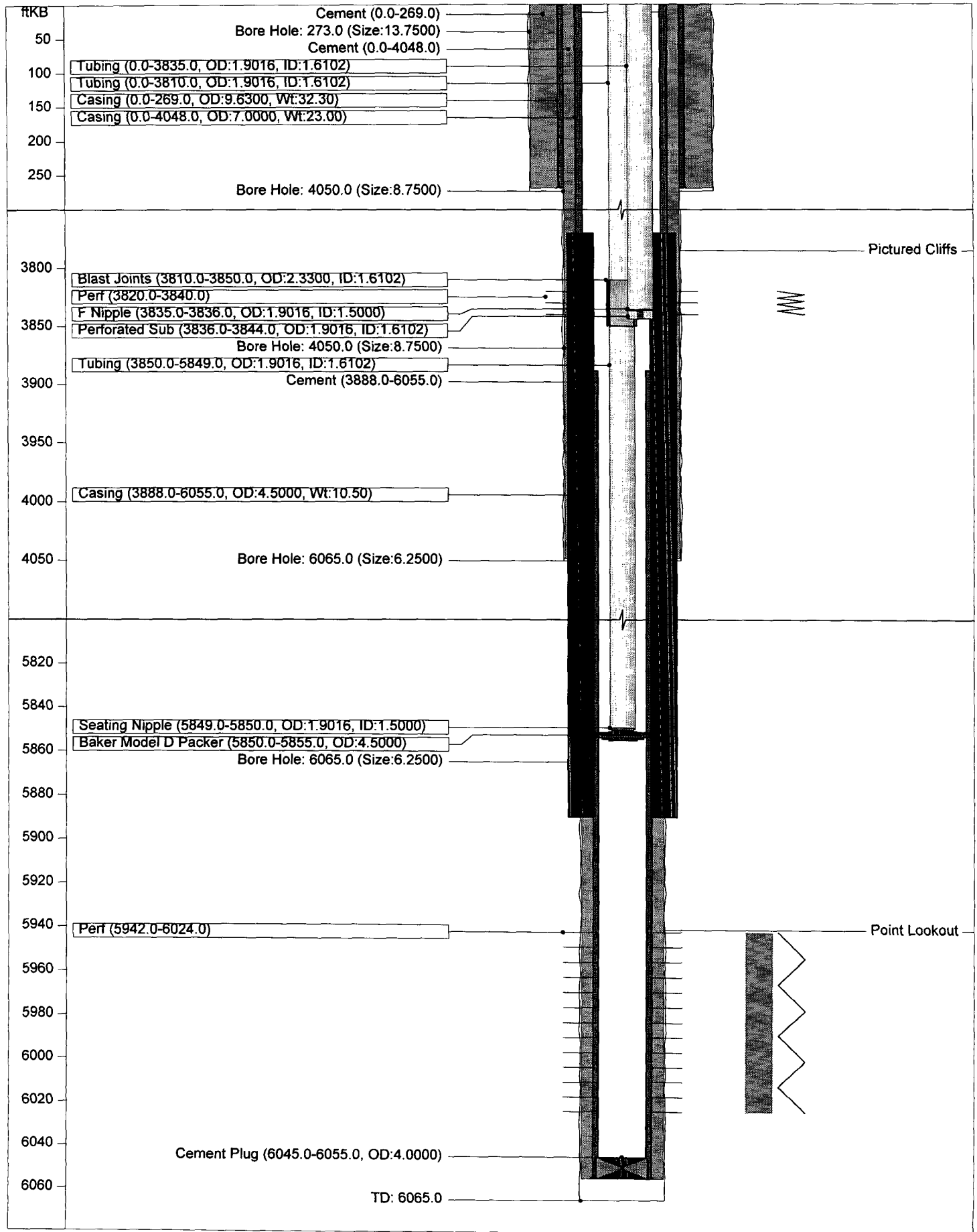
The single larger tubing string will not only allow for more efficient plunger operation, but will eliminate the cost to install a second plunger lift system and save approximately \$2000 per year in plunger lift operating expenses.

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 11 (GMH 6/24/97)



JICARILLA D 11 (GMH 6/24/97)

30039205660000

JICARILLA D 11 (GMH 6/24/97)							
API Code	300392056600			Field Code	676380663		
TD	6065.0 ftKB			Basin	SAN JUAN BASIN		
PBTD	6045.0 ftKB			Basin Code	580		
State	New Mexico			Permit	02-Oct-72		
County	RIO ARRIBA			Spud	24-Oct-72		
District	San Juan O.U.			Finish Drl	13-Nov-72		
Permit No.				Completion	30-Nov-72		
TD Measured	6065 ftKB			Abandon			
Reservoir	Dakota/Pictured Cliffs						
Field	BLANCO MV/TAPACITO PC						
Location							
Meridian	NM			Top Latitude	36.46175		
Township	26N			Top Longitude	107.1626		
Range	3W			Top NS Distance	1190.0 ft N		
Section	29			Top EW Distance	1190.0 ft E		
Quarter	SW NE NE			Bottom Latitude	0		
				Bottom Longitude	0		
				Btm NS Distance	0.0 ft		
				Btm EW Distance	0.0 ft		
Elevations							
KB	7155.0 ft			Cas Fing	0.0 ft		
Grd	7143.0 ft			Tub Head	0.0 ft		
KB-Grd	12.0 ft						
Bore Hole Data							
	Depth (ftKB)			Size (in)			
	273.0			13.7500			
	4050.0			8.7500			
	6065.0			6.2500			
Casing String - Surface Casing							
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments
9.6300 in Casing	269.0	7	9.0000	32.30	H-40		
Casing String - Intermediate Casing							
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments
7.0000 in Casing	4048.0	132	6.3700	23.00	K-55		
Casing String - Production Liner							
Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments
4.5000 in Casing	6055.0	66	4.0500	10.50	K-55		
4.5000 in Baker Model D Packer	5855.0		2.6880	0.00			Assume ID, (either 2.688 or 1.968)
Casing Cement							
Casing String	Top (ftKB)	Amount (sx)	Comments				
Surface Casing	0.0	225	Cement circ				
Intermediate Casing	0.0	700	TOC unknown, cement did not circ. DV @ 1998'. 1st stg 500ft3 (315sx), 2nd stg 600ft3 (375sx)				
Production Liner	3888.0	315	TOC unknown, LR on disp, cement w/ 500ft3.				
Other (plugs, equip., etc.) - Plug Backs							
Date	Item	Int (ftKB)	Comments				
25-Nov-72	Cement Plug	6045.0 - 6055.0					
Perforations							
Date	Int	Shots (/ft)	Type	Comments			
26-Nov-72	5942.0 - 6024.0	1.0		70-.40" EHD @ 5942-56, 5962-80, 5986-6010, 6014-24 in 250 G 7 1/2% HCl			
27-Nov-72	3820.0 - 3840.0	1.0		21 holes			
Stimulations & Treatments							
Date	Type	Zone	Int	Fluid	Comments		
23-Nov-72	Cement Squeeze	Production Liner	3770.0 - 5890.0	Cement	Shoot 2 sqz holes @ 5890', set Baker Model K Cem Ret @ 5740'. Sqz w/ 140 sx to 2000#. Sqz liner top below a pkr w/ 100 sx to 2000#. WOC 3 hrs, test 3000#, OK. Perf w/ thru tbg gun @ 3770', sqz w/ 200 sx to 3000#. CO to PBTD, test to 3000#. OK.		
26-Nov-72	Fracture	Mesaverde	5942.0 - 6024.0	Water	100,000 G w/ 50,000# 20/40 & 50,000# 10/20. ATP=1000# @ 56 bpm, ISIP=250#. Drop 8 stgs of 5 BS.		
26-Nov-72	Acid Squeeze	Mesaverde	5942.0 - 6024.0	15% HCl	BD @ 2600#. Acidize w/ 500 G @ 9 bpm @ 3500#.		
27-Nov-72	Fracture	Mesaverde	3820.0 - 3840.0	Water	60,000 G w/ 20,000# 20/40 & 40,000# 10/20. BD @ 1000#, ATP=1200# @ 57 bpm, ISIP=200#. Drop 2 stgs of 5 BS. Spearhead w/ 500 G 15% HCl.		

JICARILLA D 11 (GMH 6/24/97)

Tubing String - Tubing (MV)								
Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
1.9016 in Tubing	0.0	3810.0	116	1.6102	2.90	PCW-55	EUE	
2.3300 in Blast Joints	3810.0	40.0		1.6102	0.00	PCW-55	EUE	
1.9016 in Tubing	3850.0	1999.0	61	1.6102	2.90	PCW-55	EUE	
1.9016 in Seating Nipple	5849.0	1.0		1.5000	0.00	PCW-55	EUE	Assume ID
Tubing String - Tubing (PC)								
Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
1.9016 in Tubing	0.0	3835.0	115	1.6102	2.76	PCW-55	IJ	
1.9016 in F Nipple	3835.0	1.0		1.5000	0.00	PCW-55	IJ	Assume ID
1.9016 in Perforated Sub	3836.0	8.0		1.6102	0.00	PCW-55	IJ	
Formation/Horizon Tops								
Top (ftKB)		Formation						
3785.0		Pictured Cliffs						
5475.0		Cliff House						
5941.0		Point Lookout						
Logs Run								
Date	Type	Int	Company	Comments				
30-Oct-72	IND	268.0 - 4033.0	Atlas					
30-Oct-72	DEN	3550.0 - 4033.0	Atlas					
13-Nov-72	IND	4000.0 - 6053.0	Atlas					
13-Nov-72	DEN	5400.0 - 6058.0	Atlas					
Drilling Notes								
Date	Note							
31-Oct-72	Drill 6 1/4" hole w/ gas. Stuck drill pipe @ 5911', had to mud up.							
General Notes								
Date	Note							
30-Nov-72	Initial Potential: 756 AOF; 740 MCFPD After 3 Hrs SITP 1200 PSI After 7 Days							
03-Apr-92	Drilling Journal: 4/3/92 (chngd well name from Jicarilla #D-11).							

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____		5. LEASE DESIGNATION AND SERIAL NO. Contract #100	
2. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____		8. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla Apache	
3. NAME OF OPERATOR Southern Union Production Company		7. UNIT AGREEMENT NAME	
4. ADDRESS OF OPERATOR P.O. Box 808, Farmington, New Mexico 87401		5. FARM OR LEASE NAME Jicarilla "D"	
6. LOCATION OF WELL (Report location clearly and in accordance with any State requirements). At surface 1190 ft. from the North line & 1190 ft. from the East line At top prod. interval reported below Same as above At total depth Same as above		9. WELL NO. 11	
14. PERMIT NO.		10. FIELD AND POOL, OR WILDCAT	
DATE ISSUED		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 29, T-26N, R-3W N.M.P.M.	
15. DATE SPUNDED 10-24-72		12. COUNTY OR PARISH Rio Arriba	
16. DATE E.D. REACHED 11-13-72		13. STATE New Mexico	
17. DATE COMPL. (Ready to prod.) 11-30-72		18. ELEVATIONS (OF RES. RT. 25, ETC.) 7155 ft. R.K.B.	
19. ELEV. CASINGHEAD 7144 ft.		20. TOTAL DEPTH, MD & TVD 6065 ft. R.K.B.	
21. PLUG BACK T.D., MD & TVD 6045 ft. R.K.B.		22. IF MULTIPLE COMPL. HOW MANY? 2	
23. INTERVALS DRILLED BY 0 - 6065 ft.		24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 3820 - 3840 ft. MD. & TVD. - Tapacito Pictured Cliffs 5942 - 6024 ft. MD. & TVD. - Blanco Mesaverde	
25. TYPE ELECTRIC AND OTHER LOGS RUN B.S. Induction, Gamma - Ray Density, & Cement Bond		26. WAS DIRECTIONAL SURVEY MADE NO	
27. WAS WELL CURED NO		28. CASING RECORD (Report all strings set in well)	
29. LINER RECORD		30. TUBING RECORD	
31. PERFORATION RECORD (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
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	

SIGNED Don R. Collier TITLE Office Manager DATE January 4, 1973

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