

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 1893

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-8429

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

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
Jicanilla A

Well No
#22A

Section 24, T-26-N, R-4-W, P

County
Rio Arriba, NM

Unit Ltr Sec Two Rge

OGRID NO. 005073

Property Code 18018

API NO

30-039-22052

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)	3931-3954'		5579-6201'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a (Current) 330 b(Original) 1175	RECEIVED JUN - 4 1999 OIL CON. DIV.	575 1315
6. Oil Gravity (*API) or Gas Bt Content	1300		1305
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 Note: For new zones with no production history, applicant should be required to attach production estimates and supporting data.	Date Rates	Date Rates	Date Rates
• If Producing, date and oil/gas/water rates of recent test (within 60 days)	4/99 24 MCFD, 0 BOPD, 0 BOWD	Date Rates	4/99 140 MCFD, 1 BOPD, 0 BOWD
8. Fixed Percentage Allocation Formula - % for each zone	Oil 0 % Gas 22 %	Oil % Gas %	Oil 100 % Gas 78 %

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

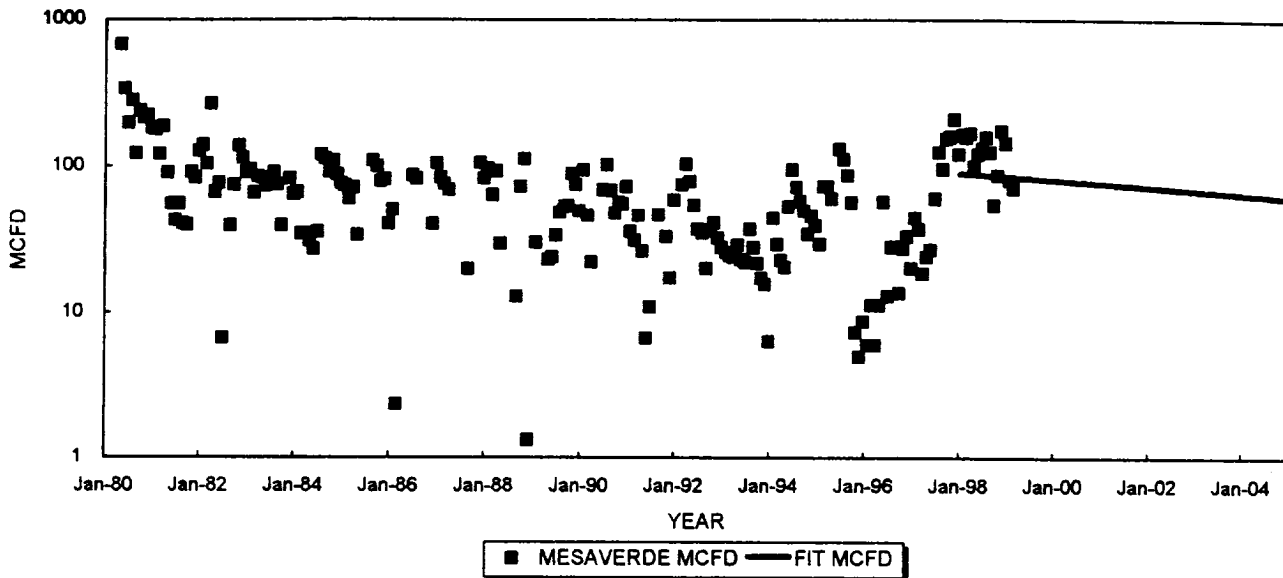
- C-102 for each zone to be commingling showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation 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 A-22A MESAVERDE PRODUCTION
SECTION 32F-29N-08W, RIO ARRIBA COUNTY, NEW MEXICO**



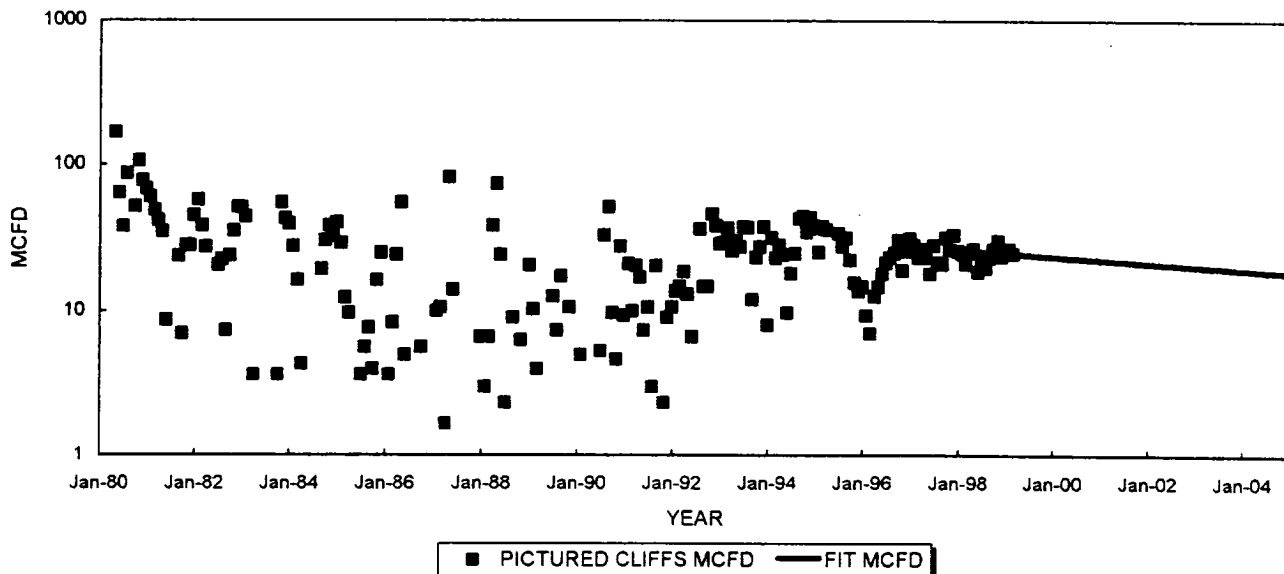
MESAVERDE HISTORICAL DATA: 1ST PROD: 05/80

OIL CUM:	2.05	MBO
GAS CUM:	448.2	MMCF
OIL YIELD:	0.0046	BBL/MCF

MESAVERDE PROJECTED DATA

1/1/98 Qi:	90	MCFD
DECLINE RATE:	5.0%	(EXPONENTIAL)

**JICARILLA A-22A PICTURED CLIFFS PRODUCTION
SECTION 32F-29N-08W, RIO ARRIBA COUNTY, NEW MEXICO**



MESAVERDE HISTORICAL DATA: 1ST PROD: 05/80

OIL CUM:	0.0	MBO
GAS CUM:	140.3	MMCF
OIL YIELD:	0.000	BBL/MCF

PICTURED CLIFFS PROJECTED DATA

1/1/98 Qi:	26	MCFD
DECLINE RATE:	5.0%	(EXPONENTIAL)

FIXED COMMINGLE ALLOCATION FACTORS:

	GAS	OIL
MESAVERDE	78%	100%
PICT. CLIFFS	22%	0%

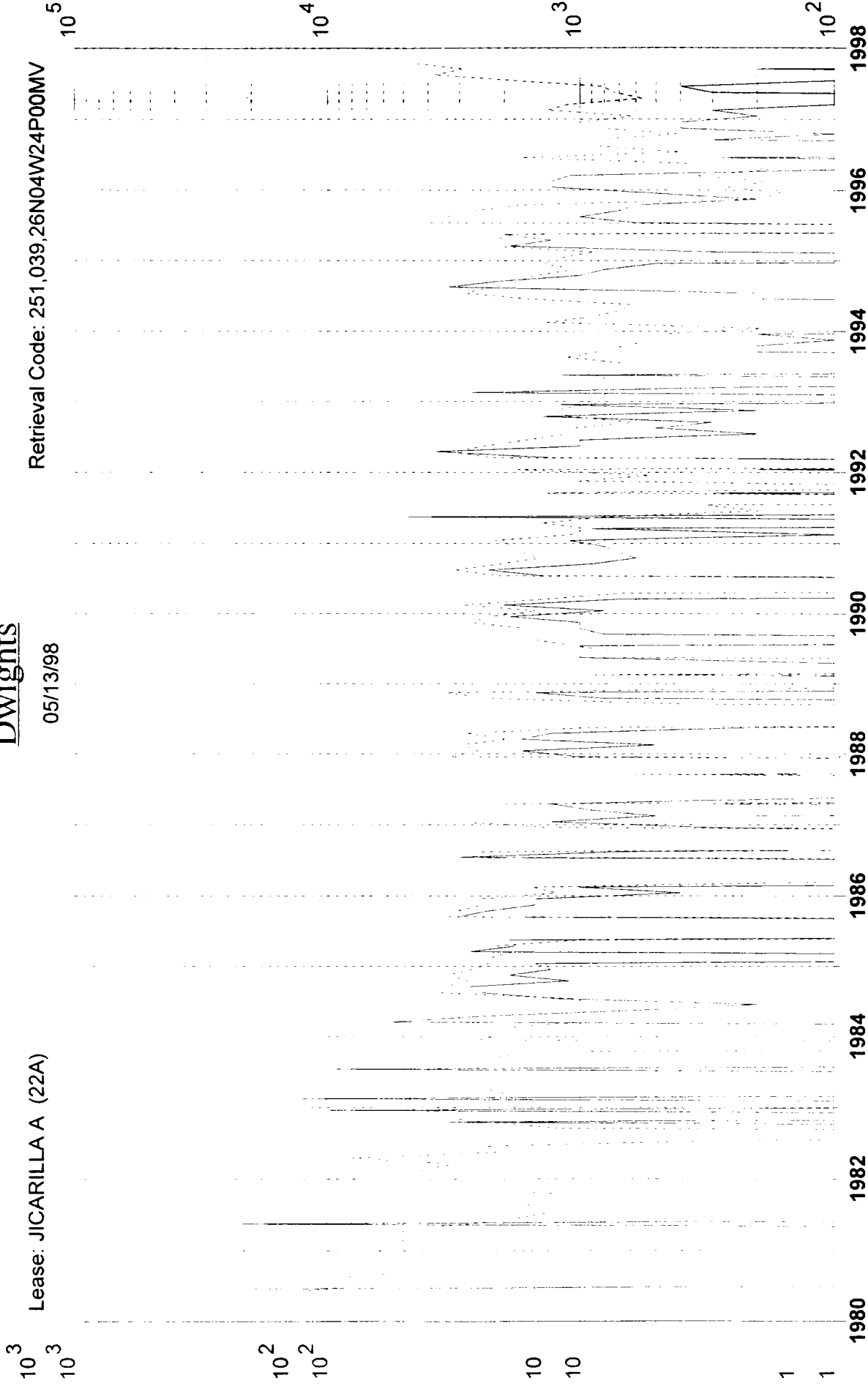
NOTE: ALL PRODUCTION DATA FROM DWIGHTS ENERGYDATA

Dwights

Lease: JICARILLA A (22A)

Retrieval Code: 251,039,26N04W24P00MV

05/13/98



Oil (bbl/mo)

Gas (mcf/mo)

Water (bbl/mo)

F.P. Date: 05/80

County: RIO ARRIBA, NM

Oil Cum: 1999 bbl

Field: BLANCO (MESAVERDE) MV

Gas Cum: 385.9 mmcf

Reservoir: MESAVERDE

Location: 24P 26N 4W

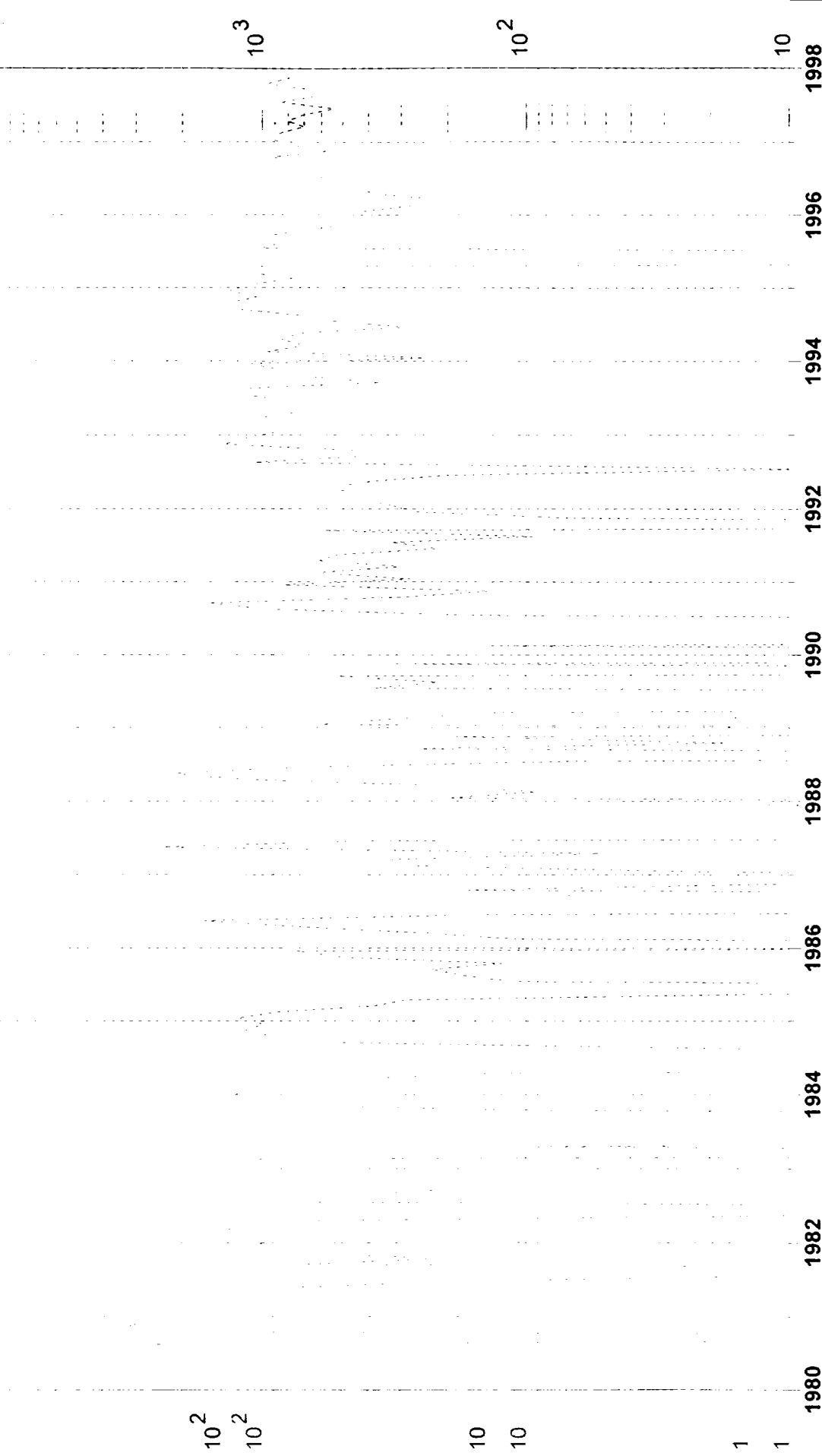
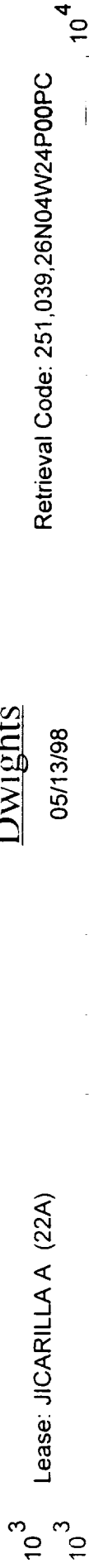
Operator: CONOCO INC

Dwights

Lease: JICARILLA A (22A)

Retrieval Code: 251,039,26N04W24P00PC

05/13/98



Oil (bbl/mo)

County: RIO ARRIBA, NM

F.P. Date: 05/80

Gas (mcf/mo)

Water (bbl/mo)

Field: TAPACITO (PICTURED CLIFFS)

Oil Cum: 10 bbl

Reservoir: PICTURED CLIFFS

Gas Cum: 128.3 mmcf

Operator: CONOCO INC

Location: 24P 26N 4W

WELL LOCATION AND ACREAGE DEDICATION PLAT

Superintendent
Effective

All distances must be from the outer boundaries of Section.

Operator SUPRON ENERGY CORPORATION			Lease JICARILLA "A"		Well No. 23
Unit Letter P	Section 24	Township 26 NORTH	Range 4 WEST	County RIO ARriba	

Actual Footage Location of Well:

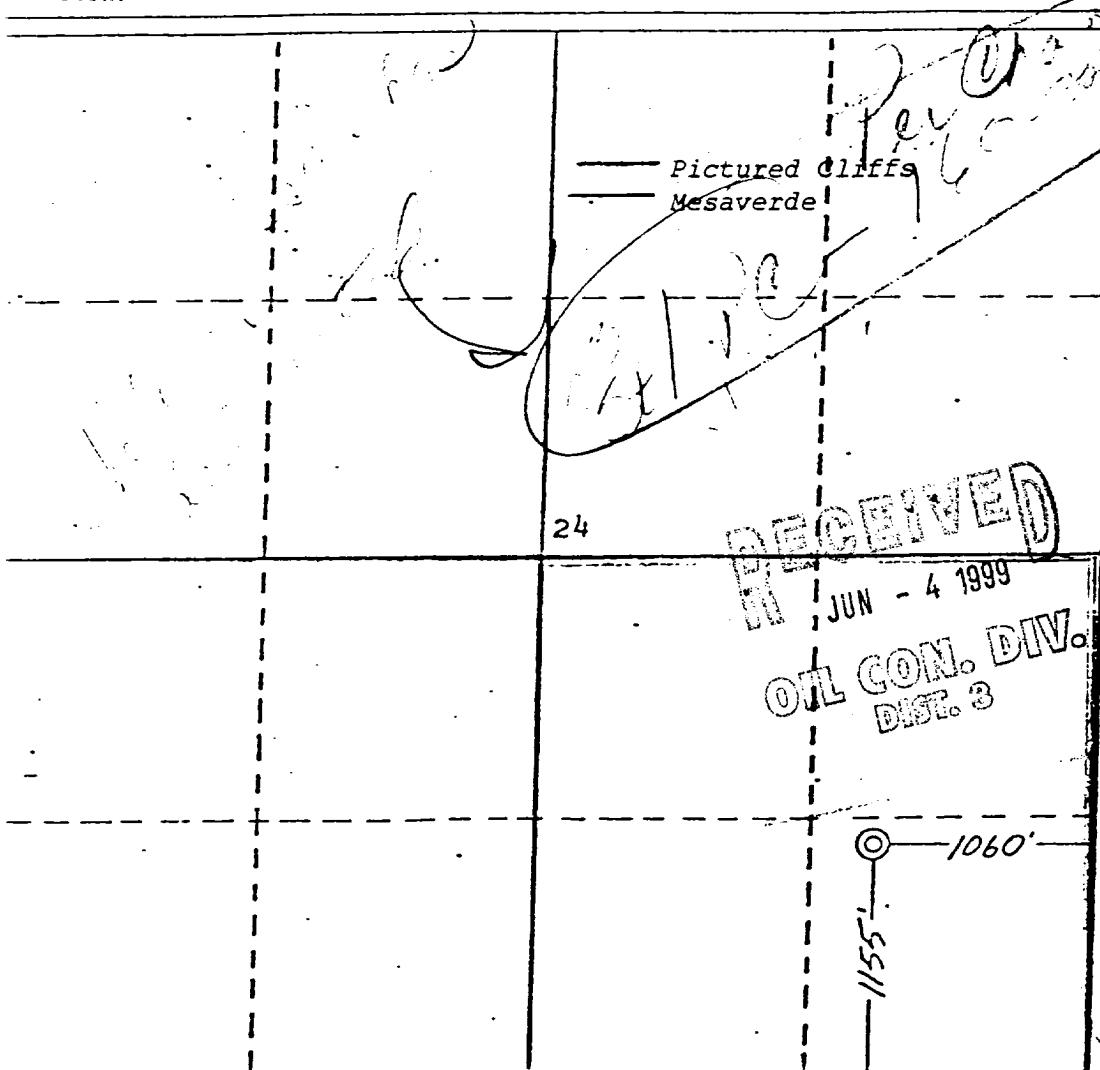
1155	feet from the SOUTH	line and	1060	feet from the EAST	line
Ground Level Elev. 7270	Producing Formation MESAVERDE	Pictured Cliffs	Pool Tapacito	Dedicated Acreage S1/2 320	
			BLANCO		

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 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 been consolidated. (Use reverse 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.

Rudy D. Motto
Name

Rudy D. Motto

Position

Area Superintendent

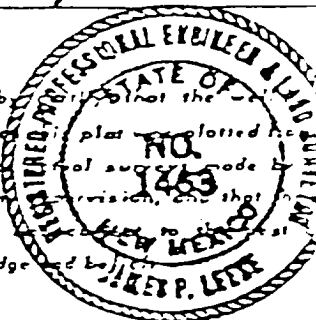
Company

SUPRON ENERGY CORPORATION

Date

April 10, 1979

I hereby certify that the information shown on this plat was plotted from notes and surveys made by me or under my supervision, and that it is true to the best of my knowledge and belief.



Date Surveyed

4 April 1979

Registered Professional Engineer and/or Land Surveyor

James P. Leese
James P. Leese

Certificate No.

1463

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 875

Form C-102
Revised 10-1-NOTE: NAME CHANGE from JICARILLA "A" 23
All distances must be from the outer boundaries of the Section.

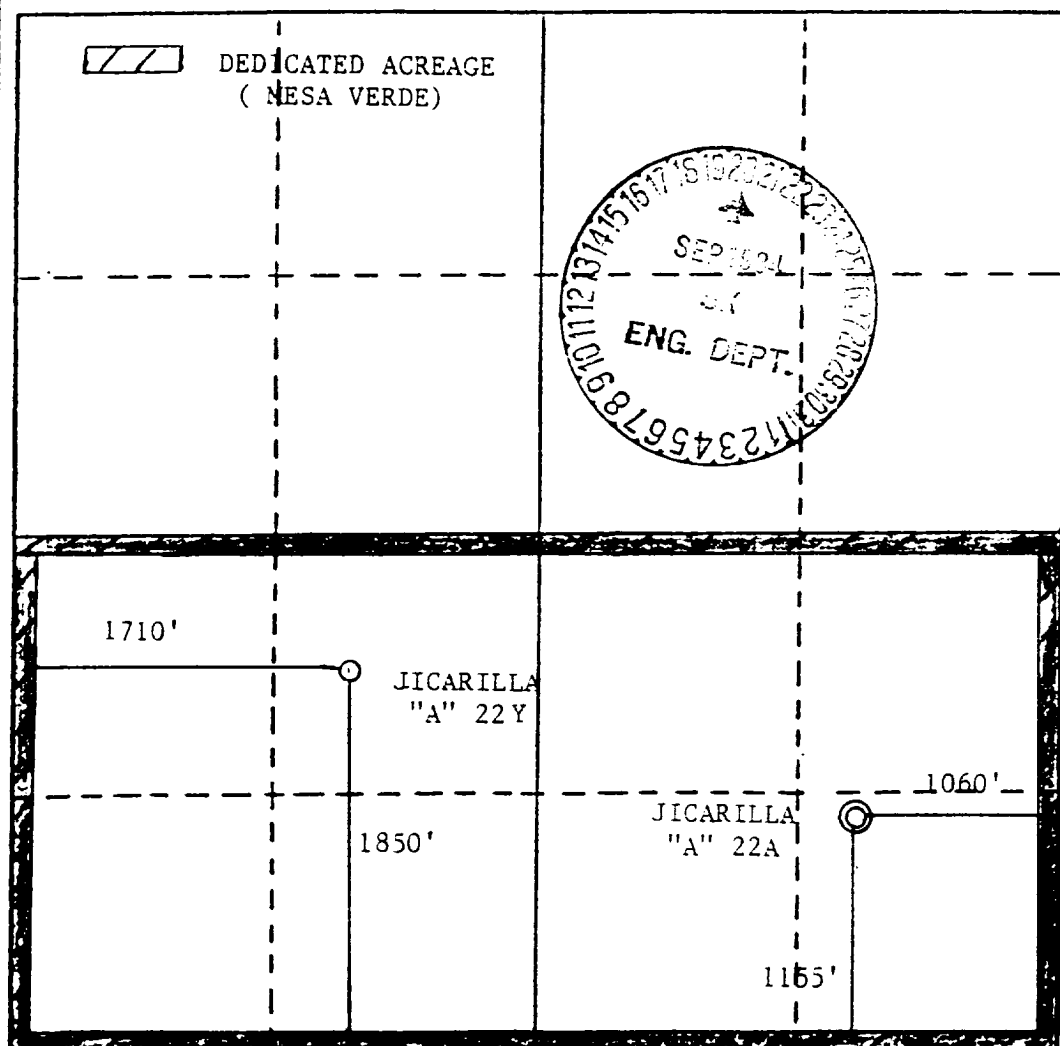
Operator SOUTHERN UNION EXPLORATION		Lease JICARILLA "A"		Well No. 22A	
Unit Letter P	Section 24	Township 26 NORTH	Range 4 WEST	County RIO ARriba	
Actual Footage Location of Well: 1155 feet from the SOUTH line and 1060 feet from the EAST line					
Ground Level Elev. 7270'	Producing Formation MESA VERDE		Pool BLANCO	Dedicated Acreage: S 1/2; 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 been 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 Division.



CERTIFICATION

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

Katherine F. Folk
Name

Katherine F. Folk
Position

Geologist

Company
Southern Union Exploration

Date
September 19, 1984

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

Registered Professional Engineer
and/or Land Surveyor

Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

June 2, 1999

Jicarilla A #22A
Section 24, T-26-N, R-4-W, P
API # 30-039-22052
Rio Arriba , NM

RE: Application to Downhole Commingle (C107A)

Offset Operators:

Chateau Oil & Gas Inc.
5950 Berkshire Ln STE 275
Dallas, TX 75225

Burlington Resources
PO Box 4289
Farmington, NM 87499

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

Jicarilla A 22A

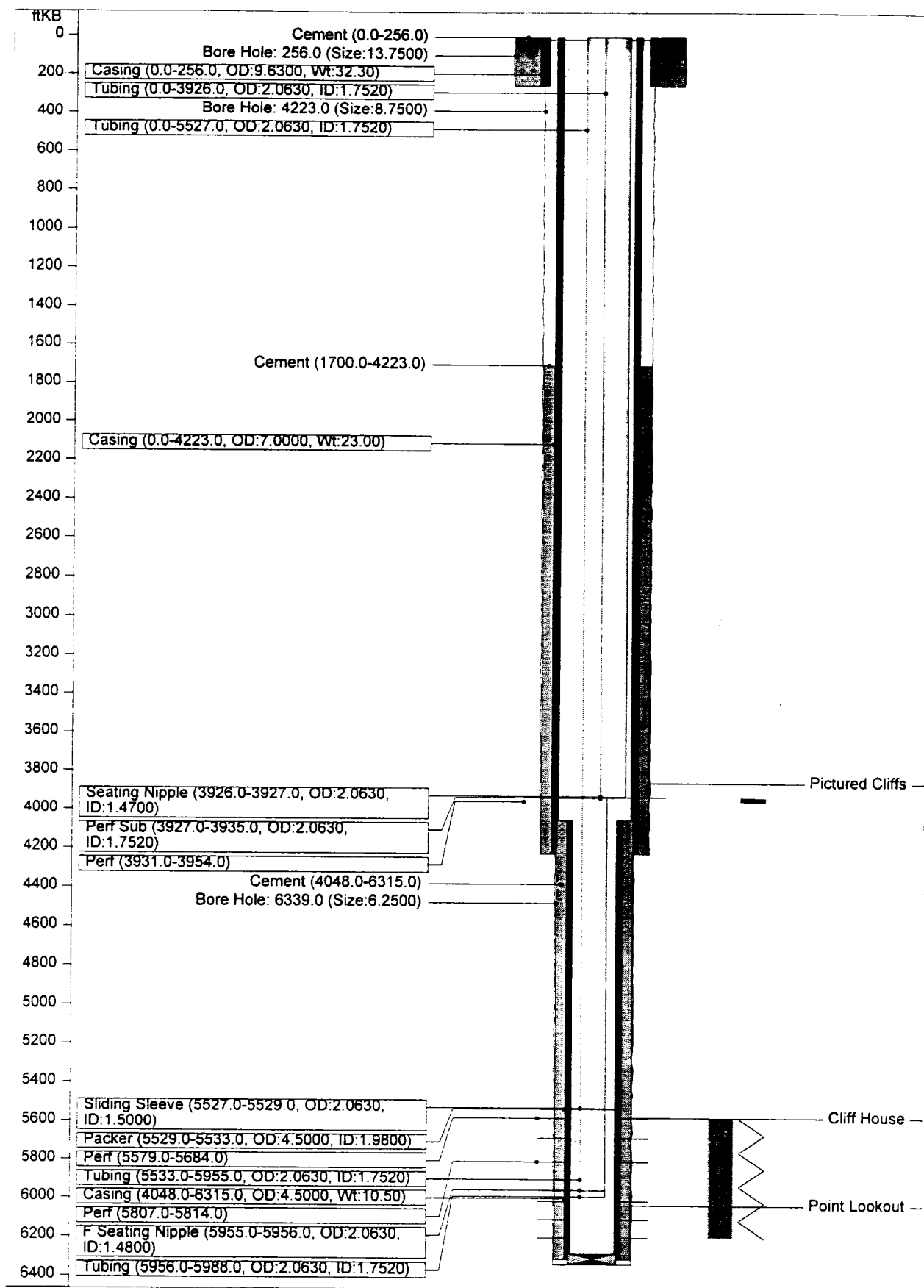
Economic/Rate Justification for Down Hole Commingling

Approval is requested to down hole commingle the existing zones in the subject well. The Jicarilla A 22A has a 4.5" production liner installed in 7" production casing. It is dually completed in the Mesa Verde and Picture Cliffs using two 2.06" 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 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 50 MCFD.

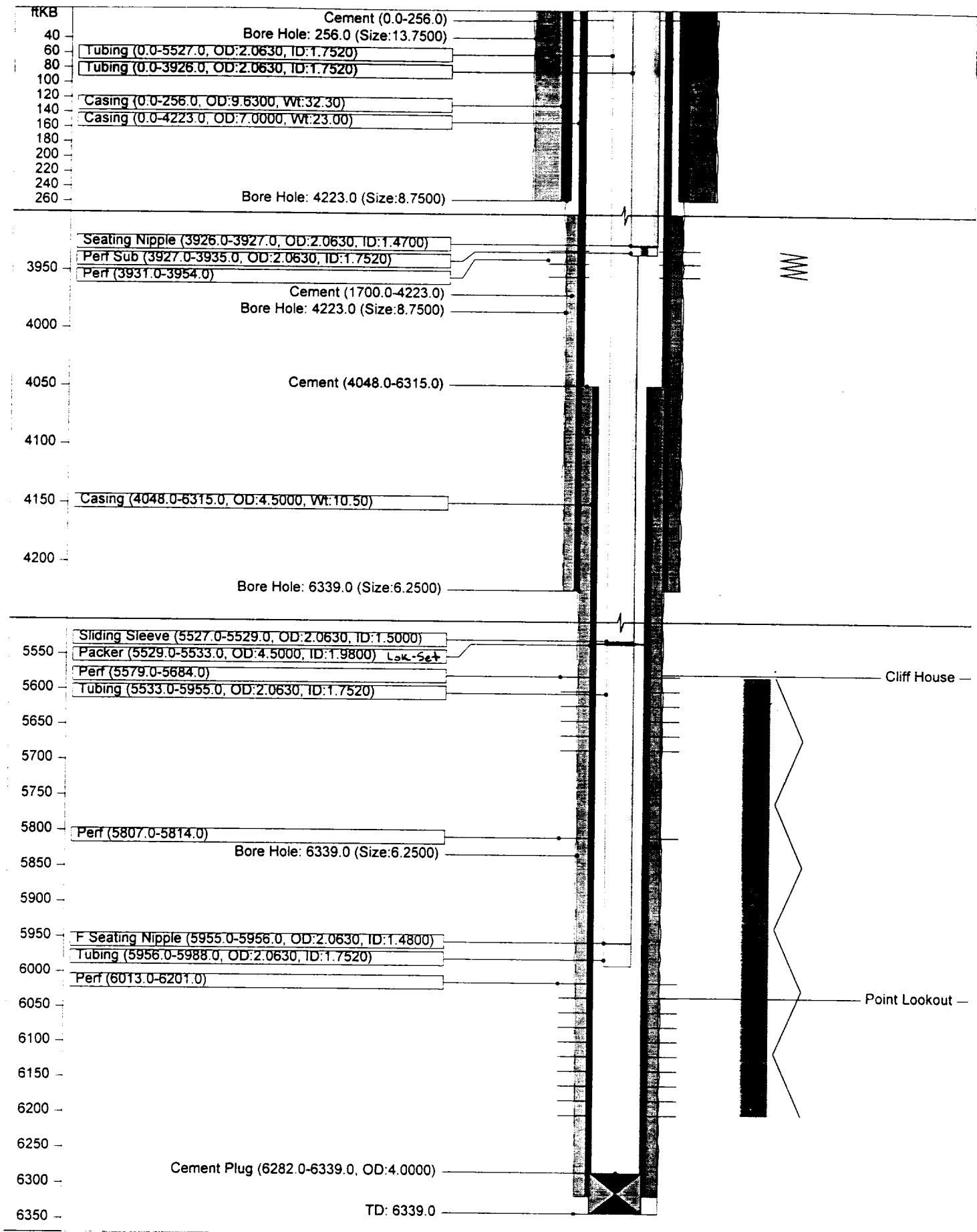
The single larger tubing string will not only allow for more efficient plunger operation, but will eliminate the cost to install a second plunger lift system and save approximately \$2000 per year in plunger lift operating expenses.

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 subtraction method formula for allocation of production from each zone.

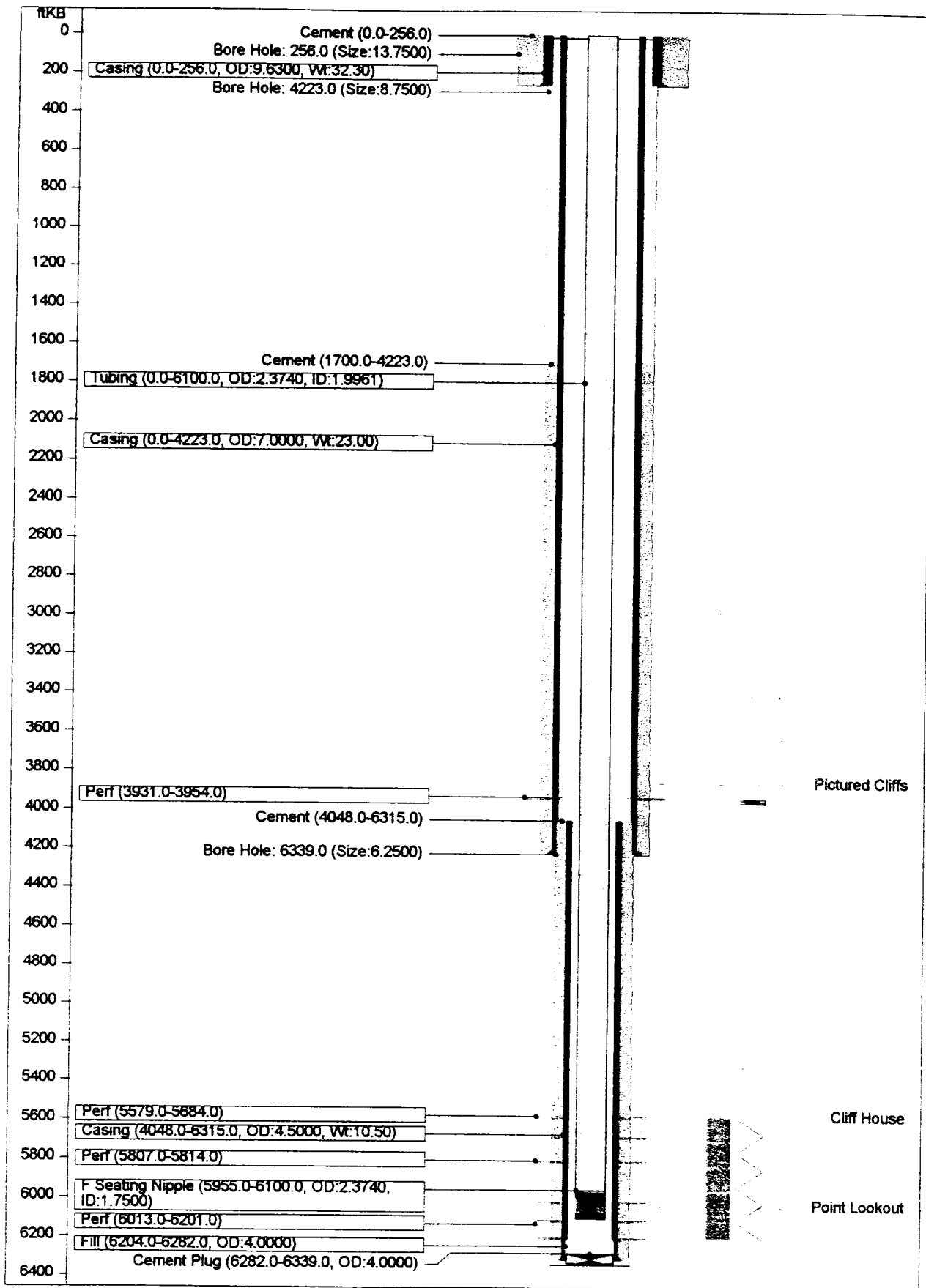
JICARILLA A 22A (GMH 8/20/97)



JICARILLA A 22A (GMH 8/20/97)



JICARILLA A 22A (Post DHC Work)



JICARILLA A 22A (GMH 8/20/97)

JICARILLA A 22A (GMH 8/20/97)

API Code	300392205200	Field Code	676378819
TD	6339.0 ftKB	Basin	SAN JUAN BASIN
PBTD	6282.0 ftKB	Basin Code	580
State	New Mexico	Permit	18-May-79
County	RIO ARRIBA	Spud	19-Sep-79
District	San Juan O.U.	Finish Drl	03-Oct-79
Permit No.		Completion	04-Jan-80
TD Measured	6339 ftKB	Abandon	
Reservoir	Pictured Cliffs/Mesaverde		
Field	BLANCO MV/TAPACITO PC		

Location

Meridian	NM	Top Latitude	36.46782
Township	26N	Top Longitude	107.1976
Range	4W	Top NS Distance	1155.0 ft S
Section	24	Top EW Distance	1060.0 ft E
Quarter	SE SE	Bottom Latitude	0
		Bottom Longitude	0
		Btm NS Distance	0.0 ft
		Btm EW Distance	0.0 ft

Elevations

KB	7283.0 ft	Cas Flng	0.0 ft
Grd	7271.0 ft	Tub Head	0.0 ft
KB-Grd	12.0 ft		

Bore Hole Data

Depth (ftKB)	Size (in)
256.0	13.7500
4223.0	8.7500
6339.0	6.2500

Casing String - Surface Casing

Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments
9.6300 in Casing	256.0	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	4223.0	111	6.3700	23.00	K-55	8rd	

Casing String - Production Liner

Item (in)	Btm (ftKB)	Jnts	ID	Wt	Grd	Thd	Comments
4.5000 in Casing	6315.0	69	4.0500	10.50	K-55		

Casing Cement

Casing String	Top (ftKB)	Amount (sx)	Comments
Surface Casing	0.0	225	Cement circ
Intermediate Casing	1700.0	280	TOC unknown, this is an estimate.
Production Liner	4048.0	350	Cement circ

Other (plugs, equip., etc.) - Plug Backs

Date	Item	Int (ftKB)	Comments
04-Dec-79	Cement Plug	6282.0 - 6339.0	

Perforations

Date	Int	Shots (/ft)	Type	Comments
05-Dec-79	3931.0 - 3954.0	1.0		11 holes @ 3931, 34, 36, 38, 40, 44, 46, 48, 50, 52, 54.
05-Dec-79	5579.0 - 5684.0	1.0		6 holes @ 5579, 99, 5637, 48, 76, 84
05-Dec-79	5807.0 - 5814.0	1.0		2 holes @ 5807, 14.
05-Dec-79	6013.0 - 6201.0	1.0		22 holes @ 6013, 16, 20, 26, 42, 54, 58, 64, 74, 77, 85, 93, 97, 6102, 04, 10, 23, 29, 77, 84, 92, 6201 all perms 5579-6201 shot in 500 G 7 1/2% HCl.

Stimulations & Treatments

Date	Type	Zone	Int	Fluid	Comments
05-Dec-79	Fracture	Mesaverde	5579.0 - 6201.0	Water	87,150 G w/ 90,000# 20/40. BD @ 2200#, ATP=1600# @ 59 bpm.
05-Dec-79	Acid Squeeze	Mesaverde	5579.0 - 6201.0	15% HCl	1000 G w/ 45 BS, good action, no BO.
06-Dec-79	Fracture	Pictured Cliffs	3931.0 - 3954.0	Foam	9000 G 1% KCl & 493 mcf N2 w/ 30,000# 20/40. Spearhead w/ 500 G 15% HCl. BD @ 2200#, AIR=6.6 bw & 16 mcf/min, ISIP=1800#

Tubing String - Tubing (MV)

Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
2.0630 in Tubing	0.0	5527.0	171	1.7520	3.25		IJ	
2.0630 in Sliding Sleeve	5527.0	2.0		1.5000	0.00		IJ	Baker Model L
4.5000 in Packer	5529.0	4.0		1.9800	0.00		IJ	
2.0630 in Tubing	5533.0	422.0	13	1.7520	3.25		IJ	
2.0630 in F	5955.0	1.0		1.4800	0.00		IJ	
Seating Nipple								
2.0630 in Tubing	5956.0	32.0	2	1.7520	3.25		IJ	

JICARILLA A 22A (GMH 8/20/97)

Tubing String - Tubing (PC)

Item (in)	Top (ftKB)	Len (ft)	Jnts	ID (in)	Wt	Grd	Thd	Comments
2.0630 in Tubing	0.0	3926.0	122	1.7520	3.25		IJ	
2.0630 in Seating Nipple	3926.0	1.0		1.4700	0.00		IJ	
2.0630 in Perf Sub	3927.0	8.0		1.7520	0.00		IJ	

Formation/Horizon Tops

Top (ftKB)	Formation
3856.0	Pictured Cliffs
5576.0	Cliff House
6033.0	Point Lookout

Logs Run

Date	Type	Int	Company	Comments
28-Sep-79	IND	256.0 - 4206.0	Gearhart	
28-Sep-79	DEN	3200.0 - 4206.0	Gearhart	
03-Oct-79	IND, DEN	5100.0 - 6340.0	Gearhart	
03-Dec-79	GR-CBL	0.0 - 0.0	Gearhart	Not in Midland files

Drilling Notes

Date	Note
29-Sep-79	Drill 6 1/4" hole w/ air

General Notes

Date	Note
04-Jan-80	Initial Potential: Dual Completion PC: 1020 MCFPD 1389 AOF SICP 430#/15D MV: 3780 MCFPD 7281 AOF SITP 1070
19-Sep-84	Changed name from Jicarilla A 23 to Jicarilla A 22A
01-Nov-95	Conoco assumed operations from Merit