DATE IN 8/16/99 PRINCIPLES 9/7/99 BHOINEER DC LOOGED M/ TYPE DHC	X / 110 [7] / V	9/7/99 BHOINE	IR DC LOOGED	KI	THE DHC
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#### NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau -ADMINISTRATIVE APPLICATION COVERSHEET THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATION **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] TYPE OF APPLICATION - Check Those Which Apply for [A] [1] Location - Spacing Unit - Directional Drilling [A] AUG | 6 1999 ☐ NSL ☐ NSP aa 🗆 Check One Only for [B] and [C] Commingling - Storage - Measurement B **₽** DHC O CTB Q PLC OLS OLM ☐ PC [C]Injection - Disposal - Pressure Increase - Enhanced Oil Recovery □ SWD DEOR ☐ WFX ☐ PMX ☐ PPR NOTIFICATION REQUIRED TO: - Check Those Which Apply, or \(\subseteq\) Does Not Apply [2] Working, Royalty or Overriding Royalty Interest Owners [A] Offset Operators, Leaseholders or Surface Owner BI [C] Application is One Which Requires Published Legal Notice Notification and/or Concurrent Approval by BLM or SLO ID1 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,

#### [3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

☐ Waivers are Attached

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.

etači by an Individual with supervisory capacity. Terri Stathem Production Analyst Print or Type Name

F

### CONCHO RESOURCES INC.

Suite 410 110 W. Louisiana Midland, Texas 79701

(915) 683-7443 Fax 683-7441

August 13, 1999

Mr. David Catanach New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe. New Mexico 87505

Mr. Catanach:

Re: Application for Downhole Commingle

Caballo '9' State No. 1 Lea County, New Mexico

Concho Resources Inc. hereby requests approval to downhole commingle production from the Strawn and Atoka pools in the Caballo '9' State No. 1 well.

On August 9, 1999 I spoke with you concerning the Caballo '9' State No. 1 well and the problems we would have if we were to isolate the two pools to determine contributing production. The Caballo '9' State No. 1 well was completed open hole from 11,800' to 12,250'. Geological data indicates the top for the Strawn is at 11,740', and the top of the Atoka is at 11,933'.

I mentioned that we ran a temperature survey and that it showed cooling in the Atoka interval from 12,158-68'. We believe this indicates the gas production is coming from the Atoka interval only. Based upon this information Concho Resources Inc. would like approval to allocate 100% of the production to the Atoka pool and 0% of the production to the Strawn pool.

Ownership and working interest for the two zones are common. A C-107A, C-102s, a Temperature Survey with GR and collar locator, a GR-CNL-CDL strip through the openhole section, a production plot, and a map are attached for your review.

Please feel free to contact me if you have any questions or need any additional information.

Sincerely,

Jim Blount

Senior Operations Engineer

#### DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-107-A

\_\_\_ YES \_\_\_ NO

# DISTRICT II

**OIL CONSERVATION DIVISION** 

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 67410-1693

811 South First St., Artesia, NM 88210-2835

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

APPLICATION FOR DOWNHOLE COMMINGLING

APPROVAL PROCESS:

Administrative \_\_Hearing

EXISTING WELLBORE

# Operator Well No.

(check 1 or more API NO. 30025-34577 Property Code 24294 \_ , State X OGRID NO. 116111 Federal (and/or) Fee The following facts are submitted in support of downhole commingling: Intermediate Zone ing Arm. STRAWN ATOKA Pool Name and Pool Code 2. Top and Bottom of Pay Section (Perforations) 11,784 - 11,93212,158 - 12,168(O H) (UH)3. Type of production (Oil or Gas) NONE GAS 4. Method of Production (Flowing or Artificial Lift) FLOWING a. (Current) 5. Bottomhole Pressure a. a. 2750 Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current b (Original) All Gas Zones:
Estimated Or Measured Original 4232 6. Oil Gravity (°API) or Gas BTU Content 7. Producing or Shut-In? PROD NO: Production Marginal? (yes or no) Dara: Date: If Shut-In, give date and oil/gas/ water rates of last production Note: For new zones with no production history, applicant shall be required to attach production Date Date: Date: 8-5-99 If Producing, give date andoil/gas/ water rates of recent test (within 60 days) Rates: 1828 MCF, 26 BC Rates: Retes: 0 BW · 0 % Gil: 100 % Ges: 100 % 8. Fixed Percentage Allocation Formula -% for each zone 0 % 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? Have all offset operators been given written notice of the proposed downhole commingling? X Yes No Will cross-flow occur? Yes X 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) 11. Will cross-flow occur? 12. Are all produced fluids from all commingled zones compatible with each other? X Yes \_\_ No 13. Will the value of production be decreased by commingling? (If Yes, attach explanation) Yes x No 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. 

X Yes No 15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S).

\*\*O-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, eastimated 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 TITLE <u>Prod. Analyst</u> DATE 8-13-99 TYPE OR PRINT NAME Terri Stathem TELEPHONE NO. ( 915 ) 683-7443 DISTRICT .! P.O. Box 1980, Hobbs, NM 88241-1980

### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 66211-0719

1006 Rio Brazos Rd., Aztec, NM 87410

DISTRICT III

Dedicated Acres

320

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## OIL CONSERVATION DIVISION

P.O. Box 2088

DISTRICT IV Santa Fe, New Mexico 87504-2088 P.O. 30X 2088, SANTA FE, N.W. 87504-2088

Consolidation Code

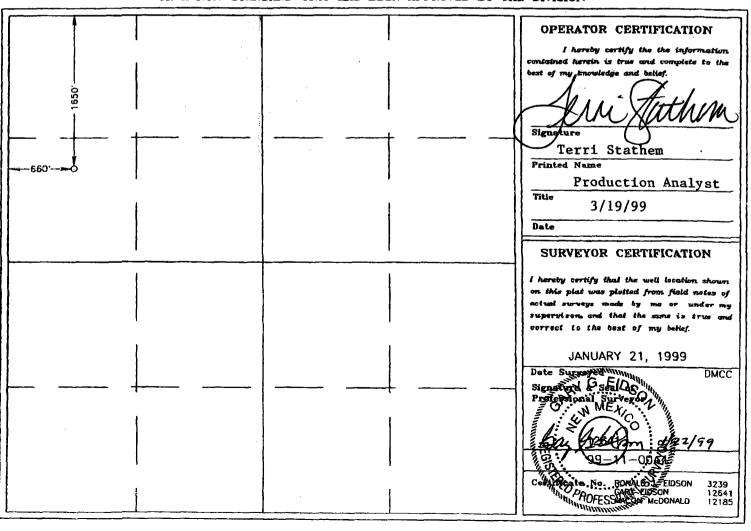
CI AMENDED REPORT

### WELL LOCATION AND ACREAGE DEDICATION PLAT

API	Number	I	i	Pool Code		-	Pool Name		
30025-34	1577	İ	70	360	Ante	labe Ridge A	TOKA		
Property 24294							Well Num	ber	
OGRID N	o.		Operator Name				Elevatio	<b>D</b>	
166111	1	Conc	ho Reso	urces I	nc.		w	3419	3
					Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot ldn	Feet from the	North/South line	Feet from the	East/West line	County
Ε	9	23 S	34 E		1650	NORTH	660	WEST	LEA
		*	Bottom	Hole Loc	eation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet (rom the	East/West line	County
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# 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

Order No.



DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980 State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

#### DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 67410

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

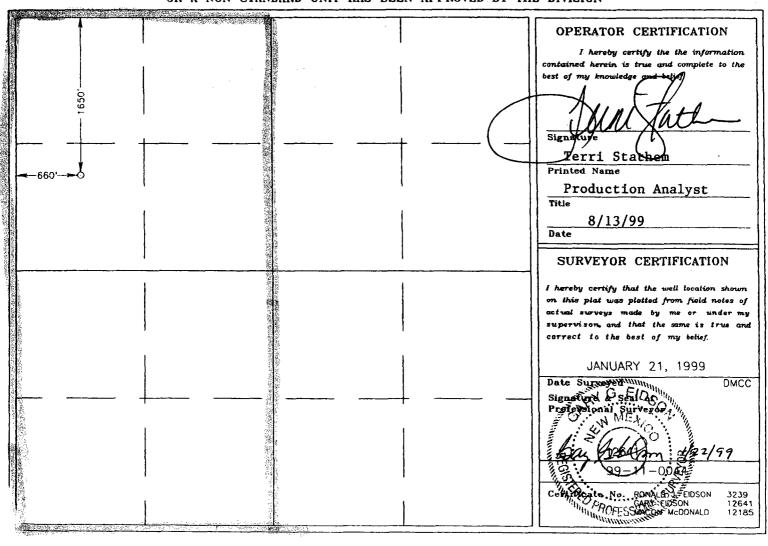
### OIL CONSERVATION DIVISION

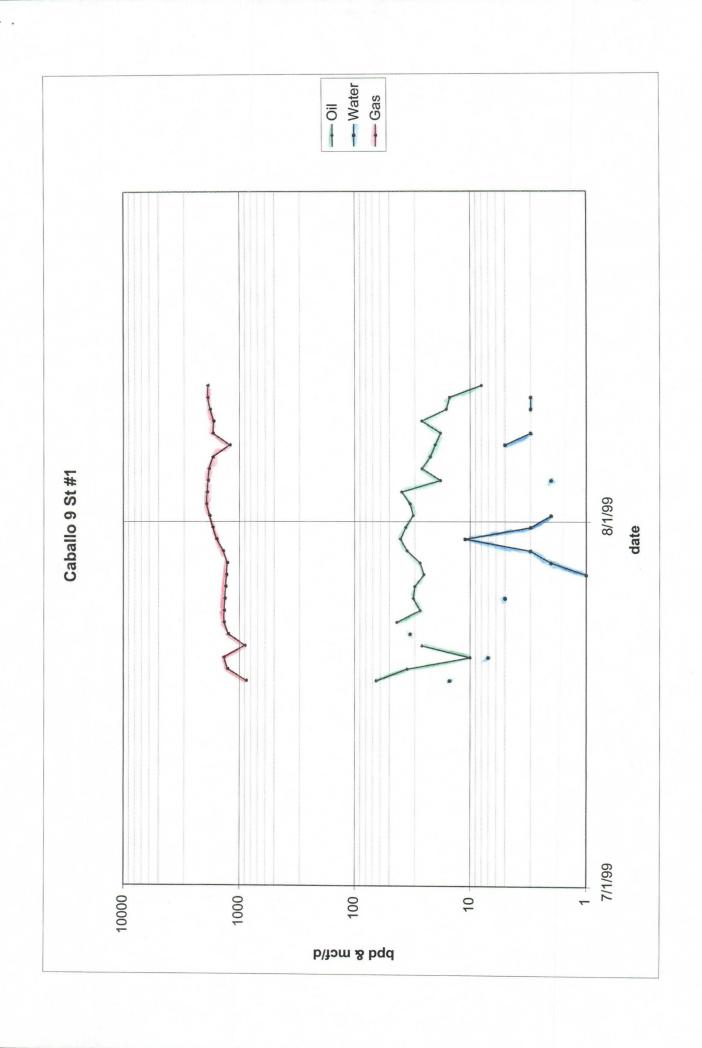
P.O. Box 2088 Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

API	Number			Pool Code			Pool Name		
300:	25 3457	7			AN'	CELOPE RIDGE	STRAWN		
Property (	Code				Property Nar	ae		Well Num	ber
2429	94	ł			CABALLO	9		1	
OGRID N	p.				Or	·e		Elevatio	n
166	111	CONC	HO RESO	URCES II	NC.	•		3419	9
<del></del>					Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot Idn	feet from the	North/South line	Feet from the	East/West line	County
E	9	23 S	34 E		1650	NORTH	660	WEST	LEA
<u></u>		·	Bottom	Hole Loc	cation If Diff	erent From Sur	face		<u> </u>
UL or lot No.	Section	Township	Range	Lot Idn	feet from the	North/South line	Feet from the	East/West line	County
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#### 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





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	RSLR 1,180		
	CPTN NOT CO	RRELATED	
*	BLCN 4,829 CYCN 5,715		*
36	BYCN 7,043		
6	BSGL 8,420	<u> </u>	3
	FBSG 9,502	PROPOSED I	LOCATION
	SBSG 10,007	1650 FNL &	660 EWI
j	* TBSG 10,934 WFMP 11,222	1 1	<b>\</b>
*	STRN 11,725	/ <b>9E-23S-3</b>	\$4E *
	ATOK 11,910		
	ATBK 12,107		
	MRRW 12,713 LMRW 13,292	NO GDS DATA	]
	MSPL 13,834	D&A - NO LOGS	RELEASED
	LMAR 4,94		
7	BLCN 5,06		<b>4,920</b> 10
	( * ) CYCN 5,80	S (,) RSLR	NO LOG RSLR 1,827
ļ	BYCN 7,14		
	981 BSGL 8,47 970 FBSG 9,59		
LMAR 4		T):	CYCN 5,920
BLCN 5,0			BYCN 7,188
BYCN 7	215 WFMP 11,37	NAT	BSGL 8,483
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CONCHO RESOURCES INC.

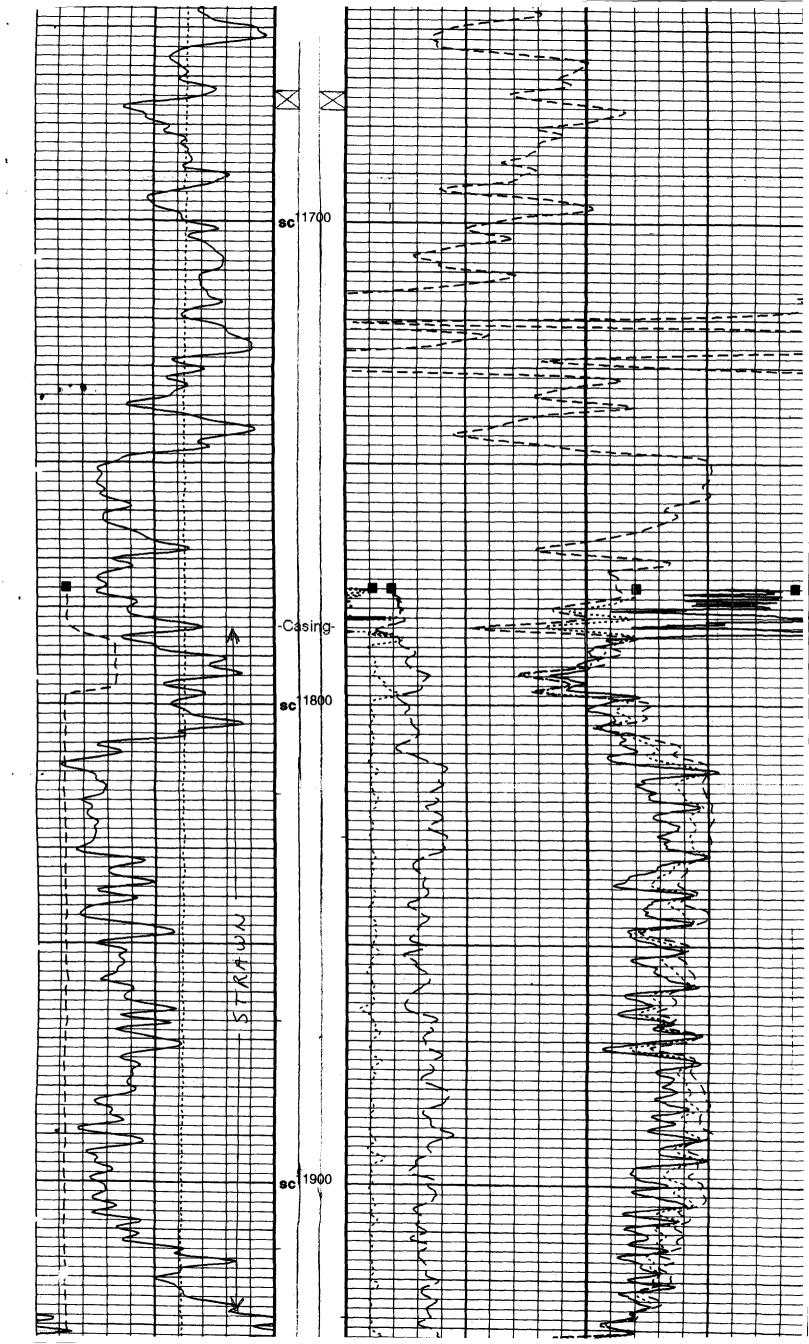
GAZELLE AREA, LEA COUNTY, NEW MEXICO GDS FORMATION TOPS

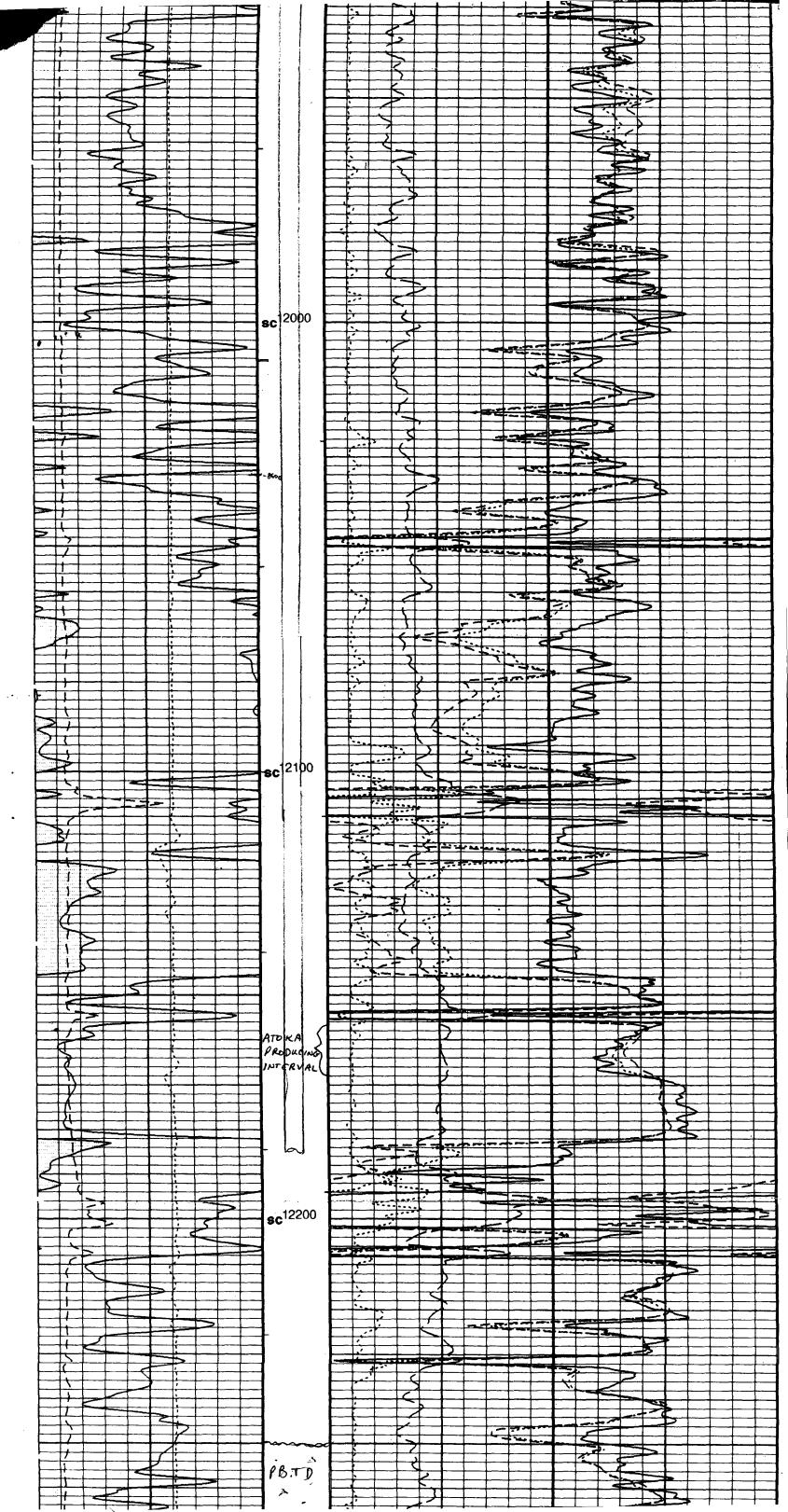
3-17-99 CZCDSTPS.CPF

## **INTENTIONAL OMISSIONS**

The following document(s) have been intentionally omitted from this file due to the

indicated reasons.	•
FILE# DHC 2451	
<u>DESCRIPTION OF OMITT</u>	TED DOCUMENTS
OMITTED DOCUMENT	REASON OMITTED
woollo "9" State No. 1" log	too large to copy
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# STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

# OIL CONSERVATION DIVISION HOBBS DISTRICT OFFICE

GOVERNOR

8/23/99

POST OFFICE BOX 1980 HOBBS, NEW MEXICO 88241-1980 (505) 393-6161

OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501
RE: Proposed: MC DHC NSL NSP SWD WFX PMX
Gentlemen:
I have examined the application for the:  Concho Resources Inc Caballo 9 State #1-8-9-235-34e  Operator Lease & Well No. Unit S-T-R 30-025-34577
and my recommendations are as follows:
May were offsels not given notice Med to attack map showing offsetty acreage.
Yours very truly,
Chia Welliams

/ed

Chris Williams

Supervisor, District 1