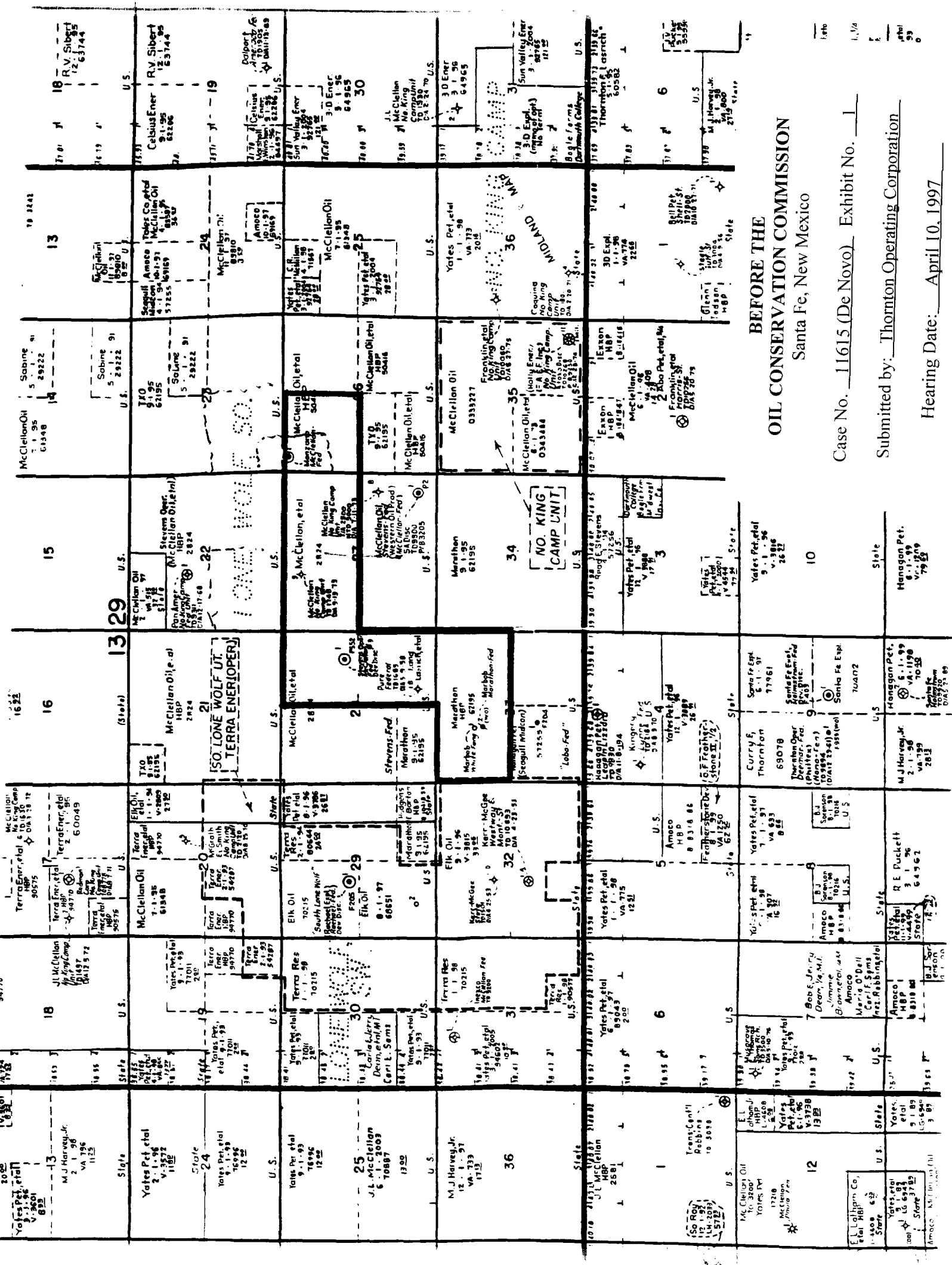




BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 1
Submitted by: Thornton Operating Corporation
Hearing Date: April 10, 1997

N&P
McClellan Oil, etal
HBP
NM-2824

Marathon
9/1/97
NM-96570

OPEN

Drainage
Radius
2786'

22

23

SunValley 50%
Marathon 50%
9-1-97
NM-96570

Proposed
Bottom Hole
Location

Thornton, etal
5-1-98

U.S.

U.S.

N&P
McClellan Oil, etal
HBP
NM-2824

McClellan Oil, etal
8-15-97
NM-96569

Thornton, etal
HBP

NM-50415

McClellan Fed
Thornton Oper.
W. King Camp
-5336

27

26

SunValley 50%
Marathon 50%
9/1/97
NM-96570

McClellan Oil, etal
HBP
NM-50416

McClellan Oil, etal
HBP
NM-50416

8
TD 3000

1
TD 9900

WEST KING CAMP

MISSISSIPPIAN LIME DEPTH
Chaves Co., N.M. T13S-R29E

PROPOSED
PRORATION UNIT

C.I.=20'

SCALE: 1"=1000'

U.S.

U.S.

R.L.

**BEFORE THE
OIL CONSERVATION COMMISSION**
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 2

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997

Nadel and Gussman Permian L.L.C.
3200 First National Tower
Tulsa, OK 74103
(918) 583-3333

April 7, 1997

Thornton Operating Corporation
Robert Thornton
P.O. Box 833
Midland, TX 79702

Via Fax

Re: Application before the Oil Conservation Division for Pool Contraction
Pool Creation, Special Pool Rules, Non-Standard Spacing or Proration
Unit, Directional Drilling and an Unorthodox Well Location, Chaves
County, New Mexico, Case No. 11615

Dear Mr. Thornton:

This is to advise that Nadel and Gussman Permian L.L.C. ("NGP") hereby conditionally agrees to waive notice of the April 11, 1997 hearing in connection with the captioned Application before the Oil Conservation Division. Our waiver is conditioned upon Thornton Operating Corporation's agreement to waive any objection to and agree not to protest a possible application by NGP seeking its own unorthodox well location and/or such other relief necessary to protect NGP from offset drainage as well as the correlative rights of other leasehold interest owners. By signing below, Thornton Operating Corporation further agrees not to cause or divulge any information as would cause any person or entity entitled to notice of NGP's possible application for such relief to protest said application.

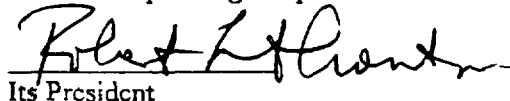
Very truly yours,



Thomas A. Adelson
For the Company

Agreed to this 8 day of April, 1997.

Thornton Operating Corporation


Its President

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

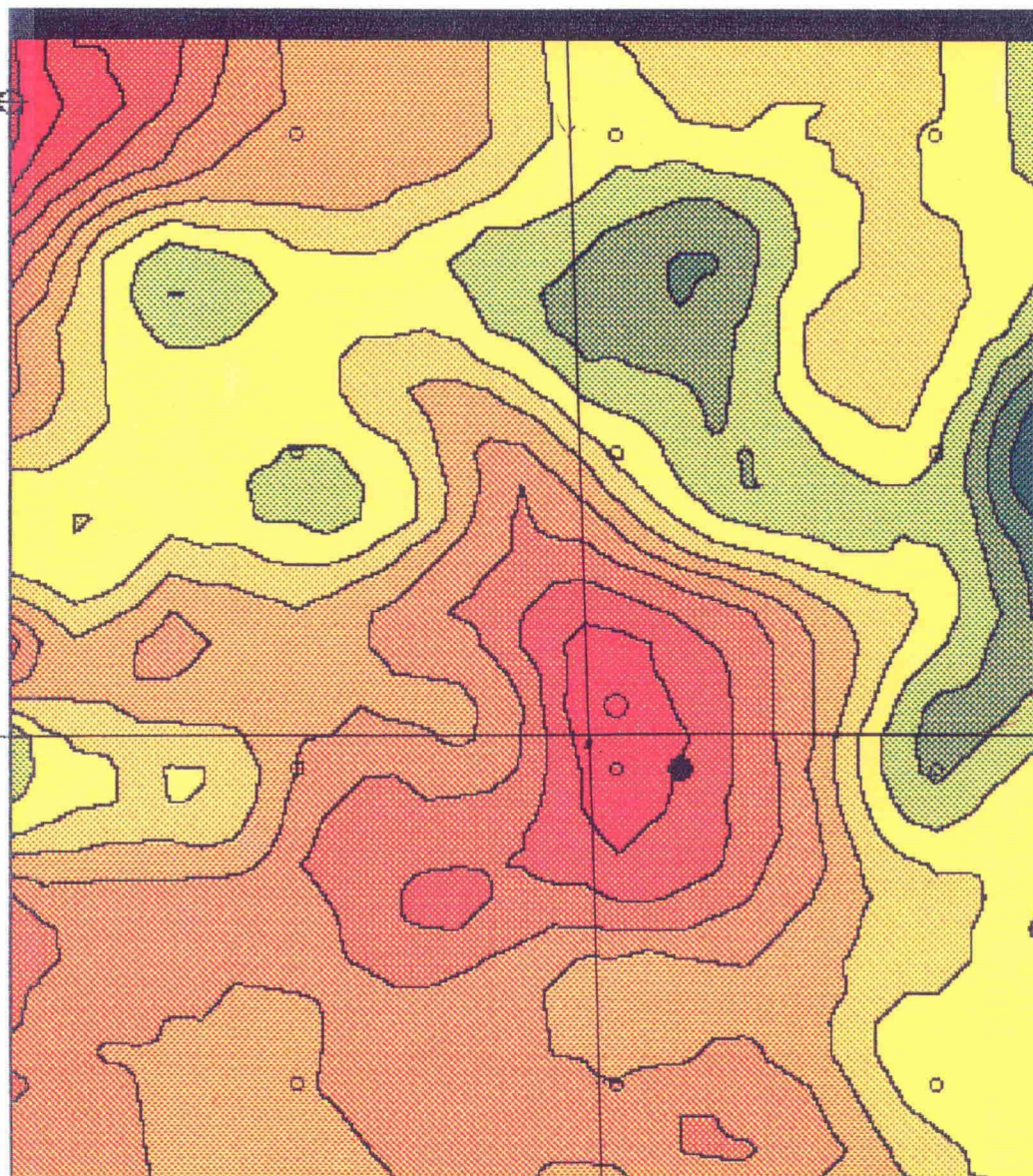
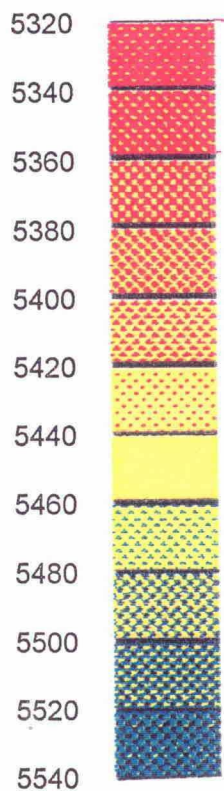
Case No. 11615 (De Novo) Exhibit No. 3

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997

10 20 30

□ □ □



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 4

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997

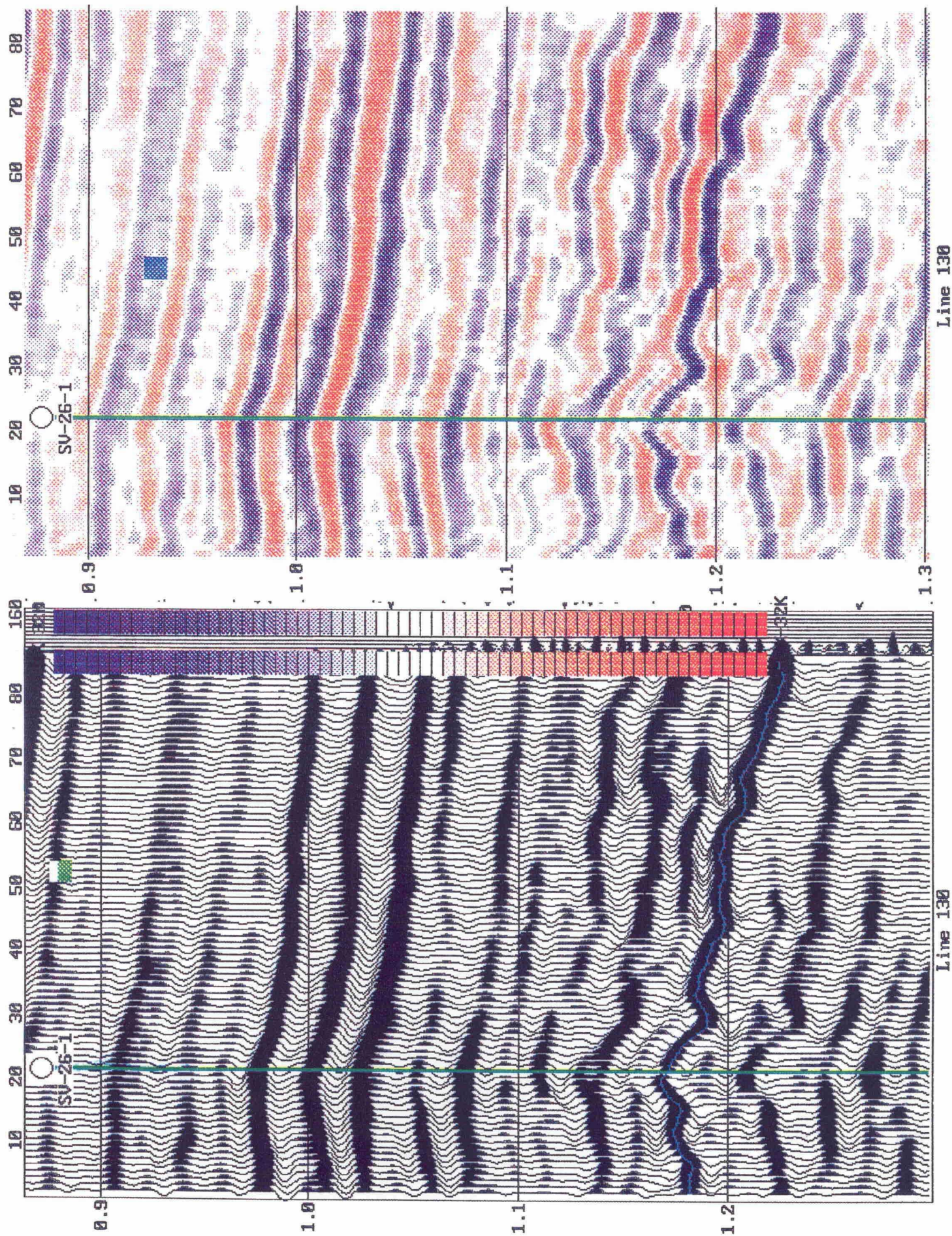
WEST KING CAMP

MISSISSIPPIAN LIME DEPTH
Chaves Co., N.M. T13S-R29E

C.I.=20'

SCALE: 1"=1000'

R.L.T.

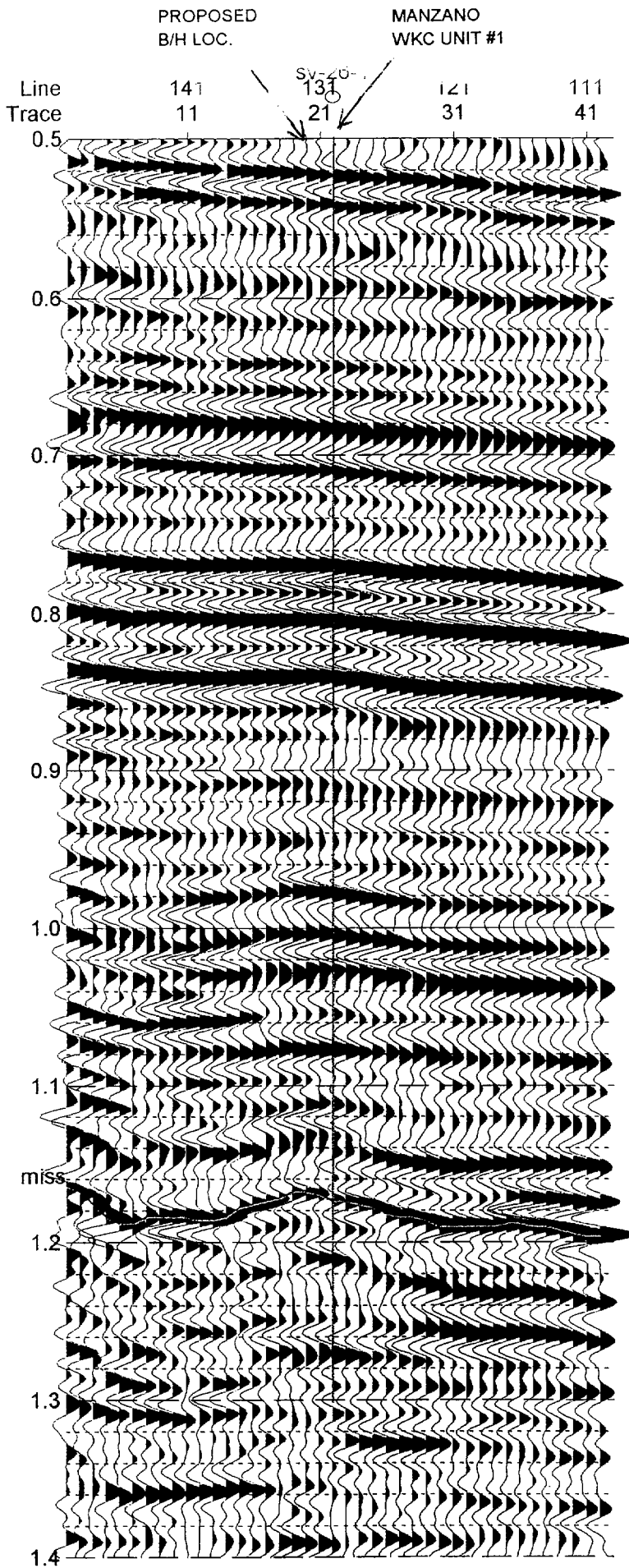


**BEFORE THE
OIL CONSERVATION COMMISSION**
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 5

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997

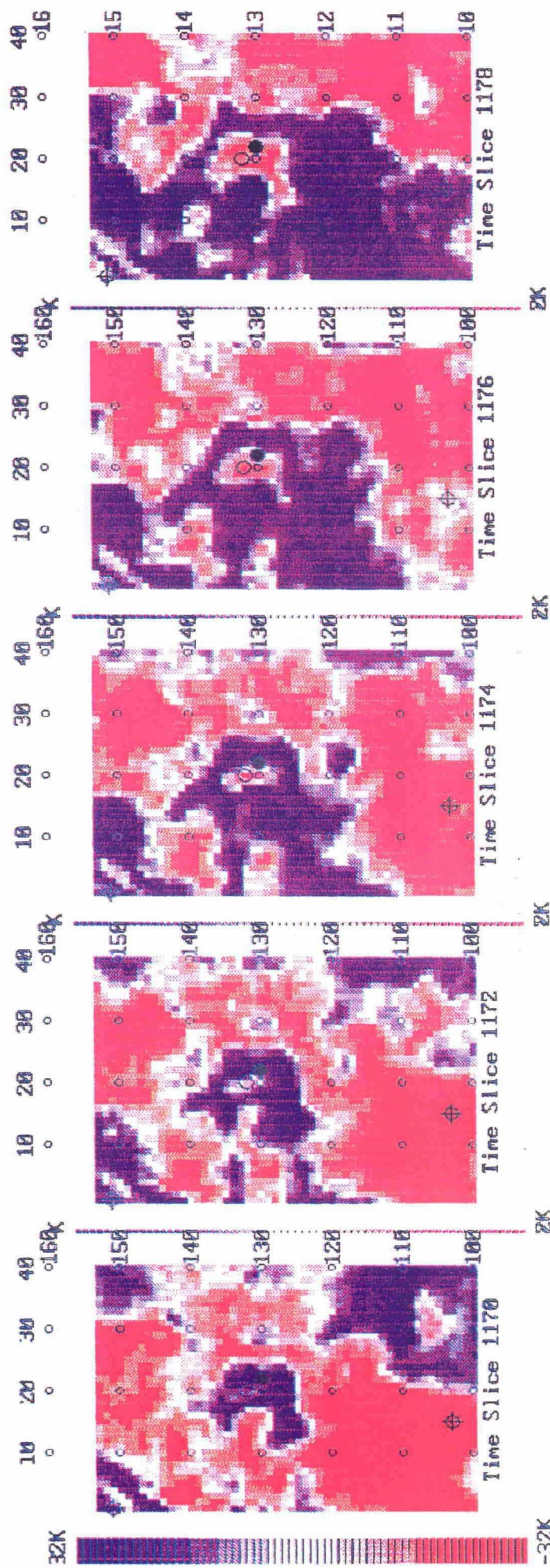
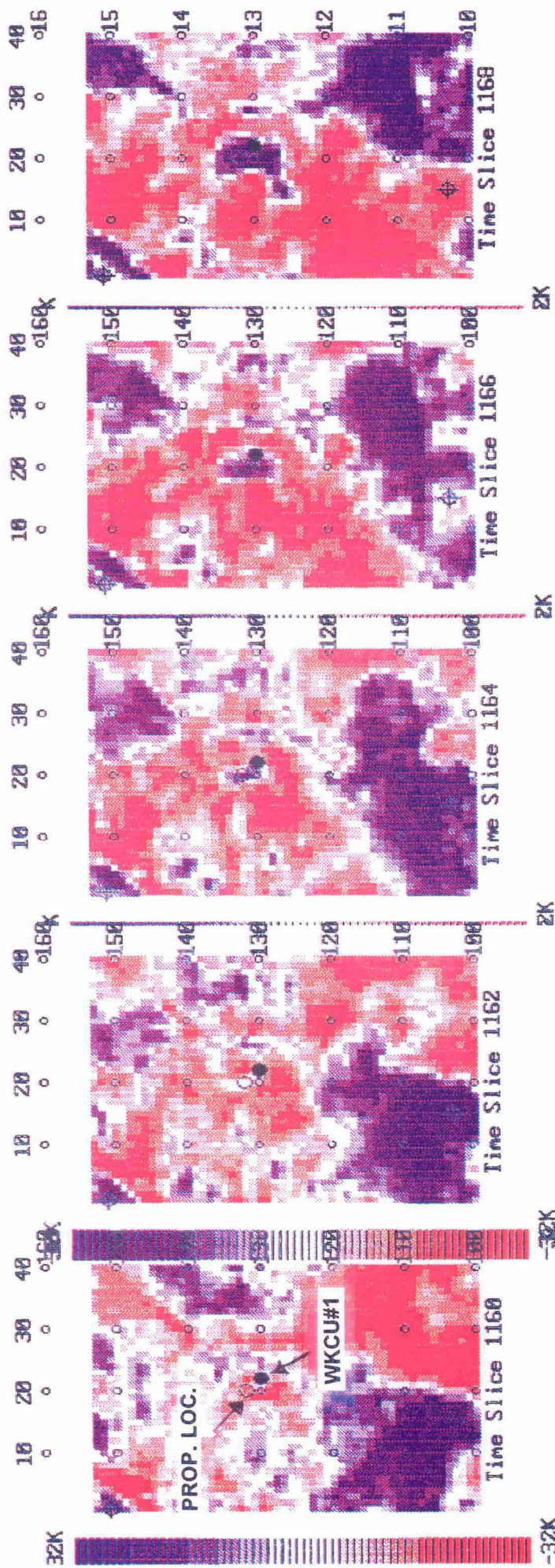


**BEFORE THE
OIL CONSERVATION COMMISSION**
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 6

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997



TIME SLICE FROM TOP OF MISS LIME (2ms intervals)

**BEFORE THE
OIL CONSERVATION COMMISSION**
Santa Fe, New Mexico

Case No. 11615 (De Noyo) Exhibit No. 7

Submitted by: Thornton Operating Corporation

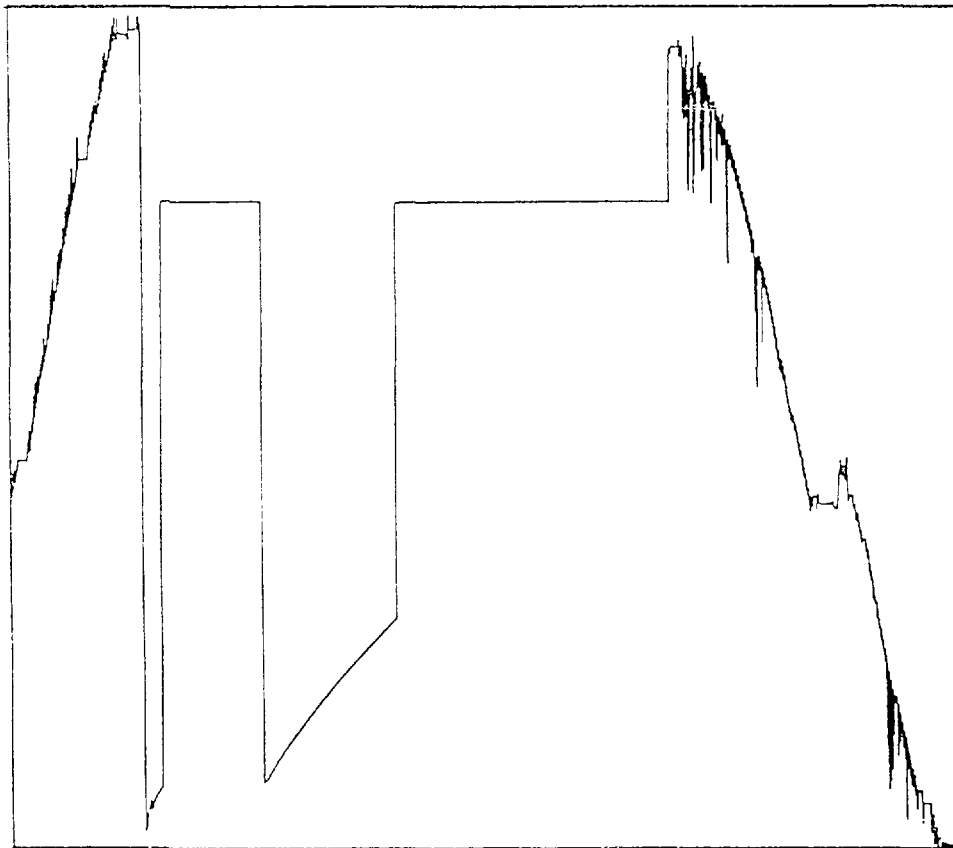
Hearing Date: April 10, 1997



Contractor Ziadril
 Rig No. 10
 Spot 182' FNL & 507' FWL
 Sec 26
 Twp. 13 S
 Rng. 29 E
 Field Wildcat
 County Chaves
 State New Mexico
 Elevation 3820' KB
 Formation Devonian

Surface Choke 1/8"
 Bottom Choke 3/4"
 Hole Size 7 7/8"
 Core Hole Size None
 DP Size & Wt. 4 1/2" 16.60
 Wt. Pipe None
 I.D. of DC 2 1/4"
 Length of DC 732'
 Total Depth 9862'
 Type Test Conventional
 Interval 9828' - 9862'

Mud Type --
 Weight 9.5
 Viscosity 40
 Water Loss --
 Filter Cake --
 Resistivity -- @ °F
 85,000 Ppm. NaCl
 B.H.T. 165.4 °F
 Co. Rep. Ronnie Carre
 Tester Mike Fraley
 Baker Dist. Hobbs NM



	REPORTED	CORRECTED	
Opened Tool @	06:46		hrs.
Flow No. 1	15	16	min.
Shut-in No. 1	90	89	min.
Flow No. 2	120	119	min.
Shut-in No. 2	240	240	min.
Flow No. 3	None	Taken	min.
Shut-in No. 3	"	"	min.

Recorder Type STI 8000
 No. 01119 Cap. 10000 psi
 Depth 9833 feet
 Inside Clock
 Outside x Range hrs.

Initial Hydrostatic	A	5046
Final Hydrostatic	K	4940
Initial Flow	B	94
Final Initial Flow	C	368
Initial Shut-in	D	3980
Second Initial Flow	E	387
Second Final Flow	F	1405
Second Shut-in	G	3978
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	

Pipe Recovery

Reverse circulated to reservoir pit:
 2878' Oil = 40.9 bbl.
 830' Water = 5.0 bbl.

Gravity:
 Top: 46.0 Deg API @ 60 Deg F
 Chlorides:
 Middle: 20,000 ppm Cl. titrated.
 Bottom: 20,000 ppm Cl. titrated.

BEFORE THE
OIL CONSERVATION COMMISSION
 Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 8Submitted by: Thornton Operating CorporationHearing Date: April 10, 1997MANZANO OIL CORP.
TICKET #012087McCLELLAN FEDERAL #1
DEVONIAN ~ 9828' - 9862'DST #1
09-28-1995

Company: Manzano Oil Corp.
Well: McClellan Federal #1
DST No: 1

09-28-1995

SAMPLER REPORT

Pressure in Sampler:	300	psig
Total Volume of Sampler:	2600	cc.
Total Volume of Sample:	2160	cc.
Oil:	2150	cc.
Water:	10	cc.
Mud:	None	cc.
Gas:	0.40	cu. ft.
Other:	None	
Sample:	20,000 ppm Cl. titrated.	
	Resistivity	

Make up Water	@	%F of Chloride Content		ppm.
Mud Pit Sample	@	%F of Chloride Content	85,000	ppm.
Gas / Oil Ratio	30/1 cu.ft./bbl.	Gravity	46.0	°API @ 60 °F
Where was sample drained	On Location.			

Remarks:

D.R.S.

Company: Manzano Oil Corp.
 Well: McClellan Federal #1, DST #1
 Field: Wildcat

09-28-1995

Gauge Depth 9833.0 feet

[INPUT PARAMETERS]
 (Build-Up Analysis)

Well Type - OIL

Reservoir Pressure	psia	P	3979
Reservoir Temperature	Deg F	T	165
Final Shut-in Pressure	psia	Psi	3978
Final Flowing Pressure	psia	Pwf	1405
Oil Flow Rate	STB/D	Qo	434
Sand Thickness	feet	hnet	12
Wellbore Radius	feet	rw	0.3280
Formation Porosity	%	POR	6
Extrapolated Pressure	psia	P*	3979
Extrapolated Press @ 1hr	psia	Plhr	3977
Semi-Log Slope	psi/cycle	M	-4.926
Production Time	hrs	tp	2.30
Shut-in Time	hrs	tsi	4.00

Uo (cp) 2.5823E+00
 Co (1/psi) 4.1207E-06

Bo (RB/STB) 1.1224E+00
 Ct (1/psi) 9.6810E-06

[CALCULATED RESULTS]

(Semi-Log) Analysis

Pressure Method

Transmissibility	md-ft/cp	kh/u	16078.476
Flow Capacity	md-ft	kh	41519.066
Permeability	md	k	3459.922
Skin Damage	total	S	+592.85
Pressure Drop due to Skin	psia	dP	+2536.03
Flow Efficiency	%	FE	+1.48
Drainage Radius	feet	rd	2786

D.R.S.

Company: Manzano Oil Corp.
Well: McClellan Federal #1
DST No: 1

09-28-1995

This analysis has been made on the basis of the liquid recovery and equations applicable to liquid recovery tests, the Horner extrapolation method and comparative log/log analysis.

The semi-log plots indicate a maximum initial reservoir pressure of 3980 psi and a maximum final reservoir pressure of 3979 psi which is equivalent to a subsurface pressure gradient of 0.405 psi/ft at gauge depth.

The Average Production Rate which was used in this analysis has been calculated from analysis of the flow pressure curves using a liquid gradient for the recovered oil of 0.345 psi/ft.

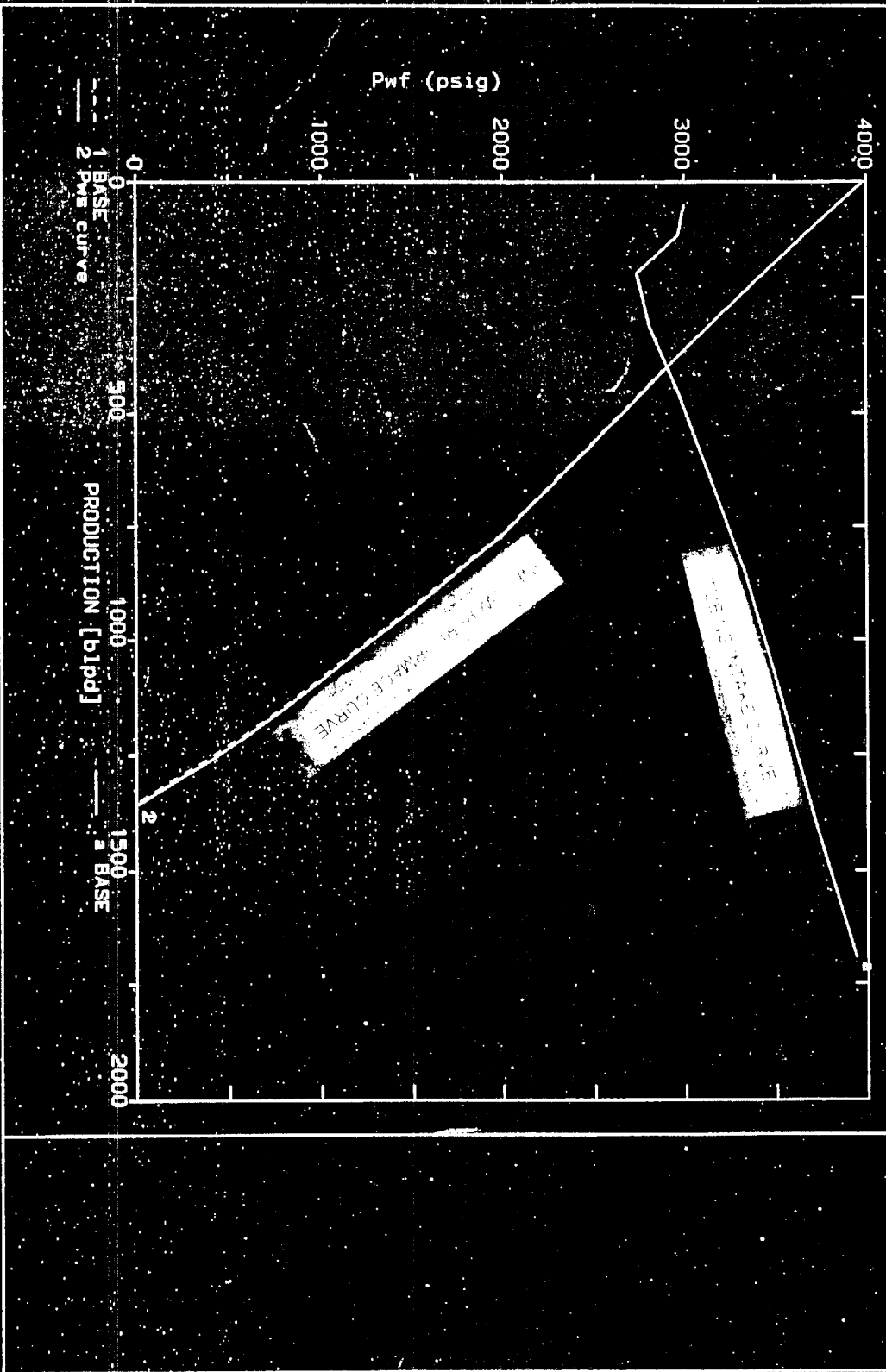
For purposes of this analysis a Pay Thickness of 12 feet and an Average Porosity of 6% has been used.

The calculated Skin Factor indicates significant well-bore damage was present at the time of this formation test.

The evaluation criteria used in the drillstem test analysis system indicate this is a good mechanical test and the results obtained in this analysis should be reliable within reasonable limits relative to the assumptions which have been made.

MODEL BUILDING

Schlumberger Systems Analysis Model	Well: McClellan Federal #1 Loc: Sec 26, Chaves Co New Mexico Desc:	06-22-1996 File: THORNTON Chris brown
--	--	---



**BEFORE THE
OIL CONSERVATION COMMISSION**
Santa Fe, New Mexico

Case No. 11615 (De Novo) Exhibit No. 9

Submitted by: Thornton Operating Corporation

Hearing Date: April 10, 1997