

W. A. MONCRIEF, JR.

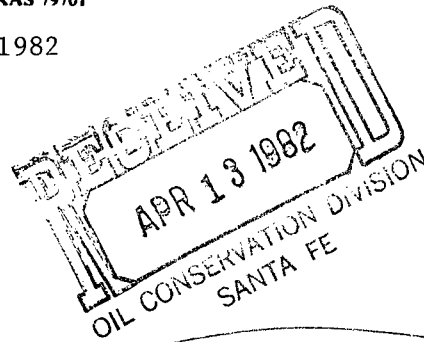
OIL PRODUCER

400 METRO BUILDING
MIDLAND, TEXAS 79701

TELEPHONE 682-1762

April 8, 1982

Mr. R.L. Stamets
Energy and Minerals Department
New Mexico Oil Conservation Commission
P.O. Box 2088
Santa Fe, New Mexico 87501



*Date
4-13-82*

*NSL-1515
Rule 104F
Waivers In
Immediate*

Re: W.A. Moncrief, Jr.
#1 Sombrero State
Unit N, 660' ESL and 1400' FWL
section 18, T16S, R34E
Lea County, New Mexico
*Wolfcamp & Pennsylvanian
formations
S/2 dedication*

Dear Mr. Stamets:

I am requesting administrative approval to drill the above-referenced well at an unorthodox location based on geology.

Attached are:

- (1.) A structure map on T/Morrow lime showing surface on which the Atoka sand was deposited and an acetate overlay showing the thickness of the Atoka sand and anticipated path of the channel.
- (2.) A cross section showing Atoka thickening across the channel and the quality of the Atoka reservoir.
- (3.) A geologic discussion outlining the necessity for an unorthodox location.
- (4.) Waiver letters from all direct and diagonal offset operators.
- (5.) Plats showing ownership of all leases offsetting the proration unit for unorthodox location and wells completed thereon.
- (6.) One (1) copy each of form C-101 and C-102.

If you need additional data or have questions concerning this location, please call me at 915/682-1762 or 682-5101.

Very truly yours,

Moncrief Oil Interests

Dewey E. Thornton
Dewey E. Thornton
Exploration Manager

P.S. - Please approve this unorthodox location for the Wolfcamp lime, Penn lime and Morrow sands in case the objective Atoka channel sand should be absent.

April 6, 1982

To Whom It May Concern:

Re: Unorthodox location
SESW section 18, T16S, R34E
Lea County, New Mexico

The Sombrero Atoka reservoir is an old stream bed or channel that was filled with sand and then covered by shale which acts as a seal for the reservoir.

The first production from the Sombrero channel was established in 1975 when Great Western Drilling Company re-entered the abandoned Sinclair #1 Seaman Unit in SESE section 13, T16S, R33E and completed it for CAOF of 2,436 MCFGPD + 58.6 BC + 234 BW. This well has produced 1.514 BCFG + 47,321 bbls condensate to 2-1-82 even though the Atoka sand was encountered at or near the gas-water contact. This indicated that the Great Western completion was part of a rather large accumulation.

Tenneco has completed three additional wells from the Sombrero channel since 1978 and two more wells are in the process of being completed at the present time.

(1.) The attached cross section shows the thickening of the Atoka section across the channel, the quality of the sand and the fact that only a thin and tight remnant of the sand was present in the Great Western State "18" #1 in NESW section 18 of T16S, R34E.

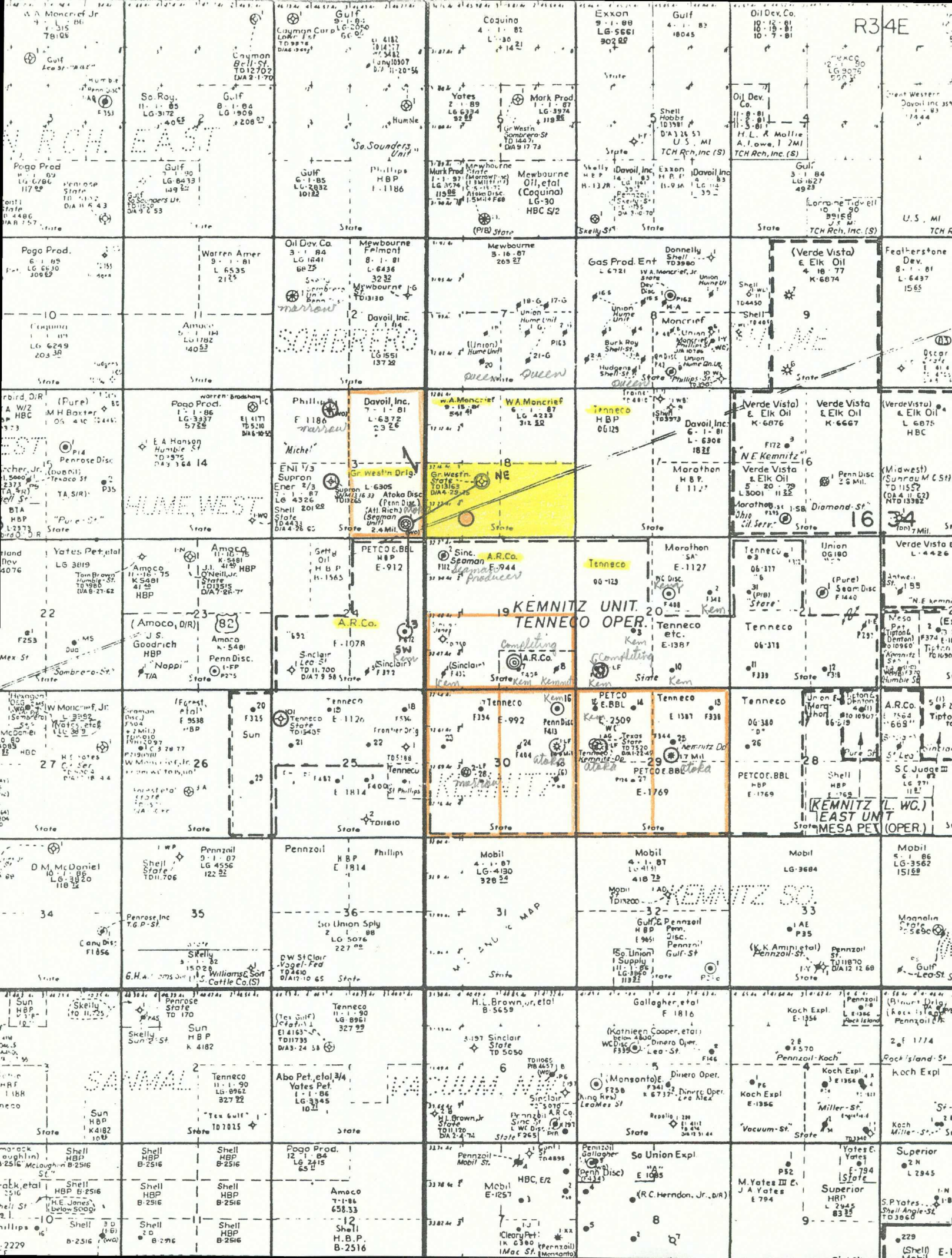
(2.) The attached structure map contoured on the top of the Morrow lime shows the topography just prior to deposition of the Atoka sand.

(3.) The acetate overlay is an isopach of the Atoka sand thickness and delineates the path of the channel.

(4.) This data indicates that the Sombrero channel crosses the S/2 of section 18 and that considerable gas and condensate reserves are present under same. These reserves will not be recovered by the operator and the state unless a well penetrates the channel.

Since channels are known to meander and no one knows exactly where this channel goes; it is requested that Moncrief be allowed to drill the #1 Sombrero State at an unorthodox location 1400' FWL and 660' FSL to enhance the probability of encountering the Sombrero channel and recovering the reserves under S/2 section 18.

Dewey Thornton
Dewey Thornton - Geologist



W. Arch. East

Hume West

Sambro

Kernitz Unit

Kernitz East Unit

Pogo Prod. 11729
Gulf 7-1-80
LG-2832
10132

Pogo Prod. 6-1-89
LG-6630
10669

Coquina 1-1-81
LG-6249
20338

Warren Amer 3-1-81
L-6535
21255

Amoco 1-1-86
LG-1317
14053

Amoco 11-16-75
K-5481
HBP

Amoco 11-16-75
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Phillips HBP
1-1186

Mewbourne 3-1-84
LG-1641
6625

Davoil Inc. 7-1-81
L-6372
2326

Davoil Inc. 7-1-81
L-6372
2326

Gr. Westin Drigs. 1-1-81
L-6305

Gr. Westin Drigs. 1-1-81
L-6305

Tenneco 1-1-81
L-6305

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Tenneco 1-1-81
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Mewbourne 3-1-87
L-6436
3232

Mewbourne 3-1-87
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N

W. A. Mencrief, Jr.

Lot # 1

32.06 Ac.

$\frac{w}{2}$ sec. 18

V- 395
288.56 Ac.

W. A. Mencrief, Jr.

E/2 Sec. 18

LG-4223

320 Ac.

Lot # 2

32.12 Ac.

Lot # 3

32.16 Ac

Lot # 4

32.22 Ac.

Lea County, New Mexico

S/2 sec 18, T16S, R 34 E

304.38 Acres

Lot 3, Lot 4, E/2 SW/4 & SE/4

S

E

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

5A. Indicate Type of Lease
STATE FEE

5. State Oil & Gas Lease No.
V-395, LG-4223

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Unit Agreement Name	
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. Farm or Lease Name Sombrero State	
2. Name of Operator W.A. Moncrief, Jr.		9. Well No. 1	
3. Address of Operator 400 Metro Bldg., Midland, Texas 79701		10. Field and Pool, or Wildcat Sombrero Atoka	
4. Location of Well UNIT LETTER <u>N</u> LOCATED <u>660'</u> FEET FROM THE <u>south</u> LINE AND <u>1400</u> FEET FROM THE <u>west</u> LINE OF SEC. <u>18</u> TWP. <u>16S</u> RGE. <u>34E</u> NMPM		12. County Lea	
19. Proposed Depth 13,200'		19A. Formation chester	20. Rotary or C.T. rotary
21. Elevations (Show whether DF, RT, etc.) 4150.5 GD 4165.5 KB	21A. Kind & Status Plug. Bond \$50,000 Blanket bond (Federal Insur. Co.)	21B. Drilling Contractor Landis	22. Approx. Date Work will start ASAP

23:

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17-1/2"	13-3/8"	48# H-40	350'	400	Circulate
11"	8-5/8"	32# K-55	4500'	1750	Circulate
7-7/8"	4-1/2"	11.6# & 13.5#	13,200'	as necessary	to be determined

(1.) Gas sales are not dedicated.

(2.) Operator will drill salt section with saturated brine and will drill out from under intermediate with fresh water. Present plans are to start adding brine at 9500' and mud up at 10,300'.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed Newey E. Thornton Title Exploration Manager Date 4-8-82

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

APR 13 1982

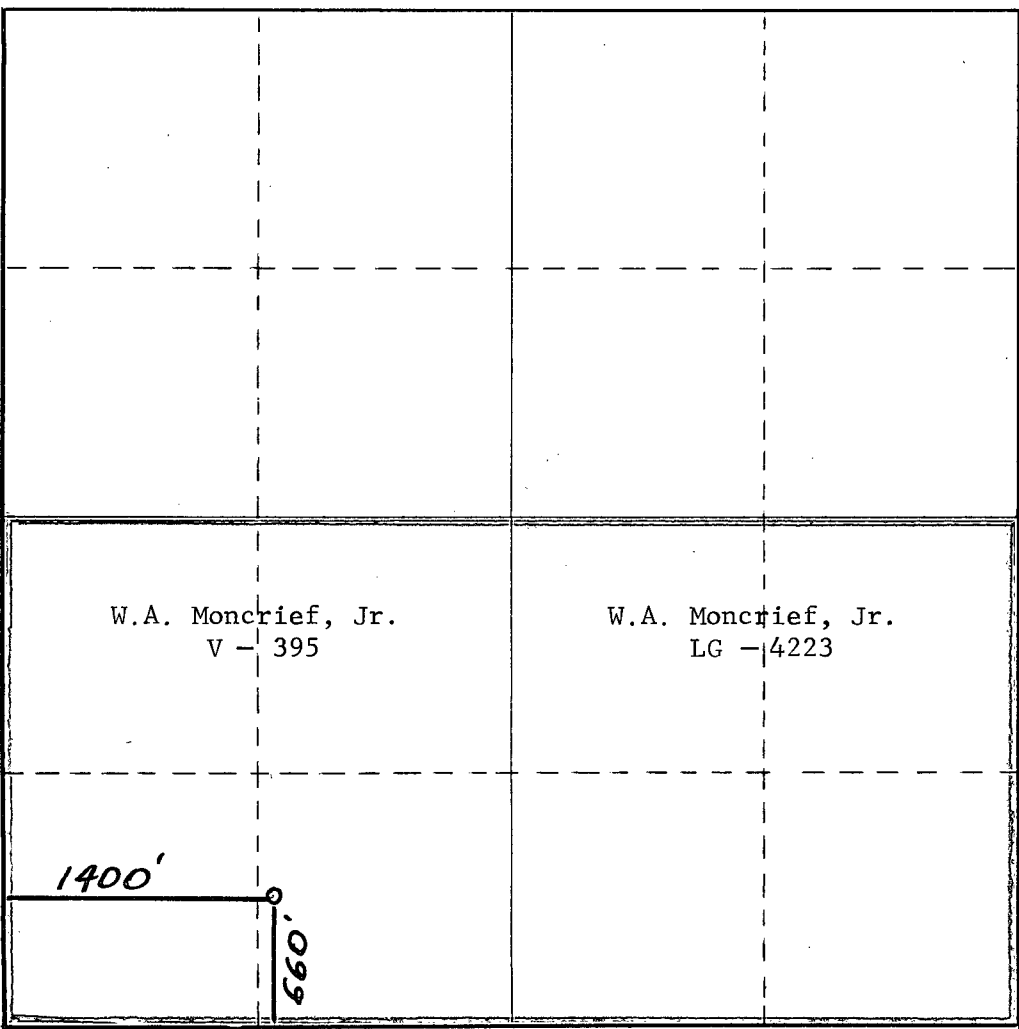
Operator W.A. MONCRIEF JR.		Lease No. 1 Sombrero State			Well No.
Unit Letter N	Section 18	Township 16 South	Range 34 East	County Lea	
Actual Footage Location of Well: 660 feet from the South line and 1400 feet from the West line					
Ground Level Elev: 4150.5	Producing Formation Atoka	Pool Sombrero Atoka		Dedicated Acreage: 304.38 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 communitization

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 Commission.



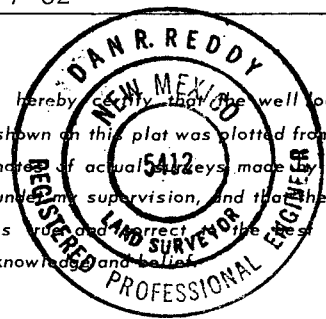
CERTIFICATION

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

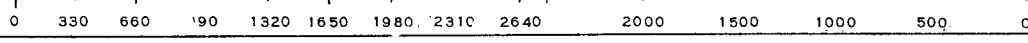
Dewey E. Thornton

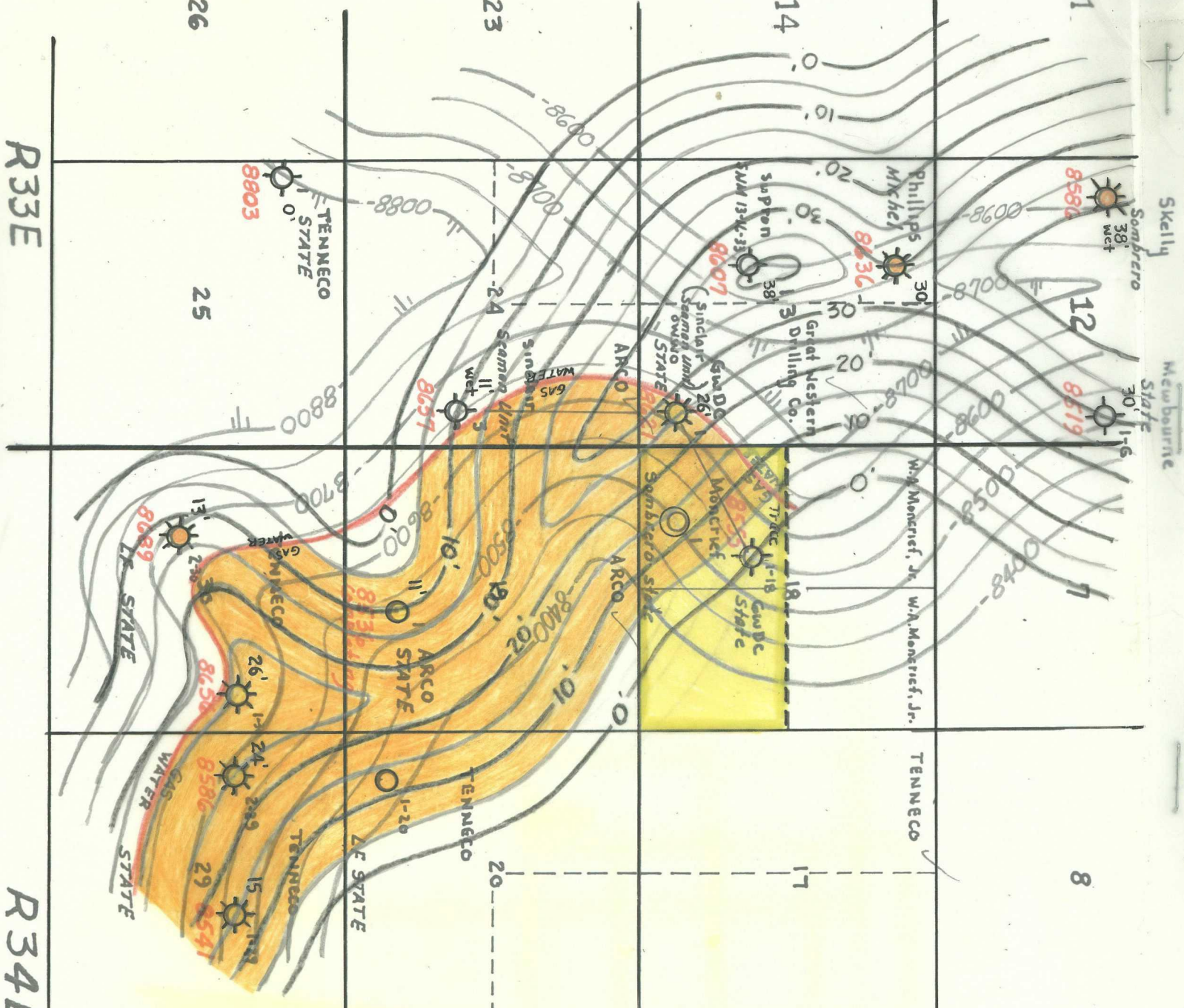
Name	Dewey E. Thornton
Position	Exploration Manager
Company	W.A. Moncrief, Jr.
Date	4-7-82

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	Apr. 3, 1982
Registered Professional Engineer and of Land Surveyor	<i>Dan R. Reddy</i>
Certificate No.	NMPE&LS No. 5412





T 16 S

SOMBRERO ATOKA PROSPECT
 Lea County, New Mexico
 STRUCTURE
 Contours on: T/Morrow Lime
 Contour Interval: 50'
 Date: 4-6-82
 Scale: 1"=2640' Geology by: DET

SOMBRERO ATOKA PROSPECT
 Lea County, New Mexico
 ISOPACH
 Contours on: Atoka Channel Sand
 Contour Interval: 5'
 Date: 4-6-82
 Scale: 1"=2640' Geology by: DET

Atoka Producer
 Morrow Producer



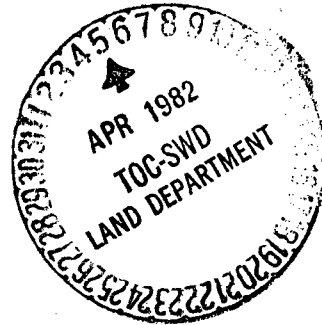
W. A. MONCRIEF, JR.

OIL PRODUCER

400 METRO BUILDING
MIDLAND, TEXAS 79701

TELEPHONE 682-1762

March 31, 1982



Tenneco Oil Exploration Company
6800 Park Ten Blvd., Suite 200 North
San Antonio, Texas 79212

Attention: Mr. Rex Bourland

Re: W.A. Moncrief, Jr.
#1 Sombrero State
Unit N, section 18, T16S, R34E
Lea County, New Mexico

Dear Mr. Bourland:

W.A. Moncrief, Jr. plans to drill the #1 Sombrero State as a 13,200' Morrow test 1400' FWL and 660' FSL section 18, T16S, R34E and plans to designate the S/2 section 18 as the 320 acre proration unit.

This is an unorthodox location for the S/2 section 18.

If you as an offset operator have no objection to the drilling of this unorthodox location; please so signify by signing the waiver below and return one copy to me.

Very truly yours,

Dewey E. Thornton
Dewey E. Thornton
Exploration Manager

TENNECO OIL EXPLORATION COMPANY as an offset operator does not object to the drilling of the above-referenced unorthodox location;

BY: Douglas C. Keon
TITLE: Div. Geol. Eng
DATE: April 5, 1982

DET:st

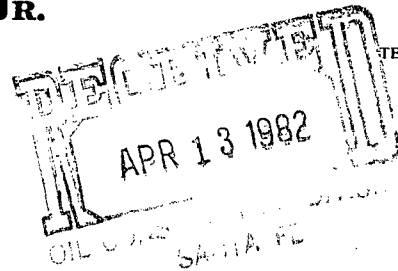
OIL PRODUCER

W. A. MONCRIEF, JR.

400 METRO BUILDING
MIDLAND, TEXAS 79701

TELEPHONE 682-1762

March 31, 1982



ARCO Oil and Gas Company
P.O. Box 1610
Midland, Texas 79702

Attention: Mr. J.L. Tweed

Re: W.A. Moncrief, Jr.
#1 Sombrero State
Unit N, section 18, T16S, R34E
Lea County, New Mexico

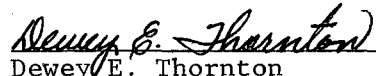
Dear Mr. Tweed:

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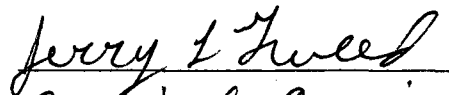

Dewey E. Thornton
Exploration Manager

ARCO OIL and GAS COMPANY as an offset operator does not object to the drilling of the above-referenced unorthodox location.

BY:

TITLE:

DATE:


District Engineer
4-1-82

DET:st

W. A. MONCRIEF, JR.

OIL PRODUCER

400 METRO BUILDING
MIDLAND, TEXAS 79701

TELEPHONE 682-1762

March 31, 1982

Great Western Drilling Company
P.O. BOX 1659
Midland, Texas 79702

ATTENTION: Mr. John T. Hampton

Re: W.A. Moncrief, Jr.
#1 Sombrero State
Unit N, section 18, T16S, R34E
Lea County, New Mexico

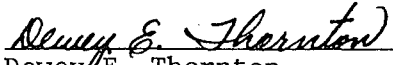
Dear Mr. Hampton:

W.A. Moncrief, Jr. plans to drill the #1 Sombrero State as a 13,200' Morrow test 1400' FWL and 660' FSL section 18, T16S, R34E and plans to designate the S/2 section 18 as the 320 acre proration unit.

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If you as an offset operator have no objection to the drilling of this unorthodox location; please so signify by signing the waiver below and return one copy to me.

Very truly yours,

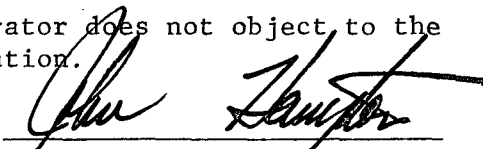

Dewey E. Thornton
Exploration Manager

GREAT WESTERN DRILLING COMPANY as an offset operator does not object to the drilling of the above-referenced unorthodox location.

BY:

TITLE:

DATE:


PRESIDENT
4-1-82

DET:st

Gamma Ray-Neutron
SIMULTANEOUS

COMPANY: SINCCLAIR OIL & GAS COMPANY
WELL: SEAMAN UNIT #3
FIELD: UNDESIGNATED
LOCATION: SEC. 24, 16S 31E
COUNTY: LEA
STATE: NEW MEXICO

Location of Well: 1980' ± S/L, 660' ± E/L
Elevation: D.F. 102.5 or G.L. 414.9
FILING NO.: 2

DATE: 1-2-57
RUN. NO.: 1
Depth Reference: GL 13.5' BELOW RB
First Reading: 12992
Last Reading: 10788
Footage Measured: 10788
Max. Depth Reached: 10789
Bottom Driller: 10791

Gamma Ray-Neutron
SIMULTANEOUS

COMPANY: SINCCLAIR OIL AND GAS COMPANY
WELL: SEAMAN UNIT #1
FIELD: WILLOCAT
LOCATION: SEC. 13-16S-33E
COUNTY: LEA
STATE: NEW MEXICO

Location of Well: 510' ± SL, 660' ± EL, GRN(ES-ML)
Elevation: D.F. or G.L. 415.9
FILING NO.:

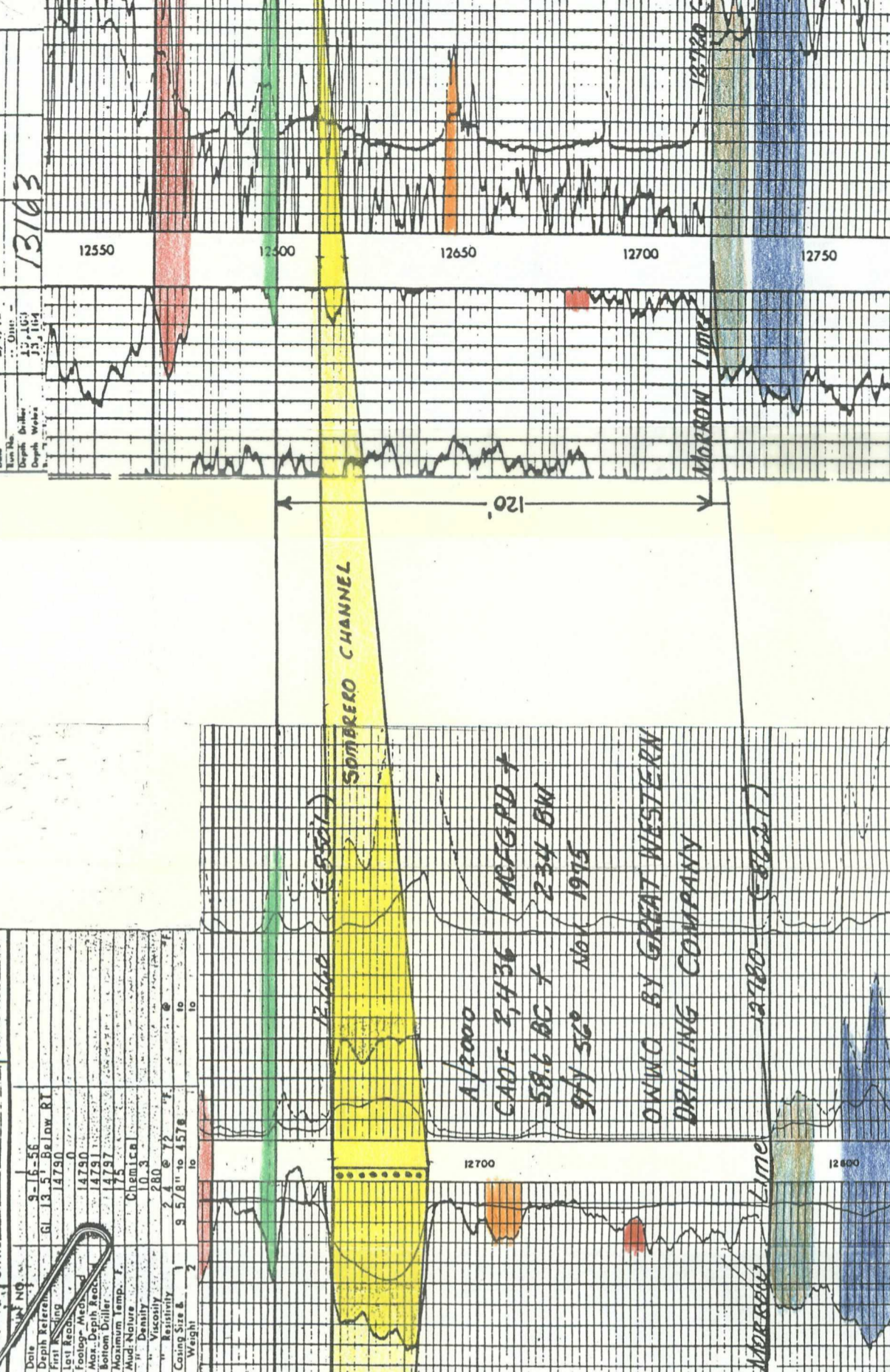
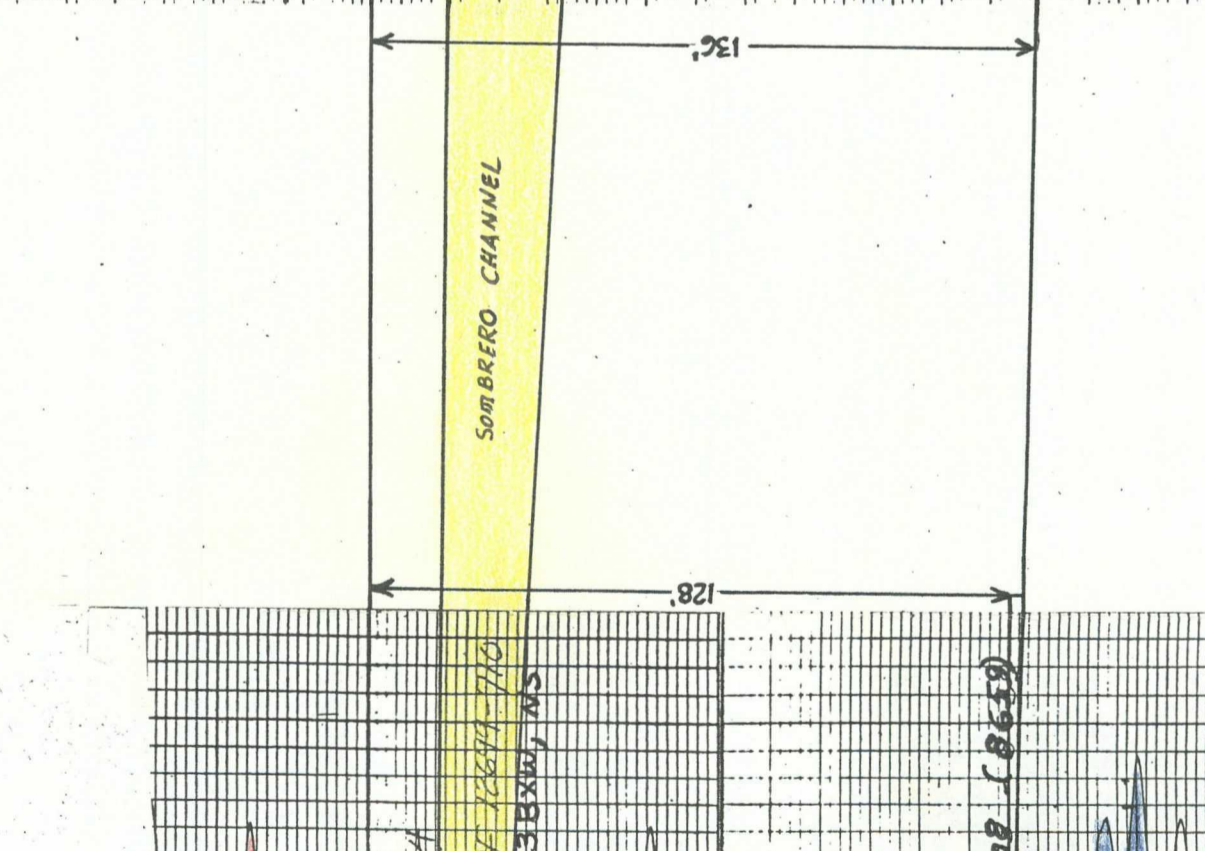
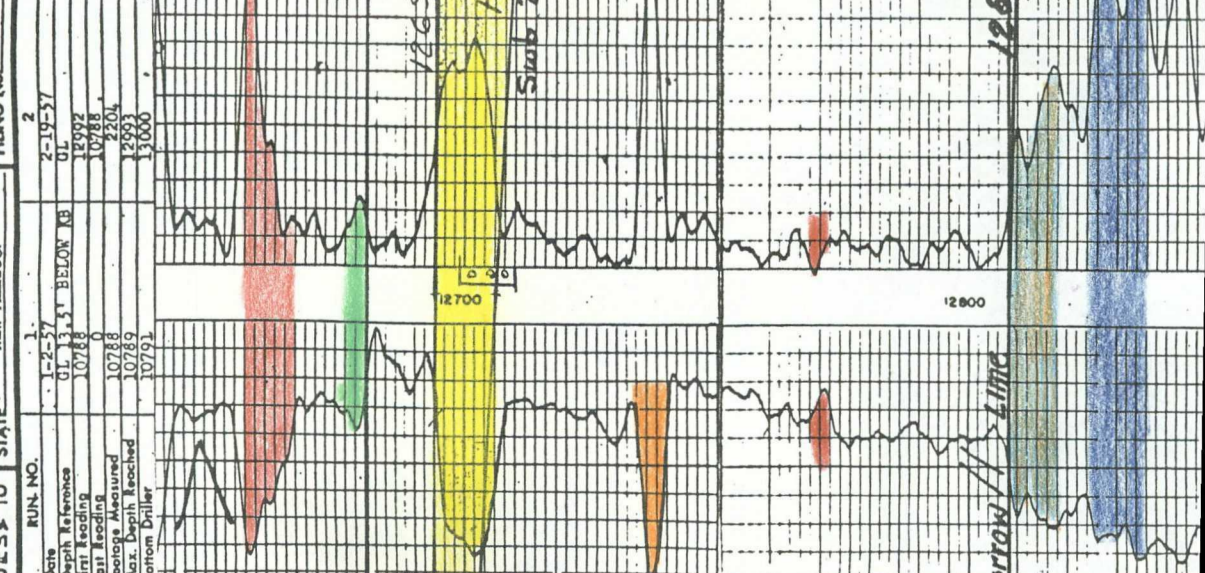
DATE: 9-16-56
RUN. NO.: 1
Depth Reference: GL 13.5' BELOW RI
First Reading: 14790
Last Reading: 0
Footage Measured: 14790
Max. Depth Reached: 14791
Bottom Driller: 14797
Mud: Nature: Chemical
Density: 10.3
Viscosity: 280
Resistivity: 2.4 @ 72° F
Casing Size & Weight: 9 5/8" to 4.578"

Gamma Ray-Neutron
SIMULTANEOUS

COMPANY: GREAT WESTERN DRILLING COMPANY
WELL: STATE "18" #1
FIELD: WILLOCAT
LOCATION: 2000' FSL & JUNG' FWL
COUNTY: LEA
STATE: NEW MEXICO

Location of Well: 510' ± SL, 660' ± EL, GRN(ES-ML)
Elevation: D.F. or G.L. 414.7
FILING NO.: 13103

DATE: 2/4/75
RUN. NO.: 1
Depth Reference: K. H. - 18.5' P. Above Perm. Datum
First Reading: 12550
Last Reading: 12400
Footage Measured: 12400
Max. Depth Reached: 12400
Bottom Driller: 12400



SOMBRERO AREA
Lea County, New Mexico
SW-NE CROSS SECTION
OF ATOKA SAND CHANNEL
Horizontal Scale: 1"=2,000'
Vertical Scale: 1"=40'

