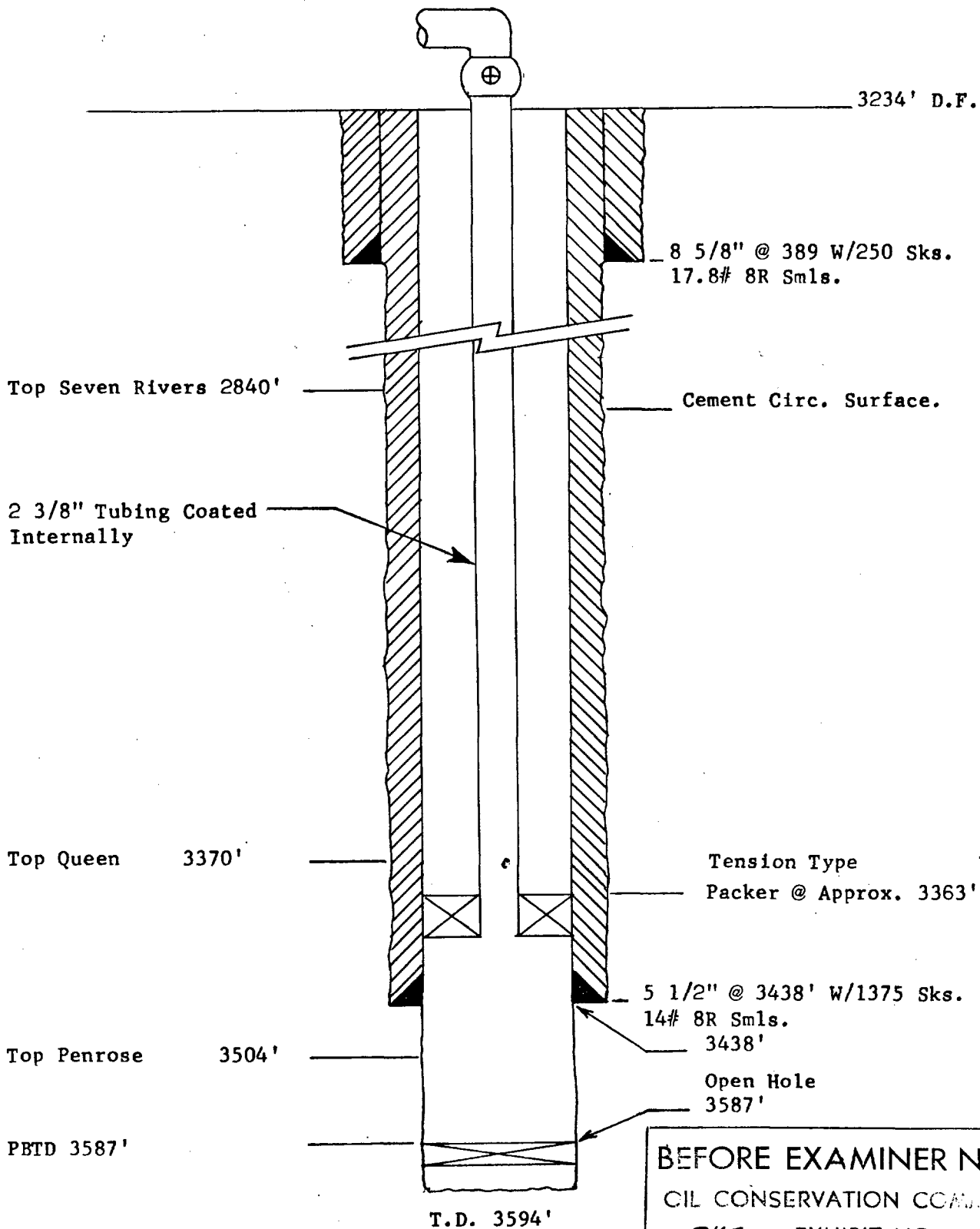


SKELLY OIL COMPANY

MATTIX "A" WELL NO. 4
1980' FSL & 1986' FWL
Section 2-24S-37E
Lea County, New Mexico



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
SKELLY EXHIBIT NO. 3
CASE NO. 3906

OF NEW MEXICO

COUNTY OF SANTIAGO

NO. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

NO. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

Company Skelly Oil Company
Field Langley Mattix
Lease Phillips Mattix Section 11/9/67
Type of Sample Heater treater

WATER ANALYSIS

IONIC FORM

Calcium (Ca ⁺⁺)	53.89	1080
Magnesium (Mg ⁺⁺)	163.99	1994
Sulfate (SO ₄ ⁻²) (calculated)	722.62	16,613
Iron		19

Chloride (Cl ⁻)	36.39	2220
Carbonate (CO ₃ ⁻²)	Not Found	
Bicarbonate (HCO ₃ ⁻)	Not Found	
Sulfide (S ⁻²)	114.51	5500
Chloride (Cl ⁻)	789.60	28,000

8.2 plus 68 F

Observed Solubility Evap. at 103° - 105° C		
Hardness as CaCO ₃	217.88	10,894
Carbonate hardness as CaCO ₃ (temporary)	36.39	1820
Non-Carbonate Hardness as CaCO ₃ (permanent)	181.49	9075
Alkalinity as CaCO ₃	36.39	1820
Specific Gravity @ 60° F	1.025	

Calcium Carbonate Scaling Index - Positive @ 84°F
Calcium Sulfate Scaling Index - Negative

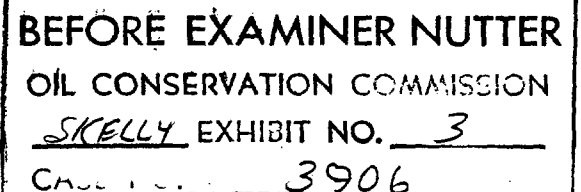
BEFORE EXAMINER NUTTER

OIL CONSERVATION CO.

SKELLY EXHIBIT NO. 5

CASE NO. 3906

MATTIX "A" WELL NO. 4
1980' FSL & 1986' FWL
Section 2-24S-37E
Lea County, New Mexico



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Skelly Oil Company
 Field Langley Mattix
 Lease Phillips Mattix Sampling Date 11/9/67
 Type of Sample Heater treater

WATER ANALYSIS

IONIC FORM	mg/l	ppm
Calcium (Ca++)	53.89	1080
Magnesium (Mg++)	163.99	1994
Sodium (Na+) (calculated)	722.62	16,613
Iron		19
Bicarbonate (HCO ₃ ⁻)	36.39	2220
Carbonate (CO ₃ ⁻)	Not Found	
Hydroxide (OH ⁻)	Not Found	
Sulphate (SO ₄ ⁻)	114.51	5500
Chloride (Cl ⁻)	789.60	28,000
8.2 pH @ 68 °F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	217.88	10,894
Carbonate Hardness as CaCO ₃ (temporary)	36.39	1820
Non-Carbonate Hardness as CaCO ₃ (permanent)	181.49	9075
Alkalinity as CaCO ₃	36.39	1820
Specific Gravity @ 68° F	1.025	

1 mg/l = milligrams per liter

1 ppm = milliequivalent per liter

Calcium Carbonate Scaling Index - Positive @ 84°F
 Calcium Sulfate Scaling Index - Negative

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

SKELLY EXHIBIT NO. 5

CASE NO. 3906

Makes Water Work

CONCLUSION

— 10 —

— NO. 12 NITEX.

2000

458

224705

ELEVATION

CONCLUSION

References

1

2-20-52

• • • • •

2000

2.06

2007

0.1

10

100

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20

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20-20

8051068

STUDIES

CASE NO.

Case 390.

OPEN HOLE RECORD

INTERVAL

3591

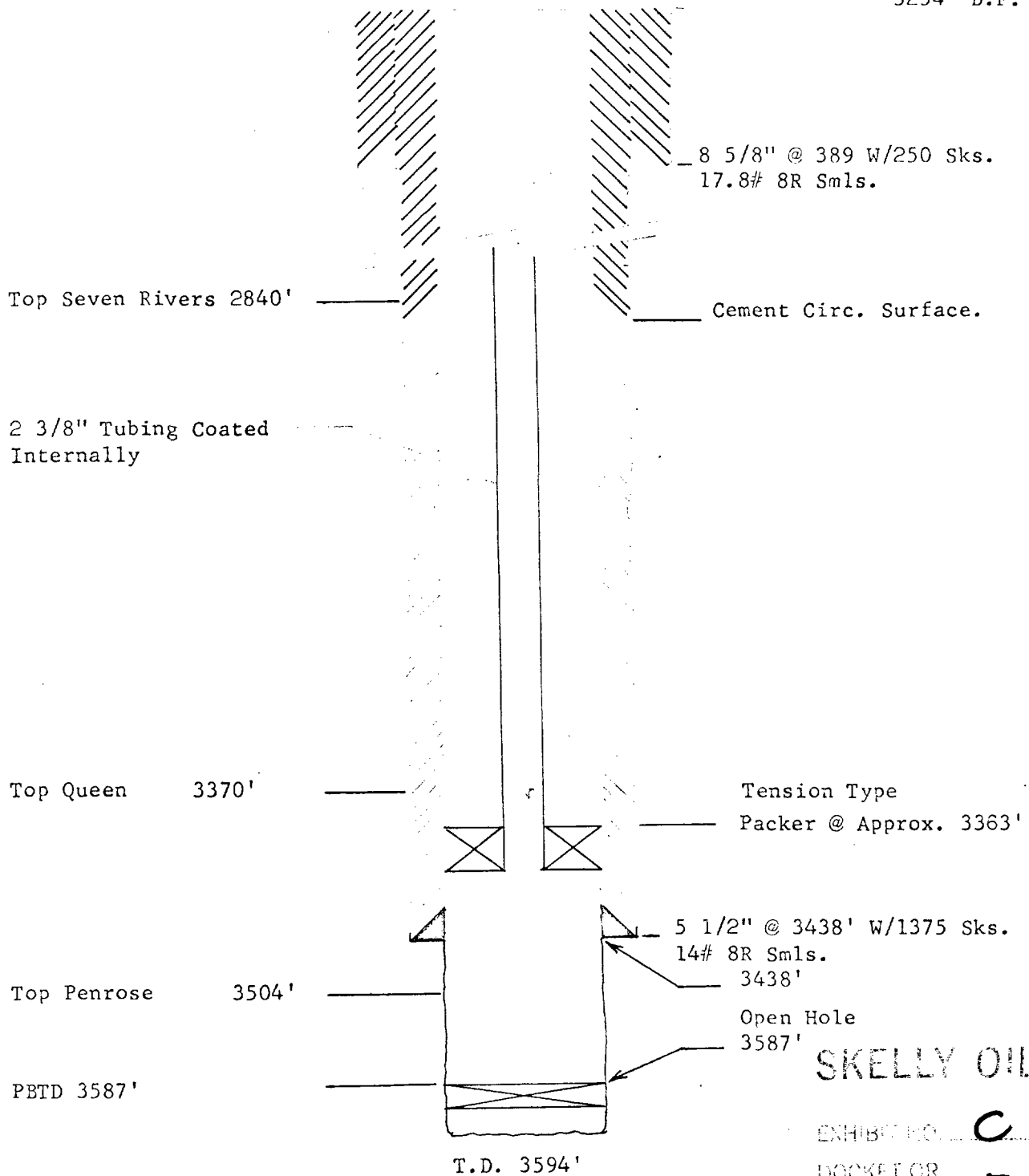
REMARKS AND OTHER DATA

ILLEGIBLE

SKELLY OIL COMPANY

MATTIX "A" WELL NO. 4
1980' FSL & 1986' FWL
Section 2-24S-37E
Lea County, New Mexico

3234' D.F.



SKELLY OIL CO.

EXHIBIT NO. C

DOCKET OR
CASE NO. 3,906

October 23, 1968