

**Tenneco Oil**  
A Tenneco Company

Suite 1200  
Lincoln Tower Building  
Denver, Colorado 80203  
(303) 292-9920



April 17, 1973

*WJ-148*

New Mexico Oil & Gas Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

*44/173*

Attention: Mr. D. S. Nutter

Re: Salt Water Disposal Application  
Kemnitz Field, Lea County,  
New Mexico

Gentlemen:

Attached is an application along with the necessary supporting data, to convert an existing well, Tenneco's Kemnitz Wolfcamp Unit No. 8, to salt water disposal. The subject well has been shut in since November 17, 1966.

Well No. 7, west offset to Well No. 8 in the Kemnitz Wolfcamp Unit, has been used for salt water disposal as approved in Case No. 3923, Order No. R-3582, November 21, 1963. We would like to temporarily abandon Well No. 7, retaining the options to use it for salt water disposal at a later date or to plug and abandon it.

If possible, we would like to have this application processed administratively. We will be injecting produced water back into the producing formation in a structurally similar well to the existing salt water disposal well, and all acreage within a half mile of the proposed injection well is held by the unit. We were given verbal approval to temporarily inject water into Well No. 8 by Mr. Joe D. Ramey, District Supervisor in Hobbs, on April 13, 1973.

If it is not possible to handle this application administratively, please schedule it for hearing as soon as possible.

Yours very truly,

TENNECO OIL COMPANY

*D.D. Myers*

D. D. Myers  
District Production Manager

FEK/jef  
Attach.

cc: New Mexico State Engineer  
State Capital Building  
Santa Fe, New Mexico

# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2038 - SANTA FE  
87501

I. R. TRUJILLO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

July 3, 1973

Tenneco Oil Company  
Suite 1200  
Lincoln Tower Building  
Denver, Colorado 80203

Gentlemen:

Enclosed herewith please find Administrative Order No. SWD-143 for your Kemnitz Wolfeamp Well No. 8 located in Unit P of Section 19, Township 16 South, Range 34 East, Lea County, New Mexico.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/JEK/og

cc: Oil Conservation Commission  
Box 1960  
Hobbs, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION  
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

|                                                                                                                                                                                                           |                      |                                                                     |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|----------------------|
| OPERATOR<br><b>Tenneco Oil Company</b>                                                                                                                                                                    |                      | ADDRESS<br><b>1860 Lincoln St., Suite 1200, Denver, Colo. 80203</b> |                      |
| LEASE NAME<br><b>Kemnitz Wolfcamp</b>                                                                                                                                                                     | WELL NO.<br><b>8</b> | FIELD<br><b>Kemnitz Wolfcamp</b>                                    | COUNTY<br><b>Lea</b> |
| LOCATION<br>UNIT LETTER <b>P</b> ; WELL IS LOCATED <b>660</b> FEET FROM THE <b>South</b> LINE AND <b>660</b> FEET FROM THE <b>East</b> LINE, SECTION <b>19</b> TOWNSHIP <b>16S</b> RANGE <b>34E</b> NMPM. |                      |                                                                     |                      |

| CASING AND TUBING DATA                                                                                                                                |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------|
| NAME OF STRING                                                                                                                                        | SIZE                                                                              | SETTING DEPTH                                                              | SACKS CEMENT                                                                | TOP OF CEMENT                                                                                  | TOP DETERMINED BY                          |
| SURFACE CASING                                                                                                                                        | <b>13-3/8"</b>                                                                    | <b>335</b>                                                                 | <b>350</b>                                                                  | <b>Circulated</b>                                                                              |                                            |
| INTERMEDIATE                                                                                                                                          | <b>9-5/8"</b>                                                                     | <b>4530</b>                                                                | <b>2600</b>                                                                 | <b>840'</b>                                                                                    | <b>Temp. Survey</b>                        |
| LONG STRING                                                                                                                                           | <b>5-1/2"</b>                                                                     | <b>11425</b>                                                               | <b>600</b>                                                                  | <b>9260'</b>                                                                                   | <b>Temp. Survey</b>                        |
| TUBING                                                                                                                                                | <b>2"</b>                                                                         | <b>10600</b>                                                               | NAME, MODEL AND DEPTH OF TUBING PACKER<br><b>Baker Model "R" at 10600'±</b> |                                                                                                |                                            |
| NAME OF PROPOSED INJECTION FORMATION<br><b>Wolfcamp</b>                                                                                               |                                                                                   |                                                                            | TOP OF FORMATION<br><b>9625'</b>                                            |                                                                                                | BOTTOM OF FORMATION<br><b>10873'</b>       |
| IS INJECTION THROUGH TUBING, CASING, OR ANNULUS?<br><b>Tubing</b>                                                                                     |                                                                                   | PERFORATIONS OR OPEN HOLE?<br><b>Perforations</b>                          | PROPOSED INTERVAL(S) OF INJECTION<br><b>10625' - 10669'</b>                 |                                                                                                |                                            |
| IS THIS A NEW WELL DRILLED FOR DISPOSAL?<br><b>No</b>                                                                                                 | IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED?<br><b>Oil Well</b> |                                                                            |                                                                             | HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE?<br><b>No</b> |                                            |
| LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH                                                               |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
| DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA<br><b>200'</b>                                                                               |                                                                                   | DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA<br><b>None</b> |                                                                             | DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA<br><b>None</b>                         |                                            |
| ANTICIPATED DAILY INJECTION VOLUME (BBLs.)<br><b>300</b>                                                                                              | MINIMUM<br><b>100</b>                                                             | MAXIMUM<br><b>500</b>                                                      | OPEN OR CLOSED TYPE SYSTEM<br><b>Closed</b>                                 | IS INJECTION TO BE BY GRAVITY OR PRESSURE?<br><b>Pressure</b>                                  | APPROX. PRESSURE (PSI)<br><b>1000</b>      |
| ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - |                                                                                   |                                                                            | WATER TO BE DISPOSED OF<br><b>Yes</b>                                       | NATURAL WATER IN DISPOSAL ZONE<br><b>Yes</b>                                                   | ARE WATER ANALYSES ATTACHED?<br><b>Yes</b> |
| NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND)<br><b>State of New Mexico</b>                                                 |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
| LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL<br><b>Offset on all sides by Kemnitz Wolfcamp Unit.</b>   |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             |                                                                                                |                                            |
| HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?                                                                                   |                                                                                   | SURFACE OWNER                                                              |                                                                             | EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL                                                |                                            |
| <b>Yes</b>                                                                                                                                            |                                                                                   | <b>Yes</b>                                                                 |                                                                             | <b>Yes</b>                                                                                     |                                            |
| ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)                                                                                 |                                                                                   | PLAT OF AREA                                                               |                                                                             | ELECTRICAL LOG                                                                                 |                                            |
| <b>Yes</b>                                                                                                                                            |                                                                                   | <b>Yes</b>                                                                 |                                                                             | <b>Yes</b>                                                                                     |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             | The New Mexico State Engineer? <b>Yes</b>                                                      |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             | DIAGRAMMATIC SKETCH OF WELL                                                                    |                                            |
|                                                                                                                                                       |                                                                                   |                                                                            |                                                                             | <b>Yes</b>                                                                                     |                                            |

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

*D. L. Myers*  
(Signature)

*District Production Manager*  
(Title)

**4-20-73**  
(Date)

NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

HALLIBURTON DIVISION LABORATORY  
HALLIBURTON COMPANY  
LOVINGTON, NEW MEXICO

## LABORATORY WATER ANALYSIS

No. W73-245To Tenneco Oil CompanyDate 4-17-731860 Lincoln St., Suite 1200Denver, Colorado 80203ATTN: Mr. Fred Kastner

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by \_\_\_\_\_

Date Rec. 4-17-73Well No. Kemnitz W.C.

Depth \_\_\_\_\_

Formation \_\_\_\_\_

County \_\_\_\_\_

Field \_\_\_\_\_

Source \_\_\_\_\_

ProducedResistivity ..... 0.102 @ 70° F.Specific Gravity ..... 1.060pH ..... 6.9Calcium (Ca) ..... 4,000

\*MPL

Magnesium (Mg) ..... 420Chlorides (Cl) ..... 54,000Sulfates (SO<sub>4</sub>) ..... 800Bicarbonates (HCO<sub>3</sub>) ..... 244Soluble Iron (Fe) ..... Nil

Remarks:

\*Milligrams per liter

Respectfully submitted,

Analyst: Brewer

cc:

HALLIBURTON COMPANY

By \_\_\_\_\_

CHEMIST

## NOTICE

This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.



Induction - Electrical Log

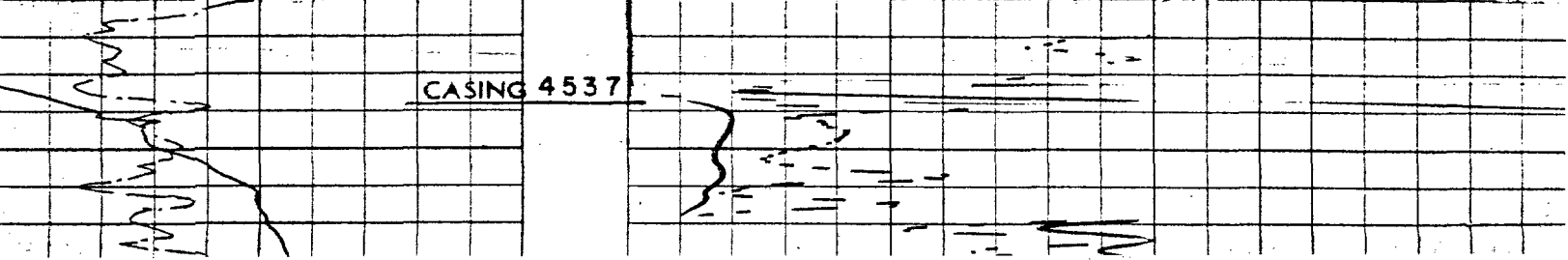
|                                                      |                            |
|------------------------------------------------------|----------------------------|
| COUNTY                                               | Lea                        |
| FIELD or LOCATION                                    | Seaman Area                |
| WELL                                                 | State 381 # 1              |
| COMPANY                                              | Sinclair Oil & Gas Company |
| COMPANY SINCLAIR OIL & GAS COMPANY                   |                            |
| WELL                                                 | STATE 381 # 1              |
| FIELD                                                | SEAMAN AREA                |
| LOCATION                                             | SEC. 19-16S-34E            |
| COUNTY                                               | LEA                        |
| STATE                                                | NEW MEXICO                 |
| Other Surveys                                        |                            |
| GRN                                                  |                            |
| Location of Well                                     | 560' ± S&E/L               |
| Elevation: D.F.: 4147<br>K.B.: 4148<br>or G.L.: 4135 |                            |
| FILING No.                                           |                            |

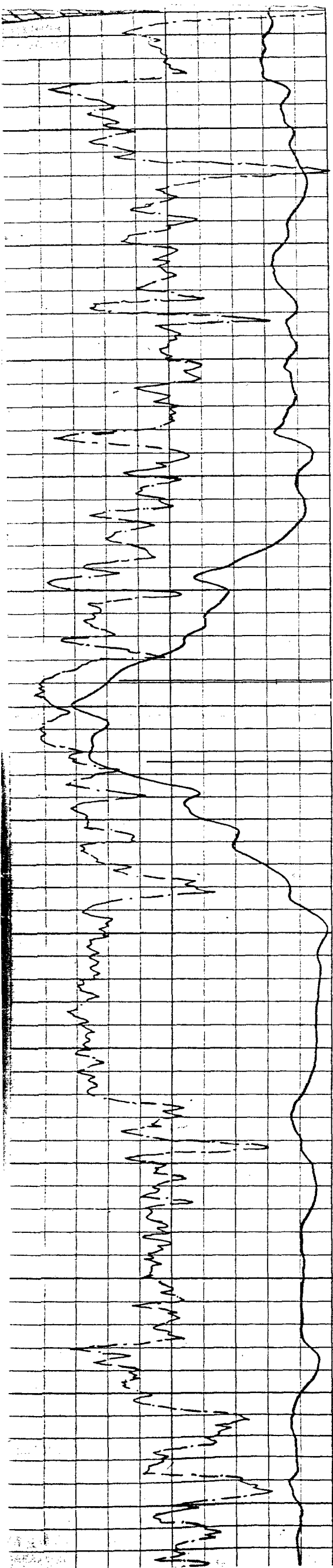
|                |              |
|----------------|--------------|
| RUN No.        | 5-25-57      |
| Date           | 11420        |
| First Reading  | 4537         |
| Last Reading   | 3883         |
| Feet Measured  | 4537         |
| Csg. Schlum.   | 4530         |
| Csg. Driller   | 11424        |
| Depth Reached  | 11425        |
| Bottom Driller | GL           |
| Depth Datum    | Chem.        |
| Mud No.        | 9.5          |
| Dens. Visc.    | 1.7 @ 86     |
| Mud Resist.    | 1.1 @ 132    |
| Res. BHT       | 1.5 @ 86     |
| Rmc            | 2.0 @ 86     |
| pH             | @            |
| Wtr. Loss      | 8 CC 30 min. |
| Bit Size       | 8 3/4"       |
| Specs.—AM      | 15" Normal   |
| IND.           | 40" Ind      |
| Op. Rig Time   | 3 Hrs.       |
| Truck No.      | 1759-H0BBS   |
| Recorded By    | Geisel       |
| Witness        | Albritton    |

REMARKS GR: B70 - 450 - 100 - 400  
LOG: sens 300; TCI-2; speed 1800 & 3600'/Hr.

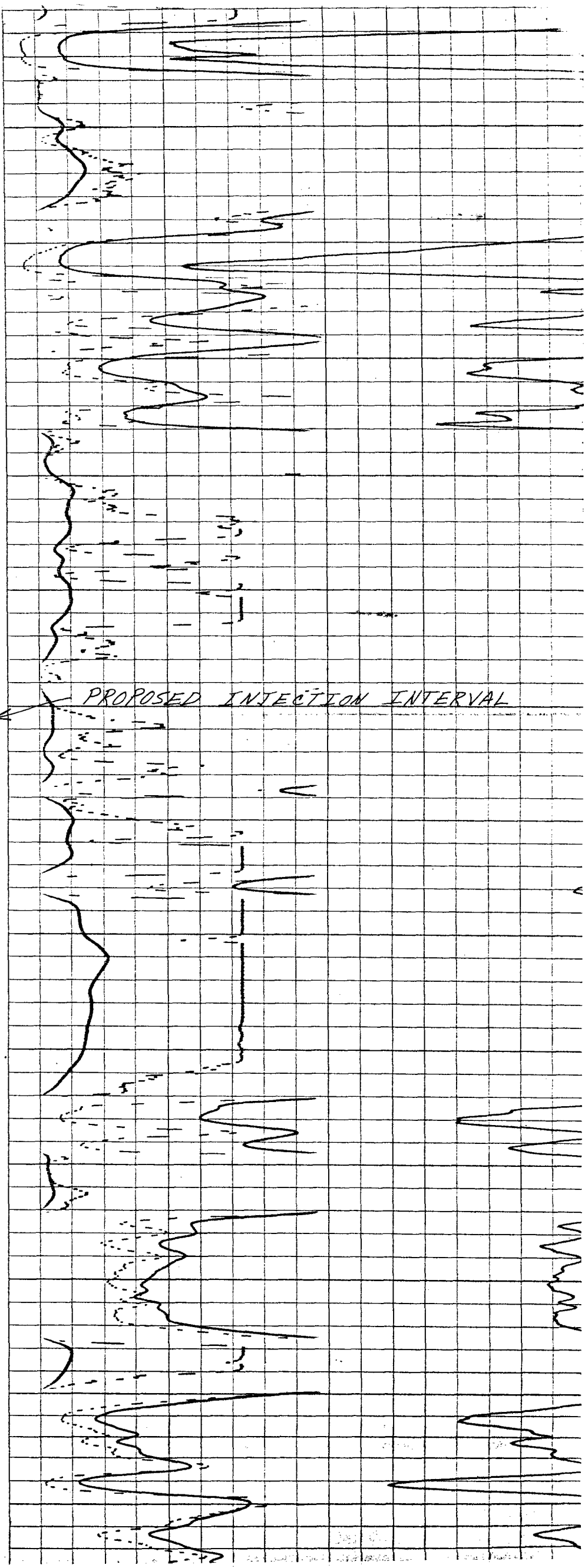
Cartridge No. 1-RHA #258 CD USED  
Panel No. 1-RPB #135  
Sonde No. 1-RSC #312

| SPONTANEOUS-POTENTIAL<br>millivolts | DEPTHS | CONDUCTIVITY<br>millimhos/m = $\frac{1000}{\text{ohms. m}^2/\text{m}}$ |                                         |
|-------------------------------------|--------|------------------------------------------------------------------------|-----------------------------------------|
|                                     |        | INDUCTION                                                              | RESISTIVITY<br>-ohms. m <sup>2</sup> /m |
| 20<br>+<br>1                        |        | 200                                                                    |                                         |
|                                     |        | 100                                                                    |                                         |
|                                     |        | 16" NORMAL                                                             |                                         |
|                                     |        | 0                                                                      | 100                                     |
|                                     |        | 0                                                                      | 1000                                    |
|                                     |        | INDUCTION                                                              |                                         |
|                                     |        | 0                                                                      | 100                                     |
|                                     |        | 0                                                                      | 1000                                    |





10400 10500 10600 10700 10800 10900 11000





# Gamma Ray - Neutron

LOCATION Seaman Area  
WELL State 381 # 1  
COMPANY Sinclair Oil & Gas Company  
COMPANY SINCLAIR OIL & GAS COMPANY  
WELL STATE 381 # 1  
FIELD SEAMAN AREA  
LOCATION SEC. 19-15S-34E  
COUNTY LEA  
STATE NEW MEXICO

Other Surveys  
IES  
Location of Well  
660' ± S&E/L  
Elevation: D.F.: 4147  
K.B.: 4148  
or G.L.: 4135  
FILING No. \_\_\_\_\_

Depths Measured From GROUND LEVEL

| RUN NO.            | 5-25-57             |
|--------------------|---------------------|
| Reading            | 1423                |
| Reading            | 0                   |
| Large Measured     | 1423                |
| x, Depth Reached   | 1425                |
| from Driller       | 1425                |
| Maximum Temp., °F. | 32                  |
| of Nature          | Chem.               |
| of Level           | 133                 |
| ing Size           | 9 5/8 in.           |
| ing Weight         | lb. } Surf to 4530  |
| ing Size           | in. }               |
| ing Weight         | lb. }               |
| ing Weight         | in. }               |
| Size               | 8 3/4 in. CSG to TD |
| Size               | in. to              |
| Counters Used      | GNAM-3              |
| Equipment          | GNP-C               |
| Panel              | 3 Hrs.              |
| Rig Time           | 1759-Hobbs          |
| k No.              | Geisel              |
| over               | Albritton           |
| 355                |                     |

FOLD HERE

| REMARKS: | CALIBRATION | BACKGROUND CPS | TEST SOURCE CPS | GALV. INCREASE DIVISIONS | PANEL SENS. TAP. |
|----------|-------------|----------------|-----------------|--------------------------|------------------|
|          | GAMMA RAY   | 70             | 450             | 100                      | 400              |
|          | NEUTRON     | 8              | 200             | 100                      | 400              |

DECENTRALIZED

| GAMMA RAY<br>MICROGRAMS RA-EQ/TON                                                                                                     | CASING<br>COLLARS | NEUTRON<br>STANDARD COUNTS/SECOND                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INTERVAL: <u>0</u> to <u>3700</u><br>Sens. <u>300</u> T.C. <u>1</u><br>Logging Speed <u>60</u> ft./min.<br>ZERO <u>0</u> div. to left |                   | INTERVAL: <u>0</u> to <u>3700</u><br>Sensitivity <u>300</u> Time Constant <u>1</u><br>Logging Speed <u>60</u> ft./min.<br>ZERO <u>8</u> divisions to left of this line |



SIMULTANEOUS

Gamma Ray - Neutron

LOCATION Seaman Area

WELL State 381 #1

COMPANY Sinclair Oil &amp; Gas Company

COMPANY SINCLAIR OIL &amp; GAS COMPANY

GAS COMPANY

WELL STATE 381 #1

FIELD SEAMAN AREA

LOCATION SEC. 19-13S-34E

COUNTY LEA

STATE NEW MEXICO

Other Surveys  
IESLocation of Well  
660' ± S&E/LElevation: D.F.: 4147  
K.B.: 4148  
or G.L.: 4135

FILING No.

Depths Measured From GROUND LEVEL

RUN NO.

5-25-57

11423

11423

11425

11425

11425

11425

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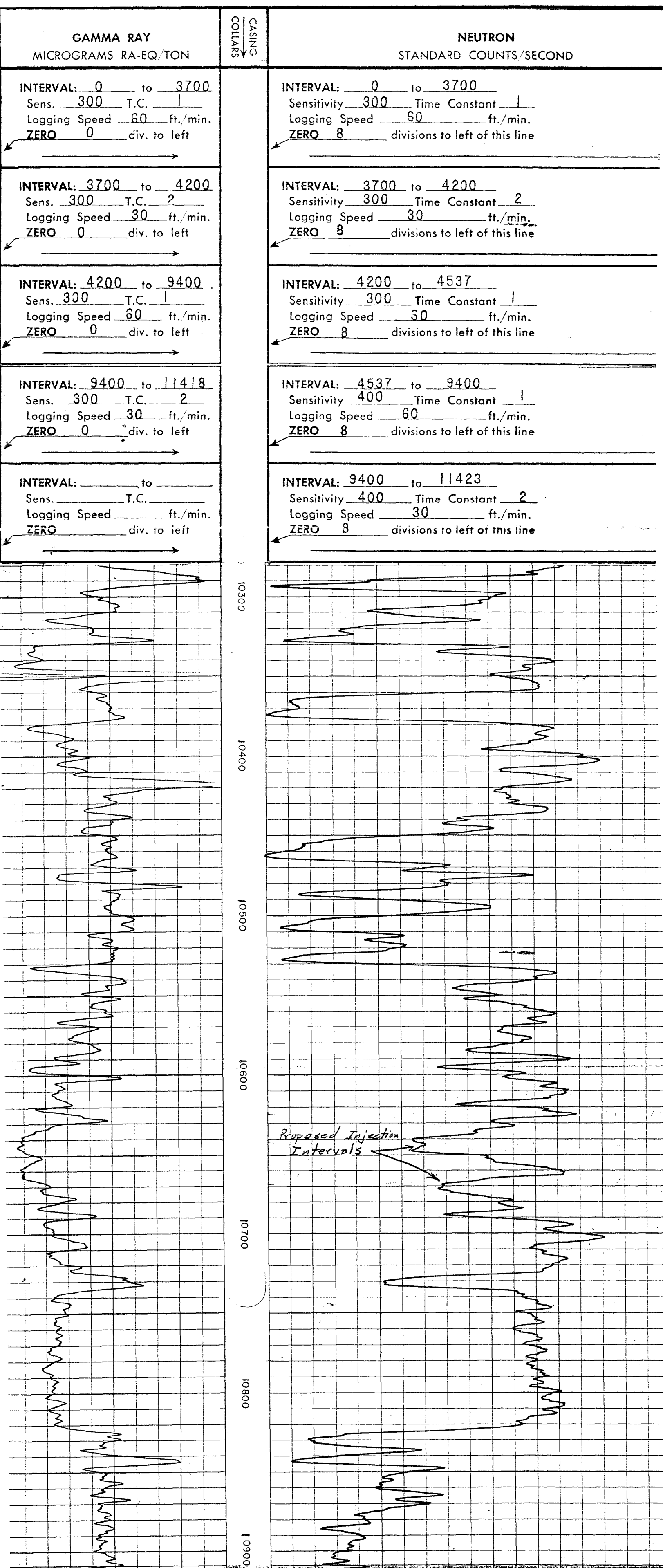
11425

11425

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|                    |                |                 |                          |                      |
|--------------------|----------------|-----------------|--------------------------|----------------------|
| MARKS: CALIBRATION | BACKGROUND CPS | TEST SOURCE CPS | GALV. INCREASE DIVISIONS | PANEL SENS. TAP. FOR |
| GAMMA RAY          | 70             | 450             | 100                      | 400                  |
| NEUTRON            | 8              | 200             | 100                      | 400                  |

DECENTRALIZED



LEASE: KEMNITZ WOLFCAMP UNIT

WELL NO. 8

ZERO ELEV.: 4136' G.L.

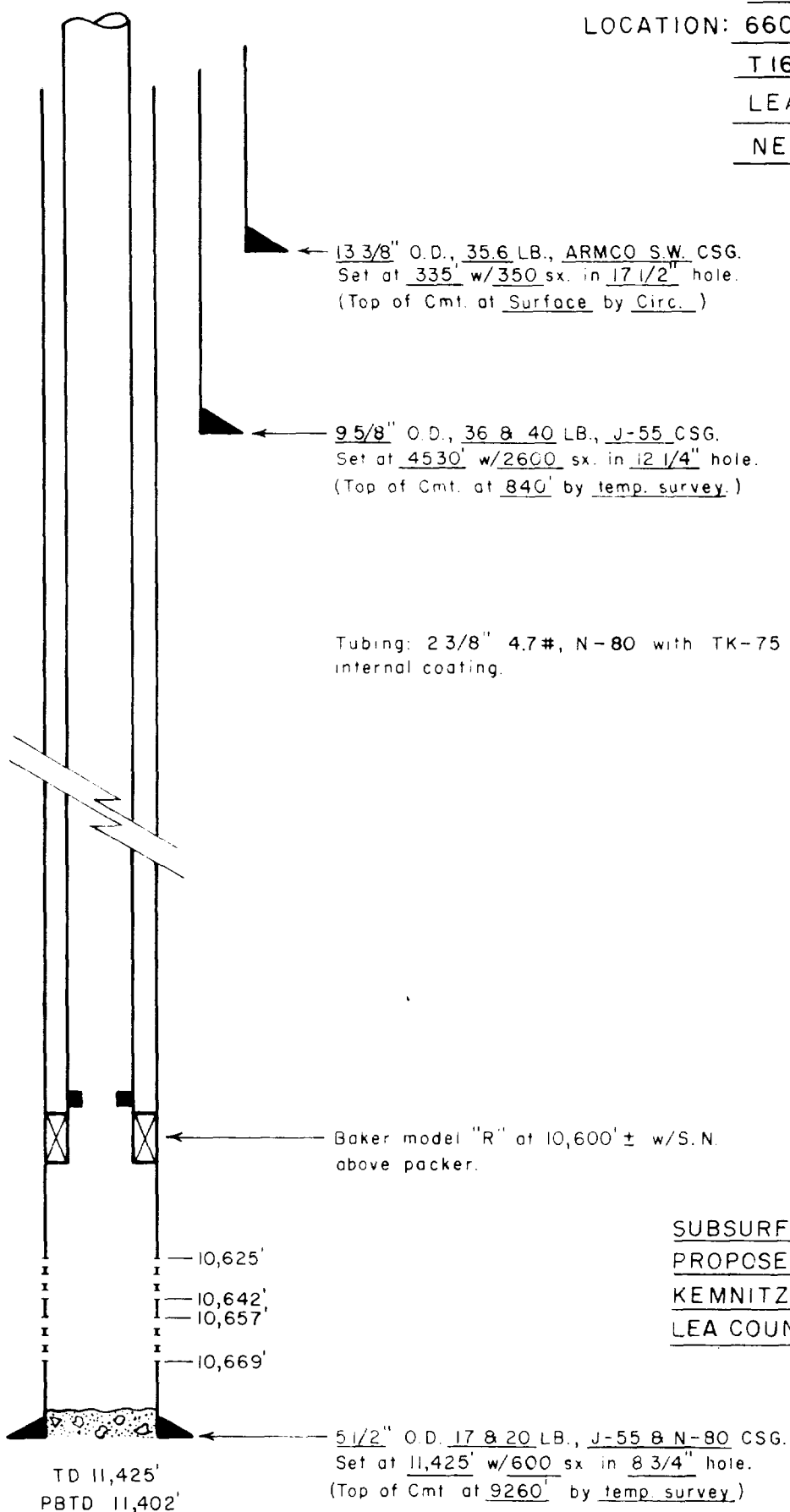
LOCATION: 660' FSL, 660' FEL SEC. 19,

T16S - R34E

LEA COUNTY,

NEW MEXICO

F.E.K. 4-24-73



SUBSURFACE SCHEMATIC  
PROPOSED SWD WELL  
KEMNITZ WOLFCAMP UNIT No. 8  
LEA COUNTY, NEW MEXICO

EVI

