FINAL PRINT "2"

Schlumberger

# INDUCTION-ELECTRICAL LOG

COMPANY E & B Natural Resources Management Corp.

WELL "WNF-I" ~~WNF~~ NO. 37 037-22796

FIELD WILMINGTON

COUNTY LOS ANGELES STATE CALIFORNIA

LOCATION LAMBERT COORDINATES: N 4 041 512 E 4 205 567

| API SERIAL NO. | SEC. | TWP | RANGE |
|---|---|---|---|
| -- | -- | | |

Other Services: NONE

COUNTY LOS ANGELES
FIELD WILMINGTON
LOCATION
WELL WNF NO. 37
COMPANY XTRA ENERGY

Permanent Datum: GL ; Elev.: 36
Log Measured From KB 22 Ft. Above Perm. Datum
Drilling Measured From KB

Elev.: K.B. 58
D.F.
G.L. 36

| | | | | |
|---|---|---|---|---|
| Date | 01/04/83 | 01/05/83 | | |
| Run No. | ONE | TWO | | |
| Depth—Driller | 4787 | 4917 | | |
| Depth—Logger (Schl.) | 4786 | 4915 | | |
| Btm. Log Interval | 4780 | 4911 | | |
| Top Log Interval | 607 | 607 | | |
| Casing—Driller | 10 3/4 @ 605 | 10 3/4 @ 605 | @ | @ |
| Casing—Logger | 607 | 607 | | |
| Bit Size | 9 7/8" | 9 7/8" | | |
| Type Fluid in Hole | CLAY BASE | CLAY BASE | | |
| Dens. / Visc. | 10.2 / 47 | 10.2 / 51 | | |
| pH / Fluid Loss | 9.5 / 5.4 ml | 9.5 / -- ml | ml | ml |
| Source of Sample | FLOWLINE | FLOWLINE | | |
| Rm @ Meas. Temp. | 1.45 @ 78 °F | 1.61 @ 74 °F | @ °F | @ °F |
| Rmf @ Meas. Temp. | 1.32 @ 59 °F | 2.10 @ 62 °F | @ °F | @ °F |
| Rmc @ Meas. Temp. | 2.34 @ 59 °F | 1.50 @ 62 °F | @ °F | @ °F |
| Source: Rmf / Rmc | FILTER PRESS | FILTER PRESS | | |
| Rm @ BHT | .962 @ 121°F | .99 @ 124°F | @ °F | @ °F |
| TIME Circulation Stopped | 1630 01/04 | 0730 01/05 | | |
| TIME Logger on Bottom | 1930 01/04 | 0930 01/05 | | |
| Max. Rec. Temp. | 121 °F | 124 °F | °F | °F |
| Equip. / Location | 8240 / 4404 | 8297 / 4404 | | |
| Recorded By | DONOVAN | GERHARDT | | |
| Witnessed By Mr. | WRIGHT | WRIGHT | | |

FOLD HERE The well name, location and borehole reference data were furnished by the customer.

| Run No. | ONE | TWO | | |
|---|---|---|---|---|
| Service Order No. | 205854 | 300083 | | |
| Fluid Level | FULL | FULL | | |

| EQUIPMENT DATA | | | | |
|---|---|---|---|---|
| Panel | IEM-1070 | IEM-663 | | |
| Mem. Panel | CSU-2008 | -- | | |
| TTR | 3980 | -- | | |
| DPI | -- | -- | | |
| Cartridge | IRC-1399 | IRC-1234 | | |
| Sonde | IRS-1387 | IRS-1274 | | |
| Cent. Device | -- | -- | | |
| Stand Off - Inches | -- | -- | | |
| G. R. Panel | -- | -- | | |
| G. R. Cartridge | -- | -- | | |

| CALIBRATION DATA | | | | |
|---|---|---|---|---|
| INDUCTION S.B.R. | 1.0 | 1.0 | | |
| INDUCTION SONDE ERROR (When measured: At surface, enter "surface" Down hole, enter depth) | SURFACE | SURFACE | | |
| Corrected For Hole Size | -- | -- | | |
| Corrected For Rm | -- | -- | | |
| Speed - F.P.M. | 60 | -- | | |
| GR BKG. CPS | -- | -- | | |
| GR Source CPS | -- | -- | | |
| GR Tc Sec | -- | -- | | |

SCALE CHANGES

| Type Log | Depth | Scale Up Hole | Scale Down Hole |
|---|---|---|---|
| | | | |

REMARKS:
RUN 1: CSU VERSION 22.4
56° MAXIMUM DEVIATION
NO CENTRALIZERS USED AT THE CLIENT'S REQUEST
SP SCALE CHANGED AT 4736
RUN 2: CSU VERSION 22.44
LOG STOPPED AT 3850' BY CLIENT REQUEST
LOGS 1 & 2 SPLICED AT 4710
SP SCALE CHANGED TO 4 MV/DIV AT 4700

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

| SP (MV) | | ILD (OHMM) 0.0 – 20.000; SFLA(OHMM) 0.0 – 4.0000; SFLA(OHMM) 0.0 – 20.000 | CILD(MMHO) |
|---|---|---|---|
| -80.00 – 20.000 | | | 1000.0 – 0.0 |

| | | | |
|---|---|---|---|
| -80.00 | SP | 20.000 | SCALE |
| -32.00 | 4700 | 8.0000 | CHANGES |

FILE 101

FILE 101

| SP (MV) | | ILD (OHMM) 0.0 – 20.000; SFLA(OHMM) 0.0 – 4.0000; SFLA(OHMM) 0.0 – 20.000 | CILD(MMHO) |
|---|---|---|---|
| -32.00 – 8.0000 | | | 1000.0 – 0.0 |

SENSOR MEASURE POINT TO TENSION REFERENCE POINT

| | | | | | |
|---|---|---|---|---|---|
| SFL | 3.9 | FEET | ILD | 6.9 | FEET |
| SP | .0 | FEET | ILM | 3.3 | FEET |
| TENS | .0 | FEET | SPAR | .0 | FEET |

PARAMETERS

| NAME | VALUE | UNIT | NAME | VALUE | UNIT |
|---|---|---|---|---|---|
| DSEC | 7.00000 | MMHO | BS | 9.87500 | IN |
| MSEC | 5.60000 | MMHO | SBR | 1.00000 | OHMM |
| DO | 0.0 | F | BHS | OPEN | |

COMPANY XTRA ENERGY
WELL WNF NO. 37
FIELD WILMINGTON
COUNTY LOS ANGELES STATE CALIFORNIA

SCHL. FR 4491
SCHL. TD 4915
DRLR. TD 4917
Elev: KB 58
DF --
GL 36

RECEIVED
MAY 20 3 47 PM '83
DIV. OF OIL AND GAS
LONG BEACH, CA.