| | |
|---|---|
| COMPANY | CHEVRON USA INC |
| WELL | OW 7301 |
| FIELD | MARSH |
| COUNTY | Kern STATE CAL |
| LOCATION | Other Services: |
| Sec | Twp | Rge |
| | | |
| Permanent Datum: GL Elev. | |
| Log Measured From: KB 12 Ft. Above Perm. Datum | |
| Drilling Measured From: KB | |

| | | | |
|---|---|---|---|
| Date | 1-Jun-2005 | | |
| Run No. | ONE | | |
| Depth-Driller | 1100 | | |
| Depth-Logger | 1098 | | |
| Bottom Log Interval | 1095 | | |
| Top Log Interval | SURFACE | | |
| Casing-Driller | 8 5/8 @ 0 | | |
| Casing-Logger | 8 5/8 @ 0 | | |
| Bit Size | 7 7/8 | | |
| Type Fluid in Hole | WATER | | |
| Dens. / Visc. | 8.4 / 28 | | |
| PH / Fluid Loss | 8 / N/A | | |
| Source of Sample | PUMPED | | |
| Rm @ Meas. Temp. | 1.0 @ 70 | | |
| Rmf @ Meas. Temp. | 1.0 @ 70 | | |
| Rmc @ Meas. Temp. | 1.0 @ 70 | | |
| Source: Rmf / Rmc | M / M | | |
| Rm @ BHT | 1.0 @ 70 | | |
| Time Since Circulation | 1 HOURS | | |
| Max. Rec. Temp. | 70 | | |
| Equipment Number | 1001 | | |
| Location | BAKERSFIELD, CALIFORNIA | | |
| Recorded By | J. MCCLELLAND | | |
| Witnessed By | MR. BRAD | | |

| BOREHOLE RECORD | | | |
|---|---|---|---|
| Bit No. | From | To | Size |
| ONE | 0 | 1100 | 7 7/8 |

| CASING RECORD | | | | |
|---|---|---|---|---|
| | Size | Wgt. | Grade | Type |
| Surface String | 8 5/8 | 24 | J-55 | SURFACE |
| Prod. String | | | | |
| Liner | | | | |
| Liner | | | | |

CAMERA SYSTEM: LOGGING MAY ATTENUATE WHEN ABSOLUTE BOTTOM BOTTOM TEMP.

| CAMERA MAX | CAMERA MAX DENSITY | CALIPER |
|---|---|---|
| 200 | 2.5 | 6 IN |

CALIBRATION DATA

Pre Log: 1 Date: 1-Jun-2005 Time: 1 Hr. Hole Volume Calibrated Using: 1 Pit

CAMMRA RAY

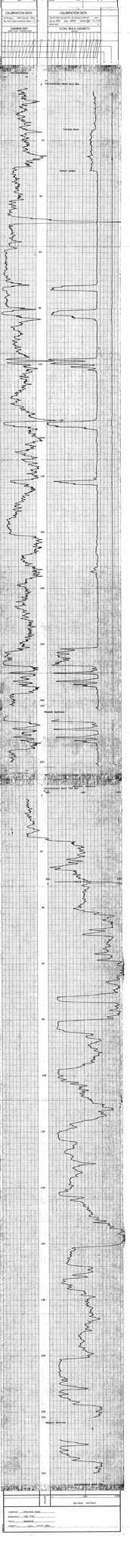
Pre Log: 1 Date: 1-Jun-2005 Time: 1 Hr. Hole Volume Calibrated Using: 1 Pit

CALIBRATION DATA

Pre Log Date: 1-Jun-2005 Time: 1 Hr. Hole Volume Calibrated Using: 1 Pit

Post Log Date: 1-Jun-2005 Time: 1 Hr. Hole Volume Calibrated Using: 1 Pit

COAL BULK DENSITY




| | |
|---|---|
| COMPANY | CHEVRON USA |
| WELL | OW 7301 |
| FIELD | MARSH |
| COUNTY | Kern STATE CAL |

SECTION - VERTICAL

Copy to
file

**SCHLUMBERGER**
**WELL SERVICES**
**DIVISION**

**MATERIAL: CHAL 2 ZONE INTERVAL**

Permanent Datum: Ground Level
Log Measured From: Ground Level
Drilling Measured From: Ground Level

Elev.: K.B. 0
D.F. 0
G.L. 0

**JOBNUMBER 0-7742**

| Run No. | Date | Type Log | Depth-Driller | Depth-Logger | Bottom Log Interval | Top Log Interval |
|---|---|---|---|---|---|---|
| ONE | 8-8-78 | DIL | 1200 | 1200 | 1200 | 0 |
| | | LSS | | | | |
| | | SNP | | | | |
| | | LDT | | | | |

**REMARKS**

Contents of Hole Type or Additional Remarks: Fluid Level Not Recorded
Max. Rec. Temp. 85 °F
Equipment Number 5-7
Logged 1 Time
Logging Unit 5-7-5-8

| | | | |
|---|---|---|---|
| Cases - 1 - 7.00 | | | |
| Casing Shoe 1200 | | | |
| Fluid Level Not Recorded | | | |
| Recorded By: Wilkins Wells | | | |
| Witnessed By: Mr. Mitchell | | | |
| Rm: 0.80@75 °F | Rmf: 0.70@75 °F | Rmc: 0.90@75 °F | |
| Source: Rmf: Rmc: | | | |
| Rm@BHT: 0.40@85 °F | | | |
| Rmf@BHT: 0.35@85 °F | | | |
| Rmc@BHT: 0.45@85 °F | | | |

Log Charges:
Unit Number 5-7-5-8
Truck Number

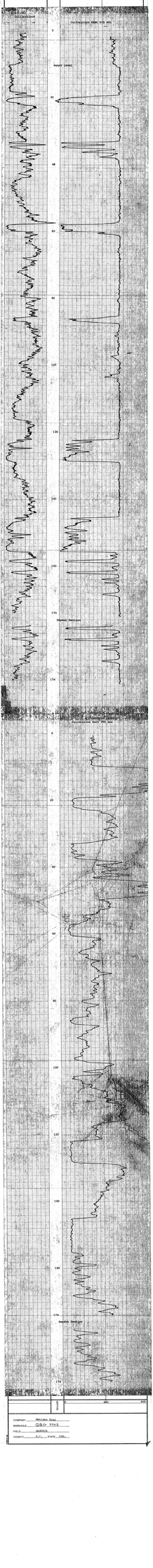
Equipment Data:
Main Recorder
Other

Tool Type: DIL-LSS-SNP-LDT
Serial Number: 5-7-5-8
Location: CORTRELL
BOONSBORO,ILLINOIS

| Service Order No. | Tool | Type | Serial No. | Hole Size | Top | Bottom | Run No. | Recorded Time | Source |
|---|---|---|---|---|---|---|---|---|---|
| DIL | | | | | | | | | |
| SFL | | | | | | | | | |
| BHC | | | | | | | | | |
| LDT | | | | | | | | | |
| CNL | | | | | | | | | |
| Caliper | | | | | | | | | |
| Gamma Ray | | | | | | | | | |
| Other | | | | | | | | | |

Gamma Ray affected by uranium-rich water issue.
Hole caved thinner drill and because of bad hole conditions.

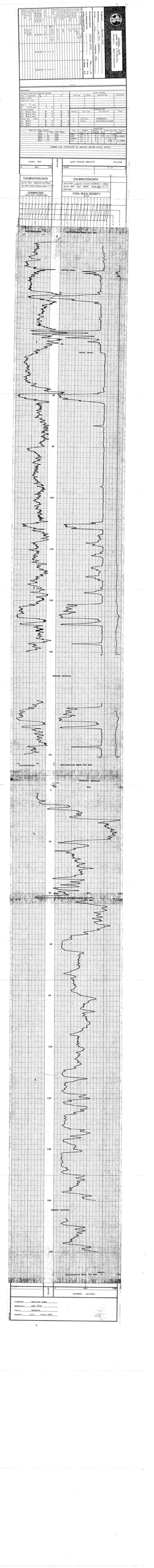
| GAMMA RAY | | LONG SPACED DENSITY | CALIPER |
|---|---|---|---|
| API 120 | 0 | 2200 SPD | 6 IN. |




| | | | |
|---|---|---|---|
| COMPANY | Williams Coal | | |
| BOREHOLE | QBCP 7742 | | |
| FIELD | BROOKS | | |
| COUNTY | P.C. | STATE | COLO. |

(OFF 25 ON)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |


Schlumberger
Dresser Atlas
Well Site Chart
Company
Well
Field
County
State
Date
Run No.
Depth Driller
Depth Logger
Bottom Log Interval
Top Log Interval
Casing Driller
Casing Logger
Bit Size
Type Fluid in Hole
Density
Viscosity
pH
Fluid Loss
Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source Rmf / Rmc
Rm @ BHT
Time Since Circ.
Max. Rec. Temp.
Equipment Location
Recorded By
Witnessed By
Equipment Number
Location
Date
Time
Type Log

| | | |

COPY TO 252

file # 611

COMPANY: Denlinger Coal
BOREHOLE: QBD 7708, McCOOL
FIELD: BARCOOK
COUNTY: Bu.Co. STATE: CONN.

Log Recorded from: KB
Measured from: KB
Elevation: 0 ft
Depth Reference: Driller
Log Depth: Logger
Date: 11 Feb 77
Run No: 1
Depth Driller: 252
Depth Logged: 252
Bottom Log Interval: 252
Top Log Interval: 0
Casing Driller: 0
Casing Logged: 0
Bit Size: 6.75
Type Fluid in Hole: Air
Density: 0
Viscosity: 0
Max Rec Temp: 0
Equipment Number: 3
Location: Barcook
Recorded by: Jones
Witnessed by: Jones

Field Name

REMARKS:
Changes in Mud Type or Additional Samples
Time | Sample No. | | | |
Depth — Drills
Type Fluid in Hole
Density | Visc.
pH | Fluid Loss | ml
Source of Sample
Rm @ Meas Temp. | @ °F | Ω-m
Rmf @ Meas Temp. | @ °F | Ω-m
Rmc @ Meas Temp. | @ °F | Ω-m
Source: Rmf | Rmc
Rm @ BHT | @ °F | Ω-m
Rmf @ BHT | @ °F | Ω-m
Rmc @ BHT | @ °F | Ω-m

Tool Line | Depth | Scale Up Hole | Scale Down
Hole Changes
From | To | Reason

Equipment Data
Run No. | Tool Type | Tool Serial No. | Driver
Sidewall
1 | C.C.D. | Sidewall

Logging Data
Log | Logging Speed | Time Constant | Sensitivity | Scale
Gamma | 252 | 0 | 9 | | 1.34 | 118

Source Gamma Data:
Source | Dip | Azm
BOD-2 | 90 | 0
BOD-1 | 63 | 0
BOD-1.5 | 56 | 0
BOD-2.5 | 25 | 0
BOD-3 | 24 | 0
BOD-3.5 | 18 | 0

Gamma Ray affected by source above water level.
No neutron neutron because of bad hole conditions.

GAMMA RAY | LONG SPACED DENSITY | CALIPER

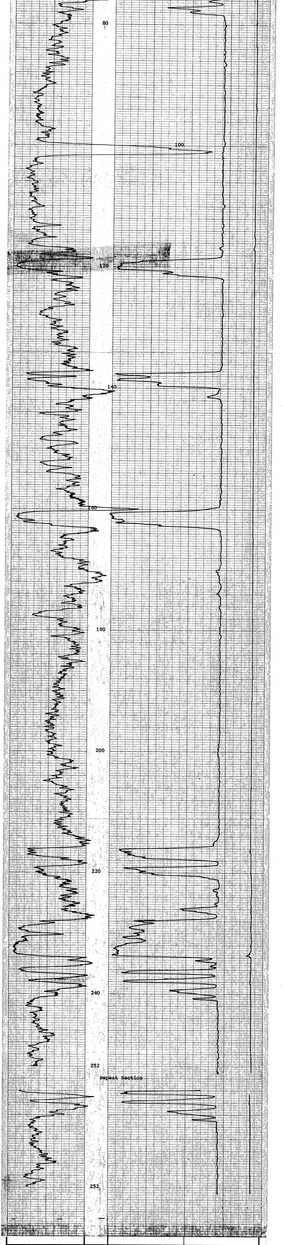
API 0 — 150 | DEPTH | 0000 — 500 | 0 7" — 2

CALIBRATION DATA
Jig No. 003 Value 3000@40cm
Jig mark shown at above value -3.10

GAMMA RAY
HOLE SIZE CORRECTION

CALIBRATION DATA
Jig Cal date 1/5/77 Jig value 6340/0 gm/cc
Jig No. 005 Term 6000 NORM 500 = .711
6000/500

COAL BULK DENSITY
gm/cc




DEPTH | 0000 — 500 | 0 7" — 2
LONG SPACED DENSITY | CALIPER

COMPANY Denlinger Coal
BOREHOLE QBD 7708
FIELD BARCOOK
COUNTY Bu.Co. STATE CONN.