SCHLUMBERGER

COMPUTED DENSITY LOG

COMPANY: ARCO OIL AND GAS CORPORATION

WELL: CHAMP 12

FIELD: CLIFFCLEAVE

COUNTY: ST. LOUIS STATE: COLORADO

Run No.	Date	Depth Driller	Depth Logger	Bottom Log Int.	Top Log Int.	Casing Driller	Casing Logger	Bit Size	Type Fluid in Hole	Density	Viscosity	pH	Fluid Loss
ONE	11-1-83	8500	8500	8500	0	8.625 @ 1500		7.875	LIGNOSULFATE	9.1	45	10.5	6.0

EQUIPMENT DATA

Run No.	Equipment Type	Serial No.	Position	Hole Size	Max. Rec. Temp.	Time Since Circ.	Time on Bottom
ONE	DENSITY	1013	BELOW	7.875	150	10:00	12:00

CALIBRATION DATA

Run No.	Source No.	Before Log	After Log
ONE	40-1000	1.13	1.13

Run No.	General	Density No.	Date	Before Log	After Log
ONE	7.875	1013	10-1-83	1.00	1.00

Run No.	Density No.	Source No.	Source Strength	Detector Type	Detector Position	Source Position
ONE	1013	40-1000	1.0	2-100	1.0	2.75

SOURCE DATA

Run No.	Date	Source No.	Source Type	Source Strength	Source Serial No.	Source Position
ONE	10-1-83	40-1000	Cs-137	1.0	1013	2.75

Remarks:

CALIPER
HOLE DIAM. IN INCHES

GAMMA RAY
API UNITS

BULK DENSITY
GRAM/CC

CORRECTION
GRAM/CC

LIMESTONE POROSITY-%

DATA SOURCE: 1-2 DD-10 FILE SERIAL: 1-DD DD-10

REPEAT SECTION

CALIBRATION DATA

CALIBRATION BEFORE SURVEY

CALIBRATION AFTER SURVEY