Schlumberger

DUAL INDUCTION-SFL

CSU Field Log

COMPANY: BRENT ENERGY
WELL: SHOGRIN FEDERAL #1
FIELD: LAKE VALLEY
COUNTY: LINCOLN
STATE: NEVADA
NATION: USA
LOCATION: 1535' FSL & 1025' FEL
SEC: 16 TWP: 6N RGE: 66E

OTHER SERVICES- LSS

PERMANENT DATUM: GROUND LEVEL ELEVATIONS-
ELEV. OF PERM. DATUM: 5954.0 F KB: 5967.0 F
LOG MEASURED FROM: KB DF: 5966.0 F
13.0 F ABOVE PERM. DATUM GL: 5954.0 F
DRLG. MEASURED FROM: KB

PROGRAM TAPE NO: 26.2
SERVICE ORDER NO: 390269

DATE: 16 MAR 85
RUN NO: 1

DEPTH-DRILLER: 8503.0 F
DEPTH-LOGGER: 8495.0 F
BTM. LOG INTERVAL: 8489.0 F
TOP LOG INTERVAL: 8130.0 F

CASING-DRILLER: 8137 F
CASING-LOGGER: 8130 F
CASING: 5.5

BIT SIZE = 4.75

TYPE FLUID IN HOLE: DISPERSALL
DENSITY: 8.7 LB/G
VISCOSITY: 39.0 S
PH: .1
FLUID LOSS: 6.8 C3
SOURCE OF SAMPLE: MUD PIT
RM: 3.530 OHMM AT 77.0 DEGF
RMF: 3.240 OHMM AT 70.0 DEGF
RMC: AT
SOURCE RMF/RMC: MEASURED/
RM AT BHT: 1.366 OHMM AT 210. DEGF
RMF AT BHT: 1.149 OHMM AT 210. DEGF
RMC AT BHT: AT 210. DEGF

TIME CIRC. STOPPED: 2300 3-15
TIME LOGGER ON BTM.: 1345 3-16

MAX. REC. TEMP: 210.0 DEGF

LOGGING UNIT NO: 8305
LOGGING UNIT LOC: VERNAL
RECORDED BY: M.W. LEA
WITNESSED BY: JOE DUNWOODY

REMARKS:

THANKS FROM THE CREW OF 8305
FEDERAL LEASE #N30929

EQUIPMENT NUMBERS-

SGC-JC 1463 NLM-BC 346 IEM-BD 1239 DIC-185
DIS 376

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 OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

FILE 6 16-MAR-85 15:07
DATA ACQUIRED 00- -00 00:00

AFTER SURVEY TOOL CHECK SUMMARY

PERFORMED: 85/03/16
PROGRAM FILE: ISN (VERSION 26.2 00/00/00)

DITD TOOL CHECK

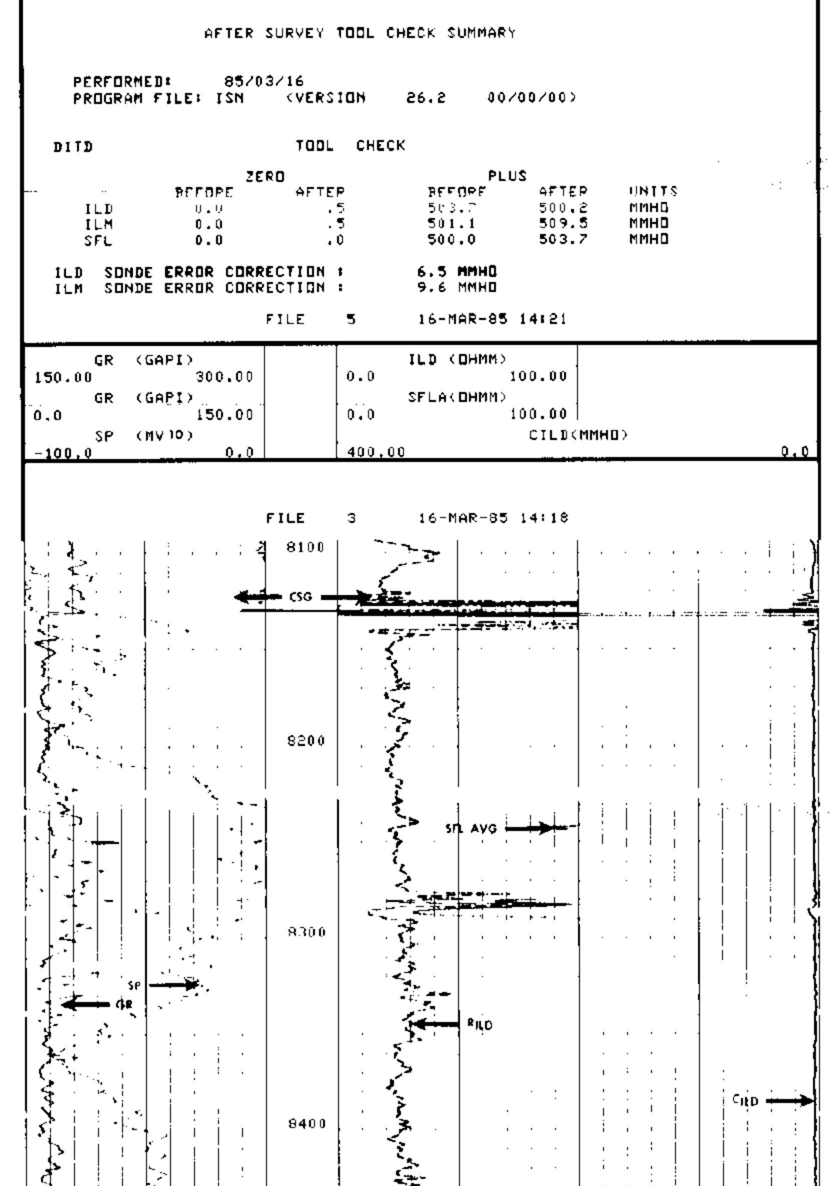
	ZERO BEFORE	ZERO AFTER	PLUS BEFORE	PLUS AFTER	UNITS
ILD	0.0	.5	503.7	500.2	MMHO
ILM	0.0	.5	501.1	509.5	MMHO
SFL	0.0	.0	500.0	503.7	MMHO

ILD SONDE ERROR CORRECTION : 6.5 MMHO
ILM SONDE ERROR CORRECTION : 9.6 MMHO

FILE 5 16-MAR-85 14:21

GR (GAPI) 150.00 – 300.00	ILD (OHMM) 0.0 – 100.00		
GR (GAPI) 0.0 – 150.00	SFLA(OHMM) 0.0 – 100.00		
SP (MV 10) -100.0 – 0.0	CILD(MMHO) 400.00 – 0.0		

FILE 3 16-MAR-85 14:18



FILE 3 16-MAR-85 14:09

GR (GAPI) 150.00 – 300.00	ILD (OHMM) 0.0 – 100.00	
GR (GAPI) 0.0 – 150.00	SFLA(OHMM) 0.0 – 100.00	
SP (MV10) -100.0 – 0.0	CILD(MMHO) 400.00 – 0.0	

SENSOR MEASURE POINT TO TOOL ZERO

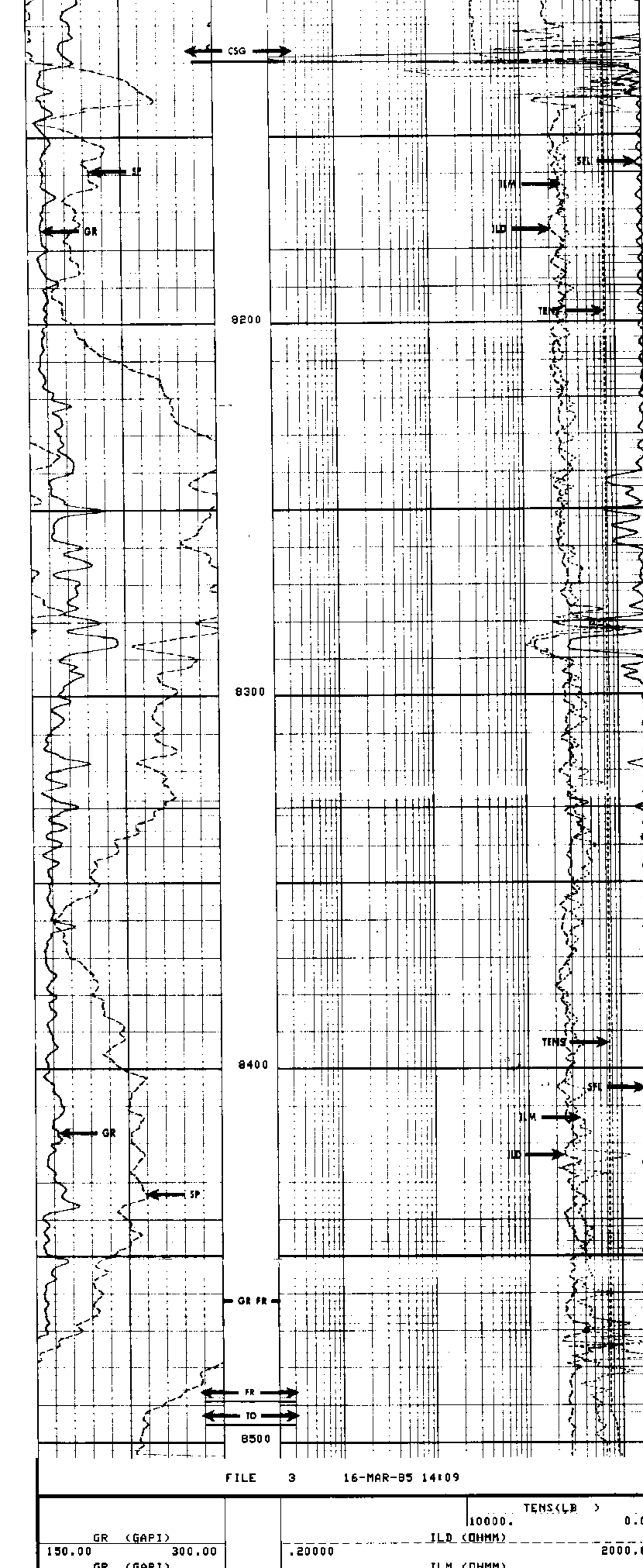
ILD 9.4 FEET
ILM 5.7 FEET
SPAR 2.5 FEET
TENS 2.5 FEET
GR 32.9 FEET
SFL 6.4 FEET
SP 2.5 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SBR	1.00000	OHMM	DSEC	6.50000	MMHO
BHS	OPEN		MSEC	9.60000	MMHO
BS	4.75000	IN			

GR (GAPI) 150.00 – 300.00	TENS(LB) 10000. – 0.0
GR (GAPI) 0.0 – 150.00	ILD (OHMM) .20000 – 2000.0
SP (MV10) -100.0 – 0.0	ILM (OHMM) .20000 – 2000.0
	SFLU(OHMM) .20000 – 2000.0

FILE 3 16-MAR-85 14:18



FILE 3 16-MAR-85 14:09

GR (GAPI) 150.00 – 300.00	TENS(LB) 10000. – 0.0
GR (GAPI) 0.0 – 150.00	ILD (OHMM) .20000 – 2000.0
SP (MV10) -100.0 – 0.0	ILM (OHMM) .20000 – 2000.0
	SFLU(OHMM) .20000 – 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

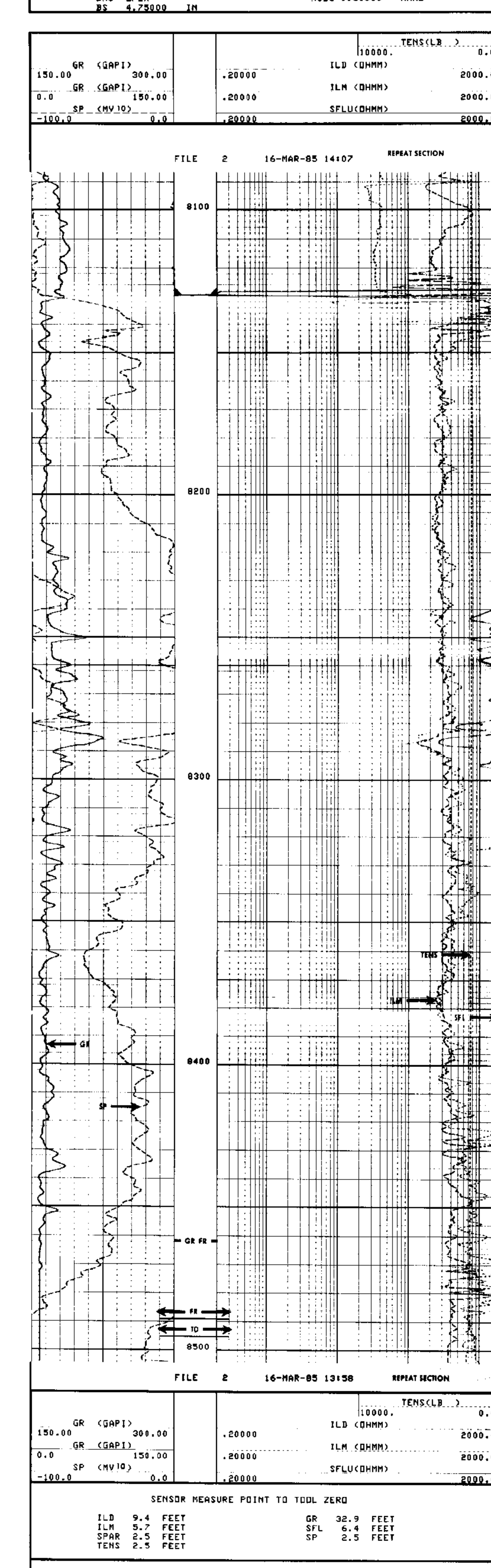
ILD 9.4 FEET
ILM 5.7 FEET
SPAR 2.5 FEET
TENS 2.5 FEET
GR 32.9 FEET
SFL 6.4 FEET
SP 2.5 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SBR	1.00000	OHMM	DSEC	6.50000	MMHO
BHS	OPEN		MSEC	9.60000	MMHO
BS	4.75000	IN			

GR (GAPI) 150.00 – 300.00	TENS(LB) 10000. – 0.0
GR (GAPI) 0.0 – 150.00	ILD (OHMM) .20000 – 2000.0
SP (MV10) -100.0 – 0.0	ILM (OHMM) .20000 – 2000.0
	SFLU(OHMM) .20000 – 2000.0

FILE 2 16-MAR-85 14:07 REPEAT SECTION



FILE 2 16-MAR-85 13:58 REPEAT SECTION

GR (GAPI) 150.00 – 300.00	TENS(LB) 10000. – 0.0
GR (GAPI) 0.0 – 150.00	ILD (OHMM) .20000 – 2000.0
SP (MV10) -100.0 – 0.0	ILM (OHMM) .20000 – 2000.0
	SFLU(OHMM) .20000 – 2000.0

SENSOR MEASURE POINT TO TOOL ZERO

ILD 9.4 FEET
ILM 5.7 FEET
SPAR 2.5 FEET
TENS 2.5 FEET
GR 32.9 FEET
SFL 6.4 FEET
SP 2.5 FEET

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
SBR	1.00000	OHMM	DSEC	6.50000	MMHO
BHS	OPEN		MSEC	9.60000	MMHO
BS	4.75000	IN			

BEFORE SURVEY CALIBRATION SUMMARY

PERFORMED: 85/03/16
PROGRAM FILE: ISN (VERSION 26.2 00/00/00)

DITD ELECTRONICS CALIBRATION SUMMARY

	MEASURED ZERO	MEASURED PLUS	CALIBRATED ZERO	CALIBRATED PLUS	UNITS
ILD	2.3	509.1	0.0	503.7	MMHO
ILM	2.7	467.5	0.0	501.1	MMHO
SFL	.7	530.5	0.0	500.0	MMHO

ILD SONDE ERROR CORRECTION : 6.5 MMHO
ILM SONDE ERROR CORRECTION : 9.6 MMHO

SGTE DETECTOR CALIBRATION SUMMARY

	MEASURED BKGD	MEASURED JIG	CALIBRATED	UNITS
GR	48	200	165	GAPI

FILE 1 16-MAR-85 13:51

SHOP SUMMARY

PERFORMED: 85/03/12
PROGRAM FILE: SHOP (VERSION 26.2 83/11/17)

DITD ELECTRONICS CALIBRATION SUMMARY

	TEST LOOP CALIBRATION MEASURED ZERO	MEASURED PLUS	CALIBRATED ZERO	CALIBRATED PLUS	TOOL CHECK CALIBRATED ZERO	PLUS	UNITS
ILD	-5.0	492.8	0.0	500.0	0.0	504.2	MMHO
ILM	-7.7	472.3	0.0	500.0	0.0	501.0	MMHO

ILD SONDE ERROR CORRECTION : 6.5 MMHO
ILM SONDE ERROR CORRECTION : 9.6 MMHO

(IS:376 , IC:185)

FILE 4 12-MAR-85 10:24