

FINAL PRINT
Schlumberger

DUAL INDUCTION - SFL
WITH LINEAR CORRELATION LOG

COUNTY		SAN JUAN	
FIELD		BASIN FRUITLAND COAL	
LOCATION		1800' FSL & 230' FWL	
WELL		CARNES 32-6-11 #1	
COMPANY		RICHMOND PETROLEUM INC.	
COMPANY		RICHMOND PETROLEUM INC.	
WELL		CARNES 32-6-11 #1	
FIELD		BASIN FRUITLAND COAL	
COUNTY		SAN JUAN	
STATE		NEW MEXICO	
LOCATION		1800' FSL & 230' FWL	
AP SERIAL NO.		N/A	
SECT.		11	
TWP.		32 N	
RANGE		6 W	
Permanent Datum		GROUND LEVEL Elev. 6149.0 F	
Log Measured From		KELLY BUSHING 17.0 F above Perm. Datum	
Drilling Measured From		KELLY BUSHING	
Date		29-DEC-1992	
Run No.		ONE	
Depth Driller		2828.0 F	
Depth Logger (Schl.)		2828.0 F	
Btm. Log Interval		2822.0 F	
Top Log Interval		2512.0 F	
Casing-Driller		9.5/8" @ 233.0 F	
Casing-Logger		7" @ 2517.0 F	
Bit Size		2512.0 F	
Type Fluid in Hole		GEL CHEM @ 6.25" @	
Dens.		11.00 LB/G	
Visc.		56.0 S	
pH		7.0	
Fid. Loss		12.0 C3	
Source of Sample		MUDTANK	
Rm @ Meas. Temp.		3.920 OHMM @ 62.0 DEGF	
Rmf @ Meas. Temp.		2.630 OHMM @ 62.0 DEGF	
Rmc @ Meas. Temp.		5.150 OHMM @ 62.0 DEGF	
Source: Rmf		MEASURED	
Rm @ BHT		2.352 OHMM @ 108. DEGF	
Circulation Ended		1100 29-DEC-1992	
Logger on Bottom		SEE LOG	
Max. Rec. Temp.		108. DEGF	
Equip. Location		8191 FARMINGTON	
Recorded By		GEORGE TRACY	
Witnessed By		BRUCE DELVENTHAL	

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

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 interpretations 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.

Run No.	ONE
Service Order No.	597890
Drilling Fluid Level	
Salinity	250.0 PPM
Rmf @ BHT	1.578 OHMM @ 108. DEGF
Rmc @ BHT	3.090 OHMM @ 108. DEGF
Logging Speed	1800.0 F/HR
EQUIPMENT DATA	
Tool Number 1	DRS 3889
Tool Number 2	NSC 2903
Tool Number 3	CNC 2343
Tool Number 4	DIC 487
Tool Number 5	DIS 490
Tool Number 6	SGTL 8191
Tool Number 7	TCCB 8191
Tool Number 8	
Tool Number 9	
Tool Number 10	
Tool Number 11	
Tool Number 12	

RECEIVED
NOV 14 1994
OIL CON. DIV.
DIST. 3

REMARKS:
LOG RUN ON SAND MATRIX (2.65 G/CC).
TOOLS RUN SLICK DUE TO HOLE SIZE.

CREW: ROOT

ACCUMULATED INTEGRATION VALUES SUMMARY:

Integrated Hole Volume: 64.5390 F3 FROM 2828.00 F TO 2512.00 F
 Integrated Cement Volume: 29.6377 F3 FROM 2828.00 F TO 2512.00 F
 (ASSUMING 4.50000 IN O.D. CASING)

EVENT MARK SUMMARY:

OUTPUT	INTERVAL BETWEEN PIPS	DEPTH TRACK EDGE
Integrated Hole Volume	10.0000 F3	LEFT EDGE
Integrated Cement Volume	10.0000 F3	RIGHT EDGE

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
DCAS	2512.00	F	2566.5				

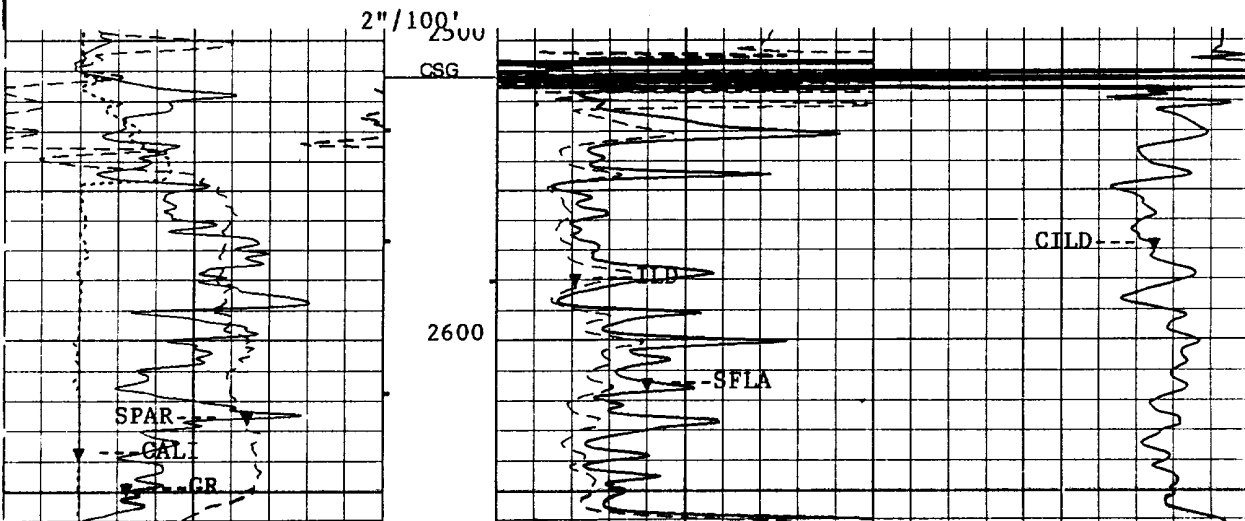
SPAR(MV)		ILD(OHMM)	
40.00	20.000	0.0	100.00
CALI(IN)		SFLA(OHMM)	
4.0000	14.000	0.0	100.00
GR(GAPI)		CILD(MM/M)	
0.0	200.00	400.00	0.0
IPBA -- Z2			
Z3 -- IFBA			

CP 32.6

FILE 7

29-DEC-1992 16:54

(UP)

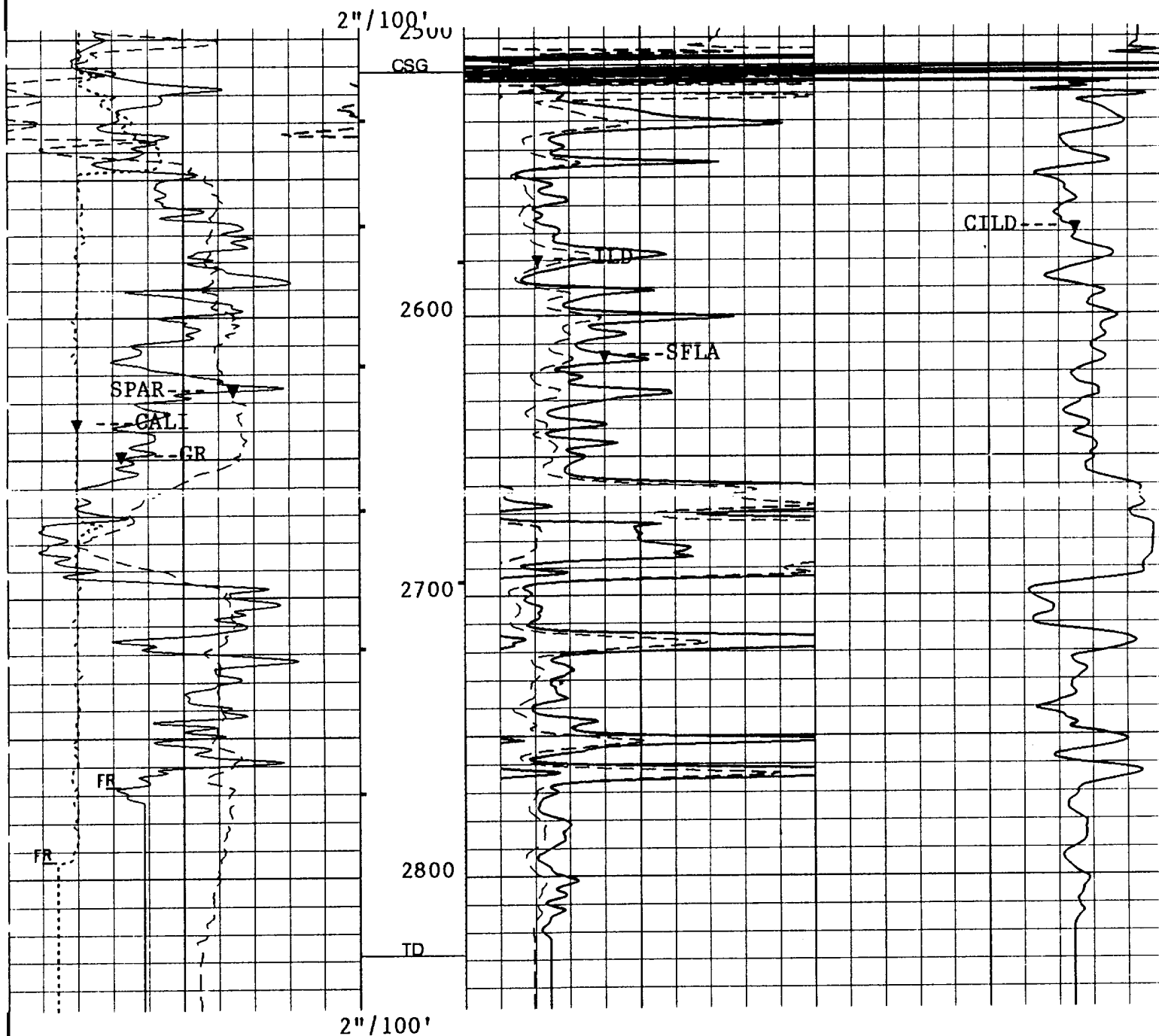


CP 32.6

FILE 7

29-DEC-1992 16:54

(UP)



CP 32.6

FILE 7

29-DEC-1992 16:41

(UP)

IPBA -- Z2

Z3 -- IFBA

SPAR(MV)

-80.00

20.000

CALI(IN)

14.0000

14.000

ILD(OHMM)

0.0

100.00

SFLA(OHMM)

0.0

100.00

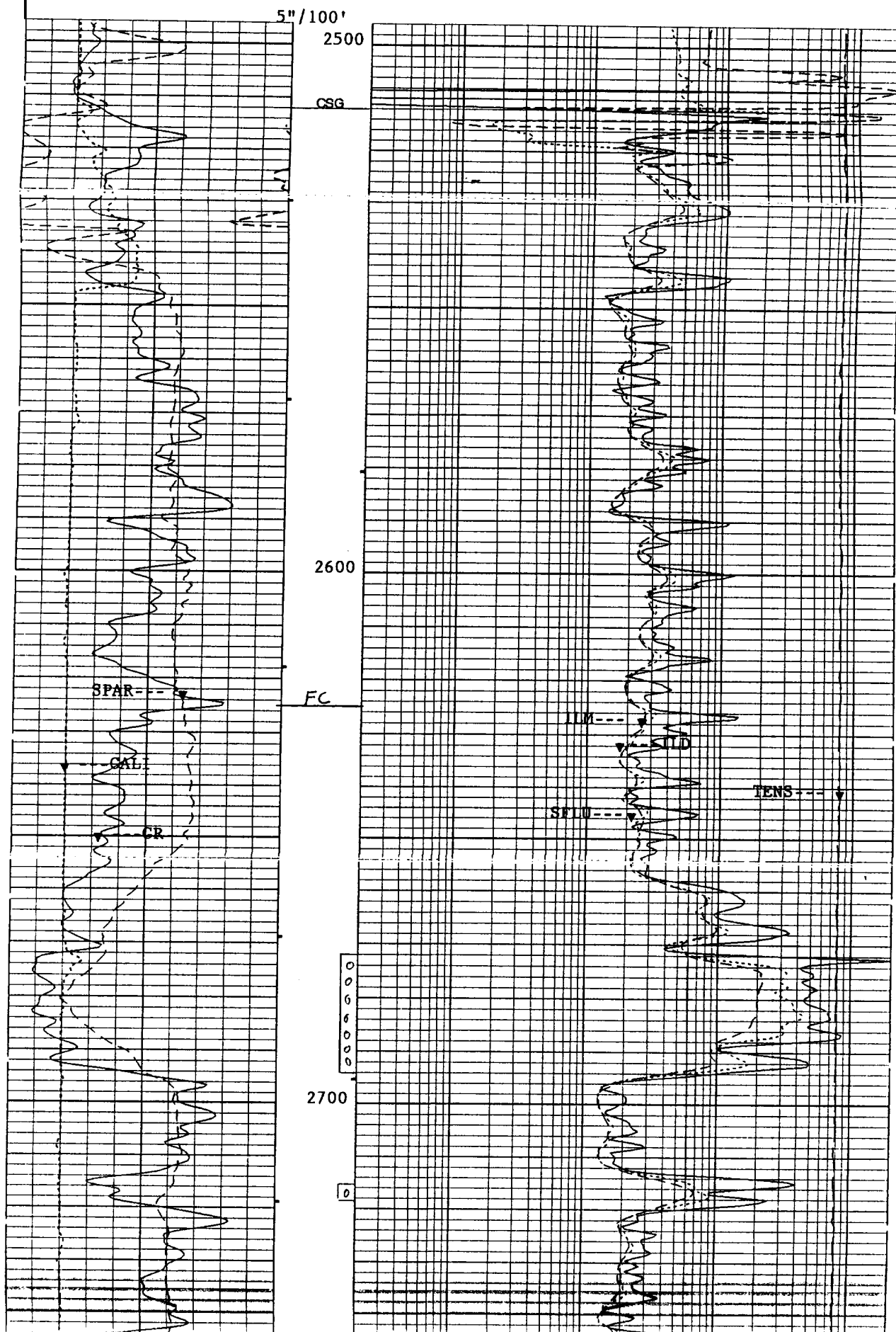
DCAS 2512.00 F 2566.5

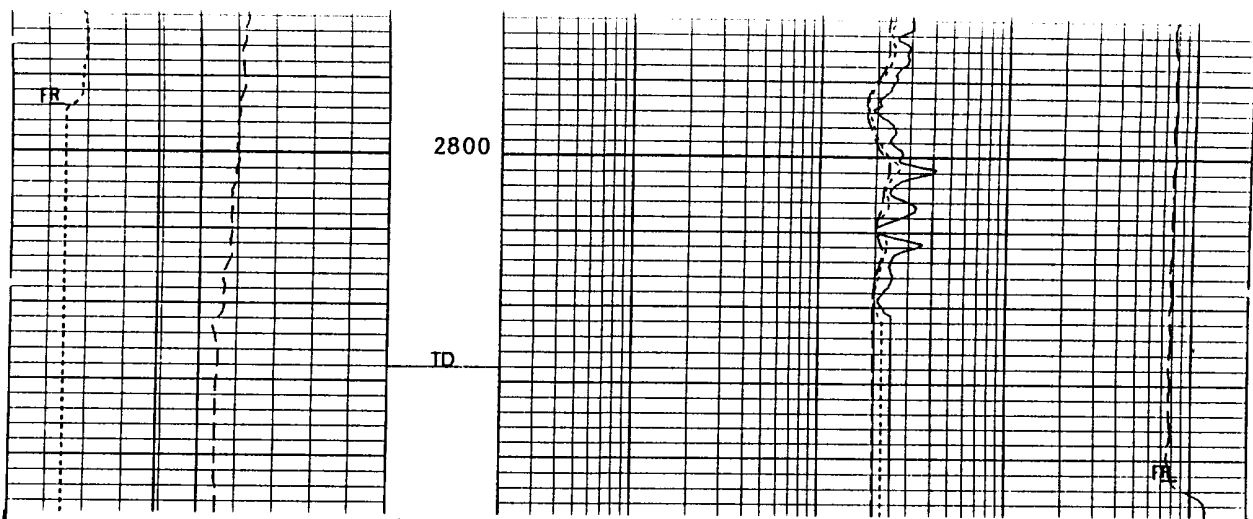
		TENS(LBF)	
		10000.	0.0
SPAR(MV)	20.000	ILM(OHMM)	2000.0
CALI(IN)	14.000	ILD(OHMM)	2000.0
GR(GAPI)	200.00	SFLU(OHMM)	2000.0
80.00		20000	
4.0000		20000	
0.0		20000	

IPBA -- Z2

Z3 -- IFBA

CP 32.6 FILE 7 29-DEC-1992 16:54 (UP)





CP 32.6

FILE 7

29-DEC-1992 16:41

(UP)

IPBA -- Z2

Z3 -- IFBA

SPAR(MV)		TENS(LBF)	
80.00	20.000	10000	0.0
CALI(IN)		ILM(OHMM)	
4.0000	14.000	20000	2000.0
GR(GAPI)		ILD(OHMM)	
0.0	200.00	20000	2000.0
		SFLU(OHMM)	
		20000	2000.0

SENSOR MEASURE POINT TO TOOL ZERO

GR	60.5	FEET	SP	10.3	FEET
IRM	6.0	FEET	IXM	6.0	FEET
ITEM	6.5	FEET	IXD	9.5	FEET
SFB	6.5	FEET	SPA	10.3	FEET
SFV	6.5	FEET	SFC	6.5	FEET
CFTC	51.5	FEET	IRD	9.5	FEET
LITH	33.9	FEET	CNTC	51.0	FEET
LS	33.9	FEET	LL	33.9	FEET
PARI	33.4	FEET	LU	33.9	FEET
SS2	33.4	FEET	SS1	33.4	FEET
TENS	-14.7	FEET	CALI	34.0	FEET
TNRA	52.0	FEET			

PARAMETERS

NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	8.00000	LB/G	TD	2828.00	F
FCD	4.50000	IN	DHC	CALI	
BFM	LIQU		MDEN	2.65000	G/C3
FD	1.00000	G/C3	DPPM	STAN	
MATR	SAND		HC	CALI	
NPDC	0		HSCO	YES	
SOCO	NO		MCCO	NO	
BSCO	NO		FSCO	NO	
MWCO	NO		PTCO	NO	
CCCO	NO		SDAT	SOCN	
MCOR	NATU		SOCN	.500000	IN
FSAL	-50000.0	PPM	ANGL	0.0	DEG
GGRD	.0100000	DF/F	BHFL	WATE	