



PHASOR INDUCTION - GR

COMPANY: Cal Resources Ltd
 WELL: Vedder #14
 FIELD: Mt. Poso
 COUNTY: Kern
 STATE: California

LOGGING DEPTH: 1915.00 F
 LOGGING INTERVAL: 1915.00 F
 LOGGING START: 1915.00 F
 LOGGING END: 1915.00 F

DATE: 2/25/92
 TIME: 09:23
 OPERATOR: R. Skipper/N. Guerra

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.

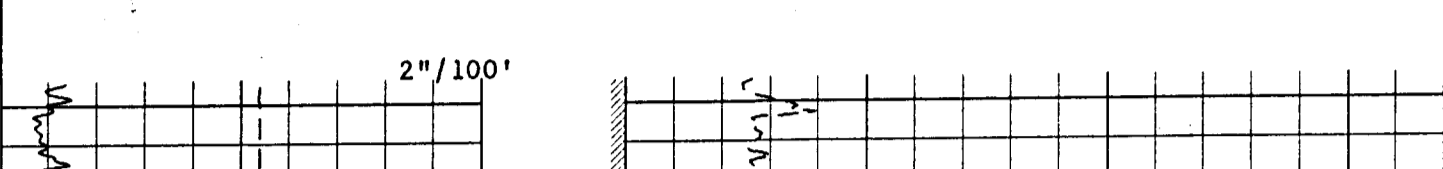
Run No.	Two
Service Order No.	80416
Drilling Fluid Level	50.0 PPM
Rmf @ BHT	184 DEGF
Rmc @ BHT	184 DEGF
Logging Speed	3600.0 F/HR

Tool Number 1	DIS
Tool Number 2	DIC
Tool Number 3	SGT L
Tool Number 4	TCC B
Tool Number 5	
Tool Number 6	
Tool Number 7	
Tool Number 8	
Tool Number 9	
Tool Number 10	
Tool Number 11	
Tool Number 12	

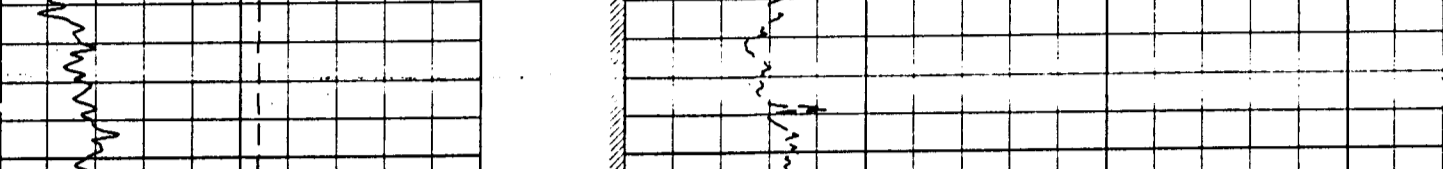
REMARKS: Thank you for choosing Schlumberger!
 Rig: Pride
 Operator: R. Skipper/N. Guerra
 Mud data as complete as possible.

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
TD	1915.00	F	1961.5				



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SENSOR MEASURE POINT TO TOOL ZERO

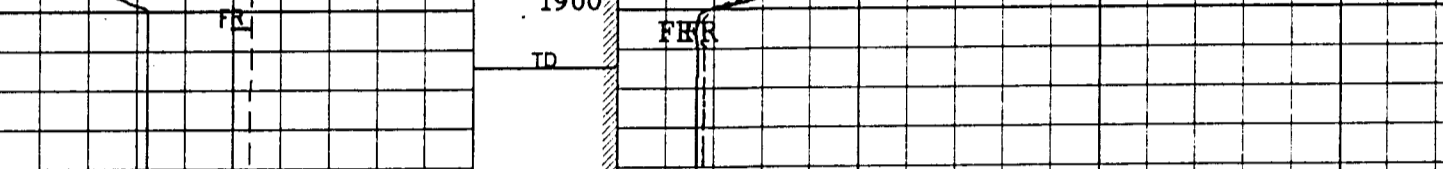
DITE 10.3 FEET SCTL 35.9 FEET
 DIT -44.0 FEET

PARAMETERS

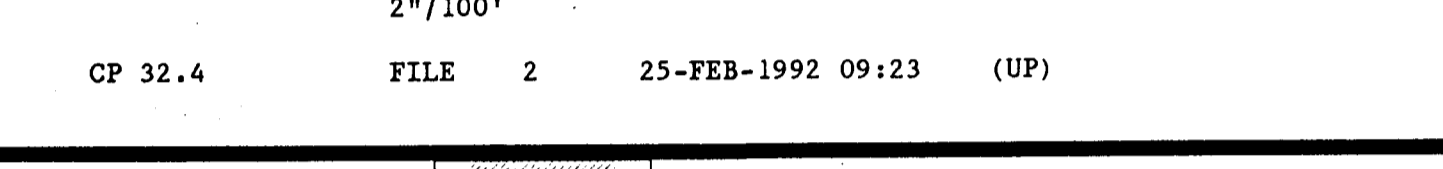
NAME	VALUE	UNIT	NAME	VALUE	UNIT
WMUD	9.00000	LB/G	TD	1928.00	F
IFRS	20	KHZ	SBR	1.00000	OHMM
MXE2	75.7724	MM/M	DXE2	78.9540	MM/M
MRE2	29.4287	MM/M	DRE2	15.5943	MM/M
MPH2	-785673	DEG	DPH2	-113178	DEG
MGF2	1.00608		DPF2	.999449	
DESP	DISA		SEL	ALL	
DCAS	0.0	F	ITEM	ALL	
DEVI	0.0	DEG	DSES	H48	
IPRO	PHAS		IPHA	NORM	
GTSE	TEMP		SHT	80.0000	DEGF
SPAE	DISA		BS	6.25000	IN
BHS	OPEN				

CHANGED PARAMETERS

NAME	VALUE	UNIT	DEPTH (F)	NAME	VALUE	UNIT	DEPTH (F)
TD	1915.00	F	1961.5				



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CONS.	GAIN	VALID RANGE	CONS.	PHASE	VALID RANGE
10KHZ:					
ILD:	MGF1	.988 .900 => 1.100	DPH1	-.06	-1.50 => 1.50
ILM:	MGF1	1.006 .900 => 1.100	MPH1	-1.19	-1.50 => 1.50
20KHZ:					
ILD:	MGF2	.999 .900 => 1.100	DPH2	-.11	-2.00 => 2.00
ILM:	MGF2	1.006 .900 => 1.100	MPH2	-.79	-3.00 => 1.00
40KHZ:					
ILD:	MGF4	1.023 .900 => 1.100	DPH4	-1.26	-4.00 => 2.00
ILM:	MGF4	1.011 .900 => 1.100	MPH4	-1.92	-5.00 => 1.00

SONDE ERROR CORRECTIONS: CONDUCTION FOR SONDE IN ZERO CONDUCTIVITY ENVIRONMENT

CONS.	SONDE ERROR CORRECTION (MM/M)	VALID RANGE (MM/M)
10KHZ:		
IXD SEC:	DRE1	40.96 -10.0 => 125.0
IRM SEC:	DXE1	134.80 -250.0 => 350.0
IXM SEC:	MRE1	136.09 -50.0 => 140.0
IXM SEC:	MXE1	97.06 -1300.0 => 1300.0
20KHZ:		
IXD SEC:	DRE2	15.59 -0.0 => 30.0
IRM SEC:	DXE2	78.95 -125.0 => 200.0
IXM SEC:	MRE2	29.43 -10.0 => 50.0
IXM SEC:	MXE2	75.77 -650.0 => 650.0
40KHZ:		
IXD SEC:	DRE4	5.03 0.0 => 15.0
IRM SEC:	DXE4	54.13 -75.0 => 125.0
IXM SEC:	MRE4	-1.91 -10.0 => 25.0
IXM SEC:	MXE4	78.84 -350.0 => 350.0

NOTE: ALL SONDE ERROR CORRECTIONS HAVE BEEN NORMALIZED TO 25 DEGC.

SHOP ELECTRONIC CALIBRATION SUMMARY

ELECTRONIC CALIBRATION: CALIBRATION OF SYSTEM ELECTRONICS USING THE INTERNAL REFERENCE

INDUCTION ELECTRONICS:

OFFSET (MM/M)	VALID RANGE (MM/M)	GAIN	VALID RANGE	PHASE (DEG.)	VALID RANGE (DEG.)
10 KHZ:					
IRD	21.4 -375. => 375.	.931	.75 => 1.25	9.41	-5.00 => 20.00
IXD	26.2 -375. => 375.	.937	.75 => 1.25		
IRM	46.8 -900. => 900.	.937	.75 => 1.25		
IXM	32.9 -900. => 900.	.933	.75 => 1.25	11.04	-5.00 => 20.00
20 KHZ:					
IRD	8.2 -150. => 150.	.943	.75 => 1.25		
IXD	10.4 -150. => 150.	.950	.75 => 1.25	7.00	-5.00 => 20.00
IRM	19.3 -350. => 350.	.987	.75 => 1.25		
IXM	13.7 -350. => 350.	.983	.75 => 1.25	9.79	-5.00 => 20.00
40 KHZ:					
IRD	5.3 -100. => 100.	.927	.75 => 1.25		
IXD	6.9 -100. => 100.	.933	.75 => 1.25	22.08	-10.00 => 35.00
IRM	12.6 -200. => 200.	1.004	.75 => 1.25		
IXM	9.0 -200. => 200.	.999	.75 => 1.25	25.12	-10.00 => 35.00

SFL ELECTRONICS:

OFFSET	VALID RANGE	UNITS	GAIN	VALID RANGE
SFV	2.4 -16.0 => 16.0	MV	1.096	.75 => 1.25
SFC	.0 -.7 => .7	MA	1.101	.75 => 1.25

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COMPANY	Shell Western Expl. & Prod., Inc.	8CHL	FR	1908.0 F
WELL	Vedder #14	8CHL	TD	1916.0 F
FIELD	Mt. Poso	DRLR	TD	1928.0 F
COUNTY	Kern	STATE	California	Elev: KB
				DF 1197.0 F
				QL 1194.0 F

Schlumberger PHASOR INDUCTION - GR