EDITADO

Schlumberger

DUAL LATEROLOG - GR - SP 2"/100'

CSU Field Log

WORKING FILE GEOSCIENCES

L06·22

PETRO—TECH PERUANA S.A.
GEOLOGIST WELL FILE

COMPANY:	BELCO PETROLEUM CORP. OF PERU
WELL:	Z2A-21-579-D-L06(L06-22)
FIELD:	LOBITOS OFFSHORE
RIG :	EQUIPO 3
STATE:	PIURA
NATION:	PERU
LOCATION:	
SEC:	TWP: TALARA RGE:
LATITUDE:	N:1,589,631.27
LONGITUDE:	E:124,653.176

OTHER SERVICES-
FDC-CNL-GR

PROGRAM TAPE NO:
26.2

PERMANENT DATUM: SEA LEVEL
ELEV. OF PERM. DATUM:
LOG MEASURED FROM: ROTARY TABL
49.0 F ABOVE PERM. DATUM
DRLG. MEASURED FROM: ROTARY TABLE

ELEVATIONS-
KB: 50.0 F
DF: 49.0 F
GL: -335.0 F

DATE: 15 OCT 84
RUN NO: 1

DEPTH-DRILLER:	5987.0 F	
DEPTH-LOGGER:	6006.0 F	
BTM. LOG INTERVAL:	5991.0 F	
TOP LOG INTERVAL:	390.0 F	
CASING-DRILLER:	2321 F	
CASING-LOGGER:	2318 F	
CASING:	9 5/8"	
WEIGHT:	40.00 LB/F	
BIT SIZE:	12 1/4"	7 7/8"
DEPTH:	2321 F	5987 F

TYPE FLUID IN HOLE:	SALT MUD POLYMER
DENSITY:	11.3 LB/G
VISCOSITY:	50.0 S
PH:	11.0
FLUID LOSS:	3.6 C3
SOURCE OF SAMPLE:	TANK
RM:	.684 OHMM AT 81.0 DEGF
RMF:	.640 OHMM AT 74.0 DEGF
RMC:	.940 OHMM AT 72.0 DEGF
SOURCE RMF/RMC:	PRESS /PRESS
RM AT BHT:	.401 OHMM AT 143. DEGF
RMF AT BHT:	.345 OHMM AT 143. DEGF
RMC AT BHT:	.495 OHMM AT 143. DEGF
TIME CIRC. STOPPED:	1700/14
TIME LOGGER ON BTM.:	2330/14
MAX. REC. TEMP:	143.0 DEGF
LOGGING UNIT NO:	736
LOGGING UNIT LOC:	TPU
RECORDED BY:	T. SATTERTHWAITE
WITNESSED BY:	R. MORANTE

REMARKS:

SP LACKS DEFINITION BECAUSE OF HIGH SALINITY MUD
MAXIMUM DEVIATION IS 46 DEGREES
SP CYCLIC NOISE DUE TO RIG INTERFERENCE. UNABLE TO ISOLATE THE CAUSE

EQUIPMENT NUMBERS-

ECH-MJA 984	SRE-CB 1703	DRS-A 860	SRA-A 969
DLH-CB 999	DLC-BB 1845	DLS-D 945	DLE-DB 887
ECH-KG 3112	NSM 1800	DLM 2851	MRM 2733

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 13 15-OCT-84 03:39
DATA ACQUIRED 00- -00 00:00

GR (GAPI)
0.0 100.00

FILE 11 15-OCT-84 03:27

TALARA

CHACRA
2576 MD
-2286 SS
S: 673
W: 379

RB?? 3380 MD
-2861 SS
S: 1179
W: 641
HD 1342

3490 MD
-2943 SS
1415 HD

L06-22

RIO BRAVO SDY
3640 MD
-3052 SS
S·1319 HD: 1511
W: 706 (-3058)

Perf & frac. 5th stage: 3978' - 3644, 27 shots at 19th/84.

NET SAND READINGS:
ON GR: 600' MD 582' VD

ON POROSITY LOGS. FROM RIOLS

6% ≤	314' MD	305' VD
9% ≤	173	168
12	56	54
9%	104 MD	98' VD

oct. 22/84 : 624 BO x 502 BW (frac) 1/4", 140# wh
oct. 24 : 438 x 60 3/8"; 170#
oct. 27 : 501 x 89 32/64"; 50#
oct. 29 : 462 x 88 20/64"; 140#

3965
-3320 SS
1700 HD

MASSIVE SANDS
4075 MD
-3412
1760 HD

Mamage

17 Junio /2001
Perforated from 4382-4102' w/200 Shots.
Pres after shooting = 0
IP = 580 psi
FG = 0.158 Psi/Ft
Set RTTS @ 3400'
BJ pumped 7200 galls of Acid. w/2500 psi.
Swabbing well.
Swabbed @ 6:00 am from 1900 to 3250' recovered 5 bls of treated water after 2 hours
Swabbed again 2700-3400 recovered 3 bls of treated water.
PO wo fluid level

Perf & frac. 4th stage: 4399' - 4103', 37 shots at 19th/84

Perf & frac. 3rd st. 4623-4423'; 19 shots; at 18/84

Perf & frac. 2nd stage 5000-4666, 20 shots at 18/84

4955 MD (-4178)
HD: 2195

Perf & frac. 1st stage 5608-5305', 20 shots at 18/84

RIO BRAVO SHALY
5385 MD
-4550 SS
S 2034
W: 1261

window

arena no completada

PALEGREDA
5730' MD -4847' SS
S 2112 W 1443'
HD: 2,560

5 1/2 csg: shoe at 5883'

5883 MD
-4974 SS
HD: 2631
vert ∢ 30.50°

TMD 5991
-5071
S: 2204
W 1517

22-907

FILE 6 14-OCT-84 23:49

L06-22

GR (GAPI)
0.0 100.00
SP (MV)
-60.00 0.0

LLD (OHMM)
0.0 50.000
LLS (OHMM)
0.0 10.000
LLS (OHMM)
0.0 50.000

CLLD(MMHO)
500.00 0.0

SENSOR MEASURE POINT TO TOOL ZERO

SPAR	66.6	FEET	SP	66.6	FEET
CALI	35.5	FEET	GR	53.5	FEET
DI90	14.9	FEET	DV90	14.9	FEET
SI90	14.9	FEET	SV90	14.9	FEET
DI0	14.9	FEET	DV0	14.9	FEET
SI0	14.9	FEET	SV0	14.9	FEET
LLS	14.9	FEET	TENS	14.9	FEET
CMSF	35.2	FEET	LLD	14.9	FEET
I1	35.5	FEET			

PARAMETERS

PETRO—TECH PERUANA S.A.
GEOLOGIST WELL FILE

NAME	VALUE	UNIT	NAME	VALUE	UNIT
RMUD	.120000	OHMM	SPT	STAN	
BS	7.87500	IN	BHS	OPEN	