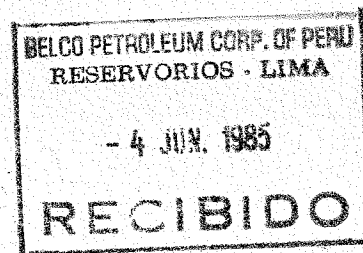


LOBITOS OFFSHORE
LO6-2

Well File

TEMPERATURE GRADIENT
RUN # 01 85-05-21
TEMPERATURE GRADIENT
RUN # 02 85-05-21



SUBSURFACE PRESSURE MEASUREMENTS

PAGE 01 OF 02

1. BASIC DATA

COMPANY Belco Petroleum corp.of Peru Inc.	WELL NAME Lobitos Offshore
ADDRESS Negritos.-	LOCATION L06-2
FIELD and POOL Lobitos	STATUS: OIL ☐ GAS ☐ OTHER SPECIFY
TYPE OF TEST Temperature Gradient	DATE OF TEST 85 05 21 TO 85 05 21
PRODUCING INTERVAL (CF) FT PERF ☐ OH ☐	PRODUCING THROUGH: IN. TUBING ☐ IN. CASING ☐
ELEVATION (CF) FT (KB) FT (KB) to CF FT	MID-POINT OF PRODUCING (MPP) INTERVAL (CF) FT
POOL DATUM FT. (subsea)	DATUM DEPTH OF WELL (FROM CF) FT
ELEMENT SERIAL NO KT-8230 RANGE 60° - 160°F	CLOCK RANGE 3 h S ☐ D ☐ # 27695 I.H. # 12638
CALIBRATION EQUATION	DATE OF LAST CALIBRATION 85 05 21

COMPANY

2. STATIC TEST

PRESSURE (GAUGE) TUBING PSI GAUGE ☐ DWG ☐	SHUT-IN DATE 85 05 21 @ 18:01 h
CASING PSI GAUGE ☐ DWG ☐	DATE ON BOTTOM 85 05 21 @ 18:06 h
RUN DEPTH (FROM CF) (5227' MD) FT	DATE OFF BOTTOM 85 05 21 @ 18:06 PSI
B.H. TEMP °C SURFACE TEMP F	MPP PRESSURE (GAUGE) PSI
R.D. PRESSURE (GAUGE) PSI GRADIENT PSI/FT	DATUM PRESSURE (GAUGE) PSI

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING FT	SHUT-IN DATE 85 05 21 @ 18:06 h
AVERAGE TUBING JOINT LENGTH FT	CURRENT WATER CUT %
NO. OF JOINTS TO LIQUID	CASING PRESSURE (GAUGE) PSI
LENGTH OF GAS COLUMN FT	GAS COLUMN PRESSURE (GAUGE) PSI
LENGTH OF LIQUID COLUMN FT	LIQUID COLUMN PRESSURE (GAUGE) PSI
GAS GRAVITY GAS GRADIENT PSI/FT	MPP PRESSURE (GAUGE) PSI
OIL GRAVITY OIL GRADIENT PSI/FT	DATUM DEPTH PRESSURE (GAUGE) PSI

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WELL PARAMETERS: POROSITY % WELL RADIUS FT THICKNESS FT WATER SATURATION %
B.H. TEMP °F DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT 85 05 21
CASING I.D. IN TUBING I.D. IN TUBING WEIGHT MASS LBS/FT
COMPRESSIBILITY μZ
OIL WELLS ONLY: GAS WELLS ONLY:
OIL VISCOSITY CC GAS VISCOSITY μZ
BUBBLE POINT PRESSURE (GAUGE) PSI Z at RESERVOIR CONDITIONS
B ₀ = VOL. AT RES. COND. RELATIVE DENSITY G
WELL PRODUCING RATE DURING ☐ PRIOR TO ☐ TEST OIL BBL/D GAS MCF/D WATER BBL/D
TOTAL PRODUCTION DURING ☐ PRIOR TO ☐ TEST OIL BBL/D GAS MCF WATER BBL/D

WELL NAME & UNIQUE IDENTIFIER

5. CHART READINGS AND CALCULATIONS

DATE			DEPTH BELOW CF FT	ACC. TIME h	TIME h	DEFLECTION IN	CALCULATED PRESSURE PSIG	CORRECTION DEVIATION PSI	TEMPERAT. °F	GRADIENT PSI/FT
YR	MO	DAY								
85	05	21	Surface		16:08	0.2370			70.78	
			250		16:14	0.1660			67.84	
			500		16:20	0.3910			76.85	
			750		16:26	0.4650			79.67	
			1000		16:32	0.4860			80.47	
			1250		16:38	0.5360			82.44	
			1500		16:49	0.7940			94.48	
			1750		16:55	0.7950			94.53	
			2000		17:01	0.8980			99.85	
85	05	21	2250		17:07	0.9900			104.58	

REMARKS

Cement job finished at 05:00 85-05-20
 I.F.V. at 5227' Shoe at 5665'
 Temperature survey # 01
 SURVEY COMPANY **Go Well Services** TEST BY **J. Covenas** COMPUTED BY **J. Covenas** CHECKED BY **J. Covenas**

LOCATION L06-2

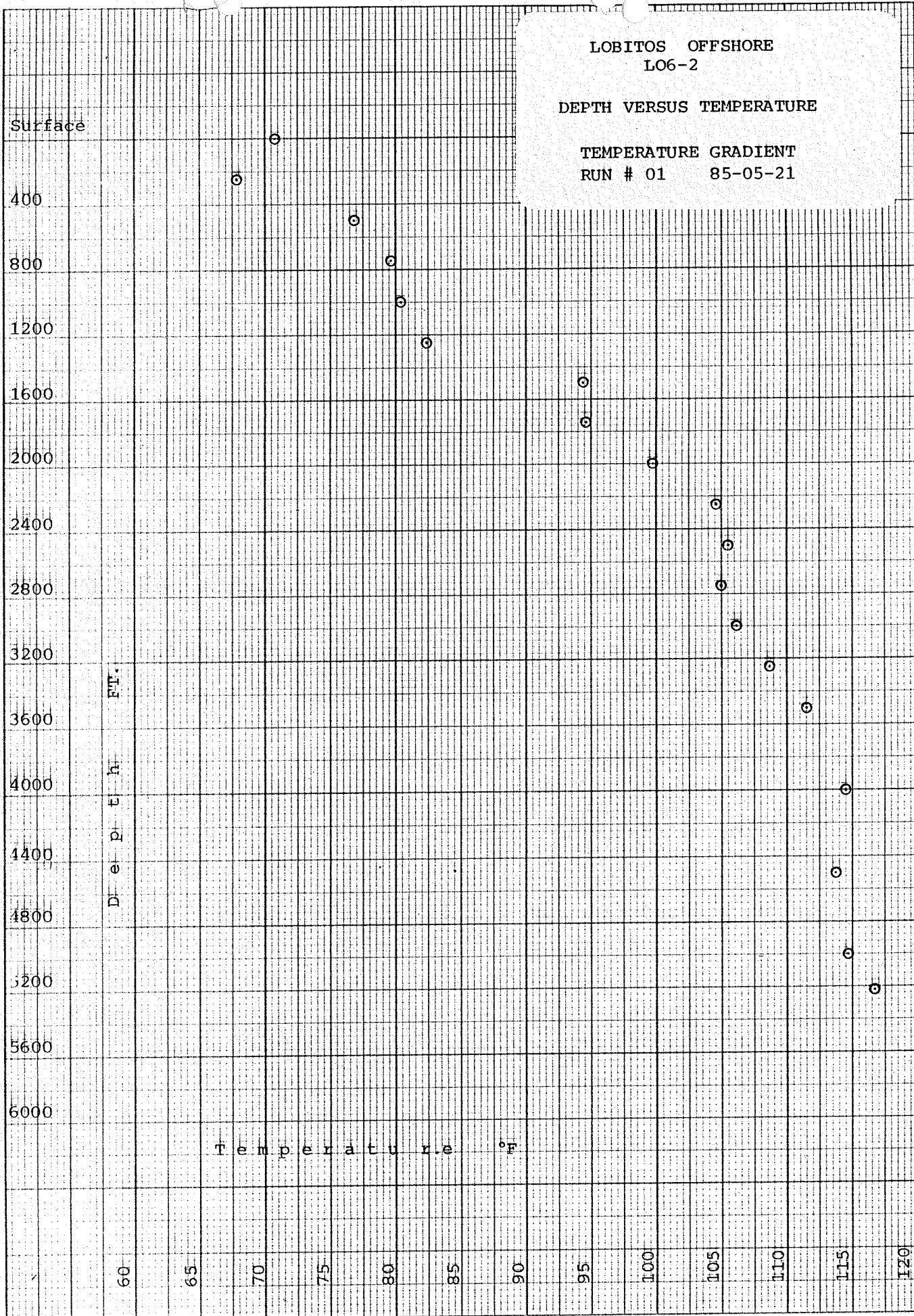
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46 1242

K&E 20 X 20 TO THE INCH 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.LOBITOS OFFSHORE
LO6-2

DEPTH VERSUS TEMPERATURE

TEMPERATURE GRADIENT
RUN # 01 85-05-21

SUBSURFACE PRESSURE MEASUREMENTS

PAGE 01 OF 02

1. BASIC DATA

COMPANY	Belco Petroleum Corp. of Peru Inc.	WELL NAME	Lobitos Offshore
ADDRESS	Negritos.-	LOCATION	L06-2
FIELD and POOL	Lobitos	STATUS OIL ☐ GAS ☐ OTHER SPECIFY	
TYPE OF TEST	Temperature Gradient	DATE OF TEST	85 05 21 TO 85 05 21
PRODUCING INTERVAL (CF)	FT PERF. ☐ OH ☒	PRODUCING THROUGH	IN TUBING ☐ IN CASING ☐
ELEVATION (CF)	FT (KB)	FT (KB) to CF	FT
POOL DATUM	FT (subsea)	MID-POINT OF PRODUCING (MPP) INTERVAL (CF)	FT
ELEMENT SERIAL NO	KT-8230	DATUM DEPTH OF WELL (FROM CF)	FT
RANGE	60° - 160°F	CLOCK RANGE	3 h S ☒ D ☐ M 27695 I.H. # 12638
CALIBRATION EQUATION		DATE OF LAST CALIBRATION	85 05 21

2. STATIC TEST

PRESSURE (GAUGE) TUBING	PSI	GAUGE ☐ DWG ☐	SHUT-IN DATE	85 05 21 @ 19:36	h
CASING	PSI	GAUGE ☐ DWG ☐	DATE ON BOTTOM	85 05 21 @ 19:36	h
RUN DEPTH (FROM CF)	(3000' MD)	FT	DATE OFF BOTTOM	85 05 21 @ 19:40	PSI
B.H. TEMP	°C	SURFACE TEMP	F	MPP PRESSURE (GAUGE)	PSI
R.D. PRESSURE (GAUGE)	PSI	GRADIENT	PSI/FT	DATUM PRESSURE (GAUGE)	PSI

3. ACOUSTIC WELL SOUNDER TEST

DEPTH OF TUBING	FT	SHUT-IN DATE	85 05 21 @	h	
AVERAGE TUBING JOINT LENGTH	FT	CURRENT WATER CUT		%	
NO. OF JOINTS TO LIQUID		CASING PRESSURE (GAUGE)		PSI	
LENGTH OF GAS COLUMN	FT	GAS COLUMN PRESSURE (GAUGE)		PSI	
LENGTH OF LIQUID COLUMN	FT	LIQUID COLUMN PRESSURE (GAUGE)		PSI	
GAS GRAVITY		GAS GRADIENT	PSI/FT	MPP PRESSURE (GAUGE)	PSI
OIL GRAVITY		OIL GRADIENT	PSI/FT	DATUM DEPTH PRESSURE (GAUGE)	PSI

4. BUILD UP OR DRAWDOWN TEST (Attach Forms 0-12A)

RESERVOIR/WELL PARAMETERS	POROSITY	%	WELL RADIUS	FT	THICKNESS	FT	WATER SATURATION	%
B.H. TEMP	°F	DATE AND DESCRIPTION OF LAST WELLBORE TREATMENT						
CASING I.D.	IN	TUBING I.D.	IN	TUBING WEIGHT MASS	LBS	FT		
COMPRESSIBILITY	μZ							
OIL WELLS ONLY:	GAS WELLS ONLY:							
OIL VISCOSITY	CC	GAS VISCOSITY						
BUBBLE POINT PRESSURE (GAUGE)	PSI	Z at RESERVOIR CONDITIONS						
B ₀ =	VOL. AT RES. COND.	RELATIVE DENSITY G						
	VOL. AT ST. COND.							
WELL PRODUCING RATE DURING	☐ PRIOR TO	☐ TEST OIL	BBL/D GAS	MCF/D	WATER	BBL/D		
TOTAL PRODUCTION DURING	☐ PRIOR TO	☐ TEST OIL	BBL/D GAS	MCF	WATER	BBL		

5. CHART READINGS AND CALCULATIONS

DATE			DEPTH BELOW CF FT	ACC. TIME h	TIME h	DEFLECTION IN	CALCULATED PRESSURE PSIG	CORRECTION DEVIATION PSI	TEMPERAT. ° F	GRADIENT PSI/FT
YR	MO	DAY								
85	05	21	Surface		18:46	0.2130			69.82	
			200		18:51	0.1700			68.01	
			250		18:55	0.1480			67.06	
			300		18:59	0.1420			66.81	
			350		19:03	0.1290			66.25	
			400		19:07	0.2660			71.94	
			500		19:11	0.3700			76.03	
			1000		19:16	0.4570			79.37	
			1400		19:20	0.5840			84.36	
85	05	21	1500		19:24	0.8920			99.54	

REMARKS Cement job finished at 05:00 85-05-21
 I.F. Collar at 5227' Shoe at 5665'
 Temperature survey # 02

SURVEY COMPANY Go. Well Services TEST BY J. Coveñas COMPUTED BY CHECKED BY

Belco Petroleum Corp. of Peru Inc.

Lobitos Offshore L06-2

LOCATION L06-2

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LOBITOS OFFSHORE
LO6-2

DEPTH VERSUS TEMPERATURE

TEMPERATURE GRADIENT
RUN # 02 85-05-21

