

WELL FILE

LOBITOS OFFSHORE
LO6-8

STATIC GRADIENT
85-05-05

well file

BELCO PETROLEUM CORP. OF PERU
DPTO. TECNICO
18 OCT. 1985
RECIBIDO

BELCO PETROLEUM CORP. OF PERU
RESERVORIOS - LIMA
18 OCT. 1985
RECIBIDO

SUBSURFACE PRESSURE MEASUREMENTS

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1. BASIC DATA

COMPANY	Belco Petroleum Corp. of Peru Inc.	WELL NAME	Lobitos Offshore
ADDRESS	Negritos.-	LOCATION	L06-8
FIELD and POOL	Lobitos	STATUS OIL ☐ GAS ☐ OTHER SPECIFY	
TYPE OF TEST	Static Gradient	DATE OF TEST	85 05 05 TO 85 05 05
PRODUCING INTERVAL (CF)	5531' - 5867 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)	5699' FT
POOL DATUM	FT. (subsea)	DATUM DEPTH OF WELL (FROM CF)	FT
ELEMENT SERIAL NO	19266N RANGE 0 - 3000 PSI	CLOCK RANGE	3 h S ☒ D ☐ # 31881 I.H. # 5861
CALIBRATION EQUATION	PC = 1517.76 D+ (-5.54)	DATE OF LAST CALIBRATION	85 02 11

COMPANY

Belco Petroleum Corp. of Peru Inc.

2. STATIC TEST

PRESSURE (GAUGE) TUBING	PSI. GAUGE ☐ DWG ☐	SHUT-IN DATE	85 05 05 @ New Well h
CASING	PSI. GAUGE ☒ DWG ☐	DATE ON BOTTOM	85 05 05 @ 03:42 h
RUN DEPTH (FROM CF)	4331.45 (5699' MD) FT.	DATE OFF BOTTOM	85 05 05 @ 04:15 PSI
B.H. TEMP	°C SURFACE TEMP F	MPP PRESSURE (GAUGE)	2248 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 05 @ 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 VISCOSITY	CC			
BUBBLE POINT PRESSURE (GAUGE)	PSI.	GAS VISCOSITY	μZ	
B ₀ = VOL. AT RES. COND.		Z at RESERVOIR CONDITIONS		
VOL. AT ST. COND.		RELATIVE DENSITY G		
WELL PRODUCING RATE DURING	☐ PRIOR TO ☐	TEST OIL	BBL/D GAS	MCF/D WATER
TOTAL PRODUCTION DURING	☐ PRIOR TO ☐	TEST OIL	BBL/D GAS	MCF WATER

WELL NAME & UNIQUE IDENTIFIER

Lobitos Offshore L06-8

5. CHART READINGS AND CALCULATIONS

DATE			DEPTH BELOW CF FT.	ACC. TIME h	TIME h	DEFLECTION IN	CALCULATED PRESSURE PSIG	CORRECTION DEVIATION PSI	CORRECTED PRESSURE PSIG	GRADIENT PSI/FT.
YR	MO	DAY								
85	05	05	Surface	Surface	02:30	0.0124	13.2	-5.5	18.7	?
		483	500.00	500.00	02:37	0.1630	241.8	4.0	245.7	0.4540
			954.76 ✓	1000.00	02:44	0.3150	472.5	2.4	474.8	0.5038
			1366.95 ✓	1500.00	02:51	0.4945	744.9	-0.5	744.4	0.6541
			1716.61 ✓	2000.00	02:58	0.6458	974.5	-2.9	971.6	0.6496
			2059.77 ✓	2500.00	03:05	0.7810	1179.7	-4.2	1175.5	0.5942
			2406.03 ✓	3000.00	03:12	0.8960	1354.3	-5.2	1349.1	0.5012
			2751.13	3500.00	03:19	1.0040	1518.2	-6.1	1512.1	0.4726
			3098.49	4000.00	03:26	1.1096	1678.5	-6.2	1672.3	0.4610
85	05	05	3453.51	4500.00	03:33	1.2200	1846.0	-6.3	1839.7	0.4716

REMARKS

T.V.D. Perf.: 4106.18 - 4455.79 MPP.: 4331.49 FT. T.V.D.

SURVEY COMPANY: Go. Well Services TEST BY: G. Preciado COMPUTED BY: G.W.S. CHECKED BY:

LOCATION L06-8

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[illegible]

FLUID TO SURFACE

Surface

LOBITOS OFFSHORE

L06-8

DEPTH VERSUS PRESSURE

STATIC GRADIENT

85-05-05

250
500
750
1000
1250
1500
1750
2000
2250
2500
2750
3000
3250
3500
3750
4000
4250
4500

FT. C.F.

P r e s s u r e

PSIG.

0 250 500 750 1000 1250 1500 1750 2000 2250 2500

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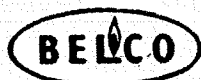
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TEC-85-912

November 11, 1985.

To : Chief Reservoir Engineer
From : Julio Mego C.
Ref. : Static Pressure Gradients at wells - L06-8, L07-5 and L010-17

Following please find a summary of results of pressure surveys ran in wells of the reference. The results are as follow:

	<u>L06-8</u>	<u>L07-5</u>	<u>L010-17</u>
Date	May 5, 85	Feb.28, 85	Oct.4/85
Interval, MD ft.	5867-5531	5235-4520'	4060-3043'
Formation	Rio Bravo	Pariñas	Pariñas& Terebratula
Well Pressure, psig	19	33	489
Pressure at B. depth, psig (VD,ft)	2248 (4330)	1396(3358)	922 (3040)
Pressure at MPP, psig	2248	1396	922
Fluid Level, VD ft	Liq.at surface	Liq.at surface	Liq.at 1750'
Avg. Fluid Gradient, psi/ft	0.515	0.406	0.327
Formation press. gradient, psi/ft	0.519	0.416	0.303
Shut-in time, min.	33	47	26
Remarks	Initial Press.	Initial Press.	--

Well L06-8 BHP survey was recorded after shooting the first interval (5867'-5531') of Rio Bravo. No pressure increase was observed during 33 min. that the bomb was in the well. Pressure recorded is near to hydrostatic pressure, however well head pressure is indicating that pressure here recorded may be considered representative of the reservoir. Pressure recorded in this well is similar to the initial pressure recorded in nearby wells.

Well L07-5 Although during the 47 minutes that bomb remained at the bottom the pressure increased 7 psi, the recorded pressure can be considered as representative of reservoir pressure. Pressure referred at MPP is similar to the initial pressure measured in well L010-18X.

Well L010-17 Recorded pressure can be considered representative of reservoir pressure, it was stabilized during the time that the bomb remained in the hole (26 min). Well is producing commingled from Pariñas and Terebratula, therefore pressure recorded can be used only for reference.

It is necessary to pointout that two of these surveys were taken a few months ago, however they have been received at this office last month.

JMC/rc.
Eng.Negritos
Prod. Supt. Neg.
Well File
GE.2201.87/89/96

Julio Mego C