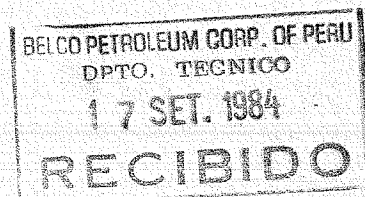
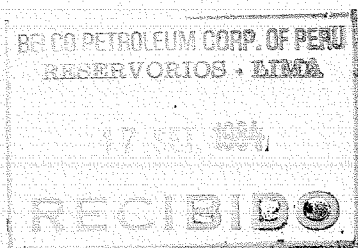
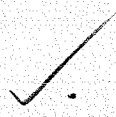


LOBITOS OFFSHORE
LO6-21

was file

TEMPERATURE GRADIENT
RUN # 1 84-09-07

TEMPERATURE GRADIENT
RUN # 2 84-09-07



SUBSURFACE PRESSURE MEASUREMENTS

PAGE 1 OF 2

1. BASIC DATA

COMPANY **Belco Petroleum Corp. of Peru Inc.** WELL NAME **Lobitos Offshore**
 ADDRESS **Negritos** LOCATION **LO6-21**
 FIELD and POOL **Lobitos** STATUS OIL ☐ GAS ☐ OTHER SPECIFY _____
 TYPE OF TEST **Temperature Gradient** DATE OF TEST **84 09 07** TO **84 09 07**
 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) _____ FT. DATUM DEPTH OF WELL (FROM CF) _____ FT.
 ELEMENT SERIAL NO **KT-8230** RANGE **60 - 160°F** CLOCK RANGE **3** h S ☒ D ☐ # **2405** I.H. # _____
 CALIBRATION EQUATION _____ DATE OF LAST CALIBRATION **84 09 07**

2. STATIC TEST

PRESSURE (GAUGE): TUBING PSI GAUGE ☐ DWG ☐ SHUT-IN DATE **84 09 07** @ **Not Perforated** h
 CASING PSI GAUGE ☐ DWG ☐ DATE ON BOTTOM **84 09 07** @ **17:34** h
 RUN DEPTH (FROM CF) **(5210' MD)** FT. DATE OFF BOTTOM **84 09 07** @ **17:43** 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 **84 09 07** @ _____ 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 _____ μZ
 BUBBLE POINT PRESSURE (GAUGE) _____ PSI Z at RESERVOIR CONDITIONS _____
 B₀ = 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/D WATER _____ BBL/D

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								
84	09	07	Surface		16:25	0.3130			73.81	
			500		16:31	0.3570			75.52	
			1000		16:37	0.4410			78.76	
			1500		16:44	0.5350			82.40	
			2000		16:51	0.7900			94.26	
			2500		16:58	0.8990			99.90	
			3000		17:05	0.9270			101.34	
			3500		17:12	0.9770			103.92	
			4000		17:19	1.0430			107.23	
84	09	07	4500		17:26	1.0700			108.57	

REMARKS **5.5" 17# Casing Well with water.**
Shoe at 5250' Float collar at 5210'
Cement job finished at 17:30 84-09-06.
Run # 1
Go Well services G. Preciado
 SURVEY COMPANY _____ TEST BY _____ COMPUTED BY _____ CHECKED BY _____

COMPANY Belco Petroleum Corp. of Peru Inc.

WELL NAME & UNIQUE IDENTIFIER Lobitos Offshore LO6-21

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY Belco Petroleum Corp.of Peru

WELL NAME Lobitos Offshore

DATE OF TEST

84	09	07
YR	MO	DAY

 TO

YR	MO	DAY

LOCATION L06-21

CHART READINGS AND CALCULATIONS

PAGE 2 of 2

[illegible]

Surface

400

800

1200

1600

2000

2400

2800

3200

3600

4000

4400

4800

5200

5600

6000

LOBITOS OFFSHORE

HOG-21

DEPTH VERUS TEMPERATURE

TEMPERATURE GRADIENT

RUN # 1

84-09-07

Comments

1816.5

T e m p e r a t u r e ° F

70

74

78

82

86

90

94

98

102

106

110

114

118

46 1242

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SUBSURFACE PRESSURE MEASUREMENTS

PAGE 1 OF 1

1. BASIC DATA

COMPANY **Belco Petroleum Corp. of Peru Inc.** WELL NAME **Lobitos Offshore**
 ADDRESS **Negritos** LOCATION **L06-21**
 FIELD and POOL **Lobitos** STATUS: OIL ☐ GAS ☐ OTHER SPECIFY ☐
 TYPE OF TEST **Temperature Gradient** DATE OF TEST **84 09 07** TO ☐ ☐ ☐
 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 ☐ # **2405** I.H. # ☐
 CALIBRATION EQUATION ☐ DATE OF LAST CALIBRATION ☐ ☐ ☐ ☐

2. STATIC TEST

PRESSURE (GAUGE): TUBING ☐ PSI. GAUGE ☐ DWG ☐ SHUT-IN DATE **84 09 07** @ **Not Perforated** h
 CASING ☐ PSI. GAUGE ☐ DWG ☐ DATE ON BOTTOM **84 09 07** @ **18:51** h
 RUN DEPTH (FROM CF) **2100 'MD** FT. DATE OFF BOTTOM **84 09 07** @ **18:52** 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 ☐ ☐ ☐ @ ☐ h
 AVERAGE TUBING JOINT LENGTH ☐ FT. CURRENT WATER CUT ☐ %
 NO. OF JOINTS TO LIQUID ☐ FT. 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 ☐ μ z
 OIL WELLS ONLY: GAS WELLS ONLY:
 OIL VISCOSITY ☐ CC GAS VISCOSITY ☐ μ z
 BUBBLE POINT PRESSURE (GAUGE) ☐ PSI. Z at RESERVOIR CONDITIONS ☐
 B_o = $\frac{\text{VOL. AT RES. COND.}}{\text{VOL. AT ST. COND.}}$ 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

5. CHART READINGS AND CALCULATIONS

DATE			DEPTH BELOW CF FT.	ACC. TIME h	TIME h	DEFLECTION IN	CALCULATED PRESSURE PSIG	CORRECTION DEVIATION PSI	TEMPERAT.	GRADIENT PSI/FT.
YR	MO	DAY							°F	
84	09	07	Surface		18:18	0.2000			69.30	
			1000		18:24	0.3580			75.56	
			1200		18:28	0.4280			78.26	
			1400		18:32	0.4860			80.47	
			1500		18:37	0.5360			82.44	
			1600		18:42	0.6580			87.55	
			1800		18:46	0.7950			94.53	
			2000		18:50	0.7990			94.75	
84	09	07	2100		18:52	0.8180			95.73	

REMARKS **5.5" . 17# casing** Well with water.
Shoe at 5250' Float collat at 5210'
Cement job finished at 17:30 84-09-06
Run # 2
 SURVEY COMPANY **Go Well Services** TEST BY **G.Preciado** COMPUTED BY ☐ CHECKED BY ☐

COMPANY

Belco Petroleum Corp. of Peru Inc.

WELL NAME & UNIQUE IDENTIFIER

Lobitos Offshore L06-21

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