

BELCO PETROLEUM CORP. OF PERU
DPTO. TECNICO
16 MAYO 1985
RECIBIDO

LOBITOS OFFSHORE
LOG - 8

TEMPERATURE GRADIENT
RUN # 01 85-05-04
TEMPERATURE GRADIENT
RUN # 02 85-05-04

will file

BELCO PETROLEUM CORP. OF PERU
RESERVORIOS - LIMA
16 MAYO 1985
RECIBIDO

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY **Belco Petroleum Corp. of Peru Inc.** WELL NAME **Lobitos Offshore**
 ADDRESS **Negritos** LOCATION **LO6-8**
 FIELD AND POOL **Lobitos** STATUS OIL ☐ GAS ☐ OTHER SPECIFY _____
 TYPE OF TEST **Temperature Gradient** DATE OF TEST **85 05 04** TO **85 05 04**
 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 ☐ 31881 I.H. # 12638
 CALIBRATION EQUATION _____ DATE OF LAST CALIBRATION _____

2 STATIC TEST

PRESSURE (GAUGE) TUBING _____ PSI. GAUGE ☐ DWG ☐ SHUT-IN DATE _____ @ **Not Perforated** h
 CASING _____ PSI. GAUGE ☐ DWG ☐ DATE ON BOTTOM **85 05 04** @ **07:16** h
 RUN DEPTH (FROM CF) **(5980' MD)** FT. DATE OFF BOTTOM **85 05 04** @ **07:22** 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 _____ 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 VISCOSITY _____ CC GAS VISCOSITY _____ μ z
 BUBBLE POINT PRESSURE (GAUGE) _____ PSI. Z at RESERVOIR CONDITIONS _____
 B = 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/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								
85	05	04	Surface		06:18	0.2000			69.31	
			500		06:23	0.3660			75.83	
			1000		06:27	0.4600			79.48	
			1500		06:34	0.5660			83.64	
			2000		06:38	0.6040			85.18	
			2500		06:42	0.6520			87.29	Top
			3000		06:50	0.9050			100.21	
			3500		06:54	1.0190			106.04	
			4000		06:59	1.1350			111.78	
85	05	04	4500		07:06	1.1600			113.02	

REMARKS

Casing 5.5" J.55 # 17 Shoe at 6000' Float Collar at 5960'

Cement job finished at 21:00 hrs. 85-05-03

Survey # 01

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

COMPANY

Belco Petroleum Corp. of Peru Inc.

WELL NAME & UNIQUE IDENTIFIER

Lobitos Offshore LO6-8

LOCATION L06-8

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[illegible]

LOBITOS OFFSHORE
LOG-8

Surface

DEPTH VERSUS TEMPERATURE

TEMPERATURE GRADIENT

RUN # 01

85-05-04

500

1000

1500

2000

2500

3000

3500

4000

4500

5000

5500

6000

6500

7000

Temperature ° F

65

70

75

80

85

90

95

100

105

110

115

SUBSURFACE PRESSURE MEASUREMENTS

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 Temperature Gradient		DATE OF TEST 85 05 04 TO 85 05 04	
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 5 D 31881 I.H. # 12638	
CALIBRATION EQUATION		DATE OF LAST CALIBRATION 85 05 04	

2. STATIC TEST

PRESSURE (GAUGE) TUBING	PSI. GAUGE ☐ DWG ☐	SHUT-IN DATE 85 05 04 @ Not Perforated	h
CASING	PSI. GAUGE ☐ DWG ☐	DATE ON BOTTOM 85 05 04 @ 05:52	h
RUN DEPTH (FROM CF) (2800' MD)	FT	DATE OFF BOTTOM 85 05 04 @ 05:55	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 04 @	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		
B _o = 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

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	04	Surface		05:08	0.2200			70.10	
			500		05:15	0.3630			75.76	
			1000		05:22	0.5020			81.08	
			1500		05:34	0.6170			85.75	
			2000		05:41	0.6400			86.76	
			2500		05:48	0.6840			88.70	
85	05	04	2800		05:55	0.8060			95.11	

REMARKS

Casing 5.5" J.55 # 17 Shoe at 6000' Float Collar at 5960'
 Cement job finished at 21:00 hrs. 85-05-03
 Survey # 02

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

Belco Petroleum Corp. of Peru Inc.

Lobitos Offshore L06-8

LOBITOS OFFSHORE
LOG-8

Surface

DEPTH VERSUS TEMPERATURE

TEMPERATURE GRADIENT

RUN # 02 85-05-04

200

400

600

800

1000

1200

1400

1600

1800

2000

2200

2400

2600

2800

3000

3200

FT.

h

t

p

d

e

e

p

t

h

Temperature °F

60

65

70

75

80

85

90

95

100

105

110

115

46 1242

18" X 26 X 20 1/2 D.D. INCH. N. D. 180 DB 5
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