

TO: Operations Manager

FROM: Exploration-Production Planning Manager

SUBJECT: PRESSURE BUILD UP AND STATIC GRADIENT SURVEYS

DATE: April 21, 1995

Enclosed please find results from Pressure Build Up and Static Gradient Surveys run in LO6-24, LO6-8, NN-14, PN1-7C, A2-3, A2-8, VV-5, PN2-18, SS-14, BB-20, PN2-17, PN2-8X and YY-9 Wells.

Likewise, you will find results from Static Gradient Surveys run in LO6-5X, LO6-9X, CC-6, CC-19A, PG-U8 and L1-13 Wells.

Should you need any additional information, do not hesitate to contact us.


Alberto Arispe
Manager

VPG/mts
Enc.

cc: Assistant Operations Manager - Engineering
Well Files
200.2.1

PETRO-TECH

PERUANA S.A.



TO: Eng. Alberto Arispe
Exploration-Production Planning Manager

FROM: Eng. Víctor Peralta

SUBJECT: **STATIC GRADIENT : LO6-5X, LO6-9X,
CC-6, CC-19A, PG-U8, AND L1-13 WELLS**

DATE: April 12, 1995


Following please find a summary of results obtained during SG. surveys run in wells of the reference to determine the status of reservoir pressure:

Form.	Formation	Perforated Interval (MD)	MPP (ft) (MD) (VD)	Press. at MPP. (psig)	Form. Grad. (psi/ft)	Level Fluids (VD)	Fluids Gradient (psi/ft)
LO6-5X	R.Bravo	5539'-4121'	4830 3909	471	0.120	Gas, Surf. Oil at 3653' Water at 4216'	0.011 0.368 0.445
LO6-9X	R.Bravo	5717'-3880'	4799 3917	856	0.219	Gas, Surf. Oil at 1756' Water at 438'	0.014 0.351 0.453
CC-6	R.Bravo	5016'-3338'	4777 2869	224	0.078	Gas, Surf. Oil at 5047' Water at 3066'	0.008 0.329 0.423
CC-19A	R.Bravo	4844'-3191'	4818 3655	337	0.092	Gas, surf. Oil at 2882' Water at 3626'	0.004 0.347 0.456
PG-U8	R.Bravo	3970'-3812'	3891 3200	476	0.149	Gas, Surf. Oil at 1874'	0.003 0.330
L1-13	I.Sands	7451'-7294'	7373 6459	424	0.066	Gas, Surf. Oil at 5684'	0.006 0.362

In the wells above referred, the current recorded pressures are considered as representative for the formations around these wells.

On the other hand, in the CC-19A Well there is indication of a possible effect of gas injection in CC-A3 R.Bravo Reservoir . Therefore, it is recommended to open the well and test it with gas lift installation.

According to these results, there is the possibility to gain oil production in LO6-9X and PG-U8 wells , equipping them with gas lift installation.


Víctor Peralta

WELL: LO6- 5X

**STATIC GRADIENT
(Date: MARCH 13, 1995)**

History

On Feb./11/85. LO6-5 Well was completed in the interval 5539'-4121' of the R.Bravo Fm. A very poor production is shown during the well history. The cumulative oil production up to Feb./95 was 15 Mbbls. Now, it is a gas lift well producing 1 bopd, stopcoking.

This survey was recommended in order to evaluate the actual reservoir pressure.

Results

<u>Formation</u>	<u>Interval</u>	<u>MPP(Ft)</u>		<u>Static Pressure (Psig)</u>	<u>Form. Grad. (Psi/Ft)</u>	<u>F l u i d s</u>		<u>Status</u>
		<u>MD</u>	<u>VD</u>			<u>Grad. (Psi/Ft)</u>	<u>Level (Ft-VD)</u>	
R.Bravo	5539'-4121'	4830	3909	471	0.120	0.011	Surf.	1 bopd,SC.
						0.368	3653'	
						0.445	4216'	

The well was shut-in during ten days, before taking this survey. The pressure at bomb depth (5600' MD-4439' VD) was 683 Psig. The final pressure was completely stabilized, no pressure increase was observed during the 60 minutes that the bomb remained in the hole.

The current pressure gradient of 0.120 psi/ft indicates a low pressure around the well. This well is draining a block reservoir from which the LO6-24, LO6-21, and LO6-13X Wells are producing. It is recommended to maintain the well shut-in.

VPG

STATIC GRADIENT L06-5

WELL	: L06-5
FORMATION	: RIO BRAVO
INTERVAL	: 5539' - 4121'
DATE	: 13/MARZO/95

