

PRUEBA DE PRESION INICIAL

CLIENTE : PETRO-TECH PERUANA S.A.

POZO : LO6 - 20

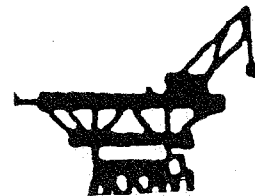
LOCACION : LOBITOS

FECHA : 27 / 10 / 94



FLOWPETROL S.A.

Avda. Mártires Petroleros Ex - Cementerio
Mz. B3 Lote C. Talara Telefax: 381690



LECTURA DE MEDICION DE PRESIONES

*GRADIENT
Flowing*

CLIENTE : PETRO-TECH PERUANA S.A.

DIRECCION : NEGRITOS

TIPO DE PRUEBA : ~~PRESION INICIAL~~ *Static Gradient*

INTERVALO PERFORADO : 6,958'-6,686' WEDGE SAND

ELEMENTO SERIAL No. : 3,000 PSI SERIE 45398

ECUACION DE CALIBRACION $K = 1530.9869$ $a = 11.4879$

NOMBRE DEL POZO : LO6 - 20

TIPO DE INSTALACION : CASING 5 1/2"

LOCACION : LOBITOS

FECHA DE LA PRUEBA : 27 / 10 / 94 ✓

FECHA DE CALIBRACION DEL ELEMENTO : 17 - 08 - 94

PUNTO MEDIO DE LOS PERFORADOS : 6,822'

PROFUNDIDAD DEL POZO : 7,844'

RELOJ : 3 HRS. SERIE: B7336

PROFUNDIDAD QUE BAJO LA BOMBA : 6,822 PIES (medido)

PRESION MAXIMA EN LA BOMBA : 908.65 PSI

NIVEL DE FLUIDO : 4,256' (PV) ; 4,698' (PM)

OBSERVACION : TAPON A 7,050'

p+1Y



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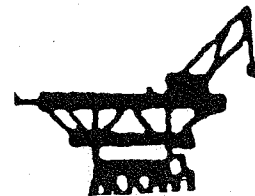
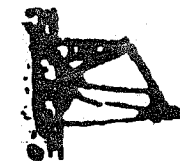


TABLA PARA ANALISIS DE GRADIENTE

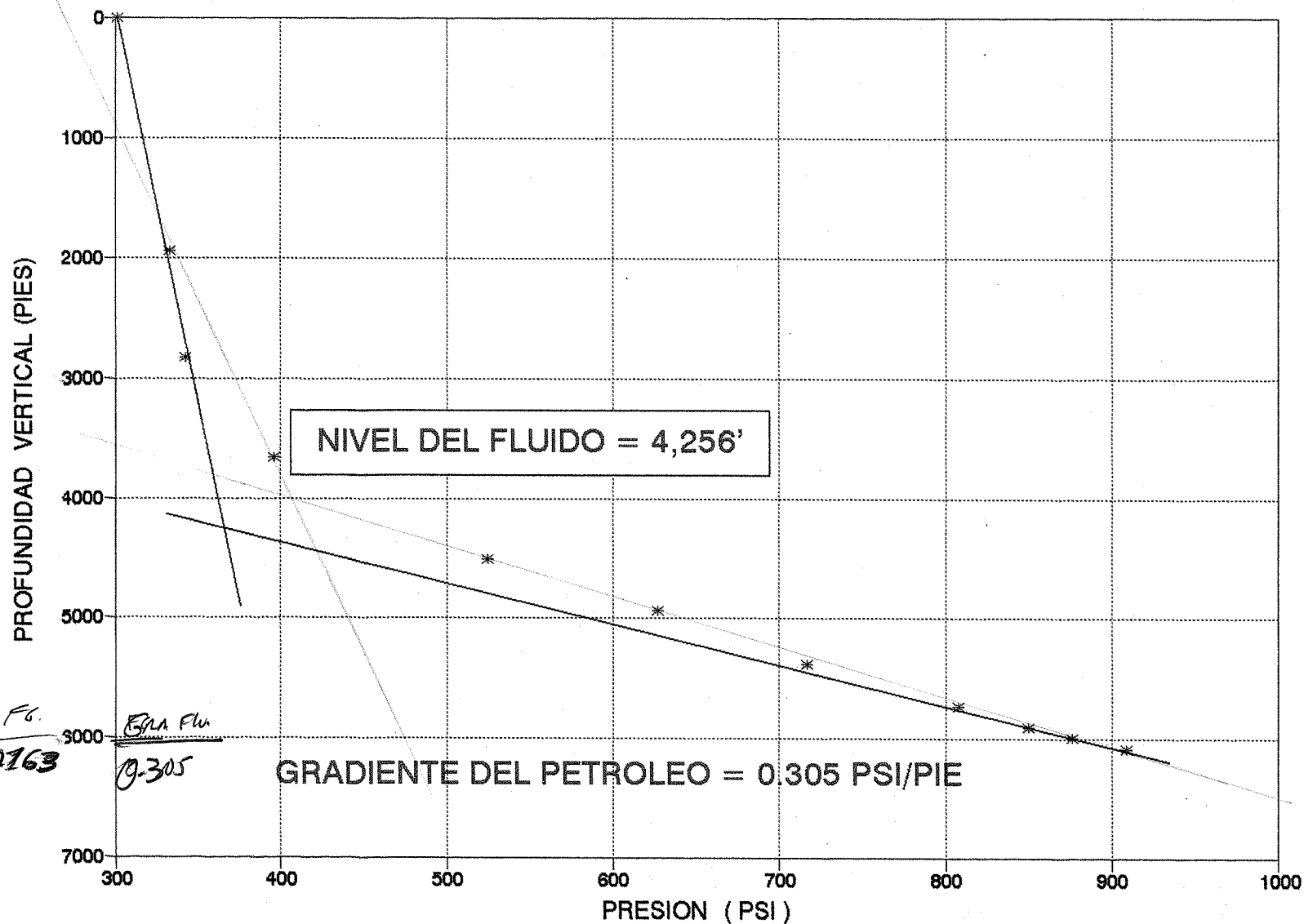
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PROF. VERTICAL (PIES)	PROF. MEDIDA (PIES)	DEFLECC.	PRESION (PSI)	GRADIENTE PSI/PIES
0.00	0	0.1895	301.61	
1950.54	2000	0.2100	333.00	0.016
2830.28	3000	0.2160	342.18	0.010
3660.80	4000	0.2510	395.77	0.065
4515.36	5000	0.3350	524.37	0.150
4950.23	5500	0.4020	626.94	0.236
5387.61	6000	0.4610	717.27	0.207
5733.45	6400	0.5200	807.60	0.261
5906.43	6600	0.5480	850.47	0.248
5991.75	6700	0.5650	876.50	0.305
6096.71	6822	0.5860	908.65	0.306



GRADIENTE Y NIVEL DE FLUIDO

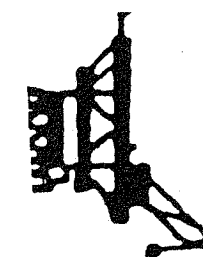
POZO: LO6 - 20 LOBITOS (27/10/94)



PAID
MD VD FG
6822 6047 0163
BPA FLW
0.305

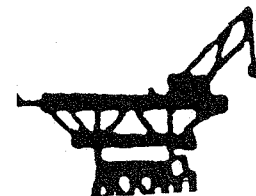
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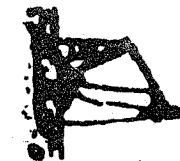
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PRESION INICIAL - POZO LO6-20 (27/10/94)

LECTURAS EN EL PUNTO MEDIO			
TIEMPO (MIN.)	PROF. MEDIDA (PIES)	DEFLECC.	PRESION (PSI)
0	6,822	0.586	908.65
5	6,822	0.591	916.30
10	6,822	0.599	928.55
15	6,822	0.602	933.14
20	6,822	0.607	940.80
25	6,822	0.612	948.45
30	6,822	0.616	954.58
35	6,822	0.621	961.47
40	6,822	0.624	966.06
45	6,822	0.625	968.35
50	6,822	0.628	972.95
55	6,822	0.631	977.54
60	6,822	0.636	985.20
65	6,822	0.637	985.96
70	6,822	0.639	989.02
75	6,822	0.640	991.32
80	6,822	0.641	992.85
85	6,822	0.643	995.91
90	6,822	0.644	997.44

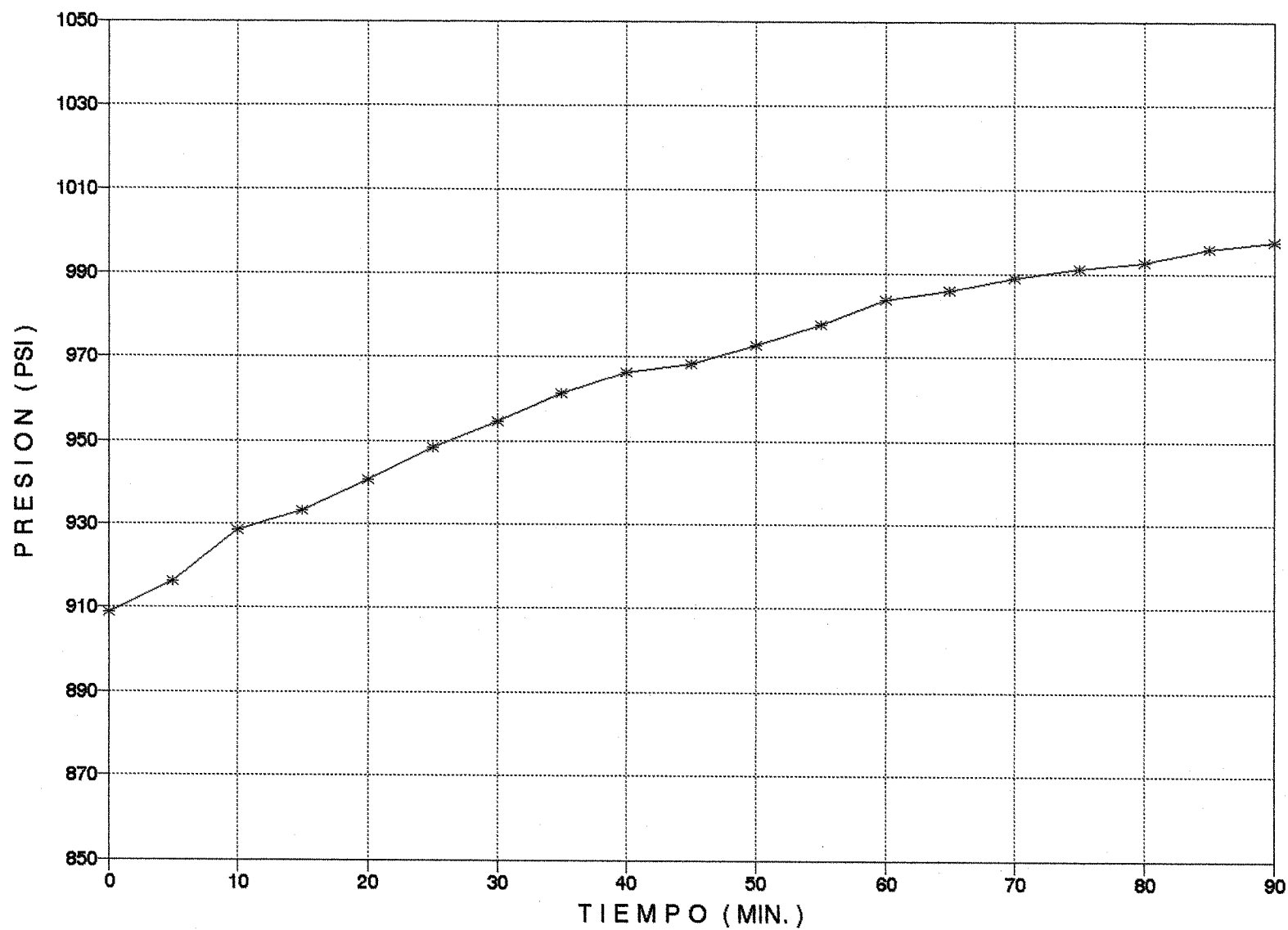
89

60
90



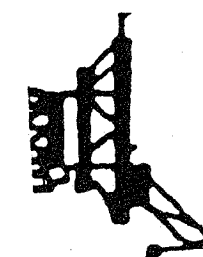
RESTAURACION DE PRESION

POZO: LO6 - 20 LOBITOS (27/10/94)



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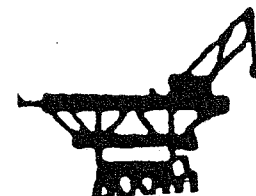
OBSERVACIONES: - INTERVALO PRODUCTOR: 6,958' - 6,686'.
- TAPON A 7,050'.



CC

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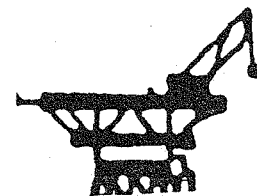
DATOS PARA PROF. VERTICAL

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"SURVEY DIRECTIONAL DRILLING"		
MEASURE DEPTH (FEET)	AVERAG ANGLE (DEG)	TOTAL VERTICAL (FEET)
1943	23.000	1898.07
2907	35.250	2754.33
3943	31.750	3612.33
4757	30.250	4305.45
5420	29.750	4880.77
5865	29.250	5269.82
6172	30.750	5537.51
6421	30.750	5752.60
6632	31.750	5933.93
6791	30.000	6069.86



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- BOTTOM HOLE PRESSURE GAUGE CALIBRATION SHEET -

DATE: 08/17/94

CALIBRATION No.:

12

- EQUIPMENT DATA -

Calibration cell No.: 2318 Manufacturer : CHANDLER
Dead weight tester No.: 13864 Manufacturer : CHANDLER Range 0 -10000 PSI
Recording element No.: 15233 Manufacturer : GRC
Pressure element No.: 45398 Manufacturer : GRC Range 0 - 3,042 PSI

- MISCELLANEOUS INFORMATION -

Base line drawing temperature : AMBT
Reference line data-temperature: AMBT -pressure Pr: reading Yr:
Calibration data -temperature: AMBT -step drawing: with crank with clock

Equivalent pressure P of level difference between Dwt and bellows

Level difference : +in case of Dwt above
Oil specific gravity : P= -in case of Dwt beneath
bellows

-CALIBRATION READING AND CALCULATIONS-

NUM. DE LECTURAS= 6

P(Dwt)	Y	ΔY	² Y	YP	$P_c = KY + a$	$C = P - P_c$
PSI	DEFLEC		-Units on this line-			
500	0.3110	----	0.0967	155.50	487.625	12.3752
1000	0.6435	0.3325	0.4141	643.50	996.678	3.3221
1500	0.9785	0.3350	0.9575	1467.75	1509.559	-9.5585
2000	1.3095	0.3310	1.7148	2619.00	2016.315	-16.3152
2500	1.6365	0.3270	2.6781	4091.25	2516.948	-16.9479
3000	1.9343	0.2978	3.7415	5802.90	2972.876	27.1243
10500	6.8133		9.6027	14779.90	ERROR =	0.0000

$A = \text{SUM}(P)/n = 1750$

$K = (A-D)/(B-C) = 1530.9869$

$B = \text{SUM}(Y)/n = 1.13555$

$a' = A - BK = 11.4879$

$C = \text{SUM}(Y) / \text{SUM}(Y) = 1.4094073$

$a' = D - CK = 11.4879$

$D = \text{SUM}(YP) / \text{SUM}(Y) = 2169.2719$

$a = a' + P = 11.4879$



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CARTA DE PRESION INICIAL

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LOCACIO : LOBITOS

POZO : LO6 - 20

PRESION: 3,000 PSI - 45398

FECHA : 27 / 10 / 94

RELOJ : 3 HRS. SERIE 7336