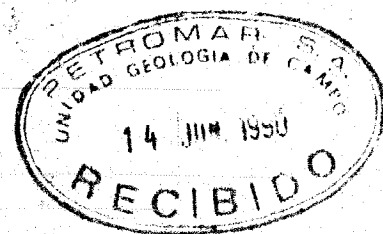
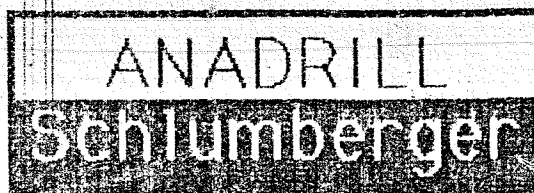
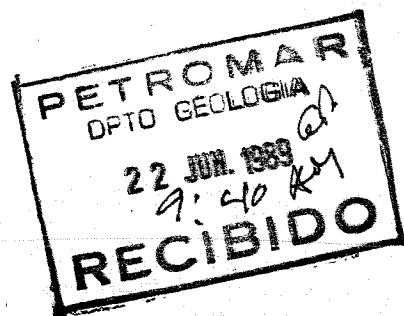


Petromar - Lima

Ingo M. Chavez

Handwritten signature
J. JERI

22 - Jun - 90



POZO DIRIGIDO

Nº OFICIAL : Z2A-21-790-D-LO16

Nº PETROMAR : LO16-22

NP: Z2A-21-790-D-LO16 (LO16-22)

KB: 50'

WD: 309

Long. Conductora: (Vertical)

Pts: 48

P.F. 8002

OPERADOR DIRECCIONAL:

ALAN VALDIVIA LOPEZ

MIGUEL DI SIERYO

WELL FILE

PETROMAR
WELL: L016-22

RADIUS OF CURVATURE CALCULATIONS

Wednesday, June 15, 1988 Page 2

MEASURED DEPTH Feet	B O R E - H O L E INCLINATION Deg Min	DIRECTION Deg Min	COURSE LENGTH Feet	VERTICAL DEPTH Feet	R E C T A N G U L A R C O O R D I N A T E S Feet		VERTICAL SECTION Feet	C L O S U R E S DISTANCE Feet	DIRECTION Deg Min	DOGLEG SEVERITY Deg/100ft.
0.00	0 0	0 0	0.00	0.00	0.00 N	0.00 E	-0.00	0.00	0 0	
456.00	0 45	N 66 0 W	456.00	455.99	1.24 N	2.79 W	2.75	3.05	N 66 0 W	0.16
496.00	0 45	N 64 0 E	30.00	495.98	1.55 N	2.79 W	2.75	3.20	N 60 54 W	4.53
527.00	0 45	N 74 0 E	31.00	526.98	1.70 N	2.41 W	2.37	2.95	N 54 51 W	0.42
709.00	1 0	S 71 0 E	182.00	708.96	1.63 N	0.32 E	-0.36	1.66	N 11 11 E	0.32
823.00	3 45	N 62 0 W	114.00	822.95	2.69 N	0.79 E	-0.86	2.81	N 16 16 E	1.53
886.00	3 30	N 28 0 E	63.00	885.94	3.29 N	0.60 E	-0.69	3.34	N 10 26 E	1.43
947.00	2 45	S 80 0 W	61.00	946.91	4.41 N	0.21 W	0.10	4.42	N 2 46 W	5.05
1041.00	5 0	N 85 0 W	94.00	1040.69	4.14 N	6.54 W	6.43	7.74	N 57 42 W	2.61
1072.00	5 45	S 85 0 W	31.00	1071.56	4.14 N	9.44 W	9.33	10.31	N 66 21 W	3.86
1104.00	6 30	S 76 0 W	32.00	1103.37	3.57 N	12.81 W	12.71	13.29	N 74 25 W	3.80
1135.00	7 30	S 63 0 W	31.00	1134.14	2.25 N	16.34 W	16.27	16.49	N 82 9 W	6.02
1167.00	8 30	S 67 0 W	32.00	1165.83	0.37 N	20.37 W	20.36	20.38	N 88 57 W	3.57
1239.00	12 0	S 69 0 W	72.00	1236.67	4.43 S	32.25 W	32.35	32.55	S 82 11 W	4.89
1332.00	14 0	S 60 0 W	93.00	1327.28	13.42 S	51.11 W	51.44	52.84	S 75 17 W	3.05
1424.00	17 15	S 65 0 W	92.00	1415.87	24.86 S	73.08 W	73.71	77.19	S 71 13 W	3.82
1515.00	21 0	S 64 0 W	91.00	1501.83	37.69 S	99.98 W	100.94	106.85	S 69 21 W	4.14
1613.00	21 45	S 68 0 W	98.00	1593.09	52.22 S	132.61 W	133.93	142.52	S 68 30 W	1.67
1738.00	22 0	S 68 0 W	125.00	1709.09	69.67 S	175.79 W	177.55	189.09	S 68 23 W	0.20
1841.00	21 45	S 70 0 W	103.00	1804.67	83.42 S	211.62 W	213.73	227.46	S 68 29 W	0.76
2142.00	22 0	S 69 0 W	301.00	2084.00	122.69 S	316.66 W	319.76	339.60	S 68 49 W	0.15
2392.00	22 0	S 75 0 W	250.00	2315.80	151.62 S	405.69 W	409.52	433.09	S 69 30 W	0.90
2643.00	22 30	S 74 0 W	251.00	2548.11	177.02 S	497.27 W	501.73	527.84	S 70 24 W	0.25
2894.00	23 30	S 75 0 W	251.00	2779.15	203.22 S	591.77 W	596.89	625.70	S 71 3 W	0.43
3143.00	23 15	S 79 0 W	249.00	3007.72	225.44 S	688.01 W	693.68	724.01	S 71 51 W	0.65

PETROMAR
WELL: L016-22

RADIUS OF CURVATURE CALCULATIONS

Wednesday, June 15, 1988 Page 3

MEASURED DEPTH Feet	B O R E - H O L E INCLINATION Deg Min	D I R E C T I O N Deg Min	C O U R S E LENGTH Feet	V E R T I C A L DEPTH Feet	R E C T A N G U L A R C O O R D I N A T E S Feet	V E R T I C A L SECTION Feet	C L O S U R E S DISTANCE Feet	D I R E C T I O N Deg Min	D O G L E G SEVERITY Deg/100ft.
3395.00	23 0	S 79 0 W	252.00	3239.47	244.33 S	785.16 W	791.29	S 72 43 W	0.10
3644.00	22 45	S 81 0 W	249.00	3468.88	261.13 S	880.48 W	887.01	S 73 29 W	0.33
3894.00	22 0	S 85 0 W	250.00	3700.06	272.73 S	974.92 W	981.72	S 74 22 W	0.68
✓ 4061.00	21 45	S 87 0 W	167.00	3855.04	277.07 S	1036.98 W	1043.88	S 75 2 W	0.47
29 4218.00	22 0	S 89 30 W	157.00	4000.73	278.86 S	1095.45 W	1102.37	S 75 43 W	0.61
4311.00	22 15	N 87 30 W	93.00	4086.88	278.25 S	1130.46 W	1137.36	S 76 10 W	1.24
4403.00	22 45	N 83 0 W	92.00	4171.88	275.33 S	1165.54 W	1172.35	S 76 43 W	1.95
4475.00	23 0	N 83 0 W	72.00	4238.22	271.92 S	1193.32 W	1200.03	S 77 10 W	0.35
4621.00	19 15	S 84 0 W	146.00	4374.38	271.46 S	1245.82 W	1252.49	S 77 42 W	4.10
34 4742.00	19 0	S 87 0 W	121.00	4488.70	274.57 S	1285.33 W	1292.08	S 77 57 W	0.84
4859.00	19 45	S 89 0 W	127.00	4608.51	276.04 S	1327.44 W	1334.21	S 78 15 W	0.79
4992.00	20 0	N 88 0 W	123.00	4724.18	275.68 S	1369.25 W	1375.99	S 78 37 W	0.85
5145.00	21 0	N 83 0 W	153.00	4867.49	271.47 S	1422.64 W	1429.26	S 79 12 W	1.32
5185.00	19 15	N 88 0 W	40.00	4905.05	270.39 S	1436.36 W	1442.95	S 79 20 W	6.13
39 5248.00	19 0	S 85 0 W	63.00	4964.57	270.93 S	1456.98 W	1463.57	S 79 28 W	3.66
5393.00	22 0	S 77 0 W	145.00	5100.37	278.87 S	1507.09 W	1513.87	S 79 31 W	2.83
5546.00	22 0	S 79 30 W	153.00	5242.23	290.54 S	1563.20 W	1570.27	S 79 28 W	0.61
5704.00	22 0	S 82 0 W	158.00	5388.73	300.06 S	1621.61 W	1628.91	S 79 31 W	0.59
5950.00	22 0	S 87 0 W	246.00	5616.82	308.88 S	1713.31 W	1720.81	S 79 47 W	0.76
44 6200.00	23 30	N 88 0 W	250.00	5847.36	309.73 S	1809.95 W	1817.44	S 80 17 W	0.98
6475.00	23 0	N 83 0 W	275.00	6100.03	301.21 S	1918.14 W	1925.37	S 81 5 W	0.74
6722.00	23 0	N 77 0 W	247.00	6327.39	284.46 S	2013.14 W	2019.90	S 81 57 W	0.95
7130.00	24 0	N 72 0 W	408.00	6701.55	241.00 S	2169.86 W	2175.43	S 83 40 W	0.55
48 8002.00	20 0	N 72 0 W	972.00	7509.89	140.08 S	2480.47 W	2483.28	S 86 46 W	0.46

Final Station Closure - Distance: 2484.42 Feet
- Direction: S 86 46 W

O.K. 
14-06-90