

PETROMAR

Apadrill

Petromar - Lima

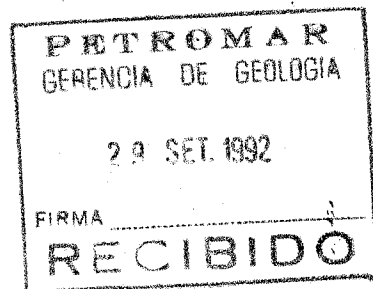
Ingo C. Carrion

[Signature]

Denis

J. Jari

29-Set-92



POZO DIRIGIDO

Nº OFICIAL : Z2A-21-014-D-L016

Nº PETROMAR : L016-10

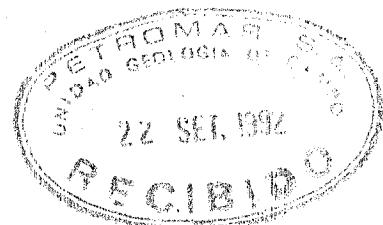
05.08.92 AL 12.09.92

OPERADOR DIRECCIONAL:

ALAN VALDIVIA LOPEZ

[Signature]

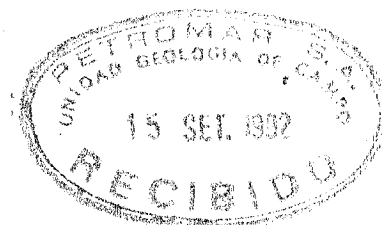
22-9-92



INFORMACION GENERAL (PROGNOSIS)

POZO	: Z2A-21-814-D-L016(L016-10)
TIPO	: DESARROLLO
EQUIPO	: 8
OBJETIVO (formacion)	: RIO BRAVO
COORDENADAS SUPERFICIE	
NORTE	: 1,595,972.46 m
ESTE	: 125,066.24 m
COORDENADAS OBJETIVO	
NORTE	: 1,596,880.00 m
ESTE	: 124,410.00 m
CONDUCTORA No.	: DIEZ (10)
ANGULO DE LA CONDUCTORA	: 14 GRADOS
PROFUNDIDAD AGUA	: 309 PIES
ELEVACION KELLY BUSHING	: 50 PIES
INICIO DEL DESVIO	: 800 PIES
ANGULO MAXIMO	: 54 GRADOS
DIRECCION DEL POZO	: N 34° W
INCREMENTO DE ANGULO	: 3°/100'
PROFUNDIDAD MEDIDA AL OBJETIVO	: 5600 PIES
PROFUNDIDAD VERTICAL AL OBJETIVO	: 3950 PIES
DISTANCIA HORIZONTAL AL OBJETIVO	: 3800 PIES
PROFUNDIDAD FINAL ESTIMADA	: 7600 PIES
PROFUNDIDAD VERTICAL AL FINAL DEL POZO	: 5100 PIES
DISTANCIA HORIZONTAL AL FINAL DEL POZO	: 5300 PIES
LIMITES DEL TOPE DEL OBJETIVO	
DERECHA	: 400 PIES
IZQUIERDA	: 400 PIES
LIMITES DE LA BASE DEL OBJETIVO	
DERECHA	: 500 PIES
IZQUIERDA	: 500 PIES

ANADRIILL SCHLUMBERGER
PETROMAR-PERU
WELL: L016-10

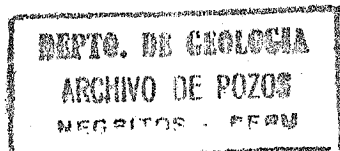


RADIUS OF CURVATURE CALCULATIONS

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MEASURED DEPTH Feet	B O R E - H O L E INCLINATION Degrees	D I R E C T I O N Degrees	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	DOGLEG SEVERITY Deg/100ft.	TURN RATE Deg/100ft.	BUILD/DROP RATE Deg/100ft.
0.00	14.00	N 82.33 W		0.00	0.00 N 0.00 E	0.00			
318.00	14.00	N 82.33 W	318.00	308.55	10.27 N 76.24 W	49.65	0.00	0.00	0.00
552.00	16.25	N 82.00 W	234.00	534.43	18.59 N 136.73 W	89.18	0.96	0.14	0.96
674.00	19.25	N 75.50 W	122.00	650.61	25.84 N 173.18 W	118.89	2.94	5.33	2.45
795.00	23.25	N 73.00 W	121.00	763.36	37.74 N 215.38 W	147.61	3.39	2.07	3.31
869.00	26.25	N 64.50 W	74.00	830.56	48.96 N 244.22 W	172.58	6.28	11.49	4.05
959.00	29.25	N 65.00 W	90.00	910.20	66.82 N 282.12 W	208.02	3.34	-0.56	3.33
1080.00	32.75	N 63.00 W	121.00	1013.90	94.15 N 338.12 W	251.16	3.01	1.65	2.89
1225.00	37.25	N 62.00 W	145.00	1132.64	132.54 N 411.87 W	333.18	3.13	0.69	3.10
1325.00	40.00	N 59.00 W	100.00	1210.76	163.27 N 466.19 W	388.29	3.33	3.00	2.75
1449.00	44.00	N 58.50 W	124.00	1302.89	206.31 N 537.11 W	462.70	3.24	0.40	3.23
1605.00	49.75	N 59.00 W	156.00	1409.49	265.35 N 634.41 W	564.80	3.69	-0.32	3.69
1731.00	54.00	N 58.00 W	126.00	1487.26	317.13 N 718.90 W	653.88	3.43	0.79	3.37
1818.00	54.75	N 55.50 W	87.00	1537.94	355.90 N 778.03 W	718.36	2.49	2.87	0.86
1911.00	55.00	N 53.50 W	93.00	1591.44	400.06 N 839.96 W	788.89	1.78	2.15	0.27
2056.00	55.00	N 55.00 W	155.00	1680.35	474.24 N 943.00 W	906.83	0.79	-0.97	0.00
2230.00	54.75	N 55.00 W	164.00	1774.71	551.18 N 1052.88 W	1030.78	0.15	0.00	-0.15
2385.00	53.25	N 53.50 W	155.00	1865.81	624.44 N 1154.64 W	1147.26	1.24	0.97	-0.97
2479.00	52.50	N 53.50 W	94.00	1922.55	669.02 N 1214.89 W	1217.24	0.80	0.00	-0.80
2698.00	51.00	N 53.00 W	219.00	2058.12	771.92 N 1352.69 W	1378.08	0.71	0.23	-0.68
2788.00	51.00	N 53.50 W	90.00	2114.76	813.77 N 1408.73 W	1443.50	0.43	-0.56	0.00
2976.00	49.25	N 54.00 W	188.00	2235.29	899.08 N 1525.08 W	1577.98	0.95	-0.27	-0.93
3074.00	50.25	N 54.50 W	98.00	2298.61	942.78 N 1585.78 W	1647.46	1.09	-0.51	1.02
3166.00	50.75	N 53.00 W	92.00	2357.13	984.75 N 1643.03 W	1713.63	1.37	1.63	0.54
3231.00	50.25	N 50.00 W	65.00	2398.47	1015.97 N 1682.27 W	1761.05	3.64	4.62	-0.77
3293.00	50.00	N 47.00 W	62.00	2438.22	1047.50 N 1717.91 W	1806.79	3.74	4.84	-0.40
3385.00	49.25	N 42.00 W	92.00	2497.82	1097.47 N 1767.01 W	1875.33	4.22	5.43	-0.82
3479.00	49.75	N 40.00 W	94.00	2558.86	1151.41 N 1813.91 W	1946.02	1.70	2.13	0.53
3572.00	50.50	N 37.50 W	93.00	2618.49	1207.07 N 1858.58 W	2016.97	2.21	2.69	0.81
3670.00	52.75	N 31.00 W	98.00	2679.32	1270.54 N 1901.79 W	2093.71	5.68	6.63	2.30
3732.00	52.25	N 27.00 W	62.00	2717.07	1313.55 N 1925.63 W	2142.80	5.18	6.45	-0.81
3795.00	51.50	N 22.00 W	63.00	2755.95	1358.63 N 1946.18 W	2191.86	6.35	7.94	-1.19
3868.00	51.75	N 19.00 W	73.00	2801.28	1412.23 N 1966.22 W	2247.83	3.24	4.11	0.34
3993.00	51.75	N 18.00 W	125.00	2878.67	1505.32 N 1997.36 W	2343.06	0.63	0.80	0.00
4147.00	51.25	N 16.00 W	154.00	2974.53	1620.57 N 2032.60 W	2459.19	1.07	1.30	-0.32
4300.00	50.00	N 15.00 W	153.00	3071.59	1734.54 N 2064.20 W	2572.27	0.96	0.65	-0.82
4454.00	48.25	N 14.00 W	154.00	3172.37	1847.27 N 2093.36 W	2683.00	1.24	0.65	-1.14
4604.00	48.50	N 12.00 W	150.00	3272.01	1956.51 N 2118.58 W	2788.68	1.01	1.33	0.17
4823.00	48.75	N 10.50 W	219.00	3416.76	2117.69 N 2150.64 W	2941.82	0.53	0.68	0.11
5036.00	49.50	N 9.00 W	213.00	3556.15	2276.42 N 2177.91 W	3090.32	0.64	0.70	0.35
5255.00	51.00	N 5.00 W	219.00	3696.18	2443.50 N 2198.43 W	3242.23	1.56	1.93	0.68
5835.00	51.50	N 3.00 E	580.00	4059.22	2895.39 N 2206.32 W	3627.51	1.08	1.38	0.09
5835.00 Dirección Proyectada									
6320.00	50.25	N 0.00 E	485.00	4365.25	3271.46 N 2196.47 W	3939.32	0.54	-0.62	-0.26
6602.00	50.75	N 2.00 W	282.00	4544.63	3489.02 N 2200.27 W	4124.80	0.58	-0.71	0.18

Final Station Closure - Distance: 4124.85 Feet
- Direction: N 32.24 W



ANADRIILL SCHLUMBERGER
 PETROMAR S.A. EQUIPO: 8
 POZO: L016-10

PLANE OF PROPOSAL
 32° 52' W

VERTICAL SECTION
 Scale 1" = 1250'

