



Vertical Section on 105.00 azimuth with reference 0.00 N, 0.00 E from 86-21

CALIFORNIA ENERGY COMPANY
NEWBERRY

86-21
86-21
NEWBERRY CRATER
OREGON

SURVEY LISTING

by
Baker Hughes INTEQ

Your ref : NEWBERRY 86-21
Our ref : svy4943
License :

Date printed : 15-Nov-95
Date created : 15-Nov-95
Last revised : 15-Nov-95

Field is centred on n43 45 0.000,w121 10 0
Structure is centred on n43 45 0.000,w121 10 0

Slot location is n43 45 0.000,w121 10 0.000
Slot Grid coordinates are N 759965.144, E 1823842.600
Slot local coordinates are 0.00 N 0.00 E
Reference North is True North

CALIFORNIA ENERGY COMPANY
NEWBERRY 86-21
NEWBERRY CRATER, OREGON

SURVEY LISTING Page 1
Your ref : NEWBERRY 86-21
Last revised : 15-Nov-95

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	R E C T A N G U L A R C O O R D I N A T E S		Dogleg Deg/100Ft	Vert Sect
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00
218.00	0.25	111.00	218.00	0.17 S	0.44 E	0.11	0.47
510.00	0.75	211.00	509.99	2.04 S	0.03 E	0.28	0.58
707.00	2.50	322.00	706.93	0.34 N	3.25 W	1.45	-3.21
902.00	3.25	291.00	901.69	5.58 N	11.03 W	0.87	-12.10
997.00	2.25	284.00	996.58	6.99 N	15.36 W	1.11	-16.64
1078.00	2.75	287.00	1077.51	7.94 N	18.76 W	0.64	-20.18
1110.00	2.50	287.00	1109.47	8.37 N	20.16 W	0.78	-21.64
1141.00	1.75	290.00	1140.45	8.73 N	21.25 W	2.44	-22.79
1171.00	1.00	298.00	1170.44	9.01 N	21.91 W	2.57	-23.50
1203.00	0.75	357.00	1202.44	9.33 N	22.17 W	2.78	-23.84
1232.00	1.00	60.00	1231.44	9.74 N	22.02 W	2.33	-23.79
1262.00	1.00	60.00	1261.43	10.07 N	21.62 W	1.16	-23.49
1294.00	1.25	110.00	1293.42	10.09 N	21.03 W	3.05	-22.95
1325.00	2.00	120.00	1324.41	9.70 N	20.27 W	2.58	-22.09
1356.00	2.75	123.00	1355.39	9.03 N	19.18 W	2.45	-20.86
1387.00	3.50	127.00	1386.34	8.05 N	17.80 W	2.52	-19.27
1417.00	4.50	127.00	1416.27	6.79 N	16.12 W	3.33	-17.33
1447.00	5.00	124.00	1446.16	5.35 N	14.10 W	1.86	-15.01
1479.00	5.75	119.00	1478.02	3.80 N	11.54 W	2.76	-12.13
1509.00	6.50	117.00	1507.85	2.30 N	8.72 W	2.60	-9.01
1541.00	6.75	108.00	1539.64	0.89 N	5.31 W	3.33	-5.36
1604.00	8.00	101.00	1602.12	1.09 S	2.51 E	2.44	2.71
1635.00	8.75	100.00	1632.79	1.91 S	6.95 E	2.46	7.21
1719.00	9.50	107.00	1715.72	5.04 S	19.87 E	1.59	20.50
1781.00	9.75	101.00	1776.85	7.54 S	29.92 E	1.67	30.85
1874.00	9.25	102.00	1868.58	10.60 S	44.96 E	0.37	44.17
1925.00	10.00	105.00	1918.86	12.60 S	53.23 E	1.77	54.69
1986.00	11.25	104.00	1978.81	15.41 S	64.14 E	2.07	65.94
2121.00	11.75	107.00	2111.10	22.51 S	90.06 E	0.58	92.84
2241.00	11.25	109.00	2228.70	30.00 S	112.81 E	0.53	114.73
2369.00	11.50	111.00	2354.18	38.63 S	136.23 E	0.36	141.88
2493.00	11.00	110.00	2473.80	47.11 S	159.19 E	0.43	165.96
2615.00	11.30	111.00	2593.45	55.45 S	181.68 E	0.44	189.65
2739.00	11.00	112.00	2717.07	64.31 S	203.99 E	0.43	213.68
2862.00	10.75	112.00	2837.86	73.00 S	225.50 E	0.20	236.71
2986.00	11.25	113.00	2939.58	82.06 S	247.36 E	0.43	260.17
3108.00	11.00	115.00	3079.29	91.63 S	268.86 E	0.38	283.42
3232.00	11.00	112.00	3201.01	101.06 S	290.55 E	0.46	306.81
3356.00	11.00	113.00	3322.74	110.12 S	312.41 E	0.13	330.27
3480.00	10.50	115.00	3444.56	119.51 S	333.34 E	0.50	353.11
3603.00	10.00	117.00	3567.56	129.23 S	353.54 E	0.49	374.94
3728.00	10.25	117.00	3688.63	139.07 S	372.80 E	0.20	396.09
3850.00	10.00	118.00	3808.73	148.97 S	391.83 E	0.25	417.03
3974.00	10.00	117.00	3930.86	158.91 S	410.92 E	0.14	438.05
4099.00	9.75	117.00	4054.01	168.64 S	430.03 E	0.20	459.02
4183.00	9.50	119.00	4138.80	175.39 S	442.72 E	0.48	473.03
4295.00	9.50	120.00	4247.29	184.33 S	458.52 E	0.15	490.61
4341.00	10.25	116.00	4292.61	188.02 S	465.49 E	2.21	498.29
4372.00	10.50	113.00	4323.11	190.34 S	470.57 E	1.92	503.80

All data is in feet unless otherwise stated
Coordinates from 86-21 and TVD from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 105.00 degrees.
Declination is 17.57 degrees, Convergence is -0.46 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

CALIFORNIA ENERGY COMPANY
NEWBERRY, 86-21
NEWBERRY CRATER, OREGON

SURVEY LISTING Page 2
Your ref : NEWBERRY 86-21
Last revised : 15-Nov-95

Measured Depth	Inclin. Degrees	Azimuth Degrees	True Vert. Depth	RECTANGULAR Dogleg			Vert Sect
				COORDINATES Deg/100Ft			
4405.00	10.75	110.00	4355.54	192.56 S	476.23 E	1.84	509.84
4438.00	11.00	108.00	4387.95	194.59 S	482.11 E	1.37	516.05
4542.00	12.75	104.00	4489.72	200.43 S	502.69 E	1.86	537.44
4635.00	13.75	103.00	4580.24	205.40 S	523.42 E	1.10	558.74
4728.00	15.25	104.00	4670.28	210.85 S	546.05 E	1.64	582.02
4819.00	16.50	104.00	4757.81	216.87 S	570.20 E	1.37	606.91
4911.00	18.75	104.00	4845.48	223.61 S	597.23 E	2.44	634.76
5041.00	19.50	102.00	4968.31	233.17 S	638.73 E	0.77	677.32
5167.00	20.50	104.00	5086.71	242.88 S	680.71 E	0.96	720.38
5290.00	20.50	102.00	5201.92	252.57 S	722.68 E	0.57	763.42
5414.00	18.75	105.00	5318.72	262.25 S	763.17 E	1.63	805.04
5501.00	19.50	102.00	5400.92	268.88 S	790.88 E	1.42	833.52
5630.00	19.50	106.00	5522.52	279.30 S	832.66 E	1.03	876.55
5755.00	19.00	101.00	5640.54	288.93 S	872.67 E	1.38	917.71
5878.00	19.25	97.00	5754.74	295.22 S	912.45 E	1.08	957.77
6002.00	19.00	104.00	5873.93	302.60 S	952.33 E	1.86	998.20
6128.00	19.75	105.00	5992.79	313.07 S	992.80 E	0.65	1039.99
6252.00	20.00	103.00	6109.41	323.26 S	1033.69 E	0.58	1082.14
6406.00	20.00	105.00	6254.12	336.00 S	1084.79 E	0.44	1134.79
6532.00	19.75	105.00	6372.62	347.09 S	1126.17 E	0.20	1177.63
6655.00	18.75	106.00	6484.74	357.92 S	1165.25 E	0.86	1213.18
6776.00	19.50	104.00	6603.06	368.16 S	1203.54 E	0.82	1257.82
6901.00	20.00	105.00	6720.71	378.74 S	1244.63 E	0.48	1300.05
7025.00	21.00	109.00	6836.86	391.47 S	1285.92 E	1.39	1343.42
7144.00	21.00	110.00	6947.96	403.70 S	1326.12 E	0.30	1385.94
7269.00	22.00	112.00	7064.26	422.13 S	1368.88 E	0.99	1431.49
7393.00	21.50	105.00	7179.45	436.72 S	1412.57 E	2.13	1477.28
7517.00	20.00	113.00	7295.43	450.89 S	1453.85 E	2.58	1521.01
7679.00	20.50	110.00	7447.42	471.42 S	1506.01 E	0.71	1576.70
7805.00	21.00	106.00	7565.25	485.18 S	1548.64 E	1.19	1621.26
7929.00	20.00	107.00	7681.40	497.31 S	1590.08 E	0.83	1664.67
8053.00	21.00	118.00	7797.59	514.15 S	1630.00 E	3.20	1707.53
8177.00	21.75	115.00	7913.06	534.29 S	1670.44 E	1.07	1751.80
8303.00	22.00	110.00	8030.00	552.23 S	1713.78 E	1.49	1798.31
8428.00	22.50	115.00	8145.70	570.34 S	1757.46 E	1.57	1845.19
8558.00	22.00	105.00	8264.06	587.17 S	1803.54 E	2.93	1894.06
8685.00	22.00	107.00	8383.82	600.28 S	1849.26 E	0.59	1941.62
8811.00	22.00	110.00	8500.65	615.25 S	1894.01 E	0.89	1988.71
8937.00	20.00	109.00	8618.27	630.34 S	1936.57 E	1.61	2033.72
9054.00	19.00	110.00	8728.56	643.37 S	1973.38 E	0.90	2072.66
9154.00	18.00	113.00	8823.39	654.97 S	2002.90 E	1.38	2104.18

All data is in feet unless otherwise stated.
Coordinates from 86-21 and TVD from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 105.00 degrees.
Dip is 17.57 degrees, Convergence is -0.46 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ

CALIFORNIA ENERGY COMPANY
NEWBERRY,86-21
NEWBERRY CRATER,OREGON

SURVEY LISTING Page 3
Your ref : NEWBERRY 86-21
Last revised : 15-Nov-95

All data is in feet unless otherwise stated
Coordinates from 86-21 and TYD from wellhead.
Bottom hole distance is 2107.25 on azimuth 108.11 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 105.00 degrees.
Declination is 17.57 degrees, Convergence is -0.45 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes INTEQ