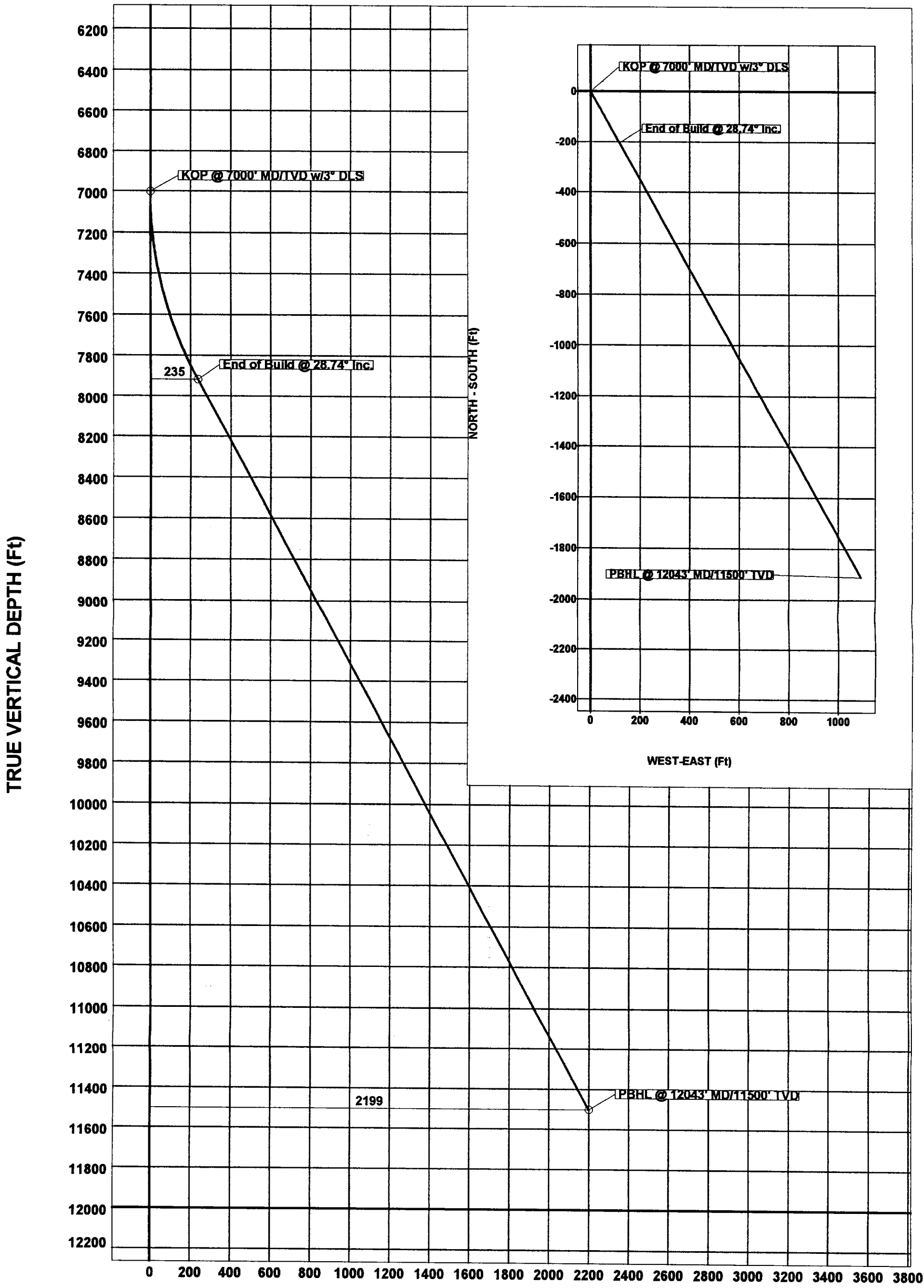


Company: GRUY PETROLEUM
Lease/Well: State '14' Com #2
Location: Eddy County
Rig Name: Patterson #79
State/Country: New Mexico/USA
Declination: N/A

Grid: N/A



VERTICAL SECTION (Ft) @ 150.29°

○ - State '14' Com #2

DDC

Directional Drilling Contractors, LLC.

Job Number: Proposal

Company: GRUY PETROLEUM

Lease/Well: State '14' Com #2

Location: Eddy County

Rig Name: Patterson #79

RKB: N/A

G.L. or M.S.L.: N/A

State/Country: New Mexico/USA

Declination: N/A

Grid: N/A

File name: C:\WINSERVE\GRUYSC2.SVY

Date/Time: 13-Jul-01 / 13:59

Curve Name: State '14' Com #2

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 150.29
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
KOP @ 7000' MD/TVD w/3° DLS							
7000.00	.00	151.86	7000.00	.00	.00	.00	.00
7030.00	.90	150.29	7030.00	-.20	.12	.24	3.00
7060.00	1.80	150.29	7059.99	-.82	.47	.94	3.00
7090.00	2.70	150.29	7089.97	-1.84	1.05	2.12	3.00
7120.00	3.60	150.29	7119.92	-3.27	1.87	3.77	3.00
7150.00	4.50	150.29	7149.85	-5.11	2.92	5.89	3.00
7180.00	5.40	150.29	7179.73	-7.36	4.20	8.48	3.00
7210.00	6.30	150.29	7209.58	-10.02	5.72	11.53	3.00
7240.00	7.20	150.29	7239.37	-13.08	7.46	15.06	3.00
7270.00	8.10	150.29	7269.10	-16.55	9.44	19.05	3.00
7300.00	9.00	150.29	7298.77	-20.42	11.65	23.51	3.00
7330.00	9.90	150.29	7328.36	-24.70	14.10	28.44	3.00
7360.00	10.80	150.29	7357.87	-29.38	16.77	33.83	3.00
7390.00	11.70	150.29	7387.30	-34.46	19.67	39.68	3.00
7420.00	12.60	150.29	7416.62	-39.95	22.80	46.00	3.00
7450.00	13.50	150.29	7445.85	-45.83	26.16	52.77	3.00
7480.00	14.40	150.29	7474.96	-52.11	29.74	60.00	3.00
7510.00	15.30	150.29	7503.96	-58.79	33.55	67.69	3.00
7540.00	16.20	150.29	7532.83	-65.86	37.59	75.83	3.00
7570.00	17.10	150.29	7561.58	-73.33	41.85	84.43	3.00
7600.00	18.00	150.29	7590.18	-81.19	46.33	93.48	3.00
7630.00	18.90	150.29	7618.64	-89.43	51.04	102.97	3.00
7660.00	19.80	150.29	7646.94	-98.06	55.96	112.91	3.00
7690.00	20.70	150.29	7675.09	-107.08	61.11	123.29	3.00
7720.00	21.60	150.29	7703.07	-116.48	66.48	134.12	3.00
7750.00	22.50	150.29	7730.87	-126.27	72.06	145.38	3.00
7780.00	23.40	150.29	7758.50	-136.43	77.86	157.08	3.00
7810.00	24.30	150.29	7785.93	-146.96	83.87	169.21	3.00
7840.00	25.20	150.29	7813.18	-157.87	90.09	181.77	3.00
7870.00	26.10	150.29	7840.22	-169.15	96.53	194.75	3.00
7900.00	27.00	150.29	7867.06	-180.79	103.18	208.16	3.00
7930.00	27.90	150.29	7893.68	-192.80	110.03	221.99	3.00
End of Build @ 28.74° Inc.							
7957.88	28.74	150.29	7918.22	-204.29	116.58	235.22	3.00
8057.88	28.74	150.29	8005.91	-246.05	140.41	283.29	.00
8157.88	28.74	150.29	8093.59	-287.80	164.24	331.37	.00
8257.88	28.74	150.29	8181.27	-329.56	188.07	379.45	.00
8357.88	28.74	150.29	8268.96	-371.32	211.90	427.53	.00
8457.88	28.74	150.29	8356.64	-413.07	235.73	475.61	.00
8557.88	28.74	150.29	8444.33	-454.83	259.56	523.68	.00
8657.88	28.74	150.29	8532.01	-496.59	283.39	571.76	.00
8757.88	28.74	150.29	8619.69	-538.34	307.22	619.84	.00
8857.88	28.74	150.29	8707.38	-580.10	331.05	667.92	.00
8957.88	28.74	150.29	8795.06	-621.86	354.88	716.00	.00
9057.88	28.74	150.29	8882.75	-663.62	378.71	764.07	.00
9157.88	28.74	150.29	8970.43	-705.37	402.54	812.15	.00
9257.88	28.74	150.29	9058.12	-747.13	426.37	860.23	.00
9357.88	28.74	150.29	9145.80	-788.89	450.20	908.31	.00
9457.88	28.74	150.29	9233.48	-830.64	474.03	956.39	.00
9557.88	28.74	150.29	9321.17	-872.40	497.86	1004.46	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
9657.88	28.74	150.29	9408.85	-914.16	521.69	1052.54	.00
9757.88	28.74	150.29	9496.54	-955.91	545.52	1100.62	.00
9857.88	28.74	150.29	9584.22	-997.67	569.35	1148.70	.00
9957.88	28.74	150.29	9671.90	-1039.43	593.18	1196.78	.00
10057.88	28.74	150.29	9759.59	-1081.18	617.01	1244.85	.00
10157.88	28.74	150.29	9847.27	-1122.94	640.84	1292.93	.00
10257.88	28.74	150.29	9934.96	-1164.70	664.67	1341.01	.00
10357.88	28.74	150.29	10022.64	-1206.45	688.50	1389.09	.00
10457.88	28.74	150.29	10110.33	-1248.21	712.33	1437.17	.00
10557.88	28.74	150.29	10198.01	-1289.97	736.16	1485.24	.00
10657.88	28.74	150.29	10285.69	-1331.72	759.99	1533.32	.00
10757.88	28.74	150.29	10373.38	-1373.48	783.82	1581.40	.00
10857.88	28.74	150.29	10461.06	-1415.24	807.65	1629.48	.00
10957.88	28.74	150.29	10548.75	-1456.99	831.48	1677.56	.00
10993.52	28.74	150.29	10580.00	-1471.88	839.97	1694.69	.00
11057.88	28.74	150.29	10636.43	-1498.75	855.31	1725.63	.00
11157.88	28.74	150.29	10724.11	-1540.51	879.14	1773.71	.00
11257.88	28.74	150.29	10811.80	-1582.27	902.97	1821.79	.00
11357.88	28.74	150.29	10899.48	-1624.02	926.80	1869.87	.00
11457.88	28.74	150.29	10987.17	-1665.78	950.63	1917.95	.00
11557.88	28.74	150.29	11074.85	-1707.54	974.46	1966.02	.00
11657.88	28.74	150.29	11162.53	-1749.29	998.29	2014.10	.00
11757.88	28.74	150.29	11250.22	-1791.05	1022.12	2062.18	.00
11857.88	28.74	150.29	11337.90	-1832.81	1045.95	2110.26	.00
11957.88	28.74	150.29	11425.59	-1874.56	1069.78	2158.34	.00
PBHL @ 12043' MD/11500' TVD							
12042.74	28.74	150.29	11500.00	-1910.00	1090.00	2199.14	.00