

Directional Drilling Company: Schlumberger Anadrill
Directional Drillers: Dwight McClellan, Francois Coquerie
Measured While Drilling (MWD) Hands: Ian Simpson, Claude Tarditi
Survey Type: magnetic
Survey Mode: MWD
Survey Date: Feb 27, 2001
Survey Calculation Method: minimum curvature
Target Azimuth: 340.00°
Dog Leg Severity Characteristic: 30.00

Survey Tie-In Information

Tie-In Co-Ordinates

Latitude: 0.1214800
Longitude: 10.0577000
N / S: 245.45 meters North of the South boundary of Sec. 25-45-12 W4M
E / W: 25.45 meters East of the West boundary of Sec. 25-45-12 W4M

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
10.00	10.00	0.000	0.00	0.00	0.00	0.00	0.00

Kick-Off (Whipstock) Information

Kick-Off Co-Ordinates

Latitude: 0.1214800
Longitude: 10.0577000
N / S: 245.28 meters North of the South boundary of Sec. 25-45-12 W4M
E / W: 26.08 meters East of the West boundary of Sec. 25-45-12 W4M

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
159.00	159.00	0.060	255.00	-0.17	-0.63	0.65	0.04

Remarks: Hole was drilled to perfection with respect to the original well plans. Casing point was within 5 cm. The horizontal portion (drain) of the well reached 525m and was terminated due to hole conditions. We could have gone further but the hole was tight.

Measured Depth	T.V.D.	Drift Angle (°)	Azimuth (°)	+N / -S Distance	+E / -W Distance	Vertical Section	DogLeg Severity
10.00	10.00	0.000	0.00	0.00	0.00	0.00	0.00
145.50	145.50	0.060	255.10	-0.02	-0.07	0.01	0.01
164.00	164.00	1.800	324.90	0.22	-0.25	0.29	2.89
182.50	182.44	6.780	341.80	1.49	-0.75	1.66	8.25
201.50	201.18	12.080	341.90	4.45	-1.72	4.77	8.37
218.70	217.83	16.650	344.40	8.54	-2.94	9.03	8.04
238.40	236.49	20.820	342.10	14.59	-4.78	15.34	6.45
257.40	253.97	25.240	339.50	21.60	-7.24	22.77	7.16
279.10	273.25	29.340	339.60	30.92	-10.71	32.72	5.67
294.90	286.69	34.080	339.90	38.71	-13.59	41.02	9.00
314.30	302.32	38.460	339.90	49.49	-17.53	52.50	6.77
333.40	316.82	42.760	338.50	61.10	-21.95	64.92	6.90
353.60	331.16	46.790	339.00	74.36	-27.10	79.14	6.01
372.10	343.30	51.180	340.10	87.44	-31.97	93.10	7.24
390.70	354.28	56.380	341.20	101.59	-36.94	108.10	8.51
409.60	363.84	62.800	340.80	116.99	-42.24	124.39	10.21
428.50	371.95	66.410	340.70	133.11	-47.87	141.46	5.73
447.70	379.14	69.600	340.60	149.91	-53.77	159.26	4.99
463.90	384.10	74.700	341.60	164.49	-58.76	174.67	9.61
482.60	388.16	80.200	341.80	181.81	-64.49	192.91	8.83
501.60	390.54	85.450	339.60	199.60	-70.72	211.75	8.98
515.70	391.24	88.800	339.70	212.80	-75.62	225.83	7.13
534.60	391.69	88.500	338.60	230.46	-82.34	244.72	1.81
543.40	391.90	88.800	338.20	238.64	-85.58	253.51	1.70
561.90	392.24	89.100	338.10	255.80	-92.47	272.00	0.51
580.40	392.27	90.700	337.90	272.96	-99.40	290.49	2.61
599.40	391.85	91.800	339.20	290.64	-106.34	309.48	2.69
618.30	391.41	90.900	338.60	308.26	-113.14	328.37	1.72
637.00	391.10	91.000	338.60	325.67	-119.97	347.06	0.16
655.40	390.66	91.700	339.20	342.83	-126.59	365.45	1.50
674.10	390.42	89.800	339.50	360.33	-133.18	384.15	3.09
692.80	390.48	89.800	339.00	377.82	-139.81	402.85	0.80