

SPERRY-SUN DRILLING SERVICES

CURRAGH RESOURCES INC.
91DY-011991 01 26
CX-LB-10076B

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE FEET	DEPARTURE FEET	VERTICAL SECTION	DOG LEG
0.00	89.65	4.08	0.00	0.00	0.00	0.00	0.00
50.00	89.63	34.42	50.00	0.28 N	0.10 E	0.13	0.38
100.00	89.43	44.49	100.00	0.59 N	0.37 E	0.17	0.43
150.00	89.47	15.61	150.00	0.99 N	0.60 E	0.30	0.55
200.00	89.35	32.72	199.99	1.46 N	0.82 E	0.48	0.42
250.00	89.20	30.82	249.99	1.99 N	1.15 E	0.64	0.30
300.00	89.27	6.94	299.98	2.61 N	1.37 E	0.93	0.65
350.00	89.00	349.41	349.98	3.36 N	1.33 E	1.50	0.75
400.00	88.65	320.59	399.97	4.24 N	0.87 E	2.45	1.35
450.00	88.55	317.82	449.95	5.17 N	0.07 E	3.67	0.24
500.00	88.42	314.02	499.94	6.11 N	0.85 W	4.99	0.33
550.00	87.75	310.19	549.91	7.23 N	2.10 W	6.66	1.36
600.00	86.75	312.43	599.85	8.82 N	3.89 W	9.05	2.01
650.00	86.08	315.59	649.75	10.99 N	6.13 W	12.17	1.39
700.00	85.60	313.26	699.62	13.53 N	8.72 W	15.79	1.02
750.00	85.00	312.92	749.45	16.33 N	11.72 W	19.88	1.20
800.00	84.87	309.54	799.26	19.23 N	15.04 W	24.28	0.65
850.00	84.48	314.16	849.04	22.33 N	18.49 W	28.91	1.15
900.00	84.53	310.74	898.81	25.56 N	22.02 W	33.68	0.66
950.00	84.30	311.81	948.57	28.77 N	25.67 W	38.53	0.51
1000.00	83.80	312.87	998.30	32.26 N	29.50 W	43.70	1.02
1050.00	83.40	313.91	1047.99	36.09 N	33.55 W	49.27	0.83
1100.00	82.75	313.96	1097.63	40.28 N	37.89 W	55.29	1.30
1150.00	82.58	312.00	1147.22	44.63 N	42.56 W	61.67	0.60
1200.00	82.50	313.06	1196.80	49.01 N	47.34 W	68.14	0.32
1250.00	82.67	314.62	1246.38	53.48 N	52.00 W	74.59	0.52
1300.00	82.87	314.72	1295.98	57.91 N	56.47 W	80.89	0.40
1350.00	82.83	316.33	1345.59	62.35 N	60.83 W	87.11	0.41
1400.00	82.50	318.47	1395.18	67.05 N	65.15 W	93.49	0.86
1440.00	81.97	320.18	1434.81	71.15 N	68.67 W	98.88	1.45

THE DOGLEG SEVERITY IS IN DEGREES PER 100.00 FEET
THE VERTICAL SECTION WAS COMPUTED ALONG 316.01x (TRUE)

BASED UPON MINIMUM CURVATURE TYPE CALCULATIONS. THE BOTTOM HOLE
DISPLACEMENT IS 98.88 FEET, IN THE DIRECTION OF 316.01x (TRUE)

SPERRY-SUN DRILLING SERVICES

CURRAGH RESOURCES INC.
91DY-021991 01 25
CX-LB-10076

MEASURED DEPTH	ANGLE DEG	DIRECTION DEG	VERTICAL DEPTH	LATITUDE FEET	DEPARTURE FEET	VERTICAL SECTION	DOG LEG
0.00	90.00	0.00	0.00	0.00	0.00	0.00	0.00
50.00	89.95	197.83	50.00	0.02 S	0.01 W	-0.01	0.10
100.00	89.00	347.66	100.00	0.38 N	0.11 W	0.37	2.09
150.00	88.75	354.07	149.99	1.35 N	0.26 W	1.23	0.56
200.00	88.83	346.54	199.98	2.39 N	0.43 W	2.16	0.36
250.00	88.80	343.90	249.97	3.39 N	0.69 W	3.11	0.13
300.00	88.75	316.25	299.96	4.29 N	1.22 W	4.14	1.17
350.00	88.28	305.09	349.94	5.11 N	2.21 W	5.39	1.09
400.00	87.25	295.39	399.90	6.06 N	3.90 W	7.18	2.19
450.00	86.27	299.23	449.82	7.36 N	6.41 W	9.75	2.01
500.00	85.47	299.50	499.69	9.13 N	9.55 W	13.06	1.60
550.00	84.32	294.77	549.49	11.14 N	13.52 W	17.08	2.45
600.00	83.62	302.55	599.21	13.68 N	18.11 W	21.89	2.15
650.00	83.13	300.31	648.88	16.68 N	23.03 W	27.28	1.10
700.00	83.00	302.61	698.51	19.83 N	28.18 W	32.92	0.62
750.00	82.67	303.88	748.12	23.25 N	33.39 W	38.81	0.74
800.00	82.67	305.65	797.71	26.89 N	38.63 W	44.90	0.45
850.00	82.30	305.49	847.28	30.69 N	43.95 W	51.16	0.74
900.00	82.00	310.28	896.82	34.89 N	49.34 W	57.77	1.44
950.00	81.50	310.80	946.30	39.55 N	54.79 W	64.79	1.01
1000.00	81.35	315.11	995.74	44.63 N	60.24 W	72.14	1.32
1050.00	80.50	321.38	1045.12	50.52 N	65.47 W	80.00	2.61
1100.00	80.00	325.17	1094.39	57.31 N	70.52 W	88.46	1.63
1150.00	79.97	324.98	1143.63	64.44 N	75.50 W	97.15	0.09
1200.00	79.48	323.82	1192.83	71.69 N	80.69 W	106.06	1.05
1250.00	79.23	327.57	1241.97	79.31 N	85.89 W	115.27	1.47
1300.00	79.45	324.89	1291.11	87.00 N	91.03 W	124.50	1.08
1350.00	79.22	326.47	1340.24	94.64 N	96.25 W	133.73	0.75
1400.00	78.60	326.21	1389.31	102.65 N	101.58 W	143.33	1.24
1450.00	77.75	324.05	1438.25	111.05 N	107.44 W	153.56	1.92
1500.00	77.13	329.64	1487.05	120.15 N	113.37 W	164.39	2.73
1550.00	76.93	333.30	1535.78	130.00 N	118.72 W	175.46	1.69
1600.00	76.83	336.46	1584.48	140.27 N	123.54 W	186.53	1.45
1650.00	77.00	334.75	1633.18	150.58 N	128.21 W	197.54	0.84
1700.00	77.43	336.28	1681.94	160.64 N	132.80 W	208.31	1.10
1750.00	77.30	338.43	1730.73	170.73 N	137.01 W	218.87	0.98
1800.00	77.53	335.78	1779.53	180.77 N	141.24 W	229.40	1.24
1825.00	77.32	336.09	1803.93	185.74 N	143.46 W	234.69	0.91

SPERRY-SUN DRILLING SERVICES

CURRAGH RESOURCES INC.
91DY-02

1991 01 25
CX-LB-10076

THE DOGLEG SEVERITY IS IN DEGREES PER 100.00 FEET
THE VERTICAL SECTION WAS COMPUTED ALONG 322.32x (TRUE)

BASED UPON MINIMUM CURVATURE TYPE CALCULATIONS. THE BOTTOM HOLE
DISPLACEMENT IS 234.69 FEET, IN THE DIRECTION OF 322.32x (TRUE)

SPERRY-SUN DRILLING SERVICES
GYROSCOPIC DIRECTIONAL SURVEY

CURRAGH RESOURCES INC.
91DY-04

CX-LB-10111B
1991 02 10

TOTAL DEPTH	DIRECTION DEG	ANGLE DEG	VERTICAL DEPTH	LATITUDE FEET	DEPARTURE FEET	VERTICAL SECTION	DOG LEG
0	217.1	0.08	0.00	0.00 N	0.00 E	0.00	0.00
50	17.1	0.12	50.00	0.02 N	0.01 W	0.02	0.39
100	325.1	0.68	100.00	0.31 N	0.16 W	0.34	1.24
150	332.5	0.85	149.99	0.89 N	0.50 W	0.99	0.39
200	349.0	1.07	199.99	1.67 N	0.76 W	1.74	0.70
250	342.0	1.50	249.97	2.75 N	1.06 W	2.72	0.92
300	342.9	1.55	299.96	4.02 N	1.46 W	3.92	0.11
350	335.4	1.55	349.94	5.28 N	1.94 W	5.17	0.41
400	330.8	1.62	399.92	6.51 N	2.56 W	6.49	0.28
450	317.9	1.73	449.90	7.69 N	3.41 W	7.93	0.79
500	314.9	1.82	499.87	8.81 N	4.48 W	9.48	0.25
550	315.9	2.00	549.85	9.99 N	5.65 W	11.14	0.37
600	311.4	2.33	599.81	11.29 N	7.02 W	13.03	0.75
650	321.9	2.28	649.77	12.75 N	8.40 W	15.03	0.85
700	314.6	2.33	699.73	14.25 N	9.74 W	17.04	0.60
750	311.1	2.87	749.68	15.78 N	11.41 W	19.30	1.11
800	313.6	2.93	799.61	17.49 N	13.28 W	21.83	0.29
850	314.6	2.58	849.56	19.16 N	15.01 W	24.23	0.71
900	315.0	3.17	899.49	20.93 N	16.79 W	26.74	1.17
950	317.0	3.08	949.42	22.89 N	18.68 W	29.46	0.27
1000	315.9	2.93	999.35	24.79 N	20.48 W	32.09	0.32
1050	316.4	3.50	1049.27	26.82 N	22.43 W	34.89	1.14
1100	312.6	3.73	1099.17	29.02 N	24.68 W	38.04	0.67
1150	316.1	4.67	1149.04	31.59 N	27.28 W	41.70	1.93
1200	314.5	4.88	1198.86	34.55 N	30.21 W	45.86	0.51
1250	316.4	5.33	1248.66	37.73 N	33.33 W	50.31	0.96
1300	319.8	5.37	1298.45	41.20 N	36.44 W	54.97	0.64
1350	314.3	6.00	1348.20	44.81 N	39.82 W	59.91	1.68
1400	316.2	6.40	1397.91	48.64 N	43.62 W	65.31	0.90
1450	318.1	6.53	1447.59	52.77 N	47.45 W	70.94	0.50
1500	314.9	6.75	1497.26	56.96 N	51.43 W	76.72	0.84
1550	313.5	7.37	1546.88	61.24 N	55.84 W	82.86	1.28
1600	314.9	7.25	1596.47	65.67 N	60.40 W	89.22	0.42
1650	313.7	7.52	1646.06	70.16 N	65.00 W	95.64	0.61
1700	315.2	7.65	1695.62	74.78 N	69.71 W	102.23	0.46
1750	313.1	7.62	1745.18	79.41 N	74.47 W	108.86	0.55
1800	314.1	7.70	1794.73	84.00 N	79.30 W	115.52	0.30
1850	315.0	7.92	1844.27	88.77 N	84.14 W	122.31	0.50

SPERRY-SUN DRILLING SERVICES
GYROSCOPIC DIRECTIONAL SURVEY

CURRAGH RESOURCES INC.
91DY-04

CX-LB-10111B
1991 02 10

THE DOGLEG SEVERITY IS IN DEGREES PER 100 FEET
THE VERTICAL SECTION WAS COMPUTED ALONG AZ. 316.53

BASED UPON MINIMUM CURVATURE TYPE CALCULATIONS. THE BOTTOM HOLE
DISPLACEMENT IS 122.31 FEET, IN THE DIRECTION OF AZ. 316.53