



CONFIDENTIAL WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 5259
Name: Mai Oil Operations, Inc.
Address 1: 8411 PRESTON RD STE 800
Address 2:
City: DALLAS State: TX Zip: 75225 + 5520
Contact Person: Allen Bangert
Phone: (214) 219-8883
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Jim Musgrove
Purchaser:

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil WSW SWD SLOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.):

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: Plug Back Total Depth
 Commingled Permit #:
 Dual Completion Permit #:
 SWD Permit #:
 ENHR Permit #:
 GSW Permit #:
11/13/2012 11/19/2012 11/19/2012
Spud Date or Date Reached TD Completion Date or Recompletion Date

API No. 15 - 15-167-23837-00-00
Spot Description:
E2 SW SW SE Sec. 4 Twp. 15 S. R. 14 East West
330 Feet from North / South Line of Section
1985 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Russell
Lease Name: Schmitt Well #: 5
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1770 Kelly Bushing: 1778
Total Depth: 3298 Plug Back Total Depth: 3273
Amount of Surface Pipe Set and Cemented at: 473 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 47000 ppm Fluid volume: 80 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Mai Oil Operations, Inc.
Lease Name: Flegler "A" License #: 5259
Quarter SW Sec. 3 Twp. 15 S. R. 14 East West
County: Russell Permit #: D30856

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Letter of Confidentiality Received
Date: 01/11/2013
 Confidential Release Date:
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: NAOMI JAMES Date: 01/11/2013

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY. DISTANCES, COORDINATES AND BEARINGS SHOWN ARE NOT INTENDED TO BE DEFINITIVE IN ESTABLISHING ACTUAL TITLE BOUNDARY. THIS DRAWING IS FOR CONSTRUCTION PURPOSES ONLY. All Bearings, Distances, and Coordinates shown hereon are based on the Kansas State Plane Coordinate System, N.A.D. 27 Datum, South Zone.

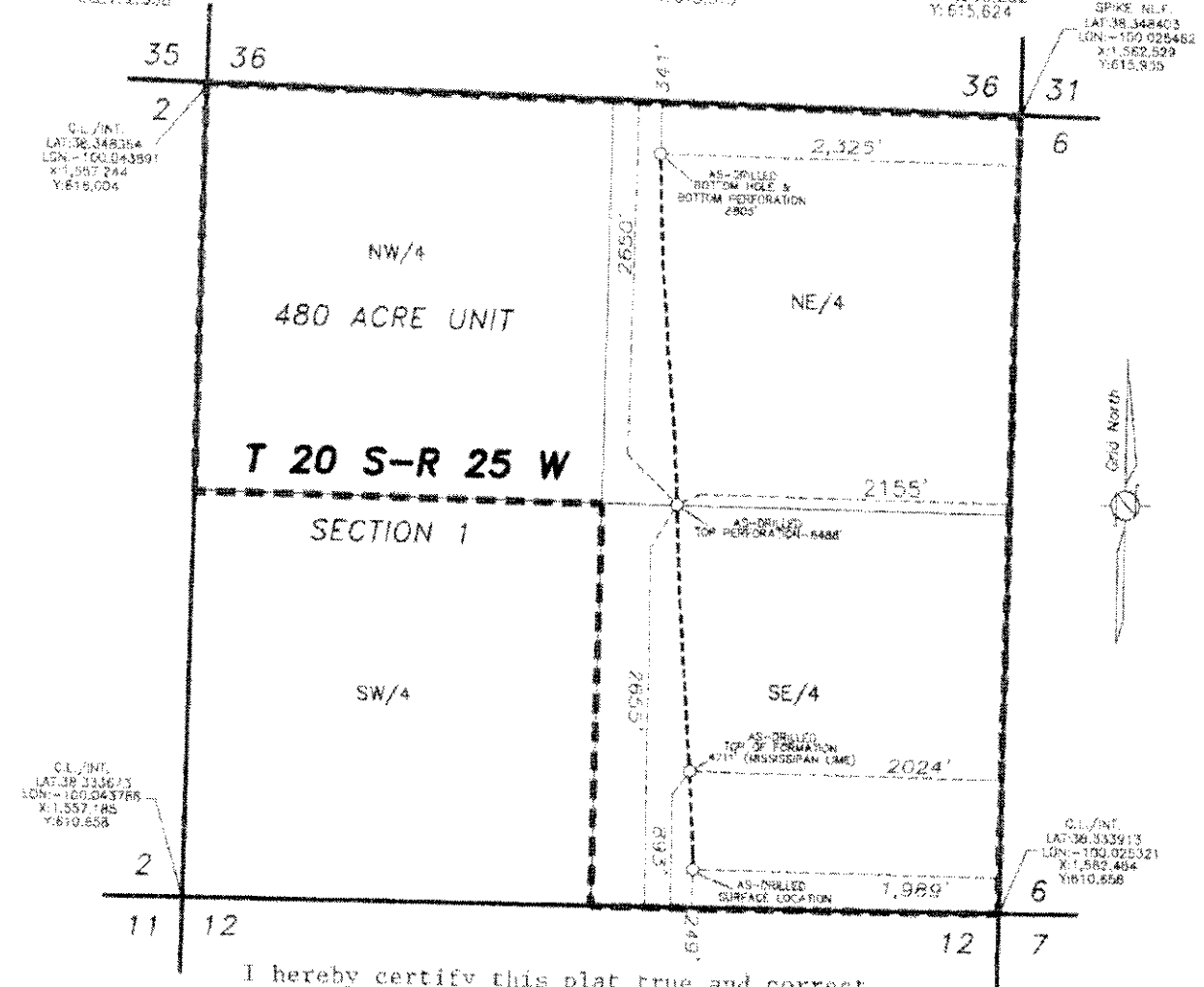
AS-DRILLED SURFACE LOCATION
1,989' FEL & 249' FSL
OF SECTION 1
LAT: 38.344508
LON: -100.032260
X: 1,560,497
Y: 610,907
ELEV: 2,358'

AS-DRILLED TOP OF FORMATION
2024' FEL & 893' FSL
OF SECTION 1
LAT: 38.336273
LON: -100.032401
X: 1,559,467
Y: 611,551

AS-DRILLED TOP PERFORMANCE
2155' FEL & 2650' FNL
OF SECTION 1
LAT: 38.341106
LON: -100.032908
X: 1,560,351
Y: 613,310

AS-DRILLED BOTTOM HOLE & BOTTOM PERFORMANCE
2,325' FEL & 341' FNL
OF SECTION 1
LAT: 38.347445
LON: -100.033580
X: 1,560,202
Y: 615,624

SPIKE NLF.
LAT: 38.348403
LON: -100.025462
X: 1,562,529
Y: 615,835



I hereby certify this plat true and correct to the best of my knowledge and belief.

Sharon Cook

REVIEW COPY Sharon Cook

AS-DRILLED PLAT
ENCANA OIL & GAS (USA) INC.
KERR 1H-2
NESS COUNTY, KANSAS
SCALE: 1" = 1000'

--- UNIT LINE



Digital Drilling Data
Systems, LLC

Survey Report

Company: Drillright Technology Inc.

Location: Sec. 01, T20S R25W

Well: Kerr 1H-2

Rig: Precision 209

API or UWI: 1513525449000

Job Number: DR1209137

State: KS

Operator: Encana Oil & Gas

County: Ness

Magnetic Declination: 0.00

Comment

Proposed Azimuth: 356.53

North Reference: GRID

Tiein Survey Data:

MD	Inclination	Azimuth	TVD	NS	EW
1578.00	0.95	101.42	1577.52	6.45	34.20

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
1622.00	0.90	148.80	1621.52	6.08	34.74	80.07	35.27	3.97	1.69
1712.00	1.00	142.90	1711.50	4.85	35.58	82.24	35.91	2.69	0.16
1802.00	1.00	160.70	1801.49	3.48	36.31	84.52	36.48	1.28	0.34
1893.00	0.80	246.50	1892.48	2.48	35.99	86.06	36.08	0.30	1.36
1983.00	0.80	236.70	1982.47	1.89	34.89	86.91	34.94	-0.23	0.15
2073.00	0.80	242.40	2072.46	1.25	33.81	87.88	33.83	-0.80	0.09
2164.00	0.80	236.20	2163.46	0.60	32.72	88.95	32.72	-1.38	0.10
2255.00	0.90	240.60	2254.45	-0.10	31.56	90.19	31.57	-2.01	0.13
2345.00	1.20	295.00	2344.43	-0.05	30.09	90.10	30.10	-1.87	1.11
2435.00	1.20	302.90	2434.41	0.86	28.45	88.27	28.46	-0.86	0.18
2525.00	1.30	297.20	2524.39	1.84	26.75	86.07	26.81	0.21	0.18
2815.00	1.20	300.30	2614.37	2.78	25.03	83.68	25.18	1.26	0.13
2706.00	1.10	295.80	2705.35	3.84	23.42	81.17	23.70	2.21	0.15
2796.00	1.10	300.40	2795.33	4.45	21.89	78.52	22.34	3.11	0.10
2887.00	1.10	298.00	2886.32	5.30	20.37	75.41	21.05	4.06	0.05
2977.00	1.10	291.30	2976.30	6.02	18.80	72.25	19.74	4.87	0.14
3068.00	1.00	287.00	3067.29	6.57	17.23	69.13	18.44	5.51	0.14
3158.00	0.90	286.80	3157.27	7.00	15.80	66.10	17.28	6.03	0.11
3248.00	0.90	282.40	3247.26	7.36	14.43	62.99	16.20	6.47	0.08

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
3339.00	0.90	281.60	3338.25	7.66	13.04	59.57	15.12	6.85	0.01
3429.00	0.80	278.70	3428.24	7.89	11.72	56.05	14.13	7.17	0.12
3519.00	1.20	277.50	3518.23	8.11	10.17	51.42	13.01	7.48	0.45
3585.00	1.30	279.10	3564.22	8.26	9.17	48.01	12.34	7.69	0.23
3610.00	1.20	332.00	3609.21	8.75	8.45	43.98	12.17	8.23	2.48
3655.00	3.00	359.70	3654.18	10.35	8.22	38.47	13.22	9.83	4.48
3701.00	5.90	358.90	3700.03	13.92	8.17	30.42	16.14	13.40	6.31
3746.00	9.40	352.20	3744.63	19.87	7.63	21.00	21.28	19.37	8.01
3791.00	12.50	351.50	3788.80	28.33	6.41	12.74	29.05	27.89	6.90
3836.00	15.90	353.20	3832.42	39.27	4.96	7.19	39.58	38.90	7.61
3882.00	19.20	356.70	3876.27	53.08	3.78	4.07	53.22	52.76	7.53
3927.00	23.20	358.50	3918.22	69.34	3.12	2.57	69.41	69.02	9.00
3972.00	27.20	358.20	3958.93	88.49	2.56	1.66	88.52	88.17	8.89
4017.00	30.70	358.30	3998.30	110.25	1.90	0.99	110.27	109.94	7.78
4062.00	33.70	357.10	4036.37	134.21	0.93	0.40	134.21	133.91	6.82
4107.00	36.60	355.90	4073.17	160.06	-0.67	359.76	160.06	159.81	6.62
4153.00	39.40	355.90	4109.41	188.31	-2.69	359.18	188.33	188.13	6.09
4198.00	42.30	355.10	4143.45	217.65	-5.01	358.68	217.71	217.55	6.55
4243.00	45.80	355.30	4175.78	248.82	-7.62	358.25	248.94	248.83	7.78
4288.00	48.80	355.50	4206.30	281.78	-10.27	357.91	281.97	281.89	6.67
4334.00	51.00	356.30	4235.93	316.88	-12.78	357.69	317.14	317.07	4.98
4379.00	54.30	356.70	4263.22	352.58	-14.96	357.57	352.90	352.84	7.37
4424.00	58.50	357.20	4288.12	390.00	-16.95	357.51	390.37	390.31	9.38
4469.00	60.80	357.60	4310.88	428.79	-18.71	357.50	429.20	429.13	5.17
4514.00	60.70	357.30	4332.84	468.01	-20.46	357.50	468.46	468.39	0.62
4560.00	61.00	357.00	4355.25	508.14	-22.46	357.47	508.63	508.56	0.87
4605.00	60.60	356.80	4377.20	547.38	-24.58	357.43	547.91	547.85	0.97
4650.00	60.60	356.70	4399.29	586.50	-26.81	357.38	587.11	587.05	0.19
4695.00	64.40	356.80	4420.07	626.35	-29.07	357.34	627.02	626.95	8.45
4740.00	69.10	355.60	4437.83	667.59	-31.81	357.27	668.34	668.29	10.73
4786.00	73.30	354.90	4452.65	710.97	-35.42	357.15	711.85	711.81	9.24
4829.00	77.30	354.80	4463.56	752.39	-39.16	357.02	753.40	753.38	9.31
4884.00	80.50	355.20	4474.15	806.15	-43.66	356.89	807.34	807.33	5.86
4916.00	84.80	355.80	4478.24	837.78	-46.35	356.83	839.06	839.05	13.57
4947.00	88.90	356.10	4479.94	868.65	-48.53	356.80	870.01	870.00	13.26

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
4979.00	89.70	356.50	4480.33	900.58	-50.60	356.78	902.00	901.99	2.80
5010.00	90.20	356.60	4480.36	931.52	-52.46	356.78	933.00	932.99	1.64
5042.00	91.00	356.30	4480.03	963.46	-54.44	356.77	964.99	964.99	2.67
5074.00	89.90	355.80	4479.77	995.38	-56.65	356.74	997.00	996.99	3.78
5105.00	88.50	355.10	4480.21	1028.28	-59.11	356.70	1027.98	1027.98	5.05
5137.00	88.50	355.20	4481.04	1058.16	-61.81	356.66	1059.96	1059.96	0.31
5169.00	89.10	355.20	4481.71	1090.04	-64.49	356.61	1091.95	1091.94	1.87
5200.00	90.90	355.60	4481.71	1120.93	-66.97	356.58	1122.93	1122.93	5.95
5232.00	91.00	356.00	4481.18	1152.84	-69.32	356.56	1154.92	1154.92	1.29
5263.00	91.40	356.20	4480.53	1183.77	-71.43	356.55	1185.92	1185.92	1.44
5294.00	92.80	356.30	4479.40	1214.68	-73.45	356.54	1216.89	1216.89	4.53
5324.00	91.80	356.00	4478.19	1244.59	-75.46	356.53	1246.87	1246.87	3.48
5355.00	90.70	356.10	4477.52	1275.50	-77.60	356.52	1277.86	1277.86	3.56
5386.00	87.80	355.90	4477.92	1306.42	-79.76	356.51	1308.86	1308.86	9.38
5417.00	87.90	356.30	4479.09	1337.33	-81.87	356.50	1339.83	1339.83	1.33
5447.00	89.40	356.10	4479.79	1367.25	-83.86	356.49	1369.82	1369.82	5.04
5477.00	89.90	355.80	4479.98	1397.17	-86.03	356.48	1399.82	1399.82	2.36
5508.00	90.30	356.10	4479.92	1428.09	-88.27	356.46	1430.82	1430.82	2.07
5539.00	91.60	356.40	4479.41	1459.02	-90.30	356.46	1461.82	1461.82	4.30
5569.00	91.40	356.50	4478.62	1488.95	-92.15	356.46	1491.80	1491.80	0.75
5600.00	90.80	355.80	4478.03	1519.88	-94.24	356.45	1522.80	1522.80	2.97
5630.00	90.80	355.20	4477.61	1549.78	-96.59	356.43	1552.78	1552.78	2.00
5661.00	90.70	355.80	4477.20	1580.68	-99.02	356.42	1583.79	1583.78	1.96
5691.00	91.30	355.80	4476.68	1610.60	-101.22	356.40	1613.78	1613.77	2.00
5722.00	91.20	356.20	4476.00	1641.52	-103.38	356.40	1644.76	1644.76	1.33
5752.00	90.90	355.50	4475.45	1671.43	-105.55	356.39	1674.76	1674.75	2.54
5783.00	89.70	354.40	4475.29	1702.31	-108.28	356.36	1705.75	1705.75	5.25
5814.00	88.40	354.00	4475.81	1733.15	-111.41	356.32	1736.73	1736.71	4.39
5844.00	88.80	355.50	4476.54	1763.01	-114.16	356.30	1766.70	1766.68	5.17
5875.00	90.00	356.50	4476.86	1793.93	-116.32	356.29	1797.70	1797.68	5.04
5906.00	90.90	357.60	4476.62	1824.89	-117.91	356.30	1828.69	1828.68	4.58
5936.00	90.30	357.30	4476.31	1854.86	-119.25	356.32	1858.69	1858.68	2.24
5967.00	90.20	357.30	4476.17	1885.82	-120.71	356.34	1889.68	1889.67	0.32
5997.00	92.00	357.50	4475.60	1915.79	-122.07	356.35	1919.67	1919.66	6.04
6028.00	91.90	357.30	4474.54	1946.74	-123.47	356.37	1950.65	1950.64	0.72

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
6059.00	91.60	357.20	4473.59	1977.69	-124.96	356.38	1981.63	1981.62	1.02
6089.00	92.00	357.00	4472.65	2007.63	-126.48	356.40	2011.61	2011.60	1.49
6120.00	93.00	357.50	4471.30	2038.57	-127.96	356.41	2042.58	2042.58	3.61
6150.00	93.00	357.20	4469.73	2068.49	-129.35	356.42	2072.53	2072.53	1.00
6181.00	91.80	356.70	4468.43	2099.42	-131.00	356.43	2103.51	2103.51	4.19
6212.00	89.70	356.40	4468.02	2130.38	-132.86	356.43	2134.51	2134.50	6.84
6243.00	89.60	356.60	4468.21	2161.30	-134.75	356.43	2165.51	2165.50	0.72
6273.00	90.00	357.00	4468.32	2191.26	-136.43	356.44	2195.49	2195.49	1.89
6295.00	90.00	357.70	4468.32	2213.23	-137.45	356.45	2217.50	2217.49	3.18
6325.00	90.00	357.40	4468.32	2243.20	-138.73	356.46	2247.49	2247.49	1.00
6356.00	90.20	357.60	4468.26	2274.18	-140.08	356.48	2278.48	2278.48	0.91
6388.00	90.70	357.30	4468.01	2306.14	-141.50	356.49	2310.49	2310.49	1.82
6419.00	91.50	357.40	4467.42	2337.10	-142.94	356.50	2341.47	2341.47	2.60
6451.00	92.20	357.40	4466.38	2369.05	-144.39	356.51	2373.46	2373.46	2.19
6483.00	92.80	357.50	4464.99	2400.99	-145.81	356.52	2405.42	2405.42	1.90
6514.00	92.90	357.70	4463.45	2431.93	-147.11	356.54	2436.37	2436.37	0.72
6546.00	91.90	357.30	4462.11	2463.87	-148.50	356.55	2468.34	2468.34	3.37
6577.00	91.40	357.10	4461.21	2494.82	-150.02	356.56	2499.32	2499.32	1.74
6609.00	90.40	357.00	4460.71	2526.77	-151.66	356.57	2531.33	2531.33	3.14
6641.00	90.70	357.20	4460.41	2558.73	-153.28	356.57	2563.32	2563.32	1.13
6672.00	90.80	357.20	4460.00	2589.69	-154.80	356.58	2594.32	2594.32	0.32
6704.00	90.00	356.30	4459.78	2621.64	-156.61	356.58	2626.31	2626.31	3.78
6735.00	89.10	356.20	4460.02	2652.57	-158.64	356.58	2657.30	2657.30	2.92
6767.00	89.10	356.30	4460.52	2684.49	-160.73	356.57	2689.31	2689.31	0.31
6799.00	90.80	356.90	4460.55	2716.44	-162.63	356.57	2721.30	2721.30	5.63
6830.00	91.70	357.40	4459.87	2747.39	-164.17	356.58	2752.30	2752.30	3.32
6862.00	91.50	357.20	4458.98	2779.34	-165.68	356.59	2784.27	2784.27	0.88
6894.00	91.70	357.20	4458.09	2811.29	-167.24	356.60	2816.26	2816.25	0.62
6925.00	90.20	356.60	4457.57	2842.24	-168.91	356.60	2847.27	2847.27	5.21
6957.00	89.80	356.50	4457.57	2874.18	-170.64	356.60	2879.27	2879.26	1.29
6989.00	90.60	356.00	4457.46	2906.11	-172.93	356.59	2911.24	2911.24	2.95
7020.00	90.00	355.10	4457.30	2937.02	-175.34	356.58	2942.26	2942.26	3.49
7052.00	89.50	354.30	4457.44	2968.88	-178.29	356.56	2974.23	2974.23	2.95
7084.00	89.90	354.50	4457.61	3000.73	-181.42	356.54	3006.20	3006.20	1.40
7115.00	90.20	354.50	4457.58	3031.59	-184.39	356.52	3037.18	3037.18	0.97

MD	Inclination	Azimuth	TVD	NS	EW	CA	CD	VS	DLS
7147.00	90.30	354.50	4457.44	3063.44	-187.45	356.50	3069.17	3069.17	0.31
7178.00	90.70	354.60	4457.17	3094.30	-190.40	356.48	3100.15	3100.15	1.33
7210.00	90.90	355.10	4456.72	3126.17	-193.27	356.46	3132.14	3132.13	1.68
7242.00	89.30	355.20	4456.67	3158.05	-195.98	356.45	3164.12	3164.12	5.01
7273.00	89.70	355.10	4456.94	3188.94	-198.60	356.44	3195.12	3195.11	1.33
7305.00	89.80	355.00	4457.08	3220.82	-201.36	356.42	3227.11	3227.11	0.44
7336.00	89.90	354.80	4457.16	3251.69	-204.11	356.41	3258.11	3258.10	0.72
7368.00	90.00	354.30	4457.19	3283.55	-207.15	356.39	3290.07	3290.06	1.59
7399.00	90.50	354.20	4457.05	3314.39	-210.26	356.37	3321.05	3321.04	1.64
7431.00	90.90	354.10	4456.66	3346.22	-213.52	356.35	3353.03	3353.02	1.29
7463.00	90.70	354.30	4456.21	3378.06	-216.75	356.33	3385.01	3384.99	0.88
7494.00	90.20	355.10	4455.97	3408.92	-219.62	356.31	3416.00	3415.97	3.04
7526.00	89.60	356.10	4456.02	3440.83	-222.07	356.31	3447.98	3447.96	3.64
7558.00	89.50	356.50	4456.28	3472.76	-224.14	356.31	3479.99	3479.97	1.29
7589.00	89.50	356.40	4456.55	3503.70	-226.06	356.31	3510.99	3510.96	0.32
7621.00	90.10	356.50	4456.66	3535.64	-228.04	356.31	3542.99	3542.97	1.90
7652.00	90.20	356.30	4456.58	3566.58	-229.98	356.31	3573.97	3573.96	0.72
7684.00	90.00	355.80	4456.52	3598.50	-232.19	356.31	3605.99	3605.96	1.68
7715.00	90.40	355.70	4456.41	3629.42	-234.49	356.30	3636.99	3636.96	1.33
7747.00	90.50	355.40	4456.18	3661.32	-236.97	356.30	3668.97	3668.94	0.99
7778.00	90.20	354.80	4455.97	3692.20	-239.62	356.28	3699.97	3699.93	2.16
7810.00	90.60	354.40	4455.75	3724.06	-242.63	356.27	3731.96	3731.92	1.77
7842.00	90.70	354.50	4455.39	3755.91	-245.72	356.26	3763.94	3763.90	0.44
7873.00	90.80	354.20	4454.98	3786.76	-248.77	356.24	3794.92	3794.87	1.02
7904.00	89.60	354.20	4454.87	3817.60	-251.91	356.22	3825.91	3825.85	3.87
7936.00	89.30	354.90	4455.18	3849.45	-254.95	356.21	3857.88	3857.82	2.38
7968.00	89.70	355.00	4455.46	3881.32	-257.76	356.20	3889.88	3889.82	1.29
7999.00	89.80	354.80	4455.59	3912.20	-260.52	356.19	3920.86	3920.79	0.72
8031.00	89.30	356.50	4455.84	3944.11	-262.95	356.19	3952.86	3952.78	5.54
8062.00	89.00	356.80	4456.30	3975.05	-264.81	356.19	3983.86	3983.79	1.02
8094.00	89.60	356.30	4456.70	4006.98	-266.79	356.19	4015.85	4015.78	2.10
8126.00	89.70	355.90	4456.89	4038.91	-268.97	356.19	4047.86	4047.79	1.29
8157.00	88.50	357.50	4457.38	4069.85	-270.75	356.19	4078.86	4078.79	6.45
8189.00	88.10	357.80	4458.33	4101.81	-272.12	356.20	4110.83	4110.76	1.29
8221.00	89.00	357.50	4459.14	4133.77	-273.49	356.21	4142.80	4142.74	2.83

MD	Inclination	Azimuth	TVD	NS	EW	GA	CD	VS	DLS
8252.00	89.30	356.90	4459.60	4164.73	-275.00	356.22	4173.80	4173.74	2.16
8284.00	89.30	356.50	4459.99	4196.67	-276.84	356.23	4205.80	4205.74	1.25
8315.00	89.40	356.60	4460.34	4227.61	-278.71	356.23	4236.80	4236.74	0.46
8347.00	89.70	357.20	4460.59	4259.57	-280.44	356.23	4268.78	4268.73	2.10
8379.00	89.50	357.00	4460.81	4291.52	-282.06	356.24	4300.78	4300.72	0.88
8410.00	89.30	356.90	4461.14	4322.48	-283.71	356.24	4331.77	4331.72	0.72
8442.00	90.00	358.20	4461.33	4354.45	-285.08	356.25	4363.79	4363.73	4.61
8474.00	89.70	358.40	4461.42	4386.43	-286.03	356.27	4395.73	4395.69	1.13
8505.00	90.10	358.30	4461.47	4417.42	-286.92	356.28	4426.74	4426.70	1.33
8537.00	91.80	358.90	4461.00	4449.41	-287.70	356.30	4458.70	4458.67	5.05
8568.00	92.10	358.30	4460.00	4480.36	-288.46	356.32	4489.67	4489.64	2.52
8600.00	92.00	357.50	4458.85	4512.34	-289.63	356.33	4521.64	4521.61	2.52
8632.00	92.30	358.60	4457.65	4544.30	-290.72	356.34	4553.58	4553.55	3.58
8663.00	92.70	358.80	4456.30	4575.26	-291.42	356.36	4584.54	4584.52	1.44
8695.00	92.20	358.80	4454.93	4607.22	-292.09	356.37	4616.47	4616.45	1.56
8726.00	91.80	357.30	4453.85	4638.19	-293.14	356.38	4647.43	4647.41	5.00
8758.00	91.20	358.50	4453.01	4670.15	-294.31	356.39	4679.42	4679.41	4.19
8805.00	91.20	358.50	4452.03	4717.13	-295.55	356.41	4726.38	4726.37	0.00



Survey Calculation Program

Encana Oil & Gas
Precision 209
Kerr 1H-2

M.W.D. OPERATOR: Kenney H. / Shawn F..
DIRECTIONAL DRILLERS: Richard Snider / Billy Spurgeon

Magnetic Declination:	6.79
Job #:	DR1209137
Vertical Section Azimuth	356.53

Minimum Curvature Calculation

No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/100
Tie	1578	0.95	101.42	1577.52	6.45	34.20	6.45	0.96
1	1622	0.9	148.8	1621.51	6.08	34.74	3.97	1.69
2	1712	1.0	142.9	1711.50	4.85	35.58	2.69	0.16
3	1802	1.0	160.7	1801.49	3.48	36.31	1.28	0.34
4	1893	0.8	246.5	1892.48	2.48	35.99	0.30	1.36
5	1983	0.8	236.7	1982.47	1.89	34.89	-0.23	0.15
6	2073	0.8	242.4	2072.46	1.25	33.81	-0.80	0.09
7	2164	0.8	236.2	2163.45	0.60	32.72	-1.38	0.10
8	2254	0.9	240.6	2253.44	-0.09	31.58	-2.01	0.13
9	2345	1.2	295.0	2344.43	-0.04	30.09	-1.86	1.09
10	2435	1.2	302.9	2434.41	0.87	28.45	-0.86	0.18
11	2525	1.3	297.2	2524.39	1.85	26.75	0.22	0.18
12	2615	1.2	300.3	2614.37	2.79	25.02	1.27	0.13
13	2706	1.1	295.6	2705.35	3.65	23.41	2.22	0.15
14	2796	1.1	300.4	2795.33	4.46	21.89	3.12	0.10
15	2887	1.1	298.0	2886.32	5.31	20.37	4.07	0.05
16	2977	1.1	291.3	2976.30	6.03	18.80	4.88	0.14
17	3068	1.0	287.0	3067.29	6.58	17.22	5.52	0.14
18	3158	0.9	286.8	3157.27	7.01	15.80	6.04	0.11
19	3248	0.9	282.4	3247.26	7.37	14.43	6.48	0.08
20	3339	0.9	281.6	3338.25	7.66	13.03	6.86	0.01
21	3429	0.8	278.7	3428.24	7.90	11.72	7.18	0.12
22	3519	1.2	277.5	3518.23	8.12	10.16	7.49	0.45
23	3565	1.3	279.1	3564.22	8.27	9.17	7.69	0.23



Survey Calculation Program

Encana Oil & Gas
Precision 209
Kerr 1H-2

M.W.D. OPERATOR: Kenney H. / Shawn F..
DIRECTIONAL DRILLERS: Richard Snider / Billy Spurgeon

Magnetic Declination:	6.79
Job #:	DR1209137
Vertical Section Azimuth	356.53

Minimum Curvature Calculation

No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/100
24	3610	1.2	332.0	3609.21	8.76	8.45	8.23	2.48
25	3655	3.0	359.7	3654.18	10.36	8.22	9.84	4.48
26	3701	5.9	358.9	3700.03	13.92	8.17	13.40	6.31
27	3746	9.4	352.2	3744.63	19.88	7.62	19.38	8.01
28	3791	12.5	351.5	3788.80	28.34	6.40	27.90	6.90
29	3836	15.9	353.2	3832.42	39.28	4.95	38.91	7.61
30	3882	19.2	356.7	3876.27	53.09	3.77	52.77	7.53
31	3927	23.2	358.5	3918.22	69.35	3.11	69.03	9.00
32	3972	27.2	358.2	3958.93	88.49	2.56	88.18	8.89
33	4017	30.7	358.3	3998.30	110.26	1.89	109.95	7.78
34	4062	33.7	357.1	4036.37	134.22	0.92	133.92	6.82
35	4107	36.6	355.9	4073.17	160.07	-0.67	159.82	6.62
36	4153	39.4	355.9	4109.41	188.32	-2.69	188.14	6.09
37	4198	42.3	355.1	4143.45	217.66	-5.01	217.56	6.55
38	4243	45.8	355.3	4175.78	248.83	-7.63	248.84	7.78
39	4288	48.8	355.5	4206.30	281.79	-10.28	281.90	6.67
40	4334	51.0	356.3	4235.93	316.89	-12.79	317.08	4.96
41	4379	54.3	356.7	4263.22	352.59	-14.97	352.85	7.37
42	4424	58.5	357.2	4288.12	390.01	-16.96	390.32	9.38
43	4469	60.8	357.9	4310.86	428.80	-18.62	429.14	5.28
44	4514	60.7	357.3	4332.84	468.03	-20.26	468.40	1.18
45	4560	61.0	357.0	4355.25	508.15	-22.26	508.57	0.87
46	4605	60.6	356.8	4377.20	547.38	-24.38	547.85	0.97
47	4650	60.6	356.7	4399.30	586.52	-26.60	587.05	0.19



DrillRight™

TECHNOLOGY, INC.

Survey Calculation Program

Encana Oil & Gas
Precision 209
Kerr 1H-2

M.W.D. OPERATOR: Kenney H. / Shawn F.
DIRECTIONAL DRILLERS: Richard Snider / Billy Spurgeon

Magnetic Declination: 6.79

Job #: DR1209137

Vertical Section Azimuth 356.53

Minimum Curvature Calculation

No.	Survey Depth	INC	AZM	TVD	N-S	E-W	Vertical Section	DLS/100
48	4695	64.4	356.8	4420.07	626.36	-28.87	626.96	8.45
49	4740	69.1	355.6	4437.83	667.60	-31.61	668.29	10.73
50	4786	73.3	354.9	4452.65	710.99	-35.22	711.82	9.24
51	4829	77.3	354.8	4463.56	752.41	-38.95	753.38	9.31
52	4884	80.5	355.2	4474.15	806.16	-43.66	807.33	5.86
53	4916	84.8	355.8	4478.24	837.80	-46.14	839.05	13.57