



30-015-43173

Cimarex

Eddy County, NM (NAD 83)
(Cabrera) SEC 34_T-26-S_R-27-E
Cabrera 34 Federal #4H

OWB
AWB

Anticollision Report

26 February, 2019





Microsoft
Anticollision Report



Company:	Cimarex	Local Co-ordinate Reference:	Well: Cabrera 34 Federal #4H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	KB @ 3259.4usft (H&P 393)
Reference Site:	(Cabrera) SEC 34 T-26-S R-27-E	MD Reference:	KB @ 3259.4usft (H&P 393)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Cabrera 34 Federal #4H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 10-13
Reference Design:	AWB	Offset TVD Reference:	Offset Datum

Reference	AWB		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,500.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Program		Date 02/26/19		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
204.0	7,124.0	Extreme MWD (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction
7,214.0	12,316.0	Intrepid MWD (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
(Cabrera) SEC 34 T-26-S R-27-E						
Cabrera 34 Federal #1H - OWB - AWB	0.0	0.0	20.0			
Cabrera 34 Federal #1H - OWB - AWB	2,300.0	2,297.5	67.2	52.0	4.423	SF

Offset Design: (Cabrera) SEC 34 T-26-S R-27-E Cabrera 34 Federal #1H - OWB - AWB													Offset Site Error: 0.0 usft	
Survey Program: 299-MWD+IFR1+MS, 7258-MWD+IFR1+MS													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.86	0.0	20.0	20.0					
100.0	100.0	99.9	99.9	0.1	0.2	-117.61	-0.1	19.9	20.4	20.1	0.30	68.261		
200.0	199.9	199.9	199.9	0.3	0.3	-123.79	-0.5	19.7	21.7	21.0	0.64	33.623		
300.0	299.8	299.9	299.9	0.7	0.5	-133.46	-1.3	19.2	23.9	22.7	1.16	20.566		
400.0	399.7	399.9	399.8	1.0	0.9	-141.84	-2.2	18.7	26.5	24.6	1.88	14.087		
500.0	499.7	499.9	499.9	1.4	1.2	-165.11	-3.1	18.1	28.7	26.1	2.60	11.044		
600.0	599.6	599.9	599.9	1.7	1.6	129.10	-4.2	17.2	29.7	26.4	3.30	8.978		
700.0	699.6	699.5	699.5	2.1	1.9	114.59	-5.2	17.0	30.8	26.8	4.00	7.705		
800.0	799.5	799.2	799.2	2.4	2.3	107.95	-5.6	17.6	32.3	27.7	4.69	6.903		
900.0	899.5	899.0	899.0	2.8	2.6	102.81	-5.5	18.8	34.2	28.8	5.37	6.364		
1,000.0	999.5	999.0	999.0	3.1	2.9	99.84	-5.0	19.9	35.7	29.7	6.06	5.901		
1,100.0	1,099.4	1,099.1	1,099.0	3.5	3.3	101.21	-4.2	20.9	37.3	30.5	6.75	5.523		
1,200.0	1,199.4	1,199.2	1,199.1	3.8	3.6	95.14	-2.7	21.7	38.5	31.1	7.44	5.173		
1,300.0	1,299.3	1,299.3	1,299.2	4.2	4.0	105.45	-0.7	22.2	39.3	31.1	8.14	4.824		
1,400.0	1,399.3	1,399.3	1,399.2	4.5	4.3	121.71	1.3	22.4	40.6	31.8	8.84	4.595		
1,500.0	1,499.2	1,499.4	1,499.2	4.9	4.7	126.76	2.7	22.5	42.6	33.0	9.54	4.463		
1,600.0	1,599.1	1,598.6	1,598.5	5.2	5.0	125.45	4.1	23.2	45.3	35.1	10.24	4.424		
1,700.0	1,699.0	1,697.7	1,697.6	5.6	5.4	102.16	5.3	25.6	48.9	38.0	10.94	4.472		
1,800.0	1,799.0	1,797.7	1,797.5	5.9	5.7	115.62	6.7	28.8	52.9	41.3	11.65	4.546		
1,900.0	1,898.9	1,897.8	1,897.6	6.3	6.1	121.73	7.8	31.6	57.5	45.2	12.36	4.657		
2,000.0	1,998.8	1,997.9	1,997.6	6.7	6.4	99.26	8.2	33.8	60.8	47.8	13.06	4.657		
2,100.0	2,098.7	2,097.8	2,097.5	7.0	6.8	93.20	8.6	36.1	63.3	49.5	13.77	4.594		
2,200.0	2,198.6	2,197.8	2,197.4	7.4	7.1	93.20	9.4	38.2	64.9	50.5	14.48	4.486		
2,300.0	2,298.5	2,297.5	2,297.1	7.7	7.5	98.67	9.7	40.3	67.2	52.0	15.18	4.423 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



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Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Cabrera 34 Federal #4H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OWB	Database:	EDM 10_13
Reference Design:	AWB	Offset TVD Reference:	Offset Datum

Offset Design: (Cabrera) SEC 34 T-26-S R-27-E - Cabrera 34 Federal #1H - OWB - AWB													Offset Site Error: 0.0 usft	
Survey Program: 299-MWD+IFR1+MS, 7258-MWD+IFR1+MS							Rule Assigned:						Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
2,400.0	2,398.4	2,396.9	2,396.5	8.1	7.8	106.94	7.6	41.5	70.3	54.4	15.88	4.428		
2,500.0	2,498.3	2,495.7	2,495.1	8.4	8.2	117.71	2.5	41.7	75.3	58.7	16.57	4.542		
2,600.0	2,598.2	2,593.5	2,592.7	8.8	8.5	129.70	-5.1	41.2	83.1	65.8	17.25	4.816		
2,700.0	2,697.9	2,689.8	2,688.4	9.1	8.8	140.18	-15.8	40.2	95.9	78.0	17.89	5.359		
2,800.0	2,797.5	2,783.5	2,780.9	9.5	9.2	149.30	-29.7	38.4	115.6	97.1	18.49	6.255		
2,900.0	2,896.7	2,876.3	2,872.2	9.9	9.5	156.99	-46.6	36.5	142.7	123.6	19.08	7.478		
3,000.0	2,995.5	2,968.6	2,962.7	10.2	9.8	162.75	-64.6	34.3	174.3	154.6	19.70	8.847		
3,100.0	3,094.1	3,061.5	3,053.6	10.6	10.1	166.25	-83.5	32.2	209.5	189.2	20.35	10.294		
3,200.0	3,192.3	3,153.3	3,143.5	10.9	10.5	168.58	-101.8	30.8	246.4	225.4	21.00	11.730		
3,300.0	3,290.3	3,241.2	3,229.5	11.3	10.8	171.74	-120.2	29.6	285.8	264.2	21.60	13.232		
3,400.0	3,388.0	3,327.5	3,313.7	11.6	11.1	174.33	-139.4	28.6	327.6	305.4	22.18	14.769		
3,500.0	3,485.7	3,412.3	3,396.1	12.0	11.4	176.76	-159.5	28.0	371.4	348.6	22.76	16.321		
3,600.0	3,583.2	3,496.9	3,478.0	12.4	11.7	179.04	-180.6	27.7	416.8	393.5	23.34	17.860		
3,700.0	3,680.7	3,587.0	3,565.2	12.7	12.1	-179.75	-203.3	27.5	462.8	438.8	24.01	19.272		
3,800.0	3,778.6	3,678.3	3,653.6	13.1	12.4	178.32	-226.1	27.1	507.1	482.4	24.70	20.529		
3,900.0	3,876.8	3,772.7	3,745.1	13.5	12.7	176.57	-249.2	26.8	549.2	523.8	25.42	21.605		
4,000.0	3,975.2	3,867.9	3,837.5	13.8	13.1	174.74	-271.7	26.7	589.8	563.7	26.15	22.556		
4,100.0	4,073.6	3,959.3	3,926.4	14.2	13.4	175.84	-293.1	26.9	629.8	603.0	26.83	23.474		
4,200.0	4,172.1	4,050.0	4,014.6	14.6	13.8	175.33	-314.3	27.2	669.9	642.4	27.50	24.355		
4,300.0	4,270.4	4,134.0	4,096.2	14.9	14.1	174.23	-334.5	27.3	710.8	682.7	28.10	25.292		
4,400.0	4,368.8	4,216.6	4,176.1	15.3	14.4	176.12	-355.2	27.0	752.8	724.1	28.69	26.243		
4,500.0	4,467.3	4,307.9	4,264.3	15.7	14.8	178.87	-378.8	26.3	794.7	765.3	29.38	27.052		
4,600.0	4,566.0	4,403.3	4,356.6	16.0	15.1	175.10	-403.0	25.9	835.3	805.2	30.11	27.741		
4,700.0	4,664.7	4,509.9	4,460.0	16.4	15.5	173.62	-429.0	25.6	874.7	843.7	30.97	28.244		
4,800.0	4,763.5	4,622.2	4,569.4	16.8	16.0	173.47	-454.1	25.6	911.9	880.0	31.87	28.612		
4,900.0	4,862.2	4,703.7	4,648.9	17.1	16.3	174.35	-472.0	25.7	949.0	916.6	32.46	29.240		
5,000.0	4,961.0	4,797.3	4,740.2	17.5	16.6	175.41	-493.1	26.0	986.0	952.9	33.16	29.732		
5,100.0	5,059.8	4,899.3	4,839.6	17.9	17.0	174.80	-515.5	26.6	1,023.1	989.1	33.96	30.129		
5,200.0	5,158.5	4,999.2	4,937.2	18.2	17.4	174.56	-536.6	27.2	1,059.9	1,025.2	34.73	30.521		
5,300.0	5,257.2	5,098.0	5,034.0	18.6	17.8	175.38	-556.9	28.0	1,095.7	1,060.2	35.48	30.878		
5,400.0	5,356.0	5,183.0	5,117.1	19.0	18.1	175.60	-574.5	28.9	1,131.2	1,095.1	36.11	31.326		
5,500.0	5,454.8	5,279.3	5,211.3	19.3	18.5	176.17	-594.7	30.1	1,166.6	1,129.8	36.84	31.664		
5,600.0	5,553.8	5,376.4	5,306.2	19.7	18.8	175.33	-614.8	31.1	1,200.9	1,163.4	37.58	31.956		
5,700.0	5,653.2	5,478.7	5,406.4	20.1	19.2	168.80	-635.6	31.9	1,232.4	1,194.0	38.36	32.129		
5,800.0	5,752.8	5,593.9	5,519.4	20.4	19.7	159.78	-658.1	32.5	1,260.2	1,221.0	39.23	32.120		
5,900.0	5,852.6	5,775.5	5,698.8	20.8	20.3	148.14	-686.0	32.8	1,280.2	1,239.6	40.57	31.555		
6,000.0	5,952.6	5,935.6	5,858.2	21.1	20.9	147.99	-701.5	31.6	1,292.8	1,251.1	41.64	31.049		
6,100.0	6,052.5	6,077.0	5,999.3	21.5	21.4	154.16	-709.0	30.0	1,300.7	1,258.2	42.54	30.578		
6,200.0	6,152.5	6,185.6	6,107.9	21.8	21.8	163.78	-713.2	27.8	1,307.1	1,263.8	43.28	30.204		
6,300.0	6,252.5	6,297.3	6,219.4	22.2	22.2	-179.73	-716.5	25.2	1,312.2	1,268.2	44.02	29.810		
6,400.0	6,352.4	6,421.1	6,343.2	22.5	22.6	-157.83	-718.7	21.5	1,315.7	1,271.0	44.80	29.370		
6,500.0	6,452.4	6,531.7	6,453.7	22.9	23.0	-151.92	-718.9	17.5	1,317.7	1,272.2	45.52	28.949		
6,600.0	6,552.4	6,629.4	6,551.3	23.2	23.3	-129.42	-719.2	13.2	1,319.6	1,273.4	46.19	28.567		
6,700.0	6,652.4	6,740.3	6,662.1	23.6	23.7	-107.98	-718.5	8.2	1,319.9	1,273.0	46.90	28.140		
6,800.0	6,752.3	6,832.4	6,754.1	23.9	24.0	-86.52	-718.2	4.6	1,319.7	1,272.1	47.55	27.753		
6,900.0	6,852.3	6,924.5	6,846.2	24.3	24.3	-73.01	-718.3	1.5	1,319.2	1,271.0	48.20	27.370		
7,000.0	6,952.2	7,016.7	6,938.4	24.6	24.6	-62.48	-719.1	-1.3	1,318.6	1,269.8	48.84	26.996		
7,100.0	7,052.2	7,114.4	7,035.9	24.9	24.9	-55.13	-720.3	-4.0	1,317.9	1,268.4	49.51	26.619		
7,200.0	7,152.0	7,460.6	7,363.8	25.1	25.3	-75.95	-688.5	-86.6	1,302.7	1,253.3	49.44	26.349		
7,300.0	7,250.0	7,494.0	7,390.4	25.2	25.3	-85.66	-683.7	-106.2	1,286.3	1,236.5	49.80	25.830		
7,400.0	7,341.6	7,549.5	7,432.1	25.2	25.3	-89.93	-677.9	-142.4	1,275.3	1,225.3	49.99	25.513		
7,500.0	7,424.3	7,589.0	7,459.3	25.2	25.4	-88.10	-675.0	-170.9	1,268.0	1,217.9	50.14	25.289		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



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Reference Design:	AWB	Offset TVD Reference:	Offset Datum

Offset Design: (Cabrera) SEC 34 T-26-S R-27-E Cabrera 34 Federal #1H - OWB - AWB													Offset Site Error: 0.0 usft	
Survey Program: 299-MWD+IFR1+MS; 7258-MWD+IFR1+MS		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:		Offset Well Error: 0.0 usft		
Reference	Vertical	Measured	Vertical	Reference	Offset	Toolface	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
7,600.0	7,496.4	7,636.0	7,488.7	25.3	25.4	-85.54	-673.4	-207.5	1,259.7	1,209.4	50.26	25.065		
7,689.5	7,549.3	7,658.9	7,501.9	25.4	25.4	-87.58	-674.0	-226.2	1,256.2	1,205.8	50.34	24.954		
7,700.0	7,554.1	7,661.4	7,503.3	25.4	25.4	-87.77	-674.2	-228.3	1,255.7	1,205.4	50.35	24.940		
7,800.0	7,598.0	7,683.0	7,515.0	25.5	25.4	-87.50	-676.1	-246.3	1,260.4	1,209.9	50.45	24.982		
7,900.0	7,623.9	7,730.0	7,537.1	25.7	25.4	-87.45	-682.9	-287.2	1,270.6	1,220.0	50.66	25.082		
8,000.0	7,633.2	8,092.2	7,624.2	25.9	26.0	-89.53	-695.3	-635.2	1,268.1	1,216.5	51.64	24.558		
8,098.0	7,635.2	8,169.9	7,624.9	26.1	26.2	-89.54	-692.1	-712.8	1,266.5	1,214.3	52.14	24.290		
8,100.0	7,634.9	8,171.4	7,624.9	26.1	26.2	-89.56	-692.1	-714.4	1,266.5	1,214.4	52.15	24.286		
8,200.0	7,634.7	8,248.8	7,626.6	26.4	26.5	-89.65	-690.5	-791.7	1,267.8	1,215.1	52.72	24.049		
8,300.0	7,637.2	8,337.9	7,631.6	26.8	26.8	-89.80	-689.7	-880.7	1,269.5	1,216.1	53.40	23.772		
8,400.0	7,641.6	8,421.0	7,638.7	27.2	27.1	-89.97	-690.1	-963.4	1,272.5	1,218.4	54.13	23.507		
8,500.0	7,646.3	8,522.7	7,647.1	27.6	27.6	-90.13	-691.2	-1,064.8	1,276.5	1,221.5	55.02	23.202		
8,600.0	7,649.4	8,643.0	7,653.9	28.1	28.2	-90.24	-690.8	-1,184.9	1,279.3	1,223.3	56.07	22.815		
8,700.0	7,651.2	8,729.6	7,657.0	28.6	28.6	-90.29	-690.3	-1,271.4	1,282.4	1,225.4	57.03	22.486		
8,800.0	7,653.1	8,800.0	7,658.3	29.1	29.0	-90.32	-691.3	-1,341.8	1,287.4	1,229.4	57.95	22.214		
8,900.0	7,655.0	8,899.6	7,658.8	29.6	29.6	-90.21	-693.8	-1,441.4	1,292.5	1,233.4	59.10	21.869		
9,000.0	7,656.2	9,011.9	7,657.1	30.2	30.3	-90.06	-696.0	-1,553.6	1,296.2	1,235.8	60.40	21.461		
9,100.0	7,656.1	9,109.9	7,654.1	30.9	30.9	-89.90	-697.6	-1,651.5	1,298.9	1,237.3	61.65	21.069		
9,200.0	7,654.1	9,205.9	7,649.9	31.5	31.6	-89.75	-699.4	-1,747.5	1,302.4	1,239.5	62.95	20.690		
9,300.0	7,649.3	9,295.0	7,646.7	32.2	32.2	-89.77	-701.4	-1,836.5	1,306.1	1,241.8	64.24	20.331		
9,400.0	7,643.4	9,374.5	7,644.4	32.9	32.8	-89.95	-704.4	-1,915.8	1,309.1	1,243.6	65.49	19.989		
9,500.0	7,636.8	9,469.0	7,640.2	33.6	33.5	-90.04	-708.7	-2,010.1	1,311.6	1,244.7	66.90	19.606		
9,600.0	7,629.6	9,561.7	7,635.8	34.3	34.2	-90.16	-713.5	-2,102.7	1,314.8	1,246.5	68.33	19.243		
9,700.0	7,625.6	9,666.4	7,633.0	35.1	35.0	-90.28	-719.0	-2,207.2	1,317.6	1,247.7	69.90	18.849		
9,800.0	7,622.6	9,808.1	7,631.9	35.8	36.1	-90.42	-724.9	-2,348.8	1,319.7	1,247.9	71.84	18.371		
9,900.0	7,620.3	9,939.9	7,632.2	36.6	37.2	-90.57	-725.2	-2,480.5	1,317.1	1,243.4	73.71	17.868		
10,000.0	7,617.7	10,034.3	7,630.4	37.4	38.0	-90.59	-724.9	-2,574.9	1,314.6	1,239.2	75.32	17.453		
10,100.0	7,614.4	10,145.0	7,628.7	38.2	39.0	-90.66	-724.4	-2,685.6	1,312.9	1,235.8	77.09	17.030		
10,200.0	7,610.3	10,263.1	7,628.9	39.1	40.0	-90.88	-722.3	-2,803.7	1,310.8	1,231.9	78.95	16.604		
10,300.0	7,606.2	10,369.0	7,627.6	39.9	40.9	-90.99	-719.5	-2,909.5	1,308.3	1,227.5	80.73	16.205		
10,400.0	7,603.2	10,476.7	7,625.5	40.8	41.9	-91.05	-716.3	-3,017.1	1,305.1	1,222.6	82.56	15.809		
10,500.0	7,600.2	10,593.7	7,623.6	41.6	43.0	-91.13	-711.6	-3,134.1	1,300.8	1,216.3	84.47	15.399		
10,600.0	7,598.3	10,702.1	7,620.7	42.5	44.0	-91.01	-706.0	-3,242.3	1,295.6	1,209.2	86.34	15.005		
10,700.0	7,598.4	10,784.0	7,619.5	43.4	44.8	-90.93	-702.2	-3,324.1	1,290.9	1,202.9	88.05	14.662		
10,800.0	7,598.7	10,862.3	7,619.0	44.3	45.5	-90.91	-699.8	-3,402.3	1,288.4	1,198.7	89.73	14.359		
10,856.6	7,598.7	10,907.7	7,618.7	44.8	45.9	-90.89	-699.0	-3,447.7	1,288.1	1,197.4	90.69	14.203		
10,900.0	7,598.7	10,942.8	7,618.4	45.2	46.3	-90.88	-698.6	-3,482.8	1,288.2	1,196.8	91.43	14.089		
11,000.0	7,598.1	11,021.4	7,617.7	46.2	47.0	-90.86	-698.6	-3,561.4	1,290.8	1,197.7	93.11	13.863		
11,100.0	7,598.1	11,099.9	7,616.5	47.1	47.8	-90.83	-700.0	-3,639.8	1,295.2	1,200.4	94.78	13.665		
11,200.0	7,598.9	11,182.8	7,615.1	48.0	48.6	-90.76	-702.7	-3,722.7	1,300.2	1,203.7	96.50	13.474		
11,300.0	7,601.4	11,276.9	7,613.5	49.0	49.5	-90.61	-706.6	-3,816.7	1,305.1	1,206.8	98.35	13.270		
11,400.0	7,605.0	11,388.6	7,609.5	49.9	50.6	-90.26	-711.0	-3,928.3	1,308.6	1,208.1	100.42	13.031		
11,500.0	7,608.7	11,502.4	7,605.7	50.9	51.7	-89.92	-714.1	-4,041.9	1,311.0	1,208.5	102.51	12.789		
11,600.0	7,611.9	11,594.1	7,605.2	51.8	52.6	-89.74	-716.3	-4,133.7	1,313.1	1,208.7	104.37	12.580		
11,700.0	7,614.1	11,687.7	7,606.3	52.8	53.6	-89.68	-719.5	-4,227.2	1,315.2	1,208.9	106.27	12.376		
11,800.0	7,614.6	11,788.1	7,607.1	53.8	54.6	-89.67	-722.9	-4,327.6	1,317.6	1,209.4	108.25	12.172		
11,900.0	7,614.5	11,885.9	7,607.2	54.8	55.6	-89.70	-726.3	-4,425.2	1,320.3	1,210.1	110.21	11.980		
12,000.0	7,615.3	11,996.7	7,606.5	55.7	56.7	-89.63	-729.9	-4,536.0	1,322.4	1,210.0	112.33	11.772		
12,100.0	7,615.4	12,100.8	7,605.5	56.7	57.8	-89.58	-732.5	-4,640.0	1,322.9	1,208.5	114.39	11.565		
12,200.0	7,615.2	12,215.9	7,602.8	57.7	58.9	-89.47	-734.7	-4,755.1	1,322.1	1,205.6	116.56	11.342		
12,300.0	7,615.3	12,322.4	7,599.6	58.7	60.0	-89.32	-735.6	-4,861.5	1,320.3	1,201.7	118.65	11.128		
12,316.0	7,615.3	12,338.4	7,599.1	58.9	60.2	-89.30	-735.7	-4,877.5	1,320.0	1,201.1	118.97	11.095		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



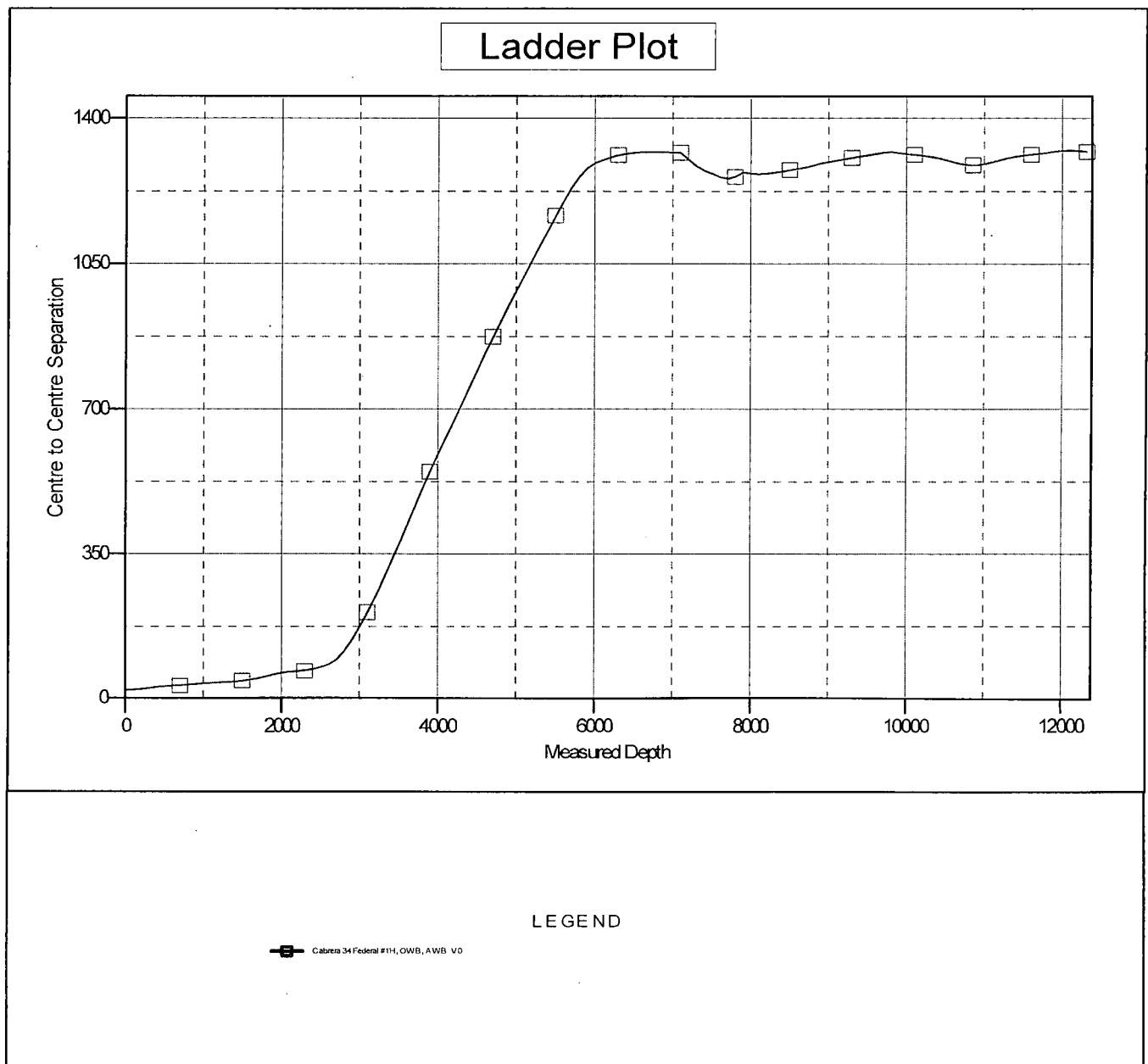
Microsoft
Anticollision Report



Company:	Cimarex	Local Co-ordinate Reference:	Well: Cabrera 34 Federal #4H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	KB @ 3259.4usft (H&P 393)
Reference Site:	(Cabrera) SEC 34 T-26-S-R-27-E	MD Reference:	KB @ 3259.4usft (H&P 393)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Cabrera 34 Federal #4H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore:	OWB	Database:	EDM 10_13
Reference Design:	AWB	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3259.4usft (H&P 393)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Cabrera 34 Federal #4H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.09°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



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