



Weatherford®

Evaluation, Drilling & Intervention
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Devon Energy
333 W. Sherridan Ave
Oklahoma City, OK, 73102

Date: August 19, 2015

Attention: Jacob Beard

NM OIL CONSERVATION
ARTESIA DISTRICT

JAN 21 2016

RECEIVED

30 015 42710

Re: Devon Energy
Well: Cerf 10 State 9H
Eddy County, New Mexico

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

Name & Title Of Surveyor	Well Number	Surveyed Depths	Dates Performed	Type of Survey
Jesus Lopez	9H	2903 MD	7/31/2015	Measurement
MWD Supervisor		12526 MD	8/14/2015	While Drilling

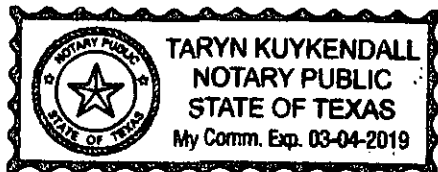
A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jesus Aguilar
MWD Coordinator

On this, the 5th day of October, 2015, before me a notary public, the undersigned officer, personally appeared Jesus Aguilar, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public



**5D Survey Report**

Devon Energy

Field Name: *Eddy Co, NM (Nad 83 NME)*
Site Name: *Cedar 11 State 2H, Cerf 10 State 9H Pad*
Well Name: *Cerf 10 State 9H*
Survey: *Wft MWD Svy*

14 August 2015





Cerf 10 State 9H

Field Name: Eddy Co, NM (Nad 83 NME)	Map Units: US ft		Company Name: Devon Energy	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD83 / New Mexico East (ftUS)			
	Comment:			
Site: Cedar 11 State 2H, Cerf 10 State 9H Pad	Units: US ft	North Reference: Grid	Convergence Angle: 0.09	
	Position:	Northing: 542315.08US ft	Latitude: 32° 29' 26.80"	
		Easting: 592170.93US ft	Longitude: -104° 10' 6.47"	
	Elevation above MSL:3285.00 US ft			
Comment:				
Slot: Cerf 10 State 9H	Position (Relative to Site Centre)			
	+N/-S: -0.29US ft	Northing: 542314.79US ft	Latitude: 32°29'26.80"	
	+E/-W: -49.99US ft	Easting: 592120.94US ft	Longitude: -104°10'7.05"	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 3284.00US ft			
	Comment:			
Well: Cerf 10 State 9H	Type:Main well		UWI:	
	File Number:	Comment:		
	Closure Distance:5255.94US ft		Closure Azimuth:280.97°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00US ft		+E/-W: 0.00US ft	
			Az: 270.00°	

Drill floor: Survey Name: Wft MWD Svy			
Rig Height (Kelly Bushing): 25.00us ft	Elevation above MSL: 3309.00us ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Wft MWD Svy				
Date: 05/Aug/2015	Survey Tool: MWD	Comment:	Company:	
Magnetic Model:				
Model Name: BGGM	Date: 30/Aug/2015	Field Strength: 48311.5nT	Declination: 7.58°	Dip: 60.26°
Tie Point:				
MD: 2824.00 US ft	Inclination: 1.30°	Azimuth: 106.00°	TVD: 2823.56 US ft	North Offset: -13.21 US ft
				East Offset: 41.94 US ft

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
2824.00	1.30	106.00	2823.56	-13.21	41.94	-41.94	0.00	542301.58	592162.88	Tie On Rig

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
2903.00	1.21	121.16	2902.54	-13.89	43.52	-43.52	0.43	542300.90	592164.46	First Wft Svy
2997.00	1.07	33.65	2996.53	-13.67	44.85	-44.85	1.68	542301.12	592165.79	
3091.00	2.87	9.19	3090.47	-10.62	45.71	-45.71	2.07	542304.17	592166.65	
3185.00	4.61	0.50	3184.27	-4.52	46.12	-46.12	1.94	542310.27	592167.06	
3280.00	6.41	357.05	3278.82	4.60	45.88	-45.88	1.93	542319.39	592166.82	
3374.00	8.31	354.64	3372.05	16.60	44.98	-44.98	2.05	542331.39	592165.92	
3468.00	8.74	353.86	3465.01	30.47	43.58	-43.58	0.47	542345.26	592164.52	
3562.00	8.83	354.18	3557.90	44.75	42.09	-42.09	0.11	542359.54	592163.03	
3656.00	8.94	353.88	3650.78	59.19	40.58	-40.58	0.13	542373.98	592161.52	
3750.00	8.81	353.82	3743.65	73.60	39.02	-39.02	0.14	542388.39	592159.96	
3845.00	8.60	351.75	3837.56	87.87	37.22	-37.22	0.40	542402.66	592158.16	
3939.00	8.17	350.22	3930.55	101.40	35.08	-35.08	0.52	542416.19	592156.02	
4033.00	8.51	355.39	4023.56	114.92	33.38	-33.38	0.88	542429.71	592154.32	
4127.00	8.35	356.28	4116.54	128.66	32.38	-32.38	0.22	542443.45	592153.32	
4221.00	8.15	355.73	4209.57	142.12	31.44	-31.44	0.23	542456.91	592152.38	
4315.00	8.06	356.47	4302.63	155.34	30.54	-30.54	0.15	542470.13	592151.48	
4409.00	7.70	355.75	4395.74	168.20	29.67	-29.67	0.40	542482.99	592150.61	
4503.00	8.77	354.63	4488.77	181.61	28.53	-28.53	1.15	542496.40	592149.47	
4598.00	8.98	354.05	4582.64	196.20	27.08	-27.08	0.24	542510.99	592148.02	
4692.00	8.87	354.07	4675.50	210.70	25.57	-25.57	0.12	542525.49	592146.51	
4786.00	8.69	354.61	4768.40	224.98	24.16	-24.16	0.21	542539.77	592145.10	
4880.00	8.43	353.21	4861.35	238.89	22.68	-22.68	0.35	542553.68	592143.62	
4974.00	8.10	353.43	4954.37	252.31	21.10	-21.10	0.35	542567.10	592142.04	
5069.00	8.82	353.38	5048.34	266.20	19.50	-19.50	0.76	542580.99	592140.44	
5163.00	9.14	353.35	5141.19	280.77	17.80	-17.80	0.34	542595.56	592138.74	
5257.00	8.84	352.77	5234.03	295.35	16.03	-16.03	0.33	542610.14	592136.97	
5351.00	8.20	352.61	5326.99	309.16	14.26	-14.26	0.68	542623.95	592135.20	
5445.00	8.44	354.86	5420.00	322.68	12.78	-12.78	0.43	542637.47	592133.72	
5539.00	7.94	355.70	5513.05	336.03	11.67	-11.67	0.55	542650.82	592132.61	
5634.00	8.58	355.66	5607.06	349.64	10.65	-10.65	0.67	542664.43	592131.59	
5728.00	9.77	356.18	5699.85	364.59	9.58	-9.58	1.27	542679.38	592130.52	
5822.00	9.27	356.08	5792.56	380.10	8.54	-8.54	0.53	542694.89	592129.48	
5916.00	8.30	352.28	5885.46	394.38	7.11	-7.11	1.20	542709.17	592128.05	
6010.00	8.67	352.29	5978.43	408.12	5.24	-5.24	0.39	542722.91	592126.18	
6104.00	8.78	355.49	6071.34	422.29	3.73	-3.73	0.53	542737.08	592124.67	
6198.00	7.84	353.97	6164.35	435.82	2.49	-2.49	1.03	542750.61	592123.43	
6292.00	7.52	353.95	6257.51	448.31	1.17	-1.17	0.34	542763.10	592122.11	
6387.00	7.51	351.93	6351.69	460.64	-0.36	0.36	0.28	542775.43	592120.58	
6481.00	7.30	357.19	6444.91	472.69	-1.51	1.51	0.75	542787.48	592119.43	
6575.00	6.66	357.88	6538.21	484.10	-2.01	2.01	0.69	542798.89	592118.93	
6670.00	5.95	356.12	6632.64	494.52	-2.54	2.54	0.77	542809.31	592118.40	
6764.00	5.34	5.08	6726.18	503.74	-2.49	2.49	1.14	542818.53	592118.45	
6859.00	4.86	6.86	6820.81	512.14	-1.61	1.61	0.53	542826.93	592119.33	
6953.00	4.98	356.22	6914.46	520.16	-1.41	1.41	0.98	542834.95	592119.53	
6984.00	7.39	334.94	6945.28	523.31	-2.34	2.34	10.61	542838.10	592118.60	
7015.00	10.79	325.65	6975.89	527.51	-4.82	4.82	11.91	542842.30	592116.12	
7047.00	13.85	322.35	7007.15	533.02	-8.85	8.85	9.81	542847.81	592112.09	
7078.00	17.00	321.58	7037.03	539.51	-13.94	13.94	10.18	542854.30	592107.00	
7109.00	20.06	320.58	7066.42	547.17	-20.13	20.13	9.92	542861.96	592100.81	
7141.00	22.78	319.19	7096.21	556.10	-27.67	27.67	8.65	542870.89	592093.27	
7172.00	25.53	318.95	7124.49	565.68	-35.98	35.98	8.88	542880.47	592084.96	
7203.00	28.68	319.31	7152.08	576.36	-45.22	45.22	10.18	542891.15	592075.72	
7235.00	31.45	318.98	7179.77	588.49	-55.70	55.70	8.67	542903.28	592065.24	
7266.00	34.81	318.32	7205.73	601.20	-66.90	66.90	10.90	542915.99	592054.04	
7297.00	37.93	317.53	7230.69	614.84	-79.22	79.22	10.18	542929.63	592041.72	
7329.00	40.87	317.40	7255.41	629.80	-92.95	92.95	9.19	542944.59	592027.99	
7360.00	43.27	317.09	7278.43	645.05	-107.05	107.05	7.77	542959.84	592013.89	
7392.00	45.97	316.65	7301.20	661.45	-122.42	122.42	8.49	542976.24	591998.52	
7423.00	48.18	316.14	7322.31	677.89	-138.07	138.07	7.23	542992.68	591982.87	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
7454.00	49.81	315.64	7342.65	694.68	-154.36	154.36	5.40	543009.47	591966.58	
7486.00	52.52	315.11	7362.72	712.42	-171.87	171.87	8.57	543027.21	591949.07	
7517.00	55.73	315.43	7380.88	730.27	-189.54	189.54	10.39	543045.06	591931.40	
7549.00	58.23	316.40	7398.32	749.54	-208.20	208.20	8.22	543064.33	591912.74	
7580.00	60.04	317.56	7414.22	768.99	-226.35	226.35	6.66	543083.78	591894.59	
7611.00	63.15	318.45	7428.96	789.26	-244.59	244.59	10.35	543104.05	591876.35	
7643.00	66.84	318.15	7442.49	810.91	-263.88	263.88	11.56	543125.70	591857.06	
7674.00	68.67	315.58	7454.23	831.84	-283.50	283.50	9.68	543146.63	591837.44	
7705.00	69.62	312.55	7465.26	851.98	-304.32	304.32	9.63	543166.77	591816.62	
7737.00	71.11	308.99	7476.02	871.66	-327.14	327.14	11.47	543186.45	591793.80	
7768.00	72.29	305.52	7485.76	889.47	-350.56	350.56	11.29	543204.26	591770.38	
7799.00	74.64	302.69	7494.58	906.12	-375.17	375.17	11.58	543220.91	591745.77	
7830.00	77.16	299.93	7502.13	921.74	-400.85	400.85	11.86	543236.53	591720.09	
7862.00	79.09	297.67	7508.72	936.82	-428.29	428.29	9.17	543251.61	591692.65	
7893.00	80.36	295.13	7514.25	950.38	-455.61	455.61	9.04	543265.17	591665.33	
7924.00	81.50	291.93	7519.14	962.60	-483.67	483.67	10.84	543277.39	591637.27	Cross Prod Box
7956.00	82.28	289.30	7523.65	973.76	-513.32	513.32	8.49	543288.55	591607.62	
7987.00	82.99	286.34	7527.63	983.16	-542.59	542.59	9.74	543297.95	591578.35	
8019.00	84.11	283.56	7531.22	991.36	-573.31	573.31	9.31	543306.15	591547.63	
8050.00	84.46	280.66	7534.31	997.83	-603.46	603.46	9.38	543312.62	591517.48	
8082.00	85.59	277.62	7537.08	1002.90	-634.93	634.93	10.10	543317.69	591486.01	
8113.00	87.20	275.64	7539.03	1006.47	-665.66	665.66	8.22	543321.26	591455.28	
8144.00	89.09	274.44	7540.04	1009.19	-696.52	696.52	7.22	543323.98	591424.42	
8176.00	90.56	271.37	7540.14	1010.81	-728.48	728.48	10.64	543325.60	591392.46	
8207.00	91.89	268.52	7539.47	1010.78	-759.47	759.47	10.14	543325.57	591361.47	
8239.00	93.08	267.43	7538.08	1009.65	-791.42	791.42	5.04	543324.44	591329.52	
8292.00	94.69	266.97	7534.49	1007.07	-844.23	844.23	3.16	543321.86	591276.71	
8386.00	94.06	267.22	7527.32	1002.32	-937.83	937.83	0.72	543317.11	591183.11	
8480.00	92.73	267.76	7521.76	998.21	-1031.58	1031.58	1.53	543313.00	591089.36	
8574.00	91.68	268.43	7518.14	995.09	-1125.45	1125.45	1.32	543309.88	590995.49	
8669.00	91.54	268.16	7515.47	992.26	-1220.37	1220.37	0.32	543307.05	590900.57	
8763.00	91.82	268.67	7512.72	989.66	-1314.30	1314.30	0.62	543304.45	590806.64	
8857.00	91.40	270.30	7510.07	988.82	-1408.25	1408.25	1.79	543303.61	590712.69	
8951.00	92.31	270.88	7507.03	989.79	-1502.20	1502.20	1.15	543304.58	590618.74	
9045.00	91.19	271.09	7504.16	991.40	-1596.14	1596.14	1.21	543306.19	590524.80	
9140.00	90.77	270.69	7502.54	992.88	-1691.11	1691.11	0.61	543307.67	590429.83	
9234.00	90.84	270.48	7501.21	993.84	-1785.10	1785.10	0.24	543308.63	590335.84	
9328.00	90.70	270.06	7499.95	994.28	-1879.09	1879.09	0.47	543309.07	590241.85	
9422.00	90.49	270.89	7498.98	995.06	-1973.08	1973.08	0.91	543309.85	590147.86	
9516.00	90.63	270.95	7498.06	996.57	-2067.06	2067.06	0.16	543311.36	590053.88	
9610.00	90.56	271.00	7497.08	998.17	-2161.04	2161.04	0.09	543312.96	589959.90	
9705.00	91.96	271.11	7494.99	999.92	-2256.00	2256.00	1.48	543314.71	589864.94	
9799.00	92.24	270.80	7491.55	1001.48	-2349.93	2349.93	0.44	543316.27	589771.01	
9893.00	92.45	270.47	7487.70	1002.52	-2443.84	2443.84	0.42	543317.31	589677.10	
9987.00	93.01	270.45	7483.22	1003.28	-2537.73	2537.73	0.60	543318.07	589583.21	
10081.00	91.82	270.70	7479.26	1004.22	-2631.64	2631.64	1.29	543319.01	589489.30	
10175.00	91.61	270.15	7476.45	1004.92	-2725.60	2725.60	0.63	543319.71	589395.34	
10269.00	91.33	270.17	7474.04	1005.18	-2819.57	2819.57	0.30	543319.97	589301.37	
10363.00	92.38	269.86	7471.00	1005.20	-2913.51	2913.51	1.16	543319.99	589207.43	
10458.00	92.03	269.71	7467.34	1004.85	-3008.44	3008.44	0.40	543319.64	589112.50	
10552.00	92.17	269.96	7463.90	1004.58	-3102.38	3102.38	0.30	543319.37	589018.56	
10646.00	91.26	270.20	7461.08	1004.71	-3196.34	3196.34	1.00	543319.50	588924.60	
10741.00	90.28	270.48	7459.81	1005.27	-3291.32	3291.32	1.07	543320.06	588829.62	
10835.00	89.51	271.13	7459.98	1006.59	-3385.31	3385.31	1.07	543321.38	588735.63	
10930.00	89.16	270.67	7461.08	1008.08	-3480.30	3480.30	0.61	543322.87	588640.64	
11024.00	89.16	270.34	7462.46	1008.91	-3574.28	3574.28	0.35	543323.70	588546.66	
11118.00	88.81	270.55	7464.12	1009.64	-3668.26	3668.26	0.43	543324.43	588452.68	
11212.00	88.95	271.31	7465.96	1011.17	-3762.23	3762.23	0.82	543325.96	588358.71	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (°/100US ft)	Northing (US ft)	Easting (US ft)	Comment
11306.00	88.39	271.69	7468.14	1013.63	-3856.17	3856.17	0.72	543328.42	588264.77	
11400.00	89.58	271.94	7469.81	1016.60	-3950.11	3950.11	1.29	543331.39	588170.83	
11494.00	89.79	270.13	7470.33	1018.30	-4044.09	4044.09	1.94	543333.09	588076.85	
11588.00	89.72	269.65	7470.73	1018.12	-4138.09	4138.09	0.52	543332.91	587982.85	
11682.00	89.30	269.59	7471.53	1017.50	-4232.08	4232.08	0.45	543332.29	587888.86	
11776.00	89.72	269.48	7472.34	1016.74	-4326.08	4326.08	0.46	543331.53	587794.86	
11871.00	89.65	268.68	7472.86	1015.21	-4421.06	4421.06	0.85	543330.00	587699.88	
11965.00	89.23	269.12	7473.78	1013.41	-4515.04	4515.04	0.65	543328.20	587605.90	
12059.00	89.23	269.31	7475.04	1012.12	-4609.02	4609.02	0.20	543326.91	587511.92	
12153.00	89.09	269.22	7476.42	1010.91	-4703.00	4703.00	0.18	543325.70	587417.94	
12247.00	89.23	269.13	7477.80	1009.56	-4796.98	4796.98	0.18	543324.35	587323.96	
12342.00	90.00	268.45	7478.43	1007.55	-4891.96	4891.96	1.08	543322.34	587228.98	
12436.00	90.07	268.42	7478.38	1004.99	-4985.93	4985.93	0.08	543319.78	587135.01	
12526.00	90.21	268.49	7478.16	1002.56	-5075.89	5075.89	0.17	543317.35	587045.05	Last Wft Svy
12580.60	90.21	268.49	7477.96	1001.12	-5130.47	5130.47	0.00	543315.91	586990.47	Cross Prod Box
12610.00	90.21	268.49	7477.85	1000.35	-5159.86	5159.86	0.00	543315.14	586961.08	Proj. To Bit



Cerf 10 State 9H
Eddy Co, NM

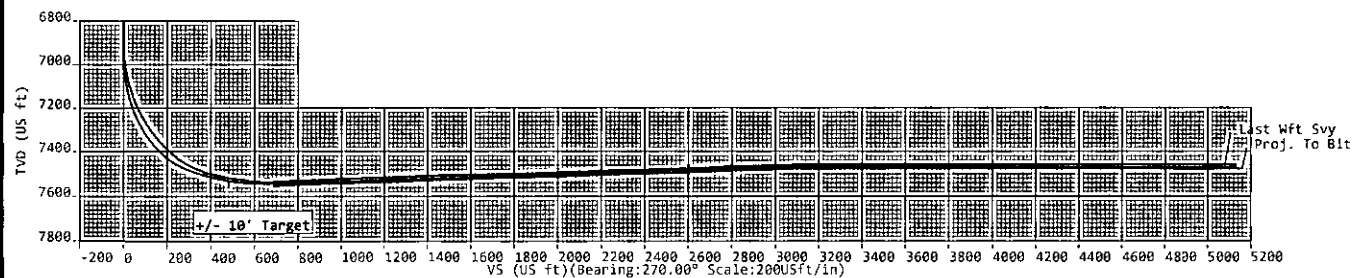
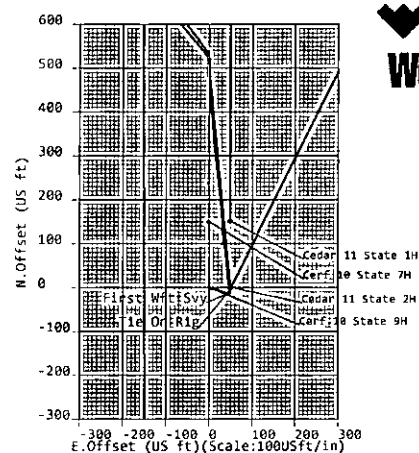
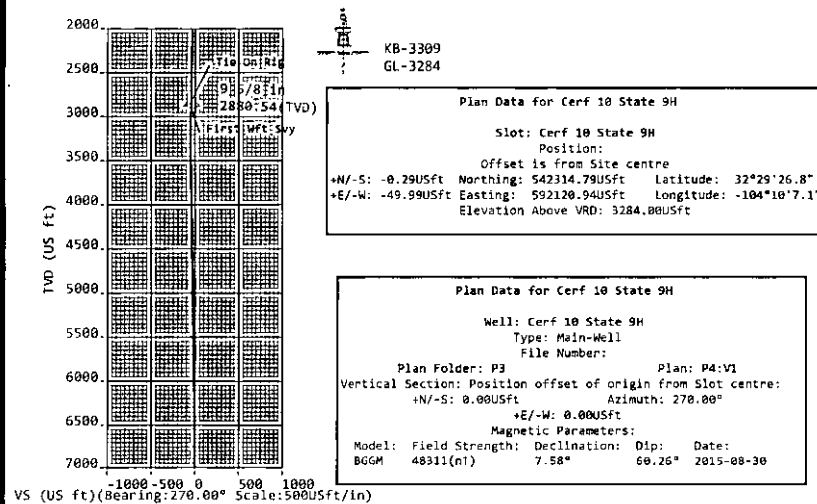
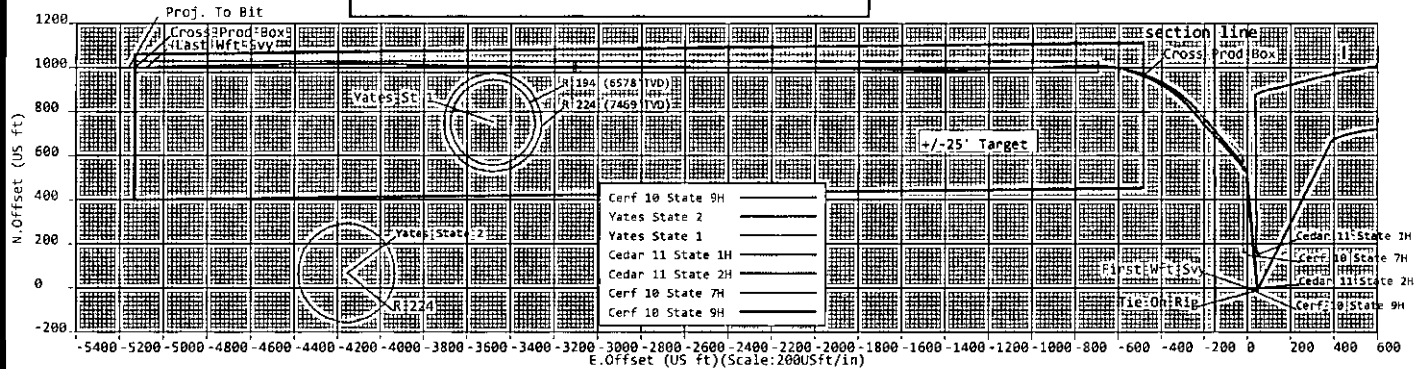
Plan Data for Cerf 10 State 9H											
Plan Point Information:											
Dogleg	Severity	Unit	%100.00ft		Position	offsets	from	Slot	center		
MD	Inc	Az	TVD	(+/-F)	(+/-W)	Northing	Easting	VSec	(USC)	(USC)	(USC)
2824.00	1.30	106.100	2824.00	2824.00	0.00	543181.18	592126.88	-41.94	0.00	0.00	0.00
2801.00	1.30	106.00	2880.54	-13.57	43.18	542391.22	592164.12	-43.18	0.00	0.00	0.00
2894.00	1.30	106.00	2988.54	-19.19	45.37	542390.60	592166.31	-45.37	0.00	0.00	0.00
3459.90	8.84	354.34	3448.71	20.35	46.93	542335.15	592167.87	-46.93	0.00	0.00	0.00
6390.26	8.84	354.34	6264.11	456.22	3.78	542771.81	592124.64	-3.78	0.00	0.00	0.00
5769.16	9.00	0.00	6749.72	10.56	0.00	543181.18	592126.88	-0.00	0.00	0.00	0.00
6398.86	8.80	0.00	6948.32	524.52	0.00	542839.31	592126.94	-0.00	0.00	0.00	0.00
7658.88	76.00	317.36	7475.83	813.58	-241.77	543128.37	591871.77	241.77	0.00	0.00	0.00
8171.61	91.78	278.70	7542.53	1003.56	-691.63	543318.45	591429.31	691.63	0.00	0.00	0.00
10491.91	91.78	278.70	7470.39	1003.70	-3810.88	543338.49	589116.14	3810.88	0.00	0.00	0.00
10580.90	90.00	278.70	7469.00	1003.70	-3095.87	543338.49	589021.47	3095.87	0.00	0.00	0.00
12612.58	90.00	278.70	7469.00	1003.53	-5133.38	543338.42	586969.87	5133.38	0.00	0.00	0.00

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Plan Data for Cerf 10 State 9H

      Target Set Information:
Name: Cerf 10 State 9H 55 Off N Box
      Position offsets from Slot centre
Name      TVD      +/-5      +/-W      Northing      Easting      Shape Comment
(Usft)    (Usft)    (Usft)    (Usft)    (Usft)    (Usft)
T1 7549.00 1003.63   -533.80  5433318.71  591627.13  Cuboid
T2 7469.00 1003.41   -359.86  543318.56  58802.87   Cuboid
PBHL 9H 7469.00 1003.24   -518.37  543318.32  586989.56 Cuboid

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Sign Off: Russell Joyner