

devon

Devon

PATHFINDER

A Schlumberger Company

WELL				PLOT				STRUCTURE			
Devon Harroun Trust 31-30 #4H				NM Eddy County (NAD 83)							
Magnum Parameters	Well	Depth	Time	Surface Location	North	East	Surface Elevation	Minimum	Maximum	Minimum	Maximum
Well: 80001 3012	Mag: 3012	Depth: 7729'	Time: 25	Lat: 32° 15' 18.43" N	Long: 104° 18' 54.1" W	Alt: 6400.00'	Surf Elev: 6400.00'	Min: 6400.00'	Max: 6400.00'	Min: 6400.00'	Max: 6400.00'

Legend

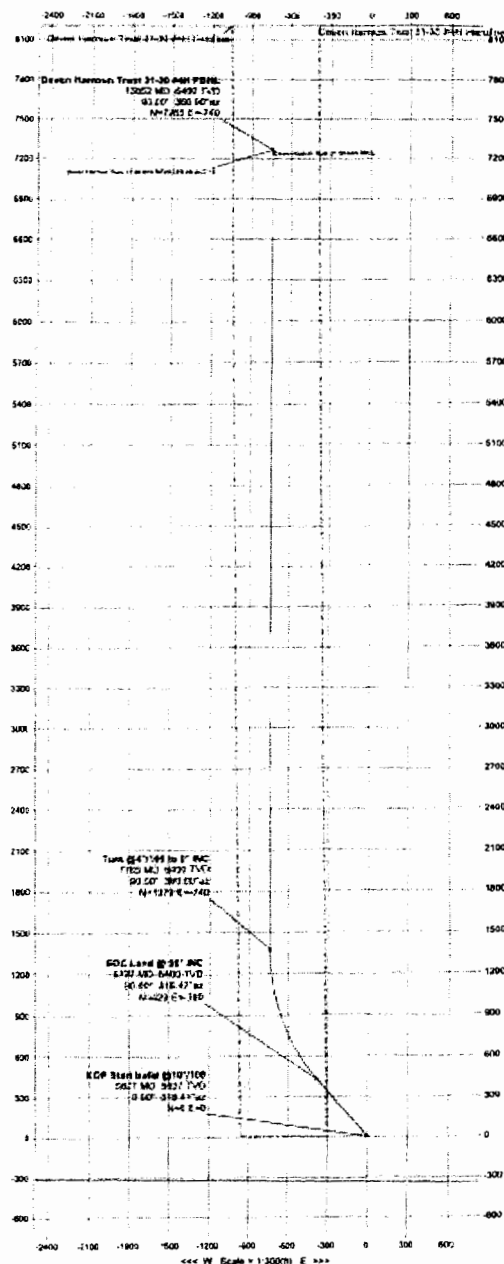
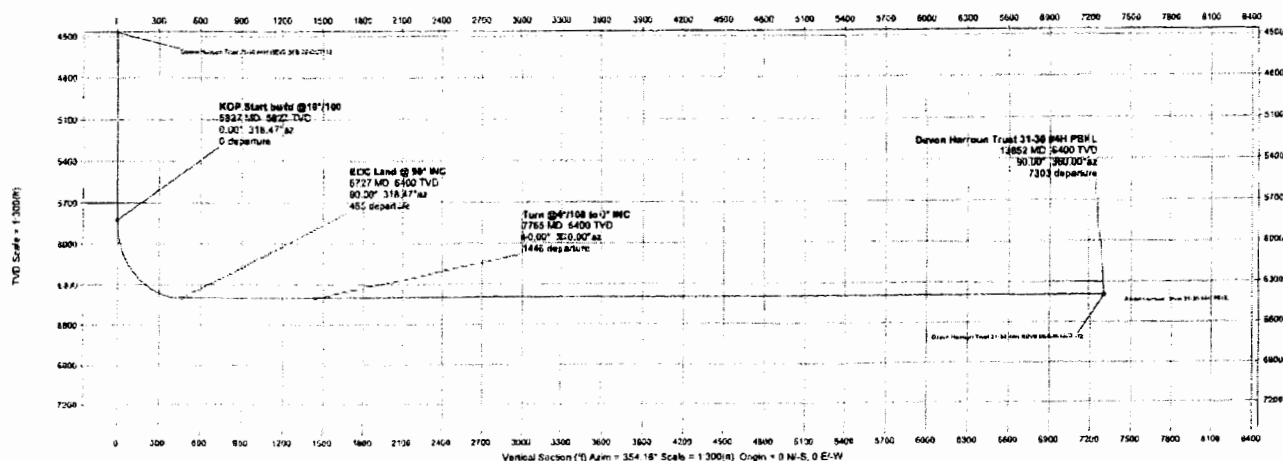
Oil Conservation Division
Case No. 14A
Exhibit No.

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Comments	Survey MO (deg)	Inclination (deg)	Azimuth (deg)	TVC (ft)	Sub-Sea TVD (ft)	NS (ft)	AS (ft)	EW (ft)	Latitude (deg)	Longitude (deg)	Easting (ft)	Northing (ft)	Closure (ft)	Closure Azimuth (deg)	CLS (ft)	Tool Face (deg)
Tie-In	0.00	0.00	318.47	0.00	-2882.10	0.00	0.00	0.00	N 32° 15' 18.43" W	104° 18' 54.1" W	630319.40	456887.50	0.00	0.00	0.00	318.47
KOP Start build @ 10°/100'	5827.04	0.00	318.47	5827.04	2842.94	0.00	0.00	0.00	N 32° 15' 18.43" W	104° 18' 54.1" W	630319.40	456887.50	0.00	0.00	0.00	318.47
EOC Land @ 90° INC	6727.04	90.00	318.47	6400.00	3416.90	455.22	428.30	-379.68	N 32° 15' 22.65" W	104° 14' 14.98	637938.55	457116.39	572.96	318.47	10.00	90.00
Turn @ 4°/100' to 0° INC	7765.22	90.00	360.00	6400.00	3416.90	1446.45	1378.55	-739.97	N 32° 15' 32.03" W	104° 19' 14.0	637578.48	458065.93	1564.59	351.77	4.32	0.00
Devon Harroun Trust 31-30 #4H PBL	13651.87	90.00	360.00	6400.00	3416.90	7302.81	7285.20	-740.26	N 32° 16' 30.34" W	104° 18' 55.4	637578.23	458065.10	7302.81	354.18	0.00	



Drawn By: Sam B. H.
Date Created: October 28, 2012 11:07:48 AM
Checked By:
Checked Date:
Approved By:
Approved Date:



Devon Harroun Trust 31-30 #4H REV0 SEB 29-OCT-12 Proposal Geodetic
Report
(Def Plan)



Report Date: October 29, 2012 - 11:00 AM
Client: Devon
Field: NM Eddy County (NAD 83)
Structure / Slot: Devon Harroun Trust 31-30 #4H / Devon Harroun Trust 31-30 #4H
Well: Devon Harroun Trust 31-30 #4H
Borehole: Original Borehole
UWI / API#: Unknown / Unknown
Survey Name: Devon Harroun Trust 31-30 #4H REV0 SEB 29-OCT-12
Survey Date: October 29, 2012
Tort / AHD / DDM / ERD Ratio: 131.527 * / 7497.788 ft / 6.323 / 1.172
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 15' 18.43085", W 104° 1' 10.57919"
Location Grid N/E Y/X: N 456887.500 NUS, E 638319.400 NUS
CRS Grid Convergence Angle: 0.1674 *
Grid Scale Factor: 0.99991086

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 354.182 * (Grid North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: KB
TVD Reference Elevation: 2983.100 ft above
Seabed / Ground Elevation: 2958.100 ft above
Magnetic Declination: 7.729 *
Total Gravity Field Strength: 999.2094 mgn (9.8 based)
Total Magnetic Field Strength: 48434.714 nT
Magnetic Dip Angle: 60.062 *
Declination Date: October 29, 2012
Magnetic Declination Model: BGGM 2012
North Reference: Grid North
Grid Convergence Used: 0.1674 *
Total Corr Mag North->Grid North: 7.5611 *
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-In	0.00	0.00	318.47	0.00	0.00	0.00	0.00	N/A	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	100.00	0.00	318.47	100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	200.00	0.00	318.47	200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	300.00	0.00	318.47	300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	400.00	0.00	318.47	400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	500.00	0.00	318.47	500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	600.00	0.00	318.47	600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	700.00	0.00	318.47	700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	800.00	0.00	318.47	800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	900.00	0.00	318.47	900.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1000.00	0.00	318.47	1000.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1100.00	0.00	318.47	1100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1200.00	0.00	318.47	1200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1300.00	0.00	318.47	1300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1400.00	0.00	318.47	1400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1500.00	0.00	318.47	1500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1600.00	0.00	318.47	1600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1700.00	0.00	318.47	1700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1800.00	0.00	318.47	1800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	1900.00	0.00	318.47	1900.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2000.00	0.00	318.47	2000.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2100.00	0.00	318.47	2100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2200.00	0.00	318.47	2200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2300.00	0.00	318.47	2300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2400.00	0.00	318.47	2400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2500.00	0.00	318.47	2500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2600.00	0.00	318.47	2600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2700.00	0.00	318.47	2700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2800.00	0.00	318.47	2800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	2900.00	0.00	318.47	2900.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3000.00	0.00	318.47	3000.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3100.00	0.00	318.47	3100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3200.00	0.00	318.47	3200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3300.00	0.00	318.47	3300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3400.00	0.00	318.47	3400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3500.00	0.00	318.47	3500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3600.00	0.00	318.47	3600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3700.00	0.00	318.47	3700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3800.00	0.00	318.47	3800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	3900.00	0.00	318.47	3900.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4000.00	0.00	318.47	4000.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4100.00	0.00	318.47	4100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4200.00	0.00	318.47	4200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4300.00	0.00	318.47	4300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4400.00	0.00	318.47	4400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4500.00	0.00	318.47	4500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4600.00	0.00	318.47	4600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4700.00	0.00	318.47	4700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4800.00	0.00	318.47	4800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	4900.00	0.00	318.47	4900.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5000.00	0.00	318.47	5000.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5100.00	0.00	318.47	5100.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5200.00	0.00	318.47	5200.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5300.00	0.00	318.47	5300.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5400.00	0.00	318.47	5400.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5500.00	0.00	318.47	5500.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5600.00	0.00	318.47	5600.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5700.00	0.00	318.47	5700.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	
	5800.00	0.00	318.47	5800.00	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43 W 104 1 10.58	

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
KOP Start build @10°/100	5827.04	0.00	318.47	5827.04	0.00	0.00	0.00	0.00	456687.50	638319.40	N 32 15 18.43	W 104 1 10.58
	5900.00	7.30	318.47	5899.80	3.77	3.47	-3.08	10.00	456690.97	638318.32	N 32 15 18.47	W 104 1 10.81
	6000.00	17.30	318.47	5997.39	21.04	19.40	-17.18	10.00	456706.89	638302.22	N 32 15 18.82	W 104 1 10.78
	6100.00	27.30	318.47	6089.79	51.80	47.76	-42.30	10.00	456735.26	638277.10	N 32 15 18.90	W 104 1 11.07
	6200.00	37.30	318.47	6174.21	95.13	87.71	-77.68	10.00	456775.20	638241.73	N 32 15 19.30	W 104 1 11.48
	6300.00	47.30	318.47	6248.09	149.70	136.02	-122.24	10.00	456825.51	638197.17	N 32 15 19.80	W 104 1 12.00
	6400.00	57.30	318.47	6309.17	213.88	197.18	-174.83	10.00	456884.88	638144.78	N 32 15 20.39	W 104 1 12.81
	6500.00	67.30	318.47	6355.60	285.96	283.37	-233.28	10.00	456950.85	638088.16	N 32 15 21.04	W 104 1 13.29
	6600.00	77.30	318.47	6385.97	362.91	334.80	-298.34	10.00	457022.07	638023.09	N 32 15 21.75	W 104 1 14.02
	6700.00	87.30	318.47	6399.38	443.27	408.69	-381.90	10.00	457096.15	637957.47	N 32 15 22.49	W 104 1 14.78
EOC Land @ 90° INC	6727.04	90.00	318.47	6400.00	485.22	428.92	-379.88	10.00	457118.39	637939.55	N 32 15 22.99	W 104 1 14.99
	6800.00	90.00	321.39	6400.00	525.52	484.75	-426.84	4.00	457172.21	637892.60	N 32 15 23.24	W 104 1 15.53
	6900.00	90.00	325.39	6400.00	611.40	565.00	-488.47	4.00	457252.45	637832.97	N 32 15 24.04	W 104 1 16.22
	7000.00	90.00	329.39	6400.00	700.65	649.22	-540.35	4.00	457336.87	637779.09	N 32 15 24.87	W 104 1 16.85
	7100.00	90.00	333.39	6400.00	792.82	738.99	-588.23	4.00	457424.43	637731.22	N 32 15 25.74	W 104 1 17.40
	7200.00	90.00	337.39	6400.00	887.47	827.69	-629.88	4.00	457515.32	637689.59	N 32 15 26.64	W 104 1 17.89
	7300.00	90.00	341.39	6400.00	984.13	921.47	-685.08	4.00	457608.89	637654.39	N 32 15 27.57	W 104 1 18.29
	7400.00	90.00	345.39	6400.00	1082.35	1017.27	-749.64	4.00	457704.89	637625.81	N 32 15 28.52	W 104 1 18.62
	7500.00	90.00	349.39	6400.00	1181.82	1114.84	-815.47	4.00	457802.25	637603.99	N 32 15 29.48	W 104 1 18.87
	7600.00	90.00	353.39	6400.00	1281.48	1213.69	-873.44	4.00	457901.09	637589.02	N 32 15 30.46	W 104 1 19.04
	7700.00	90.00	357.39	6400.00	1381.44	1313.35	-938.48	4.00	458000.74	637580.98	N 32 15 31.45	W 104 1 19.13
Turn @4°/100 to 0° INC	7765.22	90.00	360.00	6400.00	1446.45	1378.55	-739.97	4.00	458085.93	637579.49	N 32 15 32.09	W 104 1 19.15
	7800.00	90.00	360.00	6400.00	1481.05	1413.33	-739.97	0.00	458100.71	637579.49	N 32 15 32.44	W 104 1 19.15
	7900.00	90.00	360.00	6400.00	1580.54	1513.33	-739.98	0.00	458200.70	637579.48	N 32 15 33.43	W 104 1 19.14
	8000.00	90.00	360.00	6400.00	1680.03	1613.33	-739.98	0.00	458300.69	637579.48	N 32 15 34.42	W 104 1 19.14
	8100.00	90.00	360.00	6400.00	1779.51	1713.33	-739.99	0.00	458400.69	637579.47	N 32 15 35.41	W 104 1 19.14
	8200.00	90.00	360.00	6400.00	1879.00	1813.33	-739.99	0.00	458500.68	637579.47	N 32 15 36.40	W 104 1 19.13
	8300.00	90.00	360.00	6400.00	1978.48	1913.33	-740.00	0.00	458600.67	637579.46	N 32 15 37.38	W 104 1 19.13
	8400.00	90.00	360.00	6400.00	2077.97	2013.33	-740.00	0.00	458700.66	637579.46	N 32 15 38.37	W 104 1 19.13
	8500.00	90.00	360.00	6400.00	2177.45	2113.33	-740.01	0.00	458800.65	637579.45	N 32 15 39.36	W 104 1 19.12
	8600.00	90.00	360.00	6400.00	2276.94	2213.33	-740.01	0.00	458900.64	637579.45	N 32 15 40.35	W 104 1 19.12
	8700.00	90.00	360.00	6400.00	2376.42	2313.33	-740.02	0.00	459000.64	637579.45	N 32 15 41.34	W 104 1 19.12
	8800.00	90.00	360.00	6400.00	2475.91	2413.33	-740.02	0.00	459100.63	637579.44	N 32 15 42.33	W 104 1 19.11
	8900.00	90.00	360.00	6400.00	2575.39	2513.33	-740.03	0.00	459200.62	637579.44	N 32 15 43.32	W 104 1 19.11
	9000.00	90.00	360.00	6400.00	2674.88	2613.33	-740.03	0.00	459300.61	637579.43	N 32 15 44.31	W 104 1 19.11
	9100.00	90.00	360.00	6400.00	2774.36	2713.33	-740.04	0.00	459400.60	637579.43	N 32 15 45.30	W 104 1 19.10
	9200.00	90.00	360.00	6400.00	2873.85	2813.33	-740.04	0.00	459500.59	637579.42	N 32 15 46.29	W 104 1 19.10
	9300.00	90.00	360.00	6400.00	2973.34	2913.33	-740.05	0.00	459600.58	637579.42	N 32 15 47.28	W 104 1 19.10
	9400.00	90.00	360.00	6400.00	3072.82	3013.33	-740.05	0.00	459700.58	637579.41	N 32 15 48.27	W 104 1 19.09
	9500.00	90.00	360.00	6400.00	3172.31	3113.33	-740.06	0.00	459800.57	637579.41	N 32 15 49.26	W 104 1 19.09
	9600.00	90.00	360.00	6400.00	3271.79	3213.33	-740.06	0.00	459900.56	637579.40	N 32 15 50.25	W 104 1 19.09
	9700.00	90.00	360.00	6400.00	3371.28	3313.33	-740.07	0.00	460000.55	637579.40	N 32 15 51.24	W 104 1 19.09
	9800.00	90.00	360.00	6400.00	3470.76	3413.33	-740.07	0.00	460100.55	637579.39	N 32 15 52.23	W 104 1 19.08
	9900.00	90.00	360.00	6400.00	3570.25	3513.33	-740.08	0.00	460200.54	637579.39	N 32 15 53.22	W 104 1 19.08
	10000.00	90.00	360.00	6400.00	3669.73	3613.33	-740.08	0.00	460300.53	637579.38	N 32 15 54.21	W 104 1 19.08
	10100.00	90.00	360.00	6400.00	3769.22	3713.33	-740.09	0.00	460400.52	637579.38	N 32 15 55.20	W 104 1 19.07
	10200.00	90.00	360.00	6400.00	3868.70	3813.33	-740.09	0.00	460500.51	637579.37	N 32 15 56.19	W 104 1 19.07
	10300.00	90.00	360.00	6400.00	3968.19	3913.33	-740.09	0.00	460600.50	637579.37	N 32 15 57.17	W 104 1 19.07
	10400.00	90.00	360.00	6400.00	4067.68	4013.33	-740.10	0.00	460700.50	637579.36	N 32 15 58.16	W 104 1 19.06
	10500.00	90.00	360.00	6400.00	4167.16	4113.33	-740.10	0.00	460800.49	637579.36	N 32 15 59.15	W 104 1 19.06
	10600.00	90.00	360.00	6400.00	4266.65	4213.33	-740.11	0.00	460900.48	637579.35	N 32 16 0.14	W 104 1 19.06
	10700.00	90.00	360.00	6400.00	4366.13	4313.33	-740.11	0.00	461000.47	637579.35	N 32 16 1.13	W 104 1 19.05
	10800.00	90.00	360.00	6400.00	4465.62	4413.33	-740.12	0.00	461100.46	637579.34	N 32 16 2.12	W 104 1 19.05
	10900.00	90.00	360.00	6400.00	4565.10	4513.33	-740.12	0.00	461200.46	637579.34	N 32 16 3.11	W 104 1 19.05
	11000.00	90.00	360.00	6400.00	4664.59	4613.33	-740.13	0.00	461300.45	637579.33	N 32 16 4.10	W 104 1 19.04
	11100.00	90.00	360.00	6400.00	4764.07	4713.33	-740.13	0.00	461400.44	637579.33	N 32 16 5.09	W 104 1 19.04
	11200.00	90.00	360.00	6400.00	4863.56	4813.33	-740.14	0.00	461500.43	637579.32	N 32 16 6.08	W 104 1 19.04
	11300.00	90.00	360.00	6400.00	4963.04	4913.33	-740.14	0.00	461600.42	637579.32	N 32 16 7.07	W 104 1 19.03
	11400.00	90.00	360.00	6400.00	5062.53	5013.33	-740.15	0.00	461700.41	637579.31	N 32 16 8.06	W 104 1 19.03
	11500.00	90.00	360.00	6400.00	5162.01	5113.33	-740.15	0.00	461800.41	637579.31	N 32 16 9.05	W 104 1 19.03
	11600.00	90.00	360.00	6400.00	5261.50	5213.33	-740.16	0.00	461900.40	637579.30	N 32 16 10.04	W 104 1 19.02
	11700.00	90.00	360.00	6400.00	5360.99	5313.33	-740.16	0.00	462000.39	637579.30	N 32 16 11.03	W 104 1 19.02
	11800.00	90.00	360.00	6400.00	5460.47	5413.33	-740.17	0.00	462100.38	637579.29	N 32 16 12.02	W 104 1 19.02
	11900.00	90.00	360.00	6400.00	5559.96	5513.33	-740.17	0.00	462200.37	637579.29	N 32 16 13.01	W 104 1 19.01
	12000.00	90.00	360.00	6400.00	5659.44	5613.33	-740.18	0.00	462300.36	637579.28	N 32 16 14.00	W 104 1 19.01
	12100.00	90.00	360.00	6400.00	5758.93	5713.33	-740.18	0.00	462400.36	637579.28	N 32 16 14.99	W 104 1 19.01
	12200.00	90.00	360.00	6400.00	5858.41	5813.33	-740.19	0.00	462500.35	637579.27	N 32 16 15.98	W 104 1 19.00
	12300.00	90.00	360.00	6400.00	5957.90	5913.33	-740.19	0.00	462600.34	637579.27	N 32 16 16.96	W 104 1 19.00
	12400.00	90.00	360.00	6400.00	6057.38	6013.33	-740.20	0.00	462700.33	637579.26	N 32 16 17.95	W 104 1 19.00
	12500.00	90.00	360.00	6400.00	6156.87	6113.33	-740.20	0.00	462800.32	637579.26	N 32 16 18.94	W 104 1 18.99
	12600.00	90.00	360.00	6400.00	6256.35	6213.33	-740.21	0.00	462900.32	637579.25	N 32 16 19.93	W 104 1 18.99
	12700.00	90.00	360.00	6400.00	6355.84	6313.33	-740.21	0.00	463000.31	637579.25	N 32 16 20.92	W 104 1 18.99
	12800.00	90.00	360.00	6400.00	6455.33	6413.33	-740.22	0.00	463100.30	637579.24	N 32 16 21.91	W 104 1 18.98
	12900.00	90.00	360.00	6400.00	6554.81	6513.33	-740.22	0.00	463200.29	637579.24	N 32 16 22.90	W 104 1 18.98
	13000.00	90.00	360.00	6400.00	6654.30	6613.33	-740.23	0.00	463300.28	637579.23	N 32 16 23.89	W 104 1 18.98
	13100.00	90.00	360.00									

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (*/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ° °)	Longitude (E/W ° ° °)
	13600.00	90.00	360.00	6400.00	7251.21	7213.33	-740.26	0.00	463900.23	637579.20	N 32 16 29.83	W 104 1 18.96
Devon Harroun Trust 31-30 #4H PBHL	13651.87	90.00	360.00	6400.00	7302.81	7265.20	-740.26	0.00	463952.10	637579.20	N 32 16 30.34	W 104 1 18.95

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7855 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EDU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	0.000	25.000	1/100.000	30.000	30.000	SLB_MWD-STD-Depth Only	Original Borehole / Devon Harroun Trust 31-30 #4H REV0
	25.000	13651.871	1/100.000	30.000	30.000	SLB_MWD-STD	Original Borehole / Devon Harroun Trust 31-30 #4H REV0

Offset Trajectory	Separation			Allow	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	CI-CI (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
Chevron Purdue Farms AV 28-1H Gyro-Inc Only OR to 13100ft (Def Survey)													
	16261.52	32.81	16258.57	16226.71	35973.71	MAS = 10.00 (m)	0.00	0.00					Pass
	16186.82	43.21	16158.26	16145.71	598.58	OSF 1.50	4780.00	4780.00				Surface	
	16186.85	44.28	16156.49	16144.57	581.30	OSF 1.50	4670.00	4670.00				MinPt-CICI	
	16186.87	44.80	16156.27	16144.17	574.10	OSF 1.50	5070.00	5070.00				MINPT-O-EQU	
	13150.56	245.87	12984.40	12913.72	81.53	OSF 1.50	13651.87	8400.00				MinPts	
Survey-Chevron Heritage 2-15 #1H Gyro-MWD OR to 12352ft (Def Survey)													
	23951.05	32.81	23942.71	23918.84	3716.71	MAS = 10.00 (m)	0.00	0.00					Pass
	23947.36	73.22	23967.71	23874.14	507.87	OSF 1.50	870.00	870.00				Surface	
	23948.63	82.56	23962.76	23866.07	448.63	OSF 1.50	1240.00	1240.00				MinPt-CICI	
	23911.54	194.03	23781.35	23717.51	187.26	OSF 1.50	3680.00	3680.00				MinPts	
	23911.54	193.79	23781.50	23717.74	187.51	OSF 1.50	3710.00	3710.00				MinPt-CICI	
	19124.01	510.94	18781.34	18613.07	56.81	OSF 1.50	13651.87	8400.00				MinPts	
Chevron Heritage 2-15 #1H Gyro OR to 8448ft MD (Def Survey)													
	23951.05	32.81	23942.71	23918.84	3716.71	MAS = 10.00 (m)	0.00	0.00					Pass
	23947.36	73.22	23967.71	23874.14	507.87	OSF 1.50	870.00	870.00				Surface	
	23948.63	82.56	23962.76	23866.07	448.63	OSF 1.50	1240.00	1240.00				MinPt-CICI	
	23911.54	194.03	23781.35	23717.51	187.26	OSF 1.50	3680.00	3680.00				MinPts	
	23911.54	193.79	23781.50	23717.74	187.51	OSF 1.50	3710.00	3710.00				MinPt-CICI	
	19138.63	514.80	18794.38	18624.83	56.42	OSF 1.50	13651.87	8400.00				MinPts	
Chevron Nymeyer A-3 Offset Inclination only OR to 8450ft (Def Survey)													
	25207.44	32.81	25204.83	25174.63	82877.90	MAS = 10.00 (m)	0.00	0.00					Pass
	20198.80	1237.16	19388.87	18959.94	24.81	OSF 1.50	13651.87	8400.00				MinPts	
Chevron Nymeyer 1 Offset Gyro OR to 9000ft (Def Survey)													
	25637.41	32.81	25634.73	25604.60	144885.80	MAS = 10.00 (m)	0.00	0.00					Pass
	20467.36	189.98	20361.79	20297.37	159.05	OSF 1.50	13651.87	8400.00				Surface	
Chevron Heritage 2-15 #2H Rev1 MDT 10-OCT-12 (Def Plan)													
	25214.87	32.81	25212.25	25182.08	205028.12	MAS = 10.00 (m)	0.00	0.00					Pass
	20718.24	221.31	20568.74	20498.93	144.22	OSF 1.50	13651.87	8400.00				Surface	
Chevron Nymeyer A-2 Offset Inclination only OR to 8148ft (Def Survey)													
	26065.00	32.81	26062.08	26062.19	63139.00	MAS = 10.00 (m)	0.00	0.00					Pass
	26110.09	81.83	26067.87	26048.18	858.99	OSF 1.50	1310.00	1310.00				MinPts	
	20778.51	1079.63	20054.48	19968.88	29.04	OSF 1.50	13651.87	8400.00				MINPT-O-EQU	
Chevron Nymeyer A-1 Offset Inclination Only OR to 6380ft (Def Survey)													
	27024.83	32.81	27021.86	26991.99	81004.55	MAS = 10.00 (m)	0.00	0.00					Pass
	21578.41	833.76	21018.25	20742.65	39.13	OSF 1.50	13651.87	8400.00				MinPts	
Chesapeake PLU Btg Shika 26 Federal 1H Rev0 LOH 22-Sep-08 (Def Plan)													
	30650.28	107.45	30585.92	30661.81	581.31	OSF 1.50	0.00	0.00					Pass
	39834.29	114.11	39855.80	39820.14	543.83	OSF 1.50	5900.00	5659.98				Surface	
	39134.11	114.81	39055.41	39018.30	541.83	OSF 1.50	6350.00	6280.35				MinPts	
	45564.15	138.64	45470.22	45424.50	498.32	OSF 1.50	13651.87	8400.00				MinPt-O-SF	
Survey Only Devon 8 Fee 2H Gyro-MWD OR to 12121ft (Def Survey)													
	48424.05	32.81	48420.82	48391.24	88205.88	MAS = 10.00 (m)	0.00	0.00					Pass
	48422.92	32.81	48418.92	48380.11	32418.03	MAS = 10.00 (m)	360.00	360.00				Surface	
	48408.86	32.81	48393.25	48373.85	4439.79	MAS = 10.00 (m)	2240.00	2240.00				MinPts	
	48407.12	32.81	48392.76	48374.31	4080.05	MAS = 10.00 (m)	2470.00	2470.00				MinPts	
	48407.20	32.81	48392.82	48374.40	4974.19	MAS = 10.00 (m)	2480.00	2480.00				MINPT-O-SF	
	48408.86	32.81	48390.21	48373.87	3471.46	MAS = 10.00 (m)	2980.00	2980.00				MinPts	
	48407.89	32.81	48388.18	48374.68	3019.01	MAS = 10.00 (m)	3530.00	3530.00				MINPT-O-EQU	
	48406.83	32.81	48388.66	48376.12	2724.77	MAS = 10.00 (m)	3990.00	3990.00				MINPT-O-EQU	
	48415.22	34.90	48381.12	48380.32	2241.19	OSF 1.50	4920.00	4920.00				MinPts	
	48420.48	39.86	48369.17	48360.76	1853.37	OSF 1.50	5610.00	5610.00				MinPt-O-ADP	
	54394.37	143.52	54297.86	54290.85	578.56	OSF 1.50	13651.87	8400.00				MinPt O SF	