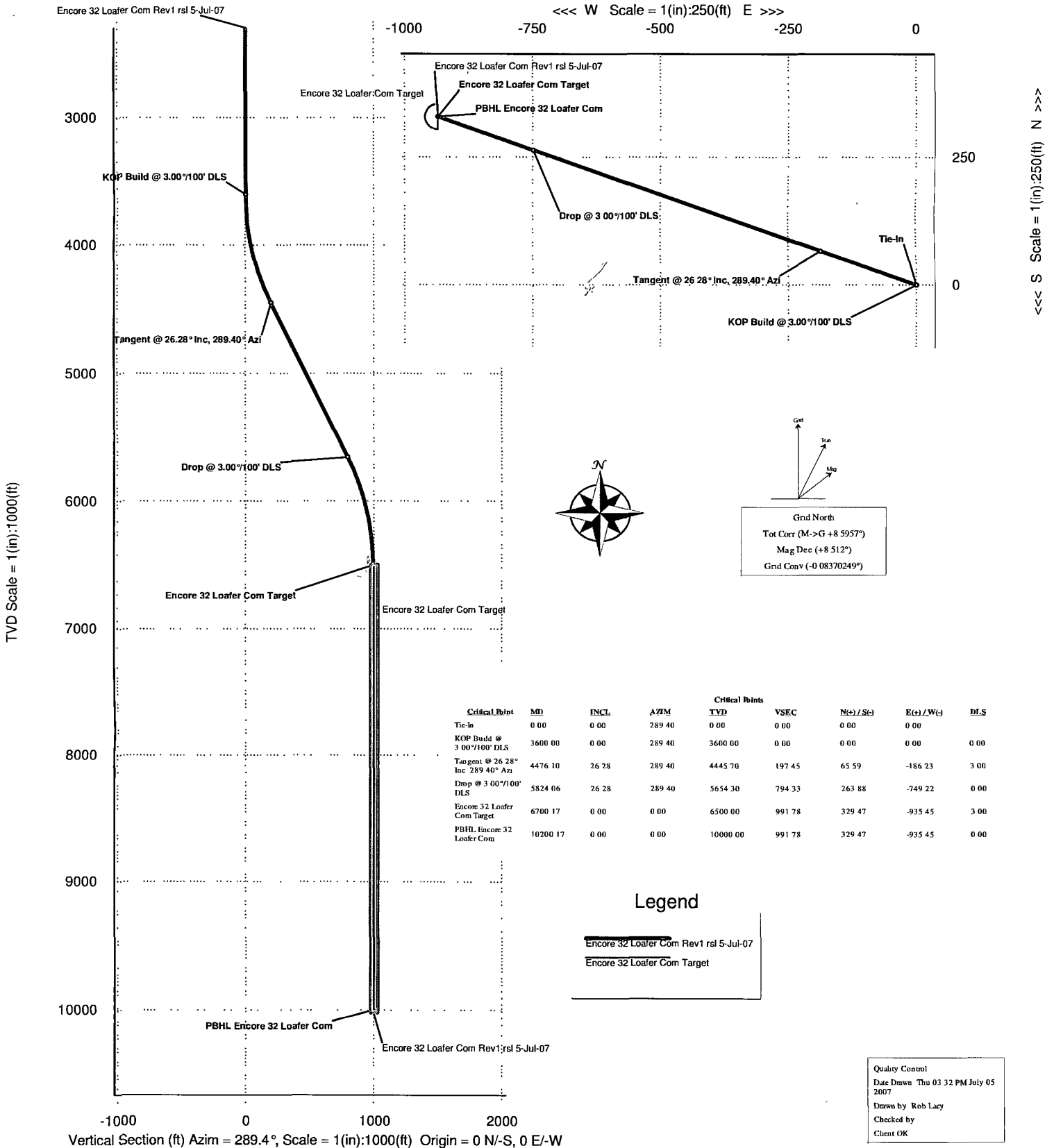


WELL 32 Loafer Com			FIELD NM, Eddy County 2			STRUCTURE Encore, 32 Loafer Com		
Magnetic Parameters Model BCGM 2007			Surface Location Lat N32 26 7 815 Lon W104 28 21 813			Miscellaneous Slot 32 Loafer Com Plan Rev1 rsl 5-Jul-07		
Dip 60.326° Mag Dec +8 512°	Date: July 18, 2007 FS 49652 1 HT		NAD27 New Mexico State Planes, Eastern Zone, US Feet 522185.40 NUS 451852.50 RUS Grid Conv -0.08370249° Scale Fact 0.999917458			TVD Ref RKB (4077.00 ft above) Srvy Date July 05, 2007		



Encore 32 Loafer Com Rev1 rsl 5-Jul-07 Proposal

Report Date	July 5, 2007	Survey / DLS Computation Method	Minimum Curvature / Lubinski
Client	Encore	Vertical Section Azimuth:	289 400°
Field:	NM, Eddy County 2	Vertical Section Origin:	N 0 000 ft, E 0 000 ft
Structure / Slot:	Encore, 32 Loafer Com / 32 Loafer Com	TVD Reference Datum:	RKB
Well	32 Loafer Com	TVD Reference Elevation:	4077 0 ft relative to
Borehole	Original Hole	Sea Bed / Ground Level Elevation:	4063 000 ft relative to
UWI/API#:		Magnetic Declination:	8 512°
Survey Name / Date:	Encore 32 Loafer Com Rev1 rsl 5-Jul-07 / July 5, 2007	Total Field Strength:	49052 144 nT
Tort / AHD / DDI / ERD ratio:	52 566° / 991 78 ft / 4 726 / 0 099	Magnetic Dip:	60 326°
Grid Coordinate System	NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date:	July 19, 2007
Location Lat/Long:	N 32 26 7 815, W 104 29 21 813	Magnetic Declination Model:	BGGM 2007
Location Grid N/E Y/X:	N 522185 400 ftUS, E 451852 500 ftUS	North Reference:	Grid North
Grid Convergence Angle:	-0 08370249°	Total Corr Mag North -> Grid North:	+8 596°
Grid Scale Factor:	0 99991175	Local Coordinates Referenced To:	Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Sub-Sea TVD (ft)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	DLS (deg/100 ft)	Northing (ftUS)	Easting (ftUS)	Latitude	Longitude
Tie-In	0 00	0 00	289 40	-4077 00	0 00	0 00	0 00	0 00	0 00	522185 40	451852 50	N 32 26 7 815	W 104 29 21 813
KOP Build @ 3 00°/100'	3600 00	0 00	289 40	-477 00	3600 00	0 00	0 00	0 00	0 00	522185 40	451852 50	N 32 26 7 815	W 104 29 21 813
DLS													
Tangent @ 26 28° Inc.	4476 10	26 28	289 40	368 70	4445 70	197 45	65 59	-186 23	3 00	522250 99	451666 28	N 32 26 8 461	W 104 29 23 987
289 40° Azi													
Drop @ 3 00°/100' DLS	5824 06	26 28	289 40	1577 30	5654 30	794 33	263 88	-749 22	0 00	522449 25	451103 35	N 32 26 10 415	W 104 29 30 559
Encore 32 Loafer Com													
Target	6700 17	0 00	0 00	2423 00	6500 00	991 78	329 47	-935 45	3 00	522514 84	450917 13	N 32 26 11 061	W 104 29 32 733
PBHL Encore 32 Loafer Com	10200 17	0 00	0 00	5923 00	10000 00	991 78	329 47	-935 45	0 00	522514 84	450917 13	N 32 26 11 061	W 104 29 32 733

Survey Type: Non-Def Proposal

Survey Error Model: SLB ISCWSA version 24 *** 3-D 95.00% Confidence 2.7955 sigma

Surveying Prog:

MD From (ft)

0 00

14 00

MD To (ft)

14 00

10200 17

EOU Freq

1/100 00

1/100 00

Survey Tool Type

SLB_MWD-STD-Depth Only

SLB_MWD-STD

Borehole -> Survey

Original Hole -> Encore 32 Loafer Com Rev1 rsl 5-Jul-07

Original Hole -> Encore 32 Loafer Com Rev1 rsl 5-Jul-07