

WELL LOCATION PLAT

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Applicant/Well Operator Name Range Resources - Appalachia, LLC	DEP ID# 141142	Well (Farm) Name Sasso, Leonard Unit	Well # 12H
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WELL PLAN

Operator Name: Range Resources - Appalachia, LLC
 Well/Farm Name: Sasso, Leonard Unit

DEP Use Only	Permit #
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Latitude Longitude

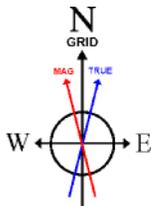
KOP: TVD: 4961.26 TMD: 4961.26 40°22'04.51"N 80°21'28.12"W Notes:

Landing Point: TVD: 6240.00 TMD: 7735.29 40°22'19.23"N 80°21'10.21"W

Easting (ft)

Scale 1 inch = 2000

-6000 -5000 -4000 -3000 -2000 -1000 0 1000 2000



BGGM (1900.0 to 2019.0) Dip: 67.36° Field: 52472.6 nT
 Magnetic North is 9.02 degrees West of True North (at 29/Aug/2017)
 Grid North is 1.69 degrees West of True North
 To correct azimuth from True to Grid add 1.69 degrees
 To correct azimuth from Magnetic to Grid subtract 7.33 degrees

Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	0.00	0.000	61.215	0.00	0.00	0.00	0.00	0.00
KOP 1	4961.26	0.000	61.215	4961.26	0.00	0.00	0.00	0.00
End of Build	5611.26	65.000	61.215	5480.53	159.29	289.94	10.00	-5.11
KOP 2	6827.30	65.000	61.215	5994.45	689.98	1255.86	0.00	-22.14
LP	7735.29	90.000	330.333	6240.00	1448.38	1429.80	10.00	550.73
PBHL	17295.29	90.000	330.333	6240.00	9755.23	-3302.00	0.00	10110.73

