



Grama Ridge East 34 State Com 3BS 5H

API # 30-025- 45625

Updated: 1/9/2019

TVD	Geological	Wellbore Sketch	Hole Size	Casing	Drilling Fluids	Cement	OH Evaluation/Logs
ft-RKB	Tops						
2,000	1,705 Rustler 2,170 Salado		17-1/2"	Surface: 13-3/8" 54.5# J55 BTC	FW Spud Mud 8.5 - 9.2 ppg 38 - 40 Vis 8 - 10 PV 8 - 10 YP	Top of Lead: Surface 13.5 ppg 1.72 cuft/sk 1,050 sks - 100% XS Top of Tail: 1,300' 14.8 ppg 1.33 cuft/sk 475 sks - 100% XS	
4,000	3,740 Yates 4,320 Capitan Reef		12-1/4"	Intermediate: 9-5/8" 40# J55 LTC	Brine 9.7 - 10.3 ppg 28 - 32 Vis 1 - 3 PV 1 - 3 YP	Stage 1 Top of Lead: 3,900' 11.5 ppg 3.66 cuft/sk 205 sks - 100% XS Top of Tail: 5,100' 14.8 ppg 1.33 cuft/sk 265 sks - 100% XS Stage 2 Top of Lead: Surface 11.5 ppg 3.66 cuft/sk 585 sks - 200% XS Top of Tail: 3,400' 14.8 ppg 1.33 cuft/sk 235 sks - 200% XS	
5,000	5,560 Delaware		8-3/4" 8-1/2" Lateral	Production: 5-1/2" 20# P110 BTC	Curve & Lateral OBM 9.0 - 9.5 ppg 15 - 20 PV, 8 - 12 YP	Top of Lead: Surface 11.3 ppg 2.95 cuft/sk 1,020 sks - 10% XS Top of Tail: 10,800' 14.5 ppg 1.22 cuft/sk 1,205 sks - 10% XS	
6,000							
7,000							
8,000	8,375 Bone Spring						
9,000	9,475 1st Bone Spring SS						
10,000	10,040 2nd Bone Spring SS						
11,000	10,915 3rd Bone Spring SS 11,210 Wolfcamp						
12,000							16,085' MD 11,190' TVD



Grama Ridge East 34 State Com 3BS 4H

API # 30-025- 45624
Updated: 2/19/2019

TVD ft-RKB		Geological Tops	Wellbore Sketch	Hole Size	Casing	Drilling Fluids	Cement	OH Evaluation/Logs
2,000	1,705 Rustler 2,170 Salado			17-1/2"	Surface: 13-3/8" 54.5# J55 BTC	FW Spud Mud 8.5 - 9.2 ppg 38 - 40 Vis 8 - 10 PV 8 - 10 YP	Top of Lead: Surface 13.5 ppg 1.72 cuft/sk 1,050 sks - 100% XS Top of Tail: 1,300' 14.8 ppg 1.33 cuft/sk 475 sks - 100% XS	
4,000	3,740 Yates 4,320 Capitan Reef		DV Tool & ECP @ 3,900'	12-1/4"	Intermediate: 9-5/8" 40# J55 LTC	Brine 9.7 - 10.3 ppg 28 - 32 Vis 1 - 3 PV 1 - 3 YP	Stage 1 Top of Lead: 3,900' 11.5 ppg 3.66 cuft/sk 205 sks - 100% XS Top of Tail: 5,100' 14.8 ppg 1.33 cuft/sk 265 sks - 100% XS Stage 2 Top of Lead: Surface 11.5 ppg 3.66 cuft/sk 585 sks - 200% XS Top of Tail: 3,400' 14.8 ppg 1.33 cuft/sk 235 sks - 200% XS	
5,000	5,560 Delaware		5,660'	8-3/4" 8-1/2" Lateral	Production: 5-1/2" 20# P110 BTC	Curve & Lateral OBM 9.0 - 9.5 ppg 15 - 20 PV 8 - 12 YP	Top of Lead: Surface 11.3 ppg 2.95 cuft/sk 1,020 sks - 10% XS Top of Tail: 10,800' 14.5 ppg 1.22 cuft/sk 1,205 sks - 10% XS	
7,000								
8,000	8,375 Bone Spring							
9,000	9,475 1st Bone Spring SS							
10,000	10,040 2nd Bone Spring SS							
11,000	10,915 3rd Bone Spring SS 11,190 Target 11,210 Wolfcamp							
12,000								16,085' MD 11,195' TVD