

7"
• 23#
Casing

*Item OD's are shown as "maximum OD"
*Item ID's are shown as "minimum ID"

Northern States Completions

Date: 2/18/2013	Field: Carrizzo Oil and Gas
Well Name: Bringelson Ranch 3-33-9-58	Rig Name & #: Xtreme 19
County: Weld	NSC Rep: Kyle Dillard
State: CO	Company Rep: Bob Mcneese

4 1/2" LINER-----"AS RUN" DETAIL									
ITEM	DESCRIPTION	OD	ID	LENGTH	TOP	BOTTOM	DRILL PIPE DEPTHS	TOP	BOTTOM
1	5 1/4" ID x 15' Polished Bore Receptacle Centralized Entry Guide on PBR Top 13.93' of 5 1/4" Seal Bore Length	5.920"	5.250"	14.93	5156.46	5171.39		5156.46	5171.39
2	4 1/2" x 7" PPK Liner Hanger Packer w/ 1' Extension Centralizer (4 1/2" Buttress Box x LTC Pin)	6.000"	4.000"	3.42	5171.39	5174.81		5171.39	5174.81
3	15 Jt 4 1/2" 11.6# LTC Blank Liner Water Reactive Elastomer (5 FT) TAM FreeCap1 Swelling Packer	5.000"	4.000"	0.60	5174.81	5175.41		5174.81	5175.41
4	8 Jt 4 1/2" 11.6# LTC Blank Liner Water Reactive Elastomer (5 FT) TAM FreeCap1 Swelling Packer	5.750"	4.000"	662.94	5175.41	5838.35		5175.41	5838.35
5	3 Jts 4 1/2" 11.6# LTC Blank Liner Water Reactive Elastomer (5 FT) TAM FreeCap1 Swelling Packer	5.000"	4.000"	15.75	5838.35	5854.10		5838.35	5854.10
6	3 Jts 4 1/2" 11.6# LTC Blank Liner	5.000"	4.000"	354.65	5854.10	6208.75		5854.10	6208.75
7	3 Jts 4 1/2" 11.6# LTC Blank Liner	5.750"	4.000"	15.75	6208.75	6224.50		6208.75	6224.50
8	3 Jts 4 1/2" 11.6# LTC Blank Liner	5.000"	4.000"	133.08	6224.50	6357.58		6224.50	6357.58

