

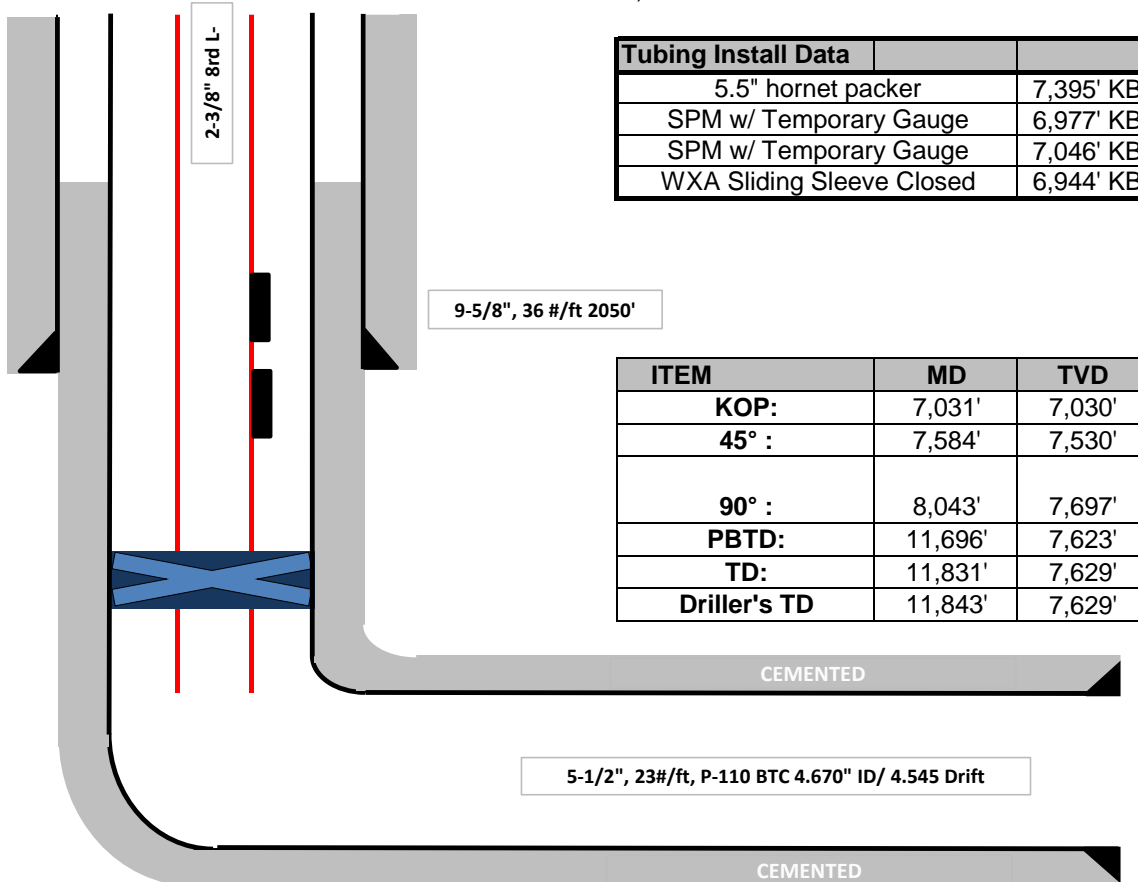
Current Vertical WBD

Reserve 3-65 26 1H

Niobrara Horizontal

GL: 5,486'

KB: 5,510'



String	Size	Weight	Grade	Thread	Top	Bottom	TOC
Surface	9 5/8"	36"	J-55	STC	Surface	2027 4/5"	Surface
Production	5 1/2"	23"	P-110	BTC	Surface	11831 1/5"	1160"

String	Drift (in)	Capacity (BBL/ft)	Burst (psi)	Collapse (psi)	Tension (psi)
Surface	8.765	0.0773	3061	1,924	281,429
Production	4.545	0.0212	10748	13,848	456,000

Reserve 3-65 26 1H

API Number: 0500109779

Niobrara Horizontal

Horizontal Wellbore Schematic

Original Elevation (GL):

5,486'

KB Elevation (KB):

5,510'

String	Size	Weight	Grade	Thread	Top	Bottom	TOC
Surface	9 5/8"	36	J-55	STC	Surface	2028	Surface
Production	5 1/2"	23	P-110	BTC	Surface	11831	1160

ITEM	MD	TVD
KOP:	7,031'	7,030'
45° :	7,584'	7,530'
90° :	8,043'	7,697'
PBTD:	11,696'	7,623'
TD:	11,831'	7,629'

Stg 11	Stg 10	Stg 9	Stg 8	Stg 7	Stg 6	Stg 5	Stg 4	Stg 3	Stg 2	Stg 1
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 9,931'	Plug @ 10,106'	Plug @ 10,281'	Plug @ 10,456'	Plug @ 10,631'	Plug @ 10,806'	Plug @ 10,981'	Plug @ 11,144'	Plug @ 11,331'	Plug @ 11,506'	Plug @ ' '
Perf @ 9,916'	Perf @ 10,090'	Perf @ 10,264'	Perf @ 10,439'	Perf @ 10,614'	Perf @ 10,786'	Perf @ 10,966'	Perf @ 11,129'	Perf @ 11,316'	Perf @ 11,491'	Perf @ 11,666'
Perf @ 9,881'	Perf @ 10,056'	Perf @ 10,231'	Perf @ 10,406'	Perf @ 10,581'	Perf @ 10,756'	Perf @ 10,931'	Perf @ 11,106'	Perf @ 11,281'	Perf @ 11,456'	Perf @ 11,631'
Perf @ 9,846'	Perf @ 10,021'	Perf @ 10,196'	Perf @ 10,371'	Perf @ 10,546'	Perf @ 10,721'	Perf @ 10,896'	Perf @ 11,073'	Perf @ 11,246'	Perf @ 11,421'	Perf @ 11,596'
Perf @ 9,811'	Perf @ 9,986'	Perf @ 10,161'	Perf @ 10,336'	Perf @ 10,511'	Perf @ 10,686'	Perf @ 10,861'	Perf @ 11,036'	Perf @ 11,211'	Perf @ 11,386'	Perf @ 11,561'
Perf @ 9,776'	Perf @ 9,951'	Perf @ 10,126'	Perf @ 10,301'	Perf @ 10,476'	Perf @ 10,651'	Perf @ 10,826'	Perf @ 11,001'	Perf @ 11,176'	Perf @ 11,351'	Perf @ 11,526'

5-1/2" Shoe
PBTD: 11696.4

Stg 22	Stg 21	Stg 20	Stg 19	Stg 18	Stg 17	Stg 16	Stg 15	Stg 14	Stg 13	Stg 12
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 8,003'	Plug @ 8,176'	Plug @ 8,350'	Plug @ 8,523'	Plug @ 8,700'	Plug @ 8,881'	Plug @ 9,056'	Plug @ 9,238'	Plug @ 9,412'	Plug @ 9,581'	Plug @ 9,756'
Perf @ 7,989'	Perf @ 8,161'	Perf @ 8,335'	Perf @ 8,508'	Perf @ 8,685'	Perf @ 8,866'	Perf @ 9,041'	Perf @ 9,216'	Perf @ 9,391'	Perf @ 9,566'	Perf @ 9,741'
Perf @ 7,956'	Perf @ 8,131'	Perf @ 8,306'	Perf @ 8,481'	Perf @ 8,656'	Perf @ 8,831'	Perf @ 9,006'	Perf @ 9,181'	Perf @ 9,356'	Perf @ 9,529'	Perf @ 9,701'
Perf @ 7,926'	Perf @ 8,094'	Perf @ 8,273'	Perf @ 8,448'	Perf @ 8,623'	Perf @ 8,797'	Perf @ 8,971'	Perf @ 9,146'	Perf @ 9,321'	Perf @ 9,496'	Perf @ 9,671'
Perf @ 7,886'	Perf @ 8,061'	Perf @ 8,236'	Perf @ 8,411'	Perf @ 8,586'	Perf @ 8,761'	Perf @ 8,936'	Perf @ 9,111'	Perf @ 9,286'	Perf @ 9,461'	Perf @ 9,636'
Perf @ 7,851'	Perf @ 8,026'	Perf @ 8,201'	Perf @ 8,376'	Perf @ 8,551'	Perf @ 8,726'	Perf @ 8,901'	Perf @ 9,076'	Perf @ 9,251'	Perf @ 9,426'	Perf @ 9,601'

TD: 11831.2