

Property Reserve 4-65 3-4 1H

API Number: 0500507226

Niobrara Horizontal

Horizontal Wellbore Schematic

Original Elevation (GL): 5,691'

KB Elevation (KB): 5,715'

String	Size	Weight	Grade	Thread	Top
Surface	9 5/8"	36	J-55	STC	24"
Production	5 1/2"	23	P-110	TXP-BTC	24'

ITEM	MD	TVD
KOP:	7,312'	7,305'
45° :	7,833'	7,776'
90° :	8,261'	7,914'
TIV :	16,823'	8,059'
Float Collar:	16,886'	8,060'
TD:	16,985'	8,061'
Drillers TD:	16,985'	8,061'

Stg 20	Stg 19	Stg 18	Stg 17	Stg 16	Stg 15	Stg 14	Stg 13	Stg 12	Stg 11	Stg 10
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 13,483'	Plug @ 13,658'	Plug @ 13,833'	Plug @ 14,007'	Plug @ 14,188'	Plug @ 14,365'	Plug @ 14,533'	Plug @ 14,708'	Plug @ 14,883'	Plug @ 15,058'	Plug @ 15,233'
Perf @ 13,468'	Perf @ 13,643'	Perf @ 13,812'	Perf @ 13,989'	Perf @ 14,168'	Perf @ 14,343'	Perf @ 14,518'	Perf @ 14,692'	Perf @ 14,865'	Perf @ 15,040'	Perf @ 15,212'
Perf @ 13,433'	Perf @ 13,608'	Perf @ 13,783'	Perf @ 13,958'	Perf @ 14,133'	Perf @ 14,308'	Perf @ 14,478'	Perf @ 14,658'	Perf @ 14,833'	Perf @ 15,008'	Perf @ 15,183'
Perf @ 13,398'	Perf @ 13,573'	Perf @ 13,748'	Perf @ 13,920'	Perf @ 14,098'	Perf @ 14,273'	Perf @ 14,448'	Perf @ 14,623'	Perf @ 14,798'	Perf @ 14,973'	Perf @ 15,148'
Perf @ 13,363'	Perf @ 13,538'	Perf @ 13,713'	Perf @ 13,888'	Perf @ 14,063'	Perf @ 14,238'	Perf @ 14,413'	Perf @ 14,588'	Perf @ 14,763'	Perf @ 14,938'	Perf @ 15,113'
Perf @ 13,328'	Perf @ 13,503'	Perf @ 13,678'	Perf @ 13,853'	Perf @ 14,028'	Perf @ 14,203'	Perf @ 14,378'	Perf @ 14,553'	Perf @ 14,728'	Perf @ 14,903'	Perf @ 15,078'

Stg 40	Stg 39	Stg 38	Stg 37	Stg 36	Stg 35	Stg 34	Stg 33	Stg 32	Stg 31	Stg 30
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 9,983'	Plug @ 10,158'	Plug @ 10,340'	Plug @ 10,508'	Plug @ 10,683'	Plug @ 10,858'	Plug @ 11,033'	Plug @ 11,208'	Plug @ 11,383'	Plug @ 11,558'	Plug @ 11,733'
Perf @ 9,968'	Perf @ 10,143'	Perf @ 10,318'	Perf @ 10,493'	Perf @ 10,668'	Perf @ 10,843'	Perf @ 11,018'	Perf @ 11,193'	Perf @ 11,368'	Perf @ 11,543'	Perf @ 11,718'
Perf @ 9,933'	Perf @ 10,108'	Perf @ 10,283'	Perf @ 10,454'	Perf @ 10,633'	Perf @ 10,808'	Perf @ 10,983'	Perf @ 11,158'	Perf @ 11,333'	Perf @ 11,508'	Perf @ 11,683'
Perf @ 9,898'	Perf @ 10,073'	Perf @ 10,244'	Perf @ 10,423'	Perf @ 10,598'	Perf @ 10,773'	Perf @ 10,948'	Perf @ 11,123'	Perf @ 11,298'	Perf @ 11,473'	Perf @ 11,648'
Perf @ 9,863'	Perf @ 10,038'	Perf @ 10,208'	Perf @ 10,388'	Perf @ 10,563'	Perf @ 10,738'	Perf @ 10,913'	Perf @ 11,088'	Perf @ 11,260'	Perf @ 11,433'	Perf @ 11,608'
Perf @ 9,828'	Perf @ 10,002'	Perf @ 10,178'	Perf @ 10,353'	Perf @ 10,528'	Perf @ 10,703'	Perf @ 11,876'	Perf @ 11,050'	Perf @ 11,228'	Perf @ 11,403'	Perf @ 11,578'

Bottom	Bit Size	Sacks	TOC
2229"	13 1/2"	770	Surface
16,975'	6"	2050	2,252'

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 @ 15,408'	Plug @ 15,583'	Plug @ 15,758'	Plug @ 15,933'	Plug @ 16,108'	Plug @ 16,283'	Plug @ 16,454'	Plug @ 16,627'	Plug @ '
Perf @ 15,387'	Perf @ 15,562'	Perf @ 15,738'	Perf @ 15,918'	Perf @ 16,090'	Perf @ 16,264'	Perf @ 16,443'	Perf @ 16,614'	Perf @ 16,793'
Perf @ 15,358'	Perf @ 15,533'	Perf @ 15,708'	Perf @ 15,883'	Perf @ 16,058'	Perf @ 16,233'	Perf @ 16,408'	Perf @ 16,583'	Perf @ 16,758'
Perf @ 15,323'	Perf @ 15,498'	Perf @ 15,673'	Perf @ 15,848'	Perf @ 16,023'	Perf @ 16,198'	Perf @ 16,373'	Perf @ 16,548'	Perf @ 16,723'
Perf @ 15,288'	Perf @ 15,463'	Perf @ 15,638'	Perf @ 15,813'	Perf @ 15,988'	Perf @ 16,163'	Perf @ 16,338'	Perf @ 16,510'	Perf @ 16,688'
Perf @ 15,253'	Perf @ 15,428'	Perf @ 15,603'	Perf @ 15,778'	Perf @ 15,953'	Perf @ 16,126'	Perf @ 16,310'	Perf @ 16,485'	Perf @ 16,653'



Stg 29	Stg 28	Stg 27	Stg 26	Stg 25	Stg 24	Stg 23	Stg 22	Stg 21
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 11,908'	Plug @ 12,083'	Plug @ 12,258'	Plug @ 12,433'	Plug @ 12,608'	Plug @ 12,783'	Plug @ 12,958'	Plug @ 13,135'	Plug @ 13,308'
Perf @ 11,893'	Perf @ 12,068'	Perf @ 12,243'	Perf @ 12,418'	Perf @ 12,593'	Perf @ 12,768'	Perf @ 12,936'	Perf @ 13,118'	Perf @ 13,293'
Perf @ 11,858'	Perf @ 12,033'	Perf @ 12,208'	Perf @ 12,383'	Perf @ 12,558'	Perf @ 12,733'	Perf @ 12,908'	Perf @ 13,083'	Perf @ 13,258'
Perf @ 11,823'	Perf @ 11,998'	Perf @ 12,173'	Perf @ 12,348'	Perf @ 12,523'	Perf @ 12,698'	Perf @ 12,873'	Perf @ 13,048'	Perf @ 13,223'
Perf @ 11,783'	Perf @ 11,967'	Perf @ 12,140'	Perf @ 12,313'	Perf @ 12,492'	Perf @ 12,668'	Perf @ 12,840'	Perf @ 13,013'	Perf @ 13,188'
Perf @ 11,753'	Perf @ 11,928'	Perf @ 12,103'	Perf @ 12,278'	Perf @ 12,453'	Perf @ 12,628'	Perf @ 12,803'	Perf @ 12,978'	Perf @ 13,153'
Stg 49	Stg 48	Stg 47	Stg 46	Stg 45	Stg 44	Stg 43	Stg 42	Stg 41
Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf	Plug & Perf
Plug @ 8,410'	Plug @ 8,585'	Plug @ 8,763'	Plug @ 8,937'	Plug @ 9,113'	Plug @ 9,286'	Plug @ 9,458'	Plug @ 9,633'	Plug @ 9,808'
Perf @ 8,393'	Perf @ 8,568'	Perf @ 8,743'	Perf @ 8,918'	Perf @ 9,093'	Perf @ 9,268'	Perf @ 9,443'	Perf @ 9,618'	Perf @ 9,787'
Perf @ 8,358'	Perf @ 8,528'	Perf @ 8,704'	Perf @ 8,877'	Perf @ 9,053'	Perf @ 9,230'	Perf @ 9,403'	Perf @ 9,585'	Perf @ 9,758'
Perf @ 8,318'	Perf @ 8,498'	Perf @ 8,673'	Perf @ 8,848'	Perf @ 9,023'	Perf @ 9,198'	Perf @ 9,373'	Perf @ 9,548'	Perf @ 9,723'
Perf @ 8,288'	Perf @ 8,463'	Perf @ 8,638'	Perf @ 8,813'	Perf @ 8,988'	Perf @ 9,163'	Perf @ 9,338'	Perf @ 9,513'	Perf @ 9,688'
Perf @ 8,253'	Perf @ 8,428'	Perf @ 8,603'	Perf @ 8,778'	Perf @ 8,953'	Perf @ 9,128'	Perf @ 9,303'	Perf @ 9,478'	Perf @ 9,653'

5-1/2" Shoe
16,985'

8.5" Hole

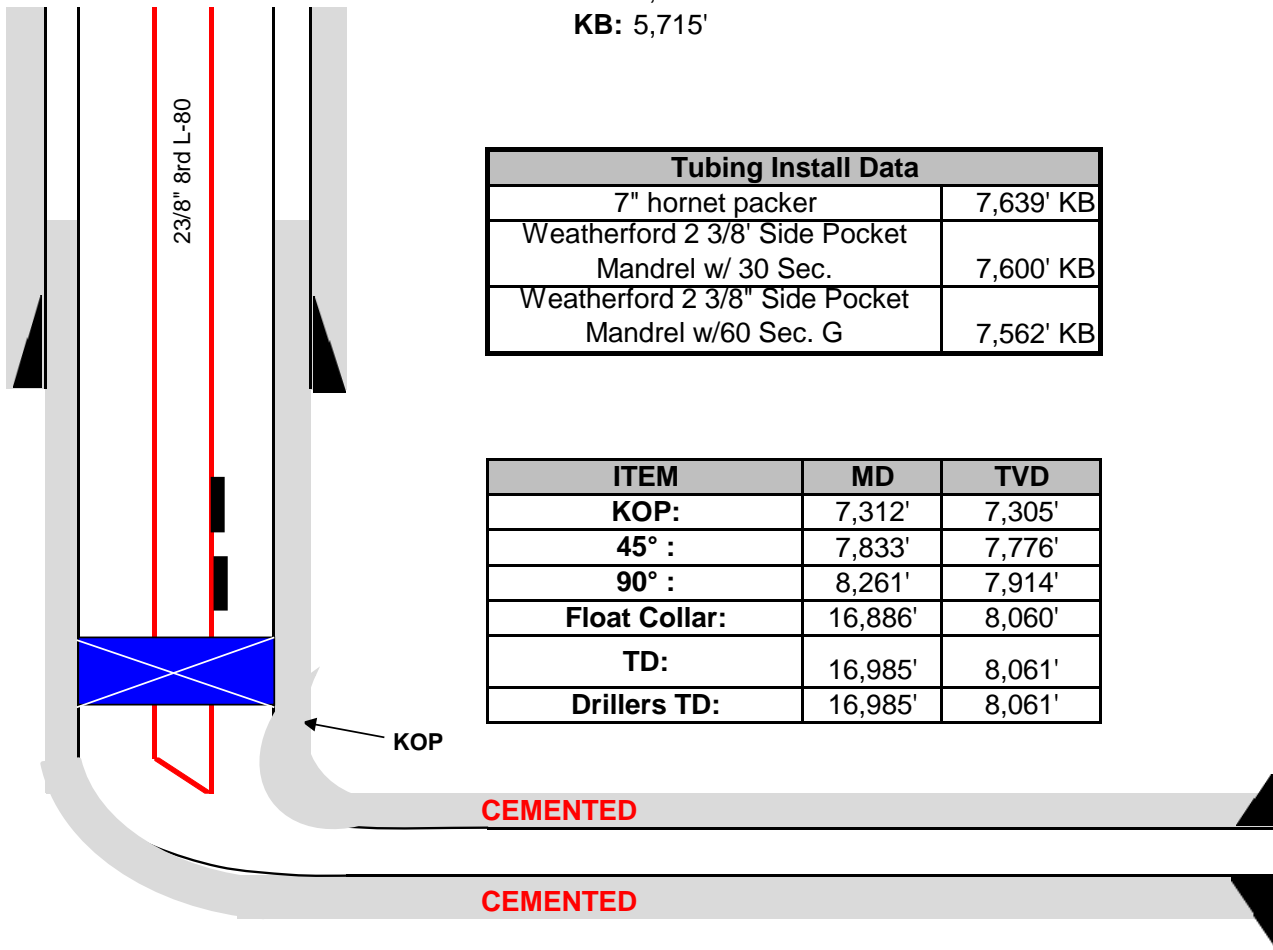
Float Collar
16,886'

Property Reserve 4-65 3-4 1H

Niobrara Horizontal

GL: 5,691'

KB: 5,715'



Tubing Install Data	
7" hornet packer	7,639' KB
Weatherford 2 3/8" Side Pocket Mandrel w/ 30 Sec.	7,600' KB
Weatherford 2 3/8" Side Pocket Mandrel w/60 Sec. G	7,562' KB

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TD:	16,985'	8,061'
Drillers TD:	16,985'	8,061'

String	Size	Weight	Grade	Thread	Top	Bottom	TOC
Surface	9 5/8"	36	J-55	STC	24'	2,229'	Surface
PROD	5 1/2"	23	P-110	TXP-BTC	24'	16,975'	2252

String	Drift (in)	Capacity (BBL/ft)	Burst (psi)	Collapse (psi)	Tension (psi)
Surface	8.765	0.0773	3,060	1,925	402,000
Production	4.545	0.0211	12,351	13,794	729,000