

Bomhoff 5 8H

API Number: 0500507180

Niobrara Horizontal

Horizontal Wellbore Schematic

Original Elevation (GL): 5,609'

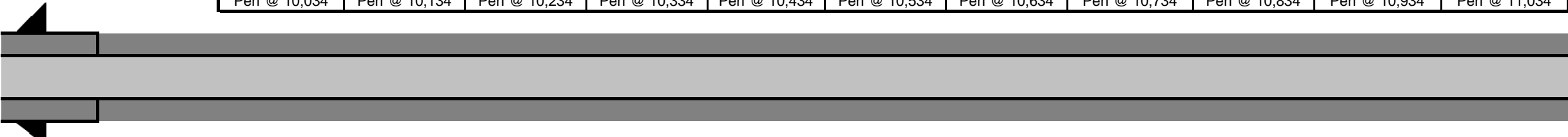
KB Elevation (KB): 5,633'

String	Size	Weight	Grade	Thread	Top
Surface	9 5/8"	36	J-55	STC	24'
Interm.	7"	32	P-110	BTC	24'
Liner	4 1/2"	13 1/2	P-110	BTC	6,688'

ITEM	MD	TVD
4-1/2" Liner Top:	6,688'	6,676'
KOP:	6,831'	6,818'
45° :	7,417'	7,352'
90° :	7,532'	7,531'
PBTD:	12,044'	7,474'
TD:	12,132'	7,495'

Float Collar
Plug back TD, drilled TD at 12,

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 @ 10,119'	Plug @ 10,219'	Plug @ 10,319'	Plug @ 10,419'	Plug @ 10,519'	Plug @ 10,619'	Plug @ 10,719'	Plug @ 10,819'	Plug @ 10,919'	Plug @ 11,019'	Plug @ 11,119'
Perf @ 10,102'	Perf @ 10,202'	Perf @ 10,302'	Perf @ 10,402'	Perf @ 10,502'	Perf @ 10,602'	Perf @ 10,702'	Perf @ 10,802'	Perf @ 10,902'	Perf @ 11,002'	Perf @ 11,102'
Perf @ 10,085'	Perf @ 10,185'	Perf @ 10,285'	Perf @ 10,385'	Perf @ 10,485'	Perf @ 10,585'	Perf @ 10,685'	Perf @ 10,785'	Perf @ 10,885'	Perf @ 10,985'	Perf @ 11,085'
Perf @ 10,070'	Perf @ 10,168'	Perf @ 10,268'	Perf @ 10,368'	Perf @ 10,468'	Perf @ 10,570'	Perf @ 10,668'	Perf @ 10,768'	Perf @ 10,868'	Perf @ 10,968'	Perf @ 11,068'
Perf @ 10,051'	Perf @ 10,151'	Perf @ 10,251'	Perf @ 10,351'	Perf @ 10,451'	Perf @ 10,551'	Perf @ 10,647'	Perf @ 10,751'	Perf @ 10,851'	Perf @ 10,953'	Perf @ 11,051'
Perf @ 10,034'	Perf @ 10,134'	Perf @ 10,234'	Perf @ 10,334'	Perf @ 10,434'	Perf @ 10,534'	Perf @ 10,634'	Perf @ 10,734'	Perf @ 10,834'	Perf @ 10,934'	Perf @ 11,034'



7" Shoe
7,915'

Stg 41	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 & Perf
Plug @ 8,019'	Plug @ 8,119'	Plug @ 8,219'	Plug @ 8,319'	Plug @ 8,419'	Plug @ 8,521'	Plug @ 8,619'	Plug @ 8,719'	Plug @ 8,819'	Plug @ 8,919'	Plug @ 9,019'	Plug @ 9,119'
Perf @ 8,002'	Perf @ 8,102'	Perf @ 8,202'	Perf @ 8,302'	Perf @ 8,400'	Perf @ 8,502'	Perf @ 8,602'	Perf @ 8,706'	Perf @ 8,802'	Perf @ 8,902'	Perf @ 9,002'	Perf @ 9,102'
Perf @ 7,983'	Perf @ 8,085'	Perf @ 8,185'	Perf @ 8,286'	Perf @ 8,385'	Perf @ 8,485'	Perf @ 8,585'	Perf @ 8,685'	Perf @ 8,785'	Perf @ 8,885'	Perf @ 8,985'	Perf @ 9,081'
Perf @ 7,968'	Perf @ 8,066'	Perf @ 8,168'	Perf @ 8,268'	Perf @ 8,370'	Perf @ 8,468'	Perf @ 8,568'	Perf @ 8,668'	Perf @ 8,768'	Perf @ 8,868'	Perf @ 8,968'	Perf @ 9,068'
Perf @ 7,951'	Perf @ 8,051'	Perf @ 8,151'	Perf @ 8,251'	Perf @ 8,351'	Perf @ 8,451'	Perf @ 8,551'	Perf @ 8,651'	Perf @ 8,751'	Perf @ 8,851'	Perf @ 8,951'	Perf @ 9,051'

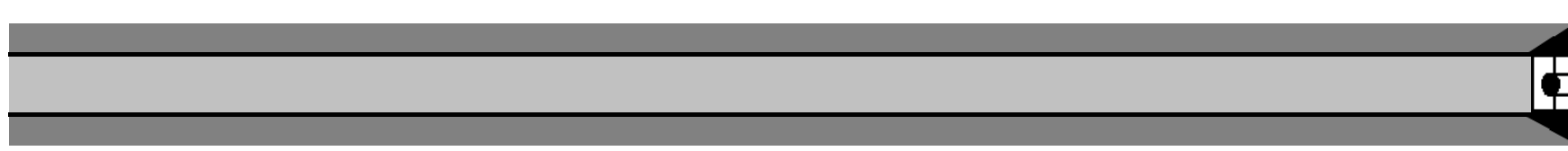
#N/A	Perf @ 8,034'	Perf @ 8,134'	Perf @ 8,234'	Perf @ 8,334'	Perf @ 8,434'	Perf @ 8,536'	Perf @ 8,634'	Perf @ 8,751'	Perf @ 8,834'	Perf @ 8,934'	Perf @ 9,034'
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Bottom	Bit Size	Sacks	TOC
1,928'	13 1/2"	650	Surface
7,915'	8 3/4"	535	471'
12,132'	6"	330	6,888'

142'

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 @ 11,219'	Plug @ 11,319'	Plug @ 11,419'	Plug @ 11,517'	Plug @ 11,619'	Plug @ 11,719'	Plug @ 11,819'	Plug @ 11,919'	Plug @ '
Perf @ 11,202'	Perf @ 11,302'	Perf @ 11,402'	Perf @ 11,502'	Perf @ 11,602'	Perf @ 11,702'	Perf @ 11,802'	Perf @ 11,902'	Perf @ 12,004'
Perf @ 11,168'	Perf @ 11,285'	Perf @ 11,385'	Perf @ 11,485'	Perf @ 11,585'	Perf @ 11,685'	Perf @ 11,785'	Perf @ 11,885'	Perf @ 11,969'
Perf @ 11,151'	Perf @ 11,268'	Perf @ 11,370'	Perf @ 11,468'	Perf @ 11,568'	Perf @ 11,668'	Perf @ 11,768'	Perf @ 11,868'	Perf @ 11,934'
Perf @ 11,134'	Perf @ 11,251'	Perf @ 11,351'	Perf @ 11,451'	Perf @ 11,551'	Perf @ 11,651'	Perf @ 11,751'	Perf @ 11,851'	
Perf @ 11,168'	Perf @ 11,234'	Perf @ 11,334'	Perf @ 11,434'	Perf @ 11,532'	Perf @ 11,634'	Perf @ 11,734'	Perf @ 11,834'	

4-1/2" Shoe
12,132'



6" Hole

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 @ 9,219'	Plug @ 9,319'	Plug @ 9,419'	Plug @ 9,519'	Plug @ 9,619'	Plug @ 9,719'	Plug @ 9,819'	Plug @ 9,919'	Plug @ 10,019'
Perf @ 9,202'	Perf @ 9,302'	Perf @ 9,402'	Perf @ 9,502'	Perf @ 9,602'	Perf @ 9,702'	Perf @ 9,802'	Perf @ 9,902'	Perf @ 10,002'
Perf @ 9,185'	Perf @ 9,285'	Perf @ 9,388'	Perf @ 9,485'	Perf @ 9,585'	Perf @ 9,685'	Perf @ 9,785'	Perf @ 9,885'	Perf @ 9,985'
Perf @ 9,166'	Perf @ 9,268'	Perf @ 9,368'	Perf @ 9,466'	Perf @ 9,568'	Perf @ 9,661'	Perf @ 9,764'	Perf @ 9,868'	Perf @ 9,968'
Perf @ 9,151'	Perf @ 9,251'	Perf @ 9,351'	Perf @ 9,451'	Perf @ 9,550'	Perf @ 9,651'	Perf @ 9,751'	Perf @ 9,850'	Perf @ 9,951'

TD Float Collar
12,044'
Final TD
12,142'

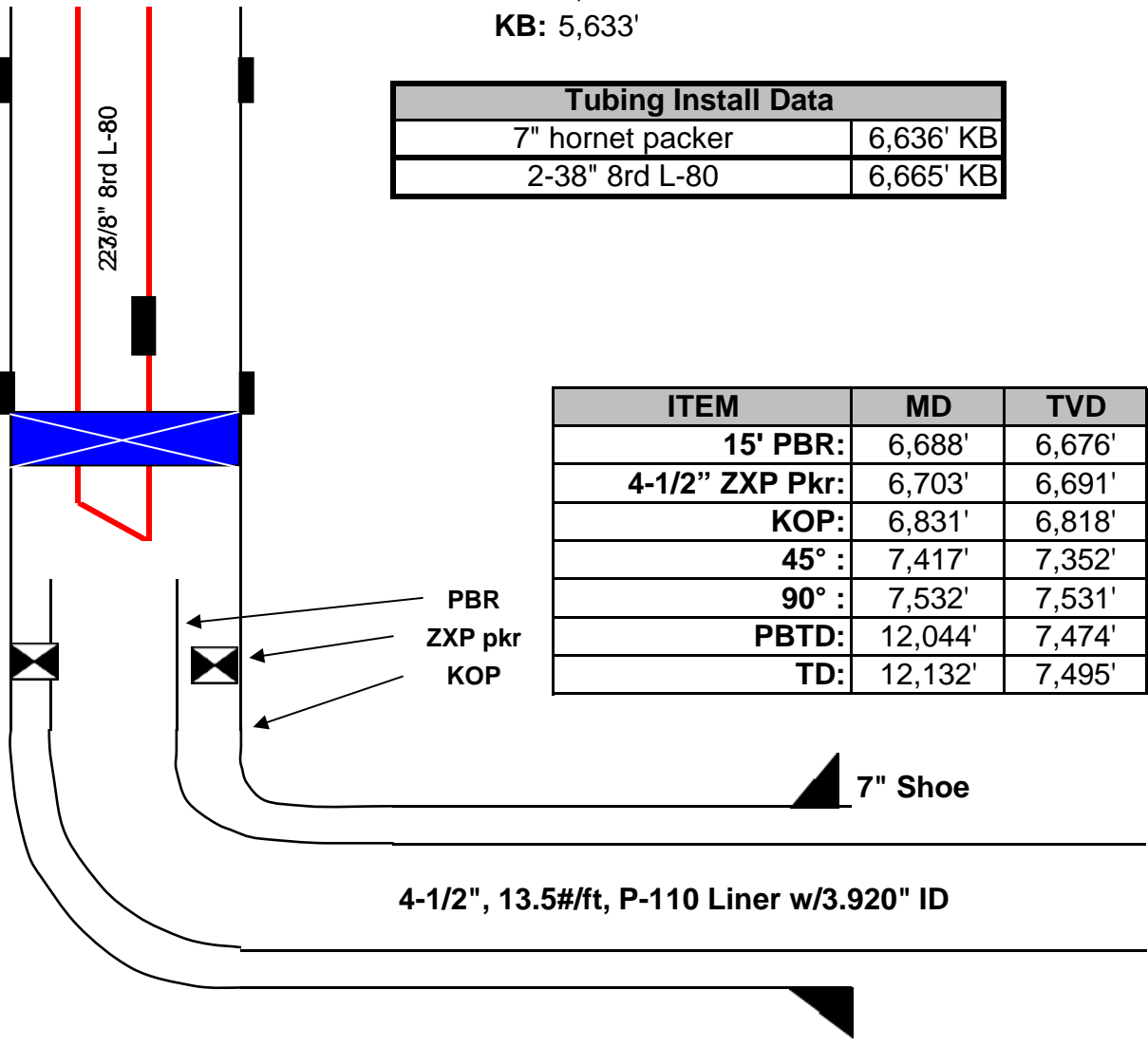
Perf @ 9,134'	Perf @ 9,234'	Perf @ 9,334'	Perf @ 9,434'	Perf @ 9,534'	Perf @ 9,634'	Perf @ 9,734'	Perf @ 9,834'	Perf @ 9,934'
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For Vertical Wellbore Schematic see previous page

Bomhoff 5 8H

Niobrara Horizontal

GL: 5,609'
KB: 5,633'



Tubing Install Data	
7" hornet packer	6,636' KB
2-38" 8rd L-80	6,665' KB

ITEM	MD	TVD
15' PBR:	6,688'	6,676'
4-1/2" ZXP Pkr:	6,703'	6,691'
KOP:	6,831'	6,818'
45° :	7,417'	7,352'
90° :	7,532'	7,531'
PBDT:	12,044'	7,474'
TD:	12,132'	7,495'

4-1/2", 13.5#/ft, P-110 Liner w/3.920" ID

String	Size	Weight	Grade	Thread	Top	Bottom	TOC
Surface	9 5/8"	36	J-55	STC	24'	1,928'	Surface
Interm.	7"	32	P-110	BTC	24'	7,915'	471
Liner	4 1/2"	13 1/2	P-110	BTC	6,688'	12,132'	6888

String	Drift (in)	Capacity (BBL/ft)	Burst (psi)	Collapse (psi)	Tension (psi)
Surface	8.765	0.0773	3061	1,924	281,429
Interm.	5.969	0.0361	7700	10,248	640,714
Liner	3.795	0.0149	9500	10,162	301,429