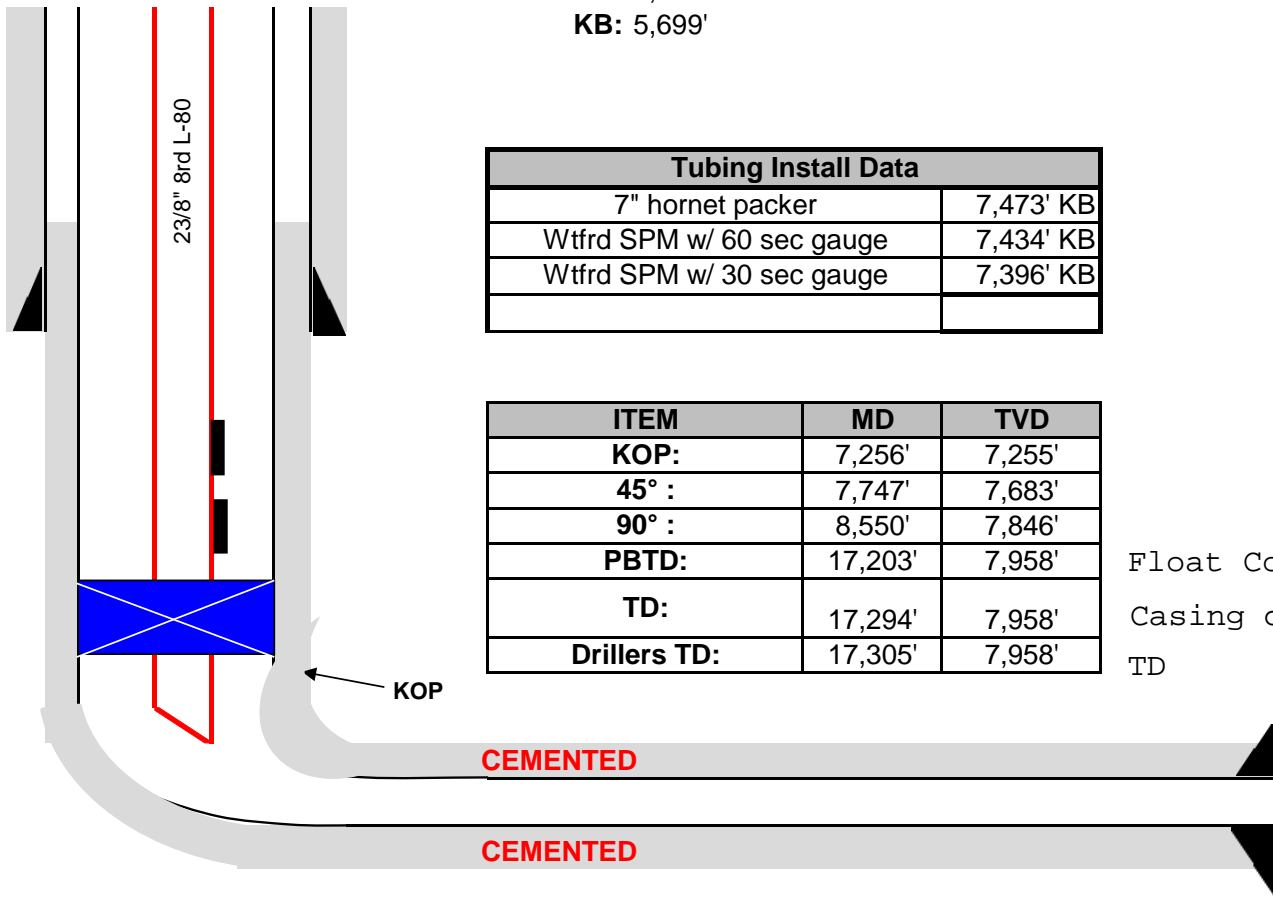


Sky Ranch 4-65 9-10 1H

Niobrara Horizontal

GL: 5,675'

KB: 5,699'



Tubing Install Data	
7" hornet packer	7,473' KB
Wtfrd SPM w/ 60 sec gauge	7,434' KB
Wtfrd SPM w/ 30 sec gauge	7,396' KB

ITEM	MD	TVD
KOP:	7,256'	7,255'
45° :	7,747'	7,683'
90° :	8,550'	7,846'
PBTD:	17,203'	7,958'
TD:	17,294'	7,958'
Drillers TD:	17,305'	7,958'

Float Collar
Casing depth
TD

String	Size	Weight	Grade	Thread	Top	Bottom	TOC
Surface	9 5/8"	36	J-55	STC	24'	2,207'	Surface
PROD	5 1/2"	23	P-110	TXP-BTC	24'	17,294'	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

Tubing Tally Description

Jts	Item Des	Nominal OD (in)	Nominal ID (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)
1	Tbg Hanger EG, T-EN 5-1/2X7	2 3/8	1.995	4.7	L-80	0.5	22
1	Tubing (30.98) 10K compress	2 3/8	1.995	4.7	L-80	33.08	22.5
1	Tubing Pup Jt.	2 3/8	1.995	4.7	L-80	2.17	55.6
237	Tubing	2 3/8	1.995	4.7	L-80	7,338.45	57.7
1	Wtfrd SPM w/ 30 sec gauge	4 1/4	1.995	4.7	L-80	6.78	7,396.20
1	Tubing	2 3/8	1.995	4.7	L-80	30.92	7,403.00
1	Wtfrd SPM w/ 60 sec gauge	4 1/4	1.995	4.7	L-80	6.8	7,433.90
1	Tubing	2 3/8	1.995	4.7	L-80	31.24	7,440.70
1	On-Off Tool	3 3/4	1.875	4.7	L-80	1.34	7,471.90
1	450-237 Hornet Packer	4 1/2	2.375	4.7	L-80	7.9	7,473.30
1	Cross Over 2-7/8 B x 2-3/8 P	3.7	1.995	4.7	L-80	0.68	7,481.20
1	Tubing Pup Jt.	2 3/8	1.995	4.7	L-80	6.18	7,481.80
1	1.875 X Profile Nipple	2 3/8	1.875	4.7	L-80	0.8	7,488.00
1	Tubing Pup Jt	2 3/8	1.995	4.7	L-80	10.16	7,488.80
1	1.875 XN Profile Nipple 1.79ng	2 3/8	1.875	4.7	L-80	1.04	7,499.00
1	Tubing Pup Jt.	2 3/8	1.995	4.7	L-80	10.13	7,500.00
1	EU8rd PxP Pump out sub w/ 1-1/2" plug	2 3/8	1.875	4.7	L-80	0.51	7,510.10
1	Tubing Perf Pup Joint	2 3/8	1.995	4.7	L-80	4.16	7,510.70
1	EU8rd Bull Plug	3.06	1.995	4.7	L-80	0.69	7,514.80

Sky Ranch 4-65 9-10 1H

API Number: 0500507224

Niobrara Horizontal

Horizontal Wellbore Schematic

Original Elevation (GL): 5,675'

KB Elevation (KB): 5,699'

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:	7,256'	7,255'
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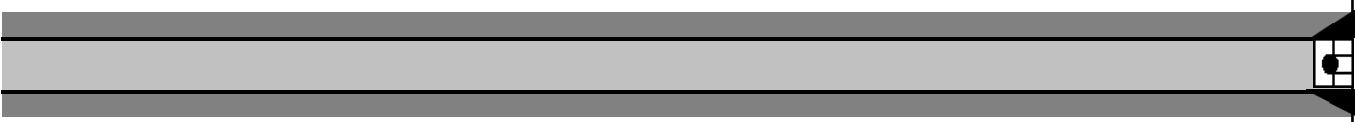
Float Collar
casing depth
TD

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 @ 13,860'	Plug @ 14,038'	Plug @ 14,210'	Plug @ 14,385'	Plug @ 14,562'	Plug @ 14,736'	Plug @ 14,908'	Plug @ 15,085'	Plug @ 15,260'	Plug @ 15,435'	Plug @ 15,613'
Perf @ 13,845'	Perf @ 14,023'	Perf @ 14,195'	Perf @ 14,357'	Perf @ 14,547'	Perf @ 14,720'	Perf @ 14,892'	Perf @ 15,070'	Perf @ 15,245'	Perf @ 15,420'	Perf @ 15,598'
Perf @ 13,813'	Perf @ 13,988'	Perf @ 14,163'	Perf @ 14,338'	Perf @ 14,513'	Perf @ 14,688'	Perf @ 14,863'	Perf @ 15,038'	Perf @ 15,213'	Perf @ 15,388'	Perf @ 15,563'
Perf @ 13,776'	Perf @ 13,950'	Perf @ 14,128'	Perf @ 14,300'	Perf @ 14,475'	Perf @ 14,650'	Perf @ 14,832'	Perf @ 15,000'	Perf @ 1,575'	Perf @ 15,351'	Perf @ 15,528'
Perf @ 13,743'	Perf @ 13,918'	Perf @ 14,093'	Perf @ 14,268'	Perf @ 14,443'	Perf @ 14,618'	Perf @ 14,793'	Perf @ 14,968'	Perf @ 15,143'	Perf @ 15,318'	Perf @ 15,493'
Perf @ 13,708'	Perf @ 13,883'	Perf @ 14,058'	Perf @ 14,233'	Perf @ 14,408'	Perf @ 14,583'	Perf @ 14,758'	Perf @ 14,933'	Perf @ 15,108'	Perf @ 15,283'	Perf @ 15,458'

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 @ 10,368'	Plug @ 10,543'	Plug @ 10,692'	Plug @ 10,890'	Plug @ 11,063'	Plug @ 11,236'	Plug @ 11,413'	Plug @ 11,588'	Plug @ 11,763'	Plug @ 11,938'	Plug @ 12,113'
Perf @ 10,348'	Perf @ 10,523'	Perf @ 10,698'	Perf @ 10,873'	Perf @ 11,048'	Perf @ 11,223'	Perf @ 11,398'	Perf @ 11,573'	Perf @ 11,748'	Perf @ 11,923'	Perf @ 12,098'
Perf @ 10,313'	Perf @ 10,488'	Perf @ 10,663'	Perf @ 10,836'	Perf @ 11,015'	Perf @ 11,188'	Perf @ 11,363'	Perf @ 11,539'	Perf @ 11,713'	Perf @ 11,892'	Perf @ 12,066'
Perf @ 10,278'	Perf @ 10,453'	Perf @ 10,628'	Perf @ 10,803'	Perf @ 10,978'	Perf @ 11,153'	Perf @ 11,328'	Perf @ 11,503'	Perf @ 11,678'	Perf @ 11,853'	Perf @ 12,028'
Perf @ 10,243'	Perf @ 10,418'	Perf @ 10,593'	Perf @ 10,768'	Perf @ 10,943'	Perf @ 11,118'	Perf @ 11,293'	Perf @ 11,468'	Perf @ 11,643'	Perf @ 11,818'	Perf @ 11,993'
Perf @ 10,208'	Perf @ 10,383'	Perf @ 10,558'	Perf @ 10,733'	Perf @ 10,908'	Perf @ 11,083'	Perf @ 11,258'	Perf @ 11,433'	Perf @ 11,608'	Perf @ 11,783'	Perf @ 11,958'

Bottom	Bit Size	Sacks	TOC
2207"	13 1/2"	770	Surface
17,294'	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 @ 15,788'	Plug @ 15,963'	Plug @ 16,138'	Plug @ 16,313'	Plug @ 16,488'	Plug @ 16,663'	Plug @ 16,834'	Plug @ 17,013'	Plug @ '
Perf @ 15,773'	Perf @ 15,948'	Perf @ 16,123'	Perf @ 16,291'	Perf @ 16,478'	Perf @ 16,648'	Perf @ 16,819'	Perf @ 16,998'	Perf @ 17,173'
Perf @ 15,738'	Perf @ 15,913'	Perf @ 16,088'	Perf @ 16,263'	Perf @ 16,443'	Perf @ 16,613'	Perf @ 16,788'	Perf @ 16,963'	Perf @ 17,138'
Perf @ 15,703'	Perf @ 15,878'	Perf @ 16,053'	Perf @ 16,228'	Perf @ 16,408'	Perf @ 16,578'	Perf @ 16,753'	Perf @ 16,928'	Perf @ 17,104'
Perf @ 15,668'	Perf @ 15,846'	Perf @ 16,013'	Perf @ 16,193'	Perf @ 16,373'	Perf @ 16,543'	Perf @ 16,718'	Perf @ 16,893'	Perf @ 17,068'
Perf @ 15,633'	Perf @ 15,808'	Perf @ 15,983'	Perf @ 16,158'	Perf @ 16,338'	Perf @ 16,508'	Perf @ 16,683'	Perf @ 16,858'	Perf @ 17,033'



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 @ 12,288'	Plug @ 12,466'	Plug @ 12,641'	Plug @ 12,814'	Plug @ 12,992'	Plug @ 13,158'	Plug @ 13,335'	Plug @ 13,512'	Plug @ 13,663'
Perf @ 12,273'	Perf @ 12,448'	Perf @ 12,623'	Perf @ 12,798'	Perf @ 12,973'	Perf @ 13,143'	Perf @ 13,320'	Perf @ 13,497'	Perf @ 13,660'
Perf @ 12,234'	Perf @ 12,411'	Perf @ 12,587'	Perf @ 12,761'	Perf @ 12,938'	Perf @ 13,113'	Perf @ 13,288'	Perf @ 13,463'	Perf @ 1,362'
Perf @ 12,203'	Perf @ 12,378'	Perf @ 12,553'	Perf @ 12,728'	Perf @ 12,904'	Perf @ 13,079'	Perf @ 13,250'	Perf @ 13,428'	Perf @ 13,593'
Perf @ 12,168'	Perf @ 12,343'	Perf @ 12,518'	Perf @ 12,693'	Perf @ 12,868'	Perf @ 13,043'	Perf @ 13,218'	Perf @ 13,393'	Perf @ 13,563'
Perf @ 12,133'	Perf @ 12,308'	Perf @ 12,483'	Perf @ 12,658'	Perf @ 12,833'	Perf @ 13,008'	Perf @ 13,183'	Perf @ 13,358'	Perf @ 13,531'
	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 @ 8,788'	Plug @ 8,963'	Plug @ 9,138'	Plug @ 9,488'	Plug @ 9,663'	Plug @ 9,838'	Plug @ 10,013'	Plug @ 10,188'
	Perf @ 8,773'	Perf @ 8,943'	Perf @ 9,120'	Perf @ 9,473'	Perf @ 9,648'	Perf @ 9,823'	Perf @ 9,998'	Perf @ 10,173'
	Perf @ 8,738'	Perf @ 8,913'	Perf @ 9,088'	Perf @ 9,438'	Perf @ 9,613'	Perf @ 9,790'	Perf @ 9,960'	Perf @ 10,138'
	Perf @ 8,703'	Perf @ 8,878'	Perf @ 9,053'	Perf @ 9,403'	Perf @ 9,578'	Perf @ 9,753'	Perf @ 9,928'	Perf @ 10,103'
	Perf @ 8,668'	Perf @ 8,843'	Perf @ 9,018'	Perf @ 9,368'	Perf @ 9,543'	Perf @ 9,718'	Perf @ 9,893'	Perf @ 10,068'
	Perf @ 8,633'	Perf @ 8,808'	Perf @ 8,983'	Perf @ 9,333'	Perf @ 9,508'	Perf @ 9,683'	Perf @ 9,858'	Perf @ 10,033'
	Perf @ 8,598'			Perf @ 9,298'				
	Perf @ 8,563'			Perf @ 9,263'				
	Perf @ 8,528'			Perf @ 9,228'				
	Perf @ 8,493'			Perf @ 9,193'				
	Perf @ 8,456'			Perf @ 9,158'				

5-1/2" Shoe
17,305'

8.5" Hole

TD
17,294'