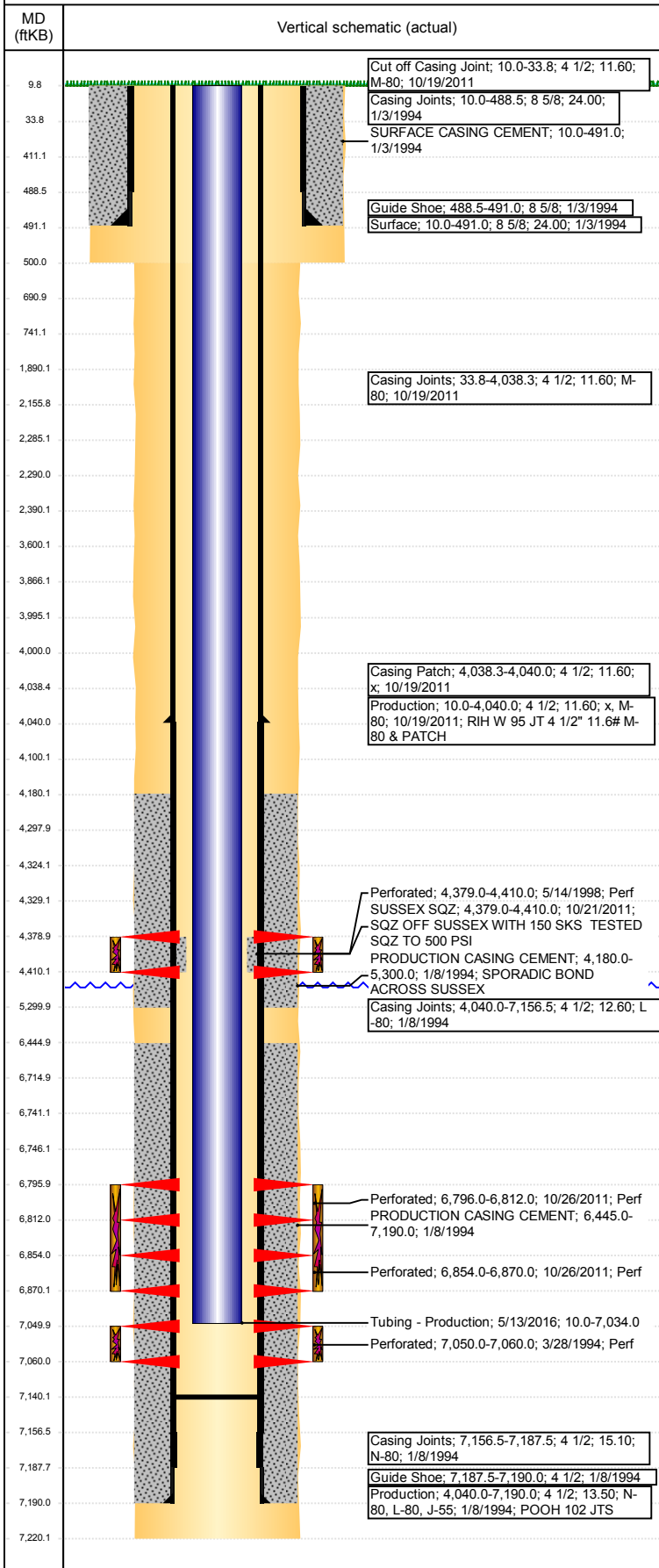


**Well Name: RITER C18-16**

VERTICAL - ORIGINAL HOLE, 10/14/2017 10:57:11 AM



## Well Header

API 05-123-17514	Business Unit DJ BASIN	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,777	KB - GL / MSL (ftKB) 10.00	Spud Date 1/3/1994	P & A Date
Comment			

## Directions To Well

RD 44 & 51 N 1/10, W INTO.

## Congressional Location

Quarter 3 SE	Quarter 4 SE	Section 18	Township 4	Twnshp N/S Dir N	Range 64	Range E/W Dir W
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## Bottom Hole Location

North-South Distance (ft)	From N or S Line	East-West Distance (ft)	From E or W Line
---------------------------	------------------	-------------------------	------------------

## Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
1/8/1994	7,108.0	CASING TALLY	LATCH DOWN COLLAR
1/11/1994	7,115.0	CASED HOLE LOG	DEPTH LOGGER
10/25/2011	7,115.0	TAG	C/O OT AFTER CSG PATCH JOB
5/13/2016	7,140.0	TAG	

## Wellbore Sections

Section Des	Size (in)	Act Top, MD (ftKB)	Act Btm, MD (ftKB)
SURFACE	12 1/4	10	500
PRODUCTION	7 7/8	500	7,220

## Zone Statuses

Zone Name	Status Date	Status	Fluid Type	Job	Prod Method
SUSSEX	10/4/1994	PR	Gas	RECOMPLETI...	
SUSSEX	5/13/1998	SI	Gas	TUBING REPA...	
SUSSEX	10/21/2011	AB	Gas	RECOMPLETI...	
CODELL	3/28/1994	PR	Gas	DRILLING/CO...	
CODELL	11/11/2008	SI	Gas	RECOMPLETI...	
CODELL	12/11/2011	PR	Gas	RECOMPLETI...	
CODELL	1/12/2016	TA	Gas	HORIZONTAL...	
CODELL	5/10/2016	SI	Gas	HORIZONTAL...	
CODELL	5/13/2016	PR	Gas	HORIZONTAL...	
NIOBRARA	11/11/2011	PR	GAS	RECOMPLETI...	
NIOBRARA	12/11/2011	PR	Gas	RECOMPLETI...	
NIOBRARA	1/12/2016	TA	Gas	HORIZONTAL...	
NIOBRARA	5/13/2016	PR	Gas	HORIZONTAL...	
NIOBRARA	5/10/2017	SI	GAS	HORIZONTAL...	

## Casing Strings

### Surface, 491.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
Surface	1/3/1994	8 5/8	24.00		10.0	491.0

### Production, 4,040.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
Production	10/19/2011	4 1/2	11.60	M-80	10.0	4,040.0

### Production, 7,190.0ftKB

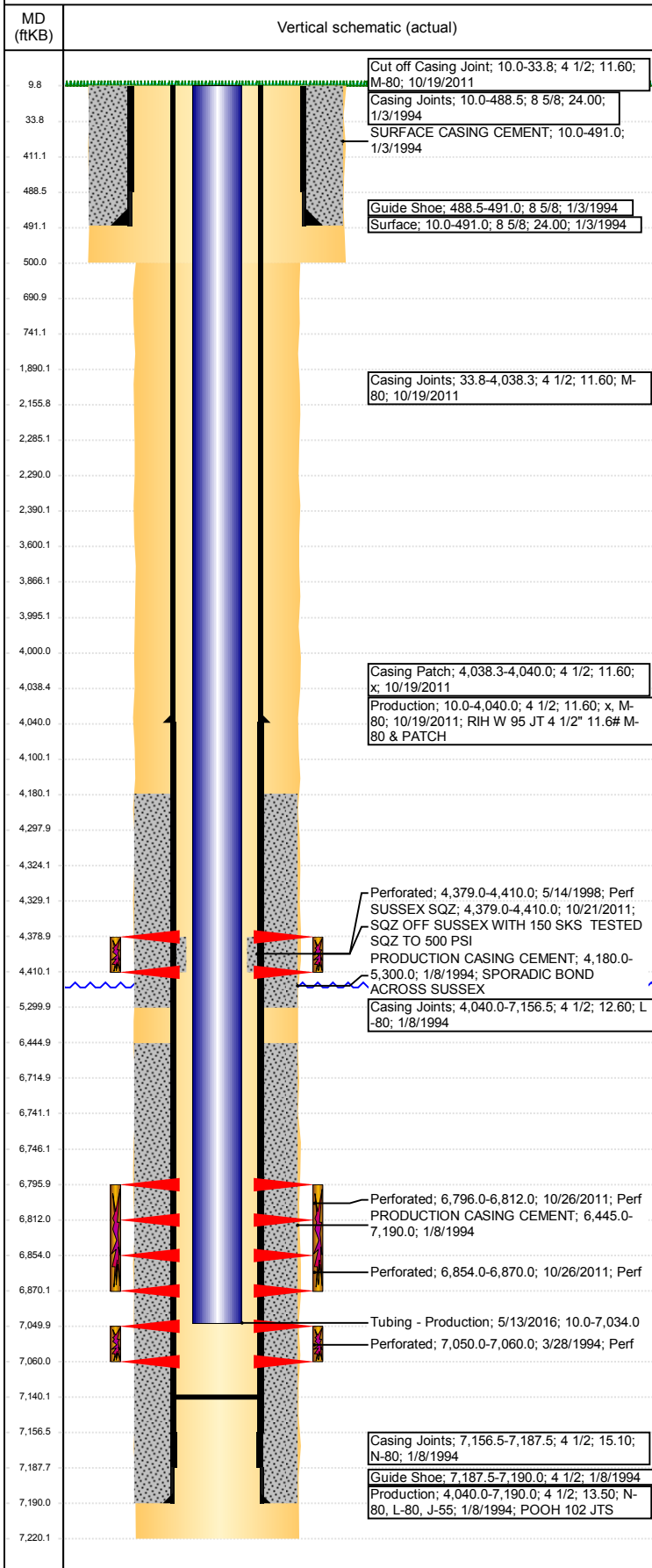
Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
Production	1/8/1994	4 1/2	12.60	L-80	10.0	7,190.0

## Cement

Description	Top Depth (ftKB)	Bottom Depth (ftKB)
SURFACE CASING CEMENT	10.0	491.0
PRODUCTION CASING CEMENT	4,180.0	5,300.0
PRODUCTION CASING CEMENT	6,445.0	7,190.0
SUSSEX SQZ	4,379.0	4,410.0
CEMENT PLUG	3,866.0	3,995.0
CEMENT PLUG	4,000.0	4,100.0
DUMP BAIL	4,298.0	4,324.0
CEMENT PLUG	3,600.0	4,100.0
DUMP BAIL	6,715.0	6,741.0

**Well Name: RITER C18-16**

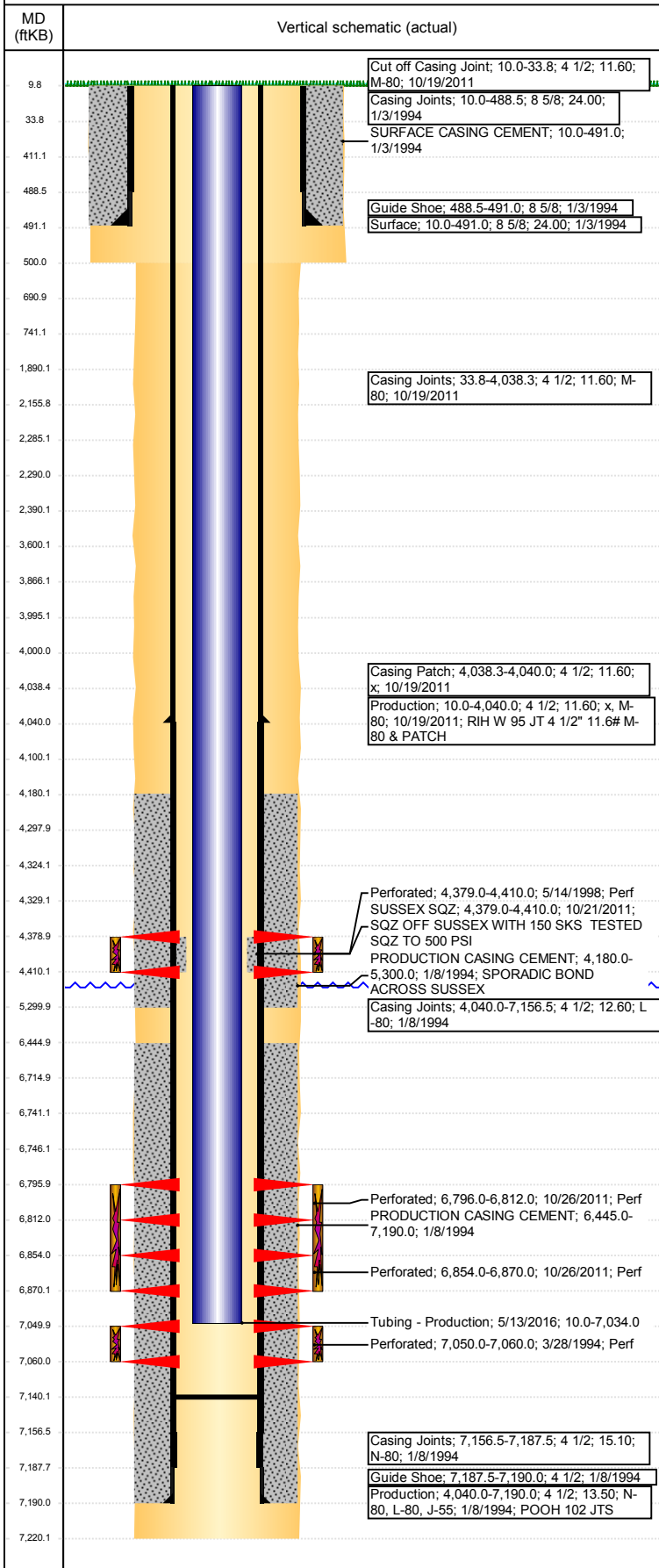
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Cement								
Description COURTESY PLUG				Top Depth (ftKB) 2,290.0		Bottom Depth (ftKB) 2,390.0		
Description COURTESY PLUG				Top Depth (ftKB) 1,890.0		Bottom Depth (ftKB) 2,390.0		
Description COURTESY PLUG				Top Depth (ftKB) 2,156.0		Bottom Depth (ftKB) 2,285.0		
Description SHOE PLUG				Top Depth (ftKB) 691.0		Bottom Depth (ftKB) 741.0		
Description SHOE PLUG				Top Depth (ftKB) 9.8		Bottom Depth (ftKB) 691.0		
Tubing Strings								
Tubing Description Tubing - Production		Run Date 5/13/1998	String... 2 3/8	ID (in) 2.00	Wt (lb/ft) 4.70	Grade J-55	Len (ft) 7,026.00	Set De...
Tubing Components								
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)	
Tubing	2 3/8	4.70	J-55		4,541.00	4,551.0		
Packer	3.99				3.00	4,554.0		
Tubing	2 3/8	4.70	J-55		2,482.00	7,036.0		
Tubing Description Tubing - Frac string		Run Date 10/27/2011	String... 2 7/8	ID (in) 2.44	Wt (lb/ft) 6.40	Grade N-80	Len (ft) 6,641.56	Set De...
Tubing Components								
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)	
Tubing	2 7/8	6.40	N-80	202	6,332.40	6,342.4		
Tubing	2 3/8	4.70	N-80	10	302.91	6,645.3		
Packer	3.99	11.60	X	1	6.25	6,651.6		
Tubing Description Tubing - Production		Run Date 11/29/2011	String... 2 3/8	ID (in) 2.00	Wt (lb/ft) 4.70	Grade J-55	Len (ft) 7,023.62	Set De...
Tubing Components								
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)	
Tubing	2 3/8	4.70	J-55	227	7,011.97	7,020.0		
Tubing Pup Joint	2 3/8	4.70	J-55	1	10.00	7,030.0		
Pump Seating Nipple	2 3/8	4.70	J-55	1	1.10	7,031.1		
Notched collar	2 3/8	4.70	J-55	1	0.55	7,031.6		
Tubing Description Tubing - Workstring		Run Date 1/13/2016	String... 2 3/8	ID (in) 2.00	Wt (lb/ft) 4.70	Grade J-55	Len (ft) 3,574.00	Set De...
Tubing Components								
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)	
EUE 8rd Tubing	2 3/8	4.70	J-55	119	3,569.90	3,579.9		
Pump Seating Nipple	2 3/8	1.10		1	1.10	3,581.0		
On-Off Tool	2 3/8			1	3.00	3,584.0		
Tubing Description Tubing - Production		Run Date 5/13/2016	String... 2 3/8	ID (in) 2.00	Wt (lb/ft) 4.70	Grade P-110	Len (ft) 7,024.00	Set De...
Tubing Components								
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)	
EUE 8rd Tubing	2 3/8	4.70	P-110	224	7,022.40	7,032.4		
Pump Seating Nipple	2 3/8	1.10		1	1.10	7,033.5		
Notched collar	2 3/8			1	0.50	7,034.0		
Other In Hole								
Run Date	Des				OD (in)	Top (ftKB)	Btm (ftKB)	
6/24/2017	CICR				4	2,285.0	2,290.0	
6/24/2017	Cast Iron Bridge Plug				3.92	6,741.0	6,746.0	
6/24/2017	CICR				4	3,995.0	4,000.0	
6/24/2017	Cast Iron Bridge Plug				3.92	4,324.0	4,329.0	
Logs								
Date	Type				Top, MD (ftKB)		Btm, MD (ftKB)	
1/5/1994	HYDROCARBON ANALYSIS				4,240.0		4,540.0	
1/8/1994	Compensated Density				3,800.0		7,220.0	

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Logs			
Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
1/8/1994	Induction	3,800.0	7,220.0
1/11/1994	CBL/CCL/GR	4,100.0	7,108.0
3/18/1994	Temperature Survey	6,940.0	7,066.0
12/1/2014	GYRO	10.0	6,950.0

Perforation Data					
Linked Zone	Bnch/St g	Sum of Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
SUSSEX, ORIGINAL HOLE NIOBRARA, ORIGINAL HOLE NIOBRARA, ORIGINAL HOLE CODELL, ORIGINAL HOLE	A	0	2,390.00	2,390.00	6/24/2017
		0	4,100.00	4,100.00	6/24/2017
	B	15	4,379.00	4,410.00	7/27/1994
		32	6,796.00	6,812.00	10/26/2011
		32	6,854.00	6,870.00	10/26/2011
		40	7,050.00	7,060.00	1/27/1994
Total (Sum)		119			

Stimulation Intervals		
Start Date	Primary Job Type	
1/31/1994	DRILLING/COMPLETION - ORIGINAL	
Technical Result	Tech Result Details	Tech Result Note
Comment		
Start Date	Primary Job Type	
7/28/1994	RECOMPLETION	
Technical Result	Tech Result Details	Tech Result Note
Comment		
NO INDICATION CDL WAS ISOLATED PRIOR TO SUSSEX FRAC.		
Start Date	Primary Job Type	
11/10/2011	RECOMPLETION	
Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	
Comment		
(NIOBRARA):- BREAK 5679 @ 5, ISIP 3724. AVER VISC 17.66, AVER PH 10.41, AVER TEMP 65.5. SAND FELL INTO TUB DURING WHILE LOADING SCREWS, AND ENGAGED THE KICKOUTS WHEN SAND HIT PERFS. NO OTHER ISSUES TO REPORT.		