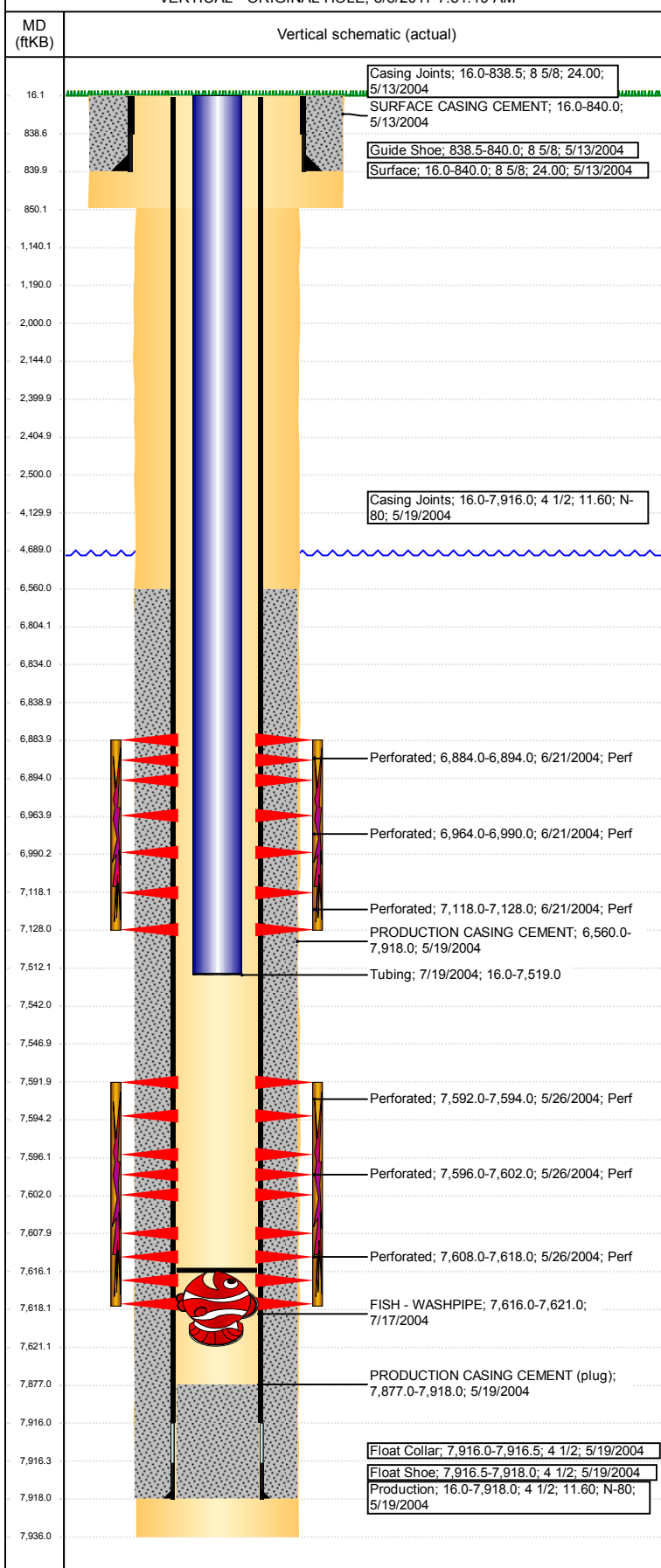


Well Name: HARKIS 11-07

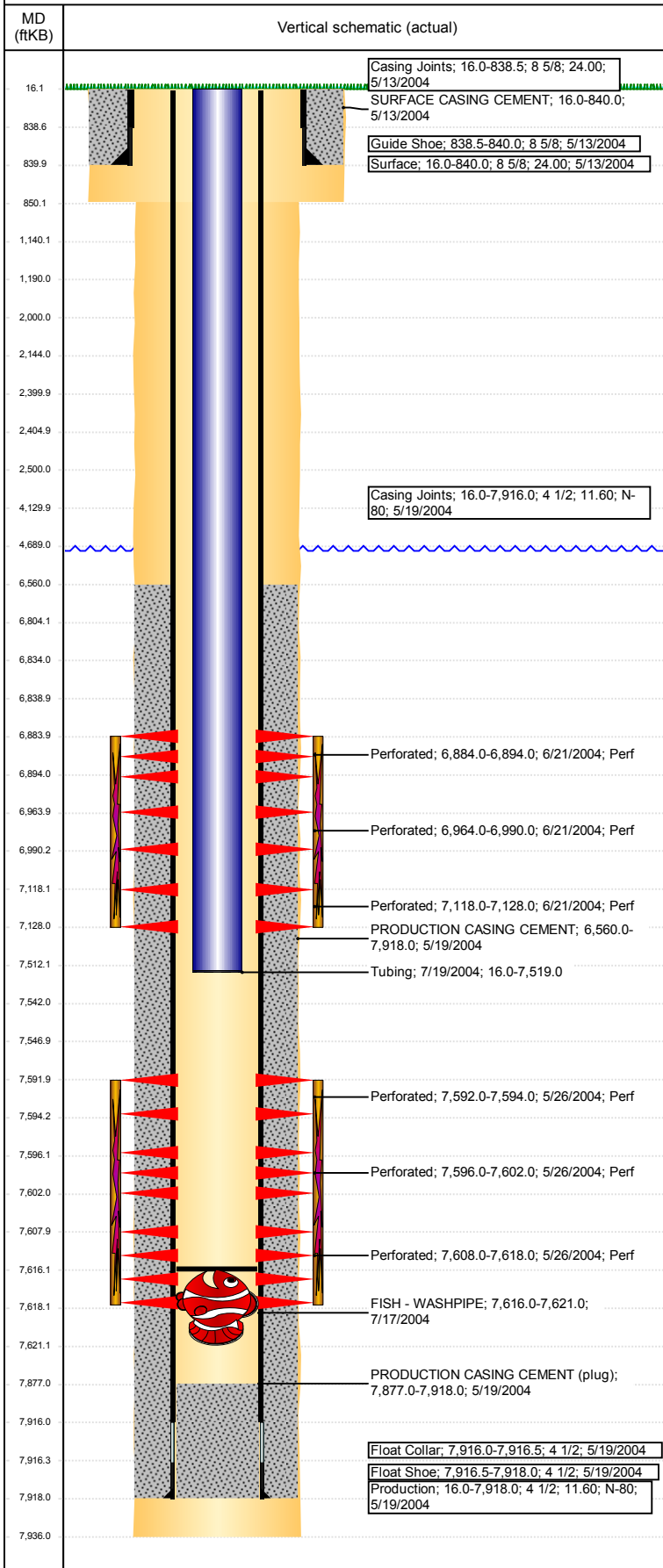
VERTICAL - ORIGINAL HOLE. 8/8/2017 7:51:19 AM



Well Header								
API 05-123-21548		Business Unit DJ BASIN		District 15		Well Config VERTICAL		
Original KB Elevation (ft) 4,918		KB - GL / MSL (ftKB) 16.00		Spud Date 5/12/2004		P & A Date		
Comment								
Directions To Well								
Congressional Location								
Quarter 3 NW	Quarter 4 NW	Section 7	Township 2	Twnshp N/S Dir N	Range 64	Range E/W Dir W		
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				
5/24/2004	7,877.0	CASED HOLE LOG		DEPTH LOGGER ON CBL				
7/17/2004	7,616.0	TAG		WASHPIPE STUCK IN HOLE				
Wellbore Sections								
Section Des		Size (in)		Act Top, MD (ftKB)		Act Btm, MD (ftKB)		
SURFACE		12 1/4		16		850		
PRODUCTION		7 7/8		850		7,936		
Zone Statuses								
Zone Name	Status Date	Status	Fluid Type	Job	Prod Method			
NIOBRARA	6/27/2004	PR	Water	RECOMPLETI...	Flowing			
NIOBRARA	9/23/2011	PR						
JSND	6/7/2004	PR		DRILLING/CO ...				
JSND	6/27/2004	PR	Water	RECOMPLETI...	Flowing			
JSND	9/23/2011	PR						
JSND	5/9/2017	SI						
CODELL	6/27/2004	PR	Water	RECOMPLETI...	Flowing			
CODELL	9/23/2011	PR						
CODELL	5/9/2017	SI						
NIOBRARA-C...	9/23/2011	PR	Water		Flowing			
Casing Strings								
Surface, 840.0ftKB								
Casing Description Surface		Run Date 5/13/2004	OD (in) 8 5/8	Wt/Len (l... 24.00	Grade	Top, MD (ft... 16.0	MD (ftKB) 840.0	
Production, 7,918.0ftKB								
Casing Description Production		Run Date 5/19/2004	OD (in) 4 1/2	Wt/Len (l... 11.60	Grade N-80	Top, MD (ft... 16.0	MD (ftKB) 7,918.0	
Cement								
Description SURFACE CASING CEMENT				Top Depth (ftKB) 16.0		Bottom Depth (ftKB) 840.0		
Description PRODUCTION CASING CEMENT				Top Depth (ftKB) 6,560.0		Bottom Depth (ftKB) 7,918.0		
Description Dump Bail				Top Depth (ftKB) 7,512.0		Bottom Depth (ftKB) 7,542.0		
Description Dump Bail				Top Depth (ftKB) 6,804.0		Bottom Depth (ftKB) 6,834.0		
Description Casing Repair Cement				Top Depth (ftKB) 2,000.0		Bottom Depth (ftKB) 2,500.0		
Description Cement Plug				Top Depth (ftKB) 2,405.0		Bottom Depth (ftKB) 2,500.0		
Description Cement Plug				Top Depth (ftKB) 2,144.0		Bottom Depth (ftKB) 2,400.0		
Description Balance Plug				Top Depth (ftKB) 1,140.0		Bottom Depth (ftKB) 1,190.0		
Description Balance Plug				Top Depth (ftKB) 850.0		Bottom Depth (ftKB) 1,140.0		
Description Balance Plug				Top Depth (ftKB) 840.0		Bottom Depth (ftKB) 850.0		
Description Balance Plug				Top Depth (ftKB) 16.0		Bottom Depth (ftKB) 840.0		
Description Balance Plug				Top Depth (ftKB) 4,130.0		Bottom Depth (ftKB) 4,689.0		
Tubing Strings								
Tubing Description Tubing		Run Date 7/19/2004	String... 2 3/8	ID (in)	Wt (lb/ft)	Grade	Len (ft) 7,503.00	Set De.

Well Name: HARKIS 11-07

VERTICAL - ORIGINAL HOLE, 8/8/2017 7:51:19 AM



Other In Hole				
Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)
7/17/2004	FISH - WASHPIPE	4	7,616.0	7,621.0
7/13/2017	Cast Iron Bridge Plug	4	7,542.0	7,547.0
7/13/2017	Cast Iron Bridge Plug	4	6,834.0	6,839.0
7/13/2017	Cement Retainer	4	2,400.0	2,405.0

Logs			
Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
5/19/2004	TRIPLE COMBO	840.0	7,927.0
5/24/2004	CEMENT BOND	6,443.0	7,872.0

Perforation Data					
Linked Zone	Bnch/St g	Sum of Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
JSND, ORIGINAL HOLE		0	2,500.00	2,500.00	7/13/2017
NIOBRARA, ORIGINAL HOLE		20	6,884.00	6,894.00	6/21/2004
NIOBRARA, ORIGINAL HOLE		52	6,964.00	6,990.00	6/21/2004
CODELL, ORIGINAL HOLE		40	7,118.00	7,128.00	6/21/2004
JSND, ORIGINAL HOLE		24	7,592.00	7,594.00	5/26/2004
JSND, ORIGINAL HOLE		24	7,596.00	7,602.00	5/26/2004
JSND, ORIGINAL HOLE		40	7,608.00	7,618.00	5/26/2004
Total (Sum)		200			

Stimulation Intervals		
Start Date	Primary Job Type	
5/27/2004	DRILLING/COMPLETION - ORIGINAL	
Technical Result	Tech Result Details	Tech Result Note
Comment		
Start Date	Primary Job Type	
6/22/2004	RECOMPLETION	
Technical Result	Tech Result Details	Tech Result Note
Comment		
LIMITED ENTRY		