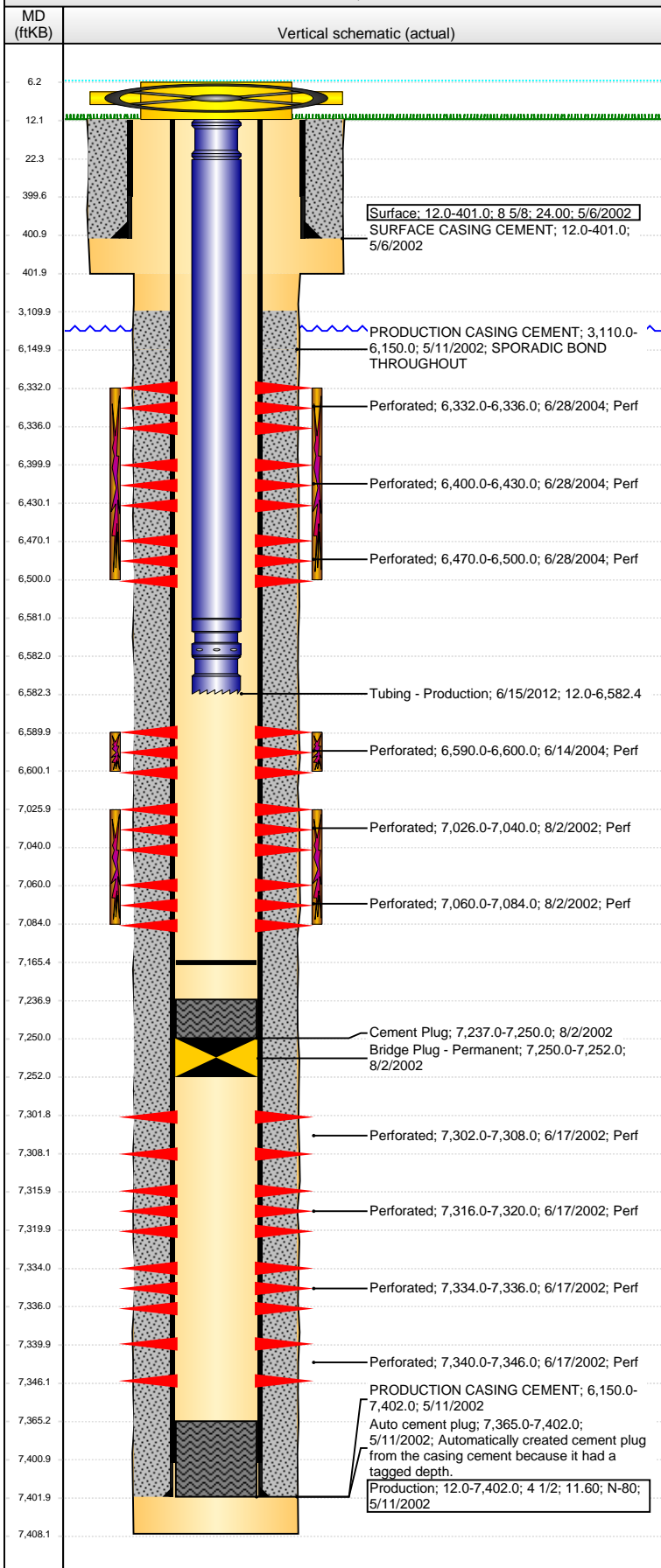


Well Name: NATIONAL HOG FARMS 21-21

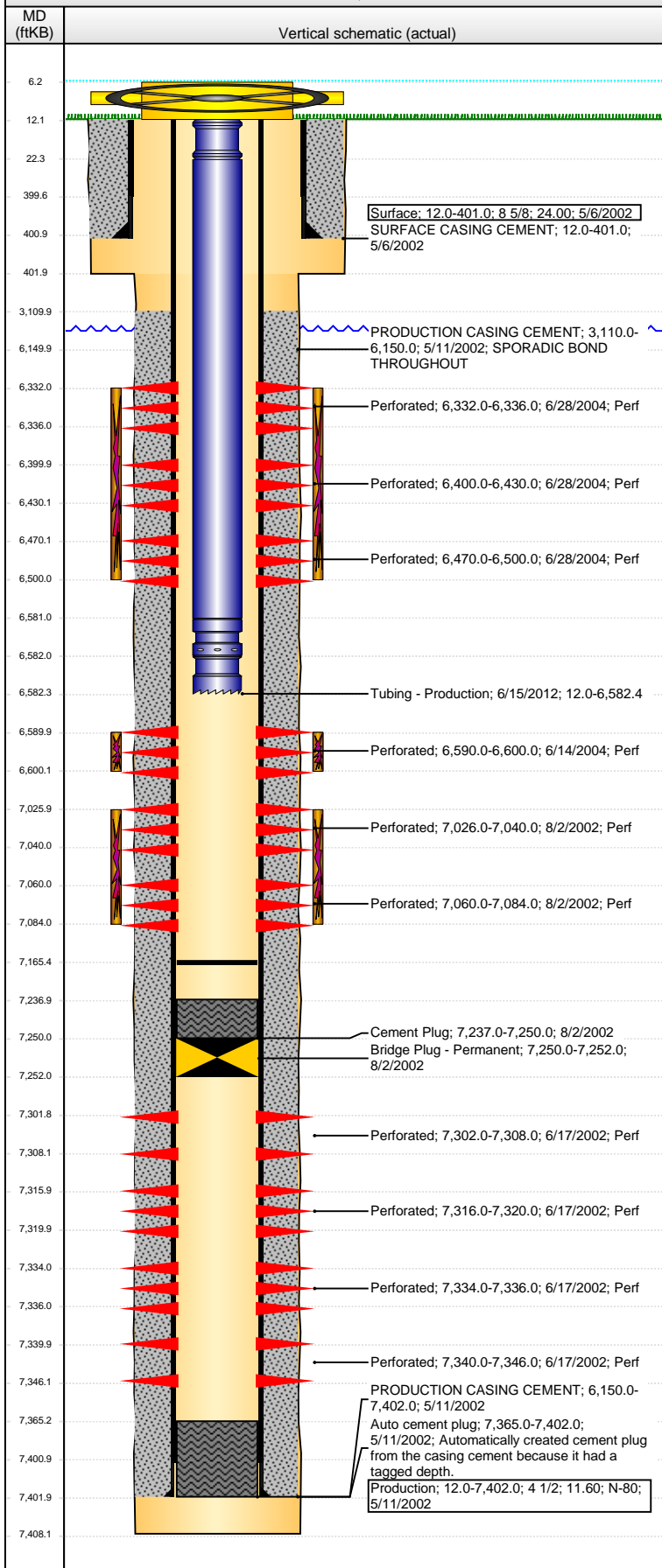
VERTICAL - ORIGINAL HOLE, 4/21/2016 10:05:05 AM



Well Header									
API 05-123-20815		Business Unit DJ BASIN		District 15		Well Config VERTICAL			
Original KB Elevation (ft) 4,646		KB - GL / MSL (ftKB) 12.00		Spud Date 5/6/2002		P & A Date			
Comment PERF'D J-SAND ZONE, BUT NEVER COMPLETED - NEVER PRODUCED									
Directions To Well									
Congressional Location									
Quarter 1	Quarter 2	Quarter 3 NE	Quarter 4 NW	Section 21	Township 5 N	Twtnshp N...	Range 63	Rng 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				
5/11/2002	7,400.0	CASING TALLY			ORIGINAL PBTD, GUIDE SHOE DEPTH LOGGER CIBP W/ CEMENT CLEAN OUT SAND TO 7096' CLEANED OUT SAND TILL BAILER QUIT (USED T...				
5/14/2002	7,365.0	CASED HOLE LOG							
8/2/2002	7,237.0	TAG							
6/10/2004	7,096.0	TAG							
6/15/2012	7,165.2	TAG							
Wellbore Sections									
Section Des			Size (in)		Act Top, MD (ftKB)		Act Btm, MD (ftKB)		
SURFACE			12 1/4		12.0		402.0		
PRODUCTION			7 7/8		402.0		7,408.0		
Zone Statuses									
Zone Name	Status Date	Status	Fluid Type		Job	Prod Method			
J SAND	11/19/2002	PR			DRILLING/CO...				
NIOBRARA	7/9/2004	PR			RECOMPLETI...				
CODELL	7/9/2004	PR			RECOMPLETI...				
CODELL	6/23/2012	PR			RE-FRAC, 5/16...				
DAKOTA	8/2/2002	AB			DRILLING/CO...				
Casing Strings									
Surface, 401.0ftKB									
Casing Description Surface		Run Date 5/6/2002	OD (in) 8 5/8	Wt/Len (l... 24.00	Grade	Top, MD (ft... 12.0	MD (ftKB) 401.0		
Production, 7,402.0ftKB									
Casing Description Production		Run Date 5/11/2002	OD (in) 4 1/2	Wt/Len (l... 11.60	Grade N-80	Top, MD (ft... 12.0	MD (ftKB) 7,402.0		
Cement									
Description SURFACE CASING CEMENT				Top Depth (ftKB) 12.0		Bottom Depth (ftKB) 401.0			
Description PRODUCTION CASING CEMENT				Top Depth (ftKB) 3,110.0		Bottom Depth (ftKB) 6,150.0			
Description PRODUCTION CASING CEMENT				Top Depth (ftKB) 6,150.0		Bottom Depth (ftKB) 7,402.0			
Description Cement Plug				Top Depth (ftKB) 7,237.0		Bottom Depth (ftKB) 7,250.0			
Tubing Strings									
Tubing Description Tubing - Production		Run Date 7/8/2004	String... 2 3/8	ID (in) 1.995	Wt (lb/ft) 4.70	Grade J-55	Len (ft) 6,546.00	Set De...	
Tubing Description Tubing - Frac string		Run Date 5/18/2012	String... 2 7/8	ID (in) 2.441	Wt (lb/ft) 6.50	Grade N-80	Len (ft) 6,527.85	Set De...	
Tubing Description Tubing - Production		Run Date 6/15/2012	String... 2 3/8	ID (in) 1.995	Wt (lb/ft) 4.70	Grade J-55	Len (ft) 6,570.41	Set De...	
Tubing Components									
Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)		Btm (ftKB)	Btm (TVD) (ftKB)	
Pup Joint	2 3/8	4.70	J-55	1	10.20		22.2		
EUE 8rd Tubing	2 3/8	4.70	J-55	205	6,558.69		6,580.9		
Pump Seating Nipple	2 3/8	4.70	N-80	1	1.12		6,582.0		
Notched collar	2 3/8	4.70	J-55	1	0.40		6,582.4		

Well Name: NATIONAL HOG FARMS 21-21

VERTICAL - ORIGINAL HOLE, 4/21/2016 10:05:08 AM



Perforation Data						
Zone	Brnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date	
NIOBRARA, ORIGINAL HOLE	A	8	6,332.00	6,336.00	6/28/2004	
NIOBRARA, ORIGINAL HOLE	B	60	6,400.00	6,430.00	6/28/2004	
NIOBRARA, ORIGINAL HOLE	C	60	6,470.00	6,500.00	6/28/2004	
CODELL, ORIGINAL HOLE		40	6,590.00	6,600.00	6/14/2004	
J SAND, ORIGINAL HOLE		56	7,026.00	7,040.00	8/2/2002	
J SAND, ORIGINAL HOLE		96	7,060.00	7,084.00	8/2/2002	
DAKOTA, ORIGINAL HOLE		24	7,302.00	7,308.00	6/17/2002	
DAKOTA, ORIGINAL HOLE		16	7,316.00	7,320.00	6/17/2002	
DAKOTA, ORIGINAL HOLE		8	7,334.00	7,336.00	6/17/2002	
DAKOTA, ORIGINAL HOLE		24	7,340.00	7,346.00	6/17/2002	

Stimulations & Treatments			
Date	Zone	Primary Job Type	
8/6/2002	J SAND, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL	
Technical Result		Tech Result Details	Tech Result Note
Comment			
Date	Zone	Primary Job Type	
6/15/2004	CODELL, ORIGINAL HOLE	RECOMPLETION	
Technical Result		Tech Result Details	Tech Result Note
Comment			
Date	Zone	Primary Job Type	
6/29/2004	NIOBRARA, ORIGINAL HOLE	RECOMPLETION	
Technical Result		Tech Result Details	Tech Result Note
Comment			
Date	Zone	Primary Job Type	
6/2/2012	CODELL, ORIGINAL HOLE	RE-FRAC	
Technical Result		Tech Result Details	Tech Result Note
Success		According to Plan	
Comment			
(CRF): SHORT ON WATER CUT 50 BBLS OF PAD AND RAN SAND A TENTH HIGH. 5 MIN SIP 3287. JOB WENT AS PLANNED.			

Other In Hole				
Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)
8/2/2002	Bridge Plug - Permanent	3.99	7,250.0	7,252.0

Logs			
Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
5/11/2002	COMPENSATED DENSITY	405.0	7,408.0
5/14/2002	CBL/CCL/GR	2,895.0	7,360.0
5/17/2011	GYRO	12.0	6,480.0