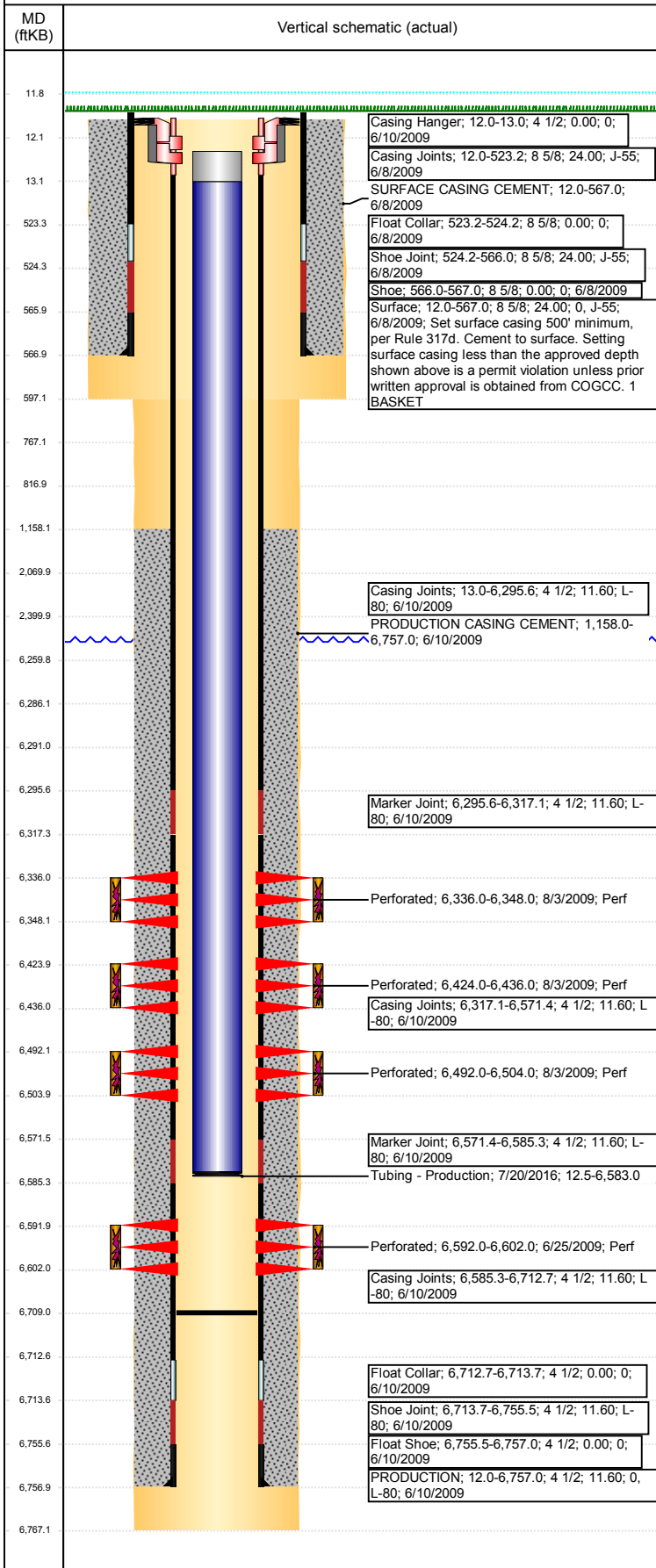


**Well Name: WELLS RANCH BB12-03**

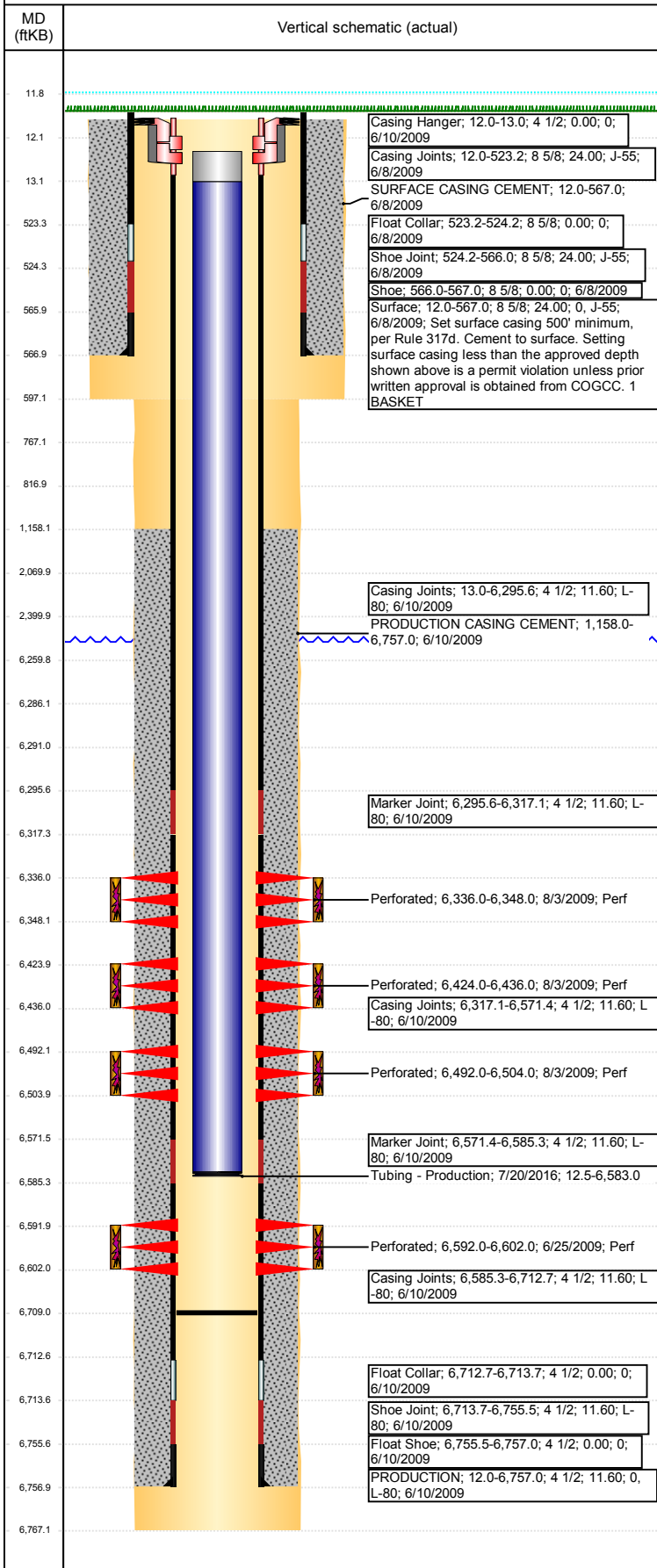
VERTICAL - ORIGINAL HOLE, 8/7/2017 2:26:38 PM



Well Header							
API 05-123-30152	Business Unit DJ BASIN	District 15	Well Config VERTICAL				
Original KB Elevation (ft) 4,675	KB - GL / MSL (ftKB) 12.00	Spud Date 6/7/2009	P & A Date				
Comment							
Directions To Well Wells Ranch BB12-03; WCR 67 & 68, E .2, S 2.75, past cow camp, E/SE 2.5, S 1, W .5, NE Into location.							
Congressional Location							
Quarter 3 NE	Quarter 4 NW	Section 12	Township 5	Twntshp N/S Dir N	Range 63	Range E/W Dir W	
Bottom Hole Location							
North-South Distance (ft) 572.0		From N or S Line FNL		East-West Distance (ft) 1,844.0		From E or W Line FWL	
Plug Back Total Depths							
Date	Depth (ftKB)	Method		Com			
6/10/2009	6,713.0	CASING TALLY		TOP OF FLOAT COLLAR			
6/23/2009	6,699.0	CASED HOLE LOG		CBL DEPTH LOGGER			
7/29/2009	6,711.0	TUBING TALLY					
9/25/2009	6,709.0	TUBING TALLY		DRILL 3 COMPOSITE PLUGS W/ CUTRITE BIT AN...			
Wellbore Sections							
Section Des		Size (in)		Act Top, MD (ftKB)		Act Btm, MD (ftKB)	
SURFACE		12 1/4		12		597	
PRODUCTION		7 7/8		597		6,767	
Zone Statuses							
Zone Name	Status Date	Status	Fluid Type	Job	Prod Method		
NIOBRARA	8/5/2009	PR		DRILLING/CO...			
CODELL	8/5/2009	PR		DRILLING/CO...			
Casing Strings							
Surface, 567.0ftKB							
Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top, MD (ft...	MD (ftKB)	
Surface	6/8/2009	8 5/8	24.00	J-55	12.0	567.0	
PRODUCTION, 6,757.0ftKB							
Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top, MD (ft...	MD (ftKB)	
PRODUCTION	6/10/2009	4 1/2	11.60	L-80	12.0	6,757.0	
Cement							
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
SURFACE CASING CEMENT				12.0	567.0		
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
PRODUCTION CASING CEMENT				1,158.0	6,757.0		
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
Dump Bail				6,260.0	6,286.0		
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
Balance Plug				2,070.0	2,400.0		
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
Balance Plug				767.0	817.0		
Description				Top Depth (ftKB)	Bottom Depth (ftKB)		
Shoe Plug				12.0	767.0		
Tubing Strings							
Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing - Production	9/25/2009	2 3/8	2.00	4.70	J-55	6,569.95	6,580.5
Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing - Production	7/20/2016	2 3/8	2.00	4.70	J-55	6,570.55	6,581.6
Other In Hole							
Run Date	Des			OD (in)	Top (ftKB)	Btm (ftKB)	
8/3/2017	Cast Iron Bridge Plug			3.99	6,286.0	6,291.0	
Logs							
Date	Type				Top, MD (ftKB)	Btm, MD (ftKB)	
6/10/2009	Caliper/Comp. Density/Neutron/GR/SP/ML				2,590.0	6,747.0	
6/10/2009	DIL/GR/SP/Caliper				567.0	6,767.0	
6/23/2009	CBL/CCL/GR				804.0	6,692.0	
7/24/2009	GYRO				0.0	6,757.0	

**Well Name: WELLS RANCH BB12-03**

VERTICAL - ORIGINAL HOLE, 8/7/2017 2:26:39 PM



Perforation Data					
Linked Zone	Bnch/St g	Sum of Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	6,336.00	6,348.00	8/3/2009
NIOBRARA, ORIGINAL HOLE	B	24	6,424.00	6,436.00	8/3/2009
NIOBRARA, ORIGINAL HOLE	C	24	6,492.00	6,504.00	8/3/2009
CODELL, ORIGINAL HOLE		40	6,592.00	6,602.00	6/25/2009
Total (Sum)		112			
Stimulation Intervals					
Start Date 8/3/2009		Primary Job Type DRILLING/COMPLETION - ORIGINAL			
Technical Result Success		Tech Result Details According to Plan		Tech Result Note	
Comment (CODELL): REVERSE STEP RATE RESULTS. PO 13 NWB 261 PSI WB 243 PSI PPF 238 PSI, FOR A TOTAL OF 742 PSI OF FRICTION. HAD SOME ISSUES WITH THE INLINE DENSIMETER. SHOULD BE FIXED IN BETWEEN STAGES. RAN A 5 BBL SPACER BEFORE GOING TO 15% HCl. TREATMENT WENT WELL. AVG VISC 28.3 CPS AVG TEMP 74.0F AVG PH 10.04. POST JOB 5 MINUTE OF 3071 PSI.					
Start Date 8/3/2009		Primary Job Type DRILLING/COMPLETION - ORIGINAL			
Technical Result Success		Tech Result Details According to Plan		Tech Result Note	
Comment (NIOBRARA "C"): DOWN FOR 2 HOURS TRYING TO GET THINGS ON THE BLENDER STRAIGHTENED OUT. WE COULD NOT SEE THE RATE. GOT ISSUES FIXED AND PUMPED JOB. AVG VISC 24.3 CPS AVG TEMP 74.9F AVG PH 10.11. POST JOB 5 MINUTE OF 2912 PSI.					
Start Date 8/3/2009		Primary Job Type DRILLING/COMPLETION - ORIGINAL			
Technical Result Success		Tech Result Details According to Plan		Tech Result Note	
Comment (NIOBRARA "B"): HAD TO SHUT DOWN BEFORE GOING TO SAND. THE AUGER ON THE DRY GEL QUIT WORKING PROPERLY. DOWN APPROXIMATELY 1 HR AND 20 MINS. ADDED 100 BBLs TO THE GEL PAD STAGE. AVG VISC 24.4 CPS AVG TEMP 74.5F AVG PH 10.11. POST JOB 5 MINUTE OF 3062 PSI.					
Start Date 8/3/2009		Primary Job Type DRILLING/COMPLETION - ORIGINAL			
Technical Result Success		Tech Result Details According to Plan		Tech Result Note	
Comment (NIOBRARA "A"): TREATMENT WENT WELL. "WOO HOO". HAD A HUGE PRESSURE DROP DURING PAD. AVG VISC 23.4 CPS AVG TEMP 73.9F AVG PH 10.03. POST JOB 5 MINUTE OF 3060 PSI.					