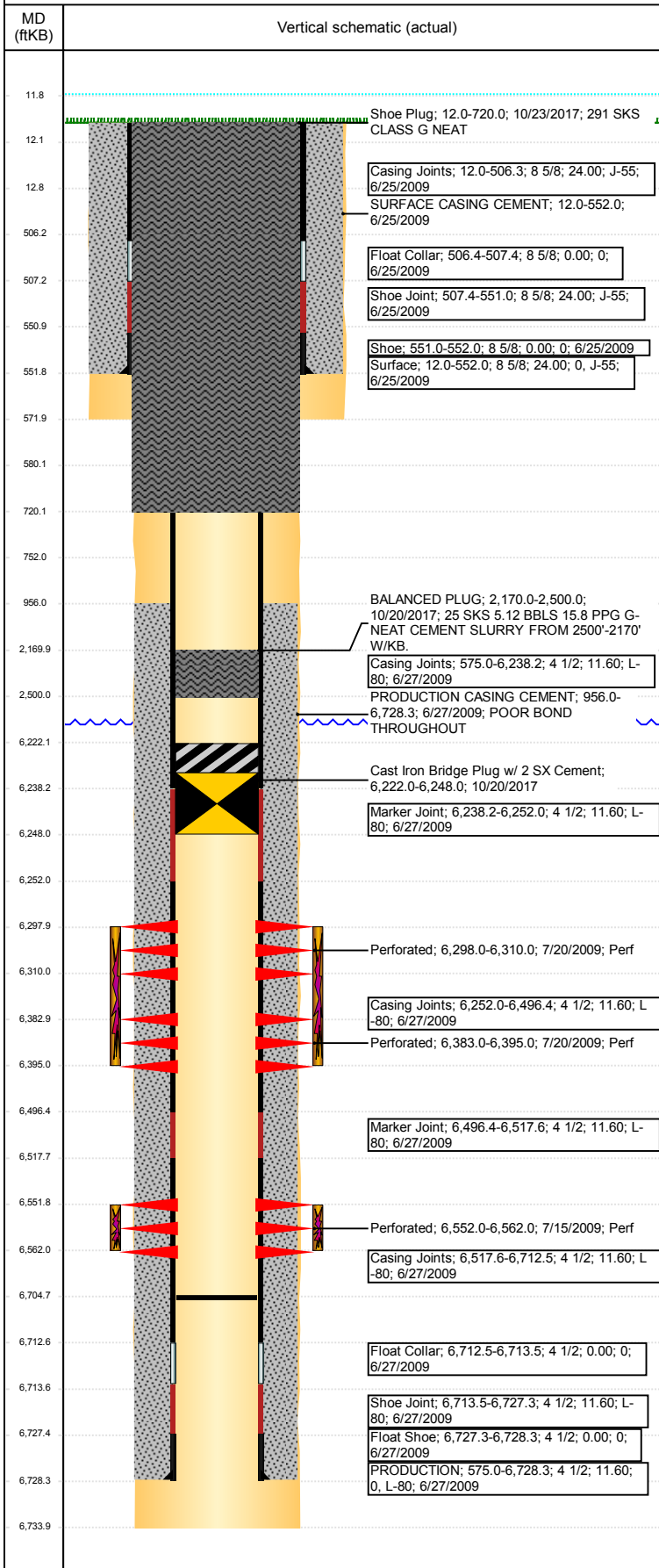


Well Name: WELLS RANCH BB12-01

VERTICAL - ORIGINAL HOLE, 11/25/2017 11:24:52 AM



Well Header

API 05-123-30128	Business Unit DJ BASIN	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,651	KB - GL / MSL (ftKB) 12.00	Spud Date 6/25/2009	P & A Date 10/23/2017

Comment

Directions To Well

Wells Ranch BB12-01; WCR 67 & 68, E .2, S 2.75, past cow camp, E/SE 2.5, S 1, NE Into location.

Congressional Location

Quarter 3 NE	Quarter 4 NE	Section 12	Township 5	Twntshp N/S Dir N	Range 63	Range E/W Dir W
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Bottom Hole Location

North-South Distance (ft) 795.0	From N or S Line FNL	East-West Distance (ft) 656.0	From E or W Line FEL
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Plug Back Total Depths

Date	Depth (ftKB)	Method	Com
6/27/2009	6,712.3	CASING TALLY	CBL DEPTH LOGGER
7/10/2009	6,677.0	CASED HOLE LOG	
7/14/2009	6,733.2	TAG	
9/14/2009	6,704.8	TAG	

Wellbore Sections

Section Des	Size (in)	Act Top, MD (ftKB)	Act Btm, MD (ftKB)
SURFACE	12 1/4	12	572
PRODUCTION	7 7/8	572	6,734

Zone Statuses

Zone Name	Status Date	Status	Fluid Type	Job	Prod Method
NIOBRARA	7/22/2009	PR		DRILLING/CO...	
NIOBRARA	10/20/2017	P&A		ABANDON WE...	
CODELL	7/22/2009	PR		DRILLING/CO...	
CODELL	10/20/2017	P&A		ABANDON WE...	

Casing Strings

Surface, 552.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top, MD (ft...)	MD (ftKB)
Surface	6/25/2009	8 5/8	24.00	J-55	12.0	552.0

PRODUCTION, 6,728.3ftKB

Casing Description	Run Date	OD (in)	Wt/Len (lb/ft)	Grade	Top, MD (ft...)	MD (ftKB)
PRODUCTION	6/27/2009	4 1/2	11.60	L-80	12.0	6,728.3

Cement

Description	Top Depth (ftKB)	Bottom Depth (ftKB)
SURFACE CASING CEMENT	12.0	552.0
PRODUCTION CASING CEMENT	956.0	6,728.3
Dump Bail	6,222.0	6,248.0
Balance Plug	2,170.0	2,500.0
Balance Plug	580.0	752.0
Shoe Plug	12.0	580.0
BALANCED PLUG	2,170.0	2,500.0
Shoe Plug	12.0	720.0

Tubing Strings

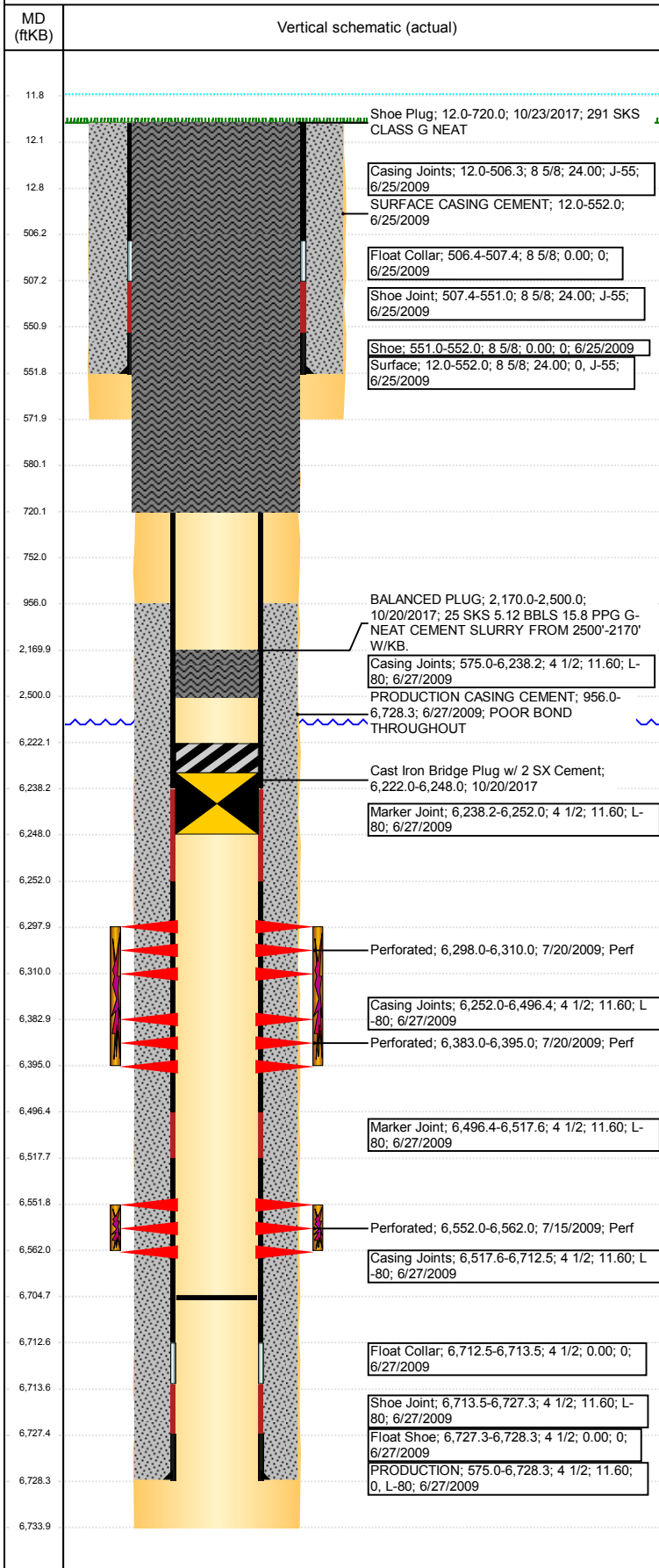
Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing - Production	9/14/2009	2 3/8	2.00	4.70	J-55	6,524.68	6,532.5

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)
Tubing Pup Joint	2 3/8	4.70	J-55	1	10.00	22.0	
Tubing Pup Joint	2 3/8	4.70	J-55	1	10.00	32.0	
Tubing	2 3/8	4.70	J-55	211	6,503.16	6,535.2	
Seal Nipple	2 3/8	4.70	N-80	1	1.10	6,536.3	6,532.1
Notched collar	3 1/16	4.70	J-55	1	0.42	6,536.7	6,532.5

Well Name: WELLS RANCH BB12-01

VERTICAL - ORIGINAL HOLE, 11/25/2017 11:24:53 AM



Other In Hole

Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)
10/20/2017	Cast Iron Bridge Plug w/ 2 SX Cement	3.99	6,222.0	6,248.0

Logs

Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
6/27/2009	Caliper/Comp. Density/Neutron/GR/SP/ML	2,600.0	6,728.0
6/27/2009	DIL/GR/SP/Caliper	552.0	6,728.0
7/10/2009	CBL/CCL/GR	390.0	6,677.0
6/29/2015	GYRO	13.0	6,450.0

Perforation Data

Linked Zone	Bnch/St g	Sum of Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	6,298.00	6,310.00	7/20/2009
NIOBRARA, ORIGINAL HOLE	B	24	6,383.00	6,395.00	7/20/2009
CODELL, ORIGINAL HOLE	01	40	6,552.00	6,562.00	7/15/2009
Total (Sum)		88			

Stimulation Intervals

Start Date	Primary Job Type	
7/20/2009	DRILLING/COMPLETION - ORIGINAL	
Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	

Comment (CODELL): REVERSE STEP RATE RESULTS. PO 12 NWB 188 PSI WB 261 PSI PPF 234 PSI FOR A TOTAL OF 683 PSI OF FRICTION. HAD TO HAVE A 150 BBLs OF WATER HAULED DUE TO BEING TIGHT ON WATER ON LOCATION. HAD A HUGE VISCOSITY DROP DUE TO COMING OUT OF THE WATER TANK THAT WAS NOT HEATED FROM TRANSPORT. TOOK 10 MINUTES TO SEE REAL TIME VISCOSITY BECAUSE OF LOCATION OF QC VAN WHICH IS NOW LOCATED IN THE TREATMENT VAN. ABOUT 200' OF 1" HOSE ON THE GROUND. TREATMENT WENT WELL. AVG VISC 27.7 CPS AVG TEMP 77.9F AVG PH 10.13. POST JOB 5 MINUTE OF 3014 PSI.

Start Date 7/20/2009	Primary Job Type DRILLING/COMPLETION - ORIGINAL		
Technical Result Success	Tech Result Details According to Plan		Tech Result Note

Comment (NIOBRARA): AT THE BEGINING OF THE JOB WE OPENED THE WELL HEAD. PRESSURED UP AND THEN REALIZED THAT THE BOTTOM MASTER VALVE WAS CLOSED. PRESSURE WENT TO 5124 PSI. LOST A FRAC PUMP DURING SLICKWATER PAD. LOST ANOTHER PUMP DURING 3 PSA STAGE. AVG VISC 24 CPS AVG TEMP 78.1F AVG PH 10.22. POST JOB 5 MINUTE OF 2938 PSI.