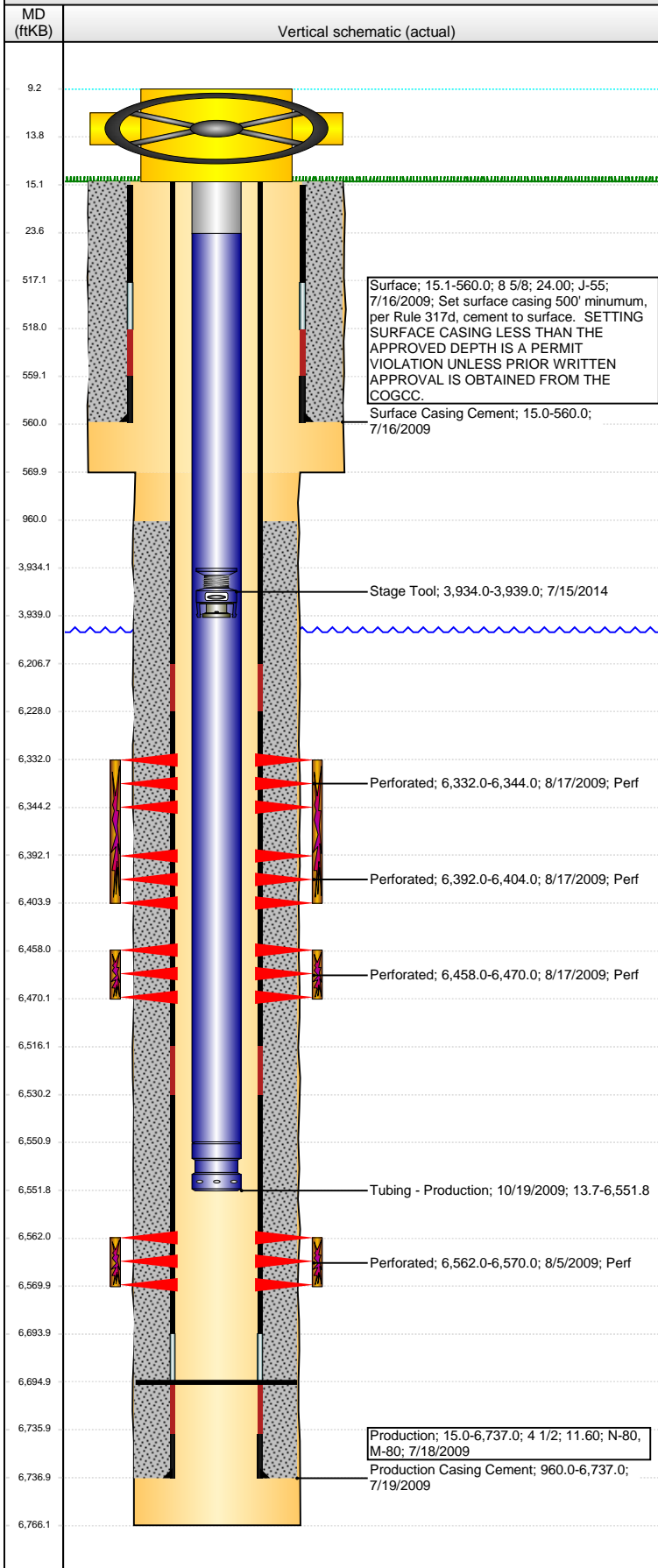


Well Name: WELLS RANCH AF06-08

VERTICAL - ORIGINAL HOLE, 1/18/2016 3:35:29 PM



Well Header

API 05-123-30171	Business Unit DJ BASIN	District 15	Well Config VERTICAL
Original KB Elevation (ft) 4,693.00	KB - GL / MSL (ftKB) 15.00	Spud Date 7/16/2009	P & A Date

Comment

AF06-09 FRAC'D INTO AF06-08 5/2010

Directions To Well

WCR 67 & 68, GO EAST 2/10THS OF A MILE, THEN SOUTH 1.75 MILES, THEN EAST 3.25 MILES, THEN SOUTH 1.5 MILES, THEN SOUTHEAST INTO LOCATION

Congressional Location

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twntshp N...	Range	Rng E/W Dir
		SE	NE	6	5	N	62	W

Bottom Hole Location

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

Date	Depth (ftKB)	Method	Com
7/19/2009	6,694.9	CASING TALLY	

Wellbore Sections

Section Des	Size (in)	Act Top, MD (ftKB)	Act Btm, MD (ftKB)
SURFACE	12 1/4	15.0	570.0
PRODUCTION	7 7/8	570.0	6,766.0

Zone Statuses

Zone Name	Status Date	Status	Fluid Type	Job	Prod Method
NIOBRARA	8/28/2009	PR		DRILLING/CO...	
CODELL	8/28/2009	PR		DRILLING/CO...	

Casing Strings

Surface, 560.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top, MD (ft...	MD (ftKB)
Surface	7/16/2009	8 5/8	24.00	J-55	15.1	560.0

Production, 6,737.0ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...	Grade	Top, MD (ft...	MD (ftKB)
Production	7/18/2009	4 1/2	11.60	N-80	15.0	6,737.0

Cement

Description	Top Depth (ftKB)	Bottom Depth (ftKB)
Surface Casing Cement	15.0	560.0
Production Casing Cement	960.0	6,737.0

Tubing Strings

Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing - Production	10/19/2009	2 3/8	1.995	4.70	J-55	6,538.06	6,549.99

Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)
Tubing Swivel	2 3/8	4.70	J-55	1	10.00	23.7	
Tubing	2 3/8	4.70	J-55	211	6,526.96	6,550.7	
Seating Nipple	2 3/8	5.40		1	1.10	6,551.8	6,549.9
Blade Bit welded to collar	3 7/8			1	0.00	6,551.8	6,549.9

Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	6,332.00	6,344.00	8/17/2009
NIOBRARA, ORIGINAL HOLE	B	24	6,392.00	6,404.00	8/17/2009
NIOBRARA, ORIGINAL HOLE	C	24	6,458.00	6,470.00	8/17/2009
CODELL, ORIGINAL HOLE		32	6,562.00	6,570.00	8/5/2009

Stimulations & Treatments

Date	Zone	Primary Job Type
8/17/2009	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL
Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	

Comment

(CODELL): REVERSE STEP RATE RESULTS: PO - 11. PERF FRIC - 277 PSI. NWB FRIC - 293 PSI. ISIP - 2667 PSI. INC RATE T/ 22 BPM DUE TO HIGH LO. TREATMENT WENT WELL. NOLTE FLAT. POST ISIP - 3054 PSI. AVG VISC - 28.1 CP. AVG TEMP - 69.2F. AVG PH - 10.10.

Well Name: WELLS RANCH AF06-08

VERTICAL - ORIGINAL HOLE, 1/18/2016 3:35:32 PM

Stimulations & Treatments

Date	Zone	Primary Job Type
8/17/2009	NIOBRARA, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	

Comment
(NIOBRARA C): ISIP - 2948 PSI. TREATMENT WENT WELL. NOLTE FLAT. POST ISIP - 3089 PSI. AVG VISC - 23.5 CP. AVG TEMP - 70.2F. AVG PH - 10.14.

Date	Zone	Primary Job Type
8/17/2009	NIOBRARA, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL

Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	

Comment
(NIOBRARA A&B): ISIP - 2979 PSI. TREATMENT WENT WELL. AVG NOLTE - 0.10. POST ISIP - 3218 PSI. AVG VISC - 24.5 CP. AVG TEMP - 70.8F. AVG PH - 10.10.

Other In Hole

Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)
7/15/2014	Stage Tool	2	3,934.0	3,939.0

Logs

Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
7/18/2009	Caliper/Comp. Density/Neutron/GR/SP/ML	2,550.0	6,733.0
7/18/2009	DIL/GR/SP/Caliper	560.0	6,753.0
7/18/2009	DIL/GR/SP/Caliper	6,322.0	6,753.0
7/27/2009	CBL/CCL/GR	0.0	6,679.0
10/7/2014	GYRO	10.0	6,500.0

Surface; 15.1-560.0; 8 5/8; 24.00; J-55; 7/16/2009; Set surface casing 500' minimum, per Rule 317d, cement to surface. SETTING SURFACE CASING LESS THAN THE APPROVED DEPTH IS A PERMIT VIOLATION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE COGCC.
Surface Casing Cement; 15.0-560.0; 7/16/2009

Stage Tool; 3,934.0-3,939.0; 7/15/2014

Perforated; 6,332.0-6,344.0; 8/17/2009; Perf

Perforated; 6,392.0-6,404.0; 8/17/2009; Perf

Perforated; 6,458.0-6,470.0; 8/17/2009; Perf

Tubing - Production; 10/19/2009; 13.7-6,551.8

Perforated; 6,562.0-6,570.0; 8/5/2009; Perf

Production; 15.0-6,737.0; 4 1/2; 11.60; N-80, M-80; 7/18/2009
Production Casing Cement; 960.0-6,737.0; 7/19/2009