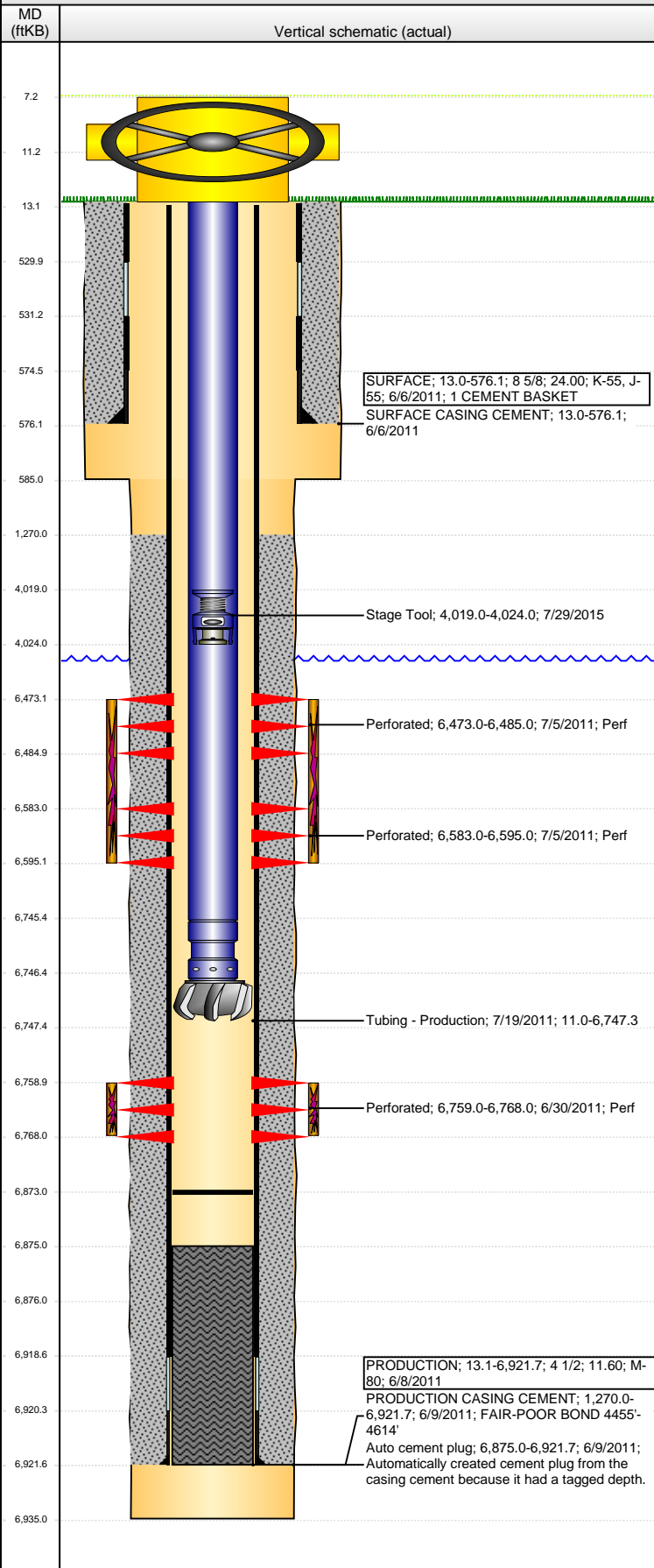


**Well Name: WELLS RANCH PC AA22-02**

VERTICAL - ORIGINAL HOLE, 3/8/2016 10:54:40 AM



## Well Header

API	Business Unit	District	Well Config
05-123-32250	DJ BASIN	15	VERTICAL
Original KB Elevation (ft)	KB - GL / MSL (ftKB)	Spud Date	P & A Date
4,746	13.00	6/5/2011	
Comment			

## Directions To Well

WCR 67 & 68, EAST 0.2 MILES, SOUTH 0.2 MILES, EAST 0.5 MILES, NORTHWEST 0.1 MILE INTO LOCATION.

## Congressional Location

Quarter 1	Quarter 2	Quarter 3	Quarter 4	Section	Township	Twnshp N...	Range	Rng E/W Dir
		NW	NE	22	6	N	63	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
6/8/2011	6,875.0	CASING TALLY	FLOAT COLLAR
6/28/2011	6,825.0	CASED HOLE LOG	DEPTH LOGGER
7/19/2011	6,873.0	TAG	CHASE CFTP TO 6873'

## Wellbore Sections

Section Des	Size (in)	Act Top, MD (ftKB)	Act Btm, MD (ftKB)
SURFACE	12 1/4	13.0	585.0
PRODUCTION	7 7/8	585.0	6,935.0

## Zone Statuses

Zone Name	Status Date	Status	Fluid Type	Job	Prod Method
CODELL	7/8/2011	PR		DRILLING/CO...	
NIOBRARA	7/8/2011	PR		DRILLING/CO...	

## Casing Strings

### SURFACE, 576.1ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
SURFACE	6/6/2011	8 5/8	24.00	J-55	13.0	576.1

### PRODUCTION, 6,921.7ftKB

Casing Description	Run Date	OD (in)	Wt/Len (l...)	Grade	Top, MD (ft...)	MD (ftKB)
PRODUCTION	6/8/2011	4 1/2	11.60	M-80	13.1	6,921.7

## Cement

Description	Top Depth (ftKB)	Bottom Depth (ftKB)
SURFACE CASING CEMENT	13.0	576.1
Description	Top Depth (ftKB)	Bottom Depth (ftKB)
PRODUCTION CASING CEMENT	1,270.0	6,921.7

## Tubing Strings

Tubing Description	Run Date	String...	ID (in)	Wt (lb/ft)	Grade	Len (ft)	Set De...
Tubing - Production	7/19/2011	2 3/8	1.995	4.70	J-55	6,736.28	

## Tubing Components

Item Des	OD (in)	Wt (lb/ft)	Grade	Jts	Len (ft)	Btm (ftKB)	Btm (TVD) (ftKB)
EUE 8rd Tubing	2 3/8	4.70	J-55	217	6,734.43	6,745.4	
Pump Seating Nipple	2 3/8		J-55	1	1.10	6,746.5	
Cutrite Blade Bit	3 7/8			1	0.75	6,747.3	

## Perforation Data

Zone	Bnch/St g	Entered Shot Total	Top (ftKB)	Btm (ftKB)	Date
NIOBRARA, ORIGINAL HOLE	A	24	6,473.00	6,485.00	7/5/2011
NIOBRARA, ORIGINAL HOLE	B	24	6,583.00	6,595.00	7/5/2011
CODELL, ORIGINAL HOLE		36	6,759.00	6,768.00	6/30/2011

## Stimulations & Treatments

Date	Zone	Primary Job Type
7/5/2011	CODELL, ORIGINAL HOLE	DRILLING/COMPLETION - ORIGINAL
Technical Result	Tech Result Details	Tech Result Note
Success	According to Plan	

## Comment

(CODELL): ISIP - 2887 PSI. TREATMENT WENT WELL. POST ISIP - 3056 PSI. AVG VISC - 21.8 CP. AVG TEMP - 76.6F. AVG PH - 9.92.

**Well Name: WELLS RANCH PC AA22-02**

VERTICAL - ORIGINAL HOLE, 3/8/2016 10:54:43 AM

## Stimulations & Treatments

Date 7/5/2011	Zone NIOBRARA, ORIGINAL HOLE	Primary Job Type DRILLING/COMPLETION - ORIGINAL
Technical Result Success	Tech Result Details According to Plan	Tech Result Note

Comment  
(NIOBRARA A&B): ISIP - 3014 PSI. RATE ERRATIC DURING PAD AND 1 PSA STAGES DUE TO PUMP PROBLEMS. OTHERWISE TREATMENT WENT WELL. POST ISIP - 3208 PSI. AVG NOLTE - 0.14. AVG VISC - 22.2 CP. AVG TEMP - 77.8F. AVG PH - 10.06.

## Other In Hole

Run Date	Des	OD (in)	Top (ftKB)	Btm (ftKB)
7/29/2015	Stage Tool	2	4,019.0	4,024.0

## Logs

Date	Type	Top, MD (ftKB)	Btm, MD (ftKB)
6/8/2011	Caliper/Comp. Density/Neutron/GR/SP/ML	2,700.0	6,930.0
6/8/2011	DIL/GR/SP/Caliper	575.0	6,930.0
6/28/2011	CBL/CCL/GR	810.0	6,824.0
12/27/2013	GYRO	10.0	6,650.0

