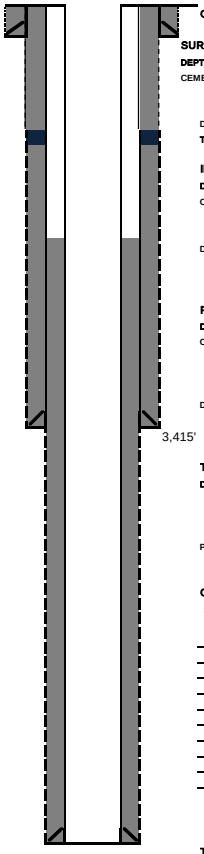
QUICKSILVER RESOURCES

WELL NAME:	Horse Gulch Federal 13-12	SPUD DATE:	9/11/2011	API#	05-081-07672-00
FIELD:	WILDCAT	COMP DATE:		AFE#	
PROJECT AREA:	Sec 12-T6N-R93W	ID DATE:		WELL CODE	05.1021.001
COUNTY/STATE:	Moffat County, CO				
RIG				QRI WI	%
				QRI NRI	%

KB: 26' GL:



Conductor Casing: 20"casing set @ 40' & cemented

SURFACE CASING:

DEPTH: 3415' SIZE: 9 5/8" WT: 36 lb/ft GRADE: J-55 BIT SIZE: 12 1/4"

CEMENT: Lead: 18 sks Econocem TM (12.7 lb/gal, 1.87 ft^3/sk)
Tail: 150 sks VariCem TM (13.5 lb/gal, 1.73 ft^3/sk)

DV TOOL: 1,210'

TOC Traces in returns on Stage 1

INTERMEDIATE CASING:

DEPTH: SIZE: WT: GRADE: BIT SIZE:

CEMENT:

DV TOOL:

PRODUCTION CASING:

DEPTH: 6737' SIZE: 5 1/2" WT: 20.0 lb/ft GRADE: L-80 BIT SIZE: 8 3/4"

CEMENT: Lead: 260 sks EconoCem TM (12.2 lb/gal, 2.22 ft^3/sk)
Tail: 525 sks LifeCem TM (13.5 lb/gal, 1.73 ft^3/sk) TOC: 4700' Calculated

TOC Calculated 712', Lost Returns 72 bbls into displacement

DV TOOL: N/A

TUBING:

DEPTH: SIZE: WT: GRADE: Packer:

Pumping Unit

COMPLETION:

STAGE	PERFS SPF/SHOTS	Holes	FG (psi/ft)	Rate BPM	Fluid Used (gal)	40/70 White (lb)	20/40 White (lb)	20/40 CRC (lb)	Fluid Type
			Totals		0	0	0	0	
			Total Sand Volume				0		

TD: 6,737' FC: 6,692'

Prepared by: CGB
Date: 06/5/2014