



# Wellbore Diagram

Well Name	Rodwell #14-31	API	05-121-11052	Well Type	Vertical Explor.	Well P X A'd 8-15-17
SHL	SWSW S31- T4S- R51W	GLE	4814 ft AMSL	MD	7630	Drilled by WW Drilling Rig #20
BHL	SWSW S31- T4S- R51W	RKB	4832 ft AMSL	TVD	7630	Spud Well 8-4-2017
State / County	Washington, Colorado	*Not to Scale*		Drawn by/Date	KEO 8/15/17	

Formation	TVD (ft)	MD (ft)	Formation Fluid	Hole Section	Drilling Fluid	Bits	Directional	Casing	Cement
	0	0	Plug #5 - Surf. Plug		None			16"	
			15 sx @ 20'	12.25" hole from 0' to 520'	FW/Gel 8.5 to 9.0 ppg	Supplied by WW Drilling	NA-vertical	9.625" 36# J55	275 sxs
Surface Casing	519	519	Plug #4- Shoe Plug						
			50 sx @ 569'						
Niobrara	3064	3064	Plug #3						
Codell	3592	3592	40 sx @ 3014'						
Greenhorn	3696	3696							
Bentonite	3900	3900	Plug #2						
Dakota D Sand	3990	3990	40 sx @ 3940'						
Dakota J Sand	4040	4040	Plug #1						
			40 sx @ 4176'						
Topeka	6058	6058							
Lansing	6218	6218							
Marmaton	6544	6544							
Cherokee	6712	6712							
Morrow	7194	7194							
Keyes	7334	7334							
Mississippian	7370	7370							
Osage	7414	7414							
Cambrian- Reagan Sand	7468	7468							
Total Depth	7630	7630							

## Cement Plugs pumped by QES

40 sx @ 4176'
40 sx @ 3940'
40 sx @ 3014'
50 sx @ 569'
15 sx @ 20'
5 sx Rathole
5 sx Mousehole
195 sx TOTAL