Cement

Well Name: Critter Creek 240-1411H

Intermediate Casing Cement

Well Name	API	Excalibur ID	Operator	Current Well Status	Government Authority
Critter Creek 240-1411H	05-123-46853-__	19957	HighPoint Resources	Producing	
Well Configuration Type	**Original KB Elevation (ft)**	**Ground Elevation (ft)**	**KB-Ground Distance (ft)**	**Regulatory Drilling Spud Date**	**Regulatory Rig Release Date**
Horizontal	5,237.80	5,217.80	20.00	6/14/2018 06:00	6/27/2018 00:00
Surface Legal Location	North/South Distance (ft)	North/South Reference	East/West Distance (ft)	East/West Reference	Lat/Long Datum
SESW Sec. 14 T11N R63W	382.0	FSL	770.0	FWL	NAD 83
Latitude (°)	Longitude (°)	Basin	Field Name	County	State/Province
40° 54' 58.586" N	104° 24' 24.196" W	DJ Basin	Hereford	Weld	Colorado

Cement Details

Description	String	Type	Cementing Start Date	Cementing End Date	Cementing Company
Intermediate Casing Cement	Intermediate, 8,000.1ftKB	Casing	6/19/2018 21:00	6/19/2018 22:30	BJ Services Company
Job Category	**Wellbore**	**Evaluation Method**	**Cement Evaluation Results**	**Technical Result**	**Cementing Supervisor**
	Original Hole	Returns to Surface	2.5 BLS TO SURFACE		

Comment

Cement Stages

Stage # 1

Stage Number	Description	Objective	Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Cement Ret (bbl)	Top Plug?	Bottom Plug?
1	Intermediate Casing Cement	CEMENT 7" CASING	20.0	8,000.0	Yes	2.5	No	No
Q Pump Init (bbl/min)	**Q Pump Final (bbl/min)**	**Q Pump Avg (bbl/min)**	**P Pump Final (psi)**	**P Plug Bump (psi)**	**Pipe Reciprocated?**	**Stroke (ft)**	**Pipe Rotated?**	**Pipe RPM (rpm)**
5	3	6	1,900.0	2,600.0	No		No	

Tagged Depth (ftKB)	Tag Method	Top Measurement Method	Depth Plug Drilled Out To (ftKB)	Drill Out Diameter (in)
		Volume Calculations		

Comment

Cement Fluids & Additives

Fluid

Fluid Type	Fluid Description	Estimated Top (ftKB)	Est Btm (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl)
Spacer		0.0	0.0			20.0
Yield (ft³/sack)	**Mix H20 Ratio (gal/sack)**	**Free Water (%)**	**Density (lb/gal)**	**Plastic Viscosity (cP)**	**Thickening Time (hr)**	**CmprStr 1 (psi)**
2.73	16.42		11.00			

Additives

Add	Type	Amount	Amount Units	Conc	Conc Unit

Fluid

Fluid Type	Fluid Description	Estimated Top (ftKB)	Est Btm (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl)
Lead		0.0	6,844.0	590	G	218.0
Yield (ft³/sack)	**Mix H20 Ratio (gal/sack)**	**Free Water (%)**	**Density (lb/gal)**	**Plastic Viscosity (cP)**	**Thickening Time (hr)**	**CmprStr 1 (psi)**
2.07	11.83		12.50			

Additives

Add	Type	Amount	Amount Units	Conc	Conc Unit

Fluid

Fluid Type	Fluid Description	Estimated Top (ftKB)	Est Btm (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl)
Tail		6,844.0	7,444.0	90	G	19.0
Yield (ft³/sack)	**Mix H20 Ratio (gal/sack)**	**Free Water (%)**	**Density (lb/gal)**	**Plastic Viscosity (cP)**	**Thickening Time (hr)**	**CmprStr 1 (psi)**
1.15	4.98		15.80			

Additives

Add	Type	Amount	Amount Units	Conc	Conc Unit

Fluid

Fluid Type	Fluid Description	Estimated Top (ftKB)	Est Btm (ftKB)	Amount (sacks)	Class	Volume Pumped (bbl)
Displacement		7,444.0	7,444.0	0		312.5
Yield (ft³/sack)	**Mix H20 Ratio (gal/sack)**	**Free Water (%)**	**Density (lb/gal)**	**Plastic Viscosity (cP)**	**Thickening Time (hr)**	**CmprStr 1 (psi)**
			8.33			

Additives

Add	Type	Amount	Amount Units	Conc	Conc Unit