



Bison Oil Well Cementing Tail & Lead

Customer: Crestone Peak Resources

Well Name: DAVIS 1M-9H-G266

Date: 5/20/2018

Invoice # 300137

API# 05-123-46519

Foreman: JASON KELEHER

County: Weld

State: Colorado

Sec: 9

Twp: 2N

Range: 66W

Consultant: BRENT

Rig Name & Number: Ensign 153

Distance To Location: 26

Units On Location: 3

Time Requested: 1930

Time Arrived On Location: 1830

Time Left Location: 1230

WELL DATA

Casing Size (in) : 9.625
Casing Weight (lb) : 40
Casing Depth (ft.) : 2,265
Total Depth (ft) : 2280
Open Hole Diameter (in) : 13.50
Conductor Length (ft) : 98
Conductor ID : 15.5
Shoe Joint Length (ft) : 86
Landing Joint (ft) : 5

Sacks of Tail Requested 190

HOC Tail (ft):

One or the other, cannot have quantity in both

Max Rate: 8

Max Pressure: 2000

Cement Data

Lead N-Gel-12

Cement Name:
Cement Density (lb/gal) : 13.5
Cement Yield (cuft) : 1.7
Gallons Per Sack 9.00
% Excess 20%

Tail Type III

Cement Name:
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess:

Fluid Ahead (bbls) 60.0
H2O Wash Up (bbls) 10.0

Spacer Ahead Makeup

60 BBL WATER DYE IN 2ND 10

Casing ID

8.835

Casing Grade

J-55 only used

Lead Calculated Results

HOC of Lead 1846.72 ft

Casing Depth - HOC Tail

Volume of Lead Cement 1025.52 cuft

HOC of Lead X Open Hole Ann

Volume of Conductor 74.78 cuft

(Conductor ID Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

Total Volume of Lead Cement 1100.17 cuft

(cuft of Lead Cement) + (Cuft of Conductor)

bbls of Lead Cement 195.94 bbls

(Total cuft of Lead Cement) X (.1781) X (1+Lead Excess)

Sacks of Lead Cement 648.00 sk

(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

bbls of Lead Mix Water 138.86 bbls

(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement 165.70 bbls

(Casing ID Squared) X (.0009714) X (Casing Depth) + (Landing Joint) - (Shoe Length)

Total Water Needed: 402.00 bbls

Tail Calculated Results

Tail Cement Volume In Ann 204.32 cuft

(HOC Tail) X (OH Ann)

Total Volume of Tail Cement 241.30 Cuft

(HOC Tail X OH Ann) - (Shoe Length X Shoe Joint Ann)

bbls of Tail Cement 42.98 bbls

(HOC of Tail) X (OH Ann) + (Cement Yield) X (Shoe Joint Ann) X (.1781) X (% Excess)

HOC Tail 418.28 ft

(Tail Cement Volume) ÷ (OH Ann)

Sacks of Tail Cement 190.00 sk

(Total Volume of Tail Cement) ÷ (Cement Yield)

bbls of Tail Mix Water 26.64 bbls

(Sacks of Tail Cement X Gallons Per Sack) ÷ 42

Pressure of cement in annulus

Hydrostatic Pressure 611.00 PSI

Collapse PSI: 2570.00 psi

Burst PSI: 3950.00 psi

X

Authorization To Proceed

