



Bison Oil Well Cementing Tail & Lead

Customer: Crestone Peak Resources
Well Name: melborn ranch 4k-17h

Date: 9/23/2018
Invoice # 200339
API#
Foreman: kirk kallhoff

County: Weld
State: Colorado
Sec: 19
Twp: 6n
Range: 63w

Consultant: buddy
Rig Name & Number: ENSIGN 153
Distance To Location: 30
Units On Location: 4028/4032/4041
Time Requested: 700 pm
Time Arrived On Location: 500 pm
Time Left Location:

WELL DATA

Casing Size (in) : 9.625
Casing Weight (lb) : 40
Casing Depth (ft.) : 2,389
Total Depth (ft) : 2439
Open Hole Diameter (in) : 13.50
Conductor Length (ft) : 98
Conductor ID : 15.25
Shoe Joint Length (ft) : 45
Landing Joint (ft) : 35

Sacks of Tail Requested 405
HOC Tail (ft): 0

One or the other, cannot have quantity in both

Max Rate: 8
Max Pressure: 2000

Cement Data

Lead

Cement Name:
Cement Density (lb/gal) : 13.5
Cement Yield (cuft) : 1.68
Gallons Per Sack 8.90
% Excess 38%

Tail

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 1242.78 ft
Casing Depth - HOC Tail
Volume of Lead Cement 607.38 cuft
HOC of Lead X Open Hole Ann
Volume of Conductor 74.79 cuft
(Conductor ID Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
Total Volume of Lead Cement 682.17 cuft
(cuft of Lead Cement) + (Cuft of Conductor)
bbls of Lead Cement 167.66 bbls
(Total cuft of Lead Cement) X (.1781) X (1+Lead Excess)
Sacks of Lead Cement 560.35 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
bbls of Lead Mix Water 118.74 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42
Displacement 180.33 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth) + (Landing Joint) - (Shoe Length)
Total Water Needed: 425.87 bbls

Tail Calculated Results

Tail Cement Volume In Ann 514.35 cuft
(HOC Tail) X (OH Ann)
Total Volume of Tail Cement 495.19 Cuft
(HOC Tail X OH Ann) - (Shoe Length X Shoe Joint Ann)
bbls of Tail Cement 91.61 bbls
(HOC of Tail) X (OH Ann) + (Cement Yield) X (Shoe Joint Ann) X (.1781) X (% Excess)
HOC Tail 1013.22 ft
(Tail Cement Volume) ÷ (OH Ann)
Sacks of Tail Cement 405.00 sk
(Total Volume of Tail Cement) ÷ (Cement Yield)
bbls of Tail Mix Water 56.80 bbls
(Sacks of Tail Cement X Gallons Per Sack) ÷ 42
Pressure of cement in annulus
Hydrostatic Pressure 585.23 PSI
Collapse PSI: 2570.00 psi
Burst PSI: 3950.00 psi

X

Authorization To Proceed

