



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/27/2018
Invoice #: 200342
API#
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation
Well Name: castle pines 19-12hz

County: Weld
State: Colorado
Sec: 23
Twp: 2N
Range: 66W

Consultant: bryan
Rig Name & Number: Cartel 88
Distance To Location: 25
Units On Location: 4028/4030/4035
Time Requested: 500 am
Time Arrived On Location: 200 am
Time Left Location: 8:30 am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,827
Total Depth (ft) : 1837
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 40
Landing Joint (ft) : 8
Max Rate: 8
Max Pressure: 2000

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.48
Gallons Per Sack: 7.40
% Excess: 10%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0
Spacer Ahead Makeup
30 bbl with Die in 2nd 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 17.36 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 61.05 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 939.19 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1017.60 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 181.24 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 688 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 121.14 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 138.77 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1347.78 PSI

Pressure of the fluids inside casing

Displacement: 770.52 psi

Shoe Joint: 29.51 PSI

Total 800.03 psi

Differential Pressure: 547.75 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 299.91 bbls

X
Authorization To Proceed

Customers hereby acknowledges and specifically agrees to the terms and condition on this work order, including, without limitation, the provisions on this work order.

Date _____

SERIES 2000

