



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/9/2018
Invoice # 200327
API#
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation
Well Name: hendu 23-11hz

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

Consultant: dave
Rig Name & Number: Cartel 88
Distance To Location: 30
Units On Location: 4028/4030/4033
Time Requested: 300 am
Time Arrived On Location: 1230 am
Time Left Location: 7:30 am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,826
Total Depth (ft) : 1836
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: 15%
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 981.32 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1059.73 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 188.74 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 716 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 126.16 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 138.69 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1347.04 PSI

Pressure of the fluids inside casing

Displacement: 770.09 psi

Shoe Joint: 29.51 PSI

Total 799.60 psi

Differential Pressure: 547.44 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 304.85 bbls

X
Authorization To Proceed

Date _____