



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/24/2018
Invoice # 300175
API# 05-123-47350
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: PETTINGER 18-4HZ

County: Weld
State: Colorado
Sec: 18
Twp: 1N
Range: 65W
Consultant: LEVI
Rig Name & Number: CARTEL 88
Distance To Location: 37
Units On Location: 4044-3103,4035-3213,4039-3214
Time Requested: 1200
Time Arrived On Location: 2300
Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,824
Total Depth (ft) : 1834
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 5
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: 7.48
% Excess: 20%
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 WATER, DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.40 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 1022.81 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1102.26 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 196.31 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 745 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 132.64 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 138.12 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1345.56 PSI

Pressure of the fluids inside casing

Displacement: 768.20 psi

Shoe Joint: 31.26 psi

Total 799.46 psi

Differential Pressure: 546.10 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 310.76 bbls



Authorization To Proceed

Date _____

PETTINGER 18-4HZ SURFACE

