



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/21/2017
Invoice #: 200182
API#:
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: burough 1n-17hz

County: Weld
State: Colorado
Sec: 17
Twp: 1n
Range: 66w
Consultant: bryan
Rig Name & Number: CARTEL 88
Distance To Location: 32
Units On Location: 4028/4020/4041
Time Requested: 400 am
Time Arrived On Location: 200 am
Time Left Location: 9:00 am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,856
Total Depth (ft) : 1866
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.5
Shoe Joint Length (ft) : 42
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: 7.48
% 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 WATER, DYE IN 2ND 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.23 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 64.40 cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 954.78 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1037.42 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 184.76 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 701 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 124.84 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.86 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1369.17 PSI

Pressure of the fluids inside casing

Displacement: 782.16 psi

Shoe Joint: 30.98 psi

Total 813.15 psi

Differential Pressure: 556.03 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 305.69 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.



Anadarko Petroleum Corporation
borough 1n-17hz

200182
Weld
Kirk Kallhoff
10/21/2017

Date _____

SERIES 2000

