

Date _____



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 5/11/2019
Invoice #: 200457
API#
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: barclay farms 28-3hz

County: Weld
State: Colorado

Sec: 21
Twp: 3n
Range: 66w

Consultant: bryan
Rig Name & Number: Cartel 88
Distance To Location: 22
Units On Location: 4047/4024/4030
Time Requested: 1100 pm
Time Arrived On Location: 830 pm
Time Left Location: 2:00 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,838
Total Depth (ft) : 1848
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 39
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 16.93 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 945.11 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1023.08 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 182.21 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 691 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 121.80 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 139.70 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1355.89 PSI

Pressure of the fluids inside casing

Displacement: 775.69 psi

Shoe Joint: 28.77 PSI

Total 804.47 psi

Differential Pressure: 551.43 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 301.49 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.

SERIES 2000

