



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/9/2019
Invoice #: 900390
API#: 05-123-50195
Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: Farley 23-1HZ

County: Weld
State: Colorado
Sec: 23
Twp: 3n
Range: 66w
Consultant: Josh
Rig Name & Number: CARTEL 88
Distance To Location: 28
Units On Location: 4028/3103-404024/3214-4039/3212
Time Requested: 2100
Time Arrived On Location: 2015
Time Left Location: 1230

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,850
Total Depth (ft) : 1860
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
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: 17.0
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0
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 61.05 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 951.56 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1030.84 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 183.59 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 697 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 124.05 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.39 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1364.75 PSI

Pressure of the fluids inside casing

Displacement: 779.58 psi

Shoe Joint: 30.98 psi

Total 810.56 psi

Differential Pressure: 554.19 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 314.44 bbls

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
Farley 23-1HZ

900390
Weld
Corey Barras
8/9/2019

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x 
Authorized signature

X
Title

X _____
Date _____

Farley 23-1HZ

