



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 1/18/2017
Invoice #: 200021
API#:
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: puma fed 29c-14hz

County: Weld
State: Colorado
Sec: 23
Twp: 1n
Range: 67w
Consultant: brian
Rig Name & Number: wmo 252
Distance To Location: 35
Units On Location: 4028/4019/4020
Time Requested: 1100 am
Time Arrived On Location: 1015 pm
Time Left Location: 3:00pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 2.257
Total Depth (ft) : 2282
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.5
Shoe Joint Length (ft) : 42
Landing Joint (ft) : 15

Max Rate: 7
Max Pressure: 1500

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
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

h2o

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 1223.56 cuft

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

Total Slurry Volume 1306.19 cuft

(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 232.63 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 883 sk

(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 155.50 bbls

(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 172.40 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1664.99 PSI

Pressure of the fluids inside casing

Displacement: 955.07 psi

Shoe Joint: 30.98 psi

Total 986.05 psi

Differential Pressure: 678.94 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 367.90 bbls

X
Authorization To Proceed

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puma fed 29c-14hz

INVOICE #
LOCATION
FOREMAN
Date

200021
Weld
Kirk Kallhoff
1/18/2017

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DESCRIPTION OF JOB EVENTS

[illegible]

X

Work Performed

X

Title

>

Date _____

SERIES 2000

