



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 7/19/2015

Invoice # 80419

API# 05-123-41554

Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation

Well Name: Carter 35C-33HZ

County: Weld

State: Colorado

Sec: 33

Twp: 2N

Range: 66W

Consultant: Bryan / Luke

Rig Name & Number: Noble 2

Distance To Location: 19 Miles

Units On Location: 4034-3104/4024-3203

Time Requested: 630pm

Time Arrived On Location: 420pm

Time Left Location: 8:00 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,841
Total Depth (ft) : 1858
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 40
Conductor ID : 16
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 10

Max Rate: 6
Max Pressure: 1750

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 25
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 15.0

Spacer Ahead Makeup

30 bbls With Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.61 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 35.64 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 1056.49 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1110.75 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 197.82 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 745 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 132.76 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 139.82 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1358.42 PSI

Pressure of the fluids inside casing

Displacement: 775.50 psi

Shoe Joint: 31.63 psi

Total 807.13 psi

Differential Pressure: 551.29 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 317.58 bbls

X

Authorization To Proceed

Bryan / Luke

Customers hereby acknowledges and specifically agrees to the terms and condition on this work order, including, without limitation, the provisions on this work order.

Bison Oil Well Cementing Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation

Carter 35C-33HZ

INVOICE #

80419

LOCATION

Weld

FOREMAN

Calvin Reimers

Date _____

7/19/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

[illegible]

X

Work Preformed

Bryan Brown

X

Title

consultant

✶

Date _____

7/19/15

SERIES 2000

