



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/15/2015
Invoice #: 80446
API#: 05-123-42072
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
Well Name: Sunflower 25G-17HZ

County: Weld
State: Colorado
Sec: 8
Twp: 2N
Range: 65W
Consultant: Hayden / Bryan
Rig Name & Number: Noble 2
Distance To Location: 28 Miles
Units On Location: 4023-3104/4033-3203
Time Requested: 500am
Time Arrived On Location: 325am
Time Left Location: 9:15am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,835
Total Depth (ft) : 1852
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 15.25
Shoe Joint Length (ft) : 41
Landing Joint (ft) : 10

Max Rate: 8
Max Pressure: 1250

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: 22
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 15.0

Spacer Ahead Makeup

30 bbls H2O+Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 17.83 cuft

(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 45.79 cuft

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

cuft of Casing 1040.86 cuft

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

Total Slurry Volume 1104.47 cuft

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

bbls of Slurry 196.71 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 741 sk

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

Mix Water 132.01 bbls

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

Displacement: 139.44 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1353.51 PSI

Pressure of the fluids inside casing

Displacement: 773.41 psi

Shoe Joint: 30.30 psi

Total 803.71 psi

Differential Pressure: 549.80 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 316.46 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.



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Customer
Well Name

Anadarko Petroleum Corporation
Sunflower 25G-17HZ

INVOICE #
LOCATION
FOREMAN
Date

80446
Weld
Calvin Reimers
9/15/2015

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DESCRIPTION OF JOB EVENTS

[illegible]

X

Work Performed

x

Title

>

Date _____

SERIES 2000

