



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/16/2018

Invoice # 200333

API#

Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: baja berg 35-8hz

County: Weld

State: Colorado

Sec: 23

Twp: 2N

Range: 66W

Consultant: dave

Rig Name & Number: Cartel 88

Distance To Location: 30

Units On Location: 4028/4033/4041

Time Requested: 630 pm

Time Arrived On Location: 330 pm

Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,877
Total Depth (ft) : 1887
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 41
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 17.80 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 966.07 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1044.92 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 186.10 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 706 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 124.40 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.56 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1384.66 PSI

Pressure of the fluids inside casing

Displacement: 791.65 psi

Shoe Joint: 30.25 PSI

Total 821.89 psi

Differential Pressure: 562.77 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 306.95 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.

X 9-16-19
Date

SERIES 2000

