



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/30/2017

Invoice # 200187

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: newby state 2n-33hz

County: Weld

State: Colorado

Sec: 17

Twp: 1n

Range: 66w

Consultant: bryan

Rig Name & Number: CARTEL 88

Distance To Location: 31

Units On Location: 4028/4039/4030

Time Requested: 200 am

Time Arrived On Location: 1200 am

Time Left Location: 4:15pm

WELL DATA

Casing Size OD (in) : 9.625

Casing Weight (lb) : 36.00

Casing Depth (ft.) : 778

Total Depth (ft) : 788

Open Hole Diameter (in.) : 13.50

Conductor Length (ft) : 80

Conductor ID : 15.5

Shoe Joint Length (ft) : 44

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:

Fluid Ahead (bbls): 30.0

H2O Wash Up (bbls): 10.0

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 19.10 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 375.25 cuft

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

Total Slurry Volume 458.75 cuft

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

bbls of Slurry 81.70 bbls

(Total Slurry Volume) X (.1781)

Sacks Needed 310 sk

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

Mix Water 55.20 bbls

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

Displacement: 57.36 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 573.93 PSI

Pressure of the fluids inside casing

Displacement: 316.49 psi

Shoe Joint: 32.46 psi

Total 348.95 psi

Differential Pressure: 224.98 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 152.57 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.



Anadarko Petroleum Corporation
newby state 2n-33hz

200187
Weld
Kirk Kallhoff
10/31/2017

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

X _____
Authorized signature

X Co. Man
Title

X 10-31-17
Date

SERIES 2000

