



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/3/2017
Invoice #: 300117
API#: 05-123-43470
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: WAGNER 27N-10HZ

County: Weld
State: Colorado

Sec: 22
Twp: 1N
Range: 67W

Consultant: BRYAN
Rig Name & Number: CARTEL 88
Distance To Location: 34
Units On Location: 4027-3103,4031-3214,4024-3214
Time Requested: 200
Time Arrived On Location: 1230
Time Left Location: 545

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,885
Total Depth (ft) : 1895
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 45
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: 23.0
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

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 19.35 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 970.32 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1050.73 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 187.13 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 710 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 126.44 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.89 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1390.50 PSI

Pressure of the fluids inside casing

Displacement: 793.51 psi

Shoe Joint: 32.89 psi

Total 826.41 psi

Differential Pressure: 564.09 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 319.33 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
WAGNER 27N-10HZ

300117
Weld
JASON KELEHER
9/3/2017

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

X 
Authorized signature

X Co-Man
Title

X 7-3-17
Date

WAGNER 27N-10HZ SURFACE

