



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/7/2018
Invoice #: 200260
API#
Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: quarter circle 24-2hz

County: Weld
State: Colorado
Sec: 24
Twp: 1n
Range: 67w

Consultant: bryan
Rig Name & Number: CARTEL 88
Distance To Location: 33
Units On Location: 4028/4030/4041
Time Requested: 830 pm
Time Arrived On Location: 700 pm
Time Left Location: 12:00 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,880
Total Depth (ft) : 18890
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.5
Shoe Joint Length (ft) : 42
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 18.23 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 967.68 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1050.32 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 187.06 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 710 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 126.39 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.71 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1386.88 PSI

Pressure of the fluids inside casing

Displacement: 792.51 psi

Shoe Joint: 30.98 psi

Total 823.49 psi

Differential Pressure: 563.38 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 309.10 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
quarter circle 24-2hz

INVOICE #
LOCATION
FOREMAN
Date

200260

Weld

Kirk Kallhoff

3/7/2018

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DESCRIPTION OF JOB EVENTS

[illegible]

X

Authorized signature

x

Title

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Date _____

SERIES 2000

