



Anadarko Petroleum Corporation
Damore 18-4HZ

INVOICE #
LOCATION
FOREMAN
Date

900478
Weld
Corey Barras
2/23/2020

Treatment Report Page 2

X _____ X *for Waller* X *2.23.20*
Authorized signature Title Date



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/23/2020

Invoice #: 900478

AFE #: 2147213

Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: Damore 18-4HZ

County: Weld

State: Colorado

Sec: 18

Twp: 5n

Range: 67w

Consultant: Joe

Rig Name & Number: CARTEL 88

Distance To Location: 15

Units On Location: 4028/3103-4020/32034033-3201

Time Requested: 1930

Time Arrived On Location: 1830

Time Left Location:

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,868
Total Depth (ft) : 1878
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
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: 12%
Displacement Fluid lb/gal: 8.3
BBL to Pit:
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 18.23 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 978.71 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1057.99 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 188.43 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 715 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 127.31 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.78 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1378.02 PSI

Pressure of the fluids inside casing

Displacement: 787.34 psi

Shoe Joint: 30.98 psi

Total 818.32 psi

Differential Pressure: 559.70 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 319.10 bbls

X for Wells
Authorization To Proceed

Damore 18-4HZ

