

Date _____



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/9/2019

Invoice # 200404

API#

Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: mab 15-5hz

County: Weld

State: Colorado

Sec: 30

Twp: 2N

Range: 65w

Consultant: brent

Rig Name & Number: Cartel 88

Distance To Location: 33

Units On Location: 4047/4023/4044

Time Requested: 900 pm

Time Arrived On Location: 700 pm

Time Left Location: 2:00 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,863
Total Depth (ft) : 1873
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 958.55 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1037.39 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 184.76 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 701 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 123.50 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.47 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1374.34 PSI

Pressure of the fluids inside casing

Displacement: 785.61 psi

Shoe Joint: 30.25 PSI

Total 815.86 psi

Differential Pressure: 558.48 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 304.97 bbls

X

Authorization to Proceed

SERIES 2000

