

Date _____



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 3/10/2019

Invoice # 200424

API#

Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: jdb 15-9hz

County: Weld

State: Colorado

Sec: 30

Twp: 2N

Range: 65w

Consultant: brent

Rig Name & Number: Cartel 88

Distance To Location: 34

Units On Location: 4047/4044/4027

Time Requested: 500 pm

Time Arrived On Location: 200 pm

Time Left Location: 7:30pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,875
Total Depth (ft) : 1885
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 80
Conductor ID : 15.25
Shoe Joint Length (ft) : 40
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 17.36 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 965.00 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1043.41 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 185.83 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 705 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 124.22 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.48 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1383.19 PSI

Pressure of the fluids inside casing

Displacement: 791.22 psi

Shoe Joint: 29.51 PSI

Total 820.73 psi

Differential Pressure: 562.46 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 306.69 bbls

X

Authorization To Proceed

MO&TB

SERIES 2000

