



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 8/13/2015
Invoice #: 80430
API#: 05-123-41918
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
Well Name: Sarchet 15N-20HZ

County: Weld
State: Colorado
Sec: 20
Twp: 2N
Range: 65W

Consultant: Bryan / Hayden
Rig Name & Number: Noble 2
Distance To Location: 28 Miles
Units On Location: 4023-3104/4024-3203
Time Requested: 830am
Time Arrived On Location: 705am
Time Left Location: 11:30 AM

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,861
Total Depth (ft) : ~~1867~~ 1878
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 15.5
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 10
Max Rate: 6
Max Pressure: 1750

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 20%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 33
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 15.0
Spacer Ahead Makeup
30 bbls With Dye in 2nd 10 bbls

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.61 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 48.30 cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 1056.21 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1123.12 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 200.03 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 754 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 134.24 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.32 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1372.82 PSI

Pressure of the fluids inside casing

Displacement: 783.91 psi

Shoe Joint: 31.63 psi

Total 815.55 psi

Differential Pressure: 557.27 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 320.57 bbls

x Bryan Brown
Authorization To Proceed



Anadarko Petroleum Corporation
Sarchet 15N-20HZ

INVOICE #
LOCATION
FOREMAN
Date

80430
Weld
Calvin Reimers
8/13/2015

Treatment Report Page 2

[illegible]

X Bryan Brown
Work Performed

X CoMan
Title

X 8/13/15
Date

SERIES 2000

