



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 6/3/2015

Invoice #: 80045

API#: 05-123-41429

Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation

Well Name: Viper Pyro 16N-10HZ

County: Weld

State: Colorado

Sec: 15

Twp: 3N

Range: 67W

Consultant: Sam / Toby

Rig Name & Number: Pinnenergy 4

Distance To Location: 17 Miles

Units On Location: 4023-3104/4030-3203

Time Requested: 1030am

Time Arrived On Location: 850am

Time Left Location: 130pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,861
Total Depth (ft) : 1880
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 16
Shoe Joint Length (ft) : 40
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: 32
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0

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 17.28 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 53.46 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 1058.65 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 1129.39 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 201.14 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 758 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 134.99 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 141.57 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1372.95 PSI

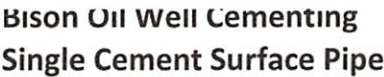
Pressure of the fluids inside casing

Displacement: 785.31 psi**Shoe Joint:** 29.38 psi**Total** 814.69 psi**Differential Pressure:** 558.26 psi**Collapse PSI:** 2020.00 psi**Burst PSI:** 3520.00 psi**Total Water Needed:** 316.57 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.




Anadarko Petroleum Corporation
Viper Pyro 16N-10HZ

INVOICE #
LOCATION
FOREMAN
Date

80045
Weld
Calvin Reimers
6/3/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

X	X	X
		
Work Performed	Title	Date

SERIES 2000

