



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/9/2014
Invoice #: 25099
API#: 05-123-40406
Foreman: Calvin Reimers

Customer: Anadarko Petroleum Corporation
Well Name: Cobra 30C-14HZ

County: Weld
State: Colorado
Sec: 22
Twp: 2N
Range: 67W

Consultant: Mike / Toby
Rig Name & Number: Major42
Distance To Location: 19 Miles
Units On Location: 4023-3104/4024-3203
Time Requested: 700am
Time Arrived On Location: 545am
Time Left Location: 9:45am

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft.) : 1,188
Total Depth (ft) : 1204
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) :
Conductor ID :
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 8

Max Rate: 5
Max Pressure: 2500

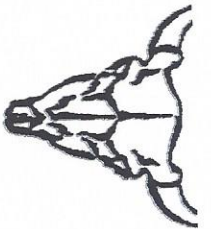
Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 14.2
Cement Yield (cuft) : 1.49
Gallons Per Sack: 7.48
% Excess: 16%
Displacement Fluid lb/gal: 8.3
BBL to Pit: 16
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
30bbls H2O+Dye in 2nd 10bbls

| | | | |
|--|--------------------|--|--------------------|
| Casing ID | 8.921 | Casing Grade | J-55 only used |
| Calculated Results | | Displacement: | 89.14 bbls |
| cuft of Shoe | 18.79 cuft | (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint) | |
| (Casing ID Squared) X (.005454) X (Shoe Joint ft) | | Pressure of cement in annulus | |
| cuft of Conductor | 0.00 cuft | Hydrostatic Pressure: | 876.60 PSI |
| (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft) | | Pressure of the fluids inside casing | |
| cuft of Casing | 671.06 cuft | Displacement: | 493.70 psi |
| (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length) | | Shoe Joint: | 31.94 psi |
| Total Slurry Volume | 689.85 cuft | Total | 525.64 psi |
| (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing) | | Differential Pressure: | 350.96 psi |
| bbls of Slurry | 122.86 bbls | Collapse PSI: | |
| (Total Slurry Volume) X (.1781) | | Burst PSI: | 3520.00 psi |
| Sacks Needed | 463 sk | Total Water Needed: | |
| (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement) | | 221.59 bbls | |
| Mix Water | 82.46 bbls | | |
| (Sacks Needed) X (Gallons Per Sack) ÷ 42 | | | |

X
Authorization To Proceed



Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation
Cobra 30C-14HZ

INVOICE #
LOCATION
FOREMAN

Weld
Calvin Reimers
Date
12/9/2014

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DESCRIPTION OF JOB EVENTS

| DESCRIPTION OF JOE EVENTS | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|-------|-------|------------|-------|------|------|------------|-----|------|------|------------|------|------|-----|------------|------|-----|------|------------|-----|--|--|
| Safety Meeting | | 751am | Displace 1 | | | | Displace 2 | | | | Displace 3 | | | | Displace 4 | | | | Displace 5 | | | |
| MIRU | 705am | 810am | BBLS | Time | PSI | BBLS | Time | PSI | BBLS | Time | PSI | BBLS | Time | PSI | BBLS | Time | PSI | BBLS | Time | PSI | | |
| CIRCULATE | | | 0 | 841am | 60 | 0 | | | 0 | | | 0 | | | 0 | | | 0 | | | | |
| | | | 10 | 843am | 30 | 10 | | | 10 | | | 10 | | | 10 | | | 10 | | | | |
| | | | 20 | 845am | 90 | 20 | | | 20 | | | 20 | | | 20 | | | 20 | | | | |
| | | | 30 | 847am | 90 | 30 | | | 30 | | | 30 | | | 30 | | | 30 | | | | |
| | | | 40 | 849am | 180 | 40 | | | 40 | | | 40 | | | 40 | | | 40 | | | | |
| 840am | | | 50 | 851am | 280 | 50 | | | 50 | | | 50 | | | 50 | | | 50 | | | | |
| | | | 60 | 853am | 350 | 60 | | | 60 | | | 60 | | | 60 | | | 60 | | | | |
| | | | 70 | 855am | 400 | 70 | | | 70 | | | 70 | | | 70 | | | 70 | | | | |
| | | | 80 | 857am | 410 | 80 | | | 80 | | | 80 | | | 80 | | | 80 | | | | |
| | | | 90 | 859am | 340 | 90 | | | 90 | | | 90 | | | 90 | | | 90 | | | | |
| M & P | | | 100 | Bump | 1360 | 100 | 901am | | 100 | | | 100 | | | 100 | | | 100 | | | | |
| | | | 110 | Bump | 1020 | 110 | 903am | | 110 | | | 110 | | | 110 | | | 110 | | | | |
| | | | 120 | | | 120 | | | 120 | | | 120 | | | 120 | | | 120 | | | | |
| | | | 130 | | | 130 | | | 130 | | | 130 | | | 130 | | | 130 | | | | |
| | | | 140 | | | 140 | | | 140 | | | 140 | | | 140 | | | 140 | | | | |
| % Excess | | 16% | 150 | | | 150 | | | 150 | | | 150 | | | 150 | | | 150 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| Mixed bbls | | 82.46 | | | | | | | | | | | | | | | | | | | | |
| Total Sacks | | 463 | | | | | | | | | | | | | | | | | | | | |
| bbl Returns | | 16 | | | | | | | | | | | | | | | | | | | | |
| Water Temp | | 74.2 | | | | | | | | | | | | | | | | | | | | |

Notes:

The day

1/2 bbl Back on Bleed Off

X

Work Preformed

X

Title

X

Date

SERIES 2000

