



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/24/2014
 Invoice # 35074
 API# _____
 Foreman: kirk kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: thomsen 3n-31hz

County: Weld
 State: Colorado
 Sec: 7
 Twp: 2n
 Range: 65w

Consultant: randy
 Rig Name & Number: major 29
 Distance To Location: 10
 Units On Location: 4030-3103/4024-3203
 Time Requested: 700 am
 Time Arrived On Location: 430 am
 Time Left Location: 12:30 pm

WELL DATA

Casing Size OD (in) : 9.625
 Casing Weight (lb) : 36.00
 Casing Depth (ft.) : 1,328
 Total Depth (ft) : 1347
 Open Hole Diameter (in.) : 13.50
 Conductor Length (ft) : _____
 Conductor ID : _____
 Shoe Joint Length (ft) : 42
 Landing Joint (ft) : 8
 Max Rate: _____
 Max Pressure: _____

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: _____
 Fluid Ahead (bbls): 30.0
 H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.23 **cuft**
 (Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 0.00 **cuft**
 (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 752.88 **cuft**
 (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 771.11 **cuft**
 (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 137.33 **bbls**
 (Total Slurry Volume) X (.1781)

Sacks Needed 518 **sk**
 (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 92.17 **bbls**
 (Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 100.04 **bbls**
 (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 979.67 **PSI**

Pressure of the fluids inside casing

Displacement: 554.50 **psi**

Shoe Joint: 30.98 **psi**

Total 585.48 **psi**

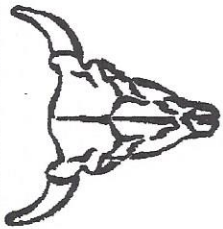
Differential Pressure: 394.18 **psi**

Collapse PSI: 2020.00 **psi**

Burst PSI: 3520.00 **psi**

Total Water Needed: 242.20 **bbls**

X [Signature]
 Authorization to Proceed



**Bison Oil Well Cementing
Single Cement Surface Pipe**

INVOICE # 35074
 LOCATION Weld
 FOREMAN kirk kallhoff
 Date 11/24/2014

Customer Anadarko Petroleum Corporation
 Well Name thomsen 3n-31hz

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
Safety Meeting	1001a														
MIRU	830a														
CIRCULATE	1028a														
Drop Plug															
1108 am															
M & P															
Time															
1035 am															
1105 am stop															
% Excess	16%														
Mixed bbls	92														
Total Sacks	517														
bbl Returns	23														
Water Temp															

Notes:

bumped plug at 1134 am at 1420 psi

floats held

X *Randy Gail*
 Work Performed

X *APC Consultant*
 Title

X
 Date

M/D TOTCO 2000 SERIES

