



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/12/2014
 Invoice # 35067
 API# _____
 Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation
Well Name: dejane state 1c-36hz

County: Weld
 State: Colorado
 Sec: 36
 Twp: 4n
 Range: 66w

Consultant: toby
 Rig Name & Number: major 42
 Distance To Location: 5
 Units On Location: 4030-3103/4024-3203
 Time Requested: 100 am
 Time Arrived On Location: 1130 pm
 Time Left Location: 1:30 pm

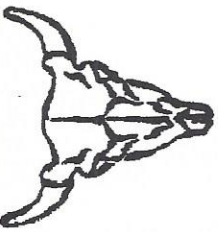
WELL DATA	
Casing Size OD (in) :	<u>9.625</u>
Casing Weight (lb) :	<u>36.00</u>
Casing Depth (ft) :	<u>1,205</u>
Total Depth (ft) :	<u>1223</u>
Open Hole Diameter (in.) :	<u>13.50</u>
Conductor Length (ft) :	
Conductor ID :	
Shoe Joint Length (ft) :	<u>42</u>
Landing Joint (ft) :	<u>8</u>
Max Rate:	
Max Pressure:	

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

Calculated Results	Displacement:	90.53 bbls
cuft of Shoe <u>18.23</u> cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)	
cuft of Conductor <u>0.00</u> cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Pressure of cement in annulus	
cuft of Casing <u>683.15</u> cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Hydrostatic Pressure: <u>888.93</u> PSI	
Total Slurry Volume <u>701.38</u> cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Pressure of the fluids inside casing	
bbls of Slurry <u>124.92</u> bbls (Total Slurry Volume) X (.1781)	Displacement: <u>501.46</u> psi	
Sacks Needed <u>471</u> sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Shoe Joint: <u>30.98</u> psi	
Mix Water <u>83.83</u> bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Total <u>532.45</u> psi	
	Differential Pressure: <u>356.48</u> psi	
	Collapse PSI: <u>2020.00</u> psi	
	Burst PSI: <u>3520.00</u> psi	
	Total Water Needed: <u>224.36</u> bbls	

X [Signature]
 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.



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

INVOICE #
LOCATION
FOREMAN
Date

35067
Weid
Kirk Kallhoff
11/13/2014

Customer
Well Name

Anadarko Petroleum Corporation
dejane state 1c-36hz

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	1050am															
MIRU	800am															
CIRCULATE	1120am															
Drop Plug																
	1157 am															
M & P																
Time																
		Sacks														
1127 am		471														
1153 am stop																
% Excess			16%													
Mixed bbls			83.8													
Total Sacks			471													
bbl Returns			18													
Water Temp																

Notes:

bumped plug at 1220 pm 1380 psi at 91 bbls

124.9 bbls slurry

floats held

X

Work Performed

X

Title

X

Date

11-13-14