



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 11/17/2017
 Invoice #: 900211
 API#: 05-123-45502
 Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation
Well Name: Papa Jo 2-25 35C-17HZ

County: Weld
 State: Colorado
 Sec: 8
 Twp: 1N
 Range: 68W
 Consultant: Matt
 Rig Name & Number: Cartel 88
 Distance To Location: 42
 Units On Location: 1027-3103/4020-3214/4030/321
 Time Requested: 1500
 Time Arrived On Location: 1410
 Time Left Location:

WELL DATA	Cement Data
Casing Size OD (in) : 9.625	Cement Name: BFN III
Casing Weight (lb) : 36.00	Cement Density (lb/gal) : 14.2
Casing Depth (ft.) : 1,865	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1875	Gallons Per Sack: 7.40
Open Hole Diameter (in.) : 13.50	% Excess: 10%
Conductor Length (ft) : 80	Displacement Fluid lb/gal: 8.3
Conductor ID : 15.25	BBL to Pit:
Shoe Joint Length (ft) : 44	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 15	H2O Wash Up (bbls): 20.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 bbl with Die in 2nd 10

Calculated Results	Pressure of cement in annulus
Displacement: 141.94 bbls (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)	Hydrostatic Pressure: 1375.81 PSI
cuft of Shoe 19.10 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Pressure of the fluids inside casing
cuft of Conductor 61.05 cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Displacement: 785.18 psi
cuft of Casing 959.62 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Shoe Joint: 32.46 psi
Total Slurry Volume 1039.77 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Total 817.64 psi
bbls of Slurry 185.18 bbls (Total Slurry Volume) X (.1781)	Differential Pressure: 558.17 psi
Sacks Needed 703 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Collapse PSI: 2020.00 psi
Mix Water 123.78 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Burst PSI: 3520.00 psi
	Total Water Needed: 315.72 bbls

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.



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Single Cement Surface Pipe**

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Well Name

Anadarko Petroleum Corporation
Papa Jo 2-25 35C-17HZ

INVOICE #	900211
LOCATION	Weld
FOREMAN	Corey Barras
Date	11/17/2017

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DESCRIPTION OF JOB EVENTS

Amount Pumped	Time	Event	Description	Rate	BBLs	Pressure
% Excess 10%	1420	What rig is doing upon Bison Arrival	Running Casing			
Mixed bbls 123.78	1430	JSA	Bison Crew			
Total Sacks 703	1445	Rig up				
bbl Returns 23	1700	Safety Meeting	Bison and Rig crew			
Water Temp 58	1740	Start Job				
	1742	Pressure Test				
Notes:						
	1744	Spacer Ahead	2nd 10 with die	7	30	80
	1750	Lead Cement	14.2 ppg	8	185	90
	1820	Shutdown				
	1822	Drop Plug	Preloaded in plug container			
	1824	Start Displacement		7	90	340
	1855	Bump Plug	500 over final lift (1180 PSI)	2	142	520
	1857	Floats Held	Held for 2 MIN with .5 bbl back			
	1900	End Job				
	1905	Rig Down				
	1930	Leave Location				

X
Work Performed

X WSC
Title

X 11/17/17
Date

Papa Jo 2-25 35C-17HZ

