



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/23/2017
 Invoice #: 900196
 API#: 05-123-45228
 Foreman: Corey B.

Customer: Anadarko Petroleum Corporation
Well Name: Burough 26N-17HZ

County: Weld
 State: Colorado
 Consultant: Matt
 Rig Name & Number: Cartel 88
 Distance To Location: 32
 Units On Location: 027/3103-4033/3212-4020/321
 Time Requested: 1530
 Time Arrived On Location: 1430
 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.) : 1,856	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1866	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	Displacement: 141.24 bbls
cuft of Shoe 19.10 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 61.05 cuft (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	Pressure of cement in annulus Hydrostatic Pressure: 1369.17 PSI
cuft of Casing 954.78 cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing Displacement: 781.30 psi Shoe Joint: 32.46 psi Total: 813.76 psi
Total Slurry Volume 1034.93 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Differential Pressure: 555.41 psi
bbls of Slurry 184.32 bbls (Total Slurry Volume) X (.1781)	Collapse PSI: 2020.00 psi Burst PSI: 3520.00 psi
Sacks Needed 699 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Total Water Needed: 314.45 bbls
Mix Water 123.21 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	

X *Byler*
 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**

Customer
Well Name

Anadarko Petroleum Corporation
Burough 26N-17HZ

INVOICE #
LOCATION
FOREMAN
Date

900196
Weld
Corey B.
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DESCRIPTION OF JOB EVENTS

Amount Pumped	Time	Event	Description	Rate	BBLs	Pressure
% Excess 10%	1430	What rig is doing upon Bison Arrival	Running Casing			
Mixed bbls 123.21	1440	JSA	Bison Crew			
Total Sacks 699	1450	Rig up				
bbl Returns 13	1800	Safety Meeting	Bison and Rig crew			
Water Temp 63	1820	Start Job				
	1822	Pressure Test				
Notes:						
	1824	Spacer Ahead	2nd 10 with die	6	30	50
	1830	Lead Cement	14.2 ppg	6	184	60
	1904	Shutdown				
	1906	Drop Plug	Preloaded in plug container			
	1909	Start Displacement		7	90	320
	1932	Bump Plug	500 over final lift 1100 psi	2	141	500
	1934	Floats Held	Held for 2 MIN with .5 bll back			
	1935	End Job				
	1945	Rig Down				
	2010	Leave Location				

X 
Work Performed

X Co. Man
Title

X 10-23-17
Date

Borough 26N-17HZ

