



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/25/2018
Invoice #: 200340
API#
Foreman: KirkKallhoff

Customer: Anadarko Petroleum Corporation

Well Name: castle pines 19-9hz

County: Weld
State: Colorado
Sec: 23
Twp: 2N
Range: 66W

Consultant: levi
Rig Name & Number: Cartel 88
Distance To Location: 25
Units On Location: 4028/4030/4032
Time Requested: 330 am
Time Arrived On Location: 1230 am
Time Left Location: 130 am

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.) : 1,830	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1840	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) : 40	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 8	H2O Wash Up (bbls): 10.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 bbl with Die in 2nd 10

Casing ID	8.921	Casing Grade	J-55 only used
Calculated Results	Displacement:	139.00	bbls
cuft of Shoe 17.36 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		
cuft of Casing 940.80 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Hydrostatic Pressure:	1349.99	PSI
Total Slurry Volume 1019.22 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Pressure of the fluids inside casing		
bbls of Slurry 181.52 bbls (Total Slurry Volume) X (.1781)	Displacement:	771.81	psi
Sacks Needed 689 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Shoe Joint:	29.51	PSI
Mix Water 121.34 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Total	801.32	psi
	Differential Pressure:	548.67	psi
	Collapse PSI:	2020.00	psi
	Burst PSI:	3520.00	psi
	Total Water Needed:	300.34	bbls

X Kallhoff
Authorization To Proceed



Customer
Well Name

castle pines 19-9hz

Date _____

9/25/2018

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DESCRIPTION OF JOB EVENTS

ix

Work Performed

X

Title

2

Date _____

SERIES 2000

