



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 7/2/2019

Invoice # ~~900364~~ 900364

API# 05-123-50072

Foreman: Corey Barras

Customer: Anadarko Petroleum Corporation

Well Name: Sarchet 21-2HZ

County: Weld
State: Colorado

Sec: 28
Twp: 3n
Range: 66w

Consultant: Bryan

Rig Name & Number: CARTEL 88

Distance To Location: 21

Units On Location: 4028/3103-4024/3201-4023/4016

Time Requested: 2000

Time Arrived On Location: 1900

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.) : 1,848	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1858	Gallons Per Sack: 7.48
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) : 42	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 8	H2O Wash Up (bbls): 20.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 BBL WATER, DYE IN 2ND 10

Casing ID 8.921 Casing Grade J-55 only used

Calculated Results	Pressure of cement in annulus
cuft of Shoe 18.23 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Displacement: 140.24 bbls (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)	Hydrostatic Pressure: 1363.27 PSI
cuft of Casing 950.48 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing
Total Slurry Volume 1029.76 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Displacement: 778.71 psi
bbls of Slurry 183.40 bbls (Total Slurry Volume) X (.1781)	Shoe Joint: 30.98 psi
Sacks Needed 696 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Total 809.70 psi
Mix Water 123.92 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Differential Pressure: 553.57 psi
	Collapse PSI: 2020.00 psi
	Burst PSI: 3520.00 psi
	Total Water Needed: 314.15 bbls

X Authorization To Proceed

Sarchet 21-2HZ

