



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/4/2019
Invoice #: 300261
API#: 05-123-49235
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation
Well Name: MAB 15-12HZ

County: Weld
State: Colorado
Sec: 15
Twp: 1N
Range: 66W
Consultant: BRET
Rig Name & Number: CARTEL 88
Distance To Location: 33
Units On Location: 4045-3103,4027-3216,4044-3213
Time Requested: 1300
Time Arrived On Location: 1000
Time Left Location: 1530

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.) : 1,860	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1870	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: 14.0
Shoe Joint Length (ft) : 42	Fluid Ahead (bbls): 30.0
Landing Joint (ft) : 5	H2O Wash Up (bbls): 10.0
Max Rate: 8	Spacer Ahead Makeup
Max Pressure: 2000	30 BBL WATER, DYE IN 2ND 10

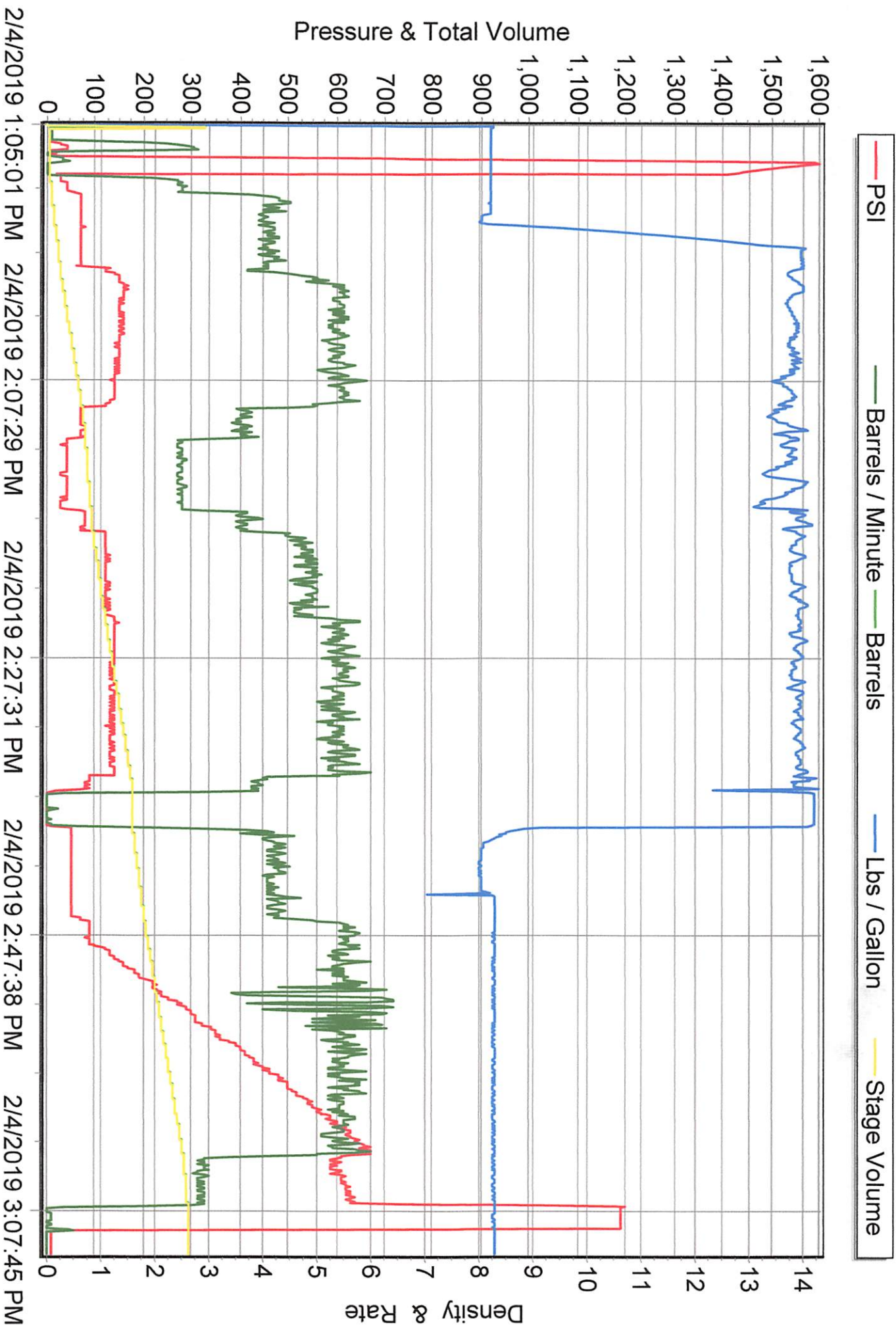
Casing ID	8.921	Casing Grade	J-55 only used
Calculated Results		Displacement: 140.94 bbls	
cuft of Shoe	18.40	cuft	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
(Casing ID Squared) X (.005454) X (Shoe Joint ft)			
cuft of Conductor	61.05	cuft	Pressure of cement in annulus
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)			Hydrostatic Pressure: 1372.47 PSI
cuft of Casing	957.19	cuft	Pressure of the fluids inside casing
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)			Displacement: 783.93 psi
Total Slurry Volume	1036.63	cuft	Shoe Joint: 31.26 psi
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)			Total 815.19 psi
bbls of Slurry	184.62	bbls	Differential Pressure: 557.28 psi
(Total Slurry Volume) X (.1781)			
Sacks Needed	700	sk	Collapse PSI: 2020.00 psi
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)			Burst PSI: 3520.00 psi
Mix Water	124.74	bbls	Total Water Needed: 305.68 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42			

X

Authorization To Proceed

Date _____

MAB 15-12HZ SURFACE





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Spacer Ahead Makeup
30 BBL WATER, DYE IN 2ND 10

Casing ID 8.921 Casing Grade J-55 only used

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Total Slurry Volume 1036.63 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 184.62 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 700 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 124.74 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 140.94 bbls

(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 1372.47 PSI

Pressure of the fluids inside casing

Displacement: 783.93 psi

Shoe Joint: 31.26 psi

Total 815.19 psi

Differential Pressure: 557.28 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 305.68 bbls

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