



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/6/2019
Invoice #: 300263
API#: 05-123-49237
Foreman: JASON KELEHER

Customer: Anadarko Petroleum Corporation

Well Name: MAB 15-9HZ

County: Weld
State: Colorado
Sec: 15
Twp: 1N
Range: 66W
Consultant: BRYAN
Rig Name & Number: CARTEL 88
Distance To Location: 33
Units On Location: 1045-3103,4027-3216,4033-320
Time Requested: 1730
Time Arrived On Location: 1530
Time Left Location: 2230

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.) : 1,884	Cement Yield (cuft) : 1.48
Total Depth (ft) : 1894	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: 22.0
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

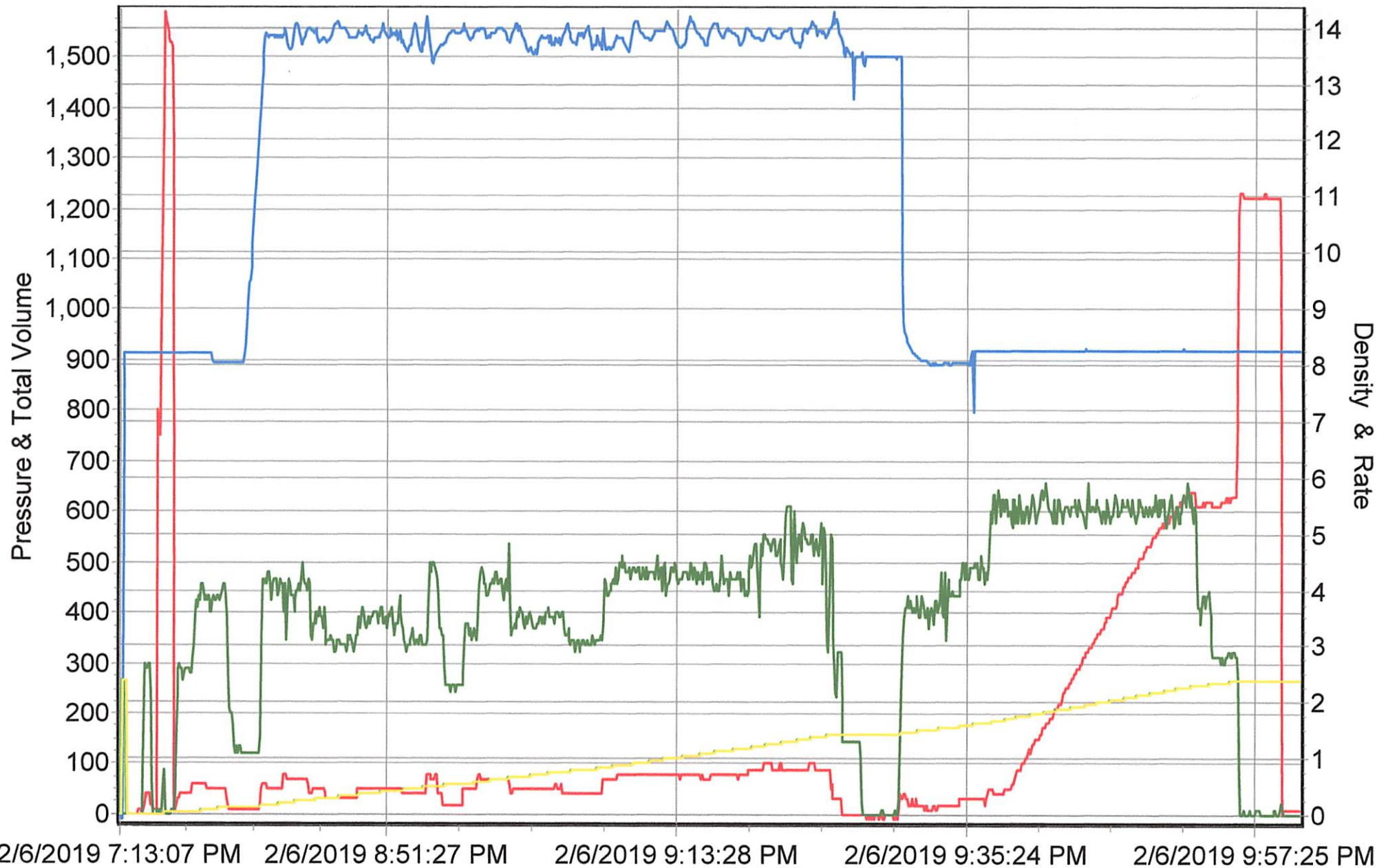
Casing ID	8.921	Casing Grade	J-55 only used
Calculated Results	Displacement:	142.83	bbls
cuft of Shoe	18.04	cuft	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
(Casing ID Squared) X (.005454) X (Shoe Joint ft)	Pressure of cement in annulus		
cuft of Conductor	61.05	cuft	Hydrostatic Pressure:
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	1389.92	PSI	
cuft of Casing	969.90	cuft	Pressure of the fluids inside casing
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Displacement:	794.48	psi
Total Slurry Volume	1048.99	cuft	Shoe Joint:
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	30.66	psi	
bbls of Slurry	186.82	bbls	Total
(Total Slurry Volume) X (.1781)	825.14	psi	
Sacks Needed	709	sk	Differential Pressure:
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	564.78	psi	
Mix Water	126.23	bbls	Collapse PSI:
(Sacks Needed) X (Gallons Per Sack) ÷ 42	2020.00	psi	
	Burst PSI:	3520.00	psi
	Total Water Needed:	309.06	bbls

X
Authorization To Proceed

Date _____

MAB 15-9HZ SURFACE

— PSI — Barrels / Minute — Barrels — Lbs / Gallon — Stage Volume





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WELL DATA

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Max Pressure: 2000

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Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 10.0

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

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.04 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 61.05 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 969.90 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1048.99 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 186.82 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 709 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 126.23 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.83 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1389.92 PSI

Pressure of the fluids inside casing

Displacement: 794.48 psi

Shoe Joint: 30.66 psi

Total 825.14 psi

Differential Pressure: 564.78 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 309.06 bbls

X

Authorization To Proceed