

Bison Oil Well Cementing Single Cement Surface Pipe

Date: 10/11/2014

Invoice # 35053

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: kerr 29c-12hz

County: Weld

State: Colorado

Sec: 13

Twp: 2n

Range: 67w

Consultant: elis

Rig Name & Number: major 29

Distance To Location: 21

Units On Location: 4030-3103/4017-3210

Time Requested: 300 am

Time Arrived On Location: 115 am

Time Left Location: 6:00 pm

WELL DATA

Casing Size OD (in) : 9.625
 Casing Weight (lb) : 36.00
 Casing Depth (ft.) : 1,045
 Total Depth (ft) : 1063
 Open Hole Diameter (in.) : 13.50
 Conductor Length (ft) :
 Conductor ID :
 Shoe Joint Length (ft) : 38
 Landing Joint (ft) : 8

Max Rate:

Max Pressure:

Cement Data

Cement Name: BFN III
 Cement Density (lb/gal) : 14.2
 Cement Yield (cuft) : 1.49
 Gallons Per Sack: 7.48
 % Excess: 16%
 Displacement Fluid lb/gal: 8.3
 BBL to Pit:
 Fluid Ahead (bbls): 30.0
 H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 16.49 cuft
 (Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 0.00 cuft
 (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 592.44 cuft
 (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 608.93 cuft
 (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 108.45 bbls
 (Total Slurry Volume) X (.1781)

Sacks Needed 409 sk
 (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 72.78 bbls
 (Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 78.47 bbls
 (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 770.90 PSI

Pressure of the fluids inside casing

Displacement: 434.20 psi

Shoe Joint: 28.03 psi

Total 462.23 psi

Differential Pressure: 308.66 psi

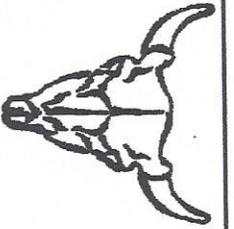
Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 201.25 bbls

[Signature]
 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
 Kerr 29c-12hz

INVOICE #
 LOCATION
 FOREMAN
 Date

35053
 Weld
 Kirk Kallhoff
 10/11/2014

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DESCRIPTION OF JOB EVENTS

Safety Meeting MRU	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5			
	356am 300am 412am	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI	BBLs	Time	PSI
CIRCULATE	0	446am	10	0	10			0	10					0	10	
Drop Plug	10	448am	50	10	20			10	20					20	20	
	20	451am	80	20	30			20	30					30	30	
	30	453am	130	30	40			30	40					40	40	
	40	455am	190	40	50			40	50					50	50	
M & P	50	457am	260	50	60			50	60					60	60	
	60	459am	340	60	70			60	70					70	70	
Time	70	502am	380	70	80			70	80					80	80	
418 am	80			80	90			80	90					90	90	
442 am stop	90			90	100			90	100					100	100	
	100			100	110			100	110					110	110	
	110			110	120			110	120					120	120	
% Excess	120			120	130			120	130					130	130	
Mixed bbls	130			130	140			130	140					140	140	
Total Sacks	140			140	150			140	150					150	150	
bbl Returns	150			150				150								
Water Temp	1.1															

Notes:

bumped plug at 80 bbls at 507 am 1370 psi

108.5 bbls slurry

floats held

X *Ellie ...* Apr 29

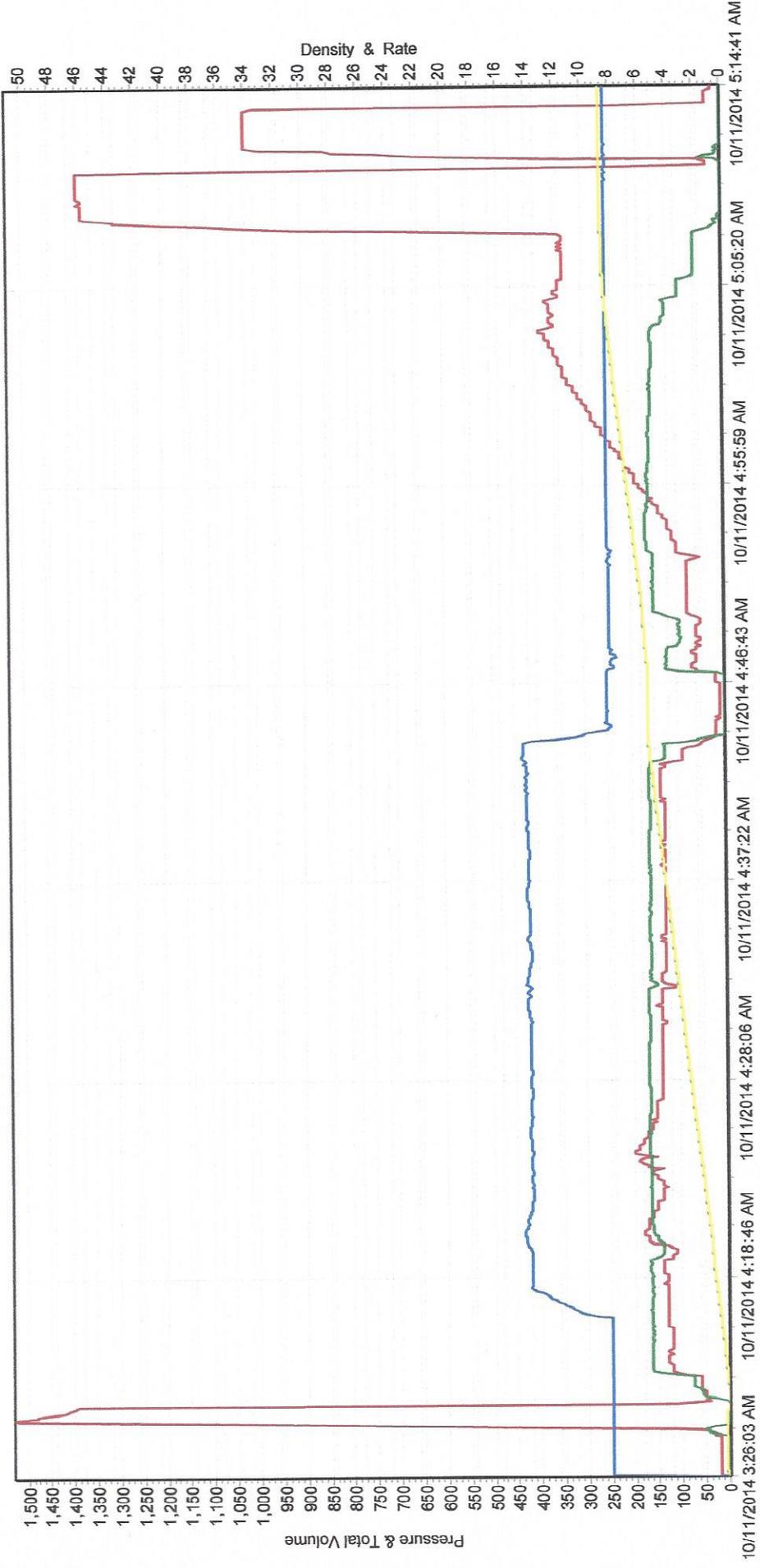
X _____
 Title

X 10-11-14
 Date

Work Performed

M/D TOTCO 2000 SERIES

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



Release and Indemnification

Customer acknowledges and assumes the risks associated with oil well drilling, cementing and acidizing, including, without limitation, destabilization, loss of production, contamination, fracturing and loss of well control. Customer agrees to release Bison Oil Well Cementing, Inc., Bison Energy Services, Inc., its agents, employees and assigns, from any and all liability for any and all damages whatsoever to property of any kind owned by, in the possession of, or leased by customer and those persons or entities customer has the ability to bind by contract. Customer also agrees to indemnify and hold harmless Bison Oil Well Cementing, Inc., Bison Energy Services, Inc., its agents, employees and assigns, from and against any and all liability, claims, costs, expenses, attorneys fees and damages whatsoever for claims, costs, expenses, attorneys fees and damages whatsoever for personal injury, illness, death, property damage and loss resulting from: loss or reduction of production, destabilization loss of oil well control, failure of or contamination by acid stimulation, hydraulic fracturing, cementing, pumping services, incompatible fluid or other processes to stimulate, complete or end production, and/or any other condition. Customer's release, indemnity and hold harmless obligation shall apply even if the liability and claims are caused by the sole, concurrent, active or passive negligence, fault, or strict liability of Bison Oil Well Cementing, Inc. and/or Bison Energy Services, Inc. or any defect in the data, products, supplies, materials or equipment furnished by Bison Oil Well Cementing, Inc. whether in the design, manufacturing, maintenance, or marketing thereof or from failure to warn of such defect. In the event that any portion of this release and indemnity is found by a court of competent jurisdiction to be inoperable or unenforceable, the remaining portions and provisions shall apply, and customer agrees that the contract price herein shall be the limit of Bison Oil Well Cementing, Inc.'s liability, if any.