

Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/13/2014

Invoice # 35038

API#

Foreman: Kirk Kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: ridgeview 3c-11hzhz

County: Weld

State: Colorado

Sec: 1

Twp: 4n

Range: 65w

Consultant: toby

Rig Name & Number: major 42

Distance To Location: 28

Units On Location: 4030-3103/4018-3204

Time Requested: 1200 am

Time Arrived On Location: 900 pm

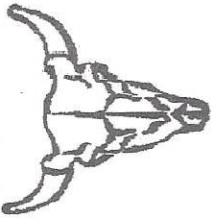
Time Left Location: 5:30 pm

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) :	1,262	Cement Yield (cuft) :	1.49
Total Depth (ft) :	1280	Gallons Per Sack:	7.48
Open Hole Diameter (in.) :	13.50	% Excess:	16%
Conductor Length (ft) :		Displacement Fluid lb/gal:	8.3
Conductor ID :		BBL to Pit:	
Shoe Joint Length (ft) :	40	Fluid Ahead (bbls):	30.0
Landing Joint (ft) :	8	H2O Wash Up (bbls):	20.0
Max Rate:		Spacer Ahead Makeup	
Max Pressure:			

Calculated Results	Displacement: 95.09 bbls (Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
cuft of Shoe 17.36 cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	Pressure of cement in annulus Hydrostatic Pressure: 930.98 PSI
cuft of Conductor 0.00 cuft (Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)	
cuft of Casing 715.46 cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of the fluids inside casing Displacement: 526.90 psi Shoe Joint: 29.51 psi Total 556.41 psi
Total Slurry Volume 732.82 cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	
bbls of Slurry 130.52 bbls (Total Slurry Volume) X (.1781)	
Sacks Needed 492 sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Differential Pressure: 374.57 psi
Mix Water 87.59 bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Collapse PSI: 2020.00 psi Burst PSI: 3520.00 psi
	Total Water Needed: 232.68 bbls

X 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**

INVOICE # 35038
 LOCATION Weld
 FOREMAN Kirk Kallhoff
 Date 9/13/2014

Customer Anadarko Petroleum Corporation
 Well Name ridgerview 3c-11hzhz

DESCRIPTION OF JOB EVENTS

	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
Safety Meeting	600am														
MIRU	520am														
CIRCULATE	548am														
Drop Plug															
	727 am														
M & P															
Time															
	657 am														
	723 am stop														
% Excess			16%												
Mixed bbbls			87.5												
Total Sacks			491												
bbbl Returns			22												
Water Temp															

Notes:

bumped plug at 95 bbbls at 750 am 1410 psi

floats held

130.5 bbbls slurry

X

X Co-man

X 7-13-14

Work Performed

Title

Date

M/D TOTCO 2000 SERIES

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

