



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 2/26/2015

Invoice # 35124

API#

Foreman: kirk kallhoff

Customer: Anadarko Petroleum Corporation

Well Name: skim 35n-28hz

County: Weld

State: Colorado

Sec: 11

Twp: 4n

Range: 65w

Consultant: toby

Rig Name & Number: advanced 10

Distance To Location: 10

Units On Location: 4038-3103/4034-3205

Time Requested: 1100 pm

Time Arrived On Location: 1000 pm

Time Left Location: 1:30 pm

WELL DATA

Casing Size OD (in) : 9.625
 Casing Weight (lb) : 36.00
 Casing Depth (ft.) : 1,152
 Total Depth (ft) : 1170
 Open Hole Diameter (in.) : 13.50
 Conductor Length (ft) : 47
 Conductor ID : 16
 Shoe Joint Length (ft) : 44
 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: 15%
 Displacement Fluid lb/gal: 8.3
 BBL to Pit:
 Fluid Ahead (bbls): 30.0
 H2O Wash Up (bbls): 10.0

Spacer Ahead Makeup

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 19.10 cuft
 (Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 41.88 cuft
 (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 621.05 cuft
 (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 682.03 cuft
 (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 121.47 bbls
 (Total Slurry Volume) X (.1781)

Sacks Needed 458 sk
 (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 81.52 bbls
 (Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 86.28 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 849.83 PSI

Pressure of the fluids inside casing

Displacement: 477.75 psi

Shoe Joint: 32.46 psi

Total 510.21 psi

Differential Pressure: 339.62 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 207.80 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**

Customer
Well Name

Anadarko Petroleum Corporation
skim 35n-28hz

INVOICE #
LOCATION
FOREMAN
Date

35124
Weld
kirk kallhoff
2/27/2015

Treatment Report Page 2

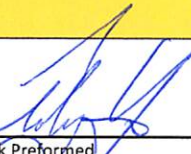
DESCRIPTION OF JOB EVENTS

		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	1056pm															
MIRU	1015pm															
CIRCULATE	1135pm	0	1213a	10	0			0			0			0		
Drop Plug		10	1216a	70	10			10			10			10		
1213 am		20	1218a	70	20			20			20			20		
		30	1220a	70	30			30			30			30		
		40	1222a	110	40			40			40			40		
M & P		50	1224a	180	50			50			50			50		
Time	Sacks	60	1226a	250	60			60			60			60		
1142 pm	456	70	1228a	320	70			70			70			70		
1210 am stop		80	1230a	370	80			80			80			80		
		90			90			90			90			90		
		100			100			100			100			100		
		110			110			110			110			110		
% Excess	15%	120			120			120			120			120		
Mixed bbls	81.2	130			130			130			130			130		
Total Sacks	456	140			140			140			140			140		
bbl Returns	13	150			150			150			150			150		
Water Temp																

Notes:

bumped plug at 1236 am 870 psi

floats held

X 
Work Performed

X _____
Title

X 2-27-15
Date

M/D TOTCO 2000 SERIES

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

