



Bison Oil Well Cementing
 1547 Gaylord Street
 Denver, CO 80206

FIELD INVOICE #

72037

FIELD INVOICE

WELL NO. AND FARM GREENLEAF 4N-2HZ	COUNTY WELD	STATE Colorado	DATE 12/8/2014	Contractor
CHARGE TO Anadarko Petroleum Corporation	WELL LOCATION Section 2		TWP 2N	RANGE 65W
PO Box 4995	DELIVERED TO CR-49-CR-22		LOCATION 1 LA SALLE	CODE
The Woodlands, TX 77387	SHIPPED VIA 3101-4029-3206-4019		LOCATION 2 CR49-CR-22	CODE
	TYPE AND PURPOSE OF JOB CONDUCTOR PIPE		LOCATION 3 LA SALLE	CODE
			WELL TYPE	CODE

ITEM	DESCRIPTION	UNITS		AMOUNT
		QTY.	MEAS.	
PUMP CHARGE				
	CONDUCTOR PIPE	1		
MILLEAGE CHARGE				
	Pickup	\$1.50 per Mile	44	
	Truck/Equipment	\$4.00 per Mile	44	
	Truck/Equipment	\$4.00 per Mile	44	
CEMENT CHARGE:				
	BFN III		200	
ADDITIVES CHARGE:				
	Sugar		50	
	Larry Hersh			
	USER ID: ktq304			
	WBS/WO/CC: 2101853 DRL			
FLOAT EQUIPMENT:				
	G/L Acct:	80012090		
	Conductor			
	CONTAIMENT		1	
OTHER CHARGES:				
	DEPTH CHARGE			
	Iron Inspection		1	
	DATA ACQUISITION FEE		1	
	Supervisor Charge		1	
	Wait Time		1	

If this account is not paid within 30 days of invoice date a FINANCE CHARGE will be made. Computed at a single monthly rate of 1 1/2% which is equal to an ANNUAL PERCENTAGE RATE OF 18%.

TAX

[Signature]
 Customer or Agent

SUBJECT TO CORRECTION

[Signature]
 Bison Oil Well Cementing, Inc. Representative



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/8/2014
 Invoice # 72037
 API# 05-123-40623
 Foreman: AARON CARRASCO

Customer: Anadarko Petroleum Corporation
Well Name: GREENLEAF 4N-2HZ

County: WELD Consultant: LARRY
 State: Colorado Rig Name & Number: _____
 Distance To Location: 21 MILES
 Sec: 2 Units On Location: 3101 4029-
 Twp: 2N Time Requested: 11AM
 Range: 65W Time Arrived On Location: 10AM
 Time Left Location: _____

WELL DATA	
Casing Size OD (in) :	
Casing Weight (lb) :	
Casing Depth (ft.) :	100
Total Depth (ft) :	100
Open Hole Diameter (in.) :	
Conductor Length (ft) :	
Conductor ID :	
Shoe Joint Length (ft) :	
Landing Joint (ft) :	
Max Rate:	2
Max Pressure:	300

Cement Data	
Cement Name:	BFN III
Cement Density (lb/gal) :	15.2
Cement Yield (cuft) :	1.27
Gallons Per Sack:	5.89
% Excess:	30%
Displacement Fluid lb/gal:	8.3
BBL to Pit:	
Fluid Ahead (bbls):	30.0
H2O Wash Up (bbls):	20.0
Spacer Ahead Makeup	

Calculated Results	Displacement: #N/A bbls
cuft of Shoe #N/A cuft (Casing ID Squared) X (.005454) X (Shoe Joint ft)	(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)
cuft of Conductor #VALUE! cuft (Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)	
cuft of Casing #VALUE! cuft (Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)	Pressure of cement in annulus Hydrostatic Pressure: 78.96 PSI
Total Slurry Volume #N/A cuft (cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)	Pressure of the fluids inside casing Displacement: 43.12 psi Shoe Joint: 0.00 psi Total 43.12 psi
bbls of Slurry #N/A bbls (Total Slurry Volume) X (.1781)	Differential Pressure: 35.84 psi
Sacks Needed #VALUE! sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)	Collapse PSI: #N/A psi Burst PSI: #N/A psi
Mix Water #VALUE! bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42	Total Water Needed: #VALUE! 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.



DISP ON Well Cementing
Single Cement Surface Pipe

Customer
 Well Name

Anadarko Petroleum Corporation
 GREENLEAF 4N-2HZ

INVOICE #
 LOCATION
 FOREMAN
 Date

72057
 WELD
 AARON CARRASCO
 12/8/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

	4:05PM	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5			
		3:30PM	BBLS	Time	PSI	BBLS	Time	PSI									
Safety Meeting	N.A	0			0			0			0			0			
MIRU		10			10			10			10			10			
CIRCULATE		20			20			20			20			20			
Drop Plug		30			30			30			30			30			
		40			40			40			40			40			
		50			50			50			50			50			
M & P		60			60			60			60			60			
Time	Sacks	60			60			60			60			60			
5:05PM	200	63			70			70			70			70			
		80			80			80			80			80			
		90			90			90			90			90			
		100			100			100			100			100			
		110			110			110			110			110			
% Excess	#N/A	120			120			120			120			120			
Mixed bbls	28	130			130			130			130			130			
Total Sacks	200	140			140			140			140			140			
bbl Returns		150			150			150			150			150			
Water Temp	51																

Notes:

X _____
 Work Performed

X *Ellis Ramirez*
 Title

X 12-13-14
 Date