



Bison Oil Well Cementing  
 1547 Gaylord Street  
 Denver, CO 80206

FIELD INVOICE #

72036

**FIELD INVOICE**

WELL NO. AND FARM GREENLEAF 30N-2HZ		COUNTY WELD	STATE Colorado	DATE 12/8/2014	Contractor
CHARGE TO Anadarko Petroleum Corporation		WELL LOCATION			
PO Box 4995		Section 2	TWP 2N	RANGE 65W	
The Woodlands, TX 77387		DELIVERED TO CR-49-CR-22		LOCATION 1 LA SALLE	CODE
		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 GAS	CODE

ITEM	DESCRIPTION	UNITS		UNIT PRICE	AMOUNT
		QTY.	MEAS.		
<b>PUMP CHARGE</b>					
CONDUCTOR PIPE		1			
<b>MILLEAGE CHARGE</b>					
Pickup	\$1.50 per Mile	44			
Truck/Equipment	\$4.00 per Mile	44			
Truck/Equipment	\$4.00 per Mile	44			
<b>CEMENT CHARGE:</b>					
BFN III		200			
<b>ADDITIVES CHARGE:</b>					
Sugar		50			
Larry Hersh USER ID: ktq304 WBS/WO/CC: 2101927 DRL G/L Acct: 80012090 Conductor					
<b>FLOAT EQUIPMENT:</b>					
CONTAIMENT		1			
<b>OTHER CHARGES:</b>					
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

SUBJECT TO CORRECTION

*Elvis Armin*  
 Customer or Agent

*Adam Carrasco*  
 Bison Oil Well Cementing, Inc. Representative

Customers hereby acknowledges and specifically agrees to the terms and conditions on this work order, including, without limitation, the provisions on the riverside hereof which include the release and indemnity.



# Bison Oil Well Cementing Single Cement Surface Pipe

Date: 12/8/2014  
 Invoice #: 72036  
 API#: 05-123-40619  
 Foreman: AARON CARRASCO

**Customer:** Anadarko Petroleum Corporation  
**Well Name:** GREENLEAF 30N-2HZ

County: WELD  
 State: Colorado  
 Sec: 2  
 Twp: 2N  
 Range: 65W

Consultant: LARRY  
 Rig Name & Number:  
 Distance To Location: 21 MILES  
 Units On Location: 3101 4029-  
 Time Requested: 11AM  
 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		
<b>cuft of Shoe</b>	#N/A	cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)		
<b>cuft of Conductor</b>	#VALUE!	cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)		
<b>cuft of Casing</b>	#VALUE!	cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length )		
<b>Total Slurry Volume</b>	#N/A	cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)		
<b>bbls of Slurry</b>	#N/A	bbls
(Total Slurry Volume) X (.1781)		
<b>Sacks Needed</b>	#VALUE!	sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		
<b>Mix Water</b>	#VALUE!	bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42		

<b>Displacement:</b>	#N/A	bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)		
<b>Pressure of cement in annulus</b>		
<b>Hydrostatic Pressure:</b>	78.96	PSI
<b>Pressure of the fluids inside casing</b>		
<b>Displacement:</b>	43.12	psi
<b>Shoe Joint:</b>	0.00	psi
<b>Total</b>	43.12	psi
<b>Differential Pressure:</b>	35.84	psi
<b>Collapse PSI:</b>	#N/A	psi
<b>Burst PSI:</b>	#N/A	psi
<b>Total Water Needed:</b>	#VALUE!	bbls

X *Ellis Horn*  
 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  
 GREENLEAF 30N-2HZ

INVOICE #  
 LOCATION  
 FOREMAN  
 Date

72030  
 WELD  
 AARON CARRASCO  
 12/8/2014

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**DESCRIPTION OF JOB EVENTS**

	Time	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
		BBLS	Time	PSI												
Safety Meeting	4:05PM															
MIRU	3:30PM															
CIRCULATE	N.A	0			0			0			0			0		
Drop Plug		10			10			10			10			10		
		20			20			20			20			20		
		30			30			30			30			30		
		40			40			40			40			40		
M & P		50			50			50			50			50		
Time	Sacks	60			60			60			60			60		
4:08PM	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:

Notes section with multiple blank lines for recording observations.

X \_\_\_\_\_  
 Work Performed

X Ellis Johnson  
 Title

X 12/13/14  
 Date