



Bison Oil Well Cementing
1547 Gaylord Street
Denver, CO 80206

FIELD INVOICE #

72038

FIELD INVOICE

WELL NO. AND FARM		COUNTY	STATE	DATE	Contractor
GREENLEAF 29N-2HZ		WELD	Colorado	12/8/2014	
CHARGE TO		WELL LOCATION			
Anadarko Petroleum Corporation		Section	TWP	RANGE	
		2	2N	65W	
PO Box 4995		DELIVERED TO		LOCATION 1	CODE
		CR-49-CR-22		LA SALLE	
The Woodlands, TX 77387		SHIPPED VIA		LOCATION 2	CODE
		3101-4029-3206-4019		CR49-CR-22	
		TYPE AND PURPOSE OF JOB		LOCATION 3	CODE
		CONDUCTOR PIPE		LA SALLE	
				WELL TYPE	CODE
ITEM	DESCRIPTION	UNITS		AMOUNT	
		QTY.	MEAS.		
PUMP CHARGE					
	CONDUCTOR PIPE	1			
MILLEAGE CHARGE					
	Pickup				
	Truck/Equipment	\$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					
FLOAT EQUIPMENT: WBS/WO/CC: 2101856 DRL					
G/L Acct: 80012090					
Conductor					
	CONTAINMENT	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

SUBJECT TO CORRECTION

Customer or Agent

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 #: 72038
API#: 05-123-40628
Foreman: AARON CARRASCO

Customer: Anadarko Petroleum Corporation
Well Name: GREENLEAF 29N-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

Casing ID	#N/A	Casing Grade	J-55 only used
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)		Pressure of cement in annulus	
cuft of Casing #VALUE! cuft (Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)		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	
bbls of Slurry #N/A bbls (Total Slurry Volume) X (.1781)		Displacement: 43.12 psi	
Sacks Needed #VALUE! sk (Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)		Shoe Joint: 0.00 psi	
Mix Water #VALUE! bbls (Sacks Needed) X (Gallons Per Sack) ÷ 42		Total 43.12 psi	
		Differential Pressure: 35.84 psi	
		Collapse PSI: #N/A psi	
		Burst PSI: #N/A psi	
		Total Water Needed: #VALUE! bbls	

X
Authorization To Proceed



Displacement Cementing
Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation
GREENLEAF 29N-2HZ

INVOICE #
LOCATION
FOREMAN
Date

72036
WELD
AARON CARRASCO
12/8/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug	4:05PM	Displace 1			Displace 2			Displace 3			Displace 4			Displace 5		
	3:30PM	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI	BBLS	Time	PSI
	N.A	0			0			0			0			0		
		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		
5:50PM	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 Preformed

X

Title

Elliot D. Davis

X

Date

12/13/14