



Bison Oil Well Cementing
1547 Gaylord Street
Denver, CO 80206

FIELD INVOICE #

72037

FIELD INVOICE

WELL NO. AND FARM	COUNTY	STATE	DATE	Contractor
GREENLEAF 4N-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
		LA SALLE		
	CONDUCTOR PIPE	WELL TYPE		CODE
ITEM	DESCRIPTION	QTY.	MEAS.	AMOUNT
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				
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 #: 72037
API#: 05-123-40623
Foreman: AARON CARRASCO

Customer: Anadarko Petroleum Corporation

Well Name: GREENLEAF 4N-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

cuft of Shoe #N/A cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
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)
Total Slurry Volume #N/A cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry #N/A bbls
(Total Slurry Volume) X (.1781)
Sacks Needed #VALUE! sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water #VALUE! bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: #N/A bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 78.96 PSI

Pressure of the fluids inside casing

Displacement: 43.12 psi

Shoe Joint: 0.00 psi

Total 43.12 psi

Differential Pressure: 35.84 psi

Collapse PSI: #N/A psi

Burst PSI: #N/A psi

Total Water Needed: #VALUE! bbls

Authorization To Proceed



DISON ON WELL CEMENTING
Single Cement Surface Pipe

Customer
Well Name

Anadarko Petroleum Corporation
GREENLEAF 4N-2HZ

INVOICE #
LOCATION
FOREMAN
Date

72037
WELD
AARON CARRASCO
12/8/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

Safety Meeting MIRU CIRCULATE Drop Plug M & P Time 5:05PM % Excess Mixed bbls Total Sacks bbl Returns Water Temp	4:05PM 3:30PM N.A	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
		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		
		50			50			50			50			50		
		60			60			60			60			60		
		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		
		120			120			120			120			120		
		130			130			130			130			130		
		140			140			140			140			140		
		150			150			150			150			150		

Notes:

X

Work Preformed

X

Title

Ellis Korman

X

Date

12-13-14