



Bison Oil Well Cementing
1547 Gaylord Street
Denver, CO 80206

FIELD INVOICE #

90041

FIELD INVOICE

WELL NO. AND FARM		COUNTY	STATE	DATE	Contractor
Sunflower 40C-17HZ		Weld	Colorado	9/18/2015	Noble 2
CHARGE TO		WELL LOCATION			
Anadarko Petroleum Corporation		Section	TWP	RANGE	
PO Box 4995		8	2N	65W	
The Woodlands, TX 77387		DELIVERED TO		LOCATION 1	CODE
		cr. 41 & cr. 24		Greeley	
		SHIPPED VIA		LOCATION 2	CODE
		4024/3210/4007/3106/3105/3204		cr. 41 & cr. 24	
		TYPE AND PURPOSE OF JOB		LOCATION 3	CODE
		SURFACE		Greeley	
				WELL TYPE	CODE
				Oil	
ITEM	DESCRIPTION	UNITS		UNIT PRICE	AMOUNT
		QTY.	MEAS.		
PUMP CHARGE					
SURFACE		1			
MILLEAGE CHARGE					
Pickup		50	mile		
Truck/Equipment		50	mile		
Truck/Equipment		50	mile		
CEMENT CHARGE:					
BFN III		728	sack		
ADDITIVES CHARGE:					
Red Dye		16	oz		
FLOAT EQUIPMENT:					
RUBBER PLUG - 9 5/8"					
OTHER CHARGES:					
DATA ACQUISITION FEE		1			
Containment		1			
Wait Time			hour		

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%.

SUNFLOWER 40C-17HZ NOBLE 2
FRANK KINNEY USER ID: CU0741
CONSULTANT: Hayden Stone
AFE# 2113379 DATE: 9-18-15
GL CODE: 800/2090

SUB TOTAL
TAX 2.90%
TOTAL

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 reverse hereof which include the release and indemnity.



Bison Oil Well Cementing Single Cement Surface Pipe

Date: 9/18/2015
Invoice #: 90041
API#: 05-123-42068
Supervisor: Nick

Customer: Anadarko Petroleum Corporation

Well Name: Sunflower 40C-17HZ

County: Weld
State: Colorado

Sec: 8
Twp: 2N
Range: 65W

Consultant: Hayden
Rig Name & Number: Noble 2
Distance To Location: 25
Units On Location: 024/3210/4007/3106/3105/320
Time Requested: 12:00
Time Arrived On Location: 11:18
Time Left Location: 14:30

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 36.00
Casing Depth (ft) : 1,875
Total Depth (ft) : 1884
Open Hole Diameter (in.) : 13.50
Conductor Length (ft) : 60
Conductor ID : 15.25
Shoe Joint Length (ft) : 43
Landing Joint (ft) : 10

Max Rate: 7
Max Pressure: 2000

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: 37.0
Fluid Ahead (bbls): 30.0
H2O Wash Up (bbls): 20.0

Spacer Ahead Makeup
30 bbl dye in second 10

Casing ID

8.921

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.66 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)
cuft of Conductor 45.79 cuft
(Conductor Width Squared) -(Casing Size OD Squared) X (.005454) X (Conductor Length ft)
cuft of Casing 1019.87 cuft
(Open Hole Squared)-(Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)
Total Slurry Volume 1084.32 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)
bbls of Slurry 193.12 bbls
(Total Slurry Volume) X (.1781)
Sacks Needed 728 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)
Mix Water 129.61 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 142.37 bbls

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

Pressure of cement in annulus

Hydrostatic Pressure: 1382.89 PSI

Pressure of the fluids inside casing

Displacement: 789.75 psi

Shoe Joint: 31.72 psi

Total 821.47 psi

Differential Pressure: 561.42 psi

Collapse PSI: 2020.00 psi

Burst PSI: 3520.00 psi

Total Water Needed: 321.98 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.



Customer
Well Name

Anadarko Petroleum Corporation
Sunflower 40C-17HZ

INVOICE #
LOCATION
Supervisor
Date

90041
Weld
Nick
9/18/2015

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

X Clayton
Work Performed

X
Title

X
Date



Bison Oil Well Cementing Single Cement Surface Pipe

Cementing Customer Satisfaction Survey

Service Date	9/18/2015
Well Name	Sunflower 40C-17HZ
County	Weld
State	Colorado
SEC	8
TWP	2N
RNG	65W

Invoice Number	90041
API #	05-123-42068
Job Type	Single Cement Surface Pipe
Company Name	Inadarko Petroleum Corporation

Customer Representative: Hayden

Supervisor Name: Nick Vigil

Employee Name (Including Supervisor)
Nick Vigil
William Jewell
James Myer

Exposure Hours (Per Employee)
3
3
3
9

Total Exposure Hours

Did we encounter any problems on this job? ☐ Yes ☒ No

To Be Completed By Customer

Rating/Description

- 5 - Superior Performance (Established new quality/performance standards)
 - 4 - Exceeded Expectation (Provided more than what was required/expected)
 - 3 - Met Expectations (Did what was expected)
 - 2 - Below Expectations (Job problems/failures occurred - *Recovery made)
 - 1 - Poor Performance (Job problems/failures occurred - *Some recovery made)
- *Recovery: resolved issue(s) on jobsite in a timely and professional manner

RATING CATEGORY

Personnel -
Equipment -
Job Design -
Product/Material -
Health & Safety -
Environmental -
Timeliness -
Condition/Appearance -
Communication -

CUSTOMER SATISFACTION RATING

Did our personnel perform to your satisfaction?
Did our equipment perform to your satisfaction?
Did we perform the job to the agreed upon design?
Did our products and materials perform as you expected?
Did we perform in a safe and careful manner (Pre/post mtgs, PPE, TSMR, etc.)?
Did we perform in an environmentally sound manner (spills, leaks, cleanup, etc.)?
Was job performed as scheduled (On time to site, accessible to customers, completed when expected)?
Did the equipment condition and appearance meet your expectations?
How well did our personnel communicate during mobilization, rig up and job execution?

Please Circle:

Yes	No	Did an accident or injury occur?
Yes	No	Did an injury requiring medical treatment occur?
Yes	No	Did a first-aid injury occur?
Yes	No	Did a vehicle accident occur?
Yes	No	Was a post-job safety meeting held?

Please Circle:

Yes	No	Was a pre-job safety meeting held?
Yes	No	Was a job safety analysis completed?
Yes	No	Were emergency services discussed?
Yes	No	Did environmental incident occur?
Yes	No	Did any near misses occur?

Additional Comments:

THE INFORMATION HEREIN IS CORRECT -

x *Hayden*
Customer Representative's Signature

DATE: _____

Any additional Customer Comments or HSE concerns should be described on the back of this form

— PSI — Barrels / Minute — Lbs / Gallon

