



Bison Oil Well Cementing
1547 Gaylord Street
Denver, CO 80206

FIELD INVOICE #

35057

FIELD INVOICE

WELL NO. AND FARM	COUNTY	STATE	DATE	Contractor	
grant elmquist 2a-14h-c268	Weld	Colorado	10/18/2014	ensign 135	
CHARGE TO	WELL LOCATION				
EnCana Oil & Gas (USA) Inc.	Section	TWP	RANGE		
EnCana Oil & Gas (USA) Inc.	14	2n	68w		
370 17th Street, Suite 1700	DELIVERED TO		LOCATION 1	CODE	
Denver, CO. 80202	22-11		shop		
	SHIPPED VIA		LOCATION 2	CODE	
	4030-3103/4020 3211		22-11		
	TYPE AND PURPOSE OF JOB		LOCATION 3	CODE	
	SURFACE		shop		
			WELL TYPE	CODE	
			gas		
ITEM	DESCRIPTION	QTY.	MEAS.	UNIT PRICE	AMOUNT
PUMP CHARGE		1			
SURFACE					
MILEAGE CHARGE		60			
Pickup		120			
Truck/Equipment					
CEMENT CHARGE:		375	sack		
BFN III					
ADDITIVES CHARGE:		16	oz		
Dye Blue		3	qts		
KCL		300	lbs		
Sugar					
FLOAT EQUIPMENT:					
OTHER CHARGES:		1	ea	\$	
DATA ACQUISITION FEE		1	ea	\$	
PSI Test					

Encana Oil & Gas (USA) Inc.	
DJ Basin	Date: 10/18/2014
Well:	Grant Elmquist 2B-14H-C268
AFE:	13175944
Major / Minor	CC: 8715. 668
Total Amount:	104.00
Signature:	[Signature]
Approver:	R.C.K.K.

SUB TOTAL \$
TAX 2.90% \$
TOTAL \$

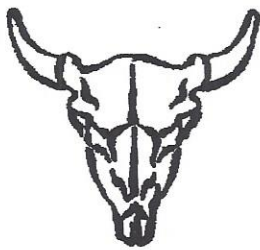
If this account is not paid within 30 days of invoice date a FINANCE CHARGE will be made. Computed at a single monthly rate of 1 1/2% which is equal to an ANNUAL PERCENTAGE RATE OF 18%.

SUBJECT TO CORRECTION

[Signature]
Customer or Agent

[Signature]
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: 10/18/2014
Invoice # 35057
API#
Foreman: Kirk Kallhoff

Customer: EnCana Oil & Gas (USA) Inc.
Well Name: grant elmquist 2a-14h-c268

County: Weld
State: Colorado
Sec: 14
Twp: 2n
Range: 68w

Consultant: dennis
Rig Name & Number: ensign 135
Distance To Location: 22
Units On Location: 4030-3103/4020 3211
Time Requested: 700 pm
Time Arrived On Location: 615 pm
Time Left Location: 10:15 pm

WELL DATA

Casing Size OD (in) : 9.625
Casing Weight (lb) : 40.00
Casing Depth (ft) : 836
Total Depth (ft) : 864
Open Hole Diameter (in.) : 12.25
Conductor Length (ft) : 100
Conductor ID : 16
Shoe Joint Length (ft) : 44
Landing Joint (ft) : 18

Max Rate:
Max Pressure:

Cement Data

Cement Name: BFN III
Cement Density (lb/gal) : 15.2
Cement Yield (cuft) : 1.27
Gallons Per Sack: 5.89
% Excess: 60%
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

8.835

Casing Grade

J-55 only used

Calculated Results

cuft of Shoe 18.73 cuft
(Casing ID Squared) X (.005454) X (Shoe Joint ft)

cuft of Conductor 89.10 cuft
(Conductor Width Squared) - (Casing Size OD Squared) X (.005454) X (Conductor Length ft)

cuft of Casing 368.80 cuft
(Open Hole Squared) - (Casing Size Squared) X (.005454) X (Casing Depth - Conductor Length)

Total Slurry Volume 476.63 cuft
(cuft of Shoe) + (cuft of Conductor) + (cuft of Casing)

bbls of Slurry 84.89 bbls
(Total Slurry Volume) X (.1781)

Sacks Needed 375 sk
(Total Slurry Volume) ÷ (Cement Yield) X (% Excess Cement)

Mix Water 52.63 bbls
(Sacks Needed) X (Gallons Per Sack) ÷ 42

Displacement: 61.42 bbls
(Casing ID Squared) X (.0009714) X (Casing Depth + Landing Joint - Shoe Joint)

Pressure of cement in annulus

Hydrostatic Pressure: 660.11 PSI

Pressure of the fluids inside casing

Displacement: 341.50 psi

Shoe Joint: 34.74 psi

Total 376.24 psi

Differential Pressure: 283.87 psi

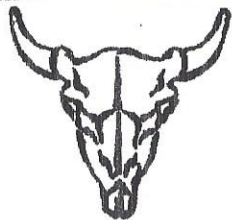
Collapse PSI: 2570.00 psi

Burst PSI: 3950.00 psi

Total Water Needed: 164.05 bbls

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

EnCana Oil & Gas (USA) Inc.
grant elmquist 2a-14h-c268

INVOICE #
LOCATION
FOREMAN
Date

35057
Weld
Kirk Kallhoff
10/18/2014

Treatment Report Page 2

DESCRIPTION OF JOB EVENTS

		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
Safety Meeting	816pm															
MIRU	735pm															
CIRCULATE	841pm	0	909pm	10	0			0			0			0		
Drop Plug		10	912pm	70	10			10			10			10		
909 pm		20	914pm	180	20			20			20			20		
		30	916pm	260	30			30			30			30		
		40	918pm	340	40			40			40			40		
M & P		50	921pm	400	50			50			50			50		
Time	Sacks	60	924pm	380	60			60			60			60		
848 pm	375	70			70			70			70			70		
907 pm stop		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		
% Excess		130			130			130			130			130		
Mixed bbls	52.6	140			140			140			140			140		
Total Sacks		150			150			150			150			150		
bbl Returns	24															
Water Temp																

Notes:

bumped plug at 926 pm 600 psi

84.8 bbls slurry

casing test 1500 psi 15 min

X Dennis J. Jorgensen
Work Performed

X EnCana Wellsite Supv.
Title

X 10-18-14
Date