

Casing Cementing



Company: NIGHTHAWK PRODUCTION LLC
Well Name: John Craig 1-10
Field: Wildcat
County: Lincoln
State: CO

Date: 10/22/2013
Well Location: Sec 2 - T10S - R56W
Well Number (API):
Proposal Number: 1
Contact: Chuck Wilson
Made By: Don Graham
Service from District: Grand Junction, CO
District Phone: 970-683-4000
Objective: SAP# 631505910. Set 8 5/8", 24#/ft surface pipe at 350 feet as per request. Thank you.

Disclaimer Notice

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EXECUTIVE SUMMARY

Enclosed are our recommendations for Schlumberger intervention on the referenced well. The proposal includes well data, design data, materials and resources requirements and cost estimates. The purpose of our services is to perform a Casing Cementing treatment.

Schlumberger has established a safety policy to which all Schlumberger personnel must adhere. A pre-job safety meeting will be held with customer representatives and other on location personnel to familiarize everyone with existing hazards and safety procedures. We would appreciate close cooperation between the customer representative and the Schlumberger representative to ensure a safe operation.

The estimated total cost of our services is \$ 11,233.45. All costs are estimates only. Actual costs will be determined by time, material and equipment used during treatment. Taxes are not included. All work will be subject to Schlumberger then-current General Terms and Conditions or to the terms and conditions of a Master Service Agreement if one is in force between Schlumberger and Customer. This quote is valid for a period of thirty (30) days from the date submitted.

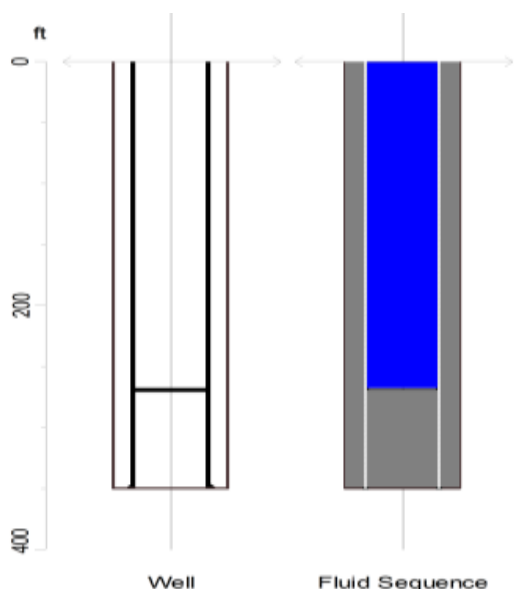
Thank you for considering Schlumberger.
Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Don Graham
303-352-1214
graham10@slb.com



WELL DATA



Well Data

Job Type :	Casing Cementing
Total Depth (Measured) :	350.0 ft
True Vertical Depth (TVD) :	350.0 ft
BHST (Tubular Bottom Static Temperature) :	84 degF
BHCT (Tubular Bottom Circulating Temperature) :	80 degF

Open Hole

Mean Diameter without Excess	Bottom Depth	Annular Excess
12.250 in	350.0 ft	20.0 %

Casing

OD	Weight	Grade	Thread	Inner Capacity	Bottom Depth
8 5/8 in	24.0 lb/ft	J-55	STC	0.36 ft ³ /ft	350.0 ft

Annular Capacity (without Excess) : Casing Bottom / Open Hole : 0.41 ft³/ft

IMPORTANT:

The well data shown on this page is based on information available when this treatment program was prepared. This data must be confirmed on location with the wellsite supervisor prior to the treatment. Any changes in the well data need to be reviewed for their impact on the treatment design.

Fluid Placement

Fluid Name	Volume bbl	Density lb/gal	Top of Fluid ft
Water	20.0	8.34	0.0
14.0# Class G	36.0	14.00	0.0
Water	17.2	8.34	0.0

Total Liquid Volume : 73.2 bbl

Set surface pipe at 350 feet. 14.0 ppg cement designed to surface.



FLUID SYSTEMS

Water			
System	Water		
Density	8.34 lb/gal		
Total Volume	37.2 bbl		
Additives	Code	Description	Concentration
14.0# Class G (132 sacks, 94 lb per sack of Blend)			
System	Conventional		
Density	14.00 lb/gal		
Yield	1.54 ft ³ /sk		
Mix Water	7.912 gal/sk		
Mix Fluid	7.912 gal/sk		
Total Volume	36.0 bbl		
Additives	Code	Description	Concentration
	G	Cement	94.0 lb/sk WBWOB
	D079	Extender	1.0 % BWOB
	D046	Anti Foam	0.2 % BWOB
	D029	Lost Circulation Control Agent	0.25 lb/sk

Some of the chemicals specified in this program may have toxic properties. All personnel should be familiar with the inherent dangers and appropriate safeguards to prevent accidental injury. Use of the chemicals may be governed by certain laws and regulations and should only be used in accordance with such. Please refer to the MSDS sheets for the recommended safety precautions and required minimum personal protective equipment.



PRICE ESTIMATE

Based on 4 hours on location, 1 pump, 1 ABT. Round trip mileage based from Cheyenne, WY.

Equipment and Services						
Code	FTL Description	Quantity	Unit List Price	Total List Price \$	Discount Rate	Discounted Price \$
48019000	Bulk Unit, Cement Add Hr	4 HR	107.50	430.00	30 %	301.00
48601000	Cement Plug Container	1 JOB	520.00	520.00	30 %	364.00
49100000	Cement Blending Charge	90 CF	2.27	204.30	30 %	143.01
49102000	Transportation, Cement Ton-mile	839 MI	2.02	1,694.78	30 %	1,186.35
56702085	Plug, Cementing Top Plastic 8.625 in	1 EA	415.00	415.00	30 %	290.50
59200002	Transportation, Mileage Heavy Vehicles	400 MI	5.52	2,208.00	30 %	1,545.60
59200005	Transportation, Mileage Light Vehicles	400 MI	3.24	1,296.00	30 %	907.20
59697004	CemCAT Monitoring System	1 JOB	880.00	880.00	30 %	616.00
102871020	Pump, Casing Cement 0-2000 ft	1 EA	2,240.00	2,240.00	30 %	1,568.00
102946000	Fuel Surcharge (non-discounted)	2 EA	450.00	900.00	0 %	900.00
102946003	Fuel Cost Index Charge (non-discounted)	2 EA	125.00	250.00	0 %	250.00
107264001	Regulatory Conformance Charge (non-discounted)	2 EA	341.00	682.00	0 %	682.00

Subtotals: \$ 11,720.08 \$ 8,753.66

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Materials						
Code	FTL Description	Quantity	Unit List Price	Total List Price \$	Discount Rate	Discounted Price \$
D029	Cellophane Flakes	33 LB	3.97	131.01	30 %	91.71
D046	Antifoam Agent, All Purpose	25 LB	4.75	118.75	30 %	83.13
D079	Chemical Extender	124 LB	2.55	316.20	30 %	221.34
D907	Cement, Class G	132 CF	22.55	2,976.60	30 %	2,083.62

Subtotals: \$ 3,542.56 \$ 2,479.80

Total Discount:	\$	4,029.19
Job Price Estimate*:	\$	11,233.45