Company: BHI_DRILLING COMPANY_US
Well: Thanks for using The Perforators LLC
Field: Hays
County: Ellis
State: Kansas
API: 15-051-26813-00-00
Location: Sec. 32 T14S R18W
Elevation: 2000 KB
Date: 10-Jul-2013
Time: 10:00:00
Service Order: 0000000000
Run: 1
Depth Driller: 3500
Depth Logger: 3500
Bottom Logged Interval: 3500
Top Logged Interval: 2000
Casing Driller: 8.625 @ 2000
Casing Logger: 2000
Bit Size: 7.875
Type Fluid: Chemical
Density: 9.2
Viscosity: 50
Fluid Loss: 8.8
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70
Rmf @ Meas Temp: 0.4 @ 70
Rmc @ Meas Temp: 0.6 @ 70
Source of Rmf and Rmc: Measured
Rm @ BHT: 0.3 @ 120
Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120
Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Tool String (Bottom to Top): Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

Drilling Fluid Type: Chemical
Density: 9.2 ppg
Viscosity: 50 s/qt
Fluid Loss: 8.8 cc
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70 °F
Rmf @ Meas Temp: 0.4 @ 70 °F
Rmc @ Meas Temp: 0.6 @ 70 °F
Source of Rmf and Rmc: Measured
Rm @ BHT: 0.3 @ 120 °F
Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120 °F

Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Run 1 — Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

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Comments

Thanks for using The Perforators LLC Hays KS - (785)421-4634.

Port Collar

Company: BHI_DRILLING COMPANY_US
Well: Thanks for using The Perforators LLC
Field: Hays
County: Ellis
State: Kansas
API: 15-051-26813-00-00
Location: Sec. 32 T14S R18W
Elevation: 2000 KB
Date: 10-Jul-2013
Time: 10:00:00
Service Order: 0000000000
Run: 1
Depth Driller: 3500
Depth Logger: 3500
Bottom Logged Interval: 3500
Top Logged Interval: 2000
Casing Driller: 8.625 @ 2000
Casing Logger: 2000
Bit Size: 7.875
Type Fluid: Chemical
Density: 9.2
Viscosity: 50
Fluid Loss: 8.8
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70
Rmf @ Meas Temp: 0.4 @ 70
Rmc @ Meas Temp: 0.6 @ 70
Source of Rmf and Rmc: Measured
Rm @ BHT: 0.3 @ 120
Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120
Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Tool String (Bottom to Top): Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

Drilling Fluid Type: Chemical
Density: 9.2 ppg
Viscosity: 50 s/qt
Fluid Loss: 8.8 cc
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70 °F
Rmf @ Meas Temp: 0.4 @ 70 °F
Rmc @ Meas Temp: 0.6 @ 70 °F
Source of Rmf and Rmc: Measured
Rm @ BHT: 0.3 @ 120 °F
Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120 °F

Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Run 1 — Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

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Comments

Thanks for using The Perforators LLC Hays KS - (785)421-4634.

Main Pass

Company: BHI_DRILLING COMPANY_US
Well: Thanks for using The Perforators LLC
Field: Hays
County: Ellis
State: Kansas
API: 15-051-26813-00-00
Location: Sec. 32 T14S R18W
Elevation: 2000 KB
Date: 10-Jul-2013
Time: 10:00:00
Service Order: 0000000000
Run: 1
Depth Driller: 3500
Depth Logger: 3500
Bottom Logged Interval: 3500
Top Logged Interval: 2000
Casing Driller: 8.625 @ 2000
Casing Logger: 2000
Bit Size: 7.875
Type Fluid: Chemical
Density: 9.2
Viscosity: 50
Fluid Loss: 8.8
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70
Rmf @ Meas Temp: 0.4 @ 70
Rmc @ Meas Temp: 0.6 @ 70
Source of Rmf and Rmc: Measured
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Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120
Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Tool String (Bottom to Top): Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

Drilling Fluid Type: Chemical
Density: 9.2 ppg
Viscosity: 50 s/qt
Fluid Loss: 8.8 cc
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70 °F
Rmf @ Meas Temp: 0.4 @ 70 °F
Rmc @ Meas Temp: 0.6 @ 70 °F
Source of Rmf and Rmc: Measured
Rm @ BHT: 0.3 @ 120 °F
Time Circulation Stopped: 09:00:00
Time Logger on Bottom: 10:00:00
Maximum Recorded Temperature: 120 °F

Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
Witnessed By: Mr. Company Rep

Run 1 — Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
1	7.875	2000	3500

Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
Gamma Ray	0.5
Cartridge	0.5
Sensor	0.5

Logged Interval

Log Interval	From	To
Primary Depth Control	2000	3500
Repeat Section	2000	3500
Main Pass	2000	3500

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Comments

Thanks for using The Perforators LLC Hays KS - (785)421-4634.

Repeat Pass

Company: BHI_DRILLING COMPANY_US
Well: Thanks for using The Perforators LLC
Field: Hays
County: Ellis
State: Kansas
API: 15-051-26813-00-00
Location: Sec. 32 T14S R18W
Elevation: 2000 KB
Date: 10-Jul-2013
Time: 10:00:00
Service Order: 0000000000
Run: 1
Depth Driller: 3500
Depth Logger: 3500
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Casing Driller: 8.625 @ 2000
Casing Logger: 2000
Bit Size: 7.875
Type Fluid: Chemical
Density: 9.2
Viscosity: 50
Fluid Loss: 8.8
Source of Sample: Flowline
Rm @ Meas Temp: 0.5 @ 70
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Tool String (Bottom to Top): Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
Cartridge	1.5	3.5
Sensor	5.5	3.5

Borehole Record

Run	Bit Size	From	To
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Casing Record

Run	Size	Weight	Grade	From	To
1	8.625	23	J-55	0	2000

Tool Standoffs

Tool	Standoff
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Log Interval	From	To
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Repeat Section	2000	3500
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Drilling Fluid Type: Chemical
Density: 9.2 ppg
Viscosity: 50 s/qt
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Source of Sample: Flowline
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Equipment Number: 10
Location: Hays
Recorded By: Cameron Pflaum
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Run 1 — Gamma Ray | Cartridge | Sensor

Tool Name	Length	OD
Gamma Ray	1.5	3.375
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Comments

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