Antelope44-41-24HNB

MD
5":100'

Polaris Guidance Systems LLC

Company: Bonanza Creek Energy Company
Well Name: Antelope 44-41-24HNB
UWI or LSD: 05-123-36468-00
Rig Id: Cade 22
State: Colorado
County/Parish: Weld
Country: USA
Survey Company: ENSIGN Directional
Job number:
Directional 1: Daniel Barton
Directional 2: Chris Saykally
MWD 1: Chad Lousberg
MWD 2: Arin Hatfield
Company Man: John Bradley
Geologist: Paul Mckay

Log measurements: Gamma
Depth measured from: 5535
Maximum temperature:

	Depth	Date
Start:	5535 ft	2/26/2013
End:	10715 ft	3/3/2013

Casing	Depth	Size
Surface:	459	9.625
Intermediate:	6548	7

Mud Type:
Density:
Viscosity:
Rm: **Rmf:** **Rmc:**

Elevations
KB: 4533
GL: 4517
DF: 4532

Run	Bit Size	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	9 5/8	0.00	0.00	0	456	2/23/2013	2/24/2013
2	8 3/4	0.00	0.00	456	5535	2/24/2013	2/26/2013
3	8 3/4	35.95	46.95	5535	6560	2/26/2013	2/28/2013
4	6 1/8	38.47	49.47	6560	10715	3/1/2013	3/3/2013
5							
6							
7							
8							
9							
10							

ENSIGN Directional uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

Gamma
API
0.0 200.0
200.0 400.0
TVD
ft
0.0 99999.0
99999.0 199998.0
MD
ROP
0
0.0 500.0
500.0 1000.0
#46 MD(5519.00) Inc(0.4) Azm(71.1) TVD(5418.37) VS(3.39) NS(-150.79) EW(868.51)
#47 MD(5551.00) Inc(3.0) Azm(9.2) TVD(5450.36) VS(4.29) NS(-149.93) EW(868.75)
#48 MD(5583.00) Inc(6.9) Azm(3.4) TVD(5482.23) VS(7.03) NS(-147.18) EW(869.00)
#49 MD(5615.00) Inc(10.4) Azm(5.6) TVD(5513.86) VS(11.82) NS(-142.39) EW(869.40)
#50 MD(5647.00) Inc(12.8) Azm(6.3) TVD(5545.21) VS(18.24) NS(-135.99) EW(870.07)

#164 MD(9313.00) Inc(91.0) Azm(358.2) TVD(6006.33)
VS(3399.08) NS(3302.43) EW(843.70)

#165 MD(9345.00) Inc(90.5) Azm(358.7) TVD(6005.91)
VS(3430.42) NS(3334.42) EW(842.84)

#166 MD(9377.00) Inc(89.9) Azm(358.4) TVD(6005.80)
VS(3461.77) NS(3366.41) EW(842.03)

#167 MD(9409.00) Inc(90.1) Azm(358.0) TVD(6005.80)
VS(3493.09) NS(3398.39) EW(841.02)

#168 MD(9441.00) Inc(89.7) Azm(358.9) TVD(6005.85)
VS(3524.43) NS(3430.38) EW(840.16)

#169 MD(9473.00) Inc(88.9) Azm(359.6) TVD(6006.24)
VS(3555.86) NS(3462.37) EW(839.74)

#170 MD(9505.00) Inc(87.8) Azm(358.4) TVD(6007.17)
VS(3587.25) NS(3494.35) EW(839.18)

#171 MD(9537.00) Inc(87.5) Azm(358.4) TVD(6008.48)
VS(3618.56) NS(3526.31) EW(838.29)

#172 MD(9569.00) Inc(88.0) Azm(358.0) TVD(6009.73)
VS(3649.86) NS(3558.27) EW(837.28)

#173 MD(9601.00) Inc(88.3) Azm(358.7) TVD(6010.77)
VS(3681.17) NS(3590.24) EW(836.36)

#174 MD(9631.00) Inc(88.8) Azm(358.9) TVD(6011.53)
VS(3710.58) NS(3620.23) EW(835.73)

#175 MD(9664.00) Inc(88.3) Azm(358.0) TVD(6012.36)
VS(3742.90) NS(3653.20) EW(834.84)

#176 MD(9696.00) Inc(88.1) Azm(358.9) TVD(6013.37)
VS(3774.23) NS(3685.17) EW(833.98)

#177 MD(9728.00) Inc(88.5) Azm(359.4) TVD(6014.32)
VS(3805.63) NS(3717.16) EW(833.50)

#178 MD(9760.00) Inc(90.1) Azm(0.1) TVD(6014.71)
VS(3837.11) NS(3749.15) EW(833.36)

#179 MD(9790.00) Inc(90.1) Azm(0.1) TVD(6014.65)
VS(3866.66) NS(3779.15) EW(833.41)

#180 MD(9822.00) Inc(89.9) Azm(359.8) TVD(6014.65)
VS(3898.16) NS(3811.15) EW(833.39)

#181 MD(9853.00) Inc(90.4) Azm(0.1) TVD(6014.57)
VS(3928.68) NS(3842.15) EW(833.36)

#182 MD(9885.00) Inc(90.7) Azm(359.9) TVD(6014.27)
VS(3960.18) NS(3874.15) EW(833.36)

#183 MD(9916.00) Inc(91.2) Azm(359.9) TVD(6013.75)
VS(3990.69) NS(3905.15) EW(833.30)

#184 MD(9948.00) Inc(91.2) Azm(0.8) TVD(6013.08)
VS(4022.23) NS(3937.14) EW(833.50)

#185 MD(9980.00) Inc(90.7) Azm(0.1) TVD(6012.55)
VS(4053.77) NS(3969.13) EW(833.75)

#186 MD(10012.00) Inc(89.5) Azm(0.3) TVD(6012.50)
VS(4085.30) NS(4001.13) EW(833.86)

#187 MD(10044.00) Inc(89.4) Azm(359.1) TVD(6012.80)
VS(4116.77) NS(4033.13) EW(833.70)

#188 MD(10075.00) Inc(90.0) Azm(0.5) TVD(6012.97)
VS(4147.27) NS(4064.13) EW(833.59)

#189 MD(10108.00) Inc(90.3) Azm(1.0) TVD(6012.88)
VS(4179.84) NS(4097.13) EW(834.02)

#190 MD(10138.00) Inc(90.0) Azm(0.6) TVD(6012.80)
VS(4209.45) NS(4127.12) EW(834.44)

#191 MD(10170.00) Inc(89.5) Azm(359.4) TVD(6012.94)
VS(4240.95) NS(4159.12) EW(834.44)

#192 MD(10202.00) Inc(89.7) Azm(358.7) TVD(6013.16)
VS(4272.36) NS(4191.12) EW(833.91)

#193 MD(10234.00) Inc(89.9) Azm(358.4) TVD(6013.28)
VS(4303.72) NS(4223.11) EW(833.10)

#194 MD(10265.00) Inc(89.7) Azm(358.7) TVD(6013.38)
VS(4334.09) NS(4254.10) EW(832.31)

#195 MD(10296.00) Inc(90.3) Azm(358.4) TVD(6013.38)
VS(4364.47) NS(4285.09) EW(831.53)

#196 MD(10328.00) Inc(90.6) Azm(358.0) TVD(6013.13)
VS(4395.78) NS(4317.07) EW(830.52)

#197 MD(10359.00) Inc(90.8) Azm(357.6) TVD(6012.75)
VS(4426.07) NS(4348.04) EW(829.33)

#198 MD(10390.00) Inc(91.0) Azm(356.9) TVD(6012.27)
VS(4456.29) NS(4379.00) EW(827.85)

#199 MD(10422.00) Inc(90.7) Azm(357.6) TVD(6011.79)
VS(4487.49) NS(4410.96) EW(826.31)

#200 MD(10453.00) Inc(90.3) Azm(358.7) TVD(6011.52)
VS(4517.82) NS(4441.94) EW(825.31)

#201 MD(10485.00) Inc(90.4) Azm(358.4) TVD(6011.33)
VS(4549.18) NS(4473.93) EW(824.50)

#202 MD(10516.00) Inc(90.5) Azm(358.7) TVD(6011.08)
VS(4579.55) NS(4504.92) EW(823.72)

#203 MD(10548.00) Inc(90.7) Azm(358.5) TVD(6010.75)
VS(4610.91) NS(4536.91) EW(822.93)

#204 MD(10580.00) Inc(90.0) Azm(358.0) TVD(6010.55)
VS(4642.23) NS(4568.90) EW(821.96)

#205 MD(10611.00) Inc(90.4) Azm(358.0) TVD(6010.44)
VS(4672.55) NS(4599.88) EW(820.88)

#206 MD(10643.00) Inc(90.1) Azm(356.9) TVD(6010.30)
VS(4703.77) NS(4631.84) EW(819.45)

#207 MD(10663.00) Inc(90.0) Azm(356.4) TVD(6010.29)
VS(4723.23) NS(4651.81) EW(818.28)

Bit Projection @ 10715'
INC: 90.0 AZM: 356.4 TVD:
6010.29'