



eog resources

600 Seventeenth Street
Suite 1000N
Denver, CO 80202
(303) 572-9000

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name:	RANDALL CREEK 4-32H, Horizontal Part			
Location:	Hereford Ranch Prospect			
License Number:	API: 05-123-31233, AFE: 310565	Region:	D-J Basin	
Spud Date:	March 6, 2011	Drilling Completed:	March 19, 2011	
Surface Coordinates:	NENE (501 ft. FNL & 1200 ft. FEL), Section 32, T12N - R62W,		Weld County,	
	Colorado			
Bottom Hole Coordinates:	SESE (600 ft. FSL & 600 ft. FEL), Section 32, T12N - R62W,		Weld County,	
	Colorado			
Ground Elevation (ft):	5,347'	K.B. Elevation (ft):	5,370'	
Logged Interval (ft):	1409'	To: 11,295'	Total Depth (ft):	11,295'
Formation:	Niobrara (Kn), Kn "B" Chalk			
Type of Drilling Fluid:	Water with Polymer, Chem gel			
	Printed by WellSight Log Manager from WellSight Systems 1-800-447-1534 www.WellSight.com			







OPERATOR







Company: EOG RESOURCES INC.
Address: 600 Seventeenth Street, Suite 1000N
Denver, Colorado, 80202







GEOLOGIST






Name:	Robert Groth	Mike Hirsch
Company:	G & H Production Co, LLC	Goolsby Brothers & Assoc, Inc
Address:	518 17th Street, Suite 1060	947 Lane 6
	Denver, Colorado 80202	Powell, Wyoming 82435

ROCK TYPES

 Frac carb chalk
 Siltst2
 Carb sh
 Carb chalk
 Arg_ss
 Anhy

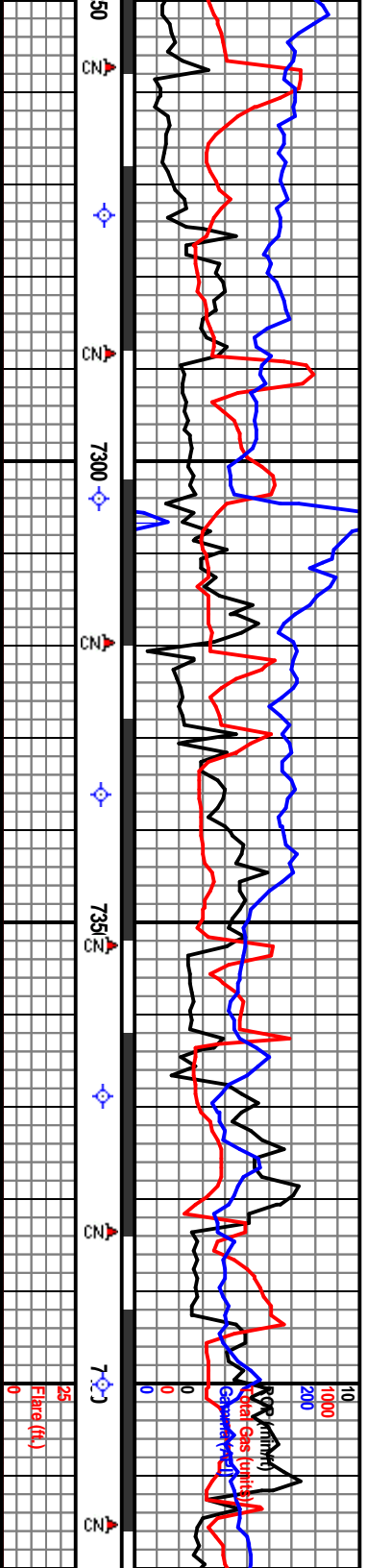
 Bent
 Cht
 Clyst
 Coal
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 Dol

 Gyp
 Lmst
 Mrlst
 Salt
 Shale
 Shcol

 Shgy
 Siltst
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 Till
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ACCESSORIES

	Minxl
	Nodule
	Phos
	Pyr
	Salt
	Sandy
	Silt
	Sil
	Sulphur
	Tuff



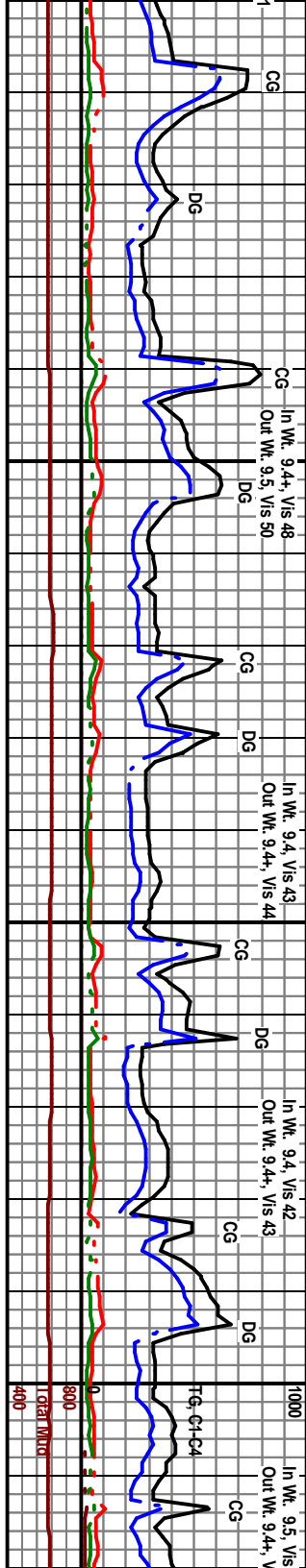
Survey @ 7273', Incl. 56.5°
Azim. 160.9°, TVD 7190.08',
VS 246.17'

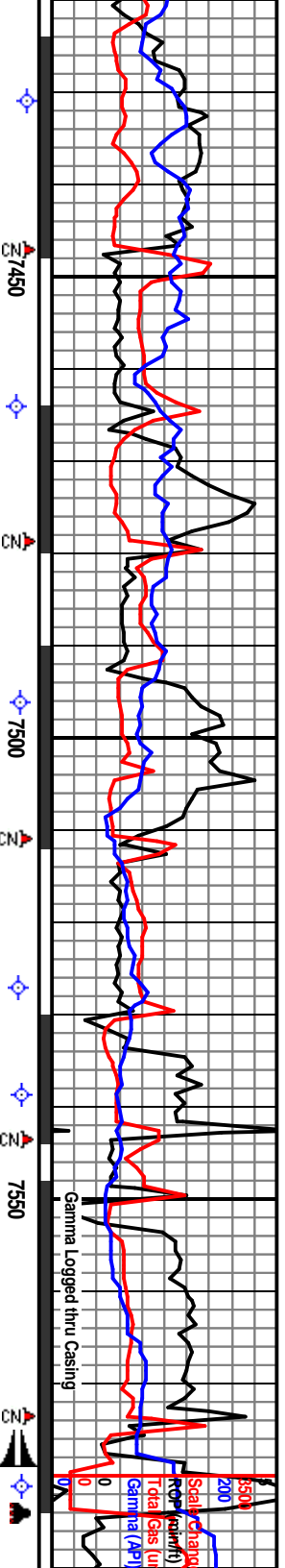
Survey @ 7336', Incl. 62.5°
Azim. 160.8°, TVD 7222.16',
VS 299.10'

7100 TVD
Survey @ 7400', Incl. 68.9°
Azim. 160.3°, TVD 7248.58',
VS 355.94'

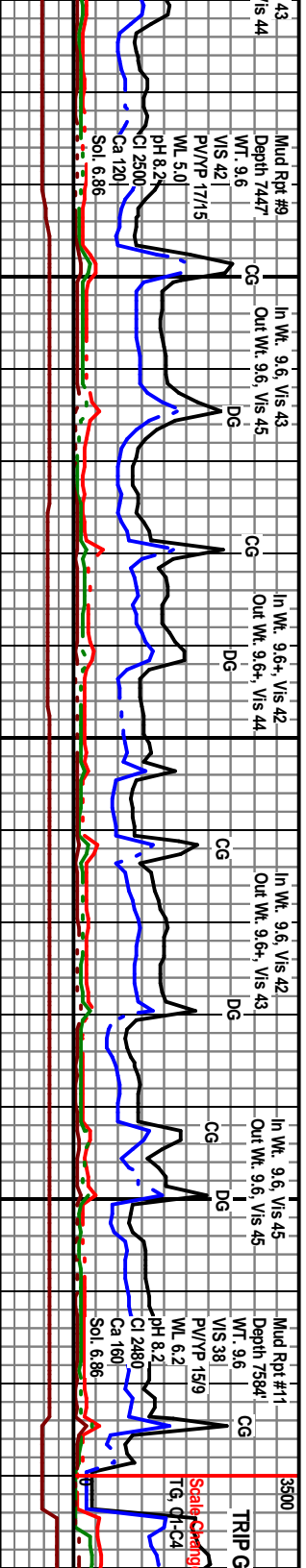
NIORARA Formation 7280 Ft. MD, 7195 Ft. TVD

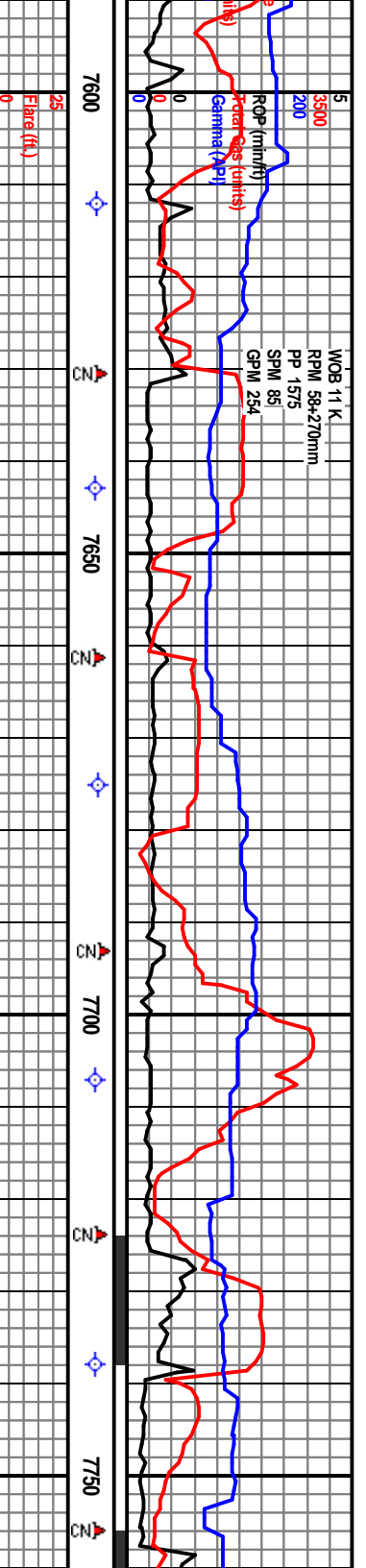
brownish gray, some black, slightly calcareous, earthy & calcareous, micro-micaceous, some splintery & fissile, to light gray, firm, platy,	Carbonaceous shale/Maristone, - dark gray to black some brownish gray, mottled in part, brittle to soft, calcite inclusions, marly - very calcareous, very carbonaceous to carbonaceous, sub-play to platy, some splintery & fissile, Bentonite - off white to light gray, firm, platy to sub-platy, non-calcareous.	Carbonaceous shale/Maristone, - dark gray to black some brownish gray, mottled in part, brittle to soft, calcite inclusions, marly - very calcareous, very carbonaceous to carbonaceous, sub-play to platy, some fissile.	Carbonaceous shale/Maristone, - dark gray to black some brownish gray, mottled in part, brittle to soft, calcite inclusions, marly - very calcareous, very carbonaceous to carbonaceous, sub-play to platy, some fissile.	Carbonaceous shale/Maristone, - dark gray to black some brownish gray, mottled in part, brittle to soft, calcite inclusions, marly - very calcareous, very carbonaceous to carbonaceous, sub-play to platy, some fissile.
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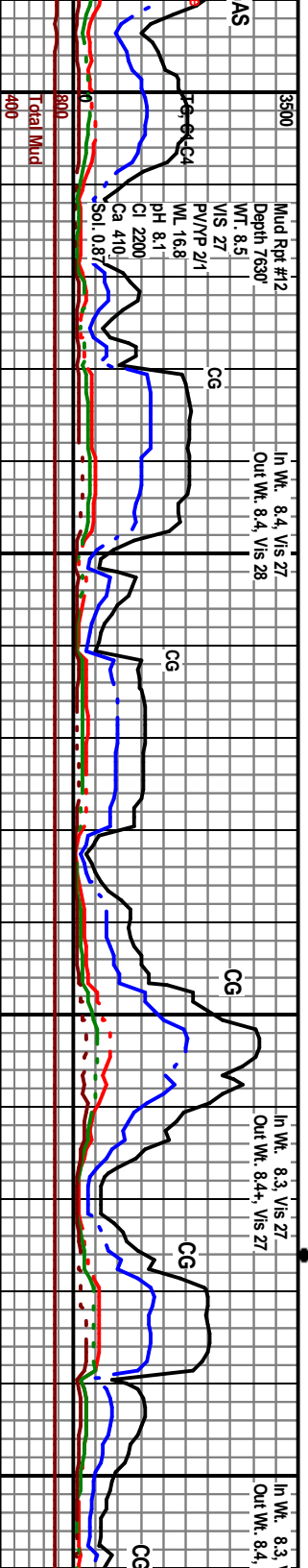


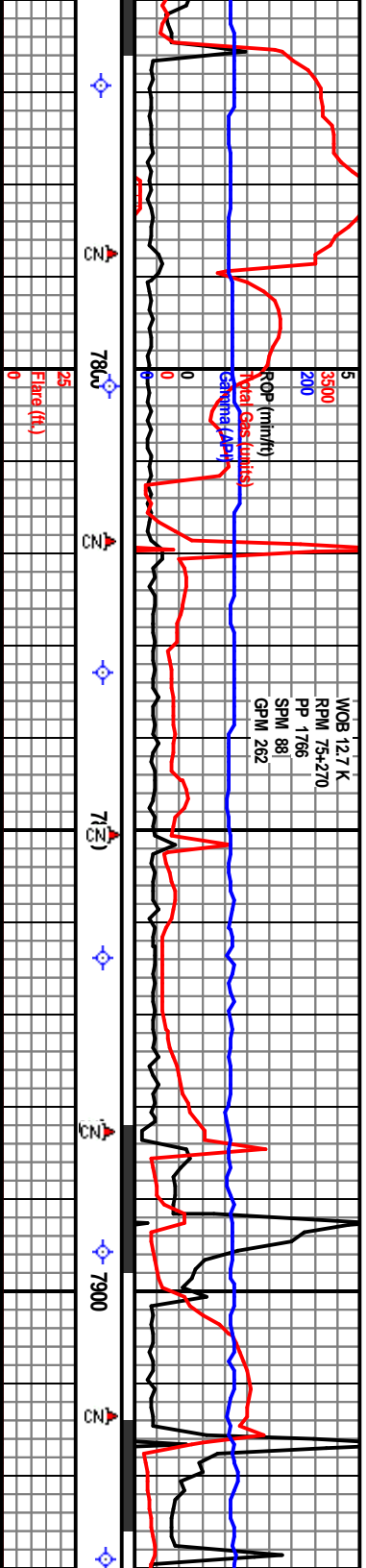
	Survey @ 7464', Incl. 75.7° Azim. 159.4°, TVD 7267.76', VS 415.33'	Survey @ 7527', Incl. 81.2° Azim. 159.0°, TVD 7280.15', VS 475.28'	Survey @ 7581', Incl. 87.2° Azim. 158.8°, TVD 7285.47', VS 527.38'	Intermediate Casing Perforations 7584 ft. MD reached at hrs on March 14, 2011	NIOBARA "B" CHALK 7,461 ft. MD, 7,267 ft. TVD	Carbonaceous Chalk - light to medium gray, some dark gray, mottled, brittle to slightly firm, limy - very calcareous, carbonaceous, sub-platy, some splintery, some off white calcite filled fractures, firm, brittle. Faint yellow fluorescence on unwashed samples, slow blooming thin yellow cut with thick ring and thin film. Bentonite - off white to cream, firm, platy to sub-platy.	Shale/Chalk - dark gray to medium gray, some dark brownish black, mostly mottled, slightly firm to brittle to slightly soft, very calcareous - very nearly, very carbonaceous, sub-blocky, sub-platy to fissile, with carbonaceous Chalk, with trace white calcite filled microfractures, slight faint yellow cut fluorescence.	Carbonaceous Chalk - medium gray to dark gray, mottled, soft, some brittle, earthy, very calcareous, slightly carbonaceous to carbonaceous, platy to sub-platy.	Carbonaceous shale/Marlstone, - very dark gray to mottled, very calcareous, very carbonaceous, sub-platy to sub blocky.	





March 15-16, 2011	Survey @ 7643', Incl. 88.0° Azim. 158.4°, TVD 7288.01', VS 587.33'	Survey @ 7707', Incl. 88.0° Azim. 158.9°, TVD 7290.41', VS 649.12'	March
Point of 0730			
# 4 6 EC (PDC) 13543Z at 7584'	Begin drilling formation at		
Very Poor Sample Quality after Drilling Out	Carbonaceous Chalk - mottled light to medium gray, some dark gray, poor induration, very calcareous, carbonaceous, sub-play to sub blocky, some off white calcite filled fractures. Even yellow fluorescence on unwashed samples, immediate yellow cut fluorescence.	Carbonaceous chalk - grayish brown to dark gray with some light gray mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, play to sub-play to sub-blocky, loose white calcite from fractures. Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbon with so carbon to sub- fracture sample immedi ring wh
7500			





Survey @ 7769', Incl: 90.3°
Azim. 157.9°, TVD 7291.47',
VS 708.97'

Survey @ 7833', Incl: 90.0°
Azim. 154.1°, TVD 7291.21',
VS 770.26'

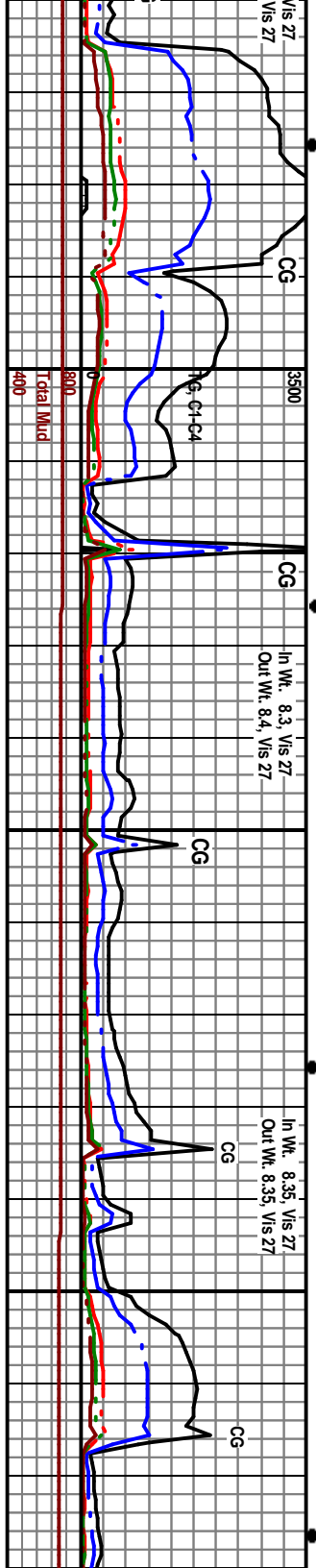
Survey @ 7896', Incl: 90.3°
Azim. 153.7°, TVD 7291.02',
VS 829.62'

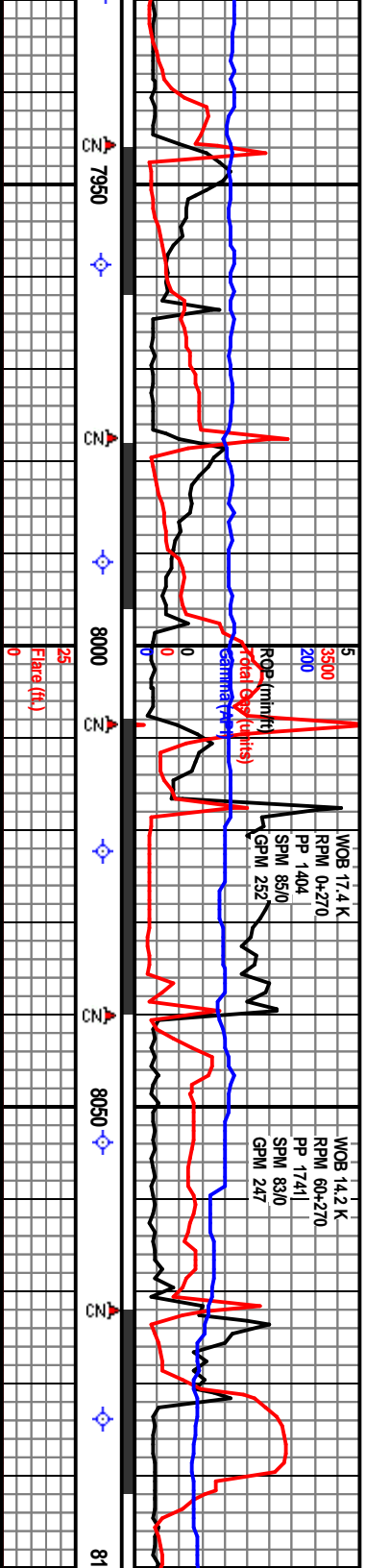
aceous chalk - grayish brown to dark gray
me light gray mottling, brittle to firm, very
aceous, very calcareous - limy - marly, platy
ply to sub-blocky, loose white calcite from
s. Yellow solid fluorescence in unwashed
sample, spotty unwashed, washed gives an
late milky white flashing cut, thin film and
men dry.

Carbonaceous chalk - light gray to grayish brown to
dark gray with some brown mottling, brittle to firm,
very carbonaceous, very calcareous - limy - marly,
platy to sub-platy to sub-blocky, loose white calcite
from fractures, Yellow solid fluorescence in unwashed
sample, spotty unwashed, washed gives an immediate
milky white flashing cut, thin film and ring when dry.

Carbonaceous chalk - light gray to grayish brown to
dark gray with some brown mottling, brittle to firm, very
carbonaceous, very calcareous - limy - marly, platy to
sub-platy to sub-blocky, loose white calcite from
fractures, Yellow solid fluorescence in unwashed
sample, spotty unwashed, washed gives an immediate
milky white flashing cut, thin film and ring when dry.

Carbonaceous chalk - dark gray to
grayish brown mottling, brittle to
carbonaceous, very calcareous
sub-platy to sub-blocky, loose w
fractures, Yellow solid fluoresce
sample, spotty unwashed, wash
milky white flashing cut, thin fil





Survey @ 7959', Incl. 90.1°
Azim. 154.7°, TVD 7290.85',
VS 889.23'

7100 TVD
Survey @ 8022', Incl. 89.2°
Azim. 161.1°, TVD 7291.1',
VS 950.00'

Survey @ 8086', Incl. 88.8°
Azim. 163.6°, TVD 7292.55',
VS 1012.82'

WPT 1 @ 8500' MD ~1450' VS, 7291 -

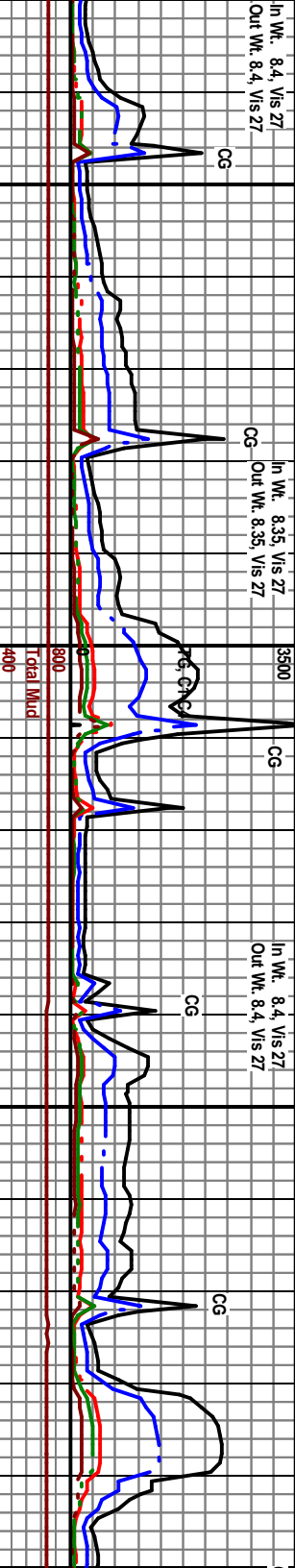
Even free greenish brown oil on shakers.

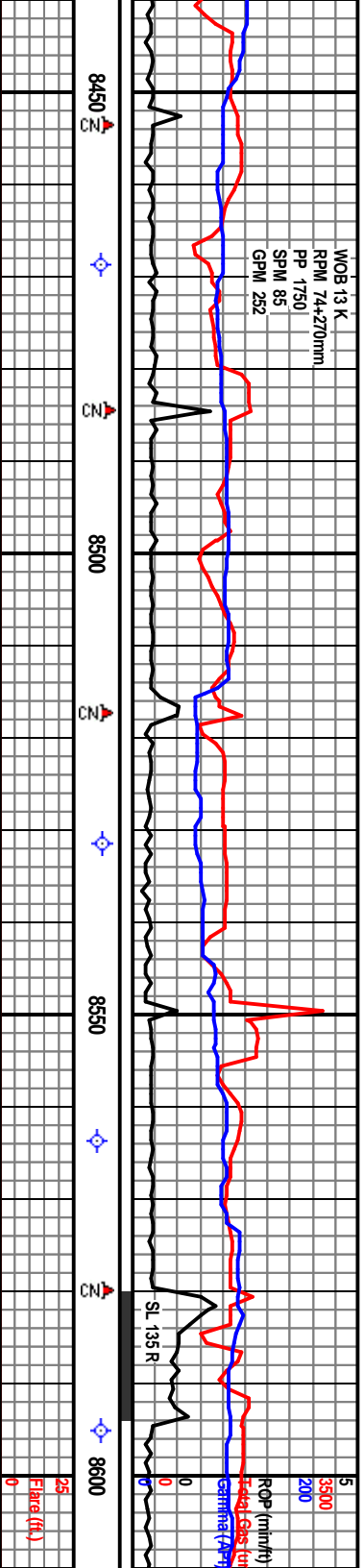
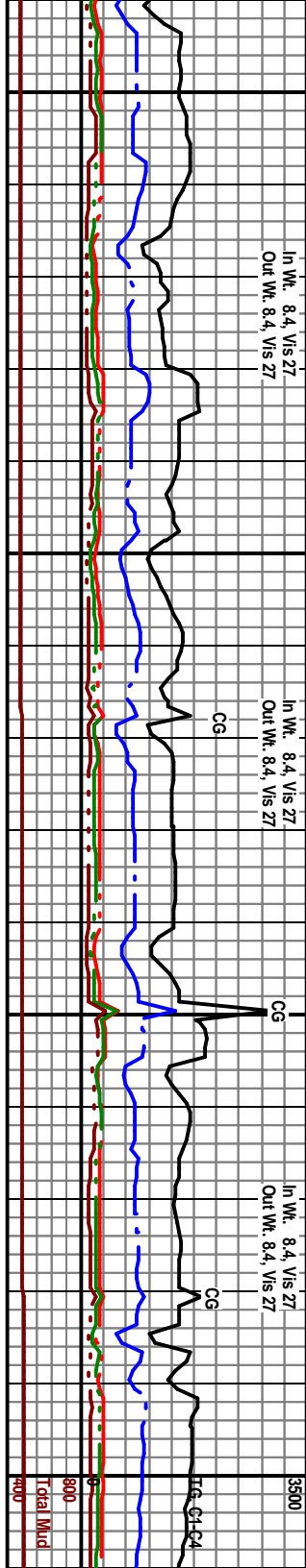
to light gray, some
firm, very
limy - mainly, platy to
white calcite from
none in unwashed
and gives an immediate
n and ring when dry.

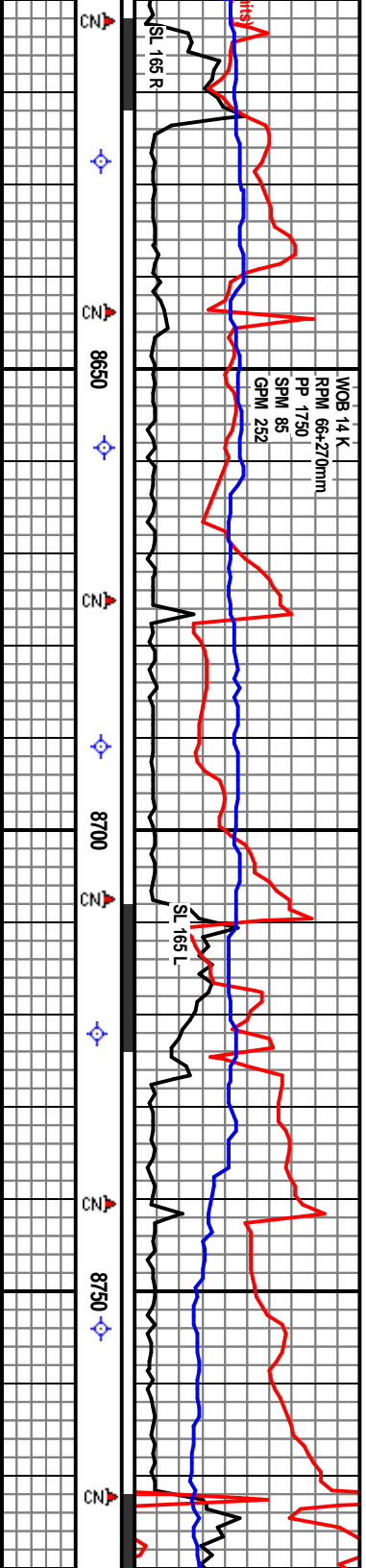
Carbonaceous chalk - dark gray to medium gray, some grayish brown mottling, brittle to firm, very carbonaceous, very calcareous - limy - mainly, platy to sub-platy to sub-blocky, loose white calcite from fractures. Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.

Carbonaceous chalk - dark gray to light gray, some grayish brown mottling, brittle to firm, very carbonaceous, very calcareous - limy - mainly, platy to sub-platy to sub-blocky, loose white calcite from fractures. Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.

Carbonaceous chalk - dark gray to light gray, some grayish brown mottling, brittle to firm, very carbonaceous, very calcareous - limy - mainly, platy to sub-platy to sub-blocky, loose white calcite from fractures. Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.



[illegible]



Survey @ 8658', Incl. 90.9°
Azim. 179.8°, TVD 7290.72',
VS 1583.36'

Survey @ 8722', Incl. 87.9°
Azim. 178.4°, TVD 7290.80',
VS 1647.04'

Survey
Azim.
VS 17

March 18, 2011

Abundant even free brownish green oil on shakers and tanks.

us chalk - mottled light gray to grayish brown to gray, poor induration, very carbonaceous and sub-platy to sub-blocky, loose white calcite from yellow solid fluorescence in unwashed sample, washed gives an immediate milky white thin film and ring when dry.

Carbonaceous chalk - mottled light gray to grayish brown to some dark gray, poor induration, very carbonaceous and calcareous, sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate flashing cut, thin film and ring when dry.

Carbonaceous chalk - dark gray to medium gray, some grayish brown mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, platy to sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.

Carbonaceous chalk - dark gray to medium gray, some grayish brown mottling, brittle to firm, very carbonaceous, very calcareous, sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.

In Wt. 8.4, Vis 27
Out Wt. 8.4, Vis 27

CG

In Wt. 8.4, Vis 27
Out Wt. 8.4, Vis 27

CG

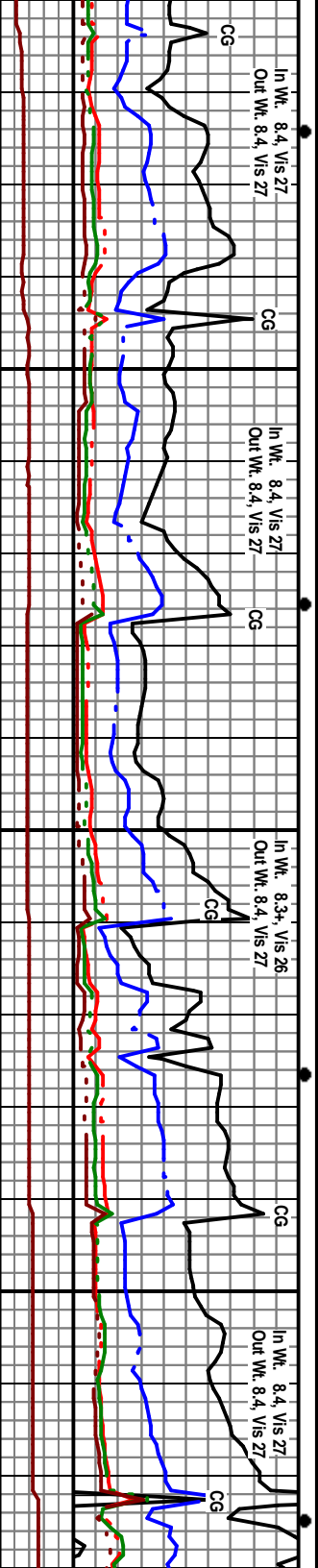
In Wt. 8.3+, Vis 26
Out Wt. 8.4, Vis 27

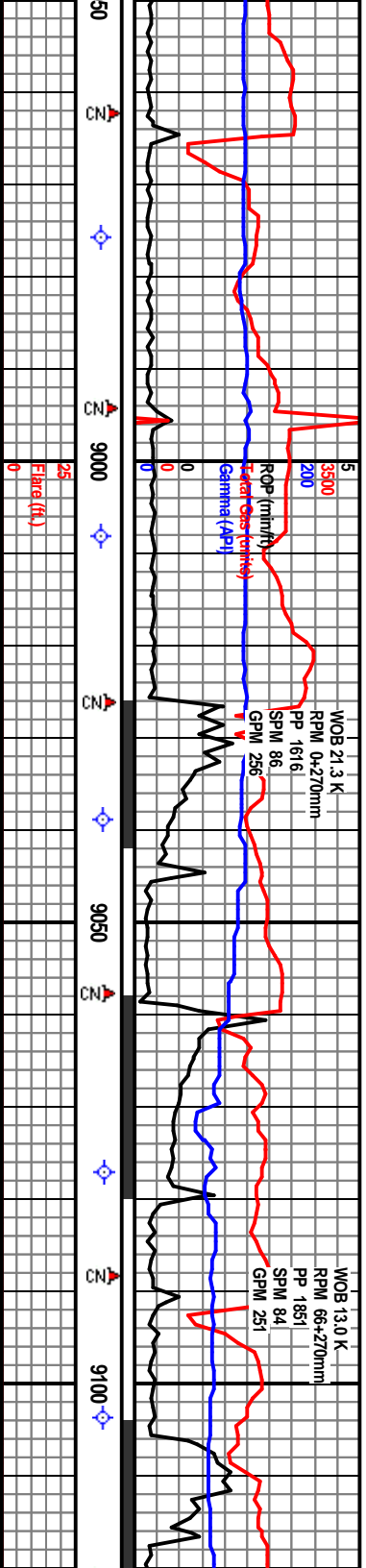
CG

CG

In Wt. 8.4, Vis 27
Out Wt. 8.4, Vis 27

CG

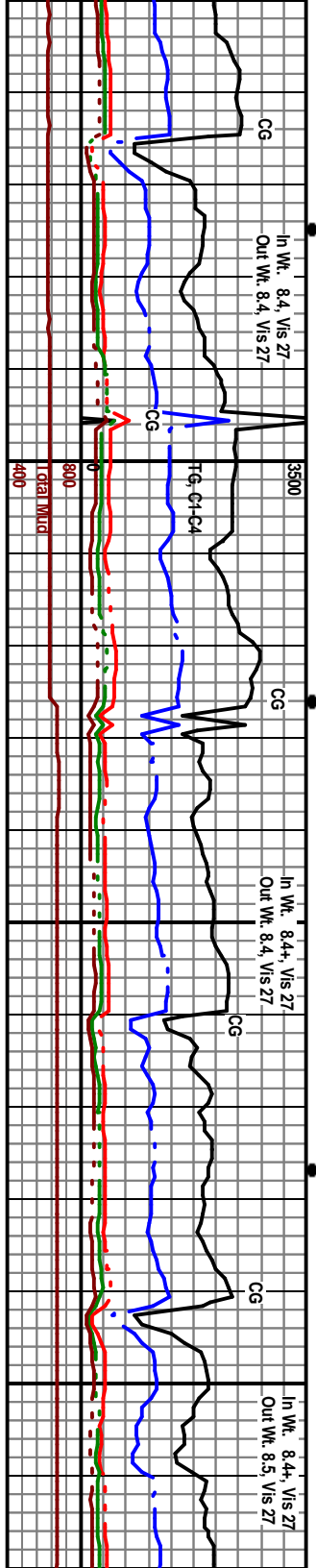


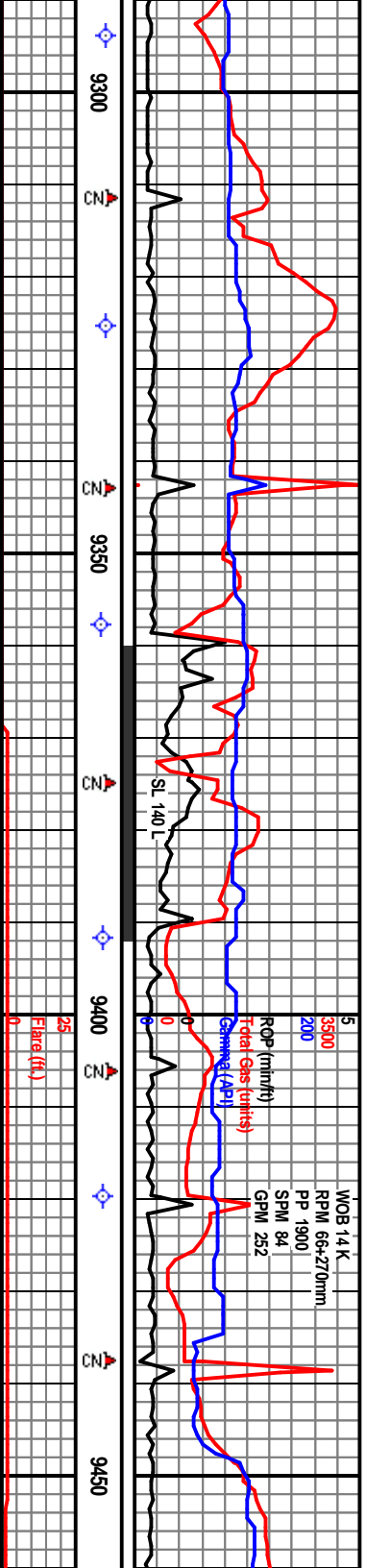


Survey @ 8976', Incl. 90.3° Azm. 176.8°, TVD 7292.77', VS 1906.32'	7100 TVD	Survey @ 9039', Incl. 90.6° Azm. 176.3°, TVD 7292.80', VS 1963.24'	Survey @ 9103', Incl. 91.8° Azm. 179.0°, TVD 7291.51', VS 2027.03'
Carbonaceous chalk - dark gray to grayish brown, light gray mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, platy to sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous chalk - dark gray to grayish brown, light gray mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, platy to sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous chalk - dark gray to grayish brown, light gray mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, platy to sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous chalk - gray mottling, brittle to firm, very carbonaceous, very calcareous - limy - marly, platy to sub-platy to sub-blocky, loose white calcite from fractures, Yellow solid fluorescence in unwashed sample, spotty unwashed, washed gives an immediate milky white flashing cut, thin film

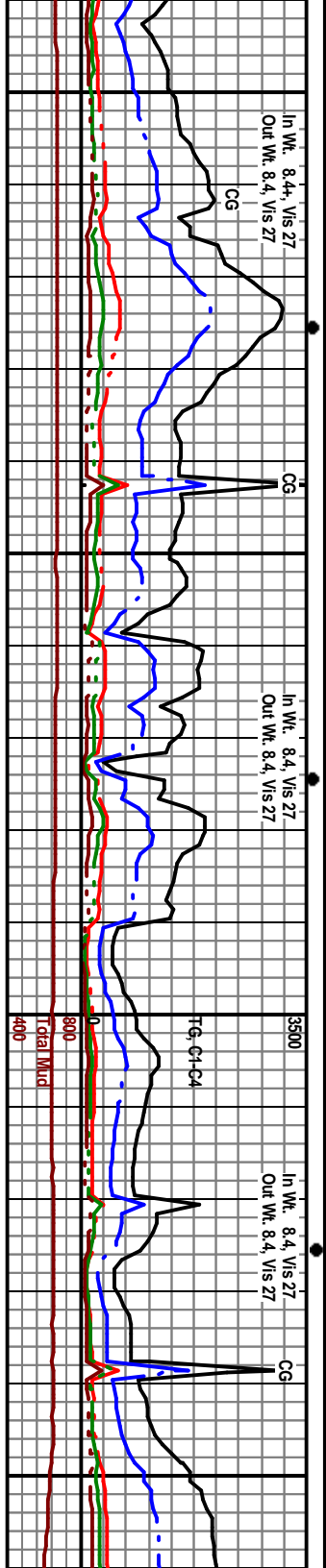
Abundant even free brownish green oil on shakers and tanks

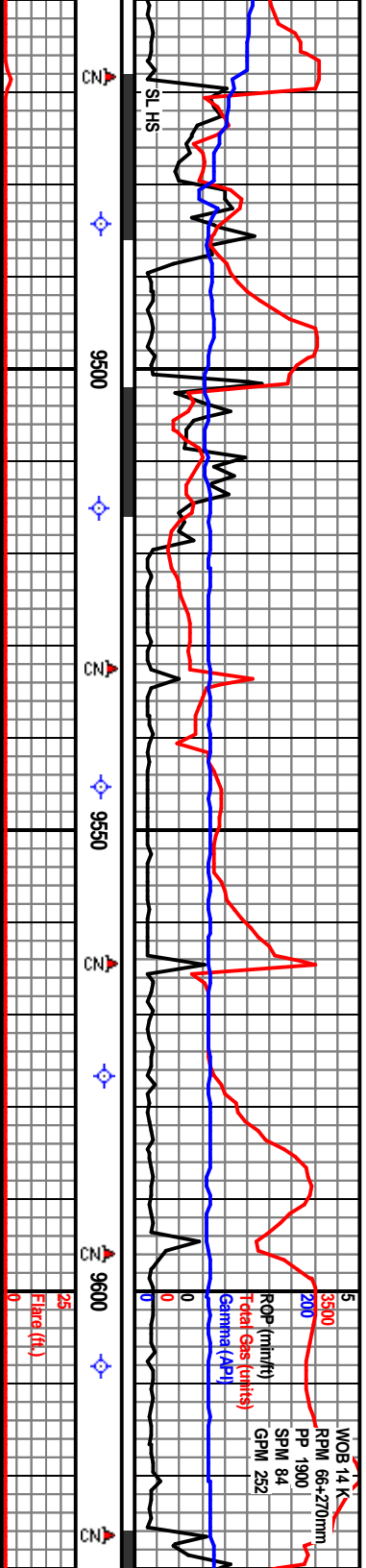
Abundant





9300	9350	9400	9450
Survey @ 9357, Incl. 90.0° Azim. 185.4°, TVD 7288.63', VS 2277.53'	ON GAS BUSTER Holding 50 psi on casing with Auto Choke	7100 TVD Survey @ 9420°, Incl. 87.1° Azim. 184.3°, TVD 7290.90', VS 2339.20'	
Carbonaceous chalk - gray to grayish brown, mottled light gray, poor induration, very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Spotty washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous chalk - gray to grayish brown, mottled light gray, poor induration, very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Spotty washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous Chalk - gray to grayish brown, mottled light gray, poor induration, very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous

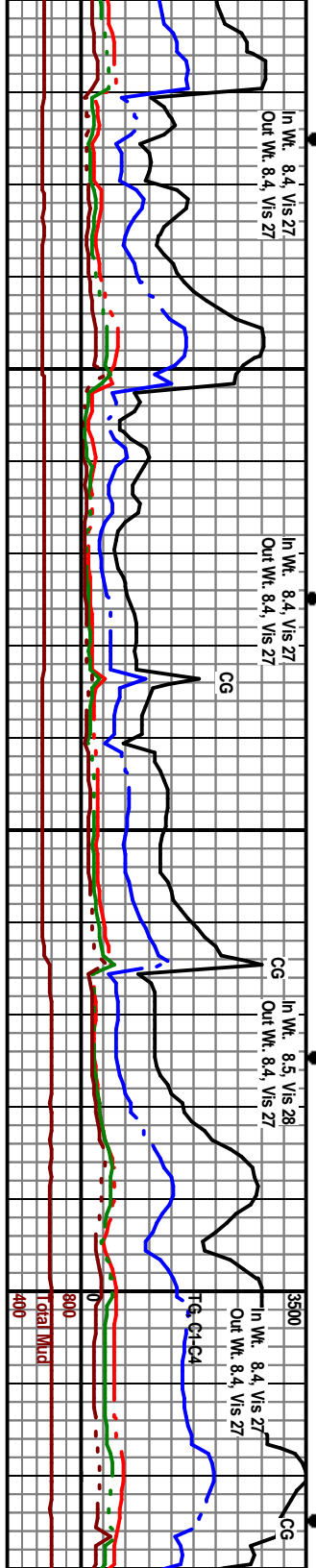


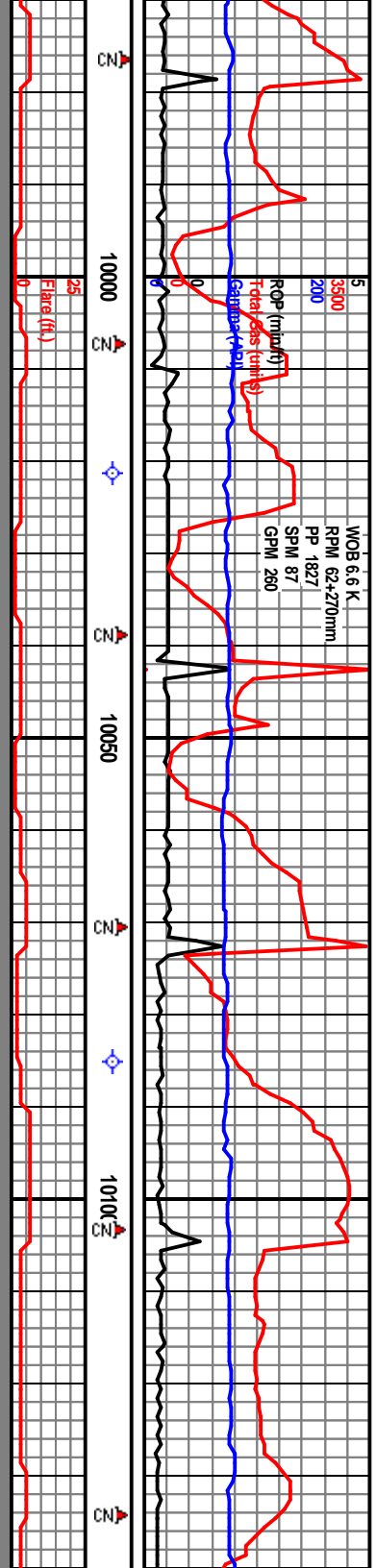


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ndant even free brownish green oil on shakers and tanks.

us chalk - gray to grayish brown, mottled light induration. very carbonaceous and calcareous, sub-blocky, loose white calcite from fractures. the solid fluorescence in unwashed sample. gives an immediate milky white flashing cut, thin film when dry.	Carbonaceous Chalk - gray to grayish brown, mottled light gray, poor induration. very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed gives an immediate milky white flashing cut, thin film and ring when dry.	Carbonaceous Chalk - gray to grayish brown, mottled light gray, poor induration. very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Spotty washed sample gives an immediate milky white flashing cut, thin film and ring when dry	Carbonaceous Chalk - gray to grayish brown, mottled light gray, poor induration. very carbonaceous and calcareous, sub-play to sub-blocky, loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Spotty washed sample gives an immediate milky white flashing cut, thin film and ring when dry
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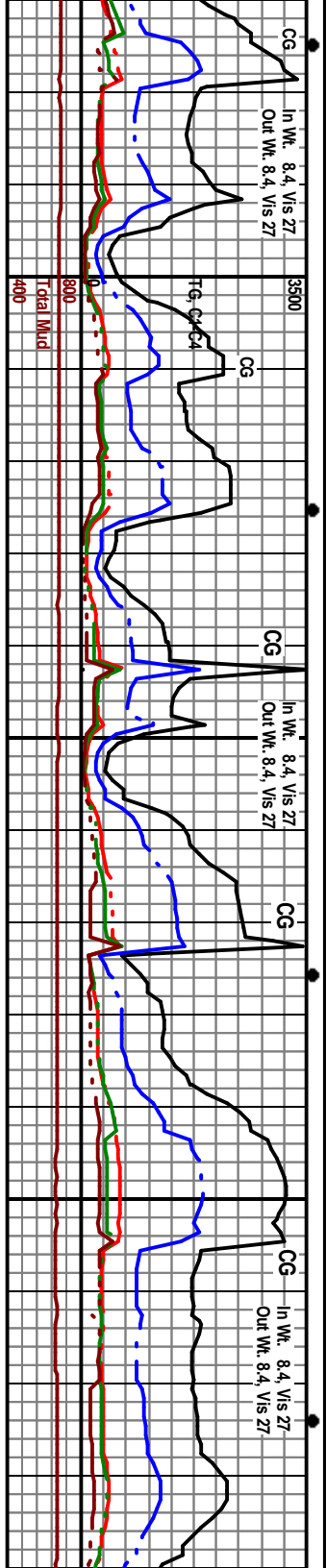


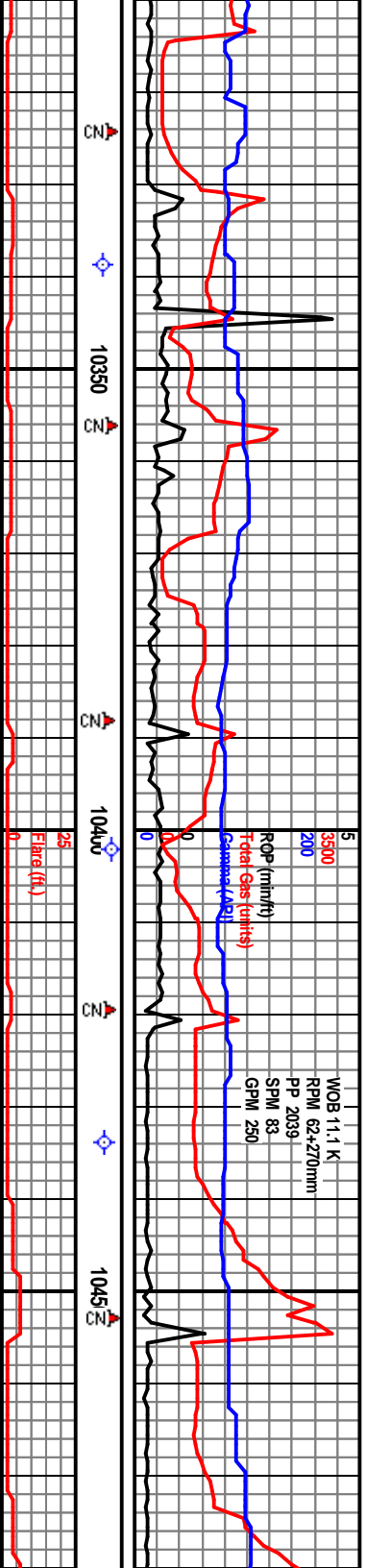


MOB 6.6 K
RPM 62+70mm
PP 1827
SPM 87
GPM 280

89.7° 2.56,	7100 TVD	Survey @ 10021', Incl: 89.6° Azim. 180.3°, TVD 7292.95, VS 2934.11'	Survey @ 10085', Incl: 89.8° Azim. 180.2°, TVD 7293.28, VS 2997.82'	Survey @ Azim. 178° VS 3060.2
- mottled light gray to brownish gray to slightly firm - poor carbonaceous, very calcareous - very sub-platey, some splintery, calcite from fractures. Yellow fluorescence in unwashed sample. Spotty yellow fluorescence gives white flashing cut, thick film and	Carbonaceous Chalk - mottled light gray to brownish gray to dark gray, brittle to slightly firm - poor induration, very carbonaceous, very calcareous - very limy - marly, platy to sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence gives an immediate milky white flashing cut, thick film and ring when dry.	Carbonaceous Chalk - mottled light gray to brownish gray to dark gray, brittle to slightly firm - poor induration, very carbonaceous, very calcareous - very limy - marly, platy to sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence gives an immediate milky white flashing cut, thick film and ring when dry.	Carbonaceous Chalk - mottled light gray to brownish gray to dark gray, brittle to slightly firm - poor induration, very carbonaceous, very calcareous - very limy - marly, platy to sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence gives an immediate milky white flashing cut, thick film and ring when dry.	Carbonaceous Chalk - dark brownish gray to dark gray to slightly firm - poor induration, sub-waxy very carbonaceous, very calcareous - marly, platy sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate white cut, thick film and ring when dry.

Abundant free dark brownish green oil on shakers and tanks.





Survey @ 10339', Incl. 90.9°
Azim. 179.0°, TVD 7292.88',
VS 3250.33'

Survey @ 10402', Incl. 90.2°
Azim. 177.5°, TVD 7292.20',
VS 3313.08'

Survey @ 10434', Incl. 89.5°
Azim. 177.8°, TVD 7292.28',
VS 3344.98'

WPT4 @ 10600' MD ~3520' VS, 7290 – 7296' TVD

on shakers and tanks.

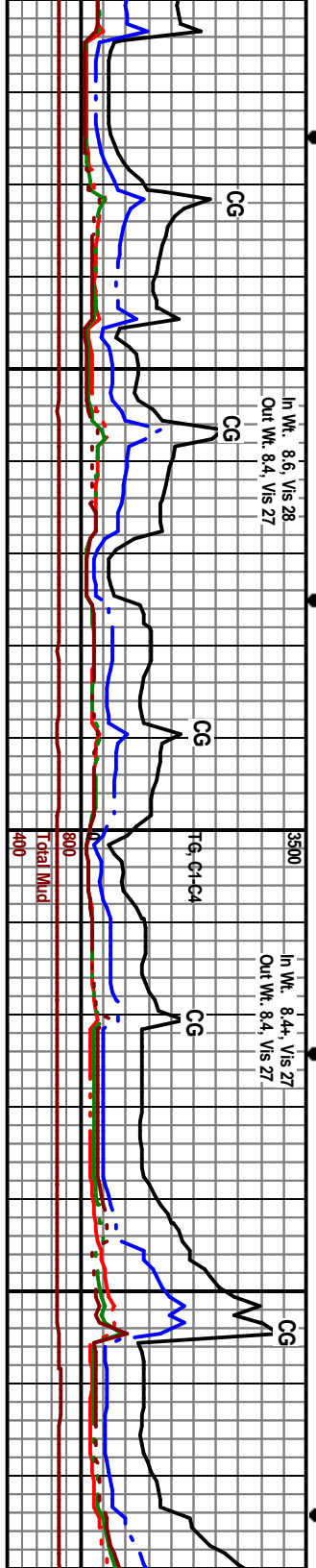
Abundant free data

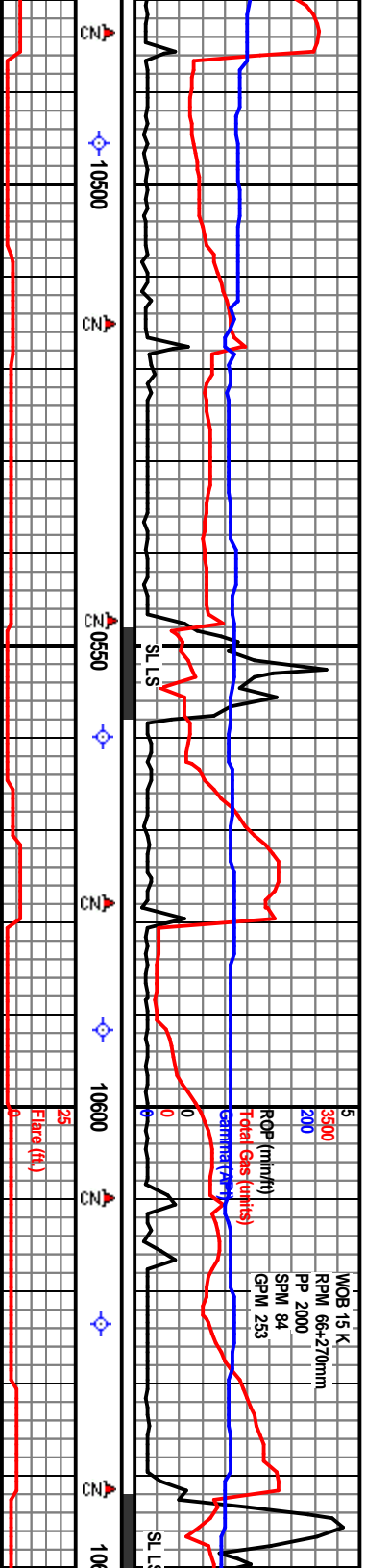
Carbonaceous Chalk - dark brownish gray to dark gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - mainly, platy to sub-platy, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed with spotly yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film when dry.

Carbonaceous Chalk - dark brownish gray to dark gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - mainly, platy to sub-platy, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotly yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.

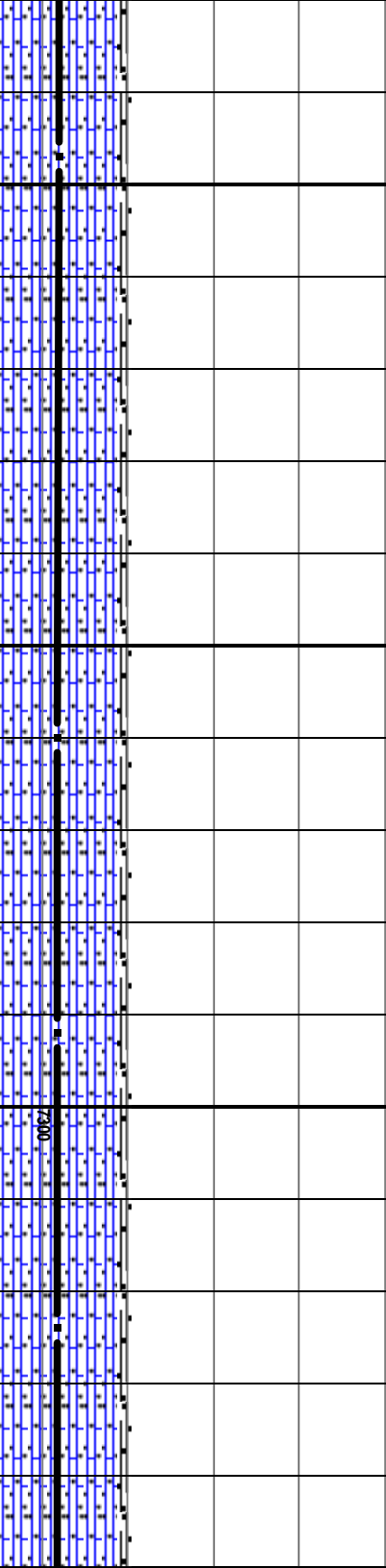
Carbonaceous Chalk - dark gray to dark brownish gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - mainly, platy to sub-platy, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotly yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film when dry.

Carbonaceous Chalk - dark gray to dark brownish gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - mainly, platy to sub-platy, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotly yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film when dry.





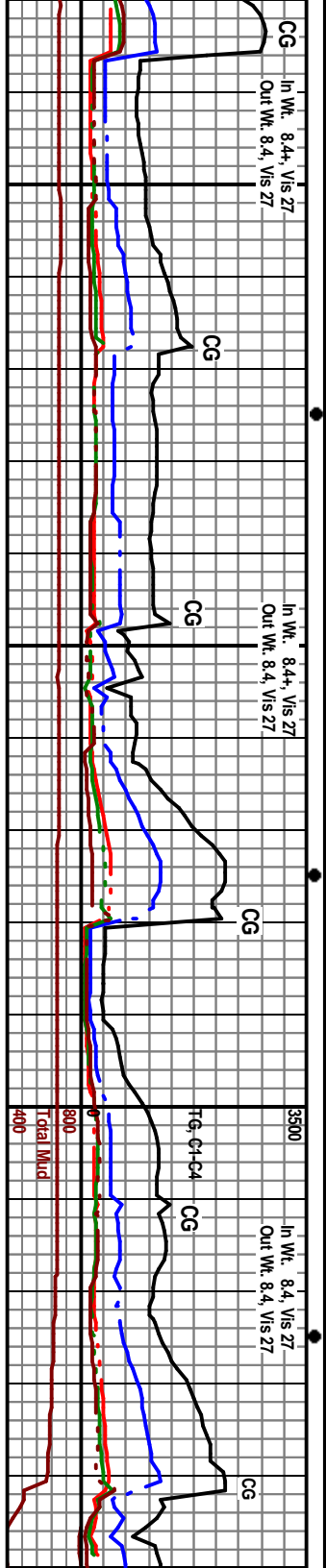
Survey @ 10497', Incl. 89.8° Azim. 178.0°, TVD 7292.67', VS 3407.76'	Survey @ 10560', Incl. 89.3° Azim. 178.1°, TVD 7293.16', VS 3470.53'	7100 TVD	Survey @ Azim. 177° VS 3566'
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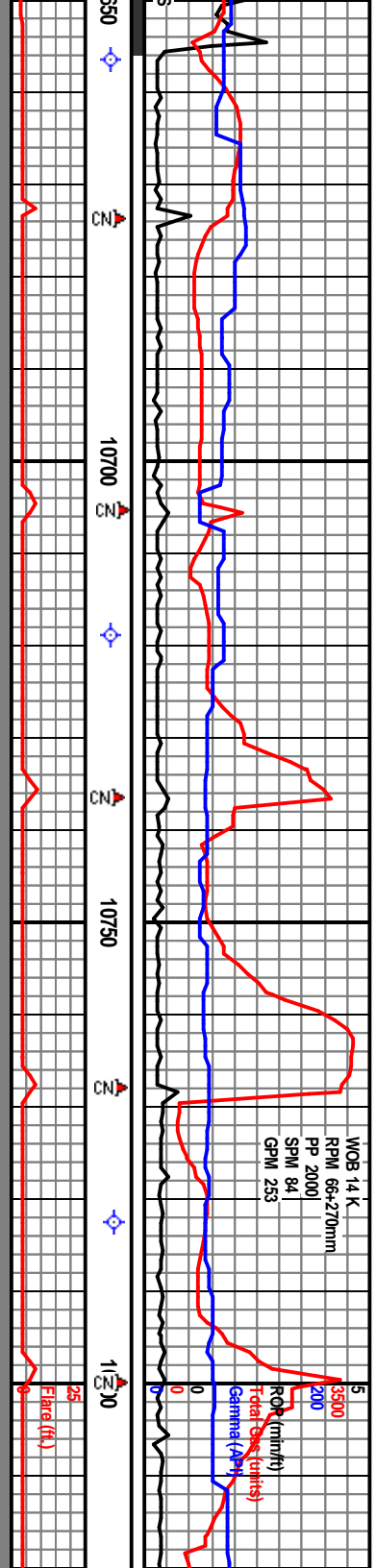
to dark brownish firm - poor v carbonaceous, sub-platey, some calcite from fluorescence in le with spotty strong odor, thick film and ring	Carbonaceous Chalk - dark gray to dark brownish gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - marly, platy to sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - dark gray to dark brownish gray, some light gray, brittle to slightly firm - poor induration, sub-waxy texture, very carbonaceous, very calcareous - marly, platy to sub-platey, some splintery, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platey, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.
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dark brownish green oil on shakers and tanks.

Abundant free brownish green oil on



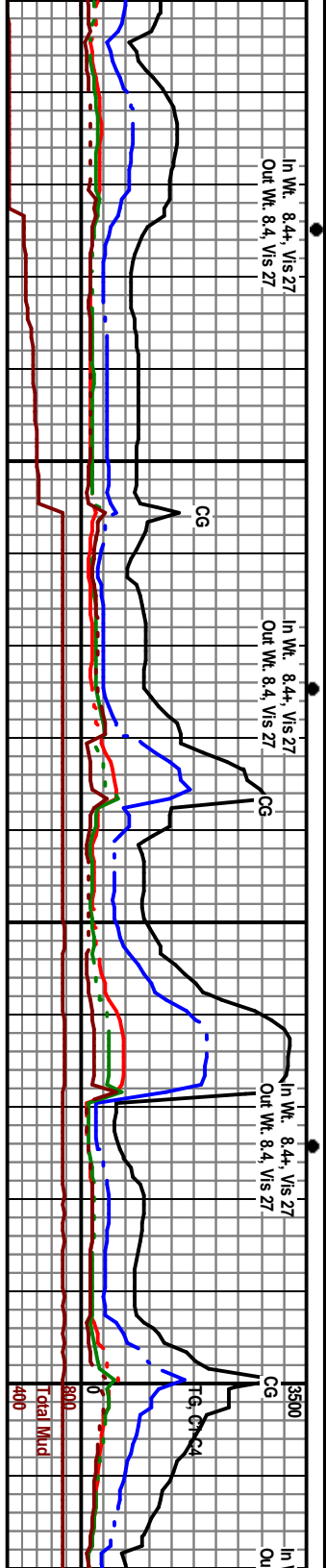
CG In Wt. 8.44, Vis 27 Out Wt. 8.4, Vis 27	CG In Wt. 8.44, Vis 27 Out Wt. 8.4, Vis 27	CG In Wt. 8.4, Vis 27 Out Wt. 8.4, Vis 27	CG In Wt. 8.4, Vis 27 Out Wt. 8.4, Vis 27
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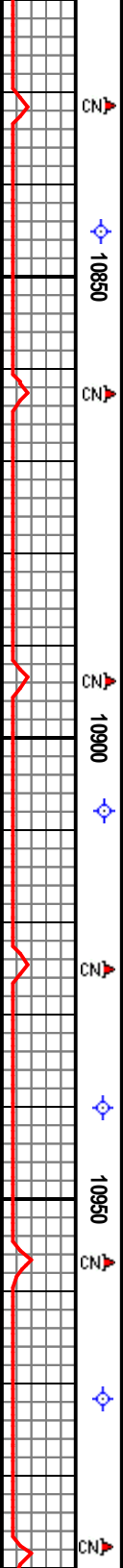
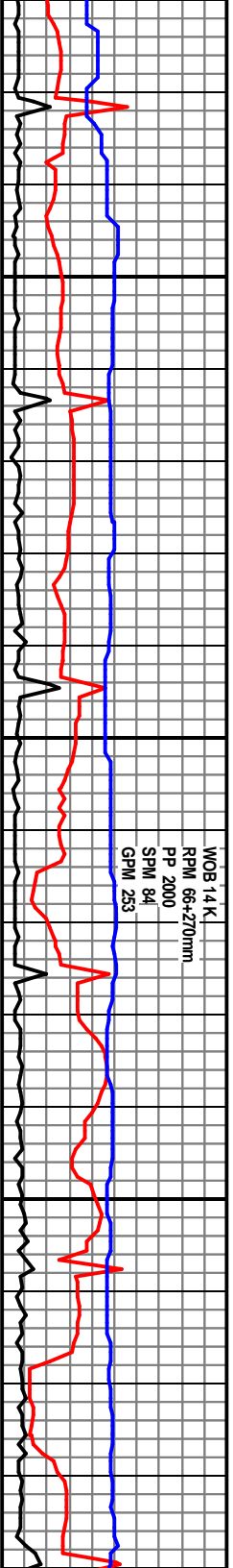


Survey @ 10656', Incl. 88.8° Az. 177.1°, TVD 7293.30', 08'	Survey @ 10719', Incl. 88.9° Az. 177.8°, TVD 7294.57', VS 3628.89'	Survey @ 10782', Incl. 89.6° Az. 177.7°, TVD 7295.39', VS 3691.68'	7100 TVD
SLC.P. = 65 psi			
Carbonaceous Chalk - light gray to gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray to gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray to gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray to gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.

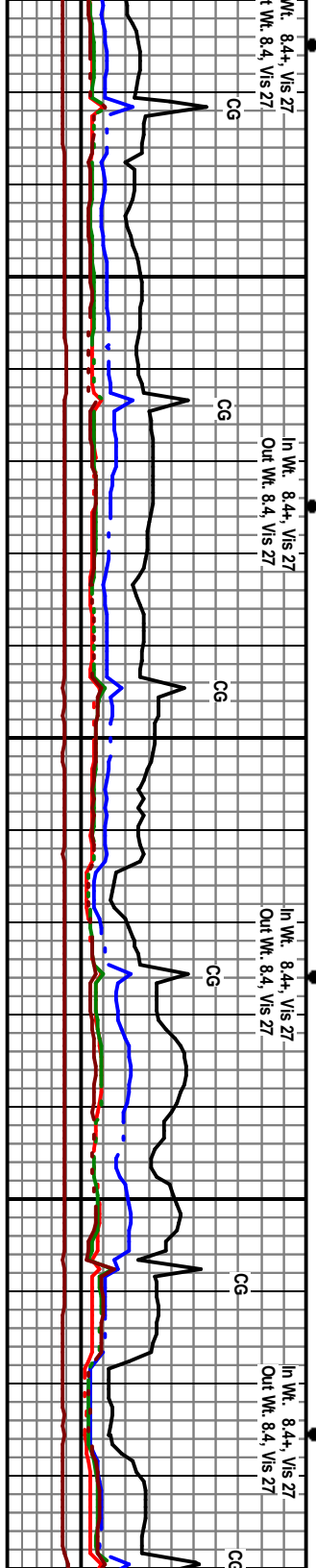
on shakers and in drilling fluid.

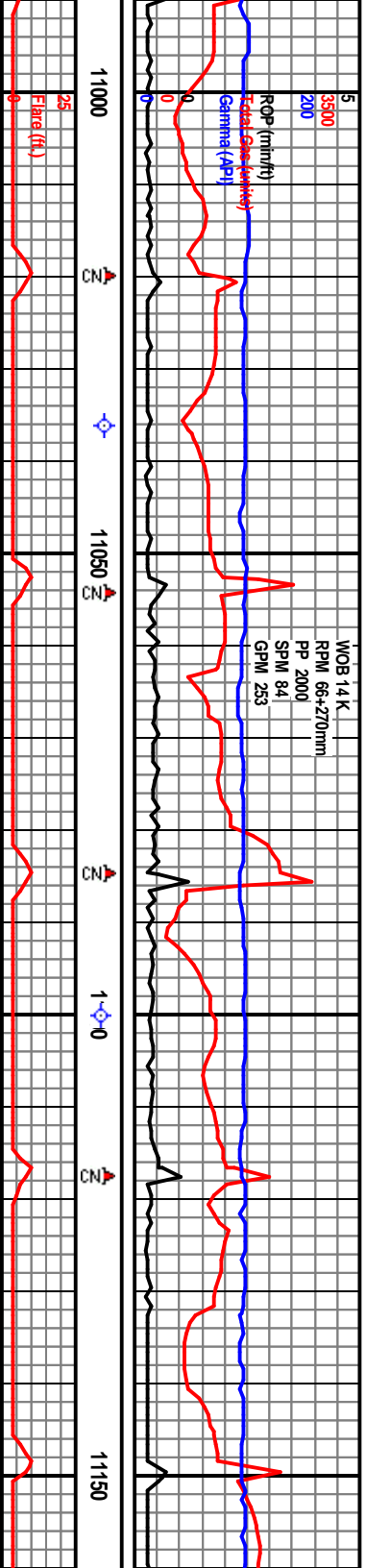
Abundant free brownish green oil on shakers and in





Survey @ 10845', Incl. 89.10° Azim. 176.8°, TVD 7296.10', VS 3754.52'			Survey @ 10908', Incl. 90.59° Azim. 177.59°, TVD 7296.32', VS 3817.36'			Survey @ 10971', Incl. 89.96° Azim. 177.79°, TVD 7295.83', VS 3880.16'
Auto choke while drilling.					S.I.C.P. = 45 psi	
drilling fluid.						
Very gray to very dark gray, poor induration. earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.			Carbonaceous Chalk - light gray to very dark gray, poor induration. earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.			Carbonaceous Chalk - light gray to very dark gray, poor induration. earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.





WPT5 @ 11100' MD ~4020' VS, 7294 – 7300' TVD			
7100 TVD	Survey @ 11036, Incl. 90.4° Azim. 177.4°, TVD 7295.66', VS 3944.96'	Survey @ 11100, Incl. 89.8° Azim. 177.6°, TVD 7295.55', VS 4008.78'	Survey @ 11150 Azim. 179.0° VS 4072.52'
poor e calcite unwashed ce, very thick film	Carbonaceous Chalk - light gray to very dark gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray to very dark gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.	Carbonaceous Chalk - light gray to very dark gray, poor induration, earthy texture, very carbonaceous, very calcareous, platy to sub-platy, abundant loose white calcite from fractures. Yellow white solid fluorescence in unwashed sample. Washed sample with spotty yellow fluorescence, very oily - strong odor, immediate streaming white cut, thick film and ring when dry.

Abundant free brownish oil on shakers and in drilling fluid.

