



Scale: 5" / 100'
Measured Depth Log

Well Name Badding 26N-26HZ

Location SESE SEC 26, T2N, R66W

State Colorado

Country USA

API Number 05-123-38336

Region DJ Basin

Spud Date 2/6/2014

Surface Coordinates 350' FSL & 626' FEL

Bottom Hole Coordinates 200' FSL & 125' FEL

County Weld

Rig Number Ensign 138

Field Wattenberg

Drilling Completed 2/13/2014

Ground Elevation 5116'

K.B. Elevation 5129'

Logged Interval 6784' To 12743'

Total Depth 12743'

Formation Niobrara

Type of Drilling Fluid H2O, LSND

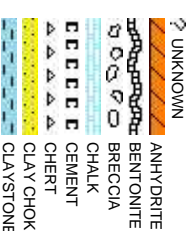
Company Anadarko

Address Granite Tower
1099 18th St, S
Denver, CO 80202

Name Zach Uber & Irene

Company Columbine Logging

Address 2385 S. Lipan St
Denver, CO 80202



Operator

uite #1800
202

Geologist

ne Kadel-Harder

ging, Inc.

it.
223

Rock Types

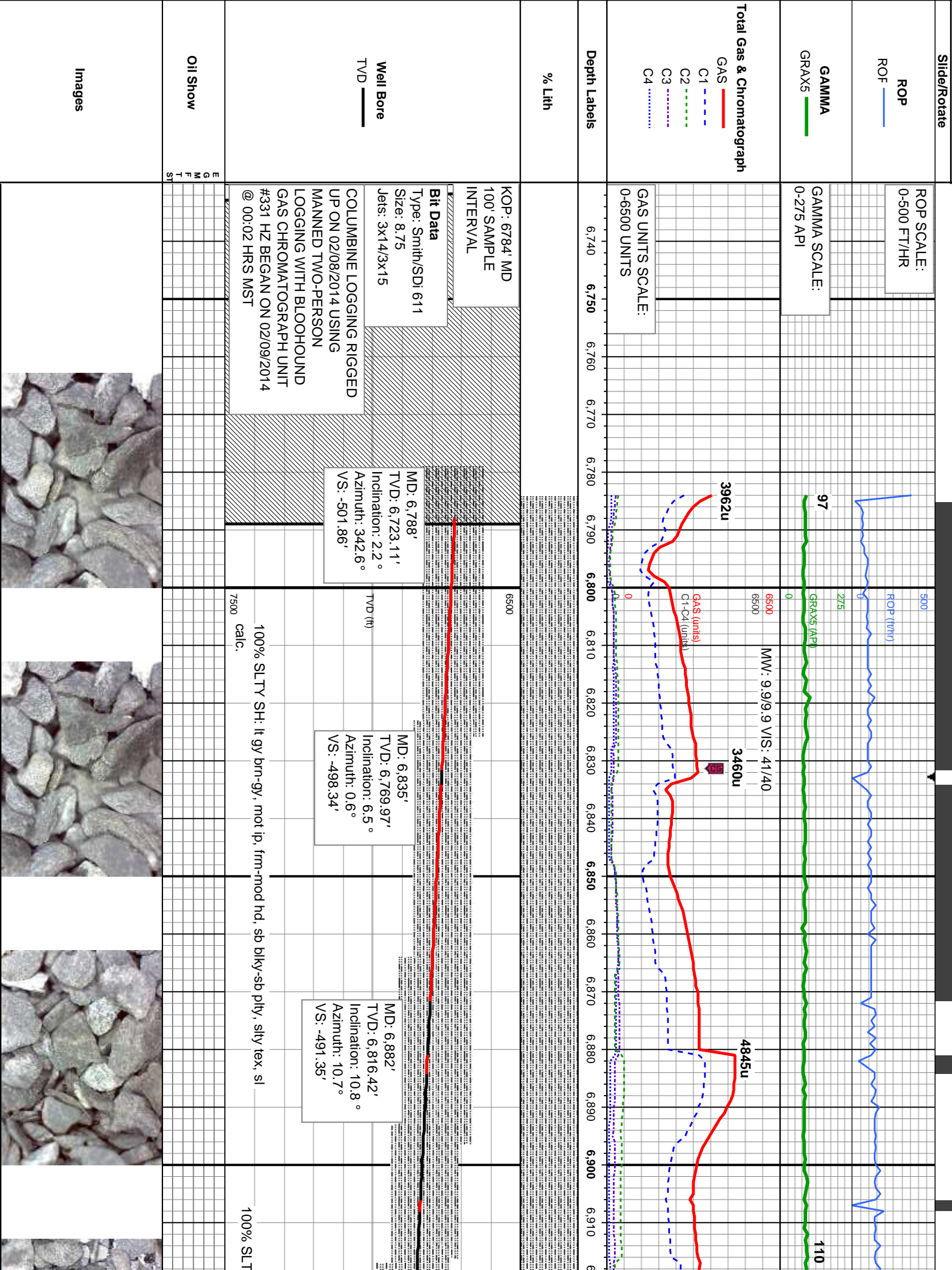
CONGLOMERATE	MARLSTONE	SHALY SANDSTONE
DOLOMITE	METAMORPHIC	SHALY SILTSTONE
DOLOMITIC LIMESTONE	NO SAMPLE	SILT SHALE
GRANITE	SALT	SILTSTONE
GYPSUM	SANDSTONE	TILL
IGNEOUS	SALT-PEPPER SAN	TUFF
SIDERITE or LIMONITE	SHALE	WELDED TUFF
LIMESTONE	SHALE COLORED	
	SHALE GRAY	

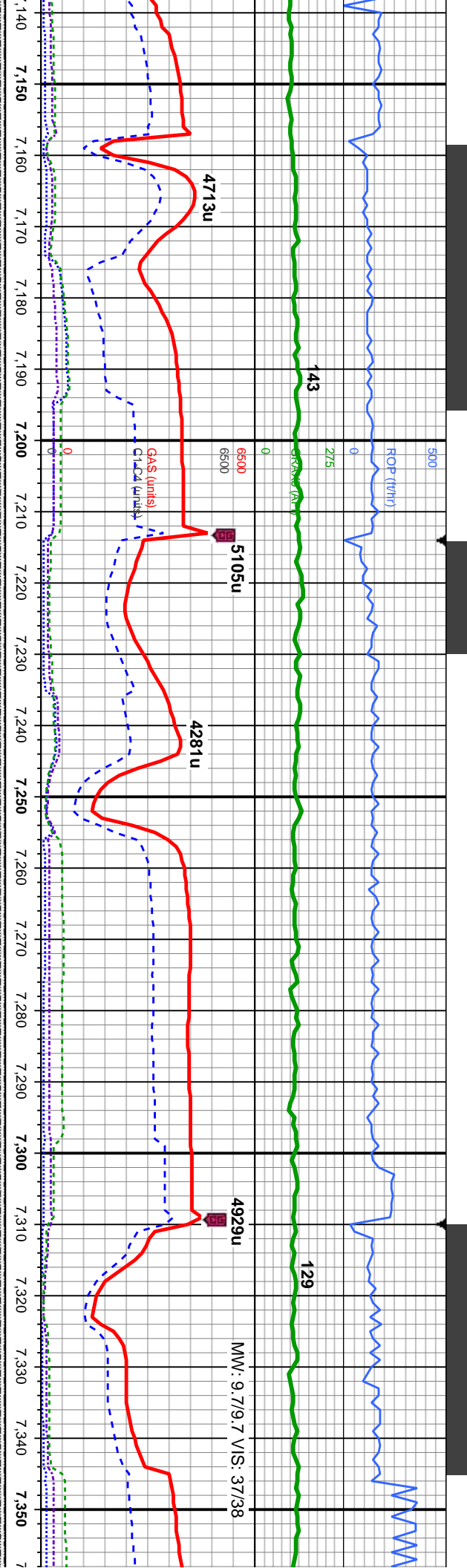
Accessories

Fossils	GASTROPOD	ARGILLITE GRAIN	HEAVY MINERAL	ANHYDRITE STRINGER
	INOCERAMUS	B BENTONITE	K KAOLIN	BENTONITE STRINGER
	ALGAE	O OOLITE	M MARLSTONE	COAL STRINGER
	AMPHIPORA	O OSTRACOD	M MICACEOUS	DOLOMITE STRINGER
	BELEMNITE	P PELECYPOD	C CALCAREOUS	GYPSUM STRINGER
	BIOCLASTIC	P PELLET	C CARBONACEOUS FLAKES	LIMESTONE STRINGER
	BRACHIOPOD	P PISOLITE	C CHTDK	N NODULES
	BRYOZOA	P PLANT REMAINS	C COAL - THIN BEDS	P PHOSPHATE PELLETS
	CEPHALOPOD	S PLANT SPORES	D DOLOMITIC	P PYRITE
	CORAL	S SCAPHOPOD	F FELDSPAR	S SALT CAST
	CRINOID	S STROMATOPOROID	F FERRUGINOUS PELLET	S SANDY
	ECHINOID		S SILICEOUS	S SILTY
	FISH	Minerals	F FERRUGINOUS	T TUFACEOUS
	FORAMINIFERA	A ANHYDRITIC	G GLAUCONITE	
	F FOSSIL	A ARGILLACEOUS	G GYPSIFEROUS	Stringer

Other Symbols

Oil Show	P PINPOINT	DST INTERVAL	WIRELINE TESTED - LEFT	E EARTHY
	V VUGGY	FAULT	WIRELINE TESTED - RT	Fx FINELYXLN
	D DEAD	FORMATION TOP	DRILL STEM TEST	GS GRAINSTONE
	E EVEN	GAS SHOW	MN DEPTH	L LITHOGRAPHIC
	Q QUESTIONABLE	OIL SHOW		Mx MICROXLN
	BIT			
	SPOTTED STAINING	CONNECTION (UP)	Rounding	MS MUDSTONE
			A ANGULAR	PS PACKSTONE
			B SUBANG	WS WACKESTONE
Porosity	CONNECTION (DOWN)	MN DEPTH (DOWN)		
	CONNECTION GAS	NORMAL FAULT		
E EARTHY	CONNECTION GAS (LEFT)	OVERTURNED STRATA		
F FENESTRAL	TRIP GAS	REVERSE FAULT	R SUBRND	
F FRACTURE	TRIP GAS (LEFT)	CASING		
INTERCRYSTALLINE	DOWN TIME GAS	SIDEWALL CORE (LEFT)	Textures	M MODERATE
INTERCRYSTALLINE	DOWN TIME GAS (LEFT)	SIDEWALL CORE (RIGHT)	P POOR	
MOLDIC	CORE - LOST	SLIDE	C CHALKY	W WELL
O ORGANIC	CORE - RECOVERED	SURVEY	Cx CRYPTOXLN	





MD: 7,166'
TVD: 7,075.39'
Inclination: 36.8 °
Azimuth: 354.8 °
VS: -380.89'

<< TVD SCALE CHANGE >>

TVD (ft)

sb pily-sb blkly, frm, rthy lstr, arg-sily, non calc, no

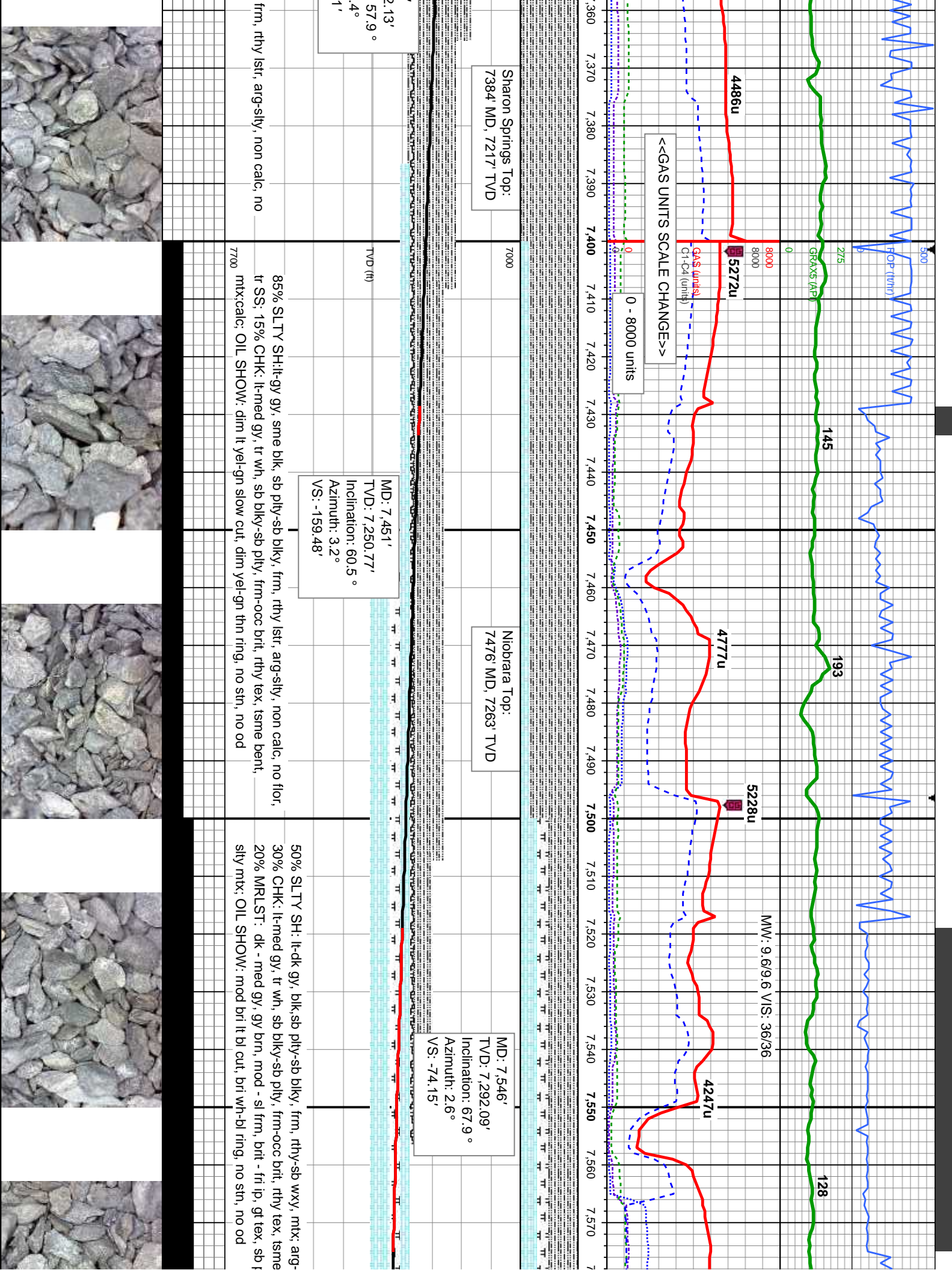
100% SLTY SH:lt-gy gy, sme blk, sb pily-sb blkly, frm, rthy lstr, arg-sily, non calc, no
flor, tr SS

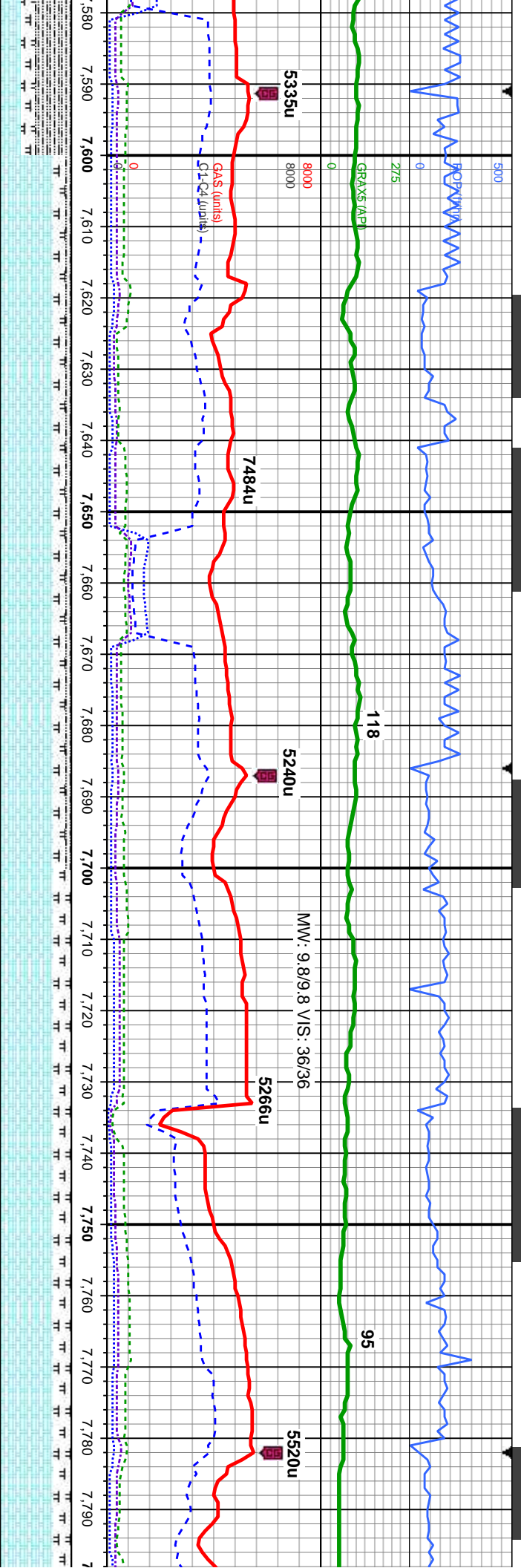
MD: 7,260'
TVD: 7,144.55'
Inclination: 48.3 °
Azimuth: 0.1 °
VS: -317.52'

100% SLTY SH:lt-gy gy, sme blk, sb pily-sb blkly, frm, rthy lstr, arg-sily, non calc, no
flor, tr SS

MD: 7,356'
TVD: 7,200'
Inclination: 3
Azimuth: 3
VS: -240.9'







MD: 7,593'
TVD: 7,308.28'
Inclination: 71.8 °
Azimuth: 1.9 °
VS: -30.08'

MD: 7,641'
TVD: 7,322.11'
Inclination: 74.7 °
Azimuth: 0.6 °
VS: 15.86'

MD: 7,688'
TVD: 7,333.32'
Inclination: 77.7 °
Azimuth: 359.7 °
VS: 61.5'

Niobrara B Chalk Top:
7692 MD, 7334' TVD

MD: 7,735'
TVD: 7,342.05'
Inclination: 80.9 °
Azimuth: 359.2 °
VS: 107.67'

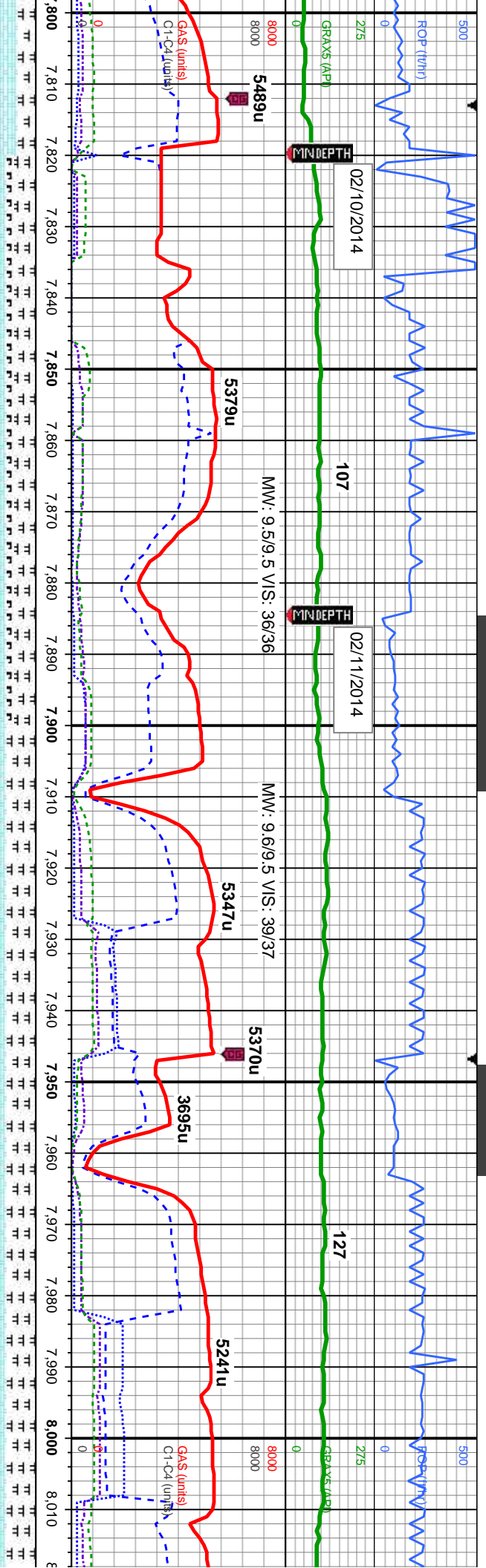
MD: 7,772'
TVD: 7,346.97'
Inclination: 83.8 °
Azimuth: 358.5 °
VS: 144.34'

TOOH @
INTERM
13.55 HF

slty,non-v sl calc; bent, mtx;calc; bly - sb blk, arg -	75% CHK: lt-med gy, tr wh, sb blk, sb ply, frm-occ brit, rthy tex, abnt bent, mtx;calc; 15% MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb ply - sb blk, arg - slty mtx; 10% SLTY SH: lt-dk gy, blk, sb ply, sb blk, frm, rthy-sb wxy, mtx; arg-slty,non-v sl calc; OIL SHOW: mod brt lt bl cut, brt wh-bl ring, no stn, no od	7700
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LATERAL
HRS ON



7000	MD: 7.829' Type: Varrel/ VS 513D Size: 6.12 Inclination: 86.8 ° Depth In: 7.820' Depth Out: 12.743' Azimuth: 357.4 ° VS: 201.11'	MD: 7.892' Type: Varrel/ VS 513D Size: 6.12 Inclination: 87.5 ° Depth In: 7.820' Depth Out: 12.743' Azimuth: 358.2 ° VS: 264'	MD: 7.985' Type: Varrel/ VS 513D Size: 6.12 Inclination: 88.6 ° Depth In: 7.820' Depth Out: 12.743' Azimuth: 358.4 ° VS: 356.92'	7000
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7820' MD FOR
EDATE CASING
VS ON 02/09/14

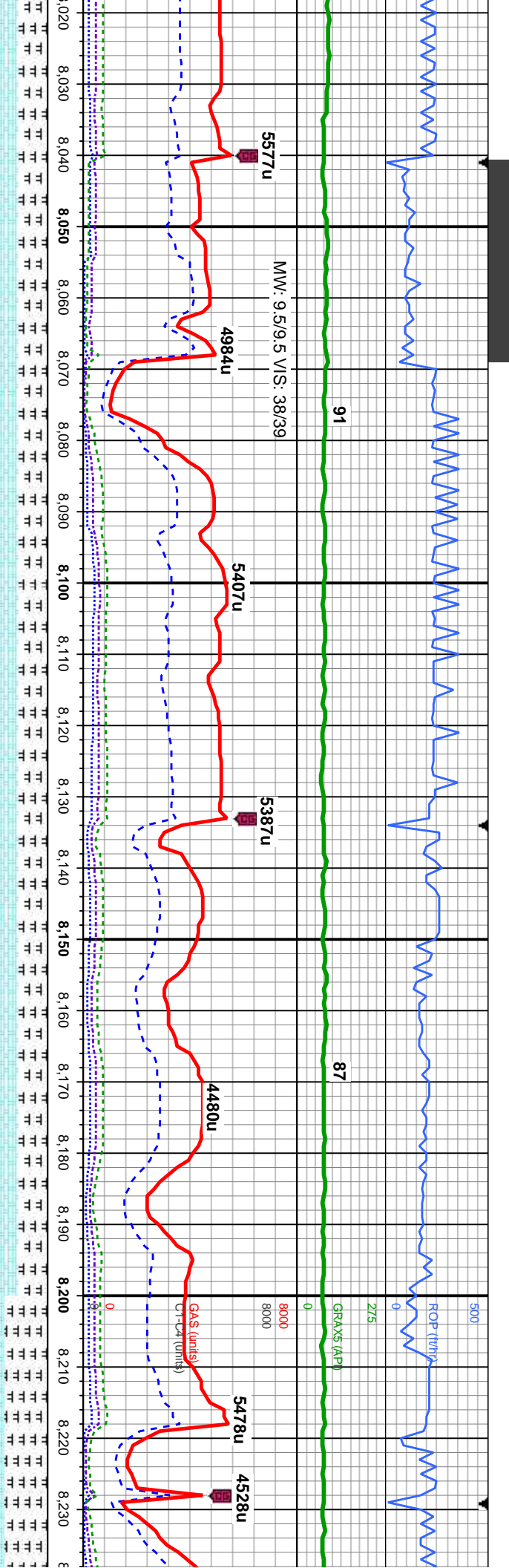
BEGAN @ 23:17
02/10/14

60% CHK: mot gy brn - lt gy, v sft - sl frm, fri, sb blkly, rthy - sb wxy tex, v calc: 30%
MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb ply - sb blkly, calc,
tr inoc foss; 10% CMT; OIL SHOW: bri lt bl, fast cut, bri wh-lt bl-gn solid ring, no
stn, no od

60% CHK: mot gy brn - lt gy, v sft - sl frm, fri, sb blkly, rthy - sb wxy tex, v calc: 40%
MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb ply - sb blkly, calc,
tr inoc foss; OIL SHOW: bri lt bl, fast cut, bri wh-lt bl-gn solid ring, no stn, no od

60% CHK:
MRLST: dk
OIL SHOW





MD: 8.080'
TVD: 7,358.44'
Inclination: 90.8°
Azimuth: 359.4°
VS: 451.9'

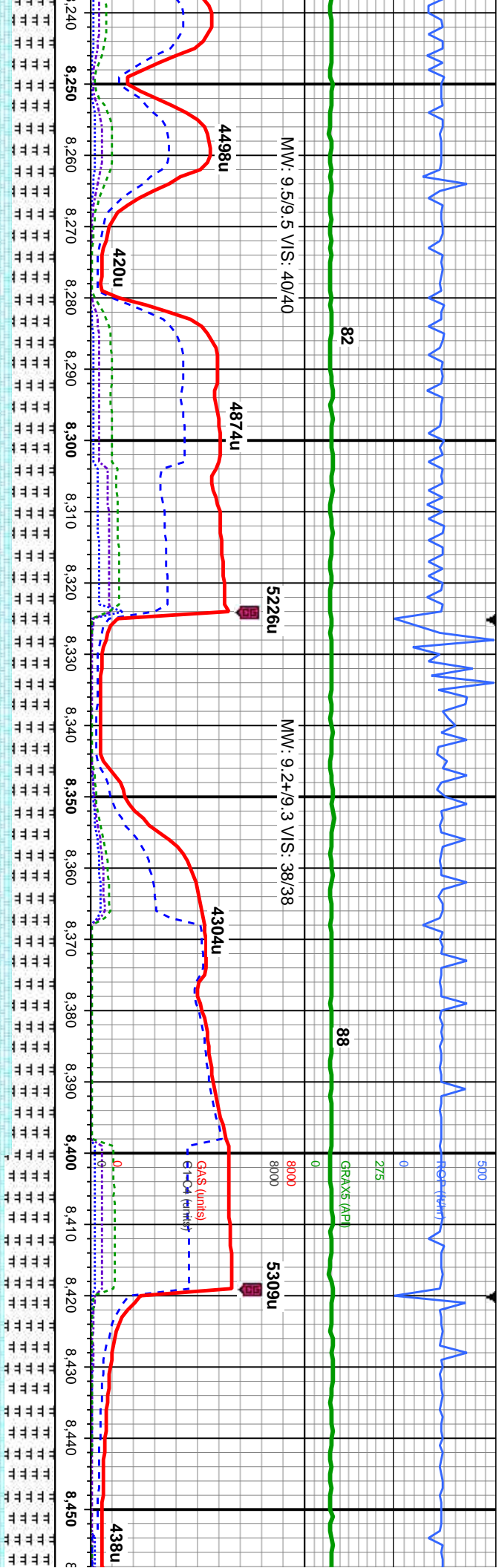
MD: 8.174'
TVD: 7,357.45'
Inclination: 90.4°
Azimuth: 359.4°
VS: 545.9'

mod gy brn - lt gy, v sft - sl frm, fri, sb blk, rthy - sb wxy tex, v calc, 40%
- med gy, gy brn, mod - sl frm, brt - fri ip, gt tex, sb ply - sb blk, calc;
brt lt bl, mod fast cut, brt lt bl-gn solid ring, no sin, no od

60% CHK: mod gy brn - lt gy, v sft - sl frm, fri, sb blk, rthy - sb wxy tex, v calc, 40%
MRLST: dk - med gy, gy brn, mod - sl frm, brt - fri ip, gt tex, sb ply - sb blk, calc;
tr inoc foss; OIL SHOW: brt lt bl, mod fast cut, brt lt bl-gn solid ring, no sin, no od

60% MRLST: dk - med gy, gy
calc, tr inoc foss; 40% CHK: r
tex, v calc; OIL SHOW: brt lt b



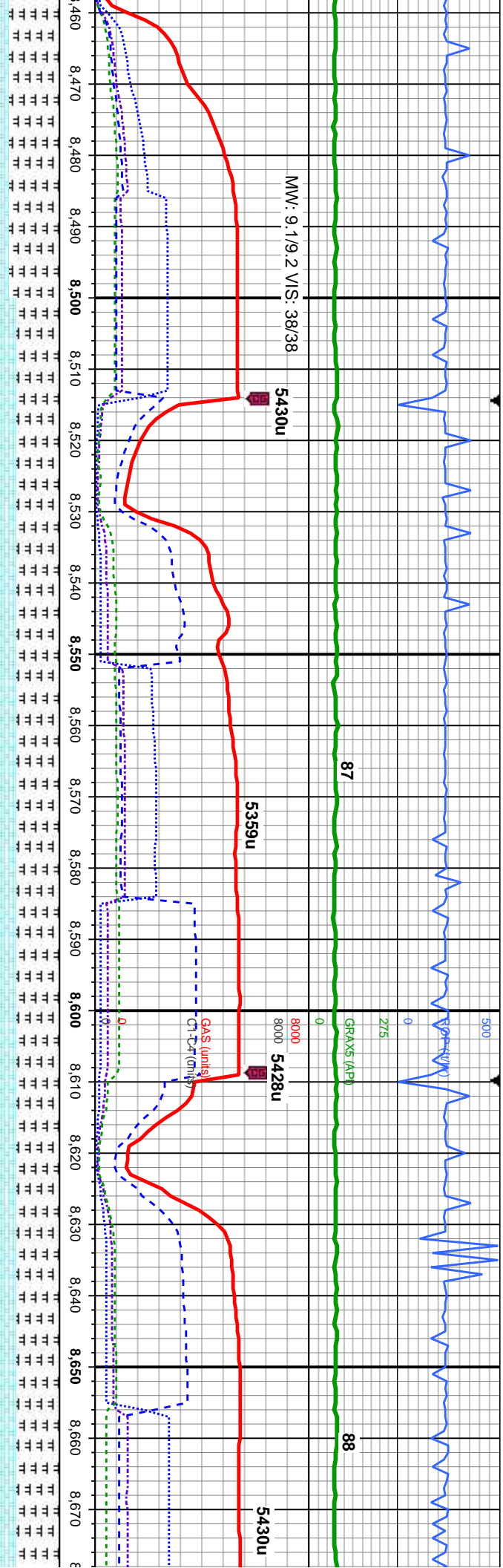


MD: 8,269'
TVD: 7,356.62'
Inclination: 90.6°
Azimuth: 359.7°
VS: 640.89'

MD: 8,363'
TVD: 7,355.64'
Inclination: 90.6°
Azimuth: 359.3°
VS: 734.89'

brn, mod - sl frm, brit - fri ip, gt tex, sb pily - sb blk, mod gy brn - lt gy, v sft - sl frm, fri, sb blk, rthy - sb wxy mod fast cut, bri lt bl-gn solid ring, no strn, no od	60% MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb pily - sb blk, calc, tr inoc foss: 40% CHK: mot gy brn - lt gy, v sft - sl frm, fri, sb blk, rthy - sb wxy tex, v calc; OIL SHOW: mod bri, lt gn cut, dim yel-gn thn ring, no strn	70% MRLST: dk - med gy, gy brn, mod - sl frm, l calc, tr inoc foss: 30% CHK: mot gy brn - lt gy, v wxy tex, v calc; OIL SHOW: mod bri, lt gn cut, di
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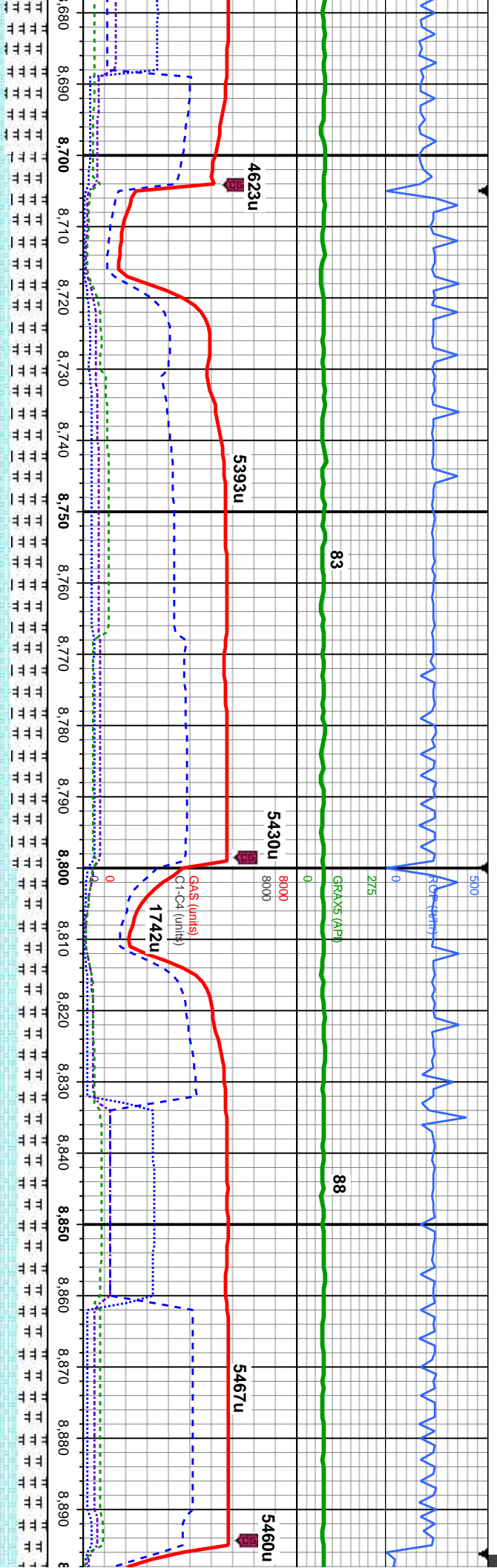




MD: 8.552'
TVD: 7,353.82'
Inclination: 90.5 °
Azimuth: 358.5°
VS: 923.86'

port - fri ip, gt tex, sb ply - sb blkly, sft - sl frm, fri, sb blkly, rthy - sb m yel-gn thn ring, no stn	60% MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb ply - sb blkly, calc, tr inoc foss: 40% CHK: mot gy brn - lt gy, wh incl ip, v sft - sl frm, fri, sb blkly, rthy - sb wxy tex, v calc; OIL SHOW: dim gn slow cut, dim yel-gn thn ring, no stn	60% MRLST: dk - med gy, gy brn, mod - sl frm, brit - fri ip, gt tex, sb ply - sb blkly, calc, tr inoc foss: 40% CHK: mot gy brn - lt gy, wh incl ip, v sft - sl frm, fri, sb blkly, rthy - sb wxy tex, v calc; OIL SHOW: mod brl, lt gn cut, dim yel-gn th
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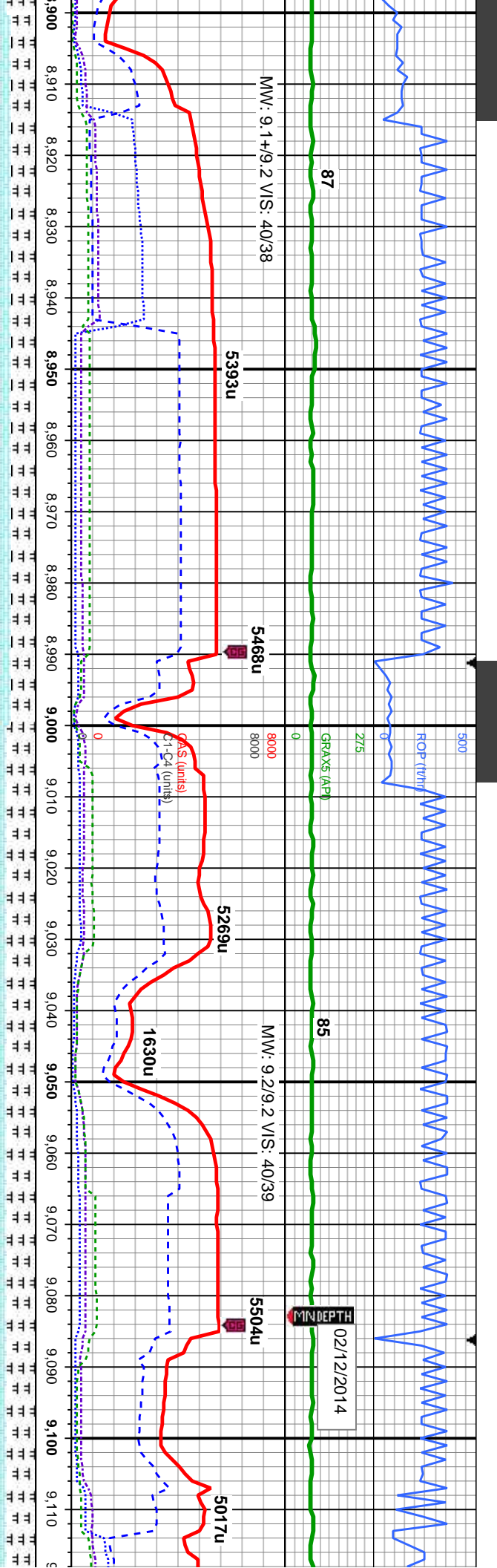




MD: 8,836'
TVD: 7,351.59'
Inclination: 90.4 °
Azimuth: 356.9 °
VS: 1,207.68'

ply - sb blk, fri, sb blk, n ring, no stn	50% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v calc; 50% MRLST: dk - med gy, gy brn, mod - frm, brit - fri ip, gt tex, sb ply - sb blk, calc, tr inoc foss; OIL SHOW: mod bri, lt gn cut, dim yel-gn thn ring, no stn	7700
	60% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v calc; 40% MRLST: dk - med gy, gy brn, mod - frm, brit - fri ip, gt tex, sb ply - sb blk, calc, tr inoc foss; OIL SHOW: bri lt bl, fast cut, bri wh-lt bl-gn solid ring, no stn, no od	





MD: 8,930'
TVD: 7,350.94'
Inclination: 90.4°
Azimuth: 358.4°
VS: 1,301.61'

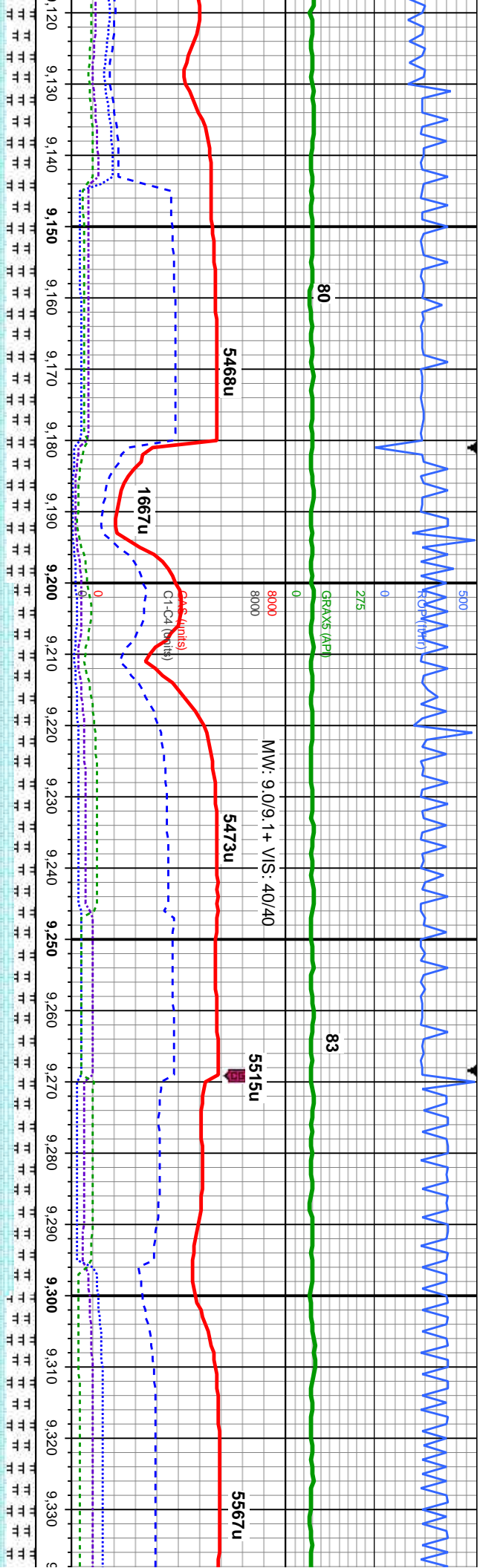
65% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v
calc: 35% MRLST: dk - med gy, gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb
ply - sb blk, calc, tr inoc foss; OIL SHOW: mod bri, lt gn cut, dim yel-gn thn ring,
no stn

60% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v
calc: 40% MRLST: dk - med gy, gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb
ply - sb blk, calc, tr inoc foss; OIL SHOW: mod bri lt gn-yel cut, mod yel-gn ring,
no stn, no od

MD: 9,100'
TVD: 7,350.94'
Inclination: 90.4°
Azimuth: 358.4°
VS: 1,301.61'

60% CHK:
40% MRLST:
sb blk, ca





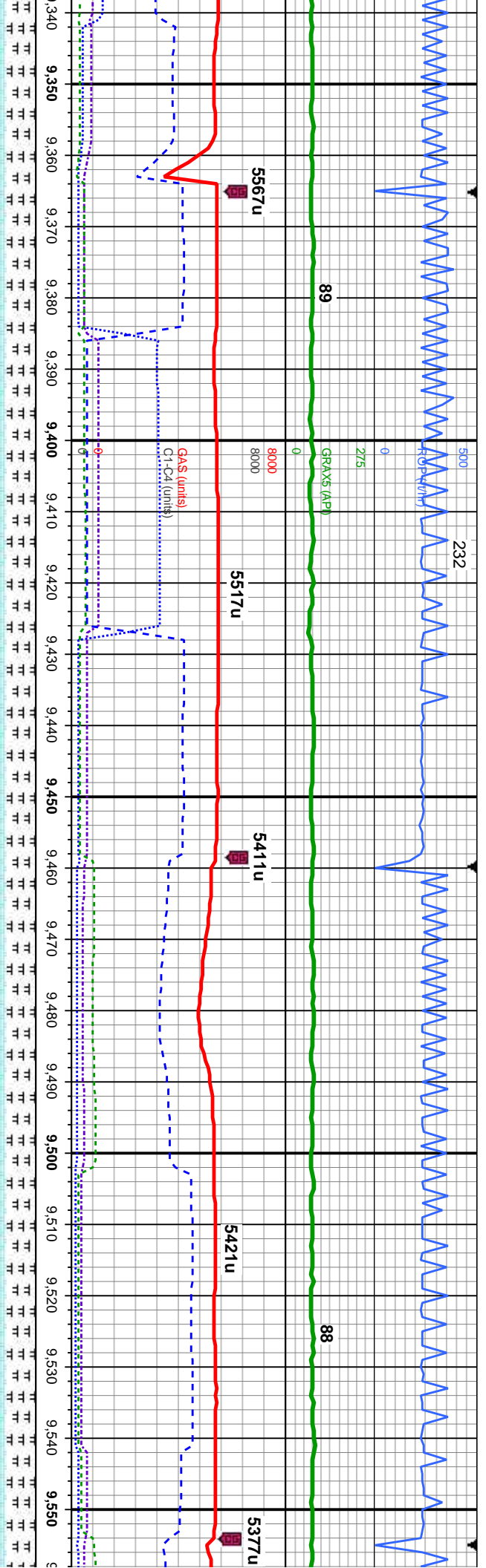
120'
350.27'
ion: 90 °
n: 0.4°
91.6'

mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blkly, rthy - sb wxy tex, v calc;
stf: dk - med gy, gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb ply -
calc; OIL SHOW: mod bri lt gn-yel cut, mod yel-gn ring, no stn, no od

70% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blkly, rthy - sb wxy tex, v calc;
30% MRLST: dk - med gy, gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb ply - sb
blkly, calc, tr inoc foss; OIL SHOW: bri lt bl, fast cut, bri wh-lt bl-gn solid ring, no stn,
no od

60% CHK: mot gy brn - lt gy, v
calc; 40% MRLST: dk - med gy
ply - sb blkly, calc, tr inoc foss
ring, no stn, no od

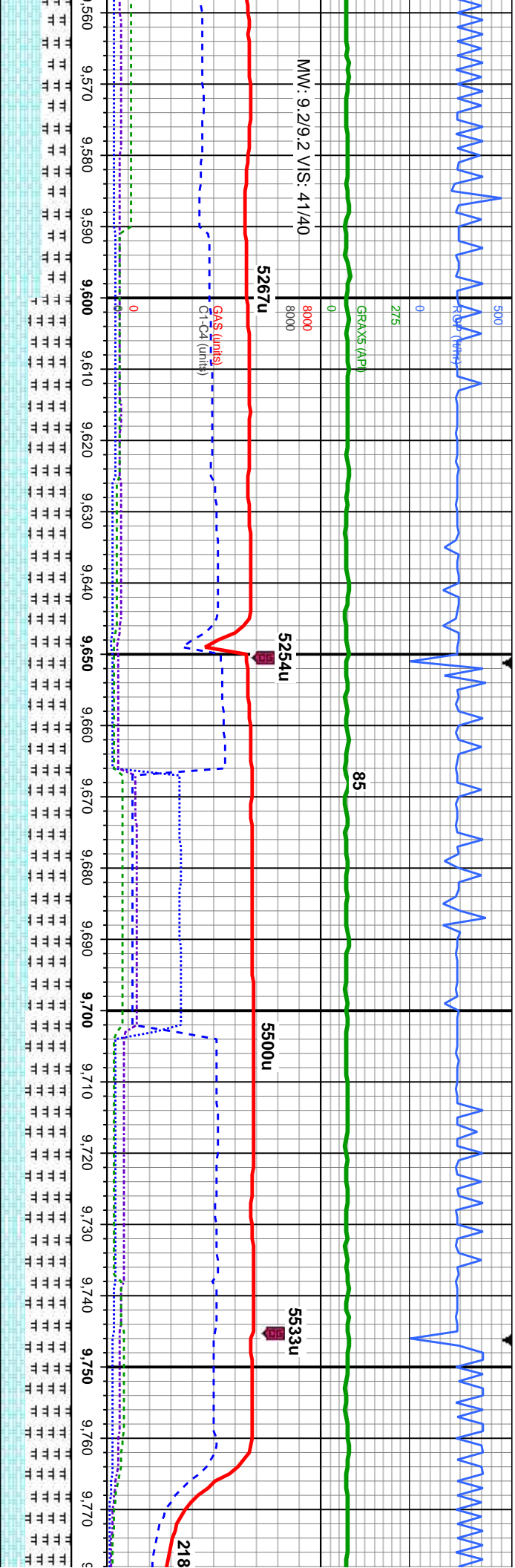




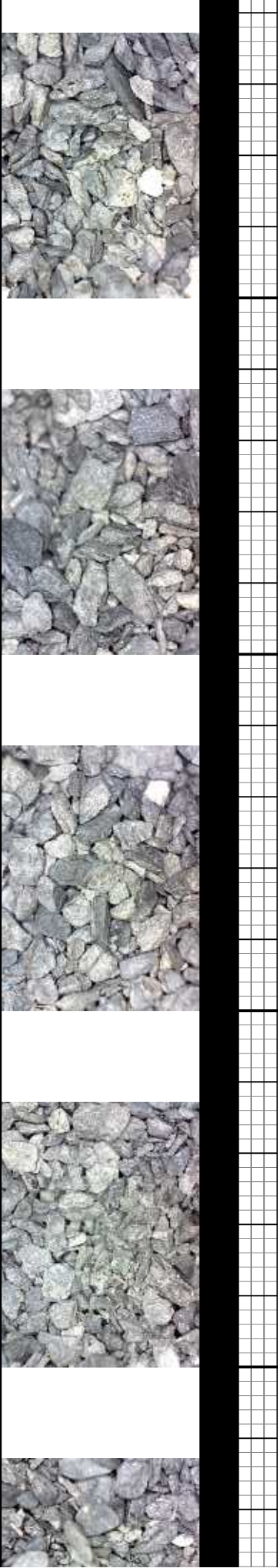
MD: 9,404'
TVD: 7,350.27'
Inclination: 90 °
Azimuth: 359.7°
VS: 1,775.59'

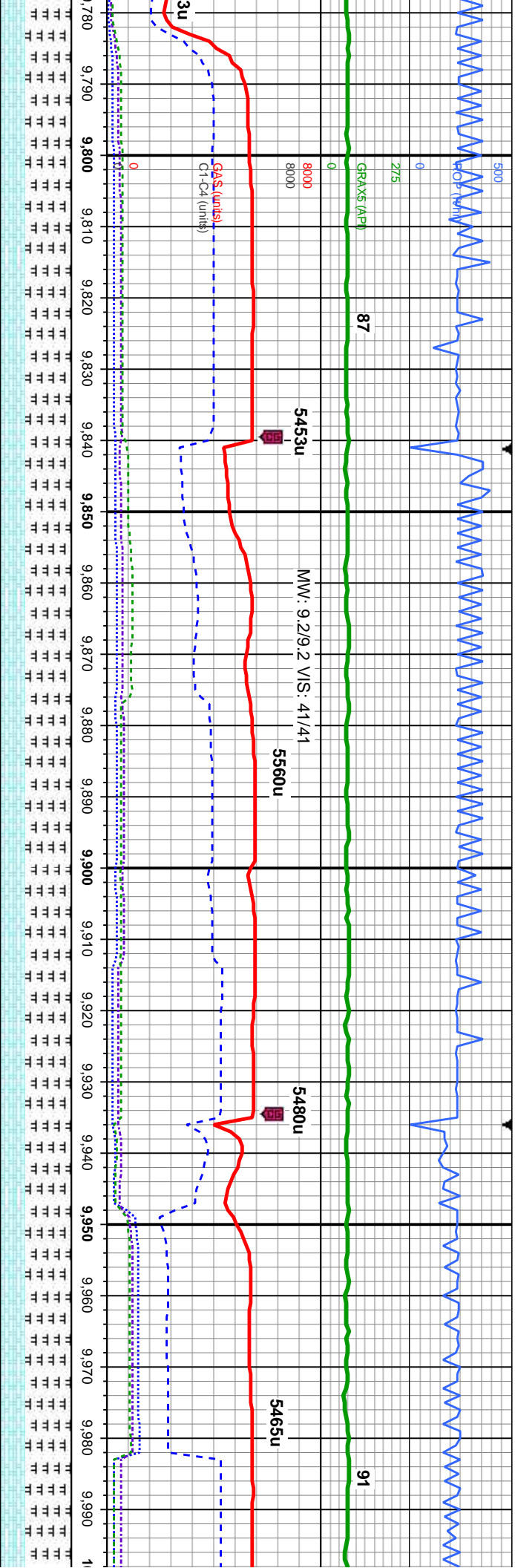
h incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v	60% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, sb blk, rthy - sb wxy tex, v calc;
gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb	40% MRLST: dk - med gy, gy brn, wh incl ip, mod - frm, brit - fri ip, gt tex, sb ply - sb
OIL SHOW: bri lt bl, fast cut, bri wh-lt bl-gn solid	blk, calc; OIL SHOW: bri lt bl string cut, bri wh-lt bl thk ring, no stn, no od
7700	60% CHK: mot gy brn - lt gy, wh incl ip, sft - frm, fri, calc; 40% MRLST: dk - med gy, gy brn, wh incl ip, r ply - sb blk, calc, tr inoc foss.; OIL SHOW: mod b no stn, no od





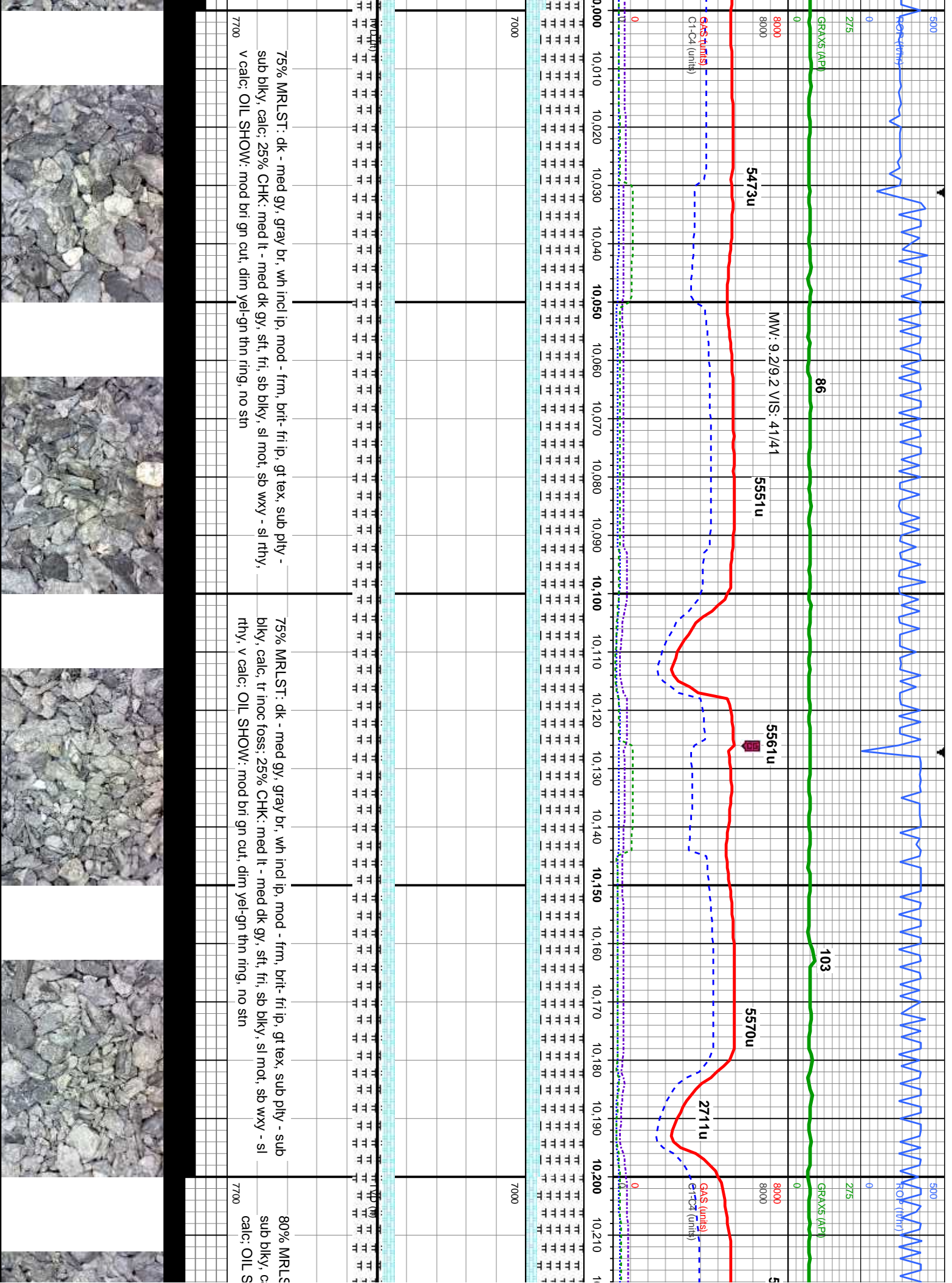
7000		MD: 9,686' TVD: 7,349.78' Inclination: 90.2° Azimuth: 359.9° VS: 2,057.59'	
sb blkly, rthy - sb wxy tex, v	60% MRLST: dk - med gy, gray br, wh incl in part, mod - firm, brit- fri ip, gt tex,	65% MRLST: dk - med gy, gray br, wh incl in part, mod - firm, brit- fr	
mod - frm, brit - fri ip, gt tex, sb	sub pily - sub blkly, calc, tr inoc foss; 40% CHK: med lt - med dk gy, sft, fri, sb	sub pily - sub blkly, calc, tr inoc foss; 35% CHK: med lt - med dk gy,	
ri lt gn-yel cut, mod yel-gn ring,	blkly, sl mot, sb wxy - sl rthy, v calc; OIL SHOW: mod bri gn cut, dim yel-gn thn	blkly, sl mot, sb wxy - sl rthy, v calc; OIL SHOW: mod bri lt gn-yel cut	
	ring, no stn	ring, no stn, no od	
	7700		

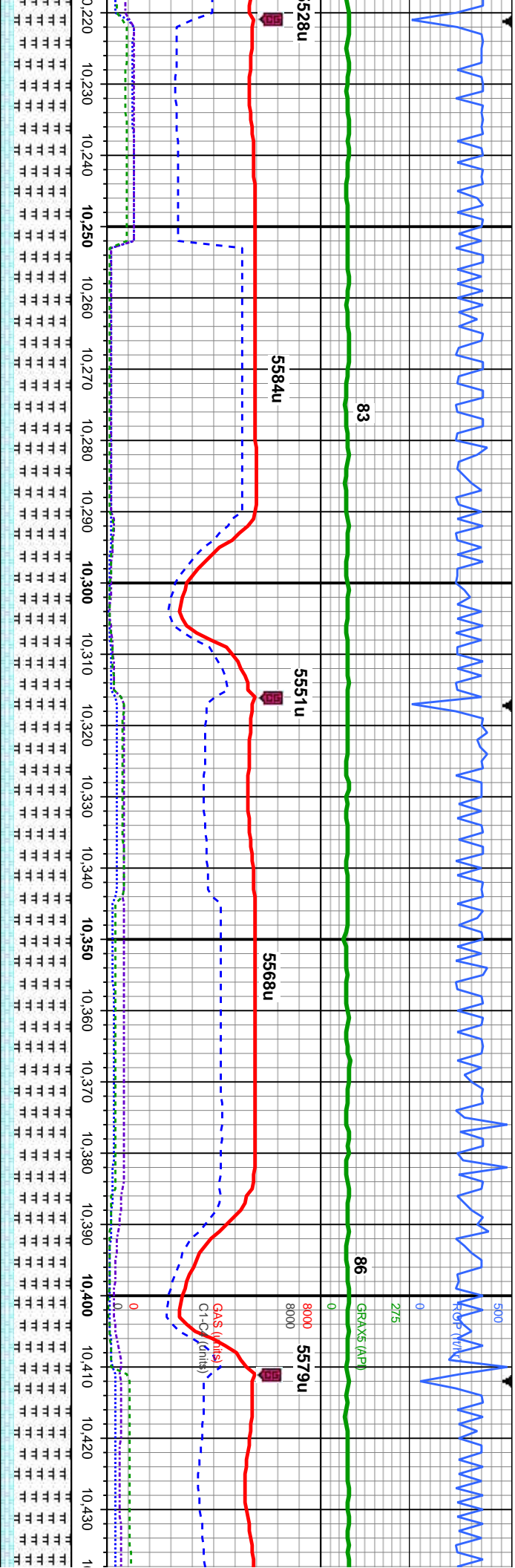




7000		
ip, gt text,	65% MRLST: dk - med gy, gray br, wh incl ip, mod - frm, brit- fri ip, gt tex, sub pty	65% MRLST: dk - med gy, gray br, wh incl ip, mod - frm, brit- fri ip, gt tex, sub pty
sst, fri, sb	- sub blk, calc, tr inoc foss; 35% CHK: med lt - med dk gy, sft, fri, sb blk, sl	blk, calc, tr inoc foss; 35% CHK: med lt - med dk gy, sft, fri, sb blk, sl
, mod yel-gn	mot, sb wxy - sl rthy, v calc; OIL SHOW: mod bri lt gn-yel cut, mod yel-gn ring, no	rthy, v calc; OIL SHOW: bri lt bl sting cut, bri wh-lt bl thk ring, no sin ,no od
7700		







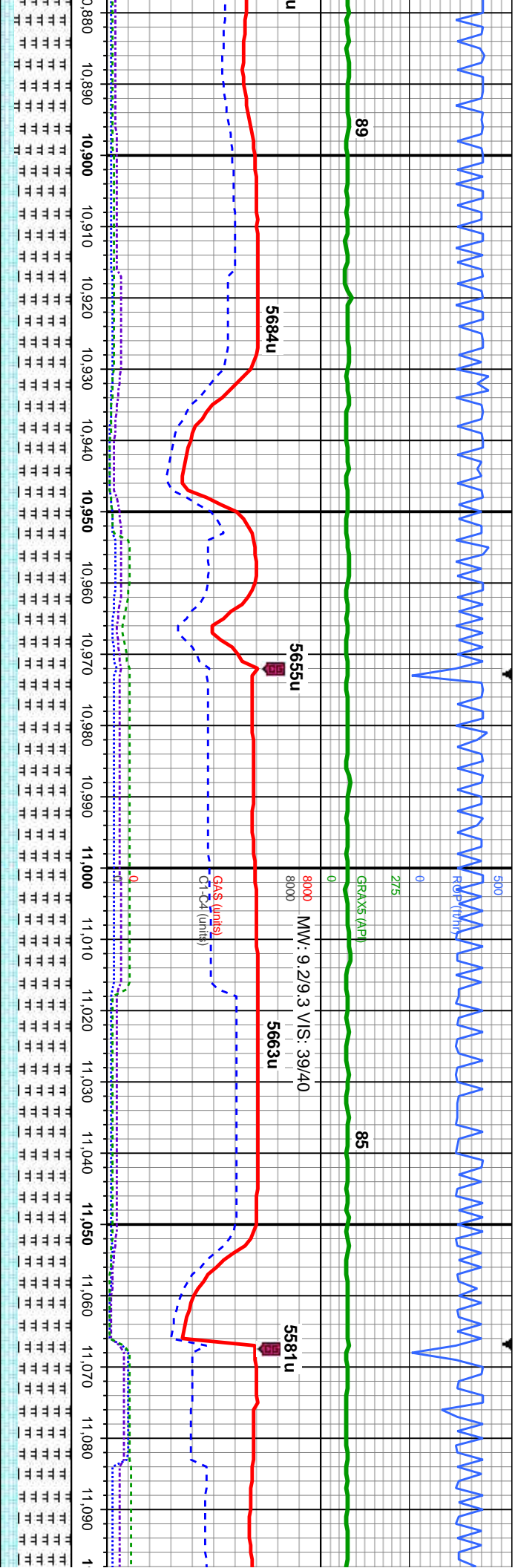
MD: 10,254'
TVD: 7,348.05'
Inclination: 90.1 °
Azimuth: 359.7°
VS: 2.625.59'

dk - med gy, gray br, wh incl ip, mod - frm, brit- fri ip, gt tex, sub pily -
alc: 20% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rthy, v
HOW: dim lt gn slow cut, dim yel-gn thn ring, no stn

80% MARLST: dk - med gy, gray br, wh incl ip, mod - frm, brit- fri ip, gt tex, sub pily -
blk, calc, tr inoc foss: 20% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl
rthy, v calc: OIL SHOW: dim lt gn slow cut, dim yel-gn thn ring, no stn

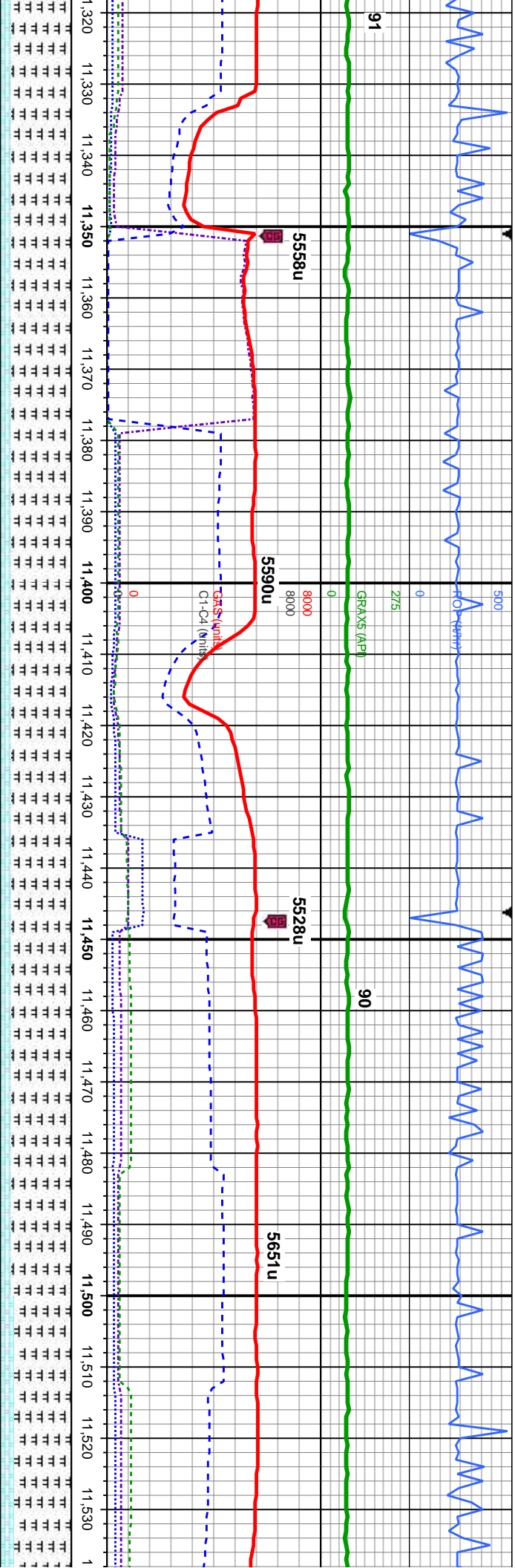
80% MARLSTONE: dk - med
sub blk, calc, tr inoc foss: 20
wxy - sl rthy, v calc: OIL SHO





75% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy - sub blk, calc; 25% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rthy, v calc; OIL SHOW: bri bl sting mky cut, bri bl thk ring, no stn, no od	75% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy - sub blk, calc; 25% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rthy, v calc; OIL SHOW: bri bl sting mky cut, bri bl thk ring, no stn, no od
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MD: 11,486'
TVD: 7,344.99'
Inclination: 89.9°
Azimuth: 356.8°
VS: 3.857.2'

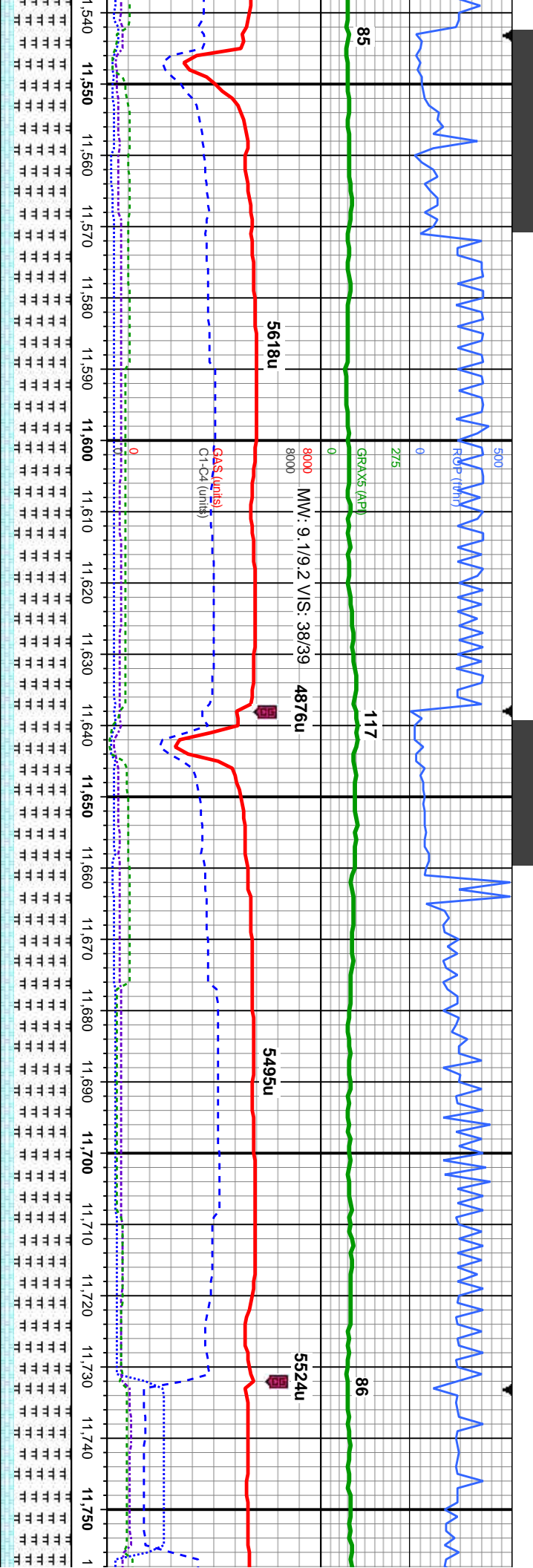
STONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy -
c: 15% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rhy, v
foss: OIL SHOW: mod bri lt gn-yel cut, mod yel-gn ring, no stn, no od

85% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc: 15% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rhy,
v calc, tr inno foss: OIL SHOW: bri bl-gn cut, mod bl-gn ring, no stn, no od

7700

80% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc: 20% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rhy,
v calc, tr inno foss: OIL SHOW: bri bl-gn cut, mod bl-gn ring, no stn, no od





MD: 11,580'
TVD: 7,345.89'
Inclination: 89 °
Azimuth: 357.5 °
VS: 3,951.1'

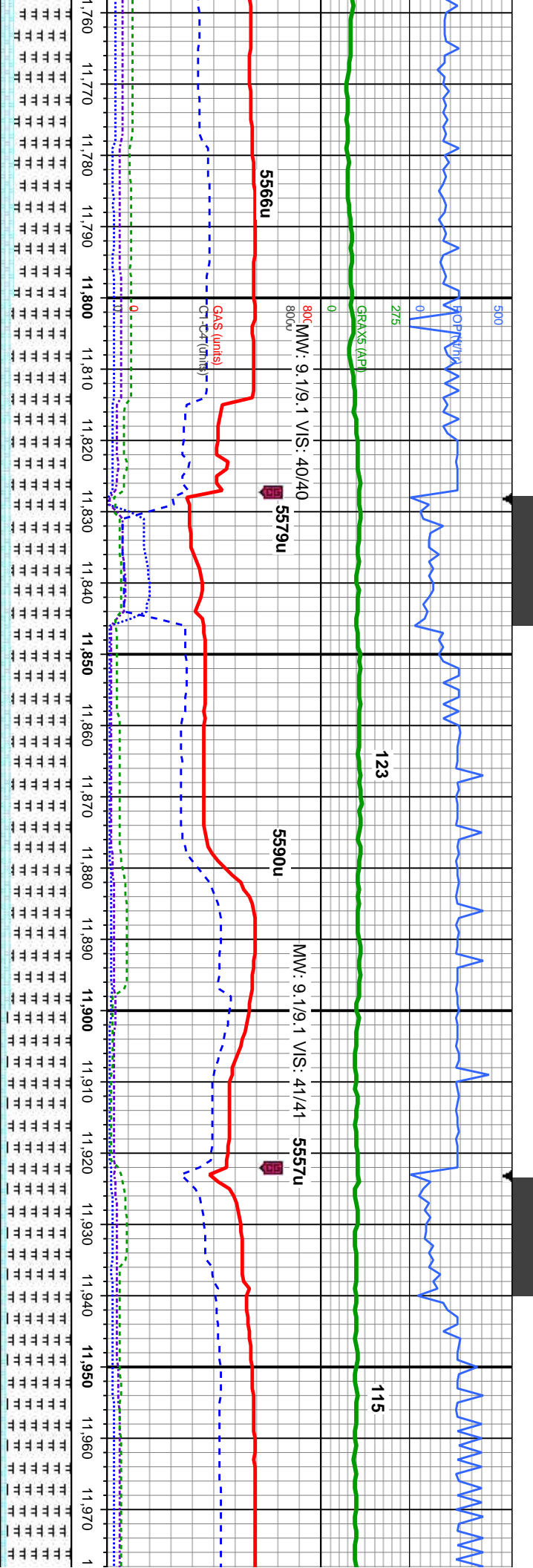
MD: 11,675'
TVD: 7,346.3'
Inclination: 90.5 °
Azimuth: 0.1 °
VS: 4,046.08'

gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy -
med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rthy, v
ng mky cut, bri bl-wh thk solid ring, no sin ,no od

80% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc; 20% CHK: med lt - med dk gy, sft, fri, sb blk, sl mot, sb wxy - sl rthy,
v calc, tr inno foss; OIL SHOW: bri bl-wh fast stmg mky cut, bri bl-wh thk solid ring,
no sin ,no od

80% MARLSTONE: dk - med gy, gy br, wh incl ip
- sub blk, calc; 20% CHK: med lt - med dk gy, m
sl rthy, v calc; OIL SHOW: bri bl-wh fast stmg mky
od





MD: 11,771'
TVD: 7,344.96'
Inclination: 91.1°
Azimuth: 0.3°
VS: 4,142.06'

MD: 11,865'
TVD: 7,343.24'
Inclination: 91°
Azimuth: 1.5°
VS: 4,236.02'

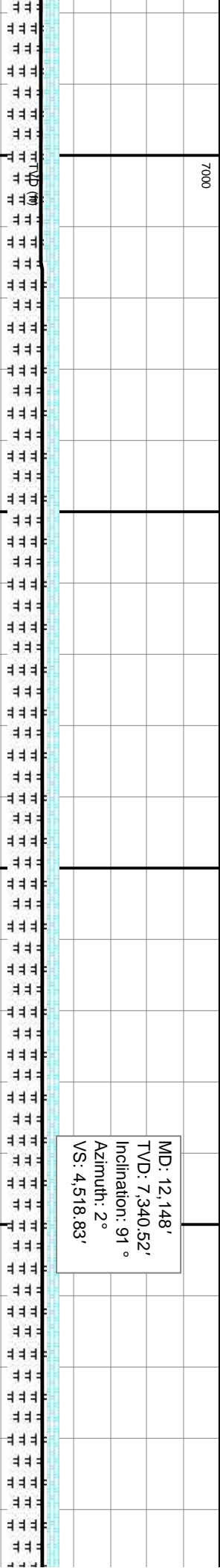
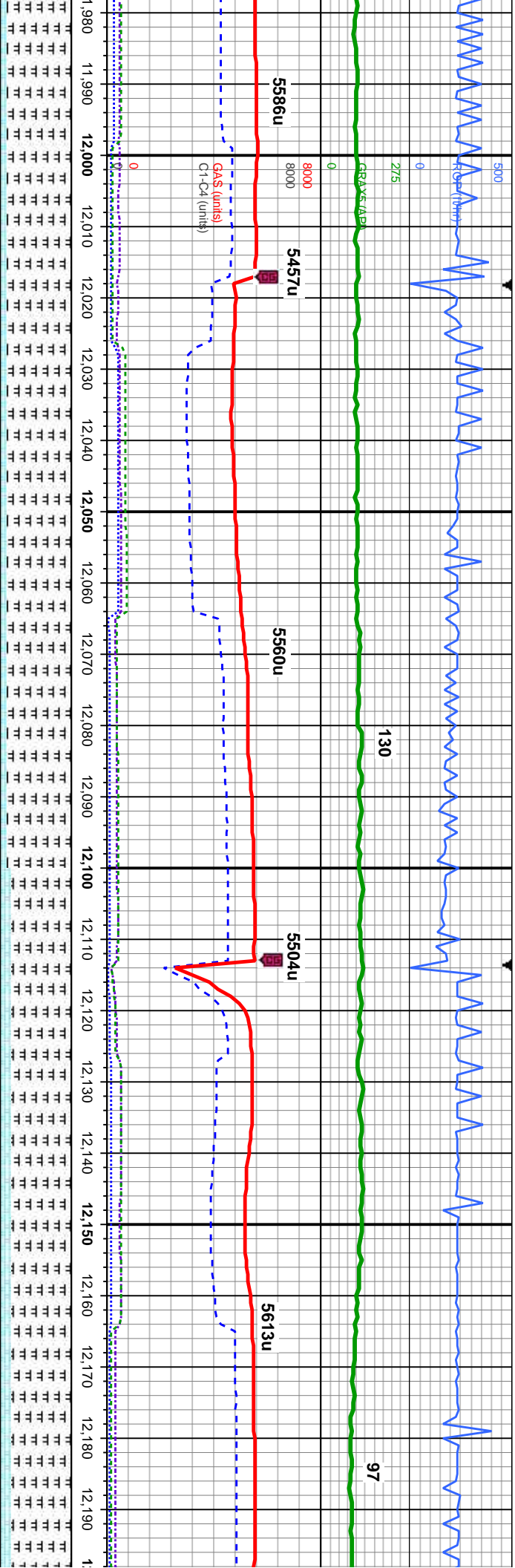
MD: 11,960'
TVD: 7,342.33'
Inclination: 90.1°
Azimuth: 1.5°
VS: 4,330.97'

mod - frm, brit - fri, gt tex, sub platy
mod firm, fri, sb blkly, sl mot, sb wxy -
v cut, bri bl thk solid ring, no sin ,no

85% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy
- sub blkly, calc: 15% CHK: med lt - med dk gy, mod firm, fri, sb blkly, sl mot, sb wxy -
sl rthy, v calc; OIL SHOW: bri bl-wh fast stmg mky cut, bri bl-wh thk solid ring, no sin
od

90% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri,
- sub blkly, calc: 10% CHK: med lt - med dk gy, mod firm, fri, sb blkly,
sl rthy, v calc; OIL SHOW: bri bl-wh fast stmg mky cut, bri lt bl-wh thk





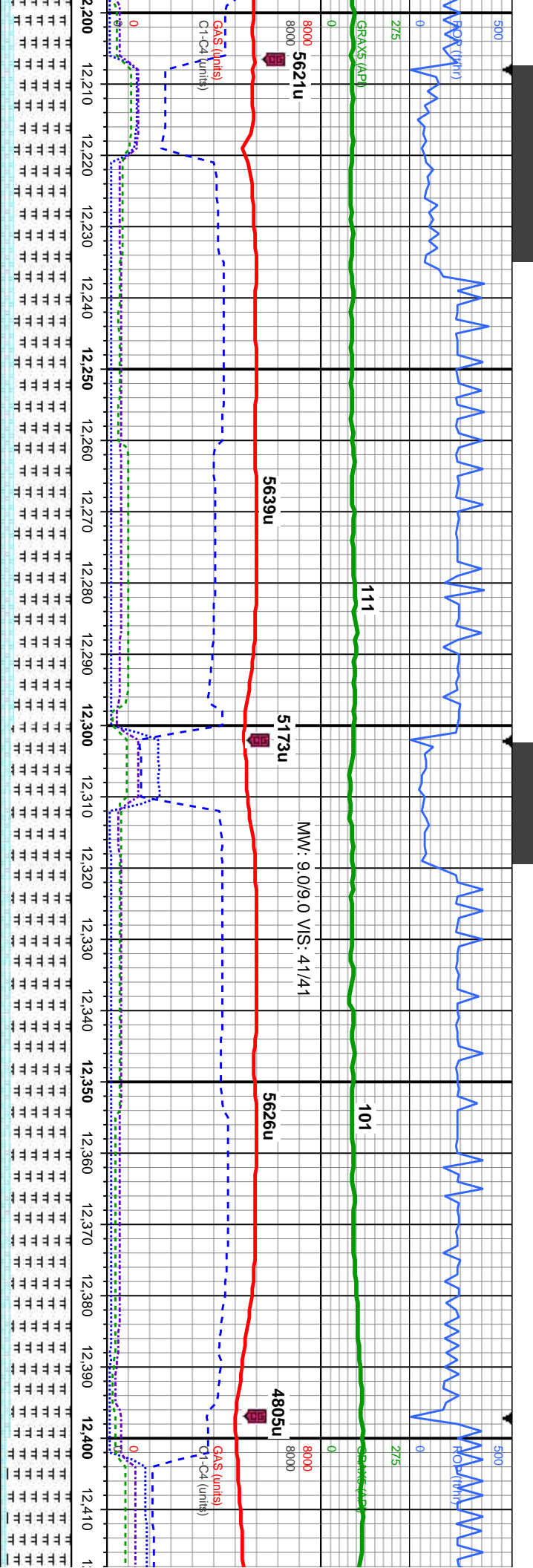
gt tex, sub platy
sl mot, sb wxy -
ring, no stn ,no

90% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc: 10% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
sl rthy, v calc: OIL SHOW: bri bl-wh fast stmg mky cut, bri bl-wh thk solid ring, sme
yel min flor, no stn ,no od

7700

85% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc: 15% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
sl rthy, v calc: OIL SHOW: bri bl-wh fast stmg mky cut, bri bl-wh thk solid ring, sme
yel min flor, no stn ,no od





MD: 12,242'
TVD: 7,339.7'
Inclination: 90 °
Azimuth: 1.3°
VS: 4,612.77'

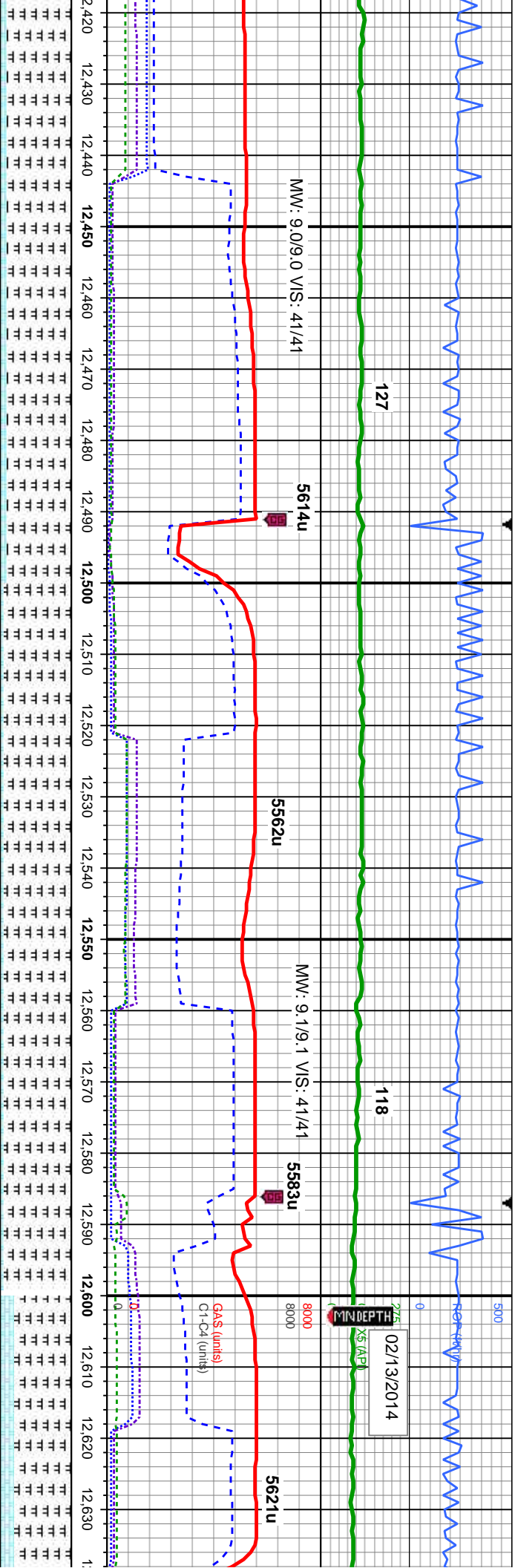
80% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc; 20% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
sl rthy, v calc; OIL SHOW: bri lt bl fast string mky cut, bri bl-wh thk solid ring, sme yel
min flr, no stn, no od

MD: 12,337'
TVD: 7,340.28'
Inclination: 89.3 °
Azimuth: 1.4°
VS: 4,707.73'

85% MARLSTONE: dk - med gy, gy br, wh incl lp, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc; 15% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
sl rthy, v calc; OIL SHOW: bri bl-wh fast string mky cut, bri bl-wh thk solid ring, mod
yel min flr, no stn, no od

90% MAR
- sub blk
sl rthy, v c





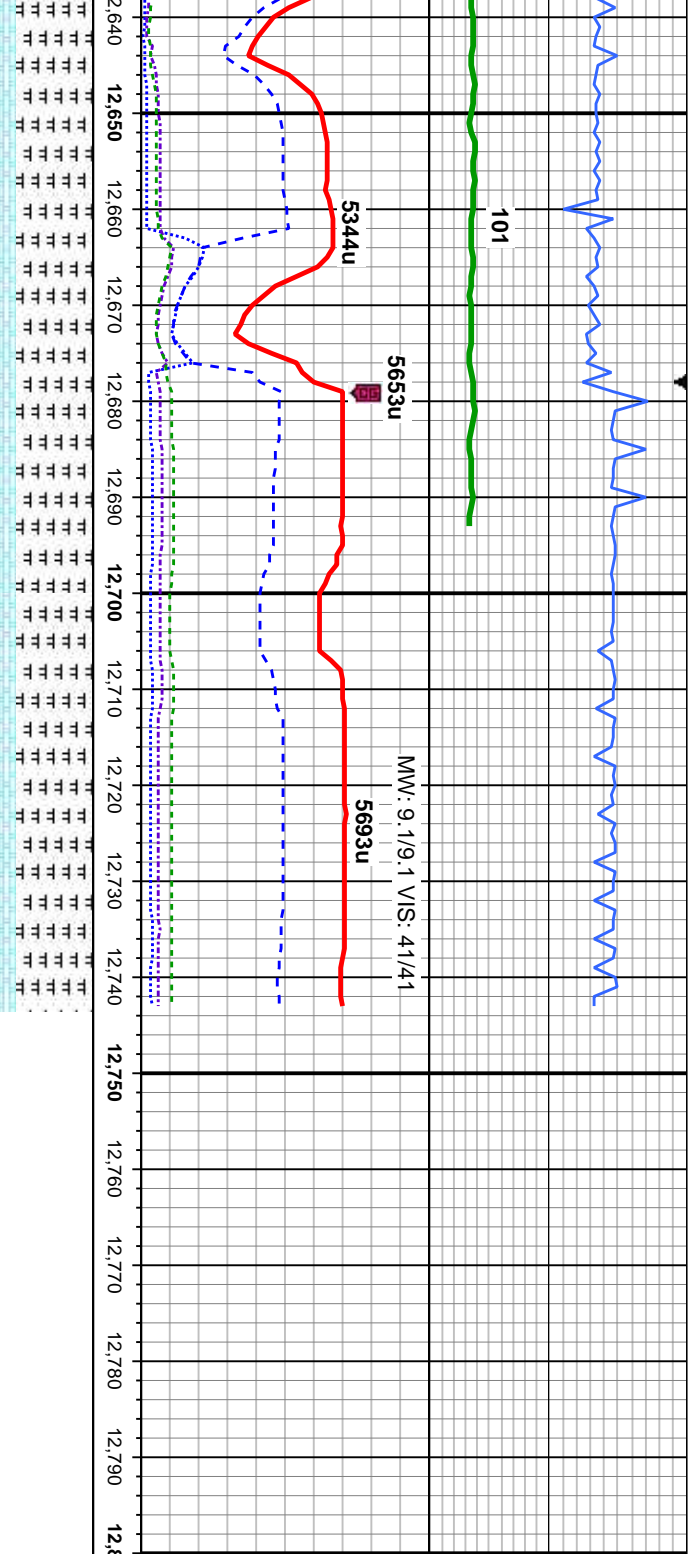
MD: 12,526'
TVD: 7,341.44'
Inclination: 90 °
Azimuth: 2.2°
VS: 4,896.59'

LSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
calc; 10% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
calc; OIL SHOW: mod brit lt gn-yel fast cut, bri wh-lt gn-yel ring, no sin

95% MARLSTONE: dk - med gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
- sub blk, calc; 5% CHK: med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy - sl
rthy, v calc; OIL SHOW: mod bri, lt gn cut, dim yel-gn thn ring, no sin

80% MARLSTONE: dk - med
- sub blk, calc; 20% CHK: m
sl rthy, v calc; OIL SHOW: m





MD: 12,690'
TVD: 7,341.58'
Inclination: 89.9°
Azimuth: 2.9°
VS: 5,060.38'

MD: 12,743'
TVD: 7,341.67'
Inclination: 89.9°
Azimuth: 2.9°
VS: 5,113.29'

TD @ 12743' MD @
00:52 on 02/13/2014

Thank you for using
Columbine Logging, Inc.

gy, gy br, wh incl ip, mod - frm, brit - fri, gt tex, sub platy
med lt - med dk gy, mod frm, fri, sb blk, sl mot, sb wxy -
mod bri, lt gn cut, dim yel-gn thn ring, no stn

80% MARLSTONE: dk - med gy, gy br, wh
incl ip, mod - frm, brit - fri, gt tex, sub platy -
sub blk, calc: 20% CHK: med lt - med dk
gy, mod frm, fri, sb blk, sl mot, sb wxy - sl
rthy, v calc: OIL SHOW: mod bri, lt gn cut,
dim yel-gn thn ring, no stn

