



Scale: 5" / 100'

<b>Well Name</b>	Mojack J-28-HN
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**Location** SEC 28-T7N-R64W

State COLORADO

County WELD

Country USA

Rig Number FRONTIER 8

API Number 051233982400

**AFF # 39824**

Region D.I BASIN

Field WATTENBERG

Spud Date 10/23/2014

**Drilling Completed** 12/6/2014

Surface Coordinates 230°E/ 1788'E/

**Bottom Hole Coordinates** 46°51'N 218°21'E

**Ground Elevation** 4899'

**K.B. Elevation** 4921.5'

Loaded Interval	6000' MD	To 11650' MD
1000'	1000'	1000'
2000'	2000'	2000'
3000'	3000'	3000'
4000'	4000'	4000'
5000'	5000'	5000'
6000'	6000'	6000'
7000'	7000'	7000'
8000'	8000'	8000'
9000'	9000'	9000'
10000'	10000'	10000'
11000'	11000'	11000'
12000'	12000'	12000'
13000'	13000'	13000'
14000'	14000'	14000'
15000'	15000'	15000'
16000'	16000'	16000'
17000'	17000'	17000'
18000'	18000'	18000'
19000'	19000'	19000'
20000'	20000'	20000'
21000'	21000'	21000'
22000'	22000'	22000'
23000'	23000'	23000'
24000'	24000'	24000'
25000'	25000'	25000'
26000'	26000'	26000'
27000'	27000'	27000'
28000'	28000'	28000'
29000'	29000'	29000'
30000'	30000'	30000'
31000'	31000'	31000'
32000'	32000'	32000'
33000'	33000'	33000'
34000'	34000'	34000'
35000'	35000'	35000'
36000'	36000'	36000'
37000'	37000'	37000'
38000'	38000'	38000'
39000'	39000'	39000'
40000'	40000'	40000'
41000'	41000'	41000'
42000'	42000'	42000'
43000'	43000'	43000'
44000'	44000'	44000'
45000'	45000'	45000'
46000'	46000'	46000'
47000'	47000'	47000'
48000'	48000'	48000'
49000'	49000'	49000'
50000'	50000'	50000'
51000'	51000'	51000'
52000'	52000'	52000'
53000'	53000'	53000'
54000'	54000'	54000'
55000'	55000'	55000'
56000'	56000'	56000'
57000'	57000'	57000'
58000'	58000'	58000'
59000'	59000'	59000'
60000'	60000'	60000'
61000'	61000'	61000'
62000'	62000'	62000'
63000'	63000'	63000'
64000'	64000'	64000'
65000'	65000'	65000'
66000'	66000'	66000'
67000'	67000'	67000'
68000'	68000'	68000'
69000'	69000'	69000'
70000'	70000'	70000'
71000'	71000'	71000'
72000'	72000'	72000'
73000'	73000'	73000'
74000'	74000'	74000'
75000'	75000'	75000'
76000'	76000'	76000'
77000'	77000'	77000'
78000'	78000'	78000'
79000'	79000'	79000'
80000'	80000'	80000'
81000'	81000'	81000'
82000'	82000'	82000'
83000'	83000'	83000'
84000'	84000'	84000'
85000'	85000'	85000'
86000'	86000'	86000'
87000'	87000'	87000'
88000'	88000'	88000'
89000'	89000'	89000'
90000'	90000'	90000'
91000'	91000'	91000'
92000'	92000'	92000'
93000'	93000'	93000'
94000'	94000'	94000'
95000'	95000'	95000'
96000'	96000'	96000'
97000'	97000'	97000'
98000'	98000'	98000'
99000'	99000'	99000'
100000'	100000'	100000'

Total Depth 11660' MD

## Formation

Type of Drilling Fluid FWLSND

## Operator

**Company** BAYSWATER EXPLORATION AND PRODUCTION  
**Address** 730 17th Street, Suite 610  
Denver, CO 80202

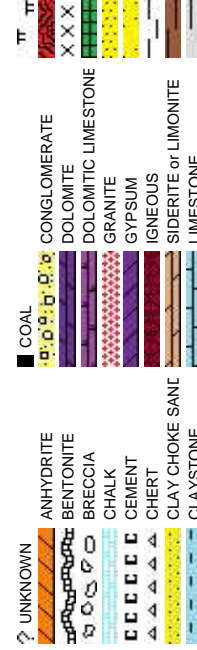
## Geologists

<b>Name</b>	ROBERT DAVIS, LISA KANT
<b>Company</b>	COLUMBINE LOGGING INC.
<b>Address</b>	602 S. Lipan St Denver CO 80223

## Zone Color Code

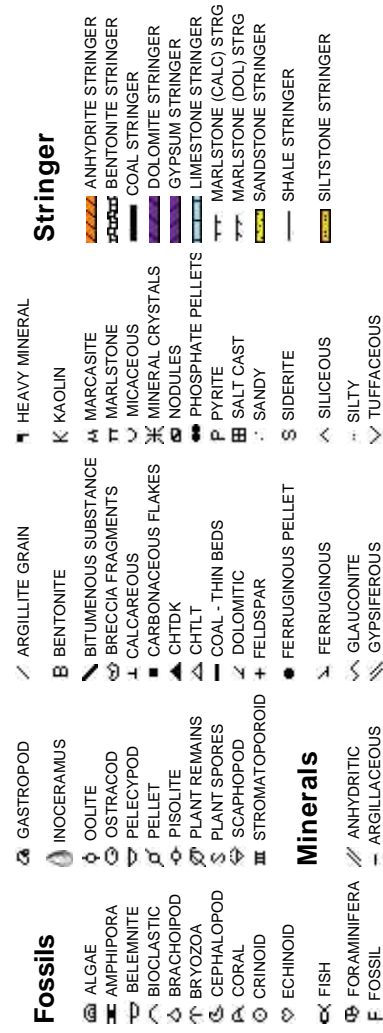


## Rock Type



## Accessories

## Fossils

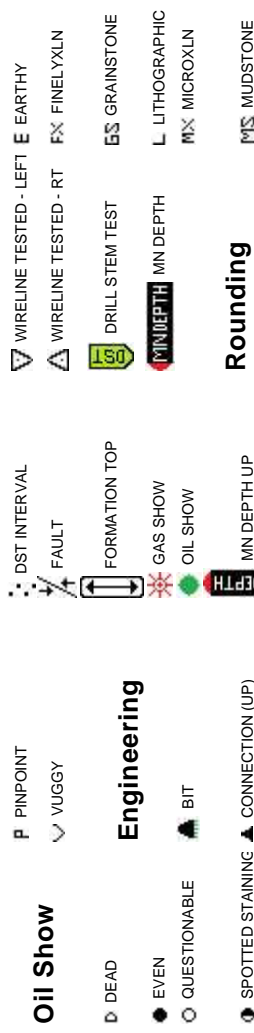


## Minerals



## Other Symbols

# Oil Show



## Porosity



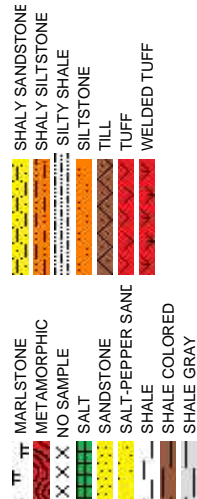
## Textures



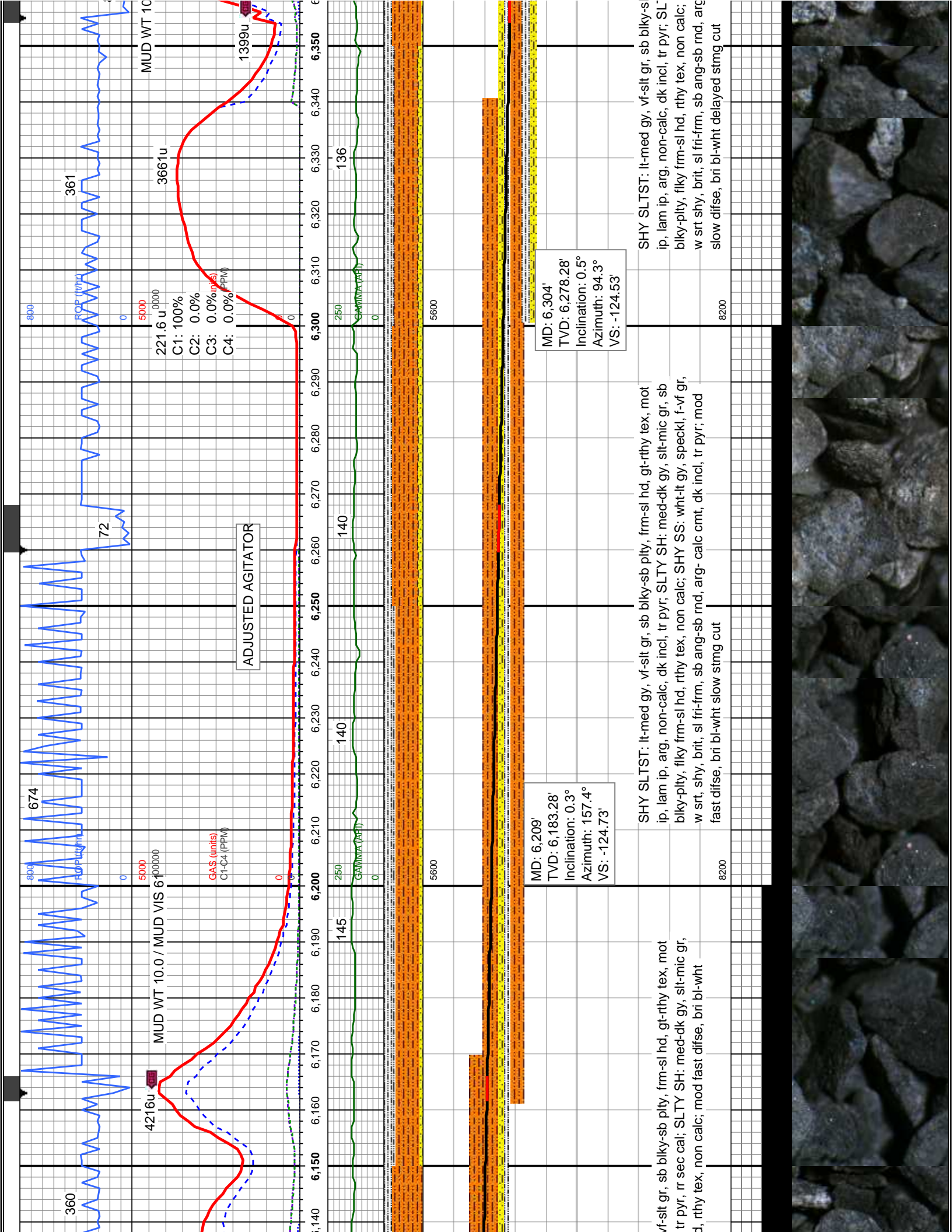
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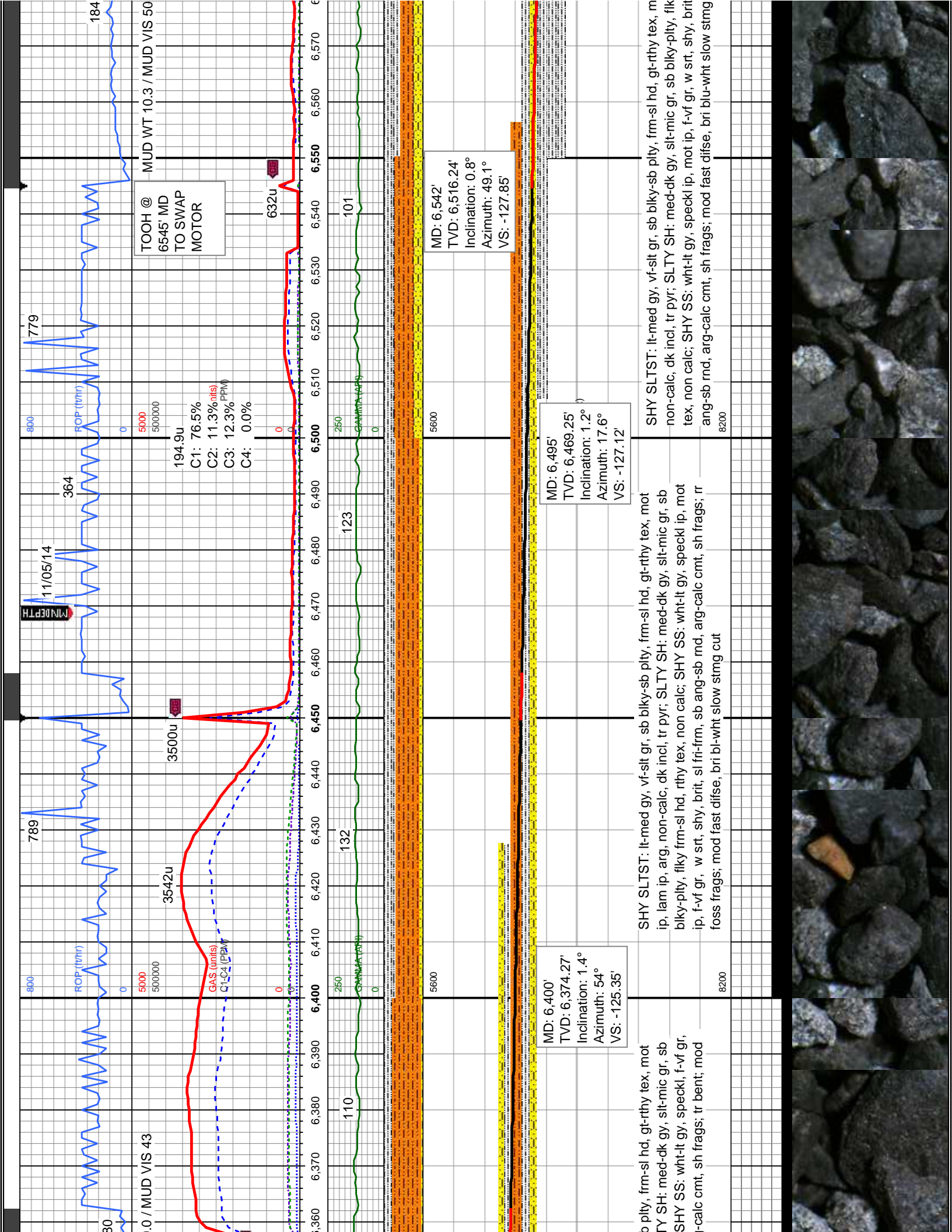
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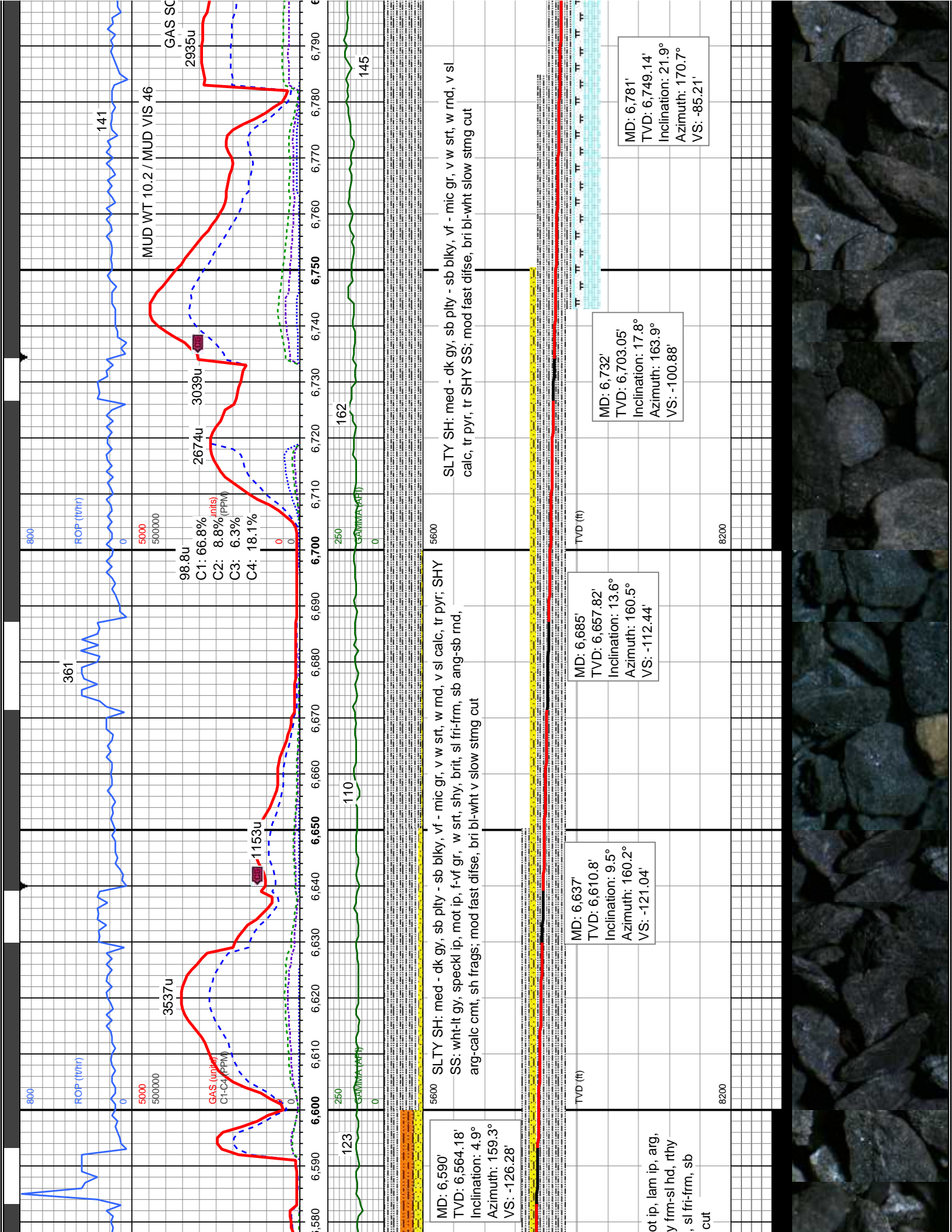


Slide/Rotate	
ROP	ROP
<p><b>Total Gas &amp; Chromatograph</b></p> <p>GAS (uPPM) ———</p> <p>C1 (66.2%) ———</p> <p>C2 (9.9% PPM) ———</p> <p>C3 (14.4% PPM) ———</p> <p>C4 (9.7%) ———</p>	
Depth Labels	<p>COLUMBINE LOGGING</p> <p>RIGGED UP ON 11/04/2014</p> <p>MANNED 2-PERSON</p> <p>LOGGING WITH</p> <p>BLOODHOUND GAS</p> <p>CHROMATOGRAPH #0298</p>
GAMMA	GAMMA (API)
% Lith	
Well Bore	<p>BEGIN LOGGING F/ 6000' MD @</p> <p>21:46 HRS ON 11/04/2014</p>
Oil Show	<p>SHY SLTST: lt-med gy, v-slt gr, sb blk-sb pty, frm-sl hd, gt-rthy tex, mot ip, arg, non-calc, dk incl, tr pyr; SLTY SH: med-dk gy, slit-mic gr, sb blk-pty, fiky frm-sl hd, rthy tex, non calc; mod fast difse, bri bl-wht slow stmng cut</p>
Images	







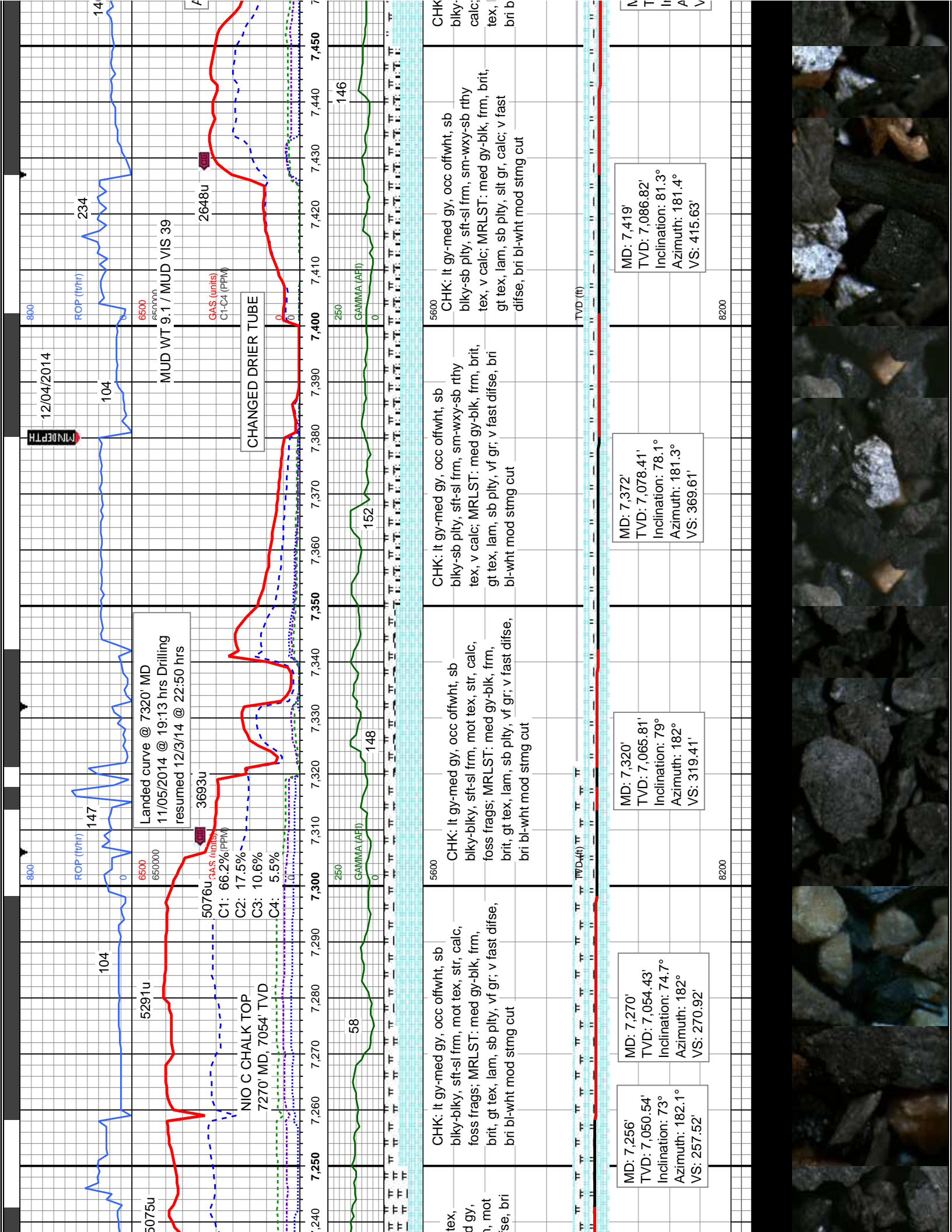


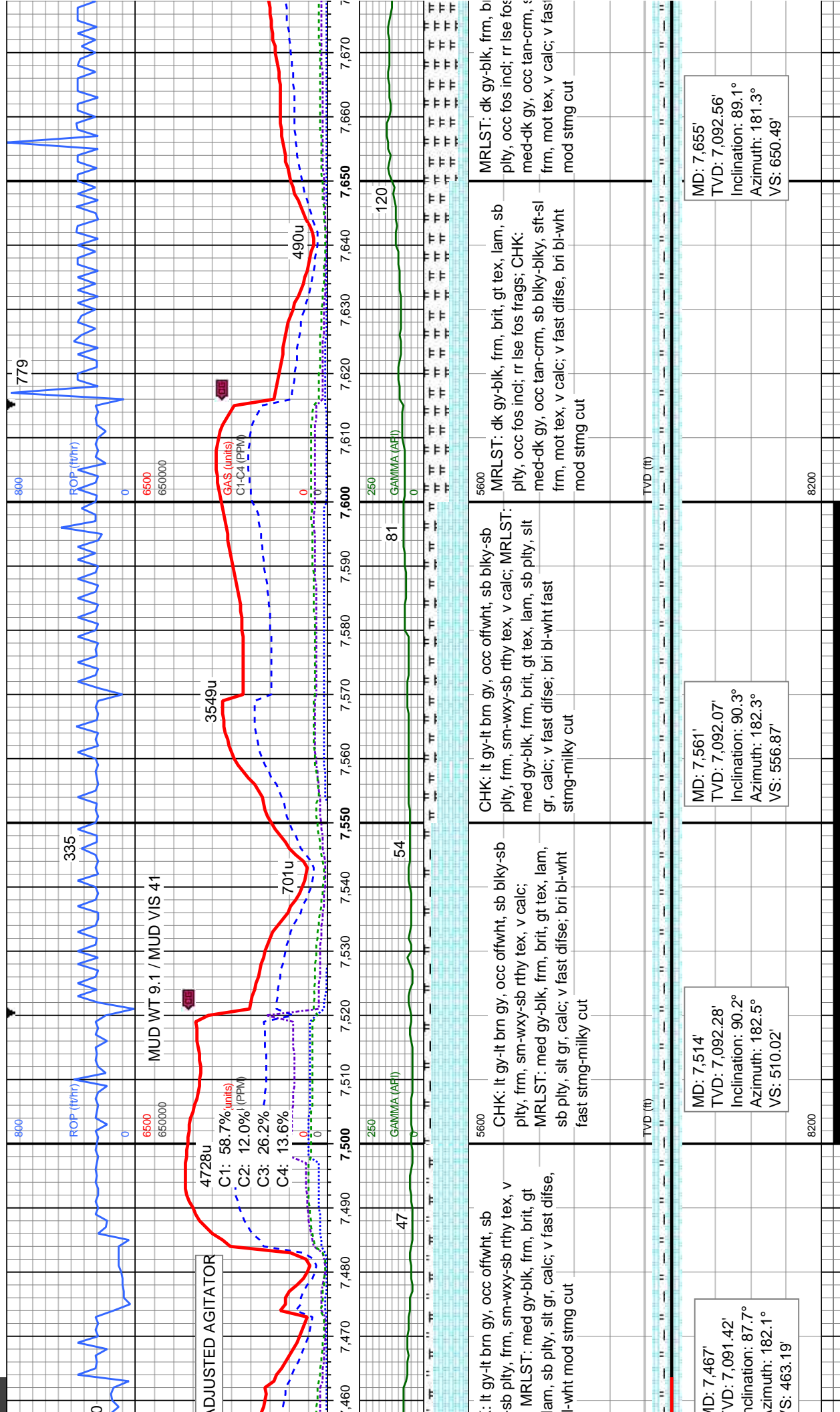




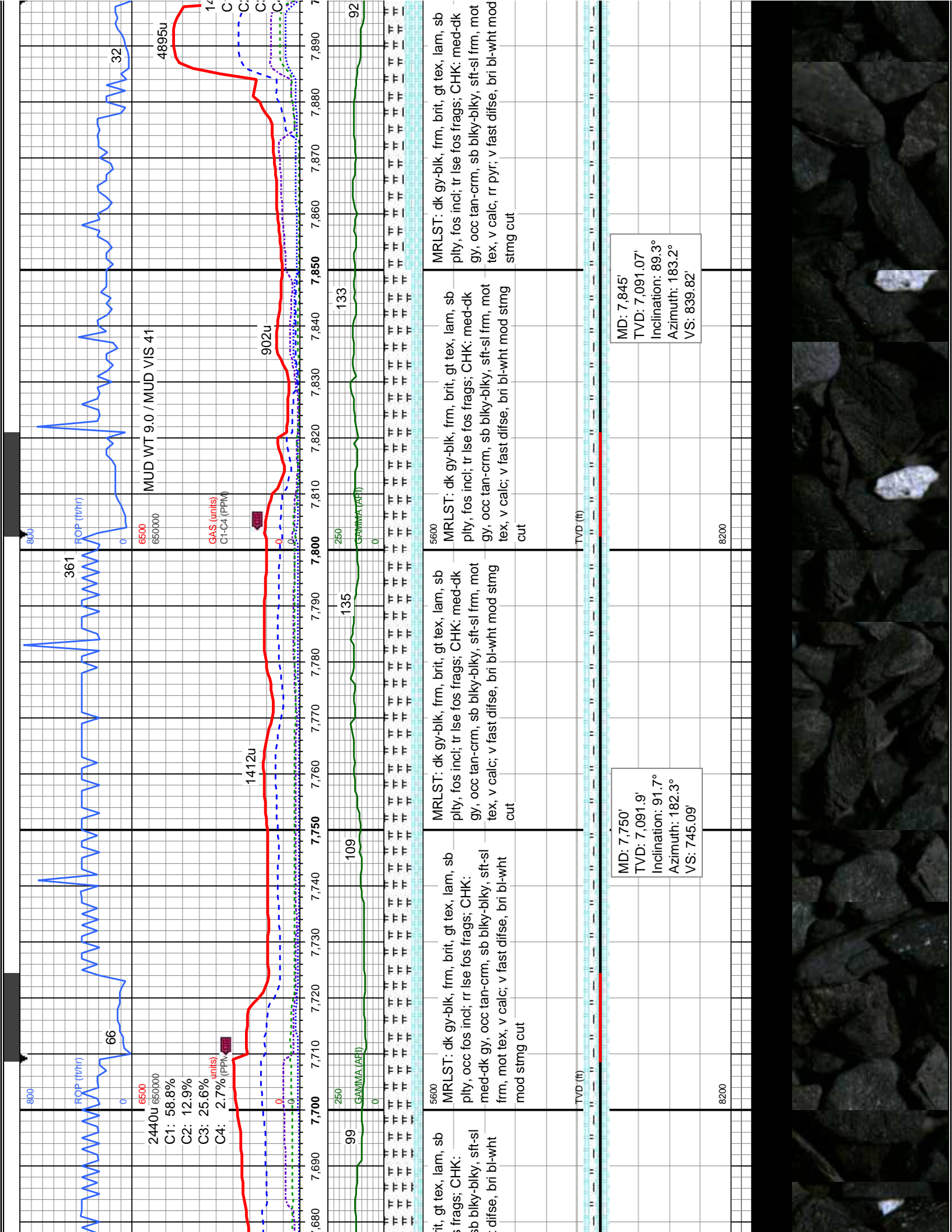












2440u  
C1: 58.8%  
C2: 12.9%  
C3: 25.6%  
C4: 2.7% (PPM)

MUD WT 9.0 / MUD VIS 41

it, gt tex, lam, sb  
s frags; CHK:  
sb blk-biky, sft-sl  
difse, bri bl-wht

MRLST: dk gy-blk, frm, brit, gt tex, lam, sb  
ply, occ fos incl; rr lse fos frags; CHK:  
med-dk gy, occ tan-crm, sb blk-biky, sft-sl  
frm, mot tex, v calc; v fast difse, bri bl-wht  
mod stmg cut

MRLST: dk gy-blk, frm, brit, gt tex, lam, sb  
ply, fos incl; tr lse fos frags; CHK: med-dk  
gy, occ tan-crm, sb blk-biky, sft-sl frm, mot  
tex, v calc; v fast difse, bri bl-wht mod stmg  
cut

MRLST: dk gy-blk, frm, brit, gt tex, lam, sb  
ply, fos incl; tr lse fos frags; CHK: med-dk  
gy, occ tan-crm, sb blk-biky, sft-sl frm, mot  
tex, v calc; v fast difse, bri bl-wht mod stmg  
cut

MRLST: dk gy-blk, frm, brit, gt tex, lam, sb  
ply, fos incl; tr lse fos frags; CHK: med-dk  
gy, occ tan-crm, sb blk-biky, sft-sl frm, mot  
tex, v calc, rr pyr; v fast difse, bri bl-wht mod  
stmg cut

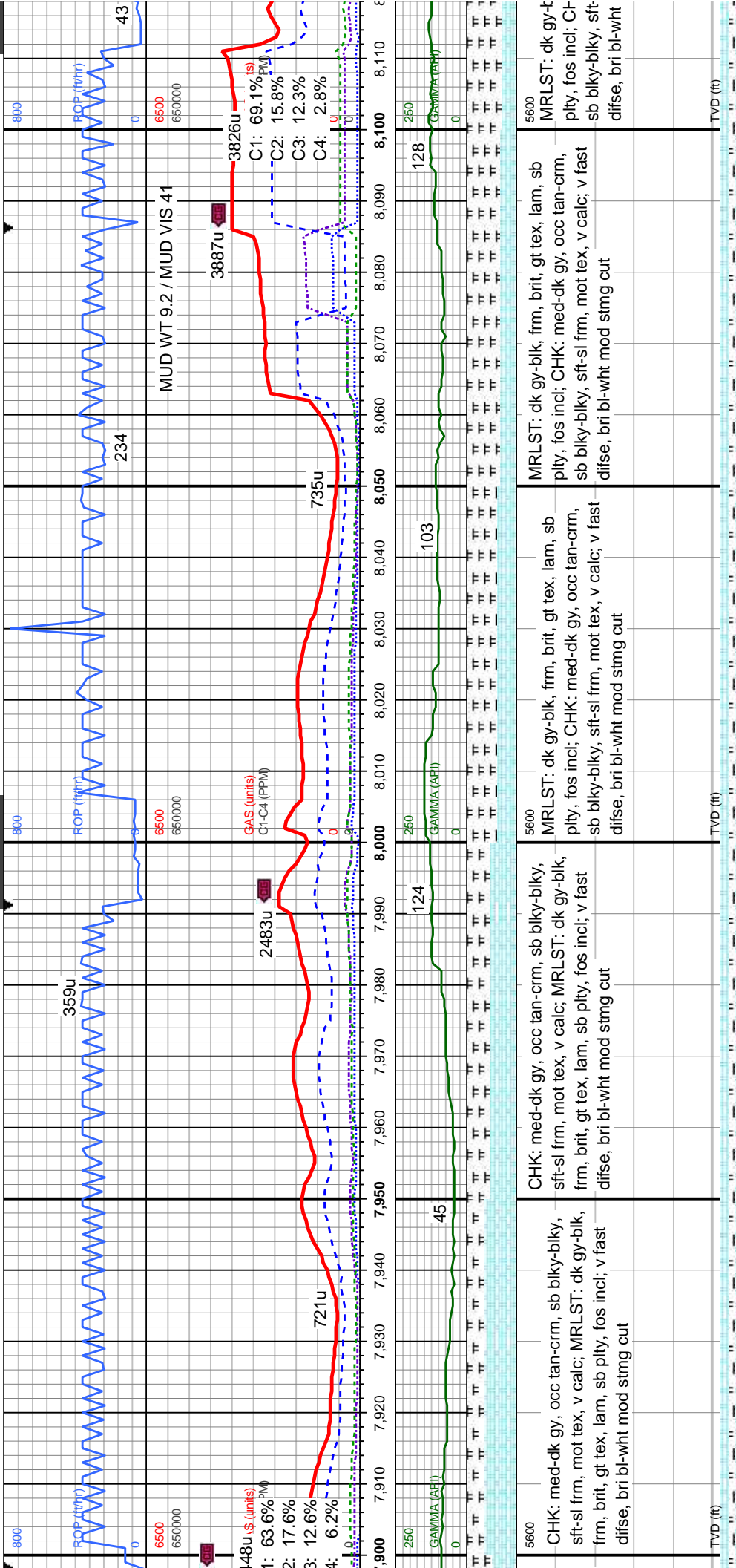
MD: 7,750'  
TVD: 7,091.9'  
Inclination: 91.7°  
Azimuth: 182.3°  
VS: 745.09'

MD: 7,845'  
TVD: 7,091.07'  
Inclination: 89.3°  
Azimuth: 183.2°  
VS: 839.82'

8200

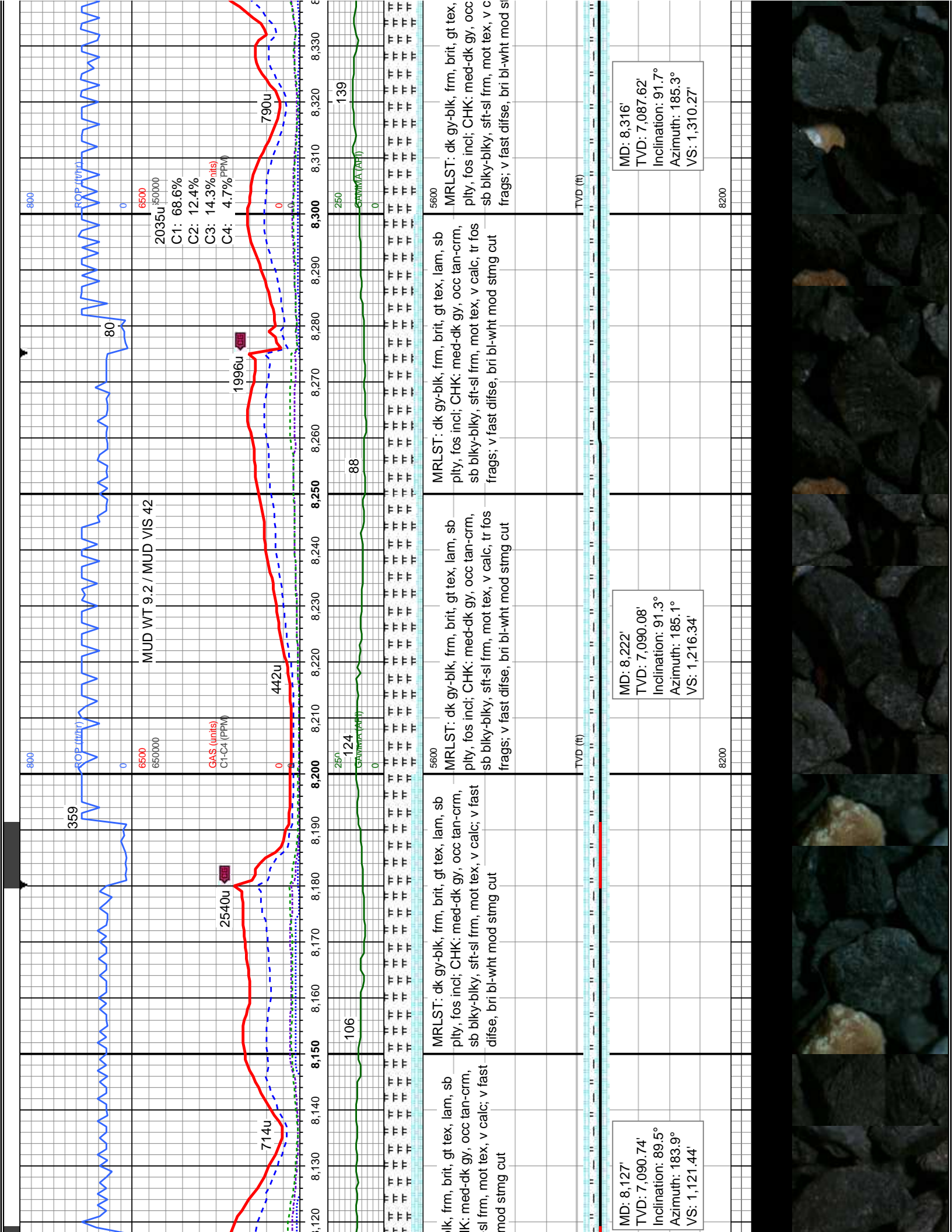
8200

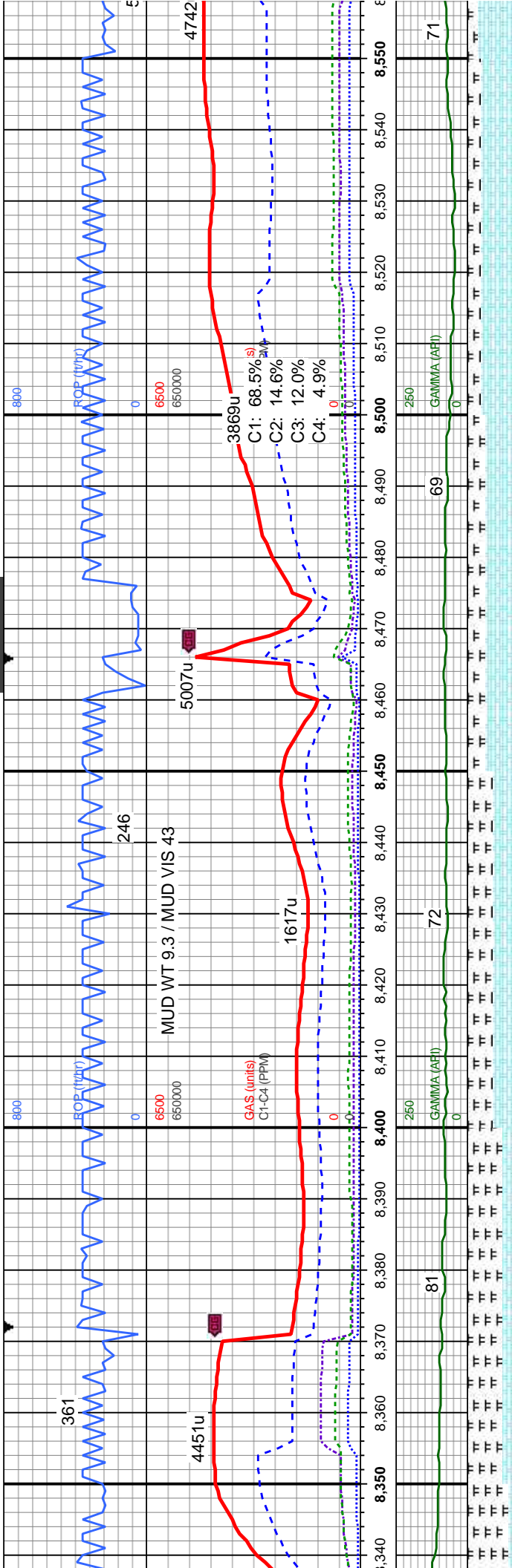




5600	5600	5600
CHK: med-dk gy, occ tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb blk-bkly, sft-sl frm, mot tex, v calc; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb blk-bkly, sft-sl frm, mot tex, v calc; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb blk-bkly, sft-sl frm, mot tex, v calc; v fast difse, bri bl-wht mod stmg cut
MD: 7,939'	MD: 8,033'	MD: 8,033'
TVD: 7,092.22'	TVD: 7,091.56'	TVD: 7,091.56'
Inclination: 89.3°	Inclination: 91.5°	Inclination: 91.5°
Azimuth: 184.6°	Azimuth: 184.1°	Azimuth: 184.1°
VS: 933.68'	VS: 1,027.57'	VS: 1,027.57'
8200	8200	8200





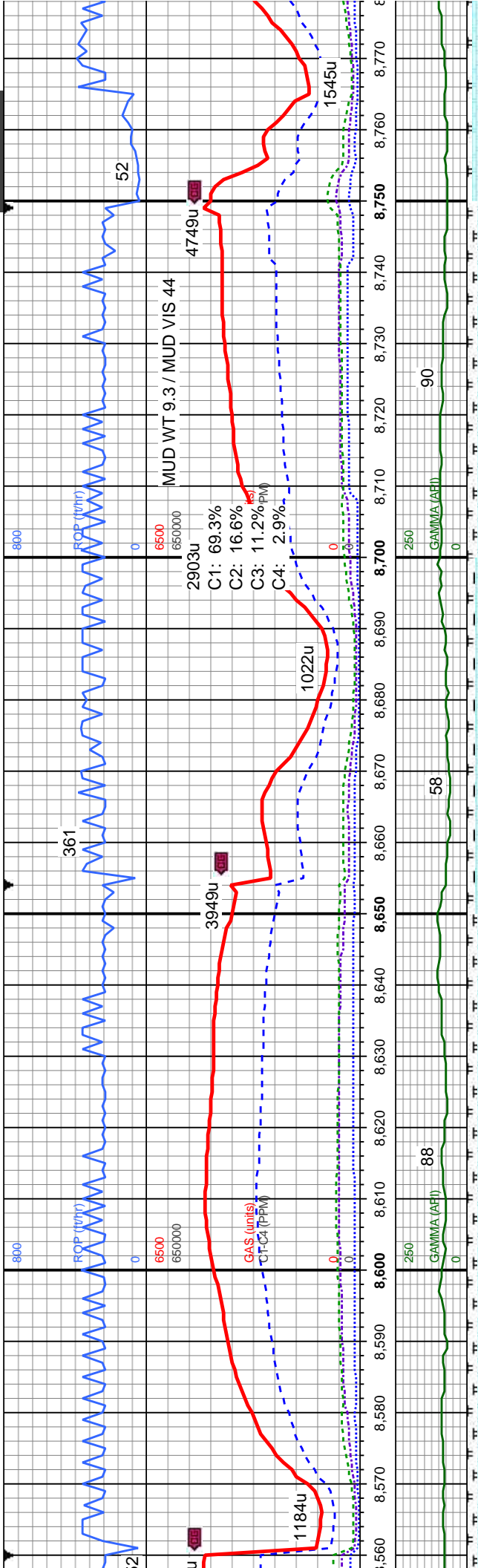


lam, sb tan-crm, alc, tr fos mg cut	MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, fos incl; CHK: med-dk gy, occ tan-crm, sb blk-ylky, sft-sl frm, mot tex, v calc, tr fos frags; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ tan-crm, sb blk-ylky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, fos incl; v fast difse, bri bl-wht mod stmg-milky cut	CHK: sft-sl frm, frm, brit, difse;
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MD: 8,411' TVD: 7,085.71' Inclination: 90.6° Azimuth: 183.4° VS: 1,405.14'	MD: 8,505' TVD: 7,083.99' Inclination: 91.5° Azimuth: 183.4° VS: 1,498.94'
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med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

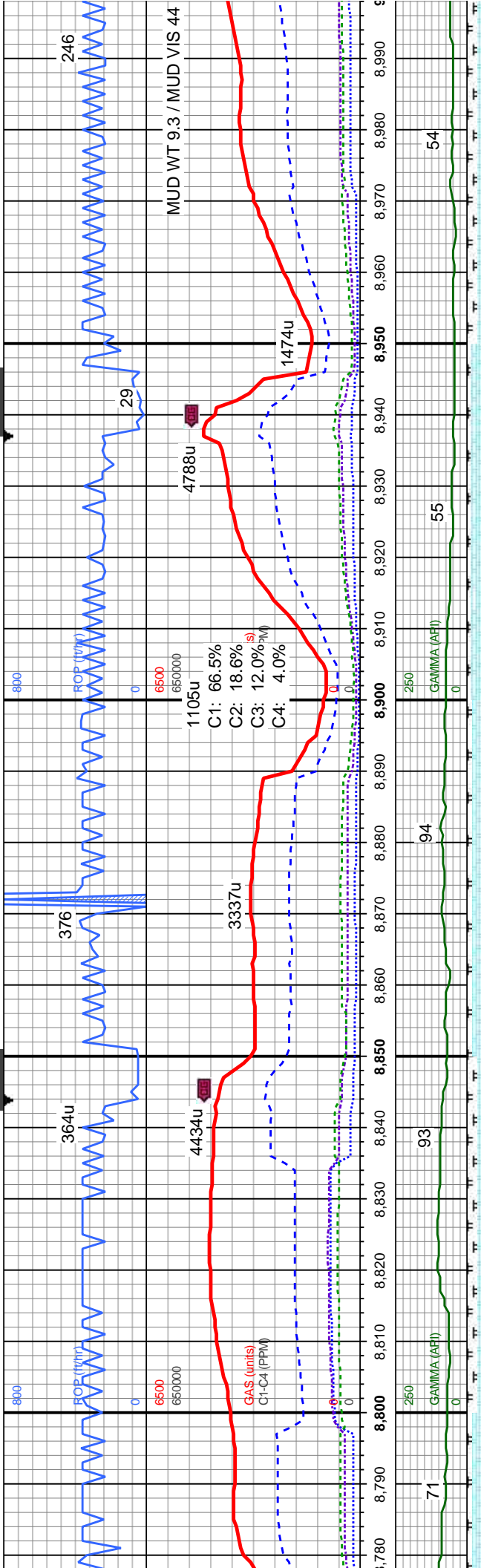
med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

med-dk gy, occ tan-crm, sb blkly-blky, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, fos incl; v fast difse; bri bl-wht fast stmg-milky cut

MD: 8,599'  
TVD: 7,081.53'  
Inclination: 91.5°  
Azimuth: 182.9°  
VS: 1,592.7'

MD: 8,694'  
TVD: 7,078.71'  
Inclination: 91.9°  
Azimuth: 182.7°  
VS: 1,687.41'





CHK: It-dk gy, tan-crm, sb blk-bkly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast strmg-milky cut

CHK: It-med gy, tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast strmg-milky cut

CHK: It-med gy, tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast strmg-milky cut

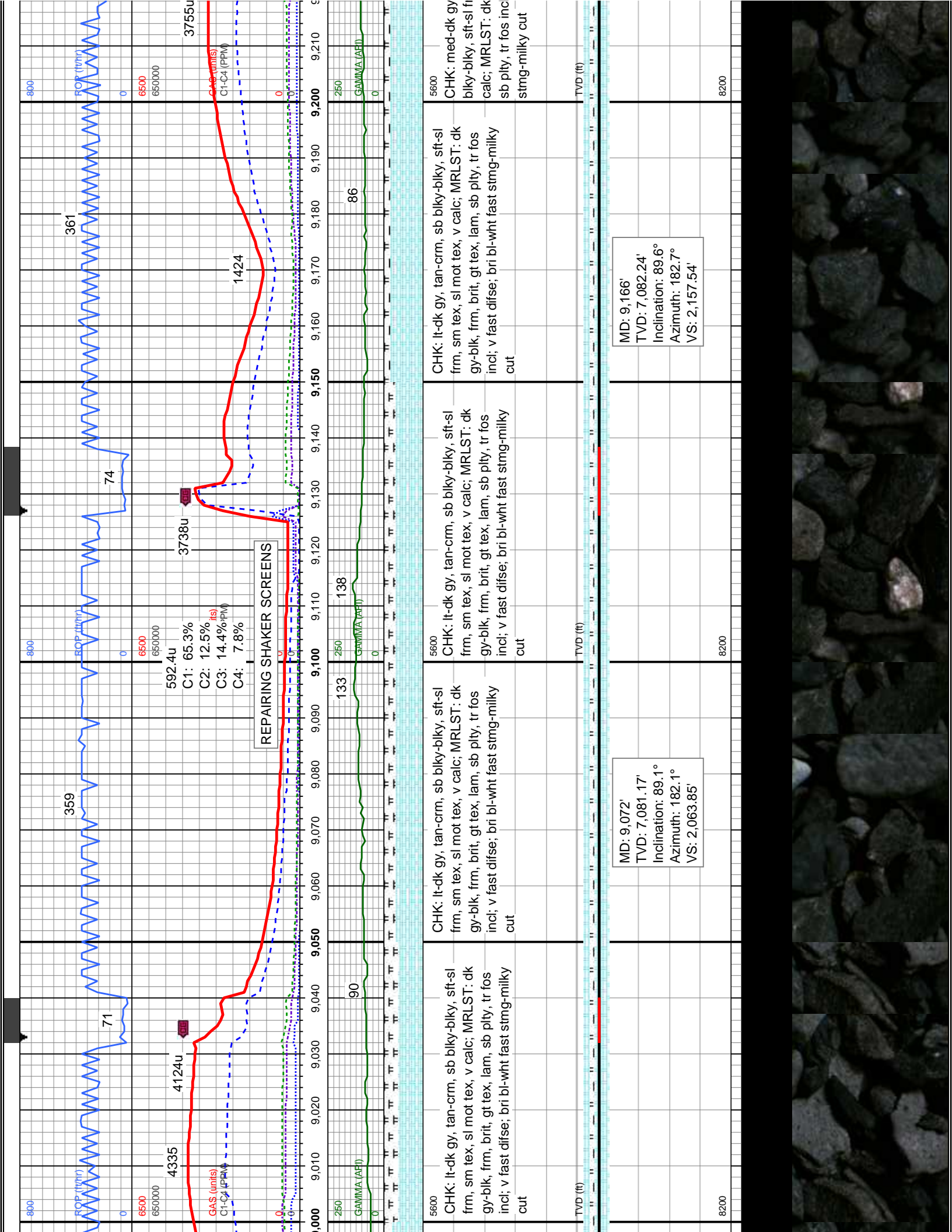
CHK: med-dk gy, occ tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast strmg-milky cut

CHK: med-dk gy, occ tan-crm, sb blk-bkly, sft-sl frm, mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast strmg-milky cut

MD: 8,789' TVD: 7,078.3' Inclination: 88.6° Azimuth: 182° VS: 1,782.09'	MD: 8,883' TVD: 7,080.02' Inclination: 89.3° Azimuth: 181.1° VS: 1,875.65'	MD: 8,978' TVD: 7,080.52' Inclination: 90.1° Azimuth: 181.8° VS: 1,970.21'
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REPAIRING SHAKER SCREENS

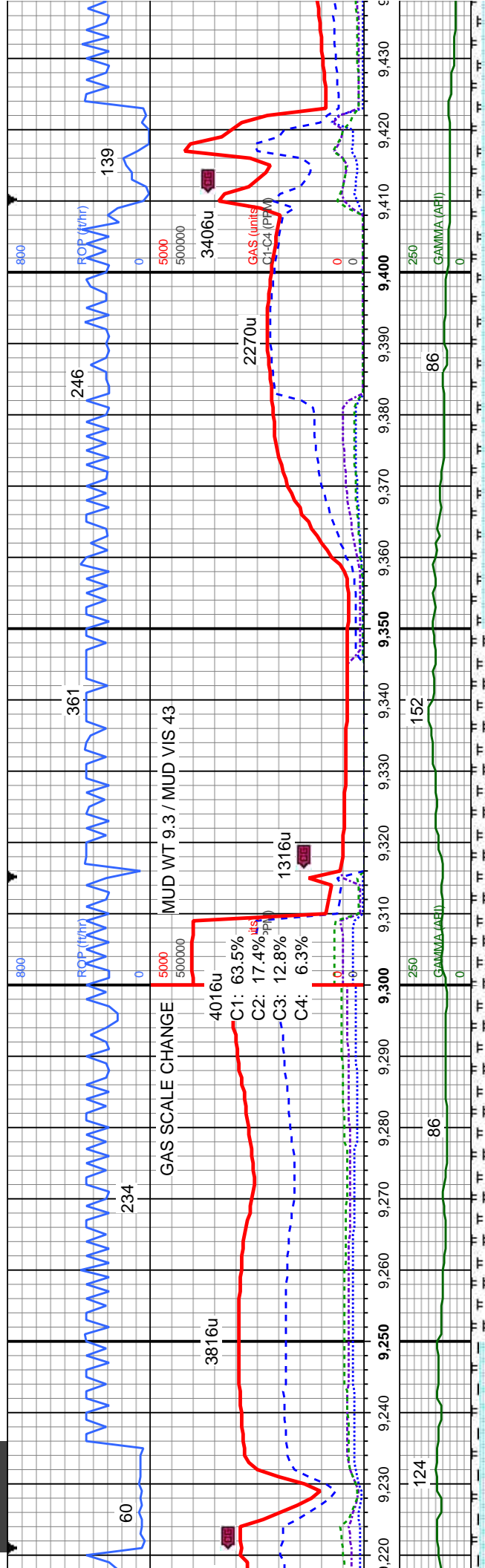
5600	CHK: lt-dk gy, tan-crm, sb blk-y-bkly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	CHK: lt-dk gy, tan-crm, sb blk-y-bkly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	CHK: med-dk gy blk-y-bkly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk calc; MRLST: dk sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut
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MD: 9,072'  
TVD: 7,081.17'  
Inclination: 89.1°  
Azimuth: 182.1°  
VS: 2,063.85'

MD: 9,166'  
TVD: 7,082.24'  
Inclination: 89.6°  
Azimuth: 182.7°  
VS: 2,157.54'



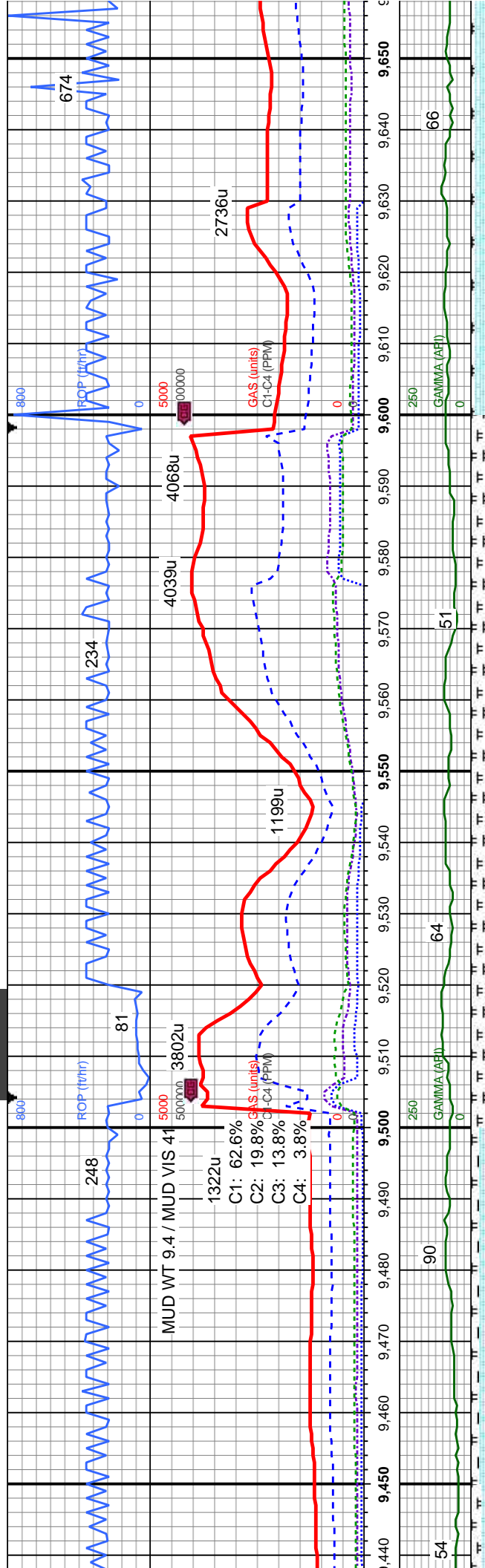




CHK: med-dk gy, occ lt gy-tan-crm, sb bly-bly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast strng-milky cut	CHK: med-dk gy, occ lt gy-tan-crm, sb bly-bly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast strng-milky cut	CHK: med-dk gy, occ lt gy-tan-crm, sb bly-bly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast strng-milky cut	CHK: med-dk gy, occ lt gy-tan-crm, sb bly-bly, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast strng-milky cut
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MD: 9,260' TVD: 7,082.08' Inclination: 90.6° Azimuth: 184.4° VS: 2,251.37'	MD: 9,355' TVD: 7,081.25' Inclination: 90.4° Azimuth: 185° VS: 2,346.3'
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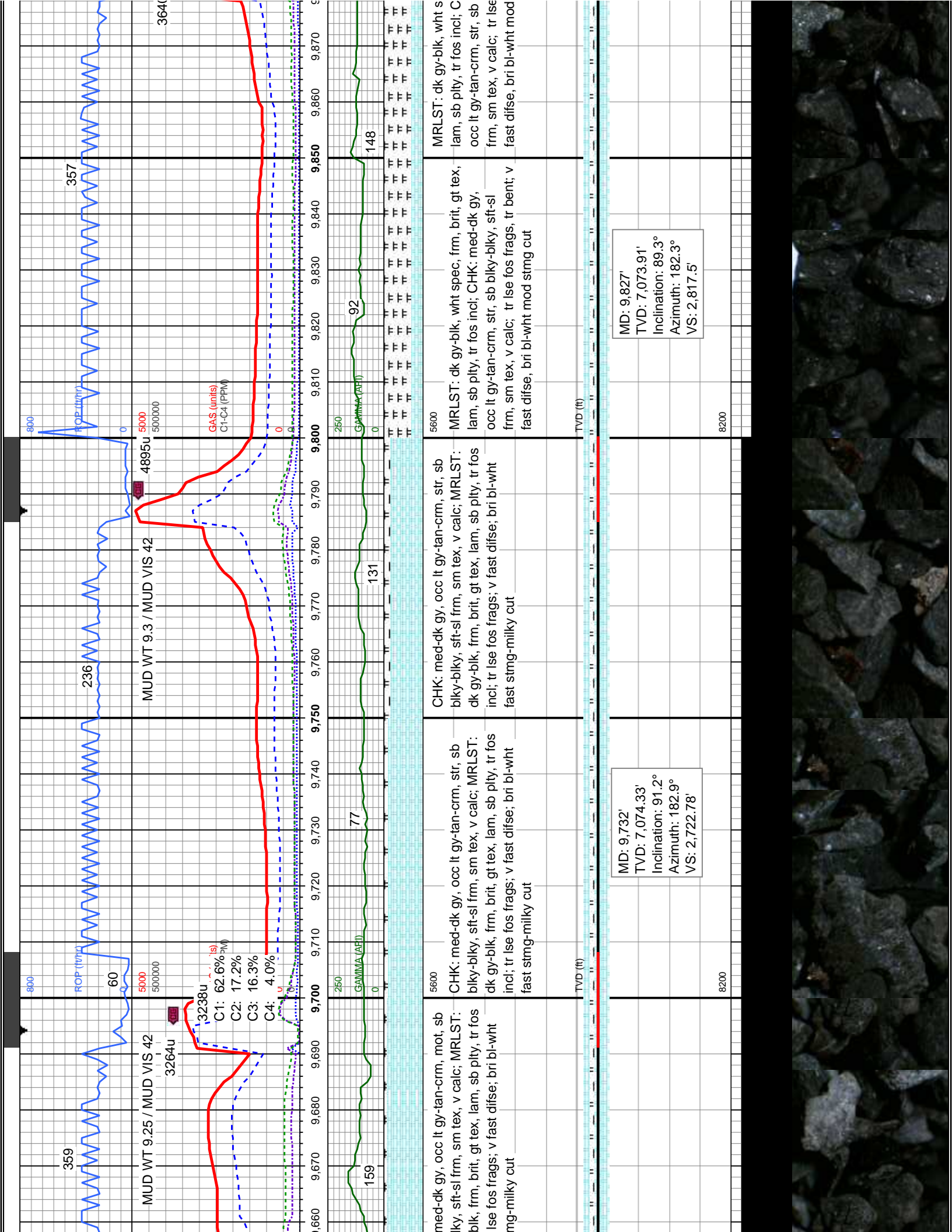


sb ex, v tex, lam, -wht fast	CHK: med-dk gy, occ lt gy-tan-crm, sb blky-blky, sft-sl frm, sm tex, sl mot tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	TVD (ft)
sb ex, v tex, lam, -wht fast	CHK: med-dk gy, occ lt gy-tan-crm, mot, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	TVD (ft)
sb ex, v tex, lam, -wht fast	CHK: med-dk gy, occ lt gy-tan-crm, mot, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb ply, tr fos incl; rr lse fos frags; v fast difse; bri bl-wht fast stmg-milky cut	5600	TVD (ft)

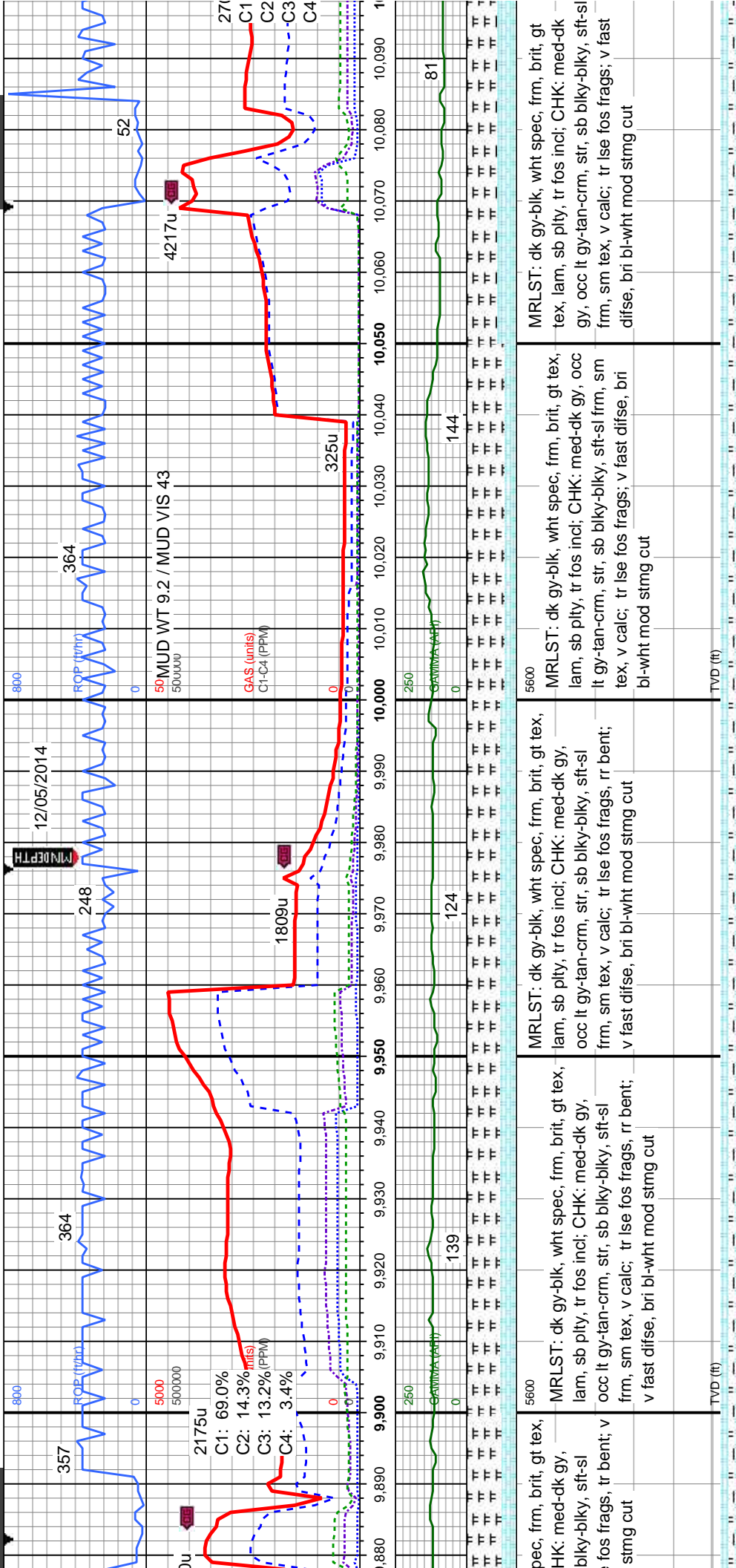
MD: 9,449' TVD: 7,080.92' Inclination: 90° Azimuth: 183.2° VS: 2,440.17'	MD: 9,543' TVD: 7,079.69' Inclination: 91.5° Azimuth: 185° VS: 2,534.04'	MD: 9,638' TVD: 7,076.87' Inclination: 91.9° Azimuth: 185.1° VS: 2,628.95'
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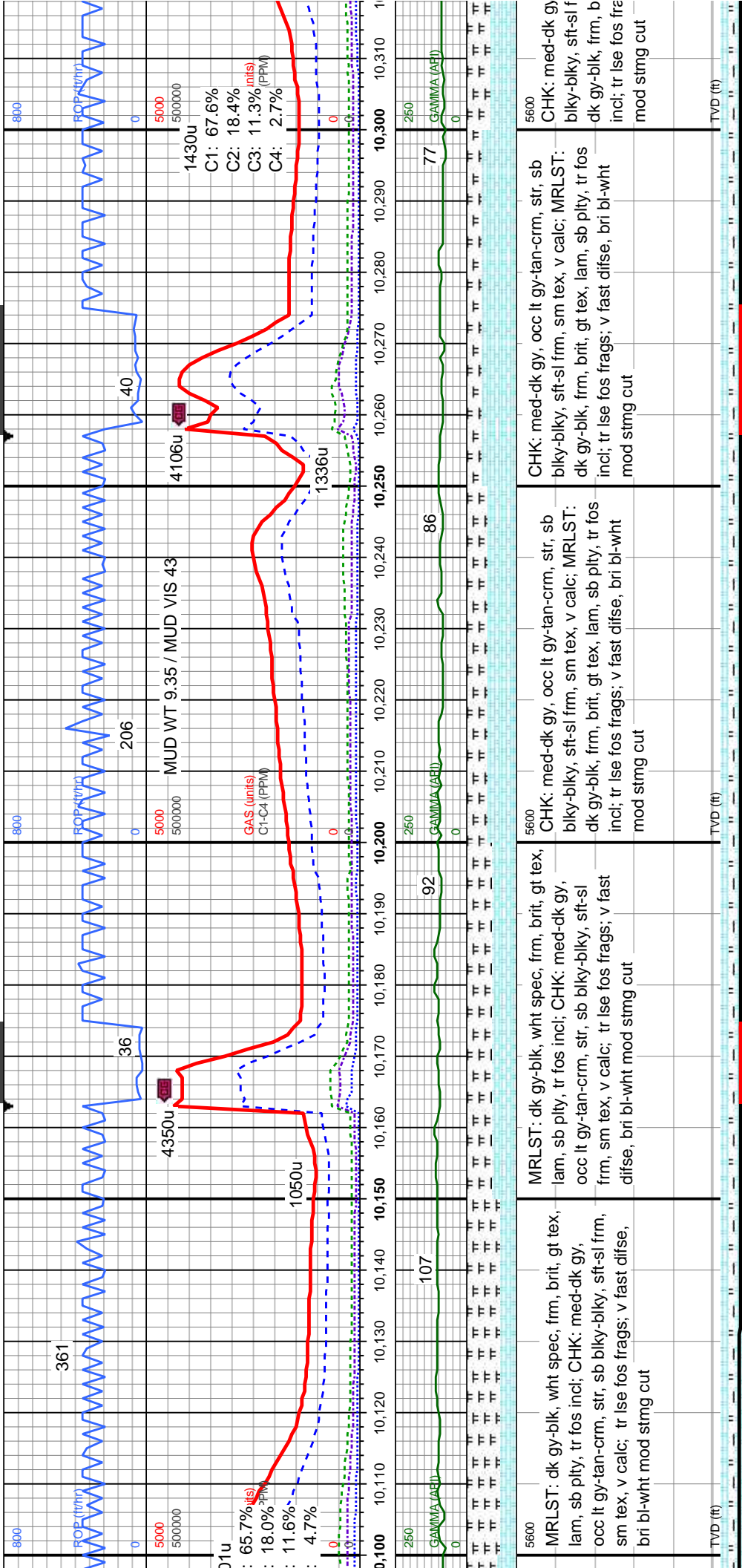
MD: 9,921'  
TVD: 7,075.47'  
Inclination: 88.8°  
Azimuth: 180°  
VS: 2,911'

8200

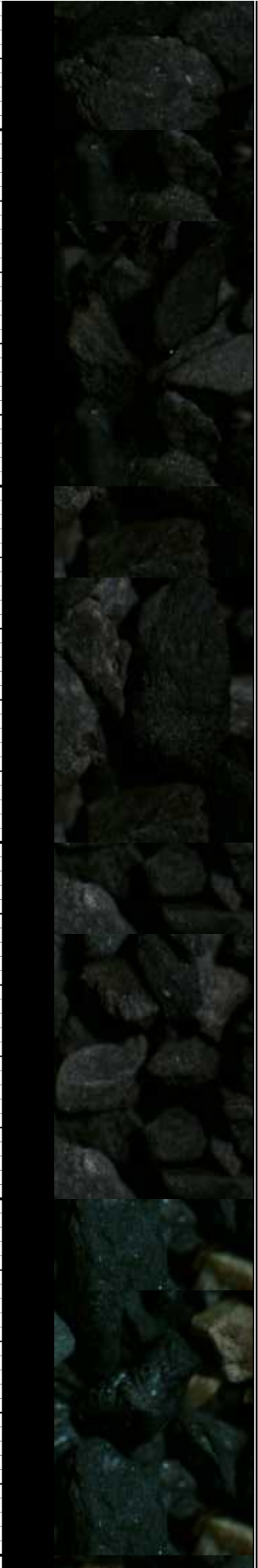
MD: 10,015'  
TVD: 7,077.77'  
Inclination: 88.4°  
Azimuth: 179.2°  
VS: 3,004.2'

8200

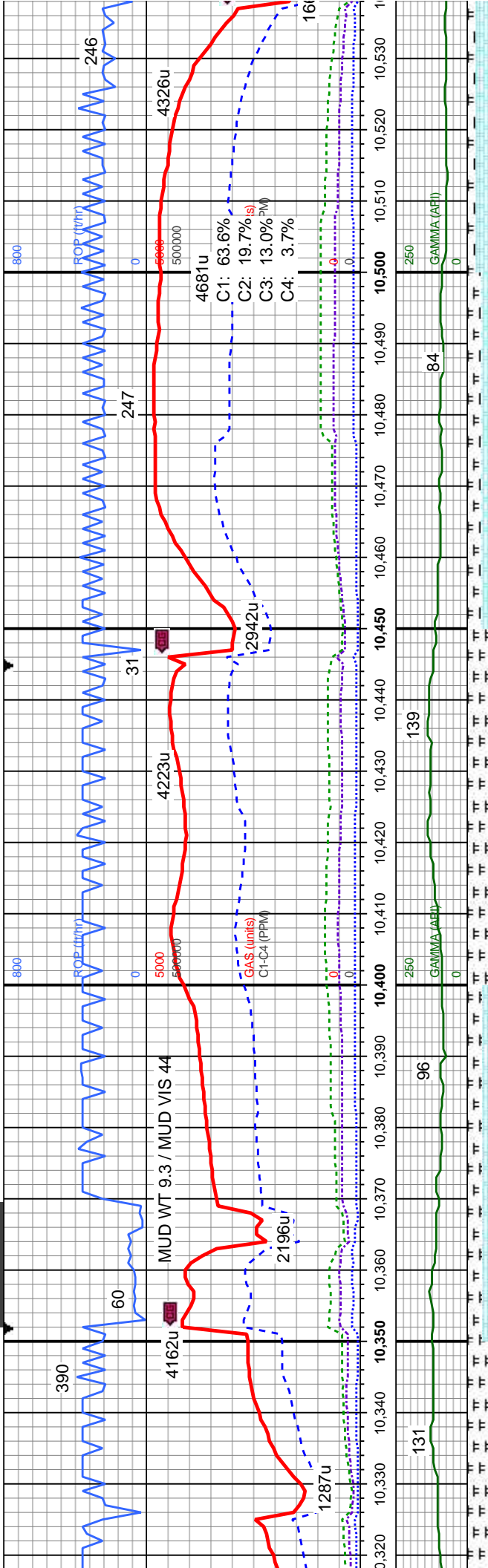




MD: 10,108' TVD: 7,079.47' Inclination: 89.5° Azimuth: 180° VS: 3,096.41'	MD: 10,202' TVD: 7,080.13' Inclination: 89.7° Azimuth: 180° VS: 3,189.72'	MD: 10,296' TVD: 7,080.05' Inclination: 90.4° Azimuth: 181.6° VS: 3,283.17'
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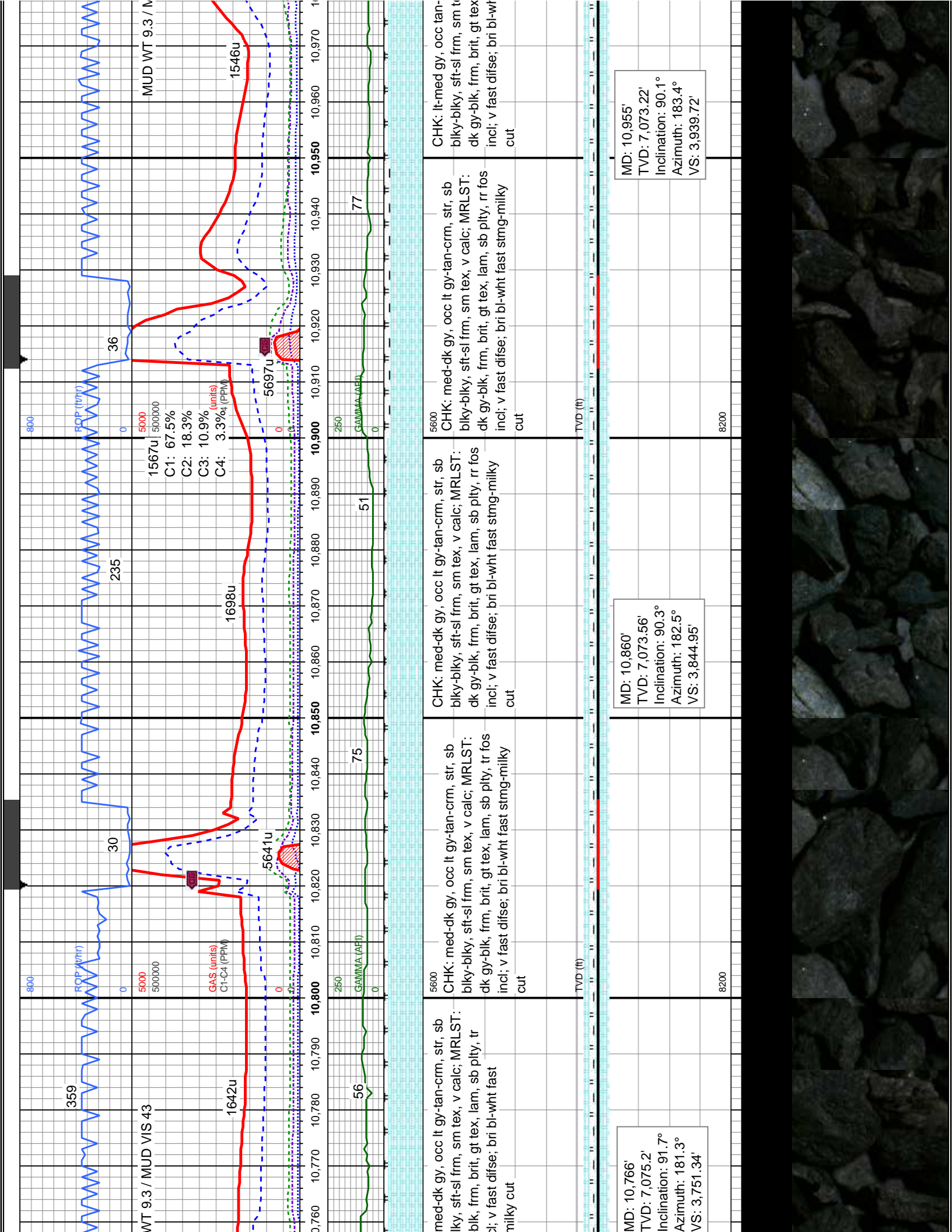
CHK: med-dk gy, occ lt gy-tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; tr ise fos frags; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ lt gy-tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; tr ise fos frags; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ lt gy-tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; tr ise fos frags; v fast difse, bri bl-wht mod stmg cut	CHK: med-dk gy, occ lt gy-tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; tr ise fos frags; v fast difse, bri bl-wht mod stmg cut
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MD: 10,389' TVD: 7,078.91' Inclination: 91° Azimuth: 183.6° VS: 3,375.89'	MD: 10,484' TVD: 7,077.91' Inclination: 90.2° Azimuth: 182.5° VS: 3,470.66'	
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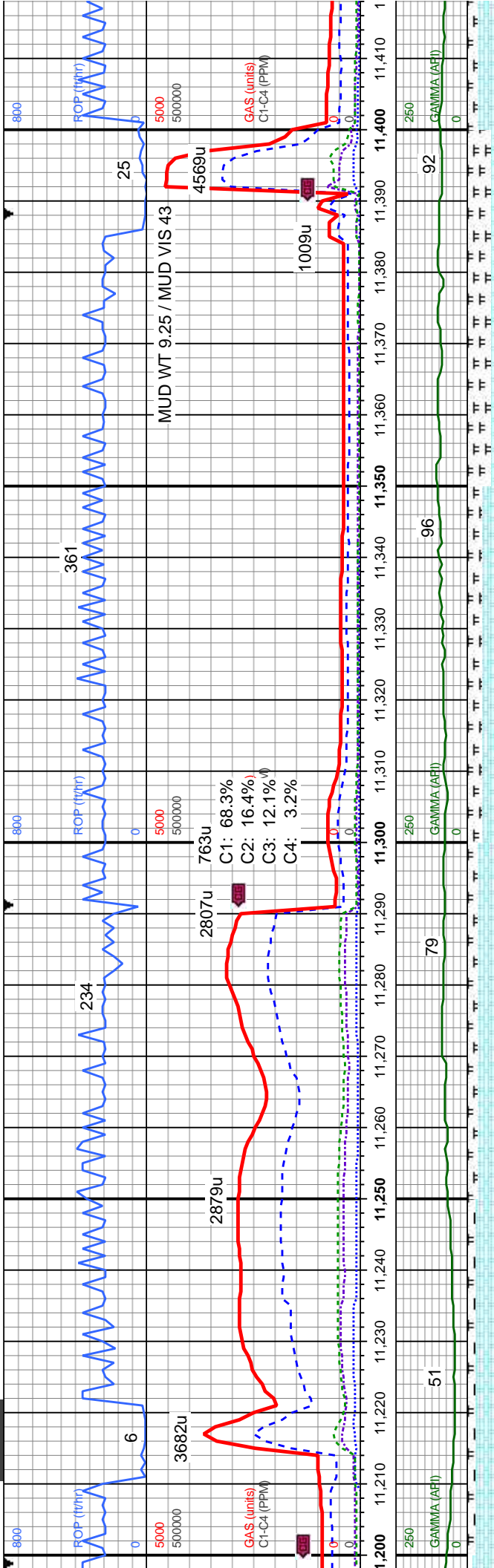












5600	CHK: lt-med gy, occ tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	CHK: lt-med gy, occ tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut	5600	CHK: lt-med gy, occ tan-crm, str, sb blky-blky, sft-sl frm, sm tex, v calc; MRLST: dk gy-blk, frm, brit, gt tex, lam, sb pty, tr fos incl; v fast difse; bri bl-wht fast stmg-milky cut
TVD (ft)		TVD (ft)		TVD (ft)	

MD: 11,238'  
TVD: 7,071.24'  
Inclination: 89.3°  
Azimuth: 182.1°  
VS: 4,221.99'

MD: 11,333'  
TVD: 7,071.82'  
Inclination: 90°  
Azimuth: 182.1°  
VS: 4,316.64'



