
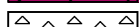



## ROCK TYPES




 Dolprim  
 Cht

 Shgy  
 Lmst fw<7


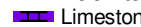
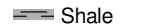
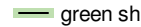

 Cht vari

## ACCESSORIES

### MINERAL

 Chert White  
 Chert, dark  
P Pyrite  
 Varicolored chert

### STRINGER

 Dolomite  
 Limestone  
 Shale  
 green shale  
 Chert

### TEXTURE










C Chalky

## OTHER SYMBOLS

### OIL SHOWS

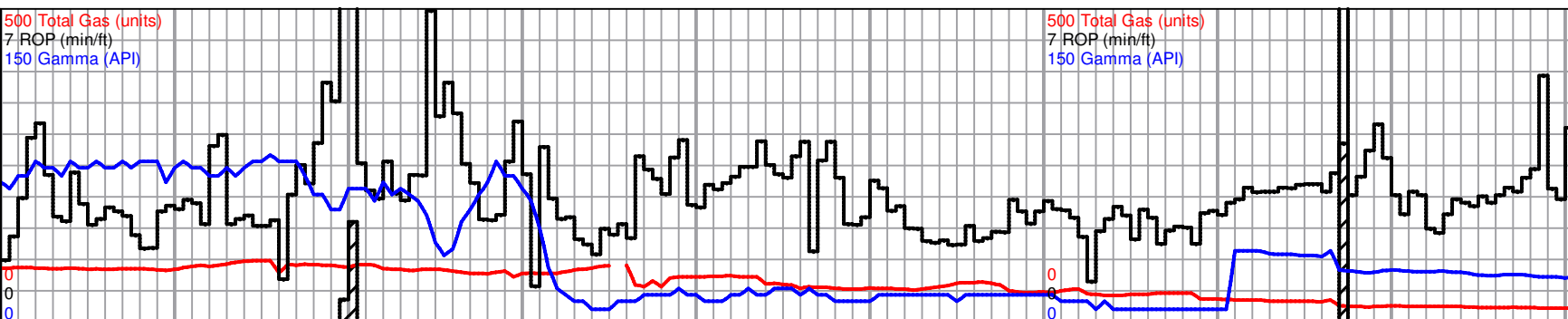
● Even Stn  
● Spotted Stn 50 - 75 %  
● Spotted Stn 25 - 50 %  
○ Spotted Stn 1 - 25 %  
○ Questionable Stn  
D Dead Oil Stn  
■ Fluorescence

### MISC

 Daily Report  
 Digital Photo  
 Document  
 Folder  
 Link  
 Vertical Log File  
 Horizontal Log File  
 Core Log File  
 Drill Cuttings Rpt

Printed by GEOstrip HZ Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #01  
 Total Gas (units)  
 ROP (min/ft)  
 Gamma (API)



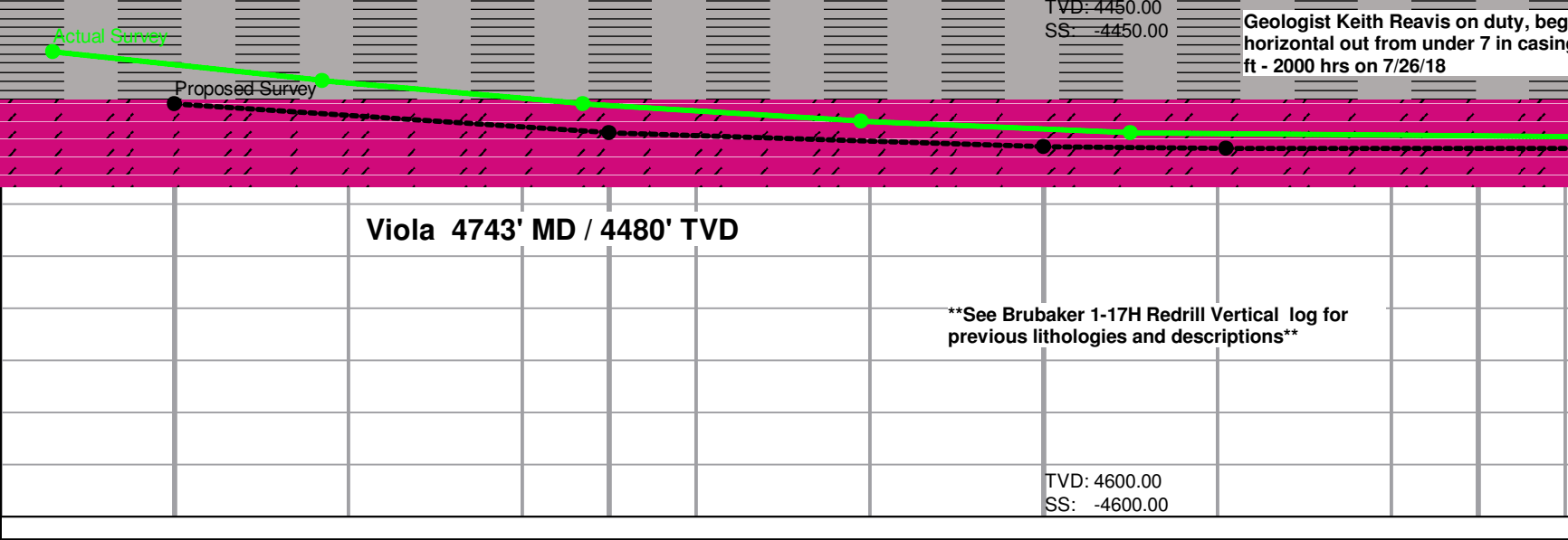
Sliding  
 Depth

Proposed Survey Data	100 survey	MD: 4,700.00 ft Incl: 77.90 Azi: 293.96 TVD: 4,481.23 ft	MD: 4,750.00 ft Incl: 82.90 Azi: 293.96 TVD: 4,489.57 ft	MD: 4,800.00 ft	100 survey	MD: 4,821.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft
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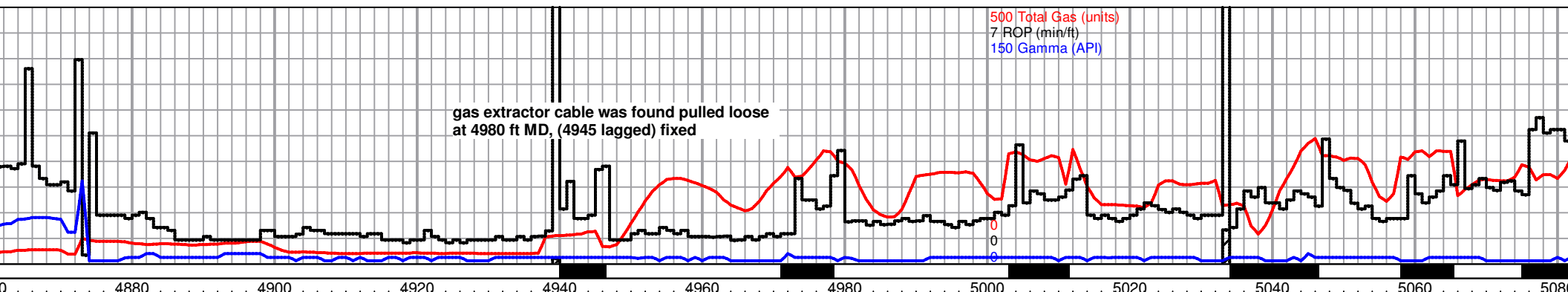
Actual Survey Data

Actual Survey Data	100 survey	MD: 4,686.00 ft Incl: 72.80 Azi: 294.00 TVD: 4,466.11 ft	MD: 4,717.00 ft Incl: 75.80 Azi: 293.80 TVD: 4,474.50 ft	MD: 4,747.00 ft Incl: 78.80 Azi: 293.60 TVD: 4,481.10 ft	MD: 4,779.00 ft	100 survey	MD: 4,810.00 ft Incl: 85.20 Azi: 293.60 TVD: 4,489.51 ft
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Well Bore Cross Section



Oil Shows



MD: 4,900.00 ft  
Incl: 90.00  
Azi: 293.96  
TVD: 4,493.96 ft

MD: 5,000.00 ft 100 survey  
Incl: 90.00  
Azi: 293.96  
TVD: 4,493.96 ft

MD: 4,879.00 ft  
Incl: 92.20  
Azi: 296.30  
TVD: 4,491.07 ft

MD: 4,911.00 ft  
Incl: 93.40  
Azi: 295.60  
TVD: 4,489.51 ft

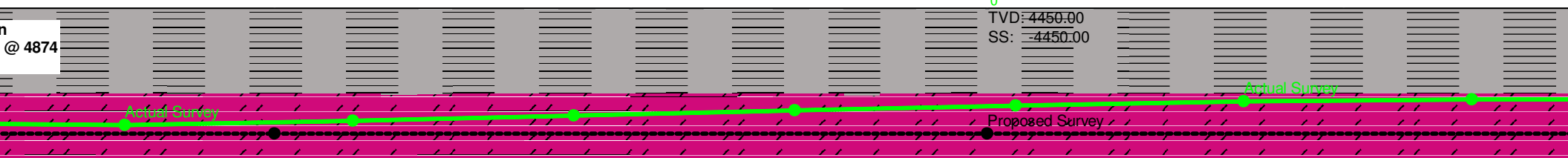
MD: 4,942.00 ft  
Incl: 93.40  
Azi: 294.90  
TVD: 4,487.67 ft

MD: 4,973.00 ft  
Incl: 93.30  
Azi: 294.20  
TVD: 4,485.86 ft

MD: 5,004.00 ft  
Incl: 93.10  
Azi: 293.80  
TVD: 4,484.13 ft

MD: 5,036.00 ft  
Incl: 92.20  
Azi: 294.20  
TVD: 4,482.65 ft

MD: 5,068.00 ft  
Incl: 90.40  
Azi: 294.50  
TVD: 4,481.92 ft



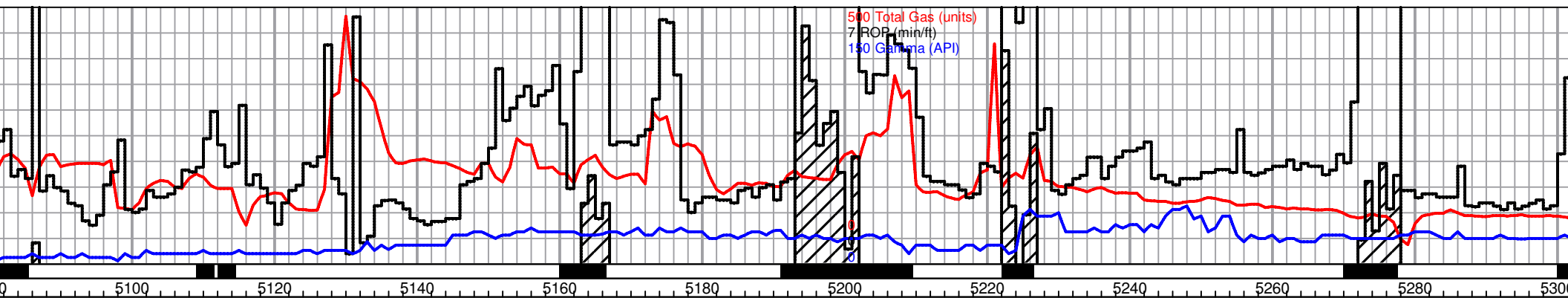
4910-4970 samples, dolomite, white, microcrystalline, powdery, crystalline samples with poor crystal definition, slight to fair light brown oily stain, no odor, no free oil

4990-5030 samples, as previous, decrease in stain

5050 sample, after sweep, dolomite, light gray to white, microcrystalline, crystalline clusters, sub-rhombic, scattered intercrystalline porosity, fairly even light brown intercrystalline oily staining, no show free oil, no odor, some spotty fair fluorescence

5070-90 samples, dolomite, white, microcrystalline, powdery, very fine defined crystals, spotty light stain, free oil, no odor, some spotty fair fluorescence

TVD: 4600.00  
SS: -4600.00



MD: 5,100.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,200.00 ft 100 survey  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,099.00 ft  
 Incl: 89.00  
 Azi: 294.90  
 TVD: 4,482.08 ft

MD: 5,130.00 ft  
 Incl: 89.20  
 Azi: 294.50  
 TVD: 4,482.57 ft

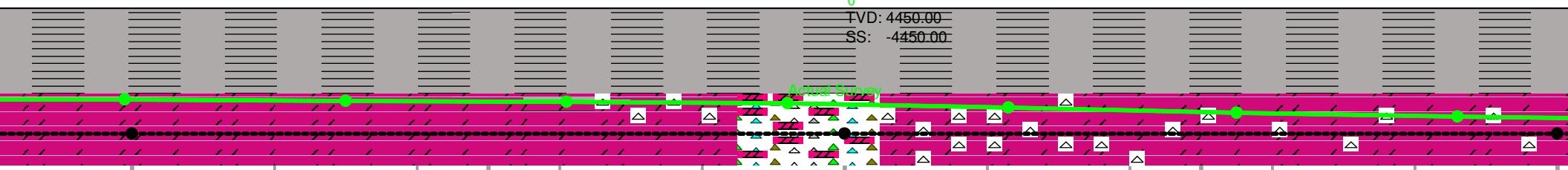
MD: 5,161.00 ft  
 Incl: 89.70  
 Azi: 294.50  
 TVD: 4,482.87 ft

MD: 5,192.00 ft  
 Incl: 88.30  
 Azi: 294.30  
 TVD: 4,483.41 ft

MD: 5,223.00 ft  
 Incl: 86.60  
 Azi: 294.00  
 TVD: 4,484.79 ft

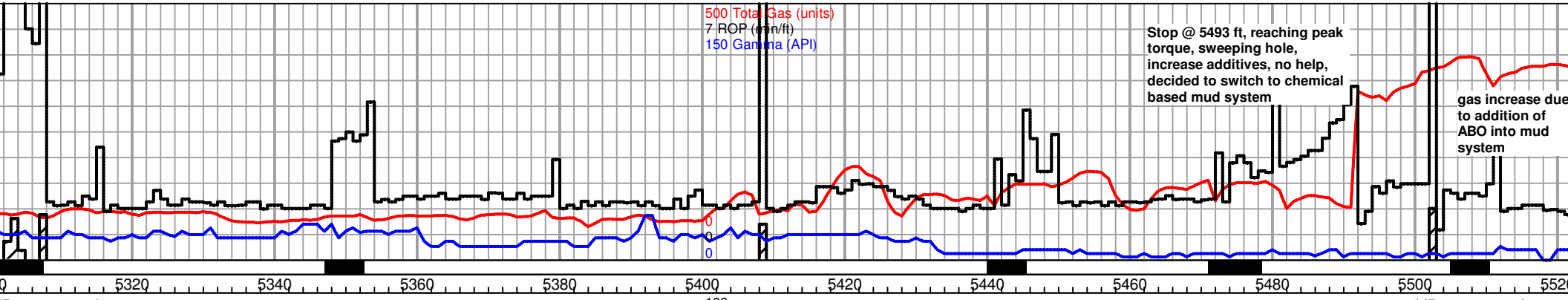
MD: 5,255.00 ft  
 Incl: 86.90  
 Azi: 293.80  
 TVD: 4,486.60 ft

MD: 5,286.00 ft  
 Incl: 87.80  
 Azi: 293.80  
 TVD: 4,488.04 ft



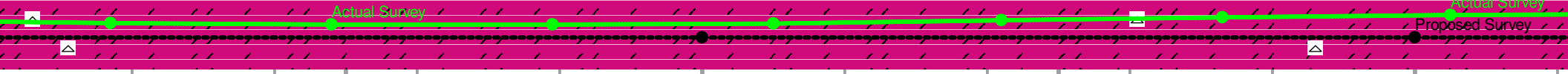
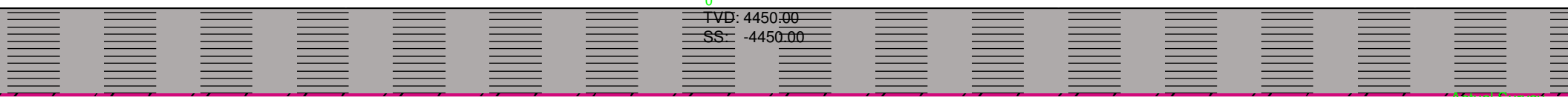
TVD: 4450.00  
 SS: -4450.00

<p>ite, fine poorly ain, no show air</p>	<p>5110 - 5150 samples - dolomite as previous, some small crystal clusters, very fine cuttings, slight stain, no free oil or odor, abundant metal shavings, light sheen in 5150 sample</p>	<p>5170 sample as previous with some pieces of gray and red blocky dense shale</p>	<p>5190 sample - dolomite as previous, shales drop out, influx translucent clear to gray chert, appx. 5-10%, dolomite still carrying spotty to fair stain, some sheen, no show free oil or odor</p>	<p>5202 &amp; 5210 sample, chert, brown to tan, translucent clear to gray, sharp, fresh, 60% of sample, dolomite as previous, with gray and brown sucrosic, slight stain, no show free oil or odor</p>	<p>5220-5250 samples, (10 ft ers) dolomite, mixed, very fine, white to cream, microcrystalline, sub-rhombic, some matrix, with brown and gray, sucrosic, some fair staining, no show free oil, no odor, cherts as previous, marked decrease, &lt; 20%, trace brown shale and metal shavings</p>	<p>5260 &amp; 70 samples, as previous, decrease in chert &lt; 10%</p>	<p>5280 - 5300 samples as previous chert &lt; 5%</p>
<p>TVD: 4600.00          SS: -4600.00</p>							



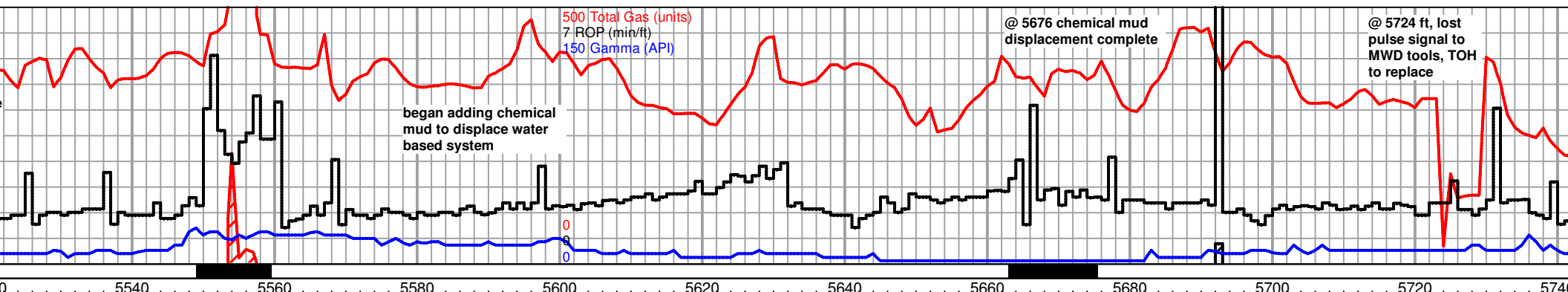
MD: 5,300.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft	MD: 5,400.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft	MD: 5,500.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft
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MD: 5,317.00 ft Incl: 88.70 Azi: 293.80 TVD: 4,488.98 ft	MD: 5,348.00 ft Incl: 89.40 Azi: 293.60 TVD: 4,489.50 ft	MD: 5,379.00 ft Incl: 90.30 Azi: 293.50 TVD: 4,489.58 ft	MD: 5,410.00 ft Incl: 91.50 Azi: 293.80 TVD: 4,489.09 ft	MD: 5,442.00 ft Incl: 92.20 Azi: 294.00 TVD: 4,488.06 ft	MD: 5,473.00 ft Incl: 91.80 Azi: 294.50 TVD: 4,486.98 ft	MD: 5,505.00 ft Incl: 91.00 Azi: 294.50 TVD: 4,486.19 ft
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5310 & 20 samples, as previous	5340 - 70 samples, samples basically dust, mostly dolomite with virtually no definition	5390 - 5480 samples, very fine crushed/powdey white to light gray dolomite, some chert, poor definition, questionable stain, no odor, no fluorescence	5500 - 5540 samples, after sweeps and mud additives during torque problems, very fine samples but better, dolomite, microcrystalline, white to light gray, sub-rhombic to sub-sucrosic, some inter-crystalline porosity with spotty to fair stain, no show free oil or odor, trace chert, some scattered light fluorescence	5560 sample, as very fine
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TVD: 4600.00 SS: -4600.00
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MD: 5,600.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,700.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,536.00 ft  
 Incl: 90.60  
 Azi: 293.80  
 TVD: 4,485.76 ft

MD: 5,567.00 ft  
 Incl: 89.20  
 Azi: 293.60  
 TVD: 4,485.81 ft

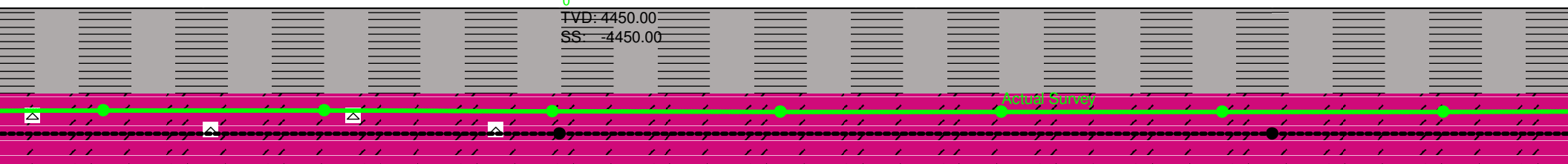
MD: 5,599.00 ft  
 Incl: 89.60  
 Azi: 293.50  
 TVD: 4,486.15 ft

MD: 5,631.00 ft  
 Incl: 89.90  
 Azi: 293.60  
 TVD: 4,486.29 ft

MD: 5,662.00 ft  
 Incl: 90.10  
 Azi: 294.30  
 TVD: 4,486.29 ft

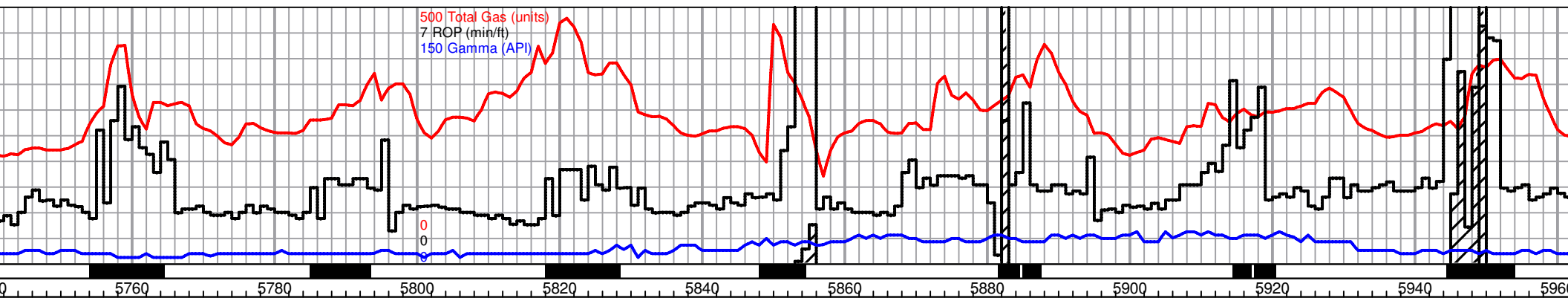
MD: 5,693.00 ft  
 Incl: 89.70  
 Azi: 294.90  
 TVD: 4,486.34 ft

MD: 5,724.00 ft  
 Incl: 90.30  
 Azi: 295.60  
 TVD: 4,486.34 ft



<p>previous, still</p>	<p>5580-5620 samples, slight sample quality improvement, dolomite, mostly white with gray, microcrystalline, sub-rhombic to sucrosic (gray facies primarily sucrosic), fair intercrystalline porosity, light but even intercrystalline stain, no show free oil or odor, scattered translucent chert shards</p>	<p>5640-80 samples, as previous, appx 50/50 white vs. gray dolomite</p>	<p>5700 &amp; 5720 sample, dolomite as previous, marked decrease in gray sucrosic</p>	<p>5750-60 &amp; 7 to light gray, sub-rhombic and staining tray, sheen droplets, no</p>
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TVD: 4600.00  
 SS: -4600.00



MD: 5,800.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,900.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

5960' sample photo  
  
 IMG\_1653.JPG

MD: 5,756.00 ft  
 Incl: 90.60  
 Azi: 296.30  
 TVD: 4,486.09 ft

MD: 5,787.00 ft  
 Incl: 89.00  
 Azi: 295.90  
 TVD: 4,486.20 ft

MD: 5,818.00 ft  
 Incl: 88.30  
 Azi: 294.70  
 TVD: 4,486.93 ft

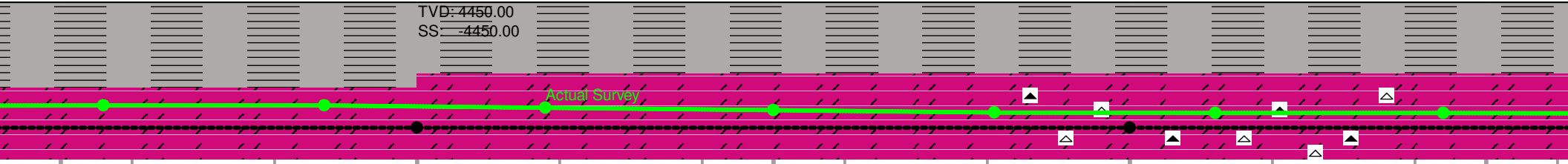
MD: 5,850.00 ft  
 Incl: 88.30  
 Azi: 294.00  
 TVD: 4,487.88 ft

MD: 5,881.00 ft  
 Incl: 89.00  
 Azi: 294.20  
 TVD: 4,488.61 ft

MD: 5,912.00 ft  
 Incl: 89.90  
 Azi: 294.30  
 TVD: 4,488.91 ft

MD: 5,944.00 ft  
 Incl: 90.10  
 Azi: 294.20  
 TVD: 4,488.91 ft

TVD: 4450.00  
 SS: -4450.00



70 samples, dolomite, white microcrystalline, rhombic to c, fair intercrystalline porosity, light streaming sheen in on break with trace free oil odor, fair fluorescence

5780 thru 5820 samples, as previous, still some sheen and trace free oil droplets, slight decrease in overall staining

5840 sample: dolomite as previous, with: trace red siltstone, trace gray blocky shale, abundant metal shavings

5860 sample: dolomite as previous, decrease staining, trace sheen, no free oil droplets, trace gas bubbles siltstone, shale and metal shavings dropped out

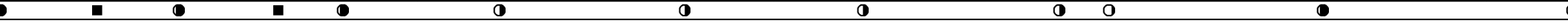
5880 & 5900 dolomite, mostly white, some light gray, microcrystalline, rhombic to sub-rhombic, fair intercrystalline porosity, light but even staining, trace sheen, no free oil or odor, trace gas bubbles

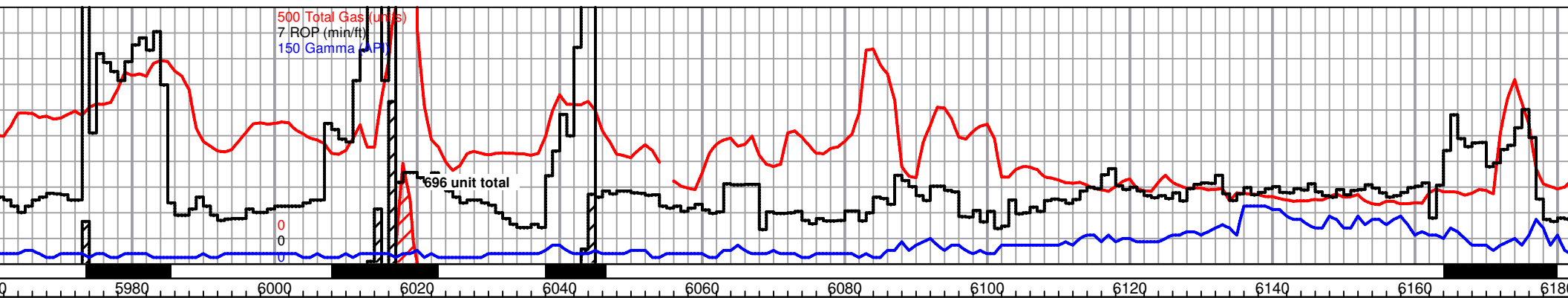
5920 and 40 samples - dolomite as previous with influx tan white and gray sucrosic, lightly stained, appx 30% of sample, with influx gray smokey translucent chert, appx 5%

5950 & 60 samples, dolomites as previous, appx. 50/50 rhombic/sucrosic, fair even stain, no free oil, trace gas bubbles, slight increase in chert smokey gray to mottled, some white

5980-6000 samples mostly white to light gray, microcrystalline, sucrosic with tan staining, fair porosity, light even some appear gilly oil or odor, marked chert

TVD: 4600.00  
 SS: -4600.00





MD: 5,975.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 6,100.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 5,975.00 ft  
 Incl: 89.70  
 Azi: 293.50  
 TVD: 4,488.96 ft

MD: 6,007.00 ft  
 Incl: 89.40  
 Azi: 292.80  
 TVD: 4,489.21 ft

MD: 6,039.00 ft  
 Incl: 88.30  
 Azi: 292.00  
 TVD: 4,489.86 ft

MD: 6,071.00 ft  
 Incl: 88.50  
 Azi: 291.90  
 TVD: 4,490.75 ft

MD: 6,102.00 ft  
 Incl: 89.90  
 Azi: 292.90  
 TVD: 4,491.18 ft

MD: 6,134.00 ft  
 Incl: 90.40  
 Azi: 292.80  
 TVD: 4,491.10 ft

MD: 6,165.00 ft  
 Incl: 90.60  
 Azi: 293.50  
 TVD: 4,490.83 ft

TVD: 4450.00  
 SS: -4450.00

Geologist Jeremy Schwartz relieved geologist Keith Reavis @ 2200 hrs 7/29/18

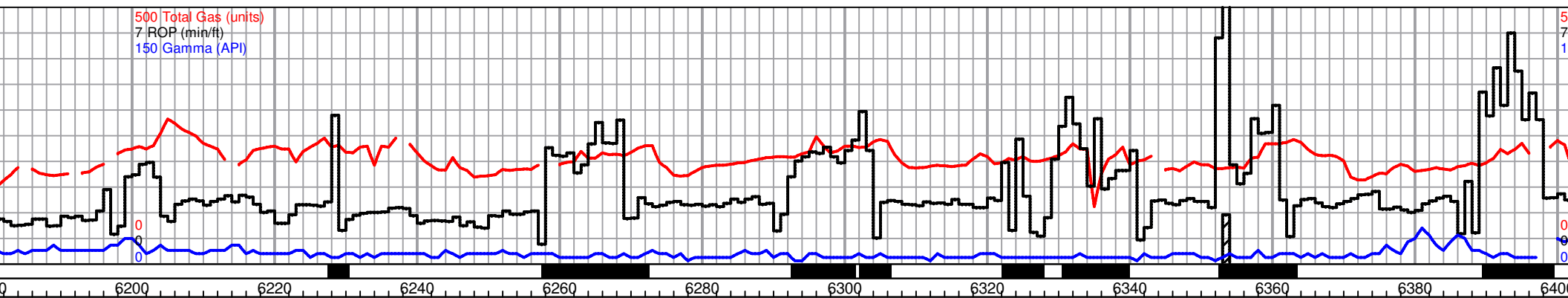


<p>oles, dolomite, light gray, rhombic, some and brown air to good en staining, sonitic, no free ed decrease in</p>	<p>6010 &amp; 6020 samples, dolomite as previous, chert drops out</p>	<p>6040-6100 samples - dolomite as previous, slightly coarser crystals with better definition, good porosity, slight increase in staining, trace gas bubbles, traces oily sheen, no free oil, no odor, scattered fluorescence</p>	<p>Dolomite, white, micro-xln, mostly sub-rhombic with poor visible porosity in small chips, most with very scattered to scattered black stain, some scattered good med-xln rhombic clusters with some fair visible inter-xln porosity, some with more even brown stain, NSFO, some very scattered gas bubbles, scattered fluor., fair fleeting odor in wet cup</p>	<p>Dolomite as previous, stain decreasing, still carrying some scattered good rhombic with brown stain, trace translucent chert, scattered fluor., NSFO, poor odor</p>	<p>~6130-6150' Dolomite, white, micro-xln, mostly sub-rhombic to rhombic with very scattered to scattered black stain, with slight influx brown, micro-xln, sucrosic, some scattered chips with fair scattered brown stain, <b>with influx gray to dark gray shale, correlates with influx brown sucrosic dolomite, trace pyrite,</b> NSFO, very scattered fluor., no odor</p>	<p>~6160-62 micro-xln, rhombic v some bar scattered <b>and brown dolomite out cong shale, N</b></p>
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TVD: 4600.00  
 SS: -4600.00



500 Total Gas (units)  
 7 ROP (min/ft)  
 150 Gamma (API)



MD: 6,200.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 6,300.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 6,215.00 ft  
 Incl: 91.50  
 Azi: 295.00  
 TVD: 4,490.26 ft

MD: 6,228.00 ft  
 Incl: 92.60  
 Azi: 296.40  
 TVD: 4,489.12 ft

MD: 6,260.00 ft  
 Incl: 92.00  
 Azi: 296.80  
 TVD: 4,487.83 ft

MD: 6,291.00 ft  
 Incl: 91.00  
 Azi: 296.60  
 TVD: 4,487.02 ft

MD: 6,323.00 ft  
 Incl: 90.40  
 Azi: 296.10  
 TVD: 4,486.63 ft

MD: 6,354.00 ft  
 Incl: 90.40  
 Azi: 295.60  
 TVD: 4,486.41 ft

MD: 6,388.00 ft  
 Incl: 90.60  
 Azi: 295.00  
 TVD: 4,486.12 ft

TVD: 4450.00  
 SS: -4450.00



~6200' Dolomite, white, sub-rhombic to rhombic with decreasing stain, brown, some with very black stain, **shales in sucrosic mostly dropping frequently, trace green NSFO, no odor**

Dolomite, white, micro-xln, mostly sub-sucrosic with poor visible porosity and barren to very scattered black stain, some scattered small fair to good med-xln rhombic clusters, some with fair visible inter-xln porosity and scattered to mostly saturated brown stain, also with some scattered brown sucrosic, NSFO, slight show gas bubbles, very scattered poor fluor., fair odor / ~6220 stain decreasing, mostly sub-rhombic, NSFO, poor odor

~6240' Dolomite, white, micro-xln, mostly sub-rhombic with poor visible porosity and barren to very scattered black to brown stain, NSFO, no odor

~6260'-6280' Dolomite as previous, some barren, some with very scattered poor gilsonitic black stain, NSFO, no odor

~6300' Dolomite, white, micro-xln, mostly sub-sucrosic with poor visible porosity, barren to slight increase in scattered black to brown stain, **with few very scattered gray shale pieces and trace translucent chert,** NSFO, no odor

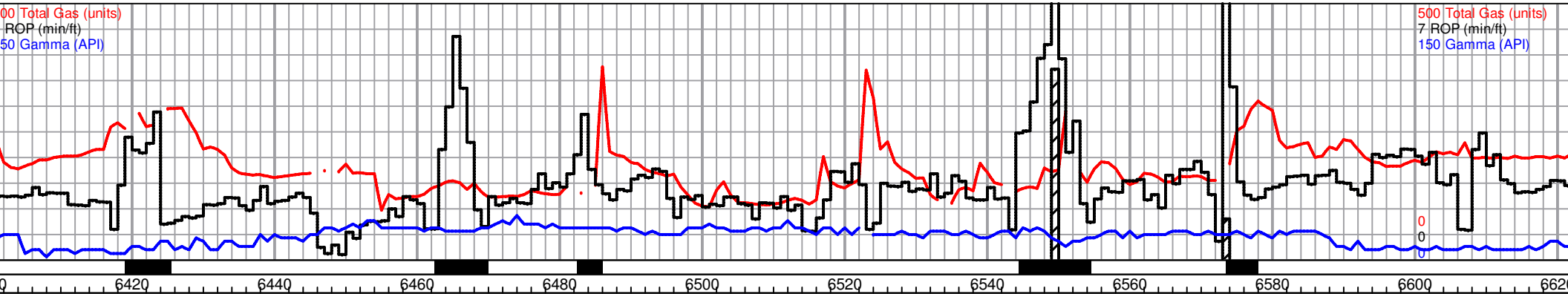
~6320'-6340' Dolomite as previous, decrease in overall stain, with some scattered good rhombic with scattered brown inter-xln stain, shale and chert dropped out, NSFO, no odor

Dolomite, white, micro-xln, mostly sub-sucrosic with poor visible porosity, ~50/50 mix barren and very scattered black to brown stain, **trace green shale,** NSFO, no odor

~6380' Dolomite as previous, still decrease in overall stain, **with trace green shale and slight influx gray shale as well as some very scattered light gray to translucent chert,** NSFO, no odor

Dolomite, white, micro-xln, mostly sub-sucrosic with poor visible porosity, barren to brown in quality stain in carry, NSFO, no odor

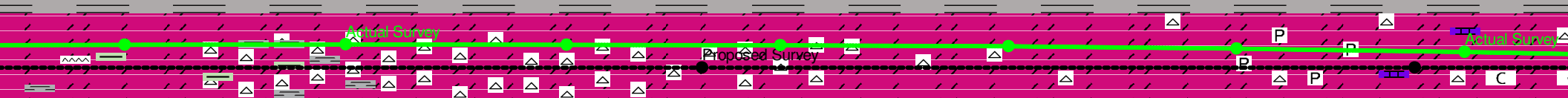
TVD: 4600.00  
 SS: -4600.00



MD: 6,500.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 6,419.00 ft	MD: 6,450.00 ft	MD: 6,481.00 ft	MD: 6,511.00 ft	MD: 6,543.00 ft	MD: 6,575.00 ft	MD: 6,607.00 ft
Incl: 90.10	Incl: 90.10	Incl: 89.40	Incl: 89.70	Incl: 89.20	Incl: 88.20	Incl: 87.40
Azi: 294.90	Azi: 294.50	Azi: 294.90	Azi: 295.00	Azi: 295.20	Azi: 295.20	Azi: 295.90
TVD: 4,485.93 ft	TVD: 4,485.87 ft	TVD: 4,486.01 ft	TVD: 4,486.24 ft	TVD: 4,486.55 ft	TVD: 4,487.28 ft	TVD: 4,488.50 ft

MD: 6,607.00 ft  
 Incl: 87.40  
 Azi: 295.90  
 TVD: 4,488.50 ft



white, white, micro-xln, sub-sucrosic with poor porosity, ~50/50 mix to very scattered black brown stain, slight increase in quantity of brown inter-xln in some chips, **still showing trace green and shale as well as chert**, no odor

~6420 Dolomite, micro-xln, sub-rhombic to rhombic with good increase in chips with stain, some light brown, most chips with very scattered to scattered stain, some scattered small vugs in some chips, with some very scattered good med-xln rhombic clusters with good inter-xln porosity and scattered black to brown stain, NSFO, scattered fluor., fair fleeting odor

~6440' Mix of 50/50 dolomite/chert, chert is mostly translucent and fresh and sharp, dolomite is sub-rhombic to sucrosic with mostly poor visible porosity, ~50/50 barren to scattered black to brown stain, **also with slight influx gray and trace green shale**, NSFO, no odor

~6460' Dolomite and chert mix as previous, overall decrease in dolomite staining, mostly very scattered, with slight influx gray chert as well as vf-xln sucrosic dolomite, very friable, most barren, **shale appears to have dropped out**, NSFO, no odor

~6480'-6500' ~50/50 dolomite/chert mix, influx light gray to light brown vf-xln sucrosic to sub-rhombic dolomite, ~70/30 barren to very scattered stain, some stain is fair light brown, influx white chert, gray appears to have dropped out, NSFO, no odor

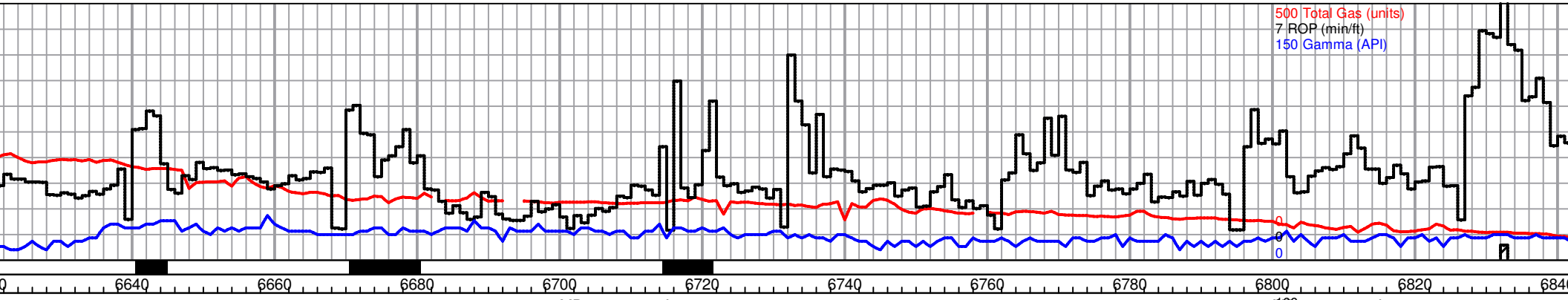
~6520'- ~6540' Dolomite, white, micro-med xln, mostly sub-rhombic to rhombic with some very scattered sucrosic, increased staining, few chips large enough to see several vugs and fair porosity, **chert has mostly dropped out**, NSFO, no odor / slight decrease in staining ~ 6540'

~6560- 6590' Dolomite, white with some very scattered gray, micro-med xln, mostly sub-rhombic to rhombic, some scattered fair porosity in some chips, some very scattered sucrosic, grading to ~60/40 barren to scattered stain, also with some scattered translucent to white chert grading out, slight influx pyrite in subsequent samples, VSSFO in 6610' sample (lags ~6580')

Dolomite, white to light gray xln, mostly sub-rhombic with visible porosity and barren, chips with scattered stain, some very scattered translucent white chert and trace pyrite, **with some very scattered LS, chalky to lithographic.**

MD: 4,600.00  
 S: -4600.00





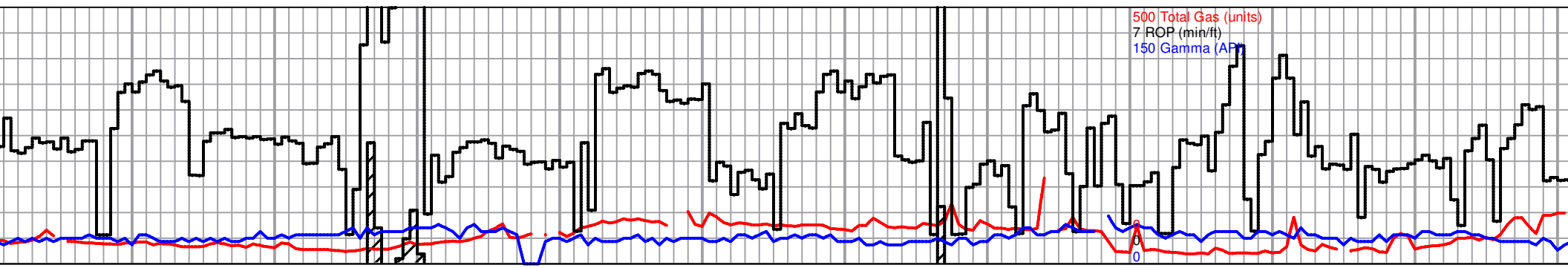
500 Total Gas (units)  
7 ROP (min/ft)  
150 Gamma (API)

MD: 6,700.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft	MD: 6,950.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft
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MD: 6,638.00 ft Incl: 86.90 Azi: 296.10 TVD: 4,490.05 ft	MD: 6,669.00 ft Incl: 86.60 Azi: 295.70 TVD: 4,491.80 ft	MD: 6,700.00 ft Incl: 86.00 Azi: 295.40 TVD: 4,493.80 ft	MD: 6,732.00 ft Incl: 87.10 Azi: 295.20 TVD: 4,495.73 ft	MD: 6,764.00 ft Incl: 87.10 Azi: 294.50 TVD: 4,497.35 ft	MD: 6,795.00 ft Incl: 87.80 Azi: 294.30 TVD: 4,498.73 ft	MD: 6,827.00 ft Incl: 87.80 Azi: 295.00 TVD: 4,499.96 ft
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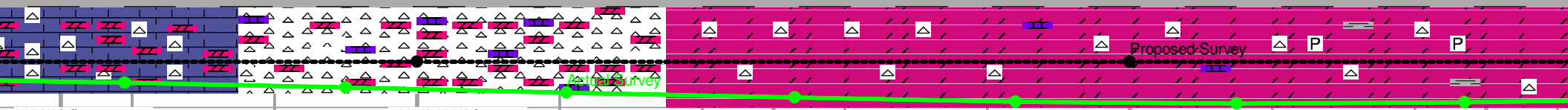
micro- n poor some with scent to also cream no odor	~6620' Dolomite, white to light gray, vf-xln sucrosic to micro-xln sub-rhombic to very scattered rhombic, some chips show some scattered fair porosity, slight increase in staining to ~60/40 barren to scattered stain, few chips with fair brown stain, few chips large enough to see several large vugs with black to brown stain, very scattered translucent chert and pyrite, also with scattered chalky cream LS as previous, fair show gas bubbles in wet tray, poor fleeting odor	~6640'-6660' Dolomite, mostly light gray, micro-xln, sub-rhombic to rhombic and sucrosic, ~60/40 barren to scattered stain, some with fair porosity, with large influx cream chalky LS to dolomitic LS, lithographic, ~70/30 mix LS/Dol, with some very scattered translucent to white chert and trace green shale and pyrite, no odor	~6670'-6700' Large influx white with some scattered translucent chert, ~80-90% Chert/LS/Dol. LS, with some scattered light gray sub-rhombic to rhombic dolomite, dolomite has mostly lost staining, no odor	~6720' Chert, white with some scattered light gray and translucent, mostly fresh and sharp, some appears weathered, with some scattered cream LS to dolomitic LS, lithographic with poor visible porosity, no show or odor	~6730' Chert as previous, some scattered with tripolitic areas and brown stain in porosity only, upon break VSSFO in some as well as good show gas bubbles clinging to broken pieces, slow cut with bright white fluor., also with some very scattered small dolomite chips, vf sucrosic and brown, possibly saturated stain?, very friable, when broken VSSFO in some, most too small and friable to test, no cut in few that were able to grab, VSSFO in tray, fair show gas bubbles, fair odor	~6750' Mostly white to translucent chert, with very scattered cream to white dolomite and dolomitic LS, dolomite vf sucrosic to vf sub-rhombic, mostly barren, some scattered chips with what appears to be very scattered brown stain, NSFO, no fluor., or odor	~6760'-6810' White chert, mostly fresh and sharp, with some very scattered cream dolomitic LS, slight influx light gray and light brown chert ~ 6790', ~6810' some very scattered chips with tripolitic edges and black stain in tripolitic areas only, slow cut with bright white fluor., no odor	~6820' Chert, white, fresh and sharp, no show or odor
							TVD: 4600.00 SS: -4600.00	



MD: 6,900.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft	MD: 6,900.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft
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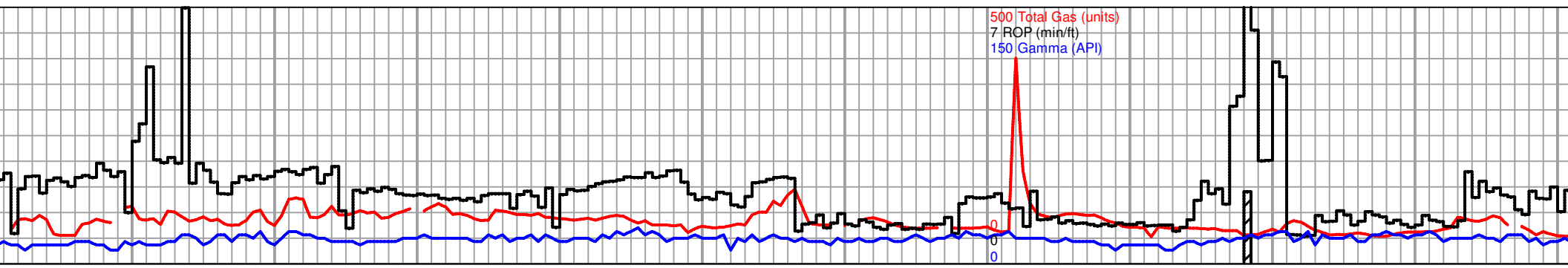
MD: 6,859.00 ft Incl: 87.30 Azi: 295.00 TVD: 4,501.32 ft	MD: 6,890.00 ft Incl: 86.70 Azi: 294.90 TVD: 4,502.95 ft	MD: 6,921.00 ft Incl: 86.60 Azi: 294.90 TVD: 4,504.76 ft	MD: 6,953.00 ft Incl: 87.10 Azi: 294.50 TVD: 4,506.52 ft	MD: 6,984.00 ft Incl: 87.60 Azi: 294.20 TVD: 4,507.95 ft	MD: 7,015.00 ft Incl: 89.90 Azi: 293.80 TVD: 4,508.63 ft	MD: 7,047.00 ft Incl: 91.80 Azi: 293.60 TVD: 4,508.15 ft
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TVD: 4450.00  
SS: -4450.00



~6840' Influx cream chalky LS as well as some dolomite, cream to light gray with some white, vf sucrosic to micro-xln sub-rhombic, few very scattered pieces white sub-rhombic with very scattered stain, with scattered white to translucent chert, NSFO, no fluor., or odor	LS and dolomite as previous, with slight influx white chert, no shows or odor	~6880' Influx translucent with some white chert, still carrying dolomite and LS with slight influx dolmitic LS, mostly poor visible porosity and barren, no odor	~6890'-6910' As previous, <b>slight influx cream to white and light gray good micro-med xln sub-rhombic to rhombic dolomite</b> , most barren, few scattered chips with scattered inter-xln black to brown stain, samples still mostly chert and LS/Dol. mix, NSFO, no odor	~6920' Mostly Chert/Chalky LS/Dol. LS, and Dol. mix still. <b>Slight increase in sub-rhombic to rhombic dolomite as well as slightly increased staining, also some white chert has tripolitic areas with stain in porosity, NSFO in chips however, did see SSFO in wet tray</b> , very scattered dull	~6930' <b>Still increasing dolomite</b> , light gray to white and cream, micro-med-xln, influx gray sub-rhombic to rhombic, some with some fair visible porosity and scattered brown to black stain, several chips with a vug or two, upon break VSSFO in a few chips, also with abundant translucent to white chert as well as some scattered cream chalky LS, some very scattered chert tripolitic with stain, fair show gas bubbles in tray, VSSFO, no odor	~6940' Mostly cream to light gray dolomite, sub-sucrosic to sucrosic with poor visible porosity and barren, with sub-rhombic to rhombic with so,e scattered fair porosity and scattered brown to black stain, with some mostly translucent chert, chalky LS dropping out, VSSFO in tray, poor fluor., no odor	~6960-6980' Dolomite appears to grade to mostly cream, sub-sucrosic to sucrosic and barren, still some scattered sub-rhombic to rhombic with scattered stain as before, chert slightly dropping out, NSFO, no odor	~6990' Mostly light gray with some cream dolomite, light gray is sub-rhombic to rhombic most with scattered black to brown stain, cream is sub-sucrosic and barren with poor visible porosity, chert continues to drop out with just scattered translucent to white, trace gray lithographic dense LS, NSFO, no odor	As previous gray sub-rhombic dolomite stain gradually decreasing scattered chert stain by ~7000'
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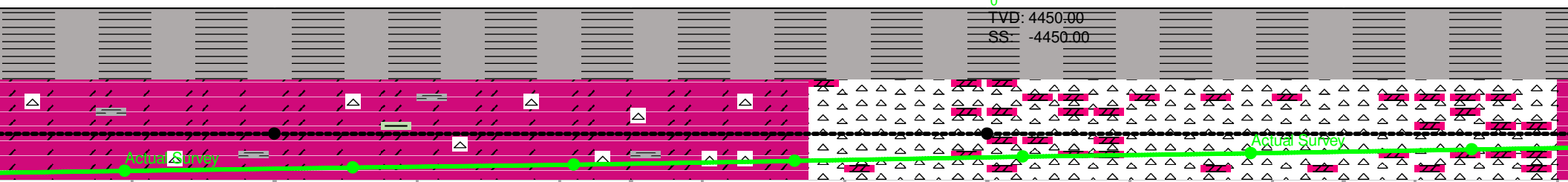
TVD: 4600.00  
SS: -4600.00



MD: 7,100.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 7,200.00 ft  
 Incl: 90.00  
 Azi: 293.96  
 TVD: 4,493.96 ft

MD: 7,079.00 ft Incl: 92.40 Azi: 293.50 TVD: 4,506.98 ft	MD: 7,111.00 ft Incl: 91.80 Azi: 293.30 TVD: 4,505.81 ft	MD: 7,142.00 ft Incl: 92.00 Azi: 292.80 TVD: 4,504.78 ft	MD: 7,173.00 ft Incl: 92.70 Azi: 292.80 TVD: 4,503.51 ft	MD: 7,205.00 ft Incl: 92.40 Azi: 292.60 TVD: 4,502.08 ft	MD: 7,237.00 ft Incl: 92.20 Azi: 292.60 TVD: 4,500.80 ft	MD: 7,268.00 ft Incl: 92.40 Azi: 292.40 TVD: 4,499.50 ft
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with light omic to omite with ally to only very chips with 020',

~7030' Dolomite, cream to light gray, mostly sub-rhombic to sub-sucrosic with poor visible porosity and barren, some scattered sub-rhombic with very scattered stain, with some very scattered good rhombic with good visible inter-xln porosity and very scattered stain, scattered chert, also with very scattered pyrite and gray silty to black shale, NSFO, no odor

~7040~7100' Dolomite, cream to light gray and white, mostly sub-sucrosic to sub-rhombic with poor visible porosity and barren, some scattered sub-rhombic with very scattered stain, scattered mostly translucent with some white chert, occasional chalky LS, trace gray to black shale, NSFO, no odor

~7100'-7120' Dolomite, cream to light gray and white, micro-xln, mostly sub-sucrosic to sub-rhombic with poor visible porosity and barren, trace sub-rhombic with scattered stain, with scattered chert, trace gray to black and occasionally green shale, NSFO, no odor

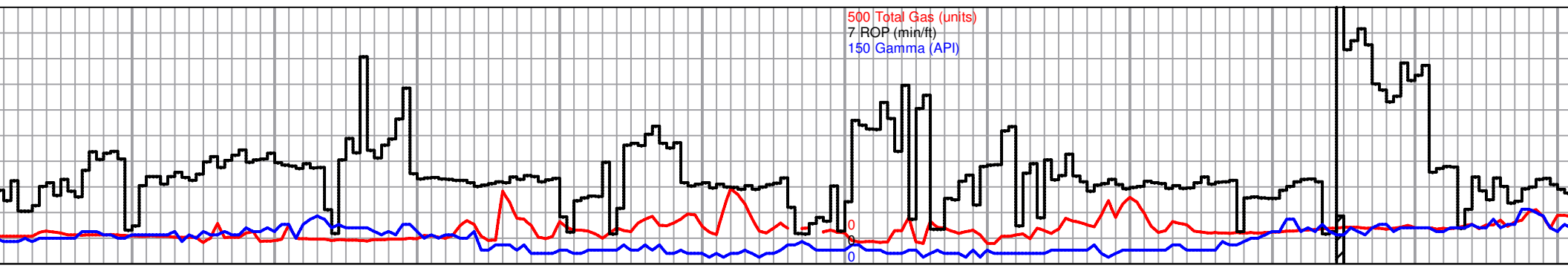
~7130'~7200' Dolomite as previous with slight influx in white chert which increases in subsequent samples until ~7180' which is mostly white chert with ~ 80/20 chert to dol., dolomite is mostly sub-sucrosic and barren with poor visible porosity, NSFO, no odor

~7200-7220' Chert slightly dropping out, ~50/50 chert/Dol. mix, dolomite is mostly cream, micro-xln, sub-sucrosic with poor visible porosity and barren, NSFO, no odor

~7240' Mostly white to translucent chert, some very scattered cream dolomite chips, too small to see xln structure, some very scattered chert with tripolitic areas and brown to black stain in areas of porosity, NSFO, no odor

~7260-7280' Mostly same as previous with slight increase in dolomite chips in subsequent samples, some scattered large enough chips to see scattered sub-rhombic development, barren, ~50/50 mix chert/dol., NSFO, no odor

TVD: 4600.00  
 SS: -4600.00



500 Total Gas (units)  
7 ROP (min/ft)  
150 Gamma (API)

MD: 7,300.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft	MD: 7,400.00 ft Incl: 90.00 Azi: 293.96 TVD: 4,493.96 ft
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MD: 7,299.00 ft Incl: 92.90 Azi: 292.40 TVD: 4,498.12 ft	MD: 7,330.00 ft Incl: 93.10 Azi: 292.40 TVD: 4,496.50 ft	MD: 7,361.00 ft Incl: 92.60 Azi: 292.60 TVD: 4,494.96 ft	MD: 7,392.00 ft Incl: 90.60 Azi: 292.00 TVD: 4,494.09 ft	MD: 7,424.00 ft Incl: 88.30 Azi: 291.90 TVD: 4,494.40 ft	MD: 7,455.00 ft Incl: 88.20 Azi: 291.50 TVD: 4,495.35 ft	MD: 7,486.00 ft Incl: 90.60 Azi: 291.50 TVD: 4,495.67 ft
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TVD: 4450.00  
SS: -4450.00

Actual Survey

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~7300'-7320' Mostly Dolomite, cream to light gray with some very scattered white, small chips, some sucrosic, some very scattered sub-rhombic, few chips have slight brown to black staining, with scattered chert, NSFO, no odor

~7340-7360' Dolomite, cream to light gray, micro-xln, very fine crushed samples, chips large enough to see xln structure are mostly sub-sucrosic with some very scattered light gray sub-rhombic, some with very scattered stain, chert has mostly dropped out, NSFO, no odor

~7380'-7400' As previous with slight increase in chert and light gray sub-rhombic dolomite in subsequent samples, some very scattered has very scattered stain, NSFO, no odor

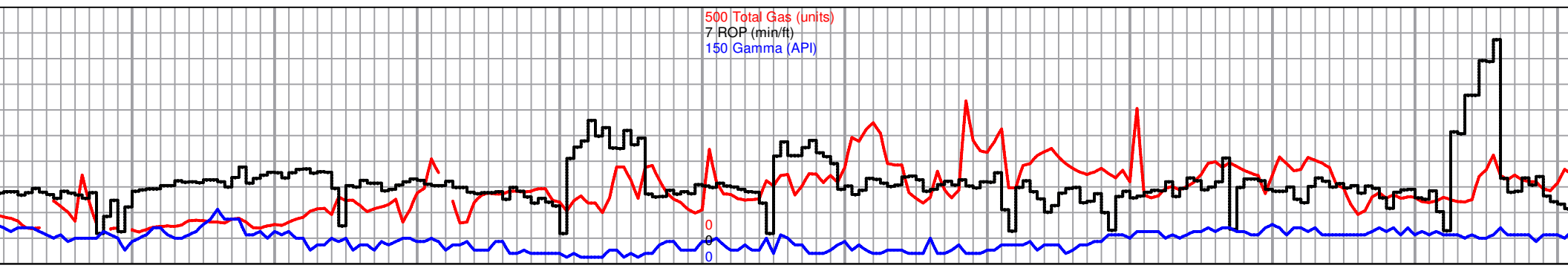
~7410' Dolomite, mostly light gray sub-rhombic, with some cream sub-sucrosic, mostly barren, chert has dropped out, NSFO, no odor

~7435' Dolomite, light gray to cream, micro-xln, increased sub-rhombic with some better crystal definition and some scattered fair visible porosity, also increased staining in light gray sub-rhombic chips, NSFO upon break, SSFO (opaque droplets) in tray, rainbow sheen on water in some areas, few very scattered large gray to black shale pieces and trace pyrite, no odor

~7450'-7470' Dolomite, cream to light gray, micro-xln, cream is mostly sub-sucrosic to sucrosic with poor visible porosity and light gray is sub-rhombic, mostly barren, some scattered sub-rhombic chips have scattered stain, with occasional chip dense gray LS and chalky LS, scattered dull yellow fluor., NSFO, no odor

~7470'-7510' Mostly cream sucrosic dolomite, barren, with some sub-rhombic chips and some very scattered scattered black stain yellow fluor. in sample, no odor

TVD: 4600.00  
SS: -4600.00

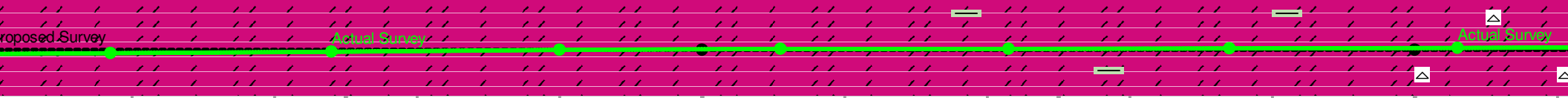
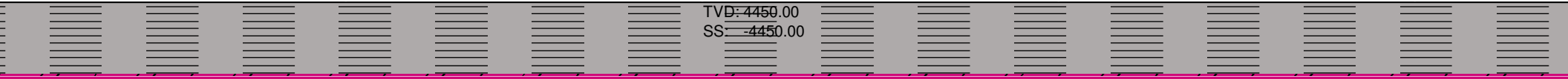


MD: 7,500.00 ft  
Incl: 90.00  
Azi: 293.96  
TVD: 4,493.96 ft

MD: 7,600.00 ft  
Incl: 90.00  
Azi: 293.96  
TVD: 4,493.96 ft

MD: 7,700.00 ft  
Incl: 90.00  
Azi: 293.96  
TVD: 4,493.96 ft

MD: 7,517.00 ft Incl: 91.00 Azi: 291.50 TVD: 4,495.24 ft	MD: 7,548.00 ft Incl: 91.30 Azi: 291.20 TVD: 4,494.62 ft	MD: 7,580.00 ft Incl: 91.10 Azi: 291.20 TVD: 4,493.95 ft	MD: 7,611.00 ft Incl: 89.90 Azi: 292.90 TVD: 4,493.68 ft	MD: 7,643.00 ft Incl: 90.10 Azi: 293.50 TVD: 4,493.68 ft	MD: 7,674.00 ft Incl: 90.40 Azi: 293.50 TVD: 4,493.54 ft	MD: 7,706.00 ft Incl: 90.60 Azi: 294.30 TVD: 4,493.26 ft
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very smallomite chips, 30% light gray and crystals, have very scattered dull les, NSFO, no

~7520-7560' As previous, with light gray sub-rhombic slightly increasing in samples until ~7560' ~60/40 light gray sub-rhombic with some scattered rhombic to cream sucrosic, some very scattered light gray has very scattered stain but overall trays mostly barren, scattered yellow fluor., throughout, no odor

~7580' 7600' Dolomite light gray sub-rhombic with very scattered rhombic to cream sucrosic mostly barren, some very scattered sub-rhombic with very scattered stain, several small chips in each tray with good sub-rhombic to rhombic structure and brown (possibly saturated stain?), very scattered fluor., NSFO, no odor

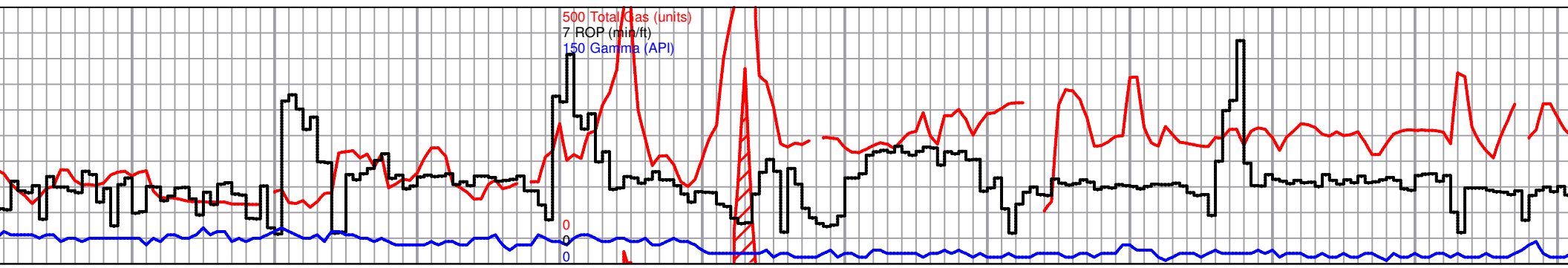
~7620' Mostly same as before, slight influx sucrosic to good rhombic clusters with light golden brown saturated stain, some rhombic shows very good inter-xln porosity, good even fluor., in tray, NSFO, no odor

~7640' Dolomite, mostly light gray to white, most sub-rhombic to rhombic and sucrosic, some scattered good rhombic with a large vug or two, most chips with at least scattered stain, some scattered chips with saturated even brown stain and fair show gas bubbles clinging to porosity, upon break some chips have FSFO, SSFO in tray, trace green shale, scattered white fluor., poor fleeting odor

~7660'-7680' Mostly same as before, slight decrease in saturated even stain, most chips have scattered stain, NSFO, scattered white fluor., trace green shale, no odor

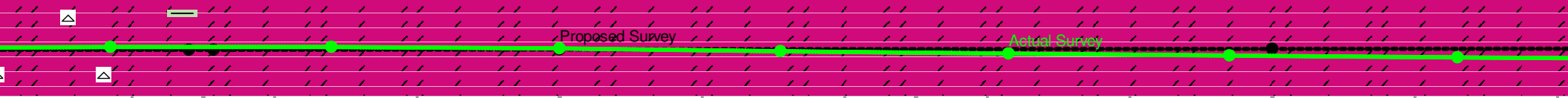
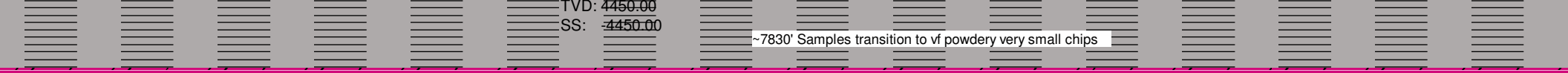
~7690' Dolomite, mostly white, sucrosic to sub-rhombic and rhombic, decrease in stain as before, ~50/50 barren to scattered brown to black stain, with some very scattered good sucrosic to rhombic chips with good visible inter-xln porosity and mostly saturated to saturated light to darker brown stain, slight influx translucent chert, NSFO, scattered dull yellow fluor., no odor

TVD: 4600.00  
SS: -4600.00



MD: 7,737.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.96 ft	MD: 7,768.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.96 ft	MD: 7,800.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.86 ft	MD: 7,831.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.86 ft	MD: 7,863.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.86 ft	MD: 7,894.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.67 ft	MD: 7,926.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.67 ft
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MD: 7,737.00 ft Incl: 90.60 Azi: 294.20 TVD: 4,492.94 ft	MD: 7,768.00 ft Incl: 89.40 Azi: 294.20 TVD: 4,492.94 ft	MD: 7,800.00 ft Incl: 88.50 Azi: 294.50 TVD: 4,493.52 ft	MD: 7,831.00 ft Incl: 88.20 Azi: 294.20 TVD: 4,494.42 ft	MD: 7,863.00 ft Incl: 88.70 Azi: 294.50 TVD: 4,495.28 ft	MD: 7,894.00 ft Incl: 88.70 Azi: 294.90 TVD: 4,495.98 ft	MD: 7,926.00 ft Incl: 89.00 Azi: 295.40 TVD: 4,496.63 ft
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~7710'-7730' Dolomite, white, micro-xln, sub-rhombic to rhombic and sucrosic, some very scattered chips with scattered black stain, at first glance most chips appear barren but some have very light saturated light golden brown stain, good even bright yellow to white floor., subsequent samples have influx translucent chert, NSFO, no odor

~7740' Dolomite, white, micro-xln, mostly sucrosic to sub-rhombic with some very scattered good rhombic, most chips appear barren, very scattered stain in some, very scattered good rhombic with saturated light to darker brown stain, trace green shale, abundant nut plug and graphite but chert appears to be dropping out, scattered fair bright yellow to white floor., NSFO, no odor

~7760'-7790' Mostly same dolomite as previous, with slight influx sub-rhombic to rhombic and fairly significant increase in scattered black to brown, stain, some very scattered chips saturated brown stain, few with good vuggy porosity, NSFO, decreased very scattered floor., no odor

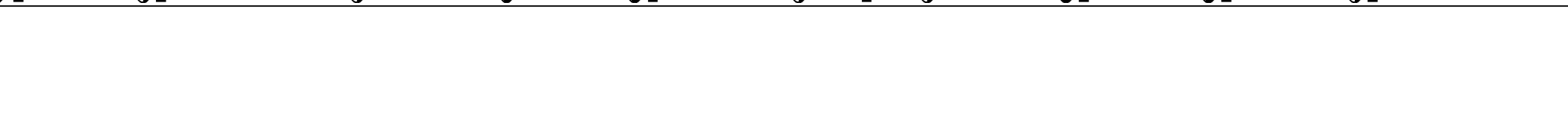
~7810' Dolomite, white, micro-xln, sub-rhombic to rhombic and sucrosic, most chips with at least scattered black stain, some have more even to saturated brown stain, some show good inter-xln to slightly vuggy porosity, chips are very friable, abundant crushed dolomite crystals in tray, scattered fair floor., SSFO in tray, no odor

~7830'-7850' Samples become more crushed very fine powdery dolomite but still large enough to see structure in some chips with mostly very scattered stain, most appear barren, some small sub-rhombic to rhombic clusters and crystals that have been broken show good saturated brown to black stain, fairly even yellow to white floor., NSFO, no odor

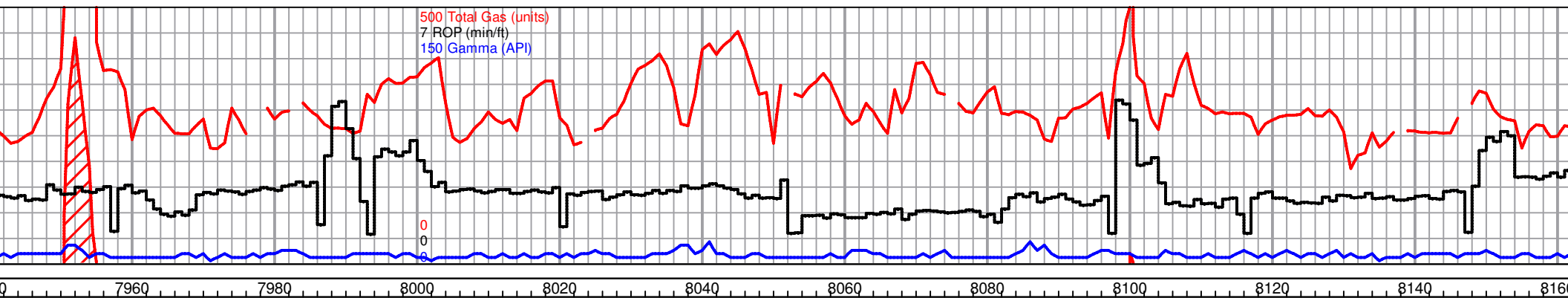
~7870' Dolomite, white to light gray, very small chips, some areas of tray are just piles of crystals, most chips sub-rhombic to rhombic and sucrosic, ~60% of chips have at least scattered stain, some very small good rhombic to sucrosic chips with saturated brown stain and occasional free oil droplet bleeding out, good fairly even yellow floor., FSFO in tray, no odor

~7890'-7910' Dolomite as previous, large decrease in overall staining, first glance most chips appear barren with only ~20% very scattered stain, scattered small rhombic to sucrosic clusters with saturated brown to light golden brown stain still present and fairly abundant but decreasing by 7910', fairly even yellow floor., FSFO in tray ~7890', no odor

TVD: 4600.00 SS: -4600.00
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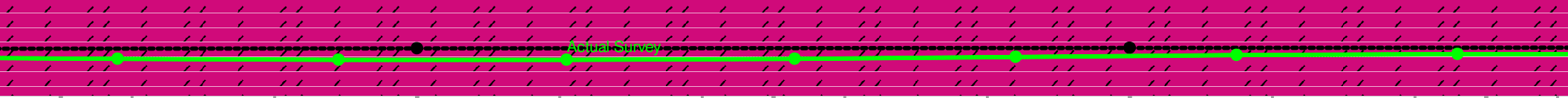


500 Total Gas (units)  
7 ROP (min/ft)  
150 Gamma (API)

MD: 8,100.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.48 ft 0	MD: 8,100.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,493.29 ft
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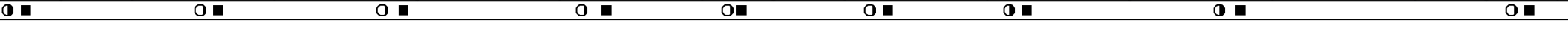
MD: 7,958.00 ft	MD: 7,989.00 ft	MD: 8,021.00 ft	MD: 8,053.00 ft	MD: 8,084.00 ft	MD: 8,115.00 ft	MD: 8,146.00 ft
Incl: 89.20	Incl: 89.70	Incl: 90.10	Incl: 90.80	Incl: 91.70	Incl: 90.80	Incl: 90.30
Azi: 295.20	Azi: 293.50	Azi: 292.20	Azi: 292.20	Azi: 292.80	Azi: 294.20	Azi: 294.30
TVD: 4,497.13 ft	TVD: 4,497.43 ft	TVD: 4,497.48 ft	TVD: 4,497.23 ft	TVD: 4,496.55 ft	TVD: 4,495.88 ft	TVD: 4,495.58 ft

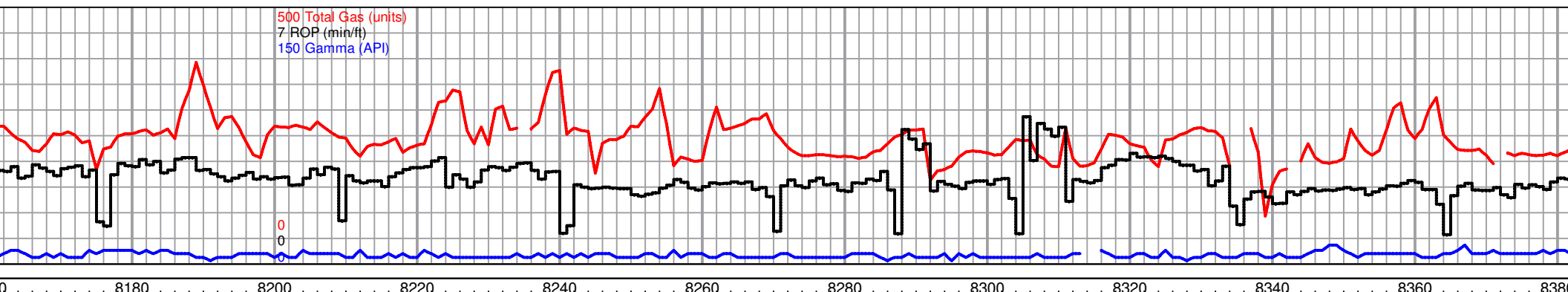
TVD: 4450.00 SS: -4450.00	
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7930'-7950' Dolomite, white to light gray, vf crushed chips, most appear barren, slight increase in overall very scattered stain to ~30%, some very scattered very small sucrosic to rhombic chips with mostly saturated light brown to brown stain, NSFO, good even yellow to white fluor., in tray, no odor	~7970' Dolomite, white to light gray, micro-xln, white is mostly sub-sucrosic to sucrosic and barren with poor visible porosity, light gray is mostly sub-rhombic to rhombic with very scattered to scattered black to brown stain, fair show gas bubbles in tray, fairly even yellow fluor., NSFO, no odor	~7990'-8060' Dolomite as previous with less overall staining, scattered fluor., NSFO, no odor	~8080' Dolomite, white to light gray, micro-xln, white is mostly sub-sucrosic to sucrosic with poor visible porosity and barren, light gray is sub-rhombic to rhombic with some scattered fair porosity and very scattered to scattered black to brown stain, slight increase in overall staining, scattered yellow fluor., NSFO, no odor	~8100'-8120' Dolomite as before, mostly vf crushed piles of light gray dolomite crystals, most appear barren, some crystals and very small sub-rhombic to rhombic clusters with scattered to saturated brown stain, slight show gas bubbles, VSSFO in tray, very scattered bright yellow to white fluor., no odor	~8150'-8210' chips, white is light gray is m very small rh scattered to s fairly even flu
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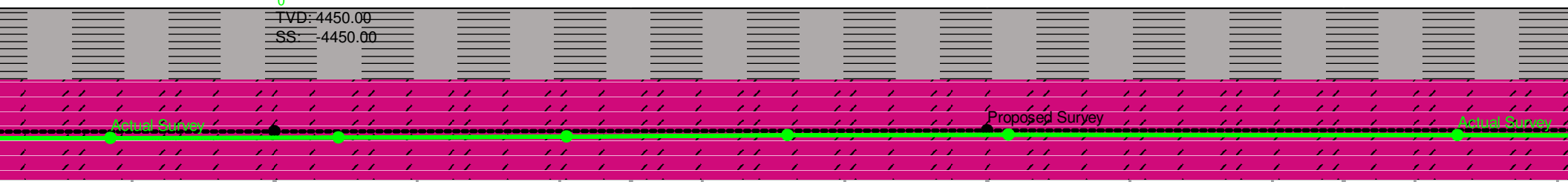
TVD: 4600.00  
SS: -4600.00





MD: 8,177.00 ft Incl: 90.10 Azi: 294.00 TVD: 4,495.47 ft	MD: 8,209.00 ft Incl: 90.30 Azi: 293.80 TVD: 4,495.36 ft	MD: 8,241.00 ft Incl: 90.80 Azi: 293.50 TVD: 4,495.05 ft	MD: 8,272.00 ft Incl: 91.10 Azi: 293.60 TVD: 4,494.54 ft	MD: 8,303.00 ft Incl: 89.90 Azi: 293.60 TVD: 4,494.27 ft	MD: 8,366.00 ft Incl: 89.60 Azi: 292.90 TVD: 4,494.54 ft
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MD: 8,177.00 ft Incl: 90.10 Azi: 294.00 TVD: 4,495.47 ft	MD: 8,209.00 ft Incl: 90.30 Azi: 293.80 TVD: 4,495.36 ft	MD: 8,241.00 ft Incl: 90.80 Azi: 293.50 TVD: 4,495.05 ft	MD: 8,272.00 ft Incl: 91.10 Azi: 293.60 TVD: 4,494.54 ft	MD: 8,303.00 ft Incl: 89.90 Azi: 293.60 TVD: 4,494.27 ft	MD: 8,366.00 ft Incl: 89.60 Azi: 292.90 TVD: 4,494.54 ft
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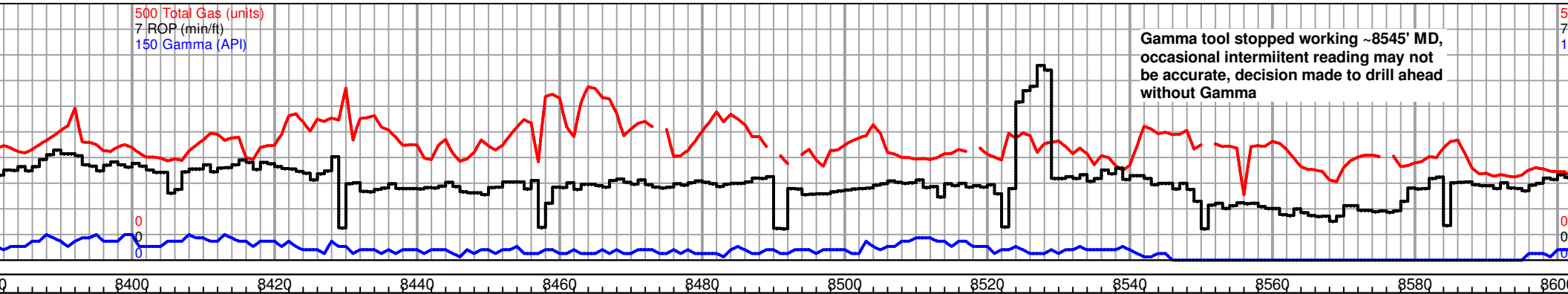


<p>Dolomite, white to light gray, vf small s mostly sucrosic to sub-sucrosic and mostly sub-rhombic with some scattered omic clusters, light gray has very scattered black to brown stain, scattered to or., NSFO, no odor</p>	<p>~8210'--~8270' Dolomite as previous, light gray overall stain slightly decreasing, still pretty good fairly even fluor., NSFO, no odor</p>	<p>~8270'--~8300" As previous, shows mostly gone, some scattered chips with very scattered stain but overall chips appear mostly barren at first glance, fairly even fluor., NSFO, no odor</p>	<p>~8310'--~8350' Dolomite as previous, mostly barren, scattered chips with very scattered to scattered stain, still scattered to fairly even fluor., NSFO, no odor</p>	<p>~8370'--8420' Dolomite as previous, mostly sucrosic to sucrosic, mostly sub-rhombic with scattered staining, NSFO, no odor</p>
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TVD: 4600.00  
SS: -4600.00

500 Total Gas (units)  
 7 ROP (min/ft)  
 150 Gamma (API)

Gamma tool stopped working ~8545' MD, occasional intermittent reading may not be accurate, decision made to drill ahead without Gamma



MD: 8,440.00 ft  
 Incl: 90.11  
 Azi: 293.96  
 TVD: 4,492.71 ft

MD: 8,500.00 ft  
 Incl: 90.11  
 Azi: 293.96  
 TVD: 4,492.52 ft

MD: 8,497.00 ft  
 Incl: 90.10  
 Azi: 293.10  
 TVD: 4,494.63 ft

MD: 8,428.00 ft  
 Incl: 90.40  
 Azi: 293.10  
 TVD: 4,494.49 ft

MD: 8,459.00 ft  
 Incl: 90.80  
 Azi: 293.10  
 TVD: 4,494.17 ft

MD: 8,490.00 ft  
 Incl: 91.00  
 Azi: 293.10  
 TVD: 4,493.68 ft

MD: 8,522.00 ft  
 Incl: 90.80  
 Azi: 292.60  
 TVD: 4,493.18 ft

MD: 8,553.00 ft  
 Incl: 91.00  
 Azi: 292.20  
 TVD: 4,492.69 ft

MD: 8,584.00 ft  
 Incl: 91.30  
 Azi: 292.40  
 TVD: 4,492.07 ft

TVD: 4450.00  
 SS: -4450.00

Dolomite chips become slightly larger in samples ~8420', still mostly of crushed still....



Dolomite, white to light gray, white is sub-sucrosic and barren, light gray chips are rhombic, most barren, few with very fine, mostly scattered fluor., NSFO, no odor

~8420'-8460' Dolomite as previous, with very slight influx larger light gray sub-rhombic chips, some very scattered rhombic development, slight increase in staining in light gray chips, slight show gas bubbles in a couple trays, more even fluor., NSFO, no odor

Mostly same as before, mostly barren, few very small sub-rhombic to rhombic clusters with better brown to black inter-xln stain, few very scattered very small clusters with saturated brown stain, occasional larger rhombic crystal with stain, fairly even fluor., NSFO, no odor

~8500'-~8540' Dolomite, mostly white sub-sucrosic to sucrosic and barren with por visible porosity, with some light gray mostly sub-rhombic, mostly barren, abundant piles of very small light gray crystals in tray, very scattered mostly poor stain, trace green shale, NSFO, scattered to fairly even fluor., no odor

~8550' Large influx light gray sub-rhombic with some scattered rhombic, some scattered small good clusters, abundant piles of crystals, most light gray has very scattered to scattered stain, few small clusters mostly saturated brown stain, some barren, fairly even fluor., fair show gas bubbles in tray, trace green shale, NSFO, no odor

~8560'-8600' Mostly same as previous with slightly less staining and good sub-rhombic to rhombic clusters, abundant piles of light gray crystals, scattered fluor., NSFO, no odor

TVD: 4600.00  
 SS: -4600.00

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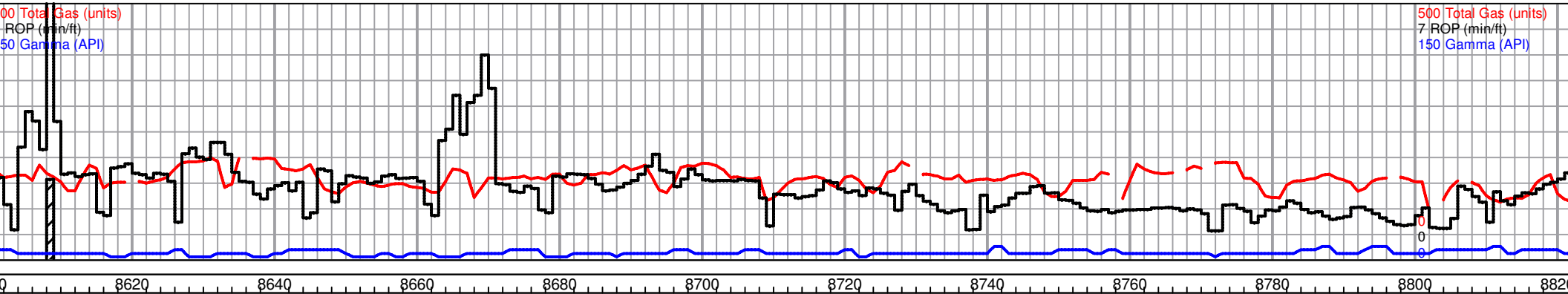
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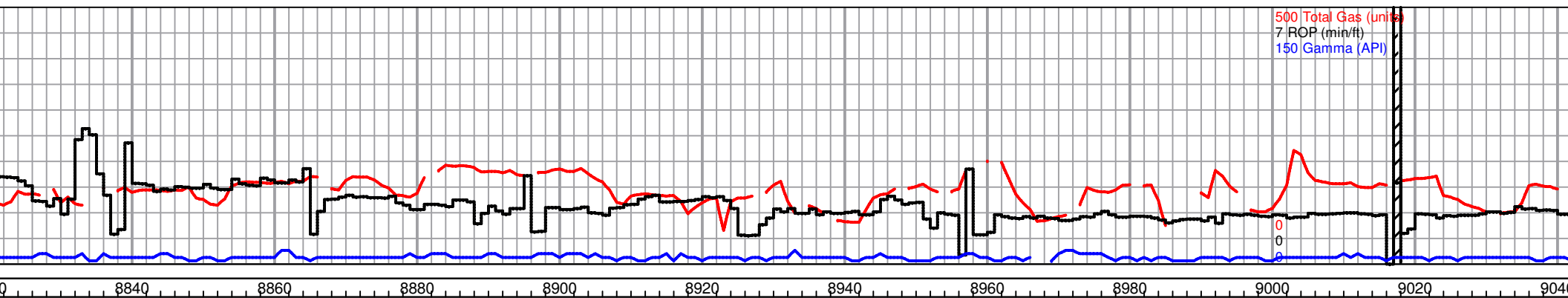
MD: 8,600.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,492.33 ft	MD: 8,700.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,492.13 ft	MD: 8,800.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,491.94 ft
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MD: 8,615.00 ft Incl: 91.30 Azi: 292.90 TVD: 4,491.36 ft	MD: 8,646.00 ft Incl: 89.90 Azi: 293.10 TVD: 4,491.04 ft	MD: 8,677.00 ft Incl: 88.30 Azi: 292.90 TVD: 4,491.53 ft	MD: 8,708.00 ft Incl: 88.50 Azi: 292.90 TVD: 4,492.39 ft	MD: 8,740.00 ft Incl: 89.00 Azi: 292.80 TVD: 4,493.09 ft	MD: 8,771.00 ft Incl: 88.90 Azi: 292.40 TVD: 4,493.66 ft	MD: 8,802.00 ft Incl: 89.40 Azi: 292.40 TVD: 4,494.12 ft
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~8600'-8640' Mostly same as previous, with slight influx better small light gray sub-rhombic to rhombic clusters with mostly very scattered stain, fair show gas bubbles in several trays, scattered fluor., NSFO, no odor	~8640-8700' Mixed white to light gray dolomite as before, most barren, some light gray has very scattered to scattered stain, trace green shale, scattered to fairly even fluor., NSFO, no odor	~8700'-8740' Dolomite, light gray with some white, white is sub-sucrosic to sucrosic and barren with poor visible porosity, light gray chips are mostly pretty small but sub-rhombic to rhombic, some barren, some with very scattered to scattered stain, trace green shale, scattered fluor., NSFO, no odor	~8740'-8780' Dolomite as previous with largely decreased staining in light gray chips, trace green shale, very slight increase in very scattered stain by 8780', very scattered poor fluor., NSFO, no odor	8800' Dolomite, mostly light gray crystals and very small sub-rhombic to rhombic clusters, most crystals and clusters have very scattered stain, few very small rhombic clusters with saturated light brown stain, scattered fluor., NSFO, no odor
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VD: 4600.00 S: -4600.00	VD: 4600.00 S: -4600.00
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500 Total Gas (units)  
7 ROP (min/ft)  
150 Gamma (API)

MD: 8,900.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,491.75 ft	MD: 9,000.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,491.56 ft
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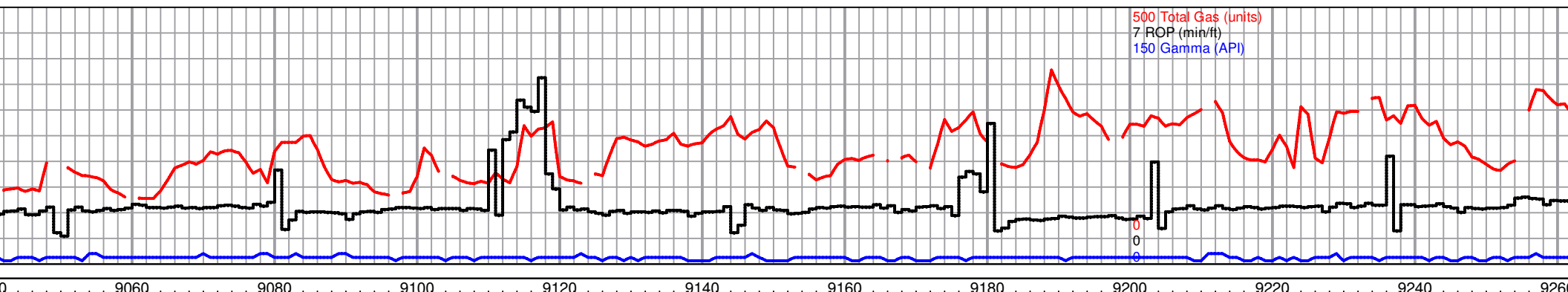
MD: 8,833.00 ft Incl: 89.60 Azi: 292.90 TVD: 4,494.39 ft	MD: 8,864.00 ft Incl: 89.70 Azi: 293.10 TVD: 4,494.58 ft	MD: 8,893.00 ft Incl: 90.10 Azi: 293.60 TVD: 4,494.63 ft	MD: 8,924.00 ft Incl: 90.80 Azi: 293.50 TVD: 4,494.38 ft	MD: 8,955.00 ft Incl: 90.80 Azi: 293.30 TVD: 4,493.95 ft	MD: 8,987.00 ft Incl: 91.00 Azi: 293.30 TVD: 4,493.45 ft	MD: 9,018.00 ft Incl: 91.10 Azi: 293.50 TVD: 4,492.88 ft
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Trip out of hole @ 8923'  
MD to move weight pipe  
around as well as pick up  
new bit, motor, and  
agitator

~8820-8840' Mostly same as before but slightly larger chips in both samples, very slight increase in better sub-rhombic to rhombic clusters with scattered stain, some small clusters with saturated light brown stain, fair scattered fluor., NSFO, no odor	~8860'-8880' slight increase in smaller chips and slight decrease in overall staining, still carrying some very scattered small sub-rhombic to rhombic clusters with saturated brown stain, slightly increased fluor., NSFO, no odor	~8900'-8920' Light gray to white dolomite, white sub-sucrosic to light gray sub-rhombic, some very scattered sub-rhombic with mostly very scattered stain, fairly even fluor., NSFO, no odor	~8920-8960' Mostly same as previous, mostly barren, fairly even fluor., ~8960 fair influx bigger light gray sub-rhombic to rhombic clusters with scattered stain, overall increased staining, very scattered translucent chert, trace gray shale, NSFO, no odor	~8980'-~9060' Dolomite, white to light gray, sub-sucrosic to s poor visible porosity and barren, light gray is mostly sub-rhomb chips to crystals, mostly barren as well with some very scattered slight influx white to translucent chert and trace green to gray, fairly even fluor., NSFO, no odor
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TVD: 4600.00  
SS: -4600.00



MD: 9,100.00 ft  
Incl: 90.11  
Azi: 293.96  
TVD: 4,491.37 ft

MD: 9,200.00 ft  
Incl: 90.11  
Azi: 293.96  
TVD: 4,491.17 ft

MD: 9,050.00 ft  
Incl: 91.30  
Azi: 293.50  
TVD: 4,492.21 ft

MD: 9,082.00 ft  
Incl: 91.50  
Azi: 293.30  
TVD: 4,491.43 ft

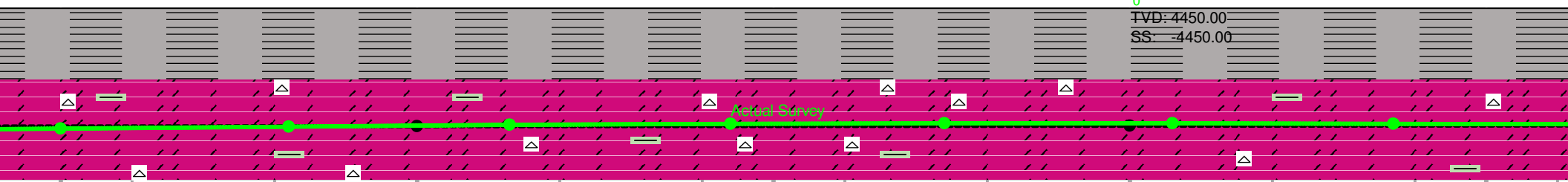
MD: 9,113.00 ft  
Incl: 90.80  
Azi: 293.60  
TVD: 4,490.81 ft

MD: 9,144.00 ft  
Incl: 90.40  
Azi: 293.30  
TVD: 4,490.48 ft

MD: 9,174.00 ft  
Incl: 90.10  
Azi: 293.60  
TVD: 4,490.35 ft

MD: 9,206.00 ft  
Incl: 89.70  
Azi: 293.80  
TVD: 4,490.41 ft

MD: 9,237.00 ft  
Incl: 89.70  
Azi: 293.80  
TVD: 4,490.57 ft



~9080' As previous, with very slightly increased staining, slight show gas bubbles, fairly even fluor., NSFO, no odor

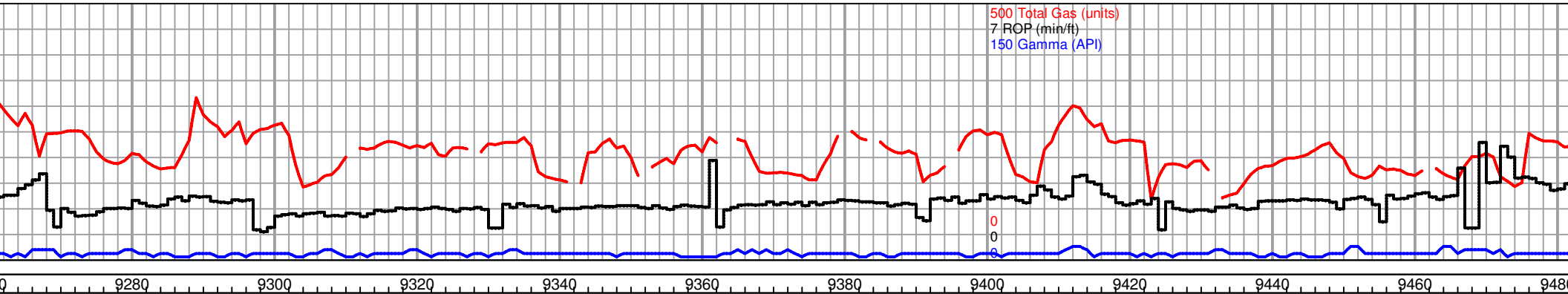
~9100'--~9120' Dolomite as before, with fair influx larger light gray sub-rhombic to rhombic clusters with scattered stain, few mostly saturated, some very scattered white to trans. chert as well as trace green shale, occasional large gray dense LS chip, slight show gas bubbles, fairly even dull fluor., NSFO, no odor

~9140'-9180' Dolomite as previous, with slightly increased staining in light gray sub-rhombic to rhombic chips, slight influx chert, trace green shale with occasional gray dense LS chip, fairly even fluor., NSFO, no odor

~9190'--~9230' Dolomite, white to light gray, mostly sub-sucrosic to sub-rhombic with poor visible porosity, piles of small light gray crystals, most barren, some very scattered staining, scattered fluor., NSFO, no odor

~9250'--9290' As previous, rhombic to very scattered, slightly increased staining, saturated down stain, i to slightly decrease by trace green shale, NSF

TVD: 4600.00  
SS: -4600.00

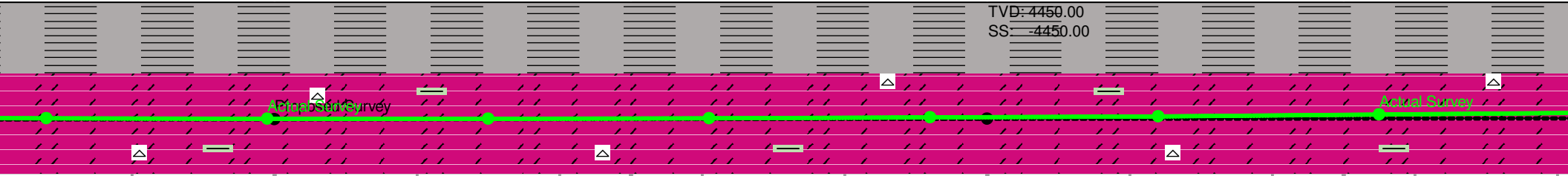


MD: 9,300.00 ft  
Incl: 90.11  
Azi: 293.96  
TVD: 4,490.98 ft

MD: 9,400.00 ft  
Incl: 90.11  
Azi: 293.96  
TVD: 4,490.79 ft

MD: 9,268.00 ft Incl: 89.70 Azi: 294.00 TVD: 4,490.73 ft	MD: 9,299.00 ft Incl: 89.90 Azi: 294.00 TVD: 4,490.84 ft	MD: 9,330.00 ft Incl: 90.30 Azi: 294.20 TVD: 4,490.79 ft	MD: 9,361.00 ft Incl: 90.40 Azi: 294.00 TVD: 4,490.60 ft	MD: 9,392.00 ft Incl: 90.60 Azi: 294.30 TVD: 4,490.33 ft	MD: 9,424.00 ft Incl: 90.80 Azi: 294.50 TVD: 4,489.94 ft	MD: 9,455.00 ft Incl: 91.30 Azi: 294.90 TVD: 4,489.37 ft
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TVD: 4450.00  
SS: -4450.00

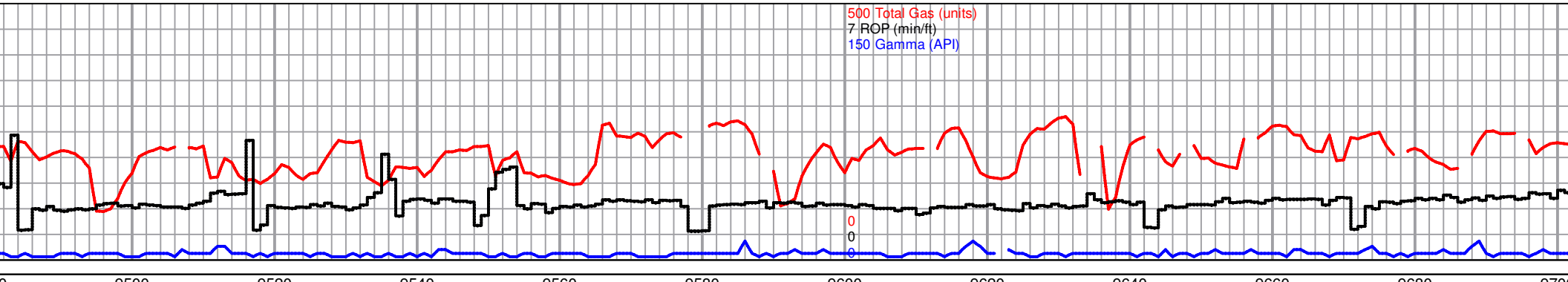


ous, with slight influx larger sub-  
ed rhombic light gray chips with very  
ing, few very small clusters mostly  
increased fluor., stain and fluor., begin  
~9270', very scattered trans., chert and  
CO, no odor

~9310'--~9390' Dolomite, white to light gray, sub-surosic to sub-rhombic, mostly barren  
with poor visible porosity, very scattered stain in some light gray, occasional larger  
medium xln rhombs with stain, mostly very scattered to scattered fluor., with some very  
scattered chert and trace green shale, NSFO, no odor

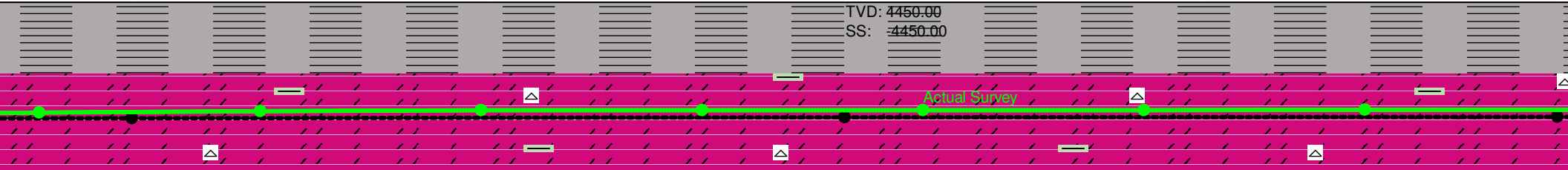
~9390'- ~9470' Dolomite as previous, mostly very small chips, occasionally  
slightly larger sub-rhombic to rhombic, mostly barren with some very scattered  
scattered stain in light gray clusters, very scattered chert and trace green shale,  
mostly scattered fluor., that increases ~9440', NSFO, no odor

TVD: 4600.00  
SS: -4600.00

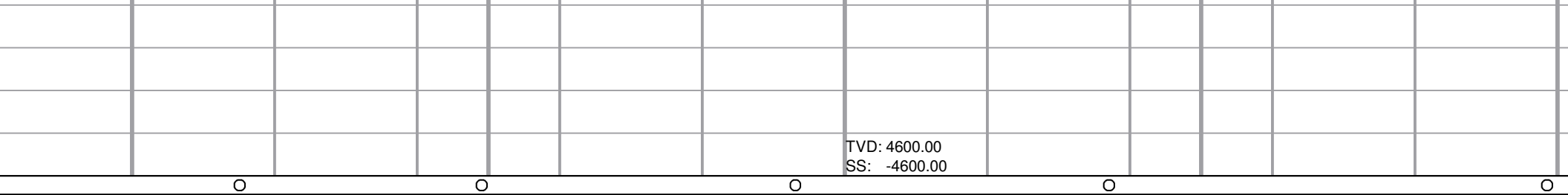


MD: 9,500.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,490.60 ft	MD: 9,600.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,490.41 ft
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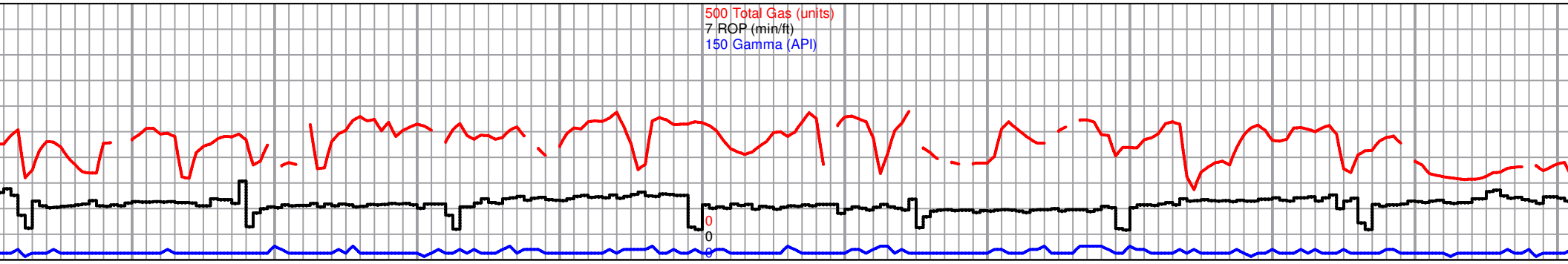
MD: 9,487.00 ft Incl: 91.00 Azi: 295.60 TVD: 4,488.72 ft	MD: 9,518.00 ft Incl: 91.00 Azi: 295.70 TVD: 4,488.18 ft	MD: 9,549.00 ft Incl: 90.10 Azi: 294.90 TVD: 4,487.89 ft	MD: 9,580.00 ft Incl: 90.10 Azi: 294.70 TVD: 4,487.83 ft	100 survey MD: 9,611.00 ft Incl: 89.90 Azi: 294.30 TVD: 4,487.83 ft	MD: 9,642.00 ft Incl: 90.10 Azi: 294.30 TVD: 4,487.83 ft	MD: 9,673.00 ft Incl: 90.30 Azi: 294.50 TVD: 4,487.72 ft
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~9490'~9590' Dolomite, mostly white with some light gray chips/crystals, very scattered light gray sub-rhombic clusters, very scattered staining, very scattered chert and trace green shale, scattered fluor., NSFO, no odor	~9610'~9670' Dolomite as previous, mostly barren, with slight influx very small light gray chips/crystals as previous, some very scattered staining, very scattered chert and trace green shale, scattered fluor., NSFO, no odor	~9690'~9710' Most previous, mostly barren, very scattered staining, scattered fluor., NSFO, no odor
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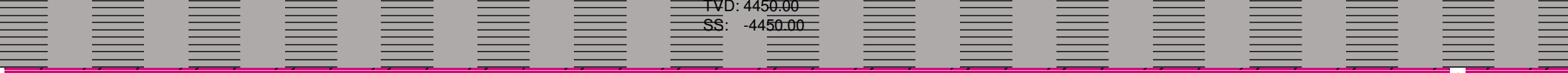




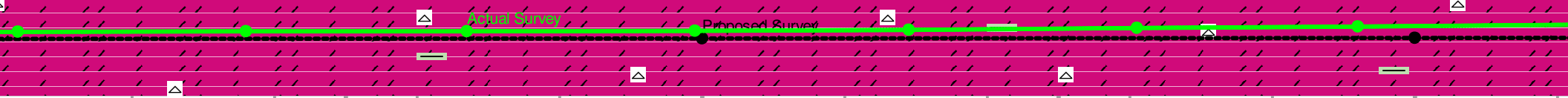
500 Total Gas (units)  
 7 ROP (min/ft)  
 150 Gamma (API)

MD: 9,700.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,490.21 ft	MD: 9,799.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,490.02 ft	MD: 9,900.00 ft Incl: 90.11 Azi: 293.96 TVD: 4,489.83 ft
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MD: 9,704.00 ft Incl: 90.10 Azi: 294.70 TVD: 4,487.62 ft	MD: 9,736.00 ft Incl: 90.10 Azi: 294.70 TVD: 4,487.56 ft	MD: 9,767.00 ft Incl: 90.30 Azi: 294.90 TVD: 4,487.45 ft	MD: 9,799.00 ft Incl: 90.40 Azi: 295.00 TVD: 4,487.26 ft	MD: 9,829.00 ft Incl: 90.80 Azi: 294.90 TVD: 4,486.94 ft	MD: 9,861.00 ft Incl: 91.10 Azi: 294.90 TVD: 4,486.41 ft	MD: 9,892.00 ft Incl: 91.10 Azi: 294.90 TVD: 4,485.82 ft
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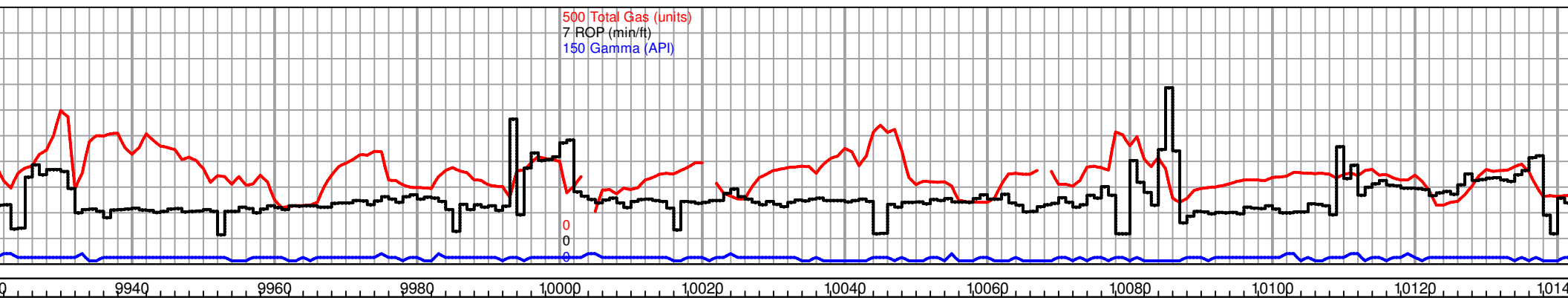


TVD: 4450.00  
 SS: -4450.00



Mostly same as barren, some staining, scattered odor	~9730'-9800' Dolomite, white to light gray, vf crushed chips, mostly just piles of crystals and chips, most appear barren, scattered fluor., with scattered chert and trace green shale, NSFO, no odor	~9810'-9920' Mostly same as previous, very slight influx light gray sub-rhombic clusters with scattered stain, occasional large rhombic crystal with staining, with some scattered chert and trace green shale, scattered fluor., NSFO, no odor
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TVD: 4600.00  
 SS: -4600.00



MD: 9,923.00 ft  
Incl: 91.10  
Azi: 295.20  
TVD: 4,485.22 ft

MD: 9,954.00 ft  
Incl: 90.60  
Azi: 295.00  
TVD: 4,484.76 ft

MD: 9,985.00 ft  
Incl: 90.60  
Azi: 294.90  
TVD: 4,484.44 ft

MD: 10,017.00 ft  
Incl: 90.40  
Azi: 294.00  
TVD: 4,484.16 ft

MD: 10,048.00 ft  
Incl: 90.60  
Azi: 294.00  
TVD: 4,483.89 ft

MD: 10,079.00 ft  
Incl: 90.60  
Azi: 294.30  
TVD: 4,483.56 ft

MD: 10,110.00 ft  
Incl: 90.40  
Azi: 294.50  
TVD: 4,483.29 ft

MD: 10,100.00 ft  
Incl: 90.11  
Azi: 293.96  
TVD: 4,489.45 ft

MD: 9,923.00 ft  
Incl: 91.10  
Azi: 295.20  
TVD: 4,485.22 ft

MD: 9,954.00 ft  
Incl: 90.60  
Azi: 295.00  
TVD: 4,484.76 ft

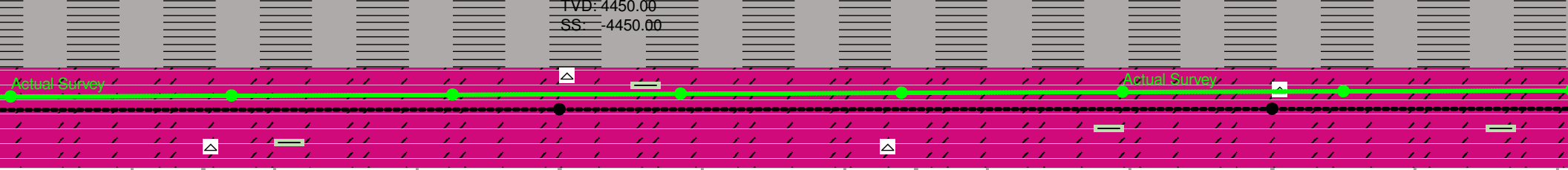
MD: 9,985.00 ft  
Incl: 90.60  
Azi: 294.90  
TVD: 4,484.44 ft

MD: 10,017.00 ft  
Incl: 90.40  
Azi: 294.00  
TVD: 4,484.16 ft

MD: 10,048.00 ft  
Incl: 90.60  
Azi: 294.00  
TVD: 4,483.89 ft

MD: 10,079.00 ft  
Incl: 90.60  
Azi: 294.30  
TVD: 4,483.56 ft

MD: 10,110.00 ft  
Incl: 90.40  
Azi: 294.50  
TVD: 4,483.29 ft

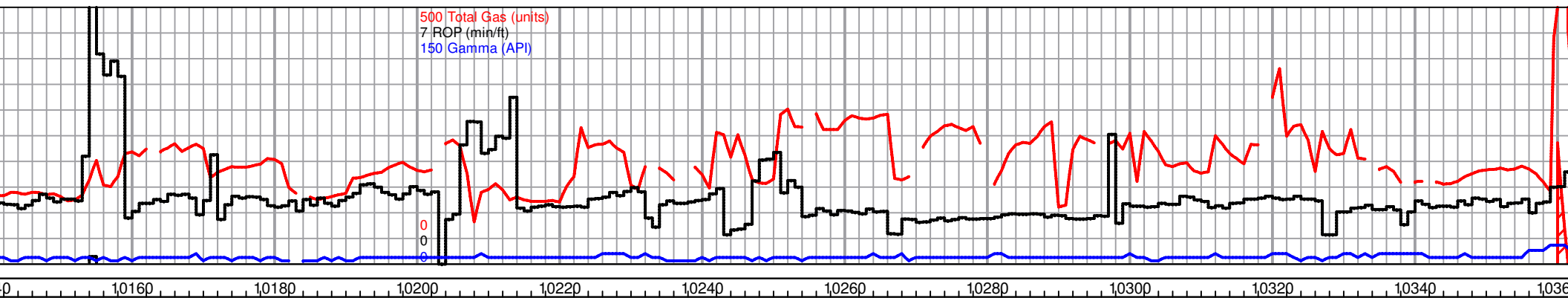


~9940'~1020' Dolomite, white to light gray, white is sub-sucrosic and barren with poor visible porosity, light gray is mostly very small dolomite chips and crystals with slight influx larger sub-rhombic clusters with scattered stain, few very scattered clusters have good mostly saturated brown stain, occasional large clear rhombic crystal, with scattered chert and trace green shale, good fairly even fluor., NSFO, no odor

~10040'~10100' Mostly same as before, white dolomite is barren, some light gray with very scattered to scattered stain, few very scattered larger sub-rhombic chips with scattered to mostly saturated brown stain, fairly even fluor., NSFO, no odor

~10100'~10120 Dolomite as before, with very slight influx larger light gray to clear sucrosic chips with mostly saturated light brown stain, fairly even fluor., NSFO, no odor

TVD: 4600.00  
SS: -4600.00



MD: 10,142.00 ft Incl: 90.60 Azi: 294.30 TVD: 4,483.01 ft	MD: 10,173.00 ft Incl: 91.00 Azi: 294.20 TVD: 4,482.58 ft	MD: 10,204.00 ft Incl: 90.30 Azi: 294.50 TVD: 4,482.23 ft	MD: 10,236.00 ft Incl: 89.20 Azi: 294.90 TVD: 4,482.37 ft	MD: 10,268.00 ft Incl: 88.30 Azi: 295.20 TVD: 4,483.07 ft	MD: 10,299.00 ft Incl: 88.30 Azi: 295.60 TVD: 4,483.98 ft	MD: 10,331.00 ft Incl: 88.50 Azi: 295.60 TVD: 4,484.88 ft
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MD: 10,142.00 ft Incl: 90.60 Azi: 294.30 TVD: 4,483.01 ft	MD: 10,173.00 ft Incl: 91.00 Azi: 294.20 TVD: 4,482.58 ft	MD: 10,204.00 ft Incl: 90.30 Azi: 294.50 TVD: 4,482.23 ft	MD: 10,236.00 ft Incl: 89.20 Azi: 294.90 TVD: 4,482.37 ft	MD: 10,268.00 ft Incl: 88.30 Azi: 295.20 TVD: 4,483.07 ft	MD: 10,299.00 ft Incl: 88.30 Azi: 295.60 TVD: 4,483.98 ft	MD: 10,331.00 ft Incl: 88.50 Azi: 295.60 TVD: 4,484.88 ft
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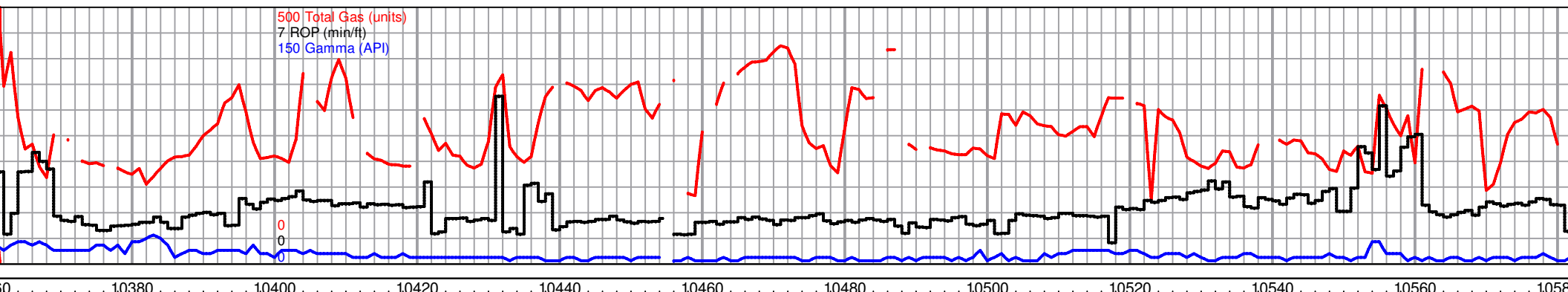
~10120'-~10170' Dolomite, white to light gray, slight increase in light gray chips as well as sub-rhombic clusters, ~80/20 white to light gray, most sub-rhombic chips have scattered stain, some smaller chips have mostly saturated brown stain, scattered chert and trace green shale, fairly even bright fluor., NSFO, no odor

~10210'-~10290' Mostly same dolomite as before, scattered chert and trace green shale, fairly even bright fluor., NSFO, no odor

~10310'-~10330' Dolomite, white to light gray, white is sub-sucrosic and barren, light gray is mostly barren crystals/chips with some scattered sub-rhombic, sub-rhombic mostly has very scattered stain, with scattered chert and trace green shale, fairly even bright fluor., NSFO, no odor

~10330'-10390' Large Influx light gray to rhombic chips, increase in most chips have scattered stain, rhombic clusters large enough to show in porosity, **decreased chert** and trace green shale, fairly even bright fluor., NSFO, no odor

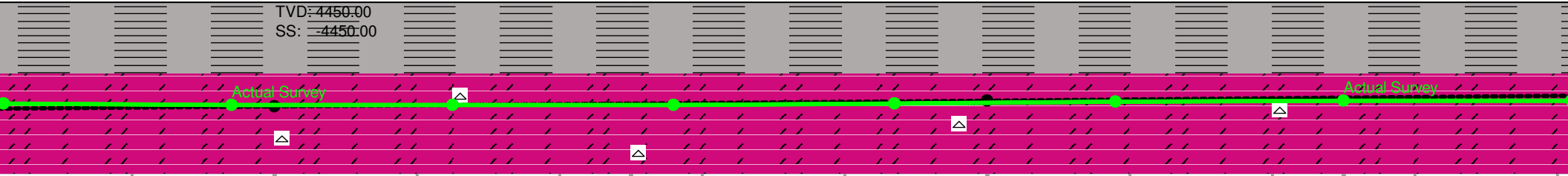
TVD: 4600.00 SS: -4600.00						
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MD: 10,362.00 ft  
 Incl: 91.15  
 Azi: 293.95  
 TVD: 4,486.43 ft

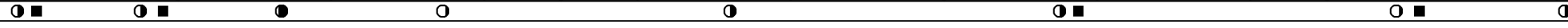
MD: 10,500.00 ft  
 Incl: 91.15  
 Azi: 293.95  
 TVD: 4,484.42 ft

MD: 10,362.00 ft Incl: 89.00 Azi: 295.40 TVD: 4,485.55 ft	MD: 10,394.00 ft Incl: 89.70 Azi: 295.60 TVD: 4,485.92 ft	MD: 10,425.00 ft Incl: 89.70 Azi: 295.40 TVD: 4,486.08 ft	MD: 10,456.00 ft Incl: 90.80 Azi: 295.70 TVD: 4,485.94 ft	MD: 10,487.00 ft Incl: 91.10 Azi: 296.40 TVD: 4,485.43 ft	MD: 10,518.00 ft Incl: 91.00 Azi: 296.40 TVD: 4,484.86 ft	MD: 10,550.00 ft Incl: 90.30 Azi: 296.60 TVD: 4,484.50 ft
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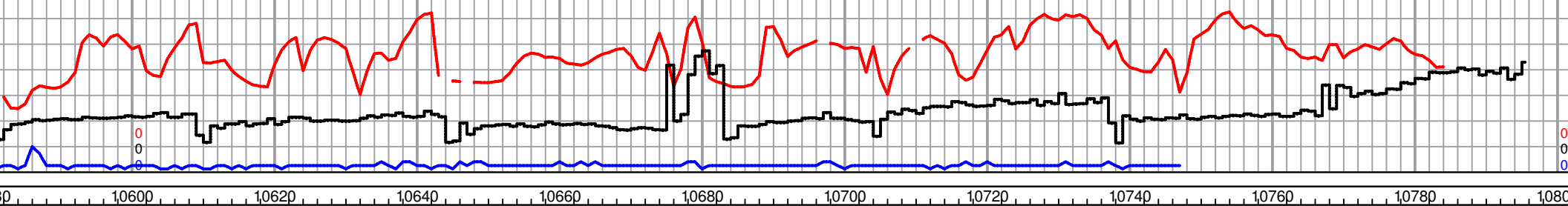


<p>nt gray crystals and sub-          based overall staining,          s, some sub-rhombic to          to see some fair inter-  <b>and no green shale,</b>          or</p>	<p>~10410' Mostly same as          before, some very scattered          small good sub-rhombic to          rhombic chips with mostly          saturated stain, scattered          chert, no green shale, fairly          even fluor., NSFO, no odor</p>	<p>~10430'-10450' Abundant light          gray crystals and clusters as          before with decreased overall          staining and slight increase in          chert, scattered fluor., NSFO,          no odor</p>	<p>~10470'--10490' Dolomite as before with          very slightly increased overall staining as well          as very slight increase small light gray sub-          rhombic to rhombic clusters with scattered          stain, few mostly saturated brown stain,          occasional large rhombs with scattered          brown stain, ver scattered chert and          scattered fluor., NSFO, no odor</p>	<p>~10500'-10520' Noticeably larger          chips, most barren but slight influx          larger sub-rhombic to rhombic          chips, most with scattered stain,          very scattered small chips with          saturated light golden brown stain,          very scattered chert, even bright          fluor., NSFO, no odor</p>	<p>~10540'--10620' Dolomite, white          barren, light gray is mostly just sm          sub-rhombic to rhombic, barren to          small sub-rhombic to rhombic chip          brown staining, with some very sc  <b>except ~10600 which shows NO</b></p>
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TVD: 4600.00  
 SS: -4600.00



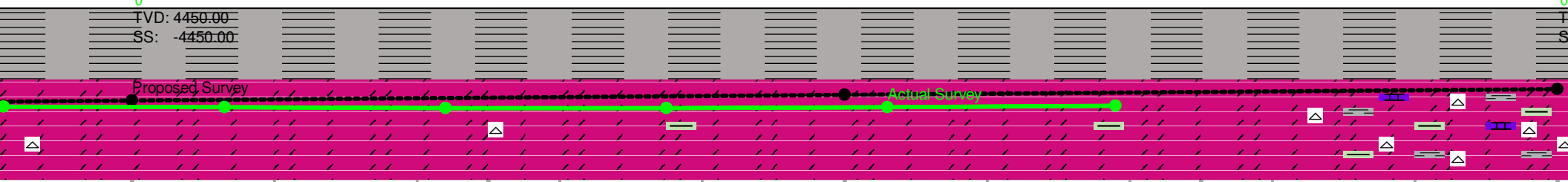
500 Total Gas (units)  
 7 ROP (min/ft)  
 150 Gamma (API)



MD: 10,582.00 ft  
 Incl: 91.15  
 Azi: 293.94  
 TVD: 4,482.41 ft

MD: 10,700.00 ft  
 Incl: 91.15  
 Azi: 293.94  
 TVD: 4,480.40 ft

MD: 10,582.00 ft Incl: 89.60 Azi: 296.40 TVD: 4,484.53 ft	MD: 10,613.00 ft Incl: 89.60 Azi: 296.40 TVD: 4,484.74 ft	MD: 10,644.00 ft Incl: 89.60 Azi: 296.40 TVD: 4,484.96 ft	MD: 10,675.00 ft Incl: 90.30 Azi: 295.90 TVD: 4,484.99 ft	MD: 10,706.00 ft Incl: 90.80 Azi: 295.60 TVD: 4,484.69 ft	MD: 10,738.00 ft Incl: 90.80 Azi: 295.60 TVD: 4,484.24 ft
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to light gray, white is sub-sucrosic and small crystals and chips with some scattered very scattered stain, occasional very chips with saturated light golden brown to scattered chert, **even very bright fluor.**, NSFO, no odor

~10640~10700 Dolomite as previous, some very scattered chert, trace green shale, fairly even good fluor., NSFO, no odor

~10720' Dolomite as before with fair increase in overall staining, still mostly scattered, as well as slight influx sub-rhombic to rhombic chips with scattered to mostly saturated black to brown stain, some large enough to see slightly vuggy porosity, some very scattered sucrosic with saturated light golden brown stain, very scattered chert and trace green shale, fairly even good fluor., NSFO, no odor

~10740 Dolomite, white to light gray, still slight increase in overall staining as well as larger sub-rhombic to rhombic chips, mostly same as before but more abundant, with some very scattered sucrosic with very light golden brown saturated stain, very scattered chert and trace green shale, good even bright fluor., NSFO, no odor

~10770' Continued increase in sub-rhombic to rhombic with scattered to mostly saturated stain in some small chips, with fair influx gray to dark gray wax to very dense shale and chert as well some scattered tan to brown LS, still trace green shale, trace pyrite

~1080' previous scattered

TVD: 4600.00  
 SS: -4600.00

