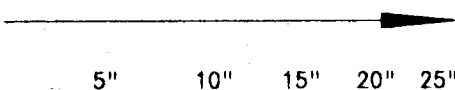


DRILLING TIME IN MINUTES
PER FOOT
Rate of Penetration Decreases



LOG 7710

DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

1400

50

60

70

80

90

1500

10

20

30

40

50

60

70

80

56

1600

Show
Gas

50

1700

50

90

10

20

30

40

50

60

70

80

90

10

20

30

40

50

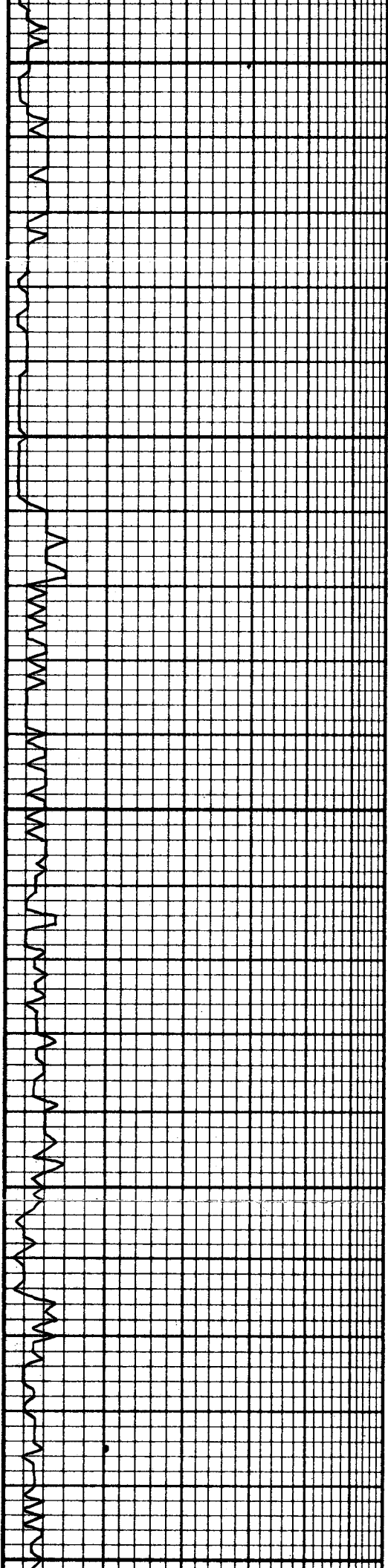
60

70

80

90

Gas kick to surface @ 1645'
Krider Ls @ 1624' (E-Log)
88 units HW
25 units Chromatograph



1800

10

20

30

40

50

60

70

80

90

1900

10

20

30

40

50

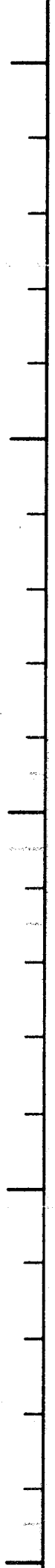
60

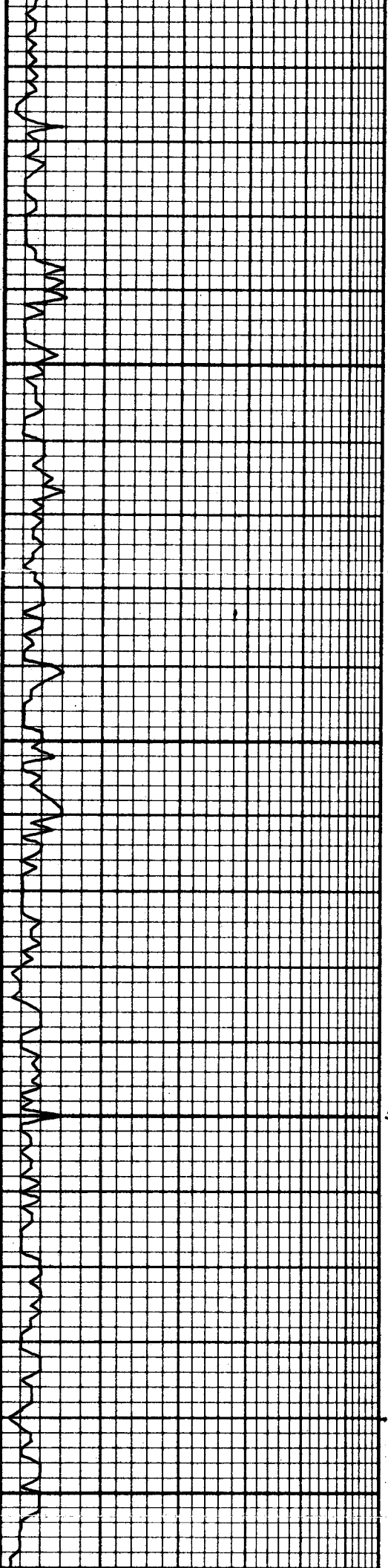
70

80

90

2000





50

2100

50

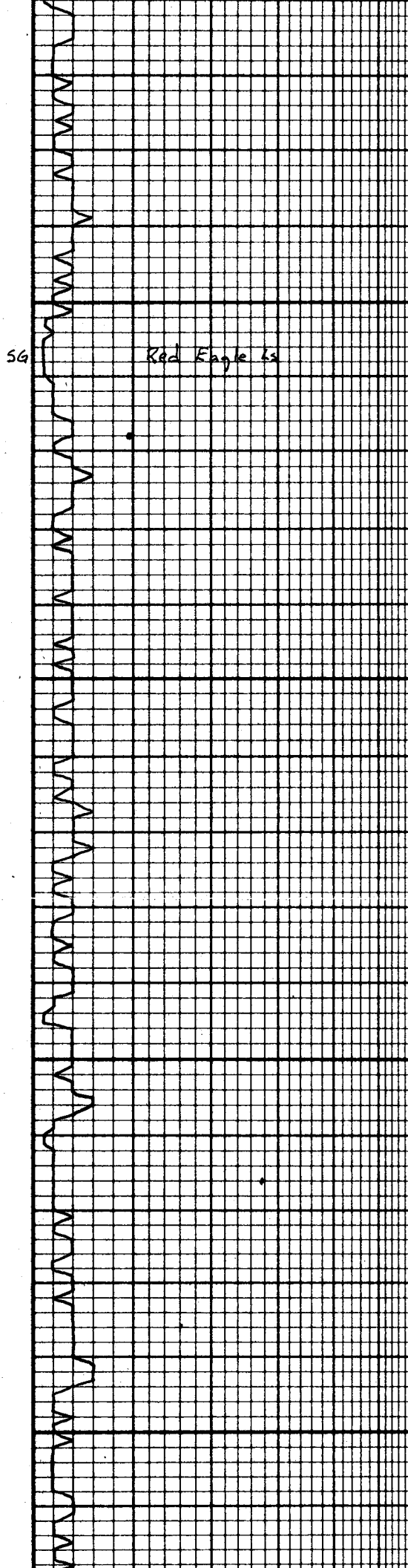
@ 7am
7-4-91

2200

10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
270
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360
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380
390
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660
670
680
690
700
710
720
730
740
750
760
770
780
790
800
810
820
830
840
850
860
870
880
890
900
910
920
930
940
950
960
970
980
990
1000

Mud-Co Mud ✓ @ 2206'

Vis 27 wt 9.7



50

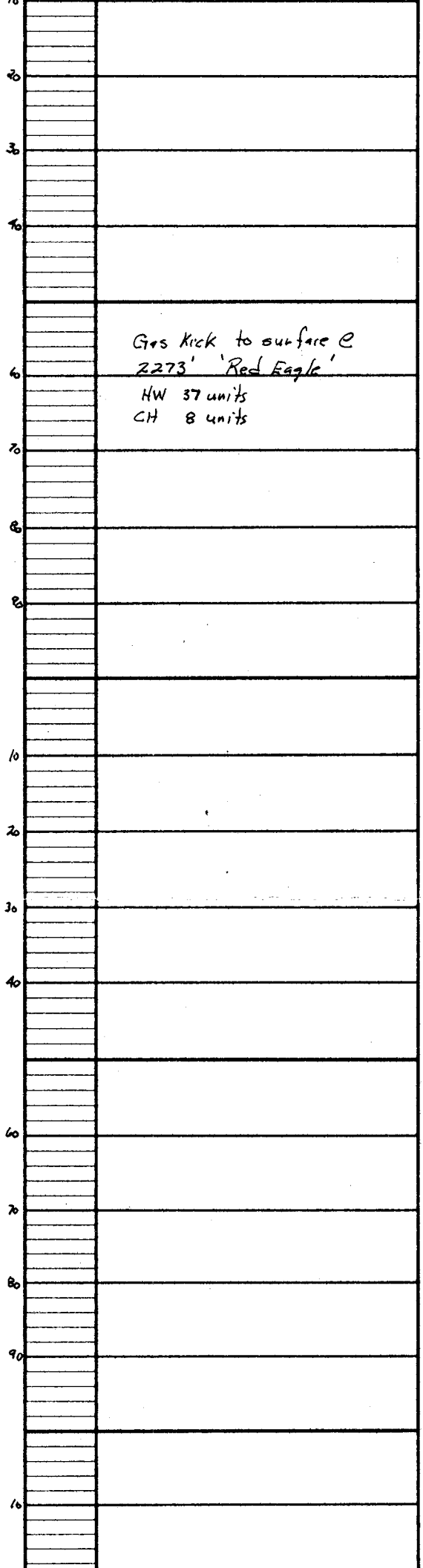
Red Eagle ls

Show
Gas

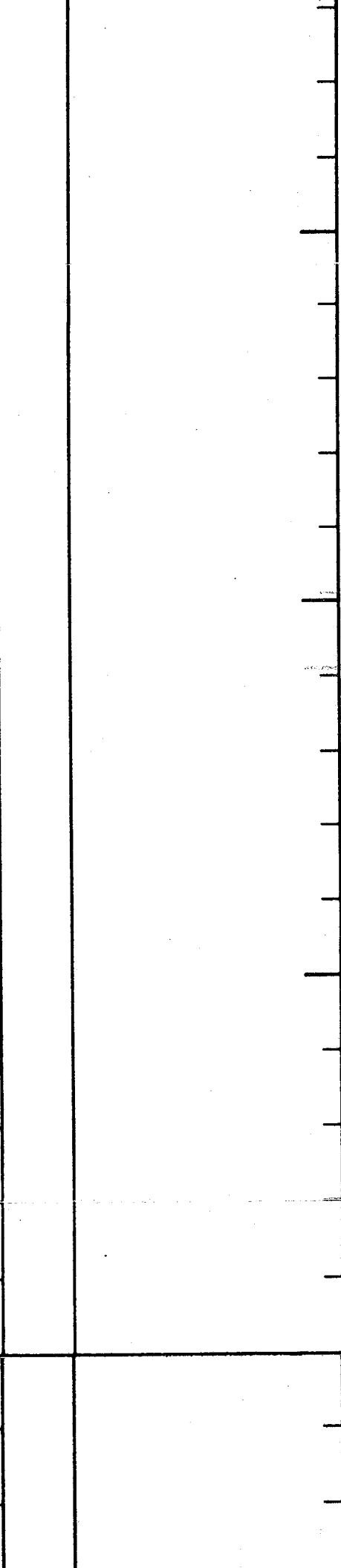
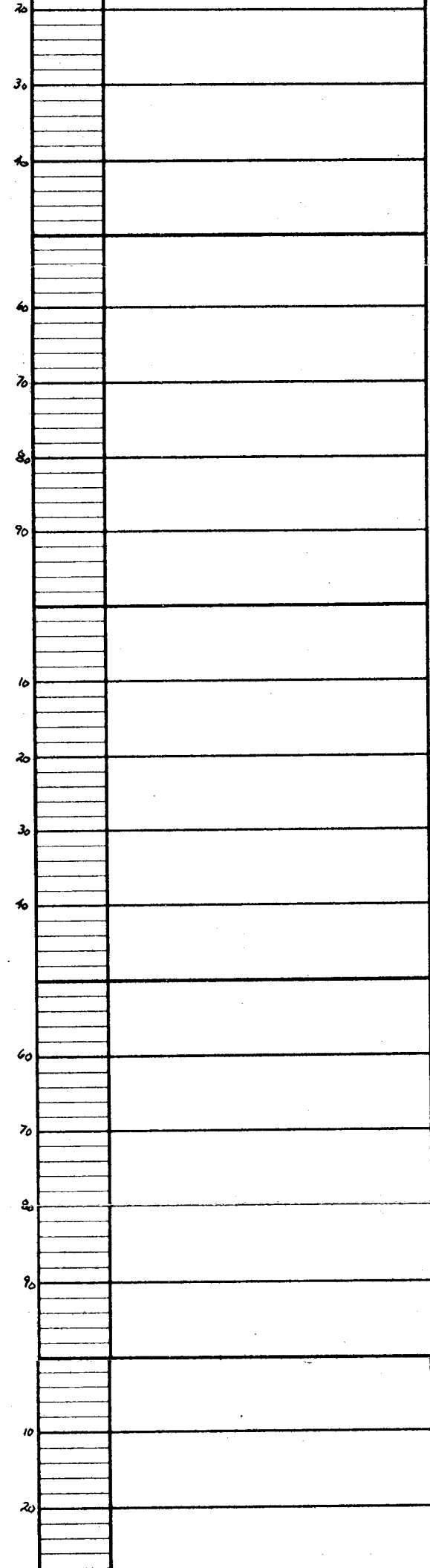
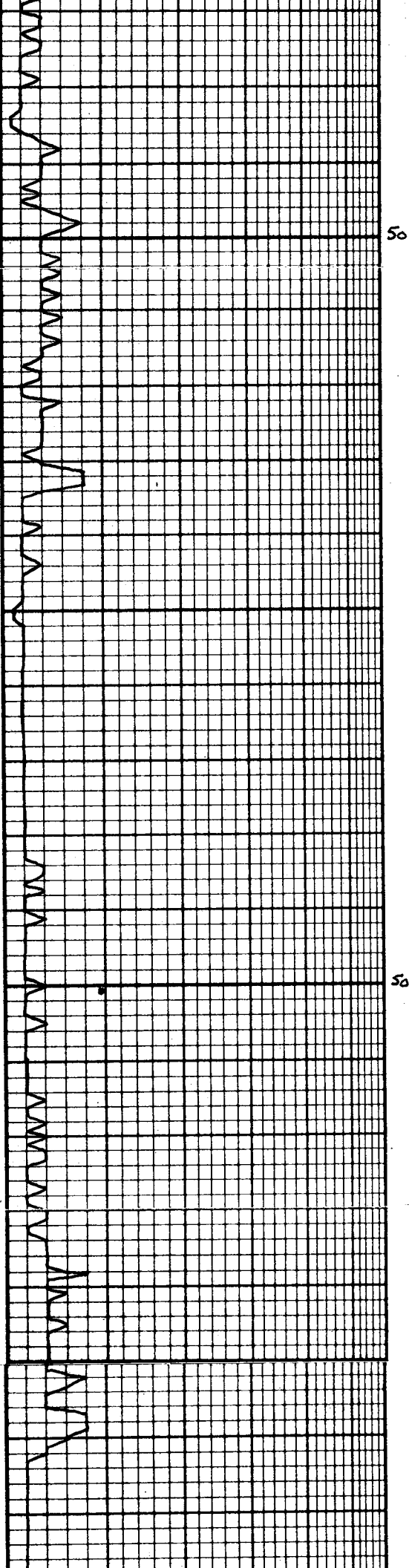
2300

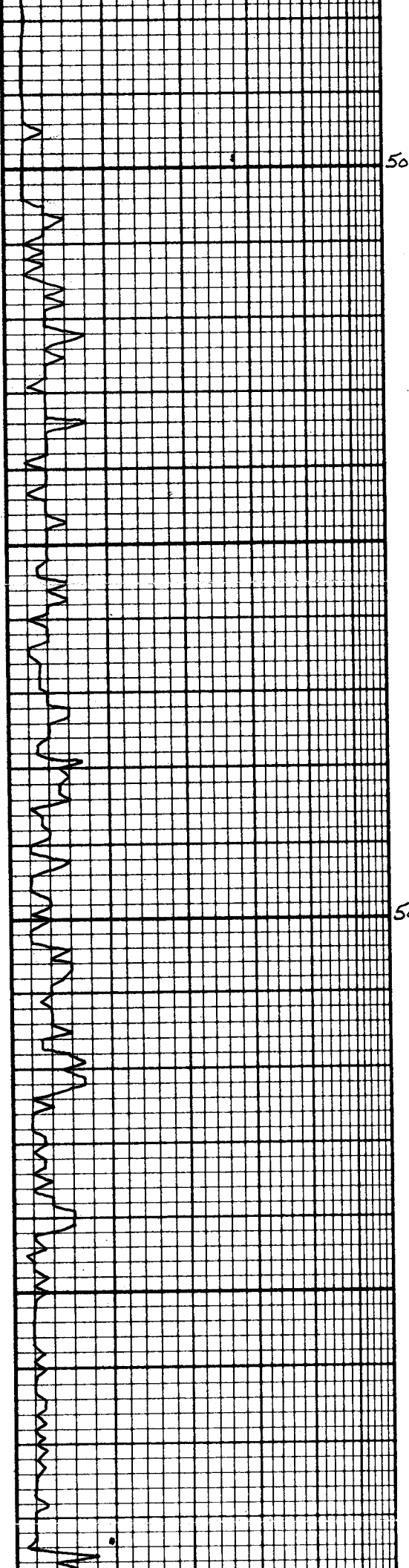
50

2400



Gas kick to surface @
2273' 'Red Eagle'
HW 37 units
CH 8 units





50

2700

50

2800

30

40

60

70

80

90

10

20

30

40

60

70

80

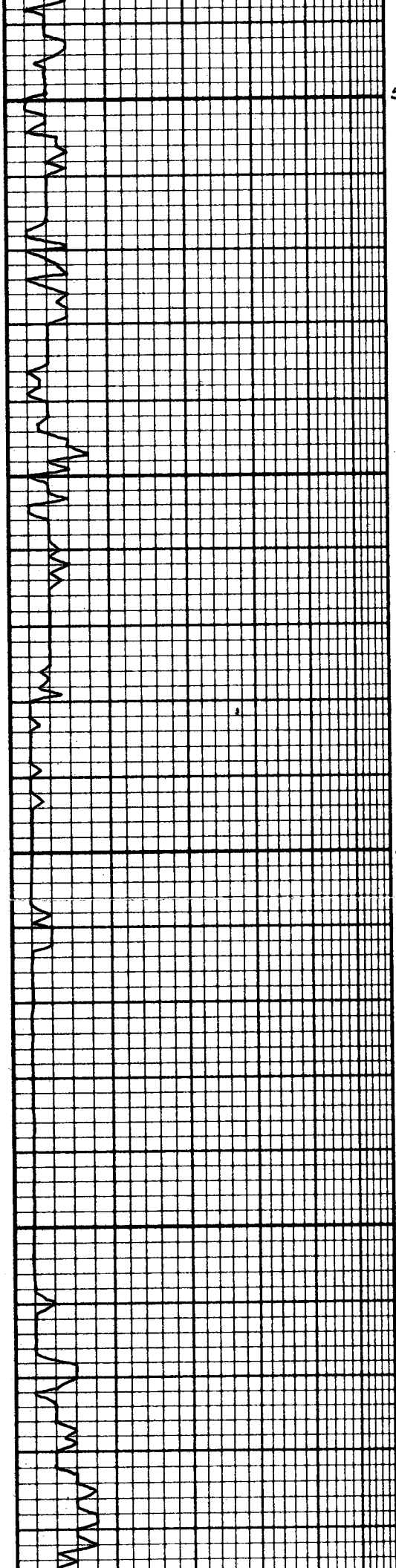
90

10

20

30



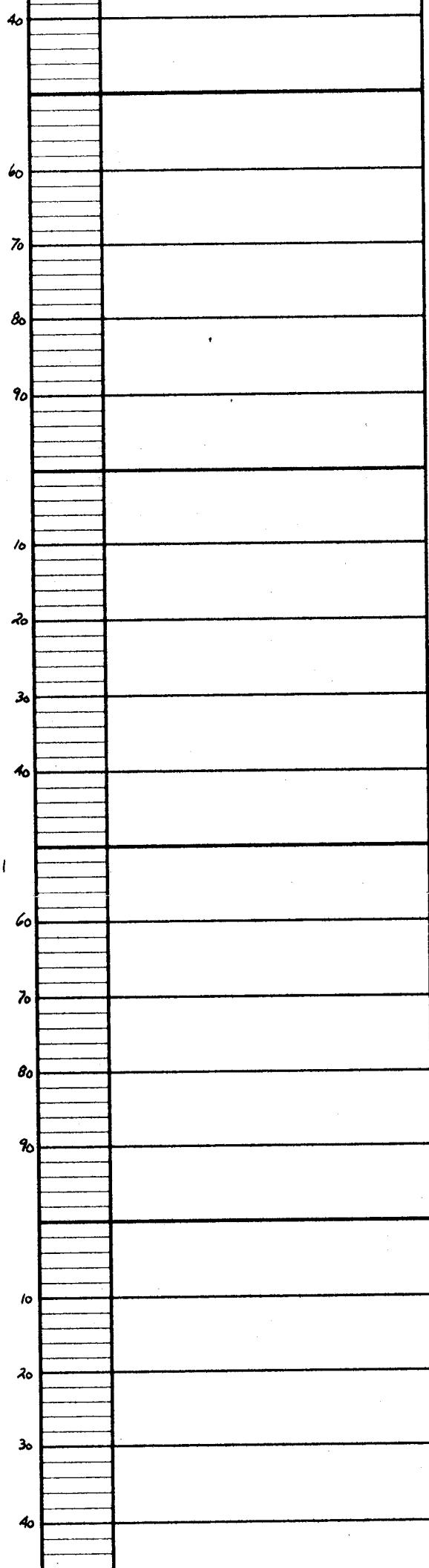


50

2900

50 - @ 7am
7-5-91

3000



40

60

70

80

90

10

20

30

40

60

70

80

90

10

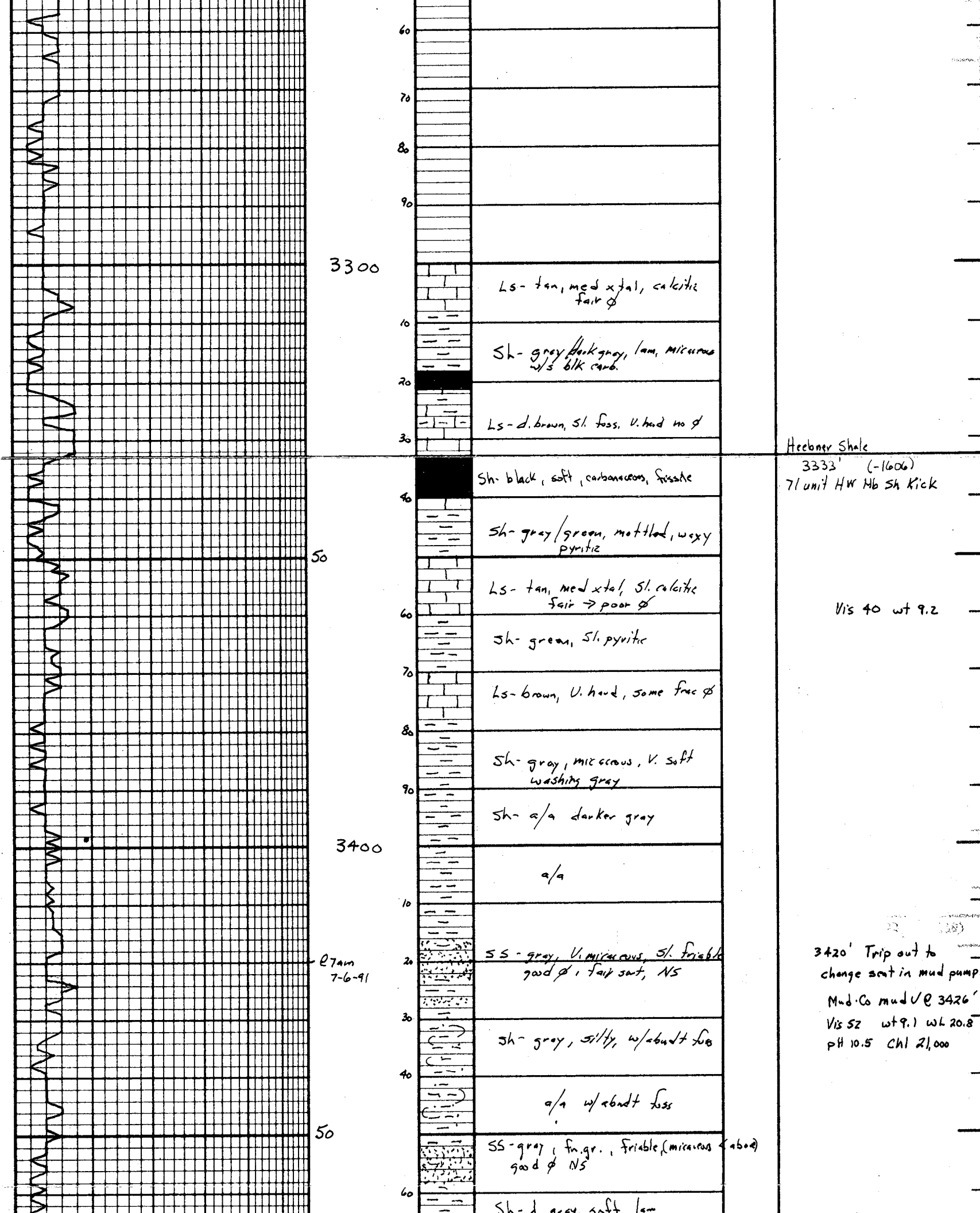
20

30

40

Dis place @ 3000'

Mud-Co Mud ✓ @ 3031'
Vis 43 wt 8.8
wL 18.4 pH 11.0
chl. 16,000
Bot. up in 27 min



3300

60
70
80
90
10
20
30

Ls - tan, med xtal, calcitic
fair ϕ

Sh - grey/black grey, lam, micaceous
w/ s blk carb.

Ls - d. brown, sl. foss, v. hard no ϕ

Hecloner Shale

3333' (-1606)
71 unit HW Mb Sh Kick

50

40
60
70
80
90

Sh - black, soft, carbonaceous, fissile

Sh - gray/green, mottled, waxy
pyritic

Ls - tan, med xtal, sl. calcitic
fair \rightarrow poor ϕ

Sh - green, sl. pyritic

Ls - brown, v. hard, some frac ϕ

Sh - gray, micaceous, v. soft
washing gray

Sh - a/a darker gray

Vis 40 wt 9.2

3400

10
20
30
40

a/a

SS - gray, v. micaceous, sl. friable
good ϕ , fair sort, NS

Sh - gray, silty, w/ abndt foss

a/a w/ abndt foss

3420' Trip out to
change seat in mud pump.

Mud. Co mud @ 3426'
Vis 52 wt 9.1 wL 20.8
pH 10.5 CHL 2,000

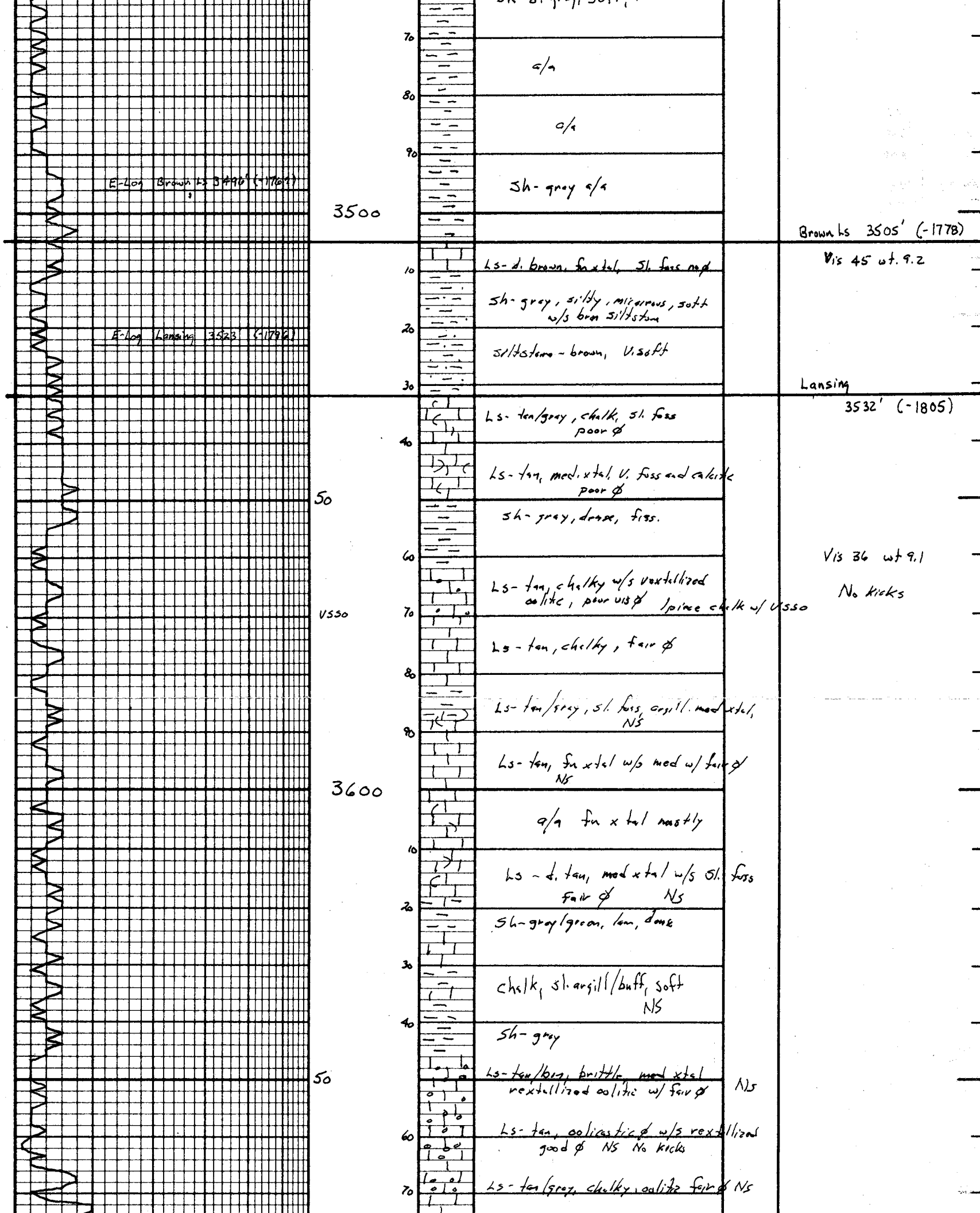
@ 7 am
7-6-91

50

60

SS - gray, fin. gr., friable (micaceous above)
good ϕ NS

Sh - d. gray soft lam



E-log Brown ls B#90 (-1769)

3500

Brown ls 3505' (-1778)

E-log Lansing 3523 (-1792)

Vis 45 wt. 9.2

Lansing

3532' (-1805)

50

Vis 36 wt 9.1

No kicks

vsso

3600

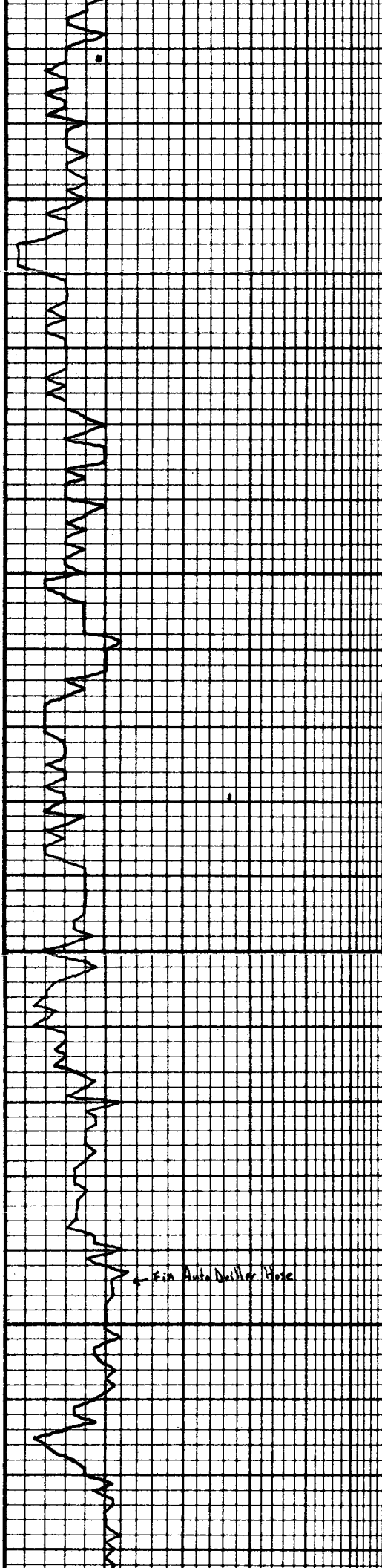
50

NS

NS

NS

NS



80	LS - tan, micrite	
90	a/a	
3700	LS - grey, micrite	
10	LS - tan, oolitic w/ good fair oolite NS No cracks	
20	LS - buff, micrite	
30	Sh - gray	NS
40	LS - buff, micrite w/ abndt smoky Δ	NS
50	a/a less Δ	NS
60	LS - tan/brn, med → fn xtal V. hard, no vis φ	NS
70	Sh - gray/green, matt.	
80	LS - tan, cherty, fn → chert xtal soft, no vis φ NS sl. foss. w/s wh chalk, V. soft	
90	LS - tan, micrite no φ w/s, wh chalk	NS
3800	LS - a/a	
10	Sh - blk. soft, matt, vis.	
20	LS - tan → wh, chalk, soft NS	
30	LS - tan → buff, med → fn xtal calcitic xtal, fair → poor φ	
40	a/a cherty Sh - blk → gray, hard	
50	LS - tan, med xtal w/s cherty sl. granular, poor φ	
60	LS - tan, med xtal, w/ abndt tan frash Δ	
70	LS - a/a dec. amt. of Δ	
80	LS - tan → wh, oolitic (oval shgn & small) w/ fair → good inter oolite, 5.50 light No gas in wet, Very sh ader	
90	LS - buff → tan, fn xtal w/s cherty	

Very low Background



Vis 40 wt 9.4

Vis 44 wt 9.35

Test Gas Det. (ok)
@ 3790'

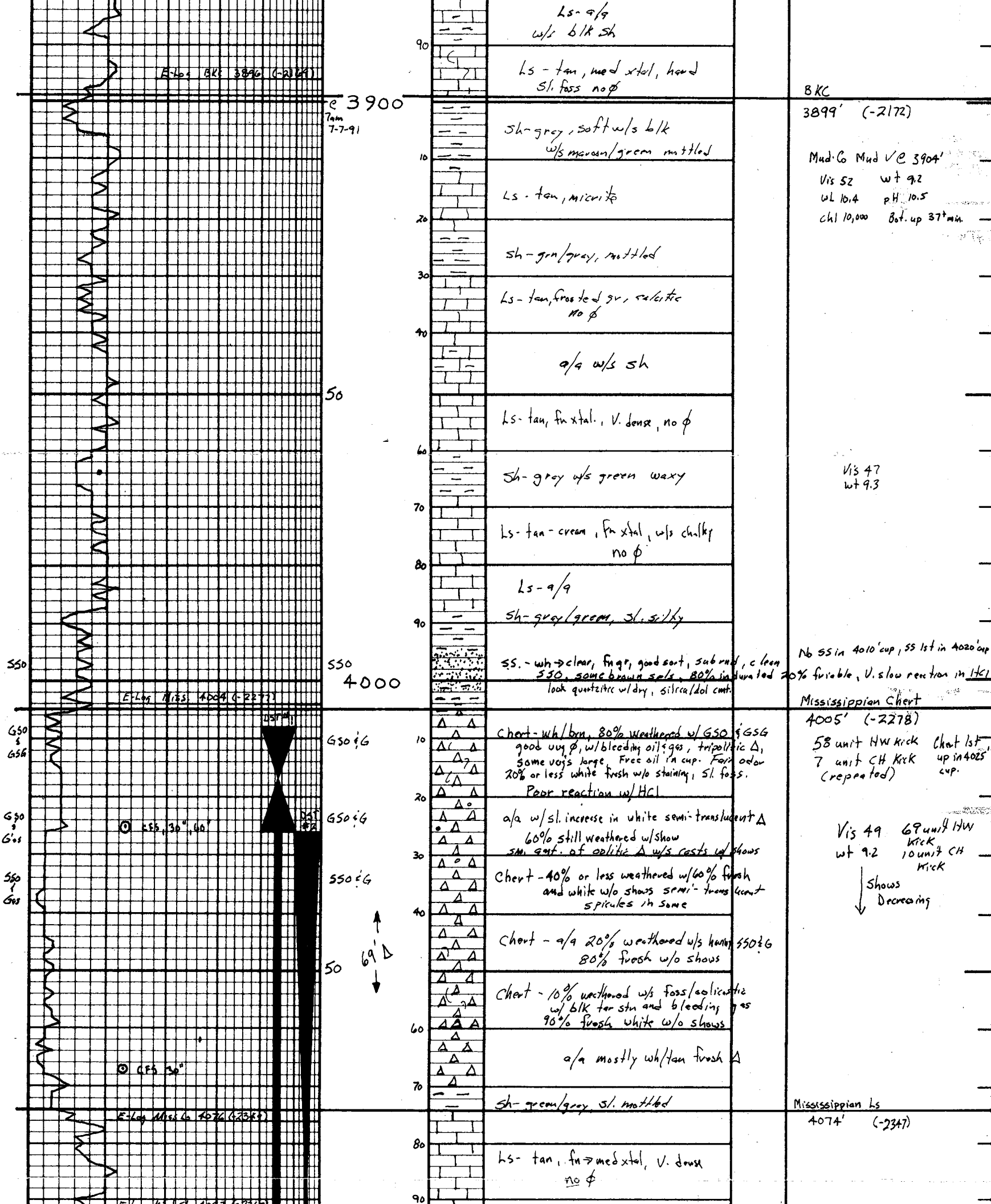
Vis 43 wt 9.3

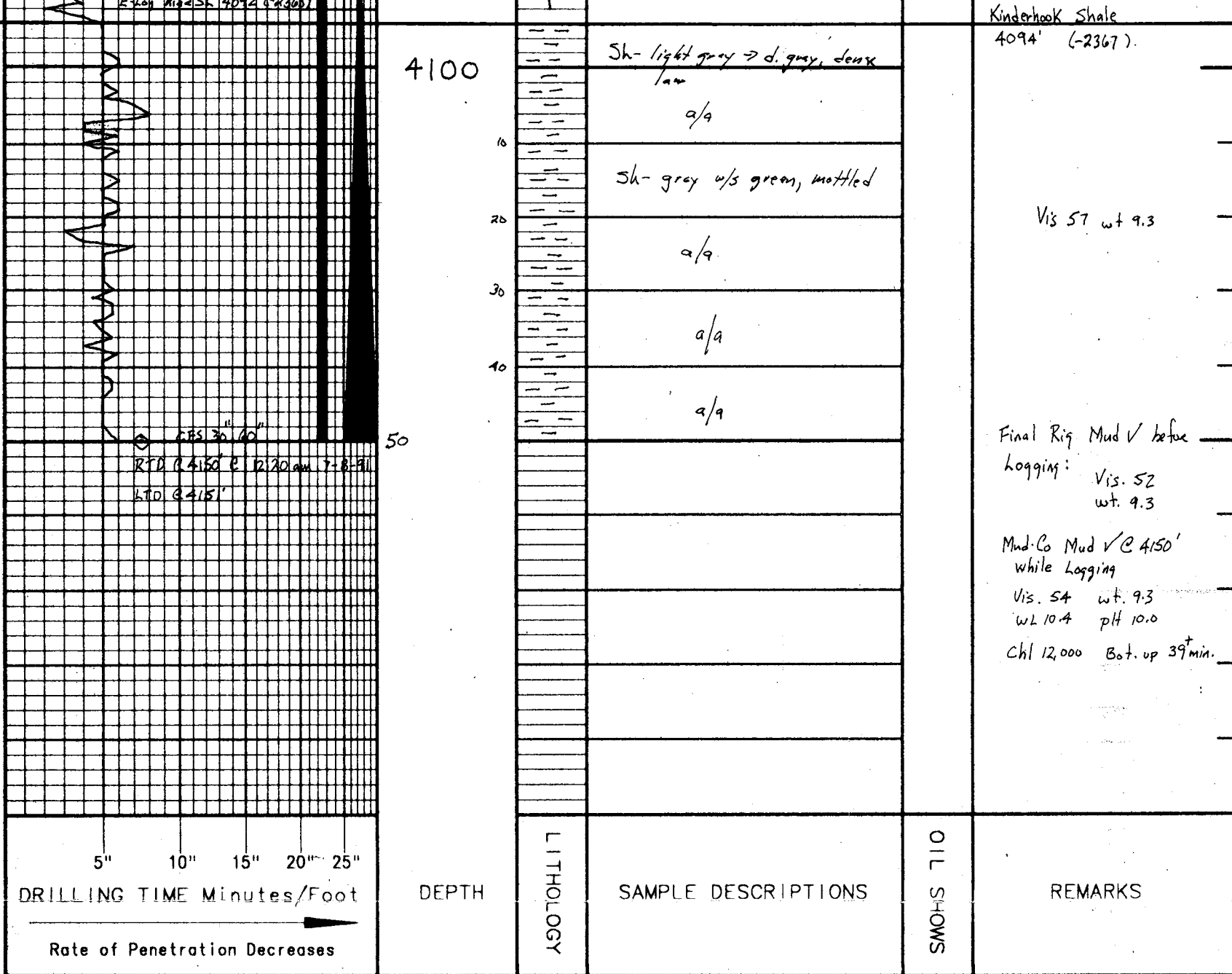
Vis. 42 wt 9.3

14 unit HW spike
4 unit CH kick

Add Mud to Lower
w.t. for Miss







CONTRACTOR Sterling Drilling Company, Rig #2

LEASE McNamee 1-21 IP _____

ELEVATION 1727 KB RTD 4150

LOCATION C-Sw-Se

SEC 21 TWP 27s RNG 10w

COUNTY Kingman STATE Kansas