

**MUD LOG**  
**WellSight Systems**  
Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: ALBERS C #1      API# 15-195-22892-00-0  
Location: SW SE NW NW Sec. 24 ;Twnsp. 15s.; Rge. 25 w.  
License Number: 34110      Region: Trego County, KS  
Spud Date: 11/20/2013      Drilling Completed: 11-28-2013  
Surface Coordinates: 1065' FNL 865' FWL  
Bottom Hole Coordinates:  
Ground Elevation (ft): 2515      K.B. Elevation (ft): 2522  
Logged Interval (ft): 3600      To: 4626      Total Depth (ft): 4630  
Formation: Mississippian  
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR**

Company: TENGASCO, INC.  
Address: 1327 Noose Rd.  
Hays, KS. 67601

**GEOLOGIST**

Name: Mike Bair  
Company: Basin Resources L.L.C.  
Address: Longmont, CO.

**FORMATION TOPS**

FORMATION	SAMPLE	LOG
Anhydrite	1976 (+546)	1974 (+548)
Heebner	3845 (-1323)	3841 (-1319)
Lansing	3884 (-1362)	3881 (-1359)
BKC	4186 (-1664)	4184 (-1662)
Pawnee	4302 (-1780)	4296 (-1774)
Ft. Scott	4373 (-1851)	4373 (-1851)
Chero Shale	4397 (-1875)	4400 (-1878)
Miss Dolo	4471 (-1949)	4469 (-1947)
Gilmore City	4575 (-1953)	4576 (-1954)
TD	4630 (-2108)	4626 (-2104)

**DSTs**

DST #1 4469 - 4495 45-45-45-45  
IFP: 2" blow in 3 min: BOB in 16 min: ISIP: surface blow died in 25 min. FFP: 2" blow in 3 min: BOB in 14 min: FSIP: surface blow died in 25 min.  
FP: (25-89)(96-145) SIP: 1130 - 1044  
REC: 455' GIP; 110' HOCGM (g=5%, o=20%, m=75%); 110' CGO (g=5%, o=95%)

**Comments**

Production casing was ran to further test the economic potential of the Mississippian formation.

### ROCK TYPES

- Anhy
- Bent
- Brec
- Cht

- Clyst
- Coal
- Congl
- Dol

- Gyp
- Igne
- Lmst
- Meta

- Mrlst
- Salt
- Shale
- Shcol

- Shgy
- Sltst
- Ss
- Till

### ACCESSORIES

#### MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau

- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

#### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite

- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

#### STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst

- Sltstrg
- Ssstrg

#### TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

### OTHER SYMBOLS

#### POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint

- Vuggy

#### SORTING

- Well
- Moderate
- Poor

#### ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

- Spotted
- Ques
- Dead

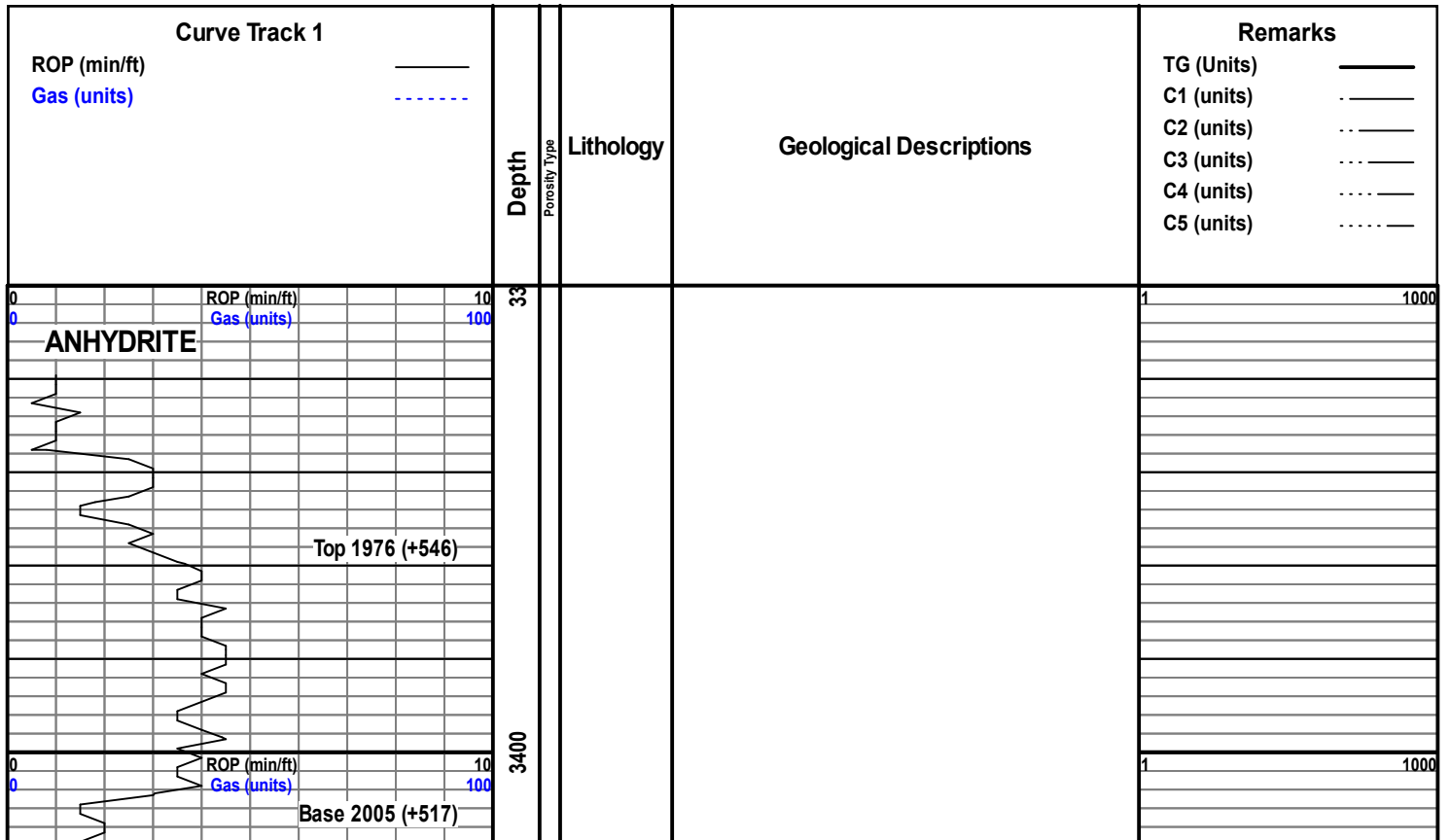
#### EVENT

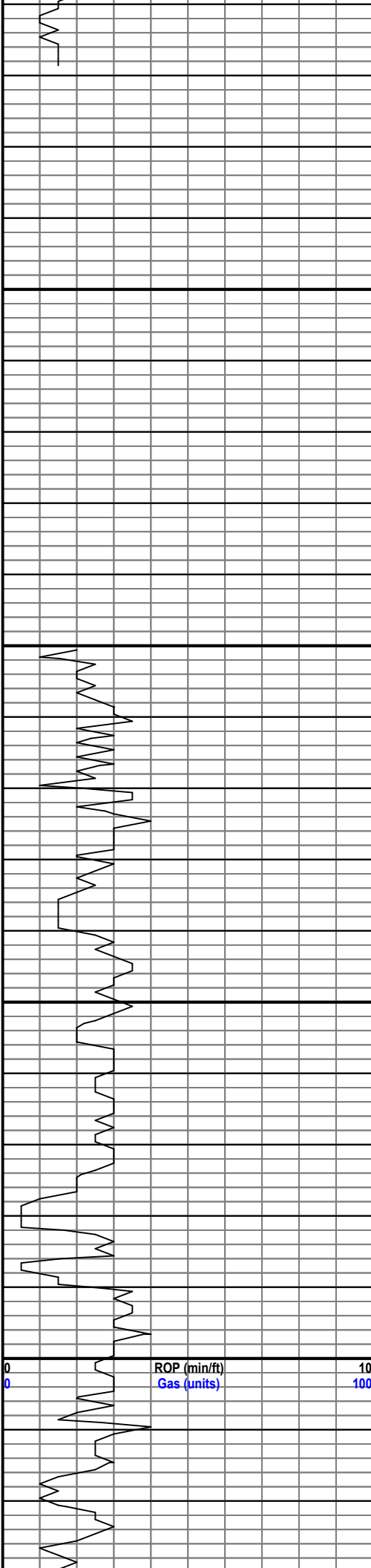
- Rft
- Sidewall

#### INTERVAL

- Core
- Dst

- OIL SHOW Even



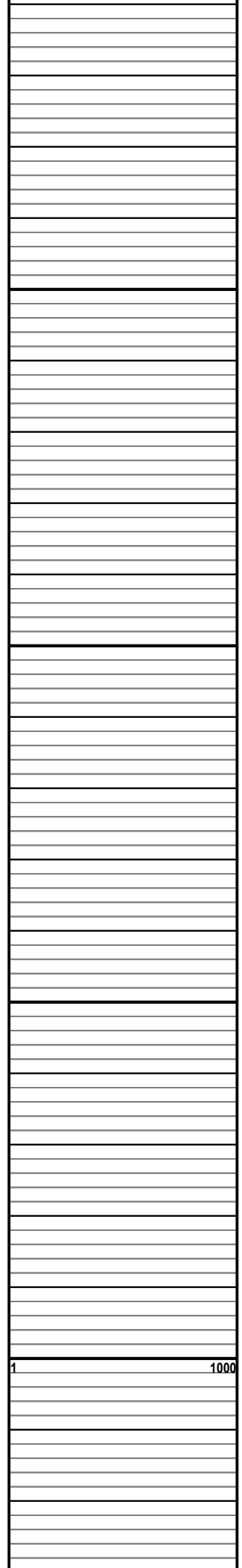


3450

3500

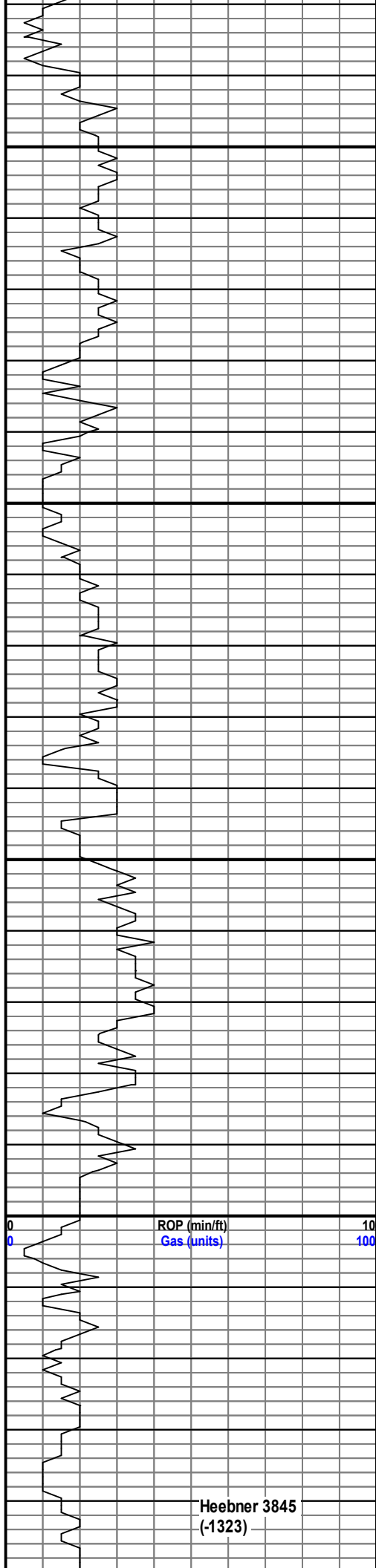
3550

3600



1

1000



3650

3700

3750

3800

3900

ROP (min/ft)

Gas (units)

Heebner 3845  
(-1323)



Ls, crm-brn, fxl to gran; Sh, v.c., Chert, tan w foss frags, n/o 3800

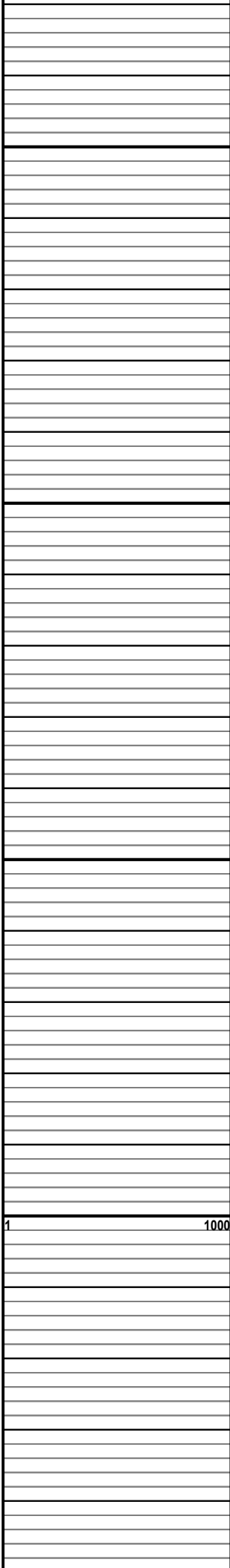
Ls, crm-tan, wkestrn-pkstrn, ns, n/o

Ls, wh-crm, wke-plstrn, cky; Sh, gry-mrn, ns, n/o

Ls, crm, gran w some cal rexln, some ixl por; Sh, blk, cky in pt, ns, n/o

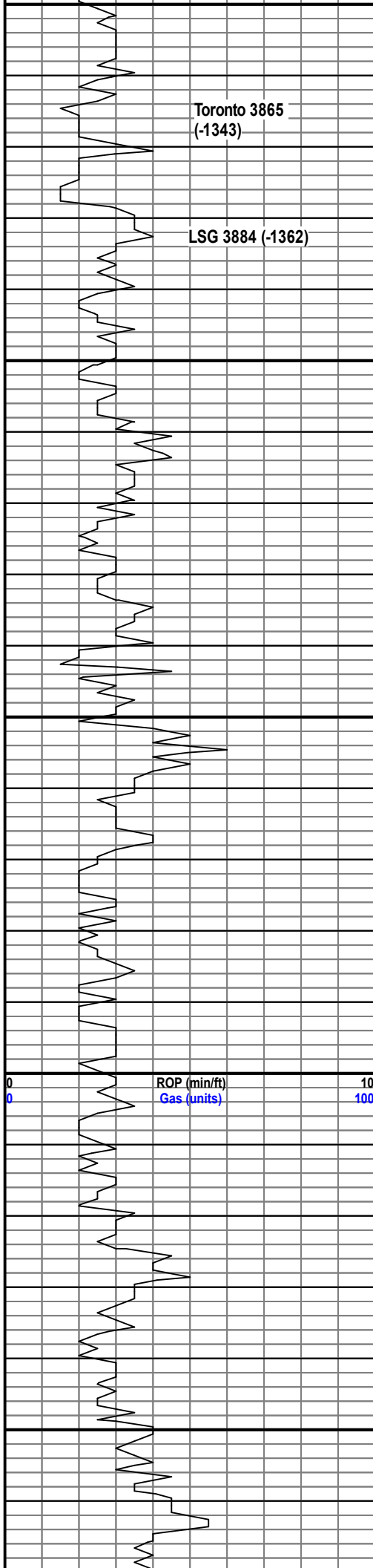
Ls, crm=gry, argil, foss frags, cky, ns, n/o 3850

Sh, blk, platy, carb 3860



1

1000



3880  
3900  
3950  
4000  
4050



Ls, wh-crm, wke-pkstn, some w cal rexln, cky;  
Chert, wh-op, fresh, dse, ns, n/o

Ls, crm-brn, fxl to sl gran, few foss frags, ns, n/o;  
Sist-sh, grn

Ls, wh-crm, cky, wke-pkstn,; Chert, wh; Sh,  
gry-grn-blk, ns, n/o

pr sample: Soft red sh; Ls, wh, ool, pr vis por, ns,  
n/o 3900

Ls, wh-tan, ool, pr vis por, cky; Chert, wh

Ls, crm-tan, wkestn-pkstn, micro ool, ns, n/o

Ls, gry, fxl, foss frags, ns; few pc Sh, blk, n/o

Ls, crm-tan, ool, sl ixool por, ns; Chert, wh, fresh,  
dse, ns, n/o

Ls, tan, mdstn to sl gran; Ls, wh, ool, mst pr vis  
por, sct'd sl ixool por, ns, n/o cky in pt 3950

Chert, op; Ls, crm, fxl-gran, ns, n/o; some cky

Chert, salmon; Ls, crm-fxl to wkestn, few foss  
frags, ns, sl cky, n/o

Ls, a/a; Sh, gry, ns, n/o

Ls, crm, fxl to wkestn, few foss frags, sl cky; Sh,  
gry-blk, ns, n/o 4000

Ls, crm-tan, fxl to sl gran, some ool, mst pr vis  
por, cky, ns, n/o

Ls, wh-crm, gran to ool, few sl oom por, ns;  
Chert, tan, foss frags, ns, n/o

Ls, wh-crm, pkstn, poss sl ixl por; Chert, wh-crm,  
some Sh, blk

Ls, wh-crm, ool, pr ixool por, r pc sl-fr oom por,  
ns, n/o

Ls, crm-brn, fxl to sl gran, foss, pr por; sct'd  
Chert, brn, ns, n/o 4050

Ls, wh, fxl-gran, r pc oom, sl oom por, ns, to Ls,  
brn, fxl, foss, ns, n/o

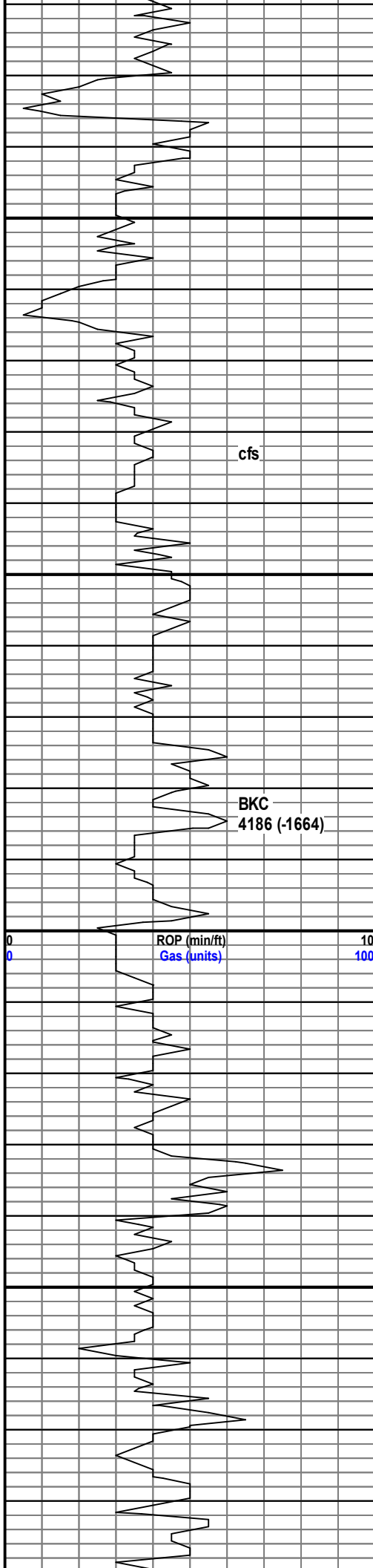
a/a, some mott; Chert, wh-gry, sharp, ns, n/o

Ls, mst crm, fxl, pr vis por; Chert, brn-tan, sharp,  
ns, n/o

Ls, crm-tan, ool, r pc oom, pr-v sl por, sl cky, r pc  
w cal xl on edge, ns, n/o

MudCo 3916  
Vis 57  
Wt. 9.1  
WL 6.0  
Chlr 1500

1 1000

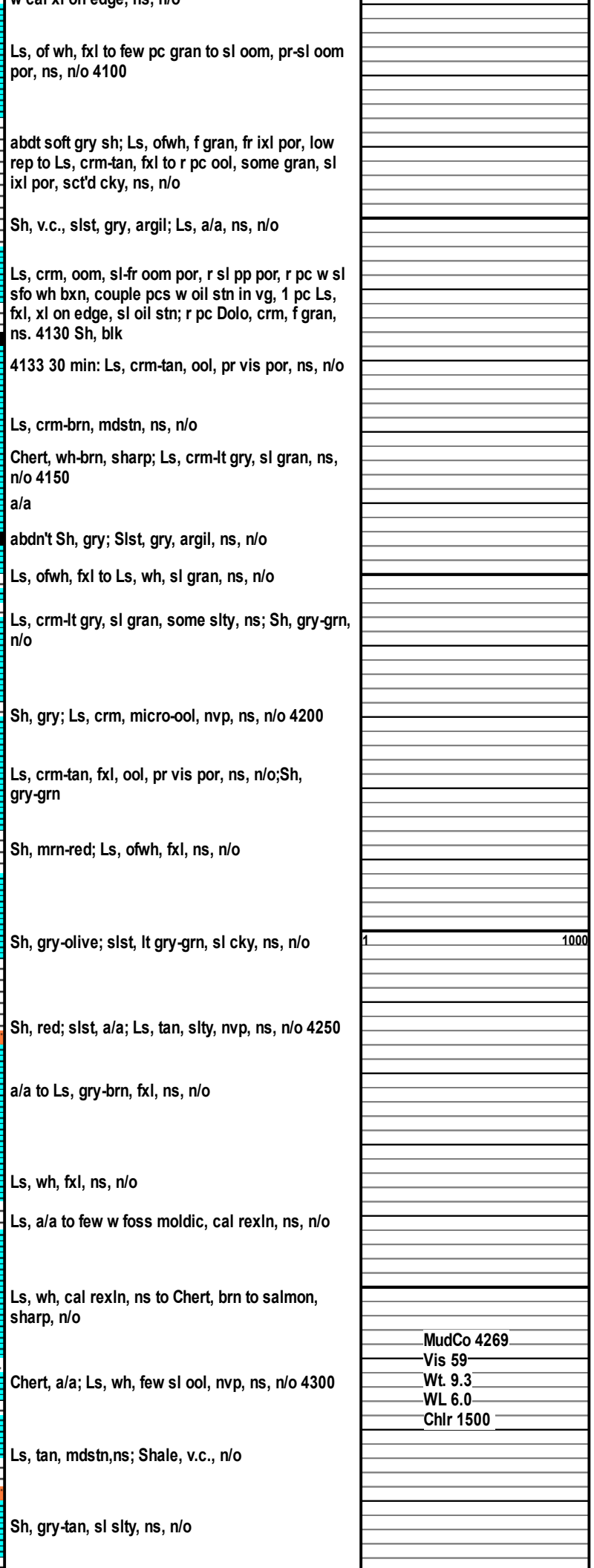


4100

4150

4200

4250



Ls, of wh, fxl to few pc gran to sl oom, pr-sl oom  
por, ns, n/o 4100

abdt soft gry sh; Ls, ofwh, f gran, fr ixl por, low  
rep to Ls, crm-tan, fxl to r pc ool, some gran, sl  
ixl por, sct'd cky, ns, n/o

Sh, v.c., slst, gry, argil; Ls, a/a, ns, n/o

Ls, crm, oom, sl-fr oom por, r sl pp por, r pc w sl  
sfo wh bxn, couple pcs w oil stn in vg, 1 pc Ls,  
fxl, xl on edge, sl oil stn; r pc Dolo, crm, f gran,  
ns. 4130 Sh, blk

4133 30 min: Ls, crm-tan, ool, pr vis por, ns, n/o

Ls, crm-brn, mdstn, ns, n/o  
Chert, wh-brn, sharp; Ls, crm-lt gry, sl gran, ns,  
n/o 4150  
a/a

abdn't Sh, gry; Slst, gry, argil, ns, n/o

Ls, ofwh, fxl to Ls, wh, sl gran, ns, n/o

Ls, crm-lt gry, sl gran, some slty, ns; Sh, gry-grn,  
n/o

Sh, gry; Ls, crm, micro-ool, nvp, ns, n/o 4200

Ls, crm-tan, fxl, ool, pr vis por, ns, n/o; Sh,  
gry-grn

Sh, mrn-red; Ls, ofwh, fxl, ns, n/o

Sh, gry-olive; slst, lt gry-grn, sl cky, ns, n/o

Sh, red; slst, a/a; Ls, tan, slty, nvp, ns, n/o 4250

a/a to Ls, gry-brn, fxl, ns, n/o

Ls, wh, fxl, ns, n/o

Ls, a/a to few w foss moldic, cal rexln, ns, n/o

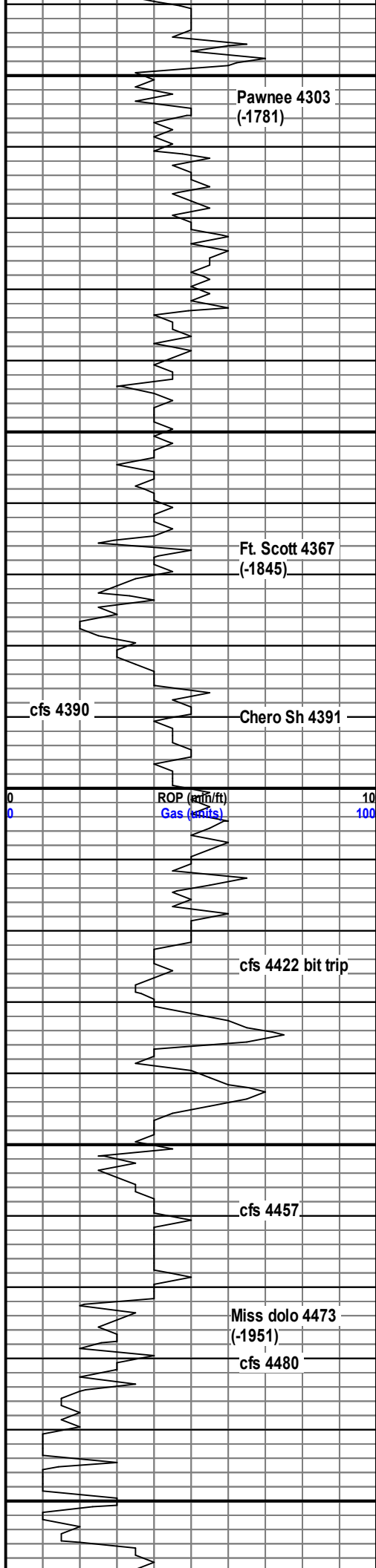
Ls, wh, cal rexln, ns to Chert, brn to salmon,  
sharp, n/o

Chert, a/a; Ls, wh, few sl ool, nvp, ns, n/o 4300

Ls, tan, mdstn, ns; Shale, v.c., n/o

Sh, gry-tan, sl slty, ns, n/o

MudCo 4269  
Vis 59  
Wt. 9.3  
WL 6.0  
Chr 1500



4300 Ls, crm-tan, mdstn, ns, Sh, a/a, n/o

Ls, tan-brn, mdstn, dse, ns, n/o

Ls, brn, sl slty, dse, ns, n/o 4350

Ls, gry, fxl, nvp; Sh, blk

Flood Sh, blk; Slstn, gry, some Ls, gry mott, pr vis por, ns, n/o

a/a

Ls, tan-brn, fxl, few foss frags, ns, n/o

Ls, tan-brn to lt gry; fxl, few foss frags, nvp, few micro pyrite, some cky to mott, cal rexln, ns, n/o 4390 60 min

Ls, tan, wh, fxl to wkestn, some foss frags, cal rexln, ns; SH, blk 4400

Ls, tan, wkestn, v sl ixl por, v sl pp por, sl cky, spt'd surf stn, cal rexln, v sl sfo wh bxn, n/o, v low rep 4410

Ls, tan-lt gry, mdstn, dse, few micro pyrite; Sh, blk, ns, n/o

Sh, v.c.; Ls, wh, v sl gran, v sl ixl por, v sl sfo, spt'd surf stn, v low rep, n/o

Ls, wh-crm, fxl, nvp, 1 pc w poss gil stn, nsfo; r pc SS, tan, qtz, v f grn, fr srt, R, fri, ns

Ls, tan, mdstn, few foss frags, nvp, some sct'd ck; Chert, op, sharp, ns, n/o

Ls, crm-tan, mdstn, ns, n/o 30/60 min cir sample: abdn't Chert, yellow-purple, v.c., sharp, some w ool, ns, n/o

Ls, crm-lt gry, mdstn; SS, qtz, wh, f grn, fri to tite, ns; sct'd reworded Ls, weather rind. 4480

Dolo, suc, wh-crm, sl suc por, spt'd surf stn, spt'd lt sat'd stn, sl sfo, v low rep 4480 30 min

4480 60 min; Dolo, crm, suc-f gran, sl pp por, few low fr por, spt'd sat'd stn, sl sfo, to Dolo, wh-crm, v f grn, algal fil, sl por, sat'd stn, sl to r L fr sfo wh bxn, lt odor.

4495 30 min: Dolo, a/a Decr show from 4490, sl decr odor, lt odor

4495 60 min: Incr Od, FR odor, Dolo, a/a few pcs w fr suc, fr pp por, fr sfo wh bxn; Chert, clr, sfo on r pc, free oil in tray

Vis 60  
Wt. 9.4

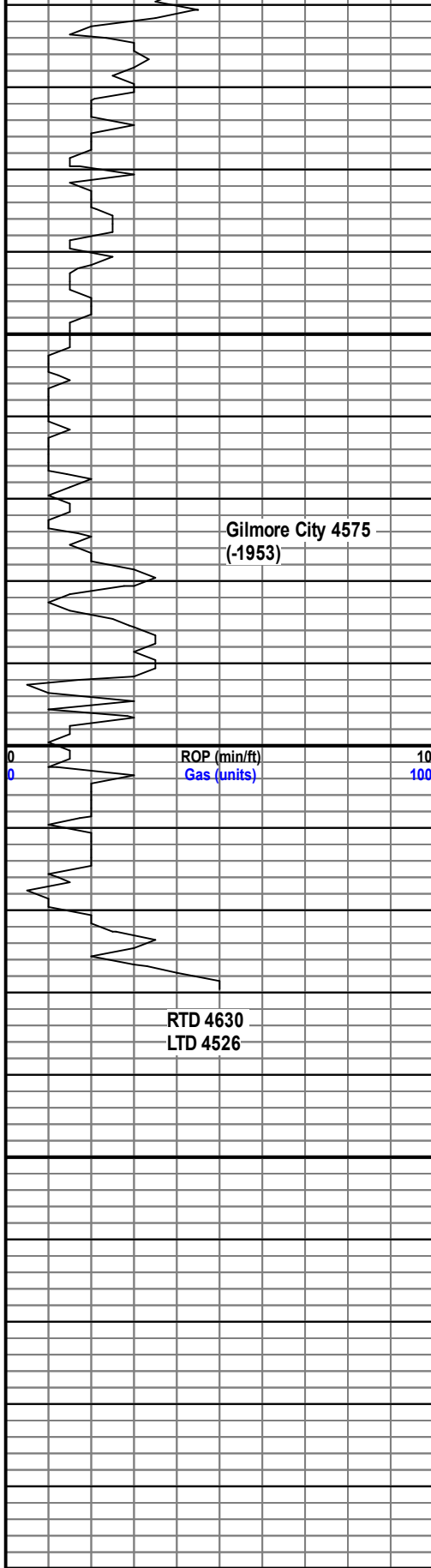
Short trip 4390

1 1000

MudCo 4457  
Vis 57  
Wt. 9.3  
WL 6.0  
Chlr 1500

4490 Dolo, suc, a/a to Dolo, crm, f grn, sl algal fil por, spt'd sat'd stn, sl sfo, Fr od

DST#1 4469-4495  
455' GIP  
110' HOCGM  
245' CGO



4550

4600

4650

00

Gilmore City 4575  
(-1953)

ROP (min/ft) 10  
Gas (units) 100

RTD 4630  
LTD 4526



r pc, free oil in tray.  
Dolo, crm, fr-gd odor, sl suc por, sl algal fil por, r  
pc w cal rexln; r pc chert, yell; sct'd clr qtz some  
w oil show, 4520

Dolo, a/a, r pc hvy sat'd stn, few w fr pp to vg por,  
sl sfo, r pc Chert, wh, fr odor 4530

Dolo, a/a incr barren; qtz, clr w brn stn, few pc  
Chert wh, Sh, gry, wk odor 4540

Strap 1.55' short  
DEV 1 deg

1 1000

MudCo 4614  
Vis 57  
Wt. 9.1  
WL 6.0  
Chlr 1600

Strap 1.05' short  
DEV 1 deg