compu-max

71 Martinview Road, N.E.
CALGARY, Alberta
T3J 2W2 (403) 280-5857

COMPOSITE WELL HISTORY
DRILLING TIME
LITHOLOGY LOG

COMPANY: AEC OIL & GAS LTD
WELL: AEC (WEST) RENAISSANCE CARCAJOU D-07
FIELD: EXPLORATORY
PROVINCE: NWT
LOCATION: LSD SEC TWP RGE W MERIDIAN

COORDINATES:
ELEVATIONS: GD 83.2 m
KB 87.5 m
WELL TYPE: EXPLORATORY
SPUD DATE: 2000-03-14
LICENCE No.: 1890

LOG MEASURED FROM KB
4.3 m ABOVE GROUND
TOTAL DEPTH:
T.D. DATE:
AFE No.: 5000047

CONTRACTOR: AKITA #14
MUD TYPE: GEL CHEM
MUD UP @:
SAMPLES: 5 & 2.5 METER INTERVALS
AEC/REN: 172m TO T.D.m
GOV'T: 172m TO T.D.m
DSTs:

CORES: NONE

OPEN HOLE LOGS: SCHLUMBERGER

SUPERVISION
GEOLOGICAL: Glen MacIntosh

DRILLING: LYN SANDQUIST

CASING DEPTH
SURFACE: 172 m
INTERMEDIATE: m
MAIN: m

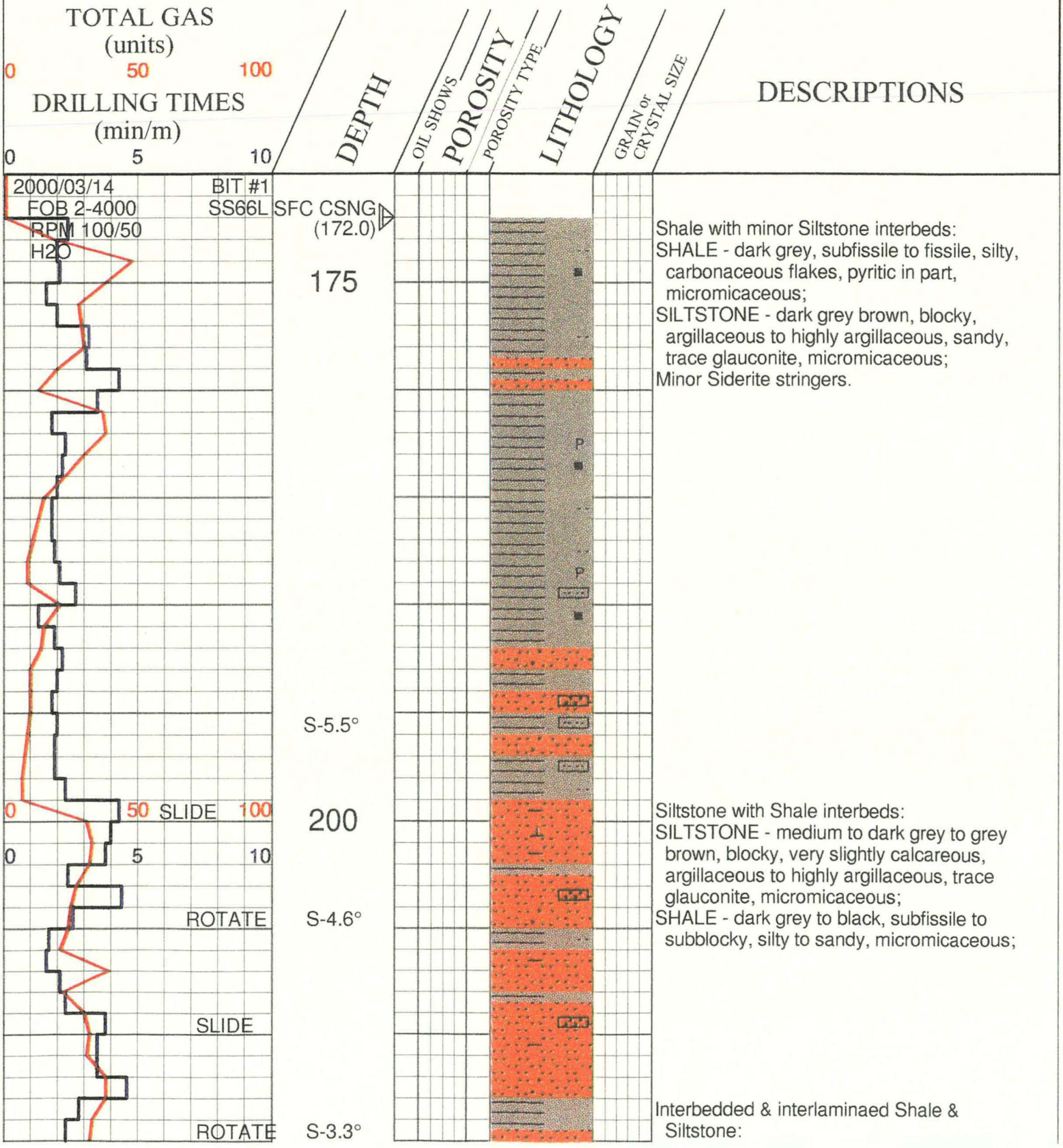
CASING SIZE
SURFACE: 244.5 mm
INTERMEDIATE: 177.8 mm
MAIN: 114 mm

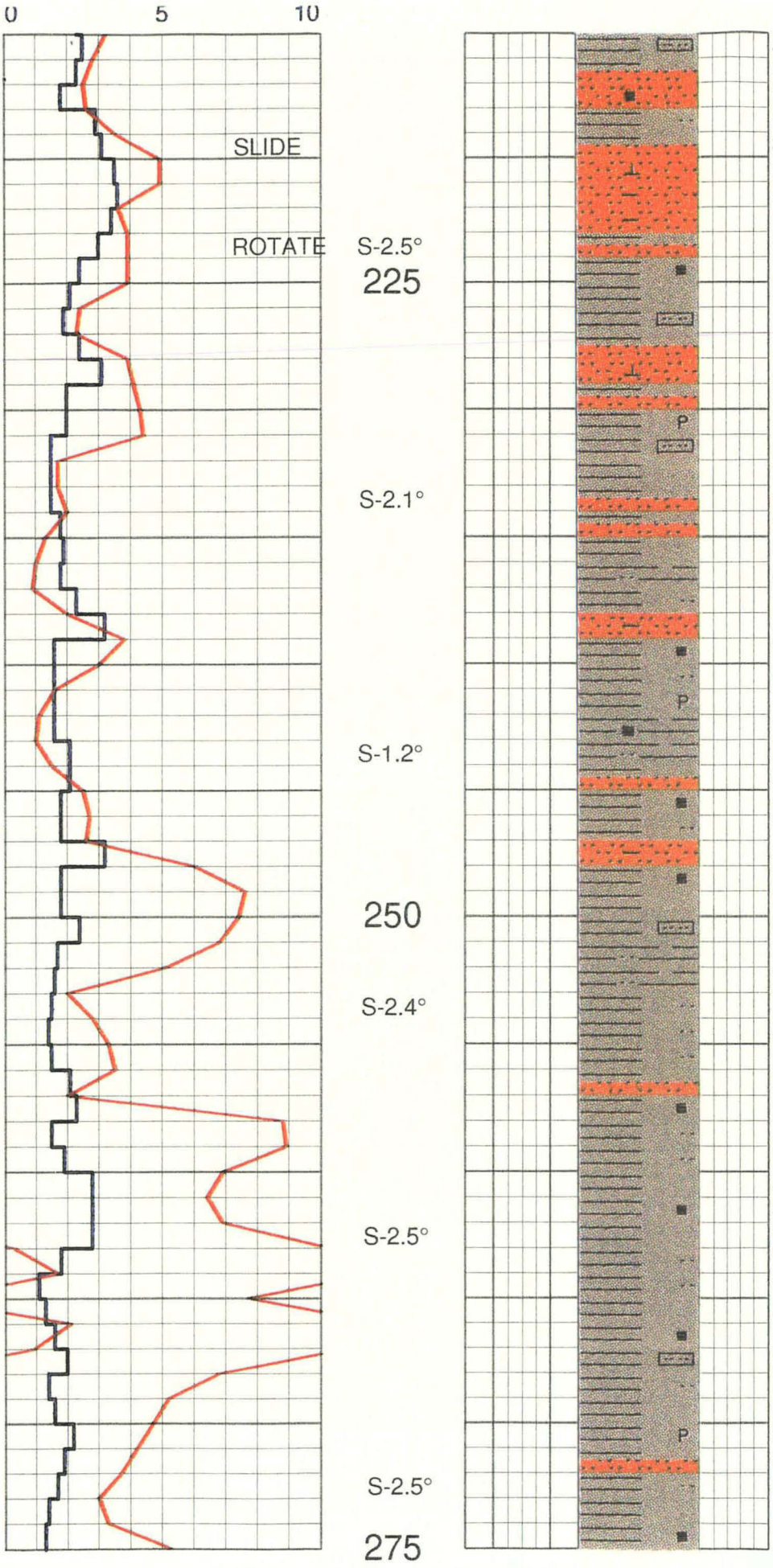
HOLE SIZE
SURFACE: 311 mm
INTERMEDIATE: 222 mm
MAIN: 156 mm

REMARKS:

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS

SCALE 1:240

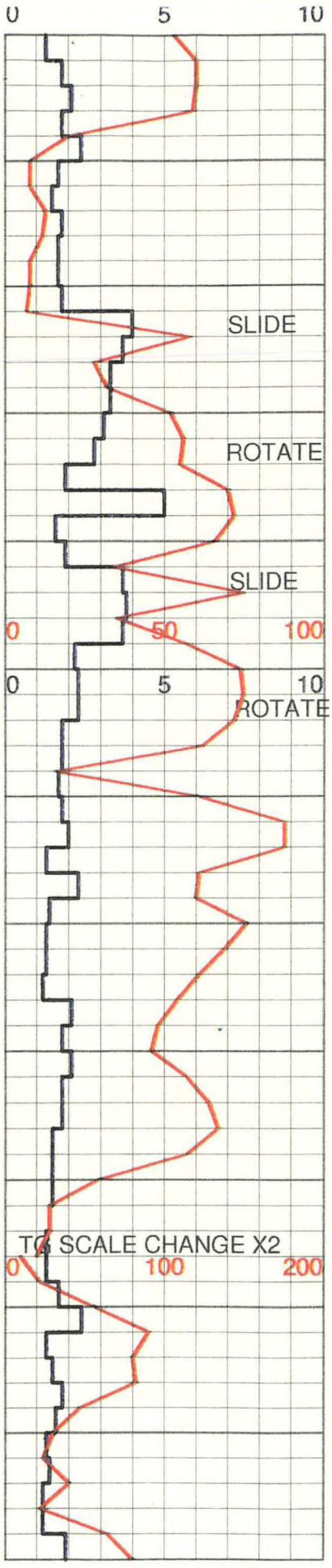




SHALE - dark grey, subfissile to fissile, silty to highly silty grading to Siltstone, carbonaceous, micromicaceous, pyritic in part;
SILTSTONE - dark grey to grey brown, well cemented, calcareous to sideritic cement, argillaceous to highly argillaceous grading to Shale, becoming sandy in part;

Shale with Siltstone interbeds:
SHALE - dark grey to black, fissile to subfissile, platy, silty, carbonaceous, minor disseminated pyrite;
SILTSTONE - dark grey to grey brown, well cemented, calcareous, carbonaceous, argillaceous to highly argillaceous, sandy in part;

Shale with minor Siltstone interbeds:
SHALE - dark grey, fissile to subfissile, silty to highly silty grading to Siltstone in part, trace carbonaceous, micromicaceous, disseminated pyrite;



S-2.7°

S-2.3°

300

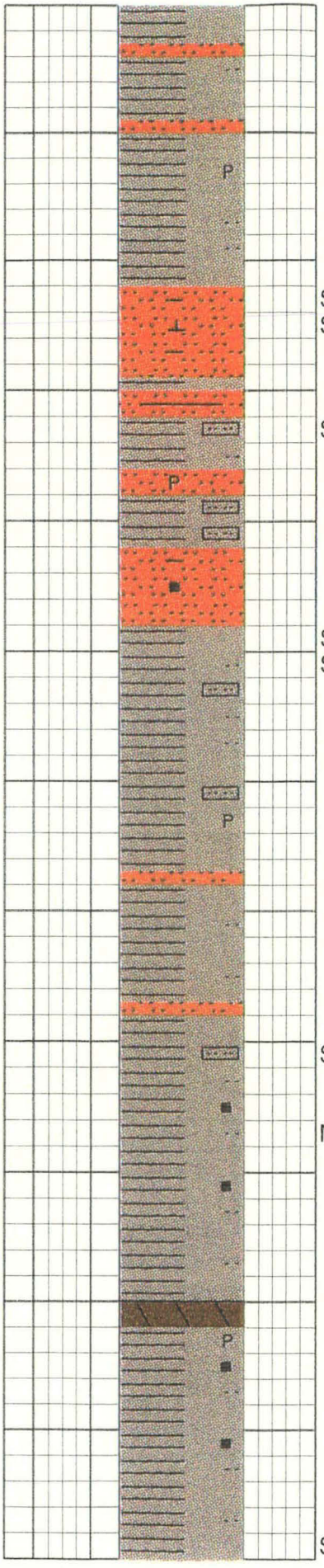
S-1.5°

S-1.4°

S-1.6°

325

S-1.5°

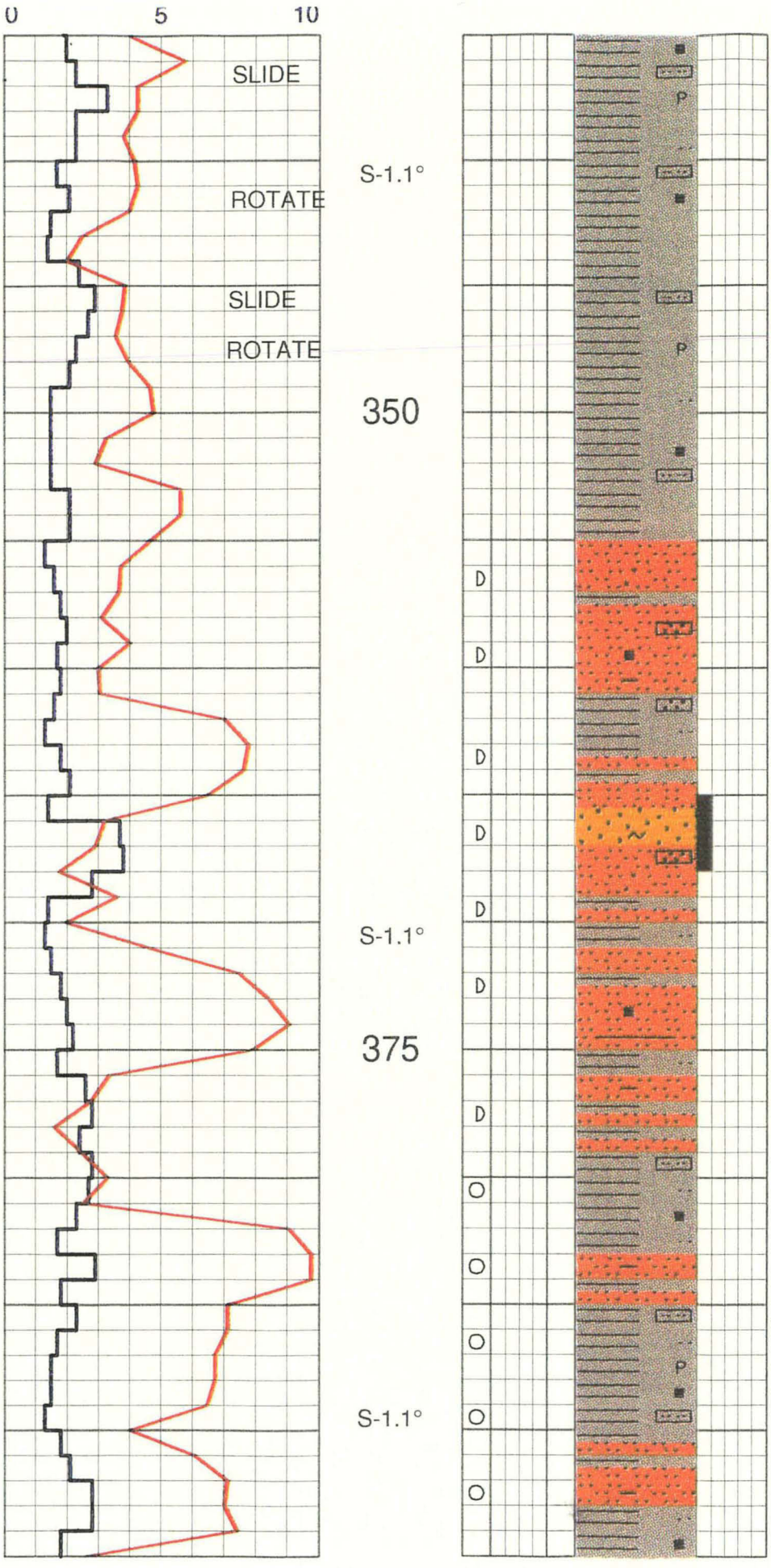


Siltstone with Shale interbeds:
SILTSTONE - medium to dark grey to grey brown, argillaceous to highly argillaceous, slightly carbonaceous, very slightly calcareous;
SHALE - dark grey, fissile to subfissile, silty to highly silty grading to Siltstone in part, trace carbonaceous, micromicaceous, disseminated pyrite;

Shale with Siltstone & Siderite stringers:
SHALE - dark grey, fissile to subfissile, silty grading to Siltstone in part, micromicaceous, trace pyrite.

SHALE - dark grey to black, fissile to subfissile, carbonaceous, silty, micromicaceous;
Minor Siderite interbeds.

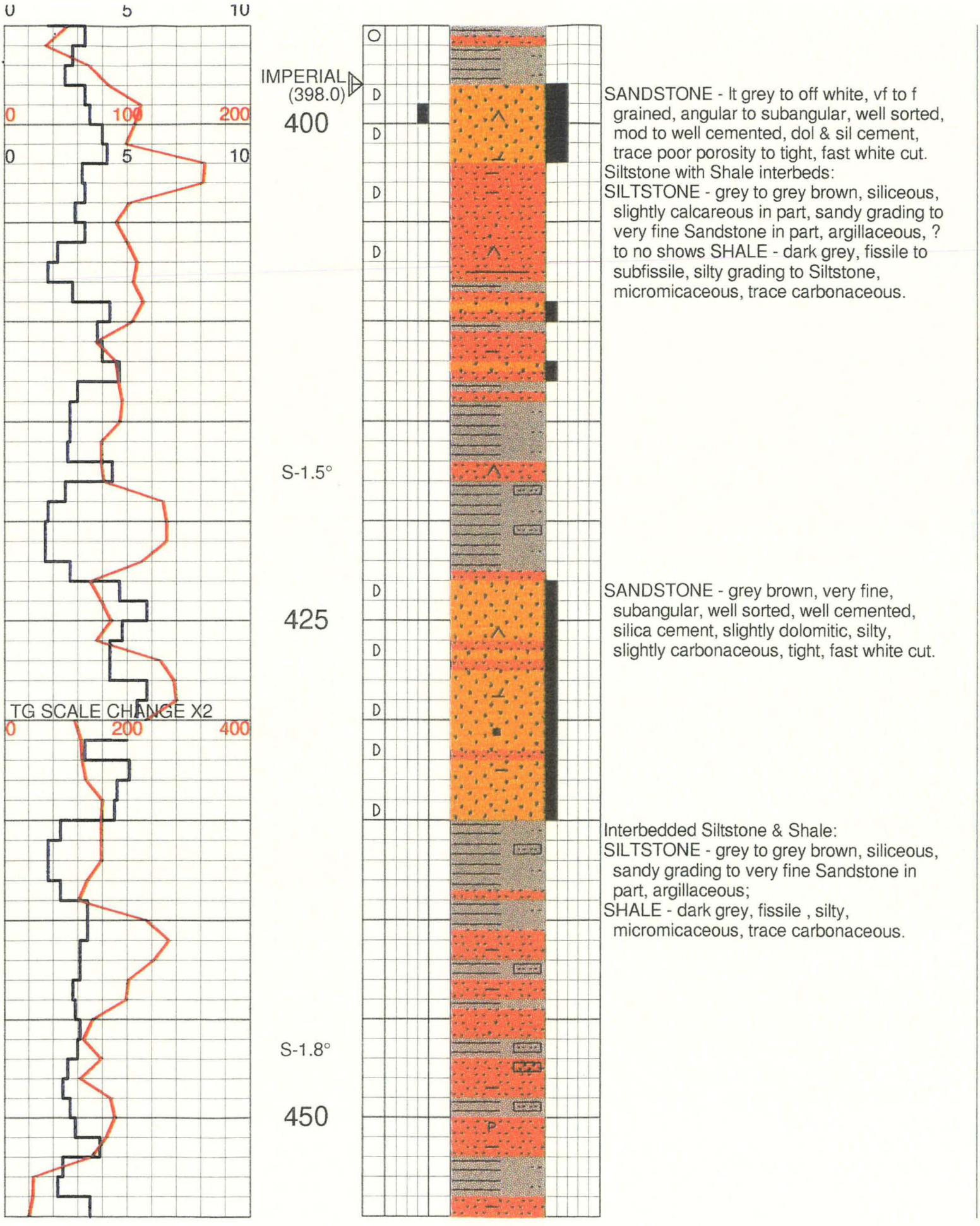
SHALE - dark grey to black, fissile to

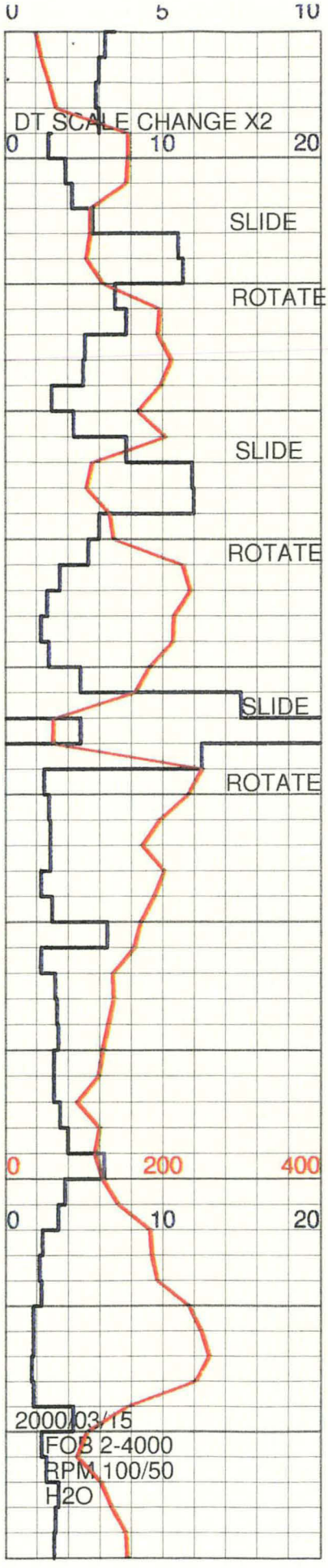


subfissile, platy to splintery in part, carbonaceous, silty to sandy, trace glauconite, micromicaceous, disseminated pyrite;
Minor Siderite interbeds.

Interbedded Siltstone & Shale:
SILTSTONE - medium to dark brown to grey brown, well cemented, argillaceous, slightly calcareous in part, sandy grading to very fine Sandstone in part, trace glauconitic, trace carbonaceous, micromicaceous, disseminated pyrite, tight, fast white cut;
SHALE - dark grey, fissile to subfissile, platy, carbonaceous, silty to sandy, micromicaceous.

Shale with Siltstone interbeds & laminae:
SHALE - dark grey to brown grey, fissile to subfissile, silty grading to Siltstone, carbonaceous, micromicaceous, disseminated pyrite;
SILTSTONE - dark grey brown, well cemented, argillaceous, calcareous in part, slightly sandy, micromicaceous, ? cut.


0
5
10
0
100
200
0
5
10
TG SCALE CHANGE X2
0
200
400
IMPERIAL
(398.0)
400
S-1.5°
425
S-1.8°
450
SANDSTONE - lt grey to off white, vf to f grained, angular to subangular, well sorted, mod to well cemented, dol & sil cement, trace poor porosity to tight, fast white cut.
Siltstone with Shale interbeds:
SILTSTONE - grey to grey brown, siliceous, slightly calcareous in part, sandy grading to very fine Sandstone in part, argillaceous, ? to no shows SHALE - dark grey, fissile to subfissile, silty grading to Siltstone, micromicaceous, trace carbonaceous.
SANDSTONE - grey brown, very fine, subangular, well sorted, well cemented, silica cement, slightly dolomitic, silty, slightly carbonaceous, tight, fast white cut.
Interbedded Siltstone & Shale:
SILTSTONE - grey to grey brown, siliceous, sandy grading to very fine Sandstone in part, argillaceous;
SHALE - dark grey, fissile , silty, micromicaceous, trace carbonaceous.



S-2.0°

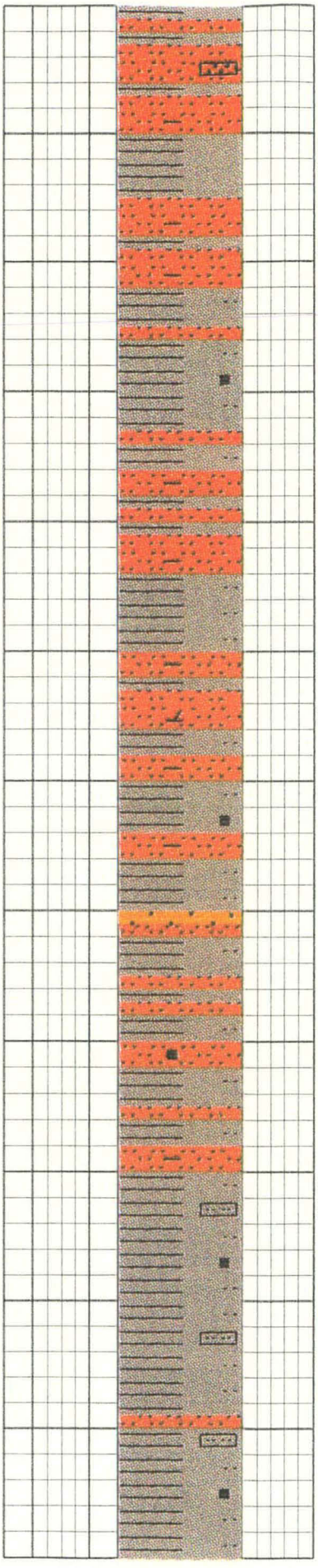
S-1.7°

475

S-1.4°

500

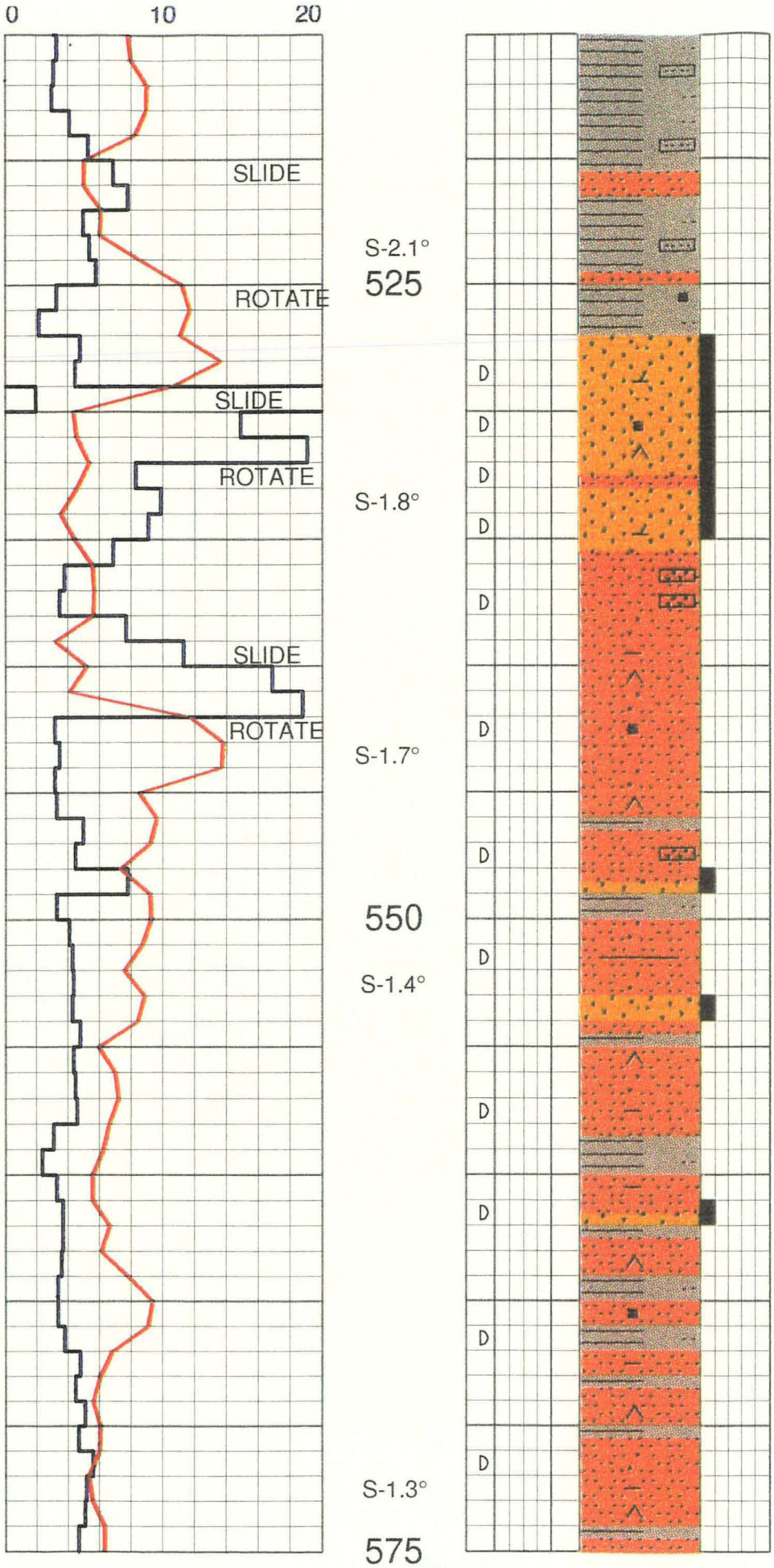
S-2.2°



Shale with Siltstone interbeds:
SHALE - dark grey, fissile to subfissile, blocky , silty, micromicaceous, trace carbonaceous;
SILTSTONE - grey to grey brown, siliceous, sandy grading to very fine Sandstone in part, argillaceous.

Interbedded & interlaminated Shale & Siltstone:
SHALE - dark grey, fissile to subfissile, blocky , silty, micromicaceous, trace carbonaceous;
SILTSTONE - grey to grey brown, siliceous, vey slightly dolomitic, sandy grading to very fine Sandstone in part, trace carbonaceous, argillaceous.

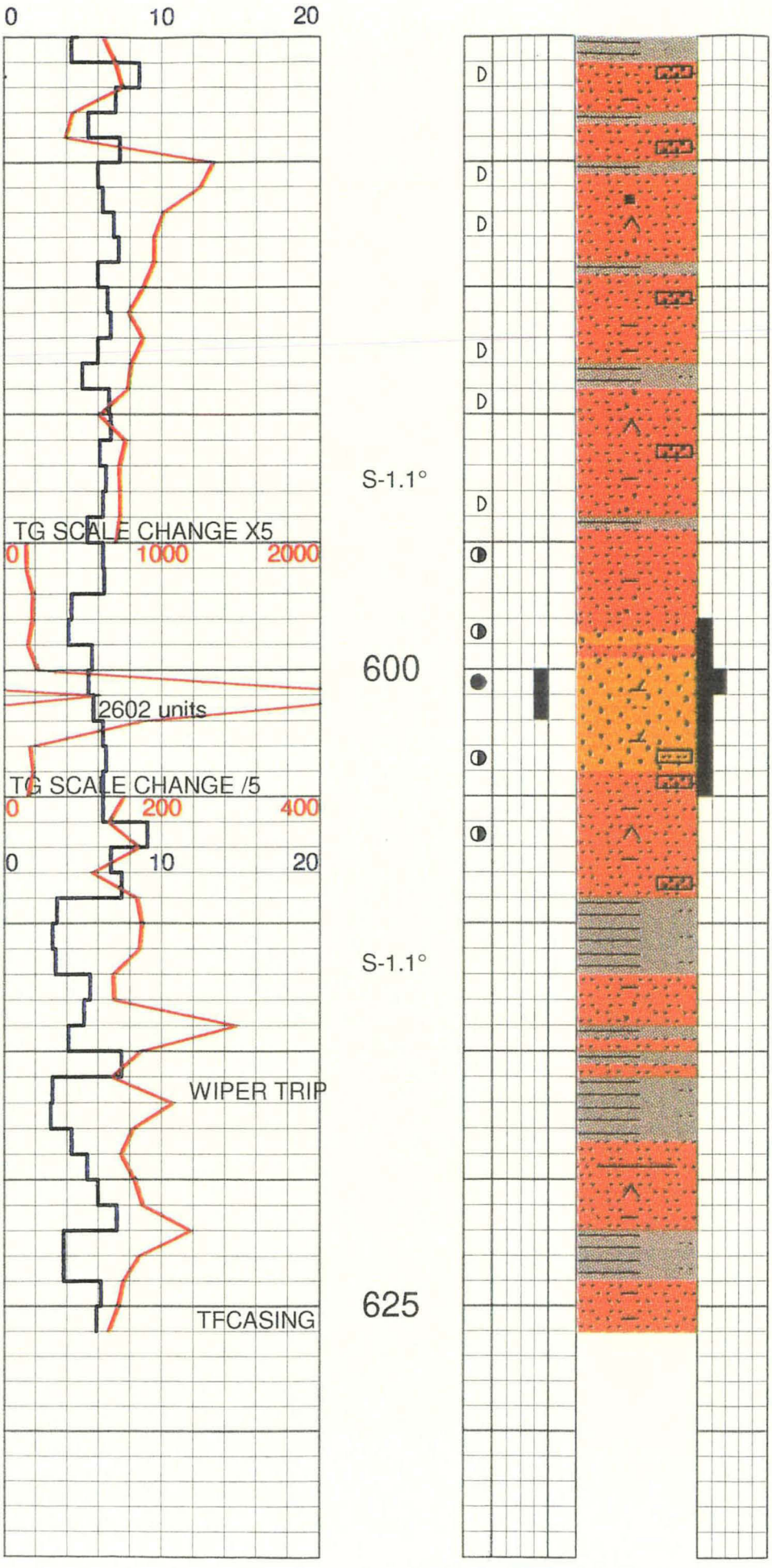
Shale wih Siltstone stringers:
SHALE - dark grey, fissile, silty grading to Siltstone in part, micromicaceous, trace carbonaceous.



SANDSTONE - light grey, silt to very fine Sandstone, subangular, well sorted, well cemented, dolomitic cement, siliceous, trace carbonaceous, tight to trace por porosity, fast white cut.

SILTSTONE - light to medium brownish grey, moderately to well cemented, silica cement, sandy grading to Sandstone in part, argillaceous, slightly carbonaceous, tight, fast white cut.

Interbedded Siltstone, Sandstone & Shale:
SILTSTONE - light to medium brownish grey, moderately to well cemented, silica cement, sandy grading to Sandstone in part, argillaceous, slightly carbonaceous, tight, fast white cut;
SANDSTONE - light to medium grey, very fine grained, subangular, well sorted, moderately cemented, silica cement, silty to highly silty, argillaceous, trace carbonaceous, tight to rare poor porosity, no florescence, fast white cut;
SHALE - dark grey, subfissile to subblocky, silty to highly silty, micromicaceous.

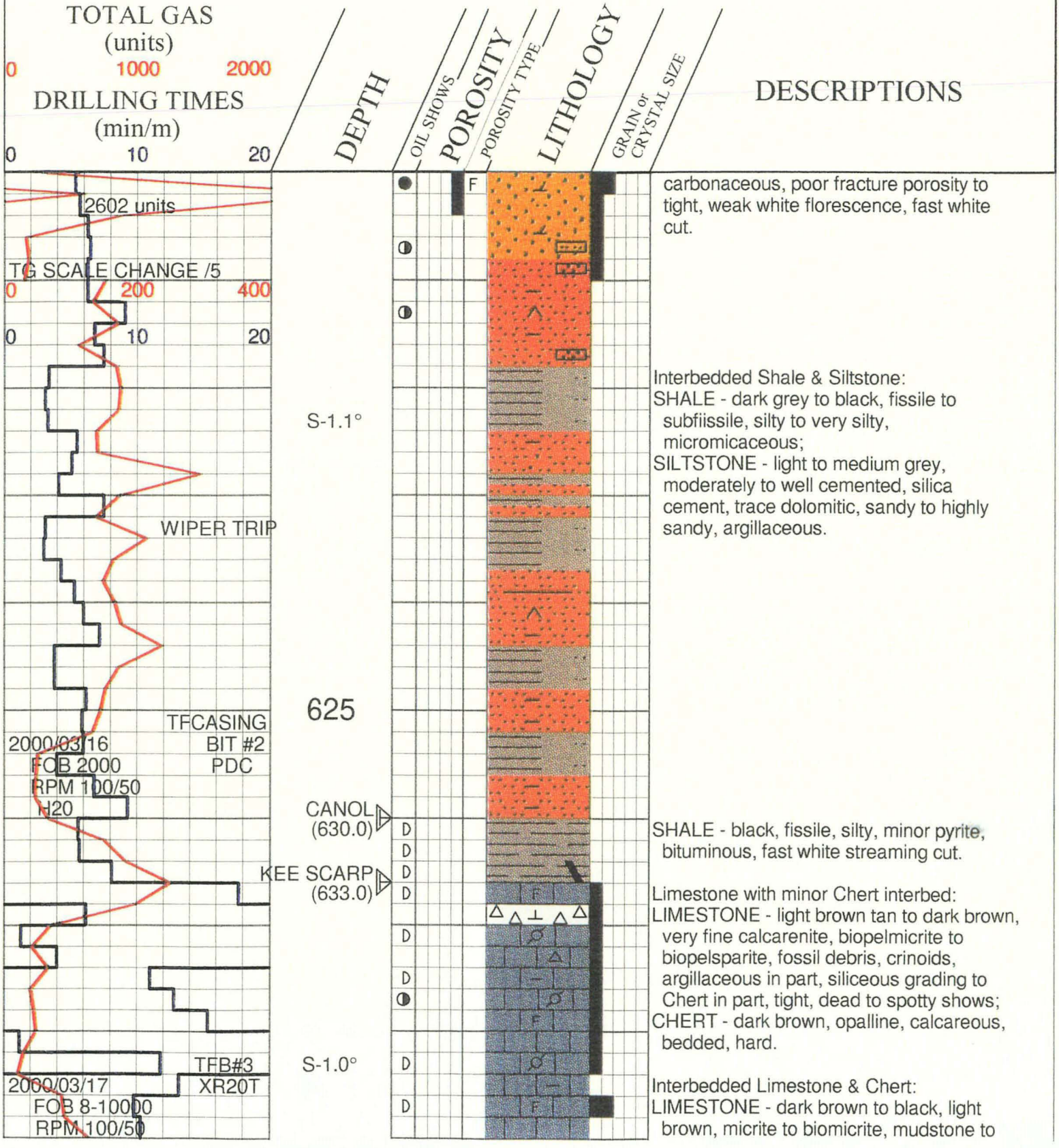


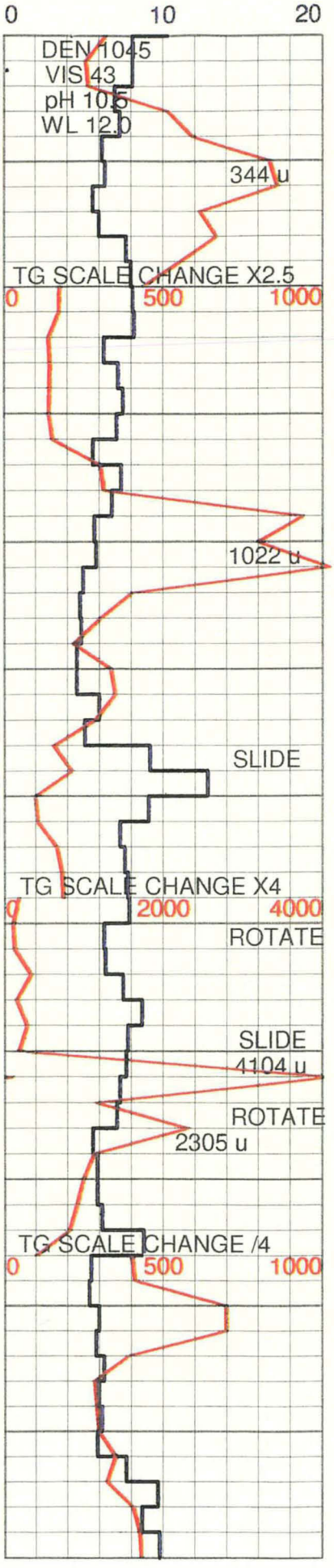
Siltstone with minor Shale interbeds:
SILTSTONE - light to medium brownish grey, moderately to well cemented, silica cement, sandy grading to Sandstone in part, argillaceous, slightly carbonaceous, tight, fast white cut;
SHALE - dark grey, subfissile to subblocky, silty to highly silty, micromicaceous.

Siltstone grading to Sandstone:
SILTSTONE - light to medium grey, moderately to well cemented, silica cement, trace dolomitic, sandy to highly sandy, argillaceous, moderate to fast white cut;
SANDSTONE - light grey, very fine to trace fine grained, subangular, well sorted, moderately to well cemented, dolomitic cement, argillaceous, slightly carbonaceous, poor fracture porosity to tight, weak white florescence, fast white cut.

Interbedded Shale & Siltstone:
SHALE - dark grey to black, fissile to subfiissile, silty to very silty, micromicaceous;
SILTSTONE - light to medium grey, moderately to well cemented, silica cement, trace dolomitic, sandy to highly sandy, argillaceous;

CANSTRAT SYMBOLS USED FOR LITHOLOGY AND SHOWS SCALE 1:240





650

S-1.2°

S-1.7°

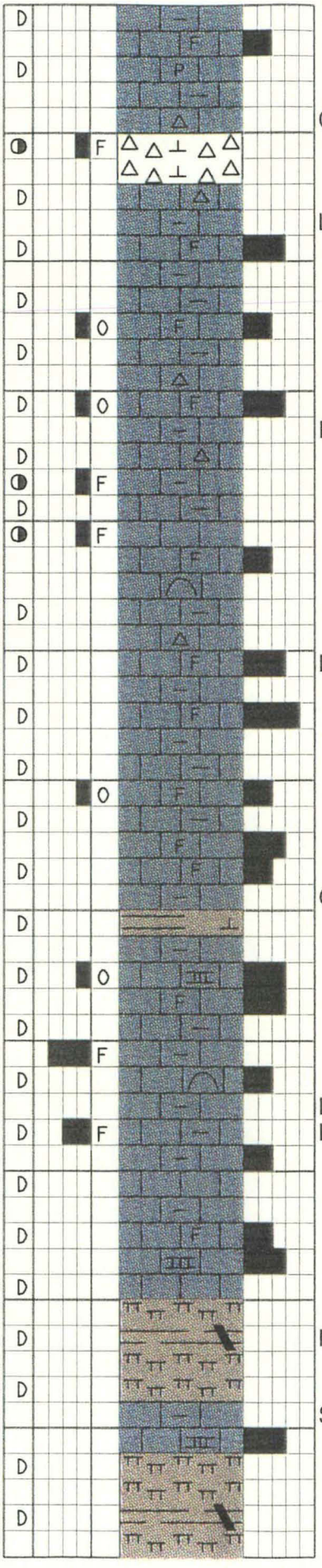
S-2.1°

675

S-1.3°

S-1.1°

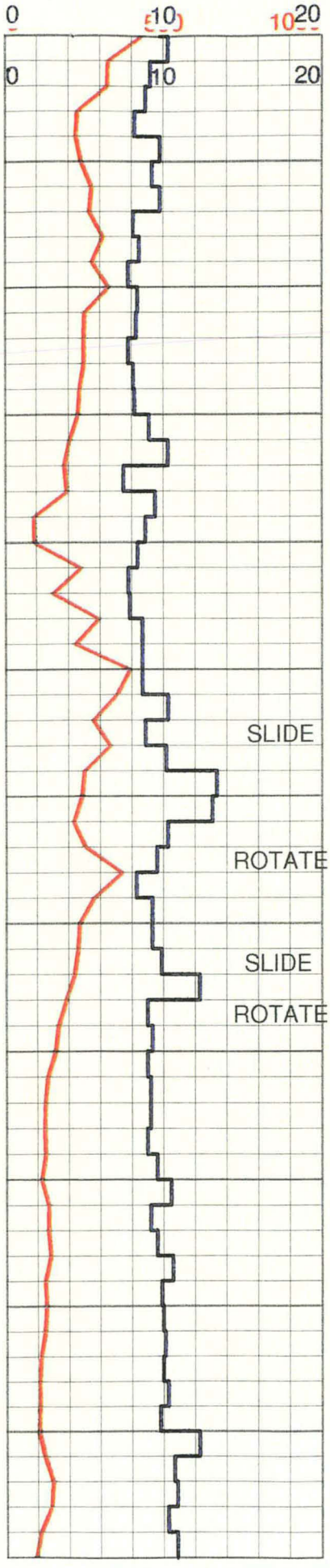
700



wackestone, argillaceous, resinous in part, dense, siliceous grading to Chert in part, trace pyrite, tight to trace fracture porosity, trace pyrobitumen, fast white cut;
CHERT - dark brown to black, opalline in part, calcareous, bedded, hard, fractured with euhedral calcite on rare faces, minor pyrobitumen on calcite crystals.
LIMESTONE - dark brown to black, light brown (allochems?) , micrite to biomicrite, mudstone to wackestone to rudstone? , argillaceous to highly argillaceous, dense, minor pyrobitumen, bituminous, tight to minor fracture porosity, trace poor (3%) chalky porosity, spotty florescence on fracture faces, fast white cut;
Fine to medium euhedral calcite crystals on occasional chips.

LIMESTONE - dark brown to black, light brown (allochems?), micrite to biomicrite, mudstone to wackestone to rudstone?, argillaceous to highly argillaceous grading to Shale in part, dense, minor pyrobitumen, bituminous, tight to fair to good fracture porosity, trace poor (3%) chalky porosity, spotty florescence on fracture faces, fast white cut;
Common loose fine to very coarse euhedral calcite crystals.

Limestone grading to Marlstone to Shale:
LIMESTONE - dark brown to black, light brown (allochems?), micrite to biomicrite, mudstone to wackestone to rudstone?, argillaceous to highly argillaceous grading to Shale in part, dense, minor pyrobitumen, bituminous, tight to minor fracture porosity, spotty florescence on fracture faces, fast white cut;
MARLSTONE - black, highly argillaceous, highly calcareous, well indurated, bituminous;
SHALE - black to dark brown, fissile to subblocky, calcareous, bituminous, firm.



S-2.0°

725

S-1.8°

S-1.1°

750

S-0.6°

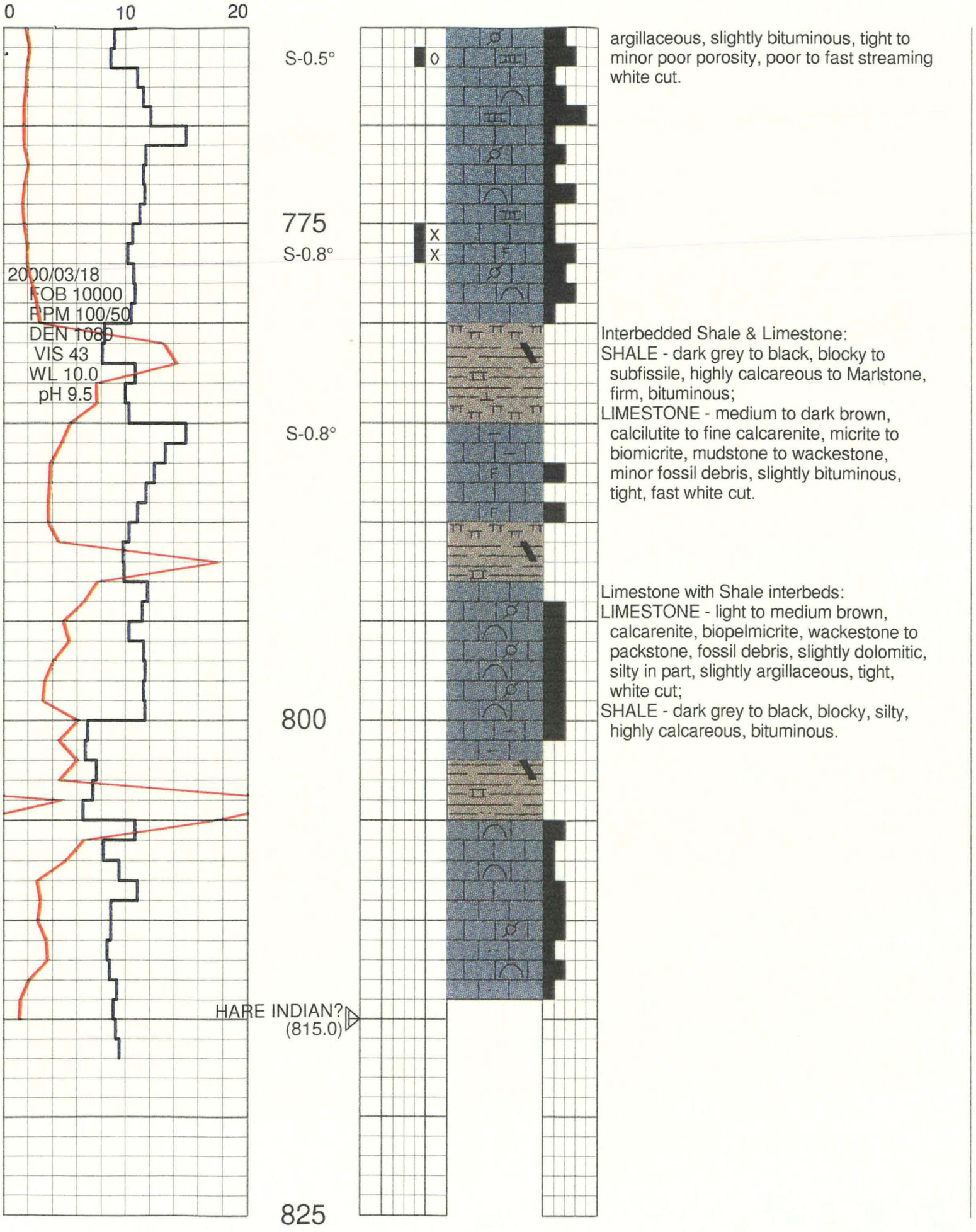
LIMESTONE - light to dark brown, micrite to biomicrite, wackestone to rudstone, stromatoporoids, fossil debris, argillaceous, bituminous, tight to poor (3%) chalky porosity, no florescence, fast white streaming cut.

LIMESTONE - light to dark grey brown, micrite to biomicrite, wackestone to rudstone, stromatoporoids, crinoids, fossil debris, argillaceous, bituminous, tight to poor to fair (3-6%) chalky porosity, no florescence, fast white streaming cut.

Limestone with minor Marlstone:
LIMESTONE - medium grey brown to dark brown, micrite to biomicrite, rudstone, stromatoporoids, fossil debris, argillaceous to highly argillaceous in part, bituminous, tight to minor poor 3% chalky porosity, poor to fast streaming white cut.

LIMESTONE - light to medium brown to dark brown, calcilutite to medium calcarenite, micrite to biopelmicrite, mudstone to wackestone to rudstone, stromatoporoids, fossil debris, slightly dolomitic, slightly argillaceous, slightly bituminous, tight to minor poor porosity, poor to fast streaming white cut.

LIMESTONE - light to medium brown to dark brown, calcilutite to medium calcarenite, micrite to biopelmicrite, mudstone to wackestone to rudstone, stromatoporoids, fossil debris, slightly dolomitic, slightly

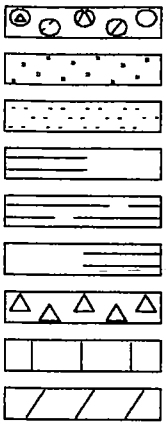


argillaceous, slightly bituminous, tight to minor poor porosity, poor to fast streaming white cut.

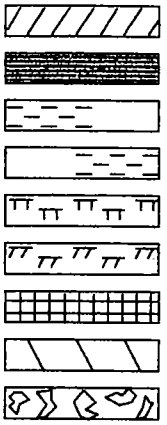
Interbedded Shale & Limestone:
SHALE - dark grey to black, blocky to subfissile, highly calcareous to Marlstone, firm, bituminous;
LIMESTONE - medium to dark brown, calcilutite to fine calcarenite, micrite to biomicrite, mudstone to wackestone, minor fossil debris, slightly bituminous, tight, fast white cut.

Limestone with Shale interbeds:
LIMESTONE - light to medium brown, calcarenite, biopelmicrite, wackestone to packstone, fossil debris, slightly dolomitic, silty in part, slightly argillaceous, tight, white cut;
SHALE - dark grey to black, blocky, silty, highly calcareous, bituminous.

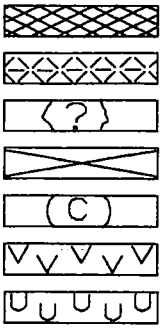
ROCK TYPE



CONGLOMERATE
SANDSTONE
SILTSTONE
SHALE, grey
SHALE, black
SHALE, coloured
CHERT
LIMESTONE
DOLOMITE

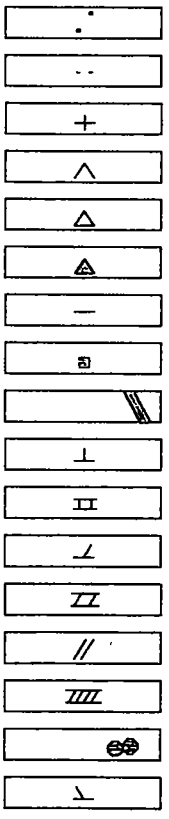


ANHYDRITE
COAL
CLAYSTONE, grey
CLAYSTONE, col
MARLSTONE, calc
MARLSTONE, dol
SALT
SIDERITE, LIMONITE
BRECCIA

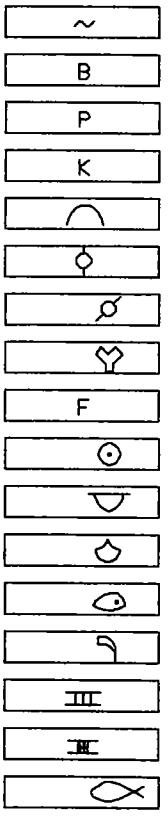


IGNEOUS, basic
IGNEOUS, acidic
CANNOT INTERPRET
NO SAMPLE
CEMENT
TUFF
ULTRABASIC

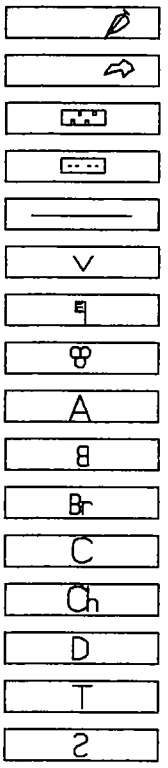
ACCESSORIES



SANDY
SILTY
FELDSPAR
SILICEOUS
CHERTY, light
CHERTY, dark
ARGILLACEOUS
CARBONACEOUS
BITUMENOUS
CALCAREOUS
LIMESTONE strg
DOLOMITIC
DOLOMITE strg
ANHYDRITIC
ANHYDRITE strg
PHOSPHATE pel
FERRUGINOUS



GLAUCONITIC
BENTONITIC
PYRITIC
KAOLINITIC
BIOCLASTIC
OOLITES
PELLETS
INTRACLASTS
FOSSILS
CRINOID
PELECYPOD
BRACHIOPOD
OSTRACOD
CORAL
STROMATOPOROID
AMPHIPORA
FISH REMAINS



PLANT REMAINS
BRECCIA frag
SANDSTONE strg
SILTSTONE strg
SHALE lam
TUFFACEOUS
Heavy, dark Minerals
FORAMINIFERA/Rad
ANTIGORITE
BRUCITE
BRONZITE
CHROMITE
CHRYSOTILE
DUNITE
TALC
SERPENTINE

OIL SHOWS

- EVEN STAINING, FLUORESCES
- SPOTTY STAIN, FLUORESCES
- QUESTIONABLE, NO FLUORESCENCE,
- DEAD, ASPHALTIC

POROSITY TYPES

- X INTERCRYSTALLINE, INTERGRANULAR
- INTEROOLITIC, INTEPELLETOID,
- V VUGGY,
- P PINPOINT,
- MOLDIC
- ORGANIC
- F FRACTURE
- EARTHY
- FENESTRAL

DUNHAM CLASSES

- PK PACKSTONE
- WK WACKESTONE
- MD MUDSTONE
- BD BOUNDSTONE
- GR GRAINSTONE