SIMON PETROLEUM TECHNOLOGY

WELL: 26/4-1

Print: 6483 J Units: (M) F

Length: 25 FT Initials: MC

Top	Bottom	Scale	TD
650	3685	1/500	3690

DIGITAL WIRELINE LOGS PACKAGE
1993
This image may not be used or reproduced without written permission from
SIMON PETROLEUM TECHNOLOGY SPT

COMPLETION LOG

M.101.1

BP PETROLEUM DEVELOPMENT (NORWAY) LTD.

TOTAL/STATOIL

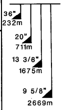
EX kopi.

NOCS 26/4-1

NOCS 26/4-1

COMPOSITE LOG

CASING (LD mbrt)



LATITUDE: 59° 36'37.84"N LONGITUDE: 03° 01'13.26"E

U.T.M. GRID REFERENCE: 501 148.5 E 6 608 189.8 N

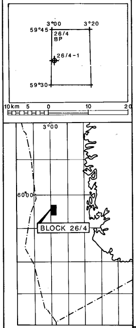
R.T.E.: 23 m A.M.S.L. 144 m A.S.B. WATER DEPTH 121 m

RIG: TREASURE SCOUT SPUDDED: 08.05.87 COMPLETED DRILLING: 09.07.87

TOTAL DEPTH: 3690 m B.R.T.(DD) 3667 m S.S.(DD)

WELL STATUS: PLUGGED AND ABANDONED DRY

LOCATION MAP
SCALE 1:1,000,000



LITHOLOGICAL

- Limestone
- Dolomite
- Misc Carbonate
- Dolomitic Limestone
- Calcareous Dolomite
- Clay, Mudstone, Shale (LT 70)
- Siltstone
- Sandstone, Sand
- Conglomerate, Gravel
- Siliceous Rock
- Coal, Lignite & other Carbonaceous Rock
- Anhydrite, Gypsum
- Halite
- Miscellaneous Chlorides and Sulphates
- Iron, Manganese, Phosphate and other Misc. Mins.
- Chert
- Extrusive Igneous
- Tuff
- Intrusive Igneous
- Metamorphic
- Cement (LT 110)
- No Samples

LITHOLOGICAL QUALIFIERS

- Clayey
- Sandy
- Silty
- Gravelly
- Calcareous
- Dolomitic
- Significant Glauconite
- Significant Carb Frags
- Phosphatic, Ferruginous Manganiferrous
- Bituminous
- Tuffaceous

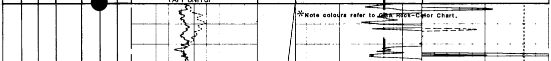
GRAIN TYPE FOSSILIFEROUS: SKELETA

- Benthonic Macrofossils
- Planktonic Macrofossils
- Benthonic Microfossils
- Planktonic Microfossils
- Plant remains

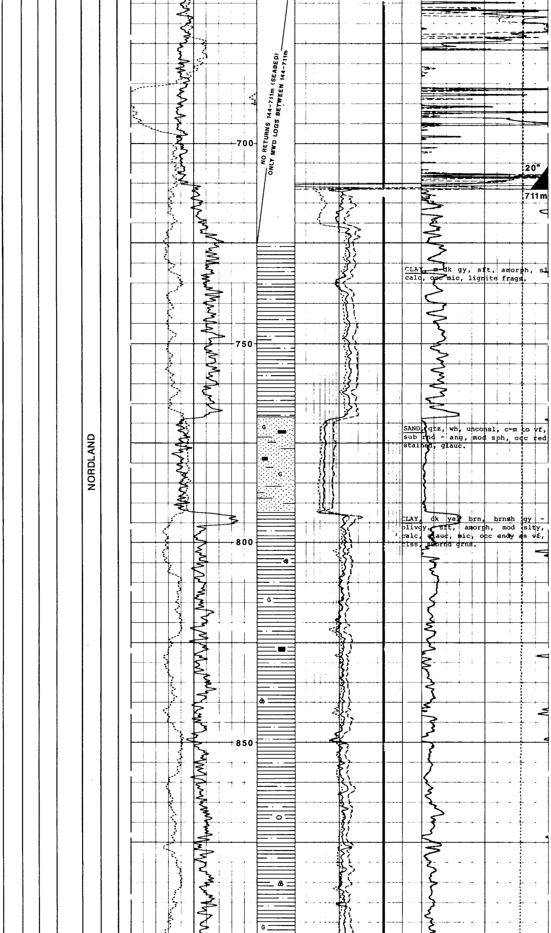
WELL SYMBOLS

- Water Flow
- Loss to Formation
- Gas Trace
- Gas Show
- ● Oil Show
- Gas & Condensate Show
- Oil and Gas Show
- ◊ Hydrocarbon Fluorescence
- Cored Interval
- Sidewall Core
- No Recovery
- Formation Interval Test
- Drill Stem Test
- Perforated Interval
- Casing Shoe
- Liner Hanger

CHRONOSTRAT			DEPTH OF BOUNDARIES	LITHOSTRAT			LOG SCALES	DEPTH (m)	LITHO LOG	CORES	SHOWS	TESTS	DESCRIPTION AND REMARKS*	CASING
SYSTEM	SERIES	STAGE		GROUP	FORMATION	MEMBER	SP – MV + -80 20 GAMMA RAY 0 Above 2669m 100 0 Below 2669m 150 (API UNITS)		1:500	ILD (OHMM) .2 20 ILM (OHMM) .2 20 SFLU (OHMM) .2 20			Δt (μs/ft) 150 Above 2669m 50 140 Below 2669m 40	



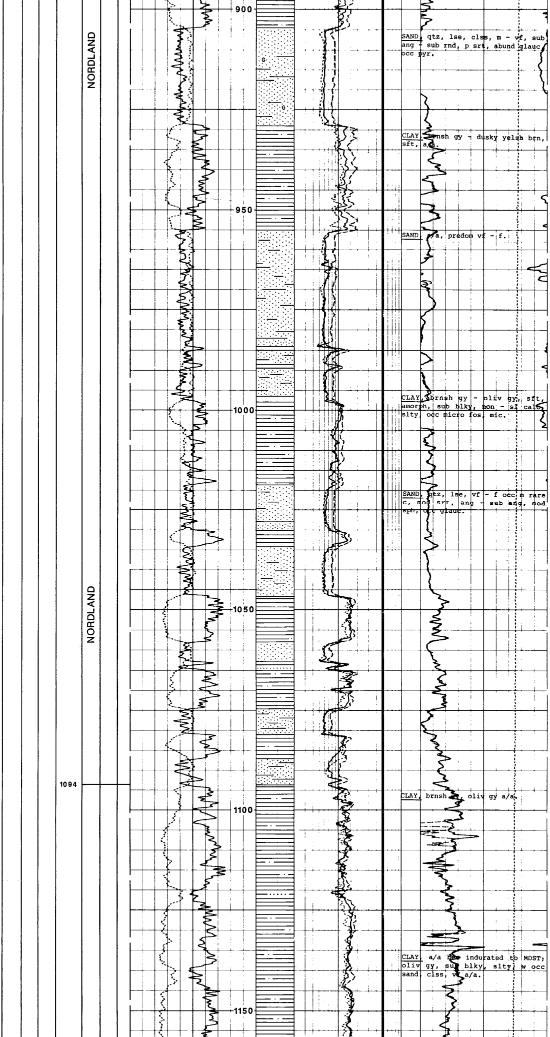
*Note colours refer to GSA Rock-Color Chart.



CLAY, m-dk gy, sft, amorph, sl
calc, occ mic, lignite frags.

SAND, qtz, wh, unconsl, c-m to vf,
sub rnd - ang, mod sph, occ red
stained, glauc.

CLAY, dk yel brn, brnsh gy -
olivgy, sft, amorph, mod slty,
calc, glauc, mic, occ sndy as vf,
clss, sbrnd grns.



SAND, qtz, lse, clss, m - vf, sub ang - sub rnd, p srt, abund glauc, occ pyr.

CLAY, brnsh gy - dusky yelsh brn, sft, a/a.

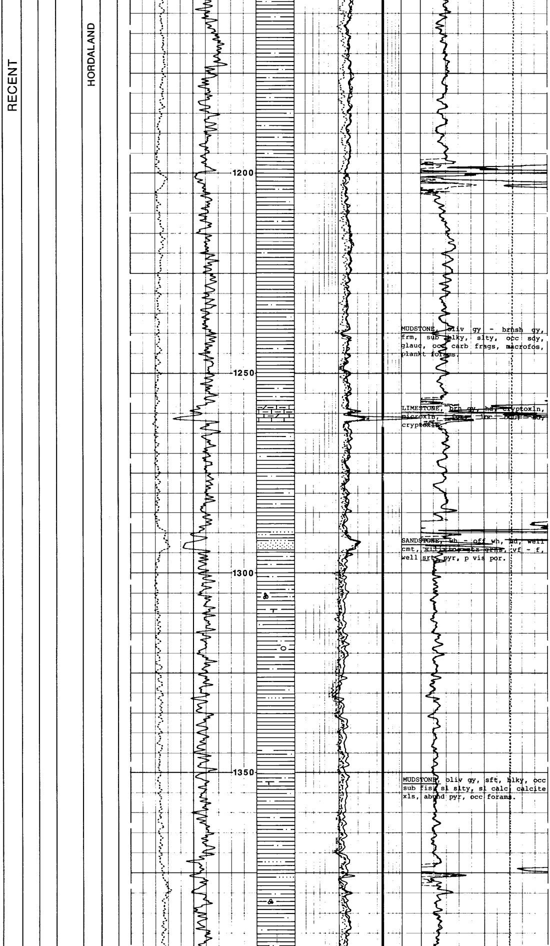
SAND, a/a, predom vf - f.

CLAY, brnsh gy - oliv gy, sft, amorph, sub blky, non - sl calc, slty, occ micro fos, mic.

SAND, qtz, lse, vf - f occ m rare c, mod srt, ang - sub ang, mod sph, occ glauc.

CLAY, brnsh gy, oliv gy a/a.

CLAY, a/a bec indurated to MDST; oliv gy, sub blky, slty, w occ sand, clss, vf a/a.

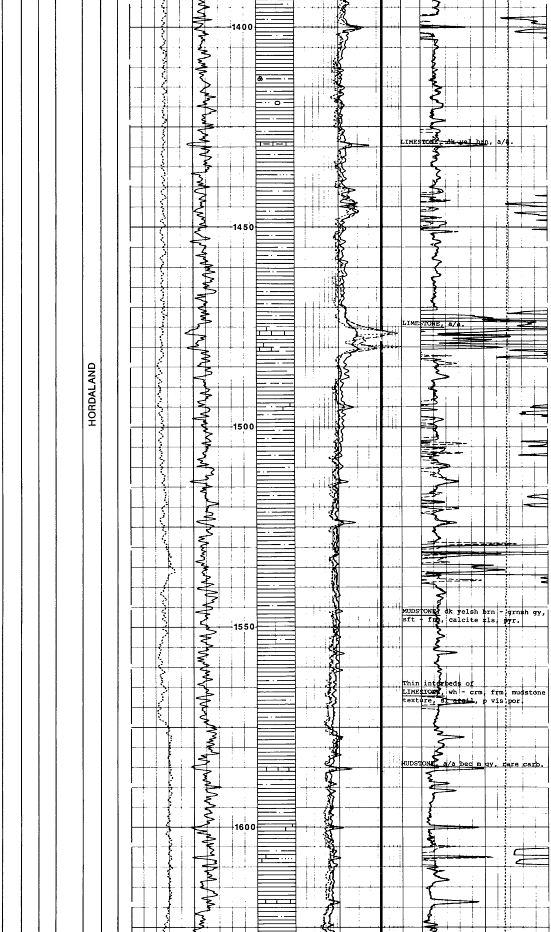


MUDSTONE, oliv gy - brnsh gy, frm, sub blky, slty, occ sdy, glauc, occ carb frags, macrofos, plankt forams.

LIMESTONE, brn gy, hd, cryptoxln, microxln, [illegible] loc [illegible] hd, cryptoxln.

SANDSTONE, wh - off wh, hd, well cmt, [illegible] qtz grns, vf - f, well srt, pyr, p vis por.

MUDSTONE, oliv gy, sft, blky, occ sub fis, sl slty, sl calc, calcite xls, abund pyr, occ forams.



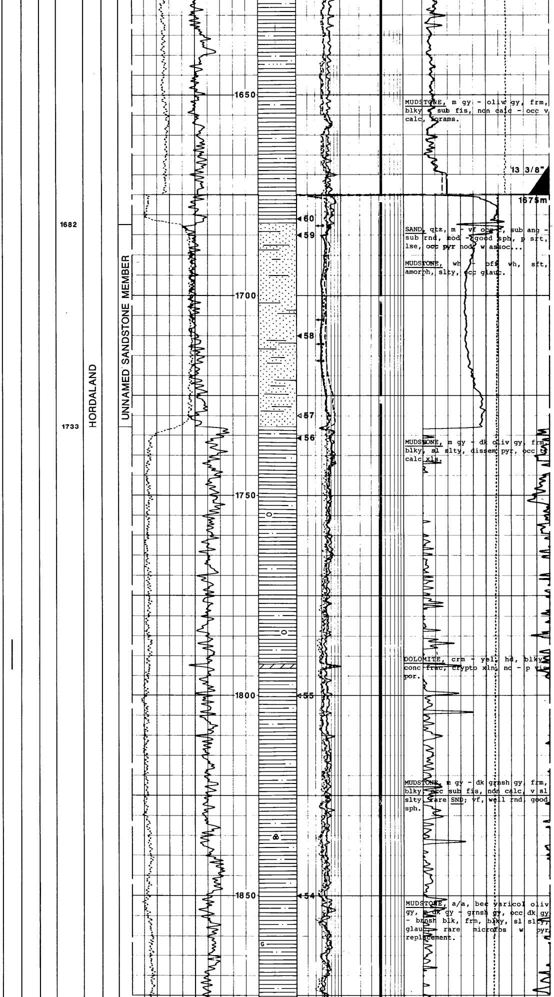
LIMESTONE, dk yel brn, a/a.

LIMESTONE, a/a.

MUDSTONE, dk yelsh brn - grnsh gy, sft - frm, calcite xls, pyr.

Thin interbeds of LIMESTONE, wh - crm, frm, mudstone texture, sl argil, p vis por.

MUDSTONE, a/a bec m gy, rare carb.



MUDSTONE, m gy - oliv gy, frm, blky - sub fis, non calc - occ v calc, forams.

SAND, qtz, m - vf occ c, sub ang - sub rnd, mod - good sph, p sft, lse, occ pyr nod, w assoc...

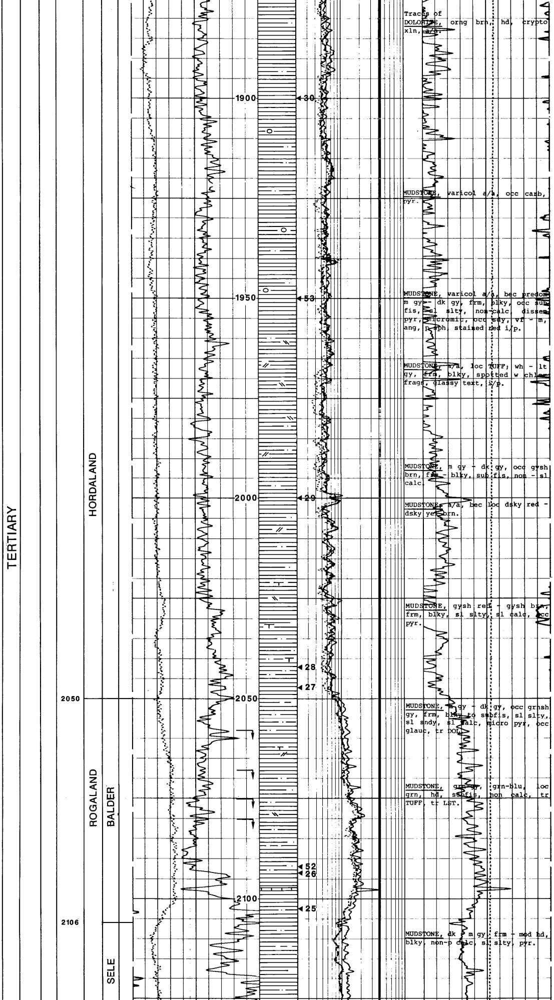
MUDSTONE, wh - off wh, sft, amorph, slty, occ glauc.

MUDSTONE, m gy - dk oliv gy, frm, blky, sl slty, dissem pyr, occ t calc xls.

DOLOMITE, crm - yel, hd, blky, conc frac, crypto xln, no - p vis por.

MUDSTONE, m gy - dk grnsh gy, frm, blky, occ sub fis, non calc, v sl slty, rare SND; vf, well rnd, good sph.

MUDSTONE, a/a, bec varicol oliv gy, m dk gy - grnsh gy, occ dk gy - brnsh blk, frm, blky, sl slty, glauc, rare microfos w pyr replacement.



Traces of DOLOMITE, orng brn, hd, crypto xln, a/a.

MUDSTONE, varicol a/a, occ carb, pyr.

MUDSTONE, varicol a/a, bec predom m gy - dk gy, frm, blky, occ sub fis, sl slty, non-calc, dissem pyr, micromic, occ sdy, vf - m, ang, p sph, stained red i/p.

MUDSTONE, a/a, loc TUFF; wh - lt gy, frm, blky, spotted w chlor frags, glassy text, i/p.

MUDSTONE, m gy - dk gy, occ gysh brn, frm - blky, sub fis, non - sl calc.

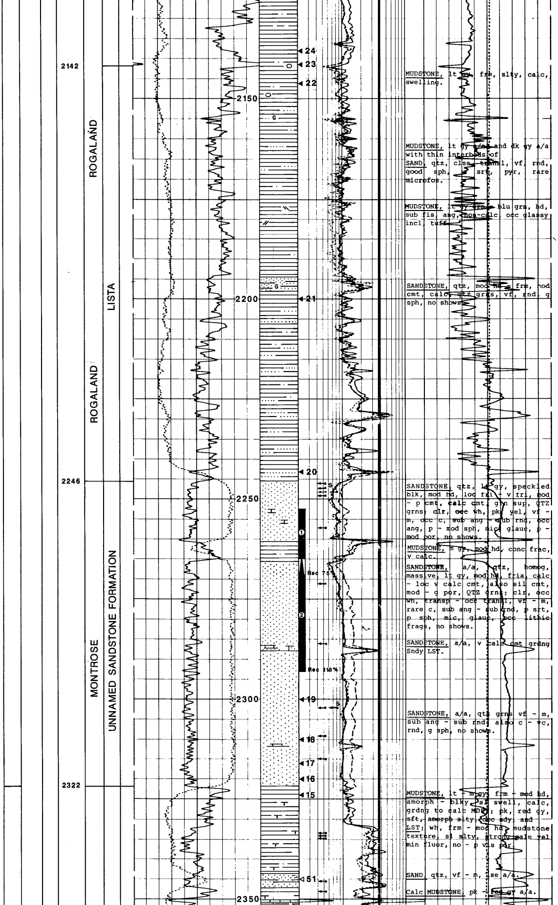
MUDSTONE, a/a, bec loc dsky red - dsky yel brn.

MUDSTONE, gysh red - gysh brn, frm, blky, sl slty, sl calc, occ pyr.

MUDSTONE, m gy - dk gy, occ grnsh gy, frm, blky to subfis, sl slty, sl sndy, sl calc, micro pyr, occ glauc, tr DOL.

MUDSTONE, grn-gy, grn-blu, loc grn, hd, subfis, non calc, tr TUFF, tr LST.

MUDSTONE, dk - m gy, frm - mod hd, blky, non-p calc, sl slty, pyr.



MUDSTONE, lt gy, frm, slty, calc, swelling.

MUDSTONE, lt gy a/a and dk gy a/a with thin interbeds of SAND, qtz, clss, transl, vf, rnd, good sph, w srt, pyr, rare microfos.

MUDSTONE, lt gy grn - blu grn, hd, sub fis, ang, non-calc, occ glassy incl, tuff.

SANDSTONE, qtz, mod hd - frm, mod cmt, calc, qtz grns, vf, rnd, g sph, no shows.

SANDSTONE, qtz, lt gy, speckled blk, mod hd, loc fri - v fri, mod - p cmt, calc cmt, grn sup, QTZ grns; clr, occ wh, pk, yel, vf - m, occ c, sub ang - sub rnd, occ ang, p - mod sph, mic, glauc, p - mod por, no shows.

MUDSTONE, m gy, mod hd, conc frac, v calc.

SANDSTONE, a/a, qtz, homog, massive, lt gy, mod hd, fria, calc - loc v calc cmt, also sil cmt, mod - g por, QTZ grns; clr, occ wh, transp - occ transl, vf - m, rare c, sub ang - sub rnd, p srt, p sph, mic, glauc, occ lithic frags, no shows.

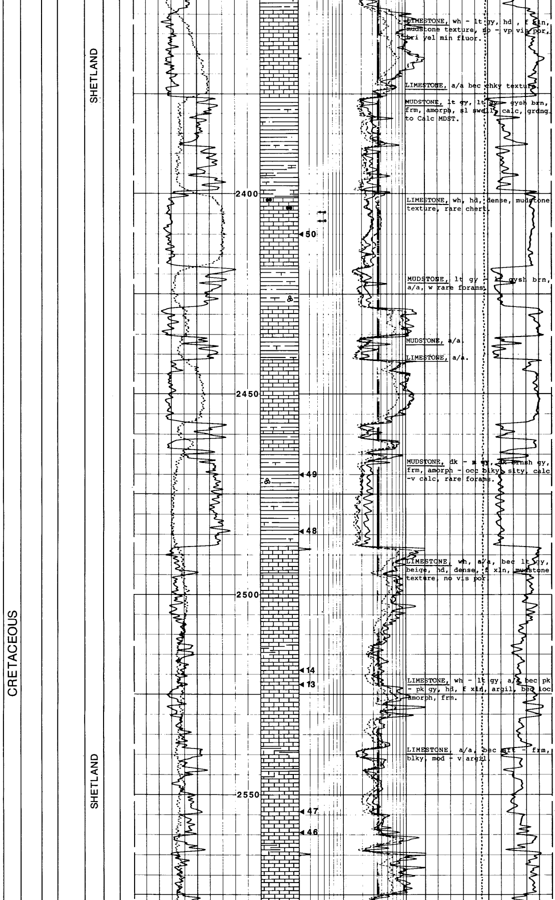
SANDSTONE, a/a, v calc cmt grdng Sndy LST.

SANDSTONE, a/a, qtz grns vf - m, sub ang - sub rnd, also c - vc, rnd, g sph, no shows.

MUDSTONE, lt - m gy, frm - mod hd, amorph - blky, sl swell, calc, grdng to calc MDST; pk, red gy, sft, amorph slty, occ sdy, and LST; wh, frm - mod hd, mudstone texture, sl slty, strong pale yel min fluor, no - p vis por.

SAND, qtz, vf - m, lse a/a.

Calc MUDSTONE, pk - red gy a/a.



LIMESTONE, wh - lt gy, hd , f xln, mudstone texture, no - vp vis por, bri yel min fluor.

LIMESTONE, a/a bec chky texture.

MUDSTONE, lt gy, lt gy - gysh brn, frm, amorph, sl swell, calc, grdng to Calc MDST.

LIMESTONE, wh, hd, dense, mudstone texture, rare chert.

MUDSTONE, lt gy - lt gysh brn, a/a, w rare forams.

MUDSTONE, a/a.

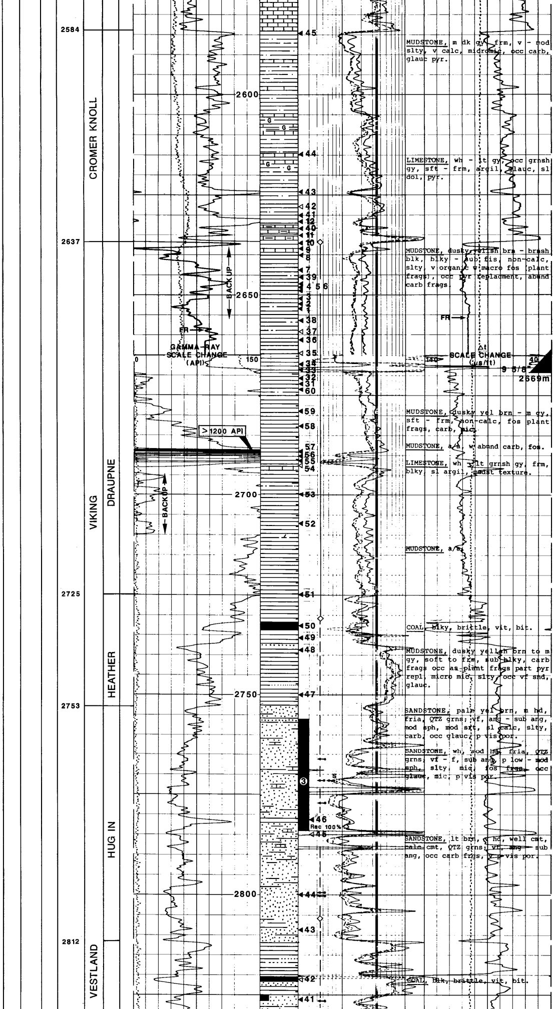
LIMESTONE, a/a.

MUDSTONE, dk - m gy, dk brnsh gy, frm, amorph - occ blky, slty, calc -v calc, rare forams.

LIMESTONE, wh, a/a, bec lt gy, beige, hd, dense, f xln, mudstone texture, no vis por.

LIMESTONE, wh - lt gy, a/a bec pk - pk gy, hd, f xln, argil, bec loc amorph, frm.

LIMESTONE, a/a, bec sft - frm, blky, mod - v argil.



MUDSTONE, m dk gy, frm, v - mod slty, v calc, micromic, occ carb, glauc pyr.

LIMESTONE, wh - lt gy, occ grnsh gy, sft - frm, argil, glauc, sl dol, pyr.

MUDSTONE, dusky yelish brn - brnsh blk, blky - sub fis, non-calc, slty, v organic w macro fos (plant frags), occ pyr replacment, abund carb frags.

MUDSTONE, dusky yel brn - m gy, sft - frm, non-calc, fos plant frags, carb, mic.

MUDSTONE, a/a, w abund carb, fos.

LIMESTONE, wh - lt grnsh gy, frm, blky, sl argil, mdst texture.

MUDSTONE, a/a.

COAL, blky, brittle, vit, bit.

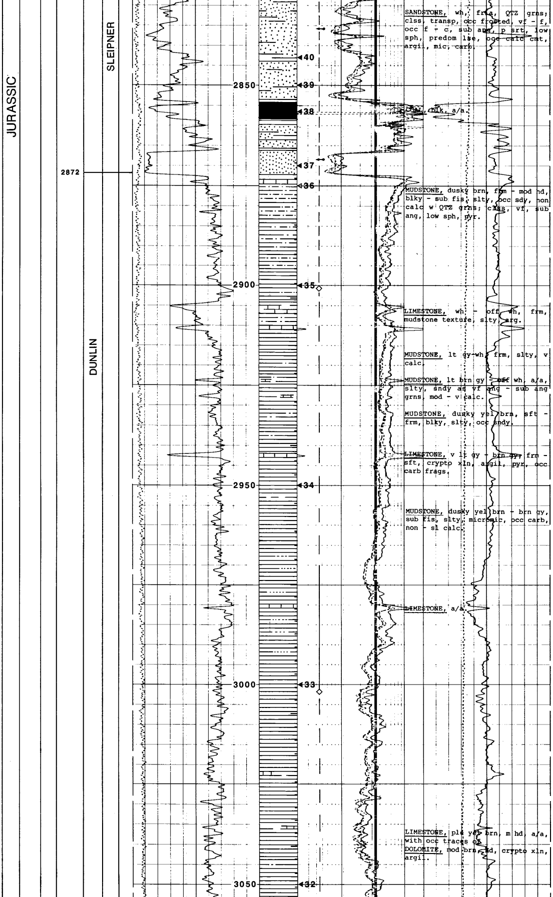
MUDSTONE, dusky yellsh brn to m gy, soft to frm, sub blky, carb frags occ as plant frags part pyr repl, micro mic, slty, occ vf snd, glauc.

SANDSTONE, pale yel brn, m hd, fria, QTZ grns; vf, ang - sub ang, mod sph, mod srt, sl calc, slty, carb, occ glauc, p vis por.

SANDSTONE, wh, mod hd, fria, QTZ grns; vf - f, sub ang, p low - mod sph, slty, mic, fos frgs, occ glauc, mic, p vis por.

SANDSTONE, lt brn, v hd, well cmt, calc cmt, QTZ grns; vf, ang - sub ang, occ carb frgs, v p vis por.

COAL, blk, brittle, vit, bit.



SANDSTONE, wh, fria, QTZ grns; clss, transp, occ frosted, vf - f, occ f - c, sub ang, p srt, low sph, predom lse, occ calc cmt, argil, mic, carb.

COAL, blk, a/a.

MUDSTONE, dusky brn, frm - mod hd, blky - sub fis, slty, occ sdy, non calc w QTZ grns; clss, vf, sub ang, low sph, pyr.

LIMESTONE, wh - off wh, frm, mudstone texture, slty, arg.

MUDSTONE, lt gy-wh, frm, slty, v calc.

MUDSTONE, lt brn gy - off wh, a/a, slty, sndy as vf ang - sub ang grns, mod - v calc.

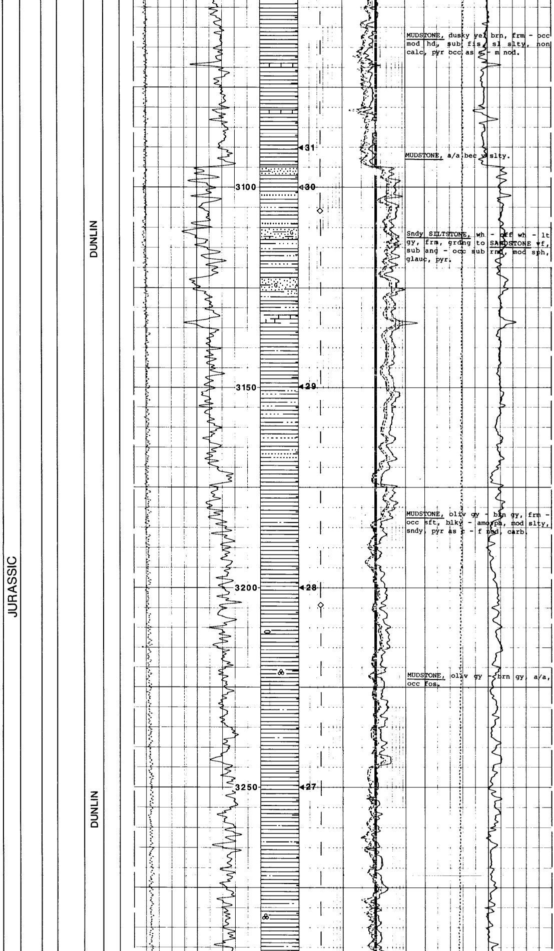
MUDSTONE, dusky yel brn, sft - frm, blky, slty, occ sndy.

LIMESTONE, v lt gy - brn gy, frm - sft, crypto xln, argil, pyr, occ carb frags.

MUDSTONE, dusky yel brn - brn gy, sub fis, slty, micromic, occ carb, non - sl calc.

LIMESTONE, a/a.

LIMESTONE, plo yel brn, m hd, a/a, with occ traces of DOLOMITE, mod brn, hd, crypto xln, argil.



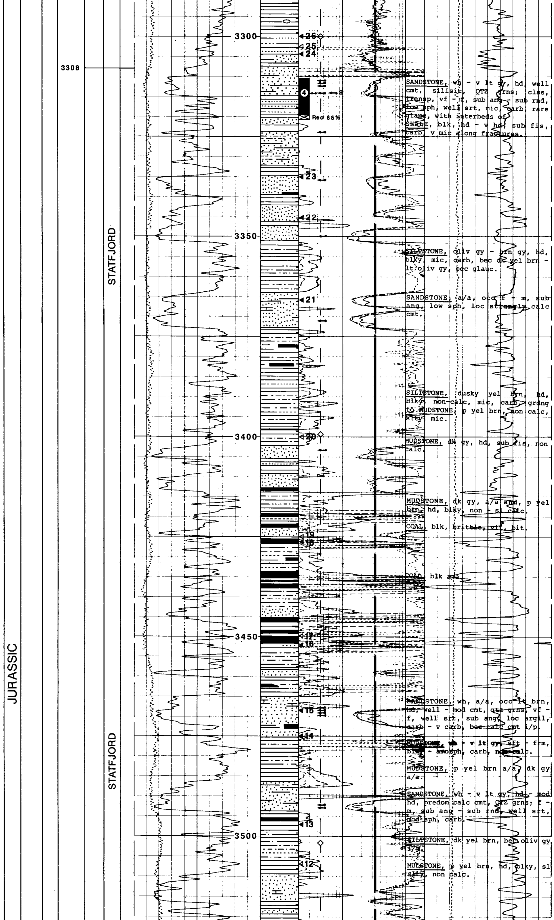
MUDSTONE, dusky yel brn, frm - occ mod hd, sub fis, sl slty, non calc, pyr occ as c - m nod.

MUDSTONE, a/a bec v slty.

Sndy SILTSTONE, wh - off wh - lt gy, frm, grdng to **SANDSTONE** vf, sub ang - occ sub rnd, mod sph, glauc, pyr.

MUDSTONE, oliv gy - brn gy, frm - occ sft, blky - amorph, mod slty, sndy, pyr as c - f nod, carb.

MUDSTONE, oliv gy - brn gy, a/a, occ fos.



SANDSTONE, wh - v lt gy, hd, well cmt, silisic, QTZ grns; clss, transp, vf - f, sub ang - sub rnd, low sph, well srt, mic, carb, rare glauc, with interbeds of SHALE, blk, hd - v hd, sub fis, carb, v mic along fractures.

SILTSTONE, oliv gy - brn gy, hd, blky, mic, carb, bec dk yel brn - lt oliv gy, occ glauc.

SANDSTONE, a/a, occ f - m, sub ang, low sph, loc strongly calc cmt.

SILTSTONE, dusky yel brn, hd, blky, non-calc, mic, carb, grdng to MUDSTONE, p yel brn, non calc, slty, mic.

MUDSTONE, dk gy, hd, sub fis, non calc.

MUDSTONE, dk gy, a/a and, p yel brn, hd, blky, non - sl calc.

COAL, blk, brittle, vit, bit.

COAL, blk a/a.

SANDSTONE, wh, a/a, occ lt brn, hd, well - mod cmt, qtz grns, vf - f, well srt, sub ang, loc argil, carb - v carb, bec calc cmt i/p.

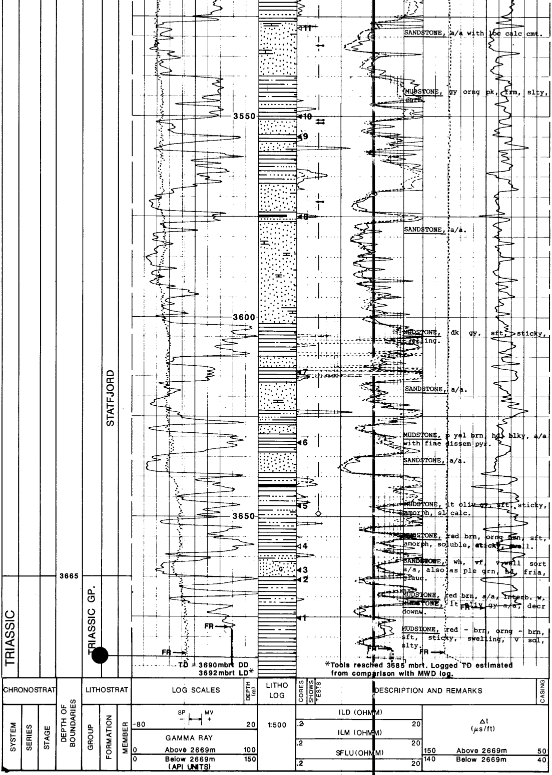
MUDSTONE, wh - v lt gy, sft - frm, blky - amorph, carb, non-calc.

MUDSTONE, p yel brn a/a, dk gy a/a.

SANDSTONE, wh - v lt gy, hd - mod hd, predom calc cmt, QTZ grns; f - m, sub ang - sub rnd, well srt, mod sph, carb.

SILTSTONE, dk yel brn, bec oliv gy a/a.

MUDSTONE, p yel brn, hd, blky, sl slty, non calc.



TESTS
RFT tests

RUN & NO	DEPTH (LD mbrt)	PRESSURE (psig)	COMMENTS
2A - 1	1683.4 m	-	Dry Test
" - 2	1716.0 m	2478.6	Good Test
" - 3	1712.0 m	2472.7	Good Test
" - 4	1706.1 m	2464.3	Good Test
" - 5	2249.0 m	3268.3	Good Test
" - 6	2248.1 m	3266.3	Good Test
" - 7	2246.0 m	3265.1	Good Test
" - 8s	2247.0 m	3265.7	Good Test, 1 gal sample
3B - 1	2248.0 m	3273.3	Good Test
" - 2	2257.0 m	3285.5	Good Test
" - 3	2271.0 m	3305.4	Good Test

" - 4	2286.0 m	3326.5	Good Test
" - 5	2302.0 m	3349.1	Good Test
" - 6	2309.0 m	3358.6	Good Test
" - 7	2315.0 m	3367.4	Good Test
" - 8	2334.5 m	-	Dry Test
" - 9	2334.0 m	-	Dry Test
" - 10	2333.5 m	-	Dry Test
" - 11	2348.0 m	-	Dry Test
" - 12	2345.5 m	3420.6	Good Test
" - 13	2406.0 m	-	Dry Test
" - 14	2404.5 m	-	Dry Test
" - 15a	2302.0 m	3347.7	Good Test, Sample
4C - 1	2766.0 m	4039.5	Poor Perm., Supercharged?
" - 2	2771.5 m	4038.0	Good Permeability
" - 3	2777.1 m	4045.0	Good Permeability
" - 4	2800.0 m	-	Dry Test
" - 5	2799.4 m	4071.0	Good Permeability
" - 6	2835.5 m	4124.0	Good Permeability
" - 7	2868.1 m	4186.0	Good Permeability
" - 8	2826.5 m	4121.0	Good Permeability
" - 9	3311.5 m	-	Seal Failure
" - 10	3312.0 m	5488.0	Poor Perm., Supercharged?
" - 11	3336.0 m	5495.0	Moderate Permeability
" - 12	3350.0 m	5494.5	Good Test
" - 13	3371.0 m	5526.0	Good Permeability
" - 14	3403.5 m	5669.0	Good Test
" - 15	3469.5 m	-	Seal Failure
" - 16	3468.6 m	-	Dry Test
" - 17	3469.0 m	-	Seal Failure
" - 18	3468.8 m	-	Seal Failure
" - 19	3492.1 m	-	Seal Failure
" - 20	3492.9 m	5840.0	Good Test
" - 21	3532.0 m	-	Seal Failure
" - 22	3551.0 m	-	Dry Test
" - 23	3551.6 m	6139.0	Supercharged?
" - 24	3571.1 m	5970.0	Good Test
" - 25			No Test
" - 26	3314.1 m	5467.0	Good Test
" - 27	3314.1 m	-	Seal Failure
" - 28s	3314.1 m	5469.0	1 gallon sample
" - 29	3324.0 m	5635.0	Seal Failure
" - 30	3310.9 m	5484.0	Poor Permeability
" - 31s	2771.5 m	4040.0	2.75 gallon sample

DST tests

No DST tests were performed.