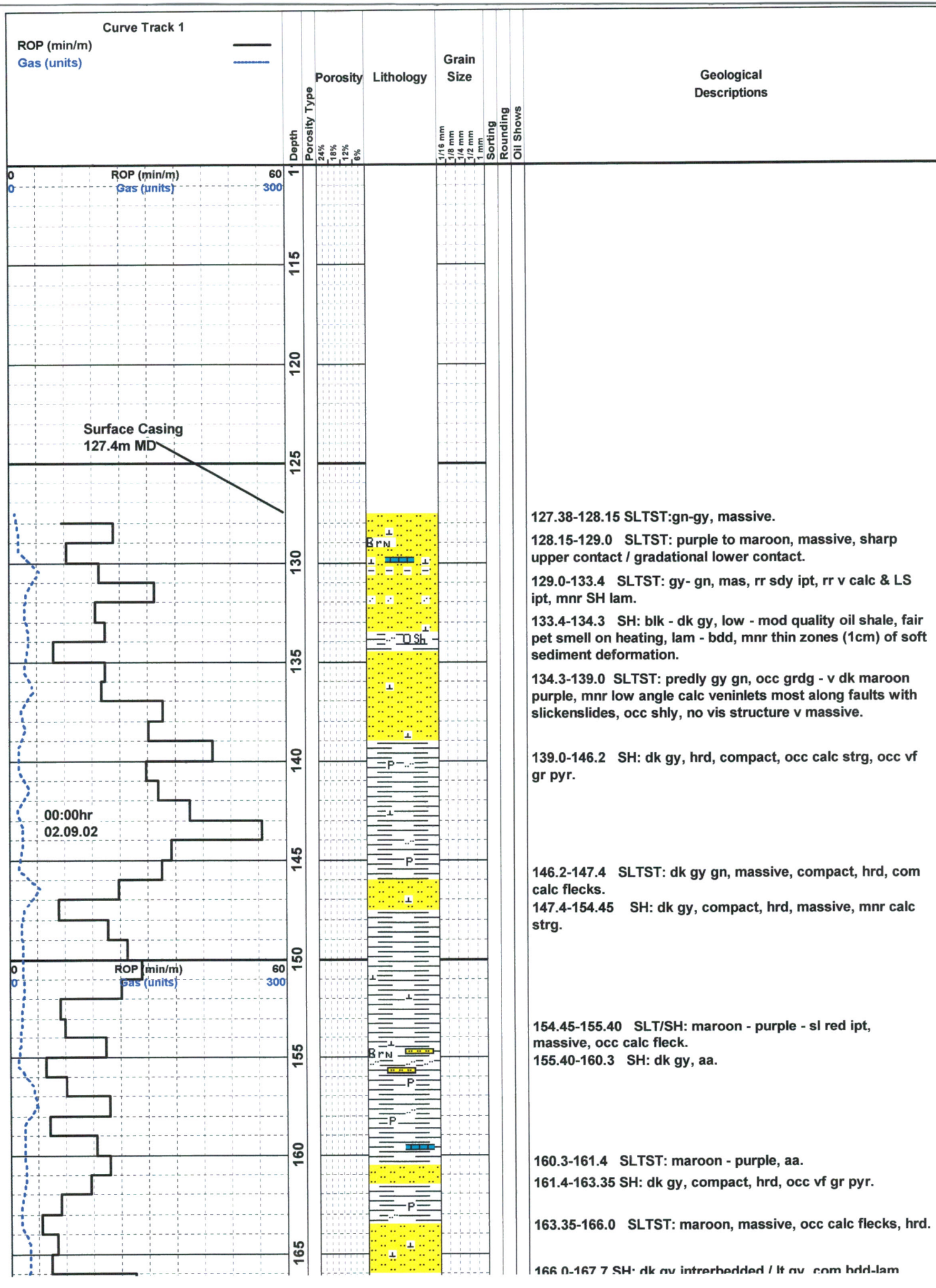
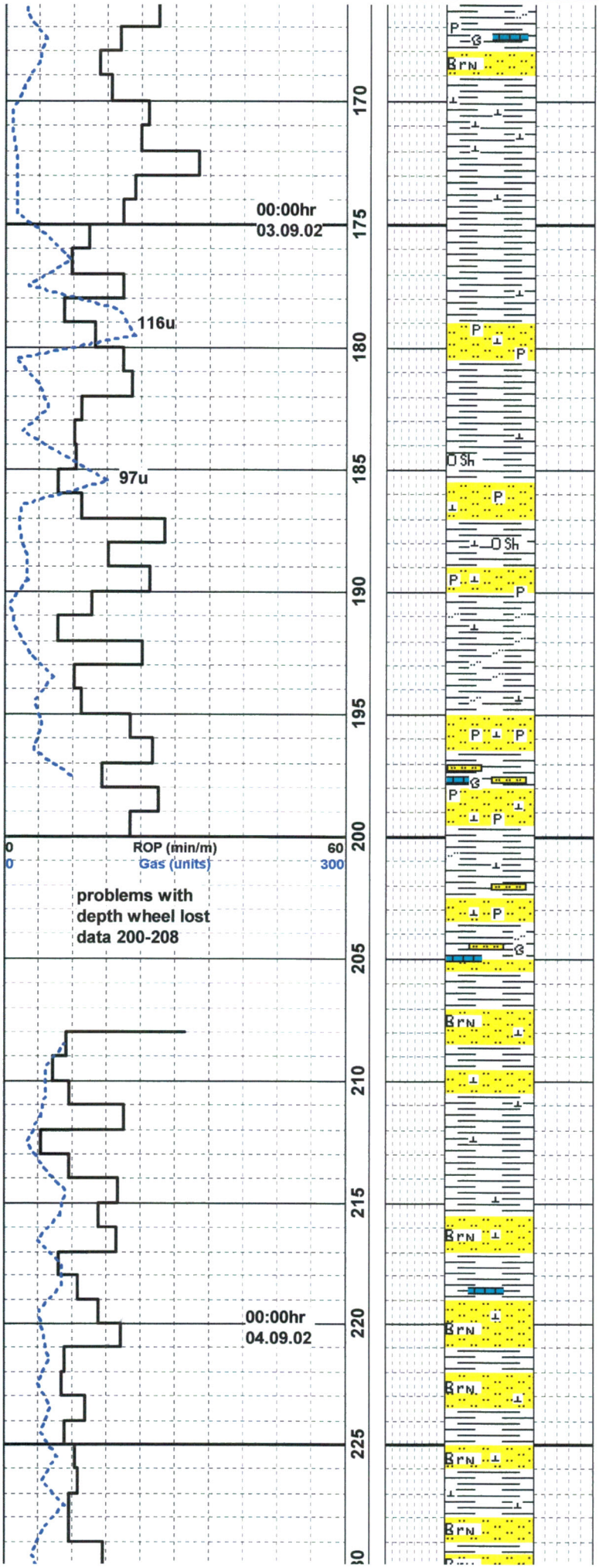

Curve Track 1
ROP (min/m)
Gas (units)
Porosity
Lithology
Grain Size
Depth
Porosity Type
24%
18%
12%
6%
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
0
ROP (min/m)
60
0
Gas (units)
300
1
115
120
125
130
135
140
145
150
155
160
165
Surface Casing
127.4m MD
00:00hr
02.09.02
Brn
Sh
P
127.38-128.15 SLTST:gn-gy, massive.
128.15-129.0 SLTST: purple to maroon, massive, sharp upper contact / gradational lower contact.
129.0-133.4 SLTST: gy- gn, mas, rr sdy ipt, rr v calc & LS ipt, mnr SH lam.
133.4-134.3 SH: blk - dk gy, low - mod quality oil shale, fair pet smell on heating, lam - bdd, mnr thin zones (1cm) of soft sediment deformation.
134.3-139.0 SLTST: predly gy gn, occ grdg - v dk maroon purple, mnr low angle calc veninlets most along faults with slickenslides, occ shly, no vis structure v massive.
139.0-146.2 SH: dk gy, hrd, compact, occ calc strg, occ vf gr pyr.
146.2-147.4 SLTST: dk gy gn, massive, compact, hrd, com calc flecks.
147.4-154.45 SH: dk gy, compact, hrd, massive, mnr calc strg.
154.45-155.40 SLT/SH: maroon - purple - sl red ipt, massive, occ calc fleck.
155.40-160.3 SH: dk gy, aa.
160.3-161.4 SLTST: maroon - purple, aa.
161.4-163.35 SH: dk gy, compact, hrd, occ vf gr pyr.
163.35-166.0 SLTST: maroon, massive, occ calc flecks, hrd.
166.0-167.7 SH: dk gy, intrerbedded / lt gy, com bdd-lam



basal 15cm consists of LS CGL 1-2cm clasts, Clasts are locally derived LS of Carboniferious age.

167.7-169.05 SLTST: maroon - purple - brn, massive, occ calc fleck.

169.05-172.3 SH: interbedd and lam lt - dk gy, predly lam - bdd, occ massive, lt gy SH v calc and LS ipt, So=0.

172.3-175.5 SH:maroon - dusky brn, hrd, massive, occ calc flecks.

175.5-179.0 SH: SLTST:gy - sl gy gn, occ blk ipt, massive, calc veins with occ slickenslides at 178.8 & 176.8.

179.0-180.70 SLTST: gy gn, massive, occ pyr.

180.70-185.6 SH:dk gy - blk, bdd - lam, predly blk and organic rich near base, fair oil shale, So=0-10.

185.6-187.0 SLTST: gy gn, massive, com pyr.

187.0-188.7 SH: dk gy - blk, blk and organic rich near base, fair oil shale.

188.7-190.2 SLTST: gy - dk gy, mas, com pyr.

190.2-194.8 SH: dk gy - gy, occ sl gy gn, slty ipt, mas, v hrd.

194.8-196.3 SLTST:gy - gn, mas, com pyr, occ calc fleck.

196.3-198.24 SH: dk gy - blk, lam, varved, occ thinly bdd - lam sltst.

198.24-199.34 SLTST: gy, mas, com pyr, occ calc flecks.

199.34-202.40 SH: gy-blk, lam - bdd, com slty ipt, basal 20cm has up to 1cm LS clasts in a calc mud matrix, just above cgl mnr cross bedding.

202.4-203.74 SLTST: gy, mas, com pyr, occ calc fleck.

203.74-205.1 SH: dk gy - blk, lam - occ bdd, mnr flame structure, basal 20cm has similar LS aa.

205.1-205.6 SLTST:gy gn, occ calc fleck.

205.6-207.0 SH: dk gy - blk, mas, hrd.

207.0-208.50 SLTST: maroon - dusky brn, mas, hrd.

208.5-209.5 SH: blk- dk gy, mas, hrd, rr lam.

209.5-210.3 SLTST: gy gn, occ sl maroon, mas, occ calc

210.3-215.7 SH: dk gy - occ blk, occ slty ipt, slty 212.3-212.9, lam near base and top, mas in center.

215.7-216.5 SLTST: gy, mas, occ calc fleck.

216.5-217.1 SLTST: maroon - dusky brn, occ calc fleck, mas, hrd.

217.1-218.9 SH: blk - gy, slty near top, limy near base, com bdd - lam.

218.9-221.1 SLTST: maroon - dusky brn, mas, mnr lam gy sh 1 m from top for 40cm.

221.1-222.1 SLTST:SH: gy - blk, lam - bdd, calc ipt.

222.1-223.3 SLTST: maroon - brn, masssive, homogeneous.

223.3-224.9 SH: dk gy - lt gy, lam - occ bdd, calc, So=0.

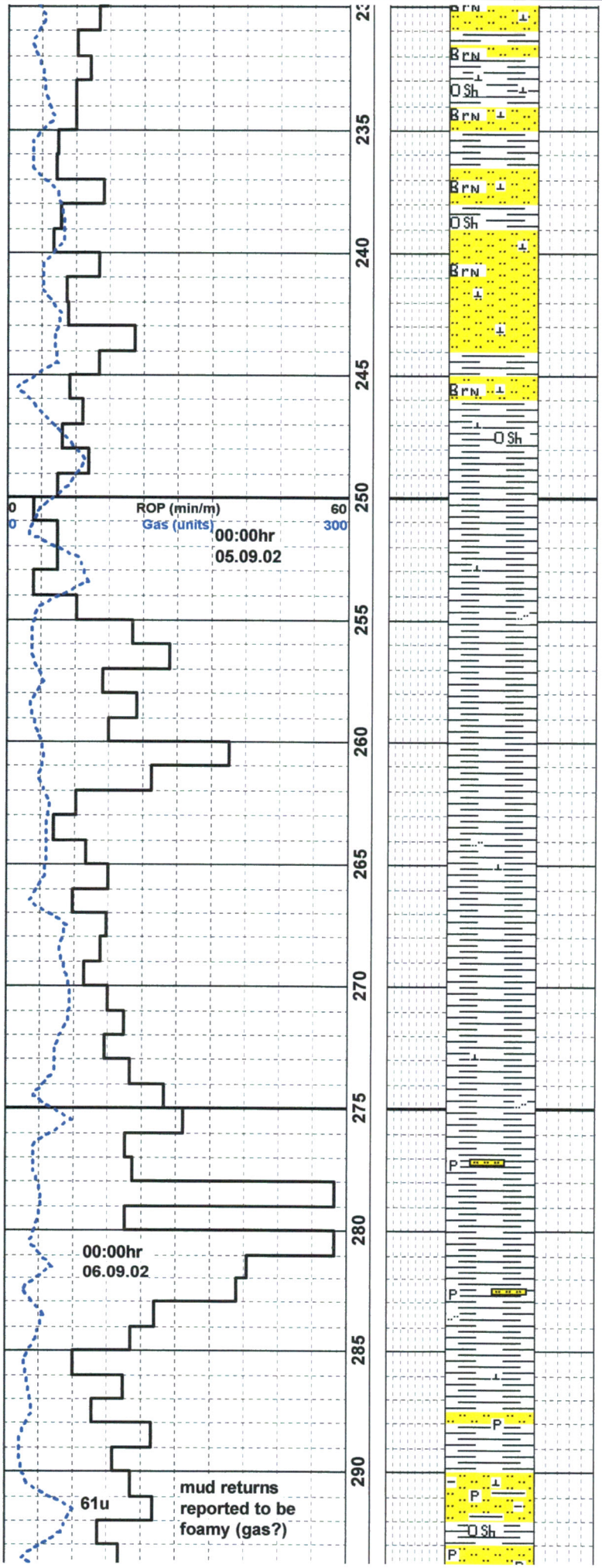
224.9-226.1 SLTST: maroon - brn, mas, com calc flecks.

226.1-228.1 SH:blk-gy, lam-bdd, calc ipt, So=0.

228.1-228.8 SLTST: maroon - brn, aa.

228.8-229.3 SH:blk-dk gy, lam.

229.3-230.7 SLTST:brn. mas. occ calc fleck.



230.7-231.4 SH:gy - sl gy gn, lam - bdd.
231.4-232.1 SLTST: maroon, aa.
232.1-233.9 SH:gy-blk, lam - bdd, mnr thin Oil Shale, oil shale occasionally exhibits dull - bri yel dry flor, n flor cut, pos min flor i.e. LS or calcite.

233.9-235.0 SLTST brn-maroon, mas, gy gn at top of unit.

235.0-236.4 SH:gy-blk, occ thin Oil Shale lam, oil shale occasionally exhibits dull - bri yel dry flor, n flor cut.

236.4-238.2 SLTST: brn - maroon, aa.

238.2-239.3 SH: SH: dk gy - gy, aa, occ thin Oil Shale.

239.3-243.9 SLTST: predly brn - maroon, mnr gy, com calc flecks.

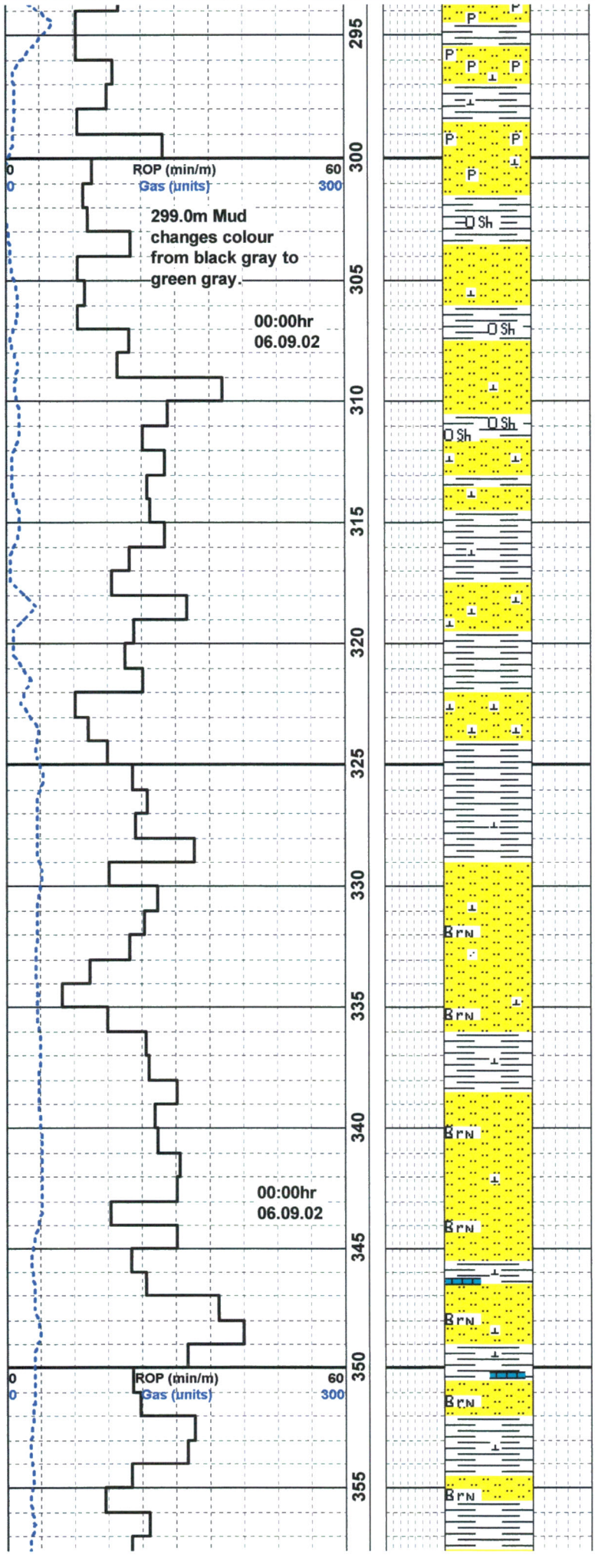
243.9-245.0 SH: gy - occ blk, lam-bdd, occ Oil Shale; 244.4 3-4cm thick lam vf gr LS SS, appears recrystalized, tt, n show.

245.0-245.7 SLTST: brn, mas, com calc flecks.

245.7-248.2 SH: dk gy - blk, predly lam - bdd, occ Oil Shale near base, oil shale occasionally exhibits dull - bri yel dry flor, n flor cut, pos min flor i.e. LS or calcite.

248.2-287.7 SH: lt gy - dk gy, occ sl blue, mnr blk, massive - mnr lam, occ slty, 20-30cm sltst strg @ 277.0 & 282.9, rr thin lam Oil Shale, very homogeneous, hrd.

287.7-288.3 SLTST: gy - sl gy gn, mas, calc, com pyr.
288.3-290.1 SH: gy - dk gy, lam - bdd.
290.1-292.1 SLTST: gy - dk gy gn, mas, mnr pyr, com shly
292.1-292.9 SH: blk / occ lt gy carb beds, com soft sediment deformation, occ Oil Shale.



292.9-294.4 SLTST: gy gn, mas, com pyr.

294.4-295.5 SH: dk dk - lt gy, lam-bdd, So=0 - 10.

295.5-296.9 SLTST: gy gn, mas, com pyr.

296.9-297.6 SH: aa.

297.6-301.7 SLTST: gn gy, notable colour change, com pyr; broken core 302.0-302.5 / slicks and thin calc fractures.

301.7-303.3 SH: dk - lt gy, lam-bdd, mnr Oil Shale.

303.3-306.1 SLTST:gn gy, aa.

306.1-307.6 SH:dk - lt gy, carb rich layers, mnr lam Oil Shale near base.

307.6-310.6 SLTST: gn gy, mas, occ mottling.

310.6-311.3 SH: lt & dk gy, occ blk, carb beds, approx 30% of interval is intpreted as Oil Shale, Oil Shale beds up to

311.3-312.9 SLTST: gy gn, mas, occ calc flecks.

312.9-314.4 SH: dk - occ lt gy, lam - bdd, occ Oil Shale lam.

314.4-315.6 SLTST: gy gn, aa.

315.6-317.4 SH: gy, homogeneous, mas.

317.4-318.9 SLTST:gy gn, mas, com calc flecks.

318.9-320.3 SH: dk gy - sl maroon, mas.

320.3-322.0 SH: dk gy - lt gy, mnr calc nod, occ calc bed, lam - bdd.

322.0-323.9 SLTST: gy, mas, abt calc flecks.

323.9-328.8 SH: gy - dk gy, occ bdd - lam, predly mas, mnr lam Oil Shale.

328.8-335.9 SLTST: brn - maroon, mas, occ calc fleck, rr lam, rr bdd & sdy ipt, mnr mottling.

335.9-338.4 SH:gy-sl gy blue, hrd, bdd-lam.

338.4-345.60 SLTST: brn, mas, mnr calc flecks, mnr mottling.

345.6-346.7 SH: gy - dk gy, lam - bdd, lam & bdd often disturbed by 3-5cm calc nod in basal 40cm.

346.7-349.1 SLTST: brn, aa.

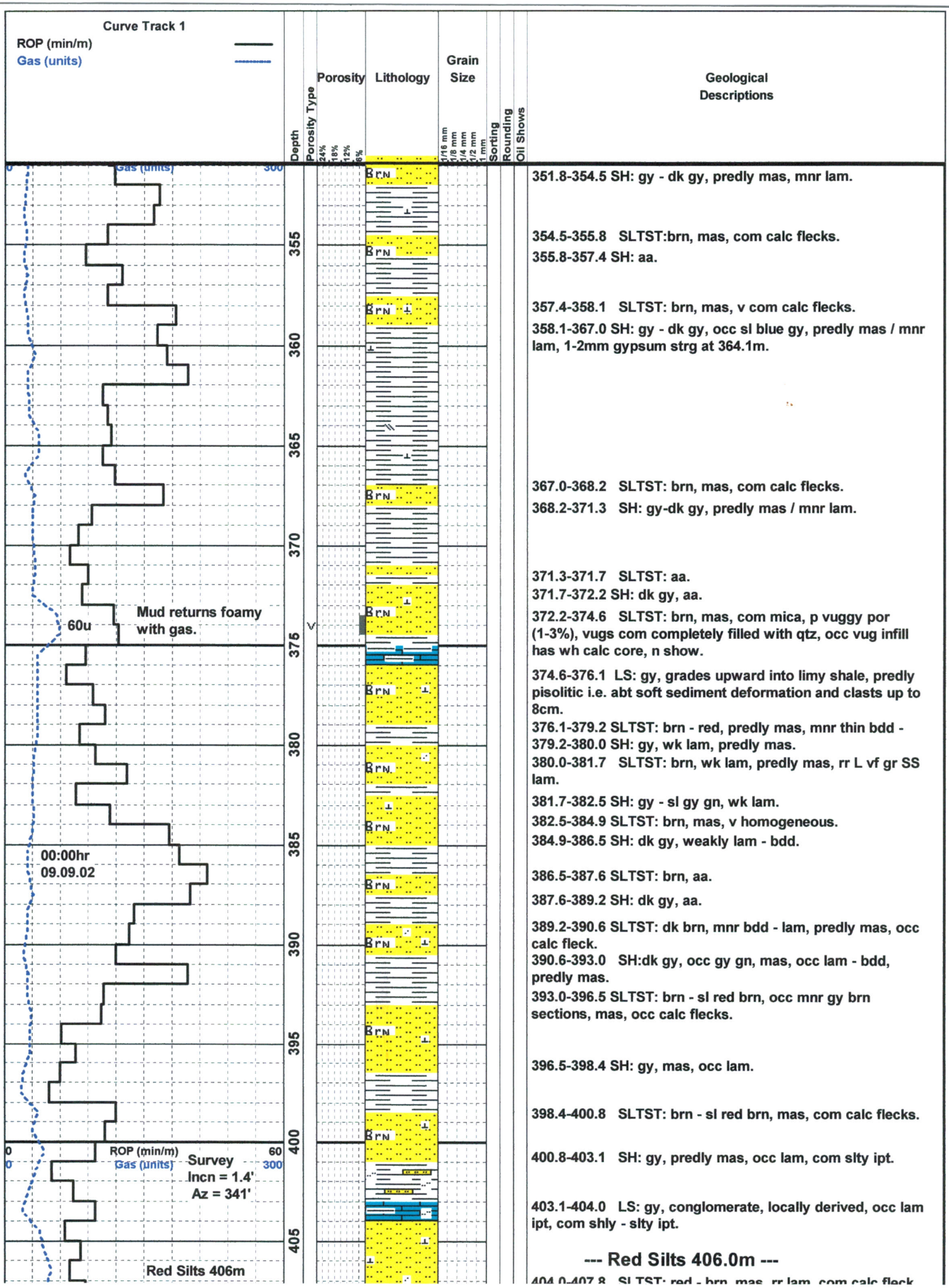
349.1-350.4 SH: gy - dk gy, aa.

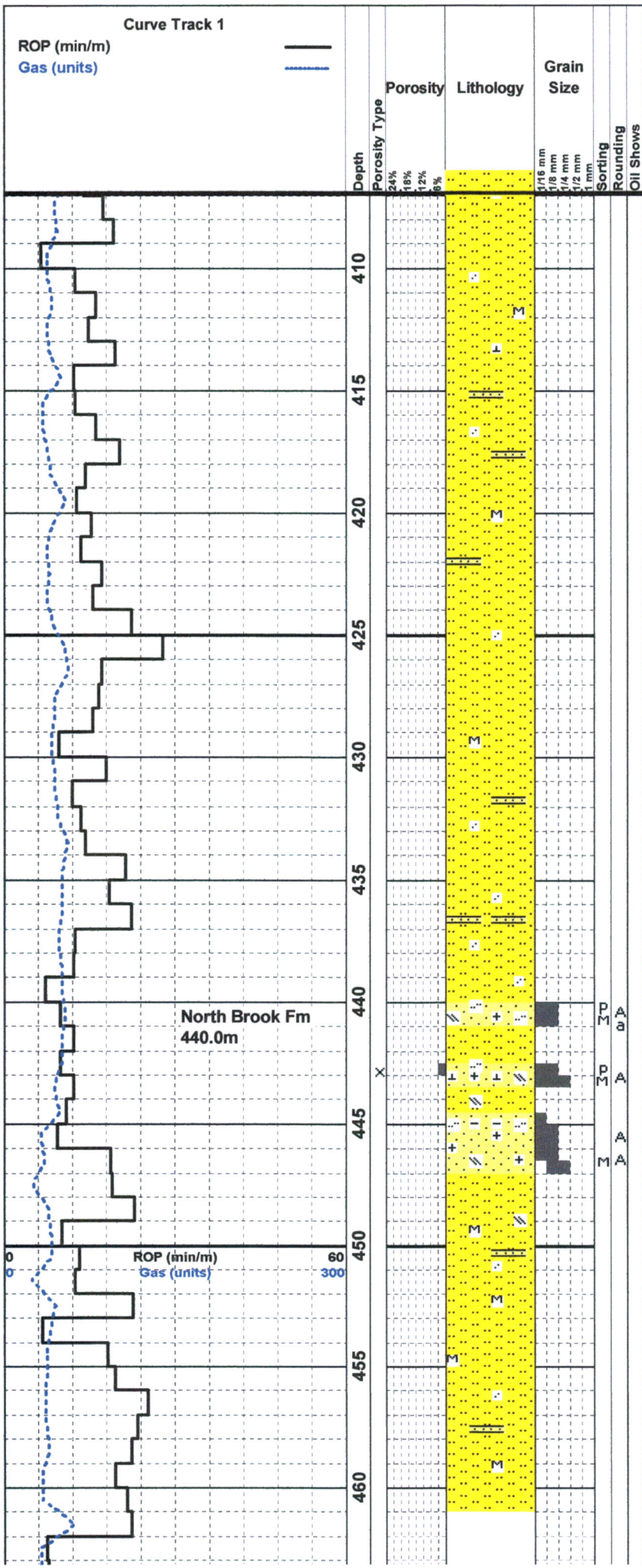
350.4-351.8 SLTST: brn, mas, v homogeneous, rr calc fleck.

351.8-354.5 SH: gy - dk gy, predly mas, mnr lam.

354.5-355.8 SLTST:brn, mas, com calc flecks.

355.8-357.4 SH: aa.


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
0
Gas (units)
300
355
360
365
370
375
380
385
390
395
400
405
Brn
Mud returns foamy with gas.
60u
00:00hr
09.09.02
0
ROP (min/m)
60
0
Gas (units)
300
Survey
Incn = 1.4'
Az = 341'
Red Silts 406m
351.8-354.5 SH: gy - dk gy, predly mas, mnr lam.
354.5-355.8 SLTST:brn, mas, com calc flecks.
355.8-357.4 SH: aa.
357.4-358.1 SLTST: brn, mas, v com calc flecks.
358.1-367.0 SH: gy - dk gy, occ sl blue gy, predly mas / mnr lam, 1-2mm gypsum strg at 364.1m.
367.0-368.2 SLTST: brn, mas, com calc flecks.
368.2-371.3 SH: gy-dk gy, predly mas / mnr lam.
371.3-371.7 SLTST: aa.
371.7-372.2 SH: dk gy, aa.
372.2-374.6 SLTST: brn, mas, com mica, p vuggy por (1-3%), vugs com completely filled with qtz, occ vug infill has wh calc core, n show.
374.6-376.1 LS: gy, grades upward into limy shale, predly pisolitic i.e. abt soft sediment deformation and clasts up to 8cm.
376.1-379.2 SLTST: brn - red, predly mas, mnr thin bdd -
379.2-380.0 SH: gy, wk lam, predly mas.
380.0-381.7 SLTST: brn, wk lam, predly mas, rr L vf gr SS lam.
381.7-382.5 SH: gy - sl gy gn, wk lam.
382.5-384.9 SLTST: brn, mas, v homogeneous.
384.9-386.5 SH: dk gy, weakly lam - bdd.
386.5-387.6 SLTST: brn, aa.
387.6-389.2 SH: dk gy, aa.
389.2-390.6 SLTST: dk brn, mnr bdd - lam, predly mas, occ calc fleck.
390.6-393.0 SH:dk gy, occ gy gn, mas, occ lam - bdd, predly mas.
393.0-396.5 SLTST: brn - sl red brn, occ mnr gy brn sections, mas, occ calc flecks.
396.5-398.4 SH: gy, mas, occ lam.
398.4-400.8 SLTST: brn - sl red brn, mas, com calc flecks.
400.8-403.1 SH: gy, predly mas, occ lam, com slty ipt.
403.1-404.0 LS: gy, conglomerate, locally derived, occ lam ipt, com shly - slty ipt.
--- Red Silts 406.0m ---
404.0-407.8 SLTST: red - brn, mas, rr lam, com calc fleck



404.0-407.8 SLTST: red - brn, mas, rr lam, com calc neck.

407.8-440.0 SLTST: red - brn, lam - thinly bdd, occ mottle, rr gy vf gr SS lam.

--- North Brook Formation 440.0m ---

440-441.0 SS: red - pink, L vf - U f, mnr m gr, predly qtz / com fsp grs, A-a, m-p srt, w srt toward base, arg cmt at top giving way to gyp cmt at base, mnr gyp strg, tt, n show; basal 6cm is CGL consisting of LS clasts (<4cm) in a limy mud martix.

441.0-442.2 SLTST: red, mas, occ sdy ipt.

442.2-443.4 SS: red, L vf - U m gr, normally graded, predly fsp / com qtz grs, A, m srt, calc cmt, p intgran por (2-3%), n show. Basal 10cm is calcareous CGL / pbl <6mm, cross bedding evident just above CGL in M gr SS.

443.4-444.7 SLTST: red, mas, occ sdy ipt.

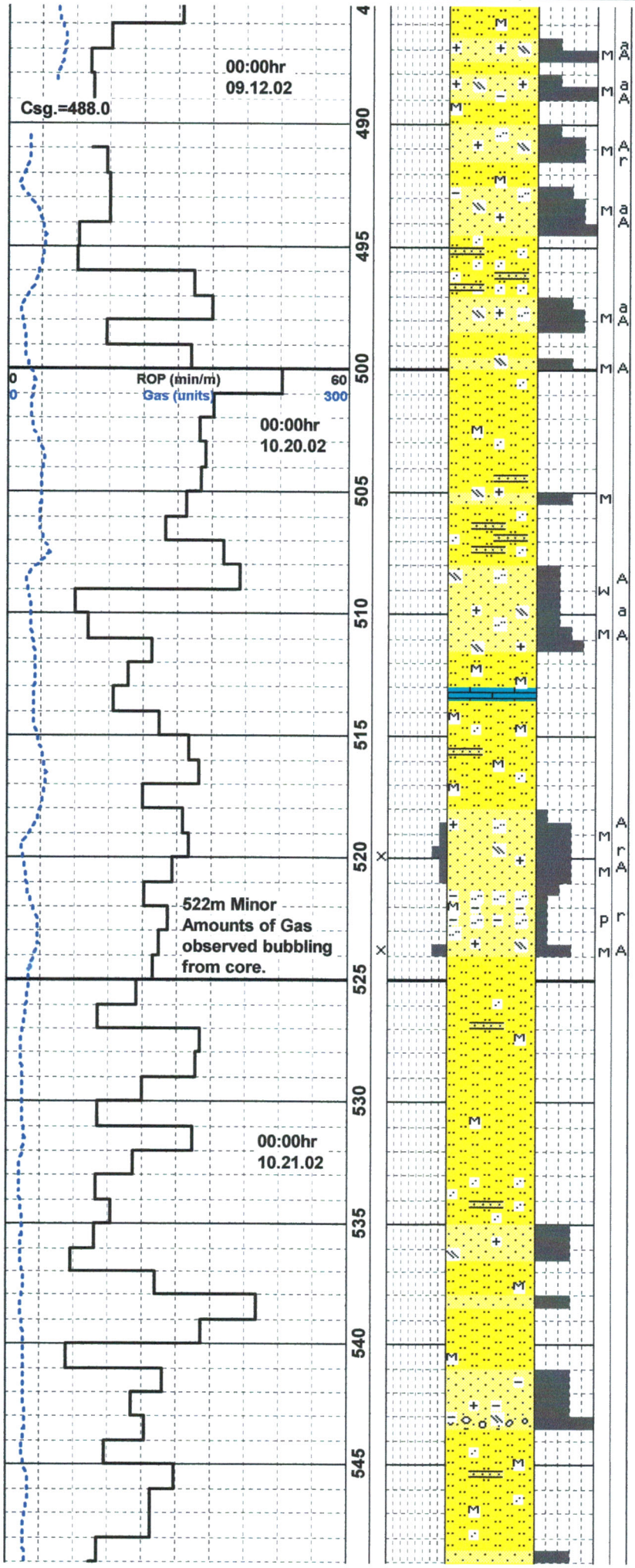
444.7-445.3 SS: red, normally graded, L vf - U m gr, arg ipt at top, predly fsp / qtz grs, A, gyp cmt, tt, n show.

445.3-445.5 SLTST: aa.

445.5-446.8 SS: red, L vf - U m gr, predly fsp & qtz, com arg at top, A, m srt, gyp cmt, tt, n show.

446.8-451.6 SLTST: red, predly mas, mnr lam ipt, occ sdy ipt, rr L vf gr SS strg, mnr mottle.

451.6-461.5 SLTST: red, aa, com mottle, mottles <5cm.



486.6-487.7 SS: lt gy & pink - red, L vf - U vc, normally graded, predly qtz / fsp, m srt, A-a, arg & gyp cmt, tt, n show.

487.7-488.1 SLTST: red, mas, occ lam, com mottle.

488.1-488.9 SS: red - pink, L vf - U vc, predly fsp toward top & qtz toward base, A-a, m srt, arg cmt toward top, gyp cmt toward base, tt, n show.

488.9-489.8 SLTST: red, mas - occ lam, mnr mottle.

Intermediate Casing = 488.0 09-12-02 @

489.8-491.6 SS: red, f- c gr, predly qtz / occ fsp, lam - bdd, m srt, A-r, gyp & arg cmt, tt.

491.6-492.4 SLTST: aa, gradational contact into unit below.

492.4-494.5 SS: red, vf - m gr, predly qtz & fsp, lam - bdd, A-a, m - p srt, arg & gyp cmt, tt.

494.5-496.8 SLTST / SS: red, mas / occ lam, occ calc mottle, com grdg ipt - vf - f gr SS, com SS strg.

496.8 -498.0 SS: gy - wh, f - c gr, predly qzt / fsp, A-a. m srt, occ mottle, arg & gyp cmt, occ calc cmt, tt.

498.0-498.6 SS: red, vf - f gr, prdly fsp & qtz, A-a, m srt, com arg ipt, lam - bdd, tt.

498.6-499.4 SLTST: aa.

499.4-500.0 SS: gy - red, f - vc gr, predly qtz & fsp, A-a, m - p srt, mas - occ lam, arg & gyp cmt, tt.

500.0-503.8 SLTST: red, mas, mnr mottle, occ sdy ipt.

503.8-504.9 SLTST: aa, com dy ipt, com grdg - L vf gr SS.

504.9-505.5 SS: red, f - m gr, predly qtz & fsp,lam, occ x beds, w srt, A-a, arg & gyp cmt, tt.

505.5-508.2 SLTST: red, com sdy ipt, predly fsp / qtz, com grdg ipt - L vf gr SS, com SS strg, mas - occ lam.

508.2-511.5 SS: red - pink, m - f gr, lam, A-a, w srt, occ slty ipt, basal 20cm has com sh rip up clast, sharp basal contact, gyp & arg cmt, tt.

511.5-512.0 SLTST: aa, com mottle.

512.0-513.0 SLTST: red, predly fsp, com grdg ipt - L vf gr SS, com sdy ipt, lam - mas.

513.0-513.4 LS: wh - lt gy, caleche nodules, rr root fos.

513.4-517.7 SLTST: red, com mottle, occ sdy ipt, lam - bdd, core com broken.

517.7-520.9 SS: red - occ pink, f - m gr, occ c - vc gr, mnr pbl up to 10mm, predly qtz, mas - occ lam, A-a, m srt, arg & mnr gyp cmt, f - p intgran por (3-6%), occ f intgran por (6-9%), n show.

520.9-522.5 SS:red, vf - f gr, occ m gr, com slty ipt, p srt, com grdrg - SLTST, mas / mnr lam, occ mottle.

522.5-523.8 SS: red, f - c gr, vc gr at base, predly qtz / fsp, A-a, w srt, lam - bdd, basal 20cm abt SH rip up clasts, arg & mnr gyp cmt, tt, n show.

523.8-535 SLTST: red, occ grdg - L vf gr SS, occ sdy strg, rr pbl up to 30mm, basal 1m com sdy ipt.

535.0-536.4 SS: red, vf - m gr, predly qtz, w srt, A-a, arg & gyp cmt, tt.

536.4-538.0 SLTST: red, aa.

538.0-538.5 SS: red - pink, vf - m gr, predly qtz, w srt, lam, arg cmt, tt.

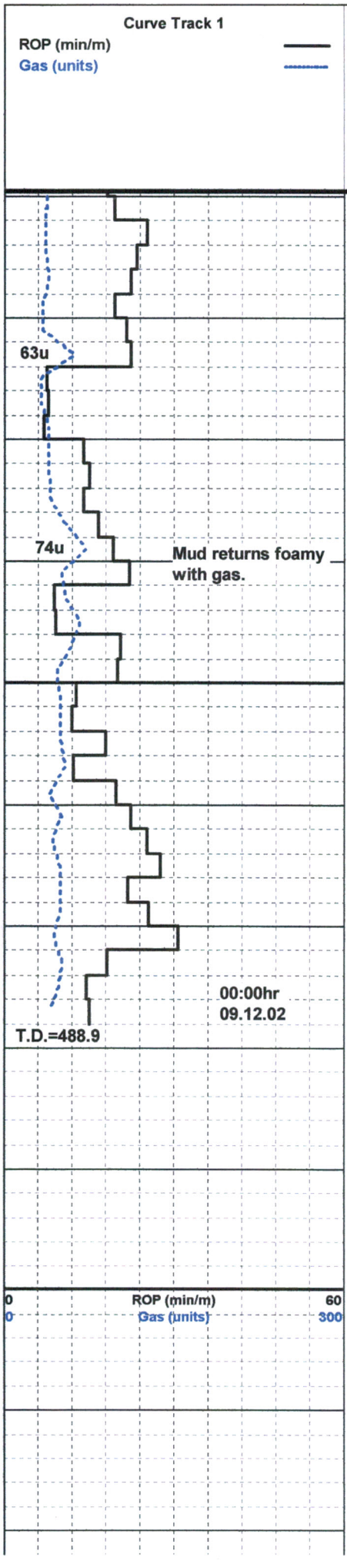
538.5-540.9 SLTST: red, aa.

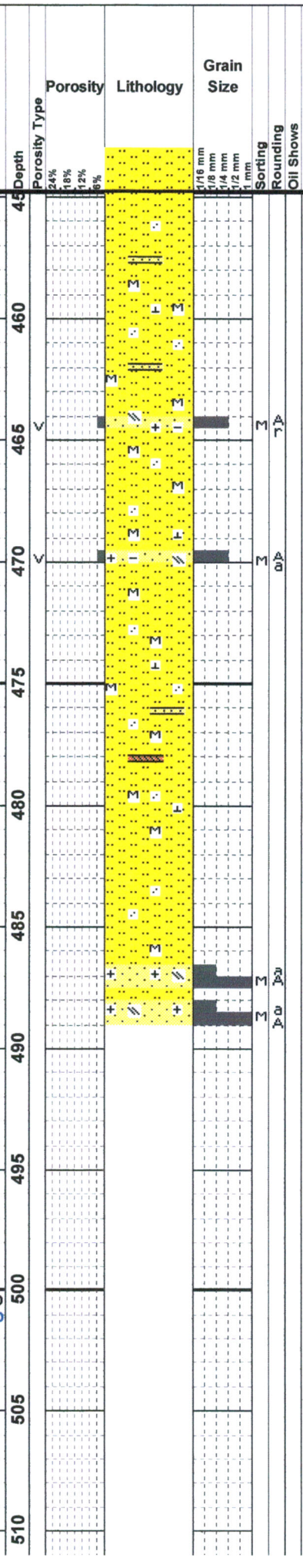
540.9-542.6 SS: red, f - m gr, occ c - vc gr, basal 70cm CGL / pbl up to 4cm, predly qtz, m srt, A-a, mnr R-r, arg & gyp cmt, tt.

542.6-543.5 SS: red, vf - m gr, predly qtz, com slty ipt, confused section of bdd SS & SLTST, abt cut & scour, occ mottle, arg cmt, tt.

543.5-548.4 SLTST: red, mas, occ mottle, 20cm of c gr SS at 545.6m.

548.4-548.8 SS: red, vf - m gr, predly qtz / fsp, pbl @ base, w srt, A-a, mnr





Geological Descriptions

440.0-451.6 SLTST: red, predly mas, mnr lam ipt, occ sdy ipt, rr L vf gr SS strg, mnr mottle.

451.6-463.3 SLTST: red, aa, com mottle, mottles <5cm.

463.3-464.2 SLTST: red, lam - occ bdd, com sdy ipt.

464.2-464.7 SS: red, L vf gr - L m gr, normaly graded, predly pink fsp / mnr qtz, r-A, m srt, arg & gyp cmt, p vuggy por (1-2%), vugs are inferred to be secondary porosity that are now filled with gypsum & mnr calcite.

464.7-469.5 SLTST: aa, com mottle, com sdy ipt.

469.5-470 SS: red, L vf - L m gr, normaly graded, predly pink fsp / qtz, A-a, m srt, arg & gyp cmt, p vuggy por (1-2%), vugs are inferred to be secondary porosity aa.

470.0-482.3 SLTST: red, lam, occ sdy ipt, rr thin sdy beds, com mottle, rr gyp strg.

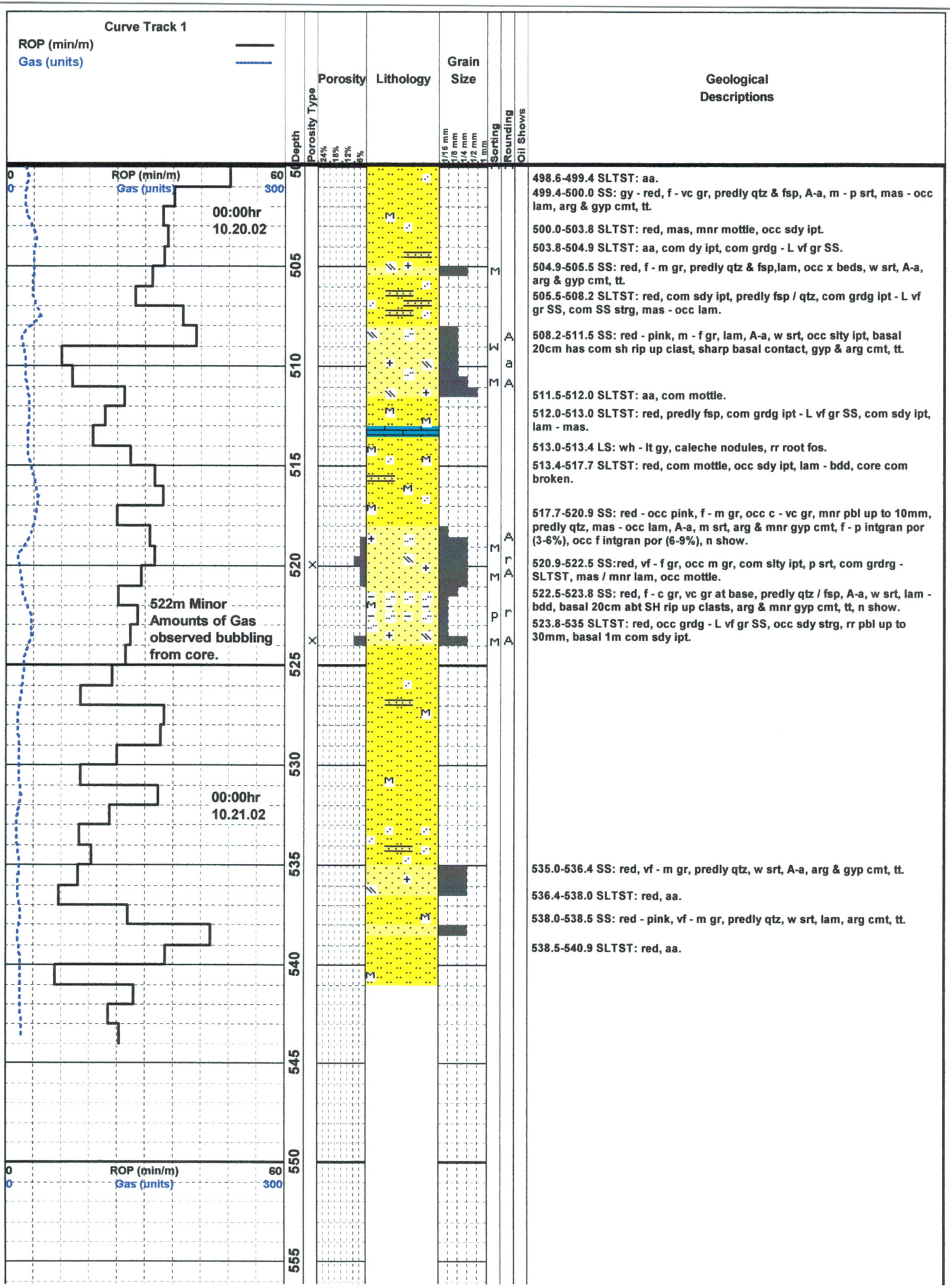
482.3-486.6 SLTST: red, lam - mas, rr mottle toward base.

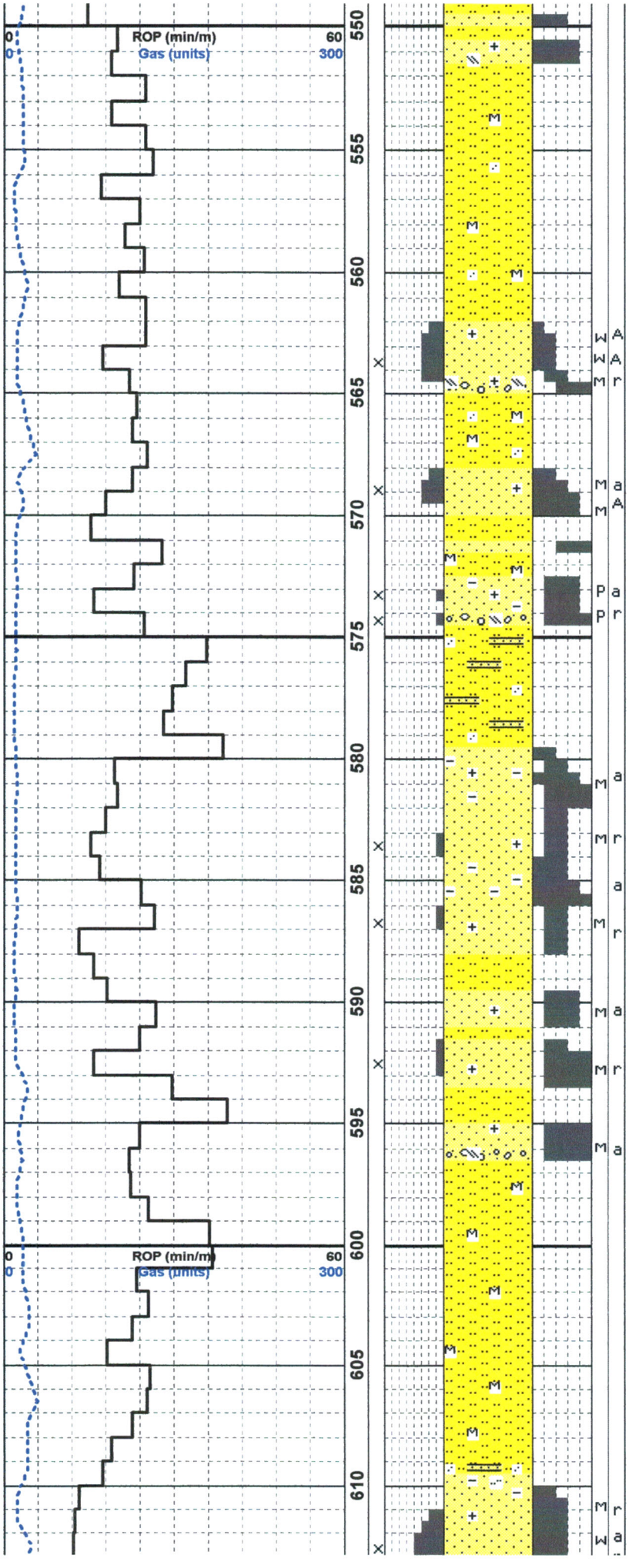
486.6-487.7 SS: lt gy & pink - red, L vf - U vc, normally graded, predly qtz / fsp, m srt, A-a, arg & gyp cmt, tt, n

487.7-488.1 SLTST: red, mas, occ lam, com mottle.

488.1-488.9 SS: red - pink, L vf - U vc, predly fsp toward top & qtz toward base, A-a, m srt, arg cmt toward top, gyp cmt toward base, tt, n show.

--- T.D. = 488.90 09-12-02 @ 00:30 ---


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
3/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
0
ROP (min/m)
60
0
Gas (units)
300
00:00hr
10.20.02
522m Minor Amounts of Gas observed bubbling from core.
00:00hr
10.21.02
505
510
515
520
525
530
535
540
545
550
555
498.6-499.4 SLTST: aa.
499.4-500.0 SS: gy - red, f - vc gr, predly qtz & fsp, A-a, m - p srt, mas - occ lam, arg & gyp cmt, tt.
500.0-503.8 SLTST: red, mas, mnr mottle, occ sdy ipt.
503.8-504.9 SLTST: aa, com dy ipt, com grdg - L vf gr SS.
504.9-505.5 SS: red, f - m gr, predly qtz & fsp,lam, occ x beds, w srt, A-a, arg & gyp cmt, tt.
505.5-508.2 SLTST: red, com sdy ipt, predly fsp / qtz, com grdg ipt - L vf gr SS, com SS strg, mas - occ lam.
508.2-511.5 SS: red - pink, m - f gr, lam, A-a, w srt, occ slty ipt, basal 20cm has com sh rip up clast, sharp basal contact, gyp & arg cmt, tt.
511.5-512.0 SLTST: aa, com mottle.
512.0-513.0 SLTST: red, predly fsp, com grdg ipt - L vf gr SS, com sdy ipt, lam - mas.
513.0-513.4 LS: wh - lt gy, caleche nodules, rr root fos.
513.4-517.7 SLTST: red, com mottle, occ sdy ipt, lam - bdd, core com broken.
517.7-520.9 SS: red - occ pink, f - m gr, occ c - vc gr, mnr pbl up to 10mm, predly qtz, mas - occ lam, A-a, m srt, arg & mnr gyp cmt, f - p intgran por (3-6%), occ f intgran por (6-9%), n show.
520.9-522.5 SS:red, vf - f gr, occ m gr, com slty ipt, p srt, com grdrg - SLTST, mas / mnr lam, occ mottle.
522.5-523.8 SS: red, f - c gr, vc gr at base, predly qtz / fsp, A-a, w srt, lam - bdd, basal 20cm abt SH rip up clasts, arg & mnr gyp cmt, tt, n show.
523.8-535 SLTST: red, occ grdg - L vf gr SS, occ sdy strg, rr pbl up to 30mm, basal 1m com sdy ipt.
535.0-536.4 SS: red, vf - m gr, predly qtz, w srt, A-a, arg & gyp cmt, tt.
536.4-538.0 SLTST: red, aa.
538.0-538.5 SS: red - pink, vf - m gr, predly qtz, w srt, lam, arg cmt, tt.
538.5-540.9 SLTST: red, aa.



r, arg & gyp cmt, tt.

548.8-549.4 SLTST: red, lam, contorted, mottle, mnr sdy ipt.

549.4-549.9 SS: red, m - c gr, predly qtz / fsp, pbl up to 2 cm, m srt, A-a, arg & gyp cmt, tt.

549.9-550.4 SLTST: aa.

550.4-551.6 SS: red, f - m gr, predly qtz, sharp basal contact, base has abt SH rip up clasts, p srt, A, arg cmt, tt.

551.6-561.8 SLTST: red, lam, occ vf gr SS strg, com mottle.

561.8-564.8 SS: red - pink, f - m gr, occ vc sections, basal 40cm CGL pbl supported up to 3cm, lam, w srt, A-a, mnr r, basal 40cm has abt gypsum cmt, predly arg & hem cmt, pervasive gyp cmt towards base, predly f intgran por(6-9%), n show.

564.8-567.7 SLTST: red, lam, com mottle, occ sdy ipt.

567.7-569.8 SS: red, vf - c gr, predly qtz, rr pbl up to 4cm, occ granule, m srt, A-a, arg & hem cmt, f ingran por (6-9%), n show.

569.8-571.2 SLTST: red, lam, rr sdy ipt.

571.2-571.6 SS: red, m - vc gr, predly qtz / fsp, a-r, m srt, arg & occ gyp cmt, tt.

571.6-572.6 SLTST: red, mas, com mottle.

572.6-574.3 SS: red, f - c gr, predly qtz / fsp, com SH rip up clasts, CGL ipt towards base, p srt, a-r, arg cmt, mnr p intgran por (3-4%), n show.

574.3-577.5 SLTST: aa.

577.5-579.5 SLTST: red, mas - lam, occ bdd, com SS strg, com sdy ipt.

579.5-581.8 SS: red, f-vc gr, occ pbl up to 1cm, predly qtz & fsp / SH rip up clasts, p srt, A-a, arg cmt, tt.

581.8-583.7 SS: red - pink, vf - vc gr, occ pbl up to 1cm, predly qtz / fsp, a-r, p srt, arg ipt, com SLTST & SH strg, arg cmt, tt.

583.7-584.0 SS: red, f-m gr, predly qtz / mnr fsp, mas, a, w srt, arg & hem / mnr gyp cmt, p-f intgran por (3-6%), n show.

584.0-586.3 SS: red, vf - cc gr, predly qtz, arg ipt, a-r, p srt, tt.

586.3-587.0 SS: red, f-m gr, predly qtz / mnr fsp, mas, a, w srt, arg & hem / mnr gyp cmt, p-f intgran por (2-3%), n show.

587.0-588.1 SS: red - pink, vf gr, predly qtz / fsp, a-r, w srt, arg cmt, arg ipt, wk calc cmt, tt.

588.1-589.4 SLTST: red, lam, mottle.

589.4-590.7 SS: red, f - c gr, predly qtz, a-r, w srt, arg cmt, p intgran por (2-3%), n show.

590.7-591.6 SLTST: red, aa.

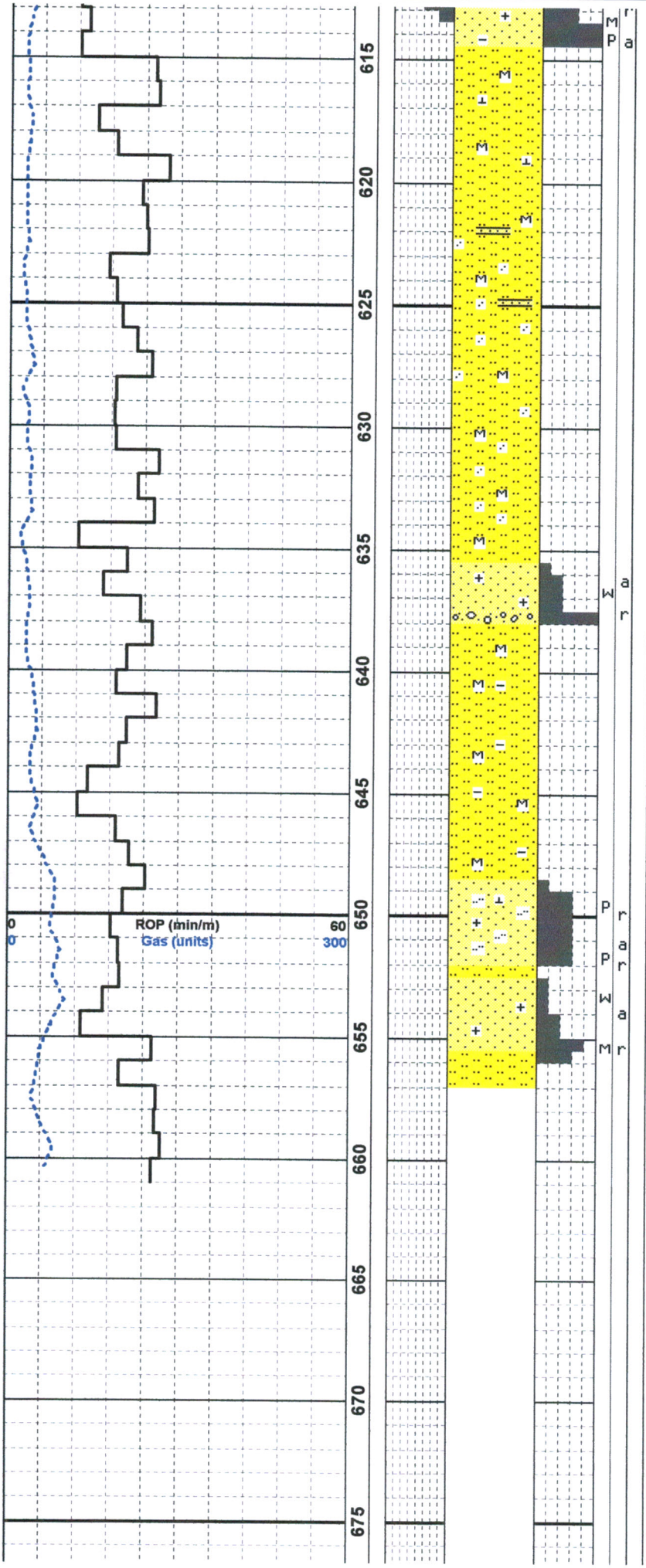
591.6-593.3 SS: red, f - vc gr, predly qtz, a-r, occ R, w srt, CGL towards base, shly at 592.5m, p intgran por (2-3%), n show.

593.3-595.0 SLTST: brn, mottle, lam.

595.0-596.6 SS: red, f - vc, predly qtz / fsp, lam - bdd, abt sh rip up clasts, CGL towards base, aby gyp cmt toeards base, arg cmt, tt.

596.6-609.4 SLTST: red, becoming brn gy toward basal 2m, lam, abt mottle, basal 1m sdy ipt and calc.

609.4-614.7 SS: brn gy, f - vc gr, predly qtz / fsp, lam & mas, occ pbl up to 1cm in basal 1.5m, com sh rip up clasts in basal 1.5m, predly w srt / occ p srt, a-r, arg & hem cmt, rr gyp cmt, f - g intgran por (8-12%), n show.



614.7-623.0 SLTST: red, occ shly, com mottle, v com calc banding, mas & occ lam.

623.0-628.3 SLTST: red, com mottle, com grdg ipt - L vf gr SS, sdy, lam & rr bdd, mnr m gr ss strg.

628.3-635.5 SLTST: red, mas - lam, com mottle, com calc strg, occ sdy ipt.

635.5-637.9 SS: red, vf - m gr, basal 50cm CGL, predly qtz / fsp, a-r, w srt, arg cmt, tt.

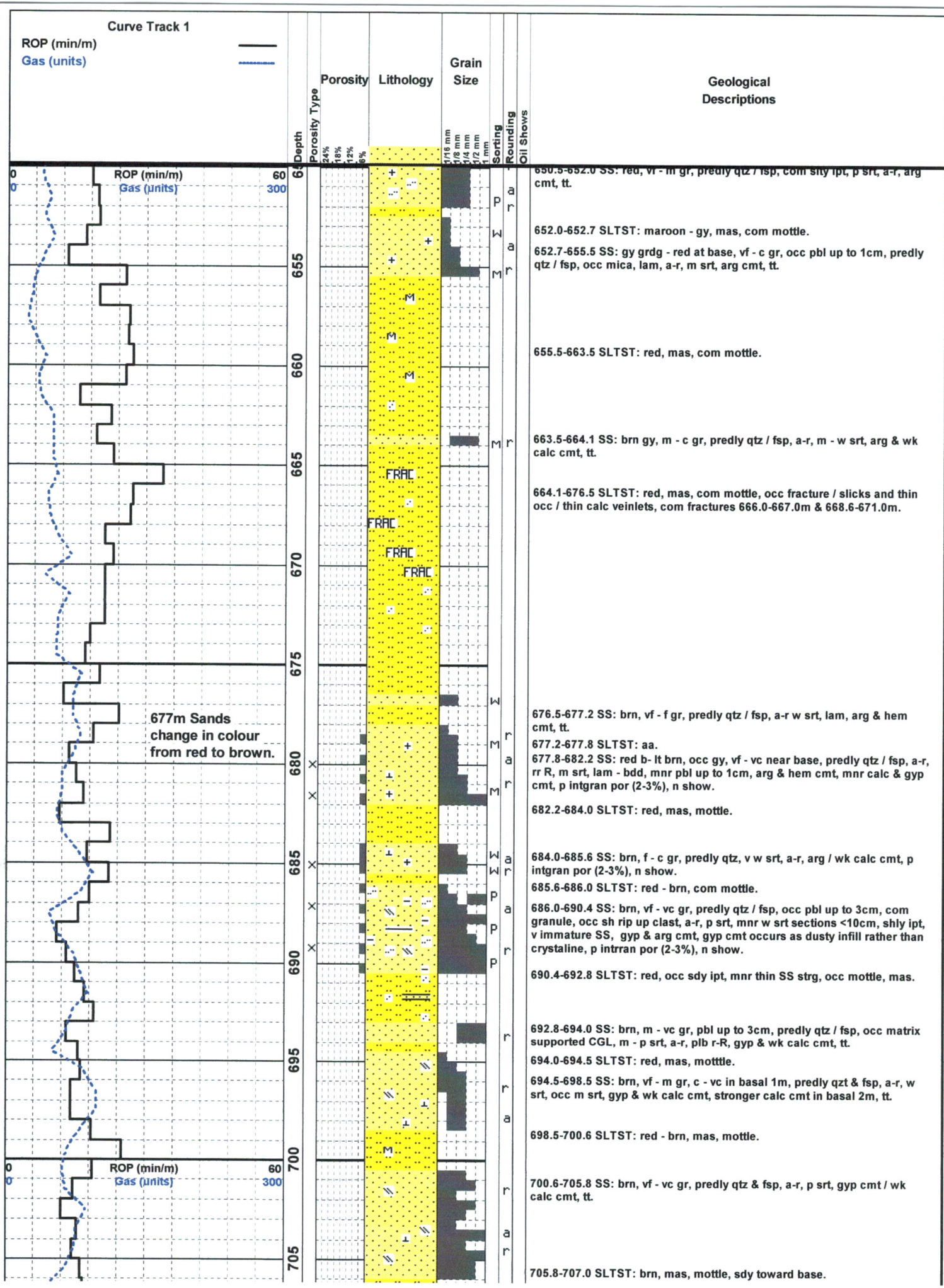
637.9-648.5 SLTST: red, mas, mottle.

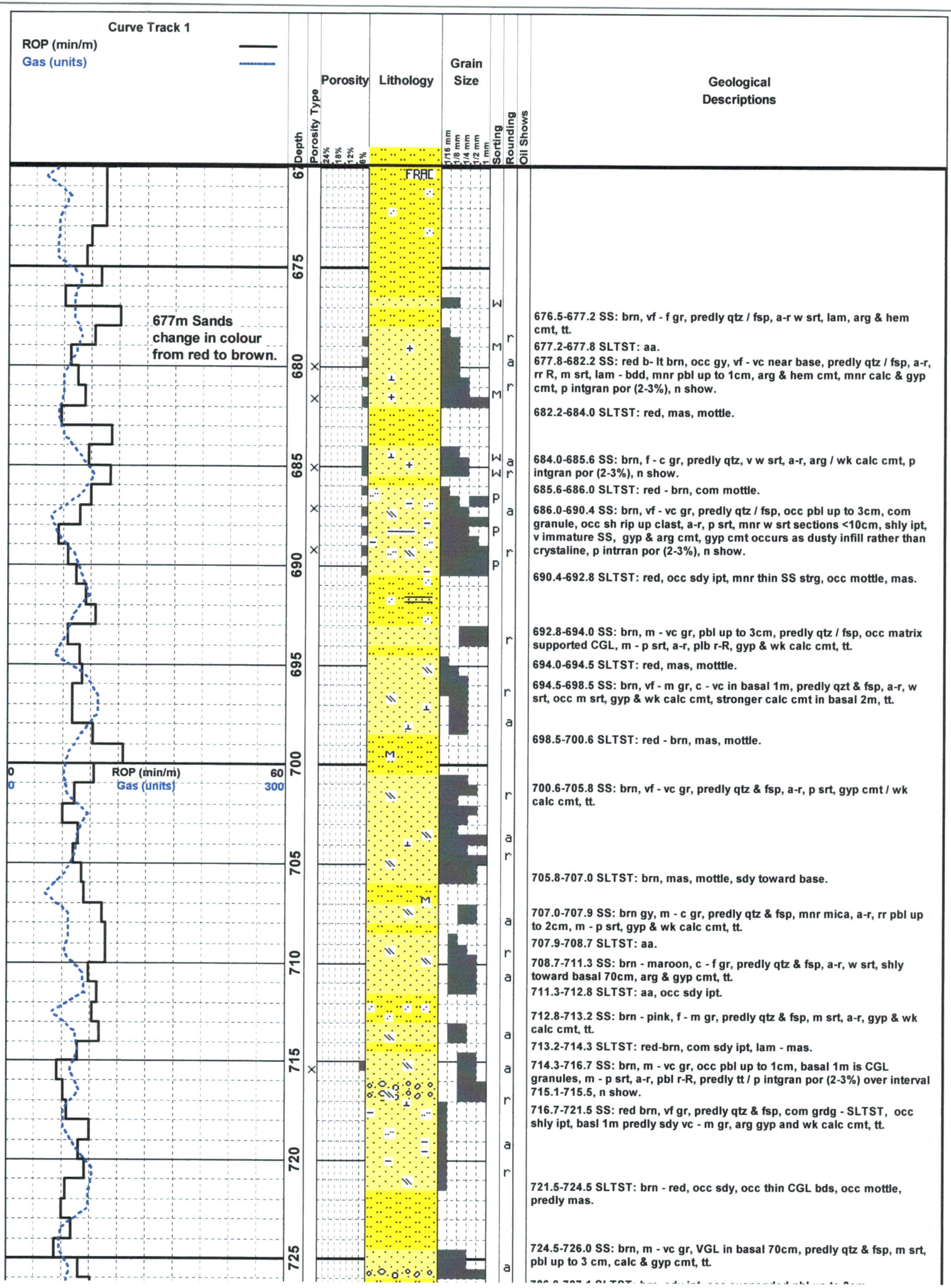
648.5-650.5 SS: red - pink, vf - m gr, com slty, predly qtz / fsp, p srt, a-r, wk calc cmt & arg cmt, tt.

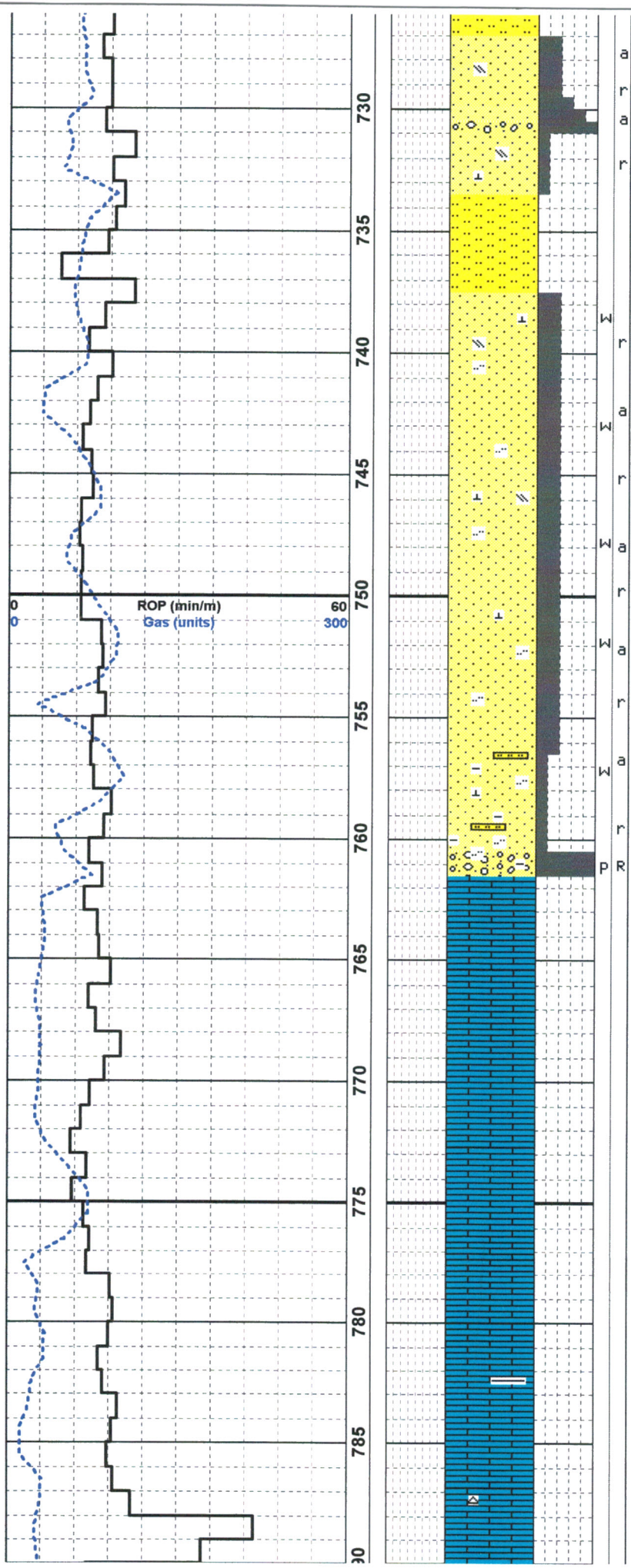
650.5-652.0 SS: red, vf - m gr, predly qtz / fsp, com slty ipt, p srt, a-r, arg cmt, tt.

652.0-652.7 SLTST: maroon - gy, mas, com mottle.

652.7-655.5 SS: gy grdg - red at base, vf - c gr, occ pbl up to 1cm, predly qtz / fsp, occ mica, lam, a-r, m srt, arg cmt, tt.


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
0
60
300
650
655
660
665
670
675
680
685
690
695
700
705
FRAC
677m Sands change in colour from red to brown.
650.5-652.0 SS: red, vf - m gr, predly qtz / fsp, com silty ipt, p srt, a-r, arg cmt, tt.
652.0-652.7 SLTST: maroon - gy, mas, com mottle.
652.7-655.5 SS: gy grdg - red at base, vf - c gr, occ pbl up to 1cm, predly qtz / fsp, occ mica, lam, a-r, m srt, arg cmt, tt.
655.5-663.5 SLTST: red, mas, com mottle.
663.5-664.1 SS: brn gy, m - c gr, predly qtz / fsp, a-r, m - w srt, arg & wk calc cmt, tt.
664.1-676.5 SLTST: red, mas, com mottle, occ fracture / slicks and thin occ / thin calc veinlets, com fractures 666.0-667.0m & 668.6-671.0m.
676.5-677.2 SS: brn, vf - f gr, predly qtz / fsp, a-r w srt, lam, arg & hem cmt, tt.
677.2-677.8 SLTST: aa.
677.8-682.2 SS: red b- lt brn, occ gy, vf - vc near base, predly qtz / fsp, a-r, rr R, m srt, lam - bdd, mnr pbl up to 1cm, arg & hem cmt, mnr calc & gyp cmt, p intgran por (2-3%), n show.
682.2-684.0 SLTST: red, mas, mottle.
684.0-685.6 SS: brn, f - c gr, predly qtz, v w srt, a-r, arg / wk calc cmt, p intgran por (2-3%), n show.
685.6-686.0 SLTST: red - brn, com mottle.
686.0-690.4 SS: brn, vf - vc gr, predly qtz / fsp, occ pbl up to 3cm, com granule, occ sh rip up clast, a-r, p srt, mnr w srt sections <10cm, shly ipt, v immature SS, gyp & arg cmt, gyp cmt occurs as dusty infill rather than crystaline, p intrran por (2-3%), n show.
690.4-692.8 SLTST: red, occ sdy ipt, mnr thin SS strg, occ mottle, mas.
692.8-694.0 SS: brn, m - vc gr, pbl up to 3cm, predly qtz / fsp, occ matrix supported CGL, m - p srt, a-r, plb r-R, gyp & wk calc cmt, tt.
694.0-694.5 SLTST: red, mas, motttle.
694.5-698.5 SS: brn, vf - m gr, c - vc in basal 1m, predly qzt & fsp, a-r, w srt, occ m srt, gyp & wk calc cmt, stronger calc cmt in basal 2m, tt.
698.5-700.6 SLTST: red - brn, mas, mottle.
700.6-705.8 SS: brn, vf - vc gr, predly qtz & fsp, a-r, p srt, gyp cmt / wk calc cmt, tt.
705.8-707.0 SLTST: brn, mas, mottle, sdy toward base.


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
677m Sands change in colour from red to brown.
ROP (min/m) 0 60
Gas (units) 0 300
FRAC
675
680
685
690
695
700
705
710
715
720
725
676.5-677.2 SS: brn, vf - f gr, predly qtz / fsp, a-r w srt, lam, arg & hem cmt, tt.
677.2-677.8 SLTST: aa.
677.8-682.2 SS: red b- lt brn, occ gy, vf - vc near base, predly qtz / fsp, a-r, rr R, m srt, lam - bdd, mnr pbl up to 1cm, arg & hem cmt, mnr calc & gyp cmt, p intgran por (2-3%), n show.
682.2-684.0 SLTST: red, mas, mottle.
684.0-685.6 SS: brn, f - c gr, predly qtz, v w srt, a-r, arg / wk calc cmt, p intgran por (2-3%), n show.
685.6-686.0 SLTST: red - brn, com mottle.
686.0-690.4 SS: brn, vf - vc gr, predly qtz / fsp, occ pbl up to 3cm, com granule, occ sh rip up clast, a-r, p srt, mnr w srt sections <10cm, shly ipt, v immature SS, gyp & arg cmt, gyp cmt occurs as dusty infill rather than crystaline, p intrran por (2-3%), n show.
690.4-692.8 SLTST: red, occ sdy ipt, mnr thin SS strg, occ mottle, mas.
692.8-694.0 SS: brn, m - vc gr, pbl up to 3cm, predly qtz / fsp, occ matrix supported CGL, m - p srt, a-r, plb r-R, gyp & wk calc cmt, tt.
694.0-694.5 SLTST: red, mas, motttle.
694.5-698.5 SS: brn, vf - m gr, c - vc in basal 1m, predly qzt & fsp, a-r, w srt, occ m srt, gyp & wk calc cmt, stronger calc cmt in basal 2m, tt.
698.5-700.6 SLTST: red - brn, mas, mottle.
700.6-705.8 SS: brn, vf - vc gr, predly qtz & fsp, a-r, p srt, gyp cmt / wk calc cmt, tt.
705.8-707.0 SLTST: brn, mas, mottle, sdy toward base.
707.0-707.9 SS: brn gy, m - c gr, predly qtz & fsp, mnr mica, a-r, rr pbl up to 2cm, m - p srt, gyp & wk calc cmt, tt.
707.9-708.7 SLTST: aa.
708.7-711.3 SS: brn - maroon, c - f gr, predly qtz & fsp, a-r, w srt, shly toward basal 70cm, arg & gyp cmt, tt.
711.3-712.8 SLTST: aa, occ sdy ipt.
712.8-713.2 SS: brn - pink, f - m gr, predly qtz & fsp, m srt, a-r, gyp & wk calc cmt, tt.
713.2-714.3 SLTST: red-brn, com sdy ipt, lam - mas.
714.3-716.7 SS: brn, m - vc gr, occ pbl up to 1cm, basal 1m is CGL granules, m - p srt, a-r, pbl r-R, predly tt / p intgran por (2-3%) over interval 715.1-715.5, n show.
716.7-721.5 SS: red brn, vf gr, predly qtz & fsp, com grdg - SLTST, occ shly ipt, basl 1m predly sdy vc - m gr, arg gyp and wk calc cmt, tt.
721.5-724.5 SLTST: brn - red, occ sdy, occ thin CGL bds, occ mottle, predly mas.
724.5-726.0 SS: brn, m - vc gr, VGL in basal 70cm, predly qtz & fsp, m srt, pbl up to 3 cm, calc & gyp cmt, tt.



726.0-727.1 SLTST: brn, sdy ipt, occ suspended pbl up to 2cm.

727.1-733.5 SS: brn, vf - m gr, predly qtz & fsp, a-r, p srt, calc & gyp cmt, tt.

733.5-737.5 SLTST: red - brn, occ sdy ipt, com mottle.

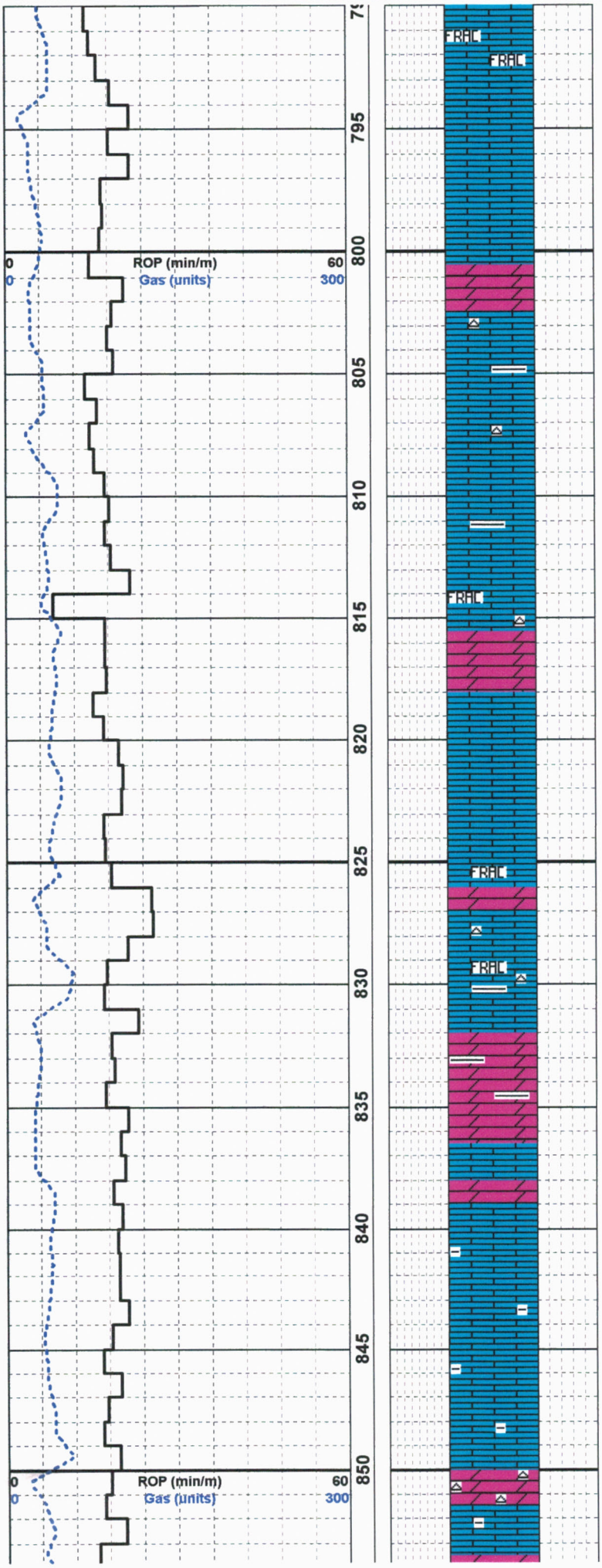
737.5-761.5 SS: brn, vf - f gr, occ suspended pbl up to 5cm, basal 1m has boulders up to 30cm, mas - lam, calc & mnr gyp cmt, tt.

761.5-780.5 MARBLE: gy - lt gy, mas - "marble" texture, predly calc, crystalline, crystals up to 2mm, occ calcite filled fracture, occ stylolite, occ fracture filled with North Brook age mud, tt.

N.B. Lithology symbols used between 761.5 & xxx.xm i.e. are used to represent the parent rock of the marble logged.

780.5-787.5 MARBLE: gy - lt gy, predly calc, mas - occ bdd, occ thin shly lam, rr fracturtes, So=45'.

787.5-780.5 MARBLE: lt gy - wh, mnr pink, predly calc, occ mnr thin schist lam, mas - thin bdd, rr thin cht veins, open fractures 791.0m & 792.0m.



800.3-802.5 MARBLE: lt gy, pink toward base, mas, predly dol & calc ipt.

802.5-815.7 MARBLE: lt gy, mas - bdd, predly calc, mnr thin schisty lam, mnr cht vein & cht filled fractures, open fracture 814.3m.

815.7-817.0 MARBLE: lt gy - wh, predly dol / mnr calc, bdd - rr cht vein & cht filled fractures.

817.0-825.9 MARBLE: wh, predly calc, finer grained than above, mnr bdd predly mas.

825.9-827.0m MARBLE: wh, predly dol / mnr calc, occ cht veins, occ thin sh lam, So=45'.

827.0-831.9 MARBLE: predly calc, mnr thin sh lam, mnr cht, open near vertical fracture 827.5 - 829m.

831.9-836.3 MARBLE: wh, predly dol / mnr calc, rr sh lam, very fine grained.

836.3-836.9 MARBLE: wh - lt gy & pink, predly calc, mas, occ shly ipt.

836.9-838.9 MARBLE: wh, mas, predly dol / mnr calc, crpxl.

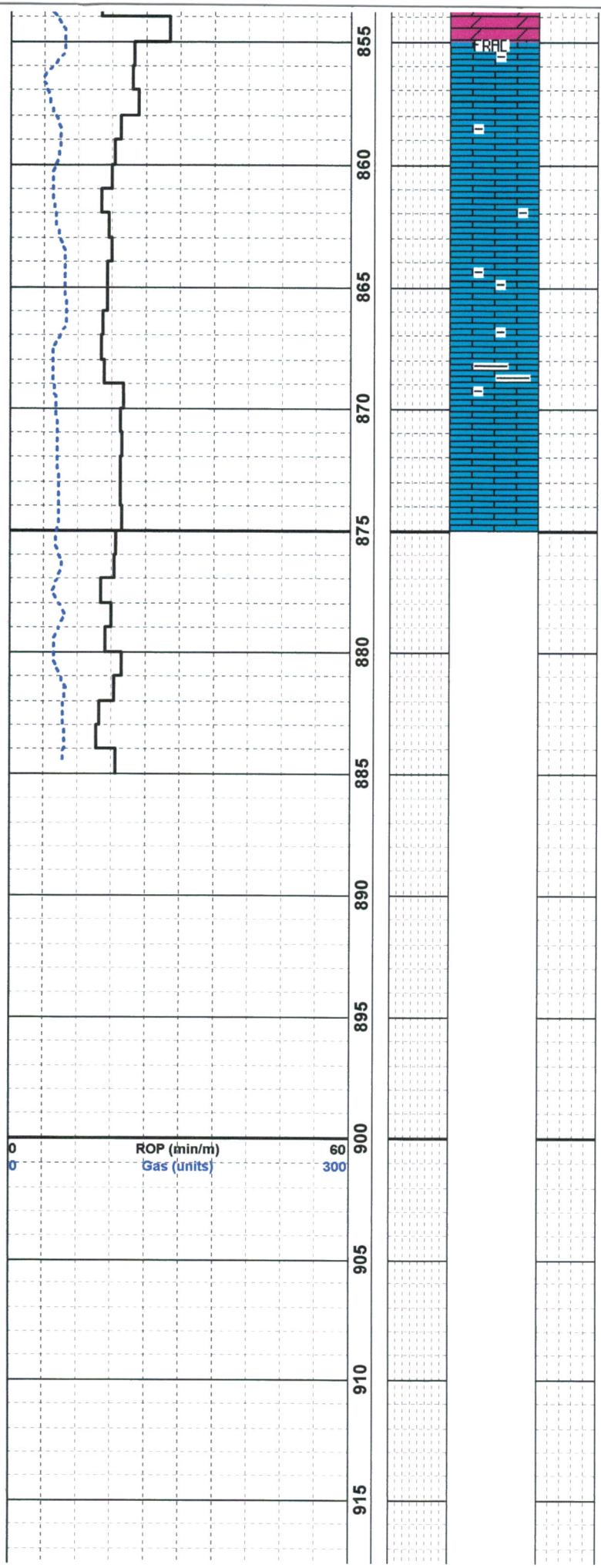
838.9-842.5 MARBLE: wh, occ lt gy, predly calc, wk bdd.

842.5-850.0 MARBLE: wh - gy, predly calc, com sh lam, basal 6cm is fault breccia and fault along the So, So=45'.

850.0-851.6 MARBLE: wh, predly dol, mas, crpxl, com cht filled closed fractures.

851.6-853.6 MARBLE: wh - lt gy, occ pink, predly calc, occ sh lam.

853.6-854.8 MARBLE: wh - gy, predly dol, mas - wk bdd, mnr

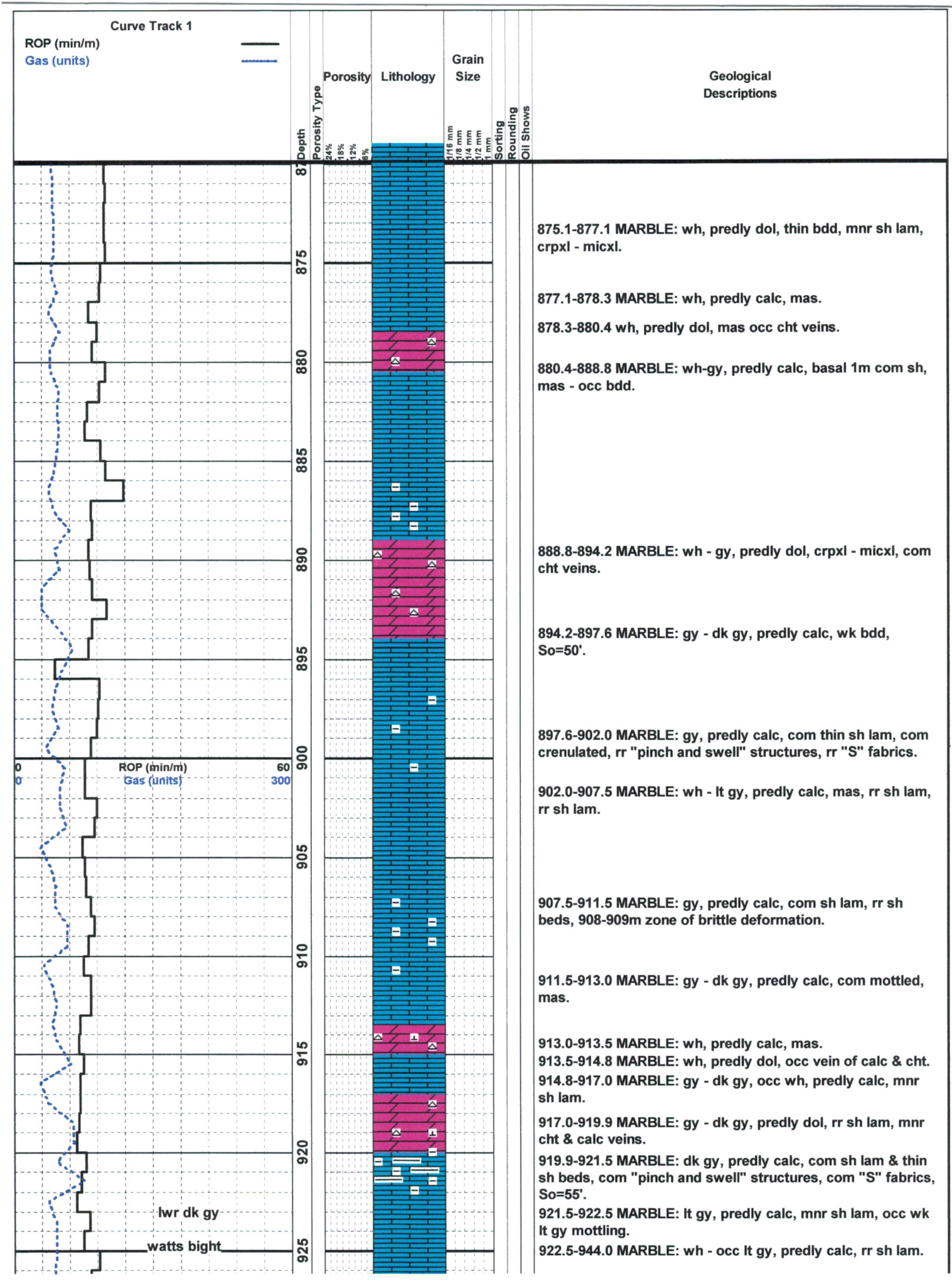


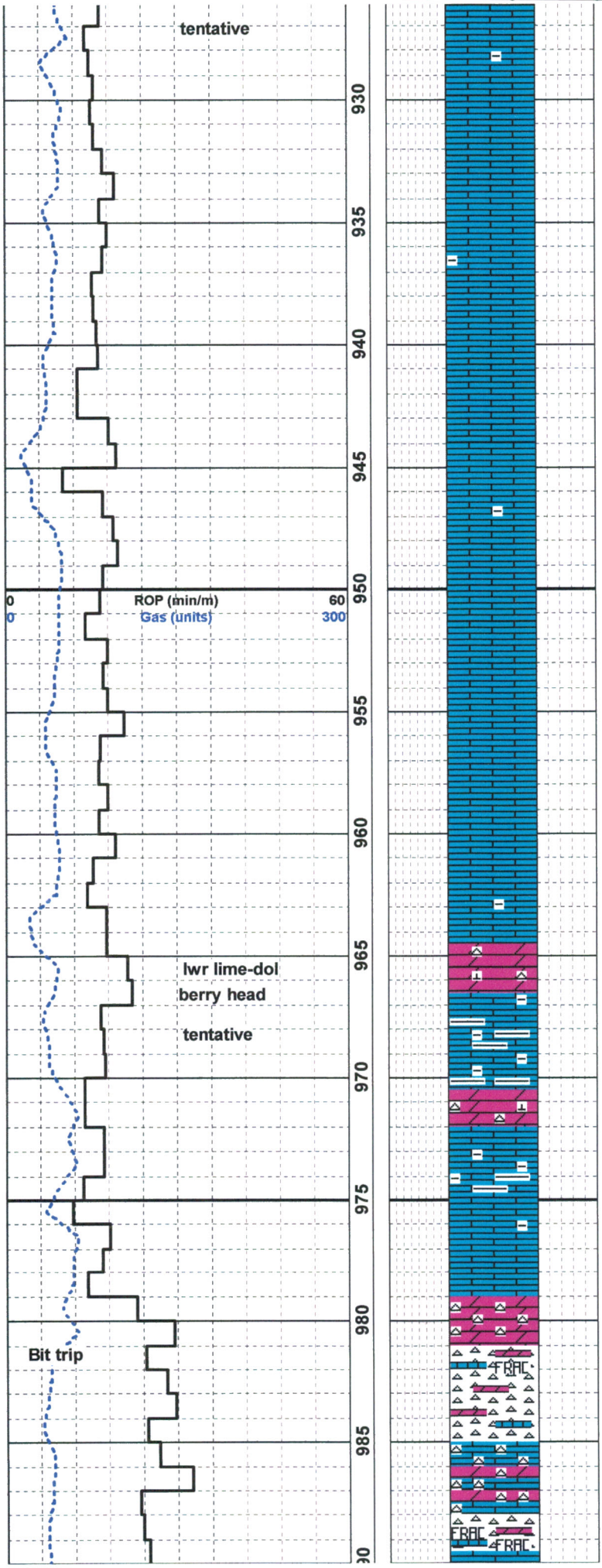
cht filled fractures.

854.8-865.3 MARBLE: gy - lt gy, occ wh, predly calc, occ sh lam, mnr mottled near top 2m, 855.0m open 45' TCA fracture.

865.3-868.9 MARBLE: gy - dk gy, predly calc, com sh lam & sh bds up to 1cm, 868.0-868.5m v com sh.

868.9-875.1 MARBLE: gy, predly calc, com large scale mottle, massive.


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
24%
18%
12%
6%
Lithology
Grain Size
1/16 mm
1/8 mm
1/4 mm
1/2 mm
1 mm
Sorting
Rounding
Oil Shows
Geological Descriptions
875
880
885
890
895
900
905
910
915
920
925
0
ROP (min/m)
60
0
Gas (units)
300
lwr dk gy
watts bight
875.1-877.1 MARBLE: wh, predly dol, thin bdd, mnr sh lam, crpxl - micxl.
877.1-878.3 MARBLE: wh, predly calc, mas.
878.3-880.4 wh, predly dol, mas occ cht veins.
880.4-888.8 MARBLE: wh-gy, predly calc, basal 1m com sh, mas - occ bdd.
888.8-894.2 MARBLE: wh - gy, predly dol, crpxl - micxl, com cht veins.
894.2-897.6 MARBLE: gy - dk gy, predly calc, wk bdd, So=50'.
897.6-902.0 MARBLE: gy, predly calc, com thin sh lam, com crenulated, rr "pinch and swell" structures, rr "S" fabrics.
902.0-907.5 MARBLE: wh - lt gy, predly calc, mas, rr sh lam, rr sh lam.
907.5-911.5 MARBLE: gy, predly calc, com sh lam, rr sh beds, 908-909m zone of brittle deformation.
911.5-913.0 MARBLE: gy - dk gy, predly calc, com mottled, mas.
913.0-913.5 MARBLE: wh, predly calc, mas.
913.5-914.8 MARBLE: wh, predly dol, occ vein of calc & cht.
914.8-917.0 MARBLE: gy - dk gy, occ wh, predly calc, mnr sh lam.
917.0-919.9 MARBLE: gy - dk gy, predly dol, rr sh lam, mnr cht & calc veins.
919.9-921.5 MARBLE: dk gy, predly calc, com sh lam & thin sh beds, com "pinch and swell" structures, com "S" fabrics, So=55'.
921.5-922.5 MARBLE: lt gy, predly calc, mnr sh lam, occ wk lt gy mottling.
922.5-944.0 MARBLE: wh - occ lt gy, predly calc, rr sh lam.



944.0-950.0 MARBLE: lt gy, predly calc, rr wk mottle, mnr sh lam.

950.0-953.1 MARBLE: gy - occ dk gy, predly calc, mas, com mottling.

953.1-960.6 MARBLE: lt gy, predly calc, mas, rr wk mottle.

960.6-963.5 MARBLE: gy - dk gy, predly calc, com mottle.

963.5-964.5 MARBLE: gy, predly calc, mas, mnr sh lam.

964.5-967.3 MARBLE: gy, predly dol, com cht & calc veins.

967.3-970.5 MARBLE: gy, predly calc, com sh strg and lam, So=65'.

970.5-971.9 MARBLE: gy, predly dol, com calc and cht veins.

971.9-973.2 MARBLE: gy, predly calc, mas, wk mottle, So=45'.

973.2-974.5 MARBLE: gy, wh and occ lt brn - pink, bdd - lam, com arg ipt / sh lam & bds up to 1cm, com p developed "pinch and swell" structures & "S" fabrics.

974.5-976.1 MARBLE: gy, predly calc, rr sh lam @ base, mas.

976.1-978.1 MARBLE: gy, predly dol, com irregular closed fractures filled with cht, calc, & hem, occ partially open fracs with hem coatings, occ closed fracs with yel staining, p vuggy secondary por (1-3%) associated with yellow stain veining.

978.1-979.0 MARBLE: wh - lt gy, predly calc, wk mottle, mas.

979.0-981.0 MARBLE: gy - dk gy, predly dol, com cht ipt, com "compressional" fractures i.e. perpendicular to core axis, occ closed hem lined fractures.

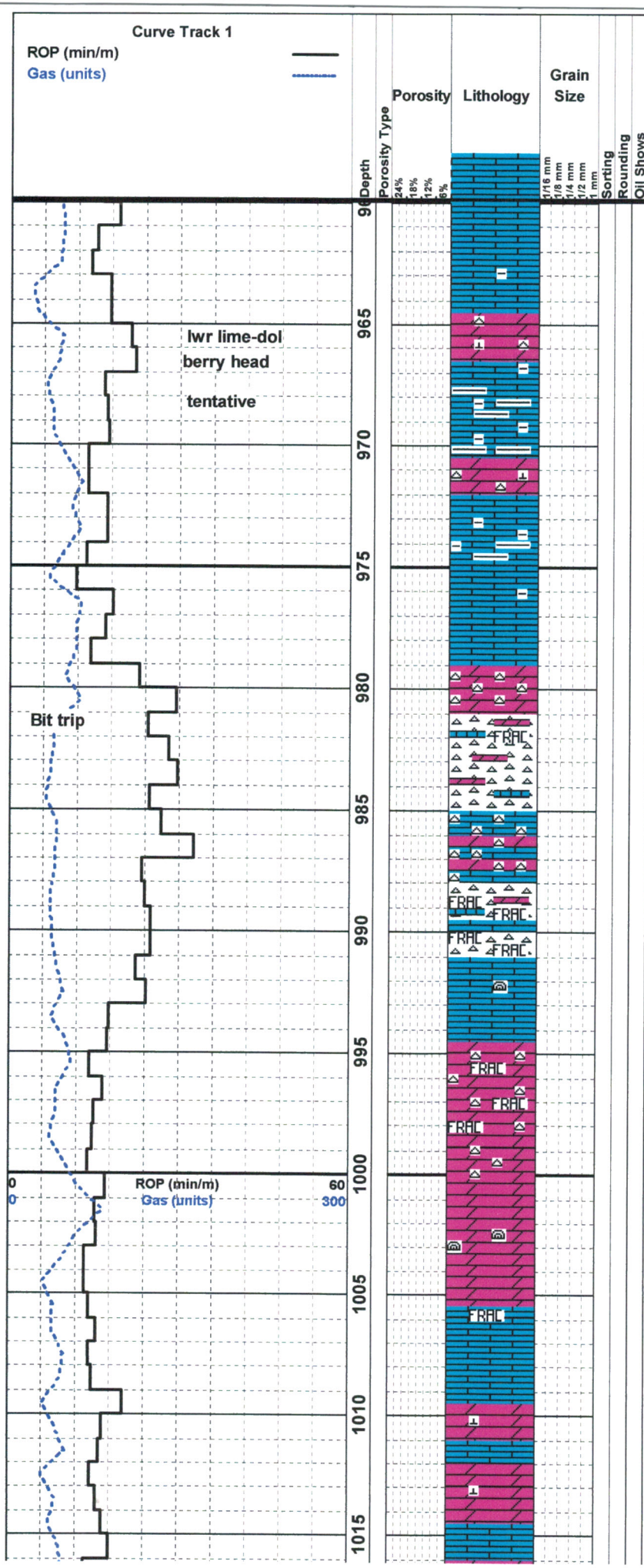
981.0-984.9 CHT: gy, dol & calc ipt, com lam, com calc & cht veins.

984.9-985.2 MARBLE: gy, predly calc, abt cht, dol ipt, bdd, mnr open frac / hem coating.

985.2-985.8 MARBLE: gy, predly calc, bdd, wk mottle, occ cht.

985.8-988.3 MARBLE: wh - gy, interbedd calc & dol bds on a 20-30cm scale, occ cht ipt.

988.3-989.3 CHT: gy, occ calc & dol ipt, abt irregular frac, abt yel stn along irregular frac, fracs com / hem coating, p spotty vuggy secondary por (1-3%) associated with yellow stain veining.



Geological Descriptions

960.6-963.5 MARBLE: gy - dk gy, predly calc, com mottle.

963.5-964.5 MARBLE: gy, predly calc, mas, mnr sh lam.

964.5-967.3 MARBLE: gy, predly dol, com cht & calc veins.

967.3-970.5 MARBLE: gy, predly calc, com sh strg and lam, So=65'.

970.5-971.9 MARBLE: gy, predly dol, com calc and cht veins.

971.9-973.2 MARBLE: gy, predly calc, mas, wk mottle, So=45'.

973.2-974.5 MARBLE: gy, wh and occ lt brn - pink, bdd - lam, com arg ipt / sh lam & bds up to 1cm, com p developed "pinch and swell" structures & "S" fabrics.

974.5-976.1 MARBLE: gy, predly calc, rr sh lam @ base, mas.

976.1-978.1 MARBLE: gy, predly dol, com irregular closed fractures filled with cht, calc, & hem, occ partially open fracs with hem coatings, occ closed fracs with yel staining, p vuggy secondary por (1-3%) associated with yellow stain veining.

978.1-979.0 MARBLE: wh - lt gy, predly calc, wk mottle, mas.

979.0-981.0 MARBLE: gy - dk gy, predly dol, com cht ipt, com "compressional" fractures i.e. perpendicular to core axis, occ closed hem lined fractures.

981.0-984.9 CHT: gy, dol & calc ipt, com lam, com calc & cht veins.

984.9-985.2 MARBLE: gy, predly calc, abt cht, dol ipt, bdd, mnr open frac / hem coating.

985.2-985.8 MARBLE: gy, predly calc, bdd, wk mottle, occ cht.

985.8-988.3 MARBLE: wh - gy, interbedd calc & dol bds on a 20-30cm scale, occ cht ipt.

988.3-989.3 CHT: gy, occ calc & dol ipt, abt irregular frac, abt yel stn along irregular frac, fracs com / hem coating, p spotty vuggy secondary por (1-3%) associated with yellow stain veining.

989.3-990.0 MARBLE: gy, predly calc, bdd, wk mottle.

990.0-990.9 CHT: gy, mas, abt irregular closed frac / com hem coatings, occ yel stn along fracs.

990.9-994.7 MARBLE: gy, predly calc, occ dol ipt, occ cht ipt, bdd-lam, quest strom.

994.7-998.8 MARBLE: gy, predly dol, com cht ipt, com - abt irregular fracs / hem coatings.

998.8-1005.5 MARBLE: gy, predly dol, occ cht ipt, bdd - lam, occ strom @ 1003.0 & 1002.5m, So=45'.

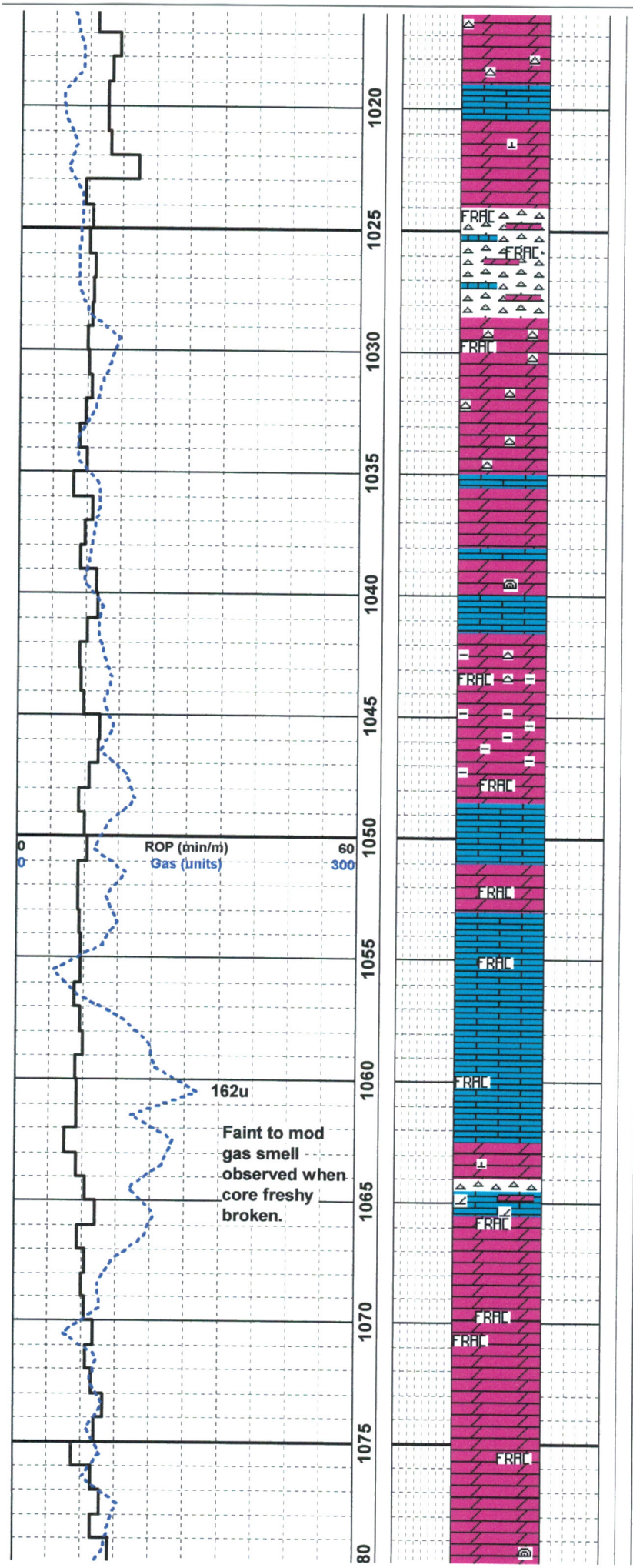
1005.5-1009.5 MARBLE: gy - dk gy, predly calc, com mottle, bdd, rr closed frac, 1006.3 abt fracs for 40cm.

1009.5-1011.1 MARBLE: wh - gy, predly dol, lam - bdd, mnr calc veins.

1011.1-1011.8 MARBLE: wh - gy, predly calc, thinly bdd.

1011.8-1014.6 MARBLE: wh - crm, predly dol, predly mas, occ calc veins, mnr irregular fracs / hem coatings from 1013.2-1013.4.

1014.6-1016.2 MARBLE: gy, predly calc, bdd, wk mottle.



1016.2-1018.9 MARBLE: gy, predly dol, mas - occ lam, rr bdd, occ chty ipt.

1018.9-1020.7 MARBLE: gy - dk gy, predly calc, bdd - occ lam, com mottle.

1020.7-1024.2 MARBLE: gy, predly dol, mas, occ calc veins, mnr closed fracs with hem coatings.

1024.2-1028.6 CHT: gy - dk gy, predly cht / com dol & mnr calc, com near vertical partially fractures, fractures 1024.2 to 1026.5.

1028.6-1034.8 MARBLE: gy - lt gy, predly dol / occ cht, near vertical fractures from 1030-1031.0, occ calc & cht veins.

1034.8-1035.2 MARBLE: lt gy - wh, predly calc, lam - bdd, mnr sh lam.

1035.2-1037.7 MARBLE: lt gy, mnr lt brn near base, predly dol, mas, occ strom near base.

1037.7-1038.5 MARBLE: gy, predly calc, bdd, rr sh lam, wk mottle, So=40'.

1038.5-1039.8 MARBLE: gy, lt brn pink toward base, mnr strom, v arg ipt toward basal 40cm.

1039.8-1041.5 MARBLE: gy - dk gy, predly calc, occ mottle, wk bdd.

1041.5-1043.7 MARBLE: gy - dk gy, predly dol, com arg & occ chty, mnr irregular closed fracs / hem coatings, 1043.8 open low angle fracture.

1043.7-1048.5 MARBLE: brn gy, predly dol, com arg ipt,com shly lam & thin bds, mnr closed irregular fracs, 1044.2 angular fault / 10cm of calc orng gouge.

1048.5-1050.8 MARBLE: wh - lt gy, predly calc, mas, com calc veins, occ irregular closed fracs / hem lining.

1050.8-1052.7 MARBLE: kt gy - gy, predly dol, mas.

1052.7-1054.4 MARBLE: gy - dk gy, mas, predly calc, basal 0.5m com med - low angle fracs.

1054.4-1062.4 MARBLE: gy - dk gy, predly calc, com bdd - occ mas, com mottle, mnr closed frac / hem lining.

1062.4-1063.8 MARBLE: gy, predly dol, mas, rr calc veins.

1063.8-1064.5 CHT: wh - pink, irregular cht nodules in lt brn gy dol marble.

1064.5-1065.7 MARBLE: gy - lt gy, predly calc & dol calc ipt, chaotic bdd, occ looks like CGL.

1065.7-1066.8 MARBLE: gy - dk gy, predly dol, mas, possible CGL.

1066.8-1068.8 MARBLE: dk gy - dk gy brn, predly dol CGL, clasts up to 6cm, pos crinoid, pos brac.

1068.8-1069.5 MARBLE: aa, clasts 1-5mm, rr up to 2cm.

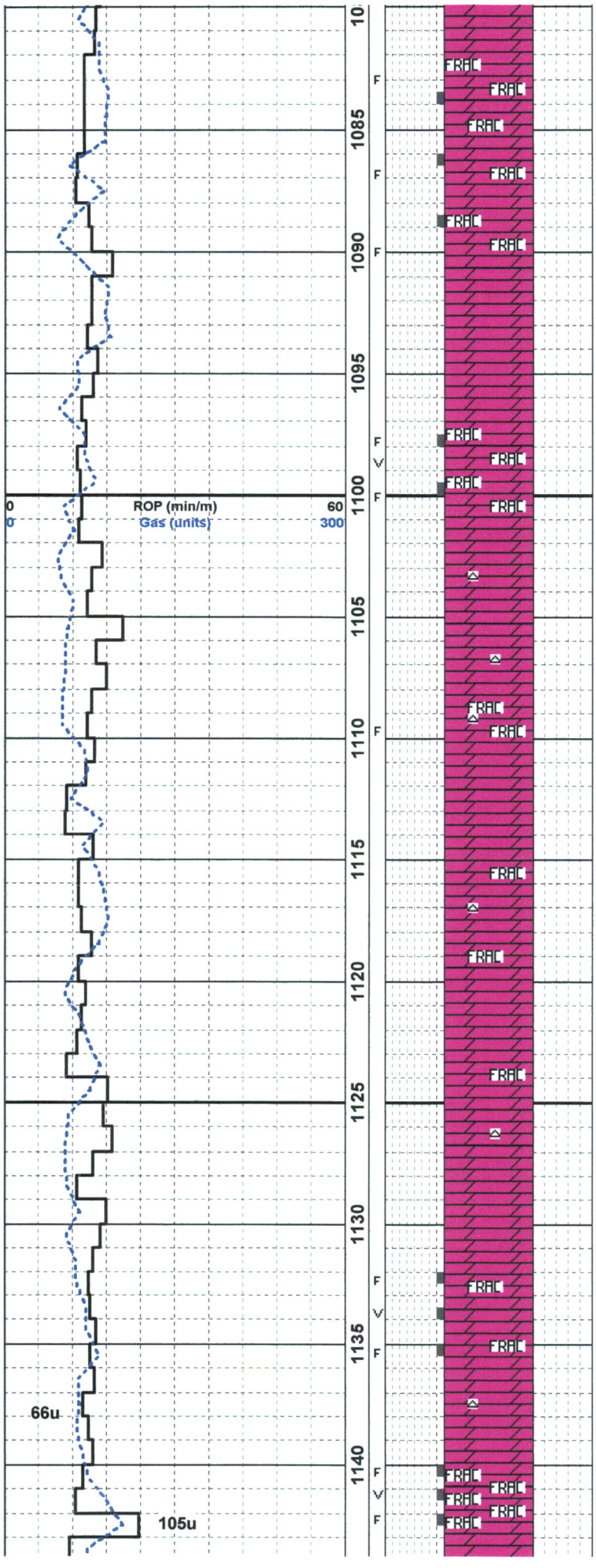
1069.5-1071.0 MARBLE: brn gy, predly dol, com arg ipt, occ vert frac.

1071.0-1074.0 MARBLE: gy - occ dk gy, mnr orng ipt, predly dol, mas, occ cht & calc veins.

1074.0-1076.7 MARBLE: gy - wh, predly dol, mas, occ near vertical frac, mnr cht & calc veins.

1076.7-1077.9 MARBLE: gy & occ yel ipt, predly dol, com irregular fracture, com yel stn, mas.

1077.9-1103.0 MARBLE: gy - lt gy, occ dk gy, predly dol, mas, occ wk bdd, strom @ 1079.5m, occ vertical fractures throughout with the majority occuring between 1082.5-1090.5m & 1094.5-1103.0m, best vuggy por



occurs 1097.5-1099.5, predly tt, mnr p vug & frac por (1-2%), n show.

1103.0-1110.0 MARBLE: gy, predly dol, bdd, occ mottle, occ chty ipt, occ fracs toward base.

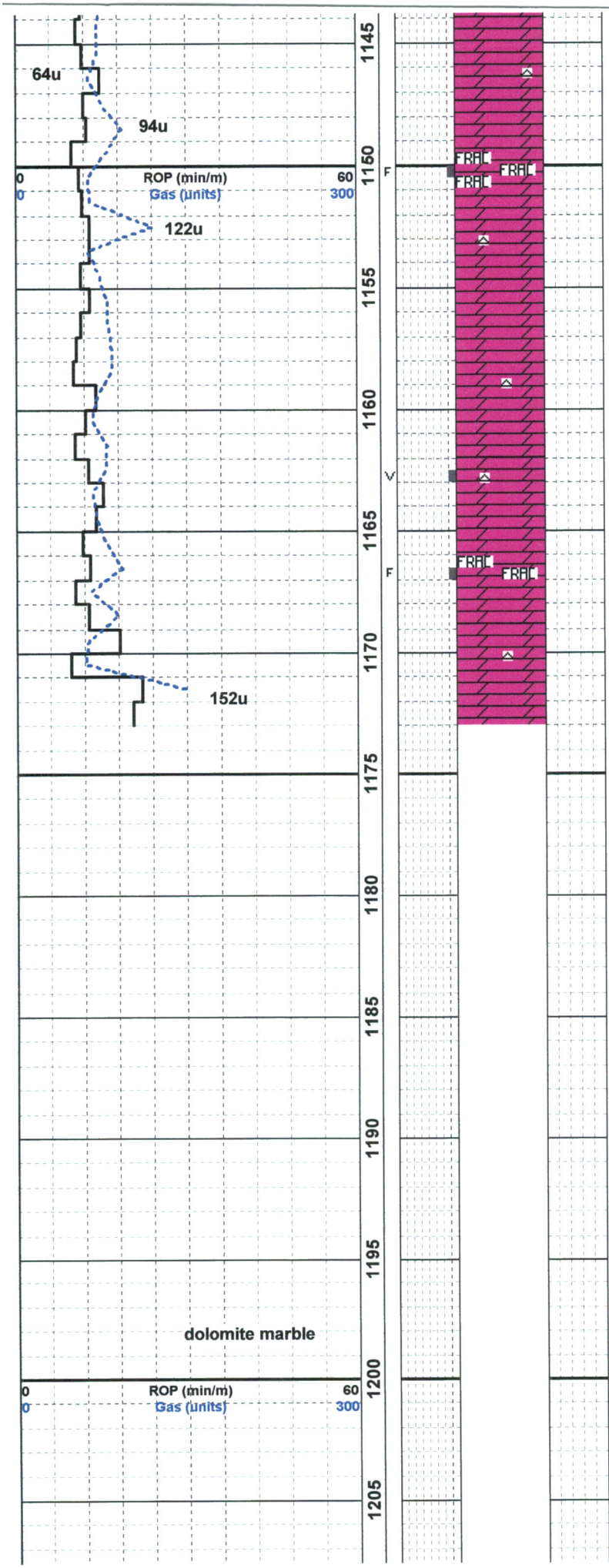
1110.0-1114.5 MARBLE: gy, predly dol, mas, com irregular fracs, mnr vugs from 1111.5 - 1113.5m, occ wk mottle in basal 1m, mnr vugs associated with fractures, vugs are com filled or filled ipt / hem.

1114.5-1119.0 MARBLE: predly gy, occ sl yel gn, com mottle, com closed irregular closed fracs.

1119.0-1132.0 MARBLE: gy, mas, predly dol, occ closed & open frac, occ bdd, 1118.9-1119.5 wk yel staining.

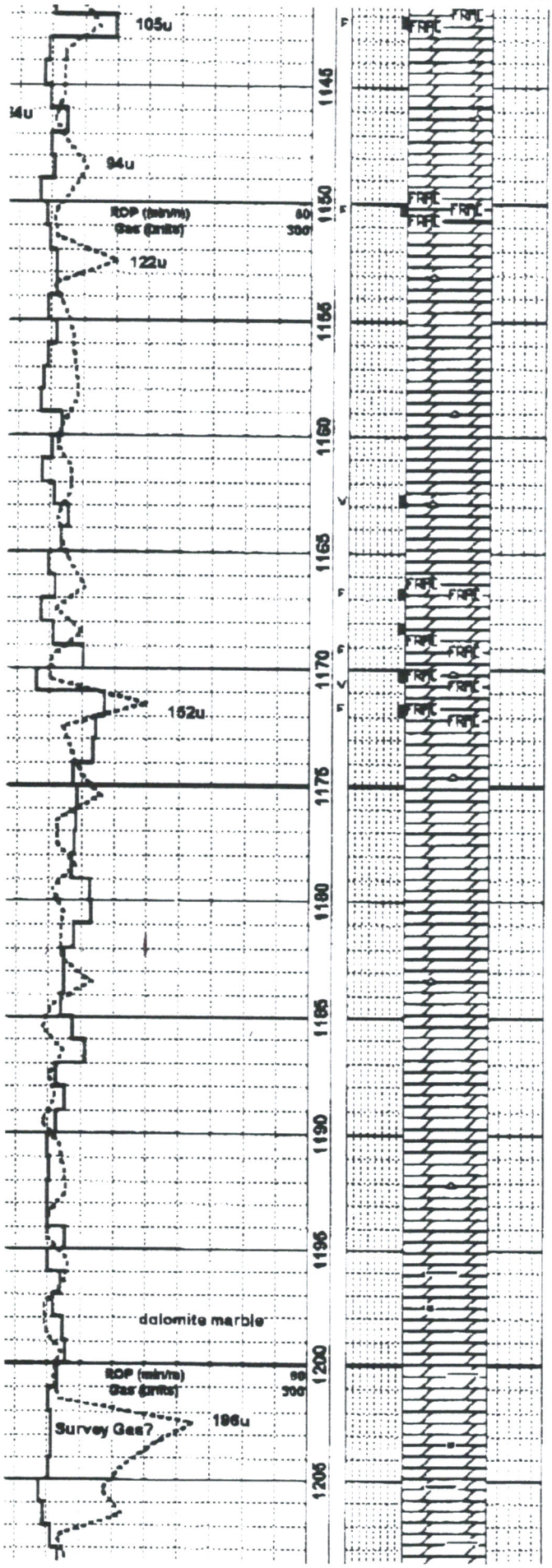
1132.0-1137.0 gy, predly dol, occ open & closed frac, occ yel stn & rr associated vug por, p vug & frac por (1%), n show.

1137.0-1153.2 gy - dk gy, predly dol, com planar smmoth surface & occ rough irregular fracs, hem coatings on all fracs, rr yel stn on fracs, v abt fracs 1140.5-1142.5m, fracs predly vertical on a 2-3cm spacing, com moderate angle fracs on a 10-15cm spacing, occ vugs, best vugs occur over interval 1142.5-1143.5m & 1149.5-1150.8m , p frac & vug por (1-2%), n show.



1153.2-1162.0 MARBLE: gy, predly dol, mas, com chty ipt, mnr vugs, mnr fracs with f dolomite crystals.

1162.0-xxxx.x MARBLE: gy, predly dol & chty ipt, com fracs / hem coatings, predly rr vugs & occ occ vugs over 1162.5-1163.5m, com fracs over 1166.0-1167.2, predly tt / mnr frac & vuggy por (1-2%), n show.

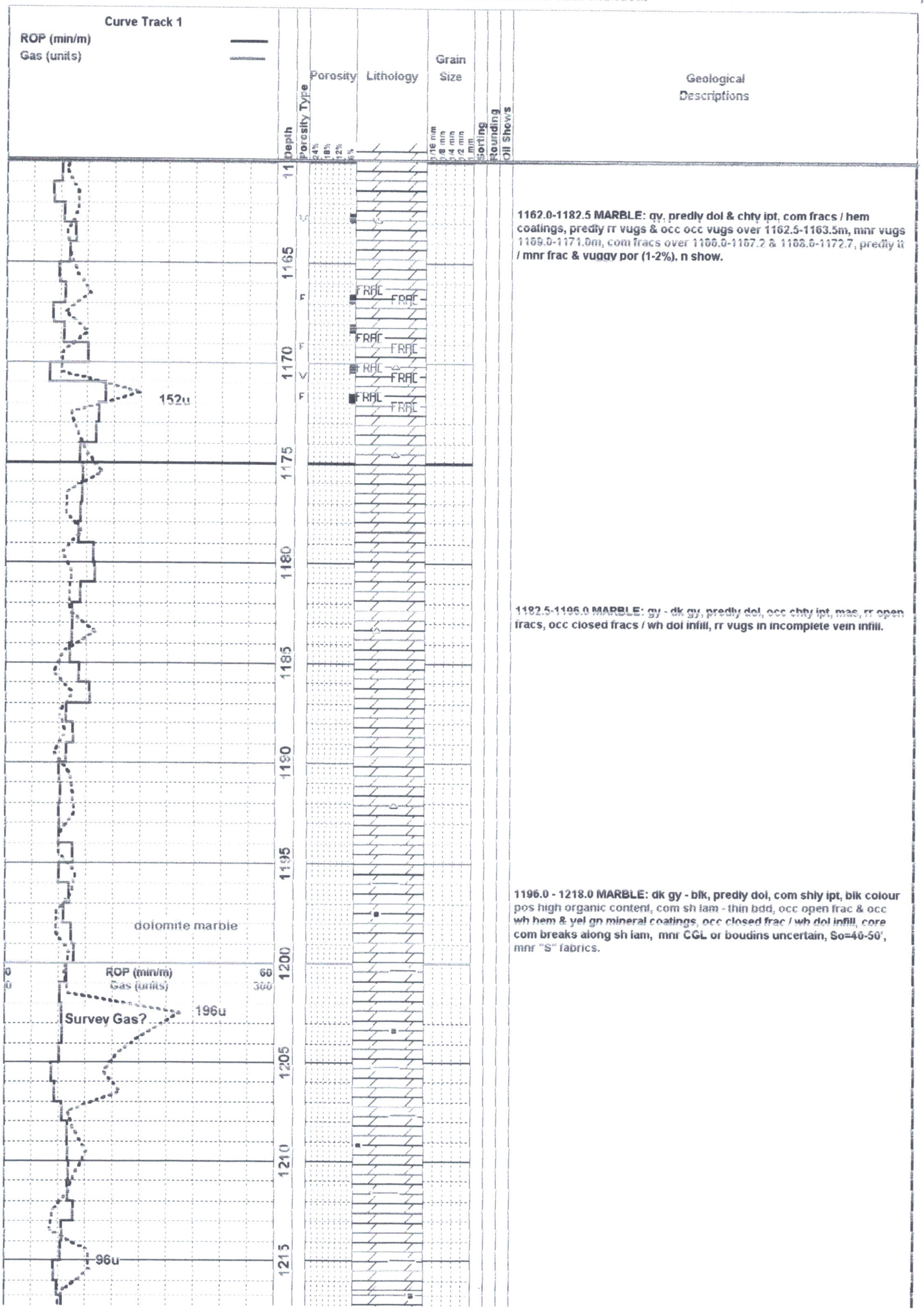


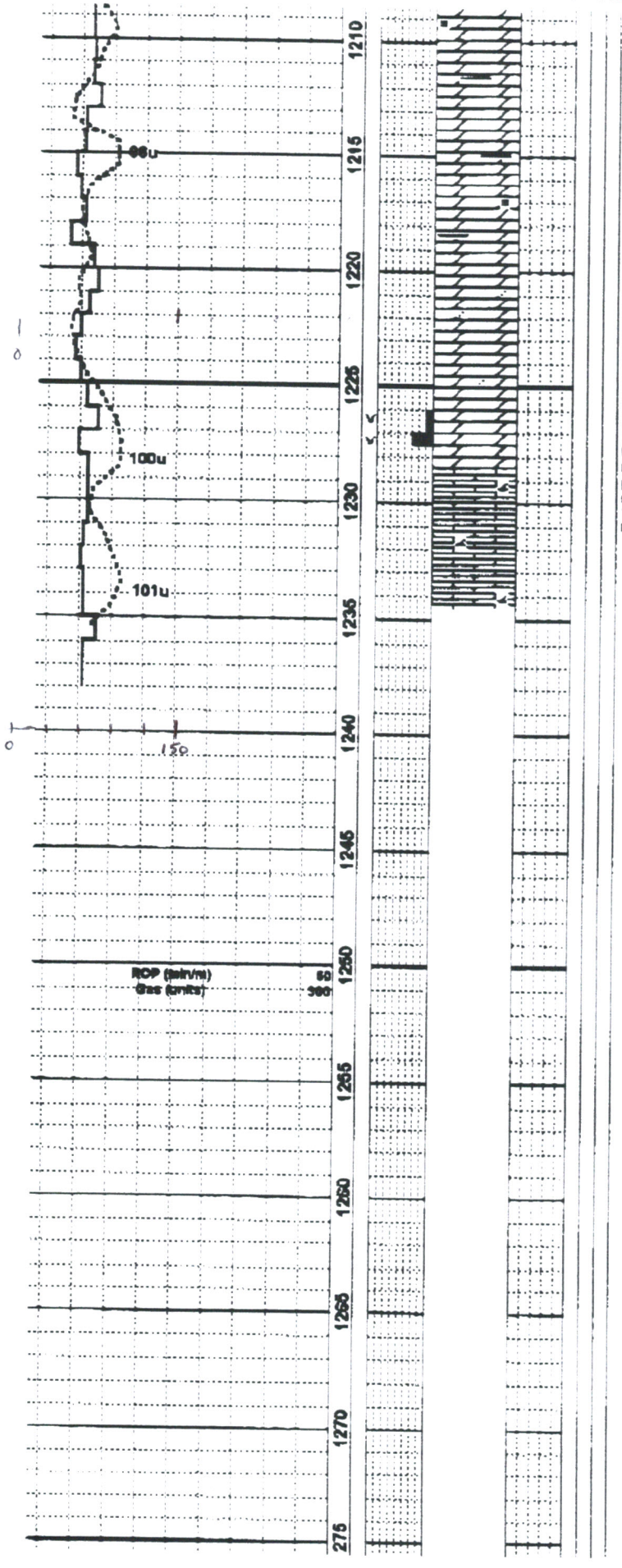
1153.2-1162.0 MARBLE: gy, predly dol, mas, com chty lpt, mnr vugs, mnr frac with f dolomite crystals.

1162.0-1182.5 MARBLE: gy, predly dol & chty lpt, com fracs / hem coatings, predly rr vugs & occ occ vugs over 1162.5-1163.5m, mnr vugs 1166.5-1171.0m, com fracs over 1166.0-1167.2 & 1168.0-1172.7, predly tt / mnr frac & vuggy por (1-2%), n show.

1182.5-1196.0 MARBLE: gy - dk gy, predly dol, occ chty lpt, mas, rr open fracs, occ closed fracs / wh dol infill, rr vugs in incomplete vein infill.

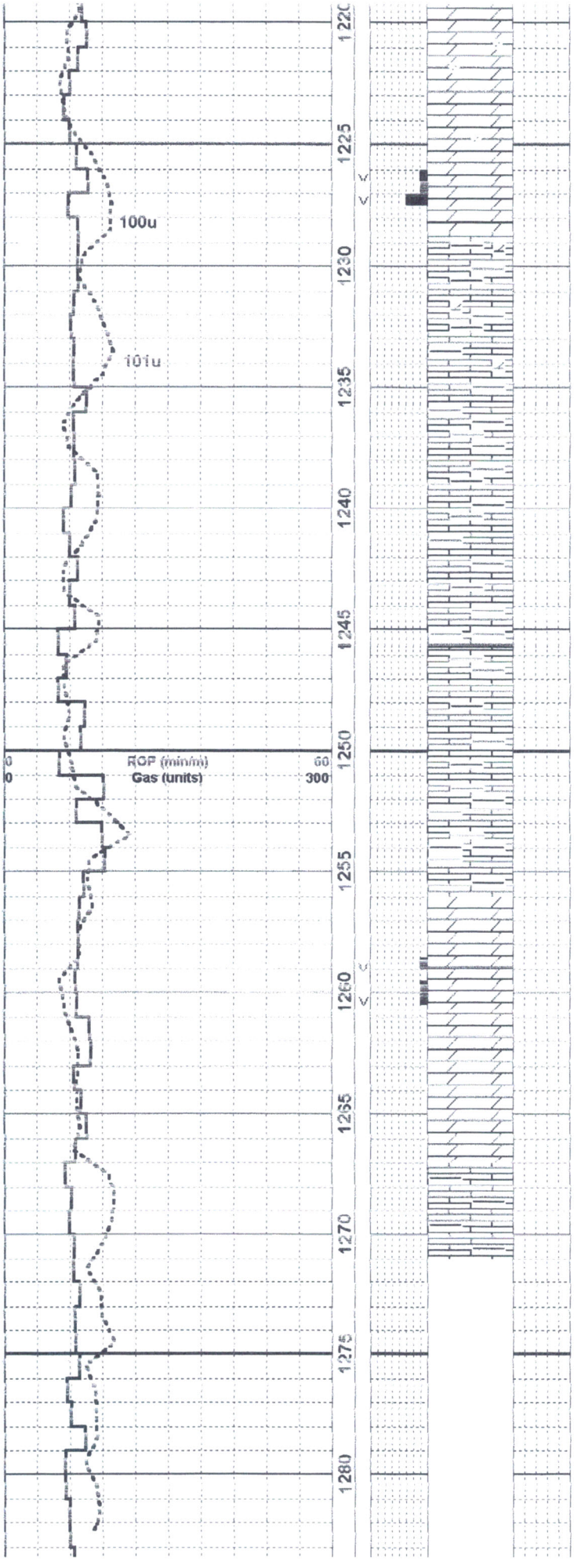
1196.0 - 1218.0 MARBLE: dk gy - blk, predly dol, com shly lpt, blk colour pos high organic content, com sh lam - thin bdd, occ open frac & occ wh hem & yel gn mineral coatings, occ closed frac / wh dol infill, core com breaks along sh lam, mnr CGL or boudins uncertain, So=40-60°, mnr "S" fabrics.


Curve Track 1
ROP (min/m)
Gas (units)
Depth
Porosity Type
Porosity
Lithology
Grain Size
Sorting
Rounding
Oil Shows
Geological Descriptions
1165
1170
1175
1180
1185
1190
1195
1200
1205
1210
1215
152u
dolomite marble
ROP (min/m)
Gas (units)
60
300
Survey Gas?
196u
96u
FRAC
1162.0-1182.5 MARBLE: gy, predly dol & chty ipt, com fracs / hem coatings, predly rr vugs & occ occ vugs over 1162.5-1163.5m, mnr vugs 1169.0-1171.0m, com fracs over 1166.0-1167.2 & 1168.0-1172.7, predly tt / mnr frac & vuggy por (1-2%), n show.
1182.5-1196.0 MARBLE: gy - dk gy, predly dol, occ chty ipt, mas, rr open fracs, occ closed fracs / wh dol infill, rr vugs in incomplete vein infill.
1196.0 - 1218.0 MARBLE: dk gy - blk, predly dol, com shly ipt, blk colour pos high organic content, com sh lam - thin bdd, occ open frac & occ wh hem & yel gn mineral coatings, occ closed frac / wh dol infill, core com breaks along sh lam, mnr CGL or boudins uncertain, So=40-50°, mnr "S" fabrics.



1218.0-1225.1 MARBLE: gy - dk gy, predly dol, rr bdd, occ grainstone lpt, com closed frac / dol infill.

1226.1-1228.6 MARBLE: gy - lt gy, predly dol, occ mottled, occ vugs 1228.0-1227.5, com vugs 1227.2-1227.5, vugs up to 5mm, vugs appear to be incomplete replacment and infill by dol of stringy calc mottles, mnr open frac / occ hem stn, hem rr associated with vugs, rr stylolite, predly p vuggy por (1-3%), mnr f vuggy por 1227.2-1227.5 (7-10%), n show.
1228.5-1234.6 MARBLE: gy - lt gy, predly calc, com mottle, com closed frac at 40-60°, with complete dol infill, 8ea45°.



ipt, com closed frac / dol infill.

1226.1-1228.5 MARBLE: gy - lt gy, predly dol, occ mottoled, occ vugs 1226.0-1227.5, com vugs 1227.2-1227.5, vugs up to 5mm, vugs appear to be incomplete replacment and infill by dol of stringy calc mottles, mnr open frac / occ hem stn, hem rr associated with vugs, rr stylolite, predly p vuggy por (1-3%), mnr f vuggy por 1227.2-1227.5 (7-10%), n show.

1228.5-1234.6 MARBLE: gy - lt gy, predly calc, com mottle, com closed frac at 40-50', with complete dol infill, So=45'.

1234.6-1256.2 MARBLE: lt & dk gy bands, interbedded phyllite & predly calc marble, interbedded on the 1-2cm scale, occ mottled & occ mas.

1256.2-1266.8 MARBLE: gy - dk gy, predly dol, mas / mnr dol veins, 1258.5-1260.5 com irregular fracs / hem & rr yel gn mineral, occ small vugs 1-2mm associated with the fracturing.

Western Adventure No. 2

- surface casing @ 127.4 m
- intermediate casing @ 488.0 m

- casing shoe cement plug @ 455 m – 490 m
- bottom hole cement plug @ 1295 m – 1325 m

Open Hole Synopsis

517.7 – 521 m	Sandstone: fine to medium grained, locally coarse to very coarse grained; poor intergranular porosity (visual estimate 3 – 6%, locally 6 – 9%); Background gas 20 to 25 units.
522 m	Minor amounts of gas observed bubbling from core.
525 – 560 m	Predominantly siltstone, local 1 to 3 m thick sandy sections; Background gas consistent between 10 to 20 units.
560 – 575 m	Interbedded siltstone and sandstone; fair intergranular sandstone porosity up to 6 – 9% (visual estimate); no show; Background gas consistent between 10 to 20 units.
575 – 609 m	Interbedded siltstone and sandstone; predominantly tight; no show; Background gas between 10 to 20 units.
609 – 615 m	Sandstone: fair to good intergranular porosity (visual estimate 8 – 12%); no show; slight increase in overall Background gas from an average of 15 units to 25 units.
615 – 645 m	Predominantly siltstone, minor sandstone; Background gas at approximately 15 units rising upwards to 25 units at 645 m.
645 – 762 m	Interbedded siltstone, sandstone and conglomerate; locally poorly developed intergranular porosity (visual estimate 2 – 4%) within sandy zones; units predominantly tight, no shows; Background gas increased from 15 – 20 units up to 60 units over entire interval, local gas peaks up to 110 units. Gas peaks appear to be primarily encountered within moderate to well sorted sandy sections. Slight gas increase of 10 to 20 units associated with fractures and fault slickensides between 660 m to 675m.
761.5 m	**Major unconformity contact**; 30 to 40 unit gas increase (background gas approximately 50 – 60 units) over 1 m contact zone.

763 m	Background gas drop to 30 units; marble host rock
761.5 – 965 m	Predominantly Calcareous Marble (80%) with Dolomitic Marble interbeds; Background gas variable from 30 to 50 units; local gas peaks (1 to 3 m duration) up to 70 units; minor gas peaks appear associated with open fractures and where present – fault breccia/gouge zones.
965 – 1065 m	Interbedded Calcareous & Dolomitic Marble (approximately 50/50); local 1 – 5 m thick, tight, highly fractured chert sections; Background gas from approximately 50 to 70 units over interval; occasional gas peaks (1 – 3 m duration) up to 100 units, gas appears associated with fractures; minor zones of 1 – 3% (visual estimate) vuggy porosity; elevated gas levels from 1056 to 1068 m – 162 unit peak at 1060.5 m and 118 unit peak at 1062.5 m – faint to moderate hydrocarbon smell from freshly broken core within this 12 m zone.
1065 – 1228 m	Dolomitic Marble; Background gas approximately 70 units throughout section, occasional gas peaks (1 to 2 m duration) associated primarily with fractured core sections, peaks range up to 152 units; minor, localized vuggy porosity (1 – 2% range – visual estimate).
1228 – 1282 m	Predominantly intermixed Calcareous & Dolomitic Marble; Background gas approximately 70 – 80 units, minor gas peaks up to 115 units, gas peaks appear associated with fractures.
1325.5 m TD	