# 30/3-1 PHASE I
# ORGANIC GEOCHEMISTRY
# ANALYTICAL RESULTS

Reported by Geochem Labs Ltd.
Work undertaken for Statoil
Exploration and Production Laboratory

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## TABLE 1
## ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-001 | 200-230m | A 50% Shale, blocky, v. hard, non-calc., dark grey | N3 | 0.09 |
| | | B 35% Shell debris, bivalves | | |
| | | C 15% Quartz, blocky, crystalline, white | N9 | |
| | | V. poor sample | | |
| 360-002 | 230-260m | A 60% Quartzite, blocky, v. hard, micro-crystalline to fine to medium, dark grey | N3 | |
| | | B 30% Shell debris, as 360-001B | | |
| | | C 10% Quartz | | |
| 360-003 | 260-290m | A 20% Sand, unconsolidated, fine-medium grained, subrounded, colourless to white | N9 | |
| | | B 20% Quartzite, as 360-002A | N3 | |
| | | C 15% Shell debris, as 360-001B | | |
| | | D 15% LCM - cement | | |
| | | E 10% Chert, blocky, hard, concnoidal | | |
| | | F 10% Igneous, blocky, hard, quartz/amphiboles | | |
| | | G 5% Chalky limestone, blocky, soft, white | N9 | |
| | | H 5% Free quartz, v. coarse, blocky, white | N9 | |
| | | V. poor sample | | |
| 360-004 | 290-320m | A 35% Sand, as 360-003A | N9 | |
| | | B 30% Quartzite, as 360-002A | N3 | |
| | | C 10% Chert, as 360-003E | | |
| | | D 10% Shell debris, as 360-001B | | |
| | | E 10% Igneous, as 360-003F | | |
| | | F 5% Chalky limestone, as 360-003G | N9 | |
| | | V. poor sample | | |
| 360-005 | 320-350m | A 30% Sand, unconsolidated, rounded to sub-rounded becoming subangular, fine-medium grained, colourless to white | N9 | |
| | | B 20% Chalky limestone, blocky, soft, creamy white, caved | N9 | 0.00,0.00 |
| | | C 15% Igneous, blocky, v. hard | | |
| | | D 15% Chert, as 360-003E | | |
| | | E 10% Shell debris, minor other fossils | | |
| | | F 10% Quartzite, as 360-002A | N3 | |
| 360-006 | 350-380m | A 25% Quartzite, as 360-002A | N3 | |
| | | B 20% Quartz, as 360-003H | N9 | |
| | | C 15% Shell debris | | |
| | | D 15% Chalky limestone, as 360-005B | N9 | |
| | | E 10% Granite, caved | | |
| | | F 10% Sand, as 360-005A | N9 | |
| | | G 5% Shale, blocky, hard, calc., greenish grey | 5G6/1 | 0.17 |
| | | V. poor sample | | |
| 360-007 | 380-410m | A 70% Igneous, blocky, v. hard, (basaltic?) | | |
| | | B 20% Shell debris | | |
| | | C 10% Sand, as 360-005A | N9 | |
| | | Minor other limestone, chert | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

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|---|---|---|---|---|
| 360-008 | 410-440m | A 90% Igneous, blocky, v. hard, prime minerals being quartz, hornblende, mica, gneissose structure (almost hornblende schist in parts)<br>B 5% Shell debris<br>C 5% Free quartz | | |
| 360-009 | 440-470m | A 80% Igneous, as 360-008A<br>B 10% Shell debris<br>C 10% Free quartz; sand | | |
| 360-010 | 470-500m | A 75% Igneous, as 360-008A<br>B 15% Shell debris<br>C 10% Sand, free quartz | | |
| 360-011 | 500-530m | A 65% Igneous, as 360-008A<br>B 20% Sand, unconsolidated, rounded to sub-rounded, becoming subangular, fine-medium, colourless to white<br>C 15% Shell debris | N9 | |
| 360-012 | 530-560m | A 70% Igneous, as 360-008A<br>B 20% Sand, as 360-011B<br>C 10% Shell debris | N9 | |
| 360-013 | 560-590m | A 70% Igneous, as 360-008A<br>B 15% Sand, as 360-011B<br>C 10% Shell debris<br>D 5% Chert<br>Minor LCM - paint | N9 | |
| 360-014 | 590-620m | A 50% Igneous, as 360-008A<br>B 30% Sand, as 360-011B<br>C 20% Shell debris<br>Minor shale, LCM - metal<br>V. poor sample | N9 | |
| 360-015 | 620-650m | A 65% Igneous, as 360-008A<br>B 20% Sand, as 360-011B<br>C 15% Shell debris<br>Minor shale<br>Poor sample | N9 | |
| 360-016 | 650-680m | A 50% Sand, unconsoldiated, fine-medium subrounded-subangular, colourless to white<br>B 45% Igneous, as 360-008A<br>C 5% Shell debris<br>V. poor sample | N9 | |
| 360-017 | 680-710m | A 80% Sand, as 360-016A<br>B 15% Igneous, as 360-008A<br>C 5% Shale, blocky, hard, non-calc., black<br>D 5% Shell debris<br>Minor other shale, free pyrite<br>V. poor sample | N9<br>N1 | 13.99 |
| 360-018 | 710-740m | A 45% Sand, as 360-016A<br>B 40% Igneous, as 360-008A<br>C 15% Shell debris | N9 | |

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|---|---|---|---|---|
| 360-018 | 710-740m | D MINOR Shale, blocky, hard, non-calc., black<br>Minor other shale | N1 | |
| 360-019 | 740-770m | A 60% Igneous, blocky, v. hard, prime minerals being quartz, hornblende, mica, gneissose structures, (almost hornblende schist in parts). | | |
| | | B 30% Sand, unconsoldiated, fine-medium subrounded-subangular, colourless to white | N9 | |
| | | C 10% Shell debris<br>Minor shale<br>V. poor sample | | |
| 360-020 | 770-800m | A 55% Igneous, as 360-019A | | |
| | | B 30% Sand, as 360-019B | N9 | |
| | | C 10% Shell debris | | |
| | | D 5% Shale, platy, soft, non-calc., light brownish grey<br>V. poor sample | 5YR6/1 | 0.92 |
| 360-021 | 800-830m | A 60% Sandstone, consoldiated, blocky, soft, v. fine-fine grained, subrounded, sub-angular, with pyrite and shale in matrix, light brown<br>V. pyritic, no F. | 5YR6/4 | |
| | | B 25% Igneous, as 360-019A | | |
| | | C 10% Coal, blocky, dull lustre, black | N1 | 48.70 |
| | | D 5% Shell debris<br>Minor other shale<br>Poor sample | | |
| 360-022 | 830-860m | A 60% Sand, unconsolidated, fine-medium occ. coarse, subrounded, colourless to white, no F. | N9 | |
| | | B 20% Mudstone, blocky, soft becoming hard, sandy in parts, non-calc., light greenish grey | 5G8/1 | 0.84,0.86 |
| | | C 10% Lignitic coal, blocky, cellular structure, soft to hard and brittle, brownish black | 5YR2/1 | 32.01 |
| | | D 10% Sandstone, as 360-021A<br>Minor shell debris | 5YR6/4 | |
| 360-023 | 860-890m | A 55% Sand, unconsolidated, fine-medium becoming coarse, subrounded, colourless to white | N9 | |
| | | B 20% Mudstone, blocky, soft to hard, sandy in parts, non-calc., yellowish to light greenish grey, significant caving | 5Y8/1-5G8/1 | 1.21 |
| | | C 15% Sandstone, consolidated, fine grained, subrounded to rounded often with black specks, pyritic in parts, faint dull patchy blue F., yellowish to light greenish grey | 5Y8/1-5G8/1 | |
| | | D 10% Lignitic coal, blocky, woody structure, brownish black to dusky brown<br>Minor shell debris, minor igneous | 5YR2/1- | 26.26 |

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**ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS**

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-024 | 890-920m | A 40% Sand, unconsolidated, fine-medium becoming coarse, subrounded, colourless to white | N9 | |
| | | B 30% Mudstone, blocky, soft to hard, sandy in parts, non-calc., yellowish to light greenish grey, moderate cavings | 5Y8/1-5G8/1 | 2.41 |
| | | C 20% Sandstone, blocky, mudstone matrix, soft, no F., yellowish to light greenish grey | 5Y8/1-5G8/1 | |
| | | D 10% Lignitic coal, blocky, woody structure, brownish black to dusky brown<br>Minor shell debris | 5YR2/1-5YR2/2 | 36.98 |
| 360-025 | 920-950m | A 45% Sand, as 360-024A | N9 | |
| | | B 30% Mudstone, as 360-024B, significant cavings | 5Y8/1-5G8/1 | 1.93,1.93 |
| | | C 15% Lignitic coal, as 360-024D | 5YR2/1-5YR2/2 | 35.73 |
| | | D 5% Sandstone, as 360-024C, no F. | 5Y8/1-5G8/1 | |
| | | E 5% Shell debris<br>Minor LCM - mica | | |
| 360-026 | 950-980m | A 45% Sand, as 360-024A | N9 | |
| | | B 20% Sandstone, consolidated, soft mud matrix, v. fine fine subrounded-rounded grains, often with black specks, greyish yellow green | 5GY7/2 | |
| | | C 15% Mudstone, as 360-024B, abundant cavings | 5Y8/1 5G8/1 | 1.68 |
| | | D 15% Shell debris | | |
| | | E 5% Lignitic coal, as 360-024D | 5YR2/1-5YR2/2 | 31.16 |
| | | Minor igneous | | |
| 360-027 | 980-1010m | A 60% Igneous, blocky, v. hard, crystalline | | |
| | | B 25% Mudstone, as 360-024B, abundant cavings | 5Y8/1-5G8/1 | 0.98,1.00 |
| | | C 10% Shell debris | | |
| | | D 5% Chert<br>Minor limestone, sand | | |
| 360-028 | 1010-040m | A 60% LCM - cement | | |
| | | B 20% Igneous, blocky, hard, crystalline gneissose in parts, hornblende/biotic/felspars | | |
| | | C 20% Mudstone, as 360-024B, abundant cavings<br>Minor shale, chert, shell debris | 5Y8/1-5G8/1 | 0.67 |
| 360-029 | 1040-070m | A 70% Mudstone, blocky, soft, non-calc., sandy, abundant cavings, greyish yellow green | 5GY7/2 | 0.88 |
| | | B 20% Igneous, granitic | | |
| | | C 10% LCM - cement | | |
| 360-030 | 1070-100m | A 70% Mudstone, as 360-029A, moderate cavings | 5GY7/2 | 1.07 |

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|---|---|---|---|---|
| 360-030 | 1070-100m | B 30% Igneous, granitic | | |
| 360-031 | 1100-130m | A 80% Mudstone, blocky, soft, non-calc., sandy, moderate cavings, greyish yellow green | 5GY7/2 | 1.28 |
| | | B 20% Igneous, as 360-030B | | |
| 360-032 | 1130-160m | A 90% Mudstone, as 360-031A, moderate cavings | 5GY7/2 | 1.30 |
| | | B 10% Igneous, as 360-031B | | |
| 360-033 | 1160-190m | A 85% Mudstone, as 360-031A, moderate cavings | 5GY7/2 | 1.23 |
| | | B 10% Sand, unconsolidated, fine-medium becoming coarse, subrounded, colourless to white | N9 | |
| | | C 5% Igneous, as 360-031B<br>Minor chert | | |
| 360-034 | 1190-220m | A 50% Mudstone, as 360-031A, sig. cavings | 5GY7/2 | 1.22 |
| | | B 35% Sand, as 360-033B | N9 | |
| | | C 10% Igneous, as 360-031B | | |
| | | D 5% Coal. lignitic, finely divided, brownish black<br>Minor chalky limestone | 5YR2/1 | 0.19 |
| 360-035 | 1220-250m | A 35% Mudstpne, as 360-031A, abundant cavings | 5GY7/2 | 1.03,1.04 |
| | | B 25% Sandstone, consolidated, fine grained, colourless to white, no F. | N9 | |
| | | C 25% Shale, blocky, hard, non-calc., brownish grey | 5YR4/1 | 0.92 |
| | | D 10% Igneous, as 360-030B | | |
| | | E 5% Sand, as 360-033B | N9 | |
| 360-036 | 1250-280m | A 45% Mudstone, as 360-031A, abundant caving | 5GY7/2 | 1.11 |
| | | B 30% Igneous, as 360-030B, abundant caving | | |
| | | C 20% Shale, as 360-035C | 5YR4/1 | 1.09 |
| | | D 5% Sandstone, as 360-035B | N9 | |
| 360-037 | 1280-310m | A 35% Mudstone, as 360-031A, abundant caving | 5GY7/2 | 0.97 |
| | | B 30% LCM - cement | | |
| | | C 30% Shale, blocky to platy, thinly fissile, soft, non-calc., brownish grey | 5YR4/1 | 1.29 |
| | | D 5% Igneous, as 360-030B<br>Minor sandstone | | |
| 360-038 | 1310-340m | A 75% Shale, platy, thinly fissile, to blocky, non-calc., med. light grey | N6 | 1.23 |
| | | B 10% Mudstone, as 360-031A, abundant cavings | 5GY7/2 | |
| | | C 10% Sandstone, as 360-035B | N9 | |
| | | D 5% LCM - cement<br>Minor igneous | | |
| 360-039 | 1340-370m | A 65% Shale, as 360-038A | N6 | 1.46 |
| | | B 25% Mudstone, as 360-031A, abundant cavings | 5GY7/2 | |

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|---|---|---|---|---|
| 360-039 | 1340-370m | C 5% Sandstone, consolidated, fine grained, colourless to white, no F. | N9 | |
| | | D 5% Sand, unconsoldiated, fine-medium becoming coarse, subrounded, colourless to white | N9 | |
| | | Minor igneous, pyrites and shell debris | | |
| 360-040 | 1370-400m | A 65% Shale, platy, thinly fissile to blocky, non-calc., med. light grey | N6 | 1.28 |
| | | B 20% Mudstone, blocky, soft, non-calc., sandy, abundant cavings, greyish yellow green | 5GY7/2 | 1.16 |
| | | C 10% Sandstone, as 360-0039C, no F. | N9 | |
| | | D 5% Mudstone, blocky, hard, non-calc., light brown | 5YR5/6 | 0.76,0.76 |
| | | Minor igneous, sand | | |
| 360-041 | 1400-430m | A 85% Shale, as 360-040A | N6 | 1.20 |
| | | B 10% Mudstone, as 360-040B, CAVED | 5GY7/2 | |
| | | C 5% Sandstone, as 360-039C, no F. | N9 | |
| | | Minor pyrites, other mudstone | | |
| 360-042 | 1430-460m | A 85% Shale, as 360-040A, minor cavings | N6 | 1.21 |
| | | B 10% Mudstone, as 360-040B, CAVED | 5GY7/2 | |
| | | C 5% Sandstone, as 360-039C, no F. | N9 | |
| | | Minor pyrites, other mudstone, igneous | | |
| 360-043 | 1460-490m | A 85% Shale, blocky to platy, soft to hard, non-calc., brownish to med. grey | 5YR4/1-N5 | 1.43 |
| | | B 5% Shale, as 360-040A, CAVED | N6 | |
| | | C 5% Mudstone, as 360-040B, CAVED | 5GY7/2 | |
| | | D 5% Sandstone, as 360-039C, no F. | N9 | |
| 360-044 | 1490-520m | A 85% Shale, blocky, platy, non-calc., thinly fissile, med. light grey | N6 | 1.24 |
| | | B 10% Shale, as 360-043A | 5YR4/1-N5 | 2.60,2.60 |
| | | C 5% Mudstone, as 360-040B, CAVED | 5GY7/2 | |
| | | Minor sandstone | | |
| 360-045 | 1520-550m | A 65% Shale, as 360-044A | N6 | 0.97 |
| | | B 30% Shale, as 360-043A | 5YR4/1-N5 | 1.61 |
| | | C 5% Mudstone, as 360-040B | 5GY7/2 | |
| | | Minor igneous, pyrite, sandstone | | |
| 360-046 | 1550-580m | A 60% Sand, unconsolidated, f. fine - fine grained, rounded - subrounded, colourless to white, no F. | N9 | |
| | | B 40% Shale, as 360-044A | N6 | 1.02 |
| | | Minor mudstone and sandstone | | |
| 360-047 | 1580-610m | A 55% Shale, as 360-044A | N6 | 1.01 |
| | | B 25% Shale, as 360-043A | 5YR4/1-N5 | 1.01,1.01 |
| | | C 15% Sand, as 360-046A, no F. | N9 | |
| | | D 5% Mudstone, as 360-040B, CAVED | 5GY7/2 | |
| | | Minor sandstone, pyrites | | |
| 360-048 | 1610-640m | A 55% Shale, blocky, platy, soft, non-calc., med. dark grey | N4 | 0.98 |
| | | B 20% Shale, blocky, soft, non-calc., med. grey | N5 | |

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|---|---|---|---|---|
| 360-048 | 1610-640m | C 20% Sand, unconsolidated, v. fine-fine grained, rounded - subrounded, colourless to white, no F. | N9 | |
| | | D 5% Mudstone, blocky, soft, non-calc., sandy, caved, greyish yellow green<br>Minor shell debris | 5GY7/2 | |
| 360-049 | 1640-670m | A 90% Shale, blocky, soft, non-calc., med. grey | N5 | 1.53 |
| | | B 10% Sand, 360-048C, no F. | N9 | |
| 360-050 | 1670-700m | A 95% Shale, blocky, soft, non-calc., med. to med. light grey | N5-6 | 0.55 |
| | | B 5% Mudstone, as 360-048D, caved<br>Minor sandstone, mudstone | 5GY7/2 | |
| 360-051 | 1700-730m | A 90% Shale, as 360-050A, minor cavings | N5-6 | 0.32 |
| | | B 10% Sand, as 360-048C, no F.<br>Minor sandstone, mudstone | N9 | |
| 360-052 | 1730-760m | A 95% Shale, blocky, soft, thinly fissile, non-calc., minor cavings, med. light grey occ. med grey | N6 occ N5 | 0.16,0.16 |
| | | B 5% Mudstone, as 360-048D, CAVED<br>Minor sandstone, other mudstone, pyrite | 5GY7/2 | |
| 360-053 | 1760-790m | A 95% Shale, blocky, soft, non-calc., thinly interbedded med. dark grey shales, minor cavings, med. light to light brownish grey | N6-5YR6/1 | 0.21 |
| | | B 5% Shale, blocky, soft, non-calc., med. dark grey<br>Minor sandstone, mudstone, pyrite | N4 | 0.16 |
| 360-054 | 1790-820m | A 70% Shale, as 360-052A | N6 occ N5 | 0.10 |
| | | B 30% LCM - cement, metal and paint<br>Minor igneous, pyrites and mudstone | | |
| 360-055 | 1820-850m | A 85% Shale, as 360-052A, med. light to light grey | N6-7 | 0.20 |
| | | B 15% LCM - cement and paint, metal | | |
| 360-056 | 1850-880m | A 95% Shale, blocky to platy, soft to hard, non-calc., med. light to light grey | N6-7 | 0.22 |
| | | B 5% LCM - cement<br>Minor mudstone other shale | | |
| 360-057 | 1880-910m | A 95% Shale, as 360-056A | N6-7 | 0.30 |
| | | B 5% LCM - cement<br>Minor mudstone, other shale | | |
| 360-058 | 1910-940m | A 80% Shale, as 360-056A, minor cavings | N6-7 | 0.40 |
| | | B 15% Shale, blocky, soft, calc., pale reddish brown to greyish red | 10R5/4-10R4/2 | 0.18 |
| | | C 5% LCM - cement<br>Minor other mudstone, pyrite | | |
| 360-059 | 1940-970m | A 85% Shale, as 360-056A | N6-7 | 0.21,0.23 |
| | | B 10% Shale, blocky, soft, calc., pale brown to pale reddish brown | 5R5/2-10R5/4 | 0.11 |
| | | C 5% LCM - cement, metal | | |

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|---|---|---|---|---|
| 360-060 | 1970-2000m | A 55% Shale, blocky to platy, soft to hard, non-calc., med. light to light grey, minor cavings | N6-7 | 0.43 |
| | | B 20% Shale, blocky, soft, calc., pale to pale reddish brown | 5YR5/2-10R5/4 | 0.17 |
| | | C 10% Mudstone, blocky, soft, non-calc., sandy, caved, greyish yellow green | 5GY7/2 | |
| | | D 10% Mudstone, sandy, blocky, soft, non-calc., med. light grey | N6 | 0.52 |
| | | E 5% LCM - cement | | |
| 360-061 | 2000-030m | A 70% Shale, as 360-060A | N6-7 | 0.40,0.40 |
| | | B 10% Shale, as 360-060B | 5YR5/2-10R5/4 | 0.09 |
| | | C 10% Mudstone, as 360-060D | N6 | 0.51 |
| | | D 10% LCM - cement, plastic<br>Minor mudstone, other shale | | |
| 360-062 | 2030-060m | A 70% Shale, platy, blocky, non-calc., silty in parts, occ. thinly interbedded with dark shales, med. light to light grey | N6-7 | 0.46 |
| | | B 20% Mudstone, as 360-060D | N6 | 0.25 |
| | | C 10% Shale, as 360-060B | 5YR5/2-10R5/4 | 0.25 |
| | | D 10% LCM - cement | | |
| 360-063 | 2060-090m | A 70% Shale, as 360-062A, minor cavings | N6-7 | 0.62,0.62 |
| | | B 15% Mudstone, interbedded with shale, sandy and calc., yellowish grey | 5Y7/2 | 0.15,0.15 |
| | | C 10% Shale, blocky, soft, non-calc-calc., pale to pale reddish brown | 5YR5/2-10R5/4 | 0.11 |
| | | D 5% LCM - cement, metal | | |
| 360-064 | 2090-120m | A 75% Shale, as 360-062A, moderate cavings | N6-7 | 0.17 |
| | | B 10% Mudstone, as 360-063B | 5Y7/2 | 1.31 |
| | | C 10% Shale, as 360-063C | 5YR5/2-10R5/4 | 0.07,0.07 |
| | | D 5% LCM - cement, metal<br>Minor pyrite | | |
| 360-065 | 2120-150m | A 90% Shale, as 360-062A, minor cavings | N6-7 | 0.33 |
| | | B 5% Shale, as 360-063C | 5YR5/2-10R5/4 | 0.03 |
| | | C 5% Mudstone, blocky, soft, calc., light greenish grey<br>Minor pyrite, other mudstone | 5G8/1 | |
| 360-066 | 2150-180m | A 90% Shale, as 360-062A, cavings | N6-7 | 0.49 |
| | | B 5% Shale, as 360-063C | 5YR5/2-10R5/4 | |
| | | C 5% Mudstone, as 360-065C<br>Minor other mudstone | 5G8/1 | |
| 360-067 | 2180-210m | A 85% Shaly mudstone, fissile to blocky, sl. calc., cavings, light to light bluish grey | N7-5B7/1 | 0.49 |
| | | B 10% LCM - walnut shell | | |
| | | C 5% Shale, as 360-063C, cavings<br>Minor other shale | 5YR5/2-10R5/4 | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

TABLE 1
ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-068 | 2210-240m | A 90% Shaly mudstone, fissile to blocky, sl. calc., light to light bluish grey | N7-5B7/1 | |
| | | B 5% LCM - walnut shell | | |
| | | C 5% Shale, blocky, soft, non-calc.-calc., pale to pale reddish brown, cavings | 5YR5/2-10R5/4 | |
| | | Minor mudstone | | |
| 360-069 | 2240-270m | A 95% Shaly mudstone, as 360-068A, mostly caved | N7-5B7/1 | 0.39 |
| | | B 5% Shale, as 360-068C | 5YR5/2-10R5/4 | |
| | | Minor mudstone, LCM | | |
| 360-070 | 2270-300m | A 95% Shaly mudstone, fissile to blocky, sl. to non-calc., sig, cavings, light to light bluish grey | N7-5B7/1 | 0.43,0.41 |
| | | B 5% LCM - walnut shell | | |
| | | Minor shale | | |
| 360-071 | 2300-330m | A 90% Shaly mudstone, as 360-070A, cavings | N7-5B7/1 | 0.39 |
| | | B 10% Shale, fissile to blocky, sl. silty, sl. calc., greyish to moderate brown | 5YR3/2-5YR3/4 | 0.03 |
| | | Minor LCM | | |
| 360-072 | 2330-360m | A 98% Shaly mudstone, as 360-070A, abundant cavings | N7-5B7/1 | 0.54 |
| | | Minor other shale and mudstone | | |
| 360-073 | 2360-390m | A 98% Shaly mudstone, as 360-070A, sig. cavings | N7-5B7/1 | 0.49 |
| | | Minor other shale and fossil (hard, non-calc. - rice like structures) fragments | | |
| 360-074 | 2390-420m | A 98% Shaly mudstone, as 360-070A, sig. cavings | N7-5B7/1 | 0.50,0.48 |
| | | Minor fossil fragments and other shale | | |
| 360-075 | 2420-450m | A 98% Shale, fissile, non-calc., sig. cavings, med. to med. light grey | N5-6 | 0.53 |
| | | Minor other shale and mudstone | | |
| 360-076 | 2450-467m | A 98% Shale, fissile to blocky, sl. calc., abundant cavings, med. light to greenish grey | N6-5G6/1 | 0.54 |
| | | Minor other shale and minor limestone | | |
| 360-077 | 2467-482m | A 95% Shale, as 360-076A, dominant cavings | N6-5G6/1 | 0.45 |
| | | B 5% Shale, as 360-071B | 5YR3/2-5YR3/4 | |
| | | Minor limestone and LCM | | |
| 360-078 | 2482-497m | A 98% Shale, fissile, non-calc., cavings, med. grey | N5 | 0.37 |
| | | Minor other shale and limestone | | |
| 360-079 | 2497-512m | A 95% Shale, as 360-078A, dominantly caved | N5 | 0.41,0.43 |
| | | B 5% Limestone, blocky, no F., pale yellowish brown to very pale orange | 10YR7/2 | |
| | | Minor other shale | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

## TABLE 1
## ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-080 | 2512-527m | A 95% Shale, fissile, non-calc., sig. cavings | N5 | 0.48 |
| | | B 5% Limestone, blocky, no F., pale yellowish brown to very pale orange | 10YR7/2 | |
| | | Minor other shale | | |
| 360-081 | 2527-542m | A 95% Shale, as 360-080A, sig. cavings | N5 | 0.35 |
| | | B 5% Limestone, as 360-080B, milky blue cut | 10YR7/2 | |
| | | Minor other shale | | |
| 360-082 | 2542-557m | A 98% Shale, fissile, sl. calc., cavings, med. light grey | N6 | 0.56 |
| | | Minor limestone, other shale | | |
| 360-083 | 2557-572m | A 98% Shale, fissile, non-calc., cavings, med. to med. light grey | N5-6 | 0.54 |
| | | Minor other shale | | |
| 360-084 | 2572-587m | A 98% Shale, as 360-083A, cavings | N5-6 | 0.46,0.48 |
| | | Minor limestone | | |
| 360-085 | 2587-602m | A 98% Shale, as 360-083A | N5-6 | 0.49 |
| | | Minor shale and limestone | | |
| 360-086 | 2602-617m | A 98% Shale, as 360-083A, cavings | N5-6 | 0.48 |
| | | Minor limestone | | |
| 360-087 | 2617-632m | A 98% Shale, as 360-083A, sig. cavings | N5-6 | 0.45 |
| | | Minor other shale and limestone | | |
| 360-088 | 2632-647m | A 98% Shale, as 360-083A, cavings | N5-6 | 0.51 |
| | | Minor other shale | | |
| 360-089 | 2647-662m | A 99% Shale, as 360-083A, cavings | N5-6 | 0.48,0.50 |
| 360-090 | 2662-677m | A 98% Shale, as 360-083A, sig. cavings | N5-6 | 0.47 |
| | | Minor limestone | | |
| 360-091 | 2677-692m | A 98% Shale, as 360-083A, cavings | N5-6 | 0.52 |
| | | Minor limestone | | |
| 360-092 | 2692-707m | A 98% Shale, as 360-083A, sig. cavings | N5-6 | 0.49 |
| | | Minor other shale | | |
| 360-093 | 2707-722m | A 60% Shale, as 360-083A, cavings | N5-6 | 0.47 |
| | | B 40% Siltstone, fissile to blocky, non-calc., minor blue cut, med. to med. light grey | N5-6 | |
| 360-094 | 2722-737m | A 98% Shale, as 360-083A, minor cavings | N5-6 | 0.52,0.54 |
| | | Minor coal - poor sample | | |
| 360-095 | 2737-752m | A 98% Shale, as 360-083A, cavings | N5-6 | 0.60 |
| | | Poor sample. Minor coal | | |
| 360-096 | 2752-767m | A 85% Shale, as 360-083A, cavings | N5-6 | 0.55 |
| | | B 10% Coal, blocky, brittle, dull lustre, black | N1 | 38.16 |
| | | C 5% Limestone, as 360-080B, no F. | 10YR7/2 | |
| | | Poor sample. Minor LCM | | |
| 360-097 | 2767-782m | A 80% Shale, as 360-083A, dominantly caved | N5-6 | 0.63 |
| | | B 10% Limestone, as 360-080B, no F. | 10YR7/2 | 0.42 |
| | | C 5% Coal, as 360-096B | N1 | |
| | | D 5% LCM - walnut shell Poor sample | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

## TABLE 1
## ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-098 | 2782-797m | A 85% Shale, fissile, non-calc., sig. cavings, med. to med. light grey | N5-6 | 0.60,0.60 |
| | | B 10% Limestone, blocky, no F., pale yellowish brown to very pale orange | 10YR7/2 | |
| | | C 5% Coal, blocky, brittle, dull lustre, black | N1 | |
| 360-099 | 2797-812m | A 90% Shale, fissile, some silty, non-calc., cavings, med. to med. greenish grey | N5-5GY5/1 | 0.49 |
| | | B 10% Shale, fissile, non-calc., pale yellowish brown | 10YR6/2 | 1.30 |
| | | Minor coal and limestone | | |
| 360-100 | 2818-827m | A 95% Shale, as 360-099A, abundant cavings | N5-5GY5/1 | 0.57 |
| | | B 5% Limestone, as 360-098B, milky blue cut | 10YR7/2 | |
| | | Minor other shale | | |
| 360-101 | 2827-842m | A 90% Shale, as 360-099A, sig. cavings | N5-5GY5/1 | 0.47 |
| | | B 5% Siltstone, fissile to blocky, non-calc., milky blue cut, med. light to light brownish grey | N6-5YR6/1 | |
| | | C 5% Dolomitic limestone, blocky, hard, milky blue cut, pale yellowish brown | 10YR6/2 | |
| 360-102 | 2842-857m | A 70% Shale, as 360-099A, sig. cavings | N5-5GY5/1 | 0.56 |
| | | B 30% Shale, as 360-099B | 10YR6/2 | 1.06,1.06 |
| | | Minor limestone and minor chalk | | |
| 360-103 | 2857-872m | A 70% Shale, as 360-099A, cavings | N5-5GY5/1 | 0.46 |
| | | B 30% Sandstone, blocky, very fine grained, non-calc., milky blue cut, med. light to light brownish grey | N6-5YR6/1 | |
| 360-104 | 2872-887m | A 98% Shale, as 360-099A, cavings | N5-5GY5/1 | 0.57 |
| | | Minor mudstone and limestone | | |
| 360-105 | 2887-902m | A 98% Shale, as 360-099A, cavings | N5-5GY5/1 | 0.41 |
| | | Minor mudstone | | |
| 360-106 | 2902-917m | A 70% Shale, as 360-099A, domminant cavings | N5-5GY5/1 | 0.54 |
| | | B 30% Mudstone, blocky, soft, calcareous, med. to med. light grey | N5-6 | 0.51 |
| | | Minor other shale | | |
| 360-107 | 2917-932m | A 85% Shale, as 360-099A, dominant cavings | N5-5GY5/1 | 0.46 |
| | | B 15% Mudstone, as 360-106B | N5-6 | 0.45 |
| 360-108 | 2932-947m | A 60% Shale, as 360-099A, dominant cavings | N5-5GY5/1 | 0.51 |
| | | B 40% Mudstone, as 360-106B | N5-6 | 0.42 |
| 360-109 | 2947-962m | A 60% Turbodrilled shale, fissile to blocky, non-calc., med. to med. light grey | N5-6 | 0.50,0.50 |
| | | B 40% Shale, as 360-099A, mostly cavings | N5-5GY5/1 | 0.44 |
| | | Minor mudstone | | |
| 360-110 | 2962-977m | A 70% Shale, blocky, non-calc., turbo drilled, med. to med. light grey | N5-6 | 0.73 |
| | | B 30% Shale, as 360-099A, abundant cavings | N5-5GY5/1 | 0.52 |
| | | Minor mudstone, LCM - paint | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

**TABLE 1**
**ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS**

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-111 | 2977-992m | A 55% Shale, blocky, hard, non-calc., turbodrilled, med. dark to med. grey, rare dark grey | N4-5 rare N3 | 0.52 |
| | | B 45% Shale, blocky, brittle, soft to hard, non-calc., mostly caved, med. light grey<br>Minor LCM - paint | N6 | 0.52 |
| 360-112 | 2992-3007m | A 50% Shale, as 360-111A | N4-5 rare N3 | 0.56,0.56 |
| | | B 50% Shale, as 360-111B, mostly caved<br>Very poor sample | N6 | 0.39 |
| 360-113 | 3007-022m | A 95% Shale, as 360-111A | N4-5 rare N3 | 0.50 |
| | | B 5% Shale, as 360-111B<br>Minor mudstone | N6 | 0.52 |
| 360-114 | 3022-037m | A 80% Shale, as 360-111A, minor cavings | N4-5 rare N3 | 0.48 |
| | | B 18% Shale, as 360-111B, abundant cavings | N6 | 0.42,0.42 |
| | | C 2% Mudstone, blocky, hard, brittle, pale yellowish brown | 10YR6/2 | 0.50 |
| 360-115 | 3037-052m | A 80% LCM - walnut shell/mica/rubber | | |
| | | B 10% Shale, as 360-111A, mostly caved | N4-5 rare N3 | 0.56 |
| | | C 10% Shale, blocky-platy, hard, non-calc., med. dark to med. grey | N4-5 | 0.50 |
| 360-116 | 3052-067m | A 95% LCM - mica | | |
| | | B 5% Shale, blocky, hard, brittle, non-calc., med. to med. light grey | N5-6 | 0.71 |
| 360-117 | 3067-082m | A 90% LCM - mica | | |
| | | B 10% Shale, as 360-116B<br>Very poor sample | N5-6 | 0.58,0.58 |
| 360-118 | 3082-097m | A 75% LCM - mica | | |
| | | B 25% Shale, as 360-116B<br>Very poor sample | N5-6 | 0.61 |
| 360-119 | 3097-112m | A 95% Shale, blocky, brittle, silty in parts, non-calc., med. to med. light grey | N5-6 | 0.60 |
| | | B 5% LCM - mica/walnut shell<br>Very small sample | | |
| 360-120 | 3112-127m | A 80% Shale, as 360-119A | N5-6 | 0.64 |
| | | B 20% LCM - mica/walnut shell<br>Very small sample | | |
| 360-121 | 3127-142m | A 95% Shale, as 360-119A | N5-6 | 0.58 |
| | | B 5% LCM - mica/walnut shells<br>Small sample | | |
| 360-122 | 3142-157m | A 95% Shale, as 360-119A | N5-6 | 0.63,0.63 |
| | | B 5% LCM - mica/walnut shells/fibre<br>Very small sample | | |
| 360-123 | 3157-172m | A 95% Shale, as 360-119A | N5-6 | 0.63 |
| | | B 5% LCM - mica/metal/walnut shells<br>Very small sample | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

## TABLE 1
## ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-124 | 3172-187m | A 80% LCM - walnut shells/mica<br>B 20% Shale, platy, brittle, non-calc., med. dark to med. grey | N4-5 | 0.60 |
| 360-125 | 3187-202m | A 75% Shale, blocky, brittle, silty in parts, non-calc., minor cavings, med. to med. light grey | N5-6 | 0.47 |
| | | B 20% LCM - walnut shells/mica<br>C 5% Shale, as 360-124B<br>Small sample | N4-5 | 2.13 |
| 360-126 | 3202-217m | A 85% Shale, blocky, silty, hard, sl. calc., med. grey | N5 | 0.54,0.54 |
| | | B 10% LCM - mica/shells<br>C 5% Shale, as 360-124B<br>Very small sample | N4-5 | 0.29 |
| 360-127 | 3217-232m | A 80% Shale, as 360-124B, moderate cavings | N4-5 | 0.51 |
| | | B 20% Shale, blocky, hard, non-calc., dark to med. dark grey<br>Minor LCM - mica/walnut shells<br>Very small sample | N3-4 | 1.01 |
| 360-128 | 3232-247m | A 80% Shale, blocky, soft, hard, non-calc., silty in parts, med. light to light grey | N6-7 | 0.34 |
| | | B 20% Shale, blocky, soft-hard, non-calc., med. to med. dark grey<br>Minor other shale. Small sample | N5-4 | 0.58,0.57 |
| 360-129 | 3247-262m | A 95% Shale, blocky, soft-hard, silty in parts, sl. calc., med. to med. light grey rare light grey | N5-6<br>rare N7 | 0.48 |
| | | B 5% Shake, as 360-128B<br>Minor other shale. Small sample | N5-4 | |
| 360-130 | 3262-277m | A 90% Shale, as 360-128A | N6-7 | 0.40 |
| | | B 10% Shale, as 360-127B<br>Small sample | N3-4 | 0.60 |
| 360-131 | 3277-292m | A 60% Shale, as 360-128A, minor cavings | N6-7 | 0.41,0.39 |
| | | B 35% Shale, as 360-128B, mod. cavings | N5-4 | 0.56 |
| | | C 5% LCM - mica | | |
| 360-132 | 3292-307m | A 85% Silty shale, blocky, hard, sl. calc., mod. caving, med. to med. light grey, rare light grey | N5-6<br>rare N7 | 0.58 |
| | | B 15% Shale, as 360-128B, mod. caving<br>Minor other shale | N5-4 | 0.71 |
| 360-133 | 3307-322m | A 65% Silty shale, as 360-132A | N5-6<br>rare N7 | 0.58 |
| | | B 35% Shale, as 360-128B, minor caving<br>Small sample | N5-4 | 0.57,0.58 |
| 360-134 | 3322-3337m | A 70% Silty shale, as 360-132A | N5-6<br>rare N7 | 0.56 |
| | | B 25% Shale, as 360-128B, mod. caving | N5-4 | 0.47 |
| | | C 5% Calc. mudstone, blocky, hard, light to very light grey<br>Small sample | N7-8 | 0.21 |

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Lost Circulation Material, moderately, occasionally, slightly, very

TABLE 1
ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-135 | 3337-352m | A 55% Shale, blocky-platy, hard, brittle, non-calc., med. to med. light grey | N5-6 | 0.53 |
| | | B 40% Shale, blocky-platy, hard, brittle, non-calc.-sl. calc., med. light to light grey | N6-7 | 0.18,0.18 |
| | | C 5% Shale, blocky, soft, hard, non-calc., dark to med. dark grey | N3-4 | 0.56 |
| 360-136 | 3352-367m | A 55% Shale, as 360-135B | N6-7 | 0.19 |
| | | B 40% Shale, as 360-135A | N5-6 | 0.52 |
| | | C 5% Limestone, blocky, hard, very light grey | N8 | 0.08 |
| | | D MINOR Calc. mudstone, blocky, hard, light to very light grey | N7-8 | |
| | | Minor other shale. Small sample | | |
| 360-137 | 3367-382m | A 65% Shale, as 360-135A, mod. cavings | N5-6 | 0.67,0.67 |
| | | B 35% Shale, as 360-135B, mod. cavings | N6-7 | 0.31 |
| | | Minor other shale | | |
| | | Very small sample | | |
| 360-138 | 3382-397m | A 70% Shale, blocky, soft-hard, non-calc., becoming calc., minor cavings, med. to med. dark grey | N5-4 | 0.57 |
| | | B 30% LCM - walnut shells/mica | | |
| | | Very small sample | | |
| 360-139 | 3397-412m | A 95% Shale, as 360-138A | N5-4 | 0.66 |
| | | B 5% LCM - mica/shells | | |
| | | Minor other shale. Very small sample | | |
| 360-140 | 3412-427m | A 95% Shale, blocky, hard, brittle, sl. calc., silty in parts, med. to med. dark grey | N5-4 | 0.57 |
| | | B 5% LCM - mica/shells | | |
| | | Very small sample | | |
| 360-141 | 3427-442m | A 95% Shale, as 360-140A | N5-4 | 0.54,0.54 |
| | | B 5% LCM - shells/mica | | |
| 360-142 | 3442-457m | A 50% Silty shale, blocky, hard, brittle, calc., med. grey | N5 | 0.57 |
| | | B 30% Shale, as 360-138A | N5-4 | 0.59 |
| | | C 15% Shale, blocky, thinly interbedded with med. dark grey shales, non-calc., light grey | N7 | 0.39 |
| | | D 5% Mudstone, calc., blocky, hard, v. fine grained, pale yellowish brown | 10YR6/2 | |
| | | Minor limestone | | |
| 360-143 | 3457-472m | A 70% Shale, blocky, soft, hard, sl. calc., light to light brownish grey | N7-5YR6/1 | 0.64 |
| | | B 30% Shale, blocky, hard, non-calc.-sl. calc., med. dark grey | N4 | 0.63 |
| | | Small sample | | |
| 360-144 | 3472-487m | A 80% Shale, as 360-143A | N7-5YR6/1 | 0.68 |
| | | B 20% Shale, as 360-143B | N4 | 0.67 |
| | | Minor LCM | | |

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Lost Circulation Material, moderately, occasionally, slightly, very

TABLE 1
ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-145 | 3487-502m | A 60% Shale, blocky, soft-hard, sandy in parts, sl. calc., light brownish grey | 5YR6/1 | 0.62 |
| | | B 40% Shale, blocky, hard, non-calc.-sl. calc., med. dark grey | N4 | 0.67 |
| | | Minor other shale | | |
| 360-146 | 3502-517m | A 55% Shale, as 360-145A | 5YR6/1 | 0.59,0.61 |
| | | B 45% Shale, as 360-145B, mod. cavings | N4 | |
| | | Minor LCM - paint/mica | | |
| 360-147 | 3517-532m | A 70% Shale, blocky, hard, silty, micaceous, sl. calc., pyritic in parts, med. to med. light grey | N5-6 | 0.46 |
| | | B 30% Shale, blocky, hard, brittle, non-calc., med. grey | N5 | 0.61 |
| | | Minor other shale, mudstone | | |
| 360-148 | 3532-547m | A 75% Shale, blocky, soft-hard, silty, micaceous, calc., med. light to light grey | N6-7 | 0.44 |
| | | B 15% Mudstone, blocky, soft, calc., light grey | N7 | 0.31,0.31 |
| | | C 10% Shale, as 360-147B | N5 | 0.51 |
| 360-149 | 3547-562m | A 50% Mudstone, as 360-148B | N7 | 0.33 |
| | | B 40% Shale, as 360-148A | N6-7 | 0.40 |
| | | C 10% Shale, as 360-147B | N5 | 0.42 |
| 360-150 | 3562-577m | A 45% Shale, as 360-148A, minor cavings | N6-7 | 0.60,0.60 |
| | | B 30% Mudstone, as 360-148B | N7 | 0.38 |
| | | C 25% Shale, blocky, non-calc., brittle, mostly caved, med. dark to med. grey | N4-5 | 0.53 |
| | | Minor other shale | | |
| 360-151 | 3577-592m | A 60% Shale, platy, blocky, non-calc., brittle, silty and micaceous in parts, med. to med. light grey | N5-6 | 0.48 |
| | | B 38% Mudstone, blocky, soft, calc., light grey | N7 | 0.36 |
| | | C 2% Shale, platy, brittle, non-calc., dark grey | N3 | 1.06 |
| 360-152 | 3592-607m | A 90% Shale, as 360-151A | N5-6 | 0.77,0.77 |
| | | B 10% Mudstone, as 360-151B | N7 | 0.55 |
| | | Minor other shale | | |
| 360-153 | 3607-622m | A 55% Mudstone, as 360-151B | N7 | 0.17 |
| | | B 25% Shale, blocky, brittle, non-calc., occ. silty, med. to med. light grey | N5-6 | 0.55 |
| | | C 20% Shale, blocky, soft, non-calc., dark to med. dark grey | N3-4 | 2.93 |
| 360-154 | 3622-637m | A 60% Mudstone, as 360-151B, minor cavings | N7 | 0.29,0.29 |
| | | B 35% Shale, as 360-153B, minor cavings | N5-6 | 0.66 |
| | | C 5% Shale, as 360-153C | N3-4 | 3.06 |
| | | Minor other shale | | |
| 360-155 | 3637-652m | A 70% Shale, blocky, brittle, non-calc., med. dark grey | N4 | 0.61 |
| | | B 30% Mudstone, as 360-151B | N7 | 0.53 |
| | | Minor other shale. Very small sample | | |

Abbreviations = arenaceous, argillaceous, calcareous, cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

TABLE 1
ORGANIC CARBON RESULTS AND GROSS LITHOLOGIC DESCRIPTIONS

| GEOCHEM SAMPLE NUMBER | DEPTH | GROSS LITHOLOGIC DESCRIPTION | G S A Colour Code | TOTAL ORGANIC CARBON (Wt. % of Rock) |
|---|---|---|---|---|
| 360-156 | 3652-667m | A 80% Shale, blocky, brittle, non-calc., med. dark grey | N4 | 0.52,0.53 |
| | | B 20% Mudstone, blocky, soft, calc., light grey | N7 | 0.38 |
| | | Minor other shale. Very small sample | | |
| 360-157 | 3667-682m | A 99% Shale, blocky, fissile in parts, brittle, non-calc., med. grey | N5 | 0.50 |
| | | Very small sample | | |
| 360-158 | 3682-697m | A 99% Shale, as 360-157A | N5 | 0.64 |
| | | Very small sample | | |
| 360-159 | 3697-712m | A 85% Shale, platy, brittle, non-calc., dark grey | N3 | 1.07 |
| | | B 15% Shale, as 360-157A | N5 | 0.56,0.56 |
| | | Minor mudstone, LCM - paint | | |
| 360-160 | 3712-718m | A 95% Shale, as 360-159A | N3 | 0.91 |
| | | B 5% Shale, as 360-157A | N5 | 0.50 |
| | | Minor mudstone, pyrite | | |

Abbreviations = arenaceous, argillaceous, calcareous, Cut, dolomitic, Fluorescence, foraminifera, fossiliferous
Lost Circulation Material, moderately, occasionally, slightly, very

TABLE 1A

CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-001 | 200-230m | 2104 | 45 | 11 | 0 | 0 | 2160 | 55 | 2.6 | 0 | 0.00 |
| 360-002 | 230-260 | 10334 | 40 | 5 | 0 | 0 | 10379 | 45 | 0.4 | 0 | 0.00 |
| 360-003 | 260-290 | 865 | 14 | 1 | 0 | 0 | 880 | 15 | 1.7 | 0 | 0.00 |
| 360-004 | 290-320 | 388 | 4 | 0 | 0 | 0 | 393 | 4 | 1.1 | 0 | 0.00 |
| 360-005 | 320-350 | 10412 | 15 | 11 | 0 | 0 | 10438 | 25 | 0.2 | 0 | 0.00 |
| 360-006 | 350-380 | 1231 | 4 | 0 | 0 | 0 | 1236 | 4 | 0.4 | 0 | 0.00 |
| 360-007 | 380-410 | 3660 | 16 | 3 | 0 | 0 | 3679 | 19 | 0.5 | 0 | 0.00 |
| 360-008 | 410-440 | 197 | 1 | 0 | 0 | 0 | 197 | 1 | 0.4 | 0 | 0.00 |
| 360-009 | 440-470 | 76 | 1 | 0 | 0 | 0 | 77 | 1 | 1.3 | 0 | 0.00 |
| 360-010 | 470-500 | 21 | 0 | 0 | 0 | 0 | 21 | 0 | 1.4 | 0 | 0.00 |
| 360-011 | 500-530 | 4250 | 29 | 5 | 0 | 0 | 4284 | 34 | 0.8 | 0 | 0.00 |
| 360-012 | 530-560 | 1215 | 5 | 1 | 0 | 0 | 1221 | 6 | 0.5 | 0 | 0.00 |
| 360-013 | 560-590 | 3539 | 1 | 0 | 0 | 0 | 3541 | 2 | 0.1 | 0 | 0.00 |
| 360-014 | 590-620 | 3888 | 5 | 1 | 0 | 0 | 3894 | 7 | 0.2 | 0 | 0.00 |
| 360-015 | 620-650 | 8452 | 61 | 1 | 0 | 0 | 8515 | 63 | 0.7 | 0 | 0.00 |
| 360-016 | 650-680 | 8637 | 56 | 1 | 0 | 0 | 8694 | 57 | 0.7 | 0 | 0.00 |
| 360-017 | 680-710 | 5208 | 46 | 2 | 0 | 0 | 5255 | 47 | 0.9 | 0 | 0.00 |
| 360-018 | 710-740 | 7563 | 56 | 2 | 0 | 0 | 7620 | 57 | 0.8 | 0 | 0.00 |
| 360-019 | 740-770 | 3859 | 26 | 3 | 0 | 0 | 3888 | 29 | 0.7 | 0 | 0.00 |
| 360-020 | 770-800 | 5005 | 29 | 3 | 0 | 0 | 5037 | 33 | 0.6 | 0 | 0.00 |
| 360-021 | 800-830 | 5247 | 33 | 3 | 0 | 0 | 5283 | 36 | 0.7 | 0 | 0.00 |
| 360-022 | 830-860 | 6629 | 34 | 1 | 0 | 0 | 6664 | 35 | 0.5 | 0 | 0.00 |
| 360-023 | 860-890 | 2832 | 48 | 1 | 0 | 0 | 2882 | 49 | 1.7 | 0 | 0.00 |
| 360-024 | 890-920 | 3418 | 45 | 1 | 0 | 0 | 3464 | 46 | 1.3 | 0 | 0.00 |
| 360-025 | 920-950 | 3972 | 44 | 2 | 0 | 0 | 4018 | 45 | 1.1 | 0 | 0.00 |
| 360-026 | 950-980 | 555 | 5 | 1 | 0 | 0 | 562 | 6 | 1.2 | 0 | 0.00 |
| 360-027 | 980-1010 | 3989 | 5 | 2 | 0 | 0 | 3996 | 7 | 0.2 | 0 | 0.00 |
| 360-028 | 1010-1040 | 3559 | 14 | 2 | 0 | 0 | 3575 | 16 | 0.4 | 0 | 0.00 |
| 360-029 | 1040-1070 | 15162 | 90 | 3 | 0 | 0 | 15255 | 93 | 0.6 | 0 | 0.00 |
| 360-030 | 1070-1100 | 2179 | 9 | 1 | 0 | 0 | 2190 | 11 | 0.5 | 0 | 0.00 |

TABLE 1A

CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-031 | 1100-1130 | 1295 | 10 | 0 | 0 | 0 | 1305 | 10 | 0.8 | 0 | 0.00 |
| 360-032 | 1130-1160 | 9721 | 22 | 1 | 0 | 0 | 9744 | 23 | 0.2 | 0 | 0.00 |
| 360-033 | 1160-1190 | 2304 | 6 | 6 | 0 | 0 | 2316 | 12 | 0.5 | 0 | 0.00 |
| 360-034 | 1190-1220 | 5363 | 14 | 0 | 0 | 0 | 5377 | 14 | 0.3 | 0 | 0.00 |
| 360-035 | 1220-1250 | 2561 | 21 | 2 | 0 | 0 | 2584 | 23 | 0.9 | 0 | 0.00 |
| 360-036 | 1250-1280 | 2053 | 0 | 0 | 0 | 0 | 2053 | 0 | 0.0 | 0 | 0.00 |
| 360-037 | 1280-1310 | 2654 | 5 | 0 | 0 | 0 | 2660 | 6 | 0.2 | 0 | 0.00 |
| 360-038 | 1310-1340 | 1002 | 11 | 0 | 0 | 0 | 1013 | 11 | 1.1 | 0 | 0.00 |
| 360-039 | 1340-1370 | 859 | 0 | 0 | 0 | 0 | 860 | 0 | 0.1 | 0 | 0.00 |
| 360-040 | 1370-1400 | 1585 | 1 | 0 | 0 | 0 | 1586 | 1 | 0.1 | 0 | 0.00 |
| 360-041 | 1400-1430 | 775 | 12 | 0 | 0 | 0 | 787 | 12 | 1.5 | 0 | 0.00 |
| 360-042 | 1430-1460 | 1133 | 19 | 0 | 0 | 0 | 1152 | 19 | 1.6 | 0 | 0.00 |
| 360-043 | 1460-1490 | 849 | 4 | 1 | 0 | 0 | 854 | 4 | 0.5 | 0 | 0.00 |
| 360-044 | 1490-1520 | 971 | 18 | 1 | 0 | 0 | 989 | 18 | 1.9 | 0 | 0.00 |
| 360-045 | 1520-1550 | 851 | 8 | 0 | 0 | 0 | 860 | 9 | 1.0 | 0 | 0.00 |
| 360-046 | 1550-1580 | 338 | 10 | 2 | 0 | 0 | 350 | 11 | 3.2 | 0 | 0.00 |
| 360-047 | 1580-1610 | 405 | 8 | 1 | 0 | 0 | 413 | 9 | 2.1 | 0 | 0.00 |
| 360-048 | 1610-1640 | 204 | 2 | 0 | 0 | 0 | 206 | 2 | 1.2 | 0 | 0.00 |
| 360-049 | 1640-1670 | 53 | 1 | 0 | 0 | 0 | 54 | 1 | 1.4 | 0 | 0.00 |
| 360-050 | 1670-1700 | 49 | 0 | 0 | 0 | 0 | 50 | 0 | 0.7 | 0 | 0.00 |
| 360-051 | 1700-1730 | 480 | 14 | 2 | 1 | 7 | 503 | 24 | 4.7 | 0 | 0.13 |
| 360-052 | 1730-1760 | 1701 | 46 | 19 | 6 | 7 | 1779 | 78 | 4.4 | 10 | 0.91 |
| 360-053 | 1760-1790 | 2689 | 80 | 32 | 10 | 13 | 2824 | 134 | 4.8 | 13 | 0.72 |
| 360-054 | 1790-1820 | 115 | 4 | 4 | 1 | 16 | 140 | 25 | 17.9 | 19 | 0.10 |
| 360-055 | 1820-1880 | 210 | 8 | 12 | 8 | 11 | 248 | 38 | 15.4 | 21 | 0.71 |
| 360-056 | 1850-1880 | 38 | 3 | 13 | 6 | 10 | 70 | 32 | 45.4 | 7 | 0.54 |
| 360-057 | 1880-1910 | 219 | 27 | 60 | 17 | 30 | 353 | 134 | 38.1 | 37 | 0.56 |
| 360-058 | 1910-1940 | 175 | 30 | 102 | 53 | 110 | 470 | 295 | 62.7 | 208 | 0.48 |
| 360-059 | 1940-1970 | 542 | 174 | 445 | 159 | 379 | 1699 | 1158 | 68.1 | 1042 | 0.42 |
| 360-060 | 1970-2000 | 582 | 194 | 499 | 185 | 419 | 1879 | 1297 | 69.0 | 969 | 0.44 |

## TABLE 1A

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-091 | 2677-2692 | 85 | 29 | 40 | 10 | 22 | 186 | 100 | 54.1 | 36 | 0.43 |
| 360-092 | 2692-2707 | 498 | 315 | 707 | 210 | 460 | 2190 | 1691 | 77.2 | 678 | 0.46 |
| 360-093 | 2707-2722 | 18 | 12 | 17 | 5 | 11 | 63 | 44 | 70.5 | 16 | 0.47 |
| 360-094 | 2722-2737 | 1038 | 415 | 633 | 158 | 328 | 2572 | 1534 | 59.6 | 537 | 0.48 |
| 360-095 | 2737-2752 | 224 | 101 | 144 | 43 | 90 | 603 | 379 | 62.9 | 135 | 0.48 |
| 360-096 | 2752-2767 | 286 | 132 | 206 | 55 | 116 | 796 | 510 | 64.1 | 204 | 0.48 |
| 360-097 | 2767-2782 | 441 | 238 | 390 | 99 | 230 | 1398 | 957 | 68.5 | 388 | 0.43 |
| 360-098 | 2782-2797 | 719 | 334 | 546 | 120 | 233 | 1952 | 1233 | 63.2 | 365 | 0.52 |
| 360-099 | 2797-2812 | 266 | 189 | 366 | 97 | 207 | 1125 | 858 | 76.3 | 359 | 0.47 |
| 360-100 | 2812-2827 | 310 | 208 | 384 | 87 | 187 | 1176 | 865 | 73.6 | 270 | 0.46 |
| 360-101 | 2827-2842 | 432 | 326 | 707 | 153 | 347 | 1965 | 1533 | 78.0 | 529 | 0.44 |
| 360-102 | 2842-2857 | 684 | 546 | 1268 | 304 | 655 | 3457 | 2773 | 80.2 | 903 | 0.46 |
| 360-103 | 2857-2872 | 827 | 558 | 1010 | 212 | 454 | 3062 | 2235 | 73.0 | 640 | 0.47 |
| 360-104 | 2872-2887 | 397 | 221 | 332 | 72 | 149 | 1171 | 774 | 66.1 | 231 | 0.49 |
| 360-105 | 2887-2902 | 39 | 19 | 33 | 9 | 18 | 118 | 80 | 67.2 | 14 | 0.51 |
| 360-106 | 2902-2917 | 127 | 95 | 135 | 26 | 72 | 456 | 329 | 72.1 | 114 | 0.37 |
| 360-107 | 2917-2932 | 207 | 99 | 142 | 29 | 64 | 542 | 335 | 61.8 | 140 | 0.46 |
| 360-108 | 2932-2947 | 121 | 57 | 91 | 21 | 51 | 341 | 220 | 64.5 | 62 | 0.42 |
| 360-109 | 2947-2962 | 180 | 64 | 90 | 11 | 29 | 373 | 193 | 51.7 | 182 | 0.37 |
| 360-110 | 2962-2977 | 1004 | 266 | 316 | 78 | 245 | 1910 | 906 | 47.4 | 496 | 0.32 |
| 360-111 | 2977-2992 | 321 | 116 | 265 | 89 | 269 | 1060 | 739 | 69.8 | 447 | 0.33 |
| 360-112 | 2992-3007 | 270 | 110 | 214 | 64 | 210 | 867 | 598 | 68.9 | 335 | 0.31 |
| 360-113 | 3007-3022 | 376 | 79 | 85 | 23 | 71 | 634 | 258 | 40.7 | 328 | 0.32 |
| 360-114 | 3022-3037 | 384 | 158 | 407 | 143 | 463 | 1556 | 1172 | 75.3 | 763 | 0.31 |
| 360-115 | 3037-3052 | 1951 | 1053 | 1958 | 538 | 1556 | 7056 | 5105 | 72.3 | 2387 | 0.35 |
| 360-116 | 3052-3067 | 1048 | 445 | 874 | 222 | 630 | 3218 | 2170 | 67.4 | 924 | 0.35 |
| 360-117 | 3067-3082 | 4935 | 1746 | 2994 | 1536 | 3546 | 14757 | 9822 | 66.6 | 7509 | 0.43 |
| 360-118 | 3082-3097 | 3061 | 1521 | 3133 | 975 | 2427 | 11118 | 8057 | 72.5 | 4474 | 0.40 |
| 360-119 | 3097-3112 | 1592 | 816 | 1052 | 366 | 918 | 4744 | 3151 | 66.4 | 1061 | 0.40 |
| 360-120 | 3112-3127 | 706 | 530 | 1035 | 273 | 810 | 3354 | 2648 | 79.0 | 1402 | 0.34 |

## TABLE 1A

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-061 | 2000-2030 | 294 | 76 | 206 | 80 | 190 | 846 | 553 | 65.3 | 508 | 0.42 |
| 360-062 | 2030-2060 | 584 | 132 | 310 | 108 | 253 | 1388 | 804 | 57.9 | 565 | 0.43 |
| 360-063 | 2060-2090 | 430 | 88 | 141 | 40 | 105 | 804 | 374 | 46.5 | 176 | 0.38 |
| 360-064 | 2090-2120 | 1167 | 419 | 907 | 268 | 671 | 3431 | 2265 | 66.0 | 1283 | 0.40 |
| 360-065 | 2120-2150 | 1395 | 377 | 681 | 194 | 496 | 3143 | 1748 | 55.6 | 1567 | 0.39 |
| 360-066 | 2150-2180 | 1752 | 709 | 1506 | 483 | 1106 | 5555 | 3804 | 68.5 | 1320 | 0.44 |
| 360-067 | 2180-2210 | 846 | 379 | 754 | 246 | 626 | 2851 | 2005 | 70.3 | 2694 | 0.39 |
| 360-068 | 2210-2240 | 2362 | 1084 | 2334 | 752 | 1959 | 8492 | 6130 | 72.2 | 6160 | 0.38 |
| 360-069 | 2240-2270 | 1760 | 837 | 1713 | 541 | 1372 | 6224 | 4464 | 71.7 | 4865 | 0.39 |
| 360-070 | 2270-2300 | 1509 | 568 | 1359 | 534 | 1251 | 5222 | 3713 | 71.1 | 2390 | 0.43 |
| 360-071 | 2300-2330 | 184 | 58 | 121 | 40 | 86 | 488 | 304 | 62.3 | 133 | 0.46 |
| 360-072 | 2330-2360 | 160 | 74 | 178 | 55 | 130 | 598 | 438 | 73.2 | 270 | 0.43 |
| 360-073 | 2360-2390 | 150 | 64 | 170 | 73 | 193 | 650 | 500 | 77.0 | 718 | 0.38 |
| 360-074 | 2390-2420 | 879 | 451 | 1109 | 330 | 843 | 3613 | 2734 | 75.7 | 2275 | 0.39 |
| 360-075 | 2420-2450 | 561 | 259 | 481 | 129 | 321 | 1750 | 1190 | 68.0 | 677 | 0.40 |
| 360-076 | 2450-2467 | 198 | 80 | 144 | 36 | 96 | 554 | 356 | 64.3 | 199 | 0.37 |
| 360-077 | 2467-2482 | 1770 | 1057 | 2072 | 470 | 1063 | 6432 | 4662 | 72.5 | 996 | 0.44 |
| 360-078 | 2482-2497 | 925 | 387 | 600 | 136 | 298 | 2347 | 1422 | 60.6 | 184 | 0.46 |
| 360-079 | 2497-2512 | 388 | 154 | 245 | 54 | 121 | 963 | 575 | 59.7 | 108 | 0.45 |
| 360-080 | 2512-2527 | 439 | 170 | 239 | 52 | 103 | 1003 | 564 | 56.2 | 92 | 0.50 |
| 360-081 | 2527-2542 | 829 | 504 | 754 | 151 | 357 | 2594 | 1765 | 68.0 | 289 | 0.42 |
| 360-082 | 2542-2557 | 395 | 133 | 224 | 61 | 136 | 948 | 553 | 58.4 | 176 | 0.45 |
| 360-083 | 2557-2572 | 359 | 273 | 515 | 113 | 255 | 1516 | 1157 | 76.3 | 348 | 0.44 |
| 360-084 | 2572-2587 | 474 | 504 | 890 | 176 | 420 | 2464 | 1990 | 80.8 | 325 | 0.42 |
| 360-085 | 2587-2602 | 181 | 81 | 158 | 43 | 102 | 565 | 384 | 68.0 | 133 | 0.42 |
| 360-086 | 2602-2617 | 166 | 68 | 117 | 29 | 64 | 445 | 278 | 62.6 | 69 | 0.44 |
| 360-087 | 2617-2632 | 331 | 122 | 252 | 75 | 161 | 940 | 610 | 64.8 | 374 | 0.47 |
| 360-088 | 2632-2647 | 606 | 233 | 431 | 124 | 285 | 1679 | 1073 | 63.9 | 694 | 0.43 |
| 360-089 | 2647-2662 | 737 | 272 | 453 | 116 | 260 | 1838 | 1101 | 59.9 | 355 | 0.45 |
| 360-090 | 2662-2677 | 698 | 282 | 509 | 128 | 307 | 1924 | 1226 | 63.7 | 308 | 0.42 |

## TABLE 1A

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-121 | 3127-3142 | 934 | 668 | 1305 | 344 | 951 | 4202 | 3268 | 77.8 | 1452 | 0.36 |
| 360-122 | 3142-3157 | 833 | 613 | 1433 | 415 | 1137 | 4431 | 3598 | 81.2 | 2461 | 0.37 |
| 360-123 | 3159-3172 | 318 | 220 | 533 | 171 | 482 | 1724 | 1407 | 81.6 | 1101 | 0.35 |
| 360-124 | 3172-3187 | 649 | 352 | 769 | 250 | 631 | 2651 | 2002 | 75.5 | 946 | 0.40 |
| 360-125 | 3187-3202 | 616 | 436 | 1054 | 334 | 905 | 3345 | 2729 | 81.6 | 1722 | 0.37 |
| 360-126 | 3202-3217 | 406 | 285 | 728 | 217 | 564 | 2201 | 1795 | 81.5 | 1203 | 0.39 |
| 360-127 | 3217-3232 | 645 | 363 | 865 | 257 | 715 | 2845 | 2200 | 77.3 | 1166 | 0.36 |
| 360-128 | 3232-3247 | 538 | 391 | 889 | 246 | 631 | 2695 | 2157 | 80.1 | 1612 | 0.39 |
| 360-129 | 3247-3262 | 845 | 736 | 2090 | 695 | 1691 | 6056 | 5211 | 86.0 | 4052 | 0.41 |
| 360-130 | 3262-3277 | 1722 | 1404 | 2820 | 1028 | 2051 | 9025 | 7303 | 80.9 | 4156 | 0.50 |
| 360-131 | 3277-3292 | 886 | 906 | 1902 | 527 | 1307 | 5527 | 4641 | 84.0 | 1966 | 0.40 |
| 360-132 | 3292-3307 | 789 | 598 | 1465 | 261 | 687 | 3800 | 3011 | 79.2 | 1482 | 0.38 |
| 360-133 | 3307-3322 | 653 | 589 | 1653 | 484 | 1189 | 4569 | 3916 | 85.7 | 2384 | 0.41 |
| 360-134 | 3322-3337 | 165 | 206 | 439 | 115 | 241 | 1166 | 1001 | 85.8 | 550 | 0.48 |
| 360-135 | 3337-3352 | 90 | 77 | 135 | 31 | 66 | 399 | 309 | 77.5 | 91 | 0.46 |
| 360-136 | 3352-3367 | 240 | 144 | 315 | 98 | 250 | 1048 | 808 | 77.1 | 588 | 0.39 |
| 360-137 | 3367-3382 | 554 | 397 | 804 | 210 | 481 | 2446 | 1892 | 77.4 | 978 | 0.44 |
| 360-138 | 3382-3397 | 249 | 177 | 520 | 177 | 493 | 1616 | 1366 | 84.6 | 1305 | 0.36 |
| 360-139 | 3397-3412 | 295 | 269 | 895 | 305 | 746 | 2510 | 2214 | 88.2 | 1904 | 0.41 |
| 360-140 | 3412-3427 | 211 | 165 | 481 | 167 | 351 | 1375 | 1164 | 84.6 | 574 | 0.47 |
| 360-141 | 3427-3442 | 514 | 592 | 1648 | 619 | 1256 | 4628 | 4114 | 88.9 | 1978 | 0.49 |
| 360-142 | 3442-3457 | 518 | 670 | 1140 | 432 | 985 | 3745 | 3227 | 86.2 | 1195 | 0.44 |
| 360-143 | 3457-3472 | 2425 | 2690 | 5066 | 2072 | 4044 | 16297 | 13872 | 85.1 | 7742 | 0.51 |
| 360-144 | 3472-3487 | 2895 | 3070 | 4559 | 1775 | 3904 | 16203 | 13308 | 82.1 | 5971 | 0.45 |
| 360-145 | 3487-3502 | 1980 | 2036 | 3645 | 1349 | 2945 | 11955 | 9975 | 83.4 | 5157 | 0.46 |
| 360-146 | 3502-3517 | 1288 | 1285 | 2098 | 903 | 1958 | 7532 | 6244 | 82.9 | 2869 | 0.46 |
| 360-147 | 3517-3532 | 938 | 1091 | 3091 | 934 | 2022 | 8075 | 7138 | 88.4 | 3848 | 0.46 |
| 360-148 | 3532-3547 | 1060 | 1012 | 2411 | 801 | 1706 | 6990 | 5930 | 84.8 | 4057 | 0.47 |
| 360-149 | 3547-3562 | 514 | 563 | 1466 | 453 | 1004 | 4000 | 3486 | 87.2 | 2060 | 0.45 |
| 360-150 | 3562-3577 | 194 | 272 | 693 | 215 | 524 | 1898 | 1704 | 89.8 | 1339 | 0.41 |

TABLE 1A

CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-151 | 3577-3592 | 181 | 191 | 698 | 244 | 541 | 1855 | 1674 | 90.2 | 997 | 0.45 |
| 360-152 | 3592-3607 | 419 | 505 | 852 | 221 | 453 | 2450 | 2031 | 82.9 | 810 | 0.49 |
| 360-153 | 3607-3622 | 12360 | 8737 | 12681 | 5598 | 10717 | 50093 | 37733 | 75.3 | 12707 | 0.52 |
| 360-154 | 3622-3637 | 2914 | 2567 | 7854 | 2709 | 5852 | 21897 | 18983 | 86.7 | 10732 | 0.46 |
| 360-155 | 3637-3652 | 346 | 355 | 1003 | 317 | 654 | 2675 | 2329 | 87.1 | 1142 | 0.48 |
| 360-156 | 3652-3667 | 520 | 394 | 463 | 91 | 156 | 1624 | 1104 | 68.0 | 267 | 0.58 |
| 360-157 | 3667-3682 | 1398 | 1030 | 909 | 113 | 228 | 3677 | 2279 | 62.0 | 427 | 0.50 |
| 360-158 | 3682-3697 | 83 | 59 | 57 | 8 | 17 | 224 | 141 | 63.1 | 34 | 0.49 |
| 360-159 | 3697-3712 | 1002 | 776 | 1031 | 257 | 467 | 3534 | 2531 | 71.6 | 726 | 0.55 |
| 360-160 | 3712-3718 | 2949 | 4827 | 4397 | 1064 | 2297 | 15534 | 12584 | 81.0 | 9234 | 0.46 |

## TABLE 1B

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN CUTTINGS GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-001 | 200-230m | 3801 | 19 | 4 | 0 | 0 | 3825 | 23 | 0.6 | 0 | 0.00 |
| 360-002 | 230-260 | 4901 | 15 | 3 | 0 | 0 | 4918 | 17 | 0.3 | 0 | 0.00 |
| 360-003 | 260-290 | 1026 | 7 | 2 | 0 | 0 | 1035 | 9 | 0.9 | 0 | 0.00 |
| 360-004 | 290-320 | 1213 | 16 | 7 | 0 | 0 | 1236 | 23 | 1.9 | 0 | 0.00 |
| 360-005 | 320-350 | 2423 | 15 | 3 | 0 | 0 | 2440 | 17 | 0.7 | 0 | 0.00 |
| 360-006 | 350-380 | 3261 | 10 | 1 | 0 | 0 | 3272 | 11 | 0.3 | 0 | 0.00 |
| 360-007 | 380-410 | 2132 | 58 | 9 | 0 | 0 | 2199 | 67 | 3.0 | 0 | 0.00 |
| 360-008 | 410-440 | 3235 | 73 | 3 | 0 | 0 | 3311 | 76 | 2.3 | 0 | 0.00 |
| 360-009 | 440-470 | 500 | 10 | 6 | 0 | 0 | 516 | 16 | 3.1 | 0 | 0.00 |
| 360-010 | 470-500 | 400 | 7 | 3 | 0 | 0 | 410 | 10 | 2.4 | 0 | 0.00 |
| 360-011 | 500-530 | 536 | 4 | 1 | 0 | 0 | 541 | 5 | 1.0 | 0 | 0.00 |
| 360-012 | 530-560 | 400 | 9 | 1 | 0 | 0 | 409 | 9 | 2.3 | 0 | 0.00 |
| 360-013 | 560-590 | 1286 | 18 | 4 | 0 | 0 | 1308 | 22 | 1.7 | 0 | 0.00 |
| 360-014 | 590-620 | 829 | 4 | 2 | 0 | 0 | 835 | 6 | 0.7 | 0 | 0.00 |
| 360-015 | 620-650 | 1536 | 114 | 4 | 0 | 0 | 1654 | 118 | 7.1 | 0 | 0.00 |
| 360-016 | 650-680 | 1393 | 71 | 4 | 0 | 0 | 1468 | 75 | 5.1 | 0 | 0.00 |
| 360-017 | 680-710 | 893 | 9 | 1 | 0 | 0 | 902 | 9 | 1.0 | 0 | 0.00 |
| 360-018 | 710-740 | 714 | 9 | 1 | 0 | 0 | 724 | 9 | 1.3 | 0 | 0.00 |
| 360-019 | 740-770 | 319 | 3 | 1 | 0 | 0 | 323 | 4 | 1.2 | 0 | 0.00 |
| 360-020 | 770-800 | 239 | 2 | 1 | 0 | 0 | 242 | 3 | 1.1 | 0 | 0.00 |
| 360-021 | 800-830 | 306 | 3 | 1 | 0 | 0 | 310 | 4 | 1.2 | 0 | 0.00 |
| 360-022 | 830-860 | 798 | 5 | 7 | 0 | 0 | 810 | 13 | 1.5 | 0 | 0.00 |
| 360-023 | 860-890 | 452 | 6 | 4 | 0 | 0 | 462 | 10 | 2.2 | 0 | 0.00 |
| 360-024 | 890-920 | 535 | 5 | 3 | 0 | 0 | 543 | 9 | 1.6 | 0 | 0.00 |
| 360-025 | 920-950 | 479 | 8 | 1 | 0 | 0 | 488 | 10 | 2.0 | 0 | 0.00 |
| 360-026 | 950-980 | 878 | 8 | 10 | 0 | 0 | 896 | 18 | 2.0 | 0 | 0.00 |
| 360-027 | 980-1010 | 330 | 5 | 4 | 0 | 0 | 339 | 9 | 2.7 | 0 | 0.00 |
| 360-028 | 1010-1040 | 3170 | 37 | 24 | 0 | 0 | 3231 | 61 | 1.9 | 0 | 0.00 |
| 360-029 | 1040-1070 | 572 | 8 | 2 | 0 | 0 | 582 | 10 | 1.7 | 0 | 0.00 |
| 360-030 | 1070-1100 | 1547 | 33 | 4 | 0 | 0 | 1584 | 37 | 2.4 | 0 | 0.00 |

## TABLE 1B

## CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN CUTTINGS GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-031 | 1100-1130 | 64 | 4 | 1 | 0 | 0 | 68 | 5 | 6.8 | 0 | 0.00 |
| 360-032 | 1130-1160 | 339 | 2 | 1 | 0 | 0 | 341 | 2 | 0.6 | 0 | 0.00 |
| 360-033 | 1160-1190 | 746 | 7 | 1 | 0 | 0 | 754 | 8 | 1.1 | 0 | 0.00 |
| 360-034 | 1190-1220 | 1229 | 7 | 1 | 0 | 0 | 1237 | 8 | 0.6 | 0 | 0.00 |
| 360-035 | 1220-1250 | 360 | 4 | 1 | 0 | 0 | 365 | 5 | 1.3 | 0 | 0.00 |
| 360-036 | 1250-1280 | 381 | 2 | 1 | 0 | 0 | 384 | 3 | 0.7 | 0 | 0.00 |
| 360-037 | 1280-1310 | 847 | 2 | 1 | 0 | 0 | 850 | 3 | 0.3 | 0 | 0.00 |
| 360-038 | 1310-1340 | 360 | 13 | 2 | 0 | 0 | 375 | 15 | 3.9 | 0 | 0.00 |
| 360-039 | 1340-1370 | 55 | 1 | 1 | 0 | 0 | 57 | 2 | 3.3 | 0 | 0.00 |
| 360-040 | 1370-1400 | 64 | 2 | 1 | 0 | 0 | 66 | 2 | 3.3 | 0 | 0.00 |
| 360-041 | 1400-1430 | 254 | 7 | 2 | 0 | 0 | 262 | 8 | 3.1 | 0 | 0.00 |
| 360-042 | 1430-1460 | 233 | 9 | 2 | 0 | 0 | 244 | 11 | 4.6 | 0 | 0.00 |
| 360-043 | 1460-1490 | 85 | 1 | 0 | 0 | 0 | 86 | 1 | 1.0 | 0 | 0.00 |
| 360-044 | 1490-1520 | 133 | 6 | 1 | 0 | 0 | 140 | 6 | 4.5 | 0 | 0.00 |
| 360-045 | 1520-1550 | 68 | 2 | 1 | 0 | 0 | 70 | 3 | 3.8 | 0 | 0.00 |
| 360-046 | 1550-1580 | 66 | 4 | 2 | 0 | 0 | 71 | 6 | 8.0 | 0 | 0.00 |
| 360-047 | 1580-1610 | 121 | 7 | 1 | 0 | 0 | 128 | 8 | 6.0 | 0 | 0.00 |
| 360-048 | 1610-1640 | 74 | 5 | 2 | 0 | 0 | 81 | 7 | 8.1 | 0 | 0.00 |
| 360-049 | 1640-1670 | 11 | 1 | 1 | 0 | 0 | 12 | 1 | 11.3 | 0 | 0.00 |
| 360-050 | 1670-1700 | 17 | 1 | 0 | 0 | 0 | 18 | 1 | 4.7 | 0 | 0.00 |
| 360-051 | 1700-1730 | 212 | 4 | 1 | 0 | 0 | 217 | 5 | 2.2 | 0 | 0.00 |
| 360-052 | 1730-1760 | 275 | 16 | 10 | 8 | 10 | 318 | 44 | 13.8 | 34 | 0.76 |
| 360-053 | 1760-1790 | 232 | 12 | 7 | 1 | 3 | 256 | 24 | 9.2 | 6 | 0.42 |
| 360-054 | 1790-1820 | 223 | 2 | 1 | 0 | 0 | 226 | 3 | 1.5 | 0 | 0.46 |
| 360-055 | 1820-1880 | 246 | 3 | 1 | 0 | 0 | 249 | 4 | 1.4 | 0 | 0.00 |
| 360-056 | 1850-1880 | 223 | 6 | 26 | 4 | 7 | 266 | 43 | 16.1 | 11 | 0.54 |
| 360-057 | 1880-1910 | 36 | 6 | 17 | 9 | 23 | 91 | 55 | 60.7 | 103 | 0.42 |
| 360-058 | 1910-1940 | 44 | 11 | 38 | 41 | 118 | 252 | 208 | 82.6 | 625 | 0.35 |
| 360-059 | 1940-1970 | 62 | 24 | 135 | 97 | 31 | 350 | 287 | 82.1 | 1750 | 3.08 |
| 360-060 | 1970-2000 | 106 | 52 | 213 | 127 | 408 | 906 | 800 | 88.3 | 1875 | 0.31 |

## TABLE 1B

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN CUTTINGS GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-061 | 2000-2030 | 125 | 57 | 249 | 150 | 486 | 1067 | 942 | 88.3 | 2188 | 0.31 |
| 360-062 | 2030-2060 | 137 | 36 | 117 | 63 | 197 | 551 | 414 | 75.1 | 1563 | 0.32 |
| 360-063 | 2060-2090 | 125 | 26 | 46 | 13 | 98 | 308 | 183 | 59.4 | 2125 | 0.13 |
| 360-064 | 2090-2120 | 77 | 40 | 138 | 60 | 236 | 550 | 473 | 86.0 | 3438 | 0.25 |
| 360-065 | 2120-2150 | 85 | 33 | 77 | 23 | 97 | 315 | 230 | 72.9 | 1563 | 0.24 |
| 360-066 | 2150-2180 | 87 | 57 | 171 | 141 | 529 | 985 | 898 | 91.1 | 6250 | 0.27 |
| 360-067 | 2180-2210 | 85 | 50 | 169 | 112 | 400 | 817 | 731 | 89.5 | 4188 | 0.28 |
| 360-068 | 2210-2240 | 79 | 61 | 212 | 143 | 464 | 959 | 880 | 91.7 | 3313 | 0.31 |
| 360-069 | 2240-2270 | 6 | 4 | 17 | 10 | 34 | 71 | 64 | 91.1 | 2500 | 0.29 |
| 360-070 | 2270-2300 | 8 | 6 | 24 | 19 | 61 | 118 | 110 | 92.9 | 1875 | 0.31 |
| 360-071 | 2300-2330 | 42 | 20 | 72 | 43 | 138 | 315 | 273 | 86.8 | 203 | 0.31 |
| 360-072 | 2330-2360 | 15 | 10 | 38 | 17 | 66 | 146 | 131 | 90.0 | 416 | 0.26 |
| 360-073 | 2360-2390 | 4 | 4 | 12 | 1 | 3 | 24 | 20 | 82.9 | 344 | 0.34 |
| 360-074 | 2390-2420 | 19 | 14 | 92 | 114 | 354 | 593 | 574 | 96.9 | 2621 | 0.32 |
| 360-075 | 2420-2450 | 28 | 22 | 74 | 34 | 117 | 274 | 247 | 89.9 | 538 | 0.29 |
| 360-076 | 2450-2467 | 9 | 5 | 15 | 13 | 33 | 76 | 67 | 87.9 | 414 | 0.41 |
| 360-077 | 2467-2482 | 28 | 38 | 178 | 80 | 213 | 536 | 509 | 94.8 | 828 | 0.37 |
| 360-078 | 2482-2497 | 421 | 259 | 742 | 330 | 907 | 2659 | 2238 | 84.2 | 2966 | 0.36 |
| 360-079 | 2497-2512 | 134 | 85 | 260 | 122 | 342 | 943 | 809 | 85.8 | 1172 | 0.36 |
| 360-080 | 2512-2527 | 162 | 72 | 166 | 61 | 154 | 615 | 453 | 73.7 | 284 | 0.40 |
| 360-081 | 2527-2542 | 19 | 18 | 58 | 25 | 72 | 191 | 172 | 90.3 | 140 | 0.35 |
| 360-082 | 2542-2557 | 79 | 43 | 127 | 65 | 193 | 507 | 429 | 84.5 | 1517 | 0.34 |
| 360-083 | 2557-2572 | 28 | 33 | 118 | 53 | 150 | 381 | 353 | 92.7 | 276 | 0.35 |
| 360-084 | 2572-2587 | 23 | 36 | 140 | 69 | 183 | 451 | 428 | 94.9 | 759 | 0.38 |
| 360-085 | 2587-2602 | 23 | 16 | 55 | 30 | 85 | 209 | 186 | 88.9 | 280 | 0.35 |
| 360-086 | 2602-2617 | 42 | 25 | 66 | 31 | 90 | 254 | 213 | 83.6 | 414 | 0.34 |
| 360-087 | 2617-2632 | 116 | 69 | 249 | 145 | 384 | 962 | 846 | 88.0 | 1448 | 0.38 |
| 360-088 | 2632-2647 | 60 | 36 | 139 | 103 | 281 | 619 | 559 | 90.3 | 1179 | 0.37 |
| 360-089 | 2647-2662 | 134 | 76 | 239 | 131 | 342 | 923 | 789 | 85.5 | 1186 | 0.38 |
| 360-090 | 2662-2677 | 88 | 54 | 213 | 138 | 365 | 858 | 770 | 89.8 | 1379 | 0.38 |

## TABLE 1B

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN CUTTINGS GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-091 | 2677-2692 | 130 | 63 | 155 | 74 | 204 | 627 | 497 | 79.3 | 607 | 0.37 |
| 360-092 | 2692-2707 | 28 | 31 | 127 | 69 | 206 | 461 | 434 | 94.0 | 828 | 0.34 |
| 360-093 | 2707-2722 | 199 | 247 | 1183 | 541 | 1604 | 3774 | 3575 | 94.7 | 5417 | 0.34 |
| 360-094 | 2722-2737 | 153 | 122 | 303 | 500 | 1976 | 3055 | 2901 | 95.0 | 3584 | 0.25 |
| 360-095 | 2737-2752 | 102 | 66 | 179 | 75 | 213 | 635 | 533 | 83.9 | 833 | 0.35 |
| 360-096 | 2752-2767 | 65 | 47 | 167 | 93 | 279 | 651 | 586 | 90.0 | 828 | 0.33 |
| 360-097 | 2767-2782 | 80 | 70 | 248 | 110 | 302 | 810 | 730 | 90.2 | 1100 | 0.36 |
| 360-098 | 2782-2797 | 159 | 136 | 372 | 152 | 397 | 1216 | 1057 | 86.9 | 942 | 0.38 |
| 360-099 | 2797-2812 | 34 | 44 | 165 | 75 | 217 | 335 | 301 | 93.6 | 822 | 0.35 |
| 360-100 | 2812-2827 | 65 | 65 | 236 | 95 | 284 | 745 | 680 | 91.3 | 731 | 0.34 |
| 360-101 | 2827-2842 | 69 | 72 | 337 | 159 | 443 | 1081 | 1012 | 93.6 | 832 | 0.36 |
| 360-102 | 2842-2857 | 32 | 36 | 184 | 83 | 230 | 565 | 533 | 94.3 | 555 | 0.36 |
| 360-103 | 2857-2872 | 60 | 76 | 316 | 161 | 445 | 1058 | 998 | 94.3 | 861 | 0.36 |
| 360-104 | 2872-2887 | 69 | 62 | 167 | 56 | 175 | 529 | 460 | 86.9 | 483 | 0.32 |
| 360-105 | 2887-2902 | 32 | 27 | 104 | 47 | 115 | 325 | 292 | 90.0 | 248 | 0.40 |
| 360-106 | 2902-2917 | 74 | 25 | 71 | 13 | 36 | 220 | 146 | 66.3 | 138 | 0.37 |
| 360-107 | 2917-2932 | 23 | 13 | 24 | 10 | 34 | 104 | 80 | 77.6 | 159 | 0.31 |
| 360-108 | 2932-2947 | 9 | 25 | 35 | 21 | 63 | 154 | 145 | 94.0 | 207 | 0.33 |
| 360-109 | 2947-2962 | 56 | 18 | 25 | 8 | 17 | 124 | 68 | 55.0 | 137 | 0.49 |
| 360-110 | 2962-2977 | 58 | 11 | 12 | 3 | 6 | 89 | 32 | 35.5 | 245 | 0.42 |
| 360-111 | 2977-2992 | 36 | 12 | 28 | 15 | 60 | 152 | 116 | 76.4 | 448 | 0.26 |
| 360-112 | 2992-3007 | 78 | 28 | 35 | 19 | 82 | 242 | 164 | 67.8 | 669 | 0.23 |
| 360-113 | 3007-3022 | 130 | 18 | 24 | 8 | 30 | 210 | 81 | 38.4 | 1013 | 0.26 |
| 360-114 | 3022-3037 | 135 | 14 | 30 | 15 | 74 | 267 | 133 | 49.6 | 646 | 0.21 |
| 360-115 | 3037-3052 | 79 | 38 | 72 | 25 | 109 | 324 | 245 | 75.5 | 1332 | 0.23 |
| 360-116 | 3052-3067 | 524 | 337 | 1490 | 925 | 3141 | 6417 | 5893 | 91.8 | 10180 | 0.29 |
| 360-117 | 3067-3082 | 171 | 94 | 324 | 189 | 654 | 1432 | 1261 | 88.0 | 3550 | 0.29 |
| 360-118 | 3082-3097 | 228 | 170 | 847 | 478 | 1577 | 3301 | 3073 | 93.1 | 3966 | 0.30 |
| 360-119 | 3097-3112 | 851 | 573 | 1816 | 1176 | 2681 | 7098 | 6247 | 88.0 | 6316 | 0.44 |
| 360-120 | 3112-3127 | 140 | 140 | 474 | 225 | 904 | 1883 | 1743 | 92.6 | 3885 | 0.25 |

## TABLE 4B

## CONCENTRATION (PPM) OF EXTRACTED $C_{15+}$ MATERIAL IN ROCK

| GEOCHEM SAMPLE NUMBER | INTERVAL | TOTAL EXTRACT | HYDROCARBONS | | | NON HYDROCARBONS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Paraffin – Naphthenes | Aromatics | TOTAL | Preciptd. Asphaltenes | Eluted NSO's | Non-eluted NSO's | Sulphur | TOTAL |
| 360-029A | 1040-1070 | 1683 | 115 | 272 | 388 | 989 | 299 | 7 | 0 | 1295 |
| 360-038 | 1310-1340 | 422 | 55 | 69 | 124 | 152 | 142 | 4 | 0 | 298 |
| 360-044 | 1490-1520 | 469 | 52 | 91 | 143 | 169 | 149 | 7 | 0 | 326 |
| 360-059 | 1940-1970 | 1572 | 213 | 144 | 357 | 1116 | 94 | 5 | 0 | 1215 |
| 360-063 | 2060-2090 | 415 | 131 | 80 | 211 | 145 | 56 | 3 | 0 | 204 |
| 360-066 | 2150-2180 | 1621 | 1041 | 297 | 1338 | 167 | 115 | 0 | 0 | 282 |
| 360-070 | 2270-2300 | 3143 | 1587 | 281 | 1868 | 1166 | 109 | 0 | 0 | 1275 |
| 360-074 | 2390-2420 | 1896 | 1222 | 289 | 1512 | 254 | 130 | 0 | 0 | 384 |
| 360-078 | 2482-2497 | 2369 | 1572 | 370 | 1942 | 223 | 203 | 0 | 0 | 427 |
| 360-084 | 2572-2587 | 924 | 528 | 164 | 692 | 154 | 79 | 0 | 0 | 233 |
| 360-087 | 2617-2632 | 923 | 431 | 185 | 616 | 197 | 105 | 5 | 0 | 307 |
| 360-092 | 2692-2707 | 1426 | 722 | 238 | 959 | 304 | 153 | 10 | 0 | 467 |
| 360-099 | 2797-2812 | 2391 | 1465 | 358 | 1823 | 352 | 215 | 0 | 0 | 567 |
| 360-101 | 2827-2847 | 2991 | 2152 | 402 | 2554 | 277 | 160 | 0 | 0 | 437 |
| 360-103 | 2857-2872 | 3416 | 1849 | 590 | 2439 | 469 | 497 | 11 | 0 | 977 |
| 360-111 | 2977-2992 | 895 | 268 | 185 | 453 | 290 | 152 | 0 | 0 | 442 |
| 360-117/ | 3067-3112 | 1710 | 740 | 237 | 977 | 473 | 246 | 15 | 0 | 733 |
| 360-125/ | 3187-3217 | 3130 | 1648 | 584 | 2232 | 456 | 442 | 0 | 0 | 898 |
| 360-130 | 3262-3277 | 3252 | 1928 | 585 | 2513 | 327 | 412 | 0 | 0 | 739 |
| 360-138/ | 3382-3412 | 1299 | 425 | 197 | 623 | 532 | 139 | 5 | 0 | 677 |
| 360-144A | 3472-3487 | 6980 | 5755 | 828 | 6584 | 214 | 182 | 0 | 0 | 396 |
| 360-146 | 3502-3517 | 2877 | 2206 | 429 | 2635 | 91 | 151 | 0 | 0 | 242 |
| 360-150 | 3562-3577 | 1536 | 1004 | 269 | 1273 | 131 | 132 | 0 | 0 | 263 |
| 360-153 | 3607-3622 | 3061 | 1933 | 459 | 2391 | 326 | 344 | 0 | 0 | 670 |
| 360-159 | 3697-3712 | 1127 | 579 | 217 | 796 | 227 | 104 | 0 | 0 | 331 |

## TABLE 1B

### CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN CUTTINGS GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-151 | 3577-3592 | 150 | 143 | 489 | 289 | 844 | 1915 | 1765 | 92.2 | 2931 | 0.34 |
| 360-152 | 3592-3607 | 236 | 353 | 896 | 257 | 692 | 2435 | 2199 | 90.3 | 1755 | 0.37 |
| 360-153 | 3607-3622 | 1083 | 1660 | 7998 | 3976 | 8986 | 23703 | 22620 | 95.4 | 15936 | 0.44 |
| 360-154 | 3622-3637 | 357 | 400 | 2017 | 1397 | 3524 | 7694 | 7337 | 95.4 | 11136 | 0.40 |
| 360-155 | 3637-3652 | 282 | 271 | 998 | 485 | 1309 | 3346 | 3064 | 91.6 | 5008 | 0.37 |
| 360-156 | 3652-3667 | 363 | 529 | 931 | 212 | 481 | 2516 | 2153 | 85.6 | 1487 | 0.44 |
| 360-157 | 3667-3682 | 363 | 498 | 776 | 132 | 328 | 2097 | 1734 | 82.7 | 1094 | 0.40 |
| 360-158 | 3682-3697 | 86 | 87 | 157 | 54 | 128 | 511 | 425 | 83.1 | 952 | 0.42 |
| 360-159 | 3697-3712 | 392 | 629 | 1579 | 542 | 1500 | 4641 | 4249 | 91.6 | 5983 | 0.36 |
| 360-160 | 3712-3718 | 156 | 578 | 1074 | 314 | 901 | 3022 | 2867 | 94.9 | 4525 | 0.35 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-001 | 200-230m | 5906 | 64 | 15 | 0 | 0 | 5984 | 79 | 1.3 | 0 | 0.00 |
| 360-002 | 230-260 | 15235 | 55 | 7 | 0 | 0 | 15297 | 62 | 0.4 | 0 | 0.00 |
| 360-003 | 260-290 | 1891 | 22 | 2 | 0 | 0 | 1915 | 24 | 1.3 | 0 | 0.00 |
| 360-004 | 290-320 | 1601 | 20 | 7 | 0 | 0 | 1629 | 27 | 1.7 | 0 | 0.00 |
| 360-005 | 320-350 | 12835 | 29 | 13 | 0 | 0 | 12878 | 43 | 0.3 | 0 | 0.00 |
| 360-006 | 350-380 | 4492 | 14 | 1 | 0 | 0 | 4508 | 15 | 0.3 | 0 | 0.00 |
| 360-007 | 380-410 | 5792 | 74 | 12 | 0 | 0 | 5878 | 86 | 1.5 | 0 | 0.00 |
| 360-008 | 410-440 | 3432 | 74 | 3 | 0 | 0 | 3508 | 76 | 2.2 | 0 | 0.00 |
| 360-009 | 440-470 | 576 | 11 | 6 | 0 | 0 | 593 | 17 | 2.9 | 0 | 0.00 |
| 360-010 | 470-500 | 421 | 7 | 3 | 0 | 0 | 431 | 10 | 2.3 | 0 | 0.00 |
| 360-011 | 500-530 | 4786 | 33 | 5 | 0 | 0 | 4824 | 39 | 0.8 | 0 | 0.00 |
| 360-012 | 530-560 | 1615 | 14 | 2 | 0 | 0 | 1631 | 15 | 0.9 | 0 | 0.00 |
| 360-013 | 560-590 | 4825 | 20 | 4 | 0 | 0 | 4848 | 24 | 0.5 | 0 | 0.00 |
| 360-014 | 590-620 | 4716 | 10 | 3 | 0 | 0 | 4729 | 13 | 0.3 | 0 | 0.00 |
| 360-015 | 620-650 | 9988 | 175 | 6 | 0 | 0 | 10169 | 181 | 1.8 | 0 | 0.00 |
| 360-016 | 650-680 | 10030 | 127 | 6 | 0 | 0 | 10162 | 132 | 1.3 | 0 | 0.00 |
| 360-017 | 680-710 | 6101 | 54 | 2 | 0 | 0 | 6158 | 56 | 0.9 | 0 | 0.00 |
| 360-018 | 710-740 | 8277 | 64 | 3 | 0 | 0 | 8344 | 67 | 0.8 | 0 | 0.00 |
| 360-019 | 740-770 | 4178 | 29 | 4 | 0 | 0 | 4211 | 33 | 0.8 | 0 | 0.00 |
| 360-020 | 770-800 | 5244 | 31 | 4 | 0 | 0 | 5279 | 35 | 0.7 | 0 | 0.00 |
| 360-021 | 800-830 | 5552 | 37 | 3 | 0 | 0 | 5592 | 40 | 0.7 | 0 | 0.00 |
| 360-022 | 830-860 | 7427 | 39 | 8 | 0 | 0 | 7474 | 47 | 0.6 | 0 | 0.00 |
| 360-023 | 860-890 | 3285 | 54 | 5 | 0 | 0 | 3344 | 60 | 1.8 | 0 | 0.00 |
| 360-024 | 890-920 | 3953 | 50 | 4 | 0 | 0 | 4007 | 54 | 1.3 | 0 | 0.00 |
| 360-025 | 920-950 | 4451 | 52 | 3 | 0 | 0 | 4506 | 55 | 1.2 | 0 | 0.00 |
| 360-026 | 950-980 | 1433 | 14 | 11 | 0 | 0 | 1458 | 25 | 1.7 | 0 | 0.00 |
| 360-027 | 980-1010 | 4319 | 10 | 6 | 0 | 0 | 4335 | 16 | 0.4 | 0 | 0.00 |
| 360-028 | 1010-1040 | 6730 | 51 | 26 | 0 | 0 | 6806 | 77 | 1.1 | 0 | 0.00 |
| 360-029 | 1040-1070 | 15734 | 98 | 4 | 0 | 0 | 15837 | 103 | 0.6 | 0 | 0.00 |
| 360-030 | 1070-1100 | 3726 | 43 | 5 | 0 | 0 | 3774 | 48 | 1.3 | 0 | 0.00 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-031 | 1100-1130 | 1358 | 14 | 1 | 0 | 0 | 1373 | 15 | 1.1 | 0 | 0.00 |
| 360-032 | 1130-1160 | 10060 | 24 | 1 | 0 | 0 | 10085 | 25 | 0.2 | 0 | 0.00 |
| 360-033 | 1160-1190 | 3050 | 13 | 6 | 0 | 0 | 3070 | 20 | 0.6 | 0 | 0.00 |
| 360-034 | 1190-1220 | 6592 | 22 | 1 | 0 | 0 | 6614 | 22 | 0.3 | 0 | 0.00 |
| 360-035 | 1220-1250 | 2922 | 25 | 3 | 0 | 0 | 2949 | 28 | 0.9 | 0 | 0.00 |
| 360-036 | 1250-1280 | 2434 | 2 | 1 | 0 | 0 | 2437 | 3 | 0.1 | 0 | 0.00 |
| 360-037 | 1280-1310 | 3502 | 7 | 1 | 0 | 0 | 3510 | 8 | 0.2 | 0 | 0.00 |
| 360-038 | 1310-1340 | 1362 | 24 | 2 | 0 | 0 | 1388 | 26 | 1.9 | 0 | 0.00 |
| 360-039 | 1340-1370 | 914 | 1 | 1 | 0 | 0 | 916 | 2 | 0.3 | 0 | 0.00 |
| 360-040 | 1370-1400 | 1648 | 3 | 1 | 0 | 0 | 1652 | 3 | 0.2 | 0 | 0.00 |
| 360-041 | 1400-1430 | 1029 | 18 | 2 | 0 | 0 | 1049 | 20 | 1.9 | 0 | 0.00 |
| 360-042 | 1430-1460 | 1367 | 28 | 2 | 0 | 0 | 1397 | 30 | 2.2 | 0 | 0.00 |
| 360-043 | 1460-1490 | 934 | 5 | 1 | 0 | 0 | 939 | 5 | 0.6 | 0 | 0.00 |
| 360-044 | 1490-1520 | 1105 | 23 | 1 | 0 | 0 | 1129 | 25 | 2.2 | 0 | 0.00 |
| 360-045 | 1520-1550 | 919 | 10 | 1 | 0 | 0 | 931 | 12 | 1.2 | 0 | 0.00 |
| 360-046 | 1550-1580 | 404 | 14 | 3 | 0 | 0 | 421 | 17 | 4.0 | 0 | 0.00 |
| 360-047 | 1580-1610 | 526 | 15 | 2 | 0 | 0 | 542 | 16 | 3.0 | 0 | 0.00 |
| 360-048 | 1610-1640 | 278 | 7 | 2 | 0 | 0 | 287 | 9 | 3.1 | 0 | 0.00 |
| 360-049 | 1640-1670 | 64 | 1 | 1 | 0 | 0 | 66 | 2 | 3.2 | 0 | 0.00 |
| 360-050 | 1670-1700 | 66 | 1 | 0 | 0 | 0 | 67 | 1 | 1.7 | 0 | 0.00 |
| 360-051 | 1700-1730 | 691 | 19 | 2 | 1 | 7 | 720 | 28 | 3.9 | 1 | 0.13 |
| 360-052 | 1730-1760 | 1975 | 62 | 29 | 14 | 17 | 2097 | 122 | 5.8 | 44 | 0.82 |
| 360-053 | 1760-1790 | 2921 | 92 | 39 | 11 | 16 | 3079 | 158 | 5.1 | 18 | 0.66 |
| 360-054 | 1790-1820 | 338 | 6 | 5 | 2 | 16 | 366 | 28 | 7.7 | 19 | 0.10 |
| 360-055 | 1820-1880 | 456 | 10 | 13 | 8 | 11 | 498 | 42 | 8.4 | 21 | 0.71 |
| 360-056 | 1850-1880 | 262 | 9 | 39 | 9 | 17 | 336 | 75 | 22.2 | 18 | 0.54 |
| 360-057 | 1880-1910 | 255 | 33 | 77 | 27 | 53 | 444 | 190 | 42.7 | 140 | 0.50 |
| 360-058 | 1910-1940 | 219 | 41 | 141 | 93 | 228 | 722 | 503 | 69.7 | 833 | 0.41 |
| 360-059 | 1940-1970 | 604 | 199 | 580 | 255 | 411 | 2049 | 1445 | 70.5 | 2792 | 0.62 |
| 360-060 | 1970-2000 | 688 | 246 | 712 | 311 | 827 | 2785 | 2097 | 75.3 | 2844 | 0.38 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-061 | 2000-2030 | 419 | 133 | 456 | 230 | 675 | 1913 | 1495 | 78.1 | 2695 | 0.34 |
| 360-062 | 2030-2060 | 721 | 168 | 428 | 171 | 451 | 1939 | 1218 | 62.8 | 2128 | 0.38 |
| 360-063 | 2060-2090 | 555 | 114 | 187 | 53 | 203 | 1112 | 557 | 50.1 | 2301 | 0.26 |
| 360-064 | 2090-2120 | 1244 | 459 | 1045 | 328 | 907 | 3982 | 2738 | 68.8 | 4721 | 0.36 |
| 360-065 | 2120-2150 | 1480 | 409 | 758 | 217 | 593 | 3458 | 1978 | 57.2 | 3129 | 0.37 |
| 360-066 | 2150-2180 | 1839 | 766 | 1677 | 624 | 1635 | 6541 | 4701 | 71.9 | 7570 | 0.38 |
| 360-067 | 2180-2210 | 932 | 430 | 923 | 358 | 1026 | 3668 | 2736 | 74.6 | 6881 | 0.35 |
| 360-068 | 2210-2240 | 2442 | 1145 | 2546 | 895 | 2423 | 9452 | 7010 | 74.2 | 9472 | 0.37 |
| 360-069 | 2240-2270 | 1766 | 841 | 1730 | 551 | 1406 | 6294 | 4528 | 71.9 | 7365 | 0.39 |
| 360-070 | 2270-2300 | 1517 | 573 | 1383 | 553 | 1313 | 5340 | 3822 | 71.6 | 4265 | 0.42 |
| 360-071 | 2300-2330 | 226 | 78 | 193 | 83 | 224 | 803 | 577 | 71.9 | 336 | 0.37 |
| 360-072 | 2330-2360 | 175 | 84 | 217 | 73 | 196 | 744 | 569 | 76.5 | 686 | 0.37 |
| 360-073 | 2360-2390 | 154 | 68 | 183 | 74 | 196 | 674 | 521 | 77.2 | 1062 | 0.38 |
| 360-074 | 2390-2420 | 898 | 466 | 1201 | 444 | 1197 | 4206 | 3308 | 78.7 | 4895 | 0.37 |
| 360-075 | 2420-2450 | 589 | 280 | 555 | 163 | 438 | 2025 | 1436 | 70.9 | 1214 | 0.37 |
| 360-076 | 2450-2467 | 207 | 86 | 159 | 49 | 129 | 630 | 423 | 67.2 | 613 | 0.38 |
| 360-077 | 2467-2482 | 1797 | 1095 | 2249 | 550 | 1276 | 6968 | 5171 | 74.2 | 1824 | 0.43 |
| 360-078 | 2482-2497 | 1347 | 646 | 1342 | 466 | 1206 | 5007 | 3660 | 73.1 | 3150 | 0.39 |
| 360-079 | 2497-2512 | 522 | 239 | 506 | 176 | 463 | 1906 | 1384 | 72.6 | 1281 | 0.38 |
| 360-080 | 2512-2527 | 601 | 243 | 405 | 113 | 257 | 1618 | 1017 | 62.9 | 376 | 0.44 |
| 360-081 | 2527-2542 | 848 | 522 | 811 | 175 | 428 | 2785 | 1938 | 69.6 | 429 | 0.41 |
| 360-082 | 2542-2557 | 474 | 176 | 351 | 126 | 328 | 1456 | 982 | 67.5 | 1693 | 0.38 |
| 360-083 | 2557-2572 | 387 | 306 | 633 | 166 | 405 | 1896 | 1509 | 79.6 | 624 | 0.41 |
| 360-084 | 2572-2587 | 497 | 541 | 1031 | 245 | 603 | 2916 | 2418 | 82.9 | 1084 | 0.41 |
| 360-085 | 2587-2602 | 204 | 97 | 214 | 73 | 187 | 775 | 570 | 73.6 | 413 | 0.39 |
| 360-086 | 2602-2617 | 208 | 94 | 183 | 60 | 155 | 699 | 491 | 70.3 | 483 | 0.38 |
| 360-087 | 2617-2632 | 446 | 191 | 501 | 220 | 544 | 1902 | 1456 | 76.5 | 1823 | 0.40 |
| 360-088 | 2632-2647 | 666 | 269 | 570 | 227 | 566 | 2299 | 1633 | 71.0 | 1873 | 0.40 |
| 360-089 | 2647-2662 | 871 | 348 | 693 | 248 | 602 | 2761 | 1890 | 68.5 | 1542 | 0.41 |
| 360-090 | 2662-2677 | 786 | 336 | 722 | 266 | 673 | 2783 | 1997 | 71.7 | 1687 | 0.40 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-091 | 2677-2692 | 215 | 92 | 195 | 84 | 226 | 812 | 597 | 73.5 | 643 | 0.37 |
| 360-092 | 2692-2707 | 526 | 345 | 834 | 279 | 666 | 2651 | 2125 | 80.2 | 1505 | 0.42 |
| 360-093 | 2707-2722 | 217 | 259 | 1200 | 546 | 1615 | 3837 | 3620 | 94.3 | 5432 | 0.34 |
| 360-094 | 2722-2737 | 1192 | 537 | 936 | 658 | 2304 | 5627 | 4435 | 78.8 | 4120 | 0.29 |
| 360-095 | 2737-2752 | 326 | 167 | 323 | 118 | 304 | 1239 | 912 | 73.7 | 969 | 0.39 |
| 360-096 | 2752-2767 | 351 | 179 | 373 | 149 | 395 | 1447 | 1096 | 75.8 | 1032 | 0.38 |
| 360-097 | 2767-2782 | 521 | 308 | 638 | 209 | 532 | 2208 | 1687 | 76.4 | 1488 | 0.39 |
| 360-098 | 2782-2797 | 878 | 470 | 917 | 273 | 630 | 3168 | 2290 | 72.3 | 1307 | 0.43 |
| 360-099 | 2797-2812 | 301 | 232 | 532 | 172 | 424 | 1660 | 1360 | 81.9 | 1181 | 0.40 |
| 360-100 | 2812-2827 | 375 | 273 | 620 | 182 | 471 | 1920 | 1545 | 80.5 | 1001 | 0.39 |
| 360-101 | 2827-2842 | 502 | 398 | 1044 | 313 | 790 | 3046 | 2544 | 83.5 | 1361 | 0.40 |
| 360-102 | 2842-2857 | 716 | 582 | 1452 | 387 | 885 | 4022 | 3306 | 82.2 | 1458 | 0.44 |
| 360-103 | 2857-2872 | 887 | 634 | 1326 | 373 | 899 | 4120 | 3233 | 78.5 | 1500 | 0.42 |
| 360-104 | 2872-2887 | 466 | 282 | 499 | 128 | 324 | 1700 | 1234 | 72.6 | 713 | 0.40 |
| 360-105 | 2887-2902 | 71 | 46 | 137 | 56 | 133 | 443 | 372 | 83.9 | 263 | 0.42 |
| 360-106 | 2902-2917 | 201 | 120 | 206 | 40 | 109 | 675 | 474 | 70.2 | 252 | 0.37 |
| 360-107 | 2917-2932 | 230 | 112 | 166 | 40 | 97 | 645 | 415 | 64.3 | 300 | 0.41 |
| 360-108 | 2932-2947 | 130 | 82 | 126 | 42 | 114 | 495 | 365 | 73.7 | 269 | 0.37 |
| 360-109 | 2947-2962 | 236 | 82 | 114 | 19 | 46 | 497 | 261 | 52.6 | 319 | 0.41 |
| 360-110 | 2962-2977 | 1062 | 277 | 328 | 81 | 251 | 1999 | 937 | 46.9 | 741 | 0.32 |
| 360-111 | 2977-2992 | 356 | 128 | 293 | 105 | 329 | 1212 | 855 | 70.6 | 895 | 0.32 |
| 360-112 | 2992-3007 | 348 | 138 | 249 | 83 | 292 | 1109 | 762 | 68.7 | 1004 | 0.29 |
| 360-113 | 3007-3022 | 505 | 97 | 109 | 31 | 101 | 844 | 339 | 40.1 | 1341 | 0.31 |
| 360-114 | 3022-3037 | 519 | 172 | 437 | 159 | 537 | 1824 | 1304 | 71.5 | 1410 | 0.30 |
| 360-115 | 3037-3052 | 2030 | 1091 | 2029 | 563 | 1665 | 7380 | 5349 | 72.5 | 3719 | 0.34 |
| 360-116 | 3052-3067 | 1572 | 782 | 2363 | 1146 | 3771 | 9635 | 8063 | 83.7 | 11105 | 0.30 |
| 360-117 | 3067-3082 | 5106 | 1840 | 3318 | 1725 | 4200 | 16189 | 11082 | 68.5 | 11059 | 0.41 |
| 360-118 | 3082-3097 | 3289 | 1690 | 3980 | 1454 | 4005 | 14419 | 11129 | 77.2 | 8440 | 0.36 |
| 360-119 | 3097-3112 | 2443 | 1389 | 2868 | 1542 | 3599 | 11841 | 9398 | 79.4 | 7377 | 0.43 |
| 360-120 | 3112-3127 | 846 | 670 | 1509 | 498 | 1714 | 5237 | 4391 | 83.8 | 5287 | 0.29 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-121 | 3127-3142 | 977 | 706 | 1402 | 371 | 1065 | 4522 | 3544 | 78.4 | 2799 | 0.35 |
| 360-122 | 3142-3157 | 946 | 699 | 1695 | 545 | 1608 | 5492 | 4546 | 82.8 | 6232 | 0.34 |
| 360-123 | 3159-3172 | 393 | 288 | 641 | 217 | 606 | 2145 | 1752 | 81.7 | 2078 | 0.36 |
| 360-124 | 3172-3187 | 751 | 429 | 954 | 338 | 933 | 3406 | 2655 | 77.9 | 2749 | 0.36 |
| 360-125 | 3187-3202 | 702 | 525 | 1349 | 481 | 1515 | 4573 | 3870 | 84.6 | 4975 | 0.32 |
| 360-126 | 3202-3217 | 491 | 350 | 899 | 301 | 861 | 2902 | 2410 | 83.1 | 3963 | 0.35 |
| 360-127 | 3217-3232 | 737 | 431 | 1045 | 363 | 1086 | 3662 | 2925 | 79.9 | 2993 | 0.33 |
| 360-128 | 3232-3247 | 631 | 468 | 1077 | 330 | 848 | 3355 | 2723 | 81.2 | 3308 | 0.39 |
| 360-129 | 3247-3262 | 943 | 779 | 2148 | 905 | 2212 | 6986 | 6043 | 86.5 | 7247 | 0.41 |
| 360-130 | 3262-3277 | 1952 | 1651 | 3889 | 1622 | 3872 | 12986 | 11034 | 85.0 | 11420 | 0.42 |
| 360-131 | 3277-3292 | 1005 | 1024 | 2133 | 614 | 1567 | 6343 | 5338 | 84.2 | 3473 | 0.39 |
| 360-132 | 3292-3307 | 938 | 740 | 1943 | 515 | 1522 | 5657 | 4719 | 83.4 | 5448 | 0.34 |
| 360-133 | 3307-3322 | 738 | 669 | 1886 | 591 | 1545 | 5428 | 4690 | 86.4 | 3662 | 0.38 |
| 360-134 | 3322-3337 | 229 | 292 | 750 | 237 | 634 | 2141 | 1912 | 89.3 | 2280 | 0.37 |
| 360-135 | 3337-3352 | 188 | 154 | 317 | 90 | 257 | 1005 | 817 | 81.3 | 1184 | 0.35 |
| 360-136 | 3352-3367 | 289 | 179 | 377 | 126 | 326 | 1296 | 1007 | 77.7 | 1546 | 0.38 |
| 360-137 | 3367-3382 | 626 | 459 | 963 | 262 | 663 | 2972 | 2346 | 78.9 | 2573 | 0.40 |
| 360-138 | 3382-3397 | 305 | 225 | 626 | 237 | 700 | 2093 | 1788 | 85.4 | 2857 | 0.34 |
| 360-139 | 3397-3412 | 344 | 310 | 1025 | 381 | 1020 | 3080 | 2737 | 88.8 | 4241 | 0.37 |
| 360-140 | 3412-3427 | 292 | 240 | 699 | 252 | 667 | 2150 | 1858 | 86.4 | 2911 | 0.38 |
| 360-141 | 3427-3442 | 590 | 681 | 2064 | 872 | 2098 | 6305 | 5715 | 90.6 | 6299 | 0.42 |
| 360-142 | 3442-3457 | 658 | 841 | 1944 | 1112 | 2266 | 6821 | 6163 | 90.4 | 7241 | 0.49 |
| 360-143 | 3457-3472 | 2557 | 2881 | 6232 | 2828 | 5703 | 20200 | 17644 | 87.3 | 12993 | 0.50 |
| 360-144 | 3472-3487 | 4053 | 5362 | 16876 | 7724 | 17388 | 51403 | 47350 | 92.1 | 29665 | 0.44 |
| 360-145 | 3487-3502 | 3132 | 3532 | 12105 | 6328 | 14582 | 39679 | 36548 | 92.1 | 31700 | 0.43 |
| 360-146 | 3502-3517 | 2285 | 2539 | 7605 | 3950 | 9566 | 25944 | 23660 | 91.2 | 23621 | 0.41 |
| 360-147 | 3517-3532 | 1353 | 1561 | 5461 | 2632 | 6299 | 17306 | 15953 | 92.2 | 19314 | 0.42 |
| 360-148 | 3532-3547 | 1371 | 1344 | 3279 | 1249 | 2876 | 10119 | 8748 | 86.5 | 11970 | 0.43 |
| 360-149 | 3547-3562 | 658 | 816 | 2969 | 1379 | 3345 | 9166 | 8509 | 92.8 | 10171 | 0.41 |
| 360-150 | 3562-3577 | 701 | 994 | 3965 | 2126 | 5059 | 12846 | 12145 | 94.5 | 13230 | 0.42 |

## TABLE 1C

### TOTAL CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS (1A + 1B)

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-151 | 3577-3592 | 331 | 334 | 1187 | 533 | 1385 | 3770 | 3440 | 91.2 | 3928 | 0.39 |
| 360-152 | 3592-3607 | 656 | 858 | 1749 | 478 | 1145 | 4885 | 4230 | 86.6 | 2566 | 0.42 |
| 360-153 | 3607-3622 | 13443 | 10398 | 20678 | 9574 | 19703 | 73796 | 60353 | 81.8 | 28643 | 0.49 |
| 360-154 | 3622-3637 | 3271 | 2967 | 9871 | 4105 | 9376 | 29591 | 26319 | 88.9 | 21868 | 0.44 |
| 360-155 | 3637-3652 | 628 | 626 | 2001 | 801 | 1964 | 6021 | 5393 | 89.6 | 6150 | 0.41 |
| 360-156 | 3652-3667 | 883 | 923 | 1395 | 303 | 636 | 4140 | 3257 | 78.7 | 1755 | 0.48 |
| 360-157 | 3667-3682 | 1761 | 1528 | 1685 | 245 | 555 | 5773 | 4013 | 69.5 | 1521 | 0.44 |
| 360-158 | 3682-3697 | 169 | 146 | 213 | 62 | 145 | 735 | 566 | 77.0 | 986 | 0.43 |
| 360-159 | 3697-3712 | 1394 | 1405 | 2610 | 799 | 1967 | 8175 | 6781 | 82.9 | 6709 | 0.41 |
| 360-160 | 3712-3718 | 3105 | 5404 | 5471 | 1378 | 3198 | 18556 | 15451 | 83.3 | 13760 | 0.43 |

## TABLE

## KEROGEN TYPE AND MATURATION

| GEOCHEM SAMPLE NUMBER | DEPTH | ORGANIC MATTER DESCRIPTION | | | | | THERMAL MATURATION INDEX |
|---|---|---|---|---|---|---|---|
| | | TYPES 40%; 10–40%; 10% | REMARKS | REWORKED (%) | PARTICLE SIZE | PRESERV-ATION | |
| 360-022B | 830-860m | H-W;Al;C-Am** | **incompletely developed fresh wood, reworking | ✓ | F-C | VG | 1+ to 2- max |
| 360-029A | 1040-070m | H-W;Al;Am-C | sapropelisation fresh wood | - | F-M | G | 1+ to 2- |
| 360-032A | 1130-160m | H-W;-;Al-Am**-C | fresh and reworked wood **incompletely developed | ✓ | F-M | VG | 1+ to 2- |
| 360-038A | 1310-340m | H-W;Al;C-Am** | **incompletely developed | - | F-M/C | VG | 1+ to 2- |
| 360-044A | 1490-520m | H-W;Al;C-Am** | **incompletely developed H at 2 to 2+ | - | F-C | VG | 1+ to 2- |
| 360-048A | 1610-640m | H-W;Al-C;- | Reworking fresh wood | ✓ | F-M | VG | 1+ to 2-/2- |
| 360-052A | 1730-760m | W-Al-H-C;-;Am** | fairly lean. H at 2, 2 to 2+ **incompletely developed (often algae?) | - | F-M | VG | 1+ to 2- |
| 360-056A | 1850-880m | Al-W-C;H;Am | minor H at 2 to 2+ | - | M | VG | 1+ to 2- |
| 360-059A | 1940-970m | Al-W-H;-;C-Am | reworking | ✓ | F-M | VG | 1+ to 2- |
| 360-063A | 2060-090m | C;W-Am**;Al-H | reworking. Sapropelisation fungal hyphae **includes incomp-letely developed material | ✓ | F-M | G | 1+ to 2- |
| 360-063B | 2060-090m | C;W-Al;Am | UNRELIABLE extremely lean | - | M | F-G | 1+ to 2-/2-(?) |
| 360-066A | 2150-180m | W;C-H;Al | reworking | ✓ | F-M | VG | 1+ to 2-/2- |
| 360-070A | 2270-300m | W;C;H-Al-Am | reworking | ✓ | F-M | VG | 1+ to 2- |
| 360-074A | 2390-420m | W;C-Al**;H | reworking **includes material passing to Am | ✓ | F-C | VG | 1+ to 2- |
| 360-078A | 2482-497m | W;C;H-Al** | some fresh wood - reworking dominant **includes material passing to Am. H at 2- and 2 | ✓ | F-M | VG | 1+ to 2-/2- |

Algal, Amorphous, Herbaceous, Inertinite, Resin, Wood, Coaly

postscript = coarse, cuticle, cysts, degraded, fine, other,. structured, spore-pollen, thick-walled, unstructured

TABLE

KEROGEN TYPE AND MATURATION

| GEOCHEM SAMPLE NUMBER | DEPTH | ORGANIC MATTER DESCRIPTION | | | | | THERMAL MATURATION INDEX |
|---|---|---|---|---|---|---|---|
| | | TYPES 40%; 10–40%; 10% | REMARKS | REWORKED (%) | PARTICLE SIZE | PRESERV-ATION | |
| 360-084A | 2572-587m | W;C;Al-H | fresh wood - reworking dominant H at 2 to 2+ | ✓ | F-C | VG | 1+ to 2- |
| 360-087A | 2617-632m | W;C-Al;H | reworking, fairly lean H at 2 to 2+ | ✓ | F-M | VG | 1+ to 2-/2- |
| 360-092A | 2692-707m | W;C-Al;H-Am** | some fresh wood, reworking **degraded. H at 1+ to 2- (caving) and 2 | ✓ | F-M | VG | 2- max |
| 360-099A | 2797-812m | W;C-Al;H-Am** | H at 1+ to 2- (caving?) and 2 to 2+. Reworking **dark, degraded | ✓ | F-C | VG | 2- max |
| 360-102B | 2842-857m | Am;-;W-Al-C-H | | - | F-M | VG | 2- |
| 360-111A | 2977-992m | C-W;-;Am**-H | extremely lean. UNRELIABLE **incompetely developed, dark, degraded | - | F | P-F | 2-(?) |
| 360-111B | 2977-992m | W;C-Al;H-Am | reworked | ✓ | F-M | VG | 2- |
| 360-126A | 3202-217m | W;C-Al**;H-Am | fresh wood. H at 2 **includes material passing to Am | - | M | VG | 2- |
| 360-130A | 3262-277m | W;C;Al-H | reworked | ✓ | F-C | VG | 2- |
| 360-132A | 3292-307m | W;C;Al-H | reworked. H at 2 to 2+ | ✓ | F-M | VG | 2- |
| 360-139A | 3397-412m | W;C-Al;H | H at 1+ to 2- (caved?) reworked, some fresh wood | ✓ | F-M | VG | 2- |
| 360-144A | 3472-487m | W-Am;Al-C;H | sapropelisation | - | F-C | G | 2- |
| 360-146B | 3502-517m | Am;-;Al-W-C-H | | - | F-M | G | 2- |
| 360-150B | 3562-577m | W;C;Al-Am-H | H at 1+ to 2- (caved?) reworking | ✓ | F-C | G | 2-(?) |
| 360-153C | 3607-622m | W-H*-Al*;C;Am** | sapropelisation **dark, degraded some caved H, *passing to Am | - | F-C | G | 2-/2- to 2 |
| 360-159C | 3697-712m | W;C;H-Al-Am | reworking - minor fresh wood | ✓ | F-C | G | 2-/2- to 2 max |

Algal, Amorphous, Herbaceous, Inertinite, Resin, Wood, Coaly

postscript = coarse, cuticle, cysts, degraded, fine, other, structured, spore-pollen, thick-walled, unstructured

## TABLE
## VITRINITE REFLECTANCE DATA

| GEOCHEM SAMPLE NUMBER | DEPTH | SAMPLE TYPE | AVERAGE REFLECTIVITY Ro (%), (NUMBER OF PARTICLES) | | | | REMARKS |
|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | |
| 360-029A | 1040-070m | | 0.38(21) | - | - | - | |
| 360-038A | 1310-340m | | 0.39(20) | - | - | - | |
| 360-048A | 1610-640m | | 0.42(26) | - | - | - | |
| 360-059A | 1940-970m | | 0.41(2) | 0.72(1) | 1.10(15) | - | |
| 360-063A | 2060-090m | | 0.39(4) | 0.58(3) | 1.05(13) | - | |
| 360-066A | 2150-180m | | 0.44(5) | 0.63(13) | 0.89(2) | - | |
| 360-074A | 2390-420m | | 0.33(1) | 0.55(4) | 0.79(11) | 1.05(4) | |
| 360-078A | 2482-497m | | 0.42(3) | 0.70(6) | 0.99(11) | - | |
| 360-087A | 2617-632m | | 0.44(2) | 0.67(3) | 0.99(15) | - | |
| 360-092A | 2692-707m | | 0.35(3) | 0.46(3) | 0.70(7) | 0.92(7) | |
| 360-099A | 2797-812m | | 0.47(4) | 0.85(17) | - | - | |
| 360-130A | 3262-277m | | 0.49(2) | 1.22(20) | - | - | |
| 360-139A | 3397-412m | | 0.53(3) | 0.74(2) | 1.06(20) | - | |
| 360-144A | 3472-487m | | 1.29(20) | - | - | - | |
| 360-150B | 3562-577m | | 1.27(20) | - | - | - | |
| 360-153C | 3607-622m | | 0.27(2) | 0.49(6) | 1.01(12) | - | |
| 360-159A | 3697-712m | | 0.36(3) | 0.44(4) | 0.79(3) | 1.37(10) | |

CT—ditch cuttings; CO—core; WR—whole rock; KC—kerogen concentrate. Colours — spore fluorescence. *Reworked

TABLE

VITRINITE REFLECTANCE - RAW DATA

| GEOCHEM SAMPLE NUMBER | DEPTH | READINGS |
|---|---|---|
| 360-029A | 1040-070m | 0.41, 0.40, 0.43, 0.36, 0.36, 0.35, 0.34, 0.40, 0.36, 0.33, 0.36, 0.46, 0.40, 0.37, 0.41, 0.35, 0.36, 0.35, 0.35, 0.33, 0.42 |
| 360-038A | 1310-340m | 0.38, 0.37, 0.37, 0.38, 0.38, 0.41, 0.43, 0.41, 0.38, 0.43, 0.36, 0.38, 0.37, 0.32, 0.46, 0.31, 0.42, 0.39, 0.41, 0.40 |
| 360-048A | 1610-640m | 0.48, 0.40, 0.38, 0.42, 0.38, 0.39, 0.35, 0.46, 0.43, 0.39, 0.44, 0.33, 0.46, 0.53, 0.50, 0.44, 0.46, 0.47, 0.40, 0.42, 0.41, 0.40, 0.42, 0.41, 0.40, 0.42 |
| 360-059A | 1940-970m | 1.25, 1.22, 0.90, 1.25, 0.86, 0.90, 1.27, 0.93, 1.33, 1.02, 0.37, 1.27, 0.72, 0.99, 0.86, 0.44, 1.35, 1.15 |
| 360-063A | 2060-090m | 1.24, 1.14, 0.73, 1.08, 1.42, 0.57, 0.90, 0.57, 1.12, 1.10, 0.82, 0.34, 1.11, 0.38, 0.38, 0.59, 1.12, 0.93, 0.45, 0.98 |
| 360-066A | 2150-180m | 0.60, 0.55, 0.58, 0.53, 0.44, 0.68, 0.64, 0.62, 0.62, 0.72, 0.78, 0.48, 0.40, 0.74, 0.92, 0.60, 0.38, 0.58, 0.86, 0.48 |
| 360-074A | 2390-420m | 0.60, 0.71, 0.51, 0.82, 1.10, 1.06, 0.74, 0.72, 0.81, 0.97, 0.68, 0.52, 0.82, 0.81, 0.57, 0.33, 1.05, 0.73, 0.87, 0.83 |
| 360-078A | 2482-497m | 0.44, 1.13, 0.72, 0.98, 0.75, 0.77, 0.39, 0.92, 0.44, 1.03, 1.10, 0.97, 0.92, 0.58, 0.70, 0.68, 0.91, 0.87, 1.02, 1.03 |
| 360-087A | 2617-632m | 0.81, 0.80, 0.42, 0.46, 1.35, 0.84, 0.98, 0.64, 0.70, 0.91, 1.09, 0.92, 0.84, 0.67, 1.12, 1.13, 1.00, 0.98, 1.14, 0.90 |
| 360-092A | 2692-707m | 1.12, 0.34, 0.76, 0.71, 0.83, 0.80, 0.67, 0.62, 0.92, 0.47, 0.34, 0.36, 0.49, 0.89, 1.07, 0.74, 0.66, 0.74, 0.81, 0.42 |
| 360-099A | 2797-812m | 0.48, 0.89, 0.71, 0.76, 0.67, 1.00, 0.78, 0.75, 1.02, 0.84, 0.97, 0.84, 0.90, 1.01, 0.76, 0.77, 0.51, 0.44, 0.43, 0.85, 0.88 |
| 360-130A | 3262-277m | 0.97, 1.53, 1.25, 1.11, 1.31, 1.08, 1.17, 1.49, 1.31, 1.23, 1.16, 0.99, 1.43, 1.17, 1.51, 1.31, 1.10, 0.51, 0.47, 1.15, 1.07, 0.98 |
| 360-139A | 3397-412m | 1.01, 1.06, 1.00, 1.03, 0.96, 0.49, 0.72, 0.51, 0.76, 1.06, 1.27, 1.05, 1.06, 1.28, 0.59, 0.87, 0.93, 0.87, 1.06, 1.35, 1.12, 1.23, 1.03, 1.06, 0.99 |

TABLE

## VITRINITE REFLECTANCE - RAW DATA

| GEOCHEM SAMPLE NUMBER | DEPTH | READINGS |
|---|---|---|
| 360-144A | 3472-487m | 1.06, 1.17, 1.29, 1.29, 1.16, 1.31, 1.14, 1.42, 1.53, 1.41, 1.51, 1.33, 1.02, 1.15, 1.69, 1.34, 1.31, 1.16, 1.11, 1.38 |
| 360-150B | 3562-577m | 1.36, 1.11, 1.30, 1.18, 1.33, 1.37, 1.46, 0.98, 1.30, 1.32, 1.52, 1.21, 1.17, 1.07, 1.46, 1.19, 1.22, 1.26, 1.10, 1.40 |
| 360-153C | 3607-622m | 1.44, 1.20, 0.26, 0.83, 0.90, 0.51, 1.13, 0.99, 0.45, 0.99, 0.53, 0.47, 0.87, 0.88, 0.28, 0.75, 0.56, 0.39, 0.89, 1.22 |
| 360-159A | 3697-712m | 0.80, 1.38, 1.12, 1.72, 1.33, 1.60, 1.92, 0.33, 1.08, 1.45, 1.02, 0.42, 0.45, 0.36, 0.82, 1.13, 0.46, 0.39, 0.44, 0.75 |

TABLE 1A

CONCENTRATION (VOL. PPM OF ROCK) OF $C_1$ - $C_7$ HYDROCARBONS IN AIR SPACE GAS

| GEOCHEM SAMPLE NUMBER | DEPTH | $C_1$ Methane | $C_2$ Ethane | $C_3$ Propane | $iC_4$ Isobutane | $nC_4$ Butane | TOTAL $C_1$ - $C_4$ | TOTAL $C_2$ - $C_4$ | % GAS WETNESS | TOTAL $C_5$ - $C_7$ | $\frac{iC_4}{nC_4}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 360-121 | 3127-3142 | 934 | 668 | 1305 | 344 | 951 | 4202 | 3268 | 77.8 | 1452 | 0.36 |
| 360-122 | 3142-3157 | 833 | 613 | 1433 | 415 | 1137 | 4431 | 3598 | 81.2 | 2461 | 0.37 |
| 360-123 | 3159-3172 | 318 | 220 | 533 | 171 | 482 | 1724 | 1407 | 81.6 | 1101 | 0.35 |
| 360-124 | 3172-3187 | 649 | 352 | 769 | 250 | 631 | 2651 | 2002 | 75.5 | 946 | 0.40 |
| 360-125 | 3187-3202 | 616 | 436 | 1054 | 334 | 905 | 3345 | 2729 | 81.6 | 1722 | 0.37 |
| 360-126 | 3202-3217 | 406 | 285 | 728 | 217 | 564 | 2201 | 1795 | 81.5 | 1203 | 0.39 |
| 360-127 | 3217-3232 | 645 | 363 | 865 | 257 | 715 | 2845 | 2200 | 77.3 | 1166 | 0.36 |
| 360-128 | 3232-3247 | 538 | 391 | 889 | 246 | 631 | 2695 | 2157 | 80.1 | 1612 | 0.39 |
| 360-129 | 3247-3262 | 845 | 736 | 2090 | 695 | 1691 | 6056 | 5211 | 86.0 | 4052 | 0.41 |
| 360-130 | 3262-3277 | 1722 | 1404 | 2820 | 1028 | 2051 | 9025 | 7303 | 80.9 | 4156 | 0.50 |
| 360-131 | 3277-3292 | 886 | 906 | 1902 | 527 | 1307 | 5527 | 4641 | 84.0 | 1966 | 0.40 |
| 360-132 | 3292-3307 | 789 | 598 | 1465 | 261 | 687 | 3800 | 3011 | 79.2 | 1482 | 0.38 |
| 360-133 | 3307-3322 | 653 | 589 | 1653 | 484 | 1189 | 4569 | 3916 | 85.7 | 2384 | 0.41 |
| 360-134 | 3322-3337 | 165 | 206 | 439 | 115 | 241 | 1166 | 1001 | 85.8 | 550 | 0.48 |
| 360-135 | 3337-3352 | 90 | 77 | 135 | 31 | 66 | 399 | 309 | 77.5 | 91 | 0.46 |
| 360-136 | 3352-3367 | 240 | 144 | 315 | 98 | 250 | 1048 | 808 | 77.1 | 588 | 0.39 |
| 360-137 | 3367-3382 | 554 | 397 | 804 | 210 | 481 | 2446 | 1892 | 77.4 | 978 | 0.44 |
| 360-138 | 3382-3397 | 249 | 177 | 520 | 177 | 493 | 1616 | 1366 | 84.6 | 1305 | 0.36 |
| 360-139 | 3397-3412 | 295 | 269 | 895 | 305 | 746 | 2510 | 2214 | 88.2 | 1904 | 0.41 |
| 360-140 | 3412-3427 | 211 | 165 | 481 | 167 | 351 | 1375 | 1164 | 84.6 | 574 | 0.47 |
| 360-141 | 3427-3442 | 514 | 592 | 1648 | 619 | 1256 | 4628 | 4114 | 88.9 | 1978 | 0.49 |
| 360-142 | 3442-3457 | 518 | 670 | 1140 | 432 | 985 | 3745 | 3227 | 86.2 | 1195 | 0.44 |
| 360-143 | 3457-3472 | 2425 | 2690 | 5066 | 2072 | 4044 | 16297 | 13872 | 85.1 | 7742 | 0.51 |
| 360-144 | 3472-3487 | 2895 | 3070 | 4559 | 1775 | 3904 | 16203 | 13308 | 82.1 | 5971 | 0.45 |
| 360-145 | 3487-3502 | 1980 | 2036 | 3645 | 1349 | 2945 | 11955 | 9975 | 83.4 | 5157 | 0.46 |
| 360-146 | 3502-3517 | 1288 | 1285 | 2098 | 903 | 1958 | 7532 | 6244 | 82.9 | 2869 | 0.46 |
| 360-147 | 3517-3532 | 938 | 1091 | 3091 | 934 | 2022 | 8075 | 7138 | 88.4 | 3848 | 0.46 |
| 360-148 | 3532-3547 | 1060 | 1012 | 2411 | 801 | 1706 | 6990 | 5930 | 84.8 | 4057 | 0.47 |
| 360-149 | 3547-3562 | 514 | 563 | 1466 | 453 | 1004 | 4000 | 3486 | 87.2 | 2060 | 0.45 |
| 360-150 | 3562-3577 | 194 | 272 | 693 | 215 | 524 | 1898 | 1704 | 89.8 | 1339 | 0.41 |

TABLE 4C

COMPOSITION (NORMALISED %) OF $C_{15+}$ MATERIAL EXTRACTED FROM ROCK

| GEOCHEM SAMPLE NUMBER | INTERVAL | HYDROCARBONS | | | NON HYDROCARBONS | | | | | HC / NON HC |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Paraffin – Naphthenes | Aromatics | P – N / AROM | Preciptd. Asphaltenes | Eluted NSO's | Non eluted NSO's | ASPH Sulphur | ASPH / NSO | |
| 360-029A | 1040-1070 | 6.85 | 16.19 | 0.42 | 58.79 | 17.75 | 0.42 | 0.00 | 3.23 | 0.30 |
| 360-038 | 1310-1340 | 12.98 | 16.32 | 0.80 | 36.10 | 33.65 | 0.95 | 0.00 | 1.04 | 0.41 |
| 360-044 | 1490-1520 | 11.00 | 19.46 | 0.57 | 36.06 | 31.90 | 1.58 | 0.00 | 1.08 | 0.44 |
| 360-059 | 1940-1970 | 13.58 | 9.16 | 1.48 | 70.98 | 5.99 | 0.29 | 0.00 | 11.30 | 0.29 |
| 360-063 | 2060-2090 | 31.52 | 19.30 | 1.63 | 35.03 | 13.45 | 0.70 | 0.00 | 2.48 | 1.03 |
| 360-066 | 2150-2180 | 64.24 | 18.34 | 3.50 | 10.30 | 7.13 | 0.00 | 0.00 | 1.44 | 4.74 |
| 360-070 | 2270-2300 | 50.48 | 8.95 | 5.64 | 37.11 | 3.46 | 0.00 | 0.00 | 10.73 | 1.46 |
| 360-074 | 2390-2420 | 64.48 | 15.26 | 4.23 | 13.39 | 6.87 | 0.00 | 0.00 | 1.95 | 3.93 |
| 360-078 | 2482-2497 | 66.37 | 15.62 | 4.25 | 9.42 | 8.59 | 0.00 | 0.00 | 1.10 | 4.55 |
| 360-084 | 2572-2587 | 57.14 | 17.69 | 3.23 | 16.65 | 8.52 | 0.00 | 0.00 | 1.96 | 2.97 |
| 360-087 | 2617-2632 | 46.69 | 20.05 | 2.33 | 21.35 | 11.37 | 0.54 | 0.00 | 1.79 | 2.01 |
| 360-092 | 2692-2707 | 50.62 | 16.65 | 3.04 | 21.31 | 10.73 | 0.69 | 0.00 | 1.87 | 2.06 |
| 360-099 | 2797-2812 | 61.30 | 14.98 | 4.09 | 14.71 | 9.01 | 0.00 | 0.00 | 1.63 | 3.22 |
| 360-101 | 2827-2847 | 71.94 | 13.45 | 5.35 | 9.26 | 5.35 | 0.00 | 0.00 | 1.73 | 5.85 |
| 360-103 | 2857-2872 | 54.14 | 17.26 | 3.14 | 13.73 | 14.54 | 0.34 | 0.00 | 0.92 | 2.50 |
| 360-111 | 2977-2992 | 29.97 | 20.62 | 1.45 | 32.42 | 16.99 | 0.00 | 0.00 | 1.91 | 1.02 |
| 360-117/ | 3067-3112 | 43.26 | 13.88 | 3.12 | 27.63 | 14.38 | 0.85 | 0.00 | 1.82 | 1.33 |
| 360-125/ | 3187-3217 | 52.65 | 18.66 | 2.82 | 14.56 | 14.13 | 0.00 | 0.00 | 1.03 | 2.49 |
| 360-130 | 3262-3277 | 59.29 | 17.99 | 3.30 | 10.05 | 12.67 | 0.00 | 0.00 | 0.79 | 3.40 |
| 360-138/ | 3382-3412 | 32.73 | 15.18 | 2.16 | 40.95 | 10.73 | 0.41 | 0.00 | 3.68 | 0.92 |
| 360-144A | 3472-3487 | 82.46 | 11.86 | 6.95 | 3.07 | 2.61 | 0.00 | 0.00 | 1.18 | 16.61 |
| 360-146 | 3502-3517 | 76.67 | 14.93 | 5.14 | 3.17 | 5.24 | 0.00 | 0.00 | 0.60 | 10.90 |
| 360-150 | 3562-3577 | 65.37 | 17.50 | 3.74 | 8.56 | 8.57 | 0.00 | 0.00 | 1.00 | 4.84 |
| 360-153 | 3607-3622 | 63.13 | 14.98 | 4.21 | 10.64 | 11.25 | 0.00 | 0.00 | 0.95 | 3.57 |
| 360-159 | 3697-3712 | 51.39 | 19.22 | 2.67 | 20.17 | 9.22 | 0.00 | 0.00 | 2.19 | 2.40 |

TABLE 7

SIGNIFICANT RATIOS (%) OF $C_{15+}$ FRACTIONS AND ORGANIC CARBON

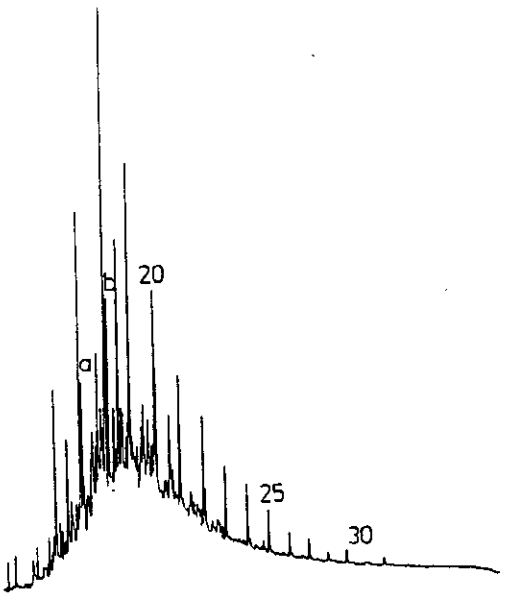
| GEOCHEM SAMPLE NUMBER | DEPTH | ORGANIC CARBON | HYDROCARBONS / TOTAL EXTRACT | HYDROCARBONS / ORGANIC CARBON | TOTAL EXTRACT / ORGANIC CARBON |
|---|---|---|---|---|---|
| 360-029A | 1040-1070 | 1.19 | 23.03 | 3.26 | 14.14 |
| 360-038 | 1310-1340 | 0.97 | 29.30 | 1.27 | 4.35 |
| 360-044 | 1490-1520 | 1.11 | 30.46 | 1.29 | 4.22 |
| 360-059 | 1940-1970 | 0.66 | 22.74 | 5.42 | 23.82 |
| 360-063 | 2060-2090 | 0.37 | 50.82 | 5.70 | 11.21 |
| 360-066 | 2150-2180 | 0.44 | 82.58 | 30.41 | 36.83 |
| 360-070 | 2270-2300 | 0.76 | 59.43 | 24.58 | 41.36 |
| 360-074 | 2390-2420 | 0.81 | 79.74 | 18.66 | 23.40 |
| 360-078 | 2482-2497 | 0.50 | 81.99 | 38.84 | 47.37 |
| 360-084 | 2572-2587 | 0.46 | 74.83 | 15.04 | 20.09 |
| 360-087 | 2617-2632 | 0.52 | 66.74 | 11.85 | 17.76 |
| 360-092 | 2692-2707 | 0.70 | 67.27 | 13.71 | 20.37 |
| 360-099 | 2797-2812 | 1.90 | 76.28 | 9.60 | 12.58 |
| 360-101 | 2827-2847 | 0.68 | 85.39 | 37.56 | 43.98 |
| 360-103 | 2857-2872 | 0.51 | 71.40 | 47.83 | 66.98 |
| 360-111 | 2977-2992 | 0.77 | 50.59 | 5.88 | 11.62 |
| 360-117/ | 3067-3112 | 0.55 | 57.14 | 17.77 | 31.09 |
| 360-125/ | 3187-3217 | 0.78 | 71.31 | 28.61 | 40.13 |
| 360-130 | 3262-3277 | 0.47 | 77.28 | 53.47 | 69.20 |
| 360-138/ | 3382-3412 | 0.71 | 47.91 | 8.77 | 18.30 |
| 360-144A | 3472-3487 | 1.39 | 94.32 | 47.36 | 50.21 |
| 360-146 | 3502-3517 | 0.45 | 91.60 | 58.55 | 63.93 |
| 360-150 | 3562-3577 | 0.57 | 82.87 | 22.33 | 26.95 |
| 360-153 | 3607-3622 | 0.56 | 78.11 | 42.70 | 54.67 |
| 360-159 | 3697-3712 | 0.76 | 70.61 | 10.47 | 14.83 |

TABLE
PYROLYSIS ANALYSIS

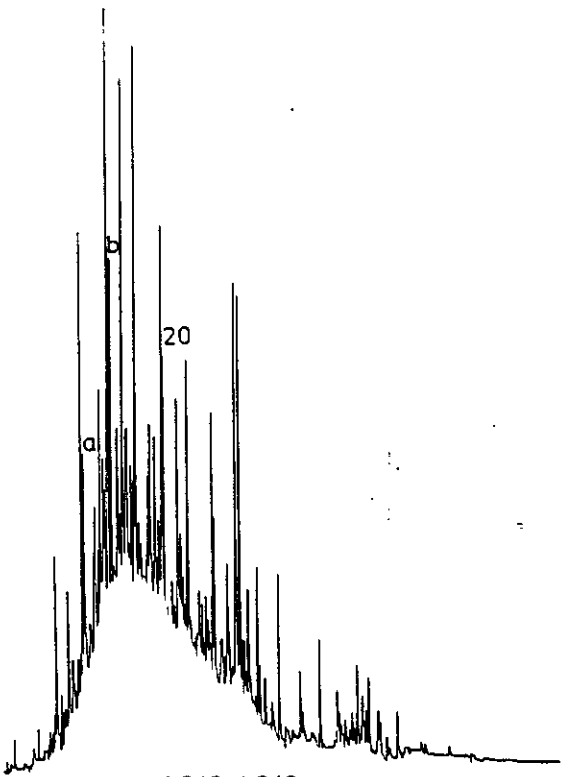
| SAMPLE NUMBER | DEPTH | ORGANIC CARBON | PPM BITUMEN* | PPM PYROLYSATE+ | PYROLYSATE ORGANIC CARBON | BITUMEN PYROLYSATE | PEAK PYROL TEMP (oC) |
|---|---|---|---|---|---|---|---|
| 360-029A | 1040-1070m | 0.88 | 214 | 2200 | 0.250 | 0.097 | 483 |
| 360-038A | 1310-1340 | 1.23 | 1048 | 4191 | 0.341 | 0.250 | 485 |
| 360-044A | 1490-1520 | 1.24 | 452 | 2836 | 0.229 | 0.159 | 493 |
| 360-059A | 1940-1970 | 0.23 | 87 | 174 | 0.076 | 0.500 | 480 |
| 360-063A | 2060-2090 | 0.62 | 103 | 1467 | 0.237 | 0.070 | 480 |
| 360-070 | 2270-2300 | 0.43 | 115 | 460 | 0.107 | 0.250 | 480 |
| 360-074 | 2390-2420 | 0.50 | 552 | 602 | 0.120 | 0.917 | 480 |
| 360-084A | 2572-2587 | 0.46 | 351 | 337 | 0.073 | 1.042 | 460 |
| 360-092 | 2692-2707 | 0.49 | 540 | 502 | 0.102 | 1.076 | 482 |
| 360-099 | 2797-2812 | 0.49 | 582 | 655 | 0.134 | 0.889 | 480 |
| 360-101A | 2827-2842 | 0.47 | 1121 | 489 | 0.104 | 2.292 | 480 |
| 360-102B | 2842-2857 | 1.06 | 6007 | 2253 | 0.213 | 2.667 | 480 |
| 360-111A | 2977-2992 | 0.52 | 109 | 124 | 0.024 | 0.882 | 483 |
| 360-125A | 3187-3202 | 0.47 | 280 | 218 | 0.046 | 1.286 | 480 |
| 360-138A | 3382-3397 | 0.57 | 589 | 718 | 0.126 | 0.821 | 478 |
| 360-144A | 3472-3487 | 0.68 | 9014 | 1803 | 0.265 | 5.000 | 480 |
| 360-146B | 3502-3517 | 0.78 | 1455 | 1205 | 0.145 | 1.208 | 480 |
| 360-150A | 3562-3577 | 0.60 | 672 | 458 | 0.076 | 1.467 | 482 |
| 360-153C | 3607-3622 | 2.93 | 918 | 4064 | 0.139 | 0.226 | 485 |
| 360-159A | 3697-3712 | 1.07 | 121 | 604 | 0.056 | 0.200 | 480 |

* 50 - 340 oC

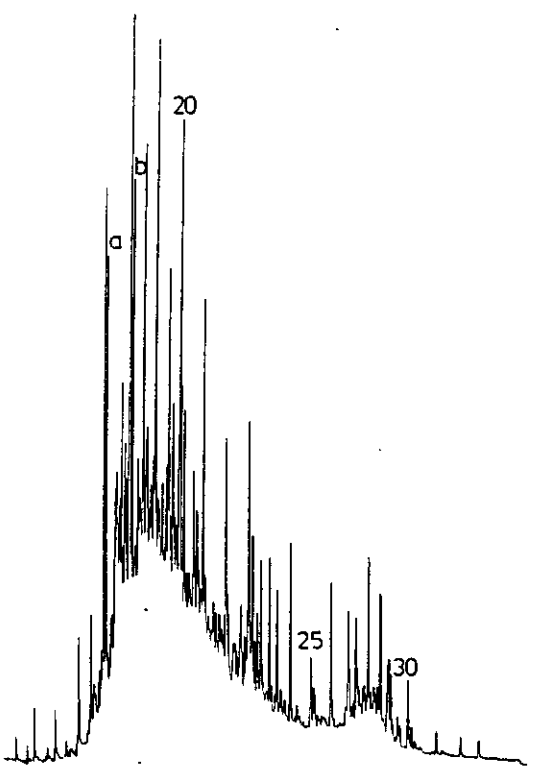
\+ 340 - 550 oC




1,040-1,070




1,310-1,340

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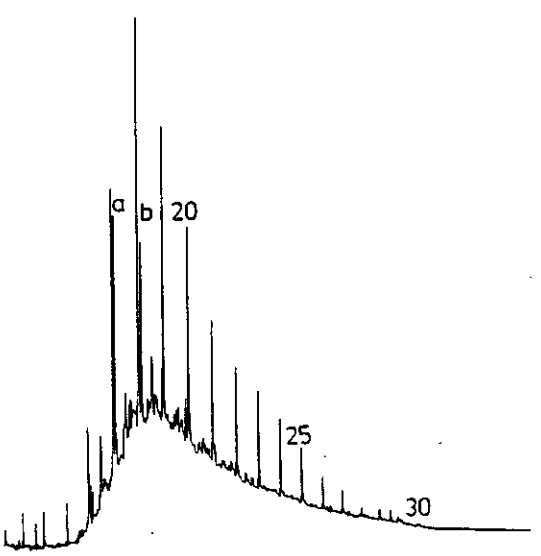
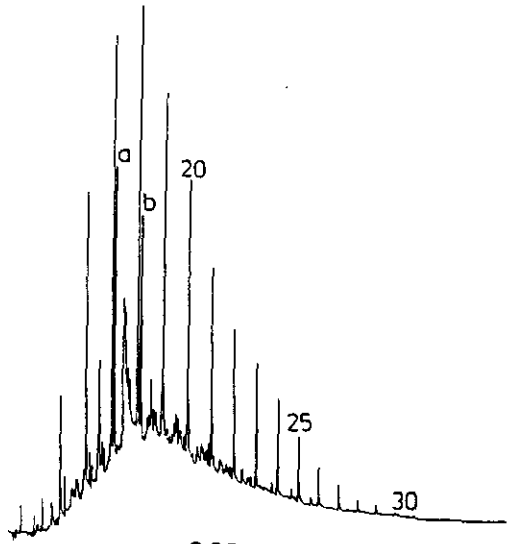



1,940-1,970

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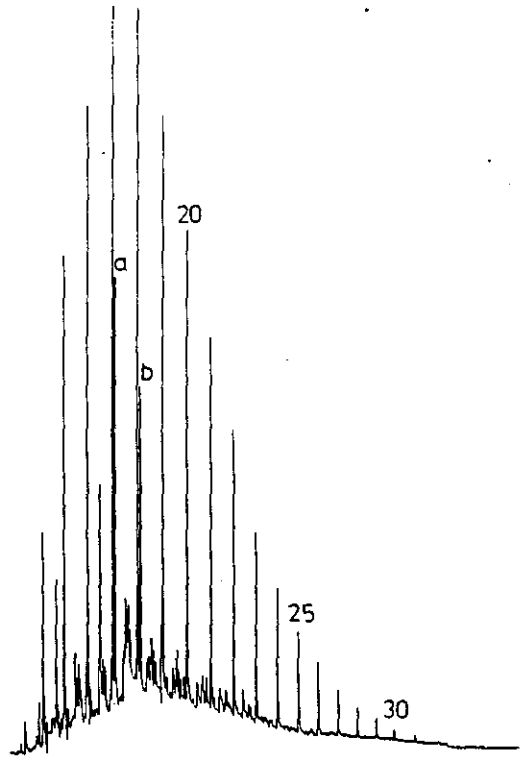


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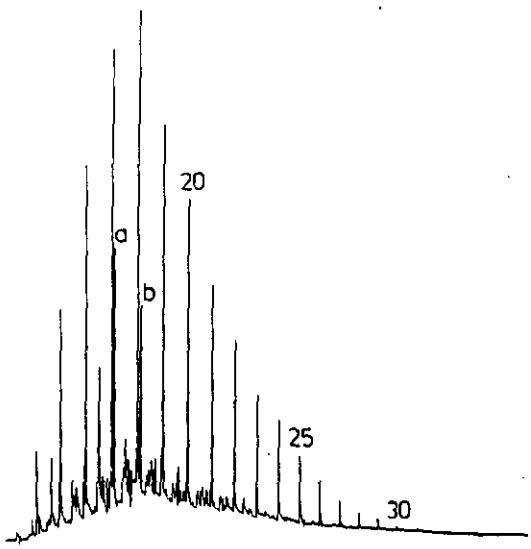
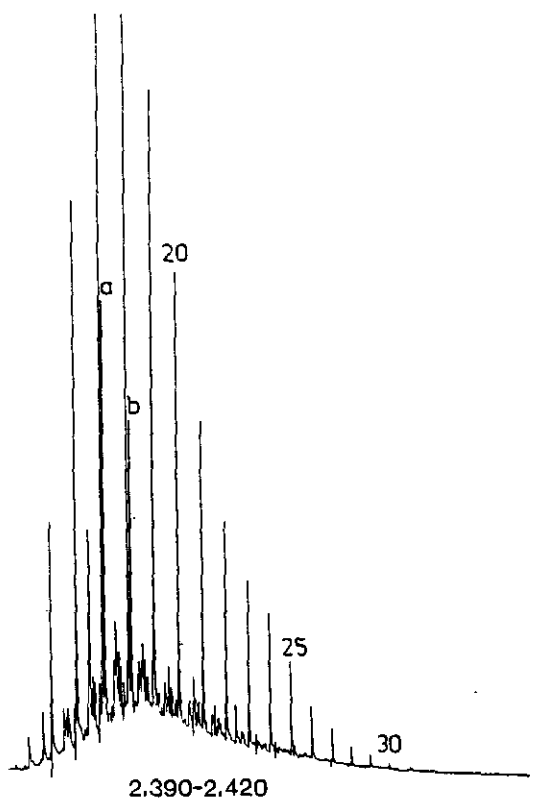
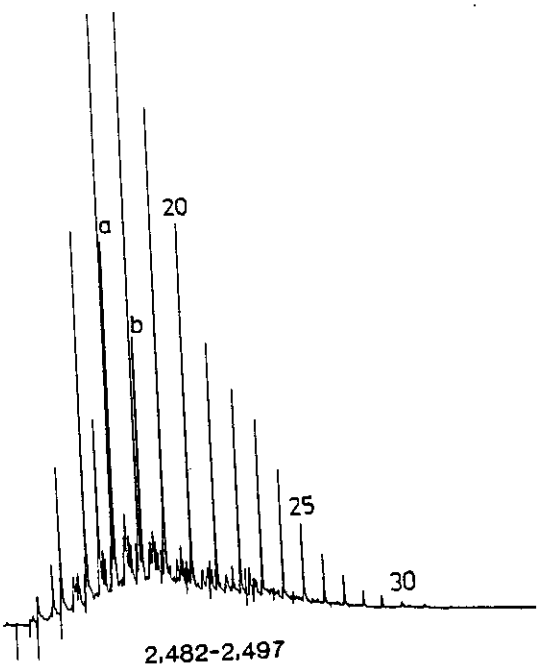


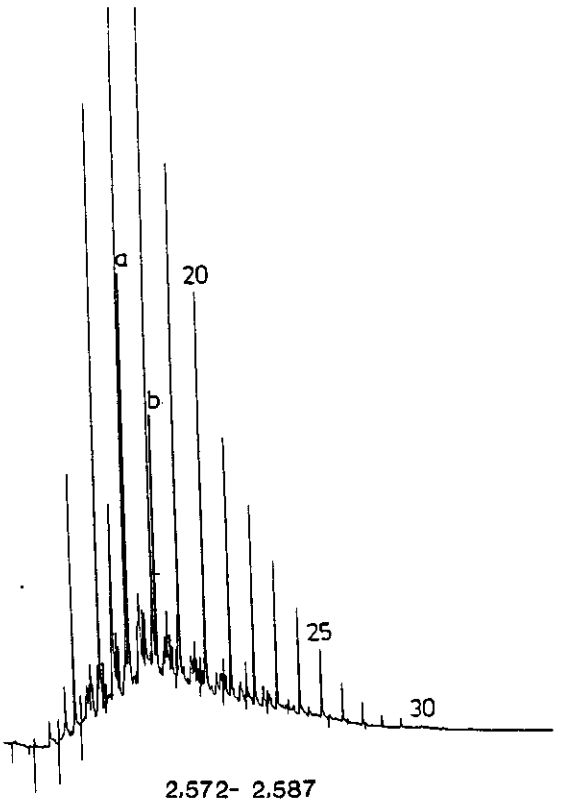

2,270-2,300



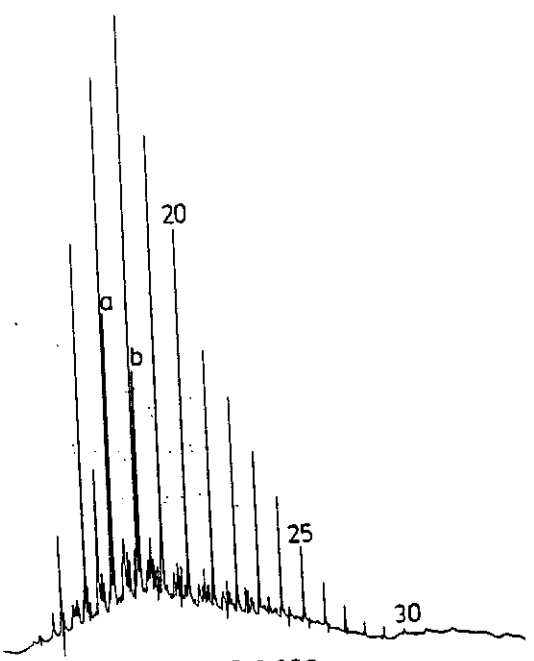

2,390-2,420



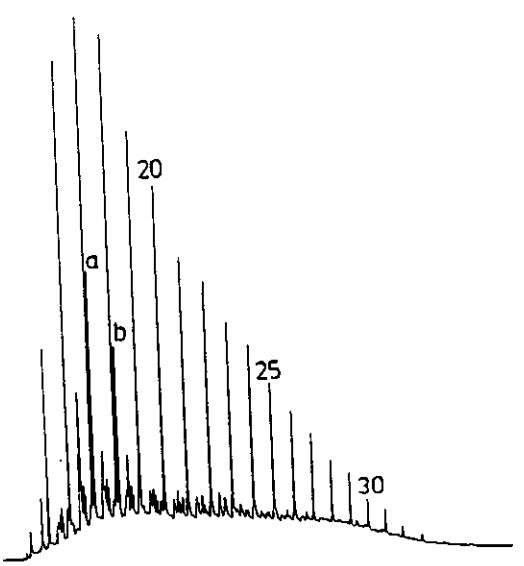

2,482-2,497



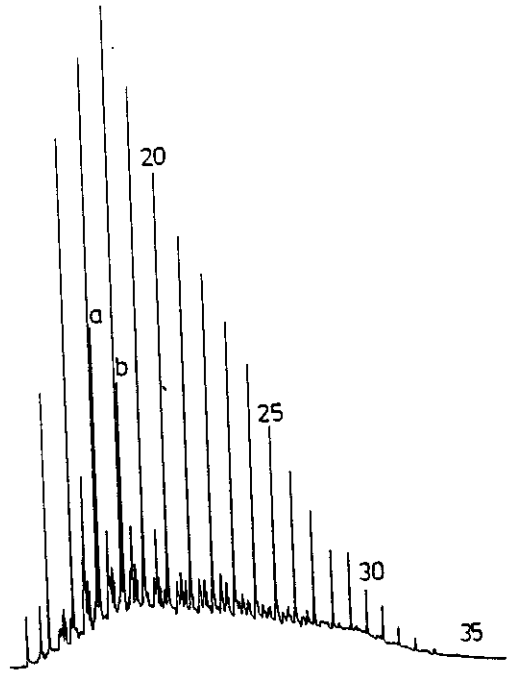

2,572- 2,587



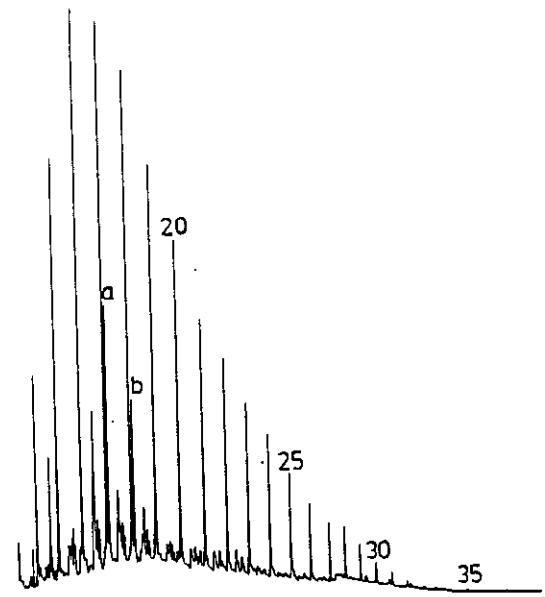

2,617-2,632



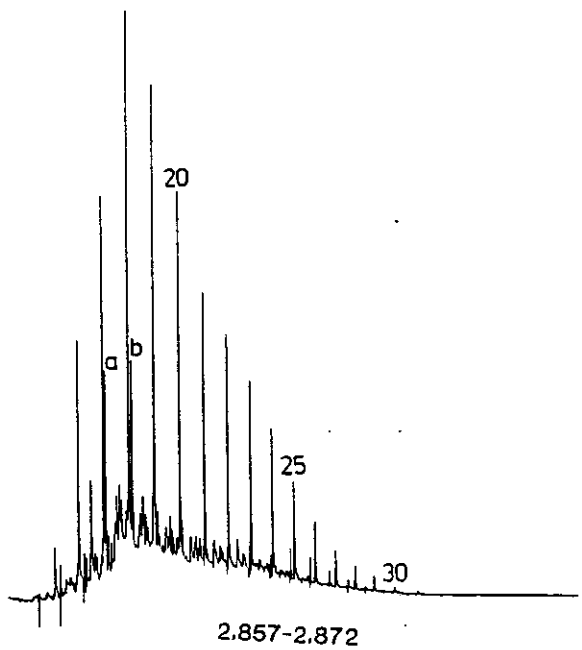

2,692-2,707



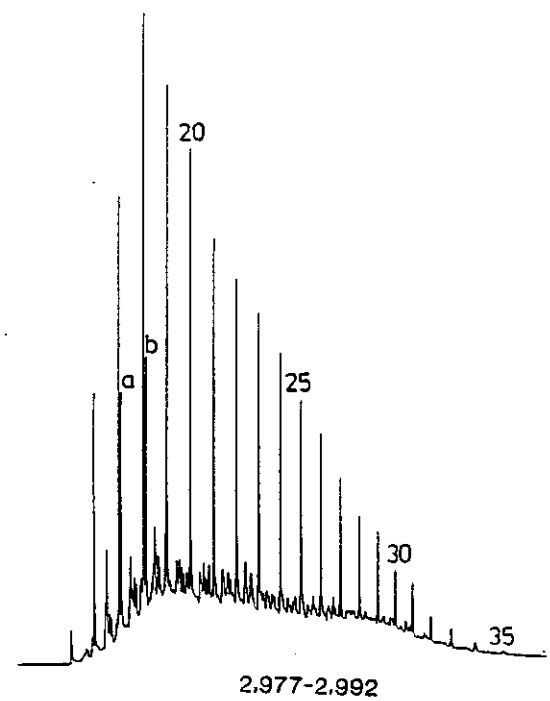

2,797-2,812



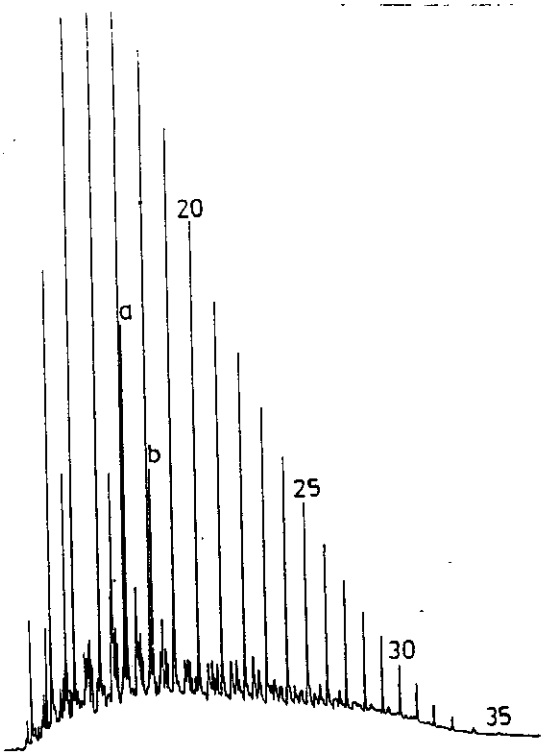

2,827-2,847



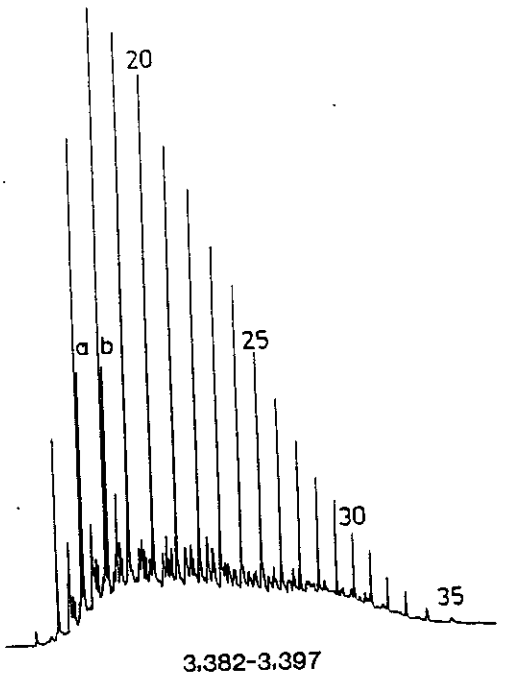

2,857-2,872



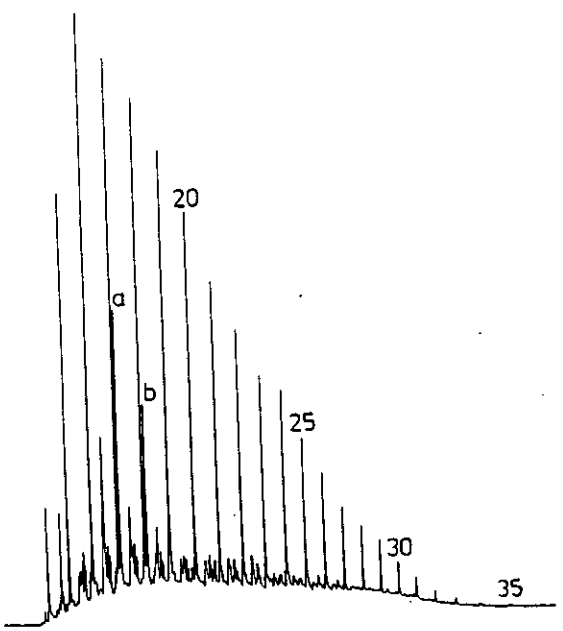

2,977-2,992



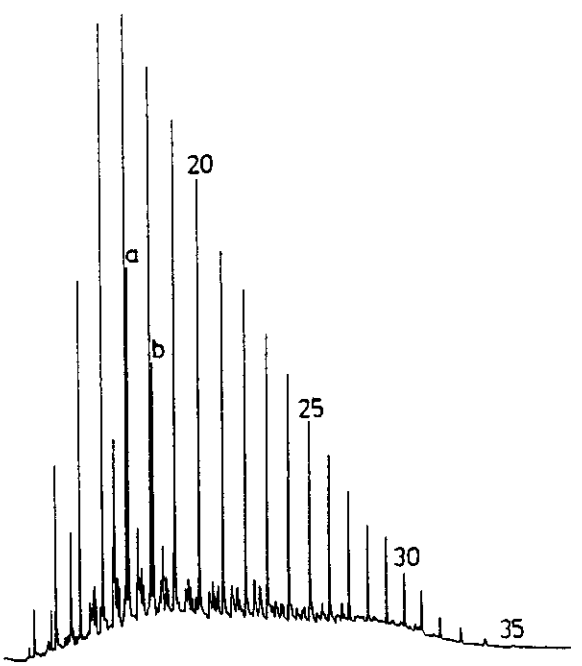

3.472-3.487



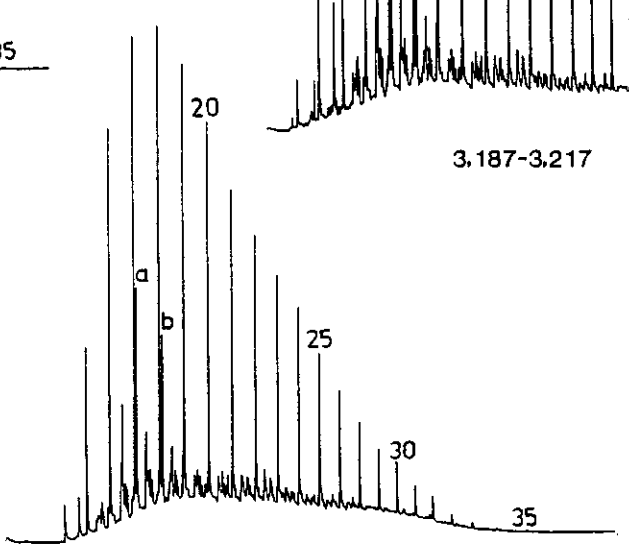

3.382-3.397



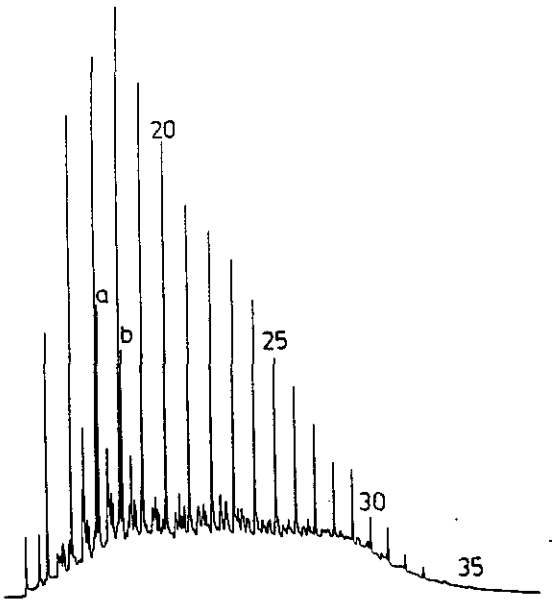

3.262- 3.277



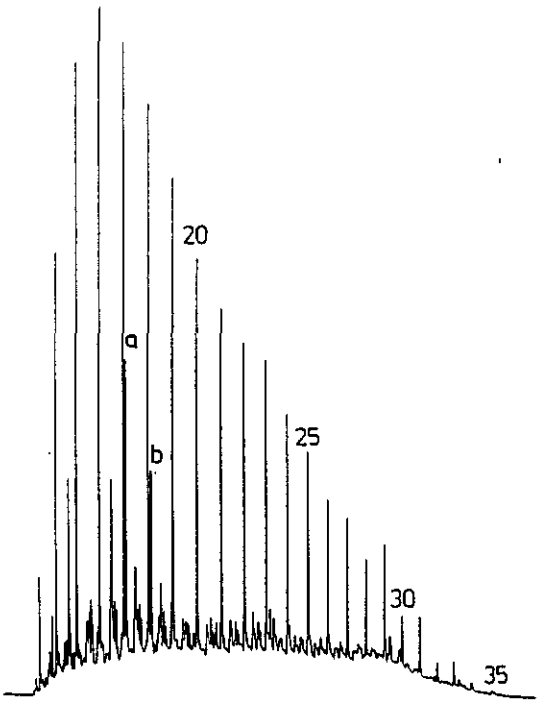

3.187-3.217



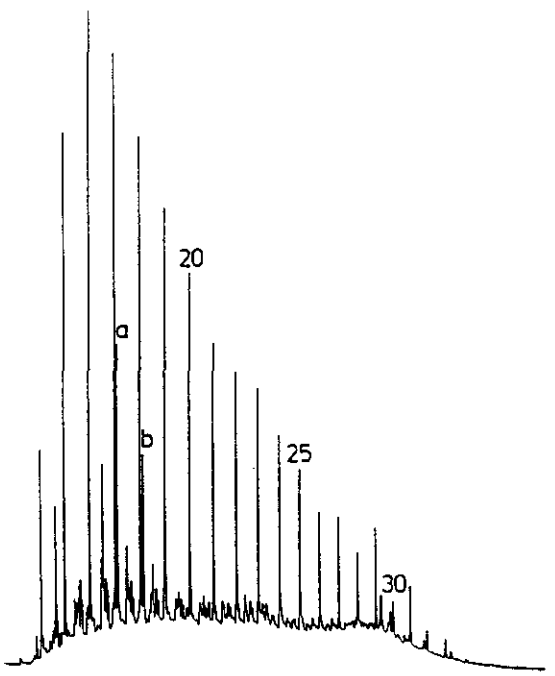

3.067-3.112



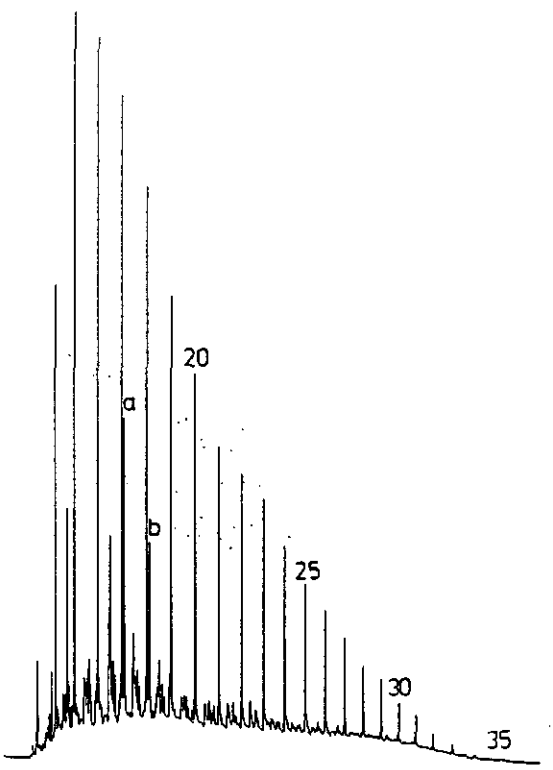

3.697-3.712




3.607-3.622




3.562-3.577




3.502-3.517