The Superior Oil Company
Rio Blanco Strat Test #12
Sec. 27-1N-97W
Rio Blanco County, COLORADO

## SAMPLE DESCRIPTION

| Depth | Description |
|---|---|
| **Core No. 1 905 to 914.9** | |
| 905-912 | OS dk gy-bwn-thin lamin w/tr diss Wac @ 910.9 |
| 912-913 | Sh aa w/op vert frac. |
| 913-914.9 | Sh aa |
| **Core No. 2 914.9 to 925** | |
| 914.9-916.3 | OS dk gy bwn w/thin lamin ac-sm & ind diag fracs |
| 916.3-918.3 | Sltstn, lt gy, sndy |
| 918.3-918.5 | OS aa |
| 918.5-920.3 | sltstn aa |
| 920.3-922.5 | OS aa |
| 922.5-922.6 | bwn OS v/brkn |
| 922.6-925 | OS aa w/v/op frac f/24.7-25 |
| **Core No. 3 925 to 935.4** | |
| 925-926.5 | dk gy bwn OS |
| 926.5-926.7 | dk gy blk poker chip sh |
| 926.7-932 | OS aa |
| 932-932.3 | OS aa w/diag op frac |
| 932.3-935.4 | OS aa |
| **Core No. 4 935.4 to 945.8** | |
| 935.4-937.9 | lt gy-tn OS |

| Depth | Description |
|---|---|
| 937.9-939.3 | dk gy-bwn OS |
| 939.3-939.9 | dk gy-bwn OS, v/frac'd |
| 939.9-942.4 | dk gy bwn OS |
| 942.4-945.8 | med gy bwn OS |

Core No. 5 945.8 to 956.1

| | |
|---|---|
| 945.8-946.8 | lt-med gy-tn OS |
| 946.8-947.6 | dk gy-blk poker chip sh |
| 947.6-956.1 | v/dk bwn-gy OS w/diag open fracs @ 953.6 & 953.9 |

Core No. 6 956.1 to 966

| | |
|---|---|
| 956.1-966 | dk gy-bwn OS w/op diag frac f/957.3 to 957.8, bdly bkn @ 961.7 to 962 |

Core No. 7 966 to 975.6

| | |
|---|---|
| 966-970.05 | dk gy bwn OS |
| 970.05-970.1 | blk frac sh |
| 970.1-975.6 | dk gy bwn OS w/diag op fracs @ 971.7, 972.2 to 973.3 & 974.1 to .3 |

Core No. 8 975.6 to 985.6

| | |
|---|---|
| 975.6-981.5 | dk gy bwn OS |
| 981.5-981.7 | OS, lt gy wet |
| 981.7-984.95 | dk gy-tn OS w/cal sealed vert & diag fracs to 982.8, open to 983.8 |
| 984.95-985.4 | lt tn OS |
| 985.4-985.6 | lt tn OS w/open vert frac |

| Depth | Description |
|---|---|
| **Core No. 9 985.6 to 989.7** | |
| 985.6-987.5 | dk gy bwn OS |
| 987.5-989.7 | dk gy bwn OS w/num op vert fracs v/badly broken |
| **Core No. 10 989.7 to 1000** | |
| 989.7-995.1 | dk gy-bwn OS w/op diag fracs @ 991 & 991.6 to 992.1 & 992.8 |
| 995.1-995.3 | blk sft sh |
| 995.3-998.3 | dk gy bwn OS aa |
| 998.3-1000 | dk gy bwn OS w/small diss NaHCO3 cavities causing broken core |
| **Core No. 11 1000 to 1005** | |
| 1000-1005 | Appears to be dk gy-bwn OS w/num diag-horiz & vert fracs - too broken to reconstruct. Appears to be some NaHCO3 dissolved. |
| **Core No. 12 1005 to 1010.1** | |
| 1005-1010.1 | Med bwn OS v/bkn to 1006', diss NaHCO3 @ 1006.8 & 1007.7, diag op frac @ 1009.5 & 1010 to .1 |
| **Core No. 13 1010.1 to 1015.1** | |
| 1010.1-1015.1 | No recovery |
| **Core No. 14 1015.1 to 1021 - Recovered 3'** | |
| 1015.1-1018.1 | No recovery |
| 1018.1-1021 | dk gy-bwn OS - ext frac'd to 19.5 burned up core bit - sealed fracs f/19.5 to 20 |
| **Core No. 15 1021 to 1023** | |
| 1021-1021.5 | dk bwn OS w/num cal filled fracs no orientation v/brec. |

| Depth | Description |
|---|---|
| 1021.5-1023 | bn tn sh, v/breciated, sft-med hd not OS? |
| **Core No. 16 1023 to 1031** | |
| 1023-1024 | OS bwn-tn-med rch - crumbly in pt - v/broken |
| 1024-1025.2 | OS aa - med rch to rch, diag open frac 24.7 to 24.9 70° |
| 1025.2-1025.8 | OS bwn-tn-crumbly-bkn |
| 1025.8-1029.1 | OS, bwn-med rich w/low L closed frac & hi L 80° closed Cal filled frac, 26 to 26.4, sm horiz Cal filled frac 26.8 - 1027.0, 70° closed frac to 27.5, also closed vert frac 1027.4-27.9, horiz frac 27.7, 30° closed frac 27.9 |
| 1029.1-1030.7 | OS med bwn-brkn v/bdly |
| 1030.7-1031 | OS aa w/horiz closed frac @ 1030.8 |
| **Core No. 17 1031 to 1035 (14 units light gas)** | |
| 1031-1031.5 | bwn-tn OS, v/broken |
| 1031.5-1032.2 | bwn-tn OS, op diag frac 31.5-32 |
| 1032.2-1033.2 | bwn OS, $NaHCO_3$? |
| 1033.2-1035 | dk bwn OS, diag open frac 33.2 to 34, w/34.1 to .2 diag op frac |
| **Core No. 18 1035 to 1043 10°** | |
| 1035-1036.5 | OS, m brn-bdly broken to 1038 - bwn OS bdly frac'd horiz & vert frac - too broken to rebuild |
| 1036.5-1039.6 | OS aa w/vert op frac - bdly bkn |
| 1039.6-1043 | OS aa -open diag frac to 1040.4 bdly broken @ 1040.4, 1041, 1042.3-.5 1042.7 - 1043 |

| Depth | Description |
|---|---|
| **Core No. 19 1043 to 1051** | |
| 1043-1048 | OS, med-dk bwn gy, v-broken |
| 1048-1051 | OS, dk bwn v/broken, no footage marks, abund. closed Cal fill frac in lower 2 feet may be cause of brecciation |
| **Core No. 20 1051 to 1061.3** | |
| 1051-1053.6 | dk bwn OS w/op vert frac 51.3 to 51.6 |
| 1053.6-1055 | OS aa v/brkn-clay? |
| 1055-1056.4 | OS, med bwn, abun cal filled fracs - v/brecciated |
| 1056.4-1056.7 | Bwn OS - brkn badly |
| 1056.7-1058.0 | bwn OS - diss NaH 57.57.2 diag op frac 57 to 58 |
| 1058.0-1059.8 | bwn OS - claystne-tn-crumbly |
| 1059.8-1061.3 | dk bwn OS - med bwn OS w/carb gil tic lamin, diag frac 60.5 to 61.3 open |
| **Core No. 21 1061.3 to 1070.3** | |
| 1061.3-1062.1 | dk gy bwn OS w/hi V op frac bdly bkn |
| 1062.1-1070.3 | dk bwn OS op fracs 60° @ 63.1 to 63.4 op fracs diag 64.3 to 64.5, op fracs 45° @ 65.5 to 65.6, op 60° @ 67.9 to 68.3, op 80° @ 69.2 to 69.8, NaH diss @ 67.3 to 67.7 irreg inclus. |
| **Core No. 22 1070.3 to 1077** | |
| 1070.3-1071.2 | dk gy-bwn OS |
| 1071.2-1071.9 | dk gy-bwn OS v/bdly bkn |
| 1071.9-1072.3 | dk gy-bwn OS |
| 1072.3-1072.10 | dk gy-bwn OS v/bdly bkn |

| Depth | Description |
|---|---|
| 1072.10-1073.2 | dk gy-bwn OS, tr NaH @ 1072.95 |
| 1073.2-1075.1 | dk gy-bwn OS, bkn in pt. |
| 1075.1-1075.3 | NaHCO3 sft sm diss |
| 1075.3-1077 | dk gy bwn OS - v/bdly broken |

Core No. 23 1077 to 1087.5

| | |
|---|---|
| 1077-1077.4 | dk bwn OS w/vert op frac |
| 1077.4-1077.8 | dk bwn OS v/bkn |
| 1077.8-1079.2 | dk bwn OS w/tr NaHCO3 xtals |
| 1079.2-1079.4 | dk bwn OS v/bkn |
| 1079.4-1080.8 | dk bwn OS |
| 1080.8-1082.7 | dk bwn OS v/bkn |
| 1082.7-1083.9 | dk bwn OS ind. of diss NaHCO3 @ 1083.5 |
| 1083.9-1086.1 | dk bwn OS w/vert closed fracs 1084.6 to 1085 |
| 1086.1-1087.5 | dk bwn OS extremely broken |

Core No. 24 1087.5 to 1094.0

| | |
|---|---|
| 1087.5-1090.5 | No rec - ground up |
| 1090.5-1094 | dk gy bwn OS -extr broken- no footage marks |

Core No. 25 1094 to 1098

| | |
|---|---|
| 1094-1098 | dk bwn gy OS, too broken to reconstruct |

Core No. 26 1098 to 1105.5 Cut 7½ Rec. 1½'

| | |
|---|---|
| 1098-1105.5 | 1½' o sh, dk gy-bwn, extremely broken footage mark at 1099' No recovery 1099.5 to 1105.5 |

| Depth | Description |
|---|---|
| **Core No. 27 1105.5 to 1114** | |
| 1105.5-1107.7 | claystn-shly w/num wh spks |
| 1107.7-1114 | sh tn-gy v/fissile, v/bkn, no odor, few footage mark, vert & diag open frac 1112.5 to 113 |
| **Core No. 28 1114 to 1123** | |
| 1114-1115.6 | lt gy sh dnse w/diag op frac 1115.2 |
| 1115.6-1119.5 | lt gy sh sft to med hd - broken - in part |
| 1119.5-1123 | sh med bwn - no odor, w/sm gy grn laminae & thin beds 1/2" NaHCO3 @ 1/2" @ 1120.4, 1/2" @ 1121 |
| **Core No. 29 1123 to 1131** | |
| 1123-1131 | OS? lt-med bwn<br>diag op frac 1125.1 to .3<br>diag op frac 1127.3 to .5<br>1129.6 to TD very bkn |
| **Core No. 30 1131 to 1141.1** | |
| 1131-1131.7 | sh aa |
| 1131.7-1137 | OS dk bwn, diag cl frac @ 1133.6 to .9 & @ 1137 |
| 1137-1137.5 | v/dk bwn OS, thin lamin |
| 1137.5-1137.8 | grn-tn sh? |
| 1137.8-1141.1 | dk bwn OS w/scatt tr |
| **Core No. 31 1141.1 to 1151.1 Bad odor** | |
| 1141.1-1146.7 | lt gy- lt tn sft-med hd claystone - mudstone? tr NahCO3 scatt. |
| 1146.7-1148.6 | dk gy-bwn OS |
| **Core No. 32 1151.1 to 1162.1** | |
| 1151.1-1154 | OS dk bwn, w/diag op frac @ 1153.5 to .8 low dip |

| Depth | Description |
|---|---|
| 1154-1156.2 | OS dk bwn 20-25° dip |
| 1156.2-1156.9 | OS dk bwn-drkr appearance - no odor |
| 1156.9-1160.1 | OS dk bwn gy , closed diag frac f/57.8 to 58.2, tr sm NaH xtal @ 1159 to 59.5 |
| 1160.1-1161.1 | OS v.dk gy bwn w/op diag frac f/59.3-.4, & .8 to td. Poss. last foot in frac @ 53-54 |

Core No. 33 1163 to 1173 Cut 10 Rec. 9'

| | |
|---|---|
| 1163-1167.1 | dk bwn OS w/sealed 64.5 to 64.9, op diag frac @ 65.4 to .6, bldg gas @ 1167.1 |
| 1167.1-1170.2 | dk bwn OS - too broken to reconst. |
| 1170.2-1172.2 | tn soft-med sh-claystone |
| 1172.2-1173 | Not recovered |

Core No. 34 1173 to 1183.3

| | |
|---|---|
| 1173-1183 | dk bwn thinly laminated v/bkn @ 74 to 74.7, & 76 to 77. Diag op @ 1173.6-.9, vert op @ 74.5 to .7, diag op @ 75.4 to .6, diag op @ 75.7 to .9, diss NaHCO3 irreg @ 77.3, diag op @ 77.6 - .8, & .9 to 78 & 1178.2 to .3, & 1180.1 to .3, & 1183 to 83.2 |

Core No. 35 1183.3 to 1191

| | |
|---|---|
| 1183.3-1187.6 | dk gy bwn OS, bdly broken @ 84.2-.4 & 85.8 - 86, & 86.2 - .7, diag op fracs @ 1183.7 to .9, 1184.4 & .6 & 1186.10 - 1187 |
| 1187.6-1188.2 | blue gy clay & OS mixed |
| 1188.2-1191 | dk gy-bwn OS, bdly bkn @ 1190.1 to 91 diag op fracs @ 1188.5 to .7, 1189 to 89.2 , 1189.4 to .8 |

Core No. 36 1191 to 1201

| | |
|---|---|
| 1191-1199.6 | OS dk bwn gy, diag op frac @ 1192.1, 1193.5-.6, 1194.1-.2, 1194.5-.6, 1195.4-.6 |

| Depth | Description |
|---|---|
| 1199.6-1201 | dk bwn gy OS, badly brkn |
| **Core No. 37 1201 to 1206 Cut 5' Rec. 3'** | |
| 1201-1204 | dk gy-tn OS, too broken to reconstruct |
| **Core No. 38 1206 to 1216** | |
| 1206-1208.2 | dk bwn OS - v/broken |
| 1208.2-1216 | dk bwn OS, diag op frac @ 1208 to .4, 1211.3 to .7, 1211.8 to 1212.2, tr NahCO3 @ 1213.4 & 1214.8 |
| **Core No. 39 1216 to 1226** | |
| 1216-1220.4 | OS dk gy-bwn, ext broken 16.0 to .3 also 19.8 to 20.4 |
| 1220.4-1221.7 | NaH & sh interbdd, tn lt bwn - sm solution @ 2" 1221.5 -.7 |
| 1221.7-1222.7 | dk gy bwn OS w/diag closed frac 1221.7 to .9, & 1222.3 to .7 |
| 1222.7-1223 | 1223.7 intbdd NaH & OS aa |
| 1223-1226 | dk gy bwn OS |
| **Core No. 40 1226 to 1236** | |
| 1226-1228.3 | OS, dk brn, hd, 60° OF 1226.9 - 1227.2 85° OF 1227.4 - 1227.9 |
| 1228.3-1230 | OS, m brn, brecciated, v brkn 1229.0 to 1229.3 |
| 1230-1232.5 | Sh, m brn, v cly, NaH irreg 1230.5 to 1230.7, 45° OF 1231.9-1232, 85° OF 1232.1-32.3 |
| 1232.5-1233.2 | Sh, lt tan-brn, v brkn, sm gy grn lam soft |
| 1233.2-1234 | Sh, tan-m brn, pkr chip, fis, 85° OF 1233.7-1234 |
| 1234-1236 | OS, dk brn, gd, odor, m rich, NaH 1" nod 1235 |

| Depth | Description |
|---|---|
| **Core No. 41 1236 to 1246** | |
| 1236-1238.5 | OS, dk brn, hd chky, sm odor, v rich irreg diag OF 1236-2136.2; OF 1236.6, 1236.7 diag, 45° OF 1237.8 - 1238.0 |
| 1238.5-1240.1 | OS, m brn, m rich, OF vert 1239.5 - 40.2 |
| 1240.1-1240.6 | OS, m brn, brkn |
| 1240.6-1242.3 | OS, m brn, dk brn, 20° dip |
| 1242.3-1243.5 | Sh, v brkn |
| 1243.5-1243.9 | Sh, tan, brkn, OF 60° 1243.7-1243.8 OF 60° 1243.8-1244 |
| 1243.9-1246 | OS, m-dk brn, gd odor, m rich 5° dip |
| **Core No. 42 1246 to 1250.5** | |
| 1246-1250.5 | lt gy clay, v/sft & brkn |
| **Core No. 43 1250.5 to 1259** | |
| 1250.5-1250.7 | dk gy-bwn sh - fiss, v/brkn |
| 1250.7-1251.3 | dk gy-bwn OS? |
| 1251.3-1254.6 | dk gy-bwn sh, v/brkn |
| 1254.6-1259 | dk gy bwn OS 45° op frac @ 1254.9 also @ 1256.4, 1257.8, good quality OS |
| **Core No. 44 1259 to 1265.5** | |
| 1259-1259.4 | dk gy bwn OS |
| 1259.4-1260.1 | dk bwn sh |
| 1260.1-1262 | dk gy bwn sh v/badly broken |
| 1262-1265.5 | dk bwn tn OS, vert op frac 1262.1 to 62.5, diss $NaHCO_3$ 62.8, 2" thick lwr foot broken |

| Depth | Description |
|---|---|
| **Core No. 45 to 1265.5 to 1273 Cut 7½' - mislatch - Rec. 1'** | |
| 1265.5-1266.5 | bwn OS - sm tan |
| 1266.5-1273 | not recovered |
| **Core No. 1273 to 1283.1** | |
| 1273-1274 | dk gy bwn OS |
| 1274-1274.5 | rusty tuff lt wt. |
| 1274.5-1277 | dk bwn gy OS w/diag OF 74.5-.7, 75.3-.4 |
| 1277-1277.9 | dk bwn gy OS v/badly frac'd |
| 1277.9-1279.2 | tan sh OS? |
| 1279.2-1279.7 | tn-bwn sh bdly frac'd |
| 1279.7-1283.1 | dk tan-bwn OS, diag OF 1282.3 - .7 |
| **Core No. 47 1283.1 to 1293.1** | |
| 1283.1-1283.5 | dk gy bwn OS much broken |
| 1283.5-1290.6 | bwn gy sh v/badly broken - cannot rebuild |
| 1290.6-1293.1 | sh dk gy bwn w/VOF 91.7 to 92 & 92.5 to .7 |
| **Core No. 48 1293.1 to 1304 Cut 10.9 Rec 7'** | |
| 1293.1-1298 | sh dk gy bwn v/brkn - cannot reconstruct |
| 1298-1300 | sh gy-med v/brkn cannot reconstruct |
| **Core No. 49 1304 to 1314** | |
| 1304-1308 | sh dk bwn OS med rich 3° dip |
| 1308-1308.2 | OS aa v/broken |
| 1308.2-1311.2 | OS dk bwn w/VOF 09.4 to 11 |
| 1311.2-1311.6 | OS aa v/broken |

| Depth | Description |
|---|---|
| 1311.6-1312.1 | OS aa |
| 1312.1-1312.9 | OS aa v/broken |
| 1312.9-1314 | OS aa w/tr NahCO3 xtals dissolved @ 1313.7 & 1313.9 to 1314 |

Core No. 50 1314 to 1324.2

| | |
|---|---|
| 1314-1315.8 | dk bwn OS, v/brkn w/diag & vert OF |
| 1315.8-1322.9 | dk bwn OS w/VOF 1316.5 - 17.2 |
| 1322.9-1323.1 | bwn sh - dolotic<br>tr NaHCO3 in bott ft. |

Core No. 51 1324.2 to 1334.5

| | |
|---|---|
| 1324.2-1330.0 | sh dk gy w/ODF @ 24.2 -.6,<br>ODF 1326.8 -27.2, ODF 28 - 28.2,<br>brecc. @ 1329-30 |
| 1330.0-1330.7 | brecc & sealed sh aa |
| 1330.7-1334.5 | intbdd sh aa & tn dolotic NaHCO3<br>1½" NaHCO3 xtal @ 31.5 |

Core No. 52 1334.5 to 1344.5

| | |
|---|---|
| 1334.5-1344.5 | Sh dk gy w/sm bwns<br>DOF @ 34.5 -36, 38.2-38.7, 40-41,<br>41.9-42.1, 42.8-43.2, 34.1-34.5<br>v/ brkn 1339 to 41.2 |

Core No. 53 1344.5 to 1355 Cut 10.5' Rec. 8'

| | |
|---|---|
| 1344.5-1345.6 | dk gy bwn sh |
| 1345.6-1349.1 | dk gy bwn sh v/badly brkn |
| 1349.1-1350.7 | dk gy bwn sh |
| 1350.7-1351.8 | sh gy-tn sft to firm |
| 1351.8-1352.6 | sh dk gy-bwn OS? |

| Depth | Description |
|---|---|
| **Core No. 54 1355 to 1365** | |
| 1355-1357.1 | dk gy bwn sh v/badly broken |
| 1357.1-1357.8 | dk gy bwn sh w/num wh spks |
| 1357.8-1360.1 | dk gy bwn sh v/badly broken |
| 1360.1-1362 | gy sh, sft to firm - v/clayey in part |
| 1362-1365 | dk gy-lt bwn sh, firm w/scatt tr diss NaHCO3 |
| **Core No. 55 1365 to 1375.2** | |
| 1365-1370.3 | sh, bwn-firm 15°-20° dip, sm sealed fracs @ 1366.6 - 1367 diag. |
| 1370.3-1375.2 | sh, lamin dk bwn & gy, DOF 1372.5 to 72.7 CDF 1374.6 to .8 |
| **Core No. 56 1375.2 to 1380.2** | |
| 1375.2-1377 | med gy sh, v/broken |
| 1377-1378.5 | sh aa w/num wh spks |
| 1378.5-1379.5 | dk gy bwn OS - brkn |
| 1379.5-1379.7 | rust col. tuff lens |
| 1379.7-1380.2 | dk bwn OS -broken at base |
| **Core No. 57 1380.2 to 1390.2** | |
| 1380.2-1381 | OS bwn - fiss, sl odor |
| 1381-1386.3 | Sh med-dk bwn firm from 85.4 many wh spks |
| 1386.3-1390.2 | Mudstone gy -crumbly to td |
| **Core No. 58 1390.2 to 1400.2** | |
| 1390.2-1392.2 | Mudstone aa v/broken |
| 1392.2-1393.4 | Sh dk gy-bwn fiss diss NaHCO3 @ 1393.2-93.4 |

| Depth | Description |
|---|---|
| 1393.4-1393.9 | dk gy sh dense SVF 1393.9 to 94.5 |
| 1393.9-1395.6 | Sh-bwn sm frac |
| 1395.6-1396.7 | Sh dk gy |
| 1396.7-1397.3 | sh bwn, v/badly broken |
| 1397.3-1400.2 | sh dk gy-bwn DOF 1397.4 - .7 |

Core No. 59 1400.2 to 1410.2

| | |
|---|---|
| 1400.2-1401.3 | sh dk gy, fiss CVF 0.8 - .9 |
| 1401.3-1406 | mudstone tan CDF 01.7 - 01.9<br>VCF w/offset 02.5 -.7, sft 02.7 to<br>04.2 v/sft, v/broken 1405.2 - .9 |
| 1406-1410.2 | sh gy $NaHCO_3$ xtal 1" at 06.7<br>wh spks 08.2 - .5 being bwn @ base<br>wh spks 09.6 - .7 |

Core No. 60 1410.2 to 1421 Cut 10' Rec. 4.5'

| | |
|---|---|
| 1410.2-1412.6 | Sh dk gy w/wh spks 1412.2 |
| 1412.6-1413.8 | tn bwn tuff |
| 1413.8-1414.7 | gy mudstone, v/brkn & mushy, $H_2S$ odor strong, |
| 1414.7-1421 | core lost |

Core No. 61 1421 to 1429

| | |
|---|---|
| 1421-1422.8 | dk gy sh 5-10° dip badly bkn |
| 1422.8-1423.2 | bwn tuff w/$NaHCO_3$? |
| 1423.2-1426.5 | dk gy v/frac'd sh, no footage mks |
| 1426.5-1429 | sh dk gy aa less fcd |

Core No. 62 1429 to 1439

| | |
|---|---|
| 1429-1431.2 | dk gy-bwn sh 8° dip +<br>brks to 29.4, tr diss $NaHCO_3$ @ 31<br>few white speck zones |

| Depth | Description |
|---|---|
| 1431.2-1439 | tn mudstone - firm @ top grdg to v/sft mushy @ base - NaHCO3 xtal diss @ 32.1, H2S |
| Core No. 63 1439 to 1444 Cut 5' Rec. 4' | |
| 1439-1439.5 | dk gy sh v/brkn possible cave |
| 1439.5-1444 | dk gy-bwn sh, v/bkn to 40.5, dense to 41.7, v/bkn to td |
| Core No. 64 1444 to 1453 Cut 9' Rec. 2' | |
| 1444-1453 | sh dk-med gy badly frac'd |
| Core No. 65 1453 to 1458 Cut 5' Rec. 4' | |
| 1453-1458 | sh dk gy-bwn, extr. frac'd w/VOF & DOF & v/brkn, no footage marks |
| Core No. 66 1458 to 1464 Cut 6' Rec. 5½' | |
| 1458-1459.7 | sh dk gy w/DOF 58.7 to 59.4 |
| 1459.7-1462 | sh dk gy w/brkn |
| 1462-1463.5 | sh dk gy bwn v/fiss @ bott 6" |
| Core No. 67 1464 to 1470 Cut 6 ft Rec. 5 ft | |
| 1464-1470 | sh dk gr brn calc very hard VOF & DOF throughout - very broken NaH cavity at 64.7 |
| Core No. 68 1470 to 1476 Cut 6' Rec. 5' | |
| 1470-1473.6 | Sh dk gy-bwn v/brkn - appears to be sm VOF & prob horiz fracs |
| 1473.6-1474.3 | Sh aa less broken |
| 1474.3-1475 | Sh aa v/brkn H2S odor |
| Core No. 69 1476 to 1481 C/R 5 ft. | |
| 1476-1481 | Sh dk gr to gr brn, OVF & ODF highly broken throughout |

| Depth | Description |
|---|---|
| Core No. 70 1481 to 1489 Cut 8' Rec. 6' | |
| 1481-1481.9 | dk gy sh v/brkn |
| 1481.9-1486.5 | Sh aa dist. bdg ODF 83.2-83.9 brkn @ 1486 - .5 |
| Core No. 71 1489 to 1493 | |
| 1489-1493 | dk gy-bwn sh v/bkn |
| Core No. 72 1493 to 1499 Cut 6' Rec. 4.5' | |
| 1493-1499 | Sh dk gy-bwn - bkn @ 94.3 - .7, 9-95.2 & 96.5 - 97.5 |
| Core No. 73 1499 to 1505 Cut 6' Rec. 6' | |
| 1499-1500.7 | dk gy sh |
| 1500.7-1501.7 | mrlstn v/sft, gy |
| 1501.7-1503.9 | bwn-gy mrlstn bcmg firm |
| 1503.9-1505 | sh bwn - firm wf tr sm NaHCO3 xtals dissolved |
| Core No. 74 1505 to 1515 Cut 10' Rec. 6' | |
| 1505-1508.4 | Sh dk gy w/sm bwn DOF @ 06.3 - .4 v/bkn to 05.7, 07.3, 07.7, 08.1, |
| 1508.4-1511 | mrlstn - tn, firm to 09.9, v/sft & brkn to 1511 |
| Core No. 75 1515 to 1525 Cut 10' Rec. 8' | |
| 1515-1516 | mrlstn soft w/NaH cavities |
| 1516-1516.4 | sh dk gy |
| 1516.4-1519.8 | sh tan w/NaH cavities |
| 1519.8-1522.1 | sh aa no cavities |
| 1522.1-1523 | sh dk gr badly broken |

| Depth | Description |
|---|---|
| **Core No. 76 1525 to 1535 C & R 10'** | |
| 1525-1530.3 | sh dk gr hard & dense |
| 1530.3-1531.3 | aa broken & NaH cavities |
| 1531.3-1533.5 | aa dense, NaH cav. at 32.5 |
| 1533.5-1535 | Sh aa badly broken NaH cav |
| **Core No. 77 1535 to 1545 Cut 10' Rec. 9.2'** | |
| 1535-1538.3 | sh brn dense (OS)?<br>NaH vugs at 35.8 to 36.2<br>OV frac 37.2 |
| 1538.3-1539.1 | sh dk gr badly broken |
| 1539.1-1540.2 | sh dk gr hard OVF |
| 1540.2-1541.5 | sh brn NaH vugs |
| 1541.5-1544.2 | sh dense dk brn , OD frac at 1541.6,<br>OD frac at 1543, NaH cavity 1543.1 |
| **Core No. 78 1545.0 to 1553.8 "Flat dip** | |
| 1545.0-1553.8 " | Sh, tn brn, with broken top 6",<br>NaH 2-3" cavities @ 1549.6, 1551.1,<br>1551.8 and 1552.10, other minor vugs |
| **Core No. 79 1553.8 to 1563.4 " 0-3°** | |
| 1553.8-1556.8 " | sh, tan, brn |
| 1556.8-1557.9 " | mls brn, jumbled |
| 1557.9-1559 " | mls brn, sl NaH cavity |
| 1559-1562.4 " | sh, tan with sl NaH @ 1559.3 & 1561.0<br>open 45° frac @ 1561.4 |
| 1562.4-1563.4 " | Lost |
| **Core No. 80 1563.4 to 1574.0 "0-3°** | |
| 1563.4-1564.6 " | tan sh |

| Depth | Description |
|---|---|
| 1564.6-1565.6" | sh, tan, soft, sulfur odor |
| 1565.6-1567.0" | tan sh, sm ½" NaH cav |
| 1567.0-1567.7" | tan sh, soft, H2S odor |
| 1567.7-1574.0" | tan sh, w/NaH cav @ 1569.4, 1569.9, 1571.1, 1571.7, hs sl smell throughout |

Core No. 81 1574.0 to 1584.0" 0-3°

| | |
|---|---|
| 1574.0-1581.7" | tan sh, firm sl OS?, some NaH sl cav @ 1576.10 and 1577.1, 45° fracs core induced, VF @ 1575 gilsonite healed |
| 1581.7-1584.0" | Lost |

Core No. 82 1584.0 to 1592.1" 0-5°

| | |
|---|---|
| 1584.0-1589.10" | tan OS, sl odor, firm w/NaH vugs @ 1589.0 |
| 1589.10-1591.6" | Lost NaH ? & sh |
| 1591.6-1592.1" | tan OS, sl slt strks 45° slicks |

Core No. 83 1592.1 to 1601.6" 0-3°

| | |
|---|---|
| 1592.1-1597.0" | lt brn OS, sl NaH solid, gil. healed frac top 2" |
| 1597.0-1601.6" | brn OS |

Core No. 84 1601.6 to 1610.0" 3-5°

| | |
|---|---|
| 1601.6-1607.0" | dk brn-brn OS |
| 1607.0-1610.0" | brn OS jumbled - trace NaH cavities, many vert fracs healed w/gilsonite |

Core No. 85 1610.0 to 1619.4" 0-5°

| | |
|---|---|
| 1610.0-1619.4" | brn OS w/NaH holes at 1613.0 - .2, 1615.4, jumbled from 1615.4 to 1616.8 and NaH from 1617.7 to 1617.10 and 1618.6 & 1618.8 |

| Depth | Description |
|---|---|
| **Core No. 86 1619.4 to 1625.3" 0-5°** | |
| 1619.4-1625.3" | brn OS w/many 1" NaH holes<br>Jumbled top 1½ foot |
| **Core No. 87 1625.3 to 1630.0" Var. 0-15°** | |
| 1625.3-1629.0" | brn OS w/sl unhealed 45° fracs<br>some V unhealed near top 1' |
| 1629.0-1630.0" | Lost |
| **Core No. 88 1630.0 to 1634.0"** | |
| 1630.0-1634.0" | Jumbled brn OS & NaH holes<br>VOF unhealed |
| **Core No. 89 1634.0 to 1644.6" 0-5°** | |
| 1634.0-1634.6" | Jumbled brn OS |
| 1634.6-1634.9" | gry sh soft |
| 1634.9-1635.1" | Tan OS |
| 1635.1-1635.4" | tan soft sh |
| 1635.4-1635.7" | jumbled brn OS |
| 1635.7-1644.6 " | brn-tan OS w/occ NaH 1" cav and<br>occ healed VF from 1640.0 to 1643.7 |
| **Core No. 90 1644.6 to 1654.3" 0-3°** | |
| 1644.6-1645.6" | brn OS |
| 1645.6-1654.3" | Jumbled brn OS with some missing<br>NaH? Many 1/8" healed faults and<br>fractures healed & open |
| **Core No. 91 1654.3 to 1662.4" 3-7°** | |
| 1654.3-1659.4" | brn OS w/VDHF occ small NaH cav |
| 1659.4-1660.0" | brn soft sh, earthy, oily |
| 1660.0-1662.4" | lt brn OS w/DOFV |

| Depth | Description |
|---|---|
| **Core No. 92 1662.4 to 1673.3" 3-5°** | |
| 1662.4-1667.0 " | lt brn OS mostly jumbled, many 45° OF w/gil healing, tr NaH cav top 2' |
| 1667.0-1673.3 " | lt brn OS w/VFHF 8" @ 1667.10 gil healed, and few 45° OF @ 1669-70. |
| **Core No. 93 1673.3 to 1682.4" 3-5°** | |
| 1673.3-1677.0" | brn OS w VH gil F top 2', jumbled 2" solid NaH @ 1682.2 -.4, unhealed from 1675.3 to 1677.0 |
| 1677.0-1682.4" | brn OS w/bit hd @ 1679.6 & 1680.5 gil healed VF top 1' |
| **Core No. 94 1682.4 to 1693.0" 3-7°** | |
| 1682.4-1683.10" | lt brn OS |
| 1683.10-1685.4" | Rubble & wash out, VFO at top |
| 1685.4-1693.0 " | lt brn OS |
| **Core No. 95 1693.0 to 1703.4" 3-5°** | |
| 1693.0-1698.6" | dk brn OS CIF |
| 1698.6-1703.4" | brn OS CIF |
| **Core No. 96 1703.4 to 1713.6" 3-5°** | |
| 1703.4-1706.4" | brn OS 45° OCF top 1' |
| 1706.4-1707.0" | poker chip lt brn OS sl clay strks |
| 1707.0-1710.1" | lt brn OS w/NaH holes & ODF |
| 1710.1-1710.4" | lt brn OS clayey |
| 1710.4-1711.7" | lt brn OS w/minute NaH holes |
| 1711.7-1713.6 " | lt brn OS jumbled many O & CVF sl clayey in spots |

| Depth | Description |
|---|---|
| **Core No. 97 1713.6 to 1723.6" 3-8°** | |
| 1713.6-1714.8" | dk brn OS |
| 1714.8-1721.9" | brn OS w/NaH 1½" cav @ 1717.3, 1720.10, 1721, ODF @ 1717.6, 1718.0 |
| 1721.9-1723.6" | brn OS w/hole @ 1721.10 & jumbled @ 1723.2-.6 |
| **Core No. 98 1723.6 to 1733.0" 3-5°** | |
| 1723.6-1724.6" | tan OS clay sl jumbled |
| 1724.6-1726 " | brn OS clayey many fracs healed |
| 1726-1729.4" | dk brn OS w/NaH holes @ 1727.2-.8 ODF @ 1728.10 |
| 1729.4-1730.4" | gry marlstone |
| 1730.4-1733.0" | lt brn OS sl clayey and soft strk strong sulfur odor |
| **Core No. 99 1733.0 to 1743 "Cut 10 Rec. 10.3** | |
| 1733.0-1735.2 " | OS brn soft & mushy prob. orig. high in NaH, sulfur odor |
| 1735.2-1737.2 " | as above but harder & 1/8" solution of NaH vugs |
| 1737.2-1739.2" | OS brn NaH holes at 1737.2-3, 1738.2, 1738.9 - 39.2, poss NaH 1738.4 to 38.9, NaH in 1" to ½" nodule |
| 1739.2-1741.7" | OS dk gr brn hard |
| 1741.7-1743.3 " | OS brn softer, sl pet. odor |
| **Core No. 100 1743 to 1752" Cut 10 Rec. 9 3-5° Dip** | |
| 1743-1743.6 " | Sh blk dk brn OS? |
| 1743.6-1745.2" | OS gr brn blk small nodules at 1743.9 |
| 1745.2-1747.8" | OS brn soft rotten, badly broken numerous NaH cavities |

| Depth | Description |
|---|---|
| 1747.8-1749.9" | OS brn harder but badly broken |
| 1749.9-1752 " | OS aa with NaH cavities 1750.0 to .5 & 1751.1 to .2 & 1751.7 |

Core No. 101 1752 to 1762"

| | |
|---|---|
| 1752-1754.9" | OS dk gr brn lmy hard, sl H2S odor |
| 1754.9-1755.4" | OS brn wi nodules of NaH, no solution |
| 1755.4-1758.3" | OS brn wi nodules of NaH at 1757.2, 1757.4 & 1758.1 |
| 1758.3-1762 " | OS brn badly broken & numerous NaH solution |

Core No. 102 1762 to 1772 "

| | |
|---|---|
| 1762-1767.6 " | OS brn becoming darker at base<br>1762.0 - OS badly broken<br>1763.2 - 64.2 NaH vugs solution<br>1765.3 - .9 NaH nodules sl etching<br>1767.0 - .5 NaH nodules sl etching |
| 1767.6-1772" | OS dk gr brn dense similar to above but darker, 1768.1 -.3 NaH sl etching on nodule |

Core No. 103 1772.0 to 1779.0" 0-3°

| | |
|---|---|
| 1772.0-1773.6" | brn OS w/OVF @ 1773 1" gil heal |
| 1773.6-1774.10 " | brn O S w NaH 2-3" thick lenses and nodes 50% NaH or 8" total perfect & some pure 2", min healed faults and fractures |
| 1774.10-1775.3" | L core missing except some rolled brn OS w/NaH traces |
| 1775.3-1778.7" | brn-dk brn OS w/D&VFO but healed w/NaH some jumbled |
| 1778.7-1778.8" | NaH |
| 1778.8-1779.0 " | brn OS out of gauge w/deep ½" pits, funny erosion at base, water course? LC burned core heads |

| Depth | Description |
|---|---|
| **Core No. 104 1779.0 to 1786" 0-3°** | |
| 1779.0-1786.0" | Rec 2'9" LC total sand blocked? buttons or pieces mainly brn OS w/minute traces NaH pits -pressured out? Top couple pieces more pitted brn sh. NaH presence evidenced on bedding planes |
| **Core No. 105 1786 to 1793 Cut 7' Rec. 3'** | |
| 1786-1793 | Brn OS w/some vert frac NaH healed but washed out. Many NaH vugs. Believe washed out zones represent about 4' of NaH. Drilled fast. (drilled with 3 tanks of gel mud) |
| **Core No. 106 1793 to 1804 Cut 11' Rec. 4.5'** | |
| 1793-1793.5 | dk bwn OS, v/brkn |
| 1793.5-1794.3 | dk bwn OS, w/tr diss NaH |
| 1794.3-1795 | dk bwn OS, v/bkn |
| 1795-1797.6 | dk bwn OS |
| **Core No. 107 1804 to 1815** | |
| 1804-1804.1 | dk bwn OS |
| 1804.1-1805.5 | 80% NaH, 20% sh intbd |
| 1805.5-1807.4 | bdd NaH, tn dnse |
| 1807.4-1807.7 | dk bwn OS dnse |
| 1807.7-1808 | bdd NaH, tn |
| 1808-1809 | 90% OS w/thin strgrs NaH |
| 1809-1811.2 | OS dk bwn gd odor w/20% NaH xtls 1" - 2" diam. |
| **Core No. 108 1815 to 1825.4** | |
| 1815-1817 | dk bwn OS w/30% NaH xtals ½" to 2" |
| 1817-1818.3 | OS aa w/small NaH xtals ½-¼" |

| Depth | Description |
|---|---|
| 1818.3-1818.6 | NaH bwn |
| 1818.6-1818.8 | OS aa |
| 1818.8-1818.95 | NaH |
| 1818.95-1819.5 | OS, bkn |
| 1819.5-1819.7 | NaH lens |
| 1819.7-1820.1 | OS aa |
| 1820.1-1820.6 | NaH w/tr OS |
| 1820.6-1820.9 | OS aa |
| 1820.9-1821.6 | NaH |
| 1821.6-1822.5 | OS w/40% NaH |
| 1822.5-1822.65 | NaH |
| 1822.65-1822.85 | OS aa |
| 1822.85-1823.1 | NaH |
| 1823.1-1825.4 | OS w/scatt NaH xtals 3/4" - 1" |

Core No. 109 1825.4 to 1833.6 Rec. 8.2'

| | |
|---|---|
| 1825.4-1825.5 | OS dk bwn v/bkn |
| 1825.5-1826.4 | OS aa dnse |
| 1826.4-1827.5 | NaH 90% w/sm OS lenses |
| 1827.5-1828.6 | NaH & OS aa intbd 50-50 |
| 1828.6-1828.8 | OS aa |
| 1828.8-1829.1 | NaH lens |
| 1829.1-1830.1 | OS aa w/tr NaH |
| 1830.1-1830.4 | OS aa |
| 1830.4-1831.75 | OS & Nah intbdd 50-50 |
| 1831.75-1833.6 | OS dk bwn 15-20% NaH xtals |

| Depth | Description |
|---|---|
| **Core No. 110 1833.6 to 1843.2** | |
| 1833.6-1834.9 | dk bwn OS w/5% NaH xtals |
| 1834.9-1835.2 | NaH bwn |
| 1835.2-1837 | OS aa w/10% NaH 1" - 1/2" |
| 1837-1837.7 | OS 50% NaH 50% |
| 1837.7-1838 | OS w/5% NaH |
| 1838-1838.45 | OS w/30% NaH |
| 1838.45-1838.6 | NaH lens |
| 1838.6-1839 | 50% NaH 50 OS |
| 1839-1839.3 | OS bwn |
| 1839.3-1839.9 | 50% NaH 2" nodular 50% OS |
| 1839.9-1840.7 | OS 10% NaH |
| 1840.7-1840.8 | NaH |
| 1840.8-1841.8 | OS w/20% NaH 1" - 1½" |
| 1841.8-1842.3 | OS w/OS |
| 1842.3-1842.6 | NaH lens |
| 1842.6-1843.2 | OS w/40% NaH bladed - washed |
| **Core No. 111 1843.2 to 1853.5** | |
| 1843.2-1843.7 | OS dk bwn w/tr 1/4" NaH xtals |
| 1843.7-1844.8 | OS w/30% NaH thin lenses |
| 1844.8-1845.3 | OS w/30% NaH xtals |
| 1845.3-1846.1 | OS w/10% NaH xtals |
| 1846.1-1846.4 | NaH nod |
| 1846.4-1846.8 | OS w/20% NaH thin bnds |

| Depth | Description |
|---|---|
| 1846.8-1847.1 | NaH nod |
| 1847.1-1847.7 | OS w/½" lens 10% NaH |
| 1847.7-1848 | NaH nod |
| 1848-1848.7 | OS w/30% NaH 1-2" xtals |
| 1848.7-1850.1 | OS dk bwn w/10% NaH nod-beds ½-1" |
| 1850.1-1850.2 | NaH lens |
| 1850.2-1851.2 | OS w/15% NaH xtals 1/4-1½" beds & nod |
| 1851.2-1851.5 | NaH nod |
| 1851.5-1852.5 | OS w/10% NaH x ¼-1½" nod |
| 1852.5-1852.6 | NaH bed 1" |
| 1852.6-1853.5 | OS w/ 10% NaH |

Core No. 112 1853.5 to 1863.7

| | |
|---|---|
| 1853.5-1854 | OS dk bwn w/50% NaH lens |
| 1854-1855.5 | OS aa |
| 1855.5-1856.3 | NaH lens w/10% OS |
| 1856.3-1860 | OS dk bwn |
| 1860-1860.5 | OS w/10% NaH x 1/2" |
| 1860.5-1861.4 | OS aa |
| 1861.4-1863 | NaH 60%, 40% OS lens |
| 1863-1863.7 | OS aa w/20% NaH 1" |

Core No. 113 1863.7 to 1873.9

| | |
|---|---|
| 1863.7-1864.2 | OS w/80% NaH x |
| 1864.2-1864.5 | OS lt tn-bwn |
| 1864.5-1865.4 | NaH w/10% OS |

| Depth | Description |
|---|---|
| 1865.4-1866 | OS w/10% NaH ½" irr lam |
| 1866-1866.7 | NaH nod 3" to 6" 80%, 20% OS |
| 1866.7-1868.5 | OS dk bwn w/1" NaH @ 67 -.1 & .2-.5, 30% NaH x 1/2" |
| 1868.5-1869.5 | OS bwn |
| 1869.5-1869.9 | NaH nod |
| 1869.9-1871.3 | OS w/25% NaH nod & lams 1½"-½" |
| 1871.3-1873.0 | OS w/10% NaH lams & nods ½" |
| 1873.0-1873.9 | OS w/40% NaH 1" to 3" nods |

Core No. 114 1873.9 to 1880.9

| | |
|---|---|
| 1880.9-1876 | OS w/1/4" NaH lens @ 74.9 |
| 1876-1876.3 | NaH |
| 1876.3-1877 | OS |
| 1877-1878.8 | OS w/3" N @ 77-77.3, .4-.6 & scatt sm xtals to 78.8 |
| 1878.8-1879.6 | OS w/30% NaH xtals |
| 1879.6-1880.1 | OS |
| 1880.1-1880.9 | 50-50 OS & NaH xtals |

Core No. 115 1880.9 to 1890.7

| | |
|---|---|
| 1880.9-1882.7 | OS dk-med bwn w/15% NaH xt, small |
| 1882.7-1883.6 | 80% NaH lenses w/20% OS aa |
| 1883.6-1890.7 | OS med bwn-gd odor w/tr NaH @ 84.2 - no NaH rest of core |

Core No. 116 1890.7 to 1897.8

| | |
|---|---|
| 1890.7-1895 | dk bwn OS |
| 1895-1895.7 | med bwn OS |

| Depth | Description |
|---|---|
| 1895.7-1896.2 | OS aa 30% NaH |
| 1896.2-1897.8 | OS w/ 10% NaH xtals v/small to 1" |
| Core No. 117 1897.8 to 1908.2 | |
| 1897.8-1908.2 | OS med bwn v/dk bwn - all one core<br>no vis NaH |
| Core No. 118 1908.2 to 1915.8 | |
| 1908.2-1909.2 | OS med bwn w/sm VHF w/carrigen |
| 1909.2-1910.5 | dk bwn-blk OS |
| 1910.5-1915.8 | OS, dk gy-blk w/num v/thin lt gy-wh lenses |
| Core No. 119 1915.8 to 1926.1 | |
| 1915.8-1926.1 | Dk bwn OS, gd odor - rich - all one piece<br>no vis NaH |
| Core No. 120 1926.1 to 1935.6 | |
| 1926.1-1930.05 | dk bwn OS - no vis NaH |
| 1930.05-1930.8 | intbdd NaH & OS aa 60% NaH<br>40% OS sol=1/16" |
| 1930.8-1931.5 | OS aa |
| 1931.5-1932.0 | NaH xtal or lens 1/8" = sol, w/thin<br>OS 1/2" in mid. |
| 1932.0-1932.3 | OS 70% w/30% NaH xtals 1/16" sol. |
| 1932.3-1933 | OS w/15% NaH 1/2" sol=1/32 |
| 1933-1934.4 | NaH lens w/v/thin lenses 1/9" of OS<br>sol = 1/32 |
| 1934.4-1935.0 | OS w/30% NaH sol - 1/32" |
| 1935.0-1935.6 | Intbd OS & Nah 50-50 1/8" sol. |
| Core No. 121 1935.6 to 1945.9 | |
| 1935.6-1936.7 | OS & NaH 50-50 - 1/16" sol |

| Depth | Description |
|---|---|
| 1936.7-1939 | OS w/20% NaH xtals sol 1/8" |
| 1939-1940.1 | NaH mass w/tr OS |
| 1940.1-1941.3 | OS aa no NaH |
| 1941.3-1941.8 | OS w/20% NaH lens 1/16" sol |
| 1941.8-1944.0 | OS & NaH 50-50, sol 1/16" |
| 1944.0-1945.9 | OS no vis NaH |
| Core No. 122 1945.9 to 1954.6 | |
| 1945.9-1948 | dk bwn OS w/tr NaH 1/4" @ 46.8 |
| 1948-1953.8 | dk bwn OS no vis NaH |
| 1953.8-1954.6 | NaH w/tr oil shale aa |
| Core No. 123 1954.6 to 1964.2 | |
| 1954.6-1956.2 | OS dk bwn no vis NaH |
| 1956.2-1956.4 | NaH xtal 1/16" sol |
| 1956.4-1957.3 | OS aa |
| 1957.3-1957.7 | NaH 1/8" sol |
| 1957.7-1964.2 | OS aa w/3" NaH @ 1960-62 1/16" sol 3" @ 61.2-.4 1/16" sol, 6" NaH @ 62-.5 1/16" sol tr to 64.2 1/16" sol |
| Core No. 124 1964.2 to 1974.6 | |
| 1964.2-1964.5 | NaH 1/4" sol |
| 1964.5-1965.6 | OS dk bwn w/5% NaH 1/8" sol |
| 1965.6-1966.1 | OS + NaH 50-50 1/16" sol |
| 1966.1-1974.6 | OS w/NaH @ 1½" @ 69 1/32" sol, 1" @ 70 1/64" sol, 3" @ 70.4 1/16" sol, 2" @ 70.9 1/8" sol, 2" @ 74 1/8" sol |

| Depth | Description |
|---|---|
| **Core No. 125 1974.6 to 1983.8** | |
| 1974.6-1983.8 | OS w/1/4" NaH 1977.3, 1" @ 1977.5 1/4" @ 78.8, 1/8" 79.4 |
| **Core No. 126 1983.8 to 1994.1** | |
| 1983.8-1994.1 | OS, dk brn to blk, gd odor, rich, sm mot 1987-1989 w/lt brn sh CVF & OVF 1992.7 1993.3 & 1993.9-1994.1 |
| **Core No. 127 1994.1 to 2003.5** | |
| 1994.1-1997.9 | OS, dk brn-blk gd odor, rich mot base 1' |
| 1997.9-1999 | OS, dk brn, gd odor m rich |
| 1999-2003.5 | OS, dk brn to blk, gd odor, rich 1/4" NaH 2001.2 |
| **Core No. 128 2003.5 to 2013.8** | |
| 2003.5-2013.8 | OS dk gy-bwn, gd odor w/VOF 1" long @ 2013.4 - .5 - no vis NaH |
| **Core No. 129 2013.8 to 2024.2** | |
| 2013.8-2014.6 | dk gy-bwn sh aa |
| 2014.6-2019.6 | tn-bwn sh OS, w/pyritic lenses ¼-½" thick @ 15.3-16-16.2-17.3-17.5-17.6-17.7 |
| 2019.6-2020 | sh tn, dolotic w/num carrig ptgs |
| 2020-2024.2 | OS dk gy-bwn no vis NaH |
| **Core No. 130 2024.2 to 2034.5** | |
| 2024.2-2029.5 | OS dk tn-bwn |
| 2029.5-2030 | OS dk bwn, v/distorted, NaH? |
| 2030-2031 | OS tn-bwn w/15% NaH lens 1/2" thick - no sol |
| 2031-2032 | OS aa w/20% NaH lens 1/2" thick - no sol |

| Depth | Description |
|---|---|
| 2032-2033.3 | OS aa w/tr NaH - no sol |
| 2033.3-2033.5 | NaH lens - no sol |
| 2033.5-2033.7 | OS w/thin NaH 1/4" lens |
| 2033.7-2033.8 | NaH lens no sol |
| 2033.8-2034.5 | OS w/v/sl/tr NaH - no sol |

Core No. 131 2034.5 to 2044.5

| | |
|---|---|
| 2034.5-2035 | OS dk bwn 50% + 50% NaH 1/8" sol |
| 2035-2037.3 | OS aa w/5% NaH 1/16" sol |
| 2037.3-2037.7 | NaH w/20% OS aa |
| 2037.7-2038.6 | OS w/30% NaH lens 1/4" thick 1/16" sol |
| 2038.6-2039.3 | 50-50 NaH & OS aa 1/8" sol |
| 2039.3-2039.6 | OS aa |
| 2039.6-2040.2 | 90% xtals NaH + OS aa 1/8-1/4" sol |
| 2040.2-2041.6 | OS aa w/3" xtal @ 40.7-.8 1/8" sol |
| 2041.6-2042.1 | OS w/30% NaH lenses 1" to ½" thick 1/16" sol |
| 2042.1-2044.5 | OS w/20% NaH lenses 1/2" thick 1/16" sol |

Core No. 132 2044.5 to 2047.6

| | |
|---|---|
| 2044.5-2045 | OS dk bwn |
| 2045-2047.6 | OS aa w/1" NaH xtal @ 46.5, 3" @47 |

Core No. 133 2047.6 to 2053.2

| | |
|---|---|
| 2047-2047.9 | NaH 1/16" sol |
| 2047.9-2049.8 | OS, dk bwn w/15% NaH 1/16" sol |
| 2049.8-2050 | OS aa & NaH 50-50, 1/8" sol |
| 2050-2051.5 | OS aa w/tr NaH |

| Depth | Description |
|---|---|
| 2051.5-2051.75 | NaH lens 1/8" sol |
| 2051.75-2052.2 | OS aa w/tr v/sm NaH xtals |
| 2052.2-2052.6 | NaH 1/8-1/4" sol |
| 2052.6-2053.2 | OS aa 15% NaH xtals 1/8" sol |

Core No. 134 2053.2 to 2063.6

| | |
|---|---|
| 2053.2-2053.4 | NaH |
| 2053.4-2056.4 | OS dk bwn w/tr v/sm NaH xtals |
| 2056.4-2059.5 | OS w/40% NaH xtals 1-2" - 1/16" sol |
| 2059.5-2061.6 | OS w/30% NaH xtals 2-4" 1/16" sol |
| 2061.6-2063.6 | OS w/20% NaH xtals 1-3" 1/16" sol |

Core No. 135 2063.6 to 2074

| | |
|---|---|
| 2063.6-2064.9 | OS dk gy, bwn 10% NaH 1/16" sol |
| 2064.9-2066.9 | OS 50 NaH xtals 1/8-1/16" sol |
| 2066.9-2068.3 | OS w/30% NaH xtals 1/8" sol |
| 2068.3-2069.3 | OS w/15% NaH xtals 1/8" sol |
| 2069.3-2070.8 | OS w/20% NaH xtals 1/16" sol |
| 2070.8-2071.5 | OS w/15% NaH xtals 1/16" sol |
| 2071.5-2074.0 | OS 60% NaH xtals 1/16" sol |

Core No. 136 2074 to 2084.4

| | |
|---|---|
| 2074-2079.8 | OS dk bwn 50% NaH xtals 1/8" sol |
| 2079.8-2080.8 | OS aa 15% NaH xtals 1/8" sol |
| 2080.8-2082.5 | OS aa 40% NaH xtals 1/16-1/4" sol |
| 2082.5-2084.4 | OS aa w/15% NaH xtals 1/4" sol |

| Depth | Description |
|---|---|
| **Core No. 137 2084.4 to 2094.8** | |
| 2084.4-2085.9 | OS dk gy bwn w/15% NaH 1/8" sol |
| 2085.9-2086.1 | NaH |
| 2086.1-2087.4 | OS w/10% NaH xt 1/8" sol |
| 2087.4-2087.6 | NaH |
| 2087.6-2088.3 | OS aa |
| 2088.3-2088.8 | OS + NaH 50-50 1/8" sol |
| 2088.8-2090.8 | OS aa |
| 2090.8-2091.7 | NaH lens - 1/16" to 1/4" sol |
| 2091.7-2092.8 | OS aa |
| 2092.8-2094.8 | NaH lens 1/8" sol |
| **Core No. 138 2094.8 to 2104.75** | |
| 2094.8-2095.2 | NaH 1/4" sol |
| 2095.2-2095.3 | OS dk bwn |
| 2095.3-2095.6 | NaH 1/4" sol |
| 2095.6-2096.7 | OS aa |
| 2096.7-2097 | NaH 1/8-1/4" sol |
| 2097-2099.7 | OS w/5% NaH 1/8" sol |
| 2099.7-2100.2 | NaH 1/16" sol |
| 2100.2-2100.5 | OS aa |
| 2100.5-2101.2 | NaH 1/8" sol |
| 2101.2-2104.75 | OS aa |
| **Core No. 139 2104.75 to 2115.1** | |
| 2104.75-2115.1 | OS - dk bwn - no vis NaH |

| Depth | Description |
|---|---|
| **Core No. 140 2115.1 to 2118.9** | |
| 2115.1-2118.9 | OS dk bwn gy no vis NaH VOF 18.7-.9 |
| **Core No. 141 2118.9 to 2129.3** | |
| 2118.9-2129.3 | OS dk gy-bwn OVF 21.5 to 22.1 v/thin dk sft clay 1/4" strgr @ 2125.4 |
| **Core No. 142 2129.3 to 2133.7** | |
| 2129.3-2133.7 | OS dk gy - no vis NaH |
| **Core No. 143 2133.7 to 2143.7** | |
| 2133.7-2137.4 | OS dk gy-bwn 1/8" sol, w/no vis NaH |
| 2137.4-2143.7 | NaH, bedded, clear in spots 1/2" |
| **Core No. 144 2143.7 to 2153.9** | |
| 2143.7-2153.9 | NaH, dk, resinous, clear in spots 1/2" 1/8" sol |
| **Core No. 145 2153.9 to 2164.4** | |
| 2153.9-2164.4 | NaH aa |
| **Core No. 146 2164.4 to 2173.7** | |
| 2164.4-2173.7 | NaH dk bwn resinous, clear in 1/2" spots 1/8-1/4" sol |
| **Core No. 147 2173.7 to 2184.2** | |
| 2173.7-2184.2 | NaH aa more brkn |
| **Core No. 148 2184.2 to 2192** | |
| 2184.2-2187.7 | NaH aa 1/8-1/4" |
| 2187.7-2188.3 | OS dk bwn w/10% NaH xtls - small |
| 2188.3-2189.2 | NaH aa 1/8" |
| 2189.2-2189.95 | NaH aa w/10% OS strgs |
| 2189.95-2191 | OS aa w/10% NaH xtals 1" diam |
| 2191-2192 | OS w/tr NaH 5% |

| Depth | Description |
|---|---|
| Core No. 149 2192 to 2202.5 | |
| 2192-2200.7 | Med bwn OS no NaH, gd odor |
| 2200.7-2202.5 | lt-med bwn OS no NaH, gd odor |
| Core No. 150 2202.5 to 2210.8 | |
| 2202.5-2210.8 | OS med gy gd odor |
| Core No. 151 2212.8 to 2223 Corr of 2.0' deeper | |
| 2212.8-2219.4 | OS dk-med bwn |
| 2219.4-2223 | OS being more dk gy-blk-bwn w/VOF 2220 to 20.9 |
| Core No. 152 2223 to 2224.5 | |
| 2223-2224.5 | OS dk gy blk-bwn |
| Core No. 153 2224.5 to 2229.7 | |
| 2224.5-2226.1 | OS dk gy bwn |
| 2226.1-2227 | OS dk gy blk alt w/dk bwn layers |
| 2227-2228.2 | OS blk |
| 2228.2-2229.7 | OS dk bwn |
| Core No. 154 2229.7 to 2233.1 | |
| 2229.7-2233.1 | OS dk gy-bwn, being fiss in part |
| Core No. 155 2233.1 to 2242.1 | |
| 2233.1-2238.4 | dk gy-blk OS |
| 2238.4-2242.1 | dk gy bwn OS |
| Core No. 156 2242.1 to 2245.8 | |
| 2242.1-2242.8 | blk sh, fiss |
| 2242.8-2245.8 | dk gy bwn OS |
| Core No. 157 2245.8 to 2254.8 | |
| 2245.8-2246.7 | blk fiss sh w/VOF 46.8-.7 |

| Depth | Description |
|---|---|
| 2246.7-2248.7 | alt. blk sh & bwn OS |
| 2248.7-2252.3 | blk sh fiss DOF @ 50.8 |
| 2252.3-2254.8 | dk bwn OS |
| **Core No. 158 2254.8 to 2265** | |
| 2254.8-2257 | dk gy-bwn OS |
| 2257-2265 | dk gy-blk sh, fiss DOF @ 58.4, 60, 60.1, 62.2, 62.7, 63.1 |
| **Core No. 159 2265 to 2274.5** | |
| 2265-2266.6 | blk fiss sh |
| 2266.6-2267.7 | intbd OS & blk fiss sh aa |
| 2267.7-2274.5 | blk fiss sh w/DOF @ 69.4, 66.2, 70.1 w/3 v/thin CAL veins 73.9, 74.1, 74.3 |
| **Core No. 160 2274.5 to 2284.5** | |
| 2274.5-2284.5 | Sh dk gy-blk VOF to 75.2-.4 VSF w/cal 75 - 75.6 |
| **Core No. 161 2284.5 to 2294.4** | |
| 2284.5-2292.4 | blk sh fiss |
| 2292.4-2294.4 | blk sh aa intbd w/dk bwn OS in strgrs |
| **Core No. 162 2294.4 to 2304.6** | |
| 2294.4-2297 | alt thin lens blk sh & bwn sh OS |
| 2297-2304.6 | blk sh fiss SDFC 02.0 |
| **Core No. 163 2304.6 to 2314.8** | |
| 2304.6-2307.4 | blk sh - fiss |
| 2307.4-2308.4 | dk bwn OS |
| 2308.4-2314.8 | blk fiss sh w/OVF f/12.7-.9 last 2' broken |

| Depth | Description |
|---|---|
| **Core No. 164 2314.8 to 2325** | |
| 2314.8-2315.3 | blk fiss sh |
| 2315.3-2315.6 | tn sltstn, non calc |
| 2315.6-2324.6 | blk fiss sh VCF 19.4 to 19.7 |
| 2324.6-2225.0 | OS, dk gy bwn |
| **Core No. 165 2325 to 2334.1** | |
| 2325-2326.4 | intbd blk sh & OS, bwn, 50-50 |
| 2326.4-2327.2 | blk fiss sh |
| 2327.2-2330.1 | OS, blk-bwn |
| 2330.1-2334.1 | blk fiss sh DOF @ 33.8-34.0 |
| **Core No. 166 2334.1 to 2344.6** | |
| 2334.1-2337.1 | blk fiss sh w/crm-tn calc 1/4" bed @ 35.9 & 36.9 |
| 2337.1-2340.2 | alternating layers blk sh & bwn OS 1"-2" thick, DOF @ 35.9, 37.1 |
| 2340.2-2344.6 | blk fiss sh w/VOF 2342.9 to 2343.6 |
| **Core No. 167 2344.6 to 2352.6** | |
| 2344.6-2347.2 | blk fiss sh |
| 2347.2-2350.7 | alt blk sh & bwn OS w/occas cal horiz vein |
| 2350.7-2352.6 | blk fiss sh aa |
| **Core No. 168 2352.6 to 2363** | |
| 2352.6-2354.8 | blk fiss sh |
| 2354.8-2356.1 | dk bwn OS |
| 2356.1-2356.9 | blk fiss sh |
| 2356.9-2358.4 | dk gy-bwn OS |

| Depth | Description |
|---|---|
| 2358.4-2360.9 | blk fiss sh |
| 2360.9-2363 | alt blk sh & dk bwn OS |

Core No. 169 2363 to 2373

| | |
|---|---|
| 2363-2373 | sh blk fissile - brkn 2371.9 to 2372.2 |

Core No. 170 2373 to 2382.4

| | |
|---|---|
| 2373-2382.4 | sh blk fissile |

Core No. 171 2382.4" to 2389 0-3°

| | |
|---|---|
| 2382.4-2389 | Sh blk w/sl alternate strks brn OS sl spots bituminous strks around 84 and 86.5" |

Core No. 172 2389 to 2397.6" 0-3°

| | |
|---|---|
| 2389-2394.0 | blk sh |
| 2394.0-2396.3" | brn OS sl odor |
| 2396.3-2397.6 | blk sh w 45° slick frac @ 2396.10". Thin aragonite strks @ 2397.3" |

Core No. 173 2397.6 to 2407.7" 3-5°

| | |
|---|---|
| 2397.6-2407.7 | blk sh w/sl strks brn OS top 4½ feet. 2" strk dol tan @ 2402.6 and 2404.1" OVF of 1" @ 2403.6 and DHF of 2" @ 2407.3" |

Core No. 174 2407.7 to 2413.9" 3-5°

| | |
|---|---|
| 2407.7-2413.9 | blk sh w/v thin strks brn OS top 1' 3" strk tan dol @ 2409.0 and 3" tuff @ 2411.6 and 1/2" tuff @ 2412.1. Tr wht arag? @ 2412.3" |

Core No. 175 2413.9 to 2422.1" 0-3°

| | |
|---|---|
| 2413.9-2419.8 | blk sh, sl fiss, thin strks bit material top 2½ feet. A 2" x 1" piece elongate bit matter @ 2417.1" . Occ 45° slick frac |

| Depth | Description |
|---|---|
| 2419.8-2422.1" | Blk sh w/interbeds brn OS. Tr bit matter @ base |

Core No. 176 2422.1 to 2431.6" 0-3°

| | |
|---|---|
| 2422.1-2431.4" | blk sh w/many 1 x ½ pods bit mat top 1½ feet. Some DHF top 3', tr 1" sft blk sh @ 2430 |
| 2431.4-2431.6" | blk sh burned in core head |

Core No. 177 2433 to 2443.8" 3-5°

| | |
|---|---|
| 2433-2443.8" | blk sh soft w occ bit nodules 2" x ½" and occ healed slick diag fracs near 3' base, 2" tan dol @ 2442.10, some thin brn OS from 2437 to 41. |

Core No. 178 2443.8 to 2452.10" 3-5°

| | |
|---|---|
| 2443.8-2452.10" | blk shale sl soft w/infrequent bit nodules, sl OS lt brn strks 2448-2450 |

Core No. 179 2452.10 to 2463.4" 2-5°

| | |
|---|---|
| 2452.10-2455.0" | sh blk w/occ bit nodules 1x½" and thin strks brn OS and 45° slick fracs H & C |
| 2455.0-2463.4" | sh blk fissile w/occ 45° slick fracs |

Core No. 180 2463.4 to 2473.10" 0-3°

| | |
|---|---|
| 2463.4-2473.10" | sh blk sl fiss w/bit nodes @ 2468.0, 2468.9 & 2469.2" , 45° slick fracs 2469.7 to 2471.6, VFO from 2472.0 to 2472.9", 2" tan dol @ 2471.10" |

Core No. 181 2473.10 to 2484.3" 0-3°

| | |
|---|---|
| 2473.10-2476.6" | blk sh w/inter brn OS |
| 2476.6-2484.3" | blk sh w/punky thin in 2477-78.0" 1" dol shaly tan, oil odor @2478.10, 2480.6 & 2481.2", VFO @ 2481.0 - .3 jumbled @ 2480.4-.6" |

| Depth | Description |
|---|---|
| **Core No. 182 2484.3 to 2494.6" 0-3°** | |
| 2484.3-2494.6" | blk sh w/thin interbeds brn OS, w/DHF @ gilsonite healed and also VHF scattered from 2489 to TD |
| **Core No. 183 2494.6 to 2505.0" 0-3°** | |
| 2494.6-2498.0" | sh,blk w/thin inter brn OS occ bit pod |
| 2498.0-2502.0" | blk sh w OVF top foot & 2" OVF @ 2500.10", gilsonite in fracs |
| 2502.0-2505.0" | sh blk w/many interbeds & pods brn OS irreg bedding, 1" bit OVF @ bottom |
| **Core No. 184 2505.0 to 2514.7" 0-5°** | |
| 2505.0-2508.8" | blk sh w/sl bed brn OS |
| 2508.8-2514.7" | blk sh w/thin stringers & pods sltst gray |
| **Core No. 185 2514.7 to 2525.0" 0-3°** | |
| 2514.7-2525.0" | blk sh w/occ thin stringers & pods sltst gry, OVF @ 2520.5 -.10" ODF @ 2522.6, 2523.3, 2524.8" |
| **Core No. 186 2525.0 to 2535.2" 0-3°** | |
| 2525.0-2535.2" | blk sh, very infrequent thin strks & pods sltst gry, 2" DOF @ 2532 and 2528.10", 2" DHF 2527.7", sl dol tan 2533.3" |
| **Core No. 187 2535.2 to 2545.5" 0-5°** | |
| 2535.2-2540.1" | blk sh w/sl strks OS, 1" soft blk fiss sh @ 2536.11 & 2539.0" |
| 2540.1-2545.5" | blk sh w/several 1" strks dol tan, distorted bedding. Occ sltst gry streaks. Sl OS brn in base 1 foot, slick VF 2543-44 |

| Depth | Description |
|---|---|
| **Core No. 188 2545.5 to 2555.7" 0-3°** | |
| 2545.5-2550.3" | blk sh sl OS strks brn-lt brn, occ strk soft sh, O & CVF from 2547.2 to 2550.3" one long frac in O & C with rust cement & bit cement but firm 1/8" crack |
| 2550.3-2551.3" | brn OS |
| 2551.3-2554.0" | blk sh w/strks brn OS, ½" arag? @ 2553.6, a 6 inch vert contorted lens of carbonate intersected by V.D. weaving of calc cement |
| **Core No. 189 2555.7 to 2566.1" 0-3°** | |
| 2555.7-2561.0" | blk sh w/strks brown OS, a 2" brn dol-oil odor fracture @ 2558.3" OVF @ 2559.2" |
| 2561.0-2566.1" | blk sh, fracs vert appear core induced, many seem bitum, also couple nodules strks brn OS near base |
| **Core No. 190 2566.1 to 2576.1" 0-3°** | |
| 2566.1-2576.1" | blk sh w/strks thin brn OS, jumbled & DF slick @ 2570.3 to 6", jumbled fracs @ 2575.8 to 2576.1" |
| **Core No. 191 2576.1 to 2584.5" 0-3°** | |
| 2576.1-2584.5" | blk sh w/sl interbed & lenses brn OS |
| **Core No. 192 2584.5 to 2594.6" 0-3°** | |
| 2584.5-2585.0" | blk sh jumbled |
| 2585.0-2590.6" | blk sh w/sl interbed brn OS |
| 2590.6-2594.6" | interbeds blk sh sl soft, strks brn OS, and 1" sltst gry @ 2591.9, 2592.3 and 2593.10", tan dol 1" @ 2591.7 & 2592.9", soft punky blk sh 1" @ 2593.11", OVDF from 2592.6 to 2593.10" |

| Depth | Description |
|---|---|
| Core No. 193 2594.6 to 2605.0" 0-3° | |
| 2594.6-2605.0" | blk sh w/occ thin strks brn OS, a 1" dol brn OS @ 2598.7" & 6" dol brn OS @ 2599.3", 2" dol brn shaly @ 2602.6" many tiny sltst gry strks, OVF @ 2603.2 to 8", DOF @ 2595.0", slump structure wht-gry sltst @ 3" @ 2604.8" |