exist in the area of the lens, which will be discussed in a later section.

Concentration of the oil within the reservoir begins before the entire pore volume of the reservoir is contacted. For example, at 4.0 million years oil has just contacted the entire reservoir space but oil has concentrated to 53 percent saturation along the upper boundary. The effect is similar to the observed saturation distribution in the matrix unit, where the oil concentrates along the upper boundary rather than migrating into non-saturated portions of the matrix.

As time progresses, the lens continues to fill from the upper, upstream "corner". At 3.0 million years (Figure 6.1b), oil saturation has attained a maximum value of 49 percent along the top of the reservoir. The process of initial downstream filling and concentration, followed by concentration towards the upstream end of the reservoir, occurs because oil is retained in the reservoir at the downstream boundary by a combination of capillary and hydrodynamic forces.

At 5.0 million years the simulation had to be stopped because oil began concentrating at the downstream end of the flow domain. Past 5.0 million years, oil began to flow back upstream. This spurious concentration was caused by the inability of the oil to migrate further downstream due to the presence of the grid boundary. The results up to the start of the spurious accumulation remain valid.

The final saturation distribution is shown in Figure 6.1c. Oil saturation has reached 55 percent, the limiting value imposed by the relative permeability curves, along the top 5.0 metres of the reservoir. Elsewhere in the reservoir, oil saturation varies from 38 to 55 percent.

Differential concentration of the oil is evident in the horizontal direction. Combined with the already existing vertical segregation, this produces tilted iso-saturation lines within the reservoir (Figure 6.2). The maximum oil saturation is observed at the upper, downstream position in the lens, with saturation values decreasing rapidly in any vertical section and less rapidly in any horizontal section.

Oil has continued to enter the lens upstream, but has started leaking out the downstream end. The downstream leakage occurs at a very slow rate. The net result is the observed, continued concentration within the reservoir. Oil saturations of up to 14 percent exist outside the reservoir because changes in fluid-potential conditions allow for some oil leakage from the reservoir. The reasons for this will be discussed further in section 6.3.

Based on filling rates for the past 5.0 million years, it is estimated that if injection were continued at the same rate, oil saturation would reach 55 percent in all areas of the lens by 6.0 million years. Therefore, under the assumed conditions, this reservoir would require approximately 5.0 million years to fill with oil.

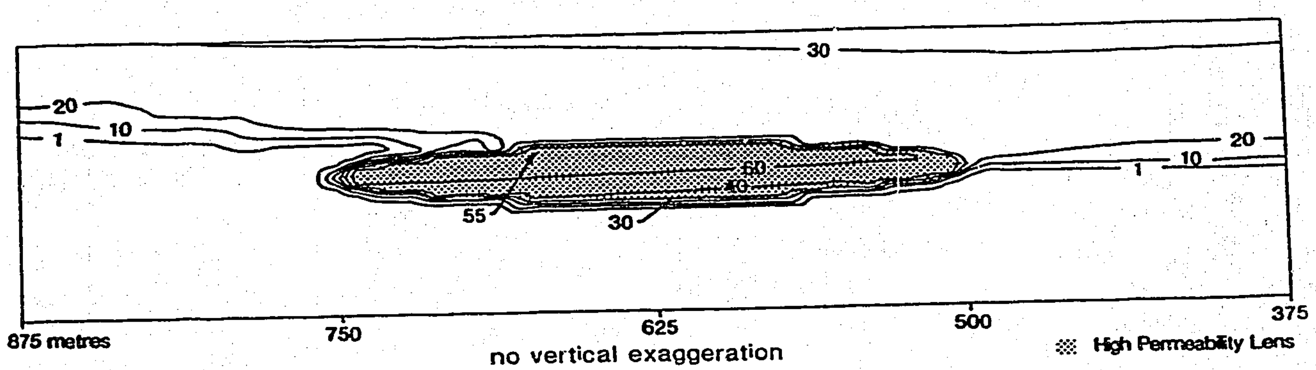

Figure 6.2: Detail of lens-area oil-saturation distribution at 5 000 000 years, Case Two. Contours in percent oil saturation.

6.2 Water Hydraulic Head

The steady state, water hydraulic-head distribution for Case Two is exactly the same as for Case One because the same water density and initial conditions were used in both cases. Figure 5.3 illustrates this pattern, of which a detailed explanation has been given in section 5.2.

The evolution of the water hydraulic-head surface during part two of the simulation is shown in Figure 6.3.

At the start of oil injection, the maximum value of water hydraulic head in the system increases, similar to that observed in Case One, because of the extra energy added to the system from fluid injection.

Overall, the hydraulic head patterns show two effects of increased oil saturation within the flow domain. First, the contours outlining the lens area are asymmetrical. This is caused by increased oil saturation in the top portion of the grid and within the lens (at later times), altering the direction of fluid-flow, and hence the fluid-potential pattern. Second, a visible difference exists between the shape of the hydraulic head contours upstream and downstream of the lens. The hydraulic head contours downstream of the lens are almost vertical. Upstream, the contours are not vertical. This illustrates the variable sensitivity of the hydraulic head pattern to changes in oil saturation.

The variable effect upstream/downstream of the lens can be explained by changes in oil saturation distribution. In both cases, there is a vertical in oil saturation gradient

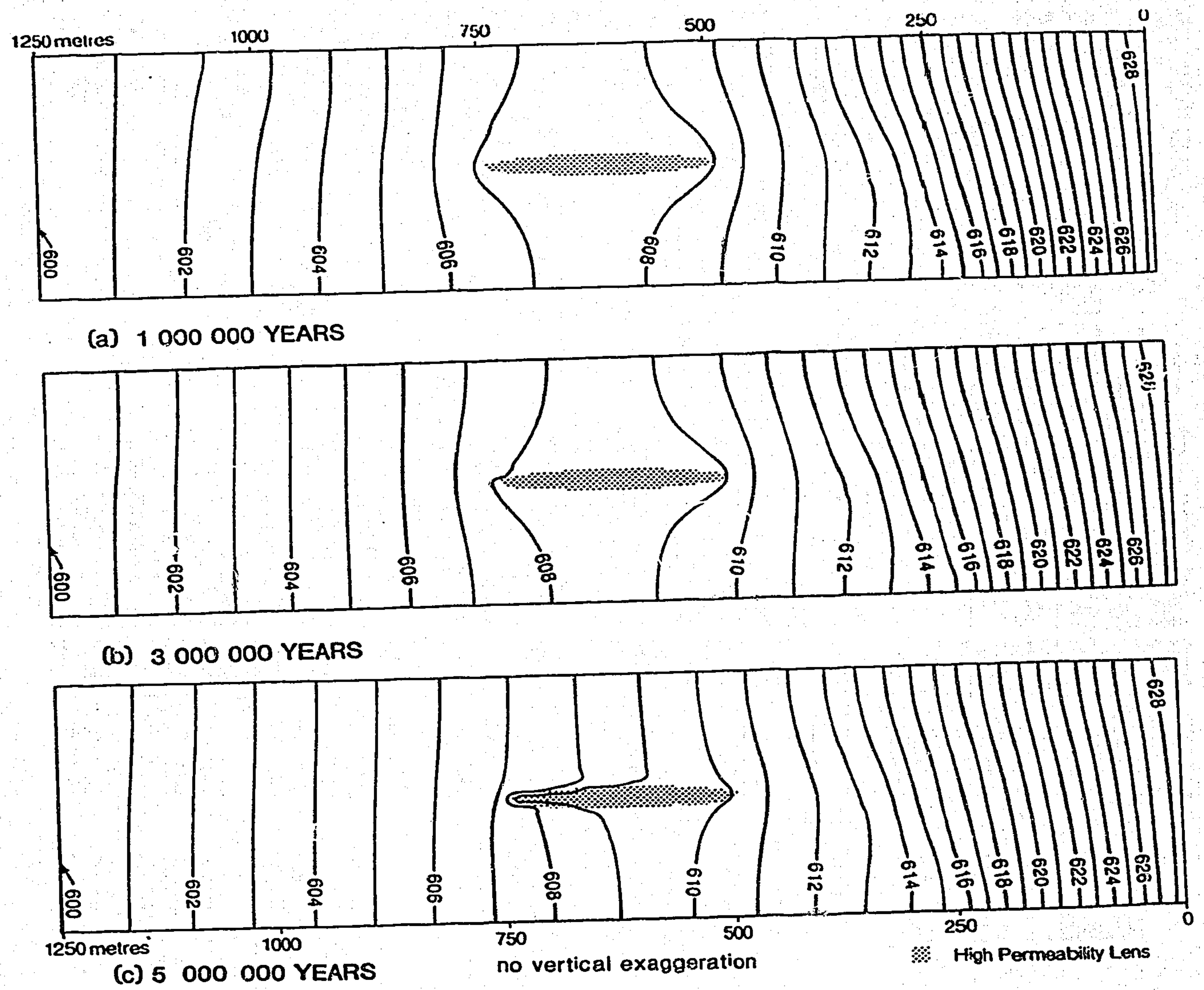

Figure 6.3: Water hydraulic-head distribution, Case Two. One metre contour interval.

across the flow domain. Upstream, the saturation varies from approximately 27 to 35 percent (bottom to top), which causes non-vertical hydraulic head contours. Downstream, the saturation varies from 0 to 30 percent, with no noticeable effect on the hydraulic head distribution. Therefore, subtle changes in saturation may or may not cause changes in the water fluid-potential patterns, depending on the position on the relative permeability curves where these changes take place.

The position of the transition zone is difficult to predict from these water potentiometric surfaces. The extent of the hydrocarbon saturated portion of the flow domain is hinted at by a slight bunching of the contours at the upstream end of the flow domain. It is interesting to note that the presence of oil shifts the contour values only 2.5 metres, a shift that could well be mistaken for the effect of another highly-permeable but non-saturated body nearby.

At 3.0 million years (Figure 6.3b) a small portion of the lens has reached 49 percent oil saturation, reducing the relative permeability to water in this area to near zero. Water is now being forced to flow around this area, which is reflected in the shape of the 608 metre contour. This effect is localized, and not noticeable elsewhere.

At 5.0 million years, the top 5.0 metres of the lens has reached 55 percent oil saturation, hence zero permeability to water. Water is starting to flow around that part of the lens. This effect is visible on the hydraulic head pattern in

Figure 6.3c. The iso-potential contours (608 to 610 metres) have begun to encircle the top 5.0 metres of the lens. This is the beginning of the isolation of that particular low permeability region from the rest of the flow domain. If the entire reservoir had reached zero relative permeability to water, it would be encircled by closed region of high fluid-potential, causing migrating water particles to flow around it, similar to the situation that existed after 2.0 million years in Case One.

In Case Two, asymmetrical water flow into, and around, the lens is indicated. This occurs because the relative permeability to water has not been reached zero throughout the lens. The non-uniform decrease in permeability has caused an asymmetrical fluid-flow pattern which is reflected in the shape of the hydraulic head contours in the lens area.

6.3 Oil Hydraulic Head

The distribution of oil hydraulic head at steady state is shown in Figure 6.4a, and in detail in Figure 6.4b. Hydraulic heads are higher than in Case One. This is due to a difference in oil density between the two cases, which can be explained by the comparison of two hypothetical fluids A and B. Applying equation 2.3 to A and B (where A is less dense than B) will result in higher hydraulic heads for fluid A, at the same point of measurement. This calculation, which illustrates the difference between hydraulic head values in cases one and two is contained in Appendix 4. It contains a

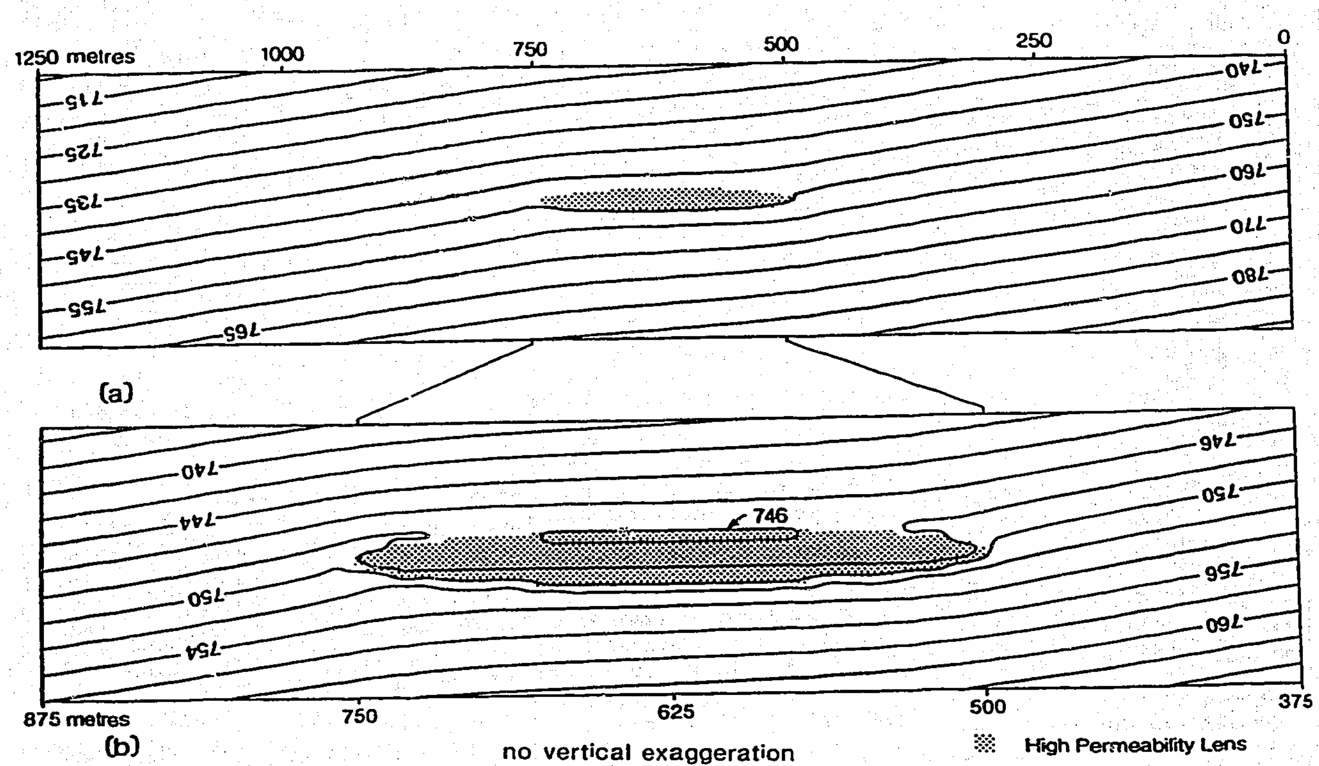

Figure 6.4: Oil hydraulic-head distribution, Steady State conditions, Case Two.
(a) Five metre contour interval
(b) Lens-area detail. Two metre contour interval.

sample calculation of an oil hydraulic-head value from a given water hydraulic head at a point near the upstream boundary of the flow domain.

The oil hydraulic-head pattern (Figure 6.4) is made up of three separate, but inter-related effects, namely: (1) buoyancy; (2) a highly-permeable lens; and (3) capillary pressures.

The buoyancy effect is clearly visible outside the lens area in Figure 6.4a. The tilted iso-potential contours are a result of the vector summation of the two separate driving forces on the fluid particles. For oil, in a hydrostatic environment, the driving force vector is vertical. For water, in a hydrodynamic environment the driving force vector is horizontal. The vector summation of these two forces yield the driving force vector for oil in a dynamic environment, namely that seen outside the lens area in Figure 6.4a. The iso-potentials resulting from a combination of lighter oil and flowing water are termed the buoyancy effect.

The highly-permeable lens effect, cannot be isolated from figures 6.4a or 6.4b, due to the insufficient resolving power of the 5.0 and 2.0 metre contour intervals. This effect arises because the permeability contrast between lens and matrix causes flow to focus into the upstream, and out the downstream, ends of an elliptical, highly-permeable rock body (Tóth and Rakhit, 1988). From results obtained in Case One (identical lens properties), the highly-permeable lens effect generates a maximum of $^+/_-$ 2.4 metres difference in hydraulic head, at the downstream and upstream ends of the lens, respectively.

The capillary pressure effect arises from differences in the capillary pressure curves at 100 percent water saturation. This effect acts normal to the lens boundary. Its magnitude can be calculated as the difference in the capillary pressures (at 100 percent water saturation) in the lens and matrix. In this instance, the magnitude equals 25.0 kPa or 3.0 metres of hydraulic head. This effect acts across the lens boundary and is directed inwards, from the matrix to the lens.

In Case Two, the summation of the buoyancy, highly-permeable lens, and capillary pressure effects does not produce a symmetrical, closed potentiometric-low, such as that seen in Case One.

Figure 6.5 is a schematic breakdown of the forces acting in the lens area. This figure is an interpretation of the simulated hydraulic-head distribution (Figure 6.4a). Six areas of interest are shown, numbered clockwise from the upper, upstream "corner" of the lens.

At steady state, oil flows into the lens from all directions. The resultants of the three force components are all directed inwards, although each vector has a different magnitude. At position 1, the capillary and permeability components override the buoyancy component. Oil flow is downstream (with respect to water) and <u>downwards into the reservoir</u>. At position 2, all three components are directed

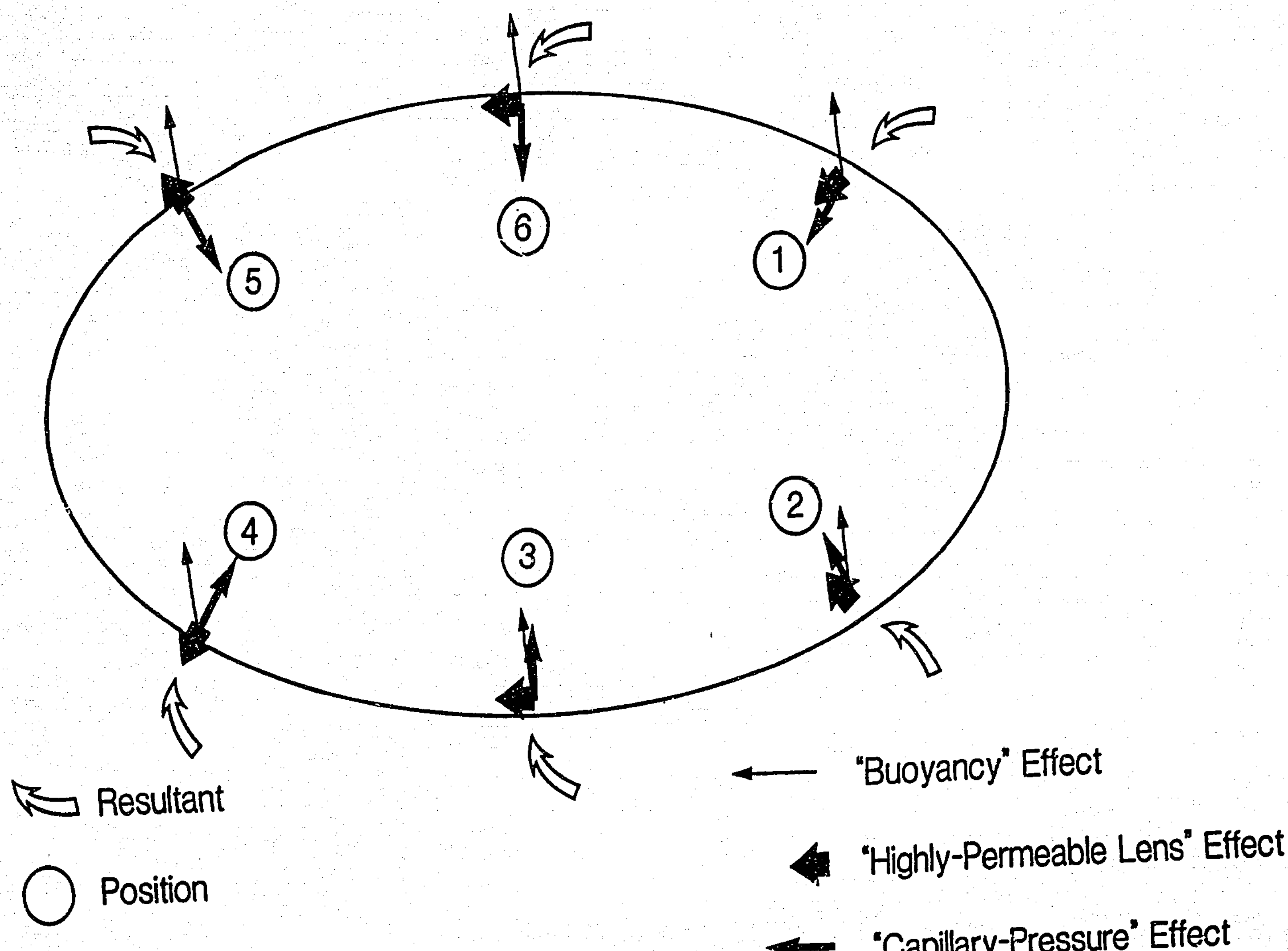

Figure 6.5: Schematic of forces acting in the area of the lens at Steady State conditions.

in towards the lens, creating the most favorable position for oil entry. At position 3, the capillary and buoyancy components combine to direct flow upwards into the lens. At position 4, the resulting oil flow is upwards into the reservoir, but upstream with respect to water. The capillary force and buoyancy components combine to control the oil flow direction. At position 5, the net result is similar to position 4, but is weaker because only the capillary force component acts to draw oil into the lens. This would be the most likely position for oil to exit from the lens. At position 6, the resultant is directed downwards because the capillary force component is larger than the buoyancy force component.

Figures 6.4 and 6.5 illustrate that oil entrapment in the reservoir is controlled by a complex super-position of buoyancy, permeability, and capillary derived forces.

The spatial and temporal evolution of the oil hydraulic-head surface during part two is shown in Figure 6.6. Details of the lens area at 1.0 and 5.0 million years are shown in figures 6.7a and 6.7b, respectively.

Outside the lens area, little change takes place in the hydraulic head surface during the 5.0 million year injection period. Upstream of the lens, oil flows upwards and downstream, as evidenced by the tilted contours in that region. Above the lens, oil flows horizontally downstream, as indicated by the near-vertical contour lines.

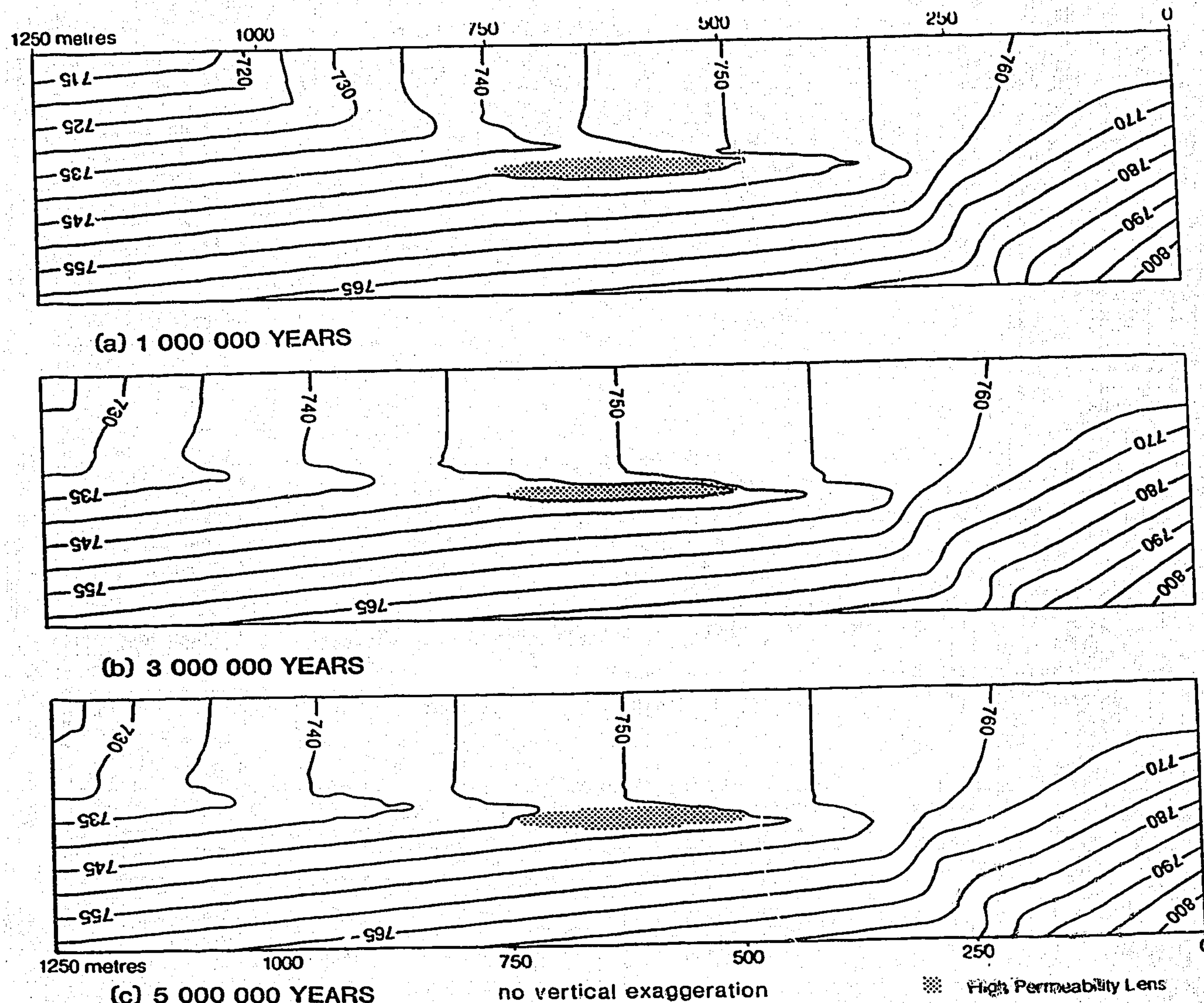

Figure 6.6: Oil hydraulic-head distribution, Case Two. Five metre contour interval.

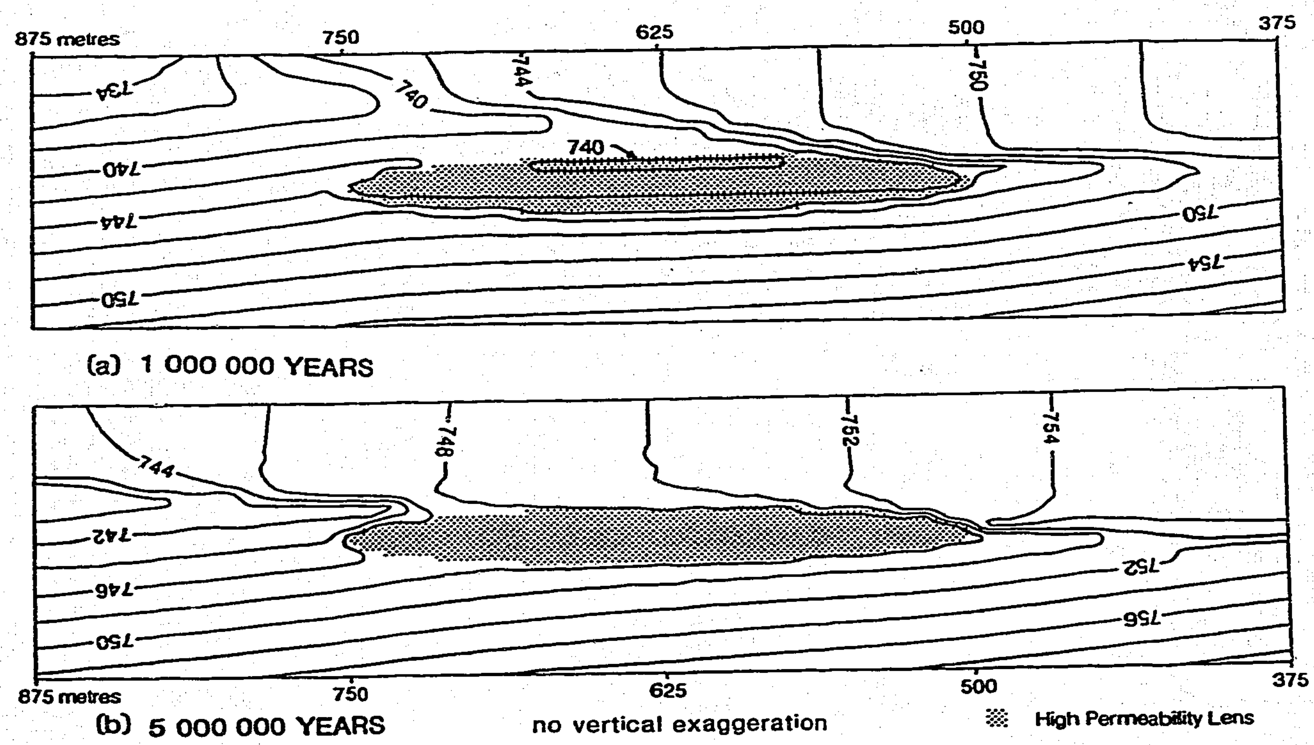

Figure 6.7: Lens-area detail of the oil hydraulic-head distribution, Case Two. Two metre contour interval.

Inside the lens, changes in the hydraulic head distribution take place as the lens fills with oil. At 1.0 million years (figures 6.6a and 6.7a) the pattern is similar to that at steady state. Oil is not yet entering the lens, but soon will be entering along the upper, upstream "corner" of the lens.

As oil fills the lens, the magnitude of the capillary pressure barrier changes. For example, by 2.0 million years (not illustrated) the capillary barrier will have been reduced from 3.0 to 1.4 metre of head. By the time 3.0 million years have elapsed, a portion of the lens has reached 50 percent oil saturation which is the point where capillary pressures are equal in the oil saturated lens and non-saturated matrix. This means that oil can leave the lens. This is visible in Figure 6.6b, where the 745 metre contour almost circles the entire reservoir, except for a small break at the "corner" of the lens (position 5 on Figure 6.5). Oil exits at a very slow rate into the low permeability unit. There is still a positive net flow of oil into the reservoir.

As time passes, the fully saturated portion of the reservoir grows in size. Associated with this is the loss of the reservoir's ability to trap oil.

The final hydraulic-head pattern is shown in Figure 6.6c and in detail in Figure 6.7b. On the regional scale there are distortions in the fluid-potential field but there is no direct indication of the presence of a lens. This is partly due to the use of a 5.0 metre contour interval, and partly as a result of lens filling causing decreased disturbance to the flow field.

The lens is now leaking from the upper, and upper-downstream boundaries (positions 5 and 6, Figure 6.5). Now, only a very minor, inward component of flow is indicated by the potentiometric surface. Oil is still focused into the lens but not nearly as strongly as before.

It is hypothesized that if injection were continued to the eventual saturation of the lens, by 6.0 million years the lens would be indistinguishable from the rest of the flow domain (based exclusively on the oil hydraulic-head distribution). Any further advancement in time would most likely produce oil hydraulic-head distributions similar to Figure 6.6c. After this time, the oil hydraulic-head pattern would likely remain unchanged.

7.0 DISCUSSION

7.1 Sensitivity Analysis

Typically, in a numerical simulation study such as this, the sensitivity of the results to changes in input parameters would be investigated. Such an analysis would normally be conducted by altering an input parameter, re-running the simulation, and comparing the results with the original case. This type of quantitative analysis was not possible in this study due to the large number of input parameters, and the length of time required to run each simulation. Instead, a qualitative discussion of the sensitivity of the results will be presented, based on simulations conducted, but not included here.

As mentioned previously, SWANFLOW-2D assumes constant values of fluid viscosity and density, that is, they are not allowed to vary as a function of pressure. The largest and smallest pressure values encountered at any time, in any position, in either case, were 9181 and 5916 kPa. These values occurred in Case Two, during the oil injection part, in the lower-upstream, and upper-downstream corners, respectively, of the grid. Tables 7.1 and 7.2 illustrate the oil viscosity and density variations over these pressures, which were obtained from PVT curves for Belly River Formation oil samples (figures 4.8 and 4.9). It can be seen that the total change in the parameters over this (maximum) pressure range, is small (1.9 and 3.9 percent for density and

Table 7.1

Oil viscosity variation over the range of pressures encountered in the simulations.

Well	Viscosity @ Pmin (mPa·s) (5916 kPa)	Viscosity @ Pmax (mPa·s) (9181 kPa)
03-34-45-06 W6	1.15	1.04
10-34-45-06 W6	0.80	0.625
16-14-45-07 W6	0.625	0.74
14-17-45-07 W6	0.88	0.74
average	0.864	0.786
range	0.078	
percent variation	0.078/2.0 · 100 = 3.9 %	

source : AERCB Pressure-Volume-Temperature (PVT) data file.

Table 7.2

Oil density variation over the range of pressures encountered in the simulations.

Well	Density @ Pmin (5916 kPa) (kg/m^3)	Density @ Pmax (9181 kPa) (kg/m^3)
03-34-45-06 W6	763	750
10-34-45-06 W6	730	710
16-14-45-07 W6	712	688
14-17-45-07 W6	738	731
average	735.8	719.8
range	16	
percent variation	16/850 · 100 = 1.9 %	

source : AERCB Pressure-Volume-Temperature (PVT) data file.

viscosity, respectively) in comparison to the magnitude of the data values. In the strictest sense, these variations should be accounted for, but in this case, the additional computing time required to obtain more accurate results is not warranted.

The input data can be divided into three groups, based on their sensitivity: (1) data that control the operation of the simulation; (2) data that, when changed, have a minor effect on the outcome of the simulation; and (3) data that, when changed, have a major effect on the outcome of the simulation.

The first group are the simulation control parameters. Their effect(s) do not directly affect the outcome of the simulations. These were discussed in section 4.5.

The second group are defined as those data which have only a minor effect on the outcome of the simulations, relative to the data in group three that have a major effect on the simulations. Data in the second group include: grid and lens size/shape; number/shape of grid blocks; magnitude and ratio of fluid viscosities; ratio of fluid densities; magnitude and ratio of permeabilities; magnitude and ratio of porosities; oil injection rate; and gradient/magnitude of water fluid-potentials. Each of these data, if altered enough, could have a major, if not controlling, effect on the simulation results. However, the simulation results are not as sensitive to changes in the group two data as compared to the group three data. By increasing/decreasing one or more of these parameters, the results will be altered, but the alteration of the results is proportional to the change(s) made. For example, a small increase in the size of the lens will cause: slightly larger fluid-potential distortions; require the use of a larger grid; and lengthen the time required to fill the lens. The fluid-potential pattern will be of similar shape, and the lens will eventually fill with oil as before, but with a slightly longer filling time.

The third group include: fluid density; relative permeability curves; and capillary pressure curves. The simulation results were sensitive to small changes in these data.

The effect of changes in density on the simulation results become evident by comparison of cases one and two. The entire oil saturation distribution, and oil/water potentiometric surfaces are affected by a change in the fluid density. Furthermore, the oil flow direction outside the area of the lens is a function of the density difference between the fluids.

The critical parts of the relative permeability curves are their respective endpoint values, S_{oi}, and S_{wi}. These values control: the amount of residual oil left behind the front; the maximum attainable level of oil saturation; the minimum oil saturation required for oil flow; the ultimate oil recovery; and a number of other parameters. The shape of the curves themselves control the rate at which permeability to each fluid is affected by changes in saturation.

Simulation results are also very sensitive to changes in capillary pressure curves, which are critical as far as trapping of oil is concerned. Each of the three parts of the curve are important, namely: (1) the entry pressure (@S_w = 100%), to which the trapping capacity of the reservoir is directly related; (2) the shape of the middle part of the curve, which influences how rapidly changes in capillary pressures occur with changes in saturation; and (3) the shape of the "tail" ($S_w \cong S_{wi}$) portion of the curve which is related to S_{wi}, and the maximum attainable oil saturation.

It should be noted that laboratory-derived capillary pressure curves may not represent long term reservoir conditions. That is, that over a long period of time the wettability factors which control the shape of the capillary pressure curves may change. This could cause changes in the shape of the capillary pressure curve(s), which would cause the real conditions to differ from the simulated conditions.

The same long-term effect could alter the relative permeability curves. The possibility exists that, for example, the irreducible oil saturation may eventually reach zero. That is, long-term wettability changes or water washing could allow all of the oil to be removed from the pore space. This could explain why no traces (or "trails") of oil exist in carrier beds along known migration pathways.

These long term changes could be simulated by altering the relative-permeability and capillary-pressure curves at certain times during the simulation, but this would only serve to further complicate the fluid-potential patterns that are evolving as the simulation proceeds. For the purpose of this work, long term changes in the input data did not warrant investigation.

7.2 Effect of Oil on Potentiometric Surfaces

One of the original objectives was to study the oil and water potentiometric surfaces during oil emplacement, with emphasis on the degree and distribution of hydrocarbon saturation. Results presented here (figures 5.1 - 5.8, 6.1 - 6.4, 6.6 - 6.7), illustrate these effects. In general, the following are found:

(1) the water potentiometric surface in an oil-free environment is a function of the regional fluid-potential gradient, permeability contrast, lens geometry, and lens orientation relative to the regional fluid-flow direction.

(2) the oil potentiometric surface in an oil-free environment is a function of the water potentiometric surface, but is modified by the capillary pressure curves of the particular rock unit, and the density difference between oil and water.

(3) once oil is introduced into the system, both fluid-potential patterns begin to change, as a result of the functional relationship between oil saturation and permeability (relative permeability curves), and oil saturation and pressure (capillary pressure curves).

(4) the original, localized potentiometric low in the lens area is reduced as the lens fills with oil. As the lens

fills, its ability to trap oil is reduced. Eventually, once full, the oil potentiometric surface appears similar to the water potentiometric surface at steady state (with modifications for capillary pressures).

(5) for the water potentiometric surface, as emplacement and concentration progress, the relative permeability to water decreases. This is manifested in an alteration of, and eventually the destruction, of the fluid-potential anomaly.

(6) for intermediate cases, i.e., partially full lenses, the potentiometric surfaces for either fluid are difficult to interpret in terms of degree and distribution of oil saturation. That is, it is difficult to take a potentiometric surface from a flow domain containing partially filled lenses, and predict the degree and extent of the oil saturation. This is because too many variables combine to produce the fluid-potential surfaces. The solution of the inverse problems from potentiometric surface to geology, is non-unique. Oil saturation cannot be determined with any degree of certainty, given only the water potentiometric surface.

7.3 Implications for Exploration

Previous work (Rakhit, 1987; Tóth and Rakhit, 1988) has illustrated that reservoir-quality rock bodies cause characteristic perturbations of the water potentiometric surface. The present study extends their analysis by including an oil phase in the flow domain. It illustrates the genetic relationship between lens, oil accumulation, and fluid-potential anomalies.

Earlier works have shown how Hubbert's UVZ method and single-phase potentiometric surface analysis can be useful for oil exploration (Dahlberg, 1982; Tóth and Rakhit, 1988). The present study investigates these methods further by accounting for oil in the reservoir, and the resulting reduction in permeability to water. It also accounts for the presence of oil, and includes capillary pressures in the flow domain.

The single-phase potentiometric-surface technique is hampered by the fact that, water potential surfaces are affected by the presence of oil. It is impossible, therefore, to differentiate between water-potential anomalies generated by low relative permeability to water or by low intrinsic permeability.

Figure 7.1 illustrates the proposed "iterative improvement process" that could be used for this problem. First, the geology of a flow domain is assumed, using where possible, information from other sources (geophysics, well logs). Next, the data are input into the numerical model, and a numerical UVZ analysis completed (such as shown in any of the oil/water hydraulic head figures). The simulated potentiometric surface can then be compared to the field-derived water potentiometric-surface. In this manner, various geological alternatives, and their resulting fluid-potential patterns can be generated and compared, in order to try and

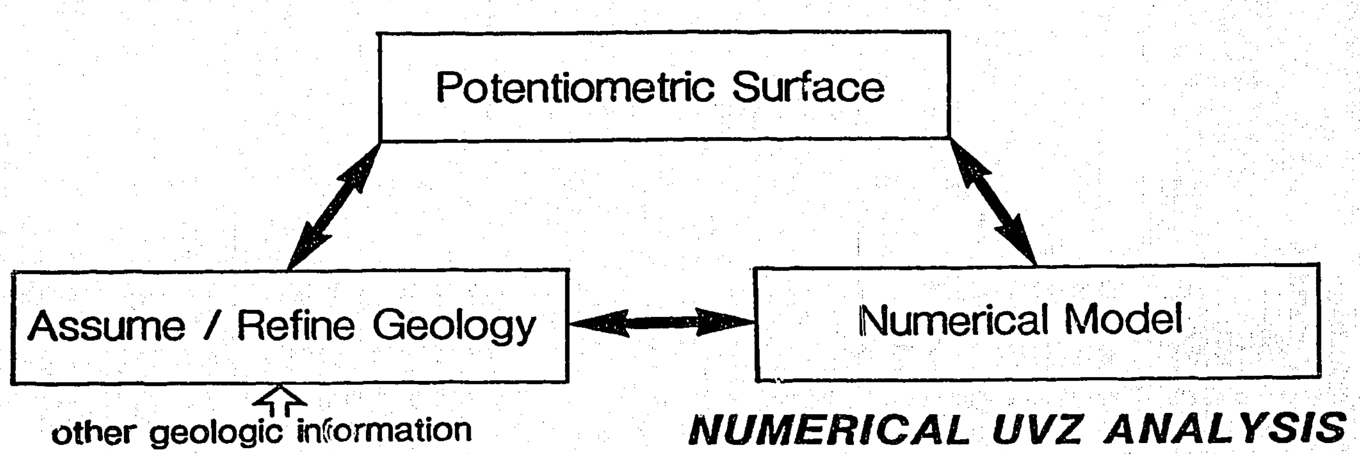

Figure 7.1: Schematic of the proposed "iterative improvement process".

determine the geology and the degree and distribution of hydrocarbon saturation, i.e., whether an oil filled lens is present or not.

8.0 CONCLUSIONS

Numerical modelling has, in general, shown that:

1) It is possible to simulate secondary oil migration and entrapment in a lenticular reservoir, on a basinal scale, using currently (1989) existing software and computer hardware.

2) Fluid-potential fields of water and oil govern fluid flow directions, which are modified by:

   (i) highly-permeable lenses, situated within the flow field;

   (ii) buoyancy;

   (iii) capillary pressures.

3) The distribution of fluid-potentials is genetically related to relative permeability and capillary pressure curve properties which are, in turn, functions of oil saturation distribution. As migration proceeds, oil saturation distribution, thus fluid-potential distributions, change in time and space.

4) Entrapment of oil within a reservoir is controlled by fluid-potential conditions that are generated by regional fluid-potential gradients, and modified by super-position of the highly-permeable lens, buoyancy, and capillary pressure effects.

5) In certain cases, fluid flow is dominated by one or more of these effects. This can lead to opposing fluid flow directions.

6) Capillary pressures and relative permeabilities, which have not been taken into account in previous works, play a major, if not controlling, role in the migration and entrapment of oil in lenticular reservoirs.

Specific conclusions from the results fall into three categories, dealing with: oil migration and entrapment; potentiometric surface effects; and implications for oil exploration techniques.

Oil migration

- Medium gravity oil (850 kg/m^3) will tend to migrate in the carrier bed along the upper boundary with a less permeable rock. Under this condition, lenticular reservoirs can be charged with oil moving downward from above.
- Once a reservoir is filled with oil, it will remain so, even after the supply of oil is terminated. This is a direct result of fluid-potential and permeability relationships within the reservoir. Oil will remain trapped until fluid-potential conditions in the reservoir change (possibly through long term changes in the capillary pressure or relative permeability curves).

Fluid-potential effects

- Water-filled lenticular reservoirs are favorable sites for oil accumulations owing to favorable permeability and capillary pressure conditions. These reservoirs generate characteristic fluid-potential patterns.

- Oil preferentially enters and accumulates within a reservoir until the oil saturation level alters the fluid-potential conditions such that oil may exit. This happens through changes in relative permeability (to oil and water), and changes in capillary pressures inside and outside the reservoir.
- The reduction in relative permeability to water, as a result of increased oil saturation within a lens, can modify and even reverse, the highly-permeable lens effect.
- Since capillary pressure and relative permeability curves are strongly non-linear, the effects on fluid-potential conditions are highly sensitive to changes in saturation at certain saturation levels.

Oil exploration techniques

- It is difficult (if not impossible) in some cases, using the water potentiometric surface, to distinguish between an oil-saturated reservoir with high intrinsic permeability and a water-filled lens of low permeability. In these cases, it is mandatory to use other information, including: oil potentiometric surfaces; and other geological, geophysical, and chemical information in the exploration effort.
- Oil hydraulic-head surfaces, as shown, are analogous to Hubbert's U surface, accounting for capillary forces and the presence of oil.
- Numerically calculated oil potentiometric-surfaces (such as shown) are more accurate, more widely applicable, and easier

to calculate than Hubbert's U surface. As such, the numerical simulations presented here demonstrate the operation of the numerical UVZ method.

9.0 REFERENCES

Abriola, L.M. and G.F. Pinder, 1985a, A Multiphase Approach to the Modeling of Porous Media Contamination by Organic Compounds, 1. Equation Development: Water Resources Research, v. 21, no. 1, p. 11-18.

Abriola, L.M. and G.F. Pinder, 1985b, A Multiphase Approach to the Modeling of Porous Media Contamination by Organic Compounds, 2. Numerical Simulation: Water Resources Research, v. 21, no. 1, p. 19-36.

AERCB (Alberta Energy Resources Conservation Board), Pressure-Volume-Temperature Files, and Special Core Analysis Files, Records Centre, Calgary, Alberta, Canada.

AGAT Laboratories, (Undated), Table of Formations of Alberta, Calgary, Alberta, Canada.

Arthur D. Little, Inc., 1983, S-Area Two Phase Flow Model, technical report for Wald, Harkrader & Ross, Washington, D.C.

Berg, R.R., 1975, Capillary Pressures in Stratigraphic Traps: AAPG Bulletin, v. 59, no. 6, p. 939-956.

Craig,Jr., F.F., 1971, The Reservoir Engineering Aspects of Waterflooding: Society of Petroleum Engineers, Monograph 5, Dallas, Texas, USA, 141 p.

Creaney, S., and J. Allan, 1988 in press , Hydrocarbon Generation and Migration in the Western Canada Sedimentary Basin: Proceedings of the Geological Society of London, 37 p.

Dahlberg, E.C., 1982, Applied Hydrodynamics in Petroleum Exploration: New York, Springer-Verlag, 161 p.

Davis, R.W., 1987, Analysis of Hydrodynamic Factors in Petroleum Migration and Entrapment: AAPG Bulletin, v. 71, no. 6, p. 643-649.

Dullien, F.A.L., 1979, Porous Media, Fluid Transport and Structure: Academic Press, 396 p.

Durand, B., Ph. Ungerer, A. Chiarelli, J.L. Oudin, 1983, Modelling of Oil Migration. Application to Two Examples of Sedimentary Basins (English Translation of: Modelisation de la Migration de l'Huile Application a Deux Exemples de Bassins Sedimentaires): proceedings, 11th World Petroleum Congress, London, p. 3-15.

England, W.A., A.S. Mackenzie, D.M. Mann, and T.M. Quigley, 1987, The Movement and Entrapment of Petroleum Fluids in the Subsurface: Journal of the Geological Society, London, v. 144, p. 327-347.

Faust, C.R., 1985, Transport of Immiscible Fluids Within and Below the Unsaturated Zone: A Numerical Model: Water Resources Research, v. 21, no. 4, p. 587-596.

__________, and J.O. Rumbaugh III, 1986, SWANFLOW-2D: Simultaneous Water, Air, and Nonaqueous Phase Flow Model in Two Dimensions, User Documentation, Version 1.0: Geotrans Inc., Herndon, Virginia, 69 p.

Franchi, J.R., K.J. Harpoole, and S.W. Bujnowski, 1982, BOAST: A Three-Dimensional, Three-Phase, Black Oil Applied Simulation Tool (Version 1.1), Volume 1, Technical Description and FORTRAN Code: United States Department of Energy, Bartlesville, Oklahoma, USA, 180 p.

Freeze, R.A., and J.A. Cherry, 1979, Groundwater: Englewood Cliffs, N. J., Prentice-Hall, 604 p.

Garven, G., 1989, A Hydrogeologic Model for the Formation of the Giant Oil Sands Deposits of the Western Canada Sedimentary Basin: American Journal of Science, vol. 289, no. 2, p. 105-166.

Hubbert, M.K., 1940, The Theory of Ground-Water Motion: Journal of Geology, v. 48, no. 8, p. 785-944.

__________, 1953, Entrapment of Petroleum Under Hydrodynamic Conditions: AAPG Bulletin, v. 37, no. 8, p. 1954-2026.

Hunter, D.E., 1966, An Investigation on the Waterflooding Behaviour of Preserved Cores from the Belly River Formation - Pembina Field: Imperial Oil Limited, Producing Department - Western Region, Laboratory Report No. L-38166, Production Research and Technical Service Department, Calgary, Alberta, June 1966, 60 p.

Huyakorn, P.S., and G.F. Pinder, 1983, Computational Methods in Subsurface Flow: Academic Press, Orlando, Florida, 473 p.

Iwuagwu, C.J., and J.F. Lerbekmo, 1982, The Petrology of the Basal Belly River Sandstone Reservoir, Pembina Field, Alberta: Bulletin of Canadian Petroleum Geology, vol. 30, no. 3, p. 187-207.

______________, and ______________, 1984, Application of Outcrop Information to Subsurface Exploration for Sandstone Reservoirs; Basal Belly River Formation (Upper Cretaceous), Alberta Foothills: The Mesozoic of Middle North America, D.F. Stott and D.J. Glass, Editors, Canadian Society of Petroleum Geologists Memoir 9, p. 387-400.

Jabour, H., and K. Nakayama, 1988, Basin Modeling of Tadia Basin, Morocco, for Hydrocarbon Potential: AAPG Bulletin, v. 72, no. 9, p. 1059-1073.

Jennings, J.B., 1987, Capillary Pressure Techniques: Application to Exploration and Development Geology: AAPG Bulletin, v. 71, no. 10, p. 1196-1209.

Lerbekmo, J.F., 1963, Petrology of the Belly River Formation, Southern Alberta Foothills: Sedimentology, v. 2, p. 54-86.

Mackenzie, A.S., and T.M. Quigley, 1988, Principles of Geochemical Prospect Appraisal: AAPG Bulletin, v. 72, no. 4, p. 399-415.

McAuliffe, C.D., 1980, Oil and Gas Migration: Chemical and Physical Constraints: Problems of Petroleum Migration, AAPG Studies in Geology, No. 10, Edited by W.H. Roberts, III and R.J. Cordell, AAPG, Tulsa, Oklahoma, p. 89-107.

McDonald, M.G., and A.W. Harbaugh, 1983, A Modular Three-Dimensional Finite-Difference Ground-Water Flow Model (MODFLOW): United States Geological Survey Open File Report, USGS Printing Office, Washington, D.C., 528 p.

Nakayama, K., 1987, Hydrocarbon-Expulsion Model and Its Application to Niigata Area, Japan: AAPG Bulletin, v. 71, no 7, p. 810-821.

______________, and I. Lerche, 1987a, Basin Analysis by Model Simulation: Effects of Geologic Parameters on 1-D and 2-D Fluid Flow Systems with Applications to an Oil Field: Gulf Coast Association of Geological Societies Transactions, v. 37, p. 175-184.

______________, and __________, 1987b, Two-Dimensional Basin Analysis: Migration of Hydrocarbons in Sedimentary Basins, IFP Exploration Research Conference no. 45, edited by B. Doligez, Editions Technip, p. 597-611.

North, F.K., 1985, Petroleum Geology: Allen and Unwin, Boston, 607 p.

Obdam, A.N.M., and E.J.M. Veling, 1987, Elliptical Inhomogeneities in Groundwater Flow - An Analytical Description: Journal of Hydrology, v. 95, p. 87-96.

Ogunyomi, O., and L.V. Hills, 1977, Depositional Environments, Foremost Formation (Late Cretaceous), Milk River Area, Southern Alberta: Bulletin of Canadian Petroleum Geology, v. 25, no. 5, p. 929-968.

Osborne, M., and J. Sykes, 1986, Numerical Modeling of Immiscible Organic Transport at the Hyde Park Landfill: Water Resources Research, v. 22, no. 1, p. 25-33.

Parks, K., and J. Tóth, 1988, Relations Between Fluid-Potential Anomalies, Sand Lenses and Oil Deposits, Belly River Formation, near Buck Lake, Alberta, Canada; Ramifications for Exploration: GSA Abstracts with Programs, v. 20, no. 7, p. A260.

Parks, K., 1989, Groundwater Flow, Pore-Pressure Anomalies and Petroleum Entrapment, Belly River Formation, West-Central Alberta: M.Sc. Thesis, University of Alberta, Edmonton, Alberta, 132 p.

Peaceman, D.W., 1977, Fundamentals of Numerical Reservoir Simulation: Elsevier, New York, USA, 176 p.

Pinder, G.F., and L.M. Abriola, 1986, On the Simulation of Nonaqueous Phase Organic Compounds in the Subsurface: Water Resources Research, v. 22, no. 9, p. 109S-119S.

Podruski, J.A, J.E. Barclay, A.P. Hamblin, P.J. Lee, K.G. Osadetz, R.M. Procter, and G.C. Taylor, 1988, Conventional Oil Resources of Western Canada (Light and Medium), Part 1: Resource Endowment: Geological Survey of Canada, Paper 87-26, 149 p.

Price, L.C., 1976, Aqueous Solubility of Petroleum as Applied to its Origin and Primary Migration: AAPG Bulletin, v. 57, no. 2, p. 213-244.

Rakhit, K., 1987, Potentiometric Surface Anomalies Due to Flow Through Highly Permeable, Lenticular Clastic Rocks and Their Application in Petroleum Exploration: M.Sc. Thesis, University of Alberta, Edmonton, Alberta, 166 p.

Sabry, H., 1988, Lithofacies, Depositional Environments and Reservoir Quality of the Basal Belly River Sands in South-Central Alberta, Canada: CSPG Reservoir, vol. 15, no. 1, p. 1-2.

Sampson, R.J., 1978, SURFACE II Graphics System (Revision One): Series on Spatial Analysis, Number One, Kansas Geological Survey, Lawrence, Kansas, USA, 240 p.

Shouldice, J.R., 1979, Nature and Potential of Belly River Gas Sand Traps and Reservoirs in Western Canada: Bulletin of Canadian Petroleum Geology, v. 27, no. 2, p. 229-241.

Schowalter, T.T., 1979, Mechanics of Secondary Hydrocarbon Migration and Entrapment: AAPG Bulletin, v. 63, no. 5, p. 723-760.

Streeter, V.L., and E.B. Wylie, 1981, Fluid Mechanics, First SI Metric Edition: McGraw-Hill Ryerson Ltd., 562 p.

Tissot, B.P., and D.H. Welte, 1984, Petroleum Formation and Occurrence, Second Revised and Enlarged Edition: Springer-Verlag, Berlin, 699 p.

_____________, 1987, Migration of Hydrocarbons in Sedimentary Basins: A Geological, Geochemical and Historical Perspective: Migration of Hydrocarbons in Sedimentary Basins, IFP Exploration Research Conference no. 45, edited by B. Doligez, Editions Technip, p. 1-19.

Tóth, J., 1962, A Theory of Groundwater Motion in Small Basins in Central Alberta, Canada: Jour. of Geophys. Research, v.67, no. 11, p. 4375-4387.

_________, 1966, Groundwater Geology, Movement, Chemistry, and Resources Near Olds, Alberta: Research Council of Alberta Bulletin 17, 126 p.

_________, 1970, Relation Between Electric Analogue Patterns of Groundwater Flow and Accumulation of Hydrocarbons: Canadian Journal of Earth Sciences, v. 7, no. 3, p. 988-1007.

_________, 1986, Models of Subsurface Hydrology of Sedimentary Basins: Proceedings, Third Canadian/American Conference on Hydrogeology, edited by B. Hitchon, S. Bachu, and C.M. Sauveplane, published by National Water Well Association, p. 1-18.

_________, and K. Rakhit, 1988, Exploration for Reservoir Quality Rock Bodies by Mapping and Simulation of Potentiometric Surface Anomalies: Bulletin of Canadian Petroleum Geology, v. 36, no. 4, p. 362-378.

Ungerer, P., F. Bessis, P.Y. Chenet, B. Durand, E. Nogaret, A. Chiarelli, J.L. Oudin, and J.F. Perrin, 1984, Geological and Geochemical Models in Oil Migration; Principles and Practical Examples: AAPG Memoir 35, Petroleum Geochemistry and Basin Evaluation, edited by G. Demaison and R.J. Murris, p. 53-77.

Ungerer, P., B. Doligez, P.Y. Chenet, J. Burrus, F. Bessis, E.L. Lafargue, C. Giroir, O. Heum, and S. Eggen, 1987, A 2-D Model of Basin Scale Petroleum Migration by Two-Phase Fluid-Flow. Application to Some Case Studies: Migration of Hydrocarbons in Sedimentary Basins, IFP Exploration Research Conference no. 45, edited by B. Doligez, Editions Technip, p. 415-456.

Vugrinovich, R., 1988, Relationships Between Regional Hydrogeology and Hydrocarbon Occurrences in Michigan, USA: Journal of Petroleum Geology, v. 11, no. 4, p. 429-442.

Wells, P.R.A., 1988, Hydrodynamic Trapping in the Cretaceous Nahr Umr Lower Sand of the North Area, Offshore Qatar: Journal of Petroleum Technology, v. 40, no. 3, p. 357-361.

Welte, D.H., and M.A. Yükler, 1981, Petroleum Origin and Accumulation in Basin Evolution-A Quantitative Model: AAPG Bulletin, v. 65, no. 8, p. 1387-1396.

Williams, G.D., and C.F. Burk Jr., 1964, Upper Cretaceous: Chapter 12, Geological History of Western Canada, edited by R.G. McCrossan and R.P. Glaister, Alberta Society of Petroleum Geologists, p. 169-189.

Zawisa, L., 1986, Hydrodynamic Conditions of Hydrocarbon Accumulation Exemplified by the Carboniferous Formation in the Lublin Synclinorium, Poland: SPE Formation Evaluation, v. 1, no. 2, p. 286-294.

Appendix 1

Results of waterflood tests on selected Belly River cores.

Well	S_{wi}	S_{oi}	por.	air perm.	commments
06-16-48-3 W5	31.9	26.8	17.7	228.	
	35.6	24.4	18.0	78.	
	45.8	21.8	17.3	33.	
	40.6	23.1	18.8	29.	
	58.7	26.9	15.6	5.3	
	49.2	28.4	13.6	4.4	
	58.2	17.8	14.9	3.8	
16-35-47-6 W5	46.5	32.4	14.3	0.8	
	41.6	30.8	13.2	0.45	
	58.2	29.7	13.6	0.53	
	47.9	37.4	14.1	0.41	
	47.9	32.0	14.8	0.89	
	53.9	31.1	14.1	0.18	
06-03-48-5 W5	55.8	24.2	18.0	12.8	
	48.5	29.8	18.5	35.3	
	59.8	28.8	14.5	0.93	
	65.9	28.8	14.7	0.80	
04-25-47-4 W5	49.6	17.9	14.3	3.07	
	64.4	7.0	16.3	12.0	
	64.6	12.1	16.3	39.3	
	56.2	15.3	15.6	4.54	
	56.1	31.8	16.0	6.35	
10-12-47-4 W5	39.7	29.7	16.4	114.	
	40.0	29.5	17.2	176.	
	42.0	29.8	16.2	7.8	
	39.8	29.0	16.9	35.0	
	85.0		13.0	.38	C-P test
	85.0		14.9	.33	"
	85.0		15.2	.51	"
	80.0		15.0	1.30	"
	35.0		18.1	250.	"
	40.0		18.5	105.	"
	35.0		19.6	260.0	"
	55.0		17.0	8.6	"
	40.0		18.7	59.0	"
	85.0		15.3	0.53	"
	80.0		15.9	1.32	"
	80.0		15.5	0.75	"

Well	S_{wi}	S_{oi}	por.	air perm.	commments
02-13-47-4 W5	43.0	31.0	16.3	24.0	
	48.0	31.0	13.9	11.0	
	51.0	30.0	16.3	4.7	
	43.0	30.0	16.2	31.0	
	42.0	29.0	13.5	8.8	
	85.0		13.9	0.31	C-P test
	88.0		14.1	0.14	"
	83.0		14.3	0.90	"
	28.0		16.9	56.0	"
	77.0		15.2	2.3	"
	70.0		16.5	3.6	"
	63.0		17.6	2.5	"
	58.0		17.8	10.9	"
	65.0		15.6	3.9	"
	53.0		15.9	6.1	"
08-12-48-3 W5	25.3		21.1	215.	"
	31.9		20.1	90.	"
	31.1		20.1	73.	"
	33.4		18.4	34.	"
	51.1		15.8	1.8	"
10-23-48-6 W5	38.0	26.0		79.	
10-15-48-6 W5	50.0	22.0		15.	
10-23-48-6 W5	52.0	15.0		5.3	
14-08-49-9 W5	30.0	42.0		1.41	
14-17-49-9 W5	32.0	28.0		256.	
	32.0	26.0		51.5	
14-34-47-2 W5	40.8	14.3	22.2	148.	
	46.8	13.8	19.6	60.	
	51.7	19.0	19.5	52.	
	55.4	19.4	18.2	23.	
	47.2	14.1	18.8	18.	
10-36-47-4 W5	39.0	17.9	21.0	379.	
	36.3	22.0	18.2	116.	
	45.3	24.8	18.0	68.	
	43.7	22.9	18.3	54.	
	46.0	23.5	18.0	27.	
	64.8	21.1	17.3	14.	
	56.7	19.7	15.0	5.8	
	55.5	24.7	16.0	2.6	

Well	S_{wi}	S_{oi}	por.	air perm.	commments
14-14-48-3 W5	52.8	21.3	19.0	92.	
	62.8	20.4	16.2	7.7	
Average	46.7	24.7	16.7	n/c	
Range	25.0 to 65.0	15.0 to 42.0	13.0 to 22.0	379. to 0.14	

Appendix 2

Sample Computer Output, Case One.

SS

```
**************************************************************************
                         S W A N F L O W - 2 D

      SIMULTANEOUS WATER, AIR, AND NAPL FLOW IN TWO DIMENSIONS

                              WRITTEN BY:

                           CHARLES R. FAUST
                          JAMES O. RUMBAUGH

                           GEOTRANS, INC.
                         250 EXCHANGE PLACE
                              SUITE A
                            HERNDON, VA

**************************************************************************

LENS 10:1  GRADIENT = 0.02  EPSILON = 1000 ----STEADY STATE----
        DATE ---- 02 FEB 1988                      RUN NO ---- 7_2

   NUMBER OF BLOCKS IN THE X-DIRECTION (COLUMNS) =    50
   NUMBER OF BLOCKS IN THE Z-DIRECTION (LAYERS)  =    30
   MAXIMUM OF NEWTON-RAPHSON ITERATIONS          =     5
   MAXIMUM BANDWIDTH                             =     0
   MAXIMUM NUMBER OF TIME STEPS                  =     0
   NUMBER OF ACTIVE GRID BLOCKS                  =  1740
   NUMBER OF TIME STEPS BETWEEN PRINTOUTS        =    50
   PRINT NAPL AND WATER POTENTIALS? (1=YES)      =     1
   PRINT DETAILED KR TABLES?        (1=YES)      =     0
   WRITE A PLOT FILE?               (1=YES)      =     1
   NUMBER OF OBSERVATION BLOCKS                  =     0
   WRITE A RESTART FILE?            (1=YES)      =     1


   GRID BLOCK THICKNESS (DY)                     =   1.0000
   MASS BALANCE TOLERANCE FOR NEWTON-RAPHSON IT. =   0.10000E-01
   INITIAL TIME VALUE                            =   0.00000E+00
   WATER DENSITY                                 =   1000.0
   NAPL DENSITY                                  =   1000.0
   WATER VISCOSITY                               =   0.10000E-02
   NAPL VISCOSITY                                =   0.20000E-02
   GRAVITATIONAL CONSTANT IN THE Z-DIRECTION     =  -9.8100
   GRAVITATIONAL CONSTANT IN THE X-DIRECTION     =   0.00000E+00
```

---

2 PC-KR TABLES WILL BE READ

********** TABLE NUMBER 1 **********

NAPL-WATER CAP. PRESSURE	WATER SATURATION	RELATIVE PERM. WATER	RELATIVE PERM. NAPL
240000.00000	-0.05000	0.00000	1.00000
240000.00000	0.00000	0.00000	1.00000
240000.00000	0.05000	0.00000	1.00000
240000.00000	0.10000	0.00000	1.00000
240000.00000	0.15000	0.00000	1.00000
240000.00000	0.20000	0.00000	1.00000
240000.00000	0.25000	0.00000	1.00000
240000.00000	0.30000	0.00000	1.00000
240000.00000	0.35000	0.00000	1.00000
150000.00000	0.40000	0.00000	1.00000
80000.00000	0.45000	0.00000	1.00000
45000.00000	0.50000	0.00500	0.50000
30000.00000	0.55000	0.01200	0.25800
21000.00000	0.60000	0.03900	0.12300
15000.00000	0.65000	0.08700	0.05500
13000.00000	0.70000	0.15200	0.02100
11000.00000	0.75000	0.22700	0.00400
9000.00000	0.80000	0.30000	0.00000
7000.00000	0.85000	0.37500	0.00000
6000.00000	0.90000	0.50000	0.00000
5500.00000	0.95000	0.65000	0.00000
5250.00000	1.00000	1.00000	0.00000
5000.00000	1.05000	1.00000	0.00000

AIR-NAPL SYSTEM -- PC-KR TABLE NUMBER 1
NAPL KR AT RESIDUAL WATER SATURATION : 0.68000

AIR-NAPL CAP. PRESSURE	AIR SATURATION	RELATIVE PERM. NAPL	RELATIVE PERM. AIR
-8100.00000	1.00000	0.60000	0.00000
0.00000	0.00000	0.00000	0.00000

********** TABLE NUMBER 2 **********

NAPL-WATER CAP. PRESSURE	WATER SATURATION	RELATIVE PERM. WATER	RELATIVE PERM. NAPL
480000.00000	-0.05000	0.00000	1.00000
480000.00000	0.00000	0.00000	1.00000
480000.00000	0.05000	0.00000	1.00000
480000.00000	0.10000	0.00000	1.00000
480000.00000	0.15000	0.00000	1.00000
480000.00000	0.20000	0.00000	1.00000
480000.00000	0.25000	0.00000	1.00000
480000.00000	0.30000	0.00000	1.00000
480000.00000	0.35000	0.00000	1.00000
480000.00000	0.40000	0.00000	1.00000
480000.00000	0.45000	0.00000	1.00000
480000.00000	0.50000	0.00500	0.50000
480000.00000	0.55000	0.01200	0.25800
380000.00000	0.60000	0.03900	0.12300
240000.00000	0.65000	0.08700	0.05500
140000.00000	0.70000	0.15200	0.02100
110000.00000	0.75000	0.22700	0.00400
87500.00000	0.80000	0.30000	0.00000
70000.00000	0.85000	0.37500	0.00000
55000.00000	0.90000	0.50000	0.00000
40000.00000	0.95000	0.65000	0.00000
30000.00000	1.00000	1.00000	0.00000

```
30000.00000          1.05000          1.00000          0.00000

AIR-NAPL SYSTEM -- PC-KR TABLE NUMBER   2
NAPL KR AT RESIDUAL WATER SATURATION :   0.85000

  AIR-NAPL CAP.        AIR         RELATIVE PERM.   RELATIVE PERM.
    PRESSURE        SATURATION         NAPL              AIR

 -8800.00000         1.00000          0.00000          0.00000
     0.00000         0.00000          0.00000          0.00000
--------------------------------------------------------------------------------

--------------------------------------------------------------------------------
                      2 PERMEABILITY SETS WILL BE READ
--------------------------------------------------------------------------------

SET NUMBER      KX            KZ

          1 0.10000E-12 0.10000E-12
          2 0.10000E-15 0.10000E-15
--------------------------------------------------------------------------------
                      2 POROSITY SETS WILL BE READ
--------------------------------------------------------------------------------

SET NUMBER     REF. POROSITY   COMPRESSIBILITY   REF. PRESSURE

     1         0.20000          0.10000E-06       0.10000E+06
     2         0.50000E-01      0.10000E-06       0.10000E+06
--------------------------------------------------------------------------------
                 GRID BLOCK SPACINGS IN THE X-DIRECTION
--------------------------------------------------------------------------------

  5.0000   10.000   50.000   50.000   50.000   50.000   50.000   50.000   50.000   50.000
  25.000   20.000   10.000   10.000   5.0000   5.0000   5.0000   5.0000   5.0000   5.0000
  5.0000   5.0000   5.0000   10.000   10.000   10.000   15.000   15.000   15.000   25.000
  25.000   15.000   15.000   15.000   10.000   10.000   10.600   5.0000   5.0000   5.0000
  5.0000   5.0000   5.0000   5.0000   5.0000   5.0000   10.000   10.000   20.000   25.000
  50.000   50.000   50.000   50.000   50.000   50.000   50.000   50.000   10.000   5.0000
--------------------------------------------------------------------------------
                 GRID BLOCK SPACINGS IN THE Z-DIRECTION
--------------------------------------------------------------------------------

  5.0000   25.000   25.000   25.000   25.000   12.500   5.0000   5.0000   5.0000   5.0000
  2.5000   2.5000   2.5000   2.5000   2.5000   2.5000   2.5000   2.5000   2.5000   2.5000
  5.0000   5.0000   5.0000   5.0000   12.500   25.000   25.000   25.000   25.000   5.0000
--------------------------------------------------------------------------------
                 THERE ARE    2 PROPERTY COMBINATION SETS
--------------------------------------------------------------------------------

   SET NUMBER     PC-KR TABLE    K CLASS    POROSITY CLASS

        1              1            1            1
        2              2            2            2

--------------------------------------------------------------------------------
                         GRID BLOCK NUMBERS
--------------------------------------------------------------------------------

                   X-DIRECTION   ---->

LAYER  1   -1 1 31 61 91 121 151 181 211 241 271 301 331 361 391 421 451 481 511 541 571 601 631 661 691
           721 751 781 811 841 871 901 931 961 991 1021 1051 1081 1111 1141 1171 1201 1231 1261 1291 1321 1351 1381 1411 1441
           1471 1501 1531 1561 1591 1621 1651 1681 1711 -1
LAYER  2   -1 2 32 62 92 122 152 182 212 242 272 302 332 362 392 422 452 482 512 542 572 602 632 662 692
           722 752 782 812 842 872 902 932 962 992 1022 1052 1082 1112 1142 1172 1202 1232 1262 1292 1322 1352 1382 1412 1442
           1472 1502 1532 1562 1592 1622 1652 1682 1712 -1
LAYER  3   -1 3 33 63 93 123 153 183 213 243 273 303 333 363 393 423 453 483 513 543 573 603 633 663 693
           723 753 783 813 843 873 903 933 963 993 1023 1053 1083 1113 1143 1173 1203 1233 1263 1293 1323 1353 1383 1413 1443
           1473 1503 1533 1563 1593 1623 1653 1683 1713 -1
LAYER  4   -1 4 34 64 94 124 154 184 214 244 274 304 334 364 394 424 454 484 514 544 574 604 634 664 694
           724 754 784 814 844 874 904 934 964 994 1024 1054 1084 1114 1144 1174 1204 1234 1264 1294 1324 1354 1384 1414 1444
           1474 1504 1534 1564 1594 1624 1654 1684 1714 -1
LAYER  5   -1 5 35 65 95 125 155 185 215 245 275 305 335 365 395 425 455 485 515 545 575 605 635 665 695
           725 755 785 815 845 875 905 935 965 995 1025 1055 1085 1115 1145 1175 1205 1235 1265 1295 1325 1355 1385 1415 1445
           1475 1505 1535 1565 1595 1625 1655 1685 1715 -1
LAYER  6   -1 6 36 66 96 126 156 186 216 246 276 306 336 366 396 426 456 486 516 546 576 606 636 666 696
           726 756 786 816 846 876 906 936 966 996 1026 1056 1086 1116 1146 1176 1206 1236 1266 1296 1326 1356 1386 1416 1446
           1476 1506 1536 1566 1596 1626 1656 1686 1716 -1
LAYER  7   -1 7 37 67 97 127 157 187 217 247 277 307 337 367 397 427 457 487 517 547 577 607 637 667 697
           727 757 787 817 847 877 907 937 967 997 1027 1057 1087 1117 1147 1177 1207 1237 1267 1297 1327 1357 1387 1417 1447
           1477 1507 1537 1567 1597 1627 1657 1687 1717 -1
LAYER  8   -1 8 38 68 98 128 158 188 218 248 278 308 338 368 398 428 458 488 518 548 578 608 638 668 698
           728 758 788 818 848 878 908 938 968 998 1028 1058 1088 1118 1148 1178 1208 1238 1268 1298 1328 1358 1388 1418 1448
           1478 1508 1538 1568 1598 1628 1658 1688 1718 -1
LAYER  9   -1 9 39 69 99 129 159 189 219 249 279 309 339 369 399 429 459 489 519 549 579 609 639 669 699
           729 759 789 819 849 879 909 939 969 999 1029 1059 1089 1119 1149 1179 1209 1239 1269 1299 1329 1359 1389 1419 1449
           1479 1509 1539 1569 1599 1629 1659 1689 1719 -1
LAYER 10   -1 10 40 70 100 130 160 190 220 250 280 310 340 370 400 430 460 490 520 550 580 610 640 670 700
           730 760 790 820 850 880 910 940 970 1000 1030 1060 1090 1120 1150 1180 1210 1240 1270 1300 1330 1360 1390 1420 1450
           1480 1510 1540 1570 1600 1630 1660 1690 1720 -1
LAYER 11   -1 11 41 71 101 131 161 191 221 251 281 311 341 371 401 431 461 491 521 551 581 611 641 671 701
           731 761 791 821 851 881 911 941 971 1001 1031 1061 1091 1121 1151 1181 1211 1241 1271 1301 1331 1361 1391 1421 1451
           1481 1511 1541 1571 1601 1631 1661 1691 1721 -1
LAYER 12   -1 12 42 72 102 132 162 192 222 252 282 312 342 372 402 432 462 492 522 552 582 612 642 672 702
           732 762 792 822 852 882 912 942 972 1002 1032 1062 1092 1122 1152 1182 1212 1242 1272 1302 1332 1362 1392 1422 1452
           1482 1512 1542 1572 1602 1632 1662 1692 1722 -1
LAYER 13   -1 13 43 73 103 133 163 193 223 253 283 313 343 373 403 433 463 493 523 553 583 613 643 673 703
           733 763 793 823 853 883 913 943 973 1003 1033 1063 1093 1123 1153 1183 1213 1243 1273 1303 1333 1363 1393 1423 1453
           1483 1513 1543 1573 1603 1633 1663 1693 1723 -1
LAYER 14   -1 14 44 74 104 134 164 194 224 254 284 314 344 374 404 434 464 494 524 554 584 614 644 674 704
           734 764 794 824 854 884 914 944 974 1004 1034 1064 1094 1124 1154 1184 1214 1244 1274 1304 1334 1364 1394 1424 1454
           1484 1514 1544 1574 1604 1634 1664 1694 1724 -1
LAYER 15   -1 15 45 75 105 135 165 195 225 255 285 315 345 375 405 435 465 495 525 555 585 615 645 675 705
           735 765 795 825 855 885 915 945 975 1005 1035 1065 1095 1125 1155 1185 1215 1245 1275 1305 1335 1365 1395 1425 1455
           1485 1515 1545 1575 1605 1635 1665 1695 1725 -1
LAYER 16   -1 16 46 76 106 136 166 196 226 256 286 316 346 376 406 436 466 496 526 556 586 616 646 676 706
           736 766 796 826 856 886 916 946 976 1006 1036 1066 1096 1126 1156 1186 1216 1246 1276 1306 1336 1366 1396 1426 1456
           1486 1516 1546 1576 1606 1636 1666 1696 1726 -1
LAYER 17   -1 17 47 77 107 137 167 197 227 257 287 317 347 377 407 437 467 497 527 557 587 617 647 677 707
           737 767 797 827 857 887 917 947 977 1007 1037 1067 1097 1127 1157 1187 1217 1247 1277 1307 1337 1367 1397 1427 1457
           1487 1517 1547 1577 1607 1637 1667 1697 1727 -1
LAYER 18   -1 18 48 78 108 138 168 198 228 258 288 318 348 378 408 438 468 498 528 558 588 618 648 678 708
           738 768 798 828 858 888 918 948 978 1008 1038 1068 1098 1128 1158 1188 1218 1248 1278 1308 1338 1368 1398 1428 1458
           1488 1518 1548 1578 1608 1638 1668 1698 1728 -1
LAYER 19   -1 19 49 79 109 139 169 199 229 259 289 319 349 379 409 439 469 499 529 559 589 619 649 679 709
           739 769 799 829 859 889 919 949 979 1009 1039 1069 1099 1129 1159 1189 1219 1249 1279 1309 1339 1369 1399 1429 1459
           1489 1519 1549 1579 1609 1639 1669 1699 1729 -1
```

```
LAYER  20   -1  20  50  80 110 140 170 200 230 260 290 320 350 380 410 440 470 500 530 560 590 620 650 680 710
            740 770 800 830 860 890 920 950 9801010104010701100113011601190122012501280131013401370140014301460
            149015201550158016101640167017001730   -1
LAYER  21   -1  21  51  81 111 141 171 201 231 261 291 321 351 381 411 441 471 501 531 561 591 621 651 681 711
            741 771 801 831 861 891 921 951 9811011104110711101113111611191122112511281131113411371140114311461
            149115211551158116111641167117011731   -1
LAYER  22   -1  22  52  82 112 142 172 202 232 262 292 322 352 382 412 442 472 502 532 562 592 622 652 682 712
            742 772 802 832 862 892 922 952 9821012104210721102113211621192122212521282131213421372140214321462
            149215221552158216121642167217021732   -1
LAYER  23   -1  23  53  83 113 143 173 203 233 263 293 323 353 383 413 443 473 503 533 563 593 623 653 683 713
            743 773 803 833 863 893 923 953 9831013104310731103113311631193122312531283131313431373140314331463
            149315231553158316131643167317031733   -1
LAYER  24   -1  24  54  84 114 144 174 204 234 264 294 324 354 384 414 444 474 504 534 564 594 624 654 684 714
            744 774 804 834 864 894 924 954 9841014104410741104113411641194122412541284131413441374140414341464
            149415241554158416141644167417041734   -1
LAYER  25   -1  25  55  85 115 145 175 205 235 265 295 325 355 385 415 445 475 505 535 565 595 625 655 685 715
            745 775 805 835 865 895 925 955 9851015104510751105113511651195122512551285131513451375140514351465
            149515251555158516151645167517051735   -1
LAYER  26   -1  26  56  86 116 146 176 206 236 266 296 326 356 386 416 446 476 506 536 566 596 626 656 686 716
            746 776 806 836 866 896 926 956 9861016104610761106113611661196122612561286131613461376140614361466
            149615261556158616161646167617061736   -1
LAYER  27   -1  27  57  87 117 147 177 207 237 267 297 327 357 387 417 447 477 507 537 567 597 627 657 687 717
            747 777 807 837 867 897 927 957 9871017104710771107113711671197122712571287131713471377140714371467
            149715271557158716171647167717071737   -1
LAYER  28   -1  28  58  88 118 148 178 208 238 268 298 328 358 388 418 448 478 508 538 568 598 628 658 688 718
            748 778 808 838 868 898 928 958 9881018104810781108113811681198122812581288131813481378140814381468
            149815281558158816181648167817081738   -1
LAYER  29   -1  29  59  89 119 149 179 209 239 269 299 329 359 389 419 449 479 509 539 569 599 629 659 689 719
            749 779 809 839 869 899 929 959 9891019104910791109113911691199122912591289131913491379140914391469
            149915291559158916191649167917091739   -1
LAYER  30   -1  30  60  90 120 150 180 210 240 270 300 330 360 390 420 450 480 510 540 570 600 630 660 690 720
            750 780 810 840 870 900 930 960 9901020105010801110114011701200123012601290132013501380141014401470
            150015301560159016201650168017101740   -1
```

PROPERTY CLASS NUMBERS

X-DIRECTION -- I INDEX

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60															
LAYER 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	1	1	1	1	1	1	2	2															
LAYER 12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	1	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	1	1	1	1	1	1	1	1	1	1															
LAYER 20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	1	1	1	1	1	1	2	2															
LAYER 21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 26	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 27	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

```
                                                                     2  2  2  2  2  2  2  2  2  2  2  2  2  2  2
                          2  2  2  2  2  2  2  2  2  2
LAYER  29                 2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2
                          2  2  2  2  2  2  2  2  2  2
                          2  2  2  2  2  2  2  2  2  2
LAYER  30                 2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2  2
                          2  2  2  2  2  2  2  2  2  2
                          2  2  2  2  2  2  2  2  2  2
```

========== CALCULATED MAXIMUM BANDWIDTH = 123 ==========

INITIAL CONDITION DATA

INITIAL NAPL PRESSURES

LAYER 1		0.58234E+07	0.58332E+07	0.58430E+07	0.58528E+07	0.58626E+07	0.58724E+07	0.58822E+07	0.58920E+07
0.59180E+07	0.59175E+07	0.59234E+07	0.60087E+07	0.60102E+07	0.60112E+07	0.60121E+07	0.60131E+07	0.60141E+07	0.60151E+07
0.59994E+07	0.60038E+07	0.60087E+07	0.60180E+07	0.60215E+07	0.60234E+07	0.60258E+07	0.60268E+07	0.60318E+07	0.60357E+07
0.60181E+07	0.60170E+07	0.60180E+07	0.60475E+07	0.60504E+07	0.60528E+07	0.60548E+07	0.60588E+07	0.60582E+07	0.60602E+07
0.60406E+07	0.60445E+07	0.60475E+07	0.60504E+07	0.60528E+07	0.60548E+07	0.60568E+07	0.60582E+07	0.60725E+07	0.60738E+07
0.60812E+07	0.60822E+07	0.60831E+07	0.60841E+07	0.60851E+07	0.60861E+07	0.60576E+07	0.61528E+07	0.61568E+07	0.61613E+07
0.60843E+07	0.60841E+07	0.61039E+07	0.61137E+07	0.61235E+07	0.61333E+07	0.61431E+07	0.61529E+07	0.61568E+07	0.61613E+07
LAYER 2				0.60901E+07	0.60998E+07	0.61097E+07	0.61195E+07	0.61294E+07	0.61392E+07
0.60822E+07	0.60848E+07	0.60705E+07	0.60803E+07	0.60901E+07	0.61583E+07	0.61593E+07	0.61603E+07	0.61613E+07	0.61622E+07
0.61455E+07	0.61510E+07	0.61539E+07	0.61558E+07	0.61573E+07	0.61708E+07	0.61730E+07	0.61760E+07	0.61785E+07	0.61828E+07
0.61832E+07	0.61842E+07	0.61852E+07	0.61865E+07	0.61885E+07	0.62020E+07	0.62039E+07	0.62054E+07	0.62064E+07	0.62074E+07
0.61877E+07	0.61917E+07	0.61946E+07	0.61975E+07	0.62113E+07	0.62123E+07	0.62132E+07	0.62147E+07	0.62167E+07	0.62240E+07
0.62083E+07	0.62093E+07	0.62103E+07	0.62113E+07	0.62705E+07	0.62804E+07	0.62803E+07	0.63001E+07	0.63058E+07	0.63084E+07
0.62314E+07	0.62412E+07	0.62510E+07	0.62608E+07						
LAYER 3						0.63550E+07	0.63648E+07	0.63746E+07	0.63844E+07
0.63084E+07	0.63088E+07	0.63158E+07	0.63256E+07	0.63354E+07	0.63452E+07	0.64045E+07	0.64055E+07	0.64065E+07	0.64075E+07
0.63518E+07	0.63862E+07	0.63851E+07	0.64011E+07	0.64028E+07	0.64038E+07	0.64163E+07	0.64212E+07	0.64242E+07	0.64281E+07
0.64085E+07	0.64094E+07	0.64104E+07	0.64118E+07	0.64138E+07	0.64158E+07	0.64482E+07	0.64508E+07	0.64518E+07	0.64528E+07
0.64330E+07	0.64368E+07	0.64399E+07	0.64428E+07	0.64453E+07	0.64472E+07	0.64800E+07	0.64818E+07	0.64848E+07	0.64883E+07
0.64538E+07	0.64546E+07	0.64558E+07	0.64565E+07	0.64575E+07	0.65257E+07	0.65355E+07	0.65453E+07	0.65512E+07	0.65527E+07
0.64788E+07	0.64885E+07	0.64983E+07	0.65081E+07	0.65159E+07					
LAYER 4					0.65904E+07	0.66002E+07	0.66101E+07	0.66199E+07	0.66287E+07
0.65537E+07	0.65551E+07	0.65610E+07	0.65708E+07	0.65806E+07	0.66488E+07	0.66498E+07	0.66508E+07	0.66518E+07	0.66527E+07
0.66370E+07	0.66415E+07	0.66444E+07	0.66464E+07	0.66478E+07	0.66611E+07	0.66635E+07	0.66665E+07	0.66694E+07	0.66733E+07
0.66537E+07	0.66547E+07	0.66557E+07	0.66571E+07	0.66591E+07	0.66925E+07	0.66944E+07	0.66959E+07	0.66969E+07	0.66979E+07
0.66782E+07	0.66822E+07	0.66851E+07	0.66880E+07	0.66905E+07	0.67027E+07	0.67052E+07	0.67072E+07	0.67101E+07	0.67145E+07
0.66988E+07	0.66998E+07	0.67008E+07	0.67018E+07	0.67028E+07	0.67706E+07	0.67808E+07	0.67908E+07	0.67854E+07	0.67889E+07
0.67218E+07	0.67317E+07	0.67415E+07	0.67513E+07	0.67611E+07					
LAYER 5				0.68258E+07	0.68357E+07	0.68455E+07	0.68553E+07	0.68651E+07	0.68749E+07
0.67881E+07	0.68004E+07	0.68023E+07	0.68181E+07	0.68831E+07	0.68841E+07	0.68850E+07	0.68860E+07	0.68870E+07	0.68880E+07
0.68823E+07	0.68167E+07	0.68886E+07	0.68018E+07	0.69044E+07	0.69083E+07	0.69088E+07	0.69117E+07	0.69147E+07	0.69186E+07
0.68990E+07	0.68998E+07	0.69008E+07	0.69024E+07	0.69333E+07	0.69357E+07	0.69377E+07	0.69397E+07	0.69411E+07	0.69421E+07
0.69236E+07	0.69274E+07	0.69304E+07	0.69470E+07	0.69480E+07	0.69490E+07	0.69505E+07	0.69524E+07	0.69554E+07	0.69588E+07
0.69441E+07	0.69451E+07	0.69460E+07	0.69958E+07	0.70054E+07	0.70152E+07	0.70250E+07	0.70358E+07	0.70417E+07	0.70442E+07
0.68871E+07	0.68770E+07	0.69868E+07							
LAYER 6					0.70198E+07	0.70294E+07	0.70392E+07	0.70491E+07	0.70589E+07
0.69628E+07	0.69843E+07	0.69902E+07	0.70000E+07	0.70098E+07	0.70780E+07	0.70780E+07	0.70800E+07	0.70808E+07	0.70818E+07
0.70882E+07	0.70706E+07	0.70735E+07	0.70755E+07	0.70770E+07	0.70903E+07	0.70927E+07	0.70957E+07	0.70986E+07	0.71025E+07
0.70829E+07	0.70839E+07	0.70849E+07	0.70863E+07	0.70883E+07	0.71216E+07	0.71236E+07	0.71251E+07	0.71261E+07	0.71270E+07
0.71074E+07	0.71113E+07	0.71143E+07	0.71172E+07	0.71197E+07	0.71328E+07	0.71344E+07	0.71364E+07	0.71393E+07	0.71437E+07
0.71280E+07	0.71290E+07	0.71300E+07	0.71310E+07	0.71318E+07	0.72001E+07	0.72099E+07	0.72197E+07	0.72256E+07	0.72281E+07
0.71511E+07	0.71609E+07	0.71707E+07	0.71805E+07	0.71903E+07					
LAYER 7					0.71055E+07	0.71153E+07	0.71251E+07	0.71349E+07	0.71467E+07
0.70867E+07	0.70701E+07	0.70760E+07	0.70858E+07	0.70957E+07	0.71638E+07	0.71648E+07	0.71658E+07	0.71668E+07	0.71678E+07
0.71521E+07	0.71558E+07	0.71594E+07	0.71614E+07	0.71629E+07	0.71761E+07	0.71785E+07	0.71815E+07	0.71844E+07	0.71884E+07
0.71687E+07	0.71697E+07	0.71707E+07	0.71722E+07	0.71741E+07	0.72075E+07	0.72094E+07	0.72109E+07	0.72119E+07	0.72128E+07
0.71933E+07	0.71972E+07	0.72001E+07	0.72031E+07	0.72055E+07	[illegible]	0.72202E+07	0.72222E+07	0.72251E+07	0.72295E+07
0.72130E+07	0.72148E+07	0.72158E+07	0.72168E+07	0.72178E+07	0.72860E+07	0.72958E+07	0.73056E+07	0.73115E+07	0.73139E+07
0.72369E+07	0.72467E+07	0.72565E+07	0.72663E+07	0.72762E+07					
LAYER 8				0.71447E+07	0.71545E+07	0.71643E+07	0.71741E+07	0.71839E+07	0.71938E+07
0.71177E+07	0.71102E+07	0.71251E+07	0.71249E+07	0.72111E+07	0.72121E+07	0.72131E+07	0.72148E+07	0.72150E+07	0.72160E+07
0.72011E+07	0.72055E+07	0.72085E+07	0.72104E+07	0.72212E+07	0.72251E+07	0.72276E+07	0.72305E+07	0.72335E+07	0.72374E+07
0.72176E+07	0.72186E+07	0.72197E+07	0.72212E+07	0.72232E+07	0.72565E+07	0.72585E+07	0.72600E+07	0.72610E+07	0.72619E+07
0.72423E+07	0.72462E+07	0.72492E+07	0.72521E+07	0.72545E+07	0.72671E+07	0.72693E+07	0.72713E+07	0.72742E+07	0.72785E+07
0.72629E+07	0.72639E+07	0.72648E+07	0.72658E+07	0.72668E+07	0.73350E+07	0.73448E+07	0.73546E+07	0.73605E+07	0.73630E+07
0.72860E+07	0.72958E+07	0.73056E+07	0.73154E+07	0.73252E+07					
LAYER 9				0.71838E+07	0.72036E+07	0.72134E+07	0.72232E+07	0.72330E+07	0.72428E+07
0.71668E+07	0.71652E+07	[illegible]	0.71838E+07	0.72601E+07	0.72612E+07	0.72622E+07	0.72638E+07	0.72648E+07	0.72658E+07
0.72502E+07	0.72546E+07	[illegible]	0.72595E+07	0.72610E+07	0.72742E+07	0.72766E+07	0.72796E+07	0.72825E+07	0.72865E+07
0.72668E+07	0.72678E+07	[illegible]	0.72703E+07	0.72723E+07	0.73056E+07	0.73075E+07	0.73090E+07	0.73100E+07	0.73110E+07
0.72914E+07	0.72953E+07	[illegible]	0.73012E+07	0.73036E+07	0.73168E+07	0.73183E+07	0.73203E+07	0.73232E+07	0.73277E+07
0.73120E+07	0.73129E+07	[illegible]	0.73149E+07	0.73159E+07	0.73841E+07	0.73939E+07	0.74037E+07	0.74096E+07	0.74120E+07
0.73350E+07	0.73448E+07	0.73546E+07	0.73645E+07	0.73743E+07					
LAYER 10				0.72328E+07	0.72426E+07	0.72526E+07	0.72624E+07	0.72722E+07	0.72820E+07	0.72918E+07
[illegible]	0.72173E+07	0.72232E+07	0.72330E+07	0.73092E+07	0.73102E+07	0.73112E+07	0.73128E+07	0.73138E+07	0.73148E+07
0.72992E+07	0.73036E+07	0.73066E+07	0.73085E+07	0.73100E+07	0.73232E+07	0.73257E+07	0.73286E+07	0.73316E+07	0.73355E+07
0.73158E+07	0.73168E+07	0.73178E+07	0.73193E+07	0.73213E+07	0.73546E+07	0.73566E+07	0.73581E+07	0.73591E+07	0.73600E+07
[illegible]	0.73443E+07	0.73473E+07	0.73502E+07	0.73527E+07	0.73658E+07	0.73674E+07	0.73694E+07	0.73723E+07	0.73767E+07
[illegible]	0.73620E+07	0.73630E+07	0.73640E+07	0.73649E+07	0.74331E+07	0.74429E+07	0.74527E+07	0.74586E+07	0.74611E+07
0.73841E+07	0.73939E+07	0.74037E+07	0.74135E+07	0.74233E+07					
LAYER 11				0.72706E+07	0.72804E+07	0.72903E+07	0.73090E+07	0.73188E+07	0.73288E+07
0.72528E+07	0.72541E+07	0.72600E+07	0.72698E+07	0.73460E+07	0.73470E+07	0.73480E+07	0.73497E+07	0.73507E+07	0.73517E+07
0.73361E+07	0.73404E+07	0.73434E+07	0.73453E+07	0.73468E+07	0.73601E+07	0.73625E+07	0.73655E+07	0.73684E+07	0.73723E+07
0.73527E+07	0.73537E+07	0.73546E+07	0.73561E+07	0.73581E+07	0.73914E+07	0.73934E+07	0.73949E+07	0.73959E+07	0.73968E+07
0.73772E+07	0.73811E+07	0.73841E+07	0.73870E+07	0.73895E+07	0.74027E+07	0.74042E+07	0.74062E+07	0.74091E+07	0.74135E+07
0.73978E+07	0.73988E+07	0.73998E+07	0.74007E+07	0.74017E+07	0.74699E+07	0.74797E+07	0.74895E+07	0.74954E+07	0.74979E+07
0.74209E+07	0.74307E+07	0.74405E+07	0.74503E+07	0.74601E+07					
LAYER 12				0.73041E+07	0.73139E+07	0.73237E+07	0.73335E+07	0.73434E+07	0.73532E+07
0.72771E+07	0.72765E+07	0.72844E+07	0.72843E+07	0.73703E+07	0.73723E+07	0.73733E+07	0.73743E+07	0.73752E+07	0.73762E+07
0.73605E+07	0.73649E+07	0.73679E+07	0.73698E+07	0.73713E+07	0.73845E+07	0.73870E+07	0.73900E+07	0.73929E+07	0.73968E+07
0.73772E+07	0.73782E+07	0.73791E+07	0.73806E+07	0.73826E+07	0.74159E+07	0.74178E+07	0.74194E+07	0.74204E+07	0.74213E+07
0.74017E+07	0.74056E+07	0.74085E+07	0.74115E+07	0.74140E+07	0.74272E+07	0.74287E+07	0.74307E+07	0.74336E+07	0.74380E+07
0.74223E+07	0.74233E+07	0.74243E+07	0.74252E+07	0.74262E+07	0.74944E+07	0.75042E+07	0.75140E+07	0.75199E+07	0.75224E+07
0.74454E+07	0.74552E+07	0.74650E+07	0.74748E+07	0.74846E+07					
LAYER 13				0.73285E+07	0.73383E+07	0.73482E+07	0.73581E+07	0.73678E+07	0.73777E+07
0.73017E+07	0.73031E+07	0.73090E+07	0.73188E+07	0.73945E+07	0.73958E+07	0.73968E+07	0.73988E+07	0.73998E+07	0.74007E+07
0.73850E+07	0.73898E+07	0.73924E+07	0.73943E+07	0.73958E+07	0.74091E+07	0.74115E+07	0.74145E+07	0.74174E+07	0.74213E+07
0.74017E+07	0.74027E+07	0.74037E+07	0.74052E+07	0.74071E+07	0.74405E+07	0.74424E+07	0.74439E+07	0.74449E+07	0.74458E+07
0.74262E+07	0.74302E+07	0.74331E+07	0.74361E+07	0.74385E+07	0.74516E+07	0.74532E+07	0.74552E+07	0.74581E+07	0.74625E+07
0.74468E+07	0.74478E+07	0.74488E+07	0.74498E+07	0.74508E+07	0.75189E+07	0.75288E+07	0.75386E+07	0.75445E+07	0.75469E+07
0.74699E+07	0.74797E+07	0.74895E+07	0.74993E+07	0.75091E+07					
LAYER 14				0.73432E+07	0.73530E+07	0.73628E+07	0.73726E+07	0.73824E+07	0.74022E+07
0.73262E+07	0.73277E+07	0.73335E+07	0.73434E+07	0.74206E+07	0.74213E+07	0.74223E+07	0.74233E+07	0.74243E+07	0.74252E+07
0.74095E+07	0.74140E+07	0.74168E+07	0.74188E+07	0.74203E+07	0.74336E+07	0.74360E+07	0.74390E+07	0.74419E+07	0.74458E+07
0.74262E+07	0.74272E+07	0.74282E+07	0.74297E+07	0.74316E+07	0.74649E+07	0.74670E+07	0.74684E+07	0.74694E+07	0.74704E+07
0.74508E+07	0.74547E+07	0.74576E+07	0.74606E+07	0.74630E+07	0.74762E+07	0.74778E+07	0.74797E+07	0.74827E+07	0.74871E+07
0.74714E+07	0.74724E+07	0.74733E+07	0.74743E+07	0.74753E+07	0.75435E+07	0.75533E+07	0.75631E+07	0.75690E+07	0.75714E+07
0.74944E+07	0.75042E+07	0.75140E+07	0.75238E+07	0.75337E+07					
LAYER 15				0.73777E+07	0.73875E+07	0.73973E+07	0.74071E+07	0.74169E+07	0.74267E+07
0.73507E+07	0.73521E+07	0.73581E+07	0.73679E+07	0.74443E+07	0.74458E+07	0.74468E+07	0.74478E+07	0.74488E+07	0.74498E+07
0.74341E+07	0.74385E+07	0.74415E+07	0.74434E+07	0.74449E+07	0.74581E+07	0.74605E+07	0.74635E+07	0.74665E+07	0.74704E+07
0.74508E+07	0.74518E+07	0.74527E+07	0.74542E+07	0.74561E+07	0.74895E+07	0.74915E+07	0.74930E+07	0.74939E+07	0.74949E+07
0.74753E+07	0.74792E+07	0.74821E+07	0.74851E+07	0.74876E+07	0.75008E+07	0.75023E+07	0.75042E+07	0.75072E+07	0.75116E+07
0.74959E+07	0.74969E+07	0.74978E+07	0.74988E+07	0.74998E+07	0.75680E+07	0.75778E+07	0.75876E+07	0.75935E+07	0.75960E+07
0.75190E+07	0.75288E+07	0.75386E+07	0.75484E+07	0.75582E+07					

```
LAYER 16
0.73752E+07 0.73757E+07 0.73828E+07 0.73924E+07 0.74022E+07 0.74120E+07 0.74218E+07 0.74318E+07 0.74415E+07 0.74513E+07
0.74555E+07 0.74630E+07 0.74650E+07 0.74678E+07 0.74684E+07 0.74704E+07 0.74714E+07 0.74724E+07 0.74733E+07 0.74743E+07
0.74753E+07 0.74763E+07 0.74773E+07 0.74787E+07 0.74807E+07 0.74827E+07 0.74851E+07 0.74881E+07 0.74910E+07 0.74948E+07
0.74988E+07 0.75037E+07 0.75087E+07 0.75098E+07 0.75121E+07 0.75140E+07 0.75150E+07 0.75175E+07 0.75185E+07 0.75194E+07
0.75204E+07 0.75214E+07 0.75224E+07 0.75234E+07 0.75243E+07 0.75253E+07 0.75268E+07 0.75288E+07 0.75317E+07 0.75361E+07
0.75435E+07 0.75533E+07 0.75631E+07 0.75728E+07 0.75827E+07 0.75925E+07 0.76023E+07 0.76121E+07 0.76180E+07 0.76205E+07
LAYER 17
0.73888E+07 0.74012E+07 0.74071E+07 0.74158E+07 0.74257E+07 0.74356E+07 0.74454E+07 0.74562E+07 0.74650E+07 0.74758E+07
0.74831E+07 0.74878E+07 0.74905E+07 0.74925E+07 0.74939E+07 0.74948E+07 0.74958E+07 0.74968E+07 0.74978E+07 0.74988E+07
0.74998E+07 0.75008E+07 0.75018E+07 0.75033E+07 0.75052E+07 0.75072E+07 0.75085E+07 0.75125E+07 0.75155E+07 0.75194E+07
0.75243E+07 0.75283E+07 0.75312E+07 0.75342E+07 0.75358E+07 0.75385E+07 0.75405E+07 0.75420E+07 0.75430E+07 0.75440E+07
0.75450E+07 0.75459E+07 0.75469E+07 0.75479E+07 0.75488E+07 0.75498E+07 0.75513E+07 0.75533E+07 0.75552E+07 0.75605E+07
0.75680E+07 0.75778E+07 0.75875E+07 0.75974E+07 0.76072E+07 0.76171E+07 0.76268E+07 0.76367E+07 0.76425E+07 0.76460E+07
LAYER 18
0.74243E+07 0.74284E+07 0.74316E+07 0.74415E+07 0.74513E+07 0.74611E+07 0.74708E+07 0.74807E+07 0.74905E+07 0.75003E+07
0.75077E+07 0.75121E+07 0.75150E+07 0.75170E+07 0.75185E+07 0.75194E+07 0.75204E+07 0.75214E+07 0.75224E+07 0.75234E+07
0.75243E+07 0.75253E+07 0.75263E+07 0.75278E+07 0.75287E+07 0.75317E+07 0.75343E+07 0.75371E+07 0.75400E+07 0.75440E+07
0.75482E+07 0.75526E+07 0.75557E+07 0.75587E+07 0.75611E+07 0.75631E+07 0.75651E+07 0.75665E+07 0.75675E+07 0.75685E+07
0.75695E+07 0.75705E+07 0.75714E+07 0.75724E+07 0.75734E+07 0.75744E+07 0.75759E+07 0.75778E+07 0.75808E+07 0.75852E+07
0.75925E+07 0.76023E+07 0.76121E+07 0.76220E+07 0.76318E+07 0.76416E+07 0.76514E+07 0.76612E+07 0.76711E+07 0.76808E+07
LAYER 19
0.74488E+07 0.74503E+07 0.74582E+07 0.74680E+07 0.74758E+07 0.74858E+07 0.74954E+07 0.75052E+07 0.75150E+07 0.75248E+07
0.75322E+07 0.75385E+07 0.75395E+07 0.75415E+07 0.75423E+07 0.75430E+07 0.75440E+07 0.75450E+07 0.75459E+07 0.75470E+07
0.75485E+07 0.75491E+07 0.75504E+07 0.75523E+07 0.75543E+07 0.75562E+07 0.75587E+07 0.75616E+07 0.75645E+07 0.75665E+07
0.75734E+07 0.75773E+07 0.75803E+07 0.75832E+07 0.75857E+07 0.75876E+07 0.75895E+07 0.75911E+07 0.75920E+07 0.75930E+07
0.75940E+07 0.75950E+07 0.75960E+07 0.75969E+07 0.75978E+07 0.75988E+07 0.76004E+07 0.76022E+07 0.76053E+07 0.76087E+07
0.76171E+07 0.76269E+07 0.76367E+07 0.76465E+07 0.76563E+07 0.76661E+07 0.76759E+07 0.76857E+07 0.76916E+07 0.76941E+07
LAYER 20
0.74733E+07 0.74748E+07 0.74807E+07 0.74905E+07 0.75003E+07 0.75101E+07 0.75199E+07 0.75297E+07 0.75395E+07 0.75494E+07
0.75587E+07 0.75611E+07 0.75641E+07 0.75660E+07 0.75675E+07 0.75685E+07 0.75695E+07 0.75705E+07 0.75714E+07 0.75724E+07
0.75734E+07 0.75744E+07 0.75754E+07 0.75768E+07 0.75788E+07 0.75808E+07 0.75832E+07 0.75862E+07 0.75891E+07 0.75930E+07
0.75978E+07 0.76018E+07 0.76045E+07 0.76077E+07 0.76102E+07 0.76121E+07 0.76141E+07 0.76156E+07 0.76166E+07 0.76175E+07
0.76185E+07 0.76195E+07 0.76205E+07 0.76215E+07 0.76224E+07 0.76234E+07 0.76248E+07 0.76268E+07 0.76298E+07 0.76342E+07
0.76416E+07 0.76514E+07 0.76612E+07 0.76710E+07 0.76808E+07 0.76906E+07 0.77004E+07 0.77102E+07 0.77161E+07 0.77166E+07
LAYER 21
0.75101E+07 0.75115E+07 0.75175E+07 0.75273E+07 0.75371E+07 0.75469E+07 0.75567E+07 0.75665E+07 0.75763E+07 0.75858E+07
0.75935E+07 0.75976E+07 0.76006E+07 0.76028E+07 0.76043E+07 0.76053E+07 0.76063E+07 0.76072E+07 0.76082E+07 0.76092E+07
0.76102E+07 0.76112E+07 0.76121E+07 0.76136E+07 0.76156E+07 0.76175E+07 0.76200E+07 0.76239E+07 0.76259E+07 0.76298E+07
0.76347E+07 0.76385E+07 0.76416E+07 0.76445E+07 0.76470E+07 0.76488E+07 0.76508E+07 0.76524E+07 0.76534E+07 0.76543E+07
0.76553E+07 0.76563E+07 0.76573E+07 0.76583E+07 0.76592E+07 0.76602E+07 0.76617E+07 0.76637E+07 0.76666E+07 0.76710E+07
0.76784E+07 0.76882E+07 0.76980E+07 0.77078E+07 0.77175E+07 0.77274E+07 0.77372E+07 0.77470E+07 0.77529E+07 0.77564E+07
LAYER 22
0.75592E+07 0.75608E+07 0.75665E+07 0.75763E+07 0.75862E+07 0.75960E+07 0.76058E+07 0.76156E+07 0.76254E+07 0.76353E+07
0.76425E+07 0.76470E+07 0.76499E+07 0.76519E+07 0.76534E+07 0.76543E+07 0.76553E+07 0.76563E+07 0.76573E+07 0.76583E+07
0.76592E+07 0.76602E+07 0.76612E+07 0.76627E+07 0.76646E+07 0.76666E+07 0.76690E+07 0.76720E+07 0.76749E+07 0.76789E+07
0.76838E+07 0.76877E+07 0.76906E+07 0.76936E+07 0.76960E+07 0.76980E+07 0.76999E+07 0.77014E+07 0.77024E+07 0.77034E+07
0.77044E+07 0.77053E+07 0.77063E+07 0.77073E+07 0.77083E+07 0.77093E+07 0.77107E+07 0.77127E+07 0.77156E+07 0.77201E+07
0.77274E+07 0.77372E+07 0.77470E+07 0.77568E+07 0.77667E+07 0.77765E+07 0.77863E+07 0.77961E+07 0.78020E+07 0.78044E+07
LAYER 23
0.76082E+07 0.76097E+07 0.76156E+07 0.76254E+07 0.76352E+07 0.76450E+07 0.76548E+07 0.76646E+07 0.76744E+07 0.76843E+07
0.76916E+07 0.76960E+07 0.76990E+07 0.77009E+07 0.77024E+07 0.77034E+07 0.77044E+07 0.77053E+07 0.77063E+07 0.77073E+07
0.77083E+07 0.77093E+07 0.77102E+07 0.77117E+07 0.77137E+07 0.77156E+07 0.77181E+07 0.77210E+07 0.77240E+07 0.77279E+07
0.77328E+07 0.77367E+07 0.77397E+07 0.77426E+07 0.77451E+07 0.77470E+07 0.77490E+07 0.77505E+07 0.77515E+07 0.77524E+07
0.77534E+07 0.77544E+07 0.77554E+07 0.77564E+07 0.77573E+07 0.77583E+07 0.77598E+07 0.77618E+07 0.77647E+07 0.77691E+07
0.77765E+07 0.77863E+07 0.77961E+07 0.78059E+07 0.78157E+07 0.78255E+07 0.78353E+07 0.78451E+07 0.78510E+07 0.78535E+07
LAYER 24
0.76573E+07 0.76587E+07 0.76646E+07 0.76744E+07 0.76843E+07 0.76941E+07 0.77039E+07 0.77137E+07 0.77235E+07 0.77333E+07
0.77407E+07 0.77451E+07 0.77480E+07 0.77500E+07 0.77515E+07 0.77524E+07 0.77534E+07 0.77544E+07 0.77554E+07 0.77564E+07
0.77573E+07 0.77583E+07 0.77593E+07 0.77608E+07 0.77627E+07 0.77647E+07 0.77671E+07 0.77700E+07 0.77730E+07 0.77770E+07
0.77818E+07 0.77858E+07 0.77887E+07 0.77917E+07 0.77941E+07 0.77961E+07 0.77981E+07 0.77995E+07 0.78005E+07 0.78015E+07
0.78025E+07 0.78034E+07 0.78044E+07 0.78054E+07 0.78064E+07 0.78074E+07 0.78088E+07 0.78108E+07 0.78137E+07 0.78182E+07
0.78255E+07 0.78353E+07 0.78451E+07 0.78549E+07 0.78648E+07 0.78746E+07 0.78844E+07 0.78942E+07 0.79001E+07 0.79025E+07
LAYER 25
0.77431E+07 0.77446E+07 0.77505E+07 0.77603E+07 0.77701E+07 0.77799E+07 0.77897E+07 0.77995E+07 0.78093E+07 0.78191E+07
0.78265E+07 0.78309E+07 0.78338E+07 0.78358E+07 0.78373E+07 0.78383E+07 0.78392E+07 0.78402E+07 0.78412E+07 0.78422E+07
0.78432E+07 0.78442E+07 0.78451E+07 0.78466E+07 0.78486E+07 0.78505E+07 0.78530E+07 0.78559E+07 0.78589E+07 0.78628E+07
0.78677E+07 0.78716E+07 0.78746E+07 0.78775E+07 0.78800E+07 0.78820E+07 0.78839E+07 0.78854E+07 0.78863E+07 0.78873E+07
0.78883E+07 0.78893E+07 0.78903E+07 0.78912E+07 0.78922E+07 0.78932E+07 0.78947E+07 0.78966E+07 0.78996E+07 0.79040E+07
0.79114E+07 0.79212E+07 0.79310E+07 0.79408E+07 0.79506E+07 0.79604E+07 0.79702E+07 0.79800E+07 0.79859E+07 0.79884E+07
LAYER 26
0.79271E+07 0.79286E+07 0.79344E+07 0.79442E+07 0.79540E+07 0.79638E+07 0.79736E+07 0.79835E+07 0.79933E+07 0.80031E+07
0.80104E+07 0.80148E+07 0.80178E+07 0.80198E+07 0.80212E+07 0.80222E+07 0.80232E+07 0.80242E+07 0.80251E+07 0.80261E+07
0.80271E+07 0.80281E+07 0.80291E+07 0.80305E+07 0.80325E+07 0.80344E+07 0.80369E+07 0.80398E+07 0.80428E+07 0.80467E+07
0.80516E+07 0.80556E+07 0.80585E+07 0.80614E+07 0.80639E+07 0.80659E+07 0.80678E+07 0.80693E+07 0.80703E+07 0.80713E+07
0.80722E+07 0.80732E+07 0.80742E+07 0.80752E+07 0.80762E+07 0.80771E+07 0.80786E+07 0.80806E+07 0.80835E+07 0.80879E+07
0.80953E+07 0.81051E+07 0.81149E+07 0.81247E+07 0.81345E+07 0.81443E+07 0.81542E+07 0.81640E+07 0.81698E+07 0.81723E+07
LAYER 27
0.81723E+07 0.81738E+07 0.81787E+07 0.81885E+07 0.81983E+07 0.82081E+07 0.82180E+07 0.82278E+07 0.82376E+07 0.82474E+07
0.82557E+07 0.82601E+07 0.82630E+07 0.82650E+07 0.82665E+07 0.82674E+07 0.82684E+07 0.82694E+07 0.82704E+07 0.82714E+07
0.82724E+07 0.82733E+07 0.82743E+07 0.82758E+07 0.82777E+07 0.82797E+07 0.82822E+07 0.82851E+07 0.82881E+07 0.82920E+07
0.82969E+07 0.83008E+07 0.83038E+07 0.83067E+07 0.83091E+07 0.83111E+07 0.83131E+07 0.83146E+07 0.83155E+07 0.83165E+07
0.83175E+07 0.83185E+07 0.83194E+07 0.83204E+07 0.83214E+07 0.83224E+07 0.83239E+07 0.83258E+07 0.83288E+07 0.83332E+07
0.83405E+07 0.83504E+07 0.83602E+07 0.83700E+07 0.83798E+07 0.83896E+07 0.83994E+07 0.84092E+07 0.84151E+07 0.84176E+07
LAYER 28
0.84176E+07 0.84190E+07 0.84249E+07 0.84347E+07 0.84445E+07 0.84543E+07 0.84641E+07 0.84740E+07 0.84838E+07 0.84936E+07
0.85009E+07 0.85054E+07 0.85083E+07 0.85103E+07 0.85117E+07 0.85127E+07 0.85137E+07 0.85147E+07 0.85157E+07 0.85166E+07
0.85176E+07 0.85186E+07 0.85196E+07 0.85210E+07 0.85230E+07 0.85250E+07 0.85274E+07 0.85304E+07 0.85333E+07 0.85372E+07
0.85421E+07 0.85461E+07 0.85490E+07 0.85519E+07 0.85544E+07 0.85564E+07 0.85583E+07 0.85598E+07 0.85608E+07 0.85618E+07
0.85627E+07 0.85637E+07 0.85647E+07 0.85657E+07 0.85667E+07 0.85676E+07 0.85691E+07 0.85711E+07 0.85740E+07 0.85784E+07
0.85858E+07 0.85956E+07 0.86054E+07 0.86152E+07 0.86250E+07 0.86348E+07 0.86447E+07 0.86545E+07 0.86603E+07 0.86628E+07
LAYER 29
0.86628E+07 0.86643E+07 0.86702E+07 0.86800E+07 0.86898E+07 0.86996E+07 0.87094E+07 0.87192E+07 0.87290E+07 0.87388E+07
0.87462E+07 0.87506E+07 0.87535E+07 0.87555E+07 0.87570E+07 0.87580E+07 0.87589E+07 0.87599E+07 0.87609E+07 0.87619E+07
0.87629E+07 0.87638E+07 0.87648E+07 0.87663E+07 0.87683E+07 0.87702E+07 0.87727E+07 0.87756E+07 0.87786E+07 0.87825E+07
0.87874E+07 0.87913E+07 0.87943E+07 0.87972E+07 0.87997E+07 0.88016E+07 0.88036E+07 0.88051E+07 0.88060E+07 0.88070E+07
0.88080E+07 0.88090E+07 0.88099E+07 0.88109E+07 0.88119E+07 0.88129E+07 0.88144E+07 0.88163E+07 0.88193E+07 0.88237E+07
0.88310E+07 0.88409E+07 0.88507E+07 0.88605E+07 0.88703E+07 0.88801E+07 0.88899E+07 0.88997E+07 0.89056E+07 0.89081E+07
LAYER 30
0.88100E+07 0.88114E+07 0.88173E+07 0.88271E+07 0.88369E+07 0.88467E+07 0.88565E+07 0.88664E+07 0.88762E+07 0.88860E+07
0.88933E+07 0.88978E+07 0.89007E+07 0.89027E+07 0.89041E+07 0.89051E+07 0.89061E+07 0.89071E+07 0.89081E+07 0.89090E+07
0.89100E+07 0.89110E+07 0.89120E+07 0.89134E+07 0.89154E+07 0.89174E+07 0.89198E+07 0.89228E+07 0.89257E+07 0.89296E+07
0.89346E+07 0.89385E+07 0.89414E+07 0.89443E+07 0.89468E+07 0.89488E+07 0.89508E+07 0.89522E+07 0.89532E+07 0.89542E+07
0.89551E+07 0.89561E+07 0.89571E+07 0.89581E+07 0.89591E+07 0.89600E+07 0.89615E+07 0.89635E+07 0.89664E+07 0.89708E+07
0.89782E+07 0.89880E+07 0.89978E+07 0.90076E+07 0.90174E+07 0.90272E+07 0.90371E+07 0.90469E+07 0.90527E+07 0.90552E+07
-----------------------------------------------------------------------------------------------------
                              INITIAL WATER SATURATIONS
-----------------------------------------------------------------------------------------------------

LAYER 1
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
LAYER 2
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
  1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000   1.0000
LAYER 3
```

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 4									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 5									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 6									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 7									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 8									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 9									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 10									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 11									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 12									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 13									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 14									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 15									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 16									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 17									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 18									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 19									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
LAYER 20									
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

```
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  21
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  22
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  23
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  24
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  25
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  26
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  27
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  28
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  29
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  30
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
---------------------------------------------------------------------------------------------------
                                       RECURRENT DATA SET
---------------------------------------------------------------------------------------------------

     INITIAL TIME STEP SIZE =  0.86400E+05
     MINIMUM TIME STEP SIZE =    3600.0
     MAXIMUM WATER SATURATION CHANGE =  0.10000
     TIME STEP MULTIPLIER =      1.2500
     TIME TO READ NEW RECURRENT DATA =  0.10000E+17
     NUMBER OF SOURCE/SINK BLOCKS =    0
     CODE FOR CHANGING FLUX RATES =    0

---------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------
                          TIME STEP NUMBER =     1          TIME VALUE =  0.86400E+05
---------------------------------------------------------------------------------------------------

                        WATER BALANCE          NAPL BALANCE
     CONSTANT PRES        2.7894               0.00000E+00
     SOURCE/SINKS       0.00000E+00            0.00000E+00
     STORAGE             -2.7894               0.00000E+00
     PER CENT ERROR     0.34251E-05            0.00000E+00

         STEP NUMBER    1 COMPLETED          SIMULATION TIME IN SECONDS 0.864E+05
         ========================                            IN MINUTES 0.144E+05
                                                             IN HOURS     240.
                                                             IN DAYS     10.00
                                                             IN YEARS   0.274E-01
---------------------------------------------------------------------------------------------------
                          TIME STEP NUMBER =     2          TIME VALUE =  0.19440E+07
---------------------------------------------------------------------------------------------------

                        WATER BALANCE          NAPL BALANCE
     CONSTANT PRES        2.7572               0.00000E+00
     SOURCE/SINKS       0.00000E+00            0.00000E+00
     STORAGE             -2.7572               0.00000E+00
     PER CENT ERROR    -0.77121E-07            0.00000E+00

         STEP NUMBER    2 COMPLETED          SIMULATION TIME IN SECONDS 0.194E+07
         ========================                            IN MINUTES 0.324E+05
                                                             IN HOURS     540.
                                                             IN DAYS     22.5
                                                             IN YEARS   0.616E-01
---------------------------------------------------------------------------------------------------
                          TIME STEP NUMBER =     3          TIME VALUE =  0.32040E+07
---------------------------------------------------------------------------------------------------

                        WATER BALANCE          NAPL BALANCE
     CONSTANT PRES        2.7275               0.00000E+00
     SOURCE/SINKS       0.00000E+00            0.00000E+00
```

LAYER 20

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 21

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 22

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 23

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 24

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 25

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 26

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 27

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 28

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 29

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

LAYER 30

1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

NAPL SATURATIONS

LAYER 1

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 2

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 3

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 4

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 5

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 6

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 7

					0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 8

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 9

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 10

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 11

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 12

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 13

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 14

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 15

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 16

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 17

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 18

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 19

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 20

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 21

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 22

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 23

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

LAYER 24

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 25									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 26									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 27									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 28									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 29									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 30									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

NAPL POTENTIALS

LAYER 1									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.69	611.78
612.57	613.03	613.32	613.51	613.65	613.73	613.82	613.91	613.99	614.07
614.15	614.23	614.31	614.42	614.56	614.70	614.85	615.04	615.21	615.43
615.89	615.91	616.08	616.26	616.42	616.55	616.69	616.81	616.88	616.96
617.04	617.12	617.21	617.29	617.38	617.47	617.61	617.80	618.08	618.54
619.34	620.44	621.56	622.69	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 2									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.36	610.68	611.78
612.58	613.03	613.32	613.51	613.65	613.74	613.83	613.91	614.00	614.08
614.16	614.24	614.32	614.43	614.57	614.70	614.86	615.04	615.21	615.43
615.89	615.80	615.07	616.25	616.41	616.55	616.69	616.80	616.86	616.88
617.04	617.12	617.20	617.29	617.38	617.47	617.60	617.79	618.08	618.54
619.34	620.44	621.56	622.69	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 3									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.68	611.79
612.60	613.07	613.37	613.56	613.70	613.79	613.88	613.97	614.05	614.14
614.22	614.30	614.37	614.46	614.62	614.75	614.91	615.08	615.24	615.44
615.88	615.88	616.04	616.21	616.36	616.49	616.63	616.74	616.82	616.90
616.96	617.06	617.16	617.24	617.33	617.42	617.58	617.75	618.05	618.52
619.32	620.44	621.56	622.69	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 4									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.69	611.81
612.65	613.13	613.45	613.65	613.80	613.89	613.98	614.07	614.16	614.26
614.33	614.41	614.48	614.59	614.73	614.85	614.99/	615.14	615.26	615.48
615.86	615.83	615.97	616.12	616.27	616.39	616.52	616.63	616.71	616.79
616.87	616.95	617.04	617.13	617.23	617.32	617.47	617.67	617.88	618.47
619.30	620.43	621.56	622.69	623.82	624.95	626.08	627.21	627.89	628.08
LAYER 5									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.70	611.84
612.70	613.22	613.56	613.74	613.95	614.05	614.15	614.25	614.34	614.43
614.82	614.60	614.67	614.76	614.30	615.01/	615.13	615.25	615.36	615.48
615.53	615.76	615.87	615.98	616.11	616.22	616.34'	616.44	616.52	616.60
616.66	616.77	616.87	616.98	617.07	617.17	617.33	617.55	617.89	618.41
619.28	620.42	621.56	622.69	623.82	624.95	626.08	627.21	627.89	628.08
LAYER 6									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.70	611.88
612.75	613.30	613.67	613.92	614.11	614.23	614.35	614.46	614.56	614.66
614.75	614.83	614.90	615.00	615.10	615.19	615.28	615.36	615.43	615.51
615.81	615.88	615.76	615.84	615.93	616.01	616.12	616.21	616.29	616.37
616.48	616.55	616.66	616.77	616.89	617.01	617.19	617.44	617.82	618.37
619.26	620.41	621.55	622.68	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 7									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.86
612.76	613.33	613.72	613.91	614.19	614.33	614.46	614.58	614.70	614.80
614.88	614.97	615.04	615.13	615.22	615.29	615.36	615.42	615.47	615.53
615.59	615.65	615.70	615.76	615.83	615.90	615.99	616.07	616.14	616.22
616.31	616.42	616.53	616.66	616.79	616.92	617.12	617.39	617.79	618.35
619.25	620.41	621.55	622.68	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 8									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
612.77	613.34	613.75	614.03	614.25	614.39	614.53	614.66	614.79	614.90
614.99	615.07	615.13	615.21	615.29	615.35	615.40	615.45	615.49	615.53
615.56	615.62	615.66	615.72	615.77	615.83	615.91	615.99	616.05	616.13
616.22	616.33	616.45	616.58	616.73	616.87	617.08	617.37	617.77	618.36
619.25	620.41	621.55	622.68	623.82	624.95	626.08	627.24	627.89	628.08
LAYER 9									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
612.78	613.36	613.76	614.07	614.30	614.45	614.61	614.76	614.89	615.01
615.10	615.17	615.23	615.30	615.37	615.41	615.45	615.49	615.52	615.56
615.57	615.60	615.63	615.67	615.71	615.75	615.82	615.88	615.94	616.02
616.11	616.23	616.36	616.51	616.66	616.82	617.05	617.34	617.75	618.34
619.28	620.41	621.55	622.68	623.82	624.95	626.08	627.21	627.89	628.08
LAYER 10									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
612.78	613.37	613.80	614.10	614.35	614.52	614.69	614.86	615.01	615.14
615.23	615.30	615.34	615.39	615.45	615.48	615.50	615.53	615.54	615.53
615.57	615.58	615.59	615.62	615.64	615.67	615.72	615.77	615.82	615.88
615.98	616.10	616.26	616.43	616.60	616.77	617.02	617.32	617.75	618.33
619.28	620.41	621.55	622.68	623.82	624.95	626.08	627.21	627.89	628.06
LAYER 11									
603.06	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
612.79	613.38	613.81	614.12	614.39	614.58	614.76	614.95	615.13	615.28
615.34	615.41	615.44	615.47	615.52	615.53	615.53	615.00	615.00	615.01
615.01	615.02	615.02	615.58	615.59	615.60	615.66	615.66	615.71	615.77
615.86	615.99	616.17	616.35	616.55	616.74	617.00	617.31	617.74	618.33
619.24	620.41	621.55	622.68	623.82	624.95	626.08	627.21	627.89	628.08

2481	LAYER 12									
2482	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2483	612.79	613.38	612.82	614.13	614.40	614.59	614.80	615.02	615.22	615.35
2484	615.42	615.48	615.50	615.52	612.99	613.00	613.00	613.00	613.00	613.01
2485	613.01	613.02	613.02	613.02	613.02	613.03	615.60	615.61	615.83	615.69
2486	615.76	615.80	616.10	616.32	616.53	616.72	615.98	617.30	617.74	618.33
2487	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2488	LAYER 13									
2489	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2490	612.79	613.38	612.82	614.14	614.41	614.61	614.84	615.09	615.32	615.47
2491	615.50	612.99	612.99	612.89	612.89	613.00	613.00	613.00	613.00	613.01
2492	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	615.62
2493	615.85	615.79	616.03	616.28	616.50	616.70	615.88	617.29	617.73	618.32
2494	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2495	LAYER 14									
2496	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2497	612.79	613.39	613.83	614.15	614.43	614.63	614.87	615.16	615.45	612.99
2498	612.99	612.89	612.99	612.89	612.99	613.00	613.00	613.03	613.00	613.01
2499	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	613.03
2500	613.03	616.56	615.96	616.25	616.48	616.59	615.97	617.29	617.73	614.32
2501	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2502	LAYER 15									
2503	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2504	612.79	613.39	613.83	614.15	614.43	614.64	614.89	615.23	612.89	612.99
2505	612.99	612.89	612.89	612.89	612.99	613.00	613.00	613.00	613.00	613.01
2506	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	613.03
2507	613.03	613.03	615.89	616.22	616.47	616.69	615.97	617.29	617.73	618.32
2508	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.48	628.06
2509	LAYER 16									
2510	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2511	612.79	613.39	613.83	614.15	614.43	614.64	614.89	615.23	612.89	612.89
2512	612.99	612.89	612.89	612.89	612.99	613.00	613.00	613.00	613.00	613.01
2513	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	613.03
2514	613.03	613.03	615.89	616.22	616.47	616.69	615.97	617.29	617 73	618.32
2515	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2516	LAYER 17									
2517	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2518	612.79	613.39	613.83	614.15	614.43	614.63	614.87	615.16	615.45	612.99
2519	612.99	612.89	612.99	612.89	612.99	613.00	613.00	613.00	613.00	613.01
2520	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	613.03
2521	613.03	615.65	615.96	616.25	616.48	616.59	616.87	617.29	617.73	618.32
2522	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2523	LAYER 18									
2524	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2525	612.79	613.38	613.82	614.14	614.41	614.61	614.84	615.09	615.32	615.47
2526	615.50	612.89	612.99	612.88	612.89	613.00	613.00	613.00	613.00	613.01
2527	613.01	613.02	613.02	613.02	613.02	613.03	613.03	613.03	613.03	615.62
2528	615.85	615.79	616.03	616.28	616.50	616.70	615.88	617.29	617.73	618.32
2529	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2530	LAYER 19									
2531	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2532	612.79	613.38	612.82	614.13	614.40	614.59	614.80	615.02	615.22	615.35
2533	615.42	615.49	615.50	615.52	612.99	613.00	613.00	613.00	613.00	613.01
2534	613.01	613.02	613.02	613.02	613.02	613.03	615.60	615.61	615.83	615.69
2535	615.76	615.80	616.10	616.32	616.53	616.72	615.98	617.30	617.74	618.33
2536	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2537	LAYER 20									
2538	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2539	612.79	613.32	613.81	614.12	614.38	614.56	614.75	614.95	615.13	615.29
2540	615.34	615.41	615.46	615.47	615.52	615.53	615.53	613.00	613.00	613.01
2541	613.01	613.02	613.02	615.58	615.59	615.60	615.65	615.68	615.71	615.77
2542	615.86	615.99	616.17	616.36	616.55	616.74	617.00	617.31	617.74	618.33
2543	619.24	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2544	LAYER 21									
2545	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2546	612.79	613.37	613.80	614.10	614.35	614.52	614.69	614.86	615.01	615.14
2547	615.23	615.30	615.34	615.39	615.45	615.45	615.50	615.53	615.64	615.55
2548	615.57	615.58	615.59	615.62	615.64	615.67	615.72	615.77	615.82	615.89
2549	615.98	616.10	616.26	616.43	616.60	616.77	617.02	617.32	617.75	618.33
2550	619.25	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2551	LAYER 22									
2552	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2553	612.78	613.36	613.76	614.07	614.30	614.46	614.61	614.76	614.89	615.01
2554	615.10	615.17	615.23	615.30	615.37	615.41	615.45	615.48	615.52	615.54
2555	615.67	615.60	615.63	615.67	615.71	615.75	615.82	615.88	615.94	616.02
2556	616.11	616.23	616.36	616.51	616.66	616.82	617.05	617.34	617.76	618.34
2557	619.25	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2558	LAYER 23									
2559	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.87
2560	612.77	613.34	613.75	614.03	614.25	614.39	614.53	614.66	614.79	614.90
2561	614.99	615.07	615.13	615.21	615.28	615.35	615.40	615.45	615.49	615.53
2562	615.58	615.62	615.66	615.72	615.77	615.83	615.91	615.99	616.06	616.13
2563	616.22	616.33	616.45	616.59	616.73	616.87	617.08	617.37	617.77	618.34
2564	619.25	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2565	LAYER 24									
2566	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.71	611.88
2567	612.76	613.33	613.72	613.89	614.19	614.33	614.46	614.58	614.70	614.80
2568	614.69	614.87	615.04	615.13	615.22	615.28	615.35	615.42	615.47	615.53
2569	615.59	615.65	615.70	615.76	615.83	615.90	615.99	616.07	616.14	616.22
2570	616.31	616.42	616.53	616.66	616.79	616.92	617.12	617.39	617.79	618.35
2571	619.25	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.89	628.06
2572	LAYER 25									
2573	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.57	610.70	611.88
2574	612.75	613.30	613.77	613.82	614.11	614.23	614.35	614.46	614.58	614.66
2575	614.75	614.83	614.90	615.00	615.10	615.18	615.28	615.38	615.43	615.51
2576	615.61	615.69	615.78	615.84	615.93	616.01	616.12	616.21	616.29	616.37
2577	616.46	616.55	616.66	616.77	616.89	617.01	617.19	617.44	617.82	618.37
2578	619.25	620.41	621.55	622.68	623.82	624.85	626.08	627.21	627.88	628.06
2579	LAYER 26									
2580	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.70	611.84
2581	612.70	613.22	613.58	613.78	613.95	614.05	614.15	614.25	614.34	614.43
2582	614.52	614.60	614.67	614.78	614.90	615.01	615.13	615.29	615.36	615.46
2583	615.63	615.75	615.87	615.99	616.11	616.22	616.34	616.44	616.52	616.60
2584	616.68	616.77	616.87	616.96	617.07	617.17	617.33	617.55	617.89	618.41
2585	619.28	620.42	621.55	622.69	623.82	624.85	626.08	627.21	627.89	628.06
2586	LAYER 27									
2587	603.05	603.23	603.91	605.04	606.17	607.30	608.43	[illegible]	610.69	611.81
2588	612.65	613.13	613.45	613.65	613.80	613.89	613.98	614.07	614.16	614.25
2589	614.33	614.41	614.48	614.59	614.73	614.85	614.99	[illegible]	615.28	615.46
2590	615.65	615.83	615.97	616.12	616.27	616.39	616.52	[illegible]	616.71	616.79
2591	616.87	616.95	617.04	617.13	617.23	617.32	617.47	[illegible]	617.88	618.47
2592	619.30	620.43	621.56	622.69	623.82	624.85	626.08	[illegible]	627.89	628.06
2593	LAYER 28									
2594	603.05	603.23	603.91	605.04	606.17	607.30	608.43	[illegible]	610.68	611.79
2595	612.60	613.07	613.37	613.56	613.70	613.79	613.88	[illegible]	614.05	614.14
2596	614.22	614.30	614.37	614.48	614.62	614.75	614.91	[illegible]	615.24	615.44
2597	615.68	615.88	616.04	616.21	616.36	616.49	616.63	[illegible]	616.82	616.90
2598	616.98	617.05	617.15	617.24	617.33	617.42	617.56	617.75	618.05	618.52
2599	619.32	620.44	621.56	622.69	623.82	624.85	626.08	627.21	627.89	628.06
2600	LAYER 29									
2601	603.05	603.23	603.91	605.04	606.17	607.30	608.43	609.56	610.68	611.78
2602	612.58	613.03	613.32	613.51	613.65	613.74	613.83	613.91	614.00	614.08
2603	614.15	614.24	614.32	614.43	614.57	614.70	614.86	615.04	615.21	615.43
2604	615.55	615.80	616.07	616.25	616.41	616.55	616.69	616.80	616.88	616.95

Listing of 572OUT at 02:52:52 on FEB 5, 1988 for CCID=BENR on UALTAMTS

617.04	617.12	617.20	617.29	617.38	617.47	617.60	617.79	618.08	618.54
618.34	620.44	621.56	622.09	623.82	624.85	626.08	627.21	627.89	628.05
LAYER 30									
603.06	603.23	603.81	605.04	606.17	607.30	608.43	609.56	610.68	611.78
612.67	613.03	613.32	613.51	613.65	613.73	613.82	613.91	613.99	614.07
614.15	614.23	614.31	614.42	614.55	614.70	614.86	615.04	615.21	615.43
615.89	615.91	616.08	616.26	616.42	616.55	616.69	616.81	616.88	615.95
617.04	617.12	617.21	617.29	617.38	617.47	617.61	617.80	618.09	618.54
618.34	620.44	621.56	622.89	623.82	624.85	626.08	627.21	627.89	628.05

WATER POTENTIALS

LAYER 1									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.72
608.51	609.87	610.26	610.45	610.59	610.66	610.76	610.65	610.83	611.02
611.10	611.17	611.25	611.36	611.51	611.64	611.80	611.98	612.15	612.37
612.63	612.85	613.02	613.20	613.35	613.49	613.64	613.75	613.83	613.90
613.88	614.07	614.15	614.24	614.32	614.41	614.55	614.74	615.03	615.48
618.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 2									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.72
608.52	609.98	610.27	610.46	610.59	610.68	610.77	610.65	610.84	611.02
611.10	611.18	611.28	611.37	611.51	611.65	611.81	611.89	612.15	612.37
612.63	612.85	613.01	613.19	613.35	613.48	613.63	613.74	613.82	613.90
613.88	614.08	614.15	614.23	614.32	614.41	614.54	614.73	615.02	615.48
618.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 3									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.73
609.54	610.01	610.31	610.50	610.64	610.73	610.82	610.91	610.98	611.08
611.16	611.24	611.31	611.42	611.58	611.70	611.85	612.02	612.18	612.38
612.62	612.82	612.98	613.15	613.30	613.44	613.58	613.68	613.70	613.84
613.82	614.01	614.09	614.18	614.27	614.36	614.50	614.68	614.99	615.46
618.27	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 4									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.63	608.76
609.59	610.06	610.39	610.59	610.74	610.83	610.93	611.02	611.10	611.19
611.27	611.35	611.43	611.54	611.67	611.79	611.93	612.09	612.22	612.40
612.60	612.78	612.91	613.07	613.21	613.33	613.46	613.57	613.65	613.73
613.61	613.90	613.98	614.07	614.17	614.26	614.41	614.61	614.93	615.41
618.24	617.37	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 5									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.64	608.78
609.66	610.16	610.50	610.73	610.89	610.99	611.08	611.19	611.28	611.37
611.46	611.54	611.61	611.72	611.84	611.95	612.07	612.19	612.30	612.42
612.58	612.70	612.81	612.93	613.05	613.16	613.28	613.39	613.46	613.54
613.53	613.71	613.81	613.91	614.01	614.11	614.27	614.50	614.84	615.35
618.22	617.36	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 6									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.80
609.68	610.24	610.61	610.86	611.05	611.17	611.29	611.40	611.50	611.60
611.69	611.77	611.84	611.94	612.04	612.13	612.22	612.30	612.37	612.45
612.55	612.63	612.70	612.78	612.87	612.96	613.06	613.16	613.23	613.31
613.40	613.50	613.60	613.71	613.83	613.95	614.11	614.39	614.76	615.31
618.20	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 7									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.80
609.71	610.27	610.66	610.93	611.14	611.27	611.40	611.52	611.64	611.74
611.84	611.92	611.98	612.07	612.16	612.23	612.30	612.36	612.41	612.47
612.53	612.58	612.64	612.70	612.77	612.84	612.93	613.02	613.08	613.16
613.26	613.36	613.48	613.60	613.73	613.86	614.07	614.34	614.73	615.29
618.20	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 8									
600.00	600.17	600.85	601.98	603.11	604.24	605.27	606.51	607.65	608.81
609.71	610.29	610.69	610.97	611.19	611.33	611.47	611.61	611.73	611.84
611.93	612.01	612.07	612.15	612.23	612.29	612.34	612.40	612.43	612.46
612.52	612.57	612.60	612.66	612.71	612.77	612.85	612.93	612.99	613.07
613.16	613.27	613.30	613.53	613.67	613.81	614.03	614.31	614.71	615.28
618.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 9									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.72	610.30	610.72	611.01	611.24	611.39	611.55	611.70	611.83	611.95
612.04	612.12	612.17	612.24	612.31	612.35	612.39	612.43	612.45	612.48
612.52	612.54	612.57	612.61	612.65	612.69	612.76	612.83	612.88	612.95
613.05	613.17	613.30	613.46	613.61	613.76	613.99	614.28	614.70	615.28
618.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 10									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.31	610.74	611.04	611.28	611.46	611.63	611.80	611.95	612.08
612.17	612.24	612.28	612.34	612.39	612.42	612.44	612.47	612.48	612.48
612.51	612.52	612.53	612.55	612.58	612.61	612.66	612.71	612.75	612.83
612.92	613.04	613.20	613.37	613.54	613.71	613.96	614.26	614.69	615.27
618.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 11									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.32	610.75	611.08	611.32	611.50	611.70	611.89	612.07	612.20
612.26	612.35	612.38	612.41	612.46	612.47	612.48	612.48	612.49	612.50
612.50	612.51	612.51	612.52	612.53	612.54	612.59	612.62	612.65	612.72
612.80	612.93	613.11	613.30	613.50	613.68	613.94	614.25	614.68	615.27
618.19	617.35	618.49	619.63	620.78	621.89	623.02	624.15	624.83	625.00
LAYER 12									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.33	610.78	611.07	611.34	611.53	611.74	611.95	612.16	612.30
612.36	612.43	612.45	612.46	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.54	612.55	612.57	612.64
612.70	612.84	613.04	613.26	613.47	613.66	613.93	614.24	614.68	615.27
618.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 13									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
609.73	610.33	610.76	611.08	611.36	611.55	611.78	612.03	612.27	612.41
612.44	612.48	612.48	612.48	612.48	612.49	612.49	612.48	612.40	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.55
612.59	612.73	612.97	613.22	613.44	613.64	613.82	614.26	614.67	615.27
618.18	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 14									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
609.74	610.33	610.77	611.09	611.37	611.57	611.81	612.10	612.38	612.48
612.48	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.52
612.52	612.61	612.90	613.19	613.43	613.63	613.81	614.23	614.67	615.26
618.18	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 15									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
609.74	610.33	610.77	611.09	611.37	611.58	611.83	612.17	612.48	612.48
612.48	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.52
612.52	612.52	612.83	613.17	613.42	613.63	613.81	614.23	614.67	615.26
618.18	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 16									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
609.74	610.33	610.77	611.09	611.37	611.58	611.83	612.17	612.48	612.48
612.48	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.50	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.52
612.52	612.52	612.83	613.17	613.42	613.63	613.81	614.23	614.67	615.26

Listing of S72OUT at 02:52:52 on FEB 5, 1988 for CCid=BENR on UALTAMTS

616.18	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 17									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
608.74	610.33	610.77	611.08	611.37	611.57	611.61	612.10	612.38	612.48
612.48	612.48	612.46	612.48	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.52
612.52	612.51	612.90	613.19	613.43	613.53	613.91	614.23	614.57	615.26
616.18	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 18									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.82
609.73	610.33	610.76	611.08	611.36	611.56	611.78	612.03	612.27	612.41
612.44	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.56
612.59	612.73	612.87	613.22	613.44	613.84	613.92	614.24	614.57	615.27
616.18	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 19									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.32	610.76	611.07	611.34	611.53	611.74	611.96	612.16	612.30
612.38	612.43	612.46	612.46	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.54	612.55	612.57	612.64
612.70	612.84	613.04	613.26	613.47	613.66	613.93	614.24	614.68	615.27
616.18	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 20									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.32	610.75	611.05	611.32	611.50	611.70	611.89	612.07	612.20
612.28	612.35	612.38	612.41	612.46	612.47	612.48	612.49	612.49	612.50
612.50	612.51	612.51	612.52	612.53	612.54	612.59	612.62	612.65	612.72
612.80	612.93	613.11	613.30	613.50	613.66	613.94	614.25	614.66	615.27
616.18	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 21									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.73	610.31	610.74	611.04	611.29	611.46	611.63	611.80	611.96	612.08
612.17	612.24	612.29	612.34	612.39	612.42	612.44	612.47	612.48	612.48
612.51	612.52	612.53	612.56	612.58	612.61	612.66	612.71	612.76	612.83
612.92	613.04	613.20	613.37	613.54	613.71	613.98	614.26	614.69	615.27
616.19	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 22									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.72	610.30	610.72	611.01	611.24	611.39	611.55	611.70	611.83	611.95
612.04	612.12	612.17	612.24	612.31	612.35	612.39	612.43	612.46	612.48
612.52	612.54	612.57	612.61	612.65	612.69	612.76	612.83	612.88	612.98
613.05	613.17	613.30	613.45	613.61	613.76	613.99	614.26	614.70	615.28
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 23									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.81
609.71	610.28	610.68	610.97	611.19	611.33	611.47	611.61	611.73	611.84
611.93	612.01	612.07	612.15	612.23	612.28	612.34	612.40	612.43	612.48
612.52	612.57	612.60	612.66	612.71	612.77	612.85	612.93	612.99	613.07
613.16	613.27	613.39	613.53	613.67	613.81	614.03	614.31	614.71	615.29
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 24									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.80
609.71	610.27	610.66	610.93	611.14	611.27	611.40	611.52	611.64	611.74
611.84	611.92	611.98	612.07	612.16	612.23	612.30	612.36	612.41	612.47
612.53	612.59	612.64	612.70	612.77	612.84	612.93	613.02	613.08	613.16
613.26	613.36	613.48	613.60	613.73	613.86	614.07	614.34	614.73	615.29
616.20	617.35	618.49	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 25									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.65	608.80
609.69	610.24	610.61	610.86	611.05	611.17	611.28	611.40	611.50	611.60
611.68	611.77	611.84	611.94	612.04	612.13	612.22	612.30	612.37	612.45
612.55	612.63	612.70	612.78	612.87	612.96	613.08	613.16	613.23	613.31
613.40	613.50	613.60	613.71	613.83	613.95	614.14	614.39	614.76	615.31
616.20	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 26									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.51	607.64	608.78
609.65	610.16	610.50	610.73	610.88	610.99	611.09	611.19	611.29	611.37
611.46	611.54	611.61	611.72	611.84	611.95	612.07	612.19	612.30	612.42
612.58	612.70	612.81	612.93	613.05	613.16	613.28	613.39	613.46	613.54
613.63	613.71	613.81	613.91	614.01	614.11	614.27	614.50	614.84	615.36
616.22	617.36	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 27									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.63	608.76
609.58	610.06	610.38	610.58	610.74	610.83	610.93	611.02	611.10	611.18
611.27	611.35	611.43	611.54	611.67	611.78	611.93	612.09	612.22	612.40
612.60	612.76	612.91	613.07	613.21	613.33	613.46	613.57	613.66	613.73
613.81	613.90	613.98	614.07	614.17	614.28	614.41	614.61	614.93	615.41
616.24	617.37	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 28									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.73
609.54	610.01	610.31	610.50	610.64	610.73	610.82	610.91	610.99	611.06
611.15	611.24	611.31	611.42	611.56	611.70	611.85	612.02	612.18	612.36
612.62	612.82	612.98	613.15	613.30	613.44	613.58	613.68	613.76	613.84
613.92	614.01	614.09	614.18	614.27	614.36	614.50	614.68	614.98	615.48
616.27	617.38	618.50	619.63	620.76	621.88	623.02	624.15	624.83	625.00
LAYER 29									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.72
609.52	609.98	610.27	610.46	610.59	610.68	610.77	610.86	610.94	611.02
611.10	611.18	611.26	611.37	611.51	611.65	611.81	611.98	612.15	612.37
612.63	612.85	613.01	613.19	613.35	613.49	613.63	613.74	613.82	613.90
613.98	614.05	614.15	614.23	614.32	614.41	614.54	614.73	615.02	615.48
616.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 30									
600.00	600.17	600.85	601.98	603.11	604.24	605.37	606.50	607.62	608.72
609.51	609.97	610.26	610.45	610.59	610.68	610.76	610.85	610.93	611.02
611.10	611.17	611.25	611.36	611.51	611.64	611.80	611.98	612.15	612.37
612.63	612.85	613.02	613.20	613.36	613.49	613.64	613.75	613.83	613.90
613.98	614.07	614.15	614.24	614.32	614.41	614.55	614.74	615.03	615.49
616.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00

EOI ENCOUNTERED.

Appendix 3

Sample Computer Output, Case Two.

S W A N F L O W - 2 D

SIMULTANEOUS WATER, AIR, AND NAPL FLOW IN TWO DIMENSIONS

WRITTEN BY:

CHARLES R. FAUST
JAMES O. RUMBAUGH

GEOTRANS, INC.
250 EXCHANGE PLACE
SUITE A
HERNDON, VA

LENS 10:1 GRADIENT = 0.02 EPSILON = 1000 ----STEADY STATE----
RUN NO .... 7_1
DATE .... 02 FEB 1988

NUMBER OF BLOCKS IN THE X-DIRECTION (COLUMNS)	=	60
NUMBER OF BLOCKS IN THE Z-DIRECTION (LAYERS)	=	29
MAXIMUM OF NEWTON-RAPHSON ITERATIONS	=	5
MAXIMUM BANDWIDTH	=	0
MAXIMUM NUMBER OF TIME STEPS	=	50
NUMBER OF ACTIVE GRID BLOCKS	=	1740
NUMBER OF TIME STEPS BETWEEN PRINTOUTS	=	50
PRINT NAPL AND WATER POTENTIALS? (1=YES)	=	1
PRINT DETAILED KR TABLES? (1=YES)	=	0
WRITE A PLOT FILE? (1=YES)	=	1
NUMBER OF OBSERVATION BLOCKS	=	0
WRITE A RESTART FILE? (1=YES)	=	1

GRID BLOCK THICKNESS (DY)	=	1.0000
MASS BALANCE TOLERANCE FOR NEWTON-RAPHSON IT.	=	0.10000E-01
INITIAL TIME VALUE	=	0.00000E+00
WATER DENSITY	=	1000.0
NAPL DENSITY	=	850.00
WATER VISCOSITY	=	0.10000E-02
NAPL VISCOSITY	=	0.20000E-02
GRAVITATIONAL CONSTANT IN THE Z-DIRECTION	=	-9.8100
GRAVITATIONAL CONSTANT IN THE X-DIRECTION	=	0.00000E+00

2 PC-KR TABLES WILL BE READ

********** TABLE NUMBER 1 **********

NAPL-WATER CAP. PRESSURE	WATER SATURATION	RELATIVE PERM. WATER	RELATIVE PERM. NAPL
240000.00000	-0.05000	0.00000	1.00000
240000.00000	0.00000	0.00000	1.00000
240000.00000	0.05000	0.00000	1.00000
240000.00000	0.10000	0.00000	1.00000
240000.00000	0.15000	0.00000	1.00000
240000.00000	0.20000	0.00000	1.00000
240000.00000	0.25000	0.00000	1.00000
240000.00000	0.30000	0.00000	1.00000
150000.00000	0.35000	0.00000	1.00000
80000.00000	0.40000	0.00000	1.00000
45000.00000	0.45000	0.00000	1.00000
30000.00000	0.50000	0.00500	0.50000
21000.00000	0.55000	0.01200	0.28500
15000.00000	0.60000	0.03200	0.12300
13000.00000	0.65000	0.08700	0.05500
11000.00000	0.70000	0.15200	0.02100
9000.00000	0.75000	0.22700	0.00400
7000.00000	0.80000	0.30000	0.00000
6000.00000	0.85000	0.37500	0.00000
5500.00000	0.90000	0.50000	0.00000
5250.00000	0.95000	0.65000	0.00000
5000.00000	1.00000	1.00000	0.00000
5000.00000	1.05000	1.00000	0.00000

AIR-NAPL SYSTEM -- PC-KR TABLE NUMBER 1
NAPL KR AT RESIDUAL WATER SATURATION : 0.58000

AIR-NAPL CAP. PRESSURE	AIR SATURATION	RELATIVE PERM. NAPL	RELATIVE PERM. AIR
-8800.00000	1.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000

********** TABLE NUMBER 2 **********

NAPL-WATER CAP. PRESSURE	WATER SATURATION	RELATIVE PERM. WATER	RELATIVE PERM. NAPL
480000.00000	-0.05000	0.00000	1.00000
480000.00000	0.00000	0.00000	1.00000
480000.00000	0.05000	0.00000	1.00000
480000.00000	0.10000	0.00000	1.00000
480000.00000	0.15000	0.00000	1.00000
480000.00000	0.20000	0.00000	1.00000
480000.00000	0.25000	0.00000	1.00000
480000.00000	0.30000	0.00000	1.00000
480000.00000	0.35000	0.00000	1.00000
480000.00000	0.40000	0.00000	1.00000
480000.00000	0.45000	0.00000	1.00000
480000.00000	0.50000	0.00500	0.50000
480000.00000	0.55000	0.01200	0.28500
480000.00000	0.60000	0.03200	0.12300
380000.00000	0.65000	0.08700	0.05500
240000.00000	0.70000	0.15200	0.02100
140000.00000	0.75000	0.22700	0.00400
110000.00000	0.80000	0.30000	0.00000
87500.00000	0.85000	0.37500	0.00000
70000.00000	0.90000	0.50000	0.00000
55000.00000	0.95000	0.65000	0.00000
40000.00000	1.00000	1.00000	0.00000
30500.00000			

```
      30000.00000         1.05000          1.00000           0.00000

      AIR-NAPL SYSTEM -- PC-KR TABLE NUMBER   2
      NAPL KR AT RESIDUAL WATER SATURATION :    0.88000

       AIR-NAPL CAP.         AIR         RELATIVE PERM.   RELATIVE PERM.
         PRESSURE        SATURATION          NAPL              AIR

      -8800.00000         1.00000          0.00000          0.60000
          0.00000         0.00000          0.00000          0.00000
-------------------------------------------------------------------------------------------------------

-------------------------------------------------------------------------------------------------------
                                        2 PERMEABILITY SETS WILL BE READ
-------------------------------------------------------------------------------------------------------

 SET NUMBER      KX          KZ

        1 0.10000E-12 0.10000E-12
        2 0.10000E-15 0.10000E-15
-------------------------------------------------------------------------------------------------------
                                        2 POROSITY SETS WILL BE READ
-------------------------------------------------------------------------------------------------------

 SET NUMBER      REF. POROSITY   COMPRESSIBILITY   REF. PRESSURE

        1         0.20000          0.10000E-06       0.10000E+06
        2         0.50000E-01      0.10000E-06       0.10000E+06
-------------------------------------------------------------------------------------------------------
                                   GRID BLOCK SPACINGS IN THE X-DIRECTION
-------------------------------------------------------------------------------------------------------

                                                                                                 50.000
   5.0000     10.000     50.000     50.000     50.000     50.000     50.000     50.000     50.000     5.0000
   25.000     20.000     10.000     10.000     5.0000     5.0000     5.0000     5.0000     5.0000     25.000
   5.0000     5.0000     5.0000     10.000     10.000     10.000     15.000     15.000     15.000     5.0000
   25.000     15.000     15.000     15.000     10.000     10.000     10.000     5.0000     5.0000     25.000
   5.0000     5.0000     5.0000     5.0000     5.0000     5.0000     10.000     10.000     20.000     5.0000
   50.000     50.000     50.000     50.000     50.000     50.000     50.000     50.000     10.000
-------------------------------------------------------------------------------------------------------
                                   GRID BLOCK SPACINGS IN THE Z-DIRECTION
-------------------------------------------------------------------------------------------------------

                                                                                                 5.0000
   5.0000     25.000     25.000     25.000     25.000     12.500     5.0000     5.0000     5.0000     2.5000
   2.5000     2.5000     2.5000     2.5000     2.5000     2.5000     2.5000     2.5000     2.5000     5.0000
   5.0000     5.0000     5.0000     5.0000     12.500     25.000     25.000     25.000     25.000
-------------------------------------------------------------------------------------------------------
                                   THERE ARE    2 PROPERTY COMBINATION SETS
-------------------------------------------------------------------------------------------------------

    SET NUMBER      PC-KR TABLE    K CLASS    POROSITY CLASS

         1               1            1              1
         2               2            2              2
-------------------------------------------------------------------------------------------------------
                                   GRID BLOCK NUMBERS
-------------------------------------------------------------------------------------------------------

                      X-DIRECTION  ---->

   LAYER   1    -1   1  31  61  91 121 151 181 211 241 271 301 331 361 391 421 451 481 511 541 571 601 631 661 691
               721 751 781 811 841 871 901 931 961 991102110511081111111411171120112311261129113211351138114111441
              147115011531156115911621165116811711  -1
   LAYER   2    -1   2  32  62  92 122 152 182 212 242 272 302 332 362 392 422 452 482 512 542 572 602 632 662 692
               722 752 782 812 842 872 902 932 962 992102210521082111211421172120212321262129213221352138214121442
              147215021532156215921622165216821712  -1
   LAYER   3    -1   3  33  63  93 123 153 183 213 243 273 303 333 363 393 423 453 483 513 543 573 603 633 663 693
               723 753 783 813 843 873 903 933 963 993102310531083111311431173120312331263129313231353138314131443
              147315031533156315931623165316831713  -1
   LAYER   4    -1   4  34  64  94 124 154 184 214 244 274 304 334 364 394 424 454 484 514 544 574 604 634 664 694
               724 754 784 814 844 874 904 934 964 994102410541084111411441174120412341264129413241354138414141444
              147415041534156415941624165416841714  -1
   LAYER   5    -1   5  35  65  95 125 155 185 215 245 275 305 335 365 395 425 455 485 515 545 575 605 635 665 695
               725 755 785 815 845 875 905 935 965 995102510551085111511451175120512351265129513251355138514151445
              147515051535156515951625165516851715  -1
   LAYER   6    -1   6  36  66  96 126 156 186 216 246 276 306 336 366 396 426 456 486 516 546 576 606 636 666 696
               726 756 786 816 846 876 906 936 966 996102610561086111611461176120612361266129613261356138614161446
              147615061536156615961626165616861716  -1
   LAYER   7    -1   7  37  67  97 127 157 187 217 247 277 307 337 367 397 427 457 487 517 547 577 607 637 667 697
               727 757 787 817 847 877 907 937 967 997102710571087111711471177120712371267129713271357138714171447
              147715071537156715971627165716871717  -1
   LAYER   8    -1   8  38  68  98 128 158 188 218 248 278 308 338 368 398 428 458 488 518 548 578 608 638 668 698
               728 758 788 818 848 878 908 938 968 998102810581088111811481178120812381268129813281358138814181448
              147815081538156815981628165816881718  -1
   LAYER   9    -1   9  39  69  99 129 159 189 219 249 279 309 339 369 399 429 459 489 519 549 579 609 639 669 699
               729 759 789 819 849 879 909 939 969 999102910591089111911491179120912391269129913291359138914191449
              147915091539156915991629165916891719  -1
   LAYER  10    -1  10  40  70 100 130 160 190 220 250 280 310 340 370 400 430 460 490 520 550 580 610 640 670 700
               730 760 790 820 850 880 910 940 9701000103010601090112011501180121012401270130013301360139014201450
              148015101540157016001630166016901720  -1
   LAYER  11    -1  11  41  71 101 131 161 191 221 251 281 311 341 371 401 431 461 491 521 551 581 611 641 671 701
               731 761 791 821 851 881 911 941 9711001103110611091112111511181121112411271130113311361139114211451
              148115111541157116011631166116911721  -1
   LAYER  12    -1  12  42  72 102 132 162 192 222 252 282 312 342 372 402 432 462 492 522 552 582 612 642 672 702
               732 762 792 822 852 882 912 942 9721002103210621092112211521182121212421272130213321362139214221452
              148215121542157216021632166216921722  -1
   LAYER  13    -1  13  43  73 103 133 163 193 223 253 283 313 343 373 403 433 463 493 523 553 583 613 643 673 703
               733 763 793 823 853 883 913 943 9731003103310631093112311531183121312431273130313331363139314231453
              148315131543157316031633166316931723  -1
   LAYER  14    -1  14  44  74 104 134 164 194 224 254 284 314 344 374 404 434 464 494 524 554 584 614 644 674 704
               734 764 794 824 854 884 914 944 9741004103410641094112411541184121412441274130413341364139414241454
              148415141544157416041634166416941724  -1
   LAYER  15    -1  15  45  75 105 135 165 195 225 255 285 315 345 375 405 435 465 495 525 555 585 615 645 675 705
               735 765 795 825 855 885 915 945 9751005103510651095112511551185121512451275130513351365139514251455
              148515151545157516051635166516951725  -1
   LAYER  16    -1  16  46  76 106 136 166 196 226 256 286 316 346 376 406 436 466 496 526 556 586 616 646 676 706
               736 766 796 826 856 886 916 946 9761006103610661096112611561186121612461276130613361366139614261456
              148615161546157616061636166616961726  -1
   LAYER  17    -1  17  47  77 107 137 167 197 227 257 287 317 347 377 407 437 467 497 527 557 587 617 647 677 707
               737 767 797 827 857 887 917 947 9771007103710671097112711571187121712471277130713371367139714271457
              148715171547157716071637166716971727  -1
   LAYER  18    -1  18  48  78 108 138 168 198 228 258 288 318 348 378 408 438 468 498 528 558 588 618 648 678 708
               738 768 798 828 858 888 918 948 9781008103810681098112811581188121812481278130813381368139814281458
              148815181548157816081638166816981728  -1
   LAYER  19    -1  19  49  79 109 139 169 199 229 259 289 319 349 379 409 439 469 499 529 559 589 619 649 679 709
               739 769 799 829 859 889 919 949 9791009103910691099112911591189121912491279130913391369139914291459
              148915191549157916091639166916991729  -1
```

```
LAYER 20   -1 20 50 80 110 140 170 200 230 260 290 320 350 380 410 440 470 500 530 560 590 620 650 680 710
           740 770 800 830 860 890 920 950 9801010104010701100113011601190122012501280131013401370140014301460
           149015201550158016101640167017001730 -1
LAYER 21   -1 21 51 81 111 141 171 201 231 261 291 321 351 381 411 441 471 501 531 561 591 621 651 681 711
           741 771 801 831 861 891 921 951 9811011104110711101113111611191122112511281131113411371140114311461
           149115211551158116111641167117011731 -1
LAYER 22   -1 22 52 82 112 142 172 202 232 262 292 322 352 382 412 442 472 502 532 562 592 622 652 682 712
           742 772 802 832 862 892 922 952 9821012104210721102113211621192122212521282131213421372140214321462
           149215221552158216121642167217021732 -1
LAYER 23   -1 23 53 83 113 143 173 203 233 263 293 323 353 383 413 443 473 503 533 563 593 623 653 683 713
           743 773 803 833 863 893 923 953 9831013104310731103113311631193122312531283131313431373140314331463
           149315231553158316131643167317031733 -1
LAYER 24   -1 24 54 84 114 144 174 204 234 264 294 324 354 384 414 444 474 504 534 564 594 624 654 684 714
           744 774 804 834 864 894 924 954 9841014104410741104113411641194122412541284131413441374140414341464
           149415241554158416141644167417041734 -1
LAYER 25   -1 25 55 85 115 145 175 205 235 265 295 325 355 385 415 445 475 505 535 565 595 625 655 685 715
           745 775 805 835 865 895 925 955 9851015104510751105113511651195122512551285131513451375140514351465
           149515251555158516151645167517051735 -1
LAYER 26   -1 26 56 86 116 146 176 206 236 266 296 326 356 386 416 446 476 506 536 566 596 626 656 686 716
           746 776 806 836 866 896 926 956 9861016104610761106113611661196122612561286131613461376140614361466
           149615261556158616161646167617061736 -1
LAYER 27   -1 27 57 87 117 147 177 207 237 267 297 327 357 387 417 447 477 507 537 567 597 627 657 687 717
           747 777 807 837 867 897 927 957 9871017104710771107113711671197122712571287131713471377140714371467
           149715271557158716171647167717071737 -1
LAYER 28   -1 28 58 88 118 148 178 208 238 268 298 328 358 388 418 448 478 508 538 568 598 628 658 688 718
           748 778 808 838 868 898 928 958 9881018104810781108113811681198122812581288131813481378140814381468
           149815281558158816181648167817081738 -1
LAYER 29   -1 29 59 89 119 149 179 209 239 269 299 329 359 389 419 449 479 509 539 569 599 629 659 689 719
           749 779 809 839 869 899 929 959 9891019104910791109113911691199122912591289131913491379140914391469
           149915291559158916191649167917091739 -1
LAYER 30   -1 30 60 90 120 150 180 210 240 270 300 330 360 390 420 450 480 510 540 570 600 630 660 690 720
           750 780 810 840 870 900 930 960 9901020105010801110114011701200123012601290132013501380141014401470
           150015301560159016201650168017101740 -1
```

PROPERTY CLASS NUMBERS

X-DIRECTION -- I INDEX

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60															
LAYER 1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 6	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 10	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 14	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 15	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 16	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 17	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 18	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 19	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1
	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 20	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 21	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 23	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 24	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 26	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 27	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	2	2	2	2	2	2	2	2	2	2															
LAYER 28	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

```
          2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
LAYER 29  2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
LAYER 30  2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2
          2 2 2 2 2 2 2 2 2 2
```

========== CALCULATED MAXIMUM BANDWIDTH = 123 ==========

INITIAL CONDITION DATA

INITIAL NAPL PRESSURES

LAYER 1

0.58160E+07	0.58175E+07	0.58234E+07	0.58232E+07	0.58430E+07	0.58528E+07	0.58626E+07	0.58724E+07	0.58822E+07	0.58920E+07
0.59084E+07	0.60039E+07	0.60057E+07	0.60087E+07	0.60102E+07	0.60112E+07	0.60121E+07	0.60131E+07	0.60141E+07	0.60151E+07
0.60151E+07	0.60170E+07	0.60180E+07	0.60195E+07	0.60215E+07	0.60234E+07	0.60258E+07	0.60286E+07	0.60318E+07	0.60357E+07
0.60406E+07	0.60445E+07	0.60475E+07	0.60504E+07	0.60528E+07	0.60548E+07	0.60558E+07	0.60582E+07	0.60612E+07	0.60602E+07
0.60812E+07	0.60822E+07	0.60831E+07	0.60841E+07	0.60851E+07	0.60861E+07	0.60878E+07	0.60885E+07	0.60725E+07	0.60758E+07
0.60842E+07	0.60941E+07	0.61038E+07	0.61127E+07	0.61235E+07	0.61323E+07	0.61421E+07	0.61525E+07	0.61588E+07	0.61613E+07

LAYER 2

0.60832E+07	0.60846E+07	0.60705E+07	0.60803E+07	0.60901E+07	0.60998E+07	0.61097E+07	0.61195E+07	0.61294E+07	0.61392E+07
0.61485E+07	0.61510E+07	0.61538E+07	0.61555E+07	0.61573E+07	0.61583E+07	0.61593E+07	0.61603E+07	0.61613E+07	0.61622E+07
0.61632E+07	0.61642E+07	0.61652E+07	0.61658E+07	0.61686E+07	0.61705E+07	0.61730E+07	0.61760E+07	0.61780E+07	0.61828E+07
0.61877E+07	0.61917E+07	0.61946E+07	0.61975E+07	0.62000E+07	0.62020E+07	0.62039E+07	0.62054E+07	0.62064E+07	0.62074E+07
0.62083E+07	0.62093E+07	0.62103E+07	0.62113E+07	0.62123E+07	0.62132E+07	0.62147E+07	0.62167E+07	0.62195E+07	0.62240E+07
0.62314E+07	0.62412E+07	0.62510E+07	0.62608E+07	0.62705E+07	0.62804E+07	0.62903E+07	0.63001E+07	0.63059E+07	0.63084E+07

LAYER 3

0.63084E+07	0.63038E+07	0.63158E+07	0.63255E+07	0.63354E+07	0.63452E+07	0.63550E+07	0.63648E+07	0.63746E+07	0.63844E+07
0.63918E+07	0.63952E+07	0.63981E+07	0.64011E+07	0.64028E+07	0.64038E+07	0.64048E+07	0.64058E+07	0.64065E+07	0.64075E+07
0.64085E+07	0.64094E+07	0.64104E+07	0.64118E+07	0.64138E+07	0.64158E+07	0.64183E+07	0.64212E+07	0.64242E+07	0.64281E+07
0.64330E+07	0.64368E+07	0.64398E+07	0.64428E+07	0.64452E+07	0.64472E+07	0.64482E+07	0.64506E+07	0.64516E+07	0.64526E+07
0.64535E+07	0.64546E+07	0.64555E+07	0.64565E+07	0.64575E+07	0.64585E+07	0.64600E+07	0.64619E+07	0.64648E+07	0.64693E+07
0.64786E+07	0.64885E+07	0.64983E+07	0.65061E+07	0.65159E+07	0.65257E+07	0.65355E+07	0.65453E+07	0.65512E+07	0.65537E+07

LAYER 4

0.65537E+07	0.65551E+07	0.65610E+07	0.65708E+07	0.65806E+07	0.65904E+07	0.66002E+07	0.66101E+07	0.66199E+07	0.66297E+07
0.66370E+07	0.66415E+07	0.66444E+07	0.66464E+07	0.66478E+07	0.66488E+07	0.66498E+07	0.66506E+07	0.66516E+07	0.66527E+07
0.66537E+07	0.66547E+07	0.66557E+07	0.66571E+07	0.66591E+07	0.66611E+07	0.66635E+07	0.66665E+07	0.66694E+07	0.66733E+07
0.66782E+07	0.66822E+07	0.66851E+07	0.66880E+07	0.66905E+07	0.66925E+07	0.66944E+07	0.66959E+07	0.66968E+07	0.66979E+07
0.66988E+07	0.66998E+07	0.67008E+07	0.67018E+07	0.67028E+07	0.67037E+07	0.67052E+07	0.67072E+07	0.67101E+07	0.67145E+07
0.67219E+07	0.67317E+07	0.67415E+07	0.67513E+07	0.67611E+07	0.67708E+07	0.67806E+07	0.67906E+07	0.67984E+07	0.67988E+07

LAYER 5

0.67988E+07	0.68004E+07	0.68063E+07	0.68161E+07	0.68259E+07	0.68357E+07	0.68455E+07	0.68553E+07	0.68651E+07	0.68740E+07
0.68823E+07	0.68857E+07	0.68886E+07	0.68918E+07	0.68931E+07	0.68941E+07	0.68950E+07	0.68960E+07	0.68970E+07	0.68980E+07
0.68990E+07	0.68999E+07	0.69009E+07	0.69024E+07	0.69044E+07	0.69063E+07	0.69088E+07	0.69117E+07	0.69147E+07	0.69186E+07
0.69235E+07	0.69274E+07	0.69304E+07	0.69333E+07	0.69357E+07	0.69377E+07	0.69397E+07	0.69411E+07	0.69421E+07	0.69431E+07
0.69441E+07	0.69451E+07	0.69460E+07	0.69470E+07	0.69480E+07	0.69490E+07	0.69505E+07	0.69524E+07	0.69554E+07	0.69598E+07
0.69671E+07	0.69770E+07	0.69868E+07	0.69966E+07	0.70064E+07	0.70162E+07	0.70260E+07	0.70358E+07	0.70417E+07	0.70442E+07

LAYER 6

0.69826E+07	0.69843E+07	0.69902E+07	0.70000E+07	0.70098E+07	0.70196E+07	0.70294E+07	0.70392E+07	0.70491E+07	0.70588E+07
0.70662E+07	0.70708E+07	0.70738E+07	0.70755E+07	0.70770E+07	0.70780E+07	0.70790E+07	0.70800E+07	0.70808E+07	0.70818E+07
0.70828E+07	0.70838E+07	0.70849E+07	0.70863E+07	0.70882E+07	0.70903E+07	0.70927E+07	0.70957E+07	0.70986E+07	0.71025E+07
0.71074E+07	0.71113E+07	0.71143E+07	0.71172E+07	0.71197E+07	0.71216E+07	0.71236E+07	0.71251E+07	0.71261E+07	0.71270E+07
0.71280E+07	0.71290E+07	0.71300E+07	0.71310E+07	0.71319E+07	0.71329E+07	0.71344E+07	0.71364E+07	0.71393E+07	0.71437E+07
0.71511E+07	0.71608E+07	0.71707E+07	0.71805E+07	0.71903E+07	0.72001E+07	0.72099E+07	0.72197E+07	0.72256E+07	0.72281E+07

LAYER 7

0.70687E+07	0.70701E+07	0.70760E+07	0.70858E+07	0.70957E+07	0.71055E+07	0.71153E+07	0.71251E+07	0.71349E+07	0.71447E+07
0.71521E+07	0.71555E+07	0.71584E+07	0.71634E+07	0.71629E+07	0.71639E+07	0.71648E+07	0.71658E+07	0.71668E+07	0.71678E+07
0.71687E+07	0.71697E+07	0.71707E+07	0.71722E+07	0.71741E+07	0.71761E+07	0.71785E+07	0.71815E+07	0.71844E+07	0.71884E+07
0.71933E+07	0.71972E+07	0.72001E+07	0.72031E+07	0.72055E+07	0.72075E+07	0.72094E+07	0.72109E+07	0.72119E+07	0.72128E+07
0.72138E+07	0.72148E+07	0.72158E+07	0.72168E+07	0.72178E+07	0.72188E+07	0.72202E+07	0.72222E+07	0.72251E+07	0.72296E+07
0.72369E+07	0.72467E+07	0.72565E+07	0.72663E+07	0.72762E+07	0.72860E+07	0.72958E+07	0.73056E+07	0.73115E+07	0.73139E+07

LAYER 8

0.71177E+07	0.71192E+07	0.71251E+07	0.71349E+07	0.71447E+07	0.71545E+07	0.71643E+07	0.71741E+07	0.71839E+07	0.71938E+07
0.72011E+07	0.72055E+07	0.72085E+07	0.72104E+07	0.72119E+07	0.72129E+07	0.72139E+07	0.72148E+07	0.72158E+07	0.72168E+07
0.72178E+07	0.72188E+07	0.72197E+07	0.72212E+07	0.72232E+07	0.72251E+07	0.72276E+07	0.72305E+07	0.72335E+07	0.72374E+07
0.72423E+07	0.72463E+07	0.72492E+07	0.72521E+07	0.72546E+07	0.72565E+07	0.72585E+07	0.72600E+07	0.72610E+07	0.72619E+07
0.72629E+07	0.72639E+07	0.72649E+07	0.72659E+07	0.72668E+07	0.72678E+07	0.72693E+07	0.72713E+07	0.72742E+07	0.72786E+07
0.72860E+07	0.72958E+07	0.73056E+07	0.73154E+07	0.73252E+07	0.73350E+07	0.73448E+07	0.73546E+07	0.73605E+07	0.73630E+07

LAYER 9

0.71668E+07	0.71682E+07	0.71741E+07	0.71839E+07	0.71938E+07	0.72036E+07	0.72134E+07	0.72232E+07	0.72330E+07	0.72428E+07
0.72502E+07	0.72545E+07	0.72575E+07	0.72595E+07	0.72610E+07	0.72619E+07	0.72629E+07	0.72639E+07	0.72649E+07	0.72658E+07
0.72668E+07	0.72678E+07	0.72688E+07	0.72703E+07	0.72722E+07	0.72742E+07	0.72766E+07	0.72796E+07	0.72825E+07	0.72865E+07
0.72914E+07	0.72953E+07	0.72982E+07	0.73012E+07	0.73036E+07	0.73056E+07	0.73075E+07	0.73090E+07	0.73100E+07	0.73110E+07
0.73120E+07	0.73129E+07	0.73139E+07	0.73149E+07	0.73159E+07	0.73169E+07	0.73183E+07	0.73203E+07	0.73232E+07	0.73277E+07
0.73350E+07	0.73448E+07	0.73546E+07	0.73644E+07	0.73742E+07	0.73841E+07	0.73939E+07	0.74037E+07	0.74096E+07	0.74120E+07

LAYER 10

0.72158E+07	0.72173E+07	0.72232E+07	0.72330E+07	0.72428E+07	0.72526E+07	0.72624E+07	0.72722E+07	0.72820E+07	0.72918E+07
0.72992E+07	0.73036E+07	0.73066E+07	0.73085E+07	0.73100E+07	0.73110E+07	0.73120E+07	0.73129E+07	0.73139E+07	0.73149E+07
0.73159E+07	0.73168E+07	0.73178E+07	0.73193E+07	0.73213E+07	0.73232E+07	0.73257E+07	0.73286E+07	0.73316E+07	0.73355E+07
0.73404E+07	0.73443E+07	0.73473E+07	0.73503E+07	0.73527E+07	0.73546E+07	0.73566E+07	0.73581E+07	0.73591E+07	0.73600E+07
0.73610E+07	0.73620E+07	0.73630E+07	0.73640E+07	0.73649E+07	0.73659E+07	0.73674E+07	0.73694E+07	0.73723E+07	0.73767E+07
0.73841E+07	0.73939E+07	0.74037E+07	0.74135E+07	0.74233E+07	0.74331E+07	0.74429E+07	0.74527E+07	0.74586E+07	0.74611E+07

LAYER 11

0.72526E+07	0.72541E+07	0.72600E+07	0.72698E+07	0.72796E+07	0.72894E+07	0.72992E+07	0.73090E+07	0.73188E+07	0.73286E+07
0.73360E+07	0.73404E+07	0.73434E+07	0.73453E+07	0.73468E+07	0.73478E+07	0.73488E+07	0.73497E+07	0.73507E+07	0.73517E+07
0.73527E+07	0.73537E+07	0.73547E+07	0.73561E+07	0.73581E+07	0.73601E+07	0.73625E+07	0.73654E+07	0.73684E+07	0.73723E+07
0.73772E+07	0.73811E+07	0.73841E+07	0.73870E+07	0.73895E+07	0.73914E+07	0.73934E+07	0.73948E+07	0.73958E+07	0.73968E+07
0.73978E+07	0.73988E+07	0.73998E+07	0.74007E+07	0.74017E+07	0.74027E+07	0.74042E+07	0.74061E+07	0.74091E+07	0.74135E+07
0.74208E+07	0.74307E+07	0.74405E+07	0.74503E+07	0.74601E+07	0.74699E+07	0.74797E+07	0.74895E+07	0.74954E+07	0.74979E+07

LAYER 12

0.72771E+07	0.72786E+07	0.72845E+07	0.72943E+07	0.73041E+07	0.73139E+07	0.73237E+07	0.73335E+07	0.73433E+07	0.73532E+07
0.73605E+07	0.73649E+07	0.73679E+07	0.73698E+07	0.73713E+07	0.73723E+07	0.73733E+07	0.73743E+07	0.73752E+07	0.73762E+07
0.73772E+07	0.73782E+07	0.73792E+07	0.73806E+07	0.73826E+07	0.73846E+07	0.73870E+07	0.73899E+07	0.73929E+07	0.73968E+07
0.74017E+07	0.74056E+07	0.74086E+07	0.74115E+07	0.74140E+07	0.74160E+07	0.74179E+07	0.74194E+07	0.74204E+07	0.74213E+07
0.74223E+07	0.74233E+07	0.74243E+07	0.74253E+07	0.74262E+07	0.74272E+07	0.74287E+07	0.74307E+07	0.74336E+07	0.74380E+07
0.74454E+07	0.74552E+07	0.74650E+07	0.74748E+07	0.74846E+07	0.74944E+07	0.75042E+07	0.75140E+07	0.75199E+07	0.75224E+07

LAYER 13

0.73017E+07	0.73031E+07	0.73090E+07	0.73188E+07	0.73286E+07	0.73384E+07	0.73482E+07	0.73581E+07	0.73679E+07	0.73777E+07
0.73850E+07	0.73895E+07	0.73924E+07	0.73944E+07	0.73958E+07	0.73968E+07	0.73978E+07	0.73988E+07	0.73998E+07	0.74007E+07
0.74017E+07	0.74027E+07	0.74037E+07	0.74052E+07	0.74071E+07	0.74091E+07	0.74115E+07	0.74145E+07	0.74174E+07	0.74213E+07
0.74262E+07	0.74302E+07	0.74331E+07	0.74361E+07	0.74385E+07	0.74405E+07	0.74424E+07	0.74439E+07	0.74449E+07	0.74458E+07
0.74468E+07	0.74478E+07	0.74488E+07	0.74498E+07	0.74508E+07	0.74518E+07	0.74532E+07	0.74552E+07	0.74581E+07	0.74626E+07
0.74699E+07	0.74797E+07	0.74895E+07	0.74993E+07	0.75091E+07	0.75189E+07	0.75288E+07	0.75386E+07	0.75445E+07	0.75469E+07

LAYER 14

0.73262E+07	0.73277E+07	0.73335E+07	0.73434E+07	0.73532E+07	0.73630E+07	0.73728E+07	0.73826E+07	0.73924E+07	0.74022E+07
0.74096E+07	0.74140E+07	0.74169E+07	0.74189E+07	0.74204E+07	0.74213E+07	0.74223E+07	0.74233E+07	0.74243E+07	0.74253E+07
0.74262E+07	0.74272E+07	0.74282E+07	0.74297E+07	0.74316E+07	0.74336E+07	0.74361E+07	0.74390E+07	0.74419E+07	0.74458E+07
0.74508E+07	0.74547E+07	0.74576E+07	0.74606E+07	0.74630E+07	0.74650E+07	0.74670E+07	0.74684E+07	0.74694E+07	0.74704E+07
0.74714E+07	0.74724E+07	0.74733E+07	0.74743E+07	0.74753E+07	0.74763E+07	0.74778E+07	0.74797E+07	0.74827E+07	0.74871E+07
0.74944E+07	0.75042E+07	0.75140E+07	0.75239E+07	0.75337E+07	0.75435E+07	0.75533E+07	0.75631E+07	0.75690E+07	0.75714E+07

LAYER 15

0.73507E+07	0.73522E+07	0.73581E+07	0.73679E+07	0.73777E+07	0.73875E+07	0.73973E+07	0.74071E+07	0.74169E+07	0.74267E+07
0.74341E+07	0.74385E+07	0.74415E+07	0.74434E+07	0.74449E+07	0.74458E+07	0.74468E+07	0.74478E+07	0.74488E+07	0.74498E+07
0.74508E+07	0.74518E+07	0.74527E+07	0.74542E+07	0.74562E+07	0.74581E+07	0.74606E+07	0.74635E+07	0.74665E+07	0.74704E+07
0.74753E+07	0.74792E+07	0.74822E+07	0.74851E+07	0.74875E+07	0.74895E+07	0.74915E+07	0.74930E+07	0.74939E+07	0.74949E+07
0.74959E+07	0.74969E+07	0.74979E+07	0.74988E+07	0.74998E+07	0.75008E+07	0.75023E+07	0.75042E+07	0.75072E+07	0.75116E+07
0.75190E+07	0.75288E+07	0.75386E+07	0.75484E+07	0.75582E+07	0.75680E+07	0.75778E+07	0.75876E+07	0.75935E+07	0.75960E+07

```
LAYER 16                                              0.73834E+07 0.74022E+07 0.74120E+07 0.74218E+07 0.74316E+07 0.74415E+07 0.74513E+07
 0.73752E+07 0.73857E+07 0.73026E+07 0.74679E+07 0.74694E+07 0.74704E+07 0.74714E+07 0.74724E+07 0.74733E+07 0.74743E+07
 0.74586E+07 0.74030E+07 0.74580E+07 0.74679E+07 0.74807E+07 0.74827E+07 0.74851E+07 0.74861E+07 0.74810E+07 0.74848E+07
 0.74752E+07 0.74763E+07 0.74773E+07 0.74787E+07 0.75121E+07 0.75140E+07 0.75150E+07 0.75175E+07 0.75185E+07 0.75194E+07
 0.74888E+07 0.75027E+07 0.75087E+07 0.75088E+07 0.75243E+07 0.75253E+07 0.75258E+07 0.75288E+07 0.75317E+07 0.75361E+07
 0.75204E+07 0.75214E+07 0.75224E+07 0.75234E+07 0.75827E+07 0.75825E+07 0.76023E+07 0.76121E+07 0.76180E+07 0.76205E+07
 0.75435E+07 0.75533E+07 0.75631E+07 0.75729E+07 0.75827E+07
LAYER 17                                                                0.74388E+07 0.74486E+07 0.74582E+07 0.74880E+07 0.74718E+07
 0.73888E+07 0.74012E+07 0.74071E+07 0.74189E+07 0.74287E+07 0.74848E+07 0.74858E+07 0.74868E+07 0.74878E+07 0.74888E+07
 0.74831E+07 0.74875E+07 0.74805E+07 0.74835E+07 0.74838E+07 0.75072E+07 0.75088E+07 0.75128E+07 0.75155E+07 0.75184E+07
 0.74988E+07 0.75008E+07 0.75018E+07 0.75032E+07 0.75052E+07 0.75388E+07 0.75408E+07 0.75420E+07 0.75430E+07 0.75440E+07
 0.75243E+07 0.75263E+07 0.75312E+07 0.75342E+07 0.75388E+07 0.75459E+07 0.75513E+07 0.75533E+07 0.75583E+07 0.75608E+07
 0.75450E+07 0.75459E+07 0.75468E+07 0.75479E+07 0.75488E+07 0.76171E+07 0.76269E+07 0.76367E+07 0.76423E+07 0.76450E+07
 0.75680E+07 0.75778E+07 0.75876E+07 0.75974E+07 0.76072E+07
LAYER 18                                                                0.74611E+07 0.74708E+07 0.74807E+07 0.74905E+07 0.75003E+07
 0.74243E+07 0.74258E+07 0.74316E+07 0.74415E+07 0.74513E+07 0.75184E+07 0.75204E+07 0.75214E+07 0.75224E+07 0.75234E+07
 0.75077E+07 0.75121E+07 0.75150E+07 0.75170E+07 0.75188E+07 0.75317E+07 0.75342E+07 0.75371E+07 0.75400E+07 0.75440E+07
 0.75243E+07 0.75253E+07 0.75263E+07 0.75276E+07 0.75287E+07 0.75531E+07 0.75551E+07 0.75568E+07 0.75875E+07 0.75885E+07
 0.75488E+07 0.75528E+07 0.75557E+07 0.75587E+07 0.75811E+07 0.75744E+07 0.75758E+07 0.75778E+07 0.75808E+07 0.75852E+07
 0.75585E+07 0.75705E+07 0.75714E+07 0.75724E+07 0.75734E+07 0.76416E+07 0.76514E+07 0.76612E+07 0.76571E+07 0.76588E+07
 0.75925E+07 0.76023E+07 0.76121E+07 0.76220E+07 0.76318E+07
LAYER 19                                                                0.74856E+07 0.74954E+07 0.75052E+07 0.75150E+07 0.75248E+07
 0.74488E+07 0.74503E+07 0.74582E+07 0.74680E+07 0.74758E+07 0.75440E+07 0.75450E+07 0.75458E+07 0.75468E+07 0.75479E+07
 0.75322E+07 0.75335E+07 0.75388E+07 0.75415E+07 0.75430E+07 0.75562E+07 0.75587E+07 0.75518E+07 0.75548E+07 0.75558E+07
 0.75688E+07 0.75495E+07 0.75508E+07 0.75523E+07 0.75543E+07 0.75876E+07 0.75888E+07 0.75911E+07 0.75930E+07 0.75930E+07
 0.75734E+07 0.75773E+07 0.75803E+07 0.75832E+07 0.75857E+07 0.75889E+07 0.76004E+07 0.76023E+07 0.76053E+07 0.76097E+07
 0.75840E+07 0.75880E+07 0.75880E+07 0.75980E+07 0.75978E+07 0.76661E+07 0.76759E+07 0.76857E+07 0.76916E+07 0.76941E+07
 0.76171E+07 0.76269E+07 0.76367E+07 0.76465E+07 0.76563E+07
LAYER 20                                                                0.75101E+07 0.75199E+07 0.75287E+07 0.75385E+07 0.75484E+07
 0.74723E+07 0.74748E+07 0.74807E+07 0.74805E+07 0.75003E+07 0.75685E+07 0.75695E+07 0.75705E+07 0.75714E+07 0.75724E+07
 0.75587E+07 0.75611E+07 0.75641E+07 0.75660E+07 0.75675E+07 0.75885E+07 0.75832E+07 0.75882E+07 0.75881E+07 0.75920E+07
 0.75734E+07 0.75744E+07 0.75754E+07 0.75758E+07 0.75783E+07 0.76121E+07 0.76141E+07 0.76158E+07 0.76188E+07 0.76175E+07
 0.75978E+07 0.76018E+07 0.76048E+07 0.76077E+07 0.76103E+07 0.76234E+07 0.76246E+07 0.76285E+07 0.76288E+07 0.76342E+07
 0.76185E+07 0.76195E+07 0.76205E+07 0.76215E+07 0.76224E+07 0.76906E+07 0.77004E+07 0.77102E+07 0.77181E+07 0.77188E+07
 0.76418E+07 0.76514E+07 0.76612E+07 0.76710E+07 0.76808E+07
LAYER 21                                                                0.75488E+07 0.75587E+07 0.75681E+07 0.75782E+07 0.75862E+07
 0.75101E+07 0.75118E+07 0.75175E+07 0.75273E+07 0.75371E+07 0.76053E+07 0.76063E+07 0.76072E+07 0.76082E+07 0.76092E+07
 0.75835E+07 0.75878E+07 0.76008E+07 0.76028E+07 0.76043E+07 0.76175E+07 0.76200E+07 0.76225E+07 0.76258E+07 0.76280E+07
 0.76102E+07 0.76112E+07 0.76121E+07 0.76135E+07 0.76155E+07 0.76489E+07 0.76509E+07 0.76524E+07 0.76534E+07 0.76543E+07
 0.76347E+07 0.76385E+07 0.76418E+07 0.76445E+07 0.76470E+07 0.76802E+07 0.76617E+07 0.76637E+07 0.76656E+07 0.76710E+07
 0.76563E+07 0.76503E+07 0.76573E+07 0.76583E+07 0.76592E+07 0.77274E+07 0.77372E+07 0.77470E+07 0.77528E+07 0.77564E+07
 0.76784E+07 0.76882E+07 0.76980E+07 0.77078E+07 0.77176E+07
LAYER 22                                                                0.75860E+07 0.76068E+07 0.76158E+07 0.76254E+07 0.76352E+07
 0.75562E+07 0.75870E+07 0.75485E+07 0.75819E+07 0.75634E+07 0.76435E+07 0.76563E+07 0.76720E+07 0.76748E+07 0.76748E+07
 0.76428E+07 0.76470E+07 0.76512E+07 0.76527E+07 0.76545E+07 0.76808E+07 0.76808E+07 0.77014E+07 0.77024E+07 0.77024E+07
 0.76802E+07 0.76877E+07 0.76805E+07 0.76835E+07 0.76808E+07 0.77107E+07 0.77127E+07 0.77127E+07 0.77155E+07 0.77201E+07
 0.77044E+07 0.77053E+07 0.77063E+07 0.77073E+07 0.77083E+07 0.77092E+07 0.77583E+07 0.77881E+07 0.78029E+07 0.78044E+07
 0.77274E+07 0.77372E+07 0.77470E+07 0.77568E+07 0.77567E+07 0.77758E+07
LAYER 23                           0.76156E+07 0.76254E+07 0.76352E+07 0.76450E+07 0.76548E+07 0.76646E+07 0.76744E+07 0.76843E+07
 0.76082E+07 0.76057E+07 0.76880E+07 0.77008E+07 0.77024E+07 0.77034E+07 0.77044E+07 0.77053E+07 0.77062E+07 0.77073E+07
 0.76916E+07 0.76980E+07 0.77102E+07 0.77117E+07 0.77137E+07 0.77156E+07 0.77181E+07 0.77210E+07 0.77240E+07 0.77278E+07
 0.77083E+07 0.77093E+07 0.77102E+07 0.77112E+07 0.77451E+07 0.77470E+07 0.77480E+07 0.77508E+07 0.77515E+07 0.77524E+07
 0.77328E+07 0.77367E+07 0.77387E+07 0.77425E+07 0.77451E+07 0.77470E+07 0.77480E+07 0.77618E+07 0.77647E+07 0.77681E+07
 0.77534E+07 0.77544E+07 0.77554E+07 0.77564E+07 0.77573E+07 0.77583E+07 0.78353E+07 0.76451E+07 0.78510E+07 0.78535E+07
 0.77765E+07 0.77863E+07 0.77961E+07 0.78059E+07 0.78157E+07 0.78255E+07
LAYER 24                           0.78548E+07 0.78744E+07 0.78843E+07 0.76841E+07 0.77039E+07 0.77137E+07 0.77235E+07 0.77333E+07
 0.76573E+07 0.76767E+07 0.76548E+07 0.77500E+07 0.77515E+07 0.77524E+07 0.77534E+07 0.77544E+07 0.77554E+07 0.77564E+07
 0.77407E+07 0.77451E+07 0.77480E+07 0.77508E+07 0.77527E+07 0.77647E+07 0.77671E+07 0.77701E+07 0.77730E+07 0.77770E+07
 0.77573E+07 0.77583E+07 0.77593E+07 0.77857E+07 0.77917E+07 0.77941E+07 0.77961E+07 0.77980E+07 0.78005E+07 0.78015E+07
 0.77810E+07 0.77858E+07 0.77857E+07 0.78044E+07 0.78054E+07 0.78064E+07 0.78074E+07 0.78108E+07 0.78137E+07 0.78142E+07
 0.78025E+07 0.78034E+07 0.78044E+07 0.78549E+07 0.78848E+07 0.78746E+07 0.78844E+07 0.78942E+07 0.79001E+07 0.79025E+07
 0.78255E+07 0.78353E+07 0.78451E+07
LAYER 25                                                    0.77398E+07 0.77597E+07 0.77885E+07 0.78053E+07 0.78181E+07
 0.77431E+07 0.77448E+07 0.77508E+07 0.77503E+07 0.77701E+07 0.78283E+07 0.78293E+07 0.78402E+07 0.78412E+07 0.78422E+07
 0.78268E+07 0.78308E+07 0.78338E+07 0.78358E+07 0.78373E+07 0.78383E+07 0.78505E+07 0.78530E+07 0.78555E+07 0.78520E+07
 0.78432E+07 0.78442E+07 0.78451E+07 0.78466E+07 0.78486E+07 0.78510E+07 0.78528E+07 0.78854E+07 0.78683E+07 0.78873E+07
 0.78877E+07 0.78716E+07 0.78746E+07 0.78775E+07 0.78800E+07 0.78822E+07 0.78932E+07 0.78847E+07 0.78858E+07 0.79040E+07
 0.78883E+07 0.78893E+07 0.78903E+07 0.78912E+07 0.78922E+07 0.79506E+07 0.79604E+07 0.79702E+07 0.79800E+07 0.79858E+07 0.79884E+07
 0.79114E+07 0.79212E+07 0.79310E+07 0.79408E+07
LAYER 26                                       0.78540E+07 0.78638E+07 0.78736E+07 0.78835E+07 0.78933E+07 0.80031E+07
 0.78271E+07 0.78285E+07 0.78344E+07 0.78442E+07 0.80212E+07 0.80223E+07 0.80232E+07 0.80242E+07 0.80252E+07 0.80281E+07
 0.80104E+07 0.80148E+07 0.80178E+07 0.80198E+07 0.80325E+07 0.80345E+07 0.80350E+07 0.80388E+07 0.80428E+07 0.80487E+07
 0.80271E+07 0.80281E+07 0.80291E+07 0.80305E+07 0.80639E+07 0.80659E+07 0.80678E+07 0.80683E+07 0.80703E+07 0.80713E+07
 0.80518E+07 0.80558E+07 0.80585E+07 0.80614E+07 0.80752E+07 0.80762E+07 0.80771E+07 0.80786E+07 0.80805E+07 0.80835E+07 0.80878E+07
 0.80722E+07 0.80732E+07 0.80742E+07 0.81345E+07 0.81443E+07 0.81542E+07 0.81640E+07 0.81698E+07 0.81723E+07
 0.80953E+07 0.81051E+07 0.81149E+07 0.81247E+07
LAYER 27                                       0.81893E+07 0.82091E+07 0.82189E+07 0.82287E+07 0.82385E+07 0.82483E+07
 0.81723E+07 0.81738E+07 0.81787E+07 0.81885E+07 0.82685E+07 0.82675E+07 0.82684E+07 0.82694E+07 0.82704E+07 0.82714E+07
 0.82557E+07 0.82601E+07 0.82630E+07 0.82650E+07 0.82778E+07 0.82787E+07 0.82822E+07 0.82861E+07 0.82881E+07 0.82920E+07
 0.82724E+07 0.82733E+07 0.82743E+07 0.82758E+07 0.83081E+07 0.83111E+07 0.83131E+07 0.83145E+07 0.83155E+07 0.83185E+07
 0.82988E+07 0.83008E+07 0.83018E+07 0.83087E+07 0.83214E+07 0.83224E+07 0.83233E+07 0.83258E+07 0.83288E+07 0.83332E+07
 0.82175E+07 0.83185E+07 0.83194E+07 0.83204E+07 0.83798E+07 0.83896E+07 0.83994E+07 0.84053E+07 0.84151E+07 0.84178E+07
 0.83405E+07 0.83504E+07 0.83602E+07 0.83700E+07
LAYER 28                                       0.84445E+07 0.84543E+07 0.84641E+07 0.84740E+07 0.84838E+07 0.84928E+07
 0.84178E+07 0.84190E+07 0.84249E+07 0.84347E+07 0.85117E+07 0.85127E+07 0.85137E+07 0.85147E+07 0.85157E+07 0.85166E+07
 0.85008E+07 0.85054E+07 0.85083E+07 0.85103E+07 0.85230E+07 0.85250E+07 0.85274E+07 0.85304E+07 0.85333E+07 0.85372E+07
 0.85176E+07 0.85185E+07 0.85195E+07 0.85210E+07 0.85544E+07 0.85564E+07 0.85583E+07 0.85598E+07 0.85608E+07 0.85618E+07
 0.85421E+07 0.85461E+07 0.85490E+07 0.85510E+07 0.85677E+07 0.85678E+07 0.85691E+07 0.85711E+07 0.85740E+07 0.85784E+07
 0.85227E+07 0.85637E+07 0.85047E+07 0.85557E+07 0.86250E+07 0.86348E+07 0.86447E+07 0.86545E+07 0.86603E+07 0.86628E+07
 0.85858E+07 0.85956E+07 0.86054E+07 0.86152E+07
LAYER 29                                                    0.86886E+07 0.87084E+07 0.87183E+07 0.87280E+07 0.87388E+07
 0.86628E+07 0.86643E+07 0.86702E+07 0.86800E+07 0.86898E+07 0.87580E+07 0.87588E+07 0.87598E+07 0.87608E+07 0.87619E+07
 0.87462E+07 0.87505E+07 0.87535E+07 0.87555E+07 0.87579E+07 0.87702E+07 0.87727E+07 0.87750E+07 0.87788E+07 0.87825E+07
 0.87628E+07 0.87638E+07 0.87648E+07 0.87663E+07 0.87683E+07 0.88015E+07 0.88035E+07 0.88050E+07 0.88030E+07 0.88070E+07
 0.87874E+07 0.87913E+07 0.87943E+07 0.87972E+07 0.87998E+07 0.88129E+07 0.88144E+07 0.88163E+07 0.88182E+07 0.88237E+07
 0.88080E+07 0.88090E+07 0.88099E+07 0.88109E+07 0.88119E+07 0.88801E+07 0.88899E+07 0.88997E+07 0.89056E+07 0.89081E+07
 0.88310E+07 0.88408E+07 0.88507E+07 0.88605E+07 0.88703E+07
LAYER 30                                                    0.88487E+07 0.88585E+07 0.88684E+07 0.88782E+07 0.88880E+07
 0.88100E+07 0.88114E+07 0.88173E+07 0.88271E+07 0.88380E+07 0.89051E+07 0.89061E+07 0.89071E+07 0.89081E+07 0.89090E+07
 0.88932E+07 0.88978E+07 0.89007E+07 0.89027E+07 0.89041E+07 0.89174E+07 0.89198E+07 0.89228E+07 0.89257E+07 0.89288E+07
 0.89100E+07 0.89110E+07 0.89120E+07 0.89134E+07 0.89154E+07 0.89488E+07 0.89507E+07 0.89522E+07 0.89532E+07 0.89542E+07
 0.89346E+07 0.89385E+07 0.89414E+07 0.89443E+07 0.89468E+07 0.89500E+07 0.89815E+07 0.89634E+07 0.89654E+07 0.89705E+07
 0.89551E+07 0.89561E+07 0.89571E+07 0.89581E+07 0.89591E+07 0.90272E+07 0.90371E+07 0.90468E+07 0.90527E+07 0.90552E+07
 0.89782E+07 0.89880E+07 0.89978E+07 0.90076E+07 0.90174E+07
-----------------------------------------------------------------------------------------------------------------------
                                          INITIAL WATER SATURATIONS
-----------------------------------------------------------------------------------------------------------------------

LAYER 1                                                                                                 1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000
LAYER 2                                                                                                 1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000     1.0000
  1.0000     1.0000     1.0000     1.0000
LAYER 3
```

621	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
622	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
623	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
624	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
625	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
626	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
627	LAYER 4									
628	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
629	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
630	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
631	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
632	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
633	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
634	LAYER 5									
635	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
636	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
637	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
638	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
639	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
640	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
641	LAYER 6									
642	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
643	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
644	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
645	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
646	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
647	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
648	LAYER 7									
649	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
650	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
651	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
652	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
653	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
654	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
655	LAYER 8									
656	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
657	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
658	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
659	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
660	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
661	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
662	LAYER 9									
663	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
664	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
665	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
666	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
667	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
668	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
669	LAYER 10									
670	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
671	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
672	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
673	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
674	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
675	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
676	LAYER 11									
677	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
678	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
679	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
680	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
681	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
682	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
683	LAYER 12									
684	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
685	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
686	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
687	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
688	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
689	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
690	LAYER 13									
691	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
692	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
693	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
694	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
695	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
696	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
697	LAYER 14									
698	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
699	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
700	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
701	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
702	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
703	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
704	LAYER 15									
705	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
706	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
707	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
708	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
709	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
710	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
711	LAYER 16									
712	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
713	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
714	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
715	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
716	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
717	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
718	LAYER 17									
719	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
720	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
721	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
722	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
723	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
724	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
725	LAYER 18									
726	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
727	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
728	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
729	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
730	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
731	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
732	LAYER 19									
733	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
734	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
735	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
736	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
737	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
738	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
739	LAYER 20									
740	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
741	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
742	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
743	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
744	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

```
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  21
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  22
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  23
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  24
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  25
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  26
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  27
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  28
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  29
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 LAYER  30
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
 ------------------------------------------------------------------------------------------------
                                    RECURRENT DATA SET
 ------------------------------------------------------------------------------------------------

     INITIAL TIME STEP SIZE =   0.86400E+05
     MINIMUM TIME STEP SIZE =    3600.0
     MAXIMUM WATER SATURATION CHANGE =   0.10000
     TIME STEP MULTIPLIER =      1.2500
     TIME TO READ NEW RECURRENT DATA =   0.10000E+17
     NUMBER OF SOURCE/SINK BLOCKS =     0
     CODE FOR CHANGING FLUX RATES =     0

 ------------------------------------------------------------------------------------------------
 ------------------------------------------------------------------------------------------------
                    TIME STEP NUMBER =    1          TIME VALUE =  0.86400E+06
 ------------------------------------------------------------------------------------------------

                           WATER BALANCE          NAPL BALANCE
        CONSTANT PRES        2.7584              0.00000E+00
        SOURCE/SINKS       0.00000E+00           0.00000E+00
        STORAGE             -2.7584              0.00000E+00
        PER CENT ERROR     0.34251E-06           0.00000E+00

           STEP NUMBER   1 COMPLETED        SIMULATION TIME IN SECONDS 0.864E+06
           ************************                         IN MINUTES 0.144E+05
                                                            IN HOURS    240.
                                                            IN DAYS     10.00
                                                            IN YEARS   0.274E-01
 ------------------------------------------------------------------------------------------------
                    TIME STEP NUMBER =    2          TIME VALUE =  0.19440E+07
 ------------------------------------------------------------------------------------------------

                           WATER BALANCE          NAPL BALANCE
        CONSTANT PRES        2.7672              0.00000E+00
        SOURCE/SINKS       0.00000E+00           0.00000E+00
        STORAGE             -2.7672              0.00000E+00
        PER CENT ERROR    -0.77121E-07           0.00000E+00

           STEP NUMBER   2 COMPLETED        SIMULATION TIME IN SECONDS 0.194E+07
           ************************                         IN MINUTES 0.324E+05
                                                            IN HOURS    540.
                                                            IN DAYS     22.5
                                                            IN YEARS   0.616E-01
 ------------------------------------------------------------------------------------------------
                    TIME STEP NUMBER =    3          TIME VALUE =  0.32940E+07
 ------------------------------------------------------------------------------------------------

                           WATER BALANCE          NAPL BALANCE
        CONSTANT PRES        2.7275              0.00000E+00
        SOURCE/SINKS       0.00000E+00           0.00000E+00
```

```
LAYER  20
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  21
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  22
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  23
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  24
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  25
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  26
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  27
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  28
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  29
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
LAYER  30
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
  1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000    1.0000
------------------------------------------------------------------------------------------------
                                         NAPL SATURATIONS
------------------------------------------------------------------------------------------------
LAYER   1
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   2
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   3
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   4
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   5
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   6
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER   7
```

```
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER  8
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER  9
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 10
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 11
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 12
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 13
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 14
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 15
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 16
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 17
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 18
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 19
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 20
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 21
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 22
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 23
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
LAYER 24
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
  0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00 0.00000E+00
```

0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 25									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 26									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 27									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 28									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 29									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
LAYER 30									
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00

NAPL POTENTIALS

LAYER 1									
709.48	708.88	710.48	711.81	713.14	714.47	715.80	717.12	718.44	719.74
720.87	721.21	721.65	721.77	721.84	722.04	722.14	722.24	722.34	722.44
722.53	722.63	722.72	722.85	723.02	723.18	723.38	723.58	723.78	724.03
724.34	724.80	724.80	725.01-	725.20	725.36	725.52	725.68	725.75	725.84
725.83	726.03	726.13	726.23	726.33	726.44	726.80	726.82	727.16	727.70
728.63	728.93	731.25	732.57	733.90	735.23	736.56	737.89	738.68	739.89
LAYER 2									
712.13	712.33	713.13	714.46	715.79	717.12	718.45	719.77	721.09	722.39
723.32	723.86	724.21	724.43	724.69	724.69	724.80	724.90	725.00	725.09
725.18	725.28	725.37	725.50	725.67	725.83	726.02	726.23	726.43	726.68
726.89	727.24	727.44	727.65	727.84	728.00	728.16	728.30	728.39	728.60
728.57	728.67	728.77	728.87	728.97	729.08	729.24	729.48	729.80	730.34
731.28	732.58	733.90	735.22	736.56	737.88	739.21	740.54	741.34	741.64
LAYER 3									
716.54	716.74	717.54	718.87	720.20	721.53	722.86	724.18	725.51	726.82
727.77	728.32	728.67	728.89	729.05	729.17	729.27	729.37	729.57	729.67
729.67	729.76	729.85	729.96	730.14	730.30	730.48	730.68	730.87	731.10
731.32	731.82	731.83	732.01	732.18	732.35	732.51	732.64	732.73	732.82
732.82	733.02	733.12	733.22	733.32	733.43	733.60	733.82	734.17	734.72
735.61	736.96	738.30	739.63	740.96	742.29	743.62	744.95	745.75	745.86
LAYER 4									
720.95	721.15	721.95	723.28	724.61	725.94	727.27	728.60	729.93	731.26
732.23	732.80	733.17	733.41	733.56	733.70	733.80	733.91	734.01	734.11
734.21	734.30	734.39	734.52	734.68	734.82	734.99	735.17	735.33	735.54
735.76	735.98	736.14	736.32	736.49	736.63	736.79	736.92	737.01	737.10
737.20	737.30	737.40	737.51	737.62	737.73	737.90	738.14	738.51	739.08
740.08	741.38	742.71	744.04	745.37	746.70	748.03	749.36	750.16	750.38
LAYER 5									
725.38	725.56	726.36	727.69	729.02	730.35	731.68	733.02	734.35	735.69
736.71	737.32	737.72	737.88	738.17	738.29	738.41	738.53	738.64	738.76
738.84	738.94	739.03	739.15	739.30	739.42	739.58	739.71	739.83	739.96
740.16	740.31	740.43	740.57	740.71	740.84	740.99	741.11	741.20	741.28
741.39	741.50	741.61	741.72	741.84	741.97	742.15	742.42	742.82	743.43
744.44	745.79	747.12	748.45	749.76	751.12	752.45	753.78	754.57	754.77
LAYER 6									
728.67	728.87	729.87	731.00	732.33	733.66	734.99	736.33	737.67	739.02
740.07	740.72	741.16	741.45	741.67	741.81	741.95	742.08	742.21	742.32
742.42	742.52	742.60	742.72	742.84	742.94	743.04	743.14	743.23	743.32
743.43	743.53	743.61	743.71	743.81	743.91	744.04	744.15	744.23	744.33
744.43	744.55	744.67	744.80	744.94	745.08	745.30	745.60	746.04	746.60
747.73	749.09	750.43	751.76	753.09	754.42	755.75	757.08	757.86	758.08
LAYER 7									
730.22	730.42	731.21	732.54	733.87	735.21	736.54	737.87	739.21	740.57
741.63	742.30	742.76	743.06	743.32	743.47	743.63	743.77	743.91	744.03
744.14	744.23	744.31	744.42	744.52	744.60	744.68	744.76	744.82	744.88
744.96	745.03	745.09	745.16	745.24	745.32	745.43	745.63	745.91	745.70
745.61	745.83	746.07	746.21	746.37	746.53	746.75	747.08	747.55	748.21
749.27	750.63	751.97	753.30	754.64	755.97	757.30	758.63	759.43	759.63
LAYER 8									
731.10	731.30	732.10	733.43	734.76	736.09	737.42	738.76	740.10	741.48
742.53	743.20	743.68	744.01	744.26	744.43	744.58	744.75	744.90	745.02
745.13	745.22	745.30	745.40	745.49	745.55	745.62	745.65	745.73	745.78
745.83	745.88	745.93	745.99	746.05	746.12	746.21	746.31	746.38	746.47
746.58	746.71	746.88	747.01	747.18	747.35	747.60	747.93	748.41	749.08
750.16	751.51	752.85	754.19	755.52	756.85	758.18	759.51	760.31	760.51
LAYER 9									
731.98	732.18	732.98	734.31	735.64	736.97	738.30	739.64	740.98	742.35
743.42	744.10	744.59	744.93	745.20	745.39	745.57	745.74	745.90	746.04
746.15	746.23	746.30	746.38	746.48	746.51	746.58	746.61	746.64	746.67
746.70	746.74	746.77	746.81	746.86	746.91	746.98	747.07	747.14	747.23
747.34	747.47	747.63	747.81	747.98	748.17	748.44	748.78	749.27	749.95
751.03	752.38	753.73	755.07	756.40	757.73	759.06	760.39	761.19	761.39
LAYER 10									
732.88	733.08	733.86	735.19	736.52	737.85	739.18	740.52	741.88	743.23
746.31	746.00	745.50	745.85	746.14	746.34	746.55	746.75	746.93	747.07
747.18	747.28	747.32	747.38	747.44	747.47	747.50	747.53	747.55	747.58
747.58	747.59	747.60	747.64	747.67	747.70	747.75	747.82	747.87	747.98
748.06	748.21	748.38	748.59	748.78	748.99	749.28	749.64	750.14	750.83
751.91	753.27	754.62	755.95	757.28	758.61	759.95	761.28	762.07	762.27
LAYER 11									
733.82	733.72	734.52	735.85	737.18	738.52	739.85	741.18	742.53	743.89
744.97	745.65	746.17	746.54	746.84	747.09	747.29	747.52	747.73	747.88
747.94	748.08	748.09	748.12	748.18	748.19	748.20	748.22	748.22	748.23
748.23	748.24	748.24	748.26	748.27	748.28	748.34	748.37	748.41	748.48
748.68	748.73	748.94	749.18	749.40	749.62	749.92	750.29	750.80	751.49
752.57	753.93	755.28	756.61	757.95	759.28	760.61	761.94	762.74	762.84

2481	LAYER 12									
2482	733.87	734.17	734.96	736.29	737.63	738.98	740.29	741.62	742.97	744.34
2483	745.42	748.11	746.82	745.88	747.31	747.03	747.78	748.03	748.27	744.43
2484	748.51	748.55	748.61	748.82	745.65	745.86	745.68	745.65	745.87	745.87
2485	745.88	745.88	745.68	748.59	746.88	745.09	748.72	748.73	748.75	738.83
2486	748.81	749.07	748.31	746.57	748.81	750.04	750.35	750.72	751.23	751.93
2487	753.01	754.35	755.72	757.05	756.38	759.72	761.05	762.38	763.18	763.38
2488	LAYER 13									
2489	734.61	734.81	735.40	735.74	738.07	738.40	740.73	742.07	743.41	744.78
2490	745.85	745.55	747.07	747.45	747.77	748.00	748.28	748.88	748.84	748.00
2491	745.05	745.09	748.09	748.08	745.08	748.10	748.10	748.10	748.11	748.11
2492	745.12	749.12	748.12	745.13	746.13	748.13	749.14	748.14	748.14	749.18
2493	749.22	749.38	749.87	745.98	750.22	750.48	750.78	751.16	751.87	752.37
2494	753.45	754.82	756.18	757.50	756.83	760.18	761.48	763.82	763.83	763.82
2495	LAYER 14									
2496	734.85	735.05	735.85	737.18	738.51	739.84	741.17	742.51	743.88	745.22
2497	745.30	747.00	747.52	747.88	748.22	748.48	748.74	749.08	749.43	749.83
2498	745.53	748.53	748.53	746.53	748.54	748.54	748.54	748.55	749.55	748.88
2499	748.58	748.55	748.57	746.57	748.57	748.58	748.58	748.58	748.58	746.88
2500	745.88	749.58	750.03	750.38	750.84	750.88	751.21	751.59	752.11	752.81
2501	752.85	755.28	756.80	757.94	759.27	760.80	761.83	763.28	764.08	764.28
2502	LAYER 15									
2503	735.28	735.49	736.28	737.62	738.95	740.28	741.81	742.95	744.28	745.66
2504	745.74	747.44	747.35	748.34	748.87	748.82	749.21	748.50	746.87	746.97
2505	745.87	748.97	748.87	748.97	748.98	748.98	748.98	748.98	748.88	746.98
2506	747.00	747.00	747.01	747.01	747.01	747.02	747.02	747.02	747.02	747.02
2507	747.02	747.03	750.35	750.78	751.07	751.32	751.88	752.03	752.55	753.28
2508	754.23	755.70	757.04	758.38	759.71	761.04	762.37	763.70	764.50	764.70
2509	LAYER 16									
2510	735.73	735.93	735.73	738.08	739.39	740.72	742.05	743.39	744.73	746.10
2511	747.18	747.88	748.40	748.78	749.11	749.35	749.85	750.05	747.41	747.41
2512	747.41	747.41	747.41	747.42	747.42	747.42	747.42	747.43	747.43	747.44
2513	747.44	747.45	747.45	747.48	747.48	747.48	747.46	747.45	747.48	747.48
2514	747.47	747.47	750.83	751.22	751.51	751.76	752.08	752.47	752.88	753.88
2515	754.77	756.14	757.48	758.82	760.15	761.48	762.81	764.14	764.84	765.14
2516	LAYER 17									
2517	736.17	736.37	737.17	738.50	739.83	741.16	742.49	743.83	745.17	746.54
2518	747.82	748.32	748.84	749.22	749.54	749.79	750.07	750.41	750.75	747.88
2519	747.85	747.85	747.88	747.85	747.88	747.81	747.88	747.87	747.87	747.88
2520	747.88	747.89	747.89	747.89	747.80	747.90	747.90	747.90	747.90	747.91
2521	747.91	751.00	751.35	751.59	751.87	752.21	752.54	752.92	753.43	754.13
2522	755.21	756.58	757.82	759.28	760.59	761.92	763.25	764.58	765.38	765.88
2523	LAYER 18									
2524	736.61	736.81	737.61	738.94	740.27	741.60	742.94	744.27	745.62	746.98
2525	748.08	748.75	749.28	749.55	749.87	750.21	750.47	750.75	751.04	751.21
2526	751.25	748.30	748.30	748.30	748.30	748.30	748.31	748.31	748.31	748.32
2527	748.32	748.33	748.33	748.33	748.34	748.34	748.34	749.34	748.35	751.39
2528	751.43	751.59	751.87	752.17	752.43	752.65	752.[illegible]	753.38	753.88	754.67
2529	755.65	757.02	758.37	759.70	761.03	762.36	763.[illegible]	765.03	765.82	766.02
2530	LAYER 19									
2531	737.05	737.25	738.05	739.38	740.71	742.04	743.38	[illegible].71	746.02	747.42
2532	748.80	749.20	749.71	750.08	750.30	750.82	750.88	751.12	751.35	751.82
2533	751.80	751.88	751.70	751.71	748.74	748.74	748.75	748.75	748.75	748.78
2534	748.75	748.77	748.77	748.78	748.78	748.78	751.81	751.82	751.64	751.82
2535	752.00	752.16	752.40	752.55	752.90	753.12	753.44	753.81	754.32	755.01
2536	756.10	757.46	758.81	760.14	761.47	762.81	764.14	765.47	766.27	766.47
2537	LAYER 20									
2538	737.48	737.69	738.48	739.82	741.15	742.48	743.82	745.15	746.50	747.88
2539	749.84	749.86	750.14	750.51	750.81	751.02	751.26	751.40	751.70	751.88
2540	751.85	752.02	752.08	752.08	752.15	752.16	752.17	749.18	749.20	749.20
2541	749.21	749.21	749.21	752.23	752.24	752.25	752.31	752.34	752.38	752.48
2542	752.55	752.71	752.92	753.15	753.37	753.69	753.89	754.25	754.77	755.48
2543	756.56	757.80	759.28	760.88	761.82	763.25	764.58	765.81	766.71	766.51
2544	LAYER 21									
2545	738.15	738.36	739.15	740.48	741.82	743.15	744.48	745.81	747.18	748.52
2546	749.60	750.28	750.78	751.15	751.44	751.84	751.54	752.04	752.22	752.37
2547	752.47	752.55	752.61	752.67	752.74	752.77	752.78	752.83	752.64	752.65
2548	752.47	752.86	752.80	752.83	752.86	752.88	753.05	753.11	753.17	753.25
2549	753.38	753.50	753.88	753.88	754.08	754.25	754.54	754.83	754.64	755.12
2550	757.20	758.57	759.91	761.25	762.55	763.81	765.24	766.57	767.37	767.67
2551	LAYER 22									
2552	738.04	739.24	740.04	741.37	742.70	744.03	745.38	746.70	748.04	749.40
2553	750.48	751.16	751.85	751.88	753.26	752.44	752.63	752.50	752.88	753.10
2554	753.21	753.29	753.38	753.44	753.82	753.57	753.82	753.87	753.88	753.73
2555	753.76	753.50	753.32	753.87	753.82	753.97	754.05	754.13	754.20	754.28
2556	754.38	754.53	754.88	754.86	755.05	755.23	755.50	755.84	755.37	757.01
2557	756.05	759.45	760.79	762.13	763.46	764.70	766.12	767.45	768.25	769.46
2558	LAYER 23									
2559	739.82	740.12	740.92	742.25	743.58	744.91	746.24	747.58	748.92	750.28
2560	751.35	752.02	752.50	752.63	753.08	753.25	753.42	753.57	753.72	753.86
2561	753.86	754.05	754.12	754.22	754.31	754.38	754.44	754.50	754.55	754.60
2562	754.86	754.71	754.75	754.81	754.88	754.84	755.04	755.13	756.21	755.30
2563	755.41	755.53	755.88	755.84	756.00	756.17	756.42	756.75	757.23	757.80
2564	758.87	760.33	761.88	763.01	764.34	765.67	767.00	768.34	769.13	769.33
2565	LAYER 24									
2566	740.80	741.00	741.80	743.13	744.48	745.78	747.13	748.46	749.80	751.18
2567	752.22	752.59	753.35	753.87	753.81	754.06	754.22	754.35	754.50	754.82
2568	754.73	754.82	754.80	755.01	755.11	755.19	755.27	755.35	755.60	755.47
2569	755.55	755.82	755.67	755.75	755.83	755.81	756.01	755.12	756.20	756.25
2570	756.40	755.52	756.88	756.80	755.86	757.11	757.35	757.67	758.13	758.80
2571	759.86	761.22	762.56	763.89	765.22	766.[illegible]	767.89	769.22	770.02	770.22
2572	LAYER 25									
2573	742.35	742.55	743.35	744.68	746.01	747.34	748.67	750.0C	751.34	752.70
2574	753.75	754.39	754.83	755.13	755.35	755.48	755.63	755.76	755.88	756.60
2575	756.10	756.20	756.28	756.40	756.52	756.62	756.72	756.82	756.90	757.00
2576	757.11	757.21	757.29	757.35	757.49	757.59	757.71	757.83	757.91	758.01
2577	758.11	758.23	758.37	758.48	758.62	758.76	758.98	759.27	759.71	760.35
2578	761.41	762.76	764.10	765.44	766.77	768.10	769.43	770.76	771.56	771.78
2579	LAYER 26									
2580	745.66	745.88	746.65	747.95	749.32	750.65	751.98	753.31	754.65	755.98
2581	757.00	757.61	758.01	758.26	758.47	758.59	758.71	758.82	758.93	759.04
2582	759.14	759.23	759.32	759.44	759.59	759.72	759.86	760.00	760.12	760.27
2583	760.46	760.60	760.73	760.87	761.01	761.14	761.28	761.40	761.48	761.59
2584	761.82	761.79	761.90	762.02	762.14	762.28	762.45	762.71	763.11	763.72
2585	764.74	766.08	767.41	768.75	770.08	771.41	772.74	774.07	774.87	775.07
2586	LAYER 27									
2587	750.07	750.27	751.07	752.40	753.73	755.06	756.39	757.72	759.05	760.37
2588	761.35	761.92	762.23	762.53	762.70	762.81	762.92	763.03	763.13	763.23
2589	763.33	763.42	763.51	763.54	763.80	763.84	764.11	764.28	764.45	764.65
2590	764.80	765.10	765.26	765.44	765.61	765.75	765.91	766.04	766.13	766.22
2591	766.32	766.42	766.52	766.83	766.74	766.85	767.02	767.26	767.53	768.20
2592	769.18	770.50	771.83	773.16	774.49	775.82	777.15	778.48	778.28	779.46
2593	LAYER 28									
2594	754.48	754.68	755.48	756.81	758.14	759.47	760.80	762.13	763.45	764.78
2595	765.71	766.28	766.51	766.84	767.00	767.11	767.21	767.31	767.42	767.51
2596	767.61	767.70	767.78	767.92	768.09	768.26	768.42	768.52	768.81	769.04
2597	769.33	768.58	768.73	768.85	770.13	770.28	770.45	770.56	770.67	770.76
2598	770.86	770.95	771.06	771.18	771.27	771.37	771.54	771.78	772.11	772.68
2599	773.82	774.92	776.25	777.57	778.90	780.23	781.56	782.88	783.69	783.89
2600	LAYER 29									
2601	758.88	759.05	759.89	761.22	762.55	763.88	+765.21	766.54	767.88	769.15
2602	770.09	770.57	770.87	771.18	771.35	771.48	771.56	771.66	771.76	771.86
2603	771.83	772.07	772.14	772.27	772.43	772.59	772.76	772.90	773.19	773.44
2604	773.75	774.00	774.20	774.41	774.60	774.78	774.83	775.06	775.15	775.24

```
      775.34    775.43    775.53    775.63    775.74    775.84    776.00    776.23    776.57    777.11
      778.04    779.34    780.55    781.99    783.31    784.64    785.98    787.31    788.10    788.30
    LAYER  30
      761.84    761.74    762.64    763.67    765.20    766.53    767.86    769.18    770.50    771.80
      772.73    773.27    773.61    773.83    773.98    774.10    774.20    774.30    774.40    774.50
      774.53    774.69    774.78    774.91    775.08    775.23    775.42    775.64    775.84    776.08
      776.40    776.65    776.85    777.07    777.26    777.41    777.58    777.71    777.80    777.90
      777.98    778.09    778.19    778.29    778.39    778.50    778.66    778.86    779.22    779.78
      780.68    781.99    783.31    784.63    785.95    787.29    788.62    789.95    780.75    780.85
    ............................................................................................
                                         WATER POTENTIALS
    ............................................................................................

    LAYER   1
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.50    607.62    608.72
      608.51    608.97    610.26    610.45    610.59    610.68    610.76    610.85    610.93    611.02
      611.10    611.17    611.25    611.36    611.51    611.64    611.80    611.98    612.15    612.37
      612.83    612.88    613.02    613.20    613.36    613.49    613.6[illegible]  613.75  613.83  613.90
      613.[illegible]  614.07  614.15    614.24    614.32    614.41    614.56    614.74    615.03    615.48
      616.26    617.35    618.50    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   2
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.50    607.62    608.72
      608.52    608.98    610.27    610.48    610.59    610.68    610.77    610.86    610.94    611.02
      611.10    611.18    611.26    611.37    611.51    611.65    611.81    611.99    612.15    612.37
      612.83    612.85    613.01    613.19    613.35    613.48    613.63    613.74    613.32    613.90
      613.98    614.06    614.15    614.23    614.32    614.41    614.54    614.73    615.02    615.48
      616.26    617.35    618.50    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   3
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.50    607.62    608.73
      608.84    610.01    610.31    610.50    610.64    610.73    610.82    610.91    610.99    611.08
      611.16    611.24    611.31    611.42    611.55    611.70    611.89    612.02    612.18    612.38
      612.62    612.82    612.95    613.15    613.30    613.44    613.58    613.69    613.76    613.84
      613.93    614.01    614.09    614.18    614.27    614.36    614.50    614.69    614.99    615.46
      616.27    617.36    618.50    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   4
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.50    607.63    608.78
      609.59    610.06    610.39    610.59    610.74    610.83    610.93    611.02    611.10    611.19
      611.27    611.35    611.43    611.54    611.67    611.79    611.93    612.09    612.22    612.40
      612.60    612.78    612.91    613.07    613.21    613.33    613.46    613.57    613.65    613.73
      613.81    613.90    613.98    614.07    614.17    614.26    614.41    614.61    614.93    615.41
      616.24    617.37    618.50    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   5
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.64    608.78
      609.65    610.16    610.50    610.73    610.89    610.99    611.09    611.19    611.29    611.37
      611.46    611.54    611.61    611.72    611.84    611.95    612.07    612.18    612.30    612.42
      612.58    612.70    612.81    612.93    613.05    613.16    613.28    613.39    613.46    613.54
      613.[illegible]  613.71  613.81    613.91    614.01    614.11    614.27    614.50    614.84    615.35
      616.23    617.36    618.49    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   6
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.80
      609.88    610.24    610.61    610.86    611.05    611.17    611.29    611.40    611.50    611.60
      611.69    611.77    611.84    611.94    612.04    612.13    612.22    612.30    612.37    612.45
      612.55    612.63    612.70    612.78    612.87    612.96    613.06    613.16    613.23    613.31
      613.40    613.50    613.60    613.71    613.83    613.95    614.14    614.39    614.76    615.31
      616.20    617.35    618.49    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   7
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.80
      609.71    610.27    610.66    610.93    611.14    611.27    611.40    611.52    611.64    611.74
      611.84    611.92    611.98    612.07    612.16    612.23    612.30    612.36    612.41    612.47
      612.53    612.59    612.64    612.76    612.77    612.84    612.93    613.02    613.08    613.16
      613.26    613.36    613.48    613.60    613.73    613.86    614.07    614.34    614.73    615.28
      616.20    617.35    618.49    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   8
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.81
      609.71    610.29    610.69    610.97    611.19    611.33    611.47    611.61    611.73    611.84
      611.93    612.01    612.07    612.15    612.23    612.29    612.34    612.40    612.43    612.48
      612.52    612.57    612.60    612.65    612.71    612.77    612.85    612.93    613.09    613.07
      613.16    613.27    613.39    613.53    613.67    613.81    614.03    614.31    614.71    615.28
      616.19    617.35    618.48    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER   9
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.81
      609.72    610.30    610.72    611.01    611.24    611.39    [illegible]  611.70  611.83    611.96
      612.04    612.12    612.17    612.24    612.31    612.35    [illegible]  612.43  612.45    612.48
      612.52    612.54    612.57    612.61    612.65    612.69    [illegible]  612.83  612.88    612.96
      613.05    613.17    613.30    613.45    613.61    613.76    [illegible]  614.28  614.70    615.28
      616.19    617.35    618.48    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  10
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.81
      609.73    610.31    610.74    611.04    611.29    611.46    611.63    611.80    611.98    612.08
      612.17    612.24    612.29    612.34    612.39    612.42    612.4[illegible]  612.47  612.48  612.49
      612.51    612.52    612.53    612.55    612.58    612.61    612.66    612.71    612.75    612.83
      612.92    613.04    613.20    613.37    613.54    613.71    613.95    614.28    614.68    615.27
      616.19    617.35    618.48    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  11
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.81
      609.73    610.32    610.75    611.06    611.22    611.50    611.70    611.89    612.07    612.20
      612.28    612.35    612.38    612.41    612.46    612.47    612.48    612.49    612.49    612.50
      612.50    612.51    612.51    612.52    612.53    612.54    612.58    612.62    612.35    612.72
      612.80    612.93    613.11    613.30    613.50    613.69    613.94    614.25    614.66    615.27
      616.18    617.35    618.48    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  12
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.81
      609.73    610.32    610.76    611.07    611.34    611.53    611.74    611.99    612.16    612.30
      612.36    612.42    612.45    612.46    612.48    612.49    612.49    612.48    612.49    612.50
      612.50    612.51    612.51    612.51    612.51    612.52    612.64    612.55    612.57    612.64
      612.70    612.84    613.04    613.26    613.47    613.66    613.93    614.24    614.66    615.27
      616.18    617.35    618.48    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  13
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.82
      609.73    610.33    610.76    611.08    611.35    611.56    611.76    612.03    612.27    612.41
      612.44    612.46    612.46    612.48    612.48    612.49    612.40    612.49    612.49    612.50
      612.50    612.51    612.51    612.51    612.51    612.52    612.52    612.52    612.52    612.56
      612.59    612.73    612.97    613.22    613.44    613.64    613.92    614.24    614.67    615.27
      616.18    617.35    618.49    619.63    620.75    621.89    623.02    624.15    624.83    625.00
    LAYER  14
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.82
      609.74    610.33    610.77    611.09    611.37    611.57    611.81    612.10    612.39    612.46
      612.48    612.48    612.48    612.46    612.48    612.49    612.49    612.49    612.49    612.50
      612.50    612.51    612.51    612.51    612.51    612.52    612.52    612.52    612.52    612.52
      612.52    612.61    612.80    613.19    613.43    613.63    613.91    614.23    614.67    615.28
      616.18    617.35    618.49    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  15
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.82
      609.74    610.33    610.77    611.09    611.37    611.58    611.83    612.17    612.46    612.48
      612.46    612.48    612.48    612.48    612.48    612.49    612.49    612.49    612.49    612.50
      612.50    612.51    612.51    612.51    612.51    612.52    612.52    612.52    612.52    612.52
      612.52    612.52    612.83    613.17    613.42    613.63    613.81    614.23    614.67    615.26
      616.18    617.35    618.49    619.63    620.76    621.89    623.02    624.15    624.83    625.00
    LAYER  16
      600.00    600.17    600.85    601.98    603.11    604.24    605.37    606.51    607.65    608.82
      609.74    610.33    610.77    611.09    611.37    611.58    611.83    612.17    612.48    612.48
      612.48    612.48    612.48    612.48    612.48    612.49    612.49    612.49    612.49    612.50
      612.50    612.51    612.51    612.51    612.51    612.52    612.52    612.52    612.52    612.52
      612.52    612.52    612.83    613.17    613.42    613.63    613.81    614.23    614.67    615.26
```

616.15	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 17									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.82
608.74	610.33	610.77	611.09	611.37	611.57	611.61	612.10	612.38	612.48
612.48	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.48	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.52
612.52	612.61	612.80	613.19	613.43	613.63	613.91	614.23	614.87	615.36
616.15	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 18									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.82
608.73	610.33	610.76	611.08	611.36	611.56	611.78	612.03	612.27	612.41
612.44	612.48	612.48	612.48	612.48	612.49	612.49	612.49	612.48	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.52	612.52	612.52	612.56
612.56	612.73	612.97	613.22	613.44	613.64	613.92	614.24	614.67	615.27
616.15	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 19									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.81
608.73	610.32	610.75	611.07	611.34	611.53	611.74	611.88	612.16	612.30
612.36	612.43	612.45	612.46	612.48	612.49	612.49	612.49	612.49	612.50
612.50	612.51	612.51	612.51	612.51	612.52	612.54	612.55	612.57	612.64
612.70	612.84	613.04	613.26	613.47	613.66	613.83	614.24	614.66	615.27
616.15	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 20									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.81
608.73	610.32	610.75	611.06	611.32	611.50	611.70	611.88	612.07	612.20
612.28	612.35	612.38	612.41	612.46	612.47	612.48	612.49	612.49	612.50
612.50	612.51	612.51	612.52	612.53	612.54	612.59	612.62	612.65	612.72
612.80	612.93	613.11	613.30	613.50	613.68	613.84	614.26	614.66	615.27
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 21									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.81
608.73	610.31	610.74	611.04	611.29	611.46	611.63	611.80	611.96	612.08
612.17	612.24	612.28	612.34	612.39	612.42	612.44	612.47	612.46	612.48
612.51	612.52	612.53	612.56	612.58	612.61	612.66	612.71	612.76	612.83
612.82	613.04	613.20	613.37	613.54	613.71	613.86	614.26	614.65	615.27
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 22									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.81
608.72	610.30	610.72	611.01	611.24	611.39	611.55	611.70	611.83	611.95
612.04	612.12	612.17	612.24	612.31	612.35	612.39	612.43	612.46	612.48
612.52	612.54	612.57	612.61	612.65	612.68	612.76	612.83	612.88	612.95
613.05	613.17	613.30	613.45	613.61	613.78	613.89	614.28	614.70	615.28
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 23									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.81
608.71	610.28	610.69	610.97	611.19	611.33	611.47	611.61	611.73	611.84
611.83	612.01	612.07	612.15	612.23	612.28	612.34	612.40	612.43	612.48
612.52	612.57	612.60	612.66	612.71	612.77	612.85	612.93	612.99	613.07
613.15	613.27	613.38	613.53	613.67	613.81	614.03	614.31	614.71	615.29
616.19	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 24									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.80
608.71	610.27	610.66	610.93	611.14	611.27	611.40	611.52	611.64	611.74
611.84	611.92	611.98	612.07	612.15	612.23	612.30	612.36	612.41	612.47
612.53	612.59	612.64	612.70	612.77	612.84	612.93	613.02	613.08	613.15
613.26	613.36	613.48	613.60	613.73	613.88	614.07	614.34	614.73	615.28
616.20	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 25									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.65	608.80
608.69	610.24	610.61	610.86	611.05	611.17	611.29	611.40	611.50	611.60
611.69	611.77	611.84	611.94	612.04	612.13	612.22	612.30	612.37	612.45
612.55	612.63	612.70	612.78	612.87	612.96	613.08	613.16	613.23	613.31
613.40	613.50	613.60	613.71	613.83	613.95	614.14	614.39	614.76	615.31
616.20	617.35	618.49	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 26									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.51	607.64	608.78
608.65	610.15	610.50	610.73	610.88	610.99	611.09	611.19	611.29	611.37
611.45	611.54	611.61	611.72	611.84	611.95	612.07	612.19	612.30	612.42
612.56	612.70	612.81	612.93	613.06	613.16	613.26	613.39	613.46	613.54
613.63	613.71	613.81	613.91	614.01	614.11	614.27	614.50	614.84	615.35
616.22	617.36	618.49	619.63	620.76	621.60	623.02	624.15	624.83	626.00
LAYER 27									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.50	607.63	608.76
608.59	610.06	610.39	610.59	610.74	610.83	610.93	611.02	611.10	611.19
611.27	611.35	611.42	611.54	611.67	611.79	611.93	612.09	612.22	612.40
612.60	612.78	612.91	613.07	613.21	613.33	613.46	613.57	613.65	613.72
613.61	613.80	613.98	614.07	614.17	614.26	614.41	614.61	614.93	615.41
616.24	617.37	618.50	619.63	620.76	621.89	623.02	624.16	624.83	625.00
LAYER 28									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.50	607.62	608.73
608.64	610.01	610.31	610.50	610.34	610.73	610.82	610.91	610.99	611.08
611.15	611.24	611.31	611.42	611.56	611.70	611.85	612.02	612.14	612.38
612.67	612.82	612.98	613.15	613.30	613.44	613.58	613.69	613.76	613.84
613.92	614.01	614.08	614.18	614.27	614.36	614.50	614.69	614.99	615.48
616.27	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.60
LAYER 29									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.50	607.62	608.72
608.52	609.88	610.27	610.46	610.58	610.68	610.77	610.86	610.94	611.02
611.10	611.18	611.25	611.37	611.51	611.63	611.81	611.98	612.16	612.37
612.63	612.85	613.01	613.19	613.35	613.49	613.63	613.74	613.82	613.80
613.98	614.05	614.15	614.23	614.32	614.41	614.54	614.73	615.02	615.48
616.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00
LAYER 30									
600.00	600.17	600.85	601.88	603.11	604.24	605.37	606.50	607.62	608.72
608.51	609.87	610.26	610.45	610.59	610.68	610.78	610.86	610.93	611.02
611.10	611.17	611.25	611.36	611.51	611.60	611.80	611.98	612.15	612.37
612.63	612.85	613.02	613.20	613.30	613.48	613.64	613.75	613.83	613.90
613.98	614.07	614.15	614.24	614.32	614.41	614.55	614.74	615.03	615.49
616.28	617.38	618.50	619.63	620.76	621.89	623.02	624.15	624.83	625.00

EOI ENCOUNTERED.

Appendix 4

Sample calculation - fluid pressure to hydraulic head.

Consider 2 points at the upstream boundary of the flow domain. Both points have water hydraulic heads equal to 625 metres. The upper point (at zero elevation), has a water pressure of 6 125 kPa and the lower point, (295 metres below) has a water pressure of 9 016 kPa. Neglecting capillary forces, (for now) each of these water pressures are converted to hydraulic heads (equation 2.3) by dividing by the specific weight of the oil (8330 $kg/m^2/s^2$). This yields 735.29 and 787.35 metres of oil hydraulic head for the upper and lower points, respectively. Then, a capillary pressure equivalent of 3.6 metres is added, to yield hydraulic heads of 738.89 and 790.95 metres, for the upper and lower points. These are the values observed in Figure 6.4 and in Appendix 3, column 60, layers 1 and 30.