

## WELL PELICAN NO. 5

## LOG OPERATIONS AND FORMATION EVALUATION REPORT

## DISCUSSION - OPERATIONS

A full suite of logs was run in Well Pelican No. 5 over the 3647-4267 meter interval during March 2-5, 1986:

| LOG                       | LOG<br>BOTTOM<br>METERS | LOG<br>TOP<br>METERS | BHT<br>DEG.<br>F. | TIME SINCE<br>CIRCULATION<br>HOURS |
|---------------------------|-------------------------|----------------------|-------------------|------------------------------------|
| LDT-CNL-GR-CAL-CL-PEF-AMS | 4267                    | 3464                 | 343               | 8.5                                |
| ISF-MSFL-GR-CL-SP         | 4248                    | 3647                 | 338               | 7.0                                |
| HDT                       | 4267                    | 3647                 | 343               | 11.5                               |
| VSP AND CHECK SHOT        | 4267                    | 100                  | 348               | 16.8                               |
| RFT                       | 3995                    | 3675                 | 339               | 45.5                               |
| CST RUN 1                 | 4255                    | 3653                 | 352               | 51.8                               |
| CST RUN 2                 | 4236                    | 3653                 | 354               | 54.8                               |
| CST RUN 3                 | 4106                    | 3660                 | 3                 | 59.3                               |

The LDT-CNL tool, being more prone to failure at elevated temperatures, was run first to take advantage of the cooler bottom hole temperature. Significant tool sticking was observed over the 4200-4273, 3948-3957, 3935-3941, 3847-3856, 3810-3826, 3758-3760, 3739-3743, 3707-3713, 3666-3668, and 3649-3655 meter intervals. Schlumberger's Auxillary Monitoring System (AMS) was run with the LDT-CNL tool to monitor down hole (cable head) mud resistivity, bore hole temperature and cable tension. Monitoring tension in this manner clearly stated overpull during tool sticking.

Based on the tool measure point with respect to tool zero, the following tabulates significant zones of invalid neutron-density tool curve data:

| INVALID<br>CNL<br>METERS | INVALID<br>LDL-PEF-CAL-DRHO<br>METERS | INVALID<br>GR<br>METERS |
|--------------------------|---------------------------------------|-------------------------|
| 4244.0 - 4265.5          | 4251.0 - 4272.5                       | 4241.5 - 4263.0         |
| 4238.0 - 4241.0          | 4244.0 - 4247.0                       | 4235.0 - 4238.0         |
| 4200.0 - 4228.5          | 4206.0 - 4234.5                       | 4192.5 - 4225.0         |
| 4193.5 - 4196.5          | 4200.0 - 4203.0                       | 4191.0 - 4194.0         |
| 3945.0 - 3950.0          | 3951.0 - 3956.0                       | 3942.0 - 3947.0         |
| 3931.0 - 3933.0          | 3937.5 - 3939.5                       | 3929.5 - 3931.5         |
| 3840.0 - 3848.5          | 3846.5 - 3855.0                       | 3837.5 - 3846.0         |
| 3803.5 - 3818.0          | 3810.5 - 3825.0                       | 3801.0 - 3815.5         |
| 3700.5 - 3706.0          | 3707.0 - 3712.5                       | 3698.0 - 3703.5         |
| 3608.5 - 3610.5          | 3665.0 - 3667.0                       | 3606.0 - 3608.0         |

The resistivity - sonic - gamma ray tool (ISF-MSFL-BHC-GR-CL-SP) was run after a hole cooling wiper trip.

The ISF-BHC-GR-SP portion was logged while running in the hole. At T.D. and in preparation to log up, the ISF-MSFL-BHC quit (probably due to temperature). The tool was then pulled into casing, allowed to cool,