

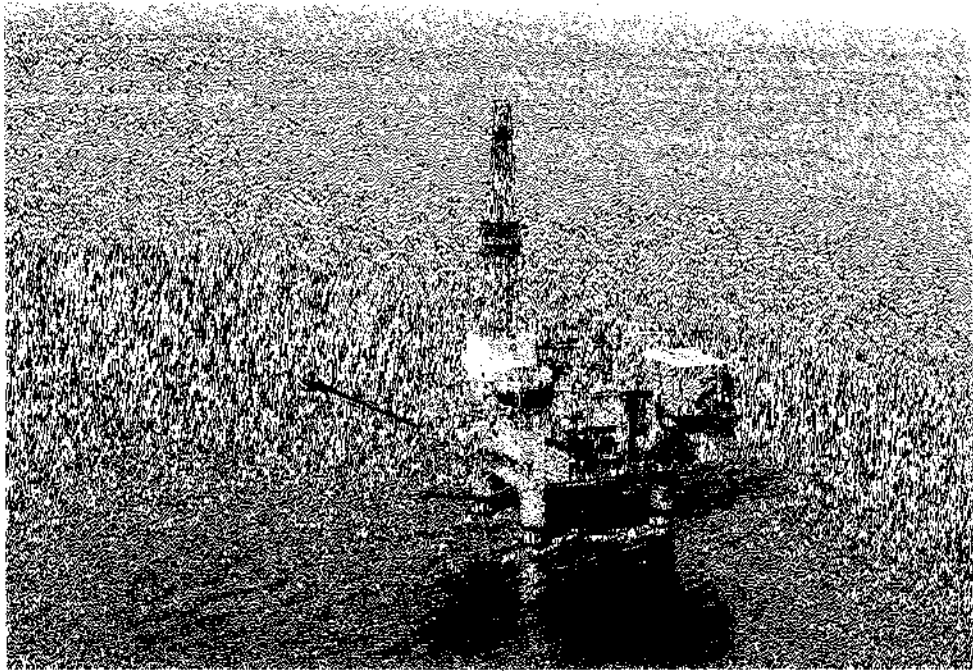
PLATFORM C

MIDDLE GROUND SHOAL FIELD

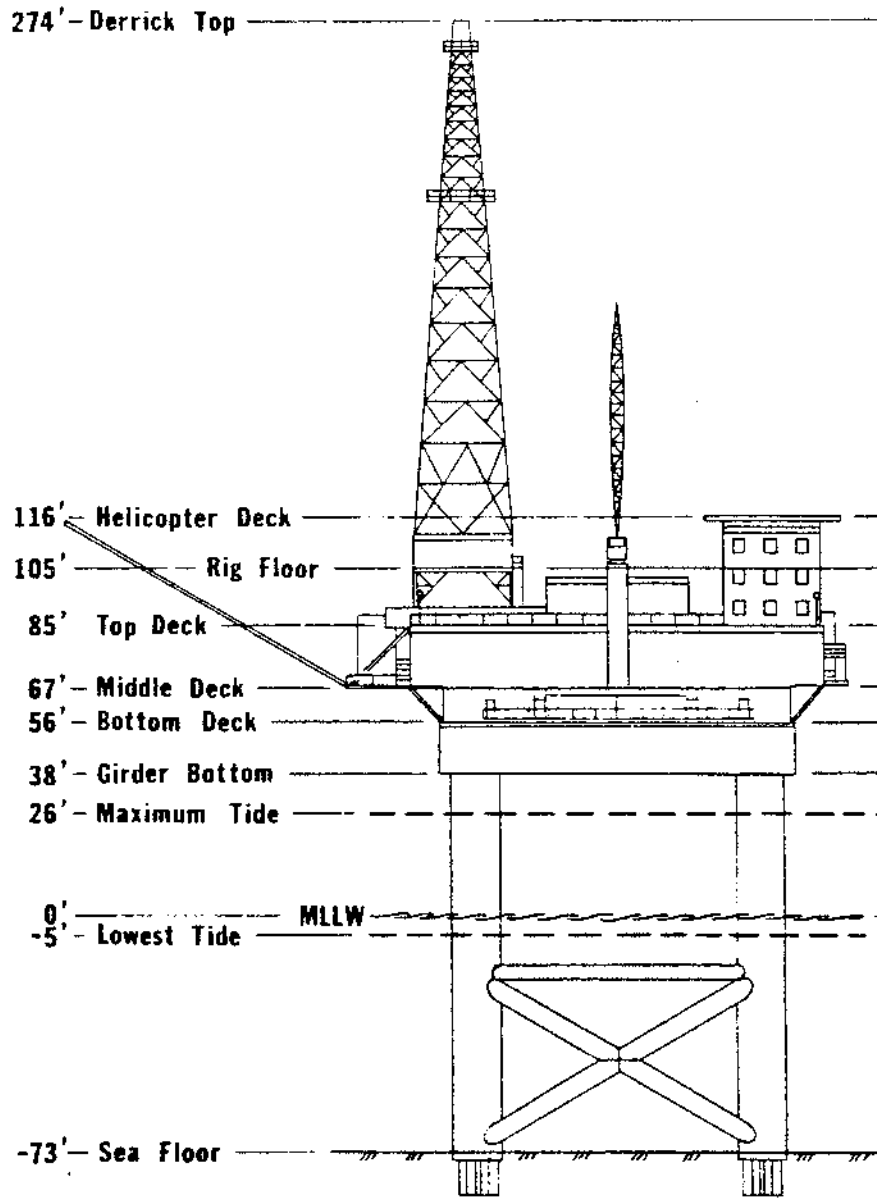
INSTALLED 1967

MGS Platform C

1. *Field name:*.....Middle Ground Shoal field
 2. *Platform operator:*Shell Western E&P Inc.
 3. *Platform owners:*Shell Western E&P Inc.
 4. *Original operator:*.....Shell
 5. *Structural design firm:*.....Earl & Wright
 6. *Fabrication yard (structure):*.....Kaiser Steel in Oakland, CA
 7. *Installation year and contractor:*1967, McDermott
 8. *Waterdepth (at MLLW):*.....73 feet
 9. *Number and diameter of legs:*.....Four - 15.5 feet
 10. *Number, size and penetration of piling:*.....Thirty two 36-inch to minus 100 feet
 11. *Number, size and penetration of inner piling:*.....Thirty two 24-inch to minus 190 feet
 12. *Method of installation (driven, drilled, combination):*36-inch driven, 24-inch drilled
 13. *Length of grouted interval in legs:*.....Bottom to top
 14. *Design codes used (UBC, AISC, API RP 2A, etc):*.....AISC; Zone 3 UBC (1964)
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15. *Number of completed wells in each leg through piling:*.....Eight wells in each of legs 1, 2 and 3
 16. *Other completed wells in each leg:*None
 17. *Top girders used as storage tanks ?*.....Yes
 18. *If so, what type of liquid:*Diesel fuel
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19. *Design criteria used:*
 - (1) *Ice thickness and strength:*.....42 inch; 300 psi
 - (2) *Wave height and period:*.....28 feet with 8.5 second period
 - (3) *Wind:*.....65 mph with 100 mph gusts
 - (4) *Earthquake:*0.06 g per UBC 1964
 - (5) *Temperature:*Minus 40° F above water, plus 28° F below water
 - (6) *Current:*.....12 feet per second
 20. *Design considerations:*20 year design life
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21. *Unusual circumstances during installation ?*.....None
 22. *Significant modification or additions to topsides:*Installed 40 x 30 foot gas compressor cantilever and 8 x 20 radiator cantilever in early 1970's.
 23. *Any significant structural damage incidents ?*.....None
 24. *Has platform structural design been re-assessed ?*.....No
 25. *If so, by whom and for what reason:*.....
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26. *Type of steel used; above water and below water:*ASTM A-537 Grade A and B where low temperature steel required. A-36 and A-441 elsewhere.
 27. *Steel corrosion allowance used:*.....0.7 inch
 28. *Type of cathodic protection:*.....Impressed current
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29. *Dates and API RP 2A levels of underwater inspection:*Level II in 1978 and 1983; Level III in 1988



Platform "C" in the Middle Ground Shoal field.



Elevation view of MGS platform C.