PLATFORM BAKER

MIDDLE GROUND SHOAL FIELD

INSTALLED 1965

Platform Baker

1. *Field name:* ..... Middle Ground Shoal field
2. *Platform operator:* ..... Unocal
3. *Platform owner(s):* ..... Unocal
4. *Original operator:* ..... Amoco
5. *Structural design firm:* ..... Earl & Wright/McDermott
6. *Fabrication yard (structure):* ..... Kaiser Steel, Oakland, California
7. *Installation year and contractor:* ..... 1965; McDermott
8. *Waterdepth (at MLLW):* ..... 102 feet
9. *Number and diameter of legs:* ..... Four legs; 14 feet diameter, one well protector leg
10. *Number, size and penetration of piling:* ..... Thirty two 33 inch diameter piling with 85 feet penetration. Each leg has seven piles in an outer ring and one pile in the center.
11. *Number, size and penetration of inner piling:* ..... None
12. *Method of installation (driven, drilled, combination):* ..... Combination
13. *Length of grouted interval in legs:* ..... 136 feet
14. *Design codes used (UBC, AISC, API RP 2A, etc):* ..... UBC, AISC

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15. *Number of completed wells in each leg through piling:* ..... Three legs have respectively 5 wells, 7 wells, and 5 wells. One leg does not have any wells.
16. *Other completed wells:* ..... One well in the well protector leg.
17. *Top girders used as storage tanks ?* ..... Yes
18. *If so, what type of liquid:* ..... Potable water, drill water, produced water, diesel fuel, crude oil, power oil.

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19. *Design criteria used:*
    - *(1) Ice thickness and strength:* ..... Front legs 120 kips/ft of diameter, back legs 50 kips/ft
    - *(2) Wave height and period:* ..... 30 feet with 9 second period
    - *(3) Wind:* ..... 80 mph above elevation 25 feet
    - *(4) Earthquake:* ..... 0.1 g seismic ground motion
    - *(5) Temperature:* .....
    - *(6) Other:* ..... 3900 kips per leg impact load. Seismic, ice and current loads applied simultaneously.
20. *Design considerations:* ..... Shadow effect

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21. *Unusual circumstances during installation ?* ..... None
22. *Significant modification or additions to topsides:* ..... Quarters extension and Sea King crane.
23. *Any significant structural damage incidents ?* ..... None (there was a 1968 or 1969 tank explosion)
24. *Has platform structural design been re-assessed ?* ..... Yes, 1993
25. *If so, by whom and for what reason:* ..... Hopper & Associates; Acquisition by Unocal from Amoco, planned drilling program and evaluation of non-low temperature steel concerns.

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26. *Type of steel used; above water and below water:* ..... A-537 Sheffield in critical areas above water; 50 MV below water.
27. *Steel corrosion allowance used:* ..... An ½ inch thick A-36 wear plate in the tidal zone.
28. *Type of cathodic protection:* ..... Impressed current

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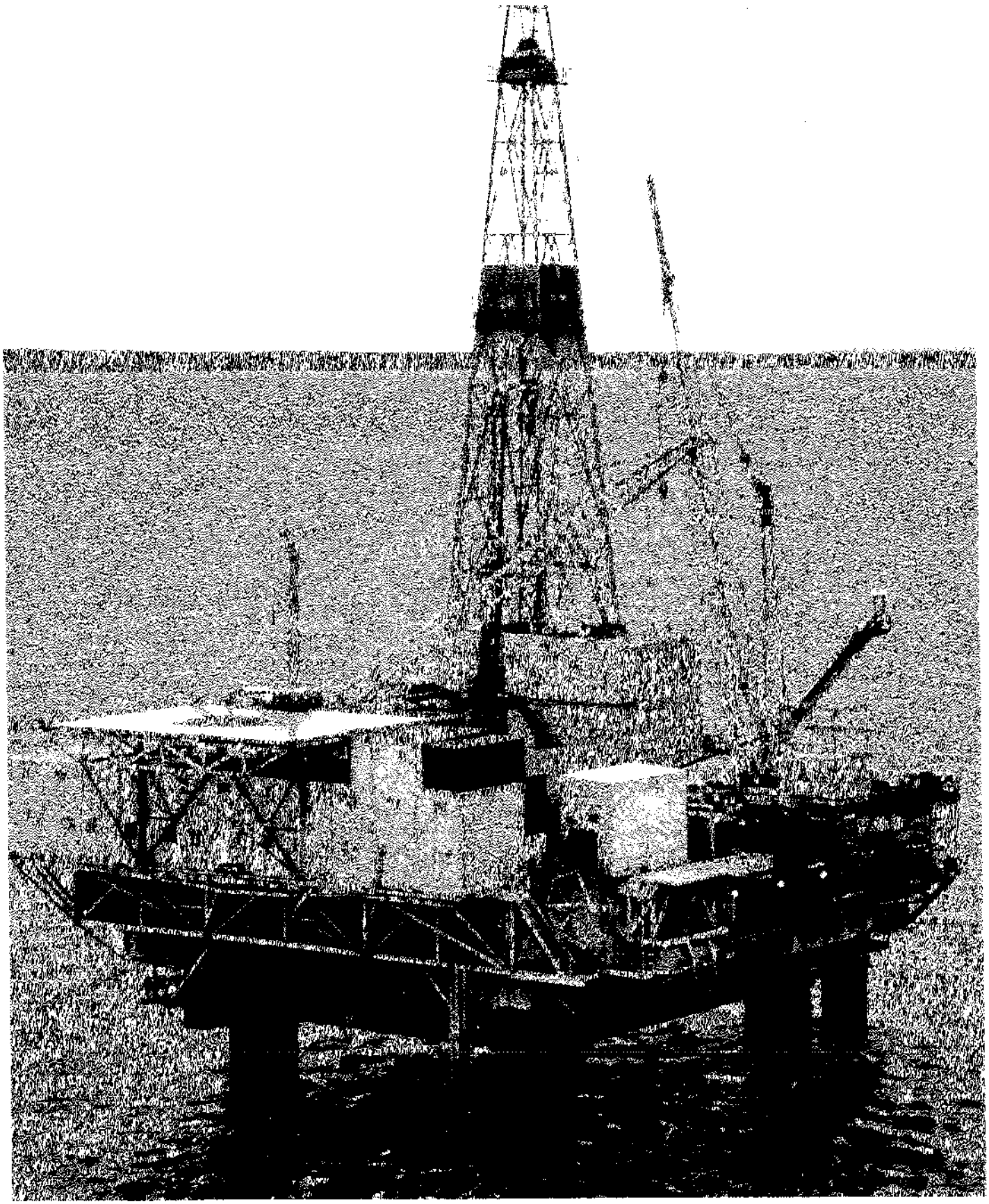
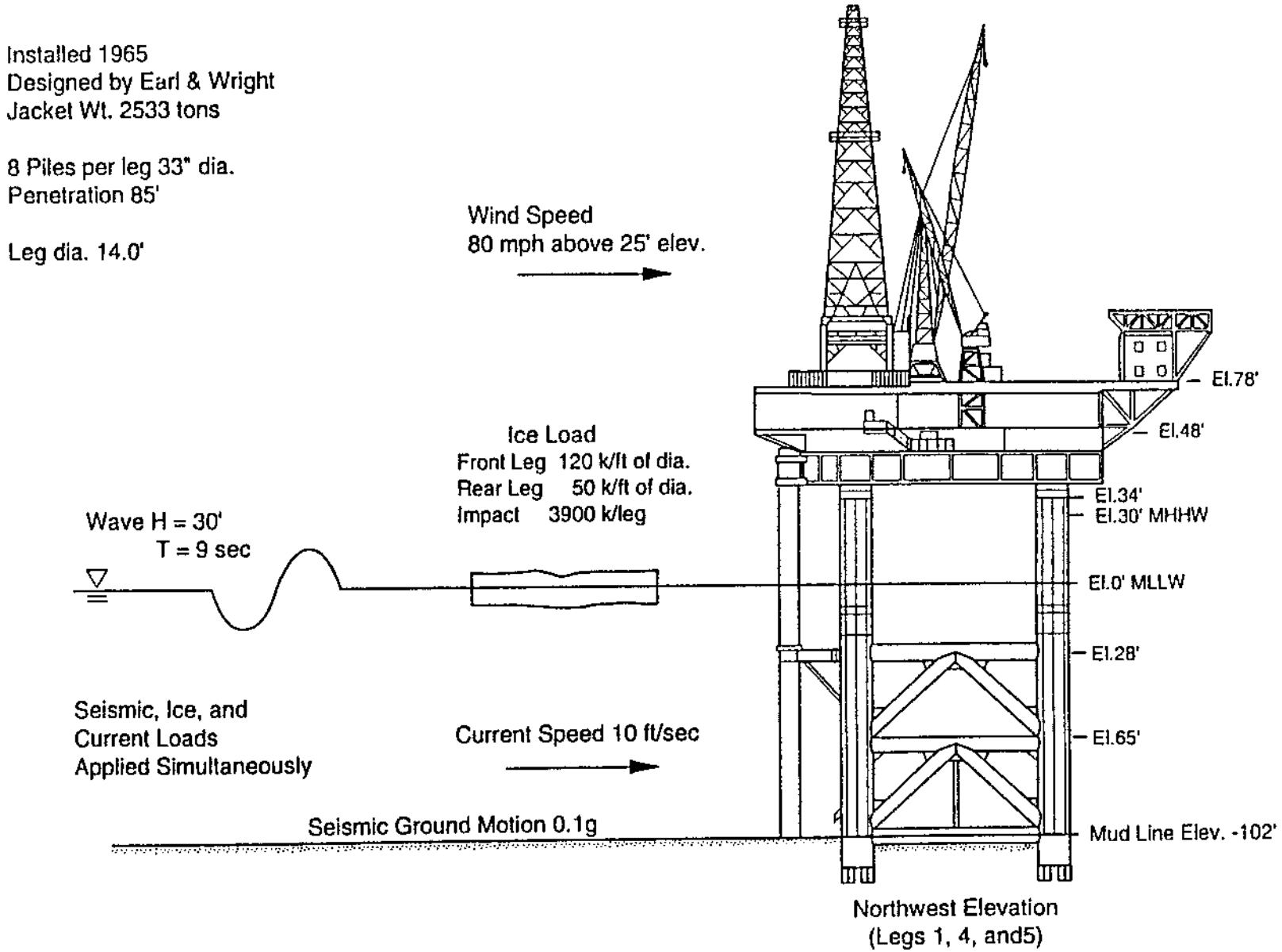
29. *Dates and API RP 2A levels of underwater inspection:* ..... Annual - cathodic protection surveys. 1992 - Level III scour and flooded member surveys.



Platform Baker in the Middle Ground Shoal field.



Elevation of MGS field platform Baker. Note the fifth leg which contains one well.