PLATFORM ANNA

GRANITE POINT FIELD

INSTALLED 1966

Platform Anna

1. *Field name:* ..... Granite Point 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 in Oakland, California
7. *Installation year and contractor:* ..... 1966; McDermott
8. *Waterdepth (at MLLW):* ..... 77 feet
9. *Number and diameter of legs:* ..... Four legs; 14 feet diameter
10. *Number, size and penetration of piling:* ..... Eight piles per leg; 30 inch diameter; 87 feet penetration.
11. *Number, size and penetration of inner piling:* ..... None
12. *Method of installation (driven, drilled, combination):* ..... Combination
13. *Length of grouted interval in legs:* ..... 137 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:* ..... Total of 26 wells, eight wells in three legs, two in one leg.
16. *Other completed wells in each leg:* ..... None
17. *Top girders used as storage tanks ?* ..... Yes
18. *If so, what type of liquid:* ..... Drill water, potable water, produced water, diesel oil, power oil, crude 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:* ..... Sea King crane
23. *Any significant structural damage incidents ?* ..... Leg dents, ice damage due to a bad cement job. Grout replaced. Sixteen feet long sleeve installed in dented area all four legs. Sleeves grouted.
24. *Has platform structural design been re-assessed ?* ..... Yes, 1993, Global platform assessment, module support structure and quarters support frame.
25. *If so, by whom and for what reason:* ..... Mc Dermott and ASCG; Chakachatna development (new rig) and evaluation of non-low temperature steel concerns.

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26. *Type of steel used; above water and below water:* ..... Low temperature steel above minus 8 feet; 50 MV steel below minus 8 feet.
27. *Steel corrosion allowance used:* ..... ½ inch A-36 steel wear plate through tidal zone.
28. *Type of cathodic protection:* ..... Impressed current

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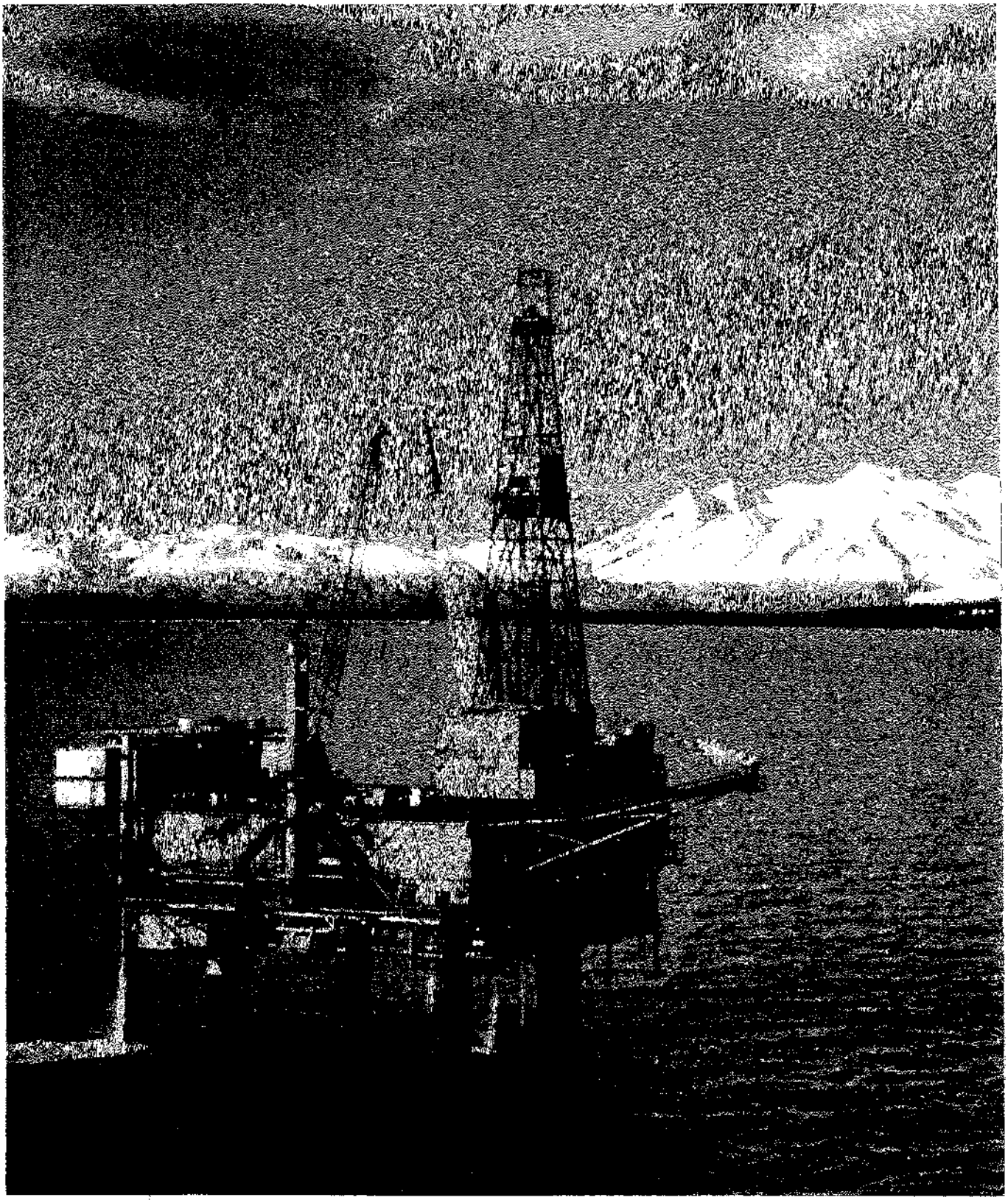
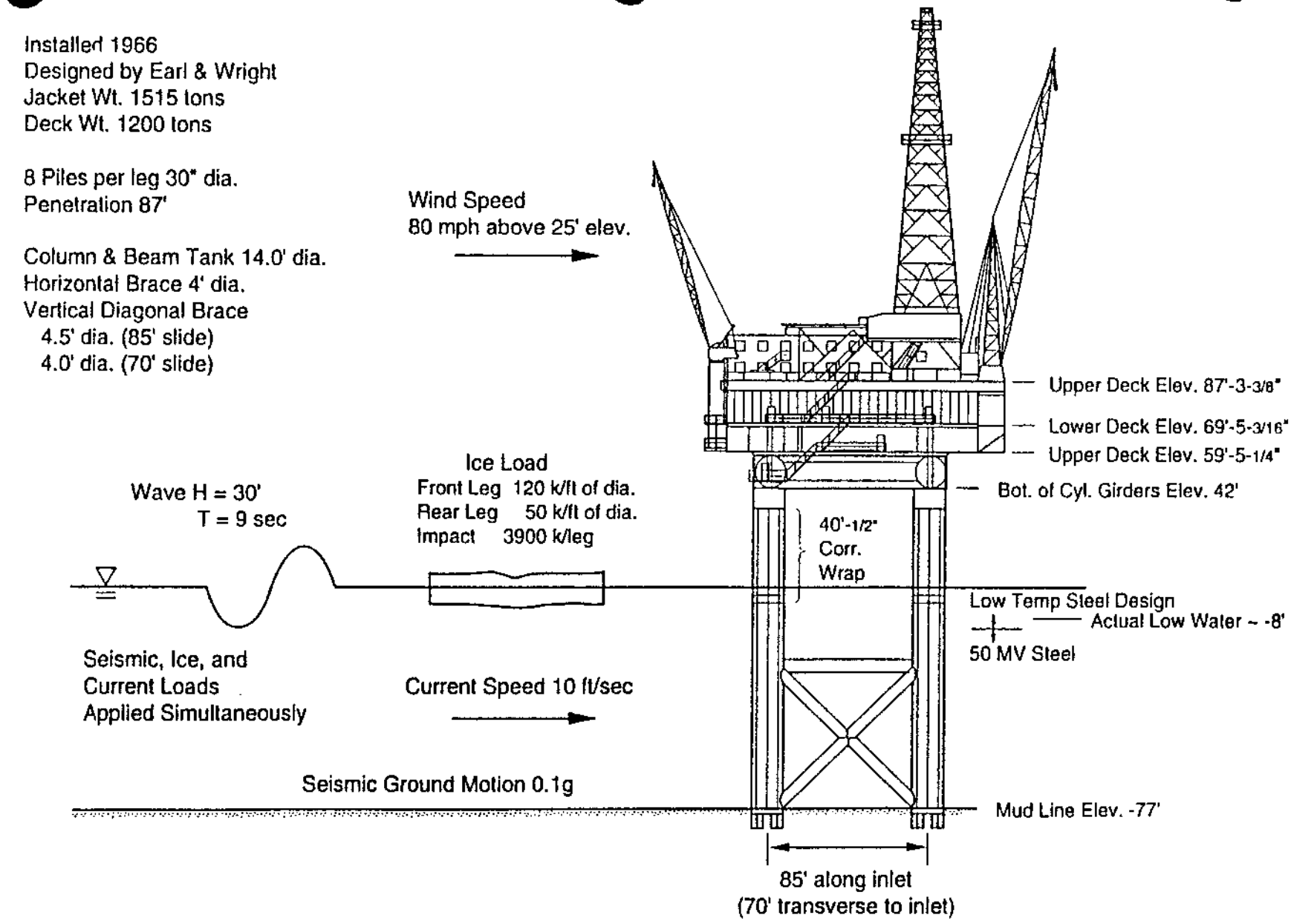
29. *Dates and API RP 2A levels of underwater inspection:* ..... 1993 - Level III; 1990 - Cathodic protection survey.



Platform Anna in the Granite Point field.



Elevation view and summary details of platform Anna.