MONOPOD PLATFORM

TRADING BAY FIELD

INSTALLED 1966
### Platform Monopod

1. **Field name:** Trading Bay field
2. **Platform operator:** Unocal
3. **Platform owner(s):** Unocal & Marathon
4. **Original operator:** Unocal
5. **Structural design firm:** Brown & Root
6. **Fabrication yard (structure):** American Pipe & Construction, Vancouver, Washington
7. **Installation year and contractor:** 1966; Brown & Root
8. **Waterdepth (at MLLW):** 66 feet
9. **Number and diameter of legs:** One leg, 28.5 feet in diameter
10. **Number, size and penetration of pontoon piling:** 32 piles; 36 inch diameter with 101 feet penetration
11. **Number, size and penetration of leg piling:** 32 conductor piles; 20 inch diameter with 97 feet penetration
12. **Method of installation (driven, drilled, combination):** Driven
13. **Length of grouted interval in legs:** Center leg has 33 feet of grout
14. **Design codes used (UBC, AISC, API RP 2A, etc):** UBC, AISC

| 15. Number of completed wells in each leg through piling | 32 |
| 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 |

19. **Design criteria used:**
   1. Ice thickness and strength: Six feet; 300 psi (7300 kips)
   2. Wave height and period: 28 feet with 8.5 second period
   3. Wind: 100 mph
   4. Earthquake: 0.1 g seismic ground motion
   5. Temperature:  
   6. Other:  
20. **Design considerations:** Single caisson

21. **Unusual circumstances during installation ?** None
22. **Significant modification or additions to topsides:** Added waterflood system
23. **Any significant structural damage incidents ?** None
24. **Has platform structural design been re-assessed ?** Yes, 1971, 1991 and 1993
25. **If so, by whom and for what reason:** Brown & Root (1971 and 1991), Bea (1993); lack of redundancy.

| 26. Type of steel used: above water and below water: | A-537 above water, A-36 below MLLW |
| 27. Steel corrosion allowance used: | ¼ inch wear plate through tide zone. |
| 28. Type of cathodic protection: | Impressed current anodes |

29. **Dates and API RP 2A levels of underwater inspection:** 1991 - Internal column thickness survey; 1993 - Level III underwater inspection.
Monopod platform in the Trading Bay field.
Installed 6-15-66
Designed by Brown & Root
Jacket Wt. 6000 tons
8 piles at each corner of base 100' penetration

Wind Speed
100 mph

Wave
H = 28'
T = 8.5 sec

Ice Load
7300 k
(300 psi ice 6' thick)

Current Speed 10 ft/sec

Seismic (Reviewed in 1971)
Max. Meas. Ice Load 45 k

EL. 62'
EL. 30' MHHW
Column Diameter 28.5'
0 MLLW
15'
EL. -40'
20'
24'
Mud Line Elev. -66'

Elevation view and summary details of the Monopod platform.