PROGRESS REPORT ON THE WELL ABANDONMENT PHASE
OF THE SUBSEA WELL ABANDONMENT AND
RIG SHARING (SWARS) PROJECT
SANTA BARBARA COUNTY

PARTY:
California State Lands Commission
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OVERVIEW:
Between August 1997 and March 1998, in the Santa Barbara Channel,
twenty three (23) subsea wells were abandoned, and associated wellheads
removed, in an unprecedented cooperative joint effort of industry and
multiple State and Federal agencies, coordinated by and through the
Commission and its Staff, without incident, and with commendations from
the public and press.

BACKGROUND:
During the 1960's a number of oil and gas companies drilled 21 wells from
mobile drilling rigs, from Point Conception to Summerland, and completed the
wells on the sea floor. These subsea wellheads produced directly into pipelines
to onshore separation facilities. There was no surface expression of the well,
and no associated platform. In the early 1980's two more of these wells were
drilled and completed in a similar fashion. Collectively, these wells produced
some 4 million barrels of oil and 140 billion cubic feet of gas, without incident,
over their active lives. The wellheads left on the sea floor averaged 15 feet in
height. These wells had all reached the end of their economic lives by the late
1980's and, by 1991, all had been shut in and were awaiting permanent
abandonment. In a visual survey it was observed that some of the wellheads
had fishing nets draped over them, and some damage from that fishing activity.
Not surprisingly, some of the fishermen in the area were anxious to see these
"obstacles" removed.
CALENDAR ITEM NO. 134 (CONT'D)

It was apparent that the most environmental, and economic, way to deal with the abandonments, and the CEQA review, was to use one rig at one time, and review the environmental impacts in one programmatic EIR. At the request of the Commission Staff, six oil and gas companies (ARCO, Shell (now AERA), Chevron, Phillips, Texaco, and Unocal) prepared a formal application for the well abandonments, and the associated flowline removal, and presented it to the Commission in 1994. The Commission, as lead agency, coordinated the effort to develop the environmental document and oversee the mitigation measures which evolved from that study. Each of the companies was responsible for obtaining all of the necessary permits from each of the responsible agencies. The Commission certified the EIR, and the project as mitigated, in 1996.

PROJECT UPDATE

After careful evaluation, only two mobile rigs met all of the strict environmental guidelines developed in the study, and one of those, the jack-up drilling rig known as the “Adriatic IV”, was contracted for the work by the SWARS project team. At the time, the rig was working off of Africa, and upon completion of that work, made a 55 day voyage on a special semi-submersible ship to the Santa Barbara Channel, during which it was outfitted with all of the required and environmentally mandated equipment, and underwent two rigorous rig safety inspections. A “jack-up” drilling rig uses a adjustable platform suspended over the water (and the well) by three legs, in a triangular or tripod arrangement, which rest on the sea floor and support the platform which is “jacked” up to its working position over the ocean surface (see figure 1).

The Adriatic IV arrived in the Channel in late July, and between August 1997, and March, 1998, plugged and abandoned the 23 subsea wells without incident, completing the task in 240 days, a month ahead of schedule in spite of the El Nino weather upsets. The wells were sealed across various geologic zones and at multiple levels below the surface, using steel and cement plugs as required and approved by the Division of Oil and Gas and Geothermal Resources (DOGGR), and State Lands Commission regulations. After each phase the work site was surveyed and cleared as required by State leases and permit requirements.

During the abandonment process, strict adherence to the Mitigation Monitoring Plan, the Marine Wildlife Contingency Plan, the Hardbottom Avoidance Plan, the Vessel Traffic Corridor Program, and the Oil Spill Contingency Plan, all developed during the environmental review process, was maintained by the
participants, and monitored by Staff. The rig and the attendant work vessels were inspected by Commission personnel for adherence to the various Plans and in accordance with current regulations. There were no environmental incidents, oil or equipment related, during the work. The Adriatic IV has left the area, bound for another foreign assignment. The Santa Barbara Channel, although looking the same on the surface, has 23 less obstacles and intrusions on its sea floor. There remains the task of removing some of the flowlines through the surf and onshore. But the wells, and their potential for damage to the environment and interference with other public trust uses of the State waterways, have been put permanently to rest with cement and steel and the efforts of dozens of professional engineers and technicians, working in concert with multiple State and federal agencies, as an effective team.

FIGURE 1: Site Map

PERMIT STREAMLINING ACT DEADLINE:
N/A
Figure 1