MARY FEDERAL - 0001 Procedure by <u>JSS</u>

OBJECTIVE: P&A wellbore in such a way as to comply with BLM rules, protect fresh water and prevent downhole movement of fluids. The following procedure attempts to accomplish this goal. Contact Jon Snell at 688-6244 prior to changing steps in this procedure.

BACKGROUND: This well has been shut in due to being uneconomic to produce. No uphole potential remains so the decision has been made to P&A the well.

SAFETY NOTE: The previous operator welded the casing and slips to the wellhead. It is unknown whether the production casing was hung in tension. For this reason the casing is being cut downhole to transfer the force that will possibly be released when the wellhead is cut off.

> Morrow at 11,363' Atoka at 10,556' Strawn at 10,268' Wolfcamp at 8542' Bone Springs at 5000'

In addition, Exxon recommends a 100' cement plug across the base of the Capitan formation at 2430' (this plug will also cover the intermediate casing shoe), and a plug from 50' below the surface casing shoe to surface.

Currently Cast Iron Bridge Plugs have been placed above the Morrow and Atoka formations, each with 35' of cement on top of them. These plugs are considered adequate to isolate flow between these zones. Therefore, the well will be P&A'd from the Strawn up to the surface with the following plugs:

Plug	Top of Cmt	Bottom of Cmt	No. Sacks Class
Plug to Cover CIBP @ 10,500 & Strawn Formation	9,850	10,465	72 H
Plug to Cover Wolfcamp Formation	8,329	8,542	25 H
Plug to Cover Bone Springs Format	4,800 tion	4,950	50 C
Covers Int. Shoe at Base of Capitan	2,355	2,480	60 C

17-17-12

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