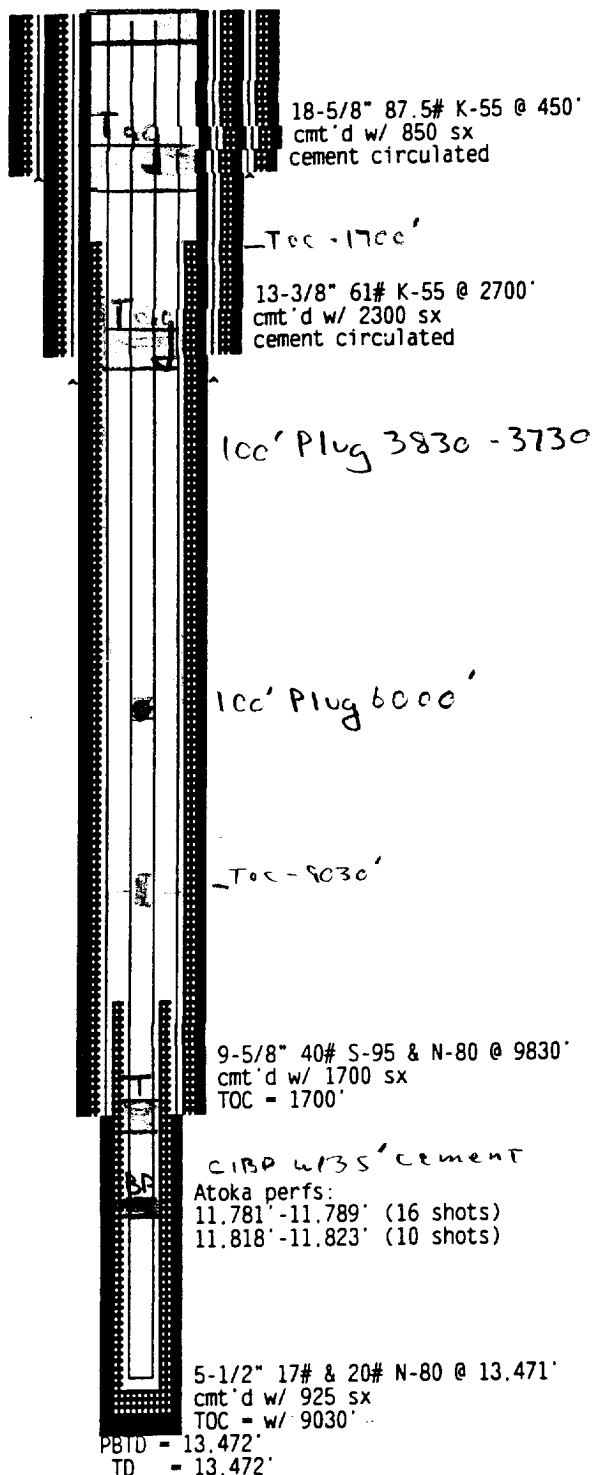


**WELL SERVICE APPROVAL - AFE
PHILLIPS PETROLEUM COMPANY--PERMIAN BASIN REGION**

RKB @ 3013.
CHF @
GL @ 2990.

Date September 14, 1993



Category Code 2
Area North Subarea Cabin Lake
Lease & Well No. Malaga-C State No. 1
Legal Description 1980' FNL & 660' FWL, Section 36, T-23-S, R-28-E,
Eddy County State: New Mexico
Field undesignated (Morrow)
Status: Atoka producer BOPD 100 MCFD
Tbg: 11,862' of 2-7/8\" OD. 6.5 #/ft. Gr. N-80 w/ VAM threads
of \" OD. \" #/ft. Gr. \"
Packer: set @ 11,682' in 10K compression Packer Type: 5-1/2\" Baker
Date Drilled/Completed: spudded 3-28-81/ completed 11/81
Hole/Casing Condition: good
Stimulation History: 10/81: treated Atoka perms 11,781'-11,823' w/ 200 gals
7-1/2% acid w/ 500 scf N, per bbl acid.

WELLHEAD DESCRIPTION: 10\" 5000 psi x 7-1/16\" 10,000 psi tubing head
7-1/16\" x 2-7/8\" 10,000 psi WKH christmas tree
PROPOSAL: Cement squeeze Atoka perforated intervals (11,781'-11,789' &
11,818'-11,823'), clean out wellbore, perforate and test Morrow
interval 13,012'-13,021'.

Reservoir Data:

Atoka interval	BHP	BHT	frac grad
11,781'-11,789'	1500 psi	182 deg F	.77 psi/ft
11,818'-11,823'	1500 psi	182 deg F	.77 psi/ft
Morrow interval	BHP (est)	BHT	frac grad
13,012'-13,021'	5000 psi	194 deg F	.77 psi/ft

TUBULAR RATINGS

Size	Weight	Grade	Burst	Collapse	Tension
2-7/8"	6.5#	N-80	8270#	9710#	93.5K
5-1/2"	17#	N-80	6800#	5930#	222K
5-1/2"	20#	N-80	8080#	8330#	273K

Checked by:
Resv Eng K. R. Schrenko
Prod Eng J. S. Hargrove
Prod Eng Supv K. E. Snow
Prod Eng Dir R. K. Bogan
Approved T. J. Bogan

mantis case name: malagac1

RISKED
PROJECT ECONOMICS @ \$2.00/MCF
BOPD 2 MMCFD
AARR 500 %
PAYOUT 0.1 YRS.
NTER 35 TIMES
NPV @ 13% \$1152 M
PI @ 13% 27
ECONOMIC LIFE 8 YRS.
EST. COMPL. DATE 12/93
PPCO: W.I. 100 %
R.I. 82.5 %

Copies: L. A. Takla
(r) Cent. Files
R. C. Ainsworth (3)
T. J. Bogan
D. R. Wier
(r) J. E. Pickett
J. S. Chimahusky
M. L. Moore
Rocky Chambers

CHARGE TO	GROSS COST	NET COST
EXPENSE AFE	\$	\$
INVESTMENT AFE <u>P-CL61</u>	\$ <u>44,500</u>	\$ <u>44,500</u>
TOTAL	\$ <u>44,500</u>	\$ <u>44,500</u>

file name: H:\wellfile\locohill\malaga-c\#01rec.s01

Salt Gel Mud consisting of 10# Barite w 2s# gel / barrel.