



**Santa Fe Energy Resources, Inc.**

HANLEY  
CASE NO. 10513

December 11, 1992

**RECEIVED**  
DEC 17 1992

Hanley Petroleum Inc.  
415 Westwall, Suite 1500  
Midland, Texas 79701-4473

Hanley Petroleum Inc.

Attention: Mr. Michael LeMond

**RE: Joint Interest Audit of  
Kachina 8 Fed # 2, L4257  
From 01/91 through 6/92**

Gentlemen:

In response to your audit report dated November 30, 1992 we are forwarding our comments.

**Exception No. 1**  
Coding Error

Requested	\$271.75
Granted	\$271.75
Denied	-0-

This exception is allowed. Credit has been issued to the Joint Account in the month of December 1992.

**Exception No. 2**  
Coding Errors

Requested	\$490.89
Granted	\$490.89
Denied	-0-

This exception is allowed. Credit has been issued to the Joint Account in the month of December 1992.

**Exception No. 3**  
Sales Tax Discounts

Requested	\$69.51
Granted	-0-
Denied	\$69.51

This exception is denied. The 2% cash discount only applies to the materials sold and this reduced amount is controlled by the vendor. The New Mexico sales tax, however, is controlled by the state and there is no discount by the state on items paid within 10 days of the invoice date.

**Exception Nos. 4 through 7**  
Undocumented

Requested	\$14,054.84
Granted	-0-
Denied	\$14,054.84

These exceptions are denied for lack of documentation. The auditors were specifically informed both in writing and at the opening and closing conferences that no exceptions would be considered without **adequate** documentation. The auditors did not submit these exceptions during their visit to our offices nor did they submit documentation with the audit report. These documentation requirements are not just Santa Fe's policy but also a procedure recognized by COPAS audit guidelines and the industry in general. It is the responsibility of the auditor to furnish proof of some reason to doubt the propriety of the charges to the Joint Account.

**Exception No. 8**  
8 5/8" Casing

Requested	\$91,670.10
Granted	-0-
Denied	\$91,670.10

This exception was submitted to our Operating Personnel for research. We have attached their letter for your review to assure a clear understanding of their position on this matter. Please note, however, that any questions or comments you may have regarding these issues must be directed to the attention of the undersigned.

Should you need any additional information, please advise.

Very truly yours,



J. L. Cassel  
Senior Auditor  
Joint Interest & Operations

SNM/snm  
(jiaudit\OP-92-15\audreply)  
Attachments

xc: Kellahin and Kellahin  
Attention: Mr. W. Thomas Kellahin  
P.O. Box 2265  
Santa Fe, New Mexico 87504-2265

Hinkle, Cox, Eaton, Coffield & Hensley  
Attention: Mr. James Bruce  
P. O. Box 2068  
Santa Fe, New Mexico 87504-2068

L. E. Shufflin

D. D. Roberts

J. P. Dukes

J. F. Lewis

Audit File

SANTA FE ENERGY RESOURCES, INC.

December 9, 1992

TO: Stella Mote - Internal Audit/Houston

FROM: Darrell Roberts - Drilling/Midland

Re: Kachina "8" Federal No.2  
Hanley Petroleum, Inc. Audit Exception

Our response to the Audit Exception No. 8, offered by Hanley Petroleum, Inc. concerning an 8-5/8" casing failure on the captioned well is that the exception be disallowed due to the following reasons:

1. Accepted engineering practices were utilized to design this casing string, as explained in our response to Hanley's concerns (see attached). The 8-5/8" 24.0 ppf K-55 ST&C was the optimum design and was more cost effective over the use of 8-5/8" 32.0 ppf K-55 ST&C.
2. Prior to the drilling of the subject well, this exact casing design was run on the Kachina "8" Fed. No. 1 (a direct offset) without any problems and was also utilized on the Kachina "5" Fed. No.s 1 & 2 (in next section to the north) without problems. I also utilized this same casing design to drill at least twelve Wolfcamp or deeper wells in Sections 17, 18, 16, & 11 of this same Township and Range for Meridian Oil, Inc., prior to the drilling of this well. This casing design was tried and proven for this area.
3. Even by the more conservative design criteria of designing for a collapse safety factor of 1.0, the collapse loads on the actual casing string never even approached 1.0 due to the fact that the 8-5/8" casing was never emptied during the drilling operations. The hole always had at least 8.7 ppg water inside the casing to serve as backup to the 10.0 ppg brine on the outside of the casing.
4. Hanley did express concern over the use of 24.0 ppf below 2200', but never insisted as stated in their exception statement. We responded to their concerns with the letter dated August 20, 1991 and we never heard or received any rebuttal to our response concerning our reasons for using this casing design, not even in the two Force Pooling Hearings.

Unfortunately the 8-5/8" casing did collapse and jump a collar at 2501' while drilling at 8979' below the 8-5/8" casing string which was set at 3080'. The problem was the result of an unforeseen salt water flow in the Salt section and drill pipe wear on the I.D. of the 8-5/8" casing. There is an inherent amount of risk in any drilling operation, no matter who the operator is, and should be born by all participating in the drilling of the well.

AUDIT.DDR - attachments  
xc: L. E. Shufflin  
M. R. Burton  
G. V. Green

*Darrell Roberts*