

KEYSTONE NO. 1
SECTION 32-G, T20S, R28E
EDDY COUNTY, NEW MEXICO

-PROCEDURE TO PLUG AND ABANDON

- 1.) MIRU plugging unit. ND wellhead. NU BOP.
- 2.) Release Baker Model "R" pkr., strap out LD pkr.
- 3.) RU wireline. Set CIBP @ 8980'. TIH open-ended w/ 2-3/8" tbg. to PBTD. Circ. hole w/ mud laden fluid (9.5 lb/gal and 35 vis.) Spot 20' Class H cmt. on top of CIBP. TOH.
* 35'
- 4.) TIH w/ freepoint tools for 4-1/2" 11.6# & 13.5# csg. and obtain freepoint. Then as follows :

- A.) If freepoint is above 3110', TIH w/ 2-3/8" tbg to PBTD. Spot the following cmt. plugs inside 4-1/2" casing :

	<u>Tbg. Depth</u>	<u>Interval Coverage</u>	<u>Cmt.</u>
<u>PLUG #1</u>	6360'	6260-6360'	* 25 10 sk
<u>PLUG #2</u>	5060'	4960-5060'	* 25 10 sk

PLUG #3 - 8-5/8" casing shoe plug as follows : TOOH w/ tbg. Perf squeeze holes in 4-1/2" csg. @ 3060'. PU 4-1/2" pkr., TIH to 2860', set pkr. Establish rate and pressure. Squeeze w/ 50 sks Class H cmt. w/ 2% CaCl and displace to 2910'. Release pkr., TOOH LD pkr. WOC 4 hrs (minimum). TIH and tag top of cmt. (top of cmt. to be at or above 2960', respot if necessary). TOOH w/ tbg. Cut 4-1/2" csg. just above top of cmt. TOOH LD csg. Continue w/ Step 5.

- B. If freepoint is below 3110', spot the following cmt. plugs :

	<u>Tbg. Depth</u>	<u>Interval Coverage</u>	<u>Interval Coverage In :</u>		
			<u>4-1/2" csg Cmt.</u>	<u>Csg & OH Cmt.</u>	<u>Open Hole Cmt.</u>
<u>PLUG #1</u>	6360'	6260-6360'	* 25 10 sk		50 sk
<u>PLUG #2</u>	5060'	4960-5060'	* 25 10 sk		50 sk
<u>PLUG #2A</u>	50' in 4-1/2" stub	50' above & below csg. stub		40 sk	
<u>PLUG #3</u>	3060'	2960-3060'			50 sk

NOTE : Plugs #2A & #3 require 4hrs WOC then tagged to insure minimum plug tops of 50' above csg stub and 2960', respectively. Respot if necessary.

- 5.) Spot the following plugs inside 8-5/8" casing :

	<u>Tbg.</u> <u>Depth</u>	<u>Interval</u> <u>Coverage</u>	<u>Cmt.</u>
		2400-2500	
PLUG #4	2610'	2510-2610'	40 sk
PLUG #5	1610'	1510-1610'	40 sk
PLUG #6	660'	560-650'	40 sk

- 6.) Cut csg. 4' below G.L. Spot 10 sk surface plug. Weld plate w/ abandoned well marker on csg. stub. Marker to have a minimum diameter of 4" and extend 4' above G.L. The following is to be welded on the marker :

Kerr-McGee Corporation
Keystone No. 1
Sec. 32-G, T20S, R28E
1980' FNL & 1980' FEL

- 7.) Reclaim location as necessary.

Note : Notify NMOCD at least 24 hrs before operations begin.
(M.B. Williams 505-748-1283)

SAK
Stephen A. Krueger
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