## Frac Fluids/Breakdown Fluids:

As per BJ Services specs/procedure

## **Drinkard Completion Procedure:**

- 1. RU workover rig. Install 5,000 PSIG WP BOP stack and test to 4,500 PSIG according to SOP's. Add 1 to 2 joints of 2 7/8", L-80 tubing to tag PBTD estimated at 7,644". The current bottom of tubing is 7595' from last report. Spot a 9.5 ppg brine water pill from 7,644' back to 6,848'. Spot 500 gals of 15% HCL from the bottom Drinkard perforation at 6,848' back to 6,350'. Note: The spot acid to be double inhibited. TOOH with tubing.
- 2. RU electric line company. Install lubricator with packoff and RIH with 4" hollow carrier perforating guns loaded 2 JSPF with 19 gm charges in 120 degree phasing to perforate (firing from the top down) the following Drinkard intervals: Correlation will be made using the CBL.

Safety Note: All 2-way radios and phones are to be turned off while perforating for a distance of 500'. Warning signs are to be posted on all incoming roads.

			<u>NEP</u>	<b>Shots</b>
Drinkard	Standard 4"	6620' to 6627'	7'	15
	Hollow Carrier	6632' to 6636'	4'	9
	(2 SPF)	6644' to 6652'	8'	17
		6660' to 6674'	14'	29
		6692' to 6706'	14'	29
		6762' to 6772'	10'	21
		6776' to 6779'	3'	7
		6806' to 6814'	8'	17
		6838' to 6848'	<u>10'</u>	21
		Total Drinkard	78'	165

RD Baker Atlas.

- 3. Install a modified test tank to swab into following the Drinkard breakdown.
- 4. PU PPI tool with 25' spacing between elements and a mechanical collar locator (no spot control valve). TIH with 2 7/8" L-80 tubing and space out to straddle the bottom set of perforations at 6838' to 6848'.
- 5. RU BJ and perform acid breakdown using 5 bbls of 15% NEFE across each of the perforated intervals as indicated below:

<u>Setting</u>	Perf. Interval_ Bottom to Top	Top Pkr <u>Setting</u>	Bottom Pkr <u>Setting</u>
1	6838' to 6848'	6830'	6855'
2	6806' to 6814'	6795'	6820'
3	6762' to 6779'	6758'	6783'
4	6692' to 6706'	6688'	6713'
5	6660' to 6674'	6655'	6680'
6	6632' to 6652'	6630'	6655'
7	6620' to 6627'	6605'	6630'