

The 13-3/8" casing was run at 3511' after a 17 1/2" hole had been drilled to 3531'. 92 joints of K-55 buttress were used. The pipe was cemented with 1800 sacks of class B + 12% gel followed by 300 sacks class B neat. A Cameron mud line hanger run at 341', was backed off to wash the cement out of the annulus. Considerable difficulty was experienced in the attempt to reconnect this riser, finally requiring the removal of the lower threads on the pin end of the hanger.

172 joints 47 lbs 9-5/8" N-80 buttress casing, a total of 7034', was run and landed in the mud line hanger at 341'. The pipe was cemented with 1700 sacks class B + 4% gel tailed in with 800 sacks neat class B, retarded.

Some cement returns were observed. The annulus was washed out and the mud line hanger reconnected and tested without incident.

#### Mud

Total mud cost on this well was approximately \$ 70,000. The well was spudded using a high viscosity gel-seawater mud. After drilling out of the 20" casing, which stuck at 793', the mud was converted to a ligno sulfonate-seawater. The 700' of 26" rathole left below the 20" casing gave considerable trouble by acting as a build up area for large balls of gumbo which collected there as 17 1/2" hole was being made. Annular velocity in this part of the hole, even with a circulation rate of 900 G.P.M. was probably less than 30 f.p.m. An attempt to run electric logs at the 13-3/8" casing point failed because of the fill at 1450'.

Drilling detergent was used to reduce torque and drag and was successful in the upper part of the hole. Toward T.D. an increase in mud weight to 14.0 ppb was necessary to further reduce excessive torque.

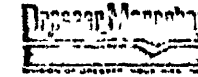
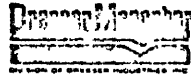
Mud supplier was Magcobar. A copy of the mud summary is attached.

#### Comments

The total rig days charged to the well include 5 days waiting on weather at the end of the operation.

A deviation problem arose in the 8 1/2" hole, starting around 7400' where the angle was 4 1/2°. It increased steadily and at 8933' the last survey point was 5 1/2°. Light bit weight, high rotary speeds, and a bottom hole assembly usually successful in dropping angle had no effect.





# WELL DATA SHEET

MAG-249 A

OPERATOR <i>171000 - Pullman - Gulf</i>	SURVEY SEC T R	CASING SIZE	DEPTH	DRLG DAYS	BIT SIZE
WELL <i>7/7-1</i>	FIELD	SURFACE			
CONTRACTOR	COUNTY	INTERMEDIATE			
ENGINEER	STATE	COUNTRY	PRODUCTION		

DATE	DEPTH	WT	VISCOSITY		CORR 115°F		GELS		pH		FLUID LOSS		ALKALINITY			CA ppm	Mg ppm	RETORT			ACTIVITY		RATIO		# Bbl
			SEC	CPS	PV	YP	0	10	BECK STRIP	100 PSI API	50C SI 30F °F H1-HP	CL <input type="checkbox"/>	CACL <input type="checkbox"/>	NACL <input type="checkbox"/>	PF			PM	MF	% OIL	% SOL	% WATER	A <sub>s</sub>	A <sub>m</sub>	
<i>1-27</i>	<i>14.1</i>	<i>14.1</i>	<i>110</i>		<i>21</i>	<i>4</i>	<i>2</i>	<i>1</i>	<i>110</i>	<i>7</i>		<i>15</i>	<i>15</i>	<i>2</i>	<i>100</i>		<i>6</i>	<i>2.1</i>	<i>1.2</i>						
<i>1-28</i>	<i>1.01</i>	<i>4</i>	<i>53</i>		<i>13</i>	<i>10</i>	<i>7</i>	<i>8</i>	<i>11</i>	<i>10</i>		<i>31</i>	<i>0.6</i>	<i>2</i>	<i>20</i>		<i>6</i>	<i>2.9</i>	<i>1.5</i>						
<i>1-29</i>	<i>1</i>	<i>-</i>	<i>52</i>							<i>7</i>		<i>31</i>			<i>1-5</i>										

DA	SPUD	DATE TD	BHT	COMPLETION FLUID TYPE.	COST
				PACKER MUD TYPE	COST