GULF STATE ** . 1 L. R. FRENC JR.

DEVIATION SURVEYS

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1/4° @ 416'
1/2° @ 1325'
1/2° @ 1970'
1/2° @ 2300'
                             11.07.13 : 1 /1 0 57
3/40 @ 2850'
1-3/4<sup>0</sup> @ 3220'
3/4 @ 4750'
10 @ 5175'
1/20 @ 5865
3/4º @ 6680'
3/4º @ 6870'
1/4° @ 7125'
o° @ 7300'
1/40 @ 74201
1/40 @ 81551
1/20 @ 8370'
3/4° @ 8550'
1/2° @ 8670'

1/2° @ 8670'

1/4° @ 9060'

1/2° @ 9150'

1-3/4° @ 9470'
2-1/4° @ 9510'
2° @ 9770'
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L. R. FRENCH, JR. - Gulf State No. 1- Lea County, New Mexico

- DST No. 1: From 4650 to 4760:, Toplgopen 2 hrs. Opened w/fair blow first 5 mins. Incr to strong steady blow for 1-1/2 hrs and decr to fair blow last 30 mins of test. Rec 1656' water 890' of it was sulphur water. 13,000 PPM. 30 Min ISIP 1775#, IFP 150#, FFP 780#, 1 Hr FSIP 1600#, IHP 2150#, FHP 2100#, Max Temp 1100
- DST No. 2: From 9316' to 9384'. Tool open 1 hr. Opened w/weak blow for 5 mins and died in 2 mins. Rec 80' drilling mud. 30 Min ISIP 45#, 1 Hr FSIP 45#, IHP 4490#, FHP 4460#, I & FFP45#. Temp 1380.
- DST No. 3: From 9796 to 9848' Tool open 2 hrs. Opened w/strong blow Gas to surf in 38 mins. Decr to good blow æst hr. Rec 165' of heavily oil and gas cut mud. IHP 4780#, FHP 4770#, 30 Min ISIP 1600#, 1 Hr FSIP 3490#, IFP 50#, FFP 60#. Max Temp 1490.
- DST No. 4: From 9830' to 9920' Tool open 3 hrs and 20 mins. Gas to surf in 2 mins, mud in 2 hrs and 2 mins and oil in 2 hrs & 17 mins. Flwd to pits 15 mins, turned to tank for 60 mins, flwd to heads for 30 mins. Last 30 mins, only gas ---no fluid. Rev out 60 BF approx 15% water. Rec 30 feet of oiland gas cut mud below circ sub. Cil 45° @ 72° gravity. Gas: 1,270,000 cu ft first 5 mins, 770,000 cu ft next 17 m and 555,000 cu ft for next 32 mins cont steady blow thruout rest of test THP 4825#, 30 Min ISIP 3510#, IFP 520#, FFP 1870#, 1-1/2 hr FSIP 3310# PHP 4810#, Max Temp 152°.
- DST No. 5: From 9960' to 9994' (34') Tool open 1 hr. Opened w/weak blow and died in 2mins. Rec 30' DM. IHP 4980#, FHP4860#, 30 Min ISIP 740#, 30 Min FSIP 60#, IFP 30#, FFP 60#