



DRILL STEM TEST REPORT

DST # 1 Date 12-7-80 Testing Co. JOHNSTON

WELL NAME: COTTONWOOD GULCH SMITH "B" 1

Formation: 1st LEWIS SAND Interval: 3730-3887 Wtr. Cushion NONE

Hole Size 7 7/8" Packer Size 6 3/4" Drl. Pipe Size 4 1/2" Bbls/Ft

Drl. Collar Size 6 1/4" Bbls/Ft Drlg. Contractor CRC COLORADO WELL SERVICE

Mud Filtrate: Ppm Nitrate 120 ppm Ppm Chlorides 700 ppm

| | Minutes Duration | | Min; Rate |
|----------------|---------------------|---|-------------|
| Preflow | <u>30</u> | Gas to Surf. <u>NONE</u> | <u>NONE</u> |
| Initial Shutin | <u>60</u> | Fluid to Surf. <u>NONE</u> | <u>NONE</u> |
| Flow Period | <u>120</u> | Mud <u>NONE</u> Min; Wtr <u>NONE</u> Min; Oil <u>NONE</u> Min | |
| Final Shutin | <u>240</u> | | |

Test Description: PREFLOW: 8 inches in the bucket or about 1 lb on a 30 lb guage in 30 mins

INITIAL SHUT IN: bubbled for 25 minutes then depleated

FINIAL OPEN: 2 inches in the bucket to start with, after 1 1/2 hrs 1/2 inch and depleating

FINAL SHUT IN: 1/2 inch in the bucket for 10 minutes then depleated

| Orifice Plate Size | Temp. | Minutes from V.O. | Pressure | Rate |
|-----------------------|-------|----------------------|----------|------|
| | | | | |
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Pressure Records (Field Readings) -- Bomb Depth 3740 Bottom Hole Temp. 108 °

| | Pre-Flow | | | Final Flow | | | | |
|------------------|-------------|------------------------|----------------|------------------|------------|----------------|------------------|-----------------|
| TOP IHP | <u>1793</u> | IFP <u>89</u> | FFP | ISIP <u>1151</u> | IFP | FFP <u>163</u> | FSIP <u>1208</u> | FHP <u>1770</u> |
| BOTTOM | <u>1782</u> | <u>75</u> | | <u>1133</u> | | <u>143</u> | <u>1197</u> | <u>1766</u> |
| Sampler Capacity | <u>2400</u> | Cc's; Sampler Pressure | <u>110 psi</u> | Rstv | <u>3.5</u> | Temp | <u>62 °</u> | |

Cu Ft Gas .12 Cc's Oil NONE Cc's Water NONE Cc's (Other) 2000 gas cut mud

Sampler Recovery (Water): Ppm Nitrate Ppm Chlorides 350

Pipe Recovery: 300 ft mud; gas cut mud at top

Problems: Drill pipe kept slipping into hole while cycling tool. Removed control head and added 1 jnt of drill pipe to facilitate cycling.

Remarks: From 3758-3768 there was a 100 unit increase on the mud log & from 3768-3814 a 10 unit increase.

Agent of Operator

Joseph J. By