

Attachment: State-Bridges #91

Totco Deviation Survey

<u>Depth</u>	<u>Degree off Vertical</u>
1315	1/4
3000	3/4
4200	3/4

Drill Stem Tests

None

Core Record

<u>No.</u>	<u>From</u>	<u>To</u>	<u>Res.</u>	<u>Description</u>
1	4646	4660	6'	Recovered 6' - Core barrel jammed, sand, dolomite, anhydrite, no shows.
2	4660	4697	36'	4660-4671 - 11' dolomite, spotted bleeding oil and fractures. 4671-4693 - 22' dolomite, no show. 4693-4695 - 2' dolomite, bleeding oil from vugs. 4695-4696 - 1' dolomite, no show. 4696-4697 - 1' lost.
3	4697	4736	39'	4697-4702 - 5' dolomite, brown, no show. 4702-4719-1/2 - 17-1/2' dolomite, light brown, good odor and stain, bleeding from vugs. 4719-1/2-4728-1/2 - 9' dolomite, light gray, no show. 4728-1/2-4731-1/2 - 31' sandy shale, no show. 4731-1/2-4736-1/2 - 4-1/2' dolomite, gray, no show.

Acidizing Record or other completion operation

7-15-57 Cardinal Chemical Company acidized open hole 4645-4770 w/3000 gals. 15% regular acid. TP 2800-2600#, CP - on Packer, injection rate 1.7 BPM. 5 minutes Shut-in Pressure 1000#. Swab 18 barrels load oil 2 hours, 30 barrels new oil + 8 barrels acid water in 8 hours.

7-17-57 Cardinal Chemical Company reacidized open hole 4645-4770 w/6000 gals. 15% regular acid. TP: 2800-2700#. Injection rate 3 BPM. 5 minutes Shut-in pressure 1100#. Swab 18 barrels load oil 2 hours, 20 barrels new oil + 82 barrels acid water 14 hours.

7-21-57 Cardinal Chemical Company reacidized open hole 4645-4770 w/15,000 gals 15% regular acid. TP: 4100-4200#. Injection rate 5.6 BPM. 5 minutes Shut-in pressure 2000#. Swab and flow 50 barrels load oil (all), swab and flow 118 barrels new oil + 120 barrels acid water 41 hours.

WATER-RESISTANT

Isolated the carrier and

4/18	210
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STANDARD 1110

6104

Proven etc

William Russell

1031 of 1031 of

chlorob, base, leaves, several more - 10 per cent
swollen on, chlorob

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~~isolation based on other competition operators.~~[illegible]

72-2147

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024-2

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2. Federal Bureau of Investigation, New York City, New York, dated
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