

Southern States Oil Company
 Rose #9, NE SW SE, Section 22-21S-12W
 Stafford County, Kansas

5½" PRODUCTION CASING SET

CONTRACTOR: Duke Drilling Co., Rig #2
 COMMENCED: 10/21/74
 COMPLETED: 10/29/74
 ELEVATIONS: 1852' K/B., 1850' D.F., 1847' G.L.
 CASING PROGRAM: Surface: 8 5/8" @ 250'
 Production: 5½" @ 3654'
 DRILLING TIME: One (1) foot drilling time recorded
 3000 feet to R.T.D.
 SAMPLES: Samples saved 3000' to R.T.D.
 ELECTRIC LOG: Gamma Ray Neutron Collar Log
 run after 5½" casing set
 MEASUREMENTS: All depths measured from the
 Kelly Bushing
 FORMATION TESTING: None

<u>FORMATION</u>	<u>SAMPLE DEPTH</u>	<u>SUB-SEA DATUM</u>
Anhydrite	629	+1223
Heebner	3109	-1257
Toronto	3128	-1276
Douglas	3139	-1287
Brown Lime	3244	-1392
Lansing	3257	-1405
Base Kansas City	3484	-1632
Viola	3502	-1650
Simpson	3530	-1678
Arbuckle	3573	-1721
Rotary Total Depth	3655	-1803

(All tops and zone determinations were made from a correlation
 of a drilling time log and sample analysis)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

TOPEKA SECTION
 3015-3025

Limestone; cream to gray, finely
 crystalline, oocastic, fossiliferous,
 good fossilcast porosity, no shows
 of oil.

3030-3044

Limestone; gray to dirty gray,
 fossiliferous, chalky in part,
 fair fossilcast porosity, no shows
 of oil. 22 unit gas kick on
 Magcobar Gas Detector.

TORONTO SECTION
3128-3134

Limestone; cream to gray,
finely crystalline, chalky in
part. No shows of oil.

LANSING SECTION
3258-3260

Limestone; gray, finely crystalline,
slightly fossiliferous, trace spotty
stain, no free oil.

3276-3280

Limestone; white to gray, finely
crystalline, fossiliferous,
cherty, scattered fossil-cast
porosity, trace spotty stain, trace
of free oil and no odor in fresh
samples.

3296-3299

Limestone; cream to gray,
fossiliferous, fair fossil-cast
porosity, good stain and saturation,
fair show of free oil and weak odor
in fresh samples.

3312-3314

Limestone; gray, oolitic to fossil-
iferous, poor visible porosity,
spotty stain, weak show of free oil
and faint odor in fresh samples.

3327-3330

Limestone; gray to dark gray,
cherty, fossiliferous, spotty stain,
trace of free oil and no odor in
fresh samples.

3238-3244

Limestone; gray, oolitic, spotty
stain, trace of free oil and no
odor in fresh samples.

3384-3387

Limestone; gray, fossiliferous,
light spotty stain, trace of free
oil and no odor in fresh samples.

3410-3416

Limestone; cream to gray, slightly
fossiliferous, oocastic, fair fossil-
cast porosity, spotty light brown to
dark black stain, trace of free oil
and no odor in fresh samples.

3442-3445

Limestone; cream to white, finely
crystalline, spotty vugular to
oocastic porosity, dark black spotty
stain, trace of free oil.

3467-3470

Limestone; gray, oocastic, good
oocastic porosity, fair to good
spotty stain and saturation, fair
show of free oil and faint odor in
fresh samples.

VIOLA SECTION
3508-3520

Chert; white to gray to tan, boney to semi-tripolitic, spotty porosity, good stain and saturation, weak show of free oil and faint odor in fresh samples.

ARBUCKLE SECTION
3573-3580

Dolomite; cream to white, finely crystalline, sucrosic, good spotty stain and saturation, fair show of free oil and strong odor in fresh samples.

3580-3590

Dolomite; cream to buff, fine to medium crystalline, good inter-crystalline to vugular type porosity, good stain, fair show of free oil and good odor in fresh samples.

3593-3608

Dolomite; as immediately above.

3612-3628

Dolomite; gray, fine to medium crystalline, fair inter-crystalline to vugular porosity, good light brown stain and saturation, fair show of free oil and good odor. Dolomite is cherty and arenaceous.

3636-3655

Dolomite; as above, increase in dirty gray, fine to medium crystalline, cherty dolomite, decrease in stain and odor.

ROTARY TOTAL DEPTH 3655 (-1803)

RECOMMENDATIONS:

It was recommended that 5½" casing be set and cemented at 3654 feet and the Arbuckle Dolomite be perforated and tested where Electric Log indicates porosity. Before abandonment of the #9 Rose, the following zones in the Lansing - Kansas City Sections should be tested through perforations:

1. 3467 to 3470
2. 3442 to 3444
3. 3411 to 3416
4. 3401 to 3404
5. 3385 to 3388
6. 3327 to 3331
7. 3295 to 3299
8. 3258 to 3260

Respectfully Submitted,


J. C. Musgrove

TIME LOG

Southern States Oil Co.
Rose #9, NE SW SE,
Section 22-21S-12W
Stafford County, Kansas

DEPTH		MINUTES										REMARKS
FROM	TO											
3000	3010	7	6	5	6	6	5	4	5	5	7	
	3020	5	5	4	5	6	6	5	3	3	2	
	3030	3	3	3	2	2	4	4	5	5	4	
	3040	3	4	4	3	2	2	2	2	2	2	
	3050	2	2	2	3	5	4	5	4	5	6	
	3060	7	6	6	6	4	4	2	6	7	6	
	3070	6	4	6	4	6	6	6	6	5	4	
	3080	4	4	3	4	3	4	5	6	4	7	
	3090	7	7	7	7	5	5	5	6	6	5	
	3100	3100	6	6	5	6	6	6	6	6	7	
3100	3110	6	7	5	5	6	5	6	6	6	3	
	3120	4	2	2	5	7	6	6	6	6	5	
	3130	5	5	6	6	6	5	5	5	4	6	
	3140	4	3	4	5	6	7	5	6	8	3	
	3150	4	2	3	3	2	3	3	4	4	4	
	3160	4	4	4	3	3	4	4	3	3	4	
	3170	2	3	3	3	3	3	4	4	4	3	
	3180	4	4	5	3	4	4	4	4	4	4	
	3190	3	3	3	2	2	2	4	4	3	4	
	3200	3200	3	5	3	3	3	3	4	4	2	3
3200	3210	4	3	3	3	3	4	3	3	3	3	
	3220	3	4	3	3	3	3	3	3	3	3	
	3230	4	4	4	3	4	3	4	3	3	3	
	3240	4	3	3	3	4	3	3	3	3	3	
	3250	3	3	4	4	7	7	6	5	6	5	
	3260	7	6	7	6	6	8	6	8	6	7	
	3270	7	8	5	6	6	6	8	7	7	8	
	3280	7	6	6	5	6	7	6	6	6	6	
	3290	7	6	6	7	7	7	7	7	6	6	
	3300	3300	6	7	6	6	4	4	6	7	6	6
3300	3310	5	7	7	8	8	9	7	8	8	7	
	3320	7	6	6	5	10	5	5	6	7	6	
	3330	5	5	9	6	6	7	7	7	6	7	
	3340	5	8	7	8	8	5	5	5	5	5	
	3350	4	5	6	6	6	7	6	6	6	6	
	3360	7	7	6	6	6	7	6	7	6	7	
	3370	6	6	7	6	5	5	6	5	5	5	
	3380	7	7	7	6	5	8	7	7	7	7	
	3390	6	7	5	6	6	5	5	6	6	5	
	3400	3400	6	7	5	6	6	6	5	5	4	6

TIME LOG

Southern States Oil Co.
Rose #9
Page Two

DEPTH		MINUTES										REMARKS
FROM	TO											
3400	3410	8	6	6	10	9	9	7	10	7	8	
	3420	6	5	5	4	5	5	7	6	6	5	
	3430	7	6	7	6	6	7	7	8	8	6	
	3440	11	9	10	8	10	8	9	10	8	6	
	3450	9	8	7	6	6	8	8	8	7	7	
	3460	8	8	6	7	10	9	8	8	9	8	
	3470	11	9	9	4	5	7	10	11	9	11	
	3480	11	11	11	10	10	10	9	7	8	7	
	3490	8	8	7	7	6	5	4	5	5	7	
	3500	6	9	6	5	5	9	9	9	9	5	
3500	3510	6	6	7	9	9	11	9	8	4	3	
	3520	3	3	3	3	3	3	3	3	4	5	
	3530	5	6	6	6	6	7	6	6	6	5	
	3540	7	6	6	6	6	6	6	6	7	7	
	3550	7	8	8	6	7	6	7	8	9	9	
	3560	8	9	8	6	7	8	7	8	7	8	
	3570	7	8	6	8	8	6	7	8	7	7	
	3580	7	6	7	5	4	3	3	3	5	4	
	3590	5	5	5	5	5	6	7	6	5	5	
	3600	6	6	6	7	6	7	7	5	6	7	
3600	3610	6	6	7	6	6	6	5	4	5	6	
	3620	5	6	6	5	5	4	6	7	5	4	
	3630	3	4	5	5	5	3	5	6	4	6	
	3640	5	4	3	3	3	5	6	4	5	6	
	3650	6	7	5	6	7	7	4	5	5	6	
	3655	6	5	5	6	7						