F. W. MORGAN
Res. Phone SH 42261

M. E. TORLINE
Res. Phone AM 23135
If no answer-
FO 34537

MORGAN & TORLINE

CONSULTING GEOLOGISTS

404 ONE TWENTY BUILDING - TELEPHONE (316) AM 52325 - AM 58421

WICHITA KANSAS 67202

GEOLOGICAL REPORT

ON

SUNGOLD OIL COMPANY, INC.

NO. 1 HARRIS

SW SW NE SECTION 6-32-6E

COWLEY COUNTY,

KANSAS

BY

MORGAN & TORLINE

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CONSULTING GEOLOGISTS

414 ONE TWENTY BUILDING TELEPHONE (316) AM 5-2315 - AM 5-8421

WICHITA, KANSAS 67202

April 7, 1966

Sungold Oil Company, Inc.
118 Misco Bldg.
Wichita, Kansas

Re: Your No. 1 Harris
SWSWNE Sec. 6-32S-6E
Cowley County, Kansas

Gentlemen:

Following is our geological report on the above listed well. We were present during the drilling of this well from a depth of 2550 feet to the total depth almost constantly. Samples were examined from a depth of 1800 feet to the total depth.

All formation tops, depths, zones, etc., were measured from the kelly bushing elevation.

Elevations: 1375 KB 1373 DF 1370 GL

Formation Tops:	Sample	Electric Log
Iatan	1875 (- 500)	1872 (- 497)
Stalnaker	1914 (- 539)	1918 (- 543)
Lansing	2086 (- 711)	2084 (- 709)
Iola	2305 (- 930)	2302 (- 927)
Layton A	2320 (- 945)	2320 (- 945)
Layton B	2338 (- 963)	2336 (- 961)
Layton C	2390 (-1015)	2390 (-1015)
Kansas City	2425 (-1050)	2424 (-1049)
Base Kansas City	2587 (-1212)	2587 (-1212)
Cleveland	2621 (-1246)	2616 (-1241)
Oswego	2757 (-1382)	2754 (-1379)
Cherokee	2819 (-1444)	2818 (-1443)
Cattleman	2911 (-1536)	2908 (-1533)
Bartlesville	3012 (-1637)	3012 (-1637)
Mississippian	3101 (-1726)	3102 (-1727)
Total Depth	3151 (-1776)	3153 (-1778)

Lithological Description of Porous Zones:

Stalnaker:

1956 - 1994 Sand, coarse, white, porous, no show of oil.

Layton A:

2315 - 2324 Sand, fine, gray, micaceous, trace oil stain.

Layton B:

2344 - 2350 Sand, white, fine, trace porosity and oil stain.
2354 - 2358 Sand, as above, trace stain.
2362 - 2376 Sand, white, fine, tight, trace stain.

2360 - 2375 Drill Stem Test. Open 7 minutes, shut in 30 minutes, open 1 hour, shut in 30 minutes, recovered 15 feet mud, Flow Pressures 9# - 27#, Shut in Pressures 779# - 706#.

Layton C:

2390 2420 Sand, white, fine to coarse, porous in zones, no show of oil.

Cleveland:

2621 - 2640 Sand, fine, white, silty, slightly porous, no show.
2648 - 2662 Sand, as above, no show.

Cattleman:

2911 - 2918 Sand, gray, very fine, dirty, trace fluorescence, no stain or odor.

Bartlesville:

(This zone was cored from 3000 to 3050 with full recovery. Following is the description of this core:)

3000 - 3007 Shale
- 3009½ Sand, fine, gray, laminated, no show
- 3012 Shale
- 3013 Sand, gray, fine, slightly porous, no show
- 3017 Sand, gray, fine, slightly porous, slight show of oil, laminated at base.

3000	-	3021	Sand, gray, fine, tight, no show, laminated.
	-	3025	Sand, shale, laminated, 75% sand, no show.
	-	3027	Shale.
	-	3033½	Sand, gray, fine, no show.
	-	3034	Shale.
	-	3050	Sand, gray, very fine, tight, no show.

Drilling:

3050	-	3085	Sand, gray, fine, slightly porous, no show of oil.

Mississippian:

3101	-	3103	Chert, white to tan, fresh, mixed with some coarse, free sand grains, no show of oil.
	-	3116	Limestone, tan, coarse to dense, cherty, non-porous.
	-	3124	Limestone, tan, oolitic.
	-	3151	Limestone, tan, fossiliferous, mixed with tan, fossiliferous chert.

Conclusions and Recommendations:

The structural position of this well was about as expected, slightly higher than nearby dry holes, confirming the location of a north-south nosing through your lease. However, the core, drill stem test, sample examination, and electric log all confirm that the well lacked reservoirs of sufficient thickness, porosity, permeability, and oil saturation to make a producing well.

The secondary reservoir, Layton Sand, was tested in the "B" zone. This zone and the "A" zone were almost not developed and had very little porosity or oil staining. The drill stem test, described above, condemned the zone tested. The Layton "C" zone was well developed but carried water.

The primary objective, Bartlesville Sand, was cored throughout the part that was expected to produce. Only four feet carried a faint show of oil. Core analysis and electric log condemned this zone. To be commercial it would have needed to be thicker than four feet.

Since this well was drilled at the extreme south end of the lease, almost a mile south of your producer to the north we recommend that you retain the lease, and by your development program may evaluate one or more locations on the north end of this lease.

Sincerely,

MORGAN & TORLINE

BY: F. W. Morgan, A.A.P.G.

FWM:svh

1500 -	20	½-½-3-1-2-1-1-1-1-½/½-½-½-1-1-½-½-2-1-1	
	40	½-½-1-1-1-1-1-1-1-1½/1-1½-1-1-1-½-½-1-½-½	
	60	1-1-½-½-1-1-½-½-1-1/1-1-½-½-1-1-1-1-1-1	
	80	1-1-1-1-2-1-1-1-1-1/1-1-1-2-1-1-1-1-1-1	
	00	1-1-1-1-1-1-1-½-½-1/1-1-2-3-1½-1½-3-3-1-1	
1600 -	20	1-½-½-1-1-3-4-1-2-1/1-1-½-½-1-1-2-1-1-1	
	40	1-1-1-1-1-1-1-1-1-1/1-1-1-1-1-3-1-1-2-2	
	60	2-2-2-2-2-3-2-1-1-1/1-1-2-1-1-1-1½-1½-1-1	
	80	2-1-1-1-2-3-4-5-4-4/2-3-2-3-3-4-3-3-1-1	
	00	1-2-1-1-2-1-2-1-1½-1½/1-1-1-1-1-2-1-2-1-1	
1700 -	20	1-2-1-1-1-1-1-1-1-1/1-1-1-1-1-1-2-1-1-1	
	40	1-1-1-1-1-4-4-3-3-4/3-4-2-1-1-1-1-2-1-2	
	60	1-1½-1½-1-2-1-1½-1½-1-1/1-2-1-1-1-1-1-1-1-1	
	80	1-1-1-1-1-1-1-1½-1-1½-2/1-1-1-1-1-1-1-1-1-1	
	00	2-1-2-1-1-2-2-2-1-2/1-2-1-3-1-2-1½-1½-1½-1½	
1800 -	20	1½-1½-1½-1½-2-2-1½-1½-2-1/2-1½-1½-2-1-2-2-1-1½-1½	
	40	2-2-1½-1½-1½-1½-2-1½-1½-2/1½-1-1½-2-2-2-2-2-2-2	
	60	2-1-2-1-2-1-1-1-2-2/2-2-1-2-1-1-1-2-2-1	
	80	2-2-2-2-2-2-2-2-2-1-1/1-2-2-1-1-3-3-3-3-3	
	00	3-3-3-3-2-2-3-3-3-3/3-2-2-3-3-3-3-3-3-3	
1900 -	20	2-2-3-3-3-2-3-2-2-2/2-2-2-3-7-3-3-3-4-4	
	40	4-3-2-2-2-3-4-3-3-3/3-3-3-3-3-2-3-3-2-2	
	60	3-3-3-3-2-3-2-2-3-3/5-4-4-3-3-4-4-4-4-4	
	80	4-4-4-4-4-5-3-3-3-2/5-5-6-6-6-6-5-4-1-1	Trip 1978'
	00	1-1-½-½-1-1-2-2-1-½/1½-1-2-2-3-2-2-3-2-1	
2000 -	20	1-1-1½-1½-1-1-1-2-1-1½/1½-1-1½-1½-1-1-1-1-1-1	
	40	1-1-1-1-1-1½-1½-1-1-2/1-1½-1½-1½-1-1½-1-1½-1½-1	
	60	1½-1-1½-1½-1-1½-1½-1-1-1/2-1½-1-1½-1-1-1½-1½-1-1	
	80	1-1-1-1-1-1-1½-1½-1½-1/1-1-1-1-1-1-1-1-1-1	
	00	1-2-1-1-1-1-3-3-4-4/2-4-4-2-2-2-2-2-2-2	
2100 -	20	2-2-2-2-2-1½-2½-1½-1½-1½/1½-2½-2-1½-2-1-1-2-1-1½	
	40	1½-1½-1½-1½-1½-1½-1½-1-1-1/1½-1-1-1½-1-1-1-1-1	
	60	1-1-1-4-2-4-3-3-2½-3/5½-5-2-1-3-6-4-5-4-5	
	80	4-3-3-2-2-2-2-1½-2-2/1½-1-2-1-2-1-2-2-2-2	
	00	2-2-2-2-2-2-2-2-2-1/1½-1½-2-1½-2-1½-1½-2-2-1	
2200 -	20	2-1½-1½-1-1-1-1-1-1-1/1-1-1-1½-1½-2-1-1½-1½-1	
	40	2-1-1½-1½-1½-1½-1½-1½-1½-1½/1½-1½-1-2-1-1-1-1½-1½-1½	
	60	1½-2-2-2-1½-1½-2-2-1½-1½/2-2-2-2-2-2-2-1½-2½-2	
	80	2-2-2-2-1½-2-2-1½-2-1½/2-1½-2-1½-2½-2-1½-2-1½-2½	
	00	2-1½-1½-2-2-2-1½-1½-2-1½/1½-2-1½-3-2½-2½-2-2-3-2	

2300 -	20	2½-2½-2½-2½-5-3-2-2½-2½-2½/1½-2-2½-2½-2-2-2-3-4-3	
	40	3-2½-2½-2½-2½-2-2-2-2-2/2-2-2-2½-2½-2-2-2½-1½-1½	
	60	2-3½-3-2½-2-3-2-2-2½-2/4-2½-2½-2½-2-2-3-4-4-3	
	80	2-2-2-2-2½-2½-2½-2-2½-2/1½-1-2-1½-2-3-2-2-1-1	Trip 2376'
	00	1-1-2-1-2-2-2-2-2-2/1-2-2-2-1-2-1-1-1-2	
2400 -	20	2-2-2-1-2-1-2-2-2-2/1-2-2-2-1-2-2-1-1-1	
	40	2-3-1-2-2-3-3-3-2-3/3-4-3-3-3-3-3-3-2-3	
	60	3-3-3-1-1-2-3-3-3-3/4-4-4-4-4-4-4-4-3-3	
	80	3-4-5-4-4-5-5-4-5-5/5-5-5-3-3-4-3-3-3-3	
	00	4-4-3-2-2-2-2-3-3-3/3-6-6-2-2-3-3-3-3-3	
2500 -	20	3-3-3-3-3-3-3-2-3-3/3-3-3-4-4-4-7-7-7-7	
	40	7-7-5-5-5-6-6-5-6-7/7-7-5-5-5-2-2-2-2-1	
	60	3-5-3-5-6-5-5-5-5-4/3-6-6-5-4-4-4-5-5-5	
	80	5-5-5-5-6-5-5-4-4-4/4-3-4-4-3-3-3-3-4-6	
	00	6-6-3-4-9-7-6-3-4-3/3-3-3-4-4-3-3-4-4-3	
2600 -	20	3-4-4-3-4-9-7-7-4-3/4-4-3-3-3-3-2-2-2-2	
	40	2-1-2-1½-2-2½-2-2-1-2/2-2-1½-1-1½-1-1½-2-½-1	
	60	1½-1½-2-1½-2-1½-2-2-1½-1½/1½-1½-1-1½-1½-1-1½-1½-1-1½	
	80	1½-1½-1½-4-4-3-3-4-3-3/4-4-3-4-4-4-3-5-8-6	Trip 2684'
	00	7-8-8-2-2-4-3-3-3-3/3-1-2-3-2-3-4-5-5-5	
2700 -	20	4-3-2-2-2-3-2-2-2-2/2-2-2-2-1-1-1-1-1-2	
	40	2-2-2-1-1-1-2-1-1-2/1-2-1-1-2-2-1-2-1-1	
	60	2-2-2-2-1-2-2-1-1-1/1-1-1-1-1-1-1-2-3-3	
	80	3-1-2-1-1-1-1-2-2-3/2-3-1-2-3-3-3-2-3-3	
	00	3-2-2-2-2-2-1-1-1-1/2-1-1-1-2-1-1-1-1-1	
2800 -	20	1-1-4-3-3-2-3-3-2-2/2-2-2-2-2-2-3-3-3-1	
	40	2-3-3-3-1-1-1-1-1-1/1-1-1-2-2-2-2-2-2-1	
	60	1-1-2-1-1-1-1-2-1-1/2-2-2-1-2-1-2-1-1-2	
	80	1-1-2-1-2-1-2-2-2-1/2-1-2-2-2-2-2-2-2-2	
	00	2-1-2-2-2-1-1-1-2-2/1-1-2-2-3-4-3-3-2-1	
2900 -	20	2-2-2-2-2-2-1-2-2-2/2-1-1-1-1-1-1-1-2-2	
	40	2-1-2-3-3-3-3-3-3-3/3-3-4-2-2-3-3-3-3-1	
	60	2-3-3-3-2-2-3-3-2-2/3-2-2-3-4-2½-2-2-1½-2	
	80	2-2-1½-2-2-2-1-2-1½-1½/1½-2-1½-2-2-2-1½-2-1½-2	
	00	2-1½-1½-1½-1½-1-1-1½-1½-2/1-1½-1-1-1-1½-2-1½-2-1½	
3000 -	20	13-8-11-11-11-12-7-6-6-8/13-14-6-5-5-6-5-4-5-5	
	40	5-7-6-5-7-8-9-11-11-8/6-5-6-7-8-6-6-7-6-6	
	60	5-5-5-5-5-5-5-5-6-6/1½-1-1½-1½-1½-1½-1½-1½-1½-1	
	80	1½-1½-1½-1½-1½-1-1-1½-1½-1½/2-2-1½-2-1½-1½-1½-1½-1½-1½	
	00	2-1½-1½-1½-1½-2½-3½-3½-3-4/4-4-3½-4-3½-4½-4-3-3½-3	
3100 -	20	2½-4-6½-8-8-6-6-7-6-11/12-15-20-10-8-9-4-7-10-11	Trip 3114'
	40	9-9-9-9-9-9-7-7-4½-7/8-6-7-7-7-8-8-7-8-9	
	60	8-7-8-8-9-7-6-8-8-10	Total Depth 3150

DRILLING DATA:

Operator:	Sungold Oil Company, Inc.
Well:	No. 1 Harris
Location:	SWSWNE Sec. 6-32-6E Cowley County, Kansas
Contractor:	Gabbert-Jones, Inc.
Tool Pusher:	Buller
Drillers:	Kinball, Higgins, Endres
Spudded:	3-28-66
Surface Casing:	8 5/8" @ 137' (not circ. - cem. from top - 100 sacks)

Daily Drilling Progress: (D.C. 12:45 P.M. 3-29-66)

3-30-66	875'	@	7:00 A.M.	3-03-66	2772'	@	7:00 A.M.
3-31-66	1825	@	7:00 A.M.	3-04-66	3000	@	7:00 A.M.
4-01-66	2315	@	7:00 A.M.	3-05-66	3118	@	7:00 A.M.
4-02-66	2478	@	7:00 A.M.				

Bit Record:

No. 1	7 7/8"	RT	580'
2	"	OSC-1E	1445
3	"	S4T	1972
4	"	OSC	2375
5	"	OSC	2683
6	"	S4T	3000
7	"	ReRun	3113
8	"	ReRun	3151

MUD RECORD:

Type - Chemical Water - Hauled Prop. Wt. 9.8
Vis. 40.0
Wtr. L. 12.8

ADDED:

Gel.	172 sks.	Soda Ash	9½ sks.
Lime	8 sks.	Tannathin	6 sks.
Hulls	88 sks.	Caustic Soda	3 sks.
Dick's Seal	16 sks.	Fibers	15 sks.