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well file

Computer Inventoried

Striker Petroleum, Corp.  
Stuart #1S

C-S/2-S/2 Sec. 12, Twp. 24S, Rng. 11~~W~~W  
Stafford County, Kansas

Rec'd  
5 April '84

12-24S-11W

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Striker Petroleum Corporation  
Stuart #1S  
C S/2 S/2 Sec. 12, Twp. 24S, Rng. 11W  
Stafford County, Kansas

### General Information

Field: Zenith/Peace Creek

Spot Location: 660' North of South Line, 2640' East of West Line

Elevation: 1790'GL 1794'KB

Spud Date: 03/24/84

TD Date: 03/31/84

Drilling and Completion Supervisor: John Swanson

Wellsite Geologist: Michael Davis

Drilling Contractor: Blackstone Rig #3

Tool Pusher: Brian Golly

Surface Casing: 260' of 8-5/8"

Production Casing: 3865' of 5-1/2"

Logging Co.: Gearhart Industries

Logs Ran: Fracture Finder with GR, Dual Latter Log with Gamma Ray  
and Caliper, Compensated Neutron Compensated Density  
with Gamma Ray and Caliper.  
From: Total Depth to Surface Casing

## Striker Petroleum - Stuart #1S

### Comments and Conclusions

The Stuart #1S was drilled in the C-S/2 S/2 Sec. 12, Twp. 24S, Rng. 11W.

The majority of the older production from this section is from Misener Sand with the first Viola Porosity (Fernvale) a very close second. Records indicate the wells from the south half of Sec. 12 averaged 75,000 to 100,000+ B0 per well. A dry hole is indicated in the NE SE SW of Section 12. However, this well was an attempted re-entry by American Energies Corporation drilled in November, 1979. The re-entry failed at 1584' where the old casing was encountered and found collapsed.

Structurally, the Stuart #1S was flat to the surrounding control wells.

The Misener Sandstone contained two separate and distinct sand bodies. The upper sand at 3725'(-1931) consisted of a fine grain sub-round to sub-angular sandstone with fair intergranular porosity. The oil shows throughout this interval were good to excellent. A drilling break at 3735'(-1941) to 3742'(-1948) revealed the second Misener Sandstone.(Samples were circulated at 3741'). The second sandstone consisted of round medium grains, well sorted. The oil shows throughout this interval were excellent. Cuttings analysis through the second Misener Sand revealed abundant fracture evidence. Some portions of the sandstone were filled with small pyrite fragments, indicating some rework and possible secondary deposition. In other portions of the samples, thin pyrite laminations could be found in small microfractures. The sandstone also contained open and opposing microfractures, usually filled with oil. The lowest portion of the sandstone was dolomitic. No calcite or calcareous clay filling was noted.

The top of the Viola at 3745'(-1951) appeared tight with oil shows throughout. The first Viola Porosity (Fernvale Member) was encountered at 3774'(-1980). At this point the lithology changed rapidly from a white chalky limestone to tan dolomite. The dolomite had fair to good intercrystalline and pin-point vuggular porosity. The oil shows throughout the first porosity were fair to good.

From the base of the first porosity to Total Depth, the lithology consisted of white to cream limestone with chalky filling and abundant milky white chert. The Viola environment at the Stuart #1S varied greatly from the ZU-16 and ZU-15. The Viola at

Cont. Comments and Conclusions

the Stuart well is highly eroded due to weathering. Because of the higher structural position, effects of low energy wave base action and chalky (limemud) filling may have adversely affected porosity in the first Viola porosity and definitely the second Viola porosity.

It is recommended that a completion attempt be made in the Viola Porosity and then the Misener Sand.

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Formation Tops

<u>Formation</u>	<u>Sample Top (Sub Sea)</u>		<u>Log Top (Sub Sea)</u>	
Anhydrite			485	(+1309)
Heebner			3159	(-1365)
Toronto			3174	(-1380)
Douglas			3242	(-1448)
Brown Lime	3314	(-1520)	3314	(-1520)
Lansing	3334	(-1540)	3334	(-1540)
Base Kansas City	3632	(-1838)	3630	(-1836)
Penn. Cong.	3666	(-1822)	3662	(-1868)
Kinderhook	3674	(-1880)	3676	(-1882)
Misener	3725	(-1931)	3728	(-1934)
Viola	3745	(-1951)	3752	(-1958)
First Viola Porosity	3774	(-1980)	3772	(-1978)
Second Viola Porosity	3808	(-2014)	3804	(-2010)
Total Depth	3870	(-2076)	3865	(-2071)

Oil Shows in Cuttings

Interval: 3724'-3744'  
 3744'-3774'  
 3774'-3786'

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Sample Descriptions

Samples Caught By: Rig Crew

Sample Interval : 10'

Sample Quality : Very Good

- 3340 - 3346 Limestone light - medium grey cryptocrystalline, firm, chalky
- 3346 - 3352 Shale dark grey, firm, carbonaceous in part
- 3352 - 3360 Limestone as above
- 3360 - 3368 Shale dark grey, firm, calcareous
- 3368 - 3380 Limestone light brown, micro to cryptocrystalline, dense, tight
- 3380 - 3390 Shale dark grey, firm, waxy, carbonaceous
- 3390 - 3392 Limestone as above
- 3392 - 3394 Shale as above
- 3394 - 3400 Limestone as above
- 3400 - 3404 Shale dark brown to dark grey, firm, brittle
- 3404 - 3412 Limestone as above
- 3412 - 3418 Shale as above
- 3418 - 3452 Limestone tan to brown microcrystalline, hard, fossiliferous, sub-chalky, occasional trace of white opaque chert
- 3452 - 3456 Shale as above
- 3456 - 3466 Limestone tan buff brown microcrystalline, oolitic in part with fair to good interoolitic porosity, NOSFC
- 3466 - 3482 Limestone tan buff brown microcrystalline, firm to hard sub-chalky
- 3482 - 3488 Shale medium to dark grey, firm blocky fissile

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Cont. Sample Descriptions

- 3488 - 3490 Limestone as above
- 3490 - 3494 Shale as above
- 3494 - 3508 Limestone buff grey, cryptocrystalline hard, dense
- 3508 - 3518 Limestone as above becoming lithographic, trace of pyrite, some scattered chert fragments
- 3518 - 3536 Limestone tan brown grey, microcrystalline hard, fossiliferous with occasional slickensides
- 3536 - 3542 Shale dark grey, firm platy calcareous
- 3542 - 3578 Limestone as above
- 3578 - 3610 Limestone white cream tan buff grey cryptocrystalline hard, dense, chalky in part, occasional trace chert milky white, opaque
- 3610 - 3614 Shale medium to dark grey, firm to moderately hard waxy carbonaceous
- 3614 - 3634 Limestone white cream buff cryptocrystalline, hard, dense with clear siliceous secondary filling
- 3634 - 3638 Shale black, brittle, firm, carbonaceous
- 3638 - 3656 Limestone white brown tan microcrystalline firm to hard with some soft chalky laminations
- 3656 - 3664 Shale green, brick red, grey soft to firm calcareous in part
- 3664 - 3676 Limestone white buff light tan cryptocrystalline with occasional micro and fine crystalline veining, sub-chalky in part. Trace of pyrite
- 3676 - 3682 Conglomerate - mostly brick red, soft silty shale with limestone and quartz fragments
- 3682 - 3726 Shale grey, dark grey, brick red, apple green firm, carbonaceous in part
- 3726 - 3733 Sandstone clear frosted light grey, hard trace small as hairline fractures, strong odor, bright gold fluorescence immediate cut, light brown oil stain saturating throughout
- 3733 - 3740 Sandstone clear to frosted, sub-round to sub-angular poorly sorted, some inbedded pyrite and pyrite on fracture surfaces dark brown to light brown oil staining immediate cut, bright yellow fluorescence, good

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Cont. Sample Descriptions

Cont.

- 3733 - 3740 intergranular porosity, very strong odor
- 3740 - 3745 Dolomite tan clear hard, fine to medium crystalline, very sandy grading to dolomitic sandstone, good oil show throughout
- 3745 - 3774 Limestone buff-tan cryptocrystalline hard dense tight with good oil show, strong odor slow streaming cut
- 3774 - 3786 Dolomite cream tan brown micro-cryptocrystalline, limey hard, good to fair light brown oil staining good to excellent intercrystalline porosity, immediate flash cut  
Abundant white soft chalk filling
- 3786 - 3890 Limestone tan white cryptocrystalline, hard, chalky  
Abundant milky white chert

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Drill Time (Minutes per foot)

3300	2,2,2,3,2,3,2,3,3,3
3310	4,4,4,3,5,5,5,5,6,5
3321	5,4,5,6,4,4,4,4,3,4
3331	4,5,4,5,5,5,5,4,4,5
3341	4,5,4,5,5,5,3,4,4,4
3351	4,4,3,3,5,4,6,3,3,4
3370	3,2,2,2,3,3,2,3,4,3
3380	3,4,3,3,3,3,4,3,3,2
3390	1,½,1,1,2,2,3,3,3,4
3400	2,1,3,4,4,4,4,4,3,4
3410	4,4,2,1,1,1,1,3,3,3
3420	2,3,4,3,4,3,3,2,3,2
3430	4,3,2,2,3,2,3,3,2,3
3440	2,3,3,5,4,3,2,2,5,5
3450	4,2,½,½,½,½,2,2,2,2
3460	½,1,1,1,1,2,2,3,2,2
3470	1,2,2,3,3,4,3,5,6,7
3480	4,2,2,2,2,2,3,4,2,1
3490	2,1,4,4,5,5,5,6,5,6
3500	4,5,4,5,4,5,5,10,8,11
3510	11,8,7,8,11,8,9,9,4,5
3520	4,4,5,4,5,6,7,4,5,8
3530	6,5,5,6,5,4,1,2,3,3
3540	3,4,5,6,6,6,6,6,6,5

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Cont. Drill Time (Minutes per foot)

3550	8,8,8,10,9,8,6,7,6,5
3560	5,5,6,4,4,4,5,7,7,7
3570	6,7,7,9,6,6,7,3,3,3
3580	7,7,8,6,7,6,6,6,4,6
3590	6,6,4,6,8,7,5,5,5,6
3600	5,5,4,5,6,7,7,6,5,4
3610	4,5,6,6,8,6,5,4,7,7
3620	7,7,8,6,4,6,4,5,4,4
3630	4,5,5,4,4,4,3,2,2,3
3640	5,5,5,6,5,5,5,6,8,5
3650	4,4,5,4,3,2,2,2,1,1
3660	2,2,3,3,4,6,5,6,4,4
3670	5,5,6,4,5,6,3,4,3,4
3680	4,4,3,5,6,6,6,7,8,6
3690	7,7,6,7,5,6,6,6,5,5
3700	5,4,5,5,4,4,4,4,4,5
3710	4,4,5,5,4,4,6,4,6,6
3720	5,5,5,6,8,8,8,8,9,10
3730	8,6,5,6,2,3,2,2,3,3
3740	4,5,3,3,6,6,6,6,4,5
3750	4,4,5,6,6,7,8,10,10,7
3760	9,9,9,10,9,7,9,9,8,6
3770	8,8,9,4,3,4,6,4,6,6
3780	7,5,5,4,6,8,9,10,6,9

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Cont. Drill Time (Minutes per foot)

3790	9,9,10,9,9,8,9,8,7,6
3800	7,6,8,5,7,6,5,7,5,6
3810	6,6,4,4,3,4,4,5,6,4
3820	5,8,9,9,9,15,15,10,8,7
3830	8,9,10,13,8,7,10,10,15,9
1840	11,12,12,13,11,8,8,8,10
3850	9,10,10,9,10,10,9,8,9,9
3860	8,7,10,10,9,8,7,7,9,9