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RELEASED

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PORTER # 1

FROM CONFIDENTIAL

WELLSITE GEOLOGICAL REPORT

WELL NAME : Porter # 1 .- API No. 15-205-24,817

LOCATION: SW SW, Section 30, 28-15, Wilson Co.,
Kansas. 4620' FEL, 660' FSL of Sec. 30

ELEVATION: 865' (Surveyed)

TOTAL DEPTH: 1140 feet, reached 18:45 hours on
August 3, 1989 in Mississippi limestones.

SPOUDED: August 1, 1989 at 18:00 hours.

CASING: 8 5/8" to 150' and cemented to surface.

HOLE SIZE: 11" to 156 feet; 6 1/2" to TD.

CORES: 1006' to 1016' for Weir Coal Seam
(5 3/4' thick).

TESTS: No show of oil. Small (50 Mcf/d) gas shows
from both the Weir and Mulky coal seams.

LOGS: None yet, will log later

DRILLING CONTRACTOR: Mokat (No. 5831), Tyro, Kansas using
a Schramm air rig and downhole hammer.

OPERATOR: Stroud Oil Properties (# 30084) of
Wichita, Kansas.

SUPERVISION: Bill Shingler, Engineer.
Bill Stoeckinger, Geologist.

STATUS: Open Hole. Waiting on logging

FORMATION TOPS: Pawnee 727', Fort Scott 780', Weir 1007',
(On samples) Bartlesville (not present), Riverton very
thin, Mississippi 1095'.

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KANSAS REGIONAL SURVEY
WICHITA BRANCH

CONCLUSIONS: No conventional gas sands were found, 5 3/4' of Weir coal was cored which is being desorbed of its gas in a sealed canister. It appears to be quite gassy and permeable.

RECOMMENDATIONS: Log and based on gas content of the Weir coal seam, run 4 1/2" casing and complete for gas.

Oil and Gas Shows

No show of oil was seen. Drilling was stopped above every potential sand reservoir and coal seam in order to check for gas flow. The first gas show (50 Mcfpd) was seen at 814 feet in the base of the Fort Scott limes (possibly equivalent to the old "shale gas" zone of the 1900's). Drilling stopped here due to night fall. The next morning there was no pressure on the wellhead. Once the water was blown out, the gas flow on the well was measured at 34 Mcfpd. The Squirrel sand was then drilled with a slight increase in gas show (to about 50 Mcfpd). Gas flow checks on the well subsequently decreased to about 30 Mcfpd. An increase to 57 Mcfpd occurred after the Weir coal seam slot was drilled. This flow continued to total depth. To conclude, it appears the Weir coal seam was capable of about 30 Mcfpd. The base Fort Scott zone (the Mulky interval) gave the best gas show (50 Mcfpd).

Formation Evaluation

Tops	Drilled depth	Sub sea
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Pawnee Limestone	727	+ 138
Fort Scott	780	+ 85
Squirrel Sand	830	+ 26
Weir Coal (5 3/4' thick)	1007	- 142
Bartlesville Sand	Not present	
Riverton Coal	Thin	
Mississippi limes	1095	- 230

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The Squirrel sand is a black, hard, compacted, fine grained sand which contained little gas and no oil. It has poor reservoir characteristics.

Streaks of coal were seen at 874', 889', 934', 950' and 988'. The last mentioned was associated with varicolored clays and siltstones. For a brief moment, we had thought this was the top of the Weir coal seam.

The Weir seam was topped at 1007 feet. 4 inches were drilled prior to pulling out for coring. 5' 6" were cored at a rate of 1 minute per foot. 3 1/2 feet of the underlying clay was cut at the rate of 3 1/2 minutes per foot. The coal seemed porous, broken, fractured and profusely bubbling gas through both vertical and horizontal fractures and vugs. Some of the coal is compacted and with a vitreous luster.

Other coal seam streaks were cut at 1060' and 1089'. The former was quite thick (less than 2 foot) and occurred at the base of a fast drilling radioactive clay. I am not sure which seam represents the Riverton zone since the Cherokee section on the Fredonia anticline is severely thinned and correlations to other areas are somewhat difficult.

The top of the Mississippi consists of quartzitic limestones and chert, followed by fast drilling which indicates porous zones. There were no shows of any kind.

A strong influx of water appeared at about 990 feet and again in the Weir coal seam. This flow dampened any potential gas flow from the Weir itself. The Bartlesville was not present, as expected.

For future work, it seems there is a strong affinity for the coals to appear at the base of fast-drilling radioactive clays. This characteristic, if it persists, will allow the driller to slow down before the actual coal is reached.

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Operations

While drilling out the cement used for surface casing, an air hose broke causing a 5 hour delay. Subsequently, the 6 1/2" hole was carried to the bottom of the Fort Scott group of limes where some gas was reported. One core was taken between 1007 and 1016 feet and recovered 5 3/4 feet of coal. The well was then drilled to the point 50 feet into the Mississippian limestones without problems.

Samples were caught and bagged every 10 feet and carried to Wichita, Kansas for delivery to the KCC at their request.

Two gas samples were taken for later analysis in Wichita. Some of the Weir coal will be saved and used for proximate analysis in laboratories located in Chetopa, Kansas (Lummes Labs).

Conclusions and Recommendations

The Weir coal seam is thick and based on initial gas desorption measurements appears to be quite gassy. After logging and if the seam proves to be gassy enough, 4 1/2" production casing will be run and a completion for coalbed methane gas attempted in this new and virgin area.

Respectfully submitted,



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Certified Petroleum Geologist.