



HUSKY OIL NPR OPERATIONS, INC.
U.S. GEOLOGICAL SURVEY/ONPRA

LOGGING REPORT

WELL NAME LISBURNE #1

Date August 22, 1979 Driller Depth 6773'

Elevation 1862' KB Logger Depth 6750'

Logs Ran and Intervals

GR/SP/DIL 4509-6744'
GR/CAL/BHC 4509-6738'

Additional Logs to Run

None

Zones of Interest

Depth	Gross Thickness	Net Feet of Porosity	Lith	Porosity	Probable Fluid Content
	NO ZONES OF INTEREST				

Discussion:

All zones showing comparatively clean GR response are of low porosity from 4-11%.
Only about 500' of open hole are to gauge. Remainder is all greater than 15" - the maximum reach of the BHC Caliper.

Log Tops & Correlations:

No identifiable formation tops or correlation with other wells.

Additional Evaluation Plans:

RAY WERMAYER

Wellsite Geologist
ARMOUR KANE

Log Analyst



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LOGGING REPORT

WELL NAME LISBURNE #1
Date November 23-24, 1979 Driller Depth 8016'
Elevation 1862' KB Logger Depth 8030'

Logs Ran and Intervals

GR/SP/DIL	4509-8024'	CST-Sidewalls	6168-8002'
GR/CAL/CNL/FDC	4509-8024'	Shot 45, Rec. 30	
GR/BHC	4509-8020'		
HRD-Dipmeter	4509-8024'		
Birdwell Velocity Survey - Top: 4500'; Btm: 8000'			

Additional Logs to Run

NONE

Zones of Interest

Depth	Gross Thickness	Net Feet of Porosity	Lith	Porosity	Probable Fluid Content
No apparent zones of interest					
Lisburne:	Spot CNL/FDC Cross-plots indicate most porosity is in the 3-4.5% with a few intervals 6-8%		One interval, 7928-7938'		shows 13%+

Discussion:

Borehole very badly washed out from casing to 6900'. HRD calipers are saturated at 19" indicating that diameter is more than 19". In some places bulk density reads 1.5 g/cc vs. mud density of 1.3, suggesting a huge hole.

Log Tops & Correlations:

Possible top Shublik 6945'
Lisburne 7408'

Tops from logs - no correlative wells available.

Additional Evaluation Plans:

DAVE YOUNG

Wellsite Geologist

ARMOUR KANE

Log Analyst



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LOGGING REPORT

WELL NAME LISBURNE #1

Date February 29, 1980 Driller Depth 13,650'

Elevation 1862' KB Logger Depth 13,651'

Logs Run and Intervals

DIL/GR/SP	8005-13,645'	GR to 7730'
BHCS/GR/TTI	8005-13,642'	GR to 7770'
CNL/FDC/GR/CAL	8010-13,650'	GR to 7710'
HDT-Dipmeter	8005-13,650'	

Additional Logs to Run

None. CST Sidewalls were not run due to hard hole condition.

Log of Interest

Interval	Gross Thickness	Net Feet of Porosity	Lith	Porosity	Probable Fluid Content
CNL/FDC					
11,618-648'	30'	Approx. 22'	Ls/Dol	5-12%	Gas (?)
11,672-678'	6'	6'	Ls/Dol	6%	Gas (?)
11,827-842'	15'	15'	Ls/Dol	6-9%	Gas (?)

REMARKS:

Water saturation could not be calculated for above intervals due to saturated Rt readings across entire carbonate intervals on DIL log.

Log Tops & Correlations:

Shublik/Base 1st Lisburne Thrust	8590'
Top 2nd Lisburne Thrust	9670'
Fault 7/Base 2nd Lisburne Thrust	10,900'
Top 3rd Lisburne Thrust	11,630'
Top Endicott/Kayak Shale	13,370'

Log Interval Evaluation Plans:

None at present time; may consider test of potential gas horizons after complete log analysis.

HARRY HAYWOOD/RAY WERMAYER

Wellsite Geologist

Log Analyst



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LOGGING REPORT

WELL NAME LISBURNE #1
Date May 19-23, 1980 Driller Depth 17,000'
Elevation 1862' K.B. Logger Depth 16,982'

Logs Ran and Intervals

Temperature Log (2)	100-16,955'	CBL - 6500-12,500'
DLL/GR	13,650-16,965'	Velocity Survey: top 4500'; btm. 16,94
BHGS/GR	13,650-16,966'	
CNL/FDC/GR/CAL	13,650-16,980'	
HRD-DIPMETER	13,645-16,979'	

Additional Logs to Run

Zones of Interest

Depth	Gross Thickness	Net Feet of Porosity	Lith	Porosity	Probable Fluid Content
NO ZONES OF INTEREST *					

Discussion:

*FDC/CNL Cross Plots indicate porosity range of 0-3% over the interval and indicate zones ranging from 100% Limestone to 80% Dolomite, 20% Limestone.

Log Tops & Correlations:

Top 4th Lisburne	13,736'
Top 5th Lisburne	15,398'

Additional Evaluation Plans:

None for logged interval. Drill stem tests are scheduled for intervals above 13,650'.

DAVE YOUNG

Wellsite Geologist

ARMOUR KANE

Log Analyst