

N.E.B. COPY

CORE ANALYSIS REPORT

FOR

SUNCOR ENERGY INC.

**SUNCOR NETLA
K77 60.50 LATITUDE 122.50 LONGITUDE
NETLA, NORTHWEST TERRITORIES**

**MICROFILMED
SUR MICROFILM:**



CORE LABORATORIES

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CORE LABORATORIES

Company : SUNCOR ENERGY INC.
 Well : SUNCOR NETLA
 Location : K77 60.50 LATITUDE 122.50 LONGITUDE
 Province : NORTHWEST TERRITORIES

Field : NETLA
 Formation : SLAVE POINT
 Coring Equip.: ROTARY SIDEWALL
 Coring Fluid : WATER BASE MUD

File No.: 52131-99-0091
 Date : 99-03-14
 Analysts: DJB
 Core Dia:

C O R E A N A L Y S I S R E S U L T S

SAMPLE NUMBER	DEPTH m	PERMEABILITY (MAXIMUM) K _{air} mD	POROSITY (HELIUM) fraction	GRAIN DENSITY kg/m3	DESCRIPTION
22	1997.50	<.01	0.005	2700.	ls i
21	2003.60	0.01	0.005	2710.	ls i
20	2010.50				NSS ru
19	2014.15	0.01	0.005	2710.	ls i
18	2016.20	0.01	0.008	2710.	ls i
17	2019.50	0.01	0.008	2690.	ls i
16	2021.60	<.01	0.005	2690.	ls i
15	2023.20	0.05	0.014	2710.	ls i
14	2026.20	0.02	0.011	2690.	ls i
13	2028.60	0.03	0.013	2700.	ls i
12	2032.00	0.03	0.019	2680.	ls i
11	2030.50	<.01	0.018	2690.	ls i
10	2034.50	0.07	0.027	2710.	ls i
9	2036.60	0.01	0.014	2700.	ls i
8	2039.00	<.01	0.011	2700.	ls i
7	2041.50	0.05	0.018	2700.	ls i
6	2043.50	0.01	0.015	2700.	ls i
5	2046.70	0.03	0.018	2710.	ls i sty
4	2050.50	<.01	0.011	2700.	ls i
3	2054.60	0.01	0.011	2700.	ls i
2	2060.50	0.03	0.011	2700.	ls i
1	2064.50	0.01	0.014	2700.	ls i

CORELAB

CODE KEY - DESCRIPTIONS

A	= (Prefix A) Horizontal matrix permeability measured by pressure decay profile permeametry through a probe tip due to induced fractures	incl	= Inclusions	shy	= Moderately shaly (20% - 40%)
ACA	= Removed for advanced core analysis	lam	= Laminae (laminated)	sid	= Siderite
anhy	= Anhydrite	lmy	= Limy	sltst	= Siltstone
AST	= Appears similar to	ls	= Limestone	slty	= Silty
bit	= Bitumen	lv	= Large vug	SP	= Small plug (sample drilled from core in maximum horizontal direction and parallel to bedding plane where possible) permeability, porosity and grain density are measured
bk	= Break	m	= Medium	ss	= Sandstone
bldr	= Boulder	mi	= Mud invaded	sshy	= Slightly shaly (<20%)
c	= Coarse	mic	= Micaceous	sty	= Stylolite (ic)
calc	= Calcite (calcareous)	mv	= Medium vug	sulf	= Sulphur
carb	= Carbonaceous	NA	= Not analyzed by request	sv	= Small vug
cbl	= Cobble	NP	= No permeability measurement possible due to poor sample quality	TEC	= Thermal Extraction Chromatography to determine oil richness
CEC	= Cation exchange capacity	NR	= Not received	TS	= Thin section
cem	= Cemented	ool	= Oolitic	uncon	= Unconsolidated
cgl	= Conglomerate	OB	= Overburden sample (permeability and porosity measured at net overburden stress)	vc	= Very coarse
cht	= Chert	P	= Preserved for future studies	vfrac	= Vertical fracture
coal	= Coal/coal inclusion	pbl	= Pebble	vf	= very fine
dol	= Dolomite	PET	= Removed for petrographic analysis	VIS	= Viscosity of oil measured
f	= Fine	ppv	= Pinpoint vug	VOB	= Vertical overburden sample (vertical permeability measured at net overburden stress)
FD	= Full diameter analysis including three directional permeabilities, porosity and densities	PSA	= Particle size analysis	vshy	= Very shaly (>40%)
foss	= Fossil (fossiliferous)	pyr	= Pyrite (pyritic)	VSP	= Vertical small plug drilled from whole core to measure vertical permeability and occasionally porosity
frac	= Fracture (undifferentiated)	pyrbit	= Pyrobitumen	vug	= Vuggy (vuggy)
fri	= Friable	ru	= Rubble	ws	= Water sand
glauc	= Glauconite (glauconitic)	SA	= Sieve analysis	XRD	= X-ray diffraction
gml	= Granule	sdv	= Sandy	*	= Perm unavailable due to broken core
gyp	= Gypsum	SEM	= Scanning electron microscope analysis		
hfrac	= Horizontal fracture	sh	= Shale		
hal	= Halite (salt)	SPH	= Humidity analysis of small plug sample at 60 degrees Celsius and 50 percent relative humidity		
i	= Intercrystalline	SPT	= Small Plug used for tracer analysis		

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Formation : SLAVE POINT

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A N A L Y T I C A L P R O C E D U R E S A N D Q U A L I T Y A S S U R A N C E

HANDLING & CLEANING

Core Transportation :
Solvent : TOLUENE
Extraction Equipment : VAPOR PHASE EXTRACTOR
Extraction Time : 28 HOURS
Drying Equipment : GRAVITY OVEN
Drying Time : 12 HOURS
Drying Temperature : 115 DEGREES C.