

**TOTAL ORGANIC CARBON**
**Company : DEER LAKE OIL & GAS INC.**
**Project # : BH-41681/08-1659-A**

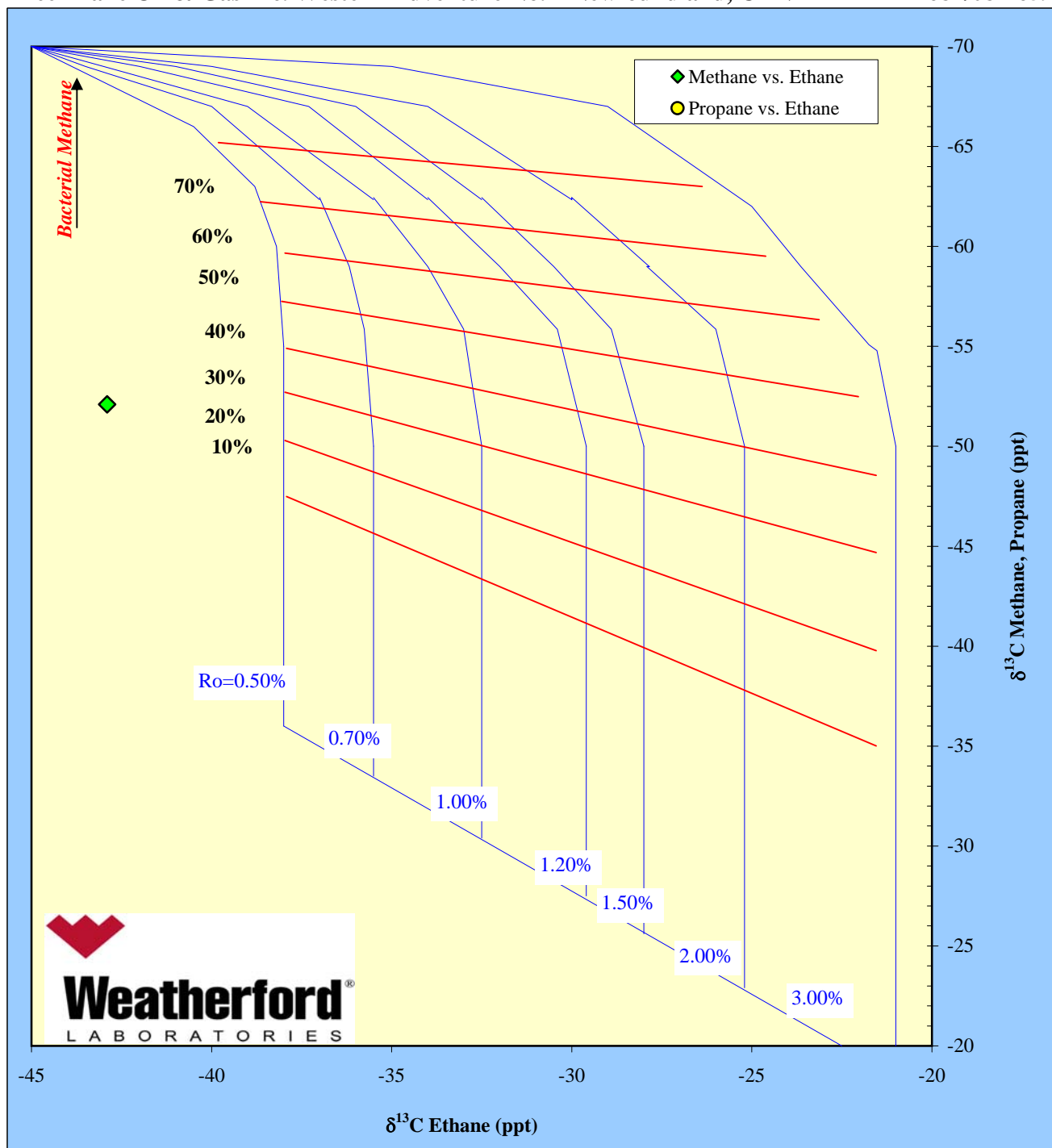
Client ID	Well Name	State	Top depth (m)	Sample Type	Prep	TOC, wt. %	Verified	Comments
BH-41681-DL000009	WESTERN ADVENTURE NO. 2	Newfoundland	26.0	Cuttings	NOPR	0.43	lc	
BH-41681-DL000010	WESTERN ADVENTURE NO. 2	Newfoundland	35.0	Cuttings	NOPR	0.86	lc	
BH-41681-DL000011	WESTERN ADVENTURE NO. 2	Newfoundland	36.5	Cuttings	NOPR	0.41	lc	
BH-41681-DL000012	WESTERN ADVENTURE NO. 2	Newfoundland	38.0	Cuttings	NOPR	0.15	lc	
BH-41681-DL000013	WESTERN ADVENTURE NO. 2	Newfoundland	39.5	Cuttings	NOPR	0.18	lc	
BH-41681-DL000014	WESTERN ADVENTURE NO. 2	Newfoundland	41.0	Cuttings	NOPR	0.15	lc	
BH-41681-DL000015	WESTERN ADVENTURE NO. 2	Newfoundland	47.0	Cuttings	NOPR	2.49	lc	
BH-41681-DL000016	WESTERN ADVENTURE NO. 2	Newfoundland	48.5	Cuttings	NOPR	0.54	lc	
BH-41681-DL000017	WESTERN ADVENTURE NO. 2	Newfoundland	59.5	Cuttings	NOPR	1.21	lc	
BH-41681-DL000018	WESTERN ADVENTURE NO. 2	Newfoundland	71.5	Cuttings	NOPR	0.52	lc	
BH-41681-DL000019	WESTERN ADVENTURE NO. 2	Newfoundland	73.0	Cuttings	NOPR	1.40		
BH-41681-DL000020	WESTERN ADVENTURE NO. 2	Newfoundland	74.5	Cuttings	NOPR	0.75	lc	
BH-41681-DL000021	WESTERN ADVENTURE NO. 2	Newfoundland	76.0	Cuttings	NOPR	0.94		
BH-41681-DL000022	WESTERN ADVENTURE NO. 2	Newfoundland	77.5	Cuttings	NOPR	0.78		
BH-41681-DL000023	WESTERN ADVENTURE NO. 2	Newfoundland	79.0	Cuttings	NOPR	0.71	lc	
BH-41681-DL000024	WESTERN ADVENTURE NO. 2	Newfoundland	81.0	Cuttings	NOPR	0.29	lc	
BH-41681-DL000025	WESTERN ADVENTURE NO. 2	Newfoundland	87.0	Cuttings	NOPR	2.24	lc	
BH-41681-DL000026	WESTERN ADVENTURE NO. 2	Newfoundland	88.5	Cuttings	NOPR	1.59	lc	
BH-41681-DL000027	WESTERN ADVENTURE NO. 2	Newfoundland	91.5	Cuttings	NOPR	0.75	lc	
BH-41681-DL000028	WESTERN ADVENTURE NO. 2	Newfoundland	97.5	Cuttings	NOPR	0.75	lc	
BH-41681-DL000029	WESTERN ADVENTURE NO. 2	Newfoundland	100.5	Cuttings	NOPR	2.16		
BH-41681-DL000030	WESTERN ADVENTURE NO. 2	Newfoundland	102.0	Cuttings	NOPR	0.30	lc	
BH-41681-DL000031	WESTERN ADVENTURE NO. 2	Newfoundland	105.0	Cuttings	NOPR	1.07		
BH-41681-DL000032	WESTERN ADVENTURE NO. 2	Newfoundland	109.5	Cuttings	NOPR	0.74		
BH-41681-DL000033	WESTERN ADVENTURE NO. 2	Newfoundland	111.5	Cuttings	NOPR	0.73		
BH-41681-DL000037	WESTERN ADVENTURE NO. 2	Newfoundland	251.0	CORE	NOPR	0.44		
BH-41681-DL000038	WESTERN ADVENTURE NO. 2	Newfoundland	268.0	CORE	NOPR	1.16	lc	
BH-41681-DL000039	WESTERN ADVENTURE NO. 2	Newfoundland	363.0	CORE	NOPR	0.05		
BH-41681-DL000040	WESTERN ADVENTURE NO. 2	Newfoundland	142.0	CORE	NOPR	0.18	lc	
BH-41681-DL000041	WESTERN ADVENTURE NO. 2	Newfoundland	151.8	CORE	NOPR	0.06	lc	
BH-41681-DL000042	WESTERN ADVENTURE NO. 2	Newfoundland	152.0	CORE	NOPR	1.54	lc	
BH-41681-DL000043	WESTERN ADVENTURE NO. 2	Newfoundland	175.0	CORE	NOPR	0.16	lc	
BH-41681-DL000044	WESTERN ADVENTURE NO. 2	Newfoundland	180.0	CORE	NOPR	0.41	lc	
BH-41681-DL000045	WESTERN ADVENTURE NO. 2	Newfoundland	183.1	CORE	NOPR	0.11		
BH-41681-DL000046	WESTERN ADVENTURE NO. 2	Newfoundland	193.0	CORE	NOPR	0.16	lc	
BH-41681-DL000034	WESTERN ADVENTURE NO. 2	Newfoundland	202.0	CORE	NOPR	10.85	lc	
BH-41681-DL000047	WESTERN ADVENTURE NO. 2	Newfoundland	214.0	CORE	NOPR	0.20		
BH-41681-DL000048	WESTERN ADVENTURE NO. 2	Newfoundland	227.0	CORE	NOPR	0.12		
BH-41681-DL000049	WESTERN ADVENTURE NO. 2	Newfoundland	253.0	CORE	NOPR	0.29		
BH-41681-DL000050	WESTERN ADVENTURE NO. 2	Newfoundland	256.0	CORE	NOPR	0.08	lc	
BH-41681-DL000051	WESTERN ADVENTURE NO. 2	Newfoundland	259.0	CORE	NOPR	0.14		
BH-41681-DL000052	WESTERN ADVENTURE NO. 2	Newfoundland	261.0	CORE	NOPR	0.13		
BH-41681-DL000035	WESTERN ADVENTURE NO. 2	Newfoundland	265.0	CORE	NOPR	2.22		
BH-41681-DL000053	WESTERN ADVENTURE NO. 2	Newfoundland	267.8	CORE	NOPR	0.08		
BH-41681-DL000054	WESTERN ADVENTURE NO. 2	Newfoundland	271.0	CORE	NOPR	0.19		
BH-41681-DL000055	WESTERN ADVENTURE NO. 2	Newfoundland	274.0	CORE	NOPR	0.24	lc	
BH-41681-DL000056	WESTERN ADVENTURE NO. 2	Newfoundland	277.1	CORE	NOPR	0.14		
BH-41681-DL000057	WESTERN ADVENTURE NO. 2	Newfoundland	280.1	CORE	NOPR	0.12		
BH-41681-DL000058	WESTERN ADVENTURE NO. 2	Newfoundland	282.9	CORE	NOPR	0.09		
BH-41681-DL000059	WESTERN ADVENTURE NO. 2	Newfoundland	285.0	CORE	NOPR	4.71	lc	
BH-41681-DL000060	WESTERN ADVENTURE NO. 2	Newfoundland	289.0	CORE	NOPR	0.24	lc	
BH-41681-DL000061	WESTERN ADVENTURE NO. 2	Newfoundland	291.0	CORE	NOPR	0.54	lc	
BH-41681-DL000062	WESTERN ADVENTURE NO. 2	Newfoundland	303.0	CORE	NOPR	1.72	lc	
BH-41681-DL000063	WESTERN ADVENTURE NO. 2	Newfoundland	307.0	CORE	NOPR	0.55	lc	
BH-41681-DL000064	WESTERN ADVENTURE NO. 2	Newfoundland	316.0	CORE	NOPR	0.56	lc	
BH-41681-DL000065	WESTERN ADVENTURE NO. 2	Newfoundland	321.0	CORE	NOPR	0.49	lc	
BH-41681-DL000066	WESTERN ADVENTURE NO. 2	Newfoundland	327.0	CORE	NOPR	0.25		
BH-41681-DL000067	WESTERN ADVENTURE NO. 2	Newfoundland	337.0	CORE	NOPR	0.23		
BH-41681-DL000068	WESTERN ADVENTURE NO. 2	Newfoundland	353.0	CORE	NOPR	0.29		
BH-41681-DL000069	WESTERN ADVENTURE NO. 2	Newfoundland	357.0	CORE	NOPR	0.16		
BH-41681-DL000036	WESTERN ADVENTURE NO. 2	Newfoundland	362.1	CORE	NOPR	0.98	lc	
BH-41681-DL000070	WESTERN ADVENTURE NO. 2	Newfoundland	364.9	CORE	NOPR	0.15	lc	
BH-41681-DL000071	WESTERN ADVENTURE NO. 2	Newfoundland	368.9	CORE	NOPR	0.22		

**Notes:**  
 NOPR - Normal Preparation

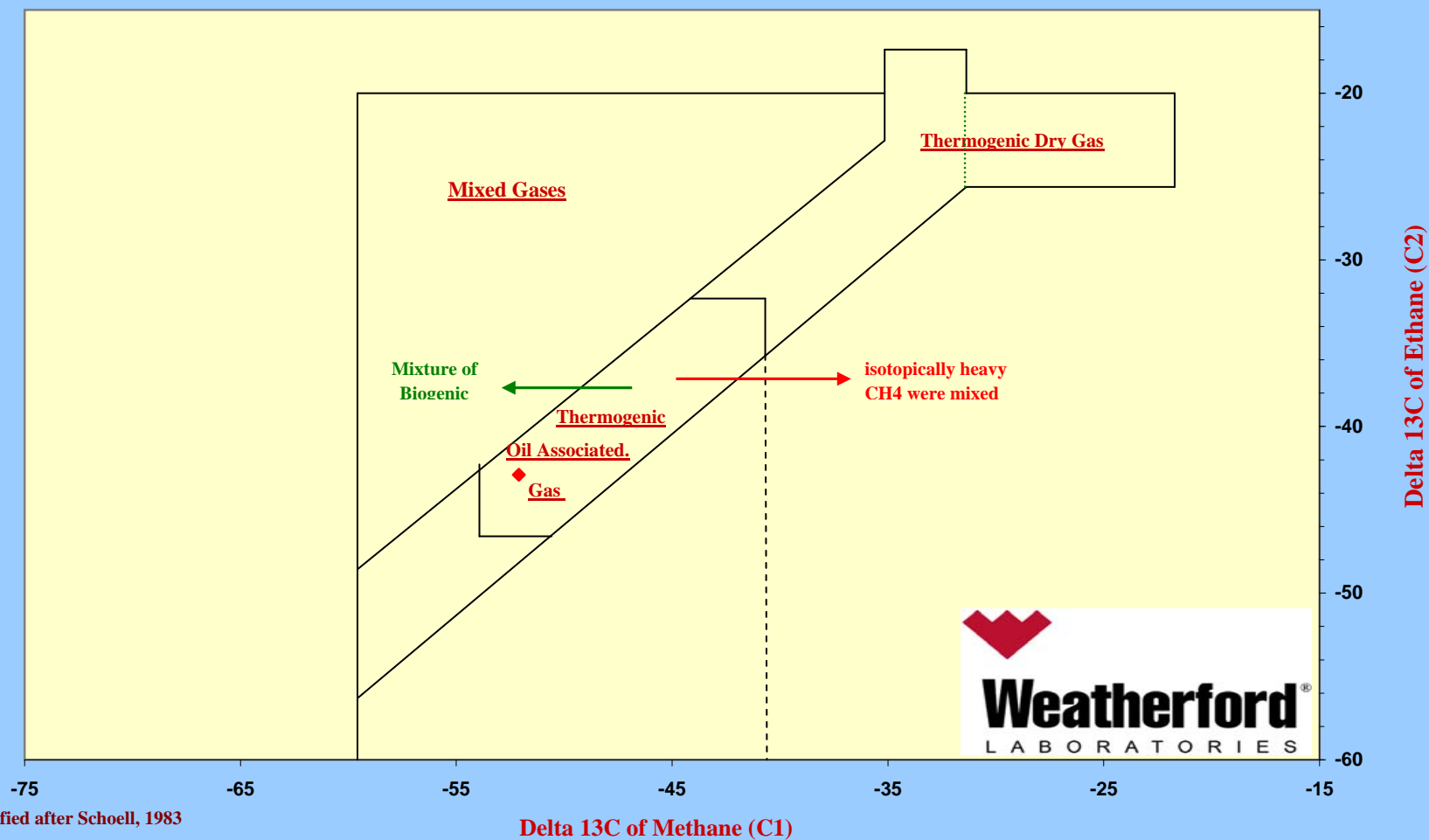
EXT - Extracted Rock

# Assessment of Thermal Maturity

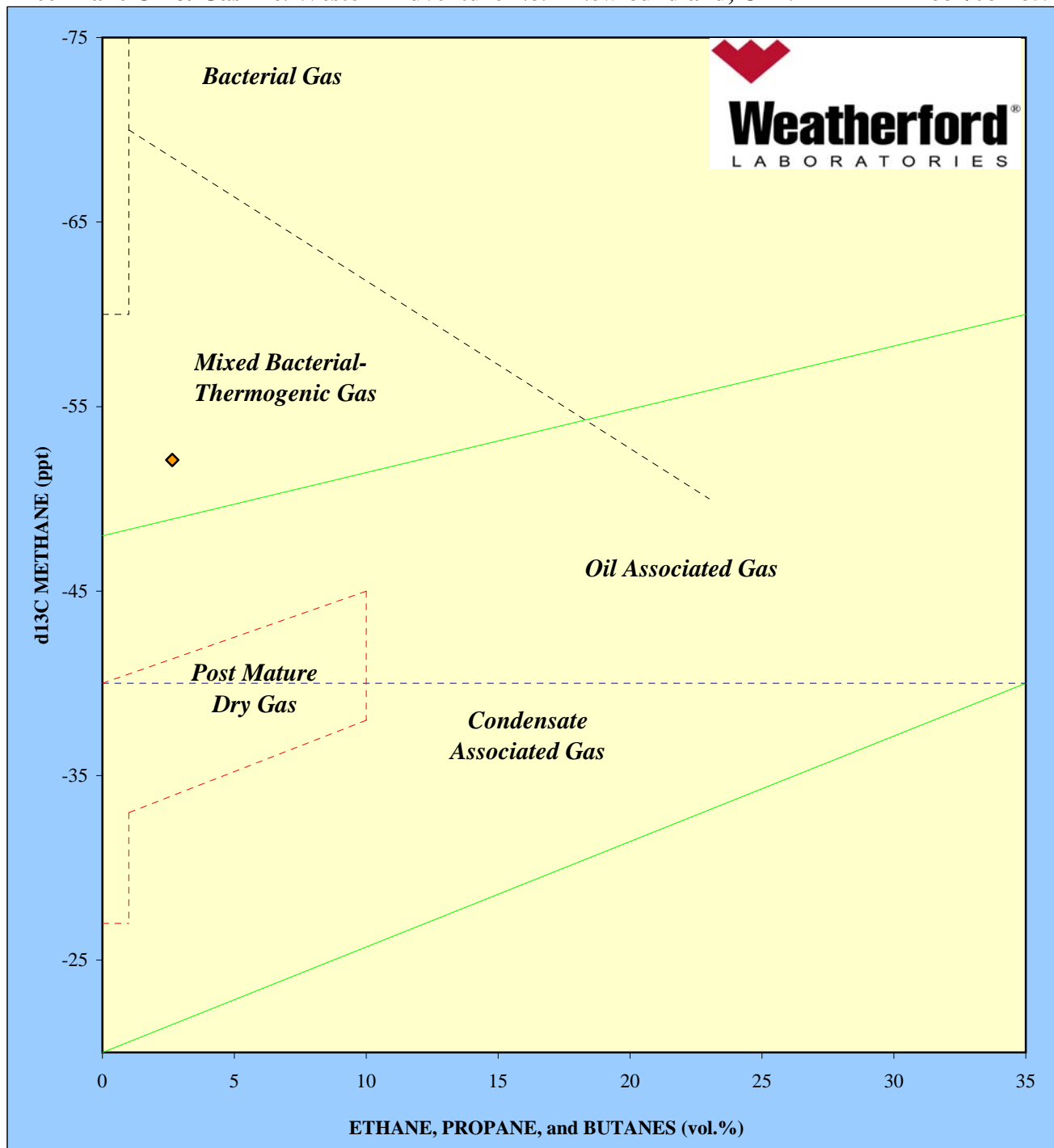
Deer Lake Oil & Gas Inc. Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659



## Characterization of Gases by Carbon Isotopic Ratios

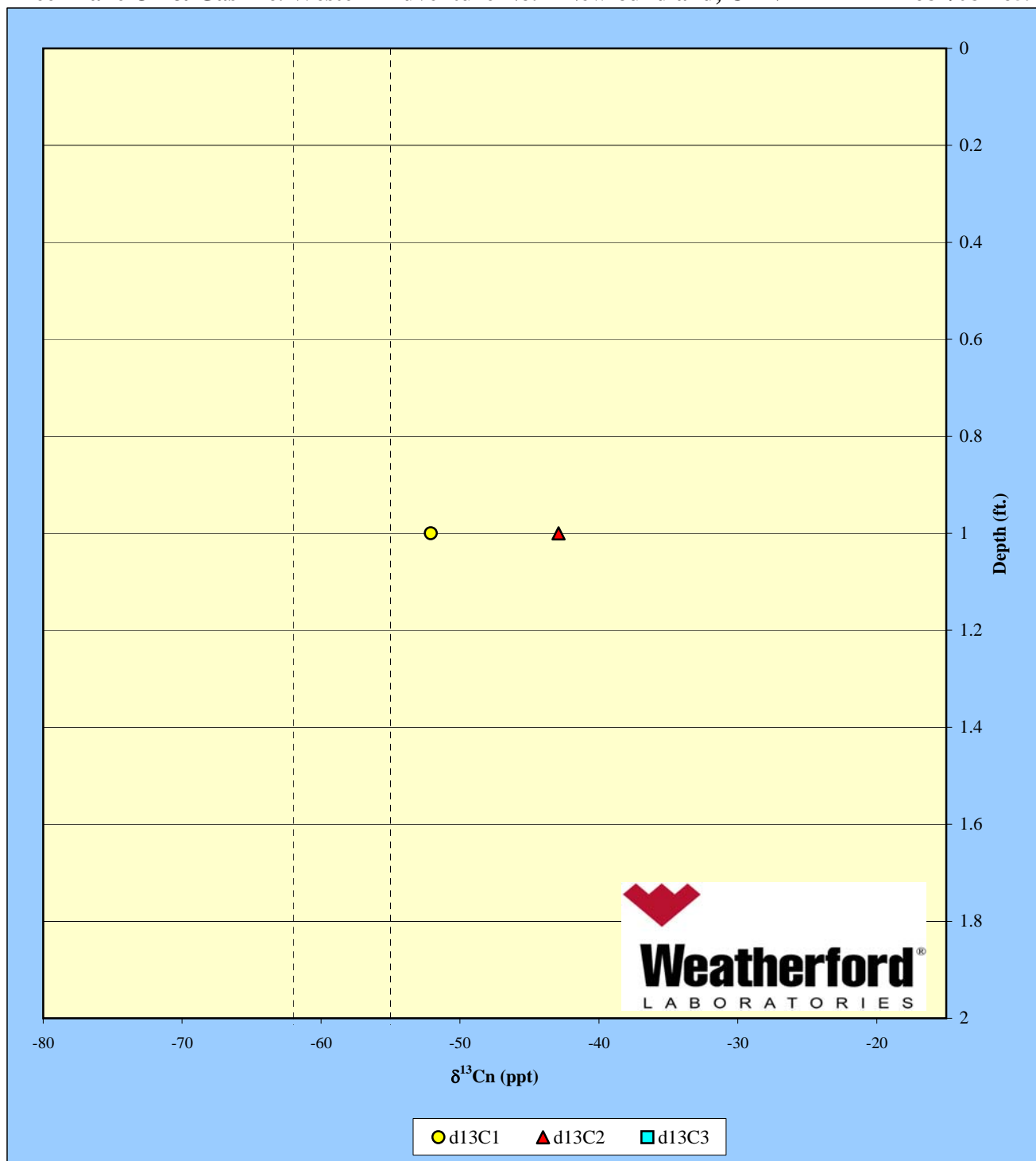


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# Methane Carbon Isotopes vs. Depth

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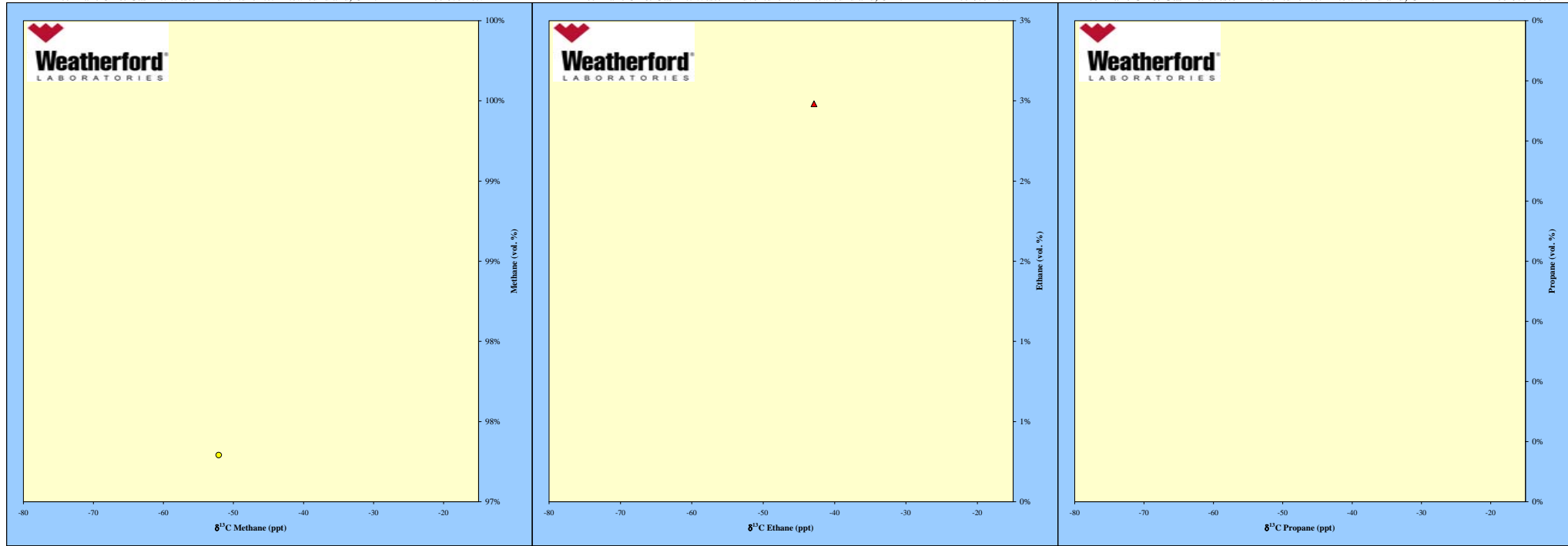


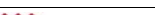
# Assessment of Gas Compartmentalization

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LABORATORIES

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Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659

Headspace gas from gas (in ppm)

WLAB No.:	Well Name	Median Depth (feet)	$\delta^{13}\text{C}$ C <sub>1</sub> (ppt)	$\delta^{13}\text{C}$ C <sub>2</sub> (ppt)	$\delta^{13}\text{C}$ C <sub>3</sub> (ppt)	Methane (C <sub>1</sub> )	Ethane (C <sub>2</sub> )	Propane (C <sub>3</sub> )	<i>iso</i> -butane ( <i>i</i> -C <sub>4</sub> )	<i>n</i> -butane ( <i>n</i> -C <sub>4</sub> )	<i>iso</i> -pentane ( <i>i</i> -C <sub>5</sub> )	<i>n</i> -pentane ( <i>n</i> -C <sub>5</sub> )	Hexanes+ (C <sub>6</sub> +)	Carbon Dioxide (CO <sub>2</sub> )	Notes
BH-41681-DL000081	Western Adventure No. 2	NA	-52.1	-42.9		10535.2	268.7	15.0	0.8	2.1	0.7	0.8	5.3	155.1	

Note: "-1" indicates no measurement was possible or an invalid ratio  
\*\* depth is for graphical purposes only  
c= sample analysis checked and confirmed

Deer Lake Oil & Gas Inc. Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659 gas Headspace Normalized Gas Composition (in vol. %)									
Median Depth (feet)	Total HC Gas (ppm)	Methane (C <sub>1</sub> )	Ethane (C <sub>2</sub> )	Propane (C <sub>3</sub> )	<i>iso</i> -butane ( <i>i</i> -C <sub>4</sub> )	<i>n</i> -butane ( <i>n</i> -C <sub>4</sub> )	<i>iso</i> -pentane ( <i>i</i> -C <sub>5</sub> )	<i>n</i> -pentane ( <i>n</i> -C <sub>5</sub> )	Hexanes+ (C <sub>6</sub> +)
NA	10829	97.3%	2.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%



Deer Lake Oil & Gas Inc. Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659 gas Headspace Gas Ratios							
Median Depth (feet)	SUM of C2, C3, i-C4, n-C4	C2 / C1	i-C4 / n-C4	C1 / C1-C4	GWR C2...C5 / C1...C8 x 100	LHR C1+C2 / C3+C4+C5	OCQ C4+C5 / C3
NA	2.6	0.026	0.4	0.974	2.66	555	0.3

GWR = gas wetness index                      < 0.5 dry gas; 0.5-17.5 gas; 17.5-40 oil; > 40 residual oil  
 LHR = light-to-heavy ratio                    LHR > 100 - dry gas; < 100 condensate/oil  
 OCQ = oil character qualifier                < 0.5 gas potential; > 0.5 gas/light oil potential

Deer Lake Oil & Gas Inc. Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659 Normalized C2, C3, and C4 gas Headspace Gas Ratios					
Median Depth (feet)	SUM of C2, C3 and C4	Norm. C2	Norm. C3	Norm. C4	C3 /(C2+C3)
NA	286	94%	5%	1%	0.05

Normalized C2-C4 data focuses on non-methane composition  
as it is most readily lost during transit in the well bore or from cans



## GAS COMPOSITION & ISOTOPES

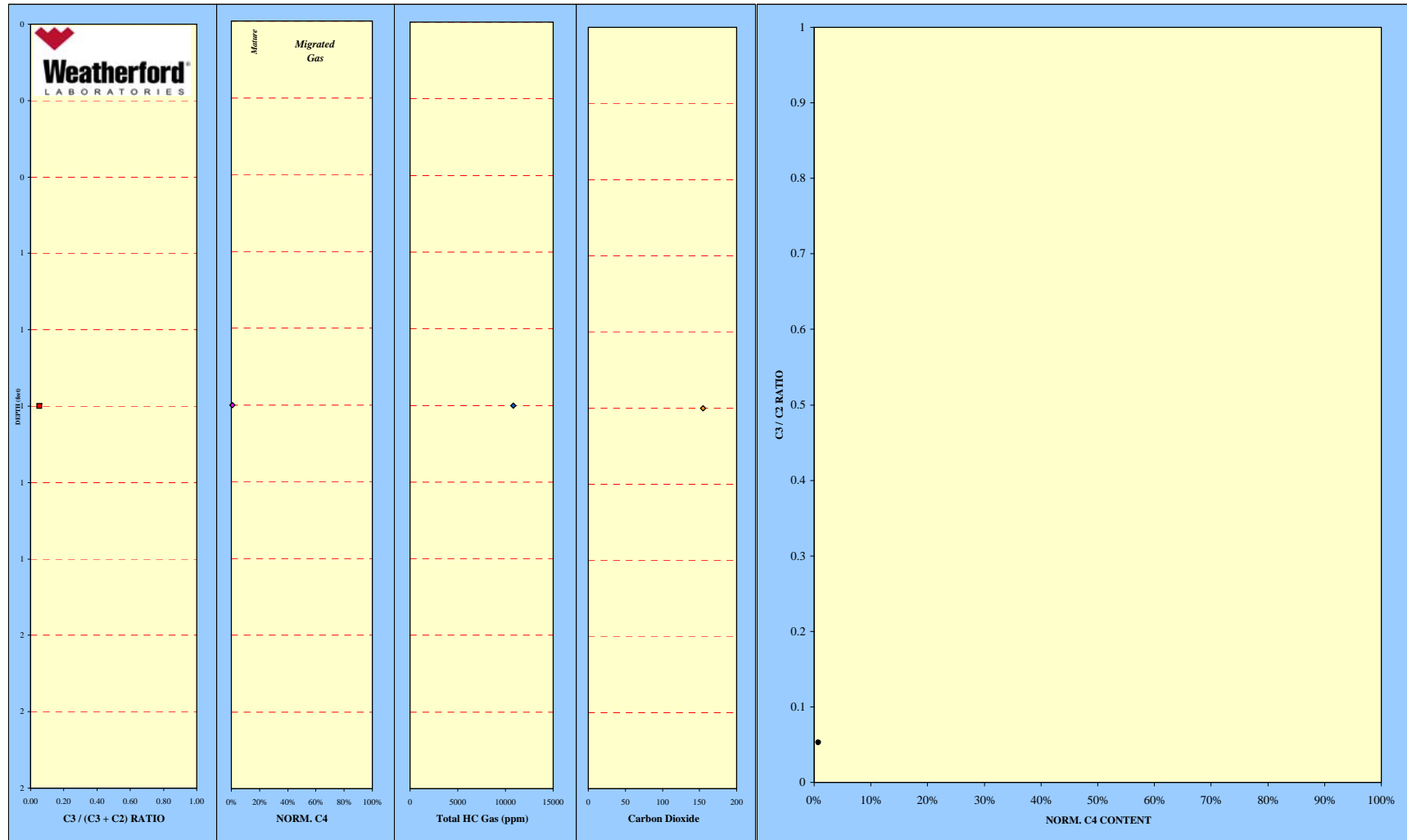
Company: DEER LAKE OIL & GAS INC. Project #: BH-41681/08-1659, BH-42509/09-180

Client ID	DL000081	DL000082
Lab ID		
Depth		
Client ID	WESTERN ADVENTURE NO. 2	WESTERN ADVENTURE NO. 2
<b>Gas Composition</b>		
C1	10535.19	1.06
C2	268.70	0.03
C2H4		0.00
C3	15.04	0.00
iC4	0.84	0.00
nC4	2.11	0.00
iC5	0.66	0.00
nC5	0.80	0.00
C6+	5.29	0.00
H2s		
He		0.33
H2		0.16
Ar		0.07
O2		1.26
Ar+O2		
Air		
N2		97.07
CO		0.00
CO2	155.12	0.02
Units	ppm	mol %
<b>Gas Isotope</b>		
δDC1		
δ13CO2		
δC13 C1	-52.1	
δC13 C2	-42.9	
δC13 C3		
δC13 iC4		
δC13 nC4		
δC13 iC5		
δC13 nC5		
Units	per mil	

Geochemical Services Group, 143 Vision Park Blvd., Shenandoah, Texas 77384 • Phone: 281-681-2200  
Fax: 281-681-0326 • Email: geocheminfo@weatherfordlabs.com

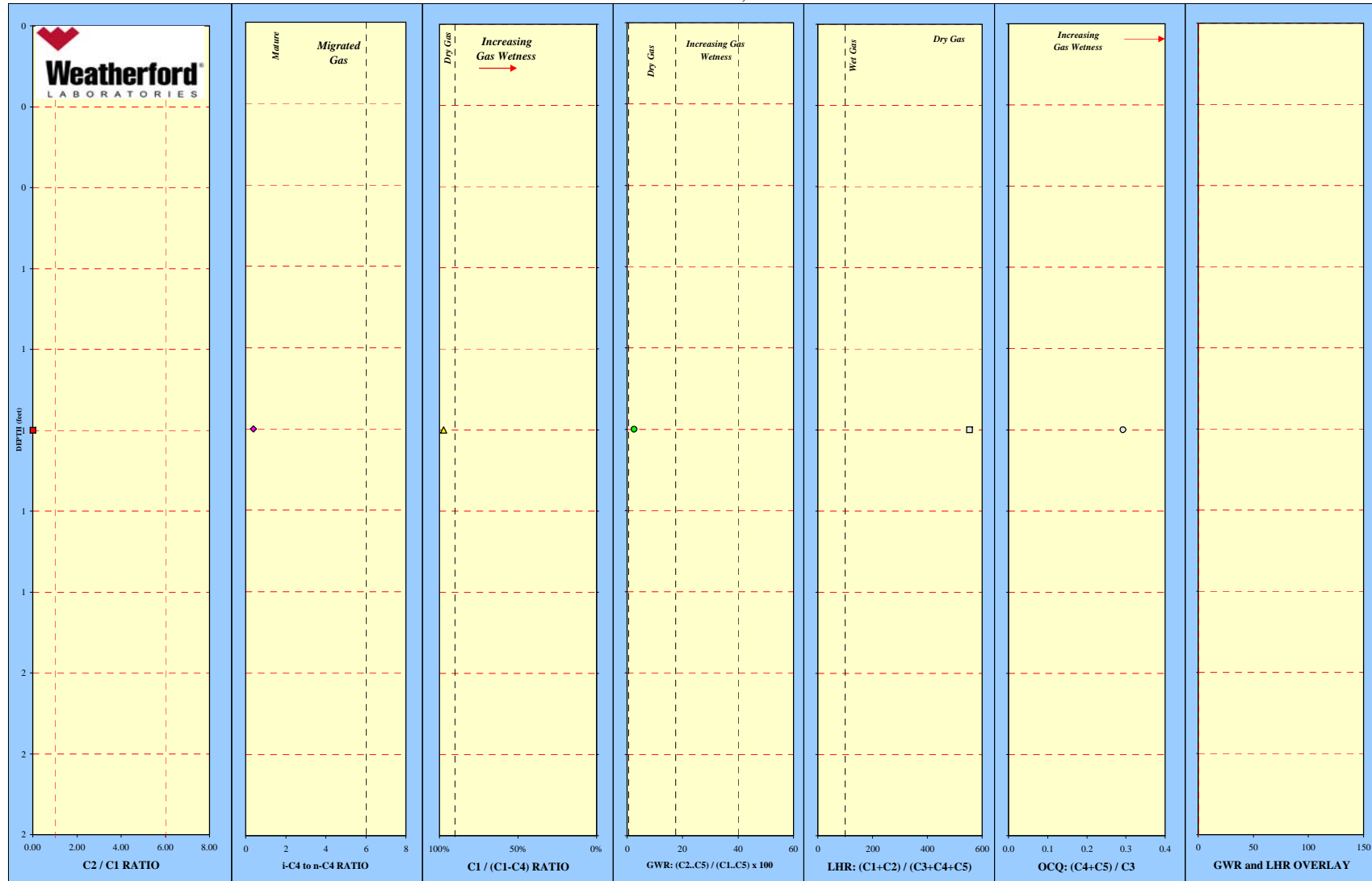
GAS COMPOSITION GEOCHEMICAL LOGS

Deer Lake Oil & Gas Inc. Western Adventure No. 2 Newfoundland, CANADA BH-41681/08-1659



GAS COMPOSITION GEOCHEMICAL LOGS

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