

**ALBERTA MEASUREMENT SERVICES LTD.**

5327 - 91 STREET ~ EDMONTON, ALBERTA, T6E 2E6 ~ CANADA  
Phone (780) 468- 6387 ~ Fax (780) 462-9387

**DEADWEIGHT CALIBRATION CERTIFICATE****CUSTOMER:** Big Country Energy Services**MODEL:** Dewitt**SERIAL:** AMS-061**RANGE:** 350 - 35,000 kPa**DATE:** October 3, 2013

MASTER DEADWEIGHT READING	WEIGHT#	CUSTOMER DEADWEIGHT READING
1) 3500 kPa	61A	3500 kPa
2) 3500 kPa	61B	3500 kPa
3) 3500 kPa	61C	3500 kPa
4) 3500 kPa	61D	3500 kPa
5) 3500 kPa	61E	3500 kPa
6) 3500 kPa	61F	3500 kPa
7) 3500 kPa	61G	3500 kPa
8) 3500 kPa	61H	3500 kPa
9) 3500 kPa	61I	3500 kPa
10) 1000 kPa	61J	1000 kPa
11) 1000 kPa	61K	1000 kPa
12) 500 kPa	61M	500 kPa
13) 500 kPa	61N	500 kPa
14) 250 kPa	61L	250 kPa
15) 100 kPa	61W	100 kPa
16) 50 kPa	61O	50 kPa
17) 50 kPa	61P	50 kPa
18) 50 kPa	61Q	50 kPa
19) 50 kPa	61R	50 kPa
20) 20 kPa	S	20 kPa
21) 20 kPa	U	20 kPa
22) 10 kPa	T	10 kPa
23) 5 kPa	V	5 kPa
350 kPa	BASE WEIGHT	350 kPa
150 kPa	BASE WEIGHT	150 kPa

REMARK: DO NOT INTERCHANGE WEIGHTS WITH OTHER DEADWEIGHT TESTERS. DO NOT  
TIGHTEN PISTON.

THE ABOVE INSTRUMENT WAS FOUND TO BE ACCURATE WITHIN THE MANUFACTURER'S  
SPECIFICATIONS FOR NON IMPROVED ACCURACY OF  $\pm 0.1\%$  OF RATED PRESSURE.

**THE ABOVE EQUIPMENT HAS BEEN COMPARED TO A RUSKA MODEL 5000 S/N 12342  
DEADWEIGHT TESTER WHICH WAS CALIBRATED AGAINST A DHI MODEL RPM-4 S/N 489  
TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST).**

WITNESSED BY: Jason OSIGNATURE: 

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**CALIBRATION CERTIFICATE****CUSTOMER: Big Country Energy Services****MODEL: nVision****CHASSIS SERIAL NUMBER: 352698****RTD MODULE SERIAL NUMBER: 351190****3K PRESSURE MODULE SERIAL NUMBER: 262920****DATE: September 27, 2013**


MASTER INSTRUMENT READING	INSTRUMENT READING	ALLOWABLE TOLERANCE
49.9989 $\Omega$	50.00 $\Omega$	0.027
99.99422 $\Omega$	100.00 $\Omega$	0.035
200.00271 $\Omega$	200.01 $\Omega$	0.050
400.00117 $\Omega$	400.02 $\Omega$	0.080
MASTER DEADWEIGHT READING	INSTRUMENT READING	ALLOWABLE TOLERANCE
0 PSI	0 PSI	0.45 PSI
750 PSI	750.0 PSI	0.45 PSI
1500 PSI	1500.1 PSI	0.75 PSI
2250 PSI	2250.3 PSI	1.13 PSI
3000 PSI	3000.3 PSI	1.50 PSI

**REMARK: DO NOT EXCEED 3000 PSI.**

THE ABOVE INSTRUMENT WAS FOUND TO BE ACCURATE WITHIN THE MANUFACTURER'S SPECIFICATIONS FOR NON IMPROVED ACCURACY.

**THE ABOVE EQUIPMENT HAS BEEN COMPARED TO A RUSKA MODEL 5000 S/N 12342 DEADWEIGHT TESTER WHICH WAS CALIBRATED AGAINST A DHI MODEL RPM-4 S/N 489 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST).**

**THE ABOVE EQUIPMENT HAS BEEN COMPARED TO A CADDOCK USF340-50-0.01%, USF340-100-0.01%, USF340-200-0.01%, USF340-400-0.01% TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST).**

**WITNESSED BY:****SIGNATURE:**

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**RECORDER CALIBRATION CERTIFICATE**

**CUSTOMER:** Big Country Energy Services  
**MODEL:** Barton  
**RANGE:** -30 - 50°C  
**SERIAL #:** AMS-397  
**DATE:** October 19, 2013

**AMBIENT TEMP:** 20C  
**ACCURACY:** ±1% F.S.  
**MECHANIC:** Jason Olszewski

**MASTER INSTRUMENT  
READING**

**INSTRUMENT  
AS FOUND**

**INSTRUMENT  
AS LEFT**

-30°C

N/A

-30°C

-10°C

-10°C

10°C

10°C

30°C

30°C

50°C

50°C

**REMARKS:** THE ABOVE EQUIPMENT HAS BEEN COMPARED TO FLUKE MODEL 51  
S/N17610133 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY (NIST).

**WITNESSED BY:** Brenna Jones **SIGNATURE:** Jason O

Lauren Dubut



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**RECORDER CALIBRATION CERTIFICATE**

CUSTOMER: Big Country Energy Services  
MODEL: Barton  
RANGE: 0 - 18000 kPa  
SERIAL #: AMS- 326  
DATE: October 3, 2013

AMBIENT TEMP: 20C  
ACCURACY:  $\pm 1\%$  F.S.  
STATIC AS FOUND: N/A  
STATIC AS LEFT: 0 kPa  
MECHANIC: Jason Olszewski

**MASTER DEADWEIGHT  
READING****INSTRUMENT  
AS FOUND****INSTRUMENT  
AS LEFT**

4500 kPa

N/A

5000 kPa

9000 kPa

9000 kPa

13500 kPa

13500 kPa

18000 kPa

18000 kPa

REMARKS: THIS RECORDER IS CERTIFIED TO MEET AND/OR EXCEED THE REQUIREMENTS AS OUTLINED IN API SPECIFICATION 6A, TWENTIETH EDITION, OCTOBER, 2010. IN COMPLIANCE WITH SECTION 7, PARAGRAPH 7.2.2, SUBPARAGRAPH 7.2.2.1, 7.2.2.2, 7.2.2.3.

THE ABOVE EQUIPMENT HAS BEEN COMPARED TO A RUSKA MODEL 5000 S/N 12342 DEADWEIGHT TESTER WHICH WAS CALIBRATED AGAINST A DHI MODEL RPM-4 S/N 489 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST).

WITNESSED BY: SIGNATURE: 

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**RECORDER CALIBRATION CERTIFICATE**

**CUSTOMER:** Big Country Energy Services  
**MODEL:** Barton  
**RANGE:** -30 to 50°C  
**SERIAL #:** AMS-227  
**DATE:** September 27, 2013

**AMBIENT TEMP:** 20C  
**ACCURACY:** ±1% F.S.  
**MECHANIC:** Jason Olszewski

MASTER INSTRUMENT READING	RED PEN AS FOUND	RED PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

MASTER INSTRUMENT READING	GREEN PEN AS FOUND	GREEN PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

**REMARKS:** THE ABOVE EQUIPMENT HAS BEEN COMPARED TO FLUKE MODEL 51  
S/N17610133 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY (NIST).

WITNESSED BY: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

Jason O

Lauren Dubois

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**RECORDER CALIBRATION CERTIFICATE**

**CUSTOMER:** Big Country Energy Services  
**MODEL:** Barton  
**RANGE:** -30 to 50°C  
**SERIAL #:** AMS-059  
**DATE:** September 27, 2013

**AMBIENT TEMP:** 20C  
**ACCURACY:** ±1% F.S.  
**MECHANIC:** Jason Olszewski

MASTER INSTRUMENT READING	RED PEN AS FOUND	RED PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

MASTER INSTRUMENT READING	GREEN PEN AS FOUND	GREEN PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

**REMARKS:** THE ABOVE EQUIPMENT HAS BEEN COMPARED TO FLUKE MODEL 51  
S/N17610133 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY (NIST).

WITNESSED BY: 

SIGNATURE: 





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**RECORDER CALIBRATION CERTIFICATE**

**CUSTOMER:** Big Country Energy Services  
**MODEL:** Barton  
**RANGE:** -30 to 50°C  
**SERIAL #:** AMS-052  
**DATE:** September 27, 2013

**AMBIENT TEMP:** 20C  
**ACCURACY:** ±1% F.S.  
**MECHANIC:** Jason Olszewski

MASTER INSTRUMENT READING	RED PEN AS FOUND	RED PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

MASTER INSTRUMENT READING	GREEN PEN AS FOUND	GREEN PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

**REMARKS:** THE ABOVE EQUIPMENT HAS BEEN COMPARED TO FLUKE MODEL 51  
S/N17610133 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY (NIST).

WITNESSED BY: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

Jason O

Richard Dubut

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**RECORDER CALIBRATION CERTIFICATE**

**CUSTOMER:** Big Country Energy Services  
**MODEL:** Barton  
**RANGE:** -30 to 50°C  
**SERIAL #:** AMS-228  
**DATE:** September 27, 2013

**AMBIENT TEMP:** 20C  
**ACCURACY:** ±1% F.S.  
**MECHANIC:** Jason Olszewski

MASTER INSTRUMENT READING	RED PEN AS FOUND	RED PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

MASTER INSTRUMENT READING	GREEN PEN AS FOUND	GREEN PEN AS LEFT
-30°C	N/A	-30°C
-10°C		-10°C
10°C		10°C
30°C		30°C
50°C		50°C

**REMARKS:** THE ABOVE EQUIPMENT HAS BEEN COMPARED TO FLUKE MODEL 51  
S/N17610133 TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND  
TECHNOLOGY (NIST).

WITNESSED BY: 

SIGNATURE: 

