



Hydrostatic Test Pressure Log

Test Start Date: 12/12/19

Pipeline or Fabrication Name: DP-204

Pipeline or Fabrication Location: _____ Job #: 16450.30

Client: Noble AFE# _____

Pipe O.D.: 8.625 Grade: X-52 W.T. _____

STA No.: 0+00 To STA No.: 260+70 Volume: _____ Gals.

Dead Weight Tester Serial No.: _____

Chart Recorder Serial No.: 112033 Digital # 358560 Inspection Rep.: _____

Readings to be entered at 15 min intervals BEES Rep: Tyler Chapp

| Time | Dead Weight Press. | Digital Gauge Press. | Ambient Temp. Deg. F. | Line Temp. Deg. F. | Water +/- gals. | Remarks |
|---------|--------------------|----------------------|-----------------------|--------------------|-----------------|--------------------------|
| 12:50am | — | 4. | 30° | 36° | | Start Pressuring |
| 1:00 | — | 12 | 30° | 36° | | |
| 1:15 | — | 281 | 30° | 35° | | First shelf-Hold 10 min |
| 1:30 | — | 563 | 30° | 35° | | Second shelf-Hold 10 min |
| 1:45 | — | 853 | 30° | 34° | | Third shelf-Hold 10 min |
| 2:00 | — | 1121 | 29° | 34° | | Reached test pressure |
| 2:15 | — | 1120 | 29° | 34° | | |
| 2:30 | — | 1120 | 29° | 33° | | |
| 2:45 | — | 1119 | 30° | 33° | | |
| 3:00 | — | 1119 | 30° | 33° | | |
| 3:15 | — | 1119 | 29° | 33° | | |
| 3:30 | — | 1119 | 29° | 32° | | |
| 3:45 | — | 1119 | 28° | 32° | | |
| 4:00 | — | 1119 | 27° | 31° | | |
| 4:15 | — | 1119 | 27° | 31° | | |
| 4:30 | — | 1119 | 26° | 31° | | |
| 4:45 | — | 1119 | 26° | 31° | | |
| 5:00 | — | 1119 | 26° | 31° | | |
| 5:15 | — | 1120 | 26° | 31° | | |
| 5:30 | — | 1120 | 26° | 31° | | |
| 5:45 | — | 1120 | 27° | 31° | | |
| 6:00 | — | 1120 | 27° | 30° | | |
| 6:15 | — | 1120 | 27° | 30° | | |
| 6:30 | — | 1120 | 27° | 30° | | |

Test No.: _____ Page _____ Of _____



| | |
|-------------------------------|--|
| Hydrostatic Test Pressure Log | |
|-------------------------------|--|

Test Start Date:

Pipeline or Fabrication Name:

Pipeline or Fabrication Location:

Job #:

Client:

AFE#

Pipe O.D.: _____

Grade: _____

W.T. _____

STA No.: _____

To STA No.:

Volume: _____ Gals.

Dead Weight Tester Serial No.:

Chart Recorder Serial No.:

Inspection Rep.:

Readings to be entered at _____ intervals

BEES Rep:

[illegible]

Test No.:

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Of

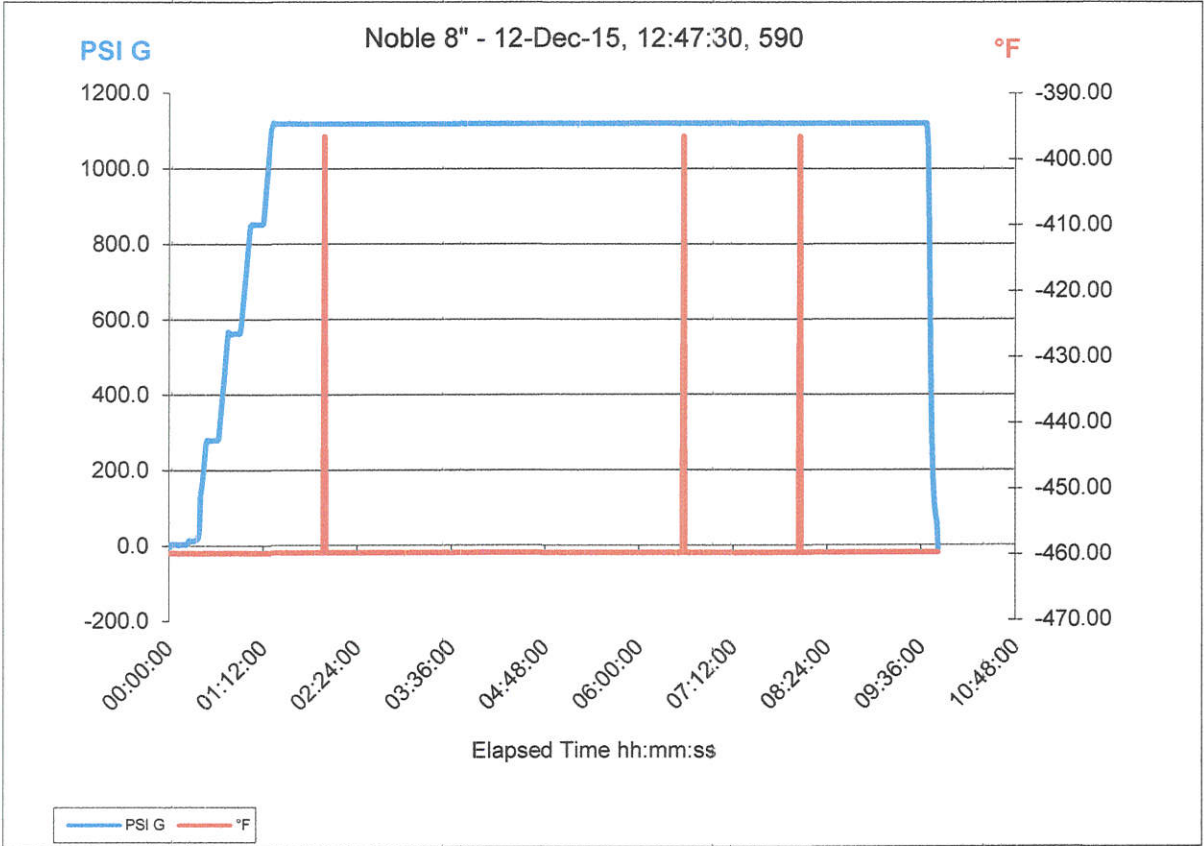
Tel: 970-532-0600
Fax: 970-532-4847
100 Commerce Drive
Berthoud CO. 80513

www.BlackEagleEnergyServices.com

Data Collection Report

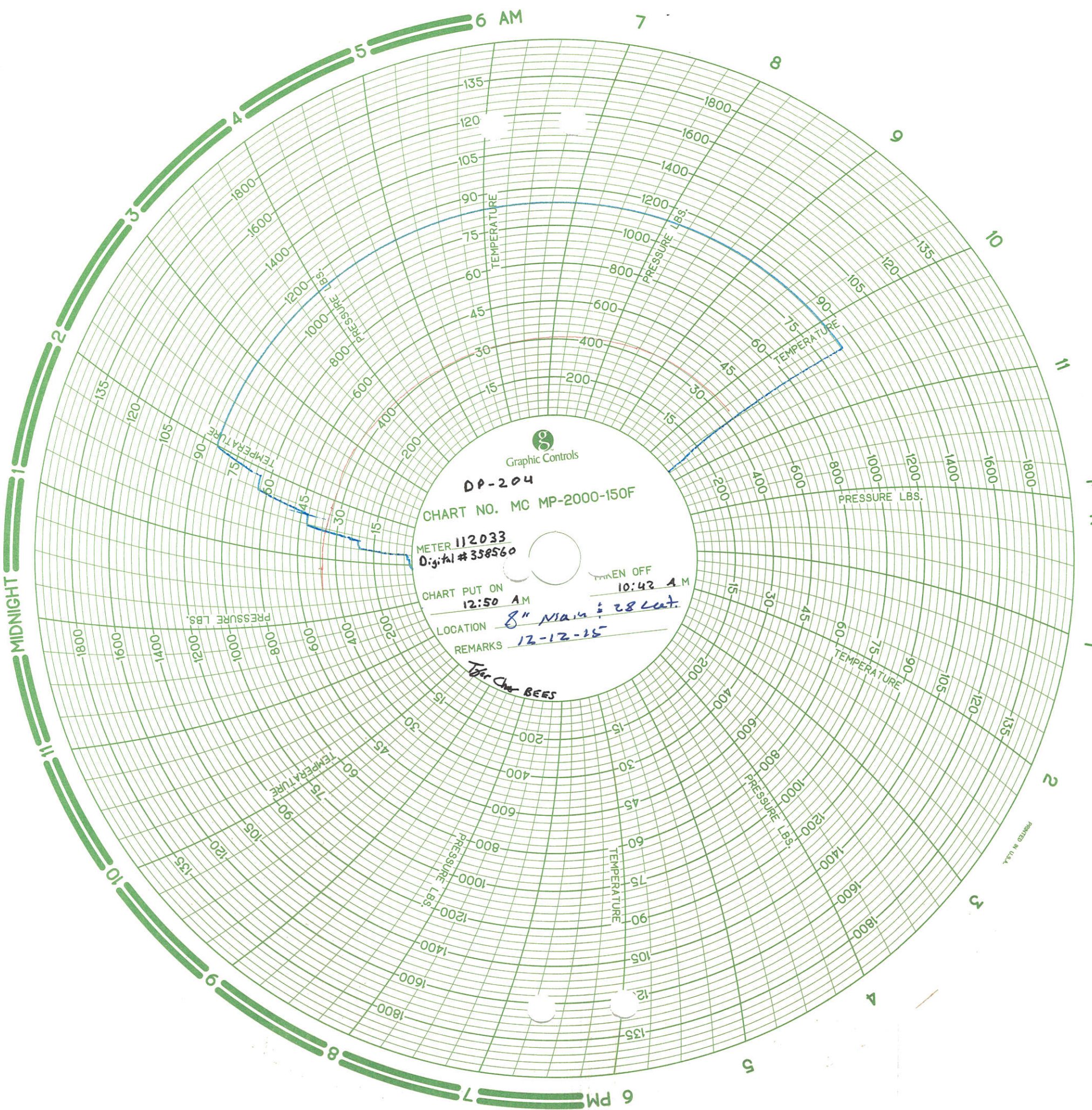
| Chassis | | Left Scale | Right Scale |
|---------------|--------|------------|-------------|
| Serial Number | 358560 | 357621 | 357110 |
| Datatype | | Lower | Upper |
| Units | | PSI G | °F |

LowerUpper



| | Chassis | Lower Module | Upper Module | BARO Module | Left Scale | Right Scale |
|------------------|---------|--------------|--------------------|-------------|----------------|-------------|
| Serial Number | 358560 | 357621 | 357110 | | 357621 | 357110 |
| Model | NV | 3KPSI | RTD100 | | | |
| Message Store | | | | | | |
| Userspan | | 1.00000 | 1.00000 | | | |
| Offset | | | | | | |
| Datatype | | | | | | |
| Units | | PSI G | °F | | Lower PSI G | Upper °F |
| Tare | | | | | | |
| Average | | | | | | |
| User Factor | | | | | | |
| User Offset | | | | | | |
| User Resolution | | | | | | |
| Firmware Version | R080015 | R090008 | R100006 | | | |
| Calibration Due | | 18-Jun-16 | 18-Jun-16 | | | |
| Run Index | 36 | | | | | |
| Run Start Time | | | 12-Dec-15/00:47:30 | | | |
| Run Duration | | | 9 hours 49 minutes | | | |
| Run Tag | | | Noble 8" | | | |
| Logging Interval | 60.0 | | | | | |

| Data Points | | | | |
|-------------|------------|--------------|------------|--|
| Point # | Time | Left - PSI G | Right - °F | |
| 1 | 00:00:00.0 | 4.8 | -459.67 | |
| 2 | 00:01:00.0 | -1.8 | -459.67 | |
| 3 | 00:02:00.0 | 5.1 | -459.67 | |
| 4 | 00:03:00.0 | 4.9 | -459.67 | |
| 5 | 00:04:00.0 | 4.2 | -459.67 | |
| 6 | 00:05:00.0 | 4.8 | -459.67 | |
| 7 | 00:06:00.0 | 5.1 | -459.67 | |
| 8 | 00:07:00.0 | 1.9 | -459.67 | |
| 9 | 00:08:00.0 | 5.3 | -459.67 | |
| 10 | 00:09:00.0 | 4.7 | -459.67 | |





INSTRUMENTS INC

9829 E. Easter Ave. • Centennial, CO 80112

303.794.8833 • Fax 303.730.1220

Toll Free 1.800.327.7257

www.jmcinstruments.com

CERTIFIED CALIBRATION

CUSTOMER BLAKEABLE ENERGY ORDER NO. _____

ITEM DIGITAL GAUGE RANGE 0/3000 PSIG ITEM NO. 4075

| TRUE VALUE <u>PSIG</u> | INDICATED VALUE | |
|---------------------------|---------------------|---------------------|
| | INCREASING READINGS | DECREASING READINGS |
| 0.0 | 0.0 | 0.1 |
| 300.0 | 299.6 | 300.0 |
| 600.0 | 599.7 | 599.7 |
| 900.0 | 899.2 | 899.1 |
| 1200.0 | 1198.9 | 1199.3 |
| 1500.0 | 1498.9 | 1499.1 |
| 1800.0 | 1798.7 | 1799.4 |
| 2100.0 | 2098.4 | 2098.7 |
| 2400.0 | 2398.2 | 2398.7 |
| 2700.0 | 2699.9 | 2699.7 |
| 3000.0 | 2999.8 | 2999.8 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Tested on ☒ Deadweight Tester S/N 1GA44774

☐ Deadweight Tester S/N 71867

Traceable to National Institute of Standards and Technology certificate

14-396A

Tested by Warren Johnston

Date 18 June 2015

Remarks:

CRYSTAL ENGINEERING cc AVision s-358560
ACCURACY IS $\pm \frac{1}{4}$ % OF FULL SCALE OR BETTER
TESTED AT 72 °F; 623 mm Hg. ATM. PRESSURE

Cross Country Pipeline Supply CO. Inc

Sales and Service

2251 Rifle Street - Aurora, Colorado 80011

Phone 303.361.6797 Fax 303.361.6836

NIST CALIBRATION DATA

| Model Number | Serial Number | Customer | Range | Accuracy |
|-------------------------|---------------|--------------------------------|-----------------------|----------|
| 202A | 112033 | Black Eagle Energy SRVS | 2000# - 150F | 1/2% |
| Work Performed: | | Calibration: Output/Reading | Results: Pressure | |
| Calibrate to Mfg. Spec. | | 0 PSI | 0 PSI | |
| | | 400 PSI | 400 PSI | |
| | | 800 PSI | 800 PSI | |
| | | 1200 PSI | 1200 PSI | |
| | | 1600 PSI | 1600 PSI | |
| | | 2000 PSI | 2000 PSI | |
| | | 33 Deg | 33 DEG | |
| | | 62 DEG | 62 DEG | |
| | | 99 DEG | 99 DEG | |
| | | 149 DEG | 149 DEG | |
| PO Number | | Sales Order Number | Date of Test | |
| RECALIBRATE | | RECERTED | 10/22/2015 4:26:26 PM | |

Remarks: ALL CALIBRATIONS ARE GOOD FOR 6 MONTH

Standard Used:

| Manufacturer | Model | Instrument | Calibration Date | Certification # |
|----------------------|-------------|----------------|------------------|-----------------|
| Perma-Cal | 101FTM15B21 | Pressure Gauge | 07/14/2015 | 14-369A |
| Tech Instrumentation | TM99A | Thermometer | 07/22/2015 | 53436 |

Justin T

Signature



10-22-15



7200 E. Dry Creek Rd. C-102
Centennial, Co. 80112
303-804-0667
cal.lab@apex-instruments.com

Silverline Services
1287 Diamond Dr.
Windsor, CO 80550

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CALIBRATION CERTIFICATE: 9012

Dec 1 2015

Device Information:

Model
Manufacturer
Serial Number

DUT
nVision
Crystal Engineering
475201

Reference
RPM4-E-DWT
Fluke
1709

Pressure Range
Tolerance

0.000 to 10000.000
0.03 %FS : < 30% FS
0.1 %Rdg : > 30% FS

0.000 to 10000.000
0.0025 %Span OR 0.008 %Rdg

Data Acquisition Mode
Date of Calibration
Calibration Due

RS232
Dec 1 2015
Dec 1 2016

RS232
Oct 23 2015
Oct 23 2016

Test Information

Test Label 10,000 psi
Date Dec 1 2015
Time 11:47:22 AM
Operator Steven L.
Station ID CALLABHP3-HP

Conditions

Ambient Pressure
Ambient Temperature 23 deg C +/- 3 C
Ambient Relative Humidity 20% - 60%

As Received Data:

| Test Point | Reference Pressure | DUT Pressure | DUT Raw Output | Abs. Error | "% Span" Error | DUT Tolerance | Status |
|------------|--------------------|--------------|----------------|------------|----------------|---------------|--------|
| | psi | psi | psi | psi | % | psi | |
| 1 | 0 | 0 | 0 | 0 | 0.0000 | 3 | Pass |
| 2 | 1999 | 1998 | 1998 | -1 | -0.0101 | 3 | Pass |
| 3 | 4005 | 4003 | 4003 | -2 | -0.0156 | 4 | Pass |
| 4 | 5997 | 5995 | 5995 | -2 | -0.0156 | 6 | Pass |
| 5 | 8000 | 7997 | 7997 | -3 | -0.0267 | 8 | Pass |
| 6 | 9998 | 9996 | 9996 | -2 | -0.0219 | 10 | Pass |
| 7 | 7998 | 7995 | 7995 | -3 | -0.0265 | 8 | Pass |
| 8 | 5997 | 5995 | 5995 | -2 | -0.0173 | 6 | Pass |
| 9 | 3998 | 3997 | 3997 | -1 | -0.0104 | 4 | Pass |
| 10 | 1998 | 1998 | 1998 | 0 | -0.0036 | 3 | Pass |
| 11 | 0 | 0 | 0 | 0 | 0.0000 | 3 | Pass |

As Received First Order Fit: $y = 1.000295E00x + 1.128518E-01$

As Left Data:

| Test Point | Reference Pressure | DUT Pressure | DUT Raw Output | Abs. Error | "% Span" Error | DUT Tolerance | Status |
|------------|--------------------|--------------|----------------|------------|----------------|---------------|--------|
|------------|--------------------|--------------|----------------|------------|----------------|---------------|--------|

ITEM: 3 of 4

Type: Repair

| IDENTIFICATION | | VALVE DATA | | MATERIAL/ DESIGN | | ORIGINAL NAMEPLATE DATA | |
|-----------------------|-----|---------------------|-----------------|---------------------|------------------------|----------------------------|----------------|
| CUST ID # | LOC | SET PRESS | Current 1000 | Required 1000 | Conventional | TYPE 91-17D51T13E1 | SET PRESS 1000 |
| MFG Mercer | | BACK PRESS | Atm. | Atm. | BASE C S | BACK PRE N.O.T. | |
| TYPE NO 91-17D51T13E1 | | C.D. PRESS | 1000 | 1000 | BODY C.S. | C.D. PRESS N.O.T. | |
| SERIAL NO 1167744 | | TEMP | Amb. | Amb. | TRIM S.S. | TEMP 70 f | |
| ORIFICE D | | BLOWDOWN | Fixed | Fixed | SPRING S.S. | CAP. 2039 scfm | |
| INLET 1 in MNPT | | CAPACITY | 2039 scfm | 2039 scfm | CAP & LEVER: Closed | BLOWDOWN N.O.T. | |
| OUTLET 1 in FNPT | | MEDIA | Vapor | Vapor | COMPLETED BY | MANUFACTURED | |
| PREVIOUS R.O. | | VALVE CONVERSION No | | | Knodel, Jason | CODE STAMP UV | |
| P.I.D. | | CODE STAMP UV | NB | | DATE 10/1/2015 | NB | |

| | | | | |
|---|---------------------------------|------------------|---------------------------------|------------------------------------|
| WORK REQUIRED | PRELIMINARY TEST RESULTS | | SPRING DATA CHECKED? | AS FOUND ADJ COMP SCREW |
| <input type="checkbox"/> Pretest | TEST MEDIA | GAUGE S/N | SPRING # | LOWER ADJ RING |
| <input checked="" type="checkbox"/> Reset | SET PRESSURE NO TEST | CAL DUE | REPLACE | UPPER ADJ RING |
| <input type="checkbox"/> Overhaul | BLOWDOWN | TESTED BY | | OVERLAP COLLAR |
| <input type="checkbox"/> Warranty | TIGHTNESS | TEST DATE | | |

[illegible]

Date:

FINAL ASSEMBLY ADJUSTMENT

[illegible]

COMPRESSION SCREW
LOWER ADJUSTMENT RING
UPPER ADJUSTMENT RING
OVERLAP COLLAR

DATE _____

Yes • No

RECORD OF FINAL ASSEMBLY

| | | | |
|-------------------|-------|------------------|---------------|
| TEST MEDIA | Air | GAUGE S/N | 5000-6 |
| STRESS | 1050 | CAL DUE | 10/28/2015 |
| VN | Fixed | TESTED BY | Knodel, Jason |
| | Good | TEST DATE | 10/1/2015 |

ADJ LKD & SEALED Yes
NAMEPLATE INSTALLED Yes
VR'D Yes
FINAL
ASSEM. BY: Knodel, Jason
DATE 10/1/2015