



FINAL INSPECTION RELEASE CERTIFICATE

SALES ORDER # *R61102115*

CUSTOMER: *MURPHY OIL c/o HZ PROJECTS* W.O# *05835*
PRODUCT: *(1) 0.75 mm btu/hr Lineheater, 42" x 12', 3" ANSI 1500# RTJ* DATE: *July 10, 08*
X 3" ANSI 1500# RTJ **FINAL INSPECTION DOCUMENTATION** *s/n NWP-1477*

REVIEWED BY: _____ ACCEPTED: _____ REJECTED: _____

STANDARD DOCUMENTATION REQUIREMENTS: (SEE DOCUMENT REQUIREMENT LIST)
ADDITIONAL DOCUMENT REQUIREMENTS: (TO BE RECORDED HERE IF APPLICABLE I.E. DOCUMENT PACKAGE REQUIRED BY CUSTOMER ETC.)
Pronghorn Permit sticker

Q.C. FILE CLOSURE BY: *Bluse* DATE: *July 10, 08*

LOOSE COMPONENTS REQUIRED / PREPARED

ITEMS REQUIRED:	NO. OF BOXES OR PKGS.
<i>0.75 mm BTU Lineheater</i>	<i>2</i>
ADDITIONAL HARDWARE OR FASTENERS REQUIRED	<i>Stack gasket Stamped drawing Nuts & bolts manuals</i>
YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

PREPARATION FOR SHIPMENT / STORAGE

PREPARATION NEEDED / COMPLETED
Ref NWP Quality Manual Sect 5.00 Rev 6

S/N # *NWP-1477*

PART # _____

INVENTORY TAGS ATTACHED YES NO

SHIPPING INSTRUCTIONS

CUSTOMER P.O REVIEWED YES N/A

CONTACT PERSON AUTHORIZED TO RELEASE PRODUCT: *NA*

PHONE: _____ FAX: _____

RELEASED TO INVENTORY: _____ DATE: _____
RELEASED TO CUSTOMER: *Bluse* DATE: *July 10, 08*

NWP INDUSTRIES INCORPORATED

SKIDDED EQUIPMENT TRAVEL SHEET

APPROVED BY: CLY

S/N NWP-1477

DATE: Mar 19.08

W/O#: 05835

DESCRIPTION: 0.75 mm btu/hr wireheater, 42" x 12', 3" ANSI 1500# RTJ

DRAWING #: 05835 REV 0; 05835-1 REV 0

	REQ.	HOLD	EMPLOYEE INT.	DATE COMPLETE	QC INIT.	DATE
QUOTATION REVIEWED	N/A				—	
WORK INSTRUCTIONS ISSUED	✓		JA	April 9 08	CO	Mar 19.08
WORK INSTRUCTIONS REVIEWED	✓		JA	April 9 08	CO	Mar 19.08
ABSA NOTIFIED FOR INSTALLATION INSPECTION	N/A				—	
MATERIAL & PARTS RELEASED	✓		JA	July 10.08	CO	July 10.08
see piping travel sheet HYDRO TEST PIPING	N/A				—	
INSTRUMENTATION	✓		JA	July 10.08	CO	July 10.08
shell/coil PNEUMATIC LEAK TEST	✓	✓	JA	July 10.08	CO	July 10.08
INSTRUMENTATION VALVES / FUNCTION TEST	✓	✓	JA	July 10.08	NA	
VISUAL INSPECTION P & ID CHECKED	✓		JA	July 10.08	CO	July 10.08
VISUAL INSPECTION OF BUILDING & RECEIVING OF P.O.	✓		JA	July 10.08	CO	July 10.08
ANY CHANGE ORDERS VERIFIED COMPLETE	✓		JA	July 10.08	CO	July 10.08
PREPARED FOR SHIPMENT & PACKAGE LOOSE ITEMS, TEST, CRATED AND DOCUMENTED	✓		JA	July 10.08	CO	July 10.08
VISUAL INSPECTION AFTER PAINT & RECEIVING OF P.O.	✓		JA	July 10.08	CO	July 10.08
PACKAGING / PRESERVATION REQUIREMENTS COMPLETE	✓		JA	July 10.08	CO	July 10.08
SERVICING REQUIREMENTS DEFINED AND APPROVED	✓					
QC INSPECTION AND FINAL RELEASE AND STICKER ATTACHED.	✓	✓			CO	July 10.08

ACCEPTED BY CUSTOMER _____

DATE _____

NWP INDUSTRIES INCORPORATED

SKID TRAVEL SHEET

S/N NWP-1477

APPROVED BY: [Signature]

DATE: Mar 19.08

WIO#: 05835

DESCRIPTION: 16' x 7' SKID f/42" x 12' LINE HEATER.

DRAWING #: 05835-3 REV 0

	REQ.	HOLD	EMPLOYEE INT.	DATE COMPLETE	QC INIT.	DATE
WORK INSTRUCTIONS/ DRAWINGS ISSUED	✓				[Signature]	Mar 19.08
WORK INSTRUCTIONS/ DRAWINGS REVIEWED	✓		AK	19/03/08	[Signature]	Mar 19.08
MATERIAL & PARTS RELEASED	✓				[Signature]	Mar 20.08
WELDING PERSONNEL ASSIGNED	✓		M EB AK	19/03/08	[Signature]	Mar 19/08 Mar 20/08
VISUAL CHECKS ON WELDS	✓		AK	20/03/08	[Signature]	Mar 20.08
DIMENSIONAL CHECK (FINAL)	✓		AK	22/03/08	[Signature]	Mar 20.08
SURFACE PREP. / SANDBLAST ETC. & P.O. RECEIVED	AKA					
PRIMER PAINT	N/A					
FINAL PAINT & P.O. RECEIVED	N/A					
QC INSPECTION & FINAL RELEASE	✓				[Signature]	Mar 20.08

ACCEPTED BY CUSTOMER _____ DATE _____

Issuing Authority: Marvin J. (Ty) DeBelser / Dale Karg
 Date of Issue: November 30, 2007
 Rev Status: 1.0



Manufacturing
 FORM-LHTS-001
 Line Heater Travel Sheet
 (Shell, Skid & Firetube Assembly)

By: *[Signature]* Date: *Mar 19.08*

W.O.# *05835* Description: *42" x 12' LINE HEATER 0.75mm btu/hr ; w/12" FIRE-TUBE s/n NWP-1477*
 Drawing# *05835-4 Rev 0*

	Req.	Hold	Employee Initial	Date Complete	QC Initial	Date
Work Instructions/Drawings Issued	✓				<i>[Signature]</i>	<i>Mar 19.08</i>
Work Instructions/Drawings Reviewed	✓				<i>[Signature]</i>	<i>Mar 19.08</i>
Material & Parts Released	✓	✓			<i>DP</i>	<i>Apr 24-08</i>
Welding Personnel Assigned	✓				<i>DP</i>	<i>Apr 24-08</i>
Visual Dimension Inspection - <i>Apr 7.08</i> Firetube/Stack	✓				<i>DP</i>	<i>Apr 24-08</i>
Visual Dimension Inspection - Skid	✓				<i>DP</i>	<i>Apr 24-08</i>
Visual Dimension Inspection - Expansion Tank	✓				<i>DP</i>	<i>Apr 24-08</i>
Visual Dimension Inspection - Preheat Line	✓				<i>DP</i>	<i>Apr 24-08</i>
Visual Dimension Inspection - Shell Assy.	✓				<i>DP</i>	<i>Apr 24-08</i>
Pneumatic Test - Firetube	✓	✓			<i>DP</i>	<i>Apr 24-08</i>
Hydro Test - Preheat Line	✓	✓			<i>[Signature]</i>	<i>Apr 23.08</i>
Pneumatic Test - Shell Assy.	✓	✓			<i>DP</i>	<i>Apr 21-08</i>
Installation of All Welded Components Complete	✓				<i>*DP</i>	<i>Apr 24-08</i>
Final Inspection Release	✓	✓			<i>[Signature]</i>	<i>July 7.08</i>

Accepted By Customer: _____ Date: _____

Welded Piping - f/0.75 mm btu/hr lineheater, 42" x 12'

PRESSURE PIPING EXAMINATION CHECKLIST

DRWG # 05835-5 Rev 0

JOB NUMBER: WO # 05835

NO.	FUNCTION	SIGNATURE OR INITIAL AND DATE	
		Q.C. INSPECTOR	OWNERS INSPECTOR
1	DRAWINGS: ABSA registration over 0.5 Cu.M. Approved by Owner. Approved for Construction (signed & dated).	NA	
2	Owner's Inspector notified.	CO Mar 19 08	DJ - May 7/08
3	Registered Welding Procedure Specifications, Q.C. Manual and Forms available at site, Job File started.	CO Mar 19 08	DJ - May 7/08
4	Welders qualified for WPS's and have valid Performance Qualification cards. Welders Log completed. WPS reviewed with Welders.	CO Mar 19 08	DJ - May 7/08
5	Material checked against P.O., drawings, and specifications. Identification confirmed. Colour coding applied.	CO Apr 25 08	
6	Sample of each Welder's work examined, including root spacing, alignment, cleaning, joint preparation, preheat and electrode control.	CO Apr 25 08	
7	Nondestructive Examination completed. Reports and radiographs reviewed, signed by Level II or III, Radiograph I.D. detailed on drawings. 100%	CO Apr 25 08	DJ - May 7/08
8	Visual Examination of all completed welds. Welders I.D. stamped and recorded on drawings.	CO Apr 25 08	
9	Heat Treatment verified and recorded on drawings.	CO May 6 08	DJ - May 7/08
10	Each system checked against specifications and drawings before test.	CO April 6 08	
11	All deficiencies recorded and signed off by Q.C.I. and Owner's Inspector before test.	CO April 6 08	
12	Pressure Test checked. Gauge calibration verified, gauge #'s recorded.	CO April 6 08	
13	System checked after test. Deficiencies recorded and corrected.	CO April 6 08	
14	Construction data reports (AB-83) prepared and signed by Q.C.I. and Owner's Inspector.	CO July 10 08	
15	Declaration form (AB-81) submitted to ABSA	NA	
16	As built drawings accepted by Owner	NA	



CONSTRUCTION DATA REPORT FOR PIPING SYSTEMS

In accordance with the provisions of the Safety Codes Act

Shop Construction ; Field Construction ; Final Data Report

Partial Data Report (from one ABSA-authorized Contractor to another ABSA- authorized Contractor).

Complete both sides of this Form

1. Constructed By: NWP Industries Inc Owner's Job No: 05835
(Name of ABSA authorized primary contractor or subcontractor)
4017 60th Ave Innisfail, AB T4G 1S9
(Address)

Alberta Quality Program No. AQP-1253 Expiry Date: Nov 24/08

2. Constructed For: HZ Projects
(Name of primary contractor if different from above)
700-400 5th Ave SW Calgary, AB T2POL6
(Address)

Alberta Quality Program No. AQP-NA Expiry Date: NA
(Required when the primary contractor undertakes some/all of the quality functions, e.g., Mat'l supply, NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

3. Owner: Murphy Oil Company Ltd
(Name and address)
UNknown
(Location of installation)

Alberta Quality Program No. AQP-NA Expiry Date: NA
(Required when the owner undertakes some/all of the quality functions, e.g., Mat'l supply, NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

4. Piping Design Alberta Registration No.: PP-NA
(Required if aggregate piping volume is over 0.5m³)

5. WP No.: WP-1604.2 ; Company: NWP Industries Inc ; Owner's WP No. (If used): WP-NA
(Alberta Registration No.) (Alberta Registration No.)

WPS No(s). used: NWP-1,NWP-3 ; Owner's WPS No(s). (If used): NA

6. Code: ASME B31.1 Non Boiler External Piping ; ASME B31.1 Boiler External Piping
ASME B31.3 - Service category: Normal D M High Pressure ; B31.5 ; B31.9

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C	Test Press. kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	R.T. %	Other NDE
05835-5Rev0	WOG	3125psig	200F	4688psig	water	SA106B	.125"	3"SCH80	SA105	1150F	100%	visual
PG-3-A- 160AB-100									CL1500			
05835-4Rev0	WOG	1000psig	200F	1500psig	water	SA106B	NA	1"SCH80	NA	NA	NA	visual
Preheat Line												

Partial Data Reports, properly identified and certified by ABSA-authorized contractors, as listed below are attached to and form part of this Data Report

No.	Line No.	Spool No.	Drg. No. (with Rev. No.)	Contractor (Name)	AQP No.	Expiry date

Remarks: Provide additional comments including noting any code work that was not performed by the ABSA- authorized contractor(s) supplying this document as a Partial Data Report but which must be completed by another ABSA-authorized contractor who assumes overall responsibility for conformance with the Safety Codes Act & Regulations and applicable ASME Codes, and who assures that all required code work is completed prior to putting the piping system into service.

Endorse certificate 'A' or 'B'

A. CERTIFICATE OF COMPLIANCE

Signed by the subcontractor when supplying this certificate as a Partial Data Report

We certify that the statements in this Data Report are correct and that materials, construction and workmanship of the piping fabrication conform to the registered quality system and the applicable Piping code(s).

Date: _____
Subcontractor

Print Authorized Representative's Name Signature

B. CERTIFICATE OF COMPLIANCE

Signed by the primary contractor when supplying this certificate as a Final Data Report

We certify that the statements in this Data Report are correct and that piping job no. 05835 described in this Data Report was constructed in accordance with the Province of Alberta Safety Codes Act and Regulations, and applicable ASME Piping Code(s).

Date: July 7, 2008 NWP Industries Inc
Primary Contractor

Colleen Tysoe _____
Print Authorized Representative's Name Signature

This certificate is not valid unless it forms part of a

CERTIFICATE OF INSPECTION

I, the undersigned, employed by Rae Engineering have inspected the piping

job no. 05835 described in this Construction Data Report and state that, to the best of my knowledge and belief, the Contractor has constructed this piping in accordance with the applicable Sections of the ASME Piping Codes and Province of Alberta Safety Codes Act and Regulations.

Date: _____ Date: _____

Print Owner's Inspector's Name Owner's Inspector's Signature Sign.: _____

ABSA Safety Codes Officer
(BOILER EXTERNAL PIPING ONLY)

NWP Industries Inc.

INDIRECT FIRED HEATER COIL EXAMINATION AND INSPECTION REPORT

DO NOT START CONSTRUCTION WITHOUT AI REVIEW

EXAMINATION AND INSPECTION REPORT

REVISION NO.:

AI REVIEW: *Used*

REVIEW DATE: *05/03/19*

SERIAL NO.: *NWP-1478* JOB NO.: *05836*

COIL TYPE: *3" 1500# RTJWN, 6 PASS F/42" x 12'*

DRAWING NO.: *05836-2* DWG. REVISION NO.: *0*

EXAMINATION AND INSPECTION REPORT

INITIATION BY: *[Signature]*

Seq.	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	<i>Mar 19 08</i>	*	<i>Used</i>	<i>05/03/19</i>		
2.	Release of App'd Dwg.	<i>05836 RD</i>	<i>[Signature]</i>	<i>Mar 19 08</i>	*	<i>Used</i>	<i>05/03/19</i>		
3.	Heat Numbers Recorded		<i>[Signature]</i>	<i>Apr 03 08</i>	*	<i>Used</i>	<i>05/04/09</i>	<i>DJ</i>	<i>16/04/05</i>
4.	MTRs Checked		<i>[Signature]</i>	<i>Apr 03 08</i>	*	<i>Used</i>	<i>05/04/09</i>	<i>DJ</i>	<i>16/04/05</i>
5.	Materials Checked Against Drawings and specs	<i>HOLD</i>	<i>[Signature]</i>	<i>Apr 17 08</i>					
6.	W.P.S. Checked		<i>[Signature]</i>	<i>Mar 19 08</i>					
7.	Welders Qualified	<i>HOLD</i>	<i>[Signature]</i>	<i>Mar 19 08</i>					
8.	Thicknesses Recorded		<i>[Signature]</i>	<i>Apr 03 08</i>					
9.	Fit-up Examination(s)		<i>[Signature]</i>	<i>Apr 03 08</i>					
10.	Impact Tests		<i>[Signature]</i>	<i>Apr 03 08</i>					
11.	Welds Examined		<i>[Signature]</i>	<i>Apr 09 08</i>	*	<i>Used</i>	<i>05/04/09</i>		<i>16/04/05</i>
12.	Welder I.D. Checked		<i>[Signature]</i>	<i>Apr 09 08</i>				<i>DJ</i>	<i>16/04/05</i>
13.	Final External Inspection	<i>HOLD</i>	<i>[Signature]</i>	<i>Apr 09 08</i>	*	<i>Used</i>	<i>05/04/16</i>		
14.	Radiography <i>100%</i>	<i>HOLD</i>	<i>[Signature]</i>	<i>Apr 09 08</i>	**	<i>Used</i>	<i>05/04/09</i>	<i>DJ</i>	<i>16/04/05</i>
15.	Other N.D.E.		<i>[Signature]</i>	<i>Apr 09 08</i>					
16.	Final Ext. Prior to P.W.H.T.	<i>HOLD</i>	<i>[Signature]</i>	<i>Apr 09 08</i>	**	<i>Used</i>	<i>05/04/09</i>		
17.	PWHT Chart Checked	<i>HOLD</i>	<i>[Signature]</i>	<i>Apr 14 08</i>	*	<i>Used</i>	<i>05/04/14</i>	<i>DJ</i>	<i>16/04/05</i>
18.	Hydrostatic Test	Coil No. 1 Gauge # <i>101000</i> Coil No. 2 Gauge # <i>101000</i>	<i>[Signature]</i>	<i>Apr 16 08</i>	*	<i>Used</i>	<i>05/04/16</i>	<i>DJ</i>	<i>16/04/05</i>
19.	CRN Drawing <i>if 10555</i>	CRN# <i>P9407.213</i>	<i>[Signature]</i>	<i>Mar 19 08</i>	*	<i>Used</i>	<i>05/03/19</i>	<i>DJ</i>	<i>16/04/05</i>
20.	N.C.R. #		<i>[Signature]</i>	<i>Mar 19 08</i>	*	<i>Used</i>	<i>05/03/19</i>	<i>DJ</i>	<i>16/04/05</i>
21.	Nameplate Stamping		<i>[Signature]</i>	<i>Apr 16 08</i>	**	<i>Used</i>	<i>05/04/16</i>	<i>DJ</i>	<i>16/04/05</i>
22.	Data Report (AB-28) completed		<i>[Signature]</i>	<i>Apr 16 08</i>	**	<i>Used</i>	<i>05/04/16</i>	<i>DJ</i>	<i>16/04/05</i>
23.	Nameplate Installation		<i>[Signature]</i>	<i>July 10 08</i>					

The Authorized Inspector shall be presented with the Examination and Inspection Report prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

* Denotes an A.I. Inspection Point ** Denotes an A.I. Hold Point

Issuing Authority: Marvin J. (Ty)
DeBelser / Dale Karg
Date of Issue: November 30, 2007
Rev Status: 1.0



ABSA
FORM-NDE-001
N.D.E. Requirements

CLIENT: _____ W.O. # 05835

PROJECT: 0.75 mm BTU Lineheater Coil DATE: Apr 7.08

PIPING: PRESSURE VESSEL: _____ TANK: _____ OTHER: _____

TEST METHOD	TANK:	OTHER:
<input type="checkbox"/> X-RAY	<input checked="" type="checkbox"/> 100%	<input type="checkbox"/> ASME SECTION VIII-UW-51
<input checked="" type="checkbox"/> GAMMA RAY	<input type="checkbox"/> FULL	<input type="checkbox"/> ASME SECTION VIII-UW-52
<input type="checkbox"/> ULTRASONICS	<input type="checkbox"/> 25%	<input type="checkbox"/> ASME B31.1
<input type="checkbox"/> LIQUID PENETRANT	<input type="checkbox"/> 10%	<input checked="" type="checkbox"/> ASME B31.3 NFS
<input type="checkbox"/> MAGNETIC PARTICLE	<input type="checkbox"/> OTHER (DEFINE)	<input type="checkbox"/> OTHER (SPECIFY)
<input type="checkbox"/> ACCOUSTIC EMISSION		

GENERAL INSTRUCTIONS: Vessel s/n NWP-1477

P1 Material _____

Welder ID: L & 4

Shell-T= _____

Pipe-T= 3" Sch 160 = 0.438"

Total Welds 24 welds

Please use wire type iQi
Please note all indications on films on reports
Please include O.F.D - S.O.D S.F.D on reports

SPECIAL REQUIREMENTS: P.O# 61-47115

PREPARED BY: _____ DATE: _____

RADIOGRAPHIC INSPECTION REPORT

DATE: Apr 17 2008 PAGE 1 OF 1
 JOB #: 5304-1043 P.O. # 614715
 CLIENT: NWP INDUSTRIES CODE: WDR 05835

LOCATION: SN NWP-1477

DEFECT LEGEND										CODE LEGEND				TECHNIQUES			
IF - INCOMPLETE FUSION	P - POROSITY	C - CRACK								1. ASME B31.3 NORMAL	5. ASME B31.1	1. SINGLE WALL EXPOSURE		3. SINGLE WALL VIEWING			
IP - INCOMPLETE PENETRATION	HL - HIGH / LOW	AC - ARC BURNS								2. ASME B31.3 SEVERE	6. CSA Z 662	2. DOUBLE WALL EXPOSURE		4. DOUBLE WALL VIEWING			
UC - UNDERCUTTING	IC - INTERNAL CONCAVITY	EP - EXCESSIVE PENETRATION								3. ASME VIII DIV 1 UW 51	7. API 650						
S - SLAG	LC - LOW COVER	SH - SHRINKAGE								4. ASME VIII DIV UW 52	8. OTHER						
BT - BURN THROUGH	HB - HOLLOW BEAD	1 - SLIGHT, 2 - MEDIUM, 3 - SEVERE															

FILM #	LOCATION	THK	DIA.	WDR SYM	IF	IP	UC	S	BT	P	IC	LC	EP	TECH #	CODE #	ACC.	REMARKS	REJECT
1	X-1		0.438"	3"	L									213	1	<input checked="" type="checkbox"/>		
2	2				4											<input checked="" type="checkbox"/>		
3	3				4											<input checked="" type="checkbox"/>		
4	4				Y											<input checked="" type="checkbox"/>		
5	5				L			1.26cm								<input checked="" type="checkbox"/>		
6	6				L											<input checked="" type="checkbox"/>		
7	7				4											<input checked="" type="checkbox"/>		
8	8				L											<input checked="" type="checkbox"/>		
9	9				L						1.24cm					<input checked="" type="checkbox"/>		
10	10				L											<input checked="" type="checkbox"/>		
11	11				4											<input checked="" type="checkbox"/>		
12	12				L			3.2cm								<input type="checkbox"/>	IP @ 2cm	X
13	13				4						1.1cm					<input checked="" type="checkbox"/>		
14	14				L						1.25cm					<input checked="" type="checkbox"/>		
15	15				4											<input checked="" type="checkbox"/>		
16	16				L			1.13cm								<input checked="" type="checkbox"/>		
17	17				4											<input checked="" type="checkbox"/>		
18	18				L						1.13cm	1.28cm				<input checked="" type="checkbox"/>		
19	19				4											<input checked="" type="checkbox"/>		
20	20				4											<input checked="" type="checkbox"/>		
21	21				L											<input checked="" type="checkbox"/>		
22	22				L											<input checked="" type="checkbox"/>		
23	23				4											<input checked="" type="checkbox"/>		
24	24				L											<input checked="" type="checkbox"/>		
25	SFO 3.5"							SFO 2"			SFO .563"					<input type="checkbox"/>		

No. of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Activity or K.V.	Maximum Source Side Object To Film Distance	Minimum Source to Object Distance	Material	Thickness		IQI		Exp. Time C/r/min (mAs)
										Base	Weld	R.F.	Type Size	
4	AGFA LEA 2	04 TOP II	1	IR	3.2mm	500i	CONTACT	CS	.438"	.438"	1.25"	ASTM B		

This Certificate or Report is valid only for that work which was specifically requested. The Company is not responsible for any views or opinions expressed by employees performing this work which fall outside the contract terms or reference. All Certificates and / or reports are the result of work performed in conformance with applicable specifications and standards to the best of our ability and intent. However, the Company will not be responsible for deviation within the normal limits of accuracy in accordance with the standard practices. Final Code Acceptance shall require Client and Manufacturer Representative's signatures.

A.M.		P.M.		TOTAL HOURS	KILOMETERS	SUBSISTENCE		FILM	
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T.	hrs.	MANDAY	OT / MEALS	24-3"	
				6	hrs.				
				O.T.	hrs.				

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.
 Radiographer: K. SVEG GUNTER SNT/CGSB Level: 2 Reg. No.: 12075 Assistant: CRAIG GILSEN
 The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
 I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: [Signature] Apr 17, 08

Issuing Authority: Marvin J. (Ty)
DeBeiser / Dale Karg
Date of Issue: November 30, 2007
Rev Status: 1.0



ABSA
FORM-NDE-001
N.D.E. Requirements

CLIENT: _____ W.O. # 05835

PROJECT: 0.75mm BTU Lineheater Coil DATE: Apr 8.08

PIPING: <input checked="" type="checkbox"/>	PRESSURE VESSEL:	TANK:	OTHER:
<input type="checkbox"/> X-RAY		<input checked="" type="checkbox"/> 100%	ASME SECTION VIII-UW-51
<input checked="" type="checkbox"/> GAMMA RAY		FULL	ASME SECTION VIII-UW-52
<input type="checkbox"/> ULTRASONICS		25%	ASME B31.1
<input type="checkbox"/> LIQUID PENETRANT		10%	<input checked="" type="checkbox"/> ASME B31.3 NFS
<input type="checkbox"/> MAGNETIC PARTICLE		OTHER (DEFINE)	OTHER (SPECIFY)
<input type="checkbox"/> ACCOUSTIC EMISSION			

GENERAL INSTRUCTIONS: Vessel s/n NWP-1477

P1 Material _____

Welder ID L

Shell-T= _____

Pipe-T= 3" Sch 160 = O. 438"

Total Welds 1 Repair weld on x-12

Please use wire type iQi

Please note all indications on films on reports

Please include O.F.D - S.O.D S.F.D on reports

SPECIAL REQUIREMENTS: P.O# 61-47187

PREPARED BY: _____ DATE: _____



RADIOGRAPHIC INSPECTION REPORT

DATE: April 8/08 PAGE 1 OF 1
JOB #: _____ P.O. # 61-47187
CLIENT: NWP Industries CODE: WO#05835

LOCATION: SN NWP-1477

DEFECT LEGEND			CODE LEGEND				TECHNIQUES			
IF - INCOMPLETE FUSION	P - POROSITY	C - CRACK	1. ASME B31.3 NORMAL	5. ASME B31.1	1. SINGLE WALL EXPOSURE				3. SINGLE WALL VIEWING	
IP - INCOMPLETE PENETRATION	HL - HIGH / LOW	AC - ARC BURNS	2. ASME B31.3 SEVERE	6. CSA Z 662	2. DOUBLE WALL EXPOSURE				4. DOUBLE WALL VIEWING	
UC - UNDERCUTTING	IC - INTERNAL CONCAVITY	EP - EXCESSIVE PENETRATION	3. ASME VIII DIV I UW 51	7. API 650						
S - SLAG	LC - LOW COVER	SH - SHRINKAGE	4. ASME VIII DIV UW 52	8. OTHER						
BT - BURN THROUGH	HB - HOLLOW BEAD	1 - SLIGHT, 2 - MEDIUM, 3 - SEVERE								

FILM #	LOCATION	THK	DIA.	WLDG SYM	IF	IP	UC	S	BT	P	IC	LC	TECH #	CODE #	ACC.	REMARKS	REJECT	
1															<input type="checkbox"/>	1		
2	X12R		4.38"	L									2/3	1	<input checked="" type="checkbox"/>	2		
3															<input type="checkbox"/>	3		
4															<input type="checkbox"/>	4		
5															<input type="checkbox"/>	5		
6															<input type="checkbox"/>	6		...
7															<input type="checkbox"/>	7		
8															<input type="checkbox"/>	8		
9															<input type="checkbox"/>	9		
10															<input type="checkbox"/>	10		
11															<input type="checkbox"/>	11		
12															<input type="checkbox"/>	12		
13															<input type="checkbox"/>	13		
14															<input type="checkbox"/>	14		
15															<input type="checkbox"/>	15		
16															<input type="checkbox"/>	16		
17															<input type="checkbox"/>	17		
18															<input type="checkbox"/>	18		
19															<input type="checkbox"/>	19		
20															<input type="checkbox"/>	20		
21															<input type="checkbox"/>	21		
22															<input type="checkbox"/>	22		
23															<input type="checkbox"/>	23		
24	SFD					SOD					OFD				<input type="checkbox"/>	24		
25	3.5"					Ø"					Ø563"				<input type="checkbox"/>	25		

No. of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Activity or K.V.	Maximum Source to Object Distance	Minimum Source to Object Distance	Material	Thickness			IQI		Exp. Time Ci/min (mAs)
										Base	Weld	R.F.	Type	Size	
1	AGFA	Lead	1	IR	32mm	35kV	CONTACT	C.S.	.438"	.438"	.125"	ASTM	B		
-	D4	.010"		IR											

This Certificate or Report is valid only for that work which was specifically requested. The Company is not responsible for any views or opinions expressed by employees performing this work which fall outside the contract terms or reference. All Certificates and / or reports are the result of work performed in conformance with applicable specifications and standards to the best of our ability and intent. However, the Company will not be responsible for deviation within the normal limits of accuracy in accordance with the standard practices. Final Code Acceptance shall require Client and Manufacturer Representative's signatures.

A.M.		P.M.		TOTAL HOURS		KILOMETERS		SUBSISTENCE		FILM	
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T.	hrs.			MANDAY	OT / MEALS	1-3"	
				O.T.	hrs.						

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.
 Radiographer: Kris Vogler SNT/CGSB Level: 2 Reg. No: 12275 Assistant: Craig Oisen
 The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
 I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: [Signature]

BF 82-08-221
B & R Stress Relieving

Client: NWP

Date: April 29 Job #:

AFF:

Operator: Jay P. White

S.D. 9788 918 956 920 911 917

Chart S.P. 50 mm / hour

Description:

- (1) Coil, sn NWP-1473, PO# 61-46592 Job# 05834
- (2) Coil, sn NWP-1474, Job# 05832, PO# 61-46697 - End Soak
- (3) Coil, sn NWP-1475, Job# 05833, PO# 61-46603 - Hour Soak
- (4) Soak, sn NWP-1477, Job# 05835, PO# 61-47061
- (5) Soak, sn NWP-1478, Job# 05836, PO# 61-47055

14:00 11:00 8:00 5:00 2:00 1:00 0:00

BF 82-08-221

50 MM/H

500 1000 1500 2000

°F

Start Soak

BURN

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

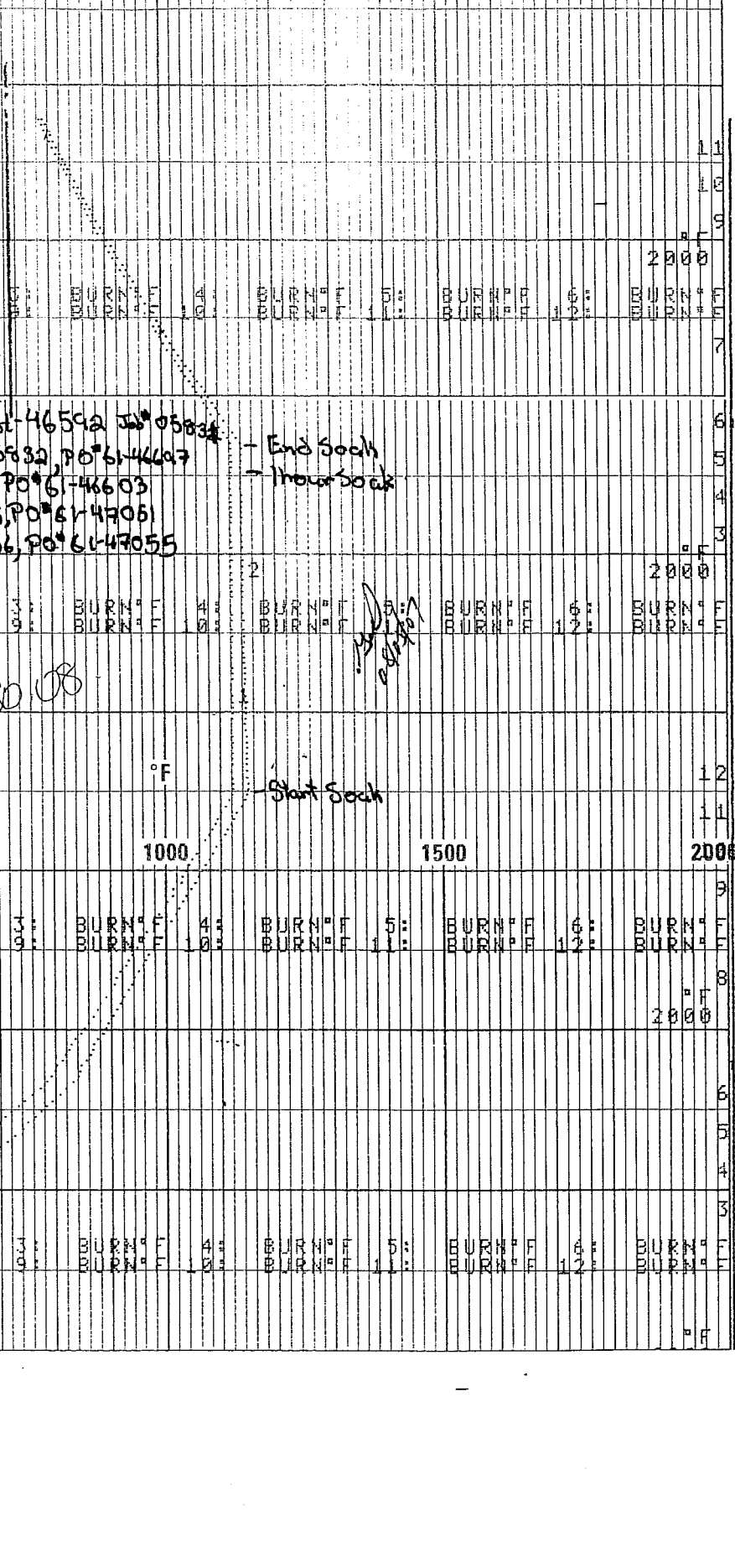
1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

1 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100



PO# 61-47051



HEAT TREATMENT REQUIREMENTS

NWP-1477

JOB NO.: 05835

CUSTOMER: Murphy Oil

DATE: Apr 28, 08

COMPONENT DESCRIPTION

DWG. NO. AND LINE NO.	DIAMETER	THICKNESS	MATERIAL	LENGTH	WEIGHT
Piping pool	3" NPS	0.438"	SA-106B	30"	± 200 lbs

TYPE OF HEAT TREATMENT: PRESSURE VESSEL STRESS RELIEVE P-NO. 1

HEATING
 Temperature to be raised from 800°F (427°C) to 1100°F (594°C) at a maximum rate of 400 °F
 () °C per hour. NOTE: THIS VALUE MUST NEVER EXCEED 400°F (222°C) PER HOUR.
 [Calculated rate = 400 degrees F/hr. (222 degrees C/hr) Divided by the maximum metal thickness of the shell or head plate in inches]

HOLDING
 Temperature to be held at a minimum of 1100°F (594°C) for 60 minutes.
 [Holding time to be determined by Table UCS-56 for Nominal Thickness as specified in UW-40(f)]

COOLING
 Temperature to be lowered from 1100°F (594°C) to 800°F (427°C) at a maximum rate of 500 °F
 () °C per hour. NOTE: THIS VALUE MUST NEVER EXCEED 500°F (278°C) PER HOUR.
 [Calculated rate = 500 degrees F/hr (278 degrees C/hr.) Divided by the maximum metal thickness of the shell or head plate in inches]

From 800°F (427°C) items may be cooled in still air.

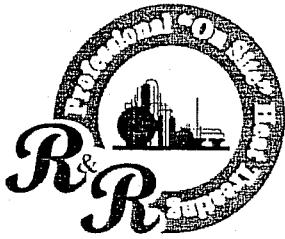
- Additional Requirements:
- Job number and description required on heat treatment charts along with the operator's signature & date.
 - Reporting of thermocouple attachment method and location, and verification of furnace thermocouple calibration is required.
 - A sufficient number of thermocouples shall be located to control and maintain uniform distribution of temperature on all vessels and parts. Thermocouples shall be directly attached to the item or provision shall be made for thermocouple placement at bottom, centre and top of the furnace charge in accordance with the ASME Code.
 - During the heating period, there shall not be a greater variation in temperature throughout the portion of the vessel being heated than 250° F (139° C) within any 15 ft. (4.6 m) interval of length. An adequate number of thermocouples must be used to ensure this Code requirement is met.
 - During the holding period, there shall not be a greater difference than 150° F (83° C) between the highest and lowest temperature throughout the portion of the vessel being heat treated, except where the range is further limited by these instructions.
 - If Capacitor Discharge welding is used to attach thermocouples an ASME Code Section IX Welding Procedure Specification is required (WPS qualification is not required), and the energy output must be limited to 125 Watt-Seconds.
 No other welding is permitted on vessels or parts. [0.5 x Capacitance in farads X Voltage² = W-Sec.]
 - The method of thermocouple removal shall not damage the heat treated item.

Q.C. Inspector Signature _____ Date: _____

Thermocouple Attachment Method: capacitor discharge Location (s) _____

Furnace Heat Number BF32-08-221

Furnace Operator Signature _____ Date: Apr 29/08



R & R Stress Relieving Service Ltd.

Nisku: 2103 - 6th Street, T9E 7X8 Tel: (780) 955-7559 Fax: (780) 955-2903
Blackfalds: #13 Burbank Industrial Park Tel: (403) 885-2280 Fax: (403) 885-0177
Calgary: (403) 236-8986 Toll Free: 1-800-499-HEAT(4328)

CERTIFICATE OF CONFORMANCE OF RECORDING INSTRUMENTS

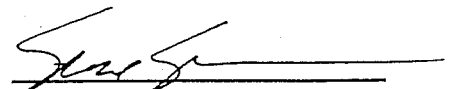
CERTIFIED BY: R & R Stress Relieving Service Ltd.
TEST NUMBER: RR1207
DATE: December 27, 2007
DATE DUE: June 27, 2008
INSTRUMENT MFG: Chino
MODEL NUMBER: AH-3725 N00
SERIAL NUMBER: AH-057C171
RECORDER NUMBER: IR-181

This instrument has been calibrated and it is within the manufacturers specifications.

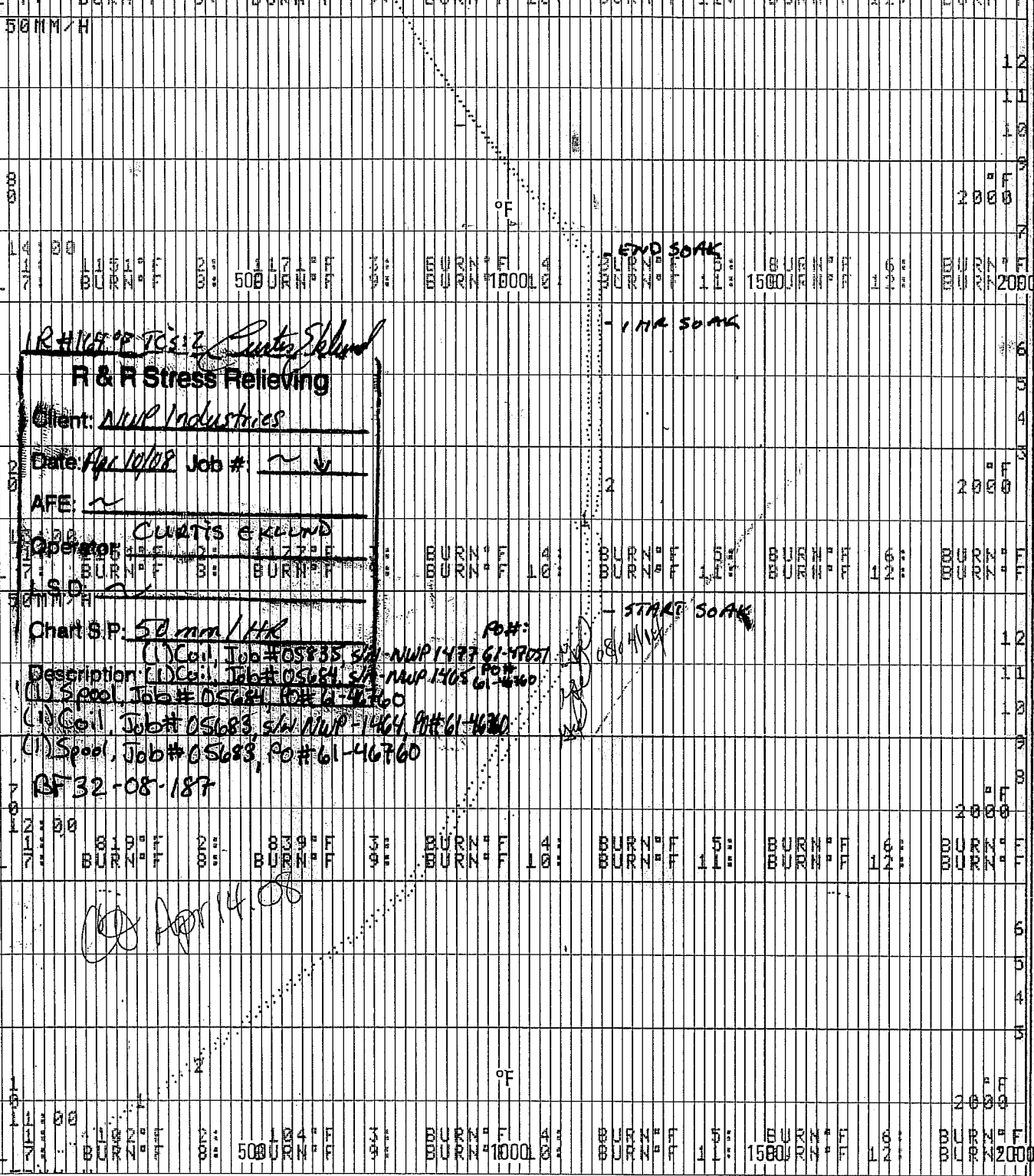
REFERENCE STANDARDS

<u>DIGI MITE 311600 S/N48430-5522</u>	<u>CERT DATE Nov 28/07</u>
<u>DIG. INDICATOR/CALIR. 028-8427113</u>	<u>CERT DATE Nov 28/07</u>

The calibration of all standards and measuring instruments used in the calibration are traceable to the National Research Council of Canada in Ottawa or to the National Bureau of Standards in Washington, D.C.


Shane Stimson

50320. 8 7 6 5 4 3 2 1



IR #12500 P.C. 2 *Quartz Ekund*
R & R Stress Relieving
 Client: *NWP Industries*
 Date: *Apr 14/08* Job # *~ ~*
 AFE: *~*
 Operator: *Quartz Ekund*
 BURN # 1: *7708*
 BURN # 2: *BURN #*
 Chart S/P: *50 mm / Hr*
 Description: (1) Coil, Job # *05235 s/n NWP 1477 61-1707* PO#:
 (1) Spool, Job # *05621 PO# 61-46760*
 (1) Coil, Job # *05683 s/n NWP-1464 PO# 61-46760*
 (1) Spool, Job # *05683, PO# 61-46760*
 BF 32-08-187

Apr 14 08

END SOAK

1 HR SOAK

START SOAK

12 11 10 9 8 7 6 5 4 3 2 1

PO# 61-47051



HEAT TREATMENT REQUIREMENTS

WOP-1477

JOB NO.: 05835

CUSTOMER: Murphy Oil

DATE: April 19, 08

COMPONENT DESCRIPTION: 0.75 mm BTU Lineheater Coil

DWG. NO. AND LINE NO.	DIAMETER	THICKNESS	MATERIAL	LENGTH	WEIGHT
Coil	3" NPS	0.438"	SA106B	153'	3010 lbs.

TYPE OF HEAT TREATMENT: PRESSURE VESSEL STRESS RELIEVE P-NO. 1

HEATING

Temperature to be raised from 800°F (427°C) to 1100°F (594°C) at a maximum rate of 400 °F

() °C per hour. NOTE: THIS VALUE MUST NEVER EXCEED 400°F (222°C) PER HOUR.

[Calculated rate = 400 degrees F/hr. (222 degrees C/hr) Divided by the maximum metal thickness of the shell or head plate in inches]

HOLDING

Temperature to be held at a minimum of 1100°F (594°C) for 600 minutes.

[Holding time to be determined by Table UCS-56 for Nominal Thickness as specified in UW-40(f)]

COOLING

Temperature to be lowered from 1100°F (594°C) to 800°F (427°C) at a maximum rate of 500 °F

() °C per hour. NOTE: THIS VALUE MUST NEVER EXCEED 500°F (278°C) PER HOUR.

[Calculated rate = 500 degrees F/hr (278 degrees C/hr) Divided by the maximum metal thickness of the shell or head plate in inches]

From 800°F (427°C) plates may be cooled at a rate of 100°F (56°C) per hour.

Additional Requirements:

- A sufficient number of thermocouples shall be located to control and maintain uniform distribution of temperature on all vessels and parts. Thermocouples shall be directly attached to the item or provision shall be made for thermocouple placement at bottom, centre and top of the furnace charge in accordance with the ASME Code.
- During the heating period, there shall not be a greater variation in temperature throughout the portion of the vessel being heated than 250° F (139° C) within any 15 ft. (4.6 m) interval of length. An adequate number of thermocouples must be used to ensure this Code requirement is met.
- During the holding period, there shall not be a greater difference than 150° F (83° C) between the highest and lowest temperature throughout the portion of the vessel being heat treated, except where the range is further limited by these instructions.
- If Capacitor Discharge welding is used to attach thermocouples an ASME Code Section IX Welding Procedure Specification is required (WPS qualification is not required), and the energy output must be limited to 125 Watt-Seconds.
- No other welding is permitted on vessels or parts. [0.5 x Capacitance in farads X Voltage ² = W-Sec.]
- The method of thermocouple removal shall not damage the heat treated item.

Q.C. Inspector Signature: *[Signature]*

Date: April 14, 08

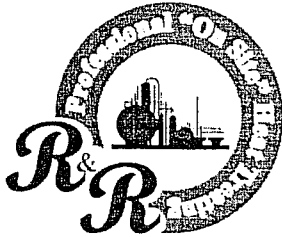
Thermocouple Attachment Method: Capacitor Discharge

Location (s)

Furnace Heat Number: BF32-08-187

Furnace Operator Signature: *[Signature]*

Date: April - 10 - 2008



R & R Stress Relieving Service Ltd.

Nisku: 2103 - 6th Street, T9E 7X8 Tel: (780) 955-7559 Fax: (780) 955-2903
Blackfalds: #13 Burbank Industrial Park Tel: (403) 885-2280 Fax: (403) 885-0177
Calgary: (403) 236-8986 Toll Free: 1-800-499-HEAT(4328)

CERTIFICATE OF CONFORMANCE OF RECORDING INSTRUMENTS

CERTIFIED BY: R & R Stress Relieving Service Ltd.
TEST NUMBER: RR0108
DATE: January 30, 2008
DATE DUE: July 30, 2008
INSTRUMENT MFG: Chino
MODEL NUMBER: AH-3725-N00
SERIAL NUMBER: AH-02XA233
RECORDER NUMBER: IR-164

This instrument has been calibrated and it is within the manufacturers specifications.

REFERENCE STANDARDS

<u>DIGI MITE 311600 S/N48430-5522</u>	<u>CERT DATE Nov 21/07</u>
<u>DIG. INDICATOR/CALIR. 028-8427113</u>	<u>CERT DATE Nov 21/07</u>

The calibration of all standards and measuring instruments used in the calibration are traceable to the National Research Council of Canada in Ottawa or to the National Bureau of Standards in Washington, D.C.


Shane Stimson




HYDROSTATIC TEST AFFIDAVIT

CUSTOMER: _____ W.O. # 05831/05835/05836
PROJECT: 1.5mm BTL Coil + 2 Spools PROJECT # NA
TEST PRESSURE: 4688 psig HOLD TIME: 15 mins
CODE REQUIREMENTS: ASME B31.3 2006 edition DATE: May 14, 08

ALL PERSONNEL INVOLVED IN TEST:
ALL SIGNS OF CORROSION POSTED:
PROJECT FILE: _____ TESTING LOGS: _____ COMPONENT TIME REQUIRED: _____ TEST PRESSURE: _____
SIGN OFF: _____ SUPERVISOR: _____ TESTER: _____

PRODUCT DESCRIPTION
NWP-1473 - Coil
NWP-1477 } Spools
NWP-1478 }

PROJECT COMPLETE / SYSTEMS CHECK COMPLETE: 
50% test pressure = 2344 psig

EQUIPMENT DOWN / FLUSHED TO PREVENT FREEZING: YES NO

START TIME: 11:30 am FINISH TIME: 12:50 pm

TEST GAUGE IDENT.	PRESSURE RANGE	CALIBRATION DATE
<u>NWP-10000-1</u>		<u>June 5, 08</u>
<u>NWP-10000-3</u>		<u>Apr 4, 09</u>

TEST BY:  DATE: _____
APPROVED BY:  DATE: May 14, 08



HYDROSTATIC TEST AFFIDAVIT

CUSTOMER: _____ W.O.# 05835/05836
PROJECT: 0.75 mm BTU Lineheater Coils PROJECT# NA
TEST PRESSURE: 4688 psig HOLD TIME: 15 mins
CODE REQUIREMENTS: ASME B31.3 2006 edition DATE: Apr 16, 08

ALL PERSONNEL INVOLVED IN TEST
ALL SIGNATURES VERIFIED & POSTED
PRIORITY ITEMS, UNDESIRABLES, COMPONENTS NOT MEET REQUIRED TEST PRESSURE
SIGN-OFF: _____ SUPERVISOR _____ TESTER _____

PRODUCT DESCRIPTION
NWP-1477
NWP-1478

(2) 0.75 mm BTU Lineheater Coils

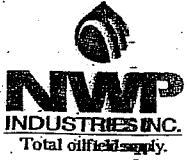
50% TEST PRESSURE LEAK/SYSTEMS CHECK COMPLETED
50% test pressure = 2344 psig

EQUIPMENT USED TO PREVENT FREEZING: YES NO

START TIME: 11:30 FINISH TIME: 12:31 PM

TEST GAUGE IDENT.	PRESSURE RANGE	CALIBRATION DATE
NWP 10000-1		June 5, 08
NWP 10000-3		Apr 4, 09

TEST BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____



HYDROSTATIC TEST AFFIDAVIT

CUSTOMER:		W.O. #	05835/05836
PROJECT:	0.5mm BTU Line heater Preheat Line	PROJECT #	NA
TEST PRESSURE:	425 psig / 500 psig	HOLD TIME:	15 mins
CODE REQUIREMENTS:	ASME B31.3 2006 edition	DATE:	Apr 16, 08

ALL TESTS COMPLETED	<input checked="" type="checkbox"/>
ALL SIGNS AND POSTERS	<input checked="" type="checkbox"/>
ALL INSTRUMENTS AND COMPONENTS MEET REQUIRED TEST PRESSURE	
SIGN OFF SUPERVISOR	TESTER: Jerry Laguer

NWP-1477
NWP-1478

PRODUCT DESCRIPTION

(2) - 1" Preheat Lines

50% test pressure = 247 psig
750

EQUIPMENT IS TESTED TO PREVENT FREEZING YES NO

START TIME: 1:00 pm

FINISH TIME: 1:27 pm

TEST GAUGE IDENT.	PRESSURE RANGE	CALIBRATION DATE
NWPG-00005000-3		Dec 26, 08
NWPG-70005000-4		June 5, 08
NWPG-5000-5		Nov 27, 08
NWPG-5000-6		Nov 27, 08
		May 9, 08
		May 9, 08
		Mar 12, 09

TEST BY: Jerry Laguer DATE: April 16/08

APPROVED BY: [Signature] DATE: April 16, 08



PNEUMATIC TEST AFFIDAVIT

CUSTOMER:		W.O. #: 5835
PROJECT: Firetubes		PROJECT #: N/A
TEST PRESSURE: 16 oz. (1 psi)		HOLD TIME: As Required
CODE REQUIREMENTS: Non-code		DATE: Apr 17 12 1008

PRODUCT DESCRIPTION:

TANK SER. # nwp-1449

DWG. # _____

REV. # _____

TEST-

#1 - All weldments.

no leaks

#2 - All weldments.

#3 - All weldments.

#4 - All weldments.

#5 - All weldments.

#6 - All weldments.

REPAIRS AND COMMENTS

REPAIR PROCEDURE (BRIEF EXPLANATION)

PROCEDURE APPROVED BY Q.C. _____

COMPLETED REPAIR CHECKED BY Q.C. _____

ADDITIONAL COMMENTS:

Start Time: _____ Finish Time: _____

TEST #	TEST BY:	Q.C.	DATE	TEST GAUGE ID.	RANGE	CALIBRATION DUE:
1	<i>[Signature]</i>	Op	Apr 17-08	nwp gauges 19820	0-5 psi	Oct 14-08

TEST APPROVED BY: Dustin Reitzsche DATE: April 17-2008

PARTIAL

A# 581122

Manufactured By: NWP Industries Inc 4017 60th Ave Innisfail, AB T4G 1L5

Manufactured For: Murphy Oil

Ultimate Owner: Murphy Oil

Location of Installation: unknown

Manufacturer's Serial No.	Construction Drawing No.	CODE: ASME B31.3			Year Built
NWP-1478	05836-2Rev0	Edition	2006	Addenda	2008

CONSTRUCTION

Coil ID/Purpose	Design Pressure	Design Temp	Design Minimum Temp	Corrosion Allowance	Registered Drawing No.	CRN
a Coil A	3125psig	200F	-20F	.125"	BDD300Rev10	P9407.213
b Coil B	3125psig	200F	-20F	.125"	BDD300Rev10	P9407.213
c						
d						
e						

COIL

Tubes			End Closures				Openings		
Mat'l Spec.	Diameter	Thickness	Return Bend		Flanges		Mat'l Spec.	Size/Type	Rating
			Mat'l Spec.	Thickness	Mat'l Spec.	Rating			
a SA106B	3"NPS	0.438"	SA234WPB	0.438"	SA105	CL1500	NA	NA	NA
b SA106B	3"NPS	0.438"	SA234WPB	0.438"	SA105	CL1500	NA	NA	NA
c									
d									
e									

HEADERS/MANIFOLDS

Purpose	Size	Shell		Ends			Openings		
		Mat'l Spec.	Thickness	Mat'l Spec.	Thickness	No	Mat'l Spec.	Size/Type	Rating
f NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
g NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

TEST PRESSURE, NDE, POSTWELD HEAT TREATMENT AND SIZE

Hydrostatic Test Pressure	Radiography (100% or % Random)	Other NDE (MT) (PT) (UT)	Postweld Heat Treatment		Overall Length	Heating Surface	Volume
			Temp.	Time			
a 4688psig	100%	visual	1100F	60mins	152.25"	67sqft	2.71cuft
b 4688psig	100%	visual	1100F	60mins	152.25"	67sqft	2.73cuft
c							
d							
e							
f							
g							

IMPACT TESTING: Exempt as per Table 323.2.2 Column A

REMARKS: Weight empty 2510 lbs WO#05836 PO#61-47184

CERTIFICATE OF COMPLIANCE

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this coil bundle are in accordance with the above Provincial Registered Design.

Date April 16, 2008 Signed [Signature] For NWP Industries Inc
(Representative) (Manufacturer)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, a duly authorized Safety Codes Officer employed by ABSA has inspected the above Heater Coils and state that, to the best of my knowledge and belief, the construction is in accordance with the Alberta Safety Codes Act and Regulations.

Date 2008/04/16 Signed [Signature] AS#146



277, 28042 Hwy 11, Red Deer County, AB T4S 2L4

Serial Number : 38023-264 Toll Free: 866-660-KING, Fax: 405.789.8198

Certificate Number: 39524.5165

OG1316.2C email: info@kingsvalve.com

Customer : NWP INDUSTRIES

Date : 17-Mar-08

BOX 6280

INNISFAIL, ALBERTA

T4G 1S9

Customer P.O. # : 61-47070

Safety Relief Valve Certification

Taylor Valve Technology, Inc. Safety Relief Valves are designed, manufactured and tested in accordance with the provisions of the ASME Boiler and Pressure Vessel Code, Section VIII. This Valve is certified to relieve within plus or minus 2 psi of the set pressure 70 psig or below, and plus or minus 3% of set point for pressures above 70 psig, as allowed for within the provisions of ASME. The published relieving capacities have been certified by the National Board of Boiler and Pressure Vessel Inspectors.

Valve Specifications

Model Number : Taylor Model 8200 Soft Seat	Orifice :	E
Body Size : 1 Inch	Orifice Diameter :	0.520 Inches
Part Number : 82E5351311	Orifice Area :	0.212 In ²
Body Configuration : 1" MNPT X 1" FNPT	Operating Temperature :	70 °F
	Spring Range :	226-450 PSI
	Set Pressure :	285 PSIG

Materials

Body : WCB Carbon Steel	Spring : 17.7 PH Stainless Steel
Seat Frame : Carbon Steel	Guide : 304 Stainless Steel
Seat Housing : 17.4 PH H900 Stainless Steel	Adjustment Screw : Carbon Steel with EN Plating
Trim : Standard	Options : None
Seat : FKM 90d	

Set Pressure Specifications

	Customer Units	ASME Units	
Set Pressure :	285.0 psig	Set Pressure :	285 psig
ASME High Set Limit :	293.6 psig	ASME High Set Limit :	294 psig
ASME Low Set Limit :	276.5 psig	ASME Low Set Limit :	276 psig
ASME (90%) rated capacity at set pressure for indicated fluid, specific gravity and temperature.			
Certifying Fluid :	Air	1,063 SCFM	Spec Gravity : 1.00 Temp : 60 oF
API 520 (100%) calculated capacity at set pressure for indicated fluid, specific gravity and temperature.			
Test Fluid :	Air	1,170 SCFM	Spec Gravity : 1.00 Temp : 60 oF

Prepared by : **Allen Mc Kenzie**

Department : **Valve Technician**

Signed

Approved by : **EARL PIKE**

Department : **Quality Verification**

Signed

BLASTING AND PRIMING REPORT "A"

Job Number: 5835 Unit #: NWP1477 Description: Lineheater
 Customer: NWP Customer Inspector: Colleen Tyson
 Job Foreman: Steve Customer Phone #: _____
 Painter: Cherly Jensen Date: April 28/09

SANDBLAST: Time blasting began: 9:45 AM Time blasting complete: 11:10 AM

CONDITIONS: (Record Every 4 Hrs.)	1 st Reading	2 nd Reading	3 rd Reading	4 th Reading	
Time:	<u>9:40 AM</u>	<u>11:20 AM</u>			
Temperature:	<u>58°</u>	<u>59°</u>			<input type="checkbox"/> Field Work
Relative Humidity:	<u>52%</u>	<u>52%</u>			<input checked="" type="checkbox"/> Shop Work
Dew Point:	<u>N/A</u>	<u>N/A</u>			

Surface Preparation Method: SANDBLAST

Sandblast Specification Required: SSPC 1 SSPC 2 SSPC 3 SSPC 4 SSPC 5
 SSPC 6 SSPC 7 SSPC 8 SSPC 9 SSPC 10 SSPC 11

Anchor profile depth, sharpness and density acceptable as required by paint manufacturer? Yes No
 (Attach sample of TESTEX Surface Profile Tape.)

Abrasive being used: SILICA 4-7 mix

Compressor air clean / dry / oil-free? (Attach blotting paper sample.) Acceptable? Yes No

Comments: _____

SANDBLASTING ACCEPTABLE TO SPECIFICATION:		
Sub-Contractor's Inspector: <u>Cherly Jensen</u> (Print, Sign and Date)	Inspector: _____ (Print, Sign and Date)	Customer's Inspector: _____ (Print, Sign and Date)

PRIME COAT: Time priming began: 2:30 PM (Must be within 8 hrs of sandblasting) Time complete: 3:40 PM

CONDITIONS (Record Every 4 Hrs.)	1 st Reading	2 nd Reading	3 rd Reading	4 th Reading	
Time:	<u>2:20 PM</u>	<u>4:00 PM</u>			
Temperature:	<u>62°</u>	<u>62°</u>			<input type="checkbox"/> Field Work
Relative Humidity:	<u>53%</u>	<u>53%</u>			<input checked="" type="checkbox"/> Shop Work
Dew Point:	<u>N/A</u>	<u>N/A</u>			
Surface Temp:	<u>58°</u>	<u>58°</u>			

(Surface temperature must NOT be less than 5°F (2°C) above Dew Point.)

Spray gun used: Graco Fluid Tip: 5-15 Air Cap: _____

Was all sandblasting grit and slag removed prior to painting? Yes No

Were all laminations removed after first blast? Yes No

Any defects noted in the steel? Yes No

Primer Used: Manufacturer: Clowndate Type: Epoxy Batch #: _____

Mils of primer specified: 2-3

Mils of primer measured, average Wet Mils: 5.1-7.2 Dry Mils: 3.6-6.1

Were all areas of low film thickness re-coated satisfactorily? Yes No

Did any dirt or abrasive particles get imbedded in the paint film? Yes No

If so, note areas: _____

Time priming complete: 3:40 PM

Any difficulties with job? NO Explain: _____

Remarks: _____

PRIME COAT ACCEPTABLE	Inspector: <u>Cherly Jensen</u> (Print, Sign and Date)	Customer's Inspector: _____ (Print, Sign and Date)
------------------------------	--	--

OVERCOATING REPORT "B"

Job Number: 5835 Unit #: NLOP1477 Description: Lineheater
 Customer: NLOP Customer Inspector: Colleen Tysoe
 Job Foreman: Steve Customer Phone #: _____
 Painter: Chelsea Jensen Date: April 29, 08

FIRST COAT Time Painting Began: 9:00 AM Time Painting Complete: 10:15 AM

CONDITIONS <i>Record Every 4 Hrs.</i>	1 st Reading	2 nd Reading	3 rd Reading	4 th Reading	
Time:	<u>8:50 AM</u>	<u>10:20 AM</u>	_____	_____	
Temperature:	<u>56°</u>	<u>57°</u>	_____	_____	<input type="checkbox"/> Field Work
Relative Humidity:	<u>51%</u>	<u>51%</u>	_____	_____	<input checked="" type="checkbox"/> Shop Work
Dew Point:	<u>N/A</u>	<u>N/A</u>	_____	_____	
Surface Temp.	<u>54°</u>	<u>54°</u>	_____	_____	

Surface temperature must be NOT less than 5°F (2°C) above dew point.)

Dry time of primer before applying overcoat? 15 hours

Time painting began: 9:00 AM

Spray gun used: BRACO Fluid Tip: 5-15... Air Cap: _____

Thinning ratio: 100%

Paint Used - Manufacturer: Clowdale Type: Epoxy Batch #: _____

Mils of overcoat specified: 2-3 Type Overcoat: _____

Mils of overcoat measured, average WET: 5.6-7.8 DRY: 4.8-6.4

Were all areas of low film build re-coated satisfactorily? Yes No

Did any abrasive particles get imbedded in paint film? Yes No

If so, note areas: _____

Inspect for defects: Runs, sags, embedded debris, voids, overspray, mud cracking, inadequate cure, lack of adhesion.

Acceptable

Requires re-work. Give details: _____

Difficulties with job? Yes No Explain: _____

Remarks: _____

SECOND COAT Time Painting Began: _____ Time Painting Complete: _____

CONDITIONS <i>Record Every 4 Hrs.</i>	1 st Reading	2 nd Reading	3 rd Reading	4 th Reading	
Time:	_____	_____	_____	_____	
Temperature:	_____	_____	_____	_____	<input type="checkbox"/> Field Work
Relative Humidity:	_____	_____	_____	_____	<input type="checkbox"/> Shop Work
Dew Point:	_____	_____	_____	_____	
Surface Temp.	_____	_____	_____	_____	

(Surface temperature must be NOT less than 5°F (2°C) above dew point.)

Dry time of first coat before applying second coat: _____

Spray gun used: _____ Fluid Tip: _____ Air Cap: _____

Thinning ratio: _____

Paint Used - Manufacturer: _____ Type: _____ Batch #: _____

Mils of overcoat specified: _____ Type Overcoat: _____

Mils of overcoat measured, average WET: _____ DRY: _____

Were all areas of low film build re-coated satisfactorily? Yes No

Did any abrasive particles get imbedded in paint film? Yes No

If so, note areas: _____

Inspect for defects: Runs, sags, embedded debris, voids, overspray, mud cracking, inadequate cure, lack of adhesion.

Acceptable

Requires re-work. Give details: _____

Difficulties with job? Yes No Explain: _____

Remarks: _____

INSPECTION SIGNOFF	Inspector _____ (Print, Sign and Date)	Customer's Inspector _____ (Print, Sign and Date)
--------------------	--	---