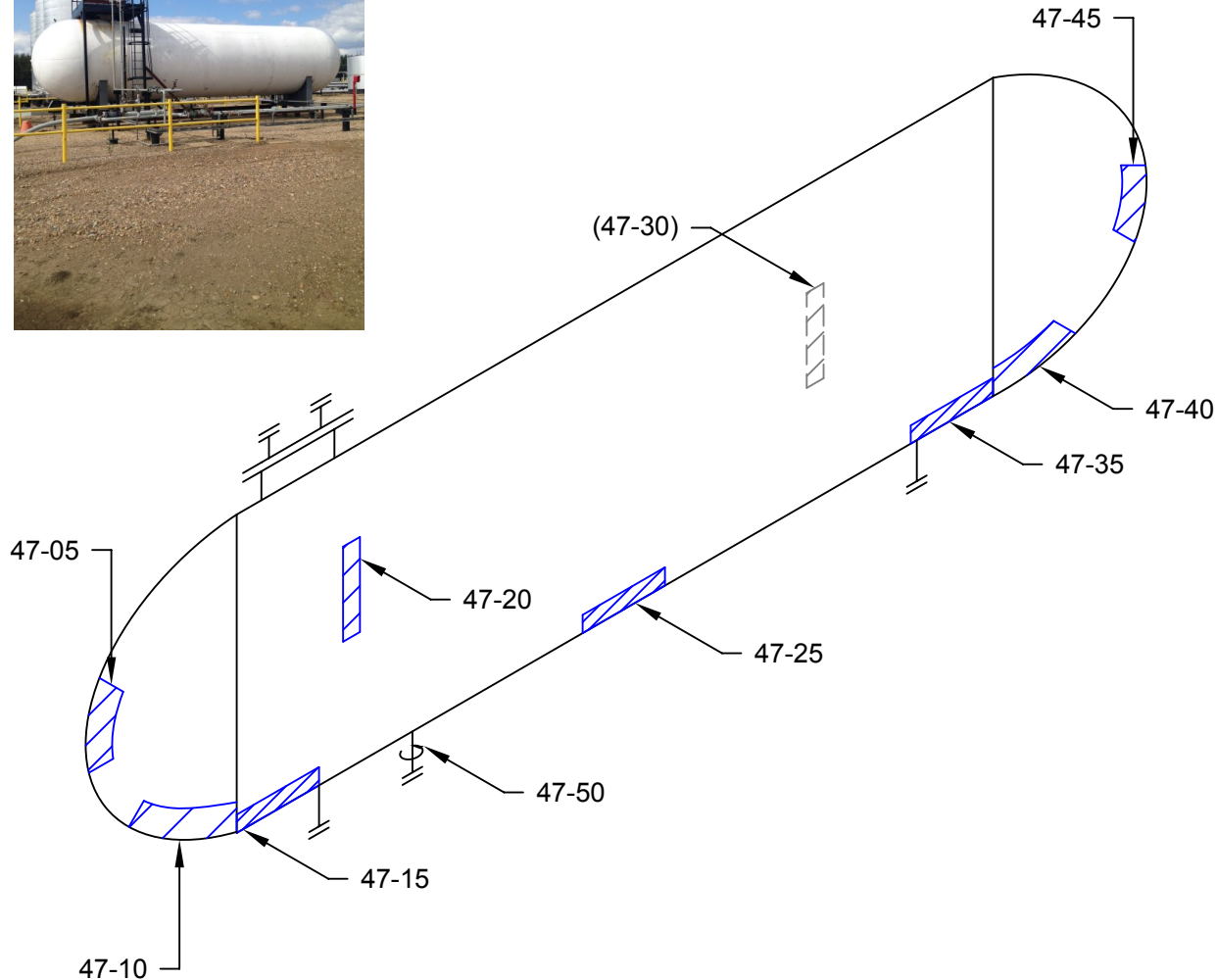


ITEM:

BULLET

A0568797



**OUNTAIN WEST
SERVICES LTD.**

ASSET INTEGRITY
SYLVAN LAKE, AB (403) 887-3562
PIPELINE INTEGRITY
WHITECOURT, AB (780) 778-5584
NON-DESTRUCTIVE TESTING
GRANDE PRAIRIE, AB (780) 518-9757

TECHNICIAN:

JACOB SULLIVAN
SNT LEVEL I
SNT-TC-1A

DATE: 8/20/14

DWG: 47

CLIENT: LONG RUN EXPLORATION

LSD: 07-04-071-18-W5M

INSPECTOR : DUANE PAETKAU

LOCATION : SNIPE LAKE

DISTRICT UNIT : NORTHERN AB

BLDG/SKID : -

PROCESS : SWEET

CODE : ASME SEC VIII DIV 1

SPECIFICATION : AS PER ASME SE 797

TECHNIQUE : UT 1-1, REV .1

METHOD : UT CONTINUOUS / A SCAN

SURFACE COND : PAINTED

SURFACE TEMP : AMBIENT

VESSEL INFORMATION

VESSEL # : A0568797

CRN # : A223.453280

SERIAL # : 5656

MANUFACTURER : TORONTO IRON WORKS

DATE BUILT : 1968

CLIENT ID / TAG : -

M.A.W.P : 250 PSI

M.A.W.T. : 128° F

JOINT EFFICIENCY/RT : NO

STRESS RELIEVED : NO

INSULATED : NO

MANWAY : YES

VESSEL SPECIFICATIONS

	OD	NOMINAL	MATERIAL	CA
VESSEL HEAD	130"	.5625"	SA-515-70	.063"
VESSEL SHELL	130"	.9375"	SA-515-70	.063"
BOOT HEAD	-	-	-	-
BOOT SHELL	-	-	-	-

COMMENTS:

CA ASSUMED

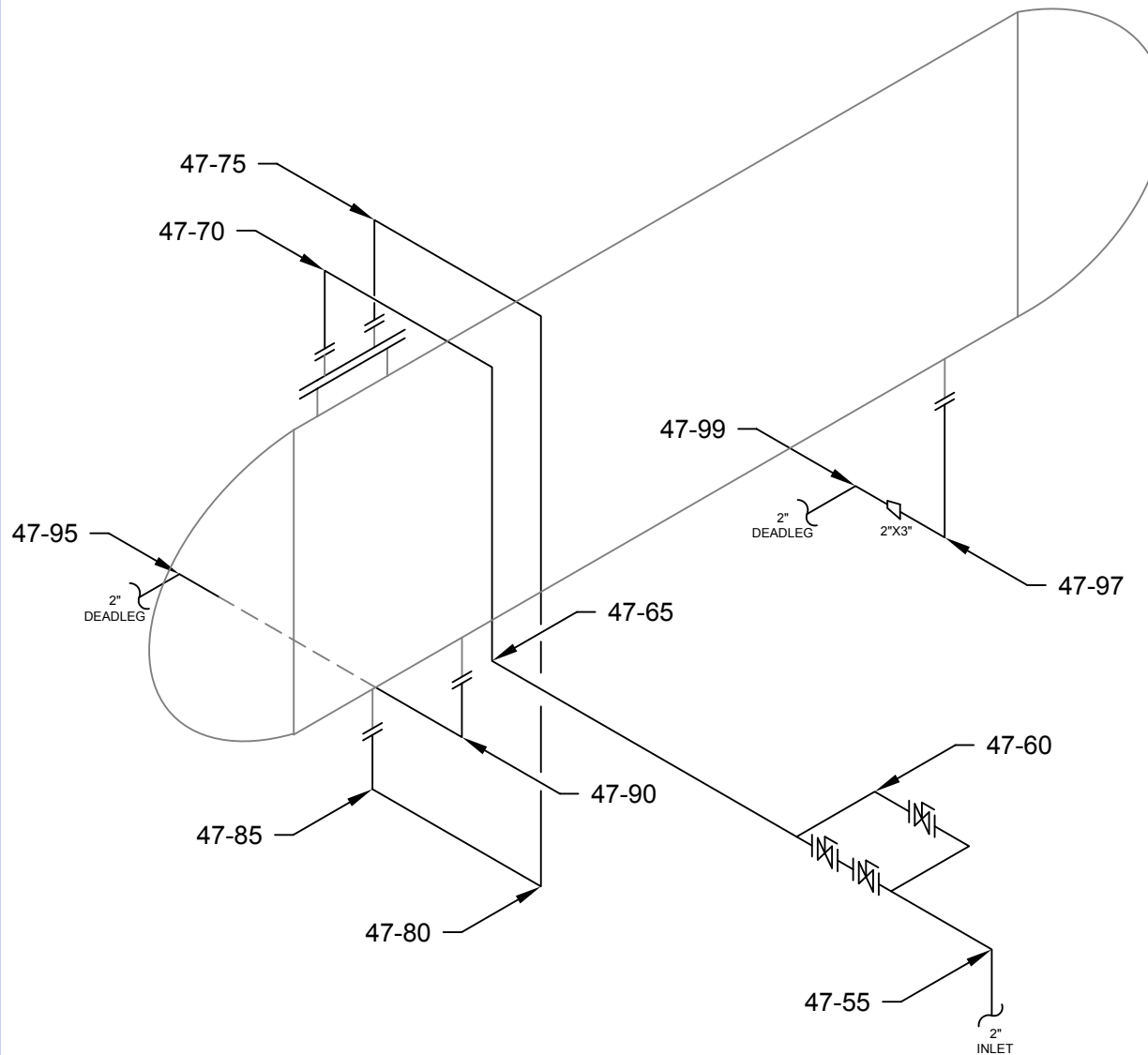
PROJECT:

C42050

ITEM:

BULLET - PIPING

A0568797



ASSET INTEGRITY
SYLVAN LAKE, AB (403) 887-3562
PIPELINE INTEGRITY
WHITECOURT, AB (780) 778-5584
NON-DESTRUCTIVE TESTING
GRANDE PRAIRIE, AB (780) 518-9757

TECHNICIAN:

JACOB SULLIVAN
SNT LEVEL I
SNT-TC-1A

DATE: 8/20/14

DWG # 47A

CLIENT: LONG RUN EXPLORATION

LSD: 07-04-071-18-W5M

INSPECTOR : DUANE PAETKAU

LOCATION : SNIPE LAKE

DISTRICT UNIT : NORTHERN AB

BLDG/SKID : -

PROCESS : SWEET

CODE : ASME B31.3

SPECIFICATION : AS PER ASME SE 797

TECHNIQUE : UT 1-1, REV .1

METHOD : UT CONTINUOUS / A SCAN

SURFACE COND : PAINTED

SURFACE TEMP : AMBIENT

PIPING INFORMATION

PIPING ID	SIZE	SCH	NOM	M.A.W.P. (VESSEL)	M.A.W.T. (VESSEL)	FLANGE RATING
47-55	2.375"	XS	.218"	250 PSI	128°F	-
47-60	"	"	"	"	"	"
47-65	"	"	"	"	"	"
47-70	"	"	"	"	"	"
47-75	"	"	"	"	"	"
47-85	"	"	"	"	"	"
47-90	"	"	"	"	"	"
47-95	"	"	"	"	"	"
47-97	3.50"	XS	.300"	"	"	"
47-99	2.375"	XS	.218"	"	"	"

COMMENTS:

PROJECT:

C42050

ULTRASONIC CORROSION SURVEY
Survey Name: LONG RUN EXPLORATION

LSD: 07-04-071-18W5
District Unit: NORTHERN - AB
Location: SNIPE LAKE
Skid: -

Vessel Number:	568797
Vessel Name:	BULLET
Year Built:	1968
Tag Number:	-
CRN:	A223.453280

Manufacturer: TORONTO IRON WORKS
Serial Number: 5656
Shell MAWP PSI: 250 MAWT F: 128
Tube MAWP PSI: MAWT F:
Vessel CA: 0.0630

Survey Date: 8/20/2014
Inspector: DUANE PAETKAU
Process: SWEET
Project #: C42050
Report Number: 30289

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
05		Head	Baseline	0.628	0.630	0.634	0.640	0.643	0.629	2014	0.634	0.628	0.5625	0.0630	0.4609	2015	2034
Shape	Hemispherical	shell Side	Previous								Comments-->			OK			
OD	130		Current	0.628	0.630	0.634	0.640	0.643	0.629	2014	0.634	0.628					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY							0						
10		Head	Baseline	0.630	0.623	0.622	0.604	0.601	0.609	2014	0.615	0.601	0.5625	0.0630	0.4609	2015	2034
Shape	Hemispherical	shell Side	Previous								Comments-->			OK			
OD	130		Current	0.630	0.623	0.622	0.604	0.601	0.609	2014	0.615	0.601					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY							0						
15		Shell	Baseline	0.969	0.966	0.970	0.972	0.972	0.969	2014	0.970	0.966	0.9375	0.0630	0.9231	2015	2034
Shape	Cylindrical	shell Side	Previous								Comments-->			OK			
OD	130		Current	0.969	0.966	0.970	0.972	0.972	0.969	2014	0.970	0.966					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY							0						
20		Shell	Baseline	0.979	0.979	0.981	0.978	0.980	0.982	2014	0.980	0.978	0.9375	0.0630	0.9231	2015	2034
Shape	Cylindrical	shell Side	Previous								Comments-->			OK			
OD	130		Current	0.979	0.979	0.981	0.978	0.980	0.982	2014	0.980	0.978					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY							0						

ULTRASONIC CORROSION SURVEY
Survey Name: LONG RUN EXPLORATION

LSD: 07-04-071-18W5
District Unit: NORTHERN - AB
Location: SNIPE LAKE
Skid: -

Vessel Number:	568797
Vessel Name:	BULLET
Year Built:	1968
Tag Number:	-
CRN:	A223.453280

Manufacturer: TORONTO IRON WORKS
Serial Number: 5656
Shell MAWP PSI: 250 MAWT F: 128
Tube MAWP PSI: MAWT F:
Vessel CA: 0.0630

Survey Date: 8/20/2014
Inspector: DUANE PAETKAU
Process: SWEET
Project #: C42050
Report Number: 30289

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
25		Shell	Baseline	0.978	0.981	0.982	0.982	0.983	0.982	2014	0.981	0.978	0.9375	0.0630	0.9231	2015	2034
Shape	Cylindrical	shell Side	Previous	Comments--> OK													
OD	130		Current	0.978	0.981	0.982	0.982	0.983	0.982	2014	0.981	0.978					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY 0													
30		Shell	Baseline	0.958	0.950	0.954	0.955	0.958	0.957	2014	0.955	0.950	0.9375	0.0630	0.9231	2015	2034
Shape	Cylindrical	shell Side	Previous	Comments--> OK													
OD	130		Current	0.958	0.950	0.954	0.955	0.958	0.957	2014	0.955	0.950					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY 0													
35		Shell	Baseline	0.948	0.944	0.946	0.953	0.952	0.953	2014	0.949	0.944	0.9375	0.0630	0.9231	2015	2034
Shape	Cylindrical	shell Side	Previous	Comments--> OK													
OD	130		Current	0.948	0.944	0.946	0.953	0.952	0.953	2014	0.949	0.944					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY 0													
40		Head	Baseline	0.607	0.613	0.615	0.614	0.613	0.607	2014	0.612	0.607	0.5625	0.0630	0.4609	2015	2034
Shape	Hemispherical	shell Side	Previous	Comments--> OK													
OD	130		Current	0.607	0.613	0.615	0.614	0.613	0.607	2014	0.612	0.607					
Spec.	VIII Div 1			ST Loss MPY													
Material	SA 515 - 70			LT Loss MPY 0													



ULTRASONIC CORROSION SURVEY

Survey Name: LONG RUN EXPLORATION

LSD: 07-04-071-18W5	Vessel Number: 568797	Manufacturer: TORONTO IRON WORKS	Survey Date: 8/20/2014
District Unit: NORTHERN - AB	Vessel Name: BULLET	Serial Number: 5656	Inspector: DUANE PAETKAU
Location: SNIPE LAKE	Year Built: 1968	Shell MAWP PSI: 250 MAWT F: 128	Process: SWEET
Skid: -	Tag Number: -	Tube MAWP PSI: MAWT F:	Project #: C42050
	CRN: A223.453280	Vessel CA: 0.0630	Report Number: 30289

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
45	Head	Baseline		0.633	0.638	0.636	0.645	0.640	0.649	2014	0.640	0.633	0.5625	0.0630	0.4609	2015	2034
Shape	Hemispherical	shell Side	Previous										Comments-->		OK		
OD	130		Current	0.633	0.638	0.636	0.645	0.640	0.649	2014	0.640	0.633					
Spec.	VIII Div 1										ST Loss MPY						
Material	SA 515 - 70										LT Loss MPY		0				
50	Nozzle	Baseline		0.223	0.219	0.217	0.219	0.219	0.219	2014	0.219	0.217	0.2180	0.0630	0.0164	2015	2034
Shape	Cylindrical	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.223	0.219	0.217	0.219	0.219	0.219	2014	0.219	0.217					
Spec.	VIII Div 1										ST Loss MPY						
Material	SA 106 - B										LT Loss MPY		0				
55	Piping	Baseline		0.198	0.198	0.200	0.201	0.198	0.200	2014	0.199	0.198	0.2180	0.0272	0.0148	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.198	0.198	0.200	0.201	0.198	0.200	2014	0.199	0.198					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				
60	Piping	Baseline		0.220	0.215	0.215	0.214	0.214	0.213	2014	0.215	0.213	0.2180	0.0272	0.0148	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.220	0.215	0.215	0.214	0.214	0.213	2014	0.215	0.213					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				

ULTRASONIC CORROSION SURVEY
Survey Name: LONG RUN EXPLORATION

LSD: 07-04-071-18W5
District Unit: NORTHERN - AB
Location: SNIPE LAKE
Skid: -

Vessel Number:	568797
Vessel Name:	BULLET
Year Built:	1968
Tag Number:	-
CRN:	A223.45

Manufacturer: TORONTO IRON WORKS
Serial Number: 5656
Shell MAWP PSI: 250 MAWT F: 128
Tube MAWP PSI: MAWT F:
Vessel CA: 0.0630

Survey Date: 8/20/2014
Inspector: DUANE PAETKAU
Process: SWEET
Project #: C42050
Report Number: 30289

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date	
				1	2	3	4	5	6									
65		Piping	Baseline	0.198	0.200	0.201	0.204	0.207	0.210	2014	0.203	0.198	0.2180	0.0272	0.0148	2015	2034	
Shape	90° Elbow	shell Side	Previous								Comments-->			OK				
OD	2.375		Current	0.198	0.200	0.201	0.204	0.207	0.210	2014	0.203	0.198						
Spec.	B31.3									ST Loss MPY								
Material	A 234 - WPB									LT Loss MPY			0					
70		Piping	Baseline	0.207	0.206	0.211	0.216	0.217	0.223	2014	0.213	0.206	0.2180	0.0272	0.0148	2015	2034	
Shape	90° Elbow	shell Side	Previous								Comments-->			OK				
OD	2.375		Current	0.207	0.206	0.211	0.216	0.217	0.223	2014	0.213	0.206						
Spec.	B31.3									ST Loss MPY								
Material	A 234 - WPB									LT Loss MPY			0					
75		Piping	Baseline	0.235	0.232	0.230	0.231	0.229	0.229	2014	0.231	0.229	0.2180	0.0272	0.0148	2015	2034	
Shape	90° Elbow	shell Side	Previous								Comments-->			OK				
OD	2.375		Current	0.235	0.232	0.230	0.231	0.229	0.229	2014	0.231	0.229						
Spec.	B31.3									ST Loss MPY								
Material	A 234 - WPB									LT Loss MPY			0					
85		Piping	Baseline	0.218	0.211	0.213	0.214	0.217	0.217	2014	0.215	0.211	0.2180	0.0272	0.0148	2015	2034	
Shape	90° Elbow	shell Side	Previous								Comments-->			OK				
OD	2.375		Current	0.218	0.211	0.213	0.214	0.217	0.217	2014	0.215	0.211						
Spec.	B31.3									ST Loss MPY								
Material	A 234 - WPB									LT Loss MPY			0					



ULTRASONIC CORROSION SURVEY

Survey Name: LONG RUN EXPLORATION

LSD: 07-04-071-18W5	Vessel Number: 568797	Manufacturer: TORONTO IRON WORKS	Survey Date: 8/20/2014
District Unit: NORTHERN - AB	Vessel Name: BULLET	Serial Number: 5656	Inspector: DUANE PAETKAU
Location: SNIPE LAKE	Year Built: 1968	Shell MAWP PSI: 250 MAWT F: 128	Process: SWEET
Skid: -	Tag Number: -	Tube MAWP PSI: MAWT F:	Project #: C42050
	CRN: A223.453280	Vessel CA: 0.0630	Report Number: 30289

Band	Description			Readings						Year	Avg Inches	Min Inches	Nominal	CA	TMIN	Recommended Next Inspection	Recommended Retirement Date
				1	2	3	4	5	6								
90	Piping	Baseline		0.200	0.198	0.195	0.193	0.191	0.194	2014	0.195	0.191	0.2180	0.0272	0.0148	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.200	0.198	0.195	0.193	0.191	0.194	2014	0.195	0.191					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				
95	Piping	Baseline		0.226	0.221	0.219	0.209	0.207	0.198	2014	0.213	0.198	0.2180	0.0272	0.0148	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.226	0.221	0.219	0.209	0.207	0.198	2014	0.213	0.198					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				
97	Piping	Baseline		0.259	0.256	0.255	0.253	0.255	0.255	2014	0.256	0.253	0.3000	0.0375	0.0217	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		Caution		
OD	3.5		Current	0.259	0.256	0.255	0.253	0.255	0.255	2014	0.256	0.253					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				
99	Piping	Baseline		0.232	0.234	0.233	0.233	0.237	0.237	2014	0.234	0.232	0.2180	0.0272	0.0148	2015	2034
Shape	90° Elbow	shell Side	Previous										Comments-->		OK		
OD	2.375		Current	0.232	0.234	0.233	0.233	0.237	0.237	2014	0.234	0.232					
Spec.	B31.3										ST Loss MPY						
Material	A 234 - WPB										LT Loss MPY		0				