

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

5. Lease Serial No.
NMLC029426B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agrément, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other: INJECTION

8. Well Name and No.
CROW FEDERAL SWD 1

2. Name of Operator
APACHE CORPORATION
Contact: SORINA FLORES
E-Mail: sorina.flores@apachecorp.com

9. API Well No.
30-015-42469-00-X1

3a. Address
303 VETERANS AIRPARK LANE SUITE 3000
MIDLAND, TX 79705

3b. Phone No. (include area code)
Ph: 432-818-1167

10. Field and Pool, or Exploratory
SALT WATER DISPOSAL (SWD)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

11. County or Parish, and State

Sec 9 T17S R31E NENE 890FNL 625FEL
32.853792 N Lat, 103.867630 W Lon

EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

BLM-CO-1463 NATIONWIDE / NMB000736

Apache proposes to drill the Crow Federal SWD #1 (30-015-42469) with Pioneer #28 which will be using a flex hose. Specs, certificate & chart for flex hose are attached.

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 08 2014

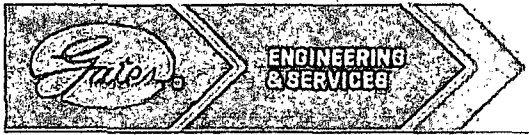
RECEIVED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record
NMOCB RE
8/12/14

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #254167 verified by the BLM Well Information System For APACHE CORPORATION, sent to the Carlsbad Committed to AFMSS for processing by JENNIFER MASON on 08/06/2014 (14JAM0361SE)	
Name (Printed/Typed) SORINA FLORES	Title SUBMITTING CONTACT
Signature (Electronic Submission)	Date 07/22/2014
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By	Title
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	
Office	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **



GATES E & S NORTH AMERICA, INC
DU-TEX
134 44TH STREET
CORPUS CHRISTI, TEXAS 78405

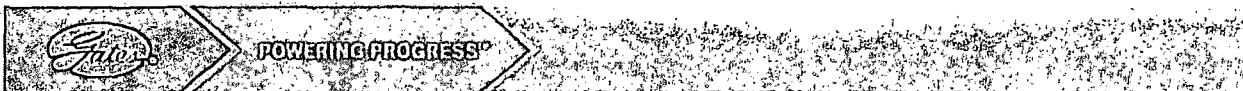
PHONE: 361-887-9807
FAX: 361-887-0812
EMAIL: crpe&s@gates.com
WEB: www.gates.com

5K CHOKE & KILL ASSEMBLY PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	7/12/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-071214-2
Invoice No. :	202462	Created By:	JERRY REYNOLDS
Product Description:	FD3.030.0CK4.1/165KFLGE/E		
End Fitting 1 :	4 1/16 in. 5K FLG	End Fitting 2 :	4 1/16 in. 5K FLG
Gates Part No. :	PENDING	Assembly Code :	L33313012313D-071214-2
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality Manager :	QUALITY	Technical Supervisor :	PRODUCTION
Date :	7/12/2014	Date :	7/12/2014
Signature :		Signature :	

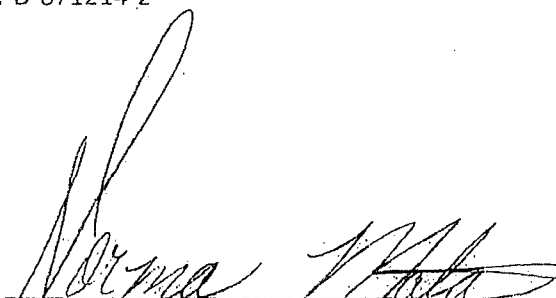


Gates E&S North America
134 - 44th St.
CORPUS CHRISTI, TEXAS 78405
PHONE : (361) 887-9807
FAX: (361) 887-0812
Tim.Cantu@gates.com

CERTIFICATE OF CONFORMANCE

This is to verify that all Parts and/or Materials included in this shipment have been manufactured and/or processed in Conformance with applicable drawings and specifications, and that Records of Required Tests are on file and subject to examination. The following items were assembled at Gates E & S, Inc. (formerly Dutex, Inc.), facilities in Corpus Christi, TX, USA. This hose assembly was designed and manufactured to meet all the requirements of API Spec 7K.

CUSTOMER: AUSTIN DISTRIBUTING
CUSTOMERS P.O.#: PENDING
PART DESCRIPTION: FD3.030.0CK4:1/165KELGE/E
SALES ORDER #: 202462
QUANTITY: 1
SERIAL #: D-071214-2

SIGNATURE: 

TITLE: _____

QUALITY _____

DATE: _____

7/12/2014



POWERING PROGRESS

MTR DATA BOOK

CUSTOMER: AUSTIN DISTRIBUTING

DATE: 7/14/2014

Purchase Order: PENDING

Sales Order #: 202462

Product Description: FD3.030.0CK4.1/165KFLGE/E

Hose S/N: D-071214-2

CONTENTS INCLUDED

1 GIMCO FITTINGS

14-081-1	INSERT STEM
14-084-2	INSERT HEAD
13-430-2	FERRULE

2 EDWARDS FABRICATION LIFT EYE CLAMPS

15949, 15781 Individual Test Certificates for Each Clamp

3 4 1/16 5K FLANGES

V01112 Heat Numbers

4 WELDING SPECIFICATIONS

Certification and Procedure for welding

5 NDE RESULTS

202307 Ultrasonic Test Results and Imaging

6 TEST CHART

Chart Recording of Hydrostatic Test

7 TEST CERTIFICATE

Document Product Details & Positive Results of Hydrostatic Testing

8 CERTIFICATE OF CONFORMANCE

A Declaration of the conformity with the type approval

9 IMAGES

Images of the product prior to shipping.

10 PACKING LIST

Details of Shipping Contents, Dimensions and Weights



Gates E&S North America
134 - 44th St.
CORPUS CHRISTI, TEXAS 78405
PHONE : (361) 887-9807
FAX: (361) 887-0812
Tim.Cantu@gates.com

CUSTOMER. : AUSTIN DISTRIBUTING
PURCHASE ORDER # : PENDING
DATE : 7/14/2014
SALES ORDER #: 202462

SOLD TO: AUSTIN DISTRIBUTING

000

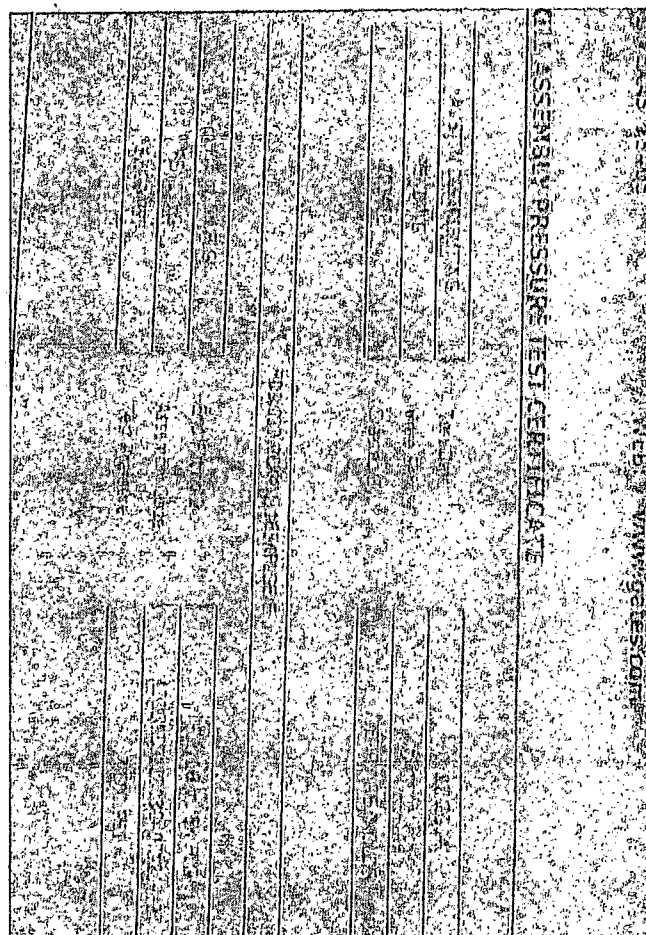
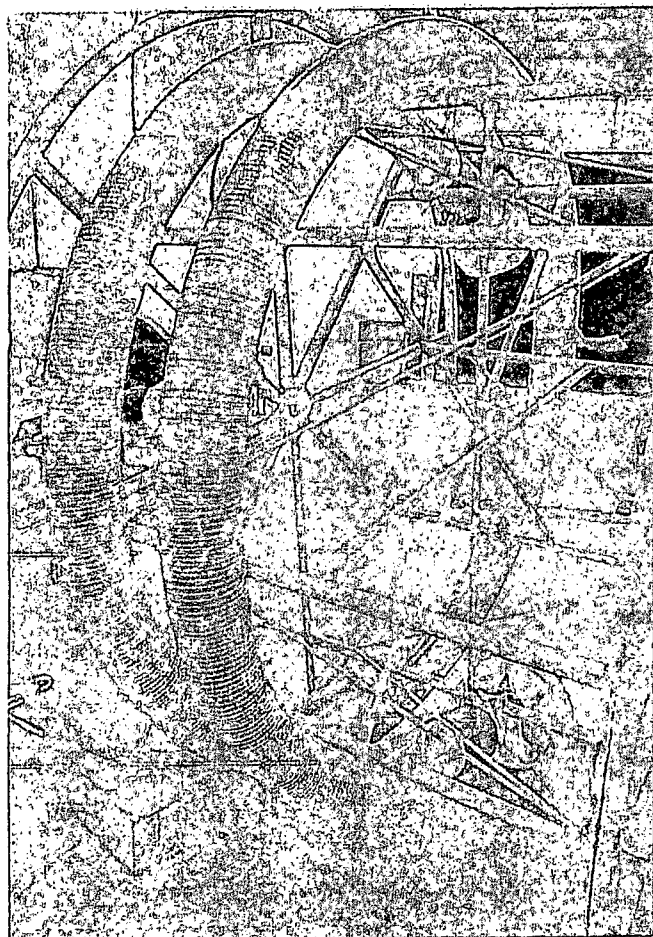
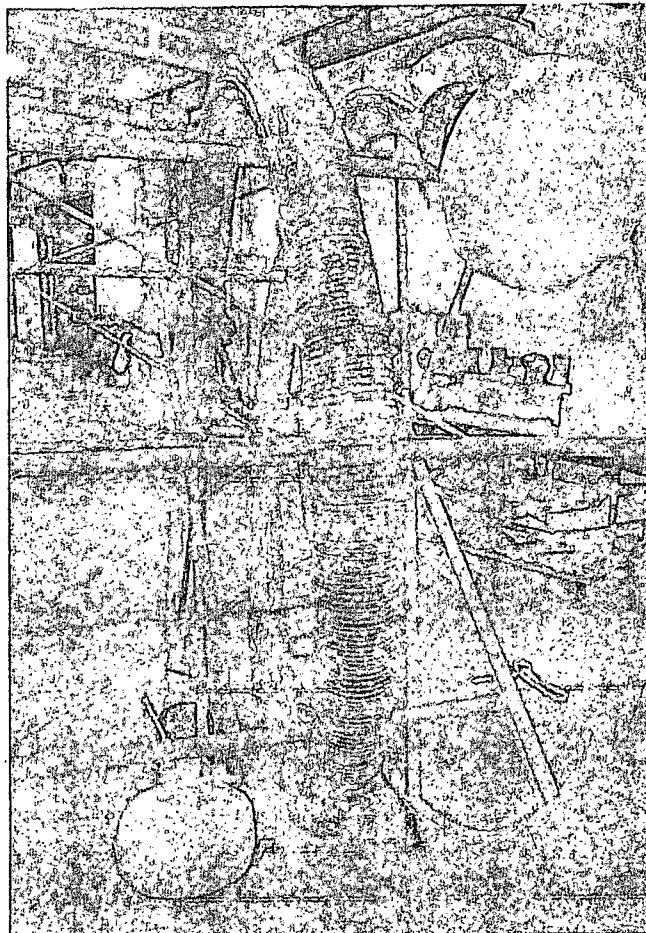
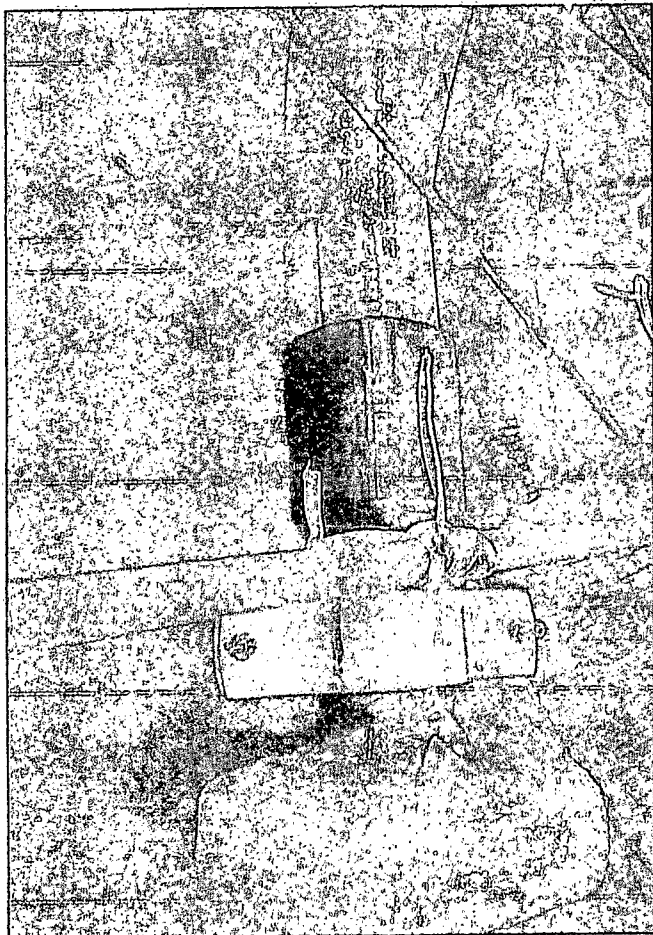
SHIP TO: 0

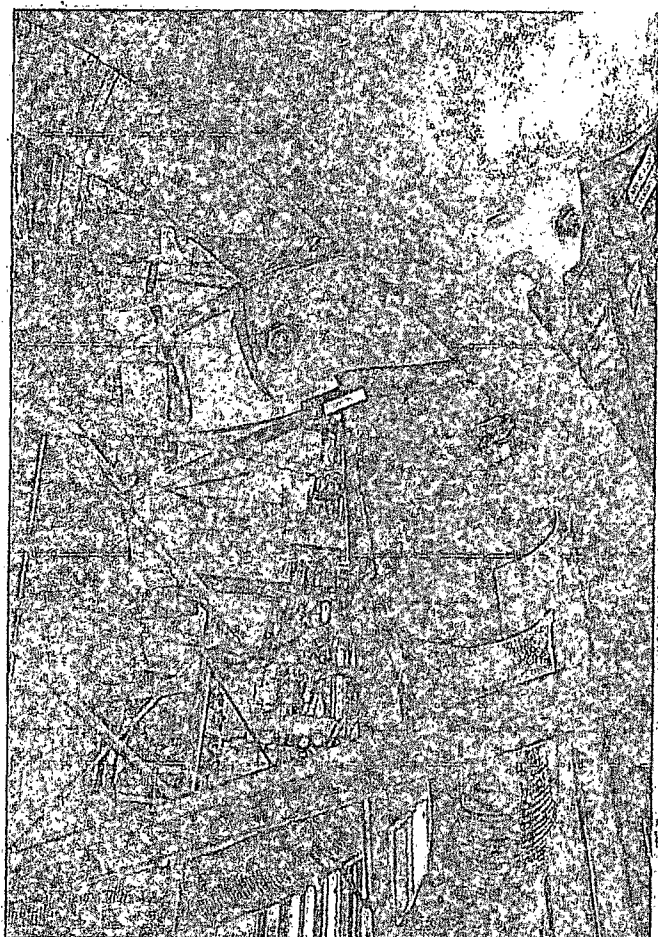
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0
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PACKAGING: HOT SHOT

PRODUCT DESCRIPTION:

ITEM	QTY	DESCRIPTION	ID	LENGTH	WORKING	TEST	END CONNECTION	SAFETY - CLAMPS / LIFT EYES
1	1	FD3.030.0CK4.1/ 165KFLGE/E	3 in.	30 ft.	5,000 PSI	7,500 PSI	4 1/16 in. 5K FLG E/E	0
COMMENTS:		CRATE DIMENSIONS:						
		HOSE WEIGHT:		CRATE WEIGHT:				
		TOTAL WEIGHT:						







INDUSTRIES, INC.

1501 FM 1489 SOUTH
P. O. BOX 1237
BROOKSHIRE TX 77423

Material Test Report

14-081-1 942111164-15

Customer Order No: 2014-081

Scot Order No: 710848.01

GEORGE MYER COMPANY
PO BOX 230014

HOUSTON

TX 77223

Material Supplier: 640.00

Part Number:

Scot Rec. No: 10146868

Heat Number: 9508155	Grade: St52.3	Dimensions: 3.125" OD 2.490" ID X 14.25"C
Scot Spec: MS-1545	ASTM Spec: A513	Other Spec:
Description: ERW * DOM * Stress Relieve Annealed * Low Carbon, High Manganese Mechanical Tubing		

Chemical Analysis	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Sn	Al	V
	0.15	1.42	0.012	0.004	0.17	0.03	0.01	0.03	0.01	<0.01	0.036	0.006
	Cb	Ti	B	Ca	N							
	0.002	0.002	0.0001	0.002	0.0058							

Mechanical Test Results

Yield Strength:(PSI)	Tensile Strength:(PSI)	Elongation:(%) in 2" G.L	ROA:(%)	Hardness
80300	93500	21		94(HRB)

Charpy Impact Energy

Energy ()					Shear Area (%)			
Temp	1	2	3	Avg	1	2	3	Avg

Eddy Current

The reported analysis and test results are certified to be the same as furnished to us by our supplier.
All records and test reports covering the above materials are on file at Scot Industries and may be examined by your personnel or by any agent authorized by you.

Joseph M. Matrey
Quality Assurance

03/21/14

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER 
Steel/Tube

14-089-2

948HXH+64W3-111

ABNAHMEPRÜFZEUGNIS EN 10204-3.1
INSPECTION CERTIFICATE EN 10204-3.1
CERTIFICAT DE RECEPTION EN 10204-3.1
EN 10204:2005-01

Benteler Steel/Tube GmbH - Postfach 1340 - 33043 Paderborn - Deutschland

JP Steel
6811 FM #382 Road
BROOKSHIRE TX 77423
USA

Dokument-Nr.: 65-785897/001/P
Document No.:
No. du document:

Kunden-Bestell-Nr.: 46001411 / JP 15238
Purchase Order No.:
No. de commande du client:

Benteler Auftrags-Nr.: 1591671
Benteler Order No.:
No. de commande Benteler:

Versandanzeigen-Nr.: 6525646
Dispatch Note No.:
No. d'avis d'expédition:

Produkt: NAHTLOSE STAHLROHRE
Product: SEAMLESS STEEL TUBES
Produit: TUBES D'ACIER SANS SOUDURE

Prüf-Nr.:
Inspection No.:
No. du certificat:

Hersteller: Warmrohrwerk Dinslaken
Manufacturer: IDN EN ISO 9001, ISO/TS-16949 CERTIFIED BY TUEV NORD CERT
Producteur: IPED 97/23/EC CERTIFIED BY TUEV NORD SYSTEMS

Herstellerzeichen:
Manufacturer's brand:
Marque du producteur:



Stempel des Abnahmebeauftragten: WA
Stamp of the inspection representative:
Poinçon du contrôleur:

Stahlerschmelzungsverfahren: ELEKTROSTAHL
Steelmaking process: ELECTRIC FURNACE
Procédé d'élaboration de l'acier: FOUR ELECTRIQUE

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Lieferbedingungen: JP STEEL 4130 rev.2 dated 17.01.2013, ASTM-A 519-2006, Hot finished, ANSI/NACE MR0175/ISO 15156-1:
Terms of delivery: 2009, ANSI/NACE MR0175/ISO 15156-2: 2009
Conditions de livraison:

Maße - Toleranzen: JP STEEL 4130 rev. 2
Dimensions-tolerances:
Dimensions-tolérances:

Stahlsorte: GRADE 4130
Steel grade:
Nuance d'acier:

Lieferzustand: QT
Delivery condition:
État de livraison:

Produktkennzeichnung: PKE: BENTELER BENTELER SIGN DIMENSIONS GRADE 4130 46001411 / JP 15238 ASTM-A 519,
Product marking: MR0175/ISO 15156-1, MR0175/ISO15156-2 WA
Marquage du produit:

AEZ = Ätzintintenbeschriftung, Etching ink marking, Gravure à l'encre . FK = Farbkennzeichnung, colour marking, marquage par couleur . FS = Farbscheiblenkung, paint stencilling, marquage par peinture . FSD = Farbstreihdrucker, Colour jet printer, Imprimante à jet d'encre de couleur . LK = Laserkennzeichnung, Laser marking, Marquage laser . PKE = Etikettenkennzeichnung, tag marking, marquage sur étiquette . PS = Prägestempel, die stamp, marquage par poinçonage . TS = Tintenstrahlkennzeichnung, Ink jet spray marking, imprimante à jet d'encre .

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER 

Steel/Tube

ABNAHMEPRÜFZEUGNIS EN 10204-3.1
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Pos.	Stück	Maße	Länge	Gewicht	Schmelzen-Nr.	Prüfdruck	Rohr-Nr.-Gruppe	Vielfachlängen
Item	Number	Dimensions	Length	Weight	Heat No.	Test pressure	Tube number group	Multiple lengths
Poste	Nombre	Dimensions	Longueur	Poids	No. de coulée	Pression d'épreuve	Série de no. des tubes	Longueurs multiples
		feet	feet	lbs				
0001	19	4.500" O.D. * 0.531" WT 17 FT - 24 FT	446,75	10007	579334			
0001	7	4.500" O.D. * 0.531" WT 17 FT - 24 FT	162,43	3668	580460			

Schmelzenanalyse [%] / Heat analysis [%] / Analyse sur coulée [%]

Pos.	Schmelzen-Nr.	C	SI	MN	P	S	CR	MO	NI
Item	Heat No.								
Poste	No. de coulée								
0001	579334	0,310	0,240	0,53	0,009	0,003	0,87	0,17	0,09
0001	580460	0,310	0,240	0,54	0,005	0,002	0,91	0,17	0,11

Prüfergebnisse / Test results / Résultats des essais

Die Rohre wurden zerstörungsfrei geprüft: The tubes are non destructive tested: Les tubes ont passé un essai non destructif:	UT-longitudinal imperfections: acc. to API 5CT, SR 2; UT-long. Test method: acc. to ASTM-E 213; Outside notch depth: 5,0 %; Inside notch depth: 5,0 %; UT-transv. imperfections: acc. to API 5CT, SR2; acc. to ASTM-E 213; Outside notch depth: 5,0 %; Inside notch depth: 5,0 %; UT-lamination detection: acc. to EN 10246-14, table 1; U2; over the entire tube length; Notch length: 6,00 mm; Notch width: 6,00 mm; T/4 < defect depth inside < T/2, max. 10 mm; Geometric inspection: with ultrasonic; wall thickness	PASSED
Augensichtkontrolle: Visual inspection: Examen visuel:	MATERIALVERWECHSLUNGSPRÜFUNG: Material conformity test: Vérification de la nuance:	PASSED
	MAßKONTROLLE: Dimensions examination: Vérification des dimensions:	PASSED

Ergebnisse der mechanischen Prüfung / Results of mechanical testing / Résultats des essais mécaniques

Die Probennahme erfolgte an Vielfachlängen.
The sampling was carried out on multiple lengths.
L'échantillonnage était réalisé aux longueurs multiples.

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER 
Steel/Tube

ABNAHMEPRÜFZEUGNIS EN 10204-3.1
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Zugversuch längs Streifenprobe / Tensile test longitudinal Strip test specimen / Essai de traction longitudinale Bande decoupee sur tube

Pos. Item Poste	Proben-Nr. Specimen No. No. de l'éprouvette	Schmelzen-Nr. Heat No. No. de coulée	Probenabmessung Specimen dimensions Dimensions de l'éprouv.	Streckgrenze Yield strength Limite élastique	Zugfestigkeit Tensile strength Résistance à la traction	Dehnung Elongation Allongement	Einschnürung Area reduction Coefficient de striction
Anforderungen Requirements Exigences			mm	Rp 0,2 % KSI 80-95	Rm KSI	A2° %	1. Formel 1. Formula 1. Formule
0001	000001	579334	25,40 X 13,80	89	106	36,00	
0001	000001	580460	25,40 X 14,00	87	106	36,00	

Härteprüfung / Hardness test / Essai de dureté

Pos. Item Poste	Proben-Nr. Specimen No. No. de l'éprouv.	Schmelzen-Nr. Heat No. No. de coulée	Härte Hardness Dureté
Anforderungen Requirements Exigences			HRC HB HV HRB HBW MAX 22,0
0001	000001	579334	018
0001	000001	580460	019

Kerbschlagbiegeversuch Notched bar impact test / Essai de flexion par choc (résilience) [1 CHARPY_VI]

Pos. Item Poste	Proben-Nr. Specimen No. No. de l'éprouv.	Schmelzen-Nr. Heat No. No. de coulée	Probenabmessung Specimen dimensions Dimensions de l'éprouvette	Probenlage Specimen position Position de l'éprouvette	Prüftemperatur Test temperature Température d'essai	Kerbschlagarbeit Absorbed energy Energie absorbée	Kerbschlagzähigkeit Impact strength Résistance au choc	Verf.-Bruchanteil Shear fracture Rupture ductile
Anforderungen Requirements Exigences			Länge Breite Höhe Length Width Height Longueur Largeur Hauteur	längs (L) longitudinal (L) longitudinal (L)		einzel mittel single average individuelle moyenne	einzel mittel single average individuelle moyenne	einzel mittel single average individuelle moyenne
				quer (Q) transversal (Q) transversal (Q)	GRAD °C -30	J J MIN 027 MIN 034	J/cm² J/cm²	% %
0001	000001	579334	55 10,00 10,00 10,00 10,00 10,00 10,00	L	-30	181 167 174		

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Kerbschlagbiegeversuch Notched bar impact test / Essai de flexion par choc (résilience) [1 CHARPY_V]

Pos. Item Poste	Proben-Nr. Specimen No. No. de l'éprouv.	Schmelzen-Nr. Heat No. No. de coulée	Probenabmessung Specimen dimensions Dimensions de l'éprouvette			Probenlage Specimen position Position de l'éprouvette	Prüftemperatur Test temperature Température d'essai	Kerbschlagarbeit Absorbed energy Energie absorbée		Kerbschlagzähigkeit Impact strength Résistance au choc		Verf.-Bruchanteil Shear fracture Rupture ductile	
			Länge Length Longueur	Breite Width Largeur	Höhe Height Hauteur	längs (L) longitudinal (L) longitudinal (L)		einzel single individuelle	mittel average moyenne	einzel single individuelle	mittel average moyenne	einzel single individuelle	mittel average moyenne
Anforderungen Requirements Exigences													
			mm	mm	mm	quer (Q) transversal (Q) transversal (Q)	GRAD °C -30	J MIN 027	J MIN 034	J/cm²	J/cm²	%	%
0001	000001	580460	55	10,00	10,00	L	-30	182					
				10,00	10,00			178					
				10,00	10,00			191	184				

Kerbschlagbiegeversuch Notched bar impact test / Essai de flexion par choc (résilience) [2 CHARPY_V]

Pos. Item Poste	Proben-Nr. Specimen No. No. de l'éprouv.	Schmelzen-Nr. Heat No. No. de coulée	Probenabmessung Specimen dimensions Dimensions de l'éprouvette			Probenlage Specimen position Position de l'éprouvette	Prüftemperatur Test temperature Température d'essai	Kerbschlagarbeit Absorbed energy Energie absorbée		Kerbschlagzähigkeit Impact strength Résistance au choc		Verf.-Bruchanteil Shear fracture Rupture ductile	
			Länge Length Longueur	Breite Width Largeur	Höhe Height Hauteur	längs (L) longitudinal (L) longitudinal (L)		einzel single individuelle	mittel average moyenne	einzel single individuelle	mittel average moyenne	einzel single individuelle	mittel average moyenne
Anforderungen Requirements Exigences													
			mm	mm	mm	quer (Q) transversal (Q) transversal (Q)	GRAD °C -40	J MIN 027	J MIN 034	J/cm²	J/cm²	%	%
0001	000001	579334	55	10,00	10,00	L	-40	180					
				10,00	10,00			170					
				10,00	10,00			173	174				
0001	000001	580460	55	10,00	10,00	L	-40	193					
				10,00	10,00			183					
				10,00	10,00			175	184				

Wärmebehandlung / Heat treatment / Traitement thermique

Hardening temperature: 870°C, Holding time: 1 min, Cooling: water / Tempering temperature: 735°C, Holding time: 5 min, Cooling: air

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER 

Steel/Tube

ABNAHMEPRÜFZEUGNIS EN 10204-3.1

INSPECTION CERTIFICATE EN 10204-3.1

CERTIFICAT DE RECEPTION EN 10204-3.1

Dokument-Nr.:

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Vermerk / Remark / Remarque

NACE Standard: Hardness acc. to NACE Standard MR0175 HRC max 22.; Certificate remarks: material free from mercury contamination;

Certificate-Remark: The steel is produced in an electric arc furnace, ladle and continuous casting machine, argon purged. This process is commonly referred to as "clean steel process". The steel is fully killed.

Verkäufer(in) / Sales personnel / Personne chargée : Mr Storm, Tel.: 05254 81-204274, Fax: 204289

Dinslaken, 11.12.2013, TEL.: 02064.623-5370 FAX: 02064.623-5390

Abnahmebeauftragter

Inspection representative

Contrôleur

DR. BASEL KEITA / Muel

Es wird bestätigt, daß die gelieferten Erzeugnisse den techn. Lieferbedingungen des Auftrages entsprechen. Dieses Dokument wurde mittels EDV erstellt und ist ohne Unterschrift rechtsgültig.

We certify that the supplied products comply with the order specification. This document was prepared by means of electronic data processing and is valid without signature.

Nous attestons que les produits livrés sont conformes aux stipulations de la commande. Ce document a été établi par traitement électronique de l'information et est valide sans signature.



ARCELORMITTAL TUBULAR PRODUCTS

SHELBY LLC.
132 WEST MAIN STREET
SHELBY, OHIO 44875-1471

Telephone 419/342-1200 FAX: 419/342-1437

MATERIAL
TEST
REPORT

ATTN: BARBARA WOYTEK

ISO/TS 16949:2009 ISO 9001:2008

13-430-2 9454X+GTA-F

SHELBY ORDER NO.
427212

C U S T O M E R	MARMON KEYSTONE CORPORATION			SPECIFICATION		CUSTOMER ORDER	
	C/O: METAL CUTTING SPECIALIST 11415 BRITTMORE PARK DRIVE HOUSTON TX 77041			ASTM A513 GMC0 A513 DOM 1 01-10		35-075069-01	

GRADE 520	SIZE(OD x ID x WALL) 5.750 X 4.750 X .500	QUANTITY 4.709 LB	168.00 FT	SHIPPED 09/13/13	DATE 09/13/13
--------------	--	----------------------	-----------	---------------------	------------------

CONDITION ASTM 513 Type 5	Produced to OD/ID Ref: WALL	PART NO.	S#00316253
EW TUFFDOM	STRESS RELIEVE ANNEAL	REV.	50064536

HEAT NO.	CHEMICAL ANALYSIS												GRAIN SIZE
	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	V	Al	OTHER	
4117283	.16	1.41	.011	.003	.190	.020	.070	.010	.040	.002	.036	.0032 B .0003 TI .0030	CA

MECHANICAL PROPERTIES								MAGNAFLUX		
HEAT NO.	LOAD NO.	YIELD	TENSILE	ELONG %	RED AREA %	HARDNESS		IMPACT	FREQ.	SEVERITY
		PSI	PSI			BHN	ROCKWELL	FT. - LBS		
4117283	T6161211	78200	89900	2.0"	29		RB	SIZE		
								10.0X10.0		
								TEMP C		
								-20-30		
								RESULTS		
115 90										
								110 97		
								104 98		

TOMMY HARDENABILITY (EXPRESSED IN 16THS)																
HEAT NO.	1	2	3	4	5	6	7	8	10	12	14	16	20	24	28	32

I.K. RATING					SLAG-OXIDE RATING		
HEAT NO.	A	B	C	D	INGOT	OXIDE	SLAG

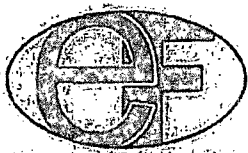
MELT SOURCE OTHER INSPECTION	Melted and Manufactured in USA EN 10204 3.1	THIS TEST REPORT NOTARIZED WHEN REQUIRED SWORN AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____
Material under this mtr was not exposed to mercury during processing.		NOTARY PUBLIC

Frank Simone

Frank Simone, Chief Metallurgist

MATERIAL PRODUCED TO THE SPECIFICATION(S) SHOWN ABOVE. NO ADDITIONAL SPECIFICATION(S) IMPLIED OR WARRANTED. THIS TEST REPORT SHALL NOT BE ALTERED OR REPRODUCED EXCEPT IN FULL.

Form 8701-04 Rev. 04-09-04



Edwards Fabrication

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134-44th Street
Corpus Christi, TX 78405

Purchase Order: 15491

Certificate Number				Date of Examination	
15781				03/28/14	
ID#	Part Number	Description	SWL*	Proofload	
15781	7361-0864	4.0" Lift-Eye Clamp-2 Bolt	4209 lbs.	8418 lbs.	
DO NOT WELD, CUT, ADD TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.					
* Safe Work Load					

THIS PRODUCT IS MANUFACTURED IN THE U.S.A.

We hereby verify that the above information is correct
as contained in the records of Edwards Fabrication L.L.C.

Michael White
Test Operator

Thomas F. Edwards
President
Edwards Fabrication L.L.C.



Edwards Fabrication

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134 44th Street
Corpus Christi, TX 78405

Purchase Order: 15926

Certificate Number				Date of Examination	
15949				04/09/14	
ID#	Part Number	Description	SWL*	Proofload	
15949	7361-0864	4.0" Lift Eye Clamp 2 Bolt	4207 lbs.	8414 lbs.	
DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.					
* Safe Work Load					

THIS PRODUCT IS MANUFACTURED IN THE U.S.A.

We hereby verify that the above information is correct
as contained in the records of Edwards Fabrication L.L.C.

Michael White
Test Operator

Thomas F. Edwards
President
Edwards Fabrication L.L.C.

API Monogram Licensee
ISO 9001:2008 Certified
PED 97/23/EC
AD 2000-Merkblatt W0



MARS FORGE PVT. LTD.

Rajkot Gondal Nh. 8-B, Village : Shapar - 360024 Dist. Rajkot (Guj.) India.
Tel. No. : 91 - 2827 - 252190, 252191, Fax No. : 91 - 2827 - 252119
E-mail : info@marsforge.com, Web. : www.marsforge.com

MATERIAL TEST REPORT

This certificate of Material is per EN 10204 3.1

TC Ref No : 36/D/2013-2014

CUSTOMER : R & S OIL FIELD INC:USA

DATE 29.03.2014	Purchase Order Ref.No. : 401 Dated 06.02.2014	Invoice No. : 36	MF Drawing No. : MF 0301-01F
Chemical Analysis Ref: 09/020114	Physical Analysis Ref: MFI-088 & AIFT-595	Test Certificate Ref: 1112	Mode of Shipping: SEA
Quantity : 27 Pcs	Part Description: Weld Neck Flange, 4-1/16" 51A X 4" SCH XXH A105, ASK, PSL2	Customer RM Spec No: MARS-01-002-Rev.1	
Heat Code/Punch: V 01112	Part Number: RSMFW405X	Marking Practice : EAF-LRF-VD-CCM	
Heat Number: V 01112	Grade/Condition: A105/A350 LF2	Reduction Ratio: Forging Reduction Ratio : 1:3.6	

CHEMICAL ANALYSIS RESULTS

Elements	C.	Mn.	Si.	Cr.	Ni.	Mo.	S.	P.	V.	Cu.
Minimum %	..	0.60	0.10	..	..	..	..	..	..	..
Maximum %	0.35	1.05	0.35	0.30	0.40	0.12	0.040	0.035	0.05	0.40
Heat Analysis %	0.18	0.88	0.20	0.018	0.005	0.003	0.010	0.019	0.004	0.006

MECHANICAL PROPERTIES (QTC SIZE 4" X 4")

CHARPY IMPACT PROPERTIES

(ASTM A 370)	Requirement	Actual	Size	10 x 10 x 55 mm	DIN	E
0.2% Yield Strength (PSI)	46,000 PSI MIN	50733 PSI	Impact	15 Ft-Lbs Min @ -50° F		
Tensile Strength (PSI)	70,000 PSI MIN	75490 PSI	Energy (F)	22.13	20.03	25.08
% Elongation	19.0% MIN	32.00%	Average	25.08 ft-lbs		
% Reduction Of Area	32.0% MIN	63.40%	L.E. (inch)	0.014	0.017	0.015
Hardness (BHN)	140-187 BHN	148-159 BHN				

HEAT TREATMENT

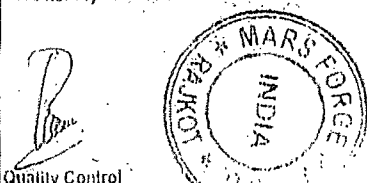
CYCLE	TEMPERATURE (C)	TEMPERATURE (F)	TIME	QUENCH MEDIA
Normalized	920 °C	1688 °F	120 Minutes	AIR COOLED
Austenitized	...	...	...	...
Tempered	...	...	...	...

NON DESTRUCTIVE EXAM (NDE)

	Yes/No	Spec Number
Ultrasonic Testing (UT)	NO	...
Magnetic Particle Inspection (MPI)	YES	ASME Section-V, Article 7

*Country of origin - India

*We hereby declare that the material herein described is in accordance with specifications of the order.



API Monogram Licensee
ISO 9001-2008 Certified
PED 97/23/EC
AD 2000-Merkblatt W0



MARS FORGE PVT. LTD.

Rajkot Gondal Nh. 8-B, Village : Shapar - 360024 Dist. Rajkot (Guj.) India
 Tel. No. : 91 - 2827 - 252190, 252191, Fax No. : 91 - 2827 - 252119
 E-mail : info@marsforge.com, Web. : www.marsforge.com

MAGNETIC PARTICLE EXAMINATION REPORT

PART No.	: MF 0301-01F	DATE	: 14.03.2014
PART NAME	: Weld Neck Flange, 4-1/16" 5M X 4" SCH XXH A105, 45K, PSL2	INSPECTOR/ LEVEL	: ASNT L-III
HEAT NO	: V 01112	QUANTITY	: 27 PCS
PROC No	: Q:WI:05 B	REJECT	: None
ACCEPT	: Acceptable		
WO/PO No.	: R&S PO# 401 Dated 06.02.2014		

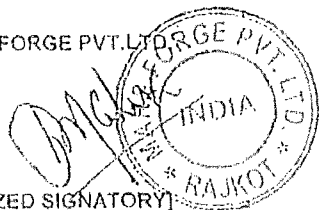
TEST PROCEDURE

EQUIPMENT :	: "Magnafield "Make , Electromagnetic Crack Detector
DETECTING MEDIA	: Fluorescent Powder
METHOD	: Wet fluorescent method
CURRENT APPLY	: H.W.D.C./A.C. Current used
LOCATION	: Cover 100% (Assessable) area of the job
MAGNETIZATION	: Longitudinal
TYPE OF MAGNETIZATION	: Continuous
EXAMINATION	: Surface & sub surface defect.
REFERENCE STANDARD	: ASME Section V, Article 7, SE709
TESTED BY	: HITESH MAHETA

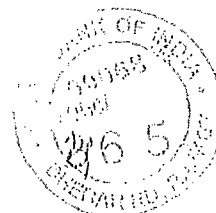
OBSERVATION : No relevant indication found

RESULT : Jobs are found satisfactory in MPT.

For, MARS FORGE PVT. LTD.



[AUTHORIZED SIGNATORY]





MORRIS INSPECTIONS

Mailing Address:
2316 Memorial Pkwy.
Portland, TX 78374-3206

Business Telephone:
(361) 643-7066
Cellular Telephone:
(361) 877-0776

QW-404 SUGGESTED FORMAT FOR MANUFACTURER'S RECORD OF WELDER

OR WELDING OPERATOR QUALIFICATION TESTS

(See QW-301, Section IX, ASME Boiler and Pressure Vessel Code)

Welder's Name	JEFFREY CHARLES THOMSEN		S. S. No.	
Welding Process(es)	Shielded Metal Arc Welding	Type	Manual	Position (QW-405.1)
Welding Procedure Specification No.	SM-4130	PQR No.	SM-4130	Backing (QW-402.7)
Material Spec. (QW-403) No.	HF-4130	Grade	LN80	P-No. " " Group " "
To				
Material Spec (QW-403) No.	HF-4130	Grade	LN80	P-No. " " Group " "
Test Thickness	531"	Range	Up to 1.062"	Test Dia. 4.00" Range 2 7/8" O.D. over
Process(es)	SMAW		SMAW	
Filler Metal (QW-404) Spec.	SFA 5.1	SFA	5.5	SFA
	Class No. E-6010	Class No.	E-8018	Class No.
	F No. 3 A No. 1	F No. 4	A No. 3	F No. A No.
Filler Diameter (QW-404.6)	1/8"		5/32"	
Weld Deposit Thickness	125"		406"	
Consumable Inert (QW-404.22)	N/A		N/A	
Gas (QW-408) Shielding	N/A		N/A	
Flow Rate	N/A		N/A	
Gas (QW-408) Purge	N/A		N/A	
Flow Rate	N/A		N/A	
Elec. (QW-409) AC/DC	Direct		Direct	
Polarity	Reverse		Reverse	
Volt Range	22-26		23-27	
Amp Range	80-120		150-210	
Progression (QW-405.3)	Root Up	Hot Pass	Up	Filler Up Cap Up
Transfer Mode (QW-409.2) GMAW	N/A			
Other		Preheat	200 F.	PWHT. N/A

For Information Only
Material 4130 IS NOT listed in ASME Section IX
but acceptable.

Submerged Arc Flux Trade Name

Guided Bend Test Results (QW-402.2(a), QW-402.3(a), QW-402.3(b))

Specimen No.	Type	Figure No.	Results	Specimen No.	Type	Figure No.	Results

Radiographic Test Results (QW-304 & QW-305)

For alternative qualification of groove welds by radiography

Radiographic Results: Satisfactory

Test Conducted by J. Morris - MORRIS INSPECTIONS

Laboratory—Test No. 09-019

We certify that the statements in this record are correct and that the test welds prepared, welded and tested in accordance with the requirements of Section IX of the ASME Code.

Joe Morris

Organization

DU-TEX, INC.

Date March 23, 2009

By

(Details of record of tests are illustrative only and may be modified to conform to the type and number of test required by the Code.)

NOTE: Any essential variables in addition to those above that be recorded. This form modified for information and typing purposes. (QW-301.4).



MORRIS INSPECTIONS

Business Telephone

(361) 643-7066

Cellular Telephone

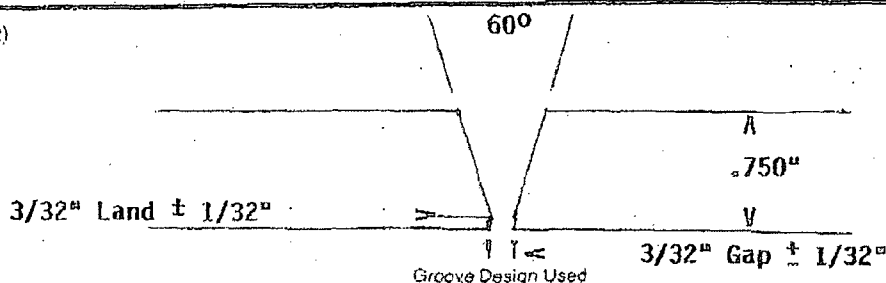
(361) 877-0776

Mailing Address:

2316 Memorial Pkwy.
Portland, TX 78374-3206QW-483 SUGGESTED FORMAT FOR PROCEDURE QUALIFICATION RECORD (PQR)
(See QW-201.2, Section IX, ASME Boiler and Pressure Vessel Code)

Company Name DU-TEX, INC. Date March 24, 2009
 Procedure Qualification Record No. SM-4130
 WPS No. SM-4130 Transfer Mode GMAW N/A
 Welding Process(es) Shielded Metal Arc Welding
 Types (Manual, Automatic, Semi-Auto.) Manual

JOINTS (QW-402)



BASE METALS (QW-403)

Material Spec. HF-4130 To HF-4130
 Type or Grade LN 80 To LN 80
 P-No. - Grp. - to P-No. - Grp. -
 Thickness Tested .750" Range: .1875" - 1.500"
 Diameter Tested 4.500" Range: Proc. unlimited
 No Pass Greater than 1/2" in thickness No
 Backing: Yes No XX Material Weld Metal only
 Other Material 4130 IS NOT listed in ASME Section IX
But is acceptable.

FILLER METALS (QW404)

Process(es)	SMAW	SMAW
Weld Metal Analysis A-No.	1	3
Weld Bead Number	1 & 2	Balance
Dia of Electrode	1/8"	5/32"
Filler Metal F-No.	3	4
SFA Specification	5.1	5.5
AWS Classification	E-6010	E-8018
Weld Deposit Range	.250"	1.250"
Weld Deposit Thickness	.125"	.625"
Tungsten: Size <u>N/A</u> Type: <u>-</u> Class: <u>-</u>		
Flux Trade Name: <u>N/A</u> Designation: <u>-</u>		
Other <u>-</u>		

POSTWELD HEAT TREATMENT (QW-407)

Temperature None applied
 Time -
 Other -

GAS (QW-408)

Process(es) SMAW-N/A
 Shielding -
 Flow Rate -
 Purge -
 Flow Rate -
 Other -

ELECTRICAL CHARACTERISTICS (QW-409)

Process(es)	SMAW	SMAW
Current	Direct	Direct
Polarity	Reverse	Reverse
Volts Range	22-26	23-27
AMPS Range	80-120	150-210
Other <u>-</u>		

POSITION (QW-405)

Position of Test Groove 6-G
 Weld Progression (Up, Down, Flat) -
 Root Up Hot Pass Up Filler Up Cap. Up

PREHEAT (QW-406)

Preheat Temp. 700 F.
 Interpass Temp. Min. - Max. -
 Other -

TECHNIQUE (QW-410)

Process(es)	SMAW	SMAW
Travel Speed	Variable	Variable
String or Weave Bead	String	String
Oscillation	None	None
Multi or Single Pass (per side)	Multiple	Multiple
Single or Multi Electrodes	Single	Single
Peening	None	None
Other <u>-</u>		

QW-483 (Back)

Tensile Test (QW-150)

NOTE: MATERIAL SPECS

Electrode Tensile Strength is 80,000 PSI

Specimen No.	Width	Thickness	Area	Ultimate Total Load lbs.	Ultimate Unit Stress psi	Character of Failure & Location
T - 1	.751"	.743"	.558"	45,000	80,645	Satisfactory-Broke in Weld Area
T - 2	.748"	.748"	.554"	44,400	80,144	Satisfactory-Broke in Weld Area

Guided Bend Test (QW-160)

Specimen No.	Type	Figure No.	Results	Specimen No.	Type	Figure	Results
6G - SB1	SBend	QW462.2	Satisfactory				
6G - SB2	SBend	QW462.2	Satisfactory				
6G - SB3	SBend	QW462.2	Satisfactory				
6G - SB4	SBend	QW462.2	Satisfactory				

Toughness Tests (QW-170)

Specimen No.	Notch Location	Specimen Size	Test Temp.	Impact Values	Lateral Exp.		Drop Weight	
					% Shear	Mils	Break	No Break

Average ft/lb for this size _____

Minimum ft/lb for this size _____

Fillet Weld Test (QW-180)

Pos.	Spec. No.	Contour	Leg No. 1	Leg No. 2	Throat	Bend Defects	Macro-Pent.	Results

Other Tests

Type of Test _____

Deposit Analysis _____

Other _____

Welder's Name Jeffrey Charles Townsend S.S.# _____ Stamp No. N/ATest conducted by: J. Morris-MORRIS INSPECTIONS Laboratory Test No. 09-022

We certify that the statements in this record are correct and that the test welds were prepared, welded and tested in accordance with the requirements of Section IX of the ASME Code.

Date March 25, 2009 By Joe Morris Manufacturer DU-TEX, INC.

Details of record of tests are illustrative only and may be modified to conform to the type and number of tests required by the Code. This form modified for information and typing purposes (QW200.2(D))

NQS INSPECTION, LTD

06589

Non-Destructive Testing Report

Report #

Customer: Gates

Date: 6/9/41

Project: 202307

METHOD

Ultrasonic	☒	Procedure #	NAS-PA-UT/2002/Rev2
Magnetic Particle	☐	Standard #	ASME
Liquid Penetrant	☐	Section # Level	II

TECHNIQUE

Shear wave	Angle	AC	DC	Dwell Time
Straight Beam	60	Wet	Dry	Penetrant #
Unit Type	70	Continuous		Developer #
Ref Standard	45	Residual		Cleaner #
Range	0	Background		

RESULTS

[illegible]

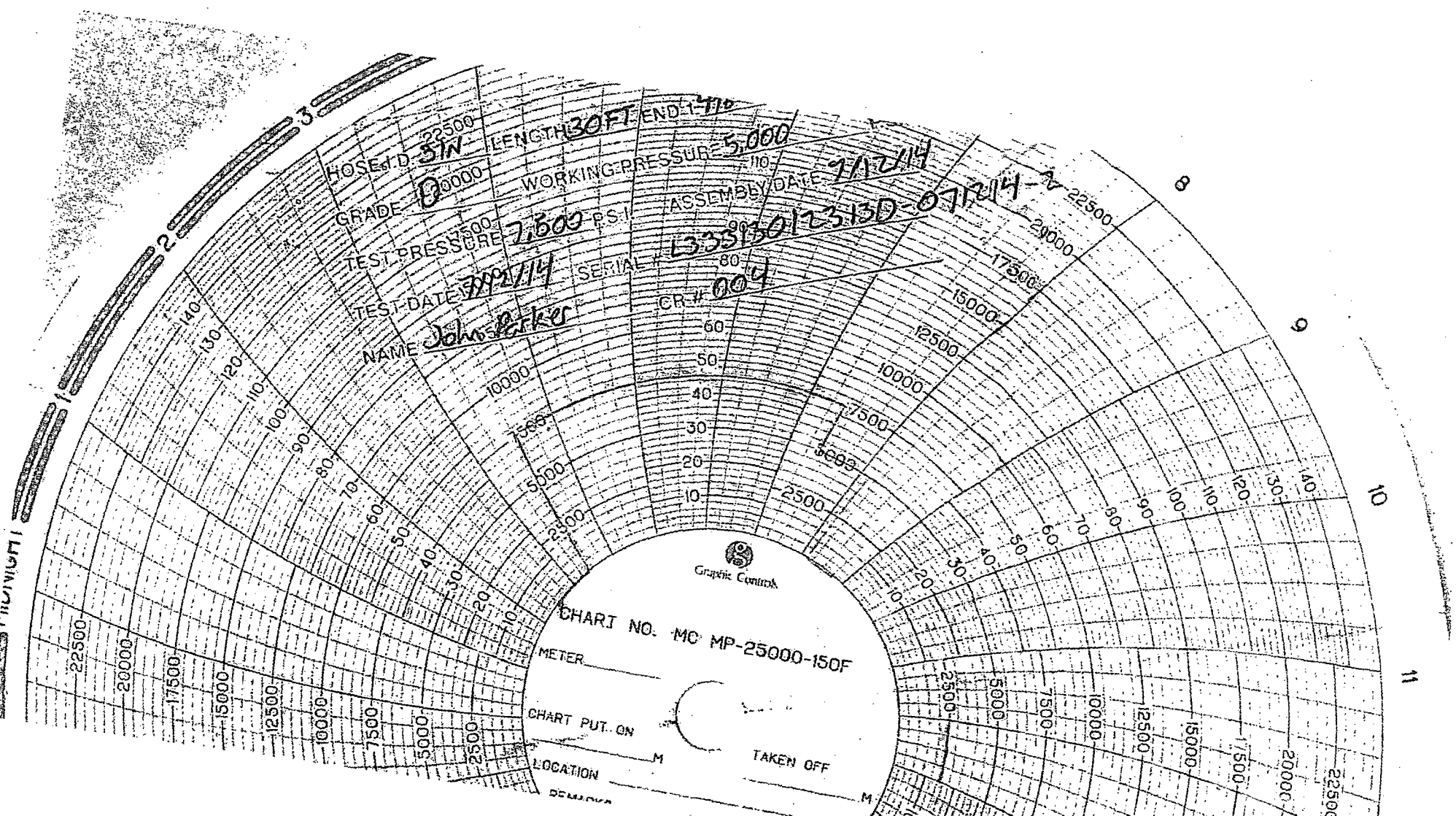
Inspector: To Baker

SNT Level II

PG # _____ of _____

Customer Representative:

Hours 24.5 Mileage



PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Apache Corporation
LEASE NO.:	NMLC-029426B
WELL NAME & NO.:	Crow Federal SWD 1
SURFACE HOLE FOOTAGE:	0890' FNL & 0625' FEL
LOCATION:	Section 09, T. 17 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico
API:	30-015-42469

The original COAs still stand with the following addition:

1. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

JAM 080614