L.S. SIMS
& ASSOCIATES
Environmental Consulting

September 2, 2009

Mr. Joseph R. May, P.G.
Florida Department of Environmental Protection
400 North Congress Avenue, Suite 200
West Palm Beach, Florida 33401

Re: **Okeechobee Landfill, Inc.**
UIC Number: 0040842-022-UC
RFI Number 3: Okeechobee Landfill Injection Well (IW-1)

Dear Mr. May:

L.S. Sims & Associates have reviewed the Department's request for additional information dated August 25, 2009 and have prepared the following responses.

Comment 1:

The response to RFI-2, received August 7, 2009, states various procedures for calibration, please see comments for each instrument/assembly.

a) Pressure element PE 200 seems to be a pressure element for PIT 200 constituting an assembly for which a manufacturer's calibration certificate must be submitted.
e) Level element LE 400 seems to be a level sensing element for LIT 400 constituting an assembly for which a manufacturer's calibration certificate must be submitted.
f) Level element LE 401 seems to be a level sensing element for LIT 401 constituting an assembly for which a manufacturer's calibration certificate must be submitted.
g) Annulus pressure tank PE 300 seems to be a pressure element for PIT 300 constituting an assembly for which a manufacturer's calibration certificate must be submitted.
h) Annulus pressure tank LS 300 response states it to be a level switch but from the illegible Copy of P&ID it appears to be LE, submit a signed and sealed P&ID.

Please submit calibration certificates for the above stated instruments/assemblies.

1530 U.S. Highway 1 Rockledge, Florida 32955 Phone (321) 504-4046 Fax (321) 504-4035

Response –

Regarding Items a, e, f, and g: Calibration test reports for the pressure transducers (PE-200, PE-300) and level transducers (LE-400, LE-401) are included herein as Exhibit 1.

Regarding Item h: Larger scale plots of the P&ID (signed & sealed) are included herein as part of Exhibit 3. The device mentioned in the comment is a level switch (LS). LE-300 is a manually operated sight glass on the side of the annulus tank. This device provides a means to visually observe the water level in the tank and is not subject to calibration.

Comment 2:

The Mill Certificates received on August 15, 2009 are illegible. Please submit legible copies of the mill certificates. Please indicate on the mill certificates which well casings are associated with the injection and monitor wells.

Response –

The requested information has been included and copies of mill certificates for casing used in the wells' construction are included here as Exhibit 2

Comment 3:

The drawings "WMI Leachate Disposal Injection Well P&ID sheet 1 of 1", "Leachate Injection Well Project IW Slab – Structural Plan" and "Leachate Injection Well Project IW Slab – Elevation Schematic" received on August 7, 2009 is still partially illegible. Please review the drawings to assure that the details can be plainly seen on the sheets submitted.

Response –

Larger sized copies of the following drawings (signed & sealed) are attached to this RFI response letter.

C-1 LEACHATE TRANSFER PIPELINE ROUTING
S-2 IW SLAB - STRUCTURAL PLAN
S-3 IW SLAB ELEVATION SCHEMATIC
I-1 PROCESS & INSTRUMENTATION DIAGRAM

If you have any questions or need additional information, you can contact me at (321) 504-4046.

Sincerely,

9/2/09

James E. McGrath, P.G.
L.S. Sims & Associates, Inc.

Cc: Gardner Strasser, P.G., FDEP
Joe Haberfield, P.G., FDEP
Nancy Marsh, USEPA Region IV
Steven D. Anderson, P.G., SFWMD
Tim Hawkins, WMI
Tony Bishop, WMI
Roger Mayfield, P.E.
File

L.S. SIMS
& ASSOCIATES
Environmental Consulting

UIC Number: 0040842-022-UC
RFI Number 3: Okeechobee Landfill Injection Well (IW-1)

EXHIBIT 1

Calibration test reports for pressure transducers (PE-200, PE-300)

Calibration test reports for level transducers (LE-400, LE-401)

(Instrument devices and calibration test reports
provided by Sligo Systems, Inc.)

1530 U.S. Highway 1 Rockledge, Florida 32955 Phone (321) 504-4046 Fax (321) 504-4035

SLIGO SYSTEMS
Landfill Pumps & Controls
PO Box 350
Cassadaga, FL 32706
386-218-4981
www.sligosystems.com

PRESSURE TRANSDUCER TEST REPORT

DATE OF TEST: August 31, 2009

DEVICE NUMBER: PE-200
MAKE & MODEL: ROSEMONT 3051S 2 C G 4A A11 A 1A B4 M5
RANGE 0 - 300 psi
SERVICE: INJECTION WELLHEAD PRESSURE

TEST GAUGE
NO: W396-09
MAKE/MODEL: ASHCROFT 45 1009S
RANGE 0 - 100 psi
DATE LAST CALIBRATED: August 6, 2009

TEST DATA

GAUGE PRESSURE psi	TRANSDUCER READING psi	DEVIATION psi	DEVIATION FROM THE MEAN +/- %
18	17.6	0.4	1.1%
26	26.4	0.4	0.8%
46	46.8	0.8	0.9%
AVERAGE DEVIATION FROM THE MEAN			0.9%

SLIGO SYSTEMS

DOUG CHAPPEL

9/1/2009
DATE

SLIGO SYSTEMS
Landfill Pumps & Controls
PO Box 350
Cassadaga, FL 32706
386-218-4981
www.sligosystems.com

PRESSURE TRANSDUCER TEST REPORT

DATE OF TEST: August 31, 2009

DEVICE NUMBER: PE-300
MAKE & MODEL: ROSEMONT 3051S 2 C G 4A A11 A 1A B4 M5
RANGE 0 - 300 psi
SERVICE: ANNULUS PRESSURE

TEST GAUGE
NO: W395-09
MAKE/MODEL: ASHCROFT 45 1009S
RANGE 0 - 100 psi
DATE LAST CALIBRATED: August 6, 2009

TEST DATA

GAUGE PRESSURE psi	TRANSDUCER READING psi	DEVIATION psi	DEVIATION FROM THE MEAN +/- %
19	18.9	0.1	0.3%
46	45.5	0.5	0.5%
91	91.4	0.4	0.2%
AVERAGE DEVIATION FROM THE MEAN			0.3%

SLIGO SYSTEMS

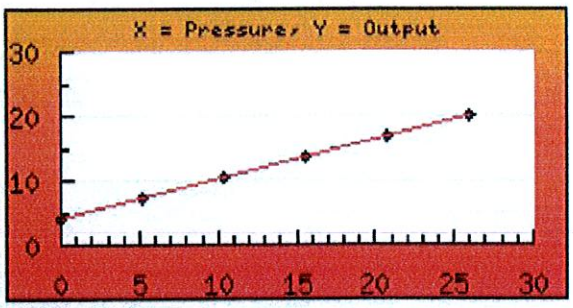
DOUG CHAPPEL

9/1/2009
DATE

Part#	0416.15902.020123.43
Serial#	34019

Px Zero	Px FS	Units
0	26	PSI (G)

Non-Linearity:		
Spec	Actual Max	Pass/Fail
1	0.009704%FS	In Spec



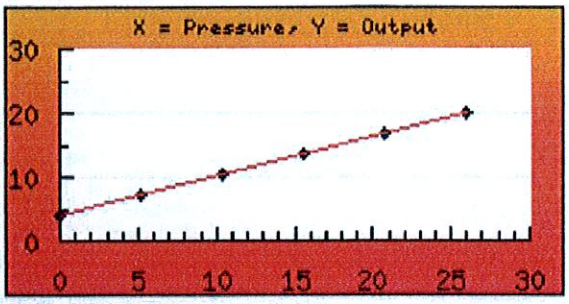
Point	Px In	Output	Lin Reg	Deviation	% Error	Status
0.00%	0.00	4.007	4.006524	0.000476	0.002977	In Spec
20.00%	5.20	7.206	7.205781	0.000219	0.001369	In Spec
40.00%	10.40	10.404	10.405038	-0.001038	0.006489	In Spec
60.00%	15.60	13.605	13.604295	0.000705	0.004406	In Spec
80.00%	20.80	16.802	16.803552	-0.001552	0.009704	In Spec
100.00%	26.00	20.004	20.002810	0.001190	0.007442	In Spec

**Red/orange cells contain defined values, all others contain generated data.*

Part#	0416.15902.020123.43
Serial#	34310

Px Zero	Px FS	Units
0	26	PSI (G)

Non-Linearity:		
Spec	Actual Max	Pass/Fail
1	0.013043%FS	In Spec



Point	Px In	Output	Lin Reg	Deviation	% Error	Status
0.00%	0.00	4.010	4.011857	-0.001857	0.011614	In Spec
20.00%	5.20	7.212	7.209914	0.002086	0.013043	In Spec
40.00%	10.40	10.408	10.407971	0.000029	0.000179	In Spec
60.00%	15.60	13.606	13.606029	-0.000029	0.000179	In Spec
80.00%	20.80	16.805	16.804086	0.000914	0.005718	In Spec
100.00%	26.00	20.001	20.002143	-0.001143	0.007147	In Spec

**Red/orange cells contain defined values, all others contain generated data.*

L.S. SIMS
& ASSOCIATES
Environmental Consulting

UIC Number: 0040842-022-UC
RFI Number 3: Okeechobee Landfill Injection Well (IW-1)

EXHIBIT 2

Casing Mill Certificates

1530 U.S. Highway 1 Rockledge, Florida 32955 Phone (321) 504-4046 Fax (321) 504-4035

INJECTION WELL

42" Conductor Casing

36" Surface Casing

26" Intermediate Casing

16" Final Casing

DUAL ZONE DEEP MONITOR WELL

34" Conductor Casing

24" Surface Casing

16" Final Casing/ Shallow Monitor Zone

INJECTION WELL

42" Conductor Casing

Изготовитель
Producer

ОАО "Харцызский трубный завод"
ул. Патона, 9, г.Харцызск
Донецкой обл. 86703 УКРАИНА

PJSC "Khartsyzsk Tube Works"
9, Paton str. Khartsyzsk
Donetsk Reg. 86703 The UKRAINE

Грузополучатель, адрес Consignee, address

65026, Украина, г.Одесса, Таможенная пл. 1, Одесский морской торговый порт, США

Дата отгрузки
The date of load Shipment **13.06.2006**

Заказ-наряд № Order № **1955**

Вагон Waggon № **67864801**

Контракт № Contract № **633 от 19.05.2005**

Система управления сертифицирована по стандартам Management System is certified in accordance with the Standards ISO 9001:2000; ДСТУ ISO 9001:2001; API Spec Q1-Seventh Edition, ISO 14001:2004; OHSAS 18001:1999.
Продукция сертифицирована по стандарту Products is certified in accordance with the Standard API Spec 5L:2004 API Spec 2B:2001.

СЕРТИФИКАТ КАЧЕСТВА № 28915
CERTIFICATE OF QUALITY

Страница Page 1 Страниц Pages 2

Согласно According DIN 50049 3.1B

Наименование товара Denomination of product	НД покрытия Standard for coating	НД труб Standard for pipes
Трубы стальные электросварные прямошовные, изготовленные методом дуговой сварки под слоем флюса Electric-welded longitudinal steel pipes, manufactured by the method of submerged arc welding under flux		API Spec 5L (43rd edition) PSL 2

Марка стали Steel grade Класс прочности Strength factor	Номер трубы Pipe number	Номер плавки Heat number	Диаметр дюйм Diameter inch	Толщина дюйм Thickness inch	Длина фут Length foot	Номер партии сварного соединения Weld joint lot number		Номер партии покр. Lot number of coating	Гидроисп. давл. Hydrostatic test pressure, psi	
						Продольного Longitudinal	Поперечн. Transverse		Стандартное Standart	Альтернативное Alternative
X52/X42	613308	6437	42	0.375	39.2	6133			840	
X52/X42	613313	6437	42	0.375	39.1	6133			840	
X52/X42	613306	6437	42	0.375	39.2	6133			840	
X52/X42	613715	6436	42	0.375	39.2	6137			840	
X52/X42	613307	6437	42	0.375	39.2	6133			840	
X52/X42	613304	6437	42	0.375	39.0	6133			840	

FSI P.O. 1040140700
Electro-welded steel pipes with one longitudinal weld, made by the method of arc welding under flux (SAW).
According to data available from the mill-supplier, steel plate used for pipe production was subjected to ultrasonic examination over the whole area - the results are satisfactory.
The preservative coating made by black bitumen lacquer is applied onto the whole external surface.
Welded joints are UT examined along the whole length, calibration of equipment was performed on reference standard, witch contains four machined notches N5 and one radially drilled hole-diameter 1.6 mm. Repaired and end sections of welded joints were tested by radiological examination with sensitivity not less than 2 % thickness of welded joint. Full circumference of end metal of all pipes was UT examined. NDT results are satisfactory.
Tensile tests of mechanical parameters of metal and welded joints were performed on flat full-size specimens as per ASTM A370 with width in tested part of a specimen 1,496 in., impact toughness test were performed on specimens cut out transversally to the rolling direction as per ASTM A370 by section size 0,394x0,394 in. at metal thickness 0,500 in. and 0,625 in., 0,394x0,295 at metal thickness 0,375 in. Tolerances on out-of- roundness and straightness of pipes are according to API 5L. Each pipe was subjected to hydrostatic testing, endurance time - 10 sec min.
Heat treatment of pipes and welded joints was not performed. All pipes are equipped with steel bevel protectors.

Погружено в вагон Loaded in waggon						Качество труб, указанных в настоящем документе, соответствует условиям Контракта и требованиям НД. The quality of pipes included in this Certificate compiles with the terms of the Contract and the requirements of Standard.
Количес. шт Quantity, pcs	Общая длина труб, фут Total length of pipes, foot	Теор. масса труб, фунт Theor. mass of pipes, lb	Теор. масса труб, кг Theor. mass of pipes, kg	Теорет. масса покрытия, кг Theor. mass of coating, kg	Теорет. масса труб с покрытием, кг Theor. mass of pipes with coating, kg	
6	234.9	39196	17737	0		

conductor 42" IW Pit Pipe

Customer Number: All Webb
☐ Inventory Transfer To:
All Webb's Enterprises, Inc. 309 Commerce Way Jupiter FI 33458-

Date Shipped	Sales Person	Terms

VASS PIPE & STEEL CO., INC.

158 Third Street
PO Box 583
Mineola, NY 11501
Phone (516) 741-8398
Fax (516) 741-8210
Toll Free 800-272-8277

Bill of Lading
Packing List

Rel # 58276 - HT
Date 1/25/2008
Rel'd by KISHOR
Whse Vass

Issued for Account of Vass Pipe and Steel

ATTN:

P.O. # OKI001
☐ Pick up at ☑ Ship to
OKEECHOBEE LANDFILL INC 10800 NE 128 TH AVE CONTACT: GENE WEBB OKEECHOBEE FL 34792- 561-718-5090

Shipped Via	Freight	FOB Point

Quantity	Bndl	Pcs	DESCRIPTION OF PIPE TO BE RELEASED Length	Product	B / L	Ship Name	Mill	Instructions
	0	7	D/R	42 BPE STD .375W WELDED API5L/X42/X52/PSL2	WBCA1000510 52	OMER KAPTANOGLU	KHARTSYZSK	

2 TRUCK ON LOAD # 1 4 PCS AND ON LOAD # 2 3 PCS

Received in good condition by_____ Signature_____ Date_____

SIGNED BILL OF LADING MUST ACCOMPANY FREIGHT INVOICE FOR PROMPT PAYMENT

CALL 24 HRS IN ADVANCE BEFORE DELIVERY

Tuesday, January 29, 2008

conductorcsg 42" IW shipping rept.

ПОКАЗАТЕЛИ КАЧЕСТВА — INDICES OF QUALITY

Механические свойства металла / Mechanical properties of base metal

Номер плавки Heat number	Времен. сопрот. вдоль Ultimate strength along, psi	Времен. сопрот. поперёк Ultimate strength across, psi	Предел текучести Yield strength psi	Относительное удлинение Relative elongation, % 52"	Энергия удара, Дж Impact energy, J KCV 32°F		MTT DWTT % 50°F
6426		61000	69000	36	139 141 155		80 80
6437		71000	58000	40	188 149 132		86 86
6485		68000	54000	42	116 124 143		86 86

Механические свойства продольных сварн. соед. / Mechanical properties of Longitudinal Weld Joints

Номер партии Lot number	Временное сопротивление Ultimate strength, psi	Энергия удара, Дж Impact energy, J по Ш.Ш, KCV 32°F			Ударно-ческий изгиб Guided-bend test	Твердость, Hardness HRC NACE MR0175 осн. металл the area of base metal	зона терм. возд. heat affected zone	металл сварн. соед. weld metal
6138	75000	52	58	49	sat	2 1	4 3	9 10
6136	75000	52	46	52	sat	1 2	3 4	11 8
6184	83000	52	66	70	sat	1 1	3 3	5 6

Треб. контр. Requirement of Contract																	

Химический состав, % / Chemical composition, %

Номер плавки Heat number	CE x100 Pcm	C x100	Si x100	Mn x100	Al x1000	S x1000	P x1000	V x1000	Nb x1000	Ti x1000	Cu x100	Cr x100	Ni x100	Mo x100	N x1000	Ca x1000	B x10000
6426	31 31	9 9 8 9	21 22 22 22	129 128 123 128	41 41 41 41	30 5 5 5	6 13 10 10	12		18 16 27 19	2 2 2 2	2 6 6 6	5 4 4 3		5 10	2.3 2.3	
6437	31 32	9 9 10 10	20 20 21 21	130 134 129 130	35 35 33 34	6 6 5 8	14 13 12 12			20 20 29 33	1 1 1 1	1 6 5 5	2 2 1 1		6 6	2.1 2.2	
6485	30 32	8 9 10 10	18 18 19 19	132 133 132 134	45 44 43 44	6 7 5 5	15 16 13 13			22 21 40 35	3 3 3 3	3 6 6 6	3 3 3 2		9 8	1.6 1.8	

Треб. контр. Requirement of Contract	Мех 43	MAX 22		MAX 140		MAX 15	MAX 25			MAX 40							

Антикоррозионное покрытия / Anticorrosive Coating

Номер партии покрытия труб Lot number of coating pipes	Толщина наружного покрыт., мм не менее Thickness of outer coating no less, mm	Шифр материал. покрытия Code of coating materials	Материалы покрытия Coating Materials: Основной слой Basic layer	Адгезионный слой Adhesive layer	Грунтовочный слой Primer layer	Результаты испытания партий антикоррозионного покрытия труб, не менее Lots anticorrosive coating of pipes test results, no less: Диэлектр. сплошн., кВ Dielectrical solidity, kV	Прочность при ударе, Дж Impact strength, J	Прочность связи, Н/см Peel strength, N/cm

BUREAU VERITAS EXPERTS IN UKRAINE PARIS 1828 INDUSTRIE SERVICES

REVIEWED
KHAREBIN. R
18.08.2006

Подписи: Signatures:

№ 28643

HOUSTON TUBULARS, INC

STRAIGHT BILL OF LADING Original - Not Negotiable - Domestic

Shipper's No. GH 1110

WTE Carrier 3040 Agent's No.

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading

at Pearland, TX 1-28 2008 from HTI/ VASS

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as shown below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is agreed, as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to VASS (Mail or street address of consignee - for purposes of notification only)

Destination _____ Street _____ City _____ State of _____ Zip Code _____ County of _____

Routing _____ Delivering Carrier _____ Vehicle, or Car Initial _____ No. _____

Collect On Delivery

$ _____ and remit to: _____

RELEASE#: 8276-1 Street _____ City _____ State _____

No. Packages	Description of Articles, Special Marks, and Exceptions	Weight (Sub. to Corr.)	Class or Rate	Check Column
4	42X 375' BAE X42 DKL			

C.O.D. charge to be paid by $ _____ Shipper / Consignee

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

If charges are to be prepaid, write or stamp here, "TO BE PREPAID."

Received $ _____ to apply in prepayment of the charges on the property described hereon.

Agent or Cashier

Per _____

(The signature here acknowledges only the amount Prepaid.)

Charges Advanced: $ _____

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight." Note - Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

_____ Shipper, Per _____ Agent, Per _____

Conductor OS - Tal

ПОКАЗАТЕЛИ КАЧЕСТВА — INDICES OF QUALITY

Механические свойства металла / Mechanical properties of base metal

Номер плавки Heat number	Времен. сопрот. вдоль Ultimate strength along, psi	Времен. сопрот. поперёк Ultimate strength across, psi	Предел текучести Yield strength psi	Относительное удлинение Relative elongation, % 52"	Энергия удара, Дж, Impact energy, J KCV 32°F			ИПГ DWTT % 50°F	
6436		69000	55000	42	104	112	111	85	85
6437		71000	58000	40	138	149	132	85	85

Механические свойства продольных сварн. соед. / Mechanical properties of Longitudinal Weld Joints

Номер партии Lot number	Временное сопротивление Ultimate strength, psi	Энергия удара, Дж Impact energy, J по Ц.Ш. KCV 32°F			Статический изгиб Guided-bend test	Твердость, Hardness HRC NACE MR0175 осн. металл the area of base metal	зона терм. возд. heat affected zone	металл сварн. соед. weld metal
6133	75000	52	50	49	sat	2	4	9
						1	3	10
6137	72000	45	39	36	sat	4	1	9
						4	2	8

Треб. контр. Requirement of Contract														

Химический состав, % / Chemical composition, %

Номер плавки Heat number	CE x100 Pcm	C x100	Si x100	Mn x100	Al x1000	S x1000	P x1000	V x1000	Nb x1000	Ti x1000	Cu x100	Cr x100	Ni x100	Mo x100	N x1000	Ca x1000	B x10000
6436	32	9	6	23	24	133	137	35	34	7	8	11	11				
	31	9	9	19	20	134	136	43	44	6	8	13	14				
6437	31	9	9	20	20	130	134	35	35	8	8	14	12				
	32	10	10	21	21	129	130	33	34	6	8	12	12				

											19	20	1	1	1	5	3	3		7	7	2.5	2.5	
											33	29	3	3	6	6	2	2						
											20	20	1	1	1	6	2	2		8	6	2.1	2.2	
											29	33	1	1	5	5	1	1						

Треб. контр. Requirement of Contract	Max 43	MAX 22		MAX 140		MAX 15	MAX 25			MAX 40								

Антикоррозионное покрытие / Anticorrosive Coating

Номер партии покрытия труб Lot number of coating pipes	Толщина наружного покрыт., мм не менее Thickness of outer coating, no less, mm	Шифр материал. покрытия Code of coating materials	Материалы покрытия Coating Materials			Результаты испытания партий антикоррозионного покрытия труб, не менее Lots anticorrosive coating of pipes test results, no less		
			Основной слой Basic layer	Адгезионный слой Adhesive layer	Грунтовочный слой Primer layer	Диэлектр. сплошн.,кВ Dielectrical solidity, kV	Прочность при ударе, Дж Impact strength, J	Прочность связи, Н/см Peel strength, N/cm

REVIEWED PERFILIEV.I 13.02.2008

BUREAU VERITAS EXPERTISE IN UKRAINE PARIS 1828 Mariupol

Подписи / Signatures:

№ 2884 ВАТ "ХТЗ" 2/2

BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

	PAGE: 1 of 1
	SHIPPER'S NO. 516533
DATE PRINTED 7/10/2006	PART NO.
TIME PRINTED 12:07:50	INVOICE NO. BETA 141090
P. O. DATE 05/18/06	MILL ORDER 1027323
P. O. NO. 53911	PICKUP NO. 134558
BULLETIN(S): 59327	

FROM: BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

SOLD TO: Naylor Pipe Company
1230 East 92nd Street
CHICAGO, IL 60619-7997

SHIP TO: Naylor Pipe Co. c/o Feralloy
6755 Waterway Dr.
PORTAGE, IN 46368

SHIPMENT SHIPPED	F.O.B. MILL	ROUTE/ CARRIER SLFP	CAR/ VEHICLE ID.
07/10/06 12:06	PORTAGE, INDIANA	S&L/FMP/PORT	TRACTOR: 9506 TRAILER: AB

TRANS. MODE CTR	TARE WEIGHT LBS.	EXCLUDED WEIGHT LBS.	B/L WEIGHT LBS.	FREIGHT TERMS COL
CUSTOMER TRUCK	0	0	72,250	COLLECT

PRODUCT DESCRIPTION: HOT ROLLED BAND PRIME COIL MILL EDGE CONV. TO A139 GR B N/A.
MATERIAL SHIPPED AS: HOT ROLLED BAND

ORDER	ORDERED DIMENSIONS
1027323	.3600 X 41.7000 X COIL MIN

B/P/L: LOAD MUST BE TARPED
MARK EACH PIECE OR COIL WITH MATERIAL ID, WEIGHT, WIDTH AND GAUGE
THREE BANDS THRU EYE OF COIL AND TWO CIRCUMFERENTIAL BANDS

MATERIAL ID	HEAT NO.	DIMENSIONS	PCS	ACTUAL
346256	C0710	.3600 X 41.7000	1	36,070
346257	C0710	.3600 X 41.7000	1	36,180
ORDER TOTAL			2	72,250

Made and Melted in the USA
HEAT: C0710

	C	MN	P	S	SI	CU	NI
FNLARL1	0.15	0.61	0.005	0.004	0.02	0.11	0.04
	CR	AL	MO	V	CB	N	B
FNLARL1	0.04	0.027	0.014	0.001	0.002	0.009	0
	CA	SN	TI				
FNLARL1	0.0024	0.01	0.001				

Richard M Chase
QA Representative

42" conductor pipe

BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

	PAGE: 2 of 2
	SHIPPER'S NO. 516322
DATE PRINTED 7/3/2006	PART NO.
TIME PRINTED 11:06:25	INVOICE NO. BETA 140864
P. O. DATE 05/18/06	MILL ORDER 1027323
P. O. NO. 53911	PICKUP NO. 134343
BULLETIN(S): 59185, 59262	

FROM
BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

SOLD TO
Naylor Pipe Company
1230 East 92nd Street
CHICAGO, IL 60619-7997

SHIP TO
Naylor Pipe Co. c/o Peralloy
6755 Waterway Dr.
PORTAGE, IN 46368

DATE/TIME SHIPPED	F.O.B. MILL	ROUTE/ CARRIER SLFP	CAR/ VEHICLE ID.
07/03/06 11:05	PORTAGE, INDIANA	S&L/FMP/PORT	TRACTOR: 9506 TRAILER: AB

TRANS. MODE PP	TARE WEIGHT LBS.	EXCLUDED WEIGHT LBS.	B/L WEIGHT LBS.	FREIGHT TERMS PPD
PREPAID TRUCK	0	0	109,230	PREPAID

PRODUCT DESCRIPTION: HOT ROLLED BAND PRIME COIL MILL EDGE CONV. TO A139 GR B N/A

MATERIAL SHIPPED AS: HOT ROLLED BAND

ORDER	ORDERED DIMENSIONS
1027323	.3600 X 41.7000 X COIL MIN

M/P/L: LOAD MUST BE TARPED
MARK EACH PIECE OR COIL WITH MATERIAL ID, WEIGHT, WIDTH AND GAUGE
THREE BANDS THRU EYE OF COIL AND TWO CIRCUMFERENTIAL BANDS

MATERIAL ID	HEAT NO.	DIMENSIONS	PCS	ACTUAL
346260	J2178	.3600 X 41.7000	1	36,320
ORDER TOTAL			1	36,320

Made and Melted in the USA
HEAT: J2178

	C	MN	P	S	SI	CU	NI
FNLARL1	0.14	0.75	0.008	0.006	0.02	0.16	0.07
	CR	AL	MO	V	CB	N	B
FNLARL1	0.05	0.026	0.021	0.001	0.002	0.008	0
	CA	SN	TI				
FNLARL1	0.0026	0.01	0.001				

Robert M Chase
QA Representative

42" conductor

36" Surface Casing

BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

	PAGE: 1 of 1
	SHIPPER'S NO. 516533
DATE PRINTED 7/10/2006	PART NO.
TIME PRINTED 12:07:50	INVOICE NO. BETA 141090
P. O. DATE 05/18/06	MILL ORDER 1027323
P. O. NO. 53911	PICKUP NO. 134558
BULLETIN(S): 59327	

FROM
BETA STEEL CORP
6500 S. BOUNDARY ROAD
PORTAGE, IN 46368

SOLD TO
Naylor Pipe Company
1230 East 92nd Street
CHICAGO, IL 60619-7997

SHIP TO
Naylor Pipe Co. c/o Feralloy
6755 Waterway Dr.
PORTAGE, IN 46368

DATE TIME SHIPPED	F.O.B. MILL	ROUTE/ CARRIER SLFP	CAR/ VEHICLE ID.
07/10/06 12:06	PORTAGE, INDIANA	S&L/FMP/PORT	TRACTOR: 9506 TRAILER: AB

TRANS. MODE CTR	TARE WEIGHT LBS.	EXCLUDED WEIGHT LBS.	B/L WEIGHT LBS.	FREIGHT TERMS COL
CUSTOMER TRUCK	0	0	72,250	COLLECT

PRODUCT DESCRIPTION: HOT ROLLED BAND PRIME COIL MILL EDGE CONV. TO A139 GR B N/A
MATERIAL SHIPPED AS: HOT ROLLED BAND

ORDER	ORDERED DIMENSIONS
1027323	.3600 X 41.7000 X COIL MIN

M/P/L: LOAD MUST BE TARPED
MARK EACH PIECE OR COIL WITH MATERIAL ID, WEIGHT, WIDTH AND GAUGE
THREE BANDS THRU EYE OF COIL AND TWO CIRCUMFERENTIAL BANDS

MATERIAL ID	HEAT NO.	DIMENSIONS	PCS	ACTUAL
346256	C0710	.3600 X 41.7000	1	36,070
346257	C0710	.3600 X 41.7000	1	36,180
ORDER TOTAL			2	72,250

Made and Melted in the USA
HEAT: C0710

FNLARL1	C 0.15	MN 0.61	P 0.005	S 0.004	SI 0.02	CU 0.11	NI 0.04
FNLARL1	CR 0.04	AL 0.027	MO 0.014	V 0.001	CB 0.002	N 0.009	B 0
FNLARL1	CA 0.0024	SN 0.01	TI 0.001				

Richard M Chance
QA Representative

Изготовитель
Producer

ОАО "Харцызский трубный завод"
ул. Патона, 9, г.Харцызск
Донецкой обл. 86703 УКРАИНА

PJSC "Khartsyzsk Tube Works"
9, Paton str. Khartsyzsk
Donetsk Reg. 86703 The UKRAINE

Грузополучатель, адрес Consignee, address
65026, Украина, г.Одесса, Таможенная пл. 1, Одесский морской торговый порт, США

Дата отгрузки
The date of load Shipment 15.12.2006

Заказ-наряд № 2491
Order №

Вагон
Waggon № 66723800

Контракт № 633 от
Contract № 19.05.2005

Система управления сертифицирована по стандартам
Management System is certified in accordance with the Standards.
ISO 9001:2000; ДСТУ ISO 9001:2001;
API Spec Q1-Seventh Edition;
ISO 14001:2004;
OHSAS 18001:1999.
Продукция сертифицирована по стандарту
Products is certified in accordance with the Standard.
API Spec 5L:2004
API Spec 2B:2001.

СЕРТИФИКАТ КАЧЕСТВА № 38831
CERTIFICATE OF QUALITY

Страница Page 1 Страниц Pages 2

Согласно: According: DIN 50049-3.1B

Наименование товара Denomination of product	НД покрытия Standard for coating	НД труб Standard for pipes
Трубы стальные электросварные прямошовные, изготовленные методом дуговой сварки под слоем флюса Electric-welded longitudinal steel pipes, manufactured by the method of submerged arc welding under flux		API Spec 5L PSL 2 (43rd edition)

Марка стали Steel grade Класс прочности Strength factor	Номер трубы Pipe number	Номер плавки Heat number	Диаметр дюйм Diameter inch	Толщина дюйм Thickness inch	Длина фут Length foot	Номер партии сварного соединения Weld joint lot number: Продольного Longitudinal	Поперечн. Transverse	Номер партии покр. Lot number of coating	Гидроисп. давл. Hydrostatic test pressure, psi: Стандартное Standart	Альтернативное Alternative
Gr.B/X42	667301	0276	36	0.375	38.2	6673			790	
Gr.B/X42	667101	0302	36	0.375	38.8	6671			790	
Gr.B/X42	667501	0278	36	0.375	38.3	6675			790	
Gr.B/X42	667126	0302	36	0.375	39.3	6671			790	
Gr.B/X42	667122	0302	36	0.375	39.2	6671			790	
Gr.B/X42	667109	0302	36	0.375	39.2	6671			790	
Gr.B/X42	667117	0302	36	0.375	39.3	6671			790	
Gr.B/X42	667202	0325	36	0.375	39.3	6672			790	

FSI P.O. 1040157700
Electric-welded steel pipes with one longitudinal weld, made by the method of arc welding under flux (SAW).
According to data available from the mill-supplier, steel plate used for pipe production was subjected to ultrasonic examination over the whole area - the results are satisfactory.
The preservative coating made by black bitumen lacquer is applied onto the whole external surface.
Welded joints are UT examined along the whole length, calibration of equipment was performed on reference standard, witch contains four machined notches N5 and one radially drilled hole-diameter 1.5 mm. Repaired and end sections of welded joints were tested by radiological examination with sensitivity not less than 2% thickness of welded joint. Full circumference of end metal of all pipes was UT examined. NDT results are satisfactory.
Tensile tests of mechanical parameters of metal and welded joints were performed on flat full-size specimens as per ASTM A370 with width in tested part of a specimen 1,496 in., impact toughness test were performed on specimens cut out transversally to the rolling direction as per ASTM A370 by section size 0,394x0,394 in. at metal thickness 0,500 in. and 0,825 in., 0,394x0,295 at metal thickness 0,375 in. Tolerances on out-of-roundness and straightness of pipes are according to API 2B. Each pipe was subjected to hydrostatic testing, endurance time - 10 sec min.
Heat treatment of pipes and welded joints was not performed. All pipes are equipped with steel bevel protectors.
FSI P.O. 1040157700
Электросварные стальные трубы с одним продольным швом, изготовленные методом дуговой сварки под флюсом (SAW).
По результатам завода поставщика стальной лист, из которого изготовлены трубы, подвергался ультразвуковому контролю по всей площади – результаты удовлетворительны.
На всю наружную поверхность труб нанесено консервационное покрытие, выполненное битумным черным лаком.
Сварные соединения всех труб по всей длине проконтролированы ультразвуковым методом контроля, настройка оборудования осуществлялась на эталонном образце, имеющем четыре механически выполненных надреза N5 и одно радиально просверленное отверстие диаметром 1,6 мм. Ремонтные и концевые участки сварных соединений подвергались радиологическому методу контроля с чувствительностью не хуже 2% толщины сварного соединения. Полная окружность металла концов всех труб подвергалась ультразвуковому методу контроля. Результаты неразрушающих методов контроля – удовлетворительны.
Испытания механических свойств металла и сварных соединений на растяжение осуществлялись на плоских полномерных образцах по ASTM A370 с шириной в испытываемой части образца 1,496 in., испытания на ударный изгиб – на образцах, вырезанных в поперечном направлении прокатки по ASTM A370 размером в сечении 0,394x0,394 in при толщине металла 0,500 in и 0,825 in, 0,394x0,295 in при толщине металла 0,375 in. Допуски по овальности и прямолинейности труб в соответствии с требованиями API 2B. Каждая труба подвергалась гидравлическому испытанию, время выдержки под давлением не менее 10 секунд. Термообработка труб и сварных соединений не производилась. Все трубы оборудованы металлическими протекторами для защиты фаски.

Погружено в вагон Loaded in waggon

Количество, шт Quantity, pcs	Общая длина труб, фут Total length of pipes, foot	Теор. масса труб, фунт Theor. mass of pipes, lb	Теор. масса труб, кг Theor. mass of pipes, kg	Теорет. масса покрытия, кг Theor. mass of coating, kg	Теорет. масса труб с покрытием, кг Theor. mass of pipes with coating, kg
8	311.6	44498	20117	0	

Качество труб, указанных в настоящем документе, соответствует условиям Контракта и требованиям НД.
The quality of pipes included in this Certificate complies with the terms of the Contract and the requirements of Standard.

surface css 36" Ext

ПОКАЗАТЕЛИ КАЧЕСТВА — INDICES OF QUALITY

Механические свойства металла / Mechanical properties of base metal

Номер плавки Heat number	Времен. сопрот. вдоль Ultimate strength along, psi	Времен. сопрот. поперёк Ultimate strength across, psi	Предел текучести Yield strength psi	Относительное удлинение, % Relative elongation, % δ 2"	Энергия удара Impact energy, ft-lb KCV 32°F			Вязк. сост., % Shear area, %	ИПГ DWTT %
0276		78000	58000	35	75	69	86	90 80 80	
0278		76000	54000	39	94	83	82	90 90 90	
0302		76000	55000	38	63	59	68	80 80 80	
0325		75000	55000	40	59	66	68	80 80 80	

Механические свойства продольных сварн. соед. / Mechanical properties of Longitudinal Weld Joints

Номер партии Lot number	Временное сопротивление Ultimate strength, psi	Энергия удара Impact energy, ft-lb по U-ш. KCV 32°F			Статический изгиб Guided bend test	Твердость. Hardness HRC NACE MR0176		
						осн. металл the area of base metal	зона термовозд. heat affected zone	металл сварн. соед. weld metal
6671	85000	44	49	52	sat	1	3	7
						1	3	8
6672	84000	61	53	68	sat	2	3	8
						1	4	10
6673	81000	78	79	80	sat	1	5	15
						2	4	14
6675	82000	55	51	52	sat	1	3	12
						2	3	11

Треб. контр. Requirement of Contract																			

Химический состав, % / Chemical composition, %

Номер плавки Heat number	CE x100 Pcm	C x100	Si x100	Mn x100	Al x1000	S x1000	P x1000	V x1000	Nb x1000	Ti x1000	Cu x100	Cr x100	Ni x100	Mo x100	N x10000	Ca x1000	B x10000
0276	33 34	15 16	21 21	105 107	45 48	5 5	11 11	5 5	28 24	18 17	1 1	2 2	1 1		5 5		
		16 16	23 22	111 107	48 46	5 5	10 9		19 17	14 15	1 1	2 2					
0278	34 35	16 16	22 25	104 109	38 29	5 4	12 13	5 5	23 25	12 9	2 1	3 4	2 1		5 7	2 2	
		16 16	28 28	110 112	28 28	3 3	11 11		26 20	7 7	1 1	5 5					
0302	31 31	15 15	21 21	90 89	49 44	7 7	14 13	5 5	10 10	5 5	3 3	4 4	2 2		7 7	2 2	
		16 16	22 22	88 87	44 43	6 6	12 12		5 5	3 3	4 4	1 1					
0325	35 35	16 16	33 33	104 105	38 41	6 5	11 12	5 5	10 10	14 16	1 1	5 5	2 2		7 7		
		14 15	48 48	112 110	36 36	6 6	14 14		16 17	3 2	1 1	5 5	2 2				

Треб. контр. Requirement of Contract																			

Антикоррозионное покрытие / Anticorrosive Coating

Номер партии покрытия труб Lot number of coating pipes	Толщина наружного покрыт., мм не менее Thickness of outer coating no less, mm	Шифр материал. покрытия Code of coating materials	Материалы покрытия Coating Materials			Результаты испытания партий антикоррозионного покрытия труб, не менее Lots anticorrosive coating of pipes test results, no less		
			Основной слой Basic layer	Адгезионный слой Adhesive layer	Грунтовочный слой Primer layer	Диэлектр. сплошн., кВ Dielectrical solidity, kV	Прочность при ударе, Дж Impact strength, J	Прочность связи, Н/см Peel strength, N/cm

REVIEWED PERFECT
16.12.2006

INSPECTION COMPANY Engineering Bureau Franke Int.

Подписи: / Signatures:

№ 3888 SAT

26" Intermediate Casing

3/31/2008
Report 108
Version 1.8
12/18/2007

CERTIFIED REPORT OF CHEMICAL ANALYSIS AND MECHANICAL TESTS

ArcelorMittal

NAYLOR PIPE C/O NACME STEEL PROCESSING 429 WEST 127TH ST CHICAGO IL	Mittal Steel Riverdale 13500 South Perry Avenue Riverdale, IL 60827
NAYLOR PIPE C/O NACME C/O NACME STEEL PROCESSING 429 WEST 127TH ST CHICAGO IL	PO#: 54416/1 Invoice #: 0500011972 SO#: 374304 Carrier: MITTAL RIVERD Shipped: 3/22/2008

Coil	Thickness (in)	Width (in)	Weight (tons)	End Use	Reduction Ratio
763406	0.360	48.875	16.2	SPIRAL BUTTWE	83.37% (6:1)
763407	0.360	48.875	18.1	SPIRAL BUTTWE	83.37% (6:1)
763408	0.360	48.875	17.6	SPIRAL BUTTWE	83.37% (6:1)
763409	0.360	48.875	17.5	SPIRAL BUTTWE	83.37% (6:1)
763410	0.360	48.875	20.1	SPIRAL BUTTWE	83.37% (6:1)

Grade	Part Number	Comments
ASTM A139 GRD B MOD1	HB3604887-01	

We certify that this material meets the provisions of the 'Buy America' program. This material was melted and manufactured in the USA. All products are strand cast and free of mercury or radioactive elements. Elongation based on 2" gage length.

Coil	Yield	Tensile	% El	Dir	N-Value	N-Range	Hardness	Bend	Ft-lbs	°F	Size	Dir

Heat	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Cb	V	Al	N	Sn	B	Ti	Ca	Sb	O	H
A17856	.22	.77	.008	.005	.03	.05	.01	.03	.01	.000	.002	.028	.0047	.005	.0000	.0020	.0020	.0000		

We hereby certify the above is correct as contained in the records of the corporation

Peter Gaudreau

26 I w intermediate

KIEH

METALLURGICAL SERVICES
(708) 544-8811 544-8820 FAX

Laboratory:
837 MANNHEIM RD.
BELLWOOD, IL 60104

Naylor Pipe Company
1230 E. 92nd St.
Chicago, IL 60619-7997

Attn : James Martin

Date received - 04-Apr-2008
Report 108 14100 c of pages
03-Apr-2008
Account 1302
P.O. 2441

our 29th year est. 197

Test report /

Sample identity	Y.S. lbs/in^2	T.S. lbs/in^2	%E 2"
V81851 3/8"x48" Mittal /A17856	48,200	74,000	35.0
ASTM A252 gr3 min. requirements	45,000	66,000	20.00

This samples reported properties conform to the requirements of an ASTM A252 gr3 material.

CHRISTOPHER LATROPOULOS
PROFESSIONAL ENGINEER
REGISTRATION #036489
STATE OF ILLINOIS

Mechanical:ASTM E8/A370 Y.S.0.2%offset []trans. *broke out of g.l. |1"g.l.

26" after weld

10/4/2006
Report: 108
Version 1.5
04/11/2006

CERTIFIED REPORT OF CHEMICAL ANALYSIS AND MECHANICAL TESTS

MITTAL
Riverdale

NAYLOR PIPE C/O NACME STEEL PROCESSING 429 WEST 127TH ST CHICAGO IL	Mittal Steel Riverdale 13500 South Perry Avenue Riverdale, IL 60827
NAYLOR PIPE C/O NACME C/O NACME STEEL PROCESSING 429 WEST 127TH ST CHICAGO IL	PO#: 53959 Invoice # SO#: 276121 Carrier: MITTAL RIVERD Shipped: 10/3/2006

Shipment Information

Coil	Thickness (in)	Width (in)	Weight (tons)	End Use	Reduction Ratio
716869	0.375	52.400	17.7	EXCESS	82.68% (6:1)

Product Information

Grade	Part Number	Comments
1021	HX3755240-01	

We certify that this material meets the provisions of the 'Buy America' program. This material was melted and manufactured in the USA. All products are strand cast and free of mercury or radioactive elements. Elongation based on 2" gage length.

Mechanical Test Results

Coil	Yield	Tensile	% El	N-Value	N-Range	Hardness	Bend	Ft-lbs	°F	Size	Dir
716871	86.8 KSI	84.6 KSI	23.0 %								
	85.7 KSI	84.5 KSI	24.0 %								

Chemical Test Results

Heat	C	Mn	P	S	Si	Cu	Ni	Cr	Mo	Cb	V	Al	N	Sn	B	Ti	Ca
B15481	.21	.96	.008	.001	.20	.03	.01	.03	.00	.001	.004	.036	.0053	.002	.0000	.0030	.0020

We hereby certify the above is correct as contained in the records of the corporation

Glen McAdam

20" intermediate

KIEH
METALLURGICAL SERVICES
(708) 544-8811 544-8820 FAX

Laboratory:
837 MANNHEIM RD.
BELLWOOD, IL 60104

Naylor Pipe Company
1230 E. 92nd St.
Chicago, IL 60619-7997

Attn : James Martin

Date received ~ 22-Mar-2007
21-Mar-2007
Report 107 12059 a of a pages
Account 1302
P.O. 2553

our 28th year est. 1979

Test report /

Sample identity	Y.S. lbs/in^2	T.S. lbs/in^2	%E 2"
V63002 3/8"x48" Mittal /B15481	54,200	81,600	32.0
ASTM A252 gr3 min. requirements	45,000	66,000	20.00

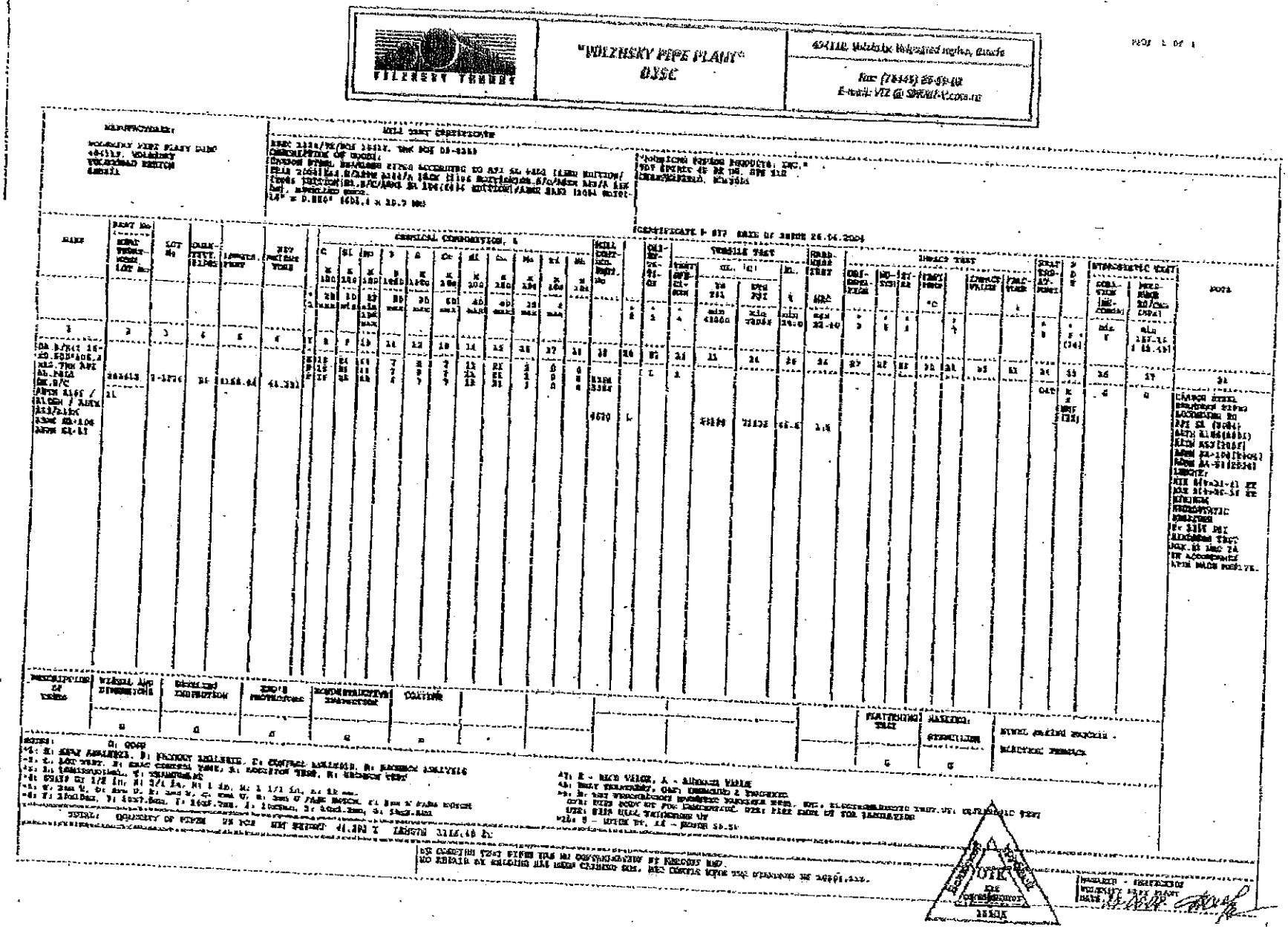
This samples reported properties conform to the requirements of an ASTM A252 gr3 material.

CHRISTOPHER J. LATTOPPOLOS
PROFESSIONAL ENGINEER
REGISTRATION #62-46469
STATE OF ILLINOIS

Mechanical:ASTM E8/A370 Y.S.0.2%offset ()trans. *broke out of g.l. 1"g.l.

03-22-07P04:16 RCVD
03-22-07P04:10 CFMD

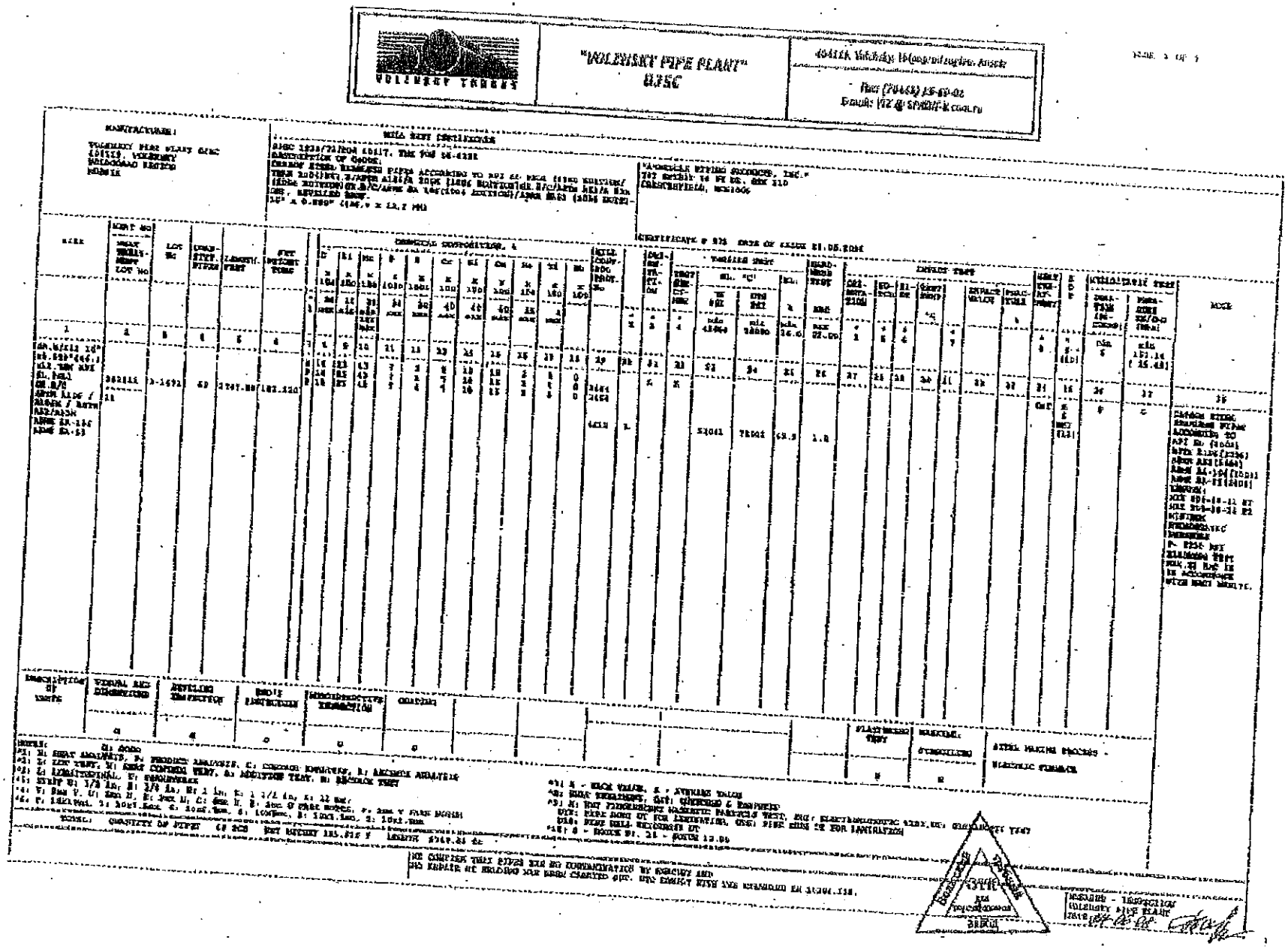
16" Final Casing



"VOLZHSKY PIPE PLANT"
OJSC

16" Find Iw

16" Final Tie



"VOLUNTARY PIPE PLANT"
U.T.S.C.

16" Final Ice

VOLKERT TUBULAR

"VOLKERSKY PIPE PLANT"
USSC

4041B, Volkersky Industrial Estate, Russia
Fax (7843) 25-60-01
E-mail: pp @ volkert-t.com.ru

PAGE 1 OF 2

MANUFACTURER:
VOLKERSKY PIPE PLANT USSC
4041B - VOLKERSKY
VOLGOGRAD REGION
RUSSIA

MILL TEST CERTIFICATE

ASTM A53/A53M/2002 GRADE B, TYPE E, ERW. API 5L PSL1
PSL2 COMPLIANCE NO CHANGE.
CARBON STEEL SEAMLESS PIPES ACCORDING TO API 5L PSL1 (53RD EDITION/ 53RD EDITION) PSL2/PSL1 AND ISO 3183:2007 (E) PSL2/PSL1 AND ASTM A53/A53M-07 GRADE B TYPE E (ERW) - WELDED AND SEAMLESS.
16" = 0.500" WALL x 13.7 KG/M

"VOLKERSKY PIPE PRODUCTS, Inc."
567 BISHOP ST PE DR. STE 120
CHEVROLETFIELD, MEXICO

CERTIFICATE # 875 DATE OF ISSUE 05.06.2008

SIZE	HEAT / CHARGE / LOT No.	LOT NO	DIMENSIONAL CHECK	LENGTH	NET WEIGHT TONS	CHEMICAL COMPOSITION, % C	Mn	P	S	Si	Cr	Ni	Mo	Cu	V	Nb	Ti	B	NITROG. CONTENT PROC.	CEQ	TENSILE TEST Yield, MPa	UTS MPa	EL, %	HARDNESS VALUE	IMPACT TEST	DROP WEIGHT TEST	FLATTENING TEST	BEND TEST	HYDROSTATIC TEST	MARK	BOX
1	2	3	4	5	6	7															8											
16"x0.500" WALL x 40' PLAIN END	881419 / 11	3-1971	84	2130.24	137.361	C 0.18 Mn 0.57 P 0.017 S 0.012 Si 0.22 Cr 0.07 Ni 0.06 Mo 0.02 Cu 0.11 V 0.003 Nb 0.002 Ti 0.004 B 0.0001 N 0.0044 CEQ 0.36															12546	20831	18.4	2.0							

DESCRIPTION OF ITEMS: VISUAL AND DIMENSIONAL | REVIEWING INSPECTION | MILL'S INSPECTOR | NONDESTRUCTIVE INSPECTION | COATING

MARKING: ETCHED

ELECTRIC WELD PROCESS - ELECTRIC FURNACE

*1: B - BESSEMER, O - OPEN HEARTH, E - ELECTRIC FURNACE
*2: A - ACID, B - BASIC
*3: H - HOT FINISHED, C - COLD FINISHED
*4: S - SEAMLESS, E - ELECTRIC WELDED, F - FURNACE WELDED
*5: NT - NON-DESTRUCTIVE EXAMINATION, UT - ULTRASONIC TEST, MPT - MAGNETIC PARTICLE TEST, ET - ELECTROMAGNETIC TEST
*6: S - SMLS, E - ERW, F - FW, A - SAW
*7: B - BEVELLED, P - PLAIN END, T - THREADED
*8: T - TRANSVERSE, L - LONGITUDINAL

TOTAL: QUANTITY OF PIPES 84 PCS NET WEIGHT 137.361 T LENGTH 2130.24 M

WE CERTIFY THAT PIPES HAS BEEN MANUFACTURED BY THE METHOD AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATION AND/OR ORDER. WELDS MADE WITH NO FILLER METAL.

SERIAL NO. 5888

MANAGER - CHIEF METALLURGIST

16" Final Ica

16" Final Inv

LIAOYANG STEEL TUBE CO.,LTD

ORIGINAL

Herein we confirm the steel pipes manufactured for your company are already supervised by our inspection staff and the following data according the standard technical requirements of your company, the results shown all the pipes are qualified to issue this certificate especially.

Name of goods: API 5L X52 PSL2 PIPE — Testing criterions: API 5L 44th — Inspection weight in charge: total 188 PCS/11838.05 kg/ 374.808 MT — Certificate No.: 2 LSA-022

Buyer: — LETTER OF CREDIT NO. 1870198 — Material: X52/4 — Size: 16" X0.375" — Page: 1

Destination country: US

Heat No	Consignment Quantity		Chemical Composition Of Material %								
	Pipe (Joint)	Length (M)	C	Si	Mn	P	S	Nb	V	Ti	Ceq
			X10^4								
7P07019	15	179.90	15	34	130	13	02	01	02	0.3	/
7P07021	14	167.88	15	35	140	1.9	02	01	02	0.4	/
7P07022	16	191.86	15	31	140	1.6	03	01	02	0.2	/
7P07025	12	143.91	16	32	140	1.9	02	01	02	0.3	/
7P06382	1	12.00	15	36	139	1.7	05	01	02	0.2	/

Hardness (HRB) max	Test Pressure 6.5Mpa ≥10S	Size and visual	NDT	
			UT	RT
80	OK	OK	OK	OK
79	OK	OK	OK	OK
79	OK	OK	OK	OK
80	OK	OK	OK	OK
77	OK	OK	OK	OK

Mechanical Properties Of Welding seam			Mechanical Properties Of Material			Material Impact 0°C
R.m Mpa	Cold-bending180°		Y.S. ≥360.5Mpa	T.S. ≥460 Mpa	EL. ≥22 %	Average (J)
	Face-bending	Root-bending				
560	OK	OK	385	553	39	/
550	OK	OK	390	545	38	/
550	OK	OK	385	545	38	/
555	OK	OK	380	550	40	/
535	OK	OK	380	529	38	/

Explanation:
1. PROCESS OF MANUFACTURE: ERW-HIGH FREQUENCY WELD
2. SPEC. SIZE: 16" X0.375" GRADE: X52 PSL2
3. HEAT TREATMENT: N+T
4. SPECIMEN OF TENSILE STRIP STANDARD: API 5L (LOCATION OF SPECIMEN: T)
5. THE QUALITY INSPECTION DISPLAY INCLUDE THE QUALITY OF TRANSPORTATION, LOADING AND UNLOADING
6. ALL PIPES ARE HYDROSTATIC TESTED AS PER API 5L AT MANUFACTURER'S WORKS AT A TEST PRESSURE WHICH RESULTS IN A MINIMUM FIBRE STRESS EQUAL TO 90% OF THE SPECIFIED MINIMUM YIELD STRENGTH. THE TEST PRESSURE IS MAINTAINED FOR A MINIMUM OF 10 SECONDS.
7. ALL PIPES ARE ULTRASONIC TESTED FOR LONGITUDINAL DEFECTS IN THE FULL LENGTH AS PER API 5L
8. MARKING: ON THE INSIDE SURFACE OF EACH PIPE AT ONE END

LIAO YANG STEEL TUBE CO.,LTD. 辽阳钢管有限公司 检验专用章 INSPECTION DEPT.

Factory in charge: Wang Yinchang Inspector: Zhang Jinjun Date of issue: January 2, 2008 Address: 1 NO HUNHANGXI FANRONG ROAD LIAOYANG CITY LIAONING PROVINCE P.R. CHINA

16" Final Iw

LIAOYANG STEEL TUBE CO. LTD

MILL TEST CERTIFICATE

ORIGINAL

Materials: API 5L

Heat No	Consigement Quantity		Chemical Composition Of Material %								Hardness (HRB) max	Test Pressure 6.5Mpa ≥ 10S	Size and visual	NDT
	Pipe (Joint)	Length (FT)	C	Si	Mn	P	S	Nb	V	Ti				UT
			X10^2											
7QC04146	47	1849.10	14	27	146	0.4	0.7	0.1	0.1	0.2	76	OK	OK	OK
7QC04213	48	1888.80	15	28	145	0.3	0.6	0.1	0.1	0.2	79	OK	OK	OK
7QB03141	29	1140.30	14	26	147	0.4	0.5	0.1	0.1	0.2	74	OK	OK	OK

Mechanical Properties Of Welding seam			Mechanical Properties Of Material			Material Impact 0℃
Rm Mpa	Cold-bending 180°		Y.S. Rt0.5Mpa	T.S Rm Mpa	EL A%	Average (J)
	Face-bending	Root-bending				
530	OK	OK	370	545	36	95
540	OK	OK	365	530	34	93
520	OK	OK	365	530	38	92

Explanation

1. PROCESS OF MANUFACTURE: ERW
2. UT: API 5L
3. RT: NONE
4. DIMENSION OF TENSILE TEST SPECIMEN: ACCORDING TO API 5L
5. DIMENSION OF IMPACT SPECIMEN: LOCATION OF SPECIMEN: E
6. THE QUALITY INSPECTION DEPART INCLUDE THE QUALITY OF EXAMINATION OF UNLOADING
7. HEAT NO. AND PIPE NO. ARE ATTACHED.
8. UT TESTING REPORT OF WELD, PIPE, INTERMEDIATE TESTING REPORT OF WELD, PIPE, E-3 REPORT FOR MECHANICAL OF WELD, PIPE, AIR-GUN TESTING REPORTS ARE ATTACHED.
9. ALL PIPES DELIVERED ARE AS PER API 5L, NO DEFECTS, NO BRUISES, NO GROOVES, NO A LONG SEAMS PERPENDICULAR TO THE AXIS OF THE PIPE, AND WITH SMOOTH FACE OF PIPE ENDS
10. ALL PIPES HAVE BEEN INSPECTED WITH MAGNETIC PARTICLE INSPECTION
11. DIAMETER OF PIPE ENDS RANGE IS NOT TO EXCEED 10 MM

LIAOYANG STEEL TUBE CO.,LTD. 检验专用章 INSPECTION DEPARTMENT

Person in charge: Yang Yunhong Inspector: Zhang Junhua Date of Issue: August 31, 2007 Address: 1 NO XUEWANDI FANGBORO ROAD LIAOYANG CITY LIAONING PROVINCE CHINA

16" Final Inv

DUAL ZONE DEEP MONITOR WELL

34" Conductor Casing

YIEH CORPORATION LIMITED

MILL CERTIFICATE

COMMODITY: CARBON STEEL PIPE PER SALES CONTRACT NO. SEUSFP6C02TD3 DATED DECEMBER 11, 2006.

CUSTOMER: OZONE INDUSTRIES CORPORATION
15465 PINE RIDGE ROAD
FORT MYERS, FL 33908

CERTIFICATE NO:PSCNR46C01TC5
DATE OF ISSUE:4/29/2007

Invoice No. SEUSFP6C02TD3
LC NUMBER.: 5279996

The CARBON STEEL PIPES are tested according to ASTM A139 GR.B
This is to certify that in accordance with the relevant specifications and contracts.
The CARBON STEEL PIPES manufactured were tested and qualified by our Quality Control Department.

TOTAL : 746 PCS / 29840FT / 1769.619MT

Pipes No.	Heat Numbers	Steel	Size			Quantity			Dimensional	TESTING RESULTS											
										CHEMICAL PROPERTIES(%)					PHYSICAL PROPERTIES			Welding properties	Hydrostatic Test Holding time 10s	Flattening	UT Test
		Grade	O.D. in	W.T. in	Length ft	Pcs	ft	MT	Inspection	C	Si	Mn	P	S	σs(Mpa)	σb(Mpa)	δ5(%)	cb	P = Psi	Test (B)	Test (B)
120	013807	B	34	0.375	40	2	80	4.892	OK	0.16	0.21	0.42	0.012	0.030	325	420	32	OK	500	OK	OK
121	047305	B	34	0.375	40	3	120	7.338	OK	0.19	0.25	0.46	0.016	0.033	315	425	31.5	OK	500	OK	OK
122	048101	B	34	0.375	40	3	120	7.338	OK	0.14	0.19	0.38	0.010	0.028	310	420	31	OK	500	OK	OK
123	008501	B	34	0.375	40	3	120	7.338	OK	0.15	0.20	0.39	0.010	0.030	315	425	31.5	OK	500	OK	OK
124	055204	B	34	0.375	40	3	120	7.338	OK	0.17	0.22	0.43	0.014	0.032	309	425	32	OK	500	OK	OK
125	055207	B	34	0.375	40	3	120	7.338	OK	0.18	0.24	0.41	0.013	0.031	295	420	31	OK	500	OK	OK
126	055024	B	34	0.375	40	3	120	7.338	OK	0.15	0.18	0.36	0.010	0.027	300	425	31	OK	500	OK	OK
127	042603	B	34	0.375	40	3	120	7.338	OK	0.17	0.21	0.42	0.013	0.030	300	420	32	OK	500	OK	OK
128	237804	B	34	0.375	40	3	120	7.338	OK	0.16	0.20	0.40	0.012	0.032	285	425	31	OK	500	OK	OK
129	048103	B	34	0.375	40	3	120	7.338	OK	0.18	0.23	0.43	0.016	0.032	295	425	30.5	OK	500	OK	OK
130	055206	B	34	0.375	40	3	120	7.338	OK	0.16	0.19	0.38	0.007	0.029	305	425	31	OK	500	OK	OK
131	055206	B	34	0.375	40	3	120	7.338	OK	0.16	0.22	0.41	0.011	0.031	280	425	31	OK	500	OK	OK
132	047302	B	34	0.375	40	3	120	7.338	OK	0.18	0.24	0.44	0.017	0.033	300	420	31	OK	500	OK	OK
133	047307	B	34	0.375	40	3	120	7.338	OK	0.18	0.25	0.46	0.015	0.032	310	420	31	OK	500	OK	OK
134	055001	B	34	0.375	40	3	120	7.338	OK	0.17	0.24	0.45	0.015	0.032	295	425	32	OK	500	OK	OK
135	054404	B	34	0.375	40	3	120	7.338	OK	0.18	0.26	0.47	0.016	0.033	305	425	31	OK	500	OK	OK
136	054409	B	34	0.375	40	2	80	4.892	OK	0.15	0.19	0.39	0.014	0.029	305	420	32	OK	500	OK	OK

YIEH CORPORATION LIMITED

34" Dmw

YIEH CORPORATION LIMITED

MILL CERTIFICATE

ODITY: CARBON STEEL PIPE PER SALES CONTRACT
NO. SBUSFP6C02TD3 DATED DECEMBER 11, 2006.

extra 16'

MER: OZONE INDUSTRIES CORPORATION
15465 PINE RIDGE ROAD
FORT MYERS, FL 33908

CERTIFICATE NO:PSCONN6C01TC5
DATE OF ISSUE:4/29/2007

Invoice No. SBUSFP6C02TD3
LC NUMBER.: 5279996

RBON STEEL PIPES are tested according to ASTM A139 GR.B
o certify that in accordance with the relevant specifications and contracts.
RBON STEEL PIPES manufactured were tested and qualified by our Quality Control Department.

TOTAL : 746 PCS / 29840FT / 1769.619MT

Heat Numbers	Steel	Size			Quantity			Dimensional	TESTING RESULTS											
		O.D.	W.T.	Length					CHEMICAL PROPERTIES(%)					PHYSICAL PROPERTIES			Welding properties	Hydrostatic Test Holding time:10s	Flattening	UT Test
	Grade	in	in	ft	Pcs	ft	MT	Inspection	C	Si	Mn	P	S	σs(Mpa)	σb(Mpa)	δ5(%)	ob	P = Psi	Test(E)	Test(E)
048505	B	34	0.375	40	3	120	7.338	OK	0.17	0.23	0.46	0.012	0.031	320	425	31	OK	500	OK	OK
014601	B	34	0.375	40	3	120	7.338	OK	0.15	0.20	0.38	0.010	0.029	300	420	32	OK	500	OK	OK
014404	B	34	0.375	40	3	120	7.338	OK	0.16	0.22	0.43	0.011	0.030	325	425	31.5	OK	500	OK	OK
053207	B	34	0.375	40	2	80	4.892	OK	0.17	0.24	0.45	0.013	0.031	310	420	31	OK	600	OK	OK
048702	B	34	0.375	40	3	120	7.338	OK	0.18	0.26	0.45	0.014	0.032	315	425	31	OK	500	OK	OK
054601	B	34	0.375	40	3	120	7.338	OK	0.17	0.26	0.44	0.015	0.032	315	420	30.5	OK	500	OK	OK
054604	B	34	0.375	40	3	120	7.338	OK	0.16	0.21	0.42	0.012	0.030	320	425	31	OK	500	OK	OK
054603	B	34	0.375	40	3	120	7.338	OK	0.15	0.19	0.40	0.009	0.029	305	420	32	OK	500	OK	OK
054605	B	34	0.375	40	3	120	7.338	OK	0.17	0.24	0.39	0.012	0.031	315	420	32	OK	500	OK	OK
048902	B	34	0.375	40	3	120	7.338	OK	0.16	0.22	0.34	0.011	0.026	315	420	31.5	OK	500	OK	OK
054401	B	34	0.375	40	2	80	4.892	OK	0.18	0.26	0.37	0.014	0.031	305	425	32	OK	500	OK	OK
054200	B	34	0.375	40	3	120	7.338	OK	0.17	0.23	0.40	0.018	0.030	305	425	31.5	OK	500	OK	OK
053802	B	34	0.375	40	3	120	7.338	OK	0.16	0.22	0.36	0.013	0.027	310	426	32	OK	500	OK	OK
047501	B	34	0.375	40	3	120	7.338	OK	0.16	0.21	0.39	0.012	0.029	305	420	32.5	OK	500	OK	OK
009106	B	34	0.375	40	3	120	7.338	OK	0.19	0.27	0.43	0.015	0.032	310	426	32	OK	500	OK	OK
045305	B	34	0.375	40	3	120	7.338	OK	0.15	0.20	0.35	0.009	0.028	305	420	32.5	OK	500	OK	OK
056701	B	34	0.375	40	2	80	4.892	OK	0.15	0.16	0.35	0.009	0.024	290	420	33.5	OK	500	OK	OK

YIEH CORPORATION LIMITED

34" DMa

YIEH CORPORATION LIMITED

MILL CERTIFICATE

COMMODITY: CARBON STEEL PIPE PER PURCHASE CONTRACT OZ110707001
COST AND FREIGHT MIAMI, FLORIDA USA

CUSTOMER: OZONE INDUSTRIES CORPORATION
15465 PINE RIDGE ROAD
FORT MYERS, FL 33908

DATE:2007-12-12

Invoice No.SEUSFP7B01TD3
Certificate No.: PSCNJN7B01TC5
LC NUMBER.: 64405432

Pipes No.	Heat Numbers	Steel Grade	(Size)			Quantity			Dimensional	TEST RESULTS												
										CHEMICAL PROPERTIES(%)					PHYSICAL PROPERTIES			Welding properties	Hydrostatic Test Holding time:10s	Flattening	UT Test
			O.D.	W.T.	length																	
			in	in	ft	(Pcs)	(ft)	(MT)	Inspection	C	Si	Mn	P	S	σs(Mpa)	σb(Mpa)	δ5(%)	σb	P = Pal	Test (B)	Test (B)
1	R7303773	B	34	0.375	39	104	4058	248.137	OK	0.13	0.14	0.39	0.025	0.031	365	425	31.5	OK	505	OK	OK
2	R7303774	B	44	0.375	39	52	2028	160.967	OK	0.14	0.16	0.39	0.013	0.034	365	425	31.5	OK	505	OK	OK
3	R730376	B	54	0.375	39	51	1988	194.056	OK	0.16	0.16	0.42	0.018	0.031	356	420	32.5	OK	505	OK	OK
TOTAL						207	8073	603.160														

Remark:
The CARBON STEEL PIPES are tested according to ASTM A139 GR.B
This is to certify that in accordance with the relevant specifications and contracts.
The CARBON STEEL PIPES manufactured were tested and qualified by our Quality Control Department.

34" DMV

24" Surface Casing

LIAOYANG LARGE-SCALE STEEL PIPE PLANT

MILL TEST CERTIFICATE

Description: NEWLY PRODUCED PRIME QUALITY STEEL PIPE

CERTIFICATE No. 1765

ASTM/ASME A/SA 53-B EDITION 2002

PO.No: SF/QT3025

DATE: 2007.07.27

NO.	HEAT NO.	PIECES	SIZE			WEIGHT (kg/m)	TOTAL WEIGH T (MT)	CHEMICAL COMPOSITION (wt%)									BASE METAL MECHANICAL PROPERTIES		
			OD (Inc)	WT (Inc)	length (ft)			C	Mn	P	S	Cu	Ni	Cr	Mo	V	Y.S. (MPa)	T.S. (MPa)	ELONGATION (%)
1	07AD3117	1	24	0.375	20	140.420	0.856	0.13	0.84	0.012	0.005	0.008	0.015	0.019	0.002	0.001	305	465	31
2	07AD3118	71	24	0.375	20	140.420	60.983	0.18	0.85	0.016	0.005	0.006	0.008	0.028	0.004	0.001	310	460	33
3	07AD3119	97	24	0.375	20	140.420	83.313	0.12	0.84	0.011	0.005	0.009	0.015	0.018	0.002	0.001	285	440	34
4	07AD3120	2	24	0.375	40	143.090	3.490	0.14	0.85	0.011	0.006	0.002	0.007	0.017	0.009	0.001	315	460	32
5	07BD3036	24	24	0.375	40	143.090	41.870	0.14	0.84	0.010	0.005	0.008	0.015	0.018	0.002	0.001	309	450	34

NO	HEAT NO.	WELD JOINT MECHANICAL PROPERTIES	FLATTENING	VISUAL&DIMENSIONS	U.T.	HYDROSTATIC PRESSURE (KPa)	DURATION OF TIME (s)
1	07AD3117	465	OK	OK	OK	4500	10
2	07AD3118	460	OK	OK	OK	4500	10
3	07AD3119	440	OK	OK	OK	4500	10
4	07AD3120	460	OK	OK	OK	4500	10
5	07BD3036	455	OK	OK	OK	4500	10

WE HERE CERTIFY THAT THE MATERIAL HEREIN DESCRIBED IS MERCURY FREE AND HAS BEEN MANUFACTURED,SAMPLED,TESTED AND INSPECTED IN ACCORDANCE WITH THE REQUIRE MENTS OF ABOVE SPECIFICATIONS AND PURCHASE ORDER,AND MET THE REQUIREMENTS.

The mill test certificate is issued by producer of Liao yang Large-Scale Steel Pipe Plant.

INSPECTOR:

ISSUER:

29" DMW

LIAOYANG LARGE-SCALE STEEL PIPE PLANT

MILL TEST CERTIFICATE

CERTIFICATE No. 1785

Description: NEWLY PRODUCED PRIME QUALITY STEEL PIPE

ASTM/ASME A/SA 53-B EDITION 2002

PO.No: SF/QT3025

DATE: 2007.07.27

NO.	HEAT NO.	PIECES	SIZE OD (inc)	SIZE WT (inc)	SIZE length (ft)	WEIGHT (kg/m)	TOTAL WEIGHT /MT	CHEMICAL COMPOSITION (wt%) C	Mn	P	S	Cu	Ni	Cr	Mo	V	BABE METAL MECHANICAL PROPERTIES Y.S. (MPa)	T.S. (MPa)	ELONGATION (%)
1	07AD3117	1	24	0.375	20	140.420	0.856	0.13	0.84	0.012	0.001	0.008	0.015	0.019	0.002	0.001	305	485	31
2	07AD3118	71	24	0.375	20	140.420	60.963	0.13	0.85	0.016	0.005	0.006	0.008	0.028	0.004	0.001	310	490	33
3	07AD3119	97	24	0.375	20	140.420	83.313	0.12	0.84	0.011	0.005	0.009	0.015	0.018	0.002	0.001	285	440	34
4	07AD3120	2	24	0.375	40	143.090	3.490	0.14	0.85	0.011	0.006	0.002	0.007	0.017	0.005	0.001	315	460	32
5	07BD3036	24	24	0.375	40	143.090	41.870	0.14	0.84	0.010	0.005	0.008	0.015	0.019	0.002	0.001	300	450	34

NO.	HEAT NO.	WELD JOINT MECHANICAL PROPERTIES	FLATTENING	VISUAL&DIMENSIONS	U.T.	HYDROSTATIC PRESSURE (KPa)	DURATION OF TIME (s)
1	07AD3117	465	OK	OK	OK	4500	10
2	07AD3118	460	OK	OK	OK	4500	10
3	07AD3119	440	OK	OK	OK	4500	10
4	07AD3120	460	OK	OK	OK	4500	10
5	07BD3036	455	OK	OK	OK	4500	10

WE HERE CERTIFY THAT THE MATERIAL HEREIN DESCRIBED IS MERCURY FREE AND HAS BEEN MANUFACTURED,SAMPLED,TESTED AND INSPECTED IN ACCORDANCE WITH THE REQUIRE MENTS OF ABOVE SPECIFICATIONS AND PURCHASE ORDER,AND MET THE REQUIREMENTS.

The mill test certificate is issued by producer of Liao yang Large-Scale Steel Pipe Plant.

INSPECTOR:

ISSUER:

24" DMW

16" Final Casing/Shallow Monitor Zone

沧州市螺旋钢管有限责任公司
Cang zhou Spiral Steel Pipe Co., Ltd
钢管质量证明书
MILL TEST CERTIFICATE

埋弧焊管生产许可证
编号:TS2710837 2013

客 户 Customer: OZONE INDUSTRIES　　合同编号 Contract No.: OZ081808008

品 名 Product name: Spiral steel pipe　　钢 级 Steel Grade: Gr.B PSL1

证书编号 Certificate No.: [illegible]5-07081286

到 站 Destination: [illegible]

Pipes No.	炉号 Heat Numbers	规格(Size)			数量Quantity			化学成分 Chemical Composition (%)					焊接接头物理性能 physical properties of welding joints			管体物理性能 physical properties of pipes				无损检测 NDT		水压试验 Hydrostatic (10s) Mpa	尺寸及外观 size & appearance
		直径 O.D. in	厚度 W.T. in	长度 lenth ft	支数 Pieces (Pcs)	总长度 lenth (ft)	总重量 Weight (MT)	C	Mn	Si	P	S	σb Mpa	正弯 face-bend 180°	反弯 back-bend 180°	σs Mpa	σb Mpa	δ (%)	冷弯 cold-bend 180°	UT	RT		
1	81-09198	16	0.375	39	51	1989	58.600	0.07	0.96	0.20	0.026	0.012	440	pass	pass	295	440	34	pass	pass	pass	6.9	pass
2	81-07529	24	0.375	39	34	1326	56.950	0.09	0.97	0.19	0.019	0.018	455	pass	pass	325	455	26	pass	pass	pass	4.6	pass
3	81-09195	24	0.375	39	6	234	10.050	0.08	0.97	0.20	0.021	0.015	445	pass	pass	315	445	34	pass	pass	pass	4.6	pass
4	82-07242	24	0.375	39	4	156	6.700	0.06	1.17	0.20	0.018	0.019	470	pass	pass	325	470	35	pass	pass	pass	4.6	pass
5	82-07364	24	0.375	39	8	312	13.400	0.08	1.20	0.30	0.019	0.020	430	pass	pass	340	430	33	pass	pass	pass	4.6	pass
6	83-04971	24	0.375	39	3	117	5.025	0.09	1.03	0.21	0.020	0.018	450	pass	pass	310	450	27	pass	pass	pass	4.6	pass
7	81-04071	24	0.375	39	2	78	3.350	0.09	0.98	0.20	0.020	0.018	440	pass	pass	300	440	23	pass	pass	pass	4.6	pass
8	81-09198	34	0.375	39	1	39	2.384	0.07	0.96	0.20	0.025	0.012	440	pass	pass	295	440	34	pass	pass	pass	3.2	pass
9	81-07529	34	0.375	39	19	741	45.298	0.09	0.96	0.21	0.020	0.020	485	pass	pass	350	485	30	pass	pass	pass	3.2	pass
Total					128	4992	199.663																

本证明本表所列产品,均依材料规格标准及试验,并符合规格之要求。

The Spiral steel pipes are tested according to API 5L Gr.B and ASTM A139 Gr.B. This is to certify that in accordance with the relevant specifications and contracts.

The Spiral steel pipes manufactured were tested and qualified by our Quality Control Department.

检验人员 INSPECTOR: 尹佳花

许可证号 LICENCE: SE-0640

日 期 Date: SEP-19-2008

16" DAW

INTERPIPE NMPP

OJSC "INTERPIPE NOVOMOSKOVSK PIPE PRODUCTION PLANT"
115 SUCHKOV STR.
NOVOMOSKOVSK UKRAINE

TÜV CERT

INSPECTION CERTIFICATE
EN 10204 / 3.1

Sheet 1 Sheets 5

DATE 07.04.08
CERT NO 2354/08
DEL NOTE

CUSTOMER

INTERPIPE NMPP REF number
SALES WORKS

CUSTOMER ORDER Nr	Freight car№	Q-ty of packs	Gross, lb weight	Net, lb weight
08-1100	68311653	15	75632	75297

PRODUCT DESCRIPTION: Electric welded steel pipes acc to ASTM A53-06/API 5L PSL 2 43-th EDITION 2004 Grade B/X42

LICENCE № 01-0304

L=LONGITUDINAL T=TRANSVERSE B=BODY W=WELD KV=CHARPY V=NOTCH HN=HARDNESS VICKERS (10 KG LOAD) DT=DROP WEIGHT TEAR TEST

ITEM N	N OF PIECES	PRODUCT DIMENSIONS	HEAT N	LOT N	TENSILE TEST Dimensions of specimen width: 1.5;1.5in length:7.874in thickness: 0.358;0.362in Type of test piece: W-F,B-B					IMPACT TEST Dimensions of specimen width: 0.295in thickness: 0.394in					STEEL MAKING PROCESS BASIC OXYGEN STEEL	
						Yeld strength Re Psi	Tensile strength Rm Psi	Elongation A%	Hydro pressure Psi	Place and orientation	Specimen type	Test temperature, °F permissive viscosity, Ft-lb Impact1 +32°	Impact2 +32°	Impact3 +32°	Average +32°	OTHER TESTS
B09	B10	B11-13	B08	C00	C01, C02, C10	C11	C12	C13	D02	C01 C02	C40 C30					
1	30-	16inODx0.375in 40.0-42.0ft 1204.6ft	3063964	32509.	W T B T	59.000;45.000	78.000;78.000 75.000;77.000	36.0;36.0	1670 10secs	BT	KV	35;39	33;35	32;38	33;27	FLATTENING TEST SATISFACTOR WELD LINE 100% US-TESTED UT SISE 16x 0.375in N10 RESIDUAL MAGNETISM 10.0-20.0 GAUSS THE MINIMUM TEMPERATURE FOR HEAT TREATMENT OF THE WELD SEAM 1634°F Hardness Rockwell < 22 HRC Weld repair isn't permitted

C71-C94 ANALYSIS %
LD-LADLE
CH-CHECK

Heat N		C	Si	Mn	P	S	N	Cr	Cu	Al	Ni	Mo	Ti	V	NB	Ca	O	Zr	CEV normal 0.43
3063964	LD	0.19	0.28	0.53	0.008	0.004	0.007	0.02	0.07	-	0.04	0.004	-	0.007	-	-	-	-	-
3063964	CH	0.21	0.31	0.59	0.010	0.006	-	<0.05	0.045	0.042	0.034	<0.01	<0.01	<0.01	<0.01	-	-	-	<0.33

THESE RESULTS ARE CERTIFIED BY INTERPIPE NMPP AND COMPLY WITH THE REQUIREMENTS OF THE PRODUCT DESCRIPTION.

C01

TECHNICAL STANDARDIZE DEPARTMENT OF CERTIFICATION

SIGNATURE

Shank Gepvin 2K № 19999

Z01/Z02

16" DMW

L.S. SIMS
& ASSOCIATES
Environmental Consulting

UIC Number: 0040842-022-UC
RFI Number 3: Okeechobee Landfill Injection Well (IW-1)

EXHIBIT 3

C-1	LEACHATE TRANSFER PIPELINE ROUTING
S-2	IW SLAB - STRUCTURAL PLAN
S-3	IW SLAB ELEVATION SCHEMATIC
I-1	PROCESS & INSTRUMENTATION DIAGRAM

1530 U.S. Highway 1 Rockledge, Florida 32955 Phone (321) 504-4046 Fax (321) 504-4035

LANDFILL

LEACHATE PONDS

CONNECTION TO LEACHATE PUMP STATION

AS BUILT LEACHATE PIPELINE ROUTING SURVEYED BASED ON MARKERS ESTABLISHED BY PIPELINE CONTRACTOR

HDPE Located 11/08 by Stand Pipes or Paint Marks Provided by Ryan Services

Stand Pipe

112
1092483.07
757068.59
59.95

CONNECTION TO INJECTION WELL PIPING

N: 1091566.6784
E: 756643.0721

DEEP WELL INJECTION LOCATION

DEEP WELL INJECTION CONCRETE PAD 110 FT x 60 FT

0 FT 100 FT 200 FT
SCALE

NORTH

AS BUILT CONDITIONS
6/24/2009

ISSUE CODE					
A	PRELIMINARY	B	DESIGN		
C	BIDS	D	CONSTRUCTION	E	APPROVAL

DESIGN	REM	SCALE	NA
DRAWN BY	REM	DATE	6/26/08
CHK'D. BY		ENGR. APPR.	APPR

WASTE MANAGEMENT

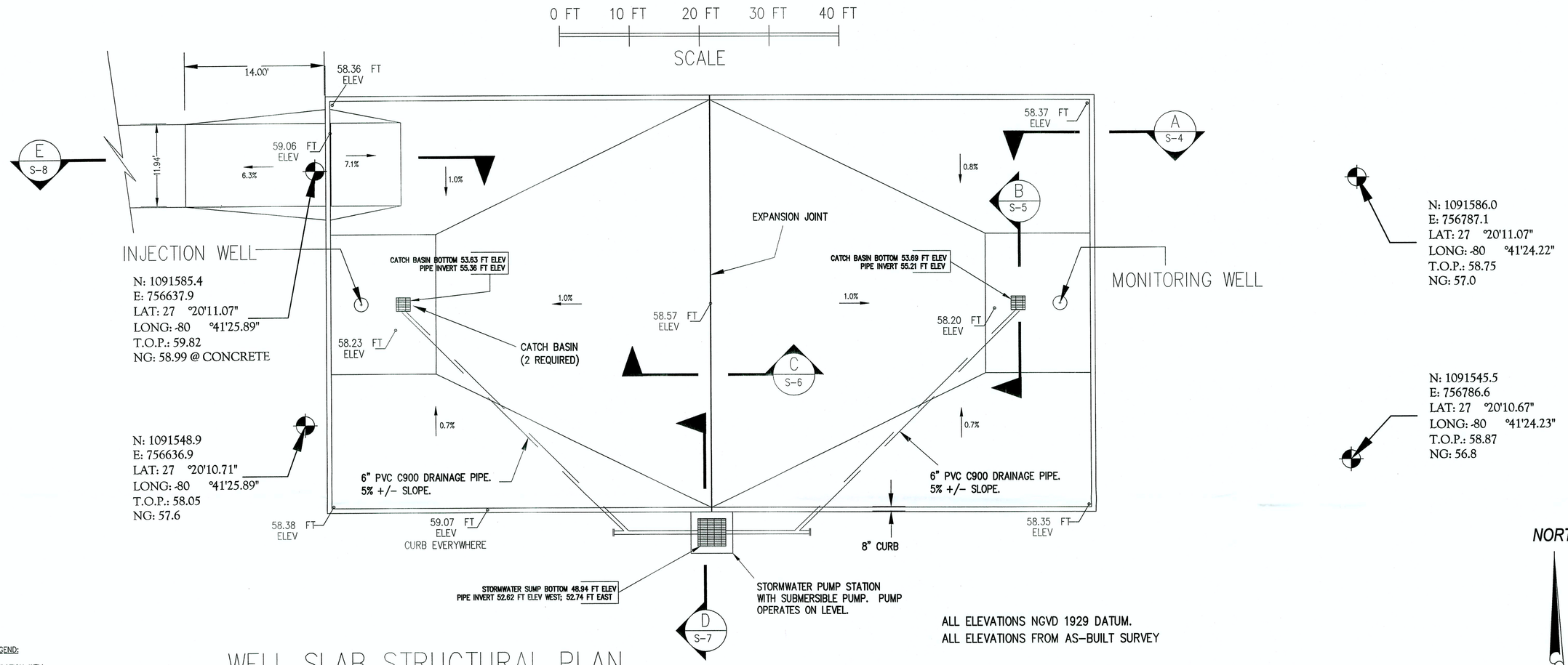
DRAWING TITLE
LEACHATE TRANSFER PIPELINE ROUTING

AREA	JOB NO.
AREA	JOBNO

DWG. NO.	REV.
D SHEET C-1	

ROGER E. MAYFIELD, P.E. FL #46092
REM ASSOCIATES
FL CERTIFICATE OF AUTHORIZATION #27397
4270 ALOMA AVE., #124-16J
WINTER PARK, FLORIDA 32792

L.S.SIMS & ASSOCIATES
ENVIRONMENTAL CONSULTING



ALL ELEVATIONS NGVD 1929 DATUM.
ALL ELEVATIONS FROM AS-BUILT SURVEY

AS-BUILT LEGEND:

INJ. W. = INJECTION WELL
MW. = MONITOR WELL
◈ = TEMPORARY MONITOR WELL
N: = NORTHING
E: = EASTING
LAT: = LATITUDE
LONG: = LONGITUDE
T.O.P.: = TOP OF PIPE
NG: = NATURAL GROUND

WELL SLAB STRUCTURAL PLAN

SCALE: AS NOTED

NOTE: ALL ELEVATIONS SHOWN ARE IN NATIONAL GEODETIC VERTICAL DATUM (NGVD) 1929.

CERTIFICATION

I HEREBY CERTIFY THAT THE ATTACHED SKETCH OF SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT IT MEETS THE MINIMUM TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 472.027 FLORIDA STATUTES.

DATE OF LAST FIELD WORK: 03-05-09
FOR THE FIRM:
WANTMAN GROUP, INC.

_____DATE_____

DEREK G. ZEMAN, P.S.M.
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LICENSE NO. 5655

SURVEYOR'S NOTES

1. THIS IS A RECORD/AS-BUILT SURVEY AS DEFINED IN CHAPTER 61G17-6.005, FLORIDA ADMINISTRATIVE CODE, THE PURPOSE OF THIS SURVEY IS TO SHOW EXISTING ELEVATIONS AT THE INJECTION WELL PAD AT SPECIFIED LOCATIONS.

2. VERTICAL VALUES ARE BASED ON NATIONAL GEODETIC SURVEY POINT "C-357", A DISK AND A FIRST ORDER CLASS II VERTICAL POINT, HAVING A PUBLISHED ELEVATION OF 57.15' NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND AN ELEVATION OF 58.43' CONVERTED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29) USING A CONVERSION VALUE OF 1.28'.

3. HORIZONTAL VALUES SHOWN HEREON ARE REFERENCED TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE, NAD 1983, (2007 ADJUSTMENT).

4. UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY WANTMAN GROUP, INC., THIS REPORT, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

5. WANTMAN GROUP, INCORPORATED, CERTIFICATE OF AUTHORIZATION NO. 7055, IS ISSUED BY THE FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION.

6. THIS SURVEY DOES NOT REFLECT NOR DETERMINE OWNERSHIP.

Wantman Group, Inc.
Engineering ❖ Planning ❖ Surveying ❖ Environmental
2035 VISTA PARKWAY, SUITE 100 WEST PALM BEACH, FL 33411 (866) 909-2220 phone (561) 687-1110 fax
CERT No. 6091 – LB No. 7055
JACKSONVILLE – ORLANDO – PORT ST. LUCIE – TAMPA
www.wantmangroup.com

DRAWING PATH:	
DRAWING NAME: *S-2 S-3.DWG*	
DRAWN BY: *GS*	JOB NUMBER: *306602.00*
CHECKED BY: *DGZ*	FIELD DATE: *02-23-09*
SHEET Model OF 2	

ROGER E. MAYFIELD, P.E. FL #46092
REM ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION # 27397
4270 ALOMA AVE., #124-54K
WINTER PARK, FLORIDA 32792

L.S.SIMS & ASSOCIATES
ENVIRONMENTAL CONSULTING

REV. NO.	BY	
REVB		
REVA		
		AS BUILT CONDITIONS 6/24/2009

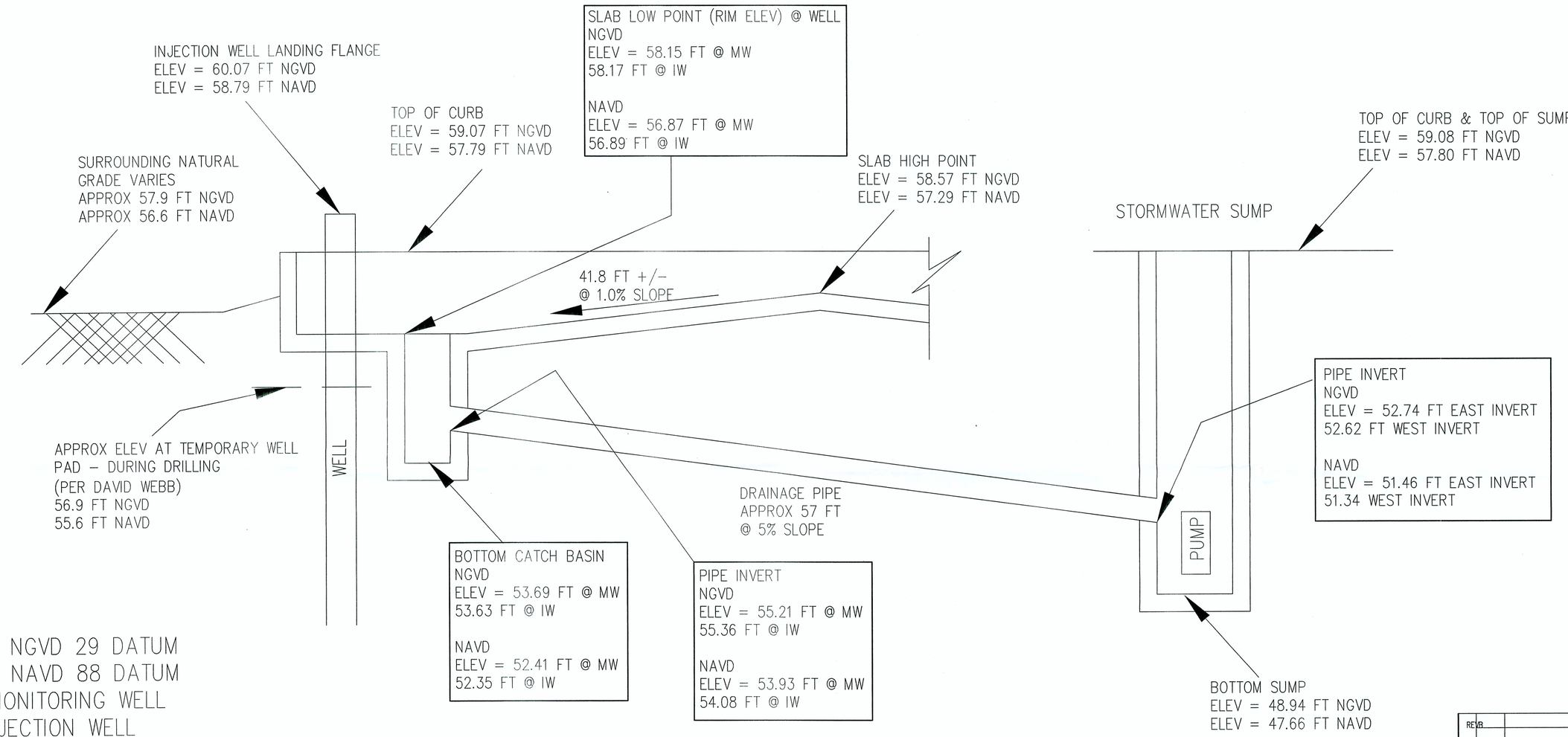
DESIGN	REM	SCALE	
DRAWN BY		DATE	11/8/08
CHK'D. BY	REM	ENGR. APPR.	REM

WASTE MANAGEMENT

DRAWING TITLE
OKEECHOBEE LANDFILL INC.
LECHATE INJECTION WELL PROJECT
IW SLAB – STRUCTURAL PLAN

AREA	JOB NO.

D	DWG. NO. S-2	REV.



NOTES:
NGVD = NGVD 29 DATUM
NAVD = NAVD 88 DATUM
MW = MONITORING WELL
IW = INJECTION WELL
ALL ELEVATIONS SHOWN ARE FROM AS-BUILT SURVEY

WELL SLAB ELEVATION SCHEMATIC

NOT TO SCALE

Wantman Group, Inc.
Engineering ❖ Planning ❖ Surveying ❖ Environmental
2035 VISTA PARKWAY, SUITE 100 WEST PALM BEACH, FL 33411 (866)
909-2220 phone (561) 687-1110 fax
CERT No. 6091 – LB No. 7055
JACKSONVILLE – ORLANDO – PORT ST. LUCIE – TAMPA
www.wantmangroup.com

DRAWING PATH:	
DRAWING NAME: *S-2 S-3.DWG*	
DRAWN BY: *GS*	JOB NUMBER: *306802.00*
CHECKED BY: *DGZ*	FIELD DATE: *02-23-09*
SHEET Model OF 2	

ROGER E. MAYFIELD, P.E. FL #46092
REM ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION # 27397
4270 ALOMA AVE., #124-54K
WINTER PARK, FLORIDA 32792

9/9/09

L.S.SIMS & ASSOCIATES
ENVIRONMENTAL CONSULTING

REV. NO.	BY	
REVB		
REVA		
		AS BUILT CONDITIONS 6/24/2009

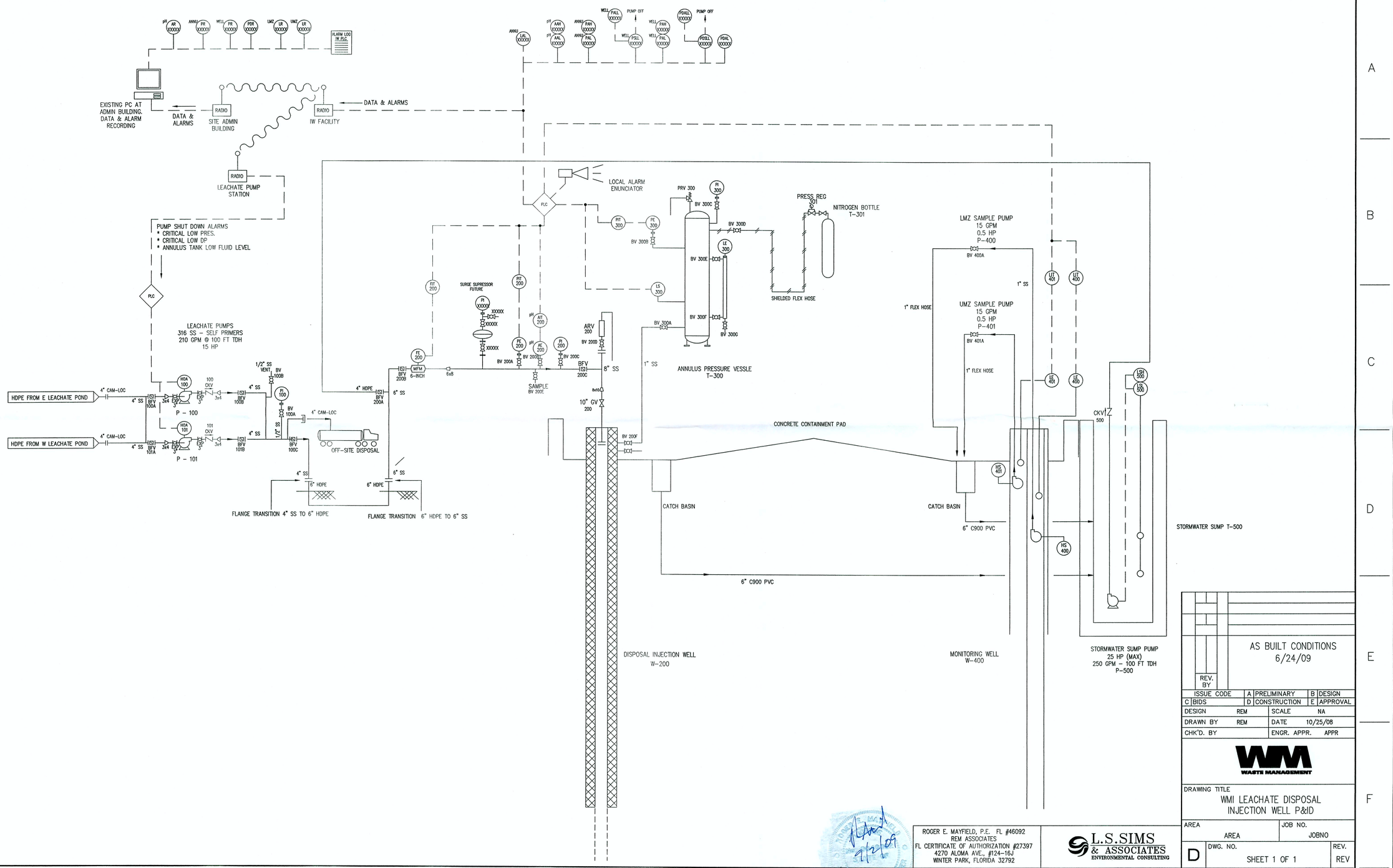
DESIGN	REM	SCALE	
DRAWN BY		DATE	11/8/08
CHK'D. BY	REM	ENGR. APPR.	REM

WASTE MANAGEMENT

DRAWING TITLE
OKEECHOBEE LANDFILL INC.
LECHATE INJECTION WELL PROJECT
IW SLAB ELEVATION SCHEMATIC

AREA	JOB NO.

D	DWG. NO. S-3	REV.



AS BUILT CONDITIONS
6/24/09

REV.	BY

ISSUE CODE					
A	PRELIMINARY	B	DESIGN		
C	BIDS	D	CONSTRUCTION	E	APPROVAL

DESIGN	REM	SCALE	NA
DRAWN BY	REM	DATE	10/25/08
CHK'D. BY		ENGR. APPR.	APPR

WASTE MANAGEMENT

DRAWING TITLE
WMI LEACHATE DISPOSAL
INJECTION WELL P&ID

AREA	JOB NO.
AREA	JOBNO

	DWG. NO.	REV.
D	SHEET 1 OF 1	REV

ROGER E. MAYFIELD, P.E. FL #46092
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