FDLE
Alcohol Testing Program

INSTRUMENT PROCESSING SHEET

Agency Sarasota County SO S/N 80-001347

Date In 10/18/17 Date Out 11/15/17 ☒Ship ☐P/U ☐H/D ☐CMI ☐EE

Intake Performed By TD

- ☐ Registration
- ☑ Annual
- ☑ Return from CMI
- ☐ Return from Enforcement Electronics
- ☐ Other

Visual Inspection:

- OK Case
- OK Dry Gas Holder
- OK Keyboard/Plug
- OK Screws tight
- OK Handle
- OK Feet
- OK Back/Plugs
- OK Breath Hose

Other Equipment:

- ☐ Power cord
- ☐ Printer Cable
- ☑ Other Static Bag

Notes:

NOV 15 2017

Quality Checks Performed By SP

- ☒ Lab Temp °C 22.3
- ☒ Breath Tube Screen
- ☒ Replace External O-Rings
- ☒ Instrument Set Up Verified
- ☒ R-Value 195
- ☒ Flow Verification (L/s)

Flow Column # ATP102

32mm .152 (.139 - .169)
36mm .171 (.156 - .190)
53mm .234 (.228 - .278)
103mm .492 (.447 - .547)

- ☒ Barometric Pressure Check

Gauge ID # 26932

- ☒ Stability Checks

Simulator	Serial #	Lot #/Exp
0.05	SD3962	201709D 7-25-19
0.08	SD1013	201707E 7-25-19
0.20	DR3856	201707C 7-24-19
0.08 DGS	N/A	AG62L0004 9-22-18

Flow Calibration Performed By

- ☒ Flow Calibration N/A
- ☐ Flow Calibration Complete

Flow Column #

- ☐ 5L/min – 17mm
- ☐ 15L/min – 53mm
- ☐ 30L/min – 103mm
- ☐ R-Value
- ☐ Post Calibration Verification (L/s)

Flow Column #

32mm (.139 - .169)
36mm (.156 - .190)
53mm (.228 - .278)
103mm (.447 - .547)

Maintenance Performed By

- ☐ Battery Replacement
- ☐ Dry Gas Regulator Replacement
- ☐ Breath Tube Replacement
- ☐ Other

Quality Checks Cont. Performed By SP

Simulator Temperatures °C

External Digital Therm. ID#: 300505

- ☑ 34°C +-.2 Serial #: SD3962
- ☑ 34°C +-.2 Serial #: SD1013
- ☑ 34°C +-.2 Serial #: DR3856

Calibration Adjustment Performed By SP

- ☐ Calibration Adjustment N/A
- ☑ Calibration Adjustment Complete

Barometric Pressure Gauge 1018 ID # 28421

Simulator	Serial Number	Lot Number	Expiration
0.000	SD1016	N/A	N/A
0.040	SD1018	16320	10-21-18
0.100	G2834	17060	2-14-19
0.200	SD1011	17090	2-24-19
0.300	DR1275	16410	12-19-18
0.080 DGS	N/A	178170SP	8/5/19

- ☒ Post Calibration Adjustment Stability Checks

Simulator	Serial Number	Lot Number	Expiration
0.05	SD3962	201707D	7-25-19
0.08	SD1013	201707E	7-25-19
0.20	DR3856	201707C	7-24-19
0.08 DGS	N/A	AG62L0004	9-22-18

Department Inspection Performed By SP

- ☒ Barometric Pressure ID# 26932 — 1018 Gauge / 1017 Instrument

Mouth Alcohol Solution Lot # 2016-C

Acetone Stock Solution Lot # 2017-A

Simulator	Serial Number
0.00	SD1019
Interferent	SD1021
0.05	SD3962
0.08	SD1013
0.20	DR3856

Attachments

- ☒ Form 41
- ☒ Pre-Stability Tests
- ☐ Flow Calibration
- ☒ Calibration Adjustment
- ☒ Post-Stability Tests
- ☒ Other FORM 40 X 2

Notes/Suggested Service:

- ☒ **Instrument Complies with Chapter 11D-8, FAC**
- ☐ **Instrument Does Not Comply with Chapter 11D-8, FAC**
- ☒ **Return to/Place into Evidentiary Use**
- ☐ **Remain Out of Evidentiary Use**
- ☒ **Conduct an Agency Inspection Before Evidentiary Use**

11/15/17 11/15/17

Quality Control Review Date

Revised May 2017
DI-IPS2017R1
FDLE/ATP -048

STABILITY CHECKS - #80-001347 - SARASOTA COUNTY SO

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
10/31/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:49
Control Test	0.050	09:50
Air Blank	0.000	09:50
Control Test	0.051	09:51
Air Blank	0.000	09:52
Control Test	0.051	09:52
Air Blank	0.000	09:53
Control Test Stats		
Average	0.0507	
Std Dev	0.0006	
Rel Std Dev(%)	1.1395	

SP
Operator's Signature

11/5/17 DGS

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
10/31/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:42
Control Test	0.083	09:43
Air Blank	0.000	09:43
Control Test	0.083	09:44
Air Blank	0.000	09:45
Control Test	0.083	09:45
Air Blank	0.000	09:46
Control Test Stats		
Average	0.0830	
Std Dev	0.0000	
Rel Std Dev(%)	0.0000	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
10/31/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:33
Control Test	0.201	09:34
Air Blank	0.000	09:34
Control Test	0.200	09:35
Air Blank	0.000	09:35
Control Test	0.201	09:36
Air Blank	0.000	09:37
Control Test Stats		
Average	0.2007	
Std Dev	0.0006	
Rel Std Dev(%)	0.2877	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
10/31/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:37
Control Test	0.080	09:38
Air Blank	0.000	09:38
Control Test	0.080	09:38
Air Blank	0.000	09:39
Control Test	0.080	09:39
Air Blank	0.000	09:40
Control Test Stats		
Average	0.0800	
Std Dev	0.0000	
Rel Std Dev(%)	0.0000	

DGS

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
11/15/2017 10:30:40

Auto Calibration
Max Power Res Value = 87
Auto Range Res Value = 58

Sol Value = 0.000 g/210L ***
Fit value = 0.0000 mg/l %%%%
Samples Taken = 4, Discarded = 1
3um Io = 12537, 9um Io = 13392

<<<<< CHANNEL 1 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	0.1220	(-0.0270)
Sample #2 =	0.1390	(0.0040)
Sample #3 =	0.1260	(0.0030)
Sample #4 =	0.1350	(0.0420)

Avg % Abs = 0.1333 (0.0163)
STD DEV = 0.0067 (0.0222)
REL STD DEV = 4.994 (136.124)

<<<<< CHANNEL 2 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	0.1550	(-0.0430)
Sample #2 =	0.1480	(-0.0200)
Sample #3 =	0.1560	(-0.0350)
Sample #4 =	0.1670	(-0.0180)

Avg % Abs = 0.1570 (-0.0243)
STD DEV = 0.0095 (0.0093)
REL STD DEV = 6.076 (38.185)

Sol Value = 0.040 g/210L ***
Fit value = 0.1905 mg/l %%%%
Samples Taken = 4, Discarded = 1
3um Io = 12527, 9um Io = 13393

<<<<< CHANNEL 1 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	0.8440	(-0.0380)
Sample #2 =	0.8670	(-0.0050)
Sample #3 =	0.8360	(0.0020)
Sample #4 =	0.8820	(-0.0070)

Avg % Abs = 0.8617 (-0.0033)
STD DEV = 0.0235 (0.0047)
REL STD DEV = 2.723 (141.774)

11/15/17

<<<<< CHANNEL 2 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	1.4980	(0.0070)
Sample #2 =	1.5140	(0.0090)
Sample #3 =	1.5220	(0.0030)
Sample #4 =	1.5490	(-0.0040)

Avg % Abs = 1.5283 (0.0027)
STD DEV = 0.0183 (0.0065)
REL STD DEV = 1.200 (243.990)

Sol Value = 0.100 g/210L ***
Fit value = 0.4762 mg/l %%%%
Samples Taken = 4, Discarded = 1
3um Io = 12521, 9um Io = 13382

<<<<< CHANNEL 1 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	1.8900	(-0.0140)
Sample #2 =	1.9180	(-0.0020)
Sample #3 =	1.9370	(-0.0030)
Sample #4 =	1.9130	(0.0030)

Avg % Abs = 1.9227 (-0.0007)
STD DEV = 0.0127 (0.0032)
REL STD DEV = 0.659 (482.183)

<<<<< CHANNEL 2 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	3.5600	(-0.0030)
Sample #2 =	3.5780	(0.0080)
Sample #3 =	3.5670	(0.0140)
Sample #4 =	3.5570	(0.0160)

Avg % Abs = 3.5673 (0.0127)
STD DEV = 0.0105 (0.0042)
REL STD DEV = 0.294 (32.868)

Sol Value = 0.200 g/210L ***
Fit value = 0.9524 mg/l %%%%
Samples Taken = 4, Discarded = 1
3um Io = 12518, 9um Io = 13380

<<<<< CHANNEL 1 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	3.6550	(-0.0130)
Sample #2 =	3.6630	(-0.0160)
Sample #3 =	3.6660	(0.0160)
Sample #4 =	3.6650	(-0.0070)

Avg % Abs = 3.6647 (-0.0023)
STD DEV = 0.0015 (0.0165)
REL STD DEV = 0.042 (707.251)

<<<<< CHANNEL 2 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	6.7740	(0.0040)
Sample #2 =	6.7720	(0.0260)
Sample #3 =	6.7710	(0.0370)
Sample #4 =	6.7810	(0.0320)

Avg % Abs = 6.7747 (0.0317)
STD DEV = 0.0055 (0.0055)
REL STD DEV = 0.081 (17.392)

Sol Value = 0.300 g/210L ***
Fit value = 1.4286 mg/l %%%%
Samples Taken = 4, Discarded = 1
3um Io = 12520, 9um Io = 13377

<<<<< CHANNEL 1 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	5.3340	(-0.0180)
Sample #2 =	5.3220	(0.0290)
Sample #3 =	5.3070	(0.0620)
Sample #4 =	5.3310	(0.0440)

Avg % Abs = 5.3200 (0.0450)
STD DEV = 0.0121 (0.0165)
REL STD DEV = 0.228 (36.717)

<<<<< CHANNEL 2 >>>>>

Sample	% Abs	(% Abs Ref)
Sample #1 =	9.7880	(-0.0180)
Sample #2 =	9.8000	(0.0220)
Sample #3 =	9.7970	(0.0520)
Sample #4 =	9.8110	(0.0360)

Avg % Abs = 9.8027 (0.0367)
STD DEV = 0.0074 (0.0150)
REL STD DEV = 0.075 (40.939)

***** AUTO CAL DATA *****

<<<<< CHANNEL 1 >>>>>

Sol Val = 0.0000 mg/l or 0.000 g/210L
% Abs = 0.133
Std Dev = 0.01 Rel Std Dev = 4.99
Sol Val = 0.1905 mg/l or 0.040 g/210L
% Abs = 0.862
Std Dev = 0.02 Rel Std Dev = 2.72
Sol Val = 0.4762 mg/l or 0.100 g/210L
% Abs = 1.923
Std Dev = 0.01 Rel Std Dev = 0.66
Sol Val = 0.9524 mg/l or 0.200 g/210L
% Abs = 3.665
Std Dev = 0.00 Rel Std Dev = 0.04
Sol Val = 1.4286 mg/l or 0.300 g/210L
% Abs = 5.320
Std Dev = 0.01 Rel Std Dev = 0.23
Zero Order Coef = -341.04
First Order Coef = 2584.16
Second Order Coef = 30.82
Standard Deviation = 14.698292

<<<<< CHANNEL 2 >>>>>

Sol Val = 0.0000 mg/l or 0.000 g/210L
% Abs = 0.157
Std Dev = 0.01 Rel Std Dev = 6.08
Sol Val = 0.1905 mg/l or 0.040 g/210L
% Abs = 1.528
Std Dev = 0.02 Rel Std Dev = 1.20
Sol Val = 0.4762 mg/l or 0.100 g/210L
% Abs = 3.567
Std Dev = 0.01 Rel Std Dev = 0.29
Sol Val = 0.9524 mg/l or 0.200 g/210L
% Abs = 6.775
Std Dev = 0.01 Rel Std Dev = 0.08
Sol Val = 1.4286 mg/l or 0.300 g/210L
% Abs = 9.803
Std Dev = 0.01 Rel Std Dev = 0.08
Zero Order Coef = -199.83
First Order Coef = 1343.62
Second Order Coef = 13.64
Standard Deviation = 11.871217

Solution Stats Quadratic Fit Chan 1

Act	Fit	Residual
g/210L	g/210L	g/210L
0.000	0.000	-0.0001
0.040	0.040	-0.0001
0.100	0.100	0.0004
0.200	0.200	-0.0004
0.300	0.300	0.0001

Solution Stats Quadratic Fit Chan 2

Act	Fit	Residual
g/210L	g/210L	g/210L
0.000	0.000	-0.0002
0.040	0.040	0.0004
0.100	0.100	-0.0001
0.200	0.200	-0.0001
0.300	0.300	0.0001

Sol Value = 0.080 g/210L ***
Fit value = 0.3810 mg/l %%%%
Samples Taken = 4, Discarded = 1
***** CHANNEL 1
Sample #1 = 2896.00
Sample #2 = 2962.00
Sample #3 = 2849.00
Sample #4 = 2833.00
Average Result = 2881.3333
STD DEV = 70.3160
REL STD DEV = 2.440
****
***** CHANNEL 2
Sample #1 = 3297.00
Sample #2 = 3301.00
Sample #3 = 3286.00
Sample #4 = 3257.00
Average Result = 3281.3333
STD DEV = 22.3681
REL STD DEV = 0.682
****
Dry Gas H2O Adjust Results **********
Barometric Pressure = 1017
3 um H2O Adjust (mg/l*10,000) = 928
9 um H2O Adjust (mg/l*10,000) = 528
**** AUTO CAL PASS

POST CAL-ADJUSTMENT STABILITY CHECKS #80-001347

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
11/15/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	11:09
Control Test	0.048	11:09
Air Blank	0.000	11:10
Control Test	0.049	11:11
Air Blank	0.000	11:11
Control Test	0.049	11:12
Air Blank	0.000	11:12
Control Test Stats		
Average	0.0487	
Std Dev	0.0006	
Rel Std Dev(%)	1.1863	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
11/15/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	11:14
Control Test	0.079	11:14
Air Blank	0.000	11:15
Control Test	0.080	11:15
Air Blank	0.000	11:16
Control Test	0.080	11:17
Air Blank	0.000	11:17
Control Test Stats		
Average	0.0797	
Std Dev	0.0006	
Rel Std Dev(%)	0.7247	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
11/15/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	11:18
Control Test	0.198	11:19
Air Blank	0.000	11:19
Control Test	0.198	11:20
Air Blank	0.000	11:21
Control Test	0.200	11:21
Air Blank	0.000	11:22
Control Test Stats		
Average	0.1987	
Std Dev	0.0012	
Rel Std Dev(%)	0.5812	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
11/15/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	11:23
Control Test	0.079	11:23
Air Blank	0.000	11:23
Control Test	0.080	11:24
Air Blank	0.000	11:24
Control Test	0.080	11:25
Air Blank	0.000	11:25
Control Test Stats		
Average	0.0797	
Std Dev	0.0006	
Rel Std Dev(%)	0.7247	

DGS

SP
Operator's Signature

11/15/17

FDLE
Alcohol Testing Program

INSTRUMENT PROCESSING SHEET

Agency Sarasota County S/N 80-001347

Date In 6/7/17 Date Out 6/20/17 ☒Ship ☐P/U ☐H/D ☐CMI ☐EE

RECEIVED
JUN 20 2017
FDLE
Alcohol Testing Program

Intake Performed By [illegible]

- ☐ Registration
- ☒ Annual
- ☐ Return from CMI
- ☐ Return from Enforcement Electronics
- ☐ Other _____

Visual Inspection:

OK Case	OK Handle
OK Dry Gas Holder	OK Feet
OK Keyboard/Plug	OK Back/Plugs
OK Screws tight	OK Breath Hose

Other Equipment:

- ☐ Power cord
- ☐ Printer Cable
- ☒ Other Static Bag

Notes: _____

Quality Checks Performed By SP

- ☒ Lab Temp °C 22.5
- ☒ Breath Tube Screen
- ☒ Replace External O-Rings
- ☒ Instrument Set Up Verified
- ☒ R-Value 197
- ☒ Flow Verification (L/s)

Flow Column # ATP103

32mm .144 (.139 - .169)
36mm .160 (.156 - .190)
53mm .226 (.228 - .278)
103mm .496 (.447 - .547)

- ☒ Barometric Pressure Check

Gauge ID # 28427

- ☒ Stability Checks

Simulator	Serial #	Lot #/Exp
0.05	SD3962	20160 3D
		3-8-18
0.08	SD3964	20161 1B
		11-15-18
0.20	SD3933	20170 2B
		2-23-19
0.08 DGS	N/A	AG626604
		9-22-18

Flow Calibration Performed By SP

- ☐ Flow Calibration N/A
- ☒ Flow Calibration Complete

Flow Column # ATP102

- ☒ 5L/min – 17mm
- ☒ 15L/min – 53mm
- ☒ 30L/min – 103mm
- ☒ R-Value 204
- ☒ Post Calibration Verification (L/s)

Flow Column # ATP103

32mm .148 (.139 - .169)
36mm .164 (.156 - .190)
53mm .234 (.228 - .278)
103mm .507 (.447 - .547)

Maintenance Performed By _____

- ☐ Battery Replacement
- ☐ Dry Gas Regulator Replacement
- ☐ Breath Tube Replacement
- ☐ Other _____

Quality Checks Cont. Performed By SP

Simulator Temperatures °C

External Digital Therm. ID#: 300504

- ☒ 34°C +-.2 Serial #: SD3962
- ☒ 34°C +-.2 Serial #: SD3964
- ☒ 34°C +-.2 Serial #: SD3933

Calibration Adjustment Performed By _____

- ☒ Calibration Adjustment N/A
- ☐ Calibration Adjustment Complete

Barometric Pressure Gauge _____ ID #_____

Simulator	Serial Number	Lot Number	Expiration
0.000		N/A	N/A
0.040			
0.100			
0.200			
0.300			
0.080 DGS	N/A		

☐ Post Calibration Adjustment Stability Checks

Simulator	Serial Number	Lot Number	Expiration
0.05			
0.08			
0.20			
0.08 DGS	N/A		

Department Inspection Performed By SP

- ☒ Barometric Pressure ID# 28427

1015 Gauge
1014 Instrument

Mouth Alcohol Solution Lot # 2016-C
Acetone Stock Solution Lot # 2017-A

Simulator	Serial Number
0.00	G2880
Interferent	G2834
0.05	SD3962
0.08	SD3964
0.20	SD3933

Attachments

- ☒ Form 41
- ☒ Pre-Stability Tests
- ☒ Flow Calibration
- ☐ Calibration Adjustment
- ☐ Post-Stability Tests
- ☐ Other _____

Notes/Suggested Service:
OA/QCOK GSM 6/20/2017

JJ Thatcher 6/20/17
Quality Control Review Date

- ☒ **Instrument Complies with Chapter 11D-8, FAC**
- ☐ **Instrument Does Not Comply with Chapter 11D-8, FAC**
- ☒ **Return to/Place into Evidentiary Use**
- ☐ **Remain Out of Evidentiary Use**
- ☒ **Conduct an Agency Inspection Before Evidentiary Use**

STABILITY CHECKS #80-001347 - SARASOTA COUNTY SO

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
06/20/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:58
Control Test	0.049	09:59
Air Blank	0.000	09:59
Control Test	0.049	10:00
Air Blank	0.000	10:00
Control Test	0.049	10:01
Air Blank	0.000	10:02
Control Test Stats		
Average	0.0490	
Std Dev	0.0000	
Rel Std Dev(%)	0.0000	

SP
Operator's Signature

CD

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
06/20/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:46
Control Test	0.078	09:47
Air Blank	0.000	09:47
Control Test	0.078	09:48
Air Blank	0.000	09:49
Control Test	0.079	09:49
Air Blank	0.000	09:50
Control Test Stats		
Average	0.0783	
Std Dev	0.0006	
Rel Std Dev(%)	0.7370	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
06/20/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	09:52
Control Test	0.200	09:53
Air Blank	0.000	09:53
Control Test	0.199	09:54
Air Blank	0.000	09:55
Control Test	0.200	09:55
Air Blank	0.000	09:56
Control Test Stats		
Average	0.1997	
Std Dev	0.0006	
Rel Std Dev(%)	0.2892	

SP
Operator's Signature

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
06/20/2017
Software: 8100.27

Test	g/210L	Time
Air Blank	0.000	10:12
Control Test	0.079	10:13
Air Blank	0.000	10:13
Control Test	0.079	10:13
Air Blank	0.000	10:14
Control Test	0.080	10:14
Air Blank	0.000	10:15
Control Test Stats		
Average	0.0793	
Std Dev	0.0006	
Rel Std Dev(%)	0.7277	

DGS

SP
Operator's Signature

FLOW CAL
ADJUSTMENT SP
#80-001347

SARASOTA COUNTY SO
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-001347
06/20/2017
Software: 8100.27

Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 6.855
2: Rate (Liters/min) = 15
SQRT(Diff)) = 11.746
3: Rate (Liters/min) = 30
SQRT(Diff)) = 20.758
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 696
Rounded Intercept = -670769
Correlation = 0.99851

PSGM

JD