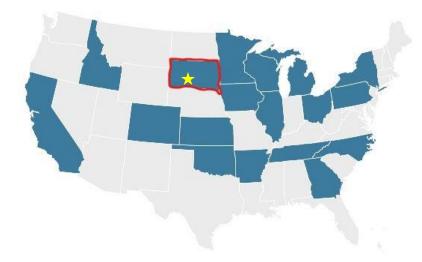
Post Construction Report for South Dakota DOT Demonstration Project Implementation of Performance Engineered Mixtures (PEM)/AASHTO PP 84

August 30, 2019



Participating state DOTs: Arkansas, California, Colorado, Georgia, Idaho, Illinois, Iowa, Kansas, Michigan, Minnesota, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, and Wisconsin.

Submitted to: Michael F. Praul, P.E.

Senior Concrete Engineer Office of Preconstruction, Construction, and Pavements (HICP-40) michael.praul@dot.gov

Reported by: Darin Hodges P.E. Concrete Engineer South Dakota DOT

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Report for South Dakota DOT Demonstration Project Implementation of Performance Engineered Mixtures (PEM)/AASHTO PP 84

INTRODUCTION

The South Dakota Department of Transportation applied for funds through the Performance Engineered Concrete Paving Mixtures pooled fund project (TPF-5(368)) to collect data and demonstrate the new tests. The FHWA approved the application for \$60,000. The SDDOT's portion was \$12,000 which is a 20% match of the total \$60,000. The application can be found in Appendix A.

The project location was on Interstate 90 in Jackson County between Kadoka and about a mile East of Belvidere. Reede Construction was awarded the \$18.7 million contract for this stretch of I90 on November 21, 2017. Reede is the paving contractor who performed all the 169,880 yd² of 10.5" PCCP and 2,133 yd² of PCC shoulder paving on the project. Grading and paving began in 2018 with almost all the concrete mainline paving done in the fall of 2018. The project was completed mid-2019. All the PEM sampling and testing was performed on the mainline concrete paving, there was also concrete paving on ramps and select shoulder locations. Figure 1 shows the project tile sheet and the plant location.

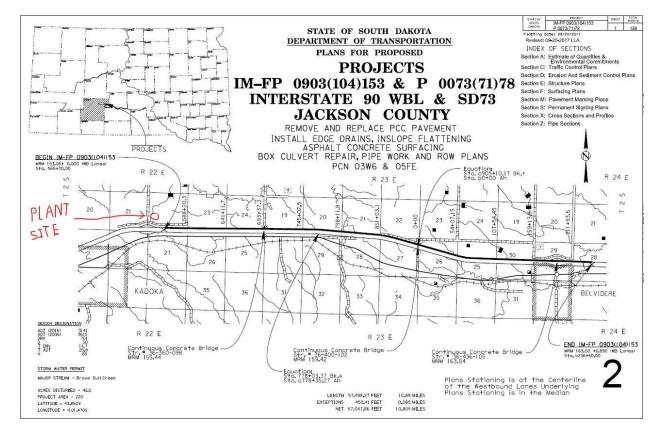
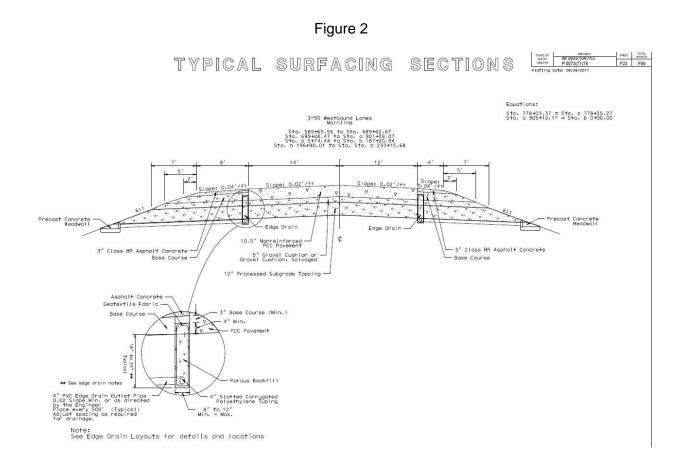


Figure 1

The Gross length of the project is 10.89 miles with a net paving length of 10.805 miles. The existing 8" Continuously Reinforced Concrete Pavement (CRCP) was originally placed in 1969. The 49-year-old CRCP section had isolated asphalt overlays placed at different times to smooth the ride due to shale heave locations. The existing CRCP still had an average overall Surface Condition Index of about 3.40 out of 5. There were large roller coaster feeling bumps from the shale heaves and numerous repairs needed in the CRCP, so full remove and replacement was selected. The typical cross section for the new 10.5" PCCP is shown below in figure 2. The notable design features are the 14' driving lane and edge drains on both sides of the new 10.5" PCCP.



The design life is 20 years with an expected service life of 40 years. The ADT on this section of WB I90 in 2016 was 3141 with 25.8% trucks.

The contract was let before a decision was made to use this project for the PEM implementation funds. The local area office worked with the contractor to add the requirements to the project via Construction Change Order.

PEM implementation funds were used for the following:

- Incorporate the SAM and box test into the mix design and mix design verification process.
 - The contractor hired a testing lab that performed the 4 required lab batches. These lab batches were tested for SAM and Box Test in addition to the normal requirements.
 - They had to pass the requirements of ≤ 2 for the Box Test and <0.20 for the SAM. These results are attached in Appendix B.
 - The SDDOT then performed one verification batch doing all the same testing to verify the testing labs results. These results are also in Appendix C.
- Perform shadow testing on a project. The SDDOT performed additional sampling and testing during the paving process. These samples were obtained from in front of the paver:
 - Plastic air content and SAM test side by side comparison
 - The SAM was performed at least once per 5 SDDOT fresh concrete tests. The minimum frequency for fresh concrete tests is every 2 hours during production.
 - Box Test performed on the grade.
 - Surface Resistivity testing was done on two 4x8 cylinders cast for each SAM test performed.
 - The air content, SAM number, SAM air, Box Test results, unit weight and temperature were recorded on the associated fresh concrete test sheet.
 - Cylinders were sent to the Central Laboratory for resistivity testing typically at 7, 14, and 28 days.
 - Surface Resistivity testing was also performed at later ages before the cylinders were sent to the CP Tech center for hardened air void analysis.

Additional PEM testing:

- The CP Tech Center obtained project materials and developed a mix design with lower cementitious and different aggregate proportioning for the contractor to try. The SDDOT left the decision to try the mix design with the contractor. Due to late season paving, the contractor decided not to try the CP Tech Center mix design.
- The CP Tech Center trailer was on the project shortly after paving began. The complete list of tests performed with results is available from the CP Tech Center.
- The CP Tech Center completed Hardened Air Void analysis on selected Surface Resistivity samples.

MIX DESIGN PROPERTIES

The SDDOT requires the contractor to furnish their own mix design for the PCC pavement. The SDDOT paving mixes utilize well graded aggregate to benefit the paving operation and allow lower cementitious contents. Low Water to Cement (w/c) ratios are also used to aid in long life durable concrete. Type F modified fly ash is used mainly to mitigate ASR that commonly occurs with local SD aggregate. Quarried ledge rock sources are also mandated for durability reasons. The Air Entraining Admixture (AEA) must be 100% Vinsol Resin based. The contractor hired a consultant Aaron Swan & Associates (ASA) to perform the laboratory trial batching (included in Appendix B). The trial batches had to meet the special provision requirements. These included a well graded combined aggregate gradation (SDDOT 0.45 Power and Coarseness Workability chart), a minimum (575 lb/yd3) and maximum (800 lb/yd3) cementitious content, a fly ash % range (20% to 25%), and a maximum W/C ratio of 0.42. In addition, the trial batches had to meet the fresh and hardened concrete properties required for trial batching that include: (a) 20 minute slump between 1.25 and 2.75", (b) Box Test of no more than a #2 rating, (c) Air Content of \geq 5.0% with a SAM # of \leq 0.20, (d) fresh temps between 68 to 86 °F, and (e) compressive strength of 5200 psi at 28 days.

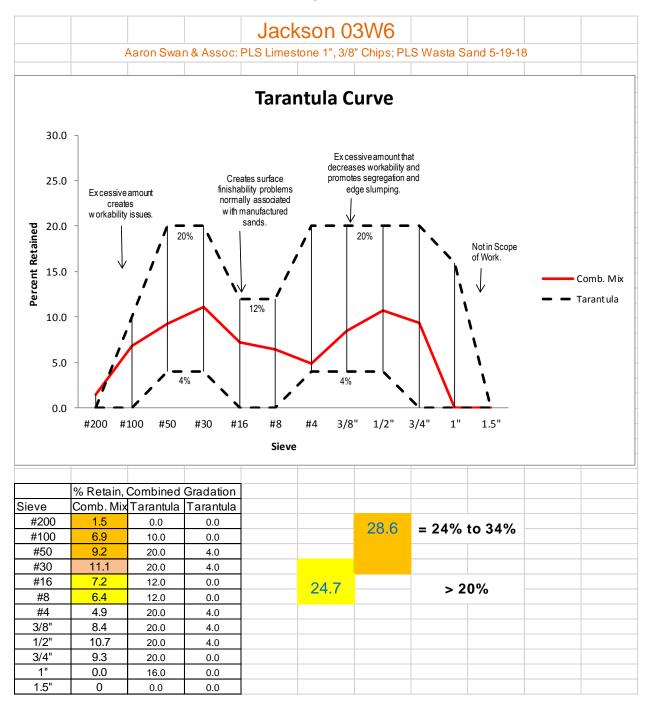
Once ASA was finished with the laboratory trial batches, the SDDOT did a verification batch of the selected mix "ASA trial #1". Results of the SDDOT verification batching are included in Appendix C.

Gradations for all aggregates were performed by both labs and production gradation averages were gathered from the aggregate sources. The results are included in Appendix D. The ASA gradations that were used to set the mix design targets were plotted on the Tarantula Curve (Figure 3) and clearly meet the requirements for a slipform mix.

The mix design used to start the project is included as Figure 4. A few minor field adjustments were made to the mix design during construction. The only notable modification was a change in the cement source to GCC Pueblo CO type II for a portion of the project.

Before production began, the Central Office held a SAM training event on 8-30-19 for all region and area office personnel interested in the SAM meter. Kyle Watkins is the SDDOT Central Office technician "SAM Super User" who provided most of the training with help from other central office employees. The first part of the training was on calibration. Both meters to be used on the project were calibrated at this time. Operation of the SAM was then demonstrated with water before fresh concrete was batched. Each participant experienced hands-on training with the SAM. Jay Lovejoy who did the testing on the project performed multiple side by side fresh concrete tests until proficiency was obtained.

Figure 3



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LIC	uiro	4
IIC	jure	4

	Contractor Concrete Mi	ix Design		DOT-24 (1-15)
Project: IM-FP 0903(104)153	County: Jackson	P	CN: 03W6	
Concrete Supplier: Reede Censtr	uction	Class of Concr	ete: PCCP	
Supplier Signature:	Tim	Mix # (DOT u	se): PCCP. C	Dtim.
Prepared by/ Title: Steve McCart	y/Lab Manager/AS&A	Approved by (DC		- finit
Date Prepared: 8/16/2018	Str. Milit	Approval Date (DC	47	0-2018
MATERIALS:	·	Sp. (Gr. Absorptio	<u>n F.M.</u>
Fine Aggregate (source, type):	Pete Lien - Concrete Sa	nd * 2.63	33 1.07	2.67
(pit name, county):	Wasta Pit, Pennington		• • • • • • • • • • • • • • • • • • •	
(Section-Township-Range):	Sec 17-T1N-R14E			
Coarse #1 (source, type, size):	Pete Lien - 1" Rock	Limestone, 2.65	98 0.49	
(pit name, county):	Rapid City Quarry, Pennin	gton		_
(Section-Township-Range):	Sec 16,20,21 - T2N - R7	X		
Coarse #2 (source, type, size):	Pete Lien - #8 chips	Limestone 2.68	87 0.46	_
(pit name, county):	Pete Lien - Penningtor	* Satur	ated Surface Dry	Basis
(Section-Township-Range):	Sec 16,20,21 - T2N - R7	'E		
Cement (brand, type, source)	GCC Dacotah Type I/II - Rapid	d Cit, SD 3.1	7	
Fly Ash (brand, type, source) Bor	Coal Creek Headwaters - Class	F modified 2.5	2	
Water (source, location):	City of Kadoka, Hydrant by	Plant 1.0		
				z/cwt, lb/yd ³
Admixture(s), etc (brand, type):	GRT - Polychem Paver P GRT - Polychem VR	lus		oz/yd3 oz/yd3
DESIGN MIX PROPORTIONS:				
W/C Ratio: 0.42 (field	d max.) <u>ib/vd³</u>	Ab	<u>os. Vol. (ft³) -</u>	
Cement	460		2.33	_
•	ementitious) <u>115</u>		0.73	
	Bradation 1239		7.54	-
	Size No1395		8.29	-
Coarse #2 %	<u>15</u> <u>465</u>		2.77	-
Water	240	· · · · · · · · · · · · · · · · · · ·	3.85	-
Air Content (structural, paving- 6.5%)	6.5%		1.76	-
TOTAL	3914		27.27	(27.0-27.4 ft ³

flat and elongated, colormetric) <u>Trial Batch</u>: {batch weights, slump, air content, unit weight, actual aggregate moisture, actual w/c ratio, cylinder compressive strengths, strength gain curve}

Concrete Purpose: PCCP - Slipform Paving _

Comments:

Distribution: Conc. Engr. - Area Engr. - Reg. Mati's Engr.

PRODUCTION AND CONSTRUCTION

The plant location was on the far West end of the project in a field with good access to the project and easy access off I90 for materials transport. Reede Construction set up their own portable high production batch plant for the mainline paving (Figure 5). Paving began at the East end of the project. With the plant location on the West end, the longest haul was at the beginning of the project being approximately 15 to 20 minutes. Paving proceeded toward the plant on the west end, so haul times were shortened as progress was made.



Figure 5

Weather became a factor during the paving operations. October and November in South Dakota that year were wet and cold at times. Equipment and plant break downs also delayed paving operations. Reede was able to place from 2,000 ft to 3,500 ft per day of the 26' wide 10.5" PCCP on full production days. On these days, the plant would produce from 1800 to 3200 yd³ per day.

The PCC paving operation is shown in figure 6. The paving train involved an unloader, spreader, paver, carpet drag, and a tining/curing machine. The paving operation was an "Iowa Special" style where dump trucks used the grade to haul the fresh concrete and dump into an unloading machine. This machine allows the dowel baskets and tie bars to be staked in place under the conveyor carrying the concrete (Figure 7).



Figure 6

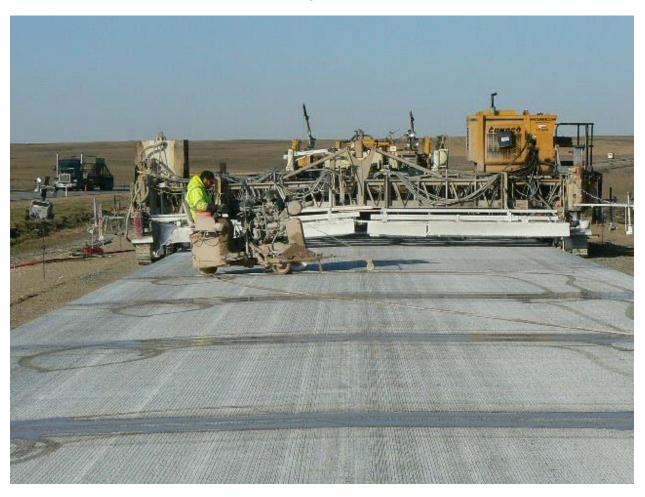
Figure 7



The base was reworked on the project and gravel pre-trimmed, but left a little high. The "lowa Special" unloading machine also performs the final trim of the base course cushion material leaving a fresh uniform cross section and base for the new concrete surfacing.

The final stages of the paving operation are to apply texture, cure, then saw and seal the joints. The texture applied was a carpet drag and longitudinally tined surface. Shortly after a water based curing compound (W.R. Meadows 1600 White) was applied. Transverse joints were initially cut to T/4 (Figure 8), then widened and sealed with silicone joint sealant. The longitudinal joint was cut to T/3, then widened and filled with hot pour joint sealant.

Figure 8



PRODUCTION MIX PROPERTIES AND TEST RESULTS

All samples taken during production were from the concrete immediately ahead of the paver. The SDDOT Winner Area office performed the SAM testing and made cylinder samples for surface resistivity. Standard SDDOT testing requirements were also fulfilled. Side by side comparisons were done for each SAM test with a standard air test.

Thirty-four SAM test results were reported, with the data is shown in Figure 9. The traditional air test results are also included. Tyler Ley was contacted after the 5th and 6th SAM tests when a 0.51 and a 0.42 SAM# were reported. Tyler was working on some analysis of each pressure step to determine if errors in testing could be flagged. To help gather data for that work, Jay Lovejoy recorded pressure steps for most of the subsequent SAM tests he performed. The SAM pressure step data was provided to Tyler Lay and the CP Tech center.

Figure 9

				ASTM	SAM	Meter
	#	ID	Date	Air (%)	SAM #	Air (%)
	1		09/29/2018	5.9	0.19	6.1
	2	2282353	10/01/2018	6.6	0.09	6.5
SDDOT	3	2282629	10/02/2010		0.18	5.8
ISU	4	at ISU	10/03/2018	5.5	0.17	5.1
10:00 AM	5	2282922	10/06/2018	5.7	0.51	5.7
11:00 AM	6	2202922	10/06/2018		0.42	6.2
	7		10/16/2018	7.4	0.23	7.4
	8		10/18/2018	5.8	0.23	5.6
	9		10/21/2018	6.4	0.34	6.1
	10		10/21/2018	6.6	0.1	7
	11		10/22/2018	6.4	0.19	6.2
	12		10/23/2018	7	0.25	7.1
	13		10/24/2018	7	0.32	7.3
	14	2284435	10/26/2018	7.4	0.32	7.6
	15	2284485	10/27/2018	6.1	0.1	6.2
	16		10/28/2018	7	0.23	6.9
	17				0.39	7.2
	18	1104610	10/20/2019	7.1	0.33	6.7
	19	2284620	10/29/2018	7.1	0.12	6.8
	20				0.33	6.3
	21		10/30/2018	5.7	0.19	5.6
	22		10/31/2018	6.5	0.35	6.7
	23	2284978	11/01/2018	7.1	0.25	7.3
	24				0.23	6
	25	2285097	11/02/2018	6.1	0.47	5.7
	26				0.24	5.3
	27	2285113	11/04/2018	7	0.08	7.2
	28		11/05/2018	6	0.26	6
	29		11/14/2018	7.5	0.17	8.3
	30	2285629	11/15/2018	6.6	0.31	6.5
	31		11/16/2018	6.6	0.22	6.9
	32		11/20/2018	7.2	0.24	7.9
	33	2285909	11/21/2018	7.8	0.15	8.2
	34	2285954	11/23/2018	7.2	0.3	8.2

The SDDOT central office performed the Box Test on the grade during production. The results on 10-29-18 and 11-2-18 were both a visual #2 indicating acceptable workability for slipform paving. The slipform paving and workability of the mix on the days tested was generally good.

Although not originally part of the testing plan, the CP Tech center worked with the SDDOT on adding surface resistivity testing. An added benefit was that these specimens could later be used for Hardened Air Void Analysis by the CPTech Center. The 4x8 inch cylinders were made in the field and sealed immediately after finishing. The next day upon demolding, the specimens were cured via the "Bucket Method". All data points for the 23 sets of cylinders can be seen in the plot of Surface Resistivity in Figure 10. Each cylinder's set of surface resistivity results is included in Appendix E. The temperature of the specimens was not taken at the time of surface resistivity testing, as this was not in the procedure provided to the SDDOT. There is good temperature control in the lab where the buckets were stored and testing was performed. All samples were likely in the range of 67 to 71 Deg F during storage and testing. Later age surface resistivity data was obtained from specimens were to be tested. As a result, some samples were taken out of the buckets a few days early and dried out. The dried samples were re-soaked for 24 hours prior to final testing and are identified in the "Comments" column. This might explain why there are some plot line differences that exist past 28 days.

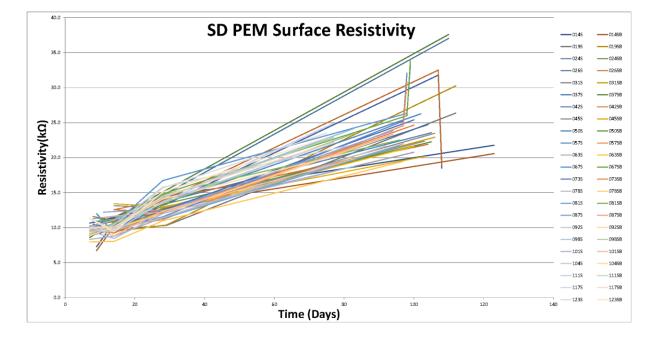
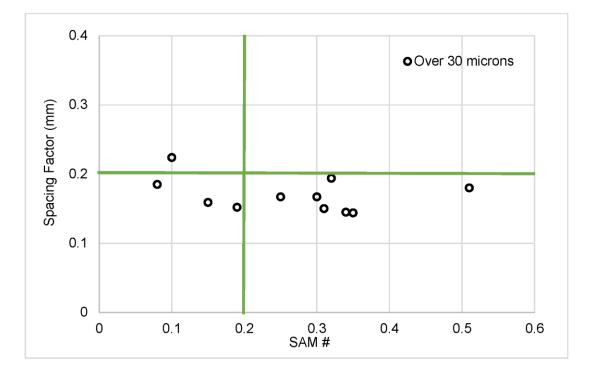


Figure 10

Twelve samples were selected by the CP Tech center for Hardened Air Testing via the "Rapid Air" method. Eleven Rapid Air test results were reported by the tech center. The entire data set of Rapid Air results are in Appendix F. The plot of the SAM # obtained during production Vs. the Rapid Air results using the cords over 30 microns is Figure 11.





SUMMARY

This was a great opportunity for the SDDOT, CP Tech Center, and the Contractor to gain experience with the PEM testing utilized on the project. There was a lot of cooperation between everyone involved to plan, perform testing, collect and analyze data.

The contractor was very accommodating to work with for the PEM testing. The Department was not able to get a response from Reede Construction on their opinions pertaining to the PEM testing performed on the project.

The mix design process went well; it is believed to be the first time a Box Test and SAM test were a mix design requirement on a project. The SDDOT will likely be adding these parameters in the future to the "Special Provision for Contractor Furnished Mix Design for PCC Pavement".

There is some concern with the variation in the SAM field sample results. 65% of the SAM #'s were above 0.2 and 32% were above 0.3. All but one of the 34 SAM test locations had an ASTM % air within the SDDOT specification of 5.0% to 7.5%. The one air test (7.8%) was only over the limit by 0.3%. The SAM testing data indicates we likely will have issues related to freeze thaw. Based on historical performance of comparable mix design with similar ASTM % air results, the SDDOT has minimal direct freeze thaw related issues. There was good correlation between the ASTM Air % and the SAM meter Air %.

The Rapid Air results from the hardened concrete samples indicate that almost all the concrete will likely exhibit acceptable freeze thaw field performance. There was poor correlation between the SAM and the Rapid Air testing for SAM #'s greater than 0.2.

The production and mix design Box Test results all produced the same #2 visual result. There was generally good workability of the mix on the project. The Box Test does seem to be an improved indicator over the slump test for a mix's performance during the slipform paving process.

The surface resistivity testing results were generally similar through the first 28 days. Temperatures were not taken during testing, but the lab climate control helped produce consistent results.

This was a good learning experience and the data collected will provided a wealth of information to further the PEM initiative.

APPENDIX A:

Demonstration Project for Implementation of Performance Engineered Mixtures/AASHTO PP 84 **Project Application Form**

Date : 2-14-18

1. State Agency:South Dakota DOT					
State Agency Contact(s): Darin Hodges, Concrete Engineer, 605-773-7193,					
darin.hodges@state.sd.us)					
FHWA Division Office Contact(s): Brett Hestdalen, Operations Engineer, 605-776-1007,					
Brett.Hestdalen@dot.gov					
2. Project Location/Description: (route designation, project length, pavement thickness,					
include anticipated date of construction, etc.)					
One of the following project to be constructed this summer (2018) would be selected. All of					
these projects have already been let so a CCO would be required to add any requirements:					
a) I90 WBL Jackson Co. 10.9 Miles of 10.5" PCC PCN 03W6 from Kadoka to Belvidere					
b) I29 SBL Roberts Co. 15.3 Miles of mostly 8" overlay, PCN 021V is Exit 224 to Exit 242					
c) Hwy 37 N&SBL Davison Co. (8) Miles of 7" overlay, PCN 023F Mitchell N. 4 Miles					
3. Requested Funding:					
Indicate which category(ies) of funding you are seeking support for:					
YES - Category A: \$40,000 for incorporating two or more AASHTO PP 84-17 tests in the mix					
design/approval process. Shadow testing is acceptable.					
YES - Category B: \$20,000 for incorporating one or more AASHTO PP 84-17 test in the					
acceptance process. Shadow testing is acceptable.					
No - Category C: \$20,000 for requiring a comprehensive QC Plan from the contractor that will					
be approved and monitored by the state.					
No - Category D: \$20,000 for requiring the use of control charts, as called for in AASHTO PP					
84-17.					

4. Description of What will be accomplished in each category:

For each Category, from above, you are seeking funding support for, please discuss the requested information.

<u>Category A</u>: Identify which tests you will be evaluating, your mix design/approval process, and how the use of the tests differs from your current process.

• The fresh concrete Air Content via SAM and the Box Test would be specified as mix design properties the contractor would have to obtain and the SDDOT would verify during the process. If funded, SDDOT would use a selected project to have an updated Contractor Mix Design Special Provision that included specifications for the SAM and Box Test CCO'd onto the project. As part of the mix design process, the contractor would be required to do lab batching that included typical fresh and hardened testing; in addition the new tests (SAM and Box) would be required. Once the contractor has obtained a mix design that meets the requirements, the SDDOT would do a verification batch to also check the properties. The difference between how we currently do business would be the addition of the box test requirement and using the SAM for acceptance of mix design air content.

<u>Category B</u>: Identify which test(s) you will be evaluating, how your acceptance process will use the test(s) results, and how the use of the tests differs from your current process.

 The fresh Air Content via SAM would be evaluated on the project utilizing shadow testing by area office personnel. Currently in SD, the SAM has only been used by Central Lab personnel. This will be a good trial run of the procedure during construction to see how it would work for field acceptance. There will be a specification, procedure, and testing frequency that the area office will need to follow.

<u>Category C</u>: Identify what you will require in the QC Plan and how you will monitor compliance with the Plan. Note if you currently require QC Plans; if currently required, note

2

how your process will differ on this project.

<u>Category D</u>: Identify what control charts you will require the contractor/supplier to use and how the charts will be monitored during construction.

5. Other Information:

The SDDOT is excited about helping move the selected SAM and Box test procedures forward. We are also interested in the other procedures listed in PP84-17 that were not selected for initial evaluation and hope to work with them more as well.

Submit to: Michael F. Praul, P.E. Senior Concrete Engineer Office of Preconstruction, Construction, and Pavements (HICP-40) michael.praul@dot.gov **APPENDIX B:**

AARO		SW	2	A 66		сел	T	FS
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CONCRETE MIX DESIGN

 CONSULTING ENGINEERS , SURVEYING & MATERIAL TESTING

 29310 GARY STREET , PIERRE, SD 57501

 PHONE # (605) 945-1315

 FAX # (605) 945-0310

REPORT DATE: 06/13/18 LAB FILE #: 18-158

PROJECT: IM-FP 0903(104)153 PCN 0	FURNIS	HED BY:	Pete Lier	& Sons		
Interstate 90 Jackson Count			-			
		-			ikali — Uto	
REPORTED TO: Reede Construction		co	PIES TO:	SEDOT		
		•		-		
SPECIFIC GRAVITIES OF MATERIALS	3	O M AWE				
COARSE AGGREGATE 2.698	CEMENT	3.15	FINE	NESS MO	DULUS	2.67
FINE AGGREGATE 2.633	FLY ASH	2.52			CHIPS	2.687
Mix #1 MIX DESIGN						
Batch size 27.30 CU. FT	, ,		cem ratio		_	
			% Flyash	20%		
Fine Agg. Wasta Pit 1239 lbs		Calculated a	ir content	6.5%		
Coarse Agg. Rapid City Pit 1395 lbs						
CHIPS Rapid City Pit 465 Ibs		(COMPRE	SSIVE ST	RENGTH	
Total Agg. <u>3099</u> lbs				3 Day	AVERAGE	
]psi
				7 DAY	AVERAGE	-
GCC Dacotah I/II cement 460 lbs		4000	4024	4035	4020]psi
Coal Creek Fly Ash 115 lbs				14 DAY		-
water 240 lbs		4590	4677	4607	4625]psi
Polychem Paver Plus 17.3 ozs	WRA			28 DAY	a a	-
Polychem VR 4.0 ozs	AEA	5420	5322	5368	5370	psi
BATCH NUMBERS		1100				
Batch size CU. FT			cem ratio			
			% Flyash	20%	-	
Fine Agg. Wasta Pit 145.5 lbs	•	Calculated a				
Coarse Agg. Rapid City Plt 161.3 lbs			E MOISTI			
CHIPS Rapid City Pit 54.3 lbs	ROCK = (0.6% CH			SAND ≈ 2	.1%
Total Agg. 361.1 lbs	(FRESH CO	NCRETE			
	1			20 min. v	/ait	
	1	AIR	6.80%		$\langle \rangle$	
GCC Dacotah I/II cement 52.9 Ibs	1	SLUMP	3 1/2"	2 1/4"		
Coal Creek Fly Ash 13.2 lbs	1	UNIT WT	143.2			1
water 23.0 lbs	1	TEMP	68			1
Polychem Paver Plus 58.8 ml	WRA	SAM		6.5% air r	eading)
Polychem VR 13.6 ml	AEA	Box Test	2			
PENIOVA AND AND AND AND AND AND AND AND AND AN						S
REMARKS: *All.weights are Saturated Su				No. No. of Concession, Name		
MIX #1 = ROCK 45% CHIPS 15% AND	SAND 40%.)					
NE MIL						
SIGNED:						

19

CONSULTING ENGINEE 29310 GARY STREET , P	AARON SWAN & ASSOCIATES CONSULTING ENGINEERS , SURVEYING & MATERIAL TESTING 29310 GARY STREET , PIERRE, SD 57501 PHONE # (605) 945-1315 FAX # (605) 945-0310				CONCRETE MIX DESIGN REPORT DATE: 06/13/18 LAB FILE #: 18-158				
PROJECT	: IM-FP 0903(104)153 PCN	03W6	FURMS	HED BY	: Pete Lien	& Sons		
	P	Jackson Coul	the second se	_					
		60.0 × 100		-). <u></u>			
REPORTED TO	: Reede Cons	truction		co	PIES TO	SDDOT			
								1117-2	
SPECIFI	C GRAVITIES	OF MATERIAL	LS				-		
COARSE AC	GREGATE	2.698	CEMENT	3.15	FINE	NESS MOD	OULUS	2.	
FINE AC	GREGATE	2.633	FLY ASH	2,52			CHIPS	2.6	
Mix #2	MIX DESIGN	-					1000000		
30	Batch size	27.30 CU. F	۲.		cem ratio		-		
		1011			% Flyash				
	g. Wasta Pit	1254 lbs		Calculated a	ir conten	t <u>6.5%</u>			
Coarse Agg. R	apid City Pit	1408 lbs 469 lbs					CHOTH		
	Total Agg.	3131 lbs			JOWIFRE	SSIVE STF 3 Day			
						JDay	AVERAGE	lpsi	
						7 DAY	AVERAGE	1 Put	
GCC Dacotal	1/II cement	460 lbs		4375	4349	4151	4292	iaq	
Coal Cr	eek Fly Ash	115 lbs				14 DAY		16.44	
	water	228 lbs		4886	4904	5033	4941	psi	
	Paver Plus	23.0 ozs	WRA			28 DAY			
Character Story of the Story of	olychem VR	5.8 ozs	AEA	5710	5634	5688	5677	psi	
BATCH	UMBERS						04440020		
	Batch size	CU. F	т.	14	cem ratio	And the second se			
Eine Ag). Wasta Pit	447.2 lbs			6 Flyash	20%			
Coarse Agg. R		147.2 lbs 162.8 lbs		Calculated a	E MOIST		•		
	apid City Pit	54.7 lbs	POCK -	0.6%CH			SAND = 2	1%	
	Total Agg.	364.78 lbs	ROOK-	FRESH CO					
			1			20 min. w	ait		
	A-100 (Salar			AIR	7.00%			1	
GCC Dacotal	1/11 cement	52.9 lbs		SLUMP	3"	2"		1	
Coal Cr	eek Fly Ash	13.2 ibs	1	UNIT WT	142.6				
	water	21.7 lbs		TEMP	70				
	Paver Plus	78.2 ml	WRA \	SAM	0.14	7.1% air re	ading	/	
	lychem VR	19.7 mi	AEA	Box Test	2		/	-	
REMARKS:	*All weights	are Saturated S	urface Dov						
(MIX #2 =		HIPS 15% AN)					
		" a sugar and							

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AARON SWAN & ASSOCIATES CONSULTING ENGINEERS , SURVEYING & MATERIAL TESTING 29310 GARY STREET , PIERRE, SD 67501 PHONE # (605) 945-1315 FAX # (605) 945-0310			CONCRETE MIX DESIGN REPORT DATE: 06/13/18 LAB FILE #: 18-158				
PROJECT: IM-FP 0903(1			FURNIS	HED BY	Pete Lien	& Sons	
Interstate 90	Jackson County		-				
REPORTED TO: Reede Const	ruction		co	PIES TO:	SDDOT		1.87
SPECIFIC GRAVITIES			-				
COARSE AGGREGATE	2.698	CEMENT	3.15	FINE	NESS MO	DULUS	2.67
FINE AGGREGATE	2.633	FLY ASH	2.52			CHIPS	2.687
Mix #3 MIX DESIGN				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -			
	27.30 CU. FT.		wtr	cem ratio	0.42		
				% Flyash	20%	-	
Fine Agg. Wasta Pit	1239 lbs		Calculated a			-	
Coarse Agg. Rapid City Pit	1457 lbs		ouiouiucou		01070	-	
CHIPS Rapid City Pit	404 lbs				SSIVE ST	DENCTU	
Total Agg.	(strength of the strength of		•	COMPRE	+		-
Total Agg.	3100 lbs				3 Day	AVERAGE	
							psi
					7 DAY	AVERAGE	-
GCC Dacotah I/II cement	10s		4062	4040	4053	4052	psi
Coal Creek Fly Ash	115 lbs				14 DAY		
water	240 lbs		4546	4675	4542	4588	lpsi
Polychern Paver Plus	17.3 ozs	WRA			28 DAY		_/'
Polychern VR	4.0 ozs	AEA	5352	5422	5368	5381	psi
BATCH NUMBERS	200					1	14
Batch size	CU. FT.		witt	cem ratio	0.42		
				% Flyash	20%	-	
Fine Agg. Wasta Pit	145.6 lbs		Calculated a				
Coarse Agg. Rapid City Pit	168.6 lbs			E MOIST		-	
CHIPS Rapid City Pit	47.0 lbs	DOOK -					
		RUCK =	0.6%C			SAND = 2	2.1%
Total Agg.	61.215 lbs	(FRESH CO	NCREIE			
					20 min. v	/ait	
		1	AIR	6.50%)
GCC Dacotah I/II cement	52.9 lbs	l i	SLUMP	3"	2"		1
Coal Creek Fly Ash	13.2 lbs		UNIT WT	143.9			1
water	23.1 lbs	1	TEMP	70			
Polychem Paver Plus	58.8 ml	WRA \	SAM	0.2	6.8% air r	reading	1
Polychem VR	13.6 ml	AEA \	Box Test	2			
	re Saturated Sur HIPS 13% AND S	face Dry.)				

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AARON SWAN & ASSOCIATES

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CONCRETE MIX DESIGN

CONSULTING ENGINEERS , SURVEYING & MATERIAL TESTING 29310 GARY STREET , PIERRE, SD 57501 PHONE # (505) 945-1315 FAX # (505) 945-0310 REPORT DATE: 06/13/18 LAB FILE #: 18-158

PROJECT:	IM-FP	0903	104)153	PCN 03W6	
	Interst	ate 90	Jackson	County	

REPORTED TO: Reede Construction

COPIES	TO:	SDDOT

FURNISHED BY: Pete Lien & Sons

SPECIFIC GRAVITIES OF MATERIALS	
COARSE AGGREGATE 2.698	CEMENT 3.15 FINENESS MODULUS 2.67
FINE AGGREGATE 2.633	FLY ASH 2.52 CHIPS 2.687
Mix #4 MIX DESIGN	
Batch size 27.30 CU. FT.	wtr/cem ratio 0.40
	% Flyash 20%
Fine Agg, Wasta Pit 1254 Ibs	Calculated air content 6.5%
Coarse Agg. Rapid City Pit 1470 lbs	
CHIPS Rapid City Pit 407 lbs	COMPRESSIVE STRENGTH
Total Agg. 3131 lbs	3 Dav AVERAGE
	[]psi
10 10 10 10 10 10 10 10 10 10 10 10 10 1	7 DAY AVERAGE
GCC Dacotah I/II cement 460 lbs	4305 4312 4181 4266 psi
Coal Creek Fly Ash 115 lbs	14 DAY
water 228 lbs	4790 4798 4994 4861 psi
Polychem Paver Plus 23.0 ozs	WRA 28 DAY
Polychem VR 5.8 ozs	AEA 5831 5872 5902 5868 psi
BATCH NUMBERS	
Batch size CU, FT,	wtr/cem ratio 0.40
	% Flvash 20%
Fine Agg. Wasta Pit 147.3 lbs	Calculated air content 6.5%
Coarse Agg. Rapid City Pit 170.0 lbs	FREE MOISTURE
CHIPS Rapid City Pit 47.5 lbs	ROCK = 0.6% CHIPS = 1.4% 5/SAND2.1%
Total Agg. 364.78 lbs	FRESH CONCRETE TESTS
	20 min. wait
A CONTRACT OF A	AIR 7.00%
GCC Dacotah I/II cement 52.9 lbs	SLUMP 2 3/4" 1 3/4"
Coal Creek Fly Ash 13.2 lbs	UNIT WT 142.4
water 21.8 lbs	TEMP 68
Polychem Paver Plus 78.2 ml	WRA SAM 0.09 7.3% air reading
Polychem VR 19.7 ml	AEA Box Test 2
REMARKS: *All weights are Saturated Surface	ace Dry
MIX #4 = ROCK 47% CHIPS 13% AND S	
SIGNED: John My Cont	
	-

APPENDIX C:

CONGRADE		BEATAN
CONCRETE	MIX	DESIGN

DATE: 6-20-2018

' CLASS: 1.0" Optimized Paving CONTRACTOR: Reede Const. SAND: Pete Lien & Sons, Wasta \$LAB/SUPPLIER: Aaron Swan & Assoc ROCK: PLS, Rapid City: Limestone, 1" Rock & Chips CEMENT: GCC Dacotah I/II, Rapid C PROJECT: IM-FP 0903(104)153 FLY ASH: Boral Res, Coal Creek Typ COUNTY: Jackson AIR ENTRAIN: GRT Polychem \ PCN: 03W6 WATER RED.: GRT Polychem Paver Plus

Jackson 03W6- MDes Verif.xlsx

SAND:	2.63	ABSORPTION %	1.07	UNIT WT #/CF	0.00
<u>Chips</u>	2.69	ABSORPTION %	0.46	UNIT WT #/CF	0.00
1"	2.70	ABSORPTION 8	0.49	UNIT WT #/CF	0.00
	1.00	ABSORPTION %	0.00	UNIT WT #/CF	0.00
	1.00	ABSORPTION %	0.00	UNIT WT #/CF	0.00
CEMENT:	3.15				

FLY ASH: 2.52	Batch	Size	1	По 16	rote	142 0
FLY_ASH: 2.52	3.20	3.20	4		gets .5 - 8.0%) -	<u>143.2 pc</u>
	3.20	Adjusted for	1		,	
DESIGN MIX (BATCH):		-		Init/20-min	Slump () -	
# OF CEMENT:		Moistures 53.9			Sam # / % Box Test #	~ 2
# OF FLYASH:		13.5	-		Box Test #	~ 2
W/C&FA RATIC		0.420	<-(Calculate	د ام ۱		
# OF WATER:		28.1	Initial	a) & Total	Average	0
* OF WATER. % Air:		6.5	<u>Moistures</u>	W/O Moisture	<u>Moistures</u>	2nd Moistur
# OF SAND	145.3	145.6	1.22	40.0	1.12	1.02
# OF Chips	54.5	54.7	0.74	15.0	0.71	0.67
# OF 1"	163.5	163.4	0.42	45.0	0.42	0.41
# OF	0.0	0.0	0.00	0.0	0.42	0.00
# OF	0.0	0.0	0.00	0.0	0.00	0.00
		0.0	0.00		0.00	0,00
	ML. W.R.A.:	52.0	0.0	0.0	0.0	1
	ML. W.R.A.(2):	0.0	0.0	0.0	0.0	
	ML. A.E.A.:	12.0	0.0	0.0	0.0	
	•					
BATCHED UNIT WT. #:	153.4	153.4	153.4	153.4	153.4	
(without air)	A A A A					
W/C-FA Ratio with	2nd moisture :		0.417	0.417	0.417	
		Batch 1	2	3	4	٦
	dd water (cc):	0	h			-
	initial Slump : mp 0 20 mins :	3.50				-
	weight (pcf):	<u>2.50</u> 143.3				-
	t Air Content:	6.6	100.0	100.0	100.0	-
	- Air Content:	7.2		100.0	100.0	4
riessure	Mix Time:	3-3-2	<u> </u>			-
1	Concrete Temp:	73.5	· · · ·			-
Lab Temp:		/3.5	}	-		-
Water Temp:			/			-
Sand Temp:			/	T		1
Chips Temp:		· · · ·				1
Coarse 1 Temp:			1			1
Coarise 2 Temp:			1	- · · · ·	· · · · · · · · · · · · · · · · · · ·	
Coarse 3 Temp:						1
Cement Temp:				<u></u>		1
Fly Ash Temp:						1
- \ -	Microwave W/C:				·	1
	on#4/expected				4 222	1
WEIGHE	Unit Wt (pcf)	142.4				1
			1			1
	SAM Air %	7.2	11			
		7.2	/			1
	SAM Air %		/	· · · · · ·		

CYLINDERS:	1-9			
LAB. NO.:	BZ4468-76			
CYL. BREAKS:	3830			
7-day	3980 3850			
AVE.	3887	#DIV/0!	#DIV/0!	#DIV/0!
Cylinder	145.7			
Unit	145.7			
Weights	146.2			
				<u>, , , , , , , , , , , , , , , , , , , </u>
CYL. BREAKS:	4060			
14-DAY	4070			
	4070			
AVE.	4067	#DIV/0!	#DIV/0!	#DIV/0!
Cylinder	146.7			
Unit	146.7			
Weights	147.2			
CYL. BREAKS:	5000			
28-DAY	4760			
	4760			
AVE.	4840	#DIV/0!	#DIV/0!	#DIV/0!
Cylinder	146.7			
	140.7			
Unit	146.7			

CYL. BREAKS: 90-DAY

?

AVE.	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Cylinder Unit Weights				

APPENDIX D:

	Jac	kson 0	3W6	Sep2017, Rec'd 5-20-		1", 3/8" Chips; PLS			
Sand	Мах	Min	Average	1	2	3	4	5	6
3/8"						· · ·			
1/4"									
#4									
#8			90.8		91.5	90.1			
#16			72.5		72.8	72.2			
#30			44.9		45.2	44.6			
#50			21.7		21.7	21.6			
#100			4.6		4.7	4.5			
#200			0.9		0.9	0.9			
	Ja	ackson 03	V6	Pete Lien & S	DOT Verif Ma	Aaron Swan i		-	
Chips	Max	Min	Average	1	2	3	4	5	6
1.5"								1	
1.25"									
1"									
.75"									
.625"									
.5"									
.375"			99.3	98.7		99.9			
.25"			50.2		54.9	45.4			
#4			17.2	14.6	20.3	16.6			
#8			1.8	1.3	2.9	1.3			
#16			1.5	0.8	2.5	1.2			
#30			1.3	0.7	2.0	1.1			
#50			1.0	0.6	1.5	1.0			
#100			0.8	0.6	1.0	0.9			
#200			0.6	0.5	0.5	0.8			
	Ja	ackson 03V	V6	Pete Lien & S	DOT Verif Ma	Aaron Swan i			-
1"	Max	Min	Average	1	2	3	4	5	6
1.5"									
1.25"									
1"									
.75"			79.3	75.7	82.9	79.3			
.625"			60.3	60.0	58.9	62.0			
			36.7	35.2	36.8	38.2			
.5"			16.0	15.0	13.6	19.5			
.375"				2.5	1.7	2.0			
.375" .25"			2.1						
.375" .25" #4			1.1	1.5	1.1	0.8			
.375" .25" #4 #8			1.1 0.7	1.5 0.8	1.1 1.0	0.8			
.375" .25" #4 #8 #16			1.1 0.7 0.6	1.5 0.8 0.6	1.1 1.0 0.8	0.8 0.4 0.4			
.375" .25" #4 #8 #16 #30			1.1 0.7 0.6 0.6	1.5 0.8 0.6 0.5	1.1 1.0 0.8 0.8	0.8 0.4 0.4 0.4		······	
.375" .25" #4 #8 #16			1.1 0.7 0.6	1.5 0.8 0.6	1.1 1.0 0.8	0.8 0.4 0.4			

APPENDIX E:

Date Tested	Tested By:	Curing Period	Date Made	Mix Design	PCN	County	Sample Number	(1) 0°	(1) 90°	(1) 180°	(1) 270°	(2) 0°	(2) 90°	(2) 180°	(2) 270°	Ave S.R.	Comments
10/15/18	PL.	9	10/06/2018	besign	03W6	Jackson	0145	7.4	7.3	7.3	7.2	7.2	7.3	7.2	7.2	7.3	
10/15/18	PL	9	10/06/2018		03₩6	Jackson	014SB	6.8	6.6	6.6	6.5	6.8	7.2	6.6	6.5	6.7	
10/19/18	PL.	13	10/06/2018		03W6	Jackson	014S	10.5	10.5	9.8	9.4	9.8	9.9	10.2	10.1	10.0	
10/19/18	PL	13	10/06/2018		03W6	Jackson	014SB	9.8	10.0	9.2	9.1	9.0	9.9	9.0	9.6	9.5	
11/2/18	PL.	27	10/06/2018		03W6	Jackson	014S	16.9	14.7	14.7	14.0	14.1	14.1	12.7	13.5	14.3	
11/2/18	PL.	27	10/06/2018		03W6	Jackson	014SB	12.7	13.1	13.0	12.9	13.0	12.7	13.0	12.9	12.9	
2/6/19	PL	123	10/06/2018		03W6	Jackson	014S	22.0	21.0	21.6	21.9	20.1	23.3	20.9	23.4	21.8	Original Cylinder After 24 Hr Soak
2/6/19	PL	123	10/06/2018		03W6	Jackson	0145B	22.5	19.0	20.0	20.7	20.6	20.1	20.3	21.4	20.6	Original Cylinder After 24 Hr Soak
2/0/15	ru.	14.5	10/00/2010		03110	70043011	01430	22.0	10.0	20.0	20.7	20.0	20.1	20.3	2.1.7	20.0	onginer cymaer Arter 24 m Soek
10/04/10	N	0	10/16/2010		00006	Lookson	01.05	10.4	10.2	0.0	10.5	10.2	0.0	0.5	10 E	10.2	
10/24/18	PL	8	10/16/2018		03W6	Jackson	0195	10.4	10.3	9.9	10.5	10.3	9.9	9.5	10.5	10.2	
10/24/18	PL	8	10/16/2018		03W6	Jackson	019SB	10.0	10.4	10.7	10.6	9.9	10.2	10.4	10.4	10.3	
10/30/18	PL	14	10/16/2018		03W6	Jackson	019S	9.8	9.2	9.9	10.3	10.3	9.1	9.5	10.1	9.8	
10/30/18	PL	14	10/16/2018		03₩6	Jackson	019SB	9.6	9.1	9.4	9.5	9.8	9.3	9.8	9.2	9.5	
11/14/18	PL	29	10/16/2018		03W6	Jackson	0195	10.5	10.2	10.4	10.1	10.4	10.4	10.5	10.0	10.3	
11/14/18	PL.	29	10/16/2018		03W6	Jackson	019SB	10.3	10.3	10.6	10.5	10.5	10.1	10.3	10.3	10.4	
2/5/19	PL	112	10/16/2018		03₩6	Jackson	019S	26.2	26.1	26.4	25.9	27.0	27.3	26.4	25.7	26.4	CYL, NOT SELECTED
2/5/19	PL.	112	10/16/2018		03W6	Jackson	019SB	27.0	29.6	33.5	30.3	28.5	29.7	32.6	30.9	30.3	CYL. NOT SELECTED
											1						
10/25/18	PL	7	10/18/2018		03W6	Jackson	024S	10.9	9.7	9.9	9.5	10.7	10.0	10.1	9.5	10.0	
0/25/18	PL	7	10/18/2018		03W6	Jackson	0245B	9.6	9.2	9.9	10.7	9.9	9.1	10.0	10.7	9.9	
		,															
11/1/18	PL	14	10/18/2018		03W6	Jackson	024S	12.1	11.5	12.7	11.1	11.3	11.0	11.8	10.5	11.5	
11/1/18	PL	14	10/18/2018		03W6	Jackson	024SB	10.6	11.3	11.9	11.4	11.0	11.6	11.4	10.9	11.3	
1/15/18	PL	28	10/18/2018		03W6	Jackson	0245	14.5	14.4	15.5	14.2	14.7	14.0	15.1	14.4	14.6	
11/15/18	PL	28	10/18/2018		03W6	Jackson	024SB	15.8	14.5	15.0	15.7	15.2	14.2	14.8	15.5	15.1	
2/5/19	PL.	110	10/18/2018		03W6	Jackson	024S	33.9	36.3	36.6	39.7	35.7	37.1	34.9	42.2	37.1	CYL, NOT SELECTED
2/5/19	PL	110	10/18/2018		03W6	Jackson	0245B	34.2	36.7	40.2	39.9	35.1	37.8	36.9	40.1	37.6	CYL. NOT SELECTED
				1													
0/29/18	PL.	8	10/21/2018	1	03W6	Jackson	026S	10.9	10.2	11.2	11.1	10.7	10.6	10.9	10.0	10.7	
0/29/18	PL PL	8	10/21/2018	1	03W6	Jackson	0265B	10.9	11.6	11.2	11.1	10.7	10.0	10.9	10.0	10.7	1
				1													
1/5/18	PL PL	15	10/21/2018		03W6	Jackson	026S	12.2	11.9	11.6	11.7	11.6	11.2	10.8	11.1	11.5	
1/5/18	PL.	15	10/21/2018		03W6	Jackson	026SB	10.9	11.3	10.8	11.4	10.5	11.0	10.5	11.2	11.0	
1/19/18	PL	29	10/21/2018		03W6	Jackson	0265	13.2	13.4	13.9	13.2	13.0	13.4	13.7	13.1	13.4	
1/19/18	PL	29	10/21/2018		03W6	Jackson	026SB	14.1	14.5	13.9	14.3	13.8	14.3	13.7	14.3	14.1	
2/5/19	PL	107	10/21/2018	1	03W6	Jackson	026S	32.0	30.5	32.4	31.9	33.0	30.3	31.9	32.3	31.8	EXTRA CYL. SELECTED
2/5/19	PL	107	10/21/2018		03W6	Jackson	026SB	31.9	33.3	32.6	34.1	31.3	33.0	31.7	32.2	32.5	EXTRA CYL, SELECTED
2/6/19	PL.	108	10/21/2018		03W6	Jackson	026S	19.1	20.1	18.4	17.3	17.8	19.0	19.1	16.9	18.5	Original Cylinder After 24 Hr Soak
					03W6												Original Cylinder After 24 Hr Soak
2/6/19	PL.	108	10/21/2018		03000	Jackson	0265B	17.9	20.6	17.6	19.0	18.0	21.3	18.1	19.1	19.0	Original Cylinder Alter 24 Hr Soak
0/30/18	PL	8	10/22/2018		03W6	Jackson	031S	10.9	9.6	10.7	10.7	10.4	9.5	9.8	10.2	10.2	
0/30/18	PL	8	10/22/2018		03W6	Jackson	031SB	10.1	10.6	9.4	9.0	9.4	9.4	8.9	8.8	9.5	
1/5/18	PL	14	10/22/2018		03W6	Jackson	0315	11.3	11.2	10.7	11.4	11.2	11.0	10.1	11.5	11.1	
1/5/18	PL.	14	10/22/2018		03W6	Jackson	031SB	10.8	10.8	10.6	10.9	10.3	10.5	10.5	10.7	10.6	
1/19/18	PL	28	10/22/2018		03W6	Jackson	031S	12.4	13.2	11.9	13.2	12.6	12.9	11.4	12.3	12.5	
1/19/18	PL	28	10/22/2018		03W6	Jackson	0315B	12.9	12.6	12.8	12.8	12.9	12.5	12.9	12.5	12.7	
2/5/19	PL	106	10/22/2018		03W6		0315	23.5	23.9	24.3	22.5	24.4	23.5	23.1	22.8	23.5	CYL, NOT SELECTED
						Jackson											
2/5/19	PL	106	10/22/2018		03₩6	Jackson	031SB	23.9	22.6	22.4	23.0	22.2	23.1	23.5	22.7	22.9	CYL, NOT SELECTED
0/30/18	PL.	7	10/23/2018		03W6	Jackson	037S	9.1	8.7	9.7	8.7	8.6	8.5	9.2	8.5	8.9	
0/30/18	PL	7	10/23/2018		03W6	Jackson	037SB	9.1	8.7	8.3	8.8	8.9	8.1	8.2	8.6	8.6	
1/6/18	PL.	14	10/23/2018		03W6	Jackson	0375	10.7	9.7	9.8	9.4	10.0	9.5	9.4	9.0	9.7	
1/6/18	PL	14	10/23/2018		03W6	Jackson	037SB	10.6	10.4	10.4	10.5	11.6	11.0	10.6	10.4	10.7	
1/20/18	PL PL	28	10/23/2018		03W6	Jackson	0375	13.9	13.5	14.7	13.8	13.5	13.1	13.8	12.7	13.6	
					03W6		0375B	12.2	12.1		13.0		12.2	13.0		12.6	
1/20/18	PL.	28	10/23/2018			Jackson				13.3		12.1			13.1		
2/5/19	PL	105	10/23/2018		03W6	Jackson	037S	25.5	25.3	22.7	23.2	22.5	23.9	22.9	22.6	23.6	CYL. NOT SELECTED
2/5/19	PL	105	10/23/2018		03₩6	Jackson	037SB	24.0	23.8	20.8	21.4	23.3	22.9	21.0	21.0	22.3	CYL, NOT SELECTED
)/31/18	PL	7	10/24/2018		03W6	Jackson	042S	11.7	10.9	10.9	10.4	11.2	10.3	10.2	9.6	10.7	
)/31/18	PL	7	10/24/2018	1	03W6	Jackson	042SB	11.1	10.1	9.8	9.9	11.0	10.0	9.9	10.0	10.2	
1/7/18	PL	14	10/24/2018	1	03W6	Jackson	0425	11.0	10.2	11.3	11.1	11.9	12.2	12.6	11.5	11.5	
1/7/18	PL PL	14	10/24/2018	1	03W6	Jackson	0423 04258	11.6	12.1	11.3	13.3	12.2	12.2	12.0	13.0	12.6	
				1			04235	13.7						12.5		12.0	
1/21/18	PL PL	28 28	10/24/2018	+	03W6	Jackson		13.7	13.0 12.8	12.6	12.7	11.3	11.9 12.1		12.3	12.4	
1/21/18				<u> </u>		Jackson	042SB				12.1	12.4		11.6			
2/5/19	PL	104	10/24/2018	ļ	03W6	Jackson	042S	25.6	27.8	24.4	24.5	23.4	25.7	22.6	23.7	24.7	CYL. NOT SELECTED
2/5/19	PL	104	10/24/2018		03W6	Jackson	042SB	24.6	22.1	21.6	20.1	23.3	20.9	21.6	21.0	21.9	CYL. NOT SELECTED
1/9/18	PL	14	10/26/2018		03W6	Jackson	045S	14.1	13.2	12.6	13.5	13.3	13.0	12.7	12.7	13.1	
1/9/18	PL.	14	10/26/2018		03W6	Jackson	045SB	15.0	13.5	14.3	13.5	13.9	12.2	12.9	12.0	13.4	
1/23/18	PL	28	10/26/2018	1	03₩6	Jackson	045S	13.2	13.2	13.0	13.0	13.0	12.5	12.3	12.5	12.8	
1/23/18	PL PL	28	10/26/2018	1	03W6	Jackson	0455B	13.2	12.7	13.3	13.0	13.9	12.3	12.3	12.3	13.0	l
2/6/19	PL PL	103	10/26/2018	1	03W6	Jackson	04558	24.0	21.4	21.3	21.9	22.1	22.1	23.3	22.7	22.4	Original Cylinder After 24 Hr Soak
2/6/19	PL	103	10/26/2018	I	03W6	Jackson	045SB	19.5	20.0	19.1	21.9	19.2	20.0	19.3	22.3	20.2	Original Cylinder After 24 Hr Soak
			1					-	-								
1/5/18	PL	9	10/27/2018	I	03W6	Jackson	050S	11.4	12.3	12.9	12.0	11.6	12.3	12.3	11.4	12.0	
1/5/18	PL	9	10/27/2018		03₩6	Jackson	050SB	11.9	11.3	12.0	11.6	11.4	10.1	11.8	11.3	11.4	
1/10/18	PL	14	10/27/2018	1	03W6	Jackson	050S	10.6	9.2	9.6	8.8	9.1	9.4	8.6	8.4	9.2	
/10/18	PL	14	10/27/2018	1	03W6	Jackson	050SB	10.2	10.6	11.4	11.0	10.0	10.3	11.3	10.7	10.7	
1/24/18	PL	28	10/27/2018	1	03W6	Jackson	0505	12.7	14.0	13.6	13.5	13.4	13.5	13.3	13.5	13.4	
	PL PL		10/27/2018	1	03W6		0505B		14.0	13.5				13.3			1
/24/18		28	10, 11, 1010			Jackson		13.0			12.5	13.1	13.5		13.5	13.3	ordered outputs of the second
	PL	102	10/27/2018		03W6	Jackson	050S	27.9	26.2	26.4	25.6	26.8	24.9	26.2	26.1	26.3	Original Cylinder After 24 Hr Soak
	PL	102	10/27/2018	L	03₩6	Jackson	050SB	21.3	24.9	20.2	21.6	21.0	23.7	20.7	22.0	21.9	Original Cylinder After 24 Hr Soak
		8	10/28/2018		03₩6	Jackson	057S	11.3	10.8	10.4	10.6	10.7	9.7	10.2	10.2	10.5	
2/6/19	PL		10/28/2018	1	03W6	Jackson	0575B	10.2	10.6	9.8	9.6	9.8	9.8	9.4	9.8	9.9	1
2/6/19 1/5/18		Ω				Jackson			9.9			9.8				9.9	1
2/6/19 1/5/18 1/5/18	PL	8					057S	10.0		10.3 9.0	9.7 9.3	9.8 9.4	9.3 9.3	10.4	9.6		
2/6/19 1/5/18 1/5/18 1/5/18	PL PL	14	10/28/2018		03W6				9.4					9.0			
2/6/19 1/5/18 1/5/18 1/11/18 1/11/18	PL PL PL	14 14	10/28/2018 10/28/2018		03W6	Jackson	057SB	9.3							9.1	9.2	
2/6/19 1/5/18 1/5/18 1/11/18 1/11/18	PL PL	14	10/28/2018				057SB 057S	12.2	13.3	12.6	12.2	12.0	9.3	12.3	9.1 12.2	9.2 12.4	
2/6/19 1/5/18 1/5/18 1/11/18 1/11/18 1/25/18	PL PL PL	14 14	10/28/2018 10/28/2018		03W6	Jackson											
2/6/19 1/5/18 1/5/18 1/1/18 1/11/18 1/11/18 1/25/18	PL PL PL PL PL	14 14 28 28	10/28/2018 10/28/2018 10/28/2018 10/28/2018		03W6 03W6 03W6	Jackson Jackson Jackson	057S 057SB	12.2 12.4	13.3 12.7	12.6 12.5	12.2 11.9	12.0 12.1	12.7 12.1	12.3 11.8	12.2 11.4	12.4 12.1	CYL. NOT SELECTED
2/6/19 2/6/19 1/5/18 1/5/18 1/1/18 1/11/18 1/25/18 1/25/18 1/25/18 2/5/19 2/5/19	PL PL PL PL PL PL	14 14 28 28 100	10/28/2018 10/28/2018 10/28/2018 10/28/2018 10/28/2018 10/28/2018		03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson	0575 05758 0575	12.2 12.4 26.3	13.3 12.7 24.7	12.6 12.5 25.1	12.2 11.9 25.8	12.0 12.1 26.4	12.7 12.1 25.3	12.3 11.8 24.6	12.2 11.4 25.0	12.4 12.1 25.4	
2/6/19 1/5/18 1/5/18 1/1/18 1/11/18 1/11/18 1/25/18	PL PL PL PL PL	14 14 28 28	10/28/2018 10/28/2018 10/28/2018 10/28/2018		03W6 03W6 03W6	Jackson Jackson Jackson	057S 057SB	12.2 12.4	13.3 12.7	12.6 12.5	12.2 11.9	12.0 12.1	12.7 12.1	12.3 11.8	12.2 11.4	12.4 12.1	CYL. NOT SELECTED CYL. NOT SELECTED
/6/19 1/5/18 1/5/18 /11/18 /11/18 /25/18 /25/18 /25/19	PL PL PL PL PL PL	14 14 28 28 100	10/28/2018 10/28/2018 10/28/2018 10/28/2018 10/28/2018 10/28/2018		03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson	0575 05758 0575	12.2 12.4 26.3	13.3 12.7 24.7	12.6 12.5 25.1	12.2 11.9 25.8	12.0 12.1 26.4	12.7 12.1 25.3	12.3 11.8 24.6	12.2 11.4 25.0	12.4 12.1 25.4	

11/12/18	PL	14	10/29/2018	03W6	Jackson	0635	10.0	9.3	9.4	9.4	9.6	9.2	9.3	9.4	9.5	
11/12/18	PL PL	14	10/29/2018	03W6	Jackson	0635B	10.0	9.8	10.2	9.6	9.9	9.6	9.4	9.4	9.5	
11/26/18	PL	28	10/29/2018	03W6	Jackson	0635	12.4	13.0	12.2	12.7	11.9	12.4	11.5	12.3	12.3	
11/26/18	PL	28	10/29/2018	03W6	Jackson	063SB	12.4	12.6	12.3	12.9	12.4	11.4	11.9	12.4	12.3	
2/6/19	PL	100	10/29/2018	03W6	Jackson	0635	20.7	21.0	20.9	20.8	19.8	21.2	21.0	20.8	20.8	Original Cylinder After 24 Hr Soak
2/6/19	PL	100	10/29/2018	03W6	Jackson	063SB	22.1	23.5	20.6	21.6	20.2	21.0	21.3	22.7	21.6	Original Cylinder After 24 Hr Soak
11/7/18	PL	8	10/30/2018	03W6	Jackson	067S	10.0	11.0	10.0	9.6	9.9	10.4	9.7	9.2	10.0	
11/7/18	PL.	8	10/30/2018	03W6	Jackson	067SB	10.4	10.0	9.4	9.8	10.0	9.9	9.1	9.9	9.8	
11/13/18	PL	14	10/30/2018	03W6	Jackson	067S	10.7	10.1	10.9	10.3	10.4	10.0	10.8	10.5	10.5	
11/13/18	PL	14	10/30/2018	03W6	Jackson	067SB	10.4	9.9	10.0	10.0	10.5	10.2	9.9	10.3	10.2	
	PL		10/30/2018	03W6	Jackson	067S						16.4			16.7	
11/27/18		28					16.5	18.6	18.2	16.4	15.7		16.3	15.7		
11/27/18	PL	28	10/30/2018	03W6	Jackson	067SB	14.9	15.3	16.3	14.9	14.8	14.2	14.6	13.5	14.8	
2/5/19	PL	98	10/30/2018	03W6	Jackson	067S	27.1	28.4	27.5	24.0	26.1	26.5	26.1	24.9	26.3	EXTRA CYL. SELECTED
2/5/19	PL	98	10/30/2018	03W6	Jackson	067SB	30.1	26.1	24.8	25.7	26.7	24.5	25.2	24.9	26.0	EXTRA CYL. SELECTED
2/6/19	PL.	99	10/30/2018	03W6	Jackson	0675	34.1	33.9	32.1	32.8	34.3	34.4	31.5	32.6	33.2	Original Cylinder After 24 Hr Soak
2/6/19	PL.	99	10/30/2018	03W6	Jackson	067SB	30.9	34.3	35.7	34.8	31.5	34.3	35.7	34.9	34.0	Original Cylinder After 24 Hr Soak
11/7/18	PL.	7	10/31/2018	03W6	Jackson	0735	8.8	9.5	9.5	9.6	8.2	9.0	9.6	9,4	9.2	
11/7/18	PL	7	10/31/2018	03W6	Jackson	073SB	9.7	9.7	9.9	9.0	9.6	9.1	10.0	9.8	9.6	
11/14/18	PL	14	10/31/2018	03W6	Jackson	0735	10.2	9.9	9.6	10.1	10.1	9.9	9.7	10.0	9.9	
11/14/18	PL	14	10/31/2018	03W6	Jackson	0735B	10.4	10.2	9,9	9.8	10.2	10.1	9.9	10.5	10.1	
							11.7								11.5	
11/28/18	PL	28	10/31/2018	03W6	Jackson	0735		11.9	12.3	11.2	11.1	12.0	11.4	10.7		
11/28/18	PL	28	10/31/2018	03W6	Jackson	073SB	11.2	11.9	11.1	11.7	11.0	11.5	10.5	10.2	11.1	
2/5/19	PL	97	10/31/2018	03W6	Jackson	073S	29.4	24.5	24.6	26.2	25.4	23.7	23.3	24.8	25.2	EXTRA CYL. SELECTED
2/5/19	PL	97	10/31/2018	03W6	Jackson	073SB	27.3	25.2	24.0	25.8	25.3	23.4	22.9	22.8	24.6	EXTRA CYL. SELECTED
2/6/19	PL	98	10/31/2018	03W6	Jackson	0735	31.9	30.9	32.8	33.8	31.5	31.5	31.9	32.4	32.1	Original Cylinder After 24 Hr Soak
2/6/19	PL	98	10/31/2018	03W6	Jackson	073SB	29.7	28.5	32.6	30.3	29.7	31.3	33.4	31.5	30.9	Original Cylinder After 24 Hr Soak
11/8/18	PL	7	11/01/2018	03W6	Jackson	0785	8.6	8.7	8.7	7.9	8.2	8.1	8.4	7.9	8.3	
11/8/18	PL	7	11/01/2018	03W6	Jackson	078SB	8.9	8.2	7.4	7.7	8.7	7.9	7.1	7.8	8.0	1
11/15/18	PL	14	11/01/2018	03W6	Jackson	0785	9.0	9.1	8.9	8.5	8.8	8.9	8.7	8.5	8.8	
11/15/18	PL	14	11/01/2018	03W6	Jackson	0785B	9.0	8.1	7.6	7.8	9.0	7.9	7.4	7.5	8.0	
																1
11/29/18	PL	28	11/01/2018	03W6	Jackson	078S	11.8	12.2	11.1	11.4	11.4	11.6	10.6	11.3	11.4	
11/29/18	PL	28	11/01/2018	03W6	Jackson	078SB	10.5	12.6	11.3	10.4	10.3	11.8	10.6	10.3	11.0	
2/6/19	PL	97	11/01/2018	03W6	Jackson	078S	23.9	23.4	20.0	22.0	20.0	24.0	21.7	21.0	22.0	Original Cylinder After 24 Hr Soak
2/6/19	PL	97	11/01/2018	03W6	Jackson	078SB	20.0	17.3	19.7	21.3	19.3	17.8	19.5	20.8	19.5	Original Cylinder After 24 Hr Soak
11/10/18	PL	8	11/02/2018	03W6	Jackson	081S	11.5	12.0	11.8	11.5	10.0	11.2	11.3	10.9	11.3	
11/10/18	PL	8	11/02/2018	03W6	Jackson	081SB	10.2	10.8	11.4	12.5	9.7	10.2	10.7	11.7	10.9	
11/16/18	PL	14	11/02/2018	03W6	Jackson	081S	11.8	12.6	11.4	11.9	10.9	11.3	11.7	11.3	11.6	
11/16/18	PL	14	11/02/2018	03W6	Jackson	0815B	10.6	11.2	12.1	12.4	10.4	10.1	11.0	11.8	11.0	
11/30/18	PL	28	11/02/2018	03W6	Jackson	08136	12.3	11.2	11.5	11.6	11.9	11.1	10.2	10.2	11.2	
11/30/18	PL	28	11/02/2018	03W6	Jackson	081SB	14.5	14.3	15.2	15.4	15.9	13.7	14.0	14.6	14.7	
2/6/19	PL	96	11/02/2018	03W6	Jackson	081S	23.3	22.6	20.1	22.2	21.9	21.8	20.5	21.3	21.7	Original Cylinder After 24 Hr Soak
2/6/19	PL	96	11/02/2018	03W6	Jackson	081SB	22.5	20.9	23.8	23.6	23.4	21.6	22.3	22.2	22.5	Original Cylinder After 24 Hr Soak
11/15/18	PL	11	11/04/2018	03W6	Jackson	0875	11.6	12.6	12.4	11.7	11.7	12.6	12.7	12.4	12.2	
11/15/18	PL.	11	11/04/2018	03W6	Jackson	087SB	12.4	12.3	11.8	11.7	12.1	10.8	10.5	10.1	11.5	
11/19/18	PL.	15	11/04/2018	03W6	Jackson	087S	11.5	12.7	12.2	12.0	11.8	12.8	13.0	12.6	12.3	
11/19/18	PL	15	11/04/2018	03W6	Jackson	0875B	12.3	12.4	11.9	12.2	12.3	10.9	10.8	10.8	11.7	
12/3/18	PL	29	11/04/2018	03W6	Jackson	0875	12.8	12.6	12.7	12.7	13.0	12.1	11.2	12.7	12.5	
12/3/18	PL	29	11/04/2018	03W6	Jackson	087SB	12.3	11.8	13.5	12.1	12.0	11.6	13.1	11.9	12.3	
2/6/19	PL	94	11/04/2018	03W6	Jackson	087S	25.6	23.6	26.1	24.1	22.6	22.1	22.4	24.4	23.9	Original Cylinder After 24 Hr Soak
2/6/19	PL	94	11/04/2018	03W6	Jackson	087SB	27.9	24.1	22.5	22.1	24.9	21.0	20.7	23.7	23.4	Original Cylinder After 24 Hr Soak
11/15/18	PL.	10	11/05/2018	03W6	Jackson	0925	10.2	9.9	9.4	9.4	9.3	9.2	9.0	8.9	9.4	
11/15/18	PL	10	11/05/2018	03W6	Jackson	092SB	9.9	9.4	10.1	9.6	9.7	9.3	9.6	9.4	9.6	
11/19/18	PL	14	11/05/2018	03W6	Jackson	0925	10.3									
11/19/18	PL	14	11/05/2018					10.1	9.4	9.6	9.6	9.4	9.1	9.5	9.6	
12/3/18	PL	28		03W6		0925B				9.6	9.6				9.6	
12/3/18	PL	20		03W6	Jackson	092SB	10.2	9.4	10.3	9.6 9.9	9.6 9.8	10.0	9.5	9.7	9.6 9.9	
			11/05/2018	03W6	Jackson Jackson	0925	10.2 11.6	9.4 11.9	10.3 11.5	9.6 9.9 11.6	9.6 9.8 11.4	10.0 11.2	9.5 11.1	9.7 11.2	9.6 9.9 11.4	
2/5/19			11/05/2018	03W6 03W6	Jackson Jackson Jackson	0925 09258	10.2 11.6 12.0	9.4 11.9 12.8	10.3 11.5 12.1	9.6 9.9 11.6 12.2	9.6 9.8 11.4 11.8	10.0 11.2 11.8	9.5 11.1 11.5	9.7 11.2 11.7	9.6 9.9 11.4 12.0	
	PL	92	11/05/2018 11/05/2018	03W6 03W6 03W6	Jackson Jackson Jackson Jackson	0925 09258 0925	10.2 11.6 12.0 22.1	9.4 11.9 12.8 22.5	10.3 11.5 12.1 21.6	9.6 9.9 11.6 12.2 23.1	9.6 9.8 11.4 11.8 20.7	10.0 11.2 11.8 20.9	9.5 11.1 11.5 20.4	9.7 11.2 11.7 22.0	9.6 9.9 11.4 12.0 21.7	CYL. NOT SELECTED
2/5/19	PL PL		11/05/2018	03W6 03W6	Jackson Jackson Jackson	0925 09258	10.2 11.6 12.0	9.4 11.9 12.8	10.3 11.5 12.1	9.6 9.9 11.6 12.2	9.6 9.8 11.4 11.8	10.0 11.2 11.8	9.5 11.1 11.5	9.7 11.2 11.7	9.6 9.9 11.4 12.0	CYL. NOT SELECTED CYL. NOT SELECTED
	PL	92 92	11/05/2018 11/05/2018 11/05/2018	03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258	10.2 11.6 12.0 22.1 24.6	9.4 11.9 12.8 22.5 22.0	10.3 11.5 12.1 21.6 23.2	9.6 9.9 11.6 12.2 23.1 22.2	9.6 9.8 11.4 11.8 20.7 24.1	10.0 11.2 11.8 20.9 21.8	9.5 11.1 11.5 20.4 23.6	9.7 11.2 11.7 22.0 21.6	9.6 9.9 11.4 12.0 21.7 22.9	
11/21/18	PL PL	92 92 7	11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258	10.2 11.6 12.0 22.1 24.6 11.0	9.4 11.9 12.8 22.5 22.0 10.0	10.3 11.5 12.1 21.6 23.2 10.6	9.6 9.9 11.6 12.2 23.1 22.2 10.2	9.6 9.8 11.4 11.8 20.7 24.1 10.0	10.0 11.2 11.8 20.9 21.8 9.6	9.5 11.1 11.5 20.4 23.6 10.0	9.7 11.2 11.7 22.0 21.6 9.8	9.6 9.9 11.4 12.0 21.7 22.9 10.2	
11/21/18 11/21/18	PL PL PL	92 92 7 7 7	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2	9.4 11.9 12.8 22.5 22.0 10.0 9.1	10.3 11.5 12.1 21.6 23.2 10.6 9.9	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4	10.0 11.2 11.8 20.9 21.8 9.6 8.4	9.5 11.1 11.5 20.4 23.6 10.0 9.5	9.7 11.2 11.7 22.0 21.6 9.8 9.1	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6	
11/21/18 11/21/18 11/28/18	PL PL PL PL	92 92 7 7 14	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258 0985 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1	9.6 9.9 11.4 12.0 21.7 22.9 10.2	
11/21/18 11/21/18 11/28/18 11/28/18	PL PL PL	92 92 7 7 7	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2	9.4 11.9 12.8 22.5 22.0 10.0 9.1	10.3 11.5 12.1 21.6 23.2 10.6 9.9	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4	10.0 11.2 11.8 20.9 21.8 9.6 8.4	9.5 11.1 11.5 20.4 23.6 10.0 9.5	9.7 11.2 11.7 22.0 21.6 9.8 9.1	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6	
11/21/18 11/21/18 11/28/18	PL PL PL PL	92 92 7 7 14	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258 0985 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1	
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18	PL PL PL PL	92 92 7 7 14 14	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09258 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6	
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18	PL PL PL PL PL	92 92 7 7 14 14 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3	
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 2/5/19	PL PL PL PL PL PL PL PL	92 92 7 7 14 14 28 28 83	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09858 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2 26.4	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2 14.5 22.0	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18	PL PL PL PL PL PL	92 92 7 7 14 14 28 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6	9.6 9.9 11.5 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2 14.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 2/5/19 2/5/19	PL PL PL PL PL PL PL PL PL	92 92 7 14 14 28 28 83 83 83	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1	9.4 11.9 12.8 22.5 22.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.5 13.2 14.5 22.0 24.2	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18	PL PL PL PL PL PL PL PL PL	92 92 7 7 14 14 28 28 83 83 83 7	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3 9.2	10.3 11.5 12.1 21.6 9.9 10.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 24.2 23.5	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18	PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 7 7 7	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6	9,4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3 9.2 10.7	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.1	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.6	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7	9.6 9.9 111.4 122.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 24.2 23.5 9.5 10.1	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18 11/22/18	PL PL PL PL PL PL PL PL PL	92 92 7 7 14 14 28 28 83 83 83 83 7 7 7 7	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3 9.2 10.7 8.9	10.3 11.5 12.1 21.6 23.2 10.5 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.4 8.4	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.6 8.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5	CYL. NOT SELECTED
11/21/18 11/28/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18 11/22/18 11/29/18	PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 7 7 7 7 14	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8	9,4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3 9.2 10.7 8.9 8.8	10.3 11.5 12.1 21.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.1 10.1 10.4 9.4	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.6 8.1 9.6 8.1 9.4	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6	9.6 9.9 11.4 12.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 24.2 23.5 10.1 18.5 8.8	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 11/28/18 12/12/18 12/12/18 12/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18	PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 83 7 7 7 7 14 14 14 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 0925 09258 09858 009858 009858 009858 009858 009858 009858 009858 009858 0000000000	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.8 9.9 10.6 8.7 8.8 11.9	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.0 7 14.9 14.2 26.4 25.3 9.2 10.7 8.9 8.8 11.2	10.3 11.5 12.1 21.6 23.2 10.6 11.4 14.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.6 8.1 9.4 13.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4 11.8	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4	9.5 11.1 20.4 23.6 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9	9.7 11.2 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.5	9.6 9.9 111.4 122.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 12.0	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18 12/13/18	PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 7 7 7 7 14 14 28 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09358 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 10158 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8 11.9 13.0	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 26.4 25.3 9.2 10.7 8.9 8.8 11.2 12.3	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 23.4 14.6 13.6 23.4 23.4 10.4 13.6 23.4 2.9 10.1 10.4 8.4 9.4 9.2 2.9	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2 24.2 24.2 24.2 9.8 9.6 8.1 9.6 8.1 9.4 13.1 12.6	9.6 9.8 11.4 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4 11.8 13.0	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9 11.5	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 1.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.6 12.7 13.9 24.6 12.7 13.9 24.6 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 13.9 24.6 12.7 12.7 13.9 24.6 12.7 12.7 13.9 24.5 12.7 13.9 24.5 12.7 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 13.9 12.7 12.7 13.9 12.7 13.0 12.7 13.0 12.7 12.7 13.0 12.5 12.0 12.5 12.0 12.5 12.0	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 8.5 8.8 12.0 12.4	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18	PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 83 7 7 7 7 14 14 14 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 0925 09258 09858 009858 009858 009858 009858 009858 009858 009858 009858 0000000000	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.8 9.9 10.6 8.7 8.8 11.9	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.0 7 14.9 14.2 26.4 25.3 9.2 10.7 8.9 8.8 11.2	10.3 11.5 12.1 21.6 23.2 10.6 11.4 14.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.6 8.1 9.4 13.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4 11.8	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4	9.5 11.1 20.4 23.6 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9	9.7 11.2 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.5	9.6 9.9 111.4 122.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 12.0	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18 12/13/18	PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 7 7 7 7 14 14 28 28	11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 0925 09258 09358 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 10158 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8 11.9 13.0	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 14.9 26.4 25.3 9.2 10.7 8.9 8.8 11.2 12.3	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 23.4 14.6 13.6 23.4 23.4 10.4 13.6 23.4 2.9 10.1 10.4 8.4 9.4 9.2 2.9	9.6 9.9 11.6 12.2 23.1 22.2 10.2 9.5 11.3 9.9 13.2 24.2 24.2 24.2 9.8 9.6 8.1 9.6 8.1 9.4 13.1 12.6	9.6 9.8 11.4 20.7 24.1 10.0 10.4 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4 11.8 13.0	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9 11.5	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 1.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.6 12.7 13.9 24.6 12.7 13.9 24.6 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7 13.9 24.6 12.7 12.7 13.9 24.6 12.7 12.7 13.9 24.5 12.7 13.9 24.5 12.7 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 24.5 12.7 13.9 12.7 13.0 12.7 13.0 12.7 12.7 13.0 12.5 12.0 12.5 12.0 12.5 12.0	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 8.5 8.8 12.0 12.4	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18 12/13/18 12/13/18 12/13/18 12/13/18 12/13/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 83 7 7 7 14 14 14 28 83 83	11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09288 0925 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 1015 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 11.6 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8 11.9 13.0 18.0	9.4 11.9 12.8 22.5 22.0 9.1 11.7 10.7 14.9 14.2 26.4 25.3 9.2 10.7 8.9 8.8 11.2 8.8 11.2 3 20.3	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.7 20.7	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.8 9.6 8.1 9.4 13.1 12.6 17.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.2 11.0 14.9 12.6 23.1 21.9 9.3 10.0 8.8 8.4 11.8 13.0 17.5	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 24.2 23.8 9.8 8.8 9.8 8.6 8.5 11.4 12.0 19.3	9.5 11.1 20.4 23.6 70.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9 11.5 20.1	9.7 11.2 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.5 12.0 17.2	9.6 9.9 11.4 12.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 12.0 12.4 18.8	CYL. NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 12/2/18 12/2/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 11/29/18 12/13/18 12/13/18 2/6/19 2/6/19	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 7 7 7 14 14 14 28 28 83 83 83 83 83 83	11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 10158 10158 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8 11.9 13.0 18.0 20.9	9.4 11.9 12.8 22.5 22.0 9.1 10.0 9.1 11.7 14.9 14.2 26.4 25.3 9.2 10.7 8.9 8.8 9.2 10.7 8.9 8.8 11.2 12.3 20.3 21.3	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2 9.4 12.7 20.7 19.9	9.6 9.9 11.6 12.2 23.1 22.2 9.5 11.3 9.9 13.2 14.5 22.0 24.2 9.8 9.6 8.1 9.6 8.1 9.4 13.1 12.6 17.1 18.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 12.6 23.1 12.6 23.1 12.6 23.1 11.0 9.3 10.0 9.3 10.0 9.3 10.0 17.5 18.9	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0 19.3 20.2	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 22.4 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.9 11.5 20.1 20.1 20.6	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.0 17.2 18.9	9.6 9.9 111.4 12.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 10.1 8.5 8.8 12.0 12.4 18.8 12.4 18.8 19.9	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 2/5/19 2/5/19 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 12/13/18 2/6/19 2/6/19 2/6/19 11/23/18	PL PL PL PL PL PL PL PL PL PL PL PL PL	92 92 7 7 7 14 14 28 83 83 83 7 7 7 14 14 14 28 83 83 83 83 83 83 7 7	11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 10158 10158 10158 10158 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 14.9 12.5 25.8 14.9 12.5 25.1 9.9 10.6 8.7 8.8 11.9 13.0 18.0 20.9 9.7	9.4 11.9 12.8 22.5 22.0 9.1 11.7 10.7 14.9 14.2 26.4 9.2 10.7 8.9 8.8 11.2 20.3 21.3 9.8	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2 12.7 19.9 9.1	9.6 9.7 11.6 12.2 23.1 12.2 23.1 12.2 23.1 12.2 9.5 11.3 9.9 13.2 24.2 24.2 24.2 24.2 24.2 12.4 5.6 8.1 9.4 12.5 12.5 12.5 12.5 12.5 13.2 14.5 13.2 14.5 13.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 10.4 11.2 21.9 23.1 21.9 9.3 10.0 8.8 8.4 13.0 17.5 18.9 9.3	10.0 11.2 11.8 20.9 9.6 8.4 10.8 10.2 14.9 24.2 23.8 8.8 9.8 8.6 9.8 8.5 11.4 12.0 19.3 20.2 23.8 9.6 9.5 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 8.8 11.5 20.1 20.6	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 9.7 9.7 8.0 8.6 12.5 12.0 17.2 18.9 8.5	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 10.1 10.6 14.3 13.5 24.2 23.5 10.1 8.5 8.8 8.5 8.8 8.5 8.8 12.0 12.4 18.8 19.9 9.2	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak
11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 12/12/18 12/12/18 12/12/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 11/29/18 12/13/18 12/13/18 12/6/19 11/23/18 11/23/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 7 14 14 28 83 83 83 7 7 7 14 28 28 83 83 7 7 7 7	11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/05/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/14/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018 11/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 10158 10158 10158 10158 10158	10.2 11.6 12.0 22.1 24.6 11.0 11.2 14.9 12.5 25.8 25.1 9.9 10.6 8.7 8.8 11.9 13.0 18.0 20.9 9.7 10.4	9.4 11.9 12.8 22.5 22.0 9.1 10.0 9.1 11.7 14.9 10.7 10.9 10.7 10.9 10.8 10.9 10.7 10.8 10.9 10.8 10.9 10.8 10.9 10.8 10.	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 14.6 23.4 22.9 10.1 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2 12.7 20.7 19.9 18.6	9.6 9.9 11.6 12.2 23.1 12.2 9.5 13.2 24.2 9.5 22.0 24.2 9.8 9.6 8.1 14.5 22.0 24.2 9.8 9.6 8.1 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 23.1 10.0 14.9 12.6 23.1 10.0 14.9 12.6 23.1 9 3.1 9 3.3 10.0 8.8 8.8 8.4 11.8 13.0 13.0 19.5 18.9 18.9 19.5 19.5 19.5 19.5 19.5 19.5 19.5 19	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.2 23.8 10.2 23.8 10.2 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0 19.3 20.9 21.8 24.2 23.8 8.4 9.6 8.5 11.4 12.9 13.5 24.2 23.8 8.6 8.5 11.4 12.9 13.5 24.2 23.8 8.6 8.5 11.4 12.9 13.5 24.2 23.8 8.6 8.5 11.4 12.9 13.5 24.2 23.8 13.5 24.2 23.8 13.5 24.2 23.8 14.9 13.5 24.2 23.8 14.9 13.5 24.2 23.8 14.9 13.5 24.2 23.8 14.9 13.5 24.2 23.8 11.4 12.5 13.5 13.5 13.5 24.2 23.8 11.4 12.5 13.5 11.4 12.5 13.5 13.5 13.5 14.9 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5 11.4 13.5 13.	9.5 11.1 11.5 20.4 23.6 9.5 10.0 9.5 10.3 10.9 14.2 12.9 24.1 22.4 9.4 9.7 8.2 11.5 20.1 1.5 20.1 1.5 20.6 8.8 8.3	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 9.7 9.7 8.0 8.6 12.5 12.0 17.5 12.9 8.5 8.5	9.6 9.9 11.4 12.0 21.7 22.9 9.6 11.1 10.6 10.6 10.6 10.6 10.6 10.6 10	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 12/12/18 12/12/18 11/22/18 11/22/18 11/22/18 11/29/18 12/13/18 12/13/18 11/23/18 11/23/18 11/23/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 14 28 83 83 83 7 7 7 14 14 28 83 83 83 7 7 7 7 7 14	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018 1.1/1	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 10158 10058 1	10.2 11.6 12.0 22.1 24.5 11.0 11.2 11.3 11.4 12.5 25.8 25.1 9.9 10.6 11.2 11.2 11.2 25.8 25.1 9.9 10.6 13.0 13.0 20.9 9.7 10.7 10.7	9.4 11.9 12.8 22.5 22.0 10.0 9.1 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 12.3 20.3 21.3 9.8 8.4 10.6	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 13.6 23.4 23.4 23.9 10.1 10.4 8.4 9.4 9.4 9.4 12.2 12.7 10.7 19.9 9.1 8.6	9.6 9.7 11.6 12.2 23.1 10.2 22.2 10.2 24.2 11.3 9.5 11.3 9.5 11.3 22.0 24.2 24.2 14.5 22.0 9.6 8.1 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 11.2 11.0 14.9 12.6 8 23.1 21.9 9.3 10.0 8.8 8.4 11.8 13.9 9.3 10.0 9.3 9.3 9.3 9.3 9.3 9.3 9.3	10.0 11.2 11.8 20.9 21.8 3.6 8.4 10.8 10.2 23.8 8.8 9.8 8.8 9.8 8.6 8.5 11.4 12.0 9.1 9.1 9.1 9.1 9.1 9.5 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	9,5 11.1 11.5 20.4 23.6 9,5 10.3 9,5 10.3 24.1 22.4 22.4 9,4 9,7 8,2 22.4 9,4 9,7 8,2 8,8 11.9 11.5 20.1 20.1 20.4 10.9 21.0 21.0 22.4 22.4 22.4 22.4 22.4 22.4 22.4 22	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 8.0 8.6 12.5 12.0 17.2 18.9 8.5 10.0	9.6 9.9 11.4 12.0 21.7 22.9 9.6 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 12.0 12.4 18.8 19.9 9.2 8.8 10.4	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 12/13/18 12/13/18 2/6/19 2/6/19 2/6/19 2/6/19 2/6/19 11/23/18 11/23/18 11/30/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 83 7 7 7 7 14 14 28 83 83 83 7 7 7 7 7 14 14	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/1/07/2018 1.1/1/07/2018 1.1/1/17/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09259 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 10158 10158 10158 10158 10158 10158 10158 10458 10458	10.2 11.6 12.0 22.1 12.0 22.1 11.2 11.2 11.2 11.2 11.2 11.2 12.5 25.8 25.1 12.9 9.9 10.6 8.7 8.8 11.9 13.0 20.9 9.7 10.4 11.0 13.0 14.0 15.0 10.0	9,4 11.9 12.8 22.5 22.0 10.0 9.1 10.7 14.2 26.4 25.3 10.7 8.9 11.2 12.3 20.3 21.3 9.8 8.4 9.8 8.4 10.6	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 13.6 23.4 23.4 23.4 23.4 23.4 10.1 10.4 8.4 9.4 12.2 10.7 10.7 19.9 9.1 8.6 10.7 19.9 9.1 8.6 10.7 10.0 1	9.6 9.9 11.6 12.2 23.1 10.2 2.2 9.5 11.3 9.5 11.3 9.5 11.3 9.5 11.3 24.2 24.2 24.2 24.2 9.8 9.6 8.1 19.4 13.1 12.6 11.6 14.5 24.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 11.0 14.9 12.6 10.0 14.9 9.3 10.0 9.3 10.0 17.5 18.9 9.3 13.0 17.5 18.9 9.3 13.0 10.0 10.5 18.9 9.3 9.3 9.7 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0 19.3 20.2 9.1 7.9 9.6 9.6 9.6 9.6 9.6 14.9 10.2 14.9 14.9 14.9 10.2 14.9 14.9 14.9 12.0 14.9 14.9 13.5 24.2 23.8 8.6 8.5 11.4 10.0 10.	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.3 10.3 10.3 10.3 10.3 22.4 22.4 22.4 9.4 9.7 8.2 8.8 8.8 11.9 11.5 20.1 22.4 11.5 20.4 24.1 22.4 24.1 22.4 8.8 8.8 8.8 8.8 8.3 10.4 10.0 10.0	9.7 11.2 11.7 22.0 21.6 9.1 9.1 11.1 9.5 12.7 13.9 24.5 24.5 24.5 24.5 24.5 24.5 12.7 13.9 24.5 24.5 24.5 12.7 13.9 24.5 24.5 25.7 9.7 8.0 8.6 12.5 13.9 15.5 1	9.6 9.9 11.4 12.0 21.7 22.9 9.6 11.1 10.6 11.1 10.6 14.3 13.5 24.2 23.5 7 9.5 10.1 8.5 8.8 12.0 12.4 18.5 12.0 12.4 18.5 19.9 9.2 8.8 10.4	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 12/12/18 12/12/18 12/12/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/23/18 11/23/18 11/23/18 11/23/18 11/30/	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 14 28 83 83 83 7 7 7 14 14 28 83 83 83 7 7 7 7 7 14	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018 1.1/1	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson Jackson	0925 09258 09258 09258 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 10158 10058 1	10.2 11.6 12.0 22.1 24.5 11.0 11.2 11.3 11.4 12.5 25.8 25.1 9.9 10.6 11.2 11.2 11.2 25.8 25.1 9.9 10.6 13.0 13.0 20.9 9.7 10.7 10.7	9.4 11.9 12.8 22.5 22.0 10.0 9.1 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 10.7 12.3 20.3 21.3 9.8 8.4 10.6	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 13.6 23.4 23.4 23.9 10.1 10.4 8.4 9.4 9.4 9.4 12.2 12.7 10.7 19.9 9.1 8.6 10.7	9.6 9.7 11.6 12.2 23.1 10.2 22.2 10.2 24.2 11.3 9.5 11.3 9.5 11.3 22.0 24.2 24.2 14.5 22.0 9.6 8.1 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 13.2 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14.5	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 11.2 11.0 14.9 12.6 8 23.1 21.9 9.3 10.0 8.8 8.4 11.8 13.9 9.3 10.0 9.3 9.3 9.3 9.3 9.3 9.3 9.3	10.0 11.2 11.8 20.9 21.8 3.6 8.4 10.8 10.2 23.8 8.8 9.8 8.8 9.8 8.6 8.5 11.4 12.0 9.1 9.1 9.1 9.1 9.1 9.5 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 9.6 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	9,5 11.1 11.5 20.4 23.6 9,5 10.3 9,5 10.3 24.1 22.4 22.4 9,4 9,7 8,2 22.4 9,4 9,7 8,2 8,8 11.9 11.5 20.1 20.1 20.4 10.9 21.0 21.0 22.4 22.4 22.4 22.4 22.4 22.4 22.4 22	9.7 11.2 11.7 22.0 21.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	9.6 9.9 11.4 12.0 21.7 22.9 9.6 10.2 9.6 11.1 10.6 14.3 13.5 24.2 23.5 9.5 10.1 8.5 8.8 12.0 12.4 18.8 19.9 9.2 8.8 10.4	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/12/18 12/12/18 2/5/19 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/29/18 12/13/18 12/13/18 2/6/19 2/6/19 2/6/19 2/6/19 2/6/19 11/23/18 11/23/18 11/30/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 83 7 7 7 7 14 14 28 83 83 83 7 7 7 7 7 14 14	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/1/07/2018 1.1/1/07/2018 1.1/1/17/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09259 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 10158 10158 10158 10158 10158 10158 10458 10458	10.2 11.6 12.0 22.1 12.0 22.1 11.2 11.2 11.2 11.2 11.2 11.2 12.5 25.8 25.1 12.9 9.9 10.6 8.7 8.8 11.9 13.0 20.9 9.7 10.4 11.0 13.0 14.0 15.0 10.0	9,4 11.9 12.8 22.5 22.0 10.0 9.1 10.7 14.2 26.4 25.3 10.7 8.9 10.2 9.2 10.3 8.8 11.2 12.3 9.8 8.4 9.8 8.4 10.6	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 11.4 13.6 23.4 23.4 23.4 23.4 23.4 10.1 10.4 8.4 9.4 12.2 10.7 10.7 19.9 9.1 8.6 10.7 19.9 9.1 8.6 10.7 10.0 1	9.6 9.9 11.6 12.2 23.1 10.2 2.2 9.5 11.3 9.5 11.3 9.5 11.3 9.5 11.3 24.2 24.2 24.2 24.2 9.8 8.6 13.1 12.6 11.6 14.5 24.2 14.5 13.1 14.5 14.5 14.5 14.5 14.5 14.5 14.5 14	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 11.0 14.9 12.6 10.0 14.9 9.3 10.0 9.3 10.0 17.5 18.9 9.3 13.0 17.5 18.9 9.3 13.0 10.0 10.5 18.9 9.3 9.3 9.7 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	10.0 11.2 11.8 20.9 21.8 9.6 8.4 10.2 14.9 13.5 24.2 23.8 8.8 9.8 8.6 8.5 11.4 12.0 19.3 20.2 9.1 7.9 9.6 9.6 9.6 9.6 9.6 9.6 14.9 10.2 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 14.9 12.0 14.9 14.9 14.9 14.9 10.2 11.0 14.9 10.2 14.9 10.2 14.9 10.2 14.9 10.2 14.9 10.2 14.9 10.2 14.9 14.9 10.2 14.9 10.2 14.9 10.2 10.2 14.9 10.2 10.3 10.5 9.6 10.5 9.6 10.5	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.3 10.3 10.3 10.3 10.3 22.4 22.4 22.4 9.4 9.7 8.2 8.8 8.8 11.9 11.5 20.1 22.4 11.5 20.4 24.1 22.4 24.1 22.4 8.8 8.8 8.8 8.8 8.3 10.4 10.0 10.0	9.7 11.2 11.7 22.0 21.6 9.1 9.1 11.1 9.5 12.7 13.9 24.5 24.5 24.5 24.5 24.5 24.5 12.7 13.9 24.5 24.5 24.5 12.7 13.9 24.5 24.5 25.7 9.7 8.0 8.6 12.5 13.9 15.5 1	9.6 9.9 11.4 12.0 21.7 22.9 9.6 11.1 10.6 14.3 13.5 24.2 23.5 7 9.5 10.1 8.5 8.8 12.0 12.4 18.5 12.0 12.4 18.5 19.9 9 9.2 8.8 10.4	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/21/18 12/12/18 12/12/18 12/2/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/23/18 12/14/1	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 14 28 83 83 83 7 7 7 14 28 83 83 83 83 7 7 7 7 14 14 28 83 83 83 83 83 83 83 83 83 83 83 83 83	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/14/2018 1.1/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09258 09855 09858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 00056 00000000	10.2 11.6 12.0 22.1 11.0 12.0 22.1 11.2 11.2 11.2 11.2 11.2 11.2 11.2 11.2 11.2 12.5 25.5 25.1	9.4 11.9 12.8 22.5 22.0 9.1 10.0 9.1 11.7 10.7 26.4 25.3 9.2 26.4 25.3 9.2 10.7 8.8 8.8 20.3 20.3 20.3 20.3 20.3 20.3 20.3 20.4 20.5 20.6 20.6 20.6 20.6 20.6 20.6 20.6 20.6	10.3 11.5 12.1 21.6 23.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2 12.7 20.7 19.9 9.1 8.6 10.7 19.9 9.1 8.5	9.6 9.9 9.7 11.6 12.2 23.1 22.2 22.2 22.2 10.2 29.5 13.2 24.2 24.2 24.2 24.2 24.2 24.2 24.2 2	9.6 9.8 11.4 11.8 20.7 12.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	10.0 11.2 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 9.8 8.8 8.6 8.5 11.4 12.0 9.1 9.4 20.2 23.8 8.8 8.5 11.4 12.0 9.9 9.5 9.5 9.5 9.5 1.5 5 12.7	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 22.4 11.5 22.4 9.4 9.7 8.2 8.8 11.5 20.1 20.6 8.3 10.4 10.4 10.4	9.7 11.2 11.7 22.0 2.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.5 12.5 12.5 12.0 17.2 18.9 8.5 8.5 8.5 8.5 8.5 13.5	9.6 9.9 11.4 12.0 21.7 22.9 10.2 9.6 11.1 10.6 11.1 10.6 11.1 10.6 11.1 10.6 11.1 10.5 24.2 23.5 10.1 8.5 8.8 12.4 18.8 19.9 9.5 10.1 8.5 8.8 12.4 18.8 19.9 9.5 10.1 12.8 12.0 12.0 12.0 12.0 12.0 10.5 12.0 10.5 12.0 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/22/18 2/5/19 2/5/19 2/5/19 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/23/18 12/13/18 12/13/18 12/6/19 2/6/19 11/23/18 11/30/18 11/30/18 11/30/18 12/14/18 12/14/18 12/14/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 7 7 7 14 14 28 83 83 83 83 83 7 7 7 14 14 28 83 83 83 83 83 83 83 83 83 83 83 83 83	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018 1.1/1	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09258 09558 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 1015 10158 1015 10158 1015 1015	10.2 11.6 12.0 22.1 12.0 22.1 11.0 11.2 11.2 11.2 11.2 11.2 12.5 25.8 10.6 8.7 8.8 9.9 10.6 8.7 11.9 10.6 8.7 10.0 20.9 9.7 10.4 10.0 20.9 9.7 10.4 10.5 20.5 10.0 20.5 10.0 20.5 2	9.4 11.9 12.8 22.5 22.0 9.1 10.0 9.1 11.7 10.7 2.6 4 9.2 10.7 8.9 8.8 10.7 10.7 8.8 21.3 20.3 21.3 20.3 21.3 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 9.9 10.6 11.4 14.6 13.6 23.4 23.4 13.6 23.4 13.6 23.4 13.6 23.9 10.1 10.4 8.4 9.4 10.2 10.7	9.6 9.9 9.6 11.6 12.2 23.1 22.2 22.2 23.2 10.2 25.5 11.3 9.5 9.5 13.2 22.0 24.2 24.2 24.2 24.2 9.8 9.6 8.1 13.1 13.1 13.1 13.1 13.1 13.1 13.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 10.4 11.2 21.1 21.9 9.3 10.0 12.6 23.1 12.6 23.1 12.6 23.1 13.9 9.3 10.0 17.5 18.9 9.3 9.3 9.7 15.2 10.7 15.2 13.5 21.1	10.0 11.2 20.9 21.8 9.6 8.4 10.2 14.9 13.5 24.2 23.8 8.8 8.6 8.5 11.4 19.3 20.2 9.1 19.3 20.2 9.1 19.3 20.2 21.5 9.6 10.5 9.6 12.7 21.0 12.7 12.	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 9.5 10.3 10.9 24.1 22.4 22.4 22.4 22.4 22.4 22.4 22.4	9.7 11.2 11.7 22.0 9.8 9.1 11.7 12.7 9.8 9.1 11.1 12.7 13.9 9.5 12.7 13.9 9.5 12.7 13.9 9.5 22.1 12.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 12.9 9.7 9.5 12.7 12.7 9.8 9.5 12.7 12.7 9.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 12.7 12.7 9.5 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7	9.6 9.9 9.9 11.4 12.0 22.7 22.9 2.7 22.9 9.6 10.2 9.6 10.2 9.6 10.2 13.5 22.9 23.5 10.1 13.5 23.5 23.5 23.5 23.5 23.5 23.5 23.5 2	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak Onginal Cylinder After 24 Hr Soak CyL, NOT SELECTED CYL, NOT SELECTED
11/21/18 11/21/18 11/28/18 11/28/18 12/21/18 12/12/18 12/12/18 12/2/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/23/18 12/14/1	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 14 28 83 83 83 7 7 7 14 28 83 83 83 83 7 7 7 7 14 14 28 83 83 83 83 83 83 83 83 83 83 83 83 83	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/1/4/2018 1.1/14/2018 1.1/15/2018	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09258 09855 09858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 009858 00056 00000000	10.2 11.6 12.0 22.1 11.0 12.0 22.1 11.2 11.2 11.2 11.2 11.2 11.2 11.2 11.2 11.2 12.5 25.5 25.1	9.4 11.9 12.8 22.5 22.0 10.0 9.1 11.7 10.7 26.4 28.3 10.2 26.4 20.3 14.2 26.3 20.3 21.3 9.8 8.4 10.6 10.6 10.6 10.5 10.5 15.1	10.3 11.5 12.1 21.6 23.6 9.9 10.6 11.4 14.6 13.6 23.4 22.9 10.1 10.4 8.4 9.4 12.2 12.7 20.7 19.9 9.1 8.6 10.7 19.9 9.1 8.5	9.6 9.9 9.7 11.6 12.2 23.1 22.2 22.2 22.2 10.2 29.5 13.2 24.2 24.2 24.2 24.2 24.2 24.2 24.2 2	9.6 9.8 11.4 11.8 20.7 12.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	10.0 11.2 20.9 21.8 9.6 8.4 10.8 10.2 14.9 13.5 9.8 8.8 8.6 8.5 11.4 12.0 9.1 9.4 20.2 23.8 8.8 8.5 11.4 12.0 9.9 9.5 9.5 9.5 9.5 1.5 5 12.7	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 14.2 22.4 11.5 22.4 9.4 9.7 8.2 8.8 11.5 20.1 20.6 8.3 10.4 10.4 10.4	9.7 11.2 11.7 22.0 2.6 9.8 9.1 11.1 9.5 12.7 13.9 24.5 22.1 9.7 9.7 8.0 8.6 12.5 12.5 12.5 12.0 17.2 18.9 8.5 8.5 8.5 8.5 8.5 13.5	9.6 9.9 9.9 11.4 12.0 22.7 22.7 22.9 9.6 10.2 9.6 10.2 9.6 10.1 10.6 11.1 10.6 14.3 24.2 23 24 24 25 10.1 10.2 10.2 10.2 10.2 10.2 10.2 10.2	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Original Cylinder After 24 Hr Soak Original Cylinder After 24 Hr Soak
11/21/18 11/21/18 11/28/18 11/28/18 12/22/18 12/22/18 12/22/18 12/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/22/18 11/23/18 12/13/18 12/13/18 12/13/18 12/318 11/30/18 11/30/18 11/30/18 11/30/18 12/14/18 12/14/18 12/14/18	PL PL PL PL PL PL PL PL PL PL PL PL PL P	92 92 7 7 14 14 28 83 83 83 7 7 7 14 14 28 83 83 83 83 83 7 7 7 14 14 28 83 83 83 83 83 83 83 83 83 83 83 83 83	1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/05/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/14/2018 1.1/15/2018 1.1/1	03W6 03W6 03W6 03W6 03W6 03W6 03W6 03W6	Jackson Jackson	0925 09258 09258 09258 09558 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 09858 1015 10158 1015 10158 1015 10158 1015 1015	10.2 11.6 12.0 22.1 12.0 22.1 11.0 11.2 11.2 11.2 11.2 11.2 12.5 25.8 10.6 8.7 8.8 9.9 10.6 8.7 11.9 10.6 8.7 10.0 20.9 9.7 10.4 10.0 20.9 9.7 10.4 10.5 20.5 10.0 20.5 10.0 20.5 2	9.4 11.9 12.8 22.5 22.0 9.1 10.0 9.1 11.7 10.7 2.6 4 9.2 10.7 8.9 8.8 10.7 10.7 8.8 21.3 20.3 21.3 20.3 21.3 20.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5	10.3 11.5 12.1 21.6 23.2 10.6 9.9 10.6 9.9 10.6 11.4 14.6 13.6 23.4 23.4 13.6 23.4 13.6 23.4 13.6 23.9 10.1 10.4 8.4 9.4 10.2 10.7	9.6 9.9 9.6 11.6 12.2 23.1 22.2 22.2 23.2 10.2 25.5 11.3 9.5 9.5 13.2 22.0 24.2 24.2 24.2 24.2 9.8 9.6 8.1 13.1 13.1 13.1 13.1 13.1 13.1 13.1	9.6 9.8 11.4 11.8 20.7 24.1 10.0 10.4 11.2 11.0 10.4 11.2 21.1 21.9 9.3 10.0 12.6 23.1 12.6 23.1 12.6 23.1 13.9 9.3 10.0 17.5 18.9 9.3 9.3 9.7 15.2 10.7 15.2 13.5 21.1	10.0 11.2 20.9 21.8 9.6 8.4 10.2 14.9 13.5 24.2 23.8 8.8 8.6 8.5 11.4 19.3 20.2 9.1 19.3 20.2 9.1 19.3 20.2 21.5 9.6 10.5 9.6 12.7 21.0 12.7 12.	9.5 11.1 11.5 20.4 23.6 10.0 9.5 10.3 10.9 9.5 10.3 10.9 24.1 22.4 22.4 22.4 22.4 22.4 22.4 22.4	9.7 11.2 11.7 22.0 9.8 9.1 11.7 12.7 9.8 9.1 11.1 12.7 13.9 9.5 12.7 13.9 9.5 12.7 13.9 9.5 22.1 12.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 12.9 9.7 9.5 12.7 12.7 9.8 9.5 12.7 12.7 9.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 9.5 12.7 12.7 12.7 12.7 12.7 12.7 12.7 12.7	9.6 9.9 9.9 11.4 12.0 22.7 22.9 2.7 22.9 9.6 10.2 9.6 10.2 9.6 10.2 10.2 10.2 10.2 10.2 10.2 10.2 10.2	CYL, NOT SELECTED CYL, NOT SELECTED CYL, NOT SELECTED Onginal Cylinder After 24 Hr Soak Onginal Cylinder After 24 Hr Soak CyL, NOT SELECTED CYL, NOT SELECTED

12/4/18	PL	14	11/20/2018	03W6	Jackson	111S	9.2	10.0	9.6	9.7	9.3	8.9	9.5	9.0	9.4	
12/4/18	PL	14	11/20/2018	03W6	Jackson	111SB	11.2	10.3	9.5	10.1	10.1	10.0	9.7	10.3	10.2	
12/18/18	PL	28	11/20/2018	03W6	Jackson	111S	13.9	14.4	13.9	14.2	13.4	13.5	13.4	13.3	13.8	
12/18/18	PL	28	11/20/2018	03W6	Jackson	111SB	13.8	14.3	15.3	14.3	13.7	14.1	14.6	14.0	14.3	
2/5/19	PL	77	11/20/2018	03W6	Jackson	1115	21.7	21.8	22.6	24.2	23.4	21.9	21.3	20.9	22.2	CYL. NOT SELECTED
2/5/19	PL	77	11/20/2018	03W6	Jackson	111SB	25.6	22.5	21.4	23.0	24.5	21.6	21.9	22.6	22.9	CYL. NOT SELECTED
11/28/18	PL	7	11/21/2018	03W6	Jackson	117S	10.2	9.9	10.6	9.8	9.7	9.7	9.9	9.2	9.9	
11/28/18	PL	7	11/21/2018	03W6	Jackson	117SB	10.8	9.9	10.0	10.7	10.2	9.6	9.2	9.5	10.0	
12/5/18	PL	14	11/21/2018	03W6	Jackson	117S	10.1	10.4	10.0	9.9	9.3	10.4	10.9	9.4	10.1	
12/5/18	PL	14	11/21/2018	03W6	Jackson	117SB	11.1	10.1	9.7	10.3	10.3	9.7	9.4	9.9	10.1	
12/19/18	PL	28	11/21/2018	03W6	Jackson	117S	13.4	13.6	14.3	13.8	13.5	13.4	12.9	13.6	13.6	
12/19/18	PL	28	11/21/2018	03W6	Jackson	117SB	15.8	14.8	14.2	14.4	14.8	14.9	13.7	13.4	14.5	
2/6/19	PL	77	11/21/2018	03W6	Jackson	117S	25.5	28.0	24.1	24.3	24.7	25.4	24.0	23.2	24.9	Original Cylinder After 24 Hr Soak
2/6/19	PL	77	11/21/2018	03W6	Jackson	117SB	23.2	23.3	21.5	22.4	21.9	23.3	19.6	22.0	22.2	Original Cylinder After 24 Hr Soak
11/30/18	PL	7	11/23/2018	03W6	Jackson	1235	10.7	11.7	11.5	11.4	10.7	12.0	11.4	11.1	11.3	
11/30/18	PL	7	11/23/2018	03W6	Jackson	123SB	11.4	10.9	11.5	11.6	11.4	11.2	11.1	11.2	11.3	
12/7/18	PL	14	11/23/2018	03W6	Jackson	1235	9.6	9.6	10.0	9.6	9.4	9.8	10.1	9.3	9.7	
12/7/18	PL	14	11/23/2018	03W6	Jackson	123SB	9.4	10.4	9.2	9.2	8.9	10.2	9.0	8.9	9.4	
12/21/18	PL	28	11/23/2018	03W6	Jackson	1235	15.8	15.4	15.9	15.7	15.6	15.5	16.0	15.4	15.7	
12/21/18	PL	28	11/23/2018	03W6	Jackson	123SB	14.8	16.4	15.2	14.1	14.7	15.5	15.4	14.5	15.1	
2/6/19	PL	75	11/23/2018	03W6	Jackson	1235	24.0	24.3	24.3	23.6	22.7	22.8	23.4	23.0	23.5	Original Cylinder After 24 Hr Soak
2/6/19	PL	75	11/23/2018	03W6	Jackson	1235B	24.7	21.9	21.2	25.3	23.7	21.2	20.8	24.1	22.9	Original Cylinder After 24 Hr Soak

APPENDIX F:

Data	ID	Field No.	ASTM	SAM I	Vleter		All Cho	ords		Over 30 m	icrons
Date	U	Field NO.	Air (%)	SAM #	Air (%)	Air (%)	Spacing Factor (mm)	Specific Surface Area (mm ⁻¹)	Air (%)	Spacing Factor (mm)	Specific Surface Area (mm ⁻¹)
10/06/2018	2282922	014S	5.7	0.51	5.7	5.99	0.1	47.92	5.46	0.18	27.65
10/21/2018		026S	6.4	0.34	6.1	7.87	0.08	51.16	7.15	0.145	30.44
10/26/2018	2284435	045S	7.4	0.32	7.6	7.04	0.137	32.38	6.74	0.194	23.38
10/27/2018	2284485	050S	6.1	0.1	6.2	5.97	0.119	40.19	5.51	0.224	22.15
10/30/2018		0675	5.7	0.19	5.6	7.85	0.08	50.71	7.08	0.152	29.15
10/31/2018		0735	6.5	0.35	6.7	8.52	0.078	48.35	7.76	0.144	28.6
11/01/2018	2284978	078S	7.1	0.25	7.3	7.28	0.12	36.34	6.93	0.167	26.71
11/04/2018	2285113	0875	7	0.08	7.2	6.47	0.131	35.09	6.18	0.185	25.42
11/15/2018	2285629	101S	6.6	0.31	6.5	8.09	0.08	49.77	7.33	0.15	29.05
11/21/2018	2285909	117S	7.8	0.15	8.2	7.06	0.088	50.59	6.4	0.159	29.07
11/23/2018	2285954	1235	7.2	0.3	8.2	7.03	0.101	43.85	6.51	0.167	27.59