

100 Barr Harbor Drive PO Box C700 West Conshohocken, PA 19428-2959 USA

tel +1.610.832.9500 fax +1.610.832.9666 www.astm.org

COMMITTEE D02 on PETROLEUM PRODUCTS, LIQUID FUELS, AND LUBRICANTS

CHAIRMAN:	Randy F Jennings, Tennessee Dept Of Agric, P O Box 40627, Nashville, TN 37204, United States (615) 837-5150, Fax: (615) 837-5327, e-mail: randy.jennings@tn.gov
FIRST VICE CHAIRMAN:	James J Simnick, Bp America, 150 Warrenville Rd, Naperville, IL 60563, United States (630) 420-5936, Fax: (630) 420-4831, e-mail: simnicjj@bp.com
SECOND VICE CHAIRMAN:	Michael A Collier, Petroleum Analyzer Co Lp, 21114 Hwy 113, Custer Park, IL 60481, United States (815) 458-0216, Fax: (815) 458-0217, e-mail: michael.collier@paclp.com
SECOND SECRETARY:	Hind M Abi-Akar, Caterpillar Inc, Building H2000, Old Galena Road, Mossville, IL 61552, United States (309) 578-9553, e-mail: abi-akar_hind@cat.com
SECRETARY:	Scott Fenwick, National Biodiesel Board, PO Box 104848, Jefferson City, MO 65110-4898, United States (800) 841-5849, Fax: (537) 635-7913, e-mail: sfenwick@biodiesel.org
STAFF MANAGER:	Alyson Fick, (610) 832-9710, e-mail: afick@astm.org

Unapproved Meeting Minutes of the Technical Guidance Committee Virtual Meeting

Marriot Anaheim, Anaheim CA

December 6, 2021

1:00 - 2:30 PM PST

Reply to: Patrick Lang

Southwest Research Institute, 6220 Culebra Road San Antonio, TX 78228

Phone: 210-522-2820, patrick.lang@swri.org

The hybrid meeting was called to order at 1:00 PM Pacific Time. Participants were in person in the meeting room as well as through the Webex.

Agenda:

The meeting agenda can be found as attachment # 1.

Membership Review:

The attendance list was determined via the names displayed on the virtual meeting dashboard as well a sign-in sheet that was circulated in meeting room (see attachment # 2).

Review and Acceptance of Minutes:

Pat Lang requested approval of the June 21, 2021 virtual meeting minutes. Receiving no comments or changes the chairman moved for approval and a second was received by Bob Campbell. The minutes were approved with no objections.

Action Item List:

The action item list was reviewed and can be found as attachment # 3. The status of each action item is listed.

Fuels Task Force Update:

Mike Lochte presented the Fuels Task Force report. Mike advised that there has been no activity this reporting period; all action items have been completed by the task force. The previous period's report with no changes was briefly reviewed again. The report can be found as attachment # 4.

Rating Task Force:

Bob Campbell provided a verbal update:

- 1) Rating workshop is now scheduled for the week of February 14, 2022. The workshop will be faceto-face. This will be the first workshop in two years. The notice will be sent out to the raters soon.
- 2) The rating round-robin for IIIH and GMOD parts looked pretty good. Sludge parts were not a part of the exercise due to obvious complications in handling such parts.
- 3) Even though face-to-face workshops will start again, the rating task force will continue to vet out the round-robin rating option for potential future use.

Old Business:

DACA II Review Task Force:

Pat Lang advised that the task force that is reviewing the DACA II document has been very active this reporting period with three virtual meetings held. The group has continued to work through the topics such as filtering, system response and quality index. A summary report can be found as attachment # 5.

New Business:

Part numbers in ASTM Procedures:

There has been a request to consider relocating the parts lists that currently reside in the ASTM test procedures to a document that resides on the TMC website. The thought behind this is that it will afford the ability of making changes or updates to part numbers without having to make changes to the test procedure. Making changes to the test procedure can be a very lengthy process and this would eliminate the burden that is put on the information letter approval process which requires balloting through Subcommittee B. The procedure would reference the document and where it is located for an interested party to access.

The Sequence VI panel is currently reviewing their parts list to ensure that everything is up to date. Once this is done, it could be used as the first example if there is agreement on taking this approach.

A caution was raised about removing too much from the procedure.

Jason Bowden commented on the oversight of any changes that could potentially be made. The current information letter approval system forces any procedural changes to go through a larger group than the individual surveillance panels. He voiced that it is very important that we keep the traceability of any changes that are made and that the current information letter system handles that.

Andrew Stevens mentioned that lab audits are increasing and it is very important to have documents readily available to justify the use of any given component in the test lab. These documents/lists need to be readily available, up to date and concise. A lot of the current parts lists are not presented in an organized manner within the procedures. Moving them to an external location could allow for more detail and flexibility in how the document is created.

Suzanne Neal suggested that critical parts continue to remain in the test procedure and the non-critical items be moved to the alternate document on the TMC website.

Alyson Fick advised that we should consider an adjunct. These are not under the normal five-year review requirement but they do get voted on. Another option would be to do an administrative ballot. The panel will review these items as potential options.

No final decisions were made on relocating the parts lists. A lot of details will need to be defined before any recommendation can be made.

TMC Voting Guidelines for Surveillance Panel Chairs:

Frank Farber presented a summary of voting guidelines (attachment # 6) that the TMC had put together to help assist chairs when conducting their meetings. After reviewing, it was pointed out that there needs to be some further direction on the definition of a quorum.

Alyson Fick stated that ASTM has rules for the voting structure relative to the balance of producers, users and general interest parties. These groups can only comprise of 5% or 10% of the voting members depending on the committee level. Additionally, there is only one vote allowable per company. She also advised that at the surveillance panel level, we could apply ASTM rules but that these panels are autonomous by choice. In a sense they are self-governing and thus do not have to follow ASTM rules as is required by a section within ASTM. The important thing is that all leaders follow the rules consistently.

Bob Campbell commented that he thinks that the Executive Committee has some documented rules but needs to double-check.

Andy Ritchie provided his account of the recent VH information letter on the industry correction factor that received a negative vote. In this case, there were no negatives at the surveillance panel level and the information letter was issued. It subsequently received a negative vote when the information letter was balloted. Andy further commented that this scenario was not the result of lack of experience on the voting process or lack of discussion on the topic. The tough part of this incident was that the negative vote was technically sound but the majority did not agree it should stop the implementation of the correction factor. He feels that it is very important that the chairs don't get bogged down in the process. They need the flexibility to keep the issue at hand moving along.

The group decided that we need to work a bit further on the voting rules. Bill Buscher volunteered to lead a task force to address voting rules.

Action: Bill Buscher to assemble a task force to discuss voting rules further.

Next Meeting:

The next meeting is planned to be held during June ASTM week.

The meeting adjourned at 2:30 PST.

Attachment #1

Agenda

December 6, 2021

AGENDA

ASTM Technical Guidance Committee Meeting Anaheim CA, Hybrid Meeting Patrick Lang – Chairman Monday December 6, 2021– 1:00 PM to 2:30 PM (PST)

- 1. Attendance
- 2. Chairman's Comments
- 3. Review & Acceptance of Minutes
 - 3.1. Acceptance of the June 21, 2021 WebEx meeting minutes.
- 4. Review Action Item List (Pat Lang)
- 5. Fuel Task Force
 - 5.1. Update on fuels task force activities (Mike Lochte)
- 6. Rating Task Force
 - 6.1. Update on status of rating task force activities (Bob Campbell)
- 7. Old Business

DACA II Review Task Force Update (Pat Lang)

- 8. New Business
 - 8.1. Create set of surveillance panel voting guidelines (TMC)

8.2. Moving parts list from test procedures and keep them on the TMC website to eliminate having to update test procedure every time a part number changes.

- 9. Next Meeting: During June 2022 ASTM Meetings, date to be announced.
- 10. Adjournment

Attachment #2

Attendance List

December 6, 2021



ASTM ATTENDANCE SHEET

PLEASE PRINT CLEARLY

MAIN/SUB/TASK GROUP:

TGC

LOCATION: ANNAHIEM, CA DATE: Dec 6,2021

NAME	COMPANY & ADDRESS	PHONE	E-MAIL
Dan Lonctot	TEL	210-860-5008	dlanctotatei-net.com
ROBERT LEGA	SURI	210-522-2071	robert. Legg @ SwRJ_Drg
T.J. Oregbesan	Chevron Passder	q 713-920-4186	
Grey Millor	Tannas Co	989-496-230)	am; Mer@ Savantarow, Com
Jim CARTER	GAGE PROPUETS	517-896-1150	JEARTER CARE PRODUCTS. COM
LOBERT SECKWELL	QRINIZE	2102323188	ROBERT. STOCKWELL ECHEVRON. COM
PRASAD TUMATI	HALTER MANN SOL	(313) 300-8300	Prunati @ JHzlamann. Com.
Suzanne Neal	Detroit Diesel/DTNA	313-408-2843	Suzanne.neal@dalmler.com
CAROLINE LAUFER	INFINEUM	347-423-6445	CAROLINE. LAUFER @INFINEUR. COM
Andrew Rilchi	INFINEUM	908-209-6263	ANDREW. RITCHER CONFIRMING

IF YOU WISH TO JOIN THE COMMITTEE PLEASE SEE YOUR STAFF MANAGER



ASTM ATTENDANCE SHEET

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MAIN/SUB/TASK GROUP: ______

LOCATION: Anaheim CA DATE: 12/6/21

NAME	COMPANY & ADDRESS	PHONE	E-MAIL
FRANK FARIBER	TMC	412-365-1030	fmf@astmtmc.org
Michael Lochte	SWRI	2102135464	MLOCHTER SURIORC
Nathan Siebert	GM	248-343-7274	northan, Siebert R Sm. Con
JASON BOWDEN	OH TECHNOLOGIES	440-354-7007	jhbowden O oh tech.com
MATTHEW BOWDEN	OH TECHNOLOGEES	440354 7007	Mi bauden @ ohtech. com
Yongli Uctarland	SWRI	210-522-2715	ymctarland@swri.org SLZX@Chevros.com
Yongli Uctarland Sean Lantz	Chevron	510 242 1142	SLZX@ Chevros. con
Steve Marty	SWRI	210 522-5929	Smarty@swri.org
Robert Warden	Su RI	210 522 5621	rwarden@suri.org
Muibat Gloding	i Calumet	713 7059197	mgbademosi & clmt.com
MIKE VAN HECKE		210-522-549	5 muanhecke @SWRI. ORS

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TGC

ASTM ATTENDANCE SHEET

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MAIN/SUB/TASK GROUP: _

LOCATION:	Ana	hei

in, CA DATE: 12/6/21

NAME	COMPANY & ADDRESS	PHONE	E-MAIL
Garrett White	5404 Danlera Rd. Ga. Antonio, TX 78238 Taterlek	(254)931-9661	gorretli-hile@into-tele.com
Andrew Smith	Intertex	210 823 8501	andrew. c. smith @intertekrom
WILLIAM & BUSCHER JE	INTERTER	210-240-8990	william. buschere intertet. com
BoBCAMBELL	AFTON	804-7885340	Bob Capte DAFTON COMMENCE
		Coller - Andre Coller - Professor	
12			

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TGC Webex Attendance 12/6/21 AL LOPEZ ANDREW SEVENS CHRIS TATLOR DAVE PASSMORE MIKE DEEAN DOTLE BOESE TALYING 1 JULIE HARDWICK JIM MATASIL MIKE KUNSELMAN RICEARDO CONTI A2-4

Attachment #3

Action Items List

December 6, 2021

Technical Guidance Committee (TGC)

Action Items List Status as of 12-6-21:

- 1. <u>Action Item</u>- Assess running viscosity grades lower than 0W-16 in the GF-6 test platforms.
 - <u>Complete</u>
- 2. <u>Action Item</u> TGC to review the current document for "out of control" tests.
 - <u>Open</u>
- 3. <u>Action Item</u> TGC to review the current "DACA II" document.
 - Task force actively working on this.
- 4. <u>Action Item</u> TGC to work on generating test procedure wording that would address the handling of testing anomalies.
 - <u>Open</u>

Attachment #4 Fuels Task Force Update December 6, 2021

TGC Fuels Task force Update – Dec 2021

no change since June

Michael Lochte, Chairman SOUTHWEST RESEARCH INSTITUTE®



A4-1

FUELS & LUBRICANTS RESEARCH

1

Activity since last ASTM TGC meeting....

 The TGC fuels task force has not met in 2021 as our activity is pretty much wrapped up



FUELS & LUBRICANTS RESEARCH

2

Status of adoption of PCMO fuel specifications

Fuel Type	Specification created by TGC fuel Task Force	Specification Adopted by Surveillance panels and posted on TMC website?
PC-10	Yes	Yes
PC-9HS	Yes	Yes
Sequence VI	Yes	yes
Sequence III	Yes	Sequence X – yes Sequence III - yes Sequence IX - yes
KA24E	Yes	Sequence IV - yes Sequence VIII - yes
Sequence V	Yes	Yes



FUELS & LUBRICANTS RESEARCH

Sequence III fuel spec

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C6 aromatics (benzene) ASTM D5769 C7 aromatics (toluene) ASTM D5769 C8 aromatics ASTM D5769 C9 aromatics ASTM D5769 C10+ aromatics ASTM D5769 Composition, olefins ASTM D5769 Lead' ASTM D5769 Manganese' ASTM D3237 Phosphorus' ASTM D3231 Silicon' ICP method Particulate matter ASTM D5452	12	31.0		34.0
C7 aromatics (toluene) ASTM D5769 C8 aromatics ASTM D5769 C9 aromatics ASTM D5769 C10+ aromatics ASTM D5769 Composition, olefins ASTM D5769 Lead' ASTM D5769 Manganese' ASTM D3831 Phosphorus' ASTM D3831 Silicon' ICP method Particulate matter ASTM D5452 Oxidation Stability ASTM D5452	12			1.0
C8 aromatics ASTM D5769 C9 aromatics ASTM D5769 C10+ aromatics ASTM D5769 Composition, olefins ASTM D5550 Lead' ASTM D3237 Manganese' ASTM D3231 Phosphorus' ASTM D3231 Silicon' ICP method Particulate matter ASTM D5452 Oxidation Stability ASTM D525	12		Report	1.0
C9 aromatics ASTM D5769 C10+ aromatics ASTM D5769 Composition, olefins ASTM D6550 Lead ASTM D3237 Manganese' ASTM D3831 Phosphorus' ASTM D3231 Silicon' ICP method Particulate matter ASTM D5452 Oxidation Stability ASTM D525	12		Report	
C10+ aromatics ASTM D5769 Composition, olefins ASTM D6550 Lead' ASTM D3237 Manganese' ASTM D3831 Phosphorus' ASTM D3231 Silicon' ICP method Particulate matter ASTM D5452 Oxidation Stability ASTM D525	12		Report	
Composition, olefins ASTM D6550* Lead* ASTM D3237 m Manganese* ASTM D3331 g Phosphorus* ASTM D3231 m Silicon* ICP method m Particulate matter ASTM D5452 n Dxidation Stability ASTM D525 min	12		Report	
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Manganese' ASTM D3831 g Phosphorus' ASTM D3231 m Silicon' ICP method mv Particulate matter ASTM D5452 m Dxidation Stability ASTM D525 mi				2.6
Phosphorus' ASTM D3231 m Silicon' ICP method mv Particulate matter ASTM D5452 m Oxidation Stability ASTM D525 mil	ig/l			
Silicon' ICP method m Particulate matter ASTM D5452 m Dxidation Stability ASTM D525 mi	'gal			0.01
Particulate matter ASTM D5452 m Dxidation Stability ASTM D525 mi	ig/l			1.3
Oxidation Stability ASTM D525 min	g/kg			4
· · · · · · · · · · · · · · · · · · ·	ig/l			1
Copper Corrosion ASTM D130	utes	1000		
				1
	00mls			5.0
	00mls			10.0
Research Octane Number ASTM D2699		96.0		
Motor Octane Number ASTM D2700			Report	
R+M/2 D2633/2700			Report	
Sensitivity		7.5		
Net Heating Value, btu/lb ASTM D3338 bi			Report	
	u/lb		Report	
			Report	
	u/lb			0.01
Color ¹ VISUAL 1.7	u/Ib u/Ib		Red	0.01



A4-4

'or use D6839 for everything measured by D5769 and D6550 for any conflict between supplier and customer measurement, refer to ASTM D3244 assigning risk

50/50 between supplier and customer

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Sequence VI fuel spec

	See. 91 Lube (29-0ct-2	
TEST	METHOD	UNITS	S.	q. TI Spec		
				TARGET	MAX	
Distillation - IBP	ASTMD86	·C	23.9		35.0	
5%		·C				
10%		·C	48.9		57.2	
20%		·C				
30%		·C				
40%		·C				
50%		·C	93.3		110.0	
60%		·C				
70%		-0				
80%		·C				
90%		·C	151.7		162.8	
95%		-0				
Distillation - EP		·C			212.8	
Rocavory		vol X		Ropart		
Roriduo		val X		Ropart		
Larr		val X		Report		
Gravity @ 60'F/60'F	ASTMD4052	'API	58.7		61.2	
Density @ 15°C	ASTMD4052	kqfl	0.734		0.744	
Dry Vapor Pressure Equivalent	ASTMD5191	kPa	60.1		63.4	
Carbon	ASTMD3343	ut X		Ropart		
Carbon	ASTMD5291	mars X		Report		
Hydragon	ASTMD5291	mars X		Report		
Hydrogon/Carbon ratio	ASTMD5291	maletmale		Report		
Oxygen'	ASTM D4815	ut X			0.2	
Oxygonator Ethanol	ASTM D4815	×		Ropart		
MTBE		×		Report		
ETBE		×		Report		
Methanol		×		Report		
Sulfur	ASTMD5453	marka	3		15	
Comparition, erometics		vel Z	31.0	1	34.0	
	ASTM 05764	yel X			1.00	
Cé erameticr (benzene) C7 erameticr (talaene)		val X val X		Report	1.00	
C6 ersmetics (benzene)	ASTH D5769			Rapurt Rapurt	1.00	
C6 erometicr (benzene) C7 erometicr (toluene)		vel Z		-	1.00	
C6 aramaticr (banzana) C7 aramaticr (taluana) C4 aramaticr	ASTM D5769 ASTM D5769	vel X vel X		Report	1.00	
C6 aramaticr (bonzono) C7 aramaticr (taluono) C8 aramaticr C9 aramaticr C10+ aramaticr	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769	x lev X lev X lev		Ropart Ropart	2.0	
C6 erameticr (benzene) C7 erameticr (talaene) C8 erameticr C9 erameticr	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769	val z val z val z val z utz		Ropart Ropart		
C6 aramaticr (banxana) C7 aramaticr (taluana) C8 aramaticr C9 aramaticr C10+ aramaticr Camparitian, alafiar Load	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6556 ASTM D6556	val z val z val z val z utz mą/l		Ropart Ropart	2. • 2.6	
C6 aramatics (bassand) C7 aramatics (talaana) C8 aramatics C9 aramatics C10+ aramatics Campasitian, alafias Load ¹ Manganeso ¹	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6556 ASTM D6556 ASTM D3237 ASTM D3231	x lav x lav x lav x lav x lav x lav mq/l q/qal		Ropart Ropart	2.0	
C6 aramatics (bassana) C7 aramatics (talaana) C8 aramatics C9 aramatics C10+ aramatics Campasitian, alafins Load! Manganeso! Phaspharus!	ASTH D5769 ASTH D5769 ASTH D5769 ASTH D5769 ASTH D6550 ASTH D3237 ASTH D3231 ASTH D3231	val z val z val z val z utz małi ałaai małi		Ropart Ropart	2.0 2.6 0.01 1.3	
C6 aramatics (bassand) C7 aramatics (taluana) C8 aramatics C9 aramatics C10+ aramatics C10+ aramatics Laad' Manganess' Phasphorus' Silicon'	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6550 ⁴ ASTM D3237 ASTM D3831 ASTM D3231 ICP methed	val z val z val z val z utz mą/i ą/ąai mą/i mą/ką		Ropart Ropart	2.0 2.6 0.01 1.3 4	
C6 aramaticr (banxana) C7 aramaticr (taluana) C9 aramaticr C9 aramaticr C104 aramaticr Camparitian, alafinr Load' Manganoro' Pharphorur' Silicon' Particulato mattor	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5759 ASTM D6559 ASTM D3237 ASTM D3231 ICP method ASTM D5452	vel Z vel Z vel Z vel Z utZ maří ařad maří mařía	1000	Ropart Ropart	2.0 2.6 0.01 1.3	
C6 aramatics (bassand) C7 aramatics (talaona) C8 aramatics C9 aramatics C10+ aramatics C10+ aramatics Camparitian, alafins Load' Manganoro' Phaspharur' Silicon' Particulato mattor Oxidation Stability	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6556 ASTM D6558 ASTM D6581 ICP mothed ASTM D5452 ASTM D525	val z val z val z val z utz mą/i ą/ąai mą/i mą/ką	1000	Ropart Ropart	2.0 2.6 0.01 1.3 4 1	
C6 aramatics (bassand) C7 aramatics C9 aramatics C9 aramatics C10+ aramatics Camparitian, alafias Load' Manganoso' Phaspharu' Silican' Particulatomattor Oxidatian Stability Cappor Carrarian	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6559 ASTM D6237 ASTM D3231 ICP methad ASTM D5452 ASTM D5452 ASTM D525 ASTM D530	val z val z val z val z mą/l a/ąal mą/ką mą/l mą/ką minuter	1000	Ropart Ropart	2.0 2.6 0.01 1.3 4 1	
C6 aramatics (bassand) C7 aramatics (taluana) C8 aramatics C9 aramatics C10+ aramatics Campasition, alafins Load' Manganese' Phasharw' Silicon' Particulato mattor Oxidation Stability Cappor Carrarian Gum contont, warhed	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D65569 ASTM D2237 ASTMD2231 ICP methad ASTMD5452 ASTMD5452 ASTMD5452 ASTMD5030 ASTMD5030	vel z vel z vel z vel z utz mał artal mał mał mał mał mał mał mał mał mał mał		Ropart Ropart	2.0 2.6 0.01 1.3 4 1 1 5.0	
C6 aramaticr (bassand) C7 aramaticr (talaona) C9 aramaticr C9 aramaticr C104 aramaticr C104 aramaticr Camparitian, alafiar Load' Manganero' Pharphorur' Silican' Particulate matter Oxidatian Stability Capper Carrarian Gum content, uarhed Gum content, unuarhed	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5759 ASTM D6559 ASTM D3237 ASTM D3231 ICP methad ASTM D5452 ASTM D525 ASTM D525 ASTM D381 ASTM D381	val z val z val z val z mą/l a/ąal mą/ką mą/l mą/ką minuter	7.0	Ropart Ropart	2.0 2.6 0.01 1.3 4 1	
C6 aramaticr (bassand) C7 aramaticr (talaona) C9 aramaticr C9 aramaticr C104 aramaticr Camparitian, alafinr Load' Manganero' Pharpharur' Silican' Particulato matter Oxidatian Stability Cappor Carrarian Gum content, unwarhed Rerearch Octano Number	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6558 ASTM D3237 ASTMD3231 ICP methad ASTMD5452 ASTMD5452 ASTMD5452 ASTMD5451 ASTMD381 ASTMD381 ASTMD381	vel z vel z vel z vel z utz mał artal mał mał mał mał mał mał mał mał mał mał		Repurt	2.0 2.6 0.01 1.3 4 1 1 5.0	
C6 aramatics (bassons) C7 aramatics (talasons) C9 aramatics C9 aramatics C10+ aramatics C10+ aramatics C10+ aramatics Camparitian, alafins Load' Manganoro' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Pharpharur' Silican' Cappor Carrarian Gum contont, unurahod Gum contont, unurahod Rassorch Octano Numbor Matar Octano Numbor	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5556 ASTM D53237 ASTMD3231 ICP mothad ASTMD5452 ASTMD5452 ASTMD5452 ASTMD381 ASTMD381 ASTMD389 ASTMD2699 ASTMD2700	vel z vel z vel z vel z utz mał artal mał mał mał mał mał mał mał mał mał mał	7.0	Ropurt Ropurt Ropurt	2.0 2.6 0.01 1.3 4 1 1 5.0	
C6 aramatics (bassand) C7 aramatics (taluana) C8 aramatics C9 aramatics C9 aramatics Camparitien, alafins Load' Manganese' Pharharw' Silican' Particulato mattor Oxidation Stability Cappor Carrarian Gum content, unuarhed Gum content, unuarhed Research Octano Numbor Retur Octano Numbor Retur Octano Numbor	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6558 ASTM D3237 ASTMD3231 ICP methad ASTMD5452 ASTMD5452 ASTMD5452 ASTMD5451 ASTMD381 ASTMD381 ASTMD381	vel z vel z vel z vel z utz mał artal mał mał mał mał mał mał mał mał mał mał	7.0 96.0	Repurt	2.0 2.6 0.01 1.3 4 1 1 5.0	
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C6 aramaticr (banxana) C7 aramaticr (talaana) C9 aramaticr C9 aramaticr C104 aramaticr Camparitian, alafinr Load' Manganero' Pharphorur' Silican' Particulato matter Oxidatian Stability Capper Carrarian Gum cantent, warhed Gum cantent, warhed Rerearch Octane Number Mater Octane Number ReHMIZ Sonritivity Net Heating Value, btu/lb	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6559 ASTM D6559 ASTM D3831 ASTMD3231 ICP methad ASTMD5452 ASTMD5452 ASTMD381 ASTMD381 ASTMD381 ASTMD280 D2699/2700 ASTMD3338	vel z vel z vel z vel z uetz mąłl ał gał mąłl mąłką mąłl małką mąłloomis mął100mis mął100mis	7.0 96.0	Ropart Ropart Ropart Ropart Ropart Ropart	2.0 2.6 0.01 1.3 4 1 1 5.0	
C6 aramatics (bassand) C7 aramatics (taluana) C9 aramatics C9 aramatics C104 aramatics C104 aramatics Campazitian, alafins Load' Manganero' Pharphorus' Silican' Particulato matter Oxidatian Stability Capper Carrazian Gum cantent, unuarhed Rerearch Octano Number Mater Octano Number Meter Octano Number ReH/2 Sonritivity Net Heating Value, btu/lb Grazz Heating Value, btu/lb	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5769 ASTM D6558 ASTM D3237 ASTMD3231 ICP methad ASTMD5452 ASTMD5452 ASTMD5452 ASTMD381 ASTMD381 ASTMD381 ASTMD2699 ASTMD2700 D2699/2700 ASTMD3338 ASTMD3338	vel z vel z vel z vel z vel z uetz mą/l a/ąal mą/l ma/ką mą/l minutor mą/100mlr mą/100mlr btu/lb btu/lb	7.0 96.0	Ropart Ropart Ropart Ropart Ropart Ropart Ropart	2.0 2.6 0.01 1.3 4 1 1 5.0	
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C6 aramatics (bassand) C7 aramatics (taluand) C8 aramatics C9 aramatics C10+ aramatics C10+ aramatics Camparitian, alafins Load' Manganese' Pharpharw' Silican' Particulate matter Oxidation Stability Capper Carrarian Gum content, unstand Gum content,	ASTM D5769 ASTM D5769 ASTM D5769 ASTM D5759 ASTM D5559 ASTM D2237 ASTMD3231 ASTMD3231 ICP mothad ASTMD5452 ASTMD5452 ASTMD525 ASTMD381 ASTMD381 ASTMD381 ASTMD381 ASTMD2400 ASTMD2400 ASTMD2400 ASTMD2409	vel z vel z vel z vel z utz mą/l mą/la mą/la mą/la mą/loomb mą/100mb mą/100mb btu/lb btu/lb btu/lb btu/lb	7.0 96.0	Roport Roport Roport Roport Roport Roport Roport	2.0 2.6 0.01 1.3 4 1 1 5.0	
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KA24E fuel spec (green fuel)

	KA24E Gre	en Fuel				
				Ret	. Date:	11/18/2819
TEST	METHOD	UNITS	SPEC	FICAT	ONS	RESULTS
			MIN	TARGET	MAX	
Distillation, % Evap - IBP	ASTM D86	Έ	75		95	
5%		Έ				
10%		Έ	120		135	
20%		Έ				
30%		Έ				
40%		Έ				
50%		Έ	200		230	
60%		Έ				
70%		Έ				
80%		Έ				
30%		Έ	300		325	
35%		Έ				
Distillation - EP		Έ	385		415	
Recovery		vol %		Report		
Residue		vol %		Report		
Loss		vol X		Report		
Gravity @ 60'F	ASTM D4052	'API	58.7		61.2	
Density @ 15°C	ASTM D4052	kg/l	0.734		0.744	
Reid Vapor Pressure	ASTM D5191	psi	8.8		9.2	
Carbon	ASTM D5291	wt fraction	0.8580		0.867	
Carbon	ASTM D334:	wt fraction		Report		
Sulfur	ASTM D262	wt %	0.0120		0.0140	
Lead	ASTM D323	g/gal			0.05	
Oxygen	ASTM D4815	wt %			0.2	
Composition, aromatics	ASTM D576S	vol %	28.5		34.5	
Composition, olefins	ASTM D6550	vol %	5.0		10.0	
Composition, saturates	Calc	vol %		Report		
Oxidation Stability	ASTM D525	minutes	1440			
Copper Corrosion, 3 hr @ 50°C	ASTM D130	Class			1	
Gum content, washed	ASTM D381	mg/100ml			5	
Gum content, unwashed	ASTM D381	mg/100ml			10	
Research Octane Number	ASTM D269:	Rating	96.0		97.5	
Motor Octane Number	ASTM D2700	Rating		Report		
R+M/2	D2699/2700			Report		
Sensitivity	D2699/2700		7.5			
Net Heating of Combustion	ASTM D240	btu/lb		Report		
Color	Visual			Green		



Attachment #5 DACA II Review Task Force Report December 6, 2021

DACA II Review Task Force

SOUTHWEST RESEARCH INSTITUTE®

Prepared By: Patrick Lang December 6, 2021

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DACA III Review Task Force Activities

- Task force formed with Pat Lang as the chairman
- Group agreed that the final document will be called DACA III.
- Five virtual meetings held to date with three taking place during this period.
- Topics covered thus far:
 - Filtering
 - System Time Response
 - Currently working on Quality Index section
- Trying to hold to monthly meetings as schedules permit.



Membership List

Attendance List for DACA II Review Task Force			
Name	Company		
Amol Savant	Valvoline		
Al Lopez Bill Buscher	Intertek		
Andrew Stevens George Szappanos David Doerr Jim Matasic	Lubrizol		
Randy Harmon John White Ron Barthold Khaled Rais Bob Warden Mike Lochte Ankit Chaudhry Tom Wirries Chris DesRuieeeau	Southwest Research		
Bob Campbell	Afton		
Tim Cushing	General Motors		
Jim Gutzwiller Andy Ritchie	Infineum		
Michael Tucker Rohit Rao Jason Griffin	Exxon Mobil		
Mike Deegan	Ford		
Robert Stockwell	Oronite		
Jeff Clark Rich Grundza Sean Moyer	Test Monitoring Center		



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Attachment #6 Voting Guidelines December 6, 2021

Surveillance Panel Voting Guidelines/Definitions:

- Membership
 - Surveillance panels are to maintain current membership rosters that list the individual, the company represented, and membership/voting status (i.e. voting or non-voting). The rosters should be reviewed at the start of each meeting.
 - Each panel stakeholder company may only have one voting member
- Voting and Quorum requirements
 - Panels should strive to follow the voting guidance for ASTM subcommittees
 - Each interested party may only have one voting member
 - In the past, surveillance panels have not had quorum requirements. Panels should follow ASTM guidance for quorums
- Proposed motions should be clear and direct
 - All attempts should be made to eliminate confusion or misinterpretation from the wording of a proposed motion
 - Motions should be written out and displayed to the panel members previous to conducting the vote
 - Unless directly stated in the proposal, changes are not to be applied retroactively. Test concluded before the effective date are not impacted by the change.
- Positive Vote: A vote in support of the proposed motion
- Negative Vote: A vote against the proposed motion. An explanation for opposition to the proposed motion should be provided and captured in the meeting minutes.
- Waived Vote: An abstention from voting in favor or against the proposed motion.
 - An example of a valid abstention is if the voting member has no stake in the issue being voted upon. Members waiving should provide explanation for their waive and this should be captured in the meeting minutes.
 - In the past voting members have waived their vote because they do not know enough about the material of the proposed motion to make an informed decision.
 - This should be discouraged and instead the panel should delay the vote until all members are able to gather the background information needed to cast a vote confidently

• Information Letter changes are changes to ASTM controlled documents. Therefore, these changes have to go through the established ASTM process of voting and committee balloting.



• The LTMS document is controlled by the Test Monitoring Center. Changes to the LTMS do not have to go through the same procedure as ASTM documents.

