

Jeff Clark

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Subject: RE: SCOTE Surveillance Panel Meeting Minutes from June 2, 2009 Conference Call

Please note correction below. Thanks.

From: Jeff Clark
Sent: Tuesday, June 02, 2009 4:07 PM
To: 'xjc@luberdi.com.cn'; 'wvda@chevrontexaco.com'; 'william.larch@lubrizol.com'; 'tlcaudill@ashland.com'; 'steven.kennedy@exxonmobil.com'; 'stacy.bond@intertek.com'; 'riccardo.conti@exxonmobil.com'; 'rbuck@tei-net.com'; 'ralph.perna@shell.com'; 'pulley_britt_a@cat.com'; 'pat.fetterman@infineum.com'; 'msut@chevrontexaco.com'; 'mawc@chevrontexaco.com'; 'luwt@ripp-sinopec.com'; 'katinas_jade@cat.com'; 'jomc@lubrizol.com'; 'john.haegelin@intertek.com'; 'jim.moritz@intertek.com'; 'jaru@chevron.com'; 'james.mccord@swri.org'; 'james.matasic@lubrizol.com'; 'james.gutzwiller@infineum.com'; 'jabs@lubrizol.com'; 'daly_kevin_a@cat.com'; 'charlie.passut@aftonchemical.com'; 'burnede@cpchem.com'; 'bob.campbell@aftonchemical.com'; 'abi-akar_hind@cat.com'; 'Stevens, Andrew'

Subject: SCOTE Surveillance Panel Meeting Minutes from June 2, 2009 Conference Call

Attendance:

Jeff Clark - TMC; Mark Overaker, Wayne Peterson, Jim Carter, Indresh Mathur - Haltermann; Jim McCord - SwRI; Ron Buck - TEI; Jim Moritz - Intertek; Bob Campbell - Afton; Jim Gutzwiller - Infineum; Hind Abi-Akar - CAT; Mark Sutherland - Oronite; Jim Matasic, Andrew Stevens - Lubrizol.

Membership:

Jeff Clark replaces Scott Parke as TMC member and as panel secretary.

SDTF2 Fuel:

The conference call was held to discuss the most recent batch of SDTF2 fuel (1K / 1M-PC); see attached documents. The panel discussed the possible impact of the fuel being out of spec as well as the options presented by Haltermann. Haltermann indicated that their long term preference is to formulate future batches using domestic feedstock. The next batch of European feedstock will present the same problem as the current batch. Much more discussion ensued, at the conclusion of which Haltermann was asked to investigate the possibility of diluting the out of spec batch fuel with domestic supply which results in a fuel that is in spec. Haltermann gave a timeline of early July for an answer (week of July 6). Haltermann will need to complete the domestic formulation and assuming that is successful, then they will work on possible blend ratio. By general consensus, this path of action was agreed to. Jim McCord will call a future conference as necessary.

1M-PC:

CF and CF-2 categories are nearing extinction. It appears that 1M-PC parts should be available through the end of the year. If the categories continue beyond year's end, we may have an availability problem with piston rings. The question was asked if there are CAT production parts (PRL) that can be used in this test. Hind Abi-Akar will check with the CAT engineers.

1N Top Ring End Gap Spec:

Jim Matasic notified the panel that Fig. A1.2, Page 19 of the 1N shows an incorrect top ring end gap spec. The spec should be 0.724 +/- 0.076 mm. This will be corrected via information letter.

Best Regards,

Jeff Clark

Jeff Clark

ASTM Test Monitoring Center

<http://www.astmtmc.cmu.edu/>

ATC European Registration Centre

<https://atc-erc.org>

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May 22, 2009

Mr. Jim McCord
Cat 1-H Surveillance Panel Chairman
Southwest Research Institute
6220 Culebra Rd.
San Antonio, TX 78238

Jim,

As discussed during our phone conversation, Haltermann Products would like to outline the current status of the SDTF2 (HF-0001) test fuel, as follows:

- Current production efforts with regard to SDTFII yielded 25K gal of finished product. The finished product meets all CofA criteria except distillation end point, thus the fuel is not sellable.
- Our current 'best effort' with the most recent supply of feedstock allows us to match all of the specifications, except the distillation end point (exceeds maximum limit by 11 degF). See attached spreadsheet comparing the latest SDTF2 hand-blend to previous sales batches.
- The fuel requires a key feedstock that is currently sourced from Europe.
- The most recent shipment of feedstock appears to be a lesser quality material thus affecting the distillation end point.
- Haltermann currently has one additional container of the latest feedstock in inventory. Since production efforts utilizing material from the first container yielded an out of spec EP (as outlined above), we are moving forward with sampling the remaining container. We fully expect the same results from this container as well.
- The current feedstock on hand would allow for a supply of SDTF2 for about 18 months at recent use rates by the industry if the distillation end point specification were waived.
- For long term consideration, Haltermann is actively investigating the use of a domestic feedstock to replace the imported feedstock. Initial formulation work with the domestic feedstock appears promising, but it will take several weeks to confirm.
- With the aforementioned information in mind, Haltermann sees the following options available to the Cat-1 test community:
 1. Postpone any SDTF2 fuel shipments until the fuel can be made to spec.
 2. Allow a waiver on the EP with the latest formulation using the feedstock currently available. This could be short or long term.
 3. Do not allow a waiver and wait until a formulation using the domestic replacement feedstock can be confirmed. This may take several weeks and, although promising, cannot be guaranteed.

Please review this information with the SDTF2 user community as to how they would like to proceed given the options available.

Haltermann looks forward to continuing to support the need of SDTF2 fuel. Please call if you have any questions.

Best regards,

Jim Carter
Technical Services and Development
Ph 517-347-3021
Cell 517-896-0897

PRODUCT
INFORMATION

Haltermann

PRODUCTS

T (281) 457-2768

F (281) 457-1469

PRODUCT:	SDTF2	Batch No.:	Latest Batch XE1121HW10 (not yet approved for sale)	Previous Sales Batches		
PRODUCT CODE:	HF001	Tank No.:		XB0321HW10	WJ2121HW10	WG1421HW01
		Analysis Date:	5/19/2009	MTS	MTS	
				43	43	43
				2/18/2009	11/12/2008	7/21/2008

TEST	METHOD	UNITS	SPECIFICATIONS			RESULTS	RESULTS	RESULTS	RESULTS
			MIN	TARGET	MAX				
Distillation - IBP	ASTM D86	°F		Report		407	379	392	363
10%		°F		Report		450	442	439	424
50%		°F	500		530	527	526	523	527
90%		°F	590		620	609	617	607	604
Distillation - EP		°F	640		690	701	688	668	658
Gravity	ASTM D4052	°API	33.0		36.0	34.2	33.3	33.6	34.6
Density	ASTM D4052	kg/m ³		Report		853.2	858	856	851
Pour Point	ASTM D97	°F			20	-6	-11	-24	-11
Cloud Point	ASTM D2500	°F		Report		10	3	-23	-8
Flash Point	ASTM D93	°F	140			184	178	174	163
Viscosity, 40°C	ASTM D445	cSt	2.0		4.0	3.3	3.3	3.0	3.0
Natural Sulfur	ASTM D4294	wt %	0.38		0.42	0.389	0.414	0.40	0.42
Natural Sulfur	ASTM D2622	wt %		Report		0.425	0.412	0.44	0.44
Composition, aromatics	ASTM D1319	vol %		Report		20.9	25.7	23.7	18.0
Composition, olefins	ASTM D1319	vol %		Report		4.1	2.9	12.9	4.1
Composition, saturates	ASTM D1319	vol %		Report		75.0	71.5	63.4	77.9
Cracked stocks				None		None	None	None	None
Basic Sediment & Water	ASTM D1796	vol %			0.1	0	0	<0.1	<0.1
Ramsbottom carbon, 10% re	ASTM D524	wt %			0.20	0.10	0.13	0.10	0.08
Ash content	ASTM D482	wt %			0.01	<0.001	<0.001	0.002	<0.01
Acid Number	ASTM D664	mg KOH/g			0.15	<0.1	0.12	<0.1	0.02
Copper Corrosion	ASTM D130				2	1a	1a	1a	1a
Cetane Number	ASTM D613		47.0		53.0	50.7	47.8	47.3	49.5
Aliphatic paraffins	ASTM D2425	wt %		Report		27.4	29.8	29.7	30.6
Monocycloparaffins	ASTM D2425	wt %		Report		14.6	15.5	17.2	19.8
Dicycloparaffins	ASTM D2425	wt %		Report		27.0	22.2	20.7	21.1
Tricycloparaffins	ASTM D2425	wt %		Report		16.4	12.6	11.7	10.4
Alkylbenzenes	ASTM D2425	wt %		Report		9.0	9.6	10.4	6.8
Indanes/Tetralins	ASTM D2425	wt %		Report		2.3	3.9	3.9	4.8
Indenes	ASTM D2425	wt %		Report		1.6	2.9	2.4	3.5
Naphthalene	ASTM D2425	wt %		Report		0.1	0.5	0.5	0.3
Naphthalenes	ASTM D2425	wt %		Report		1.0	1.2	1.4	1.6
Acenaphthenes	ASTM D2425	wt %		Report		0.4	1.1	1.3	0.7
Acenaphthylenes	ASTM D2425	wt %		Report		0.2	0.5	0.6	0.4
Tricyclic aromatics	ASTM D2425	wt %		Report		<0.1	0.2	0.2	<0.1