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Committee D02 on PETROLEUM PRODUCTS AND LUBRICANTS

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Reply to:

Scott Parke
ASTM Test Monitoring Center
6555 Penn Avenue
Pittsburgh, PA 15206

May 6, 2002

To: The Data Communications Committee

Enclosed are the minutes of the Data Communications Committee meeting held in Cleveland, Ohio on April 25, 2002.

Scott Parke
Secretary, DCC

Attachments

cc:

ftp://ftp.astmtmc.cmu.edu/docs/Data_Communications_Committee/Meeting_minutes/20020425_minutes.pdf

distribution: Email

MEETING MINUTES

DATA COMMUNICATIONS COMMITTEE

HELD APRIL 25, 2002
LUBRIZOL CORPORATION, CLEVELAND, OHIO

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8:35 EDTM CALL TO ORDER

DCC Chairman Frank Farber called the meeting to order and made several brief announcements regarding the day's schedule. He reviewed the meeting agenda (attachment 1) and membership list (attachment 2). The attendance sheet is shown as attachment 3. He also reviewed the scope for this committee (attachment 4).

8:37 CORRECTIONS TO/ACCEPTANCE OF OCTOBER 2001 MINUTES

The October 2001 meeting minutes item labeled 15:15 ETRTM REVIEW – SECTION 1.12 indicated that the length of the field LABOCODE was increased to 15. This is in error. It should read that the length was increased to 20.

With the formalities attended to, Frank moved on to discussion of progress made on the action items resulting from the last meeting.

8:40 IIIF SURVEILLANCE PANEL AND EXTENDED LENGTH TEST TASK FORCE

With regard to extended length IIIF tests, Sally Lloyd reported that her Surveillance Panel representative (Charlie Leverett) had no firm convictions as to how report forms are laid out. If generally accepted, this view would obviate the need for devising a standardized method of handling extended length tests since certain forms could be reoriented to facilitate expansion (Sally presented attachments 5 & 6 as an example). Other meeting participants, however, were certain that their own Surveillance Panel representatives did not share Charlie's opinion. In fact, over the last few meetings, much has been made of taking care to avoid the impression that DCC "dictate" any actions to the Surveillance Panels. Sally agreed to work with Charlie to revise the IIIF forms and then have Charlie present the revisions to the Surveillance Panel for its approval (or rejection).

Mark Griffin had been heading a sub-panel to devise rules to standardize the handling of extended length tests. As agreed at the last meeting, Frank Farber approached the IIIF Surveillance Panel to request direction for Mark's sub-panel in making changes to the IIIF. This effort not only did not receive support, it was actively discouraged as being an activity that was beyond the DCC's scope. The DCC unanimously approved a motion to disband Mark's sub-panel.

8:55 REPORT PACKET REVISION NOTICE

At the last meeting, the panel instructed TMC to devise a formalized, "Information Letter"-like system for implementing report form and data dictionary changes in test areas where the report package is not part of the procedure/standard. This has been done. Frank Farber presented an example of the type of notice that will be used (attachment 7).

9:03 M11 EGR TRANSFORMED UNITS

As decided last meeting (15:11 M11 EGR TRANSFORMED UNITS FOOTNOTES), form 4 of the M11 EGR has had the changes necessitated by transformed units made.

9:04 ADOBE.PDF AS JETFORM REPLACEMENT

Frank Farber reported that the TMC's testing of Adobe's .PDF file format as a replacement for JetForm is continuing apace. The results continue to be favorable. Frank showed a list of the test areas for which TMC has completed the conversion to .PDF (attachment 8). He asked the panel for suggestions for the next test areas that should be added noting that nearly all the gas tests were done (save for the IVA and Sequence VIII).

Frank asked the panel when it would be acceptable to drop JetForm. As far as TMC is concerned, it could happen as early as May but Frank guessed that this might be too early for some who still use JetForm. Phil Sattelle thought that that was a little soon for Lubrizol but felt that August 1 would be feasible.

9:24 REPORT FORM/DATA DICTIONARY STATUS

Frank Farber presented the updated Report Form/Data Dictionary Status report (attachment 9). He asked if there would be any objection to removing the obsolete test areas from the report (e.g. 1Q, GST, L-60). There was none.

9:28 TELECOM TEST SUMMARY

Frank Farber presented the latest summary of tests telecommed to the TMC (attachment 9, page 7). He pointed out that, with 0 telecommed tests of 86 reported, OSCT is really the only remaining disappointment. He suggested that perhaps working with the OSCT Surveillance Panel to revise the report forms might help.

9:52 XML PRESENTATION

After a short break, Dan Himmelman, Lubrizol's resident XML expert, gave the presentation shown in attachment 10.

Some discussion followed Dan's presentation. Mark Griffin thought XML could possibly offer an easier way of handling repeating fields. Dan replied that the "schema" component of XML would best be used for that. Frank Farber asked about XML's relationship to databases. Dan said that many databases are able to produce query output in XML format. Frank clarified that he was specifically interested in input to a database. Dan's response was that input would generally require third party

software or some home-brewed code (as the flat file format does now).

11:30 USE OF HOUR DESIGNATION IN NON-REPEATING FIELDS

Mark Slepky wished to bring to the panel's attention a field naming practice that has caused him some difficulties recently. The VIC test has several different stages to it. These stages are distinguished from one another by numeric hour designations. When the fields were named, the stage designations were incorporated as part of the name. This creates complications where these fields are used as repeating fields. Mark suggested that the practice of using numeric hourly stage designations as part of a field name be avoided. The panel agreed.

11:40 FIELD NAME CHANGES

Jody Fromer is still not really satisfied with how field name changes are handled. Currently, they are handled with a field name delete/add pairing. These pairings are not explicitly linked in any way in the "What Changed" thus often making it difficult to distinguish them from true deletions. Preventing mistakes requires diligence. After some discussion, no one was able to offer any useful suggestions for improvement.

11:43 "CROSS-OVER" TWO-CYCLE RUNS

Mark Griffin reported on a problem that often occurs in the two-cycle tests (attachment 11). These tests are among those that run candidate and reference tests simultaneously. The test engine uses two cylinders that are referred to as 1 and 2. Depending on circumstances, either cylinder may be used for the reference oil. This can make it difficult to keep track of which cylinder contains the reference data and which the candidate data. Mark proposed the changes outlined in attachment 11 to correct this. The panel agreed to adopt Mark's suggestions.

12:03 REPORT FROM THE SSL STANDARDIZATION SUB-COMMITTEE

Dave Hood, the SSL SSC chairman, presented a report on the progress of the SSL SSC to date (attachment 12). Each of the companies represented summarized their efforts.

Ethyl has done some HTML experimenting with manual uploading; has not explored SSL yet; they have been using Microsoft products to upload to the SA server software; they have been working with Sally Lloyd for their testing.

Lubrizol has investigated/experimented with some ideas but hasn't started development yet.

PerkinElmer has received the commitment from management to proceed but has not yet started development.

Infineum's provider is dropping X.400 support in June so their hand is being forced; they will switch to email while working towards full SSL implementation by the end of the year.

Southwest Research continues to test with Chevron and have talked to RSI about initiating testing with them; they are looking for suitable software to automate the file transfer process.

Chevron Oronite has continued their development and has been testing with PerkinElmer and Southwest and several web browsers.

12:30 FILE NAMING CONVENTION FOR SSL

Dave recapped some of the discussion that has taken place regarding a file naming convention for SSL-transferred files. The results are shown on page 5 of attachment 12. There was some discussion about whether or not the file names needed to stick with the 8.3 name.extension restriction. None of the representatives present felt it was necessary but the question of ERC's limitations was raised. Frank Farber felt that the panel should not allow this consideration to stall progress and urged the panel to move forward with the conventions laid out on page 5 of attachment 12. All agreed.

12:48 TIMELINE AND NEXT STEPS FOR SSL IMPLEMENTATION

Some SSL implementation dates were discussed (page 6 of attachment 12). Dave Hood expects Chevron Oronite to have completed enough testing to report back in approximately 6 weeks time. He will schedule an SSL SSC conference call for sometime in mid-June.

12:55 CHEVRON ORONITE SSL DEMO

Mike Kahn and Jeff Robinson demonstrated the progress they've made since the demo shown at the last meeting. Cosmetically, not much has changed since October but the demo was shown primarily for the benefit of those who had not seen it then.

13:15 CONFIGURATION OF RSI'S FILE TRANSFER SYSTEMS

John Beck described the configuration of RSI's file transfer systems (attachment 13). It appears their systems will be adaptable to the requirements of SSL.

13:30 REVIEW OF DCC OBJECTIVES AND PRIORITIES

Frank Farber reviewed the DCC's objectives and priorities (attachments 14 and 15, respectively). The Electronic Data Transmission Methods priority has evolved into the SSL Standardization Subcommittee and is expected to complete beta testing December 31, 2002. The Digitized Signatures priority address date has been revised to December of 2004.

13:35 NEXT MEETING AND ADJOURNMENT

Scheduling of the next meeting was discussed but left to the call of the chairman. The meeting was adjourned at 13:43.

ACTION ITEMS

- | | |
|-----|---|
| TMC | <ol style="list-style-type: none">1) Remove obsolete test areas from the Report Form/Data Dictionary Status Report.2) Work with OSCT Surveillance Panel to revise report forms to facilitate telecomming test data.3) Implement Mark Griffin's proposed changes to handle "cross-over" two- |
|-----|---|

cycle tests.

- | | |
|-------------|---|
| PerkinElmer | 1) Sally Lloyd - Work with Charlie Leverett to revise the IIIF forms and then have Charlie present the revisions to the Surveillance Panel for its approval (or rejection). |
| SSL SSC | 1) Hold conference call to discuss progress in mid-June, 2002. |
| All | 1) Complete migration away from JetForm to Adobe .PDF by August 1, 2002. |

ASTM Data Communications Committee Meeting

April 25, 2002

8:30 am – ? pm

The Lubrizol Corporation
29400 Lakeland Boulevard
Wickliffe, OH 44092-2298

Attachment	1
Page	1/1
Reference	

1. Call to Order – Agenda Review
2. Membership Changes
3. Approval of October 18, 2001 meeting minutes
4. Review Scope
5. Review Action Items From Last Meeting

ACTION ITEMS

TMC

- 1) Request Sequence IIIF Surveillance Panel permission for DCC to work on extended length data dictionary issues for IIIF.
- 2) Develop an "Information Letter" system analog for notification of report package changes where the change does not require an information letter.
- 3) Revise M11EGR form 4 footnote "B" for transformed units.
- 4) Continue investigating Adobe Acrobat as a JetForm replacement.

SSL SSC

- 1) Prepare a preliminary report for April 2002 meeting

ALL

- 1) Work on garnering support for SSL implementation within your organization.
6. Data Dictionary Construction Status
 - Priority of next test areas
 - Report Forms/Data Dictionary Memos/IL's
 - TMC Telecom Test Summary
7. XML Discussion – Dan Himmelman
8. SSL Standardization Sub. Committee – David Hood
9. Review Objectives
10. New Business
 - i. Sequence VIC Mnemonic Naming Conventions
11. Adjournment

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DCC Member List

Voting Members	
Scott Parke	TMC
Michael Burk	ExxonMobil
Mark Slepky	Lubrizol
Mark Griffin	Southwest Research Institute
Lika Barnabishvili	Infineum
Maryse Shull	Ethyl Petroleum Additives
Mike Kahn	Chevron Chemical Company
Sally Lloyd	PerkinElmer Automotive Research
Don Silver	Valvoline Inc.
Ralph Grace	Imperial Oil Inc.
Non-Voting Members	
Frank Farber	TMC
Jody Frommer	Lubrizol
David Hood	Chevron Chemical Company
Chris Richtberg	Southwest Research Institute
John Beck	RSI/ERC
John White	Southwest Research Institute

DCC Meeting #29 Attendance List (April 25, 2002 Wickcliffe, OH)

Name	Company	Address	Telephone Fax Email	Present
John Beck	RSI	5903 Rosebay Forest Place Midlothian, VA 23112	804-739-9536 jwbeckrsi@haffner.com (908) 474-2261	✓
Lika Barnabishvili	INFINEUM USA LP	1900 East Linden Avenue Linden, NJ 07036	Lika.Barnabishvili@Infineum.com	✓
Michael Burke	ExxonMobil	P.O. Box 480 Paulsboro, NJ 08066-0480	609-224-2441 609-224-3611	
Graham Fisher	Oronite Chevron	Chevron Chemical SA 79 RucArotole France	0146393639 GRLF@chevron.com	
Frank Farber	ASTM Test Monitoring Center	6555 Penn Avenue Pittsburgh, PA 15206	412-365-1030 412-365-1047 fmf@astmtmc.cmu.edu	
Jody Fromer	Lubrizol Corporation	29400 Lakeland Blvd Wickliffe, OH 44092	440-347-5172 440-945-7215 (347-5010 (fax) jff@lubrizol.com	✓
Mark Griffin	Southwest Research Institute	6220 Culebra Road San Antonio, TX 78228	210-522-3502 210-604-7323 mgriffin@swri.edu	✓
Francisco Gonzalez	Registration Systems, Inc. / ERC	4139 Gardendale Suite 205 San Antonio, TX 78229	210-545-1889 210-341-4038 cisco@txdirect.net	
David Hood	Chevron Chemical Oronite Company- Oronite Global Technology	100 Chevron Way Richmond, CA 94802-0627	510-242-3345 510-242-2965 daho@chevrontexaco.com	✓
Michael Kahn	Chevron Chemical Oronite Company- Oronite Global Technology	100 Chevron Way Richmond, CA 94802-0627	510-242-2717 510- mjka@chevrontexaco.com	✓

DCC Meeting #29 Attendance List (April 25, 2002 Wickcliffe, OH)

Name	Company	Address	Telephone Fax Email	Present
Sally Lloyd	PerkinElmer Automotive Research	5404 Bandera Road San Antonio, TX 78238	210-523-4611 210-523-4633 Sally.Lloyd@PerkinElmer.com	
Scott Parke	ASTM Test Monitoring Center	6555 Penn Avenue Pittsburgh, PA 15206	412-365-1036 412-365-1047 sdp@astmtmc.cmu.edu	
Maryse Shull	Ethyl Corporation	500 Spring Street Richmond, VA 23218	804-788-5280 804-788-6358 maryse_shull@ethyl.com	
Don Silver	Valvoline Inc	P.O. Box 391 Ashland, KY 41114	606-329-5809 606-329-5155 dwsilver@ashland.com	
Mark Slepsky	Lubrizol Corporation	29400 Lakeland Blvd Wickliffe, OH 44092	440-943-1200 Ext 2801 440-943-9041 mgs@lubrizol.com	
John White	Southwest Research Institute	6220 Culebra Road San Antonio, TX 78228	210-522-2434 210- jwwhite@swri.edu	

Attachment	<u>3</u>
Page	<u>2/3</u>
Reference	_____

DCC Guest Attendance List

Name	Company	Address	Phone Fax Email	Include on Mailing List?
John White	S&R I			
Mark Hull	Lubrizol	29400 Lakeland Blvd Wickliffe, OH 44092	(440) 347-2748 mrh@lubrizol.com	No
ANDY KERKEL	"	"	(440) 347-4526 ajk@lubrizol.com	No
Phil Sattelle	"	"	440-347-4111 Phst@Lubrizol.com	No
JEFF ROBINSON	CHEVRON ORENTAL CO.	100 CHEVRON WAY RICHMOND, CA 94802-0627	510 842-4596 JEFF.ROBINSON@CHEVRONORIENTAL.COM	NO

DATA COMMUNICATIONS COMMITTEE

Scope:

To address industry wide computer related issues and provide a forum for discussion and subsequent technical solutions to aid in standardization of computer related activities and communications systems.

To oversee, enhance and maintain the Electronic Test Report Transmission Model.

Attachment	4
Page	1/1
Reference	

1/18/02 Engineer meeting

Need to propose to TMC + DCC.

SEQUENCE III F
FORM 6
USED OIL ANALYSIS RESULTS

flexible Visc format
inflexible ICP format

call Frank

LAB:	EG	OIL CODE:	42507
TEST STAND NO.	03	TEST NO.:	IIIF-03-00-0449
LABORATORY OIL CODE:	SE10236		
FORMULATION/STAND CODE:	N/A		

2/25 msg to Frank

VISCOSITY INCREASE DATA (cSt AT 40° C)			
HOURS	VISCOSITY ^A	CHANGE	PERCENT
NEW OIL	59.03		
INITIAL ^B	56.25		
10	72.73	16.48	29.30
20	92.91	36.66	65.17
30	113.50	57.25	101.78
40	137.90	81.65	145.16
50	162.30	106.05	188.53
60	196.40	140.15	249.16
70	238.80	182.55	324.53
80	324.40	268.15	476.71
80	324.40	268.15	476.71

Attachment	5
Page	1/1
Reference	

^A 8000 cSt is maximum allowable viscosity

^B At end of leveling run

Results of ICP Analysis of Used Oil										
Test Hours	Initial	10	20	30	40	50	60	70	80	80
Iron	6	45	72	99	117	142	166	196	232	232
Copper	1	75	90	112	111	110	108	111	118	118
Lead	1	99	97	108	117	117	119	125	134	134

Cold Crank Simulator Results, D 5293	
Final Temperature, °C	
Final Cold-Crank Simulator Viscosity, cP	

Mini-Rotary Viscometer Results, D 4684	
MRV Temperature, °C	
MRV Results, cP	
Yield Stress, cP	

SEQUENCE IIIF
FORM 6

USED OIL ANALYSIS RESULTS, EXTENDED LENGTH TESTS

*flexible format for both Visc and ICP
To Frank 3/1/02*

LAB:	EG	OIL CODE:	
TEST STAND NO.	03	TEST NO.:	
LABORATORY OIL CODE:			
FORMULATION/STAND CODE:	N/A		

VISCOSITY INCREASE DATA (cSt AT 40° C)			
HOURS	VISCOSITY ^A	CHANGE ^A	PERCENT ^A
NEW OIL	54.72		
INITIAL ^B	52.86		
10			
20			
30			
40			
50			
60			
70			
80			
90			
100			
110			
120			
130			
140			
150			
160			
160			

Results of ICP Analysis of Used Oil			
HOURS	IRON	COPPER	LEAD
INITIAL			
10			
20			
30			
40			
50			
60			
70			
80			
90			
100			
110			
120			
130			
140			
150			
160			
160			

Attachment	6
Page	1/1
Reference	

6

^A 8000 cSt is maximum allowable viscosity

^B At end of leveling run

Cold Crank Simulator Results, D 5293	
Final Temperature, °C	
Final Cold-Crank Simulator Viscosity, cP	

Mini-Rotary Viscometer Results, D 4684	
MRV Temperature, °C	
MRV Results, cP	
Yield Stress, cP	



Test Monitoring Center

6555 Penn Avenue
Pittsburgh, PA 15206-4489
(412) 365-1000

Attachment	7
Page	1/1
Reference	

REPORT PACKET REVISION NOTICE: VG-20011205

VERSION: 20011205

EFFECTIVE DATE: January 15, 2002

DATE: December 14, 2001

TO: Sequence VG Surveillance Panel

FROM: Richard E. Grundza

At the November 14, 2001 Sequence VG Surveillance Panel meeting, the panel agreed to not require that NOx measurements be performed and to remove Power from the QI calculations. As a result of these changes, the report forms and data dictionary have been revised. Version 20011205 is available from the TMC Website. These changes are effective January 15, 2002.

REG/reg

c: Data Communications Committee

<ftp://www.tmc.astm.cmri.cmu.edu/doc/gas/sequencev/memos/vg-20011205>

Distribution: email

TMC
PDF Forms with Mnemonic Value Box

EOWT
Sequence IIIF
Sequence VG
Sequence VIB
Two-Cycle I
Two-Cycle II

Attachment	8
Page	1/1
Reference	

Attachment	9
Page	1/7
Reference	

Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission	
Gasoline Tests								
1	III E	Approved	Approved	19940114	94-1	19940413	19940201	
				19940414	94-89	19940413	19940413	
				19951129	95-1	19950725	19950725	
				19960628	96-1	19960221	19960124	
				19980331	98-1	19980202	19980202	
				In production	19980331	98-1	19980403	19980202
2	VE	Approved	Approved	19941101	94-3	19940713		
				19950501	95-2	19950208	19950501	
				19950901	95-5	19950530	19950530	
				19961001	96-2	19960726	19960726	
				19970310	97-2	19970130	19970109	
				In production	19971124	97-5	19970902	19970902
3	L38	Approved	Approved	19951201	21	19950816	19950803	
				19960201	22	19951002	19951002	
				19960515	23	19960326	19960326	
				19970404	25	19970129	19961024	
				In production	20000315	30	19990621	19991123
4	IID	Approved	Approved	In production	19960415	96-1	19960206	19960213
5	VIA	Approved	Approved	19951101	95-1	19950818	19950818	
				19960315	96-1	19960112	19960112	
				19960916	96-3	19960612	19960612	
				19970402	97-1	19970225	19970124	
				19980409	98-1	19971215	19971215	
				19990208	99-1	19981006	Editorial	
				In production	19991112	99-3	19990729	19990729
6	VG	Approved	Approved			19980708	19980708	
						19980820	19980820	
				19990503	99-56	19990412	19990412	
				19991025	99-154	19990827	19991015	
				20000215	00-1	20000112	20000127	
				20000802	00-2	20000713	20000629	
				20001101	00-3	20000831	20000914	
				20010206	01-1	20001214	20001222	
				20020115	VG-20011205	20011205	20011205	
				In production	20020301	VG-20020118	20020118	20020125
7	IIIF	Approved	Approved			19981008		
						19981221	19981221	
				19990401	99-30	19990301	19990301	
				20000713	00-103	20000629	20000706	
				20001113	00-137	20001011	20001006	
				20010201	01-013	20010115	20010125	
				20010629	20010615E	20010529	20010611	
				In production	20010908	01-112	20010913	20010914

Attachment	9
Page	2/7
Reference	

Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
8	IVA	Approved			98-161	19980625	19980625
					98-185	19980804	19980804
				19990216	99-5	19981201	19981201
				19991015	99-142	19990716	19990716
				20000801	00-2	20000126	20000519
			In production	20010716	01-01	20010418	2001????
9	IVD	Completed				19971117	
10	VIB	Approved				19980810	19980810
					99-44	19990303	19990303
				19990430	99-82	19990427	19990427
				19990924	99-1	19990625	19990625
				20000901	00-3	20000626	20000714
				20010301	01-009	20010105	20010116
				20011001	01-???	20010716	20010824
			In production	20011115	01-147	20011022	20011101
11	VIII	Approved			98-156	19980609	19980609
					98-180	19980805	19980805
				19990416	99-1	19980820	19980820
			In production	20000710	00-1	20000128	20000511
12	IIIFHD	Approved	In production	20020501	IIIFHD-20020325	20020323	20020320
13	VIBSJ	Approved	In production	?	VIBSJ-20020419	20020410	?
Diesel Tests							
12	T8	Approved		19940727	94-1	19940615	19940301
				19950603	95-1	19950321	19950321
				19960815	96-1	19960122	19960122
				19971001	97-1	19970702	19970630
				19980316	98-1	19980122	19980122
				19980803	98-2	19980702	19980702
				19980928	98-3	19980818	19980818
				19980928	98-3	19980902	19980818
				19990129	98-5	19981027	19981027
			In production	20020215	T8-20020107	20020107	20011221
13	1MPC	Approved		19950926	95-1	19950607	19950607
				19980430	98-2	19980203	19980203
			In production	19981109	98-4	19980922	19980922
14	6V92	Approved		19940119	94-1	19940119	
				19990301	99-1	19981208	19981208
			In production	19990601	99-2	19990414	19990414
15	RFWT	Approved		19940901	94-1	19940503	
				19950903	95-1	19950606	19960606
				19960701	96-1	19960326	19960326
			In production	19961201	96-2	19960828	19960828

Attachment	9
Page	3/7
Reference	

Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission	
16	1K/1N	Approved	Approved	19960731	96-1	19960808	19960816	
				19960923	96-2	19960913	19960913	
				19980828	98-2	19980701	19980701	
				19981111	98-3	19980923	19980923	
				In production	20020321	IL02-1	20020107	20020114
17	M11	Approved	Approved	19971006	97-178	19970725	19970721	
				19980202	97-258	19971113	19971113	
				19980202	98-25	19980129	19980129	
				19980731	98-1	19980604	19980604	
				In production	19990709	99-1	19981110	19981110
18	M11EGR	Approved	Approved	asap		20010328		
				20011102	20011024E	20011022	20010921	
				20011119	20011130E	20011120	20011130	
				In production	20020521	11EGR-2002052	20020301	20020308
19	1P	Approved	Approved			19970923	19970923	
						19971015	19971015	
				19971024	97-224	19971024	19971024	
				In production	19980601	98-51	19980302	19971223
				19981102	98-1	19980921	19980921	
20	1Q	Approved	Approved	20010207	01-016	20010122	20010207	
				In production		20010604		
21	T9	Approved	Approved	19971013	97-183	19970822	19970822	
				19980202	97-257	19971106	19971106	
				19980803	98-1	19980601	19980601	
				19981026	98-2	19980804	19980804	
				In production	19990323	99-1	19981110	19981110
22	T10	Approved	Approved	20010103	01-002	20010102	20010102	
				In production	20011110	20011024E	20011031	20010921
23	EOAT	Approved	Approved	In production	19991101	99-1	19990803	19990803
24	1R	Approved	Approved	20010207	01-016	20010122	20010207	
				In production	20020314	1R-20020207	20020207	20020215

Gear Tests

25	L60	Approved	Approved	19941120	IL-5	19941012	19950216
				In production	19950918	IL-6	19950710
26	L42	Approved	Approved	19940903	IL-4	19940707	
				19950823	IL-5	19950721	
				19960715	96-1	19960607	19960111
				19970317	97-1	19970305	19970305
				In production	19980302	98-1	19971211
				20020401	L42-20020220	20020220	200203??

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Reference	

Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
27	L33	Approved	Approved	19941020	IL-3	19940909	
				19950819	IL-4	19950509	
				19960506	96-2	19960329	19960212
				19970602	97-1	19970411	19970331
				19970602	97-3	19970609	19970609
			In production	19980303	98-1	19971218	19971218
28	L37	Approved	Approved	19940829	IL-5	19940707	
				19950819	IL-6	19950424	
				19960603	96-3	19960425	19960410
						19970902	19970902
						19971124	19971104
				19980309	98-1	19971223	19971223
				19980310	98-3	19980203	19980203
				19980901	98-4	19980605	19980605
				19981116	98-5	19980908	19980908
						20010927	20010927
29	L601	Approved	Approved			19950201	19950216
						19950705	19950705
				19951115	95-1	19950912	19950912
				19960531	96-3	19960408	19950912
				19970530	97-1	19970411	19970411
				19970829	97-2	19970611	19970611
				19971107	97-3	19970902	19970902
				19981123	98-3	19980914	19980914
						20000126	?
30	HTCT	Approved	Approved			19940809	
				19970324	97-1	19970128	19961104
				19980209	98-1	19971117	19971117
			In production	19980727	98-2	19980605	19980605
31	GST	Approved	Approved	eady for Beta Testing		19980319	
Bench Tests							
32	CBT	Approved	Approved	19961101	96-1	19960408	19960214
				19990129	98-3	19981102	19981102
						20010118	20010206
			In production	20010315	01-1	20010118	20010206
33	HTCBT	Approved	Approved	19980306	98-146	19980306	19980306
				19990122	98-256	19981120	19981120
						20010117	20010123
			In production	20010201	01-01	20010117	20010123
34	OSCT	Approved	Approved			19940216	
						19960301	
				19971201	97-3	19970917	19970528
			In production	19980817	98-1	19980122	19980122
35	GI	Approved	Approved			19960403	
				19970315	97-20	19970128	19961203
						20020204	20020201
			In production	20020415	GI-20020204	20020204	20020201

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Report Forms/Data Dictionary Status

Test Type	Report Layout Status	Data Dictionary Status	Report Package Status	Industry Effective Date	Information Letter/Memo	Current Dictionary Version	Date of DCC approval for use with electronic Transmission
36	TEOST	Approved	Approved				
			In production	19970330 20020508	97-38 EOST-20020311	19960221 19970128 20020311	19970128 20020322
37	VGC	Approved	Approved				
			In production	19970614 20020509	97-87 VGC-20020131	19960423 19970416 20020131	19970416 20020315
38	FOAM	Approved	Approved				
			In production	19980422	98-67	19960502 19980128 19980306	19980306
39	EVLO	Approved	Approved				
			In production	19980123 19980720 19990119	97-270 98-145 98-275	19960403 19971107 19980311 19981215	19971107 19980311 19981215
40	MTEOS	Approved	Approved				
			In production	19980817 20001120 20010208 ?	00-142 00-185 ?	19980803 19980820 20001013 20001208 20020121	19980803 19980820 20001013 20001211 20020422
41	BRT	Approved	Approved				
			In production	20000308	00-014	20000120	20000127
42	EOFT	Approved	Approved				
			In production	20000804 20011128	00-116 01-154	20000713 20011101	20000803 20011108
43	EOWT	Approved	Approved				
			In production	20000804 20011128	00-117 01-154	20000720 20011101	20000803 20011108
44	D6417	Approved	Approved				
			In production	20001102	00-132	20000928	20000922
45	D5800	Approved	Approved				
			In production	20001107 20020507	00-133 D5800-20020325	20000926 20020325	20000928 20020322
46	D6082	Approved	Approved				
			In production	20001109 ?	00-136 ?	20001002 20020311	20000930 20020422

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Report Forms/Data Dictionary Status

<u>Test Type</u>	<u>Report Layout Status</u>	<u>Data Dictionary Status</u>	<u>Report Package Status</u>	<u>Industry Effective Date</u>	<u>Information Letter/ Memo</u>	<u>Current Dictionary Version</u>	<u>Date of DCC approval for use with electronic Transmission</u>
Two Cycle Tests							
47	TC1	Approved	Approved				
			In production	20011211 200202??	01-179 TC1-20020218	20011127 20020218	20011101 20011211
48	TC2	Approved	Approved				
			In production	20011212 20011213	01-152 TC2-20011213	20010927 20011213	20011101 20011211
49	TC3	Approved	Approved				
			In production	20011218 20020115	01-152 TC3-20020115	20010926 20020115	20011101 20011121
	HDR	Header Data Dictionary used for Flat File Transmission					19931221
	ACK	Acknowledgement Message Dictionary					19980129

SP = Surveillance Panel

TF = Task Force (Test Type is under development and not considered an approved procedure)

Last Updated: **20020422**

Reference Oil Test Transmission Summary
20011001 to 20010400²

Group	Test Type	Reported Tests		
		# Transmitted via ETRTM	Total	% Transmitted via ETRTM
Bench Tests	BRT	119	119	100.00
	CBT	25	25	100.00
	D5800	33	33	100.00
	D6082	12	12	100.00
	D6417	13	13	100.00
	EOFT	84	84	100.00
	EOWT	355	356	99.72
	GI	29	30	96.67
	HTCBT	139	142	97.89
	MTEOS	53	53	100.00
	TEOST	6	6	100.00
	VGC	0	0	0
	Diesel Tests	1K1N	11	11
1MPC		15	15	100
1P		2	2	100
1R		6	6	100
6V92		0	1	0
EOAT		1	1	100
M11		4	4	100
M11EGR		6	6	100
RFWT		2	3	67
T10		19	20	95
T8		11	11	100
T9		0	0	0
Gasoline Tests	IIIE	0	0	0
	IIIF	29	29	100
	IVA	23	23	100
	L38	20	20	100
	VG	29	29	100
	VIA	0	0	0
	VIB	49	52	94
	VIII	13	13	100
Gear Tests	HTCT	6	6	100
	L33	31	31	100
	L37	19	19	100
	L42	60	60	100
	L601	37	37	100
	OSCT	0	86	0
	OSCTM	0	0	0
Two-Cycle Tests	TC1	3	3	100
	TC2	0	0	0
	TC3	0	0	0
Totals		1235	1332	92.7

Why XML?

1 May 2002

Agenda

- What is XML and why use it?
- Technology comparison with examples
- Scalability / Ability to support multiple connections using XSLT
- The great EDI debate
- Summary
- References

What is XML

- eXtensible Markup Language
- Roots in SGML (Std. Generalized Markup Language)
 - Tagging syntax
 - “Base” structure of HTML
 - Can be read natively by browsers
 - XML corrects imperfections of HTML
 - More syntactically correct

Why use XML - Benefits

- Common (tagging) language of the internet
 - Natively processed by browsers and web applications
- Widely available supporting technologies (browsers, parsers, communications protocols, web servers and associated infrastructure)
- Widely available skills
- Multitudes of available resources (free!)
- Ubiquitous data exchange network (almost free!)
 - very secure
- Ability to customize (extensibility) with negligible cost and impact



XML "Standards"

- RosettaNet
- CIDX – Chem eStandard/ChemXML
- ebXML



Technology comparison intro.

Separate data packet, or payload, from transport protocol

- | | |
|--|---|
| <u>Payload</u> | <u>Transport</u> |
| <ul style="list-style-type: none"> • Flat file • XML • ANSI (EDI) | <ul style="list-style-type: none"> • X.400 • HTTP/S • Async. dial-up |



Technology comparison

Function	X.400	EDI	XML
Flexibility	Poor	Avg.	High
Long range viability	Poor	Avg.	High
Cost to implement	Avg.	High	Low
Cost to operate	Avg.	High	Low
Cost to change	High	High	Low



Example of current file ("flat file")

```

VERHDR 19931221
TESTTYPE VIII
TESTSPON LUBRIZOL
LAB SR
CMIR
OILCODE LZ SAMPLE
DTCOMP 20020326
TESTNUM XX-11-33-YY
DTTRANS 20020327
TITRANS 10:17
FORM
PURPCODE 00
SPONID LZSPONSOR
VERSION 20000128
TESTSPON1 THE LUBRIZOL CORPORATION
TESTSPON2
LABVALID V
TSTOIL NR
STAND 51
ENGINE 152

```

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Reference

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Extensibility using current format

- Requires agreement among all partners
- Generally more difficult and longer to implement
- Customization can be done, but data sender must make one-off application changes and synchronize changes with receiver
- The results are:
 - Prone to error
 - Raising costs



Same example in XML

```
<?xml version='1.0' ?>
<MESSAGE>
  <HEADER>
    <VERHDR>19931221</VERHDR>
    <TESTTYPE>VII</TESTTYPE>
    <TESTSPON>LUBRIZOL</TESTSPON>
    <LABSR</LABSR>
    <OILCODE>LZ</OILCODE>
    <OILCODELZ SAMPLE/OILCODE>
    <DTCOMP>20020326</DTCOMP>
    <TESTNUM>XX-11-33-YY</TESTNUM>
    <DTTRANS>20020327</DTTRANS>
    <ITRANS>10-17</ITRANS>
    <FORM></FORM>
    <PURPOSECODE></PURPOSECODE>
    <SPONSORID>LZSPONSOR</SPONSORID>
    <VERSION>2000128</VERSION>
  </HEADER>
  <BODY>
    <TESTSPON1>The Lubrizol Corporation</TESTSPON1>
    <TESTSPON2></TESTSPON2>
    <LABVALID></LABVALID>
    <STAND-1>STAND</STAND-1>
    <ENGINE>152</ENGINE>
  </BODY>
</MESSAGE>
```



Same example with better tags

```
<?xml version='1.0' ?>
<MESSAGE>
  <HEADER>
    <VersionHeader>19931221</VersionHeader>
    <TestType>VII</TestType>
    <TestSponsor>LUBRIZOL</TestSponsor>
    <LabSR></LabSR>
    <OilCode>LZ</OilCode>
    <OilCodeLZ SAMPLE/OilCode>
    <DataCompleted>20020326</DataCompleted>
    <TestNumber>XX-11-33-YY</TestNumber>
    <TransmitDate>20020327</TransmitDate>
    <Form></Form>
    <PurposeCode></PurposeCode>
    <SponsorID>LZSPONSOR</SponsorID>
    <Version>2000128</Version>
  </HEADER>
  <BODY>
    <TestSponsorCode1>The Lubrizol Corporation</TestSponsorCode1>
    <TestSponsorCode2></TestSponsorCode2>
    <LabValidity></LabValidity>
    <TestStand-1>Stand</TestStand-1>
    <Engine>152</Engine>
  </BODY>
</MESSAGE>
```



Extensibility in XML

```
<?xml version='1.0' ?>
<MESSAGE>
  <HEADER>
    <VersionHeader>19931221</VersionHeader>
    <TestType>VII</TestType>
    <TestSponsor>LUBRIZOL</TestSponsor>
    <LabSR></LabSR>
    <OilCode>LZ</OilCode>
    <OilCodeLZ SAMPLE/OilCode>
    <DataCompleted>20020326</DataCompleted>
    <TestNumber>XX-11-33-YY</TestNumber>
    <TransmitDate>20020327</TransmitDate>
    <Form></Form>
    <PurposeCode></PurposeCode>
    <SponsorID>LZSPONSOR</SponsorID>
    <Version>2000128</Version>
    <NewTag>Data for new tag</NewTag>
  </HEADER>
  <BODY>
    <TestSponsorCode1>The Lubrizol Corporation</TestSponsorCode1>
    <TestSponsorCode2></TestSponsorCode2>
    <LabValidity></LabValidity>
    <TestStand-1>Stand</TestStand-1>
    <Engine>152</Engine>
    <CustomTag>Data for custom tag</CustomTag>
  </BODY>
</MESSAGE>
```

New tag added
Partners utilize new
field as required.

Custom tag added
without impacting
other partners.

XML vs. HTML

- HTML (HyperText Markup Language) is presentation "wrapped around" content
- XML is pure content
 - Computer applications don't care how the data is presented
- i.e., XML = HTML - presentation

HTML

```

<HTML>
<HEAD>
<TITLE>CIDX: Chemical Industry Data Exchange</TITLE>
<META http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<base href="http://www.cidx.org/cidx/">
<script language="JavaScript" type="text/javascript">
</script>
</HEAD>
<BODY marginwidth="1" marginheight="0" bgcolor="#FFFFFF" link="#003366"
vlink="#003366" style="background-color: #FFFFFF; color: #003366; font-family:
arial, helvetica, sans-serif; font-size: 10pt; font-weight: normal; text-align:
center; text-decoration: none;">





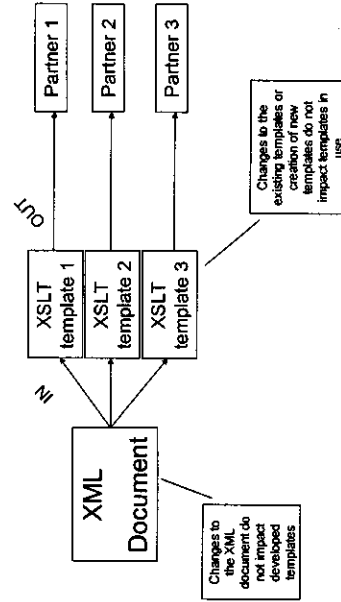


</BODY>
</HTML>
    
```

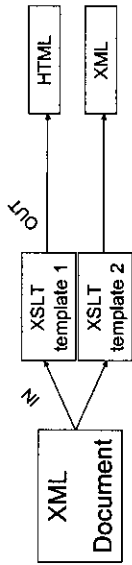
Supporting differing requirements

- XML fields are easily mapped from a "base" structure to different formats to support different receivers
- Availability of eXtensible Stylesheet Language Transformations (XSLT) to manage the mapping of one input structure to various output structures

XSLT concept



XML input, various outputs



XML + XSLT = HTML

```

<?xml version="1.0" encoding="UTF-8"?>
<!--stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0"
xmlns:wp="urn:schemas-microsoft-com:word:namespaces-wp"
-->
<xsl:output method="html" version="1.0" encoding="UTF-8" indent="yes"/>
<xsl:preserve-space/>
<TABLE border="1" style="width:100%; border-collapse: collapse; text-align: center; border: 1px solid black; border-style: solid; border-color: black; border-width: 1px;">
<tr>
<td colspan="2" style="text-align: center; padding: 5px;">
<input type="button" value="My Expense Documents" style="width: 100%; border: none; background-color: #cccccc; color: black; font-size: 12px; font-weight: bold; text-decoration: none; cursor: pointer; padding: 5px 20px; margin: 0 auto; border-radius: 5px; border: 1px solid black; border-style: solid; border-color: black; border-width: 1px;"/>




```

XML + XSLT = XML

```

<?xml version="1.0"?>
<content xmlns="http://www.develop.com/Schemas/book"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
xsl:exclude-result-prefixes="src" xsl:version="1.0"
xmlns:src="http://awi.com"/>
<name><xsl:value-of select="/src:product/@title"/></name>
<contributors>
<xsl:for-each select="/src:product/src:writer">
<xsl:if test="position() = 1">
<staff principal="true"><xsl:value-of select="@name"/></staff>
</xsl:if>
<xsl:if test="position() > 1">
<staff><xsl:value-of select="@name"/></staff>
</xsl:if>
</xsl:for-each>
</contributors>
</content>

```

The great EDI debate

- It's not EDI bad / XML good
- EDI has a large presence and a strong following and will continue into the indefinite future
- EDI still has its place in electronic document exchange
- But, XML addresses some shortcomings of EDI....

EDI vs. XML

- | | |
|---|---|
| <p>EDI</p> <ul style="list-style-type: none"> • Batch, asynchronous data exchange • Data formats tightly controlled by standard bodies • More difficult to change • 1 to 1 partnerships • Communications managed (usually) via VAN • Costly to implement and maintain support • Wide range of business document support • Document focused • Substantial learning curve • Single-purpose data packet | <p>XML</p> <ul style="list-style-type: none"> • Synchronous data exchange • Extensibility • Loose/multiple standards • Ubiquitous, less costly communication environment (HTTP) • Widely available supporting technologies, or can be developed in-house • Wide range of business document support • Process focused • Human-readable, no major skills change • Multi-purpose data packet |
|---|---|

Summary (transport)

- X.400 transport is most costly, least flexible option
 - Future is limited
- HTTP/S is more widely available and less costly
- Future of HTTP is much brighter than X.400

Summary (payload)

- Flat file format is inflexible and costly to maintain
- EDI has broader support but is not cost effective compared to XML
- XML is more versatile, less costly than EDI
- The future for XML is brighter than EDI

Reference web sites

- www.w3.org
- www.cidx.org
- www.ebxml.org
- www.rosettanet.org

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Reference	

There has been an issue raised regarding the field name definitions for the TC1 report package. This issue is related to the usage of a field name based scheme for identification of the reference oil and non-reference oil test results being reported.

Currently the field names in the TC1 report package use a cylinder number centric scheme. The cylinder number '1' or '2' is contained in the field name suffix. This was adopted from the fixed labels on the current test report forms.

According to procedure the test is run with a reference oil blend for cylinder 1 and the non-reference oil blend for cylinder 2. When the test run is deemed to be a fail, then a "cross-over" run is made; where the cylinders used for the reference oil blend and non-reference oil blend are swapped. The problem posed is that data results could not be assigned as reference and non-reference based upon field name. Note: The heading for each form indicates which cylinder number was being used for which oil blend.

The following proposal involves switching from a cylinder number centric scheme to a reference / non-reference scheme for field names. Whereby reference data is always reported in the same location on the report forms and use the same name for the flat file mnemonics. The proposal uses the current naming conventions adopted for other data dictionaries developed for standardized test reporting; i.e. taking a non-reference result field name and adding an 'R' character suffix to form a reference result field name.

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TC1 Report Package Change Proposal:

(1) Rename the fields that have cylinder number 1 reference in the name by dropping the '1' character located in the field name suffix and adding an 'R' character prefix.

(2) Modify the field descriptions that contained 'cylinder 1' text. Replace with 'REFERENCE' text at the start of the field description.

(3) Rename the fields that have cylinder number 2 reference in the name by dropping the '2' character located in the field name suffix.

(4) Modify the field descriptions that contained 'cylinder 2' text. Remove the text. These will be the non-reference result fields.

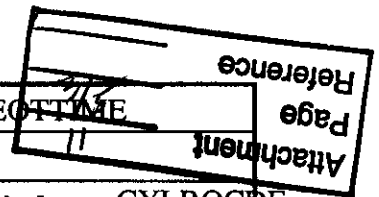
(5) Modify the column headings to replace the cylinder number labels ('Cylinder 1' and 'Cylinder 2') with 'Reference' and 'Non-Reference' labels. Re: forms 4 & 5

(6) Modify the row text to replace the cylinder # labels ('#1' and '#2') with 'Ref.' and 'Non-Ref.' Labels. Re: form 7

**Two-Stroke-Cycle Gasoline Engine Lubricant Evaluation
D4857 (Y350M2) ASTM TC Sequence I Test Procedure**

Test Result Summary

Form 4



Lab: LAB	EOT Date: DTCOMP	End Time: EOTTIME
Engine No.: ENGINE	Run Number: ENRUN	
Reference Oil: ROILCODE	Industry Oil Code: IND	Cylinder: CYLROCODE
Non Reference Oil: OILCODE		Cylinder: CYLOILCD
Formulation / Stand Code: FORM		
Date Test DTSTRT	Start Time: STRTTIME	
Stand No.: STAND	Test Length: TESTLEN	

Test Information	Cylinder 1	Cylinder 2
Laboratory Oil	LABCODE1	LABCODE2
Fuel Type	FUEL1	FUEL2
Fuel / Oil Ratio	FUELRAT1	FUELRAT2

Engine Inspection		Cylinder 1	Cylinder 2
Piston Varnish	Thrust	PVTHR1	PVTHR2
	Anti-Thrust	PVATHR1	PVATHR2
	Average	AVGPV1	AVGPV2
	Ring Land	PVRNGL1	PVRNGL2
	Undercrown	PVUC1	PVUC2
Wristpin	Varnish	WPVARN1	WPVARN2
	Condition	WPCOND1	WPCOND2
	Bearing Varnish	WPBVARN1	WPBVARN2
	Bearing Condition	WPBCOND1	WPBCOND2
Cylinder Liner Varnish		CYLVARN1	CYLVARN2
Ring Sticking	Top Ring	RSTOPRG1	RSTOPRG2
	Second Ring	RS2RG1	RS2RG2
	^A Correction Factor	RSCOR1	RSCOR2
Deposits	Piston Crown	PCCARB1	PCCARB2
	Cylinder Head	CHCARB1	CHCARB2
	Exhaust Port Blocking	EXHPBP1	EXHPBP2
	Exhaust Port Blocking	EXHPB1	EXHPB2
Piston Scuffing	Thrust	PSTHR1	PSTHR2
	Anti-Thrust	PSATHR1	PSATHR2
Cylinder Liner Wear		CLWR1	CLWR2
CRC Demerit Number		CRCRL1	CRCRL2

^A Correction factor updated via information letter.
Contact ASTM-TMC for current correction factor.

**Two-Stroke-Cycle Gasoline Engine Lubricant Evaluation
D4857 (Y350M2) ASTM TC Sequence I Test Procedure**

Ring Land Ratings

Form 5

Attachment	11
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Reference	

Lab: LAB	EOT Date: DTCOMP	End Time: EOTTIME
Engine No.: ENGINE	Run Number: ENRUN	
Reference Oil : ROILCODE	Industry Oil Code: IND	Cylinder: CYLROCODE
Non Reference Oil: OILCODE		Cylinder: CYLOILCD
Formulation / Stand Code: FORM		

Ring Lands - Carbon Ratings					
Deposit Type	Deposit Factor	Cylinder 1		Cylinder 2	
		Area %	Demerit	Area %	Demerit
HC	1.000	HCCARB1	HCDEM1	HCCARB2	HCDEM2
MHC	0.750	MHCCARB1	MHCDEM1	MHCCARB2	MHCDEM2
MC	0.500	MCCARB1	MCDEM1	MCCARB2	MCDEM2
LC	0.250	LCCARB1	LCDEM1	LCCARB2	LCDEM2
VLC	0.150	VLCCARB1	VLCDEM1	VLCCARB2	VLCDEM2
Carbon Rating (demerits)		CRBDTOT1		CRBDTOT2	

Ring Lands - Lacquer Ratings					
Deposit Type	Deposit Factor	Cylinder 1		Cylinder 2	
		Area %	Demerit	Area %	Demerit
BL	0.100	BLVARN1	BLDEM1	BLVARN2	BLDEM2
DBRN	0.075	DBRVARN1	DBRDEM1	DBRVARN2	DBRDEM2
AL	0.050	ALVARN1	ALDEM1	ALVARN2	ALDEM2
LAL	0.025	LALVARN1	LALDEM1	LALVARN2	LALDEM2
VLAL	0.010	VLAVARN1	VLADEM1	VLAVARN2	VLADEM2
RL	0.001	RLVARN1	RLDEM1	RLVARN2	RLDEM2
Lacquer Rating		VRNDTOT1		VRNDTOT2	
Clean	0	RLCLNA1	RLCLND1	RLCLNA2	RLCLND2

Zonal Rating (demerits)	CRCL1	CRCL2
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**Two-Stroke-Cycle Gasoline Engine Lubricant Evaluation
D4857 (Y350M2) ASTM TC Sequence I Test Procedure**

Operational Summary

Form 7

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Reference	

Lab: LAB	EOT Date: DTCOMP	End Time: EOTTIME
Engine No.: ENGINE	Run Number: ENRUN	
Reference Oil: ROILCODE	Industry Oil Code: IND	Cylinder: CYLROCODE
Non Reference Oil: OILCODE		Cylinder: CYLOILCD
Formulation / Stand Code: FORM		

Parameters	Phase I			Phase II		
	Maximum	Minimum	Average	Maximum	Minimum	Average
Engine Speed, r/min	XRPM1	IRPM1	ARPM1	XRPM2	IRPM2	ARPM2
Dynamometer Speed, r/min	KDYNRPM1	IDYNRPM1	ADYNRPM1	KDYNRPM2	IDYNRPM2	ADYNRPM2
Observed Load, hp	KOBLOAD1	IOBLOAD1	AOBLOAD1	KOBLOAD2	IOBLOAD2	AOBLOAD2
Corrected Load, hp	KCOLOAD1	ICOLOAD1	ACOLOAD1	KCOLOAD2	ICOLOAD2	ACOLOAD2
Air / Fuel Ratio #1	XAFRAT11	IAFRAT11	AAFRAT11	XAFRAT12	IAFRAT12	AAFRAT12
Air / Fuel Ratio #2	XAFRAT21	IAFRAT21	AAFRAT21	XAFRAT22	IAFRAT22	AAFRAT22
Air Flow #1 lb / h	XAFLOW11	IAFLOW11	AAFLOW11	XAFLOW12	IAFLOW12	AAFLOW12
Air Flow #2 lb / h	XAFLOW21	IAFLOW21	AAFLOW21	XAFLOW22	IAFLOW22	AAFLOW22
Fuel Flow #1 lb / h	XFFLOW11	IFFLOW11	AFFLOW11	XFFLOW12	IFFLOW12	AFFLOW12
Fuel Flow #2 lb / h	XFFLOW21	IFFLOW21	AFFLOW21	XFFLOW22	IFFLOW22	AFFLOW22
Pressures						
Fuel Pressure #1, psi	XFUELP11	IFUELP11	AFUELP11	XFUELP12	IFUELP12	AFUELP12
Fuel Pressure #2, psi	XFUELP21	IFUELP21	AFUELP21	XFUELP22	IFUELP22	AFUELP22
Intake Air Pressure, in. H ₂ O	XINAIRP1	IINAIRP1	AINAIRP1	XINAIRP2	IINAIRP2	AINAIRP2
Barometric Pressure, in. Hg	XBAROP1	IBAROP1	ABAROP1	XBAROP2	IBAROP2	ABAROP2
Temperatures, ° F						
Spark Plug #1	XSPKPT11	ISPKPT11	ASPKPT11	XSPKPT12	ISPKPT12	ASPKPT12
Spark Plug #2	XSPKPT21	ISPKPT21	ASPKPT21	XSPKPT22	ISPKPT22	ASPKPT22
Cylinder Liner #1	XCYLLT11	ICYLLT11	ACYLLT11	XCYLLT12	ICYLLT12	ACYLLT12
Cylinder Liner #2	XCYLLT21	ICYLLT21	ACYLLT21	XCYLLT22	ICYLLT22	ACYLLT22
Exhaust #1	XEXHT11	IEXHT11	AEXHT11	XEXHT12	IEXHT12	AEXHT12
Exhaust #2	XEXHT21	IEXHT21	AEXHT21	XEXHT22	IEXHT22	AEXHT22
Fuel #1	XFUELT11	IFUELT11	AFUELT11	XFUELT12	IFUELT12	AFUELT12
Fuel #2	XFUELT21	IFUELT21	AFUELT21	XFUELT22	IFUELT22	AFUELT22
Intake Air, Carburetor	XINAIRT1	IINAIRT1	AINAIRT1	XINAIRT2	IINAIRT2	AINAIRT2
Intake Air Dew Point	XINDWPT1	IINDWPT1	AINDWPT1	XINDWPT2	IINDWPT2	AINDWPT2
Ambient	XINAMBT1	IINAMBT1	AINAMBT1	XINAMBT2	IINAMBT2	AINAMBT2



EDTM - Standardization Subcommittee

Report to DCC
April 25, 2002
Wickliffe, Ohio

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Reference	



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SSC Agenda

- ◆ Review SSC Status
 - Standardization Issues
 - Timeline
- ◆ Oronite Secure Web Demo / Walk Through
- ◆ Manual Secure Web Highlights
- ◆ *TIME LINE*

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Reference	



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SSC 4/23 Meeting Review



Industry Development Status

- ◆ All additive companies have initiated construction, plans to construct, or plan commit resources for constructing Secure Web Site
 - Infineum Update
- ◆ “Automated xfer”: Labs (SwRI and PE) will begin testing with Oronite as early as next week
 - Oronite has not requested any ACEA testing to date
 - Multi-file xfer using Shared Server
- ◆ “Manual xfer”: ERC estimates completion by 4/30.

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Reference	



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SSC 4/23 Meeting Review, cont.



Standardization Agreements/Issues

- ◆ **Supported Web Browsers**
 - Still waiting to test with multi-labs and additive companies
- ◆ **Authentication, Verification,**
- ◆ **UserID and Passwords**
 - No issues to date
- ◆ **Automating Up/Download of files**
 - **Directory Structure Standards Identified**
 - IN and OUTBOX
 - Read/Write directory permissions for sender and sendee
 - **BATCH PROCESSING "Refer"**

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Reference	



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SSC 4/23 Meeting Review, cont.



Standardization Agreements/Issues

◆ Filename Discussion

- Minimize redundancy of DD Header
- Suggest:
+ *sender*

<ACC Company Code><Type¹><Unique ID²>. txt

1 - "DAT-Data; FCA- Functional Acknowledgement; SCD-Scheduling (Future); STA-Status (Future). This differentiates files that could utilize separate processing.

2 - This is thought to be helpful for multiple file transfers and auditing.

Note: ERC will check with ACEA companies to determine if any have 8 character filename restrictions.

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SSC 4/23 Meeting Review, cont.



- ◆ ACEA Production is 1/1/2003
- ◆ Beta Test: 6/1/2002
- ◆ Oronite Demo
- ◆ Ethyl Manual walk-thru

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Reference	

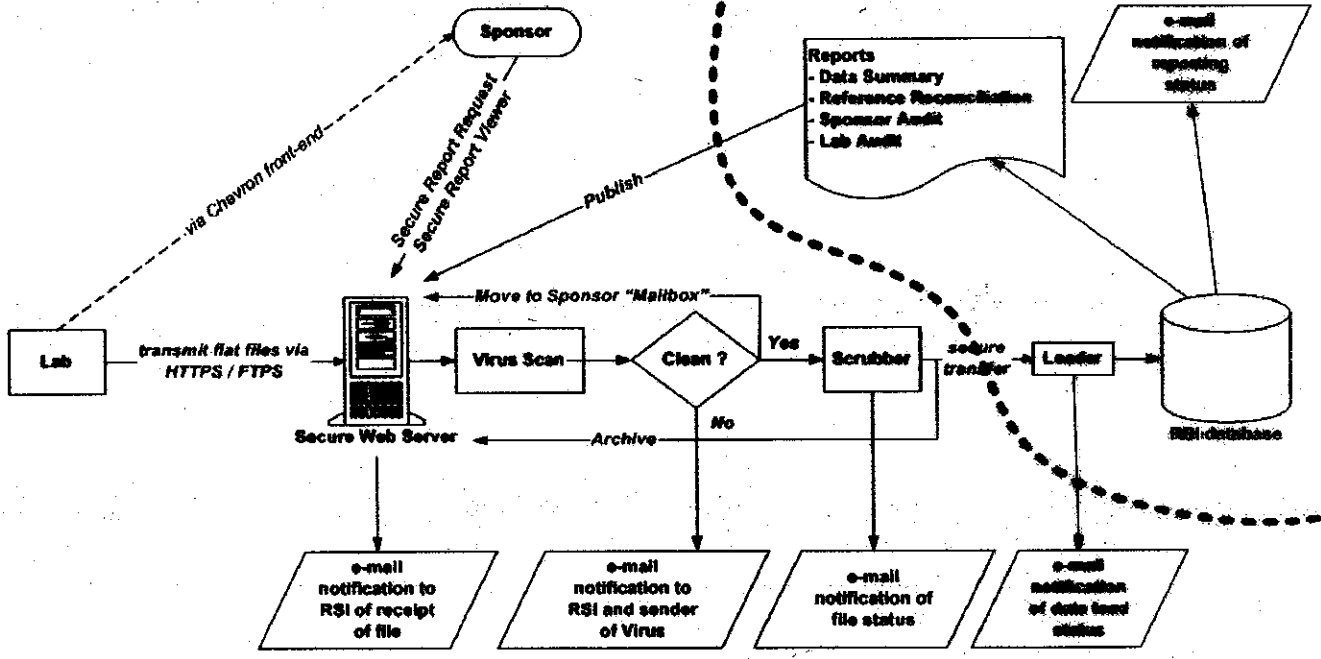


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RSI - Secure Web Server - Conceptual Design

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Data Communications Committee Objectives

Stabilization of Data Dictionaries – High Priority				
Test Area	Beta Team		Status	Expected Completion Date
	SR	Leader EG		
Sequence VIC	1		Pending Beta Release	6-2002
TC1/TC2/TC3	2		Completed	6-2001
M11-EGR		3	Completed	4-2001

Medium - Low Priority	Address
Electronic Data Transmission Methods	10-2001 *
Digitized Photographs	04-2002
Electronic Test Scheduling	12-2002
Extended Test Length Report Forms & Data Dictionary	10-2001
Digitized Signatures	12-2002 4

* BETA TESTING SCHEDULED
* TO COMPLETE 12-31-02

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