Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
Meningoencephalitis Comp Panel, CSF			REPORTED 02/13/2013 15:51		
Calif Enceph Virus Ab Pnl, IFA CSF					
California IgG	H	1:4			Y038
California IgM	H	1:8			Y038
Interpretation		ANTIBODY DETECTED			Y038

REFERENCE RANGE: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

E. Equine Enceph Virus Ab, IFA CSF					
Eastern Equine IgG	H	1:16			Y038
Eastern Equine IgM	H	1:32			Y038
Interpretation		ANTIBODY DETECTED			Y038

REFERENCE RANGE: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
St. Louis Enceph Virus Ab, IFA CSF					
St. Louis IgG	H	1:64			Y038
St. Louis IgM	H	1:128			Y038
Interpretation		ANTIBODY DETECTED			Y038
REFERENCE RANGE: IgG <1:4 IgM <1:4					
NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.					
Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
W. Equine Enceph IgG/IgM, IFA CSF					
Western Equine IgG	H	1:256			Y038
Western Equine IgM	H	1:512			Y038
Interpretation		ANTIBODY DETECTED			Y038
REFERENCE RANGE: IgG <1:4 IgM <1:4					
NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.					
Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
Lymphocytic Choriomeningitis Ab, CSF					
LCM IgG	H	1:1			Y038
LCM IgM	H	1:2			Y038
Interpretation		ANTIBODY DETECTED			Y038
REFERENCE RANGE: IgG <1:1 IgM <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps.					
This assay was developed and its performance characteristics determined by Focus Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. Performance characteristics refer to the analytical performance of the test.					
Adenovirus Antibody, CSF					
Adenovirus Ab	H	1:1			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Influenza Virus A and B Ab, CSF					
Influenza A Ab	H	1:1			Y038
Influenza B Ab	H	1:2			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Measles (Rubeola) G/M Ab, IFA CSF					
Measles (Rubeola) IgG, IFA	H	1:64			Y038
Measles (Rubeola) IgM, IFA	H	1:2			Y038

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
Interpretation		ANTIBODY DETECTED			Y038

REFERENCE RANGE: IgG <1:64
IgM <1:1

Diagnosis of central nervous system infections can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpreting results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

This assay was developed and its performance characteristics have been determined by Focus Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. Performance characteristics refer to the analytical performance of the test.

Mumps Antibody Panel, IFA CSF

Test	Flag	Results	Unit	Reference Value	Perform Site*
Mumps Ab IgG, IFA	H	1:8			Y038
Mumps Ab IgM, IFA	H	1:2			Y038
Interpretation		DETECTED			Y038

REFERENCE RANGE: IgG <1:8
IgM <1:1

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

This assay was developed and its performance characteristics have been determined by Focus

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. Performance characteristics refer to the analytical performance of the test.					
Varicella-Zoster Virus Antibody, CSF					
Varicella-Zoster Virus Ab	H	1:1			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Coxsackie A Antibodies, CSF					
Coxsackie A2 Ab	H	1:1			Y038
Coxsackie A4 Ab	H	1:2			Y038
Coxsackie A7 Ab	H	1:4			Y038
Coxsackie A9 Ab	H	1:8			Y038
Coxsackie A10 Ab	H	>=1:8			Y038
Coxsackie A16 Ab	H	>=1:8			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA:					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
<1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Coxsackie B (1-6) Antibodies, CSF					
Coxsackie B1 Ab	H	>=1:8			Y038
Coxsackie B2 Ab	H	1:8			Y038
Coxsackie B3 Ab	H	1:4			Y038
Coxsackie B4 Ab	H	1:2			Y038
Coxsackie B5 Ab	H	1:1			Y038
Coxsackie B6 Ab	H	1:1			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Echovirus Antibodies, CSF					
Echovirus 4 Ab	H	1:1			Y038
Echovirus 7 Ab	H	1:2			Y038
Echovirus 9 Ab	H	1:4			Y038
Echovirus 11 Ab	H	>=1:8			Y038
Echovirus 30 Ab	H	>=1:8			Y038
REFERENCE RANGE: <1:1					
INTERPRETIVE CRITERIA: <1:1 Antibody Not Detected > or = 1:1 Antibody Detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
Cytomegalovirus IgG Ab, ELISA CSF					
Cytomegalovirus IgG, ELISA CSF	H	1.00			Y038
REVISED RESULTS REFERENCE RANGE: <0.80					
INTERPRETIVE CRITERIA:					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
		<0.80 Antibody not detected 0.80 - 0.99 Equivocal > or = 1.00 Antibody detected			
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent. The intrathecal synthesis of CMV antibody is most accurately measured by performing the Antibody Index for CNS Infection. REVISED REPORT, Previously reported as: <0.80 (Reported 02/13/2013 15:47)					
Cytomegalovirus IgM Ab, ELISA CSF					
Cytomegalovirus IgM, ELISA CSF	H	0.90			Y038
REVISED RESULTS REFERENCE RANGE: <0.90					
INTERPRETIVE CRITERIA: <0.90 Antibody not detected 0.90 - 1.09 Equivocal > or = 1.10 Antibody detected					
Diagnosis of infections of the central nervous system is accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent. The intrathecal synthesis of CMV antibody is most accurately measured by performing the Antibody Index for CNS Infection. REVISED REPORT, Previously reported as: <0.90 (Reported 02/13/2013 15:47)					
West Nile Virus Ab (IgG, IgM), CSF					

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
West Nile Ab IgG, CSF	H	1.30			Y038
West Nile Ab IgM, CSF	H	0.90			Y038

REFERENCE RANGE: IgG <1.30
IgM <0.90

INTERPRETIVE CRITERIA

IgG:	<1.30	Antibody not detected
	1.30 - 1.49	Equivocal
	>=1.50	Antibody detected
IgM:	<0.90	Antibody not detected
	0.90 - 1.10	Equivocal
	>1.10	Antibody detected

West Nile virus (WNV) IgM is usually detectable in CSF from WNV-infected patients with encephalitis or meningitis at the time of clinical presentation. Because IgM antibody does not readily cross the blood-brain barrier, IgM antibody in CSF strongly suggests acute central nervous system infection. WNV antibody results from CSF should be in interpreted with caution. Possible complicating factors include low levels of antibody found in CSF, passive transfer of antibodies from blood, and contamination via bloody spinal taps. Antibodies induced by other flavivirus infections (e.g. Dengue virus, St. Louis encephalitis virus) may show cross-reactivity with WNV.

HSV 1/2 IgG Type-Specific Ab, CSF

HSV 1 IgG Index	H	1.10			Y038
HSV 2 IgG Index	H	1.10			Y038

REFERENCE RANGE: < or = 1.00

INTERPRETIVE CRITERIA:

< or = 1.00	Antibody not detected
> 1.00	Antibody detected

Detection of HSV type-specific IgG in CSF may indicate central nervous system (CNS) infection

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*
by that HSV type. However, interpretation of results may be complicated by a number of factors, including low antibody levels found in CSF, passive transfer of antibody across the blood-brain barrier, and serum contamination of CSF during CSF collection. PCR detection of type-specific HSV DNA in CSF is the preferred method for identifying HSV CNS infections.					
HSV 1/2 IgM Ab IFA Reflex to Titer					
HSV 1 IgM Screen	AB	POSITIVE			Y038
HSV 2 IgM Screen	AB	POSITIVE			Y038
REFERENCE RANGE: NEGATIVE					
The IFA procedure for measuring IgM antibodies to HSV 1 and HSV 2 detects both type-common and type-specific HSV antibodies. Thus, IgM reactivity to both HSV 1 and HSV 2 may represent crossreactive HSV antibodies rather than exposure to both HSV 1 and HSV 2.					
Diagnosis of central nervous system infections can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpreting results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.					
This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.					
			REPORTED 02/14/2013 10:32		
HSV 1 IgM Titer	H	1:1			Y038
			REPORTED 02/14/2013 10:32		
HSV 2 IgM Titer	H	1:1			Y038

Performing Site Legend on Last Page of Report

Patient Name	Patient ID	Age	Gender	Order #
SAMPLEREPORT,FMCPL ABNORMAL	SA00053762	42	M	SA00053762
Ordering Phys CLIENT,CLIENT				**DOB** 11/09/1970
Client Order # SA00053762	**Account Information**			**Report Notes**
Collected 02/12/2013 13:00	C7028846-DLMP ROCHESTER 3050 SUPERIOR DRIVE ROCHESTER,MN 55901			
Printed 02/18/2013 10:14				

Test	Flag	Results	Unit	Reference Value	Perform Site*

>> Accession SA00053762 - Continued From Previous Page <<
>> Do Not Discard <<

* Performing Site:

Y038	Focus Diagnostics, Inc. 5785 Corporate Avenue Cypress, CA 90630-4750	Lab Director: