



February 08, 2013

HOBBS OCD

GREG LINGAFELTER

FEB 18 2013

CIMAREX ENERGY CO.-MIDLAND

600 N. MARIENFELD ST, SUITE 600

MIDLAND, TX 79701

RECEIVED

RE: SNODDY POND

Enclosed are the results of analyses for samples received by the laboratory on 01/24/13 14:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list on accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

REVIEWED/ APPROVED

Environmental Specialist

NMOC-DIST 1

2/18/13

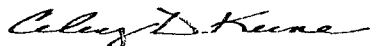
**Analytical Results For:**CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWNReported:  
08-Feb-13 18:56

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SNODDY POND WATER	H300208-01	Water	24-Jan-13 12:30	24-Jan-13 14:12

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**SNODDY POND WATER**
**H300208-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Inorganic Compounds**

Chloride*	52.0	4.00	mg/L	1	3012507	DW	25-Jan-13	4500-Cl-B	
Cyanide (total)	ND	0.010	mg/L	1	3020815	CK	07-Feb-13	335.4	GAL
Fluoride	0.965	0.200	mg/L	1	3020814	CK	28-Jan-13	4500F C	GAL
Nitrate as N	2.30	0.100	mg/L	1	3012511	AP	25-Jan-13	353.3	
pH*	7.73	0.100	pH Units	1	3012513	DW	25-Jan-13	150.1	
Phenols	ND	0.050	mg/L	1	3020816	CK	07-Feb-13	420.1	GAL
Sulfate*	46.0	10.0	mg/L	1	3012802	DW	28-Jan-13	375.4	
TDS*	306	5.00	mg/L	1	3013002	AP	30-Jan-13	160.1	

**Organic Compounds**
**SUB-SS**

PCB 1016	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1221	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1232	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1242	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1248	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1254	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	
PCB 1260	ND	2.00	ug/L	1	3020407	CK	01-Feb-13	8082	

Surrogate: Tetrachloro-meta-xylene

103 %

35-140

3020407

CK

01-Feb-13

8082


**Dissolved Metals**

Aluminum	ND	0.0500	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Arsenic	ND	0.100	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Barium	0.101	0.010	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Boron	ND	0.200	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Cadmium	ND	0.00010	mg/L	1	3020807	CK	05-Feb-13	200.8	GAL
Chromium	ND	0.050	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Cobalt	ND	0.0500	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Copper	ND	0.020	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Iron	ND	0.050	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**SNODDY POND WATER**  
**H300208-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Dissolved Metals**

Lead	ND	0.0005	mg/L	1	3020807	CK	05-Feb-13	200.8	GAL
Manganese	ND	0.005	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Molybdenum	ND	0.0500	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Nickel	ND	0.0500	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Selenium	0.005	0.001	mg/L	1	3020807	CK	05-Feb-13	200.8	GAL
Silver	ND	0.050	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL
Uranium	0.00130	0.000100	mg/L	1	3020807	CK	05-Feb-13	200.8	GAL
Zinc	ND	0.050	mg/L	1	3020806	CK	28-Jan-13	200.7	GAL

**Mercury (Total) by CVAA**

Mercury	ND	0.0002	mg/L	1	3020808	CK	31-Jan-13	245.1	GAL
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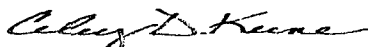
**Volatile Organic Compounds by EPA Method 8260B**

Vinyl chloride*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,1-Dichloroethene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Methylene chloride*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,1-Dichloroethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Chloroform*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Carbon tetrachloride*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,1,1-Trichloroethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Benzene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,2-Dichloroethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Trichloroethene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Toluene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Tetrachloroethene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,1,2-Trichloroethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
1,2-Dibromoethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Ethylbenzene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
m-p Xylenes*	ND	0.002	mg/L	1	3012807	ms	28-Jan-13	8260	
o-Xylene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**SNODDY POND WATER**  
**H300208-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories**
**Volatile Organic Compounds by EPA Method 8260B**

Total Xylenes*	ND	0.003	mg/L	1	3012807	ms	28-Jan-13	8260	
1,1,2,2-Tetrachloroethane*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Naphthalene*	ND	0.001	mg/L	1	3012807	ms	28-Jan-13	8260	
Surrogate: Dibromofluoromethane		94.4 %	70.2-143		3012807	ms	28-Jan-13	8260	
Surrogate: Toluene-d8		96.7 %	73.8-118		3012807	ms	28-Jan-13	8260	
Surrogate: 4-Bromofluorobenzene		95.6 %	48-134		3012807	ms	28-Jan-13	8260	


**Semivolatile Organic Compounds by GCMS**

Naphthalene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
2-Methylnaphthalene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
1-Methylnaphthalene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Acenaphthylene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Acenaphthene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Fluorene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Phenanthrene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Anthracene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Carbazole	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Fluoranthene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Pyrene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Benzo[a]anthracene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Chrysene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Benzo[b]fluoranthene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Benzo[k]fluoranthene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Benzo[a]pyrene	ND	0.0002	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Indeno[1,2,3-cd]pyrene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Dibenz[a,h]anthracene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Benzo[g,h,i]perylene	ND	0.001	mg/L	1.16	3020508	ms	05-Feb-13	8270C	
Surrogate: Nitrobenzene-d5		114 %	35-114		3020508	ms	05-Feb-13	8270C	
Surrogate: 2-Fluorobiphenyl		114 %	43-116		3020508	ms	05-Feb-13	8270C	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701Project: SNODDY POND.  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWNReported:  
08-Feb-13 18:56**SNODDY POND WATER****H300208-01 (Water)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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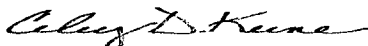
**Cardinal Laboratories****Semivolatile Organic Compounds by GCMS**

Surrogate: Terphenyl-dl4	130 %	33-141	3020508	ms	05-Feb-13	8270C
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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

**Analytical Results For:**CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWNReported:  
08-Feb-13 18:56**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3012507 - General Prep - Wet Chem****Blank (3012507-BLK1)**

Prepared &amp; Analyzed: 25-Jan-13

Chloride ND 4.00 mg/L

**LCS (3012507-BS1)**

Prepared &amp; Analyzed: 25-Jan-13

Chloride 108 4.00 mg/L 100 108 80-120

**LCS Dup (3012507-BSD1)**

Prepared &amp; Analyzed: 25-Jan-13

Chloride 108 4.00 mg/L 100 108 80-120 0.00 20

**Batch 3012511 - General Prep - Wet Chem****Blank (3012511-BLK1)**

Prepared &amp; Analyzed: 25-Jan-13

Nitrate as N ND 0.100 mg/L

**LCS (3012511-BS1)**

Prepared &amp; Analyzed: 25-Jan-13

Nitrate as N 4.60 0.100 mg/L 5.00 92.0 80-120

**Duplicate (3012511-DUP1)**

Source: H300208-01

Prepared &amp; Analyzed: 25-Jan-13

Nitrate as N 1.80 0.100 mg/L 2.30 24.4 25

**Batch 3012513 - NO PREP****LCS (3012513-BS1)**

Prepared &amp; Analyzed: 25-Jan-13

pH 7.08 pH Units 7.00 101 90-110

**Duplicate (3012513-DUP1)**

Source: H300212-01

Prepared &amp; Analyzed: 25-Jan-13

pH 7.24 0.100 pH Units 7.14 1.39 20

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 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**Inorganic Compounds - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3012802 - General Prep - Wet Chem**
**Blank (3012802-BLK1)**

Prepared &amp; Analyzed: 28-Jan-13

Sulfate ND 10.0 mg/L

**LCS (3012802-BS1)**

Prepared &amp; Analyzed: 28-Jan-13

Sulfate 18.9 10.0 mg/L 20.0 94.6 80-120

**LCS Dup (3012802-BSD1)**

Prepared &amp; Analyzed: 28-Jan-13

Sulfate 24.2 10.0 mg/L 20.0 121 80-120 24.7 25

**Batch 3013002 - Filtration**
**Blank (3013002-BLK1)**

Prepared &amp; Analyzed: 30-Jan-13

TDS ND 5.00 mg/L

**LCS (3013002-BS1)**

Prepared &amp; Analyzed: 30-Jan-13

TDS 222 5.00 mg/L 240 92.5 80-120

**Duplicate (3013002-DUP1)**

Source: H300209-07

Prepared &amp; Analyzed: 30-Jan-13

TDS 9020 5.00 mg/L 9050 0.421 20

**Batch 3020814 - General Prep**
**Blank (3020814-BLK1)**

Prepared &amp; Analyzed: 28-Jan-13

Fluoride ND 0.200 mg/L

**LCS (3020814-BS1)**

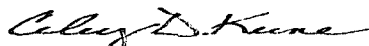
Prepared &amp; Analyzed: 28-Jan-13

Fluoride 0.965 mg/L 1.00 96.5 85-115

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 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

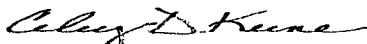
**Inorganic Compounds - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3020814 - General Prep</b>										
<b>LCS Dup (3020814-BSD1)</b>				Prepared & Analyzed: 28-Jan-13						
Fluoride	1.07		mg/L	1.00		107	85-115	10.3	20	
<b>Batch 3020815 - General Prep</b>										
<b>Blank (3020815-BLK1)</b>				Prepared & Analyzed: 07-Feb-13						
Cyanide (total)	ND	0.010	mg/L							
<b>LCS (3020815-BS1)</b>				Prepared & Analyzed: 07-Feb-13						
Cyanide (total)	0.148		mg/L	0.150		98.7	90-110			
<b>Batch 3020816 - General Prep</b>										
<b>Blank (3020816-BLK1)</b>				Prepared & Analyzed: 07-Feb-13						
Phenols	ND	0.050	mg/L							
<b>LCS (3020816-BS1)</b>				Prepared & Analyzed: 07-Feb-13						
Phenols	0.414		mg/L	0.400		104	80-120			
<b>Matrix Spike (3020816-MS1)</b>				Source: H300208-01 Prepared & Analyzed: 07-Feb-13						
Phenols	0.400		mg/L	0.400	0.00	100	70-130			
<b>Matrix Spike Dup (3020816-MSD1)</b>				Source: H300208-01 Prepared & Analyzed: 07-Feb-13						
Phenols	0.393		mg/L	0.400	0.00	98.2	70-130	1.77	20	

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701

Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWN

Reported:  
08-Feb-13 18:56

**Organic Compounds - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
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**Batch 3020407 - EPA 3510C**
**Blank (3020407-BLK1)**

Prepared: 30-Jan-13 Analyzed: 01-Feb-13

PCB 1016	ND	2.00	ug/L					
PCB 1221	ND	2.00	ug/L					
PCB 1232	ND	2.00	ug/L					
PCB 1242	ND	2.00	ug/L					
PCB 1248	ND	2.00	ug/L					
PCB 1254	ND	2.00	ug/L					
PCB 1260	ND	2.00	ug/L					
Surrogate: Tetrachloro-meta-xylene	8.77		ug/L	10.0		87.7	35-140	

**LCS (3020407-BS1)**

Prepared: 30-Jan-13 Analyzed: 01-Feb-13

PCB 1016	71.9		ug/L	100		71.9	40-130	
PCB 1242	ND	2.00	ug/L				40-130	
PCB 1254	ND	2.00	ug/L				40-130	
PCB 1260	82.7		ug/L	100		82.7	40-130	
Surrogate: Tetrachloro-meta-xylene	8.81		ug/L	10.0		88.1	35-140	

**LCS Dup (3020407-BSD1)**


Prepared: 30-Jan-13 Analyzed: 01-Feb-13

PCB 1016	74.4		ug/L	100		74.4	40-130	3.42	30
PCB 1242	ND	2.00	ug/L				40-130		30
PCB 1254	ND	2.00	ug/L				40-130		30
PCB 1260	80.8		ug/L	100		80.8	40-130	2.32	30
Surrogate: Tetrachloro-meta-xylene	9.31		ug/L	10.0		93.1	35-140		

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701

Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWN

Reported:  
08-Feb-13 18:56

**Total Recoverable Metals - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3020806 - Dissolved/Potentially Dissolved Metals**
**Blank (3020806-BLK1)**

Prepared &amp; Analyzed: 28-Jan-13

Manganese	ND	0.005	mg/L
Barium	ND	0.010	mg/L
Aluminum	ND	0.0500	mg/L
Cobalt	ND	0.0500	mg/L
Iron	ND	0.050	mg/L
Nickel	ND	0.0500	mg/L
Zinc	ND	0.050	mg/L
Boron	ND	0.200	mg/L
Chromium	ND	0.050	mg/L
Silver	ND	0.050	mg/L
Copper	ND	0.020	mg/L
Molybdenum	ND	0.0500	mg/L
Arsenic	ND	0.100	mg/L

**LCS (3020806-BS1)**

Prepared &amp; Analyzed: 28-Jan-13

Arsenic	4.88	mg/L	5.00	97.6	85-115
Chromium	2.48	mg/L	2.50	99.2	85-115
Copper	4.86	mg/L	5.00	97.2	85-115
Iron	5.02	mg/L	5.00	100	85-115
Aluminum	4.99	mg/L	5.00	99.8	85-115
Barium	2.39	mg/L	2.50	95.6	85-115
Molybdenum	4.83	mg/L	5.00	96.6	85-115
Boron	4.93	mg/L	5.00	98.6	85-115
Cobalt	2.43	mg/L	2.50	97.2	85-115
Silver	0.124	mg/L	0.125	99.2	85-115
Zinc	2.38	mg/L	2.50	95.2	85-115
Manganese	2.43	mg/L	2.50	97.2	85-115
Nickel	2.36	mg/L	2.50	94.4	85-115

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701

Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWN

Reported:  
08-Feb-13 18:56

**Dissolved Metals - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3020806 - Dissolved/Potentially Dissolved Metals**
**LCS Dup (3020806-BSD1)**

Prepared &amp; Analyzed: 28-Jan-13

Nickel	2.38		mg/L	2.50		95.2	85-115	0.844	20	
Iron	5.04		mg/L	5.00		101	85-115	0.398	20	
Zinc	2.40		mg/L	2.50		96.0	85-115	0.837	20	
Chromium	2.50		mg/L	2.50		100	85-115	0.803	20	
Molybdenum	4.89		mg/L	5.00		97.8	85-115	1.23	20	
Copper	4.89		mg/L	5.00		97.8	85-115	0.615	20	
Arsenic	4.96		mg/L	5.00		99.2	85-115	1.63	20	
Aluminum	5.00		mg/L	5.00		100	85-115	0.200	20	
Silver	0.126		mg/L	0.125		101	85-115	1.60	20	
Barium	2.42		mg/L	2.50		96.8	85-115	1.25	20	
Boron	4.96		mg/L	5.00		99.2	85-115	0.607	20	
Manganese	2.44		mg/L	2.50		97.6	85-115	0.411	20	
Cobalt	2.45		mg/L	2.50		98.0	85-115	0.820	20	

**Batch 3020807 - Dissolved/Potentially Dissolved Metals**
**Blank (3020807-BLK1)**

Prepared &amp; Analyzed: 05-Feb-13

Uranium	ND	0.000100	mg/L							
Lead	ND	0.0005	mg/L							
Selenium	ND	0.001	mg/L							
Cadmium	ND	0.00010	mg/L							

**LCS (3020807-BS1)**

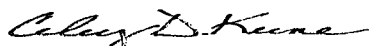
Prepared &amp; Analyzed: 05-Feb-13

Lead	0.0500		mg/L	0.0500		100	85-115			
Selenium	0.254		mg/L	0.250		102	85-115			
Cadmium	0.0500		mg/L	0.0500		100	85-115			
Uranium	0.0493		mg/L	0.0500		98.6	85-115			

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWNReported:  
08-Feb-13 18:56**Dissolved Metals - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3020807 - Dissolved/Potentially Dissolved Metals****LCS Dup (3020807-BSD1)**

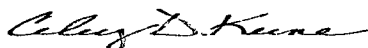
Prepared &amp; Analyzed: 05-Feb-13

Lead	0.0513		mg/L	0.0500		103	85-115	2.57	20	
Selenium	0.259		mg/L	0.250		104	85-115	1.95	20	
Uranium	0.0502		mg/L	0.0500		100	85-115	1.81	20	
Cadmium	0.0506		mg/L	0.0500		101	85-115	1.19	20	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWNReported:  
08-Feb-13 18:56**Mercury (Total) by CVAA - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
<b>Batch 3020808 - EPA 245.1</b>								
<b>Blank (3020808-BLK1)</b>				Prepared: 29-Jan-13 Analyzed: 31-Jan-13				
Mercury	ND	0.0002	mg/L					
<b>LCS (3020808-BS1)</b>				Prepared: 29-Jan-13 Analyzed: 31-Jan-13				
Mercury	0.0020		mg/L	0.00200	100	85-115		
<b>LCS Dup (3020808-BSD1)</b>				Prepared: 29-Jan-13 Analyzed: 31-Jan-13				
Mercury	0.0019		mg/L	0.00200	95.0	85-115	5.13	20

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3012807 - Volatiles**
**Blank (3012807-BLK1)**

Prepared &amp; Analyzed: 28-Jan-13

Vinyl chloride	ND	0.001	mg/L
1,1-Dichloroethene	ND	0.001	mg/L
Methylene chloride	ND	0.001	mg/L
1,1-Dichloroethane	ND	0.001	mg/L
Chloroform	ND	0.001	mg/L
Carbon tetrachloride	ND	0.001	mg/L
1,1,1-Trichloroethane	ND	0.001	mg/L
Benzene	ND	0.001	mg/L
1,2-Dichloroethane	ND	0.001	mg/L
Trichloroethene	ND	0.001	mg/L
Toluene	ND	0.001	mg/L
Tetrachloroethene	ND	0.001	mg/L
1,1,2-Trichloroethane	ND	0.001	mg/L
1,2-Dibromoethane	ND	0.001	mg/L
Ethylbenzene	ND	0.001	mg/L
m-p Xylenes	ND	0.002	mg/L
o-Xylene	ND	0.001	mg/L
Total Xylenes	ND	0.003	mg/L
1,1,2,2-Tetrachloroethane	ND	0.001	mg/L
Naphthalene	ND	0.001	mg/L

Surrogate: Dibromofluoromethane	0.00950		mg/L	0.0100	95.0	70.2-143
Surrogate: Toluene-d8	0.00966		mg/L	0.0100	96.6	73.8-118
Surrogate: 4-Bromofluorobenzene	0.00955		mg/L	0.0100	95.5	48-134

**LCS (3012807-BS1)**

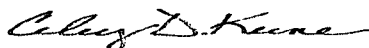
Prepared &amp; Analyzed: 28-Jan-13

Vinyl chloride	0.020	0.001	mg/L	0.0200	102	63.4-131
1,1-Dichloroethene	0.020	0.001	mg/L	0.0200	99.9	68.7-131
Methylene chloride	0.019	0.001	mg/L	0.0200	93.6	63.1-134
1,1-Dichloroethane	0.020	0.001	mg/L	0.0200	100	74.5-121
Chloroform	0.019	0.001	mg/L	0.0200	93.8	76-115
Carbon tetrachloride	0.020	0.001	mg/L	0.0200	98.8	66.6-128
1,1,1-Trichloroethane	0.020	0.001	mg/L	0.0200	98.2	71.1-127

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701

Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWN

Reported:  
08-Feb-13 18:56

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3012807 - Volatiles**
**LCS (3012807-BS1)**

Prepared &amp; Analyzed: 28-Jan-13

Benzene	0.020	0.001	mg/L	0.0200		99.4	76.5-120			
1,2-Dichloroethane	0.020	0.001	mg/L	0.0200		99.3	75.5-117			
Trichloroethene	0.020	0.001	mg/L	0.0200		98.5	76.3-118			
Toluene	0.019	0.001	mg/L	0.0200		96.6	74.8-121			
Tetrachloroethene	0.019	0.001	mg/L	0.0200		96.0	52.4-136			
1,1,2-Trichloroethane	0.020	0.001	mg/L	0.0200		101	76.6-118			
1,2-Dibromoethane	0.020	0.001	mg/L	0.0200		98.2	77.8-119			
Ethylbenzene	0.019	0.001	mg/L	0.0200		97.2	78.4-121			
m-p Xylenes	0.039	0.002	mg/L	0.0400		97.4	80-120			
o-Xylene	0.019	0.001	mg/L	0.0200		97.3	71-126			
Total Xylenes	0.058	0.003	mg/L	0.0600		97.4	73.6-126			
1,1,2,2-Tetrachloroethane	0.020	0.001	mg/L	0.0200		101	74.2-122			
Naphthalene	0.022	0.001	mg/L	0.0200		110	68.4-126			
Surrogate: Dibromofluoromethane	0.0101		mg/L	0.0100		101	70.2-143			
Surrogate: Toluene-d8	0.00987		mg/L	0.0100		98.7	73.8-118			
Surrogate: 4-Bromofluorobenzene	0.00992		mg/L	0.0100		99.2	48-134			

**LCS Dup (3012807-BSD1)**

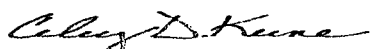
Prepared &amp; Analyzed: 28-Jan-13

Vinyl chloride	0.020	0.001	mg/L	0.0200		100	63.4-131	1.97	12.3	
1,1-Dichloroethene	0.020	0.001	mg/L	0.0200		97.7	68.7-131	2.23	18.3	
Methylene chloride	0.019	0.001	mg/L	0.0200		94.3	63.1-134	0.692	19.8	
1,1-Dichloroethane	0.019	0.001	mg/L	0.0200		97.2	74.5-121	2.84	9.91	
Chloroform	0.018	0.001	mg/L	0.0200		91.9	76-115	2.05	9.44	
Carbon tetrachloride	0.019	0.001	mg/L	0.0200		96.0	66.6-128	2.82	16	
1,1,1-Trichloroethane	0.019	0.001	mg/L	0.0200		95.6	71.1-127	2.68	12.2	
Benzene	0.020	0.001	mg/L	0.0200		97.8	76.5-120	1.67	9.89	
1,2-Dichloroethane	0.019	0.001	mg/L	0.0200		96.8	75.5-117	2.55	9.07	
Trichloroethene	0.019	0.001	mg/L	0.0200		96.0	76.3-118	2.57	12	
Toluene	0.019	0.001	mg/L	0.0200		95.8	74.8-121	0.884	12.3	
Tetrachloroethene	0.019	0.001	mg/L	0.0200		92.8	52.4-136	3.34	43.6	
1,1,2-Trichloroethane	0.020	0.001	mg/L	0.0200		101	76.6-118	0.397	11.1	
1,2-Dibromoethane	0.019	0.001	mg/L	0.0200		96.9	77.8-119	1.33	11.3	

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Celey D. Keene, Lab Director/Quality Manager



**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

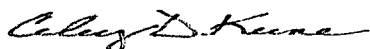
**Volatile Organic Compounds by EPA Method 8260B - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3012807 - Volatiles</b>										
<b>LCS Dup (3012807-BSD1)</b>				Prepared & Analyzed: 28-Jan-13						
Ethylbenzene	0.019	0.001	mg/L	0.0200		96.2	78.4-121	1.14	13.2	
m-p Xylenes	0.038	0.002	mg/L	0.0400		96.0	80-120	1.45	20	
o-Xylene	0.019	0.001	mg/L	0.0200		96.0	71-126	1.40	11.7	
Total Xylenes	0.058	0.003	mg/L	0.0600		96.0	73.6-126	1.43	13.1	
1,1,2,2-Tetrachloroethane	0.020	0.001	mg/L	0.0200		101	74.2-122	0.347	10.6	
Naphthalene	0.022	0.001	mg/L	0.0200		111	68.4-126	0.271	10.5	
Surrogate: Dibromofluoromethane	0.0101		mg/L	0.0100		101	70.2-143			
Surrogate: Toluene-d8	0.00990		mg/L	0.0100		99.0	73.8-118			
Surrogate: 4-Bromofluorobenzene	0.00995		mg/L	0.0100		99.5	48-134			

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND 600 N. MARIENFELD ST, SUITE 600 MIDLAND TX, 79701	Project: SNODDY POND Project Number: NONE GIVEN Project Manager: GREG LINGAFELTER Fax To: UNK-NOWN	Reported: 08-Feb-13 18:56
------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------	------------------------------

**Semivolatile Organic Compounds by GCMS - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3020508 - SW846-3510**
**Blank (3020508-BLK1)**

Prepared &amp; Analyzed: 05-Feb-13

Naphthalene	ND	0.001	mg/L							
2-Methylnaphthalene	ND	0.001	mg/L							
1-Methylnaphthalene	ND	0.001	mg/L							
Acenaphthylene	ND	0.001	mg/L							
Acenaphthene	ND	0.001	mg/L							
Fluorene	ND	0.001	mg/L							
Phenanthrene	ND	0.001	mg/L							
Anthracene	ND	0.001	mg/L							
Carbazole	ND	0.001	mg/L							
Fluoranthene	ND	0.001	mg/L							
Pyrene	ND	0.001	mg/L							
Benzo[a]anthracene	ND	0.001	mg/L							
Chrysene	ND	0.001	mg/L							
Benzo[b]fluoranthene	ND	0.001	mg/L							
Benzo[k]fluoranthene	ND	0.001	mg/L							
Benzo[a]pyrene	ND	0.0002	mg/L							
Indeno[1,2,3-cd]pyrene	ND	0.001	mg/L							
Dibenz[a,h]anthracene	ND	0.001	mg/L							
Benzo[g,h,i]perylene	ND	0.001	mg/L							
Surrogate: Nitrobenzene-d5	0.0424		mg/L	0.0500		84.8	35-114			
Surrogate: 2-Fluorobiphenyl	0.0457		mg/L	0.0500		91.4	43-116			
Surrogate: Terphenyl-d14	0.0508		mg/L	0.0500		102	33-141			

**LCS (3020508-BS1)**

Prepared &amp; Analyzed: 05-Feb-13

Naphthalene	0.010	0.001	mg/L	0.0125		78.7	21-133			
2-Methylnaphthalene	0.010	0.001	mg/L	0.0125		82.6	21-133			
Acenaphthylene	0.010	0.001	mg/L	0.0125		82.6	33-145			
Acenaphthene	0.010	0.001	mg/L	0.0125		79.3	47-145			
Fluorene	0.010	0.001	mg/L	0.0125		80.4	59-121			
Phenanthrene	0.011	0.001	mg/L	0.0125		85.4	54-120			
Anthracene	0.010	0.001	mg/L	0.0125		81.7	27-133			
Carbazole	0.010	0.001	mg/L	0.0125		77.7	70-130			

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 CIMAREX ENERGY CO.-MIDLAND  
 600 N. MARIENFELD ST, SUITE 600  
 MIDLAND TX, 79701

 Project: SNODDY POND  
 Project Number: NONE GIVEN  
 Project Manager: GREG LINGAFELTER  
 Fax To: UNK-NOWN

 Reported:  
 08-Feb-13 18:56

**Semivolatile Organic Compounds by GCMS - Quality Control**
**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3020508 - SW846-3510**
**LCS (3020508-BS1)**

Prepared &amp; Analyzed: 05-Feb-13

Fluoranthene	0.010	0.001	mg/L	0.0125		83.3	26-137			
Pyrene	0.010	0.001	mg/L	0.0125		80.7	52-115			
Benzo[a]anthracene	0.009	0.001	mg/L	0.0125		75.8	33-143			
Chrysene	0.010	0.001	mg/L	0.0125		81.8	17-168			
Benzo[b]fluoranthene	0.010	0.001	mg/L	0.0125		76.5	24-159			
Benzo[k]fluoranthene	0.010	0.001	mg/L	0.0125		83.6	11-162			
Benzo[a]pyrene	0.010	0.0002	mg/L	0.0125		80.4	17-163			
Indeno[1,2,3-cd]pyrene	0.010	0.001	mg/L	0.0125		82.4	0-171			
Dibenz[a,h]anthracene	0.010	0.001	mg/L	0.0125		81.9	0-227			
Benzo[g,h,i]perylene	0.010	0.001	mg/L	0.0125		82.5	0-219			

**LCS Dup (3020508-BS1)**

Prepared &amp; Analyzed: 05-Feb-13

Naphthalene	0.010	0.001	mg/L	0.0125		79.0	21-133	0.304	20	
2-Methylnaphthalene	0.010	0.001	mg/L	0.0125		82.8	21-133	0.193	20	
Acenaphthylene	0.010	0.001	mg/L	0.0125		82.4	33-145	0.291	20	
Acenaphthene	0.010	0.001	mg/L	0.0125		76.4	47-145	3.70	20	
Fluorene	0.010	0.001	mg/L	0.0125		77.8	59-121	3.34	20	
Phenanthrene	0.010	0.001	mg/L	0.0125		83.4	54-120	2.27	20	
Anthracene	0.010	0.001	mg/L	0.0125		79.8	27-133	2.38	20	
Carbazole	0.010	0.001	mg/L	0.0125		79.4	70-130	2.14	20	
Fluoranthene	0.011	0.001	mg/L	0.0125		84.9	26-137	1.90	20	
Pyrene	0.010	0.001	mg/L	0.0125		83.4	52-115	3.31	20	
Benzo[a]anthracene	0.010	0.001	mg/L	0.0125		83.7	33-143	9.93	20	
Chrysene	0.010	0.001	mg/L	0.0125		79.7	17-168	2.67	20	
Benzo[b]fluoranthene	0.010	0.001	mg/L	0.0125		76.7	24-159	0.313	20	
Benzo[k]fluoranthene	0.010	0.001	mg/L	0.0125		80.2	11-162	4.10	20	
Benzo[a]pyrene	0.010	0.0002	mg/L	0.0125		79.3	17-163	1.40	20	
Indeno[1,2,3-cd]pyrene	0.010	0.001	mg/L	0.0125		82.1	0-171	0.389	20	
Dibenz[a,h]anthracene	0.010	0.001	mg/L	0.0125		81.5	0-227	0.489	20	
Benzo[g,h,i]perylene	0.010	0.001	mg/L	0.0125		81.1	0-219	1.66	20	

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

CIMAREX ENERGY CO.-MIDLAND  
600 N. MARIENFELD ST, SUITE 600  
MIDLAND TX, 79701

Project: SNODDY POND  
Project Number: NONE GIVEN  
Project Manager: GREG LINGAFELTER  
Fax To: UNK-NOWN

Reported:  
08-Feb-13 18:56

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

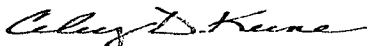
SUB-SS	Analysis subcontracted to SunStar Laboratories, Inc.
GAL	Analysis subcontracted to Green Analytical Laboratories, a subsidiary of Cardinal Laboratories.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

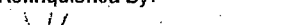
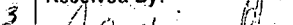



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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		Time:		Fax Result:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:		
		Time:		JHingel@cinmax.com - 432.260-7789 ext 4		
Delivered By: (Circle One)				AMangum@cinmax.com		
Sampler - UPS - Bus - Other:		Sample Condition		CHECKED BY:		
		Cool Intact		(Initials)		
		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				

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