Seq# 003

Line Name: LAU__A027

Line Brg: 101.5 °

NAVIGATION

LINE LOGS

DATE: 2009-01-29

JULIAN DAY: 29

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0812

DC SOL: *-10.0m*

DC EOL:

SMG SOL: 4.7 knots

SMG EOL: 4.7 knots knots

WEATHER

WIND SOL: 17 knots

WIND EOL: 17 knots

SEAS SOL: 2-2m

SEAS EOL:

DEPTH SOL: *2153.0m*

DEPTH EOL: *2283.0 m*

FEATHER SOL: n/a "

FEATHER EOL: n/a "

MAX FEATHER: n/a "

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
4029	1158	FSP	Start of line, first shot point
4030	1200	FGSP	First good shot point
4178	1957	LGSP	End of line, last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	4029	-20° 23' 58.800"	176° 25' 14.500"
LSP	4178	-20° 31' 08.800"	175° 47' 24.300"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:

S1 GPS KO'd

S2 GPS KO'd

Acoustic String 1 Bad

P1: Lau_A027.0.p190

P2: Lau_A028.0.p294

No Streamer

Dsnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 PacificRise.SCN(001) Lang3D.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 003	LAU__A027	29	101.5	4030		450m	

Seq# 003

Line Name: LAU__A028

Line Brg: 281.0 °

NAVIGATION

LINE LOGS

DATE: 2009-01-29

JULIAN DAY: 29

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0812

DC SOL: *-10.0m*

DC EOL:

SMG SOL: 4.7 knots

SMG EOL: 4.7 knots

WEATHER

WIND SOL: 13 knots

WIND EOL: 17 knots

SEAS SOL: *6-8 ft*

SEAS EOL:

DEPTH SOL: *2271.0 m*

DEPTH EOL: *2258.0 m*

FEATHER SOL: n/a "

FEATHER EOL: n/a "

MAX FEATHER: n/a "

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Michaela Conley, Olga Hernandez

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
		FSP	Start of line, first shot point
2999	0054	FGSP	First good shot point
3168	1001	LGSP	End of line, last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	2999	-20° 28' 57.189"	176° 46' 56.940"
LSP	3168	-20° 20' 49.680"	176° 29' 45.780"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:

S1 GPS KO'd

S2 GPS KO'd

Acoustic String 1 Bad

P1: Lau_A027.0.p190

P2: Lau_A028.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 PacificRise.SCN(001) Lang3D.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 003	LAU__A028	29	281.0	4030		450m	

Seq# 004

Line Name: LAU__A027

Line Brg: 101.5 °

NAVIGATION

LINE LOGS

DATE: 2009-01-29

JULIAN DAY: 29

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0812

DC SOL: *-10.0m*

DC EOL:

SMG SOL: 4.7 knots

SMG EOL: 4.7 knots knots

WEATHER

WIND SOL: 17 knots

WIND EOL: 17 knots

SEAS SOL: 2-2m

SEAS EOL:

DEPTH SOL: *2153.0m*

DEPTH EOL: *2283.0 m*

FEATHER SOL: n/a "

FEATHER EOL: n/a "

MAX FEATHER: n/a "

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
4029	1158	FSP	Start of line, first shot point
4030	1200	FGSP	First good shot point
4178	1957	LGSP	Last good shot point
7197	2100	LSP	Last Shot Point, EOL

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	4029	-20° 23' 58.800"	176° 25' 14.500"
LSP	4178	-20° 31' 08.800"	175° 47' 24.300"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:

S1 GPS KO'd

S2 GPS KO'd

Acoustic String 1 Bad

P1 Lau_A027.10.p190

P2 Lau_A027.10.p294

No Streamer

Deanet locations & remarks: good - none - intermittant

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_tim(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 004	LAU__A027	29	101.5	4030		450m	

Seq# 005

Line Name: LAU__A026

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-01-29

JULIAN DAY: 29

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0812

DC SOL: *240.0m*
DC EOL: -300m
SMG SOL: 4.3 knots
SMG EOL: **4.5 knots**

WEATHER
WIND SOL: **13 knots**
WIND EOL: **4 knots**
SEAS SOL: *4 ft*
SEAS EOL:

DEPTH SOL: *2277.0 m*
DEPTH EOL: *2139.0 m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
5020	2230	FSP	Start of line, first shot point
5026	2252	FGSP	First good shot point
5175	0711	LGSP	End of line, last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	5020	-20° 33' 15.060"	176° 48' 01.020"
LSP	5175	-20° 25' 59.640"	176° 27' 24.240"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:
S1 GPS KO'd
S2 GPS KO'd
Acoustic String 1 Bad

P1: Lau_A026.0.p190
P2: Lau_A026.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittant

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_tim.SCN(001) Lang3D.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 005	LAU__A026	29	281	4030		450m	

Seq# 006

Line Name: LAU__A025
Line Brg: 101 °

NAVIGATION
LINE LOGS

DATE: 2009-01-30
JULIAN DAY: 30

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: -280.0m
DC EOL: 395.0m
SMG SOL: 2.5 knots
SMG EOL: 4.8 knots
WEATHER
WIND SOL: 13 knots
WIND EOL: 2-9 knots
SEAS SOL: 4 ft
SEAS EOL: 1 m

DEPTH SOL: 2142.0m
DEPTH EOL: 2295.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Jon Sleeper, Erica Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
6022	0740	FSP	Start of line, first shot point
6022	0740	FGSP	First good shot point
6029	0802	Estimate main	Estimate position on main network 30s after shot 6028
6030			Strings 1,2 still port of 3,4
6036			KO acoustics T2
6038	0832		Re-enable acoustics T2
6046	0858		String4 let out 2m
6051	0915		String3 umbrlical brought in 1m
6054	0923		Re-enable T1
6175	1613	LSP	End of line, last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	6028	-20° 27' 56.760"	176° 27' 51.660"
LSP	6175	-20° 35' 36.300"	175° 49' 12.000"

NAVIGATION OFFSET APPLIED

NRP - COS	-180
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:
S1 GPS KO'd
S2 GPS KO'd
Acoustic String 1 Bad

P1: Lau_A025.0.p190
P2: Lau_A025.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 006	LAU__A025	30	101	6030		450m	

Seq# 007	Line Name: LAU__A024	NAVIGATION	DATE: 2009-01-30
	Line Brg: 281 °	LINE LOGS	JULIAN DAY: 30

CLIENT: National Science Foundation | SURVEY: Lau Basin | MGL0903

DC SOL: 430.0m
DC EOL: -802mC21
SMG SOL: 4.3 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 4-7 knots
WIND EOL:
SEAS SOL: 1 m
SEAS EOL:

DEPTH SOL: 2309.0m
DEPTH EOL: 1888m
FEATHER SOL: n/a "
FEATHER EOL: n/a "
MAX FEATHER: n/a "

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Erica Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
7022	16:46	FSP	Start of line, first shot point
7171	00:56		String 1 turned off
7175	01:08		String 2 turned off
7182	01:34	LGSP	End of line, last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	7022	-20° 35' 32.769"	-176° 48' 36.130"
LSP	7182	-20° 36' 25.509"	-176° 30' 22.290"

NAVIGATION OFFSET APPLIED

NRP - COS	-180
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:
S1 GPS KO'd
S2 GPS KO'd
Acoustic String 1 Bad

P1: Lau_A024.0.p190
P2: Lau_A024.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 007	LAU__A024	30	281	6030		450m	

Seq# 008

Line Name: LAU__A023

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-01-31

JULIAN DAY: 31

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL:

DC EOL:

SMG SOL:

SMG EOL:

WEATHER

WIND SOL: 15 kn knots

WIND EOL:

SEAS SOL: 3.5ft

SEAS EOL:

DEPTH SOL: 2167.0m

DEPTH EOL: 2338.0m

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Regan Austin, Erica Emry

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
8016	02:00	FSP	Start of line, first shot point
8023	02:25		String 1 turned on
8026	02:36		String 2 turned on
8028	02:40		FGSP
8167	10:10		LGSP
8177	10:40	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	8016	-20° 33' 21.489"	-179° 30' 30.900"
LSP	8177	-20° 40' 13.440"	-179° 49' 37.020"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:

S1 GPS KO'd

S2 GPS KO'd

Acoustic String 1 Bad

P1: Lau_A023.0.p190

P2: Lau_A023.0.p294

No Streamer

Pisnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 008	LAU__A023	31	101	6030	8167	450m	

Seq# 009

Line Name: LAU__A022

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-01-31

JULIAN DAY: 31

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *145 m +*
DC EOL: -245 m
SMG SOL: 4.0 knots
SMG EOL: **4.5 knots**
WEATHER
WIND SOL: **6 knots**
WIND EOL: **4-6 knots**
SEAS SOL: *2-4 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2340 m*
DEPTH EOL: *2155 m*
FEATHER SOL: n/a "
FEATHER EOL: n/a "
MAX FEATHER: n/a "

00:00 - 12:00 cst => Jonathan Sleeper, Regan Austin, Erica Emry
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
9020	11:09	FSP	Start of line, first shot point: 9020
9031	11:49	FGSP	First good shot point
9175	19:34	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	9020	-20° 42' 03.180"	176° 50' 06.360"
LSP	9175	-20° 34' 52.680"	176° 29' 21.240"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:
S1 GPS KO'd
S2 GPS KO'd
Acoustic String 1 Bad

P1: Lau_A022.0.p190
P2: Lau_A022.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittant

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 009	LAU__A022	31	281	6030		450m	

Seq# 010

Line Name: LAU__A021

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-01-31

JULIAN DAY: 31

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -328.0m
DC EOL:
SMG SOL: 4.5 knots
SMG EOL:
WEATHER
WIND SOL: 4-8 knots
WIND EOL:
SEAS SOL: 1 m
SEAS EOL:

DEPTH SOL: 2179.0m
DEPTH EOL: 2354.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst => Jonathan Sleeper, Regan Austin, Erica Emry
12:00 - 24:00 cst => Michaela Conley

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
10022	20:04	FSP	Start of line
10022	20:04	FGSP	
10105	00:44		Maggie turned off
10114	1:12		String 2 turned off
10114	1:12	LGSP	Last good shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (W)
FSP	10022	-20° 36' 46.149"	-176° 29' 51.700"
LSP	10114	-20° 41' 15.780"	-176° 06' 18.000"

NAVIGATION OFFSET APPLIED

NRP - COS		-180
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:
S1 GPS KO'd
S2 GPS KO'd
Acoustic String 1 Bad
S2 significant air leak

P1: Lau_A021.0.p190
P2: Lau_A021.0.p294

No Streamer

Drawat locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 010	LAU__A021	31	101	6030		450m	

Seq# 011

Line Name: LAU__A022A

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-01

JULIAN DAY: 32

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 145 m +
DC EOL:
SMG SOL: 4.0 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 6.5 knots
WIND EOL: 4.2 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: 2520 m
DEPTH EOL: 2515.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Michaela Conley, Olga Hernandez

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
11024	01:51	FSP	Start of line; first shot point
11030	2:10	FGSP	First good shot point
11041	02:46	LGSP	Last good shot point
11041	02:46	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	11024	-20° 39' 35.580"	-176° 07' 21.960"
LSP	11041	-20° 38' 59.340"	-176° 11' 51.720"

NAVIGATION OFFSET APPLIED

NRP - COS	-180
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A022A.0.p190
P2: Lau_A022A.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 011	LAU__A022A	32	281	11030	11041	450m	

Seq# 012

Line Name: LAU__A021
Line Brg: 101 °

NAVIGATION
LINE LOGS

DATE: 2009-02-01
JULIAN DAY: 32

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 145 m +
DC EOL: 635.0m
SMG SOL: 4.0 knots
SMG EOL:
WEATHER
WIND SOL: 5.7 knots
WIND EOL: 5.3 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: 2468.0m
DEPTH EOL: 2359.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
12092	03:12	FSP	Start of line; first shot point
12092	03:12	FGSP	First good shot point
12168	07:20	LGSP	Last good shot point
12180	07:59	LGS	Last good shot

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	12092	-20° 40' 21.420"	-176° 12' 10.560"
LSP	12180	-20° 44' 55.200"	-176° 49' 52.080"

NAVIGATION OFFSET APPLIED

NRP - COS	-180
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A021.0.p190
P2: Lau_A021.0.p294

No Streamer

Psnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 012	LAU__A021	32	101	12092	12168	450m	

Seq# 013

Line Name: LAU__A020

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-01

JULIAN DAY: 32

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *340.0m*
DC EOL: -261.0m
SMG SOL: 4.5 knots
SMG EOL: 4.0-4.5 knots
WEATHER
WIND SOL: 7.2 knots
WIND EOL: 7-9 knots
SEAS SOL:
SEAS EOL: *1 m*

DEPTH SOL: *2370.0m*
DEPTH EOL: *2113.5m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
13018	08:26	FSP	Start of line; first shot point
13025	08:50	FGSP	First good shot point
13175	17:06	LGSP	Last good shot point
13175	17:06	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	13018	-20° 46' 37.200"	-176° 50' 29.940"
LSP	13175	-20° 39' 20.400"	-176° 30' 20.220"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A020.0.p190
P2: Lau_A020.0.p294

No Streamer

Psnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 013	LAU__A020	32	281	13025		450m	

Seq# 014

Line Name: WTURNS

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-01

JULIAN DAY: 32

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -253.0m
DC EOL: -244.9m
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 1-2 knots
WIND EOL: 1-2 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2058.1m
DEPTH EOL: 2136.1m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
14097	17:11	FSP	Start of line; first shot point
14097	17:11	FGSP	First good shot point
14103	17:31	LGSP	Last good shot point
14103	17:31	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	14097	20° 39' 32.447"	176° 30' 38.126"
LSP	14103		

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A020.0.p190
P2: Lau_A020.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 014	WTURNS	32	191	13025		450m	

Seq# 015

Line Name: LAU__A019

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-02-01

JULIAN DAY: 32

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -491.3m
DC EOL: 577.0m
SMG SOL: 4.4 knots
SMG EOL: 4.7 knots

WEATHER
WIND SOL: 3 knots
WIND EOL: 2.1 knots
SEAS SOL: flat
SEAS EOL:

DEPTH SOL: 2128.1m
DEPTH EOL: 2339.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
15022	17:33	FSP	Start of line; first shot point
15022	17:33	FGSP	First good shot point
15149	00:27	LGSP	Last good shot point
15150	00:28	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	15022	-20° 41' 07.678"	-176° 38' 52.295"
LSP	15150	-20° 47' 40.260"	-175° 58' 36.790"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A019.0.p190
P2: Lau_A019.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 015	LAU__A019	32	101	15025	15149	450m	

Seq# 016

Line Name: LAU__A018

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-02

JULIAN DAY: 33

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *50.0m*
DC EOL: -560.0m
SMG SOL: 4.1 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 6.1 knots
WIND EOL: 9.5 knots
SEAS SOL: *flat*
SEAS EOL:

DEPTH SOL: *2354.0m*
DEPTH EOL: *2275.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
16049	01:00	FSP	Start of line; first shot point
16049	01:00	FGSP	First good shot point
16150	06:27	LGSP	Last good shot point
16150	06:27	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	16049	-20° 49' 39.060"	-176° 59' 23.940"
LSP	16150	-20° 45' 07.980"	-176° 25' 01.740"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A018.0.p190
P2: Lau_A018.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 016	LAU__A018	33	281	16049	16150	450m	

Seq# 017

Line Name: LAU__WTurnsA

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-02

JULIAN DAY: 33

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 60.0m
DC EOL: -465.0m
SMG SOL: 4.4 knots
SMG EOL: 4.4 knots

WEATHER
WIND SOL: 4.2 knots
WIND EOL: 0.6 knots
SEAS SOL: flat
SEAS EOL:

DEPTH SOL: 2369.0m
DEPTH EOL: 2259.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
17026	06:41	FSP	Start of line; first shot point
17026	06:41	FGSP	First good shot point
17029	06:52	LGSP	Last good shot point
17029	06:52	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	17026	-20° 46' 50.840"	-176° 25' 30.300"
LSP	17029	-20° 46' 47.520"	-176° 25' 26.520"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_WTurnsA.0.p190
P2: Lau_WTurnsA.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 017	LAU__WTurnsA	33	191	17026	17029	450m	

Seq# 018

Line Name: LAU__A017

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-02-02

JULIAN DAY: 33

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -34.0m
DC EOL: 515.0m
SMG SOL: 4.4 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 3 knots
WIND EOL: 5-7 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2199.0m
DEPTH EOL: 2375.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
18049	07:00	FSP	Start of line; first shot point
18049	07:00	FGSP	First good shot point
18150	12:32	LGSP	Last good shot point
18150	12:32	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	18049	-20° 47' 07.620"	-176° 25' 00.120"
LSP	18150	-20° 52' 18.600"	-175° 59' 25.020"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A017.0.p190
P2: Lau_A017.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 018	LAU__A017	33	101	18049		450m	

Seq# 019	Line Name: EturnA	NAVIGATION	DATE: 2009-02-02
	Line Brg: 191 °	LINE LOGS	JULIAN DAY: 33

CLIENT: National Science Foundation | SURVEY: Lau Basin | MGL0903

DC SOL: -1335.0m
DC EOL: -1244.0m
SMG SOL: 4.6 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 9-11 knots
WIND EOL: 13-16 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2375.0m
DEPTH EOL: 2372.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
19023	12:36	FSP	Start of line; first shot point
19023	12:36	FGSP	First good shot point
19029	12:56	LGSP	Last good shot point
19029	12:56	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	19023	-20° 53' 32.149"	-179° 59' 18.145"
LSP	19029	-20° 53' 57.514"	-179° 59' 40.000"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: EturnA.0.p190
P2: EturnA.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 019	EturnA	33	191	18049		450m	

Seq# 020

Line Name: LAU__A016

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-02

JULIAN DAY: 33

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 262.3m
DC EOL: 243.0m
SMG SOL: 4.4 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 4 knots
WIND EOL: 6 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2372.0m
DEPTH EOL: 2384.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
20048	13:00	FSP	Start of line; first shot point
20048	13:00	FGSP	First good shot point
20146	18:18	LGSP	Last good shot point
20146	18:18	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	20048	-20° 54' 05.639"	-176° 59' 56.155"
LSP	20146	-20° 49' 37.149"	-176° 24' 56.160"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A016.0.p190
P2: Lau_A016.0.p294

No Streamer

Drawn locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 020	LAU__A016	33	281	18049		450m	

Seq# 021

Line Name: WturnB

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-02

JULIAN DAY: 33

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 262.3m
DC EOL: 243 m
SMG SOL: 4.5 knots
SMG EOL: 4.2 knots

WEATHER
WIND SOL: 6 knots
WIND EOL: 2 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2372.0m
DEPTH EOL: 2353.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper, Regan Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
21023	18:24	FSP	Start of line; first shot point
21023	18:24	FGSP	First good shot point
21029	18:45	LGSP	Last good shot point
21029	18:45	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	21023	-20° 49' 55.910"	-176° 25' 20.220"
LSP	21029	-20° 51' 24.180"	-176° 25' 28.440"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A016.0.p190
P2: Lau_A016.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 021	WturnB	33	191	18049		450m	

Seq# 022

Line Name: LAU_A015
Line Brg: 101 °

NAVIGATION
LINE LOGS

DATE: 2009-02-02
JULIAN DAY: 33

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: -421.9m
DC EOL: 395.0m
SMG SOL: 4.2 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 2 knots
WIND EOL: 4.2 knots
SEAS SOL: flat
SEAS EOL:

DEPTH SOL: 2285.0m
DEPTH EOL: 2361.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
22051	18:47	FSP	Start of line; first shot point
22051	18:47	FGSP	First good shot point
22175	1:28	LGSP	Last good shot point
22175	1:28	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	22051	-20° 51' 30.000"	-176° 25' 24.060"
LSP	22175	-20° 57' 55.980"	-175° 53' 53.340"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A015.0.p190
P2: Lau_A015.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 022	LAU_A015	33	101	22051	22175	450m	

Seq# 023

Line Name: LAU_A014
Line Brg: 281 °

NAVIGATION
LINE LOGS

DATE: 2009-02-03
JULIAN DAY: 34

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *103.0m*
DC EOL:
SMG SOL: 3.0 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 2.7 knots
WIND EOL: 5 knots
SEAS SOL: *flat*
SEAS EOL: *2-4 ft;*

DEPTH SOL: *2379.0m*
DEPTH EOL: *2144.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
23023	02:11	FSP	Start of line; first shot point
23033	02:54	FGSP	First good shot point
230174	10:35	LGSP	Last good shot point
230174	10:35	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	23023	-20° 59' 48.439"	-176° 54' 34.800"
LSP	23174	-20° 52' 47.520"	-176° 33' 03.300"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A014.0.p190
P2 Lau_A014.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 023	LAU_A014	34	281	23033		450m	

Seq# 024

Line Name: LAU_A014A
Line Brg: 174 °

NAVIGATION
LINE LOGS

DATE: 2009-02-03
JULIAN DAY: 34

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *16.0m*
DC EOL:
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER good
WIND SOL: 4.2 knots
WIND EOL: 5 knots
SEAS SOL: *2-4 ft.*
SEAS EOL: *2-4 ft.*

DEPTH SOL: *2228 m*
DEPTH EOL: *2015 m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst => Michaela Conley
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
24025	10:45	FSP	Start of line; first shot point
24045	10:45	FGSP	First good shot point
24050	12:09	LGSP	Last good shot point
24050	12:09	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	24025	-20° 53' 19.860"	-176° 33' 27.960"
LSP	24050	-20° 59' 28.500"	-176° 32' 51.480"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A014.0.p190
P2 Lau_A014.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 024	LAU_A014A	34	174	23033		450m	

Seq# 025	Line Name: LAU_A014B	**NAVIGATION**	DATE: 2009-02-03	RV Langseth
	Line Brg: 132 °	**LINE LOGS**	JULIAN DAY: 34	LDEO

CLIENT: National Science Foundation | SURVEY: Lau Basin | MGL0903

DC SOL: *16.0m*
DC EOL:
SMG SOL: 4.5 knots
SMG EOL: **4.5 knots**
WEATHER: **good**
WIND SOL: **4.2 knots**
WIND EOL: **11 knots**
SEAS SOL: *2-4 ft.*
SEAS EOL: *2-4 ft.*

DEPTH SOL: *~2100*
DEPTH EOL: *2410.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 TOT
12:00 - 24:00 TOT
Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BGM II
MAGNETOMETER: GeoMetrics 882
MAG DEC USED: 13

SP	TIME(utc)	EVENT	COMMENTS
25021	12:11	FSP	Start of line; first shot point
25021	12:11	FGSP	First good shot point
25051	13:50	LGSP	Last good shot point
25051	13:50	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	25021		
LSP	25051	-21° 04' 37.500"	-176° 26' 59.400"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A014B.0.p190
P2: Lau_A014B.0.p294

No Streamer

Pinnel locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	none
Tailbuoy #2	n/a	Gun string #2	none
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

FGSP	LGSP	sp space	comment
23033		450m	

Seq# 026

Line Name: LAU_A014C
Line Brg: 101 °

NAVIGATION
LINE LOGS

DATE: 2009-02-03
JULIAN DAY: 34

RV Langseth
LDEO

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *16.0m*
DC EOL: -367.8m
SMG SOL: 4.5 knots
SMG EOL: **4.5 knots**
WEATHER: **good**
WIND SOL: **12 knots**
WIND EOL: **15 knots**
SEAS SOL: *2-4 ft.*
SEAS EOL: *2-4 ft.*

DEPTH SOL: *2414.0m*
DEPTH EOL: *2394.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 TOT
12:00 - 24:00 TOT
Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BGM II
MAGNETOMETER: GeoMetrics 882
MAG DEC USED: 13

SP	TIME(utc)	EVENT	COMMENTS
26021	13:52	FSP	Start of line; first shot point
26021	13:52	FGSP	First good shot point
26104	18:24	LGSP	Last good shot point
26104	18:24	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	26021	-21° 04' 43.080"	-176° 26' 49.860"
LSP	26104		

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A014C.0.p190
P2: Lau_A014C.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	none
Tailbuoy #2	n/a	Gun string #2	none
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

FGSP	LGSP	sp space	comment
23033		450m	

Seq# 027	Line Name: LAU_A013	**NAVIGATION**	DATE: 2009-02-03	RV Langseth
	Line Brg: 11 °	**LINE LOGS**	JULIAN DAY: 34	LDEO

CLIENT: National Science Foundation | SURVEY: Lau Basin | MGL0903

DC SOL:
DC EOL:
SMG SOL: 4.3 knots
SMG EOL:
WEATHER: good
WIND SOL: 16 knots
WIND EOL:
SEAS SOL: *2-4 ft*
SEAS EOL: .

DEPTH SOL:
DEPTH EOL:
FEATHER SOL: n/a "
FEATHER EOL: n/a "
MAX FEATHER: n/a "

00:00 - 12:00 TOT
12:00 - 24:00 TOT Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BGM II
MAGNETOMETER: GeoMetrics 882
MAG DEC USED: 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
27023	18:29	FSP	Start of line; first shot point
27023	18:29	FGSP	First good shot point
27189	03:26	LGSP	Last good shot point – S1,S2 powered off for repairs
27205	04:19	LSP	Last shot point
27193	03:39		KO G1T1, G1T2

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	27023	-21° 08' 19.920"	-176° 05' 22.560"
LSP	27205	-20° 24' 46.840"	-175° 55' 50.040"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A013.0.p190
P2: Lau_A013.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	none
Tailbuoy #2	n/a	Gun string #2	none
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

FGSP	LGSP	sp space	comment
27023	27189	450m	

Seq# 028

Line Name: LAU_A013A

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-04

JULIAN DAY: 35

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -421.9m
DC EOL:
SMG SOL: 4.1 knots
SMG EOL:
WEATHER
WIND SOL: 4.0 knots
WIND EOL:
SEAS SOL: flat
SEAS EOL:

DEPTH SOL: 2236.0m
DEPTH EOL: 2265.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
28023	04:30	FSP	Start of line; first shot point: Line is a turn line off of A013
28023	04:30	FGSP	First good shot point
28031	04:55	LGSP	Last good shot point
28031	04:55	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	28023	-20° 24' 22.569"	-179° 58' 17.760"
LSP	28031	-20° 24' 13.929"	-179° 58' 26.640"

NAVIGATION OFFSET APPLIED

NRP - COS		-160
NRP - CNG		n/a
COS - CNG		n/a
NRP - CMP		n/a

General remarks:

P1: Lau_A013A.0.p190
P2: Lau_A013A.0.p294

No Streamer

Dsnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 028	LAU_A013A	35	281	28023		450m	

Seq# 029

Line Name: LAU_A012

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-04

JULIAN DAY: 35

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -421.9m
DC EOL: 25.8m
SMG SOL: 4.1 knots
SMG EOL: 4.2 knots
WEATHER
WIND SOL: 4.0 knots
WIND EOL: 1 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2273.0m
DEPTH EOL: 2214.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst => Michaela Conley, Olga Hernandez
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
29023	04:58	FSP	Start of line; first shot point: Line A012
29023	04:58	FGSP	First good shot point
29171	13:01	LGSP	Last good shot point
29172	13:04	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	29023	-20° 24' 37.859"	-176° 58' 43.380"
LSP	29172	-20° 59' 42.576"	-176° 06' 30.642"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A012.0.p190
P2: Lau_A012.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 029	LAU_A012	35	191	28023		450m	

Seq# 030

Line Name: LAU_A012A
Line Brg: 281 °

NAVIGATION
LINE LOGS

DATE: 2009-02-04
JULIAN DAY: 35

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 126.5m
DC EOL: 206.9m
SMG SOL: 4.7 knots
SMG EOL: 4.7 knots
WEATHER
WIND SOL: 2 knots
WIND EOL: 6 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2422.7m
DEPTH EOL: 2131.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst => Michaela Conley, Olga Hernandez
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
30023	13:11	FSP	Start of line; first shot point: Line A012A
30023	13:11	FGSP	First good shot point
30026	13:22	LGSP	Last good shot point
30026	13:22	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	30023	-21° 00' 11.659"	-176° 06' 59.274"
LSP	30026	-21° 00' 00.459"	-176° 07' 44.515"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A012A.0.p190
P2: Lau_A012A.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status: Complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 030	LAU_A012A	35	281	30023	30026	450m	

Seq# 031

Line Name: LAU_A011

Line Brg: 11 °

NAVIGATION

LINE LOGS

DATE: 2009-02-04

JULIAN DAY: 35

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *431.1m*
DC EOL: ?
SMG SOL: 4.7 knots
SMG EOL: 4.6 knots

WEATHER
WIND SOL: 8 knots
WIND EOL: 8 knots
SEAS SOL: *calm*
SEAS EOL: *calm*

DEPTH SOL: *2993.0m*
DEPTH EOL: *2360.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
31022	13:25	FSP	Start of line; first shot point: Line A011
31022	13:25	FGSP	First good shot point
31169	21:23	LGSP	Last good shot point
31175	21:43	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	31022	-20° 59' 50.639"	-176° 07' 53.526"
LSP	31175	-20° 23' 05.340"	-176° 00' 21.120"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A011.0.p190
P2: Lau_A011.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 031	LAU_A011	35	11	31022	31169	450m	

Seq# 032

Line Name: LAU_A011A
Line Brg: 281 °

NAVIGATION
LINE LOGS

DATE: 2009-02-04
JULIAN DAY: 35

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 1.4m
DC EOL:
SMG SOL: 4.5 knots
SMG EOL:
WEATHER
WIND SOL: 9 knots
WIND EOL:
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2412.0m
DEPTH EOL:
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
32024	21:53	FSP	Start of line; first shot point: Line A011
		FGSP	First good shot point
		LGSP	Last good shot point
32028	22:07	LSP	Last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	32024	-20° 23' 35.580"	-176° 00' 53.460"
LSP	32028	-20° 22' 38.207"	-176° 01' 54.646"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A011A.0.p190
P2: Lau_A011A.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 032	LAU_A011A	35	281	32024	32028	450m	

Seq# 033

Line Name: LAU_A010

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-04

JULIAN DAY: 35

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 259.5m
DC EOL:
SMG SOL: 4.5 knots
SMG EOL:

WEATHER
WIND SOL: 8 knots
WIND EOL: 2-4 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2412.0m
DEPTH EOL: 2299.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
33020	22:15	FSP	Start of line; first shot point
33027	22:36	FGSP	First good shot point
33052	23:57		Enable T1, T2
33205		LGSP	End of line; last good shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	33020	-20° 23' 16.080"	-176° 02' 41.880"
LSP	33205	-21° 07' 05.040"	-176° 12' 09.480"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A010.0.p190
P2: Lau_A010.0.p294

No Streamer

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T1, T2 KO at SOL

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 033	LAU_A010	35	191	33027	33205	450m	

Seq# 034

Line Name: LAU_A010A

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-02-05

JULIAN DAY: 36

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL:

DC EOL:

SMG SOL: 4.5 knots

SMG EOL:

WEATHER

WIND SOL: 2-4 knots

WIND EOL:

SEAS SOL: calm

SEAS EOL: calm

DEPTH SOL: 2432.0m

DEPTH EOL: 2460.0m

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
34022	08:19	FSP	Start of line; first shot point
34026	08:36	LGSP	End of line; last good shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	34022	-21° 07' 18.060"	-176° 12' 25.620"
LSP	34026	-21° 07' 05.700"	-176° 12' 31.140"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A010A.0.p190

P2 Lau_A010A.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 034	LAU_A010A	36	101	34022	34026	450m	

Seq# 035

Line Name: LAU_A009
Line Brg: 11 °

NAVIGATION
LINE LOGS

DATE: 2009-02-05
JULIAN DAY: 36

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 418.0m
DC EOL: 788.4m
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 7-9 knots
WIND EOL: 0 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2432.0m
DEPTH EOL: 2452.0m
FEATHER SOL: n/a "
FEATHER EOL: n/a "
MAX FEATHER: n/a "

00:00 - 12:00 cst => Olga Hernandez
12:00 - 24:00 cst => Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
35022	08:37	FSP	Start of line; first shot point
35024			Estimate position main 35024
35197	18:08	LGSP	Last Good Shot Point
35207	18:39	LCSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	35022	-21° 04' 59.700"	-176° 13' 35.400"
LSP	35207	-20° 22' 51.547"	-176° 03' 45.830"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A009.0.p190
P2: Lau_A009.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittant

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 035	LAU_A009	35	11	35022	35197	450m	

Seq# 036

Line Name: LAU_A009A
Line Brg: turn °

NAVIGATION
LINE LOGS

DATE: 2009-02-05
JULIAN DAY: 36

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 863.2m
DC EOL: 564.1m
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 7 knots
WIND EOL: 5 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2448.0m
DEPTH EOL: 2392.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
36021	18:48	FSP	Start of line; first shot point
36026	19:06	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	36021	-20° 22' 15.720"	176° 04' 08.108"
LSP	36026	-20° 22' 15.356"	-176° 06' 24.987"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:
String 3 onboard, no good SP's

P1 Lau_A009A.0.p190
P2 Lau_A009A.0.p294

No Streamer

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN
SP spacing: 450m

line status:

Ocean locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 036	LAU_A009A	36	turn	36021	36026	450m	

Seq# 037

Line Name: LAU_A008

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-05

JULIAN DAY: 36

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *450.0m*
DC EOL:
SMG SOL: 4.5 knots
SMG EOL:

WEATHER
WIND SOL: 7 knots
WIND EOL:
SEAS SOL: *calm*
SEAS EOL: *calm*

DEPTH SOL: *2295.0m*
DEPTH EOL: *2377.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
37022	19:15	FSP	Start of line; first shot point
37035	19:57	FGSP	First good shot point
37062	21:24	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	37022	-20° 23' 00.023"	-176° 05' 45.340"
LSP	37062	-20° 32' 22.777"	-176° 07' 27.754"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A008.0.p190
P2: Lau_A008.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	kill'd
Tailbuoy #3	n/a	Gun string #3	off
Tailbuoy #4	n/a	Gun string #4	not installed

Acoustic remarks:
T3 KO'd for gun work

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 037	LAU_A008	35	191	37035	37062	450m	

Seq# 038

Line Name: LAU_A008cont

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-05

JULIAN DAY: 36

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -3.3m
DC EOL: 1.2m
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 1 knots
WIND EOL: 1 knots
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2340.0m
DEPTH EOL: 2420.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
38077	22:23	FSP	Start of line; first shot point
38078	22:27	LSP	End of line; last shot point
			* NOTE: Vessel position is recorded with a Lon of 36', but a comparison of GPS data for start and end time is 08'.
			*Noted 7 Feb, 2009
			*Changed Longitude data to reflect that of GPS data (02/09/2009)

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	38077	-20° 35' 57.803"	-176° 08' 12.120"
LSP	38078	-20° 35' 58.000"	-176° 08' 12.000"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A008.1.p190
P2 Lau_A008.1.p294

No Streamer

Drawn locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	kill'd
Tailbuoy #3	n/a	Gun string #3	off
Tailbuoy #4	n/a	Gun string #4	not installed

Acoustic remarks:
*3 KC'd for gun work

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 038	LAU_A008cont	35	191	38077	38078	450m	

Seq# 039

Line Name: LAU_A008

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-05

JULIAN DAY: 36

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 450.0m
DC EOL:
SMG SOL: 4.5 knots
SMG EOL:

WEATHER
WIND SOL: 7 knots
WIND EOL:
SEAS SOL: calm
SEAS EOL: calm

DEPTH SOL: 2295.0m
DEPTH EOL:
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
39076	22:30	FSP	Start of line; first shot point
39076	22:30	FGSP	First good shot point
39196	5:25	LGSP	Last good shot point
39196	5:25	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	39076	-20° 36' 27.240"	-176° 08' 20.880"
LSP	39196	-21° 06' 55.700"	-176° 15' 11.460"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A008.2.p190
P2: Lau_A008.2.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	good
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 039	LAU_A008	36	191	39076	39196	450m	

Seq# 040

Line Name: LAU_A007

Line Brg: 11 °

NAVIGATION

LINE LOGS

DATE: 2009-02-06

JULIAN DAY: 37

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -50.0m
DC EOL: 552.5m
SMG SOL: 4.7 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 11.4 knots
WIND EOL: 10-12 knots
SEAS SOL:
SEAS EOL: flat

DEPTH SOL: 2222.0m
DEPTH EOL: 2436.3m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst => Michaela Conley
12:00 - 24:00 cst => Regan Austin, Erica Emry

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
40022	05:44	FSP	Start of line; first shot point
40022	05:44	FGSP	First good shot point
40221	17:09	LGSP	Last good shot point
40221	17:09	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	40022	-20° 04' 30.439"	-176° 16' 08.460"
LSP	40221	-20° 16' 24.239"	-176° 04' 51.123"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A007.0.p190
P2: Lau_A007.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T3 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status: completed

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 040	LAU_A007	37	11	40022	40221	475m	

Seq# 041

Line Name: LAU_A006

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-06

JULIAN DAY: 37

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 878.4m
DC EOL: 338m
SMG SOL: 4.5 knots
SMG EOL:
WEATHER
WIND SOL: 6-8 knots
WIND EOL: 2-4 knots knots
SEAS SOL: flat
SEAS EOL:

DEPTH SOL: 2764.4m
DEPTH EOL: 2291m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
41023	17:38	FSP	Start of line; first shot point
41023	17:38	FGSP	First good shot point
41221	04:48	LGSP	Last good shot point
41221	04:48	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	41023	-20° 16' 14.246"	-176° 06' 42.818"
LSP	41221		

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A006.0.p190
P2 Lau_A006.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 041	LAU_A006	37	191	41023	41221	475m	

Seq# 042

Line Name: LAU_A006A

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-02-07

JULIAN DAY: 38

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL:

DC EOL:

SMG SOL:

SMG EOL:

WEATHER

WIND SOL:

WIND EOL: 7.1 knots

SEAS SOL:

SEAS EOL:

DEPTH SOL:

DEPTH EOL: 2284.0m

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
42023	05:05	FSP	Start of line; first shot point
42023	05:05	FGSP	First good shot point
42026	05:17	LGSP	Last good shot point
42026	05:17	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	42023		
LSP	42026	-21° 06' 06.000"	-176° 18' 36.840"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A006A.0.p190

P2 Lau_A006A.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 042	LAU_A006A	38	101	42023	42026	475m	

Seq# 043

Line Name: LAU_A005
Line Brg: 11 °

NAVIGATION
LINE LOGS

DATE: 2009-02-07
JULIAN DAY: 38

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 306.0m
DC EOL: 111.6m
SMG SOL: 4.5 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 7.4 knots
WIND EOL: 5-7 knots
SEAS SOL:
SEAS EOL: flat

DEPTH SOL: 2284.0m
DEPTH EOL: 2622.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
43022	05:18	FSP	Start of line; first shot point
43022	05:18	FGSP	First good shot point
43192	15:03	LGSP	Last good shot point
43192	15:03	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	43022	-21° 04' 00.240"	-176° 18' 40.860"
LSP	43192	-20° 23' 06.000"	-176° 09' 30.359"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A005.0.p190
P2: Lau_A005.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 475m

line status: completed

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 043	LAU_A005	38	11	43022	43192	475m	

Seq# 044

Line Name: LAU_A028A

Line Brg: 101 °

NAVIGATION

LINE LOGS

DATE: 2009-02-07

JULIAN DAY: 38

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -22.3m
DC EOL: 323.2m
SMG SOL: 4.3 knots
SMG EOL: 4.2 knots

WEATHER
WIND SOL: 11 knots
WIND EOL: 10 knots
SEAS SOL: 1 m
SEAS EOL: 1 m

DEPTH SOL: 2729.0m
DEPTH EOL: 2262.3m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
44021	15:16	FSP	Start of line; first shot point
44021	15:16	FGSP	First good shot point
44031	15:50	LGSP	Last good shot point
44031	15:50	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	44021	-20° 23' 47.269"	-176° 08' 35.847"
LSP	44031	-20° 23' 27.561"	-176° 05' 57.265"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A028A.0.p190
P2: Lau_A028A.0.p294

No Streamer

Ocean locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status: complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 044	LAU_A028A	38	101	44021	44031	475m	

Seq# 045

Line Name: LAU_A008R
Line Brg: 191 °

NAVIGATION
LINE LOGS

DATE: 2009-02-07
JULIAN DAY: 38

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 287.0m
DC EOL: 422.0m
SMG SOL: 4.2 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 10 knots
WIND EOL: 5 knots
SEAS SOL: flat
SEAS EOL: flat

DEPTH SOL: 2295.9m
DEPTH EOL: 2396.9m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
45019	15:53	FSP	Start of line; first shot point
45019	15:53	FGSP	First good shot point
45073	18:59	LGSP	Last good shot point
45073	18:59	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	45019	-20° 23' 39.910"	-176° 05' 48.441"
LSP	45073	-20° 37' 18.120"	-176° 08' 44.520"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A008R.0.p190
P2: Lau_A008R.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN
SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 045	LAU_A008R	38	191	45019	45073	475m	

Seq# 046

Line Name: LAU_A005A
Line Brg: 2.3 °

NAVIGATION
LINE LOGS

DATE: 2009-02-07
JULIAN DAY: 38

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 57.5 m
DC EOL: -132.7m
SMG SOL: 4.3 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 3 knots
WIND EOL: 6 knots
SEAS SOL: 1-2 ft
SEAS EOL: 1-2 ft

DEPTH SOL: 2402.4m
DEPTH EOL: 2639.9m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
46018	19:19	FSP	Start of line; first shot point
46018	19:19	FGSP	First good shot point
46072	22:23	LGSP	Last good shot point
46072	22:23	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	46018	-20° 37' 13.869"	-176° 10' 08.230"
LSP	46072	-20° 23' 21.969"	-176° 09' 36.840"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A005A.0.p190
P2 Lau_A005A.0.p294

No Streamer

Pisnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 046	LAU_A005A	38	2.3 °	46018	46072	475m	

Seq# 047

Line Name: LAU_A005

Line Brg: 11 °

NAVIGATION

LINE LOGS

DATE: 2009-02-07

JULIAN DAY: 38

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -5.5 m
DC EOL: -390.0m
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 6 knots
WIND EOL: 22:30 knots
SEAS SOL: 2.7m
SEAS EOL:

DEPTH SOL: 2574.6m
DEPTH EOL: 2615.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
47193	22:30	FSP	Start of line; first shot point
47193	22:30	FGSP	First good shot point
47221	00:06	LGSP	Last good shot point
47221	00:06	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	47193	-20° 22' 51.669"	-176° 08' 30.660"
LSP	47221	-20° 15' 44.760"	-176° 08' 10.080"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A005.0.p190
P2: Lau_A005.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittant

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 047	LAU_A005	38	11 °	47193	47221	475m	

Seq# 048

Line Name: LAU_A005B
Line Brg: 281 °

NAVIGATION
LINE LOGS

DATE: 2009-02-08
JULIAN DAY: 39

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: -104.1
DC EOL: -300.0m
SMG SOL: 4.8 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 1.3 knots
WIND EOL: 0.5 knots
SEAS SOL: 1-2 ft
SEAS EOL:

DEPTH SOL: 2613.0m
DEPTH EOL: 2474.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
48023	00:12	FSP	Start of line; first shot point
48023	00:12	FGSP	First good shot point
48026	00:23	LGSP	Last good shot point
48026	00:23	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	48023	-20° 15' 25.380"	-176° 08' 29.220"
LSP	48026	-20° 15' 22.920"	-176° 08' 19.620"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A005B.0.p190
P2 Lau_A005B.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN
SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 048	LAU_A005B	39	281 °	48023	48026	475m	

Seq# 049

Line Name: LAU_A004

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-08

JULIAN DAY: 39

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -386.3
DC EOL: 189.0m
SMG SOL: 4.3 knots
SMG EOL: 4.7 knots

WEATHER
WIND SOL: 11.6 knots
WIND EOL: 10.3 knots
SEAS SOL: 1-2 ft
SEAS EOL:

DEPTH SOL: 2432.0m
DEPTH EOL: 2317.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
49022	00:25	FSP	Start of line; first shot point
49022	00:25	FGSP	First good shot point
49189	10:00	LGSP	Last good shot point
49189	10:00	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	49022	-20° 15' 28.380"	-176° 09' 28.500"
LSP	49189	-20° 57' 34.680"	-176° 18' 57.540"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A004.0.p190
P2: Lau_A004.0.p294

No Streamer

Drawal locations & remarks: good - none - intermittant

Tailbouy #1	n/a	Gun string #1	bad
Tailbouy #2	n/a	Gun string #2	bad
Tailbouy #3	n/a	Gun string #3	good
Tailbouy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 049	LAU_A004	39	191 °	49022	49189	475m	

Seq# 050

Line Name: LAU_A004A

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-08

JULIAN DAY: 39

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: 82.7

DC EOL: 270.1m

SMG SOL: 4.1 knots

SMG EOL: 4.5 knots

WEATHER

WIND SOL: 7.2 knots

WIND EOL: 3.3 knots

SEAS SOL:

SEAS EOL:

DEPTH SOL: 2308.0m

DEPTH EOL: 2527.0m

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst =>

NAVIGATION SYSTEM USEDC-Nav - Primary

NAVIGATION SYSTEM USEDSeaPath 200

NAVIGATION SYSTEM USEDPosnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
50023	10:09	FSP	Start of line; first shot point
50023	10:09	FGSP	First good shot point
50026	10:21	LGSP	Last good shot point
50026	10:21	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	50023	-20° 57' 50.340"	-176° 19' 28.140"
LSP	50026	-20° 57' 34.620"	-176° 20' 14.820"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A004A.0.p190

P2 Lau_A004A.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 050	LAU_A004A	39	191 °	50023	50026	475m	

Seq# 051

Line Name: LAU_A003
Line Brg: 11 °

NAVIGATION
LINE LOGS

DATE: 2009-02-08
JULIAN DAY: 39

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 388.9
DC EOL:
SMG SOL: 4.4 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 2.1 knots
WIND EOL: 2 knots
SEAS SOL: 1-2 ft
SEAS EOL: 1-2 ft

DEPTH SOL: 2432.0m
DEPTH EOL: 2382.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Erica Emry, Jonathan Sleepr

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
51022	10:23	FSP	Start of line; first shot point
51022	10:23	FGSP	First good shot point
51164	18:31	LGSP	Last good shot point
51164	18:31	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	51022	-20° 57' 26.280"	-176° 20' 21.000"
LSP	51164	-20° 21' 33.060"	-176° 12' 52.860"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A003.0.p190
P2: Lau_A003.0.p294

No Streamer

Pisnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN
SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
Seq# 051	LAU_A003	39	11 °	51022	51164	475m	

Seq# 052

Line Name: LAU_A003A
Line Brg: turn °

NAVIGATION
LINE LOGS

DATE: 2009-02-08
JULIAN DAY: 39

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: -394.6m
DC EOL: -263.3m
SMG SOL: 4.3 knots
SMG EOL: 4.3 knots

WEATHER
WIND SOL: 2 knots
WIND EOL: 2 knots
SEAS SOL: 1-2 ft
SEAS EOL: 1-2 ft

DEPTH SOL: 2350.0m
DEPTH EOL: 2245.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
52022	18:35	FSP	Start of line; first shot point
52022	18:35	FGSP	First good shot point
52026	18:51	LGSP	Last good shot point
52026	18:51	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	52022	-20° 21' 20.519"	-176° 12' 59.826"
LSP	52026	-20° 21' 19.029"	-176° 13' 00.960"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A003A.0.p190
P2: Lau_A003A.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
052	LAU_A003A	39	turn °	52022	52026	475m	

Seq# 053

Line Name: LAU_A002

Line Brg: 191 °

NAVIGATION

LINE LOGS

DATE: 2009-02-08

JULIAN DAY: 39

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: -390.5

DC EOL:

SMG SOL: 4.3 knots

SMG EOL: 4.6 knots

WEATHER

WIND SOL: 3 knots

WIND EOL: 8.8 knots

SEAS SOL: 1-2 ft

SEAS EOL:

DEPTH SOL: 2223.0m

DEPTH EOL: 2349.0m

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst => Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary

NAVIGATION SYSTEM USED: SeaPath 200

NAVIGATION SYSTEM USED: Posnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
53022	18:54	FSP	Start of line; first shot point
53022	18:54	FGSP	First good shot point
53196	04:52	LGSP	Last good shot point
53196	04:52	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	53022	-20° 21' 10.200"	-176° 14' 14.520"
LSP	53196	-21° 04' 56.150"	-176° 21' 13.310"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A002.0.p190

P2: Lau_A002.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

T4 KO'd

Langseth: LauPhase1 source_lim.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
053	LAU_A002	39	191 °	53022	53196	475m	

Seq# 054

Line Name: LAU_A002A

Line Brg: 281 °

NAVIGATION

LINE LOGS

DATE: 2009-02-09

JULIAN DAY: 40

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *-6.1*

DC EOL:

SMG SOL: 4.5 knots

SMG EOL: 4.3 knots

WEATHER

WIND SOL: 9.9 knots

WIND EOL: 8.9 knots

SEAS SOL: *1-2 ft*

SEAS EOL:

DEPTH SOL: *2403.0m*

DEPTH EOL: *2419.0m*

FEATHER SOL: n/a °

FEATHER EOL: n/a °

MAX FEATHER: n/a °

00:00 - 12:00 cst =>

12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary

NAVIGATION SYSTEM USED: SeaPath 200

NAVIGATION SYSTEM USED: Posnet

GRAVITY METER: BMG-II:

MAGNETOMETER: GeoMetrics:

MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
54028	05:13	FSP	Start of line; first shot point
54028	05:13	FGSP	First good shot point
54030	05:21	LGSP	Last good shot point
54030	05:21	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	54028	-21° 04' 55.399"	-176° 25' 54.798"
LSP	54030	-21° 04' 41.217"	-176° 26' 25.392"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A002A.0.p190

P2: Lau_A002A.0.p294

No Streamer

Drawn locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
054	LAU_A002A	40	281 °	54028	54030	475m	

Seq# 55

Line Name: LAU_A001

Line Brg: 11 °

NAVIGATION

LINE LOGS

DATE: 2009-02-09

JULIAN DAY: 40

CLIENT: National Science Foundation

SURVEY: Lau Basin

MGL0903

DC SOL: *436.8*
DC EOL: *291.5m*
SMG SOL: 4.6 knots
SMG EOL: 4.2 knots
WEATHER
WIND SOL: 9.3 knots
WIND EOL: 9 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *1-2 ft*

DEPTH SOL: *2423.0m*
DEPTH EOL: *2515.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Sleeper, Austin

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
55022	05:24	FSP	Start of line; first shot point
55022	05:24	FGSP	First good shot point
55196	15:26	LGSP	Last good shot point
55196	15:26	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	55022	-21° 04' 32.113"	-176° 28' 33.169"
LSP	55196	-20° 20' 36.156"	-176° 17' 05.986"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A001.0.p190
P2 Lau_A001.0.p294

No Streamer

Deanet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
055	LAU_A001	40	11 °	55022	55196	475m	

Seq# 056

Line Name: LAU_A001A
Line Brg: 165 °

NAVIGATION
LINE LOGS

DATE: 2009-02-09
JULIAN DAY: 40

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: 430.1
DC EOL: 529.6m
SMG SOL: 4.4 knots
SMG EOL: 4.2 knots
WEATHER
WIND SOL: 7 knots
WIND EOL: 5 knots
SEAS SOL: 1-2 ft
SEAS EOL: 1-2 ft

DEPTH SOL: 2352.0m
DEPTH EOL: 2503.0m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Austin, Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
56021	15:45	FSP	Start of line; first shot point
56021	15:45	FGSP	First good shot point
56085	19:26	LGSP	Last good shot point
56085	19:26	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	56021	-20° 20' 33.659"	-176° 15' 44.313"
LSP	56085	-20° 36' 28.628"	-176° 11' 13.345"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_A001A.0.p190
P2: Lau_A001A.0.p294

No Streamer

Towed locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_tim.SCN(001) langseth.RTCN

SP spacing: 475m

line status: complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
056	LAU_A001A	40	165 °	56021	56085	475m	

Seq# 057

Line Name: LAU_A001B
Line Brg: 246 °

NAVIGATION
LINE LOGS

DATE: 2009-02-09
JULIAN DAY: 40

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *51.6 m*
DC EOL: *-6.3m*
SMG SOL: 4.3 knots
SMG EOL: 4.1 knots
WEATHER
WIND SOL: 1 knots
WIND EOL: 6-7 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2510.3m*
DEPTH EOL: *2241.6m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Austin, Emry

NAVIGATION SYSTEM USEDC-Nav - Primary
NAVIGATION SYSTEM USEDSeaPath 200
NAVIGATION SYSTEM USEDPosnet
GRAVITY METER: BMG-II:
MAGNETOMETER: GeoMetrics:
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
57023	19:30	FSP	Start of line; first shot point
57023	19:30	FGSP	First good shot point
57064	21:51	LGSP	Last good shot point
57064	21:51	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	57023	-20° 38' 40.823"	-176° 11' 24.863"
LSP	57064	-20° 40' 51.443"	-176° 21' 42.542"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_A001B.0.p190
P2 Lau_A001B.0.p294

No Streamer

Planet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	bad
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
T4 KO'd

Langseth: LauPhase1 source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status: completed

Seq	Line Name	J- Day	DIR	FGSP	LGSP	sp space	comment
056	LAU_A001B	40	11 °	57023	57064	475m	

Seq# 058

Line Name: LAU_B001 **Line Brg:** 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-12 **JULIAN DAY:** 43

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-7.2* **DC EOL:** *-207.2m*
SMG SOL: 3.0 knots **SMG EOL:** 4.5 knots
WEATHER
WIND SOL: 5.5 knots **WIND EOL:** 3.3 knots
SEAS SOL: **SEAS EOL:**

DEPTH SOL: *2281.0m* **DEPTH EOL:** *2162.0m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a ° **MAX FEATHER:** n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
58014	23:48	FSP	Start of line; first shot point
58014	23:48	FGSP	First good shot point
58143	07:33	LGSP	Last good shot point
58149	07:56	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	58014	-20° 37' 53.520"	-175° 58' 40.380"
LSP	58149	-20° 02' 02.538"	-175° 51' 00.095"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B001.0.p190 **P2** Lau_B001.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
056	LAU_B001	43	11 °	58014	58143

Seq# 059	Line Name:	LAU_B001A	NAVIGATION	DATE:	2009-02-13
	Line Brg:	281 °	LINE LOGS	JULIAN DAY:	44

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *-376.6m*
DC EOL: *-74.4m*
SMG SOL: 4.2 knots
SMG EOL: 4.7 knots
WEATHER
WIND SOL: 5.9 knots
WIND EOL: 8.8 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2203.0m*
DEPTH EOL: *2323.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
59022	07:59	FSP	Start of line; first shot point
		FGSP	First good shot point
		LGSP	Last good shot point
59025	08:11	LSP	End of line; last shot point
			String 2 pulled out of water during duration of shooting

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	59022	-20° 01' 49.188"	-175° 51' 07.438"
LSP	59025	-20° 01' 29.917"	-175° 51' 55.959"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B001A.0.p190
P2: Lau_B001A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
056	LAU_B001A	44	281 °		

Seq# 060

Line Name: LAU_B002 **Line Brg:** 191 °

NAVIGATION LINE LOGS

DATE: 2009-02-13 **JULIAN DAY:** 44

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-7.2m*
DC EOL: *277.0m*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 8.9 knots
WIND EOL: 11 knots
SEAS SOL: *2-4 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2331.0m*
DEPTH EOL: *2008.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst ==
12:00 - 24:00 cst ==Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
60027	08:37	FSP	Start of line; first shot point
60043	09:34	FGSP	First good shot point
60179	17:47	LGSP	Last good shot point
60179	17:47	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	60027	-20° 02' 56.652"	-175° 52' 50.431"
LSP	60179	-20° 43' 15.831"	-176° 01' 45.902"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B002.0.p190 **P2** Lau_B002.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
060	LAU_B002	44	191 °	60043	60179

Seq# 061

Line Name: LAU_B002A
Line Brg: 281 °

NAVIGATION LINE LOGS

DATE: 2009-02-13
JULIAN DAY: 44

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *423.2m*
DC EOL: *119.8m*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 12 knots
WIND EOL: 11 knots
SEAS SOL: *2-4 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *1998.0m*
DEPTH EOL: *2344.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
61022	17:49	FSP	Start of line; first shot point
61022	17:49	FGSP	First good shot point
61027	18:08	LGSP	Last good shot point
61027	18:08	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	61022	-20° 43' 15.831"	-176° 01' 45.902"
LSP	61027	-20° 43' 16.008"	-176° 03' 22.041"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B002A.0.p190	Lau_B002A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
061	LAU_B002A	44	281 °	61022	61027

Seq# 062

Line Name: LAU_B003 **Line Brg:** 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-13 **JULIAN DAY:** 44

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *119.8m*
DC EOL: *-5.5m*
SMG SOL: 4.5 knots
SMG EOL: 4.6 knots

WEATHER
WIND SOL: 12 knots
WIND EOL: 9.1 knots
SEAS SOL: *2-4 ft*
SEAS EOL:

DEPTH SOL: *2343.0m*
DEPTH EOL: *2154.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
62022	18:13	FSP	Start of line; first shot point
62022	18:13	FGSP	First good shot point
62160	02:31	LGSP	Last good shot point
62160	02:31	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	62022	-20° 43' 16.008"	-176° 03' 22.041"
LSP	62160	-20° 06' 19.270"	-175° 55' 55.831"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B003.0.p190 **P2** Lau_B003.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
062	LAU_B003	44	11 °	62022	62160

Seq# 063

Line Name: LAU_B004 **Line Brg:** 191 °

NAVIGATION LINE LOGS

DATE: 2009-02-14 **JULIAN DAY:** 45

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-305.2m* **DC EOL:** *215.7m*
SMG SOL: 4.1 knots **SMG EOL:** 4.4 knots
WEATHER
WIND SOL: 12.0 knots **WIND EOL:** 9 knots
SEAS SOL: *1-2 ft* **SEAS EOL:** *1-2 ft*

DEPTH SOL: *2211.1m* **DEPTH EOL:** *2524.0m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
63016	03:12	FSP	Start of line; first shot point
63016	03:12	FGSP	First good shot point
63159	11:48	LGSP	Last good shot point
63159	11:48	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	63016	-20° 04' 35.441"	-175° 57' 08.290"
LSP	63159	-20° 42' 29.766"	-176° 05' 40.759"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B004.0.p190 **P2** Lau_B004.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
063	LAU_B004	45	191 °	63016	63159

Seq# 064	Line Name:	LAU_B004A	NAVIGATION	DATE:	2009-02-14
	Line Brg:	281 °	LINE LOGS	JULIAN DAY:	45

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *375.7m*
DC EOL: *365.9m*
SMG SOL: 4.4 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 9 knots
WIND EOL: 11 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *1-2 ft*

DEPTH SOL: *2527.0m*
DEPTH EOL: *2534.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
64022	11:51	FSP	Start of line; first shot point
64022	11:51	FGSP	First good shot point
64026	12:07	LGSP	Last good shot point
64026	12:07	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	64022	-20° 42' 38.802"	-176° 05' 52.793"
LSP	64026	-20° 42' 26.213"	-176° 07' 00.593"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B004A.0.p190
P2: Lau_B004A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
064	LAU_B004A	45	281 °	64022	64026

Seq# 065	**Line Name:** LAU_B005	**NAVIGATION**	**DATE:** 2009-02-14
	Line Brg: 11 °	**LINE LOGS**	**JULIAN DAY:** 45

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *75.7m*
DC EOL: *-236.7m*
SMG SOL: 4.3 knots
SMG EOL: 4.3 knots

WEATHER
WIND SOL: 11 knots
WIND EOL: 10 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *1-2 ft*

DEPTH SOL: *2532.0m*
DEPTH EOL: *2554.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
65023	12:13	FSP	Start of line; first shot point
65023	12:13	FGSP	First good shot point
65179	21:35	LGSP	Last good shot point
65179	21:35	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	65023	-20° 42' 03.280"	-176° 07' 10.578"
LSP	65179	-20° 00' 36.517"	-175° 58' 21.193"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B005.0.p190 **P2** Lau_B005.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
065	LAU_B005	45	11 °	65023	

Seq# 066

Line Name: LAU_B005A
Line Brg: 281 °

NAVIGATION LINE LOGS

DATE: 2009-02-14
JULIAN DAY: 45

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *-371.8m*
DC EOL: *-366.9m*
SMG SOL: 4.2 knots
SMG EOL: 4 knots
WEATHER
WIND SOL: 11 knots
WIND EOL: 10 knots
SEAS SOL: *1-2ft*
SEAS EOL: *1-2 ft*

DEPTH SOL: *2560.0m*
DEPTH EOL: *2617.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst ==
12:00 - 24:00 cst ==Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
66022	21:38	FSP	Start of line; first shot point
66022	21:38	FGSP	First good shot point
66026	21:55	LGSP	Last good shot point
66026	21:55	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	66022	-20° 00' 25.116"	-175° 58' 27.916"
LSP	66026	-20° 00' 12.112"	-175° 59' 35.337"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B005.0.p190
P2 Lau_B005.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
066	LAU_B005A	45	11 °	65023	

Seq# 067	**Line Name:** LAU_B006	**NAVIGATION**	**DATE:** 2009-02-14
	Line Brg: 191 °	**LINE LOGS**	**JULIAN DAY:** 45

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-381.1m*
DC EOL: *305.7m*
SMG SOL: 4.3 knots
SMG EOL:
WEATHER
WIND SOL: 10 knots
WIND EOL: 6.7 knots
SEAS SOL: *1-2 ft*
SEAS EOL:

DEPTH SOL: *2621.0m*
DEPTH EOL: *2324.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
67022	21:57	FSP	Start of line; first shot point
67022	21:57	FGSP	First good shot point
67180	07:25	LGSP	Last good shot point
67180	07:25	LCSP	Last charted shot point
67182	07:32		Knocked out string 3 and 4 acoustics and GPS for recovery
67186	07:48	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	67022	-20° 00' 15.513"	-175° 59' 40.808"
LSP	67186	-20° 43' 43.178"	-176° 09' 31.734"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B006.0.p190 **P2** Lau_B006.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
067	LAU_B006	45	191 °	67022	67180

Seq# 068	Line Name:	LAU_B006A	NAVIGATION	DATE:	2009-02-15
	Line Brg:	281 °	LINE LOGS	JULIAN DAY:	46

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-3021.0m*
DC EOL: *-2785.0m*
SMG SOL: 4.4 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 8.6 knots
WIND EOL: 6.5 knots
SEAS SOL: *1-2 ft*
SEAS EOL:

DEPTH SOL: *2324.7m*
DEPTH EOL: *2233.2m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
68022	07:49	FSP	Start of line; first shot point
68022	07:49	FGSP	First good shot point
68028	08:13	LGSP	Last good shot point
68028	08:13	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	68022	-20° 43' 48.354"	-176° 09' 39.417"
LSP	68028	-20° 43' 21.475"	-176° 11' 19.413"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B006A.0.p190
P2: Lau_B006A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
068	LAU_B006A	46	281 °	68022	68028

Seq# 069

Line Name: LAU_B007 **Line Brg:** 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-15 **JULIAN DAY:** 46

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *13.4m* **DC EOL:** *171.9m*
SMG SOL: 3.0 knots **SMG EOL:** 4.6 knots
WEATHER
WIND SOL: 6.5 knots **WIND EOL:** 12 knots
SEAS SOL: *1-2 ft* **SEAS EOL:** *1-2 ft*

DEPTH SOL: *2194.8m* **DEPTH EOL:** *2663.0m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a ° **MAX FEATHER:** n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
69020	08:37	FSP	Start of line; first shot point
69026	09:02	FGSP	First good shot point
69180	18:17	LGSP	Last good shot point
69180	18:17	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	69020	-20° 42' 05.455"	-176° 11' 20.326"
LSP	69180	-19° 59' 38.075"	-176° 02' 01.185"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B007.0.p190 **P2** Lau_B007.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
069	LAU_B007	46	11 °	69026	

Seq# 070	**Line Name:** LAU_B007A	**NAVIGATION**	**DATE:** 2009-02-15	
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 46	

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *376.7m*
DC EOL: *63.5m*
SMG SOL: 4.5 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 9 knots
WIND EOL: 8 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *1-2ft*

DEPTH SOL: *2663.0m*
DEPTH EOL: *2676.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
70023	18:27	FSP	Start of line; first shot point
70023	18:27	FGSP	First good shot point
70026	18:39	LGSP	Last good shot point
70026	18:39	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	70023	-19° 59' 16.046"	-176° 02' 20.184"
LSP	70026	-19° 59' 13.380"	-176° 03' 30.840"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B007A.0.p190	Lau_B007A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
070	LAU_B007A	46	11 °	70023	70026

Seq# 071	**Line Name:** LAU_B008	**NAVIGATION**	**DATE:** 2009-02-15
	Line Brg: 191 °	**LINE LOGS**	**JULIAN DAY:** 46

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *434.5m*
DC EOL: *-3.2m*
SMG SOL: 4.4 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 5 knots
WIND EOL: 5-7 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2647.0m*
DEPTH EOL: *2381.9m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
71022	18:44	FSP	Start of line; first shot point
71022	18:44	FGSP	First good shot point
71180	04:14	LCSP	Last charted shot point
71181	04:18	LGSP	Last good shot point
71183	4:26:58		KO G1T2 for recovery
71200	5:27:42	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	71022	-19° 59' 28.794"	-176° 03' 45.724"
LSP	71200	-20° 46' 46.206"	-176° 13' 50.257"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B008.0.p190 **P2** Lau_B008.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
071	LAU_B008	46	191 °	71022	71200

Seq# 072

Line Name: LAU_B009 **Line Brg:** 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-16 **JULIAN DAY:** 47

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-1469.5* **DC EOL:** *-245.7m*
SMG SOL: 4.5 knots **SMG EOL:**
WEATHER
WIND SOL: 4.2 knots **WIND EOL:** 4.2 knots
SEAS SOL: *1-2 ft* **SEAS EOL:** *1-2 ft*

DEPTH SOL: *2473.5m* **DEPTH EOL:** *2574.0m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
72019	07:21	FSP	Start of line; first shot point
72019	07:21	FGSP	First good shot point
72021	07:26	FCSP	First chartered shot point
72179	16:55	LGSP	Last good shot point
72179	16:55	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	72019	-20° 42' 04.634"	-176° 14' 18.972"
LSP	72179	-19° 59' 18.540"	-176° 05' 07.680"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B009.0.p190 **P2** Lau_B009.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
072	LAU_B009	47	11 °	72021	72179

Seq# 073	**Line Name:** LAU_B009A	**NAVIGATION**	**DATE:** 2009-02-16
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 47

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-335.8*
DC EOL: *-323.8m*
SMG SOL: 4.3 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 4.2 knots
WIND EOL: 4.7 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *1-2 ft*

DEPTH SOL: *2579.0m*
DEPTH EOL: *2611.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Michaela Conley, Erica Emry, Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
73022	16:58	FSP	Start of line; first shot point
73022	16:58	FGSP	First good shot point
		FCSP	First chartered shot point
73026	17:16	LGSP	Last good shot point
73026	17:16	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	73022	-19° 59' 06.480"	-176° 05' 14.880"
LSP	73026	-19° 58' 53.282"	-176° 06' 21.675"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B009A.0.p190 **P2** Lau_B009A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	**Gun string #1**	good
Tailbuoy #2	n/a	**Gun string #2**	bad
Tailbuoy #3	n/a	**Gun string #3**	good
Tailbuoy #4	n/a	**Gun string #4**	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
073	LAU_B009A	47	281 °	73022	73026

Seq# 074	**Line Name:** LAU_B010	**NAVIGATION**	**DATE:** 2009-02-16
	Line Brg: 191 °	**LINE LOGS**	**JULIAN DAY:** 47

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-341.3*
DC EOL: *237.1m*
SMG SOL: 4.2 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 6 knots
WIND EOL: 8.2 knots
SEAS SOL: *1-2 ft*
SEAS EOL:

DEPTH SOL: *2612.6m*
DEPTH EOL: *2404.7m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Michaela Conley, Erica Emry, Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
74022	17:17	FSP	Start of line; first shot point
74022	17:17	FGSP	First good shot point
74179	02:54	LGSP	Last good shot point
74179	02:54	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	74022	-19° 58' 57.783"	-176° 06' 28.787"
LSP	74179	20° 40' 34.705"	-176° 15' 51.714"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B010.0.p190 **P2** Lau_B010.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
074	LAU_B010	47	191 °	74022	74179

Seq# 075	**Line Name:** LAU_B010A	**NAVIGATION**	**DATE:** 2009-02-17	
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 48	

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *369.7*
DC EOL: *-4.5m*
SMG SOL: 4.4 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 9.1 knots
WIND EOL: 0.8 knots
SEAS SOL: *1-2 ft*
SEAS EOL:

DEPTH SOL: *2398.2m*
DEPTH EOL: *2363.7m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Michaela Conley, Erica Emry, Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
75022	02:57	FSP	Start of line; first shot point
75022	17:17	FGSP	First good shot point
75024	03:05	LGSP	Last good shot point
75024	03:05	LSP	End of line; last shot point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	75022	-20° 40' 42.802"	-176° 16' 02.797"
LSP	75024	-20° 40' 48.278"	-176° 16' 39.232"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B010A.0.p190 **P2** Lau_B010A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
075	LAU_B010A	48	281 °	75022	75024

Seq# 076	**Line Name:** LAU_B011	**NAVIGATION**	**DATE:** 2009-02-17	
	Line Brg: 11 °	**LINE LOGS**	**JULIAN DAY:** 48	

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *64.8*
DC EOL: *-255.8m*
SMG SOL: 4.3 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 6-8 knots
WIND EOL: 4 knots
SEAS SOL: *1-2 ft*
SEAS EOL: *2-3 ft*

DEPTH SOL: *2424.8m*
DEPTH EOL: *2528.8m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst ==
12:00 - 24:00 cst ==Michaela Conley, Erica Emry, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
76023	3:19	FSP	Start of line; first shot point
76023	3:19	FGSP	First good shot point
			???
76159	12:07	LSP	Last Shot Point
76159	12:07	LGSP	Last Good Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	76023	-20° 40' 07.013"	-176° 17' 20.915"
LSP	76159	-20° 03' 58.792"	-176° 09' 41.022"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B011.0.p190
P2 Lau_B011.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
076	LAU_B011	48	11 °	76023	76159

Seq# 077	**Line Name:** LAU_B011A	**NAVIGATION**	**DATE:** 2009-02-17
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 48

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-424.9*
DC EOL: *-402.6m*
SMG SOL: 4.4 knots
SMG EOL: 4.2 knots
WEATHER
WIND SOL: 5 knots
WIND EOL: 12 knots
SEAS SOL: *2-3 ft*
SEAS EOL: *2-3 ft*

DEPTH SOL: *2533.0m*
DEPTH EOL: *2583.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
77022	12:10	FSP	Start of line; first shot point
77022	12:10	FGSP	First good shot point
77028	12:33	LSP	Last Shot Point
77028	12:33	LGSP	Last Good Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	77022	-20° 03' 47.888"	-176° 09' 47.202"
LSP	77028	-20° 03' 27.899"	-176° 11' 28.262"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B011A.0.p190	Lau_B011A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
077	LAU_B011A	48	281 °	77022	77028

Seq# 078

Line Name: LAU_B012 **Line Brg:** 191 °

NAVIGATION LINE LOGS

DATE: 2009-02-17 **JULIAN DAY:** 48

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-103.0*
DC EOL: *178.0m*
SMG SOL: 4.2 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 15 knots
WIND EOL: 12 knots
SEAS SOL: *2-4 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2571.6m*
DEPTH EOL: *2363.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Jonathan Sleeper, Olga Hernandez, Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
78023	12:39	FSP	Start of line; first shot point
78023	12:39	FGSP	First good shot point
78129	19:03	LSP	Last Shot Point
78129	19:03	LGSP	Last Good Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	78023	-20° 03' 44.234"	-176° 11' 46.424"
LSP	78129	-20° 31' 50.761"	-176° 18' 02.804"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B012.0.p190 **P2** Lau_B012.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status: complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP
078	LAU_B012	48	191 °	78023	78129

Seq# 079	**Line Name:** LAU_B012A	**NAVIGATION**	**DATE:** 2009-02-17	
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 48	

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *378.9*
DC EOL: *380.0m*
SMG SOL: 4.5 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 10 knots
WIND EOL: 9 knots
SEAS SOL: *2-4 ft*
SEAS EOL: *2-4 ft*

DEPTH SOL: *2287.0m*
DEPTH EOL: *2019.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
79022	19:07	FSP	Start of line; first shot point
79022	19:07	FGSP	First good shot point
79026	19:24	LSP	Last Shot Point
79026	19:24	LGSP	Last Good Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	79022	-20° 31' 50.761"	-176° 18' 02.804"
LSP	79026	-20° 31' 48.494"	-176° 19' 24.187"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B012A.0.p190 **P2** Lau_B012A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status: complete

Seq	Line Name	J- Day	DIR	FGSP	LGSP
079	LAU_B012A	48	281 °	79022	79026

Seq# 080	**Line Name:** LAU_B013	**NAVIGATION**	**DATE:** 2009-02-17
	Line Brg: 11 °	**LINE LOGS**	**JULIAN DAY:** 48

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *381.1*
DC EOL: *4000.0m*
SMG SOL: 4.3 knots
SMG EOL: 4.0 knots
WEATHER
WIND SOL: 9 knots
WIND EOL: 7.6 knots
SEAS SOL: *2-4 ft*
SEAS EOL:

DEPTH SOL: *2022.0m*
DEPTH EOL: *2542.3m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =:
12:00 - 24:00 cst =: Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
80022	19:25	FSP	Start of line; first shot point
80022	19:25	FGSP	First good shot point
80150	03:07	LCSP	Last charted shot point
80150	03:07	LGSP	Last Good Shot Point
80159	03:41	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	80022	-20° 31' 43.931"	-176° 19' 27.490"
LSP	80159	-19° 57' 42.729"	-176° 12' 17.163"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B013.0.p190 **P2** Lau_B013.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
080	LAU_B013	48	11 °	80022	80150

Seq# 081	**Line Name:** LAU_B013A	**NAVIGATION**	**DATE:** 2009-02-18
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 49

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *4661.1*
DC EOL: *5026.3m*
SMG SOL: 4.3 knots
SMG EOL: 3.9 knots

WEATHER
WIND SOL: 7.4 knots
WIND EOL: 12.4 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2732.9m*
DEPTH EOL: *2678.5m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
81022	03:44	FSP	Start of line; first shot point
		FGSP	First good shot point
		LSP	Last Shot Point
81026	04:02	LGSP	Last Good Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	81022	-19° 55' 03.296"	-176° 12' 00.930"
LSP	81026	-19° 54' 38.812"	-176° 13' 05.859"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B014.0.p190	Lau_B014.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
081	LAU_B013A	49	281 °		

Seq# 082	Line Name:	LAU_B014	NAVIGATION	DATE:	2009-02-18
	Line Brg:	191 °	LINE LOGS	JULIAN DAY:	49

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *1.6*
DC EOL: *417.0m*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 13.3 knots
WIND EOL: 11 knots
SEAS SOL: *2-4 ft*
SEAS EOL: *4.0m*

DEPTH SOL: *2622.0m*
DEPTH EOL: *2149.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
82021	04:45	FSP	Start of line; first shot point
82021	04:45	FGSP	First good shot point
82150	12:32	LGSP	Last Good Shot Point
82150	12:32	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	82021	-19° 57' 15.732"	-176° 13' 57.378"
LSP	82150	-20° 31' 28.440"	-176° 21' 39.120"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B014.0.p190
P2: Lau_B014.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
082	LAU_B014	49	191 °	82021	82150

Seq# 083

Line Name: LAU_B014A
Line Brg: ~350 °

NAVIGATION LINE LOGS

DATE: 2009-02-18
JULIAN DAY: 49

CLIENT: National Science Foundation
SURVEY: Lau Basin
MGL0903

DC SOL: *200.0*
DC EOL: *218.0m*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 15 knots
WIND EOL: 17 knots
SEAS SOL: *1.0m*
SEAS EOL: *1.0m*

DEPTH SOL: *2269.0m*
DEPTH EOL: *2002.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
83022	12:55	FSP	Start of line; first shot point
83022	12:55	FGSP	First good shot point
83066	15:38	LGSP	Last Good Shot Point
83066	15:38	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	83022	-20° 31' 19.500"	-176° 23' 23.820"
LSP	83066	-20° 19' 37.440"	-176° 25' 47.220"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B014A.0.p190
P2 Lau_B014A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
083	LAU_B014A	49	~350 °	83022	83066

Seq# 084

Line Name: LAU_B015 **Line Brg:** 101 °

NAVIGATION LINE LOGS

DATE: 2009-02-18 **JULIAN DAY:** 49

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *30.0* **DC EOL:** *-150.0m*
SMG SOL: 4.5 knots **SMG EOL:** 4.5 knots
WEATHER
WIND SOL: 16 knots **WIND EOL:** 14.1 knots
SEAS SOL: *1.0m* **SEAS EOL:**

DEPTH SOL: *1996.0m* **DEPTH EOL:** *2250.0m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
84025	15:46	FSP	Start of line; first shot point
84025	15:46	FGSP	First good shot point
84156	23:39	LGSP	Last Good Shot Point
84161	23:57	LCSP	Last Charted Shot Point
84167	00:19	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	84025	-20° 19' 22.560"	-176° 25' 12.120"
LSP	84167	-20° 26' 56.820"	-175° 44' 56.100"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B015.0.p190 **P2** Lau_B015.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
084	LAU_B015	49	101 °	84025	84156

Seq# 085	**Line Name:** LAU_B015A	**NAVIGATION**	**DATE:** 2009-02-19
	Line Brg: 11 °	**LINE LOGS**	**JULIAN DAY:** 50

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *4000.0*
DC EOL: *3499.0m*
SMG SOL: 4.5 knots
SMG EOL: 4.6 knots
WEATHER
WIND SOL: 15.4 knots
WIND EOL: 12.0 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2268.0m*
DEPTH EOL: *2246.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
85025	00:38	FSP	Start of line; first shot point
		FGSP	First good shot point
		LGSP	Last Good Shot Point
85028	00:50	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	85025	-20° 26' 01.521"	-175° 44' 12.657"
LSP	85082	-20° 25' 14.090"	-175° 44' 10.586"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B015A.0.p190 **P2** Lau_B015A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
085	LAU_B015A	50	11 °		

Seq# 086	**Line Name:** LAU_B016	**NAVIGATION**	**DATE:** 2009-02-19
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 50

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: 9.3
DC EOL: 270.6m
SMG SOL: 4.6 knots
SMG EOL: 4.7 knots
WEATHER
WIND SOL: 5.3 knots
WIND EOL: 9.7 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: 2271.0m
DEPTH EOL: 2044.3m
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
86019	01:17	FSP	Start of line; first shot point
86019	01:17	FGSP	First good shot point
86051	03:12		Enable T2
86160	09:44	LGSP	Last Good Shot Point
86160	09:44	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	86019	-20° 24' 31.800"	-175° 45' 48.600"
LSP	86160	-20° 16' 50.429"	-176° 25' 27.098"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B016.0.p190 **P2** Lau_B016.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
086	LAU_B016	50	281 °	86019	86160

Seq# 087

Line Name: LAU_B016A
Line Brg: 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-19
JULIAN DAY: 50

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *421.6*
DC EOL: *243.8m*
SMG SOL: 4.4 knots
SMG EOL: 4.2 knots

WEATHER
WIND SOL: 13.5 knots
WIND EOL: 19.4 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2054.0m*
DEPTH EOL: *2085.1m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
87022	09:47	FSP	Start of line; first shot point
87022	09:47	FGSP	First good shot point
87028	10:10	LGSP	Last Good Shot Point
87028	10:10	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	87022	-20° 16' 41.384"	-176° 25' 34.607"
LSP	87028	-20° 15' 04.663"	-176° 25' 19.844"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B016A.0.p190
P2 Lau_B016A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
087	LAU_B016A	50	11 °	87022	87028

Seq# 088	**Line Name:** LAU_B017	**NAVIGATION**	**DATE:** 2009-02-19	
	Line Brg: 101 °	**LINE LOGS**	**JULIAN DAY:** 50	

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *393.6*
DC EOL: *4942.0m*
SMG SOL: 4.4 knots
SMG EOL:

WEATHER
WIND SOL: 18.1 knots
WIND EOL: 15 knots knots
SEAS SOL: *1.5m*
SEAS EOL: *2m*

DEPTH SOL: *2077.3m*
DEPTH EOL: *2208.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
88022	10:13	FSP	Start of line; first shot point
88022	10:13	FGSP	First good shot point
88161	18:35	LCSP	Last Charted Shotpoint
88170	19:10		runt1 PPS in and out
88161	18:35	LGSP	Last Good Shot Point
88171	19:14	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	88022	-20° 14' 57.097"	-176° 25' 09.169"
LSP	88171	-20° 22' 21.480"	-175° 42' 57.480"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B017.0.p190 **P2** Lau_B017.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
088	LAU_B017	50	101 °	88022	88161

Seq# 089	Line Name:	LAU_B017A	**NAVIGATION**	DATE:	2009-02-19
	Line Brg:	11 °	**LINE LOGS**	JULIAN DAY:	50

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *5160.0*
DC EOL: *4700.0m*
SMG SOL:
SMG EOL:
WEATHER
WIND SOL: 15 knots
WIND EOL: 18 knots
SEAS SOL: *2.0m* 00:00 - 12:00 cst =>
SEAS EOL: *2.0m* 12:00 - 24:00 cst =>

DEPTH SOL: *2200.0m*
DEPTH EOL: *2219.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
89023	19:16	FSP	Start of line; first shot point
		FGSP	First good shot point
		LGSP	Last Good Shot Point
89029	19:40	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	89023	-20° 22' 14.648"	175° 42' 51.648"
LSP	89029	-20° 20' 34.280"	175° 42' 46.920"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B017A.0.p190
P2: Lau_B017A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good	
Tailbuoy #2	n/a	Gun string #2	bad	
Tailbuoy #3	n/a	Gun string #3	good	disabled ast SOL for gun work
Tailbuoy #4	n/a	Gun string #4	good	

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
089	LAU_B017A	50	11 °		

Seq# 090	**Line Name:** LAU_B018	**NAVIGATION**	**DATE:** 2009-02-19
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 50

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *81.3*
DC EOL: *485.7m*
SMG SOL: 4 knots
SMG EOL: 4.6 knots

WEATHER
WIND SOL: 15 knots
WIND EOL: 13.1 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2247.0m*
DEPTH EOL: *2613.8m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
90020	20:10	FSP	Start of line; first shot point
90020	20:10	FGSP	First good shot point
90143	03:32	LGSP	Last Good Shot Point
90143	03:32	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	90020	-20° 19' 59.760"	-175° 45' 08.400"
LSP	90143	-20° 13' 11.918"	-176° 19' 39.635"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B018.0.p190
P2 Lau_B018.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
090	LAU_B018	50	281 °	90020	90143

Seq# 091

Line Name: LAU_B018A
Line Brg: 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-20
JULIAN DAY: 51

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *109.2*
DC EOL: *257.8m*
SMG SOL: 4.6 knots
SMG EOL: 4.4 knots
WEATHER
WIND SOL: 12.4 knots
WIND EOL: 16.0 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2606.6m*
DEPTH EOL: *2640.8m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
91023	03:37	FSP	Start of line; first shot point
91023	03:37	FGSP	First good shot point
91028	03:56	LGSP	Last Good Shot Point
91028	03:56	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	91023	-20° 12' 53.397"	-176° 19' 47.273"
LSP	91028	-20° 11' 34.716"	-176° 19' 24.948"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B018A.0.p190	Lau_B018A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
091	LAU_B018A	51	11 °	91023	91028

Seq# 092

Line Name: LAU_B019 **Line Brg:** 101 °

NAVIGATION LINE LOGS

DATE: 2009-02-20 **JULIAN DAY:** 51

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *-2245.1m*
DC EOL: *-525.7m*
SMG SOL: 4.5 knots
SMG EOL: 4.6 knots
WEATHER
WIND SOL: 12-13 knots
WIND EOL: 15.8 knots
SEAS SOL: *4 ft*
SEAS EOL:

DEPTH SOL: *2600.7m*
DEPTH EOL: *2250.2m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
92029	04:40	FSP	Start of line; first shot point
92029	04:40	FGSP	First good shot point
92115	10:00	LGSP	Last Good Shot Point
92115	10:00	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	92029	-20° 10' 25.616"	-176° 16' 58.525"
LSP	92115	-20° 15' 56.873"	-175° 52' 58.152"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B019.0.p190
P2 Lau_B019.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
092	LAU_B019	51	101 °	92029	92115

Seq# 093	Line Name:	LAU_B019A	NAVIGATION	DATE:	2009-02-20
	Line Brg:	11 °	LINE LOGS	JULIAN DAY:	51

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *-120.3*
DC EOL: *-305.0m*
SMG SOL: 4.6 knots
SMG EOL: 4.8 knots
WEATHER
WIND SOL: 7.6 knots
WIND EOL: 13.2 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2265.8m*
DEPTH EOL: *2199.6m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
93023	10:04	FSP	Start of line; first shot point
93023	10:04	FGSP	First good shot point
93028	10:22	LGSP	Last Good Shot Point
93028	10:22	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	93023	-20° 15' 43.629"	-175° 52' 44.906"
LSP	93028	-20° 14' 22.788"	-175° 52' 33.837"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B019A.0.p190
P2: Lau_B019A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good	
Tailbuoy #2	n/a	Gun string #2	bad	
Tailbuoy #3	n/a	Gun string #3	good	disabled ast SOL for gun work
Tailbuoy #4	n/a	Gun string #4	good	

Acoustic remarks:

Langseth: LauPhase source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
093	LAU_B019A	51	11 °	93023	93028

Seq# 094	**Line Name:** LAU_B020	**NAVIGATION**	**DATE:** 2009-02-20
	Line Brg: 281 °	**LINE LOGS**	**JULIAN DAY:** 51

CLIENT: National Science Foundation **SURVEY: Lau Basin** **MGL0903**

DC SOL: *-451.3*
DC EOL: *317.0m*
SMG SOL: 4.7 knots
SMG EOL: 4.6 knots

WEATHER
WIND SOL: 13.5 knots
WIND EOL: 14 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2195.0m*
DEPTH EOL: *2166.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
94022	10:24		Start of line; first shot point
94022	10:24		First good shot point
94025	10:35		Est. position main
			Last Good Shot Point
94132	17:04		Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	94022	-20° 14' 14.221"	-175° 52' 38.741"
LSP	94132	-20° 07' 56.400"	-176° 23' 31.800"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B020.0.p190 **P2** Lau_B020.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	**Gun string #1**	good
Tailbuoy #2	n/a	**Gun string #2**	bad
Tailbuoy #3	n/a	**Gun string #3**	good
Tailbuoy #4	n/a	**Gun string #4**	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
094	LAU_B020	51	281 °	94022	94132

Seq# 095	Line Name: LAU_B020A	NAVIGATION	DATE: 2009-02-20
	Line Brg: 11 °	LINE LOGS	JULIAN DAY: 51

CLIENT: National Science Foundation | SURVEY: Lau Basin | MGL0903

DC SOL: *269.5*
DC EOL: *254.3m*
SMG SOL:
SMG EOL:
WEATHER
WIND SOL: 15 knots
WIND EOL: 15 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2185.0m*
DEPTH EOL: *2233.0m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
95022	17:06		Start of line; first shot point
95022			First good shot point
			Last Good Shot Point
95028	17:29		Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	95022	20° 07' 45.900"	176° 23' 39.900"
LSP	95028	20° 06' 10.860"	176° 23' 22.260"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B020.0.p190
P2 Lau_B020.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
095	LAU_B020A	51	11 °	95022	95028

Seq# 096	Line Name:	LAU_B021	NAVIGATION	DATE:	2009-02-20
	Line Brg:	101 °	LINE LOGS	JULIAN DAY:	51

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *393.0*
DC EOL: *-272.0m*
SMG SOL: 4.6 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 15 knots
WIND EOL: 14.1 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2207.0m*
DEPTH EOL: *2044.4m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
96022	17:32	FSP	Start of line; first shot point
		FGSP	First good shot point
96118	23:17:00		Estiate Position main network
96161	01:51	LGSP	Last Good Shot Point
96161	01:51	LCSP	Last Charted Shot Point
96170	02:23	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	96022	20° 06' 04.020"	176° 23' 13.440"
LSP	96170	-20° 13' 38.371"	-175° 41' 30.739"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B021.0.p190	Lau_B021.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good	
Tailbuoy #2	n/a	Gun string #2	bad	
Tailbuoy #3	n/a	Gun string #3	good	disabled ast SOL for gun work
Tailbuoy #4	n/a	Gun string #4	good	

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
096	LAU_B021	51	101 °	96022	96161

Seq# 097

Line Name: LAU_B021A
Line Brg: 11 °

NAVIGATION LINE LOGS

DATE: 2009-02-21
JULIAN DAY: 52

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *4463.6*
DC EOL: *4874.3m*
SMG SOL: 4.5 knots
SMG EOL: 4.7 knots
WEATHER
WIND SOL: 12.9 knots
WIND EOL: 10.3 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2048.7m*
DEPTH EOL: *2104.9m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
97022	02:26	FSP	Start of line; first shot point
		FGSP	First good shot point
		LGSP	Last Good Shot Point
97024	02:33	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	97022	-20° 13' 33.378"	-175° 41' 21.345"
LSP	97024	-20° 13' 04.183"	-175° 41' 00.564"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1	P2
Lau_B021A.0.p190	Lau_B021A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good	
Tailbuoy #2	n/a	Gun string #2	bad	
Tailbuoy #3	n/a	Gun string #3	good	disabled ast SOL for gun work
Tailbuoy #4	n/a	Gun string #4	good	

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
097	LAU_B021A	52	11 °	97022	97024

Seq# 098

Line Name: LAU_B022 **Line Brg:** 281 °

NAVIGATION LINE LOGS

DATE: 2009-02-21 **JULIAN DAY:** 52

CLIENT: National Science Foundation **SURVEY:** Lau Basin **MGL0903**

DC SOL: *1.6* **DC EOL:** *210.6m*
SMG SOL: 4.4 knots **SMG EOL:** 4.4 knots
WEATHER
WIND SOL: 5.7 knots **WIND EOL:** 12 knots
SEAS SOL: *1.5m* **SEAS EOL:** *1.5m*

DEPTH SOL: *2271.2m* **DEPTH EOL:** *1905.5m*
FEATHER SOL: n/a ° **FEATHER EOL:** n/a ° **MAX FEATHER:** n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
98022	03:23	FSP	Start of line; first shot point
98022	03:23	FGSP	First good shot point
98060	11:39	LGSP	Last Good Shot Point
98060	11:39	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	98022	-20° 11' 03.646"	-175° 43' 43.376"
LSP	98160	-20° 03' 33.431"	-176° 22' 30.582"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B022.0.p190 **P2** Lau_B022.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:
disabled ast SOL for gun work

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
098	LAU_B022	52	281 °	98022	98160

Seq# 099	Line Name:	LAU_B022A	NAVIGATION	DATE:	2009-02-21
	Line Brg:	11 °	LINE LOGS	JULIAN DAY:	52

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *113.1*
DC EOL: *40.6m*
SMG SOL: 4.4 knots
SMG EOL: 1.6 knots
WEATHER
WIND SOL: 14 knots
WIND EOL: 15 knots
SEAS SOL: *1.5m*
SEAS EOL: *1.5m*

DEPTH SOL: *1902.2m*
DEPTH EOL: *1800.5m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
99023	11:47	FSP	Start of line; first shot point
99023	11:47	FGSP	First good shot point
99027	12:01	LGSP	Last Good Shot Point
99027	12:01	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	99023	-20° 03' 03.910"	-176° 22' 47.829"
LSP	99027	-20° 01' 59.738"	-176° 22' 36.429"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1: Lau_B022A.0.p190
P2: Lau_B022A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good	
Tailbuoy #2	n/a	Gun string #2	bad	
Tailbuoy #3	n/a	Gun string #3	good	disabled ast SOL for gun work
Tailbuoy #4	n/a	Gun string #4	good	

Acoustic remarks:

Langseth: LauPhas source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
099	LAU_B022A	52	11 °	99023	99027

Seq# 100

Line Name: LAU_B023A
Line Brg: 101 °

NAVIGATION LINE LOGS

DATE: 2009-02-21
JULIAN DAY: 52

CLIENT: National Science Foundation | **SURVEY:** Lau Basin | **MGL0903**

DC SOL: *-14.1*
DC EOL: *298.5m*
SMG SOL: 4.7 knots
SMG EOL: 4.3 knots
WEATHER
WIND SOL: 18 knots
WIND EOL: 17 knots
SEAS SOL: *1.5m*
SEAS EOL: *1.5m*

DEPTH SOL: *1909.0m*
DEPTH EOL: *2559.9m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst ==
12:00 - 24:00 cst ==Olga Hernandez, Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
100024	12:16	FSP	Start of line; first shot point
100024	12:16	FGSP	First good shot point
100096	16:35	LGSP	Last Good Shot Point
100096	16:35	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	100024	-20° 01' 31.020"	-176° 21' 44.545"
LSP	100096	-20° 05' 32.290"	-176° 01' 26.588"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B023A.0.p190
P2 Lau_B023A.0.p294

No Streamer

Langseth: LauPhase source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
100	LAU_B023A	52	101 °	100024	100096

Seq# 101	Line Name: LAU_B006R	**NAVIGATION**	DATE: 2009-02-21
	Line Brg: 191 °	**LINE LOGS**	JULIAN DAY: 52

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *120.1*
DC EOL: *406.1m*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots
WEATHER
WIND SOL: 12 knots
WIND EOL: 5.1 knots
SEAS SOL: *1.5m*
SEAS EOL:

DEPTH SOL: *2543.3m*
DEPTH EOL: *2211.4m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin, Jonathan Sleeper

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
101023	16:42	FSP	Start of line; first shot point
101023	16:42	FGSP	First good shot point
101204	03:35	LGSP	Last Good Shot Point
101204	03:35	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	101023	-20° 05' 58.139"	-176° 01' 12.843"
LSP	101204	-20° 53' 59.269"	-176° 11' 49.057"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B006R.0.p190
P2 Lau_B006R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
101	LAU_B006R	52	191 °	101023	101204

Seq# 102	Line Name: LAU_B006RA	**NAVIGATION**	DATE: 2009-02-22
	Line Brg: 281 °	**LINE LOGS**	JULIAN DAY: 53

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *110.5*
DC EOL: *110.5*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 6.9 knots
WIND EOL: 6.9 knots
SEAS SOL:
SEAS EOL:

DEPTH SOL: *2192.6m*
DEPTH EOL: *2192.6m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst =>

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
102023	03:41	FSP	Start of line; first shot point
102023	03:41	FGSP	First good shot point
		LGSP	Last Good Shot Point
102023	03:41	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	102023	-20° 54' 08.668"	-176° 12' 12.101"
LSP	102023	-20° 54' 08.668"	-176° 12' 12.101"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B006RA.0.p190
P2 Lau_B006RA.0.p294

No Streamer

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
102	LAU_B006RA	53	281 °	102023	

Seq #103	Line Name: LAU_B007R	NAVIGATION	DATE: 2009-02-22
	Line Brg: 11 °	LINE LOGS	JULIAN DAY: 53

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *134.5*
DC EOL: *212.2*
SMG SOL: 4.5 knots
SMG EOL: 4.5 knots

WEATHER
WIND SOL: 10.9 knots
WIND EOL: 13 knots
SEAS SOL: *1.0m*
SEAS EOL: *1.5m*

DEPTH SOL: *2234.0m*
DEPTH EOL: *2564.8m*
FEATHER SOL: n/a °
FEATHER EOL: n/a °
MAX FEATHER: n/a °

00:00 - 12:00 cst =>
12:00 - 24:00 cst => Regan Austin

NAVIGATION SYSTEM USED: C-Nav - Primary
NAVIGATION SYSTEM USED: SeaPath 200
NAVIGATION SYSTEM USED: Posnet
GRAVITY METER: BMG-3
MAGNETOMETER: GeoMetrics G-882
MAG DEC USED : 13

SP	TIME(utc)	EVENT	COMMENTS
103024	04:06	FSP	Start of line; first shot point
103024	04:06	FGSP	First good shot point
103204	14:53	LGSP	Last Good Shot Point
103204	14:53	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	103024	-20° 53' 14.050"	-176° 13' 44.739"
LSP	103204	-20° 05' 28.140"	-176° 03' 15.841"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B007R.0.p190
P2 Lau_B007R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN
SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
103	LAU_B007R	53	11	103024	103204

Seq# 104	Line Name: LAU_B023B	**NAVIGATION**	DATE: 2009-02-22
	Line Brg: 101 °	**LINE LOGS**	JULIAN DAY: 53

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *436.7*	DEPTH SOL: *2470.1m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *87.1*	DEPTH EOL: *2227.2m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.5 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.4 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 13 knots		MAG DEC USED : 13
WIND EOL: 19 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL: *1.5m*	12:00 - 24:00 cst => Regan Austin, Jonathan Sleeper	

SP	TIME(utc)	EVENT	COMMENTS
104022	14:57	FSP	Start of line; first shot point
104022	14:57	FGSP	First good shot point
		LGSP	Last Good Shot Point
104053	16:49	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	104022	-20° 05' 18.388"	-176° 03' 03.567"
LSP	104053	-20° 06' 46.877"	-175° 54' 18.181"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B023B.0.p190 P2 Lau_B023B.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
104	LAU_B023B	53	101	104022	

Seq# 105	Line Name: LAU_B002R	NAVIGATION	DATE: 2009-02-22
	Line Brg: 191 °	LINE LOGS	JULIAN DAY: 53

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *0.5*	DEPTH SOL: *2219.5m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *150.1*	DEPTH EOL: *2420.5m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.3 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.5 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 13 knots		MAG DEC USED : 13
WIND EOL: 10 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL: *1.5m*	12:00 - 24:00 cst => Regan Austin, Jonathan Sleeper	

SP	TIME(utc)	EVENT	COMMENTS
105024	17:03	FSP	Start of line; first shot point
105024	17:03	FGSP	First good shot point
105029	17:22		Note reduced heading on seapath
105076	21:09		Posnet dropped
105124	23:04		Posnet restored
105202	03:44	LGSP	Last Good Shot Point
105203	03:48	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	105024	20° 07' 43.223"	175° 53' 52.724"
LSP	105203	-20° 55' 13.380"	-176° 04' 17.348"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B002R.0.p190 P2 Lau_B002R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
105	LAU_B002R	53	191	105024	105202

Seq# 106	Line Name: LAU_B015R	**NAVIGATION**	DATE: 2009-02-23
	Line Brg: 281 °	**LINE LOGS**	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *-2.9*	DEPTH SOL: *2422.5m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *-2.9*	DEPTH EOL: *2422.5m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.5 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.5 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 11.0 knots		MAG DEC USED : 13
WIND EOL: 11.0 knots		
SEAS SOL:	00:00 - 12:00 cst =>	
SEAS EOL:	12:00 - 24:00 cst =>	

SP	TIME(utc)	EVENT	COMMENTS
106068	04:07	FSP	Start of line; first shot point
		FGSP	First good shot point
		LGSP	Last Good Shot Point
106068	04:07	LSP	Last Shot Point
			String 3 GPS and acoustics knocked out; on deck for repair

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	106068	-20° 55' 26.130"	-176° 05' 45.780"
LSP	106068	-20° 55' 26.130"	-176° 05' 45.780"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B015R.0.p190 P2 Lau_B015R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
106	LAU_B015R	54	281		

Seq# 107	Line Name: LAU_B015R	NAVIGATION	DATE: 2009-02-23
	Line Brg: 281 °	LINE LOGS	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *2.5*	DEPTH SOL: *2262.1m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *207.2*	DEPTH EOL: *2340.3m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.5 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.1 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 12.9 knots		MAG DEC USED : 13
WIND EOL: 17.5 knots		
SEAS SOL:	00:00 - 12:00 cst =>	
SEAS EOL:	12:00 - 24:00 cst =>	

SP	TIME(utc)	EVENT	COMMENTS
107071	04:21	FSP	Start of line; first shot point
107084	05:00:25	FGSP	First good shot point
107137	06:50		Posnet GPS String 3 failed, power grounded
107137	07:57	LGSP	Last Good Shot Point
107137	07:57	LSP	Last Shot Point
	04:20		String 3 GPS and acoustic knocked out; on deck for repair

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	107071	-20° 55' 13.882"	-176° 06' 49.548"
LSP	107137	-20° 51' 55.761"	-176° 23' 35.343"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

P1 Lau_B015R.0.p190 P2 Lau_B015R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	bad
Tailbuoy #3	n/a	Gun string #3	good
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 450m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
107	LAU_B015R	54	281	107084	107137

Seq# 108	Line Name: LAU_A001R	**NAVIGATION**	DATE: 2009-02-23
	Line Brg: 11 °	**LINE LOGS**	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *-15.5*	DEPTH SOL: *2382.1m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL:	DEPTH EOL:	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.5 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL:	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 20.6 knots		MAG DEC USED : 13
WIND EOL:		
SEAS SOL:	00:00 - 12:00 cst =>	
SEAS EOL:	12:00 - 24:00 cst =>	

SP	TIME(utc)	EVENT	COMMENTS
108076	08:12	FSP	Start of line; first shot point
108076	08:12	FGSP	First good shot point
108150		LGSP	Last Good Shot Point
108150		LSP	Last Shot Point
	08:10		String 3 GPS knocked out

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	108076	-20° 50' 52.120"	-176° 23' 50.393"
LSP			

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:
String 3 picked up during previous line; GPS went out at 06:50 UTC

P1 Lau_A001R.0.p190 P2 Lau_A001R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent			
Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 475m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
108	LAU_A001R	54	11	108076	

Seq# 109	Line Name: LAU_B013R	NAVIGATION	DATE: 2009-02-23
	Line Brg: 11 °	LINE LOGS	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *16.1*	DEPTH SOL: *2056.4m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *10.7*	DEPTH EOL: *2560.0m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.5 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.5 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 20 knots		MAG DEC USED : 13
WIND EOL: 18 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL: *1.5m*	12:00 - 24:00 cst => Jonathan Sleeper	

SP	TIME(utc)	EVENT	COMMENTS
109021	12:28:41	FSP	Start of line; first shot point
109021	12:28:41	FGSP	First good shot point
109031	13:02		Lost posnet
	15:10		posnet restored
109136	19:24	LGSP	Last Good Shot Point
109136	19:24	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	109021	-20° 31' 57.464"	-176° 19' 43.303"
LSP	109136	-20° 01' 25.744"	-176° 13' 05.433"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

String 3 GPS knocked out at SOL
String 2 GPS knocked out at SOL

P1 Lau_B013R.0.p190 **P2** Lau_B013R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
109	LAU_B013R	54	11	109021	109136

Seq# 110	Line Name: LAU_B024A	**NAVIGATION**	DATE: 2009-02-23
	Line Brg: 101 °	**LINE LOGS**	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *375.6*	DEPTH SOL: *2587.4m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *509.3*	DEPTH EOL: *2595.3m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.3 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.5 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 21 knots		MAG DEC USED : 13
WIND EOL: 19 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL: *1.5m*	12:00 - 24:00 cst => Regan Austin	

SP	TIME(utc)	EVENT	COMMENTS
110024	19:39	FSP	Start of line; first shot point
110024	19:39	FGSP	First good shot point
110025	19:43	LGSP	Last Good Shot Point
110025	19:43	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	110024	-20° 01' 07.122"	-176° 12' 09.073"
LSP	110025	-20° 01' 14.605"	-176° 11' 53.142"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

String 3 GPS knocked out at SOL
String 2 GPS knocked out at SOL

P1 Lau_B024A.0.p190 P2 Lau_B024A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
110	LAU_B024A	54	101	110024	110025

Seq# 111	Line Name: LAU_B012R	NAVIGATION	DATE: 2009-02-23
	Line Brg: 191 °	LINE LOGS	JULIAN DAY: 54

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *-89.0*	DEPTH SOL: *2609.7m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *-745.0*	DEPTH EOL: *2497.3m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.4 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.6 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 19 knots		MAG DEC USED : 13
WIND EOL: 21.0 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL:	12:00 - 24:00 cst => Regan Austin	

SP	TIME(utc)	EVENT	COMMENTS
111017	19:58	FSP	Start of line; first shot point
111025	20:27	FGSP	First good shot point
111130	02:44	LGSP	Last Good Shot Point
111130	02:44	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	111017	-20° 02' 08.598"	-176° 11' 26.200"
LSP	111130	-20° 32' 12.723"	-176° 17' 35.065"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

String 3 GPS knocked out at SOL
String 2 GPS knocked out at SOL

P1 Lau_B012R.0.p190
P2 Lau_B012R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
111	LAU_B012R	54	191	111025	111130

Seq# 112	Line Name: LAU_B011R	**NAVIGATION**	DATE: 2009-02-24
	Line Brg: 11 °	**LINE LOGS**	JULIAN DAY: 55

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *212.1*	DEPTH SOL: *2256.0m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *274.4*	DEPTH EOL: *2590.1m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.6 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.2 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 18.1 knots		MAG DEC USED : 13
WIND EOL: 18.3 knots		
SEAS SOL:	00:00 - 12:00 cst =>	
SEAS EOL:	12:00 - 24:00 cst =>	

SP	TIME(utc)	EVENT	COMMENTS
112053	03:13	FSP	Start of line; first shot point
112053	03:13	FGSP	First good shot point
112166	10:01	LGSP	Last Good Shot Point
112166	10:01	LSP	Last Shot Point

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	112053	-20° 32' 10.186"	-176° 15' 31.790"
LSP	112166	-20° 02' 10.687"	-176° 08' 59.014"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

String 3 GPS knocked out at SOL
String 2 GPS knocked out at SOL

P1 Lau_B011R.0.p190
P2 Lau_B011R.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
112	LAU_B011R	55	11	112053	112166

Seq# 113	Line Name: LAU_B024A	**NAVIGATION**	DATE: 2009-02-24
	Line Brg: 101 °	**LINE LOGS**	JULIAN DAY: 55

CLIENT: National Science Foundation | **SURVEY: Lau Basin** | **MGL0903**

DC SOL: *617.8*	DEPTH SOL: *2585.4m*	NAVIGATION SYSTEM USED: C-Nav - Primary
DC EOL: *-181.5*	DEPTH EOL: *2227.8m*	NAVIGATION SYSTEM USED: SeaPath 200
SMG SOL: 4.4 knots	FEATHER SOL: n/a °	NAVIGATION SYSTEM USED: Posnet
SMG EOL: 4.5 knots	FEATHER EOL: n/a °	GRAVITY METER: BMG-3
WEATHER	MAX FEATHER: n/a °	MAGNETOMETER: GeoMetrics G-882
WIND SOL: 16.6 knots		MAG DEC USED : 13
WIND EOL: 22 knots		
SEAS SOL: *1.5m*	00:00 - 12:00 cst =>	
SEAS EOL: *1.5m*	12:00 - 24:00 cst =>	

SP	*TIME(utc)*	*EVENT*	*COMMENTS*
113037	10:07	FSP	Start of line; first shot point
113037	10:07	FGSP	First good shot point
113119	15:04	LGSP	Last Good Shot Point
113119	15:04	LSP	Last Shot Point HOORAY!!!

VESSEL POSITION

	SP	Latitude (N)	Longitude (E)
FSP	113037	-20° 01' 56.773"	-176° 08' 31.531"
LSP	113119	-20° 05' 54.052"	-176° 45' 22.736"

NAVIGATION OFFSET APPLIED

NRP - COS	-160
NRP - CNG	n/a
COS - CNG	n/a
NRP - CMP	n/a

General remarks:

String 3 GPS knocked out at SOL
String 2 GPS knocked out at SOL

P1 Lau_B024A.0.p190 **P2** Lau_B024A.0.p294

No Streamer

Posnet locations & remarks: good - none - intermittent

Tailbuoy #1	n/a	Gun string #1	good
Tailbuoy #2	n/a	Gun string #2	BAD
Tailbuoy #3	n/a	Gun string #3	BAD
Tailbuoy #4	n/a	Gun string #4	good

Acoustic remarks:

Langseth: LauPhase: source_8m.SCN(001) langseth.RTCN

SP spacing: 500m

line status:

Seq	Line Name	J- Day	DIR	FGSP	LGSP
113	LAU_B024A	55	101	113037	113119