



JM JW

DEPLOYMENT LOG for IceCube STRING # 40

Deployment Start: at ^{19:15} ~~18:15~~ on ~~17/17/2006~~ 17 Jan 2006

Deployment End: at 10:16 on Jan 18, 2006

Target depth (DOM60): 2450 m Final depth: 2451.96

Deployment Crew

Position	First Shift	Second Shift	Third Shift
Shift lead	Gary		
DOM install 1 (high)	Jon		
DOM install 2 (low)	Patrick		
DOM supply 1 / DOM install 3	Bernard		
DOM supply 2 / floater	Kevin / Stephen		
Winch operator (cable & tower)	Dan		
Notary (logbook & photos)	James J. E. H. H.		
PTS (monitoring / sensors)	Andres / Ignacio		
Support (optional)			
Time shift on:	18:00 hrs		
Time shift off:	6:45 AM ^{V18}		

Summary/Comments:

#46 changed; dropped } Before
#59: failed test: changed } deployment
18:56 Hole logger @ surface

Measuring Tape cut @ 20 cm

**Hole Handover**☒ Drill data reviewed☐ maximum drift in x: _____ ☐ plot☐ maximum drift in y: _____ ☐ plot☐ maximum dept _____☒ minimum radius: 59 cm ☐ plot☐ plot of predicted radius vs dept _____ and time☐ Hole dimensions verified

Time: _____

Drill Lead: SVEN LIDSTROM

name / signature / date.

2005-01-17Deployment Lead: Gary Hill

name / signature / date

1/17/06☐ Handover complete**Hole Logging**

(skip if not applicable)

☐ Logger drop startedTime: 1500 h

Speed: _____

☐ Logging startedTime: 1900 h

Speed: _____

☒ Logging endedTime: 1900 h☐ Estimated ☐ ole lifetime: _____

► Must reach target depth by _____ on _____

**Deployment Startup**Time: 19:30☒ Cable winch ☒ anchored and ☒ operational☐ Tower winch ☐ operational☒ Tie off verified☒ Yellow rope verified☒ Deployment monitoring system (PTS) operational ☐ DDB# 1☒ Pressure sensors on ☒ and: Paro(s) and Keller☐ Laser ranger, tape measure (metric) on ☐ and☒ Loopback terminators connected (inside cable reel drum)☒ Up ☐ ble pressure system on ☒ and: Setra sensor and cable☒ DOMs placed in racks☒ Weight stack on ☐ and: weights (5) and 2 m cableSafety checks complete (☒ 1st shift ☐ 2nd shift)☐ ☒ Crew safety briefing☐ ☒ E-stop locations identified☐ ☒ TOS evacuation procedures reviewed☐ ☒ Mustering point identified☐ ☒ Snow mobile driver(s): Gang, Dar, Ethan, Jon.☐ ☒ CPR trained: Ethan, Dar, Kara, Gang.☐ ☐ Food runners: 2 veg. 1 l.

call galley at 65521

☐ End of Main Cable brought into TOS and secured1) chair and box
for winch operator**Cable end attachments**☐ Measure well depth 53.1 m☐ Weights (5) attached☐ Weight cable attached (weight stack complete)Time: 20:11☒ Disable payout ← Added by I. Taboada³



P~~otos~~: DOM ids (☐ long ☐ s~~ort~~); connectors (☐ long ☐ s~~ort~~)

DOM position 60

(T, Long)

Cable mark: N/ADOM id: ☐ TP4P0115

Reason for substitution:

delay - securing slip ring cablePayout: N/A☐ Bottom s~~ackle~~ connected to weigh~~t~~ stack☒ Top clut~~c~~ connected at link # 19☒ Bow OK → ☐ clut~~c~~ zip tied☒ Cable end taped to weigh~~t~~ stack cableP~~otos~~: ☐ c~~ain~~ wit~~h~~ clut~~c~~ ☐ p~~i~~ orientation ☐ w~~hole~~ view**DOM position 59**

(U, Short)

Cable mark: 1.6 mDOM id: ☒ UP4P0082

Reason for substitution:

failed test $\Delta(59-60)$: 17.7

(use laser ranger)

☐ Bottom s~~ackle~~ connected☐ Top clut~~c~~ connected at link # 17☒ Bow OK → ☐ clut~~c~~ zip tiedP~~otos~~: ☐ c~~ain~~ wit~~h~~ clut~~c~~ ☐ p~~i~~ orientation ☐ w~~hole~~ view**Breakout 30**- done at 21:48Time: 21:05☒ Cable/LC continuity test complete (Q16)☐ all pass☐ fail:in all positions

Depth:

Payout: N/A**- LongDOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☒ connected**- S~~hort~~DOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☒ connected☐ Loose pigtails taped to cable☒ Therm~~istor~~ Distance to DOM59 40 cm

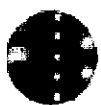
Paro: (= Paro2)

☐ Connected☐ Operational☐ Air pressure [PSI]: 9.8Ser.#: 98111☐ Cable mark: 3.3 m☐ Distance to DOM59: 1.7 mNipple ☐ on ☒ off☐ All clear to lower cable ☺

Gary wants it noted that Ethan said that only 2nd Deal have 4
 plurals ending in "i"

UP5Y0122UP5Y0122

long delay due
 to problems dealing with
 a 17m ^{wire} ~~long~~ cable between
 DOM 60 and DOM 59
 - need design/procedure review



~~P~~otos: DOM ids (☐ long ☒ s~~ort~~); connectors (☐ long ☒ s~~ort~~)

DOM position 58

(T, Long)

Cable mark: 18.6DOM id: ☒ TP4P0111☐

Reason for substitution:

☒ Bottom s~~ack~~le connected☒ Top clut~~c~~ connected at link # 19 $\Delta(58-59)$: 16.9☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tied~~P~~otos: ☒ c~~ain~~ wit~~h~~ clut~~c~~ ☒ p~~er~~ orientation ☒ w~~hole~~ view**DOM position 57**

(U, Short)

Cable mark: 35.6DOM id: ☒ UP4P0140☐

Reason for substitution:

☒ Bottom s~~ack~~le connected☒ Top clut~~c~~ connected at link # 19 $\Delta(57-58)$: 16.9☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tied~~P~~otos: ☒ c~~ain~~ wit~~h~~ clut~~c~~ ☒ p~~er~~ orientation ☒ w~~hole~~ view**Breakout 29**

Time:

☒ Cable/LC continuity test complete (Q16)☐ all pass☐ fail: same as breakout 30Now 21:09 59Last b/o 21:05 Δt [min] : 54**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 not in waterPayout N/A**- ShortDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺



P~~otos~~: DOM ids (☒ long ☒ s~~ort~~); connectors (☒ long ☒ s~~ort~~)

DOM position 56

(T, Long)

Cable mark: 52.5DOM id: ☐ TP4P0085☐

Reason for substitution:

☒ Bottom s~~ackle~~ connected☒ Top clut~~c~~ connected at link # 19 $\Delta(56-57)$: 16.9☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tiedP~~otos~~: ☒ c~~lain~~ wit~~h~~ clut~~c~~ ☒ p~~l~~ orientation ☒ w~~hole~~ view**DOM position 55**

(U, Short)

Cable mark: 69.5DOM id: ☐ UP4P0134☐

Reason for substitution:

☒ Bottom s~~ackle~~ connected☒ Top clut~~c~~ connected at link # 19 $\Delta(55-56)$: 16.9☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tiedP~~otos~~: ☒ c~~lain~~ wit~~h~~ clut~~c~~ ☒ p~~l~~ orientation ☒ w~~hole~~ view**Breakout 28**

Time:

☒ Cable/LC continuity test complete (Q15)☐ all pass☐ fail: same as last B/ONow ~~22:15~~ 22:16Last b/o 21:59 Δt [min] ~~22:16~~ :16**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 ~~22:16~~ 22:16 87.88Payout N/A**- S~~ort~~DOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected☒ Loose pigtailed taped to cable☐ All clear to lower cable ☺long dom cables are tangled



Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)

DOM position 54

(T, Long)

Cable mark: 86.16DOM id: ☐ TP4P0083☒ TP5P0695

Reason for substitution:

broken connector on ground

☒ Bottom saddle connected☒ Top clutched connected at link # 19☐ Bow OK → ☐ clutched zip tied $\Delta(54-55)$: ~~17.0~~ 17.0

static shock to dom conn.

Photos: ☒ chain with clutched ☐ pin orientation ☒ whole view**DOM position 53**

(U, Short)

Cable mark: 103.12DOM id: ☐ UP4P0088☐

Reason for substitution:

☒ Bottom saddle connected☒ Top clutched connected at link # 19☒ Bow OK → ☐ clutched zip tied $\Delta(53-54)$: 16.9Photos: ☒ chain with clutched ☐ pin orientation ☒ whole view**Breakout 27**

Time:

☒ Cable/LC continuity test complete (Q15)☐ all pass☐ fail: same as previous B/ONow 22:32Last b/o 22:00 22:15 Δt [min] 17

- LongDOM

☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 120.4Payout N/A

- ShortDOM

☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtailed to cable

second long DOM
substitution due to
static discharge to DOM
connector during o-ring
resealing

TP5P0695 → TP4P0251

☒ All clear to lower cable ☺

John Jacobsen swapped in for John Eric Eisch



☒ Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)

DOM position 52

(T, Long)

Cable mark: 120.2DOM id: ☒ TP5Y0171

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(52-53)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutche zip tied

☒ Photos: ☒ chain with clutche ☐ pin orientation ☒ whole view

DOM position 51

(U, Short)

Cable mark: 137.2DOM id: ☒ UP4P0086

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(51-52)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutche zip tied

☒ Photos: ☒ chain with clutche ☐ pin orientation ☐ whole view

Breakout 26

Time:

☒ Cable/LC continuity test complete (Q14)☐ all pass☐ fail: same as last N/ANow 22:59Last b/o 22:46 Δt [min] :13**- LongDOM**☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 155.7Payout N/A**- ShortDOM**☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺



☐ Photos: DOM ids (☐ long ☐ short); connectors (☐ long ☐ short)

DOM position 50DOM id: ☐ TP4P0133

(T, Long)

Cable mark: 154.1

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(50-51)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☐ wide view☒ Curved distance around DOM: 2.42m ☐ Vertical distance: 2.38**DOM position 49**DOM id: ☐ UP4P0194

(U, Short)

Cable mark: 171.1

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(49-50)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☐ wide view☒ Curved distance around DOM: 2.43m ☐ Vertical distance: 2.40m**Breakout 25**

Time:

☒ Cable/LC continuity test complete (Q14)☐ all pass☐ fail: same as previous B/0Now 23:12Last b/o 22:59 Δt [min] :13

- LongDOM

☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☒ connected

Depth:

Paro2 191.12Payout ~1A

- ShortDOM

☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☒ connected☐ Loose pigtailed taped to cable☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☐ s~~h~~ort); connectors (☐ long ☐ s~~h~~ort)**DOM position 48**

(T, Long)

Cable mark: 188.0DOM id: ☐ TP4Y0023

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clutc~~h~~ connected at link # 19 $\Delta(48-49)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**DOM position 47**

(U, Short)

Cable mark: 205.0DOM id: ☐ UP5P0858

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clutc~~h~~ connected at link # 19 $\Delta(47-48)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**Breakout 24**

Time:

☐ Cable/LC continuity test complete (Q13)☐ all pass☐ fail: same as last b/oNow 23:23Last b/o 23:12 Δt [min] :11**- LongDOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 223.14Payout 211**- S~~h~~ortDOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☐ connected☐ Loose pigtails taped to cable☐ All clear to lower cable ☺



~~P~~otos: DOM ids (~~☐ long ☐ s~~ort); connectors (~~☐ long ☐ s~~ort) ~~TP5P0711~~

DOM position 46

(T, Long)

Cable mark: 222.0DOM id: TP5Y0195

Reason for substitution:

~~☐ Bottom s~~ackle connected~~☐ Top clutc~~connected at link # 19 $\Delta(46-47)$: 17.0~~☐ Bow OK $\rightarrow$ ☐ clutc~~zip tied~~P~~otos: ~~☐ c~~ain wit~~☐ clutc~~ ~~☐ p~~ orientation ~~☐ w~~ble view**DOM position 45**

(U, Short)

Cable mark: 238.8DOM id: UP5Y0202

Reason for substitution:

~~☐ Bottom s~~ackle connected~~☐ Top clutc~~connected at link # 19 $\Delta(45-46)$: 16.9~~☐ Bow OK $\rightarrow$ ☐ clutc~~zip tied~~P~~otos: ~~☐ c~~ain wit~~☐ clutc~~ ~~☐ p~~ orientation ~~☐ w~~ble view**Breakout 23**

Time:

~~☐ Cable/LC continuity test complete (Q13)~~~~☐ all pass~~~~☐ fail: same as last B/O~~Now 23:45Last b/o 23:23 Δ t [min] :22~~- LongDOM~~~~☐ connector disc~~arged (ESD)~~☐ connector O-ring in place and ☐ lubed~~~~☐ breakout O-ring in place and ☐ lubed~~~~☐ connected~~

Depth:

Paro2 258.72Payout N/A~~- S~~ortDOM~~☐ connector disc~~arged (ESD)~~☐ connector O-ring in place and ☐ lubed~~~~☐ breakout O-ring in place and ☐ lubed~~~~☐ connected~~~~☐ Loose pigtails taped to cable~~~~☐ All clear to lower cable ☺~~

P~~h~~otos: DOM ids (~~long~~ ~~short~~); connectors (~~long~~ ~~short~~)**DOM position 44**

(T, Long)

Cable mark: 255.8DOM id: ~~TP4P0131~~

Reason for substitution:

~~☐ Bottom saddle connected~~~~☒ Top clut~~c~~ connected at link # 19~~ $\Delta(44-45)$: 16.9~~☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tied~~P~~h~~otos: ~~☒ c~~h~~ain wit~~h~~ clut~~c~~~~ ~~☒ p~~h~~ orientation~~ ☐ w~~h~~ole view**DOM position 43**

(U, Short)

Cable mark: 272.7DOM id: ~~UP4H0029~~

Reason for substitution:

~~☐ Bottom saddle connected~~~~☒ Top clut~~c~~ connected at link # 19~~ $\Delta(43-44)$: 16.9~~☒ Bow OK $\rightarrow$ ☒ clut~~c~~ zip tied~~P~~h~~otos: ~~☒ c~~h~~ain wit~~h~~ clut~~c~~~~ ~~☒ p~~h~~ orientation~~ ☐ w~~h~~ole view**Breakout 22**

Time:

~~☒ Cable/LC continuity test complete (Q12)~~~~☐ all pass~~~~☐ fail: same as last B/O~~Now 00:01Last b/o 23:45 Δt [min] :16**- LongDOM**~~☐ connector disc~~h~~arged (ESD)~~~~☐ connector O-ring in place and ☒ lubed~~~~☐ breakout O-ring in place and ☒ lubed~~~~☒ connected~~

Depth:

Paro2 292.26Payout n/A**- ShortDOM**~~☐ connector disc~~h~~arged (ESD)~~~~☐ connector O-ring in place and ☐ lubed~~~~☒ breakout O-ring in place and ☒ lubed~~~~☒ connected~~☐ Loose pigtails taped to cable☐ All clear to lower cable ☺no
DOM
id

Potos: DOM ids (☐ long ☐ short); connectors (☒ long ☐ short)**DOM position 42**

(T, Long)

Cable mark: 289.6
77856DOM id: ☐ TP4Y0021

Reason for substitution:

☐ Bottom saddle connected☐ Top clutched connected at link # 19 $\Delta(42-43)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutched zip tiedPotos: ☒ chain with clutched ☐ pin orientation ☐ whole view**DOM position 41**

(U, Short)

Cable mark: 306.6DOM id: ☐ UP5P0510

Reason for substitution:

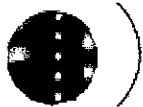
☐ Bottom saddle connected☐ Top clutched connected at link # 19 $\Delta(41-42)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutched zip tiedPotos: ☐ chain with clutched ☐ pin orientation ☐ whole view**Breakout 21**

Time:

☐ Cable/LC continuity test complete (Q12)☐ all pass☐ fail: same as last B/ONow 00:14Last b/o 00:01 Δt [min] :13**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 326.97 mPayout N/A**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected☐ Loose pigtailed taped to cable☐ All clear to lower cable ☺



IceCube String Deployment Log

String 40

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 40**

(T, Long)

Cable mark: 323.5DOM id: ☐ TP4P0289☒ ~~TP4P0289~~

Reason for substitution:

broken connector☐ Bottom s~~h~~ackle connected☐ Top clut~~c~~ connected at link # 19 $\Delta(40-41)$: 17.0☐ Bow OK $\rightarrow$ ☐ clut~~c~~ ☐ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ ☐ p~~h~~ orientation ☐ w~~h~~ole view**DOM position 39**

(U, Short)

Cable mark: 340.5DOM id: ☐ UP4P0352☐

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clut~~c~~ connected at link # 19 $\Delta(39-40)$: 16.9☐ Bow OK $\rightarrow$ ☐ clut~~c~~ ☐ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ ☐ p~~h~~ orientation ☐ w~~h~~ole view**Breakout 20**

Time:

☐ Cable/LC continuity test complete (Q11)☐ all pass☐ fail: same as last B/ONow 00:31Last b/o 00:14 Δt [min] :16**- LongDOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 361.71Payout **- S~~h~~ortDOM**☐ connector disc~~h~~arged (ESD)☐ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☐ lubed☐ connected☐ Loose pigtails taped to cable00:33 *connector broke on Dom 40*00:49 *Back to deployment*
:16 *delay*~~00:49~~
01:00 *Lunch start*
01:27 *Lunch end*☐ All clear to lower cable ☺



Photos: DOM ids (☐ long ☐ short); connectors (☒ long ☐ short)

DOM position 38

(T, Long)

Cable mark: 357.4DOM id: ☒ TP5Y0181

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(38-39)$: 17.6☒ Bow OK $\rightarrow$ ☒ clutche zip tiedPhotos: ☒ chain with clutche ☐ position orientation ☐ whole view**DOM position 37**

(U, Short)

Cable mark: 374.5DOM id: ☒ UP5Y0198

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(37-38)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutche zip tiedPhotos: ☒ chain with clutche ☐ position orientation ☐ whole view**Breakout 19**☒ Cable/LC continuity test complete (Q11)☐ all pass☐ fail: same**- LongDOM**☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected**- ShortDOM**☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☐ Loose pigtailed taped to cable

Time:

01:34Now 00:49Last b/o 00:49 Δt [min] 00:45

Depth:

Paro2 396.6Payout N/A☐ All clear to lower cable ☺



☐ Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)

DOM position 36DOM id: ☐ TP4P0279

(T, Long)

Cable mark: 391.4

Reason for substitution:

☒ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(36-37)$: 16.9☐ Bow OK $\rightarrow$ ☒ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☒ whole view**DOM position 35**DOM id: ☒ UP4P0334

(U, Short)

Cable mark: 408.4

Reason for substitution:

☐ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(35-36)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☒ whole view**Breakout 18**

Time:

☒ Cable/LC continuity test complete (Q10)☐ all pass☐ fail: same as breakout B/ONow 01:49Last b/o 01:34 Δt [min] :15**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☒ lubed☐ connected**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☒ lubed☐ connected☐ Loose pigtails taped to cable☐ Put two Kellers (one is for backup) in bucket of water/ice mix☒ All clear to lower cable ☺

Photos: DOM ids (☐ long ☒ short); connectors (☒ long ☐ short)**DOM position 34**

(T, Long)

Cable mark: 425.2DOM id: ☒ TP4P0171

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(34-35)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☒ whole view**DOM position 33**

(U, Short)

Cable mark: 442.2DOM id: ☒ UP4H0022

Reason for substitution:

☒ Bottom saddle connected☒ Top clutche connected at link # 19 $\Delta(33-34)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☒ chain with clutche ☐ pin orientation ☒ whole view**Breakout 17**

Time:

☐ Cable/LC continuity test complete (Q10)☐ all pass☐ fail: Same as last B/ONow 02:43Last b/o 01:49 Δt [min] :14**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☒ connected**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☒ connected☐ Loose pigtailed taped to cable

Depth:

Paro2 464.98Payout N/A

02:09

new laser well depth 45.88m

☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (~~long~~ ~~short~~); connectors (~~long~~ ~~short~~)**DOM position 32**

(T, Long)

Cable mark: 459.1DOM id: ~~TP5Y0117~~

Reason for substitution:

~~☐ Bottom s~~h~~ackle connected~~~~☐ Top clut~~c~~ connected at link # 19~~ $\Delta(32-33)$: 16.9~~☐ Bow OK $\rightarrow$ ☐ clut~~c~~ ☐ zip tied~~P~~h~~otos: ~~☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ p~~h~~ orientation ☐ w~~h~~ole view~~**DOM position 31**

(U, Short)

Cable mark: 445.7DOM id: ~~UP5Y0184~~

Reason for substitution:

~~☐ Bottom s~~h~~ackle connected~~~~☐ Top clut~~c~~ connected at link # 19~~ $\Delta(31-32)$: 16.9~~☐ Bow OK $\rightarrow$ ☐ clut~~c~~ ☐ zip tied~~P~~h~~otos: ~~☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ p~~h~~ orientation ☐ w~~h~~ole view~~**Breakout 16**

Time:

~~☐ Cable/LC continuity test complete (Q9)~~~~☐ all pass~~~~☐ fail: same as last B/O~~Now 02:22Last b/o 02:03 Δ t [min] :19

- LongDOM

~~☐ connector disc~~h~~arged (ESD)~~~~☐ connector O-ring in place and ☐ lubed~~~~☐ breakout O-ring in place and ☐ lubed~~~~☐ connected~~

Depth:

Paro2 492.34Payout n/A- S~~h~~ortDOM~~☐ connector disc~~h~~arged (ESD)~~~~☐ connector O-ring in place and ☐ lubed~~~~☐ breakout O-ring in place and ☐ lubed~~~~☐ connected~~~~☐ Loose pigtailed taped to cable~~

02:13 cable fault - estop power cable fell out of
estop box

☐ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 30**

(T, Long)

Cable mark: 493.6DOM id: ☒ TP4P0245

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(30-31)$: 17.6☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~ orientation ☒ w~~h~~ole view**DOM position 29**

(U, Short)

Cable mark: 510.0DOM id: ☒ UP4P0324

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(29-30)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~ orientation ☒ w~~h~~ole view**Breakout 15**

Time:

☒ Cable/LC continuity test complete (Q9)☐ all pass☐ fail: Same as last B/ONow 02:36Last b/o 02:22 Δt [min] :14**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 526.3

Payout _____

- ShortDOM☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable**Thermistor:**☒ Present☒ Distance to DOM29: 7**Keller:**☒ Connected☒ Operational☒ Air pressure [PSI]: 70.33 psiSer.#: 0504006☒ Cable mark: 511.5☒ Distance to DOM29: 1.53 m☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 28**DOM id: ☐ TP5Y0097

(T, Long)

Cable mark: 527

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(28-29)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**DOM position 27**DOM id: ☐ UP5Y0180

(U, Short)

Cable mark: 543.9

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(27-28)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**Breakout 14**

Time:

☒ Cable/LC continuity test complete (Q8)☐ all pass☒ fail: same as last B/ONow 02:55Last b/o 02:36 Δt [min] 19**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 560.07Keller M/bPayout N/A**- S~~h~~ortDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺



P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)

DOM position 26

(T, Long)

Cable mark:

5609DOM id: ☐ TP5P0739

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19☒ Bow OK → ☒ clutc~~h~~ zip tied $\Delta(26-27):$ 16.9 17.6P~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**DOM position 25**

(U, Short)

Cable mark:

577.8DOM id: ☐ UP4P0294

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19☒ Bow OK → ☒ clutc~~h~~ zip tied $\Delta(25-26):$ 16.9P~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**Breakout 13**

Time:

☒ Cable/LC continuity test complete (Q8)☐ all pass☐ fail:same as last b/o

Now

03:16

Last b/o

02:55 Δ [min]:21**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2

594.92

Keller

587

Payout

N/A**- ShortDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable

03:07 hold for removal
A wrap on reel

03:09 wrap all

☐ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 24**

(T, Long)

Cable mark: 594.8DOM id: ☐ TP5H0187

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clutc~~h~~ connected at link # 19 $\Delta(24-25)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**DOM position 23**

(U, Short)

Cable mark: 611.5DOM id: ☐ UP5H0220

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clutc~~h~~ connected at link # 19 $\Delta(23-24)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**Breakout 12**

Time:

☒ Cable/LC continuity test complete (Q7)☐ all pass☐ fail: same as last B/ONow 03:32Last b/o 03:16 Δt [min] :16**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 629.7Keller 612.5Payout N/A**- S~~h~~ortDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☐ breakout O-ring in place and ☐ lubed☒ connected☐ Loose pigtails taped to cable

03:25 photo of defect in cable between DOMs 25 and 24
03:36 more cracks at breakout 12

☒ All clear to lower cable ☺

Take tape off standard cable

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 22**

(T, Long)

Cable mark: 628.5DOM id: ☒ TP5P0897☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 18☒ Bow OK → ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view

Reason for substitution:

12-std cable
Δ(22-23): 8.0m**DOM position 21**

(U, Short)

Cable mark: 645.4DOM id: ☐ UP5Y0166☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19☒ Bow OK → ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view

Reason for substitution:

Δ(21-22): 16.9**Breakout 11**

Time:

☒ Cable/LC continuity test complete (Q7)☐ all pass☐ fail: Same as all 13/0 - 0.0Now 05:08Last b/o 03:32Δt [min] 4**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☐ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 663.5Keller 635.4Payout N/A**- S~~h~~ortDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☐ breakout O-ring in place and ☒ lubed☐ connected☒ Loose pigtails taped to cablecable mark for std cable 628.7
std cable bottom to DOM23 7.42m☒ All clear to lower cable ☺delay from std cable

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 20**

(T, Long)

Cable mark: 662.5DOM id: ☒ TP5Y0167

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~connected at link # 19 $\Delta(20-21)$: 17.0☒ Bow OK $\rightarrow$ ☐ clutc~~h~~zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view☒ Curved distance around DOM: 2.42 ☐ Vertical distance: 2.38**DOM position 19**

(U, Short)

Cable mark: ~~679.6~~DOM id: ☒ UP5P0504

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~connected at link # 19 $\Delta(19-20)$: 17.0☒ Bow OK $\rightarrow$ ☐ clutc~~h~~zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view☒ Curved distance around DOM: 2.38 ☐ Vertical distance: 2.35**Breakout 10**

Time:

☒ Cable/LC continuity test complete (Q6)☐ all pass☐ fail: same as all B/ONow 05:19Last b/o 05:08 Δt [min] :11

- LongDOM

☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 698.9Keller 660.0Payout - S~~h~~ortDOM☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☒ long ☒ s~~h~~ort); connectors (☒ long ☒ s~~h~~ort)**DOM position 18**

(T, Long)

Cable mark: 696.4DOM id: ☒ TP5P0729

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(18-19)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**DOM position 17**

(U, Short)

Cable mark: 713.4DOM id: ☒ UP5P0880

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(17-18)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**Breakout 9**

Time:

☒ Cable/LC continuity test complete (Q6)☒ all pass☒ fail: same as other B/ONow 05:33Last b/o 05:19 Δt [min] :14**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 732.54Keller 683.91Payout **- S~~h~~ortDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable

*photos of exposed copper wire in cable
(strength members?)*

☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 16**

(T, Long)

Cable mark: 739.3DOM id: ☒ TP5H0183☐

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clut~~c~~ connected at link # 19 $\Delta(16-17)$: 17.0☐ Bow OK $\rightarrow$ ☐ clut~~c~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ p~~h~~ orientation ☐ w~~h~~ole view**DOM position 15**

(U, Short)

Cable mark: 747.2DOM id: ☒ UP5H0202☐

Reason for substitution:

☐ Bottom s~~h~~ackle connected☐ Top clut~~c~~ connected at link # 19 $\Delta(15-16)$: 17.0☐ Bow OK $\rightarrow$ ☐ clut~~c~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clut~~c~~ ☐ p~~h~~ orientation ☐ w~~h~~ole view**Breakout 8**

Time:

☐ Cable/LC continuity test complete (Q5)☐ all pass☐ fail: same as other B/O'sNow 05:42Last b/o 05:33 Δt [min] 11**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 766.14Keller 767.18Payout 211**- S~~h~~ortDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☐ Loose pigtails taped to cable☐ All clear to lower cable ☺



Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)

DOM position 14DOM id: ☒ TP5Y0159

(T, Long)

Cable mark: 764.1

Reason for substitution:

☐ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(14-15)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☐ chain with clutche ☐ pig orientation ☐ whole view**DOM position 13**DOM id: ☐ UP5Y0200

(U, Short)

Cable mark: 781.1

Reason for substitution:

☐ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(13-14)$: 16.9☐ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☐ chain with clutche ☐ pig orientation ☐ whole view**Breakout 7**

Time:

☐ Cable/LC continuity test complete (Q5)☐ all pass☐ fail: same as the B/ONow 05:53Last b/o 05:42 Δt [min] :11**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 800.69Keller 731.08Payout N/A**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected☐ Loose pigtails taped to cable05:54 blanket off reel☐ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☒ long ☐ s~~h~~ort)**DOM position 12**

(T, Long)

Cable mark: 798-1DOM id: ☐ TP5P0871

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(12-13)$: 17.0☒ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☒ w~~h~~ole view**DOM position 11**

(U, Short)

Cable mark: 815.0DOM id: ☐ UP5P1012

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(11-12)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☐ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☒ w~~h~~ole view**Breakout 6**

Time:

☒ Cable/LC continuity test complete (Q4)☐ all pass☐ fail: same as other bksNow 06:00Last b/o 05:53 Δt [min] 07**- LongDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 834.92Keller 782.84Payout N/A**- ShortDOM**☐ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☒ lubed☐ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 10**

(T, Long)

Cable mark: 832mDOM id: ☒ TP5P0625

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(10-11)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**DOM position 9**

(U, Short)

Cable mark: 849.0DOM id: ☒ UP5P1006

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(9-10)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~i orientation ☒ w~~h~~ole view**Breakout 5**

Time:

☒ Cable/LC continuity test complete (Q4)☐ all pass☒ fail: Same as other B0s 0.0Now 06:08Last b/o 06:00 Δt [min] :08**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 868.98Keller 819.14

Payout _____

- ShortDOM☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable☐ All clear to lower cable ☺



P_{otos}: DOM ids (☐ long ☐ s_{ort}); connectors (☐ long ☐ s_{ort})

DOM position 8

(T, Long)

Cable mark: 866 mDOM id: ☐ TP5H0113

Reason for substitution:

☐ Bottom s_{ackle} connected☐ Top clut_c ☐ connected at link # 19 $\Delta(8-9)$: 17.0☐ Bow OK $\rightarrow$ ☐ clut_c ☐ zip tiedP_{otos}: ☐ c_{ain} wit_h ☐ clut_c ☐ ☐ p_i orientation ☐ w_{ble} view**DOM position 7**

(U, Short)

Cable mark: 582.8DOM id: ☐ UP5H0186

Reason for substitution:

☐ Bottom s_{ackle} connected☐ Top clut_c ☐ connected at link # 19 $\Delta(7-8)$: 16.9☐ Bow OK $\rightarrow$ ☐ clut_c ☐ zip tiedP_{otos}: ☐ c_{ain} wit_h ☐ clut_c ☐ ☐ p_i orientation ☐ w_{ble} view**Breakout 4**

Time:

☐ Cable/LC continuity test complete (Q3)☐ all pass☐ fail: same as other B/0s 0.0Now 06:17Last b/o 06:08 Δt [min] :09**- LongDOM**☐ connector disc_harged (ESD)☐ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 851.5 903:00Keller 851.5Payout **- S_{ort}DOM**☐ connector disc_harged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected☒ Loose pigtails taped to cable☐ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 6**

(T, Long)

Cable mark: 899.88DOM id: ☒ TP5P1015☐

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(6-7)$: 17.0☒ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**DOM position 5**

(U, Short)

Cable mark: 916.8DOM id: ☒ UP5Y0186☐

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(5-6)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☐ p~~h~~i orientation ☐ w~~h~~ole view**Breakout 3**

Time:

☒ Cable/LC continuity test complete (Q3)☐ all pass☒ fail: same as other B/O 0.0

Now

06:31

Last b/o

06:17 Δt [min]:15**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2

937.25

Keller

888.19

Payout

- S~~h~~ortDOM☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺

P~~h~~otos: DOM ids (☐ long ☒ s~~h~~ort); connectors (☐ long ☒ s~~h~~ort)**DOM position 4**

(T, Long)

Cable mark: 933.6DOM id: ☒ TP5P0767

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(4-5)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~ orientation ☒ w~~h~~ole view**DOM position 3**

(U, Short)

Cable mark: 950.7DOM id: ☒ UP5P0958

Reason for substitution:

☒ Bottom s~~h~~ackle connected☒ Top clutc~~h~~ connected at link # 19 $\Delta(3-4)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutc~~h~~ zip tiedP~~h~~otos: ☒ c~~h~~ain wit~~h~~ clutc~~h~~ ☒ p~~h~~ orientation ☒ w~~h~~ole view**Breakout 2**

Time:

☒ Cable/LC continuity test complete (Q2)☒ all pass☒ fail: 9p+ fail / 7p- fail / LC failNow 07:07Last b/o 06:32 Δt [min] 25**- LongDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 972.6Keller 922.7Payout **- ShortDOM**☒ connector disc~~h~~arged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected☒ Loose pigtails taped to cable☒ All clear to lower cable ☺



Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)

DOM position 2

(T, Long)

Cable mark: ~~XXXXXXXXXX~~DOM id: ~~TP5P0543~~

Reason for substitution:

☐ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(2-3)$: 16.8☐ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☐ chain with clutche ☐ pin orientation ☐ wide view**DOM position 1**

(U, Short)

Cable mark: 0984DOM id: ~~UP5P0866~~

Reason for substitution:

☐ Bottom saddle connected☐ Top clutche connected at link # 19 $\Delta(1-2)$: 17.0☐ Bow OK $\rightarrow$ ☐ clutche zip tiedPhotos: ☐ chain with clutche ☐ pin orientation ☐ wide view**Breakout 1**☒ Cable/LC continuity test complete (Q2)☐ all pass☒ fail: 9p+ / 7p- / LC

- LongDOM

☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☐ breakout O-ring in place and ☒ lubed☐ connected

- ShortDOM

☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☐ breakout O-ring in place and ☒ lubed☐ connected☒ Loose pigtails taped to cable

Time:

Now 07:44Last b/o 07:07 Δt [min] 37

Depth:

Paro2 1005.2Keller 956.5Payout N/A**No second Paro...**☐ Group photo☐ All clear to lower cable ☺☒ Enable Payout☒ Zero Payout to paro} Added by
T Taboada

**Uphole Pressure Sensor (Setra)***After DOM1 is safely under the surface (> 50 m)*

Time: _____

- ☒ Stop the cable winch
- ☒ Lower Setra pressure sensor into hole
- ☒ Distance to Setra from floor: 60 m
- ☒ Setra readout verified with monitoring system
- ☒ Well depth from Setra: 35.22
- ☒ Well depth from laser: 41.3

If the two well depth measurements agree:

- ☐ Switch to Setra well depth in monitoring system

Time: 8:24 AM**Now the String Drop begins**

**String Drop***The target depth is 2450 m*☐ Switch cable winch to computer control☐ Speed: _____ Time: _____ Dept: _____☐ Speed: _____ Time: _____ Dept: _____☐ Speed: _____ Time: _____ Dept: _____☐ Speed: _____ Time: _____ Dept: _____☐ Speed: _____ Time: _____ Dept: _____☐ Speed: _____ Time: _____ Dept: _____**Depth Monitoring** (log on the fly – do not stop for this)

Depth Paro2 ¹	Time	Well depth ¹	Depth c/marks ²	Depth payout ¹	Δ depth P2-P1 ¹	Δ depth P2-K ¹	Δ depth K-P1 ¹
1000 m	8:29	42.3	1476.8		n/a		n/a
1500 m	8:49	41.8	1476.8	487.25	n/a		n/a
2000 m	9:17	41.4	1973.4		n/a		n/a
2100 m					n/a		n/a
2200 m					n/a		n/a
2300 m					n/a		n/a
2400 m		41.1	2371-1.2		n/a		n/a

¹Read off monitoring screen²Cable mark offset (at DOM60) is (p. 4): _____☐ Switch to manual control @ 2400 m☐ Well dept

@ 2420: 41.4

@ 2440: 41.1

2445

☒ Position string at target dept of 2450 m

Time: 9:58 AM

☐ String secured with Yale grip and anchor chain

Time: _____



Absolute depth with bottom Paro (depth in *meters* and pressure in *PSI*)

☒ Distance from Paro2 to DOM60:

$$d_{\text{Paro2-DOM59}} = \underline{1.7 \text{ m}} \quad (\text{from p. 4})$$

$$d_{\text{Paro2-DOM60}} = (d_{\text{Paro2-DOM59}} + 17) \text{ m} = \underline{19.4} \quad \leftarrow \text{insert below}$$

☐ Convert Paro2 pressure to string dept ☐

$$K = 3.78151 \cdot 10^{-6} / \text{PSI} \quad (\text{compressibility of aerated water})$$

(use 6 decimals for exp's)

$$\text{Ambient pressure (from p. 4): } P_0 = \underline{9.8} \text{ PSI} \rightarrow \exp(-KP_0) = \underline{.999963}$$

$$\text{Pressure reading (from screen): } P = \underline{3433.01} \text{ PSI} \rightarrow \exp(-KP) = \underline{.987102}$$

$$\begin{aligned} \text{Subtract exponentials} \rightarrow &= \underline{.012861} \\ &\times 1.85947 \cdot 10^5 \end{aligned}$$

$$\text{Paro2 dept in water} \rightarrow = \underline{2391.46} \text{ m}$$

$$\text{Add distance to DOM60 (above)} \rightarrow + \underline{19.4 \text{ m}}$$

$$\text{Add well dept} \rightarrow + \underline{41.1} \text{ m}$$

$$\text{Dept of bottom DOM} \rightarrow = \underline{2451.96} \text{ m}$$

Final depth estimates

←----- read off deployment screen -----→

Time:	Paro2	Keller	Paro1	Payout	Cable marks
Reading	3433.01 PSI	2704.57 PSI	n/a	-1414.08 m	2420.5 m
Offset	9.8 PSI	70.33 PSI	n/a	3.2 m	16.1 m
Well depth	41.1 m			This space is intentionally left blank	
Dist. to DOM60	19.4 m	528.53 m	n/a		
DEPTH (DOM60)	2452.08	2414.14	n/a	-1414.09	2436.6

Time: 10:16

Final depth (DOM60): 2451.96

**Deployment Closeout**

- ☒ Log entries complete
- ☒ String safely secured
- ☒ Hole covered and secured
- ☒ Equipment safely shutdown and secured
- ☐ Deployment data OK (in database)
- ☒ Site cleanup
- ☒ Deployment crew dismissed
- ☐ String deployment complete

Reel stop
hit
10:21 AM

cable drag @ 3:00 pm 1/18/06

Time: 10:16 AM Date: Jan 18, 2006

Shift Lead: Gary Hill
name / signature

Logger: Ethan Dicks
name / signature

PTS Lead: Andres Moray, Ignacio Taboada
name / signature

Deployment Manager: [Signature]
name / signature

Safety Officer: TH
name / signature

IceCube On-ice Lead: _____
name / signature

