

**DEPLOYMENT LOG for IceCube STRING # 50**Deployment Start: at 19:36 on 21-Jan-2006Deployment End: at 7:34 on 22-Jan-2006Target depth (DOM60): **2450 m** Final depth: 2460.7**Deployment Crew**

Position	First Shift	Second Shift	Third Shift
Shift lead	Gary Hill		
DOM install 1 (high)	John Jacobson		
DOM install 2 (low)	Patrick Bengtson		
DOM supply 1 / DOM install 3	Bernhard Voigt		
DOM supply 2 / floater	Stephen Huelshagen / Dan Wharton		
Winch operator (cable & tower)	Dan Gibson		
Notary (logbook & photos)	Ethan Dicks		
PTS (monitoring / sensors)	Andrés Mory / Ignacio Taboada		
Support (optional)			
Time shift on:	19:00		
Time shift off:			

Summary/Comments:

**Hole Handover**☐ Drill data reviewed☐ maximum drift in x: _____ ☐ plot☐ maximum drift in y: _____ ☐ plot☐ maximum depth: _____☒ minimum radius: 65m ☒ plot from log sighted yesterday☐ plot of predicted radius vs depth and time☐ Hole dimensions verifiedTime: 19:44Drill Lead: SVEN LIPSTROM [signature] 2005-01-21
name / signature / dateDeployment Lead: GARY HILL [signature] 21-1-2005
name / signature / date☐ Handover complete**Hole Logging**

(skip if not applicable)

☐ Logger drop started Time: _____ Speed: _____☐ Logging started Time: _____ Speed: _____☐ Logging ended Time: _____☐ Estimated hole 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# 3
- ☒ Pressure sensors on hand: Paro(s) and Keller
- ☒ Laser ranger, tape measure (metric) on hand (~~20~~ 20 cm missing from end of tape)
- ☒ Loopback terminators connected (inside cable reel drum)
- ☒ Uphole pressure system on hand: Setra sensor and cable
- ☒ DOMs placed in racks
- ☒ Weight stack on hand: weights (5) and 17 m cable
- Safety checks complete (☐ 1st shift ☐ 2nd shift)
 - ☐ ☒ Crew safety briefing
 - ☐ ☒ E-stop locations identified
 - ☐ ☒ TOS evacuation procedures reviewed
 - ☐ ☒ Mustering point identified
 - ☐ ☒ Snow mobile driver(s): GH. D.G. E.D. I.T.
 - ☐ ☒ CPR trained: GH. D.G. E.D. A.M.
 - ☐ ☐ Food runners: _____
- ☐ End of Main Cable brought into TOS and secured

call galley at 65521

19:54 preparing to attach lower weights

Cable end attachments

- ☒ Measure well depth: 58.0 m
- ☒ Weights (5) attached
- ☒ Weight cable attached (weight stack complete) Time: 20:21

19:42 ~~19:42~~ dust logger ready
☒ Disable Downoff Added by I. Taboada



IceCube String Deployment Log

String 50

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 60**DOM id: ☒ TP5Y0209

(T, Long)

Cable mark: N/A

Reason for substitution:

☒ Bottom shackle connected to weight stack 20.44☐ Top clutch connected at link # N/A☐ Bow OK → ☐ clutch zip tied N/A☐ Cable end taped to weight stack cablePayout: N/APhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 59**DOM id: ☒ UP4P0142

(U, Short)

Cable mark: 1.6m

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19☒ Bow OK → ☒ clutch zip tied $\Delta(59-60)$: 16.8 m
(use laser ranger)Photos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 30**Time: 22:07 descending☐ Cable/LC continuity test complete (Q16)☐ all pass☒ fail: all LC + pass all 2/SC fail

- 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 cableParo: (= Paro2) ☒ Connected ☒ Operational ☒ Air pressure [PSI]: 9.97Ser.#: 98106 ☐ Cable mark: 3.3m ☒ Distance to DOM59: 1.7mNipple ☐ on ☒ off☐ All clear to lower cable ☺

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 58**

(T, Long)

Cable mark: 18.6DOM id: ☒ TP5H0169☐

Reason for substitution:

☒ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(58-59)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 57**

(U, Short)

Cable mark: 35.8DOM id: ☒ UP4P0092☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(57-58)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 29**

Time:

☒ Cable/LC continuity test complete (Q16)☐ all pass☒ fail: LC + pass rest failNow 22:16Last b/o 22:07 Δt [min] 09

- LongDOM

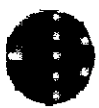
☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 N/APayout 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 56**

(T, Long)

Cable mark: 52.6DOM id: ☒ TP5H0241☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(56-57)$: 17.0☒ Bow OK → ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 55**

(U, Short)

Cable mark: 69.6DOM id: ☒ UP4P0144☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(55-56)$: 16.9☒ Bow OK → ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 28**

Time:

☒ Cable/LC continuity test complete (Q15)☐ all pass☒ fail: LC + pass rest failNow 22:30Last b/o 22:16 Δt [min] 14

- LongDOM

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

Depth:

Paro2 85.45Payout 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 54**

(T, Long)

Cable mark: 86.6DOM id: ☒ TP4P0195

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(54-55)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 53**

(U, Short)

Cable mark: B1 103.6DOM id: ☒ UP4P0100

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(53-54)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 27**

Time:

☒ Cable/LC continuity test complete (Q15)☐ all pass☒ fail: LC+ pass rest failNow 22:48Last b/o 22:30 Δt [min] 18

- LongDOM

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

Depth:

Paro2 119.29Payout w/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 52**DOM id: ☒ TP5Y0211

(T, Long)

Cable mark: 120.6

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(52-53)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 51**DOM id: ☒ UP4P0090

(U, Short)

Cable mark: 137.6

Reason for substitution:

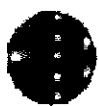
☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(51-52)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 26**

Time:

☒ Cable/LC continuity test complete (Q14)☐ all pass☒ fail: LCt pass rest failNow 22:58Last b/o 22:48 Δt [min] 10**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 153.59Payout 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 50**

(T, Long)

Cable mark: 154.6mDOM id: ☒ TP5H0117☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(50-51)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view☒ Curved distance around DOM: 2.39m ☒ Vertical distance: 2.36m**DOM position 49**

(U, Short)

Cable mark: 171.6mDOM id: ☒ UP4P0242☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(49-50)$: 16.8☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view☒ Curved distance around DOM: 2.36 ☒ Vertical distance: 2.31m**Breakout 25**

Time:

☒ Cable/LC continuity test complete (Q14)☐ all pass☒ fail: LC + pass, rest failNow 23:08Last b/o 22:58 Δt [min] 3:10**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 187.7Payout 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 48**

(T, Long)

Cable mark: 188.6DOM id: ☒ TP5Y0223☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(48-49)$: 16.9☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☐ chain with clutch ☒ phi orientation ☒ whole view**DOM position 47**

(U, Short)

Cable mark: 205.7DOM id: ☒ UP5P0990☐

Reason for substitution:

☐ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(47-48)$: 16.9☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☐ chain with clutch ☒ phi orientation ☒ whole view**Breakout 24**

Time:

☒ Cable/LC continuity test complete (Q13)☐ all pass☒ fail: LC + pass rest failNow 23:20Last b/o 23:08 Δt [min] :12**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 221.7

Payout _____

- 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 46**

(T, Long)

Cable mark: 222.7DOM id: ☒ TP5H0181☐

Reason for substitution:

☐ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(46-47)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 45**

(U, Short)

Cable mark: 239.7DOM id: ☒ UP5P0788☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(45-46)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 23**

Time:

☒ Cable/LC continuity test complete (Q13)☐ all pass☒ fail: LC + pass rest failNow 23:31Last b/o 23:20 Δt [min] _____**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☐ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 256.2Payout 211**- 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 44**

(T, Long)

Cable mark: 256.5DOM id: ☒ TP4P0143☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(44-45)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 43**

(U, Short)

Cable mark: 273.6DOM id: ☒ UP5Y0212☐

Reason for substitution:

☒ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(43-44)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 22**

Time:

☒ Cable/LC continuity test complete (Q12)☐ all pass☒ fail: LC4 fail rest passNow 23:40Last b/o 23:31 Δt [min] :09**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 290.15Payout 7/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 42DOM id: ☒ TP5Y0133

(T, Long)

Cable mark: 290.6

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(42-43)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 41**DOM id: ☒ UP5P0592

(U, Short)

Cable mark: 307.6

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(41-42)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 21**

Time:

☒ Cable/LC continuity test complete (Q12)☐ all pass☐ fail: LC + pass rest failNow 23:48Last b/o 23:40 Δt [min] 08**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 324.71

Payout _____

- 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 40**DOM id: ☒ TP4P0331

(T, Long)

Cable mark: 324.6m

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(40-41)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 39**DOM id: ☒ UP5H0164

(U, Short)

Cable mark: 341.5

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(39-40)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 20**

Time:

☒ Cable/LC continuity test complete (Q11)☐ all pass☒ fail: LC+ pass rest failNow 23:57Last b/o 23:48 Δt [min] :09**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 358.91Payout 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 38**

(T, Long)

Cable mark: 358.5DOM id: ☐ TP4P0315

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(38-39)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☐ chain with clutch ☐ phi orientation ☐ whole view**DOM position 37**

(U, Short)

Cable mark: 375.5DOM id: ☐ UP5Y0216

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(37-38)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☐ chain with clutch ☐ phi orientation ☐ whole view**Breakout 19**

Time:

☐ Cable/LC continuity test complete (Q11)☐ all pass☒ fail: LC + pass, rest failNow 00:05Last b/o 23:57 Δt [min] :08

- LongDOM

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

Depth:

Paro2 393.14Payout 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 36**

(T, Long)

Cable mark: 2392.5DOM id: ☒ TP4P0229☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(36-37)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 35**

(U, Short)

Cable mark: 409.5DOM id: ☒ UP4P0348☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(35-36)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 18**

Time:

☒ Cable/LC continuity test complete (Q10)☒ all pass☒ fail: LC4 pass, rest failNow 00:16Last b/o 00:05 Δt [min] :11**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 427.7Payout 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☐ 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**DOM id: ☒ TP4P0219

(T, Long)

Cable mark: 426.6 M

Reason for substitution:

☒ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(34-35)$: 16.9☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 33**DOM id: ☒ UP5H0206

(U, Short)

Cable mark: 443.6

Reason for substitution:

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

Time:

☒ Cable/LC continuity test complete (Q10)☐ all pass☒ fail: LC+ pass, rest failNow 00:25Last b/o 00:16 Δt [min] 09

- LongDOM

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

Depth:

Paro2 461.8Payout 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 32**

(T, Long)

Cable mark: 460.5DOM id: ☒ TP5P0531☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(32-33)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 31**

(U, Short)

Cable mark: 477.5DOM id: ☒ UP5Y0218☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(31-32)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 16**

Time:

☒ Cable/LC continuity test complete (Q9)☐ all pass☒ fail: LC + pass, rest failNow 00:36Last b/o 00:25 Δt [min] 11

- LongDOM

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

Depth:

Paro2 496.2Payout 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 30**DOM id: ☒ TP5P0537

(T, Long)

Cable mark: 494.5

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(30-31)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 29**DOM id: ☒ UP4P0262

(U, Short)

Cable mark: 0511.5m

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(29-30)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 15**

Time:

☒ Cable/LC continuity test complete (Q9)☐ all pass☒ fail: LC + pass / rest failNow 01:14Last b/o 00:36 Δt [min] :3826 min
break

- 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

Depth:

Paro2 531.12Payout N/A

12 min

00:44 lunch break

01:10 back to work

26 min

Thermistor: ☒ Present ☐ Distance to DOM29: _____Keller: ☒ Connected ☒ Operational ☒ Air pressure [PSI]: 18.01 PSISer.#: 0573998 ☒ Cable mark: 513.0 ☒ Distance to DOM29: 155m☒ All clear to lower cable ☺no light for loose measurements for

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 28**

(T, Long)

Cable mark: 528.5DOM id: ☒ TP5P0731☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(28-29)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 27**

(U, Short)

Cable mark: 545.7DOM id: ☒ UP4P0226☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(27-28)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 14**

Time:

☒ Cable/LC continuity test complete (Q8)☐ all pass☒ fail: LC+ pass / rest failNow 01:28Last b/o 01:14 Δt [min] 14**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 565.49Keller not in waterPayout 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 26**

(T, Long)

Cable mark:

562.6DOM id: ☒ TP5P0505☐

Reason for substitution:

☒ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(26-27)$: 17.0☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☐ chain with clutch ☒ phi orientation ☐ whole view**DOM position 25**

(U, Short)

Cable mark:

579.7DOM id: ☐ UP5H0170☐

Reason for substitution:

☒ Bottom shackle connected☐ Top clutch connected at link # 19 $\Delta(25-26)$: 16.9☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☐ chain with clutch ☒ phi orientation ☐ whole view**Breakout 13**

Time:

☒ Cable/LC continuity test complete (Q8)☐ all pass☒ fail: LC+ pass/rest failNow 01:40Last b/o 01:28 Δt [min] 12**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 599.78Keller 602Payout 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

7cm & black tape in hole

☒ All clear to lower cable ☺

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 24**DOM id: ☒ TP5P0855

(T, Long)

Cable mark: 596.6☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(24-25)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 23**DOM id: ☒ UP5P0802

(U, Short)

Cable mark: 613.6☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(23-24)$: 16.5☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 12**

Time:

☒ Cable/LC continuity test complete (Q7)☐ all pass☒ fail: LC + all residuesNow 01:51Last b/o 01:40 Δt [min] 11**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 634.11Keller 634.66Payout 11.1**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected☐ Loose pigtails taped to cable

01:58 3cm drop placed when released, tower winch
hook after chain attachment Dom24

☐ All clear to lower cable ☺

Photos: DOM ids (☒ long ☒ short); connectors (☐ long ☒ short)**DOM position 22**

(T, Long)

Cable mark: 630.5DOM id: ☒ TP5P0877☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(22-23)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 21**

(U, Short)

Cable mark: 647.6DOM id: ☒ UP5Y0222☐

Reason for substitution:

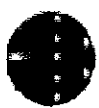
☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(21-22)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 11**

Time:

☒ Cable/LC continuity test complete (Q7)☐ all pass☒ fail: LC + pass / rest failNow 02:04Last b/o 01:51 Δt [min] 53**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☐ connected

Depth:

Paro2 667.58Keller 669.29Payout 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 20**

(T, Long)

Cable mark: 664.6DOM id: ☒ TP5P0665☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(20-21)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view☒ Curved distance around DOM: 2.38 m ☒ Vertical distance: 2.36 m**DOM position 19**

(U, Short)

Cable mark: 681.6DOM id: ☒ UP5P0786☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(19-20)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view☒ Curved distance around DOM: 2.40 ☒ Vertical distance: 2.38**Breakout 10**

Time:

☒ Cable/LC continuity test complete (Q6)☐ all pass☒ fail: ~~all fail~~ all ϕ

- 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 cableNow 02:16Last b/o 02:04 Δt [min] :12

Depth:

Paro2 702.49Keller 704.83Payout N/A

Dom 20 cable connection
- wet / ice under
cup

☒ All clear to lower cable ☺

Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)**DOM position 18**

(T, Long)

Cable mark:

698.7DOM id: ☒ TP5P0769☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(18-19)$: 17.4☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 17**

(U, Short)

Cable mark:

715.7DOM id: ☒ UP5H0180☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(17-18)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 9**

Time:

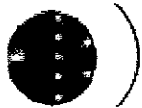
☒ Cable/LC continuity test complete (Q6)☐ all pass☒ fail: 0.0 allNow 02:35Last b/o 02:16 Δt [min] :19**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 737.18Keller 739.45

Payout _____

- 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 16**

(T, Long)

Cable mark: 732.6DOM id: ☒ TP5Y0205☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(16-17)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 15**

(U, Short)

Cable mark: 749.5DOM id: ☒ UP5P0576☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(15-16)$: 17.0☐ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 8**

Time:

☒ Cable/LC continuity test complete (Q5)☐ all pass☒ fail: 00 allNow 02:46Last b/o 02:35 Δt [min] 11**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 768.21Keller 774.00Payout 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 14**DOM id: ☒ TP5P0801

(T, Long)

Cable mark: 766.5

Reason for substitution:

☐ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(14-15)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☐ whole view**DOM position 13**DOM id: ☒ UP5Y0220

(U, Short)

Cable mark: 783.5

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(13-14)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☐ whole view**Breakout 7**

Time:

☒ Cable/LC continuity test complete (Q5)☐ all pass☐ fail: 0.0 allNow 02:59Last b/o 02:46 Δt [min] 13**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☐ lubed☒ connected

Depth:

Paro2 794.21Keller 808.6Payout 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 12**DOM id: ☒ TP5Y0157

(T, Long)

Cable mark: 800.6m

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(12-13)$: 17☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 11**DOM id: ☒ UP5P0776

(U, Short)

Cable mark: 817.6

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(11-12)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 6**

Time:

☒ Cable/LC continuity test complete (Q4)☒ all pass☒ fail: tester seems to be malfunctioningNow 02:59Last b/o 02:13 Δt [min] 14**- LongDOM**☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 810.0Keller 843.3Payout 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

03:12 - paro2 failed
paro on dist logger still working

☐ All clear to lower cable ☺

03:17 well depth 849.2m depth 851.2m 28

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 10**

(T, Long)

Cable mark: 834.6DOM id: ☒ TP5Y0183☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(10-11)$: 16.9☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 9**

(U, Short)

Cable mark: 851.6DOM id: ☒ UP5Y0090☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(9-10)$: 14.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 5**

Time:

☒ Cable/LC continuity test complete (Q4)☐ all pass☒ fail: all "overload"Now 03:29Last b/o 02:59 Δt [min] 30**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☐ lubed☒ connected

Depth:

Paro2 835.2Keller 878.7Payout 1111estimate 876m**- ShortDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☐ lubed☒ connected(before compressibility)☒ Loose pigtails taped to cable☒ All clear to lower cable ☺

Photos: DOM ids (☒ long ☒ short); connectors (☒ long ☒ short)**DOM position 8**

(T, Long)

Cable mark: 868.7DOM id: ☒ TP5P0811

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(8-9)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 7**

(U, Short)

Cable mark: 885.5DOM id: ☒ UP5Y0164

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(7-8)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 4**

Time:

☒ Cable/LC continuity test complete (Q3)☒ all pass☒ fail: all failNow 03:39Last b/o 03:29 Δt [min] 10☒ LongDOM☒ connector discharged (ESD)☒ connector O-ring in place and ☒ lubed☒ breakout O-ring in place and ☒ lubed☒ connected

Depth:

Paro2 846.62Keller 913.35Payout N/Aestimate 910.7m☒ 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 6**DOM id: ☒ TP5Y0091

(T, Long)

Cable mark: 902.8

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(6-7)$: 170☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☒ chain with clutch ☐ phi orientation ☐ whole view**DOM position 5**DOM id: ☐ UP5Y0170

(U, Short)

Cable mark: 919.7m

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(5-6)$: 170☒ Bow OK $\rightarrow$ ☐ clutch zip tiedPhotos: ☒ chain with clutch ☐ phi orientation ☐ whole view**Breakout 3**

Time:

☒ Cable/LC continuity test complete (Q3)☐ all pass☒ fail: all overbadNow 03:50Last b/o 03:39 Δt [min] 11**- LongDOM**☐ connector discharged (ESD)☒ connector O-ring in place and ☐ lubed☒ breakout O-ring in place and ☐ lubed☐ connected

Depth:

Paro2 857.77Keller 947.93Payout NAestimate 945.1m**- 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 4**

(T, Long)

Cable mark: 936.5DOM id: ☒ TP4P0257

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(4-5)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 3**

(U, Short)

Cable mark: 953.5DOM id: ☒ UP5P0562

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(3-4)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 2**☒ Cable/LC continuity test complete (Q2)☒ all pass☒ fail: all fail**- 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 03:57Last b/o 03:50 Δt [min] :07

Depth:

Paro2 884.31Keller 982.51Payout N/Aestimate 979.6☒ All clear to lower cable ☺

Photos: DOM ids (☐ long ☒ short); connectors (☐ long ☒ short)**DOM position 2**

(T, Long)

Cable mark: 970.7DOM id: ☒ TP4P0237☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(2-3)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**DOM position 1**

(U, Short)

Cable mark: 987.6DOM id: ☒ UP4P0290☐

Reason for substitution:

☒ Bottom shackle connected☒ Top clutch connected at link # 19 $\Delta(1-2)$: 17.0☒ Bow OK $\rightarrow$ ☒ clutch zip tiedPhotos: ☒ chain with clutch ☒ phi orientation ☒ whole view**Breakout 1**☒ Cable/LC continuity test complete (Q2)☐ all pass☒ fail: all fail

- 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 04:04Last b/o 03:57 Δt [min] 07

Depth:

Paro2 914.49Keller 1017.08Payout N/Aestimate 1014**No second Paro...**☐ Group photo☐ All clear to lower cable ☺☒ Enable Payout☒ Enable PayoutAdded by: I. Taboada

**Uphole Pressure Sensor (Setra)**

After DOM1 is safely under the surface (> 50 m)

Time: 04:21

- ☐ Stop the cable winch
- ☐ Lower Setra pressure sensor into hole
- ☐ Distance to Setra from floor: _____
- ☐ Setra readout verified with monitoring system
- ☐ Well depth from Setra: _____
- ☐ Well depth from laser: 47.3m

*no marks on
Setra cable
not deployed*

If the two well depth measurements agree:

- ☐ Switch to Setra well depth in monitoring system

Time: 04:37

Now the String Drop begins



String Drop

The target depth is **2450 m**

☐ Switch cable winch to computer control

☐ Speed: _____ Time: _____ Depth: _____

☐ Speed: _____ Time: _____ Depth: _____

☐ Speed: _____ Time: _____ Depth: _____

☐ Speed: _____ Time: _____ Depth: _____

☐ Speed: _____ Time: _____ Depth: _____

☐ Speed: _____ Time: _____ Depth: _____

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	Δdepth P2-P1 ¹	Δdepth P2-K ¹	Δdepth K-P1 ¹
1000 m				1000	n/a		n/a
1500 m	05:12	46.3 m	1500		n/a	1517.2	n/a
2000 m	05:54	45.1 m	1979	1979 2050	n/a		n/a
2100 m	06:10	44.7	2114		n/a		n/a
2200 m	06:17	44.7	2197		n/a		n/a
2300 m		44.2	2283		n/a		n/a
2400 m		43.8	2376		n/a		n/a

¹Read off monitoring screen

²Cable mark offset (at DOM60) is (p. 4): _____

☐ Switch to manual control @ 2400 m

☐ Well depth

@ 2420: _____

@ 2440: 43.5

☒ Position string at target depth of **2450 m**

Time: 7:26

☒ String secured with Yale grip and anchor chain

Time: 7:26

Paro2 began working again between 1000 m and 1500 m



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

☐ Distance from Paro2 to DOM60:

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

$$d_{\text{Paro2-DOM60}} = (d_{\text{Paro2-DOM59}} + 17) \text{ m} = \underline{18.5} \leftarrow \text{insert below}$$

☐ Convert Paro2 pressure to string depth:

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

(use 6 decimals for exp's)

$$\text{Ambient pressure (from p. 4): } P_0 = \underline{9.97} \text{ PSI} \rightarrow \exp(-KP_0) = \underline{0.999962}$$

$$\text{Pressure reading (from screen): } P = \underline{3443.4} \text{ PSI} \rightarrow \exp(-KP) = \underline{\quad}$$

$$\begin{aligned} \text{Subtract exponentials} &\rightarrow &= \underline{0.012899} \\ &&\times 1.85947 \cdot 10^5 \end{aligned}$$

$$\text{Paro2 depth in water} \rightarrow = \underline{2398} \text{ m}$$

$$\text{Add distance to DOM60 (above)} \rightarrow + \underline{18.5} \text{ m}$$

$$\text{Add well depth} \rightarrow + \underline{43.5} \text{ m}$$

$$\begin{aligned} \text{Depth of bottom DOM} &\rightarrow = \underline{\cancel{2460.7}} \\ &\quad \underline{2460.7} \end{aligned}$$

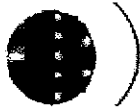
Final depth estimates

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

Time:	Paro2	Keller	Paro1	Payout	Cable marks
Reading	<u>3443.61</u> PSI	<u>2745</u> PSI	n/a	<u>-1248.45</u> m	m
Offset	<u>9.97</u> PSI	<u>18.01</u> PSI	n/a	m	m
Well depth	<u>43.5</u> m			This space is intentionally left blank	
Dist. to DOM60	<u>18.5</u> m	<u>528.35</u> m	n/a		
DEPTH (DOM60)			n/a		

Time: 7:34 AM

Final depth (DOM60): 2460.7

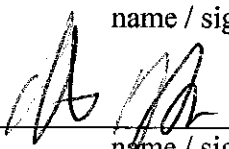
**Deployment Closeout**

- ☐ 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

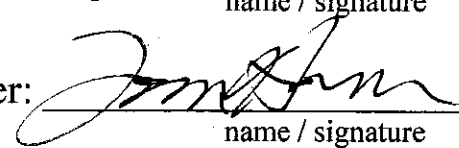
Estay 7³⁴ AM

Time: 7:34 Date: Jan/22/2006

Shift Lead: _____
name / signature

Logger:  Ethan Dick
name / signature

PTS Lead: Ignacio Taboada 
name / signature

Deployment Manager: 
name / signature

Safety Officer: TH
name / signature

IceCube On-ice Lead: 
name / signature

