MACONDO

Demobilization Project

for

MC252-1

Temporary Installed Subsea Equipment Recovery Plan

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AMENDMENT RECORD

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0	9/24/2010	Martin Pabon	Issued for Use		
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1	11/2/2010	Ben Coates	Added Attachment 3 – Files of flexible jumpers and flying leads to abandon in place	Att. 3	
			Added attachment 4 - As-built survey of concrete mat locations and pipeline crossing agreements with signatures	Att 4	
			Added list of surveys to be performed after work completed	5	12

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ATTACHMENTS

Attachment 1: Installed Subsea Inventory

Attachment 2: Subsea Equipment Recovery Procedures

Attachment 3: ASCII Files of Flexible Jumpers and Flying Leads to Abandon-in-Place

Attachment 4: As-built Survey of Concrete Mat Locations and Pipeline Crossing Agreements with Signatures

1 Introduction

During the MC 252 incident response, BP installed several temporary pieces of equipment in the water column and on the seabed for the purpose of containing flow from the well, monitoring the well, monitoring subsea work activities, and ultimately killing the well. In this document, BP is proposing, for BOEMRE approval, a plan to address the removal of the temporary equipment.

The temporary equipment installed during the MC252 incident response includes manifolds, flexible pipe, suction piles, free standing risers, top-hats, floating hoses, and surface vessels among other items. BP's objective is to release the surface vessels from contract and to recover, as practicable, almost all of the temporary equipment. Equipment that is recovered and under subpoena (Legal Hold) will be delivered to the NASA facility in Michoud, Louisiana. Equipment that is recovered and intended for future response capability will be refurbished and repaired as necessary, then preserved and stored at established locations.

An overview of major systems, components, and vessels that will be removed from the site is show below in Figure 1.

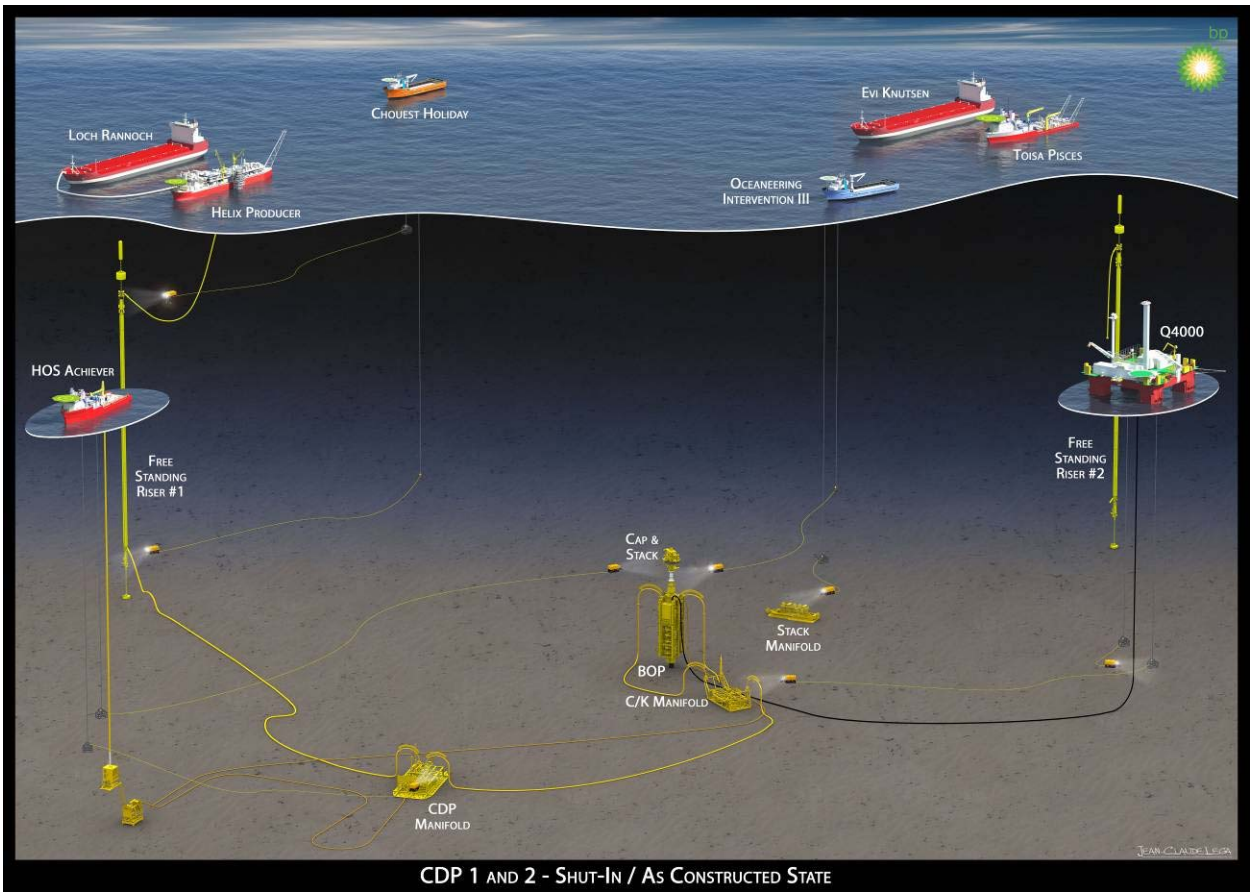

Figure 1: MC 252 Macondo Vessels and Major Subsea Equipment

2 Major Subsea Systems and Equipment

The major subsea systems and equipment to be removed are summarized in the list below:

- Accumulators
- Baskets
- Bladders
- BOP
- CDP Manifold
- Compatts / Marker Buoys
- Dispersant System
- Flexibles
- Free Standing Riser 1
- Free Standing Riser 2
- HIS, CFLs
- Junk Shot Manifold
- LMRP
- MUX Line / SCM
- Piles
- P/T Sensors
- ROV Tooling
- Stack Manifold
- 3-Ram Stack

A detailed inventory of the subsea equipment to be recovered is provided in Attachment 1. The general overview of the MC252 Macondo field is provided in Figure 2 through Figure 5, following, and shows the installed locations of the major components to be removed:

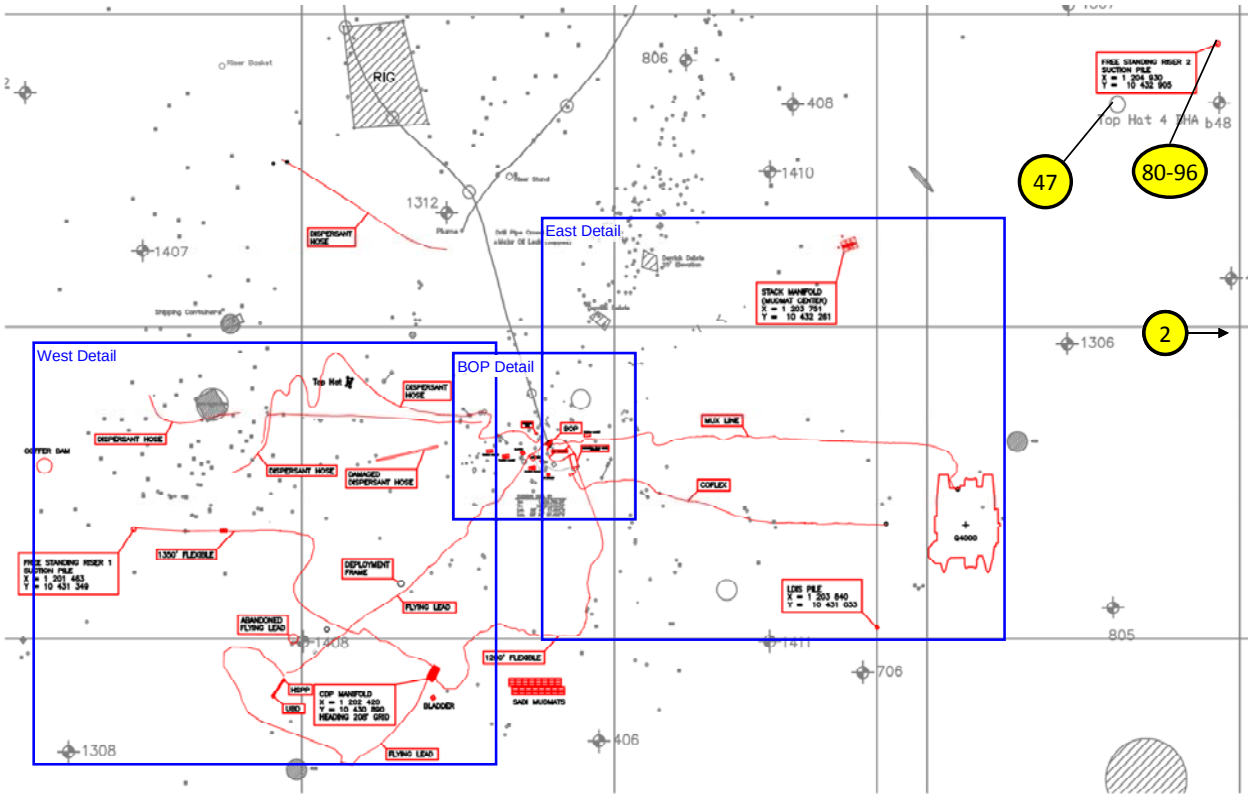

Figure 2: MC 252 Macondo Field Layout Drawing
(Refer to Attachment 1 for Numbered Items)

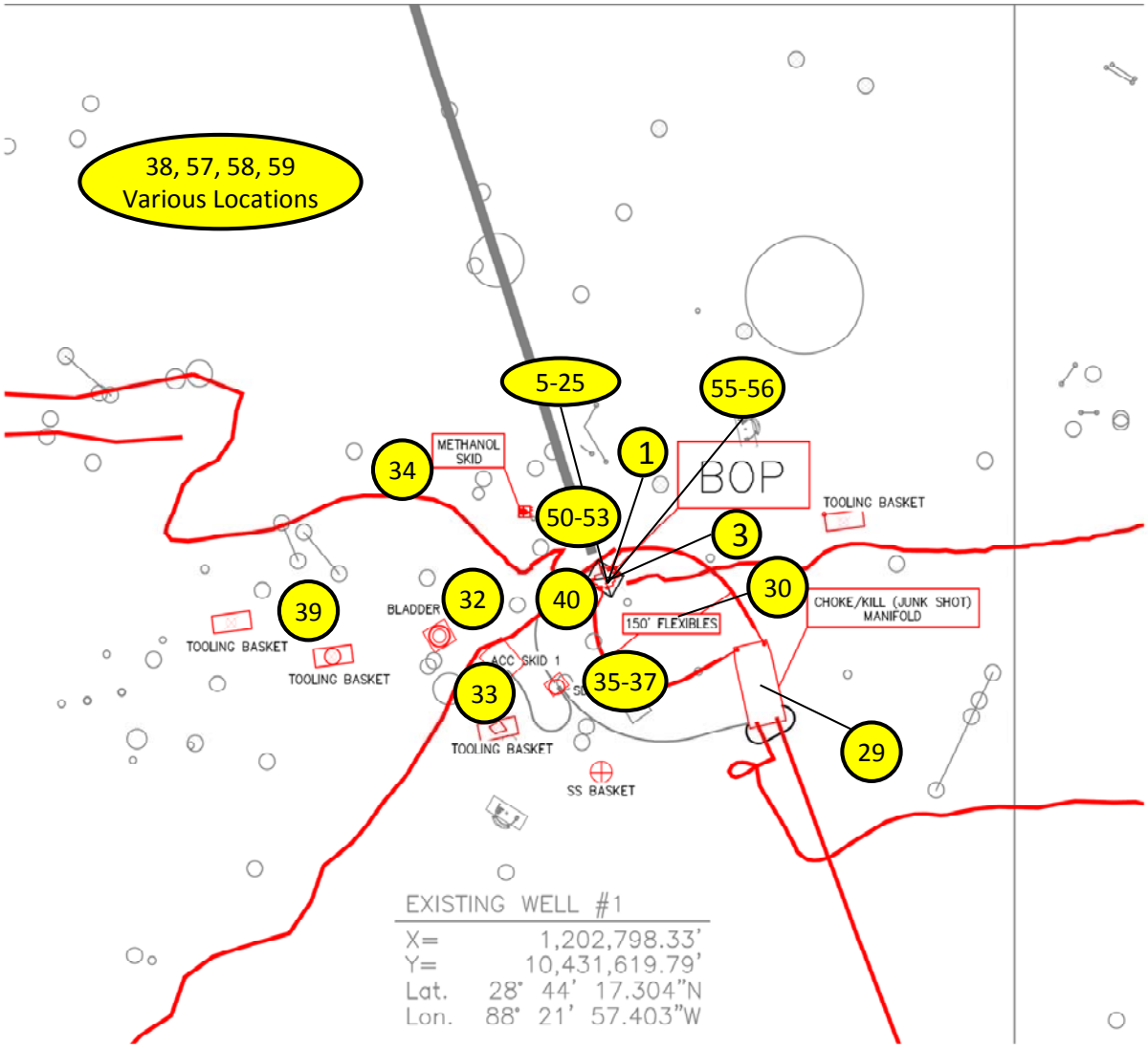

Figure 3: MC 252 Macondo – Detail of Area around BOP
(Refer to Attachment 1 for Numbered Items)

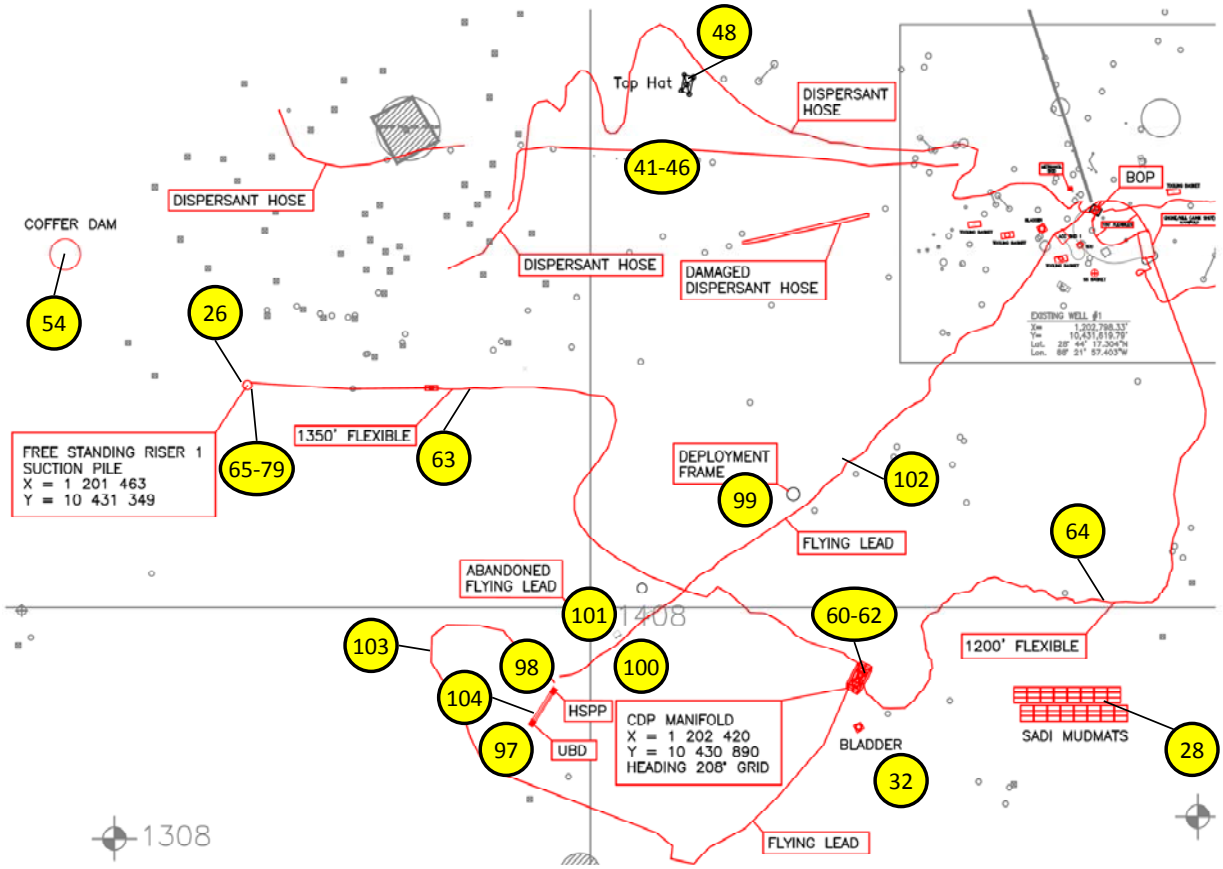

Figure 4: MC 252 Macondo – Area West of BOP
(Refer to Attachment 1 for Numbered Items)

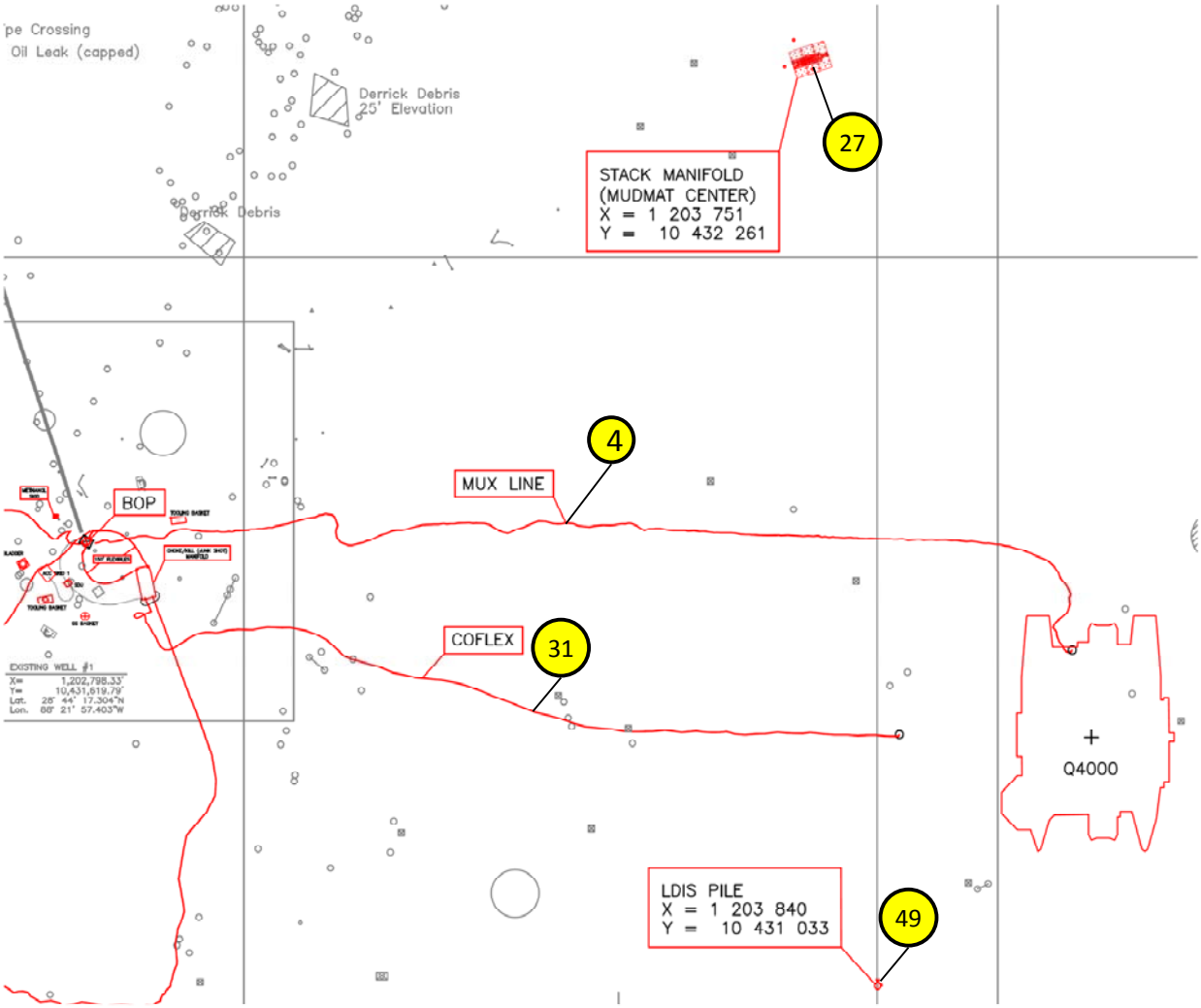

Figure 5: MC 252 Macondo – Area East of BOP
(Refer to Attachment 1 for Numbered Items)

3 Categorization of Subsea Equipment

The equipment items in the inventory list in Attachment 1 are categorized into the three areas:

1. Evidence (Legal Hold)
2. Temporary Kit to be Recovered (Non-Legal)
3. Abandon In-Place

Evidence (Legal Hold) items are items to be removed from the GoM, transported to a designated location (currently NASA facility in Michoud, Louisiana), and preserved for further investigation in accordance with USCG directives. Temporary Kit to be recovered (Non-Legal) are all other items to be removed from the GoM. These non-legal items will be evaluated for potential future utility as emergency response equipment. If an item is determined to be useful in this capacity, it will be refurbished, as necessary, and preserved in a state of readiness at a designated facility. Abandon in-place items cover those items that would typically be allowed to remain on the seabed, do not pose a hazard to safety, environment, or infrastructure, and would pose a greater risk to retrieve than to be left in-place.

Table 1: Recovery Risk Summary of Proposed Abandonment In-Place Items

Item	Risk	Description
Concrete Mats	Safety; damage to existing infrastructure	Unconventional handling of recovered mats; close proximity to existing infrastructure
Flying Leads	Safety; environmental	Unconventional handling of recovered flying leads; extensive bottom disturbing activities
Coffer Dam	Safety	Rapid large volume hydrate dissociation near support vessel; unpredictable dynamic loads; support vessel stability hazard
1,450-ft and 150-ft Flexible Jumpers	Safety	Trapped gas expansion in annulus; unconventional handling requirements

4 Installed Subsea Equipment Removal and Recovery Plan

The general procedure for recovery of installed subsea equipment will be as follows:

- Depressurization of system components
- Isolation of system components from all pressure sources
- Flushing of hydrocarbons from system components (where applicable)
- Practicable recovery or relocation of system components in a manner that preserves components for investigation purposes or future incident response capability
- Perform final AUV and seismic surveys of the incident site
- Refurbishment of any recovered subsea equipment that was damaged and is intended to be made available for a potential future response capability
- Onshore storage and long-term preservation of the equipment for future response capability

5 Priority and Execution

Evidence items will have priority for removal and will undergo complete chain of custody and control as items are relocated from seabed to shore.

The second priority is recovery of the remaining temporary response equipment. Upon recovery, containment items useful for potential future incident response capability will be restored and repaired, as necessary, for preservation and long term storage. This is to ensure a viable response containment system is made available for future use as soon as practicable.

BP plans to make use of the vessels already in the field to remove this equipment from the sea floor and to clear and restore the site around the Macondo well. Preparation for the removal and recovery efforts is in full force. This includes addressing SIMOPS concerns, preparing the vessels and resourcing our operations. Attachment 2 contains a list of subsea equipment recovery procedures that will be executed in order to deconstruct the field.

After deconstruction of the system is complete, two surveys of the site are planned to be performed. The first survey will be an autonomous underwater vehicle (AUV) inspection. The second survey will be a seismic inspection.

Target completion milestones are shown below. Large scale demobilization work began Mid September 2010. Recovery of Evidence (Legal Hold) and smaller scale tooling and support equipment was performed before commencing general field deconstruction. Work is progressing and planned to continue as long as there are no SIMOPS or weather impacts.

- Commencement of Recovery Plan — Mid September 2010
- All Evidence components recovered — Early October 2010
- All remaining items recovered* — Early November 2010
- All source and containment vessels demobilized — End November 2010
- AUV inspection survey — Mid December 2010
- Containment systems in long-term storage — End December 2010
- Seismic inspection survey — Early January 2010

(*Except for four flexible lines and a DTS buoy / clump weight - to be recovered End November / Early December 2010)

6 Abandon In-Place Items

BP is proposing to abandon in-place concrete mats, flying leads, the coffer dam and three flexible jumpers installed in and around the MC 252 field. Removal or relocation of these items pose a greater safety risk, environmental risk, and risk to pre-existing infrastructure than abandoning them in-place. In addition, the recovery of these items would be of little use to potential future incident response capability since they would likely be damaged or rendered inoperable during recovery operations. These items can readily be obtained from new equipment suppliers if needed in a potential future incident response.

Files in ASCII format of the flexible jumpers and flying leads that are planned to be abandoned in place are provided in Attachment 3.

6.1. Concrete Mats

The concrete mats are installed over pre-existing pipelines and umbilicals, and in close proximity to pre-existing UTA's, PLEMS, and a third party well. Mats reside in water depths ranging from 5,000-ft to 5,226-ft. Due to their low profile, location and water depth, the mats present no hazard to navigation, commercial fisheries, or other activities on the OCS. In addition, the primary function of the mats is to offer protection to the infrastructure upon which they lay. There is no risk to safety, the environment, or existing infrastructure if left in-place.

Removal of these mats would require significant bottom disturbing activity and present a risk of damaging the existing infrastructure. The mats are installed using purpose built handling frames that control the articulated mat sections during lowering operations through the water column and during lay down operations. Handling frames can not be effectively employed when recovering the mats. Hence, mats must be lifted and recovered using unconventional lifting configurations that can result in planning uncertainty and procedural changes during recovery operations, both of which significantly increases safety risk.

There is the additional risk in breaking rope loops that connect the individual articulated segments of the mats. These rope loops are pre-fatigued by the installation process. Rope loop breakage can result in dropped mats. Dropping mats due to rope breakage or the unconventional handling requirements in close proximity to existing infrastructure greatly increases the likelihood of damage to existing subsea equipment.

An as-built survey and record of the installed concrete mats was performed and is presented in Attachment 4, BP Document No. 2200-T2-DO-RP-4282. Also provided in Attachment 4 are Pipeline Crossing Agreements, which include concrete mat installation drawings, signed by both BP and the asset owner's representatives. There is a general understanding between the agreeing parties that the mats are intended to be installed and not recovered later. (It is important to clarify that even though Shell accepted the crossing agreement for the Nakika 18-in pipeline in block MC296, the mats were never installed).

6.2. Flying Leads

The flying leads that have been employed in the MC 252 incident response are composed of independent ½-inch steel reinforced rubber hose. These flying leads were used to supply methanol, mono ethylene glycol (MEG), and water-based hydraulic fluid to system components during containment and well killing operations.

Flying leads shorter than 750-ft have already been disconnected, placed in equipment recovery baskets, and recovered to surface. Conventional recovery procedures could be used to recover these short flying leads (e.g. 150-ft and 250-ft).

The remaining flying leads are 750-ft and longer, flushed and filled with seawater, and proposed to be abandoned in place due to the higher safety and environmental risk of removal operations. Due to the longer length, these flying leads would require unconventional handling methods to retrieve from the sea floor. Unconventional handling methods can result in planning uncertainty and procedural changes during recovery operations, both of which significantly increase safety risk. Additionally, the self-burial of the flying leads has made them difficult to locate on-bottom without extensive bottom disturbing activities. This bottom disturbing activity would increase risk of environmental damage due to the recovery operations.

The flying leads are located in water depths of 5,000-ft or greater. They have self buried below the mud line and present no hazard to navigation, commercial fisheries, or other activities on the OCS. It is proposed that the flying leads be left in place, where they present no risk to safety, the environment, or existing infrastructure.

6.3. Coffer Dam

The coffer dam containment device is parked 1,500-ft to the west of the BOP area. It is 23.5-ft long X 13.5-ft wide (excluding mudmat-wings) and 41-ft high. The coffer dam is located on the seabed in 4,980-ft water depth. The structure is leaning approximately 20 degrees and embedded 6 - 12-ft into the seabed and secured to a hold down anchor. In its current configuration the coffer dam protrudes 32-ft above the seabed. Due to its location and water depth, it presents no hazard to navigation and commercial fisheries on the OCS. Its location is accurately known and can be annotated on shallow hazard maps for the area.

The internal volume of the coffer dam is 10,787 cu. ft. During the attempted installation over the leaking well, hydrates formed within the coffer dam upper "hat" section above the mudmats, on the outside of the structure, and on the mudmats. Hydrates that formed on the outside of the coffer dam were removed during the attempted installation operations, however, the estimated volume of hydrates remaining within the coffer dam is 6,218-cu. ft.

Due to the size of the device and the presence of hydrates in the assembly, it presents a significant handling risk. Buoyancy forces as a result of hydrate formation create uncertainty in center of gravity calculations used for lift planning. This and potential suction forces resulting from the embedment would create unpredictable and correspondingly dangerous conditions for support vessel personnel if a lift were attempted.

Any attempt to recover the coffer dam would first require dissociation of the hydrates prior to lifting it near the surface or out of the water. The volume of methanol required to dissolve the hydrates within the coffer dam are too large for practical application. In addition, preliminary estimates indicate that dissociation would occur at a water depth of approximately 300-ft. This poses a significant safety risk to a recovery operation since all of the hydrates in the coffer dam would attempt to dissociate at once in the water column in close proximity to the support vessel. Approximately 1.1 million-cu. ft. of methane would be release almost instantaneously to the surface in the immediate vicinity of the work vessel. Such a large volume of methane presents a fire / explosion risk for the support vessel. There is also the risk of the large volume of methane undermining the support vessel causing a stability risk to the vessel. In addition, hydrodynamic jetting effects of the dissociated gas escaping the interior of the coffer dam would present unpredictable dynamic loading on any down line and tag line used to control the lift. These dynamic loads could result in loss of control of the load, rigging failure or the load becoming unhooked during the lift.

It is recommended that the coffer dam be inspected to verify its location and on-bottom stability and be abandoned in-place where it presents no risk to safety, the environment, or existing infrastructure. However, approval to leave Coffer Dam in place has not been granted at this time. BP and BOEM are still in discussion if and/or how this piece of equipment will be abandoned in place. Approval to abandon in place or remove the coffer dam will be addressed in a later revision to this procedure or a separate recovery plan.

6.4. Flexible Jumpers

A 1,450-ft, 3-in flexible jumper connected the Choke / Kill Manifold to the Q4000 vessel. Also, two 150-ft, 3-in flexible jumpers connected the Choke / Kill Manifold to the BOP stack. The jumpers have an outside diameter of 6.52-inches.

The jumpers present no hazard to navigation and trawl fisheries due to their location and water depth. Their locations are accurately known and can be annotated on shallow hazard maps for the area.

The jumpers are being proposed to be abandoned in-place due to safety concerns in recovering them to the surface. The jumpers have been previously flushed of hydrocarbons. Allowing the jumper pipe to remain in place poses no threat to safety, to the environment, or to the existing infrastructure. Further, the pipe itself has no remaining useful life if recovered because of the flow conditions that existed within the pipe.

The jumper pipe end fittings are not equipped with gas relief valves which are necessary to allow the gas to escape that naturally permeates through the inner layers of the carcass. As a consequence, gas that has permeated into the pipe annuli is trapped and presents a safety risk for recovery personnel if the pipe is recovered.

Recovery of the jumper would require unconventional handling methods to retrieve it from the sea floor. Unconventional handling methods can result in planning uncertainty and procedural changes during recovery operations, both of which significantly increase

safety risk. It is recommended that the 1,450-ft flexible jumper and two 150-ft flexible jumpers be abandoned in-place.

Attachment 1: Installed Subsea Inventory

The following list is the original submitted with the initial revision of this document. It is currently being reviewed and possibly adjusted as equipment is designated legal hold.

Number	Equipment List (Subsea, Installed Only)	Quantity	Regulatory Categorization 1-Evidence (Legal Hold) 2-Temporary Kit to be Recovered (Non-Legal) 3-Abandon in-Place	Potential Future Response Equipment	REMOVAL / ABANDON IN-PLACE	Comments
1	BOP (DWH Lower BOP)	1	1		REMOVAL	Assembly, includes SCM / Recovered to surface early Sept. by Q4000
2	LMRP Basket	1	2		REMOVAL	500 ft North of Wellhead
3	Transition spool and DWH LMRP	1	1		REMOVAL	Recovered
4	MUX Line to BOP SCM	1	2	Yes	REMOVAL	Control line from Q4000 to BOP SCM / Recovered to surface early Sept. by Q4000
5	9-7/8" hanger and seal assembly with 20' casing	1	2		REMOVAL	No comments
6	3-1/2" 9.3 ppf S-135 Drill Pipe	1	2		REMOVAL	No comments
7	5-1/2" 21.9 ppf S-135 Drill Pipe	1	2		REMOVAL	No comments
8	9-7/8" 62.8 ppf Q-125, Hydril 523 Casing	1	2		REMOVAL	No comments
9	7" 32 ppf HCQ-125 Hydril 513 Casing	1	2		REMOVAL	May recover up to 2000' depending on depth to hard cement.
10	16" 97 ppf P-110, Hydril 511 Casing	1	2		REMOVAL	16" hanger and seal assembly. Rupture Disks will be recovered.
11	Miscellaneous fishing debris	1	2		REMOVAL	No comments
12	Segments from Annular Rubbers (if loose)	1	2		REMOVAL	No comments
13	Pressure transducer PT-301	1	1		REMOVAL	BOP Area Temporary Basket (ODI Splitter panel, 2 compatts, ODI connector)
14	Pressure transducer PT-K	1	1		REMOVAL	BOP Area Temporary Basket (17H hot stab, hose, transducer panel, compatt)
15	Pressure transducer PT-C	1	1		REMOVAL	BOP Area Temporary Basket (17H hot stab, hose, transducer panel, compatt)
16	Pressure transducer PT-3K1	1	1		REMOVAL	BOP Area Temporary Basket (ODI Splitter panel, compatts, ODI connector)
17	Pressure transducer PT-3K2	1	1		REMOVAL	BOP Area Temporary Basket (part of the PT-3K-1 assembly)
18	Pressure transducer PT-3C	1	1		REMOVAL	BOP Area Temporary Basket (17H hot stab, hose, transducer panel, compatt)
19	Pressure Transducers & associated equipment	TBD	2	Yes	REMOVAL	BOP Area Temporary Basket (Some may be topsides)
20	ODI Splitter Panel	1	1	Yes	REMOVAL	BOP Area
21	Sonardyne acoustic Compatts	TBD	1	Yes	REMOVAL	BOP Area
22	Flanged Cormon transmitter	1	1		REMOVAL	BOP Area
23	Bulkhead mounted ODI connector	1	1		REMOVAL	BOP Area
24	Horizon BOP flanged transmitter	1	1		REMOVAL	BOP Area
25	17H hot stab in choke & kill gooseneck jumpers	TBD	2	Yes	REMOVAL	BOP Area
26	Helix Producer 1 Offloading Hose	1	2		REMOVAL	Connection between HP1 and Loch Rannoch / Recovered

= Equipment has been recovered to surface as of 9/22/2010

= Proposed to be Abandoned In-Place

Yes* = Replace in Kind (Applies to Legal Hold and Abandon In-Place Items)

Number	Equipment List (Subsea, Installed Only)	Quantity	Regulatory Categorization 1-Evidence (Legal Hold) 2-Temporary Kit to be Recovered (Non-Legal) 3-Abandon in-Place	Potential Future Response Equipment	REMOVAL / ABANDON IN-PLACE	Comments
27	Stack Manifold	1	2		REMOVAL	Never connected to flexibles; located to Northeast of BOP; CDP-2
28	SADI Mudmats	~9	3		ABN IN-PLACE	Located to the East of CDP Manifold
29	Choke/Kill Manifold (aka Junk Shot Manifold)	1	2	Yes	REMOVAL	100 ft SE of BOP
30	150' Flexibles	2	3	Yes*	ABN IN-PLACE	From Choke/Kill Manifold to Horizon BOP Choke & Kill Lines / * Replace in kind
31	1450' Flexible	1	3		ABN IN-PLACE	From Choke/Kill Manifold to Q4000 LDIS Pile / Recovery presents safety risk
32	1200 Gallon Subsea Bladders	2	2	Yes	REMOVAL	500 ft North of Wellhead
33	Accumulator Skid	1	2	Yes	REMOVAL	500 ft North of Wellhead
34	MeOH Skid	1	2	Yes	REMOVAL	Recovered
35	BOP HDS (Hydraulic Distribution Skid)	1	2	Yes	REMOVAL	500 ft North of Wellhead
36	HDS	1	2	Yes	REMOVAL	500 ft North of Wellhead
37	Misc. Thermoplastic Hose / Whips	TBD	2	Yes	REMOVAL	Recovered
38	LBL Array (Compatts)	~45	2	Yes	REMOVAL	Includes source and other response areas (SSTI)
39	Tooling / Work Baskets	~6	2	Yes	REMOVAL	500 ft North of Wellhead
40	Misc. Tooling on BOP Stack	TBD	2	Yes	REMOVAL	500 ft North of Wellhead / Chain falls, Dust Caps, Magnets, Etc.
41	600' x 1" hard plastic Dispersant hoses	2	1	Yes*	REMOVAL	Makes up one 1200' Dispersant line in the northwest / Recovered
42	400' x 1" Dispersant Hoses	2	1	Yes*	REMOVAL	W from BOP
43	Dispersant Wands in Basket #10	6	1	Yes*	REMOVAL	500 ft North of Wellhead
44	Dispersant Manifold #1	1	1	Yes*	REMOVAL	240 ft NW of BOP
45	Dispersant Manifold #2 (Mudmat)	1	2	Yes	REMOVAL	500 ft North of Wellhead / Never used
46	1100' x 1" hard plastic hose	1	1	Yes*	REMOVAL	Located West of BOP
47	Top Hat # 4 w/ Frame	1	1	Yes*	REMOVAL	200 ft S of NE Tophat Staging Area
48	Top Hat # 5	1	2	Yes	REMOVAL	500 ft North of Wellhead / Recovered
49	LDIS Parking Pile	1	2	Yes	REMOVAL	Associated with Q4000
50	H4 Yellow Debris Cap	1	2	Yes	REMOVAL	500 ft North of Wellhead
51	H4 Debris Cap	1	2	Yes	REMOVAL	500 ft North of Wellhead
52	Flex Joint Blocks, Panels, Inclinometer	Various	2	Yes	REMOVAL	500 ft North of Wellhead

= Equipment has been recovered to surface as of 9/22/2010

= Proposed to be Abandoned In-Place

Yes* = Replace in Kind (Applies to Legal Hold and Abandon In-Place Items)

Number	Equipment List (Subsea, Installed Only)	Quantity	Regulatory Categorization 1-Evidence (Legal Hold) 2-Temporary Kit to be Recovered (Non-Legal) 3-Abandon in-Place	Potential Future Response Equipment	REMOVAL / ABANDON IN-PLACE	Comments
53	RITT#1 (Riser Insertion Tube Tool)	1	1	Yes*	REMOVAL	Recovered / Cut in two pieces - lower at WWC, Golden Meadow, LA
54	Coffer Dam	1	3		ABN IN-PLACE	1500 ft West of Wellhead / Recovery presents safety risk
55	3 Ram Capping Stack	1	1	Yes*	REMOVAL	Installed after indicent / Recovered to surface
56	Subsea Choke Assembly	3	1	Yes*	REMOVAL	(x2) Basket by BOP / (x1) Only considered Legal Hold
57	Buoyancy Modules	TBD	2	Yes	REMOVAL	Various Locations
58	Concrete Mattresses	114	3		ABN IN-PLACE	Various Locations
59	Marker Buoys	TBD	2	Yes	REMOVAL	Various Locations
60	CDP Manifold	1	2	Yes	REMOVAL	Approximately 750 ft to Southwest of BOP
61	Burst Disc Assembly	1	2	Yes	REMOVAL	Connected to CDP Manifold (included in assembly)
62	Environmental Dispersant Connector	1	2	Yes	REMOVAL	Connected to CDP Manifold (included in assembly)
63	1350ft x 6in flexible jumper	1	2	Yes	REMOVAL	From CDP Manifold to Free Standing Riser 1
64	1200ft x 6in flexible jumper	1	2	Yes	REMOVAL	From Choke/Kill Manifold to CDP Manifold
65	Dril-Quip Aircan Assembly - FSR 1	1	2	Yes	REMOVAL	25ft OD x 45ft, 6 chamber aircan, supplemented with 94-in OD x 65ft Dril Quip aircan
66	SBM Aircan Assembly (Rental) - FSR 1	1	2	Yes	REMOVAL	No comments
67	Upper Assembly - FSR 1	1	2	Yes	REMOVAL	16.75"casing head / stem joint, tubing head; 5" valve leg; 400Te padeye
68	Lower Assembly - FSR 1	1	2	Yes	REMOVAL	250 Te padeye x 13-5/8 riser top w/ two 5" outlets for Vector gooseneck connectors
69	Suction Pile Assembly - FSR 1	1	2	Yes	REMOVAL	14ft OD x 85ft suction pile c/w BallTec connection system and 90ft 117mm chain tether
70	Outer Casing - FSR 1	1	2	Yes	REMOVAL	13.813" OD X 80 60ft outer casing riser joints
71	Inner Casing - FSR 1	1	2	Yes	REMOVAL	7" OD 32# P110 casing joints
72	Flexible Jumper Clamp - FSR 1	TBD	2	Yes	REMOVAL	Split clamp design to fit 13.813" outer riser with holdback bracket for 6-in ID flexible
73	PIP FSR Tension Monitoring - FSR 1	TBD	2	Yes	REMOVAL	Acoustic monitoring system using LVDT sensors clamped to outer casing
74	Upper Flexible Jumper Pull-in Head Interface - FSR 1	TBD	2	Yes	REMOVAL	45Te pull head with 50Te crosby shackle
75	Positioning Beacon Clamp - FSR 1	TBD	2	Yes	REMOVAL	Sonadyne acoustic beacons supported in a support bracket clamped to riser
76	LRAA Pup Assembly - FSR 1	1	2	Yes	REMOVAL	13-5/8" 5k flangle to RTI pin adapter and lower pup joint with annulus take off spool
77	DTS bouy Clump Weight Assembly Helix Producer 1 - FSR 1	TBD	2	Yes	REMOVAL	14 off 90ft chain section attached to spreader bar
78	Hydraulic Umbilical - FSR 1	1	2	Yes	REMOVAL	No Comments

= Equipment has been recovered to surface as of 9/22/2010

= Proposed to be Abandoned In-Place

Yes* = Replace in Kind (Applies to Legal Hold and Abandon In-Place Items)

Number	Equipment List (Subsea, Installed Only)	Quantity	Regulatory Categorization 1-Evidence (Legal Hold) 2-Temporary Kit to be Recovered (Non-Legal) 3-Abandon in-Place	Potential Future Response Equipment	REMOVAL / ABANDON IN-PLACE	Comments
79	1060ft x 6in flexible jumper - FSR 1	1	2	Yes	REMOVAL	Top of Free Standing Riser 1
80	Dril-Quip Aircan Assembly - FSR 2	1	2	Yes	REMOVAL	25ft OD x 45ft, 6 chamber aircan, supplemented with 94-in OD x 65ft Dril Quip aircan
81	SBM Aircan Assembly (Rental) - FSR 2	1	2	Yes	REMOVAL	No comments
82	Upper Assembly - FSR 2	1	2	Yes	REMOVAL	16.75"casing head / stem joint, tubing head; 5" valve leg; 400Te padeye
83	Lower Assembly - FSR 2	1	2	Yes	REMOVAL	250 Te padeye x 13-5/8 riser top w/ two 5" outlets for Vector gooseneck connectors
84	Suction Pile Assembly - FSR 2	1	2	Yes	REMOVAL	14ft OD x 85ft suction pile c/w BallTec connection system and 90ft 117mm chain tether
85	Outer Casing - FSR 2	1	2	Yes	REMOVAL	13.813" OD X 80 60ft outer casing riser joints
86	Inner Casing - FSR 2	1	2	Yes	REMOVAL	7" OD 32# P110 casing joints
87	Flexible Jumper Clamp - FSR 2	TBD	2	Yes	REMOVAL	Split clamp design to fit 13.813" outer riser with holdback bracket for 6-in ID flexible
88	PIP FSR Tension Monitoring - FSR 2	TBD	2	Yes	REMOVAL	Acoustic monitoring system using LVDT sensors clamped to outer casing
89	Upper Flexible Jumper Pull-in Head Interface - FSR 2	TBD	2	Yes	REMOVAL	45Te pull head with 50Te crosby shackle
90	Positioning Beacon Clamp - FSR 2	TBD	2	Yes	REMOVAL	Sonadyne acoustic beacons supported in a support bracket clamped to riser
91	Lifting Aid Load Test Assembly - FSR 2	1	2	Yes	REMOVAL	Fabricated, with 15kips upper swivel hoist ring and 24 kips lower swivel hoist ring
92	LRA Pup Assembly - FSR 2	TBD	2	Yes	REMOVAL	13-5/8" 5k flangle to RTI pin adapter and lower pup joint with annulus take off spool
93	LRA Burst Disc Assembly - FSR 2	TBD	2	Yes	REMOVAL	4ksi rupture disk assembly with Vector Optima hub for ROV installation at base of riser
94	URA Installation Platform - FSR 2	TBD	2	Yes	REMOVAL	4-in thick 50ksi plate table with saddle assembly using 2 hydraulic cylinder
95	Hydraulic Umbilical - FSR 2	1	2	Yes	REMOVAL	No Comments
96	1060ft x 6in flexible jumper - FSR 2	1	2	Yes	REMOVAL	Top of Free Standing Riser 2
97	IWOCS Umbilical and Umbilical Distribution Box	1	2	Yes	REMOVAL	10,000 ft Umbilical and UDB to be recovered to HOS Achiever
98	Hot Stab Patch Panel (HSPP)	1	2	Yes	REMOVAL	Near UDB when connected / Includes 1500 ft x 1/4" 12.5 K HFL
99	Flying Lead Deployment Frame (EMPTY)	1	2	Yes	REMOVAL	Mid-way Between HSPP and BOP
100	Flying Lead Deployment Frame (750 ft Flying Lead)	1	2	Yes	REMOVAL	Near HSPP / Recovered to surface
101	1500 ft x 1/2" 10K Flying Lead	4	3	Yes*	ABN IN-PLACE	Various locations / * Replace in kind
102	1500 ft x 1/2" 7.5K Flying Lead	1	3	Yes*	ABN IN-PLACE	HSPP C1 to Gooseneck Near BOP / * Replace in kind
103	750 ft x 1/2" 10 K Flying Lead	1	3	Yes*	ABN IN-PLACE	From HSPP to CDP Manifold / * Replace in kind
104	250 ft x 1/2" 10K Flying Lead	3	2	Yes	REMOVAL	From UDB to HSPP

= Equipment has been recovered to surface as of 9/22/2010

= Proposed to be Abandoned In-Place

Yes* = Replace in Kind (Applies to Legal Hold and Abandon In-Place Items)

Attachment 2: Subsea Equipment Recovery Procedures

No.	Category	Procedure	Document Number
SUBSEA EQUIPMENT RECOVERY PROCEDURES			
1	Recovery	CDP Manifold Flushiing	2200-T2-DO-PR-4675
2	Recovery	Displacement of Fluids from CDP Manifold to HP1 (Ops Note #8 to 4185)	2200-T2-DO-PR-4736
3	Recovery	Q4000 - Enterprise Flush (Ops Note #3 to 4417)	2200-T2-DO-PR-4733
4	Recovery	Hydraulic Umbilical Recovery Procedure (CD1)	2200-T2-DO-PR-4713
5	Recovery	Surface Flexible Disconnect from HP1	2200-T2-DO-PR-4728
6	Recovery	Stack Manifold Recovery Procedure	2200-T2-DO-PR-4716
7	Recovery	MeOH Skid	2200-T2-DO-SW-4603
8	Recovery	Top Hat # 4 w/ Frame	2200-T2-DO-SW-4604
9	Recovery	Top Hat # 5	2200-T2-DO-SW-4605
10	Recovery	1200 Gallon Bladder Skids	2200-T2-DO-SW-4606
11	Recovery	Accumulator Skid & Misc. Thermoplastic Hose / Whips	2200-T2-DO-SW-4607
12	Recovery	LBL Array (Compatts)	2200-T2-DO-SW-4608
13	Recovery	FSR Recovery Procedure (CDP 1 and CDP 2)	2200-T2-DO-PR-4711
14	Recovery	Aircan & Suction Pile Recovery Procedure (CDP 1 and CDP 2)	2200-T2-DO-PR-4709
15	Recovery	Surface Flexible Recovery Procedure (CDP 1 and CDP 2)	2200-T2-DO-PR-4710
16	Recovery	CDP1 – HP1 Surface Flexible Handover to FSR1	2200-T2-DO-PR-4729
17	Recovery	HIS Recovery Procedure	2200-T2-DO-PR-4718
18	Recovery	Dispersant equipment	2200-T2-DO-SW-4609
19	Recovery	Seafloor Jumper Recovery (1200' and 1350') Procedure	2200-T2-DO-PR-4714
20	Recovery	DTS Buoy / Clump Weight Recovery Procedure	2200-T2-DO-PR-4719
21	Recovery	Tooling Baskets	2200-T2-DO-SW-4610
22	Recovery	H4 Yellow Debris Cap	2200-T2-DO-SW-4611
23	Recovery	H4 Debris Cap	2200-T2-DO-SW-4612
24	Recovery	HP1 Topsides Flushing (Ops Note #9 to 4185)	2200-T2-DO-PR-4749
25	Recovery	Recovery of LDIS Parking Pile	2200-T2-DO-PR-4118
26	Recovery	Choke & Kill Manifold (Junk Shot)	2200-T2-DO-PR-4741
27	Recovery	1450' Seafloor Flexible Recovery	2200-T2-DO-PR-4742

Attachment 3: ASCII Files of Flexible Jumpers and Flying Leads to Abandon-in-Place

150-ft Flexible East

1. 28.73805832 -88.36571220 Start Line
2. 28.73808037 -88.36572762
3. 28.73811219 -88.36574985
4. 28.73814080 -88.36577457
5. 28.73815652 -88.36579191
6. 28.73817505 -88.36581274
7. 28.73819447 -88.36583194
8. 28.73821830 -88.36584754
9. 28.73824069 -88.36585576
10. 28.73826720 -88.36585957
11. 28.73828928 -88.36585752
12. 28.73831299 -88.36584912
13. 28.73833772 -88.36583078
14. 28.73834579 -88.36582083
15. 28.73836105 -88.36579257
16. 28.73836801 -88.36577343
17. 28.73837235 -88.36575779
18. 28.73837442 -88.36575083
19. 28.73837494 -88.36574596
20. 28.73837303 -88.36573670
21. 28.73836449 -88.36572982
22. 28.73835516 -88.36572979
23. 28.73835262 -88.36573107
24. 28.73834821 -88.36573469
25. 28.73834377 -88.36574646 End Line

150-ft Flexible West

1. 28.73805010 -88.36575513 Start Line
2. 28.73803764 -88.36578006
3. 28.73801947 -88.36581643
4. 28.73800077 -88.36585995
5. 28.73798757 -88.36589688
6. 28.73797852 -88.36592445
7. 28.73796755 -88.36595895
8. 28.73796225 -88.36597480
9. 28.73795598 -88.36599038
10. 28.73794754 -88.36600663
11. 28.73793570 -88.36602442
12. 28.73791923 -88.36604471
13. 28.73789699 -88.36606842
14. 28.73786768 -88.36609641
15. 28.73783015 -88.36612963
16. 28.73782098 -88.36613584
17. 28.73781402 -88.36613607
18. 28.73781145 -88.36613500
19. 28.73780456 -88.36612814
20. 28.73780158 -88.36611830
21. 28.73780183 -88.36611518
22. 28.73780398 -88.36610947
23. 28.73780934 -88.36610408
24. 28.73781280 -88.36610150 End Line

C2-HSPP-M

1. 28.73602296 -88.36854279 Start Line
2. 28.73661040 -88.36773731
3. 28.73662011 -88.36772629
4. 28.73662909 -88.36771452
5. 28.73664205 -88.36768710
6. 28.73664745 -88.36765662
7. 28.73664482 -88.36762565
8. 28.73663441 -88.36759690
9. 28.73639675 -88.36719532
10. 28.73638351 -88.36716806
11. 28.73637725 -88.36713777
12. 28.73637855 -88.36710670
13. 28.73638729 -88.36707723
14. 28.73640285 -88.36705162
15. 28.73641302 -88.36704117
16. 28.73651308 -88.36695849
17. 28.73652453 -88.36694987
18. 28.73655025 -88.36693919
19. 28.73657763 -88.36693814
20. 28.73660393 -88.36694684
21. 28.73662650 -88.36696443
22. 28.73664311 -88.36698914
23. 28.73664991 -88.36700268
24. 28.73665739 -88.36701580
25. 28.73667420 -88.36704048
26. 28.73669337 -88.36706286
27. 28.73671460 -88.36708264
28. 28.73673767 -88.36709964
29. 28.73676226 -88.36711357
30. 28.73678809 -88.36712430
31. 28.73681478 -88.36713167
32. 28.73684206 -88.36713558
33. 28.73686957 -88.36713600
34. 28.73689691 -88.36713295
35. 28.73692380 -88.36712644
36. 28.73694987 -88.36711654
37. 28.73697479 -88.36710338
38. 28.73699828 -88.36708715
39. 28.73701999 -88.36706802
40. 28.73702940 -88.36705672
41. 28.73744258 -88.36642645
42. 28.73745446 -88.36640435
43. 28.73746381 -88.36637507
44. 28.73746731 -88.36634419
45. 28.73746482 -88.36631316
46. 28.73746360 -88.36629767
47. 28.73746549 -88.36628224
48. 28.73747040 -88.36626770
49. 28.73747806 -88.36625479
50. 28.73748810 -88.36624418
51. 28.73749998 -88.36623641
52. 28.73751312 -88.36623187
53. 28.73757186 -88.36621525 End Line

CI-HSPP-M

1. 28.73605277 -88.36715230 Start Line
2. 28.73528058 -88.36763164
3. 28.73526012 -88.36765234
4. 28.73524591 -88.36767894
5. 28.73523911 -88.36770906
6. 28.73524039 -88.36774013
7. 28.73524959 -88.36776940
8. 28.73526592 -88.36779436
9. 28.73528796 -88.36781284
10. 28.73531380 -88.36782323
11. 28.73534118 -88.36782458
12. 28.73536773 -88.36781681
13. 28.73597196 -88.36744433
14. 28.73599723 -88.36743231
15. 28.73602454 -88.36743007
16. 28.73605098 -88.36743812
17. 28.73607366 -88.36745552
18. 28.73609008 -88.36748039
19. 28.73609839 -88.36750996
20. 28.73609775 -88.36754104
21. 28.73608815 -88.36757012
22. 28.73607080 -88.36759415
23. 28.73598140 -88.36769129
24. 28.73596541 -88.36771652
25. 28.73595757 -88.36774628
26. 28.73595875 -88.36777729
27. 28.73596880 -88.36780620
28. 28.73609173 -88.36795323
29. 28.73611464 -88.36797023
30. 28.73614122 -88.36797778
31. 28.73616848 -88.36797505
32. 28.73619348 -88.36796236
33. 28.73621374 -88.36794140
34. 28.73626073 -88.36788440
35. 28.73628194 -88.36786477
36. 28.73630764 -88.36785402
37. 28.73633499 -88.36785341
38. 28.73636105 -88.36786299
39. 28.73638290 -88.36788169
40. 28.73639815 -88.36790751
41. 28.73640511 -88.36793753
42. 28.73640304 -88.36796852
43. 28.73639213 -88.36799700
44. 28.73637529 -88.36802166
45. 28.73601190 -88.36853752 End Line

Coflex

1. 28.73794821 -88.36572815 Start Line
2. 28.73789482 -88.36569506
3. 28.73787099 -88.36571947
4. 28.73778057 -88.36566252
5. 28.73776267 -88.36564759
6. 28.73775754 -88.36563891
7. 28.73775712 -88.36562058
8. 28.73776925 -88.36559068
9. 28.73781646 -88.36549985
10. 28.73783347 -88.36534615
11. 28.73784291 -88.36519119
12. 28.73782732 -88.36503728
13. 28.73775298 -88.36490822
14. 28.73770815 -88.36476255
15. 28.73767013 -88.36461334
16. 28.73765477 -88.36445856
17. 28.73761567 -88.36430946
18. 28.73756619 -88.36416388
19. 28.73752663 -88.36401499
20. 28.73749282 -88.36386434
21. 28.73747860 -88.36370936
22. 28.73748385 -88.36355369
23. 28.73748006 -88.36339846
24. 28.73747251 -88.36324388
25. 28.73748208 -88.36308854
26. 28.73748021 -88.36293306
27. 28.73747441 -88.36277728
28. 28.73747254 -88.36262152
29. 28.73747965 -88.36259334 End Line

FL1-1500-10K

1. 28.73608319 -88.36857188 Start Line
2. 28.73610746 -88.36854383
3. 28.73611401 -88.36854344
4. 28.73612501 -88.36855195
5. 28.73612623 -88.36856701
6. 28.73611756 -88.36857885
7. 28.73590237 -88.36883302
8. 28.73590002 -88.36883889
9. 28.73589652 -88.36885395
10. 28.73589622 -88.36886952
11. 28.73589920 -88.36888473
12. 28.73590528 -88.36889866
13. 28.73591407 -88.36891060
14. 28.73592512 -88.36891986
15. 28.73593777 -88.36892589
16. 28.73595130 -88.36892832
17. 28.73596499 -88.36892709
18. 28.73597802 -88.36892221
19. 28.73598966 -88.36891396
20. 28.73599923 -88.36890282
21. 28.73600625 -88.36888943
22. 28.73601293 -88.36887585
23. 28.73639547 -88.36815868
24. 28.73759376 -88.36634552
25. 28.73766149 -88.36629094
26. 28.73774295 -88.36624927
27. 28.73787355 -88.36622029
28. 28.73810607 -88.36623318
29. 28.73817895 -88.36621266
30. 28.73820150 -88.36619173
31. 28.73822172 -88.36614003
32. 28.73823668 -88.36599628 End Line

FL2-1500-10K

1. 28.73604238 -88.36712355 Start Line
2. 28.73522687 -88.36757579
3. 28.73520533 -88.36759502
4. 28.73518958 -88.36762047
5. 28.73518103 -88.36765000
6. 28.73518036 -88.36768111
7. 28.73518762 -88.36771107
8. 28.73520182 -88.36773772
9. 28.73604046 -88.36931407
10. 28.73607524 -88.36936228
11. 28.73611845 -88.36940066
12. 28.73615518 -88.36942193
13. 28.73619446 -88.36943605
14. 28.73622156 -88.36944130
15. 28.73624902 -88.36944316
16. 28.73627646 -88.36944158
17. 28.73630361 -88.36943657
18. 28.73633010 -88.36942824
19. 28.73635561 -88.36941662
20. 28.73637986 -88.36940192
21. 28.73640254 -88.36938427
22. 28.73642338 -88.36936391
23. 28.73644209 -88.36934109
24. 28.73645852 -88.36931606
25. 28.73647241 -88.36928915
26. 28.73648359 -88.36926065
27. 28.73649198 -88.36923095
28. 28.73649741 -88.36920037
29. 28.73649987 -88.36916932
30. 28.73649930 -88.36913813
31. 28.73649571 -88.36910719
32. 28.73648917 -88.36907689
33. 28.73647834 -88.36904835
34. 28.73620228 -88.36849019
35. 28.73618632 -88.36846530
36. 28.73616297 -88.36844924
37. 28.73613591 -88.36844504
38. 28.73610961 -88.36845344
39. 28.73608973 -88.36847440
40. 28.73603674 -88.36854846 End Line

FL3-1500-7.5K

1. 28.73605958 -88.36858031 Start Line
2. 28.73610980 -88.36852700
3. 28.73611995 -88.36851662
4. 28.73613313 -88.36851292
5. 28.73614610 -88.36851752
6. 28.73615503 -88.36852912
7. 28.73615733 -88.36854432
8. 28.73615234 -88.36855864
9. 28.73614287 -88.36856994
10. 28.73592389 -88.36882893
11. 28.73591440 -88.36884023
12. 28.73591092 -88.36885526
13. 28.73591153 -88.36887078
14. 28.73591620 -88.36888542
15. 28.73592443 -88.36889782
16. 28.73593556 -88.36890689
17. 28.73594858 -88.36891177
18. 28.73596228 -88.36891211
19. 28.73597544 -88.36890778
20. 28.73598689 -88.36889923
21. 28.73599557 -88.36888723
22. 28.73637376 -88.36816208
23. 28.73638077 -88.36814866
24. 28.73638850 -88.36813577
25. 28.73639649 -88.36812308
26. 28.73756997 -88.36625536
27. 28.73757788 -88.36624263
28. 28.73761907 -88.36620125
29. 28.73762935 -88.36619090
30. 28.73763285 -88.36618739
31. 28.73764178 -88.36618560
32. 28.73777729 -88.36615896
33. 28.73780468 -88.36615635
34. 28.73791433 -88.36614636
35. 28.73805608 -88.36617632
36. 28.73818009 -88.36614398
37. 28.73820047 -88.36608157
38. 28.73820115 -88.36602506
39. 28.73819171 -88.36598212 End Line

FL12-750-10K

1. 28.73605907 -88.36712770 Start Line
2. 28.73557092 -88.36741558
3. 28.73555039 -88.36743610
4. 28.73553688 -88.36746314
5. 28.73553192 -88.36749369
6. 28.73553607 -88.36752439
7. 28.73554913 -88.36755165
8. 28.73604053 -88.36836128
9. 28.73604816 -88.36837427
10. 28.73609830 -88.36846743
11. 28.73610161 -88.36848255
12. 28.73610151 -88.36849812
13. 28.73609800 -88.36851315
14. 28.73609126 -88.36852673
15. 28.73605574 -88.36857371 End Line

Attachment 4: As-built Survey of Concrete Mat Locations and Pipeline Crossing Agreements with Signatures

BP Exploration & Production Inc.
200 Westlake Park Blvd.
Houston, Texas 77079
Phone: 281-366-4437
Fax: 281-366-7569
E-Mail: fletchmw@bp.com

June 30, 2010

Eni US Operating Co. Inc.
1250 Poydras Street, Suite 2000
New Orleans, LA 70113

Attn: Brian Wrobel

RE: LETTER OF NO OBJECTION ("Letter")
BP's PROPOSED 6" FLOWLINE TO BE INSTALLED ACROSS A 3" UMBILICAL LOCATED IN MISSISSIPPI CANYON AREA, BLOCK 252, OCS FEDERAL WATERS, GULF OF MEXICO, OFFSHORE LOUISIANA

Gentlemen:

BP intends to lay a 6-inch flowline installation from the Macondo well to a location on MC 252 as depicted on the attached map (copy of map attached). During the installation of BP's 6-inch flowline, it will cross a 3" umbilical located on Block 252, Mississippi Canyon Area owned by the co-owners of the leases covering the Rigel (MC-296) and Seventeen Hands (MC-299) wells. BP hereby requests that Eni, as Operator of the Rigel and Seventeen Hands prospects, indicate that it has no objection to BP's plans, provided BP agrees to and complies with the following requirements:

1. BP will secure all necessary governmental permits and approvals and comply with all applicable laws, rules, and regulations in constructing, operating, maintaining, repairing and abandoning the captioned proposed flowline. BP's operations will be performed in accordance with good accepted industry practices and all applicable laws and regulations.

2. Per the terms hereof, Eni will have the right, with BP to provide space on a suitable vessel at no expense to Eni, to have one (1) person witness construction, maintenance, and repair operations of the captioned flowline that are conducted on the referenced lease in advance of such construction or maintenance operation. Such notice will be given to:

   Mark Karns
   Production Operations Manager
   mark.karns@enipetroleum.com
   Telephone No.: (504) 593-7166
   Cell No.1: (958) 688-6314
   Cell No.2: (504) 913-4713

1

3. Within ninety (90) days following completion of construction of the captioned proposed 6" flowline, BP will furnish Eni, to the address shown in Section 2 above, an "as-built" drawing of said flowline.

4. BP will install concrete mattresses to lift BP's 6-inch flowline over the 3-inch umbilical. BP will conduct all operations, including construction, repair, and maintenance, of the proposed 6" flowline in accordance with all applicable laws and regulations, in a good and workmanlike manner, and so as not to interfere with any of Eni's operations.

5. BP SHALL DEFEND, INDEMNIFY, RELEASE AND HOLD HARMLESS ENI, ITS AGENTS, EMPLOYEES, OFFICERS, DIRECTORS, INSURERS, SUCCESSORS, AFFILIATE COMPANIES, CONTRACTORS, CO-LESSEES, THE CO-OWNERS OF RIGEL-SEVENTEEN HANDS SUBSEA PRODUCTION SYSTEM, AND CO-VENTURERS (THE "ENI GROUP") FROM AND AGAINST ANY LOSS, DAMAGE, CLAIM, SUIT, LIABILITY, JUDGMENT AND EXPENSE OF ANY NATURE WHATSOEVER (INCLUDING ATTORNEYS' FEES AND OTHER COSTS OF LITIGATION), AND ANY FINES, PENALTIES AND ASSESSMENTS, OR OTHER SIMILAR LIABILITIES, ARISING OUT OF INJURY, DISEASE OR DEATH OF THE EMPLOYEES, CONTRACTORS, SUBCONTRACTORS, AND INVITEES OF BP, ENI, DUE TO THE INSTALLATION, OPERATION, MAINTENANCE AND/OR EVENTUAL REMOVAL AND ABANDONMENT OF THE ABOVE REFERENCED 6" FLOWLINE AND/OR INTERFERENCE WITH ENI PROPERTY/FLOWLINE(S)/OPERATION(S), AND THIS INDEMNITY SHALL APPLY, EXCEPT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE ENI GROUP, WHETHER OR NOT ENI GROUP IS CLAIMED TO BE PASSIVELY, CONCURRENTLY OR ACTIVELY NEGLIGENT AND REGARDLESS OF WHETHER LIABILITY WITHOUT FAULT, INCLUDING BUT NOT LIMITED TO STRICT LIABILITY, IS IMPOSED OR SOUGHT TO BE IMPOSED UPON THE ENI GROUP.

6. BP SHALL DEFEND, INDEMNIFY, RELEASE AND HOLD THE ENI GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, COSTS, PENALTIES OR LIABILITY FOR PROPERTY OR ENVIRONMENTAL DAMAGE TO OR LOSS OF PROPERTY, INCLUDING BUT NOT LIMITED TO LOSS OF PRODUCT, OF ANY THIRD PARTY AND FOR BODILY INJURY TO OR DEATH OF ANY THIRD PARTY, INCLUDING BUT NOT LIMITED TO THIRD PARTY SHIPPERS AND TRANSPORTERS OF HYDROCARBONS, ARISING OUT OF OR RESULTING FROM THE OPERATIONS OR ACTIVITIES OF BP, ITS EMPLOYEES, CONTRACTORS AND THEIR EMPLOYEES, ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, OPERATION AND EVENTUAL ABANDONMENT AND/OR REMOVAL OF THE 6" FLOWLINE, AND THIS INDEMNITY SHALL APPLY, EXCEPT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE ENI GROUP, WHETHER OR NOT THE ENI GROUP IS CLAIMED TO BE PASSIVELY, CONCURRENTLY OR ACTIVELY NEGLIGENT AND REGARDLESS OF WHETHER LIABILITY WITHOUT FAULT, INCLUDING BUT NOT LIMITED TO STRICT LIABILITY, IS IMPOSED OR SOUGHT TO BE IMPOSED UPON THE ENI GROUP.

7. This Letter covers only the activities described herein. Further, this Letter in no way implies Eni's consent to (i) BP's proposed flowline installation and/or any flowline crossing(s) on acreage/OCS block(s) that are unleased or leased and/or

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owned by third parties (whether co-lessee or otherwise) or (ii) BP conducting any operations on the Rigel well including, but not limited to, disconnecting any existing Rigel jumper or connecting a new jumper to the Rigel well which is located on Block 252, Mississippi Canyon Area. BP recognizes it is not the intention of Eni by this letter agreement to grant a right-of-way or easement or any fee interest, but merely to signify that insofar as its interests are concerned, Eni has no objection to BP's construction of the captioned flowline if done in accordance with the provisions of this agreement. BP further recognizes that this letter does not signify that the other co-owners of the lease covering Block 252, Mississippi Canyon Area do not object to the proposed crossing.

8. This agreement shall be governed by U. S. General Maritime Law.

If Eni is agreeable to the foregoing, please have the proper authority indicate acceptance thereof by signing duplicate originals of this letter and returning one (1) executed original to the attention of Wayne Fletcher at the above address.

Yours truly,

BP Exploration & Production Inc.

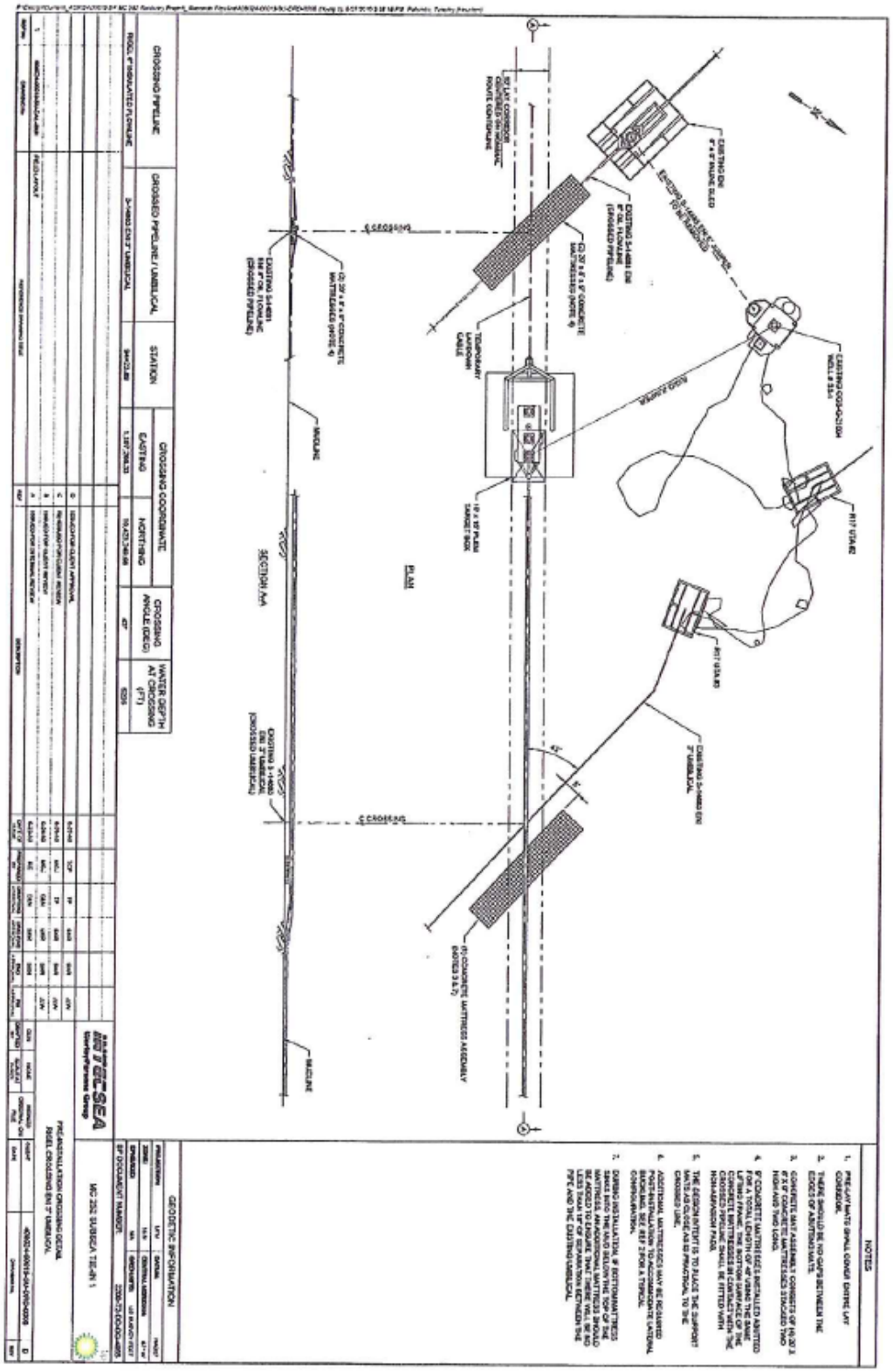
By: _____
Kemper Howe
Attorney-in-Fact

AGREED TO AND ACCEPTED THIS 30th **DAY OF** June**, 2010.**

Eni US Operating Co. Inc.

BY: _____

TITLE: VP. Operations


PLAN
SECTION A/A
NOTES
GEODETIC INFORMATION
PRE-INSTALLATION CROSSING DETAIL
REEL CROSSING ENT 2" UMBILICAL
MC 252 SUBSEA TIE-IN 1
2200-T2-DO-DC-4746

BP Exploration & Production Inc.
200 Westlake Park Blvd.
Houston, Texas 77079
Phone: 281-366-4437
Fax: 281-366-7569
E-Mail: fletchmw@bp.com

July 1, 2010

Eni US Operating Co. Inc.
1250 Poydras Street, Suite 2000
New Orleans, LA 70113

Attn: Brian Wrobel

RE: LETTER OF NO OBJECTION ("Letter")
BP's PROPOSED 8"x12" FLOWLINES TO BE INSTALLED ACROSS A 3" UMBILICAL AND 8" PIPELINE LOCATED IN MISSISSIPPI CANYON AREA, BLOCK 252, OCS FEDERAL WATERS, GULF OF MEXICO, OFFSHORE LOUISIANA

Gentlemen:

BP intends to lay two 8" x 12" PIP flowlines (the "Flowlines") from the Macondo well, located in Mississippi Canyon block 252, to ending locations on Mississippi Canyon block 383 and on Mississippi Canyon block 429 as depicted on the attached map. During the installation of the Flowlines, the Flowlines will cross a 3" umbilical and 8" pipeline located on Block 252, Mississippi Canyon Area owned by the co-owners of the leases covering the Rigel (MC-296) and Seventeen Hands (MC-299) wells. BP hereby requests that Eni US Operating Co. Inc. ("Eni"), as Operator of the Rigel and Seventeen Hands prospects and Operator of the subsea production system that includes the 3"umbilical and 8" pipeline to be crossed, indicate that it has no objection to BP's crossing such umbilical and pipeline, provided BP agrees to and complies with the following requirements:

1. BP will secure all necessary governmental permits and approvals and comply with all applicable laws, rules, and regulations in constructing, operating, maintaining, repairing and abandoning the Flowlines. BP's operations will be performed in accordance with good accepted industry practices and all applicable laws and regulations.

2. Per the terms hereof, Eni will have the right, with BP to provide space on a suitable vessel at no expense to Eni, to have one (1) person witness construction, maintenance, and repair operations of the Flowlines that are conducted on the referenced lease in advance of such construction or maintenance operation. Such notice will be given to:

   Mark Karns
   Production Operations Manager
   mark.karns@enipetroleum.com
   Telephone No.: (504) 593-7166
   Cell No.1: (958) 688-6314
   Cell No.2: (504) 913-4713

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3. Within ninety (90) days following completion of construction of the Flowlines, BP will furnish Eni, to the address shown in Section 2 above, an "as-built" drawing of the Flowlines.

4. BP will install concrete mattresses to lift the Flowlines over the 3" umbilical and 8" pipeline. BP will conduct all operations, including construction, repair, and maintenance, of the Flowlines in accordance with all applicable laws and regulations, in a good and workmanlike manner, and so as not to interfere with any of Eni's operations.

5. BP SHALL DEFEND, INDEMNIFY, RELEASE AND HOLD HARMLESS ENI, ITS AGENTS, EMPLOYEES, OFFICERS, DIRECTORS, INSURERS, SUCCESSORS, AFFILIATE COMPANIES, CONTRACTORS, CO-LESSEES, THE CO-OWNERS OF RIGEL-SEVENTEEN HANDS SUBSEA PRODUCTION SYSTEM, AND CO-VENTURERS (THE "ENI GROUP") FROM AND AGAINST ANY LOSS, DAMAGE, CLAIM, SUIT, LIABILITY, JUDGMENT AND EXPENSE OF ANY NATURE WHATSOEVER (INCLUDING ATTORNEYS' FEES AND OTHER COSTS OF LITIGATION), AND ANY FINES, PENALTIES AND ASSESSMENTS, OR OTHER SIMILAR LIABILITIES, ARISING OUT OF INJURY, DISEASE OR DEATH OF THE EMPLOYEES, CONTRACTORS, SUBCONTRACTORS, AND INVITEES OF BP AND ENI, DUE TO THE INSTALLATION, OPERATION, MAINTENANCE AND/OR EVENTUAL REMOVAL AND ABANDONMENT OF THE ABOVE REFERENCED FLOWLINES AND/OR INTERFERENCE WITH ENI PROPERTY, FLOWLINE(S), OPERATION(S), AND THIS INDEMNITY SHALL APPLY, EXCEPT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE ENI GROUP, WHETHER OR NOT ENI GROUP IS CLAIMED TO BE PASSIVELY, CONCURRENTLY OR ACTIVELY NEGLIGENT AND REGARDLESS OF WHETHER LIABILITY WITHOUT FAULT, INCLUDING BUT NOT LIMITED TO STRICT LIABILITY, IS IMPOSED OR SOUGHT TO BE IMPOSED UPON THE ENI GROUP.

6. BP SHALL DEFEND, INDEMNIFY, RELEASE AND HOLD THE ENI GROUP HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS, COSTS, PENALTIES OR LIABILITY FOR PROPERTY OR ENVIRONMENTAL DAMAGE TO OR LOSS OF PROPERTY, INCLUDING BUT NOT LIMITED TO LOSS OF PRODUCT, OF ANY THIRD PARTY AND FOR BODILY INJURY TO OR DEATH OF ANY THIRD PARTY, INCLUDING BUT NOT LIMITED TO THIRD PARTY SHIPPERS AND TRANSPORTERS OF HYDROCARBONS, ARISING OUT OF OR RESULTING FROM THE OPERATIONS OR ACTIVITIES OF BP, ITS EMPLOYEES, CONTRACTORS AND THEIR EMPLOYEES, ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, OPERATION AND EVENTUAL ABANDONMENT AND/OR REMOVAL OF THE FLOWLINES, AND THIS INDEMNITY SHALL APPLY, EXCEPT TO THE EXTENT CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE ENI GROUP, WHETHER OR NOT THE ENI GROUP IS CLAIMED TO BE PASSIVELY, CONCURRENTLY OR ACTIVELY NEGLIGENT AND REGARDLESS OF WHETHER LIABILITY WITHOUT FAULT, INCLUDING BUT NOT LIMITED TO STRICT LIABILITY, IS IMPOSED OR SOUGHT TO BE IMPOSED UPON THE ENI GROUP.

7. This Letter covers only the activities described herein. Further, this Letter in no way implies Eni's consent to (i) BP's proposed flowline installation and/or any flowline crossing(s) on acreage/OCS block(s) that are unleased or leased and/or

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owned by third parties (whether co-lessee or otherwise) or (ii) BP conducting any operations on the Rigel well which is located on Block 252, Mississippi Canyon Area or on the above referenced 3" umbilical and 8" pipeline. BP recognizes it is not the intention of Eni by this letter agreement to grant a right-of-way or easement or any fee interest, but merely to signify that insofar as its interests are concerned, Eni has no objection to BP's construction of the captioned flowline if done in accordance with the provisions of this agreement. BP further recognizes that this letter does not signify that the other co-owners of the lease covering Block 252, Mississippi Canyon Area do not object to the proposed crossing.

8. This agreement shall be governed by U. S. General Maritime Law.

If Eni is agreeable to the foregoing, please have the proper authority indicate acceptance thereof by signing duplicate originals of this letter and returning one (1) executed original to the attention of Wayne Fletcher at the above address.

Yours truly,

BP Exploration & Production Inc.

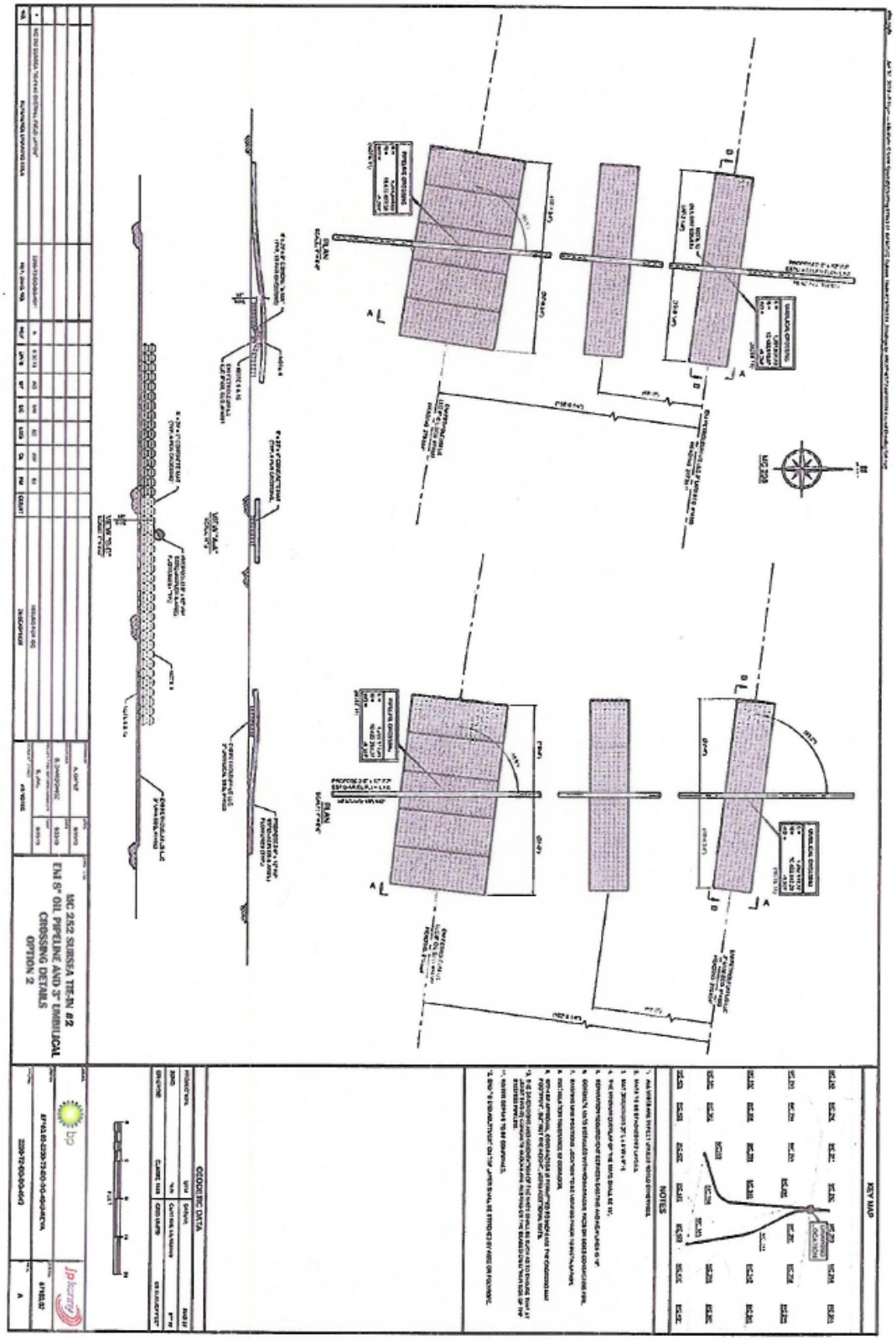
By: _____
Kemper Howe
Attorney-in-Fact

AGREED TO AND ACCEPTED THIS 1st DAY OF JULY, 2010.

Eni US Operating Co. Inc.

BY: Wm Deal

TITLE: VP, Operations


MC 252 SUBSEA TIE-IN #2
EN 8" OIL PIPELINE AND 3" UMBILICAL
CROSSING DETAILS
OPTION 2
NOTES
REV MAP
GEODETIC DATA

Shell Pipeline Company LP
Land and Permitting
Two Shell Plaza - #1571
777 Walker Street
Houston, TX 77002
Tel (713) 241-0457
Fax (713) 241-0271

VIA E-MAIL: Wayne.Fletcher@bp.com

July 2, 2010

BP Exploration & Production Inc.
Attn: Mr. Wayne Fletcher
200 Westlake Blvd.
Houston, TX 77079

Dear Mr. Fletcher:

Re: MISSISSIPPI CANYON BLOCKS 296 AND 341, OFFSHORE LOUISIANA
18-INCH, NAKIKA PIPELINE, OCS-G-23074, SEGMENT # 13543
INSTALLATION OF TWO 8" & 12" PIPE-IN-PIPE FLOWLINES
SPLC GOM FILE NO. 10-032H
PIPELINE CROSSING AGREEMENT

Shell Pipeline Company LP ("SPLC") is in receipt of your e-mail dated June 30, 2010 outlining BP Exploration & Production Inc.'s ("BP") proposed installation of two 8-inch and 12-inch PIP Flowlines across SPLC's above referenced pipeline located in Mississippi Canyon Blocks 296 and 341, OCS-G-23074, Segment # 13543.

SPLC objects to BP's plans unless BP agrees to and satisfies the following requirements:

1. At least one (1) day prior to commencing any pipe lay activity in the vicinity of the captioned SPLC pipeline, BP will notify Magellan Marine Int'l. ("Magellan") Operations Manager at (504) 835-3009 so that a Magellan employee, on SPLC's behalf, can be present during the operations.

2. BP will accomplish the crossing in accordance with BP's attached drawing attached hereto and made a part hereto. In the event SPLC's pipeline is exposed at the crossing location, BP shall install all separation materials (sandbags and mats) prior to constructing its pipeline across the SPLC pipeline.

3. BP agrees that Magellan or its designated alternate will be afforded the opportunity to be present on board the lay barge during BP construction of its pipeline across SPLC's pipeline.

4. BP's anchor-handling tug will have a satellite position system accurate to within five meters. When setting and weighing anchors, anchor positions will be plotted to determine the extent of anchor slippage. All anchors placed across the SPLC pipeline will be located a minimum horizontal distance of 1,000 feet from SPLC's pipeline, and all anchors not crossing the SPLC pipeline will be located a minimum horizontal distance of 800 feet from SPLC's pipeline. All anchors shall be weighted vertically from their stationary positions to a height of not less than one-half the distance between the ocean floor and sea level before the

BP Exploration & Production Inc.
Attn: Mr. Wayne Fletcher
July 2, 2010
Page Two

anchors move laterally in water depths greater than 100 feet; in water depths less than 100 feet the anchor shall be weighted to the surface before moved laterally. **(This paragraph is not applicable if dynamically positioned vessels (DPV) are utilized during the crossing operations).**

5. No mechanical jetting equipment will be used closer than 100 feet perpendicular either side of SPLC's pipeline. The mats will be positioned with LBL array, with associated tolerance. As-built coordinates of the pile lay corridor (+/- 5 feet) and route centerline will be taken. BP agrees to supply SPLC with the proposed set of procedures on the jetting and diving operations for SPLC's review and approval.

6. Whether BP uses divers or a remote operated vehicle ("ROV") to inspect the crossing location, BP agrees that Magellan or its designated alternate will be notified at least seven days prior to inspection operations and will be given the opportunity to be present on board the vessel during the periods of diver and/or ROV inspection.

7. In the event SPLC's 18-inch Pipeline is damaged or its operations otherwise disrupted as a result of the construction, installation, operation, maintenance, repair or removal of the proposed flowlines to cross, BP agrees to reimburse SPLC for (a) any and all expenses incurred by SPLC to repair and return the 18-inch Pipeline to its original condition to SPLC's satisfaction, (b) the value of any gas or condensate, or both, lost from SPLC's 18-inch Pipeline, (c) the cost of cleaning up and disposing of any product spilled from SPLC's 18-inch Pipeline (d) the payment of all claims, fines or penalties paid to individuals, governmental agencies, or any other entity, and (e) the cost of hydrostatic tests for the 18-inch Pipeline, if SPLC believes its integrity is in doubt.

8. Should SPLC find it necessary at any time in the future to raise, expose, or otherwise alter its pipeline from beneath BP's proposed PIP Flowline at or near the crossing location for maintenance, replacement, inspection or any other reason, BP, at its sole cost, risk, and expense, agrees to take such measures as necessary, including reduction of pressure, on BP's proposed Flowline. SPLC shall not be liable to BP for any loss of revenue due to BP's adjustment of its PIP Flowline.

9. All damages to SPLC's 18-inch Pipeline, including damage to the protective coating, due to the crossings by BP will be repaired to the satisfaction of SPLC's Authorized Representative at BP's sole risk, cost and expense.

10. BP shall defend, indemnify and hold harmless SPLC, its parents, associated and affiliated companies, its and their agents, employees, officers, directors, insurers, successors and assigns from and against any loss, damage, claim, suit liability, judgment and expense (including attorneys' fees or other costs of litigation), and any fines, penalties and assessments arising out of injury, disease or death of persons (including that of the

BP Exploration & Production Inc.
Attn: Mr. Wayne Fletcher
July 2, 2010
Page Three

employees of BP, SPLC, or their contractors and subcontractors), damage to or loss of any property (including that of BP, SPLC or their contractors and subcontractors), and any environmental harm, or damages to natural resources, caused by, arising out of or resulting from, either directly or indirectly, the activities of BP and its contractors in connection with the activities covered in this agreement.

11. Unless waived by this letter agreement or unless instructed otherwise by SPLC's on-site representative, BP, its agents, contractors, or subcontractors will observe **SPLC's General Crossing and Anchoring Guidelines for SPLC Pipeline, Offshore Gulf of Mexico** (copy attached). In the event of a conflict between this Pipeline Crossing Agreement and the Guidelines, the terms of this Pipeline Crossing Agreement shall prevail.

12. This conditional approval covers only BP's proposed Pipeline across SPLC's 18-inch Nakika Pipeline, OCS-G-23074, Segment # 13543, Mississippi Canyon Blocks 296 and 341, and in no way, implies SPLC's consent to BP crossing of other facilities, pipelines, or any other assets that may be owned, leased, and/or operated by SPLC or any of their associated or affiliated companies.

Please indicate BP's acceptance of the above by having the proper authority date and sign this letter in the spaces provided and return the original to the undersigned at the above address.

Sincerely,

Sharon L. Bevers

Sharon L. Bevers
Land Agent
Shell Pipeline Company LP

Enclosures

AGREED TO AND ACCEPTED THIS 6th DAY OF July, 2010.

APPROVED: BP EXPLORATION & PRODUCTION INC.

BY: _____

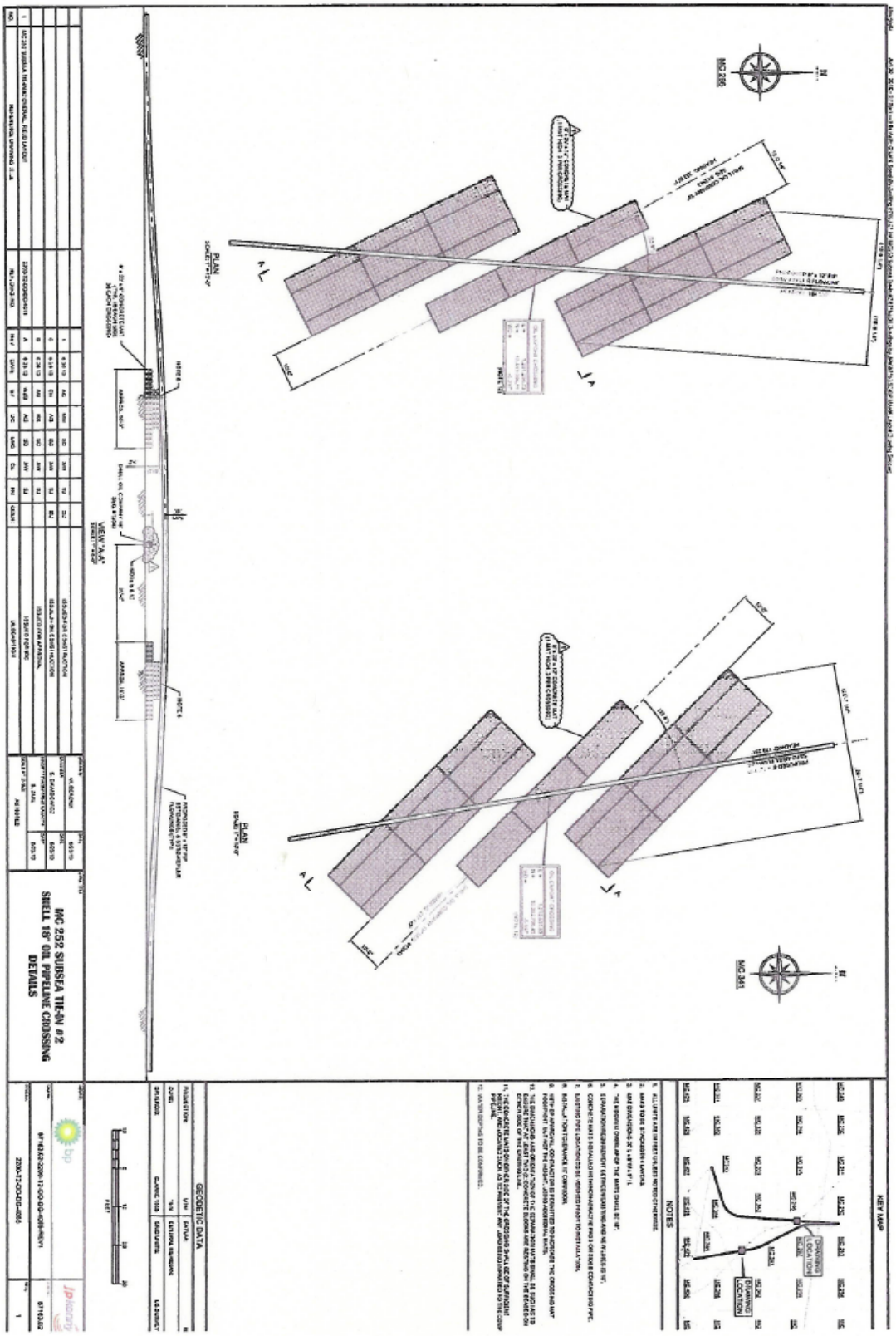
NAME: Kemper Howe

TITLE: Attorney-in-Fact

BP Exploration & Production Inc.
Attn: Mr. Wayne Fletcher
July 2, 2010
Page Four

cc: Alex Alvarado,
Minerals Management Service, Pipeline Section
1201 Elmwood Park Boulevard MS 5232
New Orleans, LA 70123-2394

cc: Shell Pipeline Company LP
Mike L. Smith, Sr. Facility Engineer, New Orleans, LA
Kelly Angelette, Maintenance Supervisor, Gibson, LA
Micah Shanks, Facility Engineer, New Orleans, LA
Magellan Marine Int'l., Metairie, LA


MC 252 SUBSEA TIE-IN #2
SHELL 18" OIL PIPELINE CROSSING
DETAILS
PLAN
PLAN
VIEW "A-A"
NOTES
GEODETIC DATA
MEP MAP

SHELL PIPELINE COMPANY LP (SPLC)
GENERAL CROSSING AND ANCHORING GUIDELINES FOR SPLC PIPELINES OFFSHORE GULF OF MEXICO

1. Work plans must be submitted to SPLC for review prior to commencing any construction activity across SPLC's pipelines or within SPLC's pipeline rights of way. All pipelines constructed across an SPLC pipeline must be installed in accordance with either of the crossing drawings contained herein, depending on whether the pipeline is to be installed in < 200' or > 200' water depth.

2. At least seven days prior to commencing any construction activity in the immediate vicinity of an SPLC pipeline, the Company crossing the SPLC line will notify Magellan Marine International's Operations Manager at (504) 835-3009 so that a Magellan Marine employee, on SPLC's behalf, can be present during the construction activities.

3. Magellan Marine or its designated alternate will be afforded the opportunity to be present on board the lay barge during any company's construction of a pipeline across an SPLC pipeline. Magellan Marine will be allowed to witness any pipeline position survey and be given the opportunity to be present on board the survey vessel during survey operations. A copy of a video survey of all pipeline conditions during the survey should be made available. Magellan Marine shall be given the opportunity to visually inspect and approve all anchor pre-set riggings, including chain shackles, triplates (or equivalent) and buoys.

4. SPLC or its representative should be allowed to witness the pre-set deployment of anchors. SPLC or its representative shall also be allowed to do the following when installing the anchoring system for a deep water (greater than 1,000 feet) location:

    a. Record bollard pull load cell reading during anchor pre-set proceeding;
    b. Monitor mooring system hook up procedures;
    c. Monitor deployment of all other anchors;
    d. Record base line anchor tension for all anchors after final positioning;
    e. Confirm line of communications for any change in drilling rig status while on location;
    f. Witness the retrieval of any and all anchors.

5. The company's anchor-handling tug will have a satellite position system accurate to within five meters. When setting and weighing anchors, anchor positions will be plotted to determine the extent of anchor slippage. All anchors placed across an SPLC pipeline will be located a minimum horizontal distance of 1,000 feet from SPLC's pipeline, and all anchors not crossing an SPLC pipeline will be located a minimum horizontal distance of 800 feet from SPLC's pipeline. All anchors shall be weighted vertically from their stationary positions to a height of not less than one-half the distance between the ocean floor and sea level before the anchors move laterally in water depths greater than 100 feet; in water depths less than 100 feet the anchor shall be weighted to the surface before moved laterally. **(This paragraph is not applicable if dynamically positioned vessels (DPV) are utilized during the crossing operations.)**

6. Whether the company uses divers or a remote operated vehicle (ROV) to inspect the crossing locations, the company agrees that Magellan Marine or its designated alternate will be notified at least seven days prior to inspection operations and will be given the opportunity to be present on board the vessel during the periods of diver and/or ROV inspection.

7. If the company intends to cross an SPLC pipeline with another pipeline, the company agrees to temporarily remove, raise or lower its pipeline, whichever is preferable, at the company's expense and at no cost or liability to SPLC, should it become necessary and for all times it should become necessary for SPLC to alter, repair, replace, relocate, change the size of, or remove SPLC's pipeline which the company intends to cross, for a period of time while SPLC's operations are in progress,

8. Within 90 days following completion of the pipeline across SPLC's pipeline, the company will furnish to SPLC, at the above address, a reproducible "as-built" drawing of the crossings.

9. Should Paragraph #5 be applicable, within 90 days following completion of construction, the company will furnish to SPLC, at the above address, anchor coordinates drawings showing the locations where all anchors were set and picked up within 1,000 feet of SPLC's pipeline, which drawings will be used to show if anchor slippage has occurred which may endanger the SPLC pipeline. The anchor locations will also be shown in a table on the as-built drawings.

10. The company shall defend, indemnify and hold harmless SPLC, its parent, associated and affiliated companies, its and their agents, employees, officers, directors, insurers, successors and assigns from and against any loss, damage, claim, suit liability, judgment and expenses (including attorneys' fees and other costs of litigation), and any fines, penalties and assessments arising out of injury, disease or death of persons (including that of the employees of the company or SPLC or their contractors and subcontractors), damage to or loss of any property (including that of the company or SPLC or their contractors and subcontractors), and any environmental harm, or damages to natural resources, caused by, arising out of or resulting from, either directly or indirectly, the activities of the company and its contractors in connection with the activities covered in the Pipeline Crossing Agreement.

11. For notification purposes, the following should be contacted:

SPLC's Maintenance Supervisor
Kelly Angelette
985-858-2570 office
985-688-7446 cell
kelly.angelette@shell.com

SPLC's On-site Representative
Magellan Marine Int'l.
504-835-3009 office
mmi-no@magellanmarine.com

Emergency Response Notification
SPLC Control Center
800-852-8144
713-241-0648

GulfofMexicoSPU

GoM Drilling, Completions and Interventions - MC252

Final Survey Report (Utec)

RPIC APPROVAL:	Print Name above	Sign Above	Date:	Time:
BOEMRE APPROVAL:	Print Name above	Sign Above	Date:	Time:
CGIC (USCG) APPROVAL:	Print Name above	Sign Above	Date:	Time:
BOEMRE (Houston Review):	Print Name above	Sign Above	Date:	Time:
CGIC (USCG) (Houston Review)	Print Name above	Sign Above	Date:	Time:

Rev	Date	Document Status	Custodian/Owner	Authority

Document Control Number	Organization ID	Sector ID	Discipline ID	Document Class	Sequence Number	Document Revision
	2200	**T2**	**DO**	**RP**	**4282**	**B**

MC252 SSTI #2

Final Survey Report (Utec)

BP Document No: 2200-T2-DO-RP-4282

Technip	Contractor Doc. No.:	GS015601-900-RT-5350-0001

Technip Rev.	BP Rev.	Date	Description	Prepared By	Checked By	Approved By	BP Reviewed	BP Approved
B	B	9/22/10	Issued for Approval	CMC	JCL	JSC		

Document Control Number	Project Abbreviation	Sector Designation	Discipline Code	Document Class	Sequence Number	BP Document Revision
	2200-	T2	DO	RP	4482	B

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REVISION HISTORY SHEET

Revision	Date	Description of Change

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Many of the documents used in the MC252 SSTI #2 Project are based on documents from the Galapagos Project. Any mention of Galapagos or the associated fields (Isabela, Santiago, or Santa Cruz) should be disregarded and reapplied to MC252 SSTI #2.

Confidential C2: Do not disclose without authorization
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MC252 SUBSEA TIE-IN

FINAL SURVEY REPORT

Issued for UTEC by: Jason Peters	Date: August 30th, 2010
Received for Technip by: Iain Miller	Date: August 30th, 2010

UTEC DOCUMENT NO:601R-10-002-RPT-01
PROJECT NO:601R-10-002

UTEC Field Report No:	601R-10-002-RPT-01

Revision History

Rev	Date	Issue purpose	Prepared	Checked	Approved	Client
2	30 AUG 2010	FINAL	MB	CW	JP	IM
1	20 AUG 2010	Issued for Client Comment	MB	CW	JP	-
0	18 AUG 2010	Issued for Review	MB	CW	-	-
STATUS CODE			I			
UTEC Checked by (Initials)						

R	Rejected – Work may not proceed	W	With Comments – Work may proceed	A	Approved	I	For information only

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1. INTRODUCTION

1.1. Survey Scope of Work

This document outlines the Survey operations performed by the support vessel involved in the survey activities for the MC 252 Subsea Tie-In #1 and MC 252 Subsea Tie-In #2 project. The construction activities outside of the survey scope are not covered in this document. The following operations were performed:

- Mobilize qualified personnel and project equipment
- Verify current procedures and drawings onboard vessels
- Complete required calibrations and checks of vessel and ROV survey systems and equipment prior to any installation activity
- Verify project survey data loaded and fully functional on survey computers
- Surface positioning and management of survey systems onboard project vessels
- Installation and calibration of one (1) LBL array for MC252 SSTI #1
- Installation and calibration of seven (7) LBL arrays for MC252 SSTI #2
- Installation of Structure Marker Buoys
- Crossing Mattress Installations
- Issue any required survey reports
- Site specific pre-lay investigation
- Recovery of MC252 SSTI #1 Compatts
- MC252 SSTI #2 Compatts and Marker Buoys to be recovered by BP designated vessel
- Submission of final reporting and deliverables

2. REFERENCES

Document Title	Reference
UTEC Survey Operating Instructions	UTEC: SIP00UI
UTEC QHSE Manual	UTEC Survey, Inc. HSE Manual 06.01.2009
UTEC Project Operating Procedures	POP-USI-601R-10-002 Rev 3
UTEC Survey Mobilization Procedures	SIP01UI
UTEC Procedure for Sound Velocity Determination - GOM	PR-USI-300
UTEC Procedure for USBL Calibration and Operation	SIP05UI
UTEC Survey GPS Health Check and Gyro Calibration Procedure –GOM	SIP03UI

Table 2-1 Utec Document Reference

Document Title	Reference
Normand Fortress Mobilization	601R-10-Mob-Rev1
Rigel-ENI Array Installation (RIG100)	601R-10-002-FR001
Strucutre Position Verification MC252 Rigel OCS-G-21164 Well No.1	601R-10-002-FR002
Kepler-Ariel-ENI Array Installation (ENI100)	601R-10-002-FR003
Ariel Mattress Installation ENI 3” UMB and 8” BLKG Lines	601R-10-002-FR004
Ariel Shell Oil Export Array Installation (APX1100)	601R-10-002-FR005
Ariel Mattress Protection for Shell 18” Oil Export Pipeline	601R-10-002-FR006
Ariel-BP 2” Fiber Optic Cable Array Installation (AXF1100)	601R-10-002-FR007
Ariel Mattress Protection For BP 2” CBLC Fibre Optic Cable	601R-10-002-FR008
Ariel Cut to Length (CTL) Array Installation (CTL1200)	601R-10-002-FR009
Ariel Laydown Array Installation (ALD1200)	601R-10-002-FR010
Ariel Field Laydown Structure As-Found Survey	601R-10-002-FR011
Kepler Laydown Array Calibration	601R-10-002-FR012
Kepler Field Laydown Structure As-Found Survey	601R-10-002-FR013
Kepler Cut to Length (CTL) Array Calibration	601R-10-002-FR014
Kepler Mattress Installation ENI 3” UMB and 8” BLKG Lines	601R-10-002-FR015

Table 2-2 Utec Field Report Reference

3. ABBREVIATIONS AND ACRONYMS

A & A	Expanded	A & A	Expanded
CM	Central Meridian	NAD27	North American Datum 1927
COMPATT	Computer and Telemetering Transponder	NADCON	North American Datum Conversion
CONUS	Continental United States	NF	Normand Fortress
CST	Central Standard time	No	Number
CTL	Cut To Length	PC	Personal Computer
DGPS	Differential Global Positioning System	PIP	Pipe in Pipe
DVL	Doppler Velocity Log	PLEM	Pipe Line End Manifold
DVR	Digital Video Recorder	PLET	Pipe Line End Termination
Ft	Feet	QHSE	Quality Health safety & Environment
GOM	Gulf of Mexico	Rev	Revision
GPS	Global Positioning System	RIG	Rigel
GVI	General Visual Inspection	ROV	Remotely Operated Vehicle
HiPAP	High Precision Acoustic Positioning	Seg#	Segment Number
HSE	Health, Safety & Environment	SIT	Silicon Intensifier Target
JSA	Job Safety Analysis	SSA	Sub Sea Assembly
LBL	Long Base Line	SSTI	Sub Sea Tie In
M	Metres	UMB	Umbilical
m/sec	Metres / Second	USBL	Ultra Short Baseline
MC	Mississippi Canyon	UTA	Umbilical Termination Assembly
MF	Medium frequency	UTM	Universal Transverse Mercator
MRU	Motion Reference Unit	WGS 84	World Geodetic System 1984

Table 3-1 Abbreviations and Acronyms

4. SAFETY

UTEC Survey followed and abided by the safety plans set forth by the client as well as those of the vessel owner.

Tool Box Talks were carried out on shift handover and JSAs were provided prior to any operation deemed necessary by any party onboard or participating in the operation.

5. SURVEY CONTROL

5.1. Survey Datum

WGS84 DGPS positional data was output to the WinFrog navigation software and transformed to the North American Datum 1927, Clarke 1866 Ellipsoid. The working projection for the project was Universal Transverse Mercator, Zone 16N.

Convergence was applied to all heading information; and was recorded and reported as grid values.

Datum parameters used during the project are as per Table 5-1

5.1.1. Geodetic Parameters

Geodetic Parameters	
Ellipsoid	Clarke 1866
Geodetic Datum	NAD 1927
Semi-Major axis	6,378,206.40 m (20,925,832.164ft)
Inverse flattening	1/294.978698
Projection	Universal Transverse Mercator (UTM)
UTM Zone:	16 North
Central Meridian	87˚ West
False Northing	0.00ft
False Easting	500,000m (1,640,416.67ft)
Scale Factor	0.9996

Table 5-1 Geodetic Parameters

5.2. Datum Shifts

The transformation from WGS84 to NAD27 within the WinFrog navigation software uses a real time NADCON routine. For the GOM, the NADCON area is CONUS and uses files supplied by the National Geodetic Survey.

5.2.1. Vertical Datum

Bathymetric survey data is reduced to Mean Sea Level using the standard port of Mobile Al.

5.2.2. Time Datum

The time datum is local time (CST)

5.3. Survey Tolerances

Positioning systems during the project were utilized and maintained such that the standard deviation of each fix was less than the following:
Surface Positioning System Normal Accuracy: ± 0.1m Horizontal & ± 0.2m Vertical (2DRMS).

For acoustic work the following accuracies were achieved;

- Acoustic USBL Positioning: 0.5% of Slant range
- LBL Range Accuracy of ROVNAV 5 and C5 COMPATTs: ±5cm

5.4. Survey Systems

5.4.1. Navigation Software

WinFrog integrated navigation software was utilized for online survey.

5.4.2. Vessel Sensors

Throughout the project, the following navigational systems were used onboard the vessels.

Surface Position System (Normand Fortress)	
Primary	**Secondary**
Veripos ULTRA Multi Ref Solution DGPS	Veripos ULTRA Multi Ref Solution DGPS
TSS Meridian Surveyor Gyrocompass	TSS Meridian Surveyor Gyrocompass
TSS DMS-05 Motion Sensor	Roll/Pitch from HiPAP500

Table 5-2 Vessel Surface Positioning

Sub-surface positioning was provided using a Sonardyne Fusion LBL ROVNAV within the confines of the installed LBL arrays. The vessels' Kongsberg HiPAP 500 USBL acoustic navigation system was used as a secondary system. Vertical control was provided by a high accuracy Tritech Seaking bathymetric system fitted to the ROVs. System documentation including calibration certification and offset location drawings can be found in the referenced mobilization report Normand Fortress (601R-10-MOB-Rev1).

5.4.3. ROV Survey Sensors

The following sensors were mounted on the ROV and utilized in the navigation software for LBL positioning:

Survey Sensors
Sonardyne Mk 5 Wideband ROVNav System
Sonardyne 8070 USBL Minibeacons
ROV Gyro-CDL Mini RLG
MRU- CDL Mini RLG
Tritech Bathy
Simrad MS 1000 Obstacle Avoidance Sonar

Table 5-3 ROV Sensors

5.4.4. Calibrations

The Normand Fortress was previously mobilized by UTEC personnel as part of an ongoing frame agreement between Technip USA and Utec Survey Inc to provide survey services onboard in the US Gulf of Mexico; therefore, calibrations were part of an ongoing process and were only repeated where necessary when vessels changed contract. A mobilisation report was completed as part of the ongoing process for each vessel and was updated and reissued as new calibrations were completed.

5.4.5. Data Logging and Video Recording

UTEC provided the VisualSoft integrated Digital Video Recording system (DVR), which also provided overlay and header capabilities. During the survey the centre (colour) & SIT (black & white) cameras were continuously recorded using VisualSoft. VisualSoft is a suite of applications to record, archive, review and report digital video running on standard PCs with Microsoft Windows. Video data was digitally time stamped and referenced to Navigation and Foot Posts. Video was recorded and backed up real time to a RAID 5 server and Digital Tape storage devices. Digital video storage negates the requirement for video overlay. However, for display purposes only, cameras were overlaid with standard ROV position data.

6. LBL ARRAY INSTALLATION AND CALIBRATION

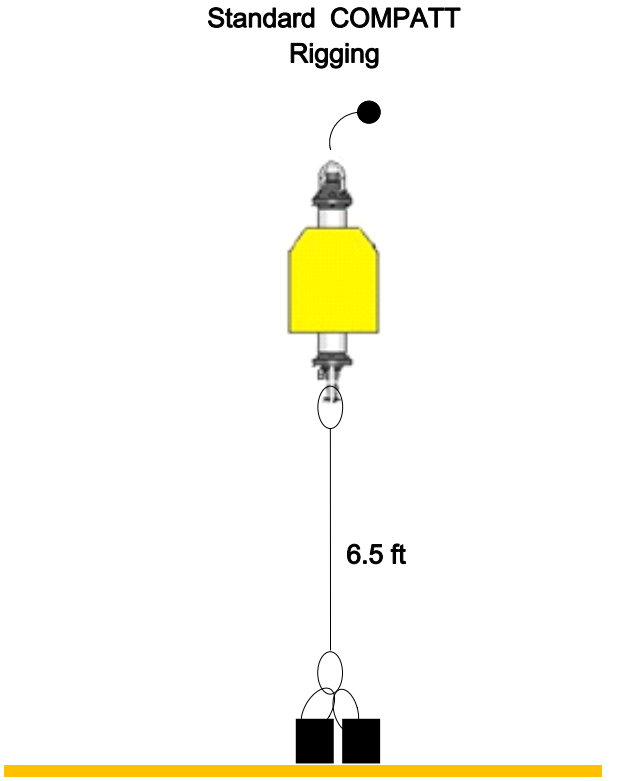


Figure 6-1 COMPATT Deployment Arrangement

6.1. MC252 Rigel SSTI #1 Array Installations

One LBL array was installed for the MC252 Subsea Tie-In #1 at the Rigel 2nd End PLEM. For a complete Field Report: Refer to UTEC 601R-10-002-FR001

6.1.1. ENI Umbilical / Pipeline Crossing Array

The Rigel ENI Umbilical / Pipeline Crossing array (RIG100) is located in MC252 block in approximately 5275 ft water depth. The RIG100 Array was installed and calibrated by the Normand Fortress on July 5th 2010 to support mattress installations at the proposed ENI 8" pipeline and 3" umbilical crossings.

The adjusted coordinates of the Five (5) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (ft)	Northing (ft)	Depth (ft)
RIG101	101	1197376.59	10423664.66	5218.26
RIG102	102	1197667.78	10423172.52	5226.15
RIG103	103	1197262.08	10422720.40	5225.57
RIG104	104	1196715.39	10422976.76	5220.71
RIG105	105	1196804.38	10423548.67	5214.61

Table 6-1 ENI Umbilical / Pipeline Crossing Array (RIGI100)

Note: Upon completion of the Rigel - ENI survey the array was recovered by Normand Fortress

6.2. MC252 Ariel – Kepler SSTI #2 Array Installations

A total of seven LBL arrays were installed for the MC252 Subsea Tie-In #2 by the Normand Fortress. Arrays were installed at the ENI Umbilical / Pipeline Crossings, Ariel / Shell Oil Export Pipeline Crossing, Ariel / Fiber Optic Cable Crossing, Ariel and Kepler proposed CTL locations, and at the Kepler and Ariel Laydown proposed locations. For full details of the installation and calibrations refer to the following Utec Field Reports: 601R-10-002-FR003, FR05, FR007, FR009, FR010, FR012, and FR014.

6.2.1. Kepler-Ariel / ENI Umbilical, Pipeline Crossings Array

The Kepler-Ariel / ENI Crossing Array (ENI100) is located in MC252 & MC295 blocks in approximately 5300 ft water depth. The ENI100 Array was installed and calibrated by the Normand Fortress between the July 8th and July 9th 2010 to support mattress installations at the proposed ENI 8” pipeline and 3” umbilical crossings.

The adjusted coordinates of the Five (5) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (USft)	Northing (USft)	Depth (ft)
ENI101	101	1202206.44	10423294.17	5243.41
ENI102	102	1202887.52	10422715.28	5250.94
ENI103	103	1202680.84	10421936.71	5257.94
ENI104	104	1201545.07	10422039.85	5247.05
ENI105	105	1201451.37	10422837.72	5241.04

Table 6-2 Kepler-Ariel /ENI Umbilical, Pipeline Crossings Array (ENI100)

6.2.2. Kepler Cut to Length Array

The Kepler Cut to Length array (CTL500) is located in MC383 and MC384 block in approximately 5750 ft water depth. The CTL500 array was installed and calibrated by the Normand Fortress on the July 17th 2010 to support the installation of the Kepler 12" PIP flowline.

The adjusted coordinates of the Four (4) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (USft)	Northing (USft)	Depth (ft)
CTL501	501	1189533.08	10383807.08	5766.32
CTL502	502	1188053.89	10383284.78	5758.91
CTL503	503	1187834.63	10384111.94	5738.98
CTL504	504	1189345.81	10384527.60	5763.93

Table 6-3 Kepler Cut To Length Array (CTL500)

6.2.3. Kepler Laydown Array

The KLD500 array is located in MC383 block in approximately 5740 ft water depth. The array was installed and calibrated by the Normand Fortress between the July 15th and July 16th 2010 to support the installation of the Kepler 12" PIP flowline and associated PLEM.

The adjusted coordinates of the Five (5) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (USft)	Northing (USft)	Depth (ft)
KLD505	505	1179970.38	10382292.52	5699.84
KLD506	506	1180861.14	10381966.33	5714.16
KLD507	507	1181092.80	10381040.52	5724.02
KLD508	508	1179839.35	10380334.19	5730.10
KLD509	509	1179143.58	10381482.49	5710.32

Table 6-4 Kepler Laydown Array (KLD500)

6.2.4. Ariel / Shell Oil Export Pipeline Crossing Array

The Ariel-Shell Oil Export crossing array (AXP1100) is located in the MC341 field in approximately 5920ft water depth. The AXP1100 array was installed and calibrated by the Normand Fortress between July 10th and July 11th 2010 to support mattress installations at the proposed Shell 18" Oil Export crossings.

The adjusted coordinates of the Four (4) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (USft)	Northing (USft)	Depth (ft)
AXP1101	1101	1212229.62	10393343.23	5876.01
AXP1102	1102	1213098.94	10393257.32	5868.11
AXP1103	1103	1213227.51	10392134.35	5910.74
AXP1104	1104	1212144.08	10392275.09	5880.58

Table 6-5 Ariel / Shell Oil Export Pipeline Crossing Array (AXP1100)

6.2.5. Ariel / BP Fiber Optic Cable Crossing Array

The Ariel-Fiber Optic Cable crossing array (AXF1100) is located in the MC385 field in approximately 5990ft water depth. The AXP1100 array was installed and calibrated by the Normand Fortress between July 13th and July 14th 2010 to support mattress installations at the proposed BP 2" CBLC Fiber Optic Cable crossing.

The adjusted coordinates of the Four (4) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (ft)	Northing (ft)	Depth (ft)
AXF1105	1105	1213115.77	10387174.94	5940.35
AXF1106	1106	1213995.94	10387304.56	5965.70
AXF1107	1107	1213199.08	10386131.58	5959.73
AXF1108	1108	1214301.68	10386283.64	5959.77

Table 6-6 Ariel / Fiber Optic Cable Crossing Array (AXF1100)

6.2.6. Ariel Cut to Length Array

The Ariel Cut to Length array (CTL1200) is located in the MC385 field in approximately 6010ft water depth. The CTL1200 array was installed and calibrated by the Normand Fortress on July 14th 2010 to support the installation of Ariel 12" PIP Flowline.

The adjusted coordinates of the Four (4) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (ft)	Northing (ft)	Depth (ft)
CTL1201	1201	1213775.78	10383955.30	5994.23
CTL1202	1202	1214527.12	10384030.80	6010.29
CTL1203	1203	1214801.19	10382491.39	6017.28
CTL1204	1204	1213976.16	10382387.67	5999.22

Table 6-7 Ariel Cut To Length Array (CTL1200)

6.2.7. Ariel Laydown Array

The Ariel Laydown array (ALD1200) is located in the MC385 & MC429 field in approximately 6100ft water depth. The ALD1200 array was installed and calibrated by the Normand Fortress on July 15th 2010 to support the installation of Ariel 12" PIP Flowline and associated PLEM.

The adjusted coordinates of the Five (5) COMPATT MF Wideband transponders are listed below:

Location	Address	Easting (ft)	Northing (ft)	Depth (ft)
ALD1205	1205	1215241.49	10375268.43	6093.73
ALD1206	1206	1216075.53	10375351.76	6093.52
ALD1207	1207	1216623.12	10374402.77	6102.40
ALD1208	1208	1216141.78	10373478.76	6092.95
ALD1209	1209	1215027.14	10373733.49	6092.79

Table 6-8 Ariel Laydown Array (ALD1200)

NOTE: All COMPATTs and marker buoys have been recovered from the seabed as of August 18th, 2010.

7. MARKER BUOY INSTALLATION

As part of the work scope for the MC252 Subsea Tie-In #2 Marker Buoys were placed as visual reference for the installation of the proposed structures and piles. A total of four (4) marker buoys were installed for the structures. The Markers were placed by ROV XLX19 onboard Normand Fortress using the previously installed LBL Arrays. For full detail of the marker installation refer to Utec Field Report: 601R-010-002-FR011, FR013. The results are shown below and overleaf.

7.1. Structure Marker Buoys

Location	Marker Id	Easting (USft)	Northing (USft)	Depth (ft)
Ariel 2nd End PLEM	MB1	1215733.31	10374481.44	6110.21
Ariel 2nd End PLEM	MB2	1215768.47	10374487.64	6111.79
Kepler 2nd End PLEM	MB1	1180079.12	10381332.55	5739.69
Kepler 2nd End PLEM	MB2	1180089.93	10381297.07	5740.88

Table 7-1 Structure Marker Buoy Locations

8. MATTRESS INSTALLATION

Prior to the mattress installations XLX19 ROV installed marker buoys +/- 2ft from the end of each mattress set to be used as a visual reference.

8.1. Rigel / ENI Mattress Locations

In preparation of the Rigel 6" Oil flowline crossing, mattress protection was installed on the ENI SEG #14883 and ENI SEG #14881 in MC252. Refer the *Appendix Figure C-1* for the mattress As-Built drawing. The calculated center coordinate for each set of mattresses are listed below:

Location	Calculated Center Coordinate	
	Easting (USft)	Northing (USft)
Rigel / ENI Umbilical Crossing	1197262	10423247
Rigel / ENI Pipeline Crossing	1197127	10423149

Table 8-1 ENI Mattress Locations

8.2. Ariel-Keppler / ENI Mattress Locations

In preparation of the Kepler 12" PIP Flowline and the Ariel 12" PIP Flowline installation, mattress protection was installed on the S-14883 ENI 3" Umbilical and S-14881 ENI 8" Flowline in block MC296. An as-found survey was conducted prior to the commencement of lifting operations.

A total of thirty six (36) mattresses were at the crossings using the ENI100 Array. Ten mattresses were installed at each pipeline crossing. Four mattresses were installed at each umbilical crossing and support. Refer the *Appendix Figure C-2* and *Figure C-3* for the mattress As-Built drawing. Refer to UTEC Field Reports 601R-10-002 FR004, FR015 for complete details. The calculated center coordinate for each set of mattresses are listed below:

Location	Calculated Center Coordinate	
	Easting (USft)	Northing (USft)
Kepler / ENI Umbilical Crossing	1201899	10422622
Kepler / ENI Pipeline Crossing	1201888	10422464
Kepler Support	1201895	10422543
Ariel / ENI Umbilical Crossing	1202518	10422541
Ariel / ENI Pipeline Crossing	1202515	10422371
Ariel Support	1202518	10422456

Table 8-2 ENI Mattress Locations

8.3. Ariel / Shell Oil Export Mattress Locations

A total of 39 mattresses were installed at the Ariel / Shell 18" Oil Export Crossing using the AXP1100 Array. At each Oil Export Bridge eighteen mattresses were installed. At the Shell protection three mattresses were installed. Refer the *Appendix Figure C-4* for the mattress As-Built drawing. The center coordinate for each set of mattresses is listed below:

Location	Center Coordinate	
	Easting (USft)	Northing (USft)
Ariel / Oil Export North Bridge	1212634	10392813
Ariel / Oil Export South Bridge	1212646	10392752
Shell Protection	1212641	10392782

Table 8-3 Oil Export Mattress Locations

8.4. Fiber Optic Cable Mattress Location

Four (4) mattresses in a double stack of two mattresses were installed using the AXF1100 Array at the Ariel / Fiber Optic Crossing. Refer the *Appendix Figure C- 5* for the mattresses As-Built drawing: The center coordinate for the mattress is listed below:

Location	Center Coordinate	
	Easting (USft)	Northing (USft)
Ariel / Fiber Optic Crossing	1213664	10386752

Table 8-4 Ariel / Fiber Optic Mattress Locations

9. AS-FOUND STRUCTURES

9.1. Rigel As-Found Survey

9.1.1. Rigel Subsea Structures

As part of the work scope for the MC252 Rigel SSTI #1 field development, preliminary General Visual Inspections (GVI's) and as found surveys were conducted on all subsea structures around Rigel OGS-G-21164 Well # SS-1. Refer to 601R-10-002-FR002 For a complete report. The results of shown below:

Structure	As-Found Easting (USft)	As-Found Northing (USft)	Depth (ft)
OCS-G-21164 Well No.1	1197105.13	10423214.88	5209.04
R17 UTA #2	1197134.74	10423264.77	5226.41
R17 UTA #3	1197189.89	10423255.60	5220.17
R 17 ILS	1197087.94	10423158.37	5214.96

Table 9-1: As-Found Positions for Rigel Subsea Structures

9.1.2. As-Found Survey of Existing S-14883 ENI 3" Umbilical

On completion of the as-found survey of the 3" ENI umbilical, a difference between previously published positional data and the umbilical's as found position was discovered and presented to Technip OM for consideration in their mattress design modifications.

9.1.3. As-Found Survey of Existing S-14881 ENI 8" Flowline

There were no significant positional deviations from the published as-laid data of the existing S-14881 ENI 8" flowline.

9.2. Ariel Field As-Found Survey

9.2.1. Ariel Subsea Structures

As part of the work scope for the Ariel SSTI #2 field development as-found surveys were conducted on all subsea structures around the proposed Ariel PLEM laydown area. Refer to 601R-10-002 FR011 for a complete report. The results are shown in the table below:

Structure	As-Found Easting (USft)	As-Found Northing (USft)	Depth (ft)
Ariel Well Hub	1215486.18	10374313.73	6091.68
Ariel North UTA	1215595.80	10374526.74	6104.10
Ariel Laydown UTA	1215649.01	10374423.01	6097.70
Ariel North PLET	1215547.68	10374253.58	6096.91
Ariel South PLEM	1215547.23	10374335.49	6088.09

Table 9-2: As-Found Positions for Ariel Subsea Structures

9.2.2. As-Found Survey of Existing BP SEG#13819 5” Umbilical

During the as-found survey of the existing BP SEG#13819 5” Umbilical, an unknown flying lead was found approximately 250ft from the existing Ariel UTA. Refer to 601R-10-002 FR011 for a complete report.

9.3. Kepler Field As Found Survey

9.3.1. Kepler Subsea Structures

As part of the work scope for the MC383 Kepler SSTI #2 field developments, preliminary General Visual Inspections (GVI's) and as-found surveys were conducted on all subsea structures around the proposed Kepler PLET laydown area. Position verifications were conducted on the Kepler North and South Well Hubs, Kepler North and South PLET's, Kepler laydown UTA and the Kepler SSA.

Structure	As-Found Easting (USft)	As-Found Northing (USft)	Depth (ft)
Kepler South Well Hub	1179902.26	10380888.79	5722.25
Kepler South PLET Hub	1179909.84	10380947.70	5720.15
Kepler North PLET Hub	1179931.70	10381030.11	5727.05
Kepler North Well Hub	1179907.54	10381100.85	5713.72
Kepler UTA Center	1180011.79	10381202.10	5731.58
Kepler SSA Center	1180049.33	10381233.15	5734.74

Table 9-3: As-Found Positions for Kepler Subsea Structures

9.3.2. As-Found Survey of Existing BP SEG#13819 5" Umbilical

There were no obstructions or debris which is cause for concern with regard to the existing structures.

9.3.3. Proposed Flexible Jumper and Flying Lead Prelay Surveys

Prelay surveys were conducted on the flexible jumper and flying leads from the proposed PLET to the Kepler North well hub. There were no obstructions or debris which is cause for concern on either of the proposed flying lead routes. Refer to 601R-10-002-FR013 for complete details

10. SOUND VELOCITY

Throughout the project on the Normand Fortress sound velocity profiles were logged using the SVX-2 instruments on the XLX19 ROV. A summary is shown below of the sound velocity profiles. Before each task, a profile was input into the positioning system used, either the vessel's HiPAP 500 system, or the Sonardyne Fusion software.

Vessel /ROV	Location	Date	Max Depth (m)	Seabed Velocity (m/sec)	Mean Velocity (m/sec)	USBL Transducer Velocity (m/sec)
NF-XLX19	RIGEL - ENI	07/05/10	1593	1494.46	1497.76	1544.56
NF-XLX19	Ariel - ENI	07/09/10	1594	1494.60	1498.31	1544.08
NF-XLX19	Ariel - Shell	07/11/10	1795	1497.78	1498.32	1545.44
NF-XLX19	2" CBLC	07/13/10	1795	1497.75	1497.97	1544.66
NF-XLX19	Ariel CTL	07/14/10	1828	1498.27	1497.77	1541.71
NF-XLX19	Ariel Laydown	07/14/10	1856	1498.71	1497.92	1544.99
NF-XLX19	Kepler Laydown	07/15/10	1745	1496.86	1497.71	1544.48
NF-XLX19	Kepler CTL	7/16/10	1762	1497.16	1497.91	1543.34

Table 10-1: Normand Fortress Sound Velocity Cast Log

Appendix A: Drawing Register

Utec Project No: 601R-10-002

Project Location: GOM

Vessel: Normand Fortress

- Denotes drawing created in office

- Denotes drawing created on VESSEL BY OFFSHORE CREW

Utec Drawing Number	Date Drawn	Description	Scale	Size	Units	Revision	Sheet No:	Drawn by:	Checked	Approved	Client	Vessel	Location	Geodesy	Issued
601R-10-002-F-001	7/5/2010	Rigel SSTI #1 OCS-G-21165 Well # SS-1 As-Built Positions	1":100'	ANSI A	Feet	2	01 of 01	MDL	MLM	SJF	Technip	Normand Fortress	MC252	UTM16N	Yes
601R-10-002-F-002	7/12/2010	Rigel SSTI #1 OCS-G-21165 Well # SS-1 Crossing Positions	1":50'	ANSI A	Feet	2	01 of 01	MDL	MLM	SJF	Technip	Normand Fortress	MC252	UTM16N	Yes
601R-10-002-F-003	7/12/2010	Ariel SSTI #2 ENI Petroleum 3" UMB & 8" PL Crossing Mattress Positions	1":50'	ANSI A	Feet	2	01 of 01	MDL	MLM	SJF	Technip	Normand Fortress	MC296	UTM16N	Yes
601R-10-002-F-004	7/13/2010	Ariel SSTI #2 Shell 18" PL Crossing Mattress Positions	1":50'	ANSI A	Feet	2	01 of 01	MLM	MDL	SJF	Technip	Normand Fortress	MC341	UTM16N	Yes
601R-10-002-F-005	7/14/2010	Ariel SSTI #2 BP E&P 2" CBLC Crossing Mattress Positions	1":50'	ANSI A	Feet	2	01 of 01	MLM	MDL	SJF	Technip	Normand Fortress	MC385	UTM16N	Yes
601R-10-002-F-006	7/16/2010	Ariel SSTI #2 Proposed 2nd End PLET As-Built Positions	1":100'	ANSI A	Feet	2	01 of 01	MDL	MLM	SJF	Technip	Normand Fortress	MC429	UTM16N	Yes
601R-10-002-F-007	7/20/2010	Ariel SSTI #2 Proposed 2nd End PLET As-Built Positions	1":100'	ANSI A	Feet	2	01 of 01	MG	MLM	SJF	Technip	Normand Fortress	MC383	UTM16N	Yes
601R-10-002-F-008	7/20/2010	Kepler SSTI #2 ENI Petroleum 3" UMB & 8" PL Crossing Mattress Positions	1":50'	ANSI A	Feet	2	01 of 01	MG	MDL	SJF	Technip	Normand Fortress	MC296	UTM16N	
601R-10-002-F-009	7/19/2010	Kepler SSTI #2 KLD Array LBL Coordinates and Depths	1":400'	ANSI A	Feet	2	01 of 01	MLM	MDL	SJF	Technip	Normand Fortress	MC383	UTM16N	Yes
601R-10-002-F-010	7/19/2010	Kepler SSTI #2 CTL Array LBL Coordinates and Depths	1":400'	ANSI A	Feet	0	01 of 01	MLM	MDL	SJF	Technip	Normand Fortress	MC383/MC343	UTM16N	
601R-10-002-F-011	7/19/2010	Kepler SSTI #2 KEP Array LBL Coordinates and Depths	1":400'	ANSI A	Feet	0	01 of 01	MLM	MDL	SJF	Technip	Normand Fortress	MC296	UTM16N	
601R-10-002-F-012	7/18/2010	Kepler SSTI #2 Sleeper Array Proposed LBL Coordinates and Depths	1":2000'	ANSI A	Feet	0	01 of 01	MDL	MLM	SJF	Technip	Normand Fortress	MC296/MC297	UTM16N	

Appendix B: Digital Video Log

UTEC

Client: Technip		UTEC Project Number: 601R-10-002						Vessel: Normand Fortress				
ROV / Dive No	Task	VisualSoft Explorer File Name	Data Information			KP Limits		Cameras				Comments
			Date	Time Stamp	File size	Start KP	End KP	XLX19 Color	XLX19 Sit	XLX18	XLX18 Sit	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705073244578	5-Jul-10	02:32:44	0:00:52	-	-	✔	✔	-	-	Header
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705073405406	5-Jul-10	02:34:05	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705080406453	5-Jul-10	03:04:06	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705083407344	5-Jul-10	03:34:07	0:13:25	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705084758484	5-Jul-10	03:47:58	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/GVI/Rigel_As_Found	DATA_20100705091758500	5-Jul-10	04:17:58	0:23:24	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705094836313	5-Jul-10	04:48:36	0:30:00	-	-	✔	✔	-	-	Header
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705101837468	5-Jul-10	5:18:37	0:29:59	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705104838125	5-Jul-10	05:48:38	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705111839562	5-Jul-10	06:18:39	0:29:59	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705114839344	5-Jul-10	6:48:39	0:29:59	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705121840109	5-Jul-10	07:18:40	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705124841266	5-Jul-10	07:48:41	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705131842391	5-Jul-10	08:18:42	0:30:00	-	-	✔	✔	-	-	
XLX-19/6	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Array_Inst_Ops	DATA_20100705134843375	5-Jul-10	08:48:43	0:13:35	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/SS-1_WELL	DATA_20100706004426437	5-Jul-10	19:44:26	0:03:09	-	-	✔	✔	-	-	Header
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/SS-1_WELL	DATA_20100706012511812	5-Jul-10	20:25:11	0:28:52	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/3in_Umbilical_As-Found	DATA_20100706015636766	5-Jul-10	20:56:36	0:01:18	-	-	✔	✔	-	-	Header
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/3in_Umbilical_As-Found	DATA_20100706015931782	5-Jul-10	20:59:31	0:10:04	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/3in_Umbilical_As-Found	DATA_20100706020940031	5-Jul-10	21:09:40	0:05:28	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/3in_Umbilical_As-Found	DATA_20100706021532531	5-Jul-10	21:15:32	0:09:29	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/3in_Umbilical_As-Found	DATA_20100706022508578	5-Jul-10	21:25:08	0:12:29	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/ENI_6in_As_Found	DATA_20100706024028641	5-Jul-10	21:40:28	0:00:21	-	-	✔	✔	-	-	Header
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/ENI_6in_As_Found	DATA_20100706024255813	5-Jul-10	21:42:55	0:06:56	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/SS-1_WELL	DATA_20100706025411782	5-Jul-10	21:54:11	0:01:21	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/R17_UTA2_As-Found	DATA_20100706025749735	5-Jul-10	21:57:49	0:00:15	-	-	✔	✔	-	-	Header
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Position_Verification_Ops/R17_UTA2_As-Found	DATA_20100706030124766	5-Jul-10	22:01:24	0:03:43	-	-	✔	✔	-	-	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706031929562	5-Jul-10	22:19:29	0:30:01	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706034931469	5-Jul-10	22:49:31	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706041933250	5-Jul-10	23:19:33	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706044934688	5-Jul-10	23:49:34	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706051936766	6-Jul-10	00:19:36	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706054938656	6-Jul-10	0:49:38	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706061939203	6-Jul-10	01:19:39	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706064940282	6-Jul-10	01:49:40	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706071940906	6-Jul-10	2:19:40	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706074941156	6-Jul-10	02:49:41	0:15:25	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706080512625	6-Jul-10	03:05:12	0:15:09	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706082026453	6-Jul-10	03:20:26	0:19:41	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706084936860	6-Jul-10	03:49:36	0:01:43	-	-	✔	✔	-	✔	Header
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706085302500	6-Jul-10	03:53:02	0:05:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706091445594	6-Jul-10	04:14:45	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706094447297	6-Jul-10	04:44:47	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706101449297	6-Jul-10	05:14:49	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706104452344	6-Jul-10	05:44:52	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706111452422	6-Jul-10	06:14:52	0:29:59	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706114452547	6-Jul-10	06:44:52	0:30:00	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706121453828	6-Jul-10	07:14:53	0:13:19	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706122818328	6-Jul-10	07:28:18	0:10:31	-	-	✔	✔	-	✔	
XLX-19/7	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100706125029610	6-Jul-10	07:50:29	0:10:38	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708135641672	8-Jul-10	08:56:41	0:03:40	-	-	✔	✔	-	✔	Header
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708140034781	8-Jul-10	09:00:34	0:30:00	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708143035187	8-Jul-10	09:30:35	0:29:59	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708150036500	8-Jul-10	10:00:36	0:30:00	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708153037422	8-Jul-10	10:30:37	0:19:04	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708155002781	8-Jul-10	10:50:02	0:07:09	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708155717688	8-Jul-10	10:57:17	0:00:07	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708155732406	8-Jul-10	10:57:32	0:01:11	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Mattress_Inst_Ops	DATA_20100708155931609	8-Jul-10	10:59:31	0:04:30	-	-	✔	✔	-	✔	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_UMB_Crossing_Mattresses	DATA_20100708161117187	8-Jul-10	11:11:17	0:01:42	-	-	✔	✔	-	-	Header
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_UMB_Crossing_Mattresses	DATA_20100708161318875	8-Jul-10	11:13:18	0:07:39	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_Crossing_As_Left	DATA_20100708162343625	8-Jul-10	11:23:43	0:01:30	-	-	✔	✔	-	-	Header
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_Crossing_As_Left	DATA_20100708162537703	8-Jul-10	11:25:37	0:29:59	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_Crossing_As_Left	DATA_20100708165538485	8-Jul-10	11:55:38	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/GVI/ENI_Crossing_As_Left	DATA_20100708172539437	8-Jul-10	12:25:39	0:12:58	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708175759641	8-Jul-10	12:57:59	0:01:15	-	-	✔	✔	-	-	Header
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708180131328	8-Jul-10	13:01:31	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708183132157	8-Jul-10	13:31:32	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708190134016	8-Jul-10	14:01:34	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708193134484	8-Jul-10	14:31:34	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708200136375	8-Jul-10	15:01:36	0:10:07	-	-	✔	✔	-	-	

XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708201212390	8-Jul-10	15:12:12	0:29:59	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708204213078	8-Jul-10	15:42:13	0:30:00	-	-	✔	✔	-	-	
XLX-19/12	601R-10-002-Macondo/SSTI#1_Rigel/Special_Tasks/Recovery_Ops/Rigel_Array	DATA_20100708211213875	8-Jul-10	16:12:13	0:23:10	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100708213737594	8-Jul-10	16:37:37	0:01:34	-	-	✔	✔	-	-	Header
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100708224057532	8-Jul-10	17:40:57	0:01:50	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100708224338656	8-Jul-10	17:43:38	0:30:00	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100708231339594	8-Jul-10	18:13:39	0:17:48	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100708233203593	8-Jul-10	18:32:03	0:29:59	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709000204688	8-Jul-10	19:02:04	0:30:00	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709003205609	8-Jul-10	19:32:05	0:30:00	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709010206641	8-Jul-10	20:02:06	0:29:59	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709013207344	8-Jul-10	20:32:07	0:29:59	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709020207484	8-Jul-10	21:02:07	0:29:59	-	-	✔	✔	-	-	
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709023208110	8-Jul-10	21:32:08	0:30:00	-	-	✔	✔	-	-	EOD #012
XLX-19/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ENI	DATA_20100709030209359	8-Jul-10	22:02:09	0:26:45	-	-	✔	✔	-	-	XLX-19 on deck
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709104443657	9-Jul-10	05:44:43	0:00:07	-	-	✔	✔	-	-	Header
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709112354547	9-Jul-10	06:23:54	0:01:35	-	-	✔	✔	-	-	ENI UMB As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709112546297	9-Jul-10	06:25:46	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709115547766	9-Jul-10	06:55:47	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709122547719	9-Jul-10	07:25:47	0:10:47	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709123646735	9-Jul-10	07:36:46	0:08:13	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709124507375	9-Jul-10	07:45:07	0:08:19	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709125331656	9-Jul-10	07:53:31	0:29:59	-	-	✔	✔	-	-	ENI PL As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709132332141	9-Jul-10	08:23:32	0:05:47	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709132930890	9-Jul-10	08:29:30	0:30:00	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709135932172	9-Jul-10	08:59:32	0:12:32	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709141308625	9-Jul-10	09:13:08	0:29:59	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100709144309172	9-Jul-10	09:43:09	0:15:58	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710000528593	9-Jul-10	19:05:28	0:00:21	-	-	✔	✔	-	-	Header
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710000616719	9-Jul-10	19:06:16	0:30:00	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710003617297	9-Jul-10	19:36:17	0:20:51	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710005824657	9-Jul-10	19:58:24	0:30:00	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710012825860	9-Jul-10	20:28:25	0:23:52	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710015241046	9-Jul-10	20:52:41	0:30:00	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710022242375	9-Jul-10	21:22:42	0:27:51	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710025040422	9-Jul-10	21:50:40	0:13:58	-	-	✔	✔	-	-	Sonar Shot & Depth Differential
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710030444406	9-Jul-10	22:04:44	0:30:00	-	-	✔	✔	-	-	EOD #013
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_UMB	DATA_20100710033445531	9-Jul-10	22:34:45	0:05:02	-	-	✔	✔	-	-	EOD #013
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709150942437	9-Jul-10	10:09:42	0:05:44	-	-	✔	✔	-	-	Header
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709151531609	9-Jul-10	10:15:31	0:01:42	-	-	✔	✔	-	-	ENI PL As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709151722703	9-Jul-10	10:17:22	0:03:32	-	-	✔	✔	-	-	ENI PL As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709152104609	9-Jul-10	10:21:04	0:05:53	-	-	✔	✔	-	-	ENI PL As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709152704453	9-Jul-10	10:27:04	0:01:17	-	-	✔	✔	-	-	ENI PL As-Found
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709152829562	9-Jul-10	10:28:29	0:29:59	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709155830203	9-Jul-10	10:58:30	0:06:49	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709160530032	9-Jul-10	11:05:30	0:29:59	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709163531171	9-Jul-10	11:35:31	0:30:00	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709170531609	9-Jul-10	12:05:31	0:19:53	-	-	✔	✔	-	-	MB Placement
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100709172531765	9-Jul-10	12:25:31	0:08:13	-	-	✔	✔	-	-	MB Placement
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718015654985	17-Jul-10	20:56:54	0:00:29	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718015759094	17-Jul-10	20:57:59	0:30:01	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718022759937	17-Jul-10	21:27:59	0:25:45	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718025357297	17-Jul-10	21:53:57	0:29:59	-	-	✔	✔	-	-	ENI UMB Mattresses
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718032357734	17-Jul-10	22:23:57	0:30:00	-	-	✔	✔	-	-	LBL Fixes
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718035358359	17-Jul-10	22:53:58	0:30:00	-	-	✔	✔	-	-	
XLX-19/036, XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_UMB	DATA_20100718042359531	17-Jul-10	23:23:59	0:07:35	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709173905813	9-Jul-10	12:39:05	0:01:33	-	-	✔	✔	-	-	Header
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709180947765	9-Jul-10	13:09:47	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709183949281	9-Jul-10	13:39:49	0:12:24	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709185218500	9-Jul-10	13:52:18	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709192219172	9-Jul-10	14:22:19	0:19:42	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709194206594	9-Jul-10	14:42:06	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709201206735	9-Jul-10	15:12:06	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709204207516	9-Jul-10	15:42:07	0:00:21	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709204315734	9-Jul-10	15:43:15	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709211316500	9-Jul-10	16:13:16	0:04:19	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709211741281	9-Jul-10	16:17:41	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709214742625	9-Jul-10	16:47:42	0:28:53	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709225111515	9-Jul-10	17:51:11	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709232112750	9-Jul-10	18:21:12	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100709235113813	9-Jul-10	18:51:13	0:13:40	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710034505672	9-Jul-10	22:45:05	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710041506859	9-Jul-10	23:15:06	0:00:08	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710041543516	9-Jul-10	23:15:43	0:03:12	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710042114719	9-Jul-10	23:21:14	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710045115375	9-Jul-10	23:51:15	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710052116453	10-Jul-10	00:21:16	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710055116656	10-Jul-10	00:51:16	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710062117906	10-Jul-10	01:21:17	0:30:01	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710065118344	10-Jul-10	01:51:18	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710072119406	10-Jul-10	02:21:19	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710075121407	10-Jul-10	02:51:21	0:06:45	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710075826500	10-Jul-10	02:58:26	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710082827297	10-Jul-10	03:28:27	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710085827515	10-Jul-10	03:58:27	0:30:00	-	-	✔	✔	-	-	

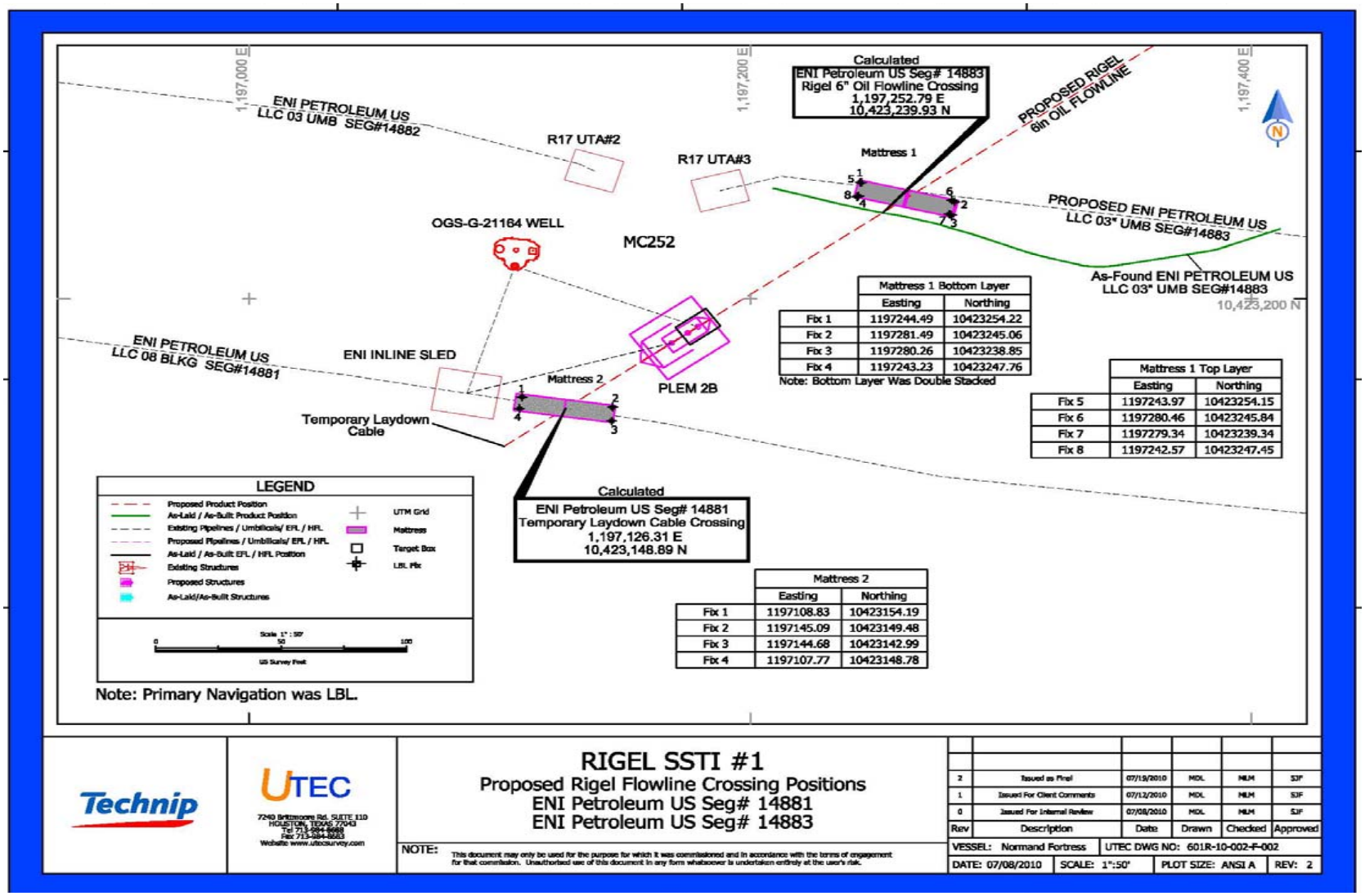
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710092829328	10-Jul-10	04:28:29	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710095830063	10-Jul-10	04:58:30	0:29:59	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710102830313	10-Jul-10	05:28:30	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710105831906	10-Jul-10	05:58:31	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710112832297	10-Jul-10	06:28:32	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710115832735	10-Jul-10	06:58:32	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710122834359	10-Jul-10	07:28:34	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710125834891	10-Jul-10	07:58:34	0:29:59	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710132836203	10-Jul-10	08:28:36	0:29:59	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710135837250	10-Jul-10	08:58:37	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710142837219	10-Jul-10	09:28:37	0:30:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710145838828	10-Jul-10	09:58:38	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710152839844	10-Jul-10	10:28:39	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710155839922	10-Jul-10	10:58:39	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710162841188	10-Jul-10	11:28:41	0:29:59	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710165841312	10-Jul-10	11:58:41	0:16:50	-	-	✔	✔	-	-	LBL Fixes
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710171619922	10-Jul-10	12:16:19	0:00:32	-	-	✔	✔	✔	✔	
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710171722640	10-Jul-10	12:17:22	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710174724140	10-Jul-10	12:47:24	0:30:02	-	-	✔	✔	✔	✔	
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710181724922	10-Jul-10	13:17:24	0:22:40	-	-	✔	✔	✔	✔	
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710184010672	10-Jul-10	13:40:10	0:30:00	-	-	✔	✔	✔	✔	LBL Fixes
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710191012234	10-Jul-10	14:10:12	0:09:55	-	-	✔	✔	✔	✔	LBL Fixes
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710192013453	10-Jul-10	14:20:13	0:04:54	-	-	✔	✔	✔	✔	
XLX-19/013, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Pipeline	DATA_20100710192512750	10-Jul-10	14:25:12	0:03:00	-	-	✔	✔	✔	✔	Sonar Shot
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_ENI_UMB	DATA_20100710025039313	9-Jul-10	21:50:39	0:14:00	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_ENI_Pipeline	DATA_20100710192012656	10-Jul-10	14:20:12	0:04:55	-	-	✔	✔	-	-	
XLX-19/013	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_ENI_Pipeline	DATA_20100710192513469	10-Jul-10	14:25:13	0:02:59	-	-	✔	✔	-	-	
XLX-19/0??	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_ENI_Pipeline	DATA_20100719012518828	18-Jul-10	20:25:18	0:00:07	-	-	✔	✔	-	-	
XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710193241079	10-Jul-10	14:32:41	0:00:23	-	-	-	-	✔	✔	Header
XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710193346015	10-Jul-10	14:33:46	0:30:00	-	-	-	-	✔	✔	
XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710200347485	10-Jul-10	15:03:47	0:11:23	-	-	-	-	✔	✔	
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710205409719	10-Jul-10	15:54:09	0:01:02	-	-	✔	✔	✔	✔	Header
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710211715203	10-Jul-10	16:17:15	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710214715922	10-Jul-10	16:47:15	0:16:15	-	-	✔	✔	✔	✔	
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710220335875	10-Jul-10	17:03:35	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710230339219	10-Jul-10	18:03:39	0:29:59	-	-	✔	✔	✔	✔	Sonar Shot
XLX-19/014, XLX-18/07	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Mattress_Inst_Ops/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710233339406	10-Jul-10	18:33:39	0:06:51	-	-	✔	✔	-	-	
XLX-19/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_ENI_Freespan_Support	DATA_20100710223337218	10-Jul-10	17:33:37	0:30:00	-	-	✔	✔	-	-	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711014458203	10-Jul-10	20:44:58	0:01:01	-	-	-	-	✔	✔	Header
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711014708328	10-Jul-10	20:47:08	0:29:59	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711021709016	10-Jul-10	21:17:09	0:02:58	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711022012235	10-Jul-10	21:20:12	0:02:12	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711022231797	10-Jul-10	21:22:31	0:14:01	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711023805015	10-Jul-10	21:38:05	0:12:53	-	-	-	-	✔	-	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711025104938	10-Jul-10	21:51:04	0:30:00	-	-	-	-	✔	-	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711032105313	10-Jul-10	22:21:05	0:30:00	-	-	-	-	✔	-	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711035106219	10-Jul-10	22:51:06	0:29:59	-	-	-	-	✔	-	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711042107312	10-Jul-10	23:21:07	0:29:59	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711045107282	10-Jul-10	23:51:07	0:30:00	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711052109578	11-Jul-10	00:21:09	0:30:00	-	-	-	-	✔	✔	EOD #008
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711055109266	11-Jul-10	00:51:09	0:30:00	-	-	-	-	✔	✔	
XLX-18/08	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Array_Inst_Ops/AXP	DATA_20100711062110500	11-Jul-10	01:21:10	0:13:59	-	-	-	-	✔	✔	
XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711151912485	11-Jul-10	10:19:12	0:00:52	-	-	-	-	✔	✔	Header
XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711152442906	11-Jul-10	10:24:42	0:12:37	-	-	-	-	✔	✔	
XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711153732328	11-Jul-10	10:37:32	0:30:01	-	-	-	-	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711160732796	11-Jul-10	11:07:32	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711163734437	11-Jul-10	11:37:34	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711170735782	11-Jul-10	12:07:35	0:11:34	-	-	✔	✔	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711171915016	11-Jul-10	12:19:15	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711174916219	11-Jul-10	12:49:16	0:00:05	-	-	✔	✔	✔	✔	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711174925844	11-Jul-10	12:49:25	0:29:52	-	-	✔	✔	✔	-	
XLX-19/015, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711181918844	11-Jul-10	13:19:18	0:29:59	-	-	✔	✔	✔	-	XLX-19 EOD #015
XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711184920015	11-Jul-10	13:49:20	0:30:00	-	-	-	-	✔	-	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711191920109	11-Jul-10	14:19:20	0:30:01	-	-	✔	✔	✔	-	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711194921297	11-Jul-10	14:49:21	0:10:26	-	-	✔	✔	✔	✔	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711195952469	11-Jul-10	14:59:52	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711202953000	11-Jul-10	15:29:53	0:03:24	-	-	✔	✔	✔	✔	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711203322172	11-Jul-10	15:33:22	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/016, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711210323281	11-Jul-10	16:03:23	0:30:01	-	-	✔	✔	✔	✔	XLX-19 EOD #016
XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711213324563	11-Jul-10	16:33:24	0:18:30	-	-	-	-	✔	✔	
XLX-19/017, XLX-18/09	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711215803766	11-Jul-10	16:58:03	0:00:55	-	-	✔	✔	✔	✔	XLX-19 Header
XLX-19/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711220001000	11-Jul-10	17:00:01	0:28:01	-	-	✔	✔	-	-	
XLX-19/017, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711222857234	11-Jul-10	17:28:57	0:00:31	-	-	✔	✔	✔	✔	XLX-18 Header
XLX-19/017, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711222944938	11-Jul-10	17:29:44	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/017, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711225945812	11-Jul-10	17:59:45	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/17, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711232946296	11-Jul-10	18:29:46	0:12:08	-	-	✔	✔	✔	✔	
XLX-19/017, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100711234201343	11-Jul-10	18:42:01	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/017, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712001201875	11-Jul-10	19:12:01	0:30:00	-	-	-	-	✔	✔	XLX-19 SOD #017
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712004202875	11-Jul-10	19:42:02	0:10:33	-	-	✔	✔	✔	✔	XLX-19 SOD #018
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712005241032	11-Jul-10	19:52:41	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712012241938	11-Jul-10	20:22:41	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712015242469	11-Jul-10	20:52:42	0:26:42	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712021931203	11-Jul-10	21:19:31	0:29:59	-	-	✔	✔	✔	✔	

XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712024931734	11-Jul-10	21:49:31	0:00:14	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712024951375	11-Jul-10	21:49:51	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712031952891	11-Jul-10	22:19:52	0:00:54	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712032051078	11-Jul-10	22:20:51	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712035051906	11-Jul-10	22:50:51	0:05:34	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712035631594	11-Jul-10	22:56:31	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712042632453	11-Jul-10	23:26:32	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/018, XLX-18/010	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712045632359	11-Jul-10	23:56:32	0:29:04	-	-	✔	✔	✔	✔	EOD
XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712083516641	12-Jul-10	03:35:16	0:01:25	-	-	✔	✔	-	-	Header
XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712083718250	12-Jul-10	03:37:18	0:30:00	-	-	✔	✔	-	-	
XLX-19/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712090718375	12-Jul-10	04:07:18	0:30:00	-	-	✔	✔	-	-	
XLX-19/019, XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712093720344	12-Jul-10	04:37:20	0:30:00	-	-	✔	✔	✔	✔	XLX-18 SOD #011
XLX-19/019, XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712100720844	12-Jul-10	05:07:20	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/019, XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712103722594	12-Jul-10	05:37:22	0:29:59	-	-	✔	✔	✔	✔	XLX-19 EOD #019
XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712110723438	12-Jul-10	06:07:23	0:30:00	-	-	-	-	✔	✔	
XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712113723656	12-Jul-10	06:37:23	0:30:00	-	-	-	-	✔	✔	
XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712120724578	12-Jul-10	07:07:24	0:03:58	-	-	-	-	✔	✔	
XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712121127296	12-Jul-10	07:11:27	0:30:00	-	-	-	-	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712124128594	12-Jul-10	07:41:28	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712131128079	12-Jul-10	08:11:28	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712134129281	12-Jul-10	08:41:29	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712141130172	12-Jul-10	09:11:30	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712144130109	12-Jul-10	09:41:30	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712154132141	12-Jul-10	10:41:32	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712164133453	12-Jul-10	11:41:33	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712171134906	12-Jul-10	12:11:34	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712174135172	12-Jul-10	12:41:35	0:18:56	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712180038937	12-Jul-10	13:00:38	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712183039891	12-Jul-10	13:30:39	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712190040234	12-Jul-10	14:00:40	0:24:17	-	-	✔	✔	✔	✔	
XLX-19/020 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712193948656	12-Jul-10	14:39:48	0:25:16	-	-	✔	✔	✔	✔	XLX-19 EOD #020 16:03
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100712235038718	12-Jul-10	18:50:38	0:25:13	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713001600125	12-Jul-10	19:16:00	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713004600891	12-Jul-10	19:46:00	0:18:54	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713010459031	12-Jul-10	20:04:59	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713013459360	12-Jul-10	20:34:59	0:04:57	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713014002422	12-Jul-10	20:40:02	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713021003531	12-Jul-10	21:10:03	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713024004296	12-Jul-10	21:40:04	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713031005609	12-Jul-10	22:10:05	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713034005860	12-Jul-10	22:40:05	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713041007328	12-Jul-10	23:10:07	0:10:11	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713042023547	12-Jul-10	23:20:23	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713045024282	12-Jul-10	23:50:24	0:30:01	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713052024437	13-Jul-10	00:20:24	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713055025406	13-Jul-10	00:50:25	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/021 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713062026109	13-Jul-10	01:20:26	0:30:00	-	-	✔	✔	✔	✔	
XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713065027515	13-Jul-10	01:50:27	0:29:59	-	-	✔	✔	✔	✔	XLX-19 EOD #20
XLX-19/022 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713072028094	13-Jul-10	02:20:28	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/022 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713075029391	13-Jul-10	02:50:29	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/022 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713082030156	13-Jul-10	03:20:30	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/022 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713085031203	13-Jul-10	03:50:31	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/022 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713092032187	13-Jul-10	04:20:32	0:30:00	-	-	✔	✔	✔	✔	XLX-19 EOD #22
XLX-19/023 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713095033235	13-Jul-10	04:50:33	0:28:58	-	-	✔	✔	✔	✔	
XLX-19/023 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713101952781	13-Jul-10	05:19:52	0:00:24	-	-	✔	✔	✔	✔	
XLX-19/023 XLX-18/011	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713102037438	13-Jul-10	05:20:37	0:29:59	-	-	✔	✔	✔	✔	XLX-18 EOD #011
XLX-19/023 XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713105037578	13-Jul-10	05:50:37	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/023 XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713112038843	13-Jul-10	06:20:38	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/023 XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713115040500	13-Jul-10	06:50:40	0:30:00	-	-	✔	✔	✔	✔	XLX-19 EOD #023
XLX-19/024 XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713122041016	13-Jul-10	07:20:41	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/024 XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713125042375	13-Jul-10	07:50:42	0:25:45	-	-	✔	✔	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713131645375	13-Jul-10	08:16:45	0:00:29	-	-	✔	✔	✔	✔	Header XLX-19 SOD #024
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713131849484	13-Jul-10	08:18:49	0:29:59	-	-	✔	✔	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713134850531	13-Jul-10	08:48:50	0:30:01	-	-	✔	✔	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713141851453	13-Jul-10	09:18:51	0:29:59	-	-	✔	✔	✔	✔	XLX-19 EOD #024
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713144852328	13-Jul-10	09:48:52	0:29:59	-	-	-	-	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713151852609	13-Jul-10	10:18:52	0:30:00	-	-	-	-	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713154853844	13-Jul-10	10:48:53	0:29:59	-	-	-	-	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713161854125	13-Jul-10	11:18:54	0:30:00	-	-	-	-	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713164855407	13-Jul-10	11:48:55	0:21:11	-	-	✔	✔	✔	✔	XLX-19 SOD #025
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713171033188	13-Jul-10	12:10:33	0:00:13	-	-	✔	✔	✔	✔	Header XLX-19 SOD #025
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713171056422	13-Jul-10	12:10:56	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713174056156	13-Jul-10	12:40:56	0:03:54	-	-	✔	✔	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713174457282	13-Jul-10	12:44:57	0:00:07	-	-	✔	✔	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713174516515	13-Jul-10	12:45:16	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713181518422	13-Jul-10	13:15:18	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/025, XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_Shell_OilExport	DATA_20100713184519344	13-Jul-10	13:45:19	0:19:10	-	-	✔	✔	✔	✔	
	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Calibrations	DATA_20100712193110063	12-Jul-10	14:31:10	0:04:33	-	-	-	-	✔	✔	XLX-18 DVL Calibaration
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_Shell_OilExport	DATA_20100713190543359	13-Jul-10	14:05:43	0:00:23	-	-	-	-	✔	✔	Header
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_Shell_OilExport	DATA_20100713190724984	13-Jul-10	14:07:24	0:21:02	-	-	-	-	✔	✔	
XLX-18/012	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Ariel_Shell_OilExport	DATA_20100713192831265	13-Jul-10	14:28:31	0:03:24	-	-	-	-	✔	✔	Sonar Shot
XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100713214119000	13-Jul-10	16:41:19	0:01:52	-	-	-	-	✔	✔	Header
XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100713221057391	13-Jul-10	17:10:57	0:30:01	-	-	-	-	✔	✔	
XLX-19/026, XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100713224058015	13-Jul-10	17:40:58	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/026, XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100713231059437	13-Jul-10	18:10:59	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/026, XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100713234100250	13-Jul-10	18:41:00	0:29:59	-	-	✔	✔	✔	✔	

XLX-19/026, XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100714001100469	13-Jul-10	19:11:00	0:17:55	-	-	✔	✔	✔	✔	
XLX-19/026, XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100714002901812	13-Jul-10	19:29:01	0:30:01	-	-	✔	✔	✔	✔	
XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100714005902109	13-Jul-10	19:59:02	0:29:59	-	-	-	-	✔	✔	
XLX-18/013	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\05_Special_Tasks\Array_Inst_Ops\AXF	DATA_20100714012902984	13-Jul-10	20:29:02	0:30:00	-	-	-	-	✔	✔	EOD #013
XLX-19/027	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\04_GVI\Mattresses_Ariel_BP_FiberOptic	DATA_20100714135815531	14-Jul-10	08:58:15	0:00:51	-	-	✔	✔	-	-	Header
XLX-19/027	601R-10-002-Macondo\SSTI#2_Ariel_Kepler\04_GVI\Mattresses_Ariel_BP_FiberOptic	DATA_20100714135923687	14-Jul-10	08:59:23	0:23:28	-	-	✔	✔	-	-	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714113309718	14-Jul-10	06:33:09	0:04:15	-	-	✔	✔	✔	✔	Header
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714114042219	14-Jul-10	06:40:42	0:03:36	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714114423672	14-Jul-10	06:44:23	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714121424531	14-Jul-10	07:14:24	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714124425547	14-Jul-10	07:44:25	0:11:25	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714125555781	14-Jul-10	07:55:55	0:01:30	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714125728984	14-Jul-10	07:57:28	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/027, XLX-18/014	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Ariel_BP_FiberOptic	DATA_20100714132730125	14-Jul-10	08:27:30	0:25:33	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714161129469	14-Jul-10	11:11:29	0:00:44	-	-	✔	✔	-	-	Header
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714163614594	14-Jul-10	11:36:14	0:30:00	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714170615609	14-Jul-10	12:06:15	0:18:24	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714172445782	14-Jul-10	12:24:45	0:30:00	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714175446594	14-Jul-10	12:54:46	0:30:00	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714182447656	14-Jul-10	13:24:47	0:30:01	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714185448906	14-Jul-10	13:54:48	0:30:00	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714192450406	14-Jul-10	14:24:50	0:29:59	-	-	✔	✔	-	-	
XLX-19/028	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100714195450546	14-Jul-10	14:54:50	0:17:22	-	-	✔	✔	-	-	
XLX-19/029	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100715041846531	14-Jul-10	23:18:46	0:01:04	-	-	✔	✔	-	-	Header
XLX-19/029	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100715042013219	14-Jul-10	23:20:13	0:29:59	-	-	✔	✔	-	-	
XLX-19/029	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Ariel	DATA_20100715045013969	14-Jul-10	23:50:13	0:30:00	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715061657610	15-Jul-10	01:16:57	0:06:37	-	-	✔	✔	-	-	Header
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715062401890	15-Jul-10	01:24:01	0:30:00	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715065402562	15-Jul-10	01:54:02	0:30:00	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715072403406	15-Jul-10	02:24:03	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715075404281	15-Jul-10	02:54:04	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715082404219	15-Jul-10	03:24:04	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715085405407	15-Jul-10	03:54:05	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715092405625	15-Jul-10	04:24:05	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715095406406	15-Jul-10	04:54:06	0:30:00	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715102407922	15-Jul-10	05:24:07	0:29:59	-	-	✔	✔	-	-	
XLX-19/030	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/ALD	DATA_20100715105408563	15-Jul-10	05:54:08	0:24:15	-	-	✔	✔	-	-	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100715191146079	15-Jul-10	14:11:46	0:01:10	-	-	-	-	✔	✔	Header
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100715192246703	15-Jul-10	14:22:46	0:30:01	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100715195247562	15-Jul-10	14:52:47	0:29:59	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100715202248297	15-Jul-10	15:22:48	0:29:59	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100715205248421	15-Jul-10	15:52:48	0:22:39	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100716004145672	15-Jul-10	19:41:45	0:30:01	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Ariel_2stEnd	DATA_20100716011146547	15-Jul-10	20:11:46	0:30:00	-	-	-	-	✔	✔	EOD #015
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715211612125	15-Jul-10	16:16:12	0:01:12	-	-	-	-	✔	✔	Header
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715211957031	15-Jul-10	16:19:57	0:07:22	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715213045875	15-Jul-10	16:30:45	0:03:47	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715213439187	15-Jul-10	16:34:39	0:23:23	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715215805859	15-Jul-10	16:58:05	0:07:13	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715220524844	15-Jul-10	17:05:24	0:06:57	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715221225953	15-Jul-10	17:12:25	0:26:40	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715223909922	15-Jul-10	17:39:09	0:12:06	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715225330703	15-Jul-10	17:53:30	0:29:59	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Ariel_Laydown_UTA	DATA_20100715232332203	15-Jul-10	18:23:32	0:11:24	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/North_UTA	DATA_20100715233715438	15-Jul-10	18:37:15	0:00:19	-	-	-	-	✔	✔	Header
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/North_UTA	DATA_20100715233758531	15-Jul-10	18:37:58	0:02:45	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/South_UTA	DATA_20100715234129266	15-Jul-10	18:41:29	0:00:21	-	-	-	-	✔	✔	Header
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/South_UTA	DATA_20100715234231453	15-Jul-10	18:42:31	0:04:54	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/PLET	DATA_20100715234945438	15-Jul-10	18:49:45	0:00:14	-	-	-	-	✔	✔	Header
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/PLET	DATA_20100715235011984	15-Jul-10	18:50:11	0:11:44	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/PLEM	DATA_20100716000252250	15-Jul-10	19:02:52	0:18:00	-	-	-	-	✔	✔	
XLX-18/015	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Ariel_Laydown_Location/Well	DATA_20100716002121797	15-Jul-10	19:21:21	0:19:36	-	-	-	-	✔	✔	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716040506859	15-Jul-10	23:05:06	0:07:41	-	-	✔	✔	-	-	Header
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716043903719	15-Jul-10	23:39:03	0:30:00	-	-	✔	✔	-	-	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716050905281	16-Jul-10	00:09:05	0:29:59	-	-	✔	✔	-	-	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716053905156	16-Jul-10	00:39:05	0:29:59	-	-	✔	✔	-	-	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716060905579	16-Jul-10	01:09:05	0:29:59	-	-	✔	✔	-	-	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716063906360	16-Jul-10	01:39:06	0:29:59	-	-	✔	✔	-	-	
XLX-19/031	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716070907531	16-Jul-10	02:09:07	0:30:00	-	-	✔	✔	-	-	
XLX-19/031, XLX-18/016	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716073907609	16-Jul-10	02:39:07	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/031, XLX-18/016	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716080908375	16-Jul-10	03:09:08	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/031, XLX-18/016	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/KLD	DATA_20100716083909641	16-Jul-10	03:39:09	0:24:07	-	-	✔	✔	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Kepler_Laydown_UTA	DATA_20100716180756375	16-Jul-10	13:07:56	0:01:28	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Position_Verification_Ops/Kepler_Laydown_UTA	DATA_20100716184902438	16-Jul-10	13:49:02	0:12:27	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Pre-Lay/Kepler_Laydown_Flexible_Jumper	DATA_20100716190447156	16-Jul-10	14:04:47	0:00:18	-	-	-	-	✔	✔	Header

XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Pre-Lay/Kepler_Laydown_Flexible_Jumper	DATA_20100716191456812	16-Jul-10	14:14:56	0:16:53	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/North_PLET	DATA_20100716193252094	16-Jul-10	14:32:52	0:00:16	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/North_PLET	DATA_20100716193327172	16-Jul-10	14:33:27	0:11:54	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/North_Well	DATA_20100716194613094	16-Jul-10	14:46:13	0:00:23	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/North_Well	DATA_20100716194802546	16-Jul-10	14:48:02	0:13:39	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Pre-Lay/Kepler_Flowline_Run_Out	DATA_20100716205253781	16-Jul-10	15:52:53	0:07:40	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Pre-Lay/Kepler_Flowline_Run_Out	DATA_20100716210040094	16-Jul-10	16:00:40	0:04:18	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Pre-Lay/Kepler_Flowline_Run_Out	DATA_20100716212640907	16-Jul-10	16:26:40	0:03:13	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/UTA	DATA_20100716210632125	16-Jul-10	16:06:32	0:00:15	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/UTA	DATA_20100716210704344	16-Jul-10	16:07:04	0:07:31	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/SSA	DATA_20100716211602547	16-Jul-10	16:16:02	0:00:33	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/SSA	DATA_20100716211705656	16-Jul-10	16:17:05	0:04:54	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/South_Well	DATA_20100716213233734	16-Jul-10	16:32:33	0:00:22	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/South_Well	DATA_20100716213304891	16-Jul-10	16:33:04	0:11:50	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/South_PLET	DATA_20100716214511094	16-Jul-10	16:45:11	0:00:10	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Kepler_Laydown_Area/South_PLET	DATA_20100716214532734	16-Jul-10	16:45:32	0:09:31	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Kepler_2stEnd	DATA_20100716215608953	16-Jul-10	16:56:08	0:00:37	-	-	-	-	✔	✔	Header
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Kepler_2stEnd	DATA_20100716215727266	16-Jul-10	16:57:27	0:29:59	-	-	-	-	✔	✔	
XLX-18/017	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Marker_Buoy_Inst_Ops/PLEM_Kepler_2stEnd	DATA_20100716222727953	16-Jul-10	17:27:27	0:20:37	-	-	-	-	✔	✔	
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717012644625	16-Jul-10	20:26:44	0:01:32	-	-	✔	✔	-	-	Header
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717020122312	16-Jul-10	21:01:22	0:30:00	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717023123157	16-Jul-10	21:31:23	0:30:00	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717030125156	16-Jul-10	22:01:25	0:14:11	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717031540907	16-Jul-10	22:15:40	0:29:59	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717034541407	16-Jul-10	22:45:41	0:08:26	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717035412579	16-Jul-10	22:54:12	0:30:00	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717042414016	16-Jul-10	23:24:14	0:29:59	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/033	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717045414125	16-Jul-10	23:54:14	0:13:23	-	-	✔	✔	-	-	
XLX-19/034	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Array_Inst_Ops/CTL_Kepler	DATA_20100717150001516	17-Jul-10	10:00:01	0:00:42	-	-	✔	✔	-	-	Header; Array Verification
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718043338110	17-Jul-10	23:33:38	0:01:34	-	-	✔	✔	✔	✔	Header
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718043544641	17-Jul-10	23:35:44	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718050545110	18-Jul-10	00:05:45	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718053546844	18-Jul-10	00:35:46	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718060548610	18-Jul-10	01:05:48	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/036, XLX-18/019	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Freespan_Support	DATA_20100718063549297	18-Jul-10	01:35:49	0:10:29	-	-	✔	✔	✔	✔	
XLX-19/036	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Kepler_ENI_UMB	DATA_20100718065407641	18-Jul-10	01:54:07	0:00:53	-	-	✔	✔	-	-	Header
XLX-19/036	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/GVI/Mattresses_Kepler_ENI_UMB	DATA_20100718065606594	18-Jul-10	01:56:06	0:15:57	-	-	✔	✔	-	-	XLX-18 on deck
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719012535375	18-Jul-10	20:25:35	0:01:37	-	-	✔	✔	✔	✔	Header
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719012741547	18-Jul-10	20:27:41	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719015742312	18-Jul-10	20:57:42	0:17:48	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719021554579	18-Jul-10	21:15:54	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719024554875	18-Jul-10	21:45:54	0:02:54	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719024856110	18-Jul-10	21:48:56	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719031856891	18-Jul-10	22:18:56	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/038, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719034857328	18-Jul-10	22:48:57	0:06:30	-	-	✔	✔	✔	✔	XLX-19 on deck
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719051328547	19-Jul-10	00:13:28	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719054328500	19-Jul-10	00:43:28	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719061329484	19-Jul-10	01:13:29	0:29:59	-	-	✔	✔	✔	✔	
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719064329109	19-Jul-10	01:43:29	0:30:00	-	-	✔	✔	✔	✔	
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719071329750	19-Jul-10	2:13:29	0:30:00	-	-	✔	✔	✔	✔	LBL Fixes
XLX-19/039, XLX-18/020	601R-10-002-Macondo/SSTI#2_Ariel_Kepler/Special_Tasks/Mattress_Inst_Ops/Mattresses_Kepler_ENI_Pipeline	DATA_20100719074331360	19-Jul-10	2:43:31	0:24:30	-	-	✔	✔	✔	✔	LBL Fixes

Appendix C: Mattress Installation As-Built Drawings



Mattress 1 Bottom Layer		
	Easting	Northing
Fix 1	1197244.49	10423254.22
Fix 2	1197281.49	10423245.06
Fix 3	1197280.26	10423238.85
Fix 4	1197243.23	10423247.76

Note: Bottom Layer Was Double Stacked

Mattress 1 Top Layer		
	Easting	Northing
Fix 5	1197243.97	10423254.15
Fix 6	1197280.46	10423245.84
Fix 7	1197279.34	10423239.34
Fix 8	1197242.57	10423247.45

Mattress 2		
	Easting	Northing
Fix 1	1197108.83	10423154.19
Fix 2	1197145.09	10423149.48
Fix 3	1197144.68	10423142.99
Fix 4	1197107.77	10423148.78

Figure C-1 Rigel / ENI Mattress Installation As-Built

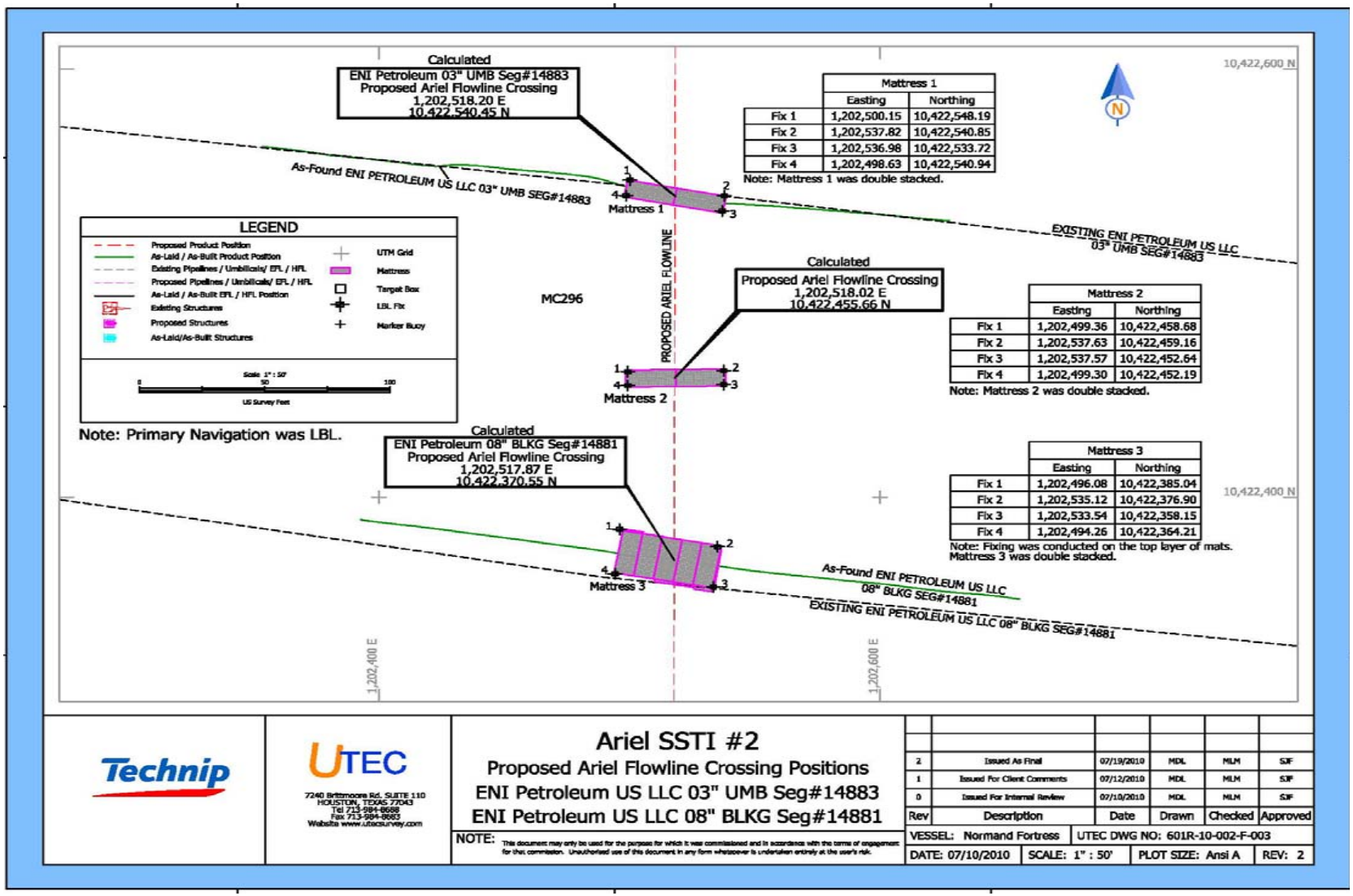
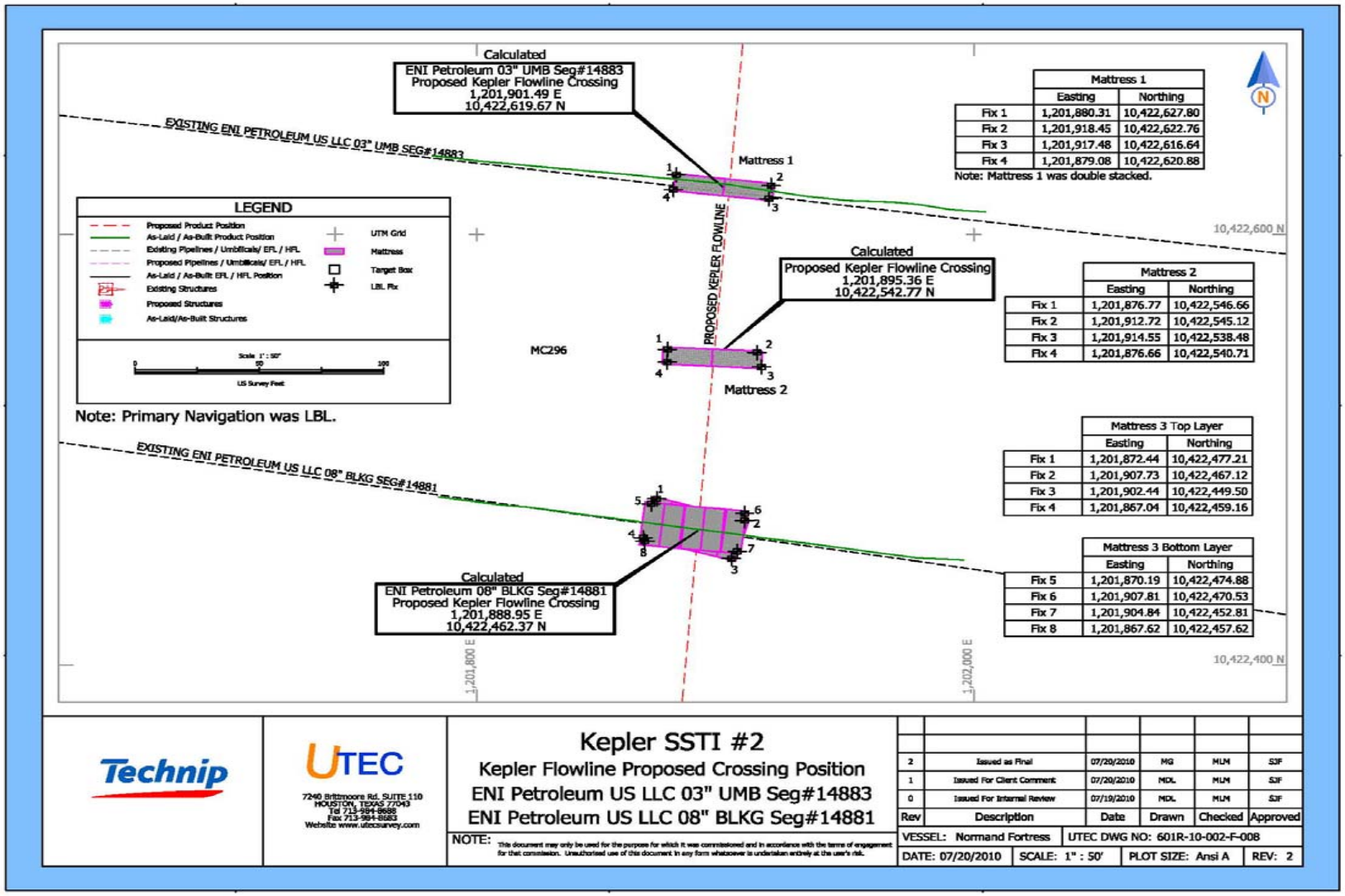


Figure C-2 Ariel /ENI Mattress Installation As-Built



Mattress 1	Easting	Northing
Fix 1	1,201,880.31	10,422,627.80
Fix 2	1,201,918.45	10,422,622.76
Fix 3	1,201,917.48	10,422,616.64
Fix 4	1,201,879.08	10,422,620.88

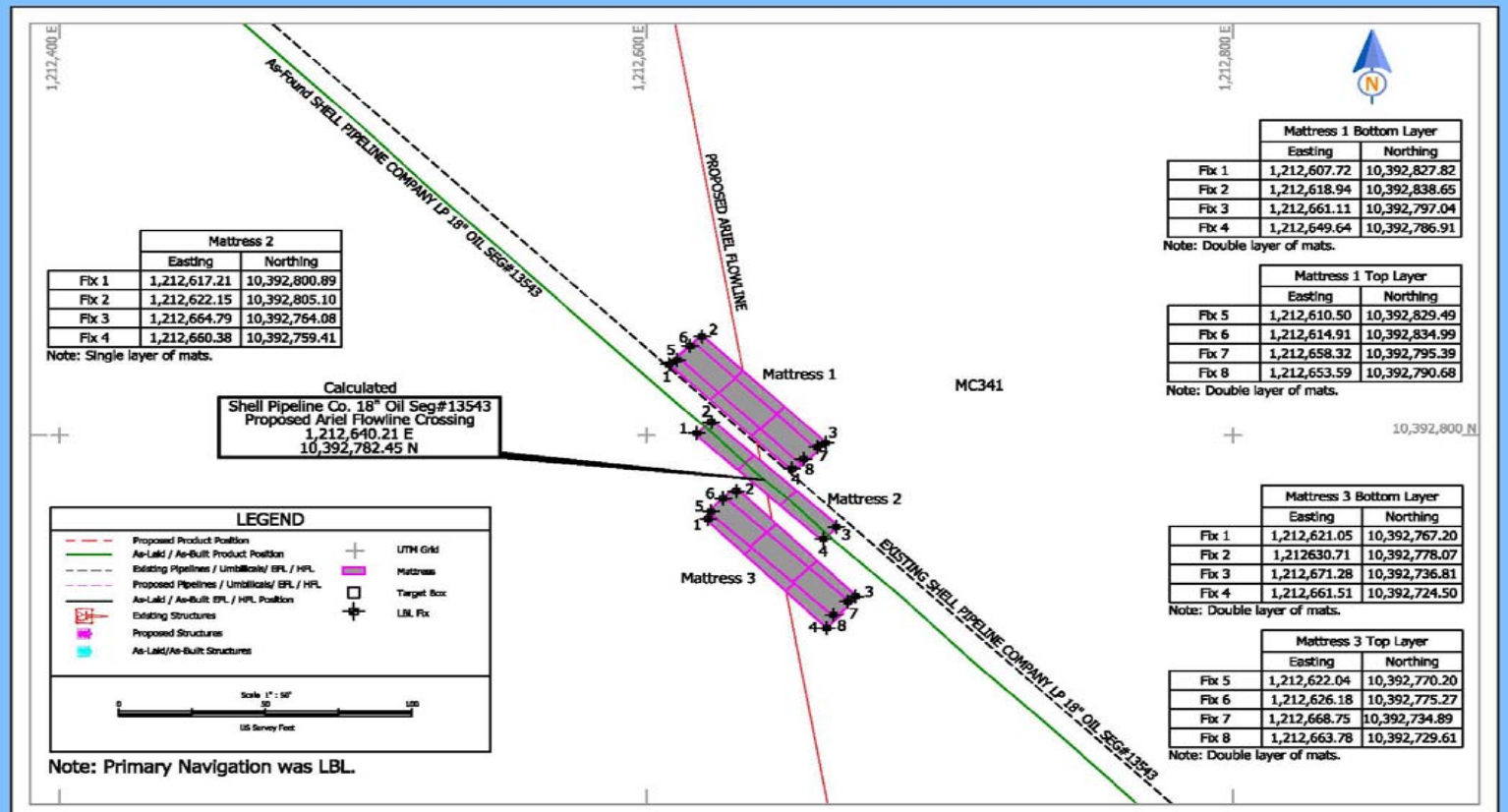
Note: Mattress 1 was double stacked.

Mattress 2	Easting	Northing
Fix 1	1,201,876.77	10,422,546.66
Fix 2	1,201,912.72	10,422,545.12
Fix 3	1,201,914.55	10,422,538.48
Fix 4	1,201,876.66	10,422,540.71

Mattress 3 Top Layer	Easting	Northing
Fix 1	1,201,872.44	10,422,477.21
Fix 2	1,201,907.73	10,422,467.12
Fix 3	1,201,902.44	10,422,449.50
Fix 4	1,201,867.04	10,422,459.16

Mattress 3 Bottom Layer	Easting	Northing
Fix 5	1,201,870.19	10,422,474.88
Fix 6	1,201,907.81	10,422,470.53
Fix 7	1,201,904.84	10,422,452.81
Fix 8	1,201,867.62	10,422,457.62

Figure C-3 Kepler / ENI Mattress Installation As-Built



Mattress 2		
	Easting	Northing
Fix 1	1,212,617.21	10,392,800.89
Fix 2	1,212,622.15	10,392,805.10
Fix 3	1,212,664.79	10,392,764.08
Fix 4	1,212,660.38	10,392,759.41

Note: Single layer of mats.

Mattress 1 Bottom Layer		
	Easting	Northing
Fix 1	1,212,607.72	10,392,827.82
Fix 2	1,212,618.94	10,392,838.65
Fix 3	1,212,661.11	10,392,797.04
Fix 4	1,212,649.64	10,392,786.91

Note: Double layer of mats.

Mattress 1 Top Layer		
	Easting	Northing
Fix 5	1,212,610.50	10,392,829.49
Fix 6	1,212,614.91	10,392,834.99
Fix 7	1,212,658.32	10,392,795.39
Fix 8	1,212,653.59	10,392,790.68

Note: Double layer of mats.

Mattress 3 Bottom Layer		
	Easting	Northing
Fix 1	1,212,621.05	10,392,767.20
Fix 2	1,212630.71	10,392,778.07
Fix 3	1,212,671.28	10,392,736.81
Fix 4	1,212,661.51	10,392,724.50

Note: Double layer of mats.

Mattress 3 Top Layer		
	Easting	Northing
Fix 5	1,212,622.04	10,392,770.20
Fix 6	1,212,626.18	10,392,775.27
Fix 7	1,212,668.75	10,392,734.89
Fix 8	1,212,663.78	10,392,729.61

Note: Double layer of mats.

Figure C-4 Ariel / Oil Export Mattress Installation As-Built

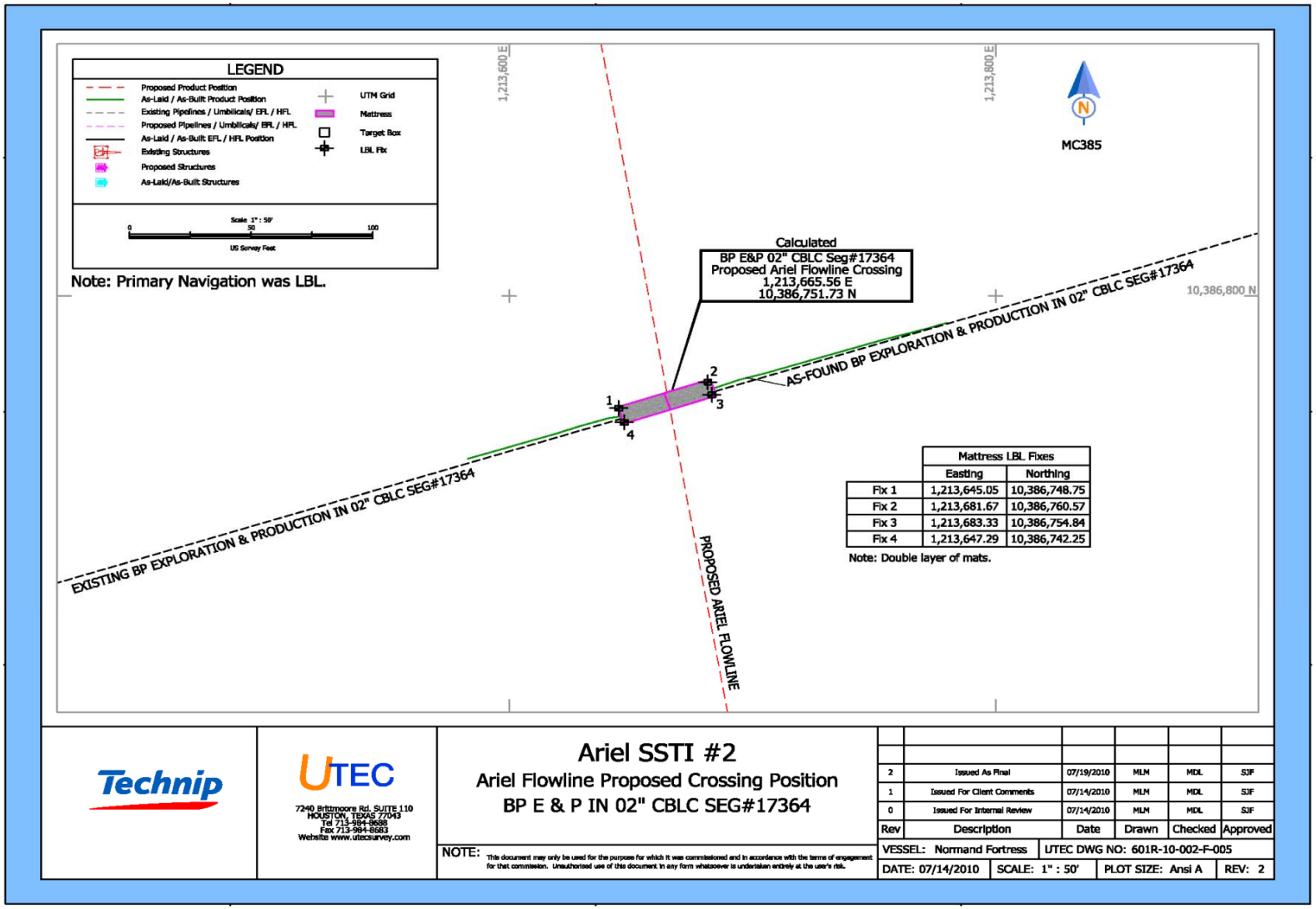


Figure C-5 Ariel / Fiber Optic Cable Mattress Installation As-Built