



**ADQUISICIÓN DE SET DE
SELLOS SECUNDARIOS
Y KITS DE REPARACIÓN
DE SELLOS MECÁNICOS
JOHN CRANE PARA
BOMBAS CENTRIFUGAS
DE LA NUEVA REFINERÍA
TALARA.**

Condiciones Técnicas

Petróleos del Perú – PETROPERÚ
S.A.
Refinería Talara

CONDICIONES TÉCNICAS

“ADQUISICIÓN DE SET DE SELLOS SECUNDARIOS Y KITS DE REPARACIÓN DE SELLOS MECÁNICOS JOHN CRANE PARA BOMBAS CENTRIFUGAS DE LA NUEVA REFINERÍA TALARA”

1. OBJETO

PETRÓLEOS DEL PERÚ - PETROPERÚ S.A., en adelante PETROPERÚ, requiere adquirir set de sellos secundarios y Kits de reparación de sellos mecánicos marca JOHN CRANE para el sistema de sellado de las bombas centrífugas de la nueva Refinería Talara.

DEFINICIONES:

- PETROPERÚ: PETROPERÚ – PETROLEOS DEL PERÚ S.A. es el comprador de los Bienes.
- PROVEEDOR: Vendedor de los Bienes.
- BIENES: Repuestos a adquirir.
- ORDEN DE COMPRA: Documento que define las obligaciones contractuales entre el Comprador y el Vendedor.

2. DESCRIPCIÓN DE LOS BIENES

Detallados en el **APÉNDICE N°01**.

3. NORMATIVA APLICABLE A LA ADQUISICIÓN

La fabricación de los Bienes, de ser aplicable, deberán seguir lo indicado en las siguientes normas para petróleo y gas:

- API American Petroleum Institute
- OSHAS Occupational Health And Safety Assessment Series
- ISO International Organization for Standardization
- ASME American Society of Mechanical Engineers
- ASTM American Society for Testing and materials
- ANSI American National Standards Institute
- AWS American Welding Society
- NACE National Association Corrosion Engineers
- NFPA National Fire Protection Association
- UL Underwriters Laboratory, Inc.
- FM Factory Mutual Engineering Corp.
- SSPC Steel Structures Painting Council
- IEC International Electrotechnical Commission
- SMRP Society for Maintenance & Reliability Professionals
- ISA International Society of Automation
- IEEE Institute of Electrical and Electronics Engineers
- NIST National Institute of Standards and Technology
- TÜV Technischer Überwachungs-Verein

4. PLAZO

4.1. Plazo de Ejecución (Orden de Compra Abierta).

La Orden de Compra es Abierta y tendrá una duración de setecientos treinta (730) días calendario o hasta completar el monto contractual. Lo que ocurra primero.

La duración podrá prorrogarse bajo los mismos términos y condiciones hasta por un (01) año adicional, por acuerdo de ambas partes.

4.2. Plazo de Entrega.

- a. La primera entrega se realizará a los ochenta (80) días calendario contados desde el día siguiente hábil de notificada la Orden de Compra y las cantidades se encuentran detallada en el **APÉNDICE N°03**.
- b. Para la segunda y demás entregas, el Administrador del contrato coordinará con el Proveedor las cantidades que deberá entregar, manteniéndose como mínimo la cantidad de la primera entrega.
- c. El tiempo para la segunda y demás entregas será de ochenta (80) días calendario días calendario contados desde el día siguiente hábil de remitida la solicitud de PETROPERÚ, previa coordinación con el Proveedor.
- d. Las cantidades y el tiempo de entrega están sujetos a variación, previa coordinación entre PETROPERÚ y el Proveedor.
- e. La conformidad de la entrega no invalida reclamos posteriores por defectos o vicios ocultos no detectados durante la recepción del bien.

5. SISTEMA DE CONTRATACIÓN

A Precios Unitarios.

6. EVALUACIÓN

Por Ítem paquete.

7. MONTO ESTIMADO REFERENCIAL (MER)

El MER es RESERVADO y en dólares. Debe incluir todos los tributos, seguros, transporte, inspecciones, pruebas y de ser el caso los costos laborales respectivos conforme a la legislación vigente, así como cualquier otro concepto que le sea aplicable y que pueda incidir sobre el valor

8. LUGAR Y CONDICIONES DE ENTREGA.

8.1. Lugar de entrega y horario:

- a) Receptoría de Carga – Refinería Talara Av. G S/N Acceso 1 (Lado Plaza Vea Centro – Talara).
- b) Horario de Atención: lunes a viernes de 7:00 a 11:30 y de 14:00 a 16:00 horas)
- c) Una vez efectuada la entrega física del material, el PROVEEDOR deberá coordinar con el administrador del contrato, para la emisión del Acta de Conformidad del bien.

8.2. Condiciones de entrega:

- a) El PROVEEDOR deberá entregar los materiales debidamente rotulados, con el Número de la Orden de Compra, el Número de Ítem de la O/C y Código del material de la O/C.
Ejemplo: O/C 4XXXXXXXXX – Ítem N°1 – Código del Material.
- b) El bien deberá cumplir con las especificaciones técnicas ofertadas por el PROVEEDOR.
- c) No se admitirá que el bien muestre signo de uso previo, defectuoso, mal embalado, mal almacenado, mala manipulación, decoloración (en caso lleven algún tipo de pintura), etc., o cualquier defecto o deterioro observado o detectado sobre el mismo.
- d) Para el caso de bienes ferrosos o metálicos, no se aceptarán con: oxidaciones, pérdidas de mill scale, pits de corrosión, con sales, rayaduras, entre otros que perjudiquen el bien entregado.
- e) El Proveedor deberá asegurar que su material sea entregando en óptimas condiciones y con toda la documentación solicitada.
- f) Los bienes recibidos pasan por un estricto control de calidad, como revisiones técnicas, entre otros, rechazando aquellos que se encuentren defectuosos y/o

que no cumplan con las especificaciones técnicas requeridas; si ese fuera el caso se notificará al PROVEEDOR la(s) observación(es) detectadas, el cual deberá efectuar las acciones necesarias para su reposición.

8.3. Embalaje:

El bien será presentado correctamente. Deberá entregarse en perfectas condiciones, caso contrario se efectuará el reclamo para su cambio correspondiente.

El PROVEEDOR debe respetar los empaques originales, etiquetas de control y marcaje del material realizado por fábrica, los cuales no deberán ser alterados, a fin de verificar la procedencia del material y su respectiva trazabilidad.

9. REQUERIMIENTOS TÉCNICOS MÍNIMOS

9.1. Carta de exclusividad emitida por el Fabricante, la cual acredite que el Postor es representante autorizado en el Perú para la comercialización, distribución y/o venta de la marca ofertada.

9.2. Cumplimiento de las Especificaciones Técnicas contenidas en el **APÉNDICE N°01**, el cual es obligatorio y será acreditado mediante Cotización del PROVEEDOR, la cual tendrá carácter de Declaración Jurada.

10. DOCUMENTOS PARA LA EMISIÓN DE LA ORDEN DE COMPRA

10.1. Declaración Jurada de Cumplimiento de Entregables (**APÉNDICE N°04**).

10.2. Lo indicado por el área ejecutora.

11. GARANTÍAS

Carta de Garantía Comercial, mínima por doce (12) meses, otorgada por el Proveedor con la entrega del bien. La garantía deberá cubrir fallas, defectos de fabricación, problemas de embalaje, cuyo plazo se computará a partir de la conformidad de la recepción de los bienes adquiridos.

12. PENALIDADES.

Si el Proveedor incurre en retraso injustificado, en la ejecución de las prestaciones objeto del contrato, PETROPERÚ S.A. aplicará una penalidad por cada día calendario de atraso, hasta por un monto máximo equivalente al diez por ciento (10%) del monto del ítem retrasado del pedido en curso. La penalidad se aplicará automáticamente y se calculará de acuerdo con la siguiente formula:

Penalidad diaria = (0.10 x Monto del ítem retrasado) / (F x plazo en días)

Donde F tendrá los siguientes valores:

Para plazos menores o iguales a sesenta (60) días: F=0.40

Para plazos mayores a sesenta (60) días: F=0.25

Esta penalidad será deducida de los pagos parciales o del pago final.

Cuando se llegue a cubrir el monto máximo de la penalidad (10% del monto contractual), PETROPERÚ podrá resolver la Orden de Compra por incumplimiento, sin perjuicio de la indemnización por los daños y perjuicios que pueda exigirse.

13. FACTURACIÓN Y FORMA DE PAGO

PETROPERÚ efectuará pago único en dólares, de acuerdo con la entrega realizada o pagos parciales por cada entrega, si así fuera el caso, previa coordinación entre PETROPERÚ y el contratista y de conformidad con su política de pago, es decir, a los sesenta (60) días de la correcta presentación del comprobante de pago correspondiente, previa conformidad del bien recibido.

El plazo de pago para la cancelación de facturas o recibos por honorarios emitidos por una MYPE será a los treinta (30) días calendario, contados a partir de la fecha de emisión de la factura o recibo por honorarios. Para tal efecto la MYPE deberá entregar lo siguiente:

- a) Declaración jurada del impuesto a la Renta correspondiente al ejercicio fiscal inmediatamente anterior a la fecha de emisión de la factura o recibo por honorarios.
- b) Número de cuenta de la empresa del sistema financiero en la que se le debe abonar el importe de la factura o recibos por honorarios emitido, de conformidad con el TUO de la Ley para la lucha contra la evasión y para la formalización de la economía, cuyo TUO fue aprobado por Decreto Supremo N°150-2007-EF y modificatorias.

El comprobante de pago deberá presentarse en Oficina de Gestión Documentaria sito en Prolongación Av. “G” – 2, Edificio Administrativo de Refinación Talara:

- Copia de la Orden de Compra, original de la(s) guía(s) de remisión firmada(s) y sellada(s) por el receptor, así como la copia del documento de Conformidad.

Tratándose de comprobantes de pago electrónico, éstos deberán ser autorizados por la SUNAT, a través de la nueva plataforma de Mesa de Partes virtual. <https://scdp.petroperu.com.pe/mpv/>

La impresión del comprobante de pago electrónico deberá ser presentar en Oficina de Gestión Documentaria, según lo indicado en los párrafos precedentes.

Aquellas facturas presentadas incorrectamente o presentadas antes de obtener la conformidad serán devueltas para su subsanación, rigiendo el nuevo plazo a partir de la fecha de su correcta presentación.

14. ADMINISTRACIÓN Y CONFORMIDAD

La administración del bien estará a cargo del supervisor que designe la Jefatura Inventarios y Almacenes y la conformidad será aprobada por el Gerente Corporativo Administración, previa aceptación del bien por parte de la dependencia técnica especializada.

PETROPERÚ tendrá un plazo de 15 días calendarios para emitir el Acta de Conformidad, después de recibido el bien.

15. OBLIGACIONES Y RESPONSABILIDADES DEL PROVEEDOR

El PROVEEDOR se obliga a cumplir con los siguientes requerimientos:

- 15.1.** Cumplir con la Política de Prevención de Lavado de Activos y del Financiamiento del Terrorismo, de Delitos de Corrupción y de Gestión Antisoborno (**APÉNDICE N°05 (A-B)**).
- 15.2.** Cumplir con la Cláusula de Prevención de Lavado de Activos y Financiamiento del Terrorismo, de Delitos de Corrupción y de Soborno (**APÉNDICE N°06**).
- 15.3.** Cumplir con la Cláusula del Sistema de Integridad (**APÉNDICE N°07**).
<https://www.petroperu.com.pe/buen-gobierno-corporativo/nuestro-sistema-de-integridad/>
- 15.4.** Cumplirá con diligencia y oportunidad la entrega de los bienes, descritos en el **APÉNDICE N°01** (Especificaciones Técnicas).
- 15.5.** Asumir la entrega y descarga de los bienes por cuenta y riesgo; deberá contar con sus propios recursos financieros, técnicos o materiales. Así como también ser responsables por los resultados de sus actividades.
- 15.6.** Debe liberar y eximir a PETROPERÚ de la responsabilidad, en cuanto a la falta de cumplimiento de las Leyes, Reglamentos y demás Disposiciones Vigentes, por parte del PROVEEDOR.
- 15.7.** Cuidará que toda información, de cualquier origen, referida a las instalaciones y personal de PETROPERÚ, que por razones de trabajo llegue a conocimiento de

su personal, se mantenga en estricta reserva. Cualquier infidencia que a criterio de PETROPERÚ pueda afectarle, será considerada como falta grave, siendo causal suficiente para resolver la Orden de Compra.

15.8. El PROVEEDOR se encuentra obligado a contar con un “Plan para la Vigilancia, Prevención y Control de COVID-19 en el Trabajo”, conforme a las disposiciones del Ministerio de Salud, además de cumplir con otros Protocolos Sectoriales que le correspondan.

Adicionalmente, todo PROVEEDOR que desarrolle labores presenciales en las instalaciones de PETROPERÚ debe cumplir las disposiciones de seguridad y salud ocupacional contra el COVID-19.

15.9. En caso el PROVEEDOR, sus trabajadores y/o personal:

- Incumpla las medidas y procedimientos de seguridad establecidas contra el COVID-19,
- Presente información falsa relacionada a ambiente, seguridad y salud ocupacional, que se establece la Ley de Seguridad y Salud en el Trabajo, su reglamento y demás disposiciones legales emitidas para la vigilancia, prevención y control del COVID-19,
- Intente o cometa actos de sustracción (robo o hurto) de bienes o sustancias de propiedad de PETROPERÚ, o
- Se presente a laborar bajo la influencia del alcohol o las drogas, o consuma alguna de estas sustancias con ocasión del trabajo,

PETROPERÚ como medida inmediata prohibirán el ingreso del trabajador/personal relacionado con dicho incumplimiento a sus instalaciones, sin perjuicio de adoptar las medidas pertinentes contra el PROVEEDOR. Así, en el caso específico de presentación de información falsa, PETROPERÚ podrá resolver el contrato.

15.10. Toda multa o sanción económica determinada por los organismos fiscalizadores que afecten a PETROPERÚ y tenga como origen el incumplimiento de las presentes Cláusulas será asumida íntegramente por el PROVEEDOR.

15.11. EL PROVEEDOR recomendará las Condiciones de Almacenamiento para su adecuada Conservación y Preservación, en caso sea aplicable.

16. CAUSALES DE RESOLUCIÓN DE CONTRATO

La Orden de Compra podrá ser Resuelta de conformidad con lo indicado en el Artículo 76 del Reglamento de Contrataciones de Petróleos del Perú – PETROPERÚ S.A.; asimismo podrá resolverse por: i) Por terminación anticipada y ii) Sin expresión de causa.

17. SEGURIDAD Y PROTECCIÓN DEL AMBIENTE.

17.1. El PROVEEDOR deberá cumplir con las normas de seguridad de PETROPERÚ (Manual Corporativo de Seguridad, Salud y Protección Ambiental para Contratistas).

17.2. El PROVEEDOR deberá cumplir con la legislación vigente relacionada a la seguridad, salud ocupacional y protección ambiental como:

- D.S. N° 005-2012-TR: Reglamento de Seguridad y Salud en el Trabajo.
- Ley N° 29783: Ley de Seguridad y Salud en el Trabajo.

El PROVEEDOR deberá implementar las medidas de seguridad, salud en el trabajo y protección ambiental, a fin de evitar accidentes, incidentes o impactos ambientales durante la entrega de los bienes, según corresponda.

- 17.3.** El PROVEEDOR se encuentra obligado a contar con un “Plan para la Vigilancia, Prevención y Control de COVID-19 en el Trabajo”, conforme a las disposiciones del Ministerio de Salud, además de cumplir con otros Protocolos Sectoriales que le correspondan.

18. ENTREGABLES

El PROVEEDOR, deberá entregar juntamente con los bienes toda la documentación siguiente:

- a) Garantía comercial según lo indicado en el numeral 11 de las Condiciones Técnicas;
- b) Guía de Remisión Remitente (conteniendo la referencia del bien y la Orden de Compra al que pertenece);
- c) Documentos que acrediten la calidad (según corresponda) y que sean trazables con el material suministrado, tales como certificados de calidad, certificados de pruebas y/o ensayos. Estos certificados deben cumplir con la descripción del bien indicadas en las Especificaciones Técnicas (**APÉNDICE N°01**).
- d) Documento indicando las recomendaciones de almacenaje y preservación de los repuestos, de ser aplicable.

19. APÉNDICES

- 19.1.** APÉNDICE N°01: Descripción del Bien – Especificaciones Técnicas.
- 19.2.** APÉNDICE N°02: Formato Propuesta Económica
- 19.3.** APÉNDICE N°03: Tabla de cantidades.
- 19.4.** APÉNDICE N°04: Declaración Jurada de Cumplimiento de Entregables.
- 19.5.** APÉNDICE N°05: Política de Prevención de Lavado de Activos y del Financiamiento del Terrorismo, de Delitos de Corrupción y de Gestión Antisoborno (A-B).
- 19.6.** APÉNDICE N°06: Cláusula de Prevención de Lavado de Activos y Financiamiento del Terrorismo, de Delitos de Corrupción y de Soborno.
- 19.7.** APÉNDICE N°07: Cláusula del Sistema de Integridad.

APÉNDICE N°01
DESCRIPCIÓN DEL BIEN - ESPECIFICACIONES TÉCNICAS

ÍTEM 1		KITS DE REPRACIÓN	
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M
1.1	157153 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4967 SPRING.ALLOY C (10 EA) ITEM 6 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ITEM 28. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.	3	KIT
1.2	157155 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: H-2375-807-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.ALLOY-C (08 EA) ITEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ITEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.	6	KIT
1.3	157157 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4967 SPRING.ALLOY C (10 EA) ITEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ITEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ITEM 28. 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.	6	KIT
1.4	157159 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: H-2375-807-9221 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-007-9221 PRIMARY RING.SILICON CARB (01 EA) ITEM 3. 4957 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.316SS (08 EA) ITEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ITEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.	3	KIT

ÍTEM 1		KITS DE REPRACIÓN		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
1.5	157161 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 C48-3500-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3 4492 SPRING.ALLOY C (12 EA) ITEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 7446 SPRING.ALLOY- C (08 EA) ITEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.	6	KIT	
1.6	157163 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 3,14. 112520070000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,16. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ITEM 7. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 9. TAB-1308-3250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 11. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 12. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 15. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ITEM 17. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 20. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 21. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 23. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 26. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ITEM 30. USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.	3	KIT	
1.7	157165 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.	3	KIT	
1.8	157167 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.	3	KIT	
1.9	157169 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: TAB-1238-2750-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 4. 210832060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2875-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2875-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-2750-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-44 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-44 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ITEM 28,29. USED IN PUMPS DV3-P-001A/R. TALARA REFINERY	3	KIT	

ÍTEM 1		KITS DE REPRACIÓN		
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
1.10	157171 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ITEM 1. 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ITEM 2,4. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 3. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 113716100000550 SET SCREW. 316SS. (04 EA) ITEM 8. 212520140000550 CAP SCREW. 316SS (06 EA) ITEM 9. 556180-101 PACKING. SPIRAL WOUND GASKET (01 EA) ITEM 10. 210832080000550 CAP SCREW. 316SS (04 EA) ITEM 13. H-3250-964-9080 BUSHING.CARBON (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000500 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 23. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 24. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.	9	KIT	
1.11	157173 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520070000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-3250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.	3	KIT	
1.12	157175 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.	3	KIT	
1.13	157177 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.	3	KIT	
1.14	157179 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: H-2750-968-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3000-009-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (08 EA) ITEM 9,18. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2500-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA)	3	KIT	

ÍTEM 1		KITS DE REPRACIÓN	
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M
	ITEM 27. 2137-1620-000-0550 CAP SCREW.316SS (03 EA) ITEM 28. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.		
1.15	157181 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ITEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ITEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 557498-54 BUSHING. CARBON (01 EA) ITEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ITEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 556885-35 BUSHING. CARBON (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 23. 222520060000550 CAP SCREW. 316SS (10 EA) ITEM 24,26. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 25. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.	6	KIT
1.16	157183 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-4625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.	3	KIT
1.17	157185 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000550 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-2375-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.	6	KIT
1.18	157187 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-1908 PRIMARY RING. SILICON CARB (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.	3	KIT
1.19	157189 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.316SS (03 EA) ITEM 9. H-2187-168-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-2437-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 4961 SPRING.ALLOY- C (08 EA) ITEM 15. 0187-0187-025-0650 KEY. 416SS (02 EA) ITEM 18. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22, 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 25. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.	3	KIT
1.20	157191	3	KIT

ÍTEM 1		KITS DE REPRACIÓN		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: D-1877-551-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-2125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 2035 SPRING. ALLOY-C (12 EA) ITEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 8. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA) ITEM 21. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.			
1.21	157193 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3750-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.	3	KIT	
1.22	157195 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.4. C48-2625-001-9055 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (03 EA) ITEM 9. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2500-005-9055 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1425-2008-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 2137-1620-000-0225 CAP SCREW.ALLOY STEEL (03 EA) ITEM 23. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 27. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 30. 0000-140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P-311A/B. TALARA REFINERY.	3	KIT	
1.23	157197 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.	3	KIT	
1.24	157199 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2.4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.	3	KIT	
1.25	157201 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179156-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9549 O-RING. FLUOROELASTOMER (01	3	KIT	

ÍTEM 1		KITS DE REPRACIÓN		
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	EA) ÍTEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 22. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 28. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.			
1.26	157203 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-4375-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 0539 SPRING.ALLOY C (12 EA) ÍTEM 6. A9-4375-032-0550 SNAP RING. 316SS (01 EA) ÍTEM 8. 1125-2008-000-0550 SET SCREW.316SS (03 EA) ÍTEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (12 EA) ÍTEM 15. A9-4125-016-0550 SNAP RING. 316SS (01 EA) ÍTEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 24. 2150-1332-000-0550 CAP SCREW.316SS (03 EA) ÍTEM 25. H-0000-295-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.	6	KIT	
1.27	157205 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: H-3375-439-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-3625-006-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 3083 SPRING.ALLOY C (10 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ÍTEM 9. D-2875-204-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 11. C48-3125-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 28. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.	6	KIT	
1.28	157207 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: D-2250-864-1903 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 2. C48-2500-003-8270 PRIMARY RING. CARBON (01 EA) ÍTEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 4. 2035 SPRING. ALLOY-C (12 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ÍTEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 15. DB-1372-225-9398 BUSHING. CARBON/ 316SS (01 EA) ÍTEM 16. 3787 SPRING. ALLOY C (03 EA) ÍTEM 17. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 18. H0000-290-0570 SPACER. 316L SS (04 EA) ÍTEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ÍTEM 21. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.	6	KIT	
1.29	157209 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES: TAB-1910-2250-1903 MATING RING.SILICON CARB (01 EA) ÍTEM 1. 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,12. C8-2500-1108-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 4. 3038 SPRING.ALLOY C (08 EA) ÍTEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ÍTEM 8. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 10. TAB-1431-2500-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 11. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ÍTEM 14. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (02 EA) ÍTEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 21. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 24. 2125-2008-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 25. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.	6	KIT	
1.30	157211 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ÍTEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ÍTEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ÍTEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ÍTEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 10. 557498-54 BUSHING. CARBON (01 EA) ÍTEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ÍTEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 16. 556885-35 BUSHING. CARBON (01 EA) ÍTEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 21. 172520080000236 SET SCREW. ALLOY STEEL L (06 EA) ÍTEM 23. 222520100000550 CAP SCREW. 316SS (06 EA) ÍTEM 24. H-0000-246-0500	3	KIT	

ÍTEM 1		KITS DE REPRACIÓN	
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M
	SPACER. 18-8 SS (04 EA) ITEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 26. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.		
1.31	157213 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: TAB-1910-2625-1903 MATING RING.SILICON CARB (01 EA) ITEM 1. 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. C8-2875-1072-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3038 SPRING.ALLOY C (12 EA) ITEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ITEM 8. D-2626-740-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 9. 0000-237-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1431-2875-8270 PRIMARY RING.CARBON (01 EA) ITEM 11. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (04 EA) ITEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 1731-2410-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ITEM 25. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.	3	KIT
1.32	157215 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: TAB-1910-3000-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 4,13. 3083 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.316SS (07 EA) ITEM 9,18. D-2750-304-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3000-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0539 SPRING.ALLOY- C (12 EA) ITEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ITEM 17. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23. 2131-2416-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 29. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.	6	KIT
1.33	157217 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: D-1877-551-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2125-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 5. 2035 SPRING. ALLOY-C (12 EA) ITEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 8. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA) ITEM 21. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.	6	KIT
1.34	157219 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN. DRAWING GA-174957-1 REV C. INCLUDES: 67812-0388 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,6. 901398-0318 PRIMARY RING. CARBON (01 EA) ITEM 3. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 18129-0182 SPRING. ALLOY X-750 (06 EA) ITEM 10. 73923-0152 CLIP. 302SS (01 EA) ITEM 11. 7103-0500-005-0550 CAP SCREW. 316SS (03 EA) ITEM 12. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. 3320 SPRING. 316SS (03 EA) ITEM 18. H-2251-471-9080 BUSHING. CARBON (01 EA) ITEM 19. 6710-1500-014-0236 SET SCREW. ALLOY STEEL (06 EA) ITEM 21. H0000-5249-0570 SETTING WASHER. 316L SS (04 EA) ITEM 23. 7206-1000-016-0550 CAP SCREW. 316SS (04 EA) ITEM 24. 2125-2006-300-0550 CAP SCREW. 316SS (04 EA) ITEM 29. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.	3	KIT
1.35	157221 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.	3	KIT
1.36	157223	3	KIT

ÍTEM 1		KITS DE REPRACIÓN		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.			
1.37	157225 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: TAB-1910-4000-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-4250-006-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0539 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (03 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.	3	KIT	
1.38	157227 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-4625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.	3	KIT	
1.39	157229 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES: TAB-1238-2000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2125-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2125-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000557 SET SCREW. 316SS (08 EA) ITEM 14. CS-H97-32. MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.	3	KIT	
1.40	157231 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.	3	KIT	
1.41	157233 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3.	3	KIT	

ÍTEM 1		KITS DE REPRACIÓN		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.			
1.42	157235 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: H-4250-145-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4500-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-425-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. 2125-2010-300-0550 CAP SCREW. 316SS (04 EA) ITEM 21. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 22. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.	6	KIT	
1.43	157237 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: D-3875-437-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-387-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3787 SPRING. ALLOY C (03 EA) ITEM 15. 0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.	6	KIT	
1.44	157240 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-3750-001-6270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9549 O-RING.FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.	6	KIT	
1.45	157242 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: H-2251-117-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2500-010-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (06 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (06 EA) ITEM 9,18. D-1750-797-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2000-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0893 SPRING.ALLOY- C (06 EA) ITEM 15. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.	6	KIT	
1.46	157244 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ITEM 1. 210832080000550 CAP SCREW. 316SS (04 EA) ITEM 2. 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 4. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. 0825/G93/171 BUSHING.CARBON (01 EA) ITEM 14. 3787 SPRING. ALLOY-C (03 EA) ITEM 15. 720610000160550 CAP SCREW. 316SS (06 EA) ITEM 17. 0349/K74/001 SPACER. 316SS (04 EA) ITEM 18. 720610000100550 CAP SCREW. 316SS (04 EA) ITEM 19. 610812500120550 SET SCREW. 316SS (04 EA) ITEM 21. 610610000160236 SET SCREW. ALLOY STEEL (06 EA) ITEM 22. 212520081000550 CAP SCREW. 316SS (06 EA) ITEM 23. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ITEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.	3	KIT	
1.47	157246 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA- 174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D.	12	KIT	

ÍTEM 1		KITS DE REPRACIÓN		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	INCLUDES: H-2001-117-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2250-008-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (06 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07. EA) ITEM 9,18. H-1500-4991-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-1750-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0707 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.			
1.48	157248 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: H-3625-385-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. C48-3625-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3125-761-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-3375-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.	3	KIT	
1.49	157251 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES: 0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0444/C40/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ITEM 7. 0707/092/033 SPRING. HASTELLOY-C (08 EA) ITEM 8. H-0300M-2236-1903 MATING RING. SILICON CARB (01 EA) ITEM 9. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (03 EA) ITEM 18. USED ON PUMP MU2-P-001. TALARA REFINERY.	3	KIT	
1.50	157255 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0952/C41/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 7. 4492/092/033 SPRING. HASTELLOY-C (12 EA) ITEM 8. CR-H83-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 9. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (06 EA) ITEM 18. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.	3	KIT	
1.51	157259 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3 4492 SPRING.ALLOY C (12 EA) ITEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 7446 SPRING.ALLOY- C (08 EA) ITEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.	6	KIT	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
2.1	194694 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.	3	SET	
2.2	194695 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.	3	SET	
2.3	194696 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.	6	SET	
2.4	194697 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.	3	SET	
2.5	194698 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.	6	SET	
2.6	194699 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 3,14. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 9. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 20. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ITEM 30. USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
2.7	194700 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.	3	SET	
2.8	194701 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.	3	SET	
2.9	194702 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-44 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ITEM 28,29. USED IN PUMPS DV3-P-001A/B. TALARA REFINERY.	3	SET	
2.10	194703 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ITEM 2,4. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-101 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 10. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ITEM 19. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.	9	SET	
2.11	194704 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.	3	SET	
2.12	194705 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
2.13	194706 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.	3	SET	
2.14	194707 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.	3	SET	
2.15	194708 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.	6	SET	
2.16	194709 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.	3	SET	
2.17	194710 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.	6	SET	
2.18	194711 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.	3	SET	
2.19	194712	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22, 24. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.			
2.20	194713 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.	3	SET	
2.21	194714 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.	3	SET	
2.22	194715 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 0000-140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P-311A/B. TALARA REFINERY.	3	SET	
2.23	194716 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.	3	SET	
2.24	194717 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2,4. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.	3	SET	
2.25	194718 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DIAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	GA-179156-1 REV D. INCLUDES: 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 24. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.			
2.26	194719 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.	6	SET	
2.27	194720 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.	6	SET	
2.28	194721 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 15. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.	6	SET	
2.29	194722 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES: 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.	6	SET	
2.30	194723 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.	3	SET	
2.31	194724 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12.	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-237-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.			
2.32	194725 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 4,13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.	6	SET	
2.33	194726 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.	6	SET	
2.34	194727 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN. DRAWING GA-174957-1 REV C. INCLUDES: 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,6. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.	3	SET	
2.35	194728 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.	3	SET	
2.36	194729 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.	3	SET	
2.37	194730 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4.	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS	
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M
	0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.		
2.38	194731 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.	3	SET
2.39	194732 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.	3	SET
2.40	194733 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.	3	SET
2.41	194734 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.	3	SET
2.42	194735 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.	6	SET
2.43	194736 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13.	6	SET

ÍTEM 2		SET DE SELLOS SECUNDARIOS		
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M	
	0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.			
2.44	194737 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9549 O-RING.FLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.	6	SET	
2.45	194738 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.	6	SET	
2.46	194739 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ITEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.	3	SET	
2.47	194740 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA- 174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D. INCLUDES: 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.	12	SET	
2.48	194741 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.	3	SET	
2.49	194742 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES: 0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP MU2-P-001. TALARA REFINERY.	3	SET	

ÍTEM 2		SET DE SELLOS SECUNDARIOS	
SUB ITEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	CANT.	U.M
2.50	194743 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.	3	SET
2.51	194744 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241- 9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 ORING. PERFLUOROELASTOMER (01 EA) ITEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.	6	SET

APÉNDICE N°02 – PROPUESTA ECONÓMICA

Lugar, de de 2023

Señores:

Agradeceremos Cotizar lo siguiente:

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
1.1	157153 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4967 SPRING.ALLOY C (10 EA) ITEM 6 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ITEM 28. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.		3	KIT		
1.2	157155 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: H-2375-807-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.ALLOY-C (08 EA) ITEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-223-9579 O-RING.		6	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (01 EA) ÍTEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 23,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.					
1.3	157157 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 4967 SPRING.ALLOY C (10 EA) ÍTEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ÍTEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ÍTEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 28. 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.		6	KIT		
1.4	157159 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: H-2375-807-9221 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-2625-007-9221 PRIMARY RING.SILICON CARB (01 EA) ÍTEM 3. 4957 SPRING.ALLOY C (08 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW.316SS (08 EA) ÍTEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 23,25. H-0000-228-0570 SPACER. 316L SS (04		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	EA) ÍTEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.					
1.5	157161 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4 C48-3500-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3 4492 SPRING.ALLOY C (12 EA) ÍTEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ÍTEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 28 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.		6	KIT		
1.6	157163 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ÍTEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 3,14. 112520070000550 SET SCREW. 316SS (08 EA) ÍTEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ÍTEM 5,16. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ÍTEM 7. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 9. TAB-1308-3250-0847 Z SPRING. ALLOY 718 (01 EA) ÍTEM 11. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ÍTEM 12. 112520080000550 SET SCREW. 316SS (08 EA) ÍTEM 15. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 17. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 20. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ÍTEM 21. 222520100000550 CAP SCREW. 316SS (06 EA) ÍTEM 23. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ÍTEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ÍTEM 26. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 30. USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.		3	KIT		
1.7	157165 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.					
1.8	157167 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.		3	KIT		
1.9	157169 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: TAB-1238-2750-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 4. 210832060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2875-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2875-0847 Z SPRING.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	ALLOY 718 (01 EA) ÍTEM 10. TAB-1123-2750-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ÍTEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ÍTEM 14. CS-1903-44 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 16. 557400-44 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ÍTEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ÍTEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ÍTEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ÍTEM 25. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ÍTEM 28,29. USED IN PUMPS DV3-P-001A/B. TALARA REFINERY.					
1.10	157171 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ÍTEM 1. 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ÍTEM 2,4. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 3. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ÍTEM 6. 113716100000550 SET SCREW. 316SS. (04 EA) ÍTEM 8. 212520140000550 CAP SCREW. 316SS (06 EA) ÍTEM 9. 556180-101 PACKING. SPIRAL WOUNG GASKET (01 EA) ÍTEM 10. 210832080000550 CAP SCREW. 316SS (04 EA) ÍTEM 13. H-3250-964-9080 BUSHING.CARBON (01 EA) ÍTEM 14. 3320 SPRING. 316SS (03 EA) ÍTEM 15. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ÍTEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ÍTEM 20. 222520100000500 CAP SCREW. 316SS (06 EA) ÍTEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ÍTEM 23. 222520060000550 CAP SCREW. 316SS (04 EA) ÍTEM 24. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.		9	KIT		
1.11	157173 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ÍTEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 2,12. 112520070000550 SET SCREW. 316SS (08 EA) ÍTEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ÍTEM 5,15. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ÍTEM 6. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 8. TAB-1308-3250-0847 Z SPRING. ALLOY 718 (01 EA) ÍTEM 10. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ÍTEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ÍTEM 14. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 16. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ÍTEM 20.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.					
1.12	157175 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.		3	KIT		
1.13	157177 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	(01 EA) ÍTEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.					
1.14	157179 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: H-2750-968-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-3000-009-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 3083 SPRING.ALLOY C (08 EA) ÍTEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (08 EA) ÍTEM 9,18. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-2500-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 2137-1620-000-0550 CAP SCREW.316SS (03 EA) ÍTEM 28. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.		3	KIT		
1.15	157181 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ÍTEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ÍTEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ÍTEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ÍTEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 10. 557498-54 BUSHING. CARBON (01 EA) ÍTEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ÍTEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 16. 556885-35 BUSHING. CARBON (01 EA) ÍTEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 21. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ÍTEM 23. 222520060000550 CAP SCREW. 316SS (10 EA) ÍTEM 24,26. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ÍTEM 25. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.		6	KIT		
1.16	157183 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-4625-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 3083 SPRING.ALLOY C (12 EA) ÍTEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ÍTEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-248-9579 O-		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.					
1.17	157185 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000550 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-2375-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.		6	KIT		
1.18	157187 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-1908 PRIMARY RING. SILICON CARB (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.					
1.19	157189 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-2625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.316SS (03 EA) ITEM 9. H-2187-168-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-2437-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 4961 SPRING.ALLOY- C (08 EA) ITEM 15. 0187-0187-025-0650 KEY. 416SS (02 EA) ITEM 18. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22. 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 25. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.		3	KIT		
1.20	157191 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: D-1877-551-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-2125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 2035 SPRING. ALLOY-C (12 EA) ITEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 8. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA) ITEM 21. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.		3	KIT		
1.21	157193 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3750-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.					
1.22	157195 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9579 O- RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-001-9055 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005- 000-0690 SET SCREW.ALLOY-C (03 EA) ITEM 9. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9579 O- RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2500-005-9055 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230- 9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1425-2008-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 18. 0000-226- 9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 2137-1620-000-0225 CAP SCREW.ALLOY STEEL (03 EA) ITEM 23. 0000-241-9579 O- RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 27. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 30. 0000- 140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P- 311A/B. TALARA REFINERY.		3	KIT		
1.23	157197 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O- RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O- RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252- 9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155- 9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
1.24	157199 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2.4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.		3	KIT		
1.25	157201 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179156-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.		3	KIT		
1.26	157203 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-4375-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0539 SPRING.ALLOY C (12 EA) ITEM 6. A9-4375-032-0550 SNAP RING. 316SS (01 EA) ITEM 8. 1125-2008-000-0550 SET SCREW.316SS (03 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446		6	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SPRING.ALLOY- C (12 EA) ÍTEM 15. A9-4125-016-0550 SNAP RING. 316SS (01 EA) ÍTEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 24. 2150-1332-000-0550 CAP SCREW.316SS (03 EA) ÍTEM 25. H-0000-295-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.					
1.27	157205 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: H-3375-439-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 2.4. C48-3625-006-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 3083 SPRING.ALLOY C (10 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ÍTEM 9. D-2875-204-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 11. C48-3125-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 28. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.		6	KIT		
1.28	157207 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: D-2250-864-1903 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 2. C48-2500-003-8270 PRIMARY RING. CARBON (01 EA) ÍTEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 4. 2035 SPRING. ALLOY-C (12 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ÍTEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 15. DB-1372-225-9398 BUSHING. CARBON/ 316SS (01 EA) ÍTEM 16. 3787 SPRING. ALLOY C (03 EA) ÍTEM 17. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 18. H0000-290-0570 SPACER. 316L SS (04 EA) ÍTEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ÍTEM 21. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.		6	KIT		
1.29	157209 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE.		6	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES: TAB-1910-2250-1903 MATING RING.SILICON CARB (01 EA) ITEM 1. 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. C8-2500-1108-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3038 SPRING.ALLOY C (08 EA) ITEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ITEM 8. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1431-2500-8270 PRIMARY RING.CARBON (01 EA) ITEM 11. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (02 EA) ITEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2125-2008-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.					
1.30	157211 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ITEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ITEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 557498-54 BUSHING. CARBON (01 EA) ITEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ITEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 556885-35 BUSHING. CARBON (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. 172520080000236 SET SCREW. ALLOY STEE L (06 EA) ITEM 23. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 24. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 26. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.		3	KIT		
1.31	157213 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: TAB-1910-2625-1903 MATING RING.SILICON CARB (01 EA) ITEM 1. 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. C8-2875-1072-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3038 SPRING.ALLOY C (12 EA) ITEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ITEM 8. D-2626-740-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 9. 0000-237-9579 O-RING.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (01 EA) ÍTEM 10. TAB-1431-2875-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 11. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ÍTEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 21. 1731-2410-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 24. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 25. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.					
1.32	157215 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: TAB-1910-3000-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 2. C48-3250-007-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 4,13. 3083 SPRING.ALLOY C (08 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW.316SS (07 EA) ÍTEM 9,18. D-2750-304-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-3000-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0539 SPRING.ALLOY- C (12 EA) ÍTEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ÍTEM 17. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 21. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 23. 2131-2416-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 27. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 29. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.		6	KIT		
1.33	157217 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: D-1877-551-1908 MATING RING. SILICON CARBIDE (01 EA) ÍTEM 1. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 2. C48-2125-001-7250 PRIMARY RING. CARBON (01 EA) ÍTEM 3. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 5. 2035 SPRING. ALLOY-C (12 EA) ÍTEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ÍTEM 8. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 3320 SPRING. 316SS (03 EA) ÍTEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ÍTEM 15. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ÍTEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA)		6	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	ITEM 21. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.					
1.34	157219 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN. DRAWING GA-174957-1 REV C. INCLUDES: 67812-0388 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.6. 901398-0318 PRIMARY RING. CARBON (01 EA) ITEM 3. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 18129-0182 SPRING. ALLOY X-750 (06 EA) ITEM 10. 73923-0152 CLIP. 302SS (01 EA) ITEM 11. 7103-0500-005-0550 CAP SCREW. 316SS (03 EA) ITEM 12. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. 3320 SPRING. 316SS (03 EA) ITEM 18. H-2251-471-9080 BUSHING. CARBON (01 EA) ITEM 19. 6710-1500-014-0236 SET SCREW. ALLOY STEEL (06 EA) ITEM 21. H0000-5249-0570 SETTING WASHER. 316L SS (04 EA) ITEM 23. 7206-1000-016-0550 CAP SCREW. 316SS (04 EA) ITEM 24. 2125-2006-300-0550 CAP SCREW. 316SS (04 EA) ITEM 29. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.		3	KIT		
1.35	157221 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.		3	KIT		
1.36	157223 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.					
1.37	157225 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: TAB-1910-4000-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-4250-006-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0539 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (03 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.		3	KIT		
1.38	157227 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-4625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.					
1.39	157229 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES: TAB-1238-2000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2125-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2125-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000557 SET SCREW. 316SS (08 EA) ITEM 14. CS-H97-32. MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.		3	KIT		
1.40	157231 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.		3	KIT		
1.41	157233 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.					
1.42	157235 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: H-4250-145-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4500-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-425-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. 2125-2010-300-0550 CAP SCREW. 316SS (04 EA) ITEM 21. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 22. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.		6	KIT		
1.43	157237 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: D-3875-437-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-387-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3787 SPRING. ALLOY C (03 EA) ITEM 15. 0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.		6	KIT		
1.44	157240 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2.		6	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	C48-3750-001-6270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9549 O-RING.FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.					
1.45	157242 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: H-2251-117-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2500-010-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (06 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (06 EA) ITEM 9,18. D-1750-797-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2000-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0893 SPRING.ALLOY- C (06 EA) ITEM 15. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.		6	KIT		
1.46	157244 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ITEM 1. 210832080000550 CAP SCREW. 316SS (04 EA) ITEM 2. 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 4. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. 0825/G93/171 BUSHING.CARBON (01 EA) ITEM 14. 3787 SPRING. ALLOY-C (03 EA) ITEM 15. 720610000160550 CAP SCREW. 316SS (06 EA) ITEM 17. 0349/K74/001 SPACER. 316SS (04 EA) ITEM 18. 720610000100550 CAP SCREW. 316SS (04 EA) ITEM 19. 610812500120550 SET SCREW. 316SS (04 EA) ITEM 21. 610610000160236 SET SCREW. ALLOY STEEL (06 EA) ITEM 22.		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	212520081000550 CAP SCREW. 316SS (06 EA) ÍTEM 23. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.					
1.47	157246 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA-174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D. INCLUDES: H-2001-117-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-2250-008-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 4957 SPRING.ALLOY C (06 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07. EA) ÍTEM 9,18. H-1500-4991-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-1750-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 0707 SPRING.ALLOY- C (08 EA) ÍTEM 15. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22,25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ÍTEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.		12	KIT		
1.48	157248 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: H-3625-385-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 2,4. C48-3625-003-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 4492 SPRING.ALLOY C (12 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ÍTEM 9,18. D-3125-761-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 11. C48-3375-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (12 EA) ÍTEM 15 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ÍTEM 22,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.		3	KIT		
1.49	157251 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES:		3	KIT		

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0444/C40/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ITEM 7. 0707/092/033 SPRING. HASTELLOY-C (08 EA) ITEM 8. H-0300M-2236-1903 MATING RING. SILICON CARB (01 EA) ITEM 9. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (03 EA) ITEM 18. USED ON PUMP MU2-P-001. TALARA REFINERY.					
1.50	157255 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0952/C41/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 7. 4492/092/033 SPRING. HASTELLOY-C (12 EA) ITEM 8. CR-H83-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 9. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (06 EA) ITEM 18. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.		3	KIT		
1.51	157259 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3 4492 SPRING.ALLOY C (12 EA) ITEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 7446 SPRING.ALLOY- C (08 EA) ITEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.		6	KIT		
SUB TOTAL						
IGV (18%)						

ÍTEM 1		KITS DE REPRACIÓN				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
MONTO TOTAL USD						

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
2.1	194694 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.		3	SET		
2.2	194695 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.		3	SET		
2.3	194696 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22.		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.					
2.4	194697 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.		3	SET		
2.5	194698 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.		6	SET		
2.6	194699 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 3,14. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 9. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 20. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ITEM 30.		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.					
2.7	194700 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.		3	SET		
2.8	194701 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.		3	SET		
2.9	194702 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-44 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ITEM 28,29. USED IN PUMPS DV3-P-001A/B. TALARA REFINERY.		3	SET		
2.10	194703 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN.		9	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ITEM 2,4. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-101 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 10. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ITEM 19. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.					
2.11	194704 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.		3	SET		
2.12	194705 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.		3	SET		
2.13	194706 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12.		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.					
2.14	194707 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.		3	SET		
2.15	194708 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.		6	SET		
2.16	194709 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING.		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (02 EA) ITEM 22,24. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.					
2.17	194710 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.		6	SET		
2.18	194711 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.		3	SET		
2.19	194712 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22, 24. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.		3	SET		
2.20	194713		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.					
2.21	194714 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.		3	SET		
2.22	194715 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 0000-140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P-311A/B. TALARA REFINERY.		3	SET		
2.23	194716 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648.		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.					
2.24	194717 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2,4. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.		3	SET		
2.25	194718 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179156-1 REV D. INCLUDES: 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 24. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.		3	SET		
2.26	194719 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11.		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.					
2.27	194720 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.		6	SET		
2.28	194721 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 15. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.		6	SET		
2.29	194722 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES: 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-245-9579 O-RING.		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.					
2.30	194723 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.		3	SET		
2.31	194724 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-237-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.		3	SET		
2.32	194725 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 4,13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 0000-249-9579 O-RING.		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	PERFLUOROELASTOMER (02 EA) ITEM 23. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.					
2.33	194726 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.		6	SET		
2.34	194727 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN. DRAWING GA-174957-1 REV C. INCLUDES: 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,6. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.		3	SET		
2.35	194728 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.		3	SET		
2.36	194729		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.					
2.37	194730 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.		3	SET		
2.38	194731 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.		3	SET		
2.39	194732 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.					
2.40	194733 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.		3	SET		
2.41	194734 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.		3	SET		
2.42	194735 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2.		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.					
2.43	194736 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.		6	SET		
2.44	194737 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.		6	SET		
2.45	194738 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM		6	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	22,25. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.					
2.46	194739 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ITEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.		3	SET		
2.47	194740 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA- 174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D. INCLUDES: 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.		12	SET		
2.48	194741 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.		3	SET		
2.49	194742		3	SET		

ÍTEM 2		SET DE SELLOS SECUNDARIOS				
SUB ÍTEM	DESCRIPCIÓN (ESPECIFICACIONES REQUERIDAS)	DESCRIPCIÓN DEL BIEN OFERTADO	CANT.	U.M	PRECIO UNITARIO	PRECIO SUB TOTAL ÍTEM
	SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES: 0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP MU2-P-001. TALARA REFINERY.					
2.50	194743 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.		3	SET		
2.51	194744 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 ORING. PERFLUOROELASTOMER (01 EA) ITEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.		6	SET		
SUB TOTAL						
IGV (18%)						
MONTO TOTAL USD						

Notas de cumplimiento obligatorio:

La columna "Descripción del bien ofertado" servirá para que el Postor detalle y amplíe la descripción de las Especificaciones Técnicas Mínimas exigidas del bien o bienes que oferte, especificando la marca, modelo, procedencia del material a suministrar, con la finalidad de facilitar la evaluación técnica.

CONDICIONES GENERALES DE LA OFERTA:

Los términos y condiciones generales acordados entre PETROPERU S.A y el PROVEEDOR están contenidos en las Condiciones Técnicas, las cuales rigen para la emisión de la Orden de Compra por parte de PETROPERÚ S.A.

DATOS DE LA OFERTA

Nº DE OFERTA:

PLAZO DE ENTREGA:

GARANTÍA:

MARCA Y PROCEDENCIA:

VALIDEZ DE LA OFERTA:

FORMA DE PAGO:

LUGAR DE ENTREGA :

DATOS DEL PROVEEDOR.

RAZON SOCIAL:

DOMICILIO FISCAL:

Nº DE RUC:

E-MAIL :

FECHA / DATE :

Nombre y firma del representante legal
Nombre de la empresa

Notas:

1. El Precio debe estar expresado en DÓLARES.
2. El Precio Unitario (P. UNITARIO), deberá contener como máximo dos (02) decimales, además no debe incluir el IGV

APÉNDICE N° 03
TABLA DE CANTIDADES

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
1.1	157153 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4967 SPRING.ALLOY C (10 EA) ITEM 6 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ITEM 28. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.	3	KIT	1	2
1.2	157155 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: H-2375-807-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2625-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.ALLOY-C (08 EA) ITEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ITEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.	6	KIT	2	4
1.3	157157 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9579 O-RING. PERFLUOROELASTOMER (02	6	KIT	2	4

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	EA) ÍTEM 2.4. C48-3750-007-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3. 4967 SPRING.ALLOY C (10 EA) ÍTEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (04 EA) ÍTEM 9. H-3001-507-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ÍTEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ÍTEM 18. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 24. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 25. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 27. 2125-2024-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 28. 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.				
1.4	157159 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: H-2375-807-9221 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1. 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2.4. C48-2625-007-9221 PRIMARY RING.SILICON CARB (01 EA) ÍTEM 3. 4957 SPRING.ALLOY C (08 EA) ÍTEM 6. 1125-2005-000-0550 SET SCREW.316SS (08 EA) ÍTEM 9,18. D-1875-391-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. C48-2125-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 2125-2016-000-0550 CAP SCREW.316SS (04 EA) ÍTEM 22. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 23,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 26. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ÍTEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 29. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.	3	KIT	1	2
1.5	157161 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4 C48-3500-001-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 3 4492 SPRING.ALLOY C (12 EA) ÍTEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ÍTEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ÍTEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ÍTEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13 7446 SPRING.ALLOY- C (08 EA) ÍTEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ÍTEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ÍTEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ÍTEM 28 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.	6	KIT	2	4
1.6	157163 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ÍTEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 3,14. 112520070000550 SET SCREW. 316SS (08 EA) ÍTEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ÍTEM 5,16. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ÍTEM 7. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 9. TAB-1308-3250-0847 Z SPRING.	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	ALLOY 718 (01 EA) ITEM 11. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 12. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 15. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ITEM 17. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 20. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 21. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 23. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 26. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ITEM 30. USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.				
1.7	157165 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.	3	KIT	1	2
1.8	157167 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.	3	KIT	1	2
1.9	157169 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: TAB-1238-2750-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 4. 210832060000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2875-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2875-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-2750-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-44 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-44	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ITEM 28,29. USED IN PUMPS DV3-P-001A/B. TALARA REFINERY.				
1.10	157171 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ITEM 1. 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ITEM 2.4. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 3. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 113716100000550 SET SCREW. 316SS. (04 EA) ITEM 8. 212520140000550 CAP SCREW. 316SS (06 EA) ITEM 9. 556180-101 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 10. 210832080000550 CAP SCREW. 316SS (04 EA) ITEM 13. H-3250-964-9080 BUSHING.CARBON (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 23. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 24. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.	9	KIT	3	6
1.11	157173 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: TAB-1238-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2.12. 112520070000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5.15. TAB-1304-3250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-3250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-3125-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-52 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.	3	KIT	1	2
1.12	157175 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: TAB-1238-4000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2.12. 112520140000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (16 EA) ITEM 5.15. TAB-1304-4250-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-4250-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-4000-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 112520080000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-64 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-64	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 27. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 28. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 29. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 30. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.				
1.13	157177 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.	3	KIT	1	2
1.14	157179 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: H-2750-968-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-3000-009-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (08 EA) ITEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (08 EA) ITEM 9,18. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2500-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 27. 2137-1620-000-0550 CAP SCREW.316SS (03 EA) ITEM 28. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.	3	KIT	1	2
1.15	157181 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ITEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ITEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 557498-54 BUSHING. CARBON (01 EA) ITEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ITEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 556885-35 BUSHING. CARBON (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 23. 222520060000550 CAP SCREW. 316SS (10 EA) ITEM 24,26. H-0000-246-0500	6	KIT	2	4

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	SPACER. 18-8 SS (04 EA) ITEM 25. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.				
1.16	157183 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-4625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW.316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.	3	KIT	1	2
1.17	157185 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: TAB-1238-2375-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 1125200500000550 SET SCREW. 316SS (08 EA) ITEM 4. 2105400600000550 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2500-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2500-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. TAB-1123-2375-2749 609 SEAL HEAD.ALLOY 718/CARBON (01 EA) ITEM 11. 1125200600000550 SET SCREW. 316SS (08 EA) ITEM 14. CS-1903-38 MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 1725200800000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 2225201000000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 2225200600000550 CAP SCREW. 316SS (04 EA) ITEM 25. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.	6	KIT	2	4
1.18	157187 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-1908 PRIMARY RING. SILICON CARB (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.	3	KIT	1	2
1.19	157189 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-2625-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW.316SS (03 EA) ITEM 9. H-2187-168-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-2437-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 4961 SPRING.ALLOY- C (08 EA) ITEM 15. 0187-0187-025-0650 KEY. 416SS (02 EA) ITEM 18. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22, 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 25. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.				
1.20	157191 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: D-1877-551-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-2125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 2035 SPRING. ALLOY-C (12 EA) ITEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 8. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA) ITEM 21. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.	3	KIT	1	2
1.21	157193 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3750-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.	3	KIT	1	2
1.22	157195 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: H-2625-786-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.4. C48-2625-001-9055 PRIMARY RING.CARBON (01 EA) ITEM 3. 2035 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0690 SET SCREW.ALLOY-C (03 EA) ITEM 9. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2500-005-9055 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1425-2008-	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	000-0690 SET SCREW.ALLOY-C (04 EA) ITEM 18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 2137-1620-000-0225 CAP SCREW.ALLOY STEEL (03 EA) ITEM 23. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 27. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 30. 0000-140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P-311A/B. TALARA REFINERY.				
1.23	157197 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.	3	KIT	1	2
1.24	157199 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2,4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.	3	KIT	1	2
1.25	157201 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179156-1 REV D. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
1.26	157203 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: H-4375-138-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-4375-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0539 SPRING.ALLOY C (12 EA) ITEM 6. A9-4375-032-0550 SNAP RING. 316SS (01 EA) ITEM 8. 1125-2008-000-0550 SET SCREW.316SS (03 EA) ITEM 9. D-3875-062-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15. A9-4125-016-0550 SNAP RING. 316SS (01 EA) ITEM 17. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. 2150-1332-000-0550 CAP SCREW.316SS (03 EA) ITEM 25. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ITEM 27. 1737-1608-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.	6	KIT	2	4
1.27	157205 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: H-3375-439-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2.4. C48-3625-006-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 3083 SPRING.ALLOY C (10 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ITEM 9. D-2875-204-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-3125-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (08 EA) ITEM 15. 1125-2005-000-0550 SET SCREW.316SS (04 EA) ITEM 18. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW.316SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 28. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.	6	KIT	2	4
1.28	157207 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: D-2250-864-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-003-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 15. DB-1372-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 16. 3787 SPRING. ALLOY C (03 EA) ITEM 17. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ITEM 18. H0000-290-0570 SPACER. 316L SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.	6	KIT	2	4
1.29	157209 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES:	6	KIT	2	4

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	TAB-1910-2250-1903 MATING RING.SILICON CARB (01 EA) ITEM 1. 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. C8-2500-1108-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3038 SPRING.ALLOY C (08 EA) ITEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ITEM 8. D-2250-864-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 9. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1431-2500-8270 PRIMARY RING.CARBON (01 EA) ITEM 11. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (02 EA) ITEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2125-2008-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.				
1.30	157211 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: TAB-1237-3125-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (01 EA) ITEM 1. 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 112520090000550 SET SCREW. 316SS (08 EA) ITEM 4. 211024060000550 CAP SCREW. 316SS (08 EA) ITEM 5. CS-1903-50 MATING RING. SILICON CARBIDE (01 EA) ITEM 6. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 557498-54 BUSHING. CARBON (01 EA) ITEM 11. 565291-027 WAVE SPRING. 302SS (02 EA) ITEM 14. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 556885-35 BUSHING. CARBON (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 23. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 24. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 25. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 26. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.	3	KIT	1	2
1.31	157213 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: TAB-1910-2625-1903 MATING RING.SILICON CARB (01 EA) ITEM 1. 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. C8-2875-1072-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3038 SPRING.ALLOY C (12 EA) ITEM 6. 1425-2008-000-0550 FULL DOG SET SCREW.316SS (04 EA) ITEM 8. D-2626-740-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 9. 0000-237-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1431-2875-8270 PRIMARY RING.CARBON (01 EA) ITEM 11. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 2125-2020-000-0550 CAP SCREW.316SS (04 EA) ITEM 19. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 1731-2410-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 24. 2125-2008-300-0550 CAP SCREW.316SS (04 EA) ITEM 25. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.	3	KIT	1	2
1.32	157215 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: TAB-1910-3000-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-007-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 4,13. 3083 SPRING.ALLOY C (08 EA) ITEM 6.	6	KIT	2	4

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	1125-2005-000-0550 SET SCREW.316SS (07 EA) ITEM 9,18. D-2750-304-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-3000-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0539 SPRING.ALLOY- C (12 EA) ITEM 15. A9-2875-043-0550 SNAP RING.316SS (01 EA) ITEM 17. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23. 2131-2416-000-0550 CAP SCREW.316SS (04 EA) ITEM 25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 27. 2225-2006-000-0550 CAP SCREW.316SS (04 EA) ITEM 29. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.				
1.33	157217 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: D-1877-551-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2125-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 5. 2035 SPRING. ALLOY-C (12 EA) ITEM 7. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 8. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-187-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 19. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 20. 2225-2012-000-0550 CAP SCREW. 316SS (04 EA) ITEM 21. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.	6	KIT	2	4
1.34	157219 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN. DRAWING GA-174957-1 REV C. INCLUDES: 67812-0388 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.6. 901398-0318 PRIMARY RING. CARBON (01 EA) ITEM 3. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 18129-0182 SPRING. ALLOY X-750 (06 EA) ITEM 10. 73923-0152 CLIP. 302SS (01 EA) ITEM 11. 7103-0500-005-0550 CAP SCREW. 316SS (03 EA) ITEM 12. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. 3320 SPRING. 316SS (03 EA) ITEM 18. H-2251-471-9080 BUSHING. CARBON (01 EA) ITEM 19. 6710-1500-014-0236 SET SCREW. ALLOY STEEL (06 EA) ITEM 21. H0000-5249-0570 SETTING WASHER. 316L SS (04 EA) ITEM 23. 7206-1000-016-0550 CAP SCREW. 316SS (04 EA) ITEM 24. 2125-2006-300-0550 CAP SCREW. 316SS (04 EA) ITEM 29. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.	3	KIT	1	2
1.35	157221 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. C48-3250-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. DB-1371-300-9398	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.				
1.36	157223 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: D-3001-646-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-3250-001-9055 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-300-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3320 SPRING. 316SS (03 EA) ITEM 19. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.	3	KIT	1	2
1.37	157225 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: TAB-1910-4000-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-4250-006-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 3083 SPRING. ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING. CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0539 SPRING. ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2006-300-0550 CAP SCREW. 316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.	3	KIT	1	2
1.38	157227 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: H-4375-138-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-4625-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 3083 SPRING. ALLOY C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (04 EA) ITEM 9. D-3875-062-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 10. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-4125-013-8270 PRIMARY RING. CARBON (01 EA) ITEM 12. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING. ALLOY- C (12 EA) ITEM 15. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ITEM 18. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. H-0000-295-0570 SPACER. 316L SS (04 EA) ITEM 25. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 26. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 28. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 30. USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.	3	KIT	1	2
1.39	157229 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES:	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	TAB-1238-2000-2265 609HTC SEAL HEAD.ALLOY 718/SIC-C (02 EA) ITEM 1,11. 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. 112520050000557 SET SCREW. 316SS (08 EA) ITEM 4. 210540060000557 CAP SCREW. 316SS (16 EA) ITEM 5,15. TAB-1304-2125-1903 MATING RING. SILICON CARB (01 EA) ITEM 6. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. TAB-1308-2125-0847 Z SPRING. ALLOY 718 (01 EA) ITEM 10. 112520060000557 SET SCREW. 316SS (08 EA) ITEM 14. CS-H97-32. MATING RING. SILICON CARBIDE (01 EA) ITEM 16. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 172520080000236 SET SCREW. ALLOY STEEL (06 EA) ITEM 20. 222520100000550 CAP SCREW. 316SS (06 EA) ITEM 22. H-0000-246-0500 SPACER. 18-8 SS (04 EA) ITEM 24. 222520060000550 CAP SCREW. 316SS (04 EA) ITEM 25. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.				
1.40	157231 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.	3	KIT	1	2
1.41	157233 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B. INCLUDES: D-2252-002-1908 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. C48-2500-001-7250 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 2035 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 13. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 14. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. DB-1371-225-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 18. 3787 SPRING. ALLOY C (03 EA) ITEM 19. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.	3	KIT	1	2
1.42	157235 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: H-4250-145-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4500-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2008-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 3320 SPRING. 316SS (03 EA) ITEM 14. DB-1371-425-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 15. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 1737-1608-000-0236 SET	6	KIT	2	4

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	SCREW. ALLOY STEEL (08 EA) ITEM 19. 2125-2010-300-0550 CAP SCREW. 316SS (04 EA) ITEM 21. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 22. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.				
1.43	157237 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: D-3875-437-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-4125-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0539 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-387-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3787 SPRING. ALLOY C (03 EA) ITEM 15. 0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-295-0570 SPACER. 316L SS (04 EA) ITEM 18. 2125-2012-300-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1737-1608-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.	6	KIT	2	4
1.44	157240 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: D-3501-222-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. C48-3750-001-6270 PRIMARY RING. CARBON (01 EA) ITEM 3. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 4492 SPRING. ALLOY-C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 9. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. DB-1371-350-9398 BUSHING. CARBON/ 316SS (01 EA) ITEM 14. 3320 SPRING. 316SS (03 EA) ITEM 15. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. H0000-228-0570 SPACER. 316L SS (04 EA) ITEM 18. 2225-2010-000-0550 CAP SCREW. 316SS (04 EA) ITEM 19. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 21. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.	6	KIT	2	4
1.45	157242 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: H-2251-117-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 1. 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.4. C48-2500-010-8270 PRIMARY RING. CARBON (01 EA) ITEM 3. 4957 SPRING. ALLOY C (06 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (06 EA) ITEM 9.18. D-1750-797-1903 MATING RING. SILICON CARBIDE (01 EA) ITEM 10. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-2000-001-8270 PRIMARY RING. CARBON (01 EA) ITEM 12. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0893 SPRING. ALLOY- C (06 EA) ITEM 15. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22.25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW. ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.	6	KIT	2	4
1.46	157244 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: TAB-1236-3500-2265 604HTC SEAL HEAD. ALLOY 718/ SIL C (01 EA) ITEM 1. 210832080000550 CAP SCREW. 316SS (04 EA)	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	ITEM 2. 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. CS-1903-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 4. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. 0825/G93/171 BUSHING.CARBON (01 EA) ITEM 14. 3787 SPRING. ALLOY-C (03 EA) ITEM 15. 720610000160550 CAP SCREW. 316SS (06 EA) ITEM 17. 0349/K74/001 SPACER. 316SS (04 EA) ITEM 18. 720610000100550 CAP SCREW. 316SS (04 EA) ITEM 19. 610812500120550 SET SCREW. 316SS (04 EA) ITEM 21. 610610000160236 SET SCREW. ALLOY STEEL (06 EA) ITEM 22. 212520081000550 CAP SCREW. 316SS (06 EA) ITEM 23. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ITEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.				
1.47	157246 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA- 174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D. INCLUDES: H-2001-117-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. C48-2250-008-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4957 SPRING.ALLOY C (06 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07. EA) ITEM 9,18. H-1500-4991-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. C48-1750-001-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0707 SPRING.ALLOY- C (08 EA) ITEM 15. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. 2131-1824-000-0550 CAP SCREW. 316SS (04 EA) ITEM 23. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 26. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 27. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.	12	KIT	4	8
1.48	157248 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: H-3625-385-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1. 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. C48-3625-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3. 4492 SPRING.ALLOY C (12 EA) ITEM 6. 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18. D-3125-761-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. C48-3375-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 7446 SPRING.ALLOY- C (12 EA) ITEM 15 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22,25. H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27. 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28. 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 29. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.	3	KIT	1	2
1.49	157251 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES: 0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0444/C40/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (04 EA) ITEM 7. 0707/092/033 SPRING. HASTELLOY-C (08 EA) ITEM 8. H-0300M-2236-1903 MATING RING. SILICON CARB (01 EA) ITEM 9. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA)	3	KIT	1	2

ÍTEM 1		KITS DE REPARACIÓN			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANT. TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (03 EA) ITEM 18. USED ON PUMP MU2-P-001. TALARA REFINERY.				
1.50	157255 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0952/C41/530 PRIMARY RING. CARBON (01 EA) ITEM 3. 1125-2005-000-0550 SET SCREW. 316SS (03 EA) ITEM 7. 4492/092/033 SPRING. HASTELLOY-C (12 EA) ITEM 8. CR-H83-56 MATING RING. SILICON CARBIDE (01 EA) ITEM 9. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. 0349/H89/001 SPACER. 316 SS (04 EA) ITEM 16. 61101500016 SET SCREW. ALLOY STEEL (06 EA) ITEM 18. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.	3	KIT	1	2
1.51	157259 REPAIR KIT FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: H-3500-672-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 1 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 C48-3500-003-8270 PRIMARY RING.CARBON (01 EA) ITEM 3 4492 SPRING.ALLOY C (12 EA) ITEM 6 1125-2005-000-0550 SET SCREW. 316SS (07 EA) ITEM 9,18 D-3000-253-1903 MATING RING.SILICON CARBIDE (01 EA) ITEM 10 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 C48-3250-005-8270 PRIMARY RING.CARBON (01 EA) ITEM 12 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13 7446 SPRING.ALLOY- C (08 EA) ITEM 15 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 1731-2408-000-0236 SET SCREW.ALLOY STEEL (08 EA) ITEM 22 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 H-0000-228-0570 SPACER. 316L SS (04 EA) ITEM 27 2125-2008-300-0550 CAP SCREW. 316SS (04 EA) ITEM 28 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.	6	KIT	2	4

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
2.1	194694 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-181518-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS AM2-P-004A/B. TALARA REFINERY.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
2.2	194695 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-3 REV H; GA-174146-1 REV C. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AM2-P-007A/R; RCA-P-003A/B. TALARA REFINERY.	3	SET	1	2
2.3	194696 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.750/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174291-2 REV D; GA-174291-1 REV B. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 31. USED IN PUMPS AM2-P-008A/B; WS2-P-003A/B. TALARA REFINERY.	6	SET	2	4
2.4	194697 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174146-2 REV F. INCLUDES: 0000-229-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23,25. USED IN PUMPS AST-P-001A/B. TALARA REFINERY.	3	SET	1	2
2.5	194698 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176937-1 REV D. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 O-RING. PERFLUOROELASTOMER (01	6	SET	2	4

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	EA) ÍTEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 24 0000-112-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 29 USED IN PUMPS DP1-P-101C/D. TALARA REFINERY.				
2.6	194699 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173802-1 REV B; GA-173802-2 REV D. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 3,14. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 8. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 9. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 18. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 20. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 29. 531256870128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 30. USED IN PUMPS DP1-P-104A/B; HTF-P-003A/B. TALARA REFINERY.	3	SET	1	2
2.7	194700 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174766-1 REV C. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 17. 637567500128589 PACKING. FLEXITE/316SS (02 EA) ÍTEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 25. USED IN PUMPS DP1-P-106A/B. TALARA REFINERY.	3	SET	1	2
2.8	194701 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174087-1 REV C. INCLUDES: 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 4. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 11. 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 17. 0000-155-9549 O-RING. FLUOROELASTOMER (01 EA) ÍTEM 22. USED ON PUMP DP1-P-118A/B. TALARA REFINERY.	3	SET	1	2
2.9	194702 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	2609HTC. DUAL CARTRIDGE. SEAL SIZE 2.875/2.750 IN. SHAFT DIAM 2.362 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-48 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2875-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2875-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-44 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-060 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 481251870128589 PACKING. FLEXITE/316SS (02 EA) ITEM 28,29. USED IN PUMPS DV3-P-001A/B. TALARA REFINERY.				
2.10	194703 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 3.500 IN. SHAFT DIAM 2.756 IN. DRAWING GA-173725-1 REV D; GA-173725-2 REV B; GA-179935-1 REV A. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (02 EA) ITEM 2,4. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-101 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 10. 557397-070 SLEEVE PACKING. FLEX GRAPHITE (02 EA) ITEM 19. USED IN PUMPS DV3-P-002A/B; FCK-P-203A/B; FCK-P-204A/B. TALARA REFINERY.	9	SET	3	6
2.11	194704 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE JC-2609HTC. DUAL CARTRIDGE. SEAL SIZE 3.250/3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174560-3 REV D; GA-174560-1 REV A; GA-174560-4 REV B. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-3250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-3250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-52 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS DV3-P-003A/B; TKS-P-005A/B; FCK-P-218A/B. TALARA REFINERY.	3	SET	1	2
2.12	194705 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 4.250/4.000 IN. SHAFT DIAM 3.543 IN. DRAWING GA-175915-1 REV E. INCLUDES: 557397-68 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-4250-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-4250-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-64 PACKING. FLEX GRAPHITE (01 EA) ITEM 17.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	637567500128589 PACKING. FLEXITE/316SS (02 EA) ITEM 20,22. 557397-090 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 25. USED IN PUMPS DV3-P-004A/B. TALARA REFINERY.				
2.13	194706 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-173858-1 REV E. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS FB2-P-003A/B. TALARA REFINERY.	3	SET	1	2
2.14	194707 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.000/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174289-1 REV C. INCLUDES: 0000-232-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-244-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22. USED IN PUMPS FCC-P-016A/B. TALARA REFINERY.	3	SET	1	2
2.15	194708 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174687-1 REV A. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA) ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS FCC-P-110A/B. TALARA REFINERY.	6	SET	2	4
2.16	194709 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174232-1 REV A. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,24. USED IN PUMPS FCC-P-111A/B. TALARA REFINERY.				
2.17	194710 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.625 /2.625 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174094-1 REV F; GA-174646-1 REV G; GA-174094-2 REV D. INCLUDES: 557397-42 DC PACKING.FLEX GRAPHITE (02 EA) ITEM 2,12. TAB-1305-2500-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ITEM 7. TAB-1306-2500-7776 PACKING. FLEX GRAPHITE (01 EA) ITEM 8. 557400-38 PACKING. FLEX GRAPHITE (01 EA) ITEM 17. 557397-050 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 19. 400043750128589 PACKING. FLEXITE/316SS (01 EA) ITEM 28. 418745620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 29. USED IN PUMPS HTF-P-012A/B; TKS-P-029A/B; FCK-P-206A/B. TALARA REFINERY.	6	SET	2	4
2.18	194711 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-180925-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP FCK-P-210A/B. TALARA REFINERY.	3	SET	1	2
2.19	194712 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 1.968 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174538-1 REV D. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22, 24. USED IN PUMPS FCK-P-215A/B. TALARA REFINERY.	3	SET	1	2
2.20	194713	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-1 REV C; GA-174144-4 REV E; GA-174144-2 REV C. INCLUDES: 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-307; MU2-P-002; RG1-P-102. TALARA REFINERY.				
2.21	194714 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-175964-1 REV B. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP FCK-P-308A/B. TALARA REFINERY.	3	SET	1	2
2.22	194715 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 2.625/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-182336-1 REV E. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 25. 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 26. 0000-140-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 32. USED IN PUMPS FCK-P-311A/B. TALARA REFINERY.	3	SET	1	2
2.23	194716 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179308-1 REV C. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	0000-236-9579 O-RING.PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP FCK-P-313A/B. TALARA REFINERY.				
2.24	194717 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-174078-1 REV E. INCLUDES: 0000-238-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 2,4. 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 13. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 20. 0000-252-9538 O-RING. TFE PROPYLENE (02 EA) ITEM 24. 0000-112-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 29. USED IN PUMPS GLP-P-002A/B. TALARA REFINERY.	3	SET	1	2
2.25	194718 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179156-1 REV D. INCLUDES: 0000-238-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-241-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-252-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 24. USED IN PUMPS GLP-P-004A/B. TALARA REFINERY.	3	SET	1	2
2.26	194719 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625 IN. SHAFT DIAM 3.625 IN. DRAWING GA-178045-1 REV B. (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-239-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 22. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. USED IN PUMPS HTD-P-005A/B. TALARA REFINERY.	6	SET	2	4
2.27	194720 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648.	6	SET	2	4

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	DUAL CARTRIDGE. SEAL SIZE 2.617 IN. SHAFT DIAM 2.617 IN. DRAWING GA-171930-1 REV C (CW); GA-170846-1 REV C (CCW) INCLUDES: 0000-237-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-231-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 24. 0000-251-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 29. USED IN PUMPS HTF-P-001A/B. TALARA REFINERY.				
2.28	194721 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-176087-1 REV D. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 15. USED ON PUMP HTF-P-002A/B. TALARA REFINERY.	6	SET	2	4
2.29	194722 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500/2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174293-2 REV B; GA-174293-1 REV B. INCLUDES: 0000-230-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. 0000-228-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2500-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTF-P-007A/B; HTN-P-007A/B. TALARA REFINERY.	6	SET	2	4
2.30	194723 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 609HTC. SINGLE CARTRIDGE. SEAL SIZE 3.125 IN. SHAFT DIAM 2.756 IN. DRAWING GA-179358-1 REV C. INCLUDES: 557397-54 DC PACKING.FLEX GRAPHITE (01 EA) ITEM 2. 557400-50 PACKING. FLEX GRAPHITE (01 EA) ITEM 7. 518755620128589 PACKING. FLEXITE/316SS (01 EA) ITEM 10. 537557500128589 PACKING. FLEXITE/316SS (01 EA)	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	ITEM 16. 557397-070 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ITEM 21. USED IN PUMPS HTN-P-005A/B. TALARA REFINERY.				
2.31	194724 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.875/2.875 IN. SHAFT DIAM 1.968 IN. DRAWING GA-187718-1 REV C. INCLUDES: 0000-233-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,12. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-237-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 10. TAB-1429-2875-7520 ANTI-X RING. CHEMLOY (01 EA) ITEM 14. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17,18. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED IN PUMPS HTN-P-009A/B. TALARA REFINERY.	3	SET	1	2
2.32	194725 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 3.250/3.000 IN. SHAFT DIAM 2.362 IN. DRAWING GA-174180-1 REV B; GA-174180-3 REV C; GA-174180-2 REV B. INCLUDES: 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-234-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 4,13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-229-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 19. 0000-246-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. 0000-249-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 23. USED IN PUMPS RCA-P-001A/B; RCA-P-002A/B; RG2-P-010A/B. TALARA REFINERY.	6	SET	2	4
2.33	194726 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.125 IN. SHAFT DIAM 1.575 IN. DRAWING GA-174144-3 REV C. INCLUDES: 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-227-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 5. 0000-223-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-239-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-151-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP RCA-P-005A/B. TALARA REFINERY.	6	SET	2	4
2.34	194727 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE RREP. SINGLE CARTRIDGE. SEAL SIZE 56 MM. SHAFT DIAM 1.968 IN.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	DRAWING GA-174957-1 REV C. INCLUDES: 0000-146-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2.6. 0560/K04/198 ANTI EXTRUSION CAP. FILLED PTFE (02 EA) ITEM 5. 0000-231-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 7. 68583-0264 ANTI EXTRUSION WASHER. FILLED PTFE (01 EA) ITEM 8. 0400/K03/696 BUSHING. POLYAMIDE/GRAPHITE (02 EA) ITEM 9. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 16. 0000-243-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 17. USED ON PUMP RCA-P-006A/B. TALARA REFINERY.				
2.35	194728 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-1 REV B; GA-179157-1 REV B. INCLUDES: 0000-241-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 2. 0000-236-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 4. 0000-232-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 11. 0000-252-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 17. 0000-155-9538 O-RING. TFE PROPYLENE (01 EA) ITEM 22. USED ON PUMP RCO-P-003A/B; RCO-P-001A/B. TALARA REFINERY.	3	SET	1	2
2.36	194729 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.756 IN. SHAFT DIAM 2.756 IN. DRAWING GA-176463-2 REV D. INCLUDES: 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-252-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-155-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 22. USED ON PUMP RCO-P-002A/B. TALARA REFINERY.	3	SET	1	2
2.37	194730 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.250/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-176349-1 REV B. INCLUDES: 0000-244-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-242-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	EA) ÍTEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 30. USED IN PUMPS RG1-P-005A/B. TALARA REFINERY.				
2.38	194731 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 4.625/4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-174233-1 REV D. INCLUDES: 0000-245-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 2,4. 0000-248-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 13. 0000-238-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 20. 0000-260-9579 O-RING. PERFLUOROELASTOMER (02 EA) ÍTEM 22,24. 0000-114-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 30. USED IN PUMPS RG2-P-009A/B. TALARA REFINERY.	3	SET	1	2
2.39	194732 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3609HTC. DUAL CARTRIDGE. SEAL SIZE 2.000 IN. SHAFT DIAM 1.575 IN. DRAWING GA-175005-1 REV D. INCLUDES: 557397-36 DC PACKING.FLEX GRAPHITE (02 EA) ÍTEM 2,12. TAB-1305-2125-7772 FLAT GASKET. FLEX GRAPHITE (01 EA) ÍTEM 7. TAB-1306-2125-7776 PACKING. FLEX GRAPHITE (01 EA) ÍTEM 8. 557400-32. PACKING. FLEX GRAPHITE (01 EA) ÍTEM 17. 557397-040 SLEEVE PACKING.FLEX GRAPHITE (02 EA) ÍTEM 19. 362540000128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 28. 375041250128589 PACKING. FLEXITE/316SS (01 EA) ÍTEM 29. USED IN PUMPS RG2-P-014A/B. TALARA REFINERY.	3	SET	1	2
2.40	194733 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-179241-1 REV A. INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ÍTEM 21. USED ON PUMP TGL-P-001A/B. TALARA REFINERY.	3	SET	1	2
2.41	194734 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.968 IN. DRAWING GA-174079-1 REV B.	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	INCLUDES: 0000-235-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 2. 0000-230-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 4. 0000-226-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-243-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 17. 0000-152-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 21. USED ON PUMP TGL-P-002A/B. TALARA REFINERY.				
2.42	194735 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.500 IN. SHAFT DIAM 3.937 IN. DRAWING GA-172889-1 REV C (CW); GA-172891-1 Rev B (CCW) INCLUDES: 0000-252-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-246-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-261-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 12. 0000-161-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 16. USED ON PUMP TKS-P-007A/B. TALARA REFINERY.	6	SET	2	4
2.43	194736 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 4.125 IN. SHAFT DIAM 3.543 IN. DRAWING GA-173061-1 REV C (CCW); GA-173062-1 REV C (CW) INCLUDES: 0000-248-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-243-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-238-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-260-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-159-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED ON PUMP TKS-P-020A/B. TALARA REFINERY.	6	SET	2	4
2.44	194737 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 3.150 IN. DRAWING GA-173049-1 REV C (CCW); GA-173054-1 REV C (CW) INCLUDES: 0000-245-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 4. 0000-235-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. 0000-254-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-157-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 17. USED IN PUMP TKS-P-026A/B. TALARA REFINERY.	6	SET	2	4

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
2.45	194738 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.500 IN. SHAFT DIAM 1.500 IN. DRAWING GA-174550-1 REV B; GA-174550-2 REV C; GA-174550-3 REV C. INCLUDES: 0000-228-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-230-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-226-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-222-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS AM2-P-006A/B; DP1-P-112A/B; DV3-P-009A/B. TALARA REFINERY.	6	SET	2	4
2.46	194739 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1604HTC. SINGLE CARTRIDGE. SEAL SIZE 70 MM. SHAFT DIAM 70 MM. DRAWING GA-169117 REV D. INCLUDES: 557400-56 DC PACKING. FLEX GRAPHITE. (01 EA) ITEM 3. 557397-070 PACKING.FLEX GRAPHITE (02 EA) ITEM 5. 557397-56 PACKING.FLEX GRAPHITE (01 EA) ITEM 6. 556180-176 PACKING. SPIRAL WOUNG GASKET (01 EA) ITEM 7. H-0700M-2990-7772 PACKING. FLEX GRAPHITE (01 EA) ITEM 24. USED IN PUMPS FB2-P-009A/B. TALARA REFINERY.	3	SET	1	2
2.47	194740 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 3648. DUAL CARTRIDGE. SEAL SIZE 2.250/1.750 IN. SHAFT DIAM 1.250 IN. DRAWING GA-174247-5 REV C; GA-176652-1 REV B; GA-174247-2 REV C; GA- 174247-3 REV C; GA-174247-7 REV B; GA-174247-6 REV C; GA-174247-1 REV D. INCLUDES: 0000-226-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4. 0000-228-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11. 0000-224-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 13. 0000-218-3779 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20. 0000-239-3779 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS FCC-P-004A/R; HTD-P-011A/B; HTD-P-012A/B; HTF-P-014A/B; HTN-P-010A/B; WS2-P-007A/B; FCK-P-314. TALARA REFINERY.	12	SET	4	8
2.48	194741 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.625/3.375 IN. SHAFT DIAM 2.815 IN. DRAWING GA-175331-1 REV A. INCLUDES: 0000-239-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 2,4. 0000-242-9549 O-RING. FLUOROELASTOMER (01 EA)	3	SET	1	2

ÍTEM 2		SET DE SELLOS SECUNDARIOS			
SUB ÍTEM	DESCRIPCIÓN CORTA	CANTIDAD TOTAL	U. MEDIDA	PRIMERA ENTREGA (A los 80 días calendario después de notificada la orden de Compra)	CANT. SALDO POR ENTREGAR
	ITEM 11. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 13. 0000-232-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 20. 0000-255-9549 O-RING. FLUOROELASTOMER (02 EA) ITEM 22,25. USED IN PUMPS GLP-P-001A/B. TALARA REFINERY.				
2.49	194742 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 1.750 IN. SHAFT DIAM 30 MM. DRAWING GA-168879 REV E. INCLUDES: 0000-224-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-227-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-217-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-237-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91038/R/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP MU2-P-001. TALARA REFINERY.	3	SET	1	2
2.50	194743 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 1648. SINGLE CARTRIDGE. SEAL SIZE 3.750 IN. SHAFT DIAM 80 MM. DRAWING GA-168836 REV E. INCLUDES: 0000-240-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 1. 0000-345-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 2. 0000-236-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 10. 0000-256-9549 O-RING. FLUOROELASTOMER (01 EA) ITEM 11. D/91090/V/134 SHAFT SEAL. FLUOROELASTOMER (01 EA) ITEM 14. USED ON PUMP TKS-P-010A/B. TALARA REFINERY.	3	SET	1	2
2.51	194744 SET SECONDARY SEALS, FOR MECHANICAL SEAL. JOHN CRANE. TYPE 2648. DUAL CARTRIDGE. SEAL SIZE 3.500/3.250 IN. SHAFT DIAM 2.756 IN. DRAWING GA-184757-1 REV E; GA-184758-1 REV E. INCLUDES: 0000-238-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 2,4 0000-241-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 11 0000-236-9579 ORING. PERFLUOROELASTOMER (01 EA) ITEM 13 0000-232-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 20 0000-252-9579 O-RING. PERFLUOROELASTOMER (02 EA) ITEM 24 0000-113-9579 O-RING. PERFLUOROELASTOMER (01 EA) ITEM 29 USED IN PUMPS RG1-P-007A/B; RG1-P-107A/B. TALARA REFINERY.	6	SET	2	4

APÉNDICE N° 04
DECLARACIÓN JURADA DE CUMPLIMIENTO DE ENTREGABLES

Lugar, de de 2023

Señores

Petróleos del Perú - PETROPERU S.A.

Presente. –

Referencia: “ADQUISICIÓN DE SET DE SELLOS SECUNDARIOS Y KITS DE REPARACIÓN DE SELLOS MECÁNICOS JOHN CRANE PARA BOMBAS CENTRIFUGAS DE LA NUEVA REFINERÍA TALARA”

De nuestra consideración:

La empresa....., con RUC N°. ..., con domicilio legal en ..., debidamente representada por su ..., el señor..., identificado con D.N.I. No. ..., según Poder inscrito en la Partida N° ..., del Registro de Personas Jurídicas de ..., manifestamos que, luego de haber examinado los documentos proporcionados por PETROPERÚ y conocer todas las condiciones existentes,

DECLARAMOS BAJO JURAMENTO

Que, cumpliremos con entregar lo solicitado en el numeral 18 (ENTREGABLES) de las Condiciones Técnicas de los bienes ofertados en nuestra propuesta técnica y económica.

Nombre y firma del representante legal

Nombre de la empresa

APÉNDICE N°05 - A**POLÍTICA DE PREVENCIÓN DE LAVADO DE ACTIVOS Y DE FINANCIAMIENTO DEL TERRORISMO, DE DELITOS DE CORRUPCIÓN Y DE GESTIÓN ANTISOBORNO**

El Directorio de Petróleos del Perú (en adelante PETROPERÚ S.A.) dedicada a la refinación, distribución y comercialización de combustibles y productos derivados de los hidrocarburos, expresa su rechazo a todo acto o intento de Lavado de Activos y Financiamiento del Terrorismo; de Corrupción, bajo las formas de Cohecho Activo Genérico, Específico y Transnacional, Tráfico de Influencias, Colusión Simple y Agravada y otros; así como prohíbe todo acto o intento de Soborno; por parte de sus funcionarios, trabajadores y/o clientes, proveedores, socios o terceros relacionados; estando comprometido a que la Empresa cumpla las leyes de Prevención de Lavado de Activos y Financiamiento del Terrorismo; de lucha contra la Corrupción y Antisoborno tales como la Ley de Prácticas Corruptas en el Extranjero de los Estados Unidos de 1977 (FCPA); así como los requisitos del Sistema de Gestión Antisoborno; manteniendo y cautelando la mejora continua del Sistema de Prevención de Lavado de Activos y Financiamiento del Terrorismo en su calidad de Sujeto Obligado, conforme a la Ley 27693 y su Reglamento; del Sistema de Prevención de Delitos de Corrupción bajo los alcances de la Ley No. 30424 y normas modificatorias y reglamentarias; así como del Sistema de Gestión Antisoborno conforme a la Norma ISO 37001:2016; así como cualquier otra normativa que resulta aplicable.

En dicho marco, PETROPERÚ declara que no iniciará relaciones contractuales, laborales ni comerciales, con personas naturales o jurídicas, si éstas o algunos de sus Socios (con la titularidad del 10% o más de acciones o participaciones), Directores o Gerentes; han sido: i) Condenados, mediante sentencia firme, por delito de Lavado de Activos, Financiamiento del Terrorismo, delitos precedentes como Narcotráfico, Delitos Tributarios o Aduaneros, Minería Ilegal, Corrupción u otros que genere ganancias ilegales; Cohecho Activo Genérico, Específico y Transnacional, Tráfico de Influencias, Colusión Simple y Agravada, Soborno; en el ámbito nacional o internacional, durante el tiempo que dure la pena impuesta en la sentencia; y/o hubieran aceptado haber cometido tales delitos en dichos ámbitos, durante el lapso de 15 años desde la aceptación, salvo disposición legal en contrario; o, ii) Comprendidos en la Lista OFAC (Oficina de Control de Activos Extranjeros del departamento de Tesoro de los Estados Unidos de América), Lista de Terroristas del Consejo de Seguridad de las Naciones Unidas, Lista relacionadas con el Financiamiento de la Proliferación de Armas de Destrucción Masiva emitida por el Consejo de Seguridad de la ONU; o, iii) Han presentado documentación falsa u omisiones en Declaración Jurada entregada a la Empresa, según lo previsto en el Código Penal Peruano, por el lapso de 6 años desde que se produjo el hecho.

El Directorio ha encargado al Oficial de Cumplimiento, para que juntamente con el ente colegiado; ejerza la supervisión de la implementación y el mantenimiento de los referidos Sistemas de Prevención y/o Gestión; debiendo velar porque goce de autoridad, autonomía e independencia para el ejercicio de sus funciones; reportándole el Oficial, de cualquier actuación, conducta, información o evidencia que pueda vulnerar la presente Política.

La Empresa promueve y garantiza la implementación y funcionamiento del Procedimiento de Planteamiento de Inquietudes (denominado “*Línea de Integridad*”), mediante consultas o denuncias de buena fe ante hechos o conductas sospechosas; garantizando la confidencialidad de estas, así como la protección ante cualquier tipo de represalias al denunciante.

Los trabajadores y/o terceros o partes interesadas que incumplan cualquiera de las disposiciones de esta Política serán sujetos, previa investigación, a las medidas administrativas, civiles, penales y/o acciones contractuales correspondientes.

Acuerdo de Directorio No. 031-2021-PP de fecha 18.03.2021.
LA EMPRESA.

APÉNDICE N°05 - B



POLICY FOR THE PREVENTION OF MONEY LAUNDERING AND THE FINANCING OF TERRORISM, FELONIES OF CORRUPTION AND ANTI-BRIBERY MANAGEMENT

The Board of Directors of Petróleos del Peru (hereinafter referred to as PETROPERÚ S.A.) dedicated to the refining, distribution and commercialization of fuels and products derived from hydrocarbons, DOES HEREBY reject any act or attempt of Money Laundering and Terrorism Financing; and Corruption, under the form of Generic, Specific and Transnational Active Bribery, Influence Trafficking, Simple and Aggravated Collusion and others; as well as any act or attempt of bribery by its officials, workers and/or clients, suppliers, partners or related third parties, is committed to ensuring that the Company complies with the laws of Prevention of Money Laundering and Financing of Terrorism; Anti-Corruption and Anti-Bribery such as the United States Foreign Corrupt Practices Act of 1977 (FCPA); as well as the requirements of the Anti-Bribery Management System; maintaining and ensuring the continuous improvement of the Asset Laundering and Terrorism Financing Prevention System as Liable Party, in accordance with Law 27693 and its Regulations of the Corruption Crimes Prevention System under the scope of Law No. 30424, and amending and regulatory rules; as well as the Anti-bribery Management System in accordance with the Standard ISO 37001: 2016; as well as any other applicable regulations.

In this framework, PETROPERÚ declares that not contractual, labor or commercial relationships with natural or legal persons will be initiated, if they or some of their Partners (with the ownership of 10% or more of shares or participations), Directors or Managers; have been: i) Convicted, through a final judgment, for the crime of Money Laundering, Terrorism Financing, preceding crimes such as Drug Trafficking, Tax or Customs Crimes, Illegal Mining, Corruption or others that generate illegal profits; Generic, Specific and Transnational Active Bribery, Influence Trafficking, Simple and Aggravated Collusion, Bribery; at the national or international level, for the duration of the punishment imposed in the sentence; and/or if they would have accepted to have committed such crimes in said areas, during the period of 15 years from the acceptance, unless otherwise provided by law; or, ii) if they are included in the OFAC List (Office of Foreign Assets Control of the Treasury Department of the United States of America), List of Terrorists of the United Nations Security Council, List related to the Financing of the Proliferation of Arms Mass Destruction issued by the UN Security Council; or, iii) if they have submitted false documentation or omissions in the Affidavit delivered to the Company, as provided in the Peruvian Criminal Code, for a period of 6 years since the event occurred.

The Board of Directors has commissioned the Compliance Officer to, together with the licensed entity; supervise the implementation and maintenance of the aforementioned Prevention and/or Management Systems; being able to ensure that he/she enjoys authority, autonomy, and independence for the exercise of his/her functions; reporting to the Officer, any action, conduct, information or evidence that may violate this Policy.

The Company promotes and guarantees the implementation and operation of the Raising Concerns Procedure (called "Integrity Line"), through inquiries or complaints in good faith regarding suspicious facts or behavior, guaranteeing the confidentiality of these, as well as protection against any type of retaliation to the complainant.

Workers and/or third parties or interested parties who breach any of the provisions of this Policy will be subject, after investigation, to the corresponding administrative, civil, criminal measures and/or contractual actions.

Board Agreement No. 031-2021-PP dated 03.18.2021.
THE COMPANY.

APÉNDICE N°06

“Prevención de Lavado de Activos y Financiamiento del Terrorismo, de delitos de Corrupción y de Soborno:

En virtud de la presente cláusula, el Contratista declara haber recibido y leído la Política de Prevención de Lavado de Activos y Financiamiento del Terrorismo, de Delitos de Corrupción y de Gestión Antisoborno de PETROPERÚ adjunta al presente contrato; manifestando comprenderla y comprometiéndose a cumplirla, conjuntamente con sus socios o asociados, directores, integrantes de los órganos de administración, representantes legales, apoderados, y toda persona natural o jurídica que actúa por su cuenta o beneficio, por su encargo o en su representación; con énfasis en los siguientes aspectos:

- 1. Utilizar recursos en la ejecución del presente contrato y la totalidad de pagos o cualquier otra transferencia de recursos, incluyendo garantías reales, efectuadas en favor de PETROPERÚ S.A., que proceden de fondos lícitos.*
- 2. No incurrir en delitos de Lavado de Activos, Financiamiento del Terrorismo, o Corrupción bajo las formas de: Cohecho Activo Genérico, Específico o Transnacional, Tráfico de Influencias, Colusión Simple o Agravada, entre otros delitos que las leyes de la materia establezcan, tales como la Ley N° 30424 y sus normas modificatorias, en relación con la celebración y la ejecución del presente contrato.*
- 3. No realizar, ofrecer, autorizar, solicitar o aceptar cualquier pago indebido o ilegal o, en general, cualquier beneficio indebido o ilegal o soborno, en relación con la celebración y la ejecución del presente contrato.*
- 4. Que ni el, ni sus socios o asociados (con la titularidad del 10% o más de acciones o participaciones), directores y gerentes: a) Tienen condena, mediante sentencia firme, por delito de Lavado de Activos, Financiamiento del Terrorismo, delitos precedentes como Narcotráfico, Delitos Tributarios o Aduaneros, Minería Ilegal, Corrupción u otros que genere ganancias ilegales; Cohecho Activo Genérico, Específico y Transnacional, Tráfico de Influencias, Colusión Simple y Agravada o Soborno; en el ámbito nacional o internacional; b) Se encuentran comprendidos en la Lista OFAC (Oficina de Control de Activos Extranjeros del departamento de Tesoro de los Estados Unidos de América), Lista de Terroristas del Consejo de Seguridad de las Naciones Unidas, Lista relacionada con el Financiamiento de la Proliferación de Armas de Destrucción Masiva emitida por el Consejo de Seguridad de las Naciones Unidas.*
- 5. Prevenir el soborno, adoptando medidas técnicas, organizativas o de personal apropiadas para evitar acto o práctica indebidos o conductas ilícitas; en la materia sobre la que versa el presente contrato.*
- 6. Poner a disposición de PETROPERÚ S.A. información veraz y completa, y en caso ésta sufra variaciones, presentar la información actualizada en un plazo de quince (15) días hábiles. PETROPERÚ S.A. puede solicitar la información que considere pertinente en cumplimiento de la legislación de lavado de activos y financiamiento del terrorismo.*
- 7. Comunicar a PETROPERÚ S.A. y las autoridades competentes, de manera directa y oportuna, cualquier acto o práctica indebidos o conductas ilícitas de la que tuviera conocimiento en relación con la celebración y la ejecución del presente contrato.*

PETROPERÚ S.A. puede resolver en cualquier momento el presente Contrato de pleno derecho, mediante notificación escrita al Contratista si, respaldado por evidencias, considera que el Contratista ha incumplido cualquiera de los compromisos mencionados en esta cláusula, situando a PETROPERÚ S.A. frente a un riesgo legal, patrimonial o reputacional o que pueda generarle sanciones administrativas, civiles, penales; sin perjuicio de que PETROPERÚ S.A. brinde información a las autoridades competentes e inicie las acciones legales pertinentes, incluyendo las indemnizatorias que resulten aplicables”.

APÉNDICE N°07

CLÁUSULA SISTEMA DE INTEGRIDAD

“El Sistema de Integridad tiene como finalidad gestionar la ética e integridad en PETROPERÚ, asumiendo un compromiso con las normas del sistema, así como fortalecer la cultura ética basada en la política de tolerancia cero frente al fraude, a la corrupción y a cualquier acto irregular, proporcionando así las directrices a seguir para desarrollar acciones preventivas y detectar actos irregulares.

En ese sentido, el CONTRATISTA/CLIENTE se obliga al cumplimiento de lo dispuesto en: i) el Código de Integridad de PETROPERÚ; ii) la Política Corporativa de Integridad y Lucha contra la Corrupción y el Fraude; y, iii) los lineamientos del Sistema de Integridad, en lo que le sea aplicable a las obligaciones a su cargo.

El Código de Integridad de PETROPERÚ, la Política Corporativa de Integridad y Lucha contra la Corrupción y el Fraude, así como los Lineamientos del Sistema de Integridad se encuentran publicados en el portal de PETROPERÚ, en el siguiente enlace: <https://www.petroperu.com.pe/buen-gobierno-corporativo/nuestro-sistema-de-integridad/>”