

| | | | LSD: 12-2 | <mark>21-050-19W</mark> | 5 | Date: 20 | 013-03-04 SAP E | quipment ID | 66181022 | |
|------------------------------|-------------------------------------|-----------------|--------------------------------------|--|--|----------------------|--|--|-----------------|--------------------|
| | | | | 1 | ESSEL ST | ATIC DATA | 1 | | | |
| lant: | ANS | ELL | | OP U | nit: | | | System: | | |
| rov. Insp . # | : 061 | 2541 | | CRN: | | P7217.2 | | Equip Tag | #: 6 | 6181022 |
| uipment De | escription: | INLET S | SEPARATOR | | | | | Serial #: | 1 | 2335 |
| anufacturer | : RJ\ | / Gas Field Se | ervices | | | | | Vessel Cla | ss: v | essel |
| Internal Access: No | | | | Desci | iption: | | | Year Built: | Year Built: 20 | |
| AWP: | 992 | 29 | kpa | At Te | mp | 38 | С | MDMT: | | -20 C |
| de: | | | | RT: | RT2 | | | PWHT: | N | lo |
| ameter: 4 | 106 mr | n Length | 1: 2286 | mm (T/T) | : mm | OAL: | mm | Orientatio | n: V | 'ertical |
| SHI | ELL I | Mat'l: SA-1 | 106 B | Thick | ness: | 1 | mm | Corr Allow | ance: | 2 mm |
| HE | AD I | Mat'l: SA-5 | 516 70 | Thick | ness: | 1 | mm | Corr Allow | ance: | 2 mm |
| | Nozzle M | lat'l: | | Thick | ness: | | | Corr Allow | rance: | |
| ternal Coati | NI- | | | | nal Clad: | No | | Capacity: | | m3 |
| anway: | No | | | | ection Port: | Yes | | | X Legs | Saddle |
| zzle Rating | | | lb ANSI | Paint | | Yes | - | Insulated: | | |
| | , | | | 1.4 | PROCESS | | | 1 | | |
| oduction De | escription: | | | Swee | | Sour: | | | | |
| erating Pre | essure | | kpa | Opera | ating Temp: | | С | | | |
| | | | | <u> </u> | PSV STATI | C DATA | | | | |
| Tag # | Serial No. | Location | Size(| (mm) Outlet | Set Press (kPa) | Capacity Imperial | Manufacturer | Model | Last Service | Service Company |
| 1221 1 | 012664 22 | Dining | | | ` ' | (SCFM) | TAVLOR | T 0200 | | <u> </u> |
| 1221-1 | 013664-33 | Piping | 25.40 | 25.40 | 9929 | 5180 | TAYLOR | T-8200- | 1 2012/03/08 | |
| | | | | INSP | ECTION SU | JMMARY | | | | |
| FIT FOR SEF | RVICE | | | | | | | | | |
| | | | | | RECOM | MENDATI | ONS | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | NONCON | IFORMANC | ES/INSPE | CTION DEFICIENC | ES | | |
| | | | | NONCON | IFORMANC | ES/INSPE | CTION DEFICIENC | CES | | |
| | | | | NONCON | FORMANC | ES/INSPE | CTION DEFICIENC | CES | | |
| | | | | | INSPECT | ES/INSPE | NING | | | |
| nspection Stra | ategy | | | NONCON Availa | INSPECT | | NING | pection Interval | | |
| | | 2013/03/04 | ŀ | Availa | INSPECT | | NING Ins | | | |
| | | 2013/03/04 | 1 | Availa | INSPECT : | ION PLAN | NING Ins | pection Interval | | |
| nspection Dat | es below certify | that inspecti | | Availa Date of | INSPECT: bility of Last Inspect REPORT C | ION PLAN | NING Ins | pection Interval e of Next Insp | | |
| nspection Dat | es below certify | that inspecti | ions/tests have | Availa Date of the complete date of next | INSPECT: bility of Last Inspect REPORT C | ION PLAN | NING Ins Dat | pection Interval e of Next Insp | Date 2013/ | 03/04 |
| specified equi | es below certify | / that inspecti | ions/tests have service until the | Availa Date of the complete date of next | INSPECT: bility of Last Inspect REPORT C | ION PLAN | NING Ins Dat TION entified inspection strateg | pection Interval e of Next Insp y and that the | Date 2013/0 | 03/04 |
| The Signature specified equi | eS below certify ipment is consider | that inspecti | ions/tests have service until the | Availa Date of the complete date of next | INSPECT bility of Last Inspect REPORT C ted in accordan inspection. | ION PLAN | NING Ins Dat TION entified inspection strateg | pection Interval e of Next Insp y and that the | | 03/04 |



Husky Energy PRESSURE VESSEL & COLUMN INSPECTION REPORT Patrix 2013-03-04 SAP Equipment ID

Date: 2013-03-04 **SAP Equipment ID** 66181022

DETAILED INSPECTION VISUAL EXTERNAL

| | VISUAL EXTERNAL | | | | | | | |
|-----|---------------------------------------|-----------|----------|-----|--|--|--|--|
| ID | Description | Condition | Location | NCR | Comments | | | |
| V1 | General Other (Please Explain) | Accept | | | VERY GOOD CONDITION | | | |
| V2 | General Corrosion | Accept | | | | | | |
| V3 | General Leaks | Accept | | | NO LEAKS/WEEPS | | | |
| V4 | Vibration | N/A | | | | | | |
| V5 | Dissimilar Flange Rating | N/A | | | | | | |
| V6 | Ladder/Stairway | N/A | | | | | | |
| V7 | Heads | Accept | | | NO DAMAGE | | | |
| V8 | Guy Wires | N/A | | | | | | |
| V9 | Electrical Ground | N/A | | | | | | |
| V10 | Painted Inactive Corrosion | N/A | | | | | | |
| V11 | Coating/Painting | Accept | | | NO DAMAGE, VERY GOOD CONDITION | | | |
| V12 | Expansion Joint or Bellows | N/A | | | | | | |
| V13 | Gauge/Site Glass | Accept | | | CLEAN/GOOD WORKING ORDER | | | |
| V14 | Shell | Accept | | | NO DAMAGE | | | |
| V15 | Jacket | N/A | | | | | | |
| V21 | Support Other (Please explain) | N/A | | | | | | |
| V22 | Foundation | N/A | | | | | | |
| V23 | Anchor Bolts | N/A | | | WELDED TO FLOOR | | | |
| V24 | Saddle/Skirt | Accept | | | NO DAmage | | | |
| V25 | Davit | N/A | | | | | | |
| V26 | Fireproofing | N/A | | | | | | |
| V31 | Connections Other (Please explain) | Accept | | | THREADED CONNECTIONS | | | |
| V32 | Small Branches | Accept | | | THREADED CONNECTIONS | | | |
| V33 | Nozzles | Accept | | | FLANGED CONNECTIONS, FULLY ENGAGED, NO DAMAGE/SHORTBOLTING | | | |
| V34 | Manways | N/A | | | | | | |
| V35 | Reinforcing Pads | N/A | | | | | | |
| V36 | Inadequate Thread Engagement | N/A | | | | | | |
| V37 | Bolting | Accept | | | NO SHORTBOLTING | | | |
| V38 | Flanges | Accept | | | NO DAMAGE | | | |
| V39 | Leak Clamps | N/A | | | | | | |
| V41 | Insulation Other (Please explain) | N/A | | | | | | |
| V42 | Damage | Accept | | | | | | |
| V43 | Penetrations | N/A | | | | | | |
| V44 | Insulation Jacket | N/A | | | | | | |
| V45 | Banding | N/A | | | | | | |
| V46 | Seals/Joints | N/A | | | | | | |
| V51 | Relief Devices Other (Please explain) | Accept | | | SET AT 1440 PSI/SERVICED 2012 | | | |
| V52 | Corrosion | Accept | | | | | | |
| V53 | Leaks | Accept | | | NO LEAKS/WEEPS | | | |
| V54 | Restricted Inlet/Outlet | N/A | | | | | | |
| | | - | • | - | • | | | |



| . | usky Energy | PRES | SURE V | 'ESSEL & | cOLUM | N INSPE | CTION REPORT | | |
|----------|------------------------|------|-----------|----------|-------|------------|------------------|----------|--|
| | | LSD: | 12-21-050 | 0-19W5 | Date: | 2013-03-04 | SAP Equipment ID | 66181022 | |
| V55 | Manual Operation Lever | | N/A | | | | | | |

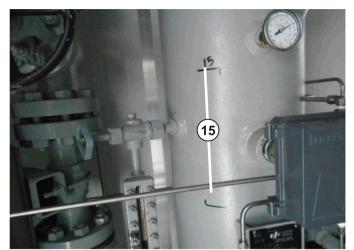
DETAILED INSPECTION OTHER TECHNIQUES

| ID | Location | Observation/Measurement | Acceptance Criteria | NCR | Comments |
|----|----------|-------------------------|---------------------|-----|----------|
| | | | | | |

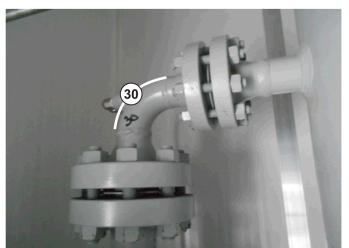
DETAILED INSPECTION UT THICKNESS

| C | ML | Nom. Thickness | CURRENT READINGS | short term corr rate | long term corr rate | remaining half life | Survey Date | Comments |
|----|-------------|-------------------|---------------------|-------------------------|------------------------|------------------------|-------------|----------|
| 05 | (Head) | 20.62 | 21.64 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 10 | (Shell) | 21.44 | 22.91 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 15 | (Shell) | 21.44 | 23.37 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 20 | (Shell) | 21.44 | 23.06 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 25 | (Head) | 20.62 | 22.53 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 30 | (90L 2 XS) | 5.54 | 5.54 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 35 | (90L 2 120) | 0.00 | 11.00 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |
| 40 | (90L 2 XS) | 5.54 | 4.85 | 0.0116 | 0.0116 | 4.6 | 2013/03/04 | |
| 45 | (90L 2 120) | 0.00 | 10.62 | 0.0000 | 0.0000 | 99.0 | 2013/03/04 | |

TOTAL INTEGRITY MANAGEMENT SOLUTIONS











| OWNER: HUSKY | SERIAL # 12335 | NOTES |
|---------------------------|----------------|-------|
| EQUIPMENT NAME: SEPARATOR | NB# | |
| REGISTRATION # 0612541 | OWNER ID | _ |

EQUIPMENT # 66181022



TOTAL INTEGRITY MANAGEMENT SOLUTIONS





NAMEPLATE OVERALL



PSV

| OWNER: HUSKY | SERIAL # 12335 | NOTES |
|---------------------------|-----------------------|-------|
| EQUIPMENT NAME: SEPARATOR | NB# | |
| REGISTRATION # 0612541 | OWNER ID | |
| EQUIPMENT # 66181022 | ONCOR ID | |