



Form : QR-22.1
Rev. : 3, Date : 01/07

NONCONFORMANCE REPORT

NCR # 130613MLa

Refer to Inspection Report #

PRIORITY ☒ Level 0 - Serious/Code Resolve Immediately
☐ Level 1 - Major Resolve within 14 days
☐ Level 2 - Minor Resolve within 30 days
☐ Level 3 (Shutdown) Resolve at next shutdown

☒ Internal (Husky) ☐ External (Contractor)

NCR Identified By Marie Lafontaine

NCR to be Actioned By Gary McKay

NCR to be Resolved By Technical Engineering

LOCATION & EQUIPMENT / PROCEDURE IDENTIFICATION

Production District HOG Sask West Facility Lilydale Comp Stn LSD 08-07-046-24W3
Equipment Description Inlet Scrubber Manufacturer Rambler Fab Husky ID # 66178606
Prov. Registration # SK Licence #7026537 CRN R2661.23 Serial # 2373-2

DESCRIPTION OF NONCONFORMANCE (To be completed by person identifying the NCR) Please attach photos when applicable

The inlet scrubber is not equipped with a PSV. Pressure vessels shall be provided with a means of overpressure protection

CAUSE OF NONCONFORMANCE (To be completed by person identifying the NCR or person issuing the NCR)

☒ Noncompliance with Husky Integrity Program/Procedure
☐ Noncompliance with Husky Eng. Specs
☒ Other TSASK IP-2011-03-001

☒ Noncompliance with Code, Act or Regulation
☐ B31.1 ☐ B31.3 ☒ Sect VIII ☐ Sect I
☐ Sect V ☐ CSA B51 ☐ Z662 ☐ Other

PRELIMINARY REVIEW (To be completed by Chief or Facility Inspector)

Prior To Issuing, Nonconformity Has Been Discussed With

☒ Operations ☐ Engineering ☐ Maintenance

NCR Issued By : Marie Lafontaine

Chief Inspector - Level 0 & 3
Facility Lead Inspector - Level 1 & 2

Print

☐ Contractor

☐ Authorized Inspector

2013-06-13

Signature

Date

RECOMMENDED ACTION (To be completed by person assigned to action the NCR)

☐ Scrap ☐ Use "As-Is" ☐ Repair ☐ Alteration ☐ Replace ☐ Return to Supplier

Describe actions required to resolve the NCR :

Review vessel overpressure protection. Either: 1) Size, select and install a PSV, or 2) review and document "overpressure protection by system design" and make application to TSASK per IP-2011-03-001.

Marie Lafontaine

Prepared by (Please Print)

Signature

2013-06-13

Date

APPROVAL OF RECOMMENDED ACTION

Required	Yes	No
Yes		
	Dale Martin	Signature
	Chief or Facility Lead Inspector (Please Print)	Date
	Tech Leader / Project Lead (Please Print)	Signature
		Date
	Operations or Contractor (Please Print)	Signature
		Date
	Authorized Inspector (Please Print)	Signature
		Date

DESCRIPTION OF RESOLUTION (To be completed by person assigned to resolve the NCR)

Describe actions taken to resolve the NCR :

Per the attached MOC memo #13-168, adequate existing overpressure protection is provided by PSV on discharge of 1st stage of the compressor.

RESOLUTION & ACTION FOLLOW-UP

Resolution Completed	Marie Whitman	Signature	Date
	Print Name		
<input checked="" type="checkbox"/> Acceptable	<input type="checkbox"/> Unacceptable	<input type="checkbox"/> Corrective Action Required	
Identify if actions were acceptable or if additional actions are required :			
Follow-up completed by (Please Print)			
Signature			
Date			

Completed forms are to be e-mailed or faxed to : _____ c-mail _____ Fax # _____

Issued NCRs have been provided to : _____

NCR has been entered into database by : _____ Date : _____

TO: Marie Lafontaine

FROM: Mladen Licul

CC: Regan Harris

DATE: 2013/06/19

MOC NO. 13-168

AFE/WO #: 4087183

SUBJECT: Overpressure protection of inlet separator

LSD: 08-07-046-24W3

Subject / question presented

- NCR # 130613MLa mentions that there is no PSV protection on the knock-out vessel (inlet scrubber, V-1 see drawing 08-07-046-24W3-PI-0003-01). This memo is to show that the system is adequately protected as designed and built.
 - The fluid service is sweet, produced gas.
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Analisis

- The configuration on the compressor is a typical design common to many compressors in the upstream industry. The suction side vessels are protected by the PSV on the discharge side of the first stage because there are no intervening block valves in the process. The suction and discharge valves in the cylinders are essentially check valves and will always allow flow from the suction side to the discharge side in the event of an upstream overpressure event.
 - The pressure ratings for the suction side vessels are all 4826 kPag and PSV 100 is set at 4137 kPag so there is adequate margin to cover for any pressure loss through the cylinder valves (this is very small). In a case of an overpressure event by fire expansion, the system is protected.
 - In the case of an overpressure event upstream of the compressor package inlet (see drawings 08-07-046-24W3-PI-0003-01 and 08-07-046-24W3-PI-0001-01), the compressor package is provided with pressure switches at the suction line set at 2275 KPag, they will shut down the compressor if the pressure increases to that value at the inlet line, then the PSV downstream the first stage will relief if necessary at 4137 KPag. The only line feeding this package is the line from the well 15-14-048-25W3, at that part of the inlet header there is a PSV with a set point of 1965 Kpag. The maximum overpressure event from the suction side will be limited to the value of 4965 KPag, which at this moment is from lines not being used, from 01-07-046-24W3 and/or 07-14-046-24W3.
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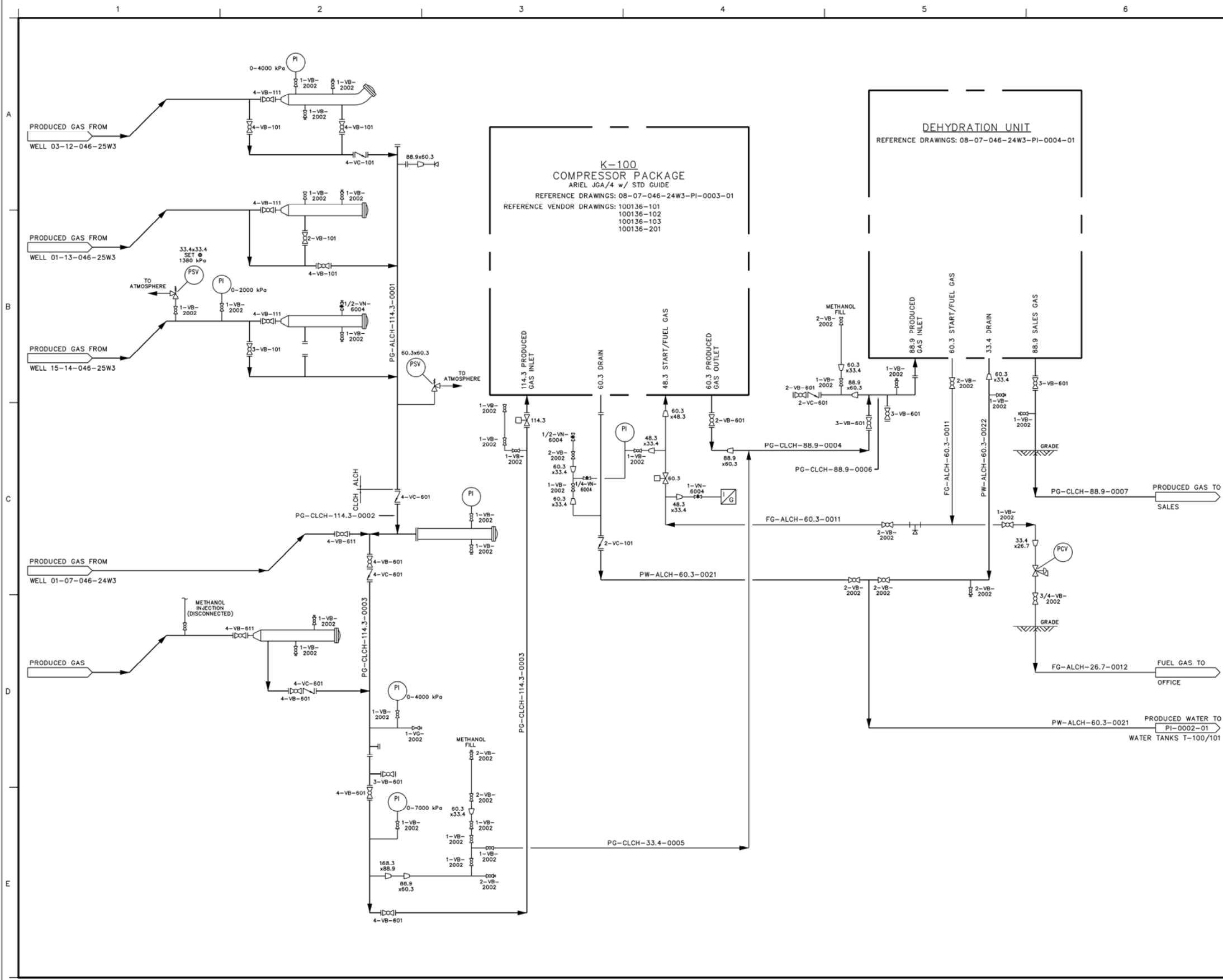
Conclusion

- The pressure vessel is protected by a PSV downstream the compressor's 1st stage. This PSV is set to 4137 KPag, and the MAWP for that vessel is 4826 Kpag.
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Attachements

- Drawings 08-07-046-24W3-PI-0003-01 and 08-07-046-24W3-PI-0001-01.

If you have any questions or concerns, please do not hesitate to call or email.



NOTES

ENGINEERING COMPANY PERMIT STAMP

REGISTERED PROFESSIONAL ENGINEER STAMP

APEGS PERMIT
C1497

5	08-07-046-24W3-PI-0004-01	DEHYDRATION UNIT P&ID
4	08-07-046-24W3-PI-0003-01	COMPRESSOR K-100 P&ID
3	08-07-046-24W3-PI-0002-01	WATER TANKS T-100/101 P&ID
2	08-07-046-24W3-LL-0001-01	MECHANICAL LINE LIST
1	08-07-046-24W3-PP-0001-01	PLOT PLAN
REF	DRAWING NUMBER	DRAWING TITLE
REFERENCE DRAWINGS		
1	2010/01/27	SITE CORE DRAWING AS BUILTS PER CC 25229
REV	DATE	DESCRIPTION
		BY CHK ENG APR
REVISION HISTORY		
<div> Husky Oil Operations Limited</div>		
LILYDALE 08-07 COMPRESSOR STATION		
TITLE COMPRESSOR STATION AS BUILTS INLET FACILITIES PIPING & INSTRUMENTATION DIAGRAM		
SURFACE LOCATION 08-07-046-24W3		
ALTERNATE DWG NUMBER		REV NO
HUSKY DWG NUMBER 08-07-046-24W3-PI-0001-01		1
VENDOR DWG NUMBER		SCALE
AMU/FLOC NUMBER		NTS
DCN NO	PROJECT NO	CC 25229

