

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض/ بسته ایستگاه تقویت فشار گاز خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)							 HAVAYAR INDUSTRIAL GROUP	
	CAUSE & EFFECT CHARTS LIST								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 1 از 14
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	HY	120	IN	LI	0001	V04	

طرح نگهداشت و افزایش تولید ۲۷ مخزن

CAUSE & EFFECT CHARTS LIST

نگهداشت و افزایش تولید میدان نفتی بینک

V04	JAN.2025	IFR	Havayar Co.	M. Fakharian	S. Faramarzpour	
V03	JUL.2024	IFR	Havayar Co.	M. Fakharian	M. Sadeghian	
V02	MAY.2024	IFR	Havayar Co.	M. Fakharian	S. Faramarzpour	
V01	SEP.2023	IFR	Havayar Co.	M. Fakharian	S. Faramarzpour	
V00	JUN.2023	IFR	Havayar Co.	M. Fakharian	A. M. Mohseni	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

CLIENT Doc. Number:

status:

IFA: Issued For Approval
IFR: Issued For Review
IFI: Issued For Information
AFC: Approved For Construction

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض ایستگاه تقویت فشار گاز خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)								
	CAUSE & EFFECT CHARTS LIST								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۶	پروژه BK	بسته کاری GCS	صادر کننده HY	تسهیلات 120	رشته IN	نوع مدرک LI	سریال 0001	نسخه V04	شماره صفحه: 2 از 14

REVISION RECORD SHEET

Page	V00	V01	V02	V03	V04	V05	V06	Page	V00	V01	V02	V03	V04	V05	V06
1	X	X	X	X	X			40							
2	X	X	X	X	X			41							
3	X	X	X	X	X			42							
4	X	X	X	X	X			43							
5		X	X	X	X			44							
6			X	X	X			45							
7			X	X	X			46							
8			X	X	X			47							
9			X	X	X			48							
10			X	X	X			49							
11			X	X	X			50							
12			X	X	X			51							
13			X	X	X			52							
14			X	X	X			53							
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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض/ بسته ایستگاه تقویت فشار گاز
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد BK-HD-GCS-CO-0008_03)



CAUSE AND EFFECT CHARTS LIST

شماره پیمان:

053 - 073 - 9184

شماره صفحه: 3 از 14

[illegible]



NISOC

تجهاداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض/بسته ایستگاه تقویت فشار گاز
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد BK-HD-GCS-CO-0008_03)



HAVAYAR
INDUSTRIAL GROUP

CAUSE AND EFFECT CHARTS LIST

شماره پیمان: 053 - 073 - 9184

شماره صفحه: 4 از 14

نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته	پروژه
V04	0001	LI	IN	120	HY	GCS	BK

ALARM SIGNALS OF COMPRESSOR A							TITLE	SOUR GAS RECIPROCATING COMPRESSOR									
EFFECTS							EQUIP.	C2101 / C-2102									
							EFFECT	COMMON ALARM LAMP LCP									
CAUSE							TAG NO.	XF-2245A									
TITLE	EQUIP.	TAG	Logic Diagram Document No.	P&ID Page No.	DESCRIPTION	INTERLOCK NO.	LOCATION	LCP 2101A									
SOUR GAS RECIPROCATING COMPRESSOR	C2101 / C-2102	PDT-2122 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	1ST STAGE SUCTION STRAINER DIFFRENTIAL PRESSURE HIGH		UCP 2101A	S									
		PT-2123 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	1ST STAGE SUCTION PRESSURE HIGH		UCP 2101A	S									
		TT-2191 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	1ST STAGE DISCHARGE TEMPERATURE HIGH		UCP 2101A	S									
		PT-2124 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	1ST STAGE DISCHARGE PRESSURE HIGH		UCP 2101A	S									
		PT-2132 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	2ND STAGE SUCTION PRESSURE LOW		UCP 2101A	S									
		TT-2194 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	2ND STAGE DISCHARGE TEMPERATURE HIGH		UCP 2101A	S									
		PT-2133 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	2ND STAGE DISCHARGE PRESSURE HIGH		UCP 2101A	S									
		PT-2200 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUBRICATOR PRESSURE LOW		UCP 2101A	S									
		PDT-2132 A	BK-GCS-HY-120-IN-DW-0006	1A of 10	2ND STAGE SUCTION STRAINER DIFFRENTIAL PRESSURE HIGH		UCP 2101A	S									
		LT-2200 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	CRANK CASE LUBE OIL LEVEL LOW		UCP 2101A	S									
		PDT-2204 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUB OIL FILTER DIFFERENTIAL PRESSURE HIGH		UCP 2101A	S									
		PT-2204 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUB OIL PRESSURE LOW		UCP 2101A	S									
		TT-2204 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUB OIL TEMPERATURE HIGH		UCP 2101A	S									
		TT-2204 A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUB OIL TEMPERATURE LOW		UCP 2101A	S									
		PT-2210 A	BK-GCS-HY-120-IN-DW-0006	4A of 10	N2 STREAM PRESSURE LOW		UCP 2101A	S									
		PT-2211 A	BK-GCS-HY-120-IN-DW-0006	4A of 10	N2 STREAM PRESSURE LOW		UCP 2101A	S									
		PT-2212 A	BK-GCS-HY-120-IN-DW-0006	4A of 10	N2 PURGE PRESSURE HIGH		UCP 2101A	S									
		LT-2213 A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER RESERVOIR LEVEL LOW		UCP 2101A	S									
		PT-2220 A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER PRESSURE LOW		UCP 2101A	S									
		PT-2220 A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER PRESSURE HIGH		UCP 2101A	S									
		TT-2221 A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER TEMPERATURE LOW		UCP 2101A	S									
		TT-2221 A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER TEMPERATURE HIGH		UCP 2101A	S									
		TT-2214 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MAIN MOTOR NDE BEARING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2215 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MAIN MOTOR DE BEARING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2216 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	BEARING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2217 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	PACKING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2218 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	BEARING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2219 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	PACKING TEMPERATURE HIGH		UCP 2101A	S									
		TT-2220 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MID BEARING TEMPERATURE HIGH		UCP 2101A	S									
		ZT-2200 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	1ST STAGE ROD DROP HIGH		UCP 2101A	S									
		ZT-2201 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	2ND STAGE ROD DROP HIGH		UCP 2101A	S									
		VT-2200 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	FRAME VIBRATION HIGH		UCP 2101A	S									
		VT-2201 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	FRAME VIBRATION HIGH		UCP 2101A	S									
		VT-2202 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	FRAME VIBRATION HIGH		UCP 2101A	S									
		TE-2222 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MAIN MOTOR WINDING W TEMPERATURE HIGH		UCP 2101A	S									
		TE-2225 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MAIN MOTOR WINDING V TEMPERATURE HIGH		UCP 2101A	S									
		TE-2228 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	MAIN MOTOR WINDING U TEMPERATURE HIGH		UCP 2101A	S									
		XT-2200 A	BK-GCS-HY-120-IN-DW-0006	7A of 10	KEY PHASOR ROTATION SPEED HIGH		UCP 2101A	S									
		General Notes:															
		LEGEND:															
		LCP: LOCAL CONTROL PANEL							S: START								
		UCP: UNIT CONTROL PANEL							SP: STOP								
		MCC: MOTOR CONTROL CENTER							T: TRIP								
									O: OPEN								
									C: CLOSE								



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نگهداشت و افزایش تولید میدان نفتی بینک
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خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد BK-HD-GCS-CO-0008_03)



CAUSE AND EFFECT CHARTS LIST

شماره پیمان:
053 - 073 - 9184

نسخه	سریال	نوع	رشته	تسهیلات	صادر	بسته	پروژه
V04	0001	LI	IN	120	HY	GCS	BK

شماره صفحه: 5 از 14

ALARM SIGNALS OF COMPRESSOR A

EFFECTS

CAUSE

TITLE	EQUIP.	TAG	Logic Diagram Document No.	P&ID Page No.	DESCRIPTION	INTERLOCK NO.	LOCATION	UCP 2101A	UCP 2101A	LCP 2101A
SOUR GAS RECIPROCATING COMPRESSOR	C2101 / C-2102	XF-2245A	BK-GCS-HY-120-IN-DW-0006	8A of 10	NO COMMON ALARM (LAMP OFF)	I-65A 	LCP 2101 A	S	S	S
		ESDL-2245A	BK-GCS-HY-120-IN-DW-0006	8A of 10	NO COMMON SHUTDOWN (LAMP OFF)		LCP 2101 A	S	S	S
		XR-2202A	BK-GCS-HY-120-IN-DW-0006	3A of 10	AXU. OIL PUMP MOTOR RUN FEED BACK		LCP 2101 A	S	S	S
		PT-2204A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUBE OIL PRESSURE		UCP 2101 A	S	S	S
		TT-2204A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUBE OIL TEMPERATURE		UCP 2101 A	S	S	S
		PT-2220A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER PRESSURE		UCP 2101 A	S	S	S
		TT-2221A	BK-GCS-HY-120-IN-DW-0006	5A of 10	COOLING WATER TEMPERATURE		UCP 2101 A	S	S	S
		XZSO-2225A	BK-GCS-HY-120-IN-DW-0006	7A of 10	BARING DEVICE UNLOCK FEED BACK (ON)		UCP 2101 A	S	S	S
		XF-2200A	BK-GCS-HY-120-IN-DW-0006	7A of 10	NO MAIN MOTOR FAULT		UCP 2101 A	S	S	S
		PT-2210A	BK-GCS-HY-120-IN-DW-0006	4A of 10	PRESSURE PACKING N2 PRESSURE		UCP 2101 A	S	S	S
		PT-2211A	BK-GCS-HY-120-IN-DW-0006	4A of 10	ROD PACKING N2 PRESSURE		UCP 2101 A	S	S	S
		LT-2200A	BK-GCS-HY-120-IN-DW-0006	3A of 10	LUBE OIL LEVEL		UCP 2101 A	S	S	S
		HSL-2242A1	BK-GCS-HY-120-IN-DW-0006	2A of 10	CAPACITY SWITCH ON 0% LOAD		UCP 2101 A	S	S	S
		XSS-2123A	BK-GCS-HY-120-IN-DW-0006	9A of 10	CLIENT PERMISSIVE TO START (NOTE 1)		UCP 2101 A	S	S	S
General Notes:										
LEGEND: LCP: LOCAL CONTROL PANEL UCP: UNIT CONTROL PANEL MCC: MOTOR CONTROL CENTER				S: START SP: STOP T: TRIP O: OPEN C: CLOSE		NOTE 1: A REQUEST PERMISSION SIGNAL (XSS-2126A) FROM UCP WILL BE SENT TO DCS, THEN START PERMISSIOM SIGNAL (HSS-2125A) FROM DCS WILL BE SENT TO UCP.				

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	CAUSE AND EFFECT CHARTS LIST									
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 7 از 14
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SHUTDOWN OF COMPRESSOR B								TITLE	SOUR GAS RECIPROCATING COMPRESSOR																							
EFFECTS								EQUIP.	C-2101 / C-2102																							
								EFFECT																								
CAUSE								TAG NO.																								
									ESD2A-C-2101-B	ESD2-C-2101-B	PSOV-2201B	PSOV-2202B	PSOV-2203B	PSOV-2204B	PSOV-2205B	PSOV-2123B	XSP-2200B	XSB-2202B	XSP-2202B (NOTE 2)	XSP-2203B	XSP-2221B	XSP-2222B	XSP-2223B	XSP-2201B (NOTE 2)	ESD-2245B	XSP-2200B	XSP-2205B	XSP-2206B	XSP-2220B	XSP-2226B		
TITLE	EQUIP.	TAG	Logic Diagram Document No.	PAID Page No.	DESCRIPTION	TRIP RELAY CENTER (NOTE 4)	INTERLOCK NO.	LOCATION	UCP 2101B	UCP 2101B	UCP 2101B	UCP 2101B	UCP 2101B	UCP 2101B	UCP 2101B	UCP 2101B	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	
SOUR GAS RECIPROCATING COMPRESSOR	C-2101 / C-2102	ESDR2A-C-2101-B	BK-GCS-HY-120-IN-DW-0006	9B of 10	CLIENT ESD SIGNAL	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		ESDR2-C-2101-B	BK-GCS-HY-120-IN-DW-0006	9B of 10	CLIENT ESD SIGNAL	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		ESD-2231 B	BK-GCS-HY-120-IN-DW-0006	9B of 10	EMERGENCY SHUTDOWN PUSH BUTTON ON UCP	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		ESD-2245 B	BK-GCS-HY-120-IN-DW-0006	8B of 10	EMERGENCY SHUTDOWN PUSH BUTTON ON LCP	USD	I-60B	LCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TS-2191 B	BK-GCS-HY-120-IN-DW-0006	1B of 10	1ST STAGE DISCHARGE TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TS-2194 B	BK-GCS-HY-120-IN-DW-0006	1B of 10	2ND STAGE DISCHARGE TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		PS-2133 B	BK-GCS-HY-120-IN-DW-0006	1B of 10	2ND STAGE DISCHARGE LINE PRESSURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		PS-2204 B	BK-GCS-HY-120-IN-DW-0006	3B of 10	LUB OIL PRESSURE LOW LOW	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		PS-2220 B	BK-GCS-HY-120-IN-DW-0006	5B of 10	COOLING WATER LINE PRESSURE LOW LOW	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2221 B	BK-GCS-HY-120-IN-DW-0006	5B of 10	COOLING WATER TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		VT-2200 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		VT-2201 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		VT-2202 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2216 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	BEARING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2217 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	PACKING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2218 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	BEARING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2220 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MID BEARING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2219 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	PACKING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2214 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MAIN MOTOR NDE BEARING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TT-2215 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MAIN MOTOR DE BEARING TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TE-2222 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MAIN MOTOR WINDING W TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TE-2225 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MAIN MOTOR WINDING V TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
		TE-2228 B	BK-GCS-HY-120-IN-DW-0006	7B of 10	MAIN MOTOR WINDING U TEMPERATURE HIGH HIGH	USD	I-60B	UCP 2101B	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	S	T	T	T	T	T
General Notes:																																
LEGEND:																																
LCP: LOCAL CONTROL PANEL UCP: UNIT CONTROL PANEL MCC: MOTOR CONTROL CENTER																																
S: START SP: STOP T: TRIP O: OPEN C: CLOSE																																



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض / بسته ایستگاه تقویت فشار گاز
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد BK-HD-GCS-CO-0008_03)



HAVAYAR
INDUSTRIAL GROUP

CAUSE AND EFFECT CHARTS LIST

شماره پیمان:
053 - 073 - 9184

نسخه	سریال	نوع	رشته	تسهیلات	صادر	بسته	پروژه
V04	0001	LI	IN	120	HY	GCS	BK

شماره صفحه: 9 از 14

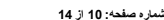
ALARM SIGNALS OF COMPRESSOR B

EFFECTS

CAUSE

TITLE	EQUIP.	TAG	Logic Diagram Document No.	P&ID Page No.	DESCRIPTION	INTERLOCK NO.	LOCATION	UCP 2101B	UCP 2101B	LCP 2101B	
SOUR GAS RECIPROCATING COMPRESSOR	C2101 / C-2102	XF-2245B	BK-GCS-HY-120-IN-DW-0006	8B of 10	NO COMMON ALARM (LAMP OFF)	I-65B 	LCP 2101 B	S	S	S	
		ESDL-2245B	BK-GCS-HY-120-IN-DW-0006	8B of 10	NO COMMON SHUTDOWN (LAMP OFF)		LCP 2101 B	S	S	S	
		XR-2202B	BK-GCS-HY-120-IN-DW-0006	3B of 10	AXU. OIL PUMP MOTOR RUN FEED BACK		LCP 2101 B	S	S	S	
		PT-2204B	BK-GCS-HY-120-IN-DW-0006	3B of 10	LUBE OIL PRESSURE		UCP 2101 B	S	S	S	
		TT-2204B	BK-GCS-HY-120-IN-DW-0006	3B of 10	LUBE OIL TEMPERATURE		UCP 2101 B	S	S	S	
		PT-2220B	BK-GCS-HY-120-IN-DW-0006	5B of 10	COOLING WATER PRESSURE		UCP 2101 B	S	S	S	
		TT-2221B	BK-GCS-HY-120-IN-DW-0006	5B of 10	COOLING WATER TEMPERATURE		UCP 2101 B	S	S	S	
		XZSO-2225B	BK-GCS-HY-120-IN-DW-0006	7B of 10	BARING DEVICE UNLOCK FEED BACK (ON)		UCP 2101 B	S	S	S	
		XF-2200B	BK-GCS-HY-120-IN-DW-0006	7B of 10	NO MAIN MOTOR FAULT		UCP 2101 B	S	S	S	
		PT-2210B	BK-GCS-HY-120-IN-DW-0006	4B of 10	PRESSURE PACKING N2 PRESSURE		UCP 2101 B	S	S	S	
		PT-2211B	BK-GCS-HY-120-IN-DW-0006	4B of 10	ROD PACKING N2 PRESSURE		UCP 2101 B	S	S	S	
		LT-2200B	BK-GCS-HY-120-IN-DW-0006	3B of 10	LUBE OIL LEVEL		UCP 2101 B	S	S	S	
		HSL-2242B1	BK-GCS-HY-120-IN-DW-0006	2B of 10	CAPACITY SWITCH ON 0% LOAD		UCP 2101 B	S	S	S	
		XSS-2123B	BK-GCS-HY-120-IN-DW-0006	9B of 10	CLIENT PERMISSIVE TO START (NOTE 1)		UCP 2101 B	S	S	S	
General Notes:											
LEGEND: LCP: LOCAL CONTROL PANEL UCP: UNIT CONTROL PANEL MCC: MOTOR CONTROL CENTER				S: START SP: STOP T: TRIP O: OPEN C: CLOSE		NOTE 1: A REQUEST PERMISSION SIGNAL (XSS-2126B) FROM UCP WILL BE SENT TO DCS, THEN START PERMISSIOM SIGNAL (HSS-2125B) FROM DCS WILL BE SENT TO UCP.					

CAUSE AND EFFECT CHARTS LIST

[illegible]

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض / بسته ایستگاه تقویت فشار گاز خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)							  
	CAUSE AND EFFECT CHARTS LIST							شماره صفحه: 11 از 14
	نسخه	سریال	نوع مدرک	رشته	تجهیزات	صادر کننده	بسته کاری	پروژه
V04	0001	LI	IN	120	HY	GCS	BK	شماره پیمان: 053 - 073 - 9184

SHUTDOWN OF COMPRESSOR C							TITLE	SOUR GAS RECIPROCATING COMPRESSOR																											
EFFECTS							EQUIP.	EFFECT	C-2101 / C-2102																										
									TAG NO.	ESD2A-C-2101-C	ESD2-C-2101-C	PSOV-2201C	PSOV-2202C	PSOV-2203C	PSOV-2204C	PSOV-2205C	PSOV-2123C	XSP-2200C	XSB-2202C	XSP-2202C (NOTE 2)	XSP-2203C	XSP-2221C	XSP-2222C	XSP-2223C	XSP-2201C (NOTE 2)	ESBL-2245C	XBP-2200C	XBP-2206C	XBP-2206C	XBP-2230C	XBP-2226C				
CAUSE							LOCATION	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	LCP 2101C	MCC	MCC	MCC	MCC	MCC						
								UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	UCP 2101C	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	MCC	
SOUR GAS RECIPROCATING COMPRESSOR C-2101 / C-2102	EQUIP.	ESDR2A-C-2101-C	BK-GCS-HY-120-IN-DW-0006	9C of 10	CLIENT ESD SIGNAL	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		ESDR2-C-2101-C	BK-GCS-HY-120-IN-DW-0006	9C of 10	CLIENT ESD SIGNAL	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		ESD-2231 C	BK-GCS-HY-120-IN-DW-0006	9C of 10	EMERGENCY SHUTDOWN PUSH BUTTON ON UCP	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		ESD-2245 C	BK-GCS-HY-120-IN-DW-0006	8C of 10	EMERGENCY SHUTDOWN PUSH BUTTON ON LCP	USD	I-60C	LCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		TS-2191 C	BK-GCS-HY-120-IN-DW-0006	1C of 10	1ST STAGE DISCHARGE TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		TS-2194 C	BK-GCS-HY-120-IN-DW-0006	1C of 10	2ND STAGE DISCHARGE TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		PS-2133 C	BK-GCS-HY-120-IN-DW-0006	1C of 10	2ND STAGE DISCHARGE LINE PRESSURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
		PS-2204 C	BK-GCS-HY-120-IN-DW-0006	3C of 10	LUB OIL PRESSURE LOW LOW	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		PS-2220 C	BK-GCS-HY-120-IN-DW-0006	5C of 10	COOLING WATER LINE PRESSURE LOW LOW	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2221 C	BK-GCS-HY-120-IN-DW-0006	5C of 10	COOLING WATER TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		VT-2200 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		VT-2201 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		VT-2202 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	COMPRESSOR FRAM VIBRATION HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2216 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	BEARING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2217 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	PACKING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2218 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	BEARING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2220 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MID BEARING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2219 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	PACKING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2214 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MAIN MOTOR NDE BEARING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TT-2215 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MAIN MOTOR DE BEARING TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TE-2222 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MAIN MOTOR WINDING W TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TE-2225 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MAIN MOTOR WINDING V TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
		TE-2228 C	BK-GCS-HY-120-IN-DW-0006	7C of 10	MAIN MOTOR WINDING U TEMPERATURE HIGH HIGH	USD	I-60C	UCP 2101C	T	T	C	C	C	C	C	O	C	T	S	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
LEGEND: LCP: LOCAL CONTROL PANEL UCP: UNIT CONTROL PANEL MCC: MOTOR CONTROL CENTER					S: START SP: STOP T: TRIP O: OPEN C: CLOSE		NOTE 1: THE START PERMISSIVE REQUEST FROM UCP TO DCS, START PERMISSION OF UCP, AND START SEQUENCE (AUTOMATICALLY) SHALL BE CONSIDERED WHEN THE COMPRESSOR START IS FROM UCP. NOTE 2: DURING THE COMPRESSOR STOP, WILL BE STOPPED WITH DELAY TIME. NOTE 3: BEFORE STARTING THE COMPRESSOR FROM LCP, PREHEATING AND PRELUBRICATION STEPS (DISCUSSED IN CONTROL PHILOSOPHY"BK-GCS-HY-120-PR-PH-0001") SHALL BE DONE BY OPERATOR VIA LCP. NOTE4: RELAY TRIP CENTER IS BACK UP OF PLC.																												



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نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض / بسته ایستگاه تقویت فشار گاز
خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک
(قرارداد BK-HD-GCS-CO-0008_03)



CAUSE AND EFFECT CHARTS LIST

شماره پیمان:
053 - 073 - 9184

نسخه	سریال	نوع	رشته	تسهیلات	صادر	بسته	پروژه
V04	0001	LI	IN	120	HY	GCS	BK

شماره صفحه: 13 از 14

ALARM SIGNALS OF COMPRESSOR C

EFFECTS

CAUSE

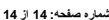
TITLE	EQUIP.	TAG	Logic Diagram Document No.	P&ID Page No.	DESCRIPTION	INTERLOCK NO.	LOCATION	UCP 2101C	UCP 2101C	LCP 2101C
SOUR GAS RECIPROCATING COMPRESSOR	C2101 / C-2102	XF-2245C	BK-GCS-HY-120-IN-DW-0006	8C of 10	NO COMMON ALARM (LAMP OFF)	I-65C 	LCP 2101 C	S	S	S
		ESDL-2245C	BK-GCS-HY-120-IN-DW-0006	8C of 10	NO COMMON SHUTDOWN (LAMP OFF)		LCP 2101 C	S	S	S
		XR-2202C	BK-GCS-HY-120-IN-DW-0006	3C of 10	AXU. OIL PUMP MOTOR RUN FEED BACK		LCP 2101 C	S	S	S
		PT-2204C	BK-GCS-HY-120-IN-DW-0006	3C of 10	LUBE OIL PRESSURE		UCP 2101 C	S	S	S
		TT-2204C	BK-GCS-HY-120-IN-DW-0006	3C of 10	LUBE OIL TEMPERATURE		UCP 2101 C	S	S	S
		PT-2220C	BK-GCS-HY-120-IN-DW-0006	5C of 10	COOLING WATER PRESSURE		UCP 2101 C	S	S	S
		TT-2221C	BK-GCS-HY-120-IN-DW-0006	5C of 10	COOLING WATER TEMPERATURE		UCP 2101 C	S	S	S
		XZSO-2225C	BK-GCS-HY-120-IN-DW-0006	7C of 10	BARING DEVICE UNLOCK FEED BACK (ON)		UCP 2101 C	S	S	S
		XF-2200C	BK-GCS-HY-120-IN-DW-0006	7C of 10	NO MAIN MOTOR FAULT		UCP 2101 C	S	S	S
		PT-2210C	BK-GCS-HY-120-IN-DW-0006	4C of 10	PRESSURE PACKING N2 PRESSURE		UCP 2101 C	S	S	S
		PT-2211C	BK-GCS-HY-120-IN-DW-0006	4C of 10	ROD PACKING N2 PRESSURE		UCP 2101 C	S	S	S
		LT-2200C	BK-GCS-HY-120-IN-DW-0006	3C of 10	LUBE OIL LEVEL		UCP 2101 C	S	S	S
		HSL-2242C1	BK-GCS-HY-120-IN-DW-0006	2C of 10	CAPACITY SWITCH ON 0% LOAD		UCP 2101 C	S	S	S
		XSS-2123C	BK-GCS-HY-120-IN-DW-0006	9C of 10	CLIENT PERMISSIVE TO START (NOTE 1)		UCP 2101 C	S	S	S

General Notes:

LEGEND:
LCP: LOCAL CONTROL PANEL
UCP: UNIT CONTROL PANEL
MCC: MOTOR CONTROL CENTER

S: START
SP: STOP
T: TRIP
O: OPEN
C: CLOSE

NOTE 1: A REQUEST PERMISSION SIGNAL (XSS-2126C) FROM UCP WILL BE SENT TO DCS, THEN START PERMISSIOM SIGNAL (HSS-2125C) FROM DCS WILL BE SENT TO UCP.

[illegible]