

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان: 053 - 073 - 9184	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تجهیزات 120	رشته IN	نوع مدرک DT	سریال 0016	نسخه D05	شماره صفحه: 1 از 27

طرح نگهداشت و افزایش تولید 27 مخزن

DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

نگهداشت و افزایش تولید میدان نفتی بینک

D05	MAR.2025	AFC	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D04	NOV.2024	AFC	P.Hajisadeghi	M.Fakharian	M.Sadeghian	
D03	AUG.2024	IFA	P.Hajisadeghi	M.Fakharian	M.Sadeghian	
D02	FEB.2024	IFA	P.Hajisadeghi	M.Fakharian	S.Faramarzpour	
D01	OCT.2022	IFA	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
D00	MAY.2022	IFC	P.Hajisadeghi	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval
Class: 1		CLIENT Doc. Number: 'F9Z-708936				
status: - IDC: Inter-Discipline Check - IFC: Issued For Comment - IFA: Issued For Approval - AFD: Approved For Design - AFC: Approved For Construction - AFP: Approved For Purchase - AFQ: Approved For Quotation - IFI: Issued For Information - AB-R: As-Built for CLIENT Review - AB-A: As-Built -Approved						



NISOC

نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

پروژه

BK

بسته کاری

GCS

صادر کننده

PEDCO

تجهیزات

120

رشته

IN

نوع مدرک

DT

سریال

0016

نسخه

D05

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REVISION RECORD SHEET

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4	X				X	
5	X	X	X		X	
6	X	X	X		X	
7	X	X	X	X	X	
8	X	X	X	X	X	
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10	X	X	X	X	X	
11	X	X	X	X	X	
12	X	X	X	X	X	
13	X	X	X		X	X
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15	X	X	X	X		X
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23	X	X	X			X
24	X	X	X	X	X	
25	X	X	X			X
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 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک								
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
	شماره پیمان:	پروژه	کارتی	بسته	صادر کننده	تهیهات	رشته	نوع مدرک	سریال
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05	شماره صفحه: 3 از 27

REFERENECE DOCUMENT

F&G Location Layout For Process AREA	BK-GCS-PEDCO-120-IN-PY-0005
F&G Location Layout For Buildings	BK-GCS-PEDCO-120-IN-PY-0006
FIRE & GAS DETECTION DESIGN CRITERIA	BK-GCS-PEDCO-120-IN-DC-0001
SPEC. FOR FIRE & GAS SENSOR AND DEVICES	BK-GNRAL-PEDCO-000-IN-SP-0009
F&G Cause and Effect Diagram For Process Area	BK-GCS-PEDCO-120-IN-DG-0009
F&G Cause and Effect Diagram For Buildings	BK-GCS-PEDCO-120-IN-DG-0010

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	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک		سریال
053 - 073 – 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05	شماره صفحه: 4 از 27

GENERAL NOTES:

- 1 - Vendor shall identify and detail any deviation from the present Data Sheet
- 2- All equipments/detectors listed in this document shall be supplied with related calibration and test equipments.
- 3 - S.S. Name plate including project description to be provided.
- 4- Low power consumption to be considered.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							  
DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه
053 - 073 – 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05
شماره صفحه: 5 از 27								

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	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 6 از 27
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DATASHEET FOR FLAMMABLE GAS DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temprature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Function
	9	Service
	9	Case Color
	10	Detector Type
	11	Sensor Type
	12	Covering Range
	13	Accuracy
	14	Detection Range
	15	Repeatability
	16	Response time
	17	Life Time
	18	Output Signal
	19	System Wiring
	20	Local Indicator LCD Type
	21	Built-in-Test
	22	Power Supply
	23	Power Consumption
	24	Electrical Connection
	25	Body and Housing Material
	26	Mounting
	27	Mounting Accessories Material
	28	Degree of Protection
	29	Explosion Protection
	30	Safety Integrity Level
	31	Certificate
	32	Nameplates
	33	Manufacturer
	34	Model No.

Notes :

- VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
- The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,not at all.
- The response of a detector shall be clearly visible from the outside by a flashing ligh-emitting(LED) of sufficient brightness.
- The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.
- Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands,shelter, other accessories (including splash guard, Calibration Kit, etc)
- Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.
- All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
- Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
- Analogue data with two digital signals as low, high alarm to be sent by detector to F&G system via multicore cable. Also analogue data to be shown by local indicator(LCD) at field.
- FGDs shall be capable to connect to Smart Hart Communication.



احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره ۵ هجری:

053 - 073 - 9184

شماره صفحہ: 7؛ 27

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نسخه

FLAMMABLE GAS DETECTOR LIST

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1. Calibration and test devices for Flammable Gas Detectors to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 		
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT									
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 8 از 27
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DATASHEET FOR TOXIC GAS DETECTOR				
GENERAL	1	Tag No.	See Next Page	
	2	Ambient Temprature Min / Max (°C)	-5 ~ 50 (°C)	
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)	
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty	
	5	Area Classification	See Next Page'	
	6	F&G Location Layout No.	See Next Page	
	7	Location of Installation	See Next Page	
DETECTOR	8	Function	Toxic Gas Detector (HC)	
	9	Service	See Next Page	
	10	Detector Type	Conventional	
	11	Sensor Type	electrochemical type	
	12	Measuring Range / Calibration Range	0 - 50 ppm / 5 - 20 ppm	
	13	Accuracy	± 2% of full scale	
	14	Repeatability	<±2% of Full Scale	
	15	Response time	<5 Sec	
	16	Life Time	Typical 2 to 5 Years	
	17	Output Signal	4~20 Ma+ Hart (signal+power)	
	18	System Wiring	3 wire	
	19	Local Indicator LCD Type	Yes	
	20	Built-in-Test	Manual and Automatic	
	21	Power Supply	24 VDC -Loop Powered	
	22	Power Consumption	VTA (Note 8)	
	23	Electrical Connection	M20 x 1.5	
	24	Body and Housing Material	Epoxy coated die cast aluminum(copper free)	
	25	Mounting	Bracket (Note 5)	
	26	Mounting Accessories Material	316 SS	
	27	Degree of Protection	See Next Page	
	28	Explosion Protection	See Next Page	
	29	Safety Integrity Level	SIL Rated (Minimum SIL 2)	
	30	Certificate	Calibration, SIL, IEC 60529 (IP), ATEX , MATERIAL	
	31	Nameplates	Stainless Steel	
		32	Manufacturer	VTA
		33	Model No.	VTA
Notes :				
1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable				
2. The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,not at all.				
3. The response of a detector shall be clearly visible from the outside by a flashing high-emitting(LED) of sufficient brightness.				
4. The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.				
5. Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands,shelter, other accessories (including splash guard, Calibration Kit, etc)				
6. Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.				
7. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.				
8. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.				
9. Analogue data with two digital signals as low, high alarm to be sent by detector to F&G system via multicore cable. Also analogue data to be shown by local indicator(LCD) at field.				
10. TGDs shall be capable to connect to Smart Hart Communication.				



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تا کم گاز در استگاه جمع آوری سنک



ماره پیمان:

053 - 073 - 9184

DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

نسخه

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شماره صفحه: 9 از 27

TOXIC GAS DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	TGD-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (4 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
2	TGD-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
3	TGD-2002	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
4	TGD-2003	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
5	TGD-2004	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (5 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
6	TGD-4001A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
7	TGD-4002A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
8	TGD-4003A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
9	TGD-4004A	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
10	TGD-4001B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
11	TGD-4002B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
12	TGD-4003B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
13	TGD-4004B	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
14	TGD-4001C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
15	TGD-4002C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
16	TGD-4003C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
17	TGD-4004C	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (7 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
18	TGD-5001A	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
19	TGD-5001B	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
20	TGD-5001C	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (8 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
21	TGD-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone1, IIB T4	Hydrocarbon	
22	TGD-6002	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone1, IIB T4	Hydrocarbon	
23	TGD-6003	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (9 of 12)	Outdoor	IP 65	Eexd Zone1, IIB T4	Hydrocarbon	
24	TGD-7001	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
25	TGD-7002	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
26	TGD-7003	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
27	TGD-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
28	TGD-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
29	TGD-1103	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
30	TGD-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
31	TGD-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
32	TGD-1203	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (3 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	
33	Calibration and test device for Toxic Gas Detectors							NOTE 1

1. Calibration and test devices for Toxic Gas Detectors to be advise by vendor.

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	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدارک	سریال	نسخه	شماره صفحه: 10 از 27
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DATASHEET FOR FLAME DETECTOR		
GENERAL	1	Tag No.
	1	Ambient Temperature Min / Max (°C)
	2	Design Relative Humidity Min / Max (%)
	3	Atmospheric Condition
	6	F&G Location Layout No.
	4	Area Classification
	5	Location of Installation
DETECTOR	6	Function
	7	Service
	8	Detector Type
	9	Sensor Type
	10	Spectral Response
	11	Field of Vision
	12	Range (m)
	13	Sensitive wave length
	14	Response time
	15	Output Signal
	16	System Wiring
	17	Built-in-Test
	18	Power Supply
	19	Power Consumption
	20	Electrical Connection
	21	Body and Housing Material
	22	Mounting
	23	Mounting Accessories Material
	24	Degree of Protection
	25	Explosion Protection
	26	Safety Integrity Level
	27	Certificate
	28	Nameplates
	30	Manufacturer
	31	Model No.

Notes :

1. VTA : Vendor To Advise. VTC : Vendor To Confirm N/A : Not Applicable
2. Vendor scope of supply includes: All Mounting Accessories, cable glands, sunshade, other accessories (including air shield, swivel elbow union, sun and rain protection, etc) and also device shall have self testing ability, IR3 test lamp (with charger), Status Indicator (LED with status, fault and alarm indication) , test magnets (if required).
3. Vendor shall consider specific requirement for proper operation of detector according to ambient humidity if required.
4. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
5. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
6. FDs shall be capable to connect to Smart Hart Communication.



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

شماره صفحه: 11 از 27

FLAME DETECTOR LIST

[illegible]

1. Calibration and test devices for Flame Detectors to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک					 			
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 27 از 12
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05	

DATASHEET FOR HORN		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	System Type
	9	Function
	10	Sound Level
	11	Service
	12	Adjustable Sound Intensity
	13	Frequency Range
	14	Multiple Terminal Connection
	15	No. of Selectable Tones
	16	Power Supply
	17	System Wiring
	18	Power Consumption
	19	Electrical Connection
	20	Body and Housing Material
	21	Installation
	22	Mounting
	23	Mounting Accessories Material
	24	Degree of Protection
	25	Explosion Protection
	26	Weather Proof and Dust Proof
	27	Safety Integrity Level
	28	Certificate
	29	Nameplates Material
	30	Manufacturer
	31	Model No.

Notes :

- VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
- Vendor shall specify weight, color and dimentions of devices and accessories.
- The value of End Of Line (EOL) resistor shall be suggested by vendor.
- Mounting Accessories, sunshade and cable gland are included in vendor scope of supply.
- 2 different tones one for Flammable/ Toxic gas detection (non-continuous) and one for fire detection (continuous). Each tone shall be activated by receiveing dedicated signal.
- All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
- Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
- Horn alarms shall have a range of at least 1.5 km in still air.
- Junction box(EXE type with 7 aumored output cable) for each conventional Horns &related beacons and cable gland for connection to junction box are included in vendor scope of supply. (All internal termination cabling in between shall be done by vendor.)



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری پینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

شماره صفحه: 13 از 27

HORN LIST

[illegible]

1. Calibration and test devices for Horn to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT							
شماره پیمان:	پروژه	بسته کاری	صادرکننده	نهیلات	رشته	نوع مدرک	سریال	نسخه
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05
شماره صفحه: 14 از 27								

DATASHEET FOR BEACON			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	Conventional/ Addressable
	9	Service	See Next Page
	10	Function	• Red for fire detection • Blue for Toxic Gas Detector(if applicable) • Yellow for flammable gas detection
	11	Flash Rate	60 FPM/1HZ (VTA)
	12	Colour	See Next Page
	13	Lens Type	Glass
	14	Field of View	360°
	15	Tube type	Xenon
	16	Effective Intensity	200 cd to 1000 cd candela (VTA)
	17	Power Supply	24 VDC-Loop powered
	18	System Wiring	2 Core x 1.5 (for each Blue/ Red/Yellow Beacon)
	19	Power Consumption	VTA (Note 4)
	20	Electrical Connection	M20 x 1.5
	21	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	22	Installation	Fix
	23	Mounting	Bracket for outdoor and wall mounted for indoor type (Note 2)
	24	Mounting Accessories Material	316 SS
	25	Degree of Protection	See Next Page
	26	Explosion Protection	See Next Page
	27	Weather Proof and Dust Proof	Yes
	28	Safety Integrity Level	Non SIL
	29	Certificate	IEC 60529 (IP), ATEX , BSI EN54-3
30	Body Color	• Red for fire and flammable gas detection • Red for Toxic Gas Detector(if applicable)	
	31	Nameplates Material	Stainless Steel
	32	Manufacturer	VTA
	33	Model No.	VTA
Notes : 1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable 2. Vendor shall specify weight, color and dimentions of devices and accessories. 3. The value of End Of Line (EOL) resistor shall be suggested by vendor. 4. Mounting Accessories, sunshade and cable gland are included in vendor scope of supply. 5. 3 different colors to be selected for lights of beacon: • Red for fire detection • Blue for Toxic Gas Detector(if applicable) • Yellow for flammable gas detection 6. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body. 7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.			

 NISOC	تجهیزات و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								شماره صفحه: 15 از 27
	شماره پیمان:	پروژه	بسته کاری	مادر کننده	تهیه کننده	رشته	نوع مدرک	میراث	
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05	

BEACON LIST									
ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	COLOR	SERVICE	REMARKS
1	BB-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
2	BB-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
3	BB-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
4	BB-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
5	BB-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
6	BB-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
7	BB-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
8	BB-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
9	BB-8001	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks & Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
10	BB-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Conventional
11	BB-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
12	BB-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
13	BB-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
14	BB-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
15	BB-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
16	BB-1401	Ware house	BK-GCS-PEDCO-120-IN-PY-0006 (7 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Blue	Hydrocarbon	Addressable
17	BR-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
18	BR-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
19	BR-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
20	BR-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
21	BR-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
22	BR-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
23	BR-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
24	BR-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
25	BR-8001	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks & Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
26	BR-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Conventional
27	BR-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
28	BR-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
29	BR-1103	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Red	Hydrocarbon	Addressable
30	BR-1104	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Red	Hydrocarbon	Addressable
31	BR-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
32	BR-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
33	BR-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
34	BR-1302	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Indoor	IP 54	Unclassified	Red	Hydrocarbon	Addressable
35	BR-1401	Ware house	BK-GCS-PEDCO-120-IN-PY-0006 (7 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Red	Hydrocarbon	Addressable
36	BY-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
37	BY-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
38	BY-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
39	BY-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
40	BY-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
41	BY-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
42	BY-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
43	BY-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
44	BY-8001	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks & Air Compressor / Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
45	BY-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Conventional
46	BY-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
47	BY-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
48	BY-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
49	BY-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
50	BY-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
51	BY-1401	Ware house	BK-GCS-PEDCO-120-IN-PY-0006 (7 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Yellow	Hydrocarbon	Addressable
52	calibration and test device for Beacons								NOTE 1

1. Calibration and test devices for Beacons to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک					 			
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	پسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 16 از 27
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05	

DATASHEET FOR HYDROGEN GAS DETECTOR			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	Conventional
	9	Function	Hydrogen Gas Detector
	10	Service	See Next Page
	11	Sensor Type	CatalyticType (HGD)
	12	Measuring Range/Calibration Range	VTA/ 0 - 100% LEL
	13	Accuracy	<+/-2 ppm
	14	Life Time	Typical 2 to 5 Years
	15	Response time	< 5 Seconds
	16	Alarm Range	High Level :5% LEL , High High Level:10% LEL
	17	Repeatability	VTA
	18	Output Signal	4~20 Ma+ Hart (signal+power)
	19	Power Supply	24 VDC-Loop powered
	20	System Wiring	3 wire
	21	Power Consumption	VTA (Note 8)
	22	Electrical Connection	M20 x 1.5
	23	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	24	Installation	Fix
	25	Mounting	Bracket (Note 5)
	26	Mounting Accessories Material	316 SS
	27	Degree of Protection	See Next Page
	28	Explosion Protection	See Next Page
	29	Weather Proof and Dust Proof	Yes
	30	Safety Integrity Level	Non SIL
	31	Certificate	Calibration, SIL, IEC 60529 (IP), ATEX , MATERIAL
	32	Nameplates Material	Stainless Steel
	33	Manufacturer	VTA
	34	Model No.	VTA

Notes :

- VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
- The gas detectors shall still work after an extended period in operation ,without any low concentration of the specific gas ,none at all.
- The response of a detector shall be clearly visible from the outside by a flashing high-emitting(LED) of sufficient brightness.
- The detector shall be designed in such a way that ambient conditions, humidity, temperature and wind can not affect the sensor signal.
- Vendor scope of supply includes: Sensor, Transmitter, All Mounting Accessories, cable glands, other accessories (including splash guard, Calibration Kit, etc)
- Calibration kit contained CALIBRATION GAS, CALIBRATION TOOL, TEST MAGNETS (if required) shall be considered.
- All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
- Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
- HGDs shall be capable to connect to Smart Hart Communication.
- The VENDOR shall provide the zero stability and the drift of the full-scale sensitivity, in % LFL (for Catalytic GD), per month and year,



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض

احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک



DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

053 - 073 - 9184

شماره صفحه: 17 از 27

HYDROGEN GAS DETECTOR LIST								
ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	HGD-1101	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 65	Eexd 'Zone1, IIC T4	Hydroen (related to the batteries)	
2	HGD-1102	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 65	Eexd 'Zone1, IIC T4	Hydroen (related to the batteries)	
5	calibration and test device for HGDs							NOTE 1

1. Calibration and test devices for HGDs to be advise by vendor.

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 شرکت گاز و پارسا TE	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
	شماره پیمان:	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه
053 - 073 - 9184		BK	GCS	PEDCO	120	IN	DT	0016	D05

شماره صفحه: 18 از 27

DATASHEET FOR MANUAL ALARM CALL POINT			
GENERAL	1	Tag No.	See Next Page
	2	Ambient Tempreature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	Function	Manual Alarm
	9	Service	See Next Page
	10	Glass Type	Resettable type
	11	Switch Type	Single pole, Normally Closed , Hermetically Sealed (equipped with opening key for test, maintenance and reset)
	12	Detector Type	Conventional/Addressable
	13	Alarm Indicator	High Intensity Red LED
	14	Output Signal	Voltage Free Contact (24VDC,5A)
	15	System Wiring	2 Core
	16	Test Key	Required
	17	Power Supply	24 VDC-Loop powered
	18	Electrical Connection	M20 x 1.5
	19	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	20	Colour	Red With Black Marking Colour
	21	End of Line Resistor	Yes
	22	Mounting	Bracket (Note 2)
	23	Mounting Accessories Material	316 SS
	24	Degree of Protection	See Next Page
	25	Explosion Protection	See Next Page
	26	Safety Integrity Level	Non SIL
	27	Certificate	IEC 60529 (IP), ATEX , BSI EN54-11
	28	Nameplates Material	Stainless Steel
	29	Manufacturer	VTA
	30	Model No.	VTA

Notes :
1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Mounting Accessories, cable gland,sunshade are included in vendor scope of supply.
3. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.

MANUAL ALARM CALL POINT LIST								
ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	MAC-1001	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
2	MAC-1002	Area 1 - Pig Receiver Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
3	MAC-2001	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
4	MAC-2002	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
5	MAC-2003	Area 2 - Slug Catcher System Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
6	MAC-3001	Area 3 - Chemical Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
7	MAC-4001	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
8	MAC-4002	Area 4 - 1St. & 2nd Stage Gas Compressor Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
9	MAC-5001	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
10	MAC-5002	Area 5 - 1St. & 2nd Stage Air Cooler Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
11	MAC-6001	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
12	MAC-6002	Area 6 - Sump & Pig Launcher Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
13	MAC-7001	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
14	MAC-7002	Area 7 - Lean Glycol Storage Tank &Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
15	MAC-8001	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks& Air Compressor /Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
16	MAC-8002	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks& Air Compressor /Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
17	MAC-8003	Area 8 - Fuel Oil Storage Drum & Fire Water Storage Tanks& Air Compressor /Air Dryer Packages Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
18	MAC-9001	Area 9 - Diesel Generator Area	BK-GCS-PEDCO-120-IN-PY-0005 (3 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
19	MAC-1101	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIC T4	Hydroen (related to the batteries)	Conventional
20	MAC-1102	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
21	MAC-1103	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
22	MAC-1104	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
23	MAC-1105	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
23	MAC-1106	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
23	MAC-1107	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
23	MAC-1108	Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
24	MAC-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
25	MAC-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (4 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
26	MAC-1203	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
27	MAC-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
28	MAC-1302	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
29	MAC-1401	Ware house	BK-GCS-PEDCO-120-IN-PY-0006 (7 of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
30								
31								
32		calibration and test device for MACs						NOTE 1
1. Calibration and test devices for MACs to be advise by vendor.								

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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان: 053 - 073 - 9184	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	IN	DT	0016	D05
شماره صفحه: 20 از 27								

DATASHEET FOR LINEAR HEAT DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Detector Type
	9	Function
	10	Service
	11	Sensor Type
	12	Outer Sheath Material
	13	Overall Diameter (mm)
	14	Alarm Temperature
	15	Temperature Rise
	16	Cable Length
	17	Output Signal
	18	Power Supply
	19	System Wiring
	20	Electrical Connection
	21	Body and Housing Material
	22	Installation
	23	Mounting
	24	Mounting Accessories Material
	25	Degree of Protection
	26	Explosion Protection
	27	Weather Proof and Dust Proof
	28	Safety Integrity Level
	29	Certificate
	30	Nameplates Material
	31	Manufacturer
	32	Model No.

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Mounting Accessories, shelter and cable gland are included in vendor scope of supply.
3. All devices shall have stainless steel tag plate with their tag no. engraved on it which is fixed on the body.
4. All required mounting & Termination accessories to be provided by vendor.
9. Junction box (EXE type) as per Linear Heat detectors and internal cabling/cable gland for connection to junction box are included in vendor scope of supply.





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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT

شماره پیمان:

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0392

مستند سازی

صادر کنندہ

تسهلات

و شته

نوع مددک

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نسخه

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شماره صفحه: 21 از 27

LINEAR HEAT DETECTOR LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	LHD-7001	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
2	LHD-7002	Area 7 - Lean Glycol Storage Tank & Dehydration Package Area	BK-GCS-PEDCO-120-IN-PY-0005 (10 of 12)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Conventional
3	LHD-1201	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
4	LHD-1202	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
5	LHD-1203	Extension of Existing Elect. Building	BK-GCS-PEDCO-120-IN-PY-0006 (5of 7)	Outdoor	IP 65	Eexd Zone2, IIB T4	Hydrocarbon	Addressable
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7								
8								
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10								
11								
12								
13								
14								
15								
16								
17								
18								
19	calibration and test device for LHDs							NOTE 1

1. Calibration and test devices for LHDs to be advise by vendor.

 NISOC	تکهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک						 	
	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT							
شماره پیمان: 053 - 073 - 9184	پروژه: BK	بسته کاری: GCS	صادر کننده: PEDCO	تجهیزات: 120	رشته: IN	نوع مدارک: DT	سریال: 0016 نسخه: D05	شماره صفحه: 27 از 22

DATASHEET FOR SMOKE DETECTOR/HEAT & SMOKE DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Detector Type
	9	Function
	10	Service
	11	Sensor Type
	12	Rate of Rise(ROR)
	13	Built-in-Test
	14	Area Coverage
	15	Operating Temperature
	16	Alarm Set point
	17	Output Signal
	18	Power Supply
	19	System Wiring
	20	Contact Type & Rating
	21	Power Consumption
	22	Electrical Connection
	23	Body and Housing Material
	24	Installation
	25	Sampling Frequency
	26	Mounting
	27	Mounting Accessories Material
	28	Degree of Protection
	29	Explosion Protection
	30	Weather Proof and Dust Proof
	31	Safety Integrity Level
	32	Certificate
	33	Sensitivity Adjustable Required
	34	Indicator
	35	Nameplates Material
	36	Manufacturer
	37	Model No.

Notes :

1. VTA : Vendor To Advise. VTC : Vendor To Confirm N/A : Not Applicable
2. Detectors shall have an inherently stable operation with built in compensation being impaired by dust, dirt or humidity.
3. All circuitry must be protected against electrical transients and electromagnetic interferences.
4. Faulty zone wiring shall not damage the detector.
5. A Built in barrier shall prevent entry of insects in the sensors.
6. Mounting Accessories, cable gland, end of line resistor are included in vendor scope of supply.
7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
8. Remote Indicator For False Ceiling /False Floor Smoke detector shall be considered.

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	DATA SHEETS FOR F&G DETECTORS & EQUIPMENT									
	پروژه	بسته کاری	صادر کننده	تهیه کننده	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: 24 از 27	
053 - 073 - 9184	BK	GCS	PEDCO	120	IN	DT	0016	D05		

DATASHEET FOR BELL										
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GENERAL	1	Tag No.	See Next Page
	2	Ambient Temperature Min / Max (°C)	-5 ~ 50 (°C)
	3	Design Relative Humidity Min / Max (%)	0~ 100 (%)
	4	Atmospheric Condition	Non-Acidic, Harsh and Dusty
	5	Area Classification	See Next Page
	6	F&G Location Layout No.	See Next Page
	7	Location of Installation	See Next Page
DETECTOR	8	System Type	See Next Page
	9	Sound Pressure Level	80 dB (At 1 meter) (VTA)
	10	Service	See Next Page
	11	Adjustable Sound Intensity	Yes
	12	Adjustable Sound In Intensity	Yes
	13	No. of Selectable Tones	Minimum 2
	14	Power Supply	24 VDC-Loop powered
	15	System Wiring	2 Core x 1.5
	16	Power Consumption	VTA (Note 4)
	17	Electrical Connection	M25 x 1.5
	18	Body and Housing Material	Epoxy coated die cast aluminum (copper free)
	19	Installation	Fix
	20	Mounting	Wall mounted (Note 2)
	21	Mounting Accessories Material	316 SS
	22	Degree of Protection	See Next Page
	23	Explosion Protection	See Next Page
	24	Weather Proof and Dust Proof	Yes
	25	Safety Integrity Level	Non SIL
	26	Certificate	IEC 60529 (IP), ATEX , BSI EN54-3
	27	Nameplates Material	Stainless Steel
	28	Manufacturer	VTA
	29	Model No.	VTA

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Vendor shall specify weight, color and dimentions of devices and accessories.
3. Mounting Accessories, sunshade and cable gland are included in vendor scope of supply.
4. All devices shall have stainless steel tag plate with their tag no engraved on it which is fixed on the body.
5. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.



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بسته کاری

صادر کنندہ

تسهيلات

رشته

ع مدرک

سویال

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شماره صفحه: 25 از 27

BELL LIST

ITEM	TAG NO.	LOCATION	LAYOUT	Indoor / Outdoor	INGRESS PROTECTION	ELECTRICAL PROTECTION	SERVICE	REMARKS
1	BL-1101	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
3	BL-1102	Extension of Existing Control Building	BK-GCS-PEDCO-120-IN-PY-0006 (2 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
4	BL-1301	CCTV Control Room	BK-GCS-PEDCO-120-IN-PY-0006 (6 of 7)	Indoor	IP 54	Unclassified	Hydrocarbon	Addressable
5								
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7								
8								
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10								
11								
12								
13								
14								
15	calibration and test device for Bells							NOTE 1

1. Calibration and test devices for Bells to be advise by vendor.

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DATA SHEETS FOR F&G DETECTORS & EQUIPMENT								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تجهیزات	رشته	نوع مدرک	سریال	نسخه
	BK	GCS	PEDCO	120	IN	DT	0016	D05
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DATASHEET FOR HEAT DETECTOR		
GENERAL	1	Tag No.
	2	Ambient Temperature Min / Max (°C)
	3	Design Relative Humidity Min / Max (%)
	4	Atmospheric Condition
	5	Area Classification
	6	F&G Location Layout No.
	7	Location of Installation
DETECTOR	8	Detector Type
	9	Function
	10	Service
	11	Sensor Type
	12	Rate of Rise(ROR)
	13	Built-in-Test
	14	Area Coverage
	15	Operating Temperature
	16	Alarm Set point
	17	Output Signal
	18	Power Supply
	19	System Wiring
	20	Contact Type & Rating
	21	Power Consumption
	22	Electrical Connection
	23	Body and Housing Material
	24	Installation
	25	Sampling Frequency
	26	Mounting
	27	Mounting Accessories Material
	28	Degree of Protection
	29	Explosion Protection
	30	Weather Proof and Dust Proof
	31	Safety Integrity Level
	32	Certificate
	33	Sensitivity Adjustable Required
	34	Indicator
	35	Nameplates Material
	36	Manufacturer
	37	Model No.

Notes :

1. VTA : Vendor To Advice. VTC : Vendor To Confirm N/A : Not Applicable
2. Detectors shall have an inherently stable operation with built in compensation being impaired by dust, dirt or humidity.
3. All circuitry must be protected against electrical transients and electromagnetic interferences.
4. Faulty zone wiring shall not damage the detector.
5. A Built in barrier shall prevent entry of insects in the sensors.
6. Mounting Accessories, cable gland, end of line resistor are included in vendor scope of supply.
7. Low power consumption to be considered. Quiescence power consumption and alarm power consumption to be specified by vendor.
8. Remote Indicator For False Ceiling /False Floor Heat detector shall be considered.



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شماره صفحه: 27 از 27

HEAT DETECTOR LIST

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1. Calibration and test devices for LHDs to be advise by vendor.