

## NOTES 1- ALL AMMETERS OF MOTORS HAVE TO BE 6xIn. 2- CATEGORY DESCRIPTION: F1: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR I<63A FEEDERS. F2: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 63A=<I<100A FEEDERS. F3: SIMPLE 4-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 100A=<I FEEDERS. F4: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR I<63A FEEDERS. F5: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 63A=<I<100A FEEDERS. F6: SIMPLE 3-POLE MCCB FEEDER WITH THERMAL/MAGNETIC TRIPS, FOR 100A=<I FEEDERS. F7: SIMPLE 2-POLE MCCB FEEDER FOR FEEDING SINGLE PHASE LOADS (PH+N OR 2-PH) M1: DIRECT ON LINE MOTOR STARTER FEEDERS FOR P < 4kW, (SWITCH FUSE+CONTACTOR+BIMETAL+R/L SIGNALING) M2: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 4kW≤P<18.5kW, (FUSE+CONTACTOR+BIMETAL+R/L SIGNALING+R/L AMMETER) M3: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 18.5kW ≤ P<30kW, (SWITCH FUSE+CONTACTOR+OVERLOAD RELAY +R/L SIGNALING+R/L AMMETER+EARTH LEAKAGE RELAY+PHASE CONTROL) M4: DIRECT ON LINE MOTOR STARTER FEEDERS FOR 30kW ≤ P /D02/ (SWITCH FUSE + CONTACTOR + R/L SIGNALING+ R/L AMMETER+MOTOR PROTECTION RELAY 3- CORE BALANCE CT RATING OF EARTH LEAKAGE RELAYS SHALL BE ACCORDING TO RELAY MANUFACTURER STANDARD 4- VOLTAGE AND CURRENT TRANSFORMERS SHALL HAVE APPROPRIATE VA. REFERENCE DRAWING DRG No ELECTRICAL LOAD LIST OF WELL PADS 5- THIS SWITCHGEAR SHALL BE DESIGNED, MANUFACTURED, INSPECTED AND TESTED IN ACCORDING ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR WITH THE APPLICABLE SECTION OF IPS-E-EL-100(1) & IPS-E-EL-143(3) 6- ALL SWITCH FUSES SHALL BE EQUIPPED WITH STRIKER PIN 7- ALL EQUIPMENT SIZING SHALL BE FINALIZED BY MANUFACTURER BASED ON SITE CONDITION. IN ADDITION, TYPE 2 OF COORDINATION SHALL BE FOLLOWED BY VENDOR. 8- CONTROL CIRCUIT VOLTAGE FOR OUTGOING IS 230 VAC WHICH WILL BE SUPPLIED FOR EACH LV CUBICLE. IN OTHER WORDS FOR EACH LV CUBICLE ONE ISOLATED DRY TYPE TRANSFORMER SHALL BE CONSIDERED BY VENDOR. KEY PLAN 9- AN INTERLOCK WILL BE CONSIDERED BETWEEN CAPACITOR BANK & DIESEL GENERATOR BY VENDOR. WHEN DIESEL IS RUNNING, CAPACITOR BANK SHALL NOT BE IN SERVICE. 10- ALL INCOMING & OUTGOING FEEDERS WILL BE EQUIPPED WITH EMERGENCY MUSHROOM PUSH BUTTON. 11- CABLE SIZING SHALL BE ACCORDING TO "BK-SSGRL-PEDCO-110-EL-CN-0005". 12- THIS DRAWING IS VALID FOR ALL 6 NUMBER SWITCHGEAR OF WELLS AS BELOW - WELL NUMBER BK-12 - WELL NUMBER W-007 - WELL NUMBER BK-15 - WELL NUMBER BKW-046 - WELL NUMBER BK-05 - WELL NUMBER BK-14 13- THE INCOMING VOLTAGE OF TRANSFORMER FOR WELL NUMBER BK-14 IS 33 KV & THEREFORE ONLY THIS TRANSFORMER DIFFER FROM OTHER WELLS. D02 JUL 2022 D01 APR.2022 IFA H.SHAKIBA M.FAKHARIAN M.MEHRSHAD \*\*.\*\* BY DATE BY DATE 14- ALL FUSES SHALL BE EQUIPPED WITH STRIKER PIN REV. D00 FEB.2022 IFC H.SHAKIBA M.FAKHARIAN M.MEHRSHAD \*\* \*\* CHECKED REV APPR REV. DATE P.O.I.S PREP. CHK. APP. AUT. اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب 15- FOR FEEDER WITH TYPE M4, CURRENT AND VOLTAGE FAULT SHALL BE CONSIDERED SEPARATELY BY VENDOR. THE ORIGINAL AND ALL COPIES OF THIS DRAWING TOGETHER WITH THE COPYRIGHT THEREIN ARE THE SOLE PROPERTY OF PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES GENERAL N.I.S.O.C./ FIELDS PROJECT NO.: 971020 16- EMERGENCY STOP & START PUSH BUTTON SHALL BE CONSIDERED ON INCOMINGS & BUS-TIES. EPC CONTRACTOR EPD/EPC CONTRACTOR (GC) BINAK OILFIELD DEVELOPMENT 17- ACB WITH BUILT-IN PROTECTION BE CONSIDERED FOR INCOMING AND DG FEEDERS PETROIRAN GENERAL. DEVELOPMENT

18- SELECTOR VOLT SWITCH SHALL BE 7 POSITION

19- OUTGOING FEEDERS SHALL BE EQUIPPED WITH ROTARY SWITCH (DISCONNECTOR) TO ON/OFF CBs ON FRONT OF)CELL

SCALE DRAWING BY CHECKED BY PROJECT ENG

NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED

WEILL PADS APPROVED FOR CONSTRUCTION BY: DATE:

SHEET NO. REV. BUDGET REF. LOCATION SIZE CLASS SERIAL NO. SHEET REVISIO

COMPANY

PEDCO

SINGLE LINE DIAGRAM FOR LV SWITCHGEAR OF WELL PADS



1- SINCE THE INCOMING CIRCUIT BREAKERS ARE BUILT IN TYPE, THEREFORE ALL REQUIRED RELAY INCLUDING CURRENT & VOLTAGE SHALL BE CONSIDERED INSIDE CBs.

ACCORDING TO NOTE 1 (ABOVE) REQUIRED RELAYS FOR INCOMING ARE AS BELOW:
-BASED ON IPS-E-EL-100(2) SECTION 7.5.3.2 FOR GENERATOR:
-50, 51, 50N, 51N, 27, 59, 81, 49

-BASED ON IPS-E-EL-100(2) FOR INCOMING -50, 51, 50N, 51N, 27, 59, 47, 49

2- ACCORDING TO NOTE 1 (ABOVE), SINCE CBs ARE BUILT IN TYPE, THEREFORE THERE IS NO NEED TO CT & PT & THEY ARE INSIDE CBs

LEGEND

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST OF WELL PADS	BK-SSGRL-PEDCO-110-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR	BK-SSGRL-PEDCO-110-EL-DG-0001

KEY PLAN

IFA H.SHAKIBA M.FAKHARIAN M.MEHRSHAD \*\*\* \*\* REV. H.SHAKIBA M.PAKHARIAN M.MEHRSHAD \*\*.\*\* BY DATE BY DATE DESCRIPTION IFC CHECKED REV. APPR.

P.O.I.S PREP. CHK. APP. AUT. BINAK OILFIELD DEVELOPMENT/SUB-SURFACE WORK PACKAGES
GENERAL

EPC CONTRACTOR: EPD/EPC CONTRACTOR (GC): HIRGAN

PEDCO

971020

PETROIRAN DEVELOPMENT COMPANY

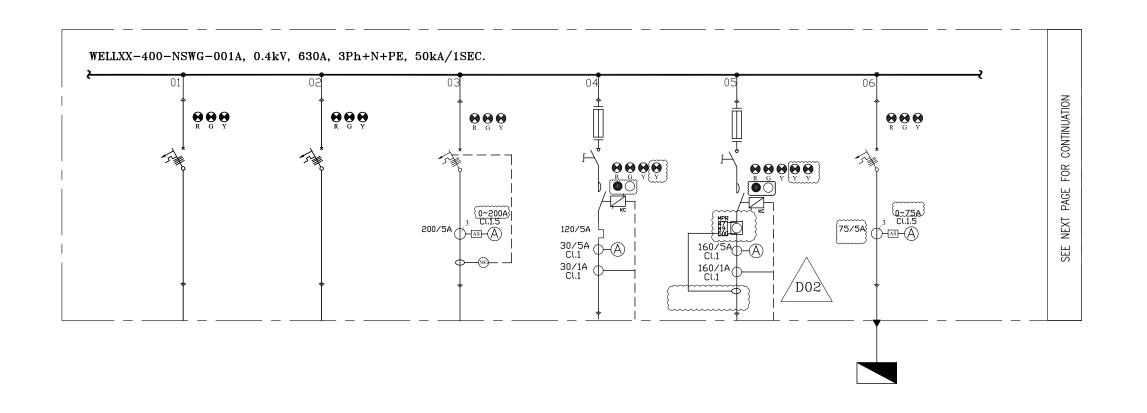
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> BINAK OILFIELD DEVELOPMENT SUB-SURFACE WORK PACKAGES GENERAL

SCALE DRAWING BY CHECKED BY PROJECT ENG. NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED DATE:

(VENDOR TITLE BLOCK)\*\*

SINGLE LINE DIAGRAM FOR LV SWITCHGEAR OF WELL PADS APPROVED FOR CONSTRUCTION BY: SCALE SIZE SHEET NO. REV. BUDGET REF. LOCATION SIZE CLASS SERIAL NO. SHEET REVISION DRAWING NO. NTS A3 BK-SSGRL-PEDCO-110-EL-SL-0002 03 0F 06 D02 053-073-9184 F 2 P 707406 03 0F 06 D02



CATEGORY	F1	F1	F3	M2	M4}	F2
CODE	SPARE	SPARE	SPARE	SPARE	SPARE	WELDING SOCKET
POWER (kW)	=	-	-	15KW	75KW	-
C.B TYPE/RATING	50A	50A	[200A]	-	-	63A
FUSE TYPE/RATING	N/A	N/A	N/A	aM/32A	aM/160A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	15KW (AC3)	75KW (AC3)	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	23 32 A	90 150 A	N/A
CABLE SIZE	-	-	-	-	-	-
DESCRIPTION OF FEEDER	SPARE	SPARE	SPARE	SPARE	SPARE	WELDING SOCKET

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST OF WELL PADS	BK-SSGRL-PEDCO-110-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANELS OF WELL PADS	BK-SSGRL-PEDCO-110-EL-DG-0001

LEGEND

NOTES

KEY PLAN

D02	JUL.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**,**	***	*******	**,**	***.***	**,**	***.***		
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**,**	REV.	DESCRIPTION	BY	DATE	BY	DATE		
D00	FEB.2022	IFC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**,**	I KEV.	REV.	REV.	DESCRIPTION	CHE	CKED	REV.	APPR.
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کلیه نیخ این نقشه و حق اقتباس متعلق به شاکت ملی مناطق نفت خیز جنوب میباشد.							

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PROJECT NAME:

PROJECT NO.:

EPC CONTRACTOR

PEDCO

EPD/EPC CONTRACTOR (GC):

PETROIRAN DEVELOPMENT COMPANY

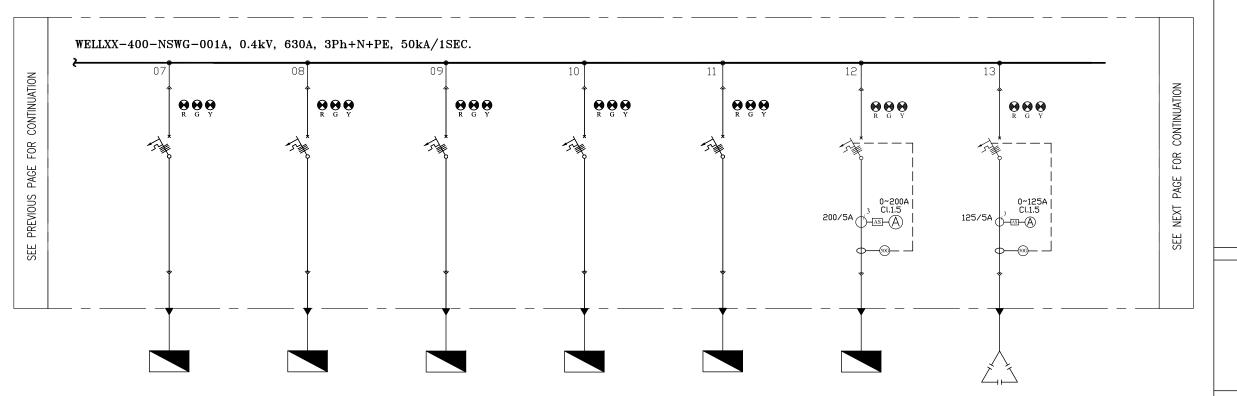
BINAK OILFIELD DEVELOPMENT SUB-SURFACE WORK PACKAGES GENERAL

DATE SCALE DRAWING BY CHECKED BY PROJECT ENG. NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE:

(VENDOR TITLE BLOCK)\*\*

DRAWING TITLE:
SINGLE LINE DIAGRAM FOR LV SWITCHGEAR OF WELL PADS SCALE SIZE DRAWING NO.

SHEET NO. REV. BUDGET REF. LOCATION SIZE CLASS SERIAL NO. SHEET REVISION NTS A3 BK-SSGRL-PEDCO-110-EL-SL-0002 04 0F 06 D02 053-073-9184 F 2 P 707406 04 0F 06 D02



		I	1		I		
CATEGORY	F1	F1	F1	F1	F1	F3	F3
CODE	WellXX-110-CHG-001	WellXX-110-CHG-002	WellXX-DP01	WellXX-DP02	WellXX-DP03	IRP Pump	СВ
POWER (kW)	3	3	10	6	8.5	90 KW	50 KVAR
C.B TYPE/RATING	16	16	32	20	25	200 A	200 A
FUSE TYPE/RATING	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CONTACTOR RATING (A)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OVER LOAD SETTING RANGE	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CABLE SIZE	-	-	-	-	_	-	-
DESCRIPTION OF FEEDER	110VDC CHARGER 1	110VDC CHARGER 2	DISTRIBUTION PANEL FOR SWITCHGEAR BUILDING	DISTRIBUTION PANEL FOR GUARD HOUSE	DISTRIBUTION PANEL FOR OUTDOOR AREA	ELECTRICAL SUBMERSIBLE PUMP & EQUIPMENT	CAPACITOR BANK

REFERENCE DRAWING	DRG. No.
ELECTRICAL LOAD LIST OF WELL PADS	BK-SSGRL-PEDCO-110-EL-LI-0001
ELECTRICAL TYPICAL SCHEMATIC DIAGRAMS FOR LV PANELS OF WELL PADS	BK-SSGRL-PEDCO-110-EL-DG-0001

LEGEND

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KEY PLAN

D02	JUL.2022	IFA	H.SHAKIBA	M.PAKHARIAN	M.MEHRSHAD	**,**	***	********	**,**	***,****	**,**	***.***	
D01	APR.2022	IFA	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**,**	REV.	DESCRIPTION	BY	DATE	BY	DATE	
D00	FEB.2022	IFC	H.SHAKIBA	M.FAKHARIAN	M.MEHRSHAD	**,**	LEV.	DESCRIPTION	CHE	CKED	REV.	APPR.	
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.	اصل و کلیه نسخ این نقشه و حق اقتباس متعلق به شرکت ملی مناطق نفت خیز جنوب میباشد.						

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PETROIRAN DEVELOPMENT COMPANY PEDCO

971020

EPD/EPC CONTRACTOR (GC):

BINAK OILFIELD DEVELOPMENT SUB-SURFACE WORK PACKAGES GENERAL DATE SCALE DRAWING BY CHECKED BY PROJECT ENG.

DRAWING TITLE:
SINGLE LINE DIAGRAM FOR LV SWITCHGEAR OF WELL PADS NO CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED
APPROVED FOR CONSTRUCTION BY: DATE: 
 SCALE
 SIZE
 DRAWING NO.
 SHEET NO.
 REV.
 BUDGET REF.
 LOCATION
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 CLASS
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 NTS
 A3
 BK-SSGRL-PEDCO-110-EL-SL-0002
 05 0F 06
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 053-073-9184
 F
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 05 0F 06
 D02
 SCALE SIZE

(VENDOR TITLE BLOCK)\*\*

PROJECT NO.:

EPC CONTRACTOR

