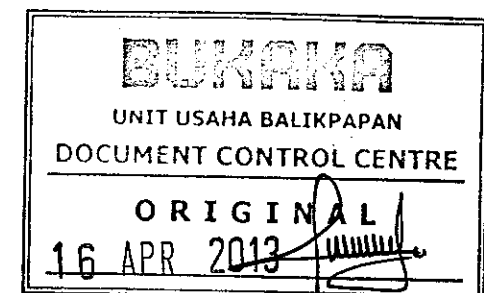


**COVER SHEET**  
**WO. 2585956 AFE EK1200181**  
**SAPI " A " PLATFORM**  
**2013 SAPI DRILLING PROGRAM**

JUDIKA J. SILALAN  
08 MAR 2013



Chevron



# CHEVRON INDONESIA COMPANY DRAWING INDEX

NO.	DRAWING NO.	REV.	TITLE	REMARKS
✓1	SPI-SPA-4000-1	0	COVER SHEET	
✓2	SPI-SPA-4000-2	0	DRAWING INDEX	
			DEMOLITION	
3	SPI-SPA-4101-3	2	P&ID WELLHEAD, PRODUCTION HEADER AND GAS EXPORT MODIFICATION	
✓4	SPI-SPA-4101-3	2	P&ID WELLHEAD, PRODUCTION HEADER AND GAS EXPORT	
✓5	SPI-SPA-4101-4	0	P&ID WELLHEAD, PRODUCTION HEADER AND GAS EXPORT	
✓6	SPI-SPA-5001	9	EQUIPMENT LAYOUT PLAN WELLHEAD AND MANIFOLD PLATFORMS	
✓7	SPI-SPA-5002-1	10	WELLHEAD AND MANIFOLD PLATFORMS PIPING PLAN ABOVE DECK	
✓8	SPI-SPA-5002-1	11	WELLHEAD AND MANIFOLD PLATFORMS PIPING PLAN BELOW DECK	
✓9	SPI-SPA-5003	12	PIPING ELEVATION LOOKING EAST	
✓10	SPI-SPA-5005	7	PIPING SECTION AND DETAILS MANIFOLD PLATFORM	
✓11	SPI-SPA-5516	2	8" GROSS HEADER ISOMETRIC LINE 231-F-8"	
✓12	SPI-SPA-5517	2	6" TEST HEADER ISOMETRIC LINE 232-F-6"	NEW DRAWING
✓13	SPI-SPA-5524-1	1	ISOMETRIC LINE 2xx-F-4" FLOWLINE WH#14	
✓14	SPI-SPA-5524-2	1	ISOMETRIC LINE 2xx-F-4" FLOWLINE WH#14	
✓15	SPI-SPA-5527-1	1	ISOMETRIC LINE 2xx-F-4" FLOWLINE WH#12	
✓16	SPI-SPA-5527-2	1	ISOMETRIC LINE 2xx-F-4" FLOWLINE WH#12	
✓17	SPI-SPA-PSD-5250-2	0	PIPE SUPPORT	
✓18	SPI-SPA-PSD-5250-3	0	PIPE SUPPORT	
✓19	SPI-SPA-PSD-5250-4	0	PIPE SUPPORT	

**BUKAKA**

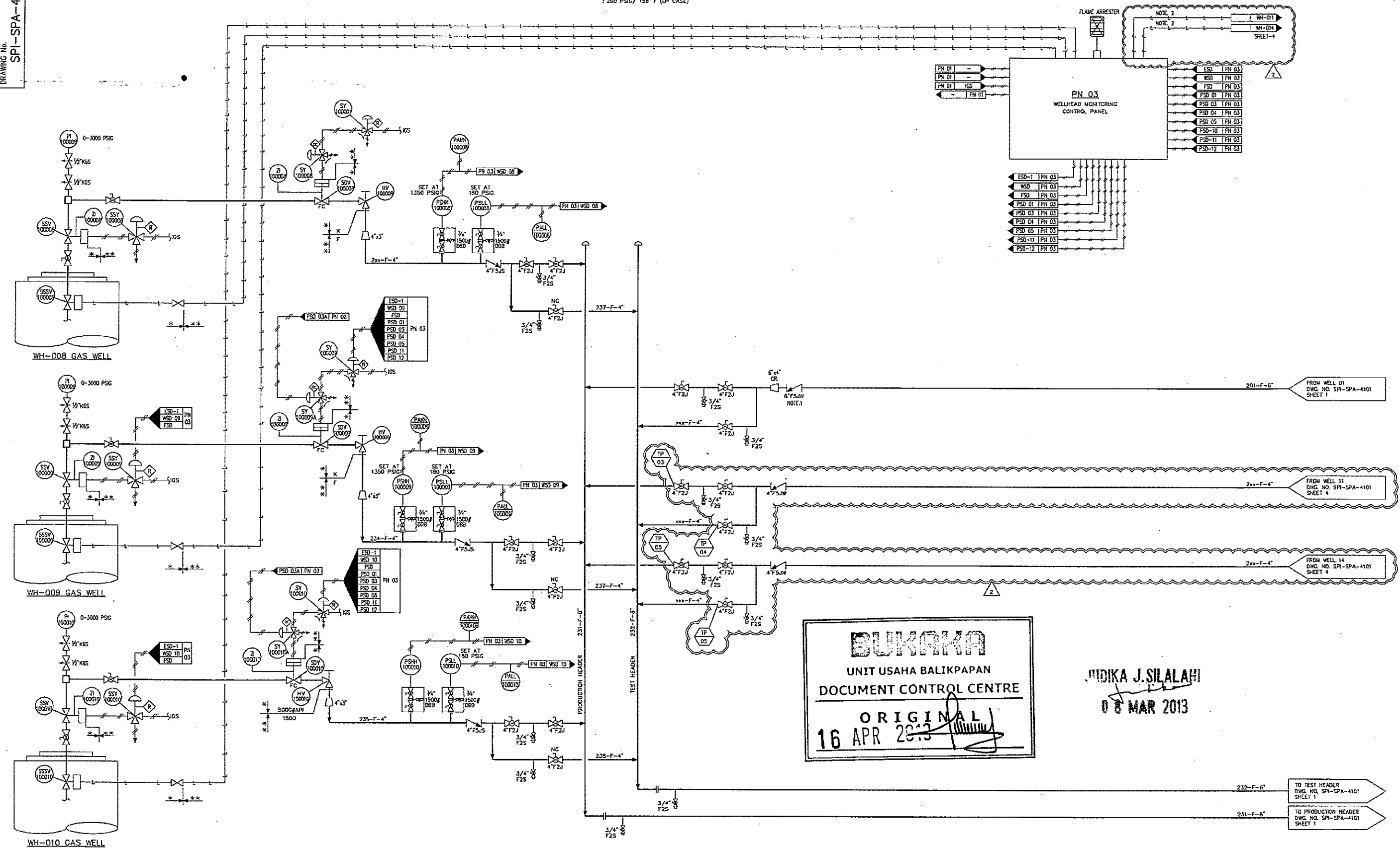
UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE

ORIGINAL  
16 APR 2013

DRAWING NO.  
SPI-SPA-4101-3

WH-008 THRU WH-010  
GAS WELL

CAPACITY : 15 MMSCFD  
OPERATING PRESS./TEMP.: 657 PSIG/ 128° F (WP CASE)  
250 PSIG/ 158° F (LP CASE)



**BUKAKA**  
UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE  
ORIGINAL  
16 APR 2013

DIKA J. SILALAH  
08 MAR 2013

**MODIFICATION**

**Chevron**  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

- NOTES :
- CHECK VALVE 6"-1500# RTJ. WAFER TYPE EXISTING REUSED.
  - MODIFICATION FOR RATING 1000 PSIG

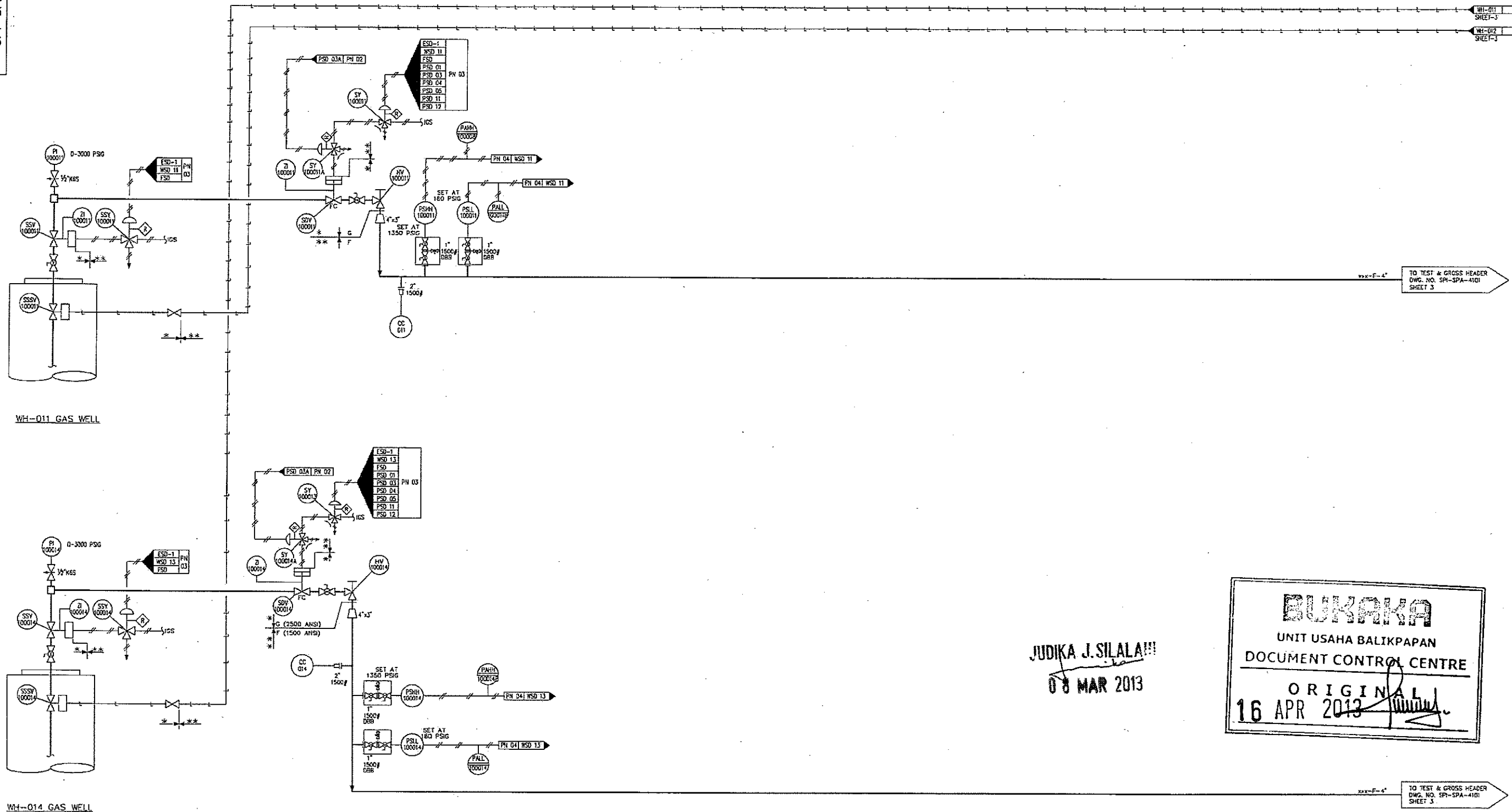
DRAWING NO.	REFERENCE DRAWINGS	REV	DATE	BY	CHKD	APPD	REVISION	SIGNED	DATE	TITLE
		1	28-12-12	WCU	JM	JM	APPROVED FOR CONSTRUCTION		01/06/04	SAPI "A" PLATFORM
		02	14-12-12	WCU	JCR	JCR	ISSUED FOR APPROVAL		07/06/04	PIPING & INSTRUMENTATION DIAGRAM
		03	23-11-12	WCU	JCR	JCR	ISSUED FOR COMMENT			WELLHEAD, PROD. HDR & GAS EXPORT
		04	21-11-12	WCU	JCR	JCR	ISSUED FOR REVIEW			
		05	22-11-12	WCU	GPA	JG	APPROVED FOR CONSTRUCTION		07/06/04	
		06	10-11-12	WCU	GPA	JG	ISSUED FOR COMMENT			
		07	02-07-13	WCU	JCR	JCR	RE-APPROVED FOR CONSTRUCTION			

SCALE : NONE  
JOB No. : 2585956  
DRAWING No. : SPI-SPA-4101 SHT-3  
REV : 2

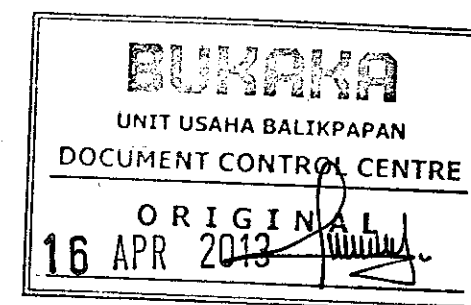
DRAWING No.  
SPI-SPA-4101-3

# WH-011 THRU WH-014 GAS WELL

CAPACITY : ~ MMSCFD  
OPERATING PRESS./TEMP. : ~ PSIG/ ~ °F (HP CASE)  
: ~ PSIG/ ~ °F (LP CASE)



JUDIKA J. SILALAHI  
08 MAR 2013



NEW DRAWING

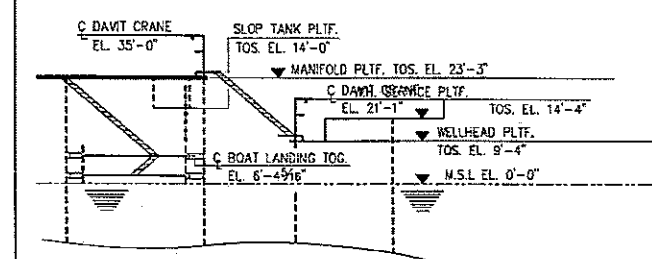
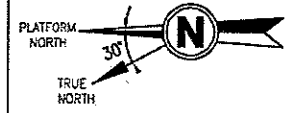
**Chevron** Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

NOTES :

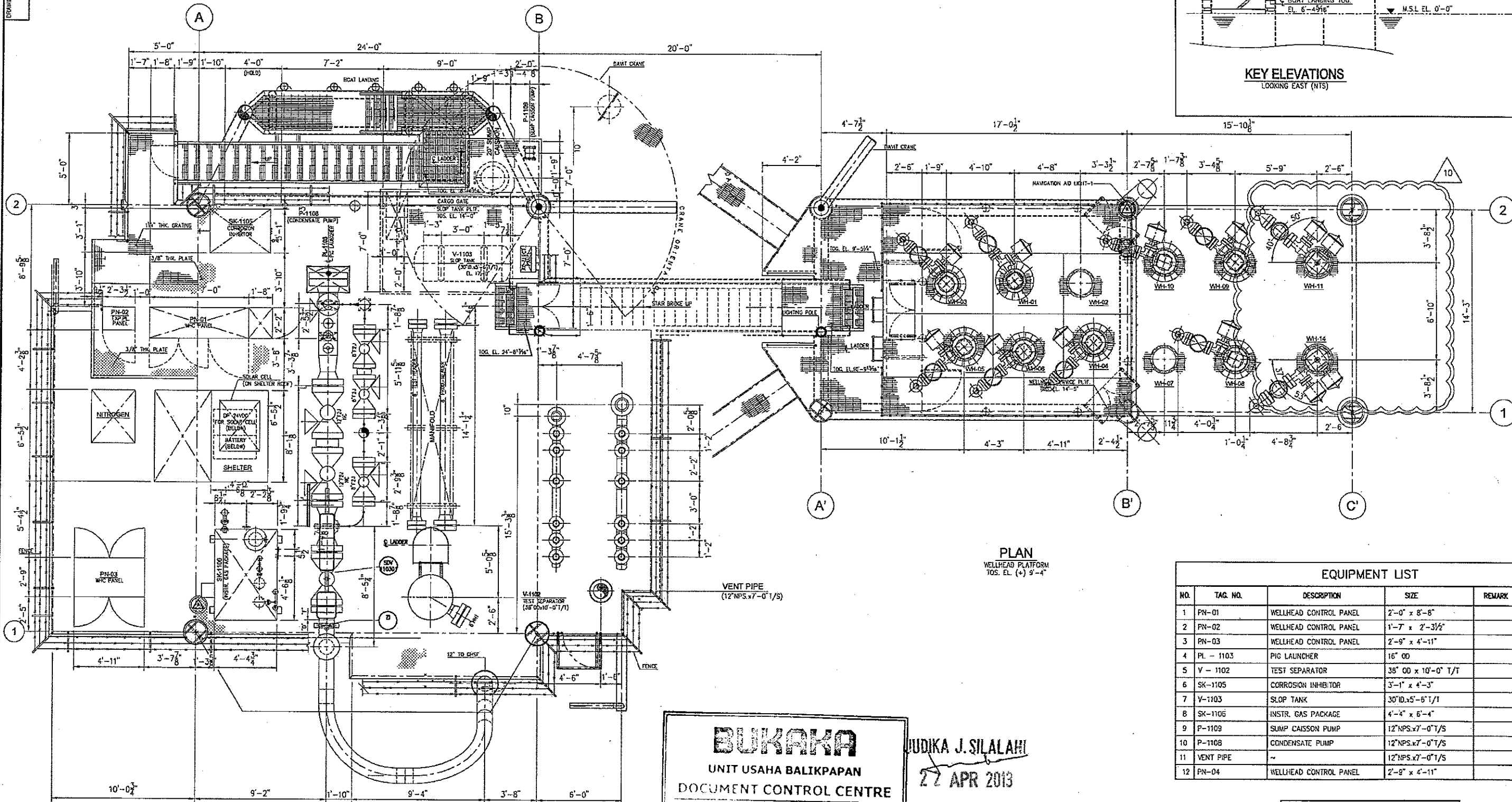
DRAWING NO.	REFERENCE DRAWINGS	REV	DATE	BY	CHKD	APPD	REVISION	SIGNED	DATE
		1	08-02-13	MGU	TGR	TGR	RE-APPROVED FOR CONSTRUCTION		
		2	28-12-12	MGU	JM	JM	APPROVED FOR CONSTRUCTION		
		3	14-12-12	MGU	TGR	TGR	ISSUED FOR APPROVAL		
		4	23-11-12	MGU	TGR	TGR	ISSUED FOR COMMENT		
		5	21-11-12	MGU	TGR	TGR	ISSUED FOR REVIEW		

TITLE		SAPI "A" PLATFORM PIPING & INSTRUMENTATION DIAGRAM WELLHEAD, PROD. HDR & GAS EXPORT	
SCALE	JOB No.	DRAWING No.	REV
NONE	2585956	SPI-SPA-4101 SHT-4	

DRAWING NO. SPI-SPA-5001



KEY ELEVATIONS  
LOOKING EAST (NTS)



PLAN  
WELLHEAD PLATFORM  
TOS. EL. (+) 9'-4"

PLAN  
MANIFOLD PLATFORM  
TOS. EL. (+) 23'-3"

EQUIPMENT LIST				
NO.	TAG NO.	DESCRIPTION	SIZE	REMARK
1	PN-01	WELLHEAD CONTROL PANEL	2'-0" x 8'-8"	
2	PN-02	WELLHEAD CONTROL PANEL	1'-7" x 2'-3 1/2"	
3	PN-03	WELLHEAD CONTROL PANEL	2'-9" x 4'-11"	
4	PL-1103	PIG LAUNCHER	16" OD	
5	V-1102	TEST SEPARATOR	38" OD x 10'-0" T/T	
6	SK-1105	CORROSION INHIBITOR	3'-1" x 4'-3"	
7	V-1103	SLOP TANK	30" ID x 5'-6" T/T	
8	SK-1106	INSTR. GAS PACKAGE	4'-4" x 5'-4"	
9	P-1109	SUMP CAISSON PUMP	12"NPS.x7'-0" T/S	
10	P-1108	CONDENSATE PUMP	12"NPS.x7'-0" T/S	
11	VENT PIPE	~	12"NPS.x7'-0" T/S	
12	PN-04	WELLHEAD CONTROL PANEL	2'-9" x 4'-11"	

**BUKAKA**  
UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE  
22 April 2013

JUDIKA J. SILALAH  
22 APR 2013

MODIFICATION

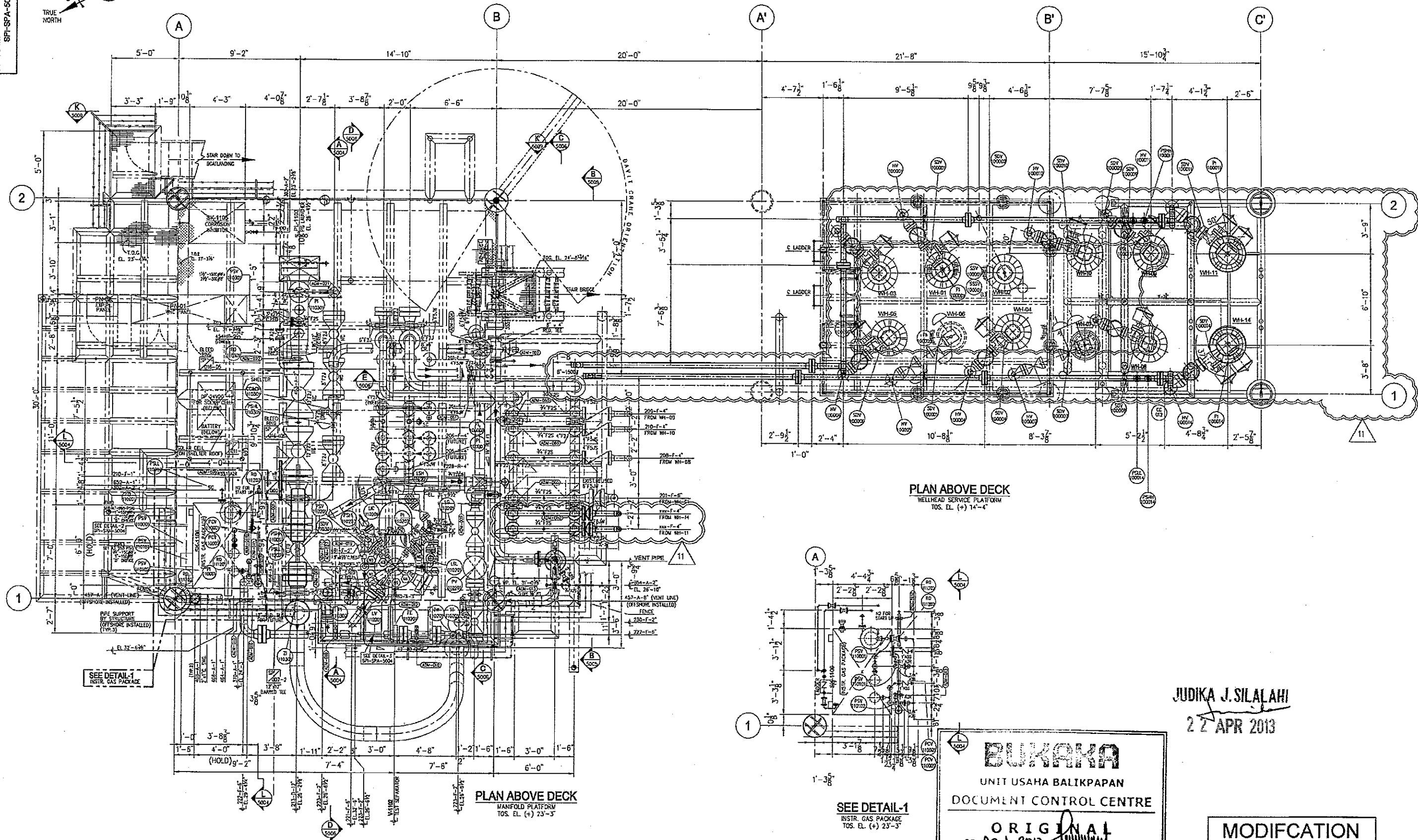
Chevron  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

NOTE:  
1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED

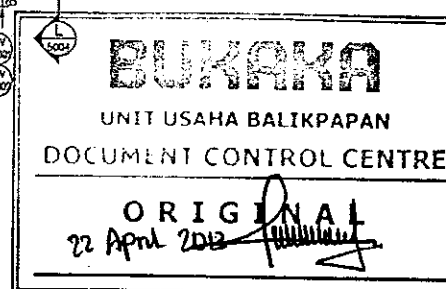
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		10	22-04-13	MGU	MOL	JJS	RE-APPROVED FOR CONSTRUCTION
		9	08-02-13	UGU	TGR	JJS	RE-APPROVED FOR CONSTRUCTION
		8	28-12-12	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
		7C	14-12-12	MGU	MOL	JJS	ISSUED FOR APPROVAL
		7B	23-11-12	MGU	MOL	JJS	ISSUED FOR COMMENT
		7A	21-11-12	MGU	MOL	JJS	ISSUED FOR REVIEW

DRAWN BY	RUL	DATE	11/06/04
CHECKED BY	PN	DATE	11/06/04
APPROVED BY	MD	DATE	11/06/04
APPROVED BY			

TITLE				
SAPI 'A' PLATFORMS EQUIPMENT LAYOUT PLAN WELLHEAD AND MANIFOLD PLATFORMS				
SCALE	JOB No.	DRAWING No.	SHT. No.	REV.
3/8"=1'-0"	2585956	SPI-SPA-5001	1 of 1	



JUDIKA J. SILALAH  
22 APR 2013



MODIFICATION

Chevron  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

NOTES:  
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

LEGEND:  
○ : DENOTES EQUIPMENT NOZZLE NUMBER

VENDOR DATA  
1. SK-1105 (CORROSION INHIBITOR PACKAGE)  
2. P-1108 (CONDENSATE PUMP)  
3. SK-1106 (INSTRUMENT GAS PACKAGE)

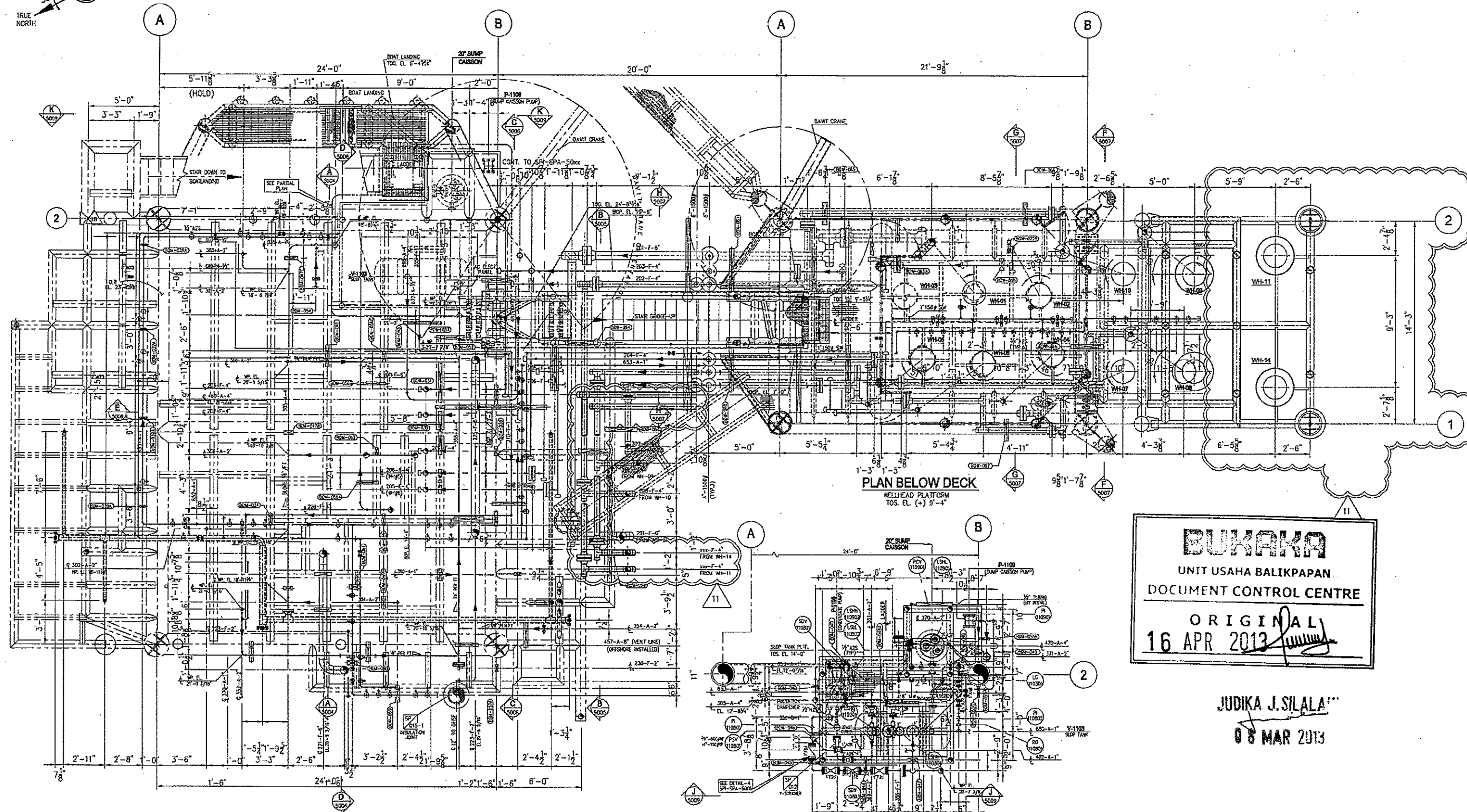
DRAWING NUMBER	REFERENCE DRAWING
SPI-SPA-5002 SHT. 2 OF 2	PIPING PLAN BELOW DECK
SPI-SPA-5001	EQUIPMENT LAYOUT PLAN WELLHEAD & MANIFOLD

REV.	DATE	BY	CHK.	APP.	DESCRIPTION
11	22-04-13	MDU	MOL	JJS	RE-APPROVED FOR CONSTRUCTION
10	08-02-13	MDU	TOR	JJS	RE-APPROVED FOR CONSTRUCTION
9	28-12-12	MDU	MOL	JJS	APPROVED FOR CONSTRUCTION
8C	14-12-12	MDU	MOL	JJS	ISSUED FOR APPROVAL
8B	23-11-12	MDU	MOL	JJS	ISSUED FOR COMMENT
8A	21-11-12	MDU	MOL	JJS	ISSUED FOR REVIEW
8	22-11-11	MDU	MOL	JJS	APPROVED FOR CONSTRUCTION

SIGNED	DATE
DRAWN BY HARI	11/05/04
CHECKED BY HRY	11/05/04
APPROVED BY FDI	11/05/04
APPROVED BY	

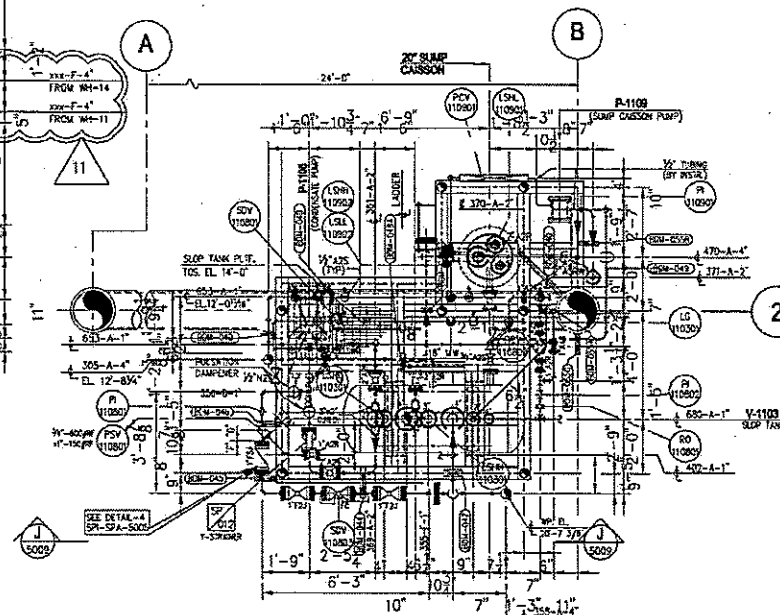
TITLE	SCALE	JOB No.	DRAWING No.	SHT. No.	REV.
SAPI 'A' PLATFORMS WELLHEAD AND MANIFOLD PLATFORMS PIPING PLAN ABOVE DECK	3/8"=1'-0"	2559556	SPI-SPA-5002	1 OF 2	





PLAN BELOW DECK  
MANIFOLD PLATFORM  
TOS. EL. (+) 23'-3"

PLAN BELOW DECK  
WELLHEAD PLATFORM  
TOS. EL. (+) 9'-4"



PARTIAL PLAN  
SLOP TANK PLATFORM  
TOS. EL. (+) 14'-0"

**BUKAKA**

UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE

ORIGINAL  
16 APR 2013

JUDIKA J. SILALA

08 MAR 2013

MODIFICATION

Chevron  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

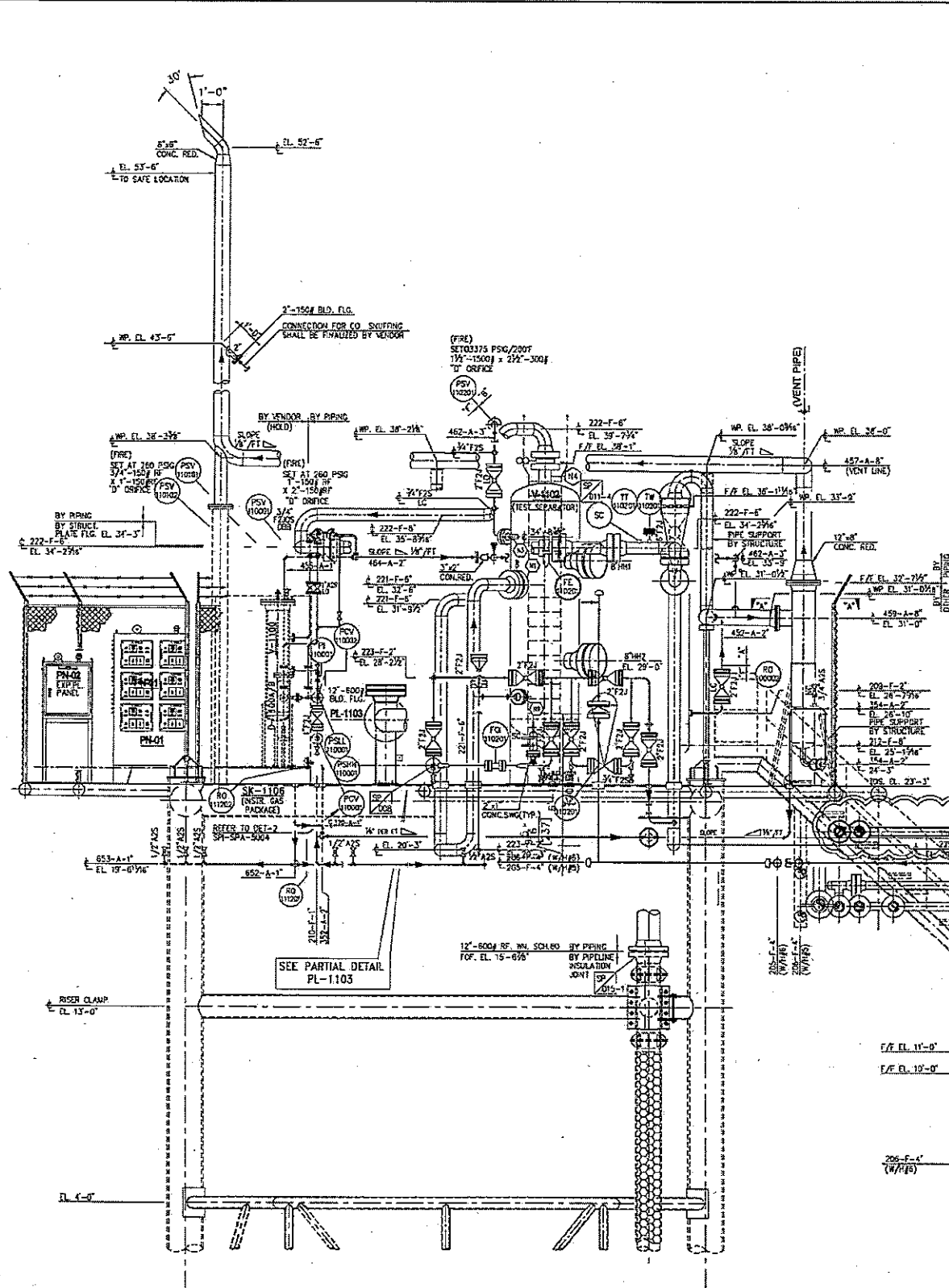
NOTES:  
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

LEGEND:  
○ : DENOTES EQUIPMENT NOZZLE NUMBER

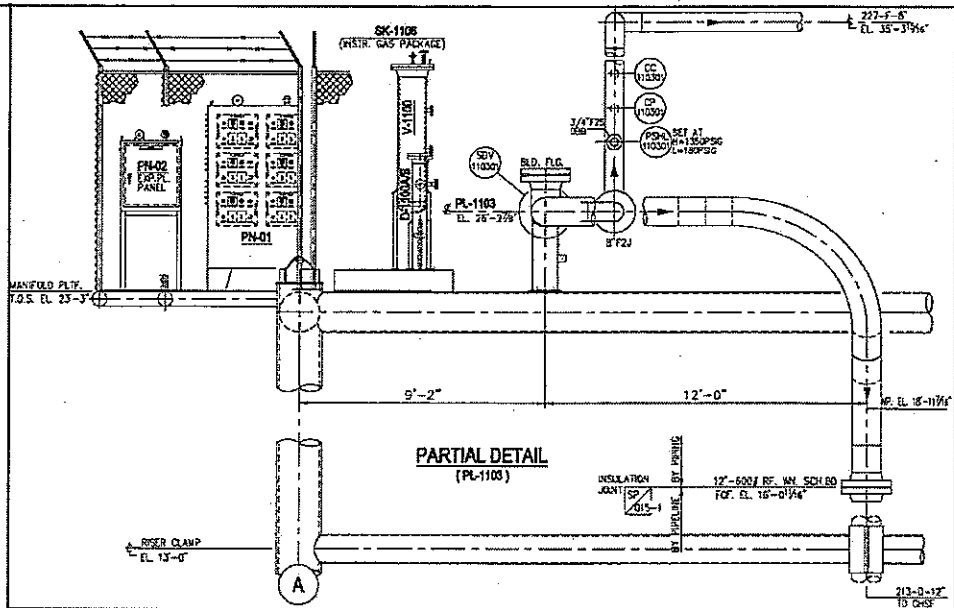
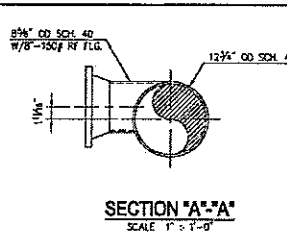
DRAWING NUMBER	REFERENCE DRAWING	REV.	DATE	BY	CHK.	APP.	APPROVED FOR CONSTRUCTION
SPI-SPA-5514	WH#4 - PIPING ISOMETRIC	10	28-12-12	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
SPI-SPA-5513	1" AIR INSTR. MODIF. PIPING ISOMETRIC	9C	14-12-12	MGU	MOL	JJS	ISSUED FOR APPROVAL
SPI-SPA-5512	WH#6 - PIPING ISOMETRIC (2 SHEETS)	9B	23-11-12	MGU	MOL	JJS	ISSUED FOR COMMENT
SPI-SPA-5511	WH#5 - PIPING ISOMETRIC (2 SHEETS)	9A	21-11-12	MGU	MOL	JJS	ISSUED FOR REVIEW
SPI-SPA-5002 SHT. 1 OF 2	PIPING PLAN ABOVE DECK	9	22-11-11	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
SPI-SPA-5001	EQUIPMENT LAYOUT PLAN WELLHEAD & MANIFOLD	8B	10-11-11	MGU	MOL	JJS	ISSUED FOR COMMENT
		11	08-02-13	MGU	TGR	JJS	RE-APPROVED FOR CONSTRUCTION

SIGNED	DATE
DRAWN BY: HART	11/08/04
CHECKED BY: PN	11/08/04
APPROVED BY: HDI	11/08/04
APPROVED BY:	

TITLE	SCALE	JOB No.	DRAWING No.	SHT. No.	REV.
SAPI 'A' PLATFORMS WELLHEAD AND MANIFOLD PLATFORMS PIPING PLAN BELOW DECK	3/8"=1'-0"	255556	SPI-SPA-5002	2 OF 2	11



**BUKAKA**  
UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE  
ORIGINAL  
16 APR 2013



**ELEVATION LOOKING EAST**  
REFER TO DWG. NO. SPI-SPA-5002

**WELLHEAD PLATFORM**  
REFER TO DWG. NO. SPI-SPA-5002

JUDIKA J. SILALAH  
08 MAR 2013

**MODIFICATION**

**Chevron**  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

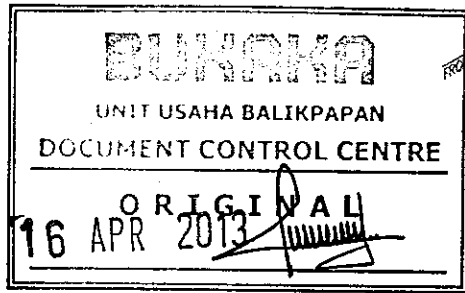
NOTES:  
1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED

REV.	DATE	BY	CHK.	APP.	REVISIONS
11	28-12-12	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
10C	14-12-12	MGU	MOL	JJS	ISSUED FOR APPROVAL
10B	23-11-12	MGU	MOL	JJS	ISSUED FOR COMMENT
10A	21-11-12	MGU	MOL	JJS	ISSUED FOR REVIEW
10	22-11-11	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
9B	10-11-11	MGU	MOL	JJS	ISSUED FOR COMMENT
12	08-02-13	MGU	TGR	JJS	RE-APPROVED FOR CONSTRUCTION

SIGNED	DATE	TITLE
DRAWN BY	PRO HAR	11/06/04
CHECKED BY	PN HRY	11/06/04
APPROVED BY	HDI	11/06/04
APPROVED BY		

SCALE	JOB No.	DRAWING No.	SHT. No.	REV.
3/8" = 1'-0"	2583958	<b>SPI-SPA-5003</b>	1 OF 1	





## MODIFICATION

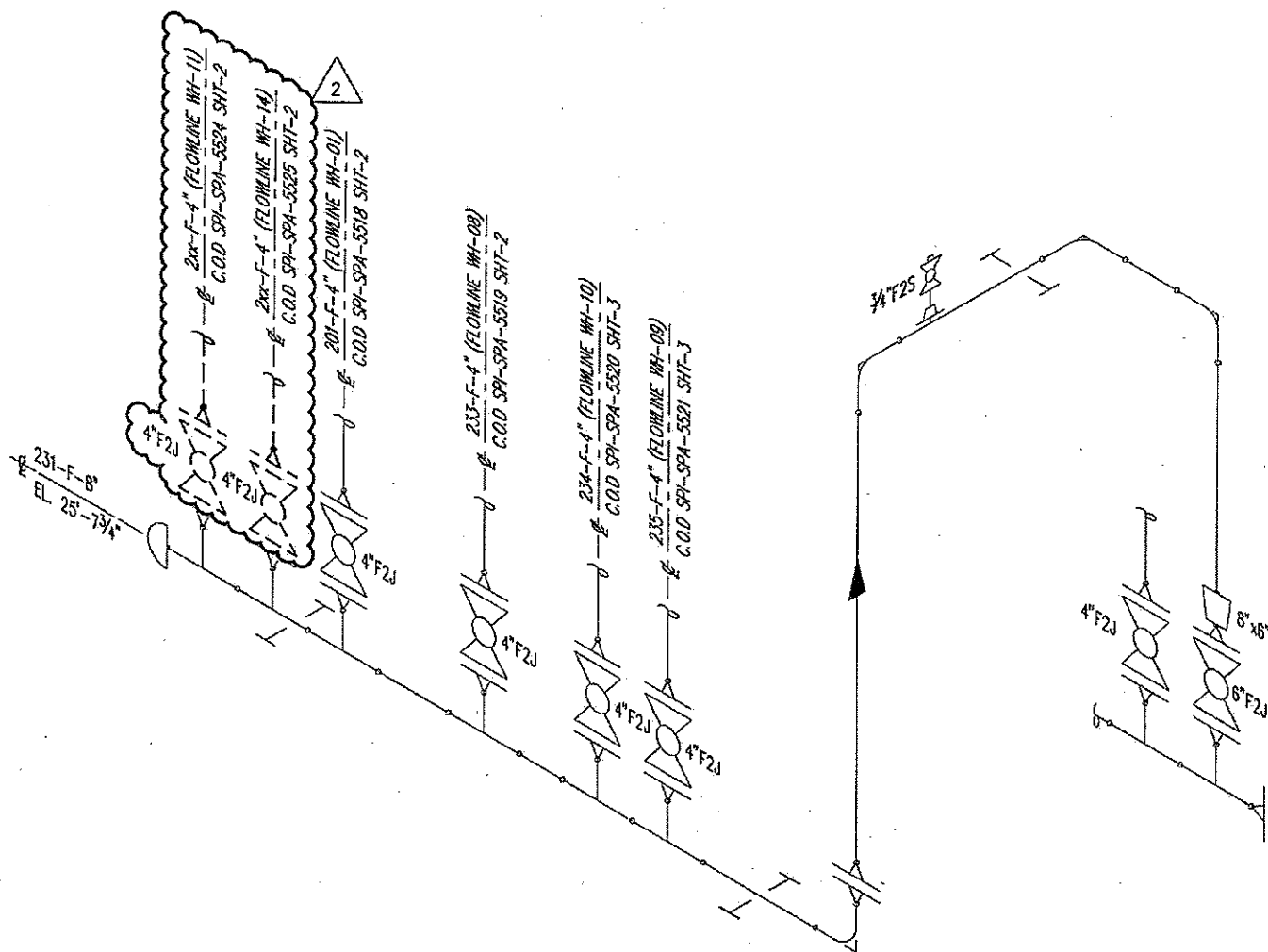
TITLE

SAPI 'A' PLATFORM  
PIPING SECTION AND DETAILS  
MANIFOLD PLATFORM

SCALE	JOB No.	DRAWING No.	SHT. No.
3/4" = 1' - 0"	2326700	SPI-SPA-5005	1 OF 1

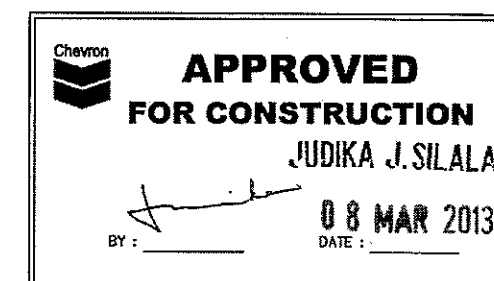
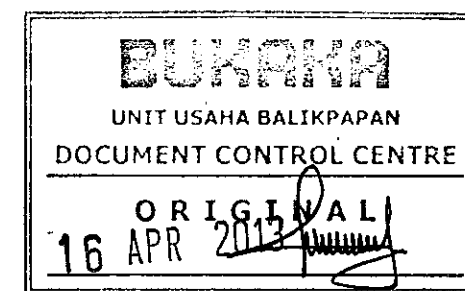
NOTES :  
1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED

DRAWING NUMBER	REFERENCE DRAWING	REV.	DATE	BY	CHK.	APP.	REVISIONS
		6A	21-11-12	MGU	MOL	JUS	ISSUED FOR REVIEW
		6	22-11-11	MGU	MOL	JUS	APPROVED FOR CONSTRUCTION
		5B	10-11-11	MGU	MOL	JUS	ISSUED FOR COMMENT
		5A	09-11-11	MGU	MOL	JUS	ISSUED FOR REVIEW
		7	21-12-12	MGU	MOL	JUS	APPROVED FOR CONSTRUCTION
SPI-SPA-5002 SHT. 1 OF 2	PIPING PLAN ABOVE DECK	6C	14-12-12	MGU	MOL	JUS	ISSUED FOR APPROVAL
SPI-SPA-5002 SHT. 2 OF 2	PIPING PLAN BELOW DECK	6B	23-11-12	MGU	MOL	JUS	ISSUED FOR COMMENT



## MATERIAL LIST

ITEM	QTY	SIZE	SCH	DESCRIPTION



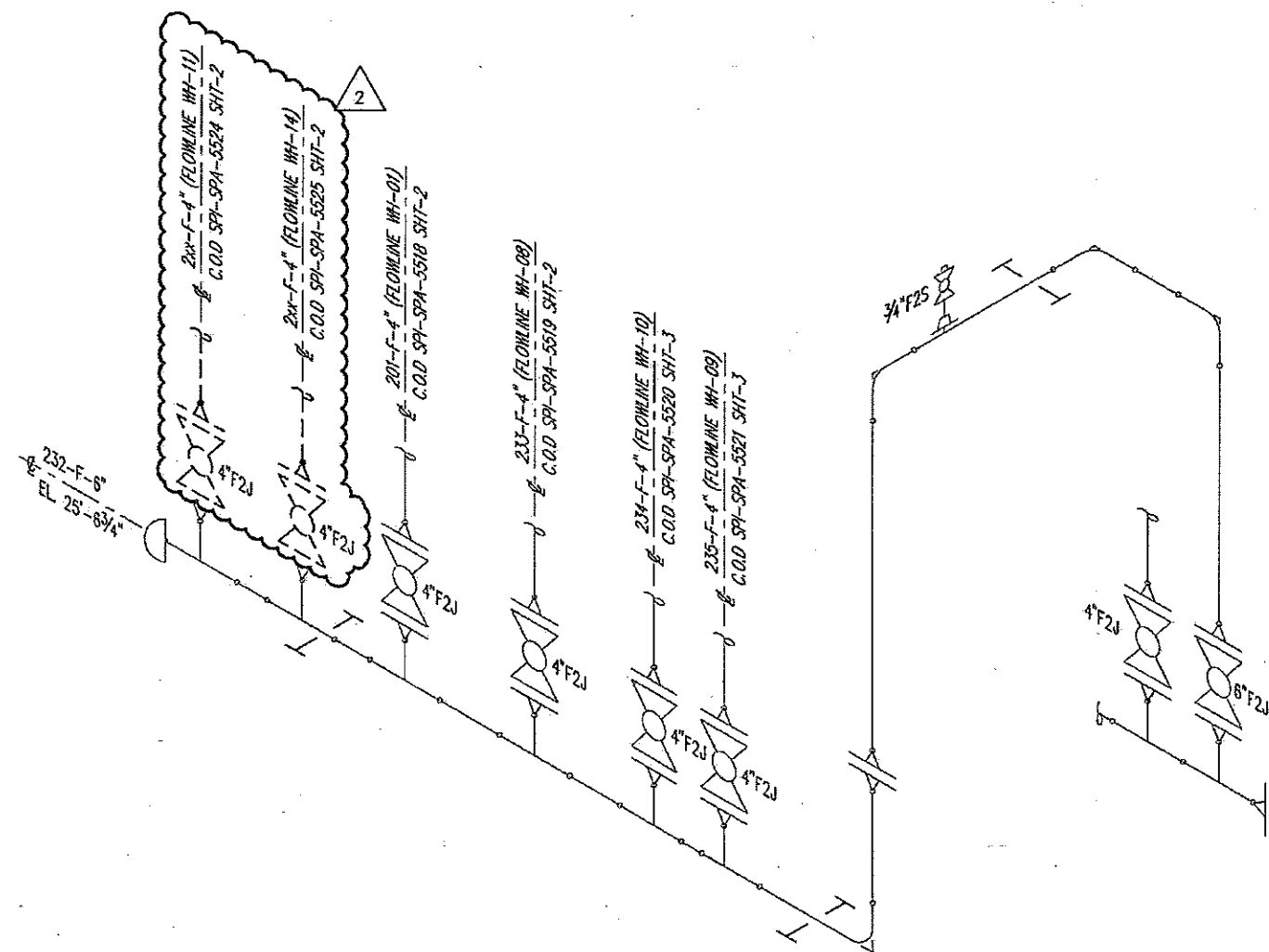
WO. 2585956

PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F	X-RAY	100%
DESIGN PRESS. (PSI)	3280	MPI	YES
DESIGN TEMP. (°F)	300	HYDROTEST (PSI)	5550-100°F
PAINT SPECIFICATION	COM-SU-2.02.C	PWHT	YES

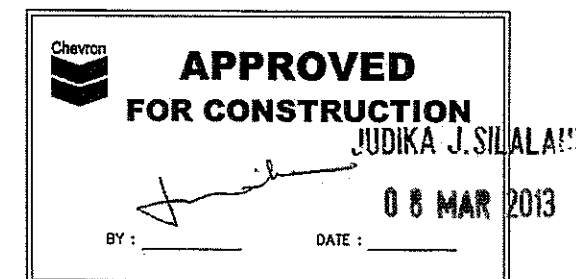
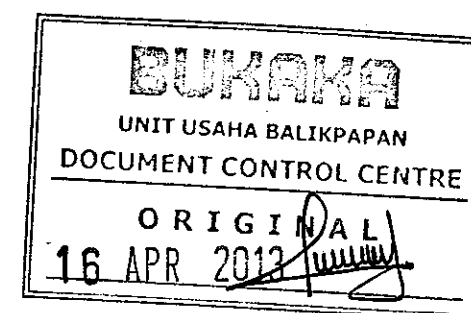
Chevron Indonesia Company BALIKPAPAN-EAST KAUMANTAN				TITLE <b>SAPI "A" PLATFORM 8" GROSS HEADER ISOMETRIC LINE 231-F-8"</b>	
DRAWN BY	NGU	SIGNED	DATE	APPROVED BY	DATE
CHECKED BY	MOL	SIGNED	DATE	APPROVED BY	DATE
CAD REF. : SPA-SPI-5516-2				JOB NO. : 2585956	
DRAWING NO. SPI-SPA-5516				SHEET NO. 1 OF 1	

- NOTES :
- ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED
  - PIPE SUPPORT SHALL BE ADJUSTED ON SITE

REFERENCE DRAWINGS	REV	DATE	BY	CHKD	APPD	REVISIONS
SPI-SPA-PSD-5241	1	28-12-12	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
SPI-SPA-PSD-5240	0C	14-12-12	MGU	MOL	JJS	ISSUED FOR APPROVAL
SPI-SPA-5005	0B	23-11-12	MGU	MOL	JJS	ISSUED FOR COMMENT
SPI-SPA-5006	0B	21-11-12	MGU	MOL	JJS	ISSUED FOR INTERNAL REVIEW
SPI-SPA-5002-1	0	22-11-11	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
SPI-SPA-4101	8	10-11-11	MGU	MOL	JJS	ISSUED FOR COMMENT
	2	08-02-13	MGU	MOL	JJS	RE-APPROVED FOR CONSTRUCTION

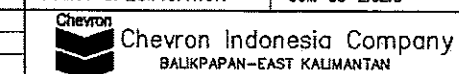


## MATERIAL LIST

[illegible]

**WO. 2585956**

PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F	X-RAY	100%
DESIGN PRESS. (PSI)	3280	MPI	YES
DESIGN TEMP. (F)	300	HYDROTEST (PSI)	5550-100F
PAINT SPECIFICATION	COM-SU-2.02.C	PWHT	NO



<del>_____</del>	SIGNED	DATE	<del>_____</del>	SIGNED	DATE
DRAWN BY	MGU	05-11-11	APPROVED BY	JJS	-
CHECKED BY	MOL	05-11-11	APPROVED BY		
CAD REF. : SPA-SPI-5517-2			JOB NO. : 2585956		

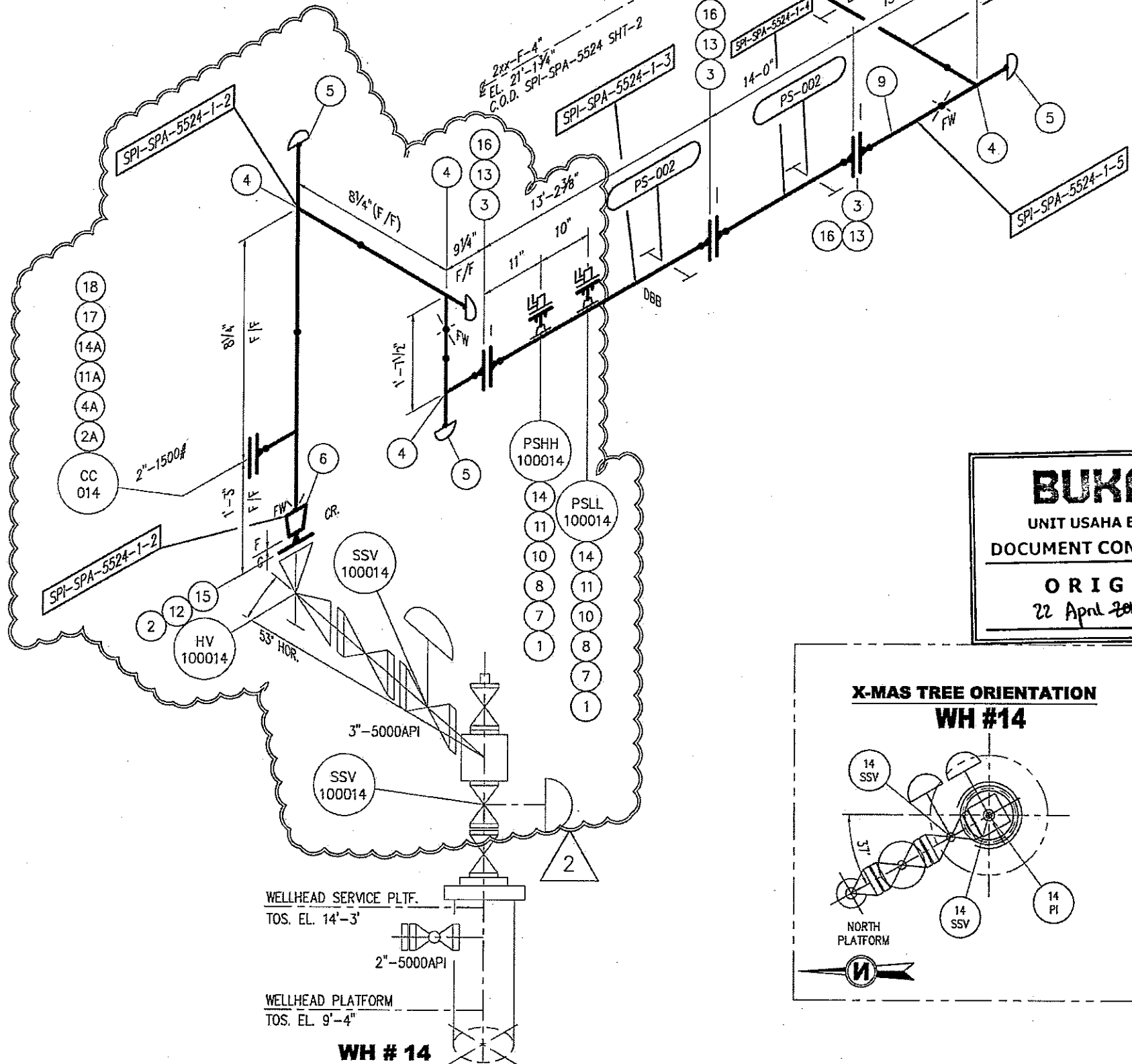
TITLE	SAPI "A" PLATFORM 6" TEST HEADER ISOMETRIC LINE 232-F-6"	NO.	DATE	BY
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DRAWING NO. SPI-SPA-5517	SHEET NO. 1 OF 1	REV 2
-----------------------------	---------------------	----------

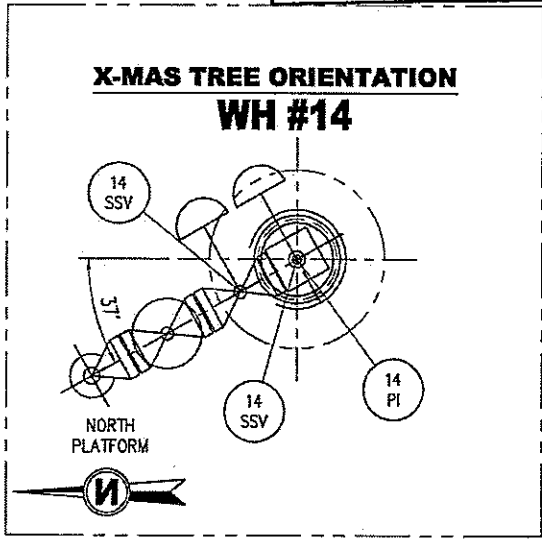
NOTES :

1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED
2. PIPE SUPPORT SHALL BE ADJUSTED ON SITE

REFERENCE DRAWINGS			1	28-12-12	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
	SP-SPA-PSD-5241	PIPE SUPPORT	0C	14-12-12	MGU	MOL	JJS	ISSUED FOR APPROVAL
	SP-SPA-PSD-5240	PIPE SUPPORT	0B	23-11-12	MGU	MOL	JJS	ISSUED FOR COMMENT
	SP1-SPA-5005	PIPING SECTION AND DETAIL MANIFOLD PLATFORM	0A	21-11-12	MGU	MOL	JJS	ISSUED FOR INTERNAL REVIEW
	SP1-SPA-5006	PIPING SECTION MANIFOLD PLATFORM	0	22-11-11	MGU	MOL	JJS	APPROVED FOR CONSTRUCTION
	SP1-SPA-5002-1	PIPING PLAN ABOVE CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	8	10-11-11	MGU	MOL	JJS	ISSUED FOR COMMENT
	SP1-SPA-4501	PAID WELLHEAD, PROD HEADER AND GAS EXPORT	2	08-02-13	MGU	MOL	JJS	RE-APPROVED FOR CONSTRUCTION
	DRAWING NO.	DRAWINGS	REV	DATE	BY	CHKD	APPR	REVISION



**BUKAKA**  
UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE  
**ORIGINAL**  
22 April 2013



**MATERIAL LIST**

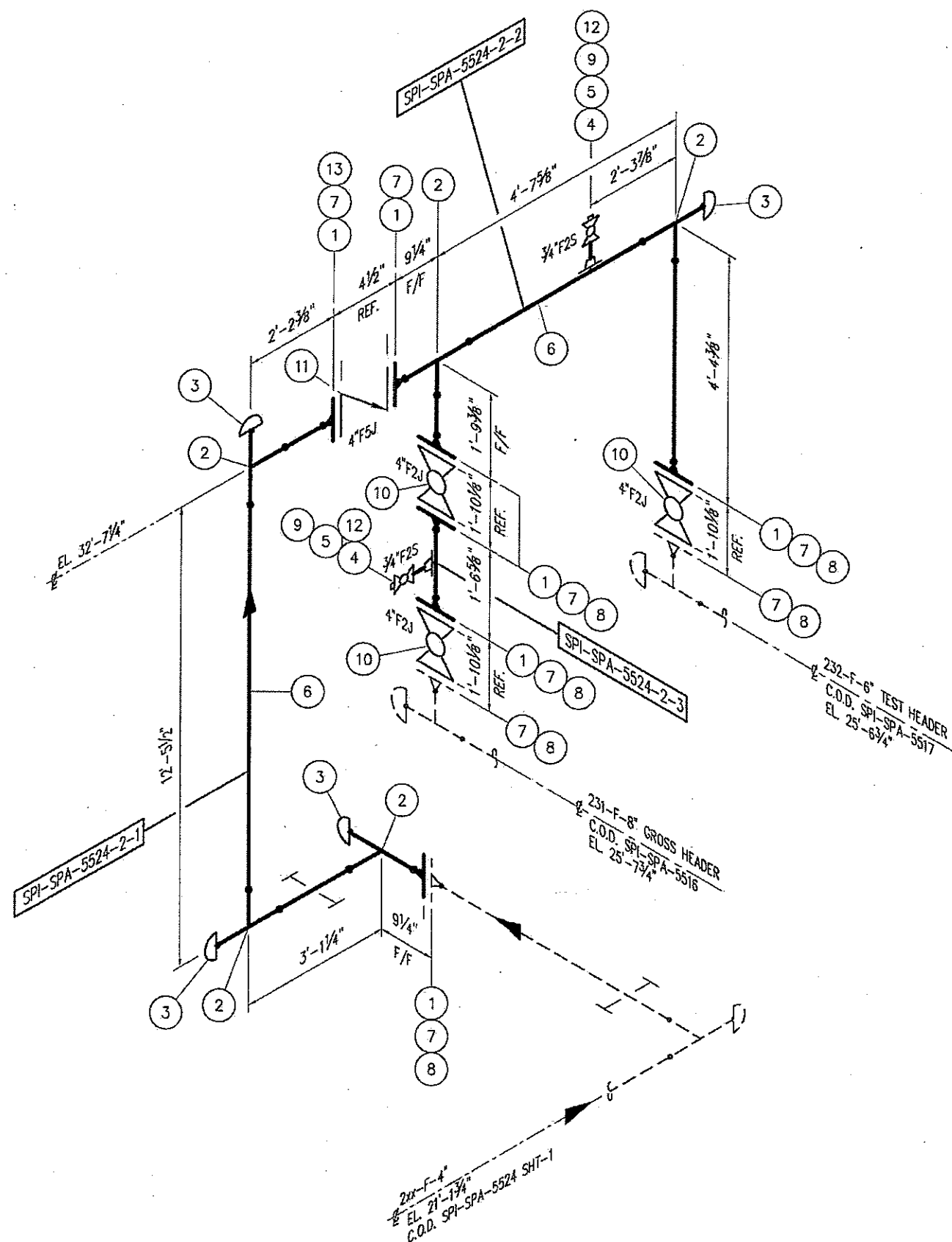
ITEM	QTY	SIZE	SCH	DESCRIPTION
FABRICATION				
1	2 EA	1"	160	FLANGE SW. 1500# RTJ, ASME B16.5 ASTM A-105
2A	1 EA	2"	160	FLANGE WN 1500# RTJ, ANSI. B.16.5 ASTM. A105
2	1 EA	3"	XXS	FLANGE WN 2500# RTJ, ANSI. B.16.5 ASTM. A105
3	7 EA	4"	160	FLANGE WN 1500# RTJ, ANSI. B.16.5 ASTM. A105
4	5 EA	4"	160	EQUAL TEE BW. ASME B.16.9 ASTM A-234 WPB
4A	1 EA	4"x2"	160	REDUCER TEE BW. ASME B.16.9 ASTM A-234 WPB
5	5 EA	4"	160	CAP BW ASME B.16.9 ASTM A-234 WPB
6	1 EA	4"x3"	160XXS	CONC. REDUCER BW. ASME B.16.9 ASTM A-234 WPB
7	2 EA	1"ON4"	~	SOCKET 6000 PSI, ASME, B16.11 ASTM A.105
8	2 EA	1"x4"LG	160	PIPE NIPPLE (PBE) ASME, B16.11 ASTM A.106 GR.B
9	60 FT	4"	160	PIPE API-5L-GR.B OR ASTM A.106 GR.B SEAMLESS
INSTALLATION				
10	2 EA	R-16	1"1500#	INSULATION GASKET
11	2 EA	1"	~	DOUBLE BLOCK AND BLEED 1500# RTJ. MONO FLANGE TYPE
11A	1 EA	R-24	2"1500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
12	1 EA	R-32	3"2500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
13	3 EA	R-39	4"1500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
14	8 EA	7/8"x5/4"	1"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
14A	8 EA	7/8"x6"	2"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
15	8 EA	1 1/4"x9/4"	3"2500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
16	24 EA	1 1/4"x8"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
17	1 EA	2"	~	COSSASCO ACCES FITTING 1500# RJ. FLANGE TYPE
18	1 EA	2"	~	BLIND FLANGE 1500# RTJ, ANSI. B.16.5 ASTM. A105

**Chevron**  
**APPROVED FOR CONSTRUCTION**  
JUDIKA J. SILALAHI  
22 APR 2013  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_

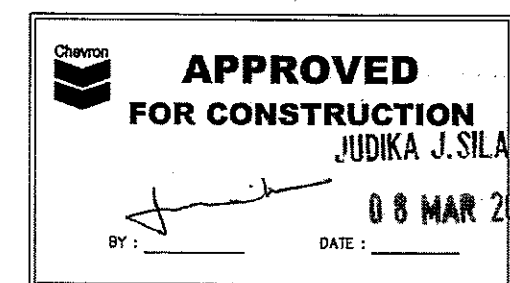
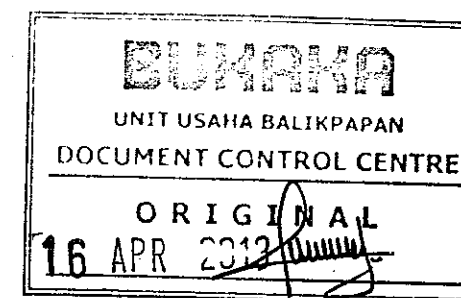
**WO. 2585956**

PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F/G	X-RAY	100%
DESIGN PRESS. (PSI)	3280/5470	MPI	YES
DESIGN TEMP. (°F)	300	HYDROTEST (PSI)	5550/9255-100°F
PAINT SPECIFICATION	COM-SU-2.02.C	PWHT	NO

<b>Chevron Indonesia Company</b> BALIKPAPAN-EAST KALIMANTAN				<b>TITLE</b> <b>SAPI "A" PLATFORM</b> <b>FLOWLINE WH#14</b> <b>ISOMETRIC LINE 2xx-F-4"</b>			
DRAWN BY	MGU	DATE	20-11-12	APPROVED BY	JJS	DATE	20-11-12
CHECKED BY	MOL	DATE	20-11-12	APPROVED BY		DATE	
CAD REF.: SPA-SPI-5524-1-2				JOB NO.: 2585956			
DRAWING NO. SPI-SPA-5524				SHEET NO. 1 OF 2		REV 2	




ITEM	QTY	SIZE	SCH	DESCRIPTION
				FABRICATION
1	7 EA	4"	160	FLANGE WN 1500# RTJ, ANSI. B.16.5 ASTM. A105
2	5 EA	4"	160	EQUAL TEE BW. ASME B.16.9 ASTM A-234 WPB
3	4 EA	4"	160	CAP BW ASME B.16.9 ASTM A-234 WPB
4	2 EA	3/4"ON4"	~	SOCKOLET 5000 PSI, ASME, B16.11 ASTM A.105
5	2 EA	3/4"x4"LG	160	PIPE NIPPLE (POE+TOE) ASME, B16.11 ASTM A.106 GR.B
6	20 FT	4"	160	PIPE API-5L-GR.B OR ASTM A.106 GR.B SEAMLESS
				INSTALLATION
7	9 EA	R-39	4"1500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
8	72 EA	1 1/4"x8"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
9	2 EA	3/4"	~	BALL VALVE 6000, WOG. SCR'D (3/4"F2S)
10	3 EA	4"	~	BALL VALVE 1500# RTJ, FLANGE END (4"F2J)
11	1 EA	4"	~	CHECK VALVE 1500# RTJ. DUAL PLATE WAFER TYPE(4"F5JW)
12	2 EA	3/4"	~	HEX HEAD PLUG 6000,PSI, ASME B16.11 , ASTM A.105
13	8 EA	1 1/4"x12"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.



**WO. 2585956**

PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F	X-RAY	100%
DESIGN PRESS. (PSI)	3280	MPI	YES
DESIGN TEMP. (°F)	300	HYDROTEST (PSI)	5550-100°F
PAINT SPECIFICATION	COM-SU-2.02.C	PWHT	NO

 Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

<del>_____</del>	SIGNED	DATE	<del>_____</del>	SIGNED	DATE
DRAWN BY	MCU	20-11-12	APPROVED BY	JJS	20-11-12

CHECKED BY	MDL	20-11-12	APPROVED BY	
CAD REF. : SPA-SPI-5524-2~1			JOB NO. : 2585956	

**SAPI "A" PLATFORM  
FLOWLINE WH#-14  
ISOMETRIC LINE 2xx-F-4"**

DRAWING NO. SPI-SPA-5524	SHEET NO. 2 OF 2	REV 1
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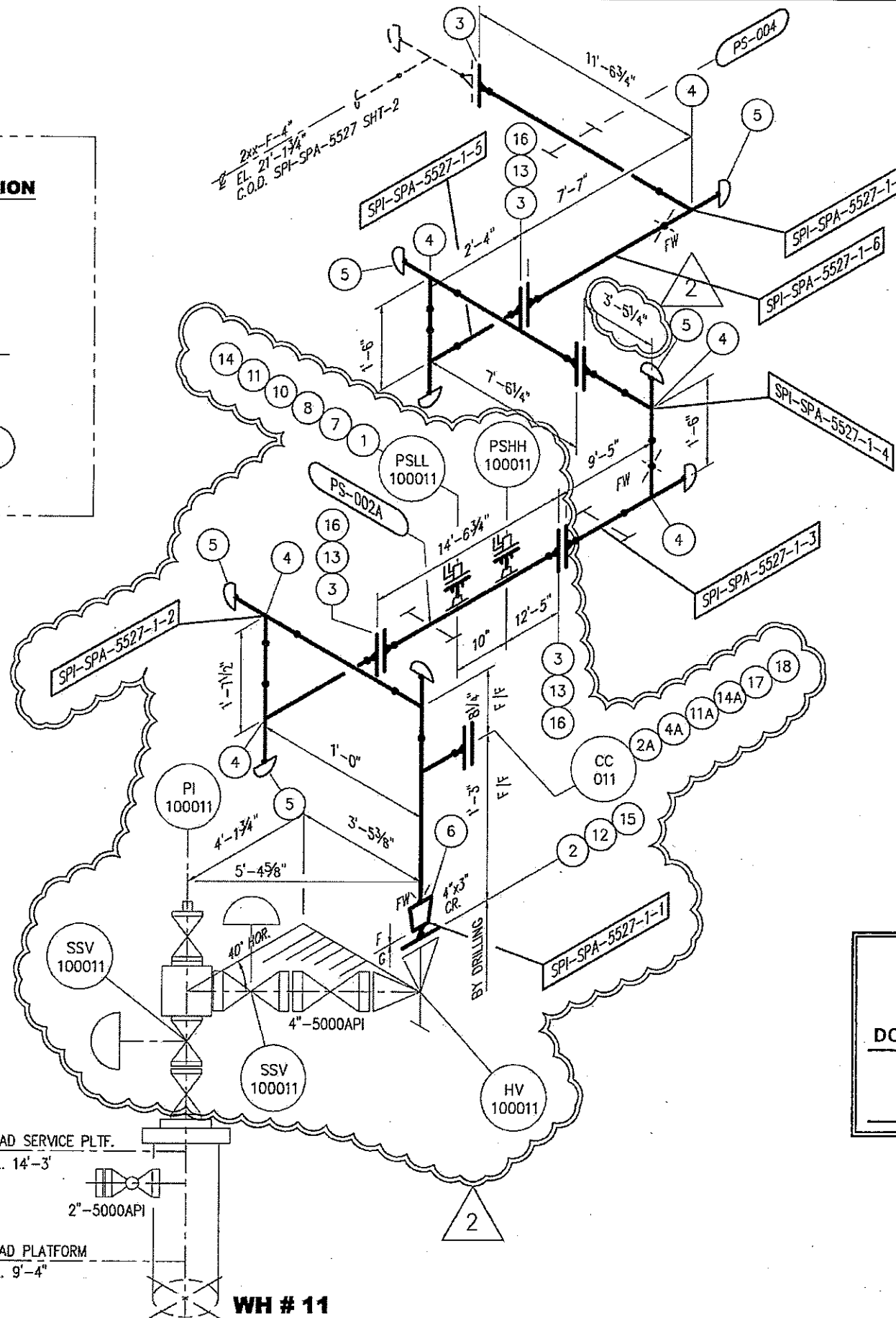
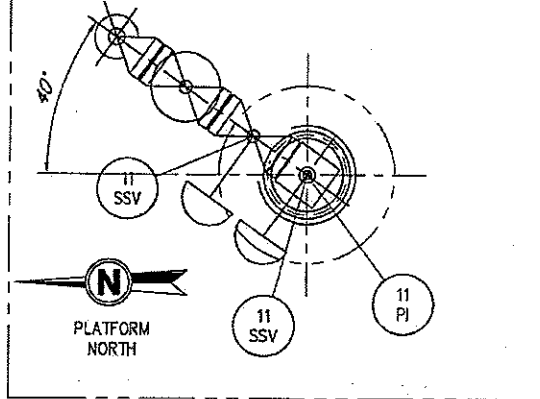
NOTES :

1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED
2. PIPE SUPPORT SHALL BE ADJUSTED ON SITE

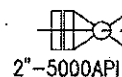
DRAWING NO.	DRAWINGS	REV	DATE	BY	CHKD	APPD	REVISIONS
SPI-SPA-5005	PIPING SECTION AND DETAIL MANIFOLD PLATFORM	1	08-02-13	WGU	TGR	JJS	RE-APPROVED FOR CONSTRUCTION
SPI-SPA-5006	PIPING SECTION MANIFOLD PLATFORM	0	28-12-12	WGU	MOL	JJS	APPROVED FOR CONSTRUCTION
SPI-SPA-5002-2	PIPING PLAN BELOW CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	C	14-12-12	WGU	MOL	JJS	ISSUED FOR APPROVAL
SPI-SPA-5002-1	PIPING PLAN ABOVE CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	B	23-11-12	WGU	MOL	JJS	ISSUED FOR COMMENT
SPI-SPA-4101	P&ID WELLHEAD, PROD HEADER AND GAS EXPORT	A	21-11-12	WGU	MOL	JJS	ISSUED FOR INTERNAL REVIEW



### X-MAS TREE ORIENTATION WH #11



WELLHEAD SERVICE PLTF.  
TOS. EL. 14'-3"



WELLHEAD PLATFORM  
TOS. EL. 9'-4"

WH # 11

- NOTES :
1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED
  2. PIPE SUPPORT SHALL BE ADJUSTED ON SITE

REFERENCE DRAWINGS

DRAWING NO.	DRAWINGS	REV	DATE	BY	CHKD	APPD
SPI-SPA-5005	PIPING SECTION AND DETAIL MANIFOLD PLATFORM	2	22-04-13	MGU	JJS	JJS
SPI-SPA-5006	PIPING SECTION MANIFOLD PLATFORM	1	08-02-13	MGU	TGR	JJS
SPI-SPA-5002-2	PIPING PLAN BELOW CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	0	28-12-12	MGU	MOL	JJS
SPI-SPA-5002-1	PIPING PLAN ABOVE CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	C	14-12-12	MGU	MOL	JJS
SPI-SPA-4101	PMD WELLHEAD, PROD HEADER AND GAS EXPORT	B	23-11-12	MGU	MOL	JJS
		A	21-11-12	MGU	MOL	JJS

REVISIONS	DATE	BY	CHKD	APPD
RE-APPROVED FOR CONSTRUCTION				
RE-APPROVED FOR CONSTRUCTION				
APPROVED FOR CONSTRUCTION				
ISSUED FOR APPROVAL				
ISSUED FOR COMMENT				
ISSUED FOR INTERNAL REVIEW				

### MATERIAL LIST

ITEM	QTY	SIZE	SCH	DESCRIPTION
FABRICATION				
1	2 EA	1"	160	FLANGE SW. 1500# RTJ, ASME B16.5 ASTM A-105
2A	1 EA	2"	160	FLANGE WN 1500# RTJ, ANSI. B.16.5 ASTM. A105
2	1 EA	3"	XXS	FLANGE WN 2500# RTJ, ANSI. B.16.5 ASTM. A105
3	9 EA	4"	160	FLANGE WN 1500# RTJ, ANSI. B.16.5 ASTM. A105
4	9 EA	4"	160	EQUAL TEE BW. ASME B.16.9 ASTM A-234 WPB
4A	1 EA	4"x2"	160	REDUCER TEE BW. ASME B.16.9 ASTM A-234 WPB
5	9 EA	4"	160	CAP BW ASME B.16.9 ASTM A-234 WPB
6	1 EA	4"x3"	160XXS	CONC. REDUCER BW. ASME B.16.9 ASTM A-234 WPB
7	2 EA	1"ON4"	~	SOCKET 6000 PSI, ASME, B16.11 ASTM A.105
8	2 EA	1"x4"LG	160	PIPE NIPPLE (PBE) ASME, B16.11 ASTM A.106 GR.B
9	60 FT	4"	160	PIPE API-5L-GR.B OR ASTM A.106 GR.B SEAMLESS
INSTALLATION				
10	2 EA	R-16	1"1500#	INSULATION GASKET
11	2 EA	1"	~	DOUBLE BLOCK AND BLEED 1500# RTJ. MONO FLANGE TYPE
11A	1 EA	R-24	2"1500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
12	1 EA	R-32	3"2500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
13	4 EA	R-39	4"1500#	OVAL RING,SOFT IRON CAD. PLTD MAX BHN 90 PER ASME B16.20
14	8 EA	7/8"x5/4"	1"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
14A	8 EA	7/8"x6"	1"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
15	8 EA	1 1/4"x9 1/4"	3"2500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
16	32 EA	1 1/4"x8"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
17	1 EA	2"	~	COSSASCO ACCES FITTING 1500# RJ. FLANGE TYPE
18	1 EA	2"	~	BLIND FLANGE 1500# RTJ, ANSI. B.16.5 ASTM. A105

**BUKAKA**

UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE

ORIGINAL

22 April 2013



**APPROVED  
FOR CONSTRUCTION**



JUDIKA J. SILALAH

DATE: 22 APR 2013

**WO. 2585956**

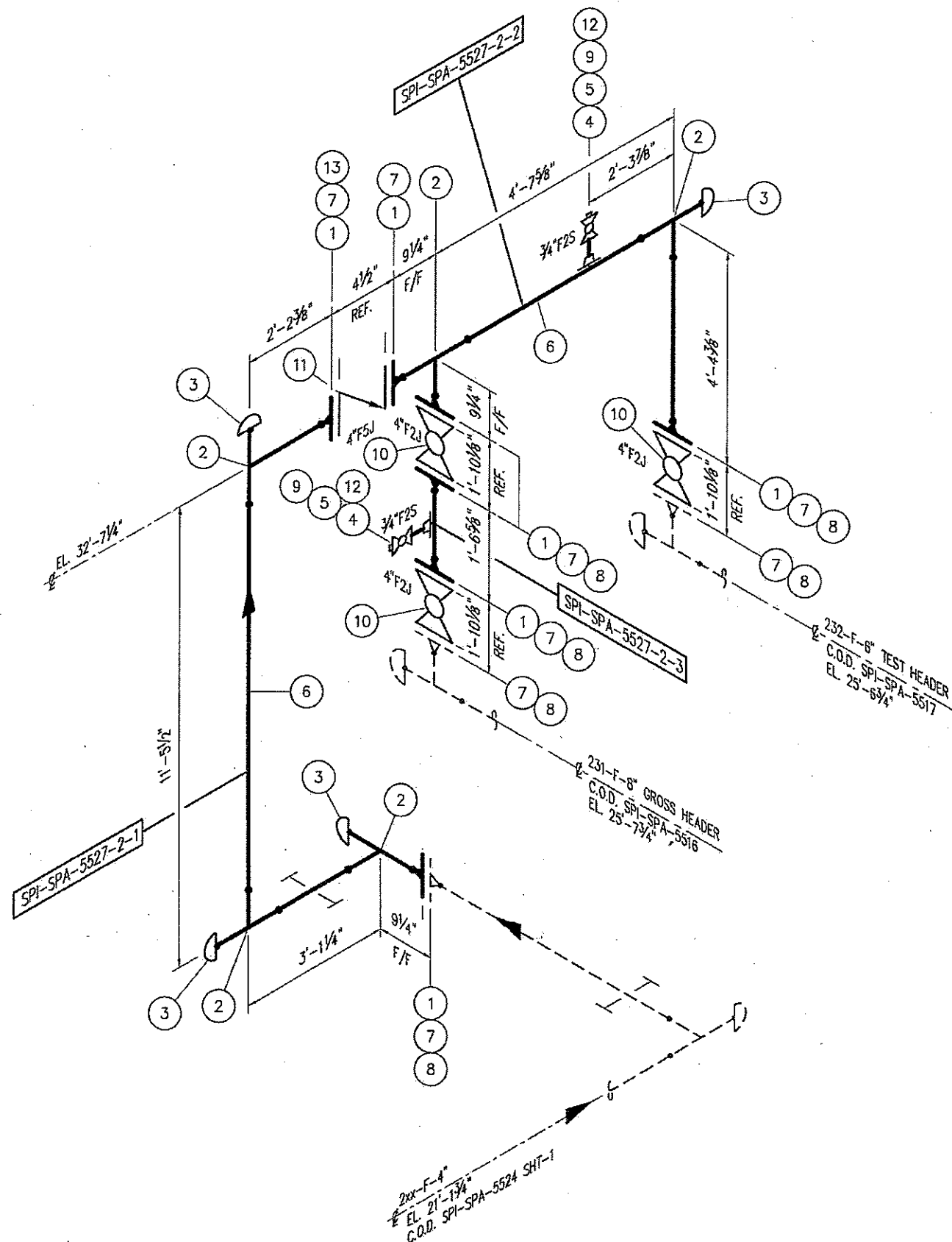
PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F/G	X-RAY	100%
DESIGN PRESS. (PSI)	3280/5470	MPI	YES
DESIGN TEMP. (°F)	300	HYDROTEST (PSI)	5550/9255-100°F
PAINT SPECIFICATION	COM-SU-2.02.C	PWHT	NO

**Chevron**  
Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

	SIGNED	DATE		SIGNED	DATE
DRAWN BY	MGU	20-11-12	APPROVED BY	JJS	20-11-12
CHECKED BY	MOL	20-11-12	APPROVED BY		
CAD REF. : SPI-SPA-5527-1~2			JOB NO. : 2585956		

TITLE <b>SAPI "A" PLATFORM FLOWLINE WH#11 ISOMETRIC LINE 2xx-F-4"</b>		
DRAWING NO. SPI-SPA-5527	SHEET NO. 1 OF 2	REV 2





- NOTES :
1. ALL DIMENSION ARE IN INCHES UNLESS OTHERWISE NOTED
  2. PIPE SUPPORT SHALL BE ADJUSTED ON SITE

REFERENCE	DRAWING NO.	DRAWINGS	REV	DATE	BY	CHKD	APPD	REVISIONS
SPI-SPA-5005	PIPING SECTION AND DETAIL MANIFOLD PLATFORM	1	08-02-13	MGU	TGR	JJS		RE-APPROVED FOR CONSTRUCTION
SPI-SPA-5006	PIPING SECTION MANIFOLD PLATFORM	0	28-12-12	MGU	MOL	JJS		APPROVED FOR CONSTRUCTION
SPI-SPA-5002-2	PIPING PLAN BELOW CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	C	14-12-12	MGU	MOL	JJS		ISSUED FOR APPROVAL
SPI-SPA-5002-1	PIPING PLAN ABOVE CELLAR DECK WELLHEAD AND MANIFOLD PLATFORMS	B	23-11-12	MGU	MOL	JJS		ISSUED FOR COMMENT
SPI-SPA-4101	PMD WELLHEAD, PROD HEADER AND GAS EXPORT	A	21-11-12	MGU	MOL	JJS		ISSUED FOR INTERNAL REVIEW

## MATERIAL LIST

ITEM	QTY	SIZE	SCH	DESCRIPTION
FABRICATION				
1	7 EA	4"	160	FLANGE WN 1500# RTJ, ANSI B.16.5 ASTM A.105
2	5 EA	4"	160	EQUAL TEE BW, ASME B.16.9 ASTM A-234 WPB
3	4 EA	4"	160	CAP BW ASME B.16.9 ASTM A-234 WPB
4	2 EA	3/4"ON4"	~	SOCKET 6000 PSI, ASME, B.16.11 ASTM A.105
5	2 EA	3/4"x4"LG	160	PIPE NIPPLE (POEXTOE) ASME, B.16.11 ASTM A.106 GR.B
6	20 FT	4"	160	PIPE API-5L-GR.B OR ASTM A.106 GR.B SEAMLESS
INSTALLATION				
7	9 EA	R-39	4"1500#	OVAL RING,SOFT IRON CAD, PLTD MAX BHN 90 PER ASME B.16.20
8	72 EA	1 1/4"x8"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.
9	2 EA	3/4"	~	BALL VALVE 6000, WOG. SCR'D (3/4"F2S)
10	3 EA	4"	~	BALL VALVE 1500# RTJ, FLANGE END (4"F2J)
11	1 EA	4"	~	CHECK VALVE 1500# RTJ, DUAL PLATE WAFER TYPE(4"F5JW)
12	2 EA	3/4"	~	HEX HEAD PLUG 6000,PSI, ASME B.16.11 , ASTM A.105
13	8 EA	1 1/4"x12"	4"1500#	STUD BOLTS ASTM A-193 GR B7, NUTS ASTM A-194 GR 2H CAD PLTD.

**BUKAKA**

UNIT USAHA BALIKPAPAN  
DOCUMENT CONTROL CENTRE

ORIGINAL

16 APR 2013



**APPROVED  
FOR CONSTRUCTION**

JUDIKA J. SILALA

08 MAR 2013

BY :

DATE :

**WO. 2585956**

PIPING CODE	ASME B.31.3	INSULATION	NO
PIPING SPEC.	F	X-RAY	100%
DESIGN PRESS. (PSI)	3280	MPI	YES
DESIGN TEMP. (°F)	300	HYDROTEST (PSI)	5550-100°F
PAINT SPECIFICATION	COM-SU-202.C	PWHT	NO



Chevron Indonesia Company  
BALIKPAPAN-EAST KALIMANTAN

SIGNED	DATE	SIGNED	DATE
DRAWN BY	MGU 20-11-12	APPROVED BY	JJS 20-11-12
CHECKED BY	MOL 20-11-12	APPROVED BY	
CAD REF. :	SPI-SPA-5527-2-1	JOB NO. :	2585956

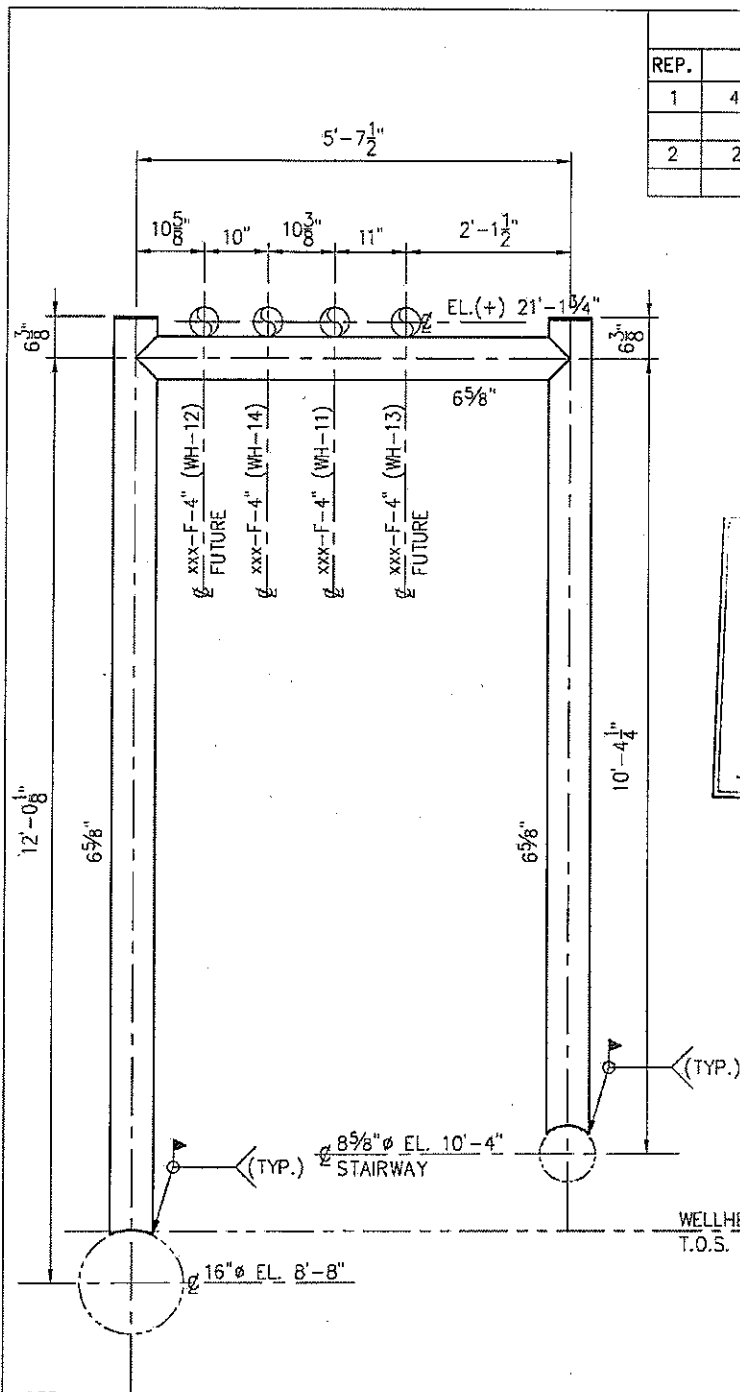
TITLE  
**SAPI "A" PLATFORM  
FLOWLINE WH#-11  
ISOMETRIC LINE 2xx-F-4"**

DRAWING NO.  
SPI-SPA-5527

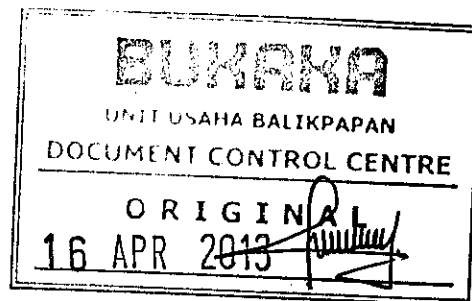
SHEET NO.  
2 OF 2

REV  
1





MATERIAL LIST		
REP.	QTY.	DESCRIPTION
1	40'-0"	PIPE 6 5/8" API 5L OR GR.B SEAMLESS
2	2 EA	6 5/8" OD x 3/8" CAP R ASTM A-36




"UDIKA J. SILALA!"  
08 MAR 2013

NOTE:

- ALL DIMENSIONS ARE IN INCHES  
UNLESS OTHERWISE NOTED.

PS-003

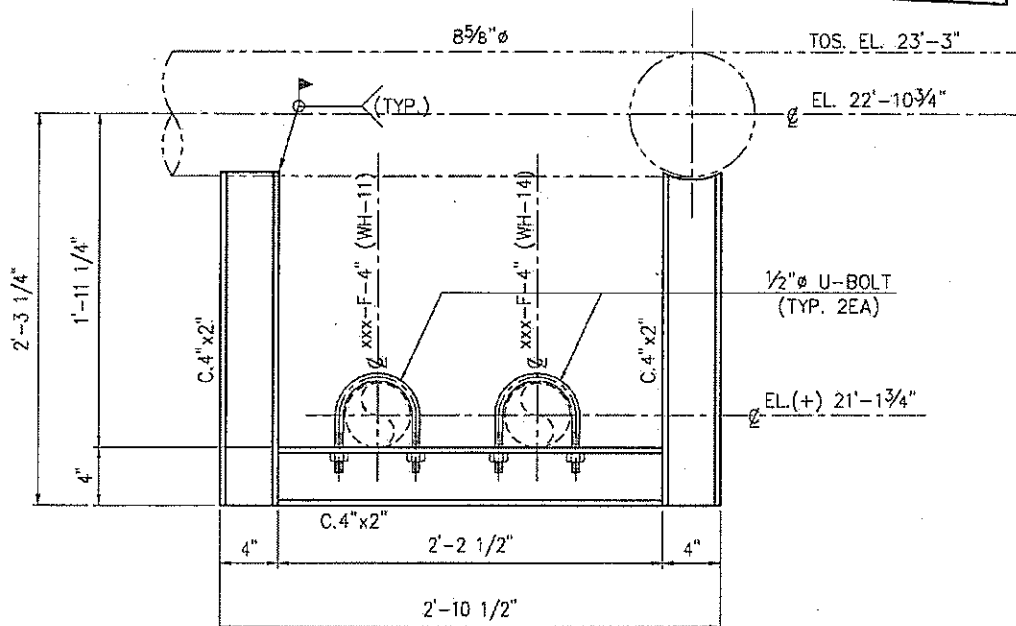
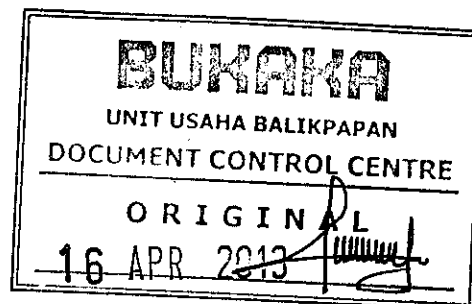
REQ'D-1 EA

						CLIENT:  Chevron Indonesia Company BALIKPAPAN-EAST KALIMANTAN
0	28-12-12	MGU	APPROVED FOR CONSTRUCTION	MGU MOL	JJS	<b>SAPI FIELD DEVELOPMENT PROJECT</b>
C	14-12-12	MGU	ISSUED FOR APPROVAL	MGU MOL	JJS	
B	08-10-12	MGU	ISSUED FOR COMMENT	MGU MOL	JJS	
A	08-10-12	MGU	ISSUED FOR REVIEW	MGU MOL	JJS	
REV.	DATE	BY	DESCRIPTION	CHKD	APPD	TITLE: PIPE SUPPORT DETAIL WELLHEAD AND MANIFOLD SAPI "B" PLATFORMS
ISO.LINE/DRAWING NO.: SPI-SPA-ISO-5524, 5525, 5526, 5527						PIPE SUPPORT NO. PS-003
PIPING PLAN DWG. NO.: SPI-SPA-5002-3						DWG. NO. SPI-SPA-PSD-5250-3
REFERENCE DRAWING						REV. 0

SCALE

1"=1'-0"

MATERIAL LIST		
REP.	QTY.	DESCRIPTION
1	20'-0"	CHANNEL 4"x2" ASTM A-36
2	2 EA	1/2" U-BOLT FOR 4" PIPE C/W NUTS




PS-004  
REQ'D-1 EA

JUDIKA J. SILALA  
08 MAR 2013

NOTE:

1. ALL DIMENSIONS ARE IN INCHES  
UNLESS OTHERWISE NOTED.

						CLIENT :  Chevron Indonesia Company BALIKPAPAN-EAST KALIMANTAN
D	28-12-12	MGU	APPROVED FOR CONSTRUCTION	MGU MOL	JJS	<b>SAPI FIELD DEVELOPMENT PROJECT</b>
C	14-12-12	MGU	ISSUED FOR APPROVAL	MGU MOL	JJS	
B	08-10-12	MGU	ISSUED FOR COMMENT	MGU MOL	JJS	
A	08-10-12	MGU	ISSUED FOR REVIEW	MGU MOL	JJS	
REV.	DATE	BY	DESCRIPTION	CHKD	APPD	TITLE : PIPE SUPPORT DETAIL WELLHEAD AND MANIFOLD SAPI "B" PLATFORMS
ISO.LINE/DRAWING NO. : SPI-SPA-ISO-5524, 5525					SCALE	PIPE SUPPORT NO. PS-004
PIPING PLAN DWG. NO. : SPI-SPA-5002-3					1"=1'-0"	DWG. NO. SPI-SPA-PSD-5250-4
REFERENCE DRAWING						REV. 0