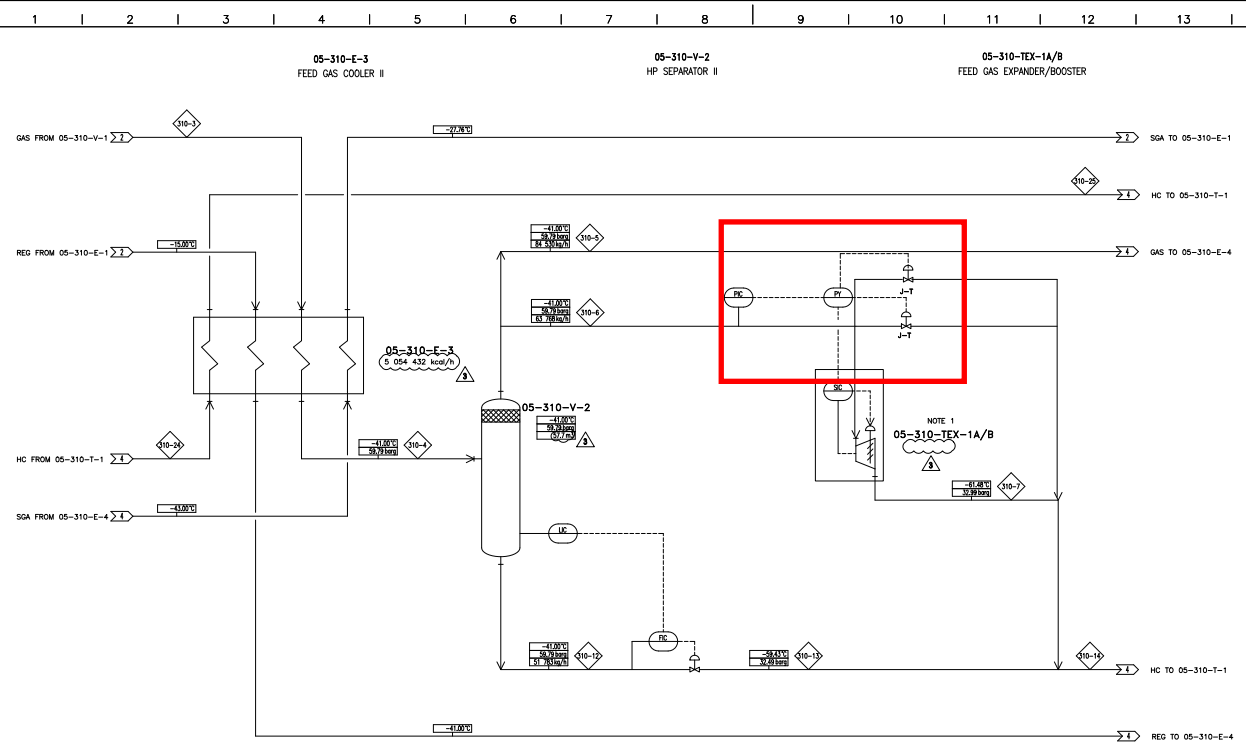

STREAM No.		310-3		310-4		310-5		310-6		310-7		310-12		310-13		310-14		310-24		310-25	
Component / Molecular Weight		mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %	mol %	weight %
H2O	18,02																				
H2S	34,08		1,98ppm		1,98ppm		1,98ppm		1,98ppm		1,98ppm		1,98ppm		1,98ppm		1,55ppm		2,98ppm		2,98ppm
CO2	44,01		8,42ppm		8,42ppm		8,31ppm		8,31ppm		8,31ppm		8,31ppm		8,31ppm		6,50ppm		11,1ppm		11,1ppm
N2	28,01	0,92	1,52	0,92	1,52	1,06	1,59	1,06	1,59	1,06	1,59	0,44	0,57	0,44	0,57	0,81	1,13	0,01	0,01	0,01	0,01
CH4	16,04	76,94	63,36	76,94	63,36	81,46	69,71	81,46	69,71	81,46	69,71	61,82	45,16	61,82	45,16	72,41	58,70	33,81	20,66	33,81	20,66
C2H6	30,07	20,68	31,91	20,68	31,91	16,68	26,76	16,68	26,76	16,68	26,76	34,10	46,67	34,10	46,67	23,92	35,68	60,49	69,20	60,49	69,20
C3H8	44,1	1,31	2,96	1,31	2,96	0,75	1,77	0,75	1,77	0,75	1,77	3,18	6,39	3,18	6,39	1,25	3,84	4,84	8,14	4,84	8,14
i C4H10	58,12	0,08	0,23	0,08	0,23	0,03	0,10	0,03	0,10	0,03	0,10	0,23	0,61	0,23	0,61	0,11	0,33	0,40	0,89	0,40	0,89
n C4H10	58,12	0,07	0,20	0,07	0,20	0,02	0,07	0,02	0,07	0,02	0,07	0,21	0,56	0,21	0,56	0,10	0,29	0,40	0,89	0,40	0,89
i C5H12	72,15		0,01		0,01							0,01	0,03	0,01	0,03		0,02	0,03	0,08	0,03	0,08
n C5H12	72,15		0,01		0,01							0,01	0,02	0,01	0,02		0,01	0,02	0,05	0,02	0,05
C6+	86,18	0,0001	0,0003	0,0001	0,0003							0,0003	0,0011	0,0003	0,0011	0,0001	0,0005	0,0015	0,0050	0,0015	0,0050
CH3S	48,11		1,02ppm		1,02ppm		0,51ppm		0,51ppm		0,51ppm		2,47ppm		2,47ppm		1,39ppm		3,35ppm		3,35ppm
C2H5S	62,13		0,85ppm		0,85ppm		0,28ppm		0,28ppm		0,28ppm		0,43ppm		0,43ppm		0,59ppm		0,22ppm		0,22ppm
COS	60,07		5,30ppm		5,30ppm		1,56ppm		1,56ppm		1,56ppm		10,4ppm		10,4ppm		6,60ppm		13,7ppm		13,7ppm
BEA	105,14																				
FLOW	kmol/h	10 269		10 269		4 509		3 402		3 402		2 357		2 357		5 759		8 464		8 464	
FLOW	kg/h	200 982		200 982		84 530		63 768		63 768		51 763		51 763		115 551		222 207		222 207	
TEMPERATURE	°C	-31,00		-41,00		-41,00		-41,00		-61,48		-41,00		-59,43		-60,70		-44,38		-56,00	
PRESSURE	barg	60,19		59,79		59,79		59,79		32,99		59,79		32,49		32,49		32,26		32,26	
MOLECULAR WEIGHT	kg/kmol	19,48		19,48		18,75		18,75		18,75		21,97		21,97		20,96		26,25		26,25	
HEAT FLOW x10⁶	kcal/h	-200,96		-204,57		-87,91		-66,52		-66,69		-50,34		-50,34		-117,03		-195,40		-197,65	
VAP. FRACTION	weight fr	1,00		0,74		1,00		1,00		0,80				0,92		0,58				0,10	
DENSITY VAP/LIQ	kg/m3	106,41		112,31	303,79	112,31		112,31		48,39	406,77		303,79	46,87	414,65	47,16	412,68		417,57	46,41	416,69
SPECIFIC HEAT VAP/LIQ	kJ/kg°C	4,89		5,75	5,18	5,75		5,75		3,05	3,60		5,16	2,98	3,31	3,00	3,53		1,33	2,72	3,36
DYNAMIC VISCOSITY x10⁻⁴ VAP/LIQ	cP	1,32		1,33	3,76	1,33		1,33		0,95	6,60		3,76	0,96	6,92	0,95	6,84		6,94	1,01	6,87
MOLECULAR WEIGHT VAP/LIQ	kg/kmol	19,48		18,75	21,97	18,75		18,75		17,79	23,89		21,97	17,89	24,58	17,83	24,31		26,25	20,17	27,13

GENERAL NOTES

1- ALL FIGURES SHOWN ON PFD (FLOW RATE, COMPOSITION, PRESSURE, TEMPERATURE, HEAT EXCHANGER DUTY) ARE REFFERED TO WINTER LEAN CASE.

NOTES

1. TURBO EXPANDER WILL BE ADDED IN FUTURE.

HOLDS

REV.	DATE	DESCRIPTION	ORIG. BY	PREP. BY	CHKD. BY	APPRD. BY	AUTH. BY
3	01/06/14	FIANL	EIED	M.D.	A.B.	A.GH.	A.P.
2	03/03/14	FINAL ISSUE	EIED	K.G.	A.B	H.S.	A.P.
1	18/02/13	ISSUED FOR APPROVAL	EIED	A.A.	E.A.	H.S.	A.P.
0	05/12/12	ISSUED FOR APPROVAL	EIED	A.A.	E.A.	M.M.	A.P.

EIED

Gas Sweetening, Sulphur Recovery, C2 Recovery, Fractionation and InterConnection Pipeline Between Fianis Project

DRAWING TITLE:

PROCESS FLOW DIAGRAM
FEED GAS COOLING SECTION
310 – C2 RECOVERY

PROJ. NAME	PLANT ID	PHASE	UNIT	DISC	TYPE	SEQ.	REV.	SH.	SIZE	SCALE
BU	05	0	310	PR	PFD	001	3	3	A1	---