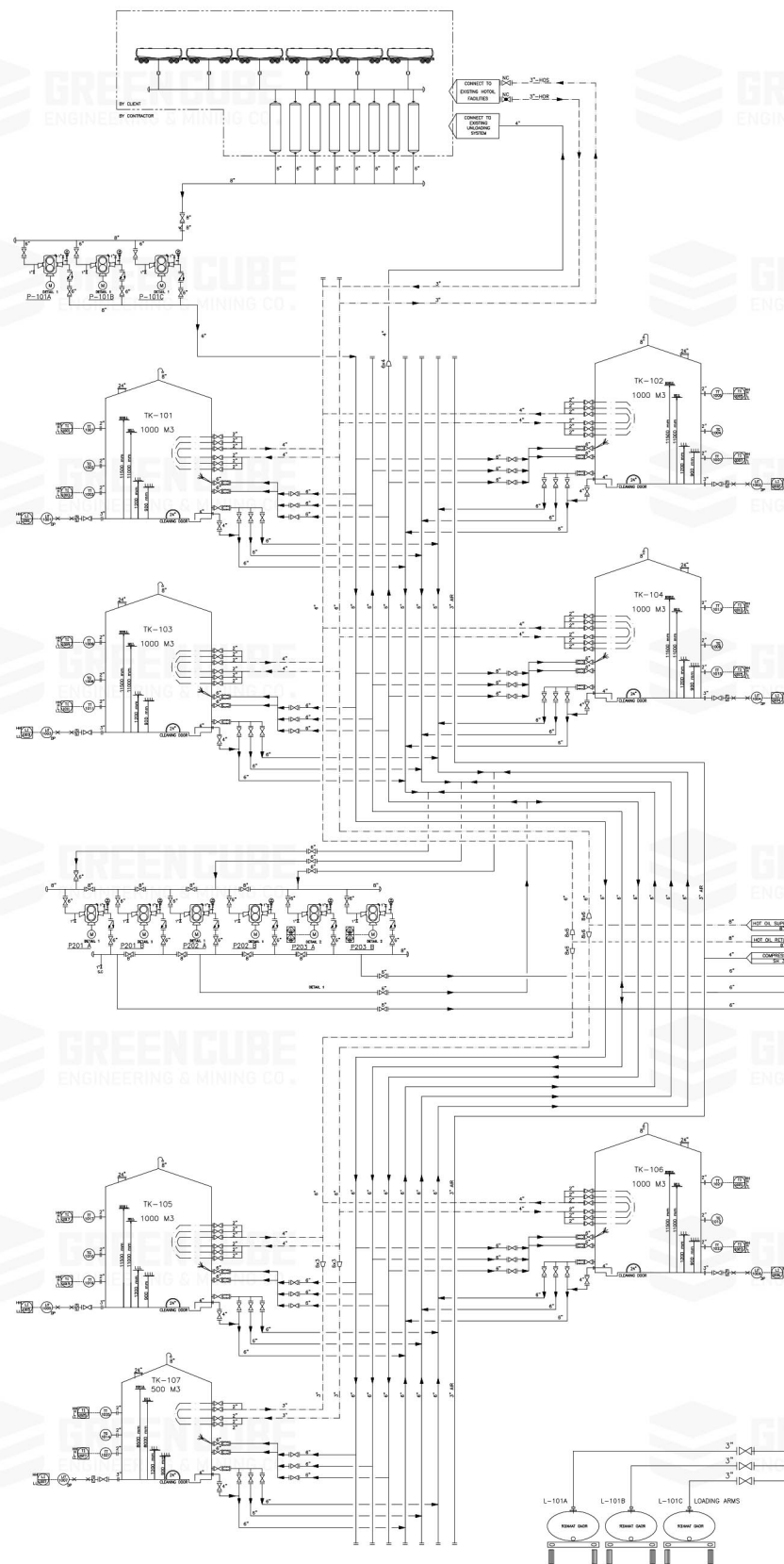




TK-101/102/103/104/105/106
VACUUM BOTTOM & BITUMEN STORAGE TANK
DESIGN TEMP: 250 °C
DESIGN PRESS: ATM
NOMINAL CAPACITY: 1000 m³
ID x HEIGHT: 8530x8940 mm
INSULATION: YES
MATERIAL: C.S.(A283 Gr.C)

TK-107
VACUUM BOTTOM & BITUMEN STORAGE TANK
DESIGN TEMP: 250 °C
DESIGN PRESS: ATM
NOMINAL CAPACITY: 500 m³
ID x HEIGHT: 8530x8940 mm
INSULATION: YES
MATERIAL: C.S.(A283 Gr.C)

P-101 A/B/C
VACUUM BOTTOM UNLOADING PUMP
RATED CAPACITY: 50 m³/h
AP: 5 bar
BREAK HORSE POWER: 10.7 KW
DESIGN PRESS. (barg): 6.25
DESIGN TEMP (°C): 250

P-201 A/B
BITUMEN LOADING PUMP
RATED CAPACITY: 66 m³/h
AP: 4 bar
BREAK HORSE POWER: 15.1 KW
DESIGN PRESS. (barg): 5
DESIGN TEMP (°C): 250

P-301 A/B
BITUMEN CIRCULATION PUMP
RATED CAPACITY: 110 m³/h
AP: 7.5 bar
BREAK HORSE POWER: 35.3 KW
DESIGN PRESS. (barg): 9.4
DESIGN TEMP (°C): 250

P-203 A/B
REACTOR LOADING PUMP
RATED CAPACITY: 50 m³/h
AP: 8 bar
BREAK HORSE POWER: 17.1 KW
DESIGN PRESS. (barg): 10
DESIGN TEMP (°C): 250

P-204 A/B
REACTOR UNLOADING PUMP
RATED CAPACITY: 40 m³/h
AP: 5 bar
BREAK HORSE POWER: 10.7 KW
DESIGN PRESS. (barg): 6.25
DESIGN TEMP (°C): 250

L-101 A/B/C
LOADING ARM
RATED CAPACITY: 55 m³/h
DESIGN PRESS. (barg): 9
DESIGN TEMP (°C): 250

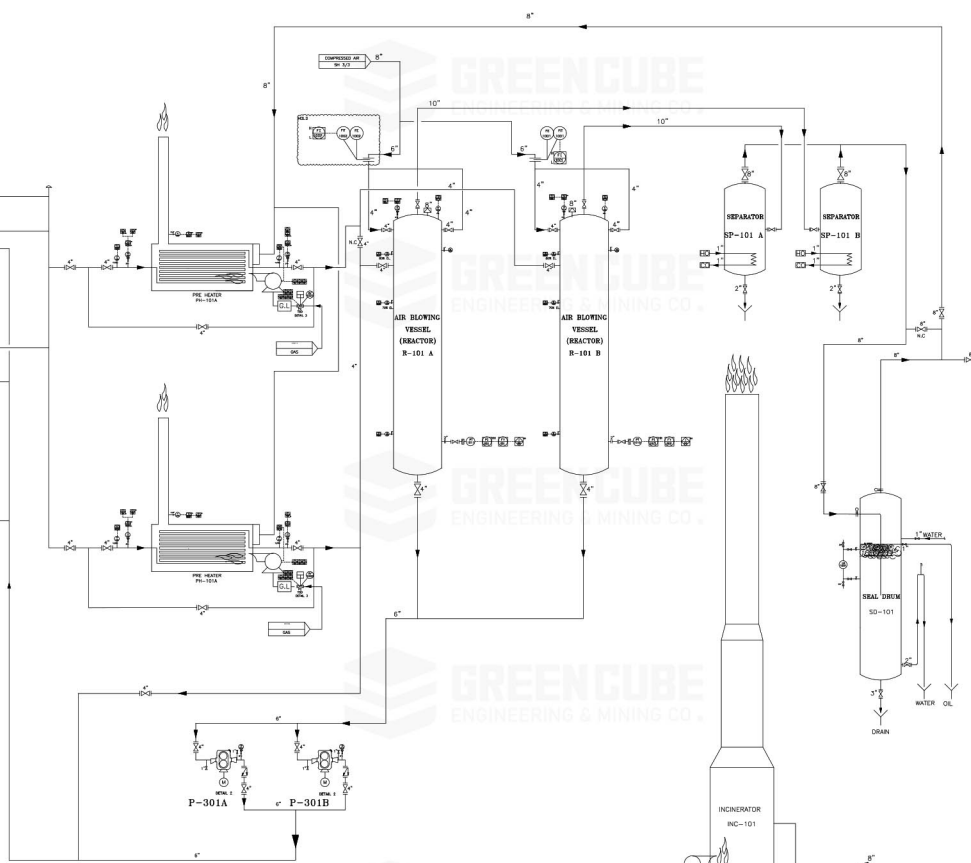
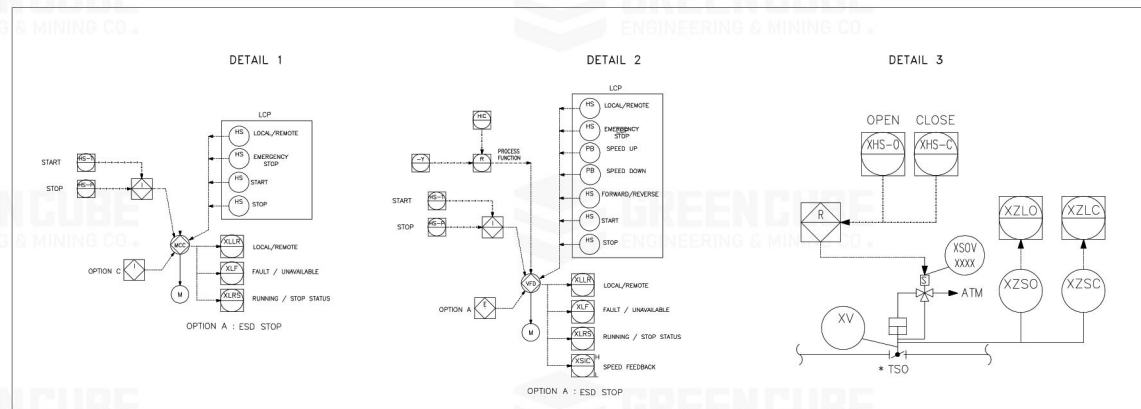
PH-101 A/B
PREHEATER
THERMAL CAPACITY 2,500,000 Kcal/h
DESIGN TEMP: 10 barg
DESIGN TEMP: 350 °C
DIMENSION LxWxH: x.x mm

R-101 A/B
AIR BLOWING VESSEL (REACTOR)
DESIGN TEMP: 250 °C
DESIGN PRESS: 3 bar
NOMINAL CAPACITY: 200 m³
ID x HEIGHT: 6000x5000 mm
INSULATION: YES
MATERIAL: C.S.(A18 GR.70H)

SP-101 A/B
SEPARATOR
DESIGN TEMP: 150 °C
DESIGN PRESS: 1 bar
NOMINAL CAPACITY: 14.6 m³
ID x HEIGHT: 1810x5320 mm
INSULATION: NO
MATERIAL: C.S.(A283 GR.C)

SD-101
SEAL DRUM
DESIGN TEMP: 150 °C
DESIGN PRESS: 1 bar
NOMINAL CAPACITY: 14.6 m³
ID x HEIGHT: 1810x5320 mm
INSULATION: YES
MATERIAL: C.S.(A283 GR.C)

INC-101
INCINERATOR
DESIGN TEMP: 350 °C
DESIGN PRESS: ATM
ID x HEIGHT: 3100x30000 mm
INSULATION: YES
MATERIAL: C.S.(A283 GR.C-APSL GR.B)



LEGEND

- GATE VALVE
- GLOBE VALVE
- EXPANSION JOINT
- STRAINER
- CHECK VALVE
- BALL VALVE
- CAP
- CON. REDUCER
- ECC. REDUCER
- SPECTACLE BLIND
- FLANGE
- PRESSURE GAGE
- S.C SAMPLE CONNECTION
- N.C NORMALLY CLOSE
- N.O NORMALLY OPEN
- TG TEMPERATURE GAGE
- PG PRESSURE GAGE
- TT TEMPERATURE TRANSMITTER
- PT PRESSURE TRANSMITTER
- LT LEVEL TRANSMITTER
- LG LEVEL GAUGE
- FT FLOW TRANSMITTER
- FE FLOW ELEMENT (ORIFICE)
- LI LEVEL INDICATOR
- TI TEMPERATURE INDICATOR
- PI PRESSURE INDICATOR
- FI FLOW INDICATOR

SIGNALS & TUBING		
CODE NO.	SYMBOL	DESCRIPTION
1		INSTRUMENT SUPPLY OR CONNECTION TO PROCESS
2		UNDEFINED SIGNAL
3		PNEUMATIC SIGNAL
4		ELECTRICAL SIGNAL
5		HYDRAULIC SIGNAL
6		CAPILLARY TUBE
7		INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)
8		FIELD MOUNTED INSTRUMENT
9		MEASURE OR SIGNAL DISPLAYED ON PIC
10		INTERLOCK

REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE
01	ISSUED FOR REVIEW	A.J	H.A	A.M	17.Jun.2026
00	ISSUED FOR REVIEW	A.J	H.A	A.M	26.Apr.2026

CLIENT: **Tarazbitum**
BITUMEN PRODUCTION

CONTRACTOR: **GREENCUBE IDEA**
ENGINEERING & MINING CO.

PROJECT: **TARAZ BITUMEN PLANT**

DRAWING TITLE: **PIPING & INSTRUMENT DIAGRAM**

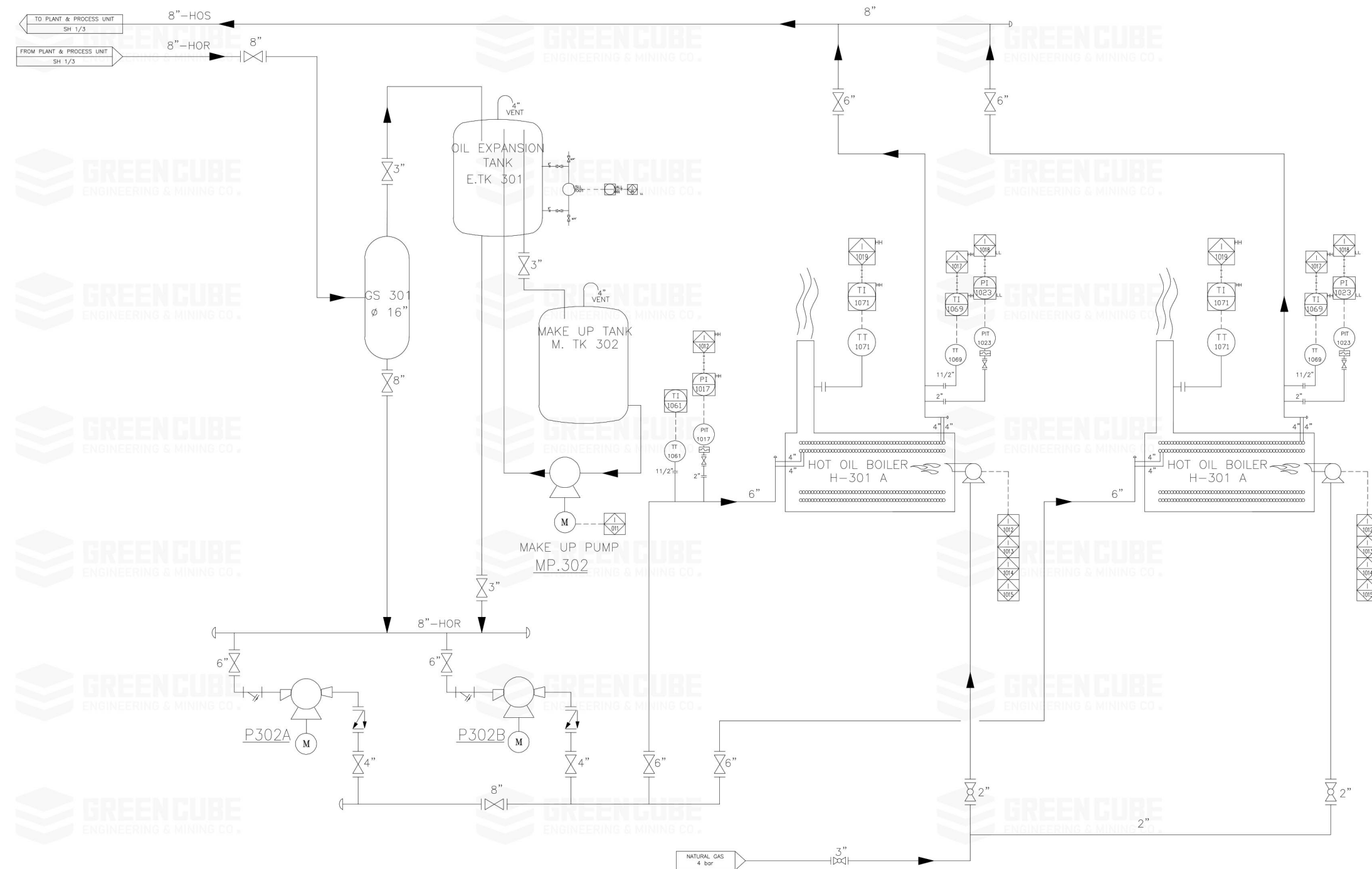
SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
NTS	A3	TRZ-PR-DI-003	1 OF 1	01

H-301 A/B
HOT OIL PACKAGE

THERMAL CAPACITY 3.000.000 Kcal/h
DESIGN PRESS. : 10 barg
DESIGN TEMP. : 350 °C
DIMENSION: LxD: 5400x2800 mm

P-301 A/B
Hot Oil PUMP

RATED CAPACITY : 140 m³/h
ΔP: 6 bar
HYDRAULIC POWER : 75 KW
DESIGN PRESS. (barg) = 8
DESIGN TEMP (°C) = 320



LEGEND

REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE
01	ISSUED FOR REVIEW	A.J	H.A	A.M	17.Jun.2026
00	ISSUED FOR REVIEW	A.J	H.A	A.M	26.Apr.2026

CLIENT:
Tarazbitum
BITUMEN PRODUCTION

CONTRACTOR:
GREENCUBE IDEA
ENGINEERING & MINING CO.

PROJECT:
TARAZ
BITUMEN PLANT

DRAWING TITLE:
PIPING & INSTRUMENT DIAGRAM
(HOT OIL)

SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
NTS	A3	TRZ-PR-DI-003	1 OF 1	01

C-301 A/B/C

AIR COMPRESSOR

RATED CAPACITY : 28.7 m³/h FAD

MOTOR POWER : 160 KW

OUTPUT PRESS. (barg) = 8.5

WORKING PRESS. (barg) = 8

DESIGN TEMP (°C) = 45

V-301 A/B

AIR RECEIVER VESSEL

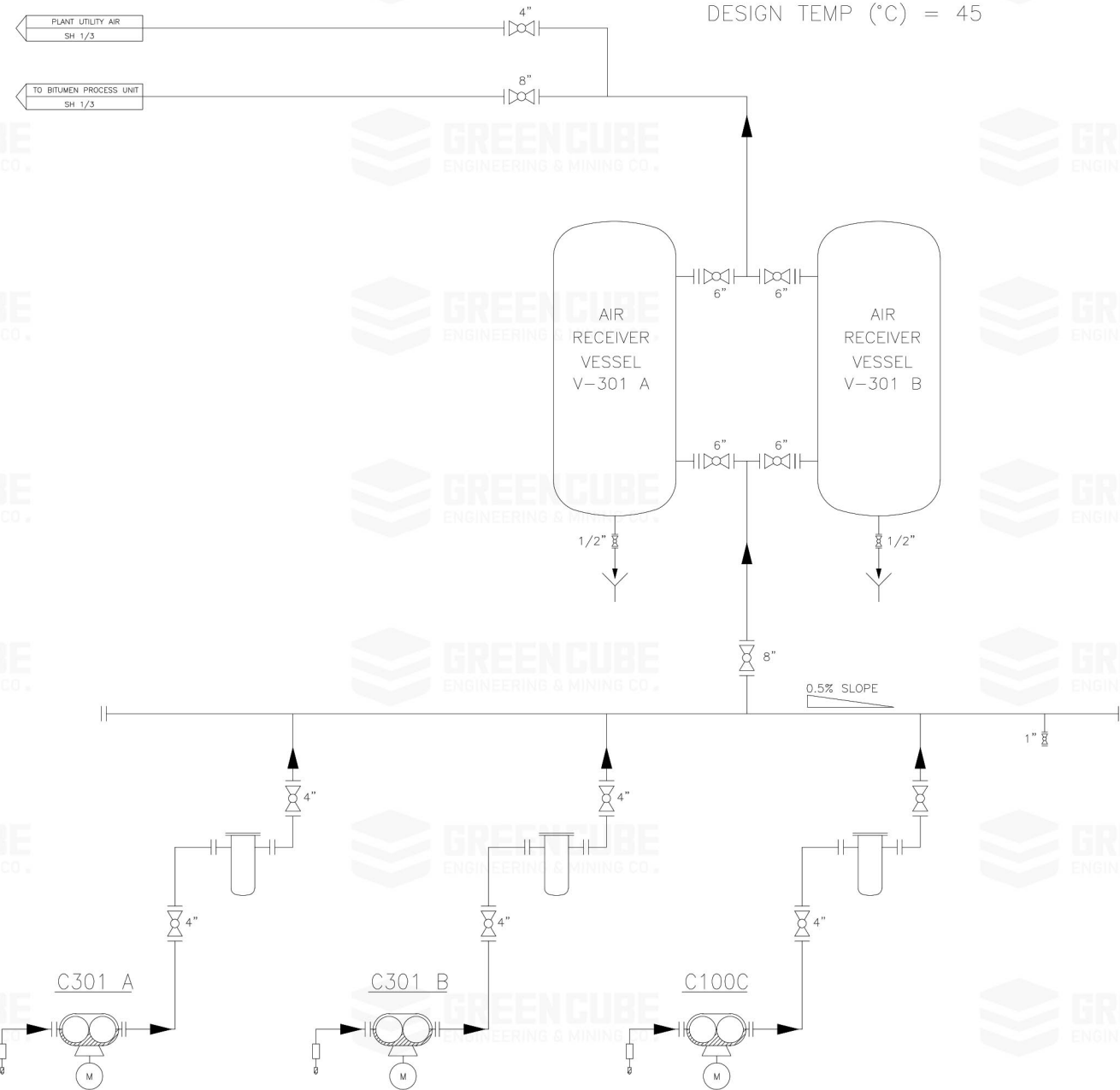
CAPACITY : 10 m³

LENGTH/ID : 5000/1600 mm

DESIGN PRESS. (barg) = 10

WORKING PRESS. (barg) = 8

DESIGN TEMP (°C) = 65



REV.	DESCRIPTION	PREP.	CHK.	APP.	DATE
01	ISSUED FOR REVIEW	A.J	H.A	A.M	17.Jun.2026
00	ISSUED FOR REVIEW	A.J	H.A	A.M	26.Apr.2026

CLIENT:
Tarazbitum
BITUMEN PRODUCTION

CONTRACTOR:
GREENCUBE IDEA
ENGINEERING & MINING CO.

PROJECT:
TARAZ
BITUMEN PLANT

DRAWING TITLE:
PIPING & INSTRUMENT DIAGRAM
(COMPRESSED AIR)

SCALE	SIZE	DOCUMENT NUMBER	SHEET	REV.
NTS	A3	TRZ-PR-DI-003	1 OF 1	01