

# **BOP, CHOKE MANIFOLD AND DIVERTER SCHEMATICS**

# OCEAN ENDEAVOR BOP STACK - JACK 3

## SCHAFFER "FT-G" RISER ADAPTER

c/w Boost Line Isolation/Test Valve  
3" 10M Failsafe Open + Check Valve

## OIL STATES 3.5K

### FLEX JOINT

10 DEG MAX DEFLECTION

## HYDRIL 10M GX ANNULAR

## GAS BLEED VALVES

### CAMERON

3 1/16" 15M Dual Block  
Failsafe Close

## HYDRIL 10M GX ANNULAR

## CHOKE & KILL ISOLATION VALVES

### CAMERON

3 1/16" 15M Failsafe Open

## CAMERON LMRP CONNECTOR

HC COLLET 18 3/4" X 10,000 psi  
4,048M Bending @ 0 psi, 0 tension  
2,063M Bending @ 10Mpsi, 2MM tension  
Max Release Angle ≤30°

## BLIND SHEAR

### 22" Bonnet

## HYDRIL 15M

### DOUBLE RAMS

## CHOKE AND KILL VALVES

### CAMERON

3 1/16" 15M Dual Block  
Failsafe Close

## VARIABLE 4 1/2"x 7"

### 15.5" Bonnet

## VARIABLE 4 1/2"x 7"

### 15.5" Bonnet

## HYDRIL 15M

### DOUBLE RAMS

## VARIABLE 4 1/2"x 7"

### 15.5" Bonnet

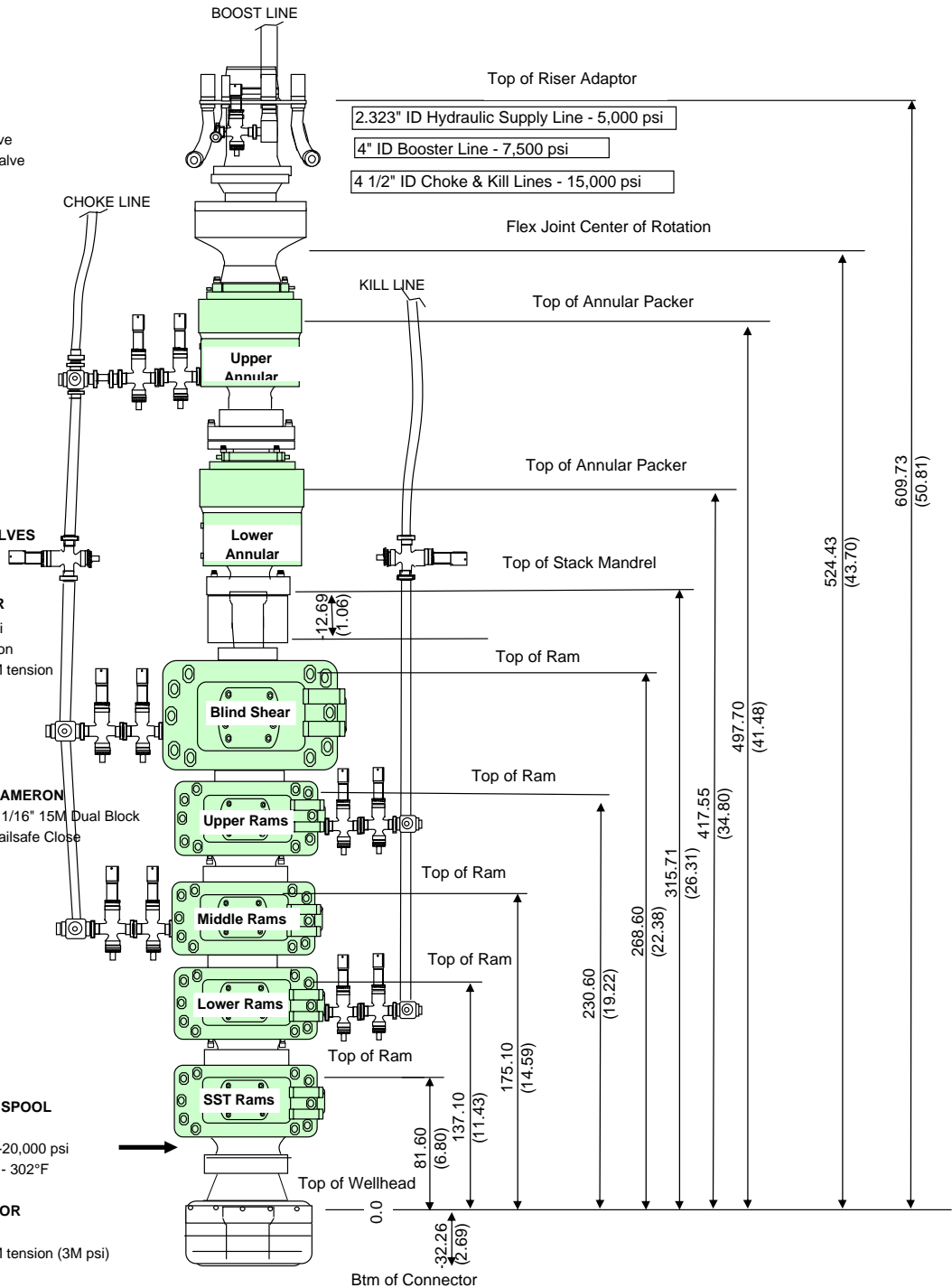
## HYDRIL 15M SINGLE SR TEST SPOOL

### VARIABLE 4 1/2"x 7"

Temp/Pressure Probe 0-20,000 psi  
0 - 302°F

## VETCO WELLHEAD CONNECTOR

SHD H-4 18 3/4" x 15,000 psi  
7MM Bending @ 15M psi, 1.5MM tension (3M psi)



ALL MEASUREMENTS ARE TAKEN FROM THE TOP OF THE RAM BLOCKS ( RAM BLOCK THICKNESS = 10.78 INCH ) OR TOP OF ANNULAR ELEMENT (ELEMENT THICKNESS = 22", PISTON STROKE = 11.5") MEASUREMENTS ARE IN INCHS (FEET).

## AUTOSHEAR FUNCTIONS:

MUST BE ENABLED TO OPERATE  
LOSE OF HYDRAULIC SUPPLY & COMM W/ BOTH PODS ACTIVATES

- 1) BLIND / SHEAR RAMS - CLOSE
- 2) CHOKE AND FAIL SAFES - CLOSE

## EDS FUNCTIONS:

SHEARING

SEE "EDS Functions Tab"

NON-SHEARING

SEE "EDS Functions Tab"

## ROV INTERVENTION FUNCTIONS:

### LMRP

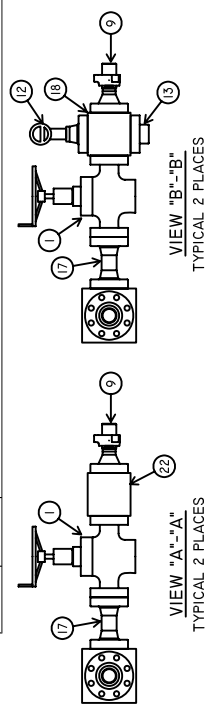
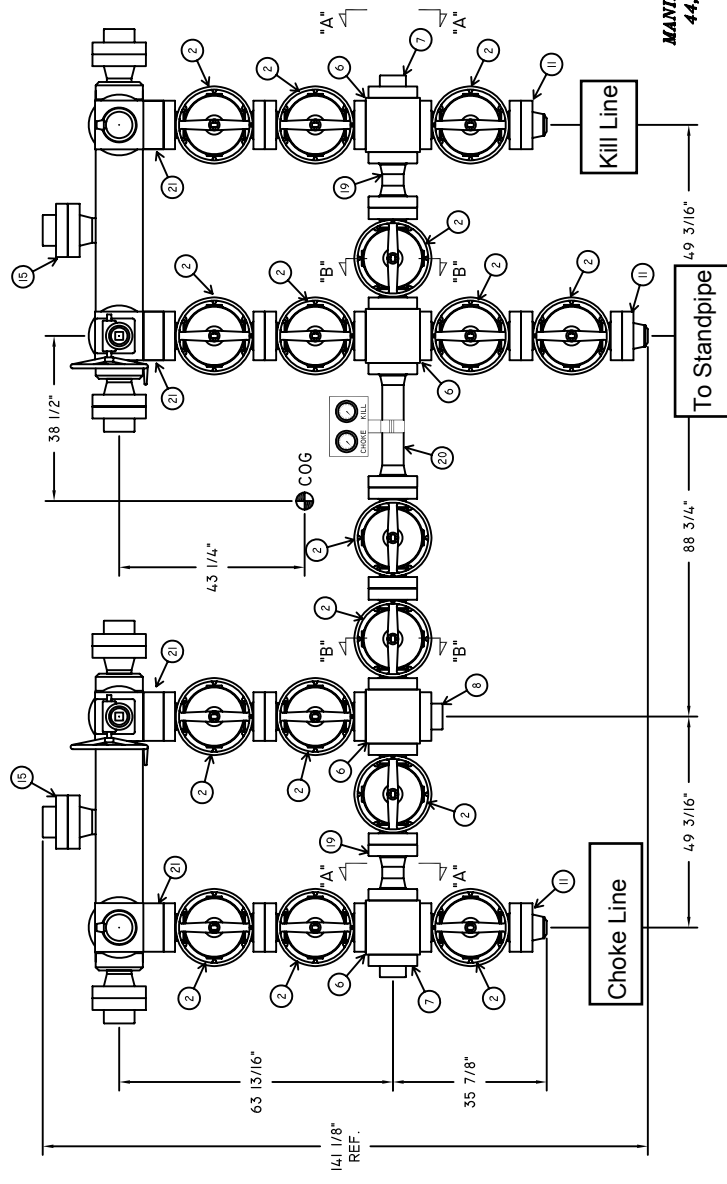
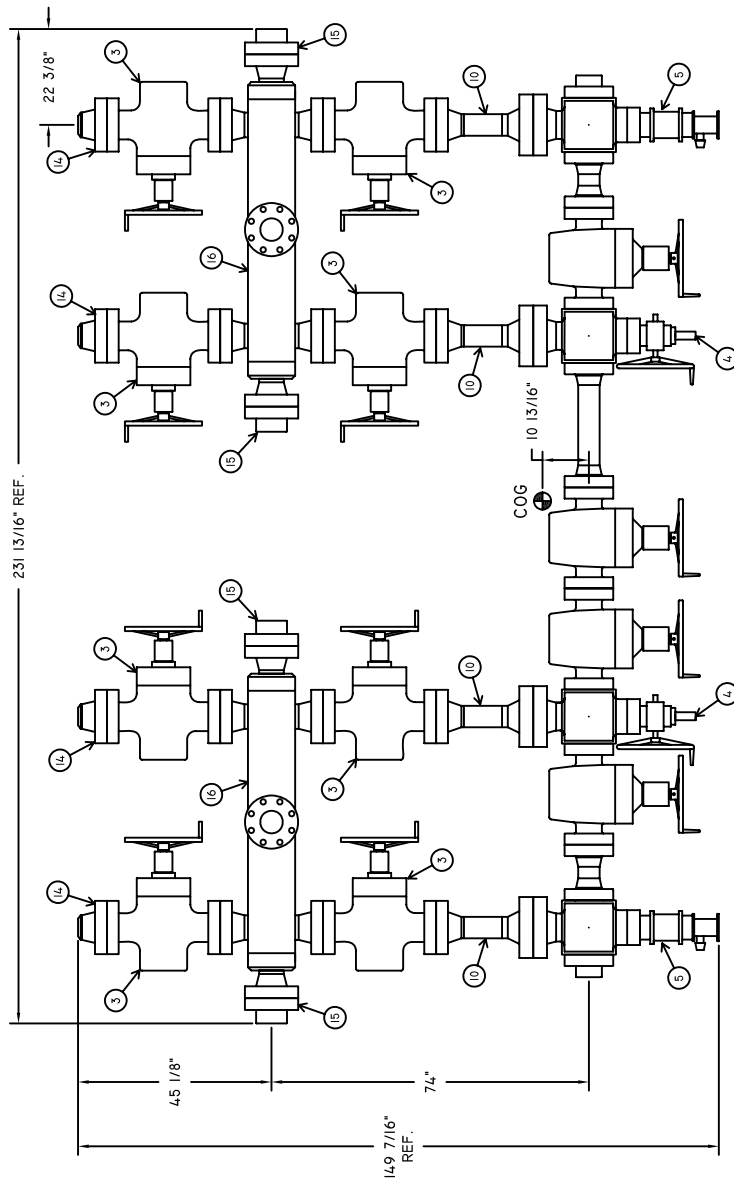
- 1) LMRP STABS - RETRACT.
- 2) RISER CONNECTOR - LOCK.
- 3) RISER CONNECTOR PRIMARY - UNLOCK
- 4) RISER CONNECTOR SECONDARY - UNLOCK
- 5) RISER CONNECTOR RING GASKET - RELEASE

### BOPE

- 1) BLIND / SHEAR RAM - CLOSE AND AUTO SHEAR ARM
- 2) MIDDLE RAMS - CLOSE
- 3) WELLHEAD CONNECTOR PRIMARY - UNLOCK
- 4) WELLHEAD CONNECTOR SECONDARY - UNLOCK
- 5) WELLHEAD CONNECTOR GLYCOL INJECTION
- 6) WELLHEAD CONNECTOR RING GASKET - RELEASE

WEIGHTS			
	LBS	LBS	
	AIR	WET	
BOP	345000	299633	
LMRP	321000	278789	
TOTAL	666000	578421	

ITEM	QTY	DESCRIPTION
1	4	GATE VALVE, 2 1/16"-15,000 PSI WP, MANUAL
2	16	GATE VALVE, 3 1/16"-15,000 PSI WP, MANUAL
3	8	GATE VALVE, 4 1/16"-10,000 PSI WP, MANUAL
4	1	HYDRAULIC DRILLING CHOKE SYSTEM, DUAL
5	2	MANUAL CHOKE, 3 1/16"-15M INLET x 4 1/16"-15M OUTLET
6	4	STUDDED CROSS, 1) 2 1/16" x 4) 3 1/16"-15,000 PSI WP
7	2	TARGET FLANGE, 3 1/16"-15,000 PSI WP
8	1	BLIND FLANGE, 3 1/16"-15,000 PSI WP
9	4	ADAPTER FLANGE, 2 1/16"-15M x 2" #2202 UNION w/ TEST PLUG
10	4	ADAPTER SPOOL, 4 1/16"-15M x 4 1/16"-10M, 22 5/8" LG.
11	3	WELDNECK FLANGE, 3 1/16"-15M w/ 5" OD x 3" ID PREP
12	2	PRESSURE GAUGE, 2 1/16"-15M FLG. x 0-15M
13	2	BLIND FLANGE, 2 1/16"-15,000 PSI WP
14	4	WELDNECK FLANGE, 4 1/16"-10M w/ 6" XXH PREP
15	6	TARGET FLANGE, 4 1/16"-10,000 PSI WP
16	2	BUFFER TANK, 7) 4 1/16"-10M INLET/OUTLET CONNECTIONS
17	4	SPACER SPOOL, 2 1/16"-15,000 PSI WP, 12" LG.
18	2	STUDDED CROSS, 2 1/16"-15,000 PSI WP
19	2	SPACER SPOOL, 3 1/16"-15,000 PSI WP, 13" LG.
20	1	SPACER SPOOL, 3 1/16"-15,000 PSI WP, 29" LG.
21	4	SPACER FLANGE, 3 1/16"-15,000 PSI WP, 4 3/4" LG.
22	2	STUDDED TEE, 2 1/16"-15,000 PSI WP
23	1	HEAVY DUTY OILFIELD SKID (NOT SHOWN)
24	144	STUD, 7/8"-9UNC x 4 3/8" LG.
25	32	STUD, 7/8"-9UNC x 6 1/4" LG.
26	128	STUD, 1 1/8"-8UN x 5 3/8" LG.
27	96	STUD, 1 1/8"-8UN x 8" LG.
28	176	STUD, 1 1/8"-8UN x 8 3/8" LG.
29	32	STUD, 1 1/8"-8UN x 10 1/8" LG.
30	32	STUD, 1 3/8"-8UN x 9 1/2" LG.
31	208	NUT, 7/8"-9UNC
32	704	NUT, 1 1/8"-8UN
33	64	NUT, 1 3/8"-8UN
34	24	RING GASKET, BX-152
35	36	RING GASKET, BX-154
36	26	RING GASKET, BX-155



**DIAMOND OFFSHORE**

**RIG:** OCEAN ENDEAVOR  
**P.O. NO.:** 126-016582  
**DESC.:** CHOKE/KILL MANIFOLD  
**DATE:** MARCH 15, 2005  
**DWG. NO.:** OENDMAN-0905  
**REVISION:** A

**MANIFOLD ASSEMBLY WEIGHT:**  
**44,750 LBS. (INCL. SKID)**

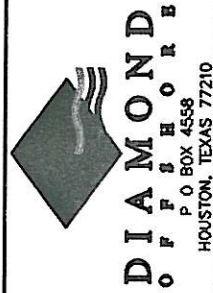
REFERENCES	
NO.	DESCRIPTION
1	PIPING DIAGRAM - CHOKES & KIL/DIVERTER SYSTEM
2	PIPING ARRANGEMENT DRILLING SUB-STRUCTURE SECTIONS/DETAILS P209
3	PIPING ARRANGEMENT UPPER HULL PLAN @ 120' & ABOVE

SYSTEM LEGEND	
ML	LOW PRESSURE MUD
DD	DRAINAGE PIPING SYSTEM (DECK DRAIN)
CH	HIGH PRESSURE CEMENT PIPING SYSTEM
MGS	MUD-GAS SEPARATOR
MH	HIGH PRESSURE MUD PIPING SYSTEM
KC	CHOKES & KIL/DIVERTER SYSTEM

### GENERAL NOTES

1. PIPING SYSTEMS HAVE BEEN INSTALLED AND TESTED IN ACCORDANCE WITH ABS AND OTHER APPLICABLE REGULATORY BODIES.
2. ALL PIPING IS PROPERLY SUPPORTED TO ALLOW FOR EXPANSION AND TO PREVENT VIBRATION.
3. ALL DECK AND BULKHEAD PENETRATIONS HAVE BEEN SEAL WELDED AND PROTECTED WITH DOUBLER PLATES TO MAINTAIN STRUCTURAL AND WATERTIGHT INTEGRITY.
4. BOLTS ARE ASTM A-193 CHROMIUM PLATED WITH A-194 NUTS, GASKET MATERIAL IS RED RUBBER WITH WIRE INSERTED.
5. PIPE SUPPORTS ARE A MAXIMUM OF 10'-0" CENTER TO CENTER.
6. 20", 12" AND 8" PIPE IS SMLS STD. WT. BLK. 16" PIPE IS SMLS SCH. 80 (NAGE-MR 01-75).
7. 12" AND 8" ELBOW 90° = LR STD. WT. BME BLK. 8" ELBOW 90° = LR XS BME BLK.
8. 20" VALVE IS KNIFE GATE LUC 150# W/HYD. ACTUATOR.
9. 16" VALVES ARE KNIFE GATE LUC 300# W/HYD. ACTUATOR.
10. ALL PIPING DIRECTION CHANGES ARE EITHER LESS THAN 45 DEGREES OR TARGETED.
11. DIVERTER CONTROL SYSTEM IS DESIGNED TO OPERATE AND INTERLOCK AS PER API AND IACS REQUIREMENTS.
12. FOR WORKING PRESSURE OF DIVERTER SYSTEM REFER TO NOTE NO. 8.

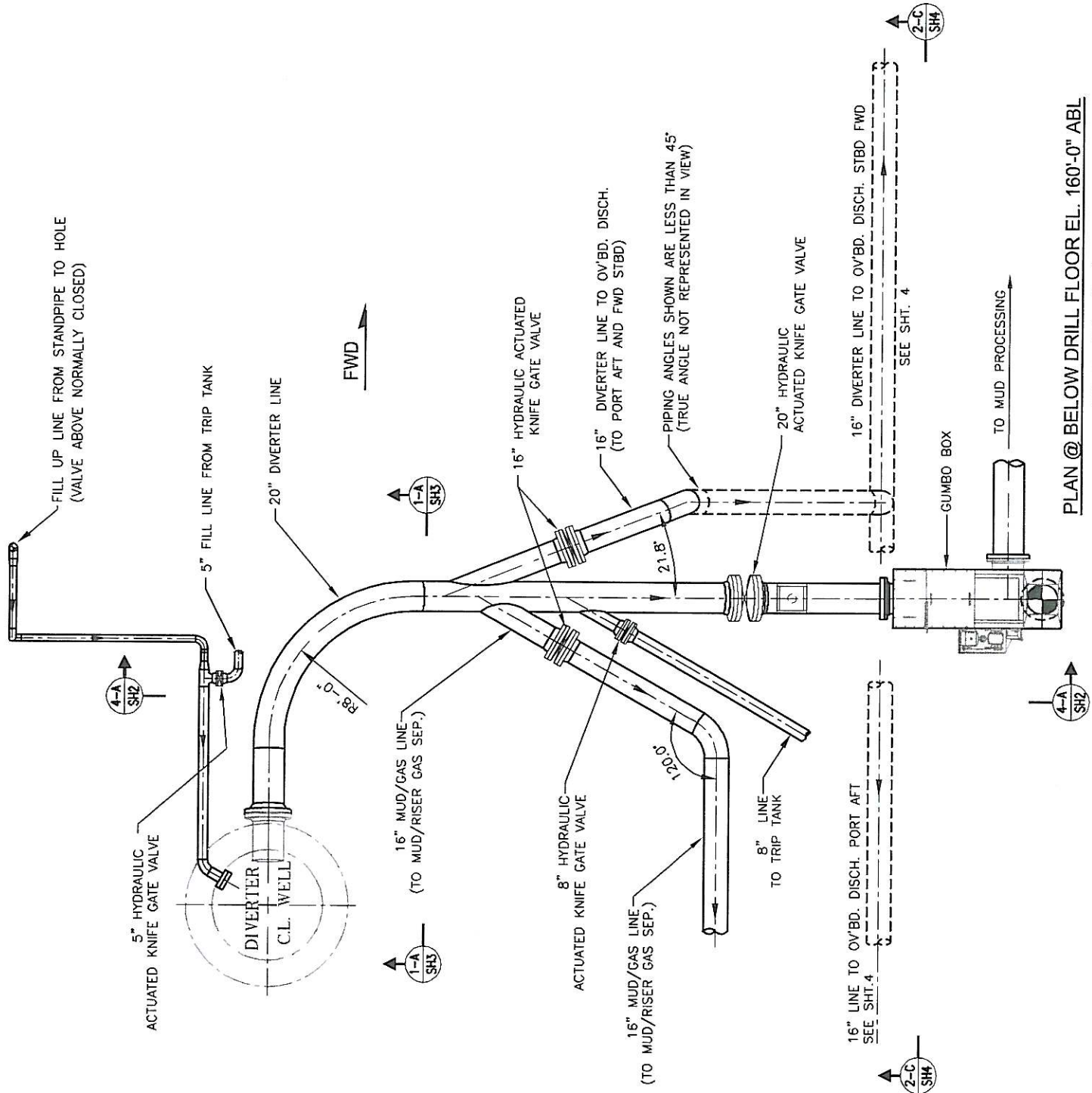
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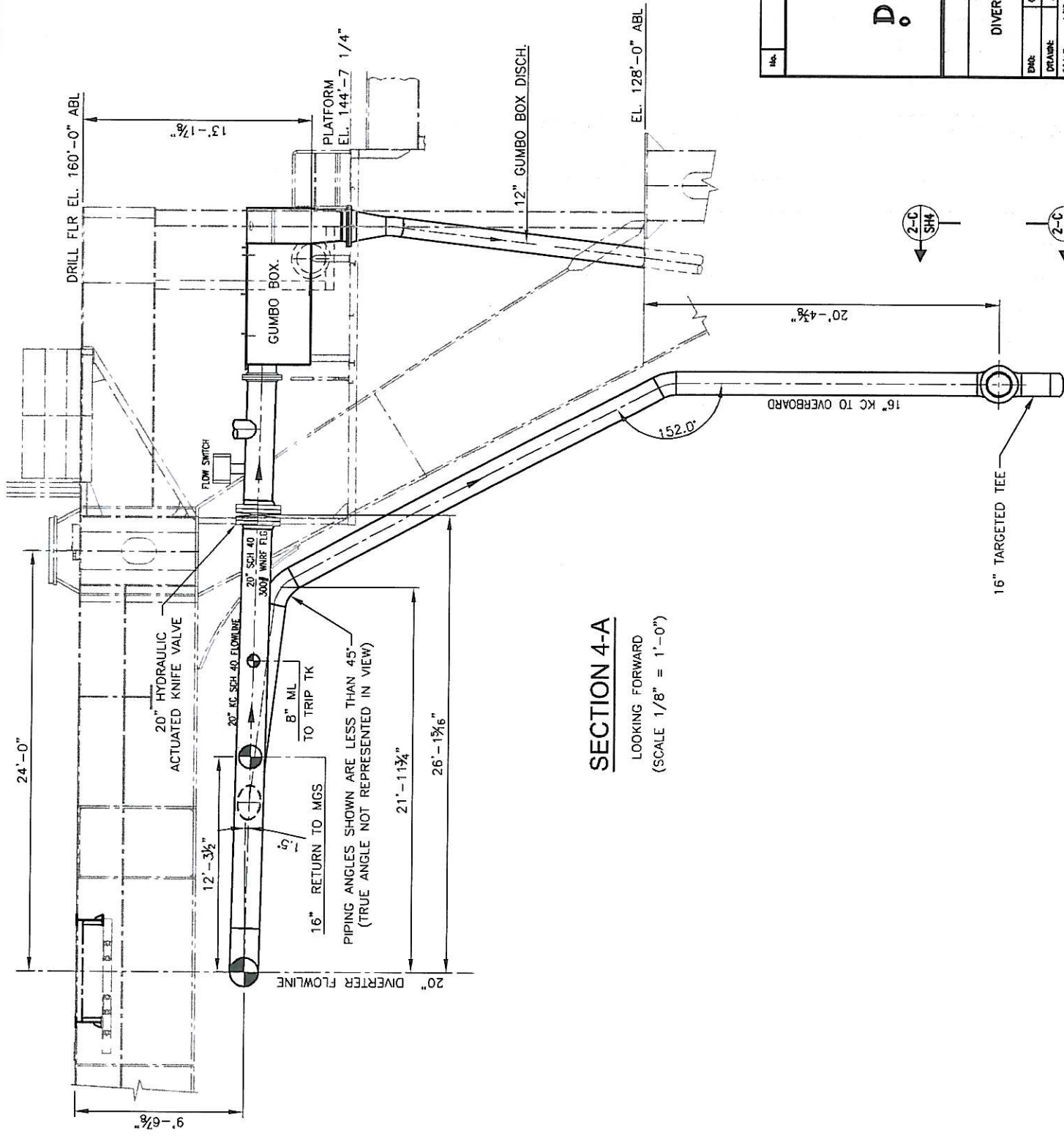


OCEAN ENDEAVOR

### DIVERTER PIPING ARRANGEMENT

DATE	4/10/07	SCALE	1/8" = 1'-0"	REV. #	0
DWG. NO.	128-PD-006	APPROVE:		AGRD. NAME:	128pd00600
SHEET	1 OF 4				






# SECTION 4-A

LOOKING FORWARD  
(SCALE 1/8" = 1'-0")

NO.	REFERENCE	DRAWING NO.
		126-PD-006

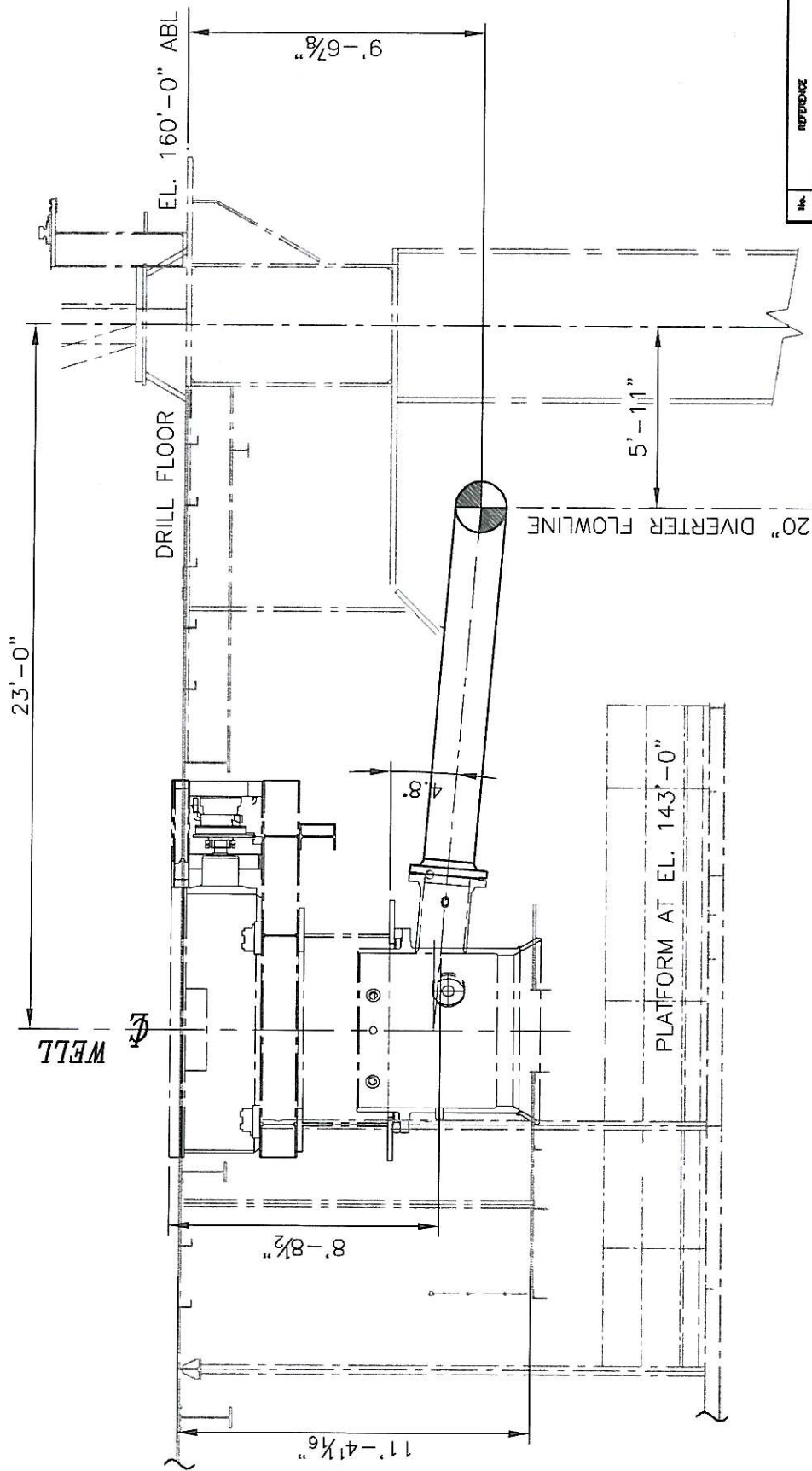


**DIAMOND  
OFFSHORE**  
P O BOX 4558  
HOUSTON, TEXAS 77210

OCEAN ENDEAVOR	
DIVERTER PIPING ARRANGEMENT	

DATE:	DESIGNED BY:	126-PD-006	REV. #
DRAWN BY:	APPROVED BY:		0
SCALE:	1/8" = 1'-0"	ACAD NAME:	
DATE:	4/19/07	SHEET	2 OF 4



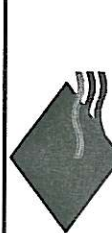


## SECTION 1-A

LOOKING TO PORT  
SCALE 3/16" = 1'-0"

FWD

No.	REFERENCE	DETAILS No.
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**DIAMOND**  
OFFSHORE  
P O BOX 4558  
HOUSTON, TEXAS 77210

OCEAN ENDEAVOR

DIVERTER PIPING ARRANGEMENT

DATE	4/19/07	REV. #	0
DRAWN	AS NOTED	SCALE	126x0008x0
CHECKED	126-PD-006	ACAD NAME	
APPROVED			

