COMPONENT SOURCE REGISTRATION

KEY

MONITORING FREQUENCY
Q--Quarterly
M--Monthly
A--Annual (Difficult-to-Monitor)
UTM--When conditions make it safe (Unsafe-to-Monitor)
A.V.O--When audible, visual, or olfactory leak suspected
N/A--Not applicable (component under vacuum)
DTM--Component is a difficult-to-monitor component

COMPONENT TYPE
V--Valve
P--Pump Seal
AGI--Agitator
C--Flange or other connector
O/E--Open Ended Line
PRV--Pressure Relief Valve

PHASE
G--Gas
L--Liquid
GV--Gas under Vacuum

TABLE 1
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-100

8 Quarterly Components, 4 UTM Components

Gas Blockdown	Monitoring Frequency	Component Type	Phase	Service Composition	Figure #	Control Block				
0011										
1000	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1001	UTM	V	G	5.36	01	1	MAIN AXI	C-100	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1002	UTM	PRV O/E	G	5.36	01	1	MAIN AXI	C-100	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1003	UTM	V	G	5.36	01	1	MAIN AXI	C-100	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0012							NOISE SUPRESSION/UNLOADING				
1004	N/A(vac)	V O/E	GV	5.36	01	1	MAIN AXI	C-100	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1005	N/A(vac)	V O/E	GV	5.36	01	1	MAIN AXI	C-100	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1006	UTM	V O/E	G	5.36	01	1	MAIN AXI	C-100	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0013							SAFETY WATER SYSTEM				
1024	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER VALVE	SAFETY WATER	Y
1025	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1026	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER GAUGE VALVE	SAFETY WATER	Y
1033	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER AUTO VALVE	SAFETY WATER	Y
1035	N/A(vac)	V	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER VALVE	SAFETY WATER	Y
1036	N/A(vac)	V O/E	GV	5.36	01	1	MAIN AXI	C-100	SAFETY WATER O/E VALVE	SAFETY WATER	Y
0014							INJECTION WATER SYSTEM				
1020	Q	V	G	5.36	01	1	MAIN AXI	C-100	INJECTION WATER AUTO VALVE	INJECTION WAT	Y
1021	Q	V	G	5.36	01	1	MAIN AXI	C-100	INJECTION WATER VALVE	INJECTION WAT	Y
1022	Q	V	G	5.36	01	1	MAIN AXI	C-100	SAFETY WATER	INJECTION WAT	Y
1023	Q	V O/E	G	5.36	01	1	MAIN AXI	C-100	RAW GAS EXHAUST CLEANOUT	INJECTION WAT	Y
0015							EXHAUST SEAL SYSTEM				
1030	Q	O/E	G	5.36	01	1	MAIN AXI	C-100	EXHAUST SEAL DRAIN		Y
1031	A.V.O	C(x2)	G	5.36	01	1	MAIN AXI	C-100	SIGHT GLASS		Y
1032	Q	V	G	5.36	01	1	MAIN AXI	C-100	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1034	Q	V	G	5.36	01	1	MAIN AXI	C-100	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 2
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-105

15 Quarterly Components, 3 UTM Components

Eng Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment #	Control Room					
0021							HEADER SYSTEM				
1050	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1051	UTM	V	G	5.36	02	1	MAIN AXI	C-105	RAW GAS BY-PASS BLOCKING VALVE	INACCESSIBLE	N
1052	UTM	PRV O/E	G	5.36	02	1	MAIN AXI	C-105	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1053	UTM	V	G	5.36	02	1	MAIN AXI	C-105	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0022							NOISE SUPRESSION/UNLOADING				
1054	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1055	UTM	V O/E	G	5.36	02	1	MAIN AXI	C-105	OISE SUPRESSOR CLEANOUT	INACCESSIBLE	N
0023							SAFETY WATER SYSTEM				
1060	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	SAFETY WATER VALVE	SAFETY WATER	Y
1061	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	SAFETY WATER PRESSURE TAP	SAFETY WATER	Y
1062	N/A(vac)	C	GV	5.36	02	1	MAIN AXI	C-105	SAFETY WATER GAUGE	SAFETY WATER	Y
1063	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	SAFETY WATER VALVE	SAFETY WATER	Y
1064	N/A(vac)	V	GV	5.36	02	1	MAIN AXI	C-105	SAFETY WATER VALVE	SAFETY WATER	Y
0024							INJECTION WATER SYSTEM				
1070	Q	V O/E	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1071	Q	V O/E	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1072	Q	V	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER VALVE	INJECTION WAT	Y
1073	Q	V	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER VALVE	INJECTION WAT	Y
1074	Q	V	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER VALVE	INJECTION WAT	Y
1076	Q	V	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER AUTO VALVE	INJECTION WAT	Y
1075	Q	V	G	5.36	02	1	MAIN AXI	C-105	INJECTION WATER C-185 BYPASS VALVE	INJECTION WAT	Y
1077	A	V	G	5.36	02	1	MAIN AXI	C-105	C-185 BYPASS VALVE (Near C-140)	INJECTION WAT	Y
1078	A	V O/E	G	5.36	02	1	MAIN AXI	C-105	C-185 BYPASS O/E VALVE (Near C-140)	INJECTION WAT	Y
0025							EXHAUST SEAL SYSTEM				
1077	Q	V O/E	G	5.36	02	1	MAIN AXI	C-105	RAW GAS EXHAUST CLEAN OUT O/E VALVE		Y
1080	Q	O/E	G	5.36	02	1	MAIN AXI	C-105	EXHAUST SEAL DRAIN		Y
1081	A,V,O	C(x2)	G	5.36	2	1	MAIN AXI	C-105	SIGHT GLASS		Y
1082	Q	V	G	5.36	02	1	MAIN AXI	C-105	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1083	Q	V O/E	G	5.36	02	1	MAIN AXI	C-105	EXHAUST SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1084	Q	V	G	5.36	02	1	MAIN AXI	C-105	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 3
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-110

13 Quarterly Components, 4 UTM Components

Tag Number	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0031						HEADER SYSTEM					
1100	N/A(vac)	V	GV	5.36	03	1	MAIN AXI	C-110	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1101	UTM	V	G	5.36	03	1	MAIN AXI	C-110	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1102	UTM	PRV O/E	G	5.36	03	1	MAIN AXI	C-110	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1103	UTM	V	G	5.36	03	1	MAIN AXI	C-110	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0032						NOISE SUPRESSION/UNLOADING					
1104	N/A(vac)	V O/E	GV	5.36	03	1	MAIN AXI	C-110	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1105	N/A(vac)	V O/E	GV	5.36	03	1	MAIN AXI	C-110	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1106	N/A(vac)	V O/E	GV	5.36	03	1	MAIN AXI	C-110	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1107	N/A(vac)	V O/E	GV	5.36	03	1	MAIN AXI	C-110	UNLOAD VALVE 4"	INACCESSIBLE	Y
1108	UTM	V O/E	G	5.36	03	1	MAIN AXI	C-110	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0033						SAFETY WATER SYSTEM					
1110	N/A(vac)	V	GV	5.36	03	1	MAIN AXI	C-110	SAFETY WATER VALVE	SAFETY WATER	Y
1111	N/A(vac)	V	GV	5.36	03	1	MAIN AXI	C-110	SAFETY WATER PRESSURE TAP	SAFETY WATER	Y
1112	N/A(vac)	C	GV	5.36	03	1	MAIN AXI	C-110	SAFETY WATER GAUGE	SAFETY WATER	Y
1113	N/A(vac)	V O/E	GV	5.36	03	1	MAIN AXI	C-110	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1114	N/A(vac)	V	GV	5.36	03	1	MAIN AXI	C-110	SAFETY WATER VALVE	SAFETY WATER	Y
0034						INJECTION WATER SYSTEM					
1120	Q	V	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER VALVE	INJECTION WAT	Y
1121	Q	V	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER VALVE	INJECTION WAT	Y
1122	Q	V O/E	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1123	Q	V	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER VALVE	INJECTION WAT	Y
1124	Q	V	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER VALVE	INJECTION WAT	Y
1134	Q	V	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER AUTO VALVE	INJECTION WAT	Y
1135	Q	V OE	G	5.36	03	1	MAIN AXI	C-110	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0035											
1125	Q	V O/E	G	5.36	03	1	MAIN AXI	C-110	RAW GAS EXHAUST CLEANOUT VALVE		Y
1131	Q	O/E	G	5.36	03	1	MAIN AXI	C-110	EXHAUST SEAL DRAIN		Y
1130	A,V,O	C(x2)	G	5.36	03	1	MAIN AXI	C-110	SIGHT GLASS		Y
1132	Q	V	G	5.36	03	1	MAIN AXI	C-110	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1133	Q	V	G	5.36	03	1	MAIN AXI	C-110	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1134	Q	V	G	5.36	03	1	MAIN AXI	C-110	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 4
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-115

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure A	Control Room					
0041							INJECTION WATER SYSTEM				
1151	UTM	V	G	5.36	04	1	MAIN AXI	C-115	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1152	UTM	PRV O/E	G	5.36	04	1	MAIN AXI	C-115	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1153	UTM	V	G	5.36	04	1	MAIN AXI	C-115	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0042							NOISE SUPRESSION/UNLOADING				
1154	N/A(vac)	V O/E	GV	5.36	04	1	MAIN AXI	C-115	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1155	UTM	V O/E	G	5.36	04	1	MAIN AXI	C-115	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0043							SAFETY WATER SYSTEM				
1160	N/A(vac)	V	GV	5.36	04	1	MAIN AXI	C-115	SAFETY WATER VALVE	SAFETY WATER	Y
1161	N/A(vac)	V	GV	5.36	04	1	MAIN AXI	C-115	SAFETY WATER PRESSURE TAP	SAFETY WATER	Y
1162	N/A(vac)	C	GV	5.36	04	1	MAIN AXI	C-115	SAFETY WATER GAUGE	SAFETY WATER	Y
1163	N/A(vac)	V O/E	GV	5.36	04	1	MAIN AXI	C-115	SAFETY WATER CLEANOUT	SAFETY WATER	Y
1164	N/A(vac)	V	GV	5.36	04	1	MAIN AXI	C-115	SAFETY WATER CONTROL VALVE	SAFETY WATER	Y
0044							INJECTION WATER SYSTEM				
1170	Q	V	G	5.36	04	1	MAIN AXI	C-115	INJECTION WATER VALVE	INJECTION WAT	Y
1171	Q	V	G	5.36	04	1	MAIN AXI	C-115	INJECTION WATER VALVE	INJECTION WAT	Y
1172	Q	V	G	5.36	04	1	MAIN AXI	C-115	INJECTION WATER VALVE	INJECTION WAT	Y
1174	Q	V	G	6.36	05	1	MAIN AXI	C-115	INJECTION WATER AUTO VALVE	INJECTION WAT	Y
1175	Q	V O/E	G	7.36	06	1	MAIN AXI	C-115	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0045											
1173	Q	V O/E	G	5.36	04	1	MAIN AXI	C-115	RAW GAS OUTLET CLEANOUT VALVE		Y
1180	Q	O/E	G	5.36	04	1	MAIN AXI	C-115	PRESSURE SEAL DRAIN		Y
1181	A,V,O	C(x2)	G	5.36	04	1	MAIN AXI	C-115	SIGHT GLASS		Y
1182	Q	V	G	5.36	04	1	MAIN AXI	C-115	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1183	Q	V O/E	G	5.36	04	1	MAIN AXI	C-115	PRESSURE SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1184	Q	V	G	5.36	04	1	MAIN AXI	C-115	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 5
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-120

12 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Beacon Concentration	Figure #	Control Room					
0051						INJECTION WATER SYSTEM					
1201	UTM	V	G	5.36	05	1	MAIN AXI	C-120	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1202	UTM	PRV O/E	G	5.36	05	1	MAIN AXI	C-120	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1203	UTM	V	G	5.36	05	1	MAIN AXI	C-120	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0052						NOISE SUPRESSION/UNLOADING					
1204	N/A(vac)	V O/E	GV	5.36	05	1	MAIN AXI	C-120	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1205	UTM	V O/E	G	5.36	05	1	MAIN AXI	C-120	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0053						SAFETY WATER SYSTEM					
1210	N/A(vac)	V	GV	5.36	05	1	MAIN AXI	C-120	SAFETY WATER VALVE	SAFETY WATER	Y
1211	N/A(vac)	V O/E	GV	5.36	05	1	MAIN AXI	C-120	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1213	N/A(vac)	V O/E	GV	5.36	05	1	MAIN AXI	C-120	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1214	N/A(vac)	V	GV	5.36	05	1	MAIN AXI	C-120	SAFETY WATER CONTROL VALVE	SAFETY WATER	Y
0054						INJECTION WATER SYSTEM					
1220	Q	V	G	5.36	05	1	MAIN AXI	C-120	INJECTION WATER VALVE	INJECTION WAT	Y
1221	Q	V O/E	G	5.36	05	1	MAIN AXI	C-120	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1222	Q	V	G	5.36	05	1	MAIN AXI	C-120	INJECTION WATER VALVE	INJECTION WAT	Y
1223	Q	V	G	5.36	05	1	MAIN AXI	C-120	INJECTION WATER VALVE	INJECTION WAT	Y
1225	Q	V	G	5.36	05	1	MAIN AXI	C-121	INJECTION WATER AUTO VALVE	INJECTION WAT	Y
1235	Q	V O/E	G	5.36	06	1	MAIN AXI	C-122	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0055						EXHAUST SEAL SYSTEM					
1224	Q	V O/E	G	5.36	05	1	MAIN AXI	C-120	RAW GAS OUTLET CLEANOUT VALVE		Y
1230	Q	O/E	G	5.36	05	1	MAIN AXI	C-120	PRESSURE SEAL DRAIN		Y
1231	A,V,O	C(x2)	G	5.36	05	1	MAIN AXI	C-120	SIGHT GLASS		Y
1232	Q	V	G	5.36	05	1	MAIN AXI	C-120	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1233	Q	V O/E	G	5.36	05	1	MAIN AXI	C-120	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1234	Q	V	G	5.36	05	1	MAIN AXI	C-120	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 6
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-125

14 Quarterly Components, 5 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0061							HEADER SYSTEM				
1250	N/A(vac)	V	GV	5.36	06	1	MAIN AXI	C-125	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1251	UTM	V	G	5.36	06	1	MAIN AXI	C-125	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1252	UTM	PRV O/E	G	5.36	06	1	MAIN AXI	C-125	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1253	UTM	V	G	5.36	06	1	MAIN AXI	C-125	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0062							NOISE SUPRESSION/UNLOADING				
1254	UTM	V O/E	G	5.36	06	1	MAIN AXI	C-125	OUTLET CLEANOUT VALVE	INACCESSIBLE	N
1255	UTM	V O/E	G	5.36	06	1	MAIN AXI	C-125	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1256	N/A(vac)	V O/E	GV	5.36	06	1	MAIN AXI	C-125	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0063							SAFETY WATER SYSTEM				
1260	N/A(vac)	V	GV	5.36	06	1	MAIN AXI	C-125	SAFTETY WATER VALVE	SAFETY WATER	Y
1261	N/A(vac)	V O/E	GV	5.36	06	1	MAIN AXI	C-125	SAFTETY WATER O/E VALVE	SAFETY WATER	Y
1262	N/A(vac)	V O/E	GV	5.36	06	1	MAIN AXI	C-125	SAFTETY WATER O/E VALVE	SAFETY WATER	Y
1263	N/A(vac)	V O/E	GV	5.36	06	1	MAIN AXI	C-125	SAFTETY WATER O/E VALVE	SAFETY WATER	Y
1264	N/A(vac)	V	GV	5.36	06	1	MAIN AXI	C-125	SAFTETY WATER CONTROL VALVE	SAFETY WATER	Y
1265	N/A(vac)	C(x2)	GV	5.36	06	1	MAIN AXI	C-125	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
0064							INJECTION WATER SYSTEM				
1270	Q	V	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER VALVE	INJECTION WAT	Y
1271	Q	V	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER VALVE	INJECTION WAT	Y
1272	Q	V	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER VALVE	INJECTION WAT	Y
1274	Q	V	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1275	Q	V	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER VALVE	INJECTION WAT	Y
1285	Q	V O/E	G	5.36	06	1	MAIN AXI	C-125	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1327	A	V O/E	G	5.36	06	1	MAIN AXI	C-125	C-185/C-105 BYPASS VALVE	INJECTION WAT	Y
1385	A	V O/E	G	5.36	06	1	MAIN AXI	C-125	C-185/C-105 BYPASS VALVE	INJECTION WAT	Y
0065							EXHAUST SEAL SYSTEM				
1273	Q	V O/E	G	5.36	06	1	MAIN AXI	C-125	RAW GAS OUTLET CLEANOUT VALVE		Y
1280	Q	O/E	G	5.36	06	1	MAIN AXI	C-125	PRESSURE SEAL DRAIN		Y
1281	A,V,O	C(x2)	G	5.36	06	1	MAIN AXI	C-125	SIGHT GLASS		Y
1282	Q	V	G	5.36	06	1	MAIN AXI	C-125	PRESSURE SEAL VENT RECYCLE LINE CLEANOUT	RECYCLE LINE	Y
1283	Q	V O/E	G	5.36	06	1	MAIN AXI	C-125	PRESSURE SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1284	Q	V	G	5.36	06	1	MAIN AXI	C-125	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 7
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-130

13 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Pipeline	Control Room					
0071					HEADER SYSTEM						
1300	N/A(vac)	V	GV	5.36	07	1	MAIN AXI	C-130	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1301	UTM	V	G	5.36	07	1	MAIN AXI	C-130	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1302	UTM	PRV O/E	G	5.36	07	1	MAIN AXI	C-130	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1303	UTM	V	G	5.36	07	1	MAIN AXI	C-130	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0072					NOISE SUPRESSION/UNLOADING						
1304	N/A(vac)	V O/E	GV	5.36	07	1	MAIN AXI	C-130	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1305	UTM	V O/E	G	5.36	07	1	MAIN AXI	C-130	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0073					SAFETY WATER SYSTEM						
1310	N/A(vac)	V	GV	5.36	07	1	MAIN AXI	C-130	SAFTETY WATER VALVE BLOCKING	SAFETY WATER	Y
1311	N/A(vac)	V	GV	5.36	07	1	MAIN AXI	C-130	SAFTETY WATER PRESSURE TA[P	SAFETY WATER	Y
1312	N/A(vac)	C	GV	5.36	07	1	MAIN AXI	C-130	SAFETY WATER GAUGE	SAFETY WATER	Y
1315	N/A(vac)	V	GV	5.36	07	1	MAIN AXI	C-130	SAFTETY WATER VALVE	SAFETY WATER	Y
1313	N/A(vac)	V O/E	GV	5.36	07	1	MAIN AXI	C-130	SAFTETY WATER O/E VALVE	SAFETY WATER	Y
1314	N/A(vac)	V	GV	5.36	07	1	MAIN AXI	C-130	SAFTETY WATER VALVE BLOCKING	SAFETY WATER	Y
0074					INJECTION WATER SYSTEM						
1320	Q	V	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER VALVE	INJECTION WAT	Y
1321	Q	V	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER VALVE	INJECTION WAT	Y
1322	Q	V O/E	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1323	Q	V	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER VALVE	INJECTION WAT	Y
1324	Q	V O/E	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1325	Q	V	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1326	Q	V O/E	G	5.36	07	1	MAIN AXI	C-130	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0075					EXHAUST SEAL SYSTEM						
1336	Q	V O/E	G	5.36	07	1	MAIN AXI	C-130	RAW GAS OUTLET CLEANOUT VALVE		Y
1330	Q	O/E	G	5.36	07	1	MAIN AXI	C-130	PRESSURE SEAL DRAIN		Y
1331	A,V,O	C(x2)	G	5.36	07	1	MAIN AXI	C-130	SIGHT GLASS		Y
1332	Q	V O/E	G	5.36	07	1	MAIN AXI	C-130	PRESSURE SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1333	Q	V	G	5.36	07	1	MAIN AXI	C-130	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1334	Q	V	G	5.36	07	1	MAIN AXI	C-130	PRESSURE SEAL VENT RECYCLE LINE	RECYCLE LINE	Y

TABLE 8
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-135

10 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure 8	Control Report					
0081					HEADER SYSTEM						
1350	N/A(vac)	V	GV	5.36	08	1	MAIN AXI	C-135	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1351	UTM	V	G	5.36	08	1	MAIN AXI	C-135	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1352	UTM	PRV O/E	G	5.36	08	1	MAIN AXI	C-135	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1353	UTM	V	G	5.36	08	1	MAIN AXI	C-135	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0082					NOISE SUPRESSION/UNLOADING						
1354	N/A(vac)	V O/E	GV	5.36	08	1	MAIN AXI	C-135	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1355	UTM	V O/E	G	5.36	08	1	MAIN AXI	C-135	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0083					SAFETY WATER SYSTEM						
1360	N/A(vac)	V	GV	5.36	08	1	MAIN AXI	C-135	SAFETY WATER VALVE	SAFETY WATER	Y
1361	N/A(vac)	V	GV	5.36	08	1	MAIN AXI	C-135	SAFETY WATER PRESSURE TAP	SAFETY WATER	Y
1362	N/A(vac)	C	GV	5.36	08	1	MAIN AXI	C-135	SAFETY WATER GAUGE	SAFETY WATER	Y
1363	N/A(vac)	V O/E	GV	5.36	08	1	MAIN AXI	C-135	SAFETY WATER CLEANOUT VALVE	SAFETY WATER	Y
1364	N/A(vac)	C(x2)	GV	5.36	08	1	MAIN AXI	C-135	SIGHT GLASS	SAFETY WATER	Y
1365	N/A(vac)	V	GV	5.36	08	1	MAIN AXI	C-135	SAFETY WATER CONTROL VALVE	SAFETY WATER	Y
0084					INJECTION WATER SYSTEM						
1370	Q	V	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER VALVE	INJECTION WAT	Y
1371	Q	V	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER VALVE	INJECTION WAT	Y
1372	Q	V O/E	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER CLEANOUT VALVE	INJECTION WAT	Y
1373	Q	V	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER VALVE	INJECTION WAT	Y
1374	Q	V	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER VALVE	INJECTION WAT	Y
1375	Q	V O/E	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1376	Q	V	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1079	Q	V O/E	G	5.36	08	1	MAIN AXI	C-135	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0085					EXHAUST SEAL SYSTEM						
1385	Q	V O/E	G	5.36	08	1	MAIN AXI	C-135	RAW GAS EXHAUST CLEANOUT VALVE		Y
1380	Q	O/E	G	5.36	08	1	MAIN AXI	C-135	EXHAUST SEAL DRAIN		Y
1381	A,V,O	C(x2)	G	5.36	08	1	MAIN AXI	C-135	SIGHT GLASS		Y
1382	Q	V O/E	G	5.36	08	1	MAIN AXI	C-135	EXHAUST SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1383	Q	V	G	5.36	08	1	MAIN AXI	C-135	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 9
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-140

10 Quarterly Components, 5 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Contract Number					
0091					HEADER SYSTEM						
1401	UTM	V	G	5.36	09	1	MAIN AXI	C-140	RAW GAS BYPASS BLOCKING VALVE	INACCESSSIBLE	N
1402	UTM	PRV O/E	G	5.36	09	1	MAIN AXI	C-140	RAW GAS BYPASS RELIEF VALVE	INACCESSSIBLE	N
1403	UTM	V	G	5.36	09	1	MAIN AXI	C-140	RAW GAS OUTLET BLOCKING VALVE	INACCESSSIBLE	N
1404	UTM	V O/E	G	5.36	09	1	MAIN AXI	C-140	OUTLET CLEANOUT VALVE	INACCESSSIBLE	N
0092					NOISE SUPRESSION/UNLOADING						
1405	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSSIBLE	N
1406	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSSIBLE	N
1407	UTM	V O/E	G	5.36	09	1	MAIN AXI	C-140	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSSIBLE	N
0093					SAFETY WATER SYSTEM						
1410	N/A(vac)	V	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER VALVE BLOCKING	SAFETY WATER	Y
1411	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1413	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1414	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER CLEANOUT VALVE	SAFETY WATER	Y
1415	N/A(vac)	V	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER VALVE	SAFETY WATER	Y
1416	N/A(vac)	V O/E	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1417	N/A(vac)	V	GV	5.36	09	1	MAIN AXI	C-140	SAFETY WATER CONTROL VALVE	SAFETY WATER	Y
0094					INJECTION WATER SYSTEM						
1420	Q	V	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER VALVE	INJECTION WAT	Y
1421	Q	V	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER VALVE	INJECTION WAT	Y
1422	Q	V	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER WHEEL VALVE	INJECTION WAT	Y
1423	Q	V	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER VALVE	INJECTION WAT	Y
1085	Q	V O/E	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER O/E VALVE		
1424	Q	V	G	5.36	09	1	MAIN AXI	C-140	INJECTION WATER		
1425	Q	V O/E	G	5.36	09	1	MAIN AXI	C-140			
0095					EXHAUST SEAL SYSTEM						
1435	Q	V O/E	G	5.36	09	1	MAIN AXI	C-140	RAW GAS OUTLET CLEANOUT VALVE		Y
1430	Q	O/E	G	5.36	09	1	MAIN AXI	C-140	PRESSURE SEAL DRAIN		Y
1431	A.V.O	C(x2)	G	5.36	09	1	MAIN AXI	C-140	SIGHT GLASS		Y
1432	Q	V O/E	G	5.36	09	1	MAIN AXI	C-140	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1433	Q	V	G	5.36	09	1	MAIN AXI	C-140	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1434	Q	V	G	5.36	09	1	MAIN AXI	C-140	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 10
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-1455

13 Quarterly Components, 5 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0101					HEADER SYSTEM						
1451	UTM	V	G	5.36	10	1	MAIN AXI	C-145	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1452	UTM	PRV O/E	G	5.36	10	1	MAIN AXI	C-145	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1453	UTM	V	G	5.36	10	1	MAIN AXI	C-145	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0102					NOISE SUPRESSION/UNLOADING						
1454	N/A(vac)	V O/E	GV	5.36	10	1	MAIN AXI	C-145	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1455	N/A(vac)	V O/E	GV	5.36	10	1	MAIN AXI	C-145	4" UNLOAD LINE	INACCESSIBLE	N
1456	UTM	V O/E	G	5.36	10	1	MAIN AXI	C-145	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1457	UTM	V O/E	G	5.36	10	1	MAIN AXI	C-145	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0103					SAFETY WATER SYSTEM						
1460	N/A(vac)	V	GV	5.36	10	1	MAIN AXI	C-145	SAFETY WATER VALVE	SAFETY WATER	Y
1461	N/A(vac)	C	GV	5.36	10	1	MAIN AXI	C-145	SAFETY WATER GAUGE	SAFETY WATER	Y
1462	N/A(vac)	V O/E	GV	5.36	10	1	MAIN AXI	C-145	SAFETY WATER VALVE	SAFETY WATER	Y
1463	N/A(vac)	C(x2)	GV	5.36	10	1	MAIN AXI	C-145	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1464	N/A(vac)	C(x2)	GV	5.36	10	1	MAIN AXI	C-145	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0104					INJECTION WATER SYSTEM						
1470	Q	V	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER VALVE	INJECTION WAT	Y
1471	Q	V	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER VALVE	INJECTION WAT	Y
1472	Q	V O/E	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1473	Q	V O/E	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER CLEANOUT VALVE	INJECTION WAT	Y
1474	Q	V	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER	INJECTION WAT	Y
1475	Q	V	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1476	Q	V O/E	G	5.36	10	1	MAIN AXI	C-145	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0105					EXHAUST SEAL SYSTEM						
1485	Q	V O/E	G	5.36	10	1	MAIN AXI	C-145	RAW GAS OUTLET CLEANOUT LINE		Y
1480	Q	O/E	G	5.36	10	1	MAIN AXI	C-145	PRESSURE SEAL DRAIN		Y
1481	A,V,O	C(x2)	G	5.36	10	1	MAIN AXI	C-145	SIGHT GLASS		Y
1482	Q	V	G	5.36	10	1	MAIN AXI	C-145	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1483	Q	V O/E	G	5.36	10	1	MAIN AXI	C-145	PRESSURE SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1484	Q	V	G	5.36	10	1	MAIN AXI	C-145	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 11
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-150

13 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Reason Exclusion	Equipment	Control Room				
0111					HEADER SYSTEM					
1500	N/A(vac)	V	GV	5.36	11	1	MAIN AXI	C-150	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1501	UTM	V	G	5.36	11	1	MAIN AXI	C-150	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1502	UTM	PRV O/E	G	5.36	11	1	MAIN AXI	C-150	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1503	UTM	V	G	5.36	11	1	MAIN AXI	C-150	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0112					NOISE SUPRESSION/UNLOADING					
1504	N/A(vac)	V O/E	GV	5.36	11	1	MAIN AXI	C-150	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1505	N/A(vac)	V	GV	5.36	11	1	MAIN AXI	C-150	4" UNLOAD LINE	INACCESSIBLE	Y
1506	N/A(vac)	V O/E	GV	5.36	11	1	MAIN AXI	C-150	4" UNLOAD LINE	INACCESSIBLE	Y
1507	UTM	V O/E	G	5.36	11	1	MAIN AXI	C-150	OUTLET NOISE SUPPRESOR CLEAN OUT VALVE	INACCESSIBLE	N
0113					SAFETY WATER SYSTEM					
1510	N/A(vac)	V	GV	5.36	11	1	MAIN AXI	C-150	SAFETY WATER VALVE	SAFETY WATER	Y
1511	N/A(vac)	V O/E	GV	5.36	11	1	MAIN AXI	C-150	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1512	N/A(vac)	V O/E	GV	5.36	11	1	MAIN AXI	C-150	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1513	N/A(vac)	C(x2)	GV	5.36	11	1	MAIN AXI	C-150	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1514	N/A(vac)	V	GV	5.36	11	1	MAIN AXI	C-150	SAFETY WATER VALVE	SAFETY WATER	Y
0114					INJECTION WATER SYSTEM					
1520	Q	V	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER VALVE	INJECTION WAT	Y
1521	Q	V	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER VALVE	INJECTION WAT	Y
1522	Q	V	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER VALVE	INJECTION WAT	Y
1523	Q	V O/E	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER O/E VALVE	INJECTION WAT	Y
1524	Q	V	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER VALVE	INJECTION WAT	Y
1525	Q	V	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1526	Q	V O/E	G	5.36	11	1	MAIN AXI	C-150	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0115					EXHAUST SEAL SYSTEM					
1535	Q	V O/E	G	5.36	11	1	MAIN AXI	C-150	RAW GAS OUTLET CLEANOUT VALVE		Y
1530	Q	O/E	G	5.36	11	1	MAIN AXI	C-150	PRESSURE SEAL DRAIN		Y
1531	A,V,O	C(x2)	G	5.36	11	1	MAIN AXI	C-150	SIGHT GLASS		Y
1532	Q	V O/E	G	5.36	11	1	MAIN AXI	C-150	PRESSURE SEAL VENT RECYCLE LINE O/E VALVE	RECYCLE LINE	Y
1533	Q	V	G	5.36	11	1	MAIN AXI	C-150	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1534	Q	V	G	5.36	11	1	MAIN AXI	C-150	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 12
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-155

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Compressor Room				
0121					HEADER SYSTEM					
1551	UTM	V	G	5.36	12	1	MAIN AXI	C-155	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1552	UTM	PRV O/E	G	5.36	12	1	MAIN AXI	C-155	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1553	UTM	V	G	5.36	12	1	MAIN AXI	C-155	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0122					NOISE SUPRESSION/UNLOADING					
1554	N/A(vac)	V	GV	5.36	12	1	MAIN AXI	C-155	INLET NOISE SUPPRESSOR PRESSURE TAP	INACCESSIBLE	N
1555	UTM	V O/E	G	5.36	12	1	MAIN AXI	C-155	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1556	N/A(vac)	C	GV	5.36	12	1	MAIN AXI	C-155	INLET NOISE SUPPRESSOR PRESSURE GAUGE	INACCESSIBLE	N
0123					SAFETY WATER SYSTEM					
1560	N/A(vac)	V	GV	5.36	12	1	MAIN AXI	C-155	SAFETY WATER VALVE	SAFETY WATER	Y
1561	N/A(vac)	V O/E	GV	5.36	12	1	MAIN AXI	C-155	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1562	N/A(vac)	V O/E	GV	5.36	12	1	MAIN AXI	C-155	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1563	N/A(vac)	V	GV	5.36	12	1	MAIN AXI	C-155	SAFETY WATER VALVE	SAFETY WATER	Y
0124					INJECTION WATER SYSTEM					
1573	Q	V	G	5.36	12	1	MAIN AXI	C-155	INJECTION WATER VALVE	INJECTION WAT	Y
1572	Q	V	G	5.36	12	1	MAIN AXI	C-155	INJECTION WATER VALVE	INJECTION WAT	Y
1571	Q	V O/E	G	5.36	12	1	MAIN AXI	C-155	INJECTION WATER CLEANOUT VALVE	INJECTION WAT	Y
1575	Q	V	G	5.36	12	1	MAIN AXI	C-155	INJECTION WATER VALVE	INJECTION WAT	Y
1576	Q	V	G	5.36	13	1	MAIN AXI	C-155	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
0125					EXHAUST SEAL SYSTEM					
1574	Q	V O/E	G	5.36	12	1	MAIN AXI	C-155	RAW GAS OUTLET CLEANOUT VALVE		Y
1580	Q	O/E	G	5.36	12	1	MAIN AXI	C-155	PRESSURE SEAL DRAIN		Y
1581	A.V.O	C(x2)	G	5.36	12	1	MAIN AXI	C-155	SIGHT GLASS		Y
1582	Q	V	G	5.36	12	1	MAIN AXI	C-155	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1583	Q	V O/E	G	5.36	12	1	MAIN AXI	C-155	PRESSURE SEAL VENT RECYCLE LINE CLEANOUT VALVE	RECYCLE LINE	Y
1584	Q	V	G	5.36	12	1	MAIN AXI	C-155	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 13
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-160

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Device				
0131					HEADER SYSTEM					
1600	N/A(vac)	V	GV	5.36	13	1	MAIN AXI	C-160	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1601	UTM	V	G	5.36	13	1	MAIN AXI	C-160	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1602	UTM	PRV O/E	G	5.36	13	1	MAIN AXI	C-160	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1603	UTM	V	G	5.36	13	1	MAIN AXI	C-160	RAW GAS OUTLET BLOCKING VALVE	INACCESSIBLE	N
0132					NOISE SUPRESSION/UNLOADING					
1604	N/A(vac)	V O/E	GV	5.36	13	1	MAIN AXI	C-160	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1605	UTM	V O/E	G	5.36	13	1	MAIN AXI	C-160	OUTLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0133					SAFETY WATER SYSTEM					
1610	N/A(vac)	V	GV	5.36	13	1	MAIN AXI	C-160	SAFETY WATER VALVE	SAFETY WATER	Y
1611	N/A(vac)	V O/E	GV	5.36	13	1	MAIN AXI	C-160	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1612	N/A(vac)	V O/E	GV	5.36	13	1	MAIN AXI	C-160	SAFETY WATER CLEANOUT VALVE	SAFETY WATER	Y
1613	N/A(vac)	C(x2)	GV	5.36	13	1	MAIN AXI	C-160	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1614	N/A(vac)	V	GV	5.36	13	1	MAIN AXI	C-160	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0134					INJECTION WATER SYSTEM					
1620	Q	V	G	5.36	13	1	MAIN AXI	C-160	INJECTION WATER VALVE	INJECTION WAT	Y
1621	Q	V	G	5.36	13	1	MAIN AXI	C-160	INJECTION WATER VALVE	INJECTION WAT	Y
1622	Q	V	G	5.36	13	1	MAIN AXI	C-160	INJECTION WATER VALVE	INJECTION WAT	Y
1623	Q	V	G	5.36	13	1	MAIN AXI	C-160	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1624	Q	V O/E	G	5.36	13	1	MAIN AXI	C-160	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0135					EXHAUST SEAL SYSTEM					
1635	Q	V O/E	G	5.36	13	1	MAIN AXI	C-160	RAW GAS OUTLET CLEANOUT VALVE		Y
1630	Q	O/E	G	5.36	13	1	MAIN AXI	C-160	PRESSURE SEAL DRAIN		Y
1631	A,V,O	C(x2)	G	5.36	13	1	MAIN AXI	C-160	SIGHT GLASS		Y
1632	Q	V O/E	G	5.36	13	1	MAIN AXI	C-160	PRESSURE SEAL VENT RECYCLE LINE CLEANOUT VALVE	RECYCLE LINE	Y
1633	Q	V	G	5.36	13	1	MAIN AXI	C-160	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1634	Q	V	G	5.36	13	1	MAIN AXI	C-160	PRESSURE SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 14
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-165

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Process	Control Room					
0141					HEADER SYSTEM						
1651	UTM	V	G	5.36	14	1	MAIN AXI	C-165	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1652	UTM	PRV O/E	G	5.36	14	1	MAIN AXI	C-165	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1653	UTM	V	G	5.36	14	1	MAIN AXI	C-165	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0142					NOISE SUPRESSION/UNLOADING						
1654	N/A(vac)	V O/E	GV	5.36	14	1	MAIN AXI	C-165	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1655	UTM	V O/E	G	5.36	14	1	MAIN AXI	C-165	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0143					SAFETY WATER SYSTEM						
1660	N/A(vac)	V	GV	5.36	14	1	MAIN AXI	C-165	SAFETY WATER VALVE	SAFETY WATER	Y
1661	N/A(vac)	V O/E	GV	5.36	14	1	MAIN AXI	C-165	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1662	N/A(vac)	V O/E	GV	5.36	14	1	MAIN AXI	C-165	SAFETY WATER CLEANOUT VALVE	SAFETY WATER	Y
1663	N/A(vac)	C(x2)	GV	5.36	14	1	MAIN AXI	C-165	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1664	N/A(vac)	V	GV	5.36	14	1	MAIN AXI	C-165	SAFETY WATER CONTROL VALVE	SAFETY WATER	Y
0144					INJECTION WATER SYSTEM						
1670	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER VALVE	INJECTION WAT	Y
1671	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER VALVE	INJECTION WAT	Y
1672	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER WHEEL VALVE	INJECTION WAT	Y
1536	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER FLEXIBLE LINE CONNECTING VALVE	INJECTION WAT	Y
1673	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER VALVE	INJECTION WAT	Y
1674	Q	V	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER CONTROL VALVE	INJECTION WAT	Y
1675	Q	V O/E	G	5.36	14	1	MAIN AXI	C-165	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0145					EXHAUST SEAL SYSTEM						
1685	Q	V O/E	G	5.36	14	1	MAIN AXI	C-165	RAW GAS EXHAUST CLEANOUT VALVE		Y
1680	Q	O/E	G	5.36	14	1	MAIN AXI	C-165	EXHAUST SEAL DRAIN		Y
1681	A,V,O	C(x2)	G	5.36	14	1	MAIN AXI	C-165	SIGHT GLASS		Y
1682	Q	V	G	5.36	14	1	MAIN AXI	C-165	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 15
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-170

13 Quarterly Components, 4 UTM Components

Tag Number	Monitoring Frequency	Component Type	Phase	Service Location	Process Unit	Process Area	Control Room			
0151					HEADER SYSTEM					
1700	N/A(vac)	V	GV	5.36	15	1	MAIN AXI	C-170	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1701	UTM	V	G	5.36	15	1	MAIN AXI	C-170	RAW GAS BYPASS BLOCKNG VALVE	INACCESSIBLE	N
1702	UTM	PRV O/E	G	5.36	15	1	MAIN AXI	C-170	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1703	UTM	V	G	5.36	15	1	MAIN AXI	C-170	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0152					NOISE SUPRESSION/UNLOADING					
1704	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1705	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1706	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1707	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1708	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1709	UTM	V O/E	G	5.36	15	1	MAIN AXI	C-170	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1740	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	4" UNLOAD VALVE		Y
1741	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	4" UNLOAD VALVE		Y
0153					SAFETY WATER SYSTEM					
1710	N/A(vac)	V	GV	5.36	15	1	MAIN AXI	C-170	SAFETY WATER VALVE	SAFETY WATER	Y
1711	N/A(vac)	V	GV	5.36	15	1	MAIN AXI	C-170	SAFETY WATER VALVE	SAFETY WATER	Y
1712	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	SAFETY WATER VALVE	SAFETY WATER	Y
1713	N/A(vac)	V O/E	GV	5.36	15	1	MAIN AXI	C-170	SAFETY WATER VALVE	SAFETY WATER	Y
1715	N/A(vac)	V	GV	5.36	15	1	MAIN AXI	C-170	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0154					INJECTION WATER SYSTEM					
1720	Q	V	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE	INJECTION WAT	Y
1721	Q	V	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE	INJECTION WAT	Y
1722	Q	V O/E	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE CLEANOUT	INJECTION WAT	Y
1723	Q	V	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE CLEANOUT	INJECTION WAT	Y
1724	Q	V O/E	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE	INJECTION WAT	Y
1725	Q	V	G	5.36	15	1	MAIN AXI	C-170	INJECTION WATER VALVE	INJECTION WAT	Y
0155					EXHAUST SEAL SYSTEM					
1537	Q	V	G	5.36	15	1	MAIN AXI	C-170	RAW GAS EXHAUST CLEANOUT VALVE		Y
1730	Q	O/E	G	5.36	15	1	MAIN AXI	C-170	EXHAUST SEAL DRAIN		Y
1731	A,V,O	C(x2)	G	5.36	15	1	MAIN AXI	C-170	SIGHT GLASS		Y
1732	Q	V O/E	G	5.36	15	1	MAIN AXI	C-170	EXHAUST SEAL VENT RECYCLE LINE CLEANOUT VALVE	RECYCLE LINE	Y
1733	Q	V	G	5.36	15	1	MAIN AXI	C-170	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1734	Q	V	G	5.36	15	1	MAIN AXI	C-170	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1735	Q	V O/E	G	5.36	15	1	MAIN AXI	C-170	EXHAUST SEAL VENT RECYCLE LINE CLEANOUT VALVE	RECYCLE LINE	Y

TABLE 16
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-175

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Service Concentration	Type 2	Control Room					
0161					HEADER SYSTEM						
1750	N/A(vac)	V	GV	5.36	16	1	MAIN AXI	C-175	RAW GAS INLET BLOCKING VALVE	INACCESSIBLE	N
1751	UTM	V	G	5.36	16	1	MAIN AXI	C-175	REW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1752	UTM	PRV O/E	G	5.36	16	1	MAIN AXI	C-175	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1753	UTM	V	G	5.36	16	1	MAIN AXI	C-175	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0162					NOISE SUPRESSION/UNLOADING						
1754	N/A(vac)	V O/E	GV	5.36	16	1	MAIN AXI	C-175	INLET NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1755	UTM	V O/E	G	5.36	16	1	MAIN AXI	C-175	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0163					SAFETY WATER SYSTEM						
1760	N/A(vac)	V O/E	GV	5.36	16	1	MAIN AXI	C-175	SAFETY WATER VALVE	SAFETY WATER	Y
1761	N/A(vac)	V O/E	GV	5.36	16	1	MAIN AXI	C-175	SAFETY WATER VALVE	SAFETY WATER	Y
1762	N/A(vac)	C(x2)	GV	5.36	16	1	MAIN AXI	C-175	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1763	N/A(vac)	V	GV	5.36	16	1	MAIN AXI	C-175	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0164					INJECTION WATER SYSTEM						
1770	Q	V	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER VALVE	INJECTION WAT	Y
1771	Q	V	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER VALVE	INJECTION WAT	Y
1772	Q	V O/E	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER VALVE	INJECTION WAT	Y
1773	Q	V	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER VALVE	INJECTION WAT	Y
1774	Q	V	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER VALVE	INJECTION WAT	Y
1775	A,V,O	C	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER PRESSURE GAUGE	INJECTION WAT	Y
1776	Q	V O/E	G	5.36	16	1	MAIN AXI	C-175	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0165					EXHAUST SEAL SYSTEM						
1785	Q	V O/E	G	5.36	16	1	MAIN AXI	C-175	RAW GAS EXHAUST CLEANOUT VALVE		Y
1780	Q	O/E	G	5.36	16	1	MAIN AXI	C-175	EXHAUST SEAL DRAIN		Y
1781	A,V,O	C(x2)	G	5.36	16	1	MAIN AXI	C-175	SIGHT GLASS		Y
1782	Q	V	G	5.36	16	1	MAIN AXI	C-175	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1783	Q	V O/E	G	5.36	16	1	MAIN AXI	C-175	EXHAUST SEAL VENT RECYCLE LINE CLEANOUT VALVE	RECYCLE LINE	Y
1784	Q	V	G	5.36	16	1	MAIN AXI	C-175	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

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TABLE 17
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-180

12 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Revision Concentration	Figure #	Control Room					
0171				HEADER SYSTEM							
1800	N/A(vac)	V	GV	5.36	17	1	MAIN AXI	C-180	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1801	UTM	V	G	5.36	17	1	MAIN AXI	C-180	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1802	UTM	PRV O/E	G	5.36	17	1	MAIN AXI	C-180	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1803	UTM	V	G	5.36	17	1	MAIN AXI	C-180	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0172				NOISE SUPRESSION/UNLOADING							
1804	N/A(vac)	V O/E	GV	5.36	17	1	MAIN AXI	C-180	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1805	N/A(vac)	V O/E	GV	5.36	17	1	MAIN AXI	C-180	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1806	UTM	V O/E	G	5.36	17	1	MAIN AXI	C-180	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0173				SAFETY WATER SYSTEM							
1810	N/A(vac)	V	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER VALVE	SAFETY WATER	Y
1811	N/A(vac)	V	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER PRESSURE TAP	SAFETY WATER	Y
1812	N/A(vac)	C	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER GAUGE	SAFETY WATER	Y
1813	N/A(vac)	V O/E	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1814	N/A(vac)	V O/E	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1815	N/A(vac)	C(x2)	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1816	N/A(vac)	V	GV	5.36	17	1	MAIN AXI	C-180	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0174				INJECTION WATER SYSTEM							
1820	Q	V	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER VALVE	INJECTION WAT	Y
1821	Q	V	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER VALVE	INJECTION WAT	Y
1822	Q	V O/E	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER VALVE	INJECTION WAT	Y
1823	Q	V	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER VALVE	INJECTION WAT	Y
1824	Q	V	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER VALVE	INJECTION WAT	Y
1825	Q	V	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER BLOCKING	INJECTION WAT	Y
1826	Q	V O/E	G	5.36	17	1	MAIN AXI	C-180	INJECTION WATER O/E VALVE	INJECTION WAT	Y
015				EXHAUST SEAL SYSTEM							
1835	Q	V O/E	G	5.36	17	1	MAIN AXI	C-180	RAW GAS EXHAUST CLEANOUT		Y
1830	Q	O/E	G	5.36	17	1	MAIN AXI	C-180	EXHAUST SEAL DRAIN		Y
1831	A,V,O	C(x2)	G	5.36	17	1	MAIN AXI	C-180	SIGHT GLASS		Y
1832	Q	V	G	5.36	17	1	MAIN AXI	C-180	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
1833	Q	V O/E	G	5.36	17	1	MAIN AXI	C-180	EXHAUST SEAL VENT RECYCLE LINE CLEANOUT	RECYCLE LINE	Y
1834	Q	V O/E	G	5.36	17	1	MAIN AXI	C-180	EXHAUST SEAL VENT RECYCLE LINE CLEANOUT	RECYCLE LINE	Y
1835	Q	V	G	5.36	17	1	MAIN AXI	C-180	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y

TABLE 18
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN AXI C-185

11 Quarterly Components, 4 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0181					HEADER SYSTEM						
1850	N/A(vac)	V	GV	5.36	18	1	MAIN AXI	C-185	RAW GAS SUCTION BLOCKING VALVE	INACCESSIBLE	N
1851	UTM	V	G	5.36	18	1	MAIN AXI	C-185	RAW GAS BYPASS BLOCKING VALVE	INACCESSIBLE	N
1852	UTM	PRV O/E	G	5.36	18	1	MAIN AXI	C-185	RAW GAS BYPASS RELIEF VALVE	INACCESSIBLE	N
1853	UTM	V	G	5.36	18	1	MAIN AXI	C-185	RAW GAS EXHAUST BLOCKING VALVE	INACCESSIBLE	N
0182					NOISE SUPRESSION/UNLOADING						
1854	N/A(vac)	V O/E	GV	5.36	18	1	MAIN AXI	C-185	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1855	N/A(vac)	V O/E	GV	5.36	18	1	MAIN AXI	C-185	SUCTION NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
1856	UTM	V O/E	G	5.36	18	1	MAIN AXI	C-185	EXHAUST NOISE SUPPRESSOR CLEANOUT VALVE	INACCESSIBLE	N
0183					SAFETY WATER SYSTEM						
1860	N/A(vac)	V	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER VALVE	SAFETY WATER	Y
1862	N/A(vac)	C	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER GAUGE	SAFETY WATER	Y
1863	N/A(vac)	V O/E	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1864	N/A(vac)	V O/E	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER O/E VALVE	SAFETY WATER	Y
1865	N/A(vac)	C(x2)	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER SIGHT GLASS	SAFETY WATER	Y
1866	N/A(vac)	V	GV	5.36	18	1	MAIN AXI	C-185	SAFETY WATER VALVE CONTROL	SAFETY WATER	Y
0184					INJECTION WATER SYSTEM						
1870	Q	V	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER VALVE	INJECTION WAT	Y
1871	Q	V	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER VALVE	INJECTION WAT	Y
1872	Q	V O/E	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER VALVE	INJECTION WAT	Y
1873	Q	V	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER VALVE	INJECTION WAT	Y
1874	Q	V	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER BLOCKING	INJECTION WAT	Y
1875	Q	V	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER VALVE	INJECTION WAT	Y
1877	Q	V O/E	G	5.36	18	1	MAIN AXI	C-185	INJECTION WATER O/E VALVE	INJECTION WAT	Y
0185					EXHAUST SEAL SYSTEM						
1885	Q	V O/E	G	5.36	18	1	MAIN AXI	C-185	RAW GAS EXHAUST CLEANOUT VALVE		Y
1880	Q	O/E	G	5.36	18	1	MAIN AXI	C-185	EXHAUST SEAL DRAIN		Y
1881	A,V,O	C(x2)	G	5.36	18	1	MAIN AXI	C-185	SIGHT GLASS		Y
1882	Q	V	G	5.36	18	1	MAIN AXI	C-185	EXHAUST SEAL VENT RECYCLE LINE VALVE	RECYCLE LINE	Y
0186					INJECTION WATER SYSTEM						
1876	Q	V	G	5.36	18	1	MAIN AXI	C-185	C-105/185 BYPASS VALVE	BYPASS LINE	Y
1824	A	V	G	5.36	18	1	MAIN AXI	C-185	C-105/185 BYPASS VALVE	BYPASS LINE	Y
1837	A	V O/E	G	5.36	18	1	MAIN AXI	C-185	C-105/185 BYPASS CLEANOUT VALVE	BYPASS LINE	Y
1884	A	V	G	5.36	18	1	MAIN AXI	C-185	C-105/185 BYPASS VALVE	BYPASS LINE	Y

TABLE 19
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL DECANT AREA

3 Monthly, 74 Quarterly Components, 10 Annual Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Reference Concentration	Figure #	Control Device				
0191					PUMP 201					
2000	Q	V	L	57.63	19	1	LO PUMP	P-201C	SUCTION BLOCKING	RIGHT SIDE	Y
2001	Q	V O/E	L	57.63	19	1	LO PUMP	P-201C	SUCTION CLEANOUT	RIGHT SIDE	Y
2002	M	P	L	57.63	19	1	LO PUMP	P-201C	PUMP SEAL	RIGHT SIDE	Y
2003	Q	V	L	57.63	19	1	LO PUMP	P-201C	OUTLET	RIGHT SIDE	Y
2004	A,V,O	C	L	57.63	19	1	LO PUMP	P-201C	OUTLET PRESSURE GAUGE	RIGHT SIDE	Y
2005	Q	V O/E	L	57.63	19	1	LO PUMP	P-201C	OUTLET SAMPLE	RIGHT SIDE	Y
2006	Q	V O/E	L	57.63	19	1	LO PUMP	P-201C	OUTLET SAMPLE	RIGHT SIDE	Y
2007	Q	V	L	57.63	19	1	LO PUMP	P-201C	OUTLET BLOCK	RIGHT SIDE	Y
0192					PUMP 203					
2010	Q	V	L	57.63	19	1	LO PUMP	P 203C	INLET	RIGHT SIDE	Y
2011	Q	V O/E	L	57.63	19	1	LO PUMP	P 203C	SUCTION CLEANOUT	RIGHT SIDE	Y
2012	M	P	L	57.63	19	1	LO PUMP	P 203C	PUMP SEAL	RIGHT SIDE	Y
2013	Q	V	L	57.63	19	1	LO PUMP	P 203C	OUTLET PRESSURE VALVE	RIGHT SIDE	Y
2014	A,V,O	C	L	57.63	19	1	LO PUMP	P 203C	OUTLET PRESSURE GAUGE	RIGHT SIDE	Y
2015	Q	V O/E	L	57.63	19	1	LO PUMP	P 203C	OUTLET PRESSURE	RIGHT SIDE	Y
2016	Q	V	L	57.63	19	1	LO PUMP	P 203C	OUTLET BLOCK	RIGHT SIDE	Y
0193					PUMP 202					
2018	Q	V	L	57.63	19	1	LO PUMP	P 202C	P 202C SUCTION PRESSURE GAUGE VALVE	RIGHT SIDE	Y
2019	Q	V O/E	L	57.63	19	1	LO PUMP	P 202C	SUCTION CLEANOUT	RIGHT SIDE	Y
2020	Q	V	L	57.63	19	1	LO PUMP	P 202C	P 202C SUCTION	RIGHT SIDE	Y
2021	M	P	L	57.63	19	1	LO PUMP	P 202C	PUMP SEAL	RIGHT SIDE	Y
2023	A,V,O	C	L	57.63	19	1	LO PUMP	P 202C	P 202C SUCTION PRESSURE GAUGE	RIGHT SIDE	Y
2024	Q	V O/E	L	57.63	19	1	LO PUMP	P 202C	P 202C SUCTION PRESSURE GAUGE VALVE	RIGHT SIDE	Y
2025	Q	V	L	57.63	19	1	LO PUMP	P 202C	P 202C SUCTION VALVE	RIGHT SIDE	Y
2026	Q	V O/E	L	57.63	19	1	LO PUMP	P 202C	OUTLET SAMPLE	RIGHT SIDE	Y
2027	Q	V	L	57.63	19	1	LO PUMP	P 202C	P 202C	RIGHT SIDE	Y
2028	Q	V O/E	L	57.63	19	1	LO PUMP	PO21/2/3C	DISCHARGE HEADER CLEANOUT	RIGHT SIDE	Y
2029	Q	V O/E	L	57.63	19	1	LO PUMP	PO21/2/3C	SUCTION HEADER CLEANOUT	RIGHT SIDE	Y
0194					TANK 201					
2030	Q	V O/E	L	57.63	19	1	LO TANK	D-201	BOTTOM DRAIN CLEANOUT	LEFT SIDE	Y
2031	Q	V	L	57.63	19	1	LO TANK	D-201	BOTTOM DRAIN	LEFT SIDE	Y
2032	Q	V	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS BOTTOM SIDE VALVE	LEFT SIDE	Y
2033	Q	V O/E	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS DRAIN	LEFT SIDE	Y
2034	Q	V	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS BOTTOM SIDE VALVE	LEFT SIDE	Y
2035	Q	V	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS TOP SIDE VALVE	LEFT SIDE	Y
2036	Q	V	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS TOP SIDE VALVE	LEFT SIDE	Y
2048	Q	V O/E	L	57.63	19	1	LO TANK	D-201	SIGHT GLASS TOP VENT	LEFT SIDE	Y
2037	A,V,O	C	L	57.63	19	1	LO TANK	D-201	MANWAY	LEFT SIDE	Y
2039	Q	V	L	57.63	19	1	LO TANK	D-201	LEVEL CONTROL BOTTOM SIDE VALVE	LEFT SIDE	Y
2040	Q	V O/E	L	57.63	19	1	LO TANK	D-201	LEVEL CONTROL DRAIN	LEFT SIDE	Y
2041	Q	V O/E	L	57.63	19	1	LO TANK	D-201	LEVEL CONTROL TOP VENT	LEFT SIDE	Y
2042	Q	V	L	57.63	19	1	LO TANK	D-201	LEVEL CONTROL TOP SIDE VALVE	LEFT SIDE	Y
2043	Q	V	L	57.63	19	1	LO TANK	D-201	TOP CLEAN OUT/VENT	LEFT SIDE	Y
2044	A	V O/E	L	57.63	19	1	LO TANK	D-201	TOP CLEAN OUT O/E VALVE	LEFT SIDE	N
2038	Q	V	L	57.63	19	1	LO TANK	D-201	PRESSURE RELIEF FLOW VALVE	LEFT SIDE	N
2046	PRV	PRV O/E	L	57.63	19	1	LO TANK	D-201	PRESSURE RELIEF VENT	LEFT SIDE	Y

2047	Q	V	L	57.63	19	1	LO TANK	D-201	LO RETURN COMMON HEADER	LEFT SIDE	Y
0195					TANK 202						
2050	Q	V	L	57.63	19	1	LO TANK	D-202	BOTTOM DRAIN VALVE	LEFT SIDE	Y
2051	Q	V O/E	L	57.63	19	1	LO TANK	D-202	BOTTOM DRAIN CLEANOUT	LEFT SIDE	Y
2052	Q	V	L	57.63	19	1	LO TANK	D-202	SIGHT GLASS BOTTOM SIDE VALVE	SIDE OF TANK	Y
2053	Q	V O/E	L	57.63	19	1	LO TANK	D-202	SIGHT GLASS DRAIN	SIDE OF TANK	Y
2054	Q	V O/E	L	57.63	19	1	LO TANK	D-202	SIGHT GLASS TOP VENT	SIDE OF TANK	Y
2055	Q	V	L	57.63	19	1	LO TANK	D-202	SIGHT GLASS TOP SIDE VALVE	SIDE OF TANK	Y
2056	A,V,O	C	L	57.63	19	1	LO TANK	D-202	MANWAY	SIDE OF TANK	Y
2058	Q	V	L	57.63	19	1	LO TANK	D-202	LEVEL CONTROL BOTTOM SIDE VALVE	SIDE OF TANK	Y
2059	Q	V O/E	L	57.63	19	1	LO TANK	D-202	LEVEL CONTROL DRAIN	SIDE OF TANK	Y
2060	Q	V O/E	L	57.63	19	1	LO TANK	D-202	LEVEL CONTROL TOP VENT	SIDE OF TANK	Y
2061	Q	V	L	57.63	19	1	LO TANK	D-202	LEVEL CONTROL TOP SIDE VALVE	SIDE OF TANK	Y
2063	DTM-PRV	PRV O/E	L	57.63	19	1	LO TANK	D-202	PRESSURE RELIEF VENT	TOP OF TANK	N
2064	A	V	L	57.63	19	1	LO TANK	D-202	PRESSURE RELIEF FLOW VALVE	TOP OF TANK	N
2067	A	V	L	57.63	19	1	LO TANK	D-202	VENT LINE COMMON HEADER	TOP OF TANK	N
2068	Q	V	L	57.63	19	1	LO TANK	D-202	LO RETURN COMMON HEADER	TOP OF TANK	Y
2082	Q	V O/E	L	57.63	19	1	LO TANK	D-202	TOP CLEANOUT	TOP OF TANK	Y
0196					TANK 203						
2070	Q	V	L	57.63	19	1	LO TANK	D-203	BOTTOM DRAIN	LEFT SIDE	Y
2071	Q	V O/E	L	57.63	19	1	LO TANK	D-203	BOTTOM DRAIN CLEANOUT	LEFT SIDE	Y
2072	Q	V	L	57.63	19	1	LO TANK	D-203	LEVEL CONTROL BOTTOM SIDE VALVE	LEFT SIDE	Y
2073	Q	V O/E	L	57.63	19	1	LO TANK	D-203	LEVEL CONTROL DRAIN	LEFT SIDE	Y
2074	Q	V O/E	L	57.63	19	1	LO TANK	D-203	LEVEL CONTROL TOP VENT	LEFT SIDE	Y
2075	Q	V	L	57.63	19	1	LO TANK	D-203	LEVEL CONTROL TOP SIDE VALVE	LEFT SIDE	Y
2076	A,V,O	C	L	57.63	19	1	LO TANK	D-203	MAN WAY	LEFT SIDE	Y
2077	A	V	L	57.63	19	1	LO TANK	D-203	PRESSURE RELIEF FLOW VALVE	LEFT SIDE	N
2078	Q	V O/E	L	57.63	19	1	LO TANK	D-203	OPEN END (SIGHT GLASS REMOVED)	LEFT SIDE	Y
2079	Q	V O/E	L	57.63	19	1	LO TANK	D-203	OPEN END TOP SIDE (SIGHT GLASS REMOVED)	LEFT SIDE	Y
2080	DTM-PRV	PRV O/E	L	57.63	19	1	LO TANK	D-203	PRESSURE RELIEF VENT	LEFT SIDE	N
2081	A	V	L	57.63	19	1	LO TANK	D-203	VENT LINE COMMON HEADER	LEFT SIDE	N
2083	A	V	L	57.63	19	1	LO TANK	D-203	LO RETURN COMMON HEADER	LEFT SIDE	N
2085	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	DRAIN LINE COMMON HEADER BLOCKING VALVE	LEFT SIDE	Y
2086	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	COMMON DRAIN LINE O/E VALVE	LEFT SIDE	Y
2087	Q	V	L	57.63	19	1	LO TANK	D-203	TOP CLEANOUT	LEFT SIDE	Y
0197					CONTROL STATION						
2090	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	BLOCKING VALVE FROM #2	BESIDE STAIRS	Y
2091	Q	V O/E	L	57.63	19	1	LO TANK	D-201/2/3	CLEAN OUT VALVE FROM #2	BESIDE STAIRS	Y
2092	Q	V	L	57.63	19	1	LO TANK	LICV 2011	CONTROL VALVE FROM #2	BESIDE STAIRS	Y
2093	Q	V O/E	L	57.63	19	1	LO TANK	D-201/2/3	CLEANOUT VALVE FROM # 2	BESIDE STAIRS	Y
2094	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	BLOCKING VALVE FROM #2	BESIDE STAIRS	Y
2095	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	BYPASS VALVE FROM #2	BESIDE STAIRS	Y
2096	A,V,O	C	L	57.63	19	1	LO TANK	D-201/2/3	ORIFICE PLATE	BESIDE STAIRS	Y
2097	A,V,O	C	L	57.63	19	1	LO TANK	D-201/2/3	ORIFICE PLATE	BESIDE STAIRS	Y
OTHER											
2066	Q	V	L	57.63	19	1	LO TANK	D-201/2/3	LO RETURN TO #2	LEFT SIDE	Y
2067	A	V	L	57.63	19	1	LO TANK	D-201/2/3	LO FROM FINAL COOLERS	LEFT SIDE	N
2084	A	V	L	57.63	19	1	LO TANK	D-201/2/3	VENT EQUALIZER TO FINAL COOLERS	LEFT SIDE	N
	A,V,O	C(x5)	L	57.63	19	1	LO TANK	D-201/2/3	SITE GLASS-LEVEL CONTROL CONNECTORS		Y
	DTM-A,V,O	C(x5)	L	57.63	19	1	LO TANK	D-201/2/3	VENT EQUALIZER TO FINAL COOLERS		N

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TABLE 20
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
FINAL COOLER AREA

5 Monthly, 51 Quarterly Components, 13 Annual Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Control Device					
201											
2100	Q	V	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE BLOCKING VALVE	CONTROL STA	Y
2101	Q	V O/E	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE CLEAN OUT VALVE	CONTROL STA	Y
2102	Q	V	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE CONTROL VALVE	CONTROL STA	Y
2103	Q	V O/E	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE CLEANOUT VALVE	CONTROL STA	Y
2104	Q	V	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE BLOCKING VALVE	CONTROL STA	Y
2105	Q	V	L	57.63	20	1	LO TANK	D-201/2/3	LO OUTLET LINE BYPASS VALVE	CONTROL STA	Y
2110	Q	V O/E	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP CLEANOUT		Y
2111	A	V	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP	GRND LVL, 12'	Y
2112	A	V	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE	GRND LVL, 12'	Y
2113	A	V	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP	GRND LVL, 12'	Y
2114	Q	V	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP	GRND LVL, 10'	Y
2115	Q	V O/E	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP CLEANOUT	GRND LVL, 8'	Y
2116	Q	V	L	57.63	20	1	TRPL VALVE	V-5	TRIPLE VALVE BYPASS LOOP	GRND LVL, 10'	Y
2118	**M**	**AGI**	**L**	**57.63**	**20**	**1**	**AGITATOR**	**T-201**	**LIGHT OIL SCREEN DEMISTER**	**TOP LEVEL, IN PROTECTIVE BOX**	**Y**
2128	**M**	**AGI**	**L**	**57.63**	**20**	**1**	**AGITATOR**	**T-202**	**LIGHT OIL SCREEN DEMISTER**	**TOP LEVEL, IN PROTECTIVE BOX**	**Y**
2138	**M**	**AGI**	**L**	**57.63**	**20**	**1**	**AGITATOR**	**T-203**	**LIGHT OIL SCREEN DEMISTER**	**TOP LEVEL, IN PROTECTIVE BOX**	**Y**
202											
2106	Q	V O/E	L	57.63	20	1	FINAL COOL	T-201/2/3	LO VENT EQUALIZER VALVE VENT		Y
2160	Q	V	G	57.63	20	1	FINAL COOL	T-201	LO VENT EQUALIZER VALVE	TOP LEVEL	Y
2161	Q	V	G	57.63	20	1	FINAL COOL	T-201	LO VENT EQUALIZER VALVE	GRND LEVEL???	Y
2170	Q	V	G	57.63	20	1	FINAL COOL	T-202	LO VENT EQUALIZER VALVE	GRND LEVEL	Y
2171	A	V O/E	G	57.63	20	1	FINAL COOL	T-202	LO VENT EQUALIZER O/E VALVE	GRND LEVEL	N
2172	A	V O/E	G	57.63	20	1	FINAL COOL	T-202	LO VENT EQUALIZER O/E VALVE	GRND LEVEL	N
2173	Q	V	G	57.63	20	1	FINAL COOL	T-202	LO VENT EQUALIZER VALVE	TOP LEVEL	Y
2180	A	V	G	57.63	20	1	FINAL COOL	T-203	LO VENT EQUALIZER VALVE	GRND LEVEL	N
2181	A	V O/E	G	57.63	20	1	FINAL COOL	T-203	LO VENT EQUALIZER O/E VALVE	GRND LEVEL	N
2182	Q	V	G	57.63	20	1	FINAL COOL	T-203	LO VENT EQUALIZER VALVE	TOP LEVEL	Y
2183	A	V O/E	G	57.63	20	1	FINAL COOL	T-203	LO VENT EQUALIZER O/E VALVE	GRND LEVEL	N
203											
2162	Q	V	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE VALVE	GRND LVL	Y
2163	Q	V	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE VALVE	TOP LEVEL	Y
2164	Q	V O/E	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE VALVE	1ST LEVEL	Y
2165	Q	V	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE VALVE	1ST LEVEL	Y
2166	Q	V	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE VALVE	1ST LEVEL	Y
2189	Q	V O/E	L	57.63	20	1	FINAL COOL	T-201	LO DRAIN LINE O/E VALVE	GRND LEVEL, 12'	Y
2107	Q	V O/E	L	57.63	20	1	FINAL COOL	T-202	LO DRAIN LINE O/E VALVE	GRND LEVEL	Y
2108	Q	V O/E	L	57.63	20	1	FINAL COOL	T-202	LO DRAIN LINE O/E VALVE	GRND LEVEL	Y
2174	Q	V	L	57.63	20	1	FINAL COOL	T-202	LO DRAIN LINE VALVE	TOP LEVEL	Y
2175	Q	V	L	57.63	20	1	FINAL COOL	T-202	LO DRAIN LINE VALVE	GRND LEVEL	Y
2176	Q	V	L	57.63	20	1	FINAL COOL	T-202	LO DRAIN LINE VALVE	GRND LEVEL	Y
2184	Q	V	L	57.63	20	1	FINAL COOL	T-203	LO DRAIN LINE VALVE	TOP LEVEL	Y
2185	Q	V	L	57.63	20	1	FINAL COOL	T-203	LO DRAIN LINE VALVE	GRND LEVEL	Y
2186	Q	V O/E	L	57.63	20	1	FINAL COOL	T-203	LO DRAIN LINE O/E VALVE	GRND LEVEL	Y
2187	Q	V O/E	L	57.63	20	1	FINAL COOL	T-203	LO DRAIN LINE O/E VALVE	GRND LEVEL	Y
2150	Q	V	L	57.63	20	1	FINAL COOL	T-206	LO DRAIN LINE VALVE	TOP LEVEL	Y

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2151	Q	V	L	57.63	20	1	FINAL COOL	T-206	LO DRAIN LINE VALVE	TOP LEVEL	Y
2152	Q	V	L	57.63	20	1	FINAL COOL	T-206	LO DRAIN LINE BFW VALVE	TOP LEVEL	Y
2153	Q	V O/E	L	57.63	20	1	FINAL COOL	T-206	LO DRAIN LINE BFW VALVE	TOP LEVEL	Y
204											
2120	A	V	L	57.63	20	1	FINAL COOL	T-206	LO INLET LINE VALVE	GRND LVL, 15'	N
2121	Q	V O/E	L	57.63	20	1	FINAL COOL	T-201	LO INLET LINE DRAIN VALVE	GRND LVL	Y
2122	A	V	L	57.63	20	1	FINAL COOL	T-201	LO INLET LINE VALVE	GRND LVL	N
2123	A	V	L	57.63	20	1	FINAL COOL	T-201	LO INLET LINE VALVE	GRND LVL, 15'	N
2124	A	V O/E	L	57.63	20	1	FINAL COOL	T-201	LO INLET LINE O/E VALVE	GRND LVL, 15'	N
2125	A	V O/E	L	57.63	20	1	FINAL COOL	T-201	LO INLET LINE O/E VALVE	GRND LVL, 15'	N
2167	Q	V	L	57.63	20	1	FINAL COOL	T-201	LO INLET VALVE BELOW WALKWAY	TOP LEVEL, BELOW CATWALK	Y
2130	Q	V	L	57.63	20	1	FINAL COOL	T-202	LO INLET LINE VALVE	1ST LEVEL	Y
2131	Q	V O/E	L	57.63	20	1	FINAL COOL	T-202	LO INLET LINE O/E VALVE	1ST LEVEL	Y
2135	Q	V O/E	L	57.63	20	1	FINAL COOL	T-202	LO INLET LINE O/E VALVE	GRND LVL	Y
2142	Q	V	L	57.63	20	1	FINAL COOL	T-202	LO INLET LINE VALVE	GRND LVL	Y
2177	A	V	L	57.63	20	1	FINAL COOL	T-202	LO INLET VALVE BELOW WALKWAY	TOP LEVEL, BELOW CATWALK	Y
2132	Q	V	L	57.63	20	1	FINAL COOL	T-203	LO INLET LINE VALVE	GRND LVL	Y
2140	Q	V	L	57.63	20	1	FINAL COOL	T-203	LO INLET LINE VALVE	1ST LEVEL	Y
2141	Q	V O/E	L	57.63	20	1	FINAL COOL	T-203	LO INLET LINE O/E VALVE	1ST LEVEL	Y
2188	A	V	L	57.63	20	1	FINAL COOL	T-203	LO INLET VALVE BELOW WALKWAY	TOP LEVEL, BELOW CATWALK	Y
2154	Q	V	L	57.63	20	1	FINAL COOL	T-206	LO INLET LINE VALVE	TOP LEVEL	Y
2155	Q	V O/E	L	57.63	20	1	FINAL COOL	T-206	LO INLET LINE VALVE	TOP LEVEL	Y
2156	Q	V	L	57.63	20	1	FINAL COOL	T-206	LO INLET LINE VALVE	TOP LEVEL	Y
2157	Q	V O/E	L	57.63	20	1	FINAL COOL	T-206	LO INLET LINE O/E VALVE	TOP LEVEL	Y
2117	Q	V O/E	L	57.63	20	1	MAIN HEADER	V-5	LO INLET MAIN LINE HEADER DRAIN VALVE	GRND LVL, 8'	Y
	A,V,O	C(x4)	L	57.63	20	1	FINAL COOL	D-201/2/3	LIGHT OIL INLET LINE FLANGES TO FINAL COOLERS	TOP LEVEL	Y

TABLE 21
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUPER STILL AREA

4 Monthly Components, 40 Quarterly Components, 20 Annual Components, 2 UTM Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Control Process					
211											
2200	A	V	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2201	A	V O/E	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2202	A	V	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2203	A	V O/E	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2204	A	V	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2205	A	V	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 CONTROL STATION	PLATFORM	N
2206	A	V O/E	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 ORIFICE PLATE VALVE	PLATFORM	N
2207	A	V O/E	L	57.63	21	1	SUPER STILL	T-207	LO FROM CONTROL ROOM 2 ORIFICE PLATE VALVE	PLATFORM	N
2208	A	V	L	57.63	21	1	SUPER STILL	T-207	LIGHT OIL FROM CONTROL ROOM 2	8' OUT, UP	N
2209	A	V O/E	L	57.63	21	1	SUPER STILL	T-207	LO TO SUPER STILL DRAIN VALVE OVER ROAD	8' OUT, UP	N
2216	Q	V	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE		Y
2217	Q	V	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE		Y
2218	Q	V O/E	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE CLEANOUT		Y
2219	Q	V O/E	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE		Y
2220	M	P	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO RECIRCULATING PUMP SEAL		Y
2221	Q	V O/E	L	57.63	21	1	PUMP	P-207D	BOTTOM OF PUMP		Y
2222	Q	V O/E	L	57.63	21	1	PUMP	P-207D	TOP SIDE		Y
2223	Q	V	L	57.63	21	1	PUMP	P-207C	BOTTOM SIDE		Y
2224	Q	V O/E	L	57.63	21	1	PUMP	P-207D	BOTTOM SIDE, 2ND VALVE		Y
2226	Q	CV	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO CHECK VALVE		Y
2227	Q	V O/E	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE		Y
2228	Q	V	L	57.63	21	1	PUMP	P-207D	SUPER STILL LO VALVE		Y
2235	Q	V	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2236	Q	V	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2237	Q	V O/E	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE CLEANOUT		Y
2225	Q	V O/E	L	57.63	21	1	PUMP	P-207c	SUPER STILL LO VALVE		Y
2238	M	P	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO RECIRCULATING PUMP SEAL		Y
2239	Q	V	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2240	Q	V O/E	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2241	Q	V O/E	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2242	Q	V O/E	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2243	Q	CV	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE CHECKING		Y
2244	Q	V O/E	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2245	Q	V	L	57.63	21	1	PUMP	P-207C	SUPER STILL LO VALVE		Y
2246	A	PRV O/E	L	57.63	21	1	SUPER STILL	P-207C/D	RELIEF VALVE		N
2255	Q	V O/E	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN		Y
2256	Q	V	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN BLOCKING		Y
2231	Q	V O/E	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN		Y
2257	Q	V	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN		Y
2229	Q	V	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN,2ND VALVE		Y
2230	Q	V O/E	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN,3RD VALVE		Y
2258	Q	V O/E	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR BOTTOM DRAIN		Y
2259	A	V O/E	L	57.63	21	1	LO SEP	T-208B	LO SEPARATOR FEED BLOCKING VALVE		N
2260	A	V	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS/LEVEL CONTROL VALVE	SEPAR SIDE	N
2261	A	V	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS/LEVEL CONTROL VALVE	SEPAR SIDE	N
2262	A	V	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS/LEVEL CONTROL VALVE	SEPAR SIDE	N

2263	DTM-A,V,O	C(x2)	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS	SEPAR SIDE	N
2264	DTM-A,V,O	C(x2)	L	57.63	21	1	LO SEP	T-208B	LEVEL CONTROL	SEPAR SIDE	N
2265	A	V	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS/ LEVEL CONTROL VALVE	SEPAR SIDE	N
2266	A	V	L	57.63	21	1	LO SEP	T-208B	SIGHT GLASS/ LEVEL CONTROL VALVE	SEPAR SIDE	N
2267	UTM	PRV O/E	L	57.63	21	1	LO SEP	T-208B	RELIEF VALVE		N
2268	A,V,O	C	L	57.63	21	1	LO SEP	T-208B	MANWAY		Y
2270	Q	V	L	57.63	21	1	PUMP	P-207G	INLET BLOCKING		Y
2271	M	P	L	57.63	21	1	PUMP	P-207G	PUMP SEAL		Y
2272	Q	V	L	57.63	21	1	PUMP	P-207G	OUTLET BLOCKING		Y
2274	Q	V	L	57.63	21	1	PUMP	P-207H	INLET BLOCKING		Y
2275	M	P	L	57.63	21	1	PUMP	P-207H	PUMP SEAL		Y
2276	Q	V	L	57.63	21	1	PUMP	P-207H	LO RECIRCULATION AND TRANSFER LOOP VALVE		Y
2277	Q	V	L	57.63	21	1	LO SEP	T-208B	LO RECIRCULATION AND TRANSFER LOOP VALVE		Y
2279	Q	V	L	57.63	21	1	LO SEP	T-208B	LO RECIRCULATION AND TRANSFER LOOP VALVE		Y
2281	Q	V	L	57.63	21	1	LO SEP	T-208B	LO RECIRCULATION AND TRANSFER LOOP VALVE		Y
2284	Q	V	L	57.63	21	1	LO SEP	T-208B	LO RECIRCULATION AND TRANSFER LOOP VALVE		Y
2282	Q	V	L	57.63	21	1	LO SEP	T-208B	LO RECIRCULATION AND TRANSFER LOOP VALVE CLEANOUT		Y
2285	Q	V	L	57.63	21	1	LO SEP	T-208B	TRANSFER LOOP BYPASS VALVE		Y
2273	Q	V	L	57.63	21	1	LO SEP	T-208B	LINE LEADING OVER ROADWAY		Y
2286	UTM	V O/E	L	57.63	21	1	LO SEP	T-208B	LO RETURN DRAIN VALVE OVER ROADWAY	15' UP	N
2290	N/A(vac)	PRV O/E	GV	5.4	21	1	SUPER STILL	T-207	RELIEF VALVE	TOP OF STILL	N
2291	N/A(vac)	V O/E	GV	5.4	21	2	SUPER STILL	T-207	CONTROL STATION BLOCKING VALVE TO MVM	TOP OF STILL	Y
2292	N/A(vac)	V	GV	5.4	21	2	SUPER STILL	T-207	CONTROL VALVE TO MVM	TOP OF STILL	Y
2293	N/A(vac)	V	GV	5.4	21	2	SUPER STILL	T-207	CONTROL STATION BLOCKING VALVE TO MVM	TOP OF STILL	Y
2294	N/A(vac)	V	GV	5.4	21	2	SUPER STILL	T-207	MVM BLOCKING	TOP OF STILL	Y
2295	N/A(vac)	V	GV	5.4	21	2	SUPER STILL	T-207	MVM BYPASS VALVE	TOP OF STILL	Y
2296	N/A(vac)	V	GV	5.4	21	2	SUPER STILL	T-207	BLOCKING VALVE LINE TO MVM	TOP OF STILL	Y
	A,V,O	C(x3)	L	57.63	21	1			MANWAYS AND BLIND FLANGES W/O IDENTIFICATION		Y

TABLE 22
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUPER STILL AREA

42 Quarterly Components, 12 Annual Components

Log Identification	Monitoring Frequency	Component Type	Phase	Reference Code Circumstance	Figure #	Control Record					
221											
2300	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE	#1 IN	Y
2301	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE DRAIN	#1 IN	Y
2302	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE CLEANOUT	#1 IN	Y
2303	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE	#1 OUT	Y
2304	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE	#1 OUT	Y
2305	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE	#1 OUT	Y
2306	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 1	SUPER STILL LO VALVE	#1 OUT	Y
2307	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 2	SUPER STILL LO VALVE	#2 IN	Y
2308	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 2	SUPER STILL LO VALVE DRAIN	#2 IN	Y
2309	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 2	SUPER STILL LO VALVE	#2 OUT	Y
2310	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 2	SUPER STILL LO VALVE	#2 OUT	Y
2311	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 3	SUPER STILL LO VALVE	#3 IN	Y
2312	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 3	SUPER STILL LO VALVE DRAIN	#3 IN	Y
2313	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 3	SUPER STILL LO VALVE	#3 OUT	Y
2314	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 3	SUPER STILL LO VALVE	#3 OUT	Y
2315	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 4	SUPER STILL LO VALVE	#4 IN	Y
2316	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 4	SUPER STILL LO VALVE DRAIN	#4 IN	Y
2317	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 4	SUPER STILL LO VALVE CLEANOUT	#4 OUT	Y
2318	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 4	SUPER STILL LO VALVE	#4 OUT	Y
2319	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 5	SUPER STILL LO VALVE	#5 IN	Y
2320	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 5	SUPER STILL LO VALVE DRAIN	#5 IN	Y
2321	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 5	SUPER STILL LO VALVE CLEANOUT	#5 OUT	Y
2323	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 5	SUPER STILL LO VALVE	#5 OUT	Y
2324	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 6	SUPER STILL LO VALVE	#6 IN	Y
2325	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 6	SUPER STILL LO VALVE DRAIN	#6 IN	Y
2326	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 6	SUPER STILL LO VALVE CLEANOUT	#6 OUT	Y
2327	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 6	SUPER STILL LO VALVE	#6 OUT	Y
2328	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 6	SUPER STILL LO VALVE	#6 OUT	Y
2329	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 7	SUPER STILL LO VALVE	#7 IN	N
2330	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 7	SUPER STILL LO VALVE	#7 IN	Y
2331	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 7	SUPER STILL SPIRAL 7 INLET CLEANOUT	#7 IN	Y
2332	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 7	SUPER STILL LO VALVE DRAIN	#7 OUT	Y
2333	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 7	SUPER STILL LO VALVE	#7 OUT	N
2334	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 8	SUPER STILL LO VALVE	#8 IN	N
2335	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 8	SUPER STILL LO VALVE	#8 IN	Y
2336	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 8	SUPER STILL LO VALVE DRAIN	#8 OUT	Y
2337	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 8	SUPER STILL LO VALVE	#8 OUT	N
2338	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 9	SUPER STILL LO VALVE	#9 IN	N
2339	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 9	SUPER STILL LO VALVE	#9 IN	Y
2340	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 9	SUPER STILL LO VALVE DRAIN	#9 OUT	Y
2341	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 9	SUPER STILL LO VALVE	#9 OUT	N
2342	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 10	SUPER STILL LO VALVE	#10 IN	N
2343	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 10	SUPER STILL LO VALVE	#10 IN	Y
2344	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 10	SUPER STILL LO VALVE DRAIN	#10 OUT	Y
2345	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 10	SUPER STILL LO VALVE	#10 OUT	N
2346	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 11	SUPER STILL LO VALVE	#11 IN	N

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2347	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 11	SUPER STILL LO VALVE	#11 IN	Y
2348	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 11	SUPER STILL LO VALVE DRAIN	#11 OUT	Y
2349	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 11	SUPER STILL LO VALVE	#11 OUT	N
2350	A	V	L	57.63	22	1	SUPER STILL	SPIRAL 12	SUPER STILL LO VALVE	#12 IN	N
2351	Q	V	L	57.63	22	1	SUPER STILL	SPIRAL 12	SUPER STILL LO VALVE	#12 IN	Y
2352	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 12	SUPER STILL SPIRAL 12 INLET CLEANOUT	#12 IN	Y
2353	Q	V O/E	L	57.63	22	1	SUPER STILL	SPIRAL 12	SUPER STILL LO VALVE DRAIN	#12 OUT	Y

TABLE 23
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-500

Tag Identification	Vapor Pressure Frequency	Component Type	Service	Benzene Concentration	Equipment #	Control Device			
0231		STEAM EDUCTOR SYSTEM							
3000	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE	STEAM	Y
3001	N/A(vac)	V O/E	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE CLEANOUT	STEAM	Y
3002	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE	STEAM	Y
3003	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE	STEAM	Y
3004	N/A(vac)	V O/E	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE	STEAM	Y
3005	N/A(vac)	C	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3006	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3007	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3008	N/A(vac)	C	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3009	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3010	N/A(vac)	C	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR GAUGE	STEAM	Y
3011	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	STEAM EDUCTOR LINE	STEAM	Y
0232		SEAL OIL RETURN SYSTEM							
3020	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN VALVE	SEAL OIL	Y
3021	A,V,O	C(x2)	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3022	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN VALVE	SEAL OIL	Y
3023	A,V,O	C(x2)	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3024	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN VALVE	SEAL OIL	Y
3025	A,V,O	C(x2)	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3026	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN VALVE	SEAL OIL	Y
3027	A,V,O	C(x2)	G	16.00	23	2	VAC MACH	C-500	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0303		RECYCLE SYSTEM							
3030	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3031	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3032	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3033	Q	V	G	16.00	23	2	VAC MACH	C-500	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
0304		SAFETY AND CLEANOUT SYSTEM							
3040	N/A(vac)	V O/E	GV	16.00	23	2	VAC MACH	C-500	FIRST STAGE CLEANOUT	SAFETY	Y
3041	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	FIRST STAGE SAFETY WATER	SAFETY	Y
3042	N/A(vac)	V O/E	GV	16.00	23	2	VAC MACH	C-500	FIRST STAGE SAFETY WATER CLEANOUT	SAFETY	Y
3043	Q	V	G	16.00	23	2	VAC MACH	C-500	SECOND STAGE SAFETY WATER	SAFETY	Y
0305		SEAL OIL INLET SYSTEM							
3050	A,V,O	C	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET GAUGE	SEAL OIL	Y
3051	Q	V	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3052	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3053	Q	V	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3054	Q	V	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3055	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3056	Q	V	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3057	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET	SEAL OIL	Y
3058	Q	V	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3059	A,V,O	C	G	16.00	23	2	VAC MACH	C-500	SEAL OIL INLET GAUGE	SEAL OIL	Y
0306		INJECTION WATER SYSTEM							
3070	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3071	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3072	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3073	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3074	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER SECOND STAGE CONTROL VALVE	INJECTION WAT	Y
3075	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3076	UTM	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
3077	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3078	Q	V O/E	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3079	Q	V	G	16.00	23	2	VAC MACH	C-500	INJECTION WATER FIRST STAGE CONTROL VALVE	INJECTION WAT	Y
0307		HEADER SYSTEM							
3080	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	SUB GAS SUCTION HEADER BLOCK	IN / OUT	N
3081	N/A(vac)	V	GV	16.00	23	2	VAC MACH	C-500	SUB GAS BYPASS VALVE	IN / OUT	N
3082	UTM	V	G	16.00	23	2	VAC MACH	C-500	SUB GAS DISCHARGE CHECK	IN / OUT	UTM
3083	UTM	V	G	16.00	23	2	VAC MACH	C-500	SUB GAS DISCHARGE HEADER BLOCK	IN / OUT	UTM
3084	UTM	V O/E	G	16.00	23	2	VAC MACH	C-500	SUB GAS DISCHARGE CLEANOUT	IN / OUT	UTM
3085	UTM	V	G	16.00	23	2	VAC MACH	C-500	SUB GAS DISCHARGE BLOCK	IN / OUT	UTM
3090	UTM	PRV	G	16.00	23	2	VAC MACH	C-500	PRESSURE RELIEF VALVE	IN / OUT	UTM

TABLE 24
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-503

Tag Identification	Monitoring Frequency	Component Type	Phase	Reference Concentration	Pressure	Control Room				
0241		STEAM EDUCTOR SYSTEM								
3100	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
3101	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
3102	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
3103	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	N
3104	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
3106	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3107	N/A(vac)	G	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3108	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
3109	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	STEAM EDUCTOR LINE VALVE	STEAM	Y
0242		SEAL OIL RETURN SYSTEM								
3120	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
3121	A,V,O	C(x2)	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3122	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN	SEAL OIL	Y
3123	A,V,O	C(x2)	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3125	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN	SEAL OIL	Y
3126	A,V,O	C(x2)	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3127	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN	SEAL OIL	Y
3128	A,V,O	C(x2)	G	16.00	24	2	VAC MACH	C-503	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0243		RECYCLE SYSTEM								
3130	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3131	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3132	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3133	Q	V	G	16.00	24	2	VAC MACH	C-503	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0244		SAFETY AND CLEANOUT SYSTEM								
3140	N/A(vac)	V O/E	GV	16.00	24	2	VAC MACH	C-503	FIRST STAGE INLET CLEANOUT	SAFETY	Y
3141	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	FIRST STAGE SAFETY WATER	SAFETY	Y
3143	Q	V	G	16.00	24	2	VAC MACH	C-503	SAFETY WATER	SAFETY	Y
0245		SEAL OIL INLET SYSTEM								
3150	A,V,O	C	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET GAUGE	SEAL OIL	Y
3151	Q	V	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3152	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET VALVE GREASE FITTING	SEAL OIL	Y
3153	Q	V	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET VALVE	SEAL OIL	Y
3154	Q	V	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET VALVE	SEAL OIL	Y
3155	Q	V O/E	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET VALVE GREASE FITTING	SEAL OIL	Y
3156	Q	V	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3157	A,V,O	C	G	16.00	24	2	VAC MACH	C-503	SEAL OIL INLET GAUGE	SEAL OIL	Y
0246		INJECTION WATER SYSTEM								
3170	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3171	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3172	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3173	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3174	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3175	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3176	Q	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3177	UTM	V	G	16.00	24	2	VAC MACH	C-503	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0247		HEADER SYSTEM								
3180	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	SUB GAS INLET HEADER BLOCKING VALVE	IN / OUT	N
3181	N/A(vac)	V	GV	16.00	24	2	VAC MACH	C-503	SUB GAS BYPASS VALVE	IN / OUT	N
3182	UTM	V	G	16.00	24	2	VAC MACH	C-503	SUB GAS DISCHARGE CHECK VALVE	IN / OUT	UTM
3183	UTM	V	G	16.00	24	2	VAC MACH	C-503	SUB GAS DISCHARGE BLOCKING VALVE	IN / OUT	UTM
3184	UTM	V O/E	G	16.00	24	2	VAC MACH	C-503	SUB GAS DISCHARGE CLEAN OUT	IN / OUT	UTM
3185	UTM	V	G	16.00	24	2	VAC MACH	C-503	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN / OUT	UTM
3186	UTM	V	G	16.00	24	2	VAC MACH	C-503	FIRST/SECOND STAGE CROSSOVER CLEANOUT	IN / OUT	UTM
3187	UTM	V	G	16.00	24	2	VAC MACH	C-503	FIRST/SECOND STAGE CROSSOVER CLEANOUT	IN / OUT	UTM
3190	UTM	PRV	G	16.00	24	2	VAC MACH	C-503	PRESSURE RELIEF VALVE	IN / OUT	UTM

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TABLE 25
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-506

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Pressure #	Connection Size					
0251		STEAM EDUCTOR SYSTEM									
3200	N/A(vac)	V	GV	16.00	25	3	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3201	N/A(vac)	V	GV	16.00	25	3	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3202	N/A(vac)	V	GV	16.00	25	2	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3203	N/A(vac)	V O/E	GV	16.00	25	2	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3204	N/A(vac)	V O/E	GV	16.00	25	2	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3207	N/A(vac)	V O/E	GV	16.00	25	2	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3208	N/A(vac)	V	GV	16.00	25	3	VAC MACH	C-506	STEAM EDUCTOR LINE VALVE	STEAM	Y
3209	N/A(vac)	C	GV	16.00	25	2	VAC MACH	C-506	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0252		SEAL OIL RETURN SYSTEM									
3220	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN	SEAL OIL	Y
3221	A,V,O	C(x2)	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3222	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN	SEAL OIL	Y
3223	A,V,O	C(x2)	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3224	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN	SEAL OIL	Y
3225	A,V,O	C(x2)	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3226	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN	SEAL OIL	Y
3227	A,V,O	C(x2)	G	16.00	25	2	VAC MACH	C-506	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0253		RECYCLE SYSTEM									
3230	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3231	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3232	Q	V	G	16.00	25	2	VAC MACH	C-506	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0254		SAFETY AND CLEANOUT SYSTEM									
3240	N/A(vac)	V O/E	GV	16.00	25	2	VAC MACH	C-506	FIRST STAGE INLET CLEANOUT O/E VALVE	SAFETY	Y
3241	N/A(vac)	V	GV	16.00	25	2	VAC MACH	C-506	FIRST STAGE INLET CLEANOUT	SAFETY	Y
3242	N/A(vac)	V	GV	16.00	25	2	VAC MACH	C-506	FIRST STAGE SAFETY WATER	SAFETY	Y
3243	Q	V	G	16.00	25	2	VAC MACH	C-506	SECOND STAGE SAFETY WATER	SAFETY	Y
3244	Q	V O/E	G	16.00	25	2	VAC MACH	C-506	SECOND STAGE SAFETY WATER CLEANOUT	SAFETY	Y
0255		SEAL OIL INLET SYSTEM									
3250	A,V,O	C	G	16.00	25	2	VAC MACH	C-506	SEAL OIL INLET PRESSURE GAUGE	SEAL OIL	Y
3251	Q	V	G	16.00	25	2	VAC MACH	C-506	SEAL OIL PRESSURE TAP	SEAL OIL	Y
3252	Q	V	G	16.00	25	2	VAC MACH	C-506	SEAL OIL BLOCKING	SEAL OIL	Y
3253	Q	V	G	16.00	25	2	VAC MACH	C-506	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3254	Q	V	G	16.00	25	2	VAC MACH	C-506	SECOND STAGE SAFETY WATER	SEAL OIL	Y
3255	A,V,O	C	G	16.00	25	2	VAC MACH	C-506	SEAL OIL INLET GAUGE	SEAL OIL	Y
0256		INJECTION WATER SYSTEM									
3270	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3271	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3272	UTM	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
3273	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3274	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3275	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3276	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3277	Q	V	G	16.00	25	2	VAC MACH	C-506	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0257		HEADER SYSTEM									
3280	N/A(vac)	V	GV	16.00	25	2	VAC MACH	C-506	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
3281	N/A(vac)	V	GV	16.00	25	2	VAC MACH	C-506	SUB GAS RECYCLE VALVE	IN/OUT	N
3282	UTM	V	G	16.00	25	2	VAC MACH	C-506	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3283	UTM	V	G	16.00	25	2	VAC MACH	C-506	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3284	UTM	V O/E	G	16.00	25	2	VAC MACH	C-506	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3285	UTM	V	G	16.00	25	2	VAC MACH	C-506	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3290	UTM	PRV	G	16.00	25	2	VAC MACH	C-506	PRESSURE RELIEF VALVE	IN/OUT	UTM

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TABLE 26
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-509

Tag Identification	Monitoring Frequency	Component Type	Service	Benzene Concentration	Figure #	Control Room					
0261	STEAM EDUCTOR SYSTEM										
3300	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE VALVE	STEAM	Y
3301	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE VALVE	STEAM	Y
3302	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE VALVE	STEAM	Y
3303	N/A(vac)	V O/E	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE VALVE	STEAM	Y
3304	N/A(vac)	V O/E	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE VALVE	STEAM	Y
3305	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3306	N/A(vac)	C	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3307	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EJECTOR LINE VALVE	STEAM	N
3308	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3309	N/A(vac)	C	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3310	N/A(vac)	C	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3311	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
0262	SEAL OIL RETURN SYSTEM										
3320	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN	SEAL OIL	Y
3321	A,V,O	C(x2)	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3322	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN	SEAL OIL	Y
3323	A,V,O	C(x2)	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3324	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN	SEAL OIL	Y
3325	A,V,O	C(x2)	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3326	A,V,O	C(x2)	G	16.00	26	2	VAC MACH	C-509	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0263	RECYCLE SYSTEM										
3330	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3331	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3332	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3333	Q	V	G	16.00	26	2	VAC MACH	C-509	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0264	SAFETY AND CLEANOUT SYSTEM										
3340	N/A(vac)	V O/E	GV	16.00	26	2	VAC MACH	C-509	STAGE 1 INLET CLEANOUT		Y
3342	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	FIRST STAGE SAFETY WATER		Y
3343	Q	V	G	16.00	26	2	VAC MACH	C-509	SECOND STAGE SAFETY WATER		Y
3368	A,V,O	C	G	16.00	26	2	VAC MACH	C-509	SECOND STAGE EXHAUST GAUGE		Y
3369	Q	V	G	16.00	26	2	VAC MACH	C-509	SECOND STAGE DISCHARGE CLEANOUT		Y
0265	SEAL OIL INLET SYSTEM										
3350	A,V,O	C	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
3351	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET VALVE	SEAL OIL	Y
3352	Q	V	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3353	Q	V	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET VALVE	SEAL OIL	Y
3354	Q	V	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3355	Q	V	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3356	A,V,O	C	G	16.00	26	2	VAC MACH	C-509	SEAL OIL INLET GAUGE	SEAL OIL	Y
0266	INJECTION WATER SYSTEM										
3370	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3371	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3372	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3373	Q	V O/E	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3374	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3375	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3376	UTM	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
3378	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3379	Q	V	G	16.00	26	2	VAC MACH	C-509	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0267	HEADER SYSTEM										
3380	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
3381	N/A(vac)	V	GV	16.00	26	2	VAC MACH	C-509	SUB GAS BYPASS VALVE	IN/OUT	N
3382	UTM	V	G	16.00	26	2	VAC MACH	C-509	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3383	UTM	V	G	16.00	26	2	VAC MACH	C-509	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
3384	UTM	V O/E	G	16.00	26	2	VAC MACH	C-509	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3385	UTM	V	G	16.00	26	2	VAC MACH	C-509	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3390	UTM	PRV	G	16.00	26	2	VAC MACH	C-509	PRESSURE RELIEF VALVE		UTM

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TABLE 27
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-512

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0271		STEAM EDUCTOR SYSTEM									
3400	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
3401	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
3402	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
3403	N/A(vac)	V O/E	GV	16.00	27	3	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
3404	N/A(vac)	V O/E	GV	16.00	27	3	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
3405	N/A(vac)	C	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3406	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3407	N/A(vac)	V O/E	GV	16.00	27	2	VAC MACH	C-512	STEAM EDUCTOR LINE VALVE	STEAM	Y
0272		SEAL OIL RETURN SYSTEM									
3420	A,V,O	C(x2)	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3421	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN	SEAL OIL	Y
3422	A,V,O	C(x2)	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3423	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN	SEAL OIL	Y
3424	A,V,O	C(x2)	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3425	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN CLEANOUT	SEAL OIL	Y
3426	A,V,O	C(x2)	G	16.00	27	2	VAC MACH	C-512	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0273		RECYCLE SYSTEM									
3430	Q	V O/E	GV	16.00	27	2	VAC MACH	C-512	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3431	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3432	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3433	Q	V	G	16.00	27	2	VAC MACH	C-512	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0274		SAFETY AND CLEANOUT SYSTEM									
3440	N/A(vac)	V O/E	GV	16.00	27	2	VAC MACH	C-512	FIRST STAGE INLET CLEANOUT		Y
3441	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	FIRST STAGE SAFETY WATER		Y
3442	Q	V	G	16.00	27	2	VAC MACH	C-512	SECOND STAGE SAFETY WATER		Y
0275		SEAL OIL INLET SYSTEM									
3450	A,V,O	C	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET GAUGE	SEAL OIL	Y
3451	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET LINE CLEANOUT	SEAL OIL	Y
3452	Q	V	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3453	Q	V	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET VALVE	SEAL OIL	Y
3454	Q	V	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3455	Q	V	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET LINE PRESSURE TAP	SEAL OIL	Y
3456	A,V,O	C	G	16.00	27	2	VAC MACH	C-512	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
3469	UTM	V O/E	G	16.00	27	2	VAC MACH	C-512	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
0276		INJECTION WATER SYSTEM									
3470	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3471	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3472	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3473	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3475	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3476	Q	V O/E	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3477	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3478	Q	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3479	UTM	V	G	16.00	27	2	VAC MACH	C-512	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0277		HEADER SYSTEM									
3480	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
3481	N/A(vac)	V	GV	16.00	27	2	VAC MACH	C-512	SUB GAS BYPASS VALVE	IN/OUT	N
3482	UTM	V	G	16.00	27	2	VAC MACH	C-512	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3483	UTM	V	G	16.00	27	2	VAC MACH	C-512	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3484	UTM	V O/E	G	16.00	27	2	VAC MACH	C-512	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3485	UTM	V	G	16.00	27	2	VAC MACH	C-512	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
3490	UTM	PRV	G	16.00	27	2	VAC MACH	C-512	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 28
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-515

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Unit #	Contact Room					
0281		STEAM EDUCTOR SYSTEM									
3500	N/A(vac)	N/A(vac)	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	Y
3501	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	Y
3502	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	Y
3503	N/A(vac)	V O/E	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	Y
3504	N/A(vac)	V O/E	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	Y
3505	N/A(vac)	C	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3506	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3507	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3508	N/A(vac)	C	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3509	N/A(vac)	C	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3510	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3511	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	STEAM EDUCTOR LINE VALVE	STEAM	N
0282		SEAL OIL RETURN SYSTEM									
3520	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN	SEAL OIL	Y
3521	A,V,O	C(x2)	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3522	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN	SEAL OIL	Y
3523	A,V,O	C(x2)	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3524	A,V,O	C(x2)	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3525	A,V,O	C(x2)	G	16.00	28	2	VAC MACH	C-515	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0283		RECYCLE SYSTEM									
3530	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3531	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3532	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3533	Q	V	G	16.00	28	2	VAC MACH	C-515	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0284		SAFETY AND CLEANOUT SYSTEM									
3540	N/A(vac)	V O/E	GV	16.00	28	2	VAC MACH	C-515	FIRST STAGE INLET CLEANOUT	SAFETY	Y
3541	N/A(vac)	V O/E	GV	16.00	28	2	VAC MACH	C-515	FIRST STAGE SAFETY WATER	SAFETY	Y
3542	Q	V	G	16.00	28	2	VAC MACH	C-515	SECOND STAGE SAFETY WATER	SAFETY	Y
0285		SEAL OIL INLET SYSTEM									
3550	A,V,O	C	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET VALVE	SEAL OIL	Y
3551	Q	V	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET VALVE	SEAL OIL	Y
3552	Q	V	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET VALVE	SEAL OIL	Y
3553	Q	V	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3554	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
3555	A,V,O	C	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET GAUGE	SEAL OIL	Y
3556	Q	V	G	16.00	28	2	VAC MACH	C-515	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
0286		INJECTION WATER SYSTEM									
3570	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3571	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3572	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3573	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3574	Q	V O/E	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3575	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3577	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3578	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3579	Q	V	G	16.00	28	2	VAC MACH	C-515	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0287		HEADER SYSTEM									
3580	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	SUB GAS SUCTION HEADER BLOCKING VALVE	IN / OUT	UTM
3581	N/A(vac)	V	GV	16.00	28	2	VAC MACH	C-515	SUB GAS BYPASS VALVE	IN / OUT	UTM
3582	UTM	V	G	16.00	28	2	VAC MACH	C-515	SUB GAS DISCHARGE CHECK VALVE	IN / OUT	UTM
3583	UTM	V	G	16.00	28	2	VAC MACH	C-515	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN / OUT	UTM
3584	UTM	V O/E	G	16.00	28	2	VAC MACH	C-515	SUB GAS DISCHARGE CLEANOUT VALVE	IN / OUT	UTM
3585	UTM	V	G	16.00	28	2	VAC MACH	C-515	SUB GAS DISCHARGE BLOCKING VALVE	IN / OUT	UTM
3586	UTM	V O/E	G	16.00	28	2	VAC MACH	C-515	SECOND STAGE DISCHARGE CLEANOUT	IN / OUT	UTM
3590	UTM	PRV	G	16.00	28	2	VAC MACH	C-515	PRESSURE RELIEF VALVE	IN / OUT	UTM

TABLE 29
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-518

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Points					
0291		STEAM EDUCTOR SYSTEM									
3600	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3601	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3602	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3603	N/A(vac)	V O/E	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3604	N/A(vac)	V O/E	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3605	N/A(vac)	C	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3606	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	N
3607	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE VALVE	STEAM	Y
3608	N/A(vac)	C	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3609	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3610	N/A(vac)	C	GV	16.00	29	2	VAC MACH	C-518	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0292		SEAL OIL RETURN SYSTEM									
3620	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
3621	A,V,O	C(x2)	G	16.00	29	2	VAC MACH	C-518	SEAL OIL SIGHT GLASS	SEAL OIL	Y
3622	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SEAL OIL CLEANOUT VALVE	SEAL OIL	Y
3623	A,V,O	C(x2)	G	16.00	29	2	VAC MACH	C-518	SEAL OIL SIGHT GLASS	SEAL OIL	Y
3624	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SEAL OIL CLEANOUT VALVE	SEAL OIL	Y
3625	A,V,O	C(x2)	G	16.00	29	2	VAC MACH	C-518	SEAL OIL SIGHT GLASS	SEAL OIL	Y
3626	A,V,O	C(x2)	G	16.00	29	2	VAC MACH	C-518	SEAL OIL SIGHT GLASS	SEAL OIL	Y
3627	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SEAL OIL CLEANOUT VALVE	SEAL OIL	Y
0293		RECYCLE SYSTEM									
3630	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3631	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3632	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3633	Q	V	G	16.00	29	2	VAC MACH	C-518	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
0294		SAFETY AND CLEANOUT SYSTEM									
3640	N/A(vac)	V O/E	GV	16.00	29	2	VAC MACH	C-518	FIRST STAGE CLEANOUT		Y
3641	N/A(vac)	V	GV	16.00	29	2	VAC MACH	C-518	FIRST STAGE SAFETY WATER		Y
3642	Q	V	G	16.00	29	2	VAC MACH	C-518	SECOND STAGE SAFETY WATER		Y
3662	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SECOND STAGE CLEANOUT VALVE		Y
0295		SEAL OIL INLET SYSTEM									
3650	A,V,O	C	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET GAUGE	SEAL OIL	Y
3651	Q	.V	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3652	Q	V	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3653	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET VALVE	SEAL OIL	Y
3654	Q	V	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET VALVE	SEAL OIL	Y
3655	Q	V	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET VALVE	SEAL OIL	Y
3656	Q	V	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3657	A,V,O	C	G	16.00	29	2	VAC MACH	C-518	SEAL OIL INLET GAUGE	SEAL OIL	Y
0296		INJECTION WATER SYSTEM									
3663	UTM	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
3664	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3665	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3666	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3667	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3668	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3669	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3670	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3671	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3672	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3673	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3674	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3675	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3676	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3677	Q	V O/E	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3678	Q	V	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3679	A,V,O	C	G	16.00	29	2	VAC MACH	C-518	INJECTION WATER SECOND STAGE	INJECTION WAT	Y

TABLE 29 (continued)

0297	HEADER SYSTEM	

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3680	N/A(vac)	V	GV	16 00	29	2	VAC MACH	C-518	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	UTM
3681	N/A(vac)	V	GV	16 00	29	2	VAC MACH	C-518	SUB GAS BYPASS VALVE	IN/OUT	UTM
3682	UTM	V	G	16 00	29	2	VAC MACH	C-518	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3683	UTM	V	G	16 00	29	2	VAC MACH	C-518	SUB GAS DISCHARGE HEADER VALVE	IN/OUT	UTM
3684	UTM	V O/E	G	16 00	29	2	VAC MACH	C-518	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3685	UTM	V	G	16 00	29	2	VAC MACH	C-518	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3686	UTM	V O/E	G	16 00	29	2	VAC MACH	C-518	2ND STAGE NOISE SUPPRESSOR TOP CLEANOUT	IN/OUT	UTM
3690	UTM	PRV	G	16 00	29	2	VAC MACH	C-518	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 30
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-521

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Operator #	Control Device #					
0301		STEAM EDUCTOR SYSTEM									
3700	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3701	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3702	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3703	N/A(vac)	V O/E	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3704	N/A(vac)	V O/E	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3705	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE VALVE	STEAM	Y
3706	N/A(vac)	C	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3707	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3708	N/A(vac)	C	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0302		SEAL OIL RETURN SYSTEM									
3720	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN	SEAL OIL	Y
3721	A,V,O	C(x2)	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3722	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN	SEAL OIL	Y
3723	A,V,O	C(x2)	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3724	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN	SEAL OIL	Y
3725	A,V,O	C(x2)	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3726	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
3727	N/A(vac)	C	GV	16.00	30	2	VAC MACH	C-521	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3728	A,V,O	C(x2)	G	16.00	30	2	VAC MACH	C-521	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0303		RECYCLE SYSTEM									
3730	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3731	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3732	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
3733	Q	V	G	16.00	30	2	VAC MACH	C-521	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
0304		SAFETY AND CLEANOUT SYSTEM									
3740	N/A(vac)	V O/E	GV	16.00	30	2	VAC MACH	C-521	FIRST STAGE INLET CLEANOUT		Y
3741	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	FIRST STAGE SAFETY WATER		Y
3742	Q	V	G	16.00	30	2	VAC MACH	C-521	SECOND STAGE SAFETY WATER		Y
0305		SEAL OIL INLET SYSTEM									
3750	A,V,O	C	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET GAUGE	SEAL OIL	Y
3751	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3752	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3753	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3754	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3755	A,V,O	C	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET GAUGE	SEAL OIL	Y
3756	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3757	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3758	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3759	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET VALVE	SEAL OIL	Y
3760	Q	V	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3761	A,V,O	C	G	16.00	30	2	VAC MACH	C-521	SEAL OIL INLET GAUGE	SEAL OIL	Y
0306		INJECTION WATER SYSTEM									
3770	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3771	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3772	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3773	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3774	Q	V O/E	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3775	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3776	UTM	V O/E	G	16.00	30	2	VAC MACH	C-521	FIRST/SECOND STAGE CROSSOVER CLEANOUT	IN/OUT	UTM
3777	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3778	Q	V	G	16.00	30	2	VAC MACH	C-521	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0307		HEADER SYSTEM									
3780	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
3781	N/A(vac)	V	GV	16.00	30	2	VAC MACH	C-521	SUB GAS BYPASS	IN/OUT	N
3782	UTM	V O/E	G	16.00	30	2	VAC MACH	C-521	2ND STAGE EXHAUST CLEAN OUT	IN/OUT	UTM
3783	UTM	V	G	16.00	30	2	VAC MACH	C-521	SUBGAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3784	UTM	V	G	16.00	30	2	VAC MACH	C-521	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
3785	UTM	V O/E	G	16.00	30	2	VAC MACH	C-521	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3786	UTM	PRV	G	16.00	30	2	VAC MACH	C-521	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM

TABLE 31
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-524

Tag Identification	Monitoring Frequency	Component Type	Phase	Operating Conditions	Unit #	Control Room					
0311		STEAM EDUCTOR SYSTEM									
3800	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3801	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3802	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3803	N/A(vac)	V O/E	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3804	N/A(vac)	V O/E	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3805	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3806	N/A(vac)	C	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3807	N/A(vac)	V O/E	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3808	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	N
3809	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE VALVE	STEAM	Y
3810	N/A(vac)	C	GV	16.00	31	2	VAC MACH	C-524	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0312		SEAL OIL RETURN SYSTEM									
3820	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3821	A,V,O	C(x2)	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3822	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3823	A,V,O	C(x2)	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3824	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3825	A,V,O	C(x2)	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3826	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3827	A,V,O	C(x2)	G	16.00	31	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0313		RECYCLE SYSTEM									
3830	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	EXHAUST SEAL GAS RECYCLE LINE DRAIN	SEAL GAS	Y
3831	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	EXHAUST SEAL GAS RECYCLE LINE VALVE	SEAL GAS	Y
3832	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	EXHAUST SEAL GAS RECYCLE LINE VALVE	SEAL GAS	Y
3833	Q	V	G	16.00	31	2	VAC MACH	C-524	EXHAUST SEAL GAS RECYCLE LINE VALVE	SEAL GAS	Y
0314		SAFETY AND CLEANOUT SYSTEM									
3840	N/A(vac)	V O/E	GV	16.00	31	2	VAC MACH	C-524	FIRST STAGE INLET CLEANOUT		Y
3841	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	FIRST STAGE SAFETY WATER		Y
3842	Q	V	G	16.00	31	2	VAC MACH	C-524	SECOND STAGE SAFETY WATER		Y
3843	Q	V O/E	G	16.00	31	2	VAC MACH	C-524	FIRST /SECOND STAGE CROSSOVER CLEANOUT		Y
0315		SEAL OIL INLET SYSTEM									
3850	A,V,O	C	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET GAUGE	SEAL OIL	Y
3851	Q	V	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3852	Q	V	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET VALVE	SEAL OIL	Y
3853	Q	V	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET VALVE	SEAL OIL	Y
3854	Q	V	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET VALVE	SEAL OIL	Y
3855	Q	V	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3856	Q	C	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
3857	Q	O/E	G	16.00	31	2	VAC MACH	C-524	SEAL OIL INLET LINE OPEN ENDED PLUG	SEAL OIL	Y
0316		INJECTION WATER SYSTEM									
3867	UTM	V O/E	G	16.00	31	2	VAC MACH	C-524	FIRST/SECOND STAGE CLEANOUT VALVE		UTM
3868	UTM	V O/E	G	16.00	31	2	VAC MACH	C-524	FIRST/SECOND STAGE CLEANOUT VALVE		UTM
3869	UTM	V O/E	G	16.00	31	2	VAC MACH	C-524	FIRST/SECOND STAGE CLEANOUT VALVE		UTM
3870	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3871	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3872	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3873	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3874	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3875	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3876	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3877	Q	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3878	UTM	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
3879	UTM	V	G	16.00	31	2	VAC MACH	C-524	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0317		HEADER SYSTEM									
3880	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
3881	N/A(vac)	V	GV	16.00	31	2	VAC MACH	C-524	SUB GAS BYPASS VALVE	IN/OUT	N
3882	UTM	V	G	16.00	31	2	VAC MACH	C-524	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3883	UTM	V	G	16.00	31	2	VAC MACH	C-524	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
3884	UTM	V O/E	G	16.00	31	2	VAC MACH	C-524	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3885	UTM	V	G	16.00	31	2	VAC MACH	C-524	SUB GAS DISCHARGE BLOCKING LINE	IN/OUT	UTM
3886	UTM	V O/E	G	16.00	31	2	VAC MACH	C-524	SECOND STAGE DISCHARGE TOP CLEANOUT	IN/OUT	UTM
3890	UTM	PRV	G	16.00	31	2	VAC MACH	C-524	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 32
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-527

Tag Identification	Monitoring Frequency	Component Type	Phase	Instrument Calibration	Figure #	Connection Number				
0321		STEAM EDUCTOR SYSTEM								
3900	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	Y
3901	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	Y
3902	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	Y
3903	N/A(vac)	V O/E	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	Y
3904	N/A(vac)	V O/E	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	Y
3905	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3906	N/A(vac)	C	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3907	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3908	N/A(vac)	C	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3909	N/A(vac)	C	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE GAUGE	STEAM	Y
3910	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
3911	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	STEAM EDUCTOR LINE VALVE	STEAM	N
0322		SEAL OIL RETURN SYSTEM									
3920	Q	V O/E	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3921	A,V,O	C(x2)	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3922	Q	V O/E	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3923	A,V,O	C(x2)	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3924	Q	V O/E	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3925	A,V,O	C(x2)	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
3926	Q	V O/E	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
3927	A,V,O	C(x2)	G	16.00	32	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0323		RECYCLE SYSTEM									
3930	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3931	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3932	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
3933	Q	V	G	16.00	32	2	VAC MACH	C-527	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
3934	UTM	V	G	16.00	32	2	VAC MACH	C-527	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	UTM
0324		SAFETY AND CLEANOUT SYSTEM									
3940	N/A(vac)	V O/E	GV	16.00	32	2	VAC MACH	C-527	FIRST STAGE INLET CLEANOUT		Y
3941	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	FIRST STAGE SAFETY WATER		Y
3942	Q	V	G	16.00	32	2	VAC MACH	C-527	SECOND STAGE SAFETY WATER		Y
3966	UTM	V O/E	G	16.00	32	2	VAC MACH	C-527	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
3967	UTM	V O/E	G	16.00	32	2	VAC MACH	C-527	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
0325		SEAL OIL INLET SYSTEM									
3950	A,V,O	C	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET GAUGE	SEAL OIL	Y
3951	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3952	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET CLEANOUT VALVE	SEAL OIL	Y
3953	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET VALVE	SEAL OIL	Y
3953	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET VALVE	SEAL OIL	Y
3954	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET VALVE	SEAL OIL	Y
3955	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET VALVE	SEAL OIL	Y
3956	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET VALVE	SEAL OIL	Y
3957	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET CLEANOUT VALVE	SEAL OIL	Y
3958	Q	V	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
3959	A,V,O	C	G	16.00	32	2	VAC MACH	C-527	SEAL OIL INLET GAUGE	SEAL OIL	Y
0326		INJECTION WATER SYSTEM									
3970	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3971	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3972	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3973	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3974	Q	V O/E	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
3975	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3976	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3977	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
3978	Q	V	G	16.00	32	2	VAC MACH	C-527	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0327		HEADER SYSTEM									
3980	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	SUB GAS SUCTION HEADER BLOCEING VALVE	IN/OUT	UTM
3981	N/A(vac)	V	GV	16.00	32	2	VAC MACH	C-527	SUB GAS BYPASS VALVE	IN/OUT	UTM
3982	UTM	V	G	16.00	32	2	VAC MACH	C-527	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
3983	UTM	V	G	16.00	32	2	VAC MACH	C-527	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
3984	UTM	V O/E	G	16.00	32	2	VAC MACH	C-527	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
3985	UTM	V	G	16.00	32	2	VAC MACH	C-527	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
3990	UTM	PRV	G	16.00	32	2	VAC MACH	C-527	PRESSURE RELIEF VALVE	IN/OUT	UTM

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TABLE 33
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-530

Tag Identification #	Monitoring Frequency	Component Type	Phase	Hazardous Characteristic	Region #	Unit #				
0331		STEAM EDUCTOR SYSTEM								
4000	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE VALVE	STEAM	Y
4001	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE VALVE	STEAM	Y
4002	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE VALVE	STEAM	Y
4003	N/A(vac)	V O/E	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE VALVE	STEAM	Y
4004	N/A(vac)	V O/E	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE VALVE	STEAM	Y
4005	N/A(vac)	C	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4006	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
4007	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
4008	N/A(vac)	C	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4009	N/A(vac)	C	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4010	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
0332		SEAL OIL RETURN SYSTEM								
4020	Q	V O/E	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
4021	A,V,O	C(x2)	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4022	Q	V O/E	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
4023	A,V,O	C(x2)	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4024	Q	V O/E	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
4025	A,V,O	C(x2)	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4026	Q	V O/E	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN	SEAL OIL	Y
4027	A,V,O	C(x2)	G	16.00	33	2	VAC MACH	C-524	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0333		RECYCLE SYSTEM								
4030	Q	V O/E	G	16.00	33	2	VAC MACH	C-530	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
4031	Q	V O/E	G	16.00	33	2	VAC MACH	C-530	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4032	Q	V O/E	G	16.00	33	2	VAC MACH	C-530	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4033	Q	V	G	16.00	33	2	VAC MACH	C-530	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4034	UTM	V	G	16.00	33	2	VAC MACH	C-530	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	UTM
0334		SAFETY AND CLEANOUT SYSTEM								
4040	N/A(vac)	V O/E	GV	16.00	33	2	VAC MACH	C-530	FIRST STAGE INLET CLEANOUT		Y
4041	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	FIRST STAGE SAFETY WATER		Y
4042	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	SECOND STAGE SAFETY WATER		Y
4066	UTM	V O/E	G	16.00	33	2	VAC MACH	C-530	FIRST/SECOND STAGE CLEANOUT VALVE		UTM
0335		SEAL OIL INLET SYSTEM								
4050	A,V,O	C	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET GAUGE	SEAL OIL	Y
4051	Q	V	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4052	Q	V	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET VALVE	SEAL OIL	Y
4053	Q	V	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
4054	Q	V	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
4055	A,V,O	C	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
4056	Q	V	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET LINE PRESSURE TAP	SEAL OIL	Y
4057	Q	V O/E	G	16.00	33	2	VAC MACH	C-530	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
0336		INJECTION WATER SYSTEM								
4070	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4071	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4072	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4073	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4074	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4075	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4076	Q	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0337		HEADER SYSTEM								
4080	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4081	N/A(vac)	V	GV	16.00	33	2	VAC MACH	C-530	SUB GAS BYPASS VALVE	IN/OUT	N
4082	UTM	V	G	16.00	33	2	VAC MACH	C-530	SUBGAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4083	UTM	V	G	16.00	33	2	VAC MACH	C-530	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4084	UTM	V O/E	G	16.00	33	2	VAC MACH	C-530	SUBGAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4085	UTM	V	G	16.00	33	2	VAC MACH	C-530	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4086	UTM	V	G	16.00	33	2	VAC MACH	C-530	SUB GAS DISCHARGE HEADER CLEANOUT	IN/OUT	UTM
4087	UTM	V O/E	G	16.00	33	2	VAC MACH	C-530	SUB GAS DISCHARGE HEADER CLEANOUT	IN/OUT	UTM
4088	UTM	V	G	16.00	33	2	VAC MACH	C-530	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
4090	UTM	PRV	G	16.00	33	2	VAC MACH	C-530	PRESSURE RELIEF VALVE	IN/OUT	UTM

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TABLE 34
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-533

Tag Identification	Component Frequency	Component Type	Phase	Electrical Classification	Figure #	Section Number	Unit	Area	Description	Service	Insulation
0341		STEAM EDUCTOR SYSTEM									
4100	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR LINE VALVE	STEAM	Y
4101	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM EDUCTOR LINE VALVE	STEAM	Y
4102	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	SEAL GAS RECYCLE LINE DRAIN	STEAM	Y
4103	N/A(vac)	V O/E	GV	16.00	34	2	VAC MACH	C-533	SEAL GAS RECYCLE LINE	STEAM	Y
4104	N/A(vac)	V O/E	GV	16.00	34	2	VAC MACH	C-533	STEAM EDUCTOR LINE VALVE	STEAM	Y
4105	N/A(vac)	C	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR LINE GAUGE	STEAM	Y
4106	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR PRESSURE TAP	STEAM	Y
4107	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR LINE VALVE	STEAM	Y
4108	N/A(vac)	C	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR LINE GAUGE	STEAM	Y
4109	N/A(vac)	C	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR LINE GAUGE	STEAM	Y
4110	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM INJECTOR PRESSURE TAP	STEAM	Y
4111	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	STEAM EDUCTOR LINE VALVE	STEAM	N
0342		SEAL OIL RETURN SYSTEM									
4120	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN	SEAL OIL	Y
4121	A,V,O	C(x2)	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4122	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN	SEAL OIL	Y
4123	A,V,O	C(x2)	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4124	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN	SEAL OIL	Y
4125	A,V,O	C(x2)	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4126	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
4127	A,V,O	C(x2)	G	16.00	34	2	VAC MACH	C-533	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0343		RECYCLE SYSTEM									
4130	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
4131	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4312	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4133	Q	V	G	16.00	34	2	VAC MACH	C-533	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0344		SAFETY AND CLEANOUT SYSTEM									
4140	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	FIRST STAGE INLET CLEANOUT		Y
4141	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	FIRST STAGE SAFETY WATER		Y
4142	Q	V	G	16.00	34	2	VAC MACH	C-533	SECOND STAGE SAFETY WATER		Y
4143	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	FIRST/SECOND STAGE CROSSOVER CLEANOUT		Y
4166	UTM	V O/E	G	16.00	34	2	VAC MACH	C-533	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
0345		SEAL OIL INLET SYSTEM									
4150	A,V,O	C	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET GAUGE	SEAL OIL	Y
4151	Q	V	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4152	Q	V	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET VALVE	SEAL OIL	Y
4153	Q	V	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET VALVE	SEAL OIL	Y
4154	Q	V	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET VALVE	SEAL OIL	Y
4155	A,V,O	C	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
4156	Q	V	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4157	Q	V O/E	G	16.00	34	2	VAC MACH	C-533	SEAL OIL INLET VALVE	SEAL OIL	Y
0346		INJECTION WATER SYSTEM									
4170	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4171	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4172	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4173	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4174	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4175	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4176	Q	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4177	UTM	V	G	16.00	34	2	VAC MACH	C-533	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0347		HEADER SYSTEM									
4180	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4181	N/A(vac)	V	GV	16.00	34	2	VAC MACH	C-533	SUB GAS BYPASS VALVE	IN/OUT	N
4182	UTM	V	G	16.00	34	2	VAC MACH	C-533	SUBGAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4183	UTM	V	G	16.00	34	2	VAC MACH	C-533	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4184	UTM	V O/E	G	16.00	34	2	VAC MACH	C-533	SUBGAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4185	UTM	V	G	16.00	34	2	VAC MACH	C-533	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4186	UTM	V O/E	G	16.00	34	2	VAC MACH	C-533	SUB GAS DISCHARGE HEADER CLEANOUT	IN/OUT	UTM
4187	UTM	V O/E	G	16.00	34	2	VAC MACH	C-533	SUB GAS DISCHARGE HEADER CLEANOUT	IN/OUT	UTM
4190	UTM	PRV	G	16.00	34	2	VAC MACH	C-533	PRESSURE RELIEF VALVE	IN/OUT	UTM

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TABLE 35
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-536

Tag Identification	Monitoring Frequency	Component Type	Phase	Service Classification	Figure #	Unit Area				
0351	STEAM EDUCTOR SYSTEM									
4200	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE VALVE	STEAM	Y
4201	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE VALVE	STEAM	Y
4202	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE VALVE	STEAM	Y
4203	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE VALVE	STEAM	Y
4204	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE VALVE	STEAM	N
4205	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
4206	N/A(vac)	G	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4207	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
4208	N/A(vac)	G	GV	16.00	35	2	VAC MACH	C-536	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0382	SEAL OIL RETURN SYSTEM									
4220	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
4221	A,V,O	C(x2)	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4222	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
4223	A,V,O	C(x2)	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4224	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN CLEANOUT VALVE	SEAL OIL	Y
4225	A,V,O	C(x2)	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4226	A,V,O	C(x2)	G	16.00	35	2	VAC MACH	C-536	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0383	RECYCLE SYSTEM									
4230	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	EXHAUST SEAL GAS RECYCLE DRAIN VALVE	RECYCLE	Y
4231	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
4232	Q	V O/E	G	16.00	35	2	VAC MACH	C-536	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
4233	Q	V	G	16.00	35	2	VAC MACH	C-536	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
0384	SAFETY AND CLEANOUT SYSTEM									
4240	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	FIRST STAGE INLET CLEANOUT		Y
4241	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	FIRST STAGE SAFETY WATER		Y
4242	Q	V	G	16.00	35	2	VAC MACH	C-536	SECOND STAGE SAFETY WATER		Y
0385	SEAL OIL INLET SYSTEM									
4250	A,V,O	C	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET GAUGE	SEAL OIL	Y
4251	Q	V	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET INSTRUMENTATION VALVE	SEAL OIL	Y
4252	Q	V	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4253	Q	V	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET VALVE	SEAL OIL	Y
4254	Q	V	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET VALVE	SEAL OIL	Y
4255	Q	V	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4256	A,V,O	C	G	16.00	35	2	VAC MACH	C-536	SEAL OIL INLET GAUGE	SEAL OIL	Y
0386	INJECTION WATER SYSTEM									
4270	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER VALVE	INJECTION WAT	Y
4271	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER VALVE	INJECTION WAT	Y
4272	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4273	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4274	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4275	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4276	Q	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4277	UTM	V	G	16.00	35	2	VAC MACH	C-536	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0387	HEADER SYSTEM									
4280	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4281	N/A(vac)	V	GV	16.00	35	2	VAC MACH	C-536	SUB GAS BYPASS VALVE	IN/OUT	N
4282	UTM	V	G	16.00	35	2	VAC MACH	C-536	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4283	UTM	V	G	16.00	35	2	VAC MACH	C-536	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4284	UTM	V O/E	G	16.00	35	2	VAC MACH	C-536	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4285	UTM	V	G	16.00	35	2	VAC MACH	C-536	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4286	UTM	V	G	16.00	35	2	VAC MACH	C-536	SECOND STAGE TOP NOISE SUPPRESSOR INST	IN/OUT	UTM
4290	UTM	PRV	G	16.00	35	2	VAC MACH	C-536	PRESSURE RELIEF VALVE	IN/OUT	UTM

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TABLE 36
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-539

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equip #	Control Room					
0361		STEAM EDUCTOR SYSTEM									
4300	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	Y
4301	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	Y
4302	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	Y
4303	N/A(vac)	V O/E	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE PRESSURE TAP	STEAM	Y
4304	N/A(vac)	C	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE GAUGE	STEAM	Y
4305	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	Y
4306	N/A(vac)	C	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE GAUGE	STEAM	Y
4307	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE PRESSURE TAP	STEAM	Y
4308	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	N
4309	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	STEAM INDUCTOR LINE VALVE	STEAM	Y
0362		SEAL OIL RETURN SYSTEM									
4320	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN	SEAL OIL	Y
4321	A,V,O	C(x2)	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4322	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN	SEAL OIL	Y
4323	A,V,O	C(x2)	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4324	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN	SEAL OIL	Y
4325	A,V,O	C(x2)	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4326	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN	SEAL OIL	Y
4327	A,V,O	C(x2)	G	16.00	36	2	VAC MACH	C-539	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0363		RECYCLE SYSTEM									
4330	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	EXHAUST SEAL GAS RECYCLE DRAIN	RECYCLE	Y
4331	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4332	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
4333	Q	V	G	16.00	36	2	VAC MACH	C-539	EXHAUST SEAL GAS RECYCLE LINE	RECYCLE	Y
0364		SAFETY AND CLEANOUT SYSTEM									
4340	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	FIRST STAGE INLET CLEANOUT		Y
4341	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	FIRST STAGE SAFETY WATER		Y
4342	Q	V	G	16.00	36	2	VAC MACH	C-539	SECOND STAGE SAFETY WATER		Y
4366	UTM	V O/E	G	16.00	36	2	VAC MACH	C-539	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
4367	UTM	V	G	16.00	36	2	VAC MACH	C-539	FROM DECANTER VENT		UTM
4391	UTM	V O/E	G	16.00	36	2	VAC MACH	C-539	EXHAUST NOISE SUPPRESSOR CLEAN OUT		UTM
4392	UTM	V O/E	G	16.00	36	2	VAC MACH	C-539	EXHAUST NOISE SUPPRESSOR CLEAN OUT		UTM
4393	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SECOND STAGE DISCHARGE CLEANOUT		Y
0365		SEAL OIL INLET SYSTEM									
4350	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4351	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4352	Q	V	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4353	A,V,O	C	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET GAUGE	SEAL OIL	Y
4354	Q	V	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4355	Q	V	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4356	Q	V	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4357	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
4358	A,V,O	C	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET GAUGE	SEAL OIL	Y
4359	Q	V	G	16.00	36	2	VAC MACH	C-539	SEAL OIL INLET VALVE	SEAL OIL	Y
0366		INJECTION WATER SYSTEM									
4370	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4371	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4372	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4373	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4374	Q	V O/E	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4375	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4376	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER LINE VALVE	INJECTION WAT	Y
4377	Q	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4378	UTM	V	G	16.00	36	2	VAC MACH	C-539	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0367		HEADER SYSTEM									
4380	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4381	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	SUB SUB GAS SUCTION HEADER BLOCK VALVE	IN/OUT	N
4382	N/A(vac)	V	GV	16.00	36	2	VAC MACH	C-539	SUB GAS BYPASS VALVE	IN/OUT	N

TABLE 36 (continued)

4383	UTM	V	G	16.00	36	2	VAC MACH	C-539	SUBGAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4384	UTM	V	G	16.00	36	2	VAC MACH	C-539	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4385	UTM	V O/E	G	16.00	36	2	VAC MACH	C-539	SUBGAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4386	UTM	V	G	16.00	36	2	VAC MACH	C-539	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4387	UTM	V	G	16.00	36	2	VAC MACH	C-539	SUB SUB GAS DISCHARGE HEADER BLOCK VALVE	IN/OUT	UTM
4388	UTM	V	G	16.00	36	2	VAC MACH	C-539	SUB SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4389	UTM	V O/E	G	16.00	36	2	VAC MACH	C-539	SUB GAS DISCHARGE HEADER CLEANOUT	IN/OUT	UTM
4390	UTM	PRV	G	16.00	36	2	VAC MACH	C-539	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 37
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-542

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Control Room				
0371		STEAM EDUCTOR SYSTEM								
4400	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE VALVE	STEAM	Y
4401	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE VALVE	STEAM	Y
4402	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE VALVE	STEAM	Y
4403	N/A(vac)	V O/E	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE CLEANOUT VALVE	STEAM	Y
4404	N/A(vac)	V O/E	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE CLEANOUT VALVE	STEAM	Y
4405	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
4406	N/A(vac)	C	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4407	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
4408	N/A(vac)	C	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4409	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE PRESSURE TAP	STEAM	Y
4410	N/A(vac)	C	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4411	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	STEAM EDUCTOR LINE VALVE	STEAM	N
0372		SEAL OIL RETURN SYSTEM								
4420	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN	SEAL OIL	Y
4421	A,V,O	C(x2)	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4422	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN	SEAL OIL	Y
4423	A,V,O	C(x2)	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4424	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN	SEAL OIL	Y
4425	A,V,O	C(x2)	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4426	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN	SEAL OIL	Y
4427	A,V,O	C(x2)	G	16.00	37	2	VAC MACH	C-542	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0373		RECYCLE SYSTEM								
4430	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
4431	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
4432	Q	V O/E	G	16.00	37	2	VAC MACH	C-542	EXHAUST SEAL GAS RECYCLE LINE VALVE	RECYCLE	Y
4433	Q	V	G	16.00	37	2	VAC MACH	C-542	EXHAUST SEAL GAS RECYCLE LINE DRAIN	RECYCLE	Y
0374		SAFETY AND CLEANOUT SYSTEM								
4440	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	FIRST STAGE INLET CLEANOUT		Y
4441	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	FIRST STAGE SAFETY WATER		Y
4442	Q	V	G	16.00	37	2	VAC MACH	C-542	SECOND STAGE SAFETY WATER		Y
4466	UTM	V O/E	G	16.00	37	2	VAC MACH	C-542	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
4467	UTM	V	G	16.00	37	2	VAC MACH	C-542	DECANTER VENT LINE		UTM
0375		SEAL OIL INLET SYSTEM								
4450	A,V,O	C	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET GAUGE	SEAL OIL	Y
4451	Q	V	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4452	Q	V	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET VALVE	SEAL OIL	Y
4453	Q	V	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET VALVE	SEAL OIL	Y
4454	Q	V	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4455	A,V,O	C	G	16.00	37	2	VAC MACH	C-542	SEAL OIL INLET GAUGE	SEAL OIL	Y
0376		INJECTION WATER SYSTEM								
4470	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4471	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4472	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4473	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4474	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4475	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4476	Q	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4477	UTM	V	G	16.00	37	2	VAC MACH	C-542	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0377		HEADER SYSTEM								
4480	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4481	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	SUB SUB GAS SUCTION HEADER CLEANOUT	IN/OUT	N
4482	N/A(vac)	V	GV	16.00	37	2	VAC MACH	C-542	SUB GAS BYPASS	IN/OUT	N
4483	UTM	V	G	16.00	37	2	VAC MACH	C-542	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4484	UTM	V	G	16.00	37	2	VAC MACH	C-542	SUB GAS DISCHARGE HEADER BLOCK VALVE	IN/OUT	UTM
4485	UTM	V O/E	G	16.00	37	2	VAC MACH	C-542	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4486	UTM	V	G	16.00	37	2	VAC MACH	C-542	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4487	UTM	V	G	16.00	37	2	VAC MACH	C-542	SUB SUB GAS DISCHARGE HEADER BLOCK VALVE	IN/OUT	UTM
4488	UTM	V	G	16.00	37	2	VAC MACH	C-542	SUB SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4490	UTM	PRV	G	16.00	37	2	VAC MACH	C-542	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 38
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-545

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Unit of Process					
0381		STEAM EDUCTOR SYSTEM									
4500	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4501	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4502	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4503	N/A(vac)	V O/E	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4504	N/A(vac)	V O/E	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4505	N/A(vac)	C	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4506	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
4507	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR PRESSURE TAP	STEAM	N
4508	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE VALVE	STEAM	Y
4509	N/A(vac)	C	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4510	N/A(vac)	C	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4511	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
0382		SEAL OIL RETURN SYSTEM									
4520	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN	SEAL OIL	Y
4521	A,V,O	C(x2)	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4522	Q	O/E	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN MISSING VALVE (O/E CAP)	SEAL OIL	Y
4523	A,V,O	C(x2)	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4524	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN	SEAL OIL	Y
4525	A,V,O	C(x2)	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4527	A,V,O	C(x2)	G	16.00	38	2	VAC MACH	C-545	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0383		RECYCLE SYSTEM									
4530	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4531	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4532	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4533	Q	V	G	16.00	38	2	VAC MACH	C-545	EXHAUST SEAL RECYCLE LINE DRAIN	RECYCLE	Y
0384		SAFETY AND CLEANOUT SYSTEM									
4540	N/A(vac)	V O/E	GV	16.00	38	2	VAC MACH	C-545	FIRST STAGE INLET CLEANOUT		Y
4541	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	FIRST STAGE SAFETY WATER		Y
4542	Q	V	G	16.00	38	2	VAC MACH	C-545	SECOND STAGE SAFETY WATER		Y
4566	UTM	V	G	16.00	38	2	VAC MACH	C-545	FROM DECANTER VENT		UTM
4567	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	SECOND STAGE EXHAUST CLEANOUT		Y
0385		SEAL OIL INLET SYSTEM									
4550	Q	V	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
4551	A,V,O	C	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
4552	Q	V	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4553	Q	V	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
4554	Q	V	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET LINE VALVE	SEAL OIL	Y
4555	Q	V	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4556	A,V,O	C	G	16.00	38	2	VAC MACH	C-545	SEAL OIL INLET LINE GAUGE	SEAL OIL	Y
0386		INJECTION WATER SYSTEM									
4570	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4571	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4572	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4573	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4574	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4575	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4576	Q	V O/E	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4577	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4578	Q	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4579	UTM	V	G	16.00	38	2	VAC MACH	C-545	INJECTION WATER SECOND STAGE	INJECTION WAT	UTM
0387		HEADER SYSTEM									
4580	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4581	N/A(vac)	V	GV	16.00	38	2	VAC MACH	C-545	SUBGAS BYPASS	IN/OUT	N
4582	UTM	V	G	16.00	38	2	VAC MACH	C-545	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4583	UTM	V	G	16.00	38	2	VAC MACH	C-545	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4584	UTM	V O/E	G	16.00	38	2	VAC MACH	C-545	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4585	UTM	V	G	16.00	38	2	VAC MACH	C-545	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4590	UTM	PRV	G	16.00	38	2	VAC MACH	C-545	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 39
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE C-548

Tag Identification	Monitoring Frequency	Component Type	Phase	Reference Concentration	Equipment	Component Number				
0391		STEAM EDUCTOR SYSTEM								
4600	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE VALVE	STEAM	Y
4601	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE VALVE	STEAM	Y
4602	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE VALVE	STEAM	Y
4603	N/A(vac)	V O/E	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE VALVE	STEAM	Y
4604	N/A(vac)	V O/E	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE VALVE	STEAM	Y
4605	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
4606	N/A(vac)	C	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE GAUGE	STEAM	Y
4607	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR PRESSURE TAP	STEAM	Y
4608	N/A(vac)	C	GV	16.00	39	2	VAC MACH	C-548	STEAM EDUCTOR LINE GAUGE	STEAM	Y
0392		SEAL OIL RETURN SYSTEM									
4620	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN	SEAL OIL	Y
4621	A,V,O	C(x2)	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4622	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN	SEAL OIL	Y
4623	A,V,O	C(x2)	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4624	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN	SEAL OIL	Y
4625	A,V,O	C(x2)	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
4626	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN	SEAL OIL	Y
4627	A,V,O	C(x2)	G	16.00	39	2	VAC MACH	C-548	SEAL OIL RETURN SIGHT GLASS	SEAL OIL	Y
0393		RECYCLE SYSTEM									
4630	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4631	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4632	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	EXHAUST SEAL RECYCLE LINE VALVE	RECYCLE	Y
4633	Q	V	G	16.00	39	2	VAC MACH	C-548	EXHAUST SEAL RECYCLE LINE DRAIN	RECYCLE	Y
0394		SAFETY AND CLEANOUT SYSTEM									
4640	N/A(vac)	V O/E	GV	16.00	39	2	VAC MACH	C-548	FIRST STAGE INLET CLEANOUT		Y
4641	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	FIRST STAGE SAFETY WATER		Y
4642	Q	V	G	16.00	39	2	VAC MACH	C-548	SECOND STAGE SAFETY WATER		Y
4666	UTM	V O/E	G	16.00	39	2	VAC MACH	C-548	FIRST/SECOND STAGE CROSSOVER CLEANOUT		UTM
4667	UTM	V	G	16.00	39	2	VAC MACH	C-548	DECANTER VENT LINE		UTM
0395		SEAL OIL INLET SYSTEM									
4650	A,V,O	C	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET GAUGE	SEAL OIL	Y
4651	Q	V	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET VALVE	SEAL OIL	Y
4652	Q	V	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4653	Q	V	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET VALVE	SEAL OIL	Y
4654	Q	V	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET VALVE	SEAL OIL	Y
4655	Q	V	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET PRESSURE TAP	SEAL OIL	Y
4656	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET VALVE	SEAL OIL	Y
4657	A,V,O	C	G	16.00	39	2	VAC MACH	C-548	SEAL OIL INLET GAUGE	SEAL OIL	Y
0396		INJECTION WATER SYSTEM									
4670	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4671	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4672	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4673	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4674	Q	V O/E	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4675	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER FIRST STAGE	INJECTION WAT	Y
4676	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4677	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4678	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
4679	Q	V	G	16.00	39	2	VAC MACH	C-548	INJECTION WATER SECOND STAGE	INJECTION WAT	Y
0397		HEADER SYSTEM									
4680	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	SUB GAS SUCTION HEADER BLOCKING VALVE	IN/OUT	N
4681	N/A(vac)	V	GV	16.00	39	2	VAC MACH	C-548	SUB GAS BYPASS VALVE	IN/OUT	N
4682	UTM	V	G	16.00	39	2	VAC MACH	C-548	SUB GAS DISCHARGE CHECK VALVE	IN/OUT	UTM
4683	UTM	V	G	16.00	39	2	VAC MACH	C-548	SUB GAS DISCHARGE HEADER BLOCKING VALVE	IN/OUT	UTM
4684	UTM	V O/E	G	16.00	39	2	VAC MACH	C-548	SUB GAS DISCHARGE CLEANOUT VALVE	IN/OUT	UTM
4685	UTM	V	G	16.00	39	2	VAC MACH	C-548	SUB GAS DISCHARGE BLOCKING VALVE	IN/OUT	UTM
4690	UTM	PRV	G	16.00	39	2	VAC MACH	C-548	PRESSURE RELIEF VALVE	IN/OUT	UTM

TABLE 40
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 1

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
8481		MAIN GAS BLOCKING VALVES								
5000	WASH	V	L	57.63	40	2	MAIN QUAD	R-401A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5001	WASH	V	L	57.63	40	2	MAIN QUAD	R-401A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5002	WASH	V	L	57.63	40	2	MAIN QUAD	R-401A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5003	WASH	V	L	57.63	40	2	MAIN QUAD	R-401B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5004	WASH	V	L	57.63	40	2	MAIN QUAD	R-401B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5005	WASH	V	L	57.63	40	2	MAIN QUAD	R-401B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5006	WASH	V	L	57.63	40	2	MAIN QUAD	R-401C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5007	WASH	V	L	57.63	40	2	MAIN QUAD	R-401C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5008	WASH	V	L	57.63	40	2	MAIN QUAD	R-401C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5009	WASH	V	L	57.63	40	2	MAIN QUAD	R-401D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5010	WASH	V	L	57.63	40	2	MAIN QUAD	R-401D	DOWNRIVER COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5011	WASH	V	L	57.63	40	2	MAIN QUAD	R-401D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
8482		SUB GAS MANIFOLD / NITROGEN								
5015	N/A(vac)	V	GV	16.00	40	2	MAIN QUAD	QUAD 1	SUB GAS HEADER CLEANOUT VALVE	HEADER	N
5016	N/A(vac)	V	GV	16.00	40	2	MAIN QUAD	QUAD 1	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5017	N/A(vac)	V	GV	16.00	40	2	MAIN QUAD	QUAD 1	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
5018	N/A(vac)	V	GV	16.00	40	2	MAIN QUAD	QUAD 1	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER	Y
5019	N/A(vac)	V	GV	16.00	40	2	MAIN QUAD	QUAD 1	BLEED VALVE SUB GAS VACUUM LINE	HEADER	Y
8483		UNIT A								
5020	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	RAW GAS VALVE	TOP #A	Y
5021	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	DOWN RIVER GAS VALVE	TOP #A	Y
5022	UTM	V	L	57.63	40	2	MAIN QUAD	R-401A	TOP LEVEL SOUTH STEAM TAP	TOP #A	Y
5023	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	UNDER FIRE GAS VALVE	TOP #A	Y
5024	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	SUB GAS VALVE	TOP #A	Y
5025	Q	V	L	57.63	40	2	MAIN QUAD	R-401A	TOP LEVEL NORTH PRESSURE TAP	TOP #A	N
5026	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	TOP PRESSURE TAP VALVE	TOP #A	Y
5027	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	TOP PRESSURE TAP	TOP #A	Y
5029	Q	V O/E	G	16.00	40	2	MAIN QUAD	R-401A	TOP PRESSURE TAP	TOP #A	Y
5030	WASH	V	G	16.00	40	2	MAIN QUAD	R-401A	MID LEVEL PRESSURE TAP	MIDDLE #A	N
5031	WASH	V	L	57.63	40	2	MAIN QUAD	R-401A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A	N
5032	Q	PRV	G	16.00	40	2	MAIN QUAD	R-401A	RELIEF VALVE	TOP #A	Y
5033	Q	V	G	16.00	40	2	MAIN QUAD	R-401A	BLOCKING VALVE TO PRV	TOP #A	Y
5034	WASH	V	L	57.63	40	2	MAIN QUAD	R-401A	LOW LEVEL PRESS. TAP DRAIN	BOTTOM #A	Y
	A.V.O	C(x3)	G	16.00	40	2	MAIN QUAD	R-401A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	Y
8484		UNIT B								
5040	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	RAW GAS VALVE	TOP #B	Y
5041	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	DOWN RIVER GAS VALVE	TOP #B	Y
5028	UTM	V	L	57.63	40	2	MAIN QUAD	R-401B	TOP LEVEL SOUTH STEAM TAP	TOP #B	Y
5043	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	UNDER FIRE GAS VALVE	TOP #B	Y
5044	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	SUB GAS VALVE	TOP #B	Y
5045	UTM	V	L	57.63	40	2	MAIN QUAD	R-401B	TOP LEVEL NORTH PRESSURE TAP	TOP #B	N
5053	Q	V	L	57.63	40	2	MAIN QUAD	R-401B	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #B	N
5046	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	TOP PRESSURE TAP VALVE	TOP #B	Y
5047	Q	V O/E	G	16.00	40	2	MAIN QUAD	R-401B	TOP PRESSURE TAP	TOP #B	Y
5048	WASH	V	G	16.00	40	2	MAIN QUAD	R-401B	MID LEVEL PRESSURE TAP	MIDDLE #B	N
5049	WASH	V	L	57.63	40	2	MAIN QUAD	R-401B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	N
5050	Q	PRV	G	16.00	40	2	MAIN QUAD	R-401B	RELIEF VALVE	TOP #B	Y
5052	Q	V	G	16.00	40	2	MAIN QUAD	R-401B	BLOCKING VALVE TO PRV	TOP #B	Y
5051	WASH	V	L	57.63	40	2	MAIN QUAD	R-401B	LOW LEVEL PRESS. TAP DRAIN	BOTTOM #B	Y
	A.V.O	C(x3)	G	16.00	40	2	MAIN QUAD	R-401B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	Y
8485		UNIT C								
5060	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	RAW GAS VALVE	TOP #C	Y
5061	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	DOWN RIVER GAS VALVE	TOP #C	Y
5062	UTM	V	L	57.63	40	2	MAIN QUAD	R-401C	TOP LEVEL SOUTH STEAM TAP	TOP #C	Y
5063	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	UNDER FIRE GAS VALVE	TOP #C	Y
5064	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	SUB GAS VALVE	TOP #C	Y
5065	UTM	V	L	57.63	40	2	MAIN QUAD	R-401C	TOP LEVEL NORTH PRESSURE TAP	TOP #C	N

TABLE 40 (continued)

5066	Q	V	L	57.63	40	2	MAIN QUAD	R-401C	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #C	N
5067	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	TOP PRESSURE TAP VALVE	TOP #C	Y

5068	Q	V O/E	G	16.00	40	2	MAIN QUAD	R-401C	TOP PRESSURE TAP	TOP #C	Y
5071	WASH	V	G	16.00	40	2	MAIN QUAD	R-401C	MID LEVEL PRESSURE TAP	MIDDLE #C	N
5072	WASH	V	L	57.63	40	2	MAIN QUAD	R-401C	LOW LEVEL PRESSURE TAP COLD	BOTTOM #C	N
5073	Q	PRV	G	16.00	40	2	MAIN QUAD	R-401C	RELIEF VALVE	TOP #C	Y
5075	Q	V	G	16.00	40	2	MAIN QUAD	R-401C	BLOCKING VALVE TO PRV	TOP #C	Y
5051	WASH	V	L	57.63	40	2	MAIN QUAD	R-401C	LOW LEVEL PRESS. TAP DRAIN	BOTTOM #C	Y
	A.V.O	C(x3)	G	16.00	40	2	MAIN QUAD	R-401C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	Y
8486		UNIT D									
5081	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	RAW GAS VALVE	TOP #D	Y
5080	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	DOWN RIVER GAS VALVE	TOP #D	Y
5082	Q	V	L	57.63	40	2	MAIN QUAD	R-401D	TOP LEVEL SOUTH STEAM TAP	TOP #D	Y
5089	Q	V	L	57.63	40	2	MAIN QUAD	R-401D	TOP LEVEL SOUTH STEAM TAP	TOP #D	Y
5083	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	UNDER FIRE GAS VALVE	TOP #D	Y
5084	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	SUB GAS VALVE	TOP #D	Y
5085	UTM	V	L	57.63	40	2	MAIN QUAD	R-401D	TOP LEVEL NORTH PRESSURE TAP	TOP #D	N
5086	Q	V	L	57.63	40	2	MAIN QUAD	R-401D	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #D	N
5087	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	TOP PRESSURE TAP VALVE	TOP #D	Y
5088	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	TOP PRESSURE TAP	TOP #D	Y
5088	A.V.O	C	G	16.00	40	2	MAIN QUAD	R-401D	TOP PRESSURE TAP PRESSURE GAUGE	TOP #D	Y
5092	WASH	V	G	16.00	40	2	MAIN QUAD	R-401D	MID LEVEL PRESSURE TAP	MIDDLE #D	N
5093	WASH	V	L	57.63	40	2	MAIN QUAD	R-401D	LOW LEVEL PRESSURE TAP COLD	BOTTOM #D	N
5094	Q	PRV	G	16.00	40	2	MAIN QUAD	R-401D	RELIEF VALVE	TOP #D	Y
5096	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	BLOCKING VALVE TO PRV	TOP #D	Y
5095	WASH	V	L	57.63	40	2	MAIN QUAD	R-401D	LOW LEVEL PRESS. TAP DRAIN	BOTTOM #D	Y
6602	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	BLOCKING VALVE ON MAIN UNDERFIRE HEADER	TOP-SOUTH #D	Y
6603	Q	V	G	16.00	40	2	MAIN QUAD	R-401D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	Y
7053	UTM	V	G	16.00	40	2	MAIN QUAD	R-401D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	N
	A.V.O	C(x3)	G	16.00	40	2	MAIN QUAD	R-401D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	Y

TABLE 41
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 2

Tag Number	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Unit Number	Unit Name	Location	Description	Tag Number
0411		MAIN GAS BLOCKING VALVES								
5100	WASH	V	L	57.63	41	2	MAIN QUAD	R-402A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5101	WASH	V	L	57.63	41	2	MAIN QUAD	R-402A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5102	WASH	V	L	57.63	41	2	MAIN QUAD	R-402A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM Y
5103	WASH	V	L	57.63	41	2	MAIN QUAD	R-402B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5104	WASH	V	L	57.63	41	2	MAIN QUAD	R-402B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5105	WASH	V	L	57.63	41	2	MAIN QUAD	R-402B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM Y
5106	WASH	V	L	57.63	41	2	MAIN QUAD	R-402C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5107	WASH	V	L	57.63	41	2	MAIN QUAD	R-402C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5108	WASH	V	L	57.63	41	2	MAIN QUAD	R-402C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM Y
5109	WASH	V	L	57.63	41	2	MAIN QUAD	R-402D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5110	WASH	V	L	57.63	41	2	MAIN QUAD	R-402D	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM Y
5111	WASH	V	L	57.63	41	2	MAIN QUAD	R-402D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM Y
0412		SUB GAS MANIFOLD / NITROGEN								
5115	N/A(vac)	V	GV	16.00	41	2	MAIN QUAD	QUAD 2	SUB GAS HEADER CLEANOUT VALVE	HEADER N
5116	N/A(vac)	V	GV	16.00	41	2	MAIN QUAD	QUAD 2	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER Y
5117	N/A(vac)	V	GV	16.00	41	2	MAIN QUAD	QUAD 2	BLOCKING VALVE NITROGEN PURGE	HEADER Y
5118	N/A(vac)	V	GV	16.00	41	2	MAIN QUAD	QUAD 2	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER Y
5119	N/A(vac)	V	GV	16.00	41	2	MAIN QUAD	QUAD 2	BLEED VALVE SUB GAS VACUUM LINE	HEADER Y
0413		UNIT A								
5120	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	RAW GAS VALVE	TOP #A Y
5121	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	TOP PRESSURE TAP VALVE	TOP #A Y
5122	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	TOP PRESSURE TAP	TOP #A Y
5124	A.V.O	C	G	16.00	41	2	MAIN QUAD	R-402A	TOP PRESSURE TAP GAUGE	TOP #A Y
5125	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	DOWN RIVER GAS VALVE	TOP #A Y
5126	UTM	V	L	57.63	41	2	MAIN QUAD	R-402A	TOP LEVEL NORTH PRESSURE TAP	TOP #A UTM
5131	Q	V O/E	L	57.63	41	2	MAIN QUAD	R-402A	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #A Y
5127	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	UNDER FIRE GAS VALVE	TOP #A Y
5128	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	SUB GAS VALVE	TOP #A Y
5129	Q	PRV	G	16.00	41	2	MAIN QUAD	R-402A	PRESSURE RELIEF VALVE	TOP #A Y
5133	Q	V	G	16.00	41	2	MAIN QUAD	R-402A	BLOCKING VALVE FOR PRESSURE RELIEF	TOP #A Y
5130	Q	V	L	57.63	41	2	MAIN QUAD	R-402A	TOP LEVEL SOUTH STEAM TAP	TOP #A Y
5132	WASH	V	G	16.00	41	2	MAIN QUAD	R-402A	MID LEVEL PRESSURE TAP VALVE	MID #A Y
5134	WASH	V	L	57.63	41	2	MAIN QUAD	R-402A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A Y
	A.V.O	C(x3)	G	16.00	41	2	MAIN QUAD	R-402A	MISCELLANEOUS UNMARKED FLANGES	TOP #A Y
0414		UNIT B								
5140	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	RAW GAS VALVE	TOP #B Y
5141	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	TOP PRESSURE TAP VALVE	TOP #B Y
5142	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	TOP PRESSURE TAP	TOP #B Y
5143	A.V.O	C	G	16.00	41	2	MAIN QUAD	R-402B	TOP PRESSURE TAP GAUGE	TOP #B Y
5144	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	DOWN RIVER GAS VALVE	TOP #B Y
5145	UTM	V	L	57.63	41	2	MAIN QUAD	R-402B	TOP LEVEL NORTH PRESSURE TAP	TOP #B UTM
5146	Q	V O/E	L	57.63	41	2	MAIN QUAD	R-402B	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #B Y
5147	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	UNDER FIRE GAS VALVE	TOP #B Y
5148	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	SUB GAS VALVE	TOP #B Y
5151	Q	PRV	G	16.00	41	2	MAIN QUAD	R-402B	PRESSURE RELIEF VALVE	TOP #B Y
5152	Q	V	G	16.00	41	2	MAIN QUAD	R-402B	BLOCKING VALVE FOR PRESSURE RELIEF	TOP #B Y
5149	UTM	V	L	57.63	41	2	MAIN QUAD	R-402B	TOP LEVEL SOUTH STEAM TAP	TOP #B UTM
5174	WASH	V	G	16.00	41	2	MAIN QUAD	R-402B	MID LEVEL PRESSURE TAP VALVE	MID #B Y
5153	WASH	V	L	57.63	41	2	MAIN QUAD	R-402B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B Y
	A.V.O	C(x3)	G	16.00	41	2	MAIN QUAD	R-402B	MISCELLANEOUS UNMARKED FLANGES	TOP #B Y
0415		UNIT C								
5160	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	RAW GAS VALVE	TOP #C Y
5161	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	TOP PRESSURE TAP VALVE	TOP #C Y
5162	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	TOP PRESSURE TAP	TOP #C Y
5163	A.V.O	C	G	16.00	41	2	MAIN QUAD	R-402C	TOP PRESSURE TAP GAUGE	TOP #C Y
5165	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	DOWN RIVER GAS VALVE	TOP #C Y
5166	UTM	V	L	57.63	41	2	MAIN QUAD	R-402C	TOP LEVEL NORTH PRESSURE TAP	TOP #C UTM

TABLE 41 (continued)

5164	Q	V O/E	L	57.63	41	2	MAIN QUAD	R-402C	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #C Y
5168	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	UNDER FIRE GAS VALVE	TOP #C Y

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5169	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	SUB GAS VALVE	TOP #C	Y
5171	Q	PRV	G	16.00	41	2	MAIN QUAD	R-402C	PRESSURE RELIEF VALVE	TOP #C	Y
5172	Q	V	G	16.00	41	2	MAIN QUAD	R-402C	BLOCKING VALVE FOR PRESSURE RELIEF	TOP #C	Y
5170	UTM	V	L	57.63	41	2	MAIN QUAD	R-402C	TOP LEVEL SOUTH STEAM TAP	TOP #C	UTM
5194	WASH	V	G	16.00	41	2	MAIN QUAD	R-402C	MID LEVEL PRESSURE TAP VALVE	MID #C	Y
5173	WASH	V	L	57.63	41	2	MAIN QUAD	R-402C	LOW LEVEL PRESSURE TAP COLD	BOTTOM #C	Y
	A.V.O	C(x3)	G	16.00	41	2	MAIN QUAD	R-402C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	Y
9416		UNIT D									
5180	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	RAW GAS VALVE	TOP #D	Y
5181	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	TOP PRESSURE TAP VALVE	TOP #D	Y
5182	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	TOP PRESSURE TAP	TOP #D	Y
5184	A.V.O	C	G	16.00	41	2	MAIN QUAD	R-402D	TOP PRESSURE TAP GAUGE	TOP #D	Y
5185	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	DOWN RIVER GAS VALVE	TOP #D	Y
5186	Q	V	L	57.63	41	2	MAIN QUAD	R-402D	TOP LEVEL NORTH PRESSURE TAP	TOP #D	Y
5187	Q	V O/E	L	57.63	41	2	MAIN QUAD	R-402D	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #D	Y
5188	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	UNDER FIRE GAS VALVE	TOP #D	Y
5189	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	SUB GAS VALVE	TOP #D	Y
5191	Q	PRV	G	16.00	41	2	MAIN QUAD	R-402D	PRESSURE RELIEF VALVE	TOP #D	Y
5192	Q	V	G	16.00	41	2	MAIN QUAD	R-402D	BLOCKING VALVE FOR PRESSURE RELIEF	TOP #D	Y
5190	UTM	V	L	57.63	41	2	MAIN QUAD	R-402D	TOP LEVEL SOUTH STEAM TAP	TOP #D	UTM
5150	WASH	V	G	16.00	41	2	MAIN QUAD	R-402D	MID LEVEL PRESSURE TAP VALVE	MID #D	Y
5193	WASH	V	L	57.63	41	2	MAIN QUAD	R-402D	LOW LEVEL PRESSURE TAP COLD	BOTTOM #D	Y
	A.V.O	C(x3)	G	16.00	41	2	MAIN QUAD	R-402D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	Y
6647	Q	V	G	16.00	41	2	DOWN RIVER LINE	R-402D	MAIN DOWN RIVER HEADER LINE BLOCKING VALVE	TOP SOUTH #D	Y
6684	Q	V	G	16.00	41	2	UNDERFIRE LINE	R-402D	MAIN UNDERFIRE HEADER LINE BLOCKING VALVE	TOP SOUTH #D	Y

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TABLE 42
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 3

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Plants #	Control Month					
6421		MAIN GAS BLOCKING VALVES									
5200	WASH	V	L	57.63	42	2	MAIN QUAD	R-403A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5201	WASH	V	L	57.63	42	2	MAIN QUAD	R-403A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5202	WASH	V	L	57.63	42	2	MAIN QUAD	R-403A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5203	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5204	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5205	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5206	WASH	V	L	57.63	42	2	MAIN QUAD	R-403C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5207	WASH	V	L	57.63	42	2	MAIN QUAD	R-403C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5208	WASH	V	L	57.63	42	2	MAIN QUAD	R-403C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5209	WASH	V	L	57.63	42	2	MAIN QUAD	R-403D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5210	WASH	V	L	57.63	42	2	MAIN QUAD	R-403D	DOWNRIVER COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5211	WASH	V	L	57.63	42	2	MAIN QUAD	R-403D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
6422		SUB GAS MANIFOLD / NITROGEN									
5215	N/A(vac)	V	GV	16.00	42	2	MAIN QUAD	QUAD 3	SUB GAS HEADER CLEANOUT VALVE	HEADER	N
5216	N/A(vac)	V	GV	16.00	42	2	MAIN QUAD	QUAD 3	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5217	N/A(vac)	V	GV	16.00	42	2	MAIN QUAD	QUAD 3	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
5218	N/A(vac)	V	GV	16.00	42	2	MAIN QUAD	QUAD 3	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER	Y
5219	N/A(vac)	V	GV	16.00	42	2	MAIN QUAD	QUAD 3	BLEED VALVE SUB GAS VACUUM LINE	HEADER	Y
6423		UNIT A									
5220	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	RAW GAS VALVE	TOP #A	Y
5221	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	DOWN RIVER GAS VALVE	TOP #A	Y
5222	UTM	V	L	57.63	42	2	MAIN QUAD	R-403A	TOP LEVEL SOUTH PRESSURE TAP	TOP #A	UTV
5224	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403A	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #A	Y
5225	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	UNDER FIRE GAS VALVE	TOP #A	Y
5226	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	TOP PRESSURE TAP	TOP #A	Y
5229	A.V.O	C	G	16.00	42	2	MAIN QUAD	R-403A	TOP PRESSURE TAP	TOP #A	Y
5230	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	SUB GAS VALVE	TOP #A	Y
5231	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	TOP LEVEL NORTH STEAM TAP	TOP #A	Y
5234	WASH	V	G	16.00	42	2	MAIN QUAD	R-403A	MID LEVEL PRESSURE TAP	MIDDLE #A	Y
5235	WASH	V	L	57.63	42	2	MAIN QUAD	R-403A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A	Y
5232	Q	PRV	G	16.00	42	2	MAIN QUAD	R-403A	RELIEF VALVE	TOP #A	Y
5233	Q	V	G	16.00	42	2	MAIN QUAD	R-403A	BLOCKING VALVE TO PRV	TOP #A	Y
	A.V.O	C(x3)	G	16.00	42	2	MAIN QUAD	R-403A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	Y
6424		UNIT B									
5240	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	RAW GAS VALVE	TOP #B	Y
5241	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	DOWN RIVER GAS VALVE	TOP #B	Y
5242	UTM	V	L	57.63	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP	TOP #B	UTM
5243	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #B	Y
5244	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	UNDER FIRE GAS VALVE	TOP #B	Y
5245	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y
5246	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y
5248	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP EXTENSION	TOP #B	Y
5249	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	SUB GAS VALVE	TOP #B	Y
5250	UTM	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL NORTH STEAM TAP	TOP #B	UTM
5234	WASH	V	G	16.00	42	2	MAIN QUAD	R-403B	MID LEVEL PRESSURE TAP	MIDDLE #B	N
5235	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	N
5232	Q	PRV	G	16.00	42	2	MAIN QUAD	R-403B	RELIEF VALVE	TOP #B	Y
5233	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	BLOCKING VALVE TO PRV	TOP #B	Y
	A.V.O	C(x3)	G	16.00	42	2	MAIN QUAD	R-403B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	Y
6425		UNIT C									
5260	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	RAW GAS VALVE	TOP #B	Y
5261	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	DOWN RIVER GAS VALVE	TOP #B	Y
5262	UTM	V	L	57.63	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP	TOP #B	UTM
5263	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #B	Y
5264	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	UNDER FIRE GAS VALVE	TOP #B	Y
5265	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y
5266	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y

TABLE 42 (continued)

5267	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP CLEANOUT	TOP #B	Y
5268	A.V.O	C	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP GAUGE	TOP #B	Y

5269	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	SUB GAS VALVE	TOP #B	Y
5270	UTM	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL NORTH STEAM TAP	TOP #B	UTM
5274	WASH	V	G	16.00	42	2	MAIN QUAD	R-403B	MID LEVEL PRESSURE TAP	MIDDLE #B	N
5275	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	N
5271	Q	PRV	G	16.00	42	2	MAIN QUAD	R-403B	RELIEF VALVE	TOP #B	Y
5272	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	BLOCKING VALVE TO PRV	TOP #B	Y
	A,V,O	C(x3)	G	16.00	42	2	MAIN QUAD	R-403B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	Y
9426		UNIT D									
5290	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	RAW GAS VALVE	TOP #B	Y
5281	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	DOWN RIVER GAS VALVE	TOP #B	Y
5282	Q	V	L	57.63	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP	TOP #B	Y
5283	Q	V O/E	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #B	Y
5284	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	UNDER FIRE GAS VALVE	TOP #B	Y
5285	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y
5286	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP	TOP #B	Y
5287	A,V,O	C	G	16.00	42	2	MAIN QUAD	R-403B	TOP EAST PRESSURE TAP GAUGE	TOP #B	Y
5289	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	SUB GAS VALVE	TOP #B	Y
5247	UTM	V	G	16.00	42	2	MAIN QUAD	R-403B	TOP LEVEL NORTH STEAM TAP	TOP #B	UTM
5294	WASH	V	G	16.00	42	2	MAIN QUAD	R-403B	MID LEVEL PRESSURE TAP	MIDDLE #B	N
5293	WASH	V	L	57.63	42	2	MAIN QUAD	R-403B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	N
5291	Q	PRV	G	16.00	42	2	MAIN QUAD	R-403B	RELIEF VALVE	TOP #B	Y
5292	Q	V	G	16.00	42	2	MAIN QUAD	R-403B	BLOCKING VALVE TO PRV	TOP #B	Y
7066	UTM	V	G	16.00	42	2	MAIN QUAD	R-403D	BLOCKING VALVE ON MAIN UNDERFIRE HEADER	TOP-SOUTH #D	UTV
7067	UTM	V	G	16.00	42	2	MAIN QUAD	R-403D	BLOCKING VALVE ON MAIN UNDERFIRE HEADER	TOP-SOUTH #D	UTV
7025	UTM	V	G	16.00	42	2	MAIN QUAD	R-403D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	Y
	A,V,O	C(x3)	G	16.00	42	2	MAIN QUAD	R-403D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	Y

TABLE 43
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD #4

Tag Identification	Monitoring Frequency	Component Type	Phase	Instrument Calibration	Figure #	Control Room			
0431		MAIN GAS BLOCKING VALVES							
5300	WASH	V	L	57.63	43	2	MAIN QUAD	R-404A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5301	WASH	V	L	57.63	43	2	MAIN QUAD	R-404A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5302	WASH	V	L	57.63	43	2	MAIN QUAD	R-404A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5303	WASH	V	L	57.63	43	2	MAIN QUAD	R-404B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5304	WASH	V	L	57.63	43	2	MAIN QUAD	R-404B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5305	WASH	V	L	57.63	43	2	MAIN QUAD	R-404B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5306	WASH	V	L	57.63	43	2	MAIN QUAD	R-404C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5307	WASH	V	L	57.63	43	2	MAIN QUAD	R-404C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5308	WASH	V	L	57.63	43	2	MAIN QUAD	R-404C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5309	WASH	V	L	57.63	43	2	MAIN QUAD	R-404D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5310	WASH	V	L	57.63	43	2	MAIN QUAD	R-404D	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5311	WASH	V	L	57.63	43	2	MAIN QUAD	R-404D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
0432		SUB GAS MANIFOLD / NITROGEN							
5315	N/A(vac)	V	GV	16.00	43	2	MAIN QUAD	QUAD 4	SUB GAS HEADER CLEANOUT VALVE	HEADER	N
5316	N/A(vac)	V	GV	16.00	43	2	MAIN QUAD	QUAD 4	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
5317	N/A(vac)	V	GV	16.00	43	2	MAIN QUAD	QUAD 4	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5318	N/A(vac)	V	GV	16.00	43	2	MAIN QUAD	QUAD 4	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER	Y
5319	N/A(vac)	V	GV	16.00	43	2	MAIN QUAD	QUAD 4	BLEED VALVE SUB GAS VACUUM LINE	HEADER	Y
0433		UNIT A							
5320	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	RAW GAS VALVE	TOP #A	Y
5321	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	TOP PRESSURE WEST TAP VALVE	TOP #A	Y
5322	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	TOP PRESSURE WEST TAP VALVE	TOP #A	Y
5324	A,V,O	C	G	16.00	43	2	MAIN QUAD	R-404A	TOP PRESSURE GAUGE	TOP #D	Y
5323	Q	V O/E	G	16.00	43	2	MAIN QUAD	R-404A	TOP PRESSURE WEST TAP CLEANOUT VALVE	TOP #A	Y
5325	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	DOWN RIVER GAS VALVE	TOP #A	Y
5326	UTM	V	L	57.63	43	2	MAIN QUAD	R-404A	TOP LEVEL SOUTH PRESSURE TAP	TOP #A	N
5327	Q	V O/E	L	57.63	43	2	MAIN QUAD	R-404-A	TOP LEVEL SOUTH PRESSURE TAP EXTENDED	TOP #A	Y
5328	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	UNDERFIRE GAS VALVE	TOP #A	Y
5329	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	SUB GAS VALVE	TOP #A	Y
5330	Q	V	L	57.63	43	2	MAIN QUAD	R-404A	TOP LEVEL NORTH STEAM VALVE	TOP #A	Y
5331	Q	PRV	G	16.00	43	2	MAIN QUAD	R-404A	PRESSURE RELIEF VALVE	TOP #A	Y
5332	Q	V	G	16.00	43	2	MAIN QUAD	R-404A	BLOCKING VALVE TO PRV	TOP #A	Y
5333	WASH	V	G	16.00	43	2	MAIN QUAD	R-404A	MID LEVEL PRESSURE TAP VALVE	MIDDLE #A	Y
5334	WASH	V	L	57.63	43	2	MAIN QUAD	R-404A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A	N
	A,V,O	C(x3)	G	16.00	43	2	MAIN QUAD	R-404A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	Y
0434		UNIT B							
5340	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	RAW GAS VALVE	TOP #B	Y
5341	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	TOP PRESSURE WEST TAP VALVE	TOP #B	Y
5342	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	TOP PRESSURE WEST TAP VALVE	TOP #B	Y
5344	A,V,O	C	G	16.00	43	2	MAIN QUAD	R-404B	TOP PRESSURE GAUGE	TOP #B	Y
5343	Q	V O/E	G	16.00	43	2	MAIN QUAD	R-404B	TOP PRESSURE WEST TAP CLEANOUT VALVE	TOP #B	Y
5352	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	DOWN RIVER GAS VALVE	TOP #B	Y
5345	UTM	V	L	57.63	43	2	MAIN QUAD	R-404B	TOP LEVEL SOUTH PRESSURE TAP	TOP #B	UTM
5346	Q	V O/E	L	57.63	43	2	MAIN QUAD	R-404-B	TOP LEVEL SOUTH PRESSURE TAP EXTENDED	TOP #B	Y
5347	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	UNDERFIRE GAS VALVE	TOP #B	Y
5348	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	SUB GAS VALVE	TOP #B	Y
5349	UTM	V	L	57.63	43	2	MAIN QUAD	R-404B	TOP LEVEL NORTH STEAM VALVE	TOP #B	UTM
5350	Q	PRV	G	16.00	43	2	MAIN QUAD	R-404B	PRESSURE RELIEF VALVE	TOP #B	Y
5351	Q	V	G	16.00	43	2	MAIN QUAD	R-404B	BLOCKING VALVE TO PRV	TOP #B	Y
5354	WASH	V	G	16.00	43	2	MAIN QUAD	R-404B	MID LEVEL PRESSURE TAP VALVE	MIDDLE #B	Y
5353	WASH	V	L	57.63	43	2	MAIN QUAD	R-404B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	Y
	A,V,O	C(x3)	G	16.00	43	2	MAIN QUAD	R-404B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	DTM
0435		UNIT C							
5360	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	RAW GAS VALVE	TOP #C	Y
5361	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	TOP PRESSURE WEST TAP VALVE	TOP #C	Y
5362	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	TOP PRESSURE WEST TAP VALVE	TOP #C	Y
5363	A,V,O	C	G	16.00	43	2	MAIN QUAD	R-404C	TOP PRESSURE GAUGE	TOP #C	Y

TABLE 43 (continued)

5364	Q	V O/E	G	16.00	43	2	MAIN QUAD	R-404C	TOP PRESSURE WEST TAP CLEANOUT VALVE	TOP #C	Y
5365	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	DOWN RIVER GAS VALVE	TOP #C	Y

5366	UTM	V	L	57.63	43	2	MAIN QUAD	R-404C	TOP LEVEL SOUTH PRESSURE TAP	TOP #C	UTM
5367	Q	V O/E	L	57.63	43	2	MAIN QUAD	R-404-C	TOP LEVEL SOUTH PRESSURE TAP EXTENDED	TOP #C	Y
5368	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	UNDERFIRE GAS VALVE	TOP #C	Y
5369	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	SUB GAS VALVE	TOP #C	Y
5370	UTM	V	L	57.63	43	2	MAIN QUAD	R-404C	TOP LEVEL NORTH STEAM VALVE	TOP #C	UTM
5374	Q	PRV	G	16.00	43	2	MAIN QUAD	R-404C	PRESSURE RELIEF VALVE	TOP #C	Y
5375	Q	V	G	16.00	43	2	MAIN QUAD	R-404C	BLOCKING VALVE TO PRV	TOP #C	Y
5391	WASH	V	G	16.00	43	2	MAIN QUAD	R-404C	MID LEVEL PRESSURE TAP VALVE	TOP #C	Y
5373	WASH	V	L	57.63	43	2	MAIN QUAD	R-404C	LOW LEVEL PRESSURE TAP COLD	TOP #C	Y
	A,V,Q	C(x3)	G	16.00	43	2	MAIN QUAD	R-404C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	DTM
6436		UNIT B									
5380	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	RAW GAS VALVE	TOP #D	Y
5381	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	TOP PRESSURE WEST TAP VALVE	TOP #D	Y
5382	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	TOP PRESSURE WEST TAP VALVE	TOP #D	Y
5383	A,V,Q	C	G	16.00	43	2	MAIN QUAD	R-404D	TOP PRESSURE GAUGE	TOP #D	Y
8390	Q	V O/E	G	16.00	43	2	MAIN QUAD	R-404D	TOP PRESSURE WEST TAP CLEANOUT VALVE	TOP #D	Y
5389	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	DOWN RIVER GAS VALVE	TOP #D	Y
5384	Q	V	L	57.63	43	2	MAIN QUAD	R-404D	TOP LEVEL SOUTH PRESSURE TAP	TOP #D	Y
5385	Q	V O/E	L	57.63	43	2	MAIN QUAD	R-404-D	TOP LEVEL SOUTH PRESSURE TAP EXTENDED	TOP #D	Y
5386	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	UNDERFIRE GAS VALVE	TOP #D	Y
5387	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	SUB GAS VALVE	TOP #D	Y
5388	UTM	V	L	57.63	43	2	MAIN QUAD	R-404D	TOP LEVEL NORTH STEAM VALVE	TOP #D	UTM
5393	Q	PRV	G	16.00	43	2	MAIN QUAD	R-404D	PRESSURE RELIEF VALVE	TOP #D	Y
5392	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	BLOCKING VALVE TO PRV	TOP #D	Y
5372	A-WASH	V	G	16.00	43	2	MAIN QUAD	R-404D	MID LEVEL PRESSURE TAP VALVE	TOP #D	DTM
5371	WASH	V	L	57.63	43	2	MAIN QUAD	R-404D	LOW LEVEL PRESSURE TAP COLD	TOP #D	Y
6986	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	Y
6987	Q	V	G	16.00	43	2	MAIN QUAD	R-404D	BLOCKING VALVE ON MAIN UNDERFIRE HEADER	TOP-SOUTH #D	Y
	A,V,Q	C(x3)	G	16.00	43	2	MAIN QUAD	R-404D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	DTM

ED_002508A_00001307-00054

TABLE 44
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 5

Tag Identification	Monitoring Frequency	Component Type	Phase	Elevation Identification	Unit #	Control Room				
0441		MAIN GAS BLOCKING VALVES								
5400	WASH	V	L	57.63	44	2	MAIN QUAD	R-405A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5501	WASH	V	L	57.63	44	2	MAIN QUAD	R-405A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5502	WASH	V	L	57.63	44	2	MAIN QUAD	R-405A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5403	WASH	V	L	57.63	44	2	MAIN QUAD	R-405B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5504	WASH	V	L	57.63	44	2	MAIN QUAD	R-405B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5505	WASH	V	L	57.63	44	2	MAIN QUAD	R-405B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5406	WASH	V	L	57.63	44	2	MAIN QUAD	R-405C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5507	WASH	V	L	57.63	44	2	MAIN QUAD	R-405C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5508	WASH	V	L	57.63	44	2	MAIN QUAD	R-405C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5409	WASH	V	L	57.63	44	2	MAIN QUAD	R-405D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5510	WASH	V	L	57.63	44	2	MAIN QUAD	R-405D	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5511	WASH	V	L	57.63	44	2	MAIN QUAD	R-405D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
0442		SUB GAS MANIFOLD / NITROGEN								
5415	N/A(vac)	V	GV	16.00	44	2	MAIN QUAD	QUAD 5	SUB GAS HEADER CLEANOUT VALVE	HEADER	UTM
5416	N/A(vac)	V	GV	16.00	44	2	MAIN QUAD	QUAD 5	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5417	N/A(vac)	V	GV	16.00	44	2	MAIN QUAD	QUAD 5	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
5418	N/A(vac)	V	GV	16.00	44	2	MAIN QUAD	QUAD 5	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER	Y
5419	N/A(vac)	V	GV	16.00	44	2	MAIN QUAD	QUAD 5	BLEED VALVE SUB GAS VACUUM LINE	HEADER	Y
0443		UNIT A								
5420	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	RAW GAS VALVE	TOP #A	Y
5422	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	DOWN RIVER GAS VALVE	TOP #A	Y
5423	UTM	V	L	57.63	44	2	MAIN QUAD	R-405A	TOP LEVEL NORTH PRESSURE TAP	TOP #A	UTM
5424	Q	V O/E	L	57.63	44	2	MAIN QUAD	R-405A	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #A	Y
5425	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	UNDERFIRE GAS VALVE	TOP #A	Y
5426	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	TOP PRESSURE TAP	TOP #A	Y
5427	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	TOP PRESSURE TAP	TOP #A	Y
5429	A.V.O	C	G	16.00	44	2	MAIN QUAD	R-405A	TOP PRESSURE GAUGE	TOP #A	Y
5430	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	SUB GAS VALVE	TOP #A	Y
5431	Q	V	L	57.63	44	2	MAIN QUAD	R-405A	TOP LEVEL SOUTH STEAM VALVE	TOP #A	Y
5432	Q	PRV	G	16.00	44	2	MAIN QUAD	R-405A	PRESSIRE RELIEF VALVE	TOP #A	Y
5433	Q	V	G	16.00	44	2	MAIN QUAD	R-405A	PRESSIRE RELIEF BLOCKING VALVE	TOP #A	Y
5434	WASH	V	G	16.00	44	2	MAIN QUAD	R-405A	MID LEVEL PRESSURE TAP VALVE	MIDDLE #A	Y
5435	WASH	V	L	57.63	44	2	MAIN QUAD	R-405A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A	Y
	A.V.O	C(x3)	G	16.00	44	2	MAIN QUAD	R-405A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	DTM
0444		UNIT B								
5440	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	RAW GAS VALVE	TOP #B	Y
5441	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	DOWN RIVER GAS VALVE	TOP #B	Y
5442	UTM	V	L	57.63	44	2	MAIN QUAD	R-405B	TOP LEVEL NORTH PRESSURE TAP	TOP #B	UTM
5443	Q	V O/E	L	57.63	44	2	MAIN QUAD	R-405B	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #B	Y
5444	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	UNDERFIRE GAS VALVE	TOP #B	Y
5445	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	TOP PRESSURE TAP	TOP #B	Y
5446	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	TOP PRESSURE TAP	TOP #B	Y
5447	A.V.O	C	G	16.00	44	2	MAIN QUAD	R-405B	TOP PRESSURE GAUGE	TOP #B	Y
5449	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	SUB GAS VALVE	TOP #B	Y
5450	UTM	V	L	57.63	44	2	MAIN QUAD	R-405B	TOP LEVEL SOUTH STEAM VALVE	TOP #B	UTM
5454	Q	PRV	G	16.00	44	2	MAIN QUAD	R-405B	PRESSIRE RELIEF VALVE	TOP #B	Y
5455	Q	V	G	16.00	44	2	MAIN QUAD	R-405B	PRESSIRE RELIEF BLOCKING VALVE	TOP #B	Y
5452	WASH	V	G	16.00	44	2	MAIN QUAD	R-405B	MID LEVEL PRESSURE TAP VALVE	MIDDLE #B	Y
5453	WASH	V	L	57.63	44	2	MAIN QUAD	R-405B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	Y
	A.V.O	C(x3)	G	16.00	44	2	MAIN QUAD	R-405B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	DTM
0445		UNIT C								
5460	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	RAW GAS VALVE	TOP #C	Y
5461	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	DOWN RIVER GAS VALVE	TOP #C	Y
5462	UTM	V	L	57.63	44	2	MAIN QUAD	R-405C	TOP LEVEL NORTH PRESSURE TAP	TOP #C	UTM
5463	Q	V O/E	L	57.63	44	2	MAIN QUAD	R-405C	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #C	Y
5464	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	UNDERFIRE GAS VALVE	TOP #C	Y
5465	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	TOP PRESSURE TAP	TOP #C	Y

TABLE 44 (continued)

5466	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	TOP PRESSURE TAP	TOP #C	Y
5468	A.V.O	C	G	16.00	44	2	MAIN QUAD	R-405C	TOP PRESSURE GAUGE	TOP #C	Y

5469	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	SUB GAS VALVE	TOP #C	Y
5470	UTM	V	L	57.63	44	2	MAIN QUAD	R-405C	TOP LEVEL SOUTH STEAM VALVE	TOP #C	UTM
5471	Q	PRV	G	16.00	44	2	MAIN QUAD	R-405C	PRESSIRE RELIEF VALVE	TOP #C	Y
5472	Q	V	G	16.00	44	2	MAIN QUAD	R-405C	PRESSIRE RELIEF BLOCKING VALVE	TOP #C	Y
5473	WASH	V	G	16.00	44	2	MAIN QUAD	R-405C	MID LEVEL PRESSURE TAP VALVE	TOP #C	Y
5474	WASH	V	L	57.63	44	2	MAIN QUAD	R-405C	LOW LEVEL PRESSURE TAP COLD	TOP #C	Y
	A.V.O	C(x3)	G	16.00	44	2	MAIN QUAD	R-405C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	DTM
6446		UNIT D									
5480	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	RAW GAS VALVE	TOP #D	Y
5481	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	DOWN RIVER GAS VALVE	TOP #D	Y
5482	Q	V	L	57.63	44	2	MAIN QUAD	R-405D	TOP LEVEL NORTH PRESSURE TAP	TOP #D	Y
5483	Q	V O/E	L	57.63	44	2	MAIN QUAD	R-405D	TOP LEVEL NORTH PRESSURE TAP EXTENSION	TOP #D	Y
5484	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	UNDERFIRE GAS VALVE	TOP #D	Y
5485	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	TOP PRESSURE TAP	TOP #D	Y
5486	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	TOP PRESSURE TAP	TOP #D	Y
5487	A.V.O	C	G	16.00	44	2	MAIN QUAD	R-405D	TOP PRESSURE GAUGE	TOP #D	Y
5489	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	SUB GAS VALVE	TOP #D	Y
5490	UTM	V	L	57.63	44	2	MAIN QUAD	R-405D	TOP LEVEL SOUTH STEAM VALVE	TOP #D	UTM
5491	Q	PRV	G	16.00	44	2	MAIN QUAD	R-405D	PRESSIRE RELIEF VALVE	TOP #D	Y
5492	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	PRESSIRE RELIEF BLOCKING VALVE	TOP #D	Y
5494	WASH	V	G	16.00	44	2	MAIN QUAD	R-405D	MID LEVEL PRESSURE TAP VALVE	TOP #D	Y
5493	WASH	V	L	57.63	44	2	MAIN QUAD	R-405D	LOW LEVEL PRESSURE TAP COLD	TOP #D	Y
5467	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	Y
5448	Q	V	G	16.00	44	2	MAIN QUAD	R-405D	BLOCKING VALVE ON MAIN UNDERFIRE HEADER	TOP-SOUTH #D	Y
	A.V.O	C(x3)	G	16.00	44	2	MAIN QUAD	R-405D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	DTM

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TABLE 45
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 6

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Pressure #	Control Room				
0451		MAIN GAS BLOCKING VALVES								
5550	WASH	V	L	57.63	45	2	MAIN QUAD	R-406A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5593	WASH	V	L	57.63	45	2	MAIN QUAD	R-406A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5500	WASH	V	L	57.63	45	2	MAIN QUAD	R-406A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5531	WASH	V	L	57.63	45	2	MAIN QUAD	R-406B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5543	WASH	V	L	57.63	45	2	MAIN QUAD	R-406B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5575	WASH	V	L	57.63	45	2	MAIN QUAD	R-406B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5506	WASH	V	L	57.63	45	2	MAIN QUAD	R-406C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5524	WASH	V	L	57.63	45	2	MAIN QUAD	R-406C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5503	WASH	V	L	57.63	45	2	MAIN QUAD	R-406C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5509	WASH	V	L	57.63	45	2	MAIN QUAD	R-406D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5512	WASH	V	L	57.63	45	2	MAIN QUAD	R-406D	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5513	WASH	V	L	57.63	45	2	MAIN QUAD	R-406D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
0452		SUB GAS MANIFOLD / NITROGEN								
5515	N/A(vac)	V	GV	16.00	45	2	MAIN QUAD	QUAD 6	SUB GAS HEADER CLEANOUT VALVE	HEADER	N
5516	N/A(vac)	V	GV	16.00	45	2	MAIN QUAD	QUAD 6	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
5517	N/A(vac)	V	GV	16.00	45	2	MAIN QUAD	QUAD 6	CLEAN OUT VALVE SUB GAS VACUUM LINE	HEADER	Y
5518	N/A(vac)	V	GV	16.00	45	2	MAIN QUAD	QUAD 6	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5519	N/A(vac)	V	GV	16.00	45	2	MAIN QUAD	QUAD 6	BLEED VALVE SUB GAS VACUUM LINE	HEADER	Y
0453										
5520	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	RAW GAS VALVE	TOP #A	Y
5521	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	TOP WEST PRESSURE TAP VALVE	TOP #A	Y
5522	Q	V O/E	G	16.00	45	2	MAIN QUAD	R-406A	TOP WEST PRESSURE TAP VALVE	TOP #A	Y
5525	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	DOWN RIVER GAS VALVE	TOP #A	Y
5526	UTM	V	L	57.63	45	2	MAIN QUAD	R-406-A	TOP LEVEL SOUTH PRESSURE TAP	TOP #A	UTM
5527	Q	V O/E	L	57.63	45	2	MAIN QUAD	R-406-A	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #A	Y
5528	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	UNDER FIRE GAS VALVE	TOP #A	Y
5529	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	SUB GAS VALVE	TOP #A	Y
5530	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	TOP LEVEL NORTH STEAM VALVE	TOP #A	Y
5532	Q	PRV	G	16.00	45	2	MAIN QUAD	R-406A	PRESSURE RELIEF VALVE	TOP #A	Y
5537	Q	V	G	16.00	45	2	MAIN QUAD	R-406A	PRV BLOCKING VALVE	TOP #A	Y
5534	WASH	V	G	16.00	45	2	MAIN QUAD	R-406A	MID LEVEL PRESSURE TAP VALVE	MIDDLE #A	Y
5535	WASH	V	L	57.63	45	2	MAIN QUAD	R-406A	LOW LEVEL PRESSURE TAP COLD	BOTTOM #A	Y
	A.V.O	C(x3)	G	16.00	45	2	MAIN QUAD	R-406A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	DTM
0454		UNIT B								
5540	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	RAW GAS VALVE	TOP #B	Y
5541	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	TOP WEST PRESSURE TAP VALVE	TOP #B	Y
5542	Q	V O/E	G	16.00	45	2	MAIN QUAD	R-406B	TOP WEST PRESSURE TAP VALVE	TOP #B	Y
5544	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	DOWN RIVER GAS VALVE	TOP #B	Y
5545	UTM	V	L	57.63	45	2	MAIN QUAD	R-406-B	TOP LEVEL SOUTH PRESSURE TAP	TOP #B	UTM
5546	Q	V O/E	L	57.63	45	2	MAIN QUAD	R-406-B	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #B	Y
5547	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	UNDER FIRE GAS VALVE	TOP #B	Y
5548	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	SUB GAS VALVE	TOP #B	Y
5549	UTM	V	G	16.00	45	2	MAIN QUAD	R-406B	TOP LEVEL NORTH STEAM VALVE	TOP #B	UTM
5551	Q	PRV	G	16.00	45	2	MAIN QUAD	R-406B	PRESSURE RELIEF VALVE	TOP #B	Y
5552	Q	V	G	16.00	45	2	MAIN QUAD	R-406B	PRV BLOCKING VALVE	TOP #B	Y
5553	WASH	V	G	16.00	45	2	MAIN QUAD	R-406B	MID LEVEL PRESSURE TAP VALVE	MIDDLE #B	Y
5564	WASH	V	L	57.63	45	2	MAIN QUAD	R-406B	LOW LEVEL PRESSURE TAP COLD	BOTTOM #B	Y
	A.V.O	C(x3)	G	16.00	45	2	MAIN QUAD	R-406B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	DTM
0455		UNIT C								
5560	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	RAW GAS VALVE	TOP #C	Y
5561	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	TOP WEST PRESSURE TAP VALVE	TOP #C	Y
5562	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	TOP WEST PRESSURE TAP VALVE	TOP #C	Y
5563	A.V.O	C	G	16.00	45	2	MAIN QUAD	R-406C	TOP WEST PRESSURE TAP GAUGE	TOP #C	Y
5565	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	DOWN RIVER GAS VALVE	TOP #C	Y
5566	UTM	V	L	57.63	45	2	MAIN QUAD	R-406-C	TOP LEVEL SOUTH PRESSURE TAP	TOP #C	UTM
5567	Q	V O/E	L	57.63	45	2	MAIN QUAD	R-406-C	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #C	Y
5568	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	UNDER FIRE GAS VALVE	TOP #C	Y

TABLE 45 (continued)

5569	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	SUB GAS VALVE	TOP #C	Y
5570	UTM	V	G	16.00	45	2	MAIN QUAD	R-406C	TOP LEVEL NORTH STEAM VALVE	TOP #C	UTM

5571	Q	PRV	G	16.00	45	2	MAIN QUAD	R-406C	PRESSURE RELIEF VALVE	TOP #C	Y
5572	Q	V	G	16.00	45	2	MAIN QUAD	R-406C	PRV BLOCKING VALVE	TOP #C	Y
5573	WASH	V	G	16.00	45	2	MAIN QUAD	R-406C	MID LEVEL PRESSURE TAP VALVE	MIDDLE #C	Y
5574	WASH	V	L	57.63	45	2	MAIN QUAD	R-406C	LOW LEVEL PRESSURE TAP COLD	COTTOM #C	Y
	A.V.O	C(x3)	G	16.00	45	2	MAIN QUAD	R-406C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	DTM
8456		UNIT D									
5580	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	RAW GAS VALVE	TOP #D	Y
5581	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	TOP WEST PRESSURE TAP VALVE	TOP #D	Y
5582	Q	V O/E	G	16.00	45	2	MAIN QUAD	R-406D	TOP WEST PRESSURE TAP VALVE	TOP #D	Y
5584	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	DOWN RIVER GAS VALVE	TOP #D	Y
5585	Q	V	L	57.63	45	2	MAIN QUAD	R-406-D	TOP LEVEL SOUTH PRESSURE TAP	TOP #D	Y
5583	Q	V O/E	L	57.63	45	2	MAIN QUAD	R-406-D	TOP LEVEL SOUTH PRESSURE TAP EXTENSION	TOP #D	Y
5586	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	UNDER FIRE GAS VALVE	TOP #D	Y
5587	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	SUB GAS VALVE	TOP #D	Y
5588	UTM	V	G	16.00	45	2	MAIN QUAD	R-406D	TOP LEVEL NORTH STEAM VALVE	TOP #D	UTM
5589	Q	PRV	G	16.00	45	2	MAIN QUAD	R-406D	PRESSURE RELIEF VALVE	TOP #D	Y
5590	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	PRV BLOCKING VALVE	TOP #D	Y
5591	WASH	V	G	16.00	45	2	MAIN QUAD	R-406D	MID LEVEL PRESSURE TAP VALVE	MIDDLE #D	Y
5592	WASH	V	L	57.63	45	2	MAIN QUAD	R-406D	LOW LEVEL PRESSURE TAP COLD	DOTTOM #D	Y
5553	Q	V	G	16.00	45	2	MAIN QUAD	R-406D	BLOCKING VALVE ON MAIN DOWN RIVER HEADER	TOP-SOUTH #D	Y
	A.V.O	C(x3)	G	16.00	45	2	MAIN QUAD	R-406D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	DTM

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TABLE 46
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MAIN QUAD NO. 7

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Unit #	Control Room				
0461		MAIN GAS BLOCKING VALVES								
5600	WASH	V	L	57.63	46	2	MAIN QUAD	R-407D	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5601	WASH	V	L	57.63	46	2	MAIN QUAD	R-407D	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5602	WASH	V	L	57.63	46	2	MAIN QUAD	R-407D	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5603	WASH	V	L	57.63	46	2	MAIN QUAD	R-407C	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5604	WASH	V	L	57.63	46	2	MAIN QUAD	R-407C	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5605	WASH	V	L	57.63	46	2	MAIN QUAD	R-407C	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5606	WASH	V	L	57.63	46	2	MAIN QUAD	R-407B	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5607	WASH	V	L	57.63	46	2	MAIN QUAD	R-407B	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5608	WASH	V	L	57.63	46	2	MAIN QUAD	R-407B	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5609	WASH	V	L	57.63	46	2	MAIN QUAD	R-407A	SUB GAS COLD SEPARATOR BLOCKING VALVE	BOTTOM	Y
5610	WASH	V	L	57.63	46	2	MAIN QUAD	R-407A	DOWNRIVER GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
5611	WASH	V	L	57.63	46	2	MAIN QUAD	R-407A	UNDERFIRE GAS COLD SEPARATOR BLOCK VALVE	BOTTOM	Y
0462		SUB GAS MANIFOLD / NITROGEN									
5615	N/A(vac)	V	GV	16.00	46	2	MAIN QUAD	QUAD 7	SUB GAS HEADER CLEAN OUT VALVE	HEADER	DTM
5616	N/A(vac)	V	GV	16.00	46	2	MAIN QUAD	QUAD 7	BLOCKING VALVE SUB GAS VACUUM LINE	HEADER	Y
5617	N/A(vac)	V	GV	16.00	46	2	MAIN QUAD	QUAD 7	BLOCKING VALVE NITROGEN PURGE	HEADER	Y
0463		UNIT A									
5620	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	RAW GAS VALVE	TOP #A	Y
5621	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	DOWN RIVER GAS VALVE	TOP #A	Y
5622	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	UNDERFIRE GAS VALVE	TOP #A	Y
5623	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	TOP PRESSURE TAP VALVE	TOP #A	Y
5624	Q	V O/E	G	16.00	46	2	MAIN QUAD	R-407A	TOP PRESSURE TAP VALVE	TOP #A	Y
5626	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	SUB GAS VALVE	TOP #A	Y
5631	Q	PRV	G	16.00	46	2	MAIN QUAD	R-407A	PRESSURE RELIEF VALVE	TOP #A	Y
5632	Q	V	G	16.00	46	2	MAIN QUAD	R-407A	PRV BLOCKING VALVE	TOP #A	Y
5629	WASH	V	G	16.00	46	2	MAIN QUAD	R-407A	MID LEVEL PRESSURE TAP VALVE	MID #A	Y
5630	WASH	V	L	57.63	46	2	MAIN QUAD	R-407A	LOW LEVEL PRESSURE TAP COLD	LOW #A	N
	A.V.O	C(x4)	G	16.00	46	2	MAIN QUAD	R-407A	MISCELLANEOUS UNMARKED FLANGES	TOP #A	DTM
0464		UNIT B									
5640	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	RAW GAS VALVE	TOP #B	Y
5641	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	DOWN RIVER GAS VALVE	TOP #B	Y
5642	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	UNDERFIRE GAS VALVE	TOP #B	Y
5643	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	TOP PRESSURE TAP VALVE	TOP #B	Y
5644	Q	V O/E	G	16.00	46	2	MAIN QUAD	R-407B	TOP PRESSURE TAP VALVE	TOP #B	Y
5646	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	SUB GAS VALVE	TOP #B	Y
5648	Q	PRV	G	16.00	46	2	MAIN QUAD	R-407B	PRESSURE RELIEF VALVE	TOP #B	Y
5649	Q	V	G	16.00	46	2	MAIN QUAD	R-407B	PRV BLOCKING VALVE	TOP #B	Y
5650	WASH	V	G	16.00	46	2	MAIN QUAD	R-407B	MID LEVEL PRESSURE TAP VALVE	MID #B	Y
5651	WASH	V	L	57.63	46	2	MAIN QUAD	R-407B	LOW LEVEL PRESSURE TAP COLD	LOW #B	N
	A.V.O	C(x4)	G	16.00	46	2	MAIN QUAD	R-407B	MISCELLANEOUS UNMARKED FLANGES	TOP #B	DTM
0465		UNIT C									
5660	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	RAW GAS VALVE	TOP #C	Y
5661	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	DOWN RIVER GAS VALVE	TOP #C	Y
5662	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	UNDERFIRE GAS VALVE	TOP #C	Y
5663	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	TOP PRESSURE TAP VALVE	TOP #C	Y
5664	Q	V O/E	G	16.00	46	2	MAIN QUAD	R-407C	TOP PRESSURE TAP VALVE	TOP #C	Y
5666	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	SUB GAS VALVE	TOP #C	Y
5671	Q	PRV	G	16.00	46	2	MAIN QUAD	R-407C	PRESSURE RELIEF VALVE	TOP #C	Y
5672	Q	V	G	16.00	46	2	MAIN QUAD	R-407C	PRV BLOCKING VALVE	TOP #C	Y
5669	WASH	V	G	16.00	46	2	MAIN QUAD	R-407C	MID LEVEL PRESSURE TAP VALVE	MID #C	Y
5670	WASH	V	L	57.63	46	2	MAIN QUAD	R-407C	LOW LEVEL PRESSURE TAP COLD	LOW #C	N
	A.V.O	C(x4)	G	16.00	46	2	MAIN QUAD	R-407C	MISCELLANEOUS UNMARKED FLANGES	TOP #C	DTM
0466		UNIT D									
5680	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	RAW GAS VALVE	TOP #D	Y
5681	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	DOWN RIVER GAS VALVE	TOP #D	Y
5682	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	UNDERFIRE GAS VALVE	TOP #D	Y
5683	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	TOP PRESSURE TAP VALVE	TOP #D	Y

TABLE 46 (continued)

5684	Q	V O/E	G	16.00	46	2	MAIN QUAD	R-407D	TOP PRESSURE TAP VALVE	TOP #D	Y

5685	Q	V O/E	G	16.00	46	2	MAIN QUAD	R-407D	TOP PRESSURE TAP VALVE	TOP #D	Y
5686	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	SUB GAS VALVE	TOP #D	Y
5688	Q	PRV	G	16.00	46	2	MAIN QUAD	R-407D	PRESSURE RELIEF VALVE	TOP #D	Y
5689	Q	V	G	16.00	46	2	MAIN QUAD	R-407D	PRV BLOCKING VALVE	TOP #D	Y
5690	WASH	V	G	16.00	46	2	MAIN QUAD	R-407D	MID LEVEL PRESSURE TAP VALVE	MID #D	Y
5691	WASH	V	L	57.63	46	2	MAIN QUAD	R-407D	LOW LEVEL PRESSURE TAP COLD	LOW #D	N
	A,V,O	C(x4)	G	16.00	46	2	MAIN QUAD	R-407D	MISCELLANEOUS UNMARKED FLANGES	TOP #D	BTM

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TABLE 47
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL SEPARATOR AREA

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Column Number					
6471		SUB GAS OUT									
6041	Q	V	G	16.0	47	2	WATER SEP	D-573	SUB GAS OUT BY PASS BLOCKING VALVE	LEVEL 2A	Y
6040	Q	V	G	16.0	47	2	WATER SEP	D-573	SUB GAS OUT BLOCKING VALVE	LEVEL 2A	Y
6042	Q	V	G	16.0	47	2	WATER SEP	D-573	SUB GAS OUT BLOCKING VALVE	LEVEL 2A	Y
6043	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	CLEAN OUT VALVES SUB GAS OUT	LEVEL 2A	Y
6044	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	CLEAN OUT VALVES SUB GAS OUT	LEVEL 2A	Y
6045	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	CLEAN OUT VALVES SUB GAS OUT	LEVEL 2A	Y
6046	Q	V	G	16.0	47	2	WATER SEP	D-573	BLOCKING VALVE FOR RELIEF VALVE	LEVEL 2A	Y
6047	Q	PRV O/E	G	16.0	47	2	WATER SEP	D-573	PRESSURE RELIEF VALVE	LEVEL 2A	Y
6048	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	CLEAN OUT VALVES SUB GAS OUT	LEVEL 2A	Y
	A,V,O	C	G	16.0	47	2	WATER SEP	D-573	UNMARKED FLANGE OFF OF VALVE 6045		
6472		SIGHT GLASS / LEVEL CONTROL - BOTTOM									
6000	Q	V	G	16.0	47	2	WATER SEP	D-573	BOTTOM LEVEL CONTROL	GROUND LEVEL	Y
6001	Q	V	G	16.0	47	2	WATER SEP	D-573	BOTTOM SIGHT GLASS	GROUND LEVEL	Y
6002	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	BOTTOM LEVEL CONTROL STEAM LINE	GROUND LEVEL	Y
6003	Q	V	G	16.0	47	2	WATER SEP	D-573	BOTTOM SIGHT GLASS	GROUND LEVEL	Y
6004	Q	V O/E	G	16.0	47	2	WATER SEP	D-573	BOTTOM SIGHT GLASS DRAIN	GROUND LEVEL	Y
	A,V,O	C(x2)	G	16.0	47	2	WATER SEP	D-573	UNMARKED CONNECTORS ON BOTTOM OF LEVEL CONTROL/SIGHT GLASS	GROUND LEVEL	Y
6473		SIGHT GLASS / LEVEL CONTROL - TOP									
6030	A	V	L	57.6	47	2	WATER SEP	D-573	LEVEL CONTROL TOP VALVE	SECOND LEVEL	DTM
6031	Q	V	L	57.6	47	2	WATER SEP	D-573	SIGHT GLASS/ LEVEL CONTROL TOP VALVE	SECOND LEVEL	Y
6032	Q	V O/E	L	57.6	47	2	WATER SEP	D-573	SIGHT GLASS/ LEVEL CONTROL TOP DRAIN	SECOND LEVEL	Y
	DTM-A,V,O	C(x2)	G	57.6	47	2	WATER SEP	D-573	UNMARKED CONNECTORS ON TOP OF LEVEL CONTROL/SIGHT GLASS	SECOND LEVEL	DTM
6474		INJECTION / CONTAMINATED WATER									
6011	N/A	V O/E	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINE DRAIN BACKUP	GROUND LEVEL	Y
6012	N/A	V	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINE DRAIN	GROUND LEVEL	Y
6013	N/A	V	L	nil	47	2	LO SEP	D-573	INJECTION WATER LINE BLOCKING	GROUND LEVEL	Y
6014	N/A	V O/E	L	nil	47	2	LO SEP	D-573	INJECTION WATER LINE DRAIN	GROUND LEVEL	Y
6015	N/A	V O/E	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINE DRAIN	GROUND LEVEL	Y
6016	N/A	V	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINES	GROUND LEVEL	Y
6017	N/A	V O/E	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINES DRAIN	GROUND LEVEL	Y
6018	N/A	V	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINES BLOCKING	GROUND LEVEL	Y
6019	N/A	V	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINES DRAIN	GROUND LEVEL	Y
6020	N/A	V O/E	L	nil	47	2	LO SEP	D-573	CONTAMINATED WATER LINES DRAIN BACKUP	GROUND LEVEL	Y
6475		DISCHARGE TO DECANTERS									
6005	Q	V	G	57.6	47	2	LO SEP	5730B	CONTROL STATION DUMP BLOCK VALVE	GROUND LEVEL	Y
6006	Q	V	G	57.6	47	2	LO SEP	5730B	CONTROL VALVE DUMP LINE	GROUND LEVEL	Y
6007	Q	V	G	57.6	47	2	LO SEP	5730B	CONTROL STATION DUMP LINE CONTROL VALVE	GROUND LEVEL	Y
6008	Q	V	G	57.6	47	2	LO SEP	5730B	DUMP LINE BYPASS VALVE	GROUND LEVEL	Y
6009	Q	V O/E	G	57.6	47	2	LO SEP	5730B	DUMP VALVE CLEAOUNT	GROUND LEVEL	Y
6033	Q	V O/E	G	57.6	47	2	LO SEP	5730B	CONTROL VALVE DUMP CLEANOUT	GROUND LEVEL	Y
6476		SUB GAS IN									
6052	A	PRV O/E	G	16.0	47	2	WATER SEP	D-573	PRESSURE RELIEF VALVE	LEVEL 2A	DTM
6050	A	V	G	16.0	47	2	WATER SEP	D-573	SUB GAS INLET PRESSURE TAP	LEVEL 2A	DTM
6051	DTM-A,V,O	C	G	16.0	47	2	WATER SEP	D-573	PRESSURE GAUGE	LEVEL 2A	DTM
OTHER											
6049	Q	V O/E	L	57.6	47	2	WATER SEP		WATER SEPARATOR PRESSURE TAP VALVE	SECOND LEVEL	Y

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TABLE 48
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB GAS COOLERS

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Process #	Control Room					
0481		COOLER 629 IN									
6108	Q	V	G	16.0	48	2	COOLER	E-629	INLET CLEANOUT VALVE	ENTRY END	Y
6107	Q	V	G	16.0	48	2	COOLER	E-629	INLET BLOCKING VALVE	ENTRY END	Y
6110	Q	V O/E	G	16.0	48	2	COOLER	E-629	INLET BOTTOM COOLER CLEANOUT VALVE	ENTRY END	Y
0482		COOLER 629 OUT									
6130	Q	V O/E	G	16.0	48	2	COOLER	E-629	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
6131	Q	V O/E	G	16.0	48	2	COOLER	E-629	OUTLET BOTTOM CLEANOUT VALVE	DISCHARGE END	Y
6132	Q	V O/E	G	16.0	48	2	COOLER	E-629	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
0483		COOLER 630 IN									
6102	Q	V	G	16.0	48	2	SEPARATOR	D-573	INLET BLOCKING VALVE	ENTRY END	Y
6103	Q	V O/E	G	16.0	48	2	COOLER	E-630	INLET CLEANOUT VALVE	ENTRY END	Y
6104	Q	V O/E	G	16.0	48	2	COOLER	E-630	INLET CLEANOUT VALVE	ENTRY END	Y
6111	Q	V O/E	G	16.0	48	2	COOLER	E-630	INLET BOTTOM COOLER CLEANOUT VALVE	ENTRY END	Y
0484		COOLER 630 OUT									
6135	Q	V O/E	G	16.0	48	2	COOLER	E-630	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
6136	Q	V O/E	G	16.0	48	2	COOLER	E-630	OUTLET BOTTOM CLEANOUT VALVE	DISCHARGE END	Y
6137	Q	V O/E	G	16.0	48	2	COOLER	E-630	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
0485		COOLER 632 IN									
6114	Q	V	G	16.0	48	2	COOLER	E-630	INLET PRESSURE BLOCKING	ENTRY END	Y
6115	Q	V	G	16.0	48	2	COOLER	E-632	INLET BLOCKING VALVE	ENTRY END	Y
6116	A,V,O	C	G	16.0	48	2	COOLER	E-632	INLET PRESSURE GAUGE	ENTRY END	Y
6117	Q	V O/E	G	16.0	48	2	COOLER	E-632	INLET TOP CLEANOUT VALVE	ENTRY END	Y
6123	Q	V O/E	G	16.0	48	2	COOLER	E-632	INLET BOTTOM COOLER CLEANOUT VALVE	ENTRY END	Y
0486		COOLER 632 OUT									
6145	Q	V O/E	G	16.0	48	2	COOLER	E-632	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
6146	Q	V O/E	G	16.0	48	2	COOLER	E-632	OUTLET BOTTOM CLEANOUT VALVE	DISCHARGE END	Y
6147	Q	V O/E	G	16.0	48	2	COOLER	E-632	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
0487		COOLER 633 IN									
6118	A	V	G	16.0	48	2	SEPARATOR	D-573	COOLER INLET MANIFOLD BLOCKING VALVE	ENTRY END	N
6119	A	V O/E	G	16.0	48	2	SEPARATOR	D-573	COOLER INLET MANIFOLD DRAIN	ENTRY END	N
5402	Q	V	G	16.0	48	2	COOLER	E-633	INLET CLEANOUT VALVE	ENTRY END	Y
5404	Q	V	G	16.0	48	2	COOLER	E-633	INLET CLEANOUT VALVE	ENTRY END	Y
5405	A,V,O	C	G	16.0	48	2	COOLER	E-633	INLET PRESSURE GAUGE	ENTRY END	Y
5407	Q	V	G	16.0	48	2	COOLER	E-633	INLET BLOCKING VALVE	ENTRY END	Y
5401	Q	V	G	16.0	48	2	COOLER	E-633	INLET BOTTOM COOLER CLEANOUT VALVE	ENTRY END	Y
0488		COOLER 633 OUT									
6148	Q	V O/E	G	16.0	48	2	COOLER	E-633	OUTLET TOP CLEANOUT VALVE	DISCHARGE END	Y
6149	Q	V O/E	G	16.0	48	2	COOLER	E-633	OUTLET COOLER TOP PRESSURE TAP CLEANOUT	DISCHARGE END	Y
6150	Q	V	G	16.0	48	2	COOLER	E-633	OUTLET COOLER TOP PRESSURE TAP	DISCHARGE END	Y
6151	A,V,O	C	G	16.0	48	2	COOLER	E-633	OUTLET COOLER TOP PRESSURE GAUGE	DISCHARGE END	Y
6152	Q	V O/E	G	16.0	48	2	COOLER	E-633	OUTLET BOTTOM CLEANOUT VALVE	DISCHARGE END	Y
0489		INLET COOLER MANIFOLD									
6100	A	V O/E	G	16.0	48	2	SEPARATOR	D-573	INLET MANIFOLD DRAIN	ENTRY END	N
6101	A	V	G	16.0	48	2	SEPARATOR	D-573	COOLER INLET MANIFOLD BLOCKING VALVE	ENTRY END	N
6106	Q	V O/E	G	16.0	48	2	COOLER	E-629	INLET MANIFOLD CLEANOUT VALVE	ENTRY END	N
OTHER											
6134	A	V	G	16.0	48	2	COOLER	E-629	OUTLET COOLER MANIFOLD CLEANOUT VALVE	DISCHARGE END	N

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TABLE 49
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB GAS WATER SEPARATOR

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene % Composition	Tagged #	Unit Area					
0491		DECANTER DRAIN CONTROL STATION									
6200	Q	V	G	57.6	49	2	SEPARATOR	D-575	DRAIN TO DECANTERS	GROUND LEVEL	Y
6201	Q	V	G	57.6	49	2	SEPARATOR	D-575	DRAIN TO DECANTERS	GROUND LEVEL	Y
6108	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	CLEANOUT	GROUND LEVEL	Y
6202	Q	V	G	57.6	49	2	SEPARATOR	D-575	DRAIN TO DECANTERS	GROUND LEVEL	Y
6203	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	DRAIN TO DECANTERS	GROUND LEVEL	Y
6204	Q	V	G	57.6	49	2	SEPARATOR	D-575	DRAIN TO DECANTERS	GROUND LEVEL	Y
6205	Q	V	G	57.6	49	2	SEPARATOR	D-575	BYPASS VALVE	GROUND LEVEL	Y
6206	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	CLEANOUT/DRAIN VALVE	GROUND LEVEL	Y
OTHER											
6207	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	WATER SEPARATOR BOTTOM DRAIN	GROUND LEVEL	Y
0492		SIGHT GLASS AND LEVEL CONTROL									
6210	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	LEVEL CONTROL BOTTOM CLEANOUT	GROUND LEVEL	Y
6211	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS BOTTOM CLEANOUT	GROUND LEVEL	Y
6212	A	V O/E	G	57.6	49	2	SEPARATOR	D-575	TOP VALVE LEVEL CONTROL	GROUND LEVEL	N
6213	A	V	G	57.6	49	2	SEPARATOR	D-575	TOP VALVE LEVEL CONTROL	GROUND LEVEL	N
6214	A	V	G	57.6	49	2	SEPARATOR	D-575	TOP VALVE SIGHT GLASS/ LEVEL CONTROL	GROUND LEVEL	N
6215	A	V	G	57.6	49	2	SEPARATOR	D-575	TOP VALVE SIGHT GLASS/ LEVEL CONTROL	GROUND LEVEL	N
6216	A	V O/E	G	57.6	49	2	SEPARATOR	D-575	TOP VALVE SIGHT GLASS/ LEVEL CONTROL	GROUND LEVEL	N
6217	A,V,O	C(x4)	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS/LEVEL CONTROL SCREW CONNECTORS	GROUND LEVEL	Y
6218	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS DRAIN	GROUND LEVEL	Y
6219	Q	V	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS DRAIN	GROUND LEVEL	Y
6220	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS DRAIN	GROUND LEVEL	Y
6221	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS DRAIN	GROUND LEVEL	Y
6222	Q	V	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS BOTTOM VALVE	GROUND LEVEL	Y
6223	Q	V O/E	G	57.6	49	2	SEPARATOR	D-575	SIGHT GLASS DRAIN	GROUND LEVEL	Y
0493		SUB GAS OUT									
6230	Q	V	G	16.0	49	2	SEPARATOR	D-575	TOP PRESSURE TAP	TOP OF UNIT	Y
6231	Q	V	G	16.0	49	2	SEPARATOR	D-575	BYPASS VALVE TO D 576	TOP OF UNIT	Y
6232	Q	V	G	16.0	49	2	SEPARATOR	D-575	RELIEF BLOCKING VALVE	TOP OF UNIT	Y
6233	Q	PRV O/E	G	16.0	49	2	SEPARATOR	D-575	RELIEF VALVE	TOP OF UNIT	Y
6234	Q	V O/E	G	16.0	49	2	SEPARATOR	D-575	OUTLET CLEANOUT VALVE	TOP OF UNIT	Y
6235	Q	PRV O/E	G	16.0	49	2	SEPARATOR	D-575	RELIEF VALVE	TOP OF UNIT	Y
6236	Q	V O/E	G	16.0	49	2	SEPARATOR	D-575	CLEANOUT	TOP OF UNIT	Y
6237	Q	V	G	16.0	49	2	SEPARATOR	D-575	PRESSURE TAP	TOP OF UNIT	Y
6238	A,V,O	C	G	16.0	49	2	SEPARATOR	D-575	PRESSURE GAUGE	TOP OF UNIT	Y
	A,V,O	C(x2)	G	16.0	49	2	SEPARATOR	D-575	MISCELLANEOUS UNMARKED FLANGES	TOP OF UNIT	Y

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TABLE 50
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB GAS AMMONIA COOLERS
14 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Reference Concentration	Figure #	Control Process					
0501		COOLER IN									
6300	Q	V	G	16.0	50	2	COOLER	E-635	INLET BLOCKING VALVE	ENTRY END	Y
6301	Q	V O/E	G	16.0	50	2	COOLER	E-635	INLET CLEANOUT VALVE	ENTRY END	Y
6302	Q	V O/E	G	16.0	50	2	COOLER	E-635	INLET CLEANOUT VALVE	ENTRY END	Y
6304	Q	V	G	16.0	50	2	COOLER	E-637	INLET CLEANOUT VALVE	ENTRY END	Y
6305	Q	V O/E	G	16.0	50	2	COOLER	E-637	INLET CLEANOUT VALVE BACKUP	ENTRY END	Y
6306	Q	V	G	16.0	50	2	COOLER	E-638	INLET BLOCKING VALVE	ENTRY END	Y
6307	Q	V O/E	G	16.0	50	2	COOLER	E-638	INLET CLEANOUT VALVE	ENTRY END	Y
0502		COOLER OUT									
6308	Q	V O/E	G	16.0	50	2	COOLER	E-638	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
6309	Q	V	G	16.0	50	2	COOLER	E-638	OUTLET BLOCKING VALVE	DISCHARGE END	Y
6310	Q	V O/E	G	16.0	50	2	COOLER	E-637	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
6311	Q	V O/E	G	16.0	50	2	COOLER	E-637	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
6303	Q	V	G	16.0	50	2	COOLER	E-635	OUTLET BLOCKING VALVE	DISCHARGE END	Y
6312	Q	V O/E	G	16.0	50	2	COOLER	E-635	OUTLET BLOCKING VALVE	DISCHARGE END	Y
6313	Q	V O/E	G	16.0	50	2	COOLER	E-635	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
	A,V,O	C(x3)	G	16.0	50	2	COOLER	GENERAL	UNMARKED FLANGES	GENERAL	Y

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TABLE 51
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB GAS AMMONIA COOLER SEPARATOR

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0511		DRAIN TO DECANTERS									
6402	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER CLEANOUT	GROUND LEVEL	Y
6403	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER CLEANOUT	GROUND LEVEL	Y
6404	Q	V	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER BLOCKING	GROUND LEVEL	Y
6405	Q	V	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER BLOCKING BYPASS	GROUND LEVEL	Y
6406	Q	V	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER DRAIN	GROUND LEVEL	Y
6407	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER DRAIN	GROUND LEVEL	Y
6408	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER DRAIN	GROUND LEVEL	Y
6409	Q	V	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER BLOCKING	GROUND LEVEL	Y
6410	Q	V	L	57.6	51	2	SEPARATOR	D-576	FEED LINE TO DECANTER CONTROL	GROUND LEVEL	Y
0512		SEPARATOR SG/LC BOTTOM									
6411	Q	V	L	57.6	51	2	SEPARATOR	D-576	BOTTOM SIGHT GLASS	GROUND LEVEL	Y
6412	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM SIGHT GLASS	GROUND LEVEL	Y
6428	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM SIGHT GLASS CLEANOUT	GROUND LEVEL	Y
6417	Q	V	L	57.6	51	2	SEPARATOR	D-576	SIGHTGLASS/LEVEL CONTROL VALVE	GROUND LEVEL	Y
6418	Q	V	L	57.6	51	2	SEPARATOR	D-576	BOTTOM SIGHT GLASS DRAIN	GROUND LEVEL	Y
6427	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM SIGHT GLASS DRAIN	GROUND LEVEL	Y
6419	Q	V	L	57.6	51	2	SEPARATOR	D-576	SIGHTGLASS/LEVEL CONTROL VALVE	GROUND LEVEL	Y
6420	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM LEVEL CONTROL DRAIN	GROUND LEVEL	Y
6421	Q	V	L	57.6	51	2	SEPARATOR	D-576	LEVEL CONTROL VALVE	GROUND LEVEL	Y
6422	Q	V	L	57.6	51	2	SEPARATOR	D-576	LEVEL CONTROL VALVE	GROUND LEVEL	Y
6426	Q	V	L	57.6	51	2	SEPARATOR	D-576	SIGHTGLASS VALVE	GROUND LEVEL	Y
0513		REGENERATOR FEED SPLITTER									
6445	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER DRAIN	THIRD LEVEL	Y
6446	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER DRAIN	THIRD LEVEL	Y
6455	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6456	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6457	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6458	A	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	10' UP	DTM
6459	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6460	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6461	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER VALVE	THIRD LEVEL	Y
6462	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER PRESSURE GAUGE VALVE	THIRD LEVEL	Y
6463	A,V,O	C	G	16.0	51	2	SEPARATOR	D-576	SUB GAS SPLITTER PRESSURE GAUGE	THIRD LEVEL	Y
0514		SUB GAS IN									
6430	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS INLET VALVE	SECOND LEVEL	Y
6431	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS INLET VALVE	SECOND LEVEL	Y
6432	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	CLEANOUT VALVE	SECOND LEVEL	Y
0515		SEPARATOR SG/LC TOP									
6413	A,V,O	C(x2)	L	57.6	51	2	SEPARATOR	D-576	SIGHTGLASS	GROUND LEVEL	Y
6429	A	V	G	16.0	51	2	SEPARATOR	D-576	SIGHTGLASS VALVE BLOCKING	12 FEET UP	DTM
6423	A	V	G	16.0	51	2	SEPARATOR	D-576	SIGHTGLASS/LEVEL CONTROL VALVE	12 FEET UP	DTM
6424	A	V	G	16.0	51	2	SEPARATOR	D-576	LEVEL CONTROL VALVE TOP CLEANOUT	12 FEET UP	DTM
6425	A,V,O	C(x2)	L	57.6	51	2	SEPARATOR	D-576	LEVEL CONTROL	GROUND LEVEL	Y
0516		SUB GAS OUT									
6441	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB SUB GAS RECYCLE	10' UP, 12' OUT	Y
6434	Q	V	G	16.0	51	2	SEPARATOR	D-576	RELIEF VALVE BLOCKING VALVE	SECOND LEVEL	Y
6435	Q	PRV O/E	G	16.0	51	2	SEPARATOR	D-576	PRESSURE RELIEF VALVE	THIRD LEVEL	Y
6444	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS OUTLET VALVE	10' UP, 12' OUT	Y
6437	Q	V	G	16.0	51	2	SEPARATOR	D-576	D-576 BYPASS VALVE	SECOND LEVEL	Y
6442	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS OUT CLEANOUT VALVE	10' UP, 12' OUT	Y
6443	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS COOLERS BYPASS	10' UP, 12' OUT	Y
6440	Q	PRV O/E	G	16.0	51	2	SEPARATOR	D-576	PRESSURE RELIEF VALVE	THIRD LEVEL	Y
6450	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS COOLERS BYPASS	THIRD LEVEL	Y
6451	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS COOLERS BYPASS	THIRD LEVEL	Y
6453	Q	V	G	16.0	51	2	SEPARATOR	D-576	SUB GAS COOLERS BYPASS	THIRD LEVEL	Y
6454	Q	V O/E	G	16.0	51	2	SEPARATOR	D-576	SUB GAS COOLERS BYPASS CLEANOUT		
OTHER											
6400	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM DRAIN	GROUND LEVEL	Y
6401	Q	V O/E	L	57.6	51	2	SEPARATOR	D-576	BOTTOM CLEANOUT	GROUND LEVEL	Y
	A,V,O	C(x7)	L	57.6	51	2	SEPARATOR	D-576	MISCELLANEOUS UNMARKED FLANGES	GENERAL	Y

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TABLE 52
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
VACUUM MACHINE HEADERS

6500	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6501	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6502	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6503	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6504	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6505	N/A	V	GV	16.0	52	2	HEADER	VAC MACHINE INLET MANIFOLD BLOCKING	IN INACCESSIBLE	UTM
6510	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6511	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6512	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6513	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6514	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6515	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD CLEANOUT	OUT INACCESSIBLE	UTM
6516	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6517	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6518	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6519	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM
6520	UTM	V	G	16.0	52	2	HEADER	VAC MACHINE EXHAUST MANIFOLD BLOCKING	OUT INACCESSIBLE	UTM

TABLE 53
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL REGENERATOR R-582

Tag Identification	Accounting Property	Component Type	Phase	Reserve Classification	Figure #	Control Room					
8531		LIGHT OIL WASH SYSTEM - BOTTOM									
6600	A-WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM UPPER CLEANOUT VALVE	GROUND LEVEL-15'	DTM
6609	WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM RELIEF VENT VALVE	GROUND LEVEL	Y
6616	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO DRAIN SYSTEM	GROUND LEVEL	Y
6602	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO DRAIN SYSTEM	GROUND LEVEL	Y
6603	WASH	V	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6617	WASH	V	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6605	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM VALVE	GROUND LEVEL	Y
6607	WASH	V	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6608	WASH	V	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6613	A-WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM NITROGEN	GROUND LEVEL-10'	DTM
6612	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6604	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6610	WASH	V	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6611	WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	Y
6612	WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	NITROGEN PURGE LINE	GROUND LEVEL	N
6606	UTM-WASH	V	L	57.6	53	2	LO REGEN	R-582	CHECK VALVE	GROUND LEVEL-20'	UTM
6614	WASH	V	L	57.6	53	2	LO REGEN	R-582	DERIMING GAS VALVE	GROUND LEVEL	Y
8532		LIGHT OIL WASH SYSTEM - TOP									
6620	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM VALVE BLOCKING	UPPER MID LEVEL	Y
6621	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
6622	WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM VALVE CLEANOUT	UPPER MID LEVEL	Y
6625	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEMVALVE	UPPER MID LEVEL	Y
6623	WASH	V O/E	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM CLEANOUT VALVE	UPPER MID LEVEL	Y
6624	WASH	V	L	57.6	53	2	LO REGEN	R-582	LO WASH SYSTEM VALVE BLOCKING	UPPER MID LEVEL	Y
8533		SUB SUB GAS OUT									
6646	Q	V	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS OUTLET VALVE BLOCKING	TOP	Y
6635	Q	V	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS OUTLET VALVE BLOCKING	TOP	Y
6631	Q	V	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS OUTLET VALVE	UPMID SUB SUB	Y
6632	A,V,O	C	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS PRESSURE GAUGE	UPMID SUB SUB	Y
6633	Q	V O/E	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS VALVE CLEANOUT	UPMID SUB SUB	Y
6634	Q	V	G	15.0	53	2	LO REGEN	R-582	SUB SUB GAS BLOCKING VALVE	UPMID SUB SUB	Y
8534		REGENERATOR DIFFERENTIAL PRESSURE									
6640	UTM	V	L	57.6	53	2	LO REGEN	R-582	DIFFERENTIAL PRESSURE TAP VALVE	TOP LEVEL, 15' OUT	UTM
6641	UTM	V	L	57.6	53	2	LO REGEN	R-582	DIFFERENTIAL PRESSURE TAP VALVE	TOP LEVEL, 15' OUT	UTM
6642	Q	V O/E	L	57.6	53	2	LO REGEN	R-582	DIFFERENTIAL PRESSURE TAP CLEANOUT	TOP LEVEL	Y
6643	A,V,O	C	L	57.6	53	2	LO REGEN	R-582	DP TRANSDUCER	TOP LEVEL	Y
6644	Q	V	L	57.6	53	2	LO REGEN	R-582	DIFFERENTIAL PRESSURE TAP INLINE VALVE	TOP LEVEL	Y
6645	Q	V O/E	L	57.6	53	2	LO REGEN	R-582	DIFFERENTIAL PRESSURE TAP 3 BLOCK VALVE	TOP LEVEL	Y
8535		SUB GAS IN									
6650	Q	V	G	16.0	53	2	LO REGEN	R-582	SUB GAS INLET VALVE	TOP TO MID	Y
6651	Q	V	G	16.0	53	2	LO REGEN	R-582	DERIMING GAS VALVE	UPMID SUB IN	Y
6652	Q	V	G	16.0	53	2	LO REGEN	R-582	CLEANOUT VALVE	UPMID SUB IN	Y
6653	Q	V	G	16.0	53	2	LO REGEN	R-582	PRESSURE TAP	UPMID SUB IN	Y
6654	A,V,O	C	G	16.0	53	2	LO REGEN	R-582	PRESSURE GAUGE	UPMID SUB IN	Y
6655	Q	V O/E	G	16.0	53	2	LO REGEN	R-582	LOADING VALVE V 504A2	UPMID SUB IN	Y
8536		CARBONATE GAS OUT									
6656	Q	V	G	0.3	53	2	LO REGEN	R-582	CLEAN SUB GAS OUTLET VALVE BLOCKING	TOP TO MID	Y
7023	Q	V	G	0.3	53	2	LO REGEN	R-582	CLEAN SUB GAS PRESSURE TAP	UPMID CARB LN	Y
6669	A	V O/E	G	0.3	53	2	LO REGEN	R-582	CLEAN SUB GAS VALVE CLEANOUT	UPMID CARB LN, 10' OUT	DTM
6663	Q	V	G	0.3	53	2	LO REGEN	R-582	CLEAN SUB GAS BLOCKING VALVE	UPMID CARB LN	Y
7024	A,V,O	C	G	0.3	53	2	LO REGEN	R-582	PRESSURE GAUGE	UPMID CARB LN	Y
OTHER											
6657	Q	V	L	57.6	53	2	LO REGEN	R-582	PRV BLOCKING VALVE	ABOVE REGEN	Y
7022	Q	PRV O/E	L	57.6	53	2	LO REGEN	R-582	PRESSURE RELIEF VALVE	ABOVE REGEN	Y
	A,V,O	C(x3)	L	57.6	53	2	LO REGEN	R-582	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	GENERAL	Y

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TABLE 54
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL REGENERATOR R-584

Tag Identification	Monitoring Frequency	Component Type	Phase	Maximum Concentration	Process #	Unit #	Unit Name				
9541		LIGHT OIL WASH SYSTEM - BOTTOM									
6700	A-WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM UPPER CLEANOUT VALVE	GROUND LEVEL-15'	DTM
6701	WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM RELIEF VENT VALVE	GROUND LEVEL	Y
6702	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO DRAIN SYSTEM	GROUND LEVEL	Y
6703	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO DRAIN SYSTEM	GROUND LEVEL	Y
6704	WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	LO DRAIN SYSTEM	GROUND LEVEL	Y
6705	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO DRAIN SYSTEM	GROUND LEVEL	Y
6706	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	GROUND LEVEL	Y
6707	WASH	V	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6708	WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6709	WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6710	A-WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM NITROGEN	GROUND LEVEL	Y
6711	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6717	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6715	WASH	V	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6716	A,V,O	C	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6718	WASH	V	L	57.6	54	2	LO REGEN	R-584	NITROGEN PURGE LINE	GROUND LEVEL	Y
6714	UTM-WASH	V	L	57.6	54	2	LO REGEN	R-584	CHECK VALVE	GROUND LEVEL	UTM
6712	WASH	V	L	57.6	54	2	LO REGEN	R-584	DERIMING GAS VALVE	GROUND LEVEL	Y
9542		LIGHT OIL WASH SYSTEM - TOP									
6720	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
6721	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
6722	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
6723	WASH	V O/E	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
6724	WASH	V	L	57.6	54	2	LO REGEN	R-584	LO WASH SYSTEM VALVE	UPPER MID LEVEL	Y
9543		SUB SUB GAS OUT									
6730	Q	V	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS OUTLET VALVE	TOP TO MID	Y
6731	Q	V	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS VALVE	UPMID SUB SUB	Y
6732	Q	V	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS VALVE	UPMID SUB SUB	Y
6736	A,V,O	C	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS PRESSURE GAUGE	UPMID SUB SUB	Y
6734	A	V	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS VALVE	UPMID SUB SUB	DTM
6735	Q	V	G	15.0	54	2	LO REGEN	R-584	SUB SUB GAS BLOCKING VALVE	UPMID SUB SUB	Y
9544		REGENERATOR DIFFERENTIAL PRESSURE									
6742	UTM	V	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP VALVE	TOP LEVEL	N
6741	Q	V	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP 3 VALVE BLOCK	TOP LEVEL	Y
6743	A,V,O	C	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE	TOP LEVEL	Y
6748	UTM	V	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP VALVE	TOP LEVEL	N
6745	Q	V O/E	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP VALVE CLEANOUT	TOP LEVEL	Y
6746	Q	V	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP VALVE	TOP LEVEL	Y
6747	A,V,O	C	L	57.6	54	2	LO REGEN	R-584	DIFFERENTIAL PRESSURE TAP GAUGE	TOP LEVEL	Y
9545		SUB GAS IN									
6750	Q	V	G	16.0	54	2	LO REGEN	R-584	SUB GAS INLET VALVE	TOP TO MID	Y
6751	Q	V	G	16.0	54	2	LO REGEN	R-584	DERIMING GAS VALVE	UPMID SUB IN	Y
6752	Q	V	G	16.0	54	2	LO REGEN	R-584	SUB GAS VALVE	UPMID SUB IN	Y
6753	Q	V	G	16.0	54	2	LO REGEN	R-584	SUB GAS VALVE	UPMID SUB IN	Y
6754	A,V,O	C	G	16.0	54	2	LO REGEN	R-584	SUB GAS VALVE GAUGE	UPMID SUB IN	Y
6755	Q	V O/E	G	16.0	54	2	LO REGEN	R-584	SUB GAS O/E VALVE	UPMID SUB IN	Y
6757	Q	V	G	16.0	54	2	LO REGEN	R-584	SUB GAS BLOCKING VALVE	UPMID SUB IN	Y
6756	Q	V	G	16.0	54	2	LO REGEN	R-584	SUB GAS BLOCKING VALVE	UPMID SUB IN	Y
9546		CARBONATE GAS OUT									
6725	Q	V	G	0.3	54	2	LO REGEN	R-584	CLEAN SUB GAS OUTLET VALVE	TOP TO MID	Y
6762	Q	V	G	0.3	54	2	LO REGEN	R-584	CLEAN SUB GAS OUT BLOCKING VALVE	UPMID CARB LN	Y
OTHER											
6737	Q	V	L	57.6	54	2	LO REGEN	R-584	PRV BLOCKING VALVE	ABOVE REGEN	Y
6736	Q	PRV O/E	L	57.6	54	2	LO REGEN	R-584	PRESSURE RELIEF VALVE	ABOVE REGEN	Y
	A,V,O	C(x3)	L	57.6	54	2	LO REGEN	R-584	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	GENERAL	Y

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TABLE 55
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL REGENERATOR R-586

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
0551		LIGHT OIL WASH SYSTEM - BOTTOM								
6802	A-WASH	V O/E	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM UPPER CLEANOUT VALVE	GROUND LEVEL-15'	DTM
6809	WASH	V O/E	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM RELIEF VENT VALVE	GROUND LEVEL	Y
6818	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO DRAIN SYSTEM	GROUND LEVEL	Y
6819	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO DRAIN SYSTEM	GROUND LEVEL	Y
6820	WASH	V	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6817	WASH	V	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6805	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	GROUND LEVEL	Y
6806	WASH	V	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6808	WASH	V O/E	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6813	A-WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM NITROGEN	GROUND LEVEL-10'	DTM
6801	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6804	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6810	WASH	V	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6811	WASH	V	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6812	WASH	C	L	57.6	55	2	LO REGEN	R-586	NITROGEN PURGE LINE	GROUND LEVEL	Y
6800	UTM-WASH	V	L	57.6	55	2	LO REGEN	R-586	CHECK VALVE	GROUND LEVEL-20'	UTM
6814	WASH	V	L	57.6	55	2	LO REGEN	R-586	DERIMING GAS VALVE	GROUND LEVEL	Y
0552		LIGHT OIL WASH SYSTEM - TOP								
6803	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6821	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6824	WASH	V O/E	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6834	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6835	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6822	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
6825	WASH	C	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM PRESSURE GAUGE	UPPER MID	Y
6823	WASH	V	L	57.6	55	2	LO REGEN	R-586	LO WASH SYSTEM VALVE	UPPER MID	Y
	WASH	C	L	57.6	55	2	LO REGEN	R-586	UNMARKED BLIND FLANGE	UPPER MID	Y
0553		SUB SUB GAS OUT								
6830	Q	V	G	15.0	55	2	LO REGEN	R-586	SUB SUB GAS OUTLET VALVE	LOW TOP	Y
6831	Q	V	G	15.0	55	2	LO REGEN	R-586	SUB SUB GAS VALVE	UPPER MID	Y
6832	A,V,O	C	G	15.0	55	2	LO REGEN	R-586	SUB SUB GAS PRESSURE GAUGE	UPPER MID	Y
6833	Q	V	G	15.0	55	2	LO REGEN	R-586	SUB SUB GAS VALVE	UPPER MID	Y
6847	Q	V	G	15.0	55	2	LO REGEN	R-586	SUB SUB GAS BLOCKING VALVE	UPPER MID	Y
0554		REGENERATOR DIFFERENTIAL PRESSURE								
6842	UTM	V	L	57.6	55	2	LO REGEN	R-586	DIFFERENTIAL PRESSURE TAP VALVE	TOP	UTM
6841	Q	V	L	57.6	55	2	LO REGEN	R-586	DIFFERENTIAL PRESSURE TAP 3 VALVE BLOCK	TOP	Y
5667	UTM	V	L	57.6	55	2	LO REGEN	R-586	DIFFERENTIAL PRESSURE TAP VALVE	TOP	UTM
6844	Q	V	L	57.6	55	2	LO REGEN	R-586	DIFFERENTIAL PRESSURE TAP VALVE	TOP	Y
6845	Q	V O/E	L	57.6	55	2	LO REGEN	R-586	DIFFERENTIAL PRESSURE TAP CLEANOUT VALVE	TOP	Y
6846	A,V,O	C	L	57.6	55	2	LO REGEN	R-586	PRESSURE GAUGE	TOP	Y
0555		SUB GAS IN								
6850	Q	V	G	16.0	55	2	LO REGEN	R-586	SUB GAS INLET VALVE	LOW TOP	Y
6851	Q	V	G	16.0	55	2	LO REGEN	R-586	SUB GAS VALVE	UPPER MID	Y
6855	A,V,O	C	G	16.0	55	2	LO REGEN	R-586	SUB GAS PRESSURE GAUGE	UPPER MID	Y
6852	Q	V	G	16.0	55	2	LO REGEN	R-586	SUB GAS VALVE	UPPER MID	Y
6853	Q	V	G	16.0	55	2	LO REGEN	R-586	DERIMING GAS VALVE	UPPER MID	Y
6854	Q	V	G	16.0	55	2	LO REGEN	R-586	504C2 LOADING VALVE	UPPER MID	Y
0556		CARBONATE GAS OUT								
6860	Q	V	L	0.3	55	2	LO REGEN	R-586	CLEAN SUB GAS OUTLET VALVE	LOW TOP	Y
6861	Q	V O/E	L	0.3	55	2	LO REGEN	R-586	CLEAN SUB GAS VALVE	UPPER MID	Y
6862	Q	V	L	0.3	55	2	LO REGEN	R-586	CLEAN SUB GAS VALVE	UPPER MID	Y
6864	Q	V	L	0.3	55	2	LO REGEN	R-586	CLEAN SUB GAS VALVE	UPPER MID	Y
6865	Q	V	G	0.3	55	2	LO REGEN	R-586	CLEAN SUB GAS BLOCKING VALVE	UPPER MID	Y
OTHER										
6837	Q	V	L	57.6	55	2	LO REGEN	R-586	PRESSURE RELIEF BLOCKING VALVE	TOP	Y
6856	Q	PRV O/E	L	57.6	55	2	LO REGEN	R-586	PRESSURE RELIEF VALVE	TOP	Y
	A,V,O	C(x3)	L	57.6	56	2	LO REGEN	R-590	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	GENERAL	Y

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TABLE 56
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL REGENERATOR R-590

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
0561	LIGHT OIL WASH SYSTEM - BOTTOM									
6900	A-WASH	V O/E	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM UPPER CLEANOUT VALVE	GROUND LEVEL-18'	DTM
6909	WASH	V O/E	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM RELIEF VENT VALVE	GROUND LEVEL	Y
6916	WASH	V	L	57.6	56	2	LO REGEN	R-590	LO DRAIN SYSTEM	GROUND LEVEL	Y
6902	WASH	V	L	57.6	56	2	LO REGEN	R-590	LO DRAIN SYSTEM	GROUND LEVEL	Y
6922	WASH	V O/E	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6903	WASH	V	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6917	WASH	V	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6905	WASH	V	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM VALVE	GROUND LEVEL	Y
6907	WASH	V	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6908	WASH	V O/E	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6913	A-WASH	V	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM NITROGEN	GROUND LEVEL-10'	DTM
6901	WASH	V	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6904	WASH	V	L	57.6	56	2	LO REGEN	R-590	LO WASH SYSTEM AUTOVALVE	GROUND LEVEL	Y
6910	WASH	V	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6911	WASH	V	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	Y
6912	WASH	V O/E	L	57.6	56	2	LO REGEN	R-590	NITROGEN PURGE LINE	GROUND LEVEL	N
6918	UTM-WASH	V	L	57.6	56	2	LO REGEN	R-590	CHECK VALVE	GROUND LEVEL-20'	UTM
6915	WASH	V	L	57.6	56	2	LO REGEN	R-590	DERIMING GAS VALVE	GROUND LEVEL	Y
0562	LIGHT OIL WASH SYSTEM - TOP									
6920	WASH	V	L	57.6	56	2	LO REGEN	R-590	LIGHT OIL WASH	MID	Y
6921	WASH	V	L	57.6	56	2	LO REGEN	R-590	LIGHT OIL WASH	MID	Y
6923	WASH	V	L	57.6	56	2	LO REGEN	R-590	LIGHT OIL WASH	MID	Y
6924	WASH	V	L	57.6	56	2	LO REGEN	R-590	LIGHT OIL WASH	MID	Y
6925	WASH	V	L	57.6	56	2	LO REGEN	R-590	LIGHT OIL WASH	MID	Y
0563	SUB SUB GAS OUT									
6930	Q	V	G	15.0	56	2	LO REGEN	R-590	SUB SUB GAS OUTLET	MID S 2 GAS	Y
6932	Q	V	G	15.0	56	2	LO REGEN	R-590	SUB SUB GAS	MID S 2 GAS	Y
6933	DTM-A.V.O	C	G	15.0	56	2	LO REGEN	R-590	SUB SUB GAS PRESSURE GAUGE	MID S 2 GAS	DTM
6934	A	V	G	15.0	56	2	LO REGEN	R-590	SUB SUB GAS	MID S 2 GAS	DTM
0564	REGENERATOR DIFFERENTIAL PRESSURE									
6945	UTM	V	L	57.6	56	2	LO REGEN	R-590	DIFFERENTIAL PRESSURE TAP VALVE	TOP PRESSURE	N
6941	Q	V O/E	L	57.6	56	2	LO REGEN	R-590	DIFFERENTIAL PRESSURE TAP 3 VALVE BLOCK	TOP PRESSURE	Y
6946	UTM	V	L	57.6	56	2	LO REGEN	R-590	DIFFERENTIAL PRESSURE TAP VALVE	TOP PRESSURE	N
6943	Q	V	L	57.6	56	2	LO REGEN	R-590	DIFFERENTIAL PRESSURE TAP VALVE	TOP PRESSURE	Y
6944	A.V.O	C	L	57.6	56	2	LO REGEN	R-590	DIFFERENTIAL PRESSURE	TOP PRESSURE	Y
0565	SUB GAS IN									
6950	Q	V	G	16.0	56	2	LO REGEN	R-590	SUB GAS INLET	TOP SUB IN	Y
6951	Q	V	G	16.0	56	2	LO REGEN	V504-D2	LOADING	TOP SUB IN	Y
6957	Q	V	G	16.0	56	2	LO REGEN	V504-D2	SUB GAS	TOP SUB IN	Y
6955	Q	V	G	16.0	56	2	LO REGEN	R-590	SUB GAS	TOP SUB IN	Y
6954	Q	V	G	16.0	56	2	LO REGEN	R-590	SUB GAS	TOP SUB IN	Y
6953	Q	V	G	16.0	56	2	LO REGEN	R-590	SUB GAS PRESSURE VALVE	TOP SUB IN	Y
6952	A.V.O	C	G	16.0	56	2	LO REGEN	R-590	SUB GAS PRESSURE GAUGE	TOP SUB IN	Y
0566	CARBONATE GAS OUT									
7077	Q	V	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS OUTLET	TOP CARB OUT	Y
6447	Q	V	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS	TOP CARB OUT	Y
6448	Q	V	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS	TOP CARB OUT	Y
6452	Q	V O/E	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS	TOP CARB OUT	Y
6449	A.V.O	C	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS PRESSURE GAUGE	TOP CARB OUT	Y
6433	Q	V	G	0.3	56	2	LO REGEN	R-590	CARBONATE GAS	TOP CARB OUT	Y
OTHER										
6935	Q	V	L	57.6	56	2	LO REGEN	R-590	PRV BLOCKING VALVE	ABOVE REGEN	Y
6968	Q	PRV O/E	L	57.6	56	2	LO REGEN	R-590	PRESSURE RELIEF VALVE	ABOVE REGEN	Y
	A.V.O	C(x3)	L	57.6	56	2	LO REGEN	R-590	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	GENERAL	Y

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TABLE 57
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS LIGHT OIL REGENERATION AUSPUFF SYSTEM

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9571		SUB SUB GAS CONTROL STATION									
6970	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
6971	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
6972	Q	V O/E	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
6973	Q	V O/E	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
6974	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
6975	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS CONTROL STATION	MD LVL EAST R582	Y
9572		SUB SUB GAS ORIFICE SYSTEM									
6976	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE TAP	MD LVL EAST R582	Y
6977	A,V,O	C(x2)	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE TRANSDUCER	MD LVL EAST R582	Y
6978	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE TRANSDUCER VALVE	MD LVL EAST R582	Y
6985	A,V,O	C	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE GAUGE	MD LVL EAST R582	Y
6979	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE VALVE	MD LVL EAST R582	Y
6980	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE TAP	MD LVL EAST R582	Y
6981	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE TAP	MD LVL EAST R582	Y
6982	Q	V	G	15.0	57	2	LO REGEN	R-584	SUB SUB GAS ORIFICE PRESSURE BLOCKING	MD LVL EAST R582	Y
6983	Q	V	G	15.0	57	2	PRESSURE	PCV6511	SUB SUB GAS ORIFICE PRESSURE GAUGE VALVE	MD LVL EAST R582	Y
6984	A,V,O	C	G	15.0	57	2	TRANSDUCER	PCV6511	SUB SUB GAS ORIFICE PRESSURE GAUGE	MD LVL EAST R582	Y
	A,V,O	C(x3)	G	15.0	57	2	GENERAL	GENERAL	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	MD LVL EAST R582	Y

TABLE 58
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS INJECTION WATER SEPARATOR

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment #	Control Room					
9581		DRAIN TO DECANTERS									
7000	Q	V	L	57.6	58	2	SEPARATOR	D-600	FEED VALVES TO DECANTER BYPASS	GROUND LEVEL	Y
7001	Q	V O/E	L	57.6	58	2	SEPARATOR	D-600	FEED VALVES TO DECANTER CLEANOUT	GROUND LEVEL	Y
7002	Q	V	L	57.6	58	2	SEPARATOR	D-600	FEED VALVES TO DECANTER	GROUND LEVEL	Y
7003	Q	V	L	57.6	58	2	SEPARATOR	D-600	FEED CONTROL VALVE TO DECANTER	GROUND LEVEL	Y
7004	Q	V	L	57.6	58	2	SEPARATOR	D-600	FEED VALVES TO DECANTER	GROUND LEVEL	Y
9582		SEPARATOR SG/LC									
7016	Q	V	L	57.6	58	2	SEPARATOR	D-600	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL	GROUND LEVEL	Y
7014	Q	V O/E	L	58.6	58	2	SEPARATOR	D-601	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL DRAIN	GROUND LEVEL	Y
7021	Q	V	L	59.6	58	2	SEPARATOR	D-602	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL DRAIN	GROUND LEVEL	Y
7028	Q	V O/E	L	60.6	58	2	SEPARATOR	D-603	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL DRAIN	GROUND LEVEL	Y
7027	Q	V	L	57.6	58	2	SEPARATOR	D-600	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL	GROUND LEVEL	Y
7015	Q	V	L	57.6	58	2	SEPARATOR	D-600	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL	GROUND LEVEL	Y
7017	Q	V	L	57.6	58	2	SEPARATOR	D-600	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL	GROUND LEVEL	Y
7019	Q	V O/E	L	57.6	58	2	SEPARATOR	D-600	BOTTOM VALVES SIGHT GLASS/LEVEL CONTROL	GROUND LEVEL	Y
7020	A,V,O	C(x2)	L	57.6	58	2	SEPARATOR	D-600	SIGHT GLASS	GROUND LEVEL	Y
7022	A	V	L	57.6	58	2	SEPARATOR	D-600	TOP VALVES SIGHT GLASS/LEVEL CONTROL	12' UP	DTM
7023	A	V	L	57.6	58	2	SEPARATOR	D-600	TOP VALVES SIGHT GLASS/LEVEL CONTROL	12' UP	DTM
7024	A,V,O	C(x2)	L	57.6	58	2	SEPARATOR	D-600	LEVEL CONTROL	GROUND LEVEL	Y
7025	A	V	L	57.6	58	2	SEPARATOR	D-600	TOP VALVES SIGHT GLASS/LEVEL CONTROL	12' UP	DTM
7026	Q	V O/E	L	57.6	58	2	SEPARATOR	D-600	SIGHT GLASS BOTTOM VALVES	GROUND LEVEL	Y
9583		SUB SUB GAS OUT									
7030	Q	V	G	15.0	58	2	SEPARATOR	D-600	NEW RELIEF VALVE BLOCKING VALVE	20' UP	Y
7031	Q	V O/E	G	15.0	58	2	SEPARATOR	D-600	CLEANOUT VALVE	20' UP	Y
7032	A	PRV O/E	G	15.0	58	2	SEPARATOR	D-600	PRESSURE RELIEF VALVE	20' UP	DTM
7033	Q	V O/E	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVE CLEANOUT	20' UP	Y
7034	Q	V O/E	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVE CLEANOUT	20' UP	Y
7035	Q	V O/E	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVE CLEANOUT	20' UP	Y
7029	Q	V O/E	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVE CLEANOUT	20' UP	Y
9584		SUB SUB GAS IN									
7036	UTM	V	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVES TANK BYPASS	20' UP	UTM
7037	UTM	V O/E	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVES	20' UP	UTM
7038	UTM	V	G	15.0	58	2	SEPARATOR	D-600	TOP GAS VALVES	20' UP	UTM
OTHER											
7005	Q	V	L	57.6	58	2	SEPARATOR	D-600	BOTTOM TANK DRAIN	GROUND LEVEL	Y
7018	Q	V O/E	L	57.6	58	2	SEPARATOR	D-600	BOTTOM SIDE DRAIN	GROUND LEVEL	Y
	A,V,O	C(x3)	L	57.6	58	2	SEPARATOR	D-600	MISCELLANEOUS FLANGES AND OTHER UNMARKED CONNECTORS	GENERAL	Y

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TABLE 59
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS WATER COOLER
20 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0591		COOLER 639 IN									
7056	Q	V	G	15.0	59	2	WATER COOL	E-639	INLET BLOCKING VALVE	LEVEL 2, INLET	Y
7060	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	INLET BLOCKING VALVE CLEANOUT	LEVEL 2, INLET	Y
7061	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	INLET BLOCKING VALVE CLEANOUT	LEVEL 2, INLET	Y
7057	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	INLET CLEANOUT VALVE	LEVEL 2, INLET	Y
7058	Q	V	G	15.0	59	2	WATER COOL	E-639	INLET CLEANOUT VALVE	LEVEL 2, INLET	Y
7059	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	INLET SIDE COOLER CLEANOUT VALVE	LEVEL 2, INLET	Y
0592		COOLER 639 OUT									
7051	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	OUTLET TOP COOLER CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7070	Q	V	G	15.0	59	2	WATER COOL	E-639	OUTLET SIDE COOLER CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7071	Q	V	G	15.0	59	2	WATER COOL	E-639	OUTLET BLOCKING VALVE	LEVEL 2, DISCHARGE	Y
7072	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	OUTLET CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7073	Q	V O/E	G	15.0	59	2	WATER COOL	E-639	OUTLET CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
0593		COOLER 640 IN									
7062	Q	V	G	15.0	59	2	WATER COOL	E-640	INLET BLOCKING VALVE	LEVEL 2, INLET	Y
7063	Q	V	G	15.0	59	2	WATER COOL	E-640	INLET CLEANOUT VALVE	LEVEL 2, INLET	Y
7064	Q	V O/E	G	15.0	59	2	WATER COOL	E-640	INLET CLEANOUT VALVE	LEVEL 2, INLET	Y
7065	Q	V O/E	G	15.0	59	2	WATER COOL	E-640	INLET SIDE COOLER CLEANOUT VALVE	LEVEL 2, INLET	Y
0594		COOLER 640 OUT									
7055	Q	V O/E	G	15.0	59	2	WATER COOL	E-640	OUTLET TOP COOLER CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7074	Q	V O/E	G	15.0	59	2	WATER COOL	E-640	OUTLET SIDE COOLER CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7075	Q	V O/E	G	15.0	59	2	WATER COOL	E-640	OUTLET CLEANOUT VALVE	LEVEL 2, DISCHARGE	Y
7076	Q	V	G	15.0	59	2	WATER COOL	E-640	OUTLET BLOCKING VALVE	LEVEL 2, DISCHARGE	Y
0595		SUB SUB GAS BYPASS LOOP									
7050	Q	V	G	15.0	59	2	WATER COOL	E-639/640	BLOCKING VALVE BYPASS LOOP	EAST OF COOLERS	Y
7052	Q	V O/E	G	15.0	59	2	WATER COOL	E-639/640	BYPASS LOOP CLEANOUT VALVE	EAST OF COOLERS	Y
7054	Q	V O/E	G	15.0	59	2	WATER COOL	E-639/640	BLOCKING VALVE BYPASS LOOP	EAST OF COOLERS	Y

TABLE 60
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS WATER SEPARATOR

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Pressure	Control Room					
0601		DRAIN TO DECANTERS									
7101	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7102	Q	V	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS BLOCKING	GROUND LEVEL	Y
7105	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7103	Q	V	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS BLOCKING	GROUND LEVEL	Y
7104	Q	V	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS BLOCKING	GROUND LEVEL	Y
7106	Q	V	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS BLOCKING	GROUND LEVEL	Y
7107	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7108	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7109	Q	V	L	57.6	60	2	SEPARATOR	D-602	FEED VALVES TO DECANTERS BLOCKING	GROUND LEVEL	Y
0602		BOTTOM SG/LC									
7110	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7111	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7112	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
5312	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	CLEANOUT VALVE	GROUND LEVEL	Y
7113	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7114	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7115	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7116	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7117	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7118	Q	V	L	57.6	60	2	SEPARATOR	D-602	SIGHT GLASS LEVEL CONTROLLER	GROUND LEVEL	Y
7119	A,V,O	C(x2)	G	15.0	60	2	SEPARATOR	D-602	LEVEL CONTROLLER	GROUND LEVEL	Y
7120	A,V,O	C(x2)	G	15.0	60	2	SEPARATOR	D-602	SIGHT GLASS	GROUND LEVEL	Y
0603		SEPARATOR GAS OUT									
7131	Q	V	G	15.0	60	2	SEPARATOR	D-602	RELIEF VALVE TAP	SECOND LEVEL	Y
7132	Q	PRV O/E	G	15.0	60	2	SEPARATOR	D-602	RELIEF VALVE	SECOND LEVEL	Y
7133	Q	PRV O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT RELIEF VALVE	SECOND LEVEL	Y
7134	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CLEANOUT	SECOND LEVEL	Y
7135	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CLEANOUT	SECOND LEVEL	Y
7136	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CLEANOUT	SECOND LEVEL	Y
7137	Q	V	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT BLOCKING VALVE	SECOND LEVEL	Y
7138	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CLEANOUT	SECOND LEVEL	Y
7139	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CLEANOUT	SECOND LEVEL	Y
7140	Q	V	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS RETURN	SECOND LEVEL	Y
0604		TO DOWNRIVER GAS									
7141	Q	V	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT TO DOWN RIVER	THIRD LEVEL	Y
7142	Q	V	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT CONTROL VALVE DOWN RIVER	THIRD LEVEL	Y
7143	Q	V	G	15.0	60	2	SEPARATOR	D-602	SUB SUB GAS OUT TO DOWN RIVER	THIRD LEVEL	Y
0605		TOP SG/LC									
7121	Q	V	G	15.0	60	2	SEPARATOR	D-602	SIGHT GLASS CLEANOUT	LADDER, N OF TK.	Y
7122	Q	V	G	15.0	60	2	SEPARATOR	D-602	SIGHT GLASS CLEANOUT	LADDER, N OF TK.	Y
7123	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	SIGHT GLASS CLEANOUT	LADDER, N OF TK.	Y
7128	A	V	G	15.0	60	2	SEPARATOR	D-602	SIGHT GLASS/LEVEL CONTROLLER TOP VALVE	12' UP	DTM
OTHER											
7100	Q	V O/E	L	57.6	60	2	SEPARATOR	D-602	TANK BOTTOM DRAIN	GROUND LEVEL	Y
7130	Q	V O/E	G	15.0	60	2	SEPARATOR	D-602	INLET PRESSURE TAP	SECOND LEVEL	Y
	A,V,O	C(x5)	G	15.0	60	2	SEPARATOR	D-602	MISCELLANEOUS UNMARKED FLANGES	GENERAL AREA	Y

TABLE 61
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS AMMONIA COOLERS

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Equipment	Control Room					
8611		COOLER 641 IN									
7150	Q	V	G	15.0	61	2	COOLER	E-641	INLET BLOCKING VALVE	INLET END	Y
7151	Q	V O/E	G	15.0	61	2	COOLER	E-641	INLET CLEANOUT VALVE	INLET END	Y
7157	Q	V	G	15.0	61	2	COOLER	E-641	INLET BLOCKING VALVE	INLET END	Y
7153	Q	V O/E	G	15.0	61	2	COOLER	E-641	INLET CLEANOUT VALVE	INLET END	Y
8612		COOLER 641 OUT									
7167	A,V,O	C	G	15.0	61	2	COOLER	E-641	OUTLET PRESSURE GAUGE	DISCHARGE END	Y
7164	Q	V	G	15.0	61	2	COOLER	E-641	OUTLET BLOCKING VALVE	DISCHARGE END	Y
7165	Q	V O/E	G	15.0	61	2	COOLER	E-641	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
7166	Q	V	G	15.0	61	2	COOLER	E-641	OUTLET BLOCKING VALVE	DISCHARGE END	Y
8613		COOLER 642 IN									
7160	Q	V	G	15.0	61	2	COOLER	E-642	INLET BLOCKING VALVE	INLET END	Y
7161	Q	V O/E	G	15.0	61	2	COOLER	E-642	INLET CLEANOUT VALVE	INLET END	Y
7162	Q	V	G	15.0	61	2	COOLER	E-642	INLET BLOCKING VALVE	INLET END	Y
7163	Q	V O/E	G	15.0	61	2	COOLER	E-642	INLET CLEANOUT VALVE	INLET END	Y
8614		COOLER 642 OUT									
7151	Q	V	G	15.0	61	2	COOLER	E-642	OUTLET BLOCKING VALVE	DISCHARGE END	Y
7156	Q	V O/E	G	15.0	61	2	COOLER	E-642	OUTLET CLEANOUT VALVE	DISCHARGE END	Y
7155	Q	V	G	15.0	61	2	COOLER	E-642	OUTLET PRESSURE TAP	DISCHARGE END	Y
7481	A,V,O	C	G	15.0	61	3	COOLER	E-642	OUTLET PRESSURE GAUGE	DISCHARGE END	Y

TABLE 62
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB SUB GAS AMMONIA COOLER SEPARATOR

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Repair #	Control Room					
0621		DRAIN TO DECANTERS									
7201	Q	V	L	57.6	62	2	SEPARATOR	D-624	BYPASS FEED TO DECANTERS	GROUND LEVEL	Y
7202	Q	V	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS	GROUND LEVEL	Y
7203	Q	V	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS	GROUND LEVEL	Y
7204	Q	V	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS	GROUND LEVEL	Y
7205	Q	V	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7209	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7214	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7206	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7207	Q	V	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT	GROUND LEVEL	Y
7208	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	FEED TO DECANTERS CLEANOUT BACKUP	GROUND LEVEL	Y
0622		SIGHT GLASS / LEVEL CONTROL - BOTTOM									
7215	Q	V	L	57.6	62	2	SEPARATOR	D-624	LEVEL CONTROL BLOCKING	GROUND LEVEL	Y
7216	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	LEVEL CONTROL DRAIN	GROUND LEVEL	Y
7217	Q	V	L	57.6	62	2	SEPARATOR	D-624	LEVEL CONTROL VALVE	GROUND LEVEL	Y
7218	Q	V	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS/ LEVEL CONTROL BLOCKING	GROUND LEVEL	Y
7219	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS DRAIN	GROUND LEVEL	Y
7220	Q	V	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS VALVE	GROUND LEVEL	Y
7221	Q	V	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS BOTTOM CONTROL VALVE	GROUND LEVEL	Y
7222	Q	V	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS/ LEVEL CONTROL	GROUND LEVEL	Y
7223	Q	V	L	57.6	62	2	SEPARATOR	D-624	LEVEL CONTROL BOTTOM VALVES	GROUND LEVEL	Y
7229	A,V,O	C(x2)	L	57.6	62	2	SEPARATOR	D-624	LEVEL CONTROLLER	GROUND LEVEL	Y
7230	A,V,O	C(x2)	L	57.6	62	2	SEPARATOR	D-624	SIGHT GLASS	GROUND LEVEL	Y
0623		BYPASS TO 576 SEPARATOR									
7235	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 BLOCKING	LEVEL 2 RECYCLE	Y
7236	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 CLEANOUT	LEVEL 2 RECYCLE	Y
7237	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 BLOCKING CONTROL	LEVEL 2 RECYCLE	Y
7238	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 CLEANOUT	LEVEL 2 RECYCLE	Y
7239	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 BLOCKING	LEVEL 2 RECYCLE	Y
7240	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 BLOCKING BYPASS	LEVEL 2 RECYCLE	Y
0624		SUB SUB GAS OUT PRESSURE									
7250	Q	V	G	15.0	62	2	SEPARATOR	D-624	PRESSURE RELIEF BLOCKING VALVE	LEVEL 2	Y
7251	Q	PRV O/E	G	15.0	62	2	SEPARATOR	D-624	PRESSURE RELIEF VALVE	LEVEL 2	Y
7255	Q	V	G	15.0	62	2	SEPARATOR	D-624	BYPASS VALVE	LEVEL 2	Y
7253	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	CLEANOUT	LEVEL 2	Y
7254	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	CLEANOUT	LEVEL 2	Y
7256	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	CLEANOUT	LEVEL 2	Y
0625		SUB SUB GAS OUT TO DOWNRIVER									
7280	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	ORIFICE PLATE CLEANOUT VALVE	LEVEL 3	Y
7281	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	ORIFICE PLATE CLEANOUT VALVE	LEVEL 3	Y
7282	Q	V	G	15.0	62	2	SEPARATOR	D-624	BLOCKING VALVE TO 3-WAY BLOCK	LEVEL 3	Y
7283	Q	V	G	15.0	62	2	SEPARATOR	D-624	3 WAY VALVE	LEVEL 3	Y
7285	Q	V	G	15.0	62	2	SEPARATOR	D-624	BLOCKING VALVE TO 3-WAY BLOCK	LEVEL 3	Y
7286	Q	V	G	15.0	62	2	SEPARATOR	D-624	BLOCKING VALVE TO DOWNRIVER	LEVEL 3	Y
7287	Q	V	G	15.0	62	2	SEPARATOR	D-624	3 WAY VALVE DISTRIBUTION	LEVEL 3	Y
7288	Q	V	G	15.0	62	2	SEPARATOR	D-624	#5 CONTROL ROOM BLOCKING VALVE	LEVEL 3	Y
0626		BYPASS TO 576 SEPARATOR									
7265	Q	V	G	15.0	62	2	SEPARATOR	D-624	SUB SUB GAS OUT VALVE BLOCKING	LEVEL 2 BLEED	Y
7266	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576	LEVEL 2 BLEED	Y
7267	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576	LEVEL 2 BLEED	Y
7268	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576	LEVEL 2 BLEED	Y
7269	Q	V	G	15.0	62	2	SEPARATOR	D-624	BY PASS TO D-576 CONTROL	LEVEL 2 BLEED	Y
7270	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	CLEANOUT	LEVEL 2 BLEED	Y
7271	Q	V	G	15.0	62	2	SEPARATOR	D-624	PRESSURE TAP LINE VALVE	LEVEL 2 BLEED	Y
7261	A,V,O	C	G	15.0	62	2	SEPARATOR	D-624	PRESSURE GAUGE	LEVEL 2 BLEED	Y
7260	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	PRESSURE TAP CLEANOUT	LEVEL 2 BLEED	Y
7272	Q	V	G	15.0	62	2	SEPARATOR	D-624	BLOCKING VALVE	LEVEL 2 BLEED	Y
7275	Q	V O/E	G	15.0	62	2	SEPARATOR	D-624	CLEANOUT	LEVEL 2 BLEED	Y

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TABLE 62 (continued)

0627		BYPASS TO 57b SEPARATOR									
7258	Q	V	G	15.0	62	2	SEPARATOR	D-624	SUB SUB GAS OUT VALVE BLOCKING	LEVEL 2	Y
7259	Q	V	G	15.0	62	2	SEPARATOR	D-624	SUB SUB GAS OUT VALVE BLOCKING	LEVEL 2	Y
7257	Q	V	G	15.0	62	2	SEPARATOR	D-624	SUB SUB GAS OUT VALVE BLOCKING	LEVEL 2	Y
0628		SIGHT GLASS / LEVEL CONTROL - TOP									
7231	A	V	G	15.0	62	2	SEPARATOR	D-624	SIGHT GLASS TOP VALVE	12' UP	DTM
7232	A	V O/E	G	15.0	62	2	SEPARATOR	D-624	SIGHT GLASS TOP VALVE CLEANOUT	12' UP	DTM
7233	A	V	G	15.0	62	2	SEPARATOR	D-624	SIGHT GLASS TOP VALVE	12' UP	DTM
7234	A	V	G	15.0	62	2	SEPARATOR	D-624	SIGHT GLASS/ LEVEL CONTROL VALVES	12' UP	DTM
OTHER											
7206	Q	V O/E	L	57.6	62	2	SEPARATOR	D-624	TANK BOTTOM DRAIN	GROUND LEVEL	Y
	A,V,O	C(x5)	G	15.0	62	2	SEPARATOR	D-624	MISCELLANEOUS FLANGES AND CONNECTORS	GENERAL	Y

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TABLE 63
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL DECANT AREA

Tag Identification	Monitoring Frequency	Component Type	Phase	Inspection Concentration	Equipment	Control Room					
7300	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON TOP SOUTH SIDE OF TANK	GROUND LEVEL	Y
7301	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON EAST MANWAY	GROUND LEVEL	Y
7354	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON EAST MANWAY	GROUND LEVEL	Y
7364	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON EAST UPPER SIDE OF TK	GROUND LEVEL	Y
7365	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON EAST UPPER SIDE OF TK	GROUND LEVEL	Y
7369	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON EAST LOWER PORTION OF TK	GROUND LEVEL	Y
7366	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON SOUTH LOWER PORTION OF TK	GROUND LEVEL	Y
7306	Q	V	L	57.6	63	2	LO DECANT	D-604	TRANSFER PUMP LINE BLOCKING VALVE	GROUND LEVEL	Y
7307	Q	V	L	57.6	63	2	LO DECANT	D-604	TRANSFER PUMP LINE BLOCKING VALVE	GROUND LEVEL	Y
7308	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	TRANSFER PUMP LINE CLEANOUT VALVE	GROUND LEVEL	Y
7312	Q	V	L	57.6	63	2	LO DECANT	D-604/605	TRANSFER PUMP LINE BLOCKING VALVE	GROUND LEVEL	Y
7332	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	TRANSFER PUMP LINE CLEANOUT VALVE	GROUND LEVEL	Y
7331	Q	V	L	57.6	63	2	LO DECANT	D-605	TRANSFER PUMP LINE BLOCKING VALVE	GROUND LEVEL	Y
7330	Q	V	L	57.6	63	2	LO DECANT	D-605	TRANSFER PUMP LINE BLOCKING VALVE	GROUND LEVEL	Y
7363	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON NORTH LOWER PORTION OF TK	GROUND LEVEL	Y
7359	A	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON NORTH TOP OF TANK	12' UP	DTM
7361	Q	V	L	57.6	63	2	LO DECANT	D-604	VALVE ON NORTH MANWAY--CLEANOUT VALVE	GROUND LEVEL	Y
7362	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	VALVE ON NORTH MANWAY--CLEANOUT VALVE	GROUND LEVEL	Y
7313	Q	V O/E	L	57.6	63	2	LO DECANT	D-604	BOTTOM OF SIGHT GLASS DRAIN	GROUND LEVEL	Y
7314	Q	V	L	57.6	63	2	LO DECANT	D-604	TOP OF SIGHT GLASS	GROUND LEVEL	Y
7315	Q	V	L	57.6	63	2	LO DECANT	D-604	BOTTOM OF SIGHT GLASS	GROUND LEVEL	Y
7367	Q	V	L	57.6	63	2	LO DECANT	D-604	L.O SEPERATOR LOADING LINE	GROUND LEVEL	Y
7368	Q	V	L	57.6	63	2	LO DECANT	D-604	L.O SEPERATOR LOADING LINE	GROUND LEVEL	Y
7370	Q	V	L	57.6	63	2	LO DECANT	D-605	L.O SEPERATOR LOADING LINE	GROUND LEVEL	Y
7371	Q	V	L	57.6	63	2	LO DECANT	D-605	L.O SEPERATOR LOADING LINE	GROUND LEVEL	Y
7355	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON SOUTH LOWER PORTION OF TK	GROUND LEVEL	Y
7356	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON NORTH LOWER PORTION OF TK	GROUND LEVEL	Y
7353	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON EAST UPPER SIDE OF TK	GROUND LEVEL	Y
7352	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON EAST MANWAY	GROUND LEVEL	Y
7357	A	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON NORTH TOP OF TANK	12' UP	DTM
7358	A	V O/E	L	57.6	63	2	LO DECANT	D-605	VALVE ON SOUTH TOP OF TANK	12' UP	DTM
7336	Q	V	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS BOTTOM VALVE	GROUND LEVEL	Y
7337	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS BOTTOM DRAIN	GROUND LEVEL	Y
7338	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS BOTTOM CLEANOUT	GROUND LEVEL	Y
7340	A,V,O	C(x2)	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS	GROUND LEVEL	Y
7342	Q	V O/E	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS TOP CLEANOUT	GROUND LEVEL	Y
7341	Q	V	L	57.6	63	2	LO DECANT	D-605	SOUTH SIDE SIGHT GLASS TOP VALVE	GROUND LEVEL	Y
7317	Q	V'	G	57.6	63	2	LO DECANT	D-604	PRESSURE RELIEF CLEANOUT	TOP LEVEL	Y
7316	Q	V O/E	G	57.6	63	2	LO DECANT	D-604	PRESSURE RELIEF CLEANOUT	TOP LEVEL	Y
7304	Q	V O/E	G	57.6	63	2	LO DECANT	D-604	PRESSURE RELIEF CLEANOUT	TOP LEVEL	Y
7318	Q	PRV O/E	G	57.6	63	2	LO DECANT	D-604	PRESSURE RELIEF VALVE	TOP LEVEL	Y
7321	Q	V	G	56.6	63	2	LO DECANT	D-604	VENT LINE CLEANOUT	TOP LEVEL	Y
7320	Q	V	G	57.6	63	2	LO DECANT	D-604	VENT LINE CLEANOUT	TOP LEVEL	Y
7319	Q	V O/E	G	57.6	63	2	LO DECANT	D-604	VENT LINE CLEANOUT	TOP LEVEL	Y
7322	Q	V	G	57.6	63	2	LO DECANT	D-604	VENT LINE BLOCKING VALVE	TOP LEVEL	Y
7323	Q	V	G	57.6	63	2	LO DECANT	D-604	VENT LINE PRESSURE TAP	TOP LEVEL	Y
7324	Q	V	G	57.6	63	2	LO DECANT	D-604	VENT LINE PRESSURE TAP	TOP LEVEL	Y
7325	A,V,O	C	G	57.6	63	2	LO DECANT	D-604	VENT LINE PRESSURE GAUGE	TOP LEVEL	Y
7327	Q	V O/E	G	57.6	63	2	LO DECANT	D-604	RETURN LINE TO PUMPS	TOP LEVEL	Y
7328	Q	V	G	57.6	63	2	LO DECANT	D-604	RETURN LINE TO PUMPS	TOP LEVEL	Y
7329	Q	V O/E	G	57.6	63	2	LO DECANT	D-604	RETURN LINE TO PUMPS	TOP LEVEL	Y
7351	Q	V	G	57.6	63	2	LO DECANT	D-605/604	VALVE TOP SOUTH SIDE OF TANK	TOP LEVEL	Y
7350	Q	V O/E	G	57.6	63	2	LO DECANT	D-605/604	RELIEF VALVE	TOP LEVEL	Y
7343	Q	V	G	56.6	63	2	LO DECANT	D-605	VENT LINE PRESSURE TAP	TOP LEVEL	Y
7339	Q	V	G	57.6	63	2	LO DECANT	D-605	VENT LINE PRESSURE TAP	TOP LEVEL	Y
7335	Q	V O/E	G	57.6	63	2	LO DECANT	D-605	VENT LINE PRESSURE GAUGE	TOP LEVEL	Y
7344	Q	V	G	57.6	63	2	LO DECANT	D-605	VENT LINE BLOCKING VALVE	TOP LEVEL	Y
7348	Q	V	G	57.6	63	2	DECANTERS	D-605	RELIEF VALVE LINE CLEANOUT	TOP LEVEL	Y
7345	Q	V O/E	G	57.6	63	2	LO DECANT	D-605	RELIEF VALVE LINE CLEANOUT	TOP LEVEL	Y
7349	Q	PRV O/E	G	57.6	63	2	DECANTERS	D-605	PRESSURE RELIEF VALVE	TOP LEVEL	Y
7347	Q	V	G	57.6	63	2	LO DECANT	D-605	RELIEF VALVE PRESSURE TAP	TOP LEVEL	Y
7346	A,V,O	C	G	57.6	63	2	LO DECANT	D-605	RELIEF VAVLE PRESSURE GAUGE	TOP LEVEL	Y
	A,V,O	C(x13)	G/L	57.6	63	2	LO DECANT	D-604/605	MISCELLANEOUS FLANGES, MANWAYS, AND OTHER UNMARKED CONNECTORS	GENERAL AREA	Y

TABLE 64
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL TRANSFER PUMP AREA

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
0641		PUMP INLET									
7400	Q	V O/E	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE INLET CLEANOUT	1ST LEVEL IN	Y
7401	Q	V	L	57.6	64	2	LO PUMP	P-619B	LO TRANSFER LINE INLET	1ST LEVEL IN	Y
7402	Q	V O/E	L	57.6	64	2	LO PUMP	P-619B	LO TRANSFER LINE INLET CLEANOUT	1ST LEVEL IN	Y
7404	A,V,O	C	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE PRESSURE GAUGE	1ST LEVEL IN	Y
7405	Q	V	L	57.6	64	2	LO PUMP	P-619A	LO TRANSFER LINE INLET	1ST LEVEL IN	Y
7406	Q	V O/E	L	57.6	64	2	LO PUMP	P-619A	LO TRANSFER LINE INLET CLEANOUT	1ST LEVEL IN	Y
7407	Q	V	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE INLET	1ST LEVEL IN	Y
7408	Q	V	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE RECIRCULATION	1ST LEVEL IN	Y
7409	Q	V	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE INLET	1ST LEVEL IN	Y
7410	Q	V O/E	L	57.6	64	2	LO PUMP	ALL 3	LO TRANSFER LINE INLET CLEANOUT	1ST LEVEL IN	Y
7415	M	P	L	57.6	64	2	LO PUMP	P-619B	MAGNETIC PUMP SEAL	1ST LEVEL PUMP	Y
7416	M	P	L	57.6	64	2	LO PUMP	P-619A	MAGNETIC PUMP SEAL	1ST LEVEL PUMP	Y
7417	M	P	L	57.6	64	2	LO PUMP	P-619-C	MAGNETIC PUMP SEAL	1ST LEVEL PUMP	Y
0642		PUMP DISCHARGE									
7425	Q	V	L	57.6	64	2	LO PUMP	P-619B/A	PUMP DISCHARGE BLOCKING VALVE	1ST LEVEL OUT	Y
7403	Q	V	L	57.6	64	2	LO PUMP	P-619A	PUMP DISCHARGE BLOCKING VALVE	1ST LEVEL OUT	Y
7412	Q	V	L	57.6	64	2	LO PUMP	P-619A	PUMP DISCHARGE PRESSURE TAP	1ST LEVEL OUT	Y
7411	A,V,O	C	L	57.6	64	2	LO PUMP	P-619A	PUMP DISCHARGE PRESSURE GAUGE	1ST LEVEL OUT	Y
7426	Q	V O/E	L	57.6	64	2	LO PUMP	P-619A	PUMP DISCHARGE CLEANOUT	1ST LEVEL OUT	Y
7422	Q	V	L	57.6	64	2	LO PUMP	ALL 3	MAIN PUMP DISCHARGE HEADER BLOCKING VALVE	1ST LEVEL OUT	Y
7423	Q	V	L	57.6	64	2	LO PUMP	ALL 3	MAIN PUMP DISCHARGE HEADER BLOCKING VALVE	1ST LEVEL OUT	Y
7427	Q	V	L	57.6	64	2	LO PUMP	P-619C/A	MAIN PUMP DISCHARGE HEADER BLOCKING VALVE	1ST LEVEL OUT	Y
7429	Q	V	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE PRESSURE TAP	1ST LEVEL OUT	Y
7430	Q	V	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE PRESSURE TAP	1ST LEVEL OUT	Y
7431	A,V,O	C	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE PRESSURE GAUGE	1ST LEVEL OUT	Y
7428	Q	V	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE CHECK VALVE	1ST LEVEL OUT	Y
7438	Q	V O/E	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE CLEANOUT	1ST LEVEL OUT	Y
7439	A,V,O	C	L	57.6	64	2	LO PUMP	P-619C	PUMP DISCHARGE PRESSURE GAUGE	1ST LEVEL OUT	Y
7420	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	RETURN LINE TO DECANTER	1ST LEVEL OUT	Y
7432	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	RETURN LINE TO DECANTER	1ST LEVEL OUT	Y
7434	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	RETURN LINE TO DECANTER CLEANOUT	1ST LEVEL OUT	Y
7433	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	RETURN LINE TO DECANTER	1ST LEVEL OUT	Y
7435	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	MAIN DISCHARGE LINE BLOCKING	1ST LEVEL OUT	Y
7436	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	MAIN DISCHARGE LINE CONTROL VALVE	1ST LEVEL OUT	Y
7437	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	MAIN DISCHARGE LINE CLEANOUT	1ST LEVEL OUT	Y
7456	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	OUT OF SERVICE LINE	1ST LEVEL OUT	Y
7457	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	OUT OF SERVICE LINE	1ST LEVEL OUT	Y
7458	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	OUT OF SERVICE LINE	1ST LEVEL OUT	Y
7459	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	OUT OF SERVICE LINE	2ND LEVEL OUT	Y
7440	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	BLOCKING VALVE	2ND LEVEL OUT	Y
7441	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	BLOCKING VALVE	2ND LEVEL OUT	Y
7442	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	BYPASS TO DECANTERS	2ND LEVEL	Y
7443	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	STEAM LINE	2ND LEVEL QUADS	Y
7444	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	STEAM LINE	2ND LEVEL QUADS	Y
7453	A,V,O	C(x2)	L	57.6	64	2	LO PUMP	DISCHARGE	LEVEL CONTROL	2ND LEVEL QUADS	Y
7460	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BLOCKING VALVE	2ND LEVEL QUADS	Y
7461	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BLOCKING VALVE	2ND LEVEL QUADS	Y
7462	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE CLEANOUT VALVE	2ND LEVEL QUADS	Y
7463	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE CLEANOUT VALVE	2ND LEVEL DECANT	Y
7464	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	#1 CONTROL ROOM LINE	2ND LEVEL DECANT	Y
7465	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	#1 CONTROL ROOM LINE CLEANOUT	2ND LEVEL DECANT	Y
7470	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	VENT LINE TO DECANTER VENT LINES	2ND LEVEL DECANT	Y
7472	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	VENT LINE TO DECANTER VENT LINES	2ND LEVEL DECANT	Y
7471	Q	PRV	L	57.6	64	2	LO PUMP	DISCHARGE	PRESSURE RELIEF VALVE TO DECANTER VENT LINES	2ND LEVEL DECANT	Y
7480	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BLOCKING VALVE	2ND LEVEL DECANT	Y
7478	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE PRESSURE TAP	2ND LEVEL DECANT	Y
7479	A,V,O	C	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE PRESSURE GAUGE	2ND LEVEL DECANT	Y

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TABLE 64 (continued)

7477	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BYPASS CONTROL VALVE	2ND LEVEL DECANT	Y
7475	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	LO TRANSFER LINE BYPASS PRESSURE TAP	2ND LEVEL DECANT	N
7476	A,V,O	C	L	57.6	64	2	LO PUMP	DISCHARGE	LO TRANSFER LINE BYPASS PRESSURE GAUGE	2ND LEVEL DECANT	Y
7473	O	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BYPASS CLEANOUT	2ND LEVEL DECANT	Y
7474	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	TRANSFER LINE BYPASS VALVE	2ND LEVEL CR#1	Y
7451	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	LINE FROM CONTROL ROOM #1	2ND LEVEL CR#1	Y
7452	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	LINE FROM CONTROL ROOM #1	2ND LEVEL CR#1	Y
7453	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	LINE FROM CONTROL ROOM #1	2ND LEVEL CR#1	Y
7445	Q	V	L	57.6	64	2	LO PUMP	DISCHARGE	OLD LO STORAGE LINE	2ND LEVEL CR#1	Y
7450	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	OLD LO STORAGE LINE CLEANOUT	2ND LEVEL DECANT	Y
7454	Q	V O/E	L	57.6	64	2	LO PUMP	DISCHARGE	LINE FROM CONTROL ROOM #1 CLEANOUT	2ND LEVEL	Y
	A,V,O	C(x3)	L	57.6	64	2	LO PUMP	DISCHARGE	MISCELLANEOUS UNMARKED FLANGES AND CONNECTORS	2ND LEVEL	Y

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TABLE 65
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
KOPPERS TRANSFER LINE AREAS

Tag Identification	Monitoring Frequency	Component Type	Phase	Temperature Deg. Fahrenheit	Pressure PSIG	Control Process			
0651		METHANOL TRANSFER							
7500	A	V	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE LO/METHANOL TRANSFER LINE	15' ABOVE GROUND	DFM
7501	Q	V	L	57.6	65	2	BLOWDOWN	B-426	CLEANOUT VALVE METHANOL TRANSFER LINE	GRND BY R-490	Y
7502	Q	V	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE (V-11) LO/METHANOL TRANSFER LINE	GRND BY R-490	Y
7503	Q	V	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE (V-16) TO/FROM BLOWDOWN TANK	GRND BY R-490	Y
7504	Q	V	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE (V-10) METHANOL TRANSFER LINE	GRND BY R-490	Y
7505	Q	V O/E	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7514	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7569	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7482	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
6757	A	V	L	57.6	65	2	BLOWDOWN	B-426	CONTROL ROOM 5 BLOCKING VALVE	GRND BY R-490	Y
7483	Q	V	L	57.6	65	2	BLOWDOWN	B-426	CONTROL ROOM 5 CLEANOUT LINE	GRND BY R-490	Y
7484	Q	V O/E	L	57.6	65	2	BLOWDOWN	B-426	CONTROL ROOM 5 CLEANOUT LINE	GRND BY R-490	Y
7485	Q	V O/E	L	57.6	65	2	BLOWDOWN	B-426	CONTROL ROOM 5 CLEANOUT LINE	GRND BY R-490	Y
8183	Q	V O/E	L	57.6	65	2	BLOWDOWN	B-426	CONTROL ROOM 5 CLEANOUT LINE	GRND BY R-490	Y
7506	Q	V	L	57.6	65	2	BLOWDOWN	B-426	N2 PURGE LINE VALVE METHANOL TRANSFER LINE	GRND BY R-490	Y
7507	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7508	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7509	A,V,O	C	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT PRESSURE GAUGE	GRND BY R-490	Y
7510	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7511	Q	V	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7512	Q	V O/E	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT LINE	GRND BY R-490	Y
7513	A,V,O	C	L	57.6	65	2	BLOWDOWN	B-426	LO/METHANOL TRANSFER CLEANOUT PRESSURE GAUGE	GRND BY R-490	Y
	UTM	C(x10)	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE (V-10) METHANOL TRANSFER LINE	OVERHEAD LINE	UTM
	A,V,O	C	L	57.6	65	2	BLOWDOWN	B-426	BLOCKING VALVE MANIFOLD FLANGE	GRND BY R-490	Y
0652		LO STORAGE TRANSFER									
7520	UTM	V	L	57.6	65	2	LO STORE	TRANSFER	BLOCKING VALVES LO STORAGE TANKS	RACK RW TANK	UTM
7521	UTM	V	L	57.6	65	2	LO STORE	TRANSFER	BLOCKING VALVES LO STORAGE TANKS	RACK RW TANK	UTM
7522	UTM	V	L	57.6	65	2	LO STORE	TRANSFER	BLOCKING VALVES LO STORAGE TANKS	RACK RW TANK	UTM
7523	UTM	V	L	57.6	65	2	LO STORE	TRANSFER	BLOCKING VALVES LO STORAGE TANKS	RACK RW TANK	UTM
0653		LO HEATER #1									UTM
7540	UTM	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 1 BLOCKING VALVE	RACK E OF BND	UTM
7541	UTM	V	L	57.6	65	2	LO HEATER	TRANSFER	LINE VALVE LO TRANSFER HEATER 1	RACK E OF BND	UTM
7542	UTM	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 1 CLEANOUT VALVE	RACK E OF BND	UTM
7543	UTM	V O/E	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 1 CLEANOUT VALVE	RACK E OF BND	UTM
7544	UTM	V	L	57.6	65	2	LO HEATER	TRANSFER	LINE VALVE LO TRANSFER HEATER 1	RACK E OF BND	UTM
7545	UTM	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 1 BLOCKING VALVE	RACK E OF BND	UTM
0654		LO HEATER #2									
7560	Q	V O/E	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 LINE CLEANOUT VALVE	RACK SW OFFC	Y
7561	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 BLOCKING VALVE	RACK SW OFFC	Y
7562	A,V,O	C	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 GAUGE	RACK SW OFFC	Y
7564	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 VALVE	RACK SW OFFC	Y
7563	A,V,O	C	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 GAUGE	RACK SW OFFC	Y
7565	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LINE VALVE LO TRANSFER HEATER 2	RACK SW OFFC	Y
7566	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 VALVE	RACK SW OFFC	Y
7568	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 2 STEAM VALVE	RACK SW OFFC	Y
0655		LO HEATER #3									
7580	A,V,O	C	L	57.6	65	2	LO HEATER	TRANSFER	PRESSURE GAUGE LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7589	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	GAUGE VALVE LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7581	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 3 BLOCKING VALVE	NEAR KOPPERS	Y
7582	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	LINE VALVE LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7583	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	RELIEF BYPASS LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7584	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	BLOCKING VALVE TO RELIEF LO HEATER 3	NEAR KOPPERS	Y
7585	Q	PRV	L	57.6	65	2	LO HEATER	TRANSFER	RELIEF VALVE LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7586	Q	V O/E	L	57.6	65	2	LO HEATER	TRANSFER	LO TRANSFER HEATER 3 VALVE	NEAR KOPPERS	Y
7587	Q	V	L	57.6	65	2	LO HEATER	TRANSFER	CLEANOUT VALVE LO TRANSFER HEATER 3	NEAR KOPPERS	Y
7588	Q	V O/E	L	57.6	65	2	LO HEATER	TRANSFER	CLEANOUT VALVE LO TRANSFER HEATER 3	NEAR KOPPERS	Y

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TABLE 66
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH HEAT EXCHANGER

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Process #	Control Room					
0661		LO HEAT EXCHANGE AREA									
8000	Q	V O/E	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP CLEANOUT VALVE	HT EXC AREA	Y
8001	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP PRESSURE TAP VALVE	HT EXC AREA	Y
8002	Q	V O/E	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP PRESSURE TAP CLEANOUT	HT EXC AREA	Y
8003	A,V,O	C	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP PRESSURE GAUGE	HT EXC AREA	Y
8004	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP DRAIN VALVE	HT EXC AREA	Y
8005	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP DRAIN CHECK VALVE	HT EXC AREA	Y
8006	Q	V O/E	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP DRAIN CLEANOUT VALVE	HT EXC AREA	Y
8007	Q	PRV	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP PRESSURE RELIEF VALVE	HT EXC AREA	Y
8008	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP DRAIN BLOCKING VALVE	HT EXC AREA	Y
8009	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP BLOCKING VALVE	HT EXC AREA	Y
8010	Q	V	L	57.6	66	2	COOLER	E-424	LO WAS COOLING LOOP PRESSURE GAUGE VALVE	HT EXC AREA	Y
8011	A,V,O	C	L	57.6	66	2	COOLER	E-424	LO WAS COOLING LOOP PRESSURE GAUGE	HT EXC AREA	Y
8012	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP SUMP BLOCKING VALVE	HT EXC AREA	Y
8013	Q	V	L	57.6	66	2	COOLER	E-424	LO WASH COOLING LOOP PRESSURE TAP VALVE	HT EXC AREA	Y
8014	Q	V	L	58.6	66	2	COOLER	E-425	LO WASH COOLING LOOP PRESSURE TAP VALVE	HT EXC AREA	Y
8015	A,V,O	C	L	59.6	66	2	COOLER	E-426	LO WASH COOLING LOOP PRESSURE GAUGE	HT EXC AREA	Y
8128	Q	V O/E	L	60.6	66	2	COOLER	E-427	LO WASH COOLING LOOP CLEANOUT VALVE	HT EXC AREA	Y
	A,V,O	C(x4)	L	57.6	66	2	COOLER	E-424	MISCELLANEOUS UNMARKED FLANGES AND CONNECTORS	HT EXC AREA	Y

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TABLE 67
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH BLOWDOWN TANK AREA

Tag Identification	Monitoring Frequency	Component Type	Phase	Hydrocarbon Concentration	Figure #	Control Room				
8100	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING FOR RECIRC LINE	TANK AREA	Y
8101	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING FOR RECIRC LINE	TANK AREA	Y
8103	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	CLEANOUT FOR RECIRCULATION LINE	TANK AREA	Y
8180	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	CLEANOUT FOR RECIRCULATION LINE	TANK AREA	Y
8102	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING	TANK AREA	Y
8104	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING	TANK AREA	Y
8107	Q	V	L	57.6	67	2	BLOWDOWN	B-426	CLEANOUT	TANK AREA	Y
8105	Q	V	L	57.6	67	2	BLOWDOWN	B-426	CLEANOUT	TANK AREA	Y
8108	Q	V	L	57.6	67	2	BLOWDOWN	B-426	LEVEL CONTROL VALVE	TANK AREA	Y
8109	Q	V	L	57.6	67	2	BLOWDOWN	B-426	SG/LC	TANK AREA	Y
8110	Q	V	L	57.6	67	2	BLOWDOWN	B-426	SIGHT GLASS DRAIN VALVE	TANK AREA	Y
8111	Q	V O/E	L	57.6	67	2	BLOWDOWN TANK	D-425	SIGHT GLASS DRAIN VALVE	TANK AREA	Y
8106	Q	V	L	57.6	67	2	BLOWDOWN	B-426	CLEANOUT	TANK AREA	Y
8112	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	RECIRC LINE	TANK AREA	Y
8113	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	SIGHT GLASS/LEVEL CONTROL CONNECTING LINE VALVE	TANK AREA	Y
8158	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	STEAM MANIFOLD BLOCKING VALVE	TANK AREA	Y
8125	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO WASH RETURN BLOCKING VALVE	TANK AREA	Y
8126	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO RETURN CHECK VALVE	TANK AREA	Y
8178	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO WASH RETURN BLOCKING VALVE	TANK AREA	Y
8127	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	VALVE TOP BACK LEVEL CONTROL	TANK AREA	Y
8128	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	VALVE TOP BACK LEVEL CONTROL	TANK AREA	Y
8129	Q	V O/E	L	57.6	67	2	BLOWDOWN TANK	D-425	BACK LEVEL CONTROL DRAIN VALVE	TANK AREA	Y
8130	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	BACK LEVEL CONTROL DRAIN CLEANOUT VALVE	TANK AREA	Y
8131	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	BACK LEVEL CONTROL BOTTOM BLOCKING	TANK AREA	Y
8132	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	BACKWASH TANK DRAIN CLEANOUT	TANK AREA	Y
8133	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BACKWASH TANK DRAIN BLOCKING	TANK AREA	Y
8134	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING	TANK AREA	Y
8181	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING	TANK AREA	Y
8135	Q	V	L	57.6	67	2	BLOW DOWN	D-425	BLOWDOWN TANK DRAIN	TANK AREA	Y
8136	Q	V O/E	L	57.6	67	2	BLOW DOWN	D-425	BLOWDOWN TANK DRAIN	TANK AREA	Y
8137	Q	V O/E	L	57.6	67	2	BLOW DOWN	D-425	BLOW DOWN TANK DRAIN	TANK AREA	Y
8138	Q	V	L	57.6	67	2	BLOW DOWN	D-425	BLOW DOWN TANK DRAIN	TANK AREA	Y
8139	Q	V	L	57.6	67	2	BLOW DOWN	D-425	BLOWDOWN TANK DRAIN	TANK AREA	Y
8150	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	LEVEL CONTROL TOP CLEANOUT	TANK AREA	Y
8151	Q	V	L	57.6	67	2	BLOWDOWN	B-426	SIGHT GLASS TOP CLEANOUT	TANK AREA	Y
8152	A,V,O	C(x2)	L	57.6	67	2	BLOWDOWN TANK	D-425	BLOW DOWN TANK SIGHT GLASS	TANK AREA	Y
8158	A,V,O	C(x2)	L	57.6	67	2	BLOWDOWN TANK	D-425	BLOW DOWN TANK LEVEL CONTROL	TANK AREA	Y
8189	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	TANK BLEED	TANK AREA	Y
8153	Q	V	L	57.6	67	2	BLOWDOWN	B-426	TANK BLEED	TANK AREA	Y
8154	Q	V	L	57.6	67	2	BLOWDOWN	B-426	MAIN REGENERATOR DRAIN BLOCKING	TANK AREA	Y
8155	Q	V	L	57.6	67	2	BLOWDOWN	B-426	TO SIGHT GLASS	TANK AREA	Y
8156	Q	V	L	57.6	67	2	BLOWDOWN	B-426	TO LEVEL CONTROL	TANK AREA	Y
8157	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING TO RECIRCULATION	TANK AREA	Y
8175	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING TO UNDERFIRE	TANK AREA	Y
8176	Q	V	L	57.6	67	2	BLOWDOWN	B-426	THREE WAY VALVE	TANK AREA	Y
8177	Q	PRV O/E	L	57.6	67	2	BLOWDOWN	B-426	EMERGENCY VENT	TANK AREA	Y
8182	Q	V	L	57.6	67	2	BLOWDOWN	B-426	BLOCKING	TANK AREA	Y
8183	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO WASH CHECK VALVE	TANK AREA	Y
8184	Q	PRV	L	57.6	67	2	BLOWDOWN	B-426	EMERGENCY VENT	TANK AREA	Y
8179	Q	V O/E	L	57.6	67	2	BLOWDOWN	B-426	EMERGENCY VENT DRAIN VALVE	TANK AREA	Y
8185	Q	V	L	57.6	67	2	BLOWDOWN	B-426	MAIN REGENERATOR RETURN BLOCKING	TANK AREA	Y
8186	Q	V	L	57.6	67	2	BLOWDOWN	B-426	MAIN REGENERATOR RETURN CHECK	TANK AREA	Y
8187	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO WASH VALVE OLD LPD OUT OF SERVICE	TANK AREA	Y
8188	Q	V	L	57.6	67	2	BLOWDOWN TANK	D-425	LO WASH VALVE OLD LPD FLOW CONTROLLER	TANK AREA	Y
	A,V,O	C(x8)	L	57.6	67	2	BLOWDOWN TANK	D-425	MISCELLANEOUS FLANGES (UNMARKED)	TANK AREA	Y

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TABLE 68
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH BLOWDOWN PUMPS

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
8201	Q	V	L	57.6	68	2	BLOWDOWN	P-425	BLOCKING	PUMP AREA	Y
8202	Q	V O/E	L	57.6	68	2	BLOWDOWN	P-425	CLEANOUT	PUMP AREA	Y
8203	M	P	L	57.6	68	2	BLOWDOWN	P-425	LO TRANSFER PUMP SEAL	PUMP AREA	Y
8204	Q	V	L	57.6	68	2	BLOWDOWN	LOADING	BLOCKING VALVE TO L.O. MANIFOLD	PUMP AREA	Y
8205	Q	V	L	57.6	68	2	BLOWDOWN	QUADS	BLOCKING VALVE TO QUAD WASH ACETONE MANIFOLDS	PUMP AREA	Y
8206	Q	V	L	57.6	68	2	BLOWDOWN	P-425	PUMP 425 DISCHARGE CHECK VALVE	PUMP AREA	Y
8207	Q	V	L	57.6	68	2	BLOWDOWN	P-425	PUMP 425 DISCHARGE BLOCKING VALVE	PUMP AREA	Y
8208	Q	V	L	57.6	68	2	BLOWDOWN	P-425	PUMP 425 DISCHARGE BLOCKING VALVE	PUMP AREA	Y
8209	Q	V	L	57.6	68	2	BLOWDOWN	QUADS	BLOCKING VALVE TO QUAD WASH ACETONE MANIFOLDS	PUMP AREA	Y
8214	Q	V	L	57.6	68	2	BLOWDOWN TANK	QUADS	BLOCKING VALVE TO QUAD WASH ACETONE MANIFOLDS	PUMP AREA	Y
8216	Q	V	L	57.6	68	2	BLOWDOWN TANK	P-426	BLOCKING	PUMP AREA	Y
8217	Q	V O/E	L	57.6	68	2	BLOWDOWN	P-426	CLEANOUT	PUMP AREA	Y
8218	Q	V	L	57.6	68	2	BLOWDOWN	QUADS	BLOCKING VALVE TO QUAD WASH ACETONE MANIFOLDS	PUMP AREA	Y
8219	M	P	L	57.6	68	2	BLOWDOWN	P-426	LO TRANSFER PUMP SEAL	PUMP AREA	Y
8220	Q	V	L	57.6	68	2	BLOWDOWN	P-426	PUMP 426 DISCHARGE CHECK VALVE	PUMP AREA	Y
8221	Q	V	L	57.6	68	2	BLOWDOWN	P-426	PUMP 426 DISCHARGE BLOCKING VALVE	PUMP AREA	Y
8222	Q	V	L	57.6	68	2	BLOWDOWN TANK	DISCHARGE	COMMON DISCHARGE LINE BLOCKING VALVE	PUMP AREA	Y
8223	Q	V	L	57.6	68	2	BLOWDOWN	QUADS	BLOCKING VALVE TO QUAD WASH ACETONE MANIFOLDS	PUMP AREA	Y
8224	Q	V	L	57.6	68	2	BLOWDOWN	REGEN	REGEN WASH BLOCKING	PUMP AREA	Y
8225	Q	V	L	57.6	68	2	BLOWDOWN	REGEN	REGEN WASH BLOCKING	PUMP AREA	Y
8226	Q	V	L	57.6	68	2	BLOWDOWN	REGEN	REGEN WASH BLOCKING	PUMP AREA	Y
8227	Q	V O/E	L	57.6	68	2	BLOWDOWN	REGEN	REGEN WASH CLEANOUT	PUMP AREA	Y
	A,V,O	C(x4)	L	57.6	68	2	BLOWDOWN	GENERAL	MISCELLANEOUS UNMARKED FLANGES AND CONNECTORS	PUMP AREA	Y

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TABLE 69
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 1
24 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
0691		ACETONE MANIFOLD								
8250	WASH	V	L	57.6	69	2	SUB GAS	QUAD 1	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8251	WASH	V	L	57.6	69	2	SUB GAS	QUAD 1	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8252	WASH	V O/E	L	57.6	69	2	SUB GAS	QUAD 1	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8253	WASH	V	L	57.6	69	2	SUB GAS	QUAD 1	ACETONE MANIFOLD SUB NITROGEN	PLATFORM	Y
8254	WASH	V	L	57.6	69	2	UF GAS	QUAD 1	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8255	WASH	V	L	57.6	69	2	UF GAS	QUAD 1	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8256	WASH	V O/E	L	57.6	69	2	UF GAS	QUAD 1	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8257	WASH	V	L	57.6	69	2	UF GAS	QUAD 1	ACETONE MANIFOLD UF NITROGEN	PLATFORM	Y
8258	WASH	V	L	57.6	69	2	DR GAS	QUAD 1	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8259	WASH	V	L	57.6	69	2	DR GAS	QUAD 1	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8260	WASH	V O/E	L	57.6	69	2	DR GAS	QUAD 1	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8261	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	ACETONE MANIFOLD DR NITROGEN	PLATFORM	Y
8262	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	ACETONE MANIFOLD NITROGEN PURGE	PLATFORM	Y
0692		DRAIN MANIFOLD								
8270	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8271	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8272	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8273	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8274	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8275	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8276	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8277	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8278	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1	LOW POINT DRAIN MANIFOLD CLEANOUT	PASSAGEWAY	Y
8269	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8279	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
0693		PRESSURE TAP								
8263	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8264	WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	Y
8265	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8266	A-WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8267	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8268	A-WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
1903	WASH	V O/E	L	57.6	69	2	MAIN QUAD	QUAD 1A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
7228	A-WASH	V	L	57.6	69	2	MAIN QUAD	QUAD 1A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
	A,V,O	C(x3)	L	57.6	69	2	MAIN QUAD	QUAD 1	UNIDENTIFIED FLANGES	PASSAGEWAY	Y

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TABLE 70
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 2

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Engineer #	Control Room					
8701		ACETONE MANIFOLD									
8301	WASH	V	L	57.6	70	2	SUB GAS	QUAD 2	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8302	WASH	V	L	57.6	70	2	SUB GAS	QUAD 2	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8303	WASH	V O/E	L	57.6	70	2	SUB GAS	QUAD 2	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8304	WASH	V	L	57.6	70	2	SUB GAS	QUAD 2	ACETONE MANIFOLD SUB NITROGEN	PLATFORM	Y
8305	WASH	V	L	57.6	70	2	UF GAS	QUAD 2	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8306	WASH	V	L	57.6	70	2	UF GAS	QUAD 2	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8307	A.V.O	C	L	57.6	70	2	UF GAS	QUAD 2	ACETONE MANIFOLD UF CLEANOUT PRESSURE GUAGE	PLATFORM	Y
8312	WASH	V O/E	L	57.6	70	2	UF GAS	QUAD 2	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8308	WASH	V	L	57.6	70	2	UF GAS	QUAD 2	ACETONE MANIFOLD UF NITROGEN	PLATFORM	Y
8310	WASH	V	L	57.6	70	2	DR GAS	QUAD 2	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8311	WASH	V	L	57.6	70	2	DR GAS	QUAD 2	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8309	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	ACETONE MANIFOLD DR NITROGEN	PLATFORM	Y
8300	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	ACETONE MANIFOLD NITROGEN PURGE	PLATFORM	Y
8702		DRAIN MANIFOLD									
8330	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8331	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8332	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8333	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8335	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8336	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8337	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8340	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8339	WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8703		PRESSURE TAP									
8320	A-WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8321	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8322	A-WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8323	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8324	A-WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8325	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8326	A-WASH	V	L	57.6	70	2	MAIN QUAD	QUAD 2A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8327	WASH	V O/E	L	57.6	70	2	MAIN QUAD	QUAD 2A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y

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TABLE 71
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 3

Tag Identification	Sampling Frequency	Component Type	Phase	Reference Temperature	Elevation	Level Number	Location	Area	Description	Leak Detection
0711		ACETONE MANIFOLD								
8355	WASH	V	L	57.6	71	2	SUB GAS	QUAD 3	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM Y
8358	WASH	V	L	57.6	71	2	SUB GAS	QUAD 3	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM Y
8356	WASH	V O/E	L	57.6	71	2	SUB GAS	QUAD 3	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM Y
8357	WASH	V	L	57.6	71	2	SUB GAS	QUAD 3	ACETONE MANIFOLD SUB NITROGEN	PLATFORM Y
8353	WASH	V	L	57.6	71	2	UF GAS	QUAD 3	ACETONE MANIFOLD UF BLOCKING	PLATFORM Y
8354	WASH	V	L	57.6	71	2	UF GAS	QUAD 3	ACETONE MANIFOLD UF BLOCKING	PLATFORM Y
8350	WASH	V O/E	L	57.6	71	2	UF GAS	QUAD 3	ACETONE MANIFOLD UF CLEANOUT	PLATFORM Y
8351	WASH	V	L	57.6	71	2	DR GAS	QUAD 3	ACETONE MANIFOLD DR BLOCKING	PLATFORM Y
8352	WASH	V	L	57.6	71	2	DR GAS	QUAD 3	ACETONE MANIFOLD DR BLOCKING	PLATFORM Y
0712		DRAIN MANIFOLD								
8378	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8379	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY Y
8380	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8381	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8382	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8383	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8384	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8385	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8386	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8359	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY Y
8387	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY Y
8388	WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY Y
8389	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY Y
0713		PRESSURE TAP								
8370	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY Y
8371	A-WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY DTM
8372	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY Y
8373	A-WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY DTM
8374	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY Y
8375	A-WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY DTM
8376	WASH	V O/E	L	57.6	71	2	MAIN QUAD	QUAD 3D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY Y
8377	A-WASH	V	L	57.6	71	2	MAIN QUAD	QUAD 3D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY DTM

TABLE 72
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 4

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Region #	Control Room				
0721		ACETONE MANIFOLD								
8400	WASH	V	L	57.6	72	2	SUB GAS	QUAD 4	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8401	WASH	V	L	57.6	72	2	SUB GAS	QUAD 4	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8407	WASH	V	L	57.6	72	2	UF GAS	QUAD 4	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8408	WASH	V	L	57.6	72	2	UF GAS	QUAD 4	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8406	WASH	V O/E	L	57.6	72	2	UF GAS	QUAD 4	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8409	WASH	V	L	57.6	72	2	DR GAS	QUAD 4	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8412	WASH	V	L	57.6	72	2	DR GAS	QUAD 4	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8410	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	ACETONE MANIFOLD DR NITROGEN	PLATFORM	Y
8411	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	ACETONE MANIFOLD (DISCONNECTED) NITROGEN PURGE	PLATFORM	Y
0722		DRAIN MANIFOLD								
8430	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8431	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8432	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8433	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8434	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8435	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8437	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8438	WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8440	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8439	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
0723		PRESSURE TAP								
8420	A-WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8421	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8422	A-WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8423	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8424	A-WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8425	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8426	A-WASH	V	L	57.6	72	2	MAIN QUAD	QUAD 4A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8427	WASH	V O/E	L	57.6	72	2	MAIN QUAD	QUAD 4A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
	A,V,O	C(x2)	L	57.6	72	2	MAIN QUAD	QUAD 4	UNIDENTIFIED FLANGES	PASSAGEWAY	Y

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TABLE 73
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 5

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
8731		ACETONE MANIFOLD								
8480	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	ACETONE MANIFOLD MAIN N2 BLOCKING VALVE	PLATFORM	Y
8481	WASH	V	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8482	WASH	V	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD SUB NITROGEN	PLATFORM	Y
8483	WASH	V O/E	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8484	WASH	V	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8485	WASH	V	L	57.6	73	2	UF GAS	QUAD 5	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8486	WASH	V	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD UF NITROGEN	PLATFORM	Y
8492	WASH	V O/E	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8487	WASH	V	L	57.6	73	2	UF GAS	QUAD 5	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8488	WASH	V	L	57.6	73	2	DR GAS	QUAD 5	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8489	WASH	V	L	57.6	73	2	SUB GAS	QUAD 5	ACETONE MANIFOLD DR NITROGEN	PLATFORM	Y
8490	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8491	WASH	V	L	57.6	73	2	DR GAS	QUAD 5	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8732		DRAIN MANIFOLD									
8450	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8451	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8454	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8455	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8456	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8457	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8459	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5	LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8452	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8453	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8460	WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8461	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
	A.V.O	C	L	57.6	73	2	MAIN QUAD	QUAD 5	UNIDENTIFIED FLANGES	PASSAGEWAY	Y
8733		PRESSURE TAP									
8465	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8466	A-WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8467	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8468	A-WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8469	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8470	A-WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8471	WASH	V O/E	L	57.6	73	2	MAIN QUAD	QUAD 5D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8472	A-WASH	V	L	57.6	73	2	MAIN QUAD	QUAD 5D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM

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TABLE 74
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 6

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
0741		ACETONE MANIFOLD								
8530	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	ACETONE MANIFOLD MAIN N2 BLOCKING VALVE	PLATFORM	Y
8531	WASH	V	L	57.6	74	2	DR GAS	QUAD 6	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8532	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8533	WASH	V	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD DR NITROGEN	PLATFORM	Y
8534	WASH	V	L	57.6	74	2	DR GAS	QUAD 6	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8535	WASH	V	L	57.6	74	2	UF GAS	QUAD 6	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8536	WASH	V O/E	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8537	WASH	V	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD UF NITROGEN	PLATFORM	Y
8538	WASH	V	L	57.6	74	2	UF GAS	QUAD 6	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8514	WASH	V	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8540	WASH	V O/E	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8541	WASH	V	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD SUB NITROGEN	PLATFORM	Y
8542	WASH	V	L	57.6	74	2	SUB GAS	QUAD 6	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8524	WASH	V	L	57.6	74	2	DR GAS	QUAD 6	ACETONE MANIFOLD M R. LINE	PLATFORM	Y
8525	WASH	V	L	57.6	74	2	DR GAS	QUAD 6	ACETONE MANIFOLD M R. LINE	PLATFORM	Y
0742		DRAIN MANIFOLD								
8500	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8501	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8502	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8503	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8504	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8505	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8506	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6	LOW POINT DRAIN M R. MANIFOLD BLOCKING	PASSAGEWAY	Y
8507	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6	LOW POINT DRAIN M R. MANIFOLD BLOCKING	PASSAGEWAY	Y
8508	WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
	WASH	C(x2)	L	57.6	74	2	MAIN QUAD	QUAD 6	UNIDENTIFIED FLANGES	PASSAGEWAY	Y
0743		PRESSURE TAP								
8521	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8522	A-WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8519	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8520	A-WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8517	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8518	A-WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8515	WASH	V O/E	L	57.6	74	2	MAIN QUAD	QUAD 6D	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8516	A-WASH	V	L	57.6	74	2	MAIN QUAD	QUAD 6D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM

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TABLE 75
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH, MAIN QUAD NO. 7

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Inches #	Coating Room				
0751		ACETONE MANIFOLD								
8580	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	ACETONE MANIFOLD MAIN N2 BLOCKING VALVE	PLATFORM	Y
8581	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8582	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB GAS BLOCKING	PLATFORM	Y
8583	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8584	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8585	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8586	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD SUB CLEANOUT	PLATFORM	Y
8587	WASH	V	L	57.6	75	2	UF GAS	QUAD 7	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8588	WASH	V	L	57.6	75	2	UF GAS	QUAD 7	ACETONE MANIFOLD UF BLOCKING	PLATFORM	Y
8589	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8590	WASH	V O/E	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8591	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	ACETONE MANIFOLD UF CLEANOUT	PLATFORM	Y
8592	WASH	V	L	57.6	75	2	DR GAS	QUAD 7	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8593	WASH	V	L	57.6	75	2	DR GAS	QUAD 7	ACETONE MANIFOLD DR BLOCKING	PLATFORM	Y
8594	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8595	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8596	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	ACETONE MANIFOLD DR CLEANOUT	PLATFORM	Y
8571	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	RETURN M R. LOW POINT DRAIN	PLATFORM	Y
8573	WASH	V	L	57.6	75	2	SUB GAS	QUAD 7	IN M R. LOW POINT DRAIN	PLATFORM	Y
0752		DRAIN MANIFOLD									
8550	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	DR LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8552	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	UF LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8556	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	SUB LOW POINT DRAIN MANIFOLD BLOCKING	PASSAGEWAY	Y
8551	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD BLOCKING (OLD MR LINE)	PASSAGEWAY	Y
8921	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD BLOCKING (OLD MR LINE)	PASSAGEWAY	Y
8922	A.V.O	C	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8553	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8555	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8557	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8554	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8564	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
8574	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7	LOW POINT DRAIN MANIFOLD DISCHARGE	PASSAGEWAY	Y
	A.V.O	C	L	57.6	75	2	MAIN QUAD	QUAD 7	UNIDENTIFIED FLANGES	PASSAGEWAY	Y
0753		PRESSURE TAP									
8565	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7A	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8566	WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7A	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	Y
8567	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7B	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8568	A-WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7B	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8569	WASH	V O/E	L	57.6	75	2	MAIN QUAD	QUAD 7C	DIFFERENTIAL PRESSURE TAP CLEANOUT	PASSAGEWAY	Y
8570	A-WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7C	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM
8572	A-WASH	V	L	57.6	75	2	MAIN QUAD	QUAD 7D	DIFFERENTIAL PRESSURE TAP	PASSAGEWAY	DTM

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TABLE 76
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH AND BALANCING GAS AREAS, MAIN QUADS NO. 1 AND 2

Tag Identification	Monitoring Frequency	Component Type	Phase	Reference Concentration	Figure #	Control Method				
8761		QUAD #1 AREA								
8600	Q	V	G	16.0	76	2	MAIN QUAD	R-401A	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8601	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401A	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8602	Q	V	G	16.0	76	2	MAIN QUAD	R-401B	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8603	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401B	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8604	Q	V	G	16.0	76	2	MAIN QUAD	R-401C	BENZENE OVER FLOW BLOCKING	OVER WALKWAY	Y
8605	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401C	BENZENE OVER FLOW CLEANOUT	OVER WALKWAY	Y
8606	Q	V	G	16.0	76	2	MAIN QUAD	R-401D	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8607	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401D	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8615	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8616	Q	V	G	16.0	76	2	MAIN QUAD	R-401A	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8617	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401A	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8618	Q	V	G	16.0	76	2	MAIN QUAD	R-401B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8619	Q	V	G	16.0	76	2	MAIN QUAD	R-401B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8620	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401B	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8621	Q	V	G	16.0	76	2	MAIN QUAD	R-401C	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8622	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8623	Q	V	G	16.0	76	2	MAIN QUAD	R-401C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8624	Q	V	G	16.0	76	2	MAIN QUAD	R-401D	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8625	Q	V	G	16.0	76	2	MAIN QUAD	R-401D	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8626	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-401D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-401A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-401B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-401C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-401D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
8762		QUAD #2 AREA								
8630	Q	V	G	16.0	76	2	MAIN QUAD	R-402A	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8631	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402A	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8632	Q	V	G	16.0	76	2	MAIN QUAD	R-402B	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8633	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402B	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8634	Q	V	G	16.0	76	2	MAIN QUAD	R-402C	BENZENE OVER FLOW BLOCKING	OVER WALKWAY	Y
8635	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402C	BENZENE OVER FLOW CLEANOUT	OVER WALKWAY	Y
8636	Q	V	G	16.0	76	2	MAIN QUAD	R-402D	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8637	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402D	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8645	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8646	Q	V	G	16.0	76	2	MAIN QUAD	R-402A	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8647	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8648	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8649	Q	V	G	16.0	76	2	MAIN QUAD	R-402B	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8650	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8651	Q	V	G	16.0	76	2	MAIN QUAD	R-402C	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
8652	Q	V O/E	G	16.0	76	2	MAIN QUAD	R-402D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	WEST OF WALKWAY	Y
8653	Q	V	G	16.0	76	2	MAIN QUAD	R-402D	LIGHT OIL BALANCING GAS VALVE BLOCKING	WEST OF WALKWAY	Y
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-402A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-402B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-402C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	76	2	MAIN QUAD	R-402D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
8763		LIGHT OIL WASH/BALANCING GAS AREA								
8653	Q	O/E	L	57.6	76	2	MAIN QUAD	QUAD 1/2	CATCHPOT	BETWEEN WALKWAYS	Y
8685	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8686	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8681	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8688	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8682	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8660	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1	AUTOVALVE	BETWEEN WALKWAYS	Y
8684	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8655	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 2	AUTOVALVE	BETWEEN WALKWAYS	Y
8687	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y

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TABLE 76 (continued)

8664	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8680	Q	V O/E	L	57.6	76	2	MAIN QUAD	QUAD 1/2	CLEANOUT VALVE	BETWEEN WALKWAYS	Y
8690	Q	V	L	57.6	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8673	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8656	Q	V O/E	GL	16.0	76	2	MAIN QUAD	QUAD 2	CLEANOUT VALVE	BETWEEN WALKWAYS	Y
8657	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8663	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8672	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8658	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8662	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	CHECK VALVE	BETWEEN WALKWAYS	Y
8671	Q	V (Cx2)	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	LO WASH REGULATOR	BETWEEN WALKWAYS	Y
8661	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8669	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8670	Q	V O/E	GL	16.0	76	2	MAIN QUAD	QUAD 1	CLEANOUT VALVE	BETWEEN WALKWAYS	Y
8665	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1/2	BLOCKING VALVE	BETWEEN WALKWAYS	Y
8666	A,V,O	(Cx2)	GL	16.0	76	2	MAIN QUAD	QUAD 2	SIGHT GLASS	BETWEEN WALKWAYS	Y
8667	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 2	STEM VALVE	BETWEEN WALKWAYS	Y
8668	Q	V	GL	16.0	76	2	MAIN QUAD	QUAD 1	STEM VALVE	BETWEEN WALKWAYS	Y

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TABLE 77
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH AND BALANCING GAS AREAS, MAIN QUADS NO. 3 AND 4

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Header					
8771		QUAD #3 AREA									
8700	Q	V	G	16.0	77	2	MAIN QUAD	R-403A	BENZENE OVERFLOW VALVE BLOCKING	OVER WALKWAY	Y
8701	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403A	BENZENE OVERFLOW VALVE CLEANOUT	OVER WALKWAY	Y
8702	Q	V	G	16.0	77	2	MAIN QUAD	R-403B	BENZENE OVERFLOW VALVE BLOCKING	OVER WALKWAY	Y
8703	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403B	BENZENE OVERFLOW VALVE CLEANOUT	OVER WALKWAY	Y
8704	Q	V	G	16.0	77	2	MAIN QUAD	R-403C	BENZENE OVERFLOW VALVE BLOCKING	OVER WALKWAY	Y
8705	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403C	BENZENE OVERFLOW VALVE CLEANOUT	OVER WALKWAY	Y
8706	Q	V	G	16.0	77	2	MAIN QUAD	R-403D	BENZENE OVERFLOW VALVE BLOCKING	OVER WALKWAY	Y
8707	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403D	BENZENE OVERFLOW VALVE CLEANOUT	OVER WALKWAY	Y
8715	Q	V	G	16.0	77	2	MAIN QUAD	R-403A	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8716	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8717	Q	V	G	16.0	77	2	MAIN QUAD	R-403A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8718	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8719	Q	V	G	16.0	77	2	MAIN QUAD	R-403B	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8720	Q	V	G	16.0	77	2	MAIN QUAD	R-403B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8721	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8722	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8723	Q	V	G	16.0	77	2	MAIN QUAD	R-403C	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8724	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-403D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8725	Q	V	G	16.0	77	2	MAIN QUAD	R-403D	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-403A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-403B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-403C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-403D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
8772		QUAD #4 AREA									
8730	Q	V	G	16.0	77	2	MAIN QUAD	R-404A	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8731	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8732	Q	V	G	16.0	77	2	MAIN QUAD	R-404B	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8733	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8734	Q	V	G	16.0	77	2	MAIN QUAD	R-404C	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8735	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8736	Q	V	G	16.0	77	2	MAIN QUAD	R-404D	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8737	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8745	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404A	BENZENE OVER FLOW VALVE CHECKING	OVER WALKWAY	Y
8746	Q	V	G	16.0	77	2	MAIN QUAD	R-404A	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8747	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404A	BENZENE OVER FLOW VALVE CHECKING	OVER WALKWAY	Y
8748	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404B	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8749	Q	V	G	16.0	77	2	MAIN QUAD	R-404B	BENZENE OVER FLOW VALVE CHECKING	OVER WALKWAY	Y
8750	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404C	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8751	Q	V	G	16.0	77	2	MAIN QUAD	R-404C	BENZENE OVER FLOW VALVE CHECKING	OVER WALKWAY	Y
8752	Q	V O/E	G	16.0	77	2	MAIN QUAD	R-404D	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8753	Q	V	G	16.0	77	2	MAIN QUAD	R-404D	BENZENE OVER FLOW VALVE CHECKING	OVER WALKWAY	Y
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-404A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-404B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-404C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	77	2	MAIN QUAD	R-404D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
8763		LIGHT OIL WASH AREA									
8754	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH VALVE	BETWEEN WALKWAYS	Y
8755	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH VALVE	BETWEEN WALKWAYS	Y
8762	Q	V O/E	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH VALVE	BETWEEN WALKWAYS	Y
8763	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH CHECK VALVE	BETWEEN WALKWAYS	Y
8764	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH VALVE	BETWEEN WALKWAYS	Y
8769	A,V,O	C(x2)	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH SIGHT GLASS	BETWEEN WALKWAYS	Y
8770	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 3	LO WASH VALVE MAIN CUTOFF QUAD 3	BETWEEN WALKWAYS	Y
8760	A,V,O	C(x2)	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH SIGHT GLASS	BETWEEN WALKWAYS	Y
8761	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH VALVE MAIN CUTOFF QUAD 4	BETWEEN WALKWAYS	Y
8765	Q	V O/E	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH VALVE	BETWEEN WALKWAYS	Y
8766	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH VALVE	BETWEEN WALKWAYS	Y

TABLE 77 (continued)

8767	Q	V	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH CHECK VALVE	BETWEEN WALKWAYS	Y

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8768	Q	V O/E	L	57.6	77	2	MAIN QUAD	QUAD 4	LO WASH VALVE	BETWEEN WALKWAYS	Y
8774		BALANCING GAS AREA									
8780	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 3	LIGHT OIL BALANCING GAS VALVE MAIN CUTOFF QUAD 3	BETWEEN WALKWAYS	Y
8781	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 3	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8782	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 3	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8783	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 3	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8784	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 3	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8785	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8786	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE MAIN CUTOFF QUAD 4	BETWEEN WALKWAYS	Y
8787	Q	V O/E	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE CLEANOUT	BETWEEN WALKWAYS	Y
8788	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8789	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8790	Q	V	GL	16.0	77	2	MAIN QUAD	QUAD 4	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y

TABLE 78
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH AND BALANCING GAS AREAS, MAIN QUADS NO. 5 AND 6

Tag Identification	Monitoring Frequency	Component Type	Phase	Instrument Accreditation	Figure #	Control Room					
0781		QUAD #5 AREA									
8800	Q	V	G	16.0	78	2	MAIN QUAD	R-405A	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8801	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405A	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8802	Q	V	G	16.0	78	2	MAIN QUAD	R-405B	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8803	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405B	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8804	Q	V	G	16.0	78	2	MAIN QUAD	R-405C	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8805	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405C	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8806	Q	V	G	16.0	78	2	MAIN QUAD	R-405D	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8807	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405D	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8815	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8816	Q	V	G	16.0	78	2	MAIN QUAD	R-405D	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8817	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405D	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8818	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405C	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8819	Q	V	G	16.0	78	2	MAIN QUAD	R-405C	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8820	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405B	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8821	Q	V	G	16.0	78	2	MAIN QUAD	R-405B	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
8822	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-405A	LIGHT OIL BALANCING GAS VALVE CLEANOUT	OVER WALKWAY	Y
8823	Q	V	G	16.0	78	2	MAIN QUAD	R-405A	LIGHT OIL BALANCING GAS VALVE BLOCKING	OVER WALKWAY	Y
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-405A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-405B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-405C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-405D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
0782		QUAD #6 AREA									
8830	Q	V	G	16.0	78	2	MAIN QUAD	R-406D	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8831	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406D	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8832	Q	V	G	16.0	78	2	MAIN QUAD	R-406C	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8833	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406C	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8834	Q	V	G	16.0	78	2	MAIN QUAD	R-406B	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8835	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406B	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8836	Q	V	G	16.0	78	2	MAIN QUAD	R-406A	BENZENE OVER FLOW VALVE BLOCKING	OVER WALKWAY	Y
8837	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406A	BENZENE OVER FLOW VALVE CLEANOUT	OVER WALKWAY	Y
8845	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406D	LIGHT OIL BALANCING GAS FLOW CLEANOUT	OVER WALKWAY	Y
8846	Q	V	G	16.0	78	2	MAIN QUAD	R-406D	LIGHT OIL BALANCING GAS FLOW BLOCKING	OVER WALKWAY	Y
8847	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406D	LIGHT OIL BALANCING GAS FLOW CLEANOUT	OVER WALKWAY	Y
8848	Q	V	G	16.0	78	2	MAIN QUAD	R-406C	LIGHT OIL BALANCING GAS FLOW CLEANOUT	OVER WALKWAY	Y
8824	A,V,O	C	G	16.0	78	2	MAIN QUAD	R-406C	LIGHT OIL BALANCING GAS FLOW BLOCKING	OVER WALKWAY	Y
8849	Q	V	G	16.0	78	2	MAIN QUAD	R-406C	LIGHT OIL BALANCING GAS FLOW CLEANOUT	OVER WALKWAY	Y
8768	Q	V	G	16.0	78	2	MAIN QUAD	R-406B	LIGHT OIL BALANCING GAS FLOW CLEANOUT	1ST BLIND VALVE	Y
8850	Q	V	G	16.0	78	2	MAIN QUAD	R-406B	LIGHT OIL BALANCING GAS FLOW BLOCKING	1ST INLINE VALVE	Y
8854	A,V,O	C	G	16.0	78	2	MAIN QUAD	R-406B	LIGHT OIL BALANCING GAS FLOW BLOCKING	OVER WALKWAY	Y
8852	Q	V O/E	G	16.0	78	2	MAIN QUAD	R-406A	LIGHT OIL BALANCING GAS FLOW CLEANOUT	OVER WALKWAY	Y
8853	Q	V	G	16.0	78	2	MAIN QUAD	R-406A	LIGHT OIL BALANCING GAS FLOW BLOCKING	OVER WALKWAY	Y
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-406A	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-406B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-406C	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-406D	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BENZENE OVERFLOW LINE	ABOVE QUAD	N
0783		LIGHT OIL WASH AREA									
8860	A,V,O	C(x2)	L	57.6	78	2	MAIN QUAD	QUAD 5	LO WASH SIGHT GLASS	BETWEEN WALKWAYS	Y
8861	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 5	LO WASH VALVE MAIN CUT OFF QUAD 5	BETWEEN WALKWAYS	Y
8862	Q	V O/E	L	57.6	78	2	MAIN QUAD	QUAD 5	LO WASH VALVE	BETWEEN WALKWAYS	Y
8863	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 5	LO WASH CHECK VALVE	BETWEEN WALKWAYS	Y
8864	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 5	LO WASH VALVE	BETWEEN WALKWAYS	Y
8865	Q	V O/E	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE BACKUP	BETWEEN WALKWAYS	Y
8866	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE	BETWEEN WALKWAYS	Y
8867	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE	BETWEEN WALKWAYS	Y
8868	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE	BETWEEN WALKWAYS	Y
8869	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH CHECK VALVE	BETWEEN WALKWAYS	Y
8870	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE	BETWEEN WALKWAYS	Y

TABLE 78 (continued)

8871	A,V,O	C(x2)	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH SIGHT GLASS	BETWEEN WALKWAYS	Y

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8872	Q	V	L	57.6	78	2	MAIN QUAD	QUAD 6	LO WASH VALVE MAIN CUTOFF QUAD 6	BETWEEN WALKWAYS	Y
9784	BALANCING GAS AREA										
8880	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 5	LIGHT OIL BALANCING GAS VALVE MAIN CUTOFF QUAD 5	BETWEEN WALKWAYS	Y
8881	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 5	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8882	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 5	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8883	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 5	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8884	Q	V O/E	GL	16.0	78	2	MAIN QUAD	QUAD 5	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8885	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8886	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS VALVE MAIN CUTOFF QUAD 6	BETWEEN WALKWAYS	Y
8887	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8888	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8889	Q	V	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	Y
8890	Q	V O/E	GL	16.0	78	2	MAIN QUAD	QUAD 6	LIGHT OIL BALANCING GAS CLEANOUT VALVE	BETWEEN WALKWAYS	Y

TABLE 79
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL WASH AND BALANCING GAS AREAS, MAIN QUAD NO. 7

Tag Identification	Monitoring Frequency	Component Type	Phase	Service Description	Unit #	Unit Area	Location	Equipment			
8791		QUAD #7 AREA									
8900	Q	V	G	16.0	79	2	MAIN QUAD	R-407A	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8901	Q	V O/E	G	16.0	79	2	MAIN QUAD	R-407A	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8902	Q	V	G	16.0	79	2	MAIN QUAD	R-407B	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8903	Q	V O/E	G	16.0	79	2	MAIN QUAD	R-407B	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8904	Q	V	G	16.0	79	2	MAIN QUAD	R-407C	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8905	Q	V O/E	G	16.0	79	2	MAIN QUAD	R-407C	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8906	Q	V	G	16.0	79	2	MAIN QUAD	R-407D	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
8907	Q	V O/E	G	16.0	79	2	MAIN QUAD	R-407D	BENZENE OVER FLOW VALVE	OVER WALKWAY	Y
	A,V,O	C(x3)	G	16.0	78	2	MAIN QUAD	R-407A	3 MANHEADS ABOVE QUAD	ABOVE QUAD	N
	A,V,O	C(x4)	G	16.0	78	2	MAIN QUAD	R-407B	3 MANHEADS ABOVE QUAD PLUS FLANGE ON BALANCING LINE	ABOVE QUAD	N
	A,V,O	C(x3)	G	16.0	78	2	MAIN QUAD	R-407C	3 MANHEADS ABOVE QUAD	ABOVE QUAD	N
	A,V,O	C(x5)	G	16.0	78	2	MAIN QUAD	R-407D	3 MANHEADS ABOVE QUAD PLUS 2 FLANGES ON BALANCING LINE	ABOVE QUAD	N
8792		BALANCING GAS AREA									
8168	A	V	GL	16.0	79	2	MAIN QUAD	R-407B	LIGHT OIL BALANCING GAS VALVE	BETWEEN WALKWAYS	DYM
8793		LIGHT OIL WASH AREA									
8908	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8920	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8909	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8917	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8916	Q	V O/E	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8915	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8911	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8912	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8913	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y
8914	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH CLEANOUT VALVE	BETWEEN WALKWAYS	Y
8910	Q	V	L	57.6	79	2	MAIN QUAD	QUAD 7	LO WASH VALVE BLOCKING	BETWEEN WALKWAYS	Y

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TABLE 80
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SUB GAS BYPASS TO CARBONATE

Tag Identification	Monitoring Frequency	Component Type	Phase	Maximum Time Delay	Figure #	Unit Number	Process		Area	Y
6551	Q	V	G	16.0	80	2	LO REGEN	R-590	VALVE	AREA	Y
6552	Q	V	G	16.0	80	2	LO REGEN	R-590	VALVE	AREA	Y
6553	A,V,O	C(x2)	G	16.0	80	2	LO REGEN	R-590	35 PSIG SWITCH	AREA	Y
6554	Q	V	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP	AREA	Y
6555	A,V,O	C	G	16.0	80	2	LO REGEN	R-590	PRESSURE GAUGE	AREA	Y
6556	Q	V	G	16.0	80	2	LO REGEN	R-590	BLOCKING VALVE	AREA	Y
6557	Q	V	G	16.0	80	2	LO REGEN	R-590	REGULATOR VALVE	AREA	Y
6558	Q	V O/E	G	16.0	80	2	LO REGEN	R-590	VALVE	AREA	Y
6559	Q	V	G	16.0	80	2	LO REGEN	R-590	VALVE	AREA	Y
6560	Q	V	G	16.0	80	2	LO REGEN	R-590	VALVE	AREA	Y
6561	Q	V	G	16.0	80	2	LO REGEN	R-590	BLOCKING VALVE	AREA	Y
6562	Q	V	G	16.0	80	2	LO REGEN	R-590	REGULATOR VALVE	AREA	Y
6563	Q	V	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP	AREA	Y
6565	A,V,O	C(x2)	G	16.0	80	2	LO REGEN	R-590	PRESSURE TRANSDUCER	AREA	Y
6564	Q	V	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP	AREA	Y
6550	A,V,O	C(x2)	G	16.0	80	2	LO REGEN	R-590	PRESSURE SWITCH	AREA	Y
6566	Q	V	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP	AREA	Y
6567	A,V,O	C	G	16.0	80	2	LO REGEN	R-590	PRESSURE GAUGE	AREA	Y
6568	A,V,O	C(x2)	G	16.0	80	2	LO REGEN	R-590	30 PSIG ALARM	AREA	Y
6569	Q	V	G	16.0	80	2	LO REGEN	R-590	CLEANOUT VALVE	AREA	Y
6570	A,V,O	C	G	16.0	80	2	LO REGEN	R-590	CLEANOUT GAUGE	AREA	Y
6571	Q	V	G	16.0	80	2	LO REGEN	R-590	CONTROL VALVE	AREA	Y
6572	A,V,O	C	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP	AREA	Y
6573	Q	V	G	16.0	80	2	LO REGEN	R-590	PRESSURE TAP VALVE	AREA	Y
6574	Q	V	G	16.0	80	2	LO REGEN	R-590	BLOCKING VALVE	AREA	Y
6575	Q	V	G	16.0	80	2	LO REGEN	R-590	RECIRCULATION BLOCKING VALVE	AREA	Y

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TABLE 81
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
LIGHT OIL DECANT VENTING SYSTEM

Tag Identification	Monitoring Frequency	Component Type	Phase	Instrument Calibration	Figure #	Control Room						
1900	A,V,O	C	G	57.6	81	2	LO DECANT	D-604/605	PRESSURE SWITCH GAUGE	THIRD LEVEL	Y
1901	Q	V	G	57.6	81	2	LO DECANT	D-604/605	PRESSURE SWITCH 6006 BLOCKING VALVE	THIRD LEVEL	Y
1902	Q	V	G	57.6	81	2	LO DECANT	D-604/605	PRESSURE SWITCH GAUGE VALVE	THIRD LEVEL	Y
1910	A	V	G	57.6	81	2	DECANTERS	D-604/605	BLOCKING VALVE	THIRD LEVEL	DTM
1911	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1912	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1913	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1914	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CONTROL VALVE	THIRD LEVEL	Y
1915	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1920	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CONTROL VALVE	THIRD LEVEL	Y
1921	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1922	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1923	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PCV VALVE 15024	THIRD LEVEL	Y
1925	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1924	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1926	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1927	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1930	Q	V	G	57.6	81	2	DECANTERS	D-604/605	BLOCKING VALVE	THIRD LEVEL	Y
1931	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1932	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1933	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1934	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1934	Q	V	G	57.6	81	2	DECANTERS	D-604/605	CLEANOUT VALVE	THIRD LEVEL	Y
1935	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1940	A,V,O	C(x2)	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TRANSDUCER 6040	THIRD LEVEL	Y
1941	A,V,O	C	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE GAUGE	THIRD LEVEL	Y
1942	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP	THIRD LEVEL	Y
1943	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP	THIRD LEVEL	Y
1944	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP CLEANOUT	THIRD LEVEL	Y
1955	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE	THIRD LEVEL	Y
1946	A,V,O	C	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE GAUGE	THIRD LEVEL	Y
1948	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE GAUGE VALVE	THIRD LEVEL	Y
1947	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP CLEANOUT	THIRD LEVEL	Y
1945	Q	V	G	57.6	81	2	DECANTERS	D-604/605	VALVE		
1949	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP	THIRD LEVEL	Y
1963	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP CLEANOUT	THIRD LEVEL	Y
1950	A,V,O	C(x3)	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE SWITCH 6028A	THIRD LEVEL	Y
1951	Q	V	G	57.6	81	2	DECANTERS	D-604/605	PRESSURE TAP	THIRD LEVEL	Y
1960	Q	V	G	57.6	81	2	DECANTERS	D-604/605	DRAIN VALVE	THIRD LEVEL	Y
1961	Q	V O/E	G	57.6	81	2	DECANTERS	D-604/605	DRAIN VALVE	THIRD LEVEL	Y
1962	Q	V	G	57.6	81	2	DECANTERS	D-604/605	DRAIN VALVE	THIRD LEVEL	Y
1963	Q	V	G	57.6	81	2	DECANTERS	D-604/605	DRAIN VALVE	THIRD LEVEL	Y
1964	Q	V	G	57.6	81	2	DECANTERS	D-604/605	DRAIN VALVE	THIRD LEVEL	Y
	A,V,O	C(x3)	G	57.6	81	2	DECANTERS	D-604/605	VARIOUS UNMARKED FLANGES	THIRD LEVEL	Y

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KEY

MONITORING FREQUENCY
Q--Quarterly
M--Monthly
A--Annually (Difficult-to-Monitor)
UTM--When conditions make it safe (Unsafe-to-Monitor)
A,V,O--When audible, visual, or olfactory leak suspected
N/A--Not applicable (component under vacuum)
DTM--Component is a difficult-to-monitor component

COMPONENT TYPE
V--Valve
P--Pump Seal
AGI--Agitator
C--Flange or other connector
O/E--Open Ended Line
PRV--Pressure Relief Valve

PHASE
G--Gas
L--Liquid
GV--Gas under Vacuum

TABLE 82
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
FLARE SYSTEM

23 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9202	Q	V	G	15.0	82	WW	FLARE		STEAM CONTROL BLOCKING VALVE	FLARE	Y
9202	Q	V	G	15.0	82	WW	FLARE		PRESSURE VALVE	FLARE	Y
9203	A,V,O	C	G	15.0	82	WW	FLARE		PRESSURE GAUGE	FLARE	Y
9204	Q	V	G	15.0	82	WW	FLARE		PRESSURE VALVE	FLARE	Y
9205	A,V,O	C	G	15.0	82	WW	FLARE		PRESSURE GAUGE	FLARE	Y
9206	Q	V	G	15.0	82	WW	FLARE		VENT LINE BLOCKING VALVE	FLARE	Y
9207	Q	V O/E	G	15.0	82	WW	FLARE		NORTH CLEANOUT/VENT O/E VALVE	FLARE	Y
9208	Q	V O/E	G	15.0	82	WW	FLARE		SOUTH CLEANOUT/VENT O/E VALVE	FLARE	Y
9209	Q	V	G	15.0	82	WW	FLARE	SOUTH TK	SOUTH TANK VENT LINE PRESSURE VALVE	FARM	Y
9220	A,V,O	C	G	15.0	82	WW	FLARE	SOUTH TK	SOUTH TANK VENT LINE PRESSURE GAUGE	FARM	Y
9222	Q	V O/E	G	15.0	82	WW	FLARE	MIDDLE TK	NORTH TANK VENT LINE O/E VENT VALVE	FARM	Y
9222	Q	V O/E	G	15.0	82	WW	FLARE	NORTH TK	NORTH TANK VENT LINE CLEANOUT O/E VALVE	FARM	Y
9223	Q	V O/E	G	15.0	82	WW	FLARE	SOUTH TK	SOUTH TANK VENT LINE CLEANOUT O/E VALVE	FARM	Y
	A,V,O	C(x20)	G	15.0	82	WW	FLARE	VENT LINE	FLANGES ALONG VENT LINE	VENT LINE	Y

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TABLE 83
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
NORTH WASTEWATER STORAGE TANK

22 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9222	Q	V O/E	L	7.5	83	WW	STORAGE TANK	NORTH TK	OPEN ENDED PRESSURE TAP	BOTTOM SIDE	Y
9223	A,V,O	C	G	15.0	83	WW	STORAGE TANK	NORTH TK	ACCESS HATCH	TOP SIDE OF WALKWAY	Y
9224	Q	O/E	G	15.0	83	WW	STORAGE TANK	NORTH TK	SUCTION SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9225	Q	O/E	G	15.0	83	WW	STORAGE TANK	NORTH TK	DISCHARGE SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9226	Q	V O/E	G	15.0	83	WW	STORAGE TANK	NORTH TK	OPEN ENDED PRESSURE TAP	TOP PLATFORM	Y
9227	A,V,O	C	G	15.0	83	WW	STORAGE TANK	NORTH TK	ACCESS HATCH	TOP PLATFORM	Y
9228	Q	O/E	G	15.0	83	WW	STORAGE TANK	NORTH TK	SUCTION SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9229	Q	O/E	G	15.0	83	WW	STORAGE TANK	NORTH TK	DISCHARGE SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9230	Q	V	L	7.5	83	WW	STORAGE TANK	NORTH TK	SUMP LINE	BOTTOM SIDE	Y
	A,V,O	C(X22)	G/L	15.0	83	WW	STORAGE TANK	NORTH TK	VARIOUS OTHER FLANGES AND MANHEAD COVERS	TOP/SIDE	Y

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TABLE 84
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
MIDDLE WATEWATER STORAGE TANK

UNIT NOT IN SERVICE, NO COMPONENTS REGISTERED

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TABLE 85
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
SOUTH WATEWATER STORAGE TANK

24 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9260	Q	O/E	G	15.0	83	WW	STORAGE TANK	SOUTH TK	DISCHARGE SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9262	Q	O/E	G	15.0	83	WW	STORAGE TANK	SOUTH TK	SUCTION SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9262	Q	V	L	7.5	83	WW	STORAGE TANK	SOUTH TK	CONTAMINATED WATER/SUMP DISCHARGE VALVE	BOTTOM SIDE	Y
9263	A,V,O	C	G	15.0	83	WW	STORAGE TANK	SOUTH TK	ACCESS HATCH	TOP PLATFORM	Y
9264	Q	O/E	G	15.0	83	WW	STORAGE TANK	SOUTH TK	SUCTION SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9265	Q	O/E	G	15.0	83	WW	STORAGE TANK	SOUTH TK	DISCHARGE SIDE OF CONSERVATION VENT	TOP PLATFORM	Y
9266	Q	V	G	7.5	83	WW	STORAGE TANK	SOUTH TK	CONTAMINATED WATER/SUMP DISCHARGE VALVE	BOTTOM SIDE	Y
9267	Q	V O/E	G	15.0	83	WW	STORAGE TANK	SOUTH TK	PRESSURE TAP VALVE	TOP PLATFORM	Y
9268	A,V,O	C	G	15.0	83	WW	STORAGE TANK	SOUTH TK	PRESSURE TAP GAUGE	TOP PLATFORM	Y
9269	A,V,O	C	G	15.0	83	WW	STORAGE TANK	SOUTH TK	ACCESS HATCH	TOP SIDE OF WALKWAY	Y
9270	Q	V O/E	L	7.5	83	WW	STORAGE TANK	SOUTH TK	OPEN ENDED PRESSURE TAP	BOTTOM SIDE	Y
	A,V,O	C(X22)	G/L	15.0	83	WW	STORAGE TANK	SOUTH TK	VARIOUS OTHER FLANGES AND MANHEAD COVERS	TOP/SIDE	Y

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TABLE 86
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
INCOMING LIGHT OIL, ACROSS ROADWAY

NO REGISTERED COMPONENTS

TABLE 87

REGISTRATION OF COMPONENTS IN BENZENE SERVICE

INCOMING LIGHT OIL, OVER STILL HOUSE

9 Quarterly Components, 2 Annual Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9000	UTM	V	L	57.6	87	KOP	OVERHEAD LINE	NO. 1 STILL	NEW LINE BLOCKING VALVE	NEW LINE	UTM
9001	UTM	V	L	57.6	87	KOP	OVERHEAD LINE	NO. 1 STILL	NEW LINE SUMP DISCHARGE BLOCKING VALVE	NEW LINE	UTM
9002	UTM	V	L	57.6	87	KOP	OVERHEAD LINE	NO. 1 STILL	NEW LINE BLOCKING VALVE	NEW LINE	UTM
	UTM-A.V.O	C(x28)	L	57.6	87	KOP	OVERHEAD LINE	NO. 1 STILL	FLANGES ALONG NEW LINE	NEW LINE	UTM

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TABLE 88
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
TANK CONNECTIONS, TANKS #61, 62, 63

29 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9459	Q	V	L	57.6	88	LOS	STORAGE TANK	T-63	LO DISCHARGE CONNECTING VALVE T-63 TO BARGE LOADING PUMPS	EAST SIDE	Y
9462	Q	V	L	7.5	88	LOS	STORAGE TANK	T-63	CONTAMINATED WATER DISCHARGE	EAST SIDE	Y
9463	Q	V	L	7.5	88	LOS	STORAGE TANK	T-63	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-63	EAST SIDE	Y
9457	Q	V	L	57.6	88	LOS	STORAGE TANK	T-63	SIDE MANHEAD SAMPLE VALVE	NORTH SIDE	Y
9458	Q	V	L	57.6	88	LOS	STORAGE TANK	T-63	SIDE SAMPLE VALVE	NORTH SIDE	Y
9466	Q	V	L	57.6	88	LOS	STORAGE TANK	T-63	USX (KEYSTONE) IN	WEST SIDE	Y
9449	Q	V	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62/63	MAIN HEADER LINE FOR BARGE LOADING	BETWEEN 63 AND 62	Y
9454	Q	V	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62/63	MAIN HEADER LINE FOR BARGE LOADING	TO SUMP PIT	Y
9484	Q	V	L	7.5	88	LOS	CONT. WATER LINE	T-62/63	MAIN HEADER LINE FOR CONTAMINATED WATER	BETWEEN 63 AND 62	Y
9483	Q	V	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62/63	MAIN HEADER LINE FOR BARGE LOADING	BETWEEN 63 AND 62	Y
9485	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	LO DISCHARGE CONNECTING VALVE T-62 TO BARGE LOADING PUMPS	EAST SIDE	Y
9497	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	LO DISCHARGE CONNECTING VALVE T-62 TO BARGE LOADING PUMPS	EAST SIDE	Y
9498	Q	V	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62	LO DISCHARGE TO BARGE LOADING PUMPS	NORTH OF 62	Y
9492	Q	V	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62/63	LO DISCHARGE BLOCKING VALVE TO BARGE LOADING PUMPS	NORTH OF 62	Y
9472	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE	EAST SIDE	Y
9470	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-62	EAST SIDE	Y
9472	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE BYPASS/SUMP LINE	NORTH SIDE	Y
9473	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE BYPASS/SUMP VALVE TO T-62	NORTH SIDE	Y
9475	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	USX (KEYSTONE) IN	WEST SIDE	Y
9488	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	USX (KEYSTONE) IN--CLEANOUT VALVE ON PLATFORM LEVEL	PLATFORM-NORTH OF 62	Y
9489	Q	V O/E	L	57.6	88	LOS	STORAGE TANK	T-62	USX (KEYSTONE) IN--CLEANOUT O/E VALVE ON PLATFORM LEVEL	PLATFORM-NORTH OF 62	Y
9428	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	LO DISCHARGE CONNECTING VALVE T-62 TO BARGE LOADING PUMPS	EAST SIDE	Y
9423	Q	V O/E	L	57.6	88	LOS	L.O. DISCHARGE LINE	T-62	L.O. DISCHARGE LINE--CLEANOUT VALVE		Y
9440	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-62	EAST SIDE	Y
9432	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE VALVE	EAST SIDE	Y
9432	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-62	EAST SIDE	Y
9429	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	CONTAMINATED WATER DISCHARGE VALVE	EAST SIDE	Y
9456	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	SEAL WATER IN	WEST SIDE	Y
9450	Q	V	L	7.5	88	LOS	STORAGE TANK	T-62	SEAL WATER OUT	WEST SIDE	Y
9444	Q	V	L	57.6	88	LOS	STORAGE TANK	T-62	USX (KEYSTONE) IN	WEST SIDE	Y
9420	Q	V O/E	L	57.6	88	LOS	L.O. DISCHARGE LINE	GENERAL	BLIND VALVE	BETWEEN 62 AND 62	Y
9422	Q	V O/E	L	57.6	88	LOS	L.O. DISCHARGE LINE	GENERAL	BLIND VALVE	BETWEEN 62 AND 62	Y
	A,V,O	C(x7)	L	57.6	88	LOS	VARIOUS	GENERAL	UNMARKED FLANGES, MANHEADS AND CONNECTORS	T-62,62, & 63	Y

TABLE 89
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
TANK CONNECTIONS, TANK #64
8 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9426	Q	V	L	57.6	89	LOS	STORAGE TANK	T-64	LO DISCHARGE CONNECTING VALVE T-64 TO BARGE LOADING PUMPS	EAST SIDE	Y
9433	Q	V	L	57.6	89	LOS	STORAGE TANK	T-64	U&X (KEYSTONE) IN	WEST SIDE	Y
9436	Q	V	L	7.5	89	LOS	STORAGE TANK	T-64	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-63	EAST SIDE	Y
9437	Q	V	L	7.5	89	LOS	STORAGE TANK	T-64	CONTAMINATED WATER DISCHARGE	EAST SIDE	Y
9486	Q	V O/E	L	7.5	89	LOS	STORAGE TANK	T-64	BLIND VALVE FOR CONTAMINATED WATER DISCHARGE LINE	NE OF T-64	Y
9427	Q	V O/E	L	57.6	89	LOS	STORAGE TANK	T-64	BLIND VALVE FOR L.O. DISHCARGE LINE	NE OF T-64	Y
	A,V,O	C(x3)	L	57.6	88	LOS	VARIOUS	GENERAL	UNMARKED FLANGES, MANHEADS AND CONNECTORS	T-64	Y

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TABLE 90
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
TANK #59 DETAILS

7 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9030	Q	V O/E	L	57.6	90	LOS	STORAGE TANK	T-59	CLEANOUT VALVE--LIGHT OIL DISCHARGE	SIDE	Y
9032	A,V,O	C	L	57.6	90	LOS	STORAGE TANK	T-59	TEMPERATURE GAUGE	SIDE	Y
9033	Q	V	L	57.6	90	LOS	STORAGE TANK	T-59	LO DISCHARGE CONNECTING VALVE T-59 TO BARGE LOADING PUMPS	SIDE	Y
9034	Q	V	L	7.5	90	LOS	STORAGE TANK	T-59	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-59	SIDE	Y
9035	Q	V	L	7.5	90	LOS	STORAGE TANK	T-59	CONTAMINATED WATER DISCHARGE LINE BLOCKING VALVE	SIDE	Y
9036	Q	V	L	57.6	90	LOS	STORAGE TANK	T-59	USX (KEYSTONE) IN	SIDE	Y
	A,V,O	C(x2)	L	57.6	90	LOS	VARIOUS	GENERAL	UNMARKED FLANGES, MANHEADS AND CONNECTORS	T-59	Y

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TABLE 91

REGISTRATION OF COMPONENTS IN BENZENE SERVICE

TANK #60 DETAILS

7 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9050	Q	V	L	57.6	90	LOS	STORAGE TANK	T-60	USX (KEYSTONE) IN	SIDE	Y
9052	A,V,O	C	L	57.6	90	LOS	STORAGE TANK	T-60	TEMPERATURE GAUGE	SIDE	Y
9053	Q	V	L	7.5	90	LOS	STORAGE TANK	T-60	CONTAMINATED WATER DISCHARGE CONNECTING VALVE TO T-60	SIDE	Y
9054	Q	V	L	57.6	90	LOS	STORAGE TANK	T-60	LO DISCHARGE CONNECTING VALVE T-60 TO BARGE LOADING PUMPS	SIDE	Y
9055	Q	V O/E	L	7.5	90	LOS	STORAGE TANK	T-60	LO DISCHARGE LINE CLEANOUT VALVE	SIDE	Y
	A,V,O	C(x2)	L	57.6	90	LOS	VARIOUS	GENERAL	UNMARKED FLANGES, MANHEADS AND CONNECTORS	T-60	Y

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TABLE 97
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
BARGE LOADING PUMP AREA
2 Monthly Components, 32 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9500	Q	V O/E	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM TANKS 59/60	CLEANOUT VALVE	Y
9502	Q	V	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM TANKS 59/60	BLOCKING VALVE	Y
9502	Q	V	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM TANKS 59 THRU 64	BLOCKING VALVE	Y
9503	Q	V O/E	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM OLD TANK MANIFOLD	CLEANOUT VALVE	Y
9504	Q	V O/E	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM OLD TANK MANIFOLD	DRAIN VALVE	Y
9505	Q	V	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM OLD TANK MANIFOLD	BLIND VALVE	Y
9506	Q	V O/E	L	57.6	97	LOS	INCOMING LINE	PUMPS 1/2	INCOMING LINE FROM OLD TANK MANIFOLD	BLOCKING VALVE	Y
9507	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	LO INLET SUCTION VALVE	BLOCKING VALVE	Y
9508	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	LO INLET SUCTION RELIEF VENT	BLOCKING VALVE	Y
9509	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	LO INLET SUCTION RELIEF VENT	VENT VALVE	Y
9510	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	LO INLET SUCTION RELIEF VENT	VENT VALVE	Y
9511	M	P	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	LOADING PUMP P-2	PUMP SEAL	Y
9512	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	INLET CLEANOUT VALVE	CLEANOUT VALVE	Y
9513	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE PRESSURE VALVE	BLOCKING VALVE	Y
9515	A.V.O	C	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	PRESSURE GAUGE	PRESSURE	Y
9516	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE FILTER	BLOCKING VALVE	Y
9517	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE FILTER	BLOCKING VALVE	Y
9518	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE FILTER	VENT VALVE	Y
9519	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE FILTER	VENT VALVE	Y
9520	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE CHECK VALVE	CHECK VALVE	Y
9521	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	DISCHARGE VALVE	BLOCKING VALVE	Y
9522	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 2	PUMP HOUSING DRAIN VALVE	DRAIN VALVE	Y
9523	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	LO INLET SUCTION VALVE	BLOCKING VALVE	Y
9524	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	LO INLET SUCTION VENT VALVE	VENT VALVE	Y
9525	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	LO INLET SUCTION VALVE	BLOCKING VALVE	Y
9526	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	PUMP HOUSING DRAIN VALVE	DRAIN VALVE	Y
9527	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	INLET CLEANOUT VALVE	CLEANOUT VALVE	Y
9528	M	P	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	LOADING PUMP P-1	PUMP SEAL	Y
9529	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE FILTER	BLOCKING VALVE	Y
9530	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE FILTER	BLOCKING VALVE	Y
9531	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE FILTER	VENT VALVE	Y
9532	Q	V O/E	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE FILTER	VENT VALVE	Y
9533	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE PRESSURE VALVE	BLOCKING VALVE	Y
9534	A.V.O	C	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	PRESSURE GAUGE	PRESSURE	Y
9535	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE CHECK VALVE	CHECK VALVE	Y
9536	Q	V	L	57.6	97	LOS	TRANSFER PUMP	PUMP 1	DISCHARGE VALVE	BLOCKING VALVE	Y
9537	Q	V	L	57.6	97	LOS	GENERAL	PUMPS 1/2	COMBINED MAIN HEADER DISCHARGE LINE	BLOCKING VALVE	Y
9538	Q	V O/E	L	57.6	97	LOS	GENERAL	PUMPS 1/2	COMBINED MAIN HEADER DISCHARGE LINE	CLEANOUT VALVE	Y
9539	Q	V	L	57.6	97	LOS	GENERAL	PUMPS 1/2	OLD TANK MANIFOLD	BLOCKING VALVE	Y
	A.V.O	C(x25)	L	57.6	97	LOS	GENERAL	PUMPS 1/2	UNMARKED FLANGES AND OTHER CONNECTORS	GENERAL	Y

TABLE 100
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
TO BARGE DOCK, WEST OF TANK FARM

8 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
9580	Q	V	L	57.6	100	LOS	DOCK FEEDING	BLOCKING		Y
9582	Q	V	L	57.6	100	LOS	DOCK FEEDING	KEYSTONE RETURN LINE/CONT. WATER LINE	BLOCKING	Y
9583	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	CLEANOUT	CLEANOUT	Y
9584	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	CLEANOUT	Y
9585	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	BLIND	Y
9586	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	BLIND	BLIND	Y
9588	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	CLEANOUT	Y
9589	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	KEYSTONE RETURN LINE/CONT. WATER LINE	CLEANOUT	Y
9590	Q	V O/E	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	CLEANOUT	Y
9591	A	V	L	57.6	100	LOS	DOCK FEEDING	KEYSTONE RETURN LINE/CONT. WATER LINE	BLOCKING-DTM	N
9592	A	V	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	BLOCKING-DTM	N
9593	A	V	L	57.6	100	LOS	DOCK FEEDING	KEYSTONE RETURN LINE/CONT. WATER LINE	BLOCKING-DTM	N
9594	A	V	L	57.6	100	LOS	DOCK FEEDING	LIGHT OIL BARGE LOADING LINE	BLOCKING-DTM	N
	A,V,O	C(x11)	L	57.6	100	LOS	DOCK FEEDING	FLANGES ON LOADING/CONT. WATER LINES	LOADING LINE	Y
	A,V,O	C	L	57.6	100	LOS	DOCK FEEDING	FLANGES ON LOADING/CONT. WATER LINES	LOADING LINE-DTM	N

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TABLE 101
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
TO BARGE DOCK, DOWNRIVER

3 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room				
9400	Q	V	L	57.6	101	BARGE	DOCK FEEDING	LOADING LINE	BLOCKING	Y
9401	Q	V	L	57.6	101	BARGE	DOCK FEEDING	LOADING LINE	INSTRUMENT AIR	Y
9402	Q	V	L	57.6	101	BARGE	DOCK FEEDING	LOADING LINE-V11	BLOCKING	Y
9403	Q	V	L	57.6	101	BARGE	DOCK FEEDING	LOADING LINE-V12	BLOCKING	Y
9404	Q	O/E	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	FLAME ARRESTOR	Y
9405	Q	V O/E	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-V1204	CLEANOUT	Y
9406	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	PRESSURE VALVE	Y
9407	A.V.O	C	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	PRESURE GAUGE	Y
9408	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-V9	BLOCKING	Y
9409	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-AV8	AUTO VALVE	Y
9410	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-AV7	AUTO VALVE	Y
9411	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-AV6	AUTO VALVE	Y
9412	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	CHECK VALVE	Y
9413	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	STEAM IN	Y
9414	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	CHECK VALVE	Y
9415	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE-AV4	AUTO VALVE	Y
9416	Q	V	G	80.0	101	BARGE	DOCK VAPOR COLLECTION SYSTEM	VAPOR RETURN LINE	BLOCKING	Y

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TABLE 103
REGISTRATION OF COMPONENTS IN BENZENE SERVICE
CONTAMINATED WATER DISCHARGE SYSTEM

2 Monthly Components, 26 Quarterly Components

Tag Identification	Monitoring Frequency	Component Type	Phase	Benzene Concentration	Figure #	Control Room					
9540	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	CLEANOUT	MAIN HEADER LINE	Y
9541	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	BLOCKING	MAIN HEADER LINE	Y
9542	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	CLEANOUT	MAIN HEADER LINE	Y
9543	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	RECIRCULATION	MAIN HEADER LINE	Y
9544	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	RECIRCULATION CLEANOUT	MAIN HEADER LINE	Y
9545	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	RECIRCULATION	MAIN HEADER LINE	Y
9546	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	BLOCKING	MAIN HEADER LINE	Y
9547	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	BLOCKING	P-2 INLET LINE	Y
9548	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	SAMPLE/DRAIN	P-2 INLET LINE	Y
9549	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	SAMPLE/DRAIN O/E VALVE	P-2 INLET LINE	Y
9550	M	P	L	7.5	103	LOS	CONTAM WATER	P-2	CONTAMINATED WATER DISCHARGE PUMP	PUMP SEAL	Y
9551	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE	P-2 DISCHARGE LINE	Y
9552	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE O/E	P-2 DISCHARGE LINE	Y
9553	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE O/E	P-2 DISCHARGE LINE	Y
9554	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	CHECK VALVE	P-2 DISCHARGE LINE	Y
9555	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	P-2 DISCHARGE LINE	Y
9556	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	BLOCKING	P-1 INLET LINE	Y
9557	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	CLEANOUT	P-1 INLET LINE	Y
9566	Q	V	L	7.5	103	LOS	CONTAM WATER	SUCTION	STEAM INLET	P-1 INLET LINE	Y
9560	M	P	L	7.5	103	LOS	CONTAM WATER	P-1	CONTAMINATED WATER DISCHARGE PUMP	PUMP SEAL	Y
9561	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE BLOCKING	P-1 DISCHARGE LINE	Y
9562	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE DRAIN O/E VALVE	P-1 DISCHARGE LINE	Y
9563	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	SAMPLE DRAIN O/E VALVE	P-1 DISCHARGE LINE	Y
9564	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	PRESSURE VALVE	P-1 DISCHARGE LINE	Y
9565	A,V,O	C	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	PRESSURE GAUGE	P-1 DISCHARGE LINE	Y
9567	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	CHECK VALVE	P-1 DISCHARGE LINE	Y
9568	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	P-1 DISCHARGE LINE	Y
9569	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	CLEANOUT	P-1 DISCHARGE LINE	Y
9570	A,V,O	C	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	PRESSURE SWITCH	MAIN HEADER LINE	Y
9571	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	CLEANOUT	MAIN HEADER LINE	Y
9572	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	MAIN HEADER LINE	Y
9573	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	MAIN HEADER LINE	Y
9574	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	CLEANOUT	MAIN HEADER LINE	Y
9575	Q	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLIND	MAIN HEADER LINE	Y
9576	A	V O/E	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	VENT RELIEF	MAIN HEADER VENT	N-DTM
9577	UTM	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	TANK LINES	UTM
9578	UTM	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	TANK LINES	UTM
9579	UTM	V	L	7.5	103	LOS	CONTAM WATER	DISCHARGE	BLOCKING	TANK LINES	UTM
9587	Q	V O/E	L	7.5	103	LOS	CONTAM WATER	SUCTION	CLEANOUT	SUCTION BLIND LINE	Y
	A,V,O	C(x10)	L	7.5	103	LOS	CONTAM WATER	GENERAL	UNMARKED FLANGES ON CONTAMINATED WATER SYSTEM	GENERAL	Y

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