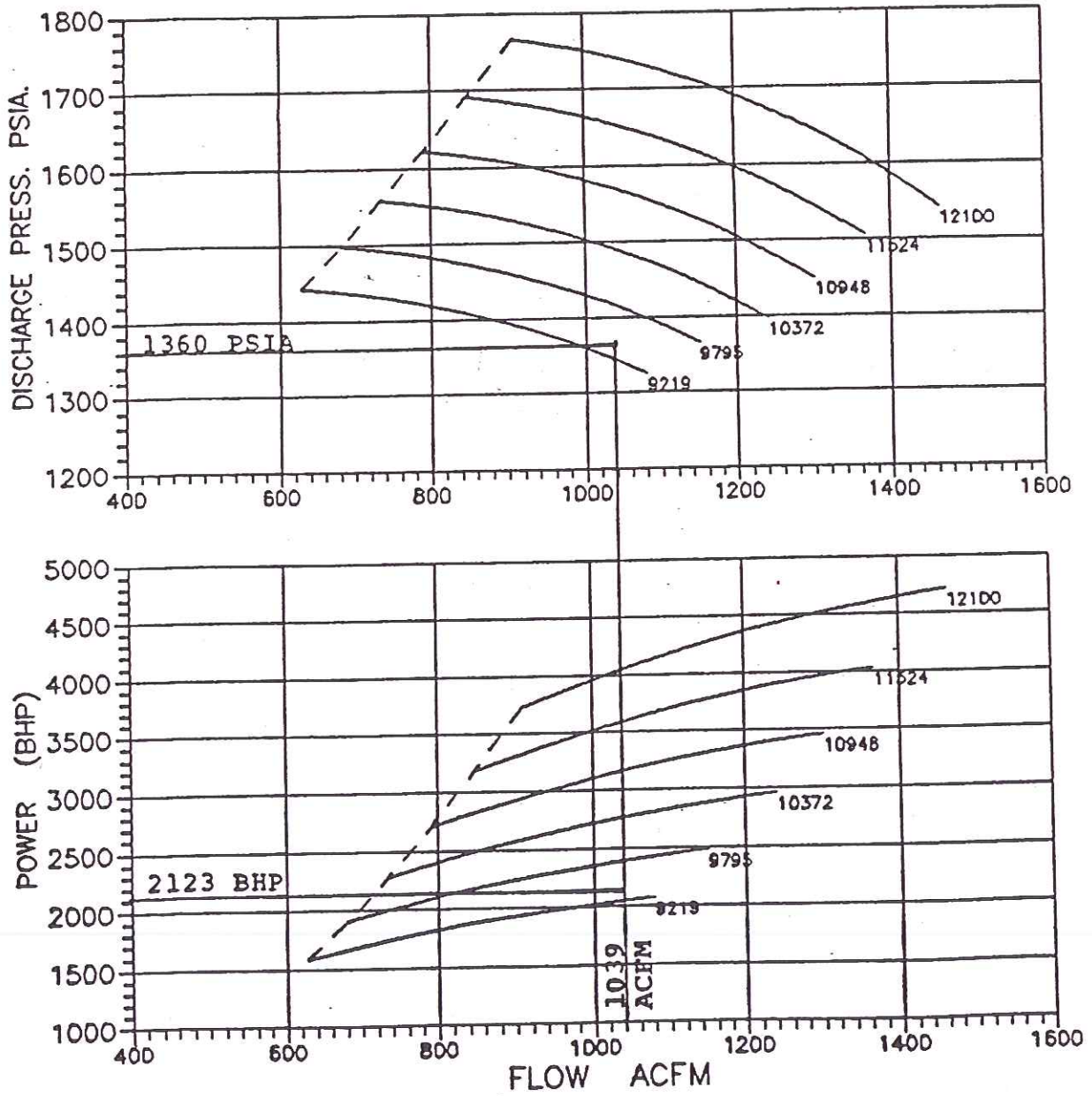


100434

PRELIMINARY PREDICTED PERFORMANCE FOR
CHEVRON U.S.A. PORT ARTHUR, TEXAS
HYDROGEN COMPRESSOR RERATE, S/N 2419 & 2420
DRESSER RAND MODELS MTGB 324 & 224

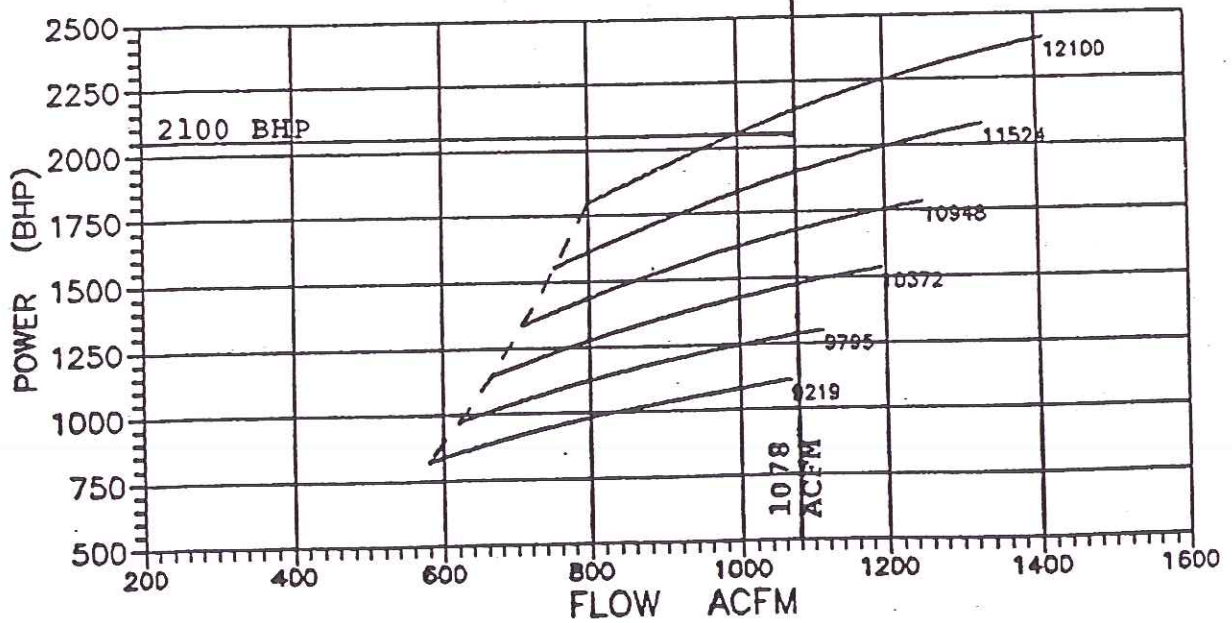
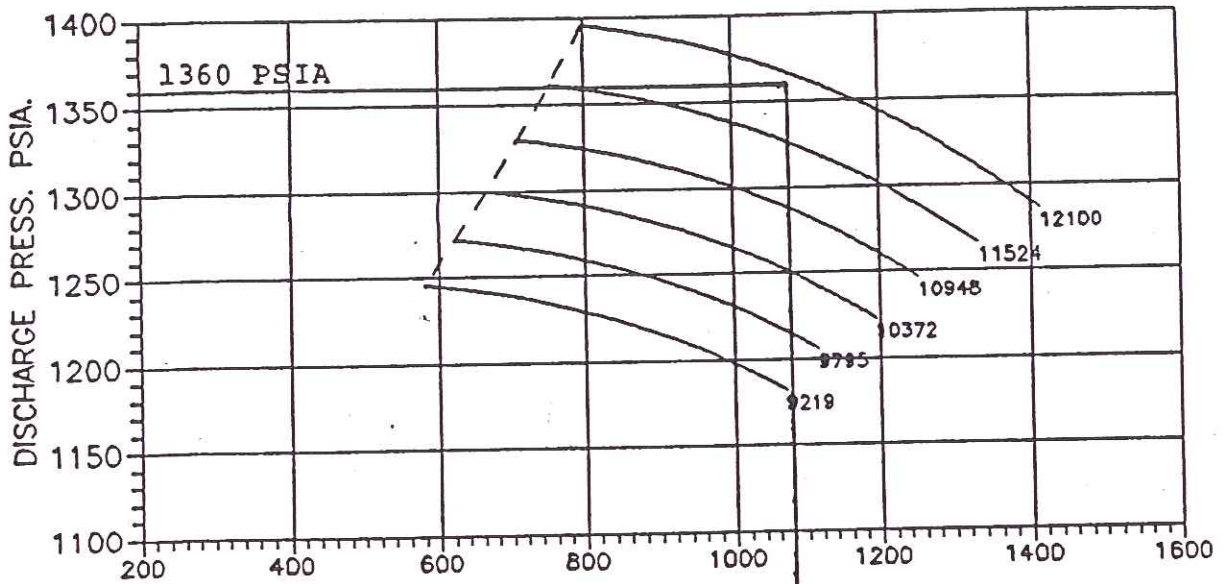
CONDITION B
SUCT. PRESS. 1052 PSIA, SUCT. TEMP. 124 DEG F
DISC. PRESS. 1360 PSIA, MOL. WGT. 10.0
VOL. FLOW 94.7 MMSCFD, LBS./MIN. 1733



DATE: 5-2-90	TPZ	CURVE No.:
HU 9553		C3

PRELIMINARY PREDICTED PERFORMANCE FOR
 CHEVRON U.S.A. PORT ARTHUR, TEXAS
 HYDROGEN COMPRESSOR RERATE, S/N 2419 & 2420
 DRESSER RAND MODELS (MTGB 324) & 224

CONDITION A
 SUCT. PRESS. 1052 PSIA, SUCT. TEMP. 124 DEG F
 DISC. PRESS. 1360 PSIA, MOL. WGT. 5.30
 VOL. FLOW 94.7 MMSCFD, LBS./MIN. 919

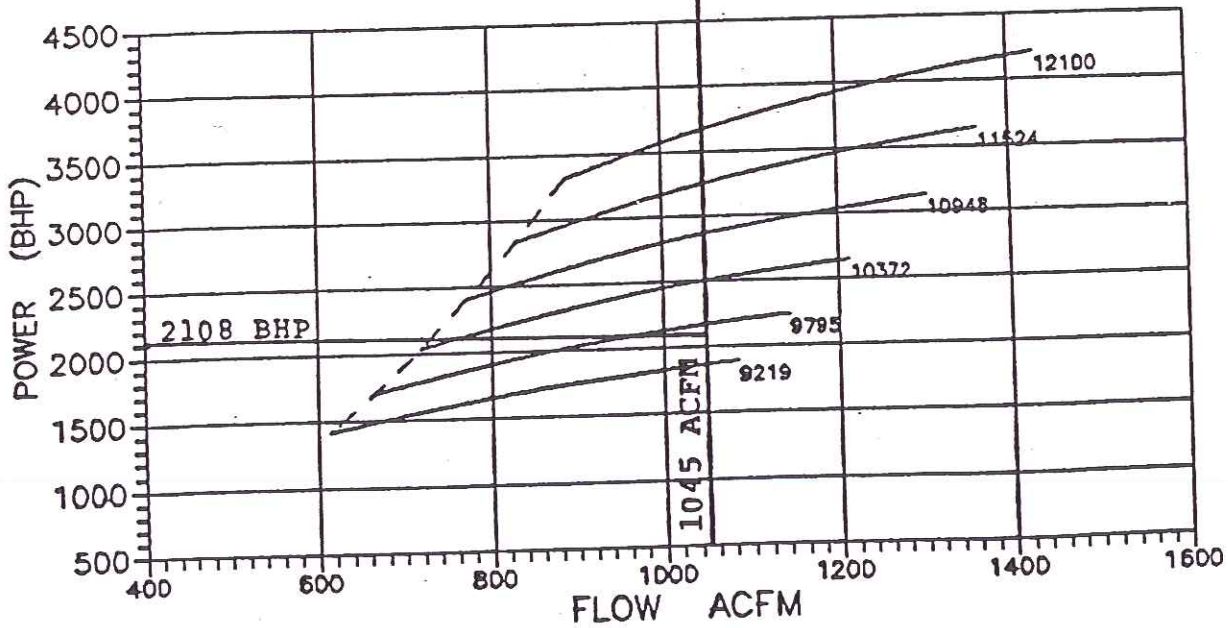
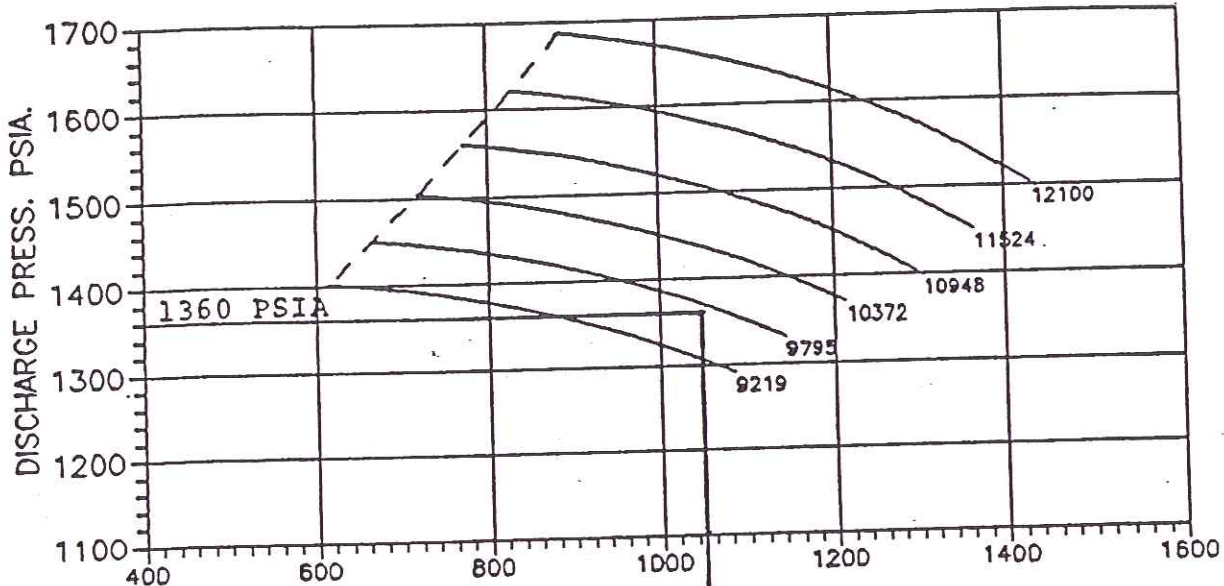


DATE: 5-2-90	TPZ	CURVE No.:
HU 9553		C2

CT. 21665
 CE. 11347

PRELIMINARY PREDICTED PERFORMANCE FOR
 CHEVRON U.S.A. PORT ARTHUR, TEXAS
 HYDROGEN COMPRESSOR RERATE, S/N 2419 & 2420
 DRESSER RAND MODELS MTGB 324 & 224

NORMAL CONDITION
 SUCT. PRESS. 1052 PSIA, SUCT. TEMP. 124 DEG F
 DISC. PRESS. 1360 PSIA, MOL. WGT. 9.1
 VOL. FLOW 94.7 MMSCFD, LBS./MIN. 1577



DATE: 5-2-90	TPZ	CURVE No.:
HU 9553		C1

CT. 21665
 CE. 11346

DRESSER-RAND COMPANY

SPECIFICATIONS

1. Quantity of Units One (1)
2. Arrangement of Unit Tandem, Series
3. Turbine Serial Number T-2418
4. Compressor Serial Number B-2419 and B-2420
5. Type of Compressors B-2419 and B-2420
Centrifugal, multi-
stage, uncooled,
single flow
6. Class and Size of Compressor B-2419: MTGB-324
B-2420: MTGB-224
7. Number of Compression Stages B-2419: Three (3)
B-2420: Two (2)
8. Compressor Rotation when Facing Coupling
End of Compressor at Driver End Clockwise
9. First Harmonic Speed:
(a) Compressor B-2419 4600 RPM
(b) Compressor B-2420 RPM
10. Second Harmonic Speed:
(a) The Compressor Above Operating
Speed
11. Combined Lube and Seal Oil System Data:
(a) Schematic Arrangement of Combined
Lube and Seal Oil System 339074
(b) Main Lube Oil Pump Capacity 283 GPM @ 80 PSIG
(c) Auxiliary Lube Oil Pump Capacity 283 GPM @ 80 PSIG
(d) Driver of Main Lube Oil Pump Westinghouse
30 HP Motor

REVAMP NAMEPLATE DATA, CT. 21665

MTGB-224

Inlet Volume, cfm 962
Maximum Continuous Speed, rpm 12100
Casing Design Pressure:
 Inlet, psig 1750
 Discharge, psig 1750
Maximum Operating Temperature, °F 350
First Critical Speed, rpm
Compressor Serial Number B-2420
Hydrostatic Test Pressure, psig 2625

SERVICE CONDITIONS

REVAMP OPERATING CONDITIONS, CT. 21665

Unit S/N	B-2419	B-2420
Case:	Condition "B"	
<u>Section:</u>	<u>MTGB-324</u>	<u>MTGB-224 *</u>
Inlet pressure, psia	1052	1217.2
Inlet temperautre, °F	124	156.4
Capacity in units given by customer, MM scfd	94.71	94.71
Capacity at inlet conditions, cfm	1039	955
Weight flow, lb/min	1733	1733
Type of gas handled	H2/HC	H2/HC
Molecular weight	10.0	10.0
Isentropic exponent	1.292	1.289
Average compressibility factor	1.007	1.014
Discharge pressure, psia	1222.2	1360
Discharge temperature, °F	156.4	179.1
Pressure drop between cases, psia		5
Operating speed, rpm	9296	9296
Compressor calculated horse-power, bhp	1232	892

* MTGB-224 Unit Only is Being Revamped
Rev. 1, 12/91

SERVICE CONDITIONS

REVAMP OPERATING CONDITIONS, CT. 21665

Unit S/N	B-2419	B-2420
Case:	Condition "A"	
<u>Section:</u>	<u>MTGB-324</u>	<u>MTGB-224 *</u>
Inlet pressure, psia	1052	1221.6
Inlet temperautre, °F	124	160.1
Capacity in units given by customer, MM scfd	94.77	94.77
Capacity at inlet conditions, cfm	1078	993
Weight flow, lb/min	919	919
Type of gas handled	H2/HC	H2/HC
Molecular weight	5.30	5.30
Isentropic exponent	1.358	1.354
Average compressibility factor	1.044	1.051
Discharge pressure, psia	1226.9	1359.9
Discharge temperature, °F	160.1	185.2
Pressure drop between cases, psia		5
Operating speed, rpm	12008	12008
Compressor calculated horse-power, bhp	1224	876

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Rev. 1, 12/91

SERVICE CONDITIONS

REVAMP OPERATING CONDITIONS, CT. 21665

	B-2419	↓ Normal	B-2420
Unit S/N			
Case:			
<u>Section:</u>	<u>MTGB-324</u>		<u>MTGB-224</u> *
Inlet pressure, psia	1052		1218.2
Inlet temperature, °F	124		156.9
Capacity in units given by customer, MM scfd	94.71		94.71
Capacity at inlet conditions, cfm	1045		962
Weight flow, lb/min	1577		1577
Type of gas handled	H2/HC		H2/HC
Molecular weight	9.10		9.10
Isentropic exponent	1.303		1.299
Average compressibility factor	1.013		1.022
Discharge pressure, psia	1223.2		1360.0
Discharge temperature, °F	156.9		179.9
Pressure drop between cases, psia		5	
Operating speed, rpm	9635		9635
Compressor calculated horsepower, bhp	1226		883

* MTGB-224 Unit Only is Being Revamped
Rev. 1, 12/91