



Company: Enerflex Compression & Power
 Quote: 050693
 Case 29: Gas Analysis

Gas Analysis Data

Customer: Detector Exploration Ltd.
 Inquiry: Lindale AB
 Project: LSD: 15-08-49-06-W5M

ENERFLEX
 Compression and Power

7.6.1.0

Services	Gatherin				
Gas Model	VMG				
Stage	# 1	# 1	# 2	# 3	Final
Stream	Main	Vapor	Vapor	Vapor	Vapor
Suction Press, psig	14.00	14.00	69.19	229.82	
Disch Press, psig		71.57	234.82	660.00	650.00
Suction Temp, °C	18.00	18.00	48.89	48.89	48.89
Disch Temp, °C		118.61	147.14	139.34	48.89
Flow, E3m3/D	35.000	35.000	35.000	35.000	35.000
Flow, lb/h	2244.3	2244.3	2244.3	2244.3	2244.3
Flow, GPM					
Dropout, %					
Specific Gravity	0.5701	0.5701	0.5701	0.5701	0.5701
Ratio of Sp Ht (N)		1.2845	1.2752	1.2848	
Comp Suct (Zs)		0.9956	0.9906	0.9730	0.9311
Comp Disch (Zd)		0.9946	0.9898	0.9742	
Comp @ Std (Zstd)		0.9975	0.9975	0.9975	0.9975
Mole Weight		16.51	16.51	16.51	16.51
Density, lb/ft3		0.080	0.221	0.663	1.917
Density @ Std, lb/ft3		0.044	0.044	0.044	0.044
Enthalpy, Btu/lb		253.32	281.52	276.98	265.02
Entropy, Btu/lb-F		2.6780	2.5970	2.4614	2.3237
Speed of Sound (Suct), ft/s		1427.67	1491.84	1481.34	1465.29
Pseudo-Pc, psig		648.529	648.529	648.529	648.529
Pseudo-Tc, °C		-84.02	-84.02	-84.02	-84.02
Cp, Btu/lb-°F		0.5276	0.5479	0.5616	0.6013
NHV Mass, BTU/ft3		887.84	887.84	887.84	887.84
Speed of Sound (Disch), ft/s		1599.74	1662.82	1655.17	1462.39
Viscosity, lb/ft-s		9.15e-006	9.82e-006	9.73e-006	8.05e-006
Thermal Cond., Btu/ft-h-°F		2.73e-002	3.05e-002	3.01e-002	2.24e-002
Heat Load, BTU/h		1.49e+005	2.17e+005	2.05e+005	0.00e+000
Humidity	0.00				
WATER					
METHANE	96.37000	96.37000	96.37000	96.37000	96.37000
ETHANE	0.35000	0.35000	0.35000	0.35000	0.35000
PROPANE	0.04000	0.04000	0.04000	0.04000	0.04000
ISOBUTANE	0.01000	0.01000	0.01000	0.01000	0.01000
n-BUTANE	0.01000	0.01000	0.01000	0.01000	0.01000
ISOPENTANE					
n-PENTANE	0.01000	0.01000	0.01000	0.01000	0.01000
n-HEXANE	0.01000	0.01000	0.01000	0.01000	0.01000
n-HEPTANE	0.03000	0.03000	0.03000	0.03000	0.03000
n-OCTANE					
n-NONANE					
n-DECANE					
NITROGEN	3.10000	3.10000	3.10000	3.10000	3.10000
CARBON DIOXIDE					
HYDROGEN SULFIDE					
HELIUM-3	0.07000	0.07000	0.07000	0.07000	0.07000



Company: Detector
Quote:
Case 1:

Ariel Performance

Customer: Gary MacDonald
Inquiry:
Project:



7.5.7.0

Compressor Data:

Elevation, ft:	2500.0	Barmtr, psia:	13.400	Ambient, °F:	90.00
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1400.0	Calc BHP:	180	Calc PS FPM:	816.7

Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL/GLD
BHP:	415 (405)
Avail:	379 (26)

Services

Stage Data:

	#1	#2	#3
Flow Req'd, MMSCFD	1.500	1.500	1.500
Flow Calc, MMSCFD	0.828	0.828	0.826
Cyl BHP per Stage	51.2	61.0	58.4
Specific Gravity	0.65	0.65	0.65
Ratio of Sp Ht (N)	1.2533	1.2413	1.2529
Comp Suct (Zs)	0.9937	0.9879	0.9620
Comp Disch (Zd)	0.9913	0.9840	0.9578
Pres Suct Line, psig	15.00	N/A	N/A
Pres Suct Flg, psig	15.00	64.58	237.94
Pres Disch Flg, psig	67.19	243.26	810.00
Pres Disch Line, psig	N/A	N/A	800.00
Pres Ratio F/F	2.838	3.291	3.276
Temp Suct, °F	60.00	120.00	120.00
Temp Clr Disch, °F	120.00	120.00	120.00

Cylinder Data:

	Throw 1	Throw 3	Throw 4	Throw 2
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	CE(HEVR)	CE(HEVR)	DBL	DBL
Cyl Disp, CFM	206.7	206.7	213.2	75.4
Pres Suct Intl, psig	13.63	13.63	62.31	232.72
Temp Suct Intl, °F	68	68	126	125
Suct Zsph	0.9940	0.9940	0.9883	0.9630
Pres Disch Intl, psig	71.60	71.60	250.94	827.16
Temp Disch Intl, °F	205	205	287	289
HE Suct Gas Vel, FPM	N/A	N/A	5847	5068
HE Disch Gas Vel, FPM	N/A	N/A	5563	4777
HE Spcrrs Used/Max	N/A	N/A	0/2	0/2
HE Vol Pkt Avail, %	N/A	N/A	1.23+57.33	0.76+56.95
Vol Pkt Used, %	N/A	N/A	0.00 (V)	0.00 (V)
HE Min Clr, %	N/A	N/A	21.60	25.59
HE Total Clr, %	N/A	N/A	22.82	26.35
CE Suct Gas Vel, FPM	6986	6986	5578	4437
CE Disch Gas Vel, FPM	6965	6965	5307	4182
CE Spcrrs Used/Max	0/2	0/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	31.36
CE Total Clr, %	16.13	16.13	22.79	31.36
Suct Vol Eff HE/CE, %	N/A/72.7	N/A/72.7	56.6/56.6	51.8/44.0
Disch Event HE/CE, ms	N/A/8.7	N/A/8.7	6.2/7.1	6.0/6.3
Suct Pseudo-Q HE/CE	N/A/4.9	N/A/4.9	2.9/2.6	2.2/1.7
Gas Rod Ld Comp, lbf	143 C	143 C	7379 C	8867 C
Gas Rod Ld Tens, lbf	4111 T	4111 T	6806 T	6953 T
Gas Rod Ld Total, lbf	4254	4254	14185	15820
Xhd Pin Deg/%RvrsI lbf	175/51.7	173/52.5	149/86.4	137/93.7
Flow Calc, MMSCFD	0.414	0.414	0.828	0.826
Cyl BHP	25.6	25.6	61.0	58.4



Company: Detector
Quote:
Case 1:

Ariel Performance

Customer: Gary MacDonald
Inquiry:
Project:



7.5.7.0

Compressor Data:

Elevation, ft:	2500.0	Barmtr, psia:	13.400	Ambient, °F:	90.00
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1400.0	Calc BHP:	210	Calc PS FPM:	816.7

Driver Data:

Type: Nat. Gas
Mfg: Waukesha
Model: H24GL/GLD
BHP: 415 (405)
Avail: 379 (26)

Services

Stage Data:

	#1	#2	#3
Flow Req'd, MMSCFD	1.500	1.500	1.500
Flow Calc, MMSCFD	0.988	0.988	0.985
Cyl BHP per Stage	67.3	69.3	64.5
Specific Gravity	0.65	0.65	0.65
Ratio of Sp Ht (N)	1.2518	1.2427	1.2551
Comp Suct (Zs)	0.9937	0.9863	0.9591
Comp Disch (Zd)	0.9910	0.9821	0.9550
Pres Suct Line, psig	15.00 ✓	N/A	N/A
Pres Suct Flg, psig	15.00	75.30	258.34
Pres Disch Flg, psig	77.91	263.66	810.00
Pres Disch Line, psig	N/A	N/A	800.00
Pres Ratio F/F	3.215	3.124	3.030
Temp Suct, °F	60.00	120.00	120.00
Temp Clr Disch, °F	120.00	120.00	120.00

Cylinder Data:

	Throw 1	Throw 3	Throw 4	Throw 2
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	418.4	418.4	213.2	75.4
Pres Suct Intl, psig	13.60	13.60	72.71	252.68
Temp Suct Intl, °F	66	66	125	125
Suct Zsph	0.9939	0.9939	0.9867	0.9601
Pres Disch Intl, psig	82.92	82.92	272.04	827.45
Temp Disch Intl, °F	219	219	280	279
HE Suct Gas Vel, FPM	7156	7156	5847	5068
HE Disch Gas Vel, FPM	7134	7134	5563	4777
HE Spcrs Used/Max	0/2	0/2	0/2	0/2
HE Vol Pkt Avail, %	1.11+51.77	1.11+51.77	1.23+57.33	0.76+56.95
Vol Pkt Used, %	64.00 (V)	64.00 (V)	0.00 (V)	0.00 (V)
HE Min Clr, %	15.41	15.41	21.60	25.59
HE Total Clr, %	49.65	49.65	22.82	26.35
CE Suct Gas Vel, FPM	6986	6986	5578	4437
CE Disch Gas Vel, FPM	6965	6965	5307	4182
CE Spcrs Used/Max	0/2	0/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	31.36
CE Total Clr, %	16.13	16.13	22.79	31.36
Suct Vol Eff HE/CE, %	17.5/68.4	17.5/68.4	59.2/59.2	56.2/49.2
Disch Event HE/CE, ms	3.3/8.0	3.3/8.0	6.4/7.5	6.4/6.9
Suct Pseudo-Q HE/CE	3.6/4.9	3.6/4.9	2.9/2.6	2.2/1.7
Gas Rod Ld Comp, lbf	5205 C	5205 C	7810 C	8623 C
Gas Rod Ld Tens, lbf	5022 T	5022 T	7180 T	6673 T
Gas Rod Ld Total, lbf	10227	10227	14990	15296
Xhd Pin Deg/%Rvrs lbf	159/80.9	159/78.0	171/90.8	143/92.2
Flow Calc, MMSCFD	0.494	0.494	0.988	0.985
Cyl BHP	33.6	33.6	69.3	64.5



Company: Ariel Corporation
Quote:
Case 1:

Ariel Performance

Customer:
Inquiry:
Project:



Compressor Data:

Elevation, ft:	2500.0	Barmtr, psia:	13.400	Ambient, °F:	95.00
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1400.0	Calc BHP:	132	Calc PS FPM:	816.7

Driver Data:

Type: Nat. Gas
Mfg: Waukesha
Model: H24GL/GLD
BHP: 415
Avail: 415 (0)

Disch Event

Services

Stage Data:

	Service 1 #1		#2	#3
Flow Req'd, MMSCFD	0.600		0.600	0.600
Flow Calc, MMSCFD	0.599		0.599	0.597
Cyl BHP per Stage	39.8		44.3	38.8
Specific Gravity	0.65		0.65	0.65
Ratio of Sp Ht (N)	1.2525		1.2417	1.2552
Comp Suct (Zs)	0.9937		0.9870	0.9589
Comp Disch (Zd)	0.9911		0.9829	0.9549
Pres Suct Line, psig	15.00		N/A	N/A
Pres Suct Flg, psig	15.00		70.58	259.32
Pres Disch Flg, psig	73.19		264.63	810.00
Pres Disch Line, psig	N/A		N/A	800.00
Pres Ratio F/F	3.049		3.311	3.019
Temp Suct, °F	60.00		120.00	120.00
Temp Clr Disch, °F	120.00		120.00	120.00

Cylinder Data:

	Throw 1	Throw 3	Throw 4	Throw 2
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	CE(HEVR)	CE(HEVR)	DBL	DBL
Cyl Disp, CFM	206.7	206.7	213.2	75.4
Pres Suct Intl, psig	13.64	13.64	68.13	253.63
Temp Suct Intl, °F	69	69	126	124
Suct Zsph	0.9940	0.9940	0.9874	0.9600
Pres Disch Intl, psig	77.85	77.85	272.95	827.46
Temp Disch Intl, °F	216	216	288	278
HE Suct Gas Vel, FPM	N/A	N/A	5847	5068
HE Disch Gas Vel, FPM	N/A	N/A	5563	4777
HE Spcrrs Used/Max	N/A	N/A	0/2	0/2
HE Vol Pkt Avail, %	N/A	N/A	1.23+57.33	0.76+56.95
Vol Pkt Used, %	N/A	N/A	39.00 (V)	50.00 (V)
HE Min Clr, %	N/A	N/A	21.60	25.59
HE Total Clr, %	N/A	N/A	45.18	54.82
CE Suct Gas Vel, FPM	6986	6986	5578	4437
CE Disch Gas Vel, FPM	6965	6965	5307	4182
CE Spcrrs Used/Max	2/2	2/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	31.36
CE Total Clr, %	28.58	28.58	22.79	31.36
Suct Vol Eff HE/CE, %	N/A/52.7	N/A/52.7	20.5/56.3	16.7/49.4
Disch Event HE/CE, ms	N/A/7.1	N/A/7.1	3.6/7.1	3.3/6.9
Suct Pseudo-Q HE/CE	N/A/4.9	N/A/4.9	2.2/2.6	1.5/1.7
Gas Rod Ld Comp, lbf	143 C	143 C	8013 C	8611 C
Gas Rod Ld Tens, lbf	4566 T	4566 T	7390 T	6660 T
Gas Rod Ld Total, lbf	4709	4709	15403	15271
Xhd Pin Deg/%Rvrs lbf	171/44.2	170/45.7	158/95.9	139/81.9
Flow Calc, MMSCFD	0.300	0.300	0.599	0.597
Cyl BHP	19.9	19.9	44.3	38.8



Ariel Performance

Company: Enerflex Compression & Power

Customer: Detector Exploration Ltd.

Quote: 050693

Inquiry: Lindale AB

ENERFLEX
Compression and Power

7.6.1.0 Case 25: 14 - 800 psig

Project: LSD: 15-08-49-06-W5M

Compressor Data:

Elevation, ft:	2700.00	Barmtr, psia:	13.300	Ambient, °C:	32.22
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1800.0	BHP:	281	Calc PS FPM:	1050.0

Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL-LCR
BHP:	530
Avail:	500 (30)

Services

Stage Data:

	1	2	3
Flow Req'd, E3m3/D	35.000	35.000	35.000
Flow Calc, E3m3/D	35.000	35.000	35.000
Cyl BHP per Stage	90.5	92.1	86.0
Specific Gravity	0.5701	0.5701	0.5701
Ratio of Sp Ht (N)	1.2839	1.2747	1.2845
Comp Suct (Zs)	0.9956	0.9902	0.9704
Comp Disch (Zd)	0.9946	0.9895	0.9736
Pres Suct Line, psig	14.00	N/A	N/A
Pres Suct Flg, psig	14.00	72.67	254.61
Pres Disch Flg, psig	75.21	259.86	810.00
Pres Disch Line, psig	N/A	N/A	800.00
Pres Ratio F/F	3.242	3.177	3.073
Temp Suct, °C	18.00	48.89	48.89
Temp Clr Disch, °C	48.89	48.89	48.89

Cylinder Data:

	Throw 2	Throw 4	Throw 3	Throw 1
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	538.0	538.0	274.2	97.0
Pres Suct Intl, psig	12.07	12.07	69.05	246.60
Temp Suct Intl, °C	22	22	52	52
Suct Zsph	0.9958	0.9958	0.9906	0.9713
Pres Disch Intl, psig	81.90	81.90	271.33	835.14
Temp Disch Intl, °C	122	122	152	149
HE Suct Gas Vel, FPM	9200	9200	7518	6516
HE Disch Gas Vel, FPM	9172	9172	7152	6267
HE Spcrrs Used/Max	0/2	0/2	0/2	0/2
HE Vol Pkt Avail, %	1.11+51.77	1.11+51.77	1.23+57.33	0.76+56.95
Vol Pkt Used, %	64.89 (V)	64.89 (V)	0.00 (V)	0.00 (V)
HE Min Clr, %	15.41	15.41	21.60	25.59
HE Total Clr, %	50.11	50.11	22.82	26.35
CE Suct Gas Vel, FPM	8982	8982	7172	5704
CE Disch Gas Vel, FPM	8955	8955	6823	5486
CE Spcrrs Used/Max	0/2	0/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	32.69
CE Total Clr, %	16.13	16.13	22.79	32.69
Suct Vol Eff HE/CE, %	19.1/69.1	19.1/69.1	59.9/59.9	57.2/48.6
Disch Event HE/CE, ms	2.8/6.3	2.8/6.3	5.1/5.8	5.1/5.4
Suct Pseudo-Q HE/CE	5.4/7.1	5.4/7.1	4.2/3.8	3.1/2.4
Gas Rod Ld Comp, lbf	5243 C	5243 C	7920 C	8818 C
Gas Rod Ld Tens, lbf	5061 T	5061 T	7292 T	6847 T
Gas Rod Ld Total, lbf	10304	10304	15212	15665
Xhd Pin Deg/%RvrsI lbf	160/70.0	160/70.0	158/74.0	152/77.0
Flow Calc, E3m3/D	17.500	17.500	35.000	35.000
Cyl BHP	45.3	45.3	92.1	86.0



Ariel Performance

Company: Enerflex Compression & Power

Customer: Detector Exploration Ltd.

Quote: 050693

Inquiry: Lindale AB

ENERFLEX
Compression and Power

7.6.1.0

Case 26: 14 - 750 psig

Project: LSD: 15-08-49-06-W5M

Compressor Data:

Elevation, ft:	2700.00	Barmtr, psia:	13.300	Ambient, °C:	32.22
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1800.0	BHP:	276	Calc PS FPM:	1050.0

Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL-LCR
BHP:	530
Avail:	500 (30)

Services

Stage Data:

	1	2	3
Flow Req'd, E3m3/D	35.000	35.000	35.000
Flow Calc, E3m3/D	35.000	35.000	35.000
Cyl BHP per Stage	89.5	90.6	83.4
Specific Gravity	0.5701	0.5701	0.5701
Ratio of Sp Ht (N)	1.2841	1.2748	1.2846
Comp Suct (Zs)	0.9956	0.9903	0.9713
Comp Disch (Zd)	0.9946	0.9896	0.9737
Pres Suct Line, psig	14.00	N/A	N/A
Pres Suct Flg, psig	14.00	71.50	246.40
Pres Disch Flg, psig	73.99	251.43	760.00
Pres Disch Line, psig	N/A	N/A	750.00
Pres Ratio F/F	3.197	3.122	2.978
Temp Suct, °C	18.00	48.89	48.89
Temp Clr Disch, °C	48.89	48.89	48.89

Cylinder Data:

	Throw 2	Throw 4	Throw 3	Throw 1
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	538.0	538.0	274.2	97.0
Pres Suct Intl, psig	12.07	12.07	67.93	238.64
Temp Suct Intl, °C	22	22	52	52
Suct Zsph	0.9958	0.9958	0.9907	0.9721
Pres Disch Intl, psig	80.61	80.61	262.60	783.78
Temp Disch Intl, °C	121	121	151	146
HE Suct Gas Vel, FPM	9200	9200	7518	6516
HE Disch Gas Vel, FPM	9172	9172	7152	6267
HE Spcrrs Used/Max	0/2	0/2	0/2	0/2
HE Vol Pkt Avail, %	1.11+51.77	1.11+51.77	1.23+57.33	0.76+56.95
Vol Pkt Used, %	67.37 (V)	67.37 (V)	0.00 (V)	0.00 (V)
HE Min Clr, %	15.41	15.41	21.60	25.59
HE Total Clr, %	51.40	51.40	22.82	26.35
CE Suct Gas Vel, FPM	8982	8982	7172	5704
CE Disch Gas Vel, FPM	8955	8955	6823	5486
CE Spcrrs Used/Max	0/2	0/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	32.69
CE Total Clr, %	16.13	16.13	22.79	32.69
Suct Vol Eff HE/CE, %	18.6/69.6	18.6/69.6	60.7/60.7	58.7/50.5
Disch Event HE/CE, ms	2.8/6.4	2.8/6.4	5.2/5.9	5.2/5.6
Suct Pseudo-Q HE/CE	5.3/7.1	5.3/7.1	4.2/3.8	3.1/2.4
Gas Rod Ld Comp, lbf	5146 C	5146 C	7625 C	8186 C
Gas Rod Ld Tens, lbf	4967 T	4967 T	7014 T	6324 T
Gas Rod Ld Total, lbf	10113	10113	14639	14510
Xhd Pin Deg/%RvrsI lbf	160/69.9	160/69.9	158/73.4	153/75.8
Flow Calc, E3m3/D	17.500	17.500	35.000	35.000
Cyl BHP	44.7	44.7	90.6	83.4



Ariel Performance

Company: Enerflex Compression & Power

Customer: Detector Exploration Ltd.

Quote: 050693

Inquiry: Lindale AB

ENERFLEX
Compression and Power

7.6.1.0

Case 27: 14 - 700 psig

Project: LSD: 15-08-49-06-W5M

Compressor Data:

Elevation, ft: 2700.00
Frame: JGJ/4
Max RL Tot, lbf: 42000
Rated RPM: 1800
Calc RPM: 1800.0

Barmtr, psia: 13.300
Stroke, in: 3.50
Max RL Tens, lbf: 21000
Rated BHP: 1240.0
BHP: 270

Ambient, °C: 32.22
Rod Dia, in: 1.500
Max RL Comp, lbf: 23000
Rated PS FPM: 1050.0
Calc PS FPM: 1050.0

Driver Data:

Type: Nat. Gas
Mfg: Waukesha
Model: H24GL-LCR
BHP: 530
Avail: 500 (30)

Services

Stage Data:

Flow Req'd, E3m3/D
Flow Calc, E3m3/D
Cyl BHP per Stage
Specific Gravity
Ratio of Sp Ht (N)
Comp Suct (Zs)
Comp Disch (Zd)
Pres Suct Line, psig
Pres Suct Flg, psig
Pres Disch Flg, psig
Pres Disch Line, psig
Pres Ratio F/F
Temp Suct, °C
Temp Clr Disch, °C

Gathering

1

35.000
35.000
88.4
0.5701
1.2843
0.9956
0.9946
14.00
14.00
72.78
N/A
3.153
18.00
48.89

2

35.000
35.000
89.1
0.5701
1.2750
0.9905
0.9897
N/A
70.35
243.14
N/A
3.066
48.89
48.89

3

35.000
35.000
80.7
0.5701
1.2847
0.9721
0.9740
N/A
238.14
710.00
700.00
2.877
48.89
48.89

Cylinder Data:

Cyl Model
Cyl Bore, in
Cyl RDP (API), psig
Cyl MAWP, psig
Cyl Action
Cyl Disp, CFM
Pres Suct Intl, psig
Temp Suct Intl, °C
Suct Zsph
Pres Disch Intl, psig
Temp Disch Intl, °C
HE Suct Gas Vel, FPM
HE Disch Gas Vel, FPM
HE Spcrrs Used/Max
HE Vol Pkt Avail, %
Vol Pkt Used, %
HE Min Clr, %
HE Total Clr, %
CE Suct Gas Vel, FPM
CE Disch Gas Vel, FPM
CE Spcrrs Used/Max
CE Min Clr, %
CE Total Clr, %
Suct Vol Eff HE/CE, %
Disch Event HE/CE, ms
Suct Pseudo-Q HE/CE
Gas Rod Ld Comp, lbf
Gas Rod Ld Tens, lbf
Gas Rod Ld Total, lbf
Xhd Pin Deg/%RvrsI lbf
Flow Calc, E3m3/D
Cyl BHP

Throw 2

9-3/4RJ
9.750
577.3
635.0
DBL
538.0
12.07
22
0.9958
79.33
120
9200
9172
0/2
1.11+51.77
69.93 (V)
15.41
52.72
8982
8955
0/2
16.13
16.13
18.2/70.1
2.7/6.4
5.3/7.1
5051 C
4874 T
9925
160/69.8
17.500
44.2

Throw 4

9-3/4RJ
9.750
577.3
635.0
DBL
538.0
12.07
22
0.9958
79.33
120
9200
9172
0/2
1.11+51.77
69.93 (V)
15.41
52.72
8982
8955
0/2
16.13
16.13
18.2/70.1
2.7/6.4
5.3/7.1
5051 C
4874 T
9925
160/69.8
17.500
44.2

Throw 3

7-3/8RJ
7.000
768.2
845.0
DBL
274.2
66.83
52
0.9908
254.00
149
7518
7152
0/2
1.23+57.33
0.00 (V)
21.60
22.82
7172
6823
0/2
22.79
22.79
61.5/61.6
5.3/6.0
4.2/3.8
7334 C
6742 T
14076
158/73.0
35.000
89.1

Throw 1

4-5/8HJ
4.250
2363.6
2600.0
DBL
97.0
230.63
52
0.9730
732.41
143
6516
6267
0/2
0.76+56.95
0.00 (V)
25.59
26.35
5704
5486
0/2
32.69
32.69
60.4/52.5
5.4/5.7
3.1/2.4
7555 C
5801 T
13356
153/74.7
35.000
80.7



Ariel Performance

Company: Enerflex Compression & Power
 Quote: 050693
 Case 28: 14 - 650 psig

Customer: Detector Exploration Ltd.
 Inquiry: Lindale AB
 Project: LSD: 15-08-49-06-W5M

ENERFLEX
 Compression and Power

Compressor Data:

Elevation, ft:	2700.00	Barmtr, psia:	13.300	Ambient, °C:	32.22
Frame:	JGJ/4	Stroke, in:	3.50	Rod Dia, in:	1.500
Max RL Tot, lbf:	42000	Max RL Tens, lbf:	21000	Max RL Comp, lbf:	23000
Rated RPM:	1800	Rated BHP:	1240.0	Rated PS FPM:	1050.0
Calc RPM:	1800.0	BHP:	264	Calc PS FPM:	1050.0

Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	H24GL-LCR
BHP:	530
Avail:	500 (30)

Services

Stage Data:

	1	2	3
Flow Req'd, E3m3/D	35.000	35.000	35.000
Flow Calc, E3m3/D	35.000	35.000	35.000
Cyl BHP per Stage	87.3	87.5	77.6
Specific Gravity	0.5701	0.5701	0.5701
Ratio of Sp Ht (N)	1.2845	1.2752	1.2848
Comp Suct (Zs)	0.9956	0.9906	0.9730
Comp Disch (Zd)	0.9946	0.9898	0.9742
Pres Suct Line, psig	14.00	N/A	N/A
Pres Suct Flg, psig	14.00	69.19	229.82
Pres Disch Flg, psig	71.57	234.82	660.00
Pres Disch Line, psig	N/A	N/A	650.00
Pres Ratio F/F	3.109	3.008	2.769
Temp Suct, °C	18.00	48.89	48.89
Temp Clr Disch, °C	48.89	48.89	48.89

Cylinder Data:

	Throw 2	Throw 4	Throw 3	Throw 1
Cyl Model	9-3/4RJ	9-3/4RJ	7-3/8RJ	4-5/8HJ
Cyl Bore, in	9.750	9.750	7.000	4.250
Cyl RDP (API), psig	577.3	577.3	768.2	2363.6
Cyl MAWP, psig	635.0	635.0	845.0	2600.0
Cyl Action	DBL	DBL	DBL	DBL
Cyl Disp, CFM	538.0	538.0	274.2	97.0
Pres Suct Intl, psig	12.07	12.07	65.72	222.56
Temp Suct Intl, °C	22	22	52	51
Suct Zsph	0.9958	0.9958	0.9909	0.9738
Pres Disch Intl, psig	78.04	78.04	245.37	681.04
Temp Disch Intl, °C	119	119	147	139
HE Suct Gas Vel, FPM	9200	9200	7518	6516
HE Disch Gas Vel, FPM	9172	9172	7152	6267
HE Spcrs Used/Max	0/2	0/2	0/2	0/2
HE Vol Pkt Avail, %	1.11+51.77	1.11+51.77	1.23+57.33	0.76+56.95
Vol Pkt Used, %	72.61 (V)	72.61 (V)	0.00 (V)	0.00 (V)
HE Min Clr, %	15.41	15.41	21.60	25.59
HE Total Clr, %	54.11	54.11	22.82	26.35
CE Suct Gas Vel, FPM	8982	8982	7172	5704
CE Disch Gas Vel, FPM	8955	8955	6823	5486
CE Spcrs Used/Max	0/2	0/2	0/2	0/2
CE Min Clr, %	16.13	16.13	22.79	32.69
CE Total Clr, %	16.13	16.13	22.79	32.69
Suct Vol Eff HE/CE, %	17.7/70.5	17.7/70.5	62.4/62.4	62.2/54.7
Disch Event HE/CE, ms	2.7/6.5	2.7/6.5	5.4/6.1	5.6/5.9
Suct Pseudo-Q HE/CE	5.2/7.1	5.2/7.1	4.2/3.8	3.1/2.4
Gas Rod Ld Comp, lbf	4954 C	4954 C	7042 C	6924 C
Gas Rod Ld Tens, lbf	4780 T	4780 T	6468 T	5280 T
Gas Rod Ld Total, lbf	9734	9734	13510	12204
Xhd Pin Deg/%RvrsI lbf	160/69.8	160/69.8	159/72.5	154/73.9
Flow Calc, E3m3/D	17.500	17.500	35.000	35.000
Cyl BHP	43.6	43.6	87.5	77.6