

Customer/End-user: Kinder Morgan
 Site Location:
 Engineer: Jason Taliaferro

ID#: 18306-61044-03174-25852-07865
 Case #: N/A
 Date: 4/25/2025, 3:21 PM

Application Data		AJAX DPC-2804LE		Driver Data		Site Data	
Unit Flow	3.64 MMscfd	Rated Power	800.0 HP	Manufacturer		Elevation	2100.0 ft
Load per Flow	205.82 HP/MMscfd	Stroke	11.000 in	Model		Atm. Pressure	13.61 psiA
Lubrication	Lubed	Rated Speed	440 RPM	Rated Power	751.6 HP	Ambient Temp	100.0 ° F
		Rod Diameter	2.500 in	Rated Speed	440 RPM	Gas Method	AGA8
Unit Load	748.5 HP	Max Rod Load Comp	40000.0 lbf	Avail. Power	751.6 HP	Base Pressure	14.696 psiA
Avg. Piston Vel.	806.67 ft/min	Max Rod Load Tens	40000.0 lbf	Derate	0.00 %	Base Temp.	60.0 ° F
Type	Gathering	Max Rod Load Gas	40000.0 lbf	Run Speed	440 RPM	Auxiliary Load	34.0 HP
CONCERNS							
Project Notes	Unit serial number 85812						
Case Notes	N/A						
Order Status							

Stage/Service Data

		Stage 1	Stage 2	Stage 3
Flow Rate	MMscfd	3.640	3.640	3.640
Load	HP	288.30	270.00	190.10
Specific Gravity	-	0.615	0.615	0.615
K Value (Cp/Cv)	-	1.2717	1.2580	1.2631
Zs	-	0.9954	0.9886	0.9658
Zd	-	0.9945	0.9884	0.9673
Suction Press.	psiG	18.00	99.23	332.13
Ps@Flange	psiG	17.68	99.23	332.13
Pd@Flange	psiG	102.62	339.05	810.00
Discharge Press.	psiG	99.23	332.13	800.00
Compress. Ratio	-	3.7142	3.1252	2.3821
Ts/Adiba. Temp.	° F	63.0/232.1	120.0/272.6	120.0/234.9
Cooler Temp.	° F	120.0	120.0	120.0

Cylinder Data

		Throw-1	Throw-2	Throw-3	Throw-4	Throw-5	Throw-6
Model	-	YK11K (ZK20SR)	YK11EC (ZEC1050SR)	YK11CD (ZCD600SR)			
Operating Mode	-	D/A Cyl	D/A Cyl	D/A Cyl	BLANK	BLANK	BLANK
Head End	Serv#/Stg#	1/1	1/2	1/3			
Bore	in	20.000	10.500	6.000			
MAWP	psiG	250.00	900.00	1800.00			
RDP	psiG	225.00	810.00	1620.00			
Tail Rod Dia	in	0.000	0.000	0.000			
Tsi / Est. Td	° F	63.0/242.6	120.0/282.2	120.0/240.5			
VVCP Open	in / Turns	2.38 : 19	0.00 : 0	0.00 : 0			
Base Clr	%	11.43	13.48	17.85			
Added Clr	%	9.14	0.00	0.00			
Total Clr	%	20.57	13.48	17.85			
Vol. Eff. Ps / Pd	% / %	59.08/21.04	77.00/31.12	79.42/40.01			
Q-Value Ps / Pd		∞ / ∞	∞ / ∞	∞ / ∞			
Flow	MMscfd	1.57	1.85	1.96			
Crank End	Serv#/Stg#	1/1	1/2	1/3			
Bore	in	20.000	10.500	6.000			
MAWP	psiG	250.00	900.00	1800.00			
RDP	psiG	225.00	810.00	1620.00			
Tsi / Est. Td	° F	63.0/242.6	120.0/282.2	120.0/240.5			
Base Clr	%	9.77	11.81	15.13			
Added Clr	%	0.00	0.00	0.00			
Total Clr	%	9.77	11.81	15.13			
Vol. Eff. Ps / Pd	% / %	78.63/28.00	79.46/32.11	82.10/41.36			
Q-Value Ps / Pd		∞ / ∞	∞ / ∞	∞ / ∞			
Flow	MMscfd	2.06	1.80	1.68			
Valve Spacers	HE#/CE#	0 / 0	0 / 0	0 / 0			
Rod Loads							
Gas-Compress.	%	66.9	53.1	37.9			
Gas-Tension	%	65.4	47.8	23.8			
Combined-Comp.	%	N/A	N/A	N/A			
Combined-Tens.	%	N/A	N/A	N/A			
Pin Reversal	Deg/Mag%	172/96	168/79	178/54			
Throw Loading	HP	288.3	270.0	190.1			

BOLD = Out of Limit

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