Ogden, Frank #1

HARBISON-FISCHER SALES CO.

PSR-R95

SUCKER ROD PUMP SERVICE REPORT — Pump Shop: Harbison-Fischer — City: Tesiac

Operator	Lease	Well No.	Fail Date	Pull Date	Repair Date	Run Date	Pump Status
Spindle top			/ /	/ /	8/17/91	/ /	New / Run / Repair / Junked

Tubing Size	Plunger Size	Type Pump	Type Bbl	Hold Down Loc	Hold Down Type	Length Bbl	Length Plg	Ext U	Ext L	Pump No.	Reason For Pull	No. Days In Well
20	150	R	W	A	C	12	3			ON 601	PF RP TL WO EC OTH	

PARTS METALLURGY	Barrel	Plunger	V. Rod Tube	T. Plg. Coupl	Seat Assy	Ext Coup	V. Rod Guide	Oth. Conn	Accessory (Identify)
Steel, No Hardening	01	01	01	01	01	01	01	01	01
Steel, Hardened	02	02	02	02	02	02	02	02	02
Steel, Chrome Plated	03	03	03	03	03	03	03	03	03
Steel, Nickel-Carbide Coated	05	05	05	05	05	05	05	05	05
Steel, Nickel Plated	04	04	04	04	04	04	04	04	04
Steel, Carburized	52	52	52	52	52	52	52	52	52
Stainless Steel 316 or 316L	10	10	10	10	10	10	10	10	10
Stainless Steel 303 or 304	11	11	11	11	11	11	11	11	11
Stainless, Chrome Plated	12	12	12	12	12	12	12	12	12
Stainless, Nickel-Carbide Coated	09	09	09	09	09	09	09	09	09
Stainless, Carburized	51	51	51	51	51	51	51	51	51
Brass or Aluminum Bronze	13	13	13	13	13	13	13	13	13
Brass or Al. Bronze, Chrome Plated	14	14	14	14	14	14	14	14	14
Brass, Nickel-Carbide Coated	06	06	06	06	06	06	06	06	06
Monel	15	15	15	15	15	15	15	15	15
Monel, Chrome Plated	16	16	16	16	16	16	16	16	16
Spray Metal, Steel Pins		17							A. Bottom Discharge Valve
Spray Metal, Monel or Nickel Pins		18							B. Gas Breaker
Flexite (No. Rings)		08							C. Sliding Top Valve
Pressure Actuated (No. Rings)		07							D. Other (Describe "other"
Composition (No. Rings)		00							accessories in remarks)
Other	19	19	19	19	19	19	19	19	19

FOREIGN MATERIAL FOUND IN PUMP

1. SAND 2. RUBBER 3. STEEL FILINGS
4. SHALE 5. PARAFFIN 6. IRON SULFIDE
7. MUD 8. SCALE 9. OTHER
0. ASPHALTINE

REMARKS: Heavy Paraffin buildup

BALL AND SEAT MATERIALS	Traveling Valve Upper Ball	Upper Seat	Upper Cage	Lower Ball	Lower Seat	Lower Cage	Standing Valve Upper Ball	Upper Seat	Upper Cage	Lower Ball	Lower Seat	Lower Cage
Alloy-Stellite	20	20		20	20		20	20		20	20	
Tungsten-Carbide	21	21		21	21		21	21		21	21	
Titanium	22	22		22	22		22	22		22	22	
Stainless 440 329	23	23		23	23		23	23		23	23	
Ceramic	24	24		24	24		24	24		24	24	
Nickel Carbide	25	25		25	25		25	25		25	25	
Sillicon Nitride	26	26		26	26		26	26		26	26	
Other	27	27		27	27		27	27		27	27	

CAGE MATERIAL	TYPE GUIDE	Traveling Valve Upper Cage	Traveling Valve Lower Cage	Standing Valve Upper Cage	Standing Valve Lower Cage
Carbon Steel Alloy	Machined	36	36	36	36
	Insert	37	37	37	37
	Hard Lined	38	38	38	38
	Rubber	39	39	39	39
Stainless Steel 40's - 316L SS 60's - Other SS	Machined	40 / 60	40 / 60	40 / 60	40 / 60
	Insert	41 / 61	41 / 61	41 / 61	41 / 61
	Hard Lined	42 / 62	42 / 62	42 / 62	42 / 62
	Rubber	43 / 63	43 / 63	43 / 63	43 / 63
Brass or Al. Bronze	Machined	44	44	44	44
	Insert	45	45	45	45
	Rubber	46	46	46	46
Monel	Machined	47	47	47	47
	Insert	48	48	48	48
	Hard Lined	49	49	49	49
	Rubber	50	50	50	50

Max. Stroke Length: 85 In.

Vacuum Test: 25 In. Hg 30

BARREL AND PLUNGER INSPECTION

FOR PAMPA TYPE PUMP REVERSE THE BARREL & PLUNGER MEASUREMENT

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Plunger .001"	Pull	3	3	3																																	
	Run	3	3	3																																	
Feet	Top																																				
Barrel .001"	Pull	1						1					1																								
	Run	1						1					1																								

FAILURE CODE	Bbl	Plg	Rod/ Tube	Plg. Coup	Seat Assy	Ext. Coup	Rod Gde	Oth. Conn	Acc	Traveling Valve Upper Ball	Upper Seat	Upper Cage	Lower Ball	Lower Seat	Lower Cage	Standing Valve Upper Ball	Upper Seat	Upper Cage	Lower Ball	Lower Seat	Lower Cage
Worn	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01
Break	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02	02
Split	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03	03
Crack	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04	04
Grooved-Scored	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05	05
Fluid Cut	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06	06
Abrasion Cut	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Plating Flaked	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07	07
Beat Out-Pounded	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08	08
Bent	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09	09
Thread Damage	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Internal Pits	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
External Pits	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
ID & OD Pits	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Unscrewed	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Turned Seat	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Part Salvaged	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Re-Work & Re-Use	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Unretrievable	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Other	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20

Additional Information:

Quan.	Part No.	Description	Price	Quan.	Part No.	Description	Price
1		1012093					
1		1012112					
3		Cups 2" H+F					
1		Sec charge	150.00				

Cost - Parts (Own Mfg.)			Service Charge		
Discount			Other Charge		
Net			Machine Shop or Labor		
Other Parts (Buy-Out)			Total Invoice		
Sub Total			Invoice Number (S.O. NO.)		