

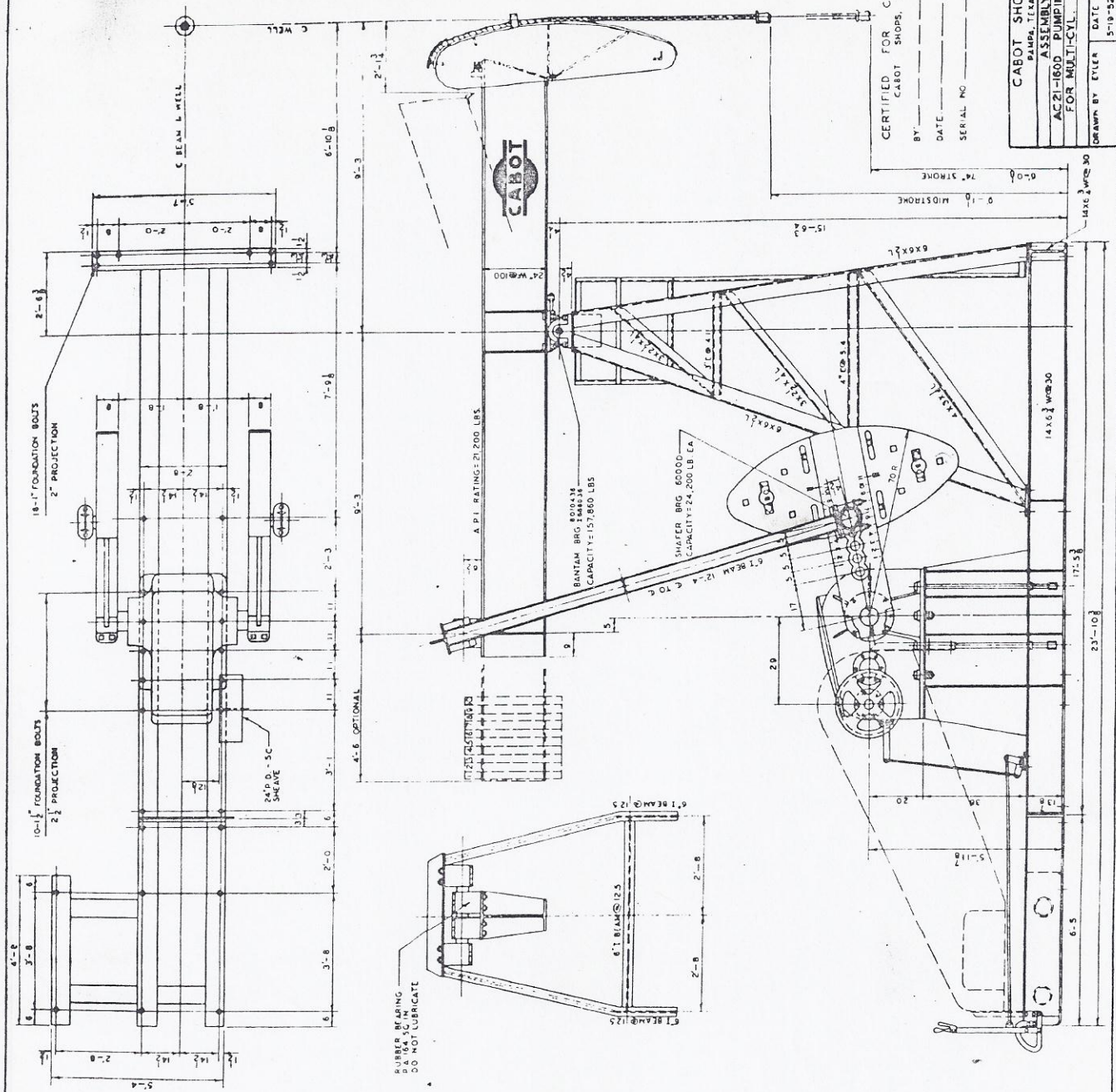
BEAM WEIGHT COUNTER-BALANCE EFFECT		
SETS OF WEIGHTS	TOTAL WT OF COUNTER-WEIGHTS	TOTAL WT OF COUNTER-BALANCE
0	600	495
1	1200	1377
2	1800	2243
3	2400	3093
4	3000	3927
5	3600	4743
6	4200	5543
7	4800	6331
8	5400	7100
9	6000	7853
10	6600	8590

BRIEF SPECIFICATIONS

API BEAM POLISH ROD LOAD RATING 21200 LBS
 LENGTH OF STROKES 34" 44" 54" 64" 74"
 API PEAK TORQUE AT 20 S.P.M. 14000 IN.-LBS

REDUCER RATIO 1600
 STANDARD SHEAVE 2.98 TO 1
 HIGH SPEED SHAFT DIA & LENGTH OF EXTENSION 2.4 P.D. - 3C 2.4" x 5"
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH 1/2" x 1.45"

CRANK WEIGHT COUNTER-BALANCE EFFECT	
MASTER WEIGHTS ONLY	
DESCRIPTION	STROKES
1	34"
2	44"
3	54"
4	64"
5	74"
PISTON PINS & CRANKS ONLY	
1	4929
2	3988
3	3397
4	2990
5	2693
WEIGHTS - POSITION	
1	10097
2	7982
3	6632
4	5735
5	5396
6	10811
7	8534
8	7101
9	6115
10	5396
11	11940
12	9097
13	7560
14	6503
15	5731
16	12256
17	9651
18	8011
19	6803
20	6060
21	12972
22	10204
23	8462
24	7264
25	6389
26	13699
27	10766
28	8920
29	7650
30	6723
31	14415
32	11319
33	9370
34	8030
35	7052
36	15138
37	11877
38	9825
39	8414
40	7384
41	15858
42	12434
43	10275
44	8797
45	7715
46	16579
47	12991
48	10733
49	9179
50	8046
51	17060
52	13362
53	11035
54	9435
55	8267
MASTER WEIGHTS & INNER WEIGHTS	
1	13549
2	10649
3	8825
4	7570
5	6654
6	14742
7	11571
8	9576
9	8203
10	7202
11	15956
12	12509
13	10340
14	8849
15	7760
16	16921
17	13453
18	11093
19	9483
20	8309
21	18258
22	14293
23	11884
24	10118
25	8957
26	20251
27	16215
28	13559
29	11596
30	9765
31	21957
32	17146
33	14118
34	12037
35	10317
36	23158
37	18075
38	14875
39	12675
40	10649
41	24382
42	19025
43	15633
44	13314
45	11622
46	25163
47	19623
48	16137
49	13740
50	11990



CERTIFIED FOR CONSTRUCTION
 CABOT SHOPS, INC.

BY: _____
 DATE: _____
 SERIAL NO: _____

CABOT SHOPS, INC.
 BALDWIN, TEXAS
 ASSEMBLY UNIT
 AC 21-1600 PUMPING UNIT
 FOR MULTI-CYL. ENGINE

DRAWN BY: EYLER DATE: 5-19-52
 AC 21-1600

BEAM WEIGHT COUNTER-BALANCE EFFECT

BE'S WEIGHTS	TOTAL WT. OF BEAMS	COUNTER WT. OF BEAMS	TOTAL COUNTER WT. BALANCE
0	600	600	415
1	1200	1200	830
2	1800	1800	1245
3	2400	2400	1660
4	3000	3000	2075
5	3600	3600	2490
6	4200	4200	2905
7	4800	4800	3320
8	5400	5400	3735
9	6000	6000	4150

BRIEF SPECIFICATIONS

API BEAM POLISH ROD LOAD RATING 21,200 LBS
 LENGTH OF STROKES 34'-4 5/16" & 14'
 API PEAK TORQUE AT 20 S.P.M. 228,200 IN.-LBS

REDUCER 222.0
 RATIO 28.6:1
 STANDARD SHEAVE 24" D. 6C
 HIGH SPEED SHAFT DIA. & LENGTH OF EXTENSION 2 1/2" X 3'-6"
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH 3/8" X 3'-6"

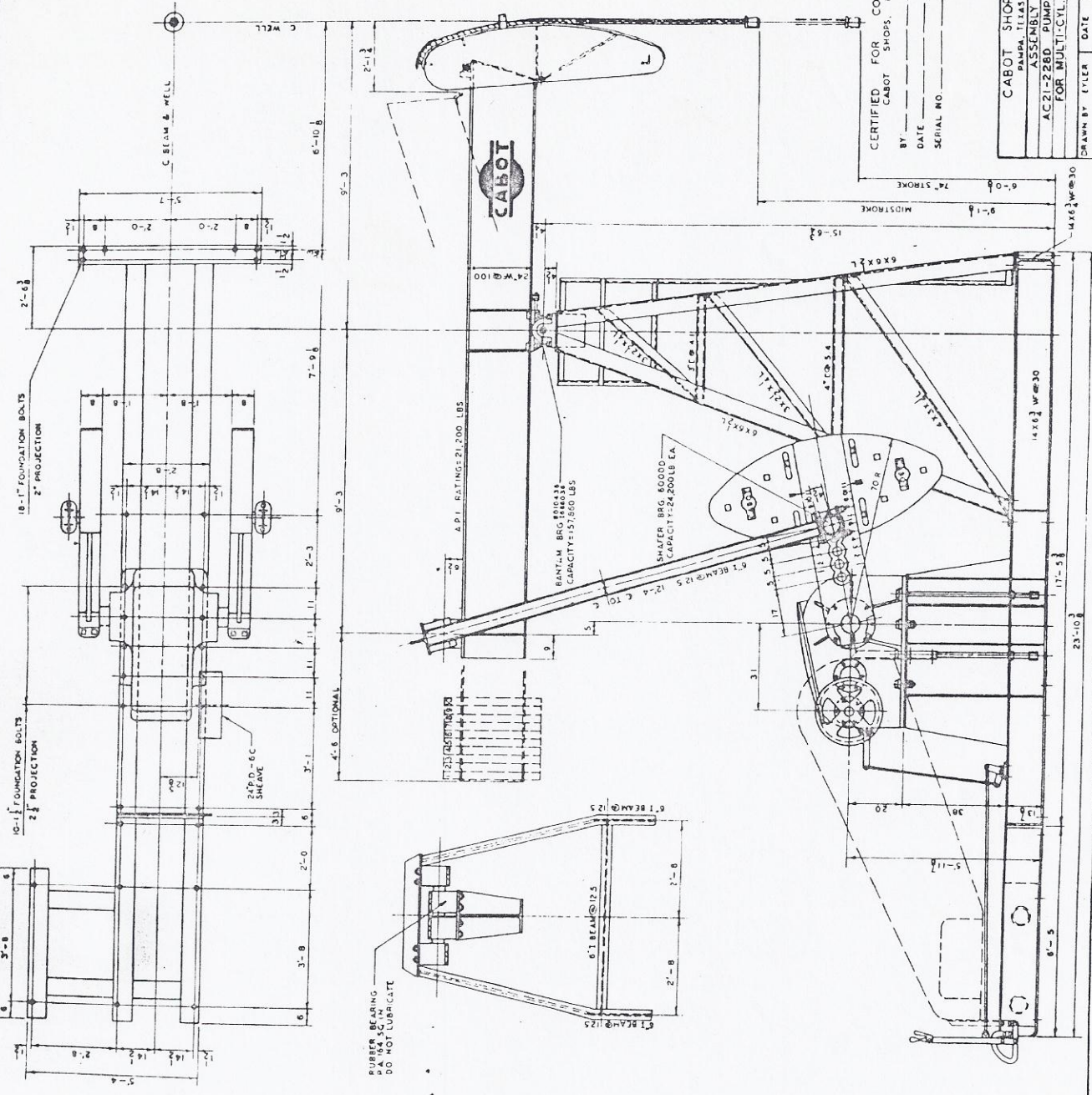
CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION	34"	44"	54"	64"	74"
1	10087	7982	3397	2990	2693
2	10981	8987	3892	3486	3188
3	11875	9992	4387	3981	3683
4	12769	10997	4882	4476	4178
5	13663	11992	5377	4971	4673
6	14557	12997	5872	5466	5168
7	15451	13992	6367	5961	5663
8	16345	14997	6862	6456	6158
9	17239	15992	7357	6951	6653
10	18133	16997	7852	7446	7148
11	19027	17992	8347	7941	7643
12	19921	18997	8842	8436	8138
13	20815	19992	9337	8931	8633
14	21709	20997	9832	9426	9128
15	22603	21992	10327	9921	9623
16	23497	22997	10822	10416	10118
17	24391	23992	11317	10911	10613
18	25285	24997	11812	11406	11108
19	26179	25992	12307	11901	11603
20	27073	26997	12802	12396	12098

MASTER WEIGHTS & INNER WEIGHTS

WEIGHTS - POSITION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1	13349	10649	8825	7570	6634	5956	5459	5072	4752	4482	4247	4036	3847	3678	3527	3392	3271	3162	3063	2974	2894
2	14742	11871	9776	8203	7022	6292	5733	5292	4929	4622	4357	4119	3904	3709	3532	3371	3223	3086	2958	2838	2726
3	16395	13209	10740	8849	7409	6528	5898	5427	5026	4684	4397	4140	3911	3701	3509	3335	3177	3033	2893	2758	2627
4	17151	13433	11053	8943	7309	6388	5738	5247	4826	4455	4140	3861	3612	3382	3170	3000	2841	2691	2541	2391	2241
5	18344	14355	11844	9483	7509	6448	5768	5247	4806	4395	4054	3755	3486	3237	3007	2795	2636	2486	2336	2186	2036
6	19958	15293	12609	10263	7963	6763	6043	5482	4991	4550	4189	3858	3537	3237	2957	2707	2457	2307	2157	2007	1857
7	20795	16215	13359	10763	8113	6853	6113	5522	5001	4540	4149	3788	3437	3107	2807	2527	2277	2027	1877	1727	1577
8	21997	17146	14118	10518	7568	6268	5498	4877	4326	3835	3414	3033	2682	2352	2052	1772	1522	1272	1122	972	822
9	23518	18075	14875	10265	6965	5615	4805	4154	3573	3042	2601	2180	1809	1459	1129	809	559	309	159	59	9
10	24362	19005	15633	10513	7213	5713	4853	4152	3541	2970	2499	2048	1617	1207	807	407	157	57	7	7	7
11	25183	19823	16137	10740	7470	5870	4960	4219	3578	2967	2456	1965	1494	1094	704	304	104	4	4	4	4



CABOT SHOPS, INC.
 PAMPA, TEXAS
 ASSEMBLY
 AC 21-228D. PUMPING UNIT
 FOR MULTI-CYL. ENGINE
 DRAWN BY TYLER DATE 5-18-32 AC 21-228D

CERTIFIED FOR CONSTRUCTION BY
 CABOT SHOPS, INC.
 BY _____ DATE _____
 SERIAL NO. _____
 74 STROKE
 6'-0" MISTROKE

NO. OF WEIGHTS	WT. OF EACH WEIGHT	TOTAL WEIGHT	TOTAL BALANCE	TOTAL COUNTER-WEIGHT
0	0	0	0	0
1	400	400	1377	495
2	800	800	2243	895
3	1200	1200	3003	1295
4	1600	1600	3763	1695
5	2000	2000	4523	2095
6	2400	2400	5283	2495
7	2800	2800	6043	2895
8	3200	3200	6803	3295
9	3600	3600	7563	3695
10	4000	4000	8323	4095

BRIEF SPECIFICATIONS

API BEAM POLISH AND LOAD RATING 21,000 LBS
 34" x 44" x 54" x 14" x 12"
 LENGTH OF STROKES 32.0000 IN.-LBS.
 MAX. PEAK TORQUE AT 20 I.P.M.

REDUCTOR 3700
 RATIO 25.93 TO 1
 STANDARD SHEAVE 24" P.D. - 8C
 HIGH SPEED SHAFT DIA. & LENGTH OF EXTENSION 3/4" DIA. x 17"
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH 3/16" x 17"

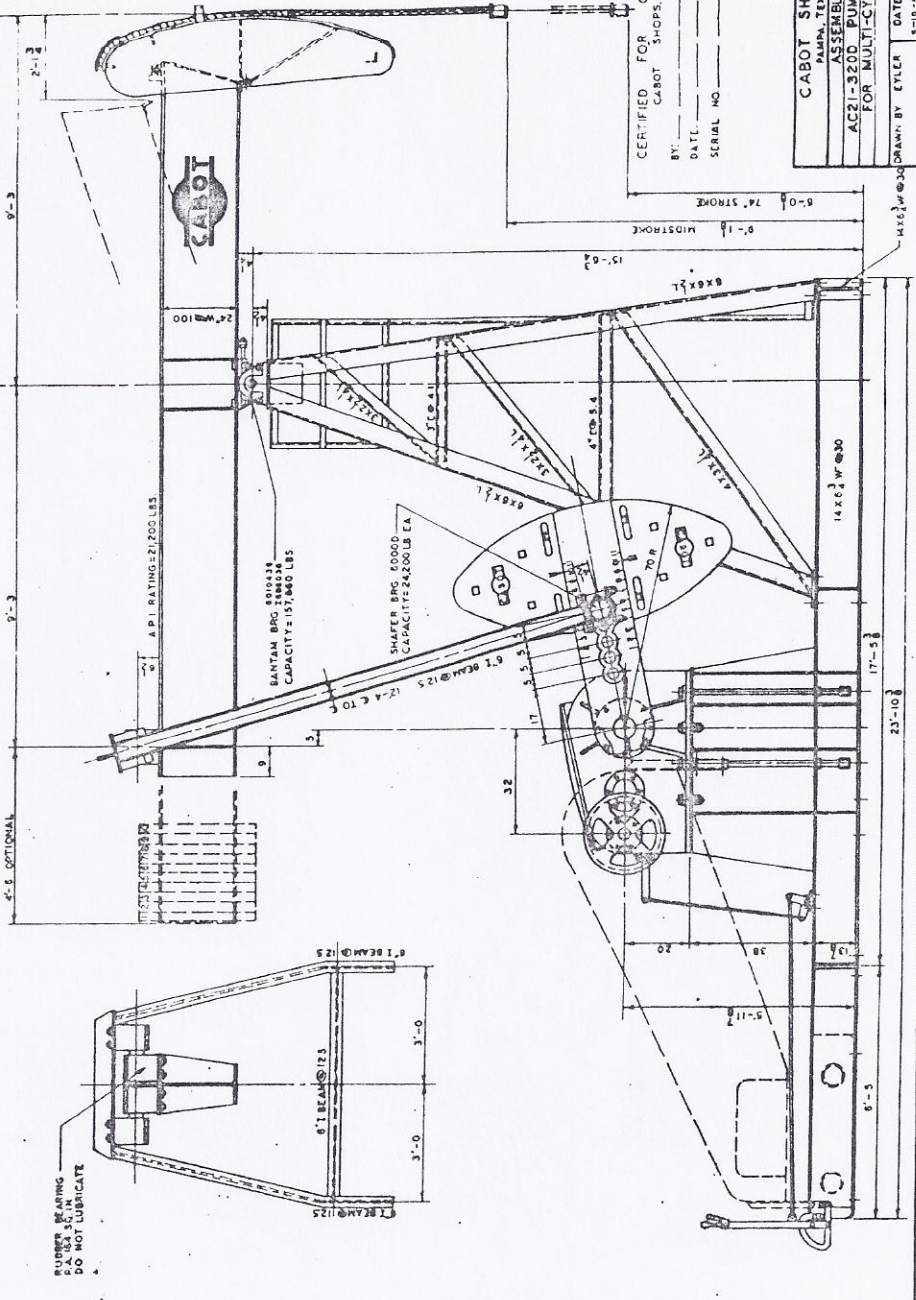
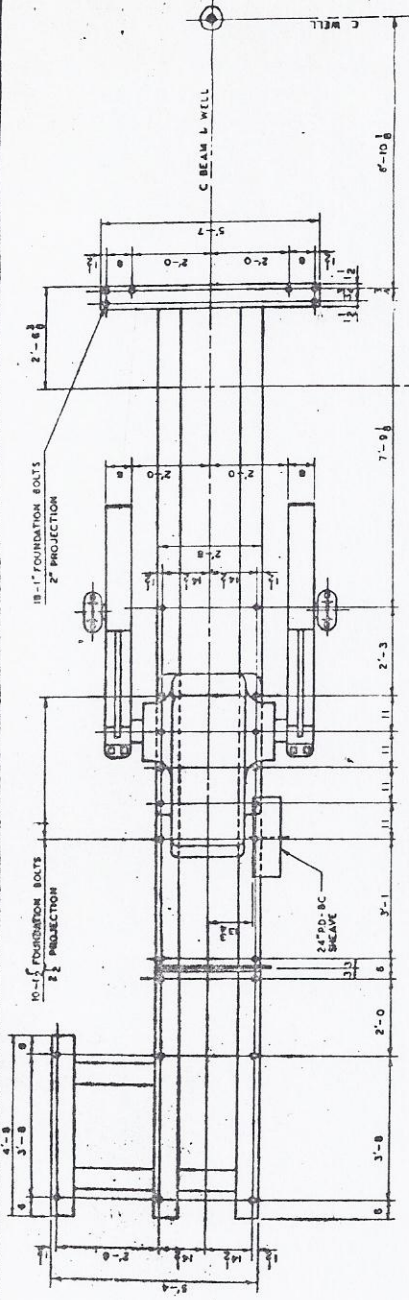
CRANK WEIGHT COUNTER-BALANCE EFFECT

MASTER WEIGHTS ONLY

DESCRIPTION	32"	44"	54"	64"	74"
STAINLESS CRANKS ONLY	4.995	4.048	3.436	3.051	2.754
WEIGHTS - POSITION 1	11.101	8.772	7.206	6.288	5.582
2	18.944	14.131	11.749	10.208	9.044
3	22.805	17.688	14.779	12.829	11.345
4	26.558	20.448	17.116	14.829	13.145
5	30.111	23.407	19.643	17.071	15.145
6	33.564	26.566	22.351	19.543	17.345
7	36.917	29.925	25.239	22.245	19.745
8	40.170	33.484	28.307	25.167	22.345
9	43.323	37.243	31.555	28.309	25.645
10	46.376	41.202	35.083	31.671	29.145
11	49.329	45.361	38.891	35.353	32.845

MASTER WEIGHTS & INNER WEIGHTS

WEIGHTS - POSITION	1	2	3	4	5	6	7	8	9	10	11
1	15.824	12.161	10.081	8.648	7.584	6.720	6.000	5.400	4.900	4.500	4.200
2	16.993	13.324	11.105	9.428	8.269	7.305	6.585	6.000	5.500	5.100	4.800
3	18.462	14.459	11.941	10.208	9.044	8.080	7.360	6.775	6.275	5.875	5.575
4	19.931	15.595	12.685	10.988	9.819	8.855	8.135	7.550	7.050	6.650	6.350
5	21.400	16.730	13.790	11.770	10.294	9.330	8.610	8.025	7.525	7.125	6.825
6	22.871	17.871	14.777	12.551	10.970	10.005	9.285	8.700	8.200	7.800	7.500
7	24.342	19.012	15.980	13.332	11.646	10.680	9.960	9.375	8.875	8.475	8.175
8	25.813	20.153	17.183	14.113	12.321	11.355	10.635	10.050	9.550	9.150	8.850
9	27.284	21.294	18.386	14.894	13.001	12.030	11.310	10.725	10.225	9.825	9.525
10	28.755	22.435	19.589	15.675	13.681	12.705	11.970	11.390	10.890	10.490	10.190
11	30.226	23.576	20.792	16.456	14.362	13.390	12.645	12.065	11.565	11.165	10.865



CERTIFIED FOR CONSTRUCTION
 BY: CABOT SHOPS, INC.
 DATE: _____
 SERIAL NO: _____

CABOT SHOPS, INC.
 PALM, TEXAS
 ASSEMBLY
 AC21-320D PUMPING UNIT
 FOR MULTI-CYL. ENGINE

DATE: 5-19-52
 DRAWN BY: TYLER
 AC21-320D

BEAM WEIGHT COUNTER - BALANCE EFFECT

BEAM WEIGHTS	TOTAL WT OF BEAM COUNTER	TOTAL WT OF BEAM COUNTER WITH EACH SET OF WEIGHTS	WT OF BEAM EXTENSION	WT OF BEAM EXTENSION
0	600	648	1472	483
2	1200	835	2307	1472
3	1800	820	3187	1472
4	2400	808	3933	1472
5	3000	791	4784	1472
6	3600	778	5502	1472
7	4200	763	6285	1472
8	4800	748	7028	1472
9	5400	730	7735	1472
10	6000	710	8468	1472

BRIEF SPECIFICATIONS

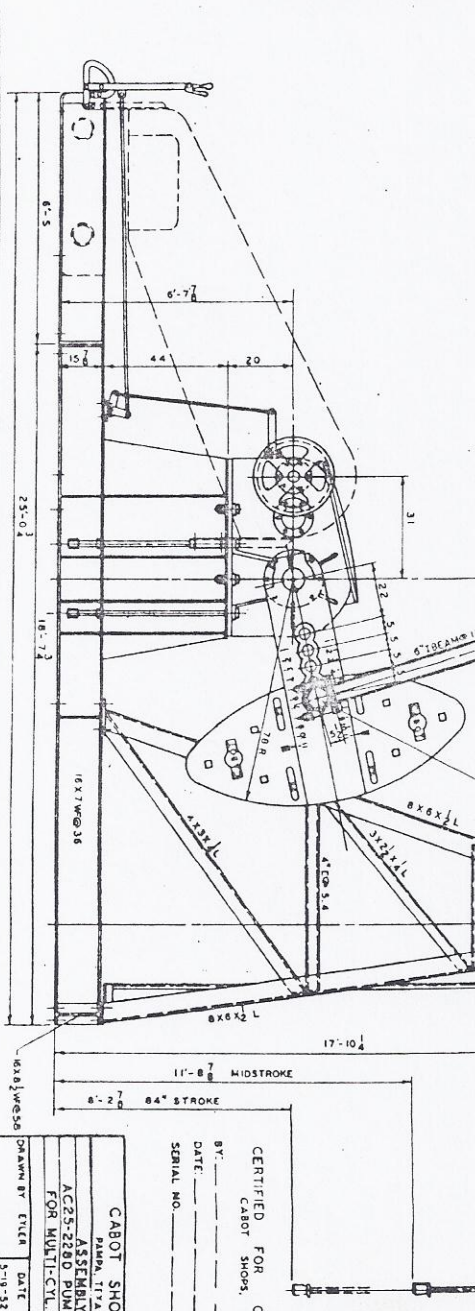
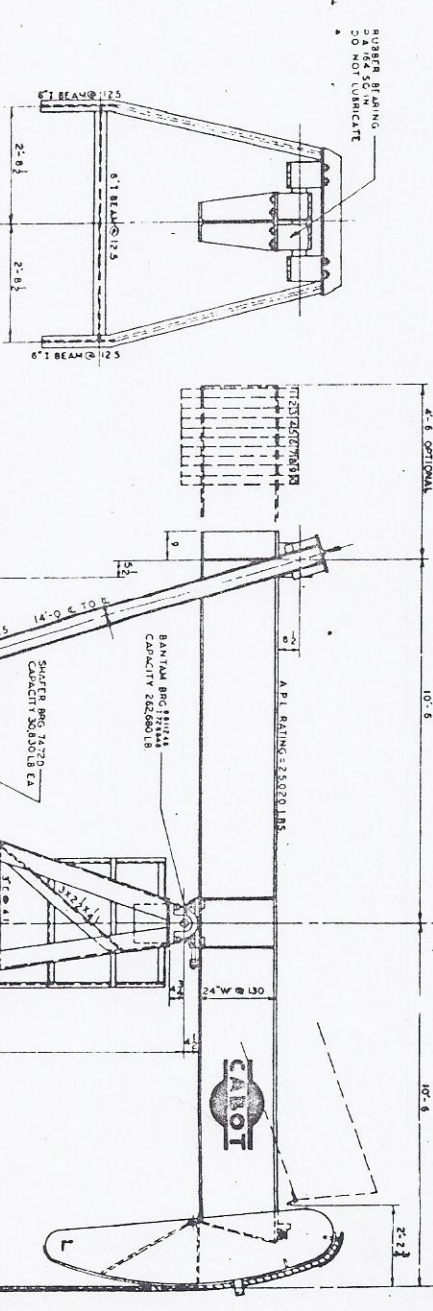
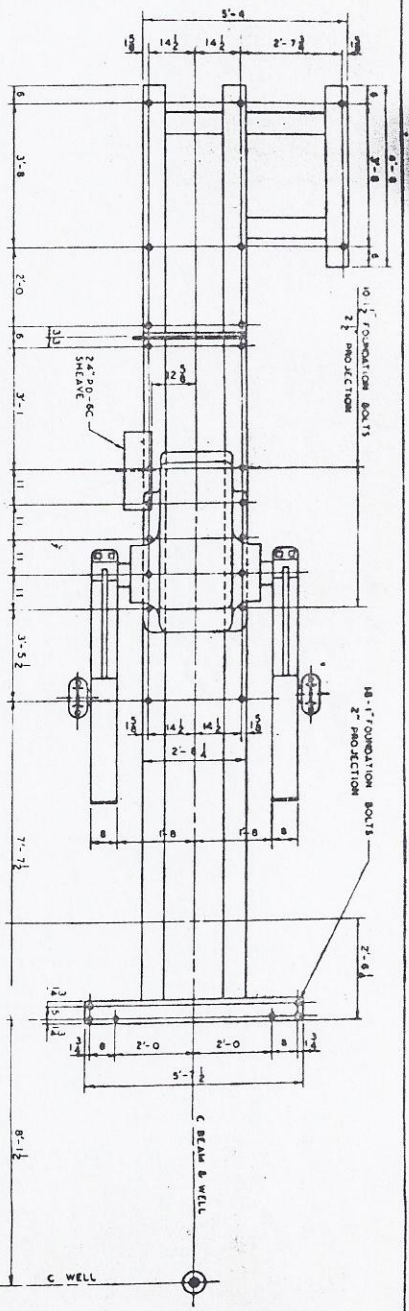
API BEAM POLISH ROD LOAD RATING: 25,020 LBS
 LENGTH OF STROKES: 44.566 FT (13.58 M)
 API PUMP TORQUE AT 20.5 RPM: 22800 IN.-LBS
 PRODUCER: 2280
 PLANT: 29.4 TO 1
 HIGH SPEED SHAFT DIA & LENGTH OF EXTENSION: 24" P.D. - 6C
 HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH: 2 1/2" X 5 1/2"

CRANK WEIGHT COUNTER-BALANCE MASTER WEIGHTS ONLY

DESCRIPTION	44"	56"	64"	72"	84"
1	5754	4506	3364	1568	3267
2	11173	9248	7965	7029	6316
3	16432	10322	8871	7812	7006
4	21690	10858	9324	8203	7331
5	27448	11395	9777	8595	7696
6	33206	11932	10230	8986	8041
7	39064	12468	10663	9378	8386
8	44922	13007	11137	9771	8732
9	50780	13543	11590	10182	9077
10	56638	14080	12042	10594	9422
11	62496	14617	12495	10946	9767

MASTER WEIGHTS & INNER WEIGHTS

WEIGHTS - POSITION	1	2	3	4	5	6	7	8	9	10	11
1	15,326	12,668	10,861	9,533	8,522						
2	16,460	13,504	11,641	10,208	9,116						
3	17,598	14,336	12,421	10,882	9,711						
4	18,731	15,156	13,202	11,597	10,356						
5	19,867	15,968	13,984	12,333	11,051						
6	21,002	16,768	14,731	13,098	11,785						
7	22,137	17,558	15,493	13,882	12,550						
8	23,275	18,338	16,262	14,692	13,345						
9	24,412	19,108	17,038	15,528	14,172						
10	25,545	19,868	17,821	16,392	15,032						
11	26,681	20,618	18,618	17,287	15,924						



CERTIFIED FOR CONSTRUCTION
 CABOT SHOPS, INC.

BY: _____
 DATE: _____
 SERIAL NO. _____

CABOT SHOPS, INC.
 PAMP, TEXAS
 ASSEMBLY
 AC25-2280 PUMPING UNIT
 FOR MULTI-CYL. ENGINE

DRAWN BY: ETLER
 DATE: 5-10-32
 AC25-2280

**BEAM WEIGHT
COUNTER-BALANCE
EFFECT**

SETS OF WEIGHTS COUNTER-BALANCE	TOTAL WT EFF. COUNTER	TOTAL WT COUNTER
0	1437	1437
1	1437	2307
2	1437	3177
3	1437	4047
4	1437	4917
5	1437	5787
6	1437	6657
7	1437	7527
8	1437	8397
9	1437	9267
10	1437	10137

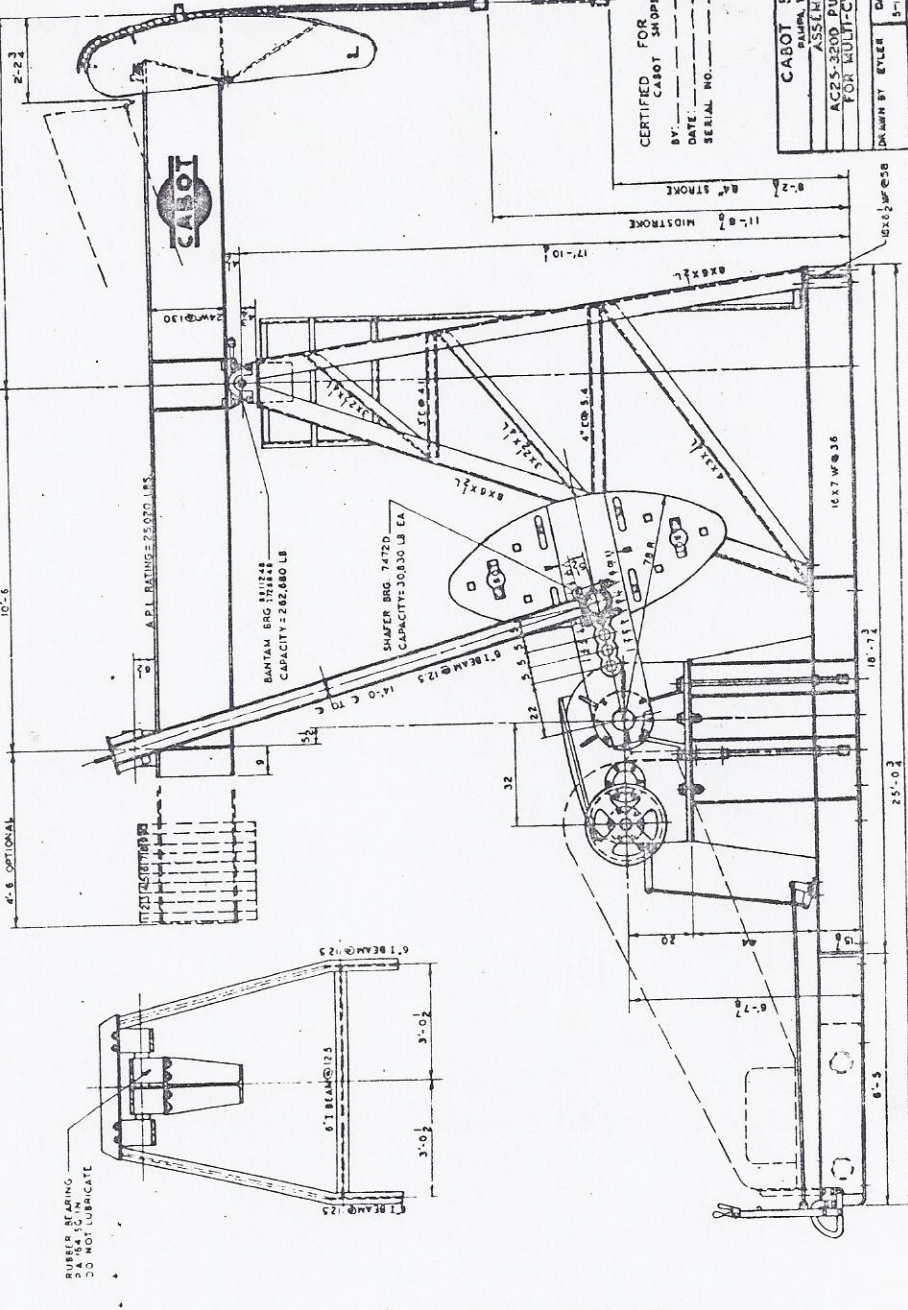
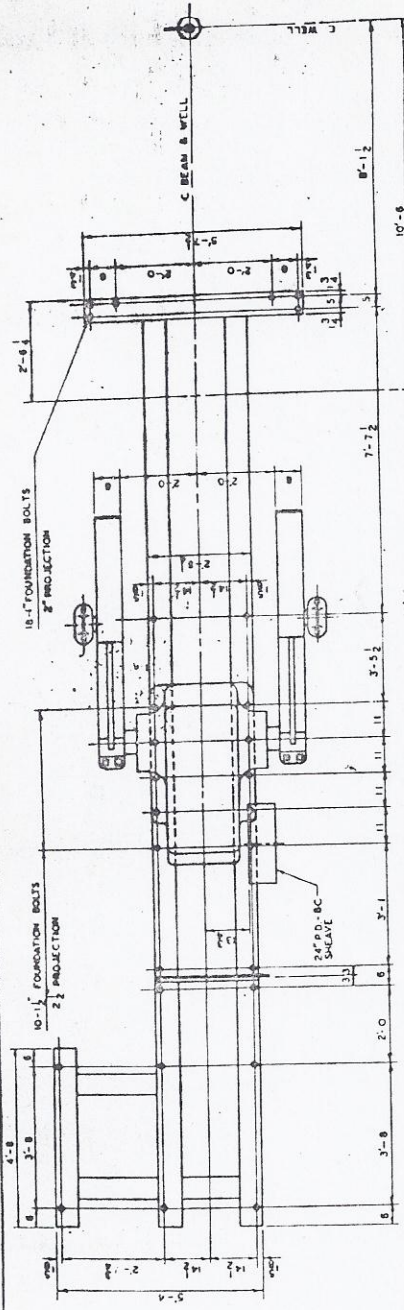
BRIEF SPECIFICATIONS	
C.B. BEAM POLISH ROD LOAD RATING	25,020 LBS.
LENGTH OF STROKES	44" 54" 64" 74" 84"
A.P.T. PEAK TORQUE AT 20 S.P.M.	3200000 IN.-LBS.
REDCER	3200
STANDARD SHEAVE	25.65 TO 1
HIGH SPEED SHAFT DIA & LENGTH OF EXTENSION	2 1/2" X 8"
HIGH SPEED SHAFT KEYWAY - SIZE & LENGTH	3/8" X 3"

**CRANK WEIGHT
COUNTER-BALANCE
EFFECT**

DESCRIPTION	STROKES			
	44"	54"	64"	84"
MINIMUM INCH CRANKS ONLY	3794	4505	5216	5927
WEIGHTS - POSITION	11775	14618	17461	20304
1	12432	15322	18212	21102
2	13090	16055	18945	21835
3	13748	16788	19678	22568
4	14406	17521	20411	23301
5	15064	18254	21144	24034
6	15722	18987	21877	24767
7	16380	19720	22610	25500
8	17038	20453	23343	26233
9	17696	21186	24076	26966
10	18354	21919	24809	27700
11	19012	22652	25542	28433
12	19670	23385	26275	29166

MASTER WEIGHTS & INNER WEIGHTS

1	15,326	12,680	10,861	9,533	8,522
2	16,480	13,604	11,641	10,206	9,118
3	17,586	14,530	12,421	10,882	9,711
4	18,731	15,456	13,202	11,557	10,308
5	19,867	16,380	13,984	12,233	10,901
6	21,002	17,305	14,765	12,908	11,495
7	22,137	18,231	15,546	13,584	12,090
8	23,272	19,156	16,327	14,260	12,686
9	24,407	20,081	17,108	14,936	13,281
10	25,542	21,007	17,889	15,612	13,877
11	26,677	21,932	18,670	16,288	14,472



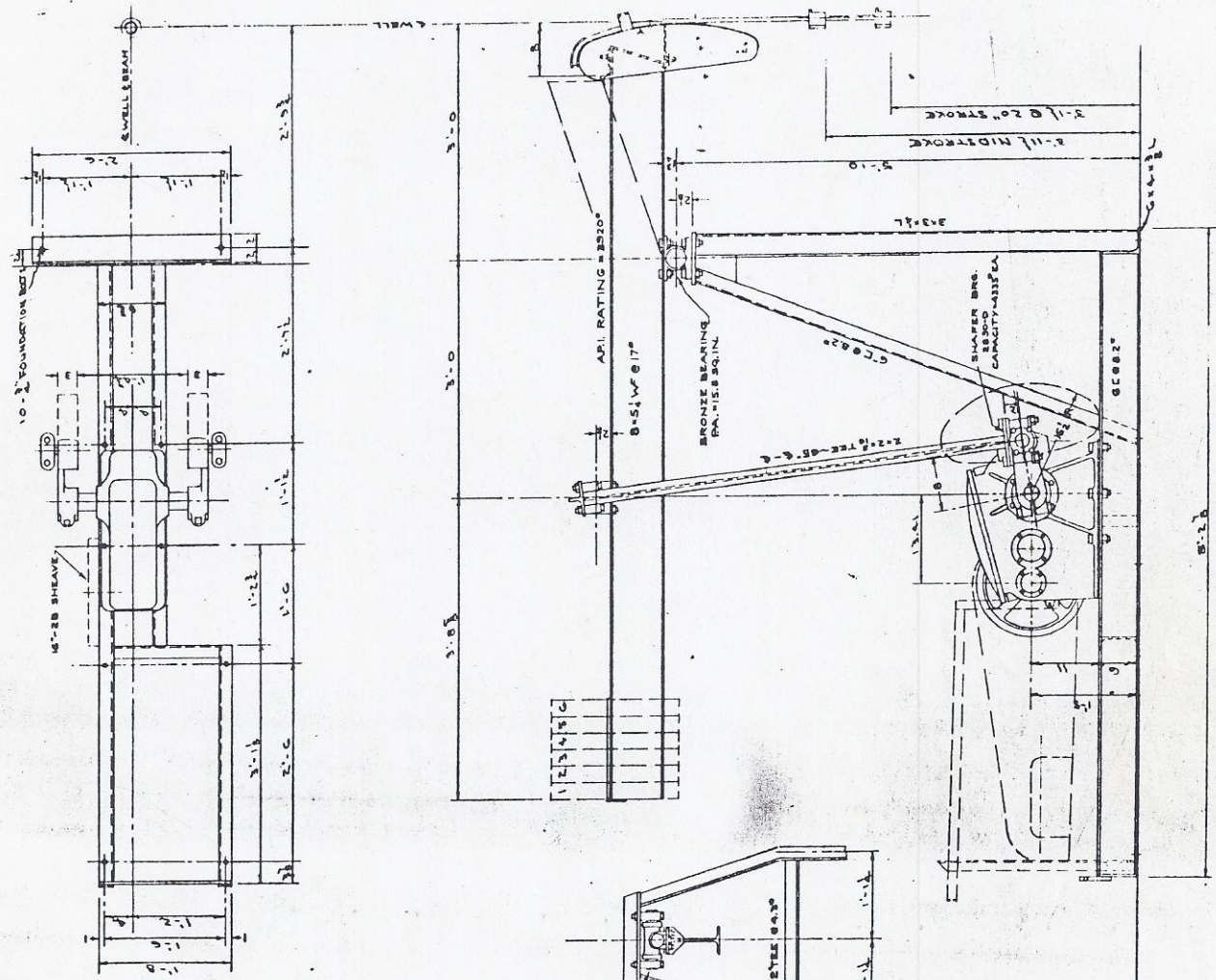
CERTIFIED FOR CONSTRUCTION
BY: _____ DATE: _____
SERIAL NO. _____

CABOT SHOPS, INC.
PULASKI, TEXAS
ASSEMBLY
AC25-3200 PUMPING UNIT
FOR MULTI-CYL. ENGINE

DRAWN BY: EULER DATE: 5-8-32
AC25-3200

BRIEF SPECIFICATIONS

BEAM RATING	3320 LBS.
LENGTH OF STROKES	12-18-20 IN.
A.P.I. PEAK TORQUE AT 20 S.P.M.	10,000 IN.-LB.
REDUCER	30.78 TO 1
RATIO	12-28
STANDARD SHEAVE	12-28
HIGH SPEED SHAFT EXTENSION	12-28
KEYWAY	12-28



CERTIFIED FOR CONSTRUCTION

BY _____ DATE _____
SERIAL NO. _____

CABOT SHOPS, INC.
PAMPA, TEXAS
ASSEMBLY
B4-10D PUMPING UNIT

DRAWN BY A.T.S. 7-20-44
DATE 1-20-44

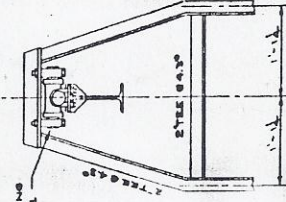
B4-10D

CO-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF STROKE	12"	18"	20"
CRANK WEIGHT	571	407	313

EFFECTIVE CO-BALANCE OF BEAM WEIGHTS

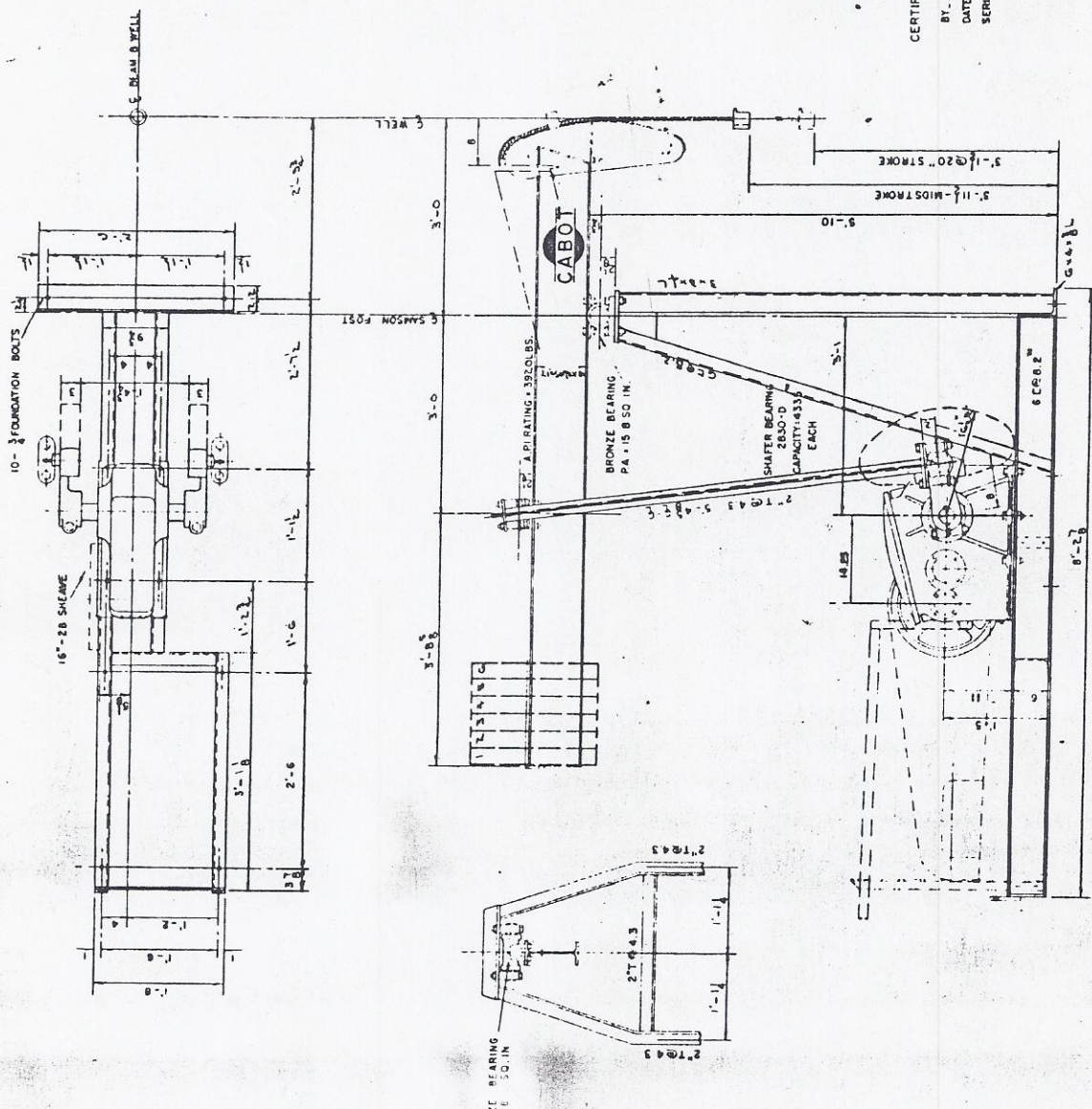
SETS TOTAL WEIGHT OF WTS. COUNTERWEIGHTS OF EACH SET	EFFECTIVE CO-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
1	1140	1140
2	570	570
3	380	380
4	285	285
5	190	190
6	1140	1140



BRONZE BEARING P.A. 15.8 SQ. IN.

SPECIFICATIONS

BEAM BASE	18-18-20 IN.
LENGTH OF STROKE	18,000 IN. LB.
A.M. PEAK TORQUE AT 20 S.P.M.	18 D
REDUCER	88.9% TO 1
RATIO	16"-28
STANDARD SHEAVE	16" X 2"
HIGH SPEED SHAFT EXTENSION	16" X 2"
KEYWAY	16" X 2"



CERTIFIED FOR CONSTRUCTION
 BY _____
 DATE _____
 SERIAL NO. _____

CABOT SHOPS, INC. PAMPA, TEXAS ASSEMBLY
-B4-16D PUMPING UNIT
DRAWN BY B.S.
DATE 7-30-38
SERIAL NO. B4-16D

LENGTH OF STROKE	12"	16"	20"
CRANK WEIGHTS	571	407	313

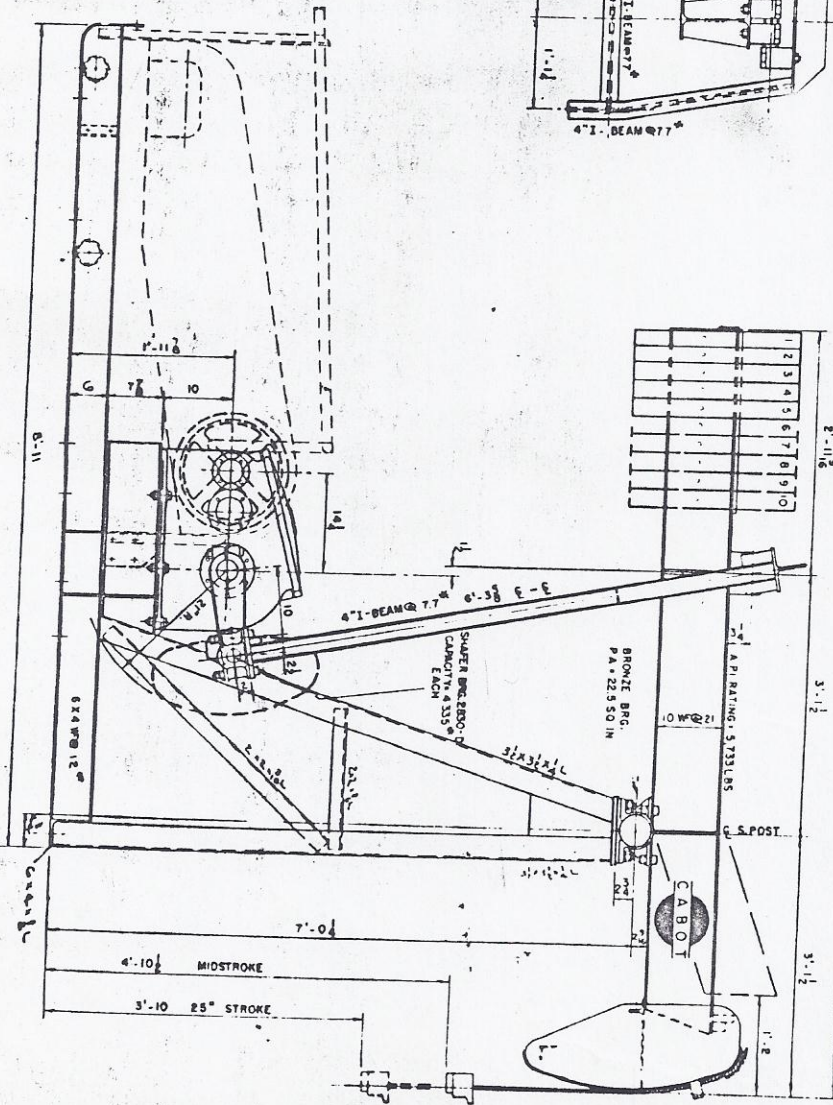
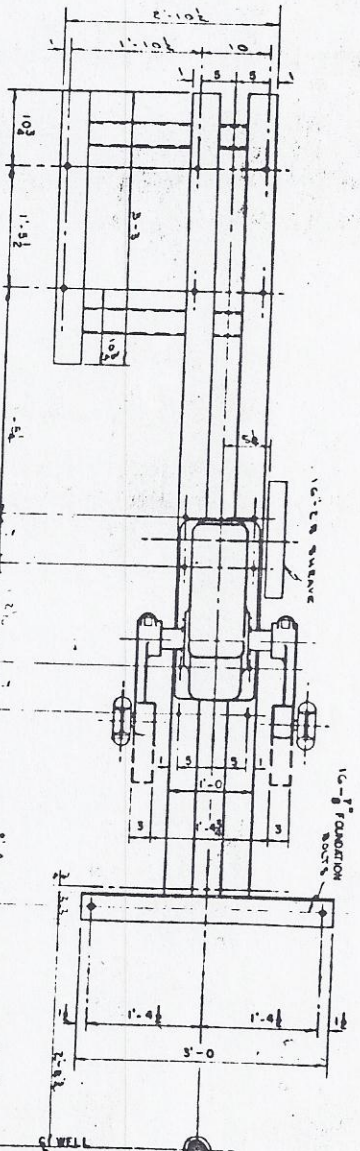
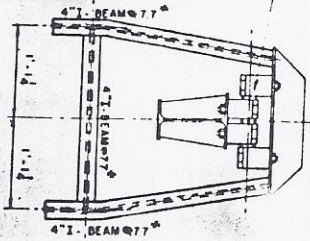
SET	TOTAL WEIGHT OF WTS. COUNTERWEIGHTS OF EACH SET	EFFECTIVE CO-BALANCE OF EACH SET	TOTAL EFFECTIVE COUNTERBALANCE
1	180	425	130
2	330	410	556
3	470	394	966
4	590	378	1360
5	690	362	1728
6	1140	346	2100
			2446

SERIAL NO. B4-16D

BRIEF SPECIFICATIONS

API BEAM RATING	3733 LBS.
LENGTH OF STROKES	20" - 23"
API FLANK TORQUE AT 525 M.	18000 IN. LB.
REDUCER	160
RATIO	29.9 TO 1
STANDARD SHEAVE	16" DIA.
HIGH SPEED SHAFT EXTENSION	4" X 2"
REVIEW	4" X 4"

EQUALASTIC BEARING
P.A. 24 50 IN.
DO NOT LUBRICATE



CO-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF STROKES	20"	23"
CRANK WEIGHTS	436	365

EFFECTIVE CO-BALANCE OF BEAM WEIGHTS

ST'S	TOTAL WEIGHT	EFFECTIVE CO-BALANCE OF EACH SET	TOTAL EFFECTIVE CO-BALANCE
1	500	475	232
2	750	480	1217
3	1000	440	1887
4	1250	425	2062
5	1500	505	2487
6	1750	510	2877
7	2000	310	3247
8	2250	315	3602
9	2500	315	3937
10	2500	210	4237

SALES DRAWING ONLY
Not To Be Used For
Installation

CABOT SHOPS, INC.
BIRMINGHAM, ALA.

BRIEF SPECIFICATIONS

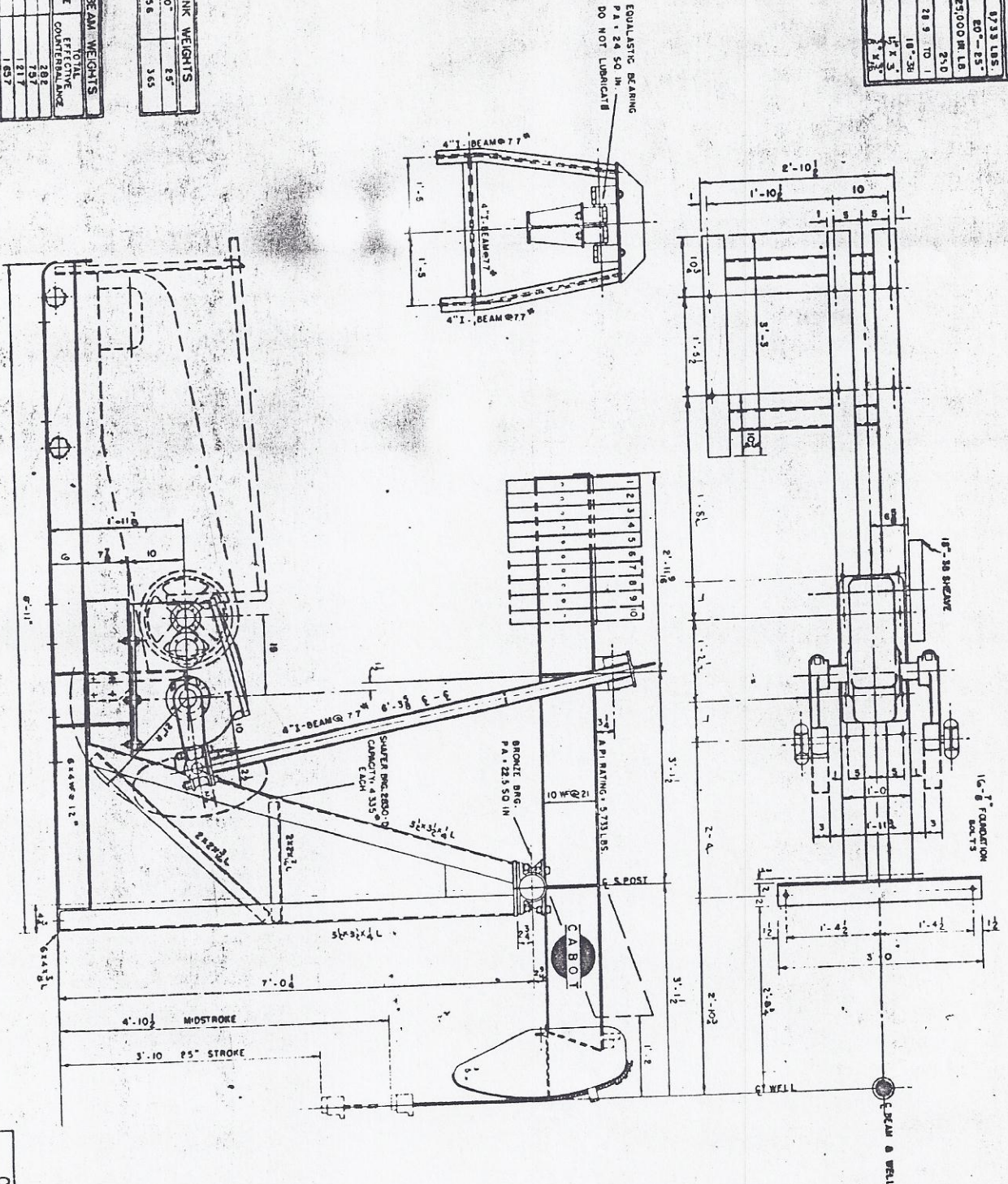
MAX. RATING	1733 LBS.
NO. OF STROKES	80 - 85*
NET TORQUE AT 20 S.P.M.	23000 IN. LB.
NET TORQUE AT 20 S.P.M.	250
1/2 SH-SHAFT	28.9 TO 1
1/2 SH-SHAFT	18" - 38"
1/2 SH-SHAFT	1 1/2" X 3"
1/2 SH-SHAFT	1 1/2" X 3"
1/2 SH-SHAFT	1 1/2" X 3"

CO-BALANCE EFFECT OF CRANK WEIGHTS

LENGTH OF STROKES	30"	85"
CRANK WEIGHTS	456	365

EFFECTIVE CO-BALANCE OF BEAM WEIGHTS

NO. OF BEAMS	WEIGHT OF EACH BEAM	COMMITMENT OF EACH SET	TOTAL EFFECTIVE CO-BALANCE
1	250	475	282
2	500	410	797
3	750	440	1857
4	1000	425	2083
5	1250	405	2487
6	1500	390	2877
7	1750	370	3242
8	2000	355	3582
9	2250	335	3897
10	2500	310	4237



SERIAL NO. 3708A ABOVE

CABOT SHOPS, INC.
 PAMPA, TEXAS
 ASSEMBLY UNIT
 85-250 PUMPING UNIT
 MULTI-CTL. ENG.
 DATE BY [Signature] DATE 1-10-50
 85-250

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