WELL 7/12-6

DST 2

TECHNICAL	DEPARTMENT	LIBRARY

AC NOCS 7/12-6 W41.7

ID 100091

INJECTION
TESTING
MEASUREMENTS

WELL 7/12-6 DST NO. 2 DATE: 17/7/81

		INJECTION	RATE	INJECTION PRE	ESSURE PSI	
TIME	GAUGE TANK BWPD	TUKBINE METER BPM	TURBINE METER TOTALISER BWPD	HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
1208	-					Open APR-N (lo-torq valve closed)
1217					3542	Pressure building up at surface.
1227					3542	Put 3500 psi below lo-torq valve - open same.
1228		2.0				Commenced pumping diesel.
1231		2.0		3300	3570	
1241		1.5		3900		
1250				4300		
1305				4400	4805	
1313		1.0		4300		
1325		1.0		4300		
1335		0.5		4300	4450	
1345		0.5		4300		
1400		0.5		4300	4516	
1406		0.5		4300		Commenced pumping seawater.

WELL 7/12-6 DST NO. 2

DATE: 17/7/81

		INJECTION	RATE	ı	INJECTION PRE	ESSURE PSI	GOVO GOVO GOVO
TIME	GAUGE TANK BWPD	TUKBINE METER BPM	TURBINE TOTAL BW			DEAD WT. TESTER	COMMENTS
1415		0.5			4300	4520	
1422		1.25			4700		
1437	1500	1.0	13.71		4950		
1452	(1.04 BPM)	1.0	(0.95 BPM)		4900		
1507		1.0			4800	4939	
1522		1.0			4600		
1537		1.0			4600	4740	
1552		1.0			4800		
1603	V	0.5	١	/	4800	4850	
1607		0.5			4800		
1622		0.5			4850		
1629		0.5			4900	4980	
1640		0.25-0.5			4400		
1649		0.0			4800		

WELL 7/12-6 DST NO. 2 DATE: 17/7/81

		INJECTION	RATE	INJECTION PR	ESSURE PSI	
TIME	GAUGE TANK BWPD	TURBINE TURBINE METER METER TOTALISER BPM BWPD		HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
1658		0.5		4500	4645	
1700	383	0.25	348	4600		
1715	(0.27 BPM)	0.25	(0.24 BPM)	4800	4620	
1730		0.25		4600		
1749		0.25		4800	4930	
1804		0.25		4800		
1820		0.25		4900	4948	
1834	V	0.25	<u> </u>	4900		
1850		0.1-0.2		4400		
1904		0.1-0.2		4400	4469	
1926		0.1-0.2		4400	4460	
1944		0.5		4800		
1956		0.5		4800		
2010		0.5		4800	4874	

		INJECTION	RATE	INJECTION PRI	ESSURE PSI	
TIME	GAUGE TANK BWPD	TURBINE METER BPM	TURBINE METER TOTALISER BWPD	HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
2012		0.6		5000	5050	
2023		0.8		5200	·	
2025		0.8		5200	5212	
2040		0.8		5200		
2042		1.0		5300		
2055	·	1.0		5300		
2100	2179	1.5	1931	5500	5430	
2115	(1.5 BPM)	1.5	(1.34 BPM)	5600 🗸		
2124		1.5		5500		
2128		1.5		5300		
2130		1.5		5300	5292	
2132		1.5		5200		
2138	\bigvee	1.5	\bigvee	5100		
2143		1.5		5000		

WELL 7/12-6 DST NO. 2

		INJECTION	RATE		INJECTION PRE	SSURE PSI	
TIME	GAUGE TANK BWPD	TURBINE TURBINE METER METER TOTALISER BPM BWPD		HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS	
2145		1.5			5000	5000	
2147		1.5			4900		
2148	3947	2.0	283	36	5000		
2153	(2.05 BPM)	2.0	(1.97	BPM)	4900		
2156		2.0			4800		
2157		2.0			4900		
2158		2.0			4800	4600	
2210	>	2.0	V	/	4300		
2215		2.5			4400	4350	
2230	3732	2.5	3730		4100	4100	
2240	(2.59 BPM)	2.5 (2.59 BPM)		4000			
2250		2.5			3800		
2300		2.5			3800	3750	
2310	√	2.5	1	/	3700		

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			INJECTION	RATE		INJECTION PRE	SSURE PSI	
TIME	GAUGE TANK BWPD		METER TOTAL		E METER LISER WPD	HALLIBURTON DEAD WT. PUMP TESTER		COMMENTS
2320			2.5			3700	3700	
2330			2.5			3700		
2340			2.5			3600	3550	
2350			2.5			3600		
2400	V	\	2.5	\	/	3550		Start adding seawater to tank.
0010	1	246	2.5	37	20	3500		
0020		.25 РМ)	2.5	(2.58 BPM)		3500		
0030			2.5		•	3400	3300	
0040			2.5			3400		
0050			2.5			3300	3300	
0100			2.5			3300		
0110			2.5			3300		
0120			2.5	·		3300		
0130		/	2.5	V	/	3250	3200	

			INJECTION	RATE		INJECTION PRI	ESSURE PSI	
TIME	GAUGE TANK BWPD		METER TOTA		E METER LISER WPD	HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
0140	37.	35	2.5	36	76	3250		
0150	(2.9 BPI	59 4)	2.5	(2.55	ВРМ)	3250		
0200			2.5			3200	3200	
0210			2.5			3150		
0225			2.5			3200	3100	
0240			2.5			3200		
0255			2.5			3150		
0311			2.5			3100		·
0325			2.5			3200	3100	
0341			2.5			3150		
0356			2.5			3150		
0412			2.5			3150	3000	
0425			2.5			3100		
0444	V		0	V	/			Pump failure due to overheating.

WELL 7/12-6 DST NO. 2 DATE: 18/7/81

			INJECTION	RATE		INJECTION PRE	ESSURE PSI	
TIME	GAUGE TANK BWPD		TURBINE METER BPM	ETER TOTALISER		HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
0449	36	40	2.5	30	617	3100		Commenced pumping again.
0455	(2. BP		2.5	(2.5	l BPM)	3100	3037	
0511			2.5			3100		
0522			2.5			2900		
0530			2.5			3000	3002	
0545			2.5			3000	2995	
0600			2.5			3000	3013	
0611			2.5			3000		
0625			2.5			3000	2998	
0640			2.5			3000		
0655			2.5			3000	2994	
0710			2.5			3000		
0725			2.5			3000	2973	
0740	1	/	2.5	\	V	3000		

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DATE: 18/7/81

		INJECTION	RATE	INJECTION PRI	ESSURE PSI	
TIME	GAUGE TANK BWPD	UGE TURBINE TURBINE METER HALLIBURTON DEAD WT. ANK METER TOTALISER PUMP TESTER	COMMENTS			
0755		2,5		3000	2960	
0810	1	2.5	V	3000		
0813						Shutdown to rearrange suction to eliminate possible sources of diesel or air giving emulsion at rig floor.
0822						Recommence pumping.
0825	5600	3.5	5332	3200	3185	
0830	(3.89 BPM)	3.5	(3.70 BPM)	3200		
0835		3.5		3200		
0850	V	3.5	V	3200	3145	
0901		4.0		4300	3130	
0916		4.0		3200	3080	
0918		4.0		3100		
0930		4.0		3100	3045	
0948		4.5		3200	3110	
1003		4.5		3200	3080	

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			INJECTION	RATE		INJECTION PRE	ESSURE PSI	
TIME	GAUGE TURBINE TANK METER BWPD BPM		METER	TURBINE METER TOTALISER BWPD		HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
1018			4.0			3000	2995	
1022			5.5			3200		
1026	9:	155	6.0	89	46	3400		
1033			6.5			3400	3260	
1035			6.5			3500	3345	
1054			6.2			3400		
1110			6.2			3400		
1116			6.2			3300	3245	
1131	V	1	6.0	\	V	3300	3185	
1145	10	124	6.0	89	51	3300	3170	
1200	1		6.0			3300	3170	
1215			6.0			3300	3155	
1230			6.0			3300	3163	
1245	V	/	6.0	\	/	3300	3154	

		INJECTION	RATE	INJECTION PR	ESSURE PSI	
TIME	GAUGE TANK BWPD	TUKBINE METER BPM	TURBINE METER TOTALISER BWPD	HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
1300	V	6.0	V	3300	3164	
1315	8448	6.0	8802	3300	3146	
1330		6.0		3300	3142	
1345		6.0		3300	3150	
1401		6.0		3300	3152	
1415		6.0		3300	3137	
1430		6.0		3300	3135	
1445		6.0		3300	3133	
1501		6.0		3300	3138	
1515		6.0		3200	3137	
1530		6.0		3200	3137	
1545	\bigvee	6.0	$\sqrt{}$	3200	3134	
1600	8458	6.0	8560	3200	3134	
1615		6.0	V	3200	3125	

		INJECTION	RATE	INJECTION PRI	ESSURE PSI	
TIME	GAUGE TANK BWPD	TURBINE METER BPM	TURBINE METER TOTALISER BWPD	HALLIBURTON PUMP	DEAD WT. TESTER	COMMENTS
1630		6.0		3200	3113	
1647		6.0		3200	3107	
1700		6.0		3200	3100	
1715		6.0		3200	3095	
1730		6.0		3200	3080	
1745		5.75		3200	3062	
1800	V	5.75	V	3200		
			·			

	ÆTER	TURBINE N		PRESSURE		TIME	
	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL	VOLUME TOTALISER US GAL	FLOWRATE BPM	psi	SEC.	MIN.	HR.
-	5.24 20.24	220 1070	00 2 00 1.5		09	31 41	12 12
				4300 4400		50 05	12 13
7			1.0 1.0	4300 4300	18	15 25	13 13
			0.5 0.5	4300 4300	27	35 45	13 13
_	26.67 0	2190 0	0.5 0.5	4300 4300	25	00 06	14 14
	.8.81	370	0.5 1.25	4300 4700	10 10	15 22	14 14
12	16.67 14.76	1070 1690	1.0	4950 4900	12 39	37 52	14 14
1	14.76 14.05	2310 2900	1.0 1.0	4800 4600	50 31	07 22	15 15
_	14.29 14 .29 5.2	3500 35 00 410	1.0 1.0	4600 4 60 0	21 41	37 52	15 15
1	8.10 2.38	4 <u>450</u> 4550	0.5 0.5	4800 4800	30 50	03 07	16 16
3	6,43 2.76	4820 4930	0.5 0.5	4850 4900	20 47	22 29	16 16
	1.52 3.57	<u>5000</u> 5150	0.25-0.5	4400 4800	30 -20	40 49	16 16
	1.67 0.71	5220 5250	0.5 0.25	4500 4600	55 20	57 00	16 17
	3.33	5390 5470	0.25 0.25	4800 4600	11 06	15 30	17 17
	5.00 3.81	5680 5840	0.25 0.25	4800 4800	47 36	48 04	17 18
1	4.52 4.29	6030 6210	0,25 0,25	4900 4900	40 29	19 34	18 18

diesel

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	TIME		PRESSURE		TURBINE N	ÆTER	
HR.	MIN.	SEC.	psi	FLOWRATE BPM	VOLUME TOTALISER US GAL	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL	
18 19	49 04	30 15	4400 4400	0.1-0.2 6320 0.1-0.2 6410		2.62 2.14	7 \
19 19	25 40	50 30	4400 4800	0.1-0.2 0.5	6550 6680	3.33 3.10	1
19 20	55 10	50	4800 4800	0.5 0.5	6920 7140	5.71 5.24	5
20 20	12 23	·	5000 5200	0.6 0.8	7270 7460	3.10 4.52	
20 20	25 40		5200 5200	0.8 0.8	7520 8010	1.43 11.67	6
20 20	42 55		5300 5300	1.0 1.0	8100 8560	2.14 10.95	7
21 21	00 15		5500 5600	1.5 1.5	8870 9650	7.38 18.57	-
21 21	24 28		5500 5300	1.5 1.5	10230 10560	13.81 7.86	
21 21	30 32		5300 5200	1.5 1.5	10680 10820	2.86 3.33	8
21 21	38 43		5100 5000	1.5 1.5	11010 11520	4.52 12.14	
21 21	45 47		5000 4900	1.5 1.5	11640 11820	2.86 4.29	
21 21	48 53		5000 4900	2.0	11910 12280	2.14 8.81	
21 21	56 57		4800 4900	2.0	12450 12570	4.05 2.86	9
21 22	58 10		4800 4300	2.0	12670 13730	2,38 25.24	
22 22	15 - 30		4400 4100	2.5 2.5	14220 15670	11.67 34.52	
22 22	40 50		4000 3800	2.5	16700 17800	24.52 26.19	

	TIME		PRESSURE		TURBINE 1	ÆTER
HR.	MIN.	SEC.	psi	FLOWRATE BPM	VOLUME TOTALISER US GAL	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL
23 23	00 10		3800 3700	2.5 2.5	18890 19920	25.95 24.52
23 23	20 30		3700 3600	2.5 2.5	21310 22060	33.10 17.86
23 23	40 50		3600 3570	2.5 2.5	23270 24000	28.81 17.38
24	00		3500	2.5	25460	34,76
					7	
		:				
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	TIME		PRESSURE		TURBINE 1	METER	
HR.	MIN.	SEC.	psi	FLOWRATE BPM	VOLUME TOTALISER US GAL	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL	
00 00	10 20		3500 3400	1		12.86 35.00	} \
00 00	30 40		3400 3400	2.5 28490 24.29 2.5 29540 25.00			
00 01	50 00		3300 3300	2.5 2.5	30640 31760	26.19 26.67	†
01 01	10 20		3300 3300	2.5 2.5	32600 33660	20.00 25.24	
01 01	30 40		3250 3250	2.5 2.5	34680 35800	24.29 26.67	
01 02	50 00		3250 3200	2.5 2.5	36960 38010	27.62 25.00	
02 02	10 25	10	3150 3200	2.5 2.5	39040 40660	24.52 38.57	†
02 02	40 55	20 05	3200 3150	2.5 2.5	42240 43710	37.62 35.00	†
03 03	10 25	55 02	3100 3200	2.5 2.5	45470 46910	41.90 34.29	
03 03	40 55	57 35	3150 3150	2.5 2.5	48700 50330	42.62 38.81	10
04 04	12 25	27 16	3150 3100	2.5 2.5	52150 53490	43.33 31.90	
04 04	44 49		- 3100	0.0 2.5	- 55610	50.48	-::
04 05	55 10	56	3100 3100	2.5 2.5	56280 5800	15.95 40.95	
05 05	21 22	42	3000 2900	2.5 2.5	59190 59300	28.33 2.62	
05 05	30 45	20 10	3000 3000	2.5	60100 61670	19.05 37.38	12
06 06	00 10			i e			

	TIME		PRESSURE		TURBINE 1	ÆTER	
HR.	MIN.	SEC.	psi	FLOWRATE BPM	VOLUME TOTALISER US GAL	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL	
06 06	25 40		3000 3000	2.5 2.5	65820 67380	36.43 37.14	1
06	55	15	3000	2.5	68970	37.86	12
07	10	03	3000	2.5	70510	36.67	
07	25	07	3000	2.5	72080	37.38	
07	40	12	3000	2.5	73650	37.38	
07	55	07	3000	2.5	75200	36.90	
08	10	13	3000	2.5	76770	37.38	
08	13	Shutdo higher	wn to rearr	ange pumps,	bringing pum	p rate and pressure	1
08 08	22 25	Restar 32	t 3200	3,5	77550	18.57	1,3
08	30	02	3200	3.5	78240	16.43	14
08	35	03	3200	3.5	79030	18.81	
08	50	01	3200	3.5	81360	55.48	_
09	01	25	3200	4.0	83220	44.29	
09 09	15 18	37	3200 3100	4.0 4.0	85680 86350	58.57 15.95	15
09 09	30 48	08	3100 3200	4.0 4.5	88260 91750	45.48 83.10	_
10	03	10	3200	4.5	94770	71.90	16
10	17	57	3000	4.0	97420	63.10	
10	18 .	06	3200	5	97760	8.10	-
10	27	11	3200	5.5	98630	20.71	
10	26	12	3400	6.0	99580	22.67	
10	33	10	3400	6.5	101410	43.57	
10	35	20	3500	6.5	102010	14.29	П
10	54	18	3400	6.2	107420	128.81	
11 11	10 15	15 38	3400 3300	6.2	111670 113200	101.19 36.43	
11 11	30 45	45 12	3300 3300	6.0	116540 120750	79.52 100.24	18

	TIME		TAN	K NO.	VOLUM	ES, BBL	
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.	COMMENTS
12 12	28 43	00 00	185 81		27.5	27.5	
12 12	51 58	00 00	40	185 155	10.8 7.9	38.3 46.2	Switch over from tank 1 to tank 2.
13 13	13 28	00 00		97 63	15.3 9.0	61.5 70.5	
13 13	43 52	00 40	40	35 15	7.4 5.3	77.9 83.2	Switch back to tank 1.
13 14	58 06	00 00	30 15		2.6 4.0	85.8 89.8	Swich to water tank 1 = left tank.
14 14	06 21	00 00	180 149		8.2	97.9	First water level reading.
14 14	36 47	00 25	109 40	180	10.6 18.2	108.5 126.7	Switch over to tank 2.
14 15	51 06	00 00		167 112	3.4 14.5	130.2 144.7	
15 15	21 28	00 00	184	63 40	12.9 6.1	157.6 163.7	Switch over to tank 1.
15 15	36 51	00 00	151 97		8.7 14.3	172.4 186.6	
16 16	06 15	00 00	57 40	185	10.6 4.5	197.2 201.7	Switch to tank 2.
16 16	21 36	00 00		174 158	2.9 4.2	204.6 208.8	
16 17	51 06			138.5 125.5	3.4 3.4	208.8 212.2	
17 17	21 36			115.5 102.5	2.6 3.4	214.9 218.3	
17 18	51 06			96.0 70	4.4 4.2	222.7 226.9	
18 18	21 31	,	184	52 40	4.8 3.2	231.6 234.8	Switch to 1.

	TIME		PRESSURE		TURBINE 1	METER	
HR.	MIN.	SEC.	psi	FLOWRATE BPM	VOLUME TOTALISER US GAL	CHANGE IN VOLUME FROM PREVIOUS MEASUREMENT, BBL	
12	00	20	3300	6.0	124760	95.48	
12	15	19	3300	6.0	128670	93.10	
12	30	13	3300	6.0	132550	92.38	
12	45	03	3300	6.0	136420	92.14	
13	00	02	3300	6.0	140330	93.10	
13	15	05	3300	6.0	144230	92.86	
13	30	04	3300	6.0	148080	91.67	
13	45	26	3300	6.0	151270	75.95	
14	00	43	3300	6.0	155920	110.71	
14	15	05	3300	6.0	159620	88.10	
14	30	00	3300	6.0	163660	96.19	
14	45	00	3300	6.0	167230	85.00	
15	00	33	3300	6.0	171270	96.19	
15	15	00	3200	6.0	174880	85.95	
15	30	03	3200	6.0	178800	93.33	
15	45	23	3200	6.0	182 7 40	93.81	
16	00	00	3200	6.0	186400	87.14	†
16	15	09	3200	6.0	190430	95.95	
16	30	27	3200	6.0	194180	89.29	10
16	47	26	3200	6.0	198440	101.43	
17	00	00	3200	6.0	201560	74.29	
17	15	00	3200	6.0	205350	90.24	
17	30	19	3200	6.0	209190	91.43	1
17	45	00	3200	5.75	212860	87.38	
18	00	00	3200	5.75	216360	83.33	16
							†
							1
							1

	TIME		TAN	K NO.	VOLUM	ES, BBL	
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.	COMMENTS
12 12	28 43	00 00	185 81		27.5	27.5	
12 12	51 58	00 00	40	185 155	10.8 7.9	38.3 46.2	Switch over from tank 1 to tank 2.
13 13	13 28	00 00		97 63	15.3 9.0	61.5	
13 13	43 52	00 40	40	35 15	7.4 5.3	77.9 83.2	Switch back to tank 1.
13 14	58 06	00 00	30 15		2.6 4.0	85.8 89.8	Swich to water tank 1 = left tank.
14 14	06 21	00 00	180 149		8.2	97.9	First water level reading.
14 14	36 47	00 25	109 40	180	10.6 18.2	108.5 126.7	Switch over to tank 2.
14 15	51 06	00 00		167 112	3.4 14.5	130.2 144.7	
15 15	21 28	00 00	184	63 40	12.9 6.1	157.6 163.7	Switch over to tank 1.
15 15	36 51	00 00	151 97		8.7 14.3	172.4 186.6	
16 16	06 15	00 00	57 40	185	10.6 4.5	197.2 201.7	Switch to tank 2.
16 16	21 36	00 00		174 158	2.9 4.2	204.6 208.8	
16 17	51 06			138.5 125.5	3.4 3.4	208.8 212.2	
17 17	21 36			115.5 102.5	2.6	214.9 218.3	
17 18	51 06			96.0 70	4.4 4.2	222.7 226.9	
18 18	21 31		184	52 40	4.8 3.2	231.6 234.8	Switch to 1.

	TIME		TANK	NO.	VOLUM	ES, BBL	
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.	COMMENTS
18 18	56 51		178 166		1.6 3.2	236.4 239.6	
19 19	06 21		154 142		3.2 3.2	242.7 245.9	
19 19	36 51		130 132	52	3.2	249.1	
20 20	06 21		111 81.5				
20 20	35 36		40	184 181	38.0 0.79	272.8 273.6	Switch to 2.
20 21	51 06			128 62	14.0 17.4	287.6 305.0	
21 21	10 21		177 112	40	5.8 17.2	310.0 328.0	Switch to 1.
21 21	34 36		40	184 171	19.0 3.4	347.0 350.4	Switch to 2.
21 21	51 55		184	74 40	25.6 9.0	376.0 385.0	2 1
22 22	06 14		102 40	180	21.6 16.4	406.7 423.0	1 2
22 22	21 28		163	111 40	18.2 18.7	441.3 460.0	2 1
22 22	36 41		86 40	150	20.3 12.1	480.3 492.5	1 2
22 22	51 52		139	42 40	28.5 0.5	521.0 521.5	2 1
23 23	02 06		40	135 96	26.1 10.3	547.6 557.9	1 2
23 23	11 21		126 40	40 119	14.8 22.7	572.7 595.4	2 1 1 2
23 23	28 36		120 43	40	20.9 20.3	616.3 636.6	2 1

	TIME		TANK	NO.	VOLUME	S, BBL			COMENTS
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.			COMMENTS
23 23	37 44		40 112	115 40	0.8 19.8	637.4 657.2	1 2	2	
23 23	51 52		45 40	115	17.7 1.3	674.9 676.2	1	2	
23	59		111	40	19.8	696.0	2	1	`
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	TIME		TANK	NO.	VOLUM	ES, BBL			
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.			COMMENTS
00 00	06 07		43 40	141	18.0 0.8	714.0 714.8	1	2	
00 00	17 21		180 151	40	26.7 7.7	741.4 749.1	2	1	
00 00	32 36		40	183 144	10.3	759.4	1	2	
00	46 51		185 139	40	27.5 12.1	786.9 799.0	2	1	
01 01	01 06		40	184 132	26.1 13.7	825.1 838.8	1	2	
01 01	15 21		184 126	40	24.3 15.3	863.1 878.4	2	1	
01 01	29 36		40	180 117	22.7 16.6	901.1 917.7	1	2	
01 01	43 51		185 113	40	20.3 19.0	938.0 957.0	2	1	
01 02	58 06		40	185 112	19.3 19.3	976.3 995.6	1	2	
02 02	13 21		183 105	40	19.0 20.6	1014.6 1035.2	2	1	
02 02	27 36		40	183 99	17.2 22.2	1052.4 1074.6	1	2	
02 02	42 51		183 95	40	15.6 23.2	1090.2 1113.4	2	1	
02 03	57 06		40	185 93	14.5 24.3	1127.9 1152.2	1	2	
03 03	11 21		170 75	40	14.0 25.1	1166.2 1191.3	2	1	
03 03	24 36		40 158	164 42	9.2 32.2	1200.5 1232.7	1 2	2	
03 03	46 51	30	40	168 129	12.7 10.3	1245.4 1255.7	1	2	

	TIME		TANK	NO.	VOLUM	ES, BBL	
HR.	MIN.	SEC.	l cm	2 cm	FROM CURRENT TANK	TOTAL VOL.	COMMENTS
03 04	59 06		185 115	40	23.5 18.5	1279.2 1297.7	2 1
04 04	14 21		40	165 89	20.1	1317.8	1 2
04 04	25 36		156 50	40	13.0 28.0	1330.8 1358.8	2 1
04 04	38 41		40	152 112	29.6 10.7	1388.4 1399.1	1 2
04 04	46 51			107 57	1.3 12.7	1400.4 1413.1	
04 05	53 06		80 43	40	5.0 36.2	1418.1 1454.3	2 1
05 05	07 18		40 140	164 40	0.8 32.7	1455.1 1487.8	1 2 2 1
05 05	21 28	30	111 40	132	7.7 18.7	1495.5 1514.2	1 2
05 05	36 38		160	59 40	19.3 5.0	1533.5 1538.5	2 1
05 05	50 51		40	180 176	31.7	1570.2 1571.2	1 2
06 06	06 21		184 40	40 184	36.0 32.7	1607.2 1639.9	2 1 1 2
06 06	36 51		184 40	40 184	38.0 38.0	1677.9 1715.9	2 1 1 2
07 07	06 21		184 40	40 184	38.0 38.0	1753.9 1791.9	2 1 1 2
07 07	36 51		184 40	40 184	38.0 38.0	1829.9 1867.9	2 1 1 2
08 08	06 14		184 110	40	38.0 19.5	1805.9 1925.4	2 1 Stopping
08 08	21 23		110 110		-		Starting

	TIME	Σ	TAN	K NO.	VOLUM	ÆS, BBL	T		
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.		COMMENTS	
08 08	28 36		40	184 67	18.5 30.9	1943.9 1974.8			
08 08	38 46		161 40	40 143	7.1 32.0	1981.9 2013.9	2	1 2	
08 08	51 54		132	77 40	17.4 9.7	2031.3 2041.0	2	1	
09 09	00 06		40	145 55	24.3 25.0	2065.3 2090.3	1	2	
09 09	07 16		178 40	40 185	4.0 33.7	2094.3 2128.0	2	1 2	
09 09	21 25		185	98	23.2 23.0	2151.2 2174.2	2	1	
09 09	35 36		40	185 171	38.3 3.7	2212.5 2216.2	1	2	
09 09	43 51		185 42	40	34.6 37.8	2250.8 2288.6	2	1	
09 09	51 56		40 130	144 40	0.5 32.7	2289.1 2321.8	1 2	2	
10 10	02 06		40 100	114 40	27.7 19.5	2349.5 2369.0	1 2	2 1	
10 10	09 12		40 83	91 40	15.8 13.5	2384.8 2398.3	1 2	2	
10 10	15 17		40 110	86 40	11.4 12.1	2409.7 2421.8	1 2	2 1	
10 10	21 21		47 40	123	16.6 1.8	2438.4 2440.2	1	2	
10 10	25 29		141 40	40 145	21.9 32.0	2462.1 2494.1	2	1 2	
10 10	34 36		151 112	40	27.7 11.3	2521.8 2532.1	2	1	
10 10	38 42		40 138	144 40	19.0 32.7	2551.1 2583.7	1 2	2	

	TIME		TANK	NO.	VOLUM	ES, BBL			COLOGENITIC
HR.	MIN.	SEC.	1 cm	2 cm	FROM CURRENT TANK	TOTAL VOL.			COMMENTS
10 10	46 50		40 125	130 40	25.9 23.8	2609.6 2633.4		2 1	
10 10	51 54		120 40	120	1.3 21.1	2634.7 2655.8	1	2	
10 11	57 00		118 40	40 117	21.1 20.6	2676.9 2697.5		1 2	
11 11	04 06		115 65	40	20.3 13.2	2717.8 2731.0	2	1	
11 11	07 10		40 111	113 40	6.6 19.3	2737.6 2756.9		2	
11 11	13 16		40 109	111 40	18.7 18.7	2775.6 2794.3		2	
11 11	19 21		40	108 77	18.2 8.2	2812.5 2820.7	1	2	
11 11	22 25		112 40	40 115	9.8 18.7	2830.5 2849.2		1 2	
11 11	29 32		119 40	40 119	19.8 20.9	2869.0 2889.8		å 2	
11 11	35 36		119 102	40	20.9	2910.8 2915.3	2	1	
11 11	39 42		40 122	120 40	16.4 21.1	2931.7 2952.8	1 2	2 1	
11 11	46 50		40 124	124 40	21.6 22.2	2974.4 2996.6		2 1	
11 11	51 54		112 40	123	3.2 19.0	2999.8 3018.8	1	2	
11 12	58 01		124 40	40 128	22.0 22.2	3040.8 3063.0		1 2	
12 12	05 09	3½0 30	134 40	40 134	21.6 32.7	2084.6 3150.0		1 2	
12 12	13 18	30	139 40	40 142	23.2 26.1	3173.2 3199.3		1 2	

DATE: 18-7-81

	TIME		TANK	NO.	VOLUM	ES, BBL		·	
HR.	MIN.	SEC.	l cm	2 cm	FROM CURRENT TANK	TOTAL VOL.			COMMENTS
12 12	22 27		142 40	40 153	27.0 27.0	3226.3 3253.3	2	1 2	
12 12	32 36	30	155 40	40 157	29.8 30.3	3283.1 3313.4	2	1 2	
12 12	42 47		161 40	40 165	30.9 31.9	3344.3 3376.2	2	1 2	
12 12	52 57	40	170 40	40 174	33.0 34.3	3409.2 3443.5	2	1 2	
13 13	03 09	40 30	176 40	140 182	9.0 36.0	3452.5 3488.5	2	1 2	
13 13	15 22	40	184 40	40 171	37.5 38.0	3526.0 3564.0	2	1 2	
13 13	27 33	30 30	176 40	38 178	35.1 35.9	3599.1 3635.0	2	1 2	
13 13	39 - 45	30	184 140	40 186	36.4 38.0	3671.4 3709.4	2 1	1 2	
13 13	51 57	30	184 40	46 167	37.0 28.0	3746.4 3784.4	2	1 2	
14 14	03 01		153 40	40 148	33.5 29.8	3817.9 3847.7	2 1	1 2	
14 14	12 17	30	146 40	40 149	28.5	3876.2 3904.1	2 1	1 2	
14 14	22 27		156 40	40 160	28.7 28.0	2932.8 3960.8	2 1	1 2	
14 14	32 37	30	166 40	40 176	31.7 33.3	3992.5 4025.8	2	1 2	
14 14	43 49	30 30	182 116	40 185	36.0 17.4	4061.8 4079.2	2	1 2	
14 15	56 01		172 40	40 139	38.3 34.8	4117.5 4152.3	2 1	1 2	
15 15	06 09		115 40	40 113	26.1 19.8	4178.4 4198.2	2 1	1 2	

	TIME		TANK	NO.	VOLUM	ES, BBL	CONTENTE
HR.	MIN.	SEC.	l cm	2 cm	FROM CURRENT TANK	TOTAL VOL.	COMMENTS
15	12		122	40	19.3	4217.5	2 1
15	16		40	120	21.6	4239.1	1 2
15	20		125	40	21.1	4260.2	2 1
15	24		40	130	22.4	4282.6	1 2
15	28		141	40	23.7	4306.3	2 1
15	33		40	145	26.7	4333.0	1 2
15	38		155	40	27.7	4360.7	2 1
15	43		40	160	27.7	4388.4	1 2
15	49		169	40	31.7	4420.1	2 1
15	55		40	180	34.0	4454.1	1 2
16	01		181	40	37.0	4491.1	2 1
16	07		40	184	37.2	4528.3	1 2
16	13		176	40	38.0	4566.3	2 1
16	19		40	184	36.0	4602.3	1 2
16	26		184	40	38.0	4640.3	2 1
16	32		40	184	38.0	4678.3	1 2
16	39		180	40	38.0	4716,3	2 1
16	45		40	180	37.0	4753.3	1 2
16	51		180	40	37.0	4790.3	2 1
16	58		40	183	37.0	4827.3	1 2
17	04		184	40	37.8	4865.1	2 1
17	10		40	184	38.0	4903.1	1 2
17	17		184	40	38.8	4941.1	2 1
17	23		40	184	38.0	4979.1	1 2
17	30		184	40	38.0	5017.1	2 1
17	36		40	178	38.0	5055.1	1 2
17	42		184	40	36.4	5091.5	2 1
17	49		40	184	38.0	5129.5	1 2
17	55		184	40	28,0	5167.5	2 1
18	00		87	162	25,6	5193.1	Stop

TIME			SSURE	TEMP.	COMMENTS	
HR.	MIN.	SEC.	DWT	GAUGE	r	
12 12	17 20		3542			Open APR-N valve.
12 12	30 45		3570 4210	3500 4200	62	
13 13	00 15		4805 4752	4800 4700	64 64	
13 13	30 45		4450 4469	4400 4400	65 66	
14 14	00 15		4516 4520	4500 4500	67 60	
14 14	30 45		5060 5050	5000 5000	58 60	
15 15	00 15		4939 4825	4900 4800	58 58	
15 15	30 45		4740 4560	4700 4600	58 58	
16 16	00 15		4850 4895	4800 4800	58 58	
16 16	30 45		4980 4573	4900 4600	58 60	
17 17	00 15		4645 4840	4600 4800	60 58	
17 17	30 45		4620 4905	4600 4800	59 58	
18 18	00 15		4930 4907	4900 4900	58 58	
18 18	30 45		4948 4425	4900 4200	58 58	
19 19	00 15		4469 4495	4500 4500	58 · 58	
19 19	30 45		4460 4859	4500 4800	58 58	

	TIME			PRESSURE psi		COMMENTS
HR.	MIN.	SEC.	DWT	GAUGE	TEMP.	
20 20	00 15		4874 5050	4800 5000	58 58	
20 20	30 45		5212 5298	5200 5300	58 58	
21 21	00 15		5430 5581	5450 5600	58 57	
21 21	30 45		5292 4992	5300 5000	57 56	
22 22	00 15		4635 4345	4600 4350	56 56	
22 22	30 45		4107 3904	4100 3900	57 57	
23 23	00 15		3745 3677	3750 3700	57 57	
23 23	30 45		3602 3552	3600 3550	57 57	
00	00		3497	3500	57	
	,		-		-	

	TIME		PRESSURE psi		TEMP.	COMMENTS	
	HR.	MIN.	SEC.	DWT	GAUGE	.	
	00 00	15 30		3430 3370	3450 3300	56 56	
	00 01	45 00		3335 3289	3300 3300	56 56	
	01 01	15 30		3263 3220	3300 3200	56 56	
	01 02	45 00		3185 3170	3200 3200	56 56	
	02 02	15 30		3150 3132	3200 3100	56 56	
	02 03	45 00		3108 3091	3100 3100	56 56	Foxburgh pen unblocked/refilled.
	03 03	15 30		3078 3093	3100 3100	56 55	
	03 04	45 00		3075 3059	3100 3100	55 54	
	04 04	15 30	·	3020 3025	3000 3000	54 54	
	04 05	45 00		2009 3037	2000 3000	. 55 55	Pumps stopped for 5 min.
	.05 05	15 30		3022 3002	3000 3000	55 54	
	05 06	45 00		2995 3013	3000 3000	54 55	
	06 06	15 30	·	3006 2998	3000 3000	55 55	
	06 07	45 00	·	2987 2994	3000 3000	55 55	
	07 07	15 30		2983 2973	3000 3000	56 -56	
	07 08	45 00		2965 2960	2950 2950	56 56	

TIME			•	SSURE	TEMP.	COMMENTS
HR.	MIN.	SEC.	DWT	GAUGE	r 	
08 08	15 30		2000 3185	2000 3200	56 56	Stopped pumps.
08 09	45 00		3145 3130	3150 3100	56 56	
09 09	15 30		3080 3045	3100 3000	56 56	
09 10	45 00		3110 3080	3100 3000	56 56	
10 10	15 30		2995 3260	3000 3200	56 56	
10 11	45 00		3345 3260	3300 3200	56 56	
11 11	15 30		3245 3185	3200 3200	56 56	
11 12	45 00		3170 3170	3200 3200	56 56	
12 12	15 30		3155 3163	3100 3100	56 56	
12 13	45 00		3154 3164	3100 3100	56 56	
13 13	15 30	314 ⁷	3146 3 15 0	3100 3100	56 56	
13 14	45 00		3150 3152	3100 3100	56 56	
14 14	15 30		3137 3135	3100 3100	56 56	
14 15	45 00		3133 3138	3100 3100	56 56	
15 15	15 30		3137 3137	3100 3100	56 - 56	
15 16	45 00		3134 3134	3100 3100	56 56	

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	,	TIME PRESSURE psi		TEMP.	COMMENTS		
	HR.	MIN.	SEC.	DWT	GAUGE	F	
	16 16	15 30		3125 3113	3100 3100	56 56	
	16 17	45 00		3107 3100	3100 3100	56 56	
	17 17	15 30		3095 3080	3100 3100	56 56	
	17 18	45 00		3062 1960	3050 - 9950	56 56	Close APR-N valve.
					2050		
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	: : : : : : : :						
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