

DRAWDOWN AND RECOVERY

DATA SHEET 5A

BUBBLER DATA

TIME INTO TEST

READINGS

0 to 5 MIN.

QUICKLY AS POSSIBLE

5 to 60 MIN.

EVERY MINUTE

1 HR. TO 5 HR.

EVERY 10 MINUTES

5 HR. TO 100 HR.

EVERY HOUR

100 HR. TO 500 HR.

EVERY 4 HOURS

FET-

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG	WELLHEAD PRESS. HEISE GAUGE PSIG	t	t'	Rate Elapsed time.
10-18-79	17:57	PUMP DOWN - BLOWN TRANSFER			4822	-	-
"	18:00	START	600	30.9	4825	3	1608
		30 SEC	600	30.9	4825.5	3.5	1379
	18:01	"	610	31.0	4826	4	1206.5
		"	620	31.0	4826.5	4.5	1072.6
	18:02	"	630	31.5	4827	5	965.4
		"	650	31.5	4827.5	5.5	877.7
	18:03	"	660	31.7	4828	6	804.7
		"	670	31.9			
	18:04	"	684	32.4	4829	7	690
		"	692	33.0			
	18:05	"	704	33.8	4830	8	603.8
		"	708	34.8			
	18:06	"	716	37.0	4831	9	536.8
		"	722	39.5			
	18:07	"	732	42.0	4832	10	483.2
		"	742	44.2			
	18:08	"	748	47.0	4833	11	439.4
		"	756	50.0			
10-18-79	18:09	"	764	51.9	4834	12	402.8

DRAWDOWN AND RECOVERY

DATA SHEET 5A

BUBBLER DATA

TIME INTO TEST

READINGS

0 to 5 MIN.

QUICKLY AS POSSIBLE

5 to 60 MIN.

EVERY MINUTE

1 HR. TO 5 HR.

EVERY 10 MINUTES

5 HR. TO 100 HR.

EVERY HOUR

100 HR. TO 500 HR.

EVERY 4 HOURS

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG	WELLHEAD PRESS. HEISE GAUGE PSIG	t	t'	Rate
10-18-79	18:09:30	30 SEC	768	54.0			
"	18:10	"	774	55.5	4835	13	372
	18:11	1 MIN	777	57.0	4836	14	345.4
	18:12	"	780	58.0	4837	15	322.5
	18:13	"	784	59.3	4838	16	302.4
	18:13	"	790	61.0	4839	17	284.7
	18:15	"	796	62.3	4840	18	268.9
	18:16	"	798	63.6	4841	19	254.8
	18:17	"	808	65.0	4842	20	242.1
	18:18	"	824	66.0	4843	21	230.6
	18:19	"	832	67.0	4844	22	220.2
	18:20	"	848	68.0	4845	23	210.7
	18:21	"	850	69.0	4846	24	202.
	18:22	"		70.0	4847	25	193.9
	18:23	"		73	4848	26	186.46
	18:24	"		75	4849	27	179.6
	18:25	"		78	4850	28	173.2
	18:26	"		79	4851	29	167.3
	18:27	"		79.5	4852	30	161.7
	18:28	"		80	4853	31	156.6

DRAWDOWN AND RECOVERY

DATA SHEET 5A

BUBBLER DATA

TIME INTO TEST

READINGS

0 to 5 MIN.
5 to 60 MIN.
1 HR. TO 5 HR.
5 HR. TO 100 HR.
100 HR. TO 500 HR.

QUICKLY AS POSSIBLE
EVERY MINUTE
EVERY 10 MINUTES
EVERY HOUR
EVERY 4 HOURS

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG	WELLHEAD PRESS. HEISE GAUGE PSIG	<i>t</i>	<i>t'</i>	<i>Ratio</i>
10-18-79	18:29	1 min.		81.5	4854	32	151.7
	18:30	"		82.0	4855	33	147.2
	18:35	5 min.		85.0	4860	38	127.9
	18:40	"		87.5	4865	43	113.1
	18:45	"		90.0	4870	48	101.5
	18:50	"		92.0	4875	53	92
	18:55	"		93.0	4880 11	58	84.1
	19:00	"		94.5	4885	63	77.5
	19:05	"		96.0	4890	68	71.9
	19:10	"		97.5	4895	73	67
	19:15	"		99.0	4900	78	62.8
	19:20	"		101.0	4905	83	59.1
	19:30	10 MIN		102.5	4915	93	52.9
	19:40	"		104.0	4925	103	47.8
	19:50	"		106.0	4935	113	43.7
	20:00	"		108.0	4945	123	40.2
	20:10	"		109.0	4955	133	37.3
	20:20	"		110.5	4965 11	143	34.7
	20:30	"		112.0	4975	153	32.5
	20:40	"		113.0	4985	163	30.6

Time	t	t'	Rate.	(diff)	Wellhead p. D.Q. (psia)	Heave. psig
10-18-79						
19:20	4905	83	53.1	12.31	113.31	101
19:40	4925	103	47.8	12.85	116.85	104
20:00	4945	123	40.2	12.1	120.1	108
20:20	4965	143	34.7	12.66	122.66	110
20:40	4985	163	30.6	11.93	124.93	113
21:00	5168	183	28.24	(av. 12.26)	126.88 con.	114.4
21:20	5371	203	26.5		128.58	116.1
21:40	5391	223	24.2		130.05	117.6
22:00	5411	243	22.3		131.37	118.9
22:20	5431	263	20.7		132.56	120.1
22:40	5451	283	19.3		133.63	121.1
23:00	5471	303	18.1		134.61	122.1
23:20	5491	323	17.0		135.5	123
23:40	5511	343	16.1		136.31	123.8
(10-19) 00:00	5531	363	15.2		137.07	124.6
1:00	5591	423	13.2		139.02	126.5
2:00	5651	483	11.7		140.65	128.2
3:00	5711	543	10.5		141.97	129.5
6:00	5882	714	8.2		144.9	132.5
8:00	6002	834	7.2		146.27	133.8

ISIP (D.Q.) (annulus) 143.3 (stabilized) psia

Imbas = 14.504 psi = 0.235 ft water.
 1 ft water = 0.433 psi