

Site 1

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

Step 5.12.7

FET 7-79 Long Term Flow Test To 7 (1)

DATE	TIME	INTERVAL TIME	BUBBLER # GAUGE PSIG	WELLHEAD PRESS. HEISE GAUGE PSIG # L 9395	INITIALS	COMMENTS
10-15-79	8:42	—————	890.0	138.5	GR	Reading Before Drawdown
	9:08	15 Sec	879	120	GR	Pump on Drawdown
	9:09	11	845	100	GR	Pump Shut Down Leak At Site 1
	9:34	—————	850	133	GR	Reading Before Drawdown
	9:35		845	90	GR	Pump ON Drawdown
		20 seconds	800 .33	70	GR	"
		11	780 .66	32	GR	"
	9:36	11	750 .10	29	GR	"
		15 seconds	748 1.25	29.5	GR	"
		11	742 1.5	30	GR	"
		11	740 1.75	30.5	GR	"
	9:37	11	738 2.0	30.8	GR	"
		11	736 2.25	31	GR	"
		11	734 2.5	31	GR	"
		11	732 2.75	31	GR	"
	9:38	11	730 3.0	31	GR	"
		11	728 3.25	31	GR	"
		11	726 3.5	31	GR	"
		11	724 3.75	31	GR	"
	9:39	11	720 4.0	31	GR	"
		11	718	31.1	GR	"

Site 1

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Step 5.12.7

Long Term Flow Test To 7 (2)

FET 7-79

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG #	WELLHEAD PRESS. HEISE GAUGE PSIG #	INITIALS	COMMENTS
10-15-79	09:39:30	15 Sec	# L 9090	# L 9395	GR	Draw down
		11	712	31	GR	"
	9:40	11 5	710	31	GR	"
	9:40:30	30 seconds	707	31	GR	"
	9:41	" 6	702	30.9	GR	"
	9:42	1 minute	697	30.8	GR	"
	9:43	11 8	690	30.6	GR	"
	9:44	11 9	684	30.5	GR	"
	9:45	11 10	680	30.5	GR	"
	9:46	11 11	676	30.5	GR	"
	9:47	11 12	672	30.5	GR	"
	9:48	11 13	668	30.5	GR	"
	9:49	11 14	664	30.4	GR	"
	9:50	11 15	660	30.4	GR	"
	9:51	11 16	656	30.4	GR	"
	9:52	11 17	654	30.4	GR	"
	9:53	11 18	650	30.4	GR	"
	9:54	11 19	648	30.3	GR	"
	9:55	11 20	646	30.2	GR	"
	9:56	11 21	644	30.1	GR	"

Site 1

BUBBLER DATA

TIME INTO TEST

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- 5 to 60 MIN.
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- 100 HR. TO 500 HR.

READINGS

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

Step 5.12.7

FET 7-79 Long Term Flow Test to 7

(3)

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG # L 9090	WELLHEAD PRESS. HEISE GAUGE PSIG # L 939.5	INITIALS	COMMENTS
10-15-79	9:57	1 Min <sup>22</sup>	642	30.1	GR	Draw down
	9:58	11 <sup>23</sup>	640	30.1	GR	"
	9:59	11 <sup>24</sup>	636	30.1	GR	"
	10:00	11 <sup>25</sup>	634	30.1	GR	"
	10:01	11 <sup>26</sup>	632	30	GR	"
	10:02	11 <sup>27</sup>	630	30	GR	"
	10:04	2 Min <sup>29</sup>	628	30.1	GR	"
	10:06	11 <sup>31</sup>	628	30	GR	"
	10:08	11 <sup>33</sup>	624	30	GR	"
	10:10	11 <sup>35</sup>	620	30	GR	"
	10:12	11 <sup>37</sup>	618	30	GR	"
	10:14	11 <sup>39</sup>	615	30	GR	"
	10:16	11 <sup>41</sup>	612	30	GR	"
	10:18	11 <sup>43</sup>	612	30	GR	"
	10:20	11 <sup>45</sup>	610	30	GR	"
	10:22	11 <sup>47</sup>	614	29.9	GR	Blow down with 15
	10:24	11 <sup>49</sup>	613.8	29.9	GR	"
	10:26	11 <sup>51</sup>	610	29.7	GR	"
	10:28	11 <sup>53</sup>	608	29.6	GR	"
	10:30	11 <sup>55</sup>	606	29.6	GR	"

BUBBLER DATA

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

Steps 5.12-7

FET 7-79

Long Term Flow Test To 7

(4)

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG # L9090	WELLHEAD PRESS. HEISE GAUGE PSIG # L9392	INITIALS	COMMENTS
10-15-79	10:32	2 min 57	610	30.6	GR	Blow Down with N <sub>2</sub>
	10:34	11 59	607	30.6	GR	"
	10:35	1 min 60	606	30.6	GR	"
	10:36	6 min	604	30.6	GR	Blow Down with N <sub>2</sub>
	10:46	11 71	594	30.5	GR	"
	10:56	11 81	588	29.4	GR	"
	11:06	11 91	578	29.4	GR	"
	11:16	11 101	560	29.5	GR	"
	11:26	11 111	560	29.3	GR	"
	11:36	11 121	554	29.5	GR	"
	11:46	11 131	546	29	GR	"
	11:56	11 141	540	29	GR	"
	12:06	11 151	536	28.8	GR	"
	12:16	11 161	530	28.8	GR	"
	12:26	11 171	526	28.7	GR	"
	12:36	11 181	524	28.7	GR	"
	12:46	11 191	522	28.6	GR	"
	12:56	11 201	522	28.5	GR	"
	13:06	11 211	521	28.5	GR	"
	13:16	11 221	522	28.5	GR	"

Site 1

BUBBLER DATA

TIME INTO TEST

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QUICKLY AS POSSIBLE  
EVERY MINUTE  
EVERY 10 MINUTES  
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step 5.12.7

FET 7-79 Long Term Flow Test To 7

5

Site 1

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG #	WELLHEAD PRESS. HEISE GAUGE PSIG #	INITIALS	COMMENTS
10-15-79	13:26	10 min 231	L 9090 522	L 9395 28.8	GR	draw down
	13:36	11 24	519	28.6	GR	"
	13:46	11 25	516	28.7	GR	"
	13:56	11 26	516	28.7	GR	"
	14:06	11 27	516	28.7	GR	"
	14:16	11 28	516	28.7	GR	"
	14:26	11 29	513	28.8	GR	"
	14:36	11 30	513	28.8	GR	"
	14:46	11 31	577*	28.5	GR	High Reading On Butt Unknown Reason
	14:56	11 32	577	28.5	GR	"
	15:06	11 33	576	28.5	GR	"
	15:16	11 34	576	28.5	GR	"
	15:26	11 35	576	28.5	GR	"
	15:30	4 minutes 355	575	28.5	GR	"
	16:30	1 hour 415	572	28.5	GR	Blew down
	17:00	" 415"	572	28.5	GR	Blew down
	17:30	" 535"	570	28.5	GR	Blew down
	18:30	1 hour 595	570	28.5	" "	" "
	19:30	" 655"	568	28.5	" "	" "
10/15/79	20:30	" 715"	567	28.5	KT	Blew down



DRAWDOWN AND RECOVERY

DATA SHEET 5A

FET-7-79

Page 22

STEP 5.12.7

10/15/79

RRGE #1

Long RANGE TEST  
From site #1 - site #2  
PAGE # 6

BUBBLER DATA

TIME INTO TEST

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DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG #	WELLHEAD PRESS. HEISE GAUGE PSIG #	INITIALS	COMMENTS
10/15/79	21:30	1 HOUR 775	# L 9090 559	# L 9395 28.5	KT	draw down
" "	22:30	" " 835	565	28.5	KT	"
" "	23:00	30 minutes 865	562	28.5	KT	CHANGED N <sub>2</sub> 2000 Blows down
" "	23:30	" " 895	556	28.5	KT	Blew down
10/16/79	00:30	1 hour 955	556	28.5	LL	"
	01:30	" " 1015	558	28.75	LL	purged
	02:30	" " 1075	556	28.50	LL	"
	03:30	" " 1135	555	28.50	LL	"
	04:30	" " 1195	554	28.50	LL	"
	05:30	" " 1255	553	28.50	LL	"
	06:30	" " 1315	551	28.50	DF	BLEW-IT
	07:30	" " 1375	544	28.40	LL	"
10/16/79	08:30	" " 1435	550	28.5	HN	PURGED
	09:30	" " 1495	547	28.5	HN	N <sub>2</sub> BOTTLES CHANGED
	10:30	" " 1555	547	28.4	HN	PURGED
	11:30	" " 1615	546	28.1	HN	PURGED
	12:30	" " 1675	545	28.1	HN	PURGE
	13:30	" " 1735	544	28.0	GR	Blow Down with N <sub>2</sub>
	14:30	" " 1795	544	28.0	GR	Blow Down with N <sub>2</sub>
	15:30	" " 1855	542	27.9	HN	PURGE

DRAWDOWN AND RECOVERY

DATA SHEET 5A

Page 7

BUBBLER DATA

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EVERY MINUTE  
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EVERY HOUR  
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Step 5.12.7  
Long Term Test

Site #1  
To Site #

Recovery

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG #	WELLHEAD PRESS. HEISE GAUGE PSIG #	INITIALS	COMMENTS
10-16	16:04	30 minutes	# L 9090	# L 9395 29.5	KT	Pump Off Recovery
"	16:12	8 minutes	714	32	KT	Recovery OBT 10 <sub>2</sub> - Replaced N <sub>2</sub> Blow Down N <sub>2</sub>
	16:13	1 minute	726	34	KT	Recovery
	16:14	"	735	38	KT	"
	16:15	"	743	41	KT	"
	16:16	"	750	43	KT	"
	16:17	"	776	46	KT	"
	16:18					
	16:20		745	30	KT	Pump ON Draw Down
		20 seconds	740	30.5	KT	"
		"	732	31	KT	"
	16:21	"	726	31.9	KT	"
		15 seconds	718	32	KT	"
		"	710	32	KT	"
		"	706	32.3	KT	"
	16:22	"	696	32.5	KT	"
		"	688	32.5	KT	"
		"	682	32.4	KT	"
		"	672	32.3	KT	"
	16:23	"	668	32	KT	"

DRAWDOWN AND RECOVERY

DATA SHEET 5A

Page 8

Step 5.12.7  
Long Term Test  
Site 1 to Site 7

BUBBLER DATA

TIME INTO TEST READINGS  
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 1 HR. TO 5 HR. EVERY 10 MINUTES  
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DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG # L9090	WELLHEAD PRESS. HEISE GAUGE PSIG # L9295	INITIALS	COMMENTS
10-16	16:23:15	15 sec	660	32.1	KT	draw down
		11	658	32.2	KT	"
		11	654	32.5	KT	"
	16:24	11	650	32.3	KT	"
		"	638	32.4	KT	"
		11	637	32.2	KT	"
		11	636	32.1	KT	"
	16:25	11	635	32	KT	"
	16:26	1 min	635	31	KT	"
	16:30	4 min.	594	31	KT	"
	17:30	1 hour	559	28.5	KT	"
	18:30	"	557	28.5	KT	"
	19:30	"	555	28.5	KT	"
	20:30	"	555	28.5	KT	"
	21:30	"	555	28.5	KT	"
	22:30	"	555	28.5	KT	"
	23:30	"	553	28.5	KT	"
10/17/79	00:30	"	552	28.25	LK	purged
	01:30	"	542	28.25	LK	"
	02:30	"	542	28.1	HH	



DRAWDOWN AND RECOVERY

DATA SHEET 5A

FET-7-79

Page 22

Page 9

Step 5.12.7  
Long Term Test  
Site 1 to Site 7

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DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG #	WELLHEAD PRESS. HEISE GAUGE PSIG ANNULUS #	INITIALS	COMMENTS
			# L9090	# L9395		DRAW DOWN
10/17/79	03:30	1 HOUR	523.5	28.00	JF	CK. comment sheet 10/17/79 (03:45)
	03:47	17 minutes	542.00	28.00	LL	CAN'T explain the INCREASE
	04:30	43 minutes	540.00	28.25	LL	draw down
	05:30	1 hour	538.00	28.30	LL	"
	06:30	"	536.00	28.30	LL	"
	07:30	"	535.00	28.25	LL	"
10-17-79	08:30	1 hour	536.00	28.5	GR	Blow Down with N <sub>2</sub>
	09:30	11	527	28.1	JH	PURGED
	10:30		538	28.1	JH	PURGED
	11:30		536	28.0	JH	PURGED
	12:30		532	28.4	JH	PURGED
	13:30		534	28.4	JH	PURGE
	14:30		535	28.4	GR	
	15:30		534	28.5	GR	
	16:30		534	28.4	ME	
	17:30		534	28.4	ME	Purged
	18:30		534	28.4	ME	
	19:30		533	28.4	ME	Purged
	20:30		533	28.4	ME	
	21:30		533	28.4	ME	Purged



DRAWDOWN AND RECOVERY  
DATA SHEET 5A

BUBBLER DATA

TIME INTO TEST 0 to 5 MIN. 5 to 60 MIN. 1 HR. TO 5 HR. 5 HR. to 100 HR. 100 HR. TO 500 HR.	READINGS QUICKLY AS POSSIBLE EVERY MINUTE EVERY 10 MINUTES EVERY HOUR EVERY 4 HOURS
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Page 11  
 Step 5.12.7  
 Long Term Test  
 Site 1 to Site 7

DATE	TIME	INTERVAL TIME	BUBBLER GAUGE PSIG # L9090	WELLHEAD PRESS. HEISE GAUGE PSIG # L9395	INITIALS	Draw Down COMMENTS	
10/16/79	00:30	1 hour	532	28.50	Lh	purged	
	01:30	"	532	28.50	LL		
	02:30	"	532	28.50	LL	purged	
	03:30	"	531	28.4	LL		
	04:30	"	531	28.4	LL	purged	
	05:30	"	531	28.5	LL		
	06:30	"	531	28.5	LL	purged	
	07:30	"	531	28.5	LL		
	08:30	"	531	28.5	STW	purged	
	09:30	"	531	28.5	STW		
	10:30	"	531	28.5	SJW	purged	
	11:30	"	531	28.5	SJW		
	12:30	"	531	28.5	SJW	purged	
	13:30	"	530	28.4	SJW		
	14:30	"	531	28.2	SJW	purged	
	15:30	"	531	28	KT		
10/18/79	16:30	"	531	28	KT	purged	
	17:30	"	530	28	RL	purged	
	17:57	End of injection Test - Start Recovery - Transformer Blow up.					