

PKRVO303850172

1P1

NA



POGO PRODUCING COMPANY

FEB - 7 2003

ARC

January 24, 2003

New Mexico Oil Conservation Division
Attn: Mr. David Catanach
2040 S. Pacheco
Santa Fe, NM 87505

RE: River Bend Federal #8 SWD
Administrative Order SWD-619
440' FNL & 330' FWL
Section 23, T24S, R29E
Eddy County, NM
Step-Rate Test

(30-015-28390)

Gentlemen:

Pogo Producing Company respectfully requests an increase in the maximum allowable surface injection pressure from the current 614 PSI to 800 PSI.

This is based on a step-rate test performed on January 21, 2003 by Arch Pressure Data. A copy of the test results is attached.

If you have any questions, please contact me at (915) 685-8100.

Thank you,

POGO PRODUCING COMPANY

Barrett L. Smith
Division Operations Engineer

Attachment



OPERATIONS LOG

COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED. # 8 SWD
FIELD (FORMATION): CEDAR CANYON ()
COUNTY: EDDY
STATE: NM

TEST TYPE: STEP-RATE

ENGINEER: BARRETT SMITH
FIELD REP: CLAY OSBORNE
JOB RUN BY: JOE PEREZ
DATA PREPARED BY: ROD DODSON
INSTRUMENT: V-92

DATE	TIME	DWG	OPERATIONS LOG - JOB NUMBER: 56694
1/15/03	07:50:00 AM		ON LOCATION
1/15/03	09:03:00 AM		START GAUGE #V-92
1/15/03	09:09:00 AM	599	IN LUBRICATOR W/ GAUGES
1/15/03	09:30:20 AM	599	ON BOTTOM W/ GAUGES
1/15/03	09:44:51 AM	599	START 1ST RATE @ 200 BPD
1/15/03	09:59:21 AM	611	START 2ND RATE @ 400 BPD
1/15/03	10:14:41 AM	618	START 3RD RATE @ 600 BPD
1/15/03	10:29:21 AM	627	START 4TH RATE @ 800 BPD
1/15/03	10:44:11 AM	628	START 5TH RATE @ 1000 BPD
1/15/03	11:00:01 AM	638	START 6TH RATE @ 1200 BPD
1/15/03	11:13:41 AM	651	START 7TH RATE @ 1400 BPD
1/15/03	11:28:11 AM	674	START 8TH RATE @ 1600 BPD
1/15/03	11:43:31 AM	697	START 9TH RATE @ 1800 BPD
1/15/03	11:58:11 AM	718	START 10TH RATE @ 2000 BPD
1/15/03	12:13:51 PM	736	START 11TH RATE @ 2200 BPD
1/15/03	12:28:11 PM	778	START 12TH RATE @ 2400 BPD
1/15/03	12:37:11 PM	786	END FINAL RATE

DATE	TIME	DWG	OPERATIONS LOG - JOB NUMBER: 56694
------	------	-----	------------------------------------

1/15/03 12:43:01 PM

OFF BOTTOM W/ GAUGES



COMPANY: POGO PRODUCING CO.
 LEASE: RIVER BEND FED. # 8 SWD
 FIELD (FORMATION): CEDAR CANYON ()
 COUNTY: EDDY
 STATE: NM

TEST DATES: 1/15/03 - 1/15/03
 RUN DEPTH: 3770
 INSTRUMENT: V-92

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	WELLHEAD PRESSURE, PSIG	INJECTION RATE, BPD	JOB NUMBER: 56694
1/15/03 09:43:20 AM	0.6722	2568.73	599.00	0.00	
1/15/03 09:59:20 AM	0.9389	2571.45	611.00	200.00	
1/15/03 10:14:40 AM	1.1944	2573.70	618.00	400.00	
1/15/03 10:29:20 AM	1.4389	2577.12	627.00	600.00	
1/15/03 10:44:10 AM	1.6861	2580.85	628.00	800.00	
1/15/03 11:00:00 AM	1.9500	2584.58	638.00	1000.00	
1/15/03 11:13:40 AM	2.1778	2588.73	651.00	1200.00	
1/15/03 11:28:10 AM	2.4194	2593.41	674.00	1400.00	
1/15/03 11:43:30 AM	2.6750	2598.92	697.00	1600.00	
1/15/03 11:58:10 AM	2.9194	2604.06	718.00	1800.00	
1/15/03 12:13:50 PM	3.1806	2608.35	736.00	2000.00	
1/15/03 12:28:10 PM	3.4194	2614.92	778.00	2200.00	
1/15/03 12:37:10 PM	3.5694	2618.43	786.00	2400.00	

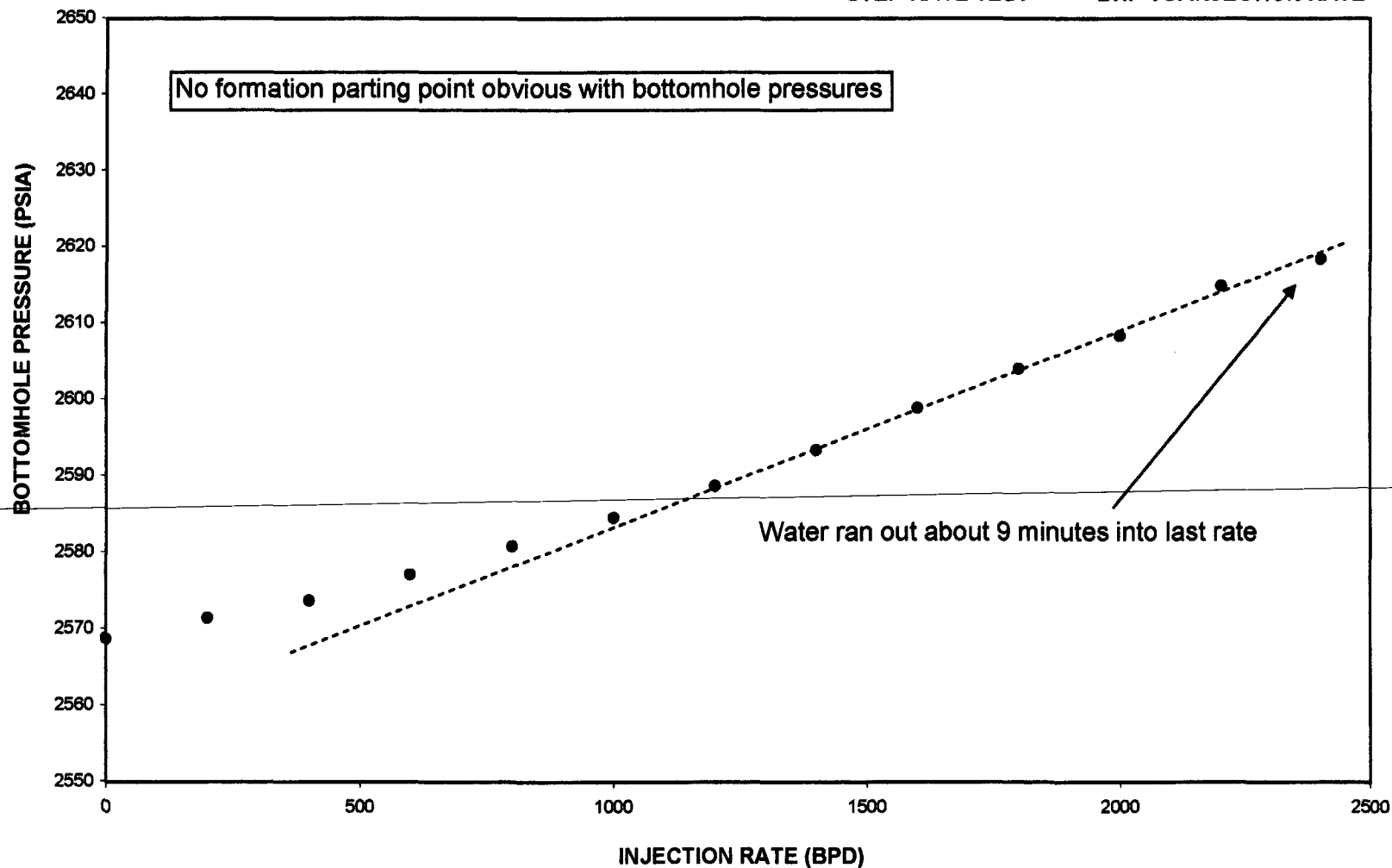


COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED.
WELL NUMBER: 8 SWD

FIELD: CEDAR CANYON
COUNTY: EDDY
STATE: NM

JOB # 56694
TEST DATE: 1/15/03 - 1/15/03

STEP-RATE TEST - BHP VS. INJECTION RATE

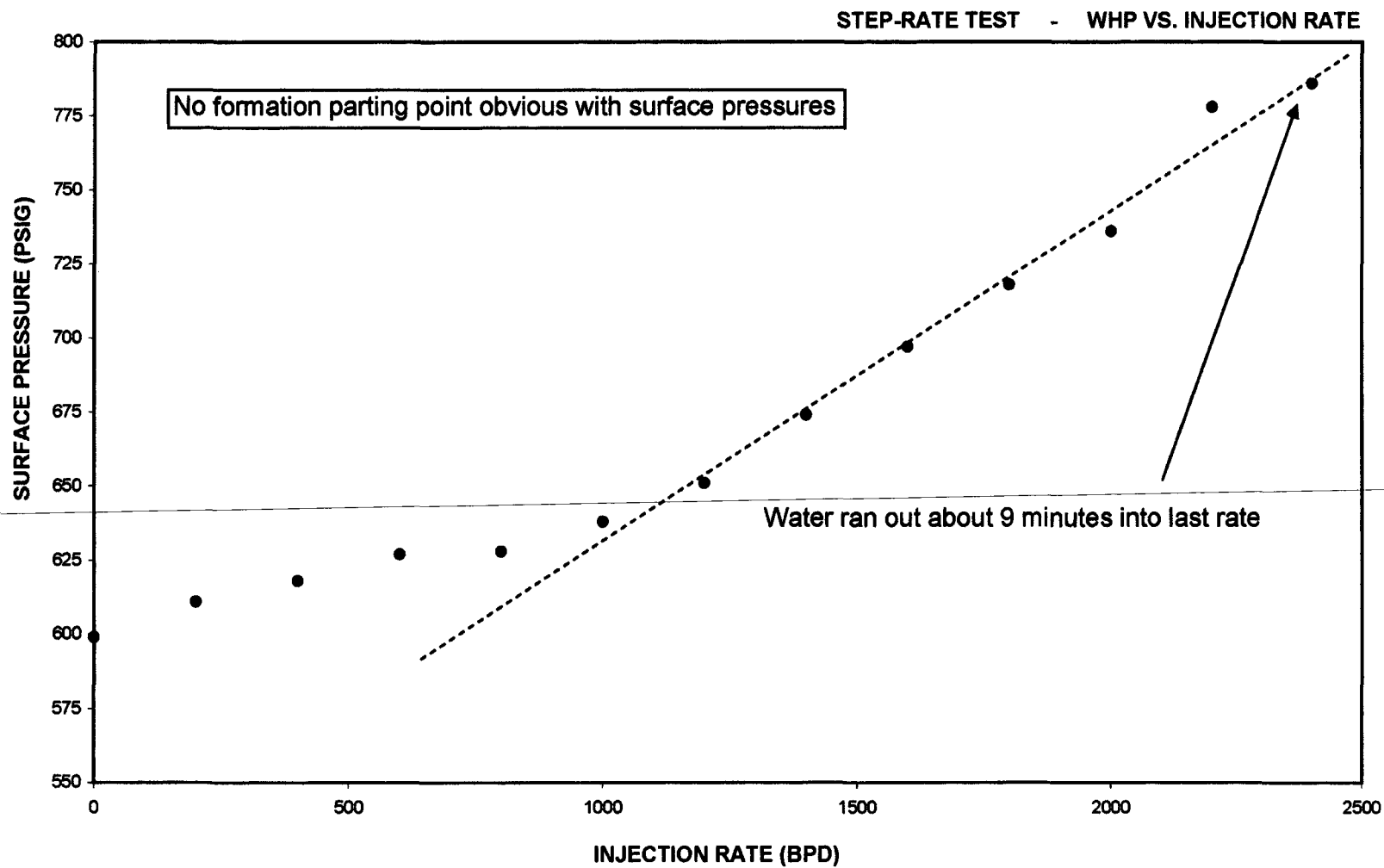




COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED.
WELL NUMBER: 8 SWD

FIELD: CEDAR CANYON
COUNTY: EDDY
STATE: NM

JOB # 56694
TEST DATE: 1/15/03 - 1/15/03



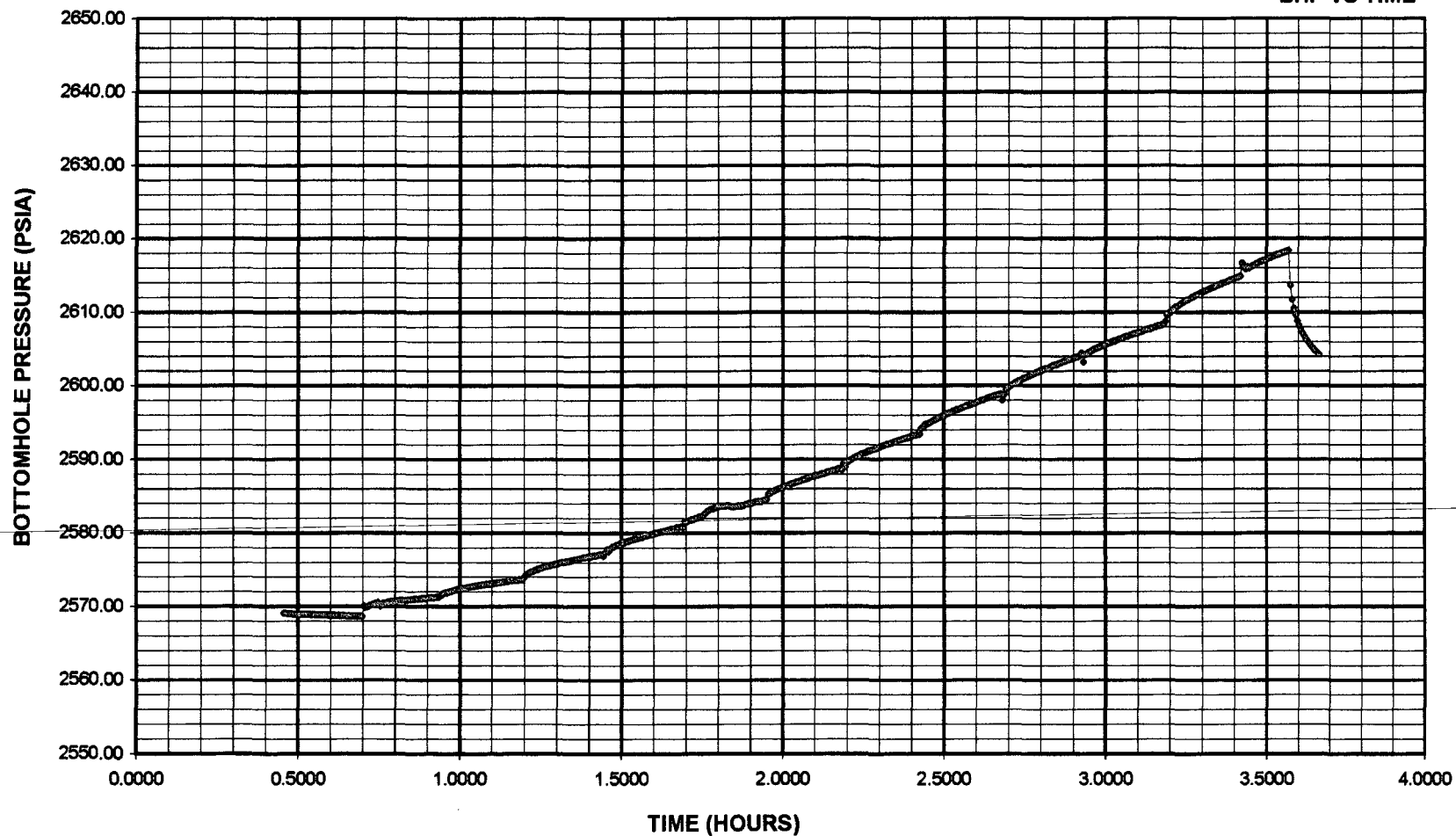


COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED.
WELL NUMBER: 8 SWD

FIELD: CEDAR CANYON
COUNTY: EDDY
STATE: NM

JOB # 56694
TEST DATE: 1/15/03 - 1/15/03

BHP VS TIME

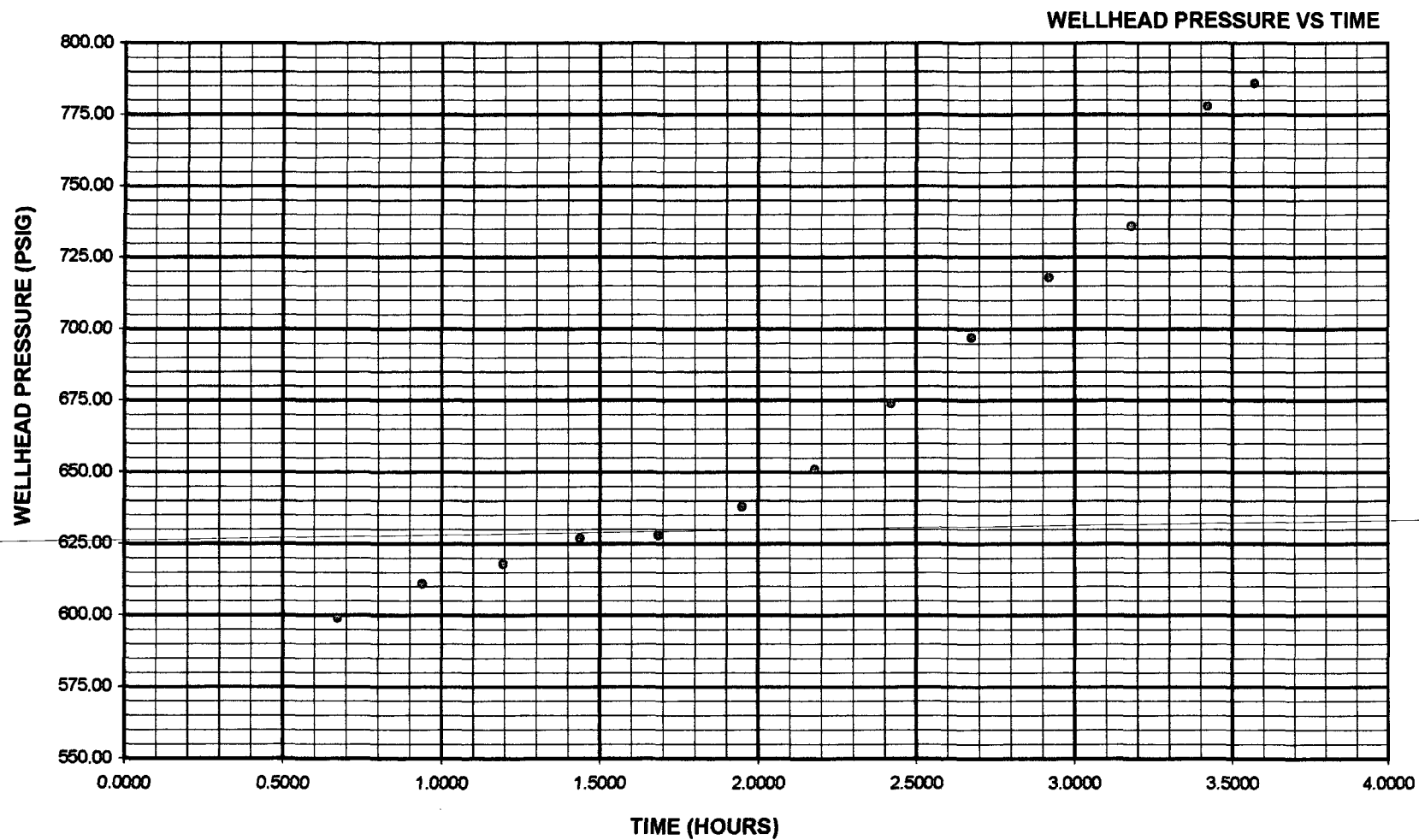




COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED.
WELL NUMBER: 8 SWD

FIELD: CEDAR CANYON
COUNTY: EDDY
STATE: NM

JOB # 56894
TEST DATE: 1/15/03 - 1/15/03

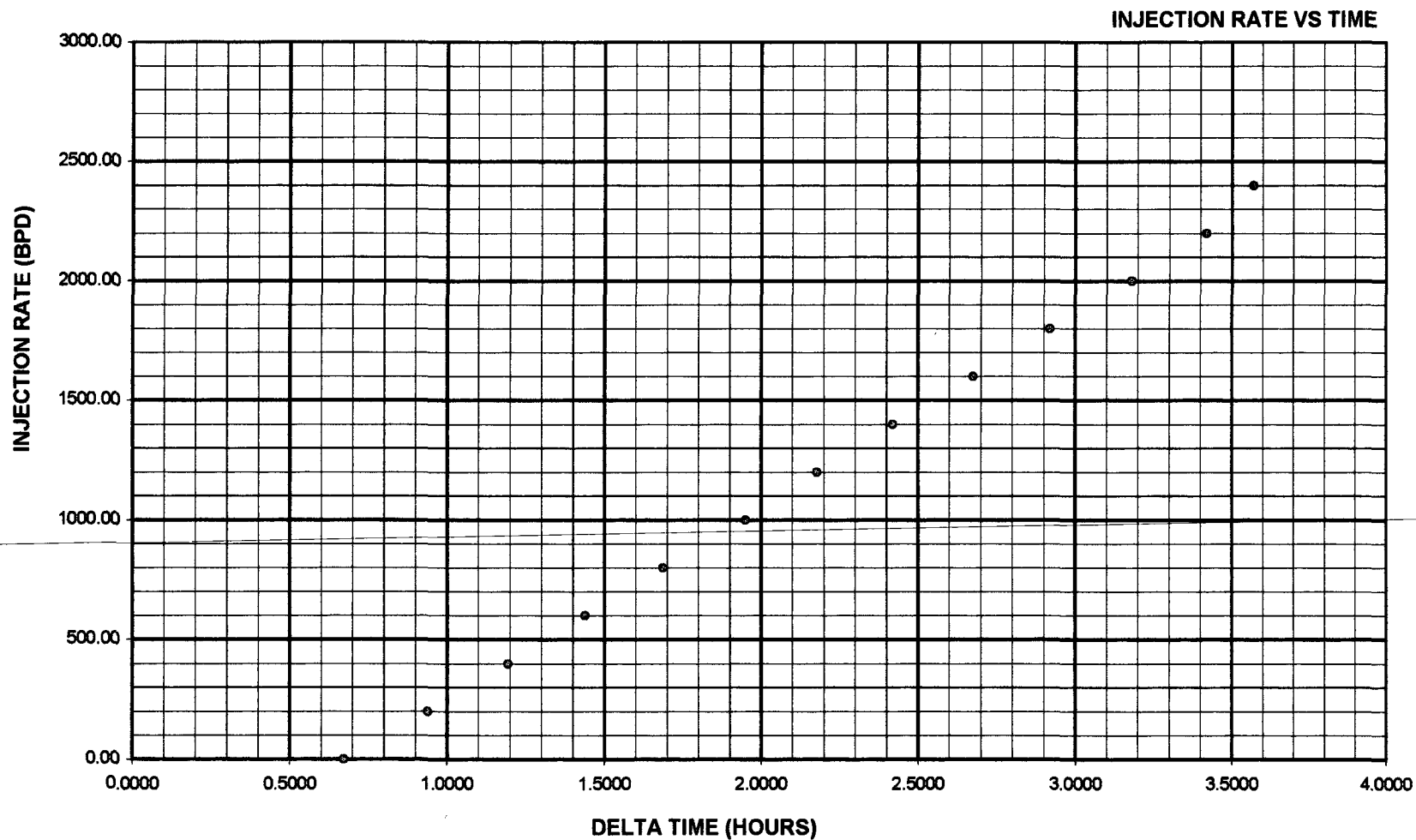




COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED.
WELL NUMBER: 8 SWD

FIELD: CEDAR CANYON
COUNTY: EDDY
STATE: NM

JOB # 56694
TEST DATE: 1/15/03 - 1/15/03





COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED. # 8 SWD
FIELD (FORMATION): CEDAR CANYON ()
COUNTY: EDDY
STATE: NM

TEST DATES: 1/15/03 - 1/15/03
RUN DEPTH: 3770
INSTRUMENT: V-92

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 07:50:00 AM			ON LOCATION
1/15/03 09:03:00 AM			START GAUGE #V-92
1/15/03 09:09:00 AM			IN LUBRICATOR W/ GAUGES
1/15/03 09:30:20 AM			ON BOTTOM W/ GAUGES
1/15/03 09:30:20 AM	0.4556	2569.12	
1/15/03 09:30:40 AM	0.4611	2569.09	
1/15/03 09:31:00 AM	0.4667	2569.08	
1/15/03 09:31:20 AM	0.4722	2569.05	
1/15/03 09:31:40 AM	0.4778	2569.03	
1/15/03 09:32:00 AM	0.4833	2569.01	
1/15/03 09:32:20 AM	0.4889	2569.01	
1/15/03 09:32:40 AM	0.4944	2568.99	
1/15/03 09:33:00 AM	0.5000	2568.99	
1/15/03 09:33:20 AM	0.5056	2568.98	
1/15/03 09:33:40 AM	0.5111	2568.98	
1/15/03 09:34:00 AM	0.5167	2568.95	
1/15/03 09:34:20 AM	0.5222	2568.96	
1/15/03 09:34:40 AM	0.5278	2568.95	
1/15/03 09:35:00 AM	0.5333	2568.95	
1/15/03 09:35:20 AM	0.5389	2568.93	
1/15/03 09:35:40 AM	0.5444	2568.91	
1/15/03 09:36:00 AM	0.5500	2568.91	
1/15/03 09:36:20 AM	0.5556	2568.91	
1/15/03 09:36:40 AM	0.5611	2568.89	
1/15/03 09:37:00 AM	0.5667	2568.90	
1/15/03 09:37:20 AM	0.5722	2568.88	
1/15/03 09:37:40 AM	0.5778	2568.90	
1/15/03 09:38:00 AM	0.5833	2568.88	
1/15/03 09:38:20 AM	0.5889	2568.87	
1/15/03 09:38:40 AM	0.5944	2568.86	
1/15/03 09:39:00 AM	0.6000	2568.83	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 09:39:20 AM	0.6056	2568.84	
1/15/03 09:39:40 AM	0.6111	2568.86	
1/15/03 09:40:00 AM	0.6167	2568.81	
1/15/03 09:40:20 AM	0.6222	2568.81	
1/15/03 09:40:40 AM	0.6278	2568.80	
1/15/03 09:41:00 AM	0.6333	2568.79	
1/15/03 09:41:20 AM	0.6389	2568.78	
1/15/03 09:41:40 AM	0.6444	2568.76	
1/15/03 09:42:00 AM	0.6500	2568.76	
1/15/03 09:42:20 AM	0.6556	2568.76	
1/15/03 09:42:40 AM	0.6611	2568.74	
1/15/03 09:43:00 AM	0.6667	2568.73	
1/15/03 09:43:20 AM	0.6722	2568.73	
1/15/03 09:43:40 AM	0.6778	2568.72	
1/15/03 09:44:00 AM	0.6833	2568.72	
1/15/03 09:44:20 AM	0.6889	2568.71	
1/15/03 09:44:40 AM	0.6944	2568.70	
1/15/03 09:44:50 AM	0.6972	2568.69	
1/15/03 09:44:51 AM			START 1ST RATE @ 200 BPD
1/15/03 09:45:10 AM	0.7028	2570.09	
1/15/03 09:45:30 AM	0.7083	2569.87	
1/15/03 09:45:50 AM	0.7139	2569.97	
1/15/03 09:46:10 AM	0.7194	2570.07	
1/15/03 09:46:30 AM	0.7250	2570.21	
1/15/03 09:46:50 AM	0.7306	2570.31	
1/15/03 09:47:10 AM	0.7361	2570.43	
1/15/03 09:47:30 AM	0.7417	2570.53	
1/15/03 09:47:50 AM	0.7472	2570.58	
1/15/03 09:48:10 AM	0.7528	2570.10	
1/15/03 09:48:30 AM	0.7583	2570.35	
1/15/03 09:48:50 AM	0.7639	2570.51	
1/15/03 09:49:10 AM	0.7694	2570.52	
1/15/03 09:49:30 AM	0.7750	2570.57	
1/15/03 09:49:50 AM	0.7806	2570.62	
1/15/03 09:50:10 AM	0.7861	2570.65	
1/15/03 09:50:30 AM	0.7917	2570.65	
1/15/03 09:50:50 AM	0.7972	2570.71	
1/15/03 09:51:10 AM	0.8028	2570.72	
1/15/03 09:51:30 AM	0.8083	2570.73	
1/15/03 09:51:50 AM	0.8139	2570.80	
1/15/03 09:52:10 AM	0.8194	2570.82	
1/15/03 09:52:30 AM	0.8250	2570.83	
1/15/03 09:52:50 AM	0.8306	2570.87	
1/15/03 09:53:10 AM	0.8361	2570.89	
1/15/03 09:53:30 AM	0.8417	2570.95	
1/15/03 09:53:50 AM	0.8472	2570.96	
1/15/03 09:54:10 AM	0.8528	2570.98	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 09:54:30 AM	0.8583	2571.02	
1/15/03 09:54:50 AM	0.8639	2571.02	
1/15/03 09:55:10 AM	0.8694	2571.06	
1/15/03 09:55:30 AM	0.8750	2571.06	
1/15/03 09:55:50 AM	0.8806	2571.10	
1/15/03 09:56:10 AM	0.8861	2571.12	
1/15/03 09:56:30 AM	0.8917	2571.16	
1/15/03 09:56:50 AM	0.8972	2571.13	
1/15/03 09:57:10 AM	0.9028	2571.21	
1/15/03 09:57:30 AM	0.9083	2571.23	
1/15/03 09:57:50 AM	0.9139	2571.25	
1/15/03 09:58:10 AM	0.9194	2571.23	
1/15/03 09:58:30 AM	0.9250	2571.29	
1/15/03 09:58:50 AM	0.9306	2571.32	
1/15/03 09:59:10 AM	0.9361	2571.41	
1/15/03 09:59:20 AM	0.9389	2571.45	
1/15/03 09:59:21 AM			START 2ND RATE @ 400 BPD
1/15/03 09:59:40 AM	0.9444	2571.59	
1/15/03 10:00:00 AM	0.9500	2571.81	
1/15/03 10:00:20 AM	0.9556	2571.91	
1/15/03 10:00:40 AM	0.9611	2571.95	
1/15/03 10:01:00 AM	0.9667	2572.03	
1/15/03 10:01:20 AM	0.9722	2572.10	
1/15/03 10:01:40 AM	0.9778	2572.17	
1/15/03 10:02:00 AM	0.9833	2572.22	
1/15/03 10:02:20 AM	0.9889	2572.29	
1/15/03 10:02:40 AM	0.9944	2572.35	
1/15/03 10:03:00 AM	1.0000	2572.39	
1/15/03 10:03:20 AM	1.0056	2572.43	
1/15/03 10:03:40 AM	1.0111	2572.48	
1/15/03 10:04:00 AM	1.0167	2572.54	
1/15/03 10:04:20 AM	1.0222	2572.59	
1/15/03 10:04:40 AM	1.0278	2572.64	
1/15/03 10:05:00 AM	1.0333	2572.68	
1/15/03 10:05:20 AM	1.0389	2572.74	
1/15/03 10:05:40 AM	1.0444	2572.76	
1/15/03 10:06:00 AM	1.0500	2572.80	
1/15/03 10:06:20 AM	1.0556	2572.85	
1/15/03 10:06:40 AM	1.0611	2572.88	
1/15/03 10:07:00 AM	1.0667	2572.92	
1/15/03 10:07:20 AM	1.0722	2572.97	
1/15/03 10:07:40 AM	1.0778	2573.01	
1/15/03 10:08:00 AM	1.0833	2573.04	
1/15/03 10:08:20 AM	1.0889	2573.09	
1/15/03 10:08:40 AM	1.0944	2573.11	
1/15/03 10:09:00 AM	1.1000	2573.15	
1/15/03 10:09:20 AM	1.1056	2573.20	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 10:09:40 AM	1.1111	2573.23	
1/15/03 10:10:00 AM	1.1167	2573.27	
1/15/03 10:10:20 AM	1.1222	2573.28	
1/15/03 10:10:40 AM	1.1278	2573.34	
1/15/03 10:11:00 AM	1.1333	2573.35	
1/15/03 10:11:20 AM	1.1389	2573.40	
1/15/03 10:11:40 AM	1.1444	2573.44	
1/15/03 10:12:00 AM	1.1500	2573.46	
1/15/03 10:12:20 AM	1.1556	2573.50	
1/15/03 10:12:40 AM	1.1611	2573.53	
1/15/03 10:13:00 AM	1.1667	2573.56	
1/15/03 10:13:20 AM	1.1722	2573.59	
1/15/03 10:13:40 AM	1.1778	2573.61	
1/15/03 10:14:00 AM	1.1833	2573.65	
1/15/03 10:14:20 AM	1.1889	2573.68	
1/15/03 10:14:40 AM	1.1944	2573.70	
1/15/03 10:14:41 AM			START 3RD RATE @ 600 BPD
1/15/03 10:15:00 AM	1.2000	2573.97	
1/15/03 10:15:20 AM	1.2056	2574.28	
1/15/03 10:15:40 AM	1.2111	2574.48	
1/15/03 10:16:00 AM	1.2167	2574.63	
1/15/03 10:16:20 AM	1.2222	2574.75	
1/15/03 10:16:40 AM	1.2278	2574.86	
1/15/03 10:17:00 AM	1.2333	2574.95	
1/15/03 10:17:20 AM	1.2389	2575.04	
1/15/03 10:17:40 AM	1.2444	2575.11	
1/15/03 10:18:00 AM	1.2500	2575.21	
1/15/03 10:18:20 AM	1.2556	2575.27	
1/15/03 10:18:40 AM	1.2611	2575.37	
1/15/03 10:19:00 AM	1.2667	2575.44	
1/15/03 10:19:20 AM	1.2722	2575.50	
1/15/03 10:19:40 AM	1.2778	2575.58	
1/15/03 10:20:00 AM	1.2833	2575.63	
1/15/03 10:20:20 AM	1.2889	2575.69	
1/15/03 10:20:40 AM	1.2944	2575.77	
1/15/03 10:21:00 AM	1.3000	2575.81	
1/15/03 10:21:20 AM	1.3056	2575.88	
1/15/03 10:21:40 AM	1.3111	2575.95	
1/15/03 10:22:00 AM	1.3167	2576.00	
1/15/03 10:22:20 AM	1.3222	2576.05	
1/15/03 10:22:40 AM	1.3278	2576.13	
1/15/03 10:23:00 AM	1.3333	2576.17	
1/15/03 10:23:20 AM	1.3389	2576.21	
1/15/03 10:23:40 AM	1.3444	2576.27	
1/15/03 10:24:00 AM	1.3500	2576.32	
1/15/03 10:24:20 AM	1.3556	2576.37	
1/15/03 10:24:40 AM	1.3611	2576.43	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 10:25:00 AM	1.3667	2576.49	
1/15/03 10:25:20 AM	1.3722	2576.56	
1/15/03 10:25:40 AM	1.3778	2576.62	
1/15/03 10:26:00 AM	1.3833	2576.66	
1/15/03 10:26:20 AM	1.3889	2576.71	
1/15/03 10:26:40 AM	1.3944	2576.77	
1/15/03 10:27:00 AM	1.4000	2576.79	
1/15/03 10:27:20 AM	1.4056	2576.84	
1/15/03 10:27:40 AM	1.4111	2576.88	
1/15/03 10:28:00 AM	1.4167	2576.93	
1/15/03 10:28:20 AM	1.4222	2576.98	
1/15/03 10:28:40 AM	1.4278	2577.03	
1/15/03 10:29:00 AM	1.4333	2577.06	
1/15/03 10:29:20 AM	1.4389	2577.12	
1/15/03 10:29:21 AM			START 4TH RATE @ 800 BPD
1/15/03 10:29:40 AM	1.4444	2576.91	
1/15/03 10:30:00 AM	1.4500	2577.37	
1/15/03 10:30:20 AM	1.4556	2577.77	
1/15/03 10:30:40 AM	1.4611	2577.50	
1/15/03 10:31:00 AM	1.4667	2577.96	
1/15/03 10:31:20 AM	1.4722	2578.11	
1/15/03 10:31:40 AM	1.4778	2578.21	
1/15/03 10:32:00 AM	1.4833	2578.33	
1/15/03 10:32:20 AM	1.4889	2578.43	
1/15/03 10:32:40 AM	1.4944	2578.52	
1/15/03 10:33:00 AM	1.5000	2578.61	
1/15/03 10:33:20 AM	1.5056	2578.67	
1/15/03 10:33:40 AM	1.5111	2578.77	
1/15/03 10:34:00 AM	1.5167	2578.84	
1/15/03 10:34:20 AM	1.5222	2578.93	
1/15/03 10:34:40 AM	1.5278	2579.01	
1/15/03 10:35:00 AM	1.5333	2579.07	
1/15/03 10:35:20 AM	1.5389	2579.14	
1/15/03 10:35:40 AM	1.5444	2579.21	
1/15/03 10:36:00 AM	1.5500	2579.29	
1/15/03 10:36:20 AM	1.5556	2579.36	
1/15/03 10:36:40 AM	1.5611	2579.43	
1/15/03 10:37:00 AM	1.5667	2579.51	
1/15/03 10:37:20 AM	1.5722	2579.58	
1/15/03 10:37:40 AM	1.5778	2579.63	
1/15/03 10:38:00 AM	1.5833	2579.70	
1/15/03 10:38:20 AM	1.5889	2579.77	
1/15/03 10:38:40 AM	1.5944	2579.84	
1/15/03 10:39:00 AM	1.6000	2579.90	
1/15/03 10:39:20 AM	1.6056	2579.97	
1/15/03 10:39:40 AM	1.6111	2580.03	
1/15/03 10:40:00 AM	1.6167	2580.09	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 10:40:20 AM	1.6222	2580.16
1/15/03 10:40:40 AM	1.6278	2580.22
1/15/03 10:41:00 AM	1.6333	2580.28
1/15/03 10:41:20 AM	1.6389	2580.35
1/15/03 10:41:40 AM	1.6444	2580.40
1/15/03 10:42:00 AM	1.6500	2580.47
1/15/03 10:42:20 AM	1.6556	2580.52
1/15/03 10:42:40 AM	1.6611	2580.58
1/15/03 10:43:00 AM	1.6667	2580.65
1/15/03 10:43:20 AM	1.6722	2580.70
1/15/03 10:43:40 AM	1.6778	2580.76
1/15/03 10:44:00 AM	1.6833	2580.82
1/15/03 10:44:10 AM	1.6861	2580.85
1/15/03 10:44:11 AM		
1/15/03 10:44:30 AM	1.6917	2580.67
1/15/03 10:44:50 AM	1.6972	2581.59
1/15/03 10:45:10 AM	1.7028	2581.56
1/15/03 10:45:30 AM	1.7083	2581.67
1/15/03 10:45:50 AM	1.7139	2581.76
1/15/03 10:46:10 AM	1.7194	2581.82
1/15/03 10:46:30 AM	1.7250	2581.89
1/15/03 10:46:50 AM	1.7306	2581.98
1/15/03 10:47:10 AM	1.7361	2582.10
1/15/03 10:47:30 AM	1.7417	2582.19
1/15/03 10:47:50 AM	1.7472	2582.28
1/15/03 10:48:10 AM	1.7528	2582.31
1/15/03 10:48:30 AM	1.7583	2582.60
1/15/03 10:48:50 AM	1.7639	2582.90
1/15/03 10:49:10 AM	1.7694	2583.07
1/15/03 10:49:30 AM	1.7750	2583.22
1/15/03 10:49:50 AM	1.7806	2583.29
1/15/03 10:50:10 AM	1.7861	2583.33
1/15/03 10:50:30 AM	1.7917	2583.40
1/15/03 10:50:50 AM	1.7972	2583.52
1/15/03 10:51:10 AM	1.8028	2583.63
1/15/03 10:51:30 AM	1.8083	2583.66
1/15/03 10:51:50 AM	1.8139	2583.66
1/15/03 10:52:10 AM	1.8194	2583.68
1/15/03 10:52:30 AM	1.8250	2583.71
1/15/03 10:52:50 AM	1.8306	2583.73
1/15/03 10:53:10 AM	1.8361	2583.67
1/15/03 10:53:30 AM	1.8417	2583.58
1/15/03 10:53:50 AM	1.8472	2583.54
1/15/03 10:54:10 AM	1.8528	2583.57
1/15/03 10:54:30 AM	1.8583	2583.67
1/15/03 10:54:50 AM	1.8639	2583.71
1/15/03 10:55:10 AM	1.8694	2583.69

START 5TH RATE @ 1000 BPD

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 10:55:30 AM	1.8750	2583.71
1/15/03 10:55:50 AM	1.8806	2583.78
1/15/03 10:56:10 AM	1.8861	2583.90
1/15/03 10:56:30 AM	1.8917	2583.97
1/15/03 10:56:50 AM	1.8972	2583.97
1/15/03 10:57:10 AM	1.9028	2583.98
1/15/03 10:57:30 AM	1.9083	2584.06
1/15/03 10:57:50 AM	1.9139	2584.19
1/15/03 10:58:10 AM	1.9194	2584.26
1/15/03 10:58:30 AM	1.9250	2584.27
1/15/03 10:58:50 AM	1.9306	2584.28
1/15/03 10:59:10 AM	1.9361	2584.33
1/15/03 10:59:30 AM	1.9417	2584.45
1/15/03 10:59:50 AM	1.9472	2584.54
1/15/03 11:00:00 AM	1.9500	2584.58
1/15/03 11:00:01 AM		
1/15/03 11:00:20 AM	1.9556	2585.30
1/15/03 11:00:40 AM	1.9611	2585.36
1/15/03 11:01:00 AM	1.9667	2585.52
1/15/03 11:01:20 AM	1.9722	2585.67
1/15/03 11:01:40 AM	1.9778	2585.79
1/15/03 11:02:00 AM	1.9833	2585.90
1/15/03 11:02:20 AM	1.9889	2586.00
1/15/03 11:02:40 AM	1.9944	2586.09
1/15/03 11:03:00 AM	2.0000	2586.19
1/15/03 11:03:20 AM	2.0056	2586.30
1/15/03 11:03:40 AM	2.0111	2586.40
1/15/03 11:04:00 AM	2.0167	2586.48
1/15/03 11:04:20 AM	2.0222	2586.58
1/15/03 11:04:40 AM	2.0278	2586.66
1/15/03 11:05:00 AM	2.0333	2586.75
1/15/03 11:05:20 AM	2.0389	2586.84
1/15/03 11:05:40 AM	2.0444	2586.92
1/15/03 11:06:00 AM	2.0500	2587.01
1/15/03 11:06:20 AM	2.0556	2587.09
1/15/03 11:06:40 AM	2.0611	2587.18
1/15/03 11:07:00 AM	2.0667	2587.25
1/15/03 11:07:20 AM	2.0722	2587.34
1/15/03 11:07:40 AM	2.0778	2587.43
1/15/03 11:08:00 AM	2.0833	2587.49
1/15/03 11:08:20 AM	2.0889	2587.59
1/15/03 11:08:40 AM	2.0944	2587.65
1/15/03 11:09:00 AM	2.1000	2587.70
1/15/03 11:09:20 AM	2.1056	2587.79
1/15/03 11:09:40 AM	2.1111	2587.86
1/15/03 11:10:00 AM	2.1167	2587.95
1/15/03 11:10:20 AM	2.1222	2588.03

START 6TH RATE @ 1200 BPD

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 11:10:40 AM	2.1278	2588.08
1/15/03 11:11:00 AM	2.1333	2588.17
1/15/03 11:11:20 AM	2.1389	2588.23
1/15/03 11:11:40 AM	2.1444	2588.31
1/15/03 11:12:00 AM	2.1500	2588.39
1/15/03 11:12:20 AM	2.1556	2588.43
1/15/03 11:12:40 AM	2.1611	2588.51
1/15/03 11:13:00 AM	2.1667	2588.58
1/15/03 11:13:20 AM	2.1722	2588.65
1/15/03 11:13:40 AM	2.1778	2588.73
1/15/03 11:13:41 AM		
1/15/03 11:14:00 AM	2.1833	2588.56
1/15/03 11:14:20 AM	2.1889	2589.40
1/15/03 11:14:40 AM	2.1944	2588.99
1/15/03 11:15:00 AM	2.2000	2589.55
1/15/03 11:15:20 AM	2.2056	2589.73
1/15/03 11:15:40 AM	2.2111	2589.94
1/15/03 11:16:00 AM	2.2167	2590.06
1/15/03 11:16:20 AM	2.2222	2590.21
1/15/03 11:16:40 AM	2.2278	2590.33
1/15/03 11:17:00 AM	2.2333	2590.44
1/15/03 11:17:20 AM	2.2389	2590.57
1/15/03 11:17:40 AM	2.2444	2590.67
1/15/03 11:18:00 AM	2.2500	2590.79
1/15/03 11:18:20 AM	2.2556	2590.88
1/15/03 11:18:40 AM	2.2611	2590.99
1/15/03 11:19:00 AM	2.2667	2591.07
1/15/03 11:19:20 AM	2.2722	2591.21
1/15/03 11:19:40 AM	2.2778	2591.29
1/15/03 11:20:00 AM	2.2833	2591.39
1/15/03 11:20:20 AM	2.2889	2591.48
1/15/03 11:20:40 AM	2.2944	2591.55
1/15/03 11:21:00 AM	2.3000	2591.66
1/15/03 11:21:20 AM	2.3056	2591.75
1/15/03 11:21:40 AM	2.3111	2591.86
1/15/03 11:22:00 AM	2.3167	2591.91
1/15/03 11:22:20 AM	2.3222	2592.08
1/15/03 11:22:40 AM	2.3278	2592.11
1/15/03 11:23:00 AM	2.3333	2592.18
1/15/03 11:23:20 AM	2.3389	2592.27
1/15/03 11:23:40 AM	2.3444	2592.34
1/15/03 11:24:00 AM	2.3500	2592.45
1/15/03 11:24:20 AM	2.3556	2592.47
1/15/03 11:24:40 AM	2.3611	2592.65
1/15/03 11:25:00 AM	2.3667	2592.67
1/15/03 11:25:20 AM	2.3722	2592.76
1/15/03 11:25:40 AM	2.3778	2592.82

START 7TH RATE @ 1400 BPD

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 11:26:00 AM	2.3833	2592.89
1/15/03 11:26:20 AM	2.3889	2592.97
1/15/03 11:26:40 AM	2.3944	2593.03
1/15/03 11:27:00 AM	2.4000	2593.15
1/15/03 11:27:20 AM	2.4056	2593.24
1/15/03 11:27:40 AM	2.4111	2593.28
1/15/03 11:28:00 AM	2.4167	2593.36
1/15/03 11:28:10 AM	2.4194	2593.41
1/15/03 11:28:11 AM		START 8TH RATE @ 1600 BPD
1/15/03 11:28:30 AM	2.4250	2593.42
1/15/03 11:28:50 AM	2.4306	2594.22
1/15/03 11:29:10 AM	2.4361	2594.34
1/15/03 11:29:30 AM	2.4417	2594.76
1/15/03 11:29:50 AM	2.4472	2594.81
1/15/03 11:30:10 AM	2.4528	2594.92
1/15/03 11:30:30 AM	2.4583	2595.05
1/15/03 11:30:50 AM	2.4639	2595.19
1/15/03 11:31:10 AM	2.4694	2595.34
1/15/03 11:31:30 AM	2.4750	2595.46
1/15/03 11:31:50 AM	2.4806	2595.56
1/15/03 11:32:10 AM	2.4861	2595.69
1/15/03 11:32:30 AM	2.4917	2595.83
1/15/03 11:32:50 AM	2.4972	2595.93
1/15/03 11:33:10 AM	2.5028	2596.04
1/15/03 11:33:30 AM	2.5083	2596.17
1/15/03 11:33:50 AM	2.5139	2596.28
1/15/03 11:34:10 AM	2.5194	2596.36
1/15/03 11:34:30 AM	2.5250	2596.47
1/15/03 11:34:50 AM	2.5306	2596.59
1/15/03 11:35:10 AM	2.5361	2596.69
1/15/03 11:35:30 AM	2.5417	2596.75
1/15/03 11:35:50 AM	2.5472	2596.84
1/15/03 11:36:10 AM	2.5528	2596.95
1/15/03 11:36:30 AM	2.5583	2597.05
1/15/03 11:36:50 AM	2.5639	2597.15
1/15/03 11:37:10 AM	2.5694	2597.26
1/15/03 11:37:30 AM	2.5750	2597.35
1/15/03 11:37:50 AM	2.5806	2597.41
1/15/03 11:38:10 AM	2.5861	2597.50
1/15/03 11:38:30 AM	2.5917	2597.61
1/15/03 11:38:50 AM	2.5972	2597.71
1/15/03 11:39:10 AM	2.6028	2597.79
1/15/03 11:39:30 AM	2.6083	2597.89
1/15/03 11:39:50 AM	2.6139	2597.98
1/15/03 11:40:10 AM	2.6194	2598.07
1/15/03 11:40:30 AM	2.6250	2598.14
1/15/03 11:40:50 AM	2.6306	2598.26

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 11:41:10 AM	2.6361	2598.34	
1/15/03 11:41:30 AM	2.6417	2598.38	
1/15/03 11:41:50 AM	2.6472	2598.49	
1/15/03 11:42:10 AM	2.6528	2598.57	
1/15/03 11:42:30 AM	2.6583	2598.65	
1/15/03 11:42:50 AM	2.6639	2598.72	
1/15/03 11:43:10 AM	2.6694	2598.83	
1/15/03 11:43:30 AM	2.6750	2598.92	
1/15/03 11:43:31 AM			START 9TH RATE @ 1800 BPD
1/15/03 11:43:50 AM	2.6806	2598.02	
1/15/03 11:44:10 AM	2.6861	2598.79	
1/15/03 11:44:30 AM	2.6917	2599.52	
1/15/03 11:44:50 AM	2.6972	2599.69	
1/15/03 11:45:10 AM	2.7028	2599.93	
1/15/03 11:45:30 AM	2.7083	2600.07	
1/15/03 11:45:50 AM	2.7139	2600.25	
1/15/03 11:46:10 AM	2.7194	2600.40	
1/15/03 11:46:30 AM	2.7250	2600.52	
1/15/03 11:46:50 AM	2.7306	2600.69	
1/15/03 11:47:10 AM	2.7361	2600.78	
1/15/03 11:47:30 AM	2.7417	2600.94	
1/15/03 11:47:50 AM	2.7472	2601.04	
1/15/03 11:48:10 AM	2.7528	2601.15	
1/15/03 11:48:30 AM	2.7583	2601.31	
1/15/03 11:48:50 AM	2.7639	2601.38	
1/15/03 11:49:10 AM	2.7694	2601.53	
1/15/03 11:49:30 AM	2.7750	2601.60	
1/15/03 11:49:50 AM	2.7806	2601.75	
1/15/03 11:50:10 AM	2.7861	2601.83	
1/15/03 11:50:30 AM	2.7917	2601.92	
1/15/03 11:50:50 AM	2.7972	2602.06	
1/15/03 11:51:10 AM	2.8028	2602.12	
1/15/03 11:51:30 AM	2.8083	2602.25	
1/15/03 11:51:50 AM	2.8139	2602.34	
1/15/03 11:52:10 AM	2.8194	2602.42	
1/15/03 11:52:30 AM	2.8250	2602.57	
1/15/03 11:52:50 AM	2.8306	2602.62	
1/15/03 11:53:10 AM	2.8361	2602.75	
1/15/03 11:53:30 AM	2.8417	2602.83	
1/15/03 11:53:50 AM	2.8472	2602.92	
1/15/03 11:54:10 AM	2.8528	2603.01	
1/15/03 11:54:30 AM	2.8583	2603.08	
1/15/03 11:54:50 AM	2.8639	2603.20	
1/15/03 11:55:10 AM	2.8694	2603.26	
1/15/03 11:55:30 AM	2.8750	2603.38	
1/15/03 11:55:50 AM	2.8806	2603.48	
1/15/03 11:56:10 AM	2.8861	2603.54	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 11:56:30 AM	2.8917	2603.65	
1/15/03 11:56:50 AM	2.8972	2603.71	
1/15/03 11:57:10 AM	2.9028	2603.80	
1/15/03 11:57:30 AM	2.9083	2603.89	
1/15/03 11:57:50 AM	2.9139	2603.94	
1/15/03 11:58:10 AM	2.9194	2604.06	
1/15/03 11:58:11 AM			START 10TH RATE @ 2000 BPD
1/15/03 11:58:30 AM	2.9250	2604.49	
1/15/03 11:58:50 AM	2.9306	2603.25	
1/15/03 11:59:10 AM	2.9361	2604.24	
1/15/03 11:59:30 AM	2.9417	2604.35	
1/15/03 11:59:50 AM	2.9472	2604.56	
1/15/03 12:00:10 PM	2.9528	2604.67	
1/15/03 12:00:30 PM	2.9583	2604.84	
1/15/03 12:00:50 PM	2.9639	2604.94	
1/15/03 12:01:10 PM	2.9694	2605.07	
1/15/03 12:01:30 PM	2.9750	2605.18	
1/15/03 12:01:50 PM	2.9806	2605.27	
1/15/03 12:02:10 PM	2.9861	2605.40	
1/15/03 12:02:30 PM	2.9917	2605.47	
1/15/03 12:02:50 PM	2.9972	2605.61	
1/15/03 12:03:10 PM	3.0028	2605.67	
1/15/03 12:03:30 PM	3.0083	2605.80	
1/15/03 12:03:50 PM	3.0139	2605.88	
1/15/03 12:04:10 PM	3.0194	2605.95	
1/15/03 12:04:30 PM	3.0250	2606.08	
1/15/03 12:04:50 PM	3.0306	2606.12	
1/15/03 12:05:10 PM	3.0361	2606.26	
1/15/03 12:05:30 PM	3.0417	2606.31	
1/15/03 12:05:50 PM	3.0472	2606.41	
1/15/03 12:06:10 PM	3.0528	2606.50	
1/15/03 12:06:30 PM	3.0583	2606.59	
1/15/03 12:06:50 PM	3.0639	2606.70	
1/15/03 12:07:10 PM	3.0694	2606.74	
1/15/03 12:07:30 PM	3.0750	2606.86	
1/15/03 12:07:50 PM	3.0806	2606.92	
1/15/03 12:08:10 PM	3.0861	2607.01	
1/15/03 12:08:30 PM	3.0917	2607.09	
1/15/03 12:08:50 PM	3.0972	2607.17	
1/15/03 12:09:10 PM	3.1028	2607.29	
1/15/03 12:09:30 PM	3.1083	2607.32	
1/15/03 12:09:50 PM	3.1139	2607.44	
1/15/03 12:10:10 PM	3.1194	2607.49	
1/15/03 12:10:30 PM	3.1250	2607.59	
1/15/03 12:10:50 PM	3.1306	2607.67	
1/15/03 12:11:10 PM	3.1361	2607.73	
1/15/03 12:11:30 PM	3.1417	2607.83	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 12:11:50 PM	3.1472	2607.87	
1/15/03 12:12:10 PM	3.1528	2607.99	
1/15/03 12:12:30 PM	3.1583	2608.04	
1/15/03 12:12:50 PM	3.1639	2608.14	
1/15/03 12:13:10 PM	3.1694	2608.20	
1/15/03 12:13:30 PM	3.1750	2608.26	
1/15/03 12:13:50 PM	3.1806	2608.35	
1/15/03 12:13:51 PM			START 11TH RATE @ 2200 BPD
1/15/03 12:14:10 PM	3.1861	2608.77	
1/15/03 12:14:30 PM	3.1917	2609.61	
1/15/03 12:14:50 PM	3.1972	2609.87	
1/15/03 12:15:10 PM	3.2028	2609.96	
1/15/03 12:15:30 PM	3.2083	2610.31	
1/15/03 12:15:50 PM	3.2139	2610.52	
1/15/03 12:16:10 PM	3.2194	2610.72	
1/15/03 12:16:30 PM	3.2250	2610.88	
1/15/03 12:16:50 PM	3.2306	2611.05	
1/15/03 12:17:10 PM	3.2361	2611.20	
1/15/03 12:17:30 PM	3.2417	2611.35	
1/15/03 12:17:50 PM	3.2472	2611.51	
1/15/03 12:18:10 PM	3.2528	2611.65	
1/15/03 12:18:30 PM	3.2583	2611.77	
1/15/03 12:18:50 PM	3.2639	2611.92	
1/15/03 12:19:10 PM	3.2694	2612.04	
1/15/03 12:19:30 PM	3.2750	2612.17	
1/15/03 12:19:50 PM	3.2806	2612.28	
1/15/03 12:20:10 PM	3.2861	2612.41	
1/15/03 12:20:30 PM	3.2917	2612.52	
1/15/03 12:20:50 PM	3.2972	2612.65	
1/15/03 12:21:10 PM	3.3028	2612.76	
1/15/03 12:21:30 PM	3.3083	2612.88	
1/15/03 12:21:50 PM	3.3139	2612.99	
1/15/03 12:22:10 PM	3.3194	2613.09	
1/15/03 12:22:30 PM	3.3250	2613.21	
1/15/03 12:22:50 PM	3.3306	2613.31	
1/15/03 12:23:10 PM	3.3361	2613.41	
1/15/03 12:23:30 PM	3.3417	2613.53	
1/15/03 12:23:50 PM	3.3472	2613.63	
1/15/03 12:24:10 PM	3.3528	2613.74	
1/15/03 12:24:30 PM	3.3583	2613.85	
1/15/03 12:24:50 PM	3.3639	2613.93	
1/15/03 12:25:10 PM	3.3694	2614.05	
1/15/03 12:25:30 PM	3.3750	2614.14	
1/15/03 12:25:50 PM	3.3806	2614.24	
1/15/03 12:26:10 PM	3.3861	2614.37	
1/15/03 12:26:30 PM	3.3917	2614.44	
1/15/03 12:26:50 PM	3.3972	2614.54	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 12:27:10 PM	3.4028	2614.64	
1/15/03 12:27:30 PM	3.4083	2614.72	
1/15/03 12:27:50 PM	3.4139	2614.84	
1/15/03 12:28:10 PM	3.4194	2614.92	
1/15/03 12:28:11 PM			START 12TH RATE @ 2400 BPD
1/15/03 12:28:30 PM	3.4250	2616.69	
1/15/03 12:28:50 PM	3.4306	2616.21	
1/15/03 12:29:10 PM	3.4361	2615.92	
1/15/03 12:29:30 PM	3.4417	2616.21	
1/15/03 12:29:50 PM	3.4472	2616.02	
1/15/03 12:30:10 PM	3.4528	2616.24	
1/15/03 12:30:30 PM	3.4583	2616.35	
1/15/03 12:30:50 PM	3.4639	2616.49	
1/15/03 12:31:10 PM	3.4694	2616.63	
1/15/03 12:31:30 PM	3.4750	2616.73	
1/15/03 12:31:50 PM	3.4806	2616.87	
1/15/03 12:32:10 PM	3.4861	2616.95	
1/15/03 12:32:30 PM	3.4917	2617.06	
1/15/03 12:32:50 PM	3.4972	2617.18	
1/15/03 12:33:10 PM	3.5028	2617.27	
1/15/03 12:33:30 PM	3.5083	2617.39	
1/15/03 12:33:50 PM	3.5139	2617.46	
1/15/03 12:34:10 PM	3.5194	2617.59	
1/15/03 12:34:30 PM	3.5250	2617.68	
1/15/03 12:34:50 PM	3.5306	2617.78	
1/15/03 12:35:10 PM	3.5361	2617.88	
1/15/03 12:35:30 PM	3.5417	2617.95	
1/15/03 12:35:50 PM	3.5472	2618.04	
1/15/03 12:36:10 PM	3.5528	2618.14	
1/15/03 12:36:30 PM	3.5583	2618.23	
1/15/03 12:36:50 PM	3.5639	2618.33	
1/15/03 12:37:10 PM	3.5694	2618.43	
1/15/03 12:37:11 PM			END FINAL RATE
1/15/03 12:37:30 PM	3.5750	2613.64	
1/15/03 12:37:50 PM	3.5806	2611.76	
1/15/03 12:38:10 PM	3.5861	2610.52	
1/15/03 12:38:30 PM	3.5917	2609.58	
1/15/03 12:38:50 PM	3.5972	2608.82	
1/15/03 12:39:10 PM	3.6028	2608.18	
1/15/03 12:39:30 PM	3.6083	2607.64	
1/15/03 12:39:50 PM	3.6139	2607.19	
1/15/03 12:40:10 PM	3.6194	2606.77	
1/15/03 12:40:30 PM	3.6250	2606.37	
1/15/03 12:40:50 PM	3.6306	2606.00	
1/15/03 12:41:10 PM	3.6361	2605.69	
1/15/03 12:41:30 PM	3.6417	2605.39	
1/15/03 12:41:50 PM	3.6472	2605.12	

REAL TIME	DELTA TIME, HOURS	BOTTOMHOLE PRESSURE, PSIA	REMARKS - JOB NUMBER: 56694
-----------	-------------------------	---------------------------------	-----------------------------

1/15/03 12:42:10 PM

3.6528

2604.86

1/15/03 12:42:30 PM

3.6583

2604.61

1/15/03 12:42:50 PM

3.6639

2604.40

1/15/03 12:43:00 PM

3.6667

2604.29

1/15/03 12:43:01 PM

OFF BOTTOM W/ GAUGES



OPERATIONS LOG

COMPANY: POGO PRODUCING CO.
LEASE: RIVER BEND FED. # 8 SWD
FIELD (FORMATION): CEDAR CANYON ()
COUNTY: EDDY
STATE: NM

TEST TYPE: STEP-RATE

ENGINEER: BARRETT SMITH
FIELD REP: CLAY OSBORNE
JOB RUN BY: JOE PEREZ
DATA PREPARED BY: ROD DODSON
INSTRUMENT: V-92

DATE	TIME	DWG	OPERATIONS LOG - JOB NUMBER: 56694
------	------	-----	------------------------------------

1/15/03 07:50:00 AM			ON LOCATION
1/15/03 09:03:00 AM			START GAUGE #V-92
1/15/03 09:09:00 AM	599		IN LUBRICATOR W/ GAUGES
1/15/03 09:30:20 AM	599		ON BOTTOM W/ GAUGES
1/15/03 09:44:51 AM	599		START 1ST RATE @ 200 BPD
1/15/03 09:59:21 AM	611		START 2ND RATE @ 400 BPD
1/15/03 10:14:41 AM	618		START 3RD RATE @ 600 BPD
1/15/03 10:29:21 AM	627		START 4TH RATE @ 800 BPD
1/15/03 10:44:11 AM	628		START 5TH RATE @ 1000 BPD
1/15/03 11:00:01 AM	638		START 6TH RATE @ 1200 BPD
1/15/03 11:13:41 AM	651		START 7TH RATE @ 1400 BPD
1/15/03 11:28:11 AM	674		START 8TH RATE @ 1600 BPD
1/15/03 11:43:31 AM	697		START 9TH RATE @ 1800 BPD
1/15/03 11:58:11 AM	718		START 10TH RATE @ 2000 BPD
1/15/03 12:13:51 PM	736		START 11TH RATE @ 2200 BPD
1/15/03 12:28:11 PM	778		START 12TH RATE @ 2400 BPD
1/15/03 12:37:11 PM	786		END FINAL RATE

DATE	TIME	DWG	OPERATIONS LOG - JOB NUMBER: 56694
------	------	-----	------------------------------------

1/15/03 12:43:01 PM

OFF BOTTOM W/ GAUGES