

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resource Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator OXY USA, INC.				Lease or Unit Name TIGER FEDERAL COMMUNITY			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 18-AUG-1997		Well No. 1	
Completion Date 19-JUL-1997		Total Depth		Plug Back TD		Elevation	
Csg. Size 4 1/2	Wt. 11.5	d	Set At	Perforations: From: 10,840 To: 10,934		Unit Ltr. - Sec. - TWP - Rge. 21 20 36	
Tbg. Size 2 3/8	Wt. 4.7	d	Set At	Perforations: From: To:		Country LEA	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 10,840		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. °F 148@10887		Mean Annual Temp. °F 60		Baro. Press - P. 13.2	
10,887		10,887		G _v 0.647 % CO ₂ 0.48 % N ₂ 0.38 % H ₂ S 0 Prover		Meter Run 4.0	
						Taps FLANGE	

FLOW DATA							4.0		FLANGE		
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI											
1.	4.03	X	1.750	22	12.5	88			2061	148	97.4
2.	4.03	X	1.750	22	23.1	86			1620	148	1
3.	4.03	X	1.750	22	36.3	84			1195	148	1
4.	4.03	X	1.750	22					835	148	0.75
5.				22	19.8	86			608	148	0.75

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_w$	Pressure P _w	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.		21.04	35.4	0.9743	1.2432	1.0054	279
2.		28.68	35.6	0.9756	1.2432	1.0055	422
3.		35.95	35.6	0.9774	1.2432	1.0056	498
4.		26.55	35.6	0.9763	1.2432	1.0055	399

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P. L. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	0.05	548	1.48	0.989	0	0	0.647	XXXXXXX	672	371
2.	0.05	546	1.47	0.989						
3.	0.05	544	1.47	0.989						
4.	0.05	546	1.47	0.989						

P _c 1540.7	P _c ² 2374									
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2182$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1526$					
1.	2668	1226	1503	871						
2.	1460	918	843	1530						
3.	719	652	425	1948						
4.	386	482	232	2142						
5.										

Absolute Open Flow **574** Mcfd @ 15.025 Angle of Slope θ **54.3** Slope, n **0.719**

Remarks: **CALCULATED FROM BOTTOM HOLE PRESSURES. USED FIRST 3 POINTS, AS LAST POINT APPEARS TO BE LOADING UP.**

Approved By Division _____ Conducted By: *Larry Davis by H* Calculated By: *Whitaker Hammer* Checked By: _____

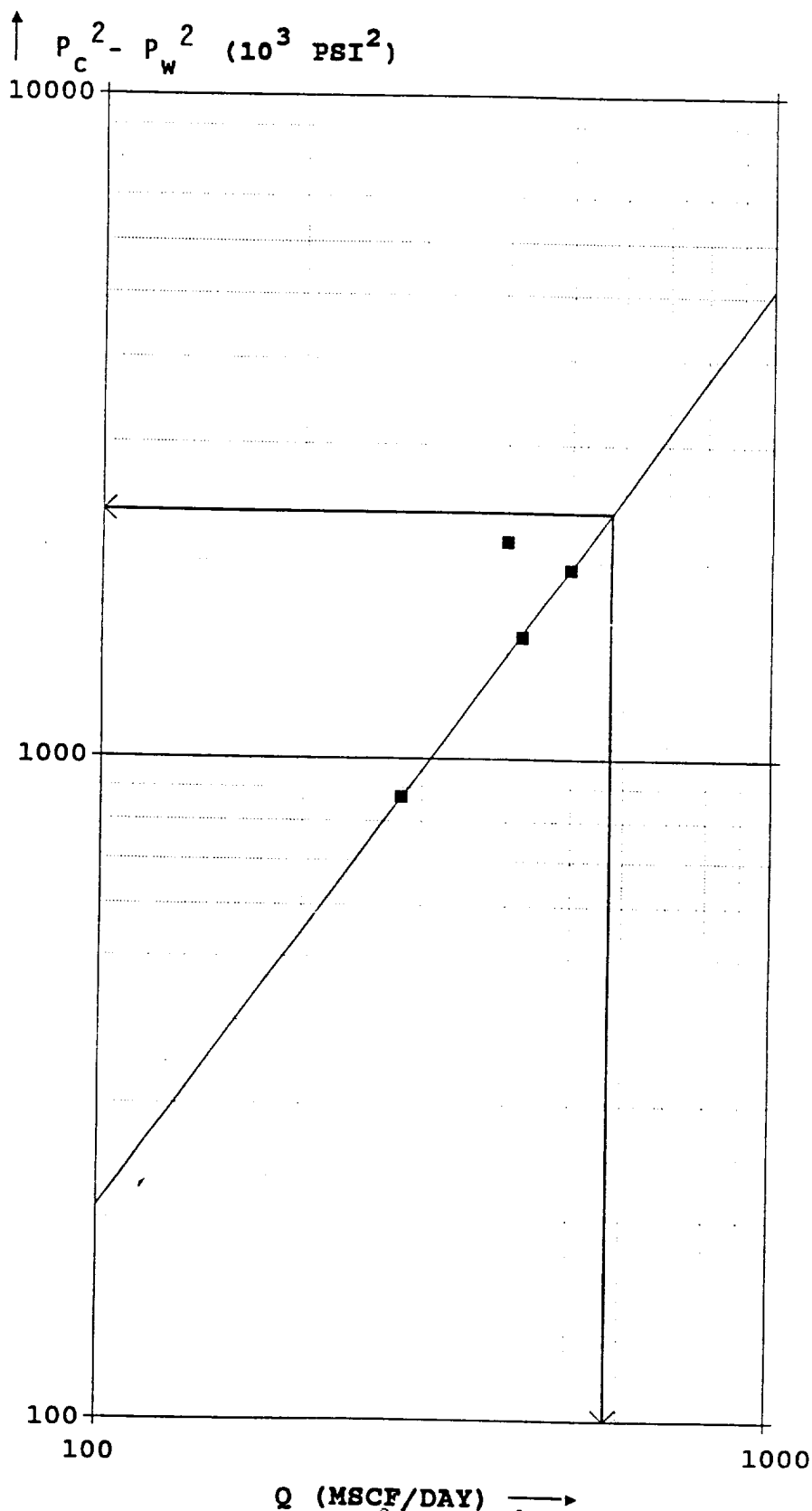
BACK PRESSURE CURVE

CLIENT: OXY USA

WELL: Tiger Federal Community #1

Test Date: 18-AUG-1997

County: LEA, NM



Well Tester:

Larry Davis by PLS

SCHLUMBERGER Testing

$\theta = 54.284$ degrees

$n = 0.7190$

AOF = 574.00 MSCF/DAY

REPORT NO.
078489

PAGE NO. 1

TEST DATE:
13-AUG-1997

STAR

Schlumberger Testing Data Report Pressure Data Report

Schlumberger

COMPANY: OXY USA INC

WELL: TIGER FEDERAL COM #1

TEST IDENTIFICATION

Test Type 4-pt.&BHP
Test No. 1
Formation MORROW
Test Interval (ft)

WELL LOCATION

Field
County LEA
State NEW MEXICO

COMPLETION CONFIGURATION

Total Depth (MD/TVD) (ft)
Casing O.D. (in) 4.5
Hole Size (in)
Perforated Interval (ft) 10840 to 10934
Shot Density (shots/ft)
Perforation Diameter (in)
Net Pay (ft) 94

TEST STRING CONFIGURATION

Tubing Length (ft)/I.D. (in)..
Tubing Length (ft)/I.D. (in)..
Packer Depth (ft)
Gauge Depth (ft)/Type 10802/WTQR-1701
Downhole Valve (Y/N)/Type

TEST CONDITIONS

Tbg/Wellhead Pressure (psi) ..
Separator Pressure (psi)

INTERPRETATION RESULTS

ROF (MCFD) 574

ROCK/FLUID/WELLBORE PROPERTIES

CO₂/H₂S/N₂ (%) 0.48/0.0/0.38
Gas Gravity 0.647
GOR (scf/STB) no liquids prod.
Water Cut (%)
Viscosity (cp)
Total Compressibility (1/psi).
Porosity (%) 10
Reservoir Temperature (F) 146

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

Analysis of the four-point test performed on this well on 18-Aug-1997 indicates an ROF of 574 MCFD. This analysis was based on the first three rates as there appeared to be a liquid loading problem during the fourth rate. Bottomhole pressures were used in the analysis. No liquids were produced to surface during this test. Please call Diane Sykes-Bookhammer at (915) 684-0700 with any questions. Thank-you for using Schlumberger Companies.

WELL TEST INTERPRETATION REPORT #:078489		PAGE: 2, 20-AUG-97
CLIENT : OXY USA INC	SEQUENCE OF EVENTS	FIELD: ZONE :MORROW WELL :TIGER FEDCOM#1 LOCATION:
REGION :CSD DISTRICT:HOBBS BASE :MIDLAND ENGINEER:LARRY DAVIS		

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					
13-AUG	13:43	Gradient Stop 0 Ft.	-1115	215	
13-AUG	13:56	Gradient Stop 2500 Ft.	-1102	232	
13-AUG	14:08	Gradient Stop 5000 Ft.	-1090	245	
13-AUG	14:40	Gradient Stop 7078 Ft.	-1058	309	
13-AUG	16:42	Gradient Stop 8500 Ft.	-936	381	
13-AUG	16:56	Gradient Stop 10000 Ft.	-922	459	
13-AUG	17:03	Gradient Stop 10400 Ft.	-915	486	
13-AUG	17:12	Gradient Stop 10802 Ft.	-906	510	
13-AUG	19:22	START FLOW	-776	510	
14-AUG	08:18	END FLOW & START SHUT-IN	0	534	
18-AUG	09:44	END SHUT-IN	5846	2032	
18-AUG	10:07	Gradient Stop 10802 Ft.	5869	2027	
18-AUG	10:26	Gradient Stop 10400 Ft.	5888	1933	
18-AUG	10:37	Gradient Stop 10000 Ft.	5899	1819	
18-AUG	10:44	Gradient Stop 8500 Ft.	5906	1762	
18-AUG	10:53	Gradient Stop 7078 Ft.	5915	1701	
18-AUG	11:08	Gradient Stop 5000 Ft.	5930	1616	
18-AUG	11:22	Gradient Stop 2500 Ft.	5944	1514	
18-AUG	11:32	Gradient Stop 0 Ft.	5954	1395	
18-AUG	12:03	START FLOW	5985	2026	
18-AUG	13:00	CHANGED CHOKE	6042		
18-AUG	14:03	CHANGED CHOKE	6105		
18-AUG	14:45	CHANGED CHOKE	6147		
18-AUG	15:35	END FLOW	6197		

WELL TEST INTERPRET JN REPORT #:078489		PAGE: 12, 20-AUG-97
CLIENT : OXY USA INC		
REGION :CSD DISTRICT:HOBBS BASE :MIDLAND ENGINEER:LARRY DAVIS	DISTRIBUTION OF REPORTS	FIELD: ZONE :MORROW WELL :TIGER FEDCOM#1 LOCATION:

SCHLUMBERGER has sent copies of this report to the following:

=====

OXY USA INC
BOX 50250
MIDLAND, TX 79710
Attn: HAND CARRY
(2 copies)

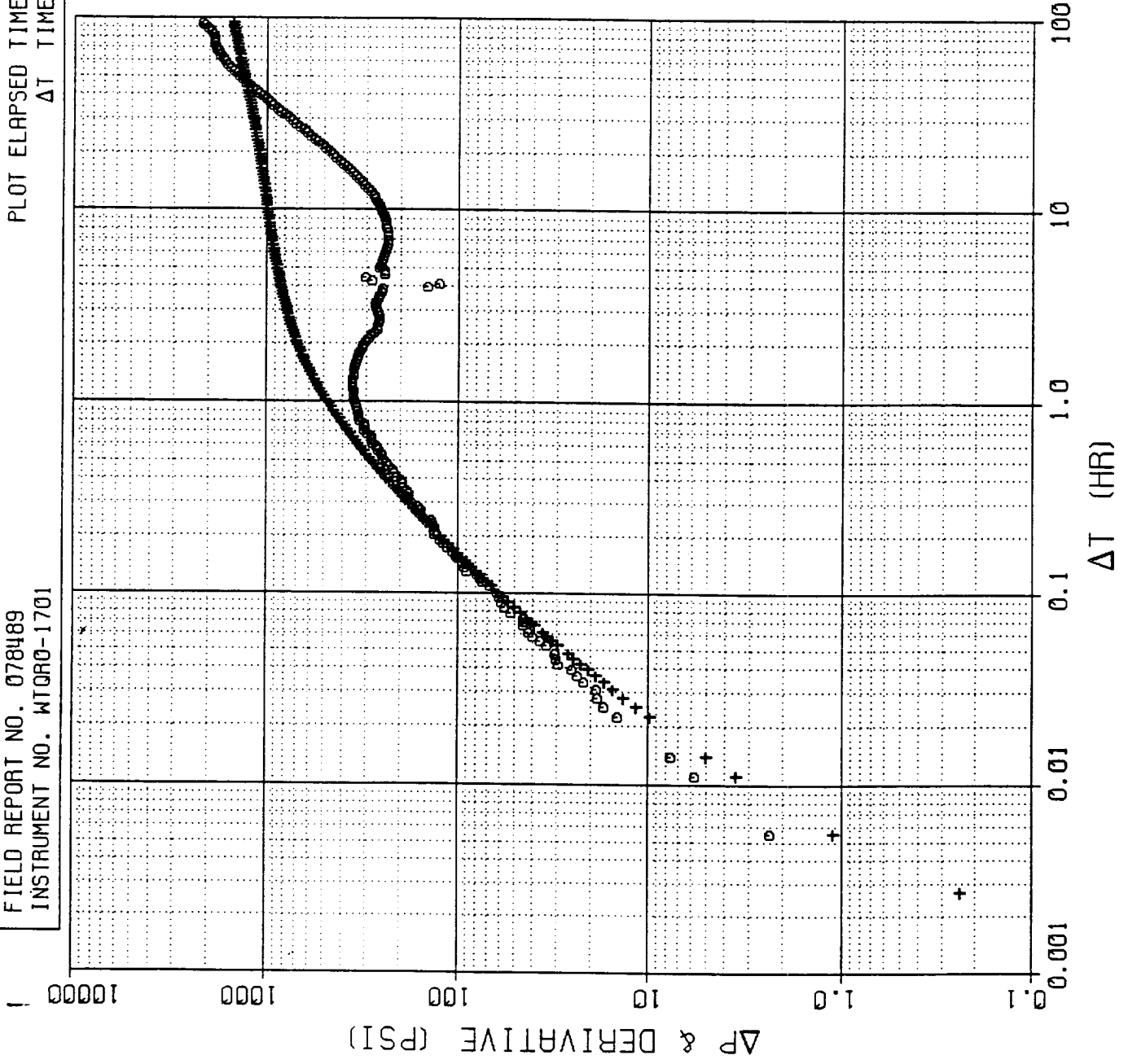
OXY USA INC
BOX 1387
CARLSBAD, NM 88231
Attn: JOHN STINSON
(1 copy)

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LOG LOG PLOT

COMPANY : OXY USA INC
WELL : TIGER FEDERAL COM #1
FIELD REPORT NO. 078489
INSTRUMENT NO. WTQ00-1701

SHUTIN #1 : PRODUCING TIME (Tp): 12.93 HR
FINAL FLOW PRESSURE (Pwf): 534 PSIA
PLOT ELAPSED TIME RANGE: 19.12 TO 116.55 HR
 ΔT TIME RANGE: 0.00 TO 97.44 HR



BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 078489

COMPANY : OXY USA INC

INSTRUMENT NO. WTQR0-1701

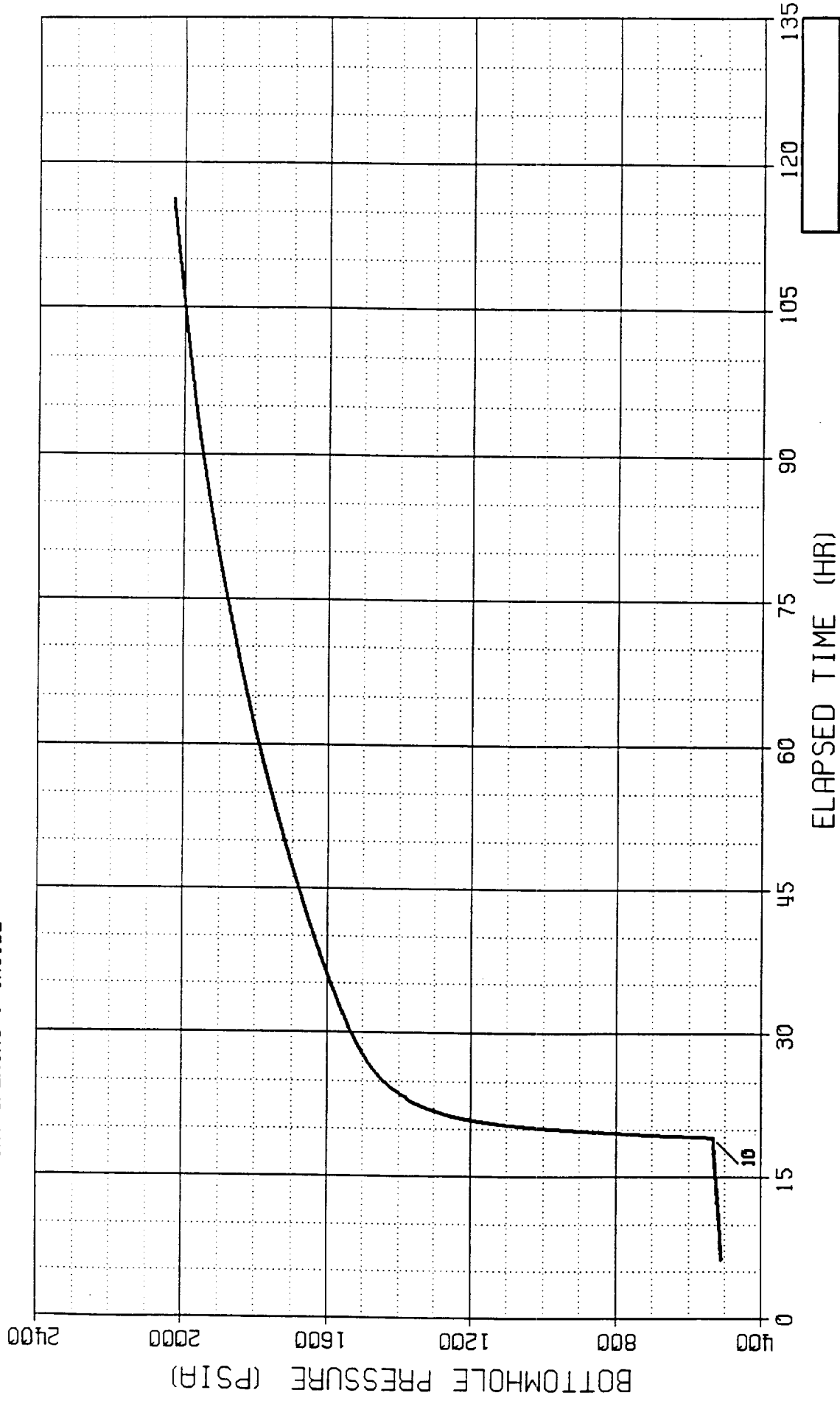
WELL : TIGER FEDERAL COM #1

DEPTH : 10802 FT

CAPACITY : 16000 PSI

Electronic Pressure Data

PORT OPENING : INSIDE



Schlumberger

BOTTOMHOLE TEMPERATURE LOG

FIELD REPORT NO. 078489

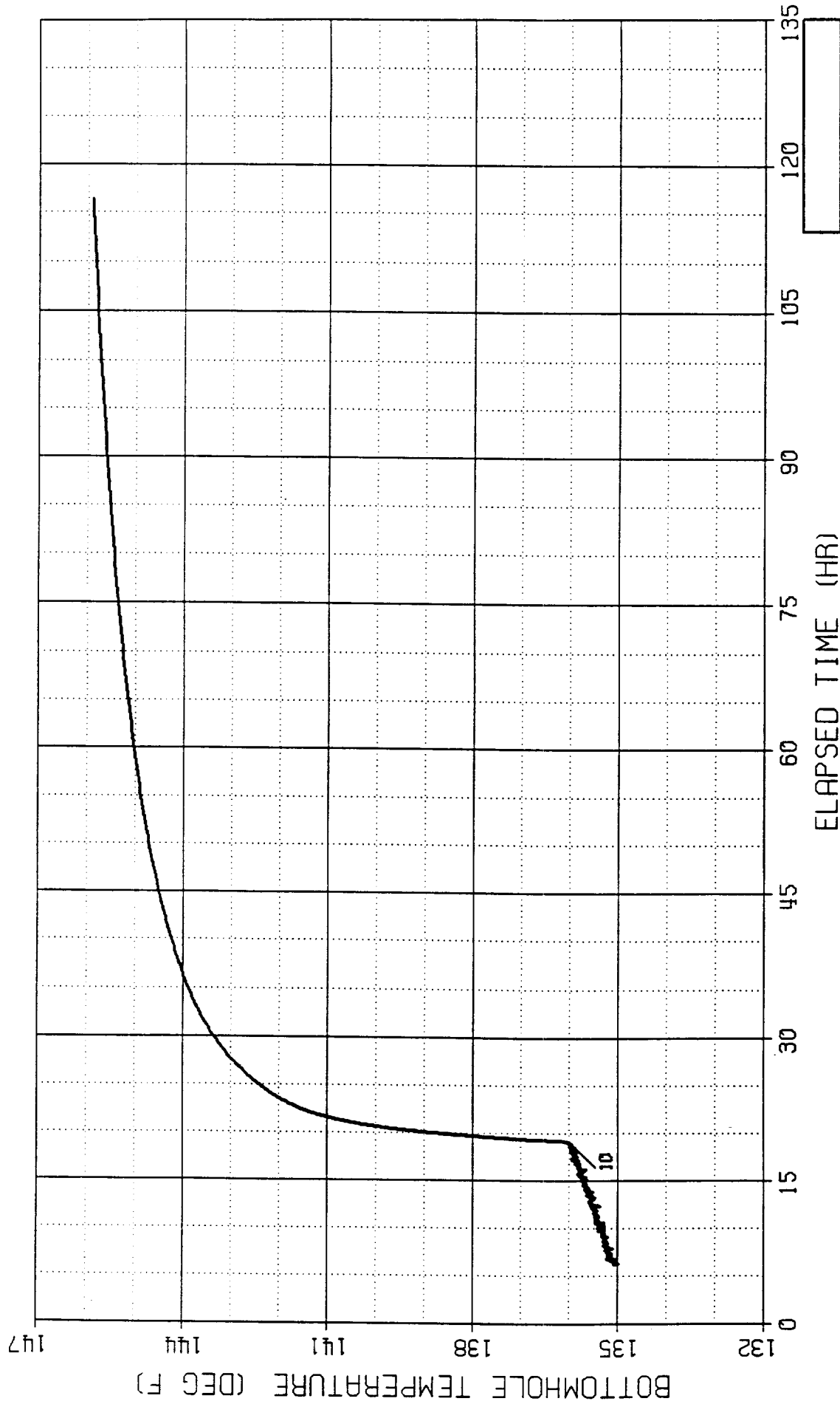
COMPANY : OXY USA INC

INSTRUMENT NO. WTQR0-1701

WELL : TIGER FEDERAL COM #1

DEPTH : 10802 FT

Electronic Temperature Data



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: OXY USA INC
 WELL: TIGER FEDERAL COM #1

FIELD REPORT NO. 078489
 INSTRUMENT NO. WTQR0-1701

RECORDER CAPACITY: 16000 PSI PORT OPENING: INSIDE DEPTH: 10802 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, HR	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F	DEPTH FT
1	13:43:34	13-AUG	GRADIENT STOP	0.543	214.86	99.03	0.0
2	13:56:14	13-AUG	GRADIENT STOP	0.754	232.45	87.35	2500.0
3	14:08:04	13-AUG	GRADIENT STOP	0.951	245.00	99.28	5000.0
4	14:40:54	13-AUG	GRADIENT STOP	1.498	308.64	115.32	7078.0
5	16:42:04	13-AUG	GRADIENT STOP	3.518	381.27	127.78	8500.0
6	16:56:14	13-AUG	GRADIENT STOP	3.754	459.30	139.80	10000.0
7	17:03:34	13-AUG	GRADIENT STOP	3.876	485.97	142.14	10400.0
8	17:12:24	13-AUG	GRADIENT STOP	4.023	510.06	134.82	10802.0
9	19:22:14	13-AUG	START FLOW	6.187	510.27	135.07	
10	8:18:04	14-AUG	END FLOW & START SHUT-IN	19.118	533.75	135.99	
11	9:44:14	18-AUG	END SHUT-IN	116.554	2031.60	145.90	
12	10:07:54	18-AUG	GRADIENT STOP	116.948	2027.08	145.92	10802.0
13	10:26:14	18-AUG	GRADIENT STOP	117.254	1933.15	142.95	10400.0
14	10:37:04	18-AUG	GRADIENT STOP	117.434	1818.89	139.19	10000.0
15	10:44:24	18-AUG	GRADIENT STOP	117.557	1761.93	128.66	8500.0
16	10:53:14	18-AUG	GRADIENT STOP	117.704	1701.18	116.40	7078.0
17	11:08:44	18-AUG	GRADIENT STOP	117.962	1615.67	99.30	5000.0
18	11:22:24	18-AUG	GRADIENT STOP	118.190	1514.43	87.64	2500.0
19	11:32:14	18-AUG	GRADIENT STOP	118.354	1394.79	76.37	0.0
20	12:03:14	18-AUG	START FLOW	118.870	2026.44	145.60	
21	13:00:44	18-AUG	CHANGED CHOKE	119.829	1594.47	144.97	
22	14:03:24	18-AUG	CHANGED CHOKE	120.873	1172.59	143.04	
23	14:45:24	18-AUG	CHANGED CHOKE	121.573	815.20	140.92	
24	15:35:54	18-AUG	END FLOW	122.415	590.52	137.70	

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, HR	END ELAPSED TIME, HR	DURATION HR	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	6.187	19.118	12.931	510.27	533.75	510.27
2	118.870	122.415	3.544	2026.44	590.52	2026.44

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, HR	END ELAPSED TIME, HR	DURATION HR	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, HR
1	19.118	116.554	97.436	533.75	2031.60	533.75	12.931

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
19:22:14	13-AUG	6.187	0.000	135.07	510.27
19:27:24	13-AUG	6.273	0.086	135.03	509.34
19:32:24	13-AUG	6.357	0.169	135.01	509.70
19:37:24	13-AUG	6.440	0.253	135.07	509.87
19:42:24	13-AUG	6.523	0.336	135.09	510.77
19:47:34	13-AUG	6.609	0.422	135.10	511.53
19:52:34	13-AUG	6.693	0.506	135.10	511.87
19:57:34	13-AUG	6.776	0.589	135.21	511.81
20:02:34	13-AUG	6.859	0.672	135.10	511.97
20:07:34	13-AUG	6.943	0.756	135.16	512.38
20:12:44	13-AUG	7.029	0.842	135.18	511.67
20:17:54	13-AUG	7.115	0.928	135.19	511.45
20:22:54	13-AUG	7.198	1.011	135.14	511.69
20:27:54	13-AUG	7.282	1.094	135.19	512.23
20:32:54	13-AUG	7.365	1.178	135.12	512.43
20:38:04	13-AUG	7.451	1.264	135.21	512.62
20:43:14	13-AUG	7.537	1.350	135.16	512.08
20:48:24	13-AUG	7.623	1.436	135.21	511.74
20:53:24	13-AUG	7.707	1.519	135.21	511.35
20:58:24	13-AUG	7.790	1.603	135.19	512.46
21:03:34	13-AUG	7.876	1.689	135.14	513.59
21:08:34	13-AUG	7.960	1.772	135.21	513.48
21:13:34	13-AUG	8.043	1.856	135.19	512.68
21:18:44	13-AUG	8.129	1.942	135.19	513.18
21:23:44	13-AUG	8.212	2.025	135.30	513.48
21:28:44	13-AUG	8.295	2.108	135.28	513.76
21:33:54	13-AUG	8.382	2.194	135.28	513.00
21:39:04	13-AUG	8.468	2.281	135.25	513.52
21:44:04	13-AUG	8.551	2.364	135.25	513.85
21:49:04	13-AUG	8.635	2.447	135.27	513.48
21:54:14	13-AUG	8.720	2.533	135.21	513.87
21:59:14	13-AUG	8.804	2.617	135.28	513.92
22:04:24	13-AUG	8.890	2.703	135.23	513.72
22:09:24	13-AUG	8.973	2.786	135.28	513.81
22:14:34	13-AUG	9.059	2.872	135.23	514.32
22:19:34	13-AUG	9.143	2.956	135.30	514.78
22:24:34	13-AUG	9.226	3.039	135.28	514.37
22:29:44	13-AUG	9.312	3.125	135.28	514.84
22:34:54	13-AUG	9.398	3.211	135.28	514.83
22:39:54	13-AUG	9.482	3.295	135.27	515.32
22:45:04	13-AUG	9.568	3.381	135.32	516.97
22:50:34	13-AUG	9.660	3.472	135.34	515.82
22:55:34	13-AUG	9.743	3.556	135.37	516.17
23:00:34	13-AUG	9.826	3.639	135.27	516.07
23:05:34	13-AUG	9.910	3.722	135.32	516.47
23:10:34	13-AUG	9.993	3.806	135.30	516.30
23:15:34	13-AUG	10.076	3.889	135.37	515.63
23:20:34	13-AUG	10.160	3.972	135.39	515.36
23:25:34	13-AUG	10.243	4.056	135.28	515.84
23:30:34	13-AUG	10.326	4.139	135.28	517.03
23:35:34	13-AUG	10.410	4.222	135.27	517.46

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
23:40:44	13-AUG	10.495	4.308	135.45	517.17
23:45:44	13-AUG	10.579	4.392	135.28	517.22
23:50:44	13-AUG	10.662	4.475	135.37	517.83
23:55:44	13-AUG	10.745	4.558	135.46	517.14
0:00:44	14-AUG	10.829	4.642	135.45	516.77
0:05:54	14-AUG	10.915	4.728	135.45	517.18
0:10:54	14-AUG	10.998	4.811	135.45	517.93
0:15:54	14-AUG	11.082	4.895	135.45	517.20
0:20:54	14-AUG	11.165	4.978	135.37	517.89
0:25:54	14-AUG	11.248	5.061	135.43	518.35
0:31:04	14-AUG	11.335	5.147	135.45	518.30
0:36:04	14-AUG	11.418	5.231	135.39	518.69
0:41:04	14-AUG	11.501	5.314	135.46	518.63
0:46:14	14-AUG	11.587	5.400	135.48	519.18
0:51:14	14-AUG	11.670	5.483	135.45	518.82
0:56:14	14-AUG	11.754	5.567	135.46	518.86
1:01:14	14-AUG	11.837	5.650	135.45	519.27
1:06:14	14-AUG	11.920	5.733	135.48	519.59
1:11:14	14-AUG	12.004	5.817	135.46	519.55
1:16:14	14-AUG	12.087	5.900	135.50	519.15
1:21:14	14-AUG	12.170	5.983	135.48	518.86
1:26:14	14-AUG	12.254	6.067	135.46	521.44
1:31:14	14-AUG	12.337	6.150	135.36	523.05
1:36:14	14-AUG	12.420	6.233	135.46	522.17
1:41:24	14-AUG	12.507	6.320	135.50	521.20
1:46:24	14-AUG	12.590	6.403	135.54	521.84
1:51:24	14-AUG	12.673	6.486	135.57	521.74
1:56:34	14-AUG	12.760	6.572	135.57	521.65
2:01:34	14-AUG	12.843	6.656	135.57	520.28
2:06:34	14-AUG	12.926	6.739	135.55	520.82
2:11:44	14-AUG	13.012	6.825	135.48	521.84
2:17:04	14-AUG	13.101	6.914	135.54	522.54
2:22:24	14-AUG	13.190	7.003	135.46	523.02
2:27:24	14-AUG	13.273	7.086	135.57	523.82
2:32:34	14-AUG	13.359	7.172	135.59	523.23
2:37:34	14-AUG	13.443	7.256	135.54	522.75
2:42:34	14-AUG	13.526	7.339	135.63	522.47
2:47:34	14-AUG	13.609	7.422	135.57	522.82
2:52:34	14-AUG	13.693	7.506	135.61	523.23
2:57:34	14-AUG	13.776	7.589	135.64	523.70
3:02:34	14-AUG	13.859	7.672	135.61	523.54
3:07:34	14-AUG	13.943	7.756	135.57	524.50
3:12:34	14-AUG	14.026	7.839	135.66	523.59
3:17:34	14-AUG	14.109	7.922	135.68	523.89
3:22:34	14-AUG	14.193	8.006	135.64	524.55
3:27:34	14-AUG	14.276	8.089	135.63	524.59
3:32:34	14-AUG	14.359	8.172	135.64	525.11
3:37:44	14-AUG	14.445	8.258	135.68	524.53
3:42:44	14-AUG	14.529	8.342	135.72	524.14
3:47:44	14-AUG	14.612	8.425	135.61	524.37
3:52:44	14-AUG	14.695	8.508	135.64	524.81

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
3:57:44	14-AUG	14.779	8.592	135.70	525.39
4:02:54	14-AUG	14.865	8.678	135.70	525.61
4:08:04	14-AUG	14.951	8.764	135.68	525.92
4:13:04	14-AUG	15.035	8.847	135.70	526.00
4:18:04	14-AUG	15.118	8.931	135.68	526.52
4:23:04	14-AUG	15.201	9.014	135.64	526.77
4:28:04	14-AUG	15.285	9.097	135.66	526.35
4:33:24	14-AUG	15.373	9.186	135.63	526.91
4:38:24	14-AUG	15.457	9.269	135.72	526.77
4:43:24	14-AUG	15.540	9.353	135.77	526.64
4:48:24	14-AUG	15.623	9.436	135.79	526.67
4:53:44	14-AUG	15.712	9.525	135.79	526.65
4:58:44	14-AUG	15.795	9.608	135.79	526.61
5:03:54	14-AUG	15.882	9.694	135.73	527.64
5:08:54	14-AUG	15.965	9.778	135.73	528.23
5:13:54	14-AUG	16.048	9.861	135.77	527.56
5:19:04	14-AUG	16.135	9.947	135.75	528.40
5:24:04	14-AUG	16.218	10.031	135.72	528.53
5:29:04	14-AUG	16.301	10.114	135.81	528.26
5:34:04	14-AUG	16.385	10.197	135.81	528.34
5:39:04	14-AUG	16.468	10.281	135.82	528.41
5:44:04	14-AUG	16.551	10.364	135.75	528.92
5:49:04	14-AUG	16.635	10.447	135.82	528.75
5:54:04	14-AUG	16.718	10.531	135.82	528.63
5:59:04	14-AUG	16.801	10.614	135.86	528.65
6:04:04	14-AUG	16.885	10.697	135.77	529.86
6:09:04	14-AUG	16.968	10.781	135.79	529.70
6:14:04	14-AUG	17.051	10.864	135.84	529.99
6:19:04	14-AUG	17.134	10.947	135.86	530.08
6:24:04	14-AUG	17.218	11.031	135.81	531.48
6:29:04	14-AUG	17.301	11.114	135.88	531.98
6:34:14	14-AUG	17.387	11.200	135.91	531.49
6:39:14	14-AUG	17.470	11.283	135.88	531.47
6:44:14	14-AUG	17.554	11.367	135.84	530.81
6:49:14	14-AUG	17.637	11.450	135.86	530.89
6:54:14	14-AUG	17.720	11.533	135.91	531.46
6:59:14	14-AUG	17.804	11.617	135.90	531.66
7:04:14	14-AUG	17.887	11.700	135.90	532.16
7:09:14	14-AUG	17.970	11.783	135.93	532.36
7:14:14	14-AUG	18.054	11.867	135.88	532.21
7:19:14	14-AUG	18.137	11.950	135.90	532.83
7:24:14	14-AUG	18.220	12.033	135.95	532.41
7:29:14	14-AUG	18.304	12.117	135.95	531.93
7:34:14	14-AUG	18.387	12.200	135.93	532.29
7:39:14	14-AUG	18.470	12.283	135.90	533.09
7:44:14	14-AUG	18.554	12.367	135.95	533.52
7:49:14	14-AUG	18.637	12.450	136.00	532.55
7:54:14	14-AUG	18.720	12.533	135.95	532.98
7:59:14	14-AUG	18.804	12.617	135.95	533.45
8:04:14	14-AUG	18.887	12.700	135.93	532.76
8:09:14	14-AUG	18.970	12.783	136.02	533.89

TEST PHASE: FLOW PERIOD # 1

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
8:14:14	14-AUG	19.054	12.867	136.02	533.51
8:18:04	14-AUG	19.118	12.931	135.99	533.75

TEST PHASE: SHUTIN PERIOD # 1

 FINAL FLOW PRESSURE = 533.75 PSIA
 PRODUCING TIME = 12.931 HR

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORN TIME
8:18:04	14-AUG	19.118	0.000	135.99	533.75	0.00	
8:18:44	14-AUG	19.129	0.011	135.99	537.23	3.48	3.0706
8:19:24	14-AUG	19.140	0.022	136.04	543.40	9.65	2.7666
8:20:04	14-AUG	19.151	0.033	136.09	550.58	16.83	2.5899
8:20:44	14-AUG	19.162	0.044	136.13	558.02	24.27	2.4664
8:21:24	14-AUG	19.173	0.056	136.15	565.29	31.54	2.3692
8:22:04	14-AUG	19.184	0.067	136.20	572.95	39.20	2.2899
8:22:44	14-AUG	19.195	0.078	136.24	580.03	46.28	2.2240
8:23:24	14-AUG	19.207	0.089	136.27	587.61	53.86	2.1660
8:24:04	14-AUG	19.218	0.100	136.33	594.74	60.99	2.1150
8:25:34	14-AUG	19.243	0.125	136.42	610.40	76.65	2.0189
8:26:54	14-AUG	19.265	0.147	136.53	624.92	91.17	1.9487
8:28:14	14-AUG	19.287	0.169	136.62	639.18	105.43	1.8885
8:29:34	14-AUG	19.309	0.192	136.72	653.35	119.60	1.8355
8:31:04	14-AUG	19.334	0.217	136.81	668.85	135.10	1.7830
8:32:24	14-AUG	19.357	0.239	136.90	681.75	148.00	1.7415
8:33:44	14-AUG	19.379	0.261	136.98	694.91	161.16	1.7037
8:35:04	14-AUG	19.401	0.283	137.07	707.40	173.65	1.6687
8:36:24	14-AUG	19.423	0.306	137.14	720.15	186.40	1.6367
8:37:44	14-AUG	19.445	0.328	137.21	732.55	198.80	1.6071
8:39:04	14-AUG	19.468	0.350	137.28	744.16	210.41	1.5792
8:40:34	14-AUG	19.493	0.375	137.37	757.37	223.62	1.5500
8:41:54	14-AUG	19.515	0.397	137.43	768.09	234.34	1.5258
8:43:14	14-AUG	19.537	0.419	137.50	779.09	245.34	1.5029
8:44:44	14-AUG	19.562	0.444	137.59	791.33	257.58	1.4786
8:46:04	14-AUG	19.584	0.467	137.64	801.71	267.96	1.4580
8:47:24	14-AUG	19.607	0.489	137.71	812.33	278.58	1.4386
8:48:44	14-AUG	19.629	0.511	137.79	822.50	288.75	1.4200
8:54:44	14-AUG	19.729	0.611	138.09	866.64	332.89	1.3456
9:01:04	14-AUG	19.834	0.717	138.40	910.19	376.44	1.2797
9:07:14	14-AUG	19.937	0.819	138.67	949.67	415.92	1.2248
9:13:14	14-AUG	20.037	0.919	138.90	985.35	451.60	1.1780
9:19:24	14-AUG	20.140	1.022	139.14	1018.90	485.15	1.1351
9:26:04	14-AUG	20.251	1.133	139.37	1052.34	518.59	1.0938
9:32:04	14-AUG	20.351	1.233	139.55	1079.58	545.83	1.0601
9:38:14	14-AUG	20.454	1.336	139.73	1105.29	571.54	1.0285
9:44:34	14-AUG	20.559	1.442	139.91	1129.30	595.55	0.9987
9:50:34	14-AUG	20.659	1.542	140.05	1150.26	616.51	0.9725
9:57:24	14-AUG	20.773	1.656	140.20	1172.05	638.30	0.9450
10:03:24	14-AUG	20.873	1.756	140.32	1189.12	655.37	0.9225
10:10:04	14-AUG	20.984	1.867	140.47	1206.87	673.12	0.8991

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 533.75 PSIA
PRODUCING TIME = 12.931 HR

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
10:16:14	14-AUG	21.087	1.969	140.58	1221.68	687.93	0.8789
10:22:24	14-AUG	21.190	2.072	140.67	1235.33	701.58	0.8597
10:29:04	14-AUG	21.301	2.183	140.77	1248.31	714.56	0.8403
10:35:04	14-AUG	21.401	2.283	140.86	1259.19	725.44	0.8237
10:41:14	14-AUG	21.504	2.386	140.95	1269.22	735.47	0.8075
10:47:14	14-AUG	21.604	2.486	141.03	1278.40	744.65	0.7925
10:53:14	14-AUG	21.704	2.586	141.10	1287.04	753.29	0.7782
10:59:14	14-AUG	21.804	2.686	141.17	1295.01	761.26	0.7645
11:05:14	14-AUG	21.904	2.786	141.24	1302.85	769.10	0.7514
11:11:14	14-AUG	22.004	2.886	141.30	1310.27	776.52	0.7388
11:17:44	14-AUG	22.112	2.994	141.37	1318.28	784.53	0.7258
11:23:54	14-AUG	22.215	3.097	141.42	1325.61	791.86	0.7139
12:23:54	14-AUG	23.215	4.097	141.87	1376.95	843.20	0.6187
13:24:14	14-AUG	24.220	5.103	142.21	1417.68	883.93	0.5483
14:26:34	14-AUG	25.259	6.142	142.48	1449.56	915.81	0.4921
15:29:54	14-AUG	26.315	7.197	142.72	1474.06	940.31	0.4466
16:34:04	14-AUG	27.384	8.267	142.95	1494.32	960.57	0.4090
17:37:44	14-AUG	28.445	9.328	143.13	1511.59	977.84	0.3777
18:38:54	14-AUG	29.465	10.347	143.29	1526.36	992.61	0.3521
19:41:24	14-AUG	30.507	11.389	143.44	1540.02	1006.27	0.3295
20:44:44	14-AUG	31.562	12.444	143.56	1552.68	1018.93	0.3094
21:51:34	14-AUG	32.676	13.558	143.69	1565.44	1031.69	0.2909
22:59:34	14-AUG	33.809	14.692	143.80	1577.73	1043.98	0.2742
0:05:14	15-AUG	34.904	15.786	143.89	1589.08	1055.33	0.2599
1:12:34	15-AUG	36.026	16.908	143.98	1600.28	1066.53	0.2467
2:16:04	15-AUG	37.084	17.967	144.05	1610.50	1076.75	0.2355
3:17:24	15-AUG	38.107	18.989	144.12	1620.11	1086.36	0.2256
4:18:34	15-AUG	39.126	20.008	144.19	1629.46	1095.71	0.2165
5:18:34	15-AUG	40.126	21.008	144.25	1638.43	1104.68	0.2083
6:23:04	15-AUG	41.201	22.083	144.32	1647.88	1114.13	0.2002
7:27:54	15-AUG	42.282	23.164	144.37	1657.19	1123.44	0.1926
8:30:04	15-AUG	43.318	24.200	144.43	1665.96	1132.21	0.1859
9:32:14	15-AUG	44.354	25.236	144.48	1674.58	1140.83	0.1797
10:33:34	15-AUG	45.376	26.258	144.52	1682.93	1149.18	0.1739
11:33:54	15-AUG	46.382	27.264	144.57	1691.02	1157.27	0.1686
12:34:34	15-AUG	47.393	28.275	144.61	1699.03	1165.28	0.1636
13:34:54	15-AUG	48.398	29.280	144.64	1706.88	1173.13	0.1588
14:37:24	15-AUG	49.440	30.322	144.70	1714.88	1181.13	0.1543
15:39:54	15-AUG	50.482	31.364	144.73	1722.77	1189.02	0.1499
16:43:14	15-AUG	51.537	32.419	144.77	1730.64	1196.89	0.1458
17:43:44	15-AUG	52.545	33.428	144.81	1738.05	1204.30	0.1420
18:47:04	15-AUG	53.601	34.483	144.84	1745.68	1211.93	0.1383
19:50:24	15-AUG	54.657	35.539	144.88	1753.20	1219.45	0.1348
20:50:44	15-AUG	55.662	36.544	144.90	1760.26	1226.51	0.1316
21:51:14	15-AUG	56.670	37.553	144.93	1767.25	1233.50	0.1285
22:51:34	15-AUG	57.676	38.558	144.97	1774.11	1240.36	0.1256
23:52:04	15-AUG	58.685	39.567	144.99	1780.91	1247.16	0.1228
0:59:34	16-AUG	59.810	40.692	145.02	1788.36	1254.61	0.1198
2:06:54	16-AUG	60.932	41.814	145.06	1795.69	1261.94	0.1170
3:07:54	16-AUG	61.948	42.830	145.08	1802.22	1268.47	0.1146

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 533.75 PSIA
PRODUCING TIME = 12.931 HR

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
4:08:14	16-AUG	62.954	43.836	145.11	1808.59	1274.84	0.1123
5:09:24	16-AUG	63.973	44.855	145.13	1814.95	1281.20	0.1100
6:09:34	16-AUG	64.976	45.858	145.15	1821.11	1287.36	0.1079
7:10:34	16-AUG	65.993	46.875	145.18	1827.28	1293.53	0.1058
8:12:04	16-AUG	67.018	47.900	145.20	1833.40	1299.65	0.1038
9:14:14	16-AUG	68.054	48.936	145.22	1839.48	1305.73	0.1018
10:14:14	16-AUG	69.054	49.936	145.24	1845.26	1311.51	0.1000
11:15:54	16-AUG	70.082	50.964	145.27	1851.12	1317.37	0.0982
12:22:34	16-AUG	71.193	52.075	145.29	1857.34	1323.59	0.0963
13:29:14	16-AUG	72.304	53.186	145.31	1863.46	1329.71	0.0945
14:31:14	16-AUG	73.337	54.219	145.33	1869.05	1335.30	0.0929
15:32:54	16-AUG	74.365	55.247	145.35	1874.53	1340.78	0.0913
16:34:44	16-AUG	75.396	56.278	145.36	1879.94	1346.19	0.0898
17:38:04	16-AUG	76.451	57.333	145.38	1885.39	1351.64	0.0883
18:39:14	16-AUG	77.470	58.353	145.42	1890.56	1356.81	0.0869
19:42:04	16-AUG	78.518	59.400	145.44	1895.79	1362.04	0.0855
20:45:04	16-AUG	79.568	60.450	145.45	1900.94	1367.19	0.0842
21:47:54	16-AUG	80.615	61.497	145.45	1905.99	1372.24	0.0829
22:54:44	16-AUG	81.729	62.611	145.49	1911.27	1377.52	0.0815
23:59:14	16-AUG	82.804	63.686	145.51	1916.27	1382.52	0.0803
0:59:44	17-AUG	83.812	64.694	145.51	1920.87	1387.12	0.0791
2:07:34	17-AUG	84.943	65.825	145.53	1925.95	1392.20	0.0779
3:08:14	17-AUG	85.954	66.836	145.54	1930.40	1396.65	0.0768
4:08:44	17-AUG	86.962	67.844	145.56	1934.75	1401.00	0.0758
5:23:04	17-AUG	88.201	69.083	145.58	1939.99	1406.24	0.0745
6:23:34	17-AUG	89.209	70.092	145.60	1944.17	1410.42	0.0735
7:29:14	17-AUG	90.304	71.186	145.62	1948.61	1414.86	0.0725
8:30:34	17-AUG	91.326	72.208	145.63	1952.68	1418.93	0.0715
9:33:04	17-AUG	92.368	73.250	145.63	1956.72	1422.97	0.0706
10:33:24	17-AUG	93.373	74.256	145.65	1960.55	1426.80	0.0697
11:36:04	17-AUG	94.418	75.300	145.67	1964.43	1430.68	0.0688
12:40:14	17-AUG	95.487	76.369	145.69	1968.31	1434.56	0.0679
13:50:24	17-AUG	96.657	77.539	145.69	1972.43	1438.68	0.0670
14:58:24	17-AUG	97.790	78.672	145.71	1976.31	1442.56	0.0661
16:02:54	17-AUG	98.865	79.747	145.72	1979.88	1446.13	0.0653
17:03:24	17-AUG	99.873	80.756	145.74	1983.12	1449.37	0.0645
18:04:04	17-AUG	100.884	81.767	145.74	1986.29	1452.54	0.0638
19:12:04	17-AUG	102.018	82.900	145.76	1989.80	1456.05	0.0629
20:14:34	17-AUG	103.059	83.942	145.78	1992.97	1459.22	0.0622
21:14:34	17-AUG	104.059	84.942	145.78	1996.00	1462.25	0.0615
22:16:44	17-AUG	105.095	85.978	145.80	1999.10	1465.35	0.0608
23:18:34	17-AUG	106.126	87.008	145.81	2002.17	1468.42	0.0602
0:19:04	18-AUG	107.134	88.017	145.81	2005.14	1471.39	0.0595
1:21:24	18-AUG	108.173	89.055	145.83	2008.17	1474.42	0.0589
2:24:04	18-AUG	109.218	90.100	145.83	2011.19	1477.44	0.0582
3:27:14	18-AUG	110.271	91.153	145.85	2014.21	1480.46	0.0576
4:29:14	18-AUG	111.304	92.186	145.87	2017.13	1483.38	0.0570
5:32:24	18-AUG	112.357	93.239	145.87	2020.10	1486.35	0.0564
6:34:44	18-AUG	113.396	94.278	145.89	2023.00	1489.25	0.0558
7:37:34	18-AUG	114.443	95.325	145.89	2025.90	1492.15	0.0552

TEST PHASE: SHUTIN PERIOD # 1

FINAL FLOW PRESSURE = 533.75 PSIA
PRODUCING TIME = 12.931 HR

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA	DELTA P PSI	LOG HORNER TIME
8:41:44	18-AUG	115.512	96.394	145.90	2028.84	1495.09	0.0547
9:44:14	18-AUG	116.554	97.436	145.90	2031.60	1497.85	0.0541

TEST PHASE: FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
12:03:14	18-AUG	118.870	0.000	145.60	2026.44
12:08:14	18-AUG	118.954	0.083	145.74	1992.25
12:13:14	18-AUG	119.037	0.167	145.58	1877.52
12:18:14	18-AUG	119.120	0.250	145.15	1782.94
12:23:14	18-AUG	119.204	0.333	144.93	1704.97
12:28:14	18-AUG	119.287	0.417	145.02	1689.54
12:33:14	18-AUG	119.370	0.500	145.08	1670.64
12:38:14	18-AUG	119.454	0.583	145.08	1653.44
12:43:24	18-AUG	119.540	0.669	145.08	1635.46
12:48:24	18-AUG	119.623	0.753	145.04	1621.78
12:53:24	18-AUG	119.707	0.836	145.00	1610.09
12:58:24	18-AUG	119.790	0.919	144.99	1599.06
13:03:24	18-AUG	119.873	1.003	144.88	1574.86
13:08:24	18-AUG	119.957	1.086	144.48	1502.74
13:13:24	18-AUG	120.040	1.169	144.27	1455.66
13:18:24	18-AUG	120.123	1.253	144.12	1408.60
13:23:24	18-AUG	120.207	1.336	143.98	1367.92
13:28:24	18-AUG	120.290	1.419	143.85	1331.96
13:33:24	18-AUG	120.373	1.503	143.73	1299.96
13:38:34	18-AUG	120.459	1.589	143.62	1269.85
13:43:34	18-AUG	120.543	1.672	143.51	1244.94
13:48:34	18-AUG	120.626	1.756	143.38	1222.88
13:53:34	18-AUG	120.709	1.839	143.26	1203.52
13:58:34	18-AUG	120.793	1.922	143.15	1187.17
14:03:44	18-AUG	120.879	2.008	143.06	1171.59
14:08:44	18-AUG	120.962	2.092	142.83	1133.10
14:13:44	18-AUG	121.046	2.175	142.38	1072.96
14:18:44	18-AUG	121.129	2.258	141.93	998.51
14:23:44	18-AUG	121.212	2.342	141.53	939.88
14:28:54	18-AUG	121.298	2.428	141.30	896.47
14:33:54	18-AUG	121.382	2.511	141.24	863.05
14:38:54	18-AUG	121.465	2.594	141.17	840.65
14:43:54	18-AUG	121.548	2.678	140.99	820.20
14:48:54	18-AUG	121.632	2.761	140.61	766.73
14:53:54	18-AUG	121.715	2.844	139.77	679.98
14:59:04	18-AUG	121.801	2.931	139.51	651.64
15:04:04	18-AUG	121.884	3.014	139.33	631.48
15:09:04	18-AUG	121.968	3.097	139.10	618.27
15:14:14	18-AUG	122.054	3.183	138.78	610.75
15:19:14	18-AUG	122.137	3.267	138.45	604.06
15:24:14	18-AUG	122.220	3.350	138.27	600.44

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TEST PHASE: FLOW PERIOD # 2

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DELTA TIME, HR	BOT HOLE TEMP. DEG F	BOT HOLE PRESSURE PSIA
15:29:14	18-AUG	122.304	3.433	138.04	596.16
15:34:44	18-AUG	122.396	3.525	137.75	591.52
15:35:54	18-AUG	122.415	3.544	137.70	590.52

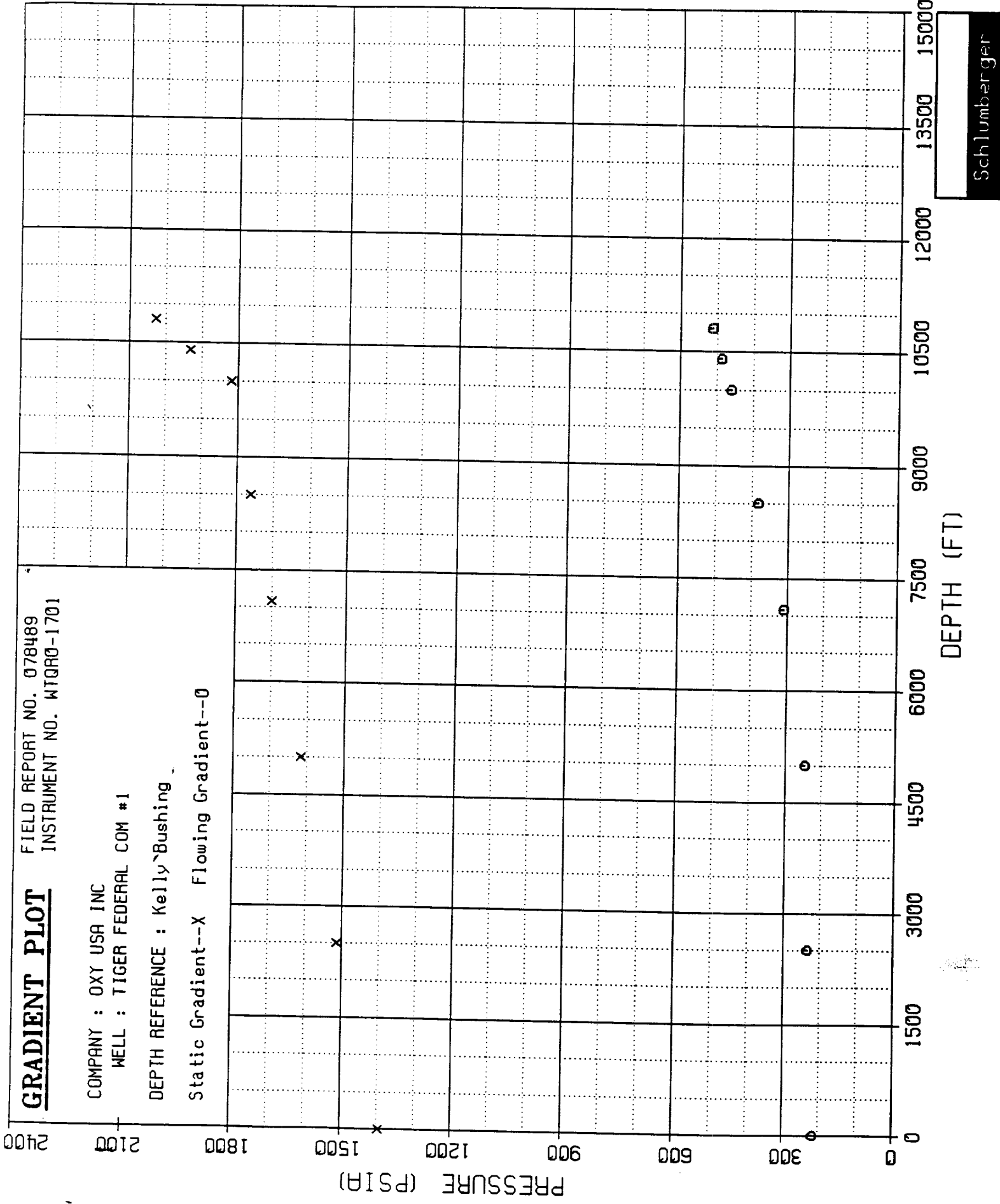
GRADIENT PLOT

FIELD REPORT NO. 078489
INSTRUMENT NO. WTQR0-1701

COMPANY : OXY USA INC
WELL : TIGER FEDERAL COM #1

DEPTH REFERENCE : Kelly Bushing

Static Gradient--X Flowing Gradient--O



Schlumberger

 ** WELL TEST DATA PRINTOUT **

COMPANY: OXY USA INC
 WELL: TIGER FEDERAL COM #1

FIELD REPORT NO. 078489
 INSTRUMENT NO. WTQR0-1701

RECORDER CAPACITY: 16000 PSI
 DEPTH REFERENCE: KB

GRADIENT INFORMATION

TIME OF DAY HH:MM:SS	DATE DD-MMM	ELAPSED TIME, HR	DEPTH FROM REF. FT	PRESSURE AT DEPTH PSIA	PRES. GRADIENT PSI/FT	TEMPERATURE AT DEPTH DEG F	TEMP. GRADIENT DEG F/FT
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13:43:34	13-AUG	0.543	0.0	214.86		99.03	
13:56:14	13-AUG	0.754	2500.0	232.45	0.00704	87.35	-0.00467
14:08:04	13-AUG	0.951	5000.0	245.00	0.00502	99.28	0.00477
14:40:54	13-AUG	1.498	7078.0	308.64	0.0306	115.32	0.00772
16:42:04	13-AUG	3.518	8500.0	381.27	0.0511	127.78	0.00876
16:56:14	13-AUG	3.754	10000.0	459.30	0.0520	139.80	0.00801
17:03:34	13-AUG	3.876	10400.0	485.97	0.0667	142.14	0.00585
17:12:24	13-AUG	4.023	10802.0	510.06	0.0599	134.82	-0.0182
10:07:54	18-AUG	116.948	10802.0	2027.08		145.92	
10:26:14	18-AUG	117.254	10400.0	1933.15	0.234	142.95	0.00739
10:37:04	18-AUG	117.434	10000.0	1818.89	0.286	139.19	0.00940
10:44:24	18-AUG	117.557	8500.0	1761.93	0.0380	128.66	0.00702
10:53:14	18-AUG	117.704	7078.0	1701.18	0.0427	116.40	0.00862
11:08:44	18-AUG	117.962	5000.0	1615.67	0.0412	99.30	0.00823
11:22:24	18-AUG	118.190	2500.0	1514.43	0.0405	87.64	0.00466
11:32:14	18-AUG	118.354	0.0	1394.79	0.0479	76.37	0.00451