

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 033-20939 0000 ORIGINAL
County Comanche County, Kansas plugged 9-72-97

C - NW - SE - Sec. 10 Twp. 33 Rge. 19 XX^E_W
1980 Feet from SN (circle one) Line of Section
1880 Feet from EW (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Donald Herd Well # 1-10
Field Name Wildcat

Producing Formation None
Elevation: Ground 2001' KB 2014'
Total Depth 6350' PBTD 6300'

Amount of Surface Pipe Set and Cemented at 702 Feet
Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set _____ Feet
If Alternate II completion, cement circulated from 802'
feet depth to surface w/ 235 sx cmt.

Drilling Fluid Management Plan D2A JTB 12-10-97
(Data must be collected from the Reserve Pit)

Chloride content 12,000 ppm Fluid volume 730 bbls
Dewatering method used hauled free water from top
then evaporate.
Location of fluid disposal if hauled offsite:

Operator Name KBW Oil & Gas
Lease Name Harmon SWD License No. 5993
NW Quarter Sec. 11 Twp. 33 S Rng. 20 EA
County Comanche Docket No. 22304

Operator: License # 6528

Name: R.J. Patrick Operating Company

Address P.O. Box 1157

City/State/Zip Liberal, Kansas 67905

Purchaser: _____

Operator Contact Person: R.J. Patrick

Phone (316) 624-8483

Contractor: Name: Duke Drilling Co., Inc.

License: 5929

Wellsite Geologist: Bob Posey

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBTD
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____

08-26-97 09-11-97 09-12-97
Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature R.J. Patrick
Title Owner Date 09/22/97

Subscribed and sworn to before me this 22nd day of September, 19 97.

Notary Public Jaym Berry

Date Commission Expires 04/04/2000

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)

STATE NOTARY PUBLIC
KANSAS
JAYM BERRY
NOTARY PUBLIC
STATE OF KANSAS
My Appt. Expires: 4-4-2000

Operator Name R.J. Patrick Operating Company Lease Name Donald Herd Well # 1-10

Sec. 10 Twp. 33 Rge. 19 East West
 County Comanche County, Kansas

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken Yes No
 (Attach Additional Sheets.)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
 (Submit Copy.)

List All E.Logs Run: comp SSD Comp Neutron
 log - Dual induction log-micro elec
 log - copies enclosed

Name	Top	Datum	<input type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
			Shawnee Sand	4139	2145
Toronto	4303	2289			
Lansing	4495	2481			
Marmaton	5004	2990			
Cherokee	5148	3134			
Mississippi	5250	3236			
Viola	5954	3940			
Simpson	6158	4144			
Arbuckle	6305	4291			

CASING RECORD

New Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Conductor		20"		49'		5yards	
Surface	12-1/4"	8-5/8"	24#	702'	MidconII 60/40 Poz	135 100	3%cc

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth	

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SMD or Inj.	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas: **METHOD OF COMPLETION** Vented Sold Used on Lease (If vented, submit ACO-1B.) Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval _____



JOB LOG 4239-5

TICKET #	307979	TICKET DATE	9-12-9
REGION	North America	NWA/COUNTRY	USA
MBU ID / EMP #	G1622	EMPLOYEE NAME	Tom A Sebba
LOCATION	Plant KJ 27550	COMPANY	R.J. PATRICK
TICKET AMOUNT	5794.57	WELL TYPE	01
WELL LOCATION	IS Coddwptoc KJ	DEPARTMENT	CMT
LEASE / WELL #	Donald HERO 1-10	SEC / TWP / RNG	10-335-19W
BDA / STATE	KJ	PSL DEPARTMENT	STEM
COUNTY	Commanche	CUSTOMER REP / PHONE	KENNY McQuisck
API / UWI #		JOB PURPOSE CODE	115

HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS	HES EMP NAME/EMP#/(EXPOSURE HOURS) HRS
T. Sebba G1622 4.5	C. Baker C9497 4.5	T.J. Claypool HS23 4.5	

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS		PRESS. (psi)		JOB DESCRIPTION / REMARKS
				T	C	Tbg	Csg	
1	22:30							Called out
	23:30							ON Loc SAFETY MTG
								125 SKJ Total
								40/60 P02 69% GIL
	02:28	5	14.69			150		1st Plug 720'
	02:50							50 SKJ
	03:06	5	11.75			130		2nd Plug 350' ORIGINAL
	03:12							40 SKJ
	07:05	2	2.93			100		3rd Plug 40' 10 SKJ
	07:10	2	4.40			100		Plug R Hole 15 SKJ
	07:15	2	2.93			160		Plug M Hole 10 SKJ
	07:15							WASH UP
								Racked up
	05:00							OFF LOC

T.H. PATRICK
CALL AG 95W
TAD
LEDBECK
T.J.

ORIGINAL

RECEIVED
KALISAS COMPANY
1977 SEP 23
11:31

DST REPORT

15-033-20939

GENERAL INFORMATION

DATE	: 9/4/97	TICKET	: 22511
CUSTOMER	: R J PATRICK OPERATING CO	LEASE	: DONALD HERD
WELL	: #1-10 TEST: 1	GEOLOGIST	: PATRICK
ELEVATION	: 2014 KB	FORMATION	: LOWER MARMATON
SECTION	: 10	TOWNSHIP	: 33S
RANGE	: 19W COUNTY: COMANCHE	STATE	: KS
GAUGE SN#	: 10242 RANGE: 4100	CLOCK	: 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	5116.00 ft	TO:	5166.00 ft	TVD:	5166.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	5118.0 ft	5129.0 ft			
TEMPERATURE:	0.0				
DRILL COLLAR LENGTH:	214.0 ft	I.D.:	2.250 in		
WEIGHT PIPE LENGTH:	0.0 ft	I.D.:	0.000 in		
DRILL PIPE LENGTH:	4874.0 ft	I.D.:	3.800 in		
TEST TOOL LENGTH:	28.0 ft	TOOL SIZE:	5.500 in		
ANCHOR LENGTH:	50.0 ft	ANCHOR SIZE:	5.500 in		
SURFACE CHOKE SIZE:	0.750 in	BOTTOM CHOKE SIZE:	0.750 in		
MAIN HOLE SIZE:	7.875 in	TOOL JOINT SIZE:	4.5XH		
PACKER DEPTH:	5111.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	5116.0 ft	SIZE:	6.630 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in		

MUD INFORMATION

DRILLING CON.:	DUKE RIG 7	VISCOSITY:	50.00 cp
MUD TYPE:	CHEMICAL	WATER LOSS:	7.200 cc
WEIGHT:	9.000 ppg	SERIAL NUMBER:	408
CHLORIDES:	5000 ppm	REVERSED OUT?:	NO
JARS-MAKE:	WTC		
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - OFF BOTTOM OF BUCKET IN 30 SECONDS. FINAL FLOW PERIOD FAIR 4 INCH TO STRONG BLOW - OFF BOTTOM OF BUCKET IN 1

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

MINUTE.

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
	Oil	Gas	Water	Mud	
0.0	0.0	0.0	0.0	0.0	1495 FT GAS ABOVE FLUID
185.0	0.0	6.0	59.0	35.0	SL GAS CUT MUDDY WATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 64000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.3065 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.3184 STB	AVERAGE WATER RATE:	13.6824 STB/D
WATER VOLUME:	0.5367 STB		
TOTAL FLUID :	0.8551 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2505.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	39.00	49.00
INITIAL SHUT-IN	60.00		1683.00
FINAL FLOW	60.00	72.00	100.00
FINAL SHUT-IN	90.00		1724.00

FINAL HYDROSTATIC PRESSURE: 2499.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2507.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	57.96	53.13
INITIAL SHUT-IN	60.00		1684.10
FINAL FLOW	60.00	88.87	109.15
FINAL SHUT-IN	90.00		1728.57

FINAL HYDROSTATIC PRESSURE: 2494.00

Company: R J PATRICK OPERATING CO
Well: #1-10 DONALD HERD
Field: TKT 22511 DST 1

[Thursday: Sep. 4, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)

START FLOW 1				
1	0	20:55:14	0.0000	57.96
8	0	20:56: 5	0.0140	57.96
17	0	20:57: 9	0.0320	55.06
26	0	20:58:14	0.0500	51.19
35	0	20:59:19	0.0679	47.33
44	0	21: 0:24	0.0859	46.37
53	0	21: 1:28	0.1039	44.43
62	0	21: 2:33	0.1219	44.43
71	0	21: 3:38	0.1399	43.47
80	0	21: 4:43	0.1579	43.47
89	0	21: 5:47	0.1759	43.47
98	0	21: 6:52	0.1938	43.47
107	0	21: 7:57	0.2118	43.47
116	0	21: 9: 2	0.2298	43.47
125	0	21:10: 6	0.2478	44.43
134	0	21:11:11	0.2658	44.43
143	0	21:12:16	0.2838	45.40
152	0	21:13:21	0.3018	46.37
161	0	21:14:25	0.3197	46.37
170	0	21:15:30	0.3377	47.33
179	0	21:16:35	0.3557	47.33
188	0	21:17:40	0.3737	48.30
197	0	21:18:44	0.3917	49.26
206	0	21:19:49	0.4097	49.26
215	0	21:20:54	0.4276	49.26
224	0	21:21:59	0.4456	50.23
233	0	21:23: 3	0.4636	52.16
242	0	21:24: 8	0.4816	53.13
END FLOW 1				
START SHUTIN 1				
248	0	21:24:51	0.4936	62.79
251	0	21:25:13	0.4996	76.31
260	0	21:26:18	0.5176	141.99
269	0	21:27:22	0.5355	197.05
278	0	21:28:27	0.5535	251.14
287	0	21:29:32	0.5715	317.79
296	0	21:30:37	0.5895	398.93
305	0	21:31:41	0.6075	483.94
314	0	21:32:46	0.6255	577.84
323	0	21:33:51	0.6435	647.51
332	0	21:34:56	0.6614	742.45
341	0	21:36: 0	0.6794	806.03
350	0	21:37: 5	0.6974	897.48
359	0	21:38:10	0.7154	949.74
368	0	21:39:15	0.7334	1021.49
377	0	21:40:19	0.7514	1074.17
386	0	21:41:24	0.7694	1130.24
395	0	21:42:29	0.7873	1180.37
404	0	21:43:34	0.8053	1219.74
413	0	21:44:38	0.8233	1254.92
422	0	21:45:43	0.8413	1287.80
431	0	21:46:48	0.8593	1318.09
440	0	21:47:53	0.8773	1345.85
449	0	21:48:57	0.8952	1371.27

Company: R J PATRICK OPERATING CO
 Well: #1-10 DONALD HERD
 Field: TKT 22511 DST 1

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
458	0	21:50: 2	0.9132	1394.44
467	0	21:51: 7	0.9312	1415.42
476	0	21:52:12	0.9492	1434.43
485	0	21:53:16	0.9672	1451.81
494	0	21:54:21	0.9852	1467.87
503	0	21:55:26	1.0032	1482.89
512	0	21:56:31	1.0211	1497.10
521	0	21:57:35	1.0391	1510.64
530	0	21:58:40	1.0571	1523.54
539	0	21:59:45	1.0751	1535.84
548	0	22: 0:50	1.0931	1547.56
557	0	22: 1:54	1.1111	1558.73
566	0	22: 2:59	1.1291	1569.38
575	0	22: 4: 4	1.1470	1579.54
584	0	22: 5: 9	1.1650	1589.25
593	0	22: 6:13	1.1830	1598.54
602	0	22: 7:18	1.2010	1607.43
611	0	22: 8:23	1.2190	1615.92
620	0	22: 9:27	1.2370	1624.04
629	0	22:10:32	1.2550	1631.77
638	0	22:11:37	1.2729	1639.12
647	0	22:12:42	1.2909	1646.15
656	0	22:13:46	1.3089	1652.89
665	0	22:14:51	1.3269	1659.39
674	0	22:15:56	1.3449	1665.66
683	0	22:17: 1	1.3629	1671.77
692	0	22:18: 5	1.3809	1677.82
701	0	22:19:10	1.3988	1684.10
		END SHUTIN 1		
		START FLOW 2		
709	0	22:22:10	1.4488	88.87
718	0	22:23:15	1.4668	88.87
727	0	22:24:20	1.4848	86.93
736	0	22:25:24	1.5027	85.00
745	0	22:26:29	1.5207	83.07
754	0	22:27:34	1.5387	82.10
763	0	22:28:39	1.5567	82.10
772	0	22:29:43	1.5747	82.10
781	0	22:30:48	1.5927	82.10
790	0	22:31:53	1.6107	83.07
799	0	22:32:58	1.6286	84.04
808	0	22:34: 2	1.6466	84.04
817	0	22:35: 7	1.6646	84.04
826	0	22:36:12	1.6826	85.00
835	0	22:37:16	1.7006	85.97
844	0	22:38:21	1.7186	86.93
853	0	22:39:26	1.7366	86.93
862	0	22:40:31	1.7545	86.93
871	0	22:41:35	1.7725	87.90
880	0	22:42:40	1.7905	88.87
889	0	22:43:45	1.8085	89.83
898	0	22:44:50	1.8265	89.83
907	0	22:45:54	1.8445	91.76
916	0	22:46:59	1.8624	91.76
925	0	22:48: 4	1.8804	91.76

RECEIVED
 TKT 22511
 09/04/97
 11:31

Company: R J PATRICK OPERATING CO
Well: #1-10 DONALD HERD
Field: TKT 22511 DST 1

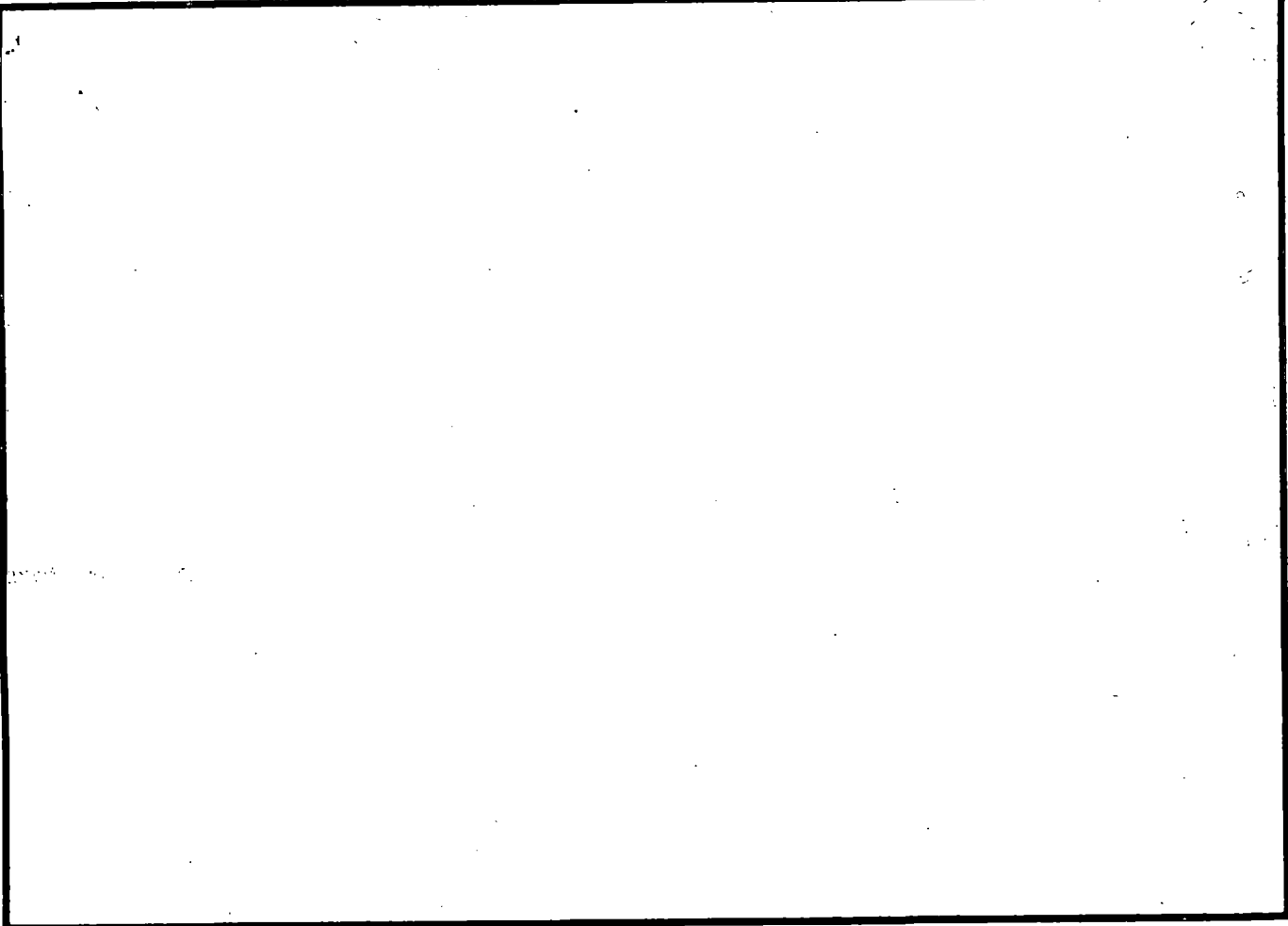
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
934	0	22:49: 9	1.8984	92.73
943	0	22:50:13	1.9164	94.66
952	0	22:51:18	1.9344	94.66
961	0	22:52:23	1.9524	96.59
970	0	22:53:28	1.9704	96.59
979	0	22:54:32	1.9883	97.56
988	0	22:55:37	2.0063	98.53
997	0	22:56:42	2.0243	98.53
1006	0	22:57:47	2.0423	98.53
1015	0	22:58:51	2.0603	98.53
1024	0	22:59:56	2.0783	100.46
1033	0	23: 1: 1	2.0963	101.42
1042	0	23: 2: 6	2.1142	102.39
1051	0	23: 3:10	2.1322	102.39
1060	0	23: 4:15	2.1502	102.39
1069	0	23: 5:20	2.1682	102.39
1078	0	23: 6:25	2.1862	103.36
1087	0	23: 7:29	2.2042	103.36
1096	0	23: 8:34	2.2221	104.32
1105	0	23: 9:39	2.2401	104.32
1114	0	23:10:44	2.2581	105.29
1123	0	23:11:48	2.2761	106.25
1132	0	23:12:53	2.2941	106.25
1141	0	23:13:58	2.3121	106.25
1150	0	23:15: 3	2.3300	106.25
1159	0	23:16: 7	2.3480	106.25
1168	0	23:17:12	2.3660	107.22
1177	0	23:18:17	2.3840	108.19
1186	0	23:19:22	2.4020	109.15
		END FLOW 2		
		START SHUTIN 2		
1191	0	23:19:58	2.4120	141.99
1195	0	23:20:26	2.4200	168.07
1204	0	23:21:31	2.4380	244.38
1213	0	23:22:36	2.4560	309.10
1222	0	23:23:41	2.4739	379.61
1231	0	23:24:45	2.4919	482.00
1240	0	23:25:50	2.5099	555.19
1249	0	23:26:55	2.5279	634.45
1258	0	23:28: 0	2.5459	679.74
1267	0	23:29: 4	2.5639	740.99
1276	0	23:30: 9	2.5819	798.00
1285	0	23:31:14	2.5998	852.59
1294	0	23:32:19	2.6178	906.62
1303	0	23:33:23	2.6358	970.40
1312	0	23:34:28	2.6538	1020.14
1321	0	23:35:33	2.6718	1062.53
1330	0	23:36:37	2.6897	1098.46
1339	0	23:37:42	2.7077	1130.76
1348	0	23:38:47	2.7257	1170.03
1357	0	23:39:52	2.7437	1196.44
1366	0	23:40:56	2.7617	1222.38
1375	0	23:42: 1	2.7797	1247.54
1384	0	23:43: 6	2.7977	1271.74
1393	0	23:44:11	2.8156	1294.70

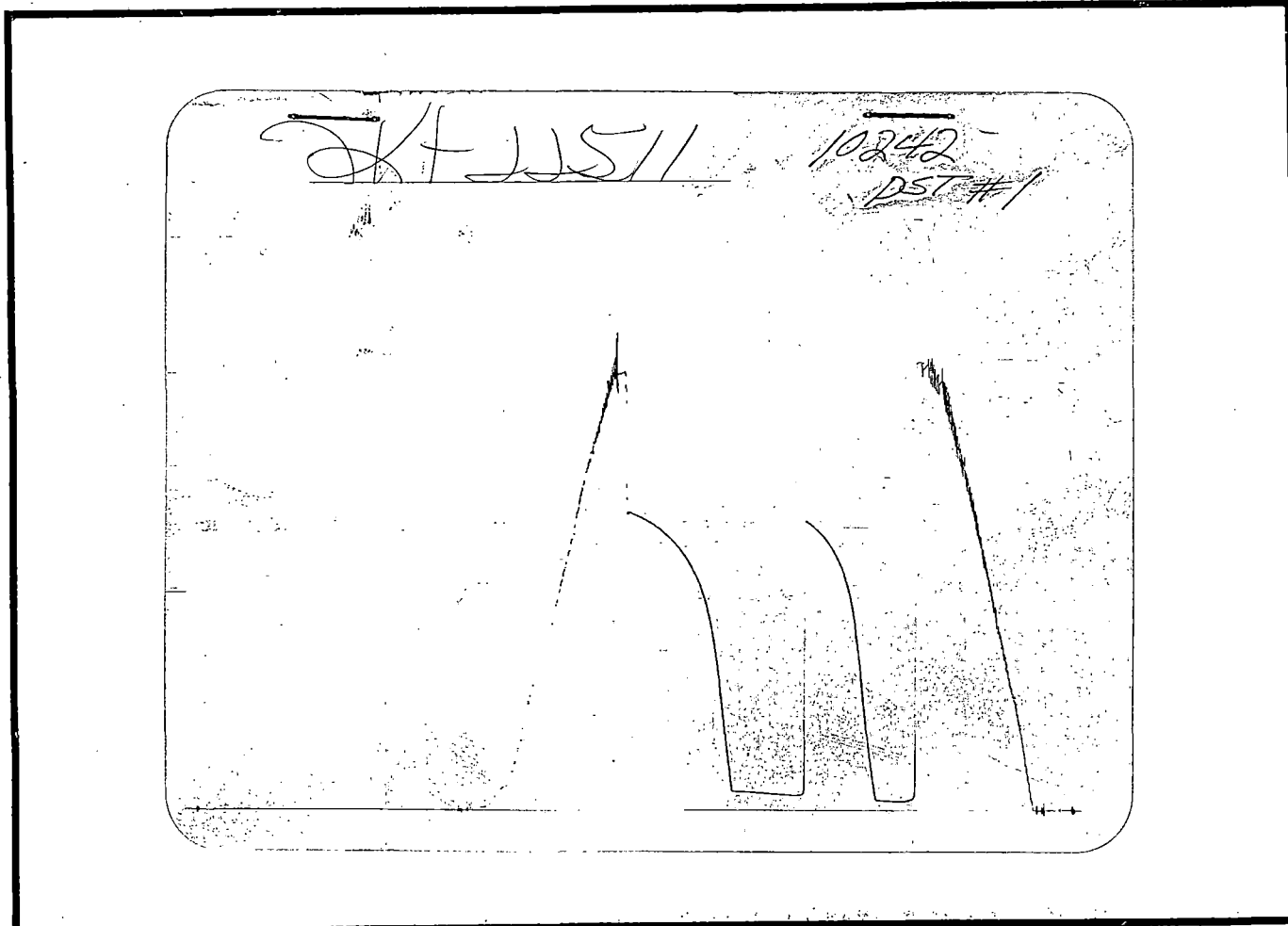
Company: R J PATRICK OPERATING CO
Well: #1-10 DONALD HERD
Field: TKT 22511 DST 1

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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1402	0	23:45:16	2.8336	1316.20
1411	0	23:46:20	2.8516	1336.38
1420	0	23:47:25	2.8696	1355.44
1429	0	23:48:30	2.8876	1373.53
1438	0	23:49:34	2.9056	1390.81
1447	0	23:50:39	2.9236	1407.40
1456	0	23:51:44	2.9416	1423.30
1465	0	23:52:49	2.9595	1438.66
1474	0	23:53:53	2.9775	1451.29
1483	0	23:54:58	2.9955	1462.54
1492	0	23:56: 3	3.0135	1473.53
1501	0	23:57: 8	3.0315	1484.22
1510	0	23:58:12	3.0495	1494.59
1519	0	23:59:17	3.0674	1504.66
[Friday: Sep. 5, 1997]				
1528	1	0: 0:22	3.0854	1514.45
1537	1	0: 1:27	3.1034	1523.94
1546	1	0: 2:31	3.1214	1533.13
1555	1	0: 3:36	3.1394	1542.04
1564	1	0: 4:41	3.1574	1550.67
1573	1	0: 5:46	3.1753	1559.03
1582	1	0: 6:50	3.1933	1567.11
1591	1	0: 7:55	3.2113	1574.92
1600	1	0: 9: 0	3.2293	1582.47
1609	1	0:10: 5	3.2473	1589.77
1618	1	0:11: 9	3.2653	1596.86
1627	1	0:12:14	3.2833	1603.75
1636	1	0:13:19	3.3012	1610.45
1645	1	0:14:24	3.3192	1616.98
1654	1	0:15:28	3.3372	1623.35
1663	1	0:16:33	3.3552	1629.56
1672	1	0:17:38	3.3732	1635.62
1681	1	0:18:43	3.3912	1641.51
1690	1	0:19:47	3.4092	1647.25
1699	1	0:20:52	3.4271	1652.83
1708	1	0:21:57	3.4451	1658.20
1717	1	0:23: 2	3.4631	1663.13
1726	1	0:24: 6	3.4811	1667.98
1735	1	0:25:11	3.4991	1672.74
1744	1	0:26:16	3.5171	1677.42
1753	1	0:27:21	3.5351	1682.03
1762	1	0:28:25	3.5530	1686.56
1771	1	0:29:30	3.5710	1691.00
1780	1	0:30:35	3.5890	1695.35
1789	1	0:31:40	3.6070	1699.55
1798	1	0:32:44	3.6250	1703.59
1807	1	0:33:49	3.6430	1707.47
1816	1	0:34:54	3.6609	1711.21
1825	1	0:35:59	3.6789	1714.86
1834	1	0:37: 3	3.6969	1718.65
1843	1	0:38: 8	3.7149	1721.90
1852	1	0:39:13	3.7329	1725.22
1861	1	0:40:18	3.7509	1728.57



Inside Recorder



Outside Recorder

RECEIVED
KANSAS CORP. (0011)
1977 SEP 23 A.M. 31

DST REPORT

GENERAL INFORMATION

DATE : 9/5/97
CUSTOMER : R J PATRICK OPERATING CO
WELL : #1-10 TEST: 2
ELEVATION: 2014 KB
SECTION : 10
RANGE : 19W COUNTY: COMANCHE
GAUGE SN#: 3017 RANGE : 5000
TICKET : 22512
LEASE : DONALD HERD
GEOLOGIST: POSEY
FORMATION: MISSISSIPPI
TOWNSHIP : 33S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 5229.00 ft TO: 5331.00 ft TVD: 5331.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 5231.0 ft 5256.0 ft
TEMPERATURE: 131.0

DRILL COLLAR LENGTH: 244.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 4957.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 28.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 102.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 5224.0 ft SIZE: 6.630 in
PACKER DEPTH: 5229.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 7
MUD TYPE : CHEMICAL
WEIGHT : 9.100 ppg
CHLORIDES : 6000 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO
VISCOSITY : 50.00 cp
WATER LOSS: 10.400 cc
SERIAL NUMBER: 408
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - OFF BOTTOM OF
BUCKET IN 30 SECONDS. GAS TO SURFACE IN 6 MINUTES
SEE FLOW CHART

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
100.0	0.0	4.0	0.0	96.0	SLIGHTLY GAS CUT MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.1104 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.4721 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.4721 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2512.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	120.00	112.00
INITIAL SHUT-IN	60.00		1635.00
FINAL FLOW	60.00	87.00	77.00
FINAL SHUT-IN	90.00		1753.00

FINAL HYDROSTATIC PRESSURE: 2500.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2512.60

Description	Duration	p1	p End
INITIAL FLOW	30.00	120.50	112.20
INITIAL SHUT-IN	60.00		1636.00
FINAL FLOW	60.00	87.80	77.40
FINAL SHUT-IN	90.00		1753.80

FINAL HYDROSTATIC PRESSURE: 2500.40

GAS FLOW REPORT

GENERAL INFORMATION

DATE : 9/5/97	TICKET : 22512
CUSTOMER : R J PATRICK OPERATING CO	LEASE : DONALD HERD
WELL : #1-10 TEST: 2	GEOLOGIST: POSEY
ELEVATION: 2014 KB	FORMATION: MISSISSIPPI
SECTION : 10	TOWNSHIP : 33S
RANGE : 19W COUNTY: COMANCHE	STATE : KS
GAUGE SN#: 3017 RANGE : 5000	CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.500	3 PSIG	59200 SCF/D
20 MIN	MERLA	0.500	3 PSIG	59200 SCF/D
30 MIN	MERLA	0.500	3 PSIG	59200 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
5 MIN	MERLA	0.500	8 PSIG	101000 SCF/D
10 MIN	MERLA	0.500	6 PSIG	86300 SCF/D
20 MIN	MERLA	0.500	5 PSIG	78100 SCF/D
30 MIN	MERLA	0.500	4 PSIG	68800 SCF/D
40 MIN	MERLA	0.500	4 PSIG	68800 SCF/D
50 MIN	MERLA	0.500	3 PSIG	59200 SCF/D
60 MIN	MERLA	0.500	3 PSIG	59200 SCF/D

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97 TIME: 21:32:21

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
***** Initial Hydro.	116.50	2512.6	0.0	113.63		
***** Start Flow 1	0.00	120.5	0.0	116.86		
	0.50	119.6	-0.8	117.06		
	1.00	116.0	-4.5	117.24		
	1.50	116.1	-4.4	117.41		
	2.00	112.9	-7.6	117.56		
	2.50	112.2	-8.3	117.71		
	3.00	111.3	-9.1	117.84		
	3.50	111.5	-9.0	117.97		
	4.00	110.8	-9.6	118.07		
	4.50	110.8	-9.6	118.18		
	5.00	109.8	-10.7	118.27		
	5.50	109.5	-11.0	118.36		
	6.00	109.4	-11.0	118.44		
	6.50	109.6	-10.8	118.52		
	7.00	109.7	-10.7	118.60		
	7.50	110.0	-10.5	118.67		
	8.00	110.2	-10.3	118.67		
	8.50	110.3	-10.2	118.70		
	9.00	110.4	-10.0	118.78		
	9.50	110.5	-10	118.83		
	10.00	110.6	-9.9	118.87		
	10.50	110.8	-9.7	118.92		
	11.00	111.0	-9.5	118.97		
	11.50	111.1	-9.3	119.00		
	12.00	111.3	-9.2	119.04		
	12.50	111.4	-9.0	119.06		
	13.00	111.5	-8.9	119.11		
	13.50	111.6	-8.9	119.14		
	14.00	111.7	-8.8	119.17		
	14.50	111.7	-8.8	119.21		
	15.00	111.8	-8.7	119.24		
	15.50	111.8	-8.7	119.27		
	16.00	111.8	-8.6	119.30		
	16.50	111.9	-8.6	119.33		
	17.00	111.9	-8.6	119.35		
	17.50	111.9	-8.5	119.38		
	18.00	111.9	-8.5	119.41		
	18.50	112.0	-8.5	119.44		
	19.00	112.0	-8.5	119.46		
	19.50	112.0	-8.5	119.49		
	20.00	112.0	-8.5	119.51		
	20.50	112.1	-8.4	119.54		
	21.00	112.1	-8.4	119.56		
	21.50	112.1	-8.4	119.59		
	22.00	112.1	-8.3	119.61		
	22.50	112.2	-8.3	119.63		
***** End Flow 1	23.00	112.2	-8.3	119.66		
***** Start Shutin 1	0.00	112.2	0.0	119.66	0.0000	0.013
	0.50	125.7	13.5	119.68	47.0000	0.016
	1.00	188.4	76.2	119.70	24.0000	0.035

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97

TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
1.50	244.6	132.5	119.75	16.3333	0.060
2.00	295.1	182.9	119.85	12.5000	0.087
2.50	340.3	228.1	120.00	10.2000	0.116
3.00	376.8	264.7	120.21	8.6667	0.142
3.50	421.1	308.9	120.46	7.5714	0.177
4.00	457.8	345.7	120.73	6.7500	0.210
4.50	493.1	380.9	121.02	6.1111	0.243
5.00	525.3	413.1	121.31	5.6000	0.276
5.50	556.1	443.9	121.59	5.1818	0.309
6.00	584.3	472.1	121.87	4.8333	0.341
6.50	610.5	498.3	122.15	4.5385	0.373
7.00	634.6	522.4	122.46	4.2857	0.403
7.50	657.6	545.5	122.76	4.0667	0.432
8.00	680.5	568.3	123.07	3.8750	0.463
8.50	703.3	591.1	123.37	3.7059	0.495
9.00	724.5	612.3	123.66	3.5556	0.525
9.50	744.5	632.3	123.97	3.4211	0.554
10.00	765.4	653.2	124.27	3.3000	0.586
10.50	785.7	673.6	124.56	3.1905	0.617
11.00	805.7	693.5	124.84	3.0909	0.649
11.50	824.9	712.8	125.06	3.0000	0.681
12.00	843.9	731.7	125.36	2.9167	0.712
12.50	862.4	750.2	125.63	2.8400	0.744
13.00	880.6	768.4	125.89	2.7692	0.775
13.50	898.5	786.3	126.13	2.7037	0.807
14.00	916.0	803.8	126.37	2.6429	0.839
14.50	933.1	821.0	126.60	2.5862	0.871
15.00	950.1	837.9	126.81	2.5333	0.903
15.50	966.5	854.4	127.04	2.4839	0.934
16.00	982.6	870.4	127.23	2.4375	0.966
16.50	998.4	886.3	127.43	2.3939	0.997
17.00	1013.9	901.7	127.62	2.3529	1.028
17.50	1029.0	916.9	127.79	2.3143	1.059
18.00	1043.8	931.6	127.97	2.2778	1.089
18.50	1058.2	946.0	128.14	2.2432	1.120
19.00	1072.4	960.2	128.30	2.2105	1.150
19.50	1086.2	974.0	128.45	2.1795	1.180
20.00	1099.7	987.5	128.60	2.1500	1.209
20.50	1112.9	1000.7	128.74	2.1220	1.239
21.00	1125.9	1013.7	128.88	2.0952	1.268
21.50	1138.5	1026.3	129.01	2.0698	1.296
22.00	1150.9	1038.7	129.13	2.0455	1.325
22.50	1163.1	1050.9	129.25	2.0222	1.353
23.00	1174.8	1062.6	129.35	2.0000	1.380
23.50	1186.5	1074.3	129.46	1.9787	1.408
24.00	1197.9	1085.7	129.55	1.9583	1.435
24.50	1209.1	1096.9	129.65	1.9388	1.462
25.00	1219.9	1107.7	129.74	1.9200	1.488
25.50	1230.6	1118.4	129.83	1.9020	1.514
26.00	1241.0	1128.9	129.90	1.8846	1.540
26.50	1251.3	1139.1	129.97	1.8679	1.566

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512
 DATE: 09/05/97 TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
27.00	1261.4	1149.2	130.05	1.8519	1.591
27.50	1271.3	1159.1	130.12	1.8364	1.616
28.00	1281.0	1168.8	130.18	1.8214	1.641
28.50	1290.4	1178.3	130.24	1.8070	1.665
29.00	1299.7	1187.6	130.29	1.7931	1.689
29.50	1308.9	1196.7	130.33	1.7797	1.713
30.00	1317.8	1205.7	130.38	1.7667	1.737
30.50	1326.6	1214.4	130.43	1.7541	1.760
31.00	1335.2	1223.0	130.46	1.7419	1.783
31.50	1343.6	1231.4	130.50	1.7302	1.805
32.00	1351.8	1239.6	130.54	1.7188	1.827
32.50	1359.9	1247.7	130.57	1.7077	1.849
33.00	1367.9	1255.7	130.60	1.6970	1.871
33.50	1375.7	1263.5	130.63	1.6866	1.893
34.00	1383.3	1271.1	130.64	1.6765	1.914
34.50	1390.7	1278.5	130.67	1.6667	1.934
35.00	1398.1	1285.9	130.68	1.6571	1.955
35.50	1405.2	1293.1	130.70	1.6479	1.975
36.00	1412.2	1300.1	130.71	1.6389	1.994
36.50	1419.3	1307.1	130.72	1.6301	2.014
37.00	1426.1	1313.9	130.73	1.6216	2.034
37.50	1432.8	1320.6	130.73	1.6133	2.053
38.00	1439.3	1327.1	130.74	1.6053	2.072
38.50	1445.7	1333.6	130.74	1.5974	2.090
39.00	1452.0	1339.8	130.74	1.5897	2.108
39.50	1458.2	1346.1	130.73	1.5823	2.126
40.00	1464.3	1352.1	130.73	1.5750	2.144
40.50	1470.2	1358.0	130.74	1.5679	2.161
41.00	1476.0	1363.8	130.72	1.5610	2.178
41.50	1481.5	1369.3	130.72	1.5542	2.195
42.00	1487.1	1375.0	130.70	1.5476	2.212
42.50	1492.6	1380.4	130.70	1.5412	2.228
43.00	1498.1	1385.9	130.68	1.5349	2.244
43.50	1503.4	1391.2	130.67	1.5287	2.260
44.00	1508.6	1396.4	130.66	1.5227	2.276
44.50	1513.7	1401.5	130.63	1.5169	2.291
45.00	1518.7	1406.5	130.62	1.5111	2.306
45.50	1523.7	1411.5	130.59	1.5055	2.322
46.00	1528.4	1416.3	130.59	1.5000	2.336
46.50	1533.1	1421.0	130.57	1.4946	2.351
47.00	1537.8	1425.6	130.54	1.4894	2.365
47.50	1542.2	1430.0	130.52	1.4842	2.378
48.00	1546.7	1434.6	130.51	1.4792	2.392
48.50	1551.1	1439.0	130.48	1.4742	2.406
49.00	1555.5	1443.3	130.46	1.4694	2.420
49.50	1559.7	1447.5	130.43	1.4646	2.433
50.00	1563.9	1451.7	130.41	1.4600	2.446
50.50	1568.0	1455.8	130.38	1.4554	2.459
51.00	1572.0	1459.8	130.35	1.4510	2.471
51.50	1575.9	1463.8	130.32	1.4466	2.484
52.00	1579.8	1467.6	130.30	1.4423	2.496

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512
 DATE: 09/05/97 TIME: 21:32:21

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	52.50	1583.6	1471.4	130.27	1.4381	2.508
	53.00	1587.3	1475.1	130.24	1.4340	2.520
	53.50	1590.9	1478.8	130.21	1.4299	2.531
	54.00	1594.5	1482.4	130.18	1.4259	2.543
	54.50	1598.1	1485.9	130.16	1.4220	2.554
	55.00	1601.5	1489.3	130.14	1.4182	2.565
	55.50	1604.9	1492.7	130.10	1.4144	2.576
	56.00	1608.3	1496.1	130.07	1.4107	2.587
	56.50	1611.6	1499.4	130.04	1.4071	2.597
	57.00	1614.6	1502.5	130.01	1.4035	2.607
	57.50	1617.9	1505.7	129.97	1.4000	2.617
	58.00	1621.0	1508.9	129.93	1.3966	2.628
	58.50	1624.1	1512.0	129.89	1.3932	2.638
	59.00	1627.2	1515.0	129.85	1.3898	2.648
	59.50	1630.2	1518.0	129.83	1.3866	2.657
	60.00	1633.1	1520.9	129.79	1.3833	2.667
***** End Shut-in 1	60.50	1636.0	1523.8	129.76	1.3802	2.676
***** Start Flow 2	0.00	87.8	0.0	124.02		
	0.50	85.1	-2.7	123.66		
	1.00	83.3	-4.5	123.35		
	1.50	83.4	-4.4	123.09		
	2.00	83.0	-4.9	122.87		
	2.50	83.1	-4.7	122.68		
	3.00	83.2	-4.6	122.53		
	3.50	83.0	-4.8	122.39		
	4.00	83.0	-4.8	122.29		
	4.50	82.9	-5.0	122.19		
	5.00	82.5	-5.3	122.12		
	5.50	82.0	-5.8	122.06		
	6.00	82.1	-5.7	122.01		
	6.50	82.2	-5.7	121.97		
	7.00	82.2	-5.6	121.93		
	7.50	82.2	-5.6	121.91		
	8.00	81.8	-6.0	121.89		
	8.50	81.6	-6.3	121.86		
	9.00	81.5	-6.3	121.86		
	9.50	81.4	-6.4	121.85		
	10.00	81.4	-6.4	121.85		
	10.50	81.2	-6.6	121.85		
	11.00	80.8	-7.0	121.85		
	11.50	80.7	-7.1	121.85		
	12.00	80.5	-7.3	121.85		
	12.50	80.4	-7.5	121.86		
	13.00	80.3	-7.5	121.86		
	13.50	80.4	-7.4	121.87		
	14.00	80.4	-7.4	121.87		
	14.50	80.5	-7.3	121.88		
	15.00	80.5	-7.3	121.90		
	15.50	80.6	-7.3	121.91		
	16.00	80.6	-7.3	121.91		
	16.50	80.6	-7.2	121.93		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97

TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
17.00	80.6	-7.2	121.94		
17.50	80.6	-7.2	121.94		
18.00	80.6	-7.2	121.95		
18.50	80.4	-7.5	121.97		
19.00	80.2	-7.6	121.98		
19.50	80.0	-7.8	121.99		
20.00	79.8	-8.0	122.00		
20.50	79.6	-8.2	122.01		
21.00	79.5	-8.4	122.02		
21.50	79.4	-8.5	122.03		
22.00	79.2	-8.6	122.04		
22.50	79.1	-8.7	122.05		
23.00	79.0	-8.8	122.06		
23.50	78.9	-8.9	122.06		
24.00	78.8	-9.0	122.07		
24.50	78.7	-9.1	122.08		
25.00	78.6	-9.2	122.09		
25.50	78.5	-9.3	122.10		
26.00	78.4	-9.4	122.11		
26.50	78.4	-9.4	122.10		
27.00	78.3	-9.5	122.12		
27.50	78.2	-9.6	122.13		
28.00	78.2	-9.6	122.13		
28.50	78.2	-9.6	122.15		
29.00	78.1	-9.7	122.15		
29.50	78.0	-9.8	122.16		
30.00	77.9	-9.9	122.17		
30.50	77.9	-9.9	122.17		
31.00	77.9	-9.9	122.18		
31.50	77.9	-9.9	122.19		
32.00	77.9	-9.9	122.19		
32.50	77.8	-10	122.20		
33.00	77.8	-10.0	122.20		
33.50	77.7	-10.1	122.21		
34.00	77.7	-10.1	122.22		
34.50	77.7	-10.1	122.23		
35.00	77.7	-10.2	122.23		
35.50	77.6	-10.2	122.23		
36.00	77.6	-10.2	122.24		
36.50	77.6	-10.2	122.25		
37.00	77.6	-10.2	122.26		
37.50	77.6	-10.2	122.26		
38.00	77.5	-10.3	122.27		
38.50	77.5	-10.3	122.28		
39.00	77.5	-10.3	122.28		
39.50	77.5	-10.3	122.28		
40.00	77.5	-10.3	122.30		
40.50	77.5	-10.3	122.31		
41.00	77.5	-10.3	122.31		
41.50	77.5	-10.3	122.31		
42.00	77.5	-10.3	122.32		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512
 DATE: 09/05/97 TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
42.50	77.5	-10.3	122.33		
43.00	77.5	-10.3	122.33		
43.50	77.5	-10.3	122.34		
44.00	77.4	-10.4	122.35		
44.50	77.4	-10.4	122.36		
45.00	77.4	-10.4	122.35		
45.50	77.4	-10.4	122.37		
46.00	77.4	-10.4	122.37		
46.50	77.4	-10.4	122.38		
47.00	77.4	-10.4	122.38		
47.50	77.4	-10.4	122.38		
48.00	77.4	-10.4	122.40		
48.50	77.4	-10.4	122.40		
49.00	77.4	-10.4	122.41		
49.50	77.4	-10.5	122.41		
50.00	77.4	-10.5	122.41		
50.50	77.4	-10.5	122.42		
51.00	77.4	-10.4	122.42		
51.50	77.4	-10.4	122.43		
52.00	77.3	-10.5	122.43		
52.50	77.4	-10.5	122.43		
53.00	77.4	-10.5	122.44		
53.50	77.4	-10.4	122.46		
54.00	77.4	-10.4	122.46		
54.50	77.4	-10.4	122.46		
55.00	77.3	-10.5	122.47		
55.50	77.4	-10.5	122.47		
***** End Flow 2					
***** Start Shutin 2					
0.00	77.4	0.0	122.47	0.0000	0.006
0.50	126.1	48.7	122.47	158.0000	0.016
1.00	173.9	96.6	122.49	79.5000	0.030
1.50	218.7	141.4	122.57	53.3333	0.048
2.00	260.6	183.2	122.69	40.2500	0.068
2.50	299.0	221.7	122.87	32.4000	0.089
3.00	335.3	258.0	123.09	27.1667	0.112
3.50	369.4	292.0	123.36	23.4286	0.136
4.00	402.0	324.7	123.67	20.6250	0.162
4.50	433.8	356.4	123.99	18.4444	0.188
5.00	464.6	387.2	124.35	16.7000	0.216
5.50	494.7	417.3	124.69	15.2727	0.245
6.00	524.0	446.6	125.02	14.0833	0.275
6.50	552.4	475.0	125.40	13.0769	0.305
7.00	580.0	502.6	125.76	12.2143	0.336
7.50	606.5	529.1	126.12	11.4667	0.368
8.00	631.9	554.6	126.47	10.8125	0.399
8.50	656.4	579.1	126.82	10.2353	0.431
9.00	680.0	602.7	127.13	9.7222	0.462
9.50	703.5	626.1	127.47	9.2632	0.495
10.00	726.4	649.1	127.80	8.8500	0.528
10.50	749.2	671.8	128.12	8.4762	0.561
11.00	771.5	694.2	128.42	8.1364	0.595
11.50	793.6	716.2	128.72	7.8261	0.630

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97

TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
12.00	815.0	737.7	129.02	7.5417	0.664
12.50	836.1	758.8	129.28	7.2800	0.699
13.00	856.7	779.4	129.56	7.0385	0.734
13.50	876.9	799.6	129.82	6.8148	0.769
14.00	896.7	819.4	130.06	6.6071	0.804
14.50	916.2	838.8	130.29	6.4138	0.839
15.00	935.2	857.8	130.54	6.2333	0.875
15.50	953.8	876.5	130.76	6.0645	0.910
16.00	972.1	894.8	130.99	5.9062	0.945
16.50	990.0	912.6	131.32	5.7576	0.980
17.00	1007.4	930.1	131.33	5.6176	1.015
17.50	1024.6	947.2	131.54	5.4857	1.050
18.00	1041.4	964.0	131.73	5.3611	1.084
18.50	1057.8	980.4	131.90	5.2432	1.119
19.00	1073.8	996.5	132.05	5.1316	1.153
19.50	1089.5	1012.2	132.21	5.0256	1.187
20.00	1104.7	1027.3	132.36	4.9250	1.220
20.50	1119.8	1042.4	132.50	4.8293	1.254
21.00	1134.4	1057.0	132.62	4.7381	1.287
21.50	1148.7	1071.4	132.74	4.6512	1.320
22.00	1162.7	1085.3	132.86	4.5682	1.352
22.50	1176.3	1098.9	132.97	4.4889	1.384
23.00	1189.6	1112.3	133.06	4.4130	1.415
23.50	1202.6	1125.3	133.15	4.3404	1.446
24.00	1215.3	1137.9	133.24	4.2708	1.477
24.50	1227.7	1150.4	133.33	4.2041	1.507
25.00	1239.8	1162.5	133.39	4.1400	1.537
25.50	1251.6	1174.3	133.46	4.0784	1.567
26.00	1263.2	1185.9	133.52	4.0192	1.596
26.50	1274.6	1197.2	133.58	3.9623	1.625
27.00	1285.6	1208.2	133.63	3.9074	1.653
27.50	1296.3	1219.0	133.68	3.8545	1.681
28.00	1306.9	1229.6	133.72	3.8036	1.708
28.50	1317.2	1239.8	133.76	3.7544	1.735
29.00	1327.2	1249.9	133.80	3.7069	1.762
29.50	1337.1	1259.7	133.82	3.6610	1.788
30.00	1346.6	1269.3	133.85	3.6167	1.813
30.50	1356.1	1278.7	133.88	3.5738	1.839
31.00	1365.3	1287.9	133.90	3.5323	1.864
31.50	1374.3	1296.9	133.91	3.4921	1.889
32.00	1383.0	1305.7	133.93	3.4531	1.913
32.50	1391.6	1314.2	133.94	3.4154	1.937
33.00	1400.0	1322.6	133.95	3.3788	1.960
33.50	1408.1	1330.8	133.96	3.3433	1.983
34.00	1416.2	1338.8	133.96	3.3088	2.006
34.50	1424.0	1346.6	133.96	3.2754	2.028
35.00	1431.7	1354.3	133.97	3.2429	2.050
35.50	1439.1	1361.7	133.97	3.2113	2.071
36.00	1446.4	1369.0	133.96	3.1806	2.092
36.50	1453.5	1376.2	133.96	3.1507	2.113
37.00	1460.5	1383.1	133.94	3.1216	2.133

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97 TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
37.50	1467.3	1389.9	133.94	3.0933	2.153
38.00	1473.9	1396.5	133.93	3.0658	2.172
38.50	1480.4	1403.0	133.91	3.0390	2.192
39.00	1486.8	1409.5	133.93	3.0128	2.211
39.50	1493.0	1415.6	133.88	2.9873	2.229
40.00	1499.1	1421.7	133.86	2.9625	2.247
40.50	1505.0	1427.6	133.85	2.9383	2.265
41.00	1510.8	1433.5	133.83	2.9146	2.283
41.50	1516.5	1439.1	133.81	2.8916	2.300
42.00	1522.1	1444.7	133.79	2.8690	2.317
42.50	1527.5	1450.2	133.77	2.8471	2.333
43.00	1532.8	1455.5	133.74	2.8256	2.350
43.50	1538.0	1460.6	133.71	2.8046	2.365
44.00	1543.2	1465.9	133.69	2.7841	2.382
44.50	1548.2	1470.9	133.67	2.7640	2.397
45.00	1553.1	1475.7	133.64	2.7444	2.412
45.50	1557.9	1480.5	133.61	2.7253	2.427
46.00	1562.5	1485.2	133.58	2.7065	2.442
46.50	1567.2	1489.9	133.56	2.6882	2.456
47.00	1571.7	1494.4	133.53	2.6702	2.470
47.50	1576.1	1498.8	133.49	2.6526	2.484
48.00	1580.4	1503.0	133.46	2.6354	2.498
48.50	1584.6	1507.2	133.44	2.6186	2.511
49.00	1588.7	1511.3	133.40	2.6020	2.524
49.50	1592.7	1515.3	133.37	2.5859	2.537
50.00	1596.6	1519.2	133.33	2.5700	2.549
50.50	1600.4	1523.0	133.31	2.5545	2.561
51.00	1604.2	1526.8	133.28	2.5392	2.573
51.50	1607.9	1530.5	133.24	2.5243	2.585
52.00	1611.5	1534.1	133.21	2.5096	2.597
52.50	1615.0	1537.6	133.17	2.4952	2.608
53.00	1618.5	1541.1	133.13	2.4811	2.619
53.50	1621.9	1544.5	133.09	2.4673	2.630
54.00	1625.1	1547.8	133.05	2.4537	2.641
54.50	1628.4	1551.0	133.02	2.4404	2.652
55.00	1631.6	1554.2	132.98	2.4273	2.662
55.50	1634.7	1557.3	132.95	2.4144	2.672
56.00	1637.7	1560.3	132.91	2.4018	2.682
56.50	1640.7	1563.3	132.88	2.3894	2.692
57.00	1643.6	1566.2	132.83	2.3772	2.701
57.50	1646.5	1569.1	132.79	2.3652	2.711
58.00	1649.3	1571.9	132.77	2.3534	2.720
58.50	1652.0	1574.7	132.73	2.3419	2.729
59.00	1654.8	1577.4	132.69	2.3305	2.738
59.50	1657.4	1580.0	132.66	2.3193	2.747
60.00	1660.0	1582.6	132.62	2.3083	2.756
60.50	1662.6	1585.2	132.57	2.2975	2.764
61.00	1665.0	1587.7	132.54	2.2869	2.772
61.50	1667.5	1590.1	132.50	2.2764	2.780
62.00	1669.9	1592.5	132.46	2.2661	2.789
62.50	1672.2	1594.9	132.44	2.2560	2.796

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97

TIME: 21:32:21

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
63.00	1674.6	1597.2	132.40	2.2460	2.804
63.50	1676.8	1599.4	132.37	2.2362	2.812
64.00	1679.1	1601.7	132.33	2.2266	2.819
64.50	1681.3	1603.9	132.29	2.2171	2.827
65.00	1683.4	1606.1	132.26	2.2077	2.834
65.50	1685.5	1608.2	132.22	2.1985	2.841
66.00	1687.6	1610.2	132.19	2.1894	2.848
66.50	1689.6	1612.2	132.15	2.1805	2.855
67.00	1691.6	1614.2	132.11	2.1716	2.862
67.50	1693.6	1616.2	132.08	2.1630	2.868
68.00	1695.5	1618.1	132.04	2.1544	2.875
68.50	1697.4	1620.1	132.02	2.1460	2.881
69.00	1699.3	1621.9	131.98	2.1377	2.888
69.50	1701.1	1623.7	131.94	2.1295	2.894
70.00	1702.9	1625.5	131.91	2.1214	2.900
70.50	1704.7	1627.3	131.88	2.1135	2.906
71.00	1706.4	1629.0	131.84	2.1056	2.912
71.50	1708.1	1630.7	131.81	2.0979	2.918
72.00	1709.8	1632.4	131.78	2.0903	2.923
72.50	1711.4	1634.1	131.75	2.0828	2.929
73.00	1713.0	1635.7	131.72	2.0753	2.935
73.50	1714.7	1637.3	131.70	2.0680	2.940
74.00	1716.2	1638.8	131.66	2.0608	2.945
74.50	1717.7	1640.3	131.62	2.0537	2.950
75.00	1719.2	1641.9	131.58	2.0467	2.956
75.50	1720.7	1643.3	131.55	2.0397	2.961
76.00	1722.2	1644.8	131.53	2.0329	2.966
76.50	1723.6	1646.2	131.50	2.0261	2.971
77.00	1725.0	1647.6	131.45	2.0195	2.976
77.50	1726.4	1649.0	131.42	2.0129	2.980
78.00	1727.7	1650.4	131.38	2.0064	2.985
78.50	1729.1	1651.7	131.33	2.0000	2.990
79.00	1730.4	1653.0	131.32	1.9937	2.994
79.50	1731.7	1654.4	131.32	1.9874	2.999
80.00	1733.0	1655.6	131.32	1.9812	3.003
80.50	1734.2	1656.9	131.32	1.9752	3.008
81.00	1735.5	1658.1	131.32	1.9691	3.012
81.50	1736.7	1659.3	131.32	1.9632	3.016
82.00	1737.8	1660.5	131.32	1.9573	3.020
82.50	1739.0	1661.7	131.30	1.9515	3.024
83.00	1740.2	1662.8	131.30	1.9458	3.028
83.50	1741.3	1664.0	131.18	1.9401	3.032
84.00	1742.4	1665.0	131.11	1.9345	3.036
84.50	1743.5	1666.1	131.09	1.9290	3.040
85.00	1744.6	1667.3	131.05	1.9235	3.044
85.50	1745.7	1668.4	131.01	1.9181	3.048
86.00	1746.8	1669.5	130.99	1.9128	3.051
86.50	1747.8	1670.5	130.96	1.9075	3.055
87.00	1748.9	1671.5	130.93	1.9023	3.059
87.50	1749.9	1672.5	130.91	1.8971	3.062
88.00	1750.9	1673.5	130.87	1.8920	3.066

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

DATE: 09/05/97

TIME: 21:32:21

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
	88.50	1751.9	1674.5	130.85	1.8870	3.069
	89.00	1752.8	1675.5	130.83	1.8820	3.072
***** End Shut-in 2	89.50	1753.8	1676.4	130.80	1.8771	3.076
***** Final Hydro.	366.50	2500.4	0.0	127.34		

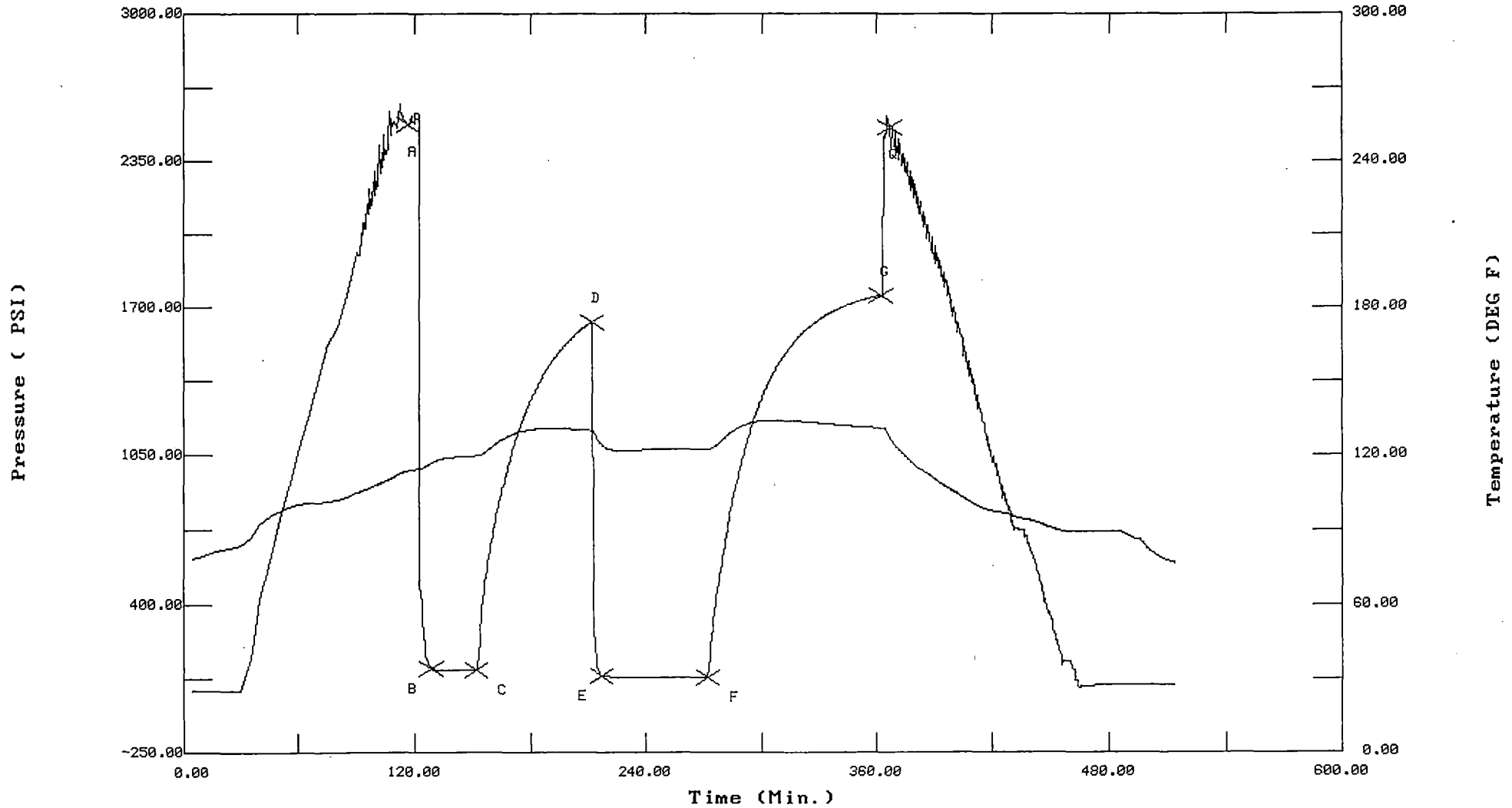
RECEIVED
KANSAS CORP. DATA
1997 SEP 23 A. 11:32

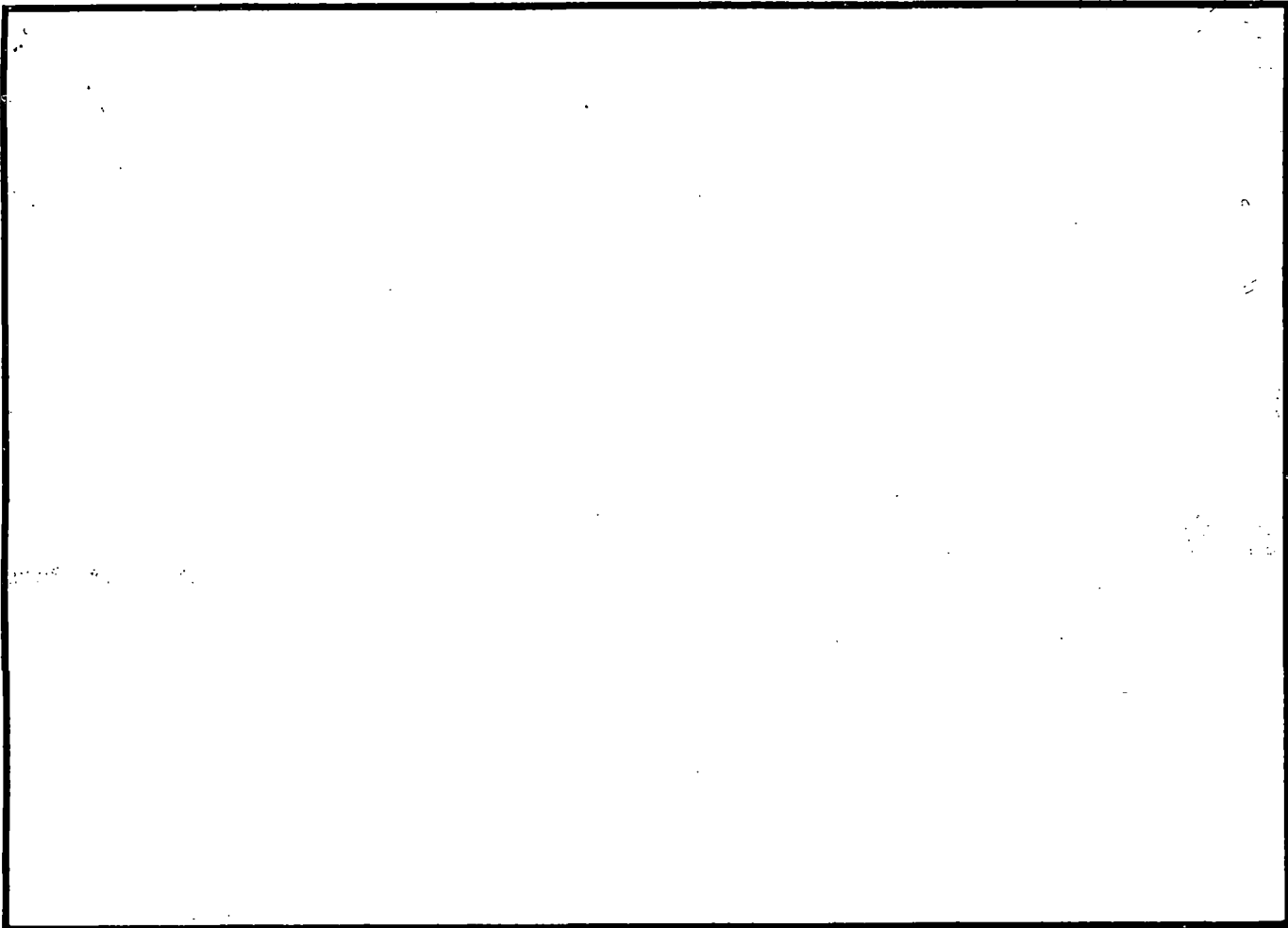
TEST HISTORY

R. J. PATRICK DST #2 9-5-97 DONALD HERD #1-10 TKT 22512

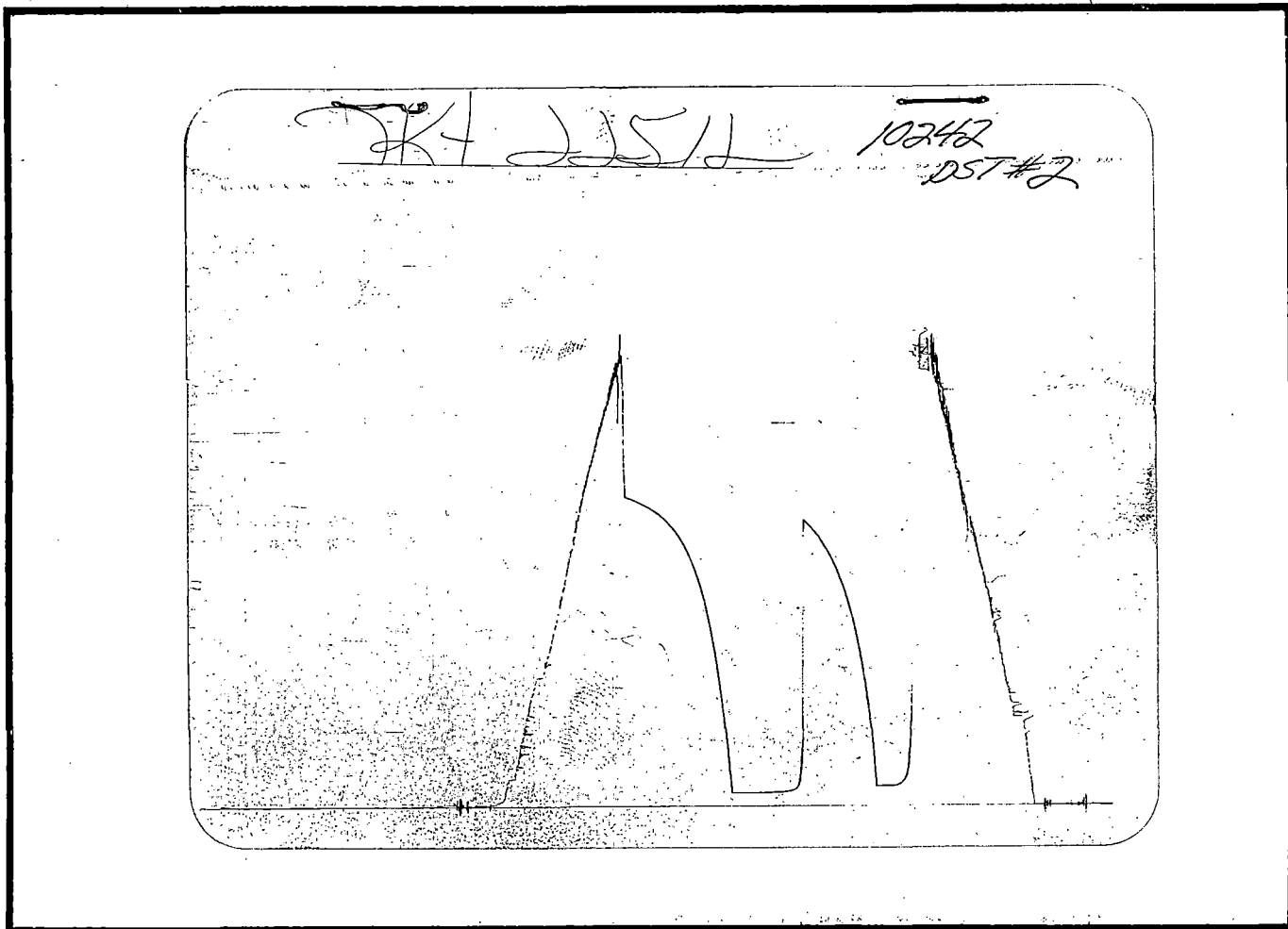
Flag Points

	t (Min.)	P (PSI)
A:	0.00	2512.64
B:	0.00	120.46
C:	23.00	112.17
D:	60.50	1635.98
E:	0.00	87.82
F:	55.50	77.37
G:	89.50	1753.81
Q:	0.00	2500.38





Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 9/8/97
CUSTOMER : R J PATRICK OPERATING CO
WELL : #1-10 TEST: 3
ELEVATION: 2014 KB
SECTION : 10
RANGE : 19W COUNTY: COMANCHE
GAUGE SN#: 3017 RANGE : 5000
TICKET : 22513
LEASE : DONALD HERD
GEOLOGIST: POSEY
FORMATION: VIOLA
TOWNSHIP : 33S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 5890.00 ft TO: 6010.00 ft TVD: 6010.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 5892.0 ft 5908.0 ft
TEMPERATURE: 127.0
DRILL COLLAR LENGTH: 244.0 ft I.D.: 2.250 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 5618.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 28.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 120.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 5885.0 ft SIZE: 6.630 in
PACKER DEPTH: 5890.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 7
MUD TYPE : CHEMICAL
WEIGHT : 9.000 ppg
CHLORIDES : 6500 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO
VISCOSITY : 53.00 cp
WATER LOSS: 7.800 cc
SERIAL NUMBER: 408
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD SURFACE BLOW - DIED IN 19
MINUTES. FINAL FLOW PERIOD SURFACE BLOW - DIED IN
4 MINUTES. HAD PLUGGING ON INITIAL FLOW AND

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

SLIGHT PLUGGING ON FINAL FLOW PERIOD.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
30.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	60.0000 min.
GAS VOLUME:	0.0000 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.1475 STB	AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB		
TOTAL FLUID :	0.1475 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2863.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	74.00	256.00
INITIAL SHUT-IN	60.00		722.00
FINAL FLOW	30.00	71.00	113.00
FINAL SHUT-IN	60.00		180.00

FINAL HYDROSTATIC PRESSURE: 2822.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2863.90

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	75.00	256.10
INITIAL SHUT-IN	60.00		722.50
FINAL FLOW	30.00	71.90	113.50
FINAL SHUT-IN	60.00		180.30

FINAL HYDROSTATIC PRESSURE: 2822.60

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513
 DATE: 09/09/97 TIME: 00:26:50

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	127.00	2863.9	0.0	120.32		
***** Start Flow 1	0.00	75.0	0.0	120.94		
	0.50	136.4	61.4	120.99		
	1.00	206.7	131.7	120.99		
	1.50	256.7	181.7	120.97		
	2.00	80.4	5.4	120.95		
	2.50	92.4	17.4	120.94		
	3.00	95.6	20.6	120.93		
	3.50	100.9	26.0	120.91		
	4.00	102.3	27.4	120.90		
	4.50	120.5	45.5	120.89		
	5.00	123.3	48.3	120.89		
	5.50	124.1	49.2	120.89		
	6.00	124.7	49.7	120.90		
	6.50	125.7	50.8	120.91		
	7.00	114.2	39.2	120.90		
	7.50	83.3	8.3	120.93		
	8.00	85.5	10.5	120.94		
	8.50	89.5	14.5	120.96		
	9.00	93.5	18.5	120.97		
	9.50	96.7	21.7	120.99		
	10.00	100.0	25.1	121.00		
	10.50	102.7	27.8	121.03		
	11.00	104.2	29.2	121.03		
	11.50	106.3	31.4	121.06		
	12.00	106.8	31.8	121.08		
	12.50	109.0	34.0	121.09		
	13.00	122.4	47.5	121.12		
	13.50	127.0	52.0	121.13		
	14.00	130.9	55.9	121.16		
	14.50	134.6	59.6	121.17		
	15.00	136.9	62.0	121.20		
	15.50	138.2	63.2	121.21		
	16.00	138.9	63.9	121.23		
	16.50	139.5	64.5	121.25		
	17.00	139.9	64.9	121.28		
	17.50	140.3	65.3	121.29		
	18.00	140.8	65.8	121.31		
	18.50	141.2	66.2	121.33		
	19.00	142.9	67.9	121.36		
	19.50	143.5	68.5	121.38		
	20.00	143.9	68.9	121.40		
	20.50	144.3	69.3	121.42		
	21.00	144.6	69.7	121.44		
	21.50	145.0	70.1	121.47		
	22.00	145.4	70.4	121.50		
	22.50	145.7	70.7	121.51		
	23.00	146.0	71.1	121.53		
	23.50	146.4	71.4	121.56		
	24.00	204.8	129.8	121.59		
	24.50	203.7	128.7	121.60		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513
 DATE: 09/09/97 TIME: 00:26:50

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
	25.00	203.8	128.8	121.62		
	25.50	205.3	130.3	121.65		
	26.00	209.1	134.1	121.67		
	26.50	213.4	138.4	121.69		
	27.00	218.0	143.0	121.71		
	27.50	222.7	147.8	121.74		
	28.00	227.4	152.5	121.75		
	28.50	232.2	157.3	121.77		
	29.00	237.1	162.2	121.80		
	29.50	241.7	166.8	121.82		
	30.00	246.5	171.6	121.85		
	30.50	251.3	176.4	121.86		
***** End Flow 1	31.00	256.1	181.2	121.88		
***** Start Shutin 1	0.00	256.1	0.0	121.88	0.0000	0.066
	0.50	261.5	5.3	121.92	63.0000	0.068
	1.00	268.5	12.4	121.93	32.0000	0.072
	1.50	273.7	17.6	121.95	21.6667	0.075
	2.00	278.3	22.1	121.97	16.5000	0.077
	2.50	283.4	27.3	122.00	13.4000	0.080
	3.00	288.8	32.6	122.02	11.3333	0.083
	3.50	294.1	37.9	122.05	9.8571	0.086
	4.00	299.3	43.1	122.09	8.7500	0.090
	4.50	304.6	48.5	122.10	7.8889	0.093
	5.00	309.7	53.6	122.12	7.2000	0.096
	5.50	314.9	58.8	122.13	6.6364	0.099
	6.00	320.2	64.1	122.16	6.1667	0.103
	6.50	325.5	69.4	122.19	5.7692	0.106
	7.00	330.6	74.5	122.22	5.4286	0.109
	7.50	335.9	79.8	122.23	5.1333	0.113
	8.00	341.1	85.0	122.25	4.8750	0.116
	8.50	346.5	90.3	122.28	4.6471	0.120
	9.00	351.6	95.5	122.30	4.4444	0.124
	9.50	356.9	100.8	122.33	4.2632	0.127
	10.00	362.3	106.1	122.35	4.1000	0.131
	10.50	282.8	26.7	122.36	3.9524	0.080
	11.00	285.2	29.1	122.38	3.8182	0.081
	11.50	288.1	32.0	122.41	3.6957	0.083
	12.00	292.3	36.2	122.44	3.5833	0.085
	12.50	296.7	40.6	122.45	3.4800	0.088
	13.00	301.2	45.1	122.47	3.3846	0.091
	13.50	305.9	49.7	122.50	3.2963	0.094
	14.00	310.4	54.3	122.51	3.2143	0.096
	14.50	315.1	58.9	122.54	3.1379	0.099
	15.00	319.7	63.5	122.56	3.0667	0.102
	15.50	324.3	68.2	122.58	3.0000	0.105
	16.00	329.0	72.9	122.60	2.9375	0.108
	16.50	333.9	77.7	122.62	2.8788	0.111
	17.00	338.6	82.5	122.65	2.8235	0.115
	17.50	343.3	87.2	122.66	2.7714	0.118
	18.00	348.0	91.9	122.69	2.7222	0.121
	18.50	352.7	96.6	122.71	2.6757	0.124

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97 TIME: 00:26:50

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
19.00	357.6	101.5	122.73	2.6316	0.128
19.50	362.4	106.3	122.75	2.5897	0.131
20.00	367.0	110.9	122.78	2.5500	0.135
20.50	371.8	115.6	122.80	2.5122	0.138
21.00	376.6	120.4	122.81	2.4762	0.142
21.50	381.3	125.2	122.84	2.4419	0.145
22.00	386.1	130.0	122.87	2.4091	0.149
22.50	391.1	135.0	122.90	2.3778	0.153
23.00	396.0	139.9	122.90	2.3478	0.157
23.50	400.8	144.7	122.92	2.3191	0.161
24.00	405.7	149.5	122.95	2.2917	0.165
24.50	410.6	154.5	122.97	2.2653	0.169
25.00	415.4	159.3	123.00	2.2400	0.173
25.50	412.0	155.9	123.01	2.2157	0.170
26.00	413.5	157.4	123.04	2.1923	0.171
26.50	415.7	159.6	123.07	2.1698	0.173
27.00	419.8	163.7	123.08	2.1481	0.176
27.50	424.5	168.3	123.10	2.1273	0.180
28.00	429.2	173.1	123.13	2.1071	0.184
28.50	433.9	177.8	123.15	2.0877	0.188
29.00	438.8	182.6	123.17	2.0690	0.193
29.50	443.6	187.5	123.19	2.0508	0.197
30.00	448.5	192.3	123.22	2.0333	0.201
30.50	453.3	197.2	123.24	2.0164	0.206
31.00	458.1	202.0	123.26	2.0000	0.210
31.50	462.9	206.8	123.28	1.9841	0.214
32.00	467.7	211.5	123.30	1.9688	0.219
32.50	472.5	216.3	123.32	1.9538	0.223
33.00	477.4	221.2	123.34	1.9394	0.228
33.50	482.2	226.0	123.35	1.9254	0.232
34.00	487.0	230.8	123.38	1.9118	0.237
34.50	491.7	235.6	123.40	1.8986	0.242
35.00	496.5	240.4	123.43	1.8857	0.247
35.50	501.3	245.2	123.45	1.8732	0.251
36.00	506.1	250.0	123.47	1.8611	0.256
36.50	510.9	254.8	123.50	1.8493	0.261
37.00	515.7	259.6	123.52	1.8378	0.266
37.50	520.5	264.3	123.54	1.8267	0.271
38.00	525.2	269.1	123.56	1.8158	0.276
38.50	529.9	273.8	123.59	1.8052	0.281
39.00	534.6	278.5	123.60	1.7949	0.286
39.50	539.4	283.2	123.62	1.7848	0.291
40.00	544.1	288.0	123.65	1.7750	0.296
40.50	548.8	292.7	123.67	1.7654	0.301
41.00	553.5	297.3	123.69	1.7561	0.306
41.50	558.1	302.0	123.71	1.7470	0.311
42.00	562.8	306.6	123.72	1.7381	0.317
42.50	567.5	311.3	123.75	1.7294	0.322
43.00	572.1	316.0	123.76	1.7209	0.327
43.50	576.8	320.6	123.78	1.7126	0.333
44.00	581.3	325.2	123.81	1.7045	0.338

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97 TIME: 00:26:50

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	44.50	585.9	329.8	123.83	1.6966	0.343
	45.00	590.0	333.9	123.85	1.6889	0.348
	45.50	592.3	336.2	123.86	1.6813	0.351
	46.00	596.4	340.2	123.92	1.6739	0.356
	46.50	600.8	344.7	123.90	1.6667	0.361
	47.00	605.3	349.2	123.94	1.6596	0.366
	47.50	609.8	353.7	123.95	1.6526	0.372
	48.00	614.3	358.1	123.97	1.6458	0.377
	48.50	618.7	362.6	123.98	1.6392	0.383
	49.00	623.0	366.9	124.00	1.6327	0.388
	49.50	627.4	371.3	124.04	1.6263	0.394
	50.00	631.9	375.8	124.05	1.6200	0.399
	50.50	636.3	380.2	124.07	1.6139	0.405
	51.00	640.8	384.6	124.09	1.6078	0.411
	51.50	645.1	389.0	124.11	1.6019	0.416
	52.00	649.5	393.4	124.13	1.5962	0.422
	52.50	653.8	397.7	124.15	1.5905	0.428
	53.00	658.3	402.1	124.17	1.5849	0.433
	53.50	662.6	406.5	124.18	1.5794	0.439
	54.00	667.0	410.9	124.21	1.5741	0.445
	54.50	671.3	415.2	124.23	1.5688	0.451
	55.00	675.6	419.5	124.26	1.5636	0.456
	55.50	679.9	423.8	124.27	1.5586	0.462
	56.00	684.2	428.0	124.29	1.5536	0.468
	56.50	688.5	432.3	124.32	1.5487	0.474
	57.00	692.8	436.7	124.33	1.5439	0.480
	57.50	697.1	441.0	124.35	1.5391	0.486
	58.00	701.4	445.2	124.37	1.5345	0.492
	58.50	705.6	449.5	124.38	1.5299	0.498
	59.00	709.8	453.7	124.41	1.5254	0.504
	59.50	714.0	457.9	124.42	1.5210	0.510
	60.00	718.2	462.1	124.44	1.5167	0.516
***** End Shut-in 1	60.50	722.5	466.4	124.46	1.5124	0.522
***** Start Flow 2	0.00	71.9	0.0	124.52		
	0.50	73.5	1.6	124.52		
	1.00	74.2	2.3	124.54		
	1.50	74.8	2.9	124.54		
	2.00	75.4	3.5	124.54		
	2.50	75.9	4.0	124.55		
	3.00	76.3	4.4	124.56		
	3.50	76.6	4.8	124.57		
	4.00	77.0	5.1	124.58		
	4.50	77.3	5.5	124.58		
	5.00	77.7	5.8	124.59		
	5.50	78.0	6.1	124.60		
	6.00	78.6	6.7	124.61		
	6.50	79.2	7.3	124.61		
	7.00	79.9	8.0	124.64		
	7.50	80.7	8.8	124.65		
	8.00	81.5	9.6	124.66		
	8.50	82.3	10.4	124.67		

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97 TIME: 00:26:50

	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
	9.00	83.1	11.2	124.68		
	9.50	83.9	12.0	124.71		
	10.00	84.6	12.8	124.72		
	10.50	85.4	13.5	124.73		
	11.00	86.2	14.3	124.75		
	11.50	86.9	15.0	124.77		
	12.00	87.8	15.9	124.78		
	12.50	88.6	16.7	124.80		
	13.00	89.4	17.5	124.83		
	13.50	90.2	18.3	124.83		
	14.00	90.9	19.0	124.86		
	14.50	91.6	19.7	124.86		
	15.00	92.4	20.5	124.89		
	15.50	93.1	21.2	124.91		
	16.00	93.9	22.0	124.93		
	16.50	94.5	22.7	124.95		
	17.00	95.3	23.4	124.97		
	17.50	96.2	24.3	125.00		
	18.00	97.1	25.3	125.01		
	18.50	97.9	26.0	125.01		
	19.00	98.7	26.8	125.01		
	19.50	99.4	27.6	125.01		
	20.00	100.2	28.3	125.01		
	20.50	101.0	29.1	125.02		
	21.00	101.6	29.7	125.01		
	21.50	102.3	30.4	125.02		
	22.00	103.0	31.2	125.03		
	22.50	104.0	32.1	125.07		
	23.00	104.8	32.9	125.09		
	23.50	105.3	33.4	125.12		
	24.00	105.8	34.0	125.15		
	24.50	106.4	34.5	125.16		
	25.00	107.0	35.1	125.18		
	25.50	107.5	35.7	125.19		
	26.00	108.2	36.3	125.21		
	26.50	108.8	37.0	125.23		
	27.00	109.5	37.7	125.24		
	27.50	110.2	38.4	125.26		
	28.00	110.9	39.0	125.28		
	28.50	111.4	39.5	125.30		
	29.00	112.0	40.1	125.32		
	29.50	112.6	40.7	125.33		
	30.00	113.0	41.2	125.36		
***** End Flow 2	30.50	113.5	41.6	125.37		
***** Start Shutin 2	0.00	113.5	0.0	125.37	0.0000	0.013
	0.50	114.0	0.5	125.39	124.0000	0.013
	1.00	114.6	1.1	125.40	62.5000	0.013
	1.50	115.0	1.4	125.42	42.0000	0.013
	2.00	115.4	1.9	125.43	31.7500	0.013
	2.50	115.7	2.2	125.45	25.6000	0.013
	3.00	116.2	2.7	125.47	21.5000	0.013

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97 TIME: 00:26:50

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
3.50	116.6	3.1	125.48	18.5714	0.014
4.00	116.9	3.4	125.50	16.3750	0.014
4.50	116.9	3.4	125.52	14.6667	0.014
5.00	116.9	3.4	125.52	13.3000	0.014
5.50	116.9	3.3	125.55	12.1818	0.014
6.00	116.9	3.4	125.57	11.2500	0.014
6.50	116.9	3.4	125.57	10.4615	0.014
7.00	117.0	3.4	125.60	9.7857	0.014
7.50	117.0	3.5	125.62	9.2000	0.014
8.00	117.0	3.5	125.63	8.6875	0.014
8.50	117.1	3.6	125.64	8.2353	0.014
9.00	117.2	3.6	125.66	7.8333	0.014
9.50	117.2	3.7	125.67	7.4737	0.014
10.00	117.3	3.8	125.69	7.1500	0.014
10.50	117.4	3.9	125.70	6.8571	0.014
11.00	117.6	4.1	125.71	6.5909	0.014
11.50	117.8	4.3	125.72	6.3478	0.014
12.00	118.0	4.5	125.76	6.1250	0.014
12.50	118.3	4.8	125.77	5.9200	0.014
13.00	118.6	5.0	125.78	5.7308	0.014
13.50	118.8	5.3	125.79	5.5556	0.014
14.00	119.1	5.6	125.81	5.3929	0.014
14.50	119.4	5.8	125.83	5.2414	0.014
15.00	119.7	6.1	125.84	5.1000	0.014
15.50	120.1	6.5	125.86	4.9677	0.014
16.00	121.1	7.6	125.87	4.8438	0.015
16.50	121.4	7.9	125.88	4.7273	0.015
17.00	121.6	8.1	125.90	4.6176	0.015
17.50	121.8	8.3	125.91	4.5143	0.015
18.00	122.0	8.5	125.93	4.4167	0.015
18.50	122.3	8.8	125.95	4.3243	0.015
19.00	122.6	9.1	125.96	4.2368	0.015
19.50	122.8	9.3	125.97	4.1538	0.015
20.00	123.0	9.5	125.99	4.0750	0.015
20.50	123.2	9.7	126.01	4.0000	0.015
21.00	123.4	9.9	126.02	3.9286	0.015
21.50	123.6	10.1	126.03	3.8605	0.015
22.00	123.9	10.4	126.05	3.7955	0.015
22.50	124.1	10.6	126.06	3.7333	0.015
23.00	124.3	10.8	126.08	3.6739	0.015
23.50	124.5	11.0	126.09	3.6170	0.016
24.00	124.8	11.3	126.11	3.5625	0.016
24.50	125.3	11.7	126.13	3.5102	0.016
25.00	125.6	12.1	126.14	3.4600	0.016
25.50	126.0	12.5	126.16	3.4118	0.016
26.00	126.4	12.8	126.17	3.3654	0.016
26.50	126.6	13.1	126.18	3.3208	0.016
27.00	126.9	13.4	126.20	3.2778	0.016
27.50	127.2	13.7	126.21	3.2364	0.016
28.00	127.5	14.0	126.23	3.1964	0.016
28.50	128.8	15.3	126.25	3.1579	0.017

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97

TIME: 00:26:50

Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
29.00	129.5	16.0	126.26	3.1207	0.017
29.50	129.7	16.2	126.28	3.0847	0.017
30.00	130.0	16.5	126.29	3.0500	0.017
30.50	130.2	16.7	126.30	3.0164	0.017
31.00	130.4	16.9	126.31	2.9839	0.017
31.50	130.7	17.1	126.33	2.9524	0.017
32.00	131.0	17.5	126.35	2.9219	0.017
32.50	131.3	17.8	126.36	2.8923	0.017
33.00	131.5	18.0	126.37	2.8636	0.017
33.50	131.8	18.3	126.38	2.8358	0.017
34.00	132.3	18.8	126.40	2.8088	0.018
34.50	132.5	19.0	126.42	2.7826	0.018
35.00	132.8	19.3	126.43	2.7571	0.018
35.50	133.1	19.6	126.44	2.7324	0.018
36.00	133.5	20.0	126.46	2.7083	0.018
36.50	133.9	20.4	126.48	2.6849	0.018
37.00	134.7	21.2	126.49	2.6622	0.018
37.50	154.1	40.6	126.51	2.6400	0.024
38.00	154.6	41.1	126.51	2.6184	0.024
38.50	155.1	41.6	126.53	2.5974	0.024
39.00	155.6	42.1	126.55	2.5769	0.024
39.50	156.1	42.6	126.57	2.5570	0.024
40.00	156.5	43.0	126.58	2.5375	0.024
40.50	157.0	43.5	126.59	2.5185	0.025
41.00	157.4	43.9	126.60	2.5000	0.025
41.50	157.8	44.3	126.61	2.4819	0.025
42.00	158.3	44.7	126.63	2.4643	0.025
42.50	158.7	45.2	126.65	2.4471	0.025
43.00	159.1	45.6	126.66	2.4302	0.025
43.50	159.5	46.0	126.67	2.4138	0.025
44.00	159.9	46.4	126.68	2.3977	0.026
44.50	160.4	46.8	126.70	2.3820	0.026
45.00	160.8	47.2	126.71	2.3667	0.026
45.50	161.2	47.7	126.72	2.3516	0.026
46.00	161.7	48.2	126.74	2.3370	0.026
46.50	162.3	48.8	126.74	2.3226	0.026
47.00	162.8	49.3	126.77	2.3085	0.027
47.50	163.3	49.8	126.78	2.2947	0.027
48.00	163.8	50.3	126.79	2.2812	0.027
48.50	164.3	50.8	126.80	2.2680	0.027
49.00	164.8	51.3	126.83	2.2551	0.027
49.50	165.3	51.8	126.84	2.2424	0.027
50.00	165.9	52.4	126.85	2.2300	0.028
50.50	167.6	54.1	126.87	2.2178	0.028
51.00	168.3	54.8	126.88	2.2059	0.028
51.50	168.9	55.4	126.89	2.1942	0.029
52.00	169.5	56.0	126.91	2.1827	0.029
52.50	170.1	56.6	126.92	2.1714	0.029
53.00	170.7	57.2	126.93	2.1604	0.029
53.50	171.3	57.7	126.94	2.1495	0.029
54.00	171.8	58.3	126.96	2.1389	0.030

 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: R.J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

DATE: 09/09/97 TIME: 00:26:50

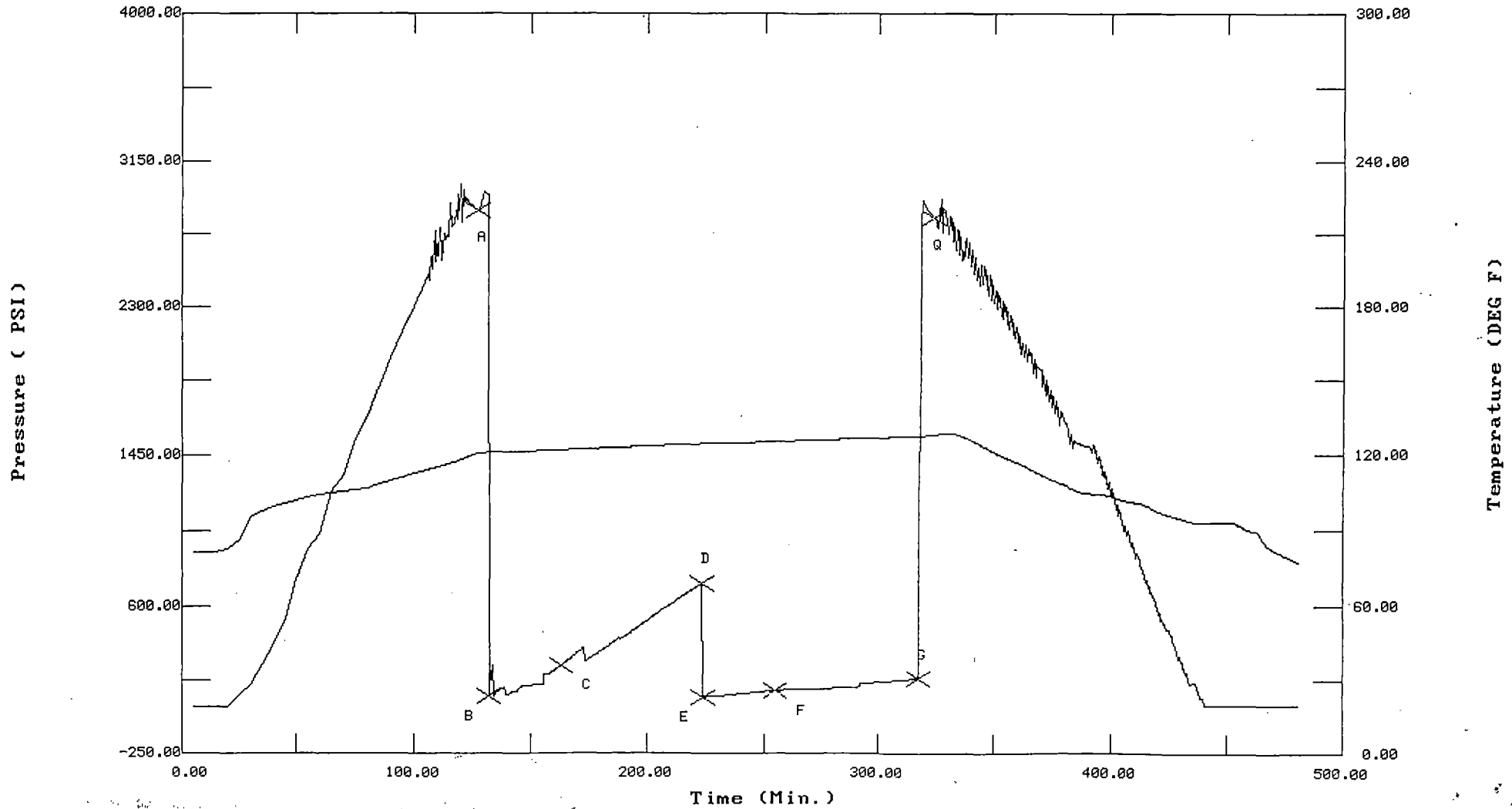
	Time	Pressure PSI	delta P PSI	Temp. DEG F	(T+dT)/dT	P^2/10^6
	54.50	172.4	58.8	126.98	2.1284	0.030
	55.00	172.9	59.4	126.99	2.1182	0.030
	55.50	173.4	59.9	127.00	2.1081	0.030
	56.00	173.9	60.4	127.03	2.0982	0.030
	56.50	174.5	61.0	127.04	2.0885	0.030
	57.00	175.0	61.5	127.05	2.0789	0.031
	57.50	175.5	62.0	127.06	2.0696	0.031
	58.00	176.0	62.5	127.09	2.0603	0.031
	58.50	176.5	63.0	127.11	2.0513	0.031
	59.00	177.0	63.5	127.11	2.0424	0.031
	59.50	177.5	64.0	127.12	2.0336	0.032
	60.00	178.0	64.5	127.12	2.0250	0.032
	60.50	178.5	65.0	127.12	2.0165	0.032
	61.00	179.0	65.5	127.13	2.0082	0.032
	61.50	179.5	65.9	127.15	2.0000	0.032
	62.00	179.9	66.4	127.17	1.9919	0.032
***** End Shut-in 2	62.50	180.3	66.8	127.18	1.9840	0.032
***** Final Hydro.	324.00	2822.6	0.0	127.87		

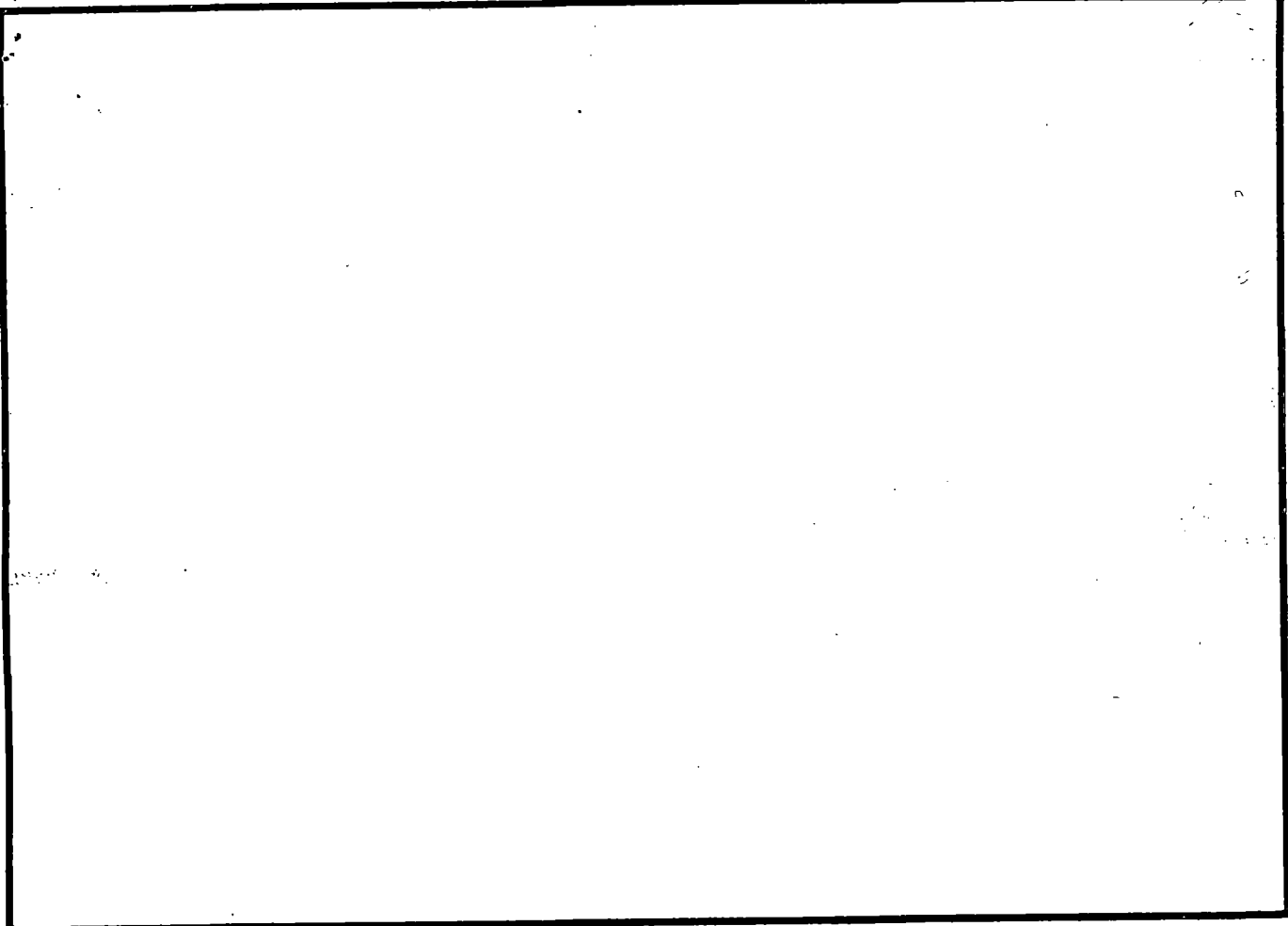
TEST HISTORY

R. J. PATRICK DST #3 DONALD HERD #1-10 TKT 22513

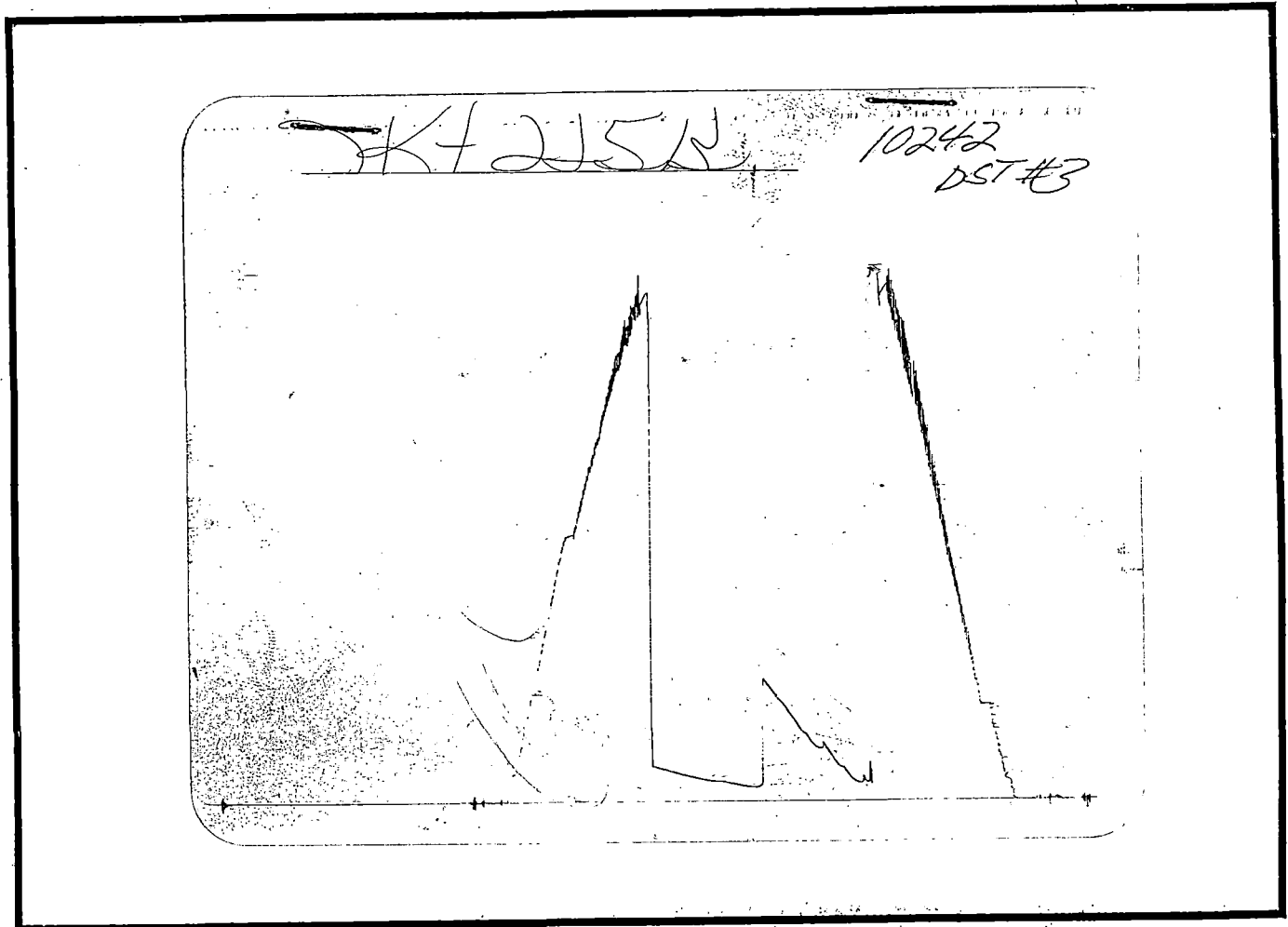
Flag Points

	t (Min.)	P (PSI)
A:	0.00	2863.92
B:	0.00	74.96
C:	31.00	256.13
D:	60.50	722.50
E:	0.00	71.88
F:	30.50	113.51
G:	62.50	180.27
Q:	0.00	2822.58





Inside Recorder



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 9/11/97	TICKET : 22514
CUSTOMER : R J PATRICK OPERATING CO	LEASE : DONALD HERD
WELL : #1-10 TEST: 4	GEOLOGIST: PATRICK
ELEVATION: 2014 KB	FORMATION: ARBUCKLE
SECTION : 10	TOWNSHIP : 33S
RANGE : 19W COUNTY: COMANCHE	STATE : KS
GAUGE SN#: 10242 RANGE : 4100	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 6304.00 ft	TO: 6350.00 ft	TVD: 6350.0 ft
DEPTH OF SELECTIVE ZONE:		TEST TYPE: GAS
DEPTH OF RECORDERS: 6311.0 ft	6347.0 ft	
TEMPERATURE: 133.0		

DRILL COLLAR LENGTH: 244.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH : 0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH : 6032.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH : 28.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH : 46.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE : 0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE : 7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH: 6299.0 ft	SIZE:	6.630 in
PACKER DEPTH: 6304.0 ft	SIZE:	6.630 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in
PACKER DEPTH: 0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 7	VISCOSITY : 63.00 cp
MUD TYPE : CHEMICAL	WATER LOSS: 12.800 cc
WEIGHT : 9.100 ppg	
CHLORIDES : 5000 ppm	
JARS-MAKE : WTC	SERIAL NUMBER: 408
DID WELL FLOW?: NO	REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - OFF BOTTOM OF BUCKET IN 90 SECONDS. FINAL FLOW PERIOD NO BLOW.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	%	%	%	%	Comments
	Oil	Gas	Water	Mud	
210.0	0.0	5.0	35.0	60.0	GAS CUT WATERY MUD
1750.0	0.0	6.0	94.0	0.0	GASSY SALTWATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 90000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	20.0000	min.
GAS VOLUME:	8.3478	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	1.7673	STB	AVERAGE WATER RATE:	1712.3328	STB/D
WATER VOLUME:	22.0151	STB			
TOTAL FLUID :	23.7824	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 3181.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	691.00	1214.00
INITIAL SHUT-IN	15.00		2294.00
FINAL FLOW	0.00	0.00	0.00
FINAL SHUT-IN	0.00		0.00

FINAL HYDROSTATIC PRESSURE: 3091.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 3191.00

Description	Duration	p1	p End
INITIAL FLOW	20.00	714.08	1229.28
INITIAL SHUT-IN	15.00		2293.65
FINAL FLOW	0.00	0.00	0.00

FINAL HYDROSTATIC PRESSURE: 3064.00

Company: R J PATRICK OPERATING CO
Well: #1-10 DONALD HERD
Field: TKT 22514 DST 4

[Thursday: Sep. 11, 1997]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)

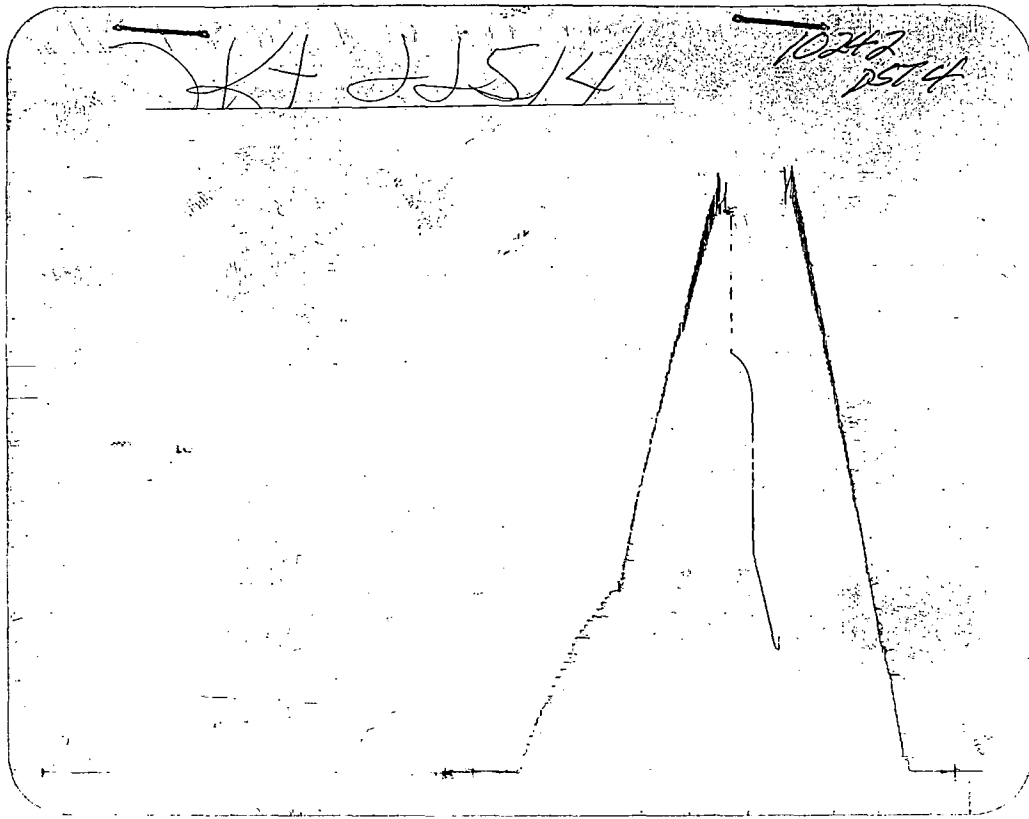
START FLOW 1				
1	0	13:51: 6	0.0000	714.08
6	0	13:51:42	0.0100	714.06
11	0	13:52:18	0.0200	714.03
16	0	13:52:54	0.0300	715.75
21	0	13:53:30	0.0401	721.83
26	0	13:54: 7	0.0502	734.87
31	0	13:54:43	0.0604	754.88
36	0	13:55:20	0.0706	771.41
41	0	13:55:57	0.0808	789.67
46	0	13:56:34	0.0911	811.95
51	0	13:57:10	0.1013	830.90
56	0	13:57:47	0.1115	850.54
61	0	13:58:24	0.1217	870.55
66	0	13:59: 1	0.1319	889.97
71	0	13:59:38	0.1421	908.32
76	0	14: 0:14	0.1524	926.54
81	0	14: 0:51	0.1626	945.10
86	0	14: 1:28	0.1728	964.02
91	0	14: 2: 5	0.1830	983.19
96	0	14: 2:41	0.1932	1002.45
101	0	14: 3:18	0.2034	1021.41
106	0	14: 3:55	0.2136	1040.47
111	0	14: 4:32	0.2239	1059.63
116	0	14: 5: 9	0.2341	1078.88
121	0	14: 5:45	0.2443	1098.27
126	0	14: 6:22	0.2545	1117.78
131	0	14: 6:59	0.2648	1137.37
136	0	14: 7:36	0.2750	1156.85
141	0	14: 8:13	0.2852	1175.91
146	0	14: 8:49	0.2954	1194.26
151	0	14: 9:26	0.3056	1211.99
156	0	14:10: 3	0.3158	1229.28
END FLOW 1				
START SHUTIN 1				
158	0	14:10:52	0.3296	2052.10
162	0	14:11:23	0.3380	2086.07
167	0	14:12: 0	0.3484	2120.03
172	0	14:12:37	0.3586	2141.02
177	0	14:13:14	0.3688	2158.71
182	0	14:13:50	0.3790	2174.16
187	0	14:14:27	0.3891	2187.13
192	0	14:15: 3	0.3993	2198.03
197	0	14:15:40	0.4094	2207.28
202	0	14:16:16	0.4195	2215.17
207	0	14:16:52	0.4295	2222.10
212	0	14:17:28	0.4396	2228.39
217	0	14:18: 5	0.4497	2234.25
222	0	14:18:41	0.4597	2239.83
227	0	14:19:17	0.4698	2245.11
232	0	14:19:53	0.4798	2250.08
237	0	14:20:29	0.4899	2254.72
242	0	14:21: 6	0.4999	2259.04
247	0	14:21:42	0.5100	2263.04
252	0	14:22:18	0.5200	2266.80

Company: R J PATRICK OPERATING CO
Well: #1-10 DONALD HERD
Field: TKT 22514 DST 4

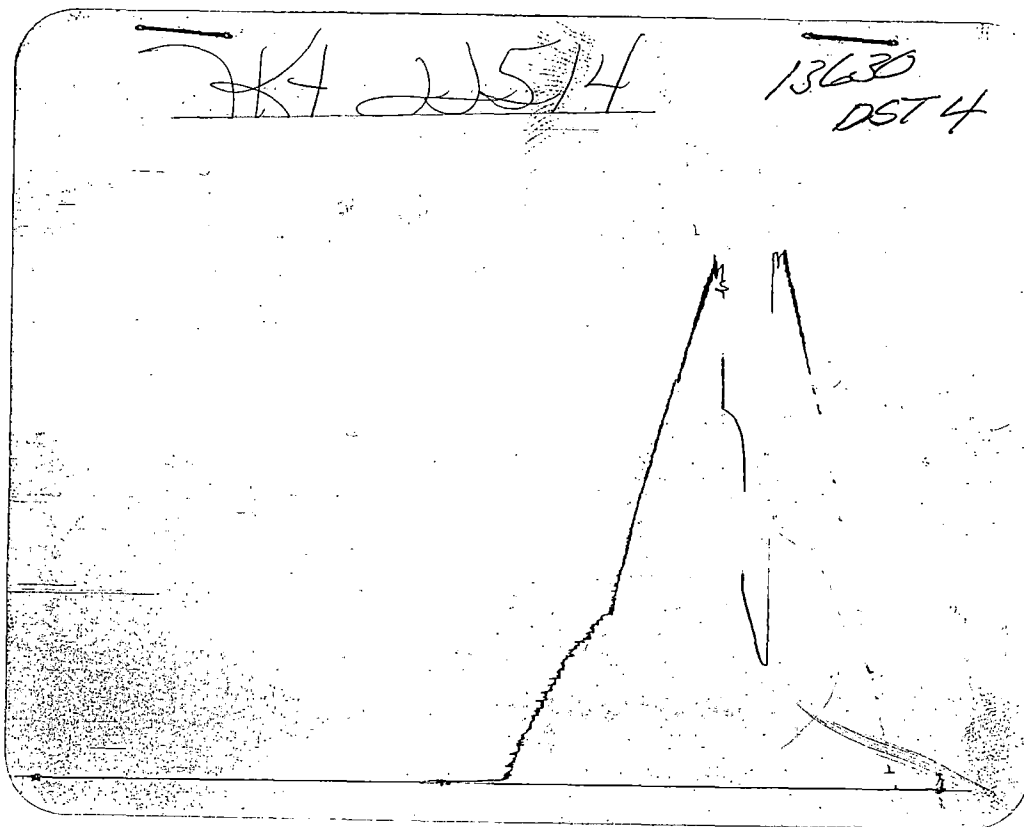
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
257	0	14:22:54	0.5300	2270.36
262	0	14:23:30	0.5401	2273.76
267	0	14:24: 6	0.5501	2277.04
272	0	14:24:42	0.5601	2280.24
277	0	14:25:18	0.5702	2283.37
282	0	14:25:55	0.5802	2286.45
287	0	14:26:31	0.5902	2289.47
292	0	14:27: 7	0.6002	2292.46
297	0	14:27:43	0.6102	2293.65

WESTERN TESTING CO., INC.



Inside Recorder



Outside Recorder