

DST REPORT

GENERAL INFORMATION

DATE : 6/23/96
CUSTOMER : PINTAIL PETROLEUM LTD
WELL : #1 TEST: 1
ELEVATION: 1304 GL
SECTION : 22
RANGE : 6W COUNTY: HARRISON
GAUGE SN#: 1562 RANGE : 3900

RELEASED

MAR 23 1998

TICKET : 20858
LEASE : HARRISON B
GEOLOGIST: PHILLIPS
FORMATION: MISSISSIPPI
TOWNSHIP : 33S
STATE : KS
CLOCK : 12

15-077-21305

WELL INFORMATION

PERFORATION INTERVAL FROM: 4275.00 ft TO: 4460.00 ft TVD: 4460.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: GAS
DEPTH OF RECORDERS: 4285.0 ft 4288.0 ft
TEMPERATURE: 122.0

DRILL COLLAR LENGTH:	480.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3775.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	185.0 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:	4270.0 ft	SIZE:	6.630 in
PACKER DEPTH:	4275.0 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. : STERLING RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.400 ppg
CHLORIDES : 5000 ppm
JARS-MAKE :
DID WELL FLOW?: YES

VISCOSITY : 50.00 cp
WATER LOSS: 12.000 cc

SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW OFF BOTTOM OF
BUCKET IN 2 MINUTES. GAS TO SURFACE IN 10 MINUTES
SEE GAS SHEET.

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

155 FT DRILL PIPE IN ANCHOR.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
330.0	0.0	2.0	0.0	98.0	SL GAS CUT MUD
0.0	0.0	0.0	0.0	0.0	CHLORIDES 5100 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB		
GAS VOLUME:	0.1822	SCF		
MUD VOLUME:	1.5903	STB		
WATER VOLUME:	0.0000	STB		
TOTAL FLUID :	1.5903	STB		
			TOTAL FLOW TIME:	90.0000 min.
			AVERAGE OIL RATE:	0.0000 STB/D
			AVERAGE WATER RATE:	0.0000 STB/D

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2191.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	250.00	250.00
INITIAL SHUT-IN	45.00		1104.00
FINAL FLOW	60.00	250.00	230.00
FINAL SHUT-IN	60.00		1025.00

FINAL HYDROSTATIC PRESSURE: 2112.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2164.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	298.38	268.80
INITIAL SHUT-IN	45.00		1101.21
FINAL FLOW	60.00	269.68	247.10
FINAL SHUT-IN	60.00		1027.37

FINAL HYDROSTATIC PRESSURE: 2093.00

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GAS FLOW REPORT

GENERAL INFORMATION

DATE : 6/23/96
 CUSTOMER : PINTAIL PETROLEUM LTD
 WELL : #1 TEST: 1
 ELEVATION: 1304 GL
 SECTION : 22
 RANGE : 6W COUNTY: HARPER
 GAUGE SN#: 1562 RANGE : 3900

TICKET : 20858
 LEASE : HARRISON B
 GEOLOGIST: PHILLIPS
 FORMATION: MISSISSIPPI
 TOWNSHIP : 33S
 STATE : KS
 CLOCK : 12

PRE FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
15 MIN	MERLA	0.250	10 PSIG	30800 SCF/D
20 MIN	MERLA	0.250	34 PSIG	67500 SCF/D
25 MIN	MERLA	0.500	24 PSIG	200000 SCF/D
30 MIN	MERLA	0.500	21 PSIG	183000 SCF/D

SECOND FLOW

Time Guage (min)	Tester Type	Orifice Size	Pressure	Flow Desc.
10 MIN	MERLA	0.500	24 PSIG	200000 SCF/D
20 MIN	MERLA	0.500	21 PSIG	183000 SCF/D
30 MIN	MERLA	0.500	19 PSIG	171000 SCF/D
40 MIN	MERLA	0.500	17 PSIG	159000 SCF/D
50 MIN	MERLA	0.500	16 PSIG	153000 SCF/D
60 MIN	MERLA	0.500	14 PSIG	141000 SCF/D

Company: PINTAIL PETROLEUM LTD
Well: #1 HARRISON B DST 1
Field: TKT 20858

[Sunday: June 23, 1996]

Page 1

REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)

START FLOW 1				
1	0	19:35:28	0.0000	298.38
6	0	19:36: 4	0.0100	300.04
15	0	19:37: 8	0.0280	300.02
24	0	19:38:13	0.0459	295.84
33	0	19:39:18	0.0639	288.33
42	0	19:40:22	0.0818	275.82
51	0	19:41:27	0.0997	268.31
60	0	19:42:31	0.1177	265.79
69	0	19:43:36	0.1357	263.28
78	0	19:44:41	0.1537	261.59
87	0	19:45:46	0.1716	259.91
96	0	19:46:50	0.1896	259.06
105	0	19:47:55	0.2076	258.21
114	0	19:49: 0	0.2256	258.19
123	0	19:50: 4	0.2436	258.17
132	0	19:51: 9	0.2616	259.82
141	0	19:52:14	0.2796	260.64
150	0	19:53:19	0.2975	261.45
159	0	19:54:24	0.3155	261.43
168	0	19:55:28	0.3335	261.42
177	0	19:56:33	0.3515	260.57
186	0	19:57:38	0.3695	262.21
195	0	19:58:43	0.3875	264.69
204	0	19:59:47	0.4055	264.68
213	0	20: 0:52	0.4235	264.66
222	0	20: 1:57	0.4415	268.80
END FLOW 1				
START SHUTIN 1				
227	0	20: 2:33	0.4515	274.62
231	0	20: 3: 2	0.4597	306.26
240	0	20: 4: 9	0.4781	382.01
249	0	20: 5:16	0.4967	500.22
258	0	20: 6:23	0.5154	614.28
267	0	20: 7:30	0.5339	712.51
276	0	20: 8:36	0.5523	779.11
285	0	20: 9:42	0.5706	834.04
294	0	20:10:47	0.5888	872.33
303	0	20:11:52	0.6069	890.63
312	0	20:12:58	0.6250	923.08
321	0	20:14: 3	0.6431	945.54
330	0	20:15: 8	0.6612	955.52
339	0	20:16:13	0.6792	966.33
348	0	20:17:18	0.6973	977.96
357	0	20:18:23	0.7154	997.93
366	0	20:19:28	0.7334	1004.48
375	0	20:20:33	0.7514	1011.00
384	0	20:21:38	0.7694	1016.69
393	0	20:22:42	0.7875	1022.39
402	0	20:23:47	0.8055	1028.90
411	0	20:24:52	0.8235	1035.42
420	0	20:25:57	0.8415	1040.30
429	0	20:27: 2	0.8595	1045.18
438	0	20:28: 7	0.8775	1050.06
447	0	20:29:12	0.8955	1054.94

WESTERN TESTING CO., INC.

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Company: PINTAIL PETROLEUM LTD
 Well: #1 HARRISON B DST 1
 Field: TKT 20858

[Sunday: June 23, 1996]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
456	0	20:30:16	0.9136	1059.00
465	0	20:31:21	0.9316	1062.25
474	0	20:32:26	0.9496	1067.13
483	0	20:33:31	0.9676	1071.20
492	0	20:34:36	0.9856	1074.44
501	0	20:35:41	1.0036	1077.69
510	0	20:36:45	1.0216	1080.94
519	0	20:37:50	1.0396	1083.37
528	0	20:38:55	1.0576	1085.80
537	0	20:40: 0	1.0756	1088.24
546	0	20:41: 5	1.0936	1091.48
555	0	20:42: 9	1.1116	1093.91
564	0	20:43:14	1.1296	1096.35
573	0	20:44:19	1.1476	1098.78
582	0	20:45:24	1.1656	1101.21
		END SHUTIN 1		
		START FLOW 2		
590	0	20:50: 2	1.2428	269.68
599	0	20:51: 6	1.2608	269.67
608	0	20:52:11	1.2787	265.49
617	0	20:53:16	1.2967	262.97
626	0	20:54:21	1.3147	261.29
635	0	20:55:25	1.3327	259.60
644	0	20:56:30	1.3506	256.26
653	0	20:57:35	1.3686	254.57
662	0	20:58:39	1.3866	253.72
671	0	20:59:44	1.4046	253.70
680	0	21: 0:49	1.4226	252.02
689	0	21: 1:54	1.4405	252.00
698	0	21: 2:58	1.4585	251.15
707	0	21: 4: 3	1.4765	249.47
716	0	21: 5: 8	1.4945	248.62
725	0	21: 6:12	1.5124	246.94
734	0	21: 7:17	1.5304	246.09
743	0	21: 8:22	1.5484	246.07
752	0	21: 9:27	1.5664	246.05
761	0	21:10:31	1.5844	246.87
770	0	21:11:36	1.6024	246.85
779	0	21:12:41	1.6204	246.83
788	0	21:13:46	1.6384	246.81
797	0	21:14:50	1.6563	246.80
806	0	21:15:55	1.6743	245.95
815	0	21:17: 0	1.6923	245.93
824	0	21:18: 5	1.7103	245.91
833	0	21:19: 9	1.7283	245.06
842	0	21:20:14	1.7462	245.04
851	0	21:21:19	1.7642	245.03
860	0	21:22:24	1.7822	245.01
869	0	21:23:28	1.8002	244.16
878	0	21:24:33	1.8182	244.14
887	0	21:25:38	1.8362	244.12
896	0	21:26:43	1.8541	244.10
905	0	21:27:47	1.8721	244.09
914	0	21:28:52	1.8901	244.07
923	0	21:29:57	1.9081	244.05

WESTERN TESTING CO., INC.

Company: PINTAIL PETROLEUM LTD
Well: #1 HARRISON B DST 1
Field: TKT 20858

[Sunday: June 23, 1996]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
932	0	21:31: 2	1.9261	244.03
941	0	21:32: 6	1.9441	244.02
950	0	21:33:11	1.9621	244.00
959	0	21:34:16	1.9800	243.15
968	0	21:35:21	1.9980	243.13
977	0	21:36:25	2.0160	243.11
986	0	21:37:30	2.0340	243.10
995	0	21:38:35	2.0520	243.08
1004	0	21:39:40	2.0700	243.06
1013	0	21:40:44	2.0879	243.04
1022	0	21:41:49	2.1059	243.02
1031	0	21:42:54	2.1239	243.01
1040	0	21:43:58	2.1419	242.99
1049	0	21:45: 3	2.1599	242.97
1058	0	21:46: 8	2.1779	242.95
1067	0	21:47:13	2.1959	247.10

END FLOW 2
START SHUTIN 2

1078	0	21:48:32	2.2180	269.56
1085	0	21:49:24	2.2322	311.18
1094	0	21:50:30	2.2506	388.59
1103	0	21:51:36	2.2691	462.68
1112	0	21:52:43	2.2875	543.43
1121	0	21:53:49	2.3058	609.19
1130	0	21:54:54	2.3241	659.13
1139	0	21:56: 0	2.3423	691.59
1148	0	21:57: 5	2.3604	719.88
1157	0	21:58:10	2.3785	737.35
1166	0	21:59:16	2.3967	769.80
1175	0	22: 0:21	2.4147	782.27
1184	0	22: 1:26	2.4328	796.41
1193	0	22: 2:31	2.4509	809.72
1202	0	22: 3:36	2.4689	823.85
1211	0	22: 4:41	2.4870	835.49
1220	0	22: 5:46	2.5050	846.30
1229	0	22: 6:51	2.5231	856.27
1238	0	22: 7:56	2.5411	866.25
1247	0	22: 9: 0	2.5591	873.72
1256	0	22:10: 5	2.5772	882.03
1265	0	22:11:10	2.5952	888.67
1274	0	22:12:15	2.6132	894.49
1283	0	22:13:20	2.6312	901.96
1292	0	22:14:25	2.6493	908.60
1301	0	22:15:30	2.6673	914.42
1310	0	22:16:35	2.6853	919.39
1319	0	22:17:39	2.7033	925.20
1328	0	22:18:44	2.7213	930.18
1337	0	22:19:49	2.7393	934.33
1346	0	22:20:54	2.7573	940.14
1355	0	22:21:59	2.7754	945.12
1364	0	22:23: 4	2.7934	950.93
1373	0	22:24: 9	2.8114	955.91
1382	0	22:25:13	2.8294	960.88
1391	0	22:26:18	2.8474	965.03

WESTERN TESTING CO., INC.

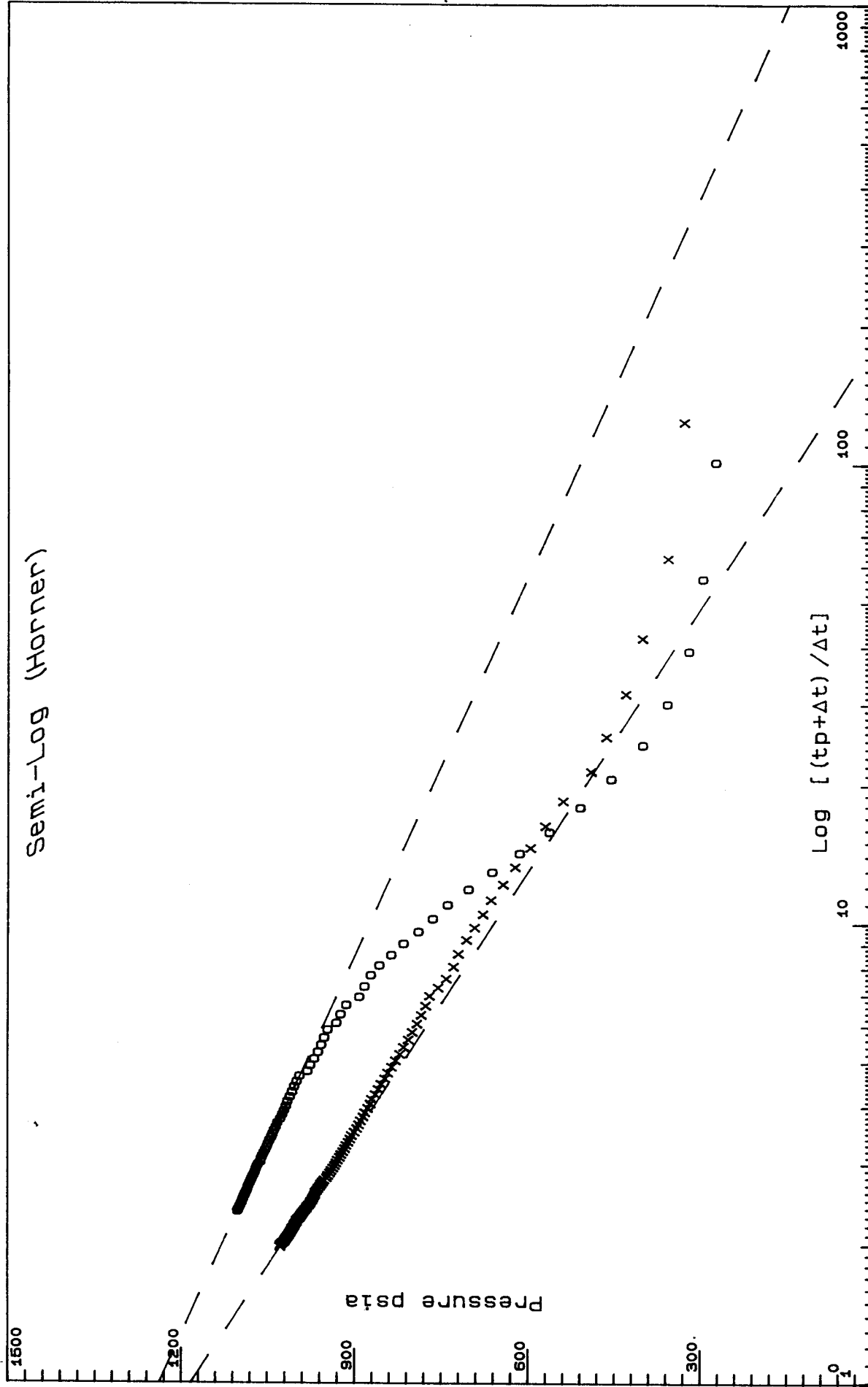
Company: PINTAIL PETROLEUM LTD
Well: #1 HARRISON B DST 1
Field: TKT 20858

[Sunday: June 23, 1996]
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REC #	DAY	REAL TIME	DT (HRS)	BHP (PSIA)
1400	0	22:27:23	2.8654	968.34
1409	0	22:28:28	2.8834	970.82
1418	0	22:29:33	2.9014	974.14
1427	0	22:30:38	2.9194	977.45
1436	0	22:31:42	2.9374	981.59
1445	0	22:32:47	2.9554	984.91
1454	0	22:33:52	2.9734	989.05
1463	0	22:34:57	2.9914	991.53
1472	0	22:36: 2	3.0094	995.68
1481	0	22:37: 6	3.0275	999.82
1490	0	22:38:11	3.0454	1000.63
1499	0	22:39:16	3.0635	1003.87
1508	0	22:40:21	3.0814	1006.31
1517	0	22:41:26	3.0994	1007.92
1526	0	22:42:30	3.1174	1010.35
1535	0	22:43:35	3.1354	1012.78
1544	0	22:44:40	3.1534	1014.40
1553	0	22:45:45	3.1714	1016.83
1562	0	22:46:50	3.1894	1019.26
1571	0	22:47:54	3.2074	1021.69
1580	0	22:48:59	3.2254	1024.94
1589	0	22:50: 4	3.2434	1027.37

WESTERN TESTING CO., INC.

Semi-Log (Horner)



Company: PINTAIL PETROLEUM LTD
 Well: #1 HARRISON B DST 1
 Field: TKT 20858

Date: 06/23/1996

SHUTIN 1 = 0
 M = -364.542
 P1HR = 1129
 P* = 1238

SHUTIN 2 = X
 M = -524.567
 P1HR = 1025
 P* = 1183

Company: PINTAIL PETROLEUM LTD
 Well: #1 HARRISON B DST 1
 Field: TKT 20858

06/23/1996

Gauge Depth 4285.0 feet

[INPUT PARAMETERS]
 (Build-Up Analysis)

Well Type - GAS			
Reservoir Pressure	psia	P	1027
Reservoir Temperature	Deg F	T	122
Final Shut-in Pressure	psia	Psi	1027
Final Flowing Pressure	psia	Pwf	230
Gas Flow Rate	mcf	Qg	141
Oil Flow Rate	STB/D	Qo	5
Sand Thickness	feet	hnet	5
Wellbore Radius	feet	rw	0.3300
Formation Porosity	%	POR	10
Extrapolated Pressure	psia	P*	1183
Extrapolated Press @ 1hr	psia	P1hr	1025
Semi-Log Slope	psi/cycle	M	-524.567
Production Time	hrs	tp	1.50
Shut-in Time	hrs	tsi	1.00

Ug (cp) 1.3881E-02
 Cg (1/psi) 9.8017E-04

Bg (ft³/scf) 1.1604E-02
 Ct (1/psi) 5.2818E-06

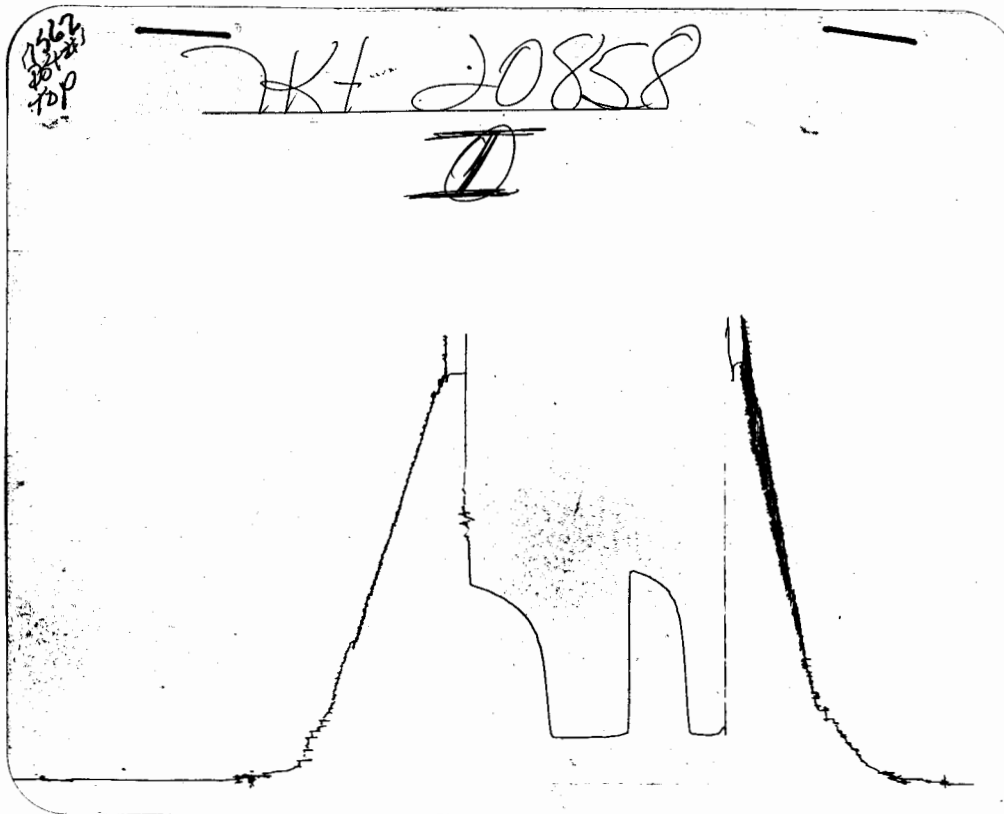
[CALCULATED RESULTS]

(Semi-Log) Analysis

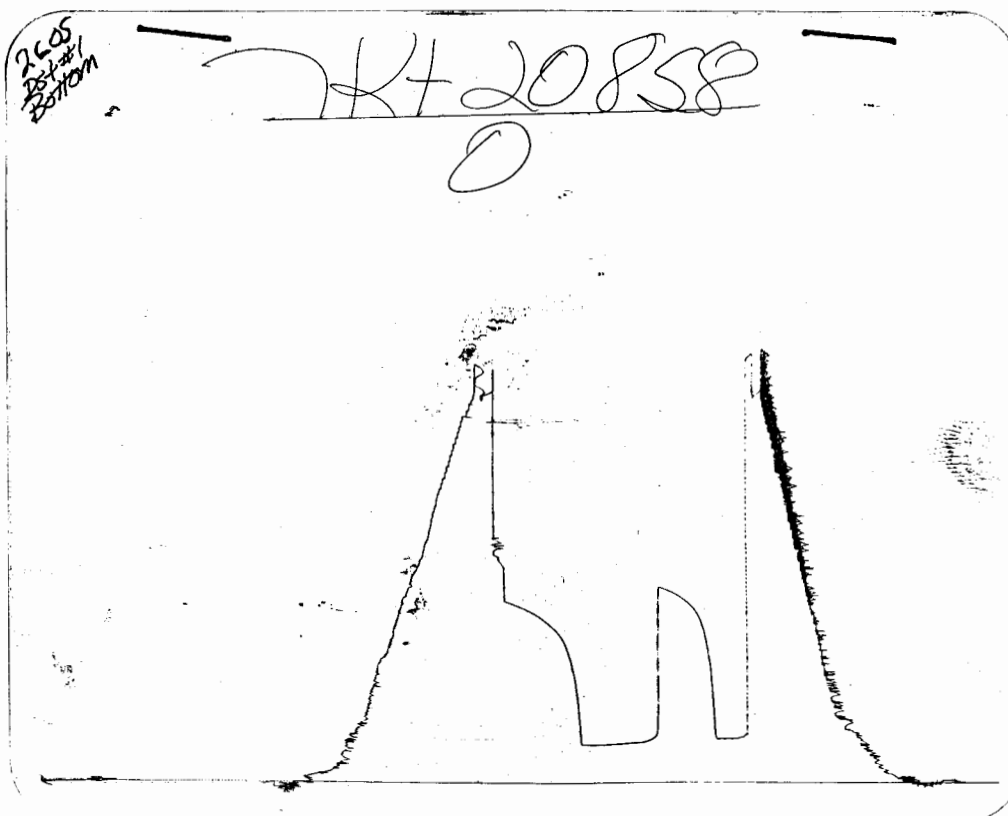
Pressure Method

Transmissibility	md-ft/cp	kh/u	90.324
Flow Capacity	md-ft	kh	1.254
Permeability	md	k	0.251
Skin Damage	total	S	-4.32
Pressure Drop due to Skin	psia	dP	+0.00
Flow Efficiency	%	FE	+100.00
Drainage Radius	feet	rd	170

WESTERN TESTING CO., INC.



Inside Recorder



Outside Recorder