

PHONE
318 / 824-7340

DEAN'S TESTERS INC.

P. O. BOX 1182
LIBERAL, Ks. 67901

Cabot Oil & Gas Corporation
OPERATOR

Massoni #3-5
WELL NAME & NO.

API # 15-175-21342

4272'-4296'
TEST INTERVAL

SEC. 5

TWP. 33S

RGE. 31W

COUNTY Seward

STATE Kansas

TICKET NO. 3569

Formation Toronto Type Test Conventional Date October 5, 1993
Anchor Length and Size 24' X 4 1/2" OD-Perf. Total Depth 4296'
Packer Depths 4267' & 4272' Below Straddle Choke Size Bottom 5/8" Surface 1"
Equipment Run 2 Packers, Jars, Sample Chamber, Safety joint, Circ. sub.

ORIGINAL

Lengths: Tool 57' D. P. 3594' ID 3.8" Wt. P. ID D. C. 655' ID 2.25"
Mud Type Chemical Vis. 44 Wt. 9.0 Wtr. Loss 6.8 Cl. 3200 ppm
Recorders: Depth 4289' Make Kuster Cap. 6500 Ser. No. 10269 Inside
Depth 4294' Make Kuster Cap. 6800 Ser. No. 10217 Outside
Depth Make Cap. Ser. No. Below Straddle

KCO

FEB 1

CONFIDENTIAL

Pressures:

Tool on Bottom @ 7:45 A.M. Initial Hydrostatic 2022 psi
Initial Flow 30 Min. IFF 745 psi to 922 psi
Initial Shut-In 60 Min. ISIP 1003 psi
Final Flow 60 Min. FFP 980 psi to 1008 psi
Final Shut-In 60 Min. FSIP 1008 psi
Tool off Bottom @ 11:15 A.M. Final Hydrostatic 2016 psi Temp. 109°F.

Blow: Strong. Gas to surface in 2 min.

RELEASED

Recovery: 2000' Total Fluid.
60' Gas Cut Muddy Water.
1940' Gas Cut Salt Water.

MAY 2 4 1995

FROM CONFIDENTIAL

Gas Flow: Initial Flow: Final Flow:
10 min.- 47.7 MCF/D 10 min.- 4.76 MCF/D
20 min.- 33.9 MCF/D 20 min.- Too small to measure.
30 min.- 11.02 MCF/D Remainder- Too small to measure.

Sampler Data:

Pressure 945 PSI
Gas 0.02 cu. ft.
Total Fluid 2000 cc
Oil -- cc
Water 2000 cc
Mud -- cc
Oil Gravity @ °F.
Gas/Oil Ratio

Remarks:

Fluid Analysis:
PPM Cl. S.G. Ph Rw.
Pit: 3200 1.005 9 .90 @ 85°F.
Top: 72,000 1.080 7 .06 @ 85°F.
Middle: 121,000 1.130 7 .04 @ 85°F.
Bottom: 121,000 1.130 7 .04 @ 85°F.
Sampler: 121,000 1.130 7 .04 @ 85°F.

Tester Butch Young Witnessed by: Jeff

Pressure Break Down

Test ticket no. 3569 Recorder no. 10269 Capacity 6500 Rec. Depth. 4289'

	Time	Given 30	Computed 30
Initial Flow pressure <u>745</u> to <u>922</u>			
Initial Closed in pressure <u>1003</u>		60	60
Final Flow pressure <u>980</u> to <u>1008</u>		60	60
Final Closed-in pressure <u>1008</u>		60	60

Initial Hydrostatic pressure 2022 Final Hydrostatic press. 2016 Temp 109°F.

Initial Flow Press.		Initial Closed in Press.		Final Flow Press		Final Closed in Press.	
Minutes	Press	Minutes	Press	Minutes	Press	Minutes	Press
0	--	0	922	0	980	0	1008
5	745	3		5		3	
10	748	6	974	10	990	6	1008
15	777	9		15		9	
20	835	12	983	20	996	12	1008
25	880	15		25		15	
30	922	18	990	30	1003	18	1008
35		21		35		21	
40		24	993	40	1008	24	1008
45		27		45		27	
50		30	996	50	1008	30	1008
55		33		55		33	
60		36	1000	60	1008	36	1008
65		39		65		39	
70		42	1003	70		42	1008
75		45		75		45	
80		48	1003	80		48	1008
85		51		85		51	
90		54	1003	90		54	1008
95		57		95		57	
100		60	1003	100		60	1008
105		63		105		63	
110		66		110		66	
115		69		115		69	
120		72		120		72	
		75		125		75	
		78		130		78	
		81		135		81	
		84		140		84	
		87		145		87	
		90		150		90	
		93		155		93	
		96		160		96	
		99		165		99	
		102		170		102	
		105		175		105	
		108		180		108	
		111				111	
		114				114	
		117				117	
		120				120	

**DEAN'S TESTERS
NATURAL GAS ANALYSIS REPORT**

Sampled by:
Dean's Testers
P. O. Box 1182
Liberal, Kansas 67905-0252
Phone: 316-624-7340
Ans. Ser.: 316-624-6247

Analyzed by:
Caraway Analytical
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number: 93189
Sample From: Masonni #3-5
Producer: Cabot Oil & Gas Co.
Date: 10/05/93
Time:
Sampler: Butch Young
Source:

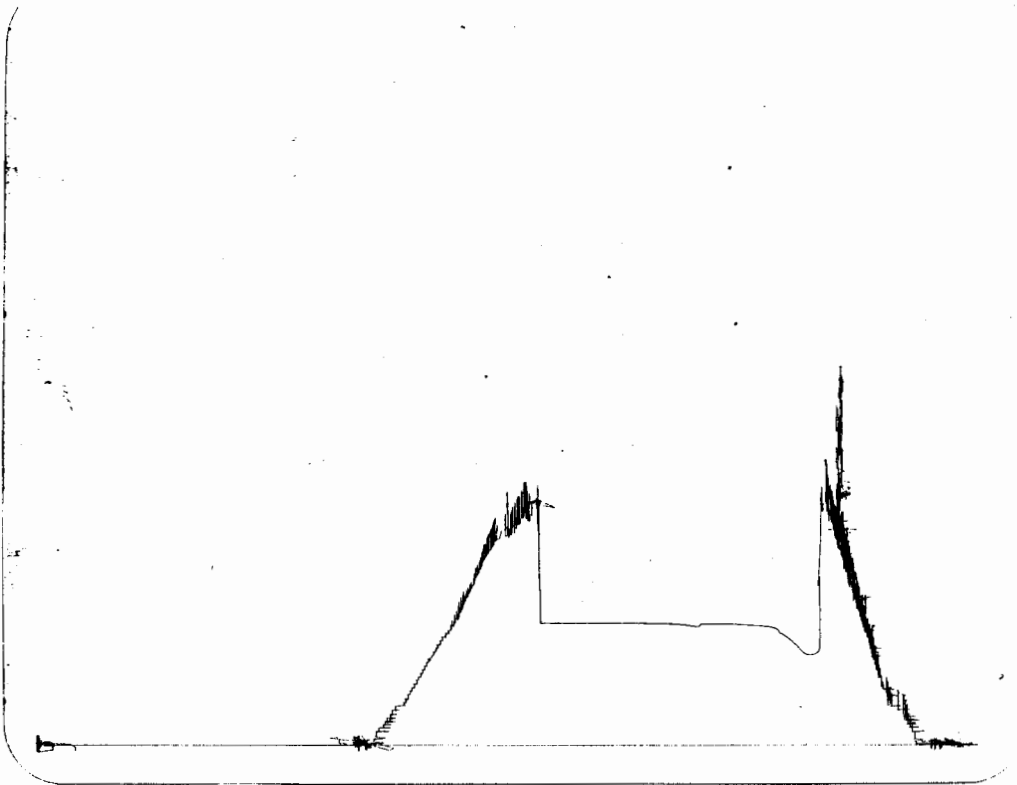
Analyzed: 10/05/93
Pressure:
Temperature:
Location: 5-338-31W
County: Seward
State: Kansas
Formation: Toronto

	Mole %	GPM
Helium	He: 0.077	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 13.498	0.000
Carbon Dioxide	CO2: 0.296	0.000
Methane	C1: 72.513	0.000
Ethane	C2: 5.880	1.573
Propane	C3: 4.476	1.233
Iso Butane	iC4: 0.566	0.185
Normal Butane	nC4: 1.298	0.409
Iso Pentane	iC5: 0.257	0.094
Normal Pentane	nC5: 0.331	0.120
Hexanes Plus	C6+: 0.808	0.353

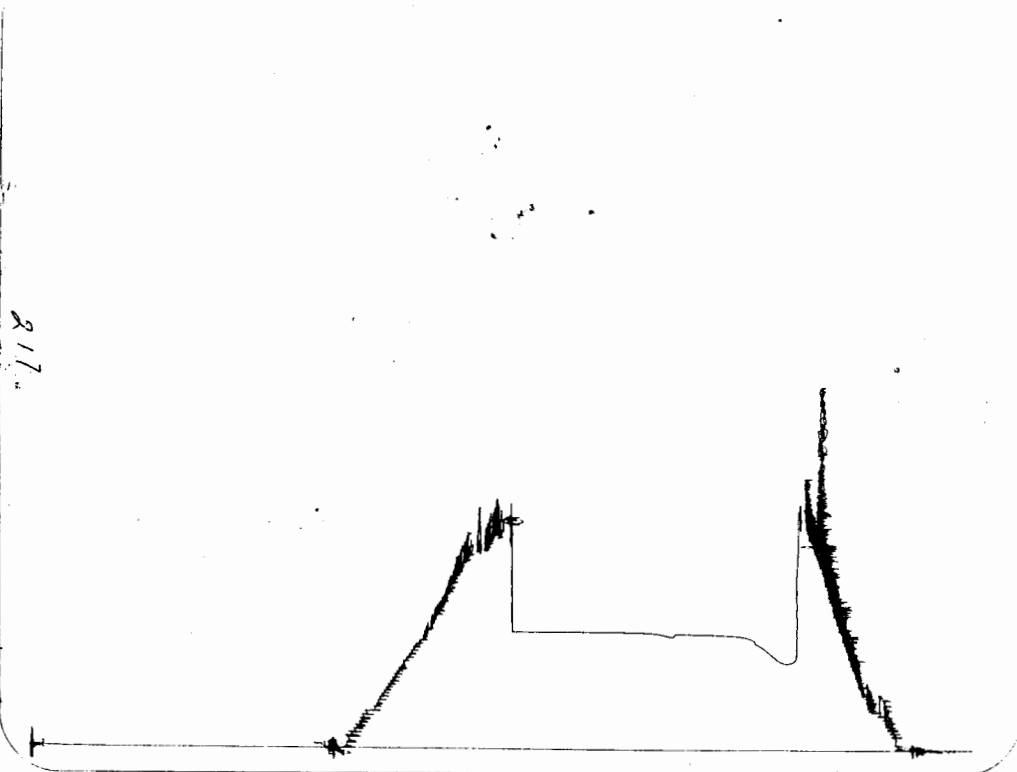
TOTAL: 100.000 3.967
Z Fact: 0.9973
SP.GR.: 0.7443
BTU (SAT): 1061.4 @ 14.73 psia
BTU (DRY): 1080.2 @ 14.73 psia

COMMENTS:

4272'-4296'



Initial Hydrostatic 2022 psi
 IFP 745 psi to 922 psi
 ISIP 1003 psi
 FFP 980 psi to 1008 psi
 FSIP 1008 psi
 Final Hydrostatic 2016 psi



Formation Kansas City Type Test Conventional Date October 6, 1993
Anchor Length and Size 34' X 4 1/2" OD-Perf. Total Depth 4546'
Packer Depths 4507' & 4512' Below Straddle Choke Size Bottom 5/8" Surface 1/4"
Equipment Run 2 Packers, Jars, Sample Chamber, Safty joint, Circ. sub.

Lengths: Tool 67' D. P. 3844' ID 3.8" Wt. P. ID D. C. 655' ID 2.25"
Mud Type Chemical Vis. 47 Wt. 9.0 Wtr. Loss 8.8 Cl. 2100 ppm
Recorders: Depth 4539' Make Kuster Cap. 6500 Ser. No. 10269 Inside
Depth 4544' Make Kuster Cap. 6800 Ser. No. 10217 Outside
Depth Make Cap. Ser. No. Below Straddle

Pressures:
Tool on Bottom @ 8:30 A.M. Initial Hydrostatic 2102 psi
Initial Flow 25 Min. IFP 103 psi to 348 psi
Initial Shut-in 60 Min. ISIP 1302 psi
Final Flow 60 Min. FFP 374 psi to 503 psi
Final Shut-in 120 Min. FSIP 1302 psi
Tool off Bottom @ 1:00 P.M. Final Hydrostatic 2086 psi Temp. 111°F.

KCC
FEB 1
CONFIDENTIAL

Blow: Weak increasing to strong on I.F.P. Weak increasing to good on F.F.P.

Recovery: 950' Total Fluid.
60' Muddy Water w/trace of oil.
890' Salt Water.

RELEASED

MAY 2 4 1995

FROM CONFIDENTIAL

Gas Flow:

Sampler Data:
Pressure 480 PSI
Gas none cu. ft.
Total Fluid 2000 cc
Oil -- cc
Water 2000 cc
Mud -- cc
Oil Gravity @ °F.
Gas/Oil Ratio

Remarks:
Fluid Analysis:
PPM Cl. S.G. Ph. Rw.
Pit: 2100 1.000 9 1.4 @ 85°F.
Top: 60,000 1.065 7 .07 @ 85°F.
Middle: 111,000 1.120 7 .04 @ 85°F.
Bottom: 111,000 1.120 7 .04 @ 85°F.
Sampler: 111,000 1.120 7 .04 @ 85°F.

Tester Butch Young Witnessed by: Jeff

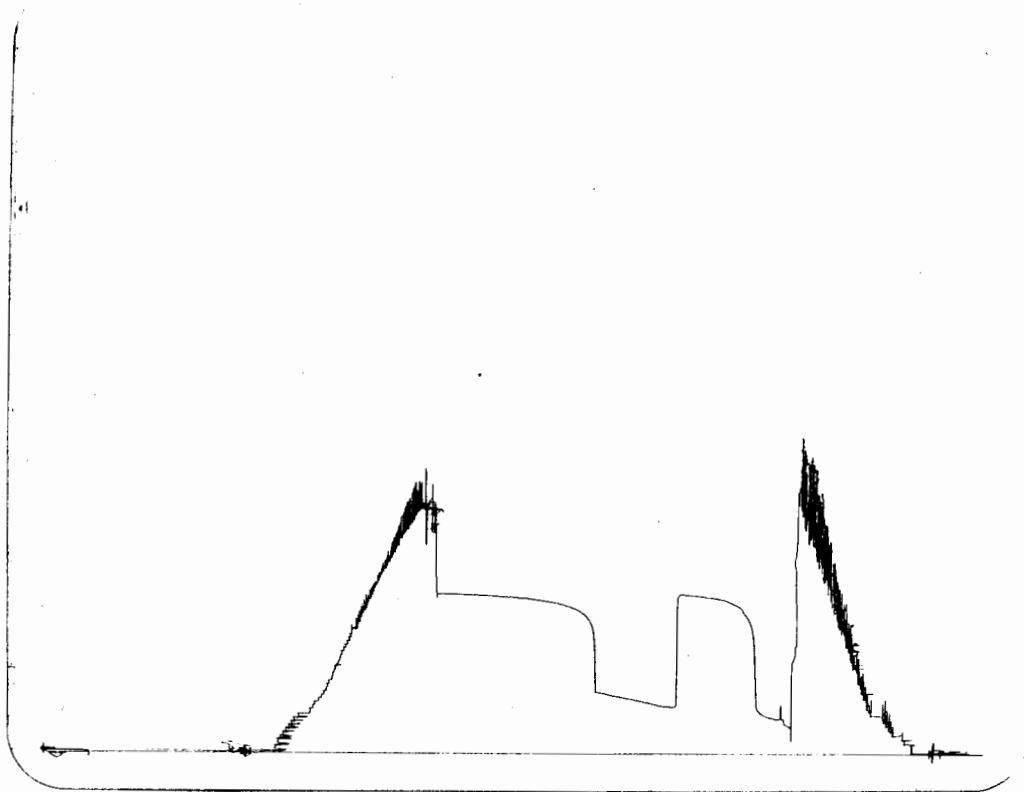
Pressure Break Down

Test ticket no. 3571 Recorder no. 10269 Capacity 6500 Rec. Depth. 4539'

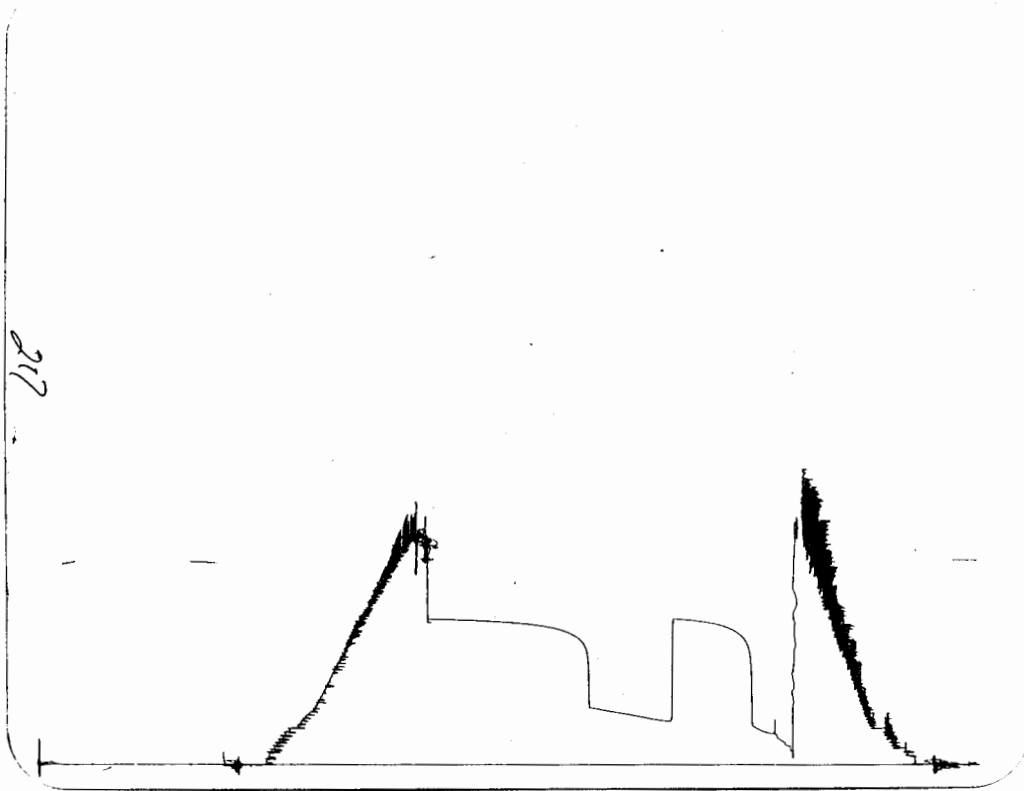
	Time	Given 30	Computed 25
Initial Flow pressure <u>103</u> to <u>348</u>			
Initial Closed in pressure <u>1302</u>		<u>60</u>	<u>60</u>
Final Flow pressure <u>374</u> to <u>503</u>		<u>60</u>	<u>60</u>
Final Closed-in pressure <u>1302</u>		<u>120</u>	<u>120</u>
Initial Hydrostatic pressure <u>2102</u>	Final Hydrostatic press. <u>2086</u>		Temp <u></u>

Initial Hydrostatic pressure 2102 Final Hydrostatic press. 2086 Temp 111°F.

Initial Flow Press.		Initial Closed in Press.		Final Flow Press		Final Closed in Press.	
Minutes	Press	Minutes	Press	Minutes	Press	Minutes	Press
0	103	0	348	0	374	0	503
5	225	3		5	377	3	
10	274	6	1054	10	380	6	1080
15	287	9		15	387	9	
20	303	12	1167	20	406	12	1147
25	348	15		25	416	15	
30		18	1209	30	429	18	1183
35		21		35	441	21	
40		24	1244	40	448	24	1202
45		27		45	458	27	
50		30	1263	50	474	30	1221
55		33		55	487	33	
60		36	1273	60	503	36	1237
65		39		65		39	
70		42	1282	70		42	1250
75		45		75		45	
80		48	1289	80		48	1257
85		51		85		51	
90		54	1295	90		54	1263
95		57		95		57	
100		60	1302	100		60	1270
105		63		105		63	
110		66		110		66	1276
115		69		115		69	
120		72		120		72	1279
		75		125		75	
		78		130		78	1282
		81		135		81	
		84		140		84	1286
		87		145		87	
		90		150		90	1289
		93		155		93	
		96		160		96	1292
		99		165		99	
		102		170		102	1295
		105		175		105	
		108		180		108	1299
		111				111	
		114				114	1302
		117				117	
		120				120	1302



Initial Hydrostatic _____ 2102 _____ psi
 IFP _____ 103 _____ psi to _____ 348 _____ psi
 ISIP _____ 1302 _____ psi
 FFP _____ 374 _____ psi to _____ 503 _____ psi
 FSIP _____ 1302 _____ psi
 Final Hydrostatic _____ 2086 _____ psi



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P. O. BOX 1182
LIBERAL, Ks. 67901

Cabot Oil & Gas Corporation
OPERATOR

Massoni #3-5
WELL NAME & NO.

API#15-175-21342
3
TEST #
5938' - 5956'
TEST INTERVAL

SEC. 5

TWP. 33S

RGE. 31W

COUNTY Seward

STATE Kansas

TICKET NO. 3573

Formation St. Louis Type Test Conventional Date October 10, 1993
Anchor Length and Size 18' X 4 1/2" OD-Perf. Total Depth 5956'
Packer Depths 5933' & 5938' Below Straddle Choke Size Bottom 5/8" Surface 1/4"
Equipment Run 2 Packers, Jars, Sample Chamber, Safty joint, Circ. sub.

Lengths: Tool 51' D. P. 5264' ID 3.8" Wt. P. ID D. C. 655' ID 2.25"
Mud Type Chemical Vis. 57 Wt. 9.0 Wtr. Loss 6.2 Cl. 1500 ppm
Recorders:
Depth 5950' Make Kuster Cap. 6500 Ser. No. 10269 Inside
Depth 5954' Make Kuster Cap. 6800 Ser. No. 10217 Outside
Depth _____ Make _____ Cap. _____ Ser. No. _____ Below Straddle

Pressures:
Tool on Bottom @ 1:15 A.M. Initial Hydrostatic 2791 pel
Initial Flow 30 Min. IFP 38 pel to 54 pel
Initial Shut-In 60 Min. ISIP 1700 pel
Final Flow 60 Min. FFP 61 pel to 93 pel
Final Shut-In 120 Min. FSIP 1684 pel
Tool off Bottom @ 5:45 A.M. Final Hydrostatic 2778 pel Temp. 131°F.

KSC
FEB 1
CONFIDENTIAL

Blow: Weak increasing to fair on I.F.P., Weak increasing to strong on F.F.P.

Recovery: 1000' Gas in drill pipe. 180' Total Fluid.
120' Oil
60' Oil Cut Mud. 31,000 PPM Cl.
Rw.- .15 @ 65°F.
S.G. 1.035
Ph./ 8

RELEASED
MAY 24 1995
FROM CONFIDENTIAL

Gas Flow:

Sampler Data:

Pressure 55 PSI
Gas 0.05 cu. ft.
Total Fluid 1800 cc
Oil 400 cc
Water 250 cc
Mud & oil emulsion 1150 cc
Oil Gravity 27.5 @ 60 °F.
Gas/Oil Ratio _____

Remarks:

Fluid Analysis:
Cl PPM S.G. Ph. Rw.
Pit: 1500 1.000 9 2.40 @ 65°F.
Sampler: 45,000 1.050 7 .12 @ 65°F.

Tester Butch Young Witnessed by: Carl Cowen

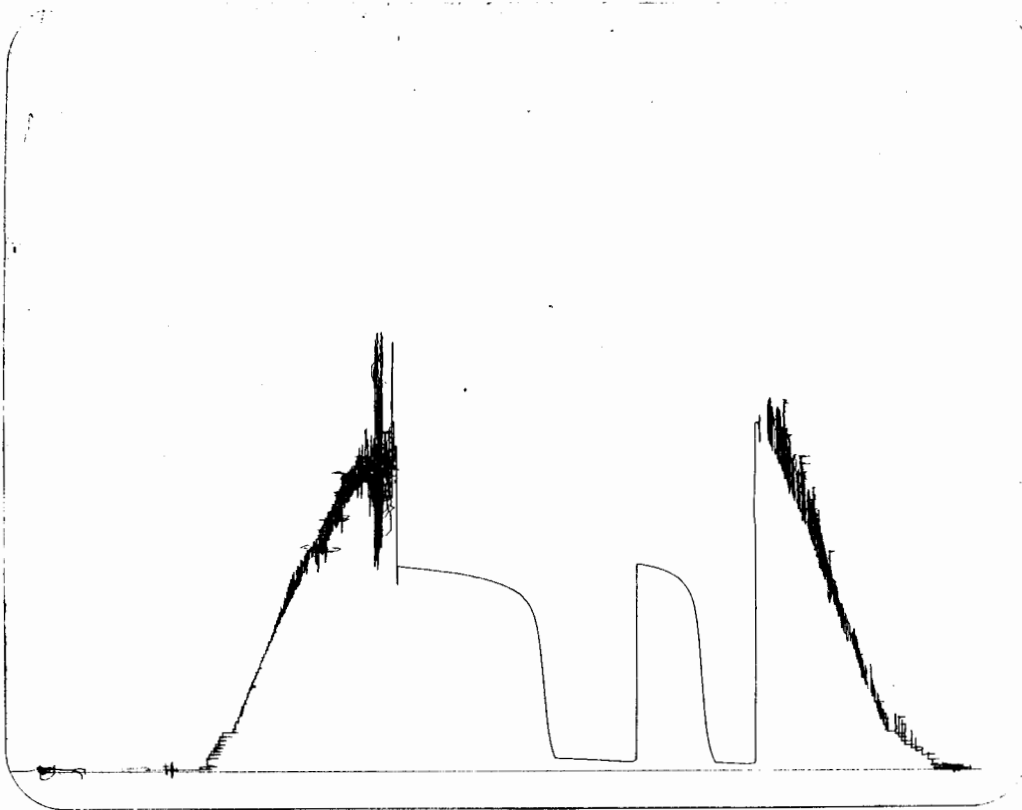
Pressure Break Down

Test ticket no. 3573 Recorder no. 10269 Capacity 6500 Rec. Depth. 5950'

		Given	Computed
Initial Flow pressure	38 to 54	30	30
Initial Closed in pressure	1700	60	60
Final Flow pressure	61 to 93	60	60
Final Closed-in pressure	1684	120	120
Initial Hydrostatic pressure	2791		
Final Hydrostatic press.	2778		
Temp			

Initial Hydrostatic pressure 2791 Final Hydrostatic press. 2778 Temp 131°F.

Initial Flow Press.		Initial Closed in Press.		Final Flow Press		Final Closed in Press.	
Minutes	Press	Minutes	Press	Minutes	Press	Minutes	Press
0	--	0	54	0	--	0	93
5	38	3	138	5	61	3	
10	41	6	303	10	64	6	390
15	45	9	677	15	67	9	
20	48	12	1131	20	70	12	1077
25	51	15	1347	25	74	15	
30	54	18	1450	30	77	18	1337
35		21	1508	35	80	21	
40		24	1549	40	83	24	1427
45		27	1581	45	87	27	
50		30	1604	50	90	30	1475
55		33	1623	55	90	33	
60		36	1639	60	93	36	1511
65		39	1652	65		39	
70		42	1662	70		42	1540
75		45	1672	75		45	
80		48	1681	80		48	1562
85		51	1688	85		51	
90		54	1694	90		54	1581
95		57	1697	95		57	
100		60	1700	100		60	1594
105		63		105		63	
110		66		110		66	1607
115		69		115		69	
120		72		120		72	1620
		75		125		75	
		78		130		78	1633
		81		135		81	
		84		140		84	1639
		87		145		87	
		90		150		90	1646
		93		155		93	
		96		160		96	1655
		99		165		99	
		102		170		102	1665
		105		175		105	
		108		180		108	1672
		111				111	
		114				114	1678
		117				117	
		120				120	1684



Initial Hydrostatic _____ 2791 _____ pel
 IFP _____ 38 _____ pel to _____ 54 _____ pel
 ISIP _____ 1700 _____ pel
 FFP _____ 61 _____ pel to _____ 93 _____ pel
 FSIP _____ 1684 _____ pel
 Final Hydrostatic _____ 2778 _____ pel

