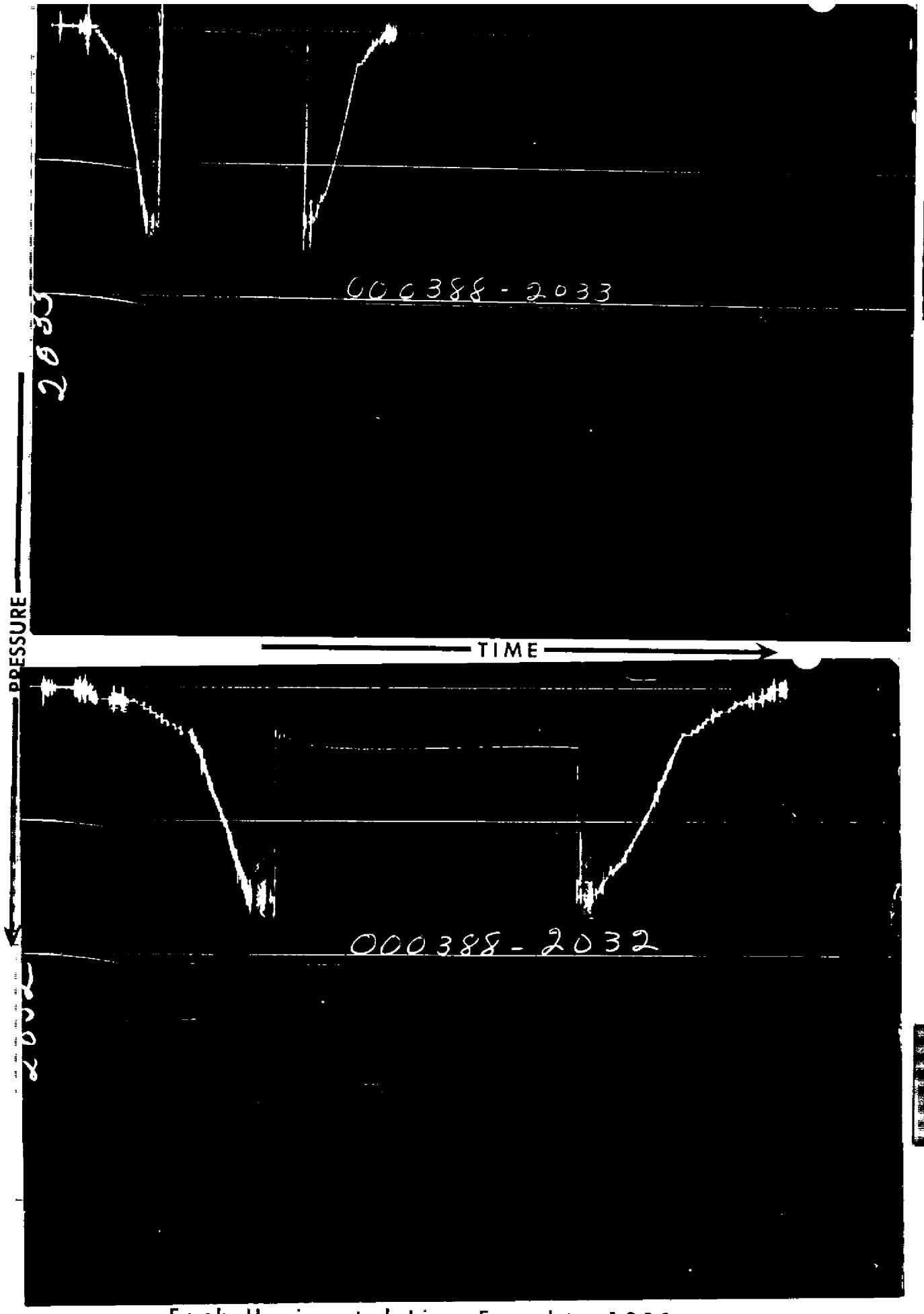

Each Horizontal Line Equal to 1000 p.s.i.

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	Feet
D.R.	= Damage Ratio	—
El	= Elevation	Feet
GD	= B.T. Gauge Depth (From Surface Reference)	Feet
h	= Interval Tested	Feet
h_1	= Net Pay Thickness	Feet
K	= Permeability	md
K_1	= Permeability (From Net Pay Zone h_1)	md
m	= Slope Extrapolated Pressure Plot (Psi^2/cycle Gas)	psi/cycle
OF_1	= Maximum Indicated Flow Rate	MCF/D
OF_2	= Minimum Indicated Flow Rate	MCF/D
OF_3	= Theoretical Open Flow Potential with/Damage Removed Max.	MCF/D
OF_4	= Theoretical Open Flow Potential with/Damage Removed Min.	MCF/D
P_s	= Extrapolated Static Pressure	Psig.
P_f	= Final Flow Pressure	Psig.
P_{ot}	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbls/day
Q_1	= Theoretical Production w/Damage Removed	bbls/day
Q_g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	°R
Z	= Compressibility Factor	—
μ	= Viscosity Gas or Liquid	CP
Log	= Common Log	

* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100 F.

FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water 2250
cc. Mud _____
Tot. Liquid cc. 2250
Gravity _____ ° API @ _____ °F.
Gas/Oil Ratio _____ cu. ft./bbl.

	RESISTIVITY			CHLORIDE CONTENT
Recovery Water	.36	@ 70	°F.	ppm
Recovery Mud		@	°F.	ppm
Recovery Mud Filtrate		@	°F.	ppm
Mud Pit Sample	.38	@ 86	°F.	ppm
Mud Pit Sample Filtrate		@	°F.	ppm

Mud Weight 8.7 vis 46 Sec.

Date 7-16-76 Ticket Number 000209
Kind of Job OPEN HOLE TEST Halliburton District FARMINGTON
Tester D. HOEFER Witness C.D. MOORE
Drilling Contractor LOFFLAND BROTHERS DRILLING COMPANY

EQUIPMENT & HOLE DATA

PW

Formation Tested Entrada
Elevation 7000' + or - Ft.
Net Productive Interval 15' Ft.
All Depths Measured From Kelly Bushing
Total Depth 5176' Ft.
Main Hole/Casing Size 8 3/4"
Drill Collar Length 654' I.D. 2 1/4"
Drill Pipe Length 4470' I.D. 3.340"
Packer Depth(s) 5156' - 5161' Ft.
Depth Tester Valve 5133' Ft.

Cushion TYPE AMOUNT Ft. Depth Back Pres. Valve
Surface Choke 3/4" Adj. Choke 3/4" Bottom

Recovered 150 Feet of Mud cut water.
Recovered 4050 Feet of Water.
Recovered Feet of
Recovered Feet of
Recovered Feet of

Meas. From Tester Valve

Remarks Charts indicate possible slight plugging during initial flow period.

SEE PRODUCTION TEST DATA SHEET.....

(* = Time given and recorded do not agree).

TEMPERATURE	Gauge No. 2033 Depth: 5138 Ft.		Gauge No. 2032 Depth: 5172 Ft.		Gauge No. Depth: Ft.		TIME	
	12 Hour Clock		24 Hour Clock		Hour Clock		Tool Opened 5:45	A.M. P.M.
Est. °F.	Blanked Off No		Blanked Off Yes		Blanked Off			
Actual 149 °F.	Pressures		Pressures		Pressures		Opened Bypass 9:00	A.M. P.M.
	Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic	2468	2462	2479	2475				
First Period Flow Initial	345	163-Q	609	232			———	———
First Period Flow Final	1293	1289	1345	1335			30	30
First Period Closed in	1939	1939	1952	1951			45	46
Second Period Flow Initial	1346	1271	1476	1289			———	———
Second Period Flow Final	1926	1864	1873	1873			60	65*
Second Period Closed in	1979	1941	1952	1954			60	60
Third Period Flow Initial							———	———
Third Period Flow Final								
Third Period Closed in								
Final Hydrostatic	2468	2447	2479	2462			———	———

Q = Questionable

FORM 181-R1—PRINTED IN U.S.A.

FORMATION TEST DATA

LITTLE'S 96671 10M 8/74

Legal Location Sec. - Twp. - Rng. 30 - 19 - 2
Lease Name FEDERAL 30
Well No. 1
Test No. 2
Tested Interval 5161' - 5176'
Field Area WILDCAT
County SANDOVAL
State NEW MEXICO
Lease Owner/Company Name FILON EXPLORATION CORPORATION

13

Casing perfs._____ Bottom choke_____ Surf. temp_____ °F Ticket No. 000209

Gas gravity_____ Oil gravity_____ GOR_____

Spec. gravity_____ Chlorides_____ ppm Res._____ @_____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED_____

Date Time a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
12:15					On location.
2:00					Picked up and made up tools.
2:45					Started in hole.
5:43					On bottom.
5:45					Opened tool with a good blow.
6:15					Closed tool.
7:00					Reopened tool with a fair blow.
8:00					Closed tool.
9:00					Opened bypass.
9:10					Come off bottom.
9:45					Hit 4200' of fluid. 150' of mud
					cut water. 4050' of water.
12:00					Out of hole.

FORM 162 RI—PRINTED IN U.S.A.

PRODUCTION TEST DATA

LITTLE'S 96672 5M 8/74

/2

Gauge No.	2033	Depth	5138'	Clock No.	10444	12 hour	Ticket No. 000209

	First Flow Period		First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.000	163-Q	.000		1289	.000	1271	.000		1864					
1	.196	1289	.0256*		1922	.0958**	1555	.0198		1937					
2			.0447		1927	.1596	1661	.0396		1938					
3			.0639		1931	.2235	1737	.0594		1938					
4	PLUGGING		.0831		1933	.2873	1794	.0792		1939					
5			.1023		1934	.3512	1835	.0990		1939					
6			.1214		1935	.4150	1864	.1188		1939					
7			.1406		1937			.1386		1939					
8			.1598		1937			.1584		1939					
9			.1789		1938			.1782		1939					
10			.1981		1938			.1980		1939					
11			.2173		1938			.2376		1939					
12			.2364		1938			.2772		1941					
13			.2556		1939			.3168		1941					
14			.2748		1939			.3564		1941					
15			.2940		1939			.3960		1941					

Gauge No.	2032	Depth	5172'	Clock No.	1387	24 hour

0	.000	232	.000		1335	.000	1289	.000		1873					
1	.0167	P	.0134*		1929	.0503**	1599	.0101		1947					
2	.0333	922	.0234		1938	.0839	1706	.0201		1950					
3	.0500	1039	.0335		1942	.1174	1770	.0302		1951					
4	.0667	1172	.0435		1944	.1509	1804	.0402		1951					
5	.0834	1291	.0536		1947	.1844	1845	.0503		1951					
6	.1000	1335	.0636		1948	.2180	1873	.0603		1952					
7			.0736		1950			.0704		1952					
8			.0873		1950			.0804		1952					
9			.0937		1950	STAIR-STEPPING		.0905		1952					
10			.1038		1950			.1005		1952					
11			.1138		1951			.1206		1954					
12			.1238		1951			.1407		1954					
13			.1339		1951			.1608		1954					
14			.1439		1951			.1809		1954					
15			.1540		1951			.2010		1954					
Reading Interval	5		3			10		***							Minutes

REMARKS: * = 4 minutes ** = 15 minutes *** = First 10 intervals are equal to 3 minutes each; the next 5 intervals are equal to 6 minutes each. P = Plugging Q = Questionable

SPECIAL PRESSURE DATA

LITTLE'S 96673 75C 8/74

TICKET NO. 000209

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6"	2.5"		
Water Cushion Valve				
Drill Pipe	4"	3.340"	4470'	
Drill Collars	6"	2.25"	654'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	8'	5125'
Hydro-Spring Tester	5"	.75"	5'	5133'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.5"	4'	5138'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1.00"	3'	
Pressure Equalizing Crossover				
Packer Assembly	7 1/2"	1.53"	6'	5156'
Distributor				
Packer Assembly	7 1/2"	1.53"	6'	5161'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5 3/4"	2.5"	10'	
Blanked-Off B.T. Running Case	5 3/4"	3.50"	4'	5172'
Total Depth				5176'