

SANTAFE 20

Lease Name

Well No. 3

Test No. 2

5593' - 5608'

Tested Interval

DOMESTIC PETROLEUM CORPORATION

Lease Owner/Company Name

Legal Location
Sec. - Twp. - Rng.

20 - 19N - 8W

Field Area

SNAKE EYES

County

SAN JUAN

State

NEW MEXICO

FLUID SAMPLE DATA				Date 6-16-77		Ticket Number 162166	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE TEST		Halliburton District FARMINGTON	
Recovery: Cu. Ft. Gas _____				Tester G. K. SMITH		Witness HOLLINGSWORTH	
cc. Oil 2100				Drilling Contractor FOUR CORNERS TH S			
cc. Water _____				EQUIPMENT & HOLE DATA			
cc. Mud _____				Formation Tested Entrada			
Tot. Liquid cc. 2100				Elevation 6585' Ft.			
Gravity _____ ° API @ _____ ° F.				Net Productive Interval 8' Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				All Depths Measured From Rotary Kelly Bushing			
RESISTIVITY _____ CHLORIDE CONTENT _____				Total Depth 5608' Ft.			
Recovery Water _____ @ _____ ° F. _____ ppm				Main Hole/Casing Size 8 3/4"			
Recovery Mud _____ @ _____ ° F. _____ ppm				Drill Collar Length 582' I.D. 2 1/4"			
Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm				Drill Pipe Length 5074' I.D. 3.826"			
Mud Pit Sample _____ @ _____ ° F. _____ ppm				Packer Depth(s) 5588' - 5593' Ft.			
Mud Pit Sample Filtrate _____ @ _____ ° F. _____ ppm				Depth Tester Valve 5572' Ft.			
Mud Weight 9.2 vis 72 sec				Surface Choke 34/" Adj. Choke 3/4"			
Cushion		TYPE AMOUNT		Depth Back Pres. Valve		Bottom Choke	
Recovered 5590		Feet of oil.					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks See Production Test Data Sheet							
Q - Questionable. . .							
TEMPERATURE		Gauge No. 2032		Gauge No. 2033		Gauge No.	
Depth: 5576 Ft.		Depth: 5604 Ft.		Depth: _____ Ft.		TIME	
Est. _____ ° F.		24 Hour Clock		12 Hour Clock		Hour Clock	
Blanked Off NO		Blanked Off YES		Blanked Off		Tool _____ A.M.	
Actual 140 ° F.		Pressures		Pressures		Opened 1520 P.M.	
		Pressures		Pressures		Opened _____ A.M.	
		Pressures		Pressures		Bypass 1835 P.M.	
		Field Office		Field Office		Reported _____	
		Field Office		Field Office		Computed _____	
Initial Hydrostatic		2584 2654		2634 2680		Minutes Minutes	
Flow Initial		662 657-0		634 555-0			
Flow Final		1109 1134		1161 1169			
Closed in		2321 2327		2345 2348		15 15	
Flow Initial		1346 1366		1397 1405		30 29	
Flow Final		2137 2151		2134 2172			
Closed in		2321 2340		2345 2358		60 62	
Flow Initial						90 91	
Flow Final							
Closed in							
Final Hydrostatic		2584 2613		2608 2635			

Casing perms. _____ Bottom choke _____ Surf. temp _____ °F Ticket No. 162166
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 2032		Depth 5576		Clock No. 9756		24 hour		Ticket No. 162166	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.
0	.0000	657-0	.0000	.0000	1366	.0000			2151
1	.0108	673	.0064	.0393	1534	.0099			2253
2	.0216	805	.0160	.0720	1725	.0197			2289
3	.0324	916	.0257	.1048	1879	.0296			2308
4	.0432	1032	.0353	.1375	1993	.0394			2319
5	.0540	1134	.0449	.1703	2087	.0493			2324
6			.0545	.2030	2151	.0591			2329
7			.0641			.0690			2332
8			.0738			.0788			2333
9			.0834			.0887			2335
10			.0930			.0985			2335
11						.1314			2336
12						.1642			2337
13						.1971			2337
14						.2299			2339
15						.2990			2340

Gauge No. 2033		Depth 5604		Clock No. 10445		12 hour	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure	
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\log \frac{t + \theta}{\theta}$
0	.0000	555-0	.0000	.0000	1405	.0000	
1	.0210	709	.0137*	.0807**	1586	.0203	
2	.0420	884	.0343	.1480	1765	.0407	
3	.0630	971	.0549	.2152	1913	.0610	
4	.0840	1065	.0755	.2825	2024	.0814	
5	.1050	1169	.0960	.3497	2110	.1017	
6			.1166	.4170	2172	.1220	
7			.1372			.1424	
8			.1578			.1627	
9			.1784			.1831	
10			.1990			.2034	
11						.2712	
12						.3390	
13						.4068	
14						.4746	
15						.6170	
Reading Interval 3		3		10		***	

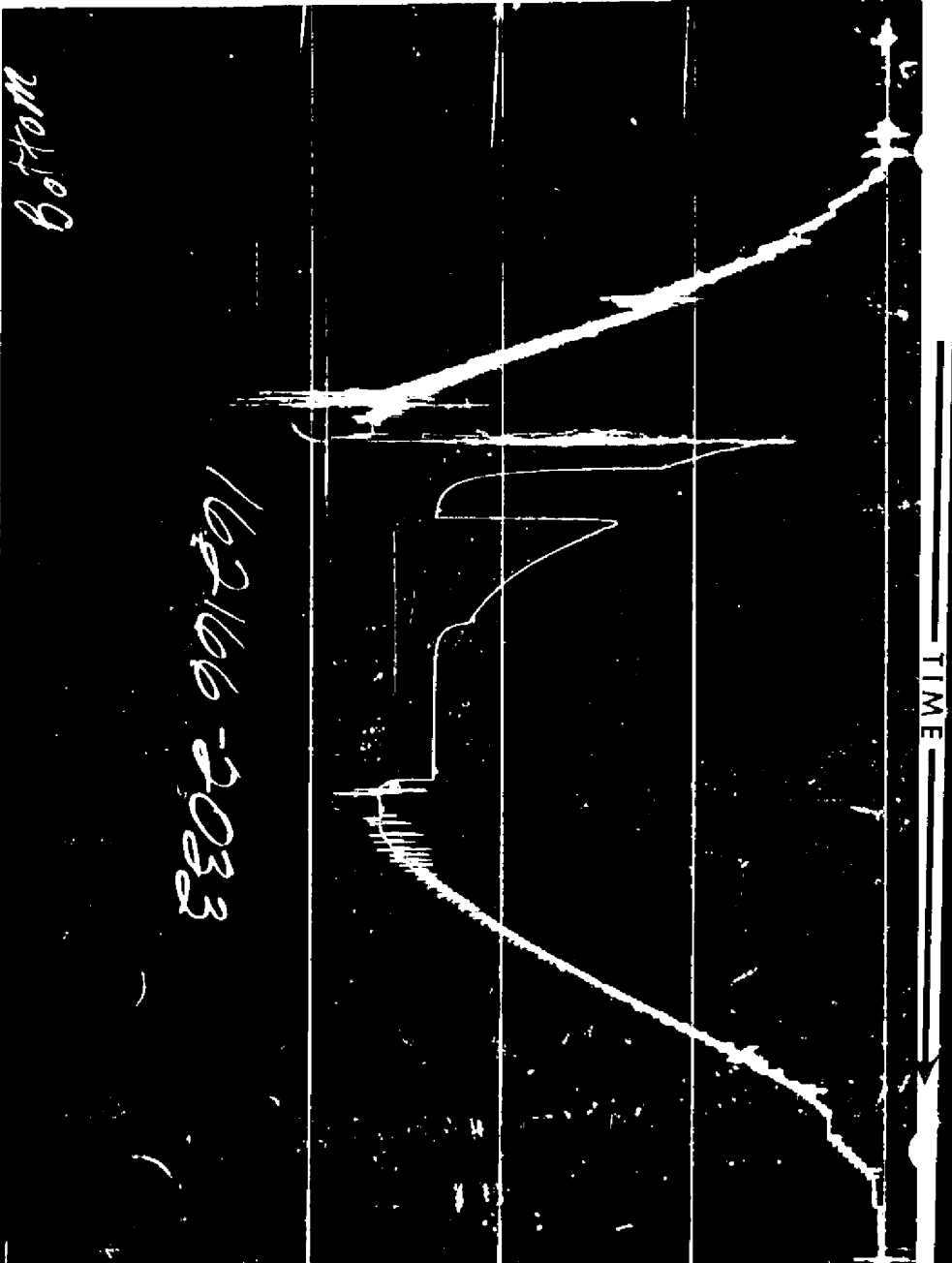
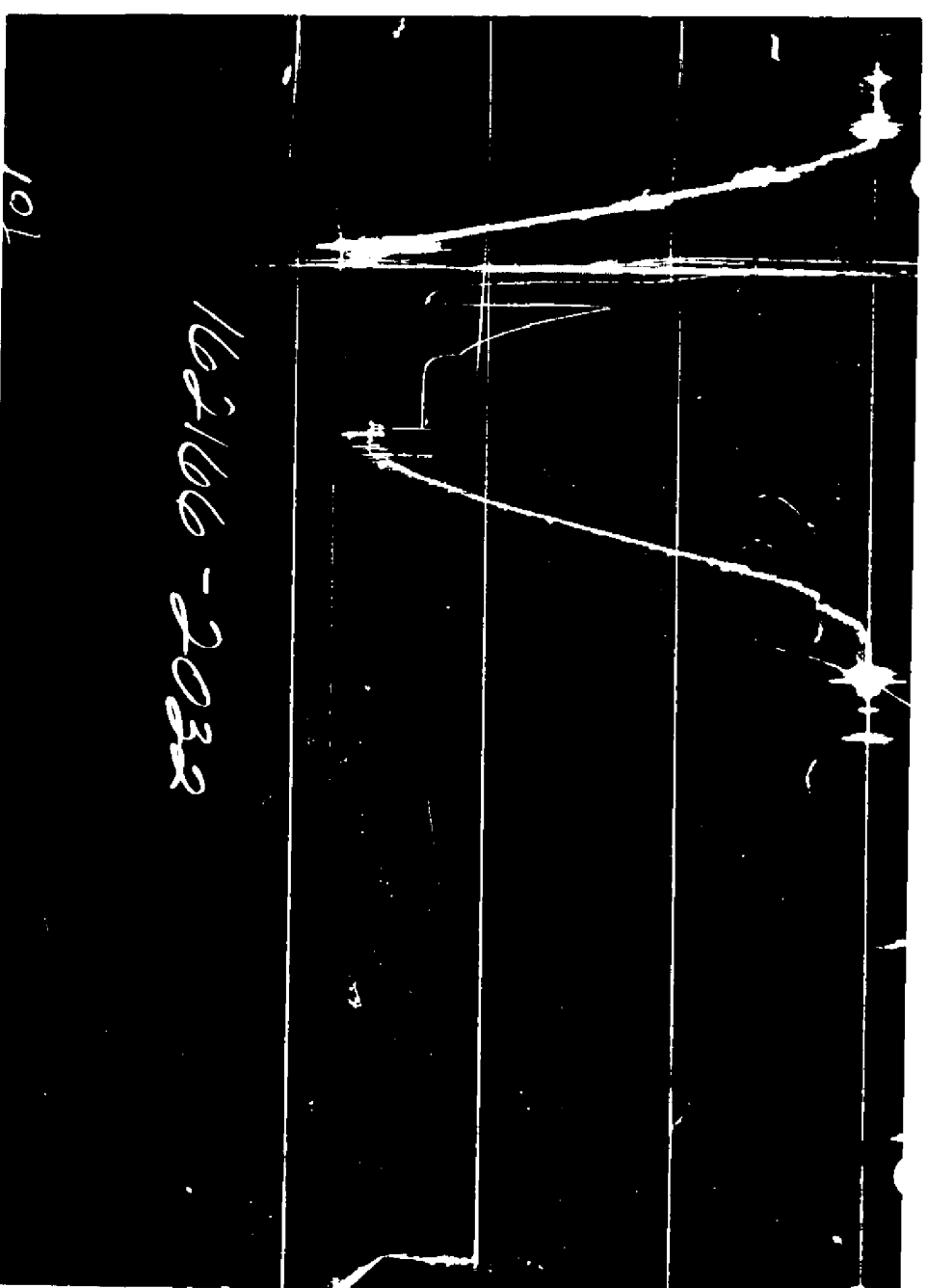
REMARKS: * - first interval is equal to 2 minutes, ** - 12 minutes, *** - first 10 intervals are equal to 3 minutes each, next 4 intervals are equal to 10 minutes each, and last interval is equal to 21 minutes.

Q - Questionable.

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h)	Feet
D.R.	= Damage Ratio	
EI	= 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)	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_{so}	= 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.



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