

NOMENCLATURE

b	= Approximate Radius of Investigation	Feet
b_1	= Approximate Radius of Investigation (Net Pay Zone h_1)	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_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_w	= Potentiometric Surface (Fresh Water *)	Feet
Q	= Average Adjusted Production Rate During Test	bbbls/day
Q_1	= Theoretical Production w/Damage Removed	bbbls/day
Q_g	= Measured Gas Production Rate	MCF/D
R	= Corrected Recovery	bbbls
r_w	= Radius of Well Bore	Feet
t	= Flow Time	Minutes
t_o	= Total Flow Time	Minutes
T	= Temperature Rankine	$^{\circ}R$
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 $^{\circ}F$.

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

PRESSURE

TIME

000274-6040

000274-6039

FLUID SAMPLE DATA				Date 5-7-76		Ticket Number 000274	
Sampler Pressure _____ P.S.I.G. at Surface Recovery: Cu. Ft. Gas _____ cc. Oil _____ cc. Water _____ cc. Mud 2250 Tot. Liquid cc. _____ Gravity _____ ° API @ _____ °F. Gas/Oil Ratio _____ cu. ft./bbl. RESISTIVITY CHLORIDE CONTENT				Kind of Job OPEN HOLE Halliburton District FARMINGTON Tester MR. HOEFER Witness MR. MOORE Drilling Contractor FOUR CORNERS DRILLING DR EQUIPMENT & HOLE DATA			
Recovery Water _____ @ _____ °F. _____ ppm Recovery Mud 3.8 @ 66 °F. _____ ppm Recovery Mud Filtrate _____ @ _____ °F. _____ ppm Mud Pit Sample 3.8 @ 66 °F. _____ ppm Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm Mud Weight 9.0 vis 61 cp				Formation Tested Gallup Elevation 6925' Ft. Net Productive Interval 200' Ft. All Depths Measured From Kelly Bushing Total Depth 4304 Ft. Main Hole/Casing Size 8 3/4" Drill Collar Length 461' I.D. 2.25" Drill Pipe Length 3713' I.D. 3.826" Packer Depth(s) 4098-4104' Ft. Depth Tester Valve 4081' Ft.			
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Choke 3/4" Adj. Bottom Choke 3/4"	
Recovered 50 Feet of mud							
Recovered Feet of							
Recovered Feet of							
Recovered Feet of							
Recovered Feet of							
Remarks SEE PRODUCTION TEST DATA SHEET							
TEMPERATURE		Gauge No. 6040		Gauge No. 6039		Gauge No.	
Depth:		4086 Ft.		4301 Ft.		Depth: Ft.	
12 Hour Clock		24 Hour Clock		Hour Clock		TIME	
Est.	°F.	Blanked Off No		Blanked Off Yes		Blanked Off	
Actual 117 °F.		Pressures		Pressures		Pressures	
	Field	Office	Field	Office	Field	Office	Reported
Initial Hydrostatic	1997	1979	2092	2087			Minutes
First Period Flow	Initial	40	38	146	139		
	Final	53	34	159	143		
	Closed in	93	91	199	202		15
Second Period Flow	Initial	53	49	159	159		
	Final	53	44	159	161		90
	Closed in	159	151	251	262		120
Third Period Flow	Initial						
	Final						
	Closed in						
Final Hydrostatic	1984	1971	2079	2079			

Legal Location Sec. - Twp. - Range. 33-21-5
 Lease Name FEDERAL 33
 Well No. 5
 Test No. 1
 Tested Interval 4104-4304'
 County SANDOVAL
 State NEW MEXICO
 Lease Owner/Company Name FILON EXPLORATION CORPORATION

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing	6"	2.50"	1'	
Reversing Sub				
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	3713'	
Drill Collars	6 1/4"	2.25"	461'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	8'	4073'
Hydro-Spring Tester	5"	.75"	5'	4081'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.50"	4'	4086'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1.00"	3'	
Pressure Equalizing Crossover				
Packer Assembly	7 1/2"	1.53"	6'	4098'
Distributor				
Packer Assembly	7 1/2"	1.53"	6'	4104'
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	6 1/4"	2.25"	159'	
Flush Joint Anchor	5 3/4"	3.50"	34'	
Blanked-Off B.T. Running Case	5 3/4"	3.50"	4'	4301'
Total Depth				4304'