FLUID SAMPLE DATA

Sampler Pressure _____ P.S.I.G. at Surface
Recovery: Cu. Ft. Gas _____
cc. Oil _____
cc. Water _____
cc. Mud _____
Tot. Liquid cc. _____
Gravity _____ ° API @ _____ °F.
Gas/Oil Ratio No sampler pressure cu. ft./bbl.

		RESISTIVITY		CHLORIDE CONTENT
Recovery Water	@	°F.		ppm
Recovery Mud	@	°F.		ppm
Recovery Mud Filtrate	@	°F.		ppm
Mud Pit Sample	@	°F.		ppm
Mud Pit Sample Filtrate	@	°F.		ppm

Mud Weight 10.2 vis 52 sec CR

Date 8-7-79 Ticket Number 603825
Kind of Job OPEN HOLE Halliburton District HOBBS
Tester C. PAPPAS Witness P. BRASHER
Drilling Contractor RIAL DRILLING COMPANY SM

EQUIPMENT & HOLE DATA

Formation Tested Lower 3 Brothers
Elevation - Ft.
Net Productive Interval 10' Ft.
All Depths Measured From Rotary table
Total Depth 7708' Ft.
Main Hole/Casing Size 8 3/4"
Drill Collar Length 651' I.D. 2.25"
Drill Pipe Length 6986' I.D. 3.826"
Packer Depth(s) 7668-7676' Ft.
Depth Tester Valve 7637' Ft.

Cushion TYPE AMOUNT Ft. Depth Back Pres. Valve
Surface Choke Floor Manifold Bottom Choke .75"

Recovered 325 Feet of heavy gas cut mud
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Meas. From Tester Valve

Remarks SEE PRODUCTION TEST DATA SHEET....Charts indicate partial plugging of perforations during both flow periods.

TEMPERATURE	Gauge No. 1515	Gauge No. 1496	Gauge No.	TIME
	Depth: 7656 Ft.	Depth: 7703 Ft.	Depth: Ft.	
	24 Hour Clock	24 Hour Clock	Hour Clock	Tool Opened 1135 A.M. P.M.
Est. °F.	Blanked Off no	Blanked Off yes	Blanked Off	Opened A.M. P.M.
Actual 127 °F.	Pressures	Pressures	Pressures	Bypass

		Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic		4192	4058.8	3980	4087.0			———	———
First Period	Flow Initial	265	244.0	518	949.1				
	Flow Final	287	280.7	Plugging	433.6			15	15
	Closed in	2479	2467.5	2417	2472.2			35	34
Second Period	Flow Initial	287	164.1	475	530.9			———	———
	Flow Final	331	295.8	540	473.4			60	60
	Closed in	2434	2367.9	2374	2383.5			121	121
Third Period	Flow Initial							———	———
	Flow Final								
	Closed in								
Final Hydrostatic		4214	4047.9	4089	4066.9			———	———

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FORMATION TEST DATA

LITTLE'S 96671 10M 8/74

Legal Location Sec. - Twp. - Rng. 1-6S-33
Lease Name LAMBIRTH
Well No. 5
Test No. 1
Tested Interval 7676 - 7708'
Field Area SOUTH PETERSON(W & S DORA)
County ROOSEVELT
State NEW MEXICO
Lease Owner/Company Name ENSERCH EXPLORATION INCORPORATED

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Casing perfs.____ Bottom choke____ Surf. temp____ °F Ticket No. 603825

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
0230					Special operator on location
					Came out of hole
0630					Unloaded and made up tools
0800					Started tools in hole
1135	BH				Opened tool with good to strong blow
1140	BH	50			Increasing
1142	BH	80			Opened to 1/4"
1143	1/4"	90			Gas to surface - increasing
1145	"	100			Increasing
1150	"	115			Closed tool
1225	"				Reopened tool
1230	"	70			Increasing
1235	"	115			"
1240	"	140			"
1250	"	165			"
1255	"	180			"
1300	"	180			" - steady
1305	"	185			Slight increase
1310	"	185			Steady
1315	"	185			"
1320	"	185			"
1325	"	185			Opened for 60 minutes, closed tool
1526					Started out of hole.

Gauge No.	1516		Depth	7656'		Clock No.	5981		24 hour	Ticket No.	603825			
	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	.0000	244.0	.0000		280.7	.0000	164.1	.0000		295.8					
1	.0520	280.7	.0135*		2140.6	.1980	295.8	.0303**		1885.5					
2			.0237		2274.8			.0572		2023.8					
3	Plugging		.0338		2337.6	Plugging		.0841		2101.7					
4			.0440		2374.4			.1110		2153.6					
5			.0541		2400.4			.1379		2194.8					
6			.0643		2415.5			.1648		2227.2					
7			.0744		2430.7			.1917		2255.4					
8			.0846		2439.3			.2186		2279.2					
9			.0947		2448.0			.2456		2298.7					
10			.1049		2458.8			.2725		2313.8					
11			.1150		2467.5			.2994		2326.8					
12								.3263		2339.8					
13								.3532		2348.4					
14								.3801		2359.3					
15								.4070		2367.9					
Gauge No.	1496		Depth	7703'		Clock No.	5979	24 hour							
0	.0000	949.1	.0000		433.6	.0000	530.9	.0000		473.4					
1	.0510	433.6	.0132*		2212.8	.1990	473.4	.0298**		1929.2					
2			.0232		2303.7			.0563		2044.3					
3	Plugging		.0319		2352.5	Plugging		.0828		2117.5					
4			.0428		2385.8			.1094		2168.5					
5			.0527		2407.9			.1359		2206.2					
6			.0626		2423.5			.1624		2239.4					
7			.0725		2439.0			.1889		2268.2					
8			.0823		2450.1			.2154		2290.4					
9			.0922		2456.7			.2419		2310.4					
10			.1021		2467.8			.2684		2328.1					
11			.1120		2472.2			.2949		2341.4					
12								.3214		2354.7					
13								.3479		2365.8					
14								.3745		2374.7					
15								.4010		2383.5					
Reading Interval			3					8							Minutes

REMARKS: *First interval is equal to 4 minutes. ** = 9 minutes.

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SPECIAL PRESSURE DATA

LITTLE'S 96673 75C 8/74

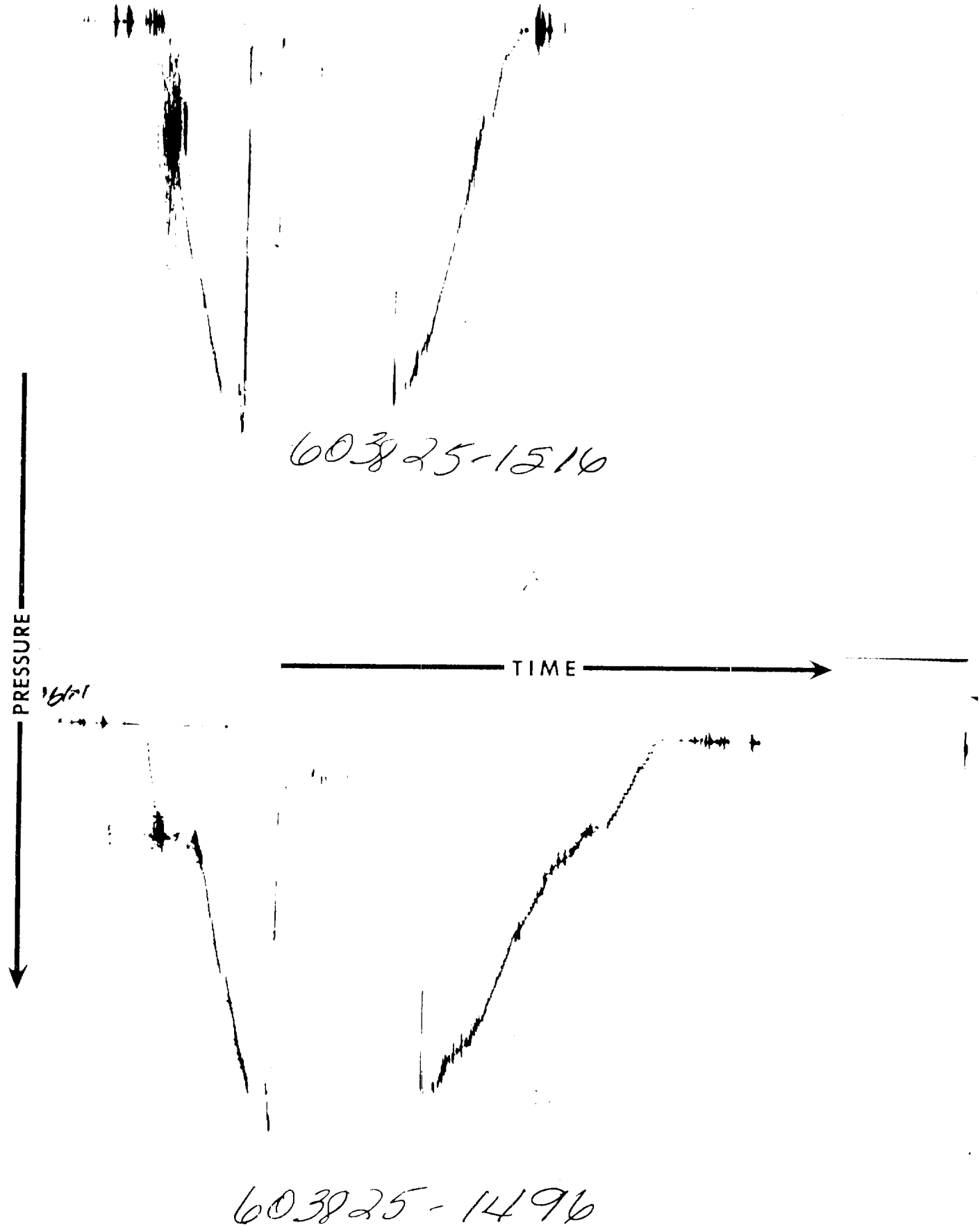
	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6.25"	3'	1'	
Water Cushion Valve				
Drill Pipe	4.5"	3.826"	6986'	
Drill Collars	6.25"	2.25"	651'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	7637'
Multiple CIP Sampler	5"	2.38"	4'	
Extension Joint	5"	1.50"	10'	
AP Running Case	5"	3.50"	4'	7656'
Hydraulic Jar	5"	1.75"	5'	
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	7.75"	1.53"	6'	7668'
Distributor	5"	1.68"	3'	
Packer Assembly	7.75"	1.53"	6'	7676'
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	5.75"	3.50"	27'	
Blanked-Off B.T. Running Case	5.75"	3.50"	5'	7703'
Total Depth				7708'

EQUIPMENT DATA

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.



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