

FLUID SAMPLE DATA		Date	2-20-72	Ticket Number	452318
Sampler Pressure _____ P.S.I.G. at Surface	Recovery: Cu. Ft. Gas _____	Kind of Job	OPEN HOLE	Halliburton District	EL DORADO
cc. Oil _____	cc. Water _____	Tester	MACY	Witness	OVERALL
cc. Mud _____	Tot. Liquid cc. _____	Drilling Contractor	WHITE AND ELLIS DRILLING, INC. NM		
Gravity _____ ° API @ _____ 60 °F.	Gas/Oil Ratio _____ cu. ft./bbl.	EQUIPMENT & HOLE DATA S			
	RESISTIVITY _____ CHLORIDE CONTENT _____	Formation Tested	Viola		
Recovery Water _____ @ _____ °F. _____ ppm	Recovery Mud _____ @ _____ °F. _____ ppm	Elevation	1405' K.B. _____ Ft.		
Recovery Mud Filtrate _____ @ _____ °F. _____ ppm	Mud Pit Sample _____ @ _____ °F. _____ ppm	Net Productive Interval	7' _____ Ft.		
Mud Pit Sample Filtrate _____ @ _____ °F. _____ ppm	Mud Weight _____ 9.8 vis _____ 44 cp	All Depths Measured From	Kelly Bushing		
		Total Depth	2486' _____ Ft.		
		Main Hole/Casing Size	7 7/8"		
		Drill Collar Length	104'	I.D.	2.25"
		Drill Pipe Length	2323'	I.D.	3.826"
		Packer Depth(s)	2479' _____ Ft.		
		Depth Tester Valve	2466' _____ Ft.		

Cushion	TYPE NONE	AMOUNT	Ft.	Depth Back Pres. Valve	NONE	Surface Choke	1/4"	Bottom Choke	3/4"
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Recovered	710'	Feet of	oil	Med. From Tester Valve
Recovered	60'	Feet of	mud cut oil	
Recovered	829'	Feet of	slightly salty water	
Recovered		Feet of		
Recovered		Feet of		

Remarks Tool opened for a 28 minute first flow with a strong blow. Rotated tool for a 30 minute first closed in pressure. Tool reopened with a strong blow. No gas. Took a 31 minute second closed in pressure.

TEMPERATURE	Gauge No. 537		Gauge No. 291		Gauge No.		TIME
	Depth: 2467' Ft.		Depth: 2481' Ft.		Depth: _____ Ft.		
Est. 95 °F.	12 Hour Clock		12 Hour Clock		Hour Clock		Tool Opened 0841 A.M. P.M.
Actual °F.	Blanked Off NO		Blanked Off YES		Blanked Off		Tool Closed 1111 A.M. P.M.
	Pressures		Pressures		Pressures		Reported Computed
	Field	Office	Field	Office	Field	Office	Minutes Minutes
Initial Hydrostatic		1256	1287.4	1261			
First Period Flow	Initial	63	109.9	74			
	Final	414	416.0	420			30 28
	Closed in	734	737.5	739			30 30
Second Period Flow	Initial	418	416.0	427			
	Final	642	635.6	647			60 61
	Closed in	739	745.3	743			30 31
Third Period Flow	Initial						
	Final						
Closed in							
Final Hydrostatic		1236	1255.9	1245			

Legal Location Sec. - Twp. - Rng. 30 - 25S - 5E
 Lease Name MURKAY
 Well No. 101
 Test No. 1
 Field Area EL DORADO
 Test Interval 2479' - 2486'
 County BUTLER
 State KANSAS
 Lease Owner/Company Name CITIES SERVICE OIL COMPANY

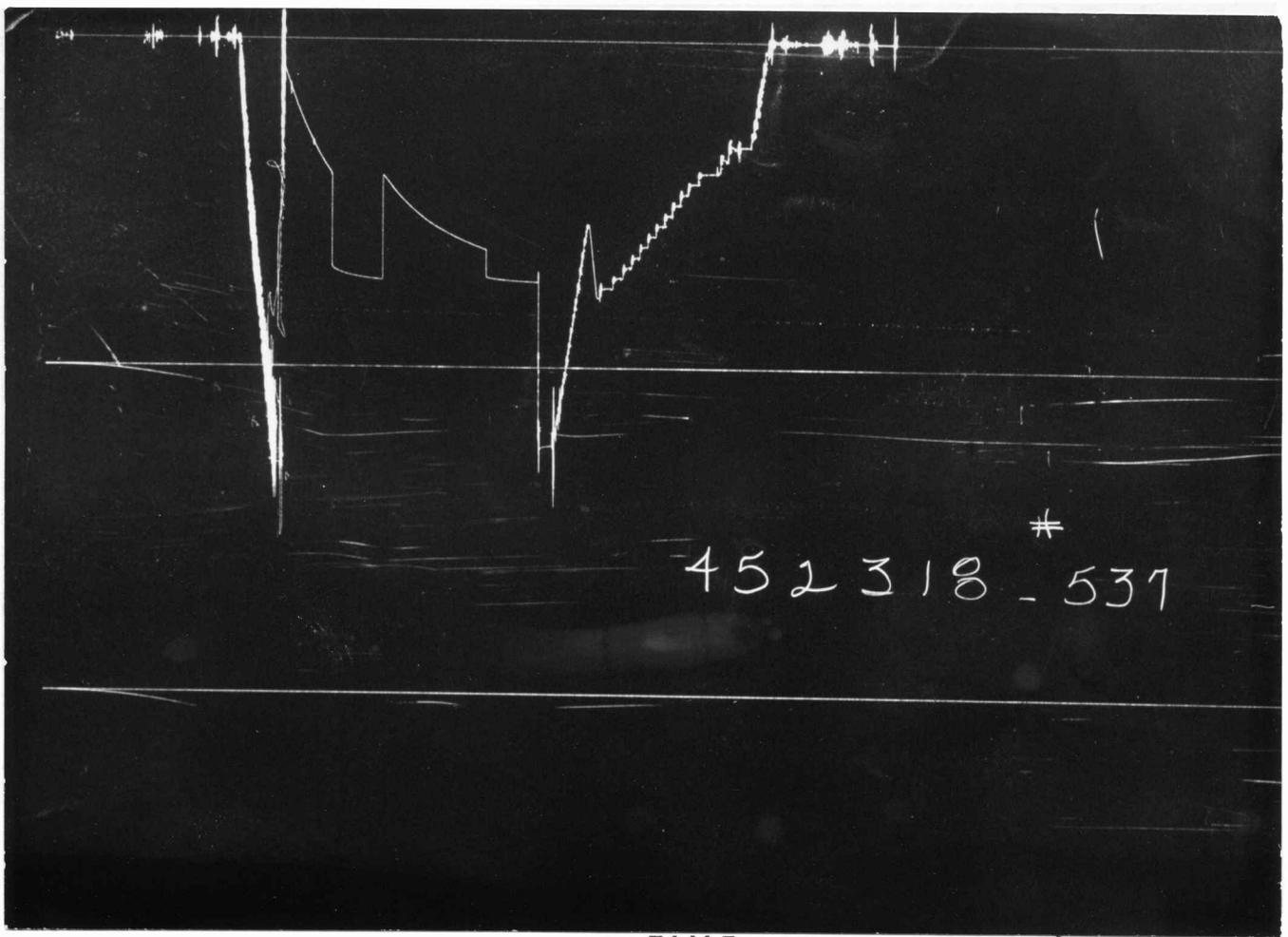
Gauge No. 537		Depth 2467'		Clock No. 7101		12 hour		Ticket No. 452318	
First Flow Period		First Closed In Pressure		Second Flow Period		Second Closed In Pressure		Third Flow Period	
Time Defl. .000"	PSIG Temp. Corr.								
Log $\frac{t + \theta}{\theta}$		Log $\frac{t + \theta}{\theta}$		Log $\frac{t + \theta}{\theta}$		Log $\frac{t + \theta}{\theta}$		Log $\frac{t + \theta}{\theta}$	
0	.000	63	414	.000	418	.000	642		
1	.0283	131	700	.0661	479	.0066	726		
2	.0566	193	703	.1322	528	.0132	727		
3	.0849	248	706	.1983	568	.0198	729		
4	.1132	296	709	.2644	596	.0264	729		
5	.1415	341	711	.3305	620	.0330	730		
6	.1698	379	713	.403	642**	.0396	730		
7	.198	414	715			.0462	731		
8			716			.0528	732		
9			718			.0594	732		
10			719			.0660	733		
11			723			.0923	734		
12			727			.1186	736		
13			730			.1449	737		
14			732			.1712	738		
15			734			.204	739		
Gauge No. 291									
0		420		2481'		3228		12	
0	.000	74	420	.000	427	.000	647		
1	.0273	150	705	.0662	483	.0066	730		
2	.0546	213	709	.1324	532	.0132	731		
3	.0819	264	712	.1986	571	.0198	733		
4	.1092	308	714	.2648	600	.0264	734		
5	.1365	351	716	.3310	624	.0330	734		
6	.1638	387	718	.404	647**	.0396	735		
7	.191	420	719			.0462	735		
8			721			.0528	736		
9			723			.0594	736		
10			724			.0660	737		
11			729			.0923	739		
12			732			.1186	741		
13			735			.1449	741		
14			737			.1712	742		
15			739			.204	743		
Reading Interval 4		*		10		***		Minutes	

REMARKS: * FIRST 10 READINGS = 1 MINUTE EACH AND THE LAST 5 READINGS = 4 MINUTES EACH.
 ** INTERVAL = 11 MINUTES. *** FIRST 10 READINGS = 1 MINUTE EACH - NEXT 4 READINGS = 4 MINUTES EACH AND THE LAST INTERVAL = 5 MINUTES.

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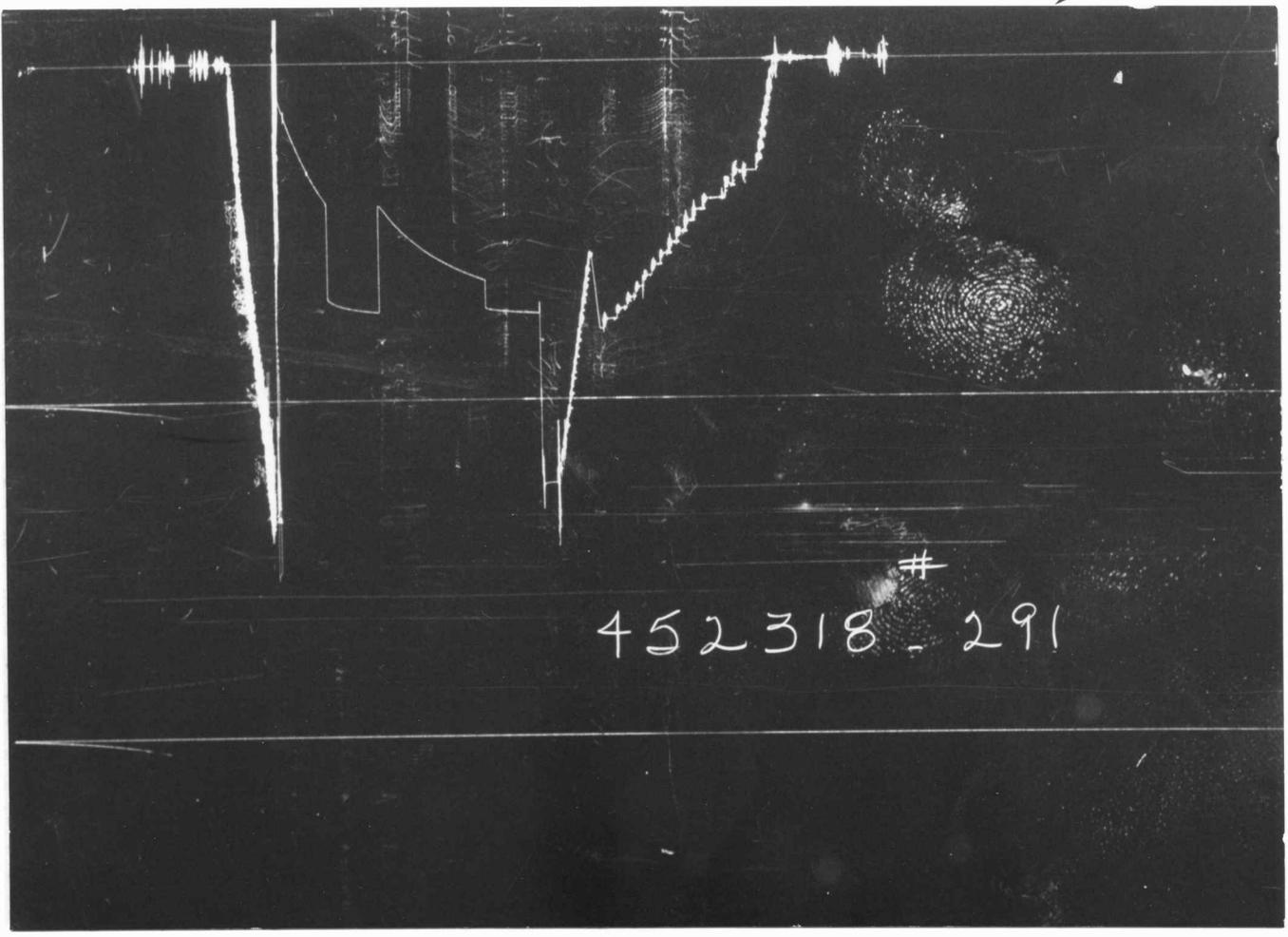
	O. D.	I. D.	LENGTH	DEPTH
Reversing Sub	5"		1'	
Water Cushion Valve				
Drill Pipe	4 1/2"	3.826"	2323'	
Drill Collars	6"	2.25"	104'	
Handling Sub & Choke Assembly				
Dual CIP Valve	5"	.87"	5'	
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	2466'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.75"	4'	2467'
Hydraulic Jar	5"	1.00"	5'	
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.00"	4'	2479'
Distributor				
Packer Assembly				
Flush Joint Anchor	4 3/4"		3'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.75"	4'	2481'
Drill Collars				
Anchor Pipe Safety Joint				
Packer Assembly				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor				
Blanked-Off B.T. Running Case				

↑ PRESSURE ↓



452318-531

↑ PRESSURE ↓



452318-291

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