

FLUID SAMPLE DATA		Date	3-3-72	Ticket Number	452321
Sampler Pressure	_____ P.S.I.G. at Surface		Kind of Job	OPEN HOLE	Halliburton District
Recovery: Cu. Ft. Gas	_____		Tester	MACY	Witness
cc. Oil	_____		Drilling Contractor	WHITE AND ELLIS DRILLING, INC. NM S	
cc. Water	_____		EQUIPMENT & HOLE DATA		
cc. Mud	_____		Formation Tested	Viola	
Tot. Liquid cc.	_____		Elevation	1411' K.B. _____ Ft.	
Gravity	38.1	° API @ 60 °F.	Net Productive Interval	6' _____ Ft.	
Gas/Oil Ratio	_____ cu. ft./bbl.		All Depths Measured From	Kelly Bushing _____ Ft.	
	RESISTIVITY	CHLORIDE CONTENT	Total Depth	2507' _____ Ft.	
Recovery Water	_____ @ _____ °F.	_____ ppm	Main Hole/Casing Size	7 7/8" _____	
Recovery Mud	_____ @ _____ °F.	_____ ppm	Drill Collar Length	105' I.D. 2.25" _____	
Recovery Mud Filtrate	_____ @ _____ °F.	_____ ppm	Drill Pipe Length	2370' I.D. 3.826" _____	
Mud Pit Sample	_____ @ _____ °F.	_____ ppm	Packer Depth(s)	2501' _____ Ft.	
Mud Pit Sample Filtrate	_____ @ _____ °F.	_____ ppm	Depth Tester Valve	2488' _____ Ft.	
Mud Weight	9.6	vis 41 cp			

Cushion	TYPE NONE	AMOUNT	Depth Back Pres. Valve	NONE	Surface Choke	1/4"	Bottom Choke	3/4"
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Recovered	40'	Feet of	oil	Meas. From Tester Valve
Recovered	50'	Feet of	oil cut muddy water	
Recovered	65'	Feet of	oil and water	
Recovered		Feet of		
Recovered		Feet of		

Remarks Tool opened for a 16 minute first flow with a weak blow - building slowly. Rotated tool for a 30 minute first closed in pressure. Tool reopened for a 59 minute second flow with a weak blow - which continued weak throughout. Took a 32 minute second closed in pressure.

TEMPERATURE	Gauge No. 537		Gauge No. 291		Gauge No.		TIME	
	Depth: 2489' Ft.		Depth: 2502' Ft.		Depth: _____ Ft.			
Est. 95°F.	12 Hour Clock		12 Hour Clock		Hour Clock		Tool _____ A.M.	
	Blanked Off NO		Blanked Off YES		Blanked Off		Opened 2224 P.M.	
Actual °F.	Pressures		Pressures		Pressures		Tool _____ A.M.	
	Field	Office	Field	Office	Field	Office	Reported	Computed
Initial Hydrostatic	1270.1	1268	-	1277			Minutes	Minutes
First Period Flow	Initial	7.9	8	-	18			
	Final	23.7	24	-	30		16	16
	Closed in	734.3	734	-	739		30	30
Second Period Flow	Initial	23.7	29	-	38			
	Final	63.3	62	-	68		60	59
	Closed in	734.3	733	-	738		31	32
Third Period Flow	Initial							
	Final							
Final Hydrostatic	1270.1	1268	-	1277				

Legal Location Sec. - Twp. - Rng. 30 - 25 - 5E

Lease Name MURRAY

Well No. 102

Test No. 1

Field Area EL DORADO

County BUTLER

State KANSAS

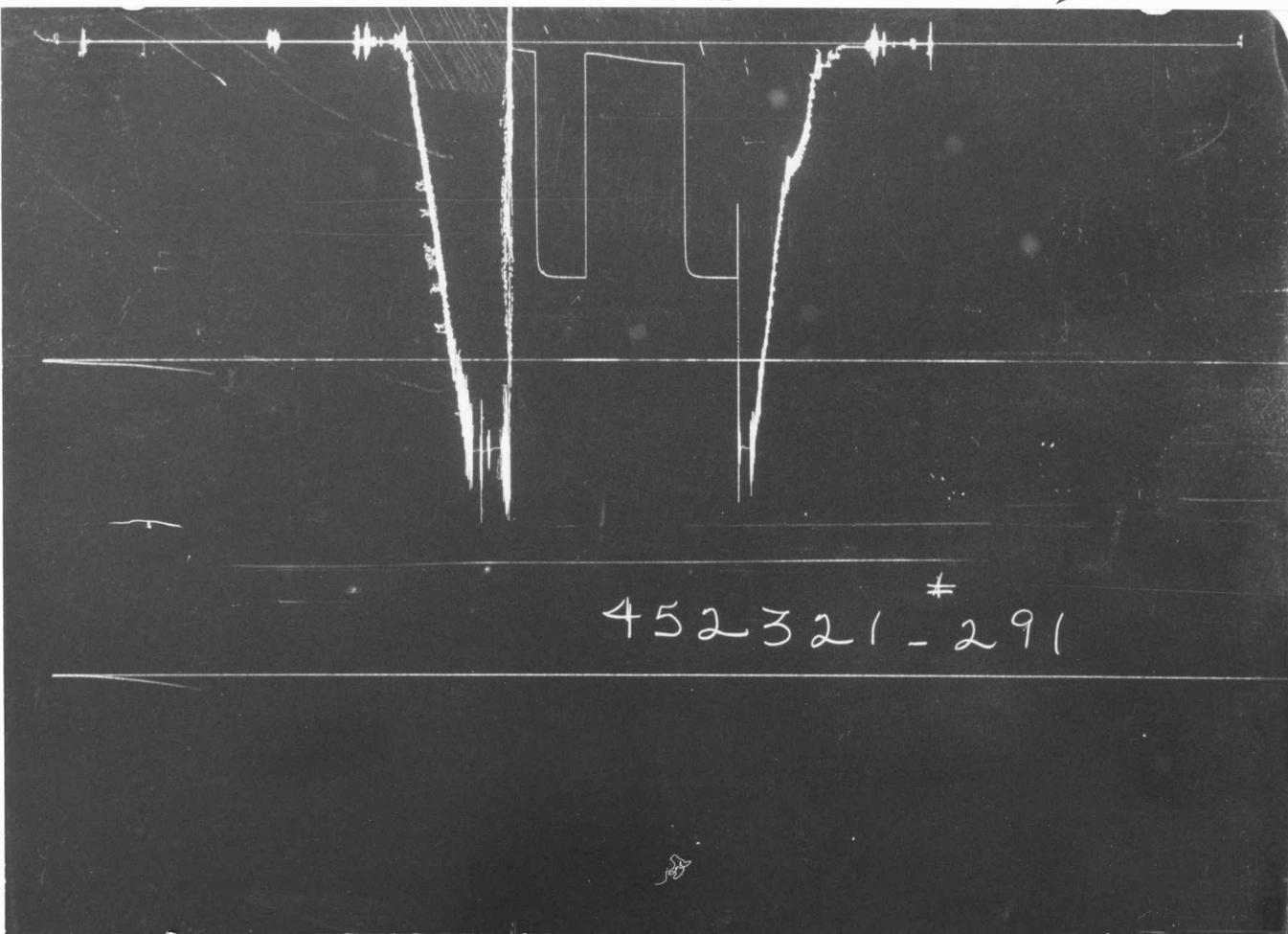
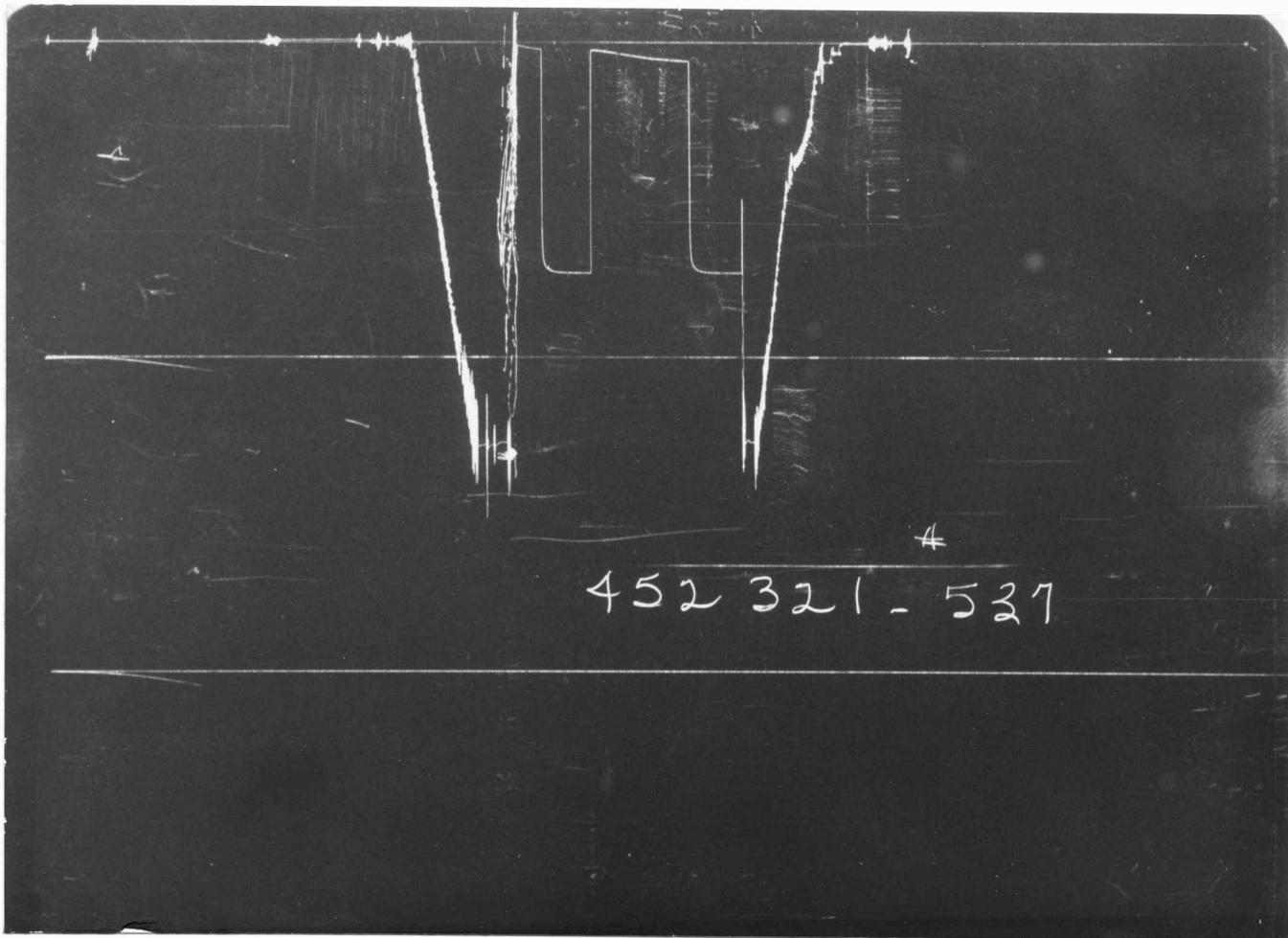
Tested Interval 2501' - 2507'

Lease Owner/Company Name CITIES SERVICE OIL COMPANY

Gauge No. 537		Depth		2489'		Clock No. 7101		12 hour		Ticket No. 452321	
First Flow Period		Closed In Pressure		Second Flow Period		Closed In Pressure		Flow Period		Third Flow Period	
Time Defl. .000''	PSIG Temp. Corr.	Time Defl. .000''	PSIG Temp. Corr.	Time Defl. .000''	PSIG Temp. Corr.	Time Defl. .000''	PSIG Temp. Corr.	Time Defl. .000''	PSIG Temp. Corr.	Time Defl. .000''	PSIG Temp. Corr.
$\text{Log } \frac{t + \theta}{\theta}$		$\text{Log } \frac{t + \theta}{\theta}$		$\text{Log } \frac{t + \theta}{\theta}$		$\text{Log } \frac{t + \theta}{\theta}$		$\text{Log } \frac{t + \theta}{\theta}$		$\text{Log } \frac{t + \theta}{\theta}$	
0	.000	.000	24	.000	29	.000	62	.000			
1	.0273	.0068	600	.0669	31	.0067	653	.0067			
2	.0546	.0136	697	.1338	39	.0134	699	.0134			
3	.0819	.0204	711	.2007	47	.0201	712	.0201			
4	.109	.0272	719	.2676	53	.0268	719	.0268			
5		.0340	720	.3345	58	.0335	722	.0335			
6		.0408	725	.395	62**	.0402	725	.0402			
7		.0476	727			.0469	726	.0469			
8		.0544	729			.0536	728	.0536			
9		.0612	730			.0603	730	.0603			
10		.0680	730			.0670	730	.0670			
11		.0951	732			.0938	731	.0938			
12		.1222	734			.1206	732	.1206			
13		.1493	734			.1474	733	.1474			
14		.1764	734			.1742	733	.1742			
15		.203	734			.214	733	.214			
Gauge No. 291											
Depth											
2502'											
Clock No. 3228											
hour 12											
0	.000	.000	30	.000	38	.000	68	.000			
1	.0265	.0067	666	.0675	38	.0067	691	.0067			
2	.0530	.0134	710	.1350	46	.0134	713	.0134			
3	.0795	.0201	720	.2025	53	.0201	722	.0201			
4	.106	.0268	726	.2700	60	.0268	726	.0268			
5		.0335	729	.3375	64	.0335	730	.0335			
6		.0402	732	.398	68**	.0402	732	.0402			
7		.0469	734			.0469	734	.0469			
8		.0536	735			.0536	735	.0536			
9		.0603	736			.0603	736	.0603			
10		.0670	737			.0670	736	.0670			
11		.0938	738			.0936	737	.0936			
12		.1206	739			.1202	738	.1202			
13		.1474	739			.1468	738	.1468			
14		.1742	739			.1734	738	.1734			
15		.201	739			.213	738	.213			
Reading Interval 4										**	
REMARKS: * FIRST 10 READINGS = 1 MINUTE EACH AND THE LAST 5 READINGS = 4 MINUTES EACH. ** INTERVAL = 9 MINUTES.											
*** FIRST 10 READINGS = 1 MINUTE EACH - NEXT 4 READINGS = 4 MINUTES EACH AND THE LAST READING = 6 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"	2370'	
Drill Collars	6"	2.25"	105'	
Handling Sub & Choke Assembly	5"	.87"	5'	
Dual CIP Valve				
Dual CIP Sampler				
Hydro-Spring Tester	5"	.75"	5'	2488'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3.75"	4'	2489'
Hydraulic Jar	5"	1"	5'	
VR Safety Joint				
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1"	4'	2501'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"		2'	
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case	5"	3.75"	4'	2502'
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				



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