

CROUCH

Lease Name

Well No.

Test No.

1652 - 1661'

Tested Interval

BRANDT DRILLING COMPANY

Lease Owner/Company Name

Legal Location
Sec. - Twp. - Rng.

25-20S-13E

Field Area

HARTFORD

County

COFFEY

State

KANSAS

FLUID SAMPLE DATA				Date 3-27-76		Ticket Number 086490	
Sampler Pressure _____ P.S.I.G. at Surface				Kind of Job OPEN HOLE		Halliburton District EL DORADO	
Recovery: Cu. Ft. Gas _____				S. CANNON		Tester J. MYERS	
cc. Oil _____				Witness W. CRAIG			
cc. Water _____				Drilling Contractor COMPANY TOOLS SM			
cc. Mud _____				EQUIPMENT & HOLE DATA			
Tot. Liquid cc. _____				Formation Tested Burgess sand			
Gravity _____ ° API @ _____ °F.				Elevation _____ Ft.			
Gas/Oil Ratio _____ cu. ft./bbl.				Net Productive Interval 9' Ft.			
RESISTIVITY _____ CHLORIDE CONTENT _____				All Depths Measured From Kelly bushing			
Recovery Water @ _____ °F. _____ ppm				Total Depth 1661' Ft.			
Recovery Mud @ _____ °F. _____ ppm				Main Hole/Casing Size 7 7/8" hole			
Recovery Mud Filtrate @ _____ °F. _____ ppm				Drill Collar Length 92' I.D. 2.250"			
Mud Pit Sample @ _____ °F. _____ ppm				Drill Pipe Length 1548' I.D. 3.826"			
Mud Pit Sample Filtrate @ _____ °F. _____ ppm				Packer Depth(s) 1652' Ft.			
Mud Weight 9.5 vis 40 cp				Depth Tester Valve 1636' Ft.			
TYPE		AMOUNT		Depth Back		Surface	
Cushion				Ft. Pres. Valve		Choke 1/4" Bottom Choke 3/4"	
Recovered 72		Feet of watery, sulphur-smelling mud					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Recovered		Feet of					
Remarks		SEE PRODUCTION TEST DATA SHEET					
Charts indicate partial plugging of anchor perforations during early part of initial flow period.							
TEMPERATURE		Gauge No. 5595		Gauge No. 5594		Gauge No.	
Depth: 1641 Ft.		Depth: 1658 Ft.		Depth: _____ Ft.		TIME	
Est. 85 °F.		12 Hour Clock		12 Hour Clock		Tool A.M.	
Blanked Off no		Blanked Off yes		Blanked Off		Opened 1901 P.M.	
Actual °F.		Pressures		Pressures		Opened A.M.	
		Pressures		Pressures		Bypass 2100 P.M.	
		Field Office		Field Office		Reported Computed	
		Minutes Minutes					
Initial Hydrostatic		829 818		832 818			
Flow Initial		31 24		151 245			
Flow Final		117 162		257 257		29 28	
Closed in		531 524		534 531		30 30	
Flow Initial		154 153		242 270			
Flow Final		208 203		264 270		30 30	
Closed in		524 519		530 528		30 31	
Flow Initial							
Flow Final							
Closed in							
Final Hydrostatic		821 815		827 818			

Casing perms. _____ Bottom choke 3/4" Surf. temp _____ °F Ticket No. 086490
 Gas gravity _____ Oil gravity _____ GOR _____
 Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F
 INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED 2" Merla well tester

Date Time	a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
3-27-76						
1410						Called out
1645						On location
1705						Picked up tools
1740						Started tools in hole
1856						On bottom, slid 3'
1901						Tool opened with very strong
						blow
1905						Gas to the surface
1910		1"	10	472		Gauged gas
1912		1 1/4"	7	653		Changed chokes
1915		1 1/4"	8	700		Gauged gas
1920		1 1/4"	12	893		"
1925		"	14	980		"
1928		"	15	1023		"
1930						Closed tool
2000						Opened tool
2002		1 1/4"	15	1023		Gauged gas
2005		"	18	1146		Gauged gas
2010		"	20	1233		Gauged gas
2015		"	20 1/2	1256		Gauged gas
2020		"	21	1270		Gauged gas
2025		"	22	1316		Gauged gas
2030						Tool closed
2100						Pulled out of hole 1 jt.

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INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED.

[illegible]

Gauge No. 5595		Depth 1641'		Clock No. 13663				12hour		Ticket No. 086490		
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"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	$\text{Log } \frac{t + \theta}{\theta}$	PSIG Temp. Corr.
0	.0000 24	.0000		162	.0000		203					
1	.1900 162	.0133		511	.0330		505					
2		.0267		516	.0660		510					
3		.0400		518	.0990		513					
4		.0533		519	.1320		514					
5		.0667		520	.1650		515					
6		.0800		521	.1980		516					
7		.0933		522			516					
8		.1066		522			517					
9		.1200		522			517					
10		.1333		523			518					
11		.1466		523			519					
12		.1600		523			519					
13		.1733		523			519					
14		.1866		524			519					
15		.2000		524			519					

Gauge No. 5594		Depth		1658'		Clock No. 3459		12 hour	
0	.0000 245	.0000	257	.0000	270	.0000		270	
1	.1850 257	.0131	518	.0325	246	.0194*		512	
2		.0261	523	.0650	252	.0323		517	
3		.0392	525	.0975	256	.0452		520	
4		.0523	527	.1300	263	.0581		521	
5		.0654	528	.1625	266	.0710		523	
6		.0784	528	.1950	270	.0839		523	
7		.0915	529			.0968		524	
8		.1046	529			.1097		525	
9		.1176	529			.1226		525	
10		.1307	529			.1355		526	
11		.1438	530			.1484		526	
12		.1568	531			.1613		527	
13		.1699	531			.1742		527	
14		.1830	531			.1871		527	
15		.1960	531			.2000		528	
Reading Interval		2		5		2		Minutes	

REMARKS: *First interval is equal to 3 minutes.

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	5"	3"	1'	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	1548'	
Drill Collars	6 1/4"	2.25"	92'	
Handling Sub & Choke Assembly	5"	2.25"	3'	
Dual CIP Valve	5"	.87"	3'	1631'
Dual CIP Sampler Double pin	5"	2.25"	1'	
Hydro-Spring Tester	5"	.75"	5'	1636'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	2.25"	4'	1641'
Hydraulic Jar				
VR Safety Joint	5"	1"	3'	
Pressure Equalizing Crossover				
Packer Assembly	6 3/4"	1.53"	6'	1652'
Distributor				
Packer Assembly				
Flush Joint Anchor	5"	2.37"	4'	
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				
Blanked-Off B.T. Running Case	5"	2.75"	4'	1658'
Total Depth				1661'

PRESSURE

086490.5595

086490
BT 5595

TIME

086490.5594

086490

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