

WESTERN TESTING CO. INC. SUBSURFACE PRESSURE SURVEY

TICKET #16715 DATE: 10/13/83 LEASE: "A" STEWART CUSTOMER: RANGE DIL COMPANY INC. GEOLOGIST: T. LAUER TEST: 1 FORMATION: MISSISSIPPI ELEVATION (KB): 1522 TOWNSHIP: 33S SECTION: 17 STATE: KANSAS COUNTY: BARBER RANGE: 10W CLOCK: 12 GAUGE SN #13402 RANGE: 4025 FT TOTAL DEPTH: 4585 FT INTERVAL TEST FROM: 4554 FT TO: 4585 FT DEPTH OF SELECTIVE ZONE: PACKER DEPTH: 4549 FT SIZE: 6 3/4 IN PACKER DEPTH: 4554 FT SIZE: 6 3/4 IN PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN DRILLING CONTRACTOR: RANGE #2 MUD TYPE: CHEMICAL VISCOSITY: 40
WEIGHT: 9.2 WATER LOSS (CC): 12.8 CHLORIDES (P.P.M.): 11500 JARS - MAKE: NO SERIAL NUMBER: DID WELL FLOW? NO REVERSED OUT? NO IH DRILL COLLAR LENGTH: 270 FT I.D.: 2.2 I.D.: WEIGHT PIPE LENGTH: FT DRILL PIPE LENGTH: 4264 FT I.D.: 3.8 IN TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 31 FT SIZE: 5 1/2 O.D. IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 X.H. IN BLOW: STRONG BLOW. GAS TO SURFACE IN 3 MINUTES. SEE GAS FLOW REPORT. FT OF: GAS CUT MUD RECOVERED: 5 FT OF: RECOVERED: OF: RECOVERED: REMARKS: TIME SET PACKER(S): 1:07 P.M. TIME STARTED OFF BOTTOM: 4:37 P.M. WELL TEMPERATURE: 120 'F PSI (A) 2255 INITIAL HYDROSTATIC PRESSURE: (B) 93 PSI TO (C) 78 PSI INITIAL FLOW PERIOD MIN: 30 MIN: 27 PSI (D) 1494 INITIAL CLOSED IN PERIOD PSI TO (F) 63 PSI (E) 79 MIN: 60 FINAL FLOW PERIOD FINAL CLOSED IN PERIOD MIN: 60
FINAL HYDROSTATIC PRESSURE (G) 1379 PSI

(H) 2174

PSI

WESTERN TESTING CO. INC. PRESSURE DATA

DATE: 10/13/83				TICKET	#16715
CUSTOMER: RANGE DIL COMPAN	Y INC.			LEASE:	"A" STEWART
WELL: 4	EST: 1			GEOLOGI	ST: T. LAUER
ELEVATION (KB): 1522		F	ORMATION:	MISSISS	IPPI
SECTION: 17		T	WHSHIP:	335	
RANGE: 10W C	OUNTY:	BARBER		STATE:	KANSAS
GAUGE SN #13402 R	ANGE: 4	025		CLOCK:	12
(A) INITIAL HYDROSTATIC PR	ESSURE:	2255	PSI		
(B) FIRST INITIAL FLOW PRE	SSURE:	93	PSI		
(C) FIRST FINAL FLOW PRESS	URE:	78	PSI		
(D) INITIAL CLOSED-IN PRES	SURE:	1494	PSI		
(E) SECOND INITIAL FLOW PR	ESSURE:	79	PSI		
(F) SECOND FINAL FLOW PRES	SURE:	63	PSI		
(G) FINAL CLOSED-IN PRESSU	RE:	1379	PSI		
(H) FINAL HYDROSTATIC PRES	SURE:	2174	PSI		
WELL TEMPERATURE:		120	'F		
OPEN TOOL: 1:07 P.M.					
	TIME -	GIVEN	TIME - AC	CTUAL	
FIRST FLOW PRESSURE:	30	MIN	30	MIN	
INITIAL CLOSED-IN PRESSURE:	30	MIN	27	MIN	
SECOND FLOW PRESSURE:	60	MIN	60	MIN	
FINAL CLOSED-IN PRESSURE:	90	MIN	60	MIN	

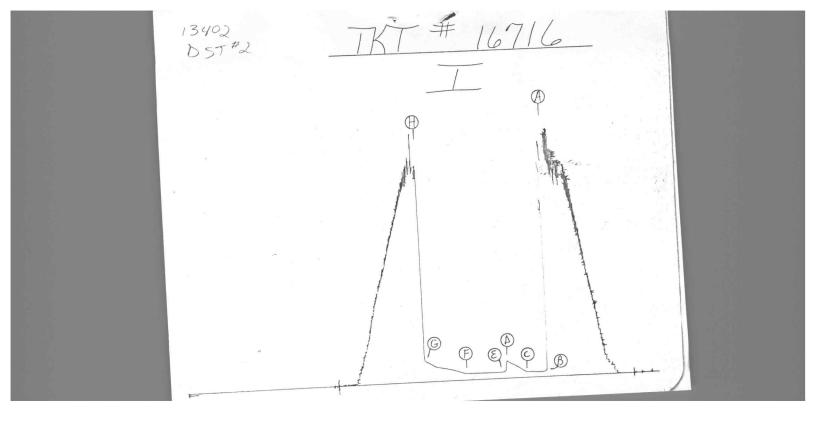
DDD	SSURF	DDEA	KDUMN

	FIRS	ST FLOW	IHITIA	AL SHUT-IN	SECO	OND FLOW	FINAL	SHUT-IN
PT	MIN	PRESSURE	MIH	PRESSURE	MIH	PRESSURE	MIH	PRESSURE
1	0	93	0	78	0	79	0	63
2	5	93	3	1313	5	79	3	1137
3	10	85	6	1398	10	71	6	1229
4	15	83	9	1432	15	67	9	1265
5	20	79	12	1452	20	65	12	1289
6	25	78	15	1466	25	64	15	1305
7	30	78	18	1476	30	63	18	1317
8			21	1482	35	63	21	1327
9			24	1489	40	63	24	1333
10			27	1494	45	63	27	1341
11					50	63	30	1345
12					55	63	33	1351
13					60	63	36	1355
14							39	1359
15							42	1363
16			¥				45	1365
17							48	1369
18							51	1371
19							54	1375
20							57	1377
21							60	1379
22								
23								

WESTERN TESTING CO. INC. GAS FLOW REPORT

WELL: 4 ELEVATION SECTION: RANGE: 10 GAUGE SN #	RANGE DIL COMPA (KB): 1522 17 W 13402	COUNTY: E RANGE: 40	BARBER 025 E PRESSURE	TICKET #16715 LEASE: "A" STEWART GEOLOGIST: T. LAUER N: MISSISSIPPI : 335 STATE: KANSAS CLOCK: 12 FLOW DESCRIPTION
(MIN)	12372	SIZE	(PSI)	
			PRE FLOW	
3 10 20 30	MERLA	1 1 1	5 PSIG 5 PSIG 5 PSIG	GAS TO SURFACE 31900 CFPD 319000 CFPD 319000 CFPD
			SECOND FLOW	
10 20 30 40 50	MERLA	1 1 1 1 1	5 PSIG 4 PSIG 4 PSIG 4 PSIG 4 PSIG 4 PSIG 4 PSIG	283000 CFPD 283000 CFPD

GAS BOTTLE SN ::
DATE BOTTLE FILLED:
DATE TO BE INVOICED: 10/13/83



WESTERN TESTING CO. INC. SUBSURFACE PRESSURE SURVEY

TICKET #16716 DATE: 10/14/83 LEASE: "A" STEWART CUSTOMER: RANGE DIL COMPANY INC. GEOLOGIST: T. LAUER TEST: 2 WELL: 4 FORMATION: MISSISSIPPI ELEVATION (KB): 1522 TOWNSHIP: 33S SECTION: 17 STATE: KANSAS COUNTY: BARBER RANGE: 10W GAUGE SN #13402 CLOCK: 12 RANGE: 4025 INTERVAL TEST FROM: 4587 FT TO: 4610 FT TOTAL DEPTH: 4610 FT DEPTH OF SELECTIVE ZONE: PACKER DEPTH: 4583 FT SIZE: 6 3/4 IN PACKER DEPTH: 4587 FT SIZE: 6 3/4 IN PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: DRILLING CONTRACTOR: RANGE #2 MUD TYPE: CHEMICAL VISCOSITY: 40 WATER LOSS (CC): 12.8 WFIGHT: 9.2 CHLORIDES (P.P.M.): 11500 JARS - MAKE: NO SERIAL NUMBER: DID WELL FLOW? NO REVERSED OUT? NO DRILL COLLAR LENGTH: 330 IN FT I.D.: 2.2 WEIGHT PIPE LENGTH: IN I.D.: FT IN DRILL PIPE LENGTH: 4237 FT I.D.: 3.8 FT TOOL SIZE: 5 1/2 O.D. IN 20 TEST TOOL LENGTH: SIZE: 5 1/2 0.D. IN 23 FT ANCHOR LENGTH: SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 1/2 X.H. IN BLOW: STRONG THROUGH BOTH FLOW PERIODS. FT OF: GAS ABOVE FLUID RECOVERED: 780 FT OF: SLIGHTLY DIL & GAS CUT MUD RECOVERED: 90 FT OF: 70% MUD; 10% WATER; 10% OIL; 10% GAS RECOVERED: FT OF: RECOVERED: FT OF: RECOVERED: FT RECOVERED: OF: FT OF: RECOVERED: FT OF: RECOVERED: FT RECOVERED: OF: REMARKS: TIME SET PACKER(S): 5:30 A.M. TIME STARTED OFF BOTTOM: 9:00 A.M. WELL TEMPERATURE: 120 'F PSI INITIAL HYDROSTATIC PRESSURE: (A) 2240 PSI (B) 54 PSI TO (C) 61 INITIAL FLOW PERIOD MIN: 30 PSI MIH: 30 (D) 179 INITIAL CLOSED IN PERIOD PSI PSI TO (F) 71 (E) 65 MIN: 60 FINAL FLOW PERIOD FINAL CLOSED IN PERIOD MIN: 60 (G) 211 PSI

(H) 2196

FINAL HYDROSTATIC PRESSURE

PSI

WESTERN TESTING CO. INC. PRESSURE DATA

DATE: 10/14/83 TICKET #16716	
CUSTOMER: RANGE DIL COMPANY INC. LEASE: "A" STEWART	
WELL: 4 TEST: 2 GEOLOGIST: T. LAUER	
ELEVATION (KB): 1522 FORMATION: MISSISSIPPI	
SECTION: 17 TOWNSHIP: 33S	
RANGE: 10W COUNTY: BARBER STATE: KANSAS	
GAUGE SN #13402 RANGE: 4025 CLOCK: 12	
(A) INITIAL HYDROSTATIC PRESSURE: 2240 PSI	
(B) FIRST INITIAL FLOW PRESSURE: 54 PSI	
(C) FIRST FINAL FLOW PRESSURE: 61 PSI	
(D) INITIAL CLOSED-IN PRESSURE: 179 PSI	
(E) SECOND INITIAL FLOW PRESSURE: 65 PSI	
(F) SECOND FINAL FLOW PRESSURE: 71 PSI	
(G) FINAL CLOSED-IN PRESSURE: 211 PSI	
(H) FINAL HYDROSTATIC PRESSURE: 2196 PSI	
WELL TEMPERATURE: 120 'F	
OPEN TOOL: 5:30 A.M.	
TIME - GIVEN TIME - ACTUAL	
FIRST FLOW PRESSURE: 30 MIN 30 MIN	
INITIAL CLOSED-IN PRESSURE: 30 MIN 30 MIN	
SECOND FLOW PRESSURE: 60 MIN 60 MIN	
FINAL CLOSED-IN PRESSURE: 60 MIN 60 MIN	

PP	FSSI	IDE	BRE	AKD	UHIN

	FIRS	T FLOW	INITIA	L SHUT-IN	SECO	ND FLOW	FINAL	SHUT-IN
PT	MIH	PRESSURE	MIH	PRESSURE	MIH	PRESSURE	MIH	PRESSURE
1	0	54	0	61	0	65	0	71
2	5	54	3	73	5	65	3	79
3	10	55	6	85	10	65	6	87
4	15	56	9	99	15	65	9	93
5	20	58	12	114	20	65	12	99
6	25	60	15	125	25	66	15	106
7	30	61	18	138	30	67	18	112
8			21	148	35	67	21	118
9			24	160	40	68	24	124
10			27	173	45	69	27	128
11		90	30	179	50	69	30	132
12					55	70	33	136
13					60	71	36	140
14							39	144
15							42	150
16							45	160
17							48	173
18							51	187
19							54	197
20							57	205
21							60	211
22					- 1 1			
23								