FORMATION TEST REPORT

WESTERN TESTERS

Home Office: Wichita, Kansas 67201

P.O. Box 1599 Phone (316) 262-5861

mpanyRBT. E. CAMPBELL OIL & GAS OP Lease and Well No. #2 MINNIE BENSON Sec. 7 TWP. 29S RGE. 6W

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/14/84 TICKET #4711
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 1 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI CHERT
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4103 FT TO: 4120 FT TOTAL DEPTH: 4120 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4098 FT SIZE: 6 5/8 IN PACKER DEPTH: 4103 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: DUNNE GARDNER DRLG
MUD TYPE: CHEMICAL VISCOSITY: 37
WEIGHT: 9.3 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 50000
JARS - MAKE: NO SERIAL NUMBER: NO
DID WELL FLOW? NO REVERSED OUT? NO

DRILL COLLAR LENGTH:		FT	I.D.:		IN
WEIGHT PIPE LENGTH:	340	FT	I.D.:	2.7	IN
DRILL PIPE LENGTH:	3742	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	4 1/2	IN
ANCHOR LENGTH:	17	FT	SIZE:	5 1/2	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 XH	IN

BLOW: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE ON FINAL FLOW.
SEE ATTACHED SHEET FOR GAS MEASUREMENTS.

RECOVERED: 125 FT OF: 12% WATER; 80% MUD; 8% GAS.
RECOVERED: FT OF: CHLORIDES 45000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 11:05 TIME STARTED OFF BOTTOM: 4:05
WELL TEMPERATURE: 124 'F

INITIAL HYDROSTATIC PRESSURE:		(A) 2174	PSI	
INITIAL FLOW PERIOD	MIN: 30	(B) 51	PSI TO (C) 57	PSI
INITIAL CLOSED IN PERIOD	MIN: 48	(D) 1513	PSI	
FINAL FLOW PERIOD	MIN: 120	(E) 69	PSI TO (F) 103	PSI
FINAL CLOSED IN PERIOD	MIN: 87	(G) 1519	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 2060	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 3/14/84
TICKET #4711
CUSTOMER: RBT. E. CAMPBELL OIL & GAS
LEASE: MINNIE BENSON
WELL: 2
TEST: 1
GEOLOGIST: NOAH
ELEVATION (KB): 1589
FORMATION: MISSISSIPPI CHERT
SECTION: 7
TOWNSHIP: 29S
RANGE: 6W
COUNTY: KINGMAN
STATE: KANSAS
GAUGE SN #3659
RANGE: 4000
CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 2174 PSI
(B) FIRST INITIAL FLOW PRESSURE: 51 PSI
(C) FIRST FINAL FLOW PRESSURE: 57 PSI
(D) INITIAL CLOSED-IN PRESSURE: 1513 PSI
(E) SECOND INITIAL FLOW PRESSURE: 69 PSI
(F) SECOND FINAL FLOW PRESSURE: 103 PSI
(G) FINAL CLOSED-IN PRESSURE: 1519 PSI
(H) FINAL HYDROSTATIC PRESSURE: 2060 PSI
WELL TEMPERATURE: 124 'F
OPEN TOOL: 11:05

	TIME - GIVEN		TIME - ACTUAL	
FIRST FLOW PRESSURE:	30	MIN	30	MIN
INITIAL CLOSED-IN PRESSURE:	45	MIN	48	MIN
SECOND FLOW PRESSURE:	130	MIN	120	MIN
FINAL CLOSED-IN PRESSURE:	90	MIN	87	MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	51	0	57	0	69	0	103
2	5	51	3	542	5	69	3	622
3	10	51	6	800	10	70	6	906
4	15	52	9	1023	15	71	9	1114
5	20	53	12	1165	20	72	12	1240
6	25	55	15	1265	25	73	15	1315
7	30	57	18	1326	30	74	18	1365
8			21	1378	35	75	21	1403
9			24	1416	40	76	24	1428
10			27	1439	45	77	27	1444
11			30	1461	50	78	30	1457
12			33	1477	55	79	33	1467
13			36	1489	60	80	36	1475
14			39	1498	65	81	39	1482
15			42	1505	70	83	42	1488
16			45	1511	75	85	45	1492
17			48	1513	80	87	48	1495
18					85	90	51	1498
19					90	93	54	1501
20					95	96	57	1503
21					100	98	60	1505
22					105	100	63	1507
23					110	101	66	1509
24					115	102	69	1511
25					120	103	72	1513
26							75	1515
27							78	1516
28							81	1517
29							84	1518
30							87	1519

WESTERN TESTING CO. INC.
GAS FLOW REPORT

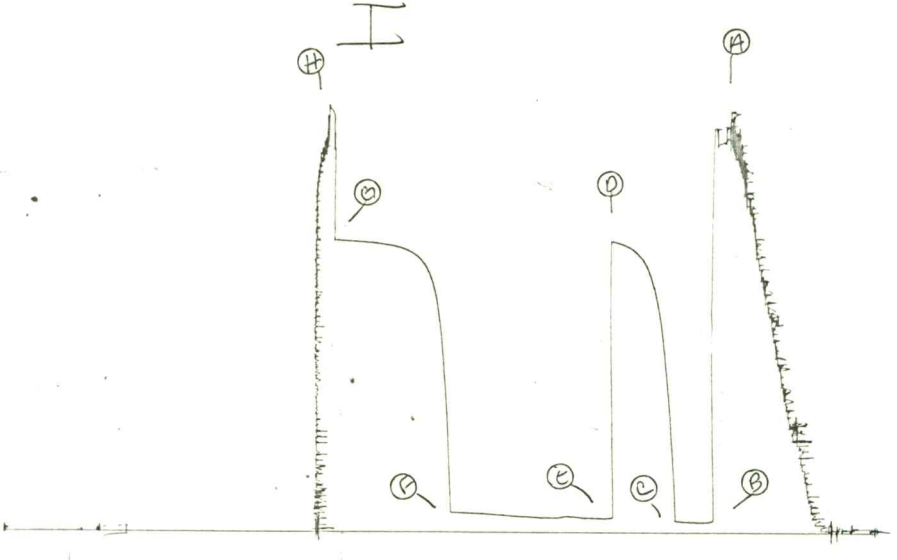
DATE: 3/14/84 TICKET #4711
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 1 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI CHERT
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
		PRE FLOW		
		SECOND FLOW		
10	MERLA	1/4	5 PSIG	20700 CFPD
20			6	22900
30			8	27000
40			9	29000
50			10	30800
60			15	39200
70			18	43900
80			20	47100
90			21	48700
100			24	53200
110			25	54700
120			27	57700
130			27	57700

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED:

3659-1

TCK# 4711



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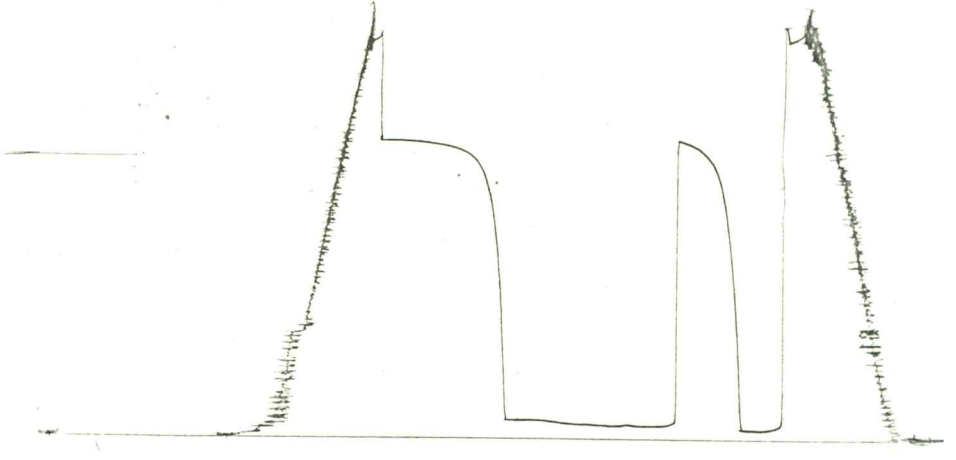

FORMATION TEST REPORT

WESTERN TESTERS

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mpany RBT. E. CAMPBELL OIL & GAS OL Lease and Well No. #2 MINNIE BENSON Sec. 7 Twp. 29S Rge. 6W Test No. 2 Date 3/15/8

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/15/84 TICKET #4712
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 2 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4122 FT TO: 4136 FT TOTAL DEPTH: 4136 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4117 FT SIZE: 6 5/8 IN PACKER DEPTH: 4122 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: DUNNE GARDNER DRLG
MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.2 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 7000
JARS - MAKE: NO SERIAL NUMBER: NO
DID WELL FLOW? GAS REVERSED OUT? NO

DRILL COLLAR LENGTH:		FT	I.D.:		IN
WEIGHT PIPE LENGTH:	340	FT	I.D.:	2.7	IN
DRILL PIPE LENGTH:	3761	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	4 1/2	IN
ANCHOR LENGTH:	14	FT	SIZE:	5 1/2	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 XH	IN

BLOW: GAS TO SURFACE IN 5 MINUTES.
SEE ATTACHED SHEET FOR GAS MEASUREMENTS.

RECOVERED: 80 FT OF: MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 3:40 TIME STARTED OFF BOTTOM: 7:05
WELL TEMPERATURE: 125 °F

INITIAL HYDROSTATIC PRESSURE:		(A) 2052	PSI	
INITIAL FLOW PERIOD	MIN: 30	(B) 123	PSI TO (C) 123	PSI
INITIAL CLOSED IN PERIOD	MIN: 42	(D) 1479	PSI	
FINAL FLOW PERIOD	MIN: 60	(E) 114	PSI TO (F) 114	PSI
FINAL CLOSED IN PERIOD	MIN: 63	(G) 1433	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 1960	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 3/15/84 TICKET #4712
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 2 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 2052 PSI
(B) FIRST INITIAL FLOW PRESSURE: 123 PSI
(C) FIRST FINAL FLOW PRESSURE: 123 PSI
(D) INITIAL CLOSED-IN PRESSURE: 1479 PSI
(E) SECOND INITIAL FLOW PRESSURE: 114 PSI
(F) SECOND FINAL FLOW PRESSURE: 114 PSI
(G) FINAL CLOSED-IN PRESSURE: 1433 PSI
(H) FINAL HYDROSTATIC PRESSURE: 1960 PSI
WELL TEMPERATURE: 125 'F
OPEN TOOL: 3:40

	TIME - GIVEN		TIME - ACTUAL	
FIRST FLOW PRESSURE:	30	MIN	30	MIN
INITIAL CLOSED-IN PRESSURE:	45	MIN	42	MIN
SECOND FLOW PRESSURE:	60	MIN	60	MIN
FINAL CLOSED-IN PRESSURE:	60	MIN	63	MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	123	0	123	0	114	0	114
2	5	123	3	1174	5	114	3	954
3	10	123	6	1396	10	114	6	1256
4	15	123	9	1411	15	114	9	1283
5	20	123	12	1424	20	114	12	1298
6	25	123	15	1434	25	114	15	1312
7	30	123	18	1441	30	114	18	1325
8			21	1448	35	114	21	1338
9			24	1455	40	114	24	1348
10			27	1461	45	114	27	1358
11			30	1467	50	114	30	1368
12			33	1470	55	114	33	1376
13			36	1473	60	114	36	1384
14			39	1476			39	1392
15			42	1479			42	1400
16							45	1406
17							48	1412
18							51	1418
19							54	1422
20							57	1426
21							60	1430
22							63	1433
23								
24								
25								
26								
27								
28								
29								
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WESTERN TESTING CO. INC.
GAS FLOW REPORT

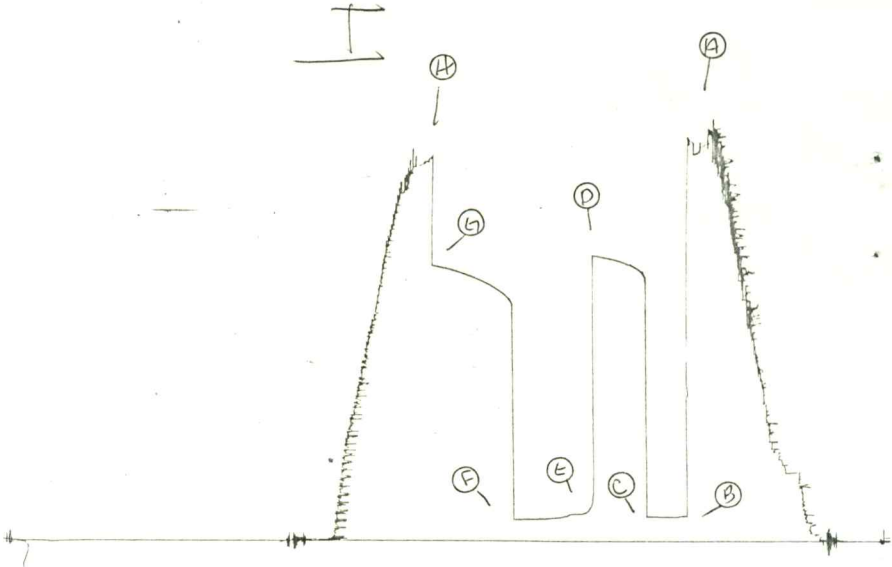
DATE: 3/15/84
TICKET #4712
CUSTOMER: RBT. E. CAMPBELL OIL & GAS
LEASE: MINNIE BENSON
WELL: 2
TEST: 2
GEOLOGIST: NOAH
ELEVATION (KB): 1589
FORMATION: MISSISSIPPI
SECTION: 7
TOWNSHIP: 29S
RANGE: 6W
COUNTY: KINGMAN
STATE: KANSAS
GAUGE SN #3659
RANGE: 4000
CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
			PRE FLOW	
10	MERLA	1/2	35 PSIG	260000 CFPD
20			44	306000
30			44	306000
			SECOND FLOW	
10	MERLA	1	10 PSIG	472000 CFPD
20			8	415000
30			8	415000
40			8	415000
50			8	415000
60			8	415000

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED:

3659-2

+Uk# 4712



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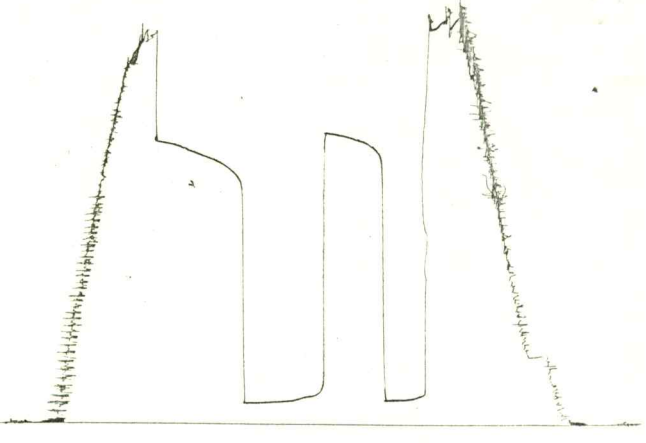

FORMATION TEST REPORT

WESTERN TESTERS

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mpany RBT. E. CAMPBELL OIL & GAS OPLease and Well No. #2 MINNIE BENSON Sec. 7 Twp. 29S Rge. 6W Test No. 3 Date 3/16/8

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 3/16/84 TICKET #4713
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 3 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4138 FT TO: 4157 FT TOTAL DEPTH: 4157 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4133 FT SIZE: 6 5/8 IN PACKER DEPTH: 4138 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: DUNNE GARDNER DRLG
MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.2 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 7000
JARS - MAKE: NO SERIAL NUMBER: NO
DID WELL FLOW? GAS REVERSED OUT? NO

DRILL COLLAR LENGTH:		FT	I.D.:		IN
WEIGHT PIPE LENGTH:	340	FT	I.D.:	2.7	IN
DRILL PIPE LENGTH:	3777	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	4 1/2	IN
ANCHOR LENGTH:	19	FT	SIZE:	5 1/2	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 XH	IN

BLOW: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE.
SEE ATTACHED SHEET FOR GAS MEASUREMENTS.

RECOVERED: 60 FT OF: 60% MUD; 10% OIL; 5% WATER; 25% GAS.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 10:45 TIME STARTED OFF BOTTOM: 1:30
WELL TEMPERATURE: 0 'F

INITIAL HYDROSTATIC PRESSURE:		(A) 2174	PSI
INITIAL FLOW PERIOD	MIN: 30	(B) 45	PSI TO (C) 48 PSI
INITIAL CLOSED IN PERIOD	MIN: 48	(D) 1526	PSI
FINAL FLOW PERIOD	MIN: 40	(E) 44	PSI TO (F) 48 PSI
FINAL CLOSED IN PERIOD	MIN: 51	(G) 1520	PSI
FINAL HYDROSTATIC PRESSURE		(H) 2002	PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 3/16/84 TICKET #4713
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 3 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 2174 PSI
(B) FIRST INITIAL FLOW PRESSURE: 45 PSI
(C) FIRST FINAL FLOW PRESSURE: 48 PSI
(D) INITIAL CLOSED-IN PRESSURE: 1526 PSI
(E) SECOND INITIAL FLOW PRESSURE: 44 PSI
(F) SECOND FINAL FLOW PRESSURE: 48 PSI
(G) FINAL CLOSED-IN PRESSURE: 1520 PSI
(H) FINAL HYDROSTATIC PRESSURE: 2002 PSI
WELL TEMPERATURE: 0 'F
OPEN TOOL: 10:45

	TIME - GIVEN		TIME - ACTUAL	
FIRST FLOW PRESSURE:	30	MIN	30	MIN
INITIAL CLOSED-IN PRESSURE:	45	MIN	48	MIN
SECOND FLOW PRESSURE:	40	MIN	40	MIN
FINAL CLOSED-IN PRESSURE:	45	MIN	51	MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	45	0	48	0	44	0	48
2	5	45	3	539	5	44	3	639
3	10	45	6	1042	10	44	6	1035
4	15	46	9	1250	15	44	9	1207
5	20	46	12	1346	20	44	12	1307
6	25	47	15	1401	25	45	15	1369
7	30	48	18	1437	30	46	18	1412
8			21	1460	35	47	21	1441
9			24	1476	40	48	24	1461
10			27	1491			27	1475
11			30	1499			30	1489
12			33	1507			33	1498
13			36	1513			36	1505
14			39	1517			39	1509
15			42	1520			42	1513
16			45	1523			45	1516
17			48	1526			48	1518
18							51	1520
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WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 3/16/84 TICKET #4713
CUSTOMER: RBT. E. CAMPBELL OIL & GAS LEASE: MINNIE BENSON
WELL: 2 TEST: 3 GEOLOGIST: NOAH
ELEVATION (KB): 1589 FORMATION: MISSISSIPPI
SECTION: 7 TOWNSHIP: 29S
RANGE: 6W COUNTY: KINGMAN STATE: KANSAS
GAUGE SN #3659 RANGE: 4000 CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
		PRE FLOW		
		SECOND FLOW		
10	MERLA	1/4	2 PSIG	12700 CFPD
20			5	20700
30			6	22900
40			6	22900

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED:

HC# 4713

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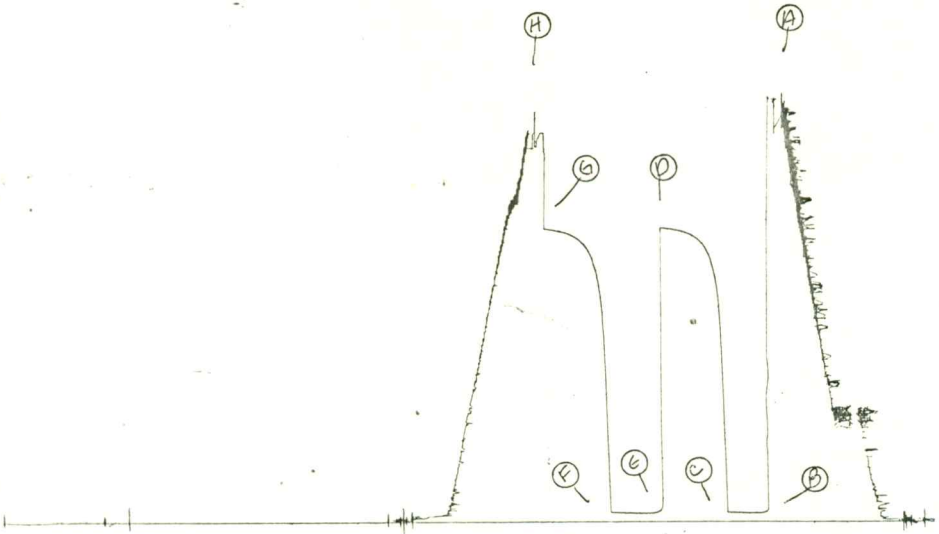
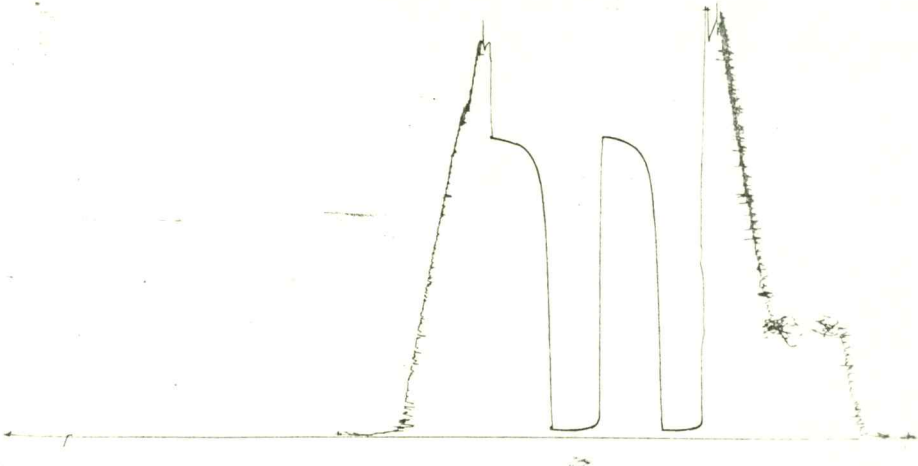
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