

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7/16/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2245
SECTION: 20
RANGE: 18W
GAUGE SN #13547

TEST: 1
FORMATION: LANSING
TOWNSHIP: 29S
COUNTY: KIOWA
RANGE: 4225

TICKET #19036
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4452 FT TO: 4480 FT TOTAL DEPTH: 4480 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4447 FT SIZE: 6 5/8 IN PACKER DEPTH: 4452 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: BEREDCO

MUD TYPE: CHEMICAL VISCOSITY: 42
WEIGHT: 9.2 WATER LOSS (CC): 12.0

CHLORIDES (P.P.M.): 9000

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? YES

REVERSED OUT? NO

DRILL COLLAR LENGTH:	310	FT	I.D.:	2 1/4	IN
WEIGHT PIPE LENGTH:		FT	I.D.:		IN
DRILL PIPE LENGTH:	4121	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	5 1/2 OD	IN
ANCHOR LENGTH:	28	FT	SIZE:	5 1/2 OD	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 FH	IN

BLOW: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE IN 2 MINUTES ON PREFLOW.
SEE ATTACHED GAS SHEET.

RECOVERED:	120	FT	OF:	CLEAN GASSY OIL	(GRAVITY 46)
RECOVERED:	190	FT	OF:	FOGGY OIL	
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		
RECOVERED:		FT	OF:		

REMARKS: TIGHT HOLE.

TIME SET PACKER(S): 4:45 PM

TIME STARTED OFF BOTTOM: 8:30 PM

WELL TEMPERATURE: 122 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD	MIN: 15	(A) 2138	PSI	
INITIAL CLOSED IN PERIOD	MIN: 27	(B) 299	PSI TO (C) 315	PSI
FINAL FLOW PERIOD	MIN: 55	(D) 1588	PSI	
FINAL CLOSED IN PERIOD	MIN: 114	(E) 315	PSI TO (F) 360	PSI
FINAL HYDROSTATIC PRESSURE		(G) 1589	PSI	
		(H) 2123	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 7/16/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2245
SECTION: 20
RANGE: 18W
GAUGE SN #13547

TEST: 1

FORMATION: LANSING
TOWNSHIP: 29S

TICKET #19036
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
LANSING
295
STATE: KANSAS
CLOCK: 12

(A)	INITIAL HYDROSTATIC PRESSURE:	2138	PSI
(B)	FIRST INITIAL FLOW PRESSURE:	299	PSI
(C)	FIRST FINAL FLOW PRESSURE:	315	PSI
(D)	INITIAL CLOSED-IN PRESSURE:	1588	PSI
(E)	SECOND INITIAL FLOW PRESSURE:	315	PSI
(F)	SECOND FINAL FLOW PRESSURE:	360	PSI
(G)	FINAL CLOSED-IN PRESSURE:	1589	PSI
(H)	FINAL HYDROSTATIC PRESSURE:	2123	PSI
WELL TEMPERATURE:		122	'F
OPEN TOOL: 4:45 PM			

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	15 MIN	15 MIN
INITIAL CLOSED-IN PRESSURE:	30 MIN	27 MIN
SECOND FLOW PRESSURE:	60 MIN	55 MIN
FINAL CLOSED-IN PRESSURE:	120 MIN	114 MIN

PRESSURE BREAKDOWN

[illegible]

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 7/16/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2245
SECTION: 20
RANGE: 18W
GAUGE SN #13547

TEST: 1
COUNTY: KIOWA
RANGE: 4225

TICKET #19036
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
FORMATION: LANSING
TOWNSHIP: 29S
STATE: KANSAS
CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

2				GAS TO SURFACE
5	MERLA	1 1/2	9.0 PSIG	1198000 CFPD
10		1 1/2	15 PSIG	1626000 CFPD
15		1 1/2	19 PSIG	1887000 CFPD

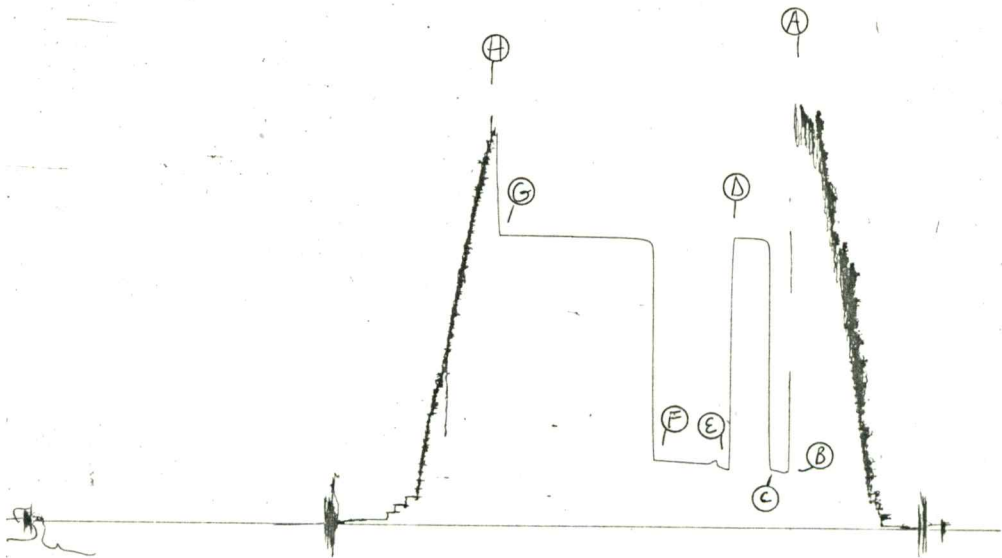
SECOND FLOW

5	MERLA	2	3.0 PSIG	1250000 CFPD
10		2	4.0 PSIG	1450000 CFPD
20		2	5.0 PSIG	1630000 CFPD
30		2	5.0 PSIG	1630000 CFPD
40		2	5.0 PSIG	1630000 CFPD
50		2	5.0 PSIG	1630000 CFPD
60		2	5.0 PSIG	1630000 CFPD

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED: 7/16/83

TKT # 19036

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WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7/17/83
CUSTOMER: PETROLEUM INC.
WELL: 2 TEST: 2
ELEVATION (KB): 2243 FORMATION: SWOPE
SECTION: 20 TOWNSHIP: 29S
RANGE: 18W COUNTY: KIOWA STATE: KANSAS
GAUGE SN #2606 RANGE: 4150 CLOCK: 12

TICKET #1252
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN

INTERVAL TEST FROM: 4538 FT TO: 4575 FT TOTAL DEPTH: 4575 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4533 FT SIZE: 6 3/4 IN PACKER DEPTH: 4538 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: BEREDCO
MUD TYPE: CHEMICAL VISCOSITY: 39
WEIGHT: 9.2 WATER LOSS (CC): 15.6
CHLORIDES (P.P.M.): 9000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 302 FT I.D.: 2 1/4 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4216 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 37 FT SIZE: 5 1/2 OD 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 FH IN

BLOW: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE IN 10 MINUTES.
SEE ATTACHED GAS SHEET.

RECOVERED: 90	FT	OF: GASSY MUD (SLIGHT SHOW OF OIL)
RECOVERED: 210	FT	OF: HEAVY GAS & OIL CUT MUD
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

REMARKS: TIGHT HOLE.
SLID TOOL 10 FT. TO BOTTOM.

TIME SET PACKER(S): 11:00 AM
WELL TEMPERATURE: 120 °F

TIME STARTED OFF BOTTOM: 2:45 PM

INITIAL HYDROSTATIC PRESSURE:	(A) 2245	PSI	
INITIAL FLOW PERIOD MIN: 15	(B) 104	PSI TO (C) 94	PSI
INITIAL CLOSED IN PERIOD MIN: 30	(D) 1336	PSI	
FINAL FLOW PERIOD MIN: 60	(E) 91	PSI TO (F) 99	PSI
FINAL CLOSED IN PERIOD MIN: 120	(G) 1535	PSI	
FINAL HYDROSTATIC PRESSURE	(H) 2220	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 7/17/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2243
SECTION: 20
RANGE: 18W
GAUGE SN #2606

TEST: 2

COUNTY: KIOWA
RANGE: 4150

TICKET #1252
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
SWOPE
295
STATE: KANSAS
CLOCK: 12

(A)	INITIAL HYDROSTATIC PRESSURE:	2245	PSI
(B)	FIRST INITIAL FLOW PRESSURE:	104	PSI
(C)	FIRST FINAL FLOW PRESSURE:	94	PSI
(D)	INITIAL CLOSED-IN PRESSURE:	1336	PSI
(E)	SECOND INITIAL FLOW PRESSURE:	91	PSI
(F)	SECOND FINAL FLOW PRESSURE:	99	PSI
(G)	FINAL CLOSED-IN PRESSURE:	1535	PSI
(H)	FINAL HYDROSTATIC PRESSURE:	2220	PSI
WELL TEMPERATURE:		120	'F
OPEN TOOL: 11:00 AM			

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	15 MIN	15 MIN
INITIAL CLOSED-IN PRESSURE:	30 MIN	30 MIN
SECOND FLOW PRESSURE:	60 MIN	60 MIN
FINAL CLOSED-IN PRESSURE:	120 MIN	120 MIN

PRESSURE BREAKDOWN

[illegible]

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 7/17/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2243
SECTION: 20
RANGE: 18W
GAUGE SN #2606

TEST: 2
COUNTY: KIOWA
RANGE: 4150

TICKET #1252
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
FORMATION: SWOPE
TOWNSHIP: 29S
STATE: KANSAS
CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

10				GAS TO SURFACE
15	MERLA	3/4	1.0 PSIG	76000 CFPD

SECOND FLOW

10	MERLA	1/2	5.0 PSIG	78100 CFPD
20		1/2	4.0 PSIG	68800 CFPD
30		1/2	3.0 PSIG	59200 CFPD
40		1/2	2.0 PSIG	47700 CFPD
50		1/2	2.0 PSIG	47700 CFPD
60		1/2	2.0 PSIG	47700 CFPD

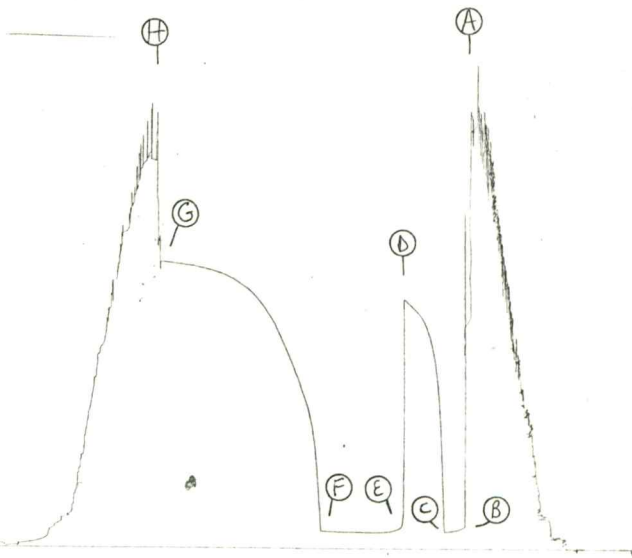
GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED: 7/17/83

2606 VSI 44

TKT # 1252

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WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7/18/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2243
SECTION: 20
RANGE: 18W
GAUGE SN #2606

TEST: 3

FORMATION:

TOWNSHIP: 29S

COUNTY: KIOWA
RANGE: 4150

TICKET #1253
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4591 FT TO: 4635 FT TOTAL DEPTH: 4635 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4586 FT SIZE: 6 3/4 IN PACKER DEPTH: 4591 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: BEREDCO

MUD TYPE: CHEMICAL

VISCOSITY: 62

WEIGHT: 9.3

WATER LOSS (CC): 11.0

CHLORIDES (P.P.M.): 19000

JARS - MAKE: NO

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? YES

DRILL COLLAR LENGTH: 302

FT

I.D.: 2 1/4

IN

WEIGHT PIPE LENGTH:

FT

I.D.:

IN

DRILL PIPE LENGTH: 4269

FT

I.D.: 3.8

IN

TEST TOOL LENGTH: 20

FT

TOOL SIZE: 5 1/2 OD

IN

ANCHOR LENGTH: 44

FT

SIZE: 5 1/2 OD

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 FH

IN

BLOW: STRONG BLOW THROUGHOUT TEST.
WOULD MAINTAIN 2 INCH FLOW LINE.
NO GAS TO SURFACE.

RECOVERED: 820	FT	OF: MUDDY WATER
RECOVERED:	FT	OF: CHLORIDES 96000 PPM
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

REMARKS: RESISTIVITY 0.1 @ 80 DEGREES F.
TIGHT HOLE.

TIME SET PACKER(S): 3:30 AM

TIME STARTED OFF BOTTOM: 7:15 AM

WELL TEMPERATURE: 122 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 10

(A) 2163

PSI

INITIAL CLOSED IN PERIOD MIN: 30

(B) 83

PSI TO (C) 148

PSI

FINAL FLOW PERIOD MIN: 60

(D) 1610

PSI

FINAL CLOSED IN PERIOD MIN: 120

(E) 258

PSI TO (F) 389

PSI

FINAL HYDROSTATIC PRESSURE

(G) 1624

PSI

(H) 2156

PSI

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CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2243
SECTION: 20
RANGE: 18W
GAUGE SN #2606

TEST: 3

TICKET #1253
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
295
STATE: KANSAS
CLOCK: 12

(A)	INITIAL HYDROSTATIC PRESSURE:	2163	PSI
(B)	FIRST INITIAL FLOW PRESSURE:	83	PSI
(C)	FIRST FINAL FLOW PRESSURE:	148	PSI
(D)	INITIAL CLOSED-IN PRESSURE:	1610	PSI
(E)	SECOND INITIAL FLOW PRESSURE:	258	PSI
(F)	SECOND FINAL FLOW PRESSURE:	389	PSI
(G)	FINAL CLOSED-IN PRESSURE:	1624	PSI
(H)	FINAL HYDROSTATIC PRESSURE:	2156	PSI
WELL TEMPERATURE:		122	'F
OPEN TOOL: 3:30 AM			

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	15 MIN	10 MIN
INITIAL CLOSED-IN PRESSURE:	30 MIN	30 MIN
SECOND FLOW PRESSURE:	60 MIN	60 MIN
FINAL CLOSED-IN PRESSURE:	90 MIN	120 MIN

PRESSURE BREAKDOWN

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PRESSURE BREAKDOWN - CONT. TICKET #1253

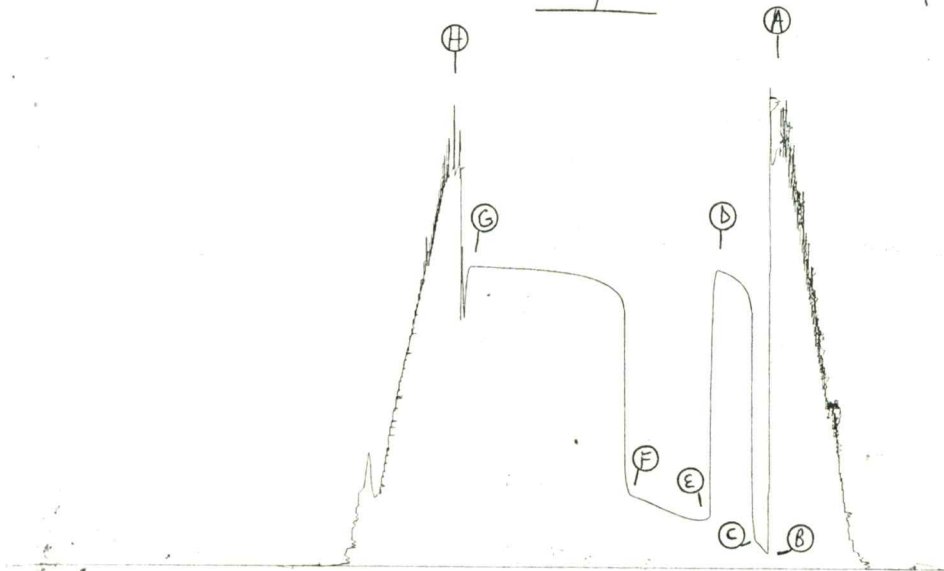
PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
31							90	1615
32							93	1616
33							96	1617
34							99	1618
35							102	1619
36							105	1620
37							108	1621
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2606 DST#3

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TKT. # 1253

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WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7/19/83
CUSTOMER: PETROLEUM INC.
WELL: 2
ELEVATION (KB): 2243
SECTION: 20
RANGE: 18W
GAUGE SN #2606

TEST: 4

FORMATION: MISSISSIPPI
TOWNSHIP: 29S

COUNTY: KIOWA
RANGE: 4150

TICKET #1254
LEASE: "D" NICHOLS
GEOLOGIST: HAMLIN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4877 FT TO: 4904 FT TOTAL DEPTH: 4904 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4872 FT SIZE: 6 3/4 IN PACKER DEPTH: 4877 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: BEREDCO

MUD TYPE: CHEMICAL

VISCOSITY: 64

WEIGHT: 9.4

WATER LOSS (CC): 11.2

CHLORIDES (P.P.M.): 11000

JARS - MAKE: NO

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 302

FT I.D.: 2 1/4 IN

WEIGHT PIPE LENGTH:

FT I.D.: IN

DRILL PIPE LENGTH: 4555

FT I.D.: 3.8 IN

TEST TOOL LENGTH: 20

FT TOOL SIZE: 5 1/2 OD IN

ANCHOR LENGTH: 27

FT SIZE: 5 1/2 OD 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 FH IN

BLOW: INITIAL FLOW PERIOD GOOD BLOW BUILDING
TO STRONG IN 15 MINUTES.
FINAL FLOW PERIOD STRONG BLOW DEPLETING
TO FAIR BLOW.

RECOVERED: 20	FT	OF: DRILLING 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: TIGHT HOLE.

TIME SET PACKER(S): 8:00 AM

TIME STARTED OFF BOTTOM: 11:45 AM

WELL TEMPERATURE: 123 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 2528 PSI

INITIAL FLOW PERIOD MIN: 15

(B) 63 PSI TO (C) 63 PSI

INITIAL CLOSED IN PERIOD MIN: 27

(D) 98 PSI

FINAL FLOW PERIOD MIN: 60

(E) 55 PSI TO (F) 55 PSI

FINAL CLOSED IN PERIOD MIN: 120

(G) 239 PSI

FINAL HYDROSTATIC PRESSURE

(H) 2470 PSI

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TKT. # 1254

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