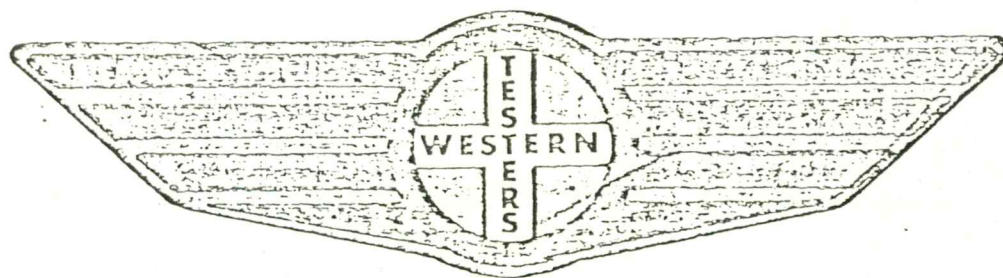


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/5/84
CUSTOMER: A.P.C. INC.
WELL: 1
ELEVATION (KB): 1286
SECTION: 16
RANGE: 6W
GAUGE SN #2606

TEST: 1
FORMATION: KANSAS CITY
TOWNSHIP: 34S
COUNTY: HARPER
RANGE: 4150

TICKET #5667
LEASE: ROBB
GEOLOGIST: HOWARD
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 3846 FT TO: 3856 FT TOTAL DEPTH: 3856 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3841 FT SIZE: 6 5/8 IN PACKER DEPTH: 3846 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: HEARTLAND DRLG
MUD TYPE: PREMIX VISCOSITY: 33
WEIGHT: 9.3 WATER LOSS (CC): 46.6
CHLORIDES (P.P.M.): 12000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 454 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3372 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 10 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: WEAK BLOW TO FAIR BLOW THROUGHOUT
TEST. NO GAS TO SURFACE.

RECOVERED: 300	FT	OF: GAS ABOVE FLUID.
RECOVERED: 60	FT	OF: GAS & SLIGHTLY OIL CUT MUD.
RECOVERED:	FT	OF: 10% GAS; 2% OIL; 88% MUD.
RECOVERED: 60	FT	OF: GAS & OIL CUT MUD.
RECOVERED:	FT	OF: 55% MUD; 10% WATER; 5% OIL; 30% GAS.
RECOVERED: 60	FT	OF: GAS & OIL CUT MUD.
RECOVERED:	FT	OF: 50% MUD; 5% OIL; 10% WATER; 35% GAS.
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

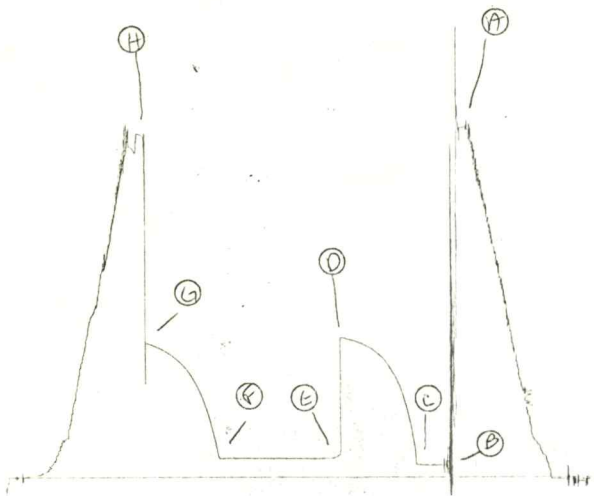
REMARKS: SLID TOOL 8 FEET TO BOTTOM.

TIME SET PACKER(S): 4:45 PM TIME STARTED OFF BOTTOM: 8:45 PM
WELL TEMPERATURE: 126 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1880 PSI
INITIAL FLOW PERIOD MIN: 25 (B) 70 PSI TO (C) 71 PSI
INITIAL CLOSED IN PERIOD MIN: 57 (D) 755 PSI
FINAL FLOW PERIOD MIN: 90 (E) 104 PSI TO (F) 105 PSI
FINAL CLOSED IN PERIOD MIN: 54 (G) 724 PSI
FINAL HYDROSTATIC PRESSURE (H) 1851 PSI

2406 PST#1

4C# 5667

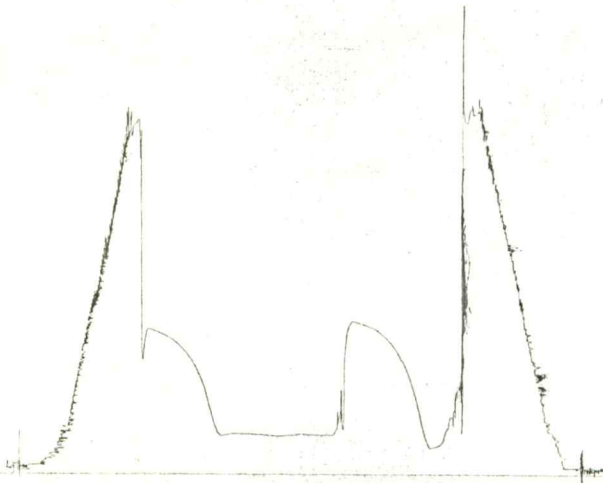
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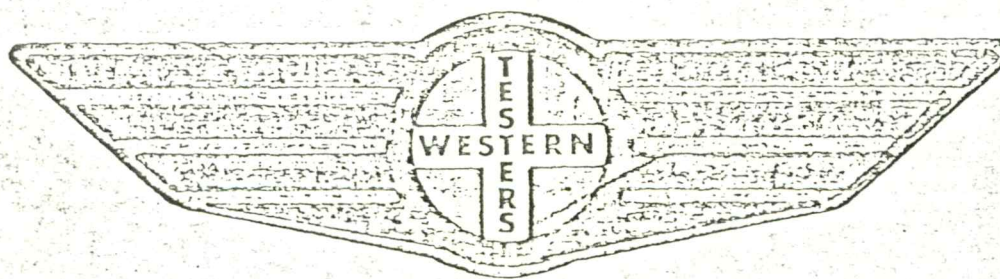
12267 DST#1

4CK# 5667

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/8/84
CUSTOMER: A.P.C. INC.
WELL: 1
ELEVATION (KB): 1286
SECTION: 16
RANGE: 6W
GAUGE SN #2606

TEST: 2
FORMATION: MISSISSIPPI
TOWNSHIP: 34S
COUNTY: HARPER
RANGE: 4150

TICKET #5668
LEASE: ROBB
GEOLOGIST: HOWARD
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4525 FT TO: 4579 FT TOTAL DEPTH: 4579 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4520 FT SIZE: 6 5/8 IN PACKER DEPTH: 4525 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: HEARTLAND DRLG
MUD TYPE: PREMIX
WEIGHT: 9.2
CHLORIDES (P.P.M.): 9000
JARS - MAKE: NO
DID WELL FLOW? NO
DRILL COLLAR LENGTH: 454 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4051 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 54 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

VISCOSECITY: 45
WATER LOSS (CC): 18.4
SERIAL NUMBER:
REVERSED OUT? NO

BLOW: STRONG BLOW THROUGHOUT TEST. GAS
TO SURFACE IN 3 MINUTES ON THE
INITIAL FLOW PERIOD. SEE ATTACHED
SHEET FOR GAS MEASUREMENTS.

RECOVERED: 90	FT	OF: GAS CUT MUD.
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): 6:10 AM	TIME STARTED OFF BOTTOM: 9:40 AM
WELL TEMPERATURE: 126 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 2214 PSI
INITIAL FLOW PERIOD MIN: 30	(B) 78 PSI TO (C) 78 PSI
INITIAL CLOSED IN PERIOD MIN: 60	(D) 978 PSI
FINAL FLOW PERIOD MIN: 60	(E) 57 PSI TO (F) 57 PSI
FINAL CLOSED IN PERIOD MIN: 60	(G) 871 PSI
FINAL HYDROSTATIC PRESSURE	(H) 2214 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 9/8/84
CUSTOMER: A.P.C. INC.
WELL: 1
ELEVATION (KB): 1286
SECTION: 16
RANGE: 6W
GAUGE SN #2606

TEST: 2
COUNTY: HARPER
RANGE: 4150

TICKET #5668
LEASE: ROBB
GEOLOGIST: HOWARD
MISSISSIPPI
345
STATE: KANSAS
CLOCK: 12

(A)	INITIAL HYDROSTATIC PRESSURE:	2214	PSI
(B)	FIRST INITIAL FLOW PRESSURE:	78	PSI
(C)	FIRST FINAL FLOW PRESSURE:	78	PSI
(D)	INITIAL CLOSED-IN PRESSURE:	978	PSI
(E)	SECOND INITIAL FLOW PRESSURE:	57	PSI
(F)	SECOND FINAL FLOW PRESSURE:	57	PSI
(G)	FINAL CLOSED-IN PRESSURE:	871	PSI
(H)	FINAL HYDROSTATIC PRESSURE:	2214	PSI
	WELL TEMPERATURE:	126	'F
	OPEN TOOL:	6:10 AM	

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

PRESSURE BREAKDOWN

PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	78	0	78	0	57	0	57
2	5	78	3	855	5	57	3	721
3	10	78	6	897	10	57	6	771
4	15	78	9	915	15	57	9	789
5	20	78	12	926	20	57	12	800
6	25	78	15	933	25	57	15	809
7	30	78	18	938	30	57	18	817
8			21	943	35	57	21	825
9			24	948	40	57	24	832
10			27	953	45	57	27	836
11			30	957	50	57	30	840
12			33	960	55	57	33	844
13			36	963	60	57	36	848
14			39	966			39	852
15			42	969			42	856
16			45	972			45	860
17			48	974			48	863
18			51	975			51	865
19			54	976			54	867
20			57	977			57	869
21			60	978			60	871

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23
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WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 9/8/84
CUSTOMER: A.P.C. INC.
WELL: 1
ELEVATION (KB): 1286
SECTION: 16
RANGE: 6W
GAUGE SN #2606

TEST: 2
FORMATION: MISSISSIPPI
TOWNSHIP: 34S
COUNTY: HARPER
RANGE: 4150

TICKET #5668
LEASE: ROBB
GEOLOGIST: HOWARD
STATE: KANSAS
CLOCK: 12

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

10	MERLA	1	2.0 PSIG	195000 CFPD
20			2.5	220000
30			2.5	220000

SECOND FLOW

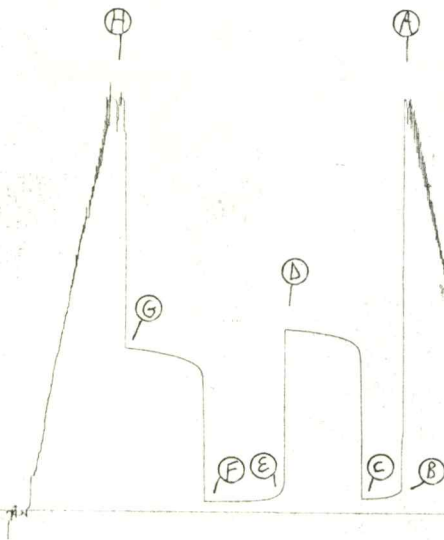
10	MERLA	1	2.5 PSIG	220000 CFPD
20			2.5	220000
30			2.0	195000
40			2.0	195000
50			1.5	169000
60			1.5	169000

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

2606 DST #2

TKT # 5668

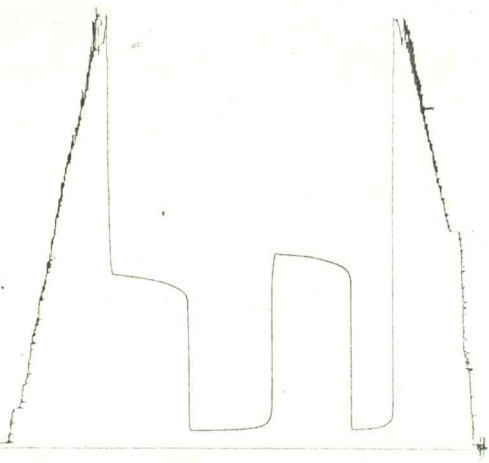
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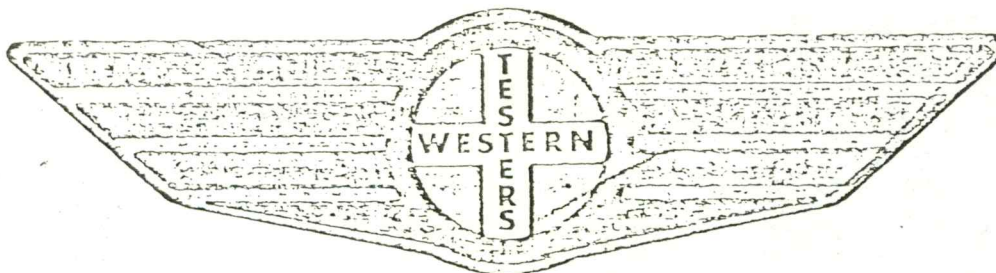
13267 DST#2

TKT # 5668

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company A.P.C. INC. Lease and Well No. #1 ROBB Sec. 10 Twp. 24S Rge. 06W Test No. 1 Date 1/1/57

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9/9/84
CUSTOMER: A.P.C. INC.
WELL: 1
ELEVATION (KB): 1286
SECTION: 16
RANGE: 6W
GAUGE SN #2606

TEST: 3
FORMATION: LOWER MISSISSIPPI
TOWNSHIP: 34S
COUNTY: HARPER
RANGE: 4150

TICKET #5669
LEASE: ROBB
GEOLOGIST: HOWARD
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4676 FT TO: 4786 FT TOTAL DEPTH: 4786 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4671 FT SIZE: 6 5/8 IN PACKER DEPTH: 4676 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: HEARTLAND DRLG
MUD TYPE: PREMIX VISCOSITY: 49
WEIGHT: 9.0 WATER LOSS (CC): 19.2
CHLORIDES (P.P.M.): 10000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 394 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4262 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 110 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: WEAK STEADY BLOW THROUGHOUT TEST.

RECOVERED: 240 FT OF: SLIGHTLY OIL CUT MUD.
RECOVERED: FT OF: 2% OIL IN BOTTOM OF SAMPLE.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

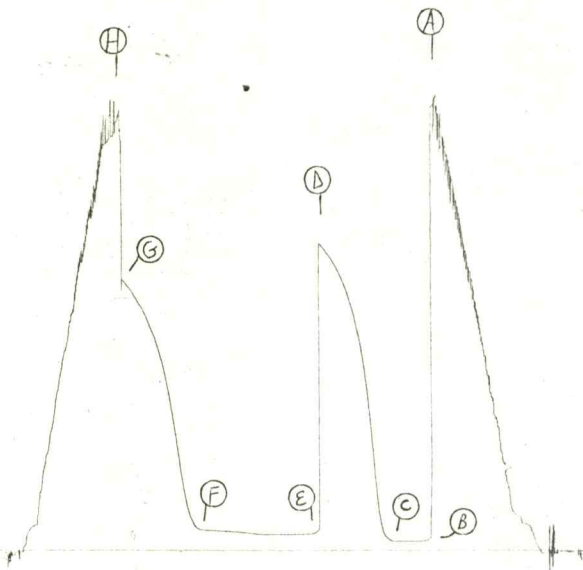
REMARKS:

TIME SET PACKER(S): 8:00 AM TIME STARTED OFF BOTTOM: 12:00 PM
WELL TEMPERATURE: 136 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2361 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 47 PSI TO (C) 47 PSI
INITIAL CLOSED IN PERIOD MIN: 54 (D) 1631 PSI
FINAL FLOW PERIOD MIN: 90 (E) 84 PSI TO (F) 109 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 1443 PSI
FINAL HYDROSTATIC PRESSURE (H) 2330 PSI

2606 DST#5

TKT # 5669

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15241 DSI 45

TKT # 5669

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