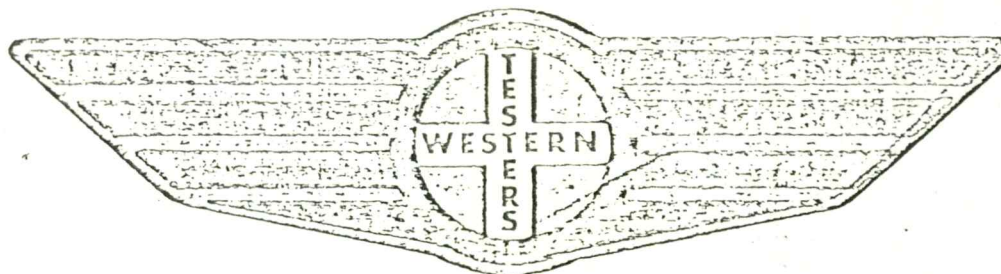


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ VINCENT OIL CORPORATION
Lease and Well No. _____ #1 B UNKUH
Sec. _____ 20 Twp. _____ 29S Rge. _____ 19W
Test No. _____ 1 Date 11/23/

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/23/84 TICKET #7404
CUSTOMER: VINCENT OIL CORPORATION LEASE: "B" UNRUH
WELL: 1 TEST: 1 GEOLOGIST: SCHMALTZ
ELEVATION (KB): 2073 FORMATION: LANSING
SECTION: 26 TOWNSHIP: 29S
RANGE: 19W COUNTY: KIOWA STATE: KANSAS
GAUGE SN #6074 RANGE: 5100 CLOCK: 12

INTERVAL TEST FROM: 4573 FT TO: 4588 FT TOTAL DEPTH: 4588 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4568 FT SIZE: 6 5/8 IN PACKER DEPTH: 4573 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG
MUD TYPE: PRE-CHEM VISCOSITY: 38
WEIGHT: 9.5 WATER LOSS (CC):
CHLORIDES (P.P.M.): 21000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.2 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4433 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 15 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 WEAK BLOW BUILDING
TO A STRONG STEADY BLOW. FINAL
FLOW PERIOD WEAK BLOW BUILDING TO
A STRONG STEADY BLOW.

RECOVERED: 750 FT OF: MUDDY SALT WATER.
RECOVERED: FT OF: CHLORIDES 111000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

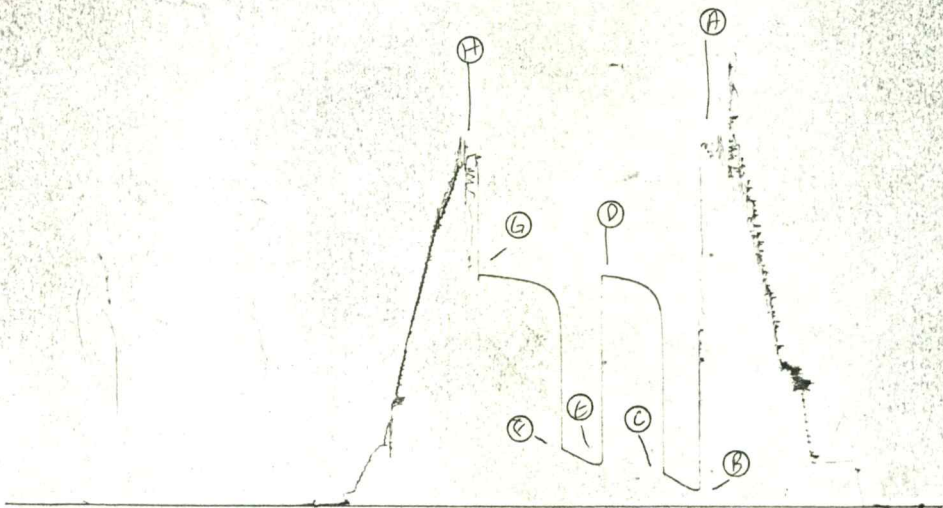
REMARKS:

TIME SET PACKER(S): 8:25 AM TIME STARTED OFF BOTTOM: 11:10 AM
WELL TEMPERATURE: 119 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2395 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 112 PSI TO (C) 219 PSI
INITIAL CLOSED IN PERIOD MIN: 45 (D) 1531 PSI
FINAL FLOW PERIOD MIN: 30 (E) 280 PSI TO (F) 381 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 1533 PSI
FINAL HYDROSTATIC PRESSURE (H) 2325 PSI

tcp# 7404.

DST#1 7404

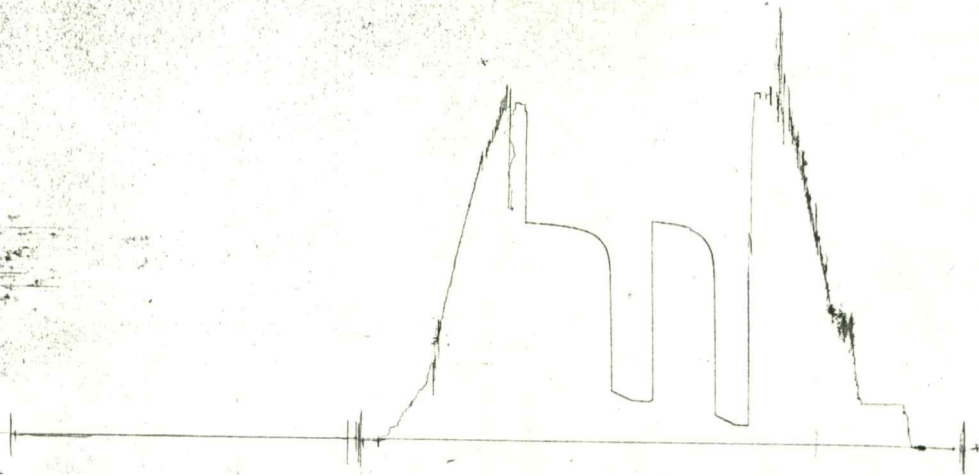
I



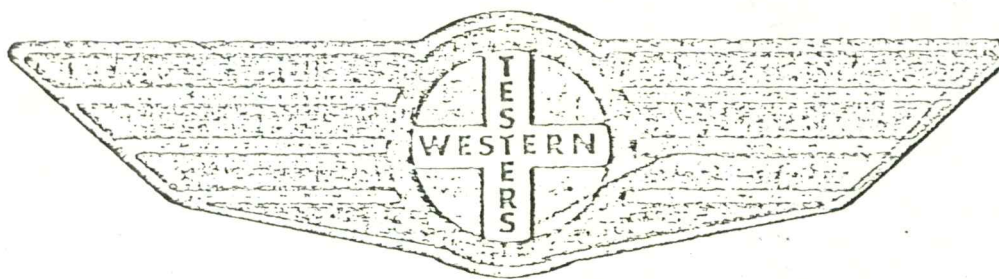
ICF# 7404

OST#1 #7404

O



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____ VINCENT OIL CORPORATION
Lease and Well No. _____
#1 D UNKN
Sec. _____
40 Twp. _____
795 Rge. _____
13W Test No. _____
Date 11/24/60

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/24/84

TICKET #7405

CUSTOMER: VINCENT OIL CORPORATION

LEASE: "B" UNRUH

WELL: 1

TEST: 2

GEOLOGIST: SCHMALTZ

ELEVATION (KB): 2073

FORMATION: KANSAS CITY

SECTION: 26

TOWNSHIP: 29S

RANGE: 19W

COUNTY: KIOWA

STATE: KANSAS

GAUGE SN 6074

RANGE: 5100

CLOCK: 12

INTERVAL TEST FROM: 4792 FT TO: 4887 FT TOTAL DEPTH: 4887 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4787 FT SIZE: 6 5/8 IN PACKER DEPTH: 4792 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG

MUD TYPE: DRIS-CHEM

VISCOSITY: 40

WEIGHT: 9.6

WATER LOSS (CC): 15.6

CHLORIDES (P.P.M.): 19000

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 120

FT I.D.: 2.2 IN

WEIGHT PIPE LENGTH:

FT I.D.: IN

DRILL PIPE LENGTH: 4652

FT I.D.: 3.8 IN

TEST TOOL LENGTH: 20

FT TOOL SIZE: 5 1/2 OD IN

ANCHOR LENGTH: 95

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 WEAK BLOW

BUILDING TO A STRONG BLOW.

FINAL FLOW PERIOD WEAK BLOW

BUILDING TO A STRONG BLOW IN 15 MINUTES.

RECOVERED: 925

FT OF: MUDDY SALT WATER.

RECOVERED:

FT OF: CHLORIDES 112000 PPM.

RECOVERED:

FT OF:

RECOVERED:

FT OF:

RECOVERED:

FT OF:

RECOVERED:

FT OF:

RECOVERED:

FT OF:

RECOVERED:

FT OF:

RECOVERED:

FT OF:

REMARKS: ONE STAND DRILL PIPE IN ANCHOR (60').

TIME SET PACKER(S): 6:50 PM

TIME STARTED OFF BOTTOM: 9:50 PM

WELL TEMPERATURE: 130 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 2534 PSI

INITIAL FLOW PERIOD

MIN: 30

(B) 119 PSI TO (C) 257 PSI

INITIAL CLOSED IN PERIOD

MIN: 45

(D) 1655 PSI

FINAL FLOW PERIOD

MIN: 45

(E) 314 PSI TO (F) 476 PSI

FINAL CLOSED IN PERIOD

MIN: 60

(G) 1639 PSI

FINAL HYDROSTATIC PRESSURE

(H) 2478 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

TICKET #7405

LEASE: "B" UNRUH

GEOLOGIST: SCHMALTZ

FORMATION: KANSAS CITY

TOWNSHIP: 29S

COUNTY: KIOWA

STATE: KANSAS

RANGE: 5100

CLOCK: 12

(B) FIRST INITIAL FLOW PRESSURE: 119 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1655 PSI

(F) SECOND FINAL FLOW PRESSURE: 476 PSI

(H) FINAL HYDROSTATIC PRESSURE: 2478 PSI

OPEN TOOL: 6:50 PM

FIRST FLOW PRESSURE: 30 MIN 30 MIN

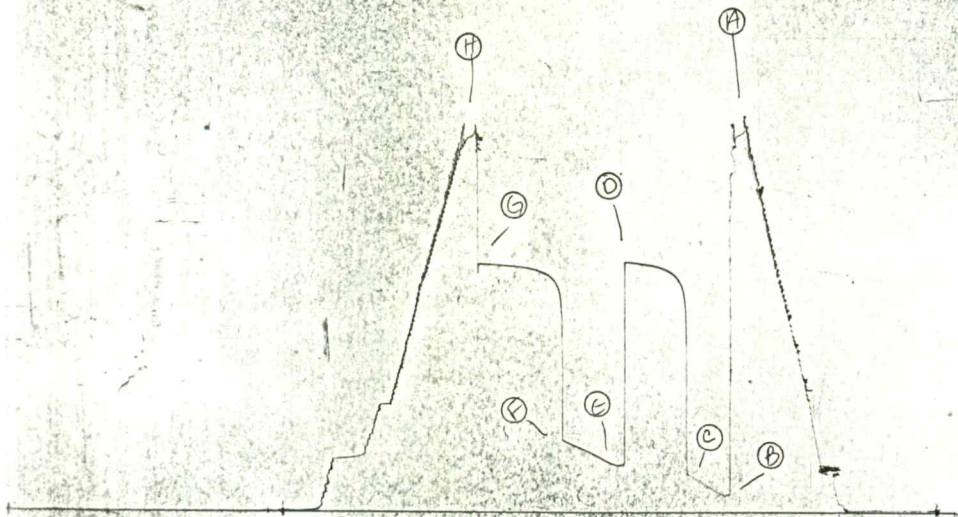
SECOND FLOW PRESSURE: 45 MIN 45 MIN

[illegible]

LOT# 7405

60 DSR#2

I

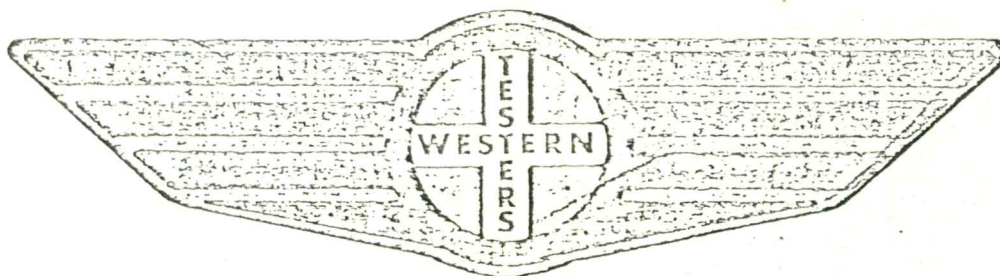


TEXT# 7405.

6270
DST#2



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company VINCENT OIL CORPORATION Lease and Well No. #1 "B" UNRUH Sec. 26 Twp. 29S Rge. 19W Test No. 3 Date 1/26/3

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/26/84
CUSTOMER: VINCENT OIL CORPORATION
WELL: #1
ELEVATION (KB): 2073
SECTION: 26
RANGE: 19W
GAUGE SN #6074

TICKET #7406
LEASE: UNRUH "B"
GEOLOGIST: SCHMALTZ
FORMATION: CHEROKEE
TOWNSHIP: 29S
COUNTY: KANSAS
RANGE: 5100
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 4931 FT TO: 5080 FT TOTAL DEPTH: 5080 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4926 FT SIZE: 6 5/8 IN PACKER DEPTH: 4931 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE
MUD TYPE: CHEM DRIS VISCOSITY: 46
WEIGHT: 9.5 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 26000

JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?

DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4731 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 149 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW DECREASING
THROUGHOUT. FINAL FLOW PERIOD VERY WEAK
BLOW DECREASING IN 5 MINUTES; FLUSHED
TOOL WEAK BLOW DECREASING THROUGHOUT.

RECOVERED: 60 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:
RECOVERED: FT OF:

REMARKS: 123 FEET OF DRILL PIPE IN ANCHOR.

TIME SET PACKER(S): 2:05 A.M. TIME STARTED OFF BOTTOM: 4:05 A.M.
WELL TEMPERATURE: 120 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2498 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 38 PSI TO (C) 38 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 48 PSI
FINAL FLOW PERIOD MIN: 30 (E) 41 PSI TO (F) 52 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 57 PSI
FINAL HYDROSTATIC PRESSURE (H) 2480 PSI

WESTERN TESTING COMPANY INC.
PRESSURE DATA

DATE: 11/26/84
CUSTOMER: VINCENT OIL CORPORATION
WELL: #1 TEST: 3
ELEVATION (KB): 2073 FORMATION: CHEROKEE
SECTION: 26 TOWNSHIP: 29S
RANGE: 19W COUNTY: KIOWA STATE: KANSAS
GAUGE SN #6074 RANGE: 5100 CLOCK: 12

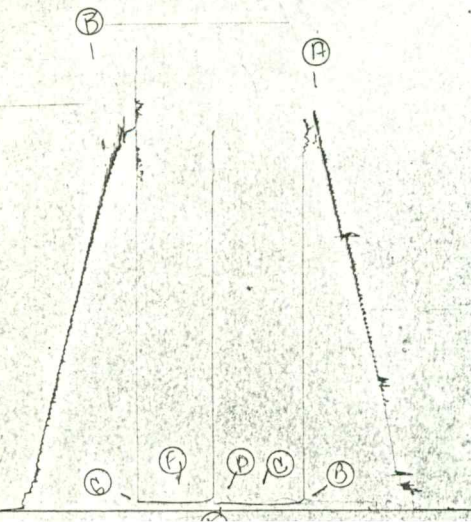
(A) INITIAL HYDROSTATIC PRESSURE: 2498 PSI
(B) FIRST INITIAL FLOW PRESSURE: 38 PSI
(C) FIRST FINAL FLOW PRESSURE: 38 PSI
(D) INITIAL CLOSED-IN PRESSURE: 48 PSI
(E) SECOND INITIAL FLOW PRESSURE: 41 PSI
(F) SECOND FINAL FLOW PRESSURE: 52 PSI
(G) FINAL CLOSED-IN PRESSURE: 57 PSI
(H) FINAL HYDROSTATIC PRESSURE: 2480 PSI
WELL TEMPERATURE: 120 °F
OPEN TOOL: 2:05 A.M.

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

PRESSURE BREAKDOWN								
PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	38	0	38	0	41	0	52
2	5	38	3	39	5	69	3	52
3	10	38	6	40	10	56	6	52
4	15	38	9	41	15	54	9	52
5	20	38	12	42	20	52	12	55
6	25	38	15	43	25	52	15	56
7	30	38	18	44	30	52	18	57
8			21	45			21	57
9			24	46			24	57
10			27	47			27	57
11			30	48			30	57
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

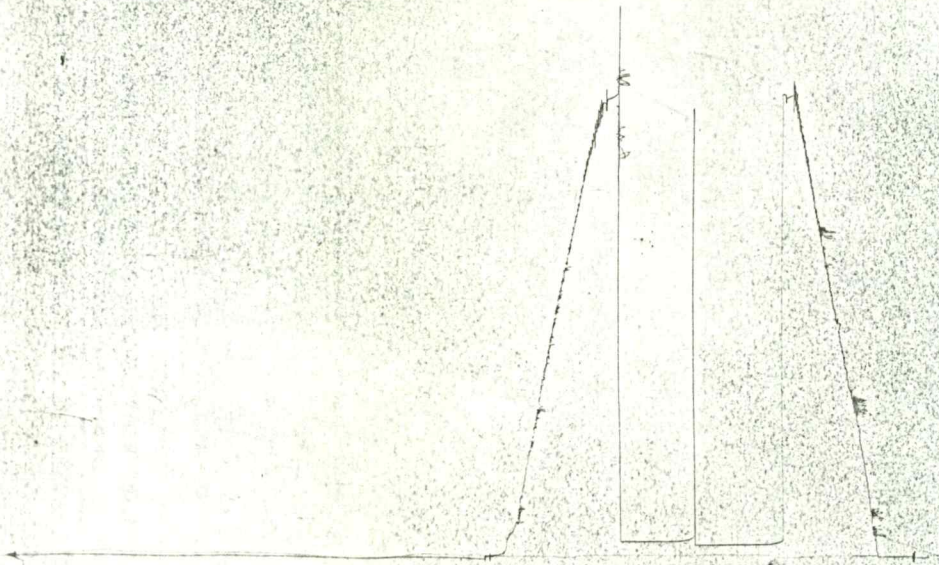
TKT # 74060

I



TKT# 7406

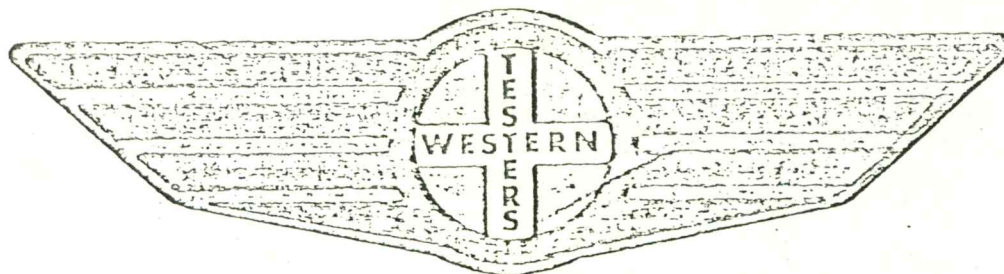
0



FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/26/84
CUSTOMER: VINCENT OIL CORP
WELL: 1
ELEVATION (KB): 2073
SECTION: 26
RANGE: 19W
GAUGE SN #6074

TEST: 4
FORMATION: MISSISSIPPI
TOWNSHIP: 29S
COUNTY: KIOWA
RANGE: 5100

TICKET #7407
LEASE: 'B' UNRUH
GEOLOGIST: SCHMALTZ
STATE: KS
CLOCK: 12

INTERVAL TEST FROM: 5052 FT TO: 5117 FT TOTAL DEPTH: 5117 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 5047 FT SIZE: 6 5/8 IN PACKER DEPTH: 5052 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG
MUD TYPE: CHEM-DRIS VISCOSITY: 50
WEIGHT: 9.4 WATER LOSS (CC): 15.0

CHLORIDES (P.P.M.):

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH:	180	FT	I.D.:	2.25	IN
WEIGHT PIPE LENGTH:		FT	I.D.:		IN
DRILL PIPE LENGTH:	4852	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	20	FT	TOOL SIZE:	5 1/2	IN
ANCHOR LENGTH:	65	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 GAS TO SURFACE 10 MINUTES (SEE FLOW CHART)

RECOVERED:	250	FT	OF:	GAS CUT 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:

TIME SET PACKER(S): 11:45 PM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE:
INITIAL FLOW PERIOD MIN: 45
INITIAL CLOSED IN PERIOD MIN: 60
FINAL FLOW PERIOD MIN: 75
FINAL CLOSED IN PERIOD MIN: 78
FINAL HYDROSTATIC PRESSURE

TIME STARTED OFF BOTTOM: 4:15 AM

(A)	2606	PSI	
(B)	242	PSI TO (C)	248 PSI
(D)	1369	PSI	
(E)	204	PSI TO (F)	219 PSI
(G)	1150	PSI	
(H)	2580	PSI	

WESTERN TESTING COMPANY INC.
GAS FLOW REPORT

DATE: 11/26/84

TICKET #7407

CUSTOMER: VINCENT OIL CORP

LEASE: 'B' UNRUH

WELL: 1

TEST: 4

GEOLOGIST: SCHMALTZ

ELEVATION (KB): 2073

FORMATION: MISSISSIPPI

SECTION: 26

TOWNSHIP: 29S

RANGE: 19W

COUNTY: KIOWA

STATE: KS

GAUGE SN #6074

RANGE: 5100

CLOCK: 12

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

PRE FLOW

15	MERLA	3/4	39 PSIG	628000 CFPD
20			44	685000
25			47	720000
30			50	756000
35			51	767000
40			51	767000
45			52	779000

SECOND FLOW

5	MERLA	3/4	21 PSIG	411000 CFPD
10			38	617000
15			45	697000
20			49	744000
25			50	756000
30			50	756000
35			49	744000
40			49	744000
45			48	732000
50			47	720000
55			46	708000
60			45	697000
65			44	685000
70			44	685000
75			43	674000

GAS BOTTLE SN #:

DATE BOTTLE FILLED:

DATE TO BE INVOICED:

Gas Production

B.T. Gauge Numbers				Ticket Number	7407
Initial Hydrostatic			Pressure	Elevation	2073 KB . ft.
			2606		
Final Hydrostatic			2580	Production Initial	779 m cu. ft.
1st Flow	Initial	Time	265	Rate Final	674 m cu. ft.
	Final	45			
		248			
Initial Closed In Pressure				Hole Size	7.875 in.
			60	Footage Tested	65 (9) ft.
			1369		
2nd Flow	Initial	---	204	Mud Weight	9.4 lbs. gal.
	Final		219	Gas Viscosity	cp
		75			
Final Closed In Pressure			90	Gas Gravity	---
			1150		
Extrapolated Static Pressure	Initial		1399 - 1307	Gas Compressibility	---
	Final		1187 - 1051		
Slope Psi ² /cycle	Initial		92.622		
	Final		135.641		

Remarks: _____

SUMMARY

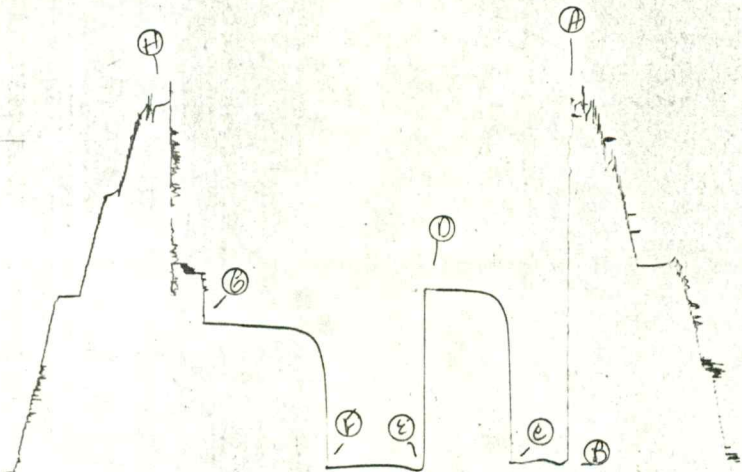
BT Gauge
Number
Depth

Product	Equation	Initial	Final	Units
Transmissibility	$\frac{Kh}{\mu} = \frac{1637 Q_e ZT}{m}$	2444.597	1730.001	md. ft. / cp
Theoretical Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$	44.002	31.140	md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$	4.889	3.460	md.
	$K_1 = \frac{Kh}{h_1}$	—	—	md.
Indicated Flow Capacity	$(Kh)_i = \frac{3200 Q_e \mu ZT \log(0.472 b/r_w)}{P_s^2 - P_r^2}$	15.328	18.970	md. ft.
Damage Ratio	$DR = \frac{\text{Theo. Flow Cap}}{\text{Indicated Flow Cap}} \frac{Kh}{(Kh)_i}$	4.175	1.641	—
Indicated Flow Rate	$OF_1 = \frac{Q_e}{P_s^2 - P_r^2} \frac{P_s^2}{P_r^2}$	804,273	697,751	MCFD
		791,536	685,772	MCFD
Theoretical Potential Rate	$OF_3 = OF_1 DR \quad \text{Max.}$	3,358,219	1,145,350	MCFD
	$OF_4 = OF_2 DR \quad \text{Min.}$	3,305,032	1,125,687	MCFD
Approx. Radius of Investigation	$b \approx \sqrt{Kt} \text{ or } \sqrt{Kt_0}$	14.832	16.109	ft.
	$b_1 \approx \sqrt{K_1 t} \text{ or } \sqrt{K_1 t_0}$	—	—	ft.
Potentiometric Surface *	$\text{Pot.} = (EI - GD) + (2.319 Ps)$	270.281	221.347	ft.

NOTICE:

These calculations are based upon information furnished by you and taken from Drill Stem Tests pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Western Testing Co., Inc., is merely expressing its opinion. You agree that Western Testing Co., Inc., make no warranty express or implied as to the accuracy of such calculations or opinions, and that Western Testing Co., Inc., shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

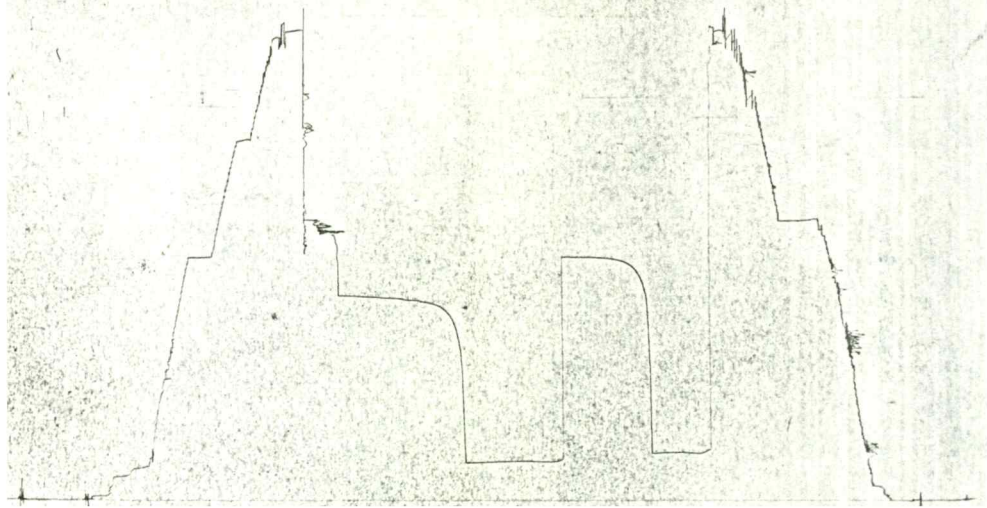
TK+ # 7407
I



Ticket 7407

1051 1017

TKT # 7407



Lease and Well No. _____ Sec. _____ TWP. _____ RGE. _____ NESE NO. _____ DATE 4/1/10



P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/27/84
CUSTOMER: VINCENT OIL CORPORATION
WELL: 1 TEST: 5
ELEVATION (KB): 2073 FORMATION: MISSISSIPPI
SECTION: 26 TOWNSHIP: 29S
RANGE: 19W COUNTY: KIOWA STATE: KANSAS
GAUGE SN #6074 RANGE: 5100 CLOCK: 12

INTERVAL TEST FROM: 5117 FT TO: 5127 FT TOTAL DEPTH: 5127 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 5112 FT SIZE: 6 5/8 IN PACKER DEPTH: 5117 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG
MUD TYPE: CHEM-DRIS VISCOSITY: 48
WEIGHT: 9.6 WATER LOSS (CC): 16.2
CHLORIDES (P.P.M.): 84000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 240 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4857 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 10 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW
INCREASING VERY VERY SLOWLY.
FINAL FLOW PERIOD WEAK BLOW SLOWLY BUILDING
UNTIL LAST 25 MINS. THEN INCREASING MORE RAPIDLY.

RECOVERED: 120 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: SLID TOOL 5 TO 6 FEET AFTER OPENING.

TIME SET PACKER(S): 6:30 PM TIME STARTED OFF BOTTOM: 11:00 PM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2627 PSI
INITIAL FLOW PERIOD MIN: 45 (B) 46 PSI TO (C) 59 PSI
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1482 PSI
FINAL FLOW PERIOD MIN: 75 (E) 68 PSI TO (F) 82 PSI
FINAL CLOSED IN PERIOD MIN: 90 (G) 1354 PSI
FINAL HYDROSTATIC PRESSURE (H) 2627 PSI

WESTERN TESTING CO. INC.

PRESSURE DATA

DATE: 11/27/84

TICKET #7408

CUSTOMER: VINCENT OIL CORPORATION

LEASE: "B" UNRUH

TEST: 5

GEOLOGIST: SCHMALTZ

FORMATION: MISSISSIPPI

TOWNSHIP: 29S

COUNTY: KIOWA

STATE: KANSAS

RANGE: 5100

CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 2627 PSI

(B) FIRST INITIAL FLOW PRESSURE: 46 PSI

(C) FIRST FINAL FLOW PRESSURE: 59 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1482 PSI

(E) SECOND INITIAL FLOW PRESSURE: 68 PSI

(F) SECOND FINAL FLOW PRESSURE: 82 PSI

(G) FINAL CLOSED-IN PRESSURE: 1354 PSI

(H) FINAL HYDROSTATIC PRESSURE: 2627 PSI

WELL TEMPERATURE: 122 °F

OPEN TOOL: 6:30 PM

TIME - GIVEN TIME - ACTUAL

FIRST FLOW PRESSURE: 45 MIN 45 MIN

INITIAL CLOSED-IN PRESSURE: 60 MIN 60 MIN

SECOND FLOW PRESSURE: 75 MIN 75 MIN

FINAL CLOSED-IN PRESSURE: 90 MIN 90 MIN

PRESSURE BREAKDOWN

[illegible]

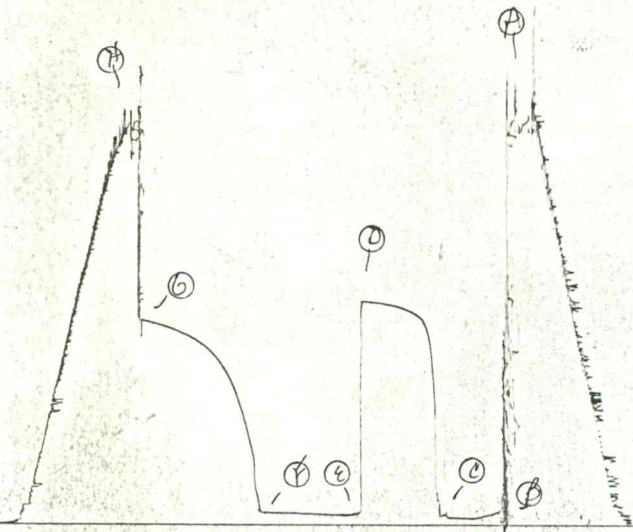
° PRESSURE BREAKDOWN - CONT. - TICKET #7408

PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
31							90	1354
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								
61								
62								
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75								
76								
77								
78								
79								
80								
81								
82								
83								
84								
85								
86								
87								
88								
89								

6074 101 10
#7408

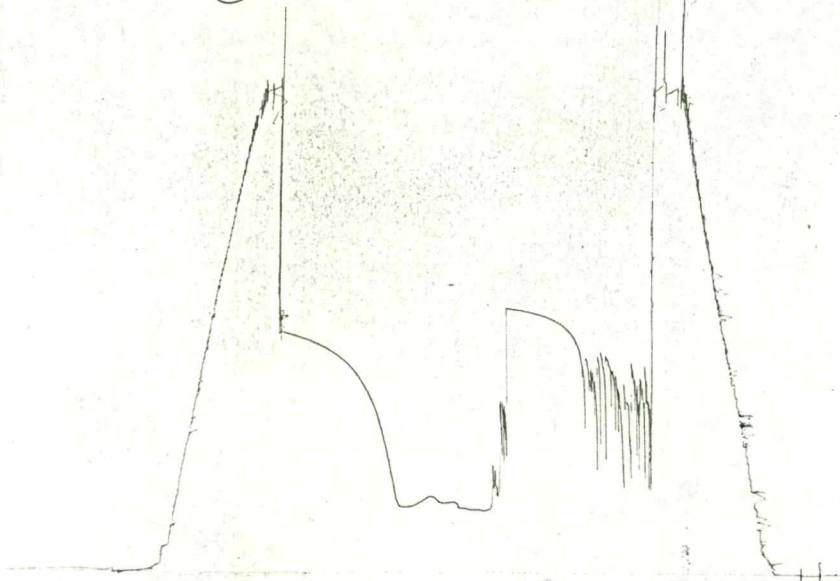
SK # 7408

I

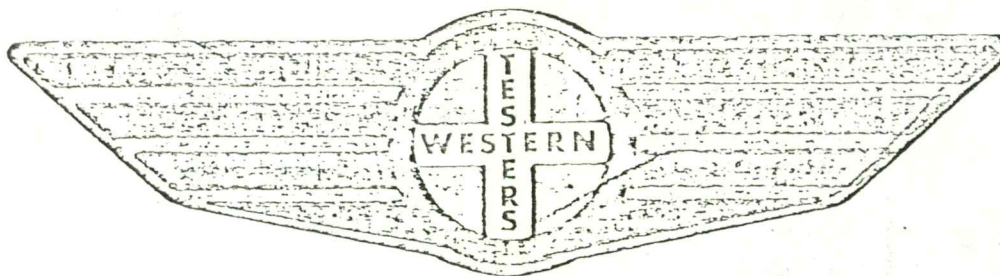


Alt # 7408

0



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/28/84

CUSTOMER: VINCENT OIL CORPORATION

WELL: 1

TEST: 6

ELEVATION (KB): 2073

FORMATION: MISSISSIPPI

SECTION: 26

TOWNSHIP: 29S

RANGE: 19W

COUNTY: KIOWA

STATE: KANSAS

GAUGE SN #6074

RANGE: 5100

CLOCK: 12

TICKET #7409

LEASE: "B" UNRUH

GEOLOGIST: SCHMALTZ

INTERVAL TEST FROM: 5125 FT TO: 5142 FT TOTAL DEPTH: 5142 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 5120 FT SIZE: 6 5/8 IN PACKER DEPTH: 5125 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG

MUD TYPE: CHEM-DRIS

VISCOSITY: 55

WEIGHT: 9.1

WATER LOSS (CC): 23.6

CHLORIDES (P.P.M.):

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 240 FT I.D.: 2.25 IN

WEIGHT PIPE LENGTH: FT I.D.: IN

DRILL PIPE LENGTH: 4865 FT I.D.: 3.8 IN

TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW
BUILDING TO A STRONG BLOW.
FINAL FLOW PERIOD WEAK BLOW
BUILDING TO A GOOD BLOW.

RECOVERED: 240 FT OF: GAS ABOVE FLUID.
RECOVERED: 60 FT OF: SLIGHTLY OIL CUT MUDDY WATER.
RECOVERED: 240 FT OF: SALT WATER.
RECOVERED: FT OF: CHLORIDES 68000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 11:25 AM

TIME STARTED OFF BOTTOM: 3:10 PM

WELL TEMPERATURE: 123 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 45 (A) 2695 PSI (B) 59 PSI TO (C) 102 PSI

INITIAL CLOSED IN PERIOD MIN: 60 (D) 1287 PSI (E) 143 PSI TO (F) 156 PSI

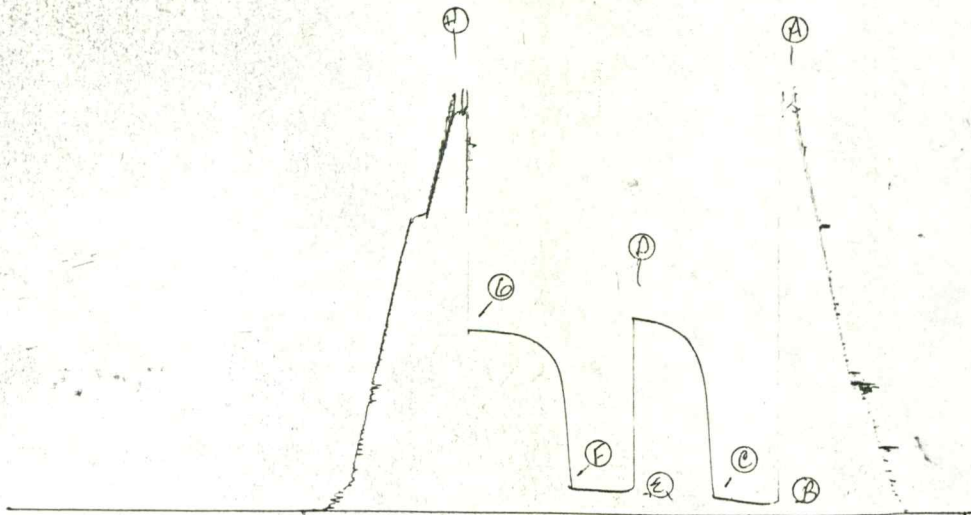
FINAL FLOW PERIOD MIN: 45 (G) 1202 PSI

FINAL CLOSED IN PERIOD MIN: 75 (H) 2619 PSI

FINAL HYDROSTATIC PRESSURE

7409

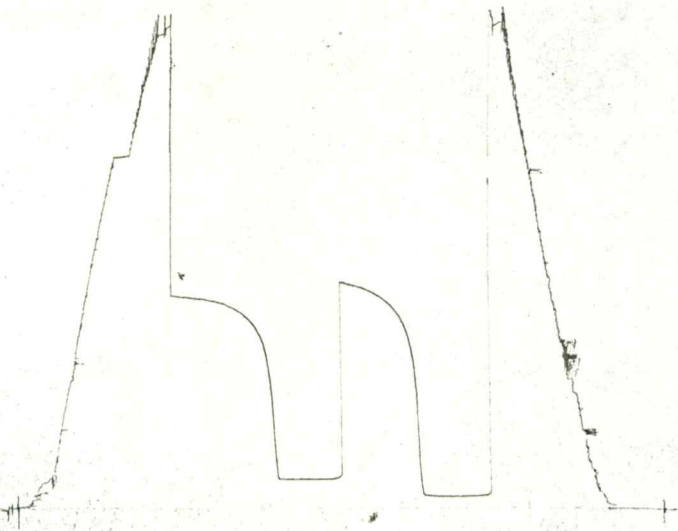
TK+ # 7409
I



1051 DST#6

KT # 7409

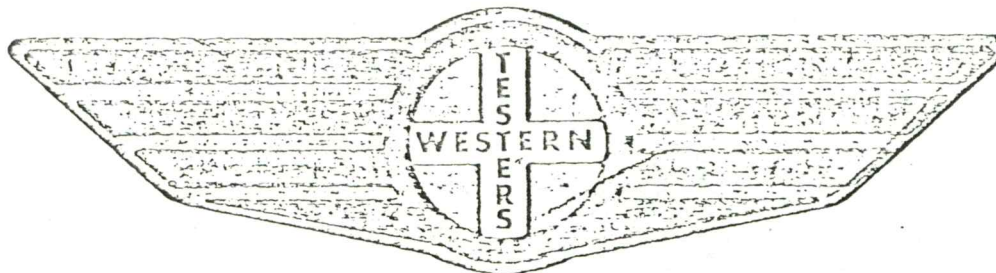
0



FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/29/84 TICKET #7410
CUSTOMER: VINCENT OIL CORPORATION LEASE: "B" UNRUH
WELL: 1 TEST: 7 GEOLOGIST: SCHMALTZ
ELEVATION (KB): 2073 FORMATION: MISSISSIPPI
SECTION: 26 TOWNSHIP: 29S
RANGE: 19W COUNTY: KIOWA STATE: KANSAS
GAUGE SN #6074 RANGE: 5100 CLOCK: 12

INTERVAL TEST FROM: 5096 FT TO: 5115 FT TOTAL DEPTH: 5172 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 5091 FT SIZE: 6 5/8 IN PACKER DEPTH: 5096 FT SIZE: 6 5/8 IN
PACKER DEPTH: 5115 FT SIZE: 6 5/8 IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG
MUD TYPE: CHEM-PRE VISCOSITY: 44
WEIGHT: 9.5 WATER LOSS (CC): 24.2
CHLORIDES (P.P.M.): 39000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 240 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4836 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 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 FH IN

BLOW:

RECOVERED: FT OF:
RECOVERED: FT OF:
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: 57' TAIL PIPE (31' DRILL PIPE; 26' PERFS).
MISRUN. COULD NOT GET A PACKER SEAT.

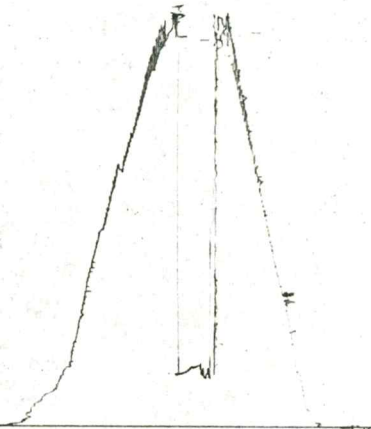
TIME SET PACKER(S): 12:05 PM TIME STARTED OFF BOTTOM:
WELL TEMPERATURE: 0 'F
INITIAL HYDROSTATIC PRESSURE: (A) 2683 PSI
INITIAL FLOW PERIOD MIN: 0 (B) 0 PSI TO (C) 0 PSI
INITIAL CLOSED IN PERIOD MIN: 0 (D) 0 PSI
FINAL FLOW PERIOD MIN: 0 (E) 0 PSI TO (F) 0 PSI
FINAL CLOSED IN PERIOD MIN: 0 (G) 0 PSI
FINAL HYDROSTATIC PRESSURE (H) 2683 PSI

SK # 2410

I

④

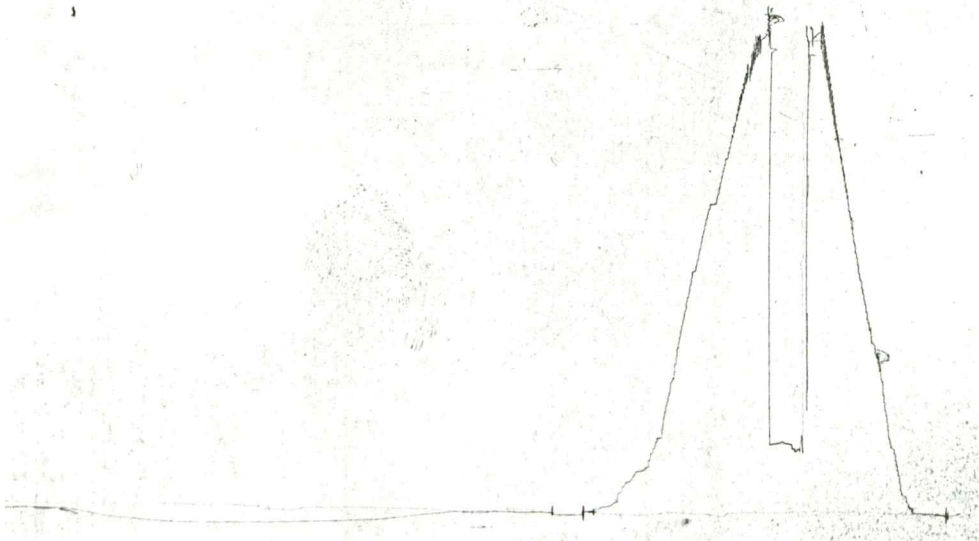
④



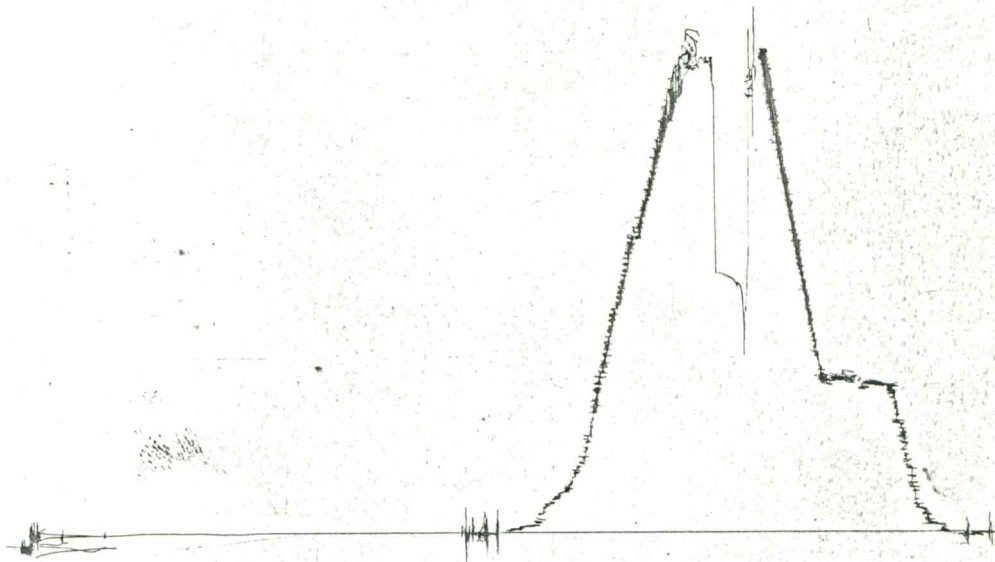
170 7051 001-7

SK # 7410

①



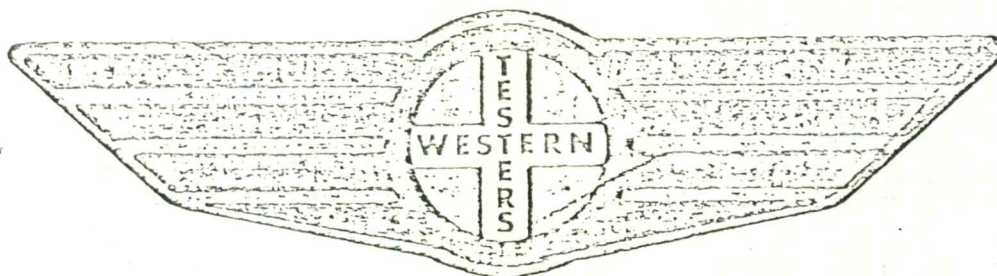
JK # 7410
Below Straddle



FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/29/84

TICKET #7411

CUSTOMER: VINCENT OIL CORPORATION

LEASE: "B" UNRUH

WELL: 1

TEST: 8

GEOLOGIST: SCHMALTZ

ELEVATION (KB): 2073

FORMATION: MISSISSIPPI

SECTION: 26

TOWNSHIP: 29S

RANGE: 19W

COUNTY: KIOWA

STATE: KANSAS

GAUGE SN #1051

RANGE: 4100

CLOCK: 12

INTERVAL TEST FROM: 5073 FT TO: 5115 FT TOTAL DEPTH: 5172 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 5068 FT SIZE: 6 5/8 IN PACKER DEPTH: 5073 FT SIZE: 6 5/8 IN
PACKER DEPTH: 5115 FT SIZE: 6 5/8 IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: WHEATSTATE DRLG

MUD TYPE: CHEM-PRE

VISCOSITY: 44

WEIGHT: 9.5

WATER LOSS (CC): 24.2

CHLORIDES (P.P.M.):

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT?

DRILL COLLAR LENGTH: 240 FT I.D.: 2.25 IN

WEIGHT PIPE LENGTH: FT I.D.: IN

DRILL PIPE LENGTH: 4813 FT I.D.: 3.8 IN

TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 IN

ANCHOR LENGTH: 42 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 FH IN

BLOW: STRONG BLOW THROUGHOUT TEST. GAS

TO SURFACE IN 13 MINUTES. SEE

ATTACHED SHEET FOR GAS MEASUREMENTS.

RECOVERED: 275 FT OF: GASSY DRILLING MUD. CHLORIDES 32000 PPM.

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: READ OUTSIDE CHART. CLOCK STOPPED

ON INSIDE CHART. 57 FEET OF TAIL PIPE.

TIME SET PACKER(S): 12:35 AM

TIME STARTED OFF BOTTOM: 7:05 AM

WELL TEMPERATURE: 127 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 2652 PSI

INITIAL FLOW PERIOD MIN: 75

(B) 116 PSI TO (C) 145 PSI

INITIAL CLOSED IN PERIOD MIN: 81

(D) 1303 PSI

FINAL FLOW PERIOD MIN: 115

(E) 130 PSI TO (F) 130 PSI

FINAL CLOSED IN PERIOD MIN: 126

(G) 1158 PSI

FINAL HYDROSTATIC PRESSURE

(H) 2598 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

TICKET #7411

LEASE: "B" UNRUH

GEOLOGIST: SCHMALTZ

FORMATION: MISSISSIPPI

TOWNSHIP: 29S

STATE: KANSAS

CLOCK: 12

(B) FIRST INITIAL FLOW PRESSURE: 116 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1303 PSI

(F) SECOND FINAL FLOW PRESSURE: 130 PSI

(H) FINAL HYDROSTATIC PRESSURE: 2598 PSI

OPEN TOOL: 12:35 AM

INITIAL CLOSED-IN PRESSURE: 75 MIN 81 MIN

FINAL CLOSED-IN PRESSURE: 120 MIN 126 MIN

PRESSURE BREAKDOWN

[illegible]

PRESSURE BREAKDOWN - CONT. - TICKET #7411

PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
31							90	1151
32							93	1152
33							96	1153
34							99	1154
35							102	1154
36							105	1155
37							108	1155
38							111	1156
39							114	1156
40							117	1157
41							120	1157
42							123	1158
43							126	1158
44								
45								
46								
47								
48								
49								
50								
51								
52								
53								
54								
55								
56								
57								
58								
59								
60								
61								
62								
63								
64								
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75								
76								
77								
78								
79								
80								
81								
82								
83								
84								
85								
86								
87								
88								
89								

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 11/29/84
CUSTOMER: VINCENT OIL CORPORATION
WELL: 1
ELEVATION (KB): 2073
SECTION: 26
RANGE: 19W
GAUGE SN #1051

TEST: 8
FORMATION: MISSISSIPPI
TOWNSHIP: 29S
COUNTY: KIOWA
RANGE: 4100

TICKET #7411
LEASE: "B" UNRUH
GEOLOGIST: SCHMALTZ
STATE: KANSAS
CLOCK: 12

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

PRE FLOW

15	MERLA	1/2	3 PSIG	59200 CFPD
20			5	78100
25			7	94500
30			10	116000
35			12	129000
40			14	141000
45			16	153000
50			18	166000
55			19	171000
60			20	177000
65			21	183000
70			22	189000
75			23	193000

SECOND FLOW

5	MERLA	1/2	17 PSIG	159000 CFPD
10			21	183000
15			25	205000
20			26	211000
25			26	211000
30			27	216000
35			28	222000
40			28	222000
45			29	226000
50			29	226000
55			29	226000
60			30	231000
65			30	231000
70			30	231000
75			30	231000
80			31	237000
85			31	237000
90			31	237000
95			31	237000
100			31	237000
105			31	237000
110			31	237000
115			31	237000
120			31	237000

GAS BOTTLE SN #:
DATE BOTTLE FILLED:

Gas Production

B.T. Gauge Numbers			1051	Ticket Number	7411
Initial Hydrostatic			Pressure 2652	Elevation	2073 K.B. ft.
Final Hydrostatic			2598	Production Initial	193 m cu. ft.
1st Flow	Initial	Time — — — —	116	Rate Final	237 m cu. ft.
	Final	75	145	Hole Size	7.875 in.
Initial Closed In Pressure		81	1303	Footage Tested	42 ft.
2nd Flow	Initial	— — — —	130	Mud Weight	9.5 lbs. gal.
	Final	115	130	Gas Viscosity	cp
Final Closed In Pressure		126	1158	Gas Gravity	—
Extrapolated Static Pressure	Initial		1336 - 1277	Gas Compressibility	—
	Final		1185 - 1088		
Slope Psi ² /cycle	Initial		58.887		
	Final		96.341		

Remarks: _____

SUMMARY

BT Gauge
Number
Depth

Product	Equation	Initial	Final	Units
Transmissibility	$\frac{Kh}{\mu} = \frac{1637 Q_e ZT}{m}$	986.430	846.989	md. ft. cp
Theoretical Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$	17.755	15.245	md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$	2.959	2.540	md.
	$K_1 = \frac{Kh}{h_1}$	-----	-----	md.
Indicated Flow Capacity	$(Kh)_s = \frac{3200 Q_e \mu ZT \log(0.472 b/r_w)}{P_s^2 - P_r^2}$	4.122	6.725	md. ft.
Damage Ratio	$DR = \frac{\text{Theo. Flow Cap}}{\text{Indicated Flow Cap}} \frac{Kh}{(Kh)_s}$	9.158	2.267	—
Indicated Flow Rate	$OF_1 = \frac{Q_e}{P_s^2 - P_r^2} \frac{P_s^2}{P_r^2}$	195,300	239,887	MCFD
		194,146	238,439	MCFD
Theoretical Potential Rate	$OF_3 = OF_1 DR \quad \text{Max.}$	1,788,691	543,831	MCFD
	$OF_4 = OF_2 DR \quad \text{Min.}$	1,778,125	540,548	MCFD
Approx. Radius of Investigation	$b \approx \sqrt{Kt} \text{ or } \sqrt{Kt_0}$	14.897	17,094	ft.
	$b_1 \approx \sqrt{K_1 t} \text{ or } \sqrt{K_1 t_0}$	-----	-----	ft.
Potentiometric Surface *	$Pot. = (EI - CD) + (2.319 Ps)$	96.184	253.985	ft.

NOTICE:

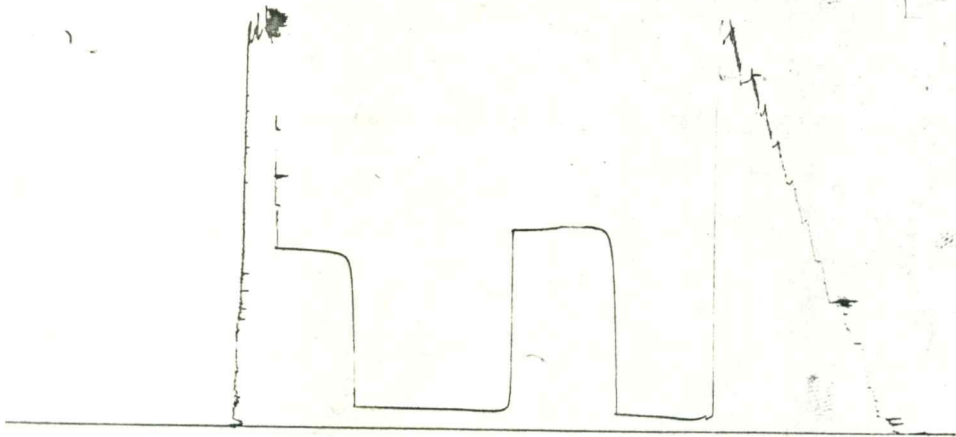
These calculations are based upon information furnished by you and taken from Drill Stem Tests pressure charts, and are furnished you for your information. In furnishing such calculations and evaluations based thereon, Western Testing Co., Inc. is merely expressing its opinion. You agree that Western Testing Co., Inc. makes no warranty, express or implied as to the accuracy of such calculations or opinions, and that Western Testing Co., Inc. shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

Ticket # 7411

6074 DST #8

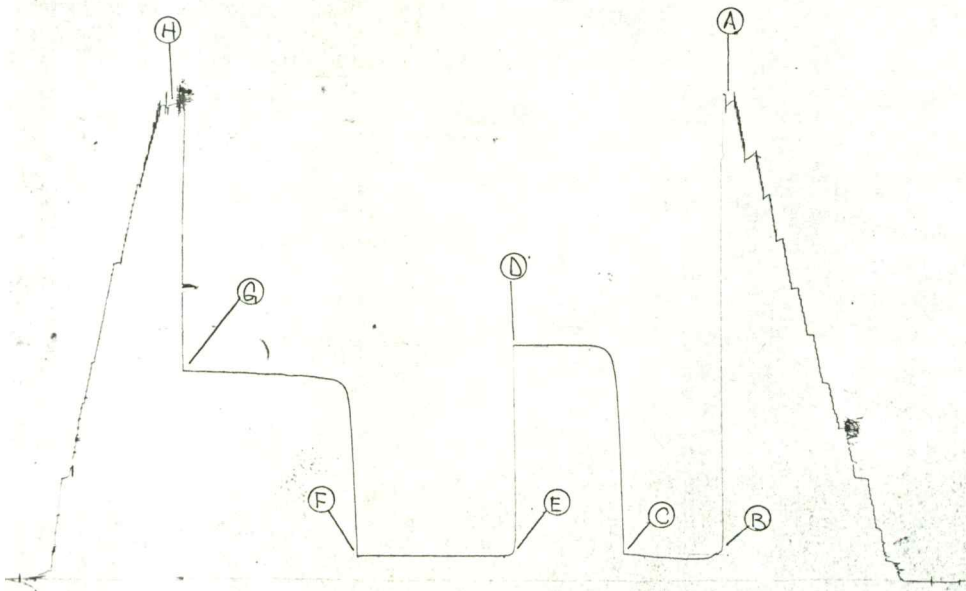
TKT # 7411

I



TKT # 7411

0



TKT # 7411

Below Straddle:

