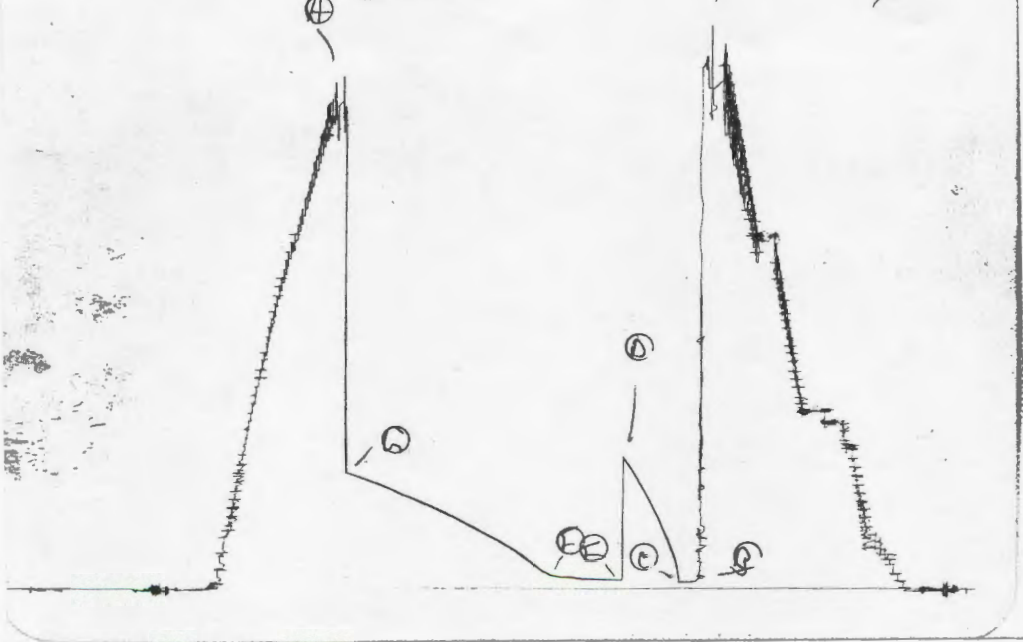


KT 19092

#3849 OST 2

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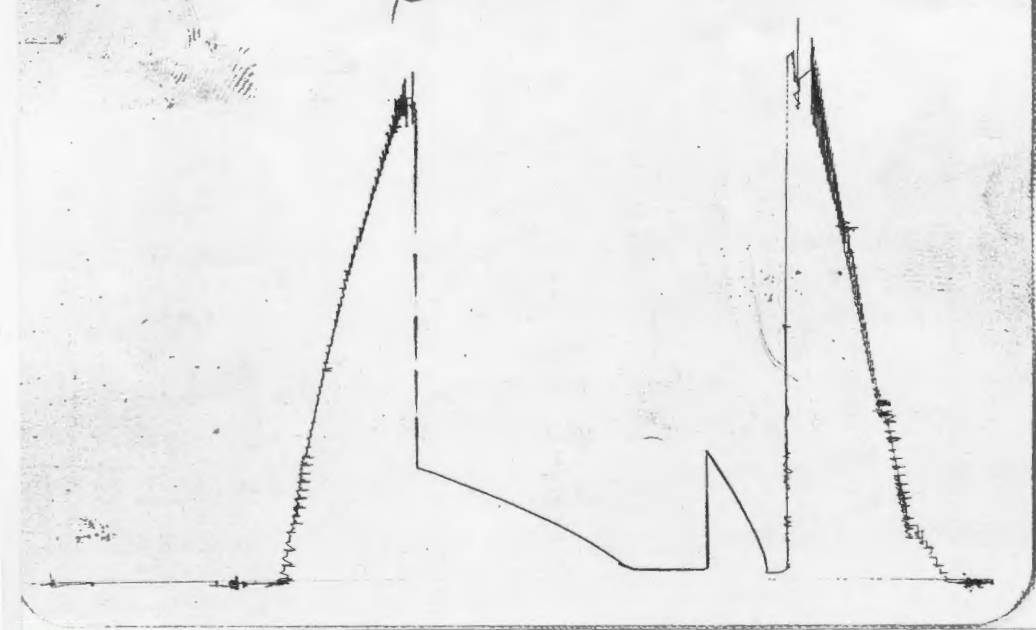


KT 19092

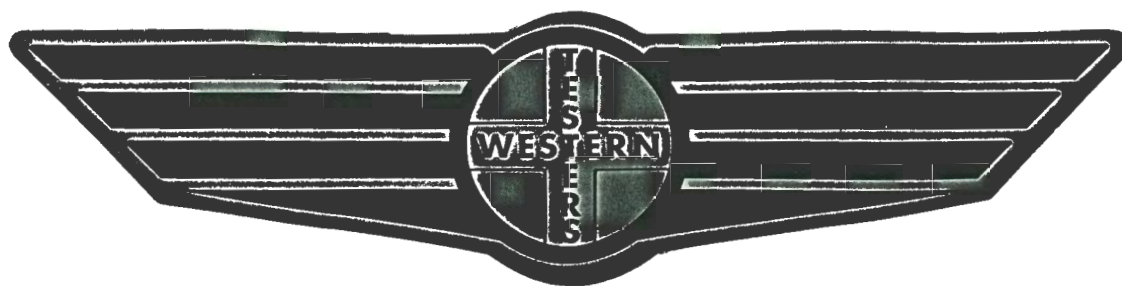
2604 OST 2

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY CHARTER PRODUCTION CO LEASE & WELL NO. #1 TAPSCOTT SEC. 28 TWP. 30S RGE. 39W TEST NO. 2 DATE 8/9/93

DST REPORT

GENERAL INFORMATION

DATE : 8/9/93
CUSTOMER : CHARTER PRODUCTION CO
WELL : #1 TEST: 2
ELEVATION: 3226 KB
SECTION : 28
RANGE : 39W COUNTY: STANTON
GAUGE SN#: 3849 RANGE : 4200

TICKET : 19093
LEASE : TAPSCOTT
GEOLOGIST: ?
FORMATION: MORROW
TOWNSHIP : 30S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 5599.00 ft TO: 5636.00 ft TVD: 5636.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 5621.0 ft 5624.0 ft
TEMPERATURE: 157.0

DRILL COLLAR LENGTH:	533.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	5038.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	28.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	37.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	5594.0 ft	SIZE:	6.630 in
PACKER DEPTH:	5599.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. :	ZENITH RIG 6	VISCOSITY :	60.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	7.200 cc
WEIGHT :	9.200 ppg	SERIAL NUMBER:	402
CHLORIDES :	1500 ppm	REVERSED OUT?:	NO
JARS-MAKE :	WTC		
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK 1/2 INCH BLOW BUILT TO 9
INCHES IN BUCKET IN 15 MINUTES. FINAL FLOW PERIOD
FAIR 5 INCH BLOW BUILT TO STRONG - BOTTOM OF

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

BUCKET IN 8 MINUTES.
SLID TOOL 8 FT TO BOTTOM.
SHOW OF OIL IN TEST TOOL.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
0.0	0.0	0.0	0.0	0.0	840 FT GAS ABOVE FLUID
40.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	65.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.1967	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.1967	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2735.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	25.00	25.00
INITIAL SHUT-IN	45.00		711.00
FINAL FLOW	60.00	36.00	51.00
FINAL SHUT-IN	150.00		638.00
FINAL HYDROSTATIC PRESSURE:	2650.00		

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2780.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	46.00	46.00
INITIAL SHUT-IN	42.00		728.00
FINAL FLOW	50.00	59.00	80.00
FINAL SHUT-IN	153.00		643.00

FINAL HYDROSTATIC PRESSURE: 2660.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/9/93	TICKET : 19093
CUSTOMER : CHARTER PRODUCTION CO	LEASE : TAPSCOTT
WELL : #1	GEOLOGIST: ?
ELEVATION: 3226 KB	FORMATION: MORROW
SECTION : 28	TOWNSHIP : 30S
RANGE : 39W	STATE : KS
GAUGE SN#: 3849	CLOCK : 12
COUNTY: STANTON	
RANGE : 4200	

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	46.00	46.00
5.00	46.00	0.00
10.00	46.00	0.00
15.00	46.00	0.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	165.00	165.00	0.00
6.00	234.00	69.00	0.00
9.00	287.00	53.00	0.00
12.00	338.00	51.00	0.00
15.00	394.00	56.00	0.00
18.00	435.00	41.00	0.00
21.00	478.00	43.00	0.00
24.00	517.00	39.00	0.00
27.00	556.00	39.00	0.00
30.00	595.00	39.00	0.00
33.00	636.00	41.00	0.00
36.00	672.00	36.00	0.00
39.00	702.00	30.00	0.00
42.00	728.00	26.00	0.00

FINAL FLOW

Time (min)	Pressure	Delta P
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PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
0.00	59.00	59.00
5.00	59.00	0.00
10.00	59.00	0.00
15.00	61.00	2.00
20.00	63.00	2.00
25.00	65.00	2.00
30.00	67.00	2.00
35.00	69.00	2.00
40.00	71.00	2.00
45.00	74.00	3.00
50.00	80.00	6.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	84.00	84.00	0.00
6.00	94.00	10.00	0.00
9.00	103.00	9.00	0.00
12.00	120.00	17.00	0.00
15.00	140.00	20.00	0.00
18.00	155.00	15.00	0.00
21.00	171.00	16.00	0.00
24.00	191.00	20.00	0.00
27.00	205.00	14.00	0.00
30.00	219.00	14.00	0.00
33.00	234.00	15.00	0.00
36.00	248.00	14.00	0.00
39.00	260.00	12.00	0.00
42.00	273.00	13.00	0.00
45.00	286.00	13.00	0.00
48.00	296.00	10.00	0.00
51.00	309.00	13.00	0.00
54.00	321.00	12.00	0.00
57.00	334.00	13.00	0.00
60.00	346.00	12.00	0.00
63.00	359.00	13.00	0.00
66.00	370.00	11.00	0.00
69.00	381.00	11.00	0.00
72.00	391.00	10.00	0.00
75.00	406.00	15.00	0.00
78.00	415.00	9.00	0.00
81.00	427.00	12.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

Time (min)	Pressure	Delta P	Horner T
84.00	438.00	11.00	0.00
87.00	449.00	11.00	0.00
90.00	457.00	8.00	0.00
93.00	467.00	10.00	0.00
96.00	478.00	11.00	0.00
99.00	488.00	10.00	0.00
102.00	496.00	8.00	0.00
105.00	504.00	8.00	0.00
108.00	516.00	12.00	0.00
111.00	521.00	5.00	0.00
114.00	531.00	10.00	0.00
117.00	539.00	8.00	0.00
120.00	553.00	14.00	0.00
123.00	563.00	10.00	0.00
126.00	569.00	6.00	0.00
129.00	580.00	11.00	0.00
132.00	587.00	7.00	0.00
135.00	596.00	9.00	0.00
138.00	604.00	8.00	0.00
141.00	612.00	8.00	0.00
144.00	618.00	6.00	0.00
147.00	628.00	10.00	0.00
150.00	635.00	7.00	0.00
153.00	643.00	8.00	0.00

TO: CHARTER PRODUCTION CO.
224 E DOUGLAS SUITE 400
WICHITA, KANSAS 67202

FROM: WESTERN TESTING CO. INC.
P.O. BOX 1599
WICHITA, KANSAS 67201-1599

SUBJECT: COPIES OF DRILL STEM TEST MAILED TO INTEREST OWNERS.

DATE : AUGUST 16, 1993

WELL NAME & NUMBER: #1 TAPSCOTT

TEST NUMBERS: 2

LOCATION: STANTON CO., KANSAS

COPIES MAILED TO:

CHARTER PRODUCTION CO.
224 EAST DOUGLAS SUITE 400
WICHITA, KS 67202
(INVOICE + ORIGINAL + 4 COPIES)

MR. CHARLIE BARTBERGER
AMOCO PRODUCTION COMPANY
PO BOX 800
DENVER, COLORADO 80201
(3 COPIES)



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 19093

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 3226 A.B. Formation Morrow Eff. Pay _____ Ft.

District Crook County Date 8-9-93 Customer Order No. _____

COMPANY NAME Charter Production Co.

ADDRESS 224 E. Douglas, Suite 400 Wichita, KS. 67202

LEASE AND WELL NO. Tapscott #1 COUNTY Stanton STATE KS Sec 28 Twp 30S Rge 39W

Mail Invoice To Charter Prod Co. Name Same Address #1 TAPSCOTT No. Copies Requested Reg

Mail Charts To Charter Co. Advice 3 Address _____ No. Copies Requested 9

Formation Test No. 2 Interval Tested From 5599 ft. to 5636 ft. Total Depth 5636 ft.

Packer Depth 5594 ft. Size 6.58 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 5599 ft. Size 6.58 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 5621 ft. Recorder Number 3849 Cap. 4200

Bottom Recorder Depth (Outside) 5624 ft. Recorder Number 2604 Cap. 4150

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Zenith Rig Co Drill Collar Length 533 I. D. 2 1/4 in.

Mud Type Chem Viscosity 60 Weight Pipe Length _____ I. D. _____ in.

Weight 9.2 Water Loss 7.2 cc. Drill Pipe Length 5038 I. D. 3.8 in.

Chlorides 1500 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 in.

Jars: Make W.T.C. Serial Number 402 Anchor Length 32 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No 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 1 1/2 in.

Blow: Wash 1/2" Built to 9" in Bucket 15 Min. I.F.
For 5" Built to Strong "B.O.B." in 8 Min. F.F.

Recovered 840 ft. of G.I.P.

Recovered 40 ft. of mud

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of Total Fluid Rec. 40'

Chlorides _____ P.P.M. Sample Jars used _____ Remarks: Slid tool 8' to Bottom.

* Showed Oil in Test Tool

Time On Location 11:30 A.M. Time Pick Up Tool 12:45 A.M. Time Off Location _____ A.M.

Time Set Packer(s) 2:45 P.M. Time Started Off Bottom 7:15 P.M. Maximum Temperature 157°F

Initial Hydrostatic Pressure (A) 2735 P.S.I.

Initial Flow Period Minutes 15 (B) 25 P.S.I. to (C) 25 P.S.I.

Initial Closed In Period Minutes 45 (D) 711 P.S.I.

Final Flow Period Minutes 60 (E) 36 P.S.I. to (F) 51 P.S.I.

Final Closed In Period Minutes 150 (G) 638 P.S.I.

Final Hydrostatic Pressure (H) 2650 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]
Signature of Customer or his authorized representative

Western Representative [Signature]

FIELD INVOICE

Open Hole Test ☒ \$ _____
Misrun \$ _____
Straddle Test \$ _____
Jars ☒ \$ _____
Selective Zone \$ _____
Safety Joint ☒ \$ _____
Standby \$ _____
Evaluation \$ _____
Extra Packer \$ _____
Circ. Sub. ☒ \$ _____
Mileage \$ _____
Fluid Sampler \$ _____
Extra Charts \$ _____
Insurance \$ _____
Telecopier \$ _____
TOTAL \$ _____

WESTERN TESTING CO., INC. Pressure Data

Date 8-9-92 Test Ticket No. 19092
 Recorder No. 3849 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2780</u> P.S.I.		M _____
B First Initial Flow Pressure	<u>46</u> P.S.I.		Mins. <u>15</u> Mins.
C First Final Flow Pressure	<u>46</u> P.S.I.		Mins. <u>41</u> Mins.
D Initial Closed-in Pressure	<u>728</u> P.S.I.		Mins. <u>50</u> Mins.
E Second Initial Flow Pressure	<u>59</u> P.S.I.		Mins. <u>153</u> Mins.
F Second Final Flow Pressure	<u>80</u> P.S.I.		
G Final Closed-in Pressure	<u>643</u> P.S.I.		
H Final Hydrostatic Mud	<u>26600</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>46</u>	0	<u>46</u>	0	<u>59</u>	0	<u>80</u>
P 2 5	<u>46</u>	3	<u>165</u>	5	<u>59</u>	3	<u>84</u>
P 3 10	<u>46</u>	6	<u>234</u>	10	<u>59</u>	6	<u>94</u>
P 4 15	<u>46</u>	9	<u>287</u>	15	<u>61</u>	9	<u>102</u>
P 5 20		12	<u>338</u>	20	<u>63</u>	12	<u>120</u>
P 6 25		15	<u>394</u>	25	<u>65</u>	15	<u>140</u>
P 7 30		18	<u>435</u>	30	<u>67</u>	18	<u>155</u>
P 8 35		21	<u>478</u>	35	<u>69</u>	21	<u>171</u>
P 9 40		24	<u>517</u>	40	<u>71</u>	24	<u>191</u>
P10 45		27	<u>556</u>	45	<u>74</u>	27	<u>205</u>
P11 50		30	<u>595</u>	50	<u>80</u> ^{21c}	30	<u>219</u>
P12 55		33	<u>636</u>	55		33	<u>234</u>
P13 60		36	<u>672</u>	60		36	<u>248</u>
P14 65		39	<u>702</u>	65		39	<u>260</u>
P15 70		42	<u>728</u>	70		42	<u>273</u>
P16 75		45		75		45	<u>286</u>
P17 80		48		80		48	<u>296</u>
P18 85		51		85		51	<u>309</u>
P19 90		54		90		54	<u>321</u>
P19 95		57		95		57	<u>334</u>
100		60		100		60	<u>346</u>

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 19092

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud _____	P.S.I.	Open Tool _____	M _____	
B. First Initial Flow Pressure _____	P.S.I.	First Flow Pressure _____	Mins. _____	Mins. _____
C. First Final Flow Pressure _____	P.S.I.	Initial Closed-in Pressure _____	Mins. _____	Mins. _____
D. Initial Closed-in Pressure _____	P.S.I.	Second Flow Pressure _____	Mins. _____	Mins. _____
E. Second Initial Flow Pressure _____	P.S.I.	Final Closed-in Pressure _____	Mins. _____	Mins. _____
F. Second Final Flow Pressure _____	P.S.I.			
G. Final Closed-in Pressure _____	P.S.I.			
H. Final Hydrostatic Mud _____	P.S.I.			

PRESSURE BREAKDOWN

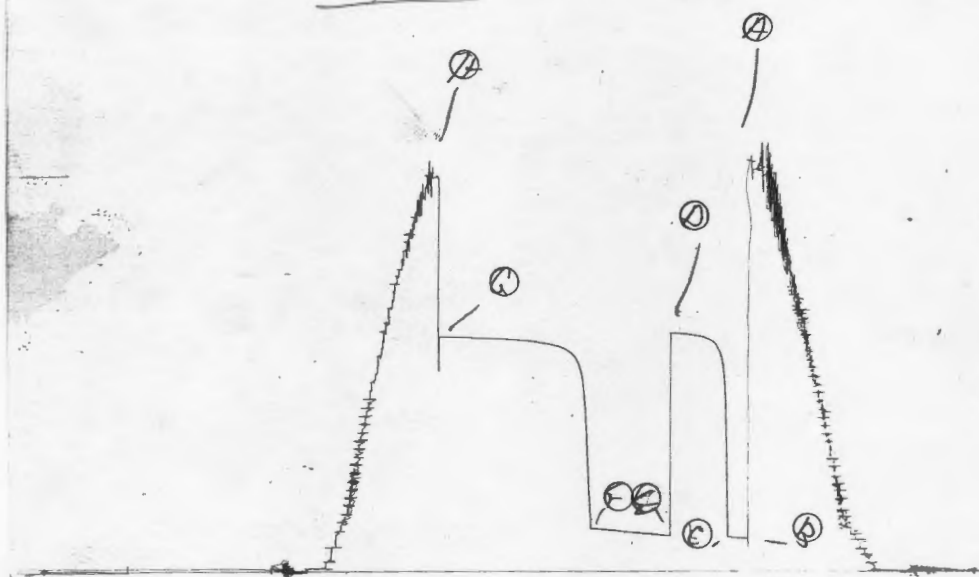
First Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 205		123		205		123	563
P 2 210		126		210		126	569
P 3 215		129		215		129	580
P 4 220		132		220		132	587
P 5 225		135		225		135	596
P 6 230		138		230		138	604
P 7 235		141		235		141	612
P 8 240		144		240		144	618
P 9 245		147		245		147	628
P10 250		150		250		150	635
P11 255		153		255		153	643
P12 260		156		260		156	
P13 265		159		265		159	
P14 270		162		270		162	
P15 275		165		275		165	
P16 280		168		280		168	
P17 285		171		285		171	
P18 290		174		290		174	
P19 295		177		295		177	
P20 300		180		300		180	

K+19092

#3845 DST1

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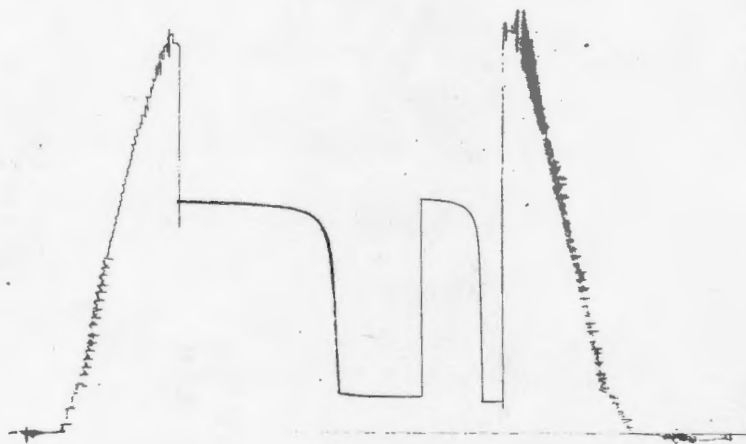


K+19092

2604 DST1

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY CHARTER PRODUCTION COMPANY LEASE & WELL NO. #1 TAPSCOTT SEC. 28 TWP. 30S RGE. 39W TEST NO. 1 DATE 8/6/93

DST REPORT

GENERAL INFORMATION

DATE : 8/6/93
CUSTOMER : CHARTER PRODUCTION CO
WELL : #1 TEST: 1
ELEVATION: 3226 KB
SECTION : 28
RANGE : 39W COUNTY: STANTON
GAUGE SN#: 3849 RANGE : 4200

TICKET : 19092
LEASE : TAPSCOTT
GEOLOGIST: ?
FORMATION: MARMATON
TOWNSHIP : 30S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4614.00 ft TO: 4646.00 ft TVD: 4646.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL

DEPTH OF RECORDERS: 4631.0 ft 4634.0 ft
TEMPERATURE: 125.0

DRILL COLLAR LENGTH:	533.0 ft	I.D.:	2.250 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	4053.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	28.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	32.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	4609.0 ft	SIZE:	6.630 in
PACKER DEPTH:	4614.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : ZENITH RIG 6
MUD TYPE : CHEMICAL
WEIGHT : 9.000 ppg
CHLORIDES : 1500 ppm
JARS-MAKE : WTC
DID WELL FLOW?: NO

VISCOSITY : 48.00 cp
WATER LOSS: 12.000 cc

SERIAL NUMBER: 402
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD SURFACE BLOW - BUILT TO 1.5
INCHES IN BUCKET IN 15 MINUTES. FINAL FLOW PERIOD
SURFACE BLOW-BUILT TO 2.5 INCHES IN BUCKET IN 60

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

MINUTES.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
100.0	0.0	0.0	0.0	100.0	MUD
160.0	0.0	5.0	6.0	89.0	SL GAS & WATER CUT MUD
180.0	0.0	0.0	100.0	0.0	SALTWATER
0.0	0.0	0.0	0.0	0.0	CHLORIDES 26000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	75.0000	min.
GAS VOLUME:	0.2209	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	1.1920	STB	AVERAGE WATER RATE:	31.3460	STB/D
WATER VOLUME:	0.9324	STB			
TOTAL FLUID :	2.1244	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2194.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	148.00	178.00
INITIAL SHUT-IN	45.00		1292.00
FINAL FLOW	60.00	182.00	225.00
FINAL SHUT-IN	120.00		1278.00

FINAL HYDROSTATIC PRESSURE: 2141.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2239.00

Description	Duration	p1	p End
INITIAL FLOW	15.00	131.00	190.00
INITIAL SHUT-IN	42.00		1300.00
FINAL FLOW	60.00	200.00	239.00
FINAL SHUT-IN	114.00		1282.00

FINAL HYDROSTATIC PRESSURE: 2174.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 8/6/93	TICKET : 19092
CUSTOMER : CHARTER PRODUCTION CO	LEASE : TAPSCOTT
WELL : #1	GEOLOGIST : ?
ELEVATION : 3226 KB	FORMATION : MARMATON
SECTION : 28	TOWNSHIP : 30S
RANGE : 39W	STATE : KS
GAUGE SN# : 3849	CLOCK : 12
TEST : 1	
COUNTY : STANTON	
RANGE : 4200	

INITIAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	131.00	131.00
5.00	184.00	53.00
10.00	187.00	3.00
15.00	190.00	3.00

INITIAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	1091.00	1091.00	0.00
6.00	1198.00	107.00	0.00
9.00	1237.00	39.00	0.00
12.00	1256.00	19.00	0.00
15.00	1270.00	14.00	0.00
18.00	1280.00	10.00	0.00
21.00	1286.00	6.00	0.00
24.00	1289.00	3.00	0.00
27.00	1292.00	3.00	0.00
30.00	1295.00	3.00	0.00
33.00	1297.00	2.00	0.00
36.00	1298.00	1.00	0.00
39.00	1299.00	1.00	0.00
42.00	1300.00	1.00	0.00

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
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PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

Time (min)	Pressure	Delta P
0.00	200.00	200.00
5.00	201.00	1.00
10.00	205.00	4.00
15.00	211.00	6.00
20.00	213.00	2.00
25.00	216.00	3.00
30.00	218.00	2.00
35.00	221.00	3.00
40.00	225.00	4.00
45.00	230.00	5.00
50.00	233.00	3.00
55.00	236.00	3.00
60.00	239.00	3.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	662.00	662.00	0.00
6.00	1001.00	339.00	0.00
9.00	1132.00	131.00	0.00
12.00	1173.00	41.00	0.00
15.00	1196.00	23.00	0.00
18.00	1211.00	15.00	0.00
21.00	1224.00	13.00	0.00
24.00	1232.00	8.00	0.00
27.00	1235.00	3.00	0.00
30.00	1242.00	7.00	0.00
33.00	1247.00	5.00	0.00
36.00	1250.00	3.00	0.00
39.00	1254.00	4.00	0.00
42.00	1257.00	3.00	0.00
45.00	1262.00	5.00	0.00
48.00	1264.00	2.00	0.00
51.00	1266.00	2.00	0.00
54.00	1267.00	1.00	0.00
57.00	1268.00	1.00	0.00
60.00	1269.00	1.00	0.00
63.00	1270.00	1.00	0.00
66.00	1271.00	1.00	0.00
69.00	1272.00	1.00	0.00
72.00	1273.00	1.00	0.00
75.00	1274.00	1.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL SHUT IN (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
78.00	1275.00	1.00	0.00
81.00	1276.00	1.00	0.00
84.00	1277.00	1.00	0.00
87.00	1278.00	1.00	0.00
90.00	1278.00	0.00	0.00
93.00	1279.00	1.00	0.00
96.00	1279.00	0.00	0.00
99.00	1280.00	1.00	0.00
102.00	1280.00	0.00	0.00
105.00	1281.00	1.00	0.00
108.00	1281.00	0.00	0.00
111.00	1282.00	1.00	0.00
114.00	1282.00	0.00	0.00



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

Nº 19092

P. O. BOX 1599 PHONE (316) 262-5861

WICHITA, KANSAS 67201

Elevation 3226 K.B. Formation Marmaton Eff. Pay _____ Ft.District Golden City Date 8-6-93 Customer Order No. _____COMPANY NAME Charter Production Co.ADDRESS 224 E. Douglas, Suite 400 Wichita, KS 67202LEASE AND WELL NO. Tapscott #1 COUNTY Stanton STATE KS. Sec. 28 Twp. 30S Rge. 39WMail Invoice To Charter Prod. Co. Name Same Address _____ No. Copies Requested Reg.Mail Charts To Amoco - 3 #1 Tapscott Address See Above No. Copies Requested 8Formation Test No. 1 Interval Tested From 4614 ft. to 4646 ft. Total Depth 4646 ft.Packer Depth 4609 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.Packer Depth 4614 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4631 ft. Recorder Number 3849 Cap. 4200Bottom Recorder Depth (Outside) 4634 ft. Recorder Number 2604 Cap. 4150

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Zenith Rig Co. Drill Collar Length 533 I. D. 2 1/4 in.Mud Type Chem Viscosity 48 Weight Pipe Length _____ I. D. _____ in.Weight 9.0 Water Loss 12.0 cc. Drill Pipe Length 4053 I. D. 3.8 in.Chlorides 1500 P.P.M. Test Tool Length 28 ft. Tool Size 5 1/2 in.Jars: Make W.T.C. Serial Number 402 Anchor Length 32 ft. Size 5 1/2 in.Did Well Flow? No Reversed Out No Surface Choke Size 3 1/4 in. Bottom Choke Size 3 1/4 in.Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 X H. in.Blow: Surface Blow, Built to 1 1/2" in Bucket 15 min. I.F.Surface Blow, Built to 2 1/2" in Bucket 60 min. F.F.Recovered 100 ft. of MudRecovered 160 ft. of Slit Gas & WTR cut mud 5% Gas 6% WTR 89% mudRecovered 180 ft. of Soft WTR 26000 P.P.M.

Recovered _____ ft. of _____

Recovered _____ ft. of Total Fluid Recd. 4440'Chlorides 26000 P.P.M. Sample Jars used _____ Remarks: _____

AUG 09 1993

Time On Location 12:00 A.M. Time Pick Up Tool 2:00 A.M. Time Off Location _____ A.M.Time Set Packer(s) 4:05 P.M. Time Started Off Bottom 8:05 A.M. Maximum Temperature 125°FInitial Hydrostatic Pressure _____ (A) 2194 P.S.I.Initial Flow Period _____ Minutes 15 (B) 148 P.S.I. to (C) 178 P.S.I.Initial Closed In Period _____ Minutes 45 (D) 1292 P.S.I.Final Flow Period _____ Minutes 60 (E) 182 P.S.I. to (F) 225 P.S.I.Final Closed In Period _____ Minutes 120 (G) 1278 P.S.I.Final Hydrostatic Pressure _____ (H) 2141 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]
Signature of Customer or his authorized representativeWestern Representative [Signature]

FIELD INVOICE

Open Hole Test	\$	✓
Misrun	\$	
Straddle Test	\$	
Jars	\$	✓
Selective Zone	\$	
Safety Joint	\$	✓
Standby	\$	
Evaluation	\$	
Extra Packer	\$	
Circ. Sub.	\$	
Mileage	\$	
Fluid Sampler	\$	
Extra Charts	\$	
Insurance	\$	
Telecopier	\$	
TOTAL	\$	

WESTERN TESTING CO., INC.

Pressure Data

Date 8-6-93 Test Ticket No. 19092
 Recorder No. 3849 Capacity _____ Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2239</u> P.S.I.			M
B First Initial Flow Pressure	<u>131</u> P.S.I.	First Flow Pressure	Mins. <u>15</u>	Mins.
C First Final Flow Pressure	<u>190</u> P.S.I.	Initial Closed-in Pressure	Mins. <u>42</u>	Mins.
D Initial Closed-in Pressure	<u>1500</u> P.S.I.	Second Flow Pressure	Mins. <u>60</u>	Mins.
E Second Initial Flow Pressure	<u>200</u> P.S.I.	Final Closed-in Pressure	Mins. <u>114</u>	Mins.
F Second Final Flow Pressure	<u>239</u> P.S.I.			
G Final Closed-in Pressure	<u>1282</u> P.S.I.			
H Final Hydrostatic Mud	<u>2174</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>131</u>	0	<u>190</u>	0	<u>200</u>	0	<u>239</u>
P 2 5	<u>184</u>	3	<u>1091</u>	5	<u>201</u>	3	<u>1662</u>
P 3 10	<u>187</u>	6	<u>1198</u>	10	<u>205</u>	6	<u>1001</u>
P 4 15	<u>190</u>	9	<u>1287</u>	15	<u>211</u>	9	<u>1132</u>
P 5 20		12	<u>1256</u>	20	<u>213</u>	12	<u>1123</u>
P 6 25		15	<u>1270</u>	25	<u>216</u>	15	<u>1194</u>
P 7 30		18	<u>1280</u>	30	<u>218</u>	18	<u>1211</u>
P 8 35		21	<u>1286</u>	35	<u>221</u>	21	<u>1224</u>
P 9 40		24	<u>1289</u>	40	<u>225</u>	24	<u>1232</u>
P10 45		27	<u>1292</u>	45	<u>230</u>	27	<u>1235</u>
P11 50		30	<u>1295</u>	50	<u>232</u>	30	<u>1242</u>
P12 55		33	<u>1297</u>	55	<u>236</u>	33	<u>1247</u>
P13 60		36	<u>1298</u>	60	<u>239</u>	36	<u>1250</u>
P14 65		39	<u>1299</u>	65		39	<u>1254</u>
P15 70		42	<u>1300</u>	70		42	<u>1257</u>
P16 75		45	<u>1300</u>	75		45	<u>1262</u>
P17 80		48		80		48	<u>1264</u>
P18 85		51		85		51	<u>1266</u>
P19 90		54		90		54	<u>1267</u>
P20 95		57		95		57	<u>1268</u>
100		60		100		60	<u>1269</u>

WESTERN TESTING CO., INC.

Pressure Data

Date _____

Test Ticket No. 19092

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	Open Tool _____	M _____	
B First Initial Flow Pressure _____	P.S.I.	First Flow Pressure _____	Mins. _____	Mins. _____
C First Final Flow Pressure _____	P.S.I.	Initial Closed-in Pressure _____	Mins. _____	Mins. _____
D Initial Closed-in Pressure _____	P.S.I.	Second Flow Pressure _____	Mins. _____	Mins. _____
E Second Initial Flow Pressure _____	P.S.I.	Final Closed-in Pressure _____	Mins. _____	Mins. _____
F Second Final Flow Pressure _____	P.S.I.			
G Final Closed-in Pressure _____	P.S.I.			
H Final Hydrostatic Mud _____	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of _____ mins. and a		of _____ mins. and a		of _____ mins. and a		of _____ mins. and a	
final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.		final inc. of _____ Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 105		63		105		63	1270
P 2 110		66		110		66	1271
P 3 115		69		115		69	1272
P 4 120		72		120		72	1273
P 5 125		75		125		75	1274
P 6 130		78		130		78	1275
P 7 135		81		135		81	1276
P 8 140		84		140		84	1277
P 9 145		87		145		87	1278
P10 150		90		150		90	1279
P11 155		93		155		93	1280
P12 160		96		160		96	1281
P13 165		99		165		99	1282
P14 170		102		170		102	1283
P15 175		105		175		105	1284
P16 180		108		180		108	1285
P17 185		111		185		111	1286
P18 190		114		190		114	1287
P19 195		117		195		117	
P20 200		120		200		120	

TO: CHARTER PRODUCTION CO.
224 E DOUGLAS SUITE 400
WICHITA, KANSAS 67202

FROM: WESTERN TESTING CO. INC.
P.O. BOX 1599
WICHITA, KANSAS 67201-1599

SUBJECT: COPIES OF DRILL STEM TEST MAILED TO INTEREST OWNERS.

DATE : AUGUST 9, 1993

WELL NAME & NUMBER: #1 TAPSCOTT

TEST NUMBERS: 1

LOCATION: STANTON CO., KANSAS

COPIES MAILED TO:

CHARTER PRODUCTION CO.
224 EAST DOUGLAS SUITE 400
WICHITA, KS 67202
(INVOICE + ORIGINAL + 4 COPIES)

MR. CHARLIE BARTBERGER
AMOCO PRODUCTION COMPANY
PO BOX 800
DENVER, COLORADO 80201
(3 COPIES)