WESTERN TESTING CO., INC.
FORMATION TESTING

(talk OK)

TICKET No. 6359

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

Elevation 1318 GL Formation White Cloud Eff. Pay ____ Ft.

13

K110 District Augusta Date 11-24-84 Customer Order No. ____

COMPANY NAME Kiowa Exploration Co

ADDRESS 110 So. Main Suite 510 Wichita Ks

LEASE AND WELL NO. Rennert #1 COUNTY Sumner STATE Ks Sec. 35 Twp. 32 Rge. 2 W

Mail Invoice To Same No. Copies Requested 1
Co. Name Address

Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. 1 Interval Tested From 1928 ft. to 1938 ft. Total Depth 1938 ft.

Packer Depth 1928 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Packer Depth 1923 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 1929 ft. Recorder Number 3474 Cap. 3000

Bottom Recorder Depth (Outside) 1934 ft. Recorder Number 2605 Cap. 4150

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

Drilling Contractor McAlister #10

Mud Type Chem Viscosity 32

Weight 9.8 Water Loss N/A cc.

Chlorides N/A P.P.M.

Jars: Make NO Serial Number ____

Did Well Flow? NO Reversed Out ____

Drill Collar Length 300 I. D. 2.25 in.

Weight Pipe Length ____ I. D. ____ in.

Drill Pipe Length 1608 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 XH in.

Blow: Weak blow died in 10 min, NO blow second flow

Recovered 80 ft. of muddy salt water

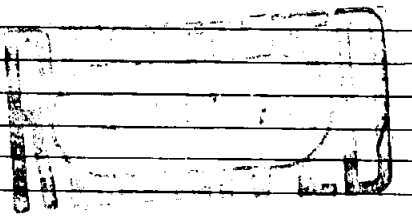
Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Chlorides 85,000 P.P.M. Sample Jars used ____ Remarks: Slid tool 15'



Time On Location ____ A.M. P.M. Time Pick Up Tool ____ A.M. P.M. Time Off Location ____ A.M. P.M.

Time Set Packer(s) ____ A.M. P.M. Time Started Off Bottom ____ A.M. P.M. Maximum Temperature 99°

Initial Hydrostatic Pressure		(A)	1007	P.S.I.	
Initial Flow Period	Minutes 20	(B)	37	P.S.I. to (C)	45 P.S.I.
Initial Closed In Period	Minutes 20	(D)	454	P.S.I.	
Final Flow Period	Minutes 20	(E)	60	P.S.I. to (F)	53 P.S.I.
Final Closed In Period	Minutes 20	(G)	431	P.S.I.	
Final Hydrostatic Pressure		(H)	1007	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 of Customer or his authorized representative

Western Representative Kenny Kimbrell

1127

FIELD INVOICE

Open Hole Test	$ 550
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 11/24/ Test Ticket No. 63559

Recorder No. 3474 Capacity Location Ft.

Clock No. — — — — Elevation Well Temperature °F

Point		Pressure			Time Given	Time Computed
A	Initial Hydrostatic Mud	1012	P.S.I.	Open Tool	M	
B	First Initial Flow Pressure	33	P.S.I.	First Flow Pressure	20 Mins.	Mins.
C	First Final Flow Pressure	35	P.S.I.	Initial Closed-in Pressure	20 Mins.	Mins.
D	Initial Closed-in Pressure	453	P.S.I.	Second Flow Pressure	20 Mins.	Mins.
E	Second Initial Flow Pressure	58	P.S.I.	Final Closed-in Pressure	20 Mins.	Mins.
F	Second Final Flow Pressure	58	P.S.I.			
G	Final Closed-in Pressure	431	P.S.I.			
H	Final Hydrostatic Mud	1001	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 5 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	33
P 2	5	
P 3	10	
P 4	15	33
P 5	20	35
P 6	25	
P 7	30	
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In
Breakdown: 9 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	835
	3	82
	6	205
	9	333
	12	383
	15	414
	18	433
	21	446
	24	453
	27	
	30	
	33	
	36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

Second Flow Pressure
Breakdown: 5 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	58
	5	
	10	
	15	
	20	58
	25	
	30	
	35	
	40	
	45	
	50	
	55	
	60	
	65	
	70	
	75	
	80	
	85	
	90	

Final Shut-In
Breakdown: 8 Inc. of 3 mins. and a final inc. of 0 Min.

Point	Minutes	Press.
	0	58
	3	117
	6	242
	9	329
	12	373
	15	400
	18	418
	21	431
	24	
	27	
	30	
	33	
	36	
	39	
	42	
	45	
	48	
	51	
	54	
	57	
	60	

IRT # 6359

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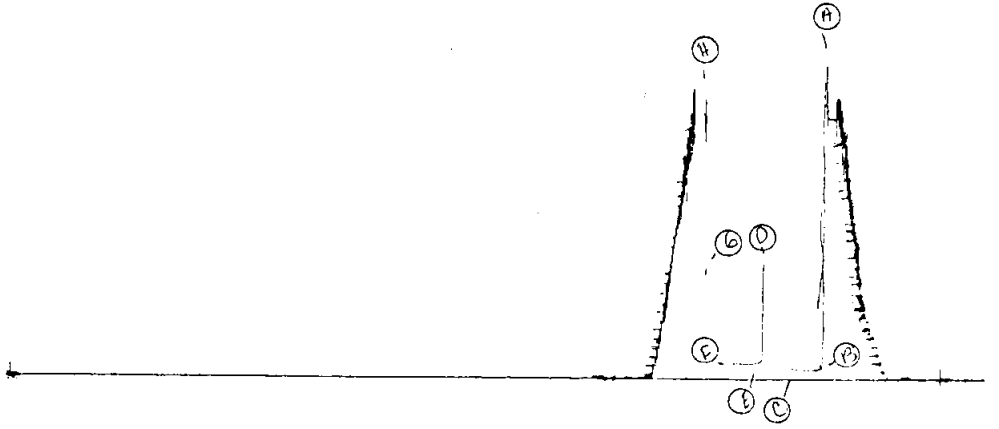
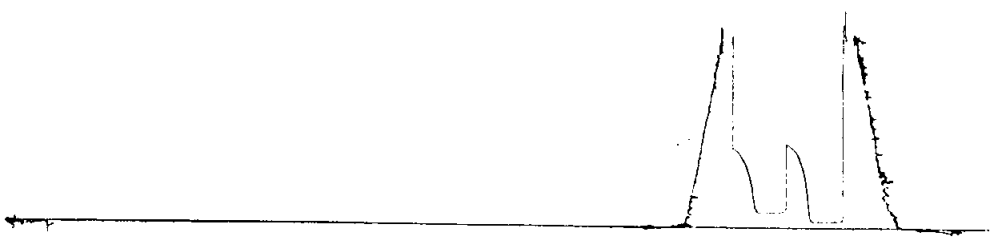
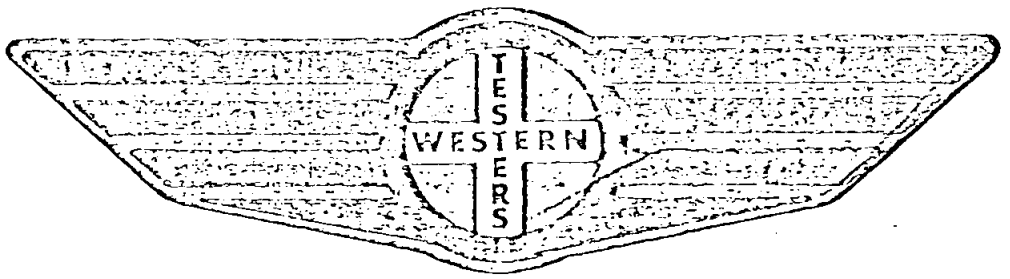
3474
DST #1



TKT # 6359



FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

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

Company KIOWA EXPLORATION COMPANY Lease and Well No. #1 KENNER Sec. 33 Twp. 30S Rge. 27W Test No. 1 Date 11/74/8

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/24/84 TICKET #6359
CUSTOMER: KIOWA EXPLORATION COMPANY LEASE: RENNER
WELL: 1 TEST: 1 GEOLOGIST: TINSMON
ELEVATION (KB): 1323 FORMATION: WHITE CLOUD
SECTION: 35 TOWNSHIP: 30S
RANGE: 2W COUNTY: SUMNER STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 1928 FT TO: 1938 FT TOTAL DEPTH: 1938 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 1928 FT SIZE: 6 3/4 IN PACKER DEPTH: 1923 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: MCALLISTER DRLG
MUD TYPE: CHEMICAL VISCOSITY: 32
WEIGHT: 9.8 WATER LOSS (CC):
CHLORIDES (P.P.M.):
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT?

DRILL COLLAR LENGTH:	300 FT	I.D.:	2.25	IN	
WEIGHT PIPE LENGTH:	FT	I.D.:		IN	
DRILL PIPE LENGTH:	1608 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 XH	IN	

BLOW: INITIAL FLOW PERIOD WEAK BLOW.
DIED IN 10 MINUTES. FINAL FLOW
PERIOD NO BLOW.

RECOVERED: 80 FT OF: MUDDY SALT WATER.
RECOVERED: FT OF: CHLORIDES 85000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: SLID TOOL 15 FEET.

TIME SET PACKER(S): TIME STARTED OFF BOTTOM:
WELL TEMPERATURE: 99 °F

INITIAL HYDROSTATIC PRESSURE:		(A) 1012	PSI	
INITIAL FLOW PERIOD	MIN: 20	(B) 33	PSI TO (C) 35	PSI
INITIAL CLOSED IN PERIOD	MIN: 24	(D) 453	PSI	
FINAL FLOW PERIOD	MIN: 20	(E) 58	PSI TO (F) 58	PSI
FINAL CLOSED IN PERIOD	MIN: 21	(G) 431	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 1001	PSI	

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 11/24/84 TICKET #6359
CUSTOMER: KIOWA EXPLORATION COMPANY LEASE: RENNER
WELL: 1 TEST: 1 GEOLOGIST: TINSMON
ELEVATION (KB): 1323 FORMATION: WHITE CLOUD
SECTION: 35 TOWNSHIP: 30S
RANGE: 2W COUNTY: SUMNER STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE:	1012	PSI
(B) FIRST INITIAL FLOW PRESSURE:	33	PSI
(C) FIRST FINAL FLOW PRESSURE:	35	PSI
(D) INITIAL CLOSED-IN PRESSURE:	453	PSI
(E) SECOND INITIAL FLOW PRESSURE:	58	PSI
(F) SECOND FINAL FLOW PRESSURE:	58	PSI
(G) FINAL CLOSED-IN PRESSURE:	431	PSI
(H) FINAL HYDROSTATIC PRESSURE:	1001	PSI
WELL TEMPERATURE:	99	'F

OPEN TOOL:

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	20 MIN	20 MIN
INITIAL CLOSED-IN PRESSURE:	20 MIN	24 MIN
SECOND FLOW PRESSURE:	20 MIN	20 MIN
FINAL CLOSED-IN PRESSURE:	20 MIN	21 MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	33	0	35	0	58	0	58
2	5	33	3	82	5	58	3	117
3	10	33	6	205	10	58	6	242
4	15	33	9	333	15	58	9	329
5	20	35	12	383	20	58	12	373
6			15	414			15	400
7			18	433			18	418
8			21	446			21	431
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 8013

OK

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

Elevation 1323 KB Formation KC Eff. Pay Ft.

14

KID. District Augusta Date 11-28-84 Customer Order No.

COMPANY NAME Kiowa Exploration Co.

ADDRESS 110 S. Main Suite #510 Wichita, KS. 67202

LEASE AND WELL NO. Renner #1 COUNTY Sumner STATE Kansas Sec. 35 Twp. 30S Rge. 2W

Mail Invoice To #1 Renner Co. Name Same Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 2 Interval Tested From 3205 ft. to 3229 ft. Total Depth 3229 ft.

Packer Depth 3200 ft. Size 6.75 in. Packer Depth — ft. Size in.

Packer Depth 3205 ft. Size 6.75 in. Packer Depth — ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3220 ft. Recorder Number 5666 Cap. 3950

Bottom Recorder Depth (Outside) 3224 ft. Recorder Number 13265 Cap. 3975

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor McAllister # 10 Drill Collar Length 338 I. D. 2.25 in.

Mud Type Starch Viscosity 40 Weight Pipe Length I. D. in.

Weight 9.8 Water Loss 12.2 cc. Drill Pipe Length 2847 I. D. 3.8 in.

Chlorides 48,000 P.P.M. Test Tool Length 20 ft. Tool Size 5.5 in.

Jars: Make — Serial Number Anchor Length 24 ft. Size 5.5 in.

Did Well Flow? NO Reversed Out NO Surface Choke Size .75 in. Bottom Choke Size .75 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4½XH in.

Blow: Weak to Fair then out

Recovered 330 ft. of Water with skin of oil on top

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 165,000 P.P.M. Sample Jars used 2 Remarks:

RECEIVED

Time On Location 5:00 A.M. Time Pick Up Tool 7:00 A.M. Time Off Location 2:00 P.M.

Time Set Packer(s) 8:30 A.M. Time Started Off Bottom 12:00 P.M. Maximum Temperature 106°

Initial Hydrostatic Pressure			(A)	1735	P.S.I.	
Initial Flow Period	Minutes	30	(B)	70	P.S.I. to (C)	100 P.S.I.
Initial Closed In Period	Minutes	60	(D)	800	P.S.I.	
Final Flow Period	Minutes	60	(E)	140	P.S.I. to (F)	195 P.S.I.
Final Closed In Period	Minutes	60	(G)	770	P.S.I.	* 5666
Final Hydrostatic Pressure			(H)	1655	P.S.I.	

COMPANY TERMS

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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.

J. Corry Tinsmon

Test Approved By
Signature of Customer or his authorized representative

Western Representative Allen Edgington 525

FIELD INVOICE

Open Hole Test	$ 550.00
Misrun	$
Straddle Test	$
Jars	$
Selective Zone	$
Safety Joint	$
Standby	$
Evaluation	$
Extra Packer	$
Circ. Sub.	$
Mileage	$
Fluid Sampler	$
Extra Charts	$
Insurance	$ 50.00
Telecopier	$
TOTAL	$ 600.00

WESTERN TESTING CO., INC.

Pressure Data

Date 11-28 Test Ticket No. 8013

Recorder No. 5666 Capacity Location Ft.

Clock No. — — — — Elevation Well Temperature °F

Point		Pressure		Time Given	Time Computed
A	Initial Hydrostatic Mud	1735	P.S.I.		M
B	First Initial Flow Pressure	75	P.S.I.	30 Mins.	30 Mins.
C	First Final Flow Pressure	98	P.S.I.	60 Mins.	66 Mins.
D	Initial Closed-in Pressure	798	P.S.I.	60 Mins.	60 Mins.
E	Second Initial Flow Pressure	146	P.S.I.	60 Mins.	66 Mins.
F	Second Final Flow Pressure	196	P.S.I.		
G	Final Closed-in Pressure	773	P.S.I.		
H	Final Hydrostatic Mud	1650	P.S.I.		

Open Tool

First Flow Pressure

Initial Closed-in Pressure

Second Flow Pressure

Final Closed-in Pressure

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: 7 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	75
P 2	5	75
P 3	10	78
P 4	15	82
P 5	20	86
P 6	25	91
P 7	30	98
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In

Breakdown: 23 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	98
3	431
6	592
9	653
12	689
15	709
18	724
21	735
24	743
27	751
30	758
33	764
36	769
39	774
42	779
45	783
48	786
51	789
54	792
57	794
60	796
63	797
	790

Second Flow Pressure

Breakdown: 13 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	146
5	146
10	146
15	150
20	154
25	158
30	162
35	166
40	172
45	178
50	184
55	190
60	196
65	
70	
75	
80	
85	
90	

Final Shut-In

Breakdown: 23 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	196
3	441
6	598
9	647
12	673
15	691
18	705
21	715
24	725
27	731
30	737
33	743
36	749
39	754
42	759
45	762
48	765
51	767
54	769
57	770
60	771
63	772
	773

WTC - 4

8013

5666

TKT # 8013

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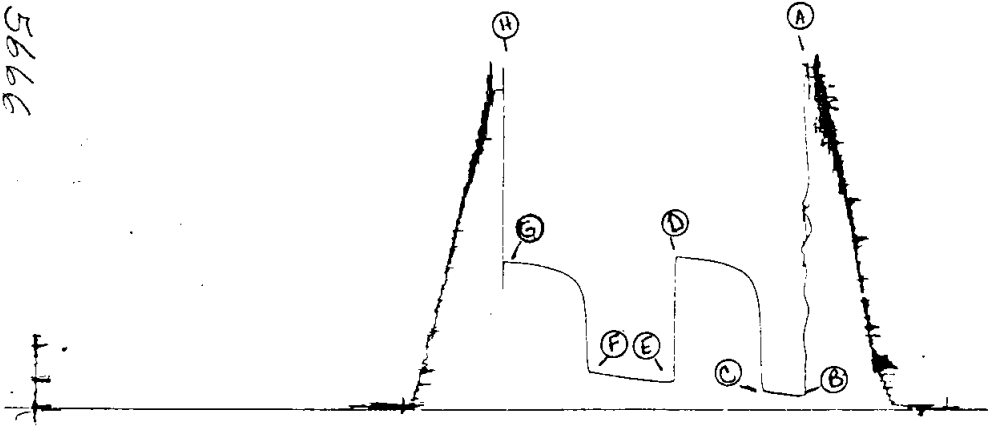

IKT # 8013

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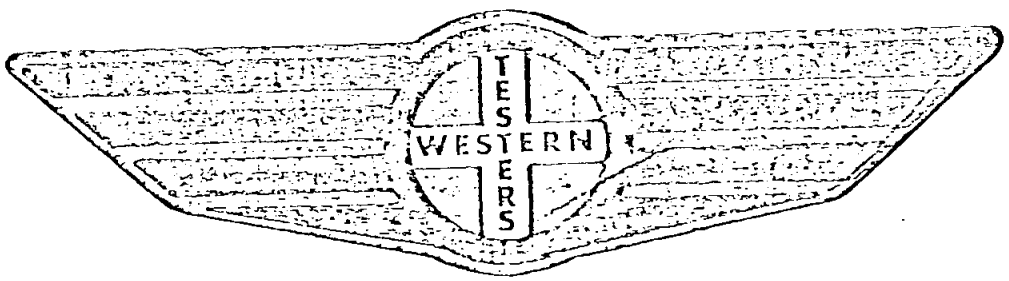
8013

13265

FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

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

mpany KIOWA EXPLORATION COMPANY Lease and Well No. #1 RENNER Sec. 35 Twp. 30S Rge. 2W Test No. 2 Date 11/6/8

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/28/84 TICKET #8013
CUSTOMER: KIOWA EXPLORATION CO. LEASE: RENNER
WELL: 1 TEST: 2 GEOLOGIST: TINSMON
ELEVATION (KB): 1323 FORMATION: KANSAS CITY
SECTION: 35 TOWNSHIP: 30S
RANGE: 2W COUNTY: SUMNER STATE: KS
GAUGE SN #5666 RANGE: 3950 CLOCK: 12

INTERVAL TEST FROM: 3205 FT TO: 3229 FT TOTAL DEPTH: 3229 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3200 FT SIZE: 6.75 IN PACKER DEPTH: 3205 FT SIZE: 6.75 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: MC ALLISTER
MUD TYPE: STARCH VISCOSITY: 40
WEIGHT: 9.8 WATER LOSS (CC): 12.2
CHLORIDES (P.P.M.): 48000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO

DRILL COLLAR LENGTH:	338	FT	I.D.:	2.25	IN		
WEIGHT PIPE LENGTH:		FT	I.D.:		IN		
DRILL PIPE LENGTH:	2847	FT	I.D.:	3.8	IN		
TEST TOOL LENGTH:	20	FT	TOOL SIZE:	5.5	IN		
ANCHOR LENGTH:	24	FT	SIZE:	5.5	IN		
SURFACE CHOKE SIZE:	.75	IN	BOTTOM CHOKE SIZE:	.75	IN		
MAIN HOLE SIZE:	7 7/8	IN	TOOL JOINT SIZE:	4 1/2 XH	IN		

BLOW: INITIAL FLOW PERIOD WEAK TO FAIR
FINAL FLOW PERIOD WEAK TO FAIR

RECOVERED: 330 FT OF: WATER WITH SKIM OF OIL ON TOP
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: CHLORIDES 165000 P.P.M.

TIME SET PACKER(S): 8:30 AM TIME STARTED OFF BOTTOM: 12:00 PM
WELL TEMPERATURE: 106 'F

INITIAL HYDROSTATIC PRESSURE:		(A) 1735	PSI	
INITIAL FLOW PERIOD	MIN: 30	(B) 75	PSI TO (C) 98	PSI
INITIAL CLOSED IN PERIOD	MIN: 66	(D) 798	PSI	
FINAL FLOW PERIOD	MIN: 60	(E) 146	PSI TO (F) 196	PSI
FINAL CLOSED IN PERIOD	MIN: 66	(G) 773	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 1650	PSI	

WESTERN TESTING COMPANY INC.
PRESSURE DATA

DATE: 11/28/84
CUSTOMER: KIOWA EXPLORATION CO.
WELL: 1
TEST: 2
ELEVATION (KB): 1323
FORMATION: KANSAS CITY
SECTION: 35
TOWNSHIP: 30S
RANGE: 2W
COUNTY: SUMNER
STATE: KS
GAUGE SN #5666
RANGE: 3950
CLOCK: 12

TICKET #8013
LEASE: RENNER
GEOLOGIST: TINSMON

(A) INITIAL HYDROSTATIC PRESSURE:	1735	PSI
(B) FIRST INITIAL FLOW PRESSURE:	75	PSI
(C) FIRST FINAL FLOW PRESSURE:	98	PSI
(D) INITIAL CLOSED-IN PRESSURE:	798	PSI
(E) SECOND INITIAL FLOW PRESSURE:	146	PSI
(F) SECOND FINAL FLOW PRESSURE:	196	PSI
(G) FINAL CLOSED-IN PRESSURE:	773	PSI
(H) FINAL HYDROSTATIC PRESSURE:	1650	PSI
WELL TEMPERATURE:	106	°F

OPEN TOOL: 8:30 AM

	TIME - GIVEN		TIME - ACTUAL	
FIRST FLOW PRESSURE:	30	MIN	30	MIN
INITIAL CLOSED-IN PRESSURE:	60	MIN	66	MIN
SECOND FLOW PRESSURE:	60	MIN	60	MIN
FINAL CLOSED-IN PRESSURE:	60	MIN	66	MIN

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	75	0	98	0	146	0	196
2	5	75	3	431	5	146	3	441
3	10	78	6	592	10	146	6	598
4	15	82	9	653	15	150	9	647
5	20	86	12	689	20	154	12	673
6	25	91	15	709	25	158	15	691
7	30	98	18	724	30	162	18	705
8			21	734	35	166	21	715
9			24	743	40	172	24	725
10			27	751	45	178	27	731
11			30	758	50	184	30	737
12			33	764	55	190	33	743
13			36	769	60	196	36	749
14			39	774			39	754
15			42	779			42	759
16			45	783			45	762
17			48	786			48	765
18			51	789			51	767
19			54	792			54	769
20			57	794			57	770
21			60	796			60	771
22			63	797			63	772
23			66	798			66	773
24								
25								
26								
27								
28								
29								
30								

WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET Nº 6363

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

Elevation 1318 GL Formation Miss Eff. Pay Ft.

13 District Augusta Date 11-30-84 Customer Order No.

K 110 COMPANY NAME Kiowa Exploration Co

ADDRESS 110 So. Main Suite #510

LEASE AND WELL NO. Renner #1 COUNTY Sumner STATE Ks Sec. 35 Twp. 30 Rge. 2W

Mail Invoice To Same No. Copies Requested 1

Mail Charts To Same Co. Name #1 RENNER Address No. Copies Requested 5

Address

Formation Test No. 3 Interval Tested From 3754 ft. to 3775 ft. Total Depth 3775 ft.

Packer Depth 3754 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 3749 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3760 ft. Recorder Number 3474 Cap. 3000

Bottom Recorder Depth (Outside) 3765 ft. Recorder Number 2605 Cap. 4150

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor McAlster #10 Drill Collar Length 330 I. D. 2.25 in.

Mud Type Starch Viscosity 45 Weight Pipe Length I. D. in.

Weight 9.7 Water Loss 18 cc. Drill Pipe Length 3404 I. D. 3.8 in.

Chlorides 45,000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make NO Serial Number Anchor Length 21 ft. Size 5 1/2 in.

Did Well Flow? Reversed Out 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: weak blow throughout test

Recovered 150 ft. of muddy salt water [redacted] with few Oil spots on top of tool

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides 105,000 P.P.M. Sample Jars used Remarks: Oil Chart

Time On Location 5:30 A.M. P.M. Time Pick Up Tool 8:00 A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 9:55 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature 115°

Initial Hydrostatic Pressure		(A)	1934	P.S.I.	
Initial Flow Period	Minutes 30	(B)	45	P.S.I. to (C)	45 P.S.I.
Initial Closed In Period	Minutes 45	(D)	500	P.S.I.	
Final Flow Period	Minutes 60	(E)	60	P.S.I. to (F)	75 P.S.I.
Final Closed In Period	Minutes 60	(G)	628	P.S.I.	
Final Hydrostatic Pressure		(H)	1934	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 of Customer or his authorized representative

Western Representative Kenneth Kirkendall

1127

FIELD INVOICE

Open Hole Test	$ 550
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 11-30-84 Test Ticket No. 63163

Recorder No. 3474 Capacity 3000 Location Ft.

Clock No. — — — — Elevation Well Temperature °F

Point		Pressure	
A	Initial Hydrostatic Mud	1934	P.S.I.
B	First Initial Flow Pressure	48	P.S.I.
C	First Final Flow Pressure	48	P.S.I.
D	Initial Closed-in Pressure	495	P.S.I.
E	Second Initial Flow Pressure	64	P.S.I.
F	Second Final Flow Pressure	70	P.S.I.
G	Final Closed-in Pressure	581	P.S.I.
H	Final Hydrostatic Mud	1904	P.S.I.

	Time Given	Time Computed
Open Tool	M	
First Flow Pressure	30 Mins.	Mins.
Initial Closed-in Pressure	45 Mins.	Mins.
Second Flow Pressure	60 Mins.	Mins.
Final Closed-in Pressure	60 Mins.	Mins.

PRESSURE BREAKDOWN

First Flow Pressure

Breakdown: 7 Inc. of 5 mins. and a final inc. of 0 Min.

Point	Mins.	Press.
P 1	0	48
P 2	5	
P 3	10	
P 4	15	
P 5	20	
P 6	25	
P 7	30	48
P 8	35	
P 9	40	
P10	45	
P11	50	
P12	55	
P13	60	
P14		
P15		
P16		
P17		
P18		
P19		
P20		

Initial Shut-In

Breakdown: 16 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	48
3	49
6	57
9	71
12	89
15	104
18	129
21	161
24	195
27	238 [redacted]
30	284
33	341
36	387
39	430
42	465
45	495
48	
51	
54	
57	
60	

Second Flow Pressure

Breakdown: 13 Inc. of 5 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	64
5	
10	
15	
20	64
25	65
30	65
35	66
40	66
45	67
50	68
55	69
60	70
65	
70	
75	
80	
85	
90	

Final Shut-In

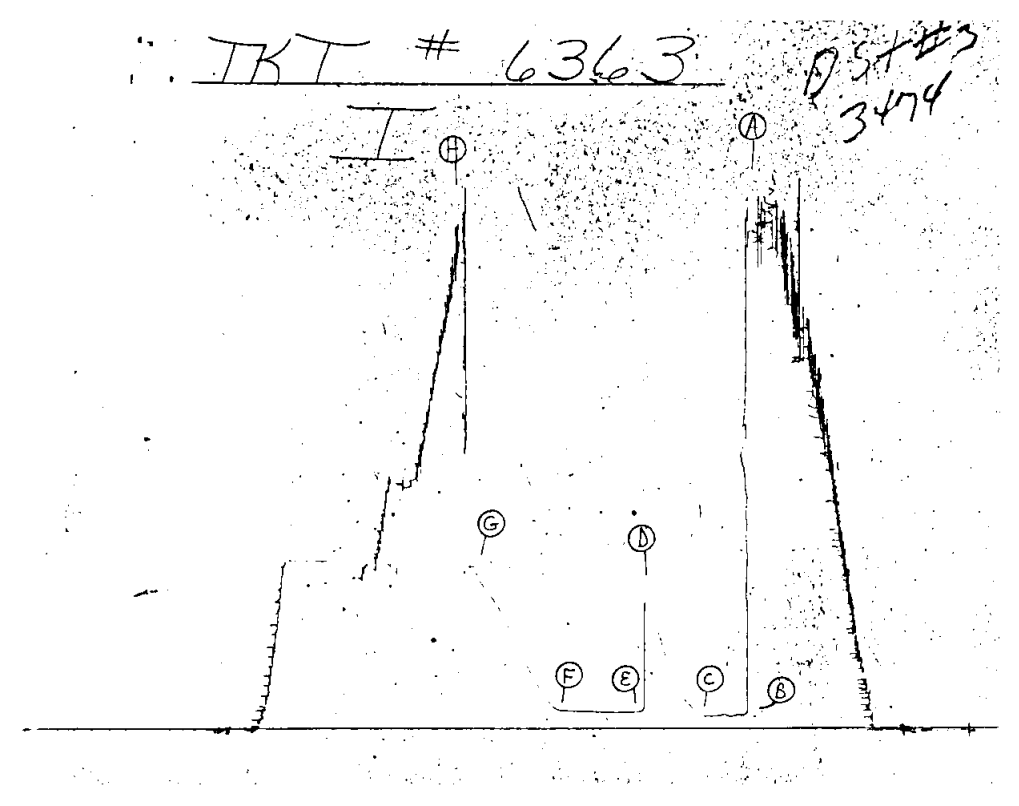
Breakdown: 21 Inc. of 3 mins. and a final inc. of 0 Min.

Point Minutes	Press.
0	70
3	76
6	89
9	108
12	129
15	156
18	185
21	215
24	246
27	281
30	317
33	353
36	386
39	424
42	452
45	482
48	505
51	527
54	546
57	571 [redacted]
60	[redacted]

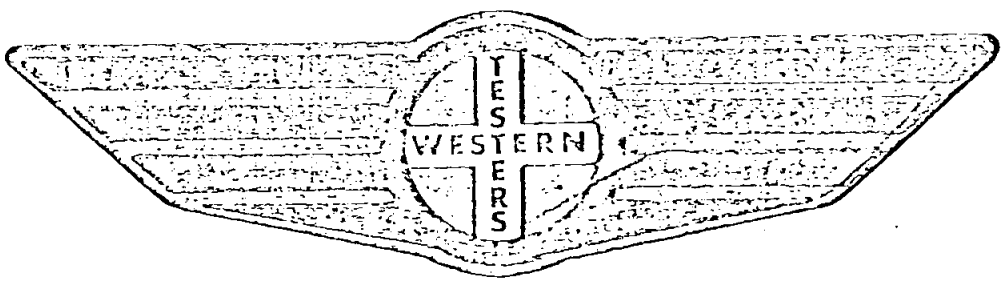
WTC - 4

IKT # 6363

DST #3
3474



FORMATION TEST REPORT



Home Office: Wichita, Kansas 67201

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

Company KIOWA EXPLORATION COMPANY Lease and Well No. #1 RENNER Sec. 35 Twp. 30S Rge. 2W Test No. 3 Date 1/30/8

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/30/84 TICKET #6363
CUSTOMER: KIOWA EXPLORATION COMPANY LEASE: RENNER
WELL: 1 TEST: 3 GEOLOGIST: TINSMON
ELEVATION (KB): 1323 FORMATION: MISSISSIPPI
SECTION: 35 TOWNSHIP: 30S
RANGE: 2W COUNTY: SUMNER STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 3754 FT TO: 3775 FT TOTAL DEPTH: 3775 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3754 FT SIZE: 6 3/4 IN PACKER DEPTH: 3749 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: MCALLISTER DRLG
MUD TYPE: STARCH VISCOSITY: 45
WEIGHT: 9.7 WATER LOSS (CC): 18.0
CHLORIDES (P.P.M.): 45000
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 330 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3404 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 IN
ANCHOR LENGTH: 21 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: WEAK BLOW THROUGHOUT TEST.

RECOVERED: 150 FT OF: MUDDY SALT WATER.
RECOVERED: FT OF: (WITH A FEW OIL SPOTS ON TOP OF TOOL).
RECOVERED: FT OF: CHLORIDES 105000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: ONLY RECEIVED ONE CHART.

TIME SET PACKER(S): 9:55 PM TIME STARTED OFF BOTTOM:
WELL TEMPERATURE: 115 'F
INITIAL HYDROSTATIC PRESSURE: (A) 1934 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 48 PSI TO (C) 48 PSI
INITIAL CLOSED IN PERIOD MIN: 45 (D) 495 PSI
FINAL FLOW PERIOD MIN: 60 (E) 64 PSI TO (F) 70 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 581 PSI
FINAL HYDROSTATIC PRESSURE (H) 1904 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 11/30/84 TICKET #6363
CUSTOMER: KIOWA EXPLORATION COMPANY LEASE: RENNER
WELL: 1 TEST: 3 GEOLOGIST: TINSMON
ELEVATION (KB): 1323 FORMATION: MISSISSIPPI
SECTION: 35 TOWNSHIP: 30S
RANGE: 2W COUNTY: SUMNER STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE:	1934	PSI
(B) FIRST INITIAL FLOW PRESSURE:	48	PSI
(C) FIRST FINAL FLOW PRESSURE:	48	PSI
(D) INITIAL CLOSED-IN PRESSURE:	495	PSI
(E) SECOND INITIAL FLOW PRESSURE:	64	PSI
(F) SECOND FINAL FLOW PRESSURE:	70	PSI
(G) FINAL CLOSED-IN PRESSURE:	581	PSI
(H) FINAL HYDROSTATIC PRESSURE:	1904	PSI
WELL TEMPERATURE:	115	°F

OPEN TOOL: 9:55 PM

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

PRESSURE BREAKDOWN

	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
PT	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
1	0	48	0	48	0	64	0	70
2	5	48	3	49	5	64	3	76
3	10	48	6	57	10	64	6	89
4	15	48	9	71	15	64	9	108
5	20	48	12	89	20	64	12	129
6	25	48	15	104	25	65	15	156
7	30	48	18	129	30	65	18	185
8			21	161	35	66	21	215
9			24	195	40	66	24	246
10			27	238	45	67	27	281
11			30	284	50	68	30	317
12			33	341	55	69	33	353
13			36	389	60	70	36	386
14			39	430			39	424
15			42	465			42	452
16			45	495			45	482
17							48	505
18							51	527
19							54	546
20							57	571
21							60	581
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