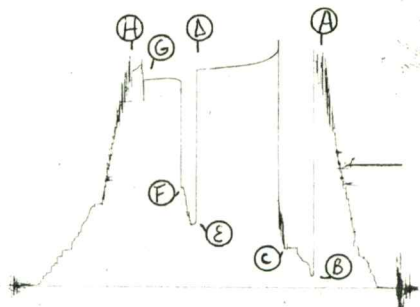


1064
DST-H1

TKT # 16331

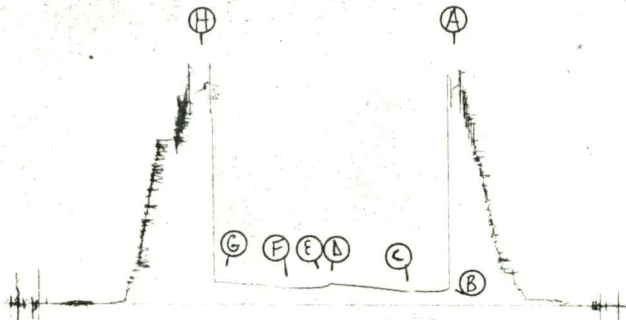
I



1566

TKT # 16332

I



Company Associated Petroleum Consultants, Inc. Lease & Well No. #2 Steffen
 Elevation - Formation - Effective Pay - Ft. Ticket No. 16331
 Date 7/22/82 Sec. 12 Twp. 29S Range 10W County Kingman State Kansas
 Test Approved by Paul Hagewein Western Representative Mike Rogers
 Formation Test No. 1 Interval Tested from 2502 ft. to 2527 ft. Total Depth 2527 ft.
 Packer Depth 2497 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 2502 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2505 ft. Recorder Number 1566 Cap. 4300
 Bottom Recorder Depth (Outside) 2509 ft. Recorder Number 3086 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Heartland Drill Collar Length 463 I. D. 2.2 in.
 Mud Type Starch Viscosity 27 Weight Pipe Length - I. D. - in.
 Weight 9.4 Water Loss - cc. Drill Pipe Length 2009 I. D. 3.8 in.
 Chlorides 94,000 P.P.M. Test Tool Length 30 ft. Tool Size 5 1/2 in.
 Jars: Make WTC Serial Number 3660 Anchor Length 25 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 in.

Blow: Weak building to good blow both flow periods.

Recovered 1050 ft. of drilling fluid

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: Losing fluid severely

Time Set Packer(s) 9:30 A.M. P.M. Time Started Off Bottom 11:40 A.M. P.M. Maximum Temperature -
 Initial Hydrostatic Pressure 1214 P.S.I.
 Initial Flow Period 25 Minutes (B) 67 P.S.I. to (C) 221 P.S.I.
 Initial Closed In Period 60 Minutes (D) 1218 P.S.I.
 Final Flow Period 10 Minutes (E) 350 P.S.I. to (F) 559 P.S.I.
 Final Closed In Period 27 Minutes (G) 1160 P.S.I.
 Final Hydrostatic Pressure 1210 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 7/22/82 Test Ticket No. 16331

Recorder No. 1566 Capacity 4300 Location 2505 Ft.

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

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	1214 P.S.I.	9:30 M	
B First Initial Flow Pressure	67 P.S.I.	25 Mins.	25 Mins.
C First Final Flow Pressure	221 P.S.I.	60 Mins.	60 Mins.
D Initial Closed-in Pressure	1218 P.S.I.	15 Mins.	10 Mins.
E Second Initial Flow Pressure	350 P.S.I.	30 Mins.	27 Mins.
F Second Final Flow Pressure	559 P.S.I.		
G Final Closed-in Pressure	1160 P.S.I.		
H Final Hydrostatic Mud	1210 P.S.I.		

ALL PRESSURES QUESTIONABLE DUE TO FLUID LOSS.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>5</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>2</u> Inc.		Breakdown: <u>9</u> 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 <u>0</u>	67	0	221	0	350	0	559
P 2 <u>5</u>	146	3	1309	5	400	3	1166
P 3 <u>10</u>	179	6	1289	10	559	6	1169
P 4 <u>15</u>	226	9	1275			9	1171
P 5 <u>20</u>	221	12	1266			12	1171
P 6 <u>25</u>	221	15	1258			15	1168
P 7		18	1252			18	1166
P 8		21	1248			21	1164
P 9		24	1244			24	1162
P10		27	1242			27	1160
P11		30	1239				
P12		33	1237				
P13		36	1235				
P14		39	1233				
P15		42	1231				
P16		45	1229				
P17		48	1226				
P18		51	1223				
P19		54	1220				
P20		57	1219				
		60	1218				

Associated Petroleum Consultants, Inc.

#2 Steffen

Company _____ Lease & Well No. _____
 Elevation _____ Formation Indian Cave Effective Pay _____ Ft. Ticket No. 16332
 Date 7/23/82 Sec. 12 Twp. 29S Range 10W County Kingman State Kansas
 Test Approved by Paul Hagewein Western Representative Mike Rogers

Formation Test No. 2 Interval Tested from 2474 ft. to 2537 ft. Total Depth 2537 ft.

Packer Depth 2469 ft. Size 6 5/8 in. Packer Depth -- ft. Size -- in.

Packer Depth 2474 ft. Size 6 5/8 in. Packer Depth -- ft. Size -- in.

Depth of Selective Zone Set --

Top Recorder Depth (Inside) 2510 ft.

Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 2514 ft.

Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth -- ft.

Recorder Number -- Cap. --

Drilling Contractor Heartland

Drill Collar Length 463 I. D. 2.2 in.

Mud Type Starch Viscosity 27

Weight Pipe Length -- I. D. -- in.

Weight 9.4 Water Loss -- cc.

Drill Pipe Length 1981 I. D. 3.8 in.

Chlorides 94,000 P.P.M.

Test Tool Length 30 ft. Tool Size 5 1/2 in.

Jars: Make WTC Serial Number 3660

DC in anchor 31 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 in.

Blow: Weak building to 2 inches then gradually depleting to very weak on initial flow period
 dead on final flow period.

Recovered 35 ft. of drilling fluid

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 9:30 A.M. Time Started Off Bottom 12:30 A.M. Maximum Temperature 101

Initial Hydrostatic Pressure (A) 1201 P.S.I.

Initial Flow Period Minutes 30 (B) 80 P.S.I. to (C) 80 P.S.I.

Initial Closed In Period Minutes 57 (D) 120 P.S.I.

Final Flow Period Minutes 30 (E) 94 P.S.I. to (F) 94 P.S.I.

Final Closed In Period Minutes 54 (G) 125 P.S.I.

Final Hydrostatic Pressure (H) 1171 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 7/23/82 Test Ticket No. 16332
 Recorder No. 1566 Capacity 4300 Location 2510 Ft.
 Clock No. -- Elevation -- Well Temperature 101 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1201</u> P.S.I.	Open Tool	<u>9:30A</u> M	
B First Initial Flow Pressure	<u>80</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>80</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
D Initial Closed-in Pressure	<u>120</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>94</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>54</u> Mins.
F Second Final Flow Pressure	<u>94</u> P.S.I.			
G Final Closed-in Pressure	<u>125</u> P.S.I.			
H Final Hydrostatic Mud	<u>1171</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>19</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>18</u> 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 <u>0</u>	<u>80</u>	<u>0</u>	<u>80</u>	<u>0</u>	<u>94</u>	<u>0</u>	<u>94</u>
P 2 <u>5</u>	<u>80</u>	<u>3</u>	<u>82</u>	<u>5</u>	<u>94</u>	<u>3</u>	<u>97</u>
P 3 <u>10</u>	<u>80</u>	<u>6</u>	<u>84</u>	<u>10</u>	<u>94</u>	<u>6</u>	<u>100</u>
P 4 <u>15</u>	<u>80</u>	<u>9</u>	<u>86</u>	<u>15</u>	<u>94</u>	<u>9</u>	<u>103</u>
P 5 <u>20</u>	<u>80</u>	<u>12</u>	<u>88</u>	<u>20</u>	<u>94</u>	<u>12</u>	<u>106</u>
P 6 <u>25</u>	<u>80</u>	<u>15</u>	<u>91</u>	<u>25</u>	<u>94</u>	<u>15</u>	<u>107</u>
P 7 <u>30</u>	<u>80</u>	<u>18</u>	<u>94</u>	<u>30</u>	<u>94</u>	<u>18</u>	<u>108</u>
P 8		<u>21</u>	<u>97</u>			<u>21</u>	<u>110</u>
P 9		<u>24</u>	<u>100</u>			<u>24</u>	<u>112</u>
P 10		<u>27</u>	<u>103</u>			<u>27</u>	<u>114</u>
P 11		<u>30</u>	<u>105</u>			<u>30</u>	<u>116</u>
P 12		<u>33</u>	<u>107</u>			<u>33</u>	<u>118</u>
P 13		<u>36</u>	<u>109</u>			<u>36</u>	<u>119</u>
P 14		<u>39</u>	<u>111</u>			<u>39</u>	<u>120</u>
P 15		<u>42</u>	<u>112</u>			<u>42</u>	<u>121</u>
P 16		<u>45</u>	<u>113</u>			<u>45</u>	<u>122</u>
P 17		<u>48</u>	<u>114</u>			<u>48</u>	<u>123</u>
P 18		<u>51</u>	<u>116</u>			<u>51</u>	<u>124</u>
P 19		<u>54</u>	<u>118</u>			<u>54</u>	<u>125</u>
P 20		<u>57</u>	<u>120</u>				