

Company American Energies Corporation Lease & Well No. #1 Wendell
Elevation -- Formation Lansing "B" Effective Pay --- Ft. Ticket No. 16443
Date 10/31/82 Sec. 27 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Wm. K. Clark Western Representative Jeff Piotrowski
Formation Test No. 1 Interval Tested from 3912 ft. to 3938 ft. Total Depth 3938 ft.
Packer Depth 3907 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3912 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3928 ft. Recorder Number 1565 Cap 4900
Bottom Recorder Depth (Outside) 3931 ft. Recorder Number 1560 Cap 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap -
Drilling Contractor Kaw Drilling Rig #1 Drill Collar Length - I. D. - in.
Mud Type starch Viscosity 38 Weight Pipe Length 300 I. D. 3.2 in.
Weight 9.9 Water Loss 15.0 cc. Drill Pipe Length 3583 I. D. 3.8 in.
Chlorides 48,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 OD in.
Jars: Make WTC Serial Number 405 Anchor Length 26 ft. Size 5 1/2 OD 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 XH in.

Blow: Strong. Gas to surface in eleven minutes. See attached sheet for gas measurements.

Recovered	60	ft. of	mud - few oil specks
Recovered	60	ft. of	very heavy oil cut gassy mud
Recovered	390	ft. of	clean oil 39° Gravity @ 63°F
Recovered	180	ft. of	froggy oil
Recovered	150	ft. of	water Chlorides 89,000 ppm

Remarks: _____

Time Set	Packer(s)	<u>3:50</u>	P.M. <u>A.M.</u>	Time Started	Off Bottom	<u>7:35</u>	P.M. <u>A.M.</u>	Maximum Temperature	<u>115°</u>
Initial Hydrostatic Pressure				(A)		<u>2041</u>		P.S.I.	
Initial Flow Period		Minutes	<u>30</u>	(B)		<u>139</u>	P.S.I. to (C)	<u>178</u>	P.S.I.
Initial Closed In Period		Minutes	<u>60</u>	(D)		<u>1226</u>		P.S.I.	
Final Flow Period		Minutes	<u>45</u>	(E)		<u>252</u>	P.S.I. to (F)	<u>316</u>	P.S.I.
Final Closed In Period		Minutes	<u>90</u>	(G)		<u>1209</u>		P.S.I.	
Final Hydrostatic Pressure				(H)		<u>2002</u>		P.S.I.	

GAS FLOW REPORT

Date 10/31/82 Ticket 16443 Company American Energies Corporation
 Well Name and No. #1 Wendell Dst No. 1 Interval Tested 3912'-3938'
 County Pratt State Kansas Sec. 27 Twp. 27S Rg. 14W

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
10 min.	4.0 PSIG	1/4" orifice			18,500 CFPD
20 min.	6.0 PSIG	1/4" orifice			22,900 CFPD

SECOND FLOW					
10 min.	4.5 PSIG	1/4" orifice			19,500 CFPD
20 min.	3.0 PSIG	1/4" orifice			15,700 CFPD
30 min.	3.0 PSIG	1/4" orifice			15,700 CFPD
40 min.	3.0 PSIG	1/4" orifice			15,700 CFPD
45 min.	3.0 PSIG	1/4" orifice			15,700 CFPD

GAS BOTTLE

Serial No. ----- Date Bottle Filled --- Date to be Invoiced 10/31/82

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME American Energies Corporation

Authorized by Wm. K. Clark

Liquid Production

B.T. Gauge Numbers			Ticket Number		16443
Initial Hydrostatic			PRESSURE		
Final Hydrostatic			2041		
1st Flow			2002		
Initial			Time		
Final			139		
30			178		
Initial Closed In Pressure			60		
252			1226		
Initial			252		
Final			316		
Final Closed In Pressure			90		
1209			Footage Tested		26 ft.
Initial			1374-523		Mud Weight 9.9 lbs. gal.
Final			1332-628		Viscosity, Oil or Water cp
Initial			850.475		Oil API Gravity —
Final			704.107		Water Specific Gravity —

Remarks: _____

SUMMARY		Gauge No.	992	988	
		Depth	INITIAL	FINAL	Units
Product	Equation				
Production	$Q = \frac{1440 R}{t}$		180.040	289.840	bbls. day
Transmissability	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$		34.400	66.943	md. ft. cp
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$		13.760	26.777	md. ft.
Average Effective	$K = \frac{Kh}{h}$		1.720	3.347	md.
Permeability	$K_i = \frac{Kh}{h_i}$		-	-	md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$		.257	.264	—
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$		DR less than one	DR less than one	bbls. day
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$		46.30	76.54	ft.
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$			-	ft.
Potentiometric Surface *	Pot. = EI - CD + 2.319 Ps			-	ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations 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.

INTERPRETATIONS AND CALCULATIONS

Liquid Production

B.T. Gauge Numbers			Ticket Number	16443
Initial Hydrostatic		PRESSURE	Elevation	ft.
		2041		
Final Hydrostatic		2002	Indicated Production	1st Flow 3.75 bbls. day
1st Flow	Initial	Time ----- 139	Total Flow	9.05 bbls. day
	Final	30 178	Drill Collar Length weight	300 ft.
Initial Closed In Pressure		60 1226	Drill Collar I.D.	2.25 in.
2nd Flow	Initial	----- 252	Drill Pipe Factor	.0142 bbls. ft.
	Final	45 316	Hole Size	7.875 in.
Final Closed In Pressure		90 1209	Footage Tested	26 ft.
Extrapolated Static Pressure	Initial	1374-523	Mud Weight	9.9 lbs. gal.
	Final	1332-628.3	Viscosity, Oil or Water	cp
Slope psi/cycle	Initial	850.475	Oil API Gravity	—
	Final	704.107	Water Specific Gravity	—

Remarks: _____

SUMMARY

Gauge No.
Depth

992

988

Product	Equation	INITIAL	FINAL	Units
Production	$Q = \frac{1440 R}{t}$	180.040	289.840	bbls. day.
Transmissability	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$	34.400	704.66 943	md. ft. cp
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$	13.760	66.94 267.77	md. ft.
Average Effective Permeability	$K = \frac{Kh}{h}$	1.720	3.3478	md.
	$K_1 = \frac{Kh}{h_1}$	—	264	md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$	.257	.264	—
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$	DR less than one	P.R. less than one	bbls. day
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$	46.308	76.54	ft.
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$	—	—	ft.
Potentiometric Surface *	$Pot. = EI - GD + 2.319 P_s$	—	—	ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations 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.

INTERPRETATIONS AND CALCULATIONS

WESTERN TESTING CO., INC.

Pressure Data

Date 10/31/82 Test Ticket No. 16443

Recorder No. 1565 Capacity 4900 Location 3928 Ft.

Clock No. -- Elevation --- Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2041</u> P.S.I.	Open Tool	<u>3:50A</u>	<u>M</u>
B First Initial Flow Pressure	<u>139</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>178</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1226</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>252</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>316</u> P.S.I.			
G Final Closed-in Pressure	<u>1209</u> P.S.I.			
H Final Hydrostatic Mud	<u>2002</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</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>	<u>139</u>	<u>0</u>	<u>178</u>	<u>0</u>	<u>252</u>	<u>0</u>	<u>316</u>
P 2 <u>5</u>	<u>139</u>	<u>3</u>	<u>636</u>	<u>5</u>	<u>252</u>	<u>3</u>	<u>698</u>
P 3 <u>10</u>	<u>139</u>	<u>6</u>	<u>804</u>	<u>10</u>	<u>252</u>	<u>6</u>	<u>826</u>
P 4 <u>15</u>	<u>140</u>	<u>9</u>	<u>903</u>	<u>15</u>	<u>252</u>	<u>9</u>	<u>879</u>
P 5 <u>20</u>	<u>152</u>	<u>12</u>	<u>959</u>	<u>20</u>	<u>264</u>	<u>12</u>	<u>918</u>
P 6 <u>25</u>	<u>171</u>	<u>15</u>	<u>1002</u>	<u>25</u>	<u>276</u>	<u>15</u>	<u>953</u>
P 7 <u>30</u>	<u>178</u>	<u>18</u>	<u>1034</u>	<u>30</u>	<u>287</u>	<u>18</u>	<u>978</u>
P 8		<u>21</u>	<u>1062</u>	<u>35</u>	<u>301</u>	<u>21</u>	<u>1001</u>
P 9		<u>24</u>	<u>1085</u>	<u>40</u>	<u>309</u>	<u>24</u>	<u>1022</u>
P10		<u>27</u>	<u>1107</u>	<u>45</u>	<u>316</u>	<u>27</u>	<u>1039</u>
P11		<u>30</u>	<u>1126</u>			<u>30</u>	<u>1053</u>
P12		<u>33</u>	<u>1138</u>			<u>33</u>	<u>1071</u>
P13		<u>36</u>	<u>1154</u>			<u>36</u>	<u>1083</u>
P14		<u>39</u>	<u>1165</u>			<u>39</u>	<u>1096</u>
P15		<u>42</u>	<u>1177</u>			<u>42</u>	<u>1108</u>
P16		<u>45</u>	<u>1187</u>			<u>45</u>	<u>1117</u>
P17		<u>48</u>	<u>1197</u>			<u>48</u>	<u>1127</u>
P18		<u>51</u>	<u>1204</u>			<u>51</u>	<u>1135</u>
P19		<u>54</u>	<u>1212</u>			<u>54</u>	<u>1144</u>
P20		<u>57</u>	<u>1218</u>			<u>57</u>	<u>1152</u>
		<u>60</u>	<u>1226</u>			<u>60</u>	<u>1159</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 10/31/82 Test Ticket No. 16443
 Recorder No. 1565 Capacity 4900 Location 3928 Ft.
 Clock No. -- Elevation --- Well Temperature 115 °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2041</u> P.S.I.	Open Tool	<u>3:50A</u>	<u>M</u>
B. First Initial Flow Pressure	<u>139</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>178</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D. Initial Closed-in Pressure	<u>1226</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E. Second Initial Flow Pressure	<u>252</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F. Second Final Flow Pressure	<u>316</u> P.S.I.			
G. Final Closed-in Pressure	<u>1209</u> P.S.I.			
H. Final Hydrostatic Mud	<u>2002</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 6 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 20 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

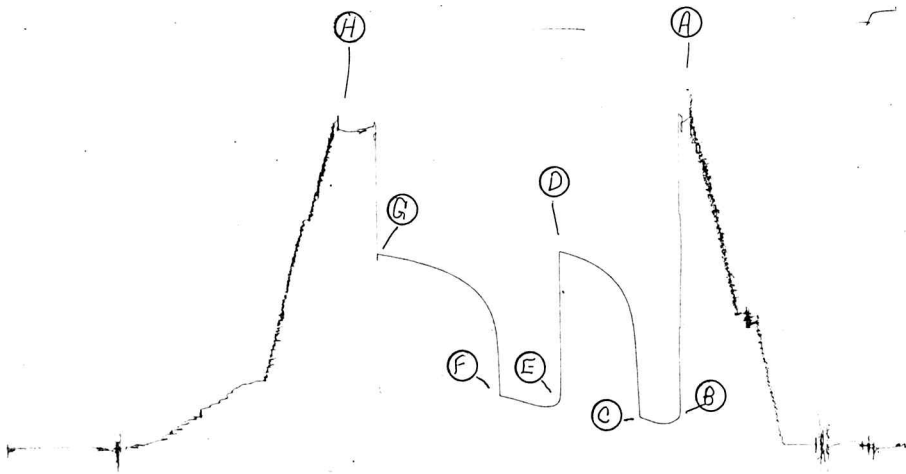
Second Flow Pressure
 Breakdown: 9 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 30 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1						63	1165
P 2						66	1171
P 3						69	1177
P 4						72	1184
P 5						75	1189
P 6						78	1194
P 7						81	1200
P 8						84	1203
P 9						87	1206
P10						90	1209
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

TKT 10443

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Company American Energies Corporation Lease & Well No. #1 Wendell
Elevation ---- Formation Lansing "H" Effective Pay --- Ft. Ticket No. 16444
Date 11/ 1 /82 Sec. 27 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Wm. K. Clark Western Representative Jeff Piotrowski
Formation Test No. 2 Interval Tested from 4048 ft. to 4060 ft. Total Depth 4060 ft.
Packer Depth 4043 ft. size 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4048 ft. size 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4051 ft. Recorder Number 1565 Cap. 4900
Bottom Recorder Depth (Outside) 4054 ft. Recorder Number 1560 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Kaw Drilling Rig #1 Drill Collar Length - I. D. - in.
Mud Type starch Viscosity 42 Weight Pipe Length 300 I. D. 3.2 in.
Weight 9.5 Water Loss 18.2 cc. Drill Pipe Length 3718 I. D. 3.8 in.
Chlorides 48,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 12 ft. Size 5 1/2 OD 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 XH in.

Blow: Fair throughout initial flow period. Weak through final flow period.

Recovered 120 ft. of gas in pipe
Recovered 60 ft. of mud - few oil specks
Recovered 60 ft. of watery mud
Recovered 60 ft. of water Chlorides 100,000 ppm
Recovered ft. of

Remarks:

Time Set Packer(s) 8:20 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 12:05 ~~P.M.~~ ^{A.M.} Maximum Temperature 118°
Initial Hydrostatic Pressure 2126 P.S.I. (A)
Initial Flow Period 30 Minutes (B) 52 P.S.I. to (C) 57 P.S.I.
Initial Closed In Period 60 Minutes (D) 1392 P.S.I.
Final Flow Period 45 Minutes (E) 91 P.S.I. to (F) 101 P.S.I.
Final Closed In Period 90 Minutes (G) 1391 P.S.I.
Final Hydrostatic Pressure 2126 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 11/1/82 Test Ticket No. 16444
 Recorder No. 1565 Capacity 4900 Location 4051 Ft.
 Clock No. --- Elevation --- Well Temperature 118 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2126	P.S.I.	8:20A	M
B First Initial Flow Pressure	52	P.S.I.	30	Mins. 30
C First Final Flow Pressure	57	P.S.I.	60	Mins. 60
D Initial Closed-in Pressure	1392	P.S.I.	45	Mins. 45
E Second Initial Flow Pressure	91	P.S.I.	90	Mins. 90
F Second Final Flow Pressure	101	P.S.I.		
G Final Closed-in Pressure	1391	P.S.I.		
H Final Hydrostatic Mud	2126	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</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>	52	0	57	0	91	0	101
P 2 <u>5</u>	52	3	92	5	91	3	181
P 3 <u>10</u>	52	6	262	10	91	6	354
P 4 <u>15</u>	52	9	604	15	91	9	611
P 5 <u>20</u>	53	12	906	20	92	12	856
P 6 <u>25</u>	55	15	1068	25	93	15	992
P 7 <u>30</u>	57	18	1153	30	94	18	1076
P 8		21	1206	35	96	21	1131
P 9		24	1240	40	98	24	1171
P10		27	1267	45	101	27	1202
P11		30	1288			30	1226
P12		33	1309			33	1248
P13		36	1325			36	1264
P14		39	1339			39	1278
P15		42	1350			42	1290
P16		45	1361			45	1302
P17		48	1368			48	1314
P18		51	1376			51	1322
P19		54	1383			54	1333
P20		57	1389			57	1342
		60	1392			60	1349

WESTERN TESTING CO., INC.

Pressure Data

Date 11/1/82

Test Ticket No. 16444

Recorder No. 1565

Capacity 4900

Location 4051

Clock No. --- Elevation ---

Well Temperature 118 °F

Point	Pressure	
A Initial Hydrostatic Mud	<u>2126</u>	P.S.I.
B First Initial Flow Pressure	<u>52</u>	P.S.I.
C First Final Flow Pressure	<u>57</u>	P.S.I.
D Initial Closed-in Pressure	<u>1392</u>	P.S.I.
E Second Initial Flow Pressure	<u>91</u>	P.S.I.
F Second Final Flow Pressure	<u>101</u>	P.S.I.
G Final Closed-in Pressure	<u>1391</u>	P.S.I.
H Final Hydrostatic Mud	<u>2126</u>	P.S.I.

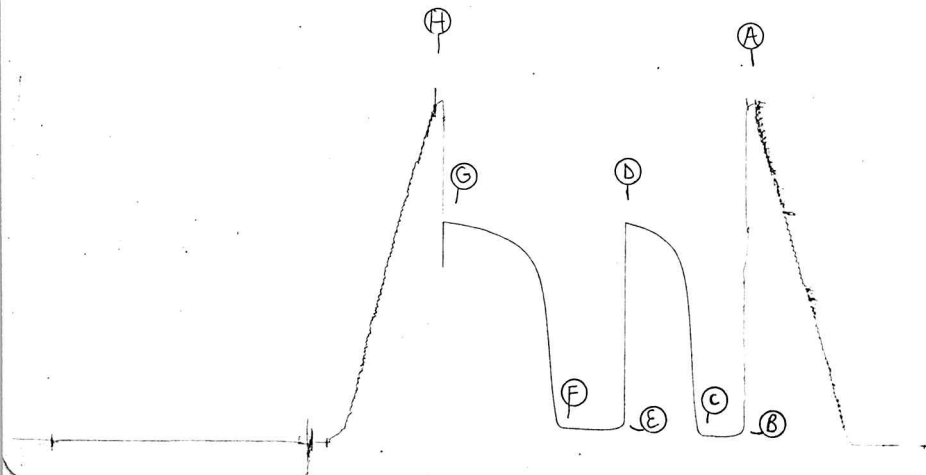
Time Given	Time Computed
8:20A	M
30	Mins. 30
60	Mins. 60
45	Mins. 45
90	Mins. 90

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</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						63	1355
P 2						66	1361
P 3						69	1366
P 4						72	1371
P 5						75	1376
P 6						78	1379
P 7						81	1382
P 8						84	1385
P 9						87	1388
P10						90	1391
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1565
DST#2

TKT # 16444
I



Company American Energies Corporation Lease & Well No. #1 Wendell
 Elevation ---- Formation Lansing " I" Effective Pay --- Ft. Ticket No. 16445
 Date 11/ 2 /82 Sec. 27 Twp. 27S Range 14W County Pratt State Kansas
 Test Approved by Wm. K. Clark Western Representative Jeff Piotrowski
 Formation Test No. 3 Interval Tested from 4069 ft. to 4114 ft. Total Depth 4114 ft.
 Packer Depth 4064 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4069 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4104 ft. Recorder Number 1565 Cap. 4900
 Bottom Recorder Depth (Outside) 4107 ft. Recorder Number 1560 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Kaw Drilling Rig #1 Drill Collar Length - I. D. - in.
 Mud Type starch Viscosity 45 Weight Pipe Length 300 I. D. 3.2 in.
 Weight 10.0 Water Loss 16.0 cc. Drill Pipe Length 3747 I. D. 3.8 in.
 Chlorides 45,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 45 ft. Size 5 1/2 OD 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 XH in.

Blow: Strong throughout both flow periods.

Recovered 2940 ft. of gas in pipe
 Recovered 90 ft. of gassy mud - few oil specks
 Recovered 240 ft. of heavy oil cut gassy mud 30% mud;3% water;3% water;30% oil;37% gas
 Recovered - ft. of Bottom: 9% mud;6% water;35% oil;50% gas
 Recovered - ft. of -

Remarks:

Time Set Packer(s) 4:45 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 8:30 ~~P.M.~~ ^{A.M.} Maximum Temperature 120°
 Initial Hydrostatic Pressure 2165 P.S.I.
 Initial Flow Period 30 Minutes (B) 68 P.S.I. to (C) 77 P.S.I.
 Initial Closed In Period 60 Minutes (D) 1360 P.S.I.
 Final Flow Period 45 Minutes (E) 129 P.S.I. to (F) 131 P.S.I.
 Final Closed In Period 90 Minutes (G) 1374 P.S.I.
 Final Hydrostatic Pressure 2165 P.S.I. (H)

Liquid Production

B.T. Gauge Numbers			1565	Ticket Number		16445
Initial Hydrostatic			2165	Elevation		ft.
Final Hydrostatic			2165	Indicated Production		bbls. day
			68	1st Flow		bbls. day
1st Flow			77	Total Flow		1.18 bbls. day
Initial			30	Drill Collar Length		300 ft.
Final			60	Drill Collar I.D.		2.25 in.
Initial Closed In Pressure			1360	Drill Pipe Factor		.0142 bbls. ft.
Initial			129	Hole Size		7.875 in.
2nd Flow			131	Footage Tested		45 ft.
Final			90	Mud Weight		10.0 lbs. gal.
Final Closed In Pressure			1374	Viscosity, Oil or Water		cp
Extrapolated Static Pressure			1678-126	Oil API Gravity		—
Initial			1538-602	Water Specific Gravity		—
Final			1805.775			
Slope psi/cycle			935.227			
Final						

Remarks: _____

SUMMARY		Gauge No.	Depth		
Product	Equation	INITIAL	FINAL	Units	
Production	$Q = \frac{1440 R}{t}$		37.779	bbls. day	
Transmissability	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$		6.566	md. ft. cp	
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$		26.266	md. ft.	
Average Effective	$K = \frac{Kh}{h}$		2.918	md.	
Permeability	$K_i = \frac{Kh}{h_i}$		-	md.	
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$		.275	—	
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$		DR less than one	bbls. day	
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$		10.398	ft.	
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$		-	ft.	
Potentiometric Surface *	$Pot. = EI - CD + 2.319 P_s$		-	ft.	

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations 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.

INTERPRETATIONS AND CALCULATIONS

Liquid Production

B.T. Gauge Numbers		1565	Ticket Number	16445
Initial Hydrostatic		PRESSURE 2165	Elevation	ft.
Final Hydrostatic		2165	Indicated Production	1st Flow Total Flow bbls. day
1st Flow	Initial	Time ----- 68	Total Flow	1.18 bbls. day
	Final	30 77		
Initial Closed In Pressure		60 1360	Drill Collar Length	300 ft.
2nd Flow	Initial	----- 129	Drill Collar I.D.	2.25 in.
	Final	45 131	Drill Pipe Factor	.0142 7.875 bbls. ft.
Final Closed In Pressure		90 1374	Hole Size	7.875 in.
Extrapolated Static Pressure	Initial	1678-126	Footage Tested	45 ft.
	Final	1538-602	Mud Weight	10.0 lbs. gal.
Slope psi/cycle	Initial	1805.775	Viscosity, Oil or Water	cp
	Final	935.227	Oil API Gravity	—
			Water Specific Gravity	—

Remarks: _____

SUMMARY		Gauge No. Depth		
Product	Equation		INITIAL	FINAL
Production	$Q = \frac{1440 R}{t}$			37.779
Transmissability	$\frac{Kh}{\mu} = \frac{162.6 Q}{m}$			6.566
Indicated Flow Capacity	$Kh = \frac{Kh}{\mu} \mu$			26.266
Average Effective Permeability	$K = \frac{Kh}{h}$			2.918
	$K_1 = \frac{Kh}{h_1}$			—
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$			.275
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$			DR less than one
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$			10.398
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$			—
Potentiometric Surface *	$Pot. = EI - GD + 2.319 P_s$			—

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations 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.

INTERPRETATIONS AND CALCULATIONS

WESTERN TESTING CO., INC.

Pressure Data

Date 11/2/82 Test Ticket No. 16445
 Recorder No. 1565 Capacity 4900 Location 4104 Ft.
 Clock No. -- Elevation --- Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2165</u> P.S.I.	Open Tool	<u>4:45A</u> M	
B First Initial Flow Pressure	<u>68</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>77</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1360</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>129</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>131</u> P.S.I.			
G Final Closed-in Pressure	<u>1374</u> P.S.I.			
H Final Hydrostatic Mud	<u>2165</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</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>	<u>68</u>	<u>0</u>	<u>77</u>	<u>0</u>	<u>129</u>	<u>0</u>	<u>131</u>
P 2 <u>5</u>	<u>68</u>	<u>3</u>	<u>91</u>	<u>5</u>	<u>129</u>	<u>3</u>	<u>160</u>
P 3 <u>10</u>	<u>68</u>	<u>6</u>	<u>141</u>	<u>10</u>	<u>129</u>	<u>6</u>	<u>198</u>
P 4 <u>15</u>	<u>68</u>	<u>9</u>	<u>200</u>	<u>15</u>	<u>129</u>	<u>9</u>	<u>247</u>
P 5 <u>20</u>	<u>70</u>	<u>12</u>	<u>272</u>	<u>20</u>	<u>129</u>	<u>12</u>	<u>297</u>
P 6 <u>25</u>	<u>73</u>	<u>15</u>	<u>353</u>	<u>25</u>	<u>129</u>	<u>15</u>	<u>358</u>
P 7 <u>30</u>	<u>77</u>	<u>18</u>	<u>460</u>	<u>30</u>	<u>129</u>	<u>18</u>	<u>434</u>
P 8		<u>21</u>	<u>589</u>	<u>35</u>	<u>129</u>	<u>21</u>	<u>519</u>
P 9		<u>24</u>	<u>735</u>	<u>40</u>	<u>130</u>	<u>24</u>	<u>618</u>
P10		<u>27</u>	<u>874</u>	<u>45</u>	<u>131</u>	<u>27</u>	<u>718</u>
P11		<u>30</u>	<u>988</u>			<u>30</u>	<u>818</u>
P12		<u>33</u>	<u>1081</u>			<u>33</u>	<u>918</u>
P13		<u>36</u>	<u>1153</u>			<u>36</u>	<u>997</u>
P14		<u>39</u>	<u>1203</u>			<u>39</u>	<u>1063</u>
P15		<u>42</u>	<u>1241</u>			<u>42</u>	<u>1111</u>
P16		<u>45</u>	<u>1272</u>			<u>45</u>	<u>1154</u>
P17		<u>48</u>	<u>1297</u>			<u>48</u>	<u>1187</u>
P18		<u>51</u>	<u>1319</u>			<u>51</u>	<u>1216</u>
P19		<u>54</u>	<u>1337</u>			<u>54</u>	<u>1240</u>
P20		<u>57</u>	<u>1351</u>			<u>57</u>	<u>1264</u>
		<u>60</u>	<u>1360</u>			<u>60</u>	<u>1283</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 11/2/82

Test Ticket No. 16445

Recorder No. 1565

Capacity 4900

Location 4104 Ft.

Clock No. --

Elevation ---

Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2165</u> P.S.I.	Open Tool	<u>4:45A</u> M	
B First Initial Flow Pressure	<u>68</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>77</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1360</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>129</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>131</u> P.S.I.			
G Final Closed-in Pressure	<u>1374</u> P.S.I.			
H Final Hydrostatic Mud	<u>2165</u> P.S.I.			

PRESSURE BREAKDOWN

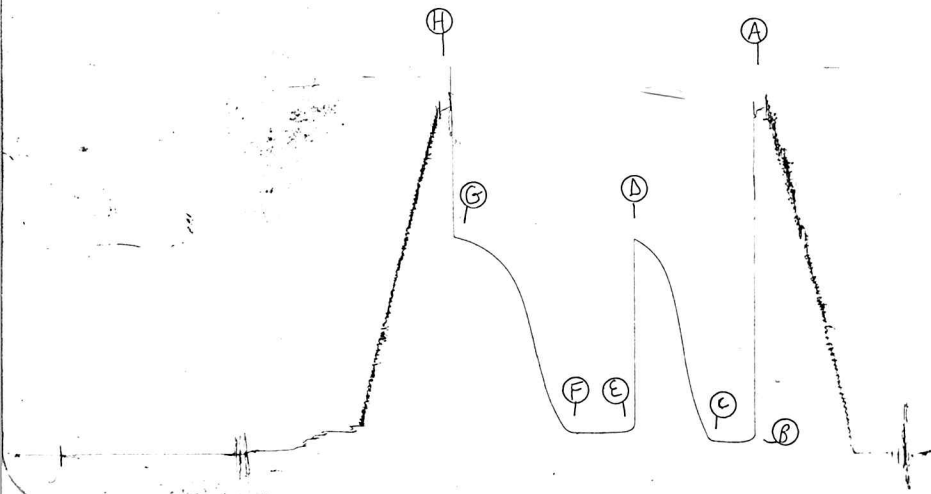
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> 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						63	1299
P 2						66	1315
P 3						69	1328
P 4						72	1340
P 5						75	1350
P 6						78	1355
P 7						81	1360
P 8						84	1365
P 9						87	1370
P10						90	1374
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1565

D97-3

TKT # 16445

I



Company American Energies Corporation Lease & Well No. #1 Wendell
Elevation --- Formation Lansing "J" Effective Pay --- Ft. Ticket No. 16446
Date 11/3/82 Sec. 27 Twp. 27S Range 14W County Pratt State Kansas
Test Approved by Wm. K. Clark Western Representative Jeff Piotrowski
Formation Test No. 4 Interval Tested from 4132 ft. to 4150 ft. Total Depth 4150 ft.
Packer Depth 4127 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 4132 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 4140 ft. Recorder Number 1565 Cap. 4900
Bottom Recorder Depth (Outside) 4143 ft. Recorder Number 1560 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Kaw Drilling Rig #1 Drill Collar Length - I. D. - in.
Mud Type starch Viscosity 50 Weight Pipe Length 300 I. D. 3.2 in.
Weight 10 Water Loss 16.0 cc. Drill Pipe Length 3810 I. D. 3.8 in.
Chlorides 45,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
Jars: Make - Serial Number - Anchor Length 18 ft. Size 5 1/2 OD 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 XH in.

Blow: Weak throughout initial flow period. One half inch in bucket; weak on final flow period and died in twenty minutes.

Recovered 30 ft. of mud

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Recovered - ft. of -

Remarks: -

Time Set Packer(s) 12:55 A.M. Time Started Off Bottom 3:55 A.M. Maximum Temperature 120°
P.M. P.M.
Initial Hydrostatic Pressure 2200 P.S.I. (A)
Initial Flow Period 30 Minutes (B) 37 P.S.I. to (C) 37 P.S.I.
Initial Closed In Period 60 Minutes (D) 203 P.S.I.
Final Flow Period 30 Minutes (E) 53 P.S.I. to (F) 59 P.S.I.
Final Closed In Period 60 Minutes (G) 103 P.S.I.
Final Hydrostatic Pressure 2163 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 11/3/82 Recorder No. 1565 Capacity 4900 Test Ticket No. 16446 Location 4140 Ft.
 Clock No. --- Elevation --- Well Temperature 120 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2200 P.S.I.	Open Tool	12:55A	M
B First Initial Flow Pressure	37 P.S.I.	First Flow Pressure	30 Mins.	30 Mins.
C First Final Flow Pressure	37 P.S.I.	Initial Closed-in Pressure	60 Mins.	60 Mins.
D Initial Closed-in Pressure	203 P.S.I.	Second Flow Pressure	30 Mins.	30 Mins.
E Second Initial Flow Pressure	53 P.S.I.	Final Closed-in Pressure	60 Mins.	60 Mins.
F Second Final Flow Pressure	59 P.S.I.			
G Final Closed-in Pressure	103 P.S.I.			
H Final Hydrostatic Mud	2163 P.S.I.			

PRESSURE BREAKDOWN

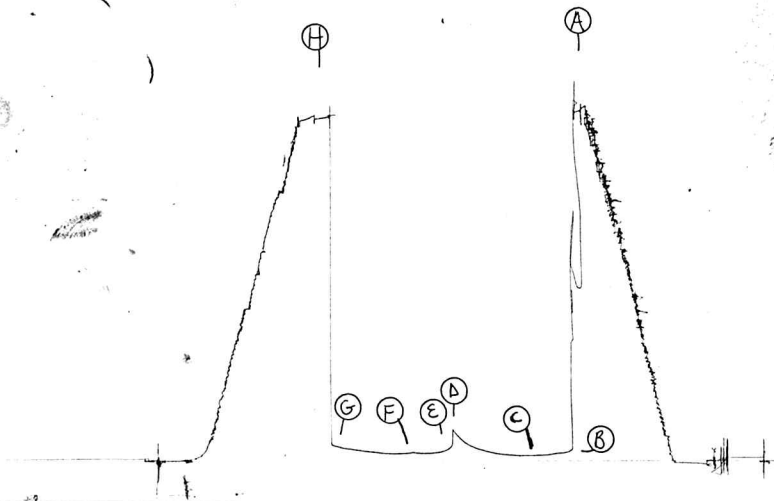
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> 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>	<u>37</u>	<u>0</u>	<u>37</u>	<u>0</u>	<u>53</u>	<u>0</u>	<u>59</u>
P 2 <u>5</u>	<u>37</u>	<u>3</u>	<u>38</u>	<u>5</u>	<u>53</u>	<u>3</u>	<u>57</u>
P 3 <u>10</u>	<u>37</u>	<u>6</u>	<u>39</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>55</u>
P 4 <u>15</u>	<u>37</u>	<u>9</u>	<u>40</u>	<u>15</u>	<u>53</u>	<u>9</u>	<u>53</u>
P 5 <u>20</u>	<u>37</u>	<u>12</u>	<u>41</u>	<u>20</u>	<u>53</u>	<u>12</u>	<u>52</u>
P 6 <u>25</u>	<u>37</u>	<u>15</u>	<u>42</u>	<u>25</u>	<u>56</u>	<u>15</u>	<u>51</u>
P 7 <u>30</u>	<u>37</u>	<u>18</u>	<u>44</u>	<u>30</u>	<u>59</u>	<u>18</u>	<u>53</u>
P 8		<u>21</u>	<u>46</u>			<u>21</u>	<u>55</u>
P 9		<u>24</u>	<u>49</u>			<u>24</u>	<u>57</u>
P10		<u>27</u>	<u>53</u>			<u>27</u>	<u>60</u>
P11		<u>30</u>	<u>58</u>			<u>30</u>	<u>63</u>
P12		<u>33</u>	<u>64</u>			<u>33</u>	<u>67</u>
P13		<u>36</u>	<u>72</u>			<u>36</u>	<u>71</u>
P14		<u>39</u>	<u>79</u>			<u>39</u>	<u>75</u>
P15		<u>42</u>	<u>88</u>			<u>42</u>	<u>79</u>
P16		<u>45</u>	<u>101</u>			<u>45</u>	<u>83</u>
P17		<u>48</u>	<u>116</u>			<u>48</u>	<u>87</u>
P18		<u>51</u>	<u>134</u>			<u>51</u>	<u>91</u>
P19		<u>54</u>	<u>160</u>			<u>54</u>	<u>95</u>
P20		<u>57</u>	<u>193</u>			<u>57</u>	<u>99</u>
		<u>60</u>	<u>203</u>			<u>60</u>	<u>103</u>

1505
DST #4

7

TKT # 16446

I



Company American Energies Corporation Lease & Well No. #1 Wendell
 Elevation --- Formation Mississippi Effective Pay --- Ft. Ticker No. 16447
 Date 11/4/82 Sec. 27 Twp. 27S Range 14W County Pratt State Kansas
 Test Approved by Wm. K. Clark Western Representative Jeff Piotrowski
 Formation Test No. 5 Interval Tested from 4316 ft. to 4364 ft. Total Depth 4364 ft.
 Packer Depth 4311 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 4316 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 4354 ft. Recorder Number 1565 Cap. 4900
 Bottom Recorder Depth (Outside) 4357 ft. Recorder Number 1560 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Kaw Drilling Rig #1 Drill Collar Length - I. D. - in.
 Mud Type starch Viscosity 47 Weight Pipe Length 300 I. D. 3.2 in.
 Weight 9.6 Water Loss 16.0 cc. Drill Pipe Length 3994 I. D. 3.8 in.
 Chlorides 56,000 P.P.M. Test Tool Length 22 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 48 ft. Size 5 1/2 OD 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 XH in.

Blow: Strong throughout initial flow period. Gas to surface in fourteen minutes on final flow too small to measure

Recovered 60 ft. of gas cut mud Chlorides 45,000 ppm

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:

Time Set Packer(s) 10:45 A.M. Time Started Off Bottom 2:30 P.M. Maximum Temperature 121°
 Initial Hydrostatic Pressure 2369 P.S.I.
 Initial Flow Period 30 Minutes (A) 63 P.S.I. to (C) 63 P.S.I.
 Initial Closed In Period 60 Minutes (D) 1333 P.S.I.
 Final Flow Period 45 Minutes (E) 58 P.S.I. to (F) 58 P.S.I.
 Final Closed In Period 90 Minutes (G) 1391 P.S.I.
 Final Hydrostatic Pressure 2323 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 11/4/82 Test Ticket No. 16447

Recorder No. 1565 Capacity 4900 Location 4354 Ft.

Clock No. --- Elevation --- Well Temperature 121 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2369</u> P.S.I.	Open Tool	<u>10:45</u> A	<u>M</u>
B First Initial Flow Pressure	<u>63</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>63</u> P.S.I.	Initial Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
D Initial Closed-in Pressure	<u>1333</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>58</u> P.S.I.	Final Closed-in Pressure	<u>90</u> Mins.	<u>90</u> Mins.
F Second Final Flow Pressure	<u>58</u> P.S.I.			
G Final Closed-in Pressure	<u>1391</u> P.S.I.			
H Final Hydrostatic Mud	<u>2323</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure				Initial Shut-In				Second Flow Pressure				Final Shut-In			
Breakdown: <u>6</u> Inc.				Breakdown: <u>20</u> Inc.				Breakdown: <u>9</u> Inc.				Breakdown: <u>30</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.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 <u>0</u>	<u>63</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>63</u>	<u>0</u>	<u>58</u>	<u>0</u>	<u>58</u>	<u>0</u>	<u>58</u>	<u>0</u>	<u>58</u>	<u>0</u>	<u>58</u>
P 2 <u>5</u>	<u>63</u>	<u>3</u>	<u>181</u>	<u>5</u>	<u>58</u>	<u>3</u>	<u>183</u>	<u>5</u>	<u>58</u>	<u>3</u>	<u>183</u>	<u>5</u>	<u>58</u>	<u>3</u>	<u>183</u>
P 3 <u>10</u>	<u>63</u>	<u>6</u>	<u>297</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>270</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>270</u>	<u>10</u>	<u>58</u>	<u>6</u>	<u>270</u>
P 4 <u>15</u>	<u>63</u>	<u>9</u>	<u>401</u>	<u>15</u>	<u>58</u>	<u>9</u>	<u>361</u>	<u>15</u>	<u>58</u>	<u>9</u>	<u>361</u>	<u>15</u>	<u>58</u>	<u>9</u>	<u>361</u>
P 5 <u>20</u>	<u>63</u>	<u>12</u>	<u>506</u>	<u>20</u>	<u>58</u>	<u>12</u>	<u>448</u>	<u>20</u>	<u>58</u>	<u>12</u>	<u>448</u>	<u>20</u>	<u>58</u>	<u>12</u>	<u>448</u>
P 6 <u>25</u>	<u>63</u>	<u>15</u>	<u>601</u>	<u>25</u>	<u>58</u>	<u>15</u>	<u>530</u>	<u>25</u>	<u>58</u>	<u>15</u>	<u>530</u>	<u>25</u>	<u>58</u>	<u>15</u>	<u>530</u>
P 7 <u>30</u>	<u>63</u>	<u>18</u>	<u>691</u>	<u>30</u>	<u>58</u>	<u>18</u>	<u>606</u>	<u>30</u>	<u>58</u>	<u>18</u>	<u>606</u>	<u>30</u>	<u>58</u>	<u>18</u>	<u>606</u>
P 8		<u>21</u>	<u>775</u>	<u>35</u>	<u>58</u>	<u>21</u>	<u>675</u>	<u>35</u>	<u>58</u>	<u>21</u>	<u>675</u>	<u>35</u>	<u>58</u>	<u>21</u>	<u>675</u>
P 9		<u>24</u>	<u>853</u>	<u>40</u>	<u>58</u>	<u>24</u>	<u>742</u>	<u>40</u>	<u>58</u>	<u>24</u>	<u>742</u>	<u>40</u>	<u>58</u>	<u>24</u>	<u>742</u>
P10		<u>27</u>	<u>920</u>	<u>45</u>	<u>58</u>	<u>27</u>	<u>800</u>	<u>45</u>	<u>58</u>	<u>27</u>	<u>800</u>	<u>45</u>	<u>58</u>	<u>27</u>	<u>800</u>
P11		<u>30</u>	<u>980</u>			<u>30</u>	<u>856</u>			<u>30</u>	<u>856</u>			<u>30</u>	<u>856</u>
P12		<u>33</u>	<u>1037</u>			<u>33</u>	<u>913</u>			<u>33</u>	<u>913</u>			<u>33</u>	<u>913</u>
P13		<u>36</u>	<u>1081</u>			<u>36</u>	<u>960</u>			<u>36</u>	<u>960</u>			<u>36</u>	<u>960</u>
P14		<u>39</u>	<u>1126</u>			<u>39</u>	<u>1007</u>			<u>39</u>	<u>1007</u>			<u>39</u>	<u>1007</u>
P15		<u>42</u>	<u>1170</u>			<u>42</u>	<u>1048</u>			<u>42</u>	<u>1048</u>			<u>42</u>	<u>1048</u>
P16		<u>45</u>	<u>1204</u>			<u>45</u>	<u>1090</u>			<u>45</u>	<u>1090</u>			<u>45</u>	<u>1090</u>
P17		<u>48</u>	<u>1236</u>			<u>48</u>	<u>1125</u>			<u>48</u>	<u>1125</u>			<u>48</u>	<u>1125</u>
P18		<u>51</u>	<u>1266</u>			<u>51</u>	<u>1158</u>			<u>51</u>	<u>1158</u>			<u>51</u>	<u>1158</u>
P19		<u>54</u>	<u>1293</u>			<u>54</u>	<u>1192</u>			<u>54</u>	<u>1192</u>			<u>54</u>	<u>1192</u>
P20		<u>57</u>	<u>1319</u>			<u>57</u>	<u>1221</u>			<u>57</u>	<u>1221</u>			<u>57</u>	<u>1221</u>
		<u>60</u>	<u>1333</u>			<u>60</u>	<u>1249</u>			<u>60</u>	<u>1249</u>			<u>60</u>	<u>1249</u>

WESTERN TESTING CO., INC.

Pressure Data

Date 11/4/82 Test Ticket No. 16447
 Recorder No. 1565 Capacity 4900 Location 4354 Ft.
 Clock No. --- Elevation --- Well Temperature 121 °F
 Point Pressure Time Given Time Computed
 A Initial Hydrostatic Mud 2369 P.S.I. Open Tool 10:45 A M
 B First Initial Flow Pressure 63 P.S.I. First Flow Pressure 30 Mins. 30 Mins.
 C First Final Flow Pressure 63 P.S.I. Initial Closed-in Pressure 60 Mins. 60 Mins.
 D Initial Closed-in Pressure 1333 P.S.I. Second Flow Pressure 45 Mins. 45 Mins.
 E Second Initial Flow Pressure 58 P.S.I. Final Closed-in Pressure 90 Mins. 90 Mins.
 F Second Final Flow Pressure 58 P.S.I.
 G Final Closed-in Pressure 1391 P.S.I.
 H Final Hydrostatic Mud 2323 P.S.I.

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>20</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>30</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						63	1271
P 2						66	1291
P 3						69	1309
P 4						72	1327
P 5						75	1340
P 6						78	1352
P 7						81	1365
P 8						84	1376
P 9						87	1384
P10						90	1391
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

1505
5-5-85

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TKT # 16447

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