

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 1 Date 7/4/94
Company ANADARKO PETROLEUM CORPORATION Zone HERINGTON
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3186 KB
Co. Rep./Geo. BILLY DIXON Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay 14
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2433-3497 Drill Pipe Size 4.5" XH
Anchor Length 64 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2426 Drill Collar - 2.25 Ft. Run 609
Bottom Packer Depth 2433 Mud Wt. _____ 1 lb/Gal.
Total Depth 2497 Viscosity 81 Filtrate _____

Tool Open @ 12:40PM Initial Blow VERY WEAK BLOW FOR 30 SECONDS
STRONG BLOW TO BOTTOM IN 30 SECONDS - GAS TO SURFACE IN 30 MINUTES
Final Blow _____

Recovery - Total Feet 90 Flush Tool? NO

Rec. 90 Feet of SLIGHTLY GAS CUT SOAPY WATER 10%GAS/90%WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 0.745 @ 104 °F Chlorides 7000 ppm Recovery Chlorides 400 ppm System

A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 90 Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative ROBERT COLLINS

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

Lab Number:	940328	Analyzed:	07/06/94
Sample From:	Youngren 'J' 1-H DST 1	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Herrington

		Mole %	GPM
Helium	He:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	13.410	0.000
Carbon Dioxide	CO2:	0.111	0.000
Methane	C1:	73.894	0.000
Ethane	C2:	6.761	1.808
Propane	C3:	3.785	1.043
Iso Butane	iC4:	0.418	0.137
Normal Butane	nC4:	0.928	0.293
Iso Pentane	iC5:	0.156	0.057
Normal Pentane	nC5:	0.189	0.068
Hexanes Plus	C6+:	0.348	0.152
TOTAL:		100.000	3.558
Z Fact:		0.9975	
SP.GR.:		0.7171	
BTU (SAT):		1023.6 @ 14.73 psia	
BTU (DRY):		1041.7 @ 14.73 psia	
OCTANE RATING:		108.2	

COMMENTS: Sample entered under vacuum
 Insufficient pressure for Helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 2 Date 7/7/94
Company ANADARKO PETROLEUM CORPORATION Zone KRIDER
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3186 KB
Co. Rep./Geo. BILLY DIXON Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay 27
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2508-2535</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>27</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u> </u>
Top Packer Depth	<u>2501</u>	Drill Collar - 2.25 Ft. Run	<u>640</u>
Bottom Packer Depth	<u>2508</u>	Mud Wt.	<u>1.01</u> lb/Gal.
Total Depth	<u>2535</u>	Viscosity	<u>81</u> Filtrate <u> </u>

Tool Open @ 3:05PM Initial Blow STRONG BLOW - GAS TO SURFACE IN 5 MINUTES

Final Blow

Recovery - Total Feet 20 Flush Tool? NO

Rec. 20 Feet of SOAPY WATER
Rec. Feet of
Rec. Feet of
Rec. Feet of
Rec. Feet of

PH °F Gravity °API @ °F Corrected Gravity °API
W 1.075 @ 79 °F Chlorides 6000 ppm Recovery Chlorides ppm System

A) Initial Hydrostatic Mud PSI AK1 Recorder No. Range

(B) First Initial Flow Pressure PSI @ (depth) w / Clock No.

(C) First Final Flow Pressure PSI AK1 Recorder No. Range

(D) Initial Shut-in Pressure PSI @ (depth) w / Clock No.

(E) Second Initial Flow Pressure PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure PSI Initial Opening 90 Final Flow

(H) Final Hydrostatic Mud PSI Initial Shut-in 22 1/2 HRS Final Shut-in

Our Representative ROBERT COLLINS

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940327	Analyzed:	07/06/94
Sample From:	Youngren 'J' 1-H DST 2	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Krider

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 70.019	0.000
Carbon Dioxide	CO2: 0.434	0.000
Methane	C1: 24.164	0.000
Ethane	C2: 3.393	0.907
Propane	C3: 0.989	0.273
Iso Butane	iC4: 0.321	0.105
Normal Butane	nC4: 0.259	0.082
Iso Pentane	iC5: 0.137	0.050
Normal Pentane	nC5: 0.083	0.030
Hexanes Plus	C6+: 0.201	0.088
TOTAL:	100.000	1.535
Z Fact:	0.9992	
SP.GR.:	0.8923	
BTU (SAT):	361.7 @ 14.73 psia	
BTU (DRY):	368.1 @ 14.73 psia	
OCTANE RATING:	36.6	

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

Lab Number:	940334	Analyzed:	07/09/94
Sample From:	Youngren 'J' 1-H DST 2	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Krider

	Mole %	GPM
Helium	He: 0.489	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 13.559	0.000
Carbon Dioxide	CO2: 0.000	0.000
Methane	C1: 72.601	0.000
Ethane	C2: 6.879	1.840
Propane	C3: 3.970	1.094
Iso Butane	iC4: 0.458	0.150
Normal Butane	nC4: 1.090	0.344
Iso Pentane	iC5: 0.189	0.069
Normal Pentane	nC5: 0.296	0.107
Hexanes Plus	C6+: 0.469	0.205

TOTAL:	100.000	3.808
Z Fact:	0.9974	
SP.GR.:	0.7259	
BTU (SAT):	1035.6 @ 14.73 psia	
BTU (DRY):	1053.9 @ 14.73 psia	
OCTANE RATING:	107.2	

 COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 3 Date 7/8/94
Company ANADARKO PETROLEUM CORPORATION Zone ODDLL
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3186 KB
Co. Rep./Geo. BILLY DIXON Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay 10
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2542-2552</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>10</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u> </u>
Top Packer Depth	<u>2535</u>	Drill Collar - 2.25 Ft. Run	<u>640</u>
Bottom Packer Depth	<u>2542</u>	Mud Wt.	<u>.96</u> lb/Gal.
Total Depth	<u>2552</u>	Viscosity	<u>82</u> Filtrate <u> </u>

Well Open @ 7:50AM Initial Blow FAIR BLOW BUILT TO

Final Blow

Recovery - Total Feet 10 Flush Tool? NO

Rec. 10 Feet of SOAPY WATER
ec. Feet of
ec. Feet of
Rec. Feet of
ec. Feet of

WHT °F Gravity °API @ °F Corrected Gravity °API
W 1.418 @ 79 °F Chlorides 5000 ppm Recovery Chlorides 450 ppm System

(A) Initial Hydrostatic Mud PSI AK1 Recorder No. Range

(B) First Initial Flow Pressure PSI @ (depth) w / Clock No.

(C) First Final Flow Pressure PSI AK1 Recorder No. Range

(D) Initial Shut-in Pressure PSI @ (depth) w / Clock No.

(E) Second Initial Flow Pressure PSI AK1 Recorder No. Range

(F) Second Final Flow Pressure PSI @ (depth) w / Clock No.

(G) Final Shut-in Pressure PSI Initial Opening 90 Final Flow

(H) Final Hydrostatic Mud PSI Initial Shut-in 23 1/2 HRS Final Shut-in

Our Representative ROBERT COLLINS

NATURAL GAS ANALYSIS REPORT

Sampled by:
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Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940340B	Analyzed:	07/11/94
Sample From:	Youngren 'J' 1-H DST 3	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Odell

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	68.520
Carbon Dioxide	CO2:	0.823
Methane	C1:	25.532
Ethane	C2:	2.358
Propane	C3:	1.472
Iso Butane	iC4:	0.209
Normal Butane	nC4:	0.511
Iso Pentane	iC5:	0.047
Normal Pentane	nC5:	0.138
Hexanes Plus	C6+:	0.390

TOTAL: 100.000 1.503
Z Fact: 0.9991
SP.GR.: 0.8960
BTU (SAT): 382.0 @ 14.73 psia
BTU (DRY): 388.8 @ 14.73 psia
OCTANE RATING: 37.9

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis
Air calculated out

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
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Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940340A	Analyzed:	07/11/94
Sample From:	Youngren 'J' 1-H DST 3	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Odell

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	13.582
Nitrogen	N2:	76.316
Carbon Dioxide	CO2:	0.264
Methane	C1:	8.194
Ethane	C2:	0.757
Propane	C3:	0.472
Iso Butane	iC4:	0.067
Normal Butane	nC4:	0.164
Iso Pentane	iC5:	0.015
Normal Pentane	nC5:	0.044
Hexanes Plus	C6+:	0.125
TOTAL:	100.000	0.482
Z Fact:	0.9995	
SP.GR.:	0.9632	
BTU (SAT):	122.5 @ 14.73 psia	
BTU (DRY):	124.7 @ 14.73 psia	
OCTANE RATING:	12.2	

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis
As Analyzed

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 4 Date 7/9/94
Company ANADARKO PETROLEUM CORPORATION Zone WINFIELD
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3186 KB
Co. Rep./Geo. BILLY DIXON Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay 8
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2549-2559 Drill Pipe Size 4.5" XH
Anchor Length 10 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2542 Drill Collar - 2.25 Ft. Run 640
Bottom Packer Depth 2549 Mud Wt. _____ 1.1 lb/Gal.
Total Depth 2559 Viscosity 82 Filtrate _____

Well Open @ 10:51PM Initial Blow STRONG BLOW BOTTOM OF BUCKET AS TOOL OPENED
GAS TO SURFACE IN 25 MINUTES

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Sec. 5 Feet of SOAPY WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

WT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N 1.76 @ 73 °F Chlorides 5000 ppm Recovery Chlorides 450 ppm System

(v) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(w) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(;) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(,) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

i) Final Shut-in Pressure _____ PSI Initial Opening 90 Final Flow _____

l) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative ROBERT COLLINS

FLUID SAMPLER DATA

Ticket No.: 6901 Date: 7/9/94
 Company: ANADARKO PETROLEUM CORPORATION
 Lease: YOUNGER 'J' H-1 Test No.: 4
 County: STEVENS Sec.: 4 Twp.: 33S Rng.: 38W

SAMPLER RECOVERY

Gas 4000
 Oil
 Mud
 Water
 Other
 Pressure 85
 TOTAL 4000

PIT MUD ANALYSIS

Chlorides 450
 Resistivity ohms@ F
 Viscosity 82
 Mud Wt. 1.1
 Filtrate
 Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
 Chlorides ppm.
 Gravity corrected @60F

Resistivity ohms@ F
 Chlorides ppm

MIDDLE

Resistivity ohms@ F
 Chlorides ppm

BOTTOM

Resistivity 1.76 ohms@ 73 F
 Chlorides 5000 ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

 Lab Number: 940341 Analyzed: 07/11/94
 Sample From: Youngren 'J' 1-H DST 4 Pressure:
 Producer: Anadarko Temperature:
 Date: Location: 4-33-38W
 Time: County: Stevens
 Sampler: State: Kansas
 Source: Formation: Winfield
 ----- Sand

		Mole %	GPM
Helium	He:	0.424	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	13.812	0.000
Carbon Dioxide	CO2:	0.000	0.000
Methane	C1:	73.583	0.000
Ethane	C2:	6.679	1.786
Propane	C3:	3.696	1.018
Iso Butane	iC4:	0.412	0.135
Normal Butane	nC4:	0.921	0.290
Iso Pentane	iC5:	0.139	0.051
Normal Pentane	nC5:	0.162	0.059
Hexanes Plus	C6+:	0.172	0.075
TOTAL:		100.000	3.414
Z Fact:		0.9976	
SP.GR.:		0.7089	
BTU (SAT):		1005.7 @ 14.73 psia	
BTU (DRY):		1023.5 @ 14.73 psia	
OCTANE RATING:		107.6	

 COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 5 Date 7/11/94
Company ANADARKO PETROLEUM CORPORATION Zone WINFIELD CAR
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3186 KB
Co. Rep./Geo. BILLY DIXON Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2565-2591 Drill Pipe Size 4.5" XH
Anchor Length 26 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2559 Drill Collar - 2.25 Ft. Run 640
Bottom Packer Depth 2565 Mud Wt. .92 lb/Gal.
Total Depth 2591 Viscosity 82 Filtrate _____

Tool Open @ 1:15 P.M. Initial Blow STRONG BLOW BOTTOM OF BUCKET AS TOOL OPENED
GAS TO SURFACE IN 15 MIN

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Sec. 5 Feet of SOAPY WATER 100% WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Sec. _____ Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W 1.323 @ 97 °F Chlorides 5000 ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____
(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure _____ PSI Initial Opening 90 Final Flow _____
(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative ROBERT COLLINS

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
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Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number: 940342 Analyzed: 07/11/94
Sample From: Youngren 'J' 1-H DST 5 Pressure:
Producer: Anadarko Temperature:
Date: Location: 4-33-38W
Time: County: Stevens
Sampler: State: Kansas
Source: Formation: Winfield

Carbonate

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	13.607
Carbon Dioxide	CO2:	0.077
Methane	C1:	73.313
Ethane	C2:	6.778
Propane	C3:	3.917
Iso Butane	iC4:	0.451
Normal Butane	nC4:	1.032
Iso Pentane	iC5:	0.137
Normal Pentane	nC5:	0.232
Hexanes Plus	C6+:	0.456
	TOTAL:	100.000
	Z Fact:	0.9974
	SP.GR.:	0.7244
	BTU (SAT):	1032.3 @ 14.73 psia
	BTU (DRY):	1050.5 @ 14.73 psia
	OCTANE RATING:	107.8

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 6 Date 7/13/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2598-2608 Drill Pipe Size 4.5" XH
Anchor Length 10 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2590 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2598 Mud Wt. _____ 1.1 lb/Gal.
Total Depth 2608 Viscosity 83 Filtrate _____

Well Open @ 1:00 A.M. Initial Blow 1/2 BLOW OPEN 2 IN

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

PHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
V 1.94 @ 64 °F Chlorides 3400 ppm Recovery Chlorides 1450 ppm System

(a) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(b) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(c) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(d) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(e) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(f) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(g) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(h) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
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Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940345B	Analyzed:	07/16/94
Sample From:	Youngren 'J' 1-H DST 6	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Chase, Gage

	Mole %	GPM
Helium	He: 0.372	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 15.436	0.000
Carbon Dioxide	CO2: 0.099	0.000
Methane	C1: 71.989	0.000
Ethane	C2: 6.428	1.719
Propane	C3: 3.711	1.023
Iso Butane	iC4: 0.436	0.143
Normal Butane	nC4: 0.985	0.311
Iso Pentane	iC5: 0.130	0.048
Normal Pentane	nC5: 0.186	0.067
Hexanes Plus	C6+: 0.228	0.099

TOTAL:	100.000	3.409
Z Fact:	0.9976	
SP.GR.:	0.7188	
BTU (SAT):	992.0 @ 14.73 psia	
BTU (DRY):	1009.6 @ 14.73 psia	
OCTANE RATING:	105.4	

COMMENTS: Air calculated out

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
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Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940345A	Analyzed:	07/16/94
Sample From:	Youngren 'J' 1-H DST 6	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Chase, Gage

	Mole %	GPM
Helium	He: 0.318	0.000
Oxygen	O2: 2.923	0.000
Nitrogen	N2: 24.874	0.000
Carbon Dioxide	CO2: 0.085	0.000
Methane	C1: 61.465	0.000
Ethane	C2: 5.488	1.468
Propane	C3: 3.169	0.873
Iso Butane	iC4: 0.372	0.122
Normal Butane	nC4: 0.841	0.265
Iso Pentane	iC5: 0.111	0.041
Normal Pentane	nC5: 0.159	0.058
Hexanes Plus	C6+: 0.195	0.085

TOTAL: 100.000 2.911
Z Fact: 0.9980
SP.GR.: 0.7591
BTU (SAT): 846.7 @ 14.73 psia
BTU (DRY): 861.7 @ 14.73 psia
OCTANE RATING: 90.0

COMMENTS: As Analyzed

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 7 Date 7/14/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2597-2608 Drill Pipe Size 4.5" XH
Anchor Length 11 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2589 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2597 Mud Wt. 1.1 lb/Gal.
Total Depth 2608 Viscosity 83 Filtrate _____

Blow Open @ 6:50 A.M. Initial Blow 1 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Sec. 5 Feet of WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
V 0.68 @ 76 °F Chlorides 8200 ppm Recovery Chlorides 1450 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940346	Analyzed:	07/16/94
Sample From:	Youngren 'J' 1-H DST 7	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Chase, Gage

	Mole %	GPM
Helium	He: 0.275	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 14.100	0.000
Carbon Dioxide	CO2: 0.000	0.000
Methane	C1: 72.909	0.000
Ethane	C2: 6.823	1.825
Propane	C3: 3.853	1.062
Iso Butane	iC4: 0.428	0.140
Normal Butane	nC4: 0.966	0.305
Iso Pentane	iC5: 0.126	0.046
Normal Pentane	nC5: 0.202	0.073
Hexanes Plus	C6+: 0.318	0.139

TOTAL: 100.000 3.589
Z Fact: 0.9975
SP.GR.: 0.7183
BTU (SAT): 1015.9 @ 14.73 psia
BTU (DRY): 1033.9 @ 14.73 psia
OCTANE RATING: 107.1

COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 8 Date 7/15/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2617-2658</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>41</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>2612</u>	Drill Collar - 2.25 Ft. Run	<u>642</u>
Bottom Packer Depth	<u>2617</u>	Mud Wt.	<u>1.0</u> lb/Gal.
Total Depth	<u>2658</u>	Viscosity	<u>83</u> Filtrate _____

Well Open @ 10:20 A.M. Initial Blow STRONG BLOW-OPEN 2 IN (GAS TO SURFACE IN 12 MIN)

Final Blow _____

Recovery - Total Feet 15 Flush Tool? NO

Rec. 15 Feet of WATER
ec. _____ Feet of _____
ec. _____ Feet of _____
Rec. _____ Feet of _____
ec. _____ Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W 1.9 @ 90 °F Chlorides 2250 ppm Recovery Chlorides 600 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940347	Analyzed:	07/16/94
Sample From:	Youngren 'J' 1-H DST 8	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Chase, Towanda

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	13.815
Carbon Dioxide	CO2:	0.075
Methane	C1:	72.963
Ethane	C2:	6.802
Propane	C3:	3.972
Iso Butane	iC4:	0.472
Normal Butane	nC4:	1.071
Iso Pentane	iC5:	0.155
Normal Pentane	nC5:	0.256
Hexanes Plus	C6+:	0.419

TOTAL: 100.000 3.738
Z Fact: 0.9974
SP.GR.: 0.7266
BTU (SAT): 1032.3 @ 14.73 psia
BTU (DRY): 1050.6 @ 14.73 psia
OCTANE RATING: 107.5

COMMENTS: Sample entered under vaccum
Insufficient pressure for Helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 9 Date 7/17/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2616-2658</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>42</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>2611</u>	Drill Collar - 2.25 Ft. Run	<u>642</u>
Bottom Packer Depth	<u>2616</u>	Mud Wt.	<u>1.0</u> lb/Gal.
Total Depth	<u>2658</u>	Viscosity	<u>83</u> Filtrate _____

Tool Open @ 9:15 A.M. Initial Blow STRONG BLOW - OPEN 2 IN (GAS TO SURFACE IN 10 MIN)

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N 1.81 @ 95 °F Chlorides 2400 ppm Recovery Chlorides 600 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(J) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(I) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(F) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(r) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(S) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(I) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6726 Date: 7/17/94
Company: ANADARKO PETROLEUM CORPORATION
Lease: YOUNGER 'J' H-1 Test No.: 9
County: STEVENS Sec.: 4 Twp.: 33S Rng.: 38W

SAMPLER RECOVERY

Gas 4000
Oil
Mud
Water
Other
Pressure 80
TOTAL 4000

PIT MUD ANALYSIS

Chlorides 600
Resistivity ohms@ F
Viscosity 83
Mud Wt. 1
Filtrate
Other

SAMPLER ANALYSIS

Resistivity ohms@ F
Chlorides ppm.
Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity 1.81 ohms@ 95 F
Chlorides 2400 ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 10 Date 7/18/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE (HOLMES)
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2665-2672 Drill Pipe Size 4.5" XH
Anchor Length 7 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2657 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2665 Mud Wt. 1.15 lb/Gal.
Total Depth 2672 Viscosity 87 Filtrate _____

Tool Open @ 8:50 P.M. Initial Blow NO BLOW - FLUSHED TOOL - NO BLOW

Final Blow NO BLOW

Recovery - Total Feet 0 Flush Tool? YES

Sec. 0 Feet of _____
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 450 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 11 Date 7/20/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE-UP FT.
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2678-2713 Drill Pipe Size 4.5" XH
Anchor Length 35 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2670 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2678 Mud Wt. .86 lb/Gal.
Total Depth 2713 Viscosity 87 Filtrate _____

Well Open @ 10:00 A.M. Initial Blow STRONG BLOW-OPEN 2 IN (GAS TO SURFACE IN 10 MIN)

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Sec. 5 Feet of WATER
1C. _____ Feet of _____
2C. _____ Feet of _____
3C. _____ Feet of _____
4C. _____ Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N 1.1 @ 82 °F Chlorides 4900 ppm Recovery Chlorides 750 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6728 Date: 7/20/94
 Company: ANADARKO PETROLEUM CORPORATION
 Lease: YOUNGER 'J' H-1 Test No.: 11
 County: STEVENS Sec.: 4 Twp.: 33S Rng.: 38W

SAMPLER RECOVERY

Gas 4000
 Oil
 Mud
 Water
 Other
 Pressure 200
 TOTAL 4000

PIT MUD ANALYSIS

Chlorides 750
 Resistivity ohms@ F
 Viscosity 0.86
 Mud Wt. 87
 Filtrate
 Other FOAM

SAMPLER ANALYSIS

Resistivity ohms@ F
 Chlorides ppm.
 Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F
 Chlorides ppm

MIDDLE

Resistivity ohms@ F
 Chlorides ppm

BOTTOM

Resistivity 1.1 ohms@ 82 F
 Chlorides 4900 ppm

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 12 Date 7/21/94
Company ANADARKO PETROLEUM CORPORATION Zone L. FT. RILEY
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2718-2728 Drill Pipe Size 4.5" XH
Anchor Length 10 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2710 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2718 Mud Wt. 1.04 lb/Gal.
Total Depth 2728 Viscosity 87 Filtrate _____

Well Open @ 9:23 P.M. Initial Blow 1/4 BLOW - OPEN 2 IN

Final Blow _____

Recovery - Total Feet 0 Flush Tool? NO

Sec. 0 Feet of _____
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

API _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
V _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 500 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 13 Date 7/21/94
Company ANADARKO PETROLEUM CORPORATION Zone FLORENCE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2734-2746 Drill Pipe Size 4.5" XH
Anchor Length 12 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2726 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2734 Mud Wt. .87 lb/Gal.
Total Depth 2746 Viscosity 88 Filtrate _____

Well Open @ 1:21 P.M. Initial Blow 1/2 BLOW - OPEN 2 IN

Final Blow _____

Recovery - Total Feet 0 Flush Tool? NO

1. _____ Feet of _____
2. _____ Feet of _____
3. _____ Feet of _____
4. _____ Feet of _____
Rec. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 450 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(u) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

i) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

l) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940357	Analyzed:	07/25/94
Sample From:	Youngren 'J' 1-H DST 13	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Florence

		Mole %	GPM
Helium	He:	0.597	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	12.484	0.000
Carbon Dioxide	CO2:	0.000	0.000
Methane	C1:	73.196	0.000
Ethane	C2:	7.029	1.880
Propane	C3:	4.281	1.180
Iso Butane	iC4:	0.527	0.172
Normal Butane	nC4:	1.246	0.393
Iso Pentane	iC5:	0.209	0.076
Normal Pentane	nC5:	0.222	0.080
Hexanes Plus	C6+:	0.209	0.091

TOTAL: 100.000 3.873
Z Fact: 0.9974
SP.GR.: 0.7201
BTU (SAT): 1043.8 @ 14.73 psia
BTU (DRY): 1062.3 @ 14.73 psia
OCTANE RATING: 108.5

COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 14 Date 7/25/94
Company ANADARKO PETROLEUM CORPORATION Zone WREFORD
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2763-2788 Drill Pipe Size 4.5" XH
Anchor Length 25 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2755 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2763 Mud Wt. 1.0 lb/Gal.
Total Depth 2788 Viscosity 90 Filtrate _____

Well Open @ 4:49 A.M. Initial Blow STRONG BLOW OPEN 2 IN.

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Sec. 5 Feet of WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

HT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W 1.8 @ 94 °F Chlorides 2400 ppm Recovery Chlorides 750 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940358	Analyzed:	07/26/94
Sample From:	Youngren 'J' 1-H DST 14	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Wreford

	Mole %	GPM
Helium	He: 0.801	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 15.363	0.000
Carbon Dioxide	CO2: 0.072	0.000
Methane	C1: 73.382	0.000
Ethane	C2: 6.769	1.810
Propane	C3: 3.829	1.055
Iso Butane	iC4: 0.442	0.145
Normal Butane	nC4: 0.986	0.311
Iso Pentane	iC5: 0.163	0.060
Normal Pentane	nC5: 0.202	0.073
Hexanes Plus	C6+: 0.191	0.083
TOTAL:	100.000	3.537
Z Fact:	0.9975	
SP.GR.:	0.7119	
BTU (SAT):	1015.2 @ 14.73 psia	
BTU (DRY):	1033.1 @ 14.73 psia	
OCTANE RATING:	107.7	

COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 15 Date 7/26/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2426-2788 Drill Pipe Size 4.5" XH
Anchor Length 362 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2418 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2426 Mud Wt. _____ 1.01 lb/Gal.
Total Depth 2788 Viscosity 90 Filtrate _____

Tool Open @ 5:08 Initial Blow STRONG BLOW - OPEN 2 IN

Final Blow _____

Recovery - Total Feet 1 Flush Tool? NO

Sec. 1 Feet of WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

HT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 950 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 36 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6732 **Date:** 7/26/94
Company: ANADARKO PETROLEUM CORPORATION
Lease: YOUNGER 'J' H-1 **Test No.:** 15
County: STEVENS **Sec.:** 4 **Twp.:** 33S **Rng.:** 38W

SAMPLER RECOVERY

Gas 4000
Oil
Mud
Water
Other
Pressure 60
TOTAL 4000

PIT MUD ANALYSIS

Chlorides 950
Resistivity ohms@ F
Viscosity 90
Mud Wt. 1.01
Filtrate
Other FOAM

SAMPLER ANALYSIS

Resistivity ohms@ F
Chlorides ppm.
Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity ohms@ F
Chlorides ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940359	Analyzed:	07/26/94
Sample From:	Youngren 'J' 1-H DST 15	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Chase
			Comingled

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	13.377
Carbon Dioxide	CO2:	0.000
Methane	C1:	73.775
Ethane	C2:	6.790
Propane	C3:	3.888
Iso Butane	iC4:	0.441
Normal Butane	nC4:	1.055
Iso Pentane	iC5:	0.209
Normal Pentane	nC5:	0.244
Hexanes Plus	C6+:	0.221

TOTAL: 100.000 3.625
Z Fact: 0.9975
SP.GR.: 0.7180
BTU (SAT): 1028.2 @ 14.73 psia
BTU (DRY): 1046.4 @ 14.73 psia
OCTANE RATING: 108.4

COMMENTS: Sample entered under vacuum
Insufficient pressure for Helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 16 Date 7/28/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Geo. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2787-2803</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>16</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>2779</u>	Drill Collar - 2.25 Ft. Run	<u>642</u>
Bottom Packer Depth	<u>2787</u>	Mud Wt.	<u>1.0</u> lb/Gal.
Total Depth	<u>2803</u>	Viscosity	<u>90</u> Filtrate _____

Tool Open @ 4:36 P.M. Initial Blow 2 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 10 Flush Tool? NO

Rec. <u>10</u>	Feet of <u>WATER</u>
ec. _____	Feet of _____
ec. _____	Feet of _____
Rec. _____	Feet of _____
ec. _____	Feet of _____

WT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N 1.4 @ 85 °F Chlorides 3600 ppm Recovery Chlorides 920 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

Lab Number:	940375	Analyzed:	08/01/94
Sample From:	Youngren 'J' 1-H DST 16	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	Council Grove

----- 'A'

	Mole %	GPM
Helium	He: 0.582	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 13.709	0.000
Carbon Dioxide	CO2: 0.000	0.000
Methane	C1: 73.441	0.000
Ethane	C2: 6.711	1.795
Propane	C3: 3.691	1.017
Iso Butane	iC4: 0.413	0.135
Normal Butane	nC4: 0.960	0.303
Iso Pentane	iC5: 0.182	0.067
Normal Pentane	nC5: 0.185	0.067
Hexanes Plus	C6+: 0.126	0.055
TOTAL:	100.000	3.438
Z Fact:	0.9976	
SP.GR.:	0.7085	
BTU (SAT):	1006.3 @ 14.73 psia	
BTU (DRY):	1024.1 @ 14.73 psia	
OCTANE RATING:	17.5	

COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 17 Date 7/30/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2808-2853 Drill Pipe Size 4.5" XH
Anchor Length 45 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2802 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2808 Mud Wt. _____ .98 lb/Gal.
Total Depth 2853 Viscosity 91 Filtrate _____

Tool Open @ 7:52 A.M. Initial Blow 1/4 BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet _____ Flush Tool? NO

Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

HT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 950 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 45 MIN Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. _____ Date 7/31/94
Company ANADARKO PETROLEUM CORPORATION Zone _____
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2388-2853 Drill Pipe Size 4.5" XH
Anchor Length 465 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2382 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2388 Mud Wt. _____ lb/Gal.
Total Depth 2853 Viscosity _____ Filtrate _____

Well Open @ _____ Initial Blow SET PACKERS IN 8 5/8 TO STOP GAS FLOW SO THAT
THE CASING COULD BE WELDED

Final Blow _____

Recovery - Total Feet _____ Flush Tool? _____

Rec. _____ Feet of _____
ec. _____ Feet of _____
ec. _____ Feet of _____
Rec. _____ Feet of _____
ec. _____ Feet of _____

HT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening _____ Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in _____ Final Shut-in _____

Our Representative TOM HORACEK

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 18 Date 8/1/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested	<u>2860-2888</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>28</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>2854</u>	Drill Collar - 2.25 Ft. Run	<u>642</u>
Bottom Packer Depth	<u>2860</u>	Mud Wt.	<u>1.15</u> lb/Gal.
Total Depth	<u>2888</u>	Viscosity	<u>92</u> Filtrate _____

Well Open @ 1:00 A.M. Initial Blow 2 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 5 Flush Tool? NO

Rec. 5 Feet of _____
ec. _____ Feet of _____
ec. _____ Feet of _____
Rec. _____ Feet of _____
ec. _____ Feet of _____

WHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W 1.5 @ 78 °F Chlorides 3600 ppm Recovery Chlorides 880 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

 Lab Number: 940377 Analyzed: 08/02/94
 Sample From: Youngren 'J' 1-H DST 18 Pressure:
 Producer: Anadarko Temperature:
 Date: Location: 4-33-38W
 Time: County: Stevens
 Sampler: State: Kansas
 Source: Formation: C. G. B-1

		Mole %	GPM
Helium	He:	0.532	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	15.922	0.000
Carbon Dioxide	CO2:	0.000	0.000
Methane	C1:	72.100	0.000
Ethane	C2:	6.288	1.682
Propane	C3:	3.345	0.922
Iso Butane	iC4:	0.399	0.131
Normal Butane	nC4:	0.873	0.275
Iso Pentane	iC5:	0.176	0.064
Normal Pentane	nC5:	0.192	0.070
Hexanes Plus	C6+:	0.173	0.075
TOTAL:		100.000	3.219
Z Fact:		0.9977	
SP.GR.:		0.7122	
BTU (SAT):		976.0 @ 14.73 psia	
BTU (DRY):		993.3 @ 14.73 psia	
OCTANE RATING:		104.9	

 COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 19 Date 8/2/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. JAMES DRUYFF Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2893-2908 Drill Pipe Size 4.5" XH
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2887 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2893 Mud Wt. 1.1 lb/Gal.
Total Depth 2908 Viscosity 92 Filtrate _____

Tool Open @ 1:01 P.M. Initial Blow 2 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 1 Flush Tool? NO

Sec. 1 Feet of WATER
Sec. _____ Feet of _____
Sec. _____ Feet of _____
Rec. _____ Feet of _____
Sec. _____ Feet of _____

PH 0.6 °F Gravity 100 °API @ _____ °F Corrected Gravity _____ °API
Clorides 3100 ppm Recovery Clorides 1050 ppm System

A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940381	Analyzed:	08/03/94
Sample From:	Youngren 'J' 1-H DST 19	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	C. G. B-2

		Mole %	GPM
Helium	He:	0.482	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	16.688	0.000
Carbon Dioxide	CO2:	0.000	0.000
Methane	C1:	72.169	0.000
Ethane	C2:	6.028	1.612
Propane	C3:	3.118	0.859
Iso Butane	iC4:	0.359	0.117
Normal Butane	nC4:	0.757	0.239
Iso Pentane	iC5:	0.150	0.055
Normal Pentane	nC5:	0.149	0.054
Hexanes Plus	C6+:	0.100	0.044

TOTAL:	100.000	2.980
Z Fact:	0.9978	
SP.GR.:	0.7065	
BTU (SAT):	955.0 @ 14.73 psia	
BTU (DRY):	971.9 @ 14.73 psia	
OCTANE RATING:	104.3	

COMMENTS:

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 20 Date 8/4/94'
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. MATHEW GOOLSBY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2913-2940 Drill Pipe Size 4.5" XH
Anchor Length 27 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2907 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2913 Mud Wt. _____ lb/Gal.
Total Depth 2940 Viscosity 94 Filtrate _____

Well Open @ 2:30 A.M. Initial Blow 3 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 10 Flush Tool? NO

10
C. _____ Feet of _____
C. _____ Feet of _____
C. _____ Feet of _____
Rec. _____ Feet of _____
C. _____ Feet of _____

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N 0.72 @ 65 °F Chlorides 9600 ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940389	Analyzed:	08/04/94
Sample From:	Youngren 'J' 1-H DST 20	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	C. G. B-3-4

	Mole %	GPM
Helium	He:	
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 17.057	0.000
Carbon Dioxide	CO2: 0.137	0.000
Methane	C1: 71.699	0.000
Ethane	C2: 5.960	1.594
Propane	C3: 3.364	0.927
Iso Butane	iC4: 0.400	0.131
Normal Butane	nC4: 0.906	0.286
Iso Pentane	iC5: 0.152	0.056
Normal Pentane	nC5: 0.174	0.063
Hexanes Plus	C6+: 0.151	0.066
TOTAL:	100.000	3.122
Z Fact:	0.9977	
SP.GR.:	0.7181	
BTU (SAT):	965.0 @ 14.73 psia	
BTU (DRY):	982.1 @ 14.73 psia	
OCTANE RATING:	104.1	

COMMENTS: Sample Entered under vacuum
Insufficient pressure for helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 21 Date 8/5/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. MATHEW GOOLSBY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2945-2960 Drill Pipe Size 4.5" XH
Anchor Length 15 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2939 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2945 Mud Wt. 1.05 lb/Gal.
Total Depth 2960 Viscosity 92 Filtrate _____

Well Open @ 4:12 P.M. Initial Blow 4 IN BLOW-OPEN 2 IN

Final Blow _____

Recovery - Total Feet 0 Flush Tool? NO

0 Feet of _____
0 Feet of _____
0 Feet of _____
0 Feet of _____
0 Feet of _____

RHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
N _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1250 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____

(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____

(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure _____ PSI Initial Opening 1 1/2 HRS Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 22 1/2 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6739

Date: 8/5/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: YOUNGER 'J' H-1

Test No.: 21

County: STEVENS

Sec.: 4

Twp.: 33S

Rng.: 38W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 170

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1250

Resistivity ohms@ F

Viscosity 92

Mud Wt. 1.05

Filtrate

Other FOAM

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity ohms@ F

Chlorides ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7108

Lab Number:	940392	Analyzed:	08/06/94
Sample From:	Youngren 'J' 1-H DST 21	Pressure:	
Producer:	Anadarko	Temperature:	
Date:		Location:	4-33-38W
Time:		County:	Stevens
Sampler:		State:	Kansas
Source:		Formation:	C. G.

-----B-3-5

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	17.053
Carbon Dioxide	CO2:	0.112
Methane	C1:	71.794
Ethane	C2:	5.962
Propane	C3:	3.318
Iso Butane	iC4:	0.402
Normal Butane	nC4:	0.871
Iso Pentane	iC5:	0.124
Normal Pentane	nC5:	0.159
Hexanes Plus	C6+:	0.205

TOTAL: 100.000 3.107

Z Fact: 0.9977

SP.GR.: 0.7176

BTU (SAT): 964.8 @ 14.73 psia

BTU (DRY): 981.9 @ 14.73 psia

OCTANE RATING: 104.1

COMMENTS: Sample Entered under vacuum
Insufficient pressure for helium analysis

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name YOUNGER 'J' H-1 Test No. 22 Date 8/7/94
Company ANADARKO PETROLEUM CORPORATION Zone COUNCIL GROV
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3175 KB
Co. Rep./Geo. MATHEW GOOLSBY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 4 Twp. 33S Rge. 38W Co. STEVENS State KS

Interval Tested 2788-2960 Drill Pipe Size 4.5" XH
Anchor Length 172 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2782 Drill Collar - 2.25 Ft. Run 642
Bottom Packer Depth 2788 Mud Wt. _____ .95 lb/Gal.
Total Depth 2960 Viscosity 94 Filtrate _____

Well Open @ 2:31 A.M. Initial Blow 3 IN BLOW-OPEN 2 IN
Final Blow _____

Recovery - Total Feet 0 Flush Tool? NO

Rec. 0 Feet of _____
c. _____ Feet of _____
c. _____ Feet of _____
Rec. _____ Feet of _____
c. _____ Feet of _____

API _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
V _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1000 ppm System

(A) Initial Hydrostatic Mud _____ PSI AK1 Recorder No. _____ Range _____
(B) First Initial Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(C) First Final Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(D) Initial Shut-in Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(E) Second Initial Flow Pressure _____ PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure _____ PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure _____ PSI Initial Opening 1 HOUR Final Flow _____
(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 36 HRS Final Shut-in _____

Our Representative TOM HORACEK

NATURAL GAS ANALYSIS REPORT

Sampled by:
 Trilobite Testing, L.L.C.
 Hays, Kansas
 Scott City, Kansas
 Phone: 800-728-5369
 Fax: 913-625-5620

Analyzed by:
 Caraway Analytical, L.L.C.
 728 North Roosevelt
 Liberal, Kansas 67901
 Phone: 316-324-5389
 Fax: 316-626-7108

 Lab Number: 940393 Analyzed: 08/07/94
 Sample From: Youngren 'J' 1-H DST 22 Pressure:
 Producer: Anadarko Temperature:
 Date: Location: 4-33-38W
 Time: County: Stevens
 Sampler: State: Kansas
 Source: Formation: Council
 -----Grove

	Mole %	GPM
Helium	He:	0.000
Oxygen	O2:	0.000
Nitrogen	N2:	16.756
Carbon Dioxide	CO2:	0.108
Methane	C1:	72.198
Ethane	C2:	5.991
Propane	C3:	3.264
Iso Butane	iC4:	0.389
Normal Butane	nC4:	0.830
Iso Pentane	iC5:	0.110
Normal Pentane	nC5:	0.163
Hexanes Plus	C6+:	0.191
TOTAL:		100.000
Z Fact:		0.9977
SP.GR.:		0.7145
BTU (SAT):		965.2 @ 14.73 psia
BTU (DRY):		982.3 @ 14.73 psia
OCTANE RATING:		104.5

 COMMENTS: Sample Entered under vacuum
 Insufficient pressure for helium analysis