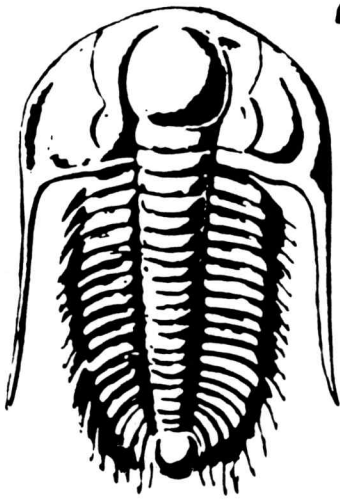


35-32-40W
15-129-21249



**TRILOBITE
TESTING, L.L.C.**

TEST REPORT

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 1 Date 1/8/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON Est. Ft. of Pay KS

Interval Tested 2296-2339 Drill Pipe Size 4.5" XH
Anchor Length 43 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2288 Drill Collar - 2.25 Ft. Run 653
Bottom Packer Depth 2296 Mud Wt. 1.3 lb/Gal.
Total Depth 2339 Viscosity 80 Filtrate _____

Tool Open @ 1:00 AM Initial Blow STRONG BLOW-BUILT TO BOTTOM OF BUCKET IN 30 SECONDS
GAS TO SURFACE IN 15 MINUTES

Final Blow _____

Recovery - Total Feet 30 Flush Tool? NO

Rec. 30 Feet of FOAMY WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT _____ °F Gravity 46 °API @ _____ °F Corrected Gravity _____ °API
RW 1.6 @ _____ °F Chlorides 6000 ppm Recovery Chlorides 1650 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 MIN Final Flow _____

(H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23.5 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6637

Date: 1/8/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY #1-H

Test No.: 1

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 125

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1650

Resistivity ohms@ F

Viscosity 80

Mud Wt. 1.3

Filtrate

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity 1.6 ohms@ 46 F

Chlorides 6000 ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 913-621-5620

Analyzed by:
Caraway Analytical, L.L.C.
28 North Roosevelt
Liberal, Kansas 67901
Phone: 316-524-5389
Fax: 316-524-7108

Lab Number: 940603
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 1

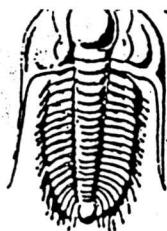
Analyzed: 01/09/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Chase

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 14.701	0.000
Carbon Dioxide	CO2: 0.114	0.000
Methane	C1: 72.069	0.000
Ethane	C2: 6.517	1.743
Propane	C3: 3.993	1.089
Isobutane	iC4: 0.433	0.141
Normal Butane	nC4: 1.264	0.399
Isopentane	iC5: 0.241	0.088
Normal Pentane	nC5: 0.430	0.136
Hexanes Plus	C6+: 0.878	0.303

TOTAL: 100.000 3.899
Z Fact: 0.9973
SP.GR.: 0.7415
BTU (SAT): 1056.6 @ 14.73 psia
BTU (DRY): 1075.3 @ 14.73 psia

COMMENTS:

Sample entered under vacuum
Insufficient pressure for Helium Analysis



**TRILOBITE
TESTING L.L.C.**

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

ID
3/4"

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

Shale
Packer

8'

Total depth 2339'

2288'

2296'

Cornell University
DST #1

← Rec.

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6637 Date 1-8-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. 1 H Test No. 41
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 125 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
Resistivity _____ ohms @ _____ F
Viscosity 80
Mud Weight 1.3
Filtrate _____
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity 1.6 ohms @ 46 F
Chlorides 6000 ppm.

Test Ticket

No 6637

Well Name & No. Cornell Univ. #1-H Test No. #1 Date 1-8-94
 Company Anadarko Petroleum Corporation Zone Tested Chase (Up. Knider)
 Address Box 351 Liberal KS 67905-0351 Elevation _____
 Co. Rep./Geo. Todd Montgomery Cont. Norseman Dls #1 Est. Ft. of Pay _____
 Location: Sec. 35 Twp. 32 Rge. 40 Co. Morton State KS
 No. of Copies _____ Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested 2296-2339 Drill Pipe Size 4.5 x-Hole
 Anchor Length 43' Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 2288 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 2296 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2339 Drill Collar — 2.25 Ft. Run 653'
 Mud Wt. 1.3 lb/gal. Viscosity 80 Filtrate _____
 Tool Open @ 1:00 AM Initial Blow Strong blow - built to bottom of bucket in 30 sec.
(GTS in 15 min.)

Final Blow _____

Recovery — Total Feet 30' Feet of Gas in Pipe _____ Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. <u>30'</u>	Feet Of <u>foamy water</u>	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 1.6 @ 46 °F Chlorides 6000 ppm Recovery Chlorides 1650 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 min. Test 600.00
 (H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 1/2 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00
 Final Shut-In _____ ~~Standby~~ 200.00

Circ. Sub _____

Sampler 200.00SHALE Extra Packer 100.00SHALE Other Packer 100.00TOTAL PRICE \$ 1450.00Approved By [Signature]Our Representative Tom Hordeck

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 2 Date 1/9/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested 2342-2360 Drill Pipe Size 4.5" XH
Anchor Length 18 Wt. Pipe I.D. - 2.7 Ft. Run 653
Top Packer Depth 2337 Drill Collar - 2.25 Ft. Run 1
Bottom Packer Depth 2342 Mud Wt. 80 lb/Gal.
Total Depth 2360 Viscosity 80 Filtrate

Tool Open @ 3:05 PM Initial Blow STRONG BLOW-BUILT TO BOTTOM OF BUCKET IN 30 SECONDS
GAS TO SURFACE IN 2 MINUTES

Final Blow

Recovery - Total Feet 0 Flush Tool? NO

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

BHT °F Gravity °API @ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides 1100 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 MIN Final Flow

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6638

Date: 1/9/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY #1-H

Test No.: 2

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 50

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@

F

Chlorides

ppm.

Gravity

corrected @60F

PIT MUD ANALYSIS

Chlorides 1100

Resistivity ohms@ F

Viscosity 80

Mud Wt. 1

Filtrate

Other

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: 913-623-5620

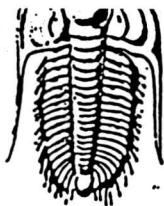
Analyzed by:
Caraway Analytical, L.L.C.
723 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-6389
Fax: 316-626-7108

Lab Number:	940005	Analyzed:	01/09/94
Sample From:	Cornell Univ 1H	Pressure:	
Producer:	Anadarko Pet. Corp.	Temperature:	
Date:		Location:	35-32-40
Time:		County:	Morton
Sampler:		State:	Kansas
Source:	DST 2	Formation:	Chase

		Mole %	GPM
Helium	He:	0.000	0.000
Oxygen	O2:	0.000	0.000
Nitrogen	N2:	0.000	0.000
Carbon Dioxide	CO2:	0.000	0.000
Methane	C1:	0.000	0.000
Ethane	C2:	0.000	0.000
Propane	C3:	0.000	0.000
Iso Butane	iC4:	0.000	0.000
Normal Butane	nC4:	0.000	0.000
Iso Pentane	iC5:	0.000	0.000
Normal Pentane	nC5:	0.000	0.000
Hexanes Plus	C6+:	0.000	0.000
TOTAL:		0.000	0.000
Z Fact:		1.0000	
SP.GR.:		0.0000	
BTU (SAT):		0.0 @ 14.73 psia	
BTU (DRY):		0.0 @ 14.73 psia	

COMMENTS:

Analyzer Malfuction
No enough pressure for second analysis
No Charge -- We apologize



MILUBITE
TESTING L.L.C.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

ID
3/4"

Jars

5'

Safety Jt.

2'

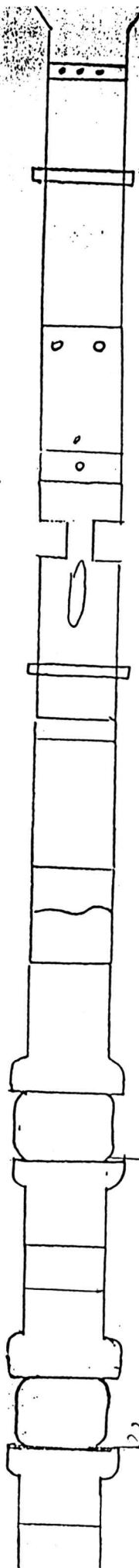
Shale
Packer

8'

Shale
Packer

4'

2'



000	2'
000	1'
000	1'
000	5'
000	3'
000	4'

REC.

2348'

2352'

2356'

Total depth 2360'

Cornell University
DST #2

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6638 Date 1-9-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. 1-H Test No. 42
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 50 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 1100 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 80
Mud Weight 1.0
Filtrate _____
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

Test Ticket

№ 6638

Well Name & No. Cornell Univ. #1 H Test No. #2 Date 1-9-94
 Company Anadarko Pet. Corp. Zone Tested Chase (L. Krider)
 Address Box 351 Liberal Ks. 67905-0351 Elevation 3226 (KB)
 Co. Rep./Geo. Todd Montgomery Cont. Norseman Dels #1 Est. Ft. of Pay _____
 Location: Sec. 35 Twp. 32 Rge. 40 Co. Morton State Ks.
 No. of Copies _____ Distribution Sheet _____ Yes ☒ No ☐ Turnkey _____ Yes ☒ No ☐ Evaluation _____

Interval Tested 2342-2360 Drill Pipe Size 4.5 x-Hole
 Anchor Length 18" Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 2327 Hole Size — 77/8" _____ Rubber Size — 63/4" _____
 Bottom Packer Depth 2342 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2360 Drill Collar — 2.25 Ft. Run 653'
 Mud Wt. 1.0 lb/gal. Viscosity 80 Filtrate _____
 Tool Open @ 3:05 pm Initial Blow strong blow - bottom of bucket 30 sec.
(6 TS in 2 min.)
 Final Blow _____

Recovery — Total Feet 0 Feet of Gas in Pipe _____ Flush Tool? No

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1,100 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 min Test 600.00

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00

Final Shut-In _____ 36.18 200.00

Circ. Sub _____

Sampler 200.00

SHALE Extra Packer 100.00

SHALE Packer 100.00

Other _____

TOTAL PRICE \$ 1450.00

Approved By [Signature]

Our Representative Tom Boruck

P.O. Box 362 • Hays, Kansas 67601

Well Name CORNELL UNIVERSITY C 1-H Test No. 3 Date 1/11/94
Company ANADARKO PETROLEUM CORPORATION Zone ODELL
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested _____	2365-2383	Drill Pipe Size _____	4.5" XH
Anchor Length _____	18	Wt. Pipe I.D. - 2.7 Ft. Run _____	
Top Packer Depth _____	2360	Drill Collar - 2.25 Ft. Run _____	653
Bottom Packer Depth _____	2365	Mud Wt. _____	0.875 lb/Gal.
Total Depth _____	2383	Viscosity _____	80
		Filtrate _____	

Tool Open @ 3:40 AM Initial Blow 2" BLOW - OPEN 2"

Final Blow _____

Recovery - Total Feet 30 Flush Tool? NO

30

SOAPY WATER

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

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 1.2 60 5900 2000
 RW _____ @ _____ °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 90 MIN Final Flow _____

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6639

Date: 1/11/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY #1-H

Test No.: 3

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 3500

Oil

Mud

Water 500

Other

Pressure 20

TOTAL 4000

SAMPLER ANALYSIS

Resistivity 1.23 ohms@ 60 F

Chlorides 6000 ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2000

Resistivity ohms@ F

Viscosity 80

Mud Wt. 0.875

Filtrate

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity 1.2 ohms@ 60 F

Chlorides 5900 ppm

NATURAL GAS ANALYSIS REPORT

Sampled by:
Trilobite Testing, L.L.C.
Hays, Kansas
Scott City, Kansas
Phone: 300-728-5369
Fax: 913-625-5620

Analyzed by:
Caraway Analytical, L.L.C.
728 North Roosevelt
Liberal, Kansas 67901
Phone: 316-324-5389
Fax: 316-626-7100

Lab Number: 940009A
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 3

Analyzed: 01/12/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Odell

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 13.151	0.000
Nitrogen	N2: 71.534	0.000
Carbon Dioxide	CO2: 0.240	0.000
Methane	C1: 12.174	0.000
Ethane	C2: 1.164	0.311
Propane	C3: 0.725	0.200
Iso Butane	iC4: 0.128	0.042
Normal Butane	nC4: 0.282	0.089
Iso Pentane	iC5: 0.090	0.033
Normal Pentane	nC5: 0.127	0.046
Hexanes Plus	C6+: 0.385	0.168

TOTAL: 100.000 0.889
Z Fact: 0.9994
SP.GR.: 0.9571
BTU (SAT): 200.6 @ 14.73 psia
BTU (DRY): 204.2 @ 14.73 psia

COMMENTS: As analyzed
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: 913-623-5620

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

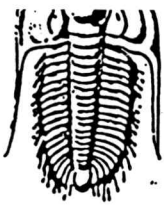
Lab Number: 940009B
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 3

Analyzed: 01/12/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Odell

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 55.280	0.000
Carbon Dioxide	CO2: 0.700	0.000
Methane	C1: 35.546	0.000
Ethane	C2: 3.400	0.909
Propane	C3: 2.118	0.584
Iso Butane	iC4: 0.375	0.123
Normal Butane	nC4: 0.824	0.260
Iso Pentane	iC5: 0.282	0.096
Normal Pentane	nC5: 0.370	0.134
Hexanes Plus	C6+: 1.125	0.491

TOTAL: 100.000 2.596
Z Fact: 0.9986
SP.GR.: 0.8843
BTU (SAT): 586.4 @ 14.73 psia
BTU (DRY): 596.8 @ 14.73 psia

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



TRILOBITE
TESTING L.L.C.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

Shale
Packer

4'

2'

000	2'
000	1'
000	1'
000	5'
000	3'
000	4'

REC.

2371'

2375'

2379'

Total depth 2383'

ID
3/4"

2360'

2365'

Cornell University
DST #3

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6639 Date 1-11-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. 1H Test No. #3
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 3500 ML
Oil _____ ML
Mud _____ ML
Water 500 ML
Other _____ ML
Pressure 20 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 2000 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 80
Mud Weight 875
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity 1.23 ohms @ 60 F
Chlorides 6000 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity 1.20 ohms @ 60 F
Chlorides 5900 ppm.

Test Ticket

№ 6639

Well Name & No.	Cornell Unit #1 H	Test No.	#3	Date	1-11-94
Company	Anadarko Pet. Corp	Zone Tested	Odell		
Address	Box 351 Liberal KS. 67905-0351	Elevation	3226 (KB)		
Co. Rep./Geo.	Todd Montgomery	Cont.	Norseman Dkt #1	Est. Ft. of Pay	
Location: Sec.	35	Twp.	32	Rge.	40
		Co.	Morton	State	KS
No. of Copies		Distribution Sheet	Yes ☒ No ☐	Turnkey	Yes ☒ No ☐
				Evaluation	

Interval Tested	2365-2383	Drill Pipe Size	4.5 x-Hole
Anchor Length	18'	Top Choke — 1"	Bottom Choke — 3/4"
Top Packer Depth	2360	Hole Size — 77/8"	Rubber Size — 63/4"
Bottom Packer Depth	2365	Wt. Pipe I.D. — 2.7 Ft. Run	—
Total Depth	2383	Drill Collar — 2.25 Ft. Run	653'
Mud Wt.	1.875	Viscosity	80
	lb/gal.	Filtrate	
Tool Open @	3:40 AM	Initial Blow	2 in blow - open 2 in.

Final Blow —

Recovery — Total Feet 30' Feet of Gas in Pipe Flush Tool? NO

Rec.	Feet Of	%gas	%Oil	%water	%mud
Rec.	Feet Of	%gas	%Oil	%water	%mud
Rec.	30'	%gas	%Oil	%water	%mud
Rec.	Feet Of	%gas	%Oil	%water	%mud
Rec.	Feet Of	%gas	%Oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 1.2 @ 60 °F Chlorides 5900 ppm Recovery Chlorides 2,000 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 min Test 600.00

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow — Safety Joint 50.00

Final Shut-In — Stand By 200.00

Circ. Sub _____

Sampler 200.00

SHALE Packer 100.00

Other 100.00

TOTAL PRICE \$ 1450.00

Approved By _____

Our Representative Tom Horvack

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 4 Date 1/12/94
Company ANADARKO PETROLEUM CORPORATION Zone WINFIELD
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON Est. Ft. of Pay KS

Interval Tested 2384-2395 Drill Pipe Size 4.5" XH
Anchor Length 11 Wt. Pipe I.D. - 2.7 Ft. Run 653
Top Packer Depth 2376 Drill Collar - 2.25 Ft. Run 1.02
Bottom Packer Depth 2384 Mud Wt. 80 lb/Gal.
Total Depth 2395 Viscosity 80 Filtrate

Tool Open @ 3:40 PM Initial Blow 2" BLOW - OPEN 2" / GAS TO SURFACE IN 20 MINUTES

Final Blow

Recovery - Total Feet 0 Flush Tool? NO

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

BHT °F Gravity °API @ °F Corrected Gravity °API
RW @ °F Chlorides ppm Recovery Chlorides 1100 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 MIN Final Flow

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6640

Date: 1/12/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY #1-H

Test No.: 4

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 75

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1100

Resistivity ohms@ F

Viscosity 80

Mud Wt. 1.02

Filtrate

Other

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: 800-728-5389
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: 940010B
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 4

Analyzed: 01/12/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Winfield

Up.

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 16.931	0.000
Carbon Dioxide	CO2: 0.249	0.000
Methane	C1: 70.566	0.000
Ethane	C2: 6.449	1.725
Propane	C3: 3.716	1.024
Iso Butane	iC4: 0.382	0.125
Normal Butane	nC4: 1.056	0.333
Iso Pentane	iC5: 0.144	0.053
Normal Pentane	nC5: 0.255	0.092
Hexanes Plus	C6+: 0.252	0.110

TOTAL: 100.000 3.462
Z Fact: 0.9976
SP.GR.: 0.7278
BTU (SAT): 983.4 @ 14.73 psia
BTU (DRY): 1000.8 @ 14.73 psia

COMMENTS: Air calculated out
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: 913-625-5628

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

Lab Number: 940010A
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 4

Analyzed: 01/12/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Winfield

Up.

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 3.307	0.000
Nitrogen	N2: 27.359	0.000
Carbon Dioxide	CO2: 0.208	0.000
Methane	C1: 58.898	0.000
Ethane	C2: 5.383	1.440
Propane	C3: 3.102	0.855
Iso Butane	iC4: 0.319	0.104
Normal Butane	nC4: 0.881	0.278
Iso Pentane	iC5: 0.120	0.044
Normal Pentane	nC5: 0.213	0.077
Hexanes Plus	C6+: 0.210	0.092

TOTAL: 100.000 2.889
Z Fact: 0.9981
SP.GR.: 0.7720
BTU (SAT): 820.4 @ 14.73 psia
BTU (DRY): 834.9 @ 14.73 psia

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



**TRILOBITE
TESTING L.L.C.**

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

Shale
Packer

8'

0 0 0	5'
0 0 0	
0 0 0	3'
0 0 0	
0 0 0	

2391'

2395'

Total depth 2395'

ID
3/4"

23716'

2384'

Cornell University
DST #4

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6640 Date 1-12-94
Company Name Anadarko Pet. Corp
Lease Cornell Univ. #1 H Test No. #4
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 75 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 1100 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 80
Mud Weight 1.02
Filtrate _____
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

Test Ticket

№ 6640

Well Name & No. Cornell Univ. 1 H Test No. 4 Date 1-12-94
 Company Anadarko Pet. Corp. Zone Tested UP. Winfield
 Address Box 351 Liberal KS 67905-0351 Elevation 3226 (KB)
 Co. Rep./Geo. Todd Montgomery Cont. Norseman Dr. #1 Est. Ft. of Pay _____
 Location: Sec. 35 Twp. 32 Rge. 40 Co. Morton State KS
 No. of Copies _____ Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes X No _____ Evaluation _____

Interval Tested 2384-2395 Drill Pipe Size 4.5 x - Hole
 Anchor Length 11' Top Choke — 1" _____ Bottom Choke — 3/4" _____
 Top Packer Depth 2376 Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
 Bottom Packer Depth 2384 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2395 Drill Collar — 2.25 Ft. Run 653
 Mud Wt. 1.02 lb/gal. Viscosity 80 Filtrate _____
 Tool Open @ 3:40 pm Initial Blow 2 in. blow - Open 2 in.
(6 TS in 20 min.)

Final Blow _____

Recovery — Total Feet 0 Feet of Gas in Pipe _____ Flush Tool? NO

Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 1100 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 min Test 600.00

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00

Final Shut-In _____ Stand By 200.00

Circ. Sub _____

Sampler 200.00

SHALE Extra Packer 100.00

SHALE Packer 235.00

Other _____

Approved By [Signature]

Our Representative Tom Horacek

TOTAL PRICE \$ 1585.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 5 Date 1/14/94
Company ANADARKO PETROLEUM CORPORATION Zone LWR WINFIELD
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested 2400-2412 Drill Pipe Size 4.5" XH
Anchor Length 12 Wt. Pipe I.D. - 2.7 Ft. Run 653
Top Packer Depth 2392 Drill Collar - 2.25 Ft. Run 0.87
Bottom Packer Depth 2400 Mud Wt. 80 lb/Gal.
Total Depth 2412 Viscosity 80 Filtrate

Tool Open @ 2:40 AM Initial Blow STRONG BLOW- BOTTOM OF BUCKET IN 30 SECONDS/
GAS TO SURFACE IN 40 MINUTES

Final Blow

Recovery - Total Feet 0 Flush Tool? NO

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

BHT °F Gravity °API @ °F Corrected Gravity °API
RW @ °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 90 MIN Final Flow

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6641

Date: 1/14/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY C 1-H

Test No.: 5

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 25

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1000

Resistivity ohms@ F

Viscosity 80

Mud Wt. 0.87

Filtrate

Other

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: 316-324-5369
Fax: 316-626-7108

Lab Number: 940012
Sample From: Cornell Univ 1H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 5

Analyzed: 01/14/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Winfield

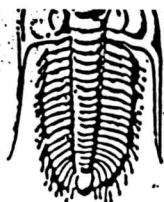
Lower

	Mole %	GPM
Helium	He: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 14.333	0.000
Carbon Dioxide	CO2: 0.221	0.000
Methane	C1: 72.359	0.000
Ethane	C2: 6.749	1.805
Propane	C3: 3.923	1.081
Iso Butane	iC4: 0.426	0.139
Normal Butane	nC4: 1.135	0.358
Iso Pentane	iC5: 0.168	0.081
Normal Pentane	nC5: 0.249	0.090
Hexanes Plus	C6+: 0.437	0.191

TOTAL: 100.000 3.726
Z Fact: 0.9974
SP.GR.: 0.7282
BTU (SAT): 1025.8 @ 14.73 psia
BTU (DRY): 1044.0 @ 14.73 psia

COMMENTS:

Sample entered under vacuum
Insufficient pressure for Helium Analysis



TRILOBITE
TESTING L.L.C.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

Shale
Packer

8'

ID
3/4"

2392'

2400'

Cornell University
DST #5

000
000
000
000
000
000

5'

4'

2402'

2406'

2410'

Total depth 2412'

Test Ticket

No 6641

Well Name & No. <u>Cornell Univ. #1 H</u>	Test No. <u>#5</u>	Date <u>1-14-94</u>
Company <u>Anadarko Pet. Corp.</u>	Zone Tested <u>Lower Winfield</u>	
Address <u>Box 351 Liberal KS 67905-0351</u>	Elevation <u>3226 (KB)</u>	
Co. Rep./Geo. <u>Todd Montgomery cont. Norseman Dly #1</u>	Est. Ft. of Pay	
Location: Sec. <u>35</u> Twp. <u>32</u> Rge. <u>40</u> Co. <u>Morton</u> State <u>KS</u>		
No. of Copies	Distribution Sheet	Yes <u>X</u> No Turnkey Yes <u>X</u> No Evaluation

Interval Tested <u>2400-2412</u>	Drill Pipe Size <u>4.5 x-Hole</u>
Anchor Length <u>12'</u>	Top Choke — 1" Bottom Choke — 3/4"
Top Packer Depth <u>2392</u>	Hole Size — 7 7/8" Rubber Size — 6 3/4"
Bottom Packer Depth <u>2400</u>	Wt. Pipe I.D. — 2.7 Ft. Run
Total Depth <u>2412</u>	Drill Collar — 2.25 Ft. Run <u>653'</u>
Mud Wt. <u>8.7</u> lb/gal.	Viscosity <u>80</u> Filtrate
Tool Open @ <u>2:40 AM</u> Initial Blow <u>Strong How bottom of bucket 30 sec</u>	<u>(GTS in 40 min)</u>

Final Blow

Recovery — Total Feet 0 Feet of Gas in Pipe Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT °F Gravity °API @ °F Corrected Gravity °API

RW @ °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 90 min Test 600.00
- (H) Final Hydrostatic Mud PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]

Our Representative TOM BURCEK

Final Flow ~ Safety Joint 50.00

Final Shut-In ~ Straddle 200.00

Circ. Sub

Sampler 200.00

Extra Packer 100.00

Other 100.00

TOTAL PRICE \$ 1450.00

15-129-21249

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6641 Date 1-14-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. #1 H Test No. #5
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 25 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 1000 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 80
Mud Weight 187
Filtrate _____
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Vell Name CORNELL UNIVERSITY C 1-H Test No. 6 Date 1/15/94
Company ANADARKO PETROLEUM CORPORATION Zone GAGE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested	<u>2432-2445</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>13</u>	Wt. Pipe I.D. - 2.7 Ft. Run	_____
Top Packer Depth	<u>2424</u>	Drill Collar - 2.25 Ft. Run	<u>653</u>
Bottom Packer Depth	<u>2432</u>	Mud Wt.	<u>0.875</u> lb/Gal.
Total Depth	<u>2445</u>	Viscosity	<u>79</u>
		Filtrate	_____

Tool Open @ 3:10 PM Initial Blow 1/4" BLOW - OPEN 2"

Initial Blow _____

Recovery - Total Feet 30 Flush Tool? NO

Sec. <u>30</u>	Feet of	<u>SOAPY WATER</u>
Sec. _____	Feet of	_____
Sec. _____	Feet of	_____
Sec. _____	Feet of	_____
Sec. _____	Feet of	_____

HT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
W 1.94 @ 50 °F Chlorides 4200 ppm Recovery Chlorides 300 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 MIN Final Flow _____

H) Final Hydrostatic Mud _____ PSI Initial Shut-in 23 HRS Final Shut-in _____

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6642 Date: 1/15/94
Company: ANADARKO PETROLEUM CORPORATION
Lease: CORNELL UNIVERSITY C 1-H Test No.: 6
County: MORTON Sec.: 35 Twp.: 32S Rng.: 40W

SAMPLER RECOVERY

Gas
Oil
Mud
Water 4000
Other
Pressure 2
TOTAL 4000

PIT MUD ANALYSIS

Chlorides 300
Resistivity ohms@ F
Viscosity 79
Mud Wt. 0.875
Filtrate
Other

SAMPLER ANALYSIS

Resistivity 1.94 ohms@ 50 F
Chlorides 4200 ppm.
Gravity corrected @60F

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity 2 ohms@ 50 F
Chlorides 4100 ppm



**RILOBITE
TESTING L.L.C.**

REC.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

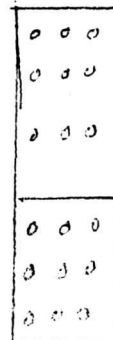
Shale
Packer

8'

2424'

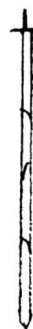
2432'

Total depth 2445'



5'

4'



2436'

2440'

2444'

ID
3/4"

Cornell University (C-1H)
DST #6

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6642 Date _____
Company Name Anadarko Pet. Corp
Lease Cornell Univ. C²/H Test No. #6
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud _____ ML
Water soapy water 4000 ML
Other _____ ML
Pressure 2 PSI
Total 4000 ML

SAMPLER ANALYSIS

Resistivity 1.94 ohms @ 50 F
Chlorides 4200 ppm.
Gravity _____ corrected @ 60 F

PIT MUD ANALYSIS

Chlorides 300 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 79
Mud Weight .875
Filtrate _____
Other _____

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity 2.00 ohms @ 50 F
Chlorides 4100 ppm.

Test Ticket

No 6642

Well Name & No.	Cornell Univ. C#1 H	Test No.	#6	Date	1-15-97
Company	Anadarko Pet. Corp.	Zone Tested	Gage		
Address	Box 351 Liberal KS. 67905-0351	Elevation	3226 (KB)		
Co. Rep./Geo.	Todd Montgomery	Cont.	Norseman Drlg #1	Est. Ft. of Pay	
Location: Sec.	35	Twp.	32	Rge.	40
		Co.	Morton	State	KS
No. of Copies		Distribution Sheet	Yes ☒ No ☐	Turnkey	Yes ☒ No ☐
				Evaluation	

Interval Tested	2432-2445	Drill Pipe Size	4.5 X-Hole
Anchor Length	13'	Top Choke — 1"	Bottom Choke — 3/4"
Top Packer Depth	2424	Hole Size — 7 7/8"	Rubber Size — 6 3/4"
Bottom Packer Depth	2432	Wt. Pipe I.D. — 2.7 Ft. Run	
Total Depth	2445	Drill Collar — 2.25 Ft. Run	653'
Mud Wt.	8.75	lb/gal.	Viscosity 79
			Filtrate
Tool Open @	3:10 pm	Initial Blow	1/4 blow open 2 in.

Final Blow

Recovery — Total Feet 30' Feet of Gas in Pipe Flush Tool? NO.

Rec.	Feet Of	% gas	% oil	% water	% mud
Rec.	Feet Of	% gas	% oil	% water	% mud
Rec. 30'	Feet Of	soapy water	% gas	% oil	% water
Rec.	Feet Of	% gas	% oil	% water	% mud
Rec.	Feet Of	% gas	% oil	% water	% mud

BHT °F Gravity °API @ °F Corrected Gravity °API

RW 1.94 @ 50 °F Chlorides 4200 ppm Recovery Chlorides 300 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 min. Test 600.00

(H) Final Hydrostatic Mud PSI Initial Shut-In 23 hrs. Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow

Final Shut-In

Safety Joint 50.00

Straddle 200.00

Circ. Sub

Sampler 200.00

SHALE 100.00

SHALE Packer 100.00

Other

TOTAL PRICE \$ 1450.00

Approved By

Our Representative Tom Horacek

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 7 Date 1/17/94
Company ANADARKO PETROLEUM CORPORATION Zone TOWANDA
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay 35
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested <u>2465-2506</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>41</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>653</u>
Top Packer Depth <u>2457</u>	Drill Collar - 2.25 Ft. Run <u>1.2</u>
Bottom Packer Depth <u>2465</u>	Mud Wt. <u>107</u> lb/Gal.
Total Depth <u>2506</u>	Viscosity <u>107</u> Filtrate <u> </u>

Tool Open @ 5:25 Initial Blow STRONG BLOW - BOTTOM OF BUCKET IN 30 SECONDS
OPEN 2" / GAS TO SURFACE IN 10 MINUTES

Final Blow

Recovery - Total Feet 60 Flush Tool? NO

<u>60</u>	Feet of <u>SOAPY WATER</u>
<u> </u>	Feet of <u> </u>
<u> </u>	Feet of <u> </u>
<u> </u>	Feet of <u> </u>
<u> </u>	Feet of <u> </u>

WHT 1.23 °F Gravity 50 °API 7000 @ °F Corrected Gravity 1800 °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

FLUID SAMPLER DATA

Ticket No.: 6643 Date: 1/17/94
Company: ANADARKO PETROLEUM CORPORATION
Lease: CORNELL UNIVERSITY C 1-H Test No.: 7
County: MORTON Sec.: 35 Twp.: 32S Rng.: 40W

SAMPLER RECOVERY

Gas 3500
Oil
Mud
Water 500
Other
Pressure 80
TOTAL 4000

SAMPLER ANALYSIS

Resistivity 1.23 ohms@ 50 F
Chlorides 7000 ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 1800
Resistivity ohms@ F
Viscosity 107
Mud Wt. 1.2
Filtrate
Other

PIPE RECOVERY

TOP

Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity 1.23 ohms@ 50 F
Chlorides 7000 ppm



5'

↑
3'

↑

↑
5'

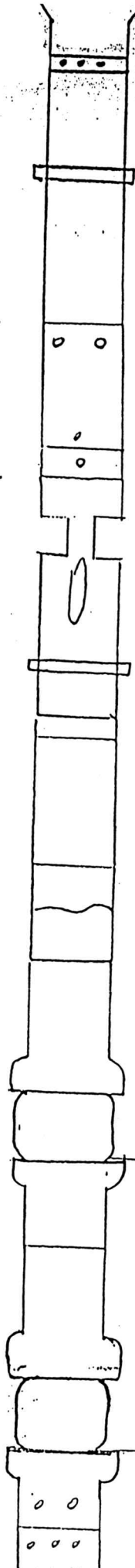
↑
2'

8.

8'

↓

3

[illegible]

2470'

2474

2478

Total depth 2506'

2457

2465

Cornell University (C-14)
DST #7

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6643 Date 1-17-94
Company Name Anadarko Pet Corp.
Lease Cornell Univ. "C" - 1H Test No. # 7
County Morton KS. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 3500 ML
Oil _____ ML
Mud _____ ML
Water 500 ML
Other _____ ML
Pressure 80 PSI
Total 4000 ML

SAMPLER ANALYSIS

Resistivity 1.23 ohms @ 50 F
Chlorides 7000 ppm.
Gravity _____ corrected @ 60 F

PIT MUD ANALYSIS

Chlorides 1800 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 107
Mud Weight 1.2
Filtrate _____
Other _____

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity 1.23 ohms @ 50 F
Chlorides 7000 ppm.

Test Ticket

No 6643

Well Name & No.	Cornell Univ. # C-1 H	Test No.	# 7	Date	1-17-94
Company	Anadarko Pet. Corp.	Zone Tested	Towanda		
Address	Box 351 Liberal KS. 67905-0351	Elevation	3226		
Co. Rep./Geo.	Todd Montgomery	Cont.	Norseman Dr/g #1	Est. Ft. of Pay	
Location: Sec.	35	Twp.	32	Rge.	40
		Co.	Morton	State	KS
No. of Copies		Distribution Sheet	Yes ☒ No ☐	Turnkey	Yes ☒ No ☐
				Evaluation	

Interval Tested	2465-2506	Drill Pipe Size	4.5 x-Hole
Anchor Length	41'	Top Choke — 1"	Bottom Choke — 3/4"
Top Packer Depth	2457	Hole Size — 7 7/8"	Rubber Size — 6 3/4"
Bottom Packer Depth	2465	Wt. Pipe I.D. — 2.7 Ft. Run	-
Total Depth	2506	Drill Collar — 2.25 Ft. Run	653
Mud Wt.	1.2	Viscosity	107
		Filtrate	
Tool Open @	5:25	Initial Blow	strong blow Bottom of bucket 30 sec
			Open 2 in (GTS in 10 min)
Final Blow			

Recovery — Total Feet 60' Feet of Gas in Pipe _____ Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. <u>60'</u>	Feet Of <u>soapy water</u>	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW 1.23 @ 50 °F Chlorides 7,000 ppm Recovery Chlorides 1800 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 _____ Test 600.00

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In _____ Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By Jim Drury

Our Representative Tom Horacek

Final Flow _____ Safety Joint 50.00

Final Shut-In _____ Standby 200.00

Circ. Sub _____

Sampler 200.00

5 1/2" Extra Packer 100.00

SHALCPACK Other 100.00

TOTAL PRICE \$ 1450.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 8 Date 1/18/94
Company ANADARKO PETROLEUM CORPORATION Zone FT RILEY
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay KS
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested <u>2525-2547</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>22</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>653</u>
Top Packer Depth <u>2517</u>	Drill Collar - 2.25 Ft. Run <u>0.75</u>
Bottom Packer Depth <u>2525</u>	Mud Wt. <u>106</u> lb/Gal.
Total Depth <u>2547</u>	Viscosity <u>106</u> Filtrate <u> </u>

Tool Open @ 8:30 PM Initial Blow 1 1/2" BLOW - OPEN 2"

Final Blow

Recovery - Total Feet 60 Flush Tool? NO

Rec. <u>60</u>	Feet of <u>SOAPY WATER</u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>

3HT 1.93 °F Gravity 49 °API @ °F Corrected Gravity 900 °API
RW @ °F Chlorides 4300 ppm Recovery Chlorides 900 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 MIN Final Flow

H) Final Hydrostatic Mud PSI Initial Shut-in 23 HRS Final Shut-in

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6644 Date: 1/18/94
Company: ANADARKO PETROLEUM CORPORATION
Lease: CORNELL UNIVERSITY C 1-H Test No.: 8
County: MORTON Sec.: 35 Twp.: 32S Rng.: 40W

SAMPLER RECOVERY

Gas 100
Oil
Mud
Water 3900
Other
Pressure 5
TOTAL 4000

SAMPLER ANALYSIS

Resistivity 1.93 ohms@ 49 F
Chlorides 4300 ppm.
Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 900
Resistivity ohms@ F
Viscosity 106
Mud Wt. 0.75
Filtrate
Other

PIPE RECOVERY

TOP

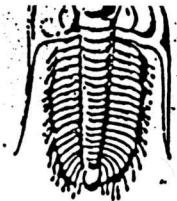
Resistivity ohms@ F
Chlorides ppm

MIDDLE

Resistivity ohms@ F
Chlorides ppm

BOTTOM

Resistivity 1.97 ohms@ 49 F
Chlorides 4300 ppm



HILOBITE
TESTING L.L.C.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

Shale
Packer

8'

Shale
Packer

8'

1'

3'

ID
3/4"

000	5'
000	
000	
000	5'
000	
000	
000	4'
000	
000	
000	4'
000	
000	

REC.

2529'

2533'

2537'

Total depth 2547'

2517'

Cornell University (C-1H)

DST #8

2525'

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6644 Date 1-18-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. "C" 1 H Test No. 48
County Morton Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 100 ML
Oil _____ ML
Mud _____ ML
Water 3900 ML
Other _____ ML
Pressure 5 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 900 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 106
Mud Weight 1.75
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity 1.93 ohms @ 49 F
Chlorides 4300 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

BOTTOM
Resistivity 1.97 ohms @ 49 F
Chlorides 4300 ppm.

Test Ticket

N^o 6644

Well Name & No. <u>Cornell Univ. C" #1 H</u>	Test No. <u>#8</u>	Date <u>1-18-94</u>
Company <u>Anadarko Pet Corp</u>	Zone Tested <u>Up Ft. Riley</u>	
Address <u>Box 351 Liberal Ks. 67905-0351</u>	Elevation <u>3226 (KRB)</u>	
Co. Rep./Geo. <u>Todd Montgomery</u>	Cont. <u>Norseman Dr. #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>35</u>	Twp. <u>32</u>	Rge. <u>40</u> Co. <u>Marion</u> State <u>Ks.</u>
No. of Copies _____	Distribution Sheet _____	Yes <u>X</u> No _____ Turnkey _____ Yes <u>X</u> No _____ Evaluation _____

Interval Tested <u>2525-2547</u>	Drill Pipe Size <u>4.5 x-Hole</u>
Anchor Length <u>22'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>2517</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>2525</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>2547</u>	Drill Collar — 2.25 Ft. Run <u>653</u>
Mud Wt. <u>1.75</u> lb/gal.	Viscosity <u>106</u> Filtrate _____
Tool Open @ <u>8:30 pm</u> Initial Blow <u>1/2 blow</u>	<u>open 2 in.</u>

Final Blow _____

Recovery — Total Feet 60' Feet of Gas in Pipe _____ Flush Tool? NO

Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. <u>60'</u>	Feet Of <u>soapy water</u>	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 1.93 @ 49 °F Chlorides 4300 ppm Recovery Chlorides 900 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 min. Test 600.00

(H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00
Final Shut-In _____ Shale Straddle 200.00

Circ. Sub _____

Sampler 200.00SHALE Extra Packer 100.00SHALE Packer 100.00

Other _____

TOTAL PRICE \$ 1450.00

Approved By _____

Our Representative Tom Horacek

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 9 Date 1/20/94
Company ANADARKO PETROLEUM CORPORATION
Address BOX 351 LIBERAL KS 67905-0351 Zone FT RILEY
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Elevation 3226 KB
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested 2515-2547 Drill Pipe Size 4.5" XH
Anchor Length 32 Wt. Pipe I.D. - 2.7 Ft. Run 653
Top Packer Depth 2510 Drill Collar - 2.25 Ft. Run 0.75
Bottom Packer Depth 2515 Mud Wt. 106 lb/Gal.
Total Depth 2547 Viscosity 106 Filtrate

Tool Open @ 4:00 AM Initial Blow STRONG BLOW-OPEN 2" / GAS TO SURFACE IN 40 MINUTES

Final Blow

Recovery - Total Feet 60 Flush Tool? NO

Rec. 60 Feet of SOAPY WATER
Rec. Feet of
Rec. Feet of
Rec. Feet of
Rec. Feet of

BHT 1.93 °F Gravity 50 °API @ °F Corrected Gravity 900 °API
RW @ °F Chlorides 4300 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 1 HR Final Flow

(H) Final Hydrostatic Mud PSI Initial Shut-in 30 HRS Final Shut-in

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6645

Date: 1/20/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY C 1-H

Test No.: 9

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 4000

Oil

Mud

Water

Other

Pressure 75

TOTAL 4000

SAMPLER ANALYSIS

Resistivity ohms@ F

Chlorides ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 900

Resistivity ohms@ F

Viscosity 106

Mud Wt. 0.75

Filtrate

Other

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: 940021
Sample From: Cornell C 1-H
Producer: Anadarko Pet. Corp.
Date:
Time:
Sampler:
Source: DST 9

Analyzed: 01/17/94
Pressure:
Temperature:
Location: 35-32-40
County: Morton
State: Kansas
Formation: Up Ft. Riley

	Mole %	GPM
Helium	He:	
Oxygen	O2:	0.000 0.000
Nitrogen	N2:	15.210 0.000
Carbon Dioxide	CO2:	0.182 0.000
Methane	C1:	71.969 0.000
Ethane	C2:	6.647 1.778
Propane	C3:	4.061 1.119
Iso Butane	iC4:	0.391 0.128
Normal Butane	nC4:	1.052 0.332
Iso Pentane	iC5:	0.137 0.050
Normal Pentane	nC5:	0.231 0.084
Hexanes Plus	C6+:	0.120 0.052

TOTAL: 100.000 3.542
Z Fact: 0.9976
SP.GR.: 0.7208
BTU (SAT): 1001.7 @ 14.73 psia
BTU (DRY): 1019.4 @ 14.73 psia

COMMENTS:

Sample entered under vacuum
Insufficient pressure for Helium Analysis



Shut-in fool

Sampler

Hydraulic tool

Jars

Safety It.

Shale Packer

Shale Packer

ID
3/4"

REC.

2520'

2524

ಎಸ್ಎಚ್

Total depth 2547

Cornell University (C-1H)
DST #9

DST #9

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6645 Date 1-20-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. "C" 1 H Test No. #9
County Morton K.S. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 4000 ML
Oil _____ ML
Mud _____ ML
Water _____ ML
Other _____ ML
Pressure 75 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 900 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 106
Mud Weight .75
Filtrate _____
Other _____

SAMPLER ANALYSIS

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

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.

Test Ticket

N2 6645

Well Name & No. Cornell Univ. "C" #1 H Test No. # 9 Date 1-20-94
 Company Anadarko Pet. Corp. Zone Tested Up. Ft. Riley
 Address Box 351 Liberal Ks. 67905-0351 Elevation 3226 (KB)
 Co. Rep./Geo. Todd Montgomery cont. Norseman Drilling #1 Est. Ft. of Pay _____
 Location: Sec. 35 Twp. 32 Rge. 40 Co. Morton State Ks.
 No. of Copies _____ Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes X No _____ Evaluation _____

Interval Tested 2515-2547 Drill Pipe Size 4.5 x-Hole
 Anchor Length 32' Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 2510 Hole Size — 77/8" _____ Rubber Size — 63/4" _____
 Bottom Packer Depth 2515 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2547 Drill Collar — 2.25 Ft. Run 653'
 Mud Wt. 175 lb/gal. Viscosity 106 Filtrate _____
 Tool Open @ 4:00 AM Initial Blow Strong How. Open 2 in.
675 in 40 min.

Final Blow _____

Recovery — Total Feet 60' Feet of Gas in Pipe _____ Flush Tool? NO

Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. <u>60'</u>	Feet Of <u>scapy water</u>	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud
Rec. _____	Feet Of _____	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 1.93 @ 50 °F Chlorides 4300 ppm Recovery Chlorides 900 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 hr. Test 600.00
 (H) Final Hydrostatic Mud _____ PSI Initial Shut-In 30 hrs. Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00
 Final Shut-In _____ Straddle 200.00

Circ. Sub _____

Sampler 200.00

SHALC Extra Packer 100.00

SHALC Pack. K. Other 100.00

TOTAL PRICE \$ 1450.00

Approved By K. Todd Montgomery

Our Representative Tom Horvath

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 10 Date 1/21/94
Company ANADARKO PETROLEUM CORPORATION Zone FT RILEY
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay _____
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested 2557-2580 Drill Pipe Size 4.5" XH
Anchor Length 23 Wt. Pipe I.D. - 2.7 Ft. Run _____
Top Packer Depth 2552 Drill Collar - 2.25 Ft. Run 653
Bottom Packer Depth 2557 Mud Wt. _____ lb/Gal.
Total Depth 2580 Viscosity 107 Filtrate _____

Tool Open @ 10:45 PM Initial Blow VERY WEAK BLOW-OPEN 2"

Final Blow _____

Recovery - Total Feet 30 Flush Tool? NO

Rec. 30 Feet of SOAPY WATER
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT _____ °F Gravity 48 °API _____ @ _____ °F Corrected Gravity _____ °API
RW 1.6 @ _____ °F Chlorides 6400 ppm Recovery Chlorides 2500 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 1.5 HRS Final Flow _____

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6646

Date: 1/21/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY C 1-H

Test No.: 10

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas

Oil

Mud

Water 4000

Other

Pressure 1

TOTAL 4000

SAMPLER ANALYSIS

Resistivity 1.6 ohms@ 48 F

Chlorides 6400 ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2500

Resistivity ohms@ F

Viscosity 107

Mud Wt. 0.92

Filtrate

Other

PIPE RECOVERY

TOP

Resistivity ohms@ F

Chlorides ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity 1.6 ohms@ 48 F

Chlorides 6400 ppm



**TRILOBITE
TESTING L.L.C.**

Shut-in tool

ID
3/4"

Sampler

Hydraulic tool

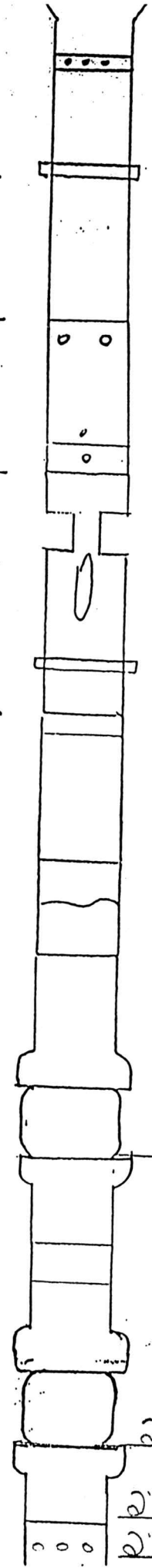
Jars

Safety Jt.

Shale
Packer

Shale
Packer

5'
3'
5'
5'
5'
2'
8'
4'



0 0 0	2'
0 0 0	
0 0 0	5'
0 0 0	
0 0 0	5'
0 0 0	
0 0 0	3'
0 0 0	
0 0 0	4'
0 0 0	

Rec.



Total depth 2580'

2552'

Cornell University (C-1H)

DST #10

2557'

2'
2'

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6646 Date 1-21-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ 'C' #1H Test No. #10
County Morton KS. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas _____ ML
Oil _____ ML
Mud _____ ML
Water 4000 ML
Other _____ ML
Pressure 1 PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 2500 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 10.7
Mud Weight 1.92
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity 1.6 ohms @ 48 F
Chlorides 6400 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity 1.6 ohms @ 48 F
Chlorides 6400 ppm.

Test Ticket

№ 6646

Well Name & No. Cornell Univ. '0' #1 A Test No. #10 Date 1-21-94
 Company Anadarko Pet. Corp. Zone Tested Ft. Riley
 Address Box 351 Liberal KS 67905-0351 Elevation 3226 (KB)
 Co. Rep./Geo. Todd Montgomery cont. Norsemann Dr. #1 Est. Ft. of Pay _____
 Location: Sec. 35 Twp. 32 Rge. 40 Co. Morton State KS.
 No. of Copies _____ Distribution Sheet _____ Yes X No _____ Turnkey _____ Yes X No _____ Evaluation _____

Interval Tested 2557-2580 Drill Pipe Size 4.5 x-Hole
 Anchor Length 23 Top Choke — 1" _____ Bottom Choke — 1/4" _____
 Top Packer Depth 2552 Hole Size — 77/8" _____ Rubber Size — 63/4" _____
 Bottom Packer Depth 2557 Wt. Pipe I.D. — 2.7 Ft. Run _____
 Total Depth 2580 Drill Collar — 2.25 Ft. Run 653'
 Mud Wt. .92 lb/gal. Viscosity 107 Filtrate _____
 Tool Open @ 10:45 pm Initial Blow very weak blow open 2 in.

Final Blow _____

Recovery — Total Feet 30' Feet of Gas in Pipe _____ Flush Tool? NO

Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec. <u>30'</u>	Feet Of <u>soapy water</u>	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud
Rec.	Feet Of	%gas	%oil	%water	%mud

BHT _____ °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
 RW 1.6 @ 48 °F Chlorides 6400 ppm Recovery Chlorides 2500 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 Test 600.00
 (H) Final Hydrostatic Mud _____ PSI Initial Shut-In 23 hrs Jars 200.00

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____ Safety Joint 50.00
 Final Shut-In _____ Straddle 200.00

Approved By Jim DruryOur Representative Tom Horvick

Circ. Sub _____
 Sampler 200.00
 3/4" Packer 100.00
 5/8" Packer 100.00
 Other _____
 TOTAL PRICE \$ 1450.00

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name CORNELL UNIVERSITY C 1-H Test No. 11 Date 1/23/94
Company ANADARKO PETROLEUM CORPORATION Zone CHASE
Address BOX 351 LIBERAL KS 67905-0351 Elevation 3226 KB
Co. Rep./Geo. TODD MONTGOMERY Cont. NORSEMAN DRLG RIG #1 Est. Ft. of Pay KS
Location: Sec. 35 Twp. 32S Rge. 40W Co. MORTON State KS

Interval Tested <u>2256-2580</u>	Drill Pipe Size <u>4.5" XH</u>
Anchor Length <u>324</u>	Wt. Pipe I.D. - 2.7 Ft. Run <u>373</u>
Top Packer Depth <u>2251</u>	Drill Collar - 2.25 Ft. Run <u>0.92</u>
Bottom Packer Depth <u>2256</u>	Mud Wt. <u>107</u> lb/Gal.
Total Depth <u>2580</u>	Viscosity <u>107</u> Filtrate <u> </u>

Tool Open @ 3:30 AM Initial Blow STRONG BLOW-BOTTOM OF BUCKET IN 15 SECONDS
GAS TO SURFACE 20 MINUTES

Final Blow

Recovery - Total Feet 290 Flush Tool? NO

Rec. <u>290</u>	Feet of <u>SOAPY WATER</u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>
Rec. <u> </u>	Feet of <u> </u>

BHT 1.08 °F Gravity 47 °API @ 8200 °F Corrected Gravity 2500 °API
RW @ °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 1.5 HRS Final Flow

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

Our Representative TOM HORACEK

FLUID SAMPLER DATA

Ticket No.: 6647

Date: 1/23/94

Company: ANADARKO PETROLEUM CORPORATION

Lease: CORNELL UNIVERSITY C 1-H

Test No.: 11

County: MORTON

Sec.: 35

Twp.: 32S

Rng.: 40W

SAMPLER RECOVERY

Gas 2000

Oil

Mud

Water 2000

Other

Pressure 40

TOTAL 4000

SAMPLER ANALYSIS

Resistivity 1.08 ohms@ 47 F

Chlorides 8200 ppm.

Gravity corrected @60F

PIT MUD ANALYSIS

Chlorides 2500

Resistivity ohms@ F

Viscosity 107

Mud Wt. 0.92

Filtrate

Other

PIPE RECOVERY

TOP

Resistivity 1.13 ohms@ 47 F

Chlorides 8000 ppm

MIDDLE

Resistivity ohms@ F

Chlorides ppm

BOTTOM

Resistivity 1.07 ohms@ 47 F

Chlorides 8200 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:	940033	Analyzed:	01/23/94
Sample From:	Cornell C 1-H	Pressure:	
Producer:	Anadarko Pet. Corp.	Temperature:	
Date:		Location:	35-32-40
Time:		County:	Morton
Sampler:		State:	Kansas
Source:	DST 11	Formation:	Chase Comingled

	Mole %	GPM
Helium	He:	
Oxygen	O2:	0.000 0.000
Nitrogen	N2:	14.485 0.000
Carbon Dioxide	CO2:	0.137 0.000
Methane	C1:	72.097 0.000
Ethane	C2:	6.703 1.793
Propane	C3:	3.892 1.072
Iso Butane	iC4:	0.498 0.163
Normal Butane	nC4:	1.067 0.336
Iso Pentane	iC5:	0.263 0.096
Normal Pentane	nC5:	0.267 0.097
Hexanes Plus	C6+:	0.591 0.258
TOTAL:		100.000 3.815
Z Fact:		0.9974
SP.GR.:		0.7358
BTU (SAT):		1034.1 @ 14.73 psia
BTU (DRY):		1052.4 @ 14.73 psia

COMMENTS:

Sample entered under vacuum
Insufficient pressure for Helium Analysis



TESTING L.L.C.

Shut-in tool

5'

Sampler

3'

Hydraulic tool

5'

Jars

5'

Safety Jt.

2'

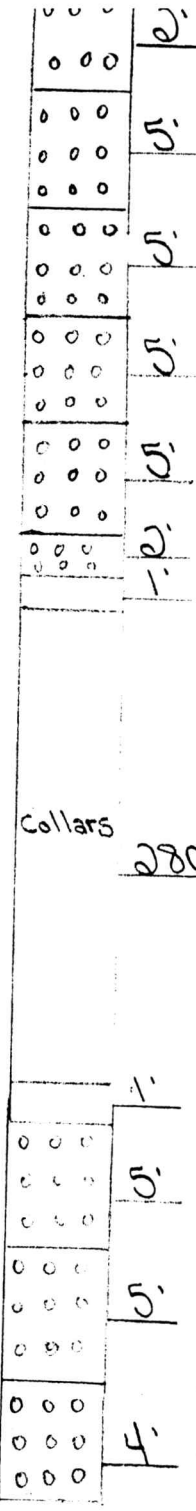
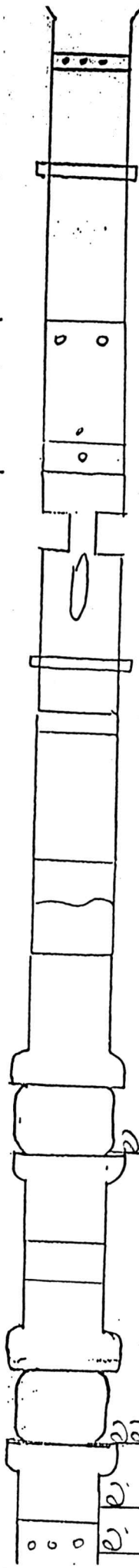
Shale
Packer

8'

Shale
Packer

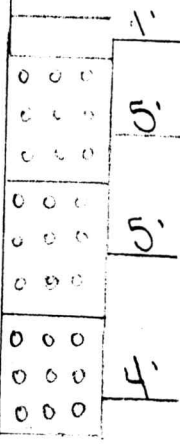
4'

ID
3/4"



Collars

280'



Total depth 2580'

Cornell University (C-1H)
DST # 11

Rec.
2262'
2266'
2270'

TRILOBITE TESTING L.L.C.

P.O. Box 362 - Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 6647 Date 1-23-94
Company Name Anadarko Pet. Corp.
Lease Cornell Univ. CR #1 H Test No. #11
County Marion Ks. Sec. 35 Twp. 32 Rng. 40

SAMPLER RECOVERY

Gas 2000 ML
Oil _____ ML
Mud _____ ML
Water 2000 ML
Other _____ ML
Pressure 40. PSI
Total 4000 ML

PIT MUD ANALYSIS

Chlorides 2500 ppm.
Resistivity _____ ohms @ _____ F
Viscosity 107
Mud Weight .92
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity 1.08 ohms @ 47 F
Chlorides 8200 ppm.
Gravity _____ corrected @ 60 F

PIPE RECOVERY

TOP
Resistivity 1.13 ohms @ 47 F
Chlorides 8000 ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity 1.07 ohms @ 47 F
Chlorides 8200 ppm.

TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 6647

Well Name & No. <u>Cornell Univ. "C" #1-H</u>	Test No. <u>11</u>	Date <u>1-23-94</u>
Company <u>Anadarko Pet. Corp.</u>	Zone Tested <u>Chase</u>	
Address <u>Box 351 Liberal Ks 67905-0351</u>	Elevation <u>3226 (KB)</u>	
Co. Rep./Geo. <u>Todd Montgomery</u>	cont. <u>Norseman Digs #1</u>	Est. Ft. of Pay _____
Location: Sec. <u>35</u>	Twp. <u>32</u>	Rge. <u>40</u>
co. <u>Morton</u>	state <u>Ks</u>	
No. of Copies _____	Distribution Sheet _____	Yes <u>X</u> No _____
Turnkey _____	Yes <u>X</u> No _____	Evaluation _____

Interval Tested <u>2256-2580</u>	Drill Pipe Size <u>4.5 x Hole</u>
Anchor Length <u>324'</u>	Top Choke — 1" _____ Bottom Choke — 3/4" _____
Top Packer Depth <u>2251</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>2256</u>	Wt. Pipe I.D. — 2.7 Ft. Run _____
Total Depth <u>2580</u>	Drill Collar — 2.25 Ft. Run <u>373'</u>
Mud Wt. <u>12.92</u> lb/gal.	Viscosity <u>107</u> Filtrate _____
Tool Open @ <u>3:30 AM</u>	Initial Blow <u>strong blow - Bottom of bucket 15 sec.</u>
	<u>(Gas to surface 20 min.)</u>
Final Blow _____	

Recovery — Total Feet <u>290'</u>	Feet of Gas in Pipe _____	Flush Tool? <u>NO</u>
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. <u>290'</u> Feet Of <u>soapy water</u>	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	
Rec. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT _____ °F	Gravity _____	°API @ _____	°F Corrected Gravity _____	°API _____
RW <u>1.05</u> @ <u>47</u> °F	Chlorides <u>8200</u> ppm	Recovery _____	Chlorides <u>2500</u> 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 <u>1 1/2 hrs</u>	Test <u>600.00</u>
(H) Final Hydrostatic Mud _____	PSI	Initial Shut-In <u>23 hrs</u>	Jars <u>200.00</u>

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Final Flow _____	Safety Joint <u>50.00</u>
Final Shut-In _____	Standby <u>200.00</u>
	Straddle _____
	Circ. Sub _____
	Sampler <u>200.00</u>
	SPAC <u>100.00</u>
	Extra Packer <u>100.00</u>
	SPAC Packer <u>100.00</u>
	Other _____
	TOTAL PRICE \$ <u>1450.00</u>

Approved By Jim Drueck

Our Representative Tom Horack