FORM MUST BE TYPED **CONFIDENTIAL** SIDE ONE **ORIGINAL**

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 4549

Name: ANADARKO PETROLEUM CORPORATION

Address P. O. BOX 351

City/State/Zip LIBERAL, KANSAS 67905-0351

Purchaser: NATIONAL COOPERATIVE REFINING ASSOCIATION

Operator Contact Person: SHAWN YOUNG

Phone (316) 624-6253

Contractor: Name: NORSEMAN DRILLING

License: 3779

Wellsite Geologist:

Designate Type of Completion
X New Well ____ Re-Entry ____ Workover

X Oil ____ SWD ____ SIOW ____ Temp. Abd.
____ Gas ____ ENHR ____ SIGW
____ Dry ____ Other (Core, WSW, Expl., Cathodic, etc)

If Workover:

Operator:

Well Name:

Comp. Date ____ Old Total Depth ____

____ Deepening ____ Re-perf. ____ Conv. to Inj/SWD
____ Plug Back ____ PBTD
____ Commingled Docket No. ____
____ Dual Completion Docket No. ____
____ Other (SWD or Inj?) Docket No. ____

8-4-2000 Spud Date | 8-17-2000 Date Reached TD | 9-13-2000 Completion Date

API NO. 15- 067-21466-0000

County GRANT

5' N & 5' W OF ____E
____ - C - SE - SE Sec. 35 Twp. 29S Rge. 35 X W

335 Feet from X S (circle one) Line of Section

335 Feet from E X (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, (SE), NW or SW (circle one)

Lease Name HJV CROCKER "A" Well # 1

Field Name RYUS E.

Producing Formation KANSAS CITY "A"

Elevation: Ground 3021.4 KB

Total Depth 5700 PBTD 5350

Amount of Surface Pipe Set and Cemented at 1840 Feet

Multiple Stage Cementing Collar Used? X Yes ____ No

If yes, show depth set 3238 Feet

If Alternate II completion, cement circulated from ____

feet depth to ____ w/ ____ sx cmt.

Drilling Fluid Management Plan ALT I 5/9/01 AB
(Data must be collected from the Reserve Pit)

Chloride content 2500 ppm Fluid volume 700 bbls

Dewatering method used DRY, BACKFILL & RESTORE LOCATION.

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

____ Quarter Sec. ____ Twp. ____ S Rng. ____ E/W

County Docket No.

KCC
OCT 16 2000
CONFIDENTIAL

RECEIVED
STATE CORPORATION COMMISSION
OCT 18 2000
CONSERVATION DIVISION
Wichita, Kansas

RELEASED
NOV 12 2002
FROM CONFIDENTIAL

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature L. Marc Harvey 10-16-00
L. MARC HARVEY

Title ENGINEERING TECHNICIAN III Date 10-16-00

Subscribed and sworn to before me this 16th day of October 20 00.

Notary Public Shirley J. Childers

Date Commission Expires

NOTARY PUBLIC - State of Kansas
SHIRLEY J. CHILDERS
My Appt. Exp. 11/14/02

K.C.C. OFFICE USE ONLY
F ✓ Letter of Confidentiality Attached
C ✓ Wireline Log Received
C ____ Geologist Report Received

Distribution
____ KCC ____ SWD/Rep ____ NGPA
____ KGS ____ Plug ____ Other (Specify)

Form ACO-1 (7-91)

SIDE TWO

Operator Name ANADARKO PETROLEUM CORPORATION Lease Name HJV-CROCKER "A" Well # 1

Sec. 35 Twp. 29S Rge. 35 ☐ East ☒ West County GRANT

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.) ☐ Yes ☒ No

Samples Sent to Geological Survey ☒ Yes ☐ No

Cores Taken ☒ Yes ☐ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

List All E. Logs Run: CBL-CCL-GR, DIL, CNL-LDT-ML, SONIC.

☒ Log Formation (Top), Depth and Datums ☐ Sample

Name	Top	Datum
CHASE	2506	
COUNCIL GROVE	2834	
B/HEEBNER	4000	
MARMATON	4706	
MORROW	5283	
STE. GENEVIVE	5606	

CASING RECORD ☒ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	12-1/4"	8-5/8"	24.0	1840	CLASS C/ CLASS C.	450/100	3%D29,.2%D46, ¼#/SK CF/2%D29,¼#/SK CF.
PRODUCTION	7-7/8"	5-1/2"	15.5	6365	15/85 POZ C/ CLASS H.	190/75	8%GEL,10%SALT,¼#/SK CF/2%GEL,10%SALT, ¼#/SK CF.
			PORT COLLAR @	3238	15/85 POZ C/ 50/50 POZ C.	50/50	NONE/.75%FLAC,10% SALT,2%GEL,¼#/SK CF.

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top	Depth Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate					
___ Protect Casing					
___ Plug Back TD					
___ Plug Off Zone					

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	5380-98, RBP @ 5350.	ACID: 1800 GAL 15% HCL.	5380-98.
		FRAC: 29,000 GAL GEL & 46,000# 12/20 SD.	5380-98.
6	4540-60	ACID: 2000 GAL 15% HCL.	4540-60.

TUBING RECORD	Size	Set At	Packer At	Liner Run
	2-7/8"	4647'		☐ Yes ☒ No

Date of First, Resumed Production, SWD or Inj. 10/4/2000

Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity
	376 Bbls.	0 Mcf	205 Bbls.	TSTM	41.5

Disposition of Gas:

☐ Vented ☒ Sold ☐ Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled

☐ Other (Specify)

Production Interval

4540-4560 OA.

CONFIDENTIAL

ORIGINAL

KCC

OCT 16 2000

CONFIDENTIAL

Schlumberger
Dowell

Service Order

06-Aug-00

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
ANADARKO PETROLEUM CORPORATI	Stephen Cole	Ulysses, KS	8/3/00	20171771

Well Name and Number	Legal Location	Field	County	State/Province
HJV CROCKER A-1	35-29S-35W	RYUS E.	GRANT	KS

Rig Name	Well Age	Sales Engineer	Job Type
NORSMAN 3	New	Stephen Cole	Cem Surface Casing

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
8/6/00 3:30 AM	°	12.3 in	1,842 ft	1,842 ft	psi	80 °F	80 °F

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Casing	None	ft	Single cement head	0		

Casing

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1840 ~~1839~~	8.62	23	WC-50	8RD

Tubing

Depth,	Size, in	Weight, lb/ft	Grade	Thread
0	0	0		
0	0	0		

Perforated Intervals

Top, ft	Bottom, ft	spf	No. of Shots	Total Interval
				ft
				Diameter
				in

Services Instructions:

8 5/8" SURFACE SET @ APPROX 1800' IN 12.25" HOLE
450 SK LEAD @ 11.4 PPG
100 SK TAIL @ 14.8 PPG

Extra Equipment:

8 5/8"
TX ptn guide shoe
Orfice fill insert float
4 centralizers
1 basket
Top plastic plug
1 threadlock kit

Contact	Voice	Mobile	FAX	Notes
Jim Barlow	316-629-4350	281-543-2343	316-629-4321	ANADARKO
Dick Collins	RIG3 621-3534	316-621-3542		NORSMAN DRILLING
Stephen Cole	316-624-8432	405-880-3396	316-624-8432	PAGER 353-0515

RECEIVED
STATE CORPORATION COMMISSION

OCT 18 2000

CONSERVATION DIVISION
Wichita, Kansas

Notes:

Soon as get on location, check water, get out press mud scale, clean it, lube it
Hook up PRISM, do sensor verification, check compressors, fluff cement trucks

RELEASED

NOV 12 2002

Directions:

Ulysses East To Jct 190&160 South To Ryus 1 south On Dirt Rd West & North Into.

FROM CONFIDENTIAL

Other Notes:

If float does not hold, or lose circulation, or any other unusual conditions, document it with your ink pen in the job file and (for xxxxxx's sake) let the manager on call know about it when it happens.

Comments:
Anadarko
HJV Crocker A1
8 5/8 surface

Fluid Systems:

LEAD

450 SK C + 3% D79 + 0.2% D46 + 1/2 PPS D29

Density:	11.4	lb/gal	*Thickening Time:*		
Yield:	2.87	ft³/sk	*Viscosity:*		cp
H2O Mix:	17.7	gal/sk	*Break Time:*		
H2O:	7965	gal	*Eq. Sack Weight:*	94	lb

Dowell Code	Conc/ Amount		Total Quantity
D046	0.2	% BWOB	84.6
D029	0.5	lbs/sk	225
D079	3	% BWOB	1269
D903 'C'	94	lbs/sk	42300

TAIL

100 SK C + 2% S1 + 1/4 PPS D29

Density:	14.8	lb/gal	*Thickening Time:*		
Yield:	1.34	ft³/sk	*Viscosity:*		cp
H2O Mix:	6.36	gal/sk	*Break Time:*		
H2O:	636	gal	*Eq. Sack Weight:*	94	lb

Dowell Code	Conc/ Amount		Total Quantity
D029	0.25	lbs/sk	25
S001	2	% BWOB	188
D903 'C'	94	lbs/sk	9400

Schlumberger
Dowell

Service Order

KCC
OCT 16 2000
CONFIDENTIAL

18-Aug-00
ORIGINAL

CONFIDENTIAL

Customer	Person Taking Call	Dowell Location	Order Date	Job Number
ANADARKO PETROLEUM CORPORATI	Stephen Cole	Ulysses, KS	8/18/00	20194002

Well Name and Number	Legal Location	Field	County	State/Province
HJV CROCKER A-1	35-29S-35W	RYUS E.	GRANT	KS

Rig Name	Well Age	Sales Engineer	Job Type
NORSMAN 3	New	Stephen Cole	Cem Prod Casing

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
8/18/00 10:30 AM	°	7.63 in	5,700 ft	5,700 ft	psi	80 °F	80 °F

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Casing	None	ft	Single cement head	0	2000	

Casing

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
5685 5700	5.5	15.5	K55	8RD

Tubing

Depth,	Size, in	Weight, lb/ft	Grade	Thread
0	0	0		
0	0	0		

Perforated Intervals

Top, ft	Bottom, ft	spf	No. of Shots	Total Interval
				ft
				Diameter
				in

Services Instructions:

Extra Equipment:
8 5/8"
TX ptn guide shoe
Orfice fill insert float
4 centralizers
1 basket
Top plastic plug
1 threadlock kit

Contact	Voice	Mobile	FAX	Notes
Jim Barlow	316-629-4350	281-543-2343	316-629-4321	ANADARKO
Dick Collins	RIG3 621-3534	316-621-3542		NORSMAN DRILLING
Stephen Cole	316-624-8432	405-880-3396	316-624-8432	PAGER 353-0515

Notes:
Soon as get on location, check water, get out press mud scale, clean it, lube it
Hook up PRISM, do sensor verification, check compressors, fluff cement trucks

RELEASED
NOV 12 2002
FROM CONFIDENTIAL

Directions:
Ulysses East To Jct 190&160 South To Ryus 1 south On Dirt Rd West & North Into.

Other Notes:
If float does not hold, or lose circulation, or any other unusual conditions, document it with your ink pen in the job file and (for xxxxxx's sake) let the manager on call know about it when it happens.

Comments:
Anadarko
HJV Crocker A1
~~8 5/8 surface~~ 5½" prod

CONFIDENTIAL

Fluid Systems:

LEAD					
190 SK 15/85 (Poz/C) + 8% D020 + 10% D044(BWOW) + 1/4 pps D029					
Density:	12.8	lb/gal	*Thickening Time:*		
Yield:	1.99	ft³/sk	*Viscosity:*		cp
H2O Mix:	10.8	gal/sk	*Break Time:*		
H2O:	2052	gal	*Eq. Sack Weight:*	91.75	lb

Dowell Code	Conc/ Amount		Total Quantity
D046	0.2	% BWOB	34.865
D020	8	% BWOB	1394.6
D044	10	% BWOW	1711.368
D029	0.25	lbs/sk	47.5
D132	11.85	lbs/sk	2251.5
D903	79.9	lbs/sk	15181

TAIL					
75 SK 50/50 (H/Poz) + 2% D020 + 10% D044 (BWOW) + 1/4 PPS D29					
Density:	14.4	lb/gal	*Thickening Time:*		
Yield:	1.34	ft³/sk	*Viscosity:*		cp
H2O Mix:	5.99	gal/sk	*Break Time:*		
H2O:	449.25	gal	*Eq. Sack Weight:*	86.5	lb

Dowell Code	Conc/ Amount		Total Quantity
D046	0.2	% BWOB	12.975
D044	10	% BWOW	374.6745
D060	0.75	% BWOB	48.65625
D020	2	% BWOW	74.9349
D029	0.25	lbs/sk	18.75
D132	39.5	lbs/sk	2962.5
D909	47	lbs/sk	3525

CONFIDENTIAL

KCC

OCT 16 2000

CONFIDENTIAL

ORIGINAL

Schlumberger
Dowell

Service Order

29-Aug-00

Customer	Person Taking Call	Dowell Location	OrderDate	Job Number
ANADARKO PETROLEUM CORPORATI	Dave Brawley	Ulysses, KS	8/29/00	20175543

Well Name and Number	Legal Location	Field	County	State/Province
HJV CROCKER A1		RYUS E.		KS

Rig Name	Well Age	Sales Engineer	Job Type
	New	Dave Brawley	Cem Top Outside Case

Time Well Ready:	Deviation	Bit Size	Well MD	Well TVD	BHP	BHST	BHCT
8/29/00 12:00 PM	0 °	0 in	0 ft	0 ft	0 psi	0 °F	0 °F

Treat Down	Packer Type	Packer Depth	WellHead Connection	HHP on Location	Max AllowedPressure	Max Allowed AnnPressure
Tubing		3238 ~~3239~~ ft	2 7/8" 6.5# T/S	0	0	0

Casing

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
0	0	0		
0	0	0		

Tubing

Depth,	Size, in	Weight, lb/ft	Grade	Thread
0	0	0		
0	0	0		

Perforated Intervals

Top, ft	Bottom, ft	spf	No. of Shots	Total Interval
0	0	0	0	0 ft
0	0	0	0	Diameter
0	0	0	0	0 in

Services Instructions:

Safely Cement Port Collar as requested by customer.

Extra Equipment:

RELEASED

NOV 12 2002

FROM CONFIDENTIAL

Contact	Voice	Mobile	FAX	Notes
Bill Glick	316-544-6205	281-543-2341		

Notes:

Directions:

UKS east to 190, south to Ryus, 1 south, west into.

Other Notes:

Comments:

Cmt. Port Collar

Fluid Systems:

Lead					
50 sks 15/85 Poz/C					
Density:	11.1	lb/gal	*Thickening Time:*	+8hrs	
Yield:	3.22	ft³/sk	*Viscosity:*		cp
H2O Mix:	20.3	gal/sk	*Break Time:*		
H2O:	1015	gal	*Eq. Sack Weight:*	91.75	lb

Dowell Code	Conc/ Amount		Total Quantity	
D132	11.85	lbs/sk	592.5	- extender
D903	79.9	lbs/sk	3995	- cement

Tail					
50 sks 50/50 Poz/C					
Density:	14.4	lb/gal	*Thickening Time:*	3 hrs	
Yield:	1.29	ft³/sk	*Viscosity:*		cp
H2O Mix:	5.7	gal/sk	*Break Time:*		
H2O:	285	gal	*Eq. Sack Weight:*	86.5	lb

Dowell Code	Conc/ Amount		Total Quantity	
D060	0.75	% BWOB	32.4375	- FLAC
D029	0.25	lbs/sk	12.5	- cellophane flakes
D044	10	% BWOW	237.69	- Salt
D020	2	% BWOB	86.5	- Bentonite
D132	39.5	lbs/sk	1975	- extender
D903	47	lbs/sk	2350	- cement

CONFIDENTIAL

ORIGINAL

9-7-00

KCC OCT 16 2000 CONFIDENTIAL

SUMMARY OF ROUTINE CORE ANALYSES RESULTS

Dean Stark Samples

Anadarko Petroleum Corporation
HJV Crocker #A1

Grant County, Kansas
File: H-3403

Core Number	Sample Number	Sample Depth, feet	Permeability, millidarcys to Air 800 psi	Permeability, millidarcys Klinkenberg 800 psi	Porosity, percent 800 psi	Grain Density, gm/cc	Water Saturation, percent 800 psi	Oil Saturation, percent 800 psi	Total Saturation, percent 800 psi	Lithologic Description
1	1-1	4548.20	5.26	3.98	18.6	2.70	49.9	6.6	56.4	Ls, fxl, intrapar, ool, ppvgs
1	1-2	4549.20	11.3	8.91	19.4	2.72	47.5	9.2	56.7	Ls, fxl, intrapar, ool, ppvgs
1	1-3	4550.40	12.1	9.57	21.8	2.69	47.9	7.0	54.9	Ls, fxl, intrapar, ool, ppvgs
1	1-4	4551.20	5.30	4.04	17.0	2.70	37.9	9.9	47.8	Ls, fxl, intrapar, ool, ppvgs
1	1-5	4552.20	10.6	8.37	28.7	2.70	35.1	7.2	42.4	Ls, fxl, intrapar, ool, ppvgs
1	1-6	4553.20	15.5	12.5	24.7	2.70	35.3	5.1	40.4	Ls, fxl, intrapar, ool, ppvgs
1	1-7	4554.20	8.29	6.45	25.0	2.70	38.1	5.8	44.0	Ls, fxl, intrapar, ool, ppvgs
1	1-8	4555.40	2.30	1.72	28.8	2.69	57.8	3.8	61.6	Ls, fxl, intrapar, ool, ppvgs
1	1-9	4556.20	0.292	0.197	27.0	2.69	59.7	3.8	63.4	Ls, fxl, intrapar, ool, ppvgs
1	1-10	4557.20	0.152	0.094	23.2	2.69	73.8	4.5	78.3	Ls, fxl, intrapar, ool, ppvgs
1	1-11	4558.20	0.498	0.361	27.2	2.69	61.4	3.6	65.0	Ls, fxl, intrapar, ool, ppvgs
1	1-12	4559.20	0.183	0.116	31.7	2.70	56.9	3.9	60.8	Ls, fxl, intrapar, ool, ppvgs
1	1-13	4560.20	0.915	0.668	30.0	2.70	53.2	7.1	60.3	Ls, fxl, intrapar, ool, ppvgs
1	1-14	4561.20	0.415	0.291	29.3	2.70	53.5	6.3	59.8	Ls, fxl, intrapar, ool, ppvgs
1	1-15	4562.20	3.92	2.95	30.0	2.71	53.3	5.7	59.0	Ls, fxl, intrapar, ool, ppvgs
1	1-16	4563.20	6.44	4.97	26.2	2.70	55.7	4.2	59.9	Ls, fxl, intrapar, ool, ppvgs
1	1-17	4564.40	6.50	5.00	32.3	2.70	57.6	2.0	59.6	Ls, fxl, intrapar, ool, ppvgs
1	1-18	4565.20	3.24	2.42	34.6	2.71	54.0	3.9	57.9	Ls, fxl, intrapar, ool, ppvgs
1 F	1-19	4566.40	18.0	14.5	11.9	2.71	68.6	9.6	78.3	Ls, fxl, intrapar, intpar, ool, ppvgs, styl, fos
1	1-20	4567.45	0.552	0.402	25.2	2.71	58.2	5.1	63.2	Ls, fxl, intrapar, ool, ppvgs, fos
1	1-21A	4568.20	0.012	0.0043	10.4	2.73	65.7	8.5	74.2	Ls, fxl, intrapar, ool, ppvgs, fos

RELEASED NOV 12 2002 FROM CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

ORIGINAL

1	1-22	4569.20		+	3.4	2.71	42.5	5.4	47.9	Ls, fxl, intxl, styl, frac
1	1-23	4570.20	0.0051	0.0015	3.4	2.70	73.7	7.3	81.1	Ls, fxl, intxl
1	1-24	4571.50	0.0021	0.0005	1.0	2.70	72.5	1.9	74.3	Ls, fxl, intxl, fd frac
1	1-25A	4572.50	0.0024	0.0006	2.8	2.71	46.5	3.2	49.7	Ls, fxl, intxl
1 F	1-26	4573.20	0.033	0.016	1.7	2.70	85.1	1.5	86.5	Ls, fxl, intxl, stly, pof
1 F	1-27	4574.50	0.103	0.060	3.5	2.70	89.5	3.5	93.0	Ls, fxl, intxl, styl
1	1-29	4576.05	0.094	0.054	3.4	2.71	93.8	3.8	97.6	Ls, fxl, intxl, styl, pof
1	1-28	4576.60	0.015	0.0058	4.9	2.70	78.5	4.8	83.3	Ls, fxl, intxl
1	1-30A	4577.40	0.012	0.0047	3.8	2.71	52.3	5.8	58.1	Ls, fxl, intxl
1 F	1-31	4578.50	0.471	0.339	4.7	2.71	76.6	6.4	83.0	Ls, fxl, intxl, pof
2	2-1	5313.90	0.0004	0.0000	0.3	3.24	96.4	0.0	96.4	Dol, xln, ool, pyr
2	2-2	5314.40	0.0004	0.0000	0.0	3.19	91.5	0.0	91.5	Dol, xln, ool, pyr
4	4-1	5381.05	0.060	0.032	1.0	2.72	87.2	6.5	93.7	Ls, xln, v foss
4	4-2	5386.50	0.058	0.031	1.0	2.75	90.5	6.8	97.3	Ls, xln, foss
4	4-3	5387.50	0.039	0.019	2.3	2.70	91.5	7.3	98.8	Ls, xln, foss
4	4-4	5388.50	3.42	2.57	5.4	2.70	47.5	15.4	62.8	Ls, xln, foss
4	4-5	5389.50	7.80	6.06	7.1	2.71	27.3	19.0	46.3	Ls, xln, foss
4	4-6	5390.50	1.97	1.44	5.0	2.70	53.3	17.3	70.5	Ls, xln, foss
4	4-7	5391.35	0.262	0.174	4.1	2.74	40.8	17.8	58.5	Ls, xln, foss
4	4-8	5392.60	0.019	0.0080	2.1	2.71	83.6	8.3	91.9	Ls, xln, foss
4	4-9	5393.50	0.091	0.052	2.4	2.72	71.8	1.8	73.6	Ls, xln, foss
4	4-10	5394.45	3.42	2.56	4.4	2.73	59.8	14.4	74.2	Ls, xln, foss
4	4-11	5395.45	0.011	0.0040	1.0	2.70	83.0	6.2	89.2	Ls, xln, foss
4	4-12	5396.16	0.156	0.097	1.7	2.71	92.5	7.9	100.4	Ls, xln, foss
		Average	3.75	2.93	17.9	2.70	59.1	5.4	64.5	

+ denotes samples unsuitable for permeability measurement - ambient porosity reported
F denotes samples with filled fractures

KCC
OCT 16 2000
CONFIDENTIAL

RELEASED
NOV 12 2002
FROM CONFIDENTIAL

CONFIDENTIAL