

FINAL CORE ANALYSIS REPORT

**CHEVRON et al LIARD
300M256030123300**

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CORE SERVICES DIVISION

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FINAL CORE ANALYSIS REPORT

CHEVRON et al LIARD
300M256030123300

Prepared for:

CHEVRON CANADA RESOURCES LIMITED

RC8471

January, 2000

"In Pursuit of Excellence"

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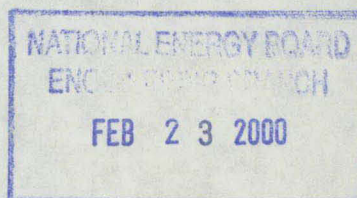


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CORE ANALYSIS DATA

**CHEVRON et al LIARD
300M256030123300**

COMPANY : CHEVRON CANADA RESOURCES LIMITED
WELL NAME : CHEVRON et al LIARD
LOCATION : 300M256030123300
FORMATION : NAHANNI
DRILLING FLUID : WATER BASE MUD

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ROUTINE CORE ANALYSIS

Sample	interval (m)		Rep Thick (m)	Sample Length (m)	Gas Permeability			Capacity Kmax mD·m	Porosity	Capacity Ø·m	Density (Kg/m³)		Residual Saturation		Remarks
	Top	Base			Kmax (mD)	K90 (mD)	Kv (mD)				Bulk	Grain	Oil	Water	
CORE NO. 1 3450.00 - 3452.00 (CUT / RECEIVED = 2.00 / 1.40 m TOTAL BOXES = 2)															
001	3450.00	3450.36	0.36	0.06	11.7	9.79	14.5	4.21	0.034	0.012	2730	2820	-	-	dol:vf-cxln:scatvugs:vfracs
SP002	3450.36	3451.40	1.04	-	2.55	-	-	2.65	0.074	0.077	2620	2830	-	-	dol:vf-cxln:scatvugs:fracs
LC	3451.40	3452.00	0.60	-	-	-	-	-	-	-	-	-	-	-	Lost Core
CORE NO. 2 3452.00 - 3457.20 (CUT / RECEIVED = 5.20 / 5.20 m TOTAL BOXES = 5)															
003	3452.00	3452.43	0.43	0.07	0.94	0.46	0.26	0.40	0.021	0.009	2790	2840	-	-	dol:vf-cxln:styl:fracs
004	3452.43	3452.60	0.17	0.10	9.39	9.38	132.	1.60	0.045	0.008	2680	2810	-	-	dol:vf-cxln:styl:vfracs
005	3452.60	3452.97	0.37	0.08	133.	58.0	133.	49.2	0.037	0.014	2710	2820	-	-	dol:vf-cxln:styl:vfracs
006	3452.97	3453.20	0.23	0.13	19.2	17.2	1.68	4.42	0.039	0.009	2690	2800	-	-	dol:vf-cxln:styl:vfracs
007	3453.20	3453.46	0.26	0.07	0.80	0.77	0.61	0.21	0.011	0.003	2790	2820	-	-	dol:vf-cxln:styl:vfracs
008	3453.46	3453.93	0.47	0.10	0.52	0.18	0.22	0.24	0.009	0.004	2810	2830	-	-	dol:vf-cxln:styl:vfracs
009	3453.93	3454.22	0.29	0.12	6.73	4.52	0.98	1.95	0.015	0.004	2770	2820	-	-	dol:vf-cxln:styl:vfracs
010	3454.22	3454.59	0.37	0.13	1.77	0.50	0.47	0.65	0.012	0.004	2790	2820	-	-	dol:vf-cxln:scatvugs:styl:vfracs
011	3454.59	3455.04	0.45	0.11	6.04	5.00	0.62	2.72	0.018	0.008	2790	2840	-	-	dol:vf-cxln:scatvugs:styl:vfracs
012	3455.04	3455.31	0.27	0.14	38.2	11.7	79.0	10.3	0.017	0.005	2790	2830	-	-	dol:vf-cxln:scatvugs:vfracs
013	3455.31	3455.63	0.32	0.16	68.0	4.92	50.0	21.8	0.026	0.008	2750	2820	-	-	dol:vf-cxln:scatvugs:vfracs
014	3455.63	3455.91	0.28	0.12	7.22	0.48	26.7	2.02	0.011	0.003	2810	2840	-	-	dol:vf-cxln:vfracs
015	3455.91	3456.44	0.53	0.07	99.4	63.9	90.7	52.7	0.017	0.009	2770	2820	-	-	dol:vf-cxln:styl:vfracs
SP016	3456.44	3457.20	0.76	-	0.07	-	-	0.05	0.013	0.010	2850	2880	-	-	dol:vf-cxln:scatppvugs:anhy

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CORE ANALYSIS - QUALITY CONTROL REPORT

CORE NO. 1 3450.00 - 3452.00 (CUT / RECEIVED = 2.00 / 1.40 m TOTAL BOXES = 2)

001 3450.00 - 3450.36

- KMax (11.7) IS LESS THAN Kv (14.5)

vertical fractures;results verified

- K90 (9.79) IS LESS THAN Kv (14.5)

vertical fractures;results verified

SP002 3450.36 - 3451.40

- KMax (2.55) IS OUTSIDE FOUR STANDARD DEVIATIONS (357 - 12840)

results verified

LC 3451.40 - 3452.00

CORE NO. 2 3452.00 - 3457.20 (CUT / RECEIVED = 5.20 / 5.20 m TOTAL BOXES = 5)

003 3452.00 - 3452.43

- K90 (0.46) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.51 - 18.5)

results verified

- Kv (0.26) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.73 - 26.1)

results verified

004 3452.43 - 3452.60

- KMax (9.39) IS OUTSIDE FOUR STANDARD DEVIATIONS (11 - 397)

vertical fractures;results verified

- K90 (9.38) IS OUTSIDE FOUR STANDARD DEVIATIONS (22.6 - 813)

vertical fractures;results verified

- KMax (9.39) IS LESS THAN Kv (132.)

vertical fractures;results verified

- K90 (9.38) IS LESS THAN Kv (132.)

vertical fractures;results verified

005 3452.60 - 3452.97

- K90 (58.0) IS LESS THAN Kv (133.)

vertical fractures;results verified

006 3452.97 - 3453.20

- Kv (1.68) IS OUTSIDE FOUR STANDARD DEVIATIONS (33.7 - 1210)

vertical fractures;results verified

007 3453.20 - 3453.46

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CORE ANALYSIS - QUALITY CONTROL REPORT

008	3453.46 - 3453.93	
- K90 (0.18) IS LESS THAN Kv (0.22)		vertical fractures;results verified
009	3453.93 - 3454.22	
010	3454.22 - 3454.59	
011	3454.59 - 3455.04	
012	3455.04 - 3455.31	
- KMax (38.2) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.38 - 13.8)		vertical fractures;results verified
- K90 (11.7) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.27 - 9.82)		vertical fractures;results verified
- Kv (79.0) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.31 - 11.1)		vertical fractures;results verified
- KMax (38.2) IS LESS THAN Kv (79.0)		vertical fractures;results verified
- K90 (11.7) IS LESS THAN Kv (79.0)		vertical fractures;results verified
013	3455.31 - 3455.63	
- KMax (68.0) IS OUTSIDE FOUR STANDARD DEVIATIONS (1.13 - 40.7)		vertical fractures;results verified
- K90 (4.92) IS LESS THAN Kv (50.0)		vertical fractures;results verified
014	3455.63 - 3455.91	
- KMax (7.22) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.19 - 6.74)		vertical fractures;results verified
- Kv (26.7) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.09 - 3.09)		vertical fractures;results verified
- KMax (7.22) IS LESS THAN Kv (26.7)		vertical fractures;results verified
- K90 (0.48) IS LESS THAN Kv (26.7)		vertical fractures;results verified
015	3455.91 - 3456.44	
- KMax (99.4) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.38 - 13.8)		vertical fractures;results verified
- K90 (63.9) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.27 - 9.82)		vertical fractures;results verified
- Kv (90.7) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.31 - 11.1)		vertical fractures;results verified
- K90 (63.9) IS LESS THAN Kv (90.7)		vertical fractures;results verified
SP016	3456.44 - 3457.20	
- KMax (0.07) IS OUTSIDE FOUR STANDARD DEVIATIONS (0.24 - 8.56)		results verified

Approved :

Quality Control Supervisor

Date

01-13-2000

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CALCULATED DATA REPORT

Sample	interval (m)		Rep Thick (m)	Rep Cuml. (m)	Porosity	Porosity *		Wt. Avg. Porosity (Arith.)	Kmax (mD)	Kmax *		Wt.Avg Kmax (Arith.)
	Top	Base				Rep. Ø·m	Thickness Cuml.			Rep mD·m	Thickness Cuml.	
CORE NO. 1 3450.00 - 3452.00 (CUT / RECEIVED = 2.00 / 1.40 m TOTAL BOXES = 2)												
001	3450.00	3450.36	0.36	0.36	0.034	0.012	0.012	0.033	11.7	4.21	4.21	11.7
SP002	3450.36	3451.40	1.04	1.40	0.074	0.077	0.089	0.064	2.55	2.65	6.86	4.90
LC	3451.40	3452.00	0.60	-	-	-	-	-	-	-	-	-
CORE NO. 2 3452.00 - 3457.20 (CUT / RECEIVED = 5.20 / 5.20 m TOTAL BOXES = 5)												
003	3452.00	3452.43	0.43	1.83	0.021	0.009	0.098	0.054	0.94	0.40	7.27	3.97
004	3452.43	3452.60	0.17	2.00	0.045	0.008	0.106	0.053	9.39	1.60	8.86	4.43
005	3452.60	3452.97	0.37	2.37	0.037	0.014	0.120	0.051	133.	49.2	58.1	24.5
006	3452.97	3453.20	0.23	2.60	0.039	0.009	0.129	0.050	19.2	4.42	62.5	24.0
007	3453.20	3453.46	0.26	2.86	0.011	0.003	0.132	0.046	0.80	0.21	62.7	21.9
008	3453.46	3453.93	0.47	3.33	0.009	0.004	0.136	0.041	0.52	0.24	62.9	18.9
009	3453.93	3454.22	0.29	3.62	0.015	0.004	0.140	0.039	6.73	1.95	64.9	17.9
010	3454.22	3454.59	0.37	3.99	0.012	0.004	0.144	0.036	1.77	0.65	65.5	16.4
011	3454.59	3455.04	0.45	4.44	0.018	0.008	0.152	0.034	6.04	2.72	68.3	15.4
012	3455.04	3455.31	0.27	4.71	0.017	0.005	0.157	0.033	38.2	10.3	78.6	16.7
013	3455.31	3455.63	0.32	5.03	0.026	0.008	0.165	0.033	68.0	21.8	100.	19.9
014	3455.63	3455.91	0.28	5.31	0.011	0.003	0.168	0.032	7.22	2.02	102.	19.3

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CALCULATED DATA REPORT

Sample	interval (m)		Rep Thick (m)	Rep Cuml. (m)	Porosity	Porosity *		Wt. Avg. Porosity (Arith.)	Kmax (mD)	Kmax *		Wt.Avg Kmax (Arith.)
	Top	Base				Rep. Ø·m	Thickness Cuml.			Rep mD·m	Thickness Cuml.	
015	3455.91	3456.44	0.53	5.84	0.017	0.009	0.177	0.030	99.4	52.7	155.	26.5
SP016	3456.44	3457.20	0.76	6.60	0.013	0.010	0.187	0.028	0.07	0.05	155.	23.5

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

GROUPING BY POROSITY RANGES

Porosity Range		Samples		Metres		Wt. Avg. Porosity (Arith.)	Wt. Avg. Kmax		Frequency %	
		In Range	Cuml.	In Range	Cuml.		(Arith.)	Geom	In Rng	Cuml.
0.001 -	0.0190	9	9	3.68	3.68	0.014	19.3	2.36	57.77	57.77
0.020 -	0.0390	4	13	1.48	5.16	0.029	51.1	15.1	23.23	81.00
0.040 -	0.0599	1	14	0.17	5.33	0.045	9.39	9.39	2.67	83.67
0.060 -	0.0799	1	15	1.04	6.37	0.074	2.55	2.55	16.33	100.00

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 LOCATION : 300M256030123300
 FORMATION : NAHANNI
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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

GROUPING BY PERMEABILITY RANGES

Permeability Range		Samples		Metres		Wt. Avg. Porosity (Arith.)	Wt. Avg. Kmax		Frequency %	
		In Range	Cuml.	In Range	Cuml.		(Arith.)	Geom	In Rng	Cuml.
0.040 -	0.0790	1	1	0.76	0.76	0.013	0.07	0.07	11.52	11.52
0.320 -	0.6390	1	2	0.47	1.23	0.009	0.52	0.52	7.12	18.64
0.640 -	1.2490	2	4	0.69	1.92	0.017	0.89	0.88	10.45	29.09
1.250 -	2.4990	1	5	0.37	2.29	0.012	1.77	1.77	5.61	34.70
2.500 -	4.9990	1	6	1.04	3.33	0.074	2.55	2.55	15.76	50.45
5.000 -	9.9990	4	10	1.19	4.52	0.019	6.96	6.89	18.03	68.48
10.000 -	19.9990	2	12	0.59	5.11	0.036	14.6	14.2	8.94	77.42
20.000 -	39.9990	1	13	0.27	5.38	0.017	38.2	38.2	4.09	81.52
40.000 -	79.9990	1	14	0.32	5.70	0.026	68.0	67.9	4.85	86.36
80.000 -	159.9990	2	16	0.90	6.60	0.025	113.	112.	13.64	100.00

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM
POROSITY-METRES OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

Porosity Cut off	Metres		Capacity Lost		Capacity Remaining		Wt. Avg. Arith.	
	Lost	Remaining	Por-Metres	%	Por-Metres	%	Mean	Median
-	0.00	6.60	-	0.00	0.187	100.00	0.028	
0.020	3.68	2.92	0.051	26.97	0.137	73.03	0.047	
0.040	5.39	1.21	0.103	54.85	0.085	45.15	0.070	
0.060	5.56	1.04	0.110	58.93	0.077	41.07	0.074	
0.080	6.60	0.00	0.187	100.00	-	0.00	0.00	

Total Storage Capacity in Porosity-Metres = 0.187

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STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM
MILLIDARCY-METRES OF FLOW CAPACITY FOR SELECTED PERMEABILITY CUT OFF

Permeability Cut off	Metres		Capacity Lost		Capacity Remaining		Wt. Avg. Arith.	
	Lost	Remaining	mD-m	%	mD-m	%	Mean	Median
0.040	0.00	6.60	0.000	0.00	155.098	100.00	0.000	
0.080	0.76	5.84	0.053	0.03	155.045	99.97	0.053	
0.160	0.76	5.84	0.053	0.03	155.045	99.97	0.106	
0.320	0.76	5.84	0.053	0.03	155.045	99.97	0.160	
0.640	1.23	5.37	0.298	0.19	154.801	99.81	0.457	
1.250	1.92	4.68	0.910	0.59	154.189	99.41	1.367	
2.500	2.29	4.31	1.565	1.01	153.534	98.99	2.932	
5.000	3.33	3.27	4.217	2.72	150.882	97.28	7.148	
10.000	4.52	2.08	12.504	8.06	142.594	91.94	19.653	
20.000	5.11	1.49	21.132	13.63	133.966	86.37	40.785	
40.000	5.38	1.22	31.446	20.28	123.652	79.72	72.231	
80.000	5.70	0.90	53.206	34.30	101.892	65.70	125.438	
160.000	6.60	0.00	155.098	100.00	0.000	0.00	280.536	

Total Flow Capacity in MilliDarcy-Metres (Arithmetic) = 155.098

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SUMMARY OF CORE DATA REPORT **PERMEABILITY RANGES, MILLIDARCY**

	Total	100.00 +	10.00 - 99.99	1.00 - 9.99	0.50 - 0.99	0.10 - 0.49	0.01 - 0.09	< 0.01
Thickness (m)	6.6	0.37	1.71	2.60	1.16	0.00	0.76	0.00
Fraction of Analyzed Core		0.056	0.259	0.394	0.176	0.000	0.115	0.000
Porosity Thickness (por-m)	0.187	0.014	0.043	0.105	0.016	0.000	0.010	0.000
Permeability Thickness (mD-m)	155.1	49.21	93.38	11.59	0.86	0.00	0.05	0.00
Wt. Average Porosity	0.028	0.037	0.025	0.040	0.014	0.000	0.013	0.000
Wt. Average Permeability	23.5	133.00	54.61	4.46	0.74	0.00	0.07	0.00
Wt. Average Residual Oil	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wt. Average Residual Water	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wt. Average (geom.) Kmax. mD for all Samples = 4.04								
Wt. Average (harm.) Kmax. mD for all Samples = 0.49								

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Company : CHEVRON CANADA RESOURCES LIMITED

Location : 300M256030123300

FIGURE : 1

Interval : 3450.00 - 3456.80m

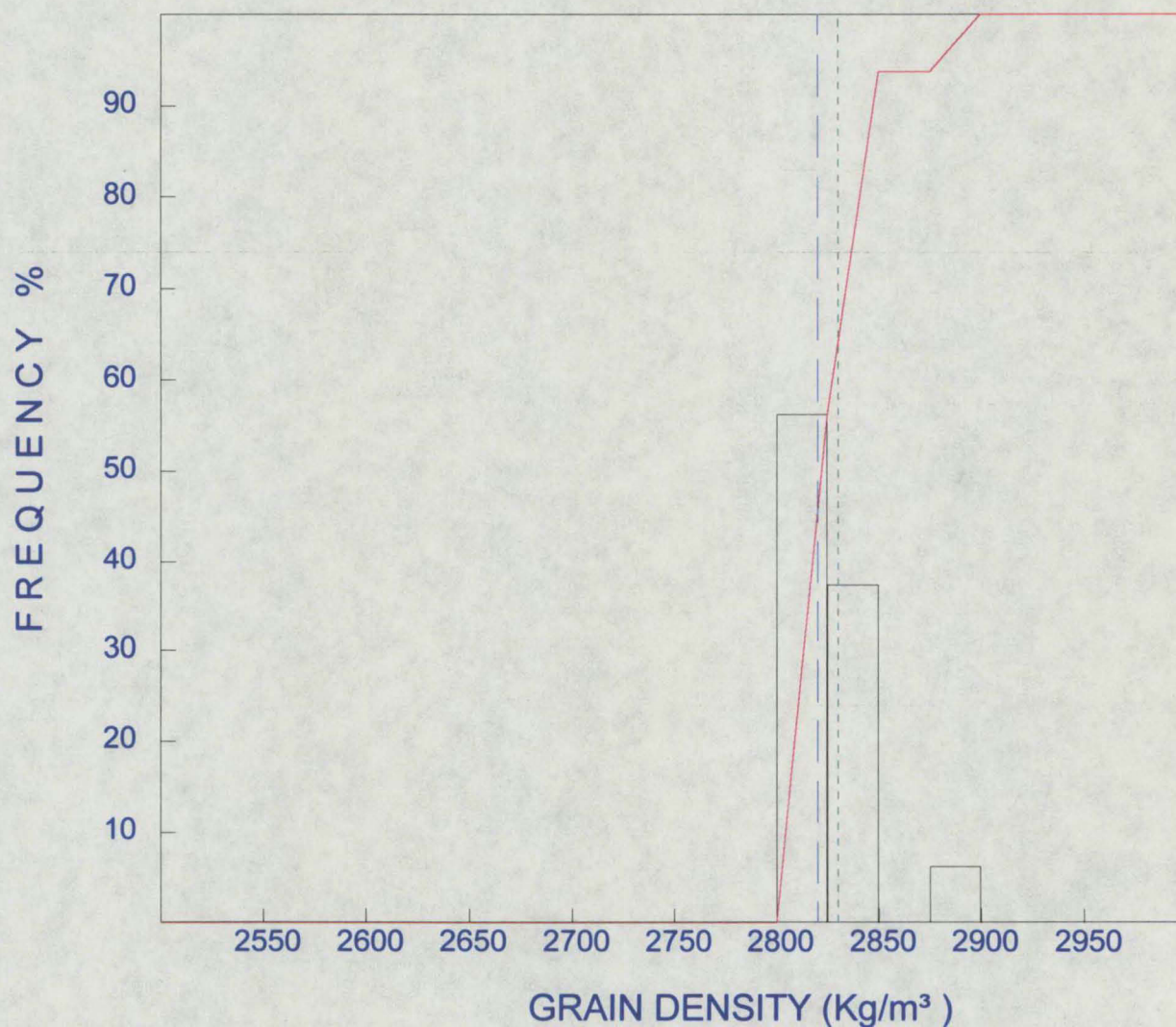
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GRAIN DENSITY DISTRIBUTION



Arithmetic Mean

.....

Mean: 2830

Median

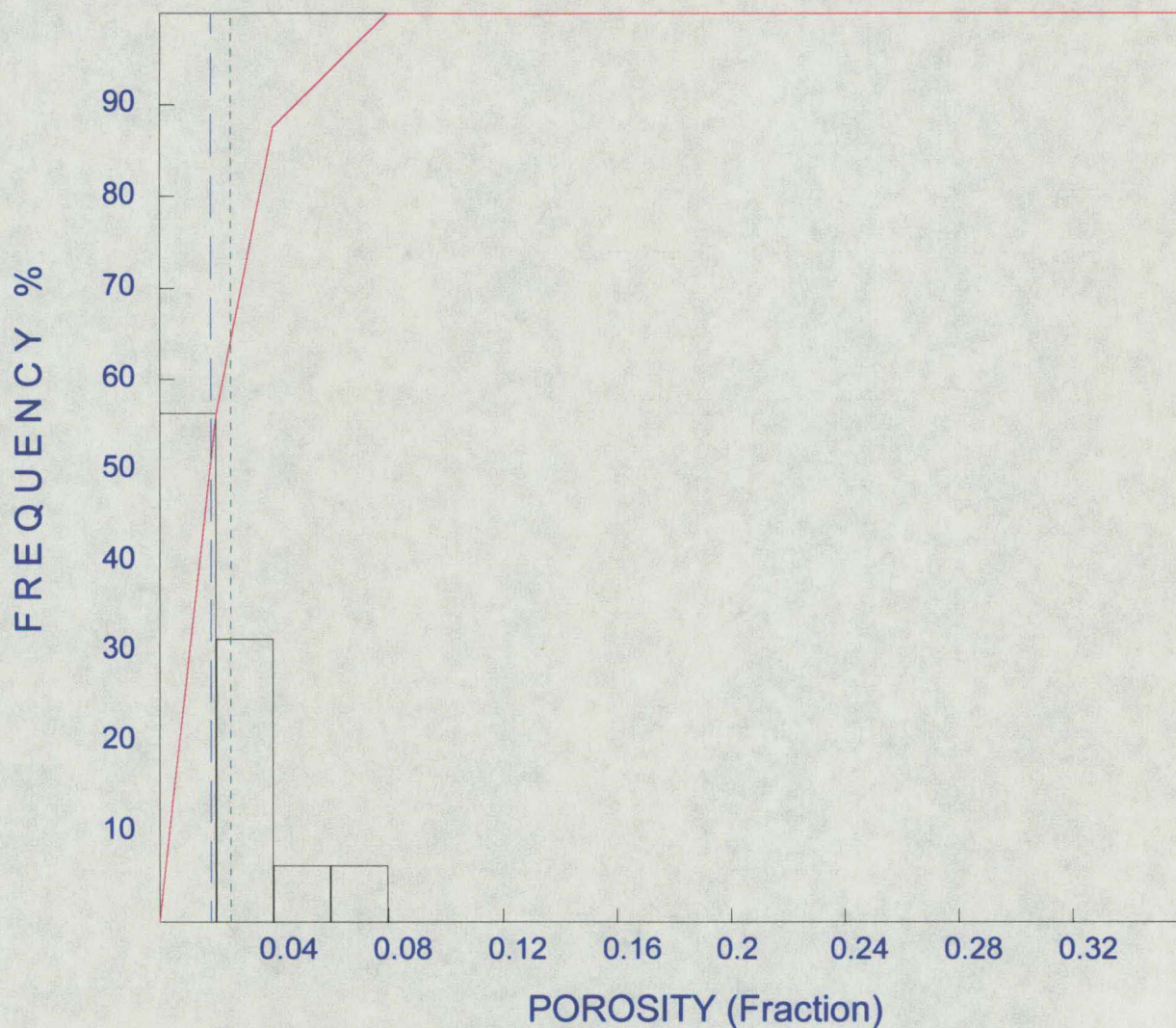
Median: 2820

Cum. Frequency %

Company :	CHEVRON CANADA RESOURCES LIMITED	FIGURE :	2
Location :	300M256030123300	W/O :	RC8471
Interval :	3450.00 - 3456.80m	Date :	01-13-2000
Formation :	NAHANNI		

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POROSITY DISTRIBUTION



Arithmetic Mean		Mean: 0.025
Median	-----	Median: 0.018
Cum. Frequency %	—————	

Company : CHEVRON CANADA RESOURCES LIMITED

Location : 300M256030123300

FIGURE : 3

Interval : 3450.00 - 3456.80m

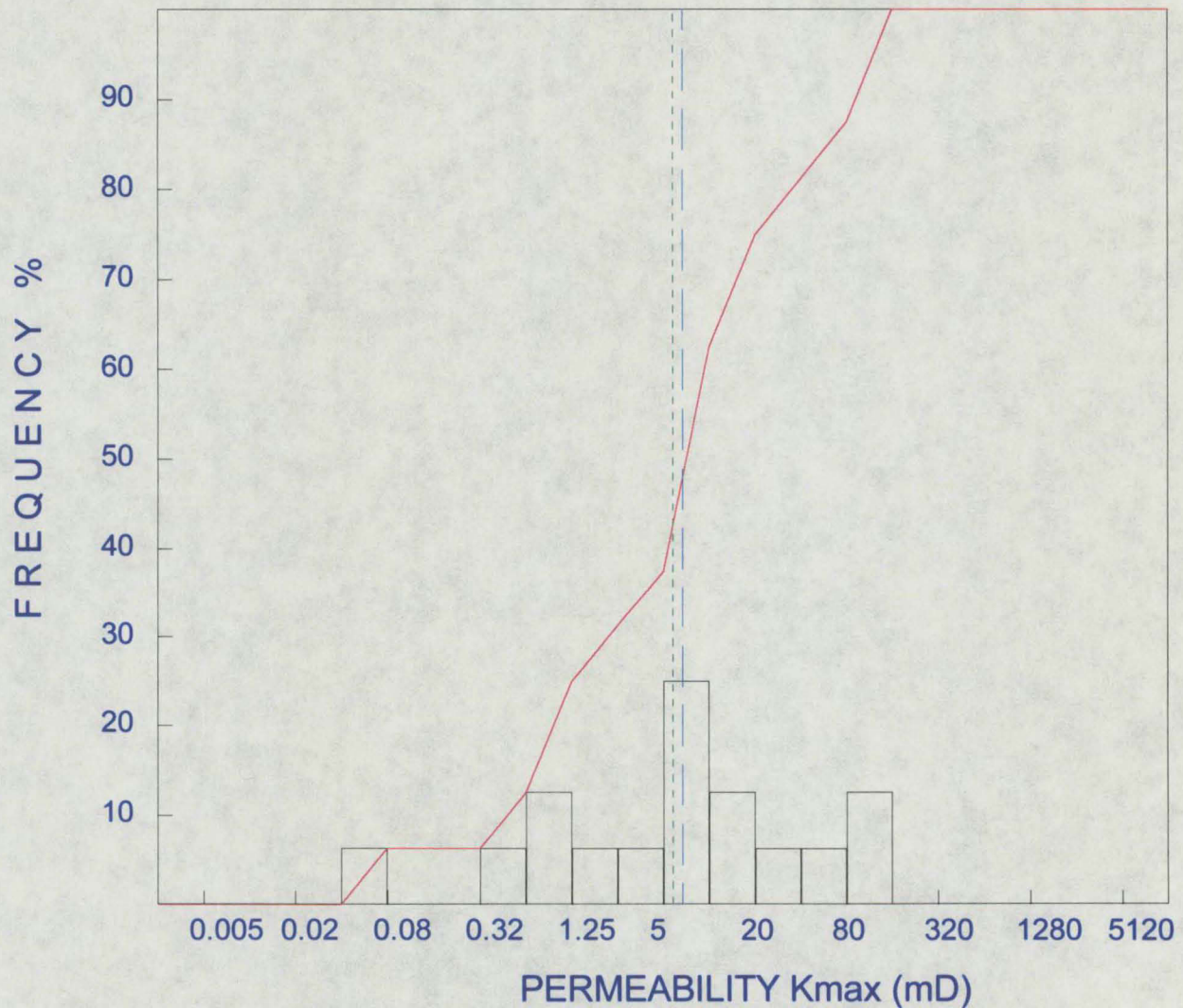
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PERMEABILITY Kmax DISTRIBUTION



Arithmetic Mean

Median

Cum. Frequency %

.....

Mean: 5.97

Median: 6.98

Company : CHEVRON CANADA RESOURCES LIMITED

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FIGURE : 4

Interval : 3450.00 - 3456.80m

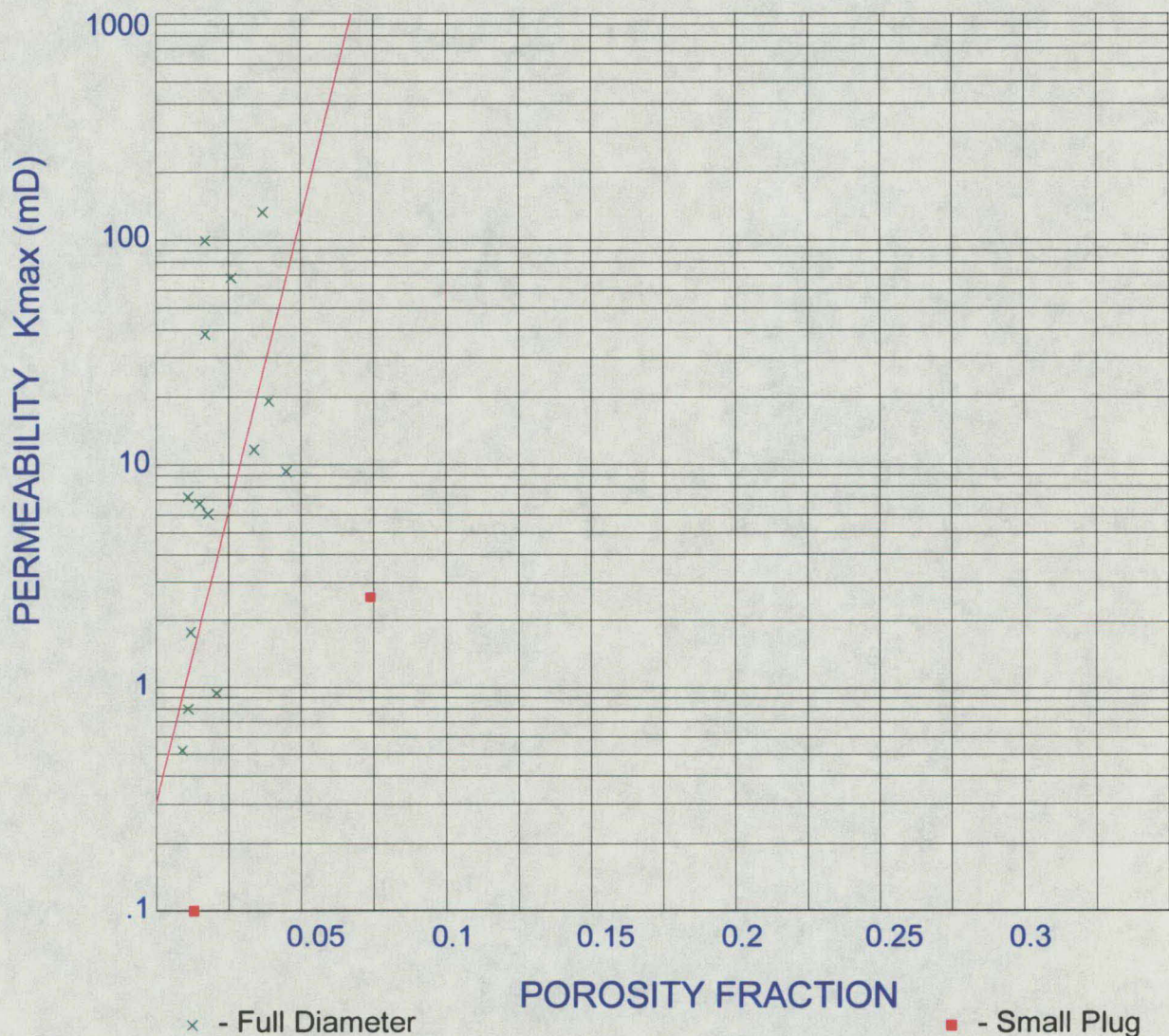
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POROSITY-PERMEABILITY CORRELATION



Equation of Line : $\text{Log (Kmax)} = -0.52 + 52.07 * \text{Porosity}$

Correlation Coefficient $r = 0.25$

GENERAL LITHOLOGICAL DESCRIPTIONS

Company : CHEVRON CANADA RESOURCES LIMITED
 Well : CHEVRON et al LIARD
 Location : 300M256030123300
 Formation : NAHANNI
 Drilling Fluid : WATER BASE MUD

Date : 01-13-2000
 W/O Number : RC8471
 Cored Interval : 1) 3450.00-3452.00m
 : 2) 3452.00-3457.20m
 Recovery : 1) 1.40m
 : 2) 5.20m

GENERAL LITHOLOGICAL DESCRIPTIONS

CORE	DEPTH INTERVAL	CORE ANALYSIS	LITHOLOGY	REMARKS
1	3450.00-3451.40	001-SP002	Dolomite	Dark grey dolomite; locally brecciated; hard; microcrystalline to coarse crystalline; locally calcareous; common oblique and vertical fractures; abundant veins/voids filled with druzey dolomite; rare oblique low amplitude stylolites at places; common organic matter; rubbly at the base. Tight to fair intercrystalline and vuggy porosity; no oil stain or fluorescence.
1	3451.40-3452.00	NA	LC	Lost core
2	3452.00-3453.20	003-006	Dolomite	Medium to dark grey; hard; microcrystalline to coarse crystalline; locally calcareous; common oblique and vertical fractures; abundant veins/voids filled with druzey dolomite; common oblique and vertical low amplitude stylolites; trace silica replaced indistinct bioclast fragments; rare dark grey chert nodules; minor coral fragments; locally rubbly. Tight; no oil stain or fluorescence.
2	3453.20-3455.63	007-013	Dolomite	Medium to dark grey; hard; microcrystalline to coarse crystalline; locally calcareous; very common oblique and vertical fractures; abundant veins/voids filled with druzey dolomite; common oblique and vertical low amplitude stylolites; occasional slickensides; minor coral fragments; locally rubbly. Tight; no oil stain or fluorescence.
2	3455.63-3457.20	014-SP016	Dolomite	Medium to dark grey; hard; microcrystalline to coarse crystalline; locally calcareous; common oblique and vertical fractures; abundant veins/voids filled with druzey dolomite; common oblique and vertical low amplitude stylolites; minor slickensides; rare indistinct bioclast fragments; locally rubbly. Tight; no oil stain or fluorescence.

SAMPLE HANDLING

AGAT LABORATORIES CORE SERVICES

SAMPLE HANDLING AND ANALYSIS INFORMATION

Company : CHEVRON CANADA RESOURCES LIMITED
Well : CHEVRON et al LIARD
Location : 300M256030123300

Coring Equipment : Diamond
Coring Fluid : Water Base Mud
Core Diameter : 0.10 m
Total Cored : 7.20 m
Total Recovered : 6.60 m

W/O Number : RC8471
Date : 01-13-2000

HANDLING

Core Transported in : Boxes
Cutting Solution : Water
Cleaning Solvent : Toluene
Extraction : CO₂-toluene
Cleaning Time : 48 hours
Drying Equipment : Convection oven
Drying Time/Temp : 48 hours @ 108°C

ANALYSIS

Grain volume measured by Boyle's Law using helium
Bulk volume measured by calipering on right-cylindrical samples
Permeability measured on .10m full diameter samples
Permeability measured on 38.10mm diameter drilled plugs
Full diameter core sandblasted Kh measurements

REMARKS

FIFTEEN (15) SETS OF COLOR PHOTOS OF CORE.

ABBREVIATIONS

COMMON ABBREVIATIONS

abnt	Abundant	C	Coarse (ly)	f	Fine (ly)
abv	Above	calc	Calcite (areous)	fau	Fauna
Alg	Algae (al)	carb	Carbonaceous	Fe	Iron-Ferruginous
alt	Altered (ing)	cbl	Cobble (64-256 mm)	Fe-mag	Ferromagnesian
amor	Amorphous	Ceph	Cephalopod	fenst	Fenestral
Amph	Amphipora	cgl	Conglomerate	fis	Fissile
ang	Angular	chk	Chalk (y)	fl	Fill (ed)
anhy	Anhydrite (ic)	chlor	Chlorite	fld	Feldspar (thic)
app	Appear	cht	Chert	flk	Flake
apr	Apparent	chty	Cherty	flky	Flaky
aprox	Approximate (ly)	cl	Clastic	flor	Fluorescence
arg	Argillaceous	cln	Clean	flt	Fault (ed)
ark	Arkose (ic)	clr	Clear	fltg	Floating
asph	Asphalt (ic)	cly	Clay (ey)	foram	Foraminifera
AST	Assigned similar to (no actual sample taken)	com	Common	fos	Fossil (iferous)
apha	Aphanitic	coq	Coquina	fr	Fair
		Cor	Coral	frac	Fracture (ed)
bcm	Become (ing)	crbnt	Carbonate	frag	Fragment (al)
bd	Bed	Crin	Crinoid (al)	fri	Friable
bdd	Bedded	crm	Cream	frmwk	Framework
bdg	Bedding	crpxl	Cryptocrystalline	fros	Frosted
Belm	Belemnites	ctc	Contact		
bent	Bentonite (ic)	deb	Debris	g	Good
bf	Buff	decr	Decrease (ing)	Gast	Gastropod
biocl	Bioclastic	desi	Desiccation	gl	Glass (y)
bioturb	Bioturbated	dism	Disseminated	glau	Glaucinite (ic)
bit	Bitumen (inous)	dk	Dark (er)	gn	Green
bl	Blue (ish)	dns	Dense (er)	gr	Grain (ed)
blk	Black	dol	Dolomite (ic)	gran	Granular
blky	Blocky	drsy	Drusy	grd	Grade (ed)
bnd	Band (ed)	dtrl	Detrital (us)	grnl	Granule (2-4 mm)
Brac	Brachiopod			gy	Grey
brec	Breccia (ted)	elg	Elongate	gyp	Gypsum (iferous)
bri	Bright	euhed	Euhedral		
brit	Brittle				
brn	Brown				
Bry	Bryozoa				
bulb	Bulbous				
bur	Burrowed				

COMMON ABBREVIATIONS (CONTINUED)

hd	Hard	m	Medium	pk	Pink
hfrac	Horizontal Fracture	mar	Maroon	plag	Plagioclase
hi	High	mas	Massive	plcy	Pelecypod
hrtl	Horizontal	mat	Material, matter	pl	Plant
hvy	Heavy	mica	Mica (ceous)	plty	Platy
hydc	Hydrocarbon	mic	Micro	por	Porous (sity)
		mky	Milky	pos	Possible (ility)
ig	Igneous	mnr	Minor	p-p	Pin-Point
imbed	Imbedded	mnrl	Mineral (ized)	pred	Predominant (ly)
imp	Impression	mnut	Minute	prim	Primary
incl	Included (sion)	Mol	Mollusca	prob	Probable (ly)
incr	Increase	mot	Mottled	prom	Prominent (ly)
indst	Indistinct	mrly	Marly	pt	Part (ly)
intbd	Interbedded	mtx	Matrix	ptch	Patch (es)
intcl	Intraclast (s)			ptg	Parting
intfrag	Interfragmental	n	No, none, non	purp	Purple
intgran	Intergranular	nod	Nodule	pyr	Pyrite (ic) (ized)
intlam	Interlaminated	num	Numerous	pyrbit	Pyrobitumen
intr	Intrusion (ive)				
intv	Interval	o	Oil	qtz	Quartz
intxl	Intercrystalline	occ	Occasional	qtzc	Quartzitic
ireg	Irregular	od	Odor	qtzs	Quartzose
ird	Iridescent	ool	Oolite (ic)		
intrsk	Intraskeletal	op	Opaque	rd	Round (ed)
		org	Organic	repl	Replaced (ing) (ment)
kao	Kaolin	ornng	Orange	rexl	Recrystallized
		orth	Orthoclase	rmn	Remains (nant)
lam	Laminated	Ost	Ostracod	rr	Rare
lchd	Leached	ovgth	Overgrowth	rsns	Resinous
len	Lentil (cular)	ox	Oxidized	rthy	Earthy
lith	Lithographic				
lmy	Limy	p	Preliminary (as suffix)	s	Small
lrg	Large (er)	pbl	Pebble (4-64 mm)	sa	Salt (y)
ls	Limestone	pel	Pellet	S	Sulphur
lse	Loose	perm	permeability	s&p	Salt & Pepper
lstr	Lustre	pet	Petroleum (iferous)	sat	Saturated
lt	Light (er)	phos	Phosphate (ic)	sb	Sub



COMMON ABBREVIATIONS (CONTINUED)

sc	Scales	tab	Tabular	xbd	Cross-bedded
scat	Scattered	tex	Texture	xbdg	Cross-bedding
sd	Sand (1/16 - 2mm)	Tham	Thamnopora	xl	Crystal (line)
sdv	Sandy	thk	Thick	xlam	Cross-laminated
sec	Secondary	thn	Thin		
sed	Sediment (ary)	thru	Throughout	yel	Yellow
sft	Soft	tr	Trace		
sh	Shale	trns	Translucent	zn	Zone
shad	Shadow	trnsp	Transparent		
shy	Shaly	tt	Tight	*	Broken core
sid	Siderite (ic)	tub	Tubular	/	With
sil	Silica			> 10000	Permeability over 10000 mD
sks	Slickensided	uncons	Unconsolidated	<0.01	Permeability less than 0.01 mD
sl	Slight (ly)	unident	Unidentifiable	CC	Cracked Core
sln	Solution	up	Upper	DR	Drilled
slt	Silt			LC	Lost Core
sltst	Siltstone	v	Very	RU	Rubble
slty	Silty	var	Variable	mD	milliDarcy
sm	Smooth	vcol	Varicolored		
SP	Small Plug (as prefix)	vfrac	Vertical Fracture		
sp	Spot (ted) (ty)	vgt	Varigated		
spec	Speck (led)	vn	Vein		
spl	Sample	vrtl	Vertical		
srt	Sort (ed) (ing)	vug	Vug (gy) (ular)		
strg	Stringer				
Strom	Stromatoporoid	w	Well		
stromlt	Stromatolite	wh	White		
struc	Structure	wk	Weak		
styl	Stylolite (ic)	wthrd	Weathered		
suc	Sucrosic	wtr	Water		
sug	Sugary	wvy	Wavy		
sup	Supported	wxy	Waxy		
surf	Surface	wsrt	Well sorted		
sz	Size				

CORE LOG

Company : CHEVRON CANADA RESOURCES LIMITED
Well Name : CHEVRON et al LIARD
Field :
Location : 300M256030123300
Formation : NAHANNI
W / O : RC8471
Plot Scale 1:240

Recovery : 6.60 m
Cored Interval : 3450.00 - 3457.20m
Drlg. Fld. : WATER BASE MUD
Elevation (KB) :

AGAT Laboratories CORE LOG

GAMMA RAY (API)
0 75 150

Sw
(frac P.V.)
1 .8 .6 .4 .2 0

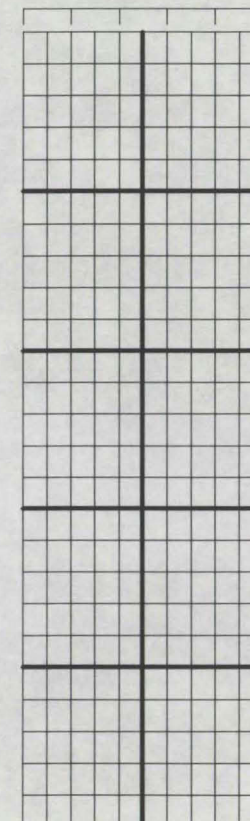
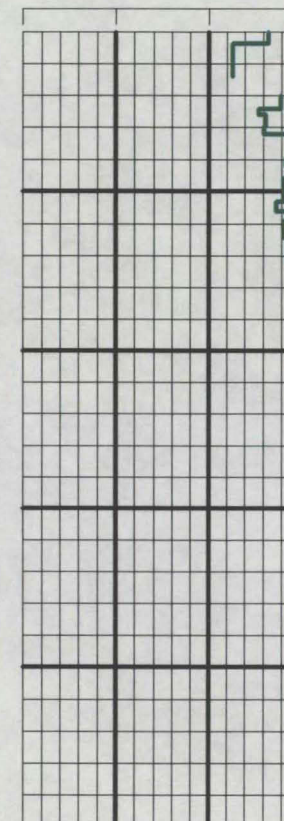
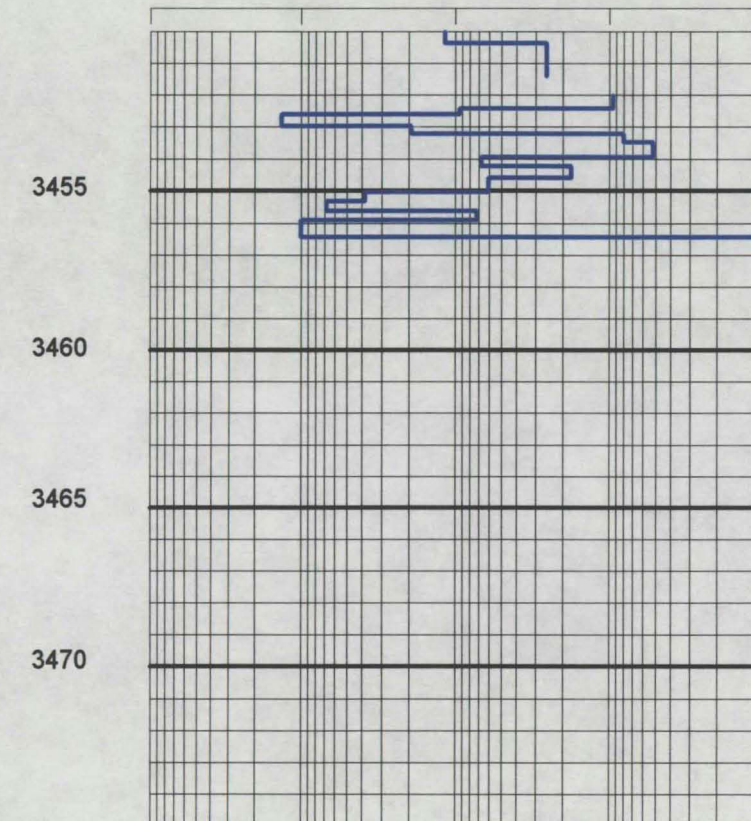
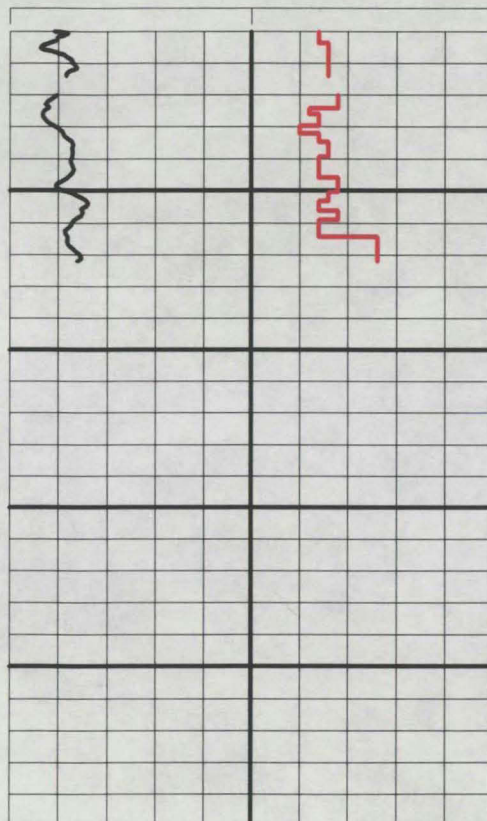
GRAIN DENSITY
(Kg/m³)
2500 2750 3000

DEPTH
(m)

PERMEABILITY (Kmax)
(mD)
1000 100 10 1 0.1

POROSITY
(fraction)
.3 .2 1 0

So
SAT'n
(frac. P.V.)
0 .4 .8 1



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GAMMA RAY (API)
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GRAIN DENSITY
(Kg/m³)
2500 2750 3000

DEPTH
(m)

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(fraction)

.3 .2 1 0

