

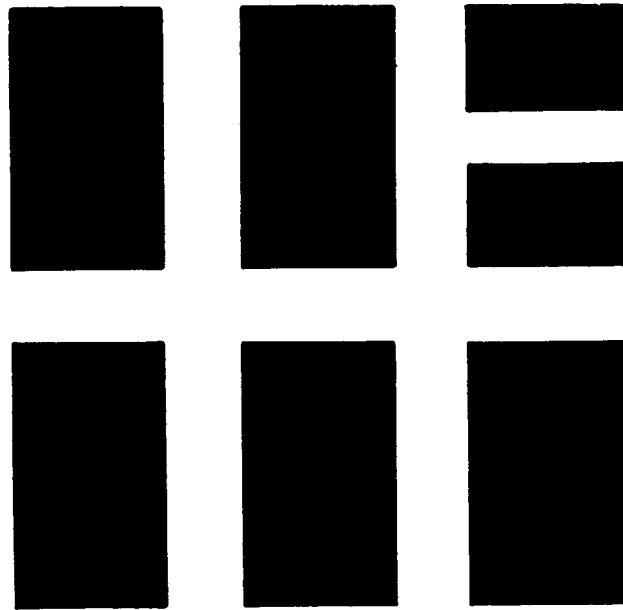
Box 169 No 5283

COMPANY	ELF NORGE A/S
WELL	25/2-4
FIELD	EAST FRIGG
COUNTRY	NORWAY
REFERENCE	513, 1477
DATE LOGGED	15/22 AUG 1975

# COMPUTER PROCESSED INTERPRETATION

Schlumberger

# Schlumberger Synergetic Log Systems



Computer Processed Interpretation

## CORIBAND

An Analysis Of Complex Lithology

# CORIBAND

## Analysis of Complex Lithology

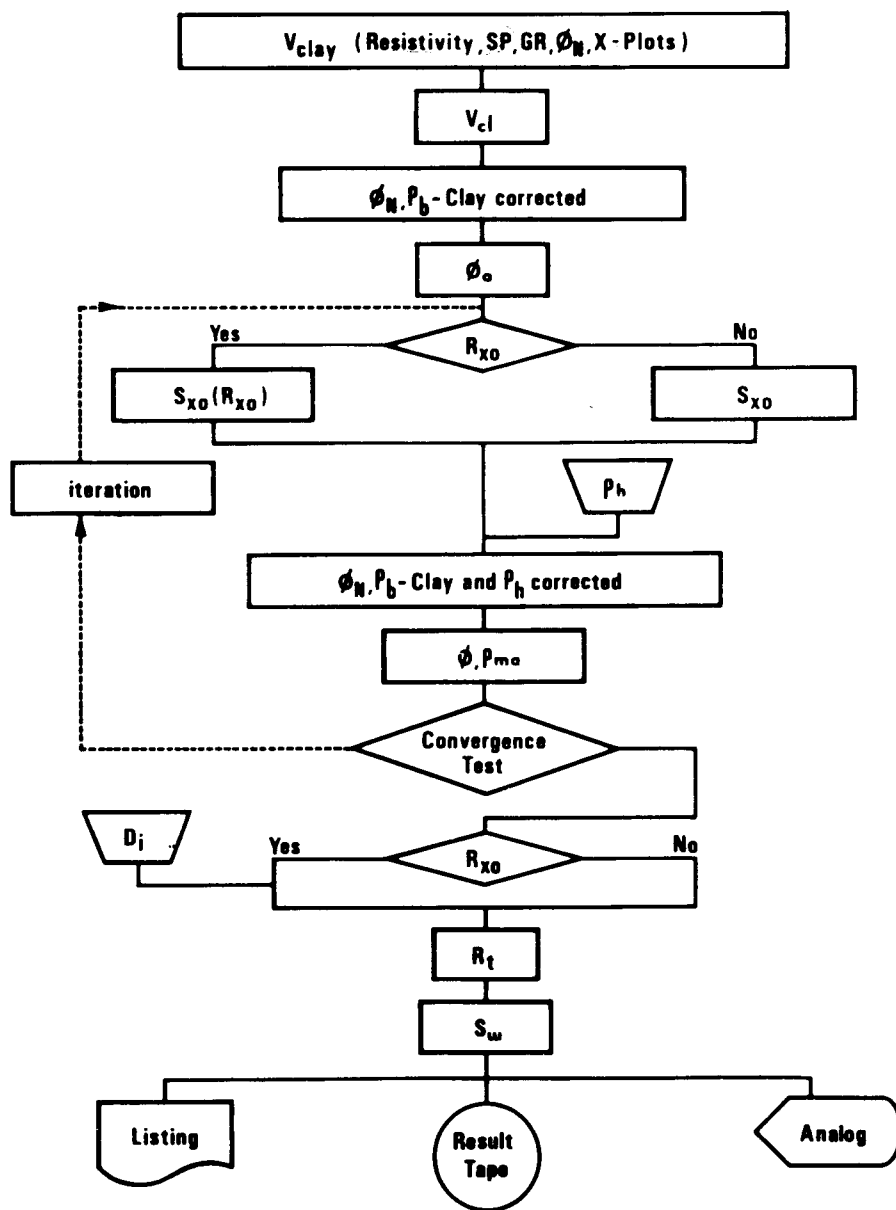
C O R I B A N D is a computer program which provides continuous computations of reservoir parameters through a zone of complex lithology. It corrects logging data for environmental effects and utilises all available information to provide the most probable solution for reservoir analysis.

Results are presented on a film coded for easy identification. A computer listing, providing a complete tabulation of reservoir parameters is also supplied. In addition, the raw log data, the normalized data and the computed results, are available in digital form on magnetic tape in a format compatible with your own computer (CERT tape).

The logging program for CORIBAND should include : a Deep Investigating Resistivity Log, a Microresistivity Log, a Formation Density Compensated Log, a Neutron Log (SNP or CNT) and a Borehole Compensated Sonic Log. And an SP and GR run in conjunction with the above logs.

Before being interpreted by the CORIBAND program : the log data are depth matched, corrected for environmental effects, and used to produce preliminary computations of porosity ( $\phi$ ), formation resistivity ( $R_t$ ), invasion diameter ( $d_i$ ),  $R_{wa}$  and  $R_{mfa}$ . This pre-interpretation pass also produces cross-plots which are used to determine parameters needed for the interpretation (e.g. clay characteristics, lithological model).

The pre-interpretation pass output is then used as input to the CORIBAND program. A flow chart with simplified explanation is shown below.



CORIBAND FLOW CHART

Lowest value of  $V_{clay}$  from various indicators is taken as final value.

This clay corrected value of porosity is used to calculate a first value of  $S_w$  and  $S_{xo}$ .  $\rho_h$  is then determined and used with  $S_{xo}$  to compute the hydrocarbon effect on the neutron and density.

The new value of porosity thus obtained is used to get a better value of  $S_{xo}$ , and the hydrocarbon effect is recomputed.

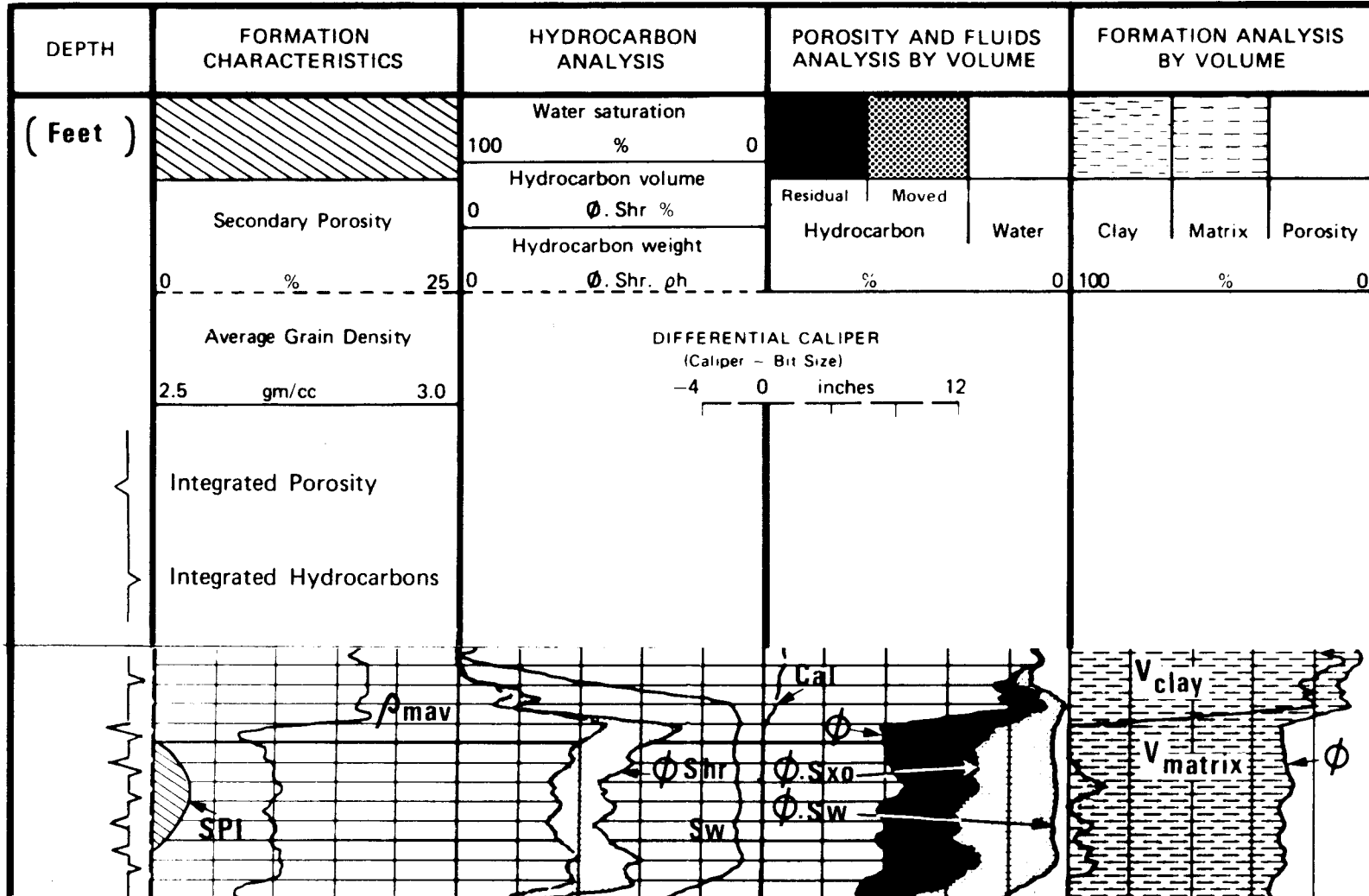
This iteration process continues until the new porosity differs from the previous value by less than 1 p.u.

Final computation of  $S_w$  using porosity corrected for clay and hydrocarbons,  $R_t$  corrected for invasion and  $V_{clay}$ .

# CORIBAND

## Analysis of Complex Lithology

## ANALOG PRESENTATION



Depth  
Track

Track I

Track II

Track III

Track IV

# CORIBAND

## Analysis of Complex Lithology

## TABULAR LISTING DATA

DEPTH FEET	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-FT	HC-FT
4517.0	.0	2.65	94.2	98.2	28.6	.0	1.7	.5	281.14	3.44
4518.0	.0	2.63	96.3	98.9	28.3	.0	1.0	.3	277.70	3.43
4519.0	.0	2.63	90.0	96.9	28.7	.0	2.9	.9	274.28	3.41
4520.0	.0	2.64	85.8	95.5	30.0	.0	4.3	1.4	270.87	3.38
4521.0	.0	2.66	87.2	96.0	30.6	.0	3.9	1.2	267.50	3.34
4522.0	.0	2.64	89.9	96.9	29.9	.0	3.0	.9	264.18	3.30
4523.0	.0	2.63	92.6	97.7	29.0	.0	2.1	.7	260.89	3.27
4524.0	.0	2.66	92.5	97.7	29.8	.0	2.2	.7	257.62	3.25
4525.0	.0	2.67	96.3	96.9	29.4	.0	1.1	.3	254.37	3.23

- Column 1 — Depth in feet or meters.
- Column 2 — Clay content in percentage of bulk volume.
- Column 3 — Average matrix density in gms/cc. including clay.
- Column 4, 5 — Water saturations in percentage of total porosity.
- Column 6, 7 — Porosity (total and secondary) in percentage of bulk volume.
- Column 8, 9 — Hydrocarbons (total and moved) in percentage of bulk volume.
- Column 10, 11 — Cumulative integrations of porosity and hydrocarbons in porosity-feet or porosity-meter and hydrocarbon-feet or hydrocarbon-meter from the bottom of the computed section.

## Reservoir Inventory – Depth Track.

**Integrated porosity.** The distance between consecutive pips represents 1 foot of 100 % porosity, or 7758 barrels of pore volume per acre. When depths are expressed in meters, the integration gives a pip for every .2 meters of 100 % porosity which represents a pore volume of  $.2 \text{ m}^3/\text{m}^2$ .

**Integrated hydrocarbon.** The distance between consecutive pips represents 1 foot of hydrocarbon in place, or 7758 barrels of hydrocarbon per acre. In meters, the integration gives a pip for every .2 meters of hydrocarbon in place.

This information, available on the listing, is displayed only if  $\emptyset$ .Shr and  $\emptyset$ .Shr. $\rho$ h are not shown.

## Formation Characteristics – Track I.

- SPI – Secondary Porosity Index. ( $\text{SPI} = \emptyset_{\text{ND}} - \emptyset_{\text{S}}$ ). As the sonic responds mainly to intergranular porosity, while the Neutron and Density respond to total porosity, the presence of vugs or fractures is shown by the Neutron-Density porosity reading higher than the sonic porosity.
- $\rho_{\text{mav}}$  – Average Grain Density. The average density of all solids, clay included. This curve indicates lithology in case of a clean monomineral matrix e.g limestone ( $= 2.71$ ). For a clean dual mineral matrix the proportion of the two constituents can be computed if these are well defined.

## Hydrocarbon Analysis – Track II.

- $S_{\text{w}}$  – Water saturation in the uncontaminated zone.
- $\emptyset$ . $S_{\text{xO}}$  – Hydrocarbon volume  $\emptyset$  ( $1 - S_{\text{xO}}$ ) in the invaded zone.
- $\emptyset$ .Shr. $\rho$ h – Hydrocarbon weight per unit volume in the invaded zone.

## Porosity Analysis – Track III.

- $\emptyset$  – Formation porosity corrected for hydrocarbon and clay effect.
- $\emptyset$ . $S_{\text{xO}}$  – Water filled porosity in the invaded zone. (plotted only when microresistivity log available).
- $\emptyset$ . $S_{\text{w}}$  – Water filled porosity in the uncontaminated zone.
- The area between  $\emptyset$ . $S_{\text{xO}}$  and  $\emptyset$ . $S_{\text{w}}$  represents the moveable hydrocarbon.
- The area between  $\emptyset$  and  $\emptyset$ . $S_{\text{w}}$  represents the total hydrocarbon.

## Bulk Volume Analysis – Track IV.

The total bulk volume is divided into  $\emptyset$ , porosity ;  $V_{\text{clay}}$ , percentage of clay ;  $V_{\text{matrix}}$ , percentage of non-clay matrix.

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\* SCHLUMBERGER \*  
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COMPUER PROCESSED INTERPRETATION  
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COMPANY            ELF NORGE A/S  
WELL                25/2-4  
FIELD              EAST FRIGG  
COUNTRY            NORWAY OFFSHORE  
REFERENCE          CPI-513,1477  
LOGGED             15/22 AUGUST 1975

VSH GREATER THAN 70 PERCENT NOT LISTED



DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3610.1	32.9	2.72	100.0	100.0	7.0	0.0	0.0	0.0	47.77	13.99
3610.4	38.6	2.73	100.0	100.0	5.3	0.0	0.0	0.0	47.75	13.99
3610.7	43.3	2.74	100.0	100.0	4.3	0.0	0.0	0.0	47.73	13.99
3611.0	52.8	2.75	100.0	100.0	3.1	0.0	0.0	0.0	47.72	13.99
3611.3	62.5	2.78	100.0	100.0	1.1	0.0	0.0	0.0	47.71	13.99
3611.6	56.7	2.76	100.0	100.0	3.6	0.0	0.0	0.0	47.71	13.99
3611.9	54.0	2.76	100.0	100.0	3.8	0.0	0.0	0.0	47.70	13.99
3612.2	52.0	2.75	100.0	100.0	3.0	0.0	0.0	0.0	47.69	13.99
3612.5	48.7	2.75	100.0	100.0	3.3	0.0	0.0	0.0	47.68	13.99
3612.8	38.1	2.73	100.0	100.0	4.8	0.0	0.0	0.0	47.66	13.99
3613.1	34.0	2.72	100.0	100.0	7.4	0.0	0.0	0.0	47.65	13.99
3613.4	38.7	2.73	100.0	100.0	6.2	0.0	0.0	0.0	47.63	13.99
3613.7	38.2	2.73	100.0	100.0	6.6	0.0	0.0	0.0	47.61	13.99
3614.0	35.6	2.72	100.0	100.0	7.3	0.0	0.0	0.0	47.58	13.99
3614.3	38.5	2.73	100.0	100.0	6.2	0.0	0.0	0.0	47.56	13.99
3614.6	30.5	2.71	100.0	100.0	7.9	0.0	0.0	0.0	47.54	13.99
3614.9	23.3	2.70	99.1	99.1	10.2	0.0	0.1	0.0	47.52	13.99
3615.2	26.2	2.70	100.0	100.0	9.0	0.0	0.0	0.0	47.49	13.99
3615.5	37.4	2.72	100.0	100.0	6.0	0.0	0.0	0.0	47.46	13.99
3615.9	38.3	2.73	100.0	100.0	6.8	0.0	0.0	0.0	47.44	13.99
3616.2	38.0	2.73	100.0	100.0	7.0	0.0	0.0	0.0	47.42	13.99
3616.5	37.2	2.72	100.0	100.0	7.3	0.0	0.0	0.0	47.40	13.99
3616.8	37.9	2.73	100.0	100.0	7.8	0.0	0.0	0.0	47.38	13.99
3617.1	40.5	2.73	100.0	100.0	6.8	0.0	0.0	0.0	47.35	13.99
3617.4	39.8	2.73	100.0	100.0	6.7	0.0	0.0	0.0	47.33	13.99
3617.7	40.8	2.73	100.0	100.0	6.5	0.0	0.0	0.0	47.31	13.99
3618.0	38.1	2.73	100.0	100.0	7.0	0.0	0.0	0.0	47.29	13.99
3618.3	42.6	2.73	100.0	100.0	5.9	0.0	0.0	0.0	47.27	13.99
3618.6	48.6	2.75	100.0	100.0	4.0	0.0	0.0	0.0	47.26	13.99
3618.9	46.7	2.74	100.0	100.0	4.9	0.0	0.0	0.0	47.24	13.99
3619.2	36.8	2.72	100.0	100.0	7.7	0.0	0.0	0.0	47.23	13.99
3619.5	34.9	2.72	100.0	100.0	7.0	0.0	0.0	0.0	47.20	13.99
3619.8	32.8	2.72	100.0	100.0	7.3	0.0	0.0	0.0	47.18	13.99
3620.1	28.8	2.71	100.0	100.0	8.1	0.0	0.0	0.0	47.16	13.99
3620.4	24.1	2.70	100.0	100.0	9.0	0.0	0.0	0.0	47.13	13.99
3620.7	26.2	2.70	100.0	100.0	9.3	0.0	0.0	0.0	47.11	13.99
3621.0	33.5	2.72	100.0	100.0	8.4	0.0	0.0	0.0	47.09	13.99
3621.3	44.6	2.74	100.0	100.0	9.3	0.0	0.0	0.0	47.05	13.99
3621.6	61.5	2.78	100.0	100.0	7.0	0.0	0.0	0.0	47.03	13.99
3622.0	56.6	2.77	100.0	100.0	7.0	0.0	0.0	0.0	47.00	13.99
3622.3	56.6	2.77	100.0	100.0	7.0	0.0	0.0	0.0	46.98	13.99
3622.6	58.3	2.77	100.0	100.0	8.0	0.0	0.0	0.0	46.96	13.99
3622.9	62.0	2.78	100.0	100.0	7.3	0.0	0.0	0.0	46.94	13.99
3624.1	67.6	2.79	100.0	100.0	4.1	0.0	0.0	0.0	46.90	13.99
3624.4	45.0	2.78	89.4	89.4	11.8	0.0	1.2	0.0	46.89	13.99
3624.7	50.0	2.79	100.0	100.0	7.4	0.0	0.0	0.0	46.85	13.99
3625.0	45.6	2.77	100.0	100.0	6.4	0.0	0.0	0.0	46.83	13.99

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3625.3	17.3	2.80	72.3	72.3	11.3	0.0	3.1	0.0	46.81	13.99
3625.6	48.5	2.82	94.9	94.9	7.6	0.0	0.4	0.0	46.77	13.98
3625.9	58.3	2.83	100.0	100.0	4.9	0.0	0.0	0.0	46.75	13.98
3626.5	68.0	2.84	100.0	100.0	3.6	0.0	0.0	0.0	46.73	13.98
3626.8	61.0	2.83	100.0	100.0	6.1	0.0	0.0	0.0	46.72	13.98
3627.1	63.1	2.85	100.0	100.0	6.1	0.0	0.0	0.0	46.70	13.98
3628.4	65.6	2.85	100.0	100.0	4.8	0.0	0.0	0.0	46.67	13.98
3628.7	69.7	2.85	100.0	100.0	2.9	0.0	0.0	0.0	46.66	13.98
3629.3	59.1	2.79	100.0	100.0	0.1	0.0	0.0	0.0	46.65	13.98
3629.6	42.7	2.75	100.0	100.0	1.1	0.0	0.0	0.0	46.65	13.98
3629.9	45.2	2.75	100.0	100.0	1.5	0.0	0.0	0.0	46.64	13.98
3630.2	55.3	2.76	100.0	100.0	1.5	0.0	0.0	0.0	46.64	13.98
3630.5	64.0	2.77	100.0	100.0	1.6	0.0	0.0	0.0	46.63	13.98
3630.8	66.8	2.78	100.0	100.0	1.2	0.0	0.0	0.0	46.63	13.98
3631.4	69.4	2.79	100.0	100.0	2.6	0.0	0.0	0.0	46.62	13.98
3634.1	65.4	2.86	85.9	94.7	11.4	0.0	1.6	1.0	46.52	13.98
3634.4	64.1	2.87	75.0	75.0	11.8	0.0	2.9	0.0	46.49	13.97
3634.8	60.9	2.81	82.3	82.3	10.7	0.0	1.9	0.0	46.45	13.96
3635.1	69.9	2.82	99.9	100.0	7.4	0.0	0.0	0.0	46.42	13.96
3635.4	62.2	2.87	52.6	52.6	12.5	0.0	5.9	0.0	46.39	13.95
3635.7	59.8	2.84	47.0	47.0	12.5	0.0	6.6	0.0	46.36	13.93
3636.0	63.5	2.81	49.2	52.7	10.1	0.0	5.1	0.4	46.32	13.91
3636.3	60.5	2.82	36.6	40.9	12.0	0.0	7.6	0.5	46.29	13.90
3636.6	60.3	2.81	34.7	37.9	12.3	0.0	8.0	0.4	46.25	13.87
3636.9	66.9	2.81	40.1	40.8	10.8	0.0	6.5	0.1	46.22	13.85
3637.2	68.8	2.82	43.6	43.6	10.3	0.0	5.8	0.0	46.18	13.83
3637.5	58.3	2.84	33.5	34.8	13.7	0.0	9.1	0.2	46.15	13.81
3637.8	45.5	2.85	24.8	29.1	18.0	0.0	13.5	0.8	46.10	13.78
3638.7	39.5	2.77	18.2	22.9	20.0	0.0	16.3	0.9	46.05	13.74
<del>3639.0</del>	<del>47.2</del>	<del>2.77</del>	<del>19.5</del>	<del>33.9</del>	<del>17.4</del>	<del>0.0</del>	<del>14.0</del>	<del>2.5</del>	<del>46.00</del>	<del>13.70</del>
3639.3	23.5	2.72	13.0	26.5	25.3	0.0	22.0	3.4	45.93	13.64
3639.6	0.0	2.66	9.3	28.5	30.6	0.0	27.9	5.9	45.85	13.57
3639.9	9.5	2.69	9.0	29.1	26.6	0.0	24.2	5.3	45.76	13.48
3640.2	14.2	2.69	7.8	29.5	24.5	0.0	22.6	5.3	45.68	13.41
3640.5	17.4	2.71	7.9	22.2	22.4	0.0	20.6	3.2	45.60	13.34
3640.8	19.3	2.71	9.8	29.5	18.5	0.0	16.7	3.7	45.54	13.29
3641.2	12.1	2.68	7.9	35.3	20.5	0.0	18.9	5.6	45.48	13.23
3641.5	8.5	2.68	7.5	32.2	26.6	0.0	24.6	6.6	45.41	13.17
3641.8	4.8	2.68	8.0	30.5	28.1	0.0	25.8	6.3	45.33	13.09
3642.1	6.6	2.68	7.3	29.9	28.2	0.0	26.1	6.4	45.25	13.02
3642.4	2.8	2.68	6.1	24.8	29.9	0.0	28.1	5.6	45.16	12.93
3642.7	0.7	2.67	5.7	23.9	30.0	0.0	28.2	5.4	45.07	12.85

311.4

12

> 40%

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3643.0	0.0	2.66	5.4	24.8	30.9	0.0	29.3	6.0	44.97	12.76
3643.3	0.0	2.66	5.0	25.5	31.2	0.0	29.6	6.4	44.88	12.67
3643.6	1.2	2.67	6.2	26.0	31.2	0.0	29.2	6.8	44.78	12.58
3643.9	4.1	2.67	7.5	33.2	30.7	0.0	28.0	7.8	44.69	12.49
3644.2	5.9	2.67	8.2	36.3	29.5	0.0	27.1	8.3	44.60	12.41
3644.5	5.1	2.67	7.6	32.5	29.9	0.0	27.6	7.4	44.51	12.32
3644.8	14.6	2.69	7.8	33.0	26.2	0.0	24.2	6.6	44.42	12.24
3645.1	10.9	2.69	7.8	31.7	26.7	0.0	24.6	6.4	44.34	12.17
3645.4	4.0	2.67	6.6	29.6	28.0	0.0	26.1	6.4	44.26	12.09
3645.7	12.7	2.69	6.7	32.1	25.6	0.0	23.8	6.5	44.17	12.01
3646.0	16.0	2.70	7.3	31.8	23.9	0.0	22.2	5.9	44.10	11.94
3646.3	15.7	2.69	7.5	36.9	22.7	0.0	21.0	6.7	44.02	11.88
3646.6	11.6	2.68	7.2	34.0	22.0	0.0	20.4	5.9	43.96	11.81
3646.9	0.9	2.67	5.9	26.5	26.5	0.0	24.9	6.0	43.89	11.75
3647.2	0.2	2.67	5.1	27.8	27.1	0.0	25.7	6.2	43.81	11.67
3647.6	0.0	2.67	5.1	29.0	26.5	0.0	25.2	6.3	43.72	11.59
3647.9	3.5	2.67	5.5	31.9	25.7	0.0	24.2	6.8	43.64	11.52
3648.2	19.3	2.70	5.7	40.6	22.0	0.0	20.7	7.7	43.57	11.45
3648.5	25.6	2.71	5.1	40.7	22.7	0.0	21.6	8.1	43.50	11.38
3648.8	27.7	2.72	7.0	39.9	22.5	0.0	20.9	7.4	43.43	11.32
3649.1	29.6	2.72	8.8	41.0	22.4	0.0	20.4	7.2	43.36	11.25
3649.4	22.9	2.71	9.1	37.4	24.9	0.0	22.7	7.1	43.29	11.19
3649.7	24.7	2.71	9.9	39.5	24.8	0.0	22.1	7.3	43.22	11.12
3650.0	23.1	2.71	9.2	42.1	25.3	0.0	22.9	8.3	43.14	11.05
3650.3	21.9	2.70	8.4	42.2	25.8	0.0	23.6	8.7	43.06	10.98
3650.6	19.6	2.70	7.5	39.8	26.5	0.0	24.5	8.5	42.98	10.91
3650.9	12.9	2.69	7.3	37.8	28.3	0.0	26.2	8.6	42.90	10.83
3651.2	9.1	2.68	6.7	40.0	28.7	0.0	26.7	9.5	42.82	10.75
3651.5	9.4	2.67	7.1	41.6	27.7	0.0	25.8	9.6	42.73	10.67
3651.8	9.5	2.68	7.2	41.4	29.2	0.0	27.1	10.0	42.64	10.59
3652.1	10.7	2.68	6.9	39.1	29.5	0.0	27.4	9.5	42.55	10.51
3652.4	5.3	2.67	6.2	35.4	31.2	0.0	29.3	9.1	42.46	10.43
3652.7	6.1	2.67	6.7	35.1	31.0	0.0	28.9	8.8	42.37	10.34
3653.0	1.8	2.66	7.1	37.0	32.2	0.0	29.9	9.7	42.27	10.25
3653.3	5.6	2.67	6.5	38.1	30.8	0.0	28.8	9.7	42.17	10.16
3653.6	7.5	2.68	7.3	35.5	30.3	0.0	28.1	8.6	42.08	10.07
3654.0	12.2	2.69	7.7	35.8	28.7	0.0	26.5	6.0	41.99	9.98
3654.3	13.3	2.69	6.6	40.3	27.4	0.0	25.5	9.1	41.90	9.90
3654.6	9.8	2.68	6.7	38.3	28.7	0.0	26.8	9.1	41.82	9.83
3654.9	10.9	2.68	7.4	39.7	28.9	0.0	26.7	9.3	41.73	9.74
3655.2	11.7	2.68	8.2	43.0	27.0	0.0	24.8	9.4	41.64	9.66
3655.5	14.3	2.68	8.3	45.9	26.4	0.0	24.2	9.9	41.56	9.59
3655.8	11.3	2.68	7.0	42.6	28.3	0.0	26.1	10.1	41.48	9.51
3656.1	15.1	2.69	8.4	42.8	26.0	0.0	23.8	8.9	41.40	9.44
3656.4	16.3	2.69	8.4	41.8	25.8	0.0	23.6	8.6	41.32	9.36
3656.7	16.8	2.69	6.2	40.5	27.2	0.0	25.5	9.3	41.24	9.29
3657.0	13.4	2.69	7.5	40.5	28.5	0.0	26.4	9.4	41.15	9.21
3657.3	13.5	2.68	7.8	44.1	27.8	0.0	25.6	10.1	41.07	9.13

1310.1

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3657.6	10.2	2.68	7.7	41.2	29.0	0.0	26.8	9.7	40.98	9.05
3657.9	10.5	2.68	7.0	38.9	28.8	0.0	26.8	9.2	40.89	8.97
3658.2	13.6	2.69	7.2	39.9	26.6	0.0	24.7	8.7	40.80	8.89
3658.5	16.1	2.69	7.2	41.5	26.5	0.0	24.6	9.1	40.72	8.82
3658.8	9.5	2.68	6.9	38.5	29.9	0.0	27.8	9.4	40.64	8.74
3659.1	9.6	2.68	8.4	40.9	29.8	0.0	27.3	9.7	40.55	8.65
3659.4	15.4	2.69	9.6	40.4	27.6	0.0	25.0	8.5	40.46	8.57
3659.7	21.0	2.70	10.8	41.1	24.7	0.0	22.1	7.5	40.38	8.50
3660.1	21.8	2.71	13.0	45.3	21.4	0.0	18.6	6.9	40.31	8.43
3660.4	10.3	2.69	10.1	37.9	26.3	0.0	23.7	7.3	40.24	8.38
3660.7	8.9	2.69	9.4	35.6	26.9	0.0	24.4	7.1	40.16	8.30
3661.0	15.3	2.70	10.5	38.2	25.1	0.0	22.4	7.0	40.08	8.23
3661.3	16.3	2.71	10.4	36.9	25.9	0.0	23.2	6.9	40.00	8.16
3661.6	16.2	2.70	10.7	39.1	24.5	0.0	21.9	7.0	39.92	8.09
3661.9	25.3	2.72	11.9	44.5	21.6	0.0	19.0	7.0	39.85	8.03
3662.2	19.2	2.71	11.2	40.9	23.6	0.0	20.9	7.0	39.78	7.97
3662.5	15.8	2.70	11.0	38.0	24.7	0.0	22.0	6.7	39.71	7.90
3662.8	19.2	2.71	11.0	37.7	23.5	0.0	21.0	6.3	39.64	7.83
3663.1	13.0	2.70	10.4	35.9	25.5	0.0	22.8	6.5	39.56	7.77
3663.4	13.3	2.70	10.1	38.0	25.8	0.0	23.2	7.2	39.48	7.70
3663.7	6.7	2.69	9.3	36.6	28.1	0.0	25.5	7.7	39.40	7.63
3664.0	6.6	2.69	9.2	35.6	28.5	0.0	25.8	7.5	39.32	7.55
3664.3	6.5	2.69	9.2	36.0	28.4	0.0	25.8	7.6	39.23	7.47
3664.6	5.5	2.69	9.2	34.5	28.6	0.0	26.0	7.2	39.14	7.39
3664.9	0.2	2.67	9.0	32.8	29.7	0.0	27.0	7.1	39.05	7.31
3665.2	0.0	2.67	9.2	33.4	29.3	0.0	26.6	7.1	38.96	7.23
3665.5	11.9	2.70	10.2	36.1	24.8	0.0	22.3	6.4	38.88	7.15
3665.8	0.0	2.74	9.6	35.4	26.2	0.0	23.7	6.8	38.80	7.08
3666.1	0.0	2.75	11.0	43.9	21.7	0.0	19.3	7.2	38.73	7.01
3666.5	12.6	2.77	15.0	62.4	15.6	0.0	13.3	7.4	38.67	6.96
3666.8	28.5	2.72	12.5	49.9	18.6	0.0	16.3	7.0	38.62	6.92
3667.1	24.3	2.72	12.2	41.9	22.0	0.0	19.3	6.5	38.56	6.87
3667.4	23.3	2.72	13.1	42.3	21.7	0.0	18.9	6.4	38.49	6.81
3667.7	18.0	2.71	11.7	38.5	21.7	0.0	19.2	5.8	38.43	6.75
3668.0	18.0	2.70	10.9	37.0	21.0	0.0	18.7	5.5	38.36	6.69
3668.3	7.7	2.73	13.4	41.3	17.2	0.0	14.9	4.8	38.30	6.64
3668.6	8.7	2.76	19.9	50.0	11.6	0.0	9.3	3.5	38.25	6.60
3668.9	39.5	2.74	18.0	63.5	11.6	0.0	9.5	5.3	38.22	6.58
3669.2	25.9	2.72	13.1	40.7	19.3	0.0	16.8	5.4	38.18	6.54
3669.5	3.3	2.73	12.1	39.1	23.7	0.0	20.9	6.4	38.12	6.49
3669.8	0.0	2.76	13.1	40.9	23.3	0.0	20.2	6.5	38.05	6.43
3670.1	19.4	2.71	13.1	40.8	22.7	0.0	19.8	6.3	37.98	6.37
3670.4	37.6	2.74	16.9	46.3	17.2	0.0	14.3	5.1	37.91	6.31
3670.7 <sup>55</sup>	57.2	2.77	22.7	59.3	11.5	0.0	8.9	4.2	37.86	6.27
3671.0	49.2	2.76	20.3	54.1	13.8	0.0	11.0	4.6	37.83	6.24
3671.3 <sup>45</sup>	44.1	2.75	18.2	50.2	16.0	0.0	13.1	5.1	37.79	6.21
3671.6	32.8	2.73	15.9	44.9	19.4	0.0	16.3	5.6	37.74	6.16
3671.9	33.9	2.73	17.0	46.4	18.7	0.0	15.5	5.5	37.68	6.12

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDRATION		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3672.2	32.0	2.73	17.4	46.9	19.1x	0.0	15.8	5.6	37.62	6.07
3672.5	47.9	2.76	20.0	50.1	16.0	0.0	12.8	4.8	37.56	6.02
3672.9	61.1	2.78	28.1	64.2	10.7	0.0	7.7	3.9	37.52	5.99
3673.2	60.1	2.78	28.0	73.1	10.6	0.0	7.6	4.8	37.49	5.97
3673.5	59.1	2.77	30.2	62.0	9.3	0.0	6.5	3.0	37.46	5.94
3673.8	54.4	2.76	31.6	60.9	7.7	0.0	5.3	2.3	37.43	5.93
3674.1	20.4	2.79	26.3	56.3	10.4x	0.0	7.6	3.1	37.41	5.91
3674.4	33.7	2.74	100.0	100.0	0.9x	0.0	0.0	0.0	37.39	5.90
3674.7	43.2	2.76	100.0	100.0	0.4	0.0	0.0	0.0	37.38	5.90
3675.0	62.7	2.77	53.6	99.4	3.8	0.0	1.7	1.7	37.38	5.90
3675.3	54.2	2.76	29.0	70.8	9.8	0.0	7.0	4.1	37.36	5.89
3675.6	30.1	2.72	19.2	49.1	17.6x	0.0	14.2	5.3	37.33	5.86
3675.9	26.5	2.72	17.8	47.5	18.4x	0.0	15.1	5.5	37.27	5.82
3676.2	17.5	2.70	14.6	43.1	21.5x	0.0	18.4	6.1	37.22	5.77
3676.5	22.7	2.71	14.6	43.2	19.1x	0.0	16.3	5.5	37.15	5.71
3676.8	32.9	2.73	24.1	54.3	11.5x	0.0	8.7	3.5	37.10	5.67
3677.1	40.1	2.74	100.0	100.0	1.0	0.0	0.0	0.0	37.07	5.64
3677.4	48.6	2.74	100.0	100.0	1.8	0.0	0.0	0.0	37.06	5.64
3677.7	38.1	2.73	22.2	62.5	13.8x	0.0	10.8	5.6	37.05	5.64
3678.0	42.7	2.75	23.8	56.7	14.2	0.0	10.8	4.7	37.01	5.60
3678.3	52.7	2.76	28.9	65.5	11.4	0.0	8.1	4.2	36.96	5.57
3678.6	62.5	2.76	36.8	95.1	7.9	0.0	5.0	4.6	36.93	5.55
3678.9	59.2	2.77	33.5	97.5	8.4	0.0	5.4	5.2	36.91	5.53
3679.3	42.0	2.74	23.5	67.5	14.7	0.0	11.3	6.5	36.88	5.51
3679.6	35.9	2.74	19.3	58.1	17.8x	0.0	14.3	6.9	36.83	5.48
3679.9	43.9	2.75	21.9	65.8	15.0	0.0	11.7	6.6	36.78	5.43
3680.2	51.0	2.76	27.0	78.1	11.6	0.0	8.5	5.9	36.74	5.40
3680.5	52.5	2.76	27.5	72.7	11.7	0.0	8.5	5.3	36.70	5.38
3680.8	40.5	2.74	22.9	57.0	15.1	0.0	11.7	5.2	36.66	5.35
3681.1	45.3	2.75	24.2	54.3	13.6	0.0	10.3	4.1	36.62	5.32
3681.4	47.2	2.75	24.7	54.8	12.4	0.0	9.3	3.7	36.58	5.28
3681.7	52.9	2.75	51.3	75.0	5.7	0.0	2.8	1.4	36.55	5.26
3682.0	53.2	2.76	100.0	100.0	1.2	0.0	0.0	0.0	36.53	5.26
3682.3	61.5	2.77	76.3	99.9	2.7	0.0	0.6	0.6	36.53	5.26
3682.6	52.7	2.76	32.5	94.0	9.3	0.0	6.3	5.7	36.52	5.25
3682.9	20.2	2.71	16.0	45.1	22.3x	0.0	18.7	6.5	36.48	5.22
3683.2	0.0	2.67	12.7	40.1	28.7x	0.0	25.1	7.9	36.46	5.16
3683.5	2.7	2.67	13.1	40.8	26.5x	0.0	23.1	7.4	36.32	5.08
3683.8	2.3	2.68	12.1	39.1	28.0x	0.0	24.6	7.6	36.23	5.01
3684.1	0.0	2.67	11.2	37.5	30.3x	0.0	26.9	8.0	36.15	4.94
3684.4	0.0	2.66	11.2	37.6	30.7x	0.0	27.3	8.1	36.05	4.85
3684.7	5.3	2.68	12.7	40.1	28.0x	0.0	24.4	7.7	35.96	4.77
3685.0	13.3	2.70	14.3	42.7	24.5x	0.0	21.0	6.9	35.88	4.70
3685.3	22.3	2.71	15.7	44.7	22.1x	0.0	18.6	6.4	35.81	4.64
3685.7	21.3	2.71	15.4	44.5	22.7x	0.0	19.2	6.6	35.74	4.58
3686.0	15.9	2.70	14.5	43.0	24.9x	0.0	21.3	7.1	35.67	4.52
3686.3	13.0	2.70	14.1	42.4	27.1x	0.0	23.2	7.7	35.59	4.45
3686.6	17.4	2.70	15.9	45.0	24.6x	0.0	20.7	7.1	35.51	4.38

4905

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3686.9	24.0	2.72	18.1	47.7	21.5	0.0	17.6	6.4	35.44	4.33
3687.2	20.2	2.71	16.5	45.7	22.4	0.0	18.7	6.6	35.37	4.27
3687.5	17.1	2.70	14.1	42.3	22.4	0.0	19.3	6.3	35.30	4.21
3687.8	21.3	2.71	13.8	41.9	19.2	0.0	16.6	5.4	35.24	4.16
3688.1 <sup>.95</sup>	40.4	2.73	27.7	57.6	<del>21.9</del>	0.0	5.7	2.4	35.19	4.11
3688.4 <sup>.95</sup>	0.0	2.80	18.8	48.7	13.3	0.0	10.8	4.0	35.16	4.09
3688.7	8.7	2.75	16.5	61.2	16.8	0.0	14.0	7.5	35.12	4.06
3689.0	16.7	2.70	13.9	42.5	24.2	0.0	20.9	6.9	35.06	4.01
3689.3	13.5	2.70	13.9	42.1	27.5	0.0	23.6	7.7	34.98	3.94
3689.6	23.4	2.72	15.4	44.2	24.6	0.0	20.8	7.1	34.90	3.87
3689.9	22.3	2.72	15.5	44.4	23.9	0.0	20.2	6.9	34.83	3.81
3690.2	24.4	2.72	16.4	45.6	21.8	0.0	18.3	6.4	34.75	3.75
3690.5	26.3	2.72	18.7	48.6	20.2	0.0	16.4	6.0	34.69	3.69
3690.8	16.8	2.70	18.0	47.6	22.3	0.0	18.3	6.6	34.63	3.64
3691.1	14.5	2.70	18.2	47.9	23.4	0.0	19.2	7.0	34.56	3.59
3691.4	26.5	2.72	23.0	53.2	20.1	0.0	15.5	6.1	34.49	3.53
3691.7	24.3	2.71	23.4	53.5	19.9	0.0	15.2	6.0	34.43	3.48
3692.1 <sup>.85</sup>	40.5	2.74	29.3	65.8	<del>14.8</del>	0.0	10.5	5.4	34.37	3.44
3692.4	42.1	2.75	27.2	63.7	15.8	0.0	11.5	5.8	34.32	3.41
3692.7	42.4	2.75	26.9	65.6	15.5	0.0	11.3	6.0	34.27	3.37
3693.0	44.1	2.75	28.3	69.9	14.3	0.0	10.2	5.9	34.23	3.34
3693.3	45.5	2.75	31.6	85.5	<del>12.4</del>	0.0	8.5	6.7	34.18	3.31
3693.6 <sup>.85</sup>	29.3	2.72	23.2	61.8	17.8	0.0	13.6	6.9	34.14	3.28
3693.9	23.8	2.71	19.9	52.2	20.7	0.0	16.6	6.7	34.09	3.23
3694.2	23.5	2.71	18.6	52.0	21.5	0.0	17.5	7.2	34.02	3.18
3694.5	11.3	2.69	16.3	46.4	24.0	0.0	20.6	7.4	33.96	3.13
3694.8	12.1	2.69	16.1	46.5	25.0	0.0	21.0	7.6	33.88	3.06
3695.1	17.9	2.70	17.9	50.5	22.5	0.0	18.5	7.3	33.81	3.00
3695.4	11.2	2.69	16.8	47.2	24.7	0.0	20.6	7.5	33.74	2.94
3695.7	12.2	2.69	16.6	47.6	24.6	0.0	20.5	7.6	33.66	2.88
3696.0	16.0	2.70	16.7	47.9	23.8	0.0	19.8	7.4	33.58	2.82
3696.3	18.0	2.70	17.2	47.6	23.1	0.0	19.1	7.0	33.51	2.76
3696.6	18.3	2.70	17.1	47.8	23.6	0.0	19.8	7.2	33.44	2.70
3696.9	14.7	2.70	17.9	51.4	23.7	0.0	19.4	7.9	33.37	2.64
3697.2	23.5	2.71	21.2	59.7	20.3	0.0	16.0	7.8	33.30	2.58
3697.5	26.6	2.72	23.8	62.6	18.4	0.0	14.0	7.1	33.24	2.53
3697.8	29.5	2.72	22.5	58.5	19.6	0.0	15.2	7.0	33.18	2.49
3698.2	34.7	2.73	21.4	59.2	19.5	0.0	15.4	7.4	33.12	2.44
3698.5	27.2	2.72	21.0	60.7	19.5	0.0	15.4	7.8	33.06	2.40
3698.8	28.6	2.72	19.4	55.9	20.1	0.0	16.2	7.3	33.00	2.35
3699.1	17.6	2.70	16.6	46.7	23.9	0.0	20.0	7.2	32.94	2.30
3699.4	14.7	2.70	16.8	44.4	24.8	0.0	20.7	6.9	32.86	2.24
3699.7	16.4	2.70	18.8	46.6	24.5	0.0	19.9	6.8	32.79	2.17
3700.0	20.8	2.71	21.2	49.1	23.3	0.0	18.4	6.5	32.72	2.11
3700.3	15.5	2.70	20.9	43.7	25.4	0.0	20.1	5.8	32.64	2.06
3700.6	16.2	2.70	23.1	43.7	24.7	0.0	19.0	5.1	32.57	2.00
3700.9	22.8	2.71	27.8	51.7	21.0	0.0	15.2	5.0	32.49	1.94
3701.2	29.6	2.72	29.7	56.9	19.6	0.0	13.8	5.3	32.43	1.90

923.7

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3701.5	19.6	2.70	28.7	51.5	<21.8	0.0	15.6	5.0	32.37	1.85
3701.8	26.2	2.72	34.4	54.3	✓19.5	0.0	12.8	3.9	32.30	1.81
3702.1	34.4	2.73	37.8	58.0	✓17.9	0.0	11.1	3.6	32.24	1.77
3702.4	52.4	2.76	52.8	81.1	11.8	0.0	5.6	3.3	32.20	1.74
3702.7	53.9	2.77	46.0	73.4	12.9	0.0	7.0	3.5	32.16	1.72
3703.0	49.1	2.76	40.7	59.0	14.7	0.0	8.7	2.7	32.12	1.70
3703.3	53.2	2.76	65.9	79.1	9.0	0.0	3.1	1.2	32.08	1.68
3703.6	64.7	2.77	100.0	100.0	2.2	0.0	0.0	0.0	32.06	1.67
3703.9	57.0	2.76	77.3	100.0	8.1	0.0	1.8	1.8	32.05	1.67
3704.2	52.5	2.76	60.3	87.4	11.6	0.0	4.6	3.2	32.02	1.66
3704.6	45.8	2.75	51.7	51.7	14.0	0.0	6.7	0.0	31.98	1.65
3704.9	51.4	2.76	61.2	61.2	10.6	0.0	4.1	0.0	31.94	1.63
3705.2	66.0	2.78	100.0	100.0	0.9	0.0	0.0	0.0	31.92	1.62
3705.5	65.4	2.79	100.0	100.0	0.3	0.0	0.0	0.0	31.91	1.62
3705.8	55.4	2.76	86.0	100.0	8.8	0.0	1.2	1.2	31.91	1.62
3706.1	44.6	2.75	58.5	75.2	14.7	0.0	6.1	2.5	31.87	1.61
3706.4	49.3	2.76	64.4	77.5	13.5	0.0	4.8	1.8	31.83	1.59
3706.7	44.5	2.75	62.2	62.2	14.3	0.0	5.4	0.0	31.79	1.58
3707.0	38.5	2.74	58.2	58.2	✓15.0	0.0	6.3	0.0	31.74	1.56
3707.3	37.9	2.73	62.1	62.1	✓14.2	0.0	5.4	0.0	31.70	1.54
3707.6	20.7	2.76	54.9	54.9	✓17.9	0.0	8.1	0.0	31.65	1.53
3707.9	16.4	2.75	52.8	54.4	✓20.7	0.0	9.8	0.3	31.60	1.50
3708.2	17.5	2.70	51.1	52.3	✓23.7	0.0	11.5	0.3	31.53	1.47
3708.5	21.5	2.71	60.0	60.2	✓22.0	0.0	8.8	0.0	31.46	1.44
3708.8	25.5	2.71	69.0	69.0	✓20.9	0.0	6.5	0.0	31.39	1.41
3709.1	21.3	2.70	71.3	71.3	✓22.8	0.0	6.6	0.0	31.33	1.39
3709.4	24.8	2.71	81.7	81.7	✓23.1	0.0	4.2	0.0	31.26	1.37
3709.7	18.6	2.70	79.0	80.8	✓25.9	0.0	5.5	0.5	31.19	1.36
3710.0	23.2	2.71	100.0	100.0	✓23.0	0.0	0.0	0.0	31.11	1.34
3710.3	30.0	2.73	100.0	100.0	✓21.0	0.0	0.0	0.0	31.04	1.34
3710.6	25.5	2.71	100.0	100.0	✓22.3	0.0	0.0	0.0	30.98	1.34
3711.0	25.5	2.72	100.0	100.0	✓22.3	0.0	0.0	0.0	30.91	1.34
3711.3	40.6	2.76	99.6	99.6	17.8	0.0	0.1	0.0	30.84	1.34
3711.6	46.0	2.84	74.6	74.6	16.2	0.0	4.1	0.0	30.79	1.34
3711.9	48.5	2.86	54.8	54.8	15.5	0.0	7.0	0.0	30.74	1.33
3712.2	65.8	2.86	64.7	64.7	10.3	0.0	3.6	0.0	30.69	1.30
3712.8	49.6	2.78	50.5	64.1	15.1	0.0	7.5	2.1	30.64	1.29
3713.1	0.0	2.80	27.6	27.6	30.0x	0.0	21.7	0.0	30.58	1.26
3713.7	0.0	2.58	45.1	48.1	30.0x	0.0	16.5	0.9	30.49	1.20
3714.0	8.2	2.68	61.4	71.9	27.5x	0.0	10.6	2.9	30.40	1.15
3714.3	21.8	2.70	94.1	100.0	23.5x	0.0	1.4	1.4	30.32	1.12
3714.6	21.1	2.70	99.7	100.0	23.7x	0.0	0.1	0.1	30.25	1.12
3714.9	12.0	2.68	99.3	100.0	26.4x	0.0	0.2	0.2	30.17	1.12
3715.2	11.4	2.68	99.9	100.0	26.6x	0.0	0.0	0.0	30.09	1.12
3715.5	12.6	2.68	100.0	100.0	26.2x	0.0	0.0	0.0	30.01	1.12
3715.8	9.3	2.67	100.0	100.0	27.2x	0.0	0.0	0.0	29.93	1.12

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3704.2  
3704.6  
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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3716.1	7.9	2.67	100.0	100.0	27.6	0.0	0.0	0.0	29.85	1.12
3716.4	4.9	2.66	99.9	99.9	28.5	0.0	0.0	0.0	29.76	1.12
3716.7	8.5	2.67	100.0	100.0	27.5	0.0	0.0	0.0	29.68	1.12
3717.0	9.3	2.68	100.0	100.0	27.2	0.0	0.0	0.0	29.60	1.12
3717.4	7.2	2.67	100.0	100.0	27.8	0.0	0.0	0.0	29.51	1.12
3717.7	7.8	2.67	100.0	100.0	27.7	0.0	0.0	0.0	29.43	1.12
3718.0	13.1	2.68	100.0	100.0	26.1	0.0	0.0	0.0	29.34	1.12
3718.3	16.1	2.69	100.0	100.0	25.2	0.0	0.0	0.0	29.27	1.12
3718.6	15.2	2.69	100.0	100.0	25.4	0.0	0.0	0.0	29.19	1.12
3718.9	14.4	2.69	100.0	100.0	25.7	0.0	0.0	0.0	29.11	1.12
3719.2	13.1	2.68	100.0	100.0	26.1	0.0	0.0	0.0	29.03	1.12
3719.5	12.4	2.68	100.0	100.0	26.3	0.0	0.0	0.0	28.95	1.12
3719.8	13.6	2.68	100.0	100.0	25.9	0.0	0.0	0.0	28.87	1.12
3720.1	13.9	2.68	100.0	100.0	25.8	0.0	0.0	0.0	28.79	1.12
3720.4	15.8	2.69	100.0	100.0	25.2	0.0	0.0	0.0	28.72	1.12
3720.7	22.1	2.70	100.0	100.0	23.4	0.0	0.0	0.0	28.64	1.12
3721.0	22.7	2.71	100.0	100.0	23.2	0.0	0.0	0.0	28.57	1.12
3721.3	21.4	2.70	99.7	99.7	23.6	0.0	0.1	0.0	28.50	1.12
3721.6 <sup>.75</sup>	37.3	2.74	100.0	100.0	18.8	0.0	0.0	0.0	28.43	1.12
3721.9	56.8	2.77	100.0	100.0	13.0	0.0	0.0	0.0	28.37	1.12
3722.5	67.5	2.83	100.0	100.0	6.9	0.0	0.0	0.0	28.32	1.12
3722.9	51.7	2.77	100.0	100.0	7.4	0.0	0.0	0.0	28.30	1.12
3723.1	56.1	2.77	92.6	100.0	12.4	0.0	0.9	0.9	28.28	1.12
3723.4	44.3	2.75	76.2	76.2	15.4	0.0	3.7	0.0	28.24	1.11
3723.8	43.4	2.75	95.9	95.9	14.5	0.0	0.6	0.0	28.19	1.10
3724.1	41.5	2.74	99.7	99.7	14.6	0.0	0.0	0.0	28.15	1.10
3724.4	43.0	2.75	97.2	100.0	16.5	0.0	0.5	0.4	28.10	1.10
3724.7 <sup>.55</sup>	35.6	2.73	92.1	97.6	18.7	0.0	1.5	1.0	28.05	1.10
3725.0	39.3	2.74	97.5	99.6	17.9	0.0	0.4	0.4	27.99	1.10
3725.3 <sup>.15</sup>	42.7	2.75	98.6	99.9	17.2	0.0	0.2	0.2	27.94	1.09
3725.6 <sup>.75</sup>	42.1	2.74	95.4	100.0	17.3	0.0	0.8	0.8	27.88	1.09
3725.9 <sup>.75</sup>	30.5	2.73	71.1	79.9	20.8	0.0	6.0	1.8	27.83	1.09
3726.2	37.1	2.73	80.3	94.4	17.6	0.0	3.5	2.5	27.77	1.07
3726.5 <sup>.35</sup>	41.4	2.74	80.6	97.1	16.1	0.0	3.1	2.7	27.71	1.06
3726.8	41.0	2.75	84.5	99.2	15.1	0.0	2.3	2.2	27.67	1.05
3727.1	45.9	2.76	100.0	100.0	10.6	0.0	0.0	0.0	27.62	1.04
3727.4	47.7	2.77	100.0	100.0	9.3	0.0	0.0	0.0	27.59	1.04
3727.7	45.0	2.78	100.0	100.0	10.8	0.0	0.0	0.0	27.56	1.04
3728.0 <sup>.15</sup>	43.1	2.78	100.0	100.0	11.4	0.0	0.0	0.0	27.53	1.04
3728.3 <sup>.15</sup>	28.2	2.78	100.0	100.0	11.9	0.0	0.0	0.0	27.49	1.04
3728.6	27.0	2.76	100.0	100.0	5.6	0.0	0.0	0.0	27.46	1.04
3728.9	25.0	2.74	100.0	100.0	3.9	0.0	0.0	0.0	27.45	1.04
3729.2	22.6	2.73	100.0	100.0	4.8	0.0	0.0	0.0	27.43	1.04
3729.5	21.8	2.73	100.0	100.0	5.3	0.0	0.0	0.0	27.42	1.04
3729.8	20.4	2.73	100.0	100.0	6.1	0.0	0.0	0.0	27.40	1.04
3730.2	22.7	2.74	100.0	100.0	6.9	0.0	0.0	0.0	27.38	1.04
3730.5 <sup>.35</sup>	43.1	2.75	100.0	100.0	6.5	0.0	0.0	0.0	27.36	1.04

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3730.8	36.1	2.73	80.5	80.5	17.7	0.0	3.5	0.0	27.34	1.04
3731.1	32.2	2.72	83.4	99.9	19.2	0.0	3.2	3.2	27.28	1.04
3731.4	30.9	2.72	79.0	97.7	20.6	0.0	4.3	3.9	27.22	1.03
3731.7	25.2	2.72	73.7	93.8	21.8	0.0	5.7	4.4	27.16	1.01
3732.0	27.4	2.72	89.4	98.1	19.3	0.0	2.0	1.7	27.10	1.00
3732.3	31.6	2.73	98.7	99.5	17.5	0.0	0.2	0.1	27.04	1.00
3732.6	36.6	2.73	100.0	100.0	16.0	0.0	0.0	0.0	26.99	1.00
3732.9	28.5	2.73	93.3	97.5	19.0	0.0	1.3	0.8	26.94	0.99
3733.2	28.7	2.74	97.2	99.5	19.1	0.0	0.5	0.4	26.88	0.99
3733.5	21.6	2.72	96.2	97.5	20.8	0.0	0.8	0.3	26.82	0.99
3733.8	19.1	2.71	100.0	100.0	21.2	0.0	0.0	0.0	26.76	0.99
3734.1	15.1	2.71	100.0	100.0	23.7	0.0	0.0	0.0	26.69	0.99
3734.4	9.4	2.71	100.0	100.0	26.1	0.0	0.0	0.0	26.61	0.99
3734.7	12.1	2.70	100.0	100.0	25.2	0.0	0.0	0.0	26.54	0.99
3735.0	8.8	2.70	100.0	100.0	27.4	0.0	0.0	0.0	26.46	0.99
3735.3	4.4	2.69	100.0	100.0	28.7	0.0	0.0	0.0	26.38	0.99
3735.6	3.9	2.69	100.0	100.0	28.8	0.0	0.0	0.0	26.29	0.99
3735.9	7.1	2.70	100.0	100.0	27.9	0.0	0.0	0.0	26.20	0.99
3736.3	14.7	2.70	100.0	100.0	25.6	0.0	0.0	0.0	26.12	0.99
3736.6	21.3	2.70	100.0	100.0	23.6	0.0	0.0	0.0	26.04	0.99
3736.9	18.6	2.70	100.0	100.0	24.4	0.0	0.0	0.0	25.97	0.99
3737.2	12.0	2.68	100.0	100.0	26.4	0.0	0.0	0.0	25.89	0.99
3737.5	19.3	2.70	100.0	100.0	24.2	0.0	0.0	0.0	25.81	0.99
3737.8	26.6	2.71	100.0	100.0	22.0	0.0	0.0	0.0	25.74	0.99
3738.1	21.3	2.71	100.0	100.0	23.6	0.0	0.0	0.0	25.67	0.99
3738.4	19.3	2.72	100.0	100.0	24.2	0.0	0.0	0.0	25.60	0.99
3738.7	27.1	2.72	100.0	100.0	21.9	0.0	0.0	0.0	25.53	0.99
3739.0	24.5	2.71	100.0	100.0	22.7	0.0	0.0	0.0	25.46	0.99
3739.3	24.5	2.71	100.0	100.0	22.5	0.0	0.0	0.0	25.39	0.99
3739.6	16.9	2.73	100.0	100.0	17.9	0.0	0.0	0.0	25.32	0.99
3739.9	16.2	2.78	100.0	100.0	6.2	0.0	0.0	0.0	25.28	0.99
3740.2	15.2	2.75	100.0	100.0	3.8	0.0	0.0	0.0	25.27	0.99
3740.5	6.0	2.76	100.0	100.0	8.0	0.0	0.0	0.0	25.25	0.99
3740.8	28.5	2.75	100.0	100.0	6.9	0.0	0.0	0.0	25.23	0.99
3741.1	38.0	2.73	100.0	100.0	14.3	0.0	0.0	0.0	25.20	0.99
3741.4	27.6	2.72	100.0	100.0	21.7	0.0	0.0	0.0	25.15	0.99
3741.7	32.9	2.73	100.0	100.0	20.1	0.0	0.0	0.0	25.08	0.99
3742.0	30.0	2.73	100.0	100.0	21.0	0.0	0.0	0.0	25.02	0.99
3742.3	29.6	2.73	100.0	100.0	21.1	0.0	0.0	0.0	24.96	0.99
3742.7	29.6	2.72	100.0	100.0	21.1	0.0	0.0	0.0	24.89	0.99
3743.0	28.2	2.72	100.0	100.0	21.5	0.0	0.0	0.0	24.83	0.99
3743.3	34.1	2.73	100.0	100.0	19.8	0.0	0.0	0.0	24.76	0.99
3743.6	31.9	2.72	100.0	100.0	20.4	0.0	0.0	0.0	24.70	0.99
3743.9	28.5	2.72	100.0	100.0	21.4	0.0	0.0	0.0	24.64	0.99
3744.2	33.9	2.73	100.0	100.0	19.8	0.0	0.0	0.0	24.57	0.99
3744.5	34.1	2.73	100.0	100.0	19.8	0.0	0.0	0.0	24.51	0.99
3744.8	23.6	2.72	99.3	100.0	21.7	0.0	0.1	0.1	24.45	0.99
3745.1	23.6	2.72	100.0	100.0	20.4	0.0	0.0	0.0	24.39	0.99

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3745.4	14.3	2.72	100.0	100.0	22.3	0.0	0.0	0.0	24.32	0.99
3745.7	9.1	2.70	100.0	100.0	23.8	0.0	0.0	0.0	24.25	0.99
3746.0	13.8	2.72	100.0	100.0	24.9	0.0	0.0	0.0	24.18	0.99
3746.3	0.0	2.71	96.1	96.1	30.0	0.0	1.2	0.0	24.10	0.99
3746.6	0.8	2.70	99.9	99.9	28.7	0.0	0.0	0.0	24.01	0.99
3746.9	0.9	2.70	99.9	99.9	28.6	0.0	0.0	0.0	23.92	0.99
3747.2	6.5	2.69	100.0	100.0	26.6	0.0	0.0	0.0	23.84	0.98
3747.5	6.1	2.70	100.0	100.0	26.8	0.0	0.0	0.0	23.75	0.98
3747.8	2.4	2.70	100.0	100.0	27.7	0.0	0.0	0.0	23.67	0.98
3748.1	3.3	2.69	100.0	100.0	27.6	0.0	0.0	0.0	23.59	0.98
3748.4	4.5	2.69	100.0	100.0	27.5	0.0	0.0	0.0	23.50	0.98
3748.7	1.4	2.69	100.0	100.0	27.6	0.0	0.0	0.0	23.42	0.98
3749.1	3.2	2.69	100.0	100.0	26.0	0.0	0.0	0.0	23.34	0.98
3749.4	0.0	2.69	100.0	100.0	26.4	0.0	0.0	0.0	23.26	0.98
3749.7	0.0	2.70	100.0	100.0	26.8	0.0	0.0	0.0	23.18	0.98
3750.0	5.3	2.71	100.0	100.0	25.4	0.0	0.0	0.0	23.10	0.98
3750.345	32.2	2.75	100.0	100.0	20.3	0.0	0.0	0.0	23.02	0.98
3751.5	65.3	2.86	86.7	86.7	10.4	0.0	1.4	0.0	22.92	0.98
3751.8	50.5	2.79	68.0	80.0	14.9	0.0	4.8	1.8	22.88	0.98
3752.1	40.7	2.77	60.1	72.4	17.8	0.0	7.1	2.2	22.84	0.96
3752.4	44.8	2.78	63.3	76.2	16.6	0.0	6.1	2.1	22.78	0.94
3752.7	69.5	2.81	99.9	59.8	9.4	0.0	0.0	0.0	22.74	0.93
3753.6	66.8	2.82	70.4	70.4	10.0	0.0	3.0	0.0	22.66	0.92
3753.9	69.8	2.83	78.9	82.7	9.1	0.0	1.9	0.3	22.63	0.91
3754.2	53.4	2.81	56.0	68.8	14.0	0.0	6.2	1.8	22.60	0.91
3754.5	55.3	2.80	56.7	62.3	13.4	0.0	5.8	0.7	22.56	0.89
3755.5	58.8	2.80	59.0	61.9	12.4	0.0	5.1	0.4	22.47	0.87
3755.8	61.3	2.80	64.1	73.9	11.6	0.0	4.2	1.1	22.44	0.85
3757.6	51.4	2.83	56.3	68.0	14.5	0.0	6.3	1.7	22.28	0.83
3757.9	44.6	2.83	54.8	54.8	14.4	0.0	6.5	0.0	22.24	0.81
3758.2	56.0	2.87	100.0	100.0	6.5	0.0	0.0	0.0	22.20	0.79
3758.5	48.4	2.88	100.0	100.0	3.9	0.0	0.0	0.0	22.18	0.79
3758.8	63.7	2.87	100.0	100.0	2.2	0.0	0.0	0.0	22.17	0.79
3759.7	68.9	2.84	99.8	99.8	9.3	0.0	0.0	0.0	22.13	0.79
3760.0	57.2	2.78	83.0	83.0	12.8	0.0	2.2	0.0	22.10	0.79
3760.3	39.6	2.74	61.8	69.8	17.8	0.0	6.8	1.4	22.05	0.78
3760.6	47.2	2.77	67.5	67.5	15.8	0.0	5.1	0.0	22.00	0.76
3760.9	64.4	2.80	97.7	97.7	10.7	0.0	0.0	0.0	21.95	0.75
3761.9	67.7	2.86	100.0	100.0	9.7	0.0	0.0	0.0	21.88	0.75
3762.2	60.8	2.80	100.0	100.0	11.8	0.0	0.0	0.0	21.85	0.75
3762.535	39.1	2.75	92.9	92.9	18.3	0.0	1.3	0.0	21.81	0.75
3762.8	31.8	2.75	78.1	78.1	20.4	0.0	4.5	0.0	21.75	0.74

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3763.1 <sup>.95</sup>	47.3	2.78	99.9	99.9	<del>14.8</del>	0.0	0.0	0.0	21.69	0.73
3763.7	69.5	2.84	100.0	100.0	<del>4.9</del>	0.0	0.0	0.0	21.64	0.73
3764.0										
3764.3										
3764.6 <sup>.45</sup>	37.9	2.85	45.6	46.7	<del>18.6</del>	0.0	10.1	0.2	21.61	0.73
3764.75										
3765.1 <sup>.95</sup>	9.8	2.86	26.5	29.1	<del>26.2</del>	0.0	19.2	0.7	21.50	0.65
3766.4	39.1	2.79	100.0	100.0	15.0	0.0	0.0	0.0	21.44	0.62
3766.7	36.2	2.75	100.0	100.0	15.8	0.0	0.0	0.0	21.39	0.62
3767.0	31.4	2.74	100.0	100.0	19.3	0.0	0.0	0.0	21.34	0.62
3767.3	28.4	2.73	100.0	100.0	21.4	0.0	0.0	0.0	21.28	0.62
3767.6	25.2	2.73	100.0	100.0	22.4	0.0	0.0	0.0	21.22	0.62
3767.9	30.2	2.73	100.0	100.0	20.7	0.0	0.0	0.0	21.15	0.62
3768.3	33.2	2.72	100.0	100.0	19.3	0.0	0.0	0.0	21.09	0.62
3768.6	34.5	2.73	100.0	100.0	19.6	0.0	0.0	0.0	21.03	0.62
3768.9	28.9	2.72	100.0	100.0	21.3	0.0	0.0	0.0	20.97	0.62
3769.2	31.1	2.73	100.0	100.0	20.7	0.0	0.0	0.0	20.90	0.62
3769.5	36.1	2.73	100.0	100.0	19.2	0.0	0.0	0.0	20.84	0.62
3769.8	33.5	2.73	99.1	100.0	20.0	0.0	0.2	0.2	20.78	0.62
3770.1	35.4	2.74	96.6	100.0	19.4	0.0	0.7	0.7	20.72	0.62
3770.4 <sup>.25</sup>	43.6	2.75	100.0	100.0	<del>16.0</del>	0.0	0.0	0.0	20.66	0.62
3770.7										
3771.0 <sup>.85</sup>	39.7	2.75	100.0	100.0	<del>15.2</del>	0.0	0.0	0.0	20.62	0.62
3771.3	33.6	2.76	98.0	100.0	15.2	0.0	0.2	0.2	20.57	0.62
3771.6 <sup>.45</sup>	40.0	2.76	93.4	93.7	<del>14.9</del>	0.0	1.0	0.0	20.53	0.62
3771.9 <sup>.05</sup>	40.5	2.79	98.8	98.8	14.0	0.0	0.2	0.0	20.48	0.61
3772.2	35.3	2.75	93.5	93.5	<del>15.9</del>	0.0	1.0	0.0	20.44	0.61
3772.5	28.8	2.74	83.0	99.8	18.9	0.0	3.2	3.2	20.39	0.61
3772.8	36.6	2.76	93.8	97.4	20.4	0.0	1.3	0.7	20.33	0.60
3773.1	36.5	2.76	100.0	100.0	18.1	0.0	0.0	0.0	20.27	0.59
3773.4	19.8	2.75	100.0	100.0	19.1	0.0	0.0	0.0	20.21	0.59
3773.7	22.3	2.71	100.0	100.0	24.1	0.0	0.0	0.0	20.15	0.59
3774.0	30.9	2.73	100.0	100.0	23.3	0.0	0.0	0.0	20.08	0.59
3774.4 <sup>.2</sup>	40.9	2.76	100.0	100.0	20.5	0.0	0.0	0.0	20.01	0.59
3774.7 <sup>.55</sup>	36.1	2.78	100.0	100.0	<del>18.9</del>	0.0	0.0	0.0	19.95	0.59
3775.0 <sup>.85</sup>	50.3	2.79	99.7	100.0	<del>17.8</del>	0.0	0.1	0.0	19.90	0.59
3775.3	60.6	2.82	100.0	100.0	14.6	0.0	0.0	0.0	19.85	0.59
3775.6	60.0	2.83	100.0	100.0	<del>10.6</del>	0.0	0.0	0.0	19.80	0.59
3775.9	66.0	2.87	100.0	100.0	6.2	0.0	0.0	0.0	19.77	0.59
3776.2		2.85	100.0	100.0	<del>7.2</del>	0.0	0.0	0.0	19.76	0.59
3776.8	69.0	2.86	100.0	100.0	9.3	0.0	0.0	0.0	19.73	0.59
3777.1	69.2	2.86	100.0	100.0	9.2	0.0	0.0	0.0	19.70	0.59
3777.4 <sup>.55</sup>	55.6	2.84	96.2	96.2	<del>13.3</del>	0.0	0.5	0.0	19.67	0.59
3777.7	34.8	2.80	73.3	73.3	16.6	0.0	4.4	0.0	19.62	0.58
3778.0	20.0	2.80	73.2	73.2	17.3	0.0	4.6	0.0	19.57	0.57
3778.3	29.0	2.78	97.7	97.7	14.2	0.0	0.3	0.0	19.52	0.56
3778.6 <sup>.45</sup>	52.0	2.78	97.3	97.3	<del>13.0</del>	0.0	0.3	0.0	19.48	0.56
3779.8 <sup>.95</sup>	41.5	2.86	49.8	49.8	17.5	0.0	8.8	0.0	19.39	0.56

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3779.8 <sup>95</sup> 3780.1 <sup>25</sup>	35.0 70.0	2.79	40.6	40.6	19.5	0.0	11.6	0.0	19.33	0.53
3781.1 <sup>95</sup>	0.0	2.73	44.2	44.2	29.8	0.0	16.6	0.0	19.26	0.48
3781.4	33.6	2.75	90.8	93.9	19.0	0.0	1.7	0.6	19.18	0.45
3781.7	35.9	2.74	100.0	100.0	18.1	0.0	0.0	0.0	19.13	0.45
3782.0	33.2	2.74	100.0	100.0	17.9	0.0	0.0	0.0	19.07	0.45
3782.3	36.9	2.75	100.0	100.0	16.5	0.0	0.0	0.0	19.02	0.45
3782.6 <sup>45</sup>	42.8	2.77	100.0	100.0	<del>18.6</del>	0.0	0.0	0.0	18.97	0.45
3782.9 <sup>25</sup>	37.0	2.75	100.0	100.0	14.6	0.0	0.0	0.0	18.92	0.45
3783.2	38.9	2.75	100.0	100.0	13.9	0.0	0.0	0.0	18.88	0.45
3783.5 <sup>35</sup>	42.4	2.75	100.0	100.0	<del>12.6</del>	0.0	0.0	0.0	18.84	0.45
3783.8	40.6	2.76	100.0	100.0	<del>12.6</del>	0.0	0.0	0.0	18.80	0.45
3784.1	40.0	2.74	100.0	100.0	<del>14.7</del>	0.0	0.0	0.0	18.76	0.45
3784.4 <sup>25</sup>	37.8	2.73	100.0	100.0	16.0	0.0	0.0	0.0	18.71	0.45
3784.7	33.1	2.75	100.0	100.0	16.3	0.0	0.0	0.0	18.66	0.45
3785.0	33.8	2.75	100.0	100.0	16.8	0.0	0.0	0.0	18.61	0.45
3785.3	25.4	2.72	100.0	100.0	20.9	0.0	0.0	0.0	18.56	0.45
3785.6	31.5	2.73	100.0	100.0	18.7	0.0	0.0	0.0	18.50	0.45
3785.9	26.4	2.72	100.0	100.0	19.9	0.0	0.0	0.0	18.44	0.45
3786.2	14.2	2.70	100.0	100.0	24.0	0.0	0.0	0.0	18.38	0.45
3786.5	9.0	2.69	100.0	100.0	25.5	0.0	0.0	0.0	18.30	0.45
3786.8	12.6	2.71	100.0	100.0	24.0	0.0	0.0	0.0	18.22	0.45
3787.2	16.7	2.72	100.0	100.0	24.7	0.0	0.0	0.0	18.15	0.45
3787.5	15.4	2.71	100.0	100.0	24.3	0.0	0.0	0.0	18.08	0.45
3787.8	21.9	2.72	100.0	100.0	22.5	0.0	0.0	0.0	18.00	0.45
3788.1	25.0	2.74	100.0	100.0	22.2	0.0	0.0	0.0	17.93	0.45
3788.4	23.4	2.72	100.0	100.0	21.8	0.0	0.0	0.0	17.87	0.45
3788.7	30.2	2.72	100.0	100.0	19.3	0.0	0.0	0.0	17.80	0.45
3789.0	24.9	2.72	100.0	100.0	21.3	0.0	0.0	0.0	17.74	0.45
3789.3	12.8	2.71	100.0	100.0	24.6	0.0	0.0	0.0	17.67	0.45
3789.6	8.8	2.69	100.0	100.0	25.8	0.0	0.0	0.0	17.60	0.45
3789.9	18.9	2.69	100.0	100.0	22.1	0.0	0.0	0.0	17.52	0.45
3790.2	17.1	2.72	100.0	100.0	16.3	0.0	0.0	0.0	17.46	0.45
3790.5	17.8	2.76	100.0	100.0	8.6	0.0	0.0	0.0	17.41	0.45
3790.8 <sup>65</sup>	41.3	2.77	100.0	100.0	<del>8.4</del>	0.0	0.0	0.0	17.39	0.45
3791.1 <sup>95</sup>	37.6	2.73	100.0	100.0	16.1	0.0	0.0	0.0	17.36	0.45
3791.4	20.4	2.71	100.0	100.0	22.7	0.0	0.0	0.0	17.31	0.45
3791.7	20.3	2.73	100.0	100.0	29.0	0.0	0.0	0.0	17.24	0.45
3792.0	10.3	2.70	100.0	100.0	24.0	0.0	0.0	0.0	17.17	0.45
3792.3	10.6	2.70	100.0	100.0	23.0	0.0	0.0	0.0	17.10	0.45
3792.6	7.6	2.70	100.0	100.0	23.5	0.0	0.0	0.0	17.03	0.45
3792.9	3.4	2.70	100.0	100.0	25.4	0.0	0.0	0.0	16.95	0.45
3793.2	6.5	2.69	100.0	100.0	25.4	0.0	0.0	0.0	16.88	0.45
3793.6	0.5	2.68	100.0	100.0	27.3	0.0	0.0	0.0	16.80	0.45
3793.9	0.0	2.67	100.0	100.0	27.4	0.0	0.0	0.0	16.71	0.45
3794.2	0.0	2.69	100.0	100.0	26.8	0.0	0.0	0.0	16.63	0.45
3794.5	1.1	2.69	100.0	100.0	26.5	0.0	0.0	0.0	16.55	0.45
3794.8	4.8	2.69	100.0	100.0	25.7	0.0	0.0	0.0	16.47	0.45

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3795.1	5.5	2.69	100.0	100.0	25.8	0.0	0.0	0.0	16.39	0.45
3795.4	7.8	2.71	100.0	100.0	25.9	0.0	0.0	0.0	16.31	0.45
3795.7	4.9	2.70	100.0	100.0	27.0	0.0	0.0	0.0	16.23	0.45
3796.0	3.5	2.70	100.0	100.0	27.2	0.0	0.0	0.0	16.15	0.45
3796.3	1.8	2.68	100.0	100.0	26.5	0.0	0.0	0.0	16.07	0.45
3796.6	5.4	2.68	100.0	100.0	25.6	0.0	0.0	0.0	15.99	0.45
3796.9	11.1	2.71	100.0	100.0	24.9	0.0	0.0	0.0	15.91	0.45
3797.2	10.2	2.70	100.0	100.0	25.1	0.0	0.0	0.0	15.83	0.45
3797.5	2.8	2.70	100.0	100.0	27.9	0.0	0.0	0.0	15.76	0.45
3797.8	0.0	2.69	100.0	100.0	29.6	0.0	0.0	0.0	15.67	0.45
3798.1	3.5	2.69	100.0	100.0	28.0	0.0	0.0	0.0	15.58	0.45
3798.4	9.3	2.70	100.0	100.0	25.3	0.0	0.0	0.0	15.50	0.45
3798.7	11.8	2.70	100.0	100.0	23.9	0.0	0.0	0.0	15.42	0.45
3799.0	9.6	2.71	100.0	100.0	24.3	0.0	0.0	0.0	15.35	0.45
3799.3	8.7	2.72	100.0	100.0	24.7	0.0	0.0	0.0	15.27	0.45
3799.6	8.9	2.72	99.1	99.1	25.0	0.0	0.2	0.0	15.20	0.45
3800.0	20.6	2.73	100.0	100.0	20.4	0.0	0.0	0.0	15.13	0.45
3800.3	33.8	2.79	100.0	100.0	16.1	0.0	0.0	0.0	15.07	0.45
3800.6 <sup>45</sup>	46.1	2.84	100.0	100.0	<del>13.5</del>	0.0	0.0	0.0	15.02	0.45
3800.9	53.0	2.83	100.0	100.0	<del>14.6</del>	0.0	0.0	0.0	14.98	0.45
3801.2 <sup>05</sup>	23.5	2.75	100.0	100.0	20.8	0.0	0.0	0.0	14.94	0.45
3801.5	20.1	2.76	100.0	100.0	21.7	0.0	0.0	0.0	14.87	0.45
3801.8	13.8	2.73	100.0	100.0	24.9	0.0	0.0	0.0	14.80	0.45
3802.1	9.3	2.72	99.8	99.8	26.6	0.0	0.0	0.0	14.73	0.45
3802.4	6.8	2.72	100.0	100.0	27.1	0.0	0.0	0.0	14.64	0.45
3802.7	9.8	2.72	100.0	100.0	26.2	0.0	0.0	0.0	14.56	0.45
3803.0	12.2	2.72	100.0	100.0	24.7	0.0	0.0	0.0	14.48	0.45
3803.3	9.7	2.72	100.0	100.0	25.0	0.0	0.0	0.0	14.41	0.45
3803.6	4.9	2.69	100.0	100.0	25.5	0.0	0.0	0.0	14.33	0.45
3803.9	3.9	2.69	100.0	100.0	26.1	0.0	0.0	0.0	14.25	0.45
3804.2	5.5	2.70	100.0	100.0	26.4	0.0	0.0	0.0	14.17	0.45
3804.5	4.9	2.70	100.0	100.0	26.1	0.0	0.0	0.0	14.09	0.45
3804.8	4.7	2.69	100.0	100.0	25.8	0.0	0.0	0.0	14.02	0.45
3805.1	2.5	2.69	100.0	100.0	26.5	0.0	0.0	0.0	13.94	0.45
3805.4	1.8	2.70	100.0	100.0	26.7	0.0	0.0	0.0	13.86	0.45
3805.7	2.6	2.70	100.0	100.0	26.6	0.0	0.0	0.0	13.77	0.45
3806.1	6.1	2.70	100.0	100.0	25.9	0.0	0.0	0.0	13.69	0.45
3806.4	1.2	2.70	100.0	100.0	27.1	0.0	0.0	0.0	13.61	0.45
3806.7	1.1	2.70	100.0	100.0	26.9	0.0	0.0	0.0	13.53	0.45
3807.0	4.2	2.71	100.0	100.0	26.4	0.0	0.0	0.0	13.45	0.45
3807.3	4.9	2.71	100.0	100.0	26.6	0.0	0.0	0.0	13.37	0.45
3807.6	1.6	2.69	100.0	100.0	27.3	0.0	0.0	0.0	13.29	0.45
3807.9	0.7	2.68	100.0	100.0	27.7	0.0	0.0	0.0	13.20	0.45
3808.2	0.0	2.66	100.0	100.0	27.9	0.0	0.0	0.0	13.12	0.45
3808.5	0.0	2.67	100.0	100.0	28.3	0.0	0.0	0.0	13.04	0.45
3808.8	0.0	2.68	100.0	100.0	28.1	0.0	0.0	0.0	12.95	0.45
3809.1	0.9	2.69	100.0	100.0	27.9	0.0	0.0	0.0	12.86	0.45
3809.4	3.1	2.70	100.0	100.0	28.1	0.0	0.0	0.0	12.78	0.45

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POK-MET	HC-MET
3809.7	0.0	2.68	100.0	100.0	29.1	0.0	0.0	0.0	12.69	0.45
3810.0	2.3	2.69	100.0	100.0	28.2	0.0	0.0	0.0	12.60	0.45
3810.3	4.8	2.67	100.0	100.0	26.7	0.0	0.0	0.0	12.52	0.45
3810.6	0.0	2.68	100.0	100.0	26.6	0.0	0.0	0.0	12.44	0.45
3810.9	0.0	2.66	100.0	100.0	24.7	0.0	0.0	0.0	12.36	0.45
3811.2	2.4	2.68	100.0	100.0	23.4	0.0	0.0	0.0	12.28	0.45
3811.5	17.1	2.71	100.0	100.0	22.1	0.0	0.0	0.0	12.22	0.45
3811.8	18.5	2.71	100.0	100.0	21.4	0.0	0.0	0.0	12.15	0.45
3812.1	16.6	2.71	100.0	100.0	21.7	0.0	0.0	0.0	12.08	0.45
3812.5	19.8	2.72	100.0	100.0	21.0	0.0	0.0	0.0	12.02	0.45
3812.8	22.5	2.72	100.0	100.0	20.3	0.0	0.0	0.0	11.96	0.45
3813.1	32.9	2.74	100.0	100.0	17.6	0.0	0.0	0.0	11.89	0.45
3813.4	39.2	2.77	100.0	100.0	17.0	0.0	0.0	0.0	11.84	0.45
3813.7	39.9	2.76	97.7	97.7	16.7	0.0	0.4	0.0	11.79	0.45
3814.0	51.5	2.77	99.9	99.9	13.7	0.0	0.0	0.0	11.74	0.45
3814.3	57.9	2.78	100.0	100.0	12.6	0.0	0.0	0.0	11.70	0.45
3814.6	38.2	2.77	73.1	73.1	17.6	0.0	4.7	0.0	11.66	0.45
3814.9	35.9	2.75	75.9	75.9	17.2	0.0	4.1	0.0	11.61	0.43
3815.2	18.3	2.75	66.8	67.2	19.6	0.0	6.5	0.1	11.55	0.42
3815.5	35.0	2.79	88.9	98.5	15.4	0.0	1.7	1.5	11.50	0.40
3815.8	52.0	2.81	99.4	99.4	12.8	0.0	0.1	0.0	11.45	0.40
3816.1	38.3	2.76	70.6	70.6	16.4	0.0	4.8	0.0	11.41	0.39
3816.4	40.3	2.79	75.3	75.3	14.4	0.0	3.6	0.0	11.36	0.38
3816.7	55.9	2.84	79.5	79.5	12.7	0.0	2.6	0.0	11.32	0.37
3817.0	64.5	2.87	66.8	66.8	10.7	0.0	1.4	0.0	11.28	0.36
3817.3	62.3	2.85	73.1	73.1	11.3	0.0	3.0	0.0	11.25	0.35
3818.2	69.1	2.85	96.6	96.6	9.3	0.0	0.3	0.0	11.16	0.34
3818.9	67.8	2.86	92.9	92.9	9.7	0.0	0.7	0.0	11.11	0.34
3819.2	69.7	2.86	98.6	98.6	9.1	0.0	0.1	0.0	11.08	0.34
3820.4	59.2	2.87	74.6	74.6	12.2	0.0	3.1	0.0	10.99	0.34
3823.4	22.1	2.86	49.9	57.3	23.4	0.0	11.7	1.7	10.94	0.33
3828.0	40.4	2.86	67.7	67.7	17.9	0.0	5.8	0.0	10.84	0.28
3828.3	52.6	2.87	99.4	99.4	14.2	0.0	0.1	0.0	10.79	0.27
3828.6	61.9	2.86	100.0	100.0	11.4	0.0	0.0	0.0	10.75	0.27
3829.2	0.0	2.68	25.5	25.5	30.0	0.0	22.3	0.0	10.68	0.24
3829.8	0.0	2.69	27.0	27.0	30.0	0.0	21.9	0.0	10.64	0.20
3830.1	25.4	2.75	49.2	57.9	20.4	0.0	10.3	1.8	10.55	0.14
3830.4	27.5	2.73	95.9	100.0	13.0	0.0	0.5	0.5	10.50	0.13
3830.7	26.5	2.74	99.8	99.9	13.5	0.0	0.0	0.0	10.47	0.13
3831.0	24.9	2.74	100.0	100.0	14.4	0.0	0.0	0.0	10.42	0.13
3831.3	15.3	2.72	100.0	100.0	17.8	0.0	0.0	0.0	10.38	0.13
3831.7	10.3	2.70	100.0	100.0	20.4	0.0	0.0	0.0	10.32	0.13

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDRATION CARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3832.0	3.2	2.68	100.0	100.0	23.1	0.0	0.0	0.0	10.76	0.13
3832.3	0.0	2.66	100.0	100.0	24.6	0.0	0.0	0.0	10.18	0.13
3832.6	0.0	2.64	100.0	100.0	27.2	0.0	0.0	0.0	10.11	0.13
3832.9	0.0	2.62	96.1	96.1	30.0	0.0	1.2	0.0	10.02	0.13
3833.2	0.0	2.65	99.9	99.9	26.4	0.0	0.0	0.0	9.93	0.12
3833.5	0.0	2.66	100.0	100.0	22.7	0.0	0.0	0.0	9.85	0.12
3833.8	0.0	2.67	96.9	98.5	23.5	0.0	0.7	0.4	9.78	0.12
3834.1	14.3	2.71	96.8	96.8	21.0	0.0	0.7	0.0	9.71	0.12
3834.4	18.5	2.72	89.4	89.4	20.7	0.0	2.2	0.0	9.65	0.12
3834.7	24.5	2.72	98.1	98.1	18.8	0.0	0.4	0.0	9.59	0.11
3835.0	27.6	2.72	99.3	99.9	18.7	0.0	0.1	0.1	9.53	0.11
3835.3	25.9	2.71	100.0	100.0	18.6	0.0	0.0	0.0	9.48	0.11
3835.6	19.6	2.70	100.0	100.0	19.8	0.0	0.0	0.0	9.42	0.11
3835.9	16.5	2.69	100.0	100.0	20.9	0.0	0.0	0.0	9.36	0.11
3836.2	13.0	2.68	100.0	100.0	22.1	0.0	0.0	0.0	9.29	0.11
3836.5	9.2	2.67	100.0	100.0	23.7	0.0	0.0	0.0	9.22	0.11
3836.8	11.8	2.68	100.0	100.0	23.0	0.0	0.0	0.0	9.15	0.11
3837.1	12.1	2.68	100.0	100.0	24.0	0.0	0.0	0.0	9.08	0.11
3837.4	12.9	2.68	100.0	100.0	22.9	0.0	0.0	0.0	9.01	0.11
3837.7	17.4	2.69	100.0	100.0	21.6	0.0	0.0	0.0	8.94	0.11
3838.1	18.7	2.69	100.0	100.0	20.2	0.0	0.0	0.0	8.87	0.11
3838.4	18.9	2.68	100.0	100.0	23.4	0.0	0.0	0.0	8.81	0.11
3838.7	11.1	2.64	100.0	100.0	23.3	0.0	0.0	0.0	8.74	0.11
3839.0	9.7	2.68	99.3	99.3	24.8	0.0	0.2	0.0	8.67	0.11
3839.3	7.5	2.67	99.2	99.2	24.9	0.0	0.2	0.0	8.59	0.11
3839.6	11.7	2.68	100.0	100.0	22.9	0.0	0.0	0.0	8.51	0.11
3839.9	17.5	2.70	100.0	100.0	20.2	0.0	0.0	0.0	8.45	0.11
3840.2	19.1	2.70	100.0	100.0	19.6	0.0	0.0	0.0	8.39	0.11
3840.5	16.7	2.69	100.0	100.0	22.4	0.0	0.0	0.0	8.33	0.11
3840.8	19.7	2.70	100.0	100.0	23.2	0.0	0.0	0.0	8.25	0.11
3841.1	12.7	2.70	99.9	99.9	26.2	0.0	0.0	0.0	8.18	0.11
3841.4	13.4	2.69	100.0	100.0	25.2	0.0	0.0	0.0	8.10	0.11
3841.7	12.0	2.69	100.0	100.0	25.1	0.0	0.0	0.0	8.03	0.11
3842.0	17.6	2.69	100.0	100.0	22.8	0.0	0.0	0.0	7.95	0.11
3842.3	26.2	2.72	100.0	100.0	21.6	0.0	0.0	0.0	7.88	0.11
3842.6	28.9	2.72	100.0	100.0	21.0	0.0	0.0	0.0	7.82	0.11
3842.9	26.3	2.71	99.6	100.0	20.9	0.0	0.1	0.1	7.75	0.11
3843.2	25.1	2.71	100.0	100.0	18.6	0.0	0.0	0.0	7.69	0.11
3843.5	23.5	2.74	100.0	100.0	13.5	0.0	0.0	0.0	7.64	0.11
3843.8	18.3	2.72	100.0	100.0	18.6	0.0	0.0	0.0	7.59	0.11
3844.2	22.7	2.71	97.6	97.6	23.2	0.0	0.5	0.0	7.53	0.11
3844.5	23.1	2.71	100.0	100.0	23.1	0.0	0.0	0.0	7.46	0.11
3844.8	21.6	2.70	100.0	100.0	23.5	0.0	0.0	0.0	7.39	0.11
3845.1	19.7	2.70	100.0	100.0	24.1	0.0	0.0	0.0	7.32	0.11
3845.4	19.0	2.70	100.0	100.0	24.3	0.0	0.0	0.0	7.25	0.11
3845.7	18.5	2.70	100.0	100.0	24.5	0.0	0.0	0.0	7.17	0.11
3846.0	22.5	2.70	100.0	100.0	23.2	0.0	0.0	0.0	7.10	0.11
3846.3	23.5	2.71	100.0	100.0	22.9	0.0	0.0	0.0	7.03	0.11

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADDED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3846.6	23.9	2.71	100.0	100.0	22.8	0.0	0.0	0.0	6.96	0.11
3846.9	30.0	2.72	100.0	100.0	21.0	0.0	0.0	0.0	6.89	0.11
3847.2	27.7	2.72	100.0	100.0	21.7	0.0	0.0	0.0	6.82	0.11
3847.5	37.8	2.74	100.0	100.0	18.7	0.0	0.0	0.0	6.76	0.11
3847.8 <sup>65</sup>	43.5	2.75	100.0	100.0	<del>18.9</del>	0.0	0.0	0.0	6.70	0.11
3848.1 <sup>45</sup>	39.8	2.75	100.0	100.0	18.1	0.0	0.0	0.0	6.65	0.11
3848.4	36.9	2.75	100.0	100.0	18.9	0.0	0.0	0.0	6.60	0.11
3848.7 <sup>85</sup>	39.6	2.74	100.0	100.0	18.1	0.0	0.0	0.0	6.54	0.11
3849.0	47.7	2.76	100.0	100.0	<del>15.7</del>	0.0	0.0	0.0	6.49	0.11
3850.2	45.2	2.78	100.0	100.0	<del>15.4</del>	0.0	0.0	0.0	6.41	0.11
3850.5 <sup>4</sup>	39.2	2.74	100.0	100.0	16.9	0.0	0.0	0.0	6.36	0.11
3850.9	11.8	2.68	97.3	97.3	23.8	0.0	0.6	0.0	6.30	0.11
3851.2	15.0	2.69	100.0	100.0	21.3	0.0	0.0	0.0	6.23	0.11
3851.5	19.9	2.70	99.8	100.0	20.1	0.0	0.0	0.0	6.17	0.11
3851.8	12.7	2.71	88.7	100.0	21.8	0.0	2.5	2.5	6.10	0.10
3852.1	11.0	2.71	76.7	99.6	22.9	0.0	5.3	5.2	6.04	0.09
3852.4	16.1	2.73	96.2	100.0	21.1	0.0	0.8	0.8	5.97	0.08
3852.7	15.2	2.73	98.5	98.5	22.6	0.0	0.3	0.0	5.90	0.08
3853.0	12.9	2.74	93.3	93.3	26.1	0.0	1.7	0.0	5.83	0.08
3853.3	16.1	2.73	100.0	100.0	24.7	0.0	0.0	0.0	5.75	0.07
3853.6	20.6	2.72	100.0	100.0	23.3	0.0	0.0	0.0	5.68	0.07
3854.2	26.2	2.71	100.0	100.0	22.1	0.0	0.0	0.0	5.61	0.07
3854.2	23.3	2.71	100.0	100.0	23.0	0.0	0.0	0.0	5.54	0.07
3854.5	31.9	2.73	100.0	100.0	20.0	0.0	0.0	0.0	5.47	0.07
3854.8	33.7	2.74	100.0	100.0	18.2	0.0	0.0	0.0	5.42	0.07
3855.1	37.4	2.76	100.0	100.0	16.4	0.0	0.0	0.0	5.36	0.07
3855.4 <sup>25</sup>	63.6	2.79	100.0	100.0	<del>6.9</del>	0.0	0.0	0.0	5.32	0.07
3855.7	60.3	2.82	100.0	100.0	<del>7.4</del>	0.0	0.0	0.0	5.30	0.07
3856.6	68.3	2.79	100.0	100.0	<del>5.8</del>	0.0	0.0	0.0	5.26	0.07
3857.0	55.9	2.79	100.0	100.0	<del>9.0</del>	0.0	0.0	0.0	5.24	0.07
3857.3	41.0	2.77	100.0	100.0	<del>13.0</del>	0.0	0.0	0.0	5.21	0.07
3857.6 <sup>45</sup>	25.8	2.75	93.1	99.2	<del>17.8</del>	0.0	1.2	1.1	5.16	0.07
3857.9	33.0	2.76	96.8	99.4	16.1	0.0	0.2	0.1	5.11	0.07
3858.2	37.0	2.75	99.9	99.9	15.0	0.0	0.0	0.0	5.07	0.07
3858.5	37.2	2.76	99.6	99.6	15.6	0.0	0.1	0.0	5.02	0.07
3858.8	35.5	2.75	99.8	99.8	15.3	0.0	0.0	0.0	4.97	0.07
3859.1	30.3	2.76	97.3	97.3	16.5	0.0	0.4	0.0	4.93	0.07
3859.4 <sup>25</sup>	41.3	2.78	98.0	98.2	<del>14.9</del>	0.0	0.3	0.0	4.88	0.07
3859.7	42.5	2.81	84.7	84.7	16.9	0.0	2.6	0.0	4.83	0.07
3860.0	42.0	2.77	94.5	94.5	15.9	0.0	0.3	0.0	4.78	0.06
3860.3	50.8	2.80	96.0	96.0	<del>14.8</del>	0.0	0.5	0.0	4.73	0.06
3860.6	52.4	2.87	99.3	99.3	14.3	0.0	0.1	0.0	4.69	0.05
3860.9	64.3	2.86	100.0	100.0	10.7	0.0	0.0	0.0	4.65	0.05
3861.2	63.6	2.86	100.0	100.0	10.9	0.0	0.0	0.0	4.61	0.05
3861.5	66.5	2.86	100.0	100.0	10.1	0.0	0.0	0.0	4.58	0.05
3861.8	66.5	2.86	100.0	100.0	10.1	0.0	0.0	0.0	4.55	0.05

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DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3862.1	68.5	2.83	100.0	100.0	9.4	0.0	0.0	0.0	4.53	0.05
3862.4	68.1	2.81	100.0	100.0	9.6	0.0	0.0	0.0	4.50	0.05
3863.0	51.9	2.85	99.2	100.0	14.4	0.0	0.1	0.1	4.44	0.05
3863.4	55.5	2.85	100.0	100.0	13.1	0.0	0.0	0.0	4.40	0.05
3863.7	54.6	2.82	100.0	100.0	11.7	0.0	0.0	0.0	4.36	0.05
3864.0	40.7	2.76	100.0	100.0	14.9	0.0	0.0	0.0	4.32	0.05
3864.3 <sup>15</sup>	26.2	2.74	97.2	97.2	19.6	0.0	0.6	0.0	4.27	0.05
3864.6	22.0	2.71	97.6	97.6	20.1	0.0	0.5	0.0	4.21	0.05
3864.9	22.3	2.71	98.3	98.3	19.8	0.0	0.3	0.0	4.15	0.05
3865.2	22.3	2.71	97.3	97.3	19.8	0.0	0.5	0.0	4.09	0.05
3865.5	36.4	2.73	100.0	100.0	14.7	0.0	0.0	0.0	4.04	0.05
3865.8	27.6	2.74	99.9	99.9	16.9	0.0	0.0	0.0	3.99	0.05
3866.1	24.2	2.74	99.5	99.5	16.8	0.0	0.1	0.0	3.94	0.05
3866.4	30.5	2.75	100.0	100.0	15.9	0.0	0.0	0.0	3.89	0.05
3866.7	26.2	2.74	100.0	100.0	15.5	0.0	0.0	0.0	3.84	0.05
3867.0	22.0	2.75	99.7	100.0	16.0	0.0	0.0	0.0	3.79	0.05
3867.3	23.8	2.74	100.0	100.0	15.9	0.0	0.0	0.0	3.74	0.05
3867.6	30.0	2.73	100.0	100.0	16.3	0.0	0.0	0.0	3.70	0.05
3867.9	24.7	2.72	100.0	100.0	19.4	0.0	0.0	0.0	3.64	0.05
3868.2	20.3	2.70	100.0	100.0	22.0	0.0	0.0	0.0	3.58	0.05
3868.5	34.7	2.69	100.0	100.0	25.0	0.0	0.0	0.0	3.51	0.05
3868.8	4.2	2.67	100.0	100.0	28.4	0.0	0.0	0.0	3.43	0.05
3869.1	5.6	2.67	100.0	100.0	27.5	0.0	0.0	0.0	3.35	0.05
3869.4	7.2	2.68	100.0	100.0	24.8	0.0	0.0	0.0	3.26	0.05
3869.8	12.0	2.68	100.0	100.0	23.4	0.0	0.0	0.0	3.19	0.05
3870.1	11.6	2.68	98.6	98.6	23.3	0.0	0.3	0.0	3.12	0.05
3870.4	14.2	2.69	93.6	98.4	22.1	0.0	1.4	1.1	3.05	0.04
3870.7	25.5	2.71	99.1	99.5	18.9	0.0	0.2	0.1	2.98	0.04
3871.0 <sup>85</sup>	44.7	2.75	100.0	100.0	14.1	0.0	0.0	0.0	2.93	0.04
3871.3 <sup>45</sup>	45.9	2.75	100.0	100.0	11.9	0.0	0.0	0.0	2.89	0.04
3871.6	18.6	2.69	98.0	100.0	20.1	0.0	0.4	0.4	2.85	0.04
3871.9	21.1	2.73	86.7	93.4	21.3	0.0	2.8	1.4	2.78	0.03
3872.2	18.9	2.70	95.2	95.2	19.8	0.0	0.9	0.0	2.72	0.03
3872.5	16.8	2.70	85.5	85.5	21.7	0.0	3.2	0.0	2.66	0.02
3872.8	12.7	2.71	83.3	83.3	22.9	0.0	3.8	0.0	2.59	0.01
3873.1	17.8	2.71	99.6	99.6	21.4	0.0	0.1	0.0	2.52	0.00
3873.4	14.6	2.69	100.0	100.0	22.1	0.0	0.0	0.0	2.46	0.00
3873.7	0.0	2.68	100.0	100.0	25.1	0.0	0.0	0.0	2.39	0.00
3874.0	0.0	2.65	100.0	100.0	25.1	0.0	0.0	0.0	2.31	0.00
3874.3	0.0	2.65	100.0	100.0	23.1	0.0	0.0	0.0	2.23	0.00
3874.6	0.0	2.63	99.7	99.7	21.6	0.0	0.1	0.0	2.16	0.00
3874.9	0.0	2.62	100.0	100.0	16.4	0.0	0.0	0.0	2.10	0.00
3875.2	2.0	2.69	100.0	100.0	6.7	0.0	0.0	0.0	2.06	0.00
3875.5	13.2	2.70	100.0	100.0	1.7	0.0	0.0	0.0	2.05	0.00
3875.8	12.6	2.72	100.0	100.0	3.2	0.0	0.0	0.0	2.04	0.00
3876.2	37.4	2.75	100.0	100.0	3.3	0.0	0.0	0.0	2.03	0.00
3876.5 <sup>35</sup>	69.8	2.87	100.0	100.0	2.6	0.0	0.0	0.0	2.02	0.00

3877m

2/7.6/38

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3877.4	56.0	2.87	87.1	98.9	12.2	0.0	1.6	1.4	2.00	0.00
3879.8	67.1	2.86	100.0	100.0	9.9	0.0	0.0	0.0	1.90	0.00
3880.1	64.4	2.87	100.0	100.0	10.7	0.0	0.0	0.0	1.86	0.00
3881.3	64.0	2.87	100.0	100.0	10.8	0.0	0.0	0.0	1.76	0.00
3883.2	67.3	2.86	100.0	100.0	9.2	0.0	0.0	0.0	1.68	0.00
3885.9	66.6	2.86	100.0	100.0	10.0	0.0	0.0	0.0	1.53	0.00
3886.2	63.5	2.87	100.0	100.0	10.9	0.0	0.0	0.0	1.50	0.00
3887.5	57.9	2.86	99.9	99.9	12.6	0.0	0.0	0.0	1.47	0.00
3888.8	64.8	2.86	100.0	100.0	10.6	0.0	0.0	0.0	1.43	0.00
3887.1	64.6	2.86	100.0	100.0	10.6	0.0	0.0	0.0	1.40	0.00
3887.4	69.6	2.85	100.0	100.0	9.1	0.0	0.0	0.0	1.36	0.00
3893.5	69.0	2.86	100.0	100.0	9.3	0.0	0.0	0.0	0.98	0.00
3896.0	61.4	2.82	100.0	100.0	9.0	0.0	0.0	0.0	0.91	0.00
3896.3	54.0	2.80	100.0	100.0	10.5	0.0	0.0	0.0	0.88	0.00
3896.6	57.7	2.78	100.0	100.0	8.1	0.0	0.0	0.0	0.85	0.00
3896.9	62.4	2.79	100.0	100.0	6.3	0.0	0.0	0.0	0.83	0.00
3897.2	60.2	2.79	100.0	100.0	7.4	0.0	0.0	0.0	0.81	0.00
3897.5	61.5	2.79	100.0	100.0	6.8	0.0	0.0	0.0	0.78	0.00
3897.8	64.8	2.80	100.0	100.0	6.2	0.0	0.0	0.0	0.76	0.00
3898.1	66.7	2.81	100.0	100.0	6.0	0.0	0.0	0.0	0.75	0.00
3898.4	67.7	2.81	100.0	100.0	5.4	0.0	0.0	0.0	0.73	0.00
3898.7	65.2	2.81	100.0	100.0	6.0	0.0	0.0	0.0	0.71	0.00
3899.0	65.4	2.80	100.0	100.0	5.7	0.0	0.0	0.0	0.69	0.00
3899.6	69.4	2.81	100.0	100.0	5.0	0.0	0.0	0.0	0.67	0.00
3899.9	66.4	2.82	100.0	100.0	6.8	0.0	0.0	0.0	0.65	0.00
3900.2	62.8	2.82	100.0	100.0	8.5	0.0	0.0	0.0	0.63	0.00
3900.5	64.9	2.83	100.0	100.0	8.0	0.0	0.0	0.0	0.60	0.00
3900.8	64.6	2.83	100.0	100.0	8.5	0.0	0.0	0.0	0.58	0.00
3901.1	61.7	2.83	100.0	100.0	9.5	0.0	0.0	0.0	0.55	0.00
3901.8	65.3	2.82	100.0	100.0	8.4	0.0	0.0	0.0	0.50	0.00
3902.1	64.1	2.81	100.0	100.0	8.8	0.0	0.0	0.0	0.48	0.00
3902.4	62.6	2.80	100.0	100.0	8.9	0.0	0.0	0.0	0.45	0.00
3902.7	66.1	2.80	100.0	100.0	7.0	0.0	0.0	0.0	0.42	0.00
3903.6	68.9	2.83	100.0	100.0	7.3	0.0	0.0	0.0	0.37	0.00
3904.5	68.0	2.83	100.0	100.0	7.5	0.0	0.0	0.0	0.31	0.00
3905.1	68.6	2.81	100.0	100.0	6.9	0.0	0.0	0.0	0.27	0.00

DEPTH METERS	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS		POROSITY		HYDROCARBONS		CUMULATIVE INTEGRATIONS	
			VIRGIN ZONE (%)	INVADED ZONE	TOTAL %	SECONDARY %	TOTAL %	MOVABLE %	POR-MET	HC-MET
3905.4	66.7	2.82	100.0	100.0	8.2	0.0	0.0	0.0	0.25	0.00
3905.7	66.1	2.82	100.0	100.0	8.8	0.0	0.0	0.0	0.22	0.00
3906.0	65.9	2.83	100.0	100.0	9.2	0.0	0.0	0.0	0.19	0.00
3906.3	67.4	2.82	100.0	100.0	8.0	0.0	0.0	0.0	0.17	0.00
3906.6	62.8	2.81	100.0	100.0	7.8	0.0	0.0	0.0	0.14	0.00
3906.9	52.1	2.80	100.0	100.0	9.7	0.0	0.0	0.0	0.11	0.00
3907.2	60.2	2.78	100.0	100.0	8.7	0.0	0.0	0.0	0.09	0.00
3907.5	68.0	2.79	100.0	100.0	7.7	0.0	0.0	0.0	0.06	0.00
3908.2	66.5	2.79	100.0	100.0	8.2	0.0	0.0	0.0	0.01	0.00