

Denne rapport
tilhører



L&U DOK. SENTER

L. NR. 20088370018

KODE Well 31/2-10 nr 4

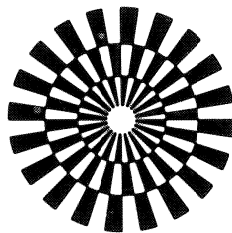
Returneres etter bruk

NORSKE SHELL A/S

WELL: 31/2 - 10

RATE: MARCH 1983

ROUTINE CORE ANALYSIS



GECO
GEOPHYSICAL COMPANY
OF NORWAY A/S

L.nr.	Statoil				
Avd. <i>FLT</i>	Sentriflerkiv				
Kod. <i>Kilt</i>	Avd arkiv				
Mott. 14 MARS 1983	Ertes arkiv				
Nr. 0000	8305-237				
O.p.r.					
År 1983					
<input checked="" type="checkbox"/> 1983	Dato	Sign	<input checked="" type="checkbox"/> 1983	Dato	Sign
Ertes arkiv					



C O M M E N T S

Routine Core Analysis

- Technics : Frozen cores technics.
- Preparation : The analyses were performed on frozen cores. The plug samples were cut by using liquid nitrogen as a cooling agent. Using a special plug holder the plugs were mounted in frozen condition.
In this holder a cold cleaning takes place, using methanol by toluene and finally methanol.
- Measurements: The plugs were measured for brine porosity and air permeability. In addition grain density were measured. You have to notice that on some plugs the helium porosity were measured. This was done because the plugs were both consolidated and very tight.
- Abbreviations: npp = no plug possible
nhpp = no horizontal plug possible
nvpp = no vertical plug possible
nmp = no measuring possible



GECO
 GEOPHYSICAL COMPANY
 OF NORWAY AS
 Petroleum Laboratory

COMPANY: Norske Shell A/S

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CORE NO.: 2

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Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a K _l	vertical K _a K _l			
21	1585.05					
22	1585.39					
23	1585.68					
24	1586.00					
25	1586.40					
26	1586.66					
27	1587.00					
28	1587.24					
29	1587.56					
30	1587.84					
31	1588.17					
32	1588.43					
33	1588.74					
34	1589.04					
35	1589.37					
36	1589.67					
37	1589.86					
38	1590.31					
39	1590.58					
40	1590.89					
41	1591.09					
42	1591.40					
43	1592.35	0.073	0.04	4.1	2.72	Calc-sst.

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CORE NO.: 3

Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		K _a	K _v			
44	1599.02	0.209	0.13	6.2	2.73	consolidated plug
45	1599.30	2321	2241	33.4	2.66	partially consolidated plug
46	1599.62	5017	4937	36.0	2.66	"
47	1599.92	7275	7175	35.4	2.64	unconsolidated plug
48	1600.22	5115	5035	34.7	2.66	partially consolidated plug
49	1600.52	4116	4036	34.1	2.66	consolidated plug
50	1600.80	7201	7101	33.9	2.64	partially consolidated plug
51	1601.40	3491	3411	33.3	2.67	consolidated plug
52	1601.72	4637	4557	32.4	2.65	"
53	1602.02	9098	8973	32.5	2.64	partially consolidated plug
54	1602.32	10602	10452	33.3	2.65	unconsolidated plug
55	1602.62	10885	10735	34.0	2.64	partially consolidated plug
56	1602.92	18093	17843	35.4	2.66	unconsolidated plug
57	1603.22	11497	11347	34.9	2.64	"
58	1603.52	9250	9125	34.8	2.66	"
59	1603.87	19545	19295	35.4	2.65	partially consolidated plug
60	1604.12	5872	5772	33.5	2.66	"
61	1604.72	6351	6251	34.9	2.65	"
62	1604.72	18902	18652	37.8	2.66	"
63	1605.02	11059	10909	36.0	2.65	"
64	1605.32	3181	3101	34.5	2.66	consolidated plug
65	1605.62	4112	4032	33.6	2.66	partially consolidated plug
66	1605.92	4771	4691	35.1	2.66	"
67	1606.22	5438	5358	36.5	2.65	"
68	1606.52	5118	5038	36.8	2.65	"
69	1606.82	2577	2497	35.5	2.66	unconsolidated plug
70	1607.20	3924	3844	35.8	2.64	consolidated plug
71	1607.50	2255	2195	35.3	2.65	partially consolidated plug
72	1607.80	129	115	30.0	2.64	consolidated plug



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CORE NO.: 3

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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		horizontal K _a	K _v			
73	1608.10	226	206	30.4	2.62	consolidated plug
74	1608.40	61	53	25.9	2.61	"
75	1608.70	5.2	3.9	10.3	2.68	"
76	1609.00	nmp			2.68	"
77	1609.30	8673	8548	33.3	2.65	"
78	1609.60	771	671	33.1	2.67	"
79	1609.90	1058	1008	34.9	2.66	"
80	1610.20	920	880	33.1	2.67	"
81	1610.50	1083	1033	32.8	2.65	"
82	1610.80	1111	1061	35.3	2.66	partially consolidated plug
83	1611.10	556	526	31.8	2.65	consolidated plug
84	1611.40	0.015	0.01		2.69	"
85	1611.80	152	137	1.3	2.67	"
86	1612.80	90	79	31.2	2.67	"
87	1613.10	164	148	31.8	2.68	"
88	1613.40	123	110	32.4	2.68	"
89	1613.70	105	93	32.2	2.67	"
90	1614.00	82	72	31.6	2.67	"
91	1614.30	101	89	31.2	2.68	"
92	1614.67	108	96	30.7	2.67	"
93	1614.88	7.0	5.3	30.3	2.68	"
94	1615.25	3144	3064	26.4	2.68	"
95	1615.55	3158	3078	34.3	2.65	partially consolidated plug
96	1615.85	4136	4056	35.5	2.67	consolidated plug
97	1616.15	3287	3207	37.3	2.66	"
98	1616.43	2448	2368	35.9	2.67	"
99	1616.75	1683	1633	35.5	2.66	"
				34.9	2.72	"

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CORE NO.: 4

DATE: 04.03.1983

Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		horizontal K _a	K _l			
100	1617.56	1687	1637	36.0	2.67	partially consolidated plug
101	1617.86	1142	1092	32.8	2.60	unconsolidated plug
102	1618.19	12351	12201	35.4	2.65	partially consolidated plug
103	1618.50	868	828	33.9	2.69	" "
104	1618.80	1253	1203	35.1	2.67	consolidated plug
105	1619.10	1062	1012	34.2	2.67	partially consolidated plug
106	1619.50	876	836	30.7	2.67	" "
107	1619.80	412	382	33.1	2.67	consolidated plug
108	1620.10	432	402	34.3	2.69	" "
109	1620.40	24088	23788	33.2	2.67	partially consolidated plug
110	1620.73	10695	10545	33.1	2.66	unconsolidated plug
111	1621.00	26354	26004	32.6	2.65	" "
112	1621.40	26153	25803	33.8	2.64	" "
113	1621.70	18059	17809	33.2	2.65	" "
114	1622.00	28524	28174	32.2	2.64	" "
115	1622.30	14813	14613	30.7	2.65	" "
116	1622.60	25027	25677	36.9	2.64	" "
117	1623.10	27266	26916	32.6	2.66	" "
118	1623.40	7674	7549	30.3	2.66	" "
119	1623.70	20998	20688	30.5	2.65	" "
120	1624.00	6981	6881	29.5	2.65	consolidated plug (uneven)
121	1624.30	26042	25692	30.3	2.67	unconsolidated plug
122	1624.53	39022	38572	31.3	2.65	" "
123	1625.00	22814	22514	31.8	2.66	" "
124	1625.30	10609	10459	30.6	2.66	" "
125	1625.60	26025	25675	30.4	2.65	" "
126	1625.90	5177	50677	32.3	2.66	" "
127	1626.31	26439	26089	32.4	2.66	" "
128	1626.66	18635	18385	33.1	2.65	" "

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CORE NO.: 4

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal Ka	vertical Ka			
129	1626.95	40010	39560	33.6	2.66	unconsolidated plug
130	1627.25	36879	36429	34.6	2.67	"
131	1627.57	48919	48419	32.3	2.66	"
132	1627.88	30709	30309	32.1	2.66	partially consolidated plug
133	1628.10	4085	4005	33.1	2.66	unconsolidated plug
134	1628.44	11890	11740	31.1	2.65	partially consolidated plug
135	1628.75	9565	9440	29.5	2.67	unconsolidated plug
136	1629.00	5056	4976	31.5	2.66	"
137	1629.34	16751	16501	34.3	2.64	"
138	1629.67	18642	18392	34.1	2.65	"
139	1629.95	24253	23953	33.5	2.65	"
140	1630.29	22763	22463	36.9	2.64	unconsolidated plug
141	1630.63	43	36	33.8	2.65	consolidated plug
142	1630.95	111	98	31.8	2.67	"
143	1631.27	70	61	32.1	2.64	partially consolidated plug
144	1631.57	6031	5931	32.5	2.63	unconsolidated plug
145	1631.90	0.012	0.01		2.67	consolidated plug
146	1632.22	3255	3175		2.56	"
147	1632.55	146	131	35.4	2.67	"
148	1632.87	382	352	32.7	2.67	"
149	1633.20	288	268	32.4	2.66	"
150	1633.50	0.007	0.007	31.1	2.66	"
151	1633.80	27	22		2.70	"
152	1634.20	113	100	27.6	2.61	"
				32.0	2.66	"

2.9

3.1

(uneven)



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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal Ka	K _v			
153	1637.02	573	543	30.7	2.66	consolidated plug
154	1637.33	nmp	nmp	32.1	2.66	consol. plug
155	1637.61	6220	6120	34.4	2.64	part. consol. plug
156	1637.93	177	157	30.3	2.67	consol. plug
157	1638.25	910	870	35.9	2.68	consol. pl. (uneven)
158	1638.56	2293	2233	33.1	2.69	consol. plug
159	1638.88	8933	8808	34.7	2.66	part. consol. plug
160	1639.20	2934	2854	34.5	2.67	consol. pl. (uneven)
161	1639.53	4812	4732	34.1	2.67	consol. pl. (fract.)
162	1639.81	9390	9265	34.1	2.66	consol. pl. (uneven)
163	1640.10	11548	11398	35.7	2.67	unconsol. plug
164	1640.42	3987	3907	35.1	2.68	unconsol. plug
165	1640.71	7418	7318	34.9	2.68	unconsol. plug
166	1641.00	5143	5063	34.6	2.68	unconsol. plug
167	1641.31	7033	6933	33.0	2.70	consol. pl. (uneven)
168	1641.61	7945	7820	33.9	2.65	consol. pl. (uneven)
169	1641.92	6466	6366	35.0	2.64	consol. plug
170	1642.22	3959	3879	35.2	2.65	consol. plug
171	1642.52	6735	6635	35.9	2.66	unconsol. plug
172	1642.82	2508	2428	34.1	2.65	part. consol. plug
173	1643.12	0.011	0.01		2.78	conventional plug
174	1643.40	0.018	0.01	4.9	2.76	conv. plug
175	1643.72	6382	6282	5.1	2.64	consol. plug
176	1644.00	6956	6856	34.0	2.65	consol. plug
177	1644.31	10252	10102	35.2	2.65	consol. plug
178	1644.65	8508	8383	35.2	2.65	consol. plug
179	1644.92	12595	12445	35.1	2.66	consol. plug
180	1645.48	6234	6134	36.9	2.66	unconsol. plug
181	1645.79	5866	5766	35.4	2.68	unconsol. plug
				33.6	2.66	part. consol. plug



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COMPANY: Norske Shell A/S
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CORE NO.: 5 (cont.) DATE: 04.03.1983

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K _v			
182	1646.12	5588	508	34.8	2.66	part. consol. plug
183	1646.42	5065	4985	36.1	2.66	unconsol. plug
184	1646.74	8803	8678	36.2	2.66	part. consol. plug
185	1647.08	1719	1659	32.0	2.65	part. consol. plug
186	1647.40	10263	10113	37.2	2.66	unconsol. plug
187	1647.70	14847	14647	36.0	2.64	unconsol. plug
188	1648.01	3226	3146	35.3	2.64	unconsol. plug
189	1648.30	1317	1267	33.6	2.64	consol. pl. (uneven)
190	1648.60	555	525	28.3	2.65	consol. plug
191	1648.90	3489	3409	34.6	2.65	part. consol. plug
192	1649.20	3590	3510	31.7	2.63	part. consol. plug
193	1649.50	12661	12511	36.3	2.64	part. consol. plug
194	1649.80	1047	997	31.3	2.65	part. consol. plug
195	1650.10	9780	9655	35.6	2.65	part. consol. plug
196	1650.42	3252	3172	35.7	2.64	part. consol. plug
197	1650.72	8041	7916	35.5	2.65	unconsol. plug
198	1651.01	1838	1778	32.1	2.64	unconsol. plug
199	1651.32	1338	1288	32.6	2.62	unconsol. plug
200	1651.63	6049	5949	36.8	2.64	unconsol. plug
201	1651.92	7097	6997	36.0	2.65	unconsol. plug
202	1652.20	6535	6435	36.5	2.65	unconsol. plug
203	1652.52	4281	4201	37.4	2.66	unconsol. plug
204	1652.81	376	346	33.9	2.64	cons.pl.(frac.,unev.)
205	1653.10	1179	1129	34.8	2.64	part. consol. plug
206	1653.41	527	497	34.7	2.65	consol. plug
207	1653.70	rmp	rmp	37.6	2.65	part. consol. plug
208	1654.00	661	631	31.3	2.64	(part.) consol. pl.
209	1654.40	19	15	24.8	2.63	consol. plug
210	1654.70	330	300	31.0	2.65	consol. plug
211	1655.10	53	45	26.5	2.61	consol. plug

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Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)		Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K _a	He	Brine		
212	1655.55	12649	12499	36.4		2.66	unconsol. plug
213	1655.90	363	333	32.3		2.64	" "
214	1656.19	1629	1579	35.0		2.63	" "
215	1656.50	3404	3324	36.7		2.64	" "
216	1656.80	12614	12464	38.3		2.64	" "
217	1657.10	3396	3316	37.9		2.64	" "
218	1657.35	572	542	34.8		2.66	" "
219	1657.62	1675	1625	36.4		2.63	" "
220	1657.94	1292	1242	35.7		2.62	" "
221	1658.25	136	122	31.4		2.64	consol. plug
222	1658.54	75	65	29.7		2.65	consol. pl.(uneven)
223	1658.84	0.94	0.64	19.8		2.57	consol. plug
224	1659.15	221	201	31.8		2.65	" "
225	1659.45	10.5	8.2	25.7		2.64	" "
226	1659.75	2.6	1.9		22.0	2.58	conventional plug
227	1660.10	35	29	28.0		2.67	consol. plug
228	1660.40	33	28	28.6		2.66	" "
229	1660.70	16	13	27.7		2.63	" "
230	1661.00	51	43	37.3		2.71	consol. plug(uneven)
231	1661.40	1183	1133	33.6		2.67	part. consol. plug
232	1661.70	5130	5050	36.3		2.66	" "
233	1661.90	1131	1081	34.6		2.69	consol. plug(uneven)
234	1662.20	3127	3047	35.4		2.67	part. consol. plug
235	1662.50	910	870	36.1		2.68	consol. plug
236	1662.80	0.036	0.02		3.0	2.70	conventional plug
237	1663.04	0.109	0.06		7.5	2.69	" "
238	1663.30	0.067	0.04		7.2	2.70	" "
239	1663.59	1236	1186	25.0		2.68	consol. plug
240	1663.90	3413	333	36.9		2.65	unconsol. plug

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COMPANY: Norske Shell A/S
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CORE NO.: 6 (cont.)

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal Ka	vertical K1			
241	1664.20	5953	5853	34.0	2.65	part. consol. plug
242	1664.59	10733	10583	35.8	2.65	unconsol. plug
243	1664.90	15081	14881	36.7	2.64	" "
244	1665.20	11081	10931	33.9	2.67	conventional plug
245	1665.51	0.050	0.03		2.70	" "
246	1665.80	0.042	0.02		2.68	" "
247	1666.10	0.062	0.03		2.67	" "
248	1666.40	0.043	0.02		2.69	" "
249	1666.72	0.034	0.02		2.68	" "
250	1667.00	0.037	0.02		2.68	" "
251	1667.30	0.035	0.02		2.67	unconsol. plug
252	1667.60	0.024	0.01		2.65	part. consol. plug
253	1667.90	12467	12317		2.68	unconsol. plug
254	1668.20	3329	3249		2.66	" "
255	1668.50	6563	6463		2.68	" "
256	1668.81	10994	10794		2.67	part. consol. plug
257	1669.10	9817	9692		2.67	" "
258	1669.41	8215	8090		2.67	" "
259	1669.70	6084	5984		2.65	" "
260	1670.00	9050	8925		2.65	unconsol. plug
261	1670.30	10416	10266		2.65	" "
262	1670.63	18212	17962		2.65	part. consol. plug
263	1670.90	5406	5326		2.72	" "
264	1671.20	6634	6534		2.66	unconsol. plug
265	1671.50	2144	2084		2.66	" "
266	1671.80	4541	4461		2.65	part. consol. plug
267	1672.12	19183	18933		2.65	" "
268	1672.40	6398	6298		2.65	unconsol. plug
269	1672.70	66776	66026		2.64	" "
		11694	41194		2.64	" "

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CORE NO.: 6 (cont.) DATE: 04.03.1983

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K _v			
271	1673.30	22556	22256	32.1	2.65	unconsol. plug
272	1673.65	25814	25464	34.5	2.65	" "
273	1673.97	14419	14219	30.4	2.65	" "

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CORE NO.: 7 DATE: 04.03.1983

Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		Ka	Kl			
274	1674.02	14641	14441	35.1	2.67	unconsolidated plug
275	1674.32	13204	13004	32.2	2.66	"
276	1674.62	15215	15015	30.1	2.66	"
277	1674.92	12871	12721	28.6	2.67	"
278	1675.20	12847	12697	27.6	2.65	part. consol. plug
279	1675.53	12708	12558	34.2	2.66	unconsolidated plug
280	1675.82	10673	10523	32.5	2.66	part. consol. plug
281	1676.12	npp				
282	1676.42	17122	16872	29.0	2.65	unconsolidated plug
283	1676.70	14516	14316	28.7	2.65	"
284	1677.00	10270	10120	32.4	2.66	"
285	1677.30	18159	17909	31.3	2.66	"
286	1677.60	16561	16311	31.5	2.66	"
287	1677.90	17047	16797	31.3	2.65	"
288	1678.20	13449	13249	31.0	2.66	"
289	1678.50	13814	13614	29.8	2.66	"
290	1678.80	8808	8693	35.1	2.65	"
291	1679.10	13094	12894	28.2	2.64	"
292	1679.42	12382	12232	30.0	2.65	"
293	1679.70	12901	12751	33.6	2.65	"
294	1680.00	16231	15981	29.5	2.65	part. consol. plug
295	1680.32	15874	15674	27.9	2.64	unconsol. plug
296	1680.61	6375	2675	31.9	2.65	consol. pl. (uneven)
297	1680.90	6180	6080	35.7	2.65	"
298	1681.20	4584	4504	30.0	2.66	"
299	1681.50	1519	1469	30.9	2.65	"
300	1681.80	2535	2455	31.2	2.65	"
301	1682.10	600	570	31.0	2.65	"
302	1682.40	808	768	33.3	2.66	"



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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		K _a	K _v			
303	1682.70	332	302	31.4	2.66	consolidated plug
304	1683.00	302	272	31.8	2.67	"
305	1683.30	160	144	30.9	2.66	"
306	1683.60	64	55	29.1	2.66	"
307	1683.92	398	368	32.8	2.67	"
308	1684.20	221	201	32.8	2.68	"
309	1684.50	116	103	29.4	2.68	"
310	1684.80	110	98	29.4	2.68	" (uneven)
311	1685.10	72	63	28.2	2.78	"
312	1685.40	27	22	23.9	2.70	" (uneven)
313	1685.68	3467	3387	30.0	2.67	unconsolidated plug
314	1686.02	6022	5922	31.9	2.66	"
315	1686.29	5980	5880	34.1	2.65	"

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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		K _a	K _v			
316	1692.51	8730	8605	29.3	2.65	unconsolidated plug
317	1692.80	4409	4329	33.6	2.67	part. consol. plug
318	1693.10	9834	9709	31.2	2.65	unconsolidated plug
319	1693.40	264	244	27.1	2.68	consolidated plug
320	1693.70	387	357	30.9	2.66	consol. pl. (uneven)
321	1694.01	9266	9141	34.8	2.63	unconsolidated plug
322	1694.30	13711	13511	34.6	2.64	"
323	1694.60	12669	12519	32.3	2.63	"
324	1694.89	10435	10285	32.5	2.63	"
325	1695.20	9634	9509	34.2	2.64	"
326	1695.50	9157	9032	33.5	2.63	"
327	1695.80	8565	8440	34.1	2.64	"
328	1696.10	7727	7602	35.7	2.64	"
329	1696.40	12754	12604	36.0	2.65	"
330	1696.70	9365	9240	35.2	2.65	"
331	1697.02	9826	9701	34.6	2.65	part. consol. plug
332	1697.30	10510	10360	34.9	2.65	consol. pl. (uneven)
333	1697.60	7885	7760	35.1	2.64	part. consol. plug
334	1697.90	8307	8182	34.2	2.65	unconsol. plug
335	1698.20	10018	9868	35.4	2.64	"
336	1698.52	9471	9346	34.1	2.64	part. consol. plug
337	1698.80	8724	8599	32.8	2.64	"
338	1699.10	9195	9070	34.0	2.64	part. consol. plug
339	1699.40	15178	14978	33.2	2.64	"
340	1699.70	19753	19503	32.5	2.65	unconsol. plug
341	1700.00	14034	13834	31.4	2.64	"
342	1700.30	19358	19108	31.6	2.64	"
343	1700.60	17577	17327	31.9	2.65	"
344	1700.90	13473	13273	31.0	2.65	"



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Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal Ka K1	vertical Ka K1			
345	1701.20	13015	12815	30.8	2.65	unconsol. plug
346	1701.50	13458	13258	29.9	2.64	" "
347	1701.80	10000	9850	31.2	2.64	" "
348	1702.10	12693	12543	34.4	2.64	" "
349	1702.40	0.045	0.02		2.64	conventional plug
350	1702.70	1.2	0.83	2.1	2.60	" "
351	1703.00	0.015	0.01	8.4	2.74	" "
352	1703.30	0.015	0.01	6.2	2.72	" "
353	1703.60	9705	9580	5.4	2.65	unconsol. plug
354	1703.90	11900	11750	33.1	2.65	part. consol. plug
355	1704.20	10992	10842	33.0	2.65	" "
				31.1	2.65	" "

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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		horizontal Ka	Ki			
356	1704.60	10022	9872	29.8	2.65	unconsolidated plug
357	1704.90	7711	7586	29.9	2.65	"
358	1705.20	8492	8367	26.3	2.65	"
359	1705.50	9585	9460	25.9	2.65	"
360	1705.80	10549	10399	28.2	2.65	"
361	1706.10	10617	10467	27.5	2.65	"
362	1706.40	10267	10117	28.6	2.66	"
363	1706.70	3926	3846	33.6	2.65	"
364	1707.01	3566	3486	31.0	2.65	"
365	1707.30	5028	4948	32.8	2.64	"
366	1707.60	2014	1954	34.2	2.65	"
367	1707.90	2080	2020	34.0	2.65	"
368	1708.20	2204	2144	35.1	2.65	"
369	1708.50	1906	1846	35.0	2.63	"
370	1708.80	2855	2775	33.7	2.66	"
371	1709.10	2786	2706	35.7	2.66	"
372	1709.40	2608	2528	33.5	2.66	part. consol. plug
373	1709.70	2065	2005	33.9	2.66	unconsolidated plug
374	1710.00	2098	2038	33.9	2.66	part. consol. plug
375	1710.30	2106	2046	32.8	2.65	unconsolidated plug
376	1710.60	7687	7562	30.4	2.66	"
377	1710.20	3772	3692	33.8	2.66	"
378	1711.20	2621	2541	32.1	2.65	"
379	1711.50	2993	2913	32.1	2.66	"
380	1711.80	3546	3466	31.1	2.66	"
381	1712.10	5014	4934	28.9	2.65	"
382	1712.45	0.39	0.25		2.65	conventional plug
383	1712.75	0.015	0.01	5.3	2.71	"
384	1713.03	0.016	0.01	3.0	2.69	"
				3.1		"

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Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		K _a	K _I			
385	1713.33	0.011	0.01	3.2	2.72	conventional plug
386	1713.60	0.021	0.01	2.4	2.70	"
387	1713.90	0.010	0.01	3.1	2.72	"
388	1714.22	0.031	0.02	6.0	2.72	"
389	1714.50	2258	2198		2.66	part. consol. plug
390	1714.80	497	467	29.0	2.65	consolidated plug
391	1715.11	620	590	29.9	2.64	"
392	1715.40	487	457	32.2	2.66	"
393	1715.70	2743	2663	35.2	2.66	part. consol. plug
394	1716.01	3495	3415	34.8	2.65	consolidated plug
395	1716.30	4239	4159	35.8	2.66	"
396	1716.60	5375	5295	35.0	2.65	" (uneven)
397	1716.89	4207	4127	35.4	2.65	"
398	1717.20	5512	5432	34.7	2.66	"
399	1717.50	7247	7147	33.8	2.66	"
400	1717.79	4322	4242	35.1	2.65	"
401	1718.10	4994	4914	35.1	2.65	part. consol. plug
402	1718.40	4907	4827	34.6	2.66	"
403	1718.69	2375	2295	33.9	2.65	"
404	1719.00	3217	3137	35.9	2.66	"
405	1719.30	3958	3878	33.3	2.65	"
406	1719.59	5299	5219	35.7	2.65	unconsolidated plug
407	1719.90	5232	5152	35.3	2.65	"
408	1720.20	0.010	0.01	2.7	2.74	conventional plug
409	1720.49	0.151	0.09	2.7	2.72	"
410	1720.80	191	171	29.1	2.66	consolidated plug
411	1721.10	1571	1521	35.0	2.65	part. consol. plug
412	1721.39	4717	4637	36.4	2.65	unconsolidated plug



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CORE NO.: 10

Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		horizontal K _a	K ₁			
413	1723.00	35	29	30.8	2.63	consolidated plug
414	1723.30	43	36	29.0	2.60	"
415	1723.60	3833	3753	36.5	2.66	"
416	1723.90	1818	1758	30.7	2.66	"
417	1724.20	npp		npp	npp	
418	1724.50	493	463	32.3	2.66	consolidated plug
419	1724.80	3834	3754	36.4	2.65	" (uneven)
420	1725.10	npp		npp	npp	
421	1725.40	333	303	28.8	2.65	consolidated plug
422	1725.70	3140	3060	35.8	2.65	"
423	1726.00	3742	3662	36.3	2.65	"
424	1726.30	3323	3243	35.7	2.65	" (uneven)
425	1726.60	3966	3886	35.5	2.65	"
426	1726.90	4192	4112	35.2	2.65	"
427	1727.20	3273	3193	33.7	2.66	"
428	1727.55	3838	3758	32.8	2.66	"
429	1727.85	1746	1686	32.9	2.66	"
430	1728.20	1766	1706	34.3	2.66	"
431	1728.50	1711	1651	32.0	2.66	"
432	1728.80	1861	1801	32.2	2.65	" (uneven)
433	1729.10	2360	2280	32.2	2.66	"
434	1729.40	1110	1060	32.5	2.66	"
435	1729.70	1720	1660	32.4	2.65	"
436	1730.00	1294	1244	31.1	2.65	"
437	1730.45	8.7	6.7	26.5	2.64	"
438	1730.75	10.4	8.1	25.8	2.62	"
439	1731.10	6.6	5.0	24.7	2.60	" (fracture)
440	1731.40	20	16	27.6	2.63	"
441	1731.65	18	15	27.2	2.63	"
442	1731.90	3.2	2.3	4.9	2.71	konv. plug

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CORE NO.: 10

Plug No.	Depth (meter)	Permeability (mD), vertical		Porosity (%) He	Grain dens. g/cc	Formation Description
		K _a	K _v			
443	1732.20	13	10	25.8	2.63	consolidated plug
444	1732.50	6.0	4.5	24.9	2.63	"
445	1732.80	1.9	1.3	23.9	2.62	"
446	1733.10	1.4	1.0	24.7	2.59	"
447	1733.35	1.7	1.2	22.0	2.62	"
448	1733.70	1.2	0.83	21.5	2.61	"
449	1734.00	1.6	1.1	22.2	2.63	"
450	1734.30	1.7	1.2	23.4	2.62	"
451	1734.60	3.1	2.8	31.5	2.64	"
452	1734.90	1.5	1.0	23.6	2.61	consolidated plug
453	1735.20	2.3	1.6	24.2	2.64	"
454	1735.50	1.8	1.3	23.2	2.63	"
455	1735.80	0.99	0.67	23.0	2.62	"
456	1736.10	0.140	0.08	18.4	2.58	"
457	1736.40	nmp			2.54	konv. plug
458	1736.70	1.3	0.91	23.7	2.63	consolidated plug(uneven)
459	1737.00	1.09	0.74	24.3	2.63	"
460	1737.30	2.9	2.1	26.7	2.64	"
461	1737.60	0.93	0.63	23.9	2.63	"
462	1737.90	1.3	0.91	24.8	2.62	"
463	1738.20	0.63	0.42	21.7	2.76	"
464	1738.50	1.2	0.83	23.5	2.64	"
465	1738.80	0.44	0.28	22.1	2.61	"
466	1739.10	0.84	0.56	23.0	2.60	"
467	1739.40	3.0	2.2	23.9	2.61	"
468	1739.70	13	10	25.1	2.63	"
469	1740.00	1.2	0.83	22.2	2.61	"
470	1740.30	1.8	1.3	24.5	2.61	"
471	1740.70	3.4	2.5	23.4	2.60	"
472	1740.95	10.7	8.4	26.5	2.61	"
473	1741.25	9.2	7.1	27.6	2.62	"
474	1741.40	5.3	4.0	25.3	2.61	"

(uneven)