

APPENDIX 6.

SIDEWALL CORE
DESCRIPTION.

PINE LODGE - 1

W1034

GAS AND FUEL EXPLORATION N.L.

SIDEWALL CORE DESCRIPTION

WELL NAME : PINE LODGE - 1

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DATE : 30-8-1990

GEOLOGIST : A. TABASSI

NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
1	2135.0	2.0	<u>CLAYSTONE</u> , light-med. grey, soft-firm dispersive in part, mod. silty in part, tr.-com. carb. det., rare very fine partially altered feld., non calcareous.	NIL
2	2121.5	2.5	<u>COAL</u> , dark-very dark brown to black, firm, rarely arg., earthy in part. Coal has no fluor. but give initially mod. becoming mod.-fast radiating mod. bright greenish white cut fluor. and very fast crush cut.	NIL
3	2109	1.0	<u>CLAYSTONE</u> as per S.W.C. No.1	NIL
4	2095	0	NO RECOVERY	-
5	2091.0	1.5	<u>SILTSTONE</u> , dark-very dark grey, firm-hard, blocky, mod argillaceous in part, trace fine lithics.	NIL
6	2087	2.0	<u>SILTSTONE</u> , as per S.W.C. No.5 with calcite vein, off white with mineral fluor.	NIL
7	2076.5	2.5	<u>SILTSTONE</u> , med.-dk. grey, firm-hard, blocky, dispersive in part. com. arg. rare lithics, rare fine quartz sand grains. Tr.-rare carb. det. rarely micaceous, in part grading to silty claystone.	NIL
8	2072.0	2.5	<u>SANDSTONE</u> , as per S.W.C. No.7.	NIL

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DATE : 30-8-1990

GEOLOGIST : A. TABASSI

NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
9	2064.5	2.5	<u>SANDSTONE</u> , light-med. grey, v.f.-med., dom. fine, mod. sorted, SA-SR, dom. SA quartz, tr. med.-dk. grey lithics, com. lt. grey, disp. arg. mtx., com. weak calc. cmt., fair vis. porosity.	Mineral fluor. from cement
10	2059.0	2.0	<u>SANDSTONE</u> , lt. grey, lt. brn. gry. v. fine-fine, dom. v. fine, fairly sorted, SA-SR quartz, tr. lithics, rare fine mica, rare carb. det. Tr.-com. lt. grey mtx., rare v. weak calc. cmt. friable, poor-fair vis. porosity.	NIL
11	2055.5	1.5	<u>CLAYSTONE</u> , lt. gry. to occ. v. lt. gry. occ. mod. silty, rarely carb. non. calc. soft, sticky in part dispersive.	NIL
12	2052.5	2.0	<u>CLAYSTONE</u> , med.-dk. gry., in part mod. silty. Tr.-com. f.-med. grained quartz sand grains, rare lithics, rare carb. det. non calc. soft, occ. firm, sticky in part, in part dispersive.	NIL
13	2045.0	2.0	<u>CLAYSTONE</u> , dk. gry. rarely silty, Tr. f. mica, rare carb. det. hard, firm blocky, in part soft and dispersive.	NIL
14	2041.0	2.5	<u>CLAYSTONE</u> , med.-dk. gry., mod. silty in part rare glauconite, rare v. f. lithics, non carb. firm, blocky in part.	NIL
15	2030.0	2.0	<u>CLAYSTONE</u> , as per S.W.C. 14, in part med.-dk. brn. gry.	NIL

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DATE : 30-8-1990

GEOLOGIST : A. TABASSI

NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
16	2024.0	0.5	<u>CLAYSTONE</u> , dk. gry., rarely silty in part, tr. f. lithics, rare glauconite, rare v.f. quartz grains, rare carb., non calc. hard - v. hard, blocky.	NIL
17	2014.0	2.0	<u>SILTSTONE</u> , med. gry, lt.-med. brn. gry. com. argillaceous, slightly-mod. carb. rarely micaceous, v. rare partially altered feld, slightly calc. firm, blocky in part disp. in part grading to silty claystone.	NIL
18	2007.0	0.5	<u>SILTSTONE</u> , med. brn. gry., mottled, rare-slightly arg., com. carb. det., Tr.-com mica flecks, tr. multi-col. lithics, non calc. hd.-v. hd., blocky.	NIL
19	1969.0	2.5	<u>SANDSTONE</u> , lt. brn. gry. v.f-f., fair-well sorted, SA-SR quartz, v. rare lithics. Tr. off white arg. mtx. Tr. silt. good vis. porosity.	NIL
20	1961.5	2.0	<u>SANDSTONE</u> , as per S.W.C. 19	NIL
21	1931.0	2.0	<u>CLAYSTONE</u> , med.-dk. gry. med. brn. gry. mod. silty, rare carb., rare v.f. mica, non calc., firm-hard, in part dispersive.	NIL
22	1898.0	2.5	<u>CLAYSTONE</u> , lt.-med. brn. gry., rarely carbonaceous and micaceous, firm, disp. in part, blocky in part.	NIL

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NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
23	1886.5	1.5	<u>SILTSTONE</u> , med.-dk. gry., slightly argillaceous, tr.-rare carb. det., rare lithics, rare mica, rare glauconite, non calc., firm-hard, v.hd. in part, blocky.	NIL
24	1874.0	0	NO RECOVERY	-
25	1868	0.5	<u>SANDSTONE</u> , off white to occ. v. lt. gry. v.f.-f., fairly sorted, SA-SR quartz, v. rare fine off white-v. lt. gry. lithics, com. off white kaolinitic arg. mtx., disp., v. rare v. weak calc. cmt., friable, fair occ. good vis. porosity. (The core was partially invaded by mud filtrate).	NIL
26	1860.0	0	NO RECOVERY	
27	1815.0	2.0	<u>SILTSTONE</u> , med. gry., v. finely carb., rare v.f. mica flecks, rarely-med. argillaceous, non calc. soft-firm, occ. hard, disp. in part, occ. blocky in part.	NIL
28	1787.0	2.0	<u>CLAYSTONE</u> , med.-dk. gry. med-dk. brn. gry., rarely silty, rare Tr. glauconite rare extremely f. carb. det. non calc., firm-hard, blocky in part.	NIL
29	1709.0	2.0	<u>SANDTONE</u> , v. lt. gry., occ. lt.-med. gry. laminac, v.f. silt. size in part, well sorted. SA-SR quartz, rare carb. det., rare f. mica flecks, rare to non arg. mtx. firm, friable in part, fair vis. porosity.	NIL

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NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
30	1624.0	2.5	<u>SILTSTONE</u> , lt.-med. gry. mod. carb. tr. f. mica flecks, rare lithics, rare glauconite, non calc. med. to commonly argillaceous. In part grading to SILTY CLAYSTONE firm-hard. In part dispersive.	NIL
31	1400.0	2.5	<u>SANDSTONE</u> , v. lt. gry. v.f.-f., fairly sorted, SA-SR, quartz, silty in part, tr. lt. green lithics, rare mica and carb. det. Tr.-com v. lt. gry. arg. mtx., friable-firm, fair vis. porosity, inter-bedded with; <u>CLAYSTONE</u> , lt.-med. brn. gry. slightly silty, soft-firm, in part blocky.	NIL
32	1376.0	3.0	<u>SANDSTONE</u> , lt. gry. to lt. brn. gry. v.f.-f. dom. v.f., silt size in part, fairly sorted. SA-SR quartz, rare lt. green and med. gry. lithics, v. rare mica and carb. det., rare arg. mtx. friable, occ. firm inter-laminated with minor <u>CLAYSTONE</u> , med. gry., silty in part, rare carb. streaks, non calc., soft in part dispersive.	NIL
33	1300.0	3.5	<u>SILTY SANDSTONE</u> , lt.-med. gry, v.f. to silt size in part grading to <u>SILTSTONE</u> , fairly sorted, SA-SR quartz, tr. carb det., rare mica, rare arg. mtx. friable, in part firm, poor vis. porosity.	NIL
34	1123.5	1.5	<u>SILTSTONE</u> , med. brn. gry., commonly arg. Tr. mica, rare carb. det. firm, in part dispersive interlaminated with minor SILTY SANDSTONE/SILTSTONE as per SEC 33.	NIL

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NO	INTERVAL (M)	REC. (Cm)	DESCRIPTION	SHOW
35	1087.5	2.5	<p><u>SANDSTONE</u>, clear-off white to v. lt. gry. v.f.-f., well sorted, SA-SR quartz, tr. mica, tr. carb. det., no apparent matrix, friable, firm in part., fair-good vis. porosity inter-laminated with <u>CLAYSTONE</u>, dark gry. slightly silty, tr. carb. det. soft interlaminated with <u>COAL</u>, black, in part arg., in part silty soft grading into carbonaceous claystone.</p>	NIL
36	1085.0	0	NO RECOVERY	
37	1081.5	2.0	<p><u>CONGLOMERATIC SANDSTONE</u> v. dk. gry.-black, spots of off white where quartz pebble are shattered. F.-pebble size pebbles are poorly sorted, rounded-well rounded. F.-med. particles are angular (possibly the product of crushed pebbles). Med.-C. grains are SA-SR, quartz. Tr.-com. cryptocrystalline pyrite. Tr. silvery colour pyrite (possibly pyrotite?) Tr. dk. gry. lithics of various size. Most pebbles are fractured filled with cryptocrystalline pyrite. Abd. v. dk. gry.-black arg. mtx. (with metallic shine in places) firm-hard, friable in few spots, v. poor-no vis. porosity.</p> <p><u>NOTE :</u> The orientation grain shape, fractured nature as well as direction of fractures may be indicative of a several post depositional Tectonic activity.</p>	

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NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
38	1079.5	2.5	<u>CLAYEY CONGLOMERATIC SANDSTONE</u> As per S.W.C. 37	NIL
39	1077.0	3.5	<u>CLAYEY CONGLOMERATIC SANDSTONE</u> As per S.W.C. 37 with decrease in pebble size and number.	NIL
			<p><u>NOTE</u></p> <ul style="list-style-type: none"> - When HCl(10%) is added to arg. mtx. of SWC 37, 38 and 39, abundant v.f. metallic particles (possibly of sulfide groups are clearly visible. - a petrological study (including SEM) recommended on these 3 cores. - the low GR value in these 3 cores could be due to presence of non radio active clay matrix. 	NIL
40	1072.0	0	NO RECOVERY	
41	1068.0	2.0	<p><u>SANDSTONE</u>, med.-dk. brownish-greenish gry. f.-pebble size, dom. C-pebble, very poorly sorted. SA-R quartz and a variety of lithics and iron. Quartz grains are clear, frosty and iron stained. Lithics are med. brown, dk. green, dk. gry., beige, dark green gry. The crumbly portion is med.-brownish grey, disp. arg. mtx. The grained portion are very strongly bonded by a ground mass of mtx./cmt. med-dk. dirty grey, v. hard to extremely hard, crumbly and brittle, no vis. porosity.</p> <p><u>NOTE</u> A similar petrological study is also recommended.</p>	NIL

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NO.	INTERVAL (m)	REC. (Cm)	DESCRIPTION	SHOW
42	1060.0	2.5	<u>SANDSTONE</u> , generally as per S.W.C. 41, in places firm to hard. No. vis. porosity.	NIL
43	1048.0	3.5	<u>SANDSTONE</u> , generally as per S.W.C. 41 with firm groundmass matrix, poor-no vis. porosity.	NIL
44	1039.5	3.0	<u>SANDSTONE</u> , generally as per S.W.C. 4 with firm ground mass/mtx., partially limonitic.	NIL
45	1030.0	3.5	<u>CLAYSTONE</u> , lt.-med. gry., dk. gry. in in part, rarely carb., rarely micaceous, rare lithics firm, hard, blocky.	NIL
46	925.0	0	NO RECOVERY	
47	750.0	3.5	<u>SILTSTONE</u> , lt. gry., sandy in part grading into v.f. <u>SANDSTONE</u> rarely arg., firm, in part dispersive interlaminated with <u>CLAYSTONE</u> , med.-brownish gry., rarely carbonaceous and micaceous, rarely silty, firm in part dispersive.	NIL
48	506.0	0	NO RECOVERY	