

CANDEL et al MOBIL S. RAMPARTS 1-77
Lat. $65^{\circ} 23' 32''$, Long. $130^{\circ} 58' 18''$
Northwest Territories, Canada

T.A.D. Haddow, P.Geol.



DRILLING AND COMPLETION REPORT

FOR

CANDEL et al NOBIL S. RAMPARTS 1-77

Lat. $65^{\circ} 23' 32''$, Long. $130^{\circ} 58' 18''$

Northwest Territories, Canada

PREPARED FOR

CANDEL OIL LTD.

821-11-05-017

April 30, 1973

Submitted by:

T.A.D. Haddow

T.A.D. Haddow, P.Geol.

INDEX

Section I	-	Summary of Well Data	1
Section II	-	Geological Summary	
(a)		Formation Tops	2
(b)		Cored Intervals	2
(c)		Core Descriptions	2
(d)		Sample Descriptions	3 - 13
(e)		Paleontological Determinations	13
Section III	-	Engineering Summary	
(a)		Report of Drill Stem Tests	
		Summary of Drill Stem Tests	14
		DST #1 Data Sheet	15
		DST #2 Data Sheet	16
		DST #3 Data Sheet	17
		Drill Stem Test Reports following	17
(b)		Casing Record	18
		Tubular Tally Report	19
(c)		Bit Record	20
(d)		Daily Mud Record	21
(e)		Deviation Record	22
(f)		Abandonment Plugs	23
(g)		Lost Circulation Zones	23
(h)		Report of Blowouts	23
Section IV	-	Summary of Logs	24
Section V	-	Analysis	25

SECTION I

SUMMARY OF WELL DATA

- (a) Well Name: CanDel et al Mobil S. Ramparts 1-77
- (b) Permittee: Mobil Oil Canada Ltd.
- (c) Operator: CanDel Oil Ltd.
28th Floor, 330-5th Ave. S.W.,
Calgary, Alberta
- (d) Location: Unit 1, Section 77, Grid 65-30-130-45
Latitude 65° 26' 32", Longitude 130° 58' 18"
Universal Well Location Reference - 65.44222° N
130.97167° W
Unique Well Identifier - 3001776530130450
- (e) Co-ordinates:
- (f) Lease No.: 4431
- (g) Contractor: Jennings International Drilling, Rig #9, GA500 Emsco
- (h) Drilling Authority: 679, March 1, 1973
- (i) Lahee Well Classification: Wildcat
- (j) Elevations: Ground 1940' K.B. 1954'
- (k) Spudded: 10:30 p.m. March 14, 1973
- (l) Completed Drilling: April 10, 1973
- (m) Total Depth: 5321' (Driller)
- (n) Well Status: Dry & Abandoned
- (o) Rig Release Date: 12:00 noon April 14, 1973
- (p) Hole Sizes: 13 3/4" from surface to 819', 8 3/4" from 819' to 5321'
- (q) Casing: Surface - Ran 20 joints (824.02') 9-5/8", KS 36#, 8 RD Thread,
ST & C Mannesman Casing. Landed at 819' K.B. Cemented
with 650 sacks Portland normal plus 3% CaCl₂. Plug down
at 11:00 a.m. March 26, 1973.
Recemented with 160 sacks plus 3% CaCl₂.

SECTION IIGEOLOGICAL SUMMARY(a) Formation Tops

Elevation 1954' K.B.

<u>Formation</u>		<u>Sample Depth</u>	<u>E-Log Depth</u>	<u>Subsea</u>
Upper Devonian	Imperial	230'		+1724'
	Canol	2213'	2195'	- 241'
	Hare Indian	2510'	2486'	- 532'
Middle Devonian	Hume	2590'	2580'	- 626'
	Headless	2800'	2762'	- 808'
	Gossage	3070'	3005'	-1051'
Sil/Ord.	Ronning	4721'	4681'	-2627'
Total Depth		5321'		-3367'

(b) Cored Intervals - no cores cut(c) Core Descriptions - none

(d)

SAMPLE DESCRIPTIONS

CanDei et al Mobil S. Ramparts 1-77

Latitude 65° 23' 32", Longitude 130° 58' 18"

K.B. 1954'

<u>Interval</u>	<u>Lithology</u>
Surface - 70'	<u>Glacial Till</u> - at the surface Missing
70 - 200'	<u>Glacial till</u> - pebbles of sandstone, quartzite, chert, dolomite and igneous rock, some interbedded dark grey shale.
200 - 230'	<u>Glacial till</u> - pebbles and boulders as above. <u>Imperial Shale</u> - 230' (1724')
230 - 240'	<u>Siltstone</u> - light grey, slightly argillaceous, calcareous in part.
240 - 250'	<u>Siltstone</u> - as above. <u>Shale</u> - grey, fissile, micromicaceous.
250 - 270'	cavings.
270 - 320'	<u>Siltstone</u> - light grey, slightly argillaceous, calcareous in part, grading to a very fine grained sandstone in part, some interbedded dark grey shale.
320 - 340'	cavings.
340 - 400'	<u>Siltstone</u> - as above, shaly in part.
400 - 610'	<u>Siltstone & Shale</u> - as above.
610 - 630'	cavings.
630 - 840'	<u>Shale</u> - medium to dark grey, micromicaceous, interbedded siltstone. <u>Siltstone</u> - grey, argillaceous, calcareous in part
840 - 1070'	<u>Shale</u> - dark grey, fissile, micromicaceous, scattered thin silty streaks.
1070 - 1110'	<u>Shale</u> - medium grey, fissile to blocky, micromicaceous, some thin silty streaks. <u>Siltstone</u> - medium grey, argillaceous.
1110 - 1140'	<u>Shale</u> - medium grey, fissile to blocky, micromicaceous, irregular streaks and lenses of siltstone, few scattered thin streaks of limy sandstone, some scattered fractures filled with calcite.

- 1140 - 1230' Shale - dark grey, fissile, slightly brittle, micromicaceous.
- 1230 - 1240' Shale - medium grey, subblocky, micromicaceous, silty - grading to siltstone.
- 1240 - 1270' Shale - medium to dark grey, fissile, micromicaceous, silty streaks, trace of fine fractures filled with calcite.
- 1270 - 1290' Shale - as above, few scattered calcareous sandy streaks
- 1290 - 1310' Shale - medium grey, fissile to subblocky, micromicaceous, silty streaks and calcareous sandy streaks.
- 1310 - 1320' Shale - medium grey, fissile to subblocky, micromicaceous, silty and sandy streaks - calcareous in part, some scattered ostracods, some streaks of black bituminous shale, some scattered fine fractures filled with calcite - trace of quartz crystals, trace of brown ironstone.
- 1320 - 1360' Shale - medium grey, fissile to blocky, micromicaceous, silty, some flakes and laminae of black bituminous shale, some brown ironstone, trace of pyrite.
- 1360 - 1380' Shale - medium grey, fissile to subblocky, micromicaceous, silty, streaks of sandstone - calcareous in part, flakes of carbonaceous material.
- 1380 - 1390' Shale - medium grey, fissile to subblocky, micromicaceous, silty.
- 1390 - 1400' Shale - as above, sandy streaks - calcareous in part, some scattered fractures filled with calcite - trace of quartz crystals.
- 1400 - 1460' Shale - medium grey, fissile, micromicaceous, some scattered silty streaks.
- 1460 - 1490' Shale - as above, streaks of calcareous sandstone.
- 1490 - 1500' Shale - medium grey, fissile, micromicaceous, scattered silty streaks, rare bentonitic streaks.
- 1500 - 1560' Shale - medium grey, fissile, micromicaceous, silty, rare fine fractures filled with calcite.
- 1560 - 1620' Shale - medium to dark grey - slightly brownish in part, micromicaceous, silty, thin streaks of calcareous sandstone, rare fine fractures filled with calcite.
- 1620 - 1650' Shale - medium to dark grey, fissile, micromicaceous, trace of brown ironstone, rare streaks of dense limestone.
- 1650 - 1730' Shale - medium grey, fissile, micromicaceous, scattered silty and sandy streaks - calcareous in part.

- 1730 - 1740' Shale - as above, trace of limestone with fish remains, trace of scattered fractures filled with calcite - rare quartz crystals.
- 1740 - 1780' Shale - medium grey, fissile, micromicaceous, some scattered silty streaks, scattered streaks of greenish grey sandstone (2%) - scattered black specks of chert, very fine grained, siliceous, calcareous in part, trace of very light bluish grey chert at the top.
- 1780 - 1820' Shale - with silty and sandy streaks as above, trace of reddish brown microcrystalline limestone.
- 1820 - 1870' Shale - medium grey, fissile, micromicaceous, some scattered silty and sandy streaks.
- 1870 - 1880' Shale - medium to dark grey, fissile, micromicaceous.
- 1880 - 1930' Shale - medium grey, fissile, micromicaceous, streaks of carbonaceous material, some scattered thin streaks of limy sandstone, rare quartz crystals.
- 1930 - 1960' Shale - medium to dark grey, subblocky, micromicaceous, silty and sandy - limy streaks, pyritic in part, trace of brown ironstone, trace of light brown dolomite, some calcite filled fractures.
- 1960 - 1970' Shale - medium to dark grey, fissile to subblocky, micromicaceous, scattered sandy streaks - limy in part.
- 1970 - 2020' Shale - medium to dark grey, fissile, micromicaceous, some silty and sandy streaks, rare fine fractures filled with calcite (some gypsum infilling fractures from 1970 to 1990').
- 2020 - 2040' Shale - medium to dark grey, fissile, micromicaceous.
Siltstone - brownish grey, argillaceous, calcareous in part, grading to a very fine grained sandstone in part, some scattered fine fractures filled with calcite - trace of quartz crystals.
- 2040 - 2050' Shale - medium to dark grey, fissile, micromicaceous.
Siltstone - brownish grey, argillaceous, grading to a very fine grained sandstone in part, few streaks of siliceous very fine grained sandstone.
- 2050 - 2060' Shale & Siltstone - as above, some limy streaks with ostracods, trace of fossil fragments (brachiopods?).
- 2060 - 2080' Siltstone - brownish grey, argillaceous, grading to a very fine grained sandstone in part, some streaks of very fine grained calcareous sandstone, shale streaks, some calcite filled fractures, trace of quartz crystals.
- 2080 - 2100' Siltstone & Shale - as above

2100 - 2110' Shale - medium grey, subblocky, micromicaceous, silty, sandy streaks - calcareous in part, some scattered carbonaceous material, some scattered pyrite.

2110 - 2130' Shale - medium to dark grey, fissile, micromicaceous.
Siltstone - brownish grey, argillaceous, grading to a very fine grained sandstone in part - some calcareous streaks, some calcite filled fractures.

2130 - 2210' Siltstone - brownish grey, argillaceous, some interbedded shale, slightly pyritic in part, rare quartz crystals, some scattered carbonaceous material.

Canol 2213' (E-Log 2195' -241')

2210 - 2220' Siltstone - brownish grey, argillaceous,
Shale - black, fissile, micromicaceous, bituminous.

2220 - 2290' Shale - dark grey to black, hard, blocky, micromicaceous, bituminous, pyritic, some siliceous streaks, rare fossil outline.

2290 - 2380' Shale - dark grey to black, hard, blocky, fissile in part, micromicaceous, bituminous, pyritic, some siliceous streaks, some streaks of black chert, some scattered calcite filled fine fractures, some scattered spores at the top.

2380 - 2400' Shale - dark grey to black, fissile to blocky, micromicaceous, bituminous, scattered pyrite.

2400 - 2430' Shale (75%) - dark grey to black, fissile to blocky, micromicaceous, bituminous, scattered pyrite.
Dolomite (25%) - thin interbeds & streaks - dark brownish grey, microcrystalline to very fine crystalline, argillaceous, dense, some scattered fine calcite filled fractures.

2430 - 2460' Shale - dark grey - slightly brownish, hard, fissile to blocky, micromicaceous, bituminous, pyritic, scattered plant spores.

2460 - 2510' Shale - as above, some thin streaks of dark brownish grey, microcrystalline to very fine crystalline, argillaceous, dense dolomite scattered plant spores, scattered pyrite, some scattered fine fractures filled with calcite.

Hare Indian 2510' (E-Log 2486' -532')

2510 - 2520' Shale - grey - slight greenish cast, fissile, micromicaceous, scattered plant spores.

2520 - 2570' Shale - as above, streaks and thin interbeds of dark grey bituminous shale, plant spores.

2570 - 2590' Shale - dark grey to black, fissile, micromicaceous, bituminous, plant spores, some scattered crinoids, scattered pyrite, some scattered fractures filled with calcite.

Hume 2590' (E-Log 2580' -626')

- 2590 - 2620' Limestone - light to medium - slightly brownish grey, microcrystalline to very fine crystalline, bioclastic, slightly chalky in part, argillaceous in part, tight, scattered crinoid stems, brachiopods, ostracods, scattered fractures filled with calcite.
- 2620 - 2660' Limestone - slightly greenish to brownish grey, microcrystalline to very fine crystalline, micritic, bioclastic in part, slightly argillaceous, very slightly dolomitic in part, tight, brachiopods, ostracods.
- 2660 - 2680' Limestone - as above, some streaks of brownish grey limestone - bioclastic, microcrystalline to very fine crystalline, slightly dolomitic in part, tight.
- 2680 - 2760' Limestone - brownish grey, microcrystalline to very fine crystalline, bioclastic, micritic in part, slightly dolomitic in part, slightly bituminous in part, tight, brachiopods, bryozoa, ostracods, scattered fractures filled with calcite, some partings of black bituminous shale.
- 2760 - 2800' Limestone - grey - slight greenish cast and brownish grey, microcrystalline to very fine crystalline, micritic, bioclastic in part, slightly argillaceous in part, slightly dolomitic in part, tight, some partings of black bituminous shale, brachiopods, ostracods.
- 2800 - 2850' Limestone - slightly greenish to brownish grey, cryptocrystalline to microcrystalline, micritic, argillaceous in part, dense, some streaks of greenish grey, slightly calcareous shale, scattered ostracods, brachiopods.
- 2850 - 2880' Limestone - as above, bioclastic in part, ostracods, brachiopods. Shale - medium grey to slightly greenish grey, fissile, micromicaceous, slightly calcareous in part.
- 2880 - 2940' Limestone - slightly brownish grey, microcrystalline to very fine crystalline, micritic, bioclastic in part, slightly argillaceous in part, some shaly streaks, dense, scattered ostracods, brachiopods, bryozoa.
- 2940 - 2970' Limestone - brownish grey, microcrystalline to very fine crystalline - some fine crystalline, bioclastic, dense, some scattered fractures filled with calcite, scattered crinoids, ostracods.
- 2970 - 2990' Limestone - as above, some interbedded greenish grey calcareous shale.
- 2990 - 3030' Shale - greenish grey, fissile, micromicaceous, calcareous - limy in part, some interbedded greenish grey, microcrystalline to very fine crystalline, silty, argillaceous, dense, limestone.
- 3030 - 3060' Shale - with interbedded limestone as above. Limestone - brownish grey, microcrystalline to very fine crystalline, bioclastic, slightly argillaceous, dense.

3060 - 3070' Limestone - brownish grey, microcrystalline to very fine crystalline, bioclastic, some argillaceous streaks, trace of dolomite streaks, dense, some partings of black bituminous shale.

Gossage 3070' (E-Log 3005' -1051')

3070 - 3140' Limestone - medium to dark brownish grey, cryptocrystalline to microcrystalline, micritic, slightly bituminous, dense, trace of ostracods.

3140 - 3160' Limestone - as above, some interbedded greenish grey slightly calcareous shale, trace of dolomitization.

3160 - 3260' Limestone - medium to dark brownish grey, cryptocrystalline to microcrystalline, micritic, slightly bituminous, dense, some scattered fractures filled with calcite, few scattered partings of bituminous shale.

3260 - 3290' Limestone - as above - somewhat lighter color.

3290 - 3330' Limestone - medium to dark brownish grey as above.

3330 - 3350' Limestone - medium to dark brownish grey, cryptocrystalline to microcrystalline, micritic, pelletoid in part, slightly bituminous, some dolomitic streaks, dense.

3350 - 3370' Limestone - medium brownish grey, cryptocrystalline to microcrystalline, micritic, slightly bituminous, dense.

3370 - 3380' Limestone - medium to dark brownish grey, cryptocrystalline to microcrystalline, micritic - rarely fragmental, bituminous, dense, scattered partings of black bituminous shale.

3380 - 3410' Limestone - as above, rare pellets, rare ostracods.

3410 - 3430' Limestone - as above.

3430 - 3460' Limestone - as above, grey - some dark streaks, cryptocrystalline to microcrystalline, micritic, slightly bituminous, dense, some thin streaks of greyish green shale with finely disseminated pyrite.

3460 - 3470' Limestone - medium brownish grey, cryptocrystalline to microcrystalline, micritic, slightly bituminous, some thin streaks of very fine to fine crystalline dolomite.

3470 - 3500' Limestone - medium brownish grey as above, some scattered calcite filled fractures, rare ostracods, some partings of black bituminous shale.

3500 - 3520' Limestone - as above, some thin streaks of greyish green shale with finely disseminated pyrite.

3520 - 3560' Limestone - as above, some darker colored streaks, streaks of green shale and partings of black bituminous shale, trace of pellets, trace of dolomitization.

- 3560 - 3570' Limestone - medium brownish grey, cryptocrystalline to microcrystalline, dense, streaks of bluish to greenish grey, calcareous shale with finely disseminated pyrite, partings of black bituminous shale.
- 3570 - 3590' Limestone - with streaks and partings of shale as above, some streaks of dark grey microcrystalline to very fine crystalline dolomite (less than 1%), scattered calcite filled fractures.
- 3590 - 3600' Limestone - medium and some light brownish grey, cryptocrystalline to microcrystalline, dense, some partings of black bituminous shale.
- 3600 - 3630' Limestone - as above, streaks of bluish to greenish grey shale with finely disseminated pyrite, scattered partings of black bituminous shale, scattered calcite filled fractures.
- 3630 - 3650' Limestone - medium to dark brownish grey, cryptocrystalline to microcrystalline, micritic, fragmental in part, streaks of very fine crystalline dolomite, tight, fractures as above.
- 3650 - 3740' Limestone - medium brownish grey - some dark streaks, cryptocrystalline to microcrystalline, micritic, fragmental in part, dense, some streaks of shale, some very fine to fine crystalline dolomite - increasing with depth, some scattered fractures filled with calcite.
- 3740 - 3750' Limestone (50%) - as above.
Dolomite (50%) - medium to dark brownish grey, very fine to fine crystalline, calcitic, slight intercrystalline porosity.
- 3750 - 3760' Dolomite (75%) - medium to dark brownish grey - some light streaks, microcrystalline to very fine crystalline, calcitic, slight to poor intercrystalline porosity.
Limestone (25%) - as above.
- 3760 - 3770' Dolomite - light to dark brownish grey, microcrystalline to very fine crystalline, calcitic for the most part, slight to poor intercrystalline porosity, some interbedded limestone as above.
- 3770 - 3810' Dolomite - brownish grey - some dark streaks, microcrystalline to very fine crystalline, slightly calcitic in part, slight to poor intercrystalline porosity - some dense streaks, some scattered calcite filled fractures.
- 3810 - 3820' Dolomite - medium brownish grey - some dark streaks, microcrystalline to fine crystalline, slightly calcitic, slight to poor intercrystalline porosity - some dense streaks, some interbedded cryptocrystalline to microcrystalline, dense, limestone (5%).
- 3820 - 3840' Dolomite - medium to dark brownish grey, microcrystalline to very fine crystalline, slightly calcitic, slight intercrystalline porosity - dense streaks, some streaks of limestone (2%) as above, some partings of black bituminous shale.

- 3840 - 3880' Dolomite - medium to dark brownish grey, microcrystalline to very fine crystalline, slightly calcitic, slight to poor intercrystalline porosity - dense streaks, some partings of black bituminous shale, scattered fractures filled with calcite.
- 3880 - 3910' Dolomite - dark brownish grey - some lighter streaks, microcrystalline to very fine crystalline, bituminous, slightly calcitic, streaky - slight intercrystalline porosity - dense streaks, some partings of black bituminous shale, trace of limestone with pellets, scattered calcite filled fractures.
- 3910 - 3940' Dolomite - medium to dark brownish grey, microcrystalline to very fine crystalline, slightly calcitic, bituminous, streaky - poor intercrystalline porosity.
- 3940 - 3970' Dolomite - brownish grey, microcrystalline to fine crystalline, slightly bituminous, slightly calcitic, poor to fair intercrystalline porosity, trace of pinpoint porosity and vuggy porosity (samples very fine and difficult to identify vugs).
- 3970 - 3980' Dolomite - as above - slightly darker color.
- 3980 - 4030' Dolomite - brownish grey, very fine to fine crystalline, slightly calcitic and bituminous, poor to fair intercrystalline porosity, scattered calcite filled fractures.
- 4030 - 4050' Dolomite - medium to dark brownish grey, very fine crystalline, slightly calcitic and bituminous, streaky - slight to poor intercrystalline porosity, scattered calcite filled fractures.
- 4050 - 4070' Dolomite - as above, streaks of light brownish grey dolomite with poor to fair intercrystalline porosity, some scattered calcite filled fractures.
- 4070 - 4090' Dolomite - medium brownish grey, very fine crystalline, slightly calcitic and bituminous, slight to poor intercrystalline porosity, fractures.
- 4090 - 4120' Dolomite - light to medium brownish grey, microcrystalline to fine crystalline, slightly calcitic, slight intercrystalline porosity - dense streaks, scattered fractures.
- 4120 - 4130' Dolomite - medium brownish grey - some dark streaks, very fine to fine crystalline, slightly calcitic and bituminous streaky - slight to poor intercrystalline porosity, scattered calcite filled fractures.
- 4130 - 4150' Dolomite - light to medium brownish grey, very fine to fine crystalline, slightly calcitic, streaky - slight to poor intercrystalline porosity, scattered fractures.
- 4150 - 4200' Dolomite - medium brownish grey - some dark streaks, very fine to fine crystalline, slightly calcitic & bituminous, streaky - slight to poor intercrystalline porosity, scattered fractures.

- 4200 - 4210' Dolomite - medium to dark brownish grey as above.
- 4210 - 4240' Dolomite - light to medium brownish grey, microcrystalline to fine crystalline, slightly silty bituminous and calcitic, dense for the most part, some streaky slight intercrystalline porosity, scattered calcite filled fractures.
- 4240 - 4290' Dolomite - as above, trace of medium crystalline, some interbedded light brownish grey cryptocrystalline limestone - argillaceous streaks.
- 4290 - 4330' Dolomite - light to medium brownish grey, microcrystalline very fine crystalline, calcitic, tight, streaks of greyish green, slightly calcareous shale with finely disseminated pyrite, some interbedded limestone as above.
- 4330 - 4350' Limestone - light grey to brownish grey, cryptocrystalline to microcrystalline, micritic, dolomitic in part, dense, partings and streaks of greyish green shale with finely disseminated pyrite.
- 4350 - 4360' Limestone (70%) - as above, streaks of pyritic shale as above.
Dolomite (30%) - brownish grey, very fine crystalline, calcitic tight.
- 4360 - 4410' Limestone (70%) - as above, shaly, micritic - fragmental in part.
Dolomite (30%) - as above.
- 4410 - 4430' Dolomite - light grey - slight greenish to brownish cast in part, microcrystalline, calcitic, dense, streaks of greyish green shale - finely disseminated pyrite.
- 4430 - 4440' Dolomite - brownish grey, microcrystalline to very fine crystalline, very calcitic, tight.
- 4440 - 4470' Dolomite - light grey - slightly brownish cast in part, microcrystalline to very fine crystalline, slightly calcitic, tight, scattered calcite filled fractures.
- 4470 - 4510' Dolomite - light grey - brownish in part, fine crystalline to coarse crystalline, slightly calcitic, streaky - slight to poor intercrystalline porosity, scattered calcite filled fractures, few streaks of greyish green shale.
- 4510 - 4530' Dolomite - buff, fine to medium crystalline, fair intercrystalline porosity, fractures with calcite.
- 4530 - 4540' Dolomite - brownish grey, fine to medium crystalline, dense, abundant calcite filled fractures.
- 4540 - 4560' Dolomite - light grey - brownish in part, fine to medium crystalline, dense, calcite filled fractures, scattered partings of black bituminous shale.

- 4560 - 4600' Dolomite - light grey to brownish grey, microcrystalline to medium crystalline, calcitic, streaky - slight intercrystalline porosity, scattered calcite filled fractures.
- 4600 - 4640' Dolomite - very light grey to brownish grey, very fine to coarse crystalline, slightly calcitic, slightly cherty - very light bluish and brownish grey, dense, scattered fractures filled with calcite.
- 4640 - 4680' Dolomite - as above - no chert. (chips are less than 1 MM in size and so it is difficult to determine the top limits of the crystal size).
- 4680 - 4720' Dolomite - greyish brown, very fine to medium crystalline, slightly calcitic and argillaceous, dense for the most part - some streaky - slight intercrystalline porosity, scattered calcite filled fractures.

Ronning 4721' (E-Log 4681' -2627')

- 4720 - 4730' Dolomite - light to medium greyish brown, very fine to fine crystalline, slightly silty and argillaceous, trace of streaky - slight intercrystalline porosity, scattered fractures.
- 4730 - 4740' Dolomite - light to medium greyish brown, very fine to fine crystalline, slightly silty and argillaceous, dense, few calcite filled fractures.
- 4740 - 4800' Dolomite - medium greyish brown, very fine to fine crystalline, slightly silty and argillaceous, dense, few calcite filled fractures.
- 4800 - 4820' Dolomite - medium greyish brown - some dark streaks, very fine to fine crystalline, slightly silty and argillaceous, dense, trace of quartz crystals, some partings of black bituminous shale.
- 4820 - 4840' Dolomite - medium greyish brown, as above, trace of milky and very light brownish grey chert, rare quartz crystals.
- 4840 - 4860' Dolomite - as above, increased chert, trace of pale greyish green shale.
- 4860 - 4900' Dolomite - as above, slightly cherty, few quartz crystals, trace of pale greyish green pyritic shale.
- 4900 - 4920' Dolomite - as above, streaky - slight to poor intercrystalline porosity.
- 4920 - 5030' Dolomite - greyish brown - dark in part, very fine to fine crystalline, silty and argillaceous in part, dense, trace of chert at the top, some partings of black bituminous shale, few calcite filled fractures.

- 5030 - 5060' Dolomite - as above, trace of chert, trace of pale greyish green waxy shale.
- 5060 - 5070' Dolomite - greyish brown, very fine crystalline, silty, dense.
- 5070 - 5080' Dolomite - greyish brown - some dark streaks, very fine to fine crystalline, silty, slightly argillaceous, very light brownish grey chert.
- 5080 - 5140' Dolomite - as above, slightly cherty.
- 5140 - 5170' Dolomite - as above, slightly cherty, trace of quartz crystals, trace of pale greyish green shale.
- 5170 - 5200' Dolomite - as above, increased chert.
- 5200 - 5240' Dolomite - as above, cherty, trace of pale greyish green shale.
- 5240 - 5250' Dolomite - very light grey, fine to medium crystalline, dense.
- 5250 - 5260' Dolomite - very light grey, fine to medium crystalline, dense, some interbedded dolomite (40%) - greyish brown, very fine to fine crystalline, slightly argillaceous and silty, slight to poor intercrystalline porosity, some brownish grey chert.
- 5260 - 5270' Dolomite - very light grey - slight brownish cast in part, microcrystalline for the most part - some streaks of fine to medium crystalline, silty, quartz crystals.
- 5270 - 5280' Dolomite - very light grey, microcrystalline to very fine crystalline, silty, quartz crystals, dense.
- 5280 - 5290' Dolomite - very light grey - some interbedded greyish brown microcrystalline to fine crystalline, silty, argillaceous streaks, dense.
- 5290 - 5320' Dolomite - very light grey, microcrystalline to medium crystalline, silty, abundant quartz crystals and grains, trace of very light brownish grey chert, dense.

F.T.D. - 5321'

(e) Paleontological Determinations - none

SECTION III

ENGINEERING SUMMARY(a) Report of Drill Stem TestsDST #1 3712 - 3862' - Gossage

Times: Preflow 5 mins., I.S.I. 31 mins., V.O. 83 mins., F.S.I. 100 mins.

Recovery: 2170 feet of fresh water

Pressures: I.H.P.	1614#	I.S.I.P.	1423#	I.F.P.	286#
F.H.P.	1611#	F.S.I.P.	1425#	F.F.P.	967#

Temperature: 80° F.

DST #2 4870 - 4970' - Misrun, Ronning

Times: Preflow 5 mins., I.S.I. 30 mins., V.O. 90 mins., F.S.I. 90 mins.

Recovery: 762' of fresh water

Pressures: I.H.P.	2056#	I.S.I.P.	1917#	I.F.P.	
F.H.P.	2056#	F.S.I.P.	1915#	F.F.P.	

Temperature: 88° F.

DST #3 4870 - 4970' - Partial Misrun, Ronning

Times: Preflow none, I.S.I. none, V.O. 118 mins., F.S.I. 83 mins.

Recovery: 750 feet of fresh water

Pressures: I.H.P.	2078#	I.S.I.P.		I.F.P.	1910#
F.H.P.	2078#	F.S.I.P.	1931#	F.F.P.	1825#

Temperature: 88° F.

DRILL STEM TEST DATA SHEET

TEST NO. 1
 DATE April 4, 1973
 WELL NAME CanDel et al Mobil S. Ramparts 1-77 LOCATION 65° 23' 32"N, 130° 58' 18" W.

TEST DATA:
 INTERVAL 3712-3863' SUB-SEA -1758' to -1908' FORMATION Gossage
 BLOW: (Describe) Good on Preflow Good blow on V.O., very slowly decreasing until dead in 80 mins.
 Gas to Surface Mins. Max. Rate (Measure) (Est.) Mcf/day
 Describe Gas: Sweet Sour Was Flare Lit
 Describe Build-up, etc.

FLUID TO SURFACE: (Record Times & Describe Fluid)

RECOVERY: (Record amount & whether Gassy, Salty, Fresh, Sulphurous, Etc.)
 Mud:
 Water: 2170' fresh water (refractometer reading 1.0 = fresh water)
 Oil:
 Remarks: (Special Samples, Sampling Points, Samples Retained, Etc.)
9 samples Top, Middle, Top of tool

RECORD OF FIELD PRESSURES AND TIMES: - inside 3695'
 Started in Hole 10:00 p.m. April 4 Out of Hole 6:30 a.m. April 5
 Initial Hydrostatic Pressure 1614 psi.
 Valve Open (Initial) 5 Mins. Pressure psi.
 Initial Shut-in 31 Mins. Pressure 1423 psi.
 Valve Open 83 Mins. Pressure (Initial) 286 (final) 967 psi.
 Final Shut-in 100 Mins. Pressure 1425 psi.
 Final Hydrostatic Pressure 1611 psi.
 Temperature 80° F.
 Remarks

HOLE DATA:
 Hole Size & Depth 8 3/4" x 3862' Mud: Wt. 8.6 Visc. 28 W.L.

TESTING EQUIPMENT: B.J. Services
 Testing Co. Ticket No.
 Packer(s): No. 2 Size 7-1/2" Choke (B.H.) 1/2"
 Drill Pipe Size: 4-1/2" EXH Drill Collars: Amit 420' I.D. 2-7/8"
 Recorders: (No. & Type) 2 AK1
 Special Equipment: (Underline) MFE Tool, Jars, Safety Joint, Pump Out Sub, Straddle By-Pass
Etc. Bottom hole sampler

REMARKS ON TEST: (Misrun, Disposition of Samples - Charts, Hole Problems, etc.)
Good test

COMPANY REPRESENTATIVE D. Nelson

DRILL STEM TEST DATA SHEET

TEST NO. 2DATE April 11/73WELL NAME Candel et al Mobil S. Ramparts 1-77 LOCATION 65° 23' 32" N, 130° 58' 18" W.TEST DATA: 4870 - 4970' SUB-SEA -2916' to -3016' FORMATION RonningINTERVAL 4870 - 4970' BLOW (Describe) Weak air blow on Preflow - very weak air blow on main flow, died in 5 mins.

Gas to Surface Mins. Max. Rate (Measure) (Est.) Mcf/day

Describe Gas: Sweet Sour Was Flare Lit

Describe Build-up, etc.

FLUID TO SURFACE: (Record Times & Describe Fluid)

RECOVERY: (Record amount & whether Gassy, Salty, Fresh, Sulphurous, Etc.)

Mud:

Water: 762' fresh water

Oil:

Remarks: (Special Samples, Sampling Points, Samples Retained, Etc.)

RECORD OF FIELD PRESSURES AND TIMES: - inside chart at 4852'

Started in Hole	<u>12:15 p.m. April 11</u>	Out of Hole	<u>9:00 p.m. April 11</u>
Initial Hydrostatic		Pressure	<u>2056</u> psi.
Valve Open (Initial)	<u>5</u>	Mins. Pressure	<u>336 - 577</u> psi.
Initial Shut-in	<u>30</u>	Mins. Pressure	<u>1917</u> psi.
Valve Open	<u>90</u>	Mins. Pressure (initial)	(final) psi.
Final Shut-in	<u>90</u>	Mins. Pressure	<u>1915</u> psi.
Final Hydrostatic		Pressure	<u>2056</u> psi.
Temperature	<u>88° F.</u>		
Remarks	<u>Misrun tool plugged with sand</u>		

HOLE DATA:

Hole Size & Depth 8 3/4" x 5321' Mud. Wt. 8.6 Visc. 28 W.L.

TESTING EQUIPMENT:

Testing Co.	<u>B.J. Services</u>	Ticket No.	<u>172</u>
Packer(s) No.	<u>4</u>	Size	<u>7 1/2"</u>
Drill Pipe Size	<u>4 1/2" EXH</u>	Choke (B.H.)	<u>172"</u>
Recorders (No. & Type)	<u>3, AK1</u>	Drill Collars	<u>Amit 330'</u>
Special Equipment: (Underline)	<u>MFE Tool, Jars, Safety Joint, Pump Out Sub, Straddle Bx-Pcs.</u>		
Etc.	<u>Bottom-hole sampler.</u>		

REMARKS ON TEST: (Misrun, Disposition of Samples - Charts, Hole Problems, etc.)

MisrunCOMPANY REPRESENTATIVE D. Nelson

DRILL STEM TEST DATA SHEET

TEST NO. 3DATE April 12, 1973WELL NAME CanDel et al Mobil S. Ramparts 1-77 LOCATION 65° 23' 32"N, 130° 58' 18" W:

TEST DATA:

INTERVAL 4870 - 4970' SUB-SEA -2916' to -3016' FORMATION RonningBLOW: (Describe) Very weak initial puff, reset tool twice in 20 mins. suddenly after 10 mins. good blow remaining constant.Gas to Surface Mins. Max. Rate (Measure) (Est.) Mcf/dayDescribe Gas: Sweet Sour Was Flare Lit Describe Build-up, etc. FLUID TO SURFACE: (Record Times & Describe Fluid)

RECOVERY: (Record amount & whether Gassy, Salty, Fresh, Sulphurous, Etc.)

Mud: Water: 750' fresh waterOil: Remarks: (Special Samples, Sampling Points, Samples Retained, Etc.)

RECORD OF FIELD PRESSURES AND TIMES: - inside chart at 4852'

Started in Hole	<u>1:30 a.m. April 12</u>	Out of Hole	<u>9:00 a.m. April 12</u>
Initial Hydrostatic	<u> </u>	Pressure	<u>2078</u> psi.
Valve Open (Initial)	<u>none</u>	Mins. Pressure	<u> </u> psi.
Initial Shut-in	<u>none</u>	Mins. Pressure	<u> </u> psi.
Valve Open	<u>118</u>	Mins. Pressure (initial)	<u>1910</u> (final) <u>1825</u> psi.
Final Shut-in	<u>83</u>	Mins. Pressure	<u>1931</u> psi.
Final Hydrostatic	<u> </u>	Pressure	<u>2078</u> psi.
Temperature	<u>88° F.</u>		
Remarks	<u>Charts indicate tool plugging - test partial success</u>		

HOLE DATA:

Hole Size & Depth 8-3/4" x 5321' Mud Wt. 8.6 Visc. 28 W.L.

TESTING EQUIPMENT:

Testing Co.	<u>B.J. Services</u>	Ticket No.	<u> </u>
Packer (s): No.	<u>4</u>	Size	<u>7-1/2"</u>
Drill Pipe Size:	<u>4 1/2" EXH</u>	Choke (B.H.)	<u>1/2"</u>
Recorders: (No. & Type)	<u>3 AKI</u>	Drill Collars: Amt	<u>330'</u>
Special Equipment: (Underline)	<u>MFE Tool Jars Safety Joint Pump Out Sub Straddle By-Pass</u>	I.D.	<u>2-7/8"</u>
Etc.	<u>Bottom hole sampler</u>		

REMARKS ON TEST: (Misrun, Disposition of Samples - Charts, Hole Problems, etc.)
test partial successCOMPANY REPRESENTATIVE D. Nelson



DRILL-STEM TEST DATA

Well Name **CANDEL MOBIL SOUTH RAMPARTS** Test No. **1**
Well Number **I - 77** Zone Tested
Company **CANDEL OIL LTD.** Interval **3712 - 3862**
D. NELSON
Comp. Rep. **D. HADDOW** Tester **BUDVARSON** Date **APRIL 5, 1973**

Type of Test **DUAL BOTTOM HOLE** RFS Tool No. **13**

Preflow **5** mins. ISI **31** mins. Flow **83** mins. FSI **100** mins.

	IN REC. No. 3958		OUT REC. No. 3973		REC. No.	
	6500	RANGE 12	HR. CLOCK 6700	PANGE 12	RANGE	HR. CLOCK
DEPTH		3695		3737		
Initial Hydro Mud Press		1614		1640		
Initial Shut-In Press		1423		1443		
Initial Flow Press		286		317		
Final Flow Press		967		985		
Final Shut-In Press		1425		1443		
Final Hydro Mud Press		1611		1636		

Mud Drop - **NIL**
Viscosity **23**
Top Packer Depth
Drill Pipe Size **4.5 XH**
Surface Choke Size **CLOSED**
Anchor Size **4.750 O.D.**
Cushion Amount

Fluid Loss
Temperature °F **80**
Bottom Packer Depth **3712**
Wt. **16.60** Drill Collar I.D. **2.875**
Bottom Choke Size **0.5**
Rot Hole Size
Type

Mud Weight **8.6**
Net Pay Tested **25.0**
Total Depth **3862**
Ft. Run **420**
Main Hole Size **8.750**
Feet of Rot Hole
Rubber Size **7.750**

Fluid Recovery Total Feet **2170**
Recovered **2170** Feet of **FRESH WATER**
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured

Riser size:

mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: **GOOD BLOW ON PREFLOW. GOOD BLOW ON FLOW.
VERY SLOWLY DECREASING UNTIL DEAD IN 80 MINUTES.**



TESTING REPORT

WEIGHT INDICATOR READING
PRIOR TO SETTING PACKERS
AFTER PULL PACKERS LOOSE

	ID	OD	LENGTH
45 LANDING SUB			
XXXXXX C.O. SUB			1.00
XXXXXX C.O. SUB			1.00
XXXXXX REC. WELL			4.00
SHUT IN TOOL		4 3/4	5.20
R.F.S. No. 13	2 1/4	4 3/4	3.35
R.F.S. No.	2 1/4	4 3/4	
HYDRAULIC TOOL		4 3/4	7.15
JARS SUTLIFF	1	4 3/4	5.50
RECORDER No. 3958	2 1/4	4 3/4	5.00
RECORDER No.	2 1/4	4 3/4	
SAFETY JOINT	2 11/16	4 3/4	1.75
BY PASS SUB	1 5/32	4 3/4	
PACKER	1 OR 3/4		6.00
PACKER	1 OR 3/4		5.00
ANCHOR—SPECIFY	2 1/2		1.00
PERFS			23.00
BLANK OFF OR BY PASS SUB	1 5/32	4 3/4	
RECORDER No. 3973	2 1/4	4 3/4	1.00
PACKER	1 OR 3/4		
PACKER	1 OR 3/4		
ANCHOR—SPECIFY	2 1/2		
RECORDER No.	2 1/4	4 3/4	
C.O. SUB			1.00
DRILL COLLARS			120.88
C.O. SUB			1.00
BULLNOSE	2 3/4	4 3/4	3.00

DEPTH 3695
DEPTH

TOOL ABOVE INTERVAL 44.95
DEPTH 3737

TOTAL INTERVAL

TOTAL TAIL PIPE 150.88
TOTAL TEST TOOL 74.95

1. PACKER DEPTH 3706

2. PACKER DEPTH 3712

3. PACKER DEPTH

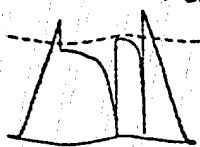
4. PACKER DEPTH

TOTAL DEPTH 3862

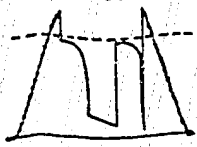
DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



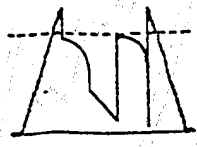
HIGH PERMEABILITY



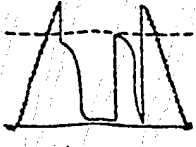
HIGH PERMEABILITY



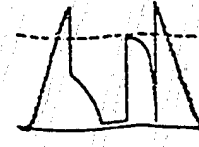
MEDIUM PERMEABILITY



MEDIUM PERMEABILITY



LOW PERMEABILITY



LOW PERMEABILITY



WELL NAME: CANDEL MOBIL SOUTH RAMPARTS
WELL LOCATION: I-77
FORMATION:

REC NO. 3958
DST NO. 1
DEPTH 3695

TIME - PRESSURE INCREMENTS

REMARKS -----	TIME MIN. -----	PRESSURE PSIG -----	T+DELTA(T) / DELTA(T) -----
RUN IN HOLE	0.	0.	
	84.0	1614.4	
INITIAL HYDRO PRESSURE	95.0	1614.4	
INITIAL PREFLOW PRESSURE	0.	107.6	
FINAL PREFLOW PRESSURE	5.0	241.7	
START INITIAL SHUT-IN	0.	241.7	
	5.0	1364.4	2.00
	10.0	1397.1	1.50
	15.0	1411.8	1.33
	20.0	1418.3	1.25
	25.0	1421.6	1.20
INITIAL SHUT-IN PRESSURE	31.0	1423.2	1.16
START FLOW PERIOD	0.	1423.2	
INITIAL FLOW PRESSURE	1.0	286.4	
	10.0	385.8	
	20.0	491.7	
	30.0	581.7	
	40.0	669.9	
	50.0	750.0	
	60.0	823.5	
	70.0	887.3	
FINAL FLOW PRESSURE	83.0	967.3	
START FINAL SHUT-IN	0.	967.3	
	5.0	1344.8	18.60



WELL NAME: CANDEL MOBIL SOUTH RAMPARTS
WELL LOCATION: I-77
FORMATION:

REC NO. 3958
DST NO. 1
DEPTH 3695

TIME - PRESSURE INCREMENTS

<u>REMARKS</u>	<u>TIME MIN.</u>	<u>PRESSURE PSIG</u>	<u>T+DELTA(T) / DELTA(T)</u>
	10.0	1372.5	9.80
	15.0	1385.6	6.87
	20.0	1393.8	5.40
	25.0	1400.3	4.52
	30.0	1403.6	3.93
	35.0	1406.9	3.51
	40.0	1410.1	3.20
	45.0	1411.8	2.96
	50.0	1413.4	2.76
	55.0	1415.0	2.60
	60.0	1416.7	2.47
	65.0	1418.3	2.35
	70.0	1419.9	2.26
	75.0	1420.8	2.17
	80.0	1421.6	2.10
	85.0	1422.4	2.04
	90.0	1423.2	1.98
	95.0	1424.0	1.93
FINAL SHUT-IN PRESSURE	100.0	1424.8	1.88
RUN OUT OF HOLE	0.	1424.8	
FINAL HYDRO PRESSURE	1.0	1611.1	
	14.0	1611.1	
OUT OF HOLE	115.0	0.	



WELL NAME: CANDEL MOBIL SOUTH RAMPARTS
WELL LOCATION: I-77
FORMATION:
RECOVERY TYPE USED IN CALCULATIONS: WATER

REC NO. 3958
DST NO. 1
DEPTH 3695
INTERVAL 3712 - 3862

SUMMARY OF CALCULATIONS

1 FIRST SHUT-IN

EXTRAPOLATED FORMATION PRESSURE -----	1436.5 PSIG
SLOPE OF EXTRAPOLATED LINE -----	194.05 PSI/CYCLE
ROOT MEAN SQUARE DEVIATION OF FITTED LINE -----	0.56 PSI
NUMBER OF POINTS IN SHUT-IN -----	7
NUMBER OF POINTS USED FOR EXTRAPOLATION -----	4

2 SECOND SHUT-IN

EXTRAPOLATED FORMATION PRESSURE -----	1444.3 PSIG
SLOPE OF EXTRAPOLATED LINE -----	71.04 PSI/CYCLE
ROOT MEAN SQUARE DEVIATION OF FITTED LINE -----	0.03 PSI
NUMBER OF POINTS IN SHUT-IN -----	21
NUMBER OF POINTS USED FOR EXTRAPOLATION -----	4
DIFFERENCE (2ND-1ST EXTRAPOLATION) -----	7.8 PSI

3 RESERVOIR AND FLUID PROPERTIES

NET PAY -----	25.00 FT
RESERVOIR POROSITY -----	15.00 PERCENT
PRODUCTION RATE -----	462.4 BPD
FORMATION VOLUME FACTOR -----	1.000 RB/STB
FLUID VISCOSITY -----	0.860 C.P.
TOTAL COMPRESSIBILITY X 10 ⁻⁶ -----	7.100 /PSI
RESERVOIR TEMPERATURE -----	80.0 F
FINAL FLOWING PRESSURE -----	967.3 PSIG
TOTAL FLOW TIME -----	88.0 MIN

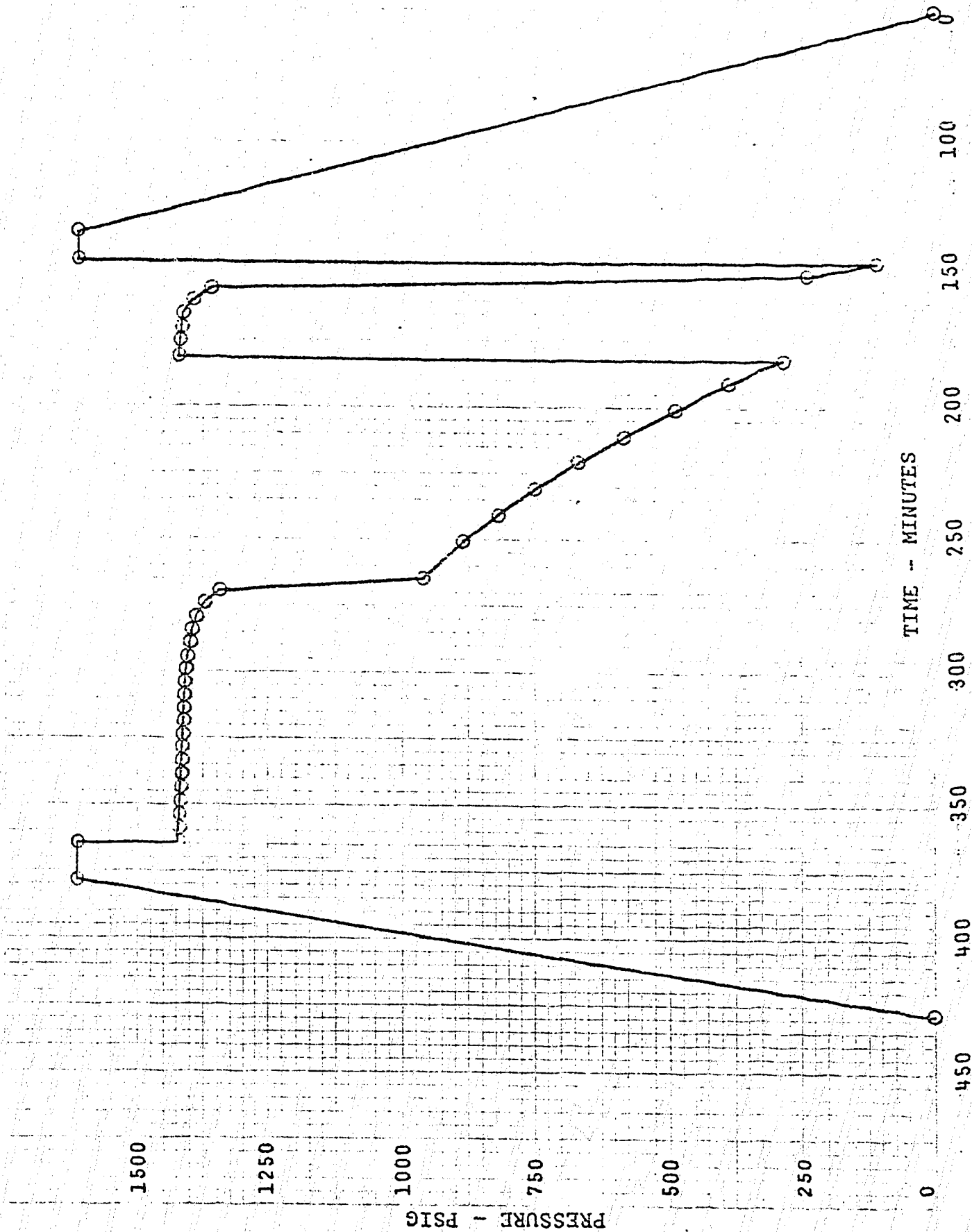
4 CALCULATION RESULTS

ESTIMATED DAMAGE RATIO -----	1.24
PERMEABILITY THICKNESS -----	909.8 MD FT
PERMEABILITY -----	36.39 MD
SKIN FACTOR -----	1.50
APPROXIMATE DRAINAGE RADIUS -----	247.2 FT
PRODUCTIVITY INDEX -----	0.970 BPD/PSI
PRODUCTION WITH DAMAGE REMOVED -----	573.8 BPD

CANDEL MOBIL SOUTH RAMPARTS I-77

DST NO. 1

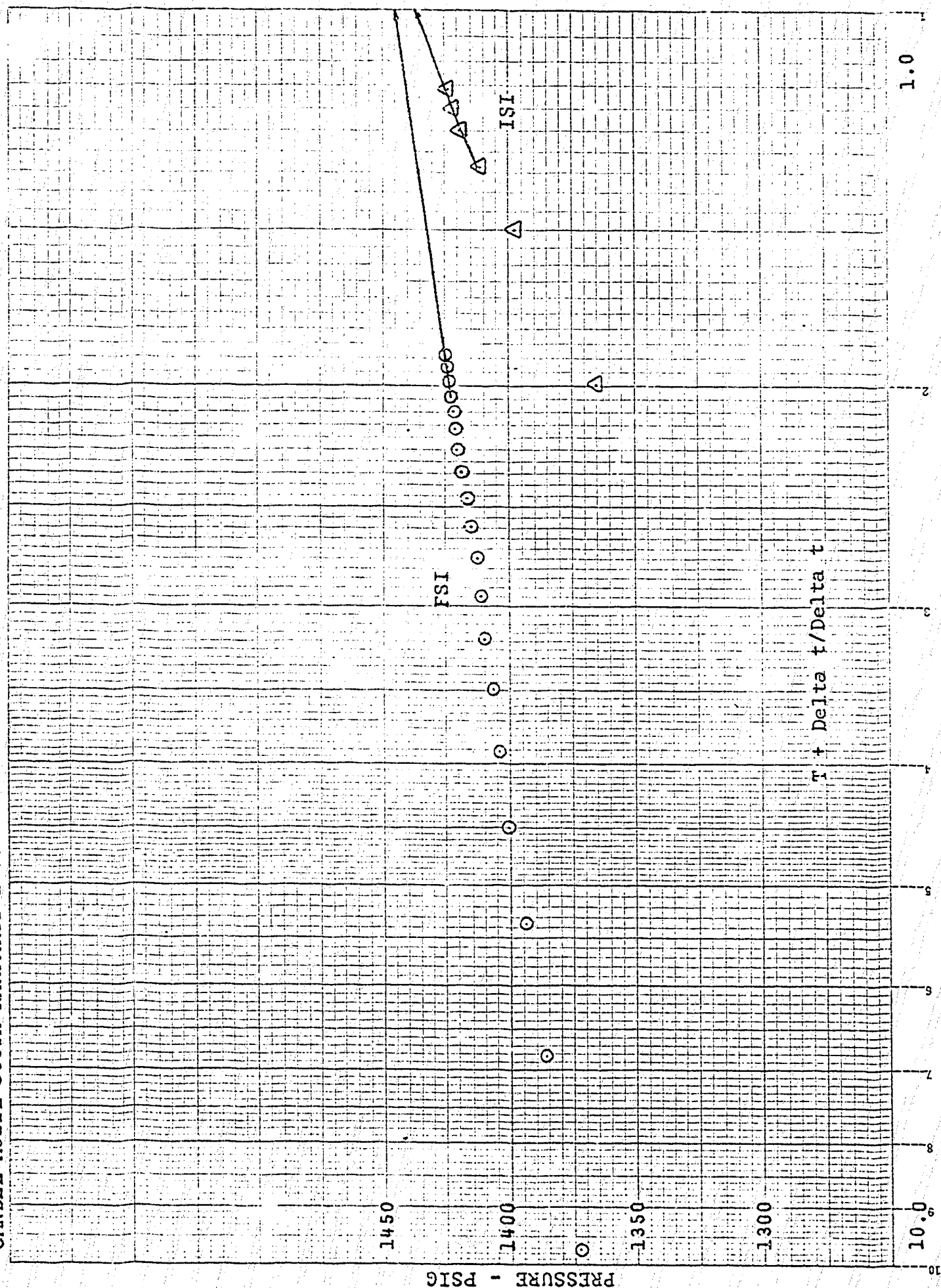
REC. NO. 3958



PSIG = 1444.3

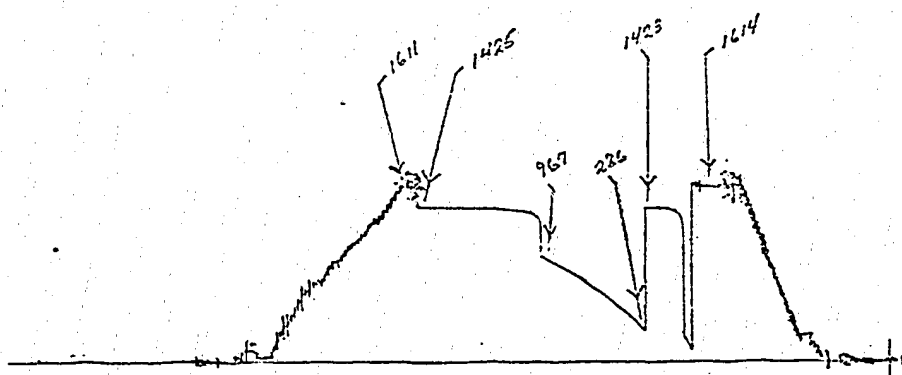
DST NO. 1

CANDEL MOBIL SOUTH RAMPARTS I-77

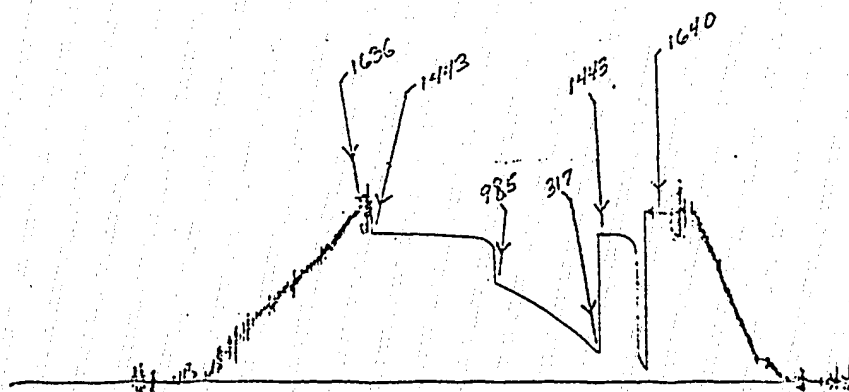


DST RECORDER CHARTS

CANDEL MOBIL SOUTH RAMPARTS I-77
DST NO. 1
INSIDE REC. NO. 3958



CANDEL MOBIL SOUTH RAMPARTS I-77
DST NO. 1
OUTSIDE REC. NO. 3973





Well Name	CANDEL MOBIL S. RAMPARTS	Test No.	2
Well Number	I-77	Zone Tested	RONNING
Company	CANDEL OIL LTD. D. NELSON	Interval	4870 - 4970
Comp. Rep.	D. HADDOW	Tester	BUDVARSON
		Date	APRIL 11, 1973

Type of Test **DUAL STRADDLE BY-PASS** RFS Tool No. **24 (DRAINED ON LOCATION)**

Preflow 5 mins. ISI 30 mins. Flow 90 mins. FSI 90 mins.

	IN REC. No. 3958	CUT REC. No. 3973	BTM REC. No. 2065
	6500 RANGE 12	HR. CLOCK 6700 RANGE 12	HR. CLOCK 6800 RANGE 24
DEPT:	4852	4877	4997
Initial Hydro Mud Press	2056	2082	2090
Initial Shut-In Press	1917	1925	
Initial Flow Press			
Final Flow Press			
Final Shut-In Press	1915	1929	
Final Hydro Mud Press	2056	2078	2090

Mud Drop	Fluid Loss	AND BORAX	Mud Weight	8.6
Viscosity 23	Temperature °F	88	Net Pay Tested	
Top Packer Depth 4870	Bottom Packer Depth	4970	Total Depth	5319
Drill Pipe Size 4.5 XH	Wt. 16.60	Drill Collar I.D. 2.875	Ft. Run	330
Surface Choke Size CLOSED	Bottom Choke Size	0.50	Main Hole Size	8.750
Anchor Size 4.750 O.D.	Rat Hole Size		Feet of Rat Hole	
Cushion Amount	Type		Rubber Size	7.5 X 4

Fluid Recovery Total Feet	762	Feet of	FRESH WATER
Recovered	762	Feet of	
Recovered		Feet of	
Recovered		Feet of	
Recovered		Feet of	
Recovered		Feet of	

[illegible]

Bleed Off Time for Drill Pipe

REMARKS:

GOOD AIR BLOW ON PREFLOW. VERY WEAK AIR BLOW
ON INITIAL FLOW. DEAD IN 2 MINUTES. DECLARED
A MISRUN - PLUGGED TOOL.



TESTING REPORT

WEIGHT INDICATOR READING
PRIOR TO SETTING PACKERS
AFTER PULL PACKERS LOOSE

1. PACKER DEPTH 4864

2. PACKER DEPTH 4870

3. PACKER DEPTH 4970

4. PACKER DEPTH 4976

TOTAL DEPTH 5319



4S LANDING SUB

~~XXXXXXXXXX~~ C.O. SUB~~XXXXXXXXXX~~ P.O. SUB~~XXXXXXXXXX~~ REC. WELL

SHUT IN TOOL

R.F.S. No. 24

R.F.S. No.

HYDRAULIC TOOL

JARS SUTLIFF

RECORDER No. 3958

RECORDER No.

SAFETY JOINT

BY PASS SUB

PACKER

PACKER

ANCHOR—SPECIFY

SLOT

PERFS

~~XXXXXXXXXX~~ BY PASS SUB

RECORDER No. 3973

C.O. SUB

DRILL COLLARS

PACKER

PACKER

ANCHOR—SPECIFY

PERFS

RECORDER No. 2065

DRILL PIPE

C.O. SUB

BULLNOSE

ID

OD

LENGTH

1.00

1.00

4.00

5.20

3.35

7.15

5.50

5.00

1.75

1.00

6.00

5.00

1.00

4.00

31.00

1.00

1.00

59.00

3.00

3.00

6.00

17.00

5.00

314.00

1.00

3.00

(DRAINED ON
LOCATION)

DEPTH 4852

DEPTH

TOOL ABOVE INTERVAL 45.95

DEPTH 4907

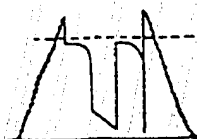
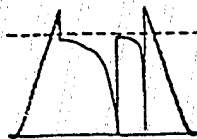
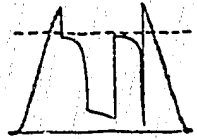
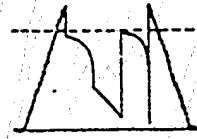
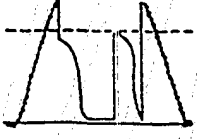
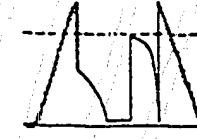
TOTAL INTERVAL 100.00

DEPTH 4997

TOTAL TAIL PIPE 349.00

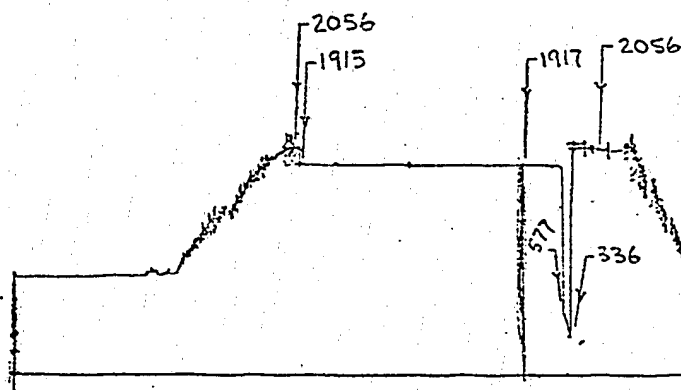
TOTAL TEST TOOL 124.95

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

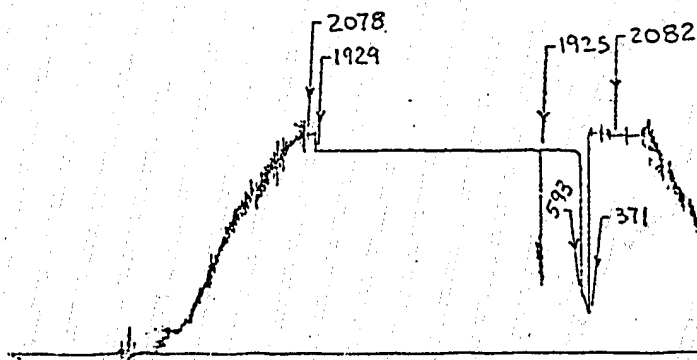
HIGH PERMEABILITY
STRONG DAMAGE EFFECTHIGH PERMEABILITY
NO DAMAGE EFFECTMEDIUM PERMEABILITY
STRONG DAMAGE EFFECTMEDIUM PERMEABILITY
NO DAMAGE EFFECTLOW PERMEABILITY
STRONG DAMAGE EFFECTLOW PERMEABILITY
NO DAMAGE EFFECT

DST RECORDER CHARTS

CANDEL MOBIL S. RAMPARTS I-77
DST NO. 2
INSIDE REC. NO. 3958



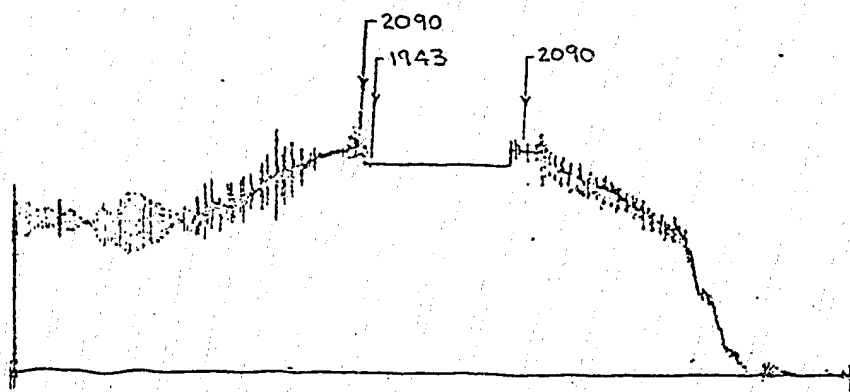
CANDEL MOBIL S. RAMPARTS I-77
DST NO. 2
OUTSIDE REC. NO. 3973





DST RECORDER CHARTS

CANDEL MOBIL S. RAMPARTS I-77
DST NO. 2
BOTTOM REC. NO. 2065





DRILL-STEM TEST DATA

Well Name CANDEL MOBIL S. RAMPARTS Test No. 3
Well Number I-77 Zone Tested RONNING
Company CANDEL OIL LTD.
D. NELSON Interval 4870 - 4970
Comp. Rep. D. HADDOW Tester BUDVARSON Date APRIL 12, 1973

Type of Test DUAL STRADDLE BY-PASS RFS Tool No. 24

Preflow mins. ISI mins. Flow 113 mins. FSI 83 mins.

	IN REC. No. 3958	OUT REC. No. 3973	BTM REC. No. 2055
DEPTH	6500 RANGE 12 HR. CLOCK	6700 RANGE 12 HR. CLOCK	6800 RANGE 24 HR. CLOCK
Initial Hydro Mud Press	4852	4877	4997
Initial Shut-In Press	2078	2093	2139
Initial Flow Press	1910	1932	
Final Flow Press	1825	1834	
Final Shut-In Press	1931	1937	
Final Hydro Mud Press	2078	2093	2139

DRILLING WITH WATER

Mud Drop Fluid Loss AND BORAX Mud Weight 8.6
Viscosity 28 Temperature °F 88 Net Pay Tested
Top Packer Depth 4870 Bottom Packer Depth 4970 Total Depth 5319
Drill Pipe Size 4.5 XH Wt. 16.60 Drill Collar I.D. 2.875 Ft. Run 330
Surface Choke Size CLOSED Bottom Choke Size 0.50 Main Hole Size 8.75
Anchor Size 4.75 Rat Hole Size Feet of Rat Hole
Cushion Amount Type Rubber Size 7.5 X 4

Fluid Recovery Total Feet 750
Recovered 750 Feet of FRESH WATER (REFRACTOMETER - 1.0)
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Gas Recovery	How Measured	Riser size:
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day
mins.	Temp. °F Press Rdg. psi Orifice Size	= MCF/Day

Bleed Off Time for Drill Pipe

REMARKS:

VERY WEAK INITIAL PUFF. RESET TOOL TWICE IN 20 MINUTES. THEN, SUDDENLY 10 MINUTES LATER RECEIVED GOOD BLOW, WHICH REMAINED CONSTANT THROUGHOUT FLOW PERIOD.



TESTING REPORT

WEIGHT INDICATOR READING
PRIOR TO SETTING PACKERS
AFTER PULL PACKERS LOOSE



	ID	OD	LENGTH	
45 LANDING SUB				
XXXXXXXX C.O. SUB			1.00	
XXXXXXXX P.O. SUB			1.00	
XXXXXX REC. WELL			4.00	
SHUT IN TOOL		4 3/4	5.20	
R.F.S. No. 24	2 1/4	4 3/4	3.35	
R.F.S. No.	2 1/4	4 3/4		
HYDRAULIC TOOL		4 3/4	7.15	
JARS SUTLIFF	1	4 3/4	5.50	
RECORDER No. 3958	2 1/4	4 3/4	5.00	DEPTH 4852
RECORDER No.	2 1/4	4 3/4		DEPTH
SAFETY JOINT	2 11/16	4 3/4	1.75	
BY PASS SUB	1 5/32	4 3/4	1.00	
PACKER	1 OR 3/8		6.00	
PACKER	1 OR 3/8		5.00	TOOL ABOVE INTERVAL 45.95
ANCHOR—SPECIFY	2 1/2		1.00	
SLOT			4.00	
PERFS			31.00	
XXXXXXXXXX BY PASS SUB	1 5/32	4 3/4	1.00	
RECORDER No. 3973	2 1/4	4 3/4		DEPTH 4907
C.O. SUB			1.00	
DRILL COLLARS			59.00	
PACKER	1 OR 3/8		3.00	TOTAL INTERVAL 100.00
PACKER			3.00	
PACKER	1 OR 3/8		6.00	
ANCHOR—SPECIFY	2 1/2			
PERFS			17.00	
RECORDER No. 2065	2 1/4	4 3/4	5.00	DEPTH 4997
DRILL PIPE			314.00	
C.O. SUB			1.00	
BULLNOSE	2 3/4	4 3/4	3.00	TOTAL TAIL PIPE 349.00
				TOTAL TEST TOOL 124.95

TOTAL DEPTH 5319

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



B

HIGH PERMEABILITY STRONG DAMAGE EFFECT
HIGH PERMEABILITY NO DAMAGE EFFECT
MEDIUM PERMEABILITY STRONG DAMAGE EFFECT
MEDIUM PERMEABILITY NO DAMAGE EFFECT
LOW PERMEABILITY STRONG DAMAGE EFFECT
LOW PERMEABILITY NO DAMAGE EFFECT

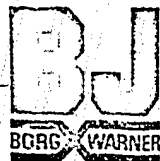


WELL NAME: CANDEL MOBIL S. RAMPARTS
WELL LOCATION: I-77
FORMATION: RONNING

REC NO. 3958
DST NO. 3
DEPTH 4852

TIME - PRESSURE INCREMENTS

REMARKS -----	TIME MIN. -----	PRESSURE PSIG -----	T+DELTA(T) / DELTA(T) -----
RUN IN HOLE	0.	0.	
INITIAL HYDRO PRESSURE	111.0	2078.4	
START FLOW PERIOD	140.0	2078.4	
INITIAL FLOW PRESSURE	0.	1910.1	
PACKERS UNSEATED	5.0	1923.2	
	6.0	2089.9	
RESET TOOLS	13.0	2089.9	
RESUME FLOW	14.0	1918.3	
PACKERS UNSEATED	20.0	1905.2	
	21.0	2089.9	
RESET TOOLS	22.0	2089.9	
RESUME FLOW	23.0	1902.0	
	30.0	1861.1	
	40.0	1844.8	
	50.0	1839.9	
	60.0	1831.7	
	70.0	1831.7	
	80.0	1828.4	
	90.0	1828.4	
	100.0	1826.8	
	110.0	1825.2	
FINAL FLOW PRESSURE	118.0	1825.2	



WELL NAME: CANDEL MOBIL S. RAMPARTS
WELL LOCATION: I-77
FORMATION: RONNING

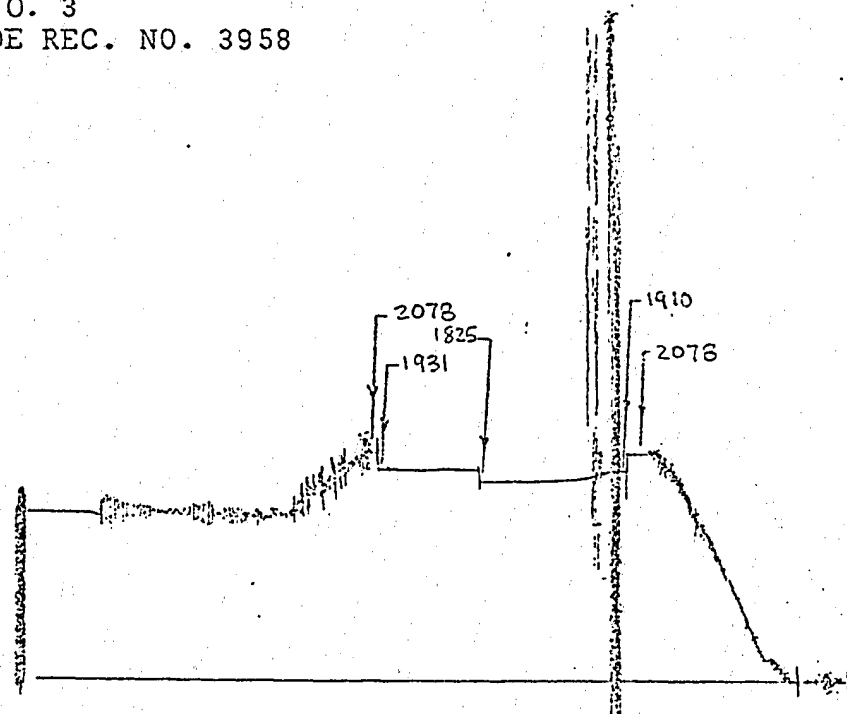
REC NO. 3958
DST NO. 3
DEPTH 4852

TIME - PRESSURE INCREMENTS

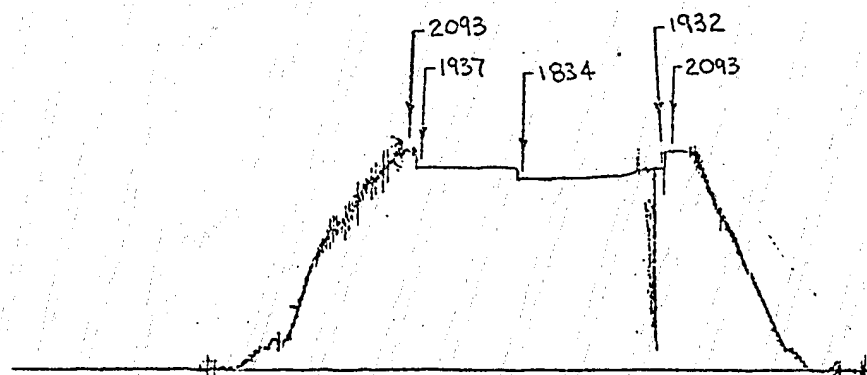
REMARKS -----	TIME MIN. -----	PRESSURE PSIG -----	T+DELTA(T)/ DELTA(T) -----
START FINAL SHUT-IN	0.	1825.2	
	2.0	1931.4	
	5.0	1933.0	
	10.0	1934.6	
	15.0	1934.6	
	20.0	1936.3	
	25.0	1936.3	
	30.0	1929.7	
	35.0	1931.4	
	40.0	1931.4	
	45.0	1931.4	
	50.0	1931.4	
	55.0	1931.4	
	60.0	1931.4	
	65.0	1931.4	
	70.0	1931.4	
	75.0	1931.4	
FINAL SHUT-IN PRESSURE	83.0	1931.4	
RUN OUT OF HOLE	0.	1931.4	
FINAL HYDRO PRESSURE	1.0	2078.4	
	7.0	2078.4	
	70.0	1514.7	
	300.0	1514.7	
CHART ENDS	301.0	0.	

DST RECORDER CHARTS

CANDEL MOBIL S. RAMPARTS I-77
DST NO. 3
INSIDE REC. NO. 3958



CANDEL MOBIL S. RAMPARTS I-77
DST NO. 3
OUTSIDE REC. NO. 3973

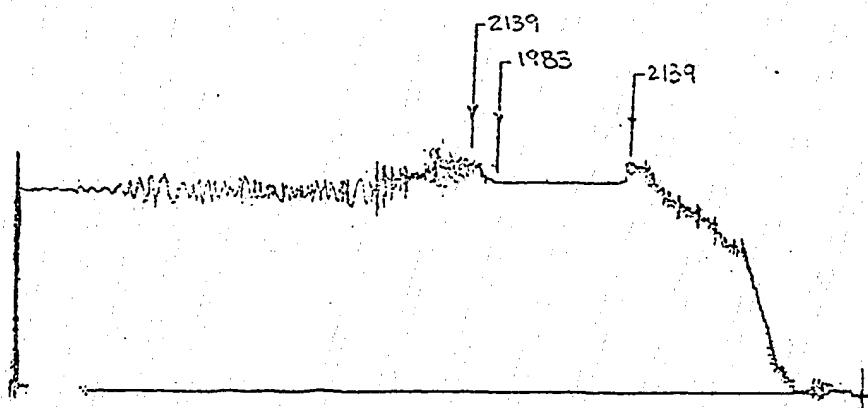


DST RECORDER CHARTS

CANDEL MOBIL S. RAMPARTS I-77

DST NO. 3

BOTTOM REC. NO. 2065



(b) Casing Record

Ran 20 joints (824.02') 9 5/8" K.S. 36# 8 RD Thread ST & C Mannesman Casing. Landed at 819' K.B.

Cemented with 650 sacks Portland normal plus 3% CaCl_2

Plug down at 11:00 a.m. March 26, 1973

Estimated 10 barrels returns.

Cement dropped - wait 14 1/2 hours and pumped 160 sacks of cement plus 3% CaCl_2 down the annulus.

TUBULAR TALLY REPORT

- 19

Well..... CanDel et al Mobil S. Ramparts 1-77
 Make Tubular Goods..... Mannesman..... Type..... Seamless
 Size..... 9-5/8"..... Weight..... 36..... Lbs./ft. Threads..... 8RD..... Grade..... K.S..... Range..... 3
 Couplings: Type..... ST & C..... Minimum I.D..... Maximum O.D..... 9-5/8"

Note: The following tally is listed in the same order as the tubular goods were run in the hole. That is joint number one will be the first joint in the hole and continuing in that order until the last joint run.

Jt. No.	feet	10s	Jt. No.	feet	10s	Jt. No.	feet	10s	Jt. No.	feet	10s	Jt. No.	feet	10s
1	43	45	1			1			1			1		
2	42	06	2			2			2			2		
3	42	58	3			3			3			3		
4	41	34	4			4			4			4		
5	43	34	5			5			5			5		
6	41	62	6			6			6			6		
7	43	40	7			7			7			7		
8	42	05	8			8			8			8		
9	42	81	9			9			9			9		
0	42	79	0			0			0			0		
a			d			g			j			m		
1	41	19	1			1			1			1		
2	42	71	2			2			2			2		
3	30	50	3			3			3			3		
4	40	67	4			4			4			4		
5	42	46	5			5			5			5		
6	43	78	6			6			6			6		
7	30	81	7			7			7			7		
8	42	19	8			8			8			8		
9	41	92	9			9			9			9		
0	39	15	0			0			0			0		
b			e			h			k			n		
1	float		1			1			1			1		
2	1	75	2			2			2			2		
3			3			3			3			3		
4	shoe		4			4			4			4		
5	1	45	5			5			5			5		
6			6			6			6			6		
7			7			7			7			7		
8			8			8			8			8		
9			9			9			9			9		
0			0			0			0			0		
c			f			i			l			o		

TOTALS

a		
b		
c		
d		
e		
f		
g		
h		
i		
j		
k		
l		
m		
n		
o		
824		02

FINAL
TOTAL

Remarks..... Casing landed at 819.02' K.B.
 Pipe above K.B. 5.00'

Tallied by.....

(c)

BIT RECORD

CanDel et al Mobil S. Ramparts 1-77

<u>No.</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Depth Out</u>	<u>Feet</u>	<u>Hours</u>	<u>Condition</u>
1A	8 3/4	H.W.	XIG	226'	226'	15 3/4	8-1-0
2A	8 3/4	H.W.	XDV	321'	95'	20	6-1-1
3A	8 3/4	H.W.	XDV	580'	259'	32 1/2	5-1-0
4A	8 3/4	H.W.	XDV	745'	165'	18 3/4	5-2-0
5A	8 3/4	H.W.	XDV	821'	76'	11 1/4	3-1-1
1	13 3/4	Reed	TriCone	362'	363'	29 1/4	6-3-1
2	13 3/4	Reed	TriCone	535'	172'	24 1/4	2-1-1
3	13 3/4	Reed	TriCone	819'	284'	41 3/4	4-1-1
1	8 3/4	H.W.	XIG	2157'	1338'	45	7-8-1
2	8 3/4	H.W.	J-33	3534'	1377'	80 1/4	6-6-0
3	8 3/4	H.W.	J-44	4644'	1110'	72 1/4	8-2-0
4	8 3/4	H.W.	J-55	5163'	519'	31	8-2-0
5	8 3/4	H.W.	WD7	5321'	159'	15 1/2	8-4-0

DAILY MUD RECORD

- 21

Date 1973	Depth	Weight	Viscosity	Water Loss	Filter Cake	Ph.	Remarks and Additives			
		# / Gal.	Seconds	15 min. C.C.	32nds		Gel	Caustic	Borax Standard	Misc.
March 14			40				8500	50		Spud 10:30 p.m.
15	150'	9.0	80				5100			
16	272'	9.5	360				600			
17	346'	9.6	500+				8200			
18	546'	9.2	200+				5100			Sawdust 10 sx. Lost 160 bbls. of mud to formation.
19	651'	9.2	210				7900			Sawdust 17 sx. Lime - 100#
20	777'	9.2	250	7.6	2	8.0	7600			Lime - 75#
21	236'	9.3	300				9000			Lime - 175#
22	352'	9.4	180				3900	50		Sawdust 7 sx. Reaming
23	473'	10.0	300				5800	175		Lime - 75# Lost 100 bbls. mud
24	605'	9.5	410				5600	125		
25	757'	9.8	460				1600			
26	819'	10.0	480							
27										Run Casing - W.O.C.
28	910'	8.5	28			8.5				6300
29	1595'	8.8	28			7.6				3300
30	2157'	9.1	28			7.2				4400
31	2661'	9.0	28			7.2				3000
April 1	3003'	8.9	28			7.6				4000
2	3330'	8.7	28			7.6				3700
3	3534'	8.7	28			7.6				1100
4	3786'	8.6	28			8.6				1000
5	3862'	8.6	28			7.2				2000
6	4234'	8.6	28			7.2				2000
7	4608'	8.5	28			7.2				1000
8	4827'	8.5	28			8.0				300
9	5163'	8.6	28							
10	5321'	8.6	28							F.T.D.

(e) DEVIATION RECORD

<u>Depth/Feet</u>	<u>Deviation/Degrees</u>	<u>Depth/Feet</u>	<u>Deviation/Degrees</u>
60	1/4	1618	7-1/2
90	1/4	1710	7-1/4
120	1-1/4	1836	8-1/4
150	1-3/4	1928	8-1/4
212	3	2023	8-1/2
276	2-3/4	2117	8-1/2
306	2-1/4	2157	9-3/4
336	2	2180	9-1/2
367	2	2274	10
400	1-3/4	2379	10
426	1-3/4	2473	10
435	3	2568	10
456	1-3/4	2651	11-1/2
488	1-1/4	2745	11-3/4
546	1-1/8	2871	11-3/4
577	1-3/4	2966	12-1/2
610	1-1/2	3060	12-3/4
673	3	3115	13-3/4
703	3	3246	14
767	3-1/4	3341	14
808	3	3435	14
821	3-1/4	3534	14-1/4
126 - Reaming	1	3624	14-1/2
257	2-1/4	3970	13-1/2
340	2-1/4	4117	14
400	1-1/4	4222	14
490	1-1/4	4345	14
590	1-1/2	4627	14
704	1	4880	13
819	2-3/4	5038	14
910	3		
928	3		
960	3		
1148	4-1/4		
1243	5		
1337	6-1/2		
1429	6-1/2		
1524	7		

(f) Abandonment Plugs

Plug #1 - 5321-5221' w/50 sacks cement - Plug down at 5:45 p.m.
April 12, 1973 - no feel.

Plug #2 - 4730-4630' w/50 sacks cement + 3% CaCl_2 - Plug down at
6:45 p.m. April 12/73
Felt at 4635' at 2:45 a.m. April 13, 1973

Plug #3 - 3052-2952' w/55 sacks cement + 3% CaCl_2 - Plug down at
5:30 a.m. April 13/73
Felt at 2940' at 1:30 p.m. April 13, 1973

Plug #4 - 2260-2160' w/60 sacks cement + 3% CaCl_2 - Plug down at
3:00 p.m. April 13/73
Felt at 2155' at 11:00 p.m. April 13, 1973

Plug #5 - 860-760' w/60 sacks cement + 3% CaCl_2 - Plug down at
12:01 a.m. April 14/73
Felt at 750' at 8:00 a.m. April 14, 1973.

5 sacks of cement in top of surface casing,
plate welded on same, sign installed.

Rig Released @ noon - April 14, 1973

(g) Lost Circulation Zones - none

(h) Report of Blowouts - none

SECTION IV - SUMMARY OF LOGS

By Schlumberger

<u>Type</u>	<u>Run No.</u>	<u>Date</u>	<u>Interval</u>
Dual Induction-Laterolog	1	April 10/73	811 - 5299'
Borehole Compensated Sonic Log	1	April 10/73	812 - 5303'
Sidewall Neutron Porosity Log	1	April 10/73	812 - 5302'
Formation Density Log	1	April 10/73	810 - 5302'

SECTION V - ANALYSIS



WATER ANALYSIS



File 7011-3257 Page 1 of 1

Company CanDel Oil Ltd.

Well CanDel et al Mobil S Ramparts I-77 K.B. Grd. 1940'

Location 65 26'32.00 N.L.
130°58'18.00 W.L. Field Fort Good Hope Province

Formation Interval 3712' - 3862'

Sampled from DST #1 (BJ Tool RFS 13) by BJ Testers

Date sampled April 5/73 Date analysed April 18/73 Analyst LK

Recovery Tool Recovery: 2000 cc water, gas = nil.

Mud type Water cushion

Resistivity 0.843 Ohm-meters @ 72 °F Total Solids: Calculated 7,042 mg/liter

Specific gravity 1.0056 @ 60°F By evaporation @ 110°C - mg/liter

pH 7.6 H₂S Absent By evaporation @ 180°C - mg/liter

Refractive Index 1.3338 @ 73°F At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
2399	229	65	Trace	-	-	-	4201	132	16	0	0

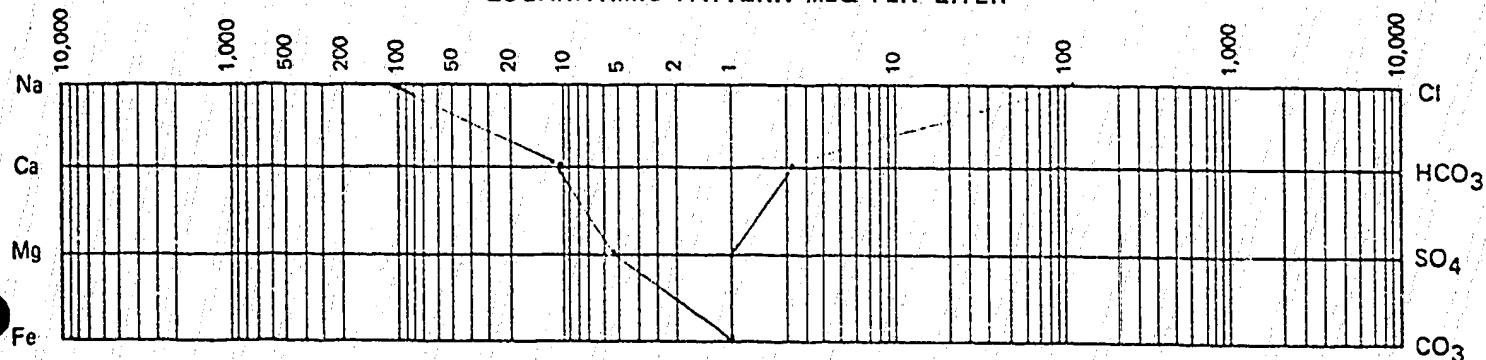
PER CENT CALCULATED SOLIDS

34.1	3.3	.9	Trace	-	-	-	59.7	1.9	.2	.0	.0
------	-----	----	-------	---	---	---	------	-----	----	----	----

MEQ PER LITER

104.3	11.4	5.3	Trace	-	-	-	118.5	2.2	.3	.0	.0
-------	------	-----	-------	---	---	---	-------	-----	----	----	----

LOGARITHMIC PATTERN MEQ PER LITER



6992. 2399.0



CORE LABORATORIES - CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS



File 7021-3669 Page 1 of 1

Company CanDel Oil Ltd.

Well CanDel et al Mobil S Ramparts I-77 K.B. Grd. 1940'

Location 65° 26'32.00 N.L.
130° 58'18.00 W.L. Field Fort Good Hope Province

Formation Interval 4870' - 4970'

Sampled from DST #3 (Top of Tool) by BJ Services

Date sampled April 12/73 Date analysed May 11/73 Analyst L. Kinsella

Recovery Fresh water.

Mud type Water cushion

Resistivity 1.47 Ohm-meters @ 70 °F

Specific gravity 1.0037 @ 60°F

pH 7.6 H₂S Absent

Refractive Index 1.3326 @ 74°F

Total Solids:

Calculated 4,389 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
1578	79	31	Trace	-	-	-	2589	83	29	0	0

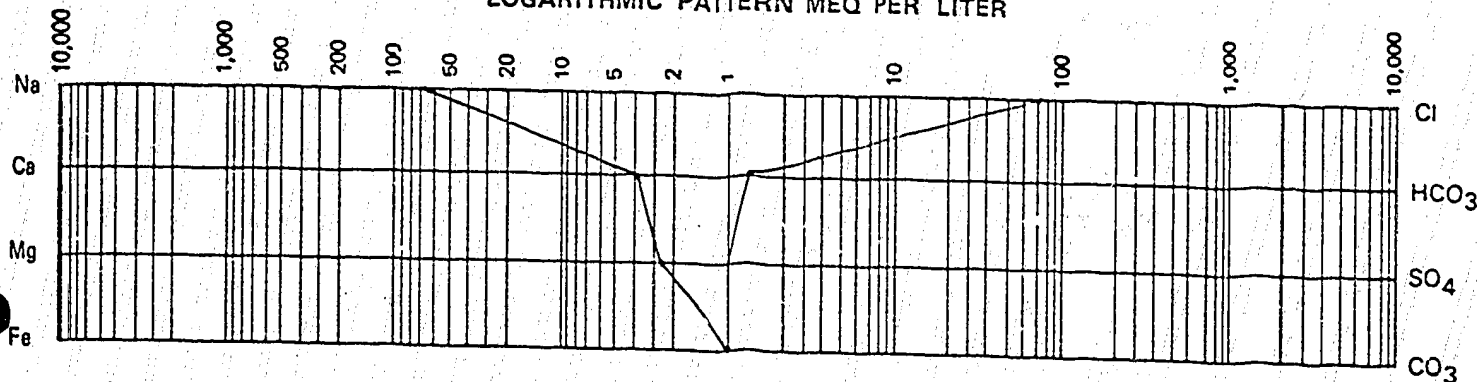
PER CENT CALCULATED SOLIDS

36.0	1.8	.7	Trace	-	-	-	59.0	1.9	.7	.0	.0
------	-----	----	-------	---	---	---	------	-----	----	----	----

MEQ PER LITER

68.6	3.9	2.5	Trace	-	-	-	73.0	1.4	.6	.0	.0
------	-----	-----	-------	---	---	---	------	-----	----	----	----

LOGARITHMIC PATTERN MEQ PER LITER



M-NWT 679
Candel et al Mobil S. Ramparts I-77

821-11-05-017

M-NWT 679
Candel et al Mobil S. Ramparts I-77



Well Name Nom du puits		CanDel et al Mobil S. Ramparts I-77		Drilling Authority No. Autorisation de forage n°		679	
Field/Area Gisement/Région				Date Issued Date d'émission		March 1, 1973	
Location Emplacement		Unit Unité		Section		Permit or Lease 4431	
		I-77-65-30-130-45					
Latitude		65°26'32"		Longitude		130°58'18"	
U.W.L.R. N.R.U.E.P.		65.44222 -- 130.97167					
U.W.I. No. N.I.P. No.		300I776530130450					
File Microfilmed				Rig. Release Date Date de transfert de la tour de forage		14-4-73	
Tour Sheets, Microfilmed				Status Statut		D+A	
				Information Release Date Date de publication autorisée des informations		14-4-75	

CHANGE OF NAME:
CHANGEMENT DE NOM:Change of Location
Changement de emplacement

INDEX	DATE RECEIVED RECU LE	INDEX
Application for a Drilling Authority	06-03-73 K	Demande d'autorisation de forage
Well Completion Data	30-5-73 K	Renseignements sur le forage d'un puits
Well History Report	30-5-73 K	Données chronologiques sur le puits
Application to Amend a Drilling Authority		Demande de modification d'une autorisation de forage
Application to Change a Well Name		Demande de changement du nom d'un puits
Application to Abandon a Well or Suspend Drilling		Demande d'abandon d'un puits ou de suspension du forage
Application to Alter Condition of a Well		Demande d'autorisation de modifier l'état d'un puits
Well History Supplement		Supplément aux données chronologiques sur le puits
Well Completion Data		Renseignements sur le forage d'un puits
Work-Over Report No.		Rapport de reconditionnement n°
Application to Commingle Production before Measurement		Demande d'autorisation de mélanger la production avant jaugeage
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel - Méthode graphique n° 7
Data for Back Pressure Test on Natural Gas Wells		Données de calcul de la capacité de production d'un puits de gaz naturel - Méthode de Vitter
M.P.R. - Oil - Calculations		Calcul du T.M.P. (Taux maximal de production) de pétrole
New Oil Well Report		Rapport sur un nouveau puits de pétrole
New Gas Well Report		Rapport sur un nouveau puits de gaz naturel
Well Inspection Report		Rapport d'inspection de l'emplacement d'un puits
Rig Inspection Report		Rapport d'inspection d'une tour de forage
Battery Inspection Report		Rapport d'inspection d'une batterie de puits
Equipment Report		Rapport d'inspection des compteurs
Well Card		Fiche de puits
New Service Well Report		Rapport sur un nouveau puits de service
Strat Service Logs		Rapport mensuel des injections d'eau
Logs - Large scale		Diagrammes: Grande échelle
Logs - Small scale		Diagrammes: Petite échelle

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.
À présenter en double dans les trente jours suivant l'achèvement, le remaniement, l'abandon et le reconditionnement de chaque puits, ou après suspension.

Well Name & No. - Nom et n° du puits CanDel et al Mobil S. Ramparts I-77		Permit No. - N° de permis 4431	Lease No. - N° de concession
(Permittee, License, Lessee) - (Défendeur de permis ou de licence, du concessionnaire) Mobil Oil Canada, Ltd.		Exploratory Licence No. - N° de licence de sondage 1471	
(Operator) - (Exécutant) CanDel Oil Ltd.		Exploratory Licence No. - N° de licence de sondage 1534	

LOCATION - EMPLACEMENT				
Unit - Unité I	Section 77	Grid - Étendue quadrillée 65-30-130-45	Latitude 65° 26' 32"	Longitude 130° 58' 18"
Unique Well Identifier - Code d'ordinateur 3001776530130450			Universal Well Location Reference - Références universelles d'emplacement du puits 65.44222° N 130.97167° W	

	Date	Depth - Profondeur	Pool(s) Gisement(s)
Spudded Début des travaux	Mch. 14/73		
Suspended Suspension des travaux			Interval(s) Open to Production Intervalle(s) de production
Resumed Operations Reprise des travaux			
Finished Drilling Forage terminé	Apr. 10/73	5321'	
Deepened Approfondissement			
Complete (Gas/Oil) Achèvement (Gaz/Pétrole)			
Abandoned Abandon	Apr. 14/73	5321'	Elevation: Gr. 1940' K.B. 1954' Altitude du sol du carré d'entraînement
Rig Released Fin des travaux	Apr. 14/73	5321'	Rig No. 9 Drilling Contractor Jennings Int. Dr. N° de la tour de forage Entrepreneur en forage
			Contractor's Business Licence No. 10881 N° du permis de l'entrepreneur

CASING RECORD - TUBAGE					
Casing Size (Inches) Diamètre (en pouces)	Grade Qualité	Weight Poids	Amount Longueur	Set at - Fixation à	Sacks of Cement and Additives Sacs de ciment et d'additifs
1. 9-5/8"	KS	36	824.02	819	650 sacks + 3% CaCl₂
2.					Recemented w/160 sacks
3.					+ 3% CaCl₂
4.					
5.					
6.					

Geological Tops Sommet des formations	Elevation - Profondeur		Core Record - Carottes					
	Depths Sous le niveau du sol	Sub-Sea Sous le niveau de la mer	From - de	To - à	Rec. Récupérées	From - de	To - à	Rec. Récup.
Canol	2195	- 241						
Hare Indian	2486	- 532						
Hume	2580	- 626						
Headless	2762	- 808						
Gossage	3005	- 1051						
Ronning	4681	- 2627						

Log Record - Diagrammes			
Run Série	Type of Log Genre de diagramme	From - De	To - À
1	Dual Induction Laterolog	811	5299
1	Borehole Compensated Sonic Log	812	5303
1	Sidewall Neutron Porosity	812	5302
1	Formation Density	810	5302

CEMENTING RECORD (Plug Squeeze, etc.) CIMENTATION (Bouchon, sous pression, etc.)				PERFORATING RECORD (Bullet, Jet) PERFORATION (à balles, à jet)				SERVICING RECORD (Acidizing, Fracing, etc.) ENTRETIEN (acidification, fracturation, etc.)			
Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques	Date	From - de	To - à	Remarks - Remarques
Apr. 12	5321	5221	50 sx. Down 5:45 pm.								
Apr. 12	4730	4630	50 sx. + 3% CaCl ₂ . Down 6:45 pm. Felt @ 4635'								
Apr. 13	3052	2952	55 sx. + 3% CaCl ₂ . Down 5:30 am. Felt @ 2940'								
Apr. 13	2260	2160	60 sx. + 3% CaCl ₂ . Down 3:00 pm. Felt @ 2155'								
Apr. 14	860	760	60 sx. + 3% CaCl ₂ . Down 12:01 am. Felt @ 750'								
			5 sx. top surface casing. Plate welded on same. Marker installed								

DRILL STEM TESTS - ESSAIS AUX TIGES

No. - N°	Date	Formation	From - de	To - à	V.O. Mins. Vapeur ouverte (minutes)	I.S.I. Mins. Première obturation (minutes)	F.S.I. Mins. Obturation définitive (minutes)	I.S.I.B.H.P. Pression de fond à la première obturation	F.S.I.B.H.P. Pression de fond à l'obturation définitive	I.F.B.H.P. Pression de fond au forage	F.F.B.H.P. Pression de fond à l'écoulement définitif	L.H.P. Pression hydrostatique de début	F.H.P. Pression hydrostatique définitive	Remarks - Remarques
1	4/5/73	Gossage	3712	3862	83	31	100	1423	1425	286	967	1614	1611	Red. 2170' fresh water.
2	4/10/73	Ronning	4870	4970	90	30	90	1917	1915	-	-	2056	2056	Misrun. Red. 762' fresh water
3	4/11/73	Ronning	4870	4970	118	none	83	-	1931	1910	1825	2078	2078	Partial misrun. Rec. 750' fresh water

ANALYSIS - ANALYSE

Lab. No. No de laboratoire	Sample Échantillon	From - de	To - à	Source	Remarks - Remarques	PRESENT STATUS OF WELL ÉTAT ACTUEL DU Puits				
						Oil Pétrole	Gas Gaz	Dry Sec	Susp. Travaux sus.	
7011-3257	Water	3712	3862	D.S.T. No. 1						
7021-3669	Water	4870	4970	D.S.T. No. 3						

Company
Société

CanDel Oil Ltd.

Signed by
Signé par

W. H. L. L. L.

Title
Titre

Vice President, Production

Date

Forms to be prepared in duplicate and forwarded to the District Conservation Engineer.

Présenter les formules remplies à l'ingénieur en conservation du district.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to drill:-

Name and number of well CanDel et al Mobil S. Ramparts I-77

Location: Unit I Section 77 Grid 65-30-130-45

Latitude 65° 26' 32" Longitude 130° 58' 18"

Unique Well Identifier 3001776530130450

Universal Well Location Reference 65.44222°N 130.97167°W

Elevation: Ground 1940' K.B. 1954 feet above sea-level.

Well is expected to produce from Sil/Ord. Ronning formation at a depth of about 4700 feet.

Expected total final depth 5200

Area assigned to well (for District Conservation Engineer's use only)

Permit No. 4431 (Group 929) Lease No. Acreage 53320

Permittee, licensee, or lessee Mobil Oil Canada, Ltd.

Exploratory Licence No. 1471

Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by Crown

We propose to use the following strings of casing, either cementing or landing them as indicated below:-

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 20" Conductor	96#	H-40	New	60'	Full Length
2. 9-5/8"	36#	K-55	New	800'	Full Length
3. 7"	23#	N-80	New	5200'	500 sacks
4.					
5. Note: If required, 16" Conductor will also be run due to possible gravel conditions	7" will be run only if commercial production found				

Expected water, gas, and oil horizons and type of control equipment.

Could be any or all horizons on Geological Prognosis

Drilling fluid and B.O.P. Equipment

Well will be drilled with Rotary Rig No. 9 by Jennings International Drilling
(Drilling Contractor or company)

Responsible agent of applicant:- Contractor's Business Licence No. 10881

At well D. R. Nelson At registered office R. K. Terrell

Address Box 54, Norman Wells Address 28th Floor, 330 5th Ave. S.W., Calgary

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at CALGARY, this 19th day of February 1973

Signed by R. K. Terrell Company CanDel Oil Ltd.

Title Vice President, Production Operator's Licence No. 1534

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved subject to the following conditions:

PLEASE SEE ATTACHED SHEET FOR CONDITION OF APPROVAL

Dated March 1, 1973

Forms to be submitted to District Conservation Engineer,
Department of Indian Affairs and Northern Development.

1.
CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY NO. 679
FOR CANDEL ET AL MOBIL S. RAMPARTS I-77

1. Copies of this Drilling Authority shall be exhibited at the Drilling rig in both the Doghouse and the Drilling Formans Office between spud and rig release dates.
2. The Company will submit to this office, on Tuesdays of each week/daily, the latest reports received by radio on the progress of the well.
3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and waste shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Any additional strings of casing must be approved by the District Conservation Engineer prior to running.
6. All significant shows of oil and/or gas are to be reported to the District Conservation Engineer immediately.
7. Should a fatal accident occur, drilling operations are to be suspended and the District Conservation Engineer notified immediately. Permission to resume drilling must be granted by the District Conservation Engineer after a fatality.
8. Forward to this Office two field print copies of all well logs with formation tops marked thereon and three copies of core analysis and fluid analysis as soon as they are available.
9. Formation tops (samples or logs) of the section penetrated each week are to be reported with the weekly drilling reports.
10. You are required to report to the Inuvik Office at least twenty-four (24) hours before spudding.

A. F. Halcrow

A. F. Halcrow
District Conservation Engineer
District 2 and 3

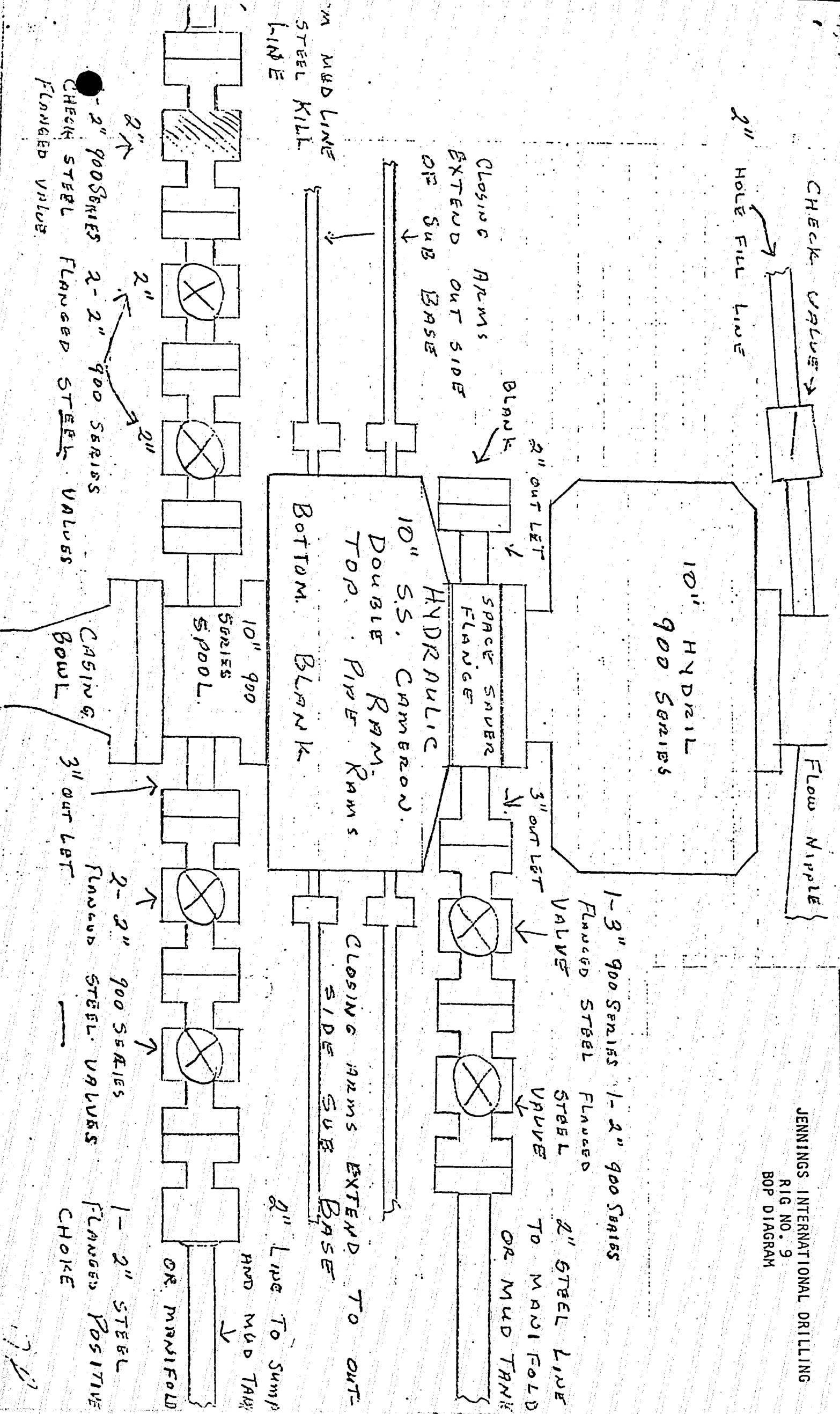
GEOLOGICAL PROGNOSIS

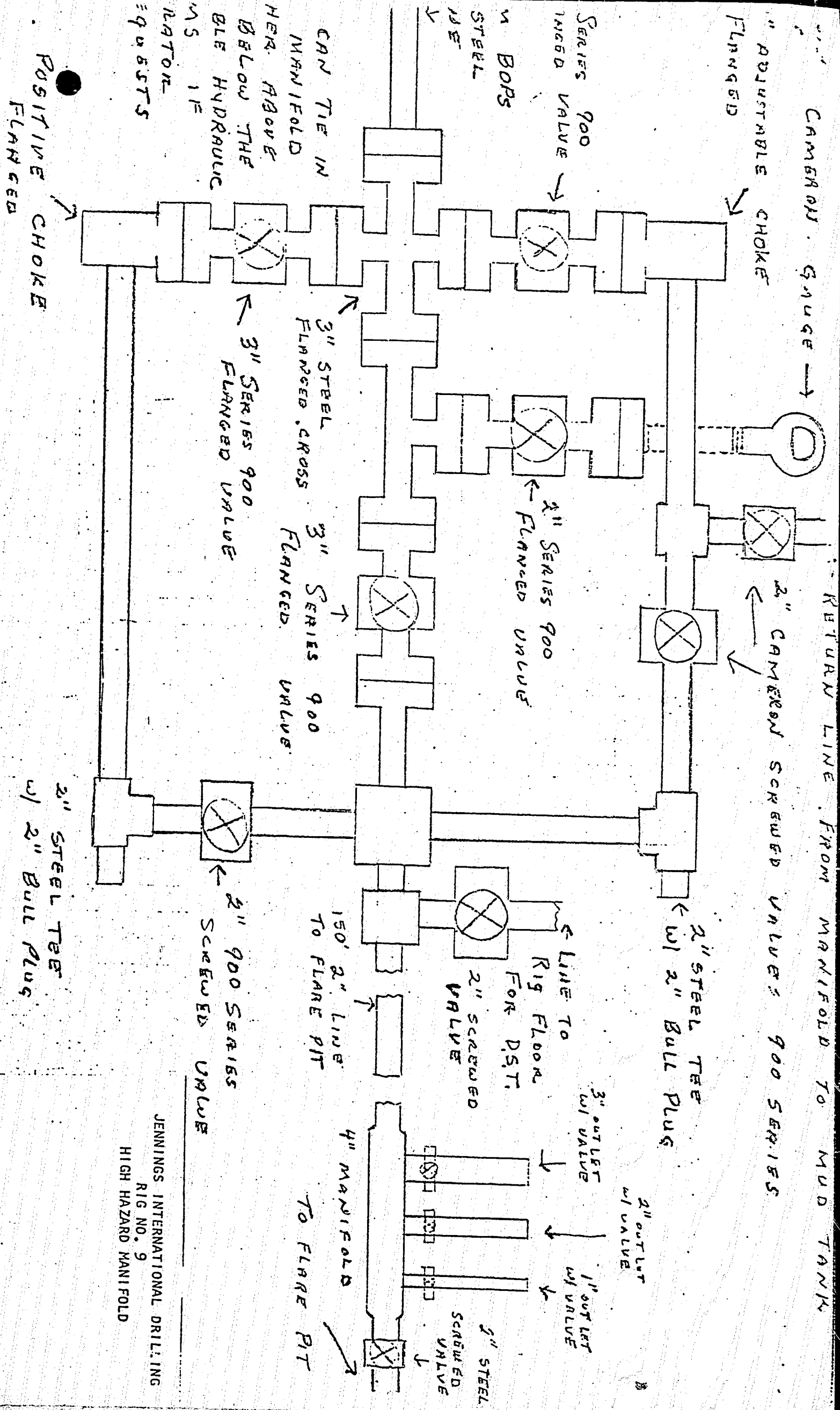
Well Name CanDel et al Mobil S. Ramparts I-77
Location 65°26'32", 130°58'18"
Elevation Ground 1940' (SP 3308, Line 36-52)
K. B. 1954' (Est.)
Operator CanDel Oil Ltd.
Contractor Jennings International Drilling - Rig No. 9

Markers

<u>Formation</u>	<u>Drilling Depth</u>	<u>Subsea Depth</u>
Upper Devonian Imperial	Near Surface	
Canol	1314	+ 640
Harc Indian	1444	+ 510
Middle Devonian Hume	2194	- 240
Gossage	2794	- 840
Sil/Ord. Ronning	4700	- 2746
TOTAL DEPTH	5200	- 3246

DME'fh
Feb. 16/73



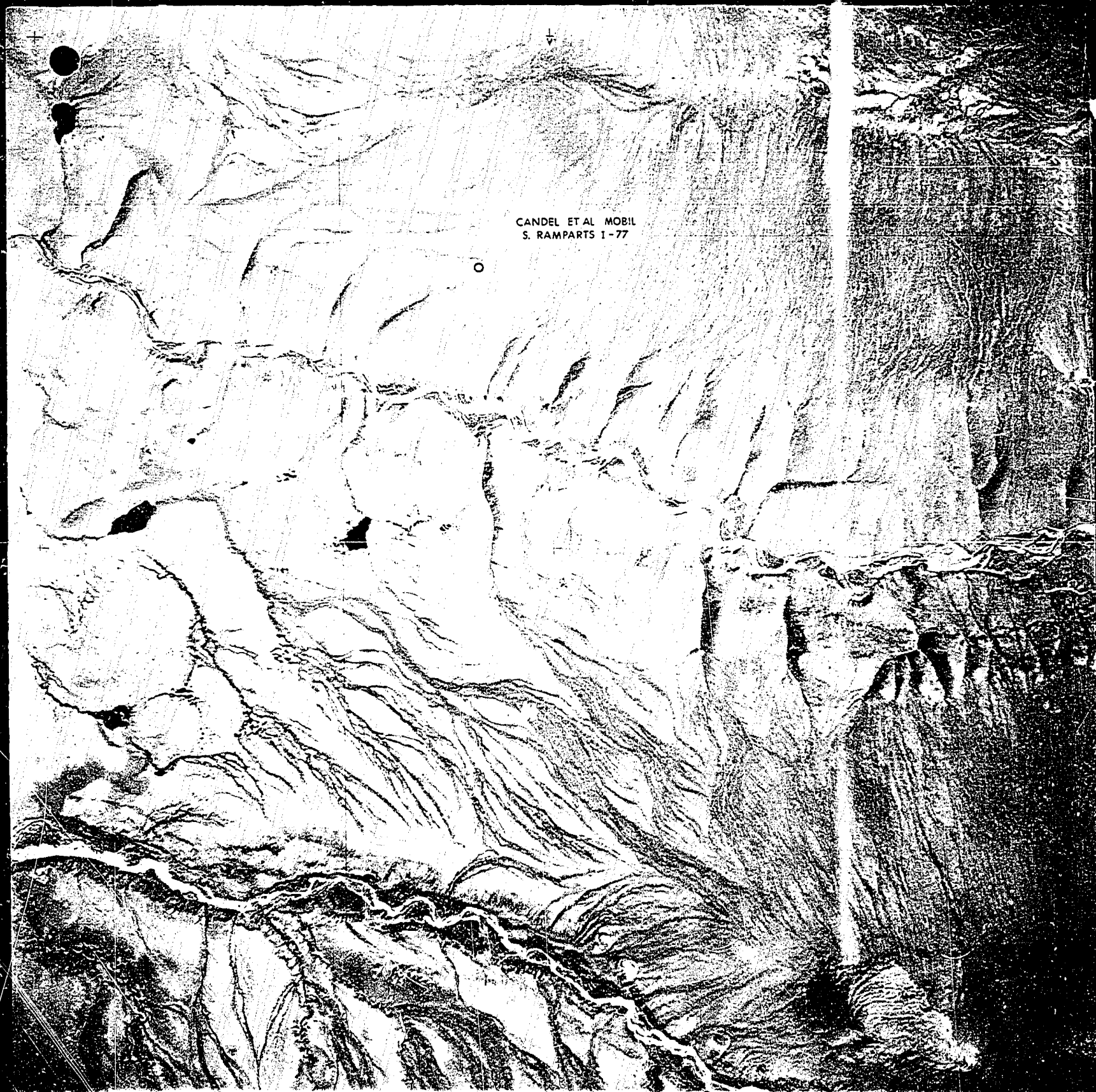


JENNINGS INTERNATIONAL DRILLING
RIG NO. 9
HIGH HAZARD MANIFOLD

NORTH

CANDEL ET AL MOBIL
S. RAMPARTS 1-77

CANADIAN GOVT



NORTH

CANDEL ET AL MOBIL
S. RAMPARTS 1-77

112252/1
CANADIAN GOVT

NORTH

CANDEL ET AL MOBIL
S. RAMPARTS 1-77

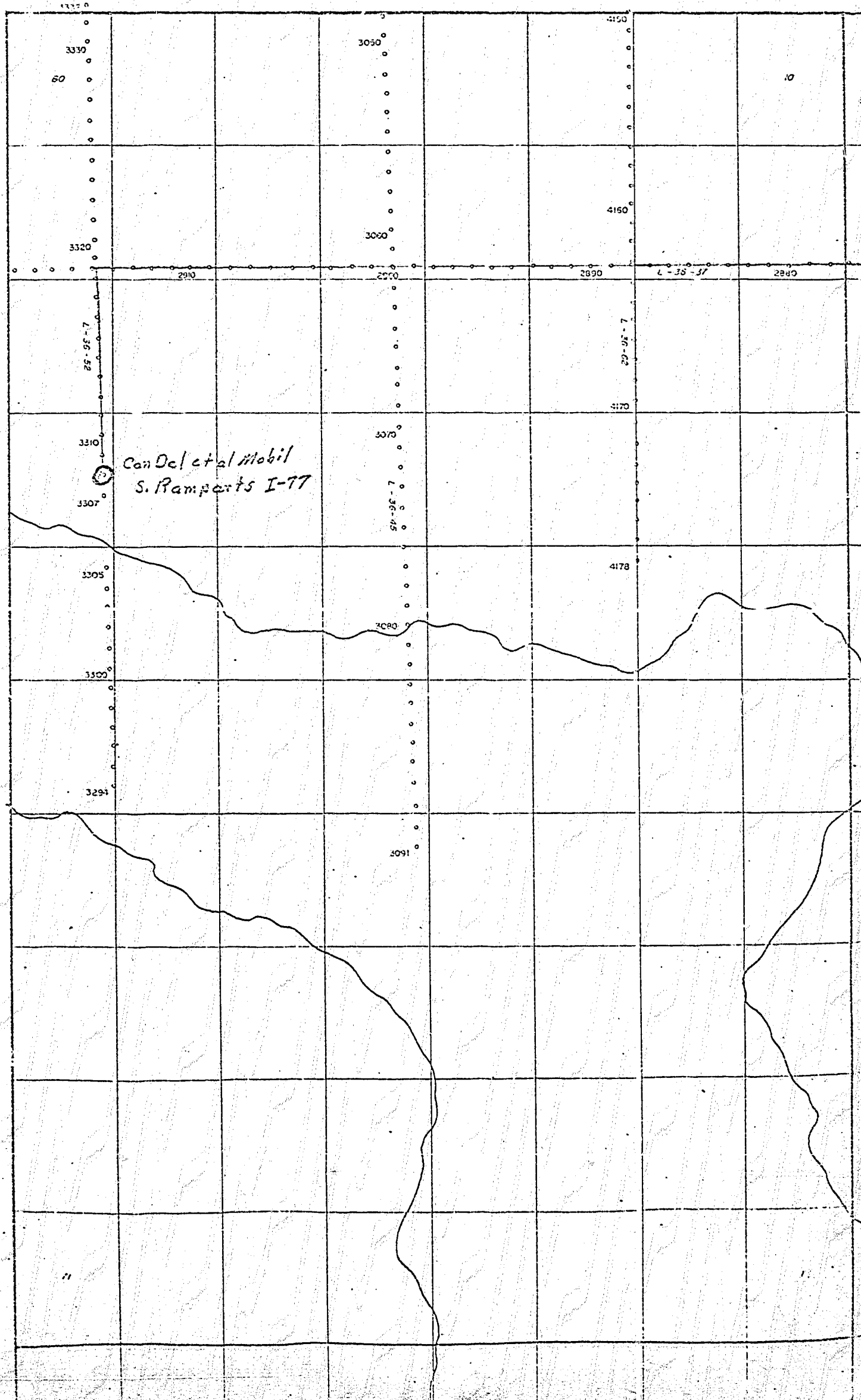
112259-14

CANADIAN GOVT

5 PARTS I-77

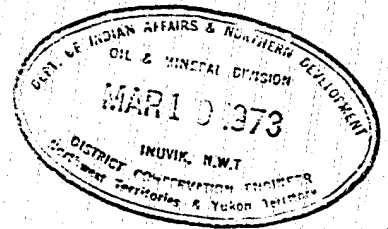
65° 30'

130° 4'



65 9 20

GENERAL PROGRAM



WELL: CanDel et al Mobil S. Ramparts I-77

LOCATION 65° 26' 32" x 130° 58' 18"

ELEVATION: Ground: 1940' K.B.: 1954'

OPERATOR: CanDel Oil Ltd. Licence No. 1534

CONTRACTOR: Jennings International Drilling Licence No. 10881

RIG: No. 9

DRILLING
AUTHORITY: No. 679

Conductor Pipe

Roberts Rat Hole has set 30' of 20" 96# conductor casing. This casing is cemented full length using a pre-heated water and not less than 3% Calcium Chloride. Depending on the amount of rock and gravel left to penetrate, it may be necessary to run 16" conductor also. This pipe is ready at Jennings in Edmonton

Surface Hole and Surface Casing

An 8-3/4" pilot hole is to be drilled to 800' and surveys taken at intervals which will assure a deviation not to exceed 3°. This pilot hole is to be drilled without the use of the square collar assembly since gravel encountered in these surface holes tend to damage the square assembly to a point which makes hole deviation control below surface casing difficult.

The pilot hole is to be opened to 13-3/4" by means of a hole opener assembly to include an 8-3/4" pilot bit. Condition the hole, dummy trip to ensure good hole conditions and run surface casing - 800' of 9-5/8" 36# K-55 - to be run with a float shoe, one centralizer, a float collar and another centralizer above the collar.

Circulate the casing until the annulus clears up and cement full length. Cement requirements will depend on conditions encountered during the drilling of the surface hole. When the plug is down, set the casing on bottom and center the casing in the rotary table, where it is to set for 12 hours. Record all casing, cement and time details on the tour report. At the end of the W.O.C. period cut the casing and dress the top to allow the installation of the slip-lock casing bowl.

B.O.P. Stack

Upon satisfactory installation of the casing bowl, assemble the B.C.P. Stack after it has been properly steamed and cleaned out. A new seal ring is to be installed between the bowl and the bottom stack flange. Install kill lines, flare lines and well control choke manifold. Ensure that steam heaters around the stack are operating properly and that satisfactory temperatures in the stack area are attained and maintained. Before drilling out, adequately test all joints, flanges and rams in the B.O.P. Stack and record on tour sheet. B.O.P. equipment is to be exercised on each trip and recorded after 2000'.

Main Hole

Pick up the square collar assembly as engineered by Drilco and proceed in an 8-3/4" hole.

Deviation is not a critical item prior to development drilling, however it is not considered that 10° at total depth is unreasonable and will help the total "days on" situation.

Mud

This hole will start in Devonian formations near the surface, terminating approximately 500' into the Ronning. Run a low weight, medium viscosity gel mud with good cleaning properties.

The Canol, Hume and Ronning could all be potentially productive and may be tested.

Drill Stem Test Procedures

It is hoped that all intervals which exhibit qualities and/or quantities that warrant testing will be detected on the way down and tested upon penetration as a bottom-hole test. This will prevent extensive invasion and

damage. A great deal of discretion will be required of the wellsite personnel.

All tests should have the following initial requirements as a bottom hole test over a newly opened interval:

Pre-flow - at least 3 minutes.

Initial Shut In - 30 minutes

Valve Open - If test appears to die in a very short time (up to 20 mins.) leave tool open for 45 minutes.
If test appears to have substantial life (tends to increase or comes in fairly strong and blow is maintained or even decreases in the manner of rising fluid column) leave tool open for 90 minutes.

Final Shut In - This period should be equal to the Valve Open time, which has been determined by the nature of the Valve Open flow.

Should a test have violent velocities, which tend to wash out equipment and fittings, or in some other way create concern with regard to safety, common sense and caution should dictate flow periods.

Should the test require less than the planned 90 minutes, maintain the final shut-in for the planned 90 minutes. Top, middle and bottom fluid samples are to be taken on each fluid recovery and a gas sample taken where possible.

Water Consumption

An accurate record of all water hauled to the lease is to be kept on a daily, 24-hour basis. This is to indicate gallons delivered and for what purpose - Rig or Camp. This record is to be forwarded to Kelly MacGregor, in Norman Wells, on a weekly basis in order that it can be sent to Calgary.

Water haulers are required to enter gallonage on each daily time ticket. This entry is just as important as the number of hours worked, and if entry is not made there will be no pay for that hauling period.

Garbage and Waste Disposal

All camp garbage, boxes, waste food, etc. will be burned on a daily basis - every afternoon - in the incineration equipment provided. This will prevent the attraction of wild life and it's chance of becoming a menace.

All ashes are to be placed in the sewage pit for burial upon clean-up.

The incinerator is to receive proper care and be kept cleaned out. Fuel is to be added only while the unit is shut down. Proper pre-heating is to be reached before garbage is put in. Idle heating situations will not be tolerated due to fuel consumption. When the unit is properly heated get the garbage burned, unit shut down, ashes into the ash bin and leave ready for the next burning.

Rig waste - sacks, filters, rags, boxes, etc. are to be kept cleaned up and burned in the bottom of the flare pit.

Do not throw discarded cans, etc. in the snow, as it will be necessary to come in by helicopter when the snow thaws and clean it up. If helicopter clean up is required the cost will be split between every contractor involved in the project. Oil cans, drums, etc. as a result of servicing along the road will be brought back to the location and properly disposed of.

Sea-Cans (Wooden Material Crates)

These are to be dismantled, wire clips placed in substantial boxes, all lumber material neatly stacked in order that they can be returned for re-use. These Sea-Cans cost \$38.00 each and the total box requirement shipped from Hay River this summer approached \$50,000.00. Use care in handling boxes with the fork lift as the bottom pallets will be torn up if a little judgement is not used.

Material Transferred from Stock Piles

Accurate record is to be kept on a weekly basis of the number of boxes moved to the rig, number of sacks and contents in each box, gallons of fuel and gasoline, barrels of kerosene. Record everything that is moved. Truck drivers are to put this on their daily time ticket or they will not be paid. Each week these tickets are to go to Kelly MacGregor in Norman Wells in order that transfers can be made and sent to the Calgary office.

Well Reports, etc.

Check all material attached to the Drilling Authority regarding reporting and notification required by the Northwest Territories Government.

Contacts

<u>Name</u>	<u>Location</u>	<u>Telephone</u>
Kelly MacGregor	Norman Wells Camp	3196
Dave Nelson	Norman Wells Camp or Well	3196
Jennings Drilling	Edmonton	469-2301
Bain Bros. Const.	Norman Wells Camp or Edmonton	466-0233
PeBen Trucking	Norman Wells Camp or Edmonton	699-5525
Sterling Air	Red Deer	886-4550
CanDel Oil Ltd.	Calgary	265-3430
R. K. Terrell	(home)	289-7652
D. M. Ericson	(home)	252-3277

DAILY DRILLING REPORT

REPORT NO. 30

DATE

April 14/73

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																			
CANDEL OIL		CANDEL ITAL MOBIL S. RAMPARTS		I-77		SOUTH RAMPARTS				N. W. T.																			
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS													
Jennings International Drilling		9	6 1/4 O.D.	X14					9 1/8	mm	36	20	824		819	810 MARKS Cement													
Division of Pancan Industries Ltd.																3% CaCl													
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO.		MANUFACTURER	TYPE	STROKE LENGTH																					
		J. J. Bailey		1.		EMSCO	DA500	16"																					
				2.		EMSCO	DA500	16"																					
				3.																									
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
MORN		DAY		EVE		STANDS D.P.		FT.		BIT NO.		TIME		FROM		TO		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
RIG UP & TEAR DOWN						SINGLES D.P.		FT.		SIZE		WEIGHT																	
DRILLING ACTUAL						D.C.				MFG.		VISC.-SEC																	
REAMING						I.D. O.D.		FT.		TYPE		W.L.-C.C.																	
CONDITIONING MUD & CIRCULATING						D.C.				NOZZLE		FLTR. CK.																	
TRIPS						I.D. O.D.		FT.		NO.		PH																	
LUBRICATE RIG						STB. BODY O.D.		FT.		SER. NO.		SD. CONT. %																	
DEVIATION SURVEY						STB. BODY O.D.		FT.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.						RMR. BODY O.D.		FT.		DEPTH IN																			
CUT OFF DRILLING LINE						SUBS O.D.		FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
REPAIR RIG						BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE		AMT.		TYPE		AMT.											
CORING						KELLY DOWN		FT.		COND. OF BIT																			
WIRE LINE LOGGING						TOTAL		FT.		REAMER NO.																			
RUNNING CASING & CEMENTING						WT. OF STRING		LBS.		REAMER TYPE		DRILLER		Dave Frykas															
WAITING ON CEMENT																													
DRILL STEM TEST																													
OTHER																													
FISHING																													
COMPLETION WORK																													
A. PERFORATING																													
B. TUBING TRIPS																													
C. SWABBING																													
D. TESTING																													
E. ADDITIONAL																													
TOTALS																													
TIME SUMMARY (OFFICE USE ONLY)																													
DAY WORK																													
HRS. W/DP																													
HRS. WO/DP																													
HRS. STANDBY																													
TOTAL DAY WORK																													
WIRE LINE RECORD																													
REEL NO.																													
NO. OF LINES																													
SIZE																													
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON MI. OR TRIPS SINCE LAST CUT																													
CUMULATIVE TON MI. OR TRIPS																													
NO. OF DAYS FROM SPUD																													
CUMULATIVE ROTATING HRS.																													



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

April 13/73

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE APRIL 12/73

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT										REPORT NO. 27	DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
OPERATOR CANDEL OIL			LEASE CANDEL ETAL MOBILE S. Ramparts			WELL NO. E-77		FIELD OR DIST. SOUTH RAMPARTS		COUNTY		STATE N.W.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.			RIG NO. 9	DRILL PIPE STRING NO. 2 SIZE 4 1/2	TOOL JOINT 6 1/4 O.D.	PUMPS		LAST CASING TUBING OR LINER		SIZE 9 5/8 MM	MAKE #30	WT. & GR. 20	FEET 824																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Jerry Bailey</i>			SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Jerry Bailey</i>			MANUFACTURER EMSCO		TYPE DA500 16"		STROKE LENGTH 16"		REMARKS 810 SKS CEMENT 3% CACI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">TIME DISTRIBUTION—HOURS</th> <th colspan="2">DRILLING ASSEMBLY AT END OF TOUR</th> <th colspan="2">BIT RECORD</th> <th colspan="2">MUD RECORD</th> <th colspan="2">FOOTAGE</th> <th colspan="2">FORMATION (SHOW CORE RECOVERY)</th> <th colspan="2">ROTARY</th> <th colspan="2">PUMP NO.</th> <th colspan="2">PUMP NO.</th> <th colspan="2">METHOD RUN</th> </tr> <tr> <th>MORN</th> <th>DAY</th> <th>EVE</th> <th></th> <th>STANDS D.P.</th> <th>FT.</th> <th>BIT NO.</th> <th></th> <th>TIME</th> <th></th> <th>FROM</th> <th>TO</th> <th>DR-D RM-R CORE-C</th> <th>CORE NO.</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> </tr> </thead> <tbody> <tr> <td colspan="4">RIG UP & TEAR DOWN</td> <td colspan="2">SINGLES D.P.</td> <td colspan="2">SIZE</td> <td colspan="2">WEIGHT</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">DRILLING ACTUAL</td> <td colspan="2">D.C.</td> <td colspan="2">MFG.</td> <td colspan="2">VISC.-SEC</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">REAMING</td> <td colspan="2">I.D. O.D.</td> <td colspan="2">FT.</td> <td colspan="2">TYPE</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">CONDITIONING MUD & CIRCULATING</td> <td colspan="2">D.C.</td> <td colspan="2">NOZZLE</td> <td colspan="2">FLTR. CK.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TRIPS</td> <td colspan="2">I.D. O.D.</td> <td colspan="2">FT.</td> <td colspan="2">PH</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">LUBRICATE RIG</td> <td colspan="2">STB. BODY O.D.</td> <td colspan="2">FT.</td> <td colspan="2">SD. CONT. %</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">DEVIATION SURVEY</td> <td colspan="2">STB. BODY O.D.</td> <td colspan="2">FT.</td> <td colspan="2">PRESSURE GRADIENT</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TEST B.O.P.</td> <td colspan="2">RMR. BODY O.D.</td> <td colspan="2">FT.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">CUT OFF DRILLING LINE</td> <td colspan="2">SUBS O.D.</td> <td colspan="2">FT.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">REPAIR RIG</td> <td colspan="2">BIT OR C.B.</td> <td colspan="2">FT.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">CORING</td> <td colspan="2">KELLY DOWN</td> <td colspan="2">FT.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">WIRE LINE LOGGING</td> <td colspan="2">TOTAL</td> <td colspan="2">FT.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">RUNNING CASING & CEMENTING</td> <td colspan="2">WT. OF STRING</td> <td colspan="2">LBS.</td> <td colspan="2">REAMER TYPE</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">WAITING ON CEMENT</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2">DRILLER <i>David Frykoo</i></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">DRILL STEM TEST</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">OTHER</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">FISHING</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">COMPLETION WORK</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">A. PERFORATING</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">B. TUBING TRIPS</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">C. SWABBING</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">D. TESTING</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">E. ADDITIONAL</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TOTALS</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TIME SUMMARY (OFFICE USE ONLY)</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">DAY WORK</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">HRS. W/DP</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">HRS. WO/DP</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">HRS. STANDBY</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TOTAL DAY WORK</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">WIRE LINE RECORD</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">REEL NO.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">NO. OF LINES</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">FEET SLIPPED</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">FEET CUT OFF</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">PRESENT LENGTH</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">TON M. OR TRIPS SINCE LAST CUT</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">CUMULATIVE TON M. OR TRIPS</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">NO. OF DAYS FROM SPUD</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="4">CUMULATIVE ROTATING HRS.</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> </tbody> </table>														TIME DISTRIBUTION—HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY		PUMP NO.		PUMP NO.		METHOD RUN		MORN	DAY	EVE		STANDS D.P.	FT.	BIT NO.		TIME		FROM	TO	DR-D RM-R CORE-C	CORE NO.	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	RIG UP & TEAR DOWN				SINGLES D.P.		SIZE		WEIGHT														DRILLING ACTUAL				D.C.		MFG.		VISC.-SEC														REAMING				I.D. O.D.		FT.		TYPE														CONDITIONING MUD & CIRCULATING				D.C.		NOZZLE		FLTR. CK.														TRIPS				I.D. O.D.		FT.		PH														LUBRICATE RIG				STB. BODY O.D.		FT.		SD. CONT. %														DEVIATION SURVEY				STB. BODY O.D.		FT.		PRESSURE GRADIENT														TEST B.O.P.				RMR. BODY O.D.		FT.																CUT OFF DRILLING LINE				SUBS O.D.		FT.																REPAIR RIG				BIT OR C.B.		FT.																CORING				KELLY DOWN		FT.																WIRE LINE LOGGING				TOTAL		FT.																RUNNING CASING & CEMENTING				WT. OF STRING		LBS.		REAMER TYPE														WAITING ON CEMENT								DRILLER <i>David Frykoo</i>														DRILL STEM TEST																						OTHER																						FISHING																						COMPLETION WORK																						A. PERFORATING																						B. TUBING TRIPS																						C. SWABBING																						D. TESTING																						E. ADDITIONAL																						TOTALS																						TIME SUMMARY (OFFICE USE ONLY)																						DAY WORK																						HRS. W/DP																						HRS. WO/DP																						HRS. STANDBY																						TOTAL DAY WORK																						WIRE LINE RECORD																						REEL NO.																						NO. OF LINES																						FEET SLIPPED																						FEET CUT OFF																						PRESENT LENGTH																						TON M. OR TRIPS SINCE LAST CUT																						CUMULATIVE TON M. OR TRIPS																						NO. OF DAYS FROM SPUD																						CUMULATIVE ROTATING HRS.																					
TIME DISTRIBUTION—HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY		PUMP NO.		PUMP NO.		METHOD RUN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
MORN	DAY	EVE		STANDS D.P.	FT.	BIT NO.		TIME		FROM	TO	DR-D RM-R CORE-C	CORE NO.	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
RIG UP & TEAR DOWN				SINGLES D.P.		SIZE		WEIGHT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
DRILLING ACTUAL				D.C.		MFG.		VISC.-SEC																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
REAMING				I.D. O.D.		FT.		TYPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
CONDITIONING MUD & CIRCULATING				D.C.		NOZZLE		FLTR. CK.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
TRIPS				I.D. O.D.		FT.		PH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
LUBRICATE RIG				STB. BODY O.D.		FT.		SD. CONT. %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
DEVIATION SURVEY				STB. BODY O.D.		FT.		PRESSURE GRADIENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
TEST B.O.P.				RMR. BODY O.D.		FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
CUT OFF DRILLING LINE				SUBS O.D.		FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
REPAIR RIG				BIT OR C.B.		FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
CORING				KELLY DOWN		FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
WIRE LINE LOGGING				TOTAL		FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
RUNNING CASING & CEMENTING				WT. OF STRING		LBS.		REAMER TYPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
WAITING ON CEMENT								DRILLER <i>David Frykoo</i>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
DRILL STEM TEST																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
OTHER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
FISHING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
COMPLETION WORK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
A. PERFORATING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
B. TUBING TRIPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
C. SWABBING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
D. TESTING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
E. ADDITIONAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TOTALS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TIME SUMMARY (OFFICE USE ONLY)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
DAY WORK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
HRS. W/DP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
HRS. WO/DP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
HRS. STANDBY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TOTAL DAY WORK																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
WIRE LINE RECORD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
REEL NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
NO. OF LINES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
FEET SLIPPED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
FEET CUT OFF																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
PRESENT LENGTH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TON M. OR TRIPS SINCE LAST CUT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
CUMULATIVE TON M. OR TRIPS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
NO. OF DAYS FROM SPUD																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
CUMULATIVE ROTATING HRS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										



A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 26

DATE APRIL 10/73

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																																																									
CANDEL OIL		CANDEL ETAL MOBIL S. RAMPARTS		I-77		SOUTH RAMPARTS				NWT																																																									
CONTRACTOR		RIG NO.		DRILL PIPE STRING		TOOL JOINT		PUMPS		LAST CASING TUBING OR LINER																																																									
Jennings International Drilling		9		6 1/4		O.D.		NO. MANUFACTURER TYPE STROKE LENGTH		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS																																																									
Division of Pancana Industries Ltd.				2 1/2		4 1/2		1. EMSCO DA-500 16"		9 3/4 MM #30 20 82402 819 810 SKS CEMENT																																																									
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		TYPE THD. XH				2. EMSCO DA-500 16"		3 0/0 CACL																																																									
		Tanner Bailey						3.																																																											
TIME DISTRIBUTION-HOURS				DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD				MUD RECORD				FOOTAGE				FORMATION (SHOW CORE RECOVERY)				ROTARY RPM				WT. ON BIT 1000 #				PUMP PRESS				PUMP NO. 1				PUMP NO. 2				METHOD RUN																							
MORN DAY EYE				NO. STANDS D.P. FT.				BIT NO. SIZE				TIME WEIGHT				FROM TO				DR. D RM. R CORE. C				CORE NO.				DEPTH				DEV.				DIRECTION				DEPTH				DEV.				DIRECTION				DEPTH				DEV.				DIRECTION							
RIG UP & TEAR DOWN				1 49				1 5				1 100 400 600				5244 5321				D																																															
DRILLING ACTUAL				18				18				28 28 28																																																							
REAMING				2				2																																																											
CONDITIONING MUD & CIRCULATING				1				1																																																											
TRIPS				1				1																																																											
LUBRICATE RIG				1				1																																																											
DEVIATION SURVEY				1				1																																																											
TEST B.O.P.				2				2																																																											
CUT OFF DRILLING LINE				1				1																																																											
REPAIR RIG				1				1																																																											
CORING				1				1																																																											
WIRE LINE LOGGING				1				1																																																											
RUNNING CASING & CEMENTING				1				1																																																											
WAITING ON CEMENT				1				1																																																											
DRILL STEM TEST				1				1																																																											
OTHER				1				1																																																											
FISHING				1				1																																																											
A. PERFORATING				1				1																																																											
B. TUBING TRIPS				1				1																																																											
C. SWABBING				1				1																																																											
D. TESTING				1				1																																																											
E. ADDITIONAL				1				1																																																											
TOTALS				8 8 8				8 8 8																																																											
TIME SUMMARY (OFFICE USE ONLY)																																																																			
DAY WORK																																																																			
HRS. W/DP																																																																			
HRS. WO/DP																																																																			
HRS. STANDBY																																																																			
TOTAL DAY WORK																																																																			
WIRE LINE RECORD																																																																			
REEL NO.																																																																			
NO. OF LINES				8				8																																																											
FEET SLIPPED																																																																			
FEET CUT OFF																																																																			
PRESENT LENGTH																																																																			
TON M. OR TRIPS SINCE LAST CUT																																																																			
CUMULATIVE TON M. OR TRIPS																																																																			
NO. OF DAYS FROM SPUD				26				26																																																											
CUMULATIVE ROTATING HRS.																																																																			



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 25 DATE APRIL 9/73

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE									
CANDEL OIL		CANDEL ETAL MOBIL S. RAMPARTS		I-77		S. RAMPARTS				NW T									
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS			SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS				
Jennings International Drilling Division of Pancana Industries Ltd.		9	NO. 2 SIZE 4 1/2	60 1/4 O.D. TYPE THD. XH	NO. 1 MANUFACTURER EMSCO TYPE DA-500 STROKE LENGTH 16"				9 3/8	MM	#30	20	82402	819	810 SKS CEMENT 3% CACL				
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER																	
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
MORN DAY EVE		NO. STANDS D.P. 4521.81 FT.		BIT NO. 4		TIME 1 00 4 00 6 00		FROM 5113 TO 5163		FUEL 4		54 40		1200 5 1/2		60			
RIG UP & TEAR DOWN		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.6 8.6 8.6													
DRILLING ACTUAL 6 3/4 7 3/4		D.C. 6 1/4		MFG. HW		VISC.-SEC 28 28 28													
REAMING		I.D. O.D. 539.25 FT.		TYPE 3-55		W.L.-C.C.													
CONDITIONING MUD & CIRCULATING		D.C. 59		NO. 3		FLTR. CK.													
TRIPS		I.D. O.D. 58.89 FT.		NOZZLE SIZE 12		PH													
LUBRICATE RIG 1 2 1/4		STB. BODY O.D. 4.99 FT.		SER. NO. KW852		SD. CONT. %													
DEVIATION SURVEY		STB. BODY O.D. 8.60 FT.		DEPTH OUT 5163		PRESSURE GRADIENT													
TEST B.O.P.		RM. BODY O.D. 5.64 FT.		DEPTH IN 4644															
CUT OFF DRILLING LINE		SUBS O.D. 3.78 FT.		TOTAL FTG. 519		MUD & CHEMICALS ADDED													
REPAIR RIG		BIT OR C.B. FT.		TOTAL HR. RUN 31		TYPE AMT. TYPE AMT.													
CORING		1 SHOCK SUB 10.65 FT.		COND. OF BIT 0-B															
WIRE LINE LOGGING		KELLY DOWN 9.39 FT.		REAMER NO.		DRILLER Ray J. Lester													
RUNNING CASING & CEMENTING		TOTAL 516300 FT.		REAMER TYPE															
WAITING ON CEMENT		WT. OF STRING 112,000 LBS.																	
DRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
OTHER		NO. STANDS D.P. FT.		BIT NO. 4 5		TIME 12 00		FROM 5163 TO											
FISHING		SINGLES D.P. FT.		SIZE 8 3/4 8 3/4		WEIGHT 8.6													
A. PERFORATING		D.C. 6 1/4		MFG. H.W. H.W.		VISC.-SEC 28													
B. TUBING TRIPS		I.D. O.D. 539.25 FT.		TYPE J-55 WD7		W.L.-C.C. 1/2"													
C. SWABBING		D.C. 59		NO. 3 3		FLTR. CK. 1/2"													
D. TESTING		I.D. O.D. 58.89 FT.		NOZZLE SIZE 12 12		PH													
E. ADDITIONAL		STB. BODY O.D. 4.99 FT.		SER. NO. KW-852 35802		SD. CONT. %													
TOTALS 8 8 8		STB. BODY O.D. 8.60 FT.		DEPTH OUT 5163		PRESSURE GRADIENT													
TIME SUMMARY (OFFICE USE ONLY)		RM. BODY O.D. 5.64 FT.		DEPTH IN 4644 5163															
DAY WORK		SUBS O.D. 3.78 FT.		TOTAL FTG. 519		MUD & CHEMICALS ADDED													
HRS. W/DP		BIT OR C.B. FT.		TOTAL HR. RUN 31		TYPE AMT. TYPE AMT.													
HRS. WO/DP		1 SHOCK SUB 10.65 FT.		COND. OF BIT 820															
HRS. STANDBY		KELLY DOWN FT.		REAMER NO.		DRILLER Dave P. P. P.													
		TOTAL FT.		REAMER TYPE															
		WT. OF STRING 112,000 LBS.																	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. STANDS D.P. FT.		BIT NO. 5		TIME 4 00 8 00 10 00		FROM 5163 TO 5244				54 35		1200 5 1/2		60			
		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.6 8.6 8.6													
		D.C. 6 1/4		MFG. H.W.		VISC.-SEC 28 28 28													
		I.D. O.D. 539.25 FT.		TYPE WD7		W.L.-C.C.													
		D.C. 59		NO. 3		FLTR. CK.													
		I.D. O.D. 58.89 FT.		NOZZLE SIZE 12		PH													
		STB. BODY O.D. 4.99 FT.		SER. NO. 35802		SD. CONT. %													
		STB. BODY O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT													
		RM. BODY O.D. 5.64 FT.		DEPTH IN 5163															
		SUBS O.D. 3.78 FT.		TOTAL FTG. 81		MUD & CHEMICALS ADDED													
		BIT OR C.B. FT.		TOTAL HR. RUN 7 3/4		TYPE AMT. TYPE AMT.													
		1 SHOCK SUB 10.65 FT.		COND. OF BIT 0-B															
		KELLY DOWN 27.27 FT.		REAMER NO.		DRILLER Ray J. Lester													
		TOTAL 5244.00 FT.		REAMER TYPE															
		WT. OF STRING 112,000 LBS.																	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. STANDS D.P. FT.		BIT NO. 5		TIME 4 00 8 00 10 00		FROM 5163 TO 5244				54 35		1200 5 1/2		60			
		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.6 8.6 8.6													
		D.C. 6 1/4		MFG. H.W.		VISC.-SEC 28 28 28													
		I.D. O.D. 539.25 FT.		TYPE WD7		W.L.-C.C.													
		D.C. 59		NO. 3		FLTR. CK.													
		I.D. O.D. 58.89 FT.		NOZZLE SIZE 12		PH													
		STB. BODY O.D. 4.99 FT.		SER. NO. 35802		SD. CONT. %													
		STB. BODY O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT													
		RM. BODY O.D. 5.64 FT.		DEPTH IN 5163															
		SUBS O.D. 3.78 FT.		TOTAL FTG. 81		MUD & CHEMICALS ADDED													
		BIT OR C.B. FT.		TOTAL HR. RUN 7 3/4		TYPE AMT. TYPE AMT.													
		1 SHOCK SUB 10.65 FT.		COND. OF BIT 0-B															
		KELLY DOWN 27.27 FT.		REAMER NO.		DRILLER Ray J. Lester													
		TOTAL 5244.00 FT.		REAMER TYPE															
		WT. OF STRING 112,000 LBS.																	

WIRE LINE RECORD

REEL NO.

NO. OF LINES 8 SIZE 1 1/8

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON M. OR TRIPS SINCE LAST CUT

CUMULATIVE TON M. OR TRIPS

NO. OF DAYS FROM SPUD 25

CUMULATIVE ROTATING HRS.



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE APRIL 8/73

OPERATOR CANDEL OIK						LEASE CANDEL ETAL MOBIL S. RAMPARTS						WELL NO. 1-77		FIELD OR DIST. S. RAMPARTS				COUNTY				STATE NWT							
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.						RIG NO. 9	DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. XH		TOOL JOINT 6 1/2 O.D.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH 1. EMSCO DA-500 16 2. EMSCO DA-500 16 3.				LAST CASING TUBING OR LINER		SIZE 9 3/8	MAKE MM	WT. & GR. #30	NO. JOINTS 20	FEET 824.02	RKB. TO CSG. HD.	SET AT 819	REMARKS 810 SKS CEMENT 3 % CACL					
SIGNATURE OF OPERATOR'S REPRESENTATIVE						SIGNATURE OF CONTRACTOR'S TOOL PUSHER																							
TIME DISTRIBUTION-HOURS						NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD				FOOTAGE 150'		DR. D R.M.R CORE-C		CORE NO.	FORMATION (SHOW CORE RECOVERY)				ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. / LINER SIZE S.P.M.		PUMP NO. / LINER SIZE S.P.M.	METHOD RUN SGL-S PAR-E-P COM'D-G
RIG UP & TEAR DOWN						STANDS D.P. FT.		BIT NO. 4		TIME 100 400 700				FROM TO		D			FUEL 5' 1"				50	35	1100	5 1/2 58			
DRILLING ACTUAL 7 3/4 6 1/2						SINGLES D.P. 4175.04 FT.		SIZE 8 3/4		WEIGHT 8.5 8.5 8.5				4677 4827															
REAMING						D.C. 6 1/2 I.D. O.D. 539.25 FT.		MFG. HW		VISC.-SEC 28 28 28																			
CONDITIONING MUD & CIRCULATING						D.C. 59 I.D. O.D. 588.9 FT.		TYPE J-55		W.L.-C.C.																			
TRIPS						NOZZLE NO. 3		FLTR. CK.		PH 8.0 8.0 8.0																			
LUBRICATE RIG 1/4 1/4 1/4						SER. NO. KW852		SD. CONT. %																					
DEVIATION SURVEY 1/4						DEPTH OUT -		PRESSURE GRADIENT																					
TEST B.O.P.						DEPTH IN 4644																							
CUT OFF DRILLING LINE 1						TOTAL FTG. 183		MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.																					
REPAIR RIG						TOTAL HR. RUN 10 1/2																							
CORING						COND. OF BIT 0 B																							
WIRE LINE LOGGING						REAMER NO.																							
RUNNING CASING & CEMENTING						REAMER TYPE																							
WAITING ON CEMENT						DRILLER ROSE J. LESTER																							
DRILL STEM TEST																													
OTHER																													
FISHING																													
COMPLETION WORK																													
A. PERFORATING																													
B. TUBING TRIPS																													
C. SWABBING																													
D. TESTING																													
E. ADDITIONAL																													
TOTALS 8 8 8																													
TIME SUMMARY (OFFICE USE ONLY)																													
DAY WORK																													
HRS. W/DP																													
HRS. WO/DP																													
HRS. STANDBY																													
TOTAL DAY WORK																													
WIRE LINE RECORD																													
REEL NO.																													
NO. OF LINES 8 SIZE 1 1/8																													
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON MI. OR TRIPS SINCE LAST CUT																													



A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

REPORT NO. 23 DATE APRIL 7/73

[illegible]

APPROVED



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 22

DATE APRIL 6/13

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE															
CANDEL OIL		CANDEL ETAL MOBIL S. RAMPARTS		I-77		South RAMPARTS				NWT															
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS									
Jennings International Drilling Division of Panca Industries Ltd.		9	NO. 2 SIZE 4 1/2	6 3/4 O.D. TYPE THD. XH	NO. 1 MANUFACTURER EMSCO TYPE DA-500 STROKE LENGTH 16		1		9 5/8	MM	#30	20	824.02		819	810 SKS. CEMENT 3% CACK									
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER																							
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 134		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN			
RIG UP & TEAR DOWN		STANDS D.P. 3581.16 FT.		BIT NO. 3		TIME 1 00 4 00 6 00		FROM 4100 TO 4234		D		54		30		1200		5 1/2		60		SGL. S. PARCEL-P. COM'D'S			
DRILLING ACTUAL		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.5 8.5 8.5																			
REAMING		D.C. 6 1/4		MFG. HW		VISC.-SEC 28 28 28																			
CONDITIONING MUD & CIRCULATING		I.D. O.D. 539.25 FT.		TYPE J-44		W.L.-C.C.																			
TRIPS		D.C. 59		NOZZLE NO. 3		FLTR. CK.																			
LUBRICATE RIG		I.D. O.D. 58.89 FT.		SIZE 12		PH 7.2 7.2 7.2																			
DEVIATION SURVEY		STB. BODY O.D. 4.99 FT.		SER. NO. 43914		SD. CONT. %																			
TEST B.O.P.		STB. BODY O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT																			
CUT OFF DRILLING LINE		RMR. BODY O.D. 5.64 FT.		DEPTH IN 3534																					
REPAIR RIG		SUBS O.D. 3.78 FT.		TOTAL FTG. 700		MUD & CHEMICALS ADDED																			
CORING		BIT OR C.B. FT.		TOTAL HR. RUN 44		TYPE AMT. TYPE AMT.																			
WIRE LINE LOGGING		KELLY DOWN 21.04 FT.		COND. OF BIT 0.3																					
RUNNING CASING & CEMENTING		TOTAL 4234.00 FT.		REAMER NO.																					
WAITING ON CEMENT		WT. OF STRING 105,000 LBS.		REAMER TYPE		DRILLER Ray Lester																			
DRILL STEM TEST		NO. 39		STANDS D.P. 3704.96 FT.		BIT NO. 3		TIME 8 00 12 00 4 00		FOOTAGE 143		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
OTHER		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.6 8.6 8.6		FROM 4234 TO 4377		D		54		5 1/2		1200		5 1/2		60		5 1/2		SGL. S. PARCEL-P. COM'D'S	
FISHING		D.C. 6 1/4		MFG. H.W.		VISC.-SEC 28 28 28																			
COMPLETION WORK		I.D. O.D. 539.25 FT.		TYPE J-44		W.L.-C.C.																			
A. PERFORATING		D.C. 59		NOZZLE NO. 3		FLTR. CK.																			
B. TUBING TRIPS		I.D. O.D. 58.89 FT.		SIZE 12		PH 7.2 7.2 7.4																			
C. STABBING		STB. BODY O.D. 4.99 FT.		SER. NO. 43914		SD. CONT. %																			
D. TESTING		STB. BODY O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT																			
E. ADDITIONAL		RMR. BODY O.D. 5.64 FT.		DEPTH IN 3534																					
TOTALS		SUBS O.D. 3.78 FT.		TOTAL FTG. 843		MUD & CHEMICALS ADDED																			
TIME SUMMARY (OFFICE USE ONLY)		BIT OR C.B. FT.		TOTAL HR. RUN 51 1/2		TYPE AMT. TYPE AMT.																			
DAY WORK		KELLY DOWN 41.00 FT.		COND. OF BIT 0/B																					
HRS. W/DP		TOTAL 105,000 LBS.		REAMER NO.		DRILLER David Frykko																			
HRS. WO/DP		WT. OF STRING		REAMER TYPE																					
HRS. STANDBY		NO. 40		STANDS D.P. 3830.72 FT.		BIT NO. 3		TIME 6 00 8 00 10 00		FOOTAGE 127		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
TOTAL DAY WORK		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.6 8.6 8.6		FROM 4377 TO 4504		D		54		5 1/2		1200		5 1/2		60		5 1/2		SGL. S. PARCEL-P. COM'D'S	
WIRE LINE RECORD		D.C. 6 1/4		MFG. H.W.		VISC.-SEC 28 28 28																			
REEL NO.		I.D. O.D. 539.25 FT.		TYPE J-44		W.L.-C.C.																			
NO. OF LINES 8 SIZE 1 1/8		D.C. 59		NOZZLE NO. 3		FLTR. CK.																			
FEET SLIPPED		I.D. O.D. 58.89 FT.		SIZE 12		PH 7.5 7.5 7.5																			
FEET CUT OFF		STB. BODY O.D. 8.60 FT.		SER. NO. 43914		SD. CONT. %																			
PRESENT LENGTH 3500		STB. BODY O.D. 5.64 FT.		DEPTH OUT		PRESSURE GRADIENT																			
TON M. OR TRIPS SINCE LAST CUT		RMR. BODY O.D. 4.99 FT.		DEPTH IN 3534																					
CUMULATIVE TON M. OR TRIPS		SUBS O.D. 3.78 FT.		TOTAL FTG. 970		MUD & CHEMICALS ADDED																			
NO. OF DAYS FROM SPUD 22		BIT OR C.B. FT.		TOTAL HR. RUN 58 1/2		TYPE AMT. TYPE AMT.																			
CUMULATIVE ROTATING HRS.		KELLY DOWN 41.48 FT.		COND. OF BIT 0.3																					
		TOTAL 7504.80 FT.		REAMER NO.																					
		WT. OF STRING 106,100 LBS.		REAMER TYPE		DRILLER Ray Lester																			



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT										REPORT NO. 21		DATE APRIL 5/73																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
OPERATOR CANDEL OIL				LEASE CANDELETA MORIL S. RAMPARTS				WELL NO. 1-77		FIELD OR DIST. S. RAMPARTS		COUNTY		STATE N.W.T.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.				RIG NO. 9		DRILL PIPE STRING NO. 4 1/2 SIZE 4 1/2 TYPE THD. XH		TOOL JOINT 6 1/4 O.D.		PUMPS		LAST CASING TUBING OR LINER		REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		NO. 1 EMSCO TYPE DA-500 STROKE LENGTH 16"		NO. 2 EMSCO TYPE DA-500 STROKE LENGTH 16"		NO. 3		SIZE 9 3/4 MM MAKE #30 WT. & GR. 20 FEET 82402 RKB. TO 819 SET AT 810 SK'S CEMENT		REMARKS 3% CASH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">TIME DISTRIBUTION-HOURS</th> <th colspan="2">DRILLING ASSEMBLY AT END OF TOUR</th> <th colspan="2">BIT RECORD</th> <th colspan="2">MUD RECORD</th> <th colspan="2">FOOTAGE</th> <th colspan="2">FORMATION (SHOW CORE RECOVERY)</th> <th colspan="2">PUMP NO.</th> <th colspan="2">PUMP NO.</th> <th colspan="2">METHOD RUN</th> </tr> <tr> <th>RIG UP & TEAR DOWN</th> <th>MORN</th> <th>DAY</th> <th>EVE</th> <th>STANDS D.P.</th> <th>FT.</th> <th>BIT NO.</th> <th>SIZE</th> <th>TIME</th> <th>WEIGHT</th> <th>FROM</th> <th>TO</th> <th>DR-D R.M.R. CORE-C</th> <th>CORE NO.</th> <th>ROTARY RPM</th> <th>WT. ON BIT 1000#</th> <th>PUMP PRESS</th> <th>PUMP NO. 1</th> <th>PUMP NO. 2</th> <th>SOL-S PARCEL-P COM'D-C</th> </tr> </thead> <tbody> <tr> <td>DRILLING ACTUAL</td> <td></td> <td>5 1/2</td> <td>7 1/2</td> <td>18</td> <td>539.25</td> <td>3</td> <td>8 3/4</td> <td></td> <td></td> <td>3862</td> <td></td> <td></td> <td></td> <td></td> <td>1400</td> <td>1610</td> <td>FFP</td> <td>970</td> <td></td> </tr> <tr> <td>REAMING</td> <td></td> <td></td> <td></td> <td>2</td> <td>58.89</td> <td>3</td> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CONDITIONING MUD & CIRCULATING</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.99</td> <td>43914</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TRIPS</td> <td></td> <td>1</td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>LUBRICATE RIG</td> <td></td> <td>1/4</td> <td>1/4</td> <td>2</td> <td>3.78</td> <td>3534</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DEVIATION SURVEY</td> <td></td> <td></td> <td></td> <td>1</td> <td>5.64</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TEST B.O.P.</td> <td></td> <td></td> <td></td> <td>1</td> <td>10.65</td> <td>408</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CUT OFF DRILLING LINE</td> <td></td> <td></td> <td></td> <td>1</td> <td>13.00</td> <td>29</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>REPAIR RIG</td> <td></td> <td></td> <td></td> <td>1</td> <td>3.94</td> <td>566</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CORING</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WIRE LINE LOGGING</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>RUNNING CASING & CEMENTING</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>WAITING ON CEMENT</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>DRILL STEM TEST</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OTHER</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FISHING</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>COMPLETION WORK</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TOTALS</td> <td></td> <td>8</td> <td>8</td> <td>1</td> <td>4.10</td> <td>365</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">TIME SUMMARY (OFFICE USE ONLY)</td> <td colspan="2">DRILLING ASSEMBLY AT END OF TOUR</td> <td colspan="2">BIT RECORD</td> <td colspan="2">MUD RECORD</td> <td colspan="2">FOOTAGE</td> <td colspan="2">FORMATION (SHOW CORE RECOVERY)</td> <td colspan="2">PUMP NO.</td> <td colspan="2">PUMP NO.</td> <td colspan="2">METHOD RUN</td> </tr> <tr> <td>DAY WORK</td> <td></td> <td></td> <td></td> <td>25</td> <td>3297.86</td> <td>3</td> <td>8 3/4</td> <td></td> <td></td> <td>3862</td> <td>3942</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HRS. W/DP</td> <td></td> <td></td> <td></td> <td>18</td> <td>539.25</td> <td>3</td> <td>12</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HRS. W/DP</td> <td></td> <td></td> <td></td> <td>2</td> <td>58.89</td> <td>43914</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>HRS. STANDBY</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.99</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TOTAL DAY WORK</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4">WIRE LINE RECORD</td> <td colspan="2">DRILLING ASSEMBLY AT END OF TOUR</td> <td colspan="2">BIT RECORD</td> <td colspan="2">MUD RECORD</td> <td colspan="2">FOOTAGE</td> <td colspan="2">FORMATION (SHOW CORE RECOVERY)</td> <td colspan="2">PUMP NO.</td> <td colspan="2">PUMP NO.</td> <td colspan="2">METHOD RUN</td> </tr> <tr> <td>REEL NO.</td> <td></td> <td></td> <td></td> <td>2</td> <td>58.89</td> <td>43914</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>NO. OF LINES</td> <td>8</td> <td></td> <td></td> <td>1</td> <td>4.99</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FEET SLIPPED</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>FEET CUT OFF</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PRESENT LENGTH</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>TON M. OR TRIPS SINCE LAST CUT</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CUMULATIVE TON M. OR TRIPS</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>NO. OF DAYS FROM SPUD</td> <td>21</td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>CUMULATIVE ROTATING HRS.</td> <td></td> <td></td> <td></td> <td>1</td> <td>4.60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>																TIME DISTRIBUTION-HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN		RIG UP & TEAR DOWN	MORN	DAY	EVE	STANDS D.P.	FT.	BIT NO.	SIZE	TIME	WEIGHT	FROM	TO	DR-D R.M.R. CORE-C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	SOL-S PARCEL-P COM'D-C	DRILLING ACTUAL		5 1/2	7 1/2	18	539.25	3	8 3/4			3862					1400	1610	FFP	970		REAMING				2	58.89	3	12													CONDITIONING MUD & CIRCULATING				1	4.99	43914														TRIPS		1		1	4.60															LUBRICATE RIG		1/4	1/4	2	3.78	3534														DEVIATION SURVEY				1	5.64															TEST B.O.P.				1	10.65	408														CUT OFF DRILLING LINE				1	13.00	29														REPAIR RIG				1	3.94	566														CORING				1	4.10	365														WIRE LINE LOGGING				1	4.10	365														RUNNING CASING & CEMENTING				1	4.10	365														WAITING ON CEMENT				1	4.10	365														DRILL STEM TEST				1	4.10	365														OTHER				1	4.10	365														FISHING				1	4.10	365														COMPLETION WORK				1	4.10	365														TOTALS		8	8	1	4.10	365														TIME SUMMARY (OFFICE USE ONLY)				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN		DAY WORK				25	3297.86	3	8 3/4			3862	3942									HRS. W/DP				18	539.25	3	12													HRS. W/DP				2	58.89	43914														HRS. STANDBY				1	4.99															TOTAL DAY WORK				1	4.60															WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN		REEL NO.				2	58.89	43914														NO. OF LINES	8			1	4.99															FEET SLIPPED				1	4.60															FEET CUT OFF				1	4.60															PRESENT LENGTH				1	4.60															TON M. OR TRIPS SINCE LAST CUT				1	4.60															CUMULATIVE TON M. OR TRIPS				1	4.60															NO. OF DAYS FROM SPUD	21			1	4.60															CUMULATIVE ROTATING HRS.				1	4.60														
TIME DISTRIBUTION-HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
RIG UP & TEAR DOWN	MORN	DAY	EVE	STANDS D.P.	FT.	BIT NO.	SIZE	TIME	WEIGHT	FROM	TO	DR-D R.M.R. CORE-C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	SOL-S PARCEL-P COM'D-C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
DRILLING ACTUAL		5 1/2	7 1/2	18	539.25	3	8 3/4			3862					1400	1610	FFP	970																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
REAMING				2	58.89	3	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
CONDITIONING MUD & CIRCULATING				1	4.99	43914																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
TRIPS		1		1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
LUBRICATE RIG		1/4	1/4	2	3.78	3534																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
DEVIATION SURVEY				1	5.64																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TEST B.O.P.				1	10.65	408																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
CUT OFF DRILLING LINE				1	13.00	29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
REPAIR RIG				1	3.94	566																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
CORING				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
WIRE LINE LOGGING				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
RUNNING CASING & CEMENTING				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
WAITING ON CEMENT				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
DRILL STEM TEST				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
OTHER				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
FISHING				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
COMPLETION WORK				1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
TOTALS		8	8	1	4.10	365																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
TIME SUMMARY (OFFICE USE ONLY)				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
DAY WORK				25	3297.86	3	8 3/4			3862	3942																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
HRS. W/DP				18	539.25	3	12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
HRS. W/DP				2	58.89	43914																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
HRS. STANDBY				1	4.99																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TOTAL DAY WORK				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
WIRE LINE RECORD				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
REEL NO.				2	58.89	43914																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
NO. OF LINES	8			1	4.99																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
FEET SLIPPED				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
FEET CUT OFF				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
PRESENT LENGTH				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
TON M. OR TRIPS SINCE LAST CUT				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
CUMULATIVE TON M. OR TRIPS				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
NO. OF DAYS FROM SPUD	21			1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
CUMULATIVE ROTATING HRS.				1	4.60																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 20

DATE APRIL 4/73

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE									
CANDEL OIL		CANDEL ET AL MOBIL S. RAMPARTS		7-77		S. RAMPARTS				NWT									
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS			
Jennings International Drilling Division of Pancana Industries Ltd.		9	2 1/2	6 1/4 O.D.					9 1/8	MM	30*	20	82402	1335	819	810 CEMENT 3% CACL			
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO.		MANUFACTURER	TYPE	STROKE LENGTH											
				1.		EMSCO	DA-500	16"											
				2.		EMSCO	DA-500	16"											
				3.															
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
MORN DAY EVE		NO. STANDS D.P. FT.		BIT NO. SIZE		TIME WEIGHT		FROM TO		FUEL 1'		54		30		1200		5 1/2 60	
RIG UP & TEAR DOWN		1 3139.75 FT.		3 8 3/4		1 00 4 00 6 00		3676 3786											
DRILLING ACTUAL 7 1/2		18 6 1/4 539.25 FT.		MFG. H.W.		VISC.-SEC 28 28 28													
REAMING		2 59' 58.89 FT.		TYPE J-44		W.L.-C.C.													
CONDITIONING MUD & CIRCULATING		1 59' 4.99 FT.		NOZZLE NO. 3		FLTR. CK.													
TRIPS		1 6 1/2 8.60 FT.		SER. NO. 43914		SD. CONT. %													
LUBRICATE RIG 1/4 1/4 1/4		1 6 1/2 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT													
DEVIATION SURVEY 1/4		1 6 1/2 8.60 FT.		DEPTH IN		MUD & CHEMICALS ADDED													
TEST B.O.P.		2 59' 58.89 FT.		TOTAL FTG.		TYPE AMT. TYPE AMT.													
CUT OFF DRILLING LINE		1 6 1/2 8.60 FT.		TOTAL HR. RUN															
REPAIR RIG		1 6 1/2 8.60 FT.		COND. OF BIT															
CORING		1 6 1/2 8.60 FT.		REAMER NO.															
WIRE LINE LOGGING		1 6 1/2 8.60 FT.		REAMER TYPE															
RUNNING CASING & CEMENTING		1 6 1/2 8.60 FT.		DRILLER															
WAITING ON CEMENT		1 6 1/2 8.60 FT.																	
DRILL STEM TEST		1 6 1/2 8.60 FT.																	
OTHER		1 6 1/2 8.60 FT.																	
FISHING		1 6 1/2 8.60 FT.																	
COMPLETION WORK		1 6 1/2 8.60 FT.																	
A. PERFORATING		1 6 1/2 8.60 FT.																	
B. TUBING TRIPS		1 6 1/2 8.60 FT.																	
C. SWABBING		1 6 1/2 8.60 FT.																	
D. TESTING		1 6 1/2 8.60 FT.																	
E. ADDITIONAL		1 6 1/2 8.60 FT.																	
TOTALS 8 8 8		1 6 1/2 8.60 FT.																	
TIME SUMMARY (OFFICE USE ONLY)		1 6 1/2 8.60 FT.																	
DAY WORK		1 6 1/2 8.60 FT.																	
HRS. W/D		1 6 1/2 8.60 FT.																	
HRS. W/D		1 6 1/2 8.60 FT.																	
HRS. STANDBY		1 6 1/2 8.60 FT.																	
TOTAL DAY WORK		1 6 1/2 8.60 FT.																	
WIRE LINE RECORD		1 6 1/2 8.60 FT.																	
REEL NO.		1 6 1/2 8.60 FT.																	
NO. OF LINES 8 SIZE 1 1/8		1 6 1/2 8.60 FT.																	
FEET SLIPPED		1 6 1/2 8.60 FT.																	
FEET CUT OFF		1 6 1/2 8.60 FT.																	
PRESENT LENGTH		1 6 1/2 8.60 FT.																	
TON M. OR TRIPS SINCE LAST CUT		1 6 1/2 8.60 FT.																	
CUMULATIVE TON M. OR TRIPS		1 6 1/2 8.60 FT.																	
NO. OF DAYS FROM SPUD		1 6 1/2 8.60 FT.																	
CUMULATIVE ROTATING HRS.		1 6 1/2 8.60 FT.																	



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE April 3, 1973

[illegible]

APPROVED



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE APRIL 2 1973



APPROVED

A.A.O.D.C--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 17

DATE APRIL 1, 1973

OPERATOR		LEASE		WELL NO.	FIELD OR DIST.	COUNTY	STATE																						
CANDELA OIL		CANDELA ETAL MOBIL S RAMPARTS		I-77	S RAMPARTS		NWT																						
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS			SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS														
Jennings International Drilling		9	2 7/8	6 1/2 O.D.	1. EMSCO DA 500 16 2. EMSCO DA 500 16 3.			9 5/8	MM	36#	20	824.02	1335	819	810 CEMENT. 370 CA.														
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER																											
		J. J. J. J.																											
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN		24		STANDS D.P.		BIT NO. 2		TIME 2:00 4:00 6:00		FROM 2885		TO 3003		D		FUEL - 8'		54		35		1200		5 1/2		60			
DRILLING ACTUAL		18		SINGLES D.P.		SIZE 8 3/4		WEIGHT 9.0 9.0 8.9		2885		3003		D		FUEL - 8'		54		35		1200		5 1/2		60			
REAMING		1		D.C.		MFG. HW		VISC.-SEC 28 28 28																					
CONDITIONING MUD & CIRCULATING		1		I.D. O.D.		TYPE 5-33		W.L.-C.C.																					
TRIPS		2		D.C. O.D.		NOZZLE NO. 3		FLTR. CK.																					
LUBRICATE RIG		1		STB. E24 BODY O.D.		SER. NO. KH-144		SD. CONT. %																					
DEVIATION SURVEY		1		STB. 601 BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																					
TEST B.O.P.		1		RMR. 301 BODY O.D.		DEPTH IN																							
CUT OFF DRILLING LINE		3		SUBS O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
REPAIR RIG		1		BIT OR C.B.		TOTAL HR. RUN		COND. OF BIT																					
CORING		1		SHOCK SUB		REAMER NO.		REAMER TYPE																					
WIRE LINE LOGGING		1		KELLY DOWN		DRILLER																							
RUNNING CASING & CEMENTING		1		TOTAL		3003 FT.																							
WAITING ON CEMENT		1		WT. OF STRING		84,000 LBS.																							
DRILL STEM TEST		24		STANDS D.P.		BIT NO. 2		TIME 8:00 11:00 3:00		FROM 3003		TO 3130		D				54		35		1200		5 1/2		60			
OTHER		18		SINGLES D.P.		SIZE 8 3/4		WEIGHT 8.9 8.9 8.9		3003		3130		D				54		35		1200		5 1/2		60			
FISHING		1		D.C.		MFG. HW		VISC.-SEC 28 28 28																					
A. PERFORATING		1		I.D. O.D.		TYPE J-33		W.L.-C.C.																					
B. TUBING TRIPS		2		D.C. O.D.		NOZZLE NO. 3		FLTR. CK.																					
C. SWABBING		1		STB. E24 BODY O.D.		SER. NO. KH-144		SD. CONT. %																					
D. TESTING		1		STB. 601 BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																					
E. ADDITIONAL		1		RMR. 301 BODY O.D.		DEPTH IN																							
TOTALS		8		8		8																							
TIME SUMMARY (OFFICE USE ONLY)		1		BIT OR C.B.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
DAY WORK		1		SHOCK SUB		TOTAL HR. RUN		COND. OF BIT																					
HRS. W/DP		1		KELLY DOWN		REAMER NO.		REAMER TYPE																					
HRS. WO/DP		1		TOTAL		3130.02 FT.																							
HRS. STANDBY		1		WT. OF STRING		85,000 LBS.																							
TOTAL DAY WORK		29		STANDS D.P.		BIT NO. 2		TIME 4:00 8:00 10:00		FROM 3130		TO 3235		D				54		35		1225		5 1/2		60			
WIRE LINE RECORD		18		SINGLES D.P.		SIZE 8 3/4		WEIGHT 8.9 8.8 8.8		3130		3235		D				54		35		1225		5 1/2		60			
PEEL NO.		1		D.C.		MFG. HW		VISC.-SEC 28 28 28																					
NO. OF LINES		2		I.D. O.D.		TYPE J-33		W.L.-C.C.																					
FEET SLIPPED		1		D.C. O.D.		NOZZLE NO. 3		FLTR. CK.																					
FEET CUT OFF		1		STB. E24 BODY O.D.		SER. NO. KH-44		SD. CONT. %																					
PRESENT LENGTH		1		STB. 601 BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																					
TON MI. OR TRIPS SINCE LAST CUT		1		RMR. 301 BODY O.D.		DEPTH IN																							
CUMULATIVE TON MI. OR TRIPS		3		SUBS O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
NO. OF DAYS FROM SPUD		1		BIT OR C.B.		TOTAL HR. RUN		COND. OF BIT																					
CUMULATIVE ROTATING HRS.		1		SHOCK SUB		REAMER NO.		REAMER TYPE																					
		1		KELLY DOWN		DRILLER																							
		1		TOTAL		3235 FT.																							
		1		WT. OF STRING		88,000 LBS.																							



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 16

DATE MARCH 31, 1973

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																							
CANDEL OIL		CANDEL ET AL 10314		I-77		S RAMPARTS				NW T																							
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS																	
Jennings International Drilling Division of Pancana Industries Ltd.		9	2 45	6 1/4 O.D.	1. FMSCO DA 500 16 2. FMSCO DA 500 16				9 3/8	MM	36	20	824.02	13.35	819	810 CEMENT 370 CA																	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO.		MANUFACTURER		TYPE		STROKE LENGTH																							
				1.		FMSCO		DA 500		16																							
				2.		FMSCO		DA 500		16																							
				3.																													
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN					
RIG UP & TEAR DOWN		1		STANDS D.P. 1975.63 FT.		BIT NO. 2		TIME 2:00 4:00 6:00		FROM 2422		TO 2661		D		FUEL 4' 10"		54		35		1200		5 1/2		60							
DRILLING ACTUAL		7 7 1/2 7 1/2		SINGLES D.P. 6 1/4 FT.		SIZE 8 3/4		WEIGHT 9.0 9.0 9.0																									
REAMING				D.C. 6 1/4		MFG. HW		VISC.-SEC 28 28 28																									
CONDITIONING MUD & CIRCULATING				I.D. O.D. 539.25 FT.		TYPE T-33		W.L.-C.C.																									
TRIPS				1 TELEDRIFT 10.97		NOZZLE NO. 3		FLTR. CK.																									
LUBRICATE RIG		1/4 1/4 1/4		2 I.D. O.D. 58.89 FT.		SIZE 12		PH 7.2 7.2 7.2																									
DEVIATION SURVEY		3/4 1/4 1/4		1 STB. BODY 4.99 FT.		SER. NO. KH-144		SD. CONT. %																									
TEST B.O.P.				1 STB. BODY 5.64 FT.		DEPTH OUT		PRESSURE GRADIENT																									
CUT OFF DRILLING LINE				1 RMR. BODY 8.60 FT.		DEPTH IN																											
REPAIR RIG				3 SUBS 5.52 FT.		TOTAL FTG. 504		MUD & CHEMICALS ADDED																									
CORING				1 BIT OR C.B. 7.75 FT.		TOTAL HR. RUN 18 1/2		TYPE AMT. TYPE AMT.																									
WIRE LINE LOGGING				1 SHOCK SUB 10.65 FT.		COND. OF BIT 08		80KAT STAN. DARD. 1000																									
RUNNING CASING & CEMENTING				KELLY DOWN 41.00 FT.		REAMER NO.																											
WAITING ON CEMENT				TOTAL 2661 FT.		REAMER TYPE																											
DRILL STEM TEST				WT. OF STRING 80.000 LBS.		DRILLER Brian Sadway																											
OTHER				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN			
FISHING				22 STANDS D.P. 2101.11 FT.		BIT NO. 2		TIME 8:00 11:00 3:00		FROM 2661		TO 2785		D						54		35		1200		5 1/2		60					
COMPLETION WORK				1 SINGLES D.P. 6 1/4 FT.		SIZE 8 3/4		WEIGHT 9.1 9.0 9.0																									
A. PERFORATING				D.C. 6 1/4		MFG. HW		VISC.-SEC 28 28 28																									
B. TUBING TRIPS				18 I.D. O.D. 539.25 FT.		TYPE T-33		W.L.-C.C.																									
C. SWABBING				1 D.C. TELEDRIFT 10.97		NOZZLE NO. 3		FLTR. CK.																									
D. TESTING				2 I.D. O.D. 58.89 FT.		SIZE 12		PH 7.2 7.2 7.2																									
E. ADDITIONAL				1 STB. BODY 4.99 FT.		SER. NO. KH-144		SD. CONT. %																									
TOTALS		8 8 8		1 STB. BODY 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT																									
TIME SUMMARY (OFFICE USE ONLY)				1 RMR. BODY 5.64 FT.		DEPTH IN																											
DAY WORK				3 SUBS 5.52 FT.		TOTAL FTG. 628		MUD & CHEMICALS ADDED																									
HRS. W/DP				1 BIT OR C.B. 7.75 FT.		TOTAL HR. RUN 25 1/4		TYPE AMT. TYPE AMT.																									
HRS. WO/DP				1 SHOCK SUB 10.65 FT.		COND. OF BIT 0.8		80KAT STAN. DARD. 1000																									
HRS. STANDBY				KELLY DOWN 39.38 FT.		REAMER NO.																											
TOTAL DAY WORK				TOTAL 2785.00 FT.		REAMER TYPE																											
WIRE LINE RECORD				WT. OF STRING LBS.		DRILLER Ray / Lister																											
REEL NO.				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN			
NO. OF LINES 8 SIZE 1 1/2				23 STANDS D.P. 2227.57 FT.		BIT NO. 2		TIME 5:00 8:00 10:00		FROM 2785		TO 2885		D						54		35		1200		5 1/2		60					
FEET SLIPPED				18 I.D. O.D. 539.25 FT.		SIZE 8 3/4		WEIGHT 9.1 9.1 9.0																									
FEET CUT OFF				1 D.C. 6 1/4		MFG. HW		VISC.-SEC 28 28 28																									
PRESENT LENGTH 5000				1 I.D. O.D. 58.89 FT.		TYPE T-33		W.L.-C.C.																									
TON M. OR TRIPS SINCE LAST CUT				1 STB. BODY 4.99 FT.		NOZZLE NO. 3		FLTR. CK.																									
CUMULATIVE TON M. OR TRIPS				1 STB. BODY 8.60 FT.		SER. NO. KH-144		SD. CONT. %																									
NO. OF DAYS FROM SPUD		16		1 RMR. BODY 5.64 FT.		DEPTH OUT		PRESSURE GRADIENT																									
CUMULATIVE ROTATING HRS.				3 SUBS 5.52 FT.		DEPTH IN																											
				1 BIT OR C.B. 7.75 FT.		TOTAL FTG. 728		MUD & CHEMICALS ADDED																									
				1 SHOCK SUB 10.65 FT.		TOTAL HR. RUN 33 1/4		TYPE AMT. TYPE AMT.																									
				KELLY DOWN 13.00 FT.		COND. OF BIT 08		80KAT STAN. DARD. 1000																									
				TOTAL 2885 FT.		REAMER NO.																											
				WT. OF STRING 82.000 LBS.		REAMER TYPE																											
				DRILLER Brian Sadway																													



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 30 1973

NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 220		DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1		PUMP-NO.		METHOD RUN
		STANDS D.P.	FT.	BIT NO.		TIME		FROM	TO								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	SOL-S PART-L COM-D-C
TOTAL DAY WORK		2	SINGLES D.P. 1756.51 FT.	SIZE	8 3/4	WEIGHT	9.1 9.0	2202	2422	D				54	30	1215	5 1/2	60			
WIRE LINE RECORD		18	D.C. 6 1/4 I.D. O.D. 539.25 FT. 10.91	MFG.	Hw	VISC.-SEC	28 28							54	35	1200	5 1/2	60			
REEL NO.		1	TELEDRIFT	TYPE	5-33	W.L.-C.C.		DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION			
NO. OF LINES 8 SIZE 1 1/8		2	I.D. 54 O.D. 58.84 FT.	NOZZLE	NO. 3	FLTR. CK		2274		10°			2379	10°							
FEET SLIPPED		1	STB. BODY O.D. 4.99 FT.	SIZE	12	PH	7.2 7.2	TIME LOG		ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS										
FEET CUT OFF		1	STB. BODY O.D. 8.60 FT.	SER. NO.	KH-144	SD. CONT. %		4:00	4:15	1/4	RIG SERVICE & CHECK BOPS										
PRESENT LENGTH		1	RMR. BODY O.D. 5.64 FT.	DEPTH OUT		PRESSURE GRADIENT		4:15	7:00	2 3/4	DRILL 8 3/4" HOLE										
TON IN. OR TRIPS SINCE LAST CUT		1	SUBS 10 O.D. 5.52 FT.	DEPTH IN	2157			7:00	7:30	1/2	TELEDRIFT 10° + TOTCO WIRELINE SURVEY (BOTH CHECK SAME)										
CUMULATIVE TON IN. OR TRIPS		1	BIT OR C.S. FT.	TOTAL FTG.	265	MUD & CHEMICALS ADDED		7:30	10:15	2 3/4	DRILL 8 3/4" HOLE										
NO. OF DAYS FROM SPUD		1	548 10.65 FT.	TOTAL HR. RUN	11 1/4	TYPE	AMT.	10:15	10:30	1/4	TELEDRIFT SURVEY @ 239										
CUMULATIVE ROTATING HRS.		1	KELLY DOWN 21.00 FT.	COND. OF BIT	03	Potash	2000#	10:30	12:00	1 1/2	DRILL 8 1/4" HOLE										
			TOTAL 2422 FT.	REAMER NO.																	
			WT. OF STRING 79000 LBS.	REAMER TYPE		DRILLER		Miguel Saboway													



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 29 1973

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE	
CANDEL OIL		CANDEL ET AL MORIL SRAMPARTS I-77		I-77		S RAMPARTS				NWT	
CONTRACTOR		RIG NO.		DRILL PIPE STRING		TOOL JOINT		PUMPS		LAST CASING TUBING OR LINER	
Jennings International Drilling		9		2 4 1/2		6 1/2 O.D.		NO. MANUFACTURER TYPE STROKE LENGTH		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS	
Division of Pancana Industries Ltd.				TYPE THD. XH				1. EMSCO DA500 16		9 1/2 MM 36# 20 824.02 1735 819 810 CEMENT	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER						2. EMSCO DA500 16		370 CA.	
Farmer Drilling											
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 199	
RIG UP & TEAR DOWN		9		STANDS D.P. FT.		BIT NO. 1		TIME 2:00 4:00 6:00		FROM TO	
DRILLING ACTUAL		7 1/4 6 3/4 6 3/4		SINGLES D.P. 910.56 FT.		SIZE 8 3/4		WEIGHT 8.7 8.7 8.8		1396 1595	
REAMING				D.C. 539.25 FT.		MFG. HW		VISC.-SEC 28 28 28			
CONDITIONING MUD & CIRCULATING				I.D. 6 1/2 O.D. 539.25 FT.		TYPE X16		W.L.-C.C.			
TRIPS				1 PELEDRIPT 10.97		NO. 3		FLTR. CK.			
LUBRICATE RIG		1/4 1/4 1/4		I.D. 6 1/2 O.D. 58.89 FT.		NOZZLE NO. 3		PH 7.6			
DEVIATION SURVEY		1/2 1/2 1/2		STB. E2U BODY O.D. 4.99 FT.		SER. NO. 50790		SD. CONT. %			
TEST B.O.P.				STB. 6PT O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT			
CUT OFF DRILLING LINE				RMR. 3PT O.D. 5.64 FT.		DEPTH IN					
REPAIR RIG				SUBS 90 O.D. 5.52 FT.		TOTAL FTG. 776		MUD & CHEMICALS ADDED			
CORING				BIT OR C.B. 1.75 FT.		TOTAL HR. RUN 25 1/4		TYPE AMT. TYPE AMT.			
WIRE LINE LOGGING				1 SHOCK SUB 10.65 FT.		COND. OF BIT OB					
RUNNING CASING & CEMENTING				KELLY DOWN 39.00 FT.		REAMER NO.					
WAITING ON CEMENT				TOTAL 1595 FT.		REAMER TYPE					
				WT. OF STRING 68,000 LBS.				DRILLER Brian Ladaway			
DRILL STEM TEST				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
OTHER		1/2 1/2		11 STANDS D.P. 109701 FT.		BIT NO. 1		TIME 9:00 11:30 3:00		FOOTAGE 175	
FISHING				SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 8.8 8.7 8.8		FROM TO	
A. PERFORATING				D.C. 539.25 FT.		MFG. HW		VISC.-SEC 28 28 28			
B. TUBING TRIPS				I.D. 6 1/2 O.D. 539.25 FT.		TYPE X16		W.L.-C.C.			
C. SWABBING				D.C. 10.97		NO. 3		FLTR. CK.			
D. TESTING				I.D. 6 1/2 O.D. 58.89 FT.		NOZZLE NO. 3		PH 7.8 7.2 7.2			
E. ADDITIONAL				STB. E2U BODY O.D. 4.99 FT.		SER. NO. 50790		SD. CONT. %			
TOTALS		8 8 8		STB. 6PT O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT			
TIME SUMMARY (OFFICE USE ONLY)				RMR. 3PT O.D. 5.64 FT.		DEPTH IN					
DAY WORK				SUBS 90 O.D. 5.52 FT.		TOTAL FTG. 951		MUD & CHEMICALS ADDED			
HRS. W/DP				BIT OR C.B. FT.		TOTAL HR. RUN 32		TYPE AMT. TYPE AMT.			
HRS. WO/DP				1 SHOCK SUB 10.65 FT.		COND. OF BIT OB					
HRS. STANDBY				KELLY DOWN 28.88 FT.		REAMER NO.					
				TOTAL 1770.00 FT.		REAMER TYPE					
				WT. OF STRING 70,000 LBS.				DRILLER Ray J. Lestus			
TOTAL DAY WORK				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
WIRE LINE RECORD				14 STANDS D.P. FT.		BIT NO. 1		TIME 5:00 8:00 10:00		FOOTAGE 242	
REEL NO.				SINGLES D.P. 1347.64 FT.		SIZE 8 3/4		WEIGHT 8.9 9.1 9.1		FROM TO	
NO. OF LINES		8 SIZE 1 1/2		D.C. 539.25 FT.		MFG. HW		VISC.-SEC 28 28 28			
FEET SLIPPED				I.D. 6 1/2 O.D. 539.25 FT.		TYPE X16		W.L.-C.C.			
FEET CUT OFF				D.C. 10.97		NO. 3		FLTR. CK.			
PRESENT LENGTH		5000		I.D. 6 1/2 O.D. 58.89 FT.		NOZZLE NO. 3		PH 7.2 7.2 7.2			
TON M. OR TRIPS SINCE LAST CUT				STB. E2U BODY O.D. 4.99 FT.		SER. NO. 50790		SD. CONT. %			
CUMULATIVE TON M. OR TRIPS				STB. 6PT O.D. 8.60 FT.		DEPTH OUT		PRESSURE GRADIENT			
NO. OF DAYS FROM SPUD		14		RMR. 3PT O.D. 5.64 FT.		DEPTH IN					
CUMULATIVE ROTATING HRS.				SUBS 90 O.D. 5.52 FT.		TOTAL FTG. 1193		MUD & CHEMICALS ADDED			



APPROVED



APPROVED

A.A.O.D.C--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

REPORT NO. 14 DATE MARCH 28, 1973

OPERATOR		LEASE		DATE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																					
CANDEL OIL		CANDEL ET AL MOBILE SUPPLIES		L-17		SOUTH RAMPARTS		COUNTY		STATE		VT																					
CONTRACTOR		RIG NO.		DRILL PIPE STRING		TOOL JOINT		PUMPS		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS									
Jennings International Drilling		9		NO. 1		SIZE 6 1/2		O.D. 6 1/2		NO. 1		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER		9 1/2		MM		36		20		824.02		819		810 CEMENT.	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO. 2		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER		9 1/2		MM		36		20		824.02		819		810 CEMENT.		370 C.					
Janna Dailay																																	
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN					
RIG UP & TEAR DOWN		2		STANDS D.P. 189.01 FT.		BIT NO. 1		TIME 5:00		FROM 819		TO 910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
DRILLING ACTUAL		18		SINGLES D.P. 62.69 FT.		SIZE 8 3/4		WEIGHT 8.5		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
REAMING		1		D.C. 6 1/2		MFG. HW		VISC.-SEC 28		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
CONDITIONING MUD & CIRCULATING		2		I.D. O.D. 539.25 FT.		TYPE X16		W.L.-C.C.		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
TRIPS		1		D.C. 6 1/2		MFG. HW		VISC.-SEC 28		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
LUBRICATE RIG		1		I.D. O.D. 588.9 FT.		NOZZLE NO. 3		FLTR. CK. 8.5		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
DEVIATION SURVEY		1		STB. BODY O.D. 4.99 FT.		SER. NO. 50790		SD. CONT. %		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
TEST B.O.P.		1		STB. BODY O.D. 5.64 FT.		DEPTH OUT 910		PRESSURE GRADIENT		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
CUT OFF DRILLING LINE		1		RMR. BODY O.D. 8.60 FT.		DEPTH IN 819		MUD & CHEMICALS ADDED		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
REPAIR RIG		1		SUBS O.D. 5.52 FT.		TOTAL FTG. 91		COND. OF BIT 0.3		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
CORING		1		BIT OR C.B. 75 FT.		TOTAL HR. RUN 42		REAMER NO.		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
WIRE LINE LOGGING		1		SHOCK SUB 10.65 FT.		COND. OF BIT 0.3		REAMER TYPE		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
RUNNING CASING & CEMENTING		1		KELLY DOWN 14.00 FT.		REAMER NO.		REAMER TYPE		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
WAITING ON CEMENT		1		TOTAL 910 FT.		REAMER NO.		REAMER TYPE		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
DRILL STEM TEST		1		WT. OF STRING 62,000 LBS.		REAMER NO.		REAMER TYPE		819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
OTHER		1								819		910		D		FUEL - 6-2		54		15		1250		52		58		SOL. PART-EL-P COM'D-C					
FISHING		1								819																							



APPROVED



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 13

DATE MARCH 27 1973

OPERATOR		LEASE		WELL NO.	FIELD OR DIST.	COUNTY	STATE																				
CANDEL OIL		CANDEL ETAL MOBIL SRAMPARTS		I-77	SOUTH SRAMPARTS		NW T																				
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS														
Jennings International Drilling		9	2 45	64 O.D.	1. EMSCO DA500 16	9 8	MM	36	20	824.02		819	810 SK CEMENT														
Division of Pancana Industries Ltd.			TYPE THD. KH		2. EMSCO DA500 16								370 CACL.														
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER																					
				1. EMSCO DA500 16																							
				2. EMSCO DA500 16																							
				3.																							
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SCL-S PAR-EL-P COM'D-C	
RIG UP & TEAR DOWN		STANDS D.P. FT.		BIT NO.		TIME		FROM TO																			
DRILLING ACTUAL		SINGLES D.P. FT.		SIZE		WEIGHT																					
REAMING		D.C.		MFG.		VISC.-SEC																					
CONDITIONING MUD & CIRCULATING		I.D. O.D. FT.		TYPE		W.L.-C.C.																					
TRIPS		D.C.		NOZZLE NO. SIZE		FLTR. CK.																					
LUBRICATE RIG		STB. BODY O.D. FT.		SER. NO.		PH																					
DEVIATION SURVEY		STB. BODY O.D. FT.		DEPTH OUT		SD. CONT. %																					
TEST B.O.P.		RMR. BODY O.D. FT.		DEPTH IN		PRESSURE GRADIENT																					
CUT OFF DRILLING LINE		SUBS O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.																					
REPAIR RIG		BIT OR C.B. FT.		TOTAL HR. RUN																							
CORING		KELLY DOWN FT.		COND. OF BIT																							
WIRE LINE LOGGING		TOTAL FT.		REAMER NO.																							
RUNNING CASING & CEMENTING		WT. OF STRING LBS.		REAMER TYPE		DRILLER Brian Anderson																					
WAITING ON CEMENT																											
DRILL STEM TEST																											
OTHER																											
FISHING																											
COMPLETION WORK																											
A. PERFORATING																											
B. TUBING TRIPS																											
C. SWABBING																											
D. TESTING																											
E. ADDITIONAL																											
TOTALS																											
TIME SUMMARY (OFFICE USE ONLY)																											
DAY WORK																											
HRS. W/DP																											
HRS. W/DP																											
HRS. STANDBY																											
TOTAL DAY WORK																											
WIRE LINE RECORD																											
PEEL NO.																											
NO. OF LINES																											
SIZE																											
FEET SLIPPED																											
FEET CUT OFF																											
PRESENT LENGTH																											
TON M. OR TRIPS SINCE LAST CUT																											
CUMULATIVE TON M. OR TRIPS																											
NO. OF DAYS FROM SPUD																											
CUMULATIVE ROTATING HRS.																											

REPORT NO. 12 DATE MARCH 26/73

[illegible]

APPROVED



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 25/77

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

10

DATE

MARCH 24/73

OPERATOR CANDEL OIL		LEASE CANDEL ETAL MOBIL SOUTH RAMPARTS		WELL NO. I-77	FIELD OR DIST. SOUTH RAMPARTS	COUNTY	STATE N.W.T.									
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.		RIG NO. 9	DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. XH	TOOL JOINT 6 1/4 O.D.	PUMPS			LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Jarvis Bailey</i>			1. EMSCO DA 500 16"											
					2. EMSCO DA 500 16"											
					3.											

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
						STANDS D.P.		SIZE		TIME		FROM										LINER SIZE		LINER SIZE		SGL-S PART-EL-P COM'D-C	
RIG UP & TEAR DOWN						1		13 3/4		200 400 700		543 605		RM								7" 60					
DRILLING ACTUAL						18		REED		460 300 710																	
REAMING				1 7/8		D.C. 6 1/4		TR CONE		VISC.-SEC																	
CONDITIONING MUD & CIRCULATING						I.D. O.D.		NO.		W.L.-C.C.																	
TRIPS						D.C.		NO.		FLTR. CK.																	
LUBRICATE RIG				1 1/4		I.D. O.D.		NO.		PH																	
DEVIATION SURVEY				1/4		STB. BODY O.D.		SER. NO.		SD. CONT. %																	
TEST B.O.P.						RMR. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																	
CUT OFF DRILLING LINE						SUBS		DEPTH IN																			
REPAIR RIG						BIT OR C.B.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
CORING						1 5' SUB		TOTAL HR. RUN		TYPE																	
WIRE LINE LOGGING						KELLY DOWN		COND. OF BIT		AMT.																	
RUNNING CASING & CEMENTING						TOTAL		REAMER NO.		TYPE																	
WAITING ON CEMENT						WT. OF STRING		REAMER TYPE		AMT.																	
DRILL STEM TEST						48,000		DRILLER		CAUSTIC 100#																	
OTHER										Klave Frykas																	
FISHING																											
COMPLETION WORK																											
A. PERFORATING																											
B. TUBING TRIPS																											
C. SWABBING																											
D. TESTING																											
E. ADDITIONAL																											
TOTALS				8 8 8																							
TIME SUMMARY (OFFICE USE ONLY)																											
DAY WORK																											
HRS. W/DP																											
HRS. WO/DP																											
HRS. STANDBY																											
TOTAL DAY WORK																											
WIRE LINE RECORD																											
REEL NO.																											
NO. OF LINES				8																							
SIZE				1 1/8																							
FEET SLIPPED																											
FEET CUT OFF																											
PRESENT LENGTH																											
TON M. OR TRIPS SINCE LAST CUT																											
CUMULATIVE TON M. OR TRIPS																											
NO. OF DAYS FROM SPUD				10																							
CUMULATIVE ROTATING HRS.																											



A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

9 11/11/23/73

DAILY DRILLING REPORT

REPORT NO. 9 DATE 11/11/23/73

OPERATOR CANDEL DIL

LEASE CANDEL ETAL MOBIL S. RAMPARTS

WELL NO. I-77 FIELD OR DIST. SOUTH RAMPARTS COUNTY STATE N.W.T.

CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.

RIG NO. 9

DRILL PIPE STRING NO. 9242

TOOL JOINT 64

TYPE THD. XH

PUMPS

NO. 1 MANUFACTURER EMSCO TYPE DA 500 16" STROKE LENGTH 16"

NO. 2 MANUFACTURER EMSCO TYPE DA 500 16" STROKE LENGTH 16"

NO. 3

LAST CASING TUBING OR LINER

SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION-HOURS

MORNING TOUR

DAY TOUR

EVENING TOUR

WIRE LINE RECORD

REEL NO. 8 149

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON M. OR TRIPS SINCE LAST CUT

CUMULATIVE TON M. OR TRIPS 4

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM

WT. ON BIT 1000 #

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD RUN

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

LOST 100 bbls MUD INTO FORMATION

DRILLER Dave Frykas

DRILLER Brian Sadoway

DRILLER Dave Frykas



DAILY DRILLING REPORT

REPORT NO. 8

DATE MAR. 22/73

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE									
CANDEL OIL		CANDEL ETAL MOBIL S. RAMPARTS		I-77		SOUTH RAMPARTS				N.W. T.									
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		SIZE		MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS				
Jennings International Drilling		9	2	4 1/2	TYPE THD. XH		NO.		MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER							
Division of Pancana Industries Ltd.							1.		EMSCO	DA500	16"								
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		3.				2.		EMSCO	DA500	16"							
Farra Bailey																			
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	METHOD RUN	
RIG UP & TEAR DOWN		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		CORE NO.		DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
DRILLING ACTUAL		SINGLES D.P. 63.05 FT.		SIZE 13 3/4		WEIGHT 9.4 9.4 9.4		305 352 RM		FUEL - 6' 4"		60 350		7	60				
REAMING 7 1/2 3		D.C. 6 1/4 269.93 FT.		MFG. REED		VISC.-SEC 190 200 180													
CONDITIONING MUD & CIRCULATING		I.D. O.D. FT.		TYPE TRI CONE		W.L.-C.C.													
TRIPS 2 1/2		D.C. FT.		NO. NOZZLE		FLTR. CK.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.	DIRECTION
LUBRICATE RIG 1 1/4 1/4		I.D. O.D. FT.		SIZE 1 1/2		PH		TIME LOG		ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
DEVIATION SURVEY 1 1/4		STB. BODY O.D. FT.		SER. NO. 536R		SD. CONT. %		FROM TO		TIME		12:00 12:15 1/4		RIG SERVICE					
TEST B.O.P.		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT		12:15 7:15 7				7:15 7:30 1/4		REAM 8 3/4" HOLE TO 13 3/4"					
CUT OFF DRILLING LINE		RMR. BODY O.D. 2.02 FT.		DEPTH IN				7:30 7:30 1/4				7:30 8:00 1/2		SURVEY @ 340' - 2' 1/4"					
REPAIR RIG		SUBS 2.98 FT.		TOTAL FTG. 352		MUD & CHEMICALS ADDED								REAM 8 3/4" HOLE TO 13 3/4"					
CORING		BIT OR C.B. FT.		TOTAL HR. RUN 26 1/4		TYPE AMT. TYPE AMT.													
WIRE LINE LOGGING		KELLY DOWN 12.00 FT.		COND. OF BIT 0/B		REAMER NO.													
RUNNING CASING & CEMENTING		TOTAL 352 FT.		REAMER TYPE		DRILLER Dave Frykas													
WAITING ON CEMENT		WT. OF STRING 34,000 LBS.																	
DRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 11		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	METHOD RUN	
OTHER 2 1/2		STANDS D.P. FT.		BIT NO. REAMER #2		TIME 10:00 12:00 2:00		FROM TO		CORE NO.		DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
FISHING		SINGLES D.P. 63.05 FT.		SIZE 13 3/4 13 3/4		WEIGHT 9.4		352 363 RM				60 6-8		350	7	60			
COMPLETION WORK		D.C. 6 1/4 269.93 FT.		MFG. REED REED		VISC.-SEC 100													
A. PERFORATING		I.D. O.D. FT.		TYPE TRI CONE TRI CONE		W.L.-C.C.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.	DIRECTION
B. TUBING TRIPS		D.C. FT.		NO. NOZZLE		FLTR. CK.		TIME LOG		ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
C. SWABBING		I.D. O.D. FT.		SIZE 1 1/2		PH		FROM TO		TIME		8:00 8:15 1/4		RIG SERVICE					
D. TESTING		STB. BODY O.D. FT.		SER. NO. 536R 581R		SD. CONT. %		8:15 11:15 3				11:15 12:00 3/4		HOIST TO CHANGE REAMER (TIGHT)					
E. ADDITIONAL		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT		12:00 2:30 2 1/2				2:30 4:00 1 1/2		WELDED WASHED CILIER JET TABLE OFF + RIG UP					
TOTALS 8 8		RMR. BODY O.D. 2.02 FT.		DEPTH IN				11:15 12:00 3/4						RUN IN + CLEAN BRIDGES FROM 60' TO 363'					
TIME SUMMARY (OFFICE USE ONLY)		SUBS 2.98 FT.		TOTAL FTG. 363		MUD & CHEMICALS ADDED													
DAY WORK		BIT OR C.B. FT.		TOTAL HR. RUN 29 1/4		TYPE AMT. TYPE AMT.													
HRS. W/DP		KELLY DOWN 23.00 FT.		COND. OF BIT 6-3-1		REAMER NO.													
HRS. WO/DP		TOTAL 363 FT.		REAMER TYPE		DRILLER Farra Bailey													
HRS. STANDBY		WT. OF STRING 34,000 LBS.																	
TOTAL DAY WORK		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 41		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	METHOD RUN	
WIRE LINE RECORD		STANDS D.P. FT.		BIT NO. REAMER #2		TIME 6:00 7:00 10:00		FROM TO		CORE NO.		DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
REEL NO.		SINGLES D.P. FT.		SIZE 13 3/4		WEIGHT 9.5 10 10		363 404				180 350		7	60				
NO. OF LINES 8 SIZE 1 1/2		D.C. 6 1/4 361.61 FT.		MFG. REED		VISC.-SEC 115 235 300													
FEET SLIPPED		I.D. O.D. FT.		TYPE TRI CONE		W.L.-C.C.		DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.	DIRECTION
FEET CUT OFF		D.C. FT.		NO. NOZZLE		FLTR. CK.		TIME LOG		ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
PRESENT LENGTH		I.D. O.D. FT.		SIZE 1 1/2		PH		FROM TO		TIME		4:00 4:15 1/4		RIG SERVICE					
TON IN OR TRIPS SINCE LAST CUT		STB. BODY O.D. FT.		SER. NO. 581R		SD. CONT. %		4:15 5:30 1 1/4				5:30 12:00 6 1/2		RUN IN CLEANING BRIDGES					
CUMULATIVE TON IN OR TRIPS		RMR. BODY O.D. 2.30 FT.		DEPTH OUT		PRESSURE GRADIENT		5:30 12:00 6 1/2						REAM 8 3/4" HOLE TO 13 3/4"					
NO. OF DAYS FROM SPUD		SUBS 2.98 FT.		TOTAL FTG. 41		MUD & CHEMICALS ADDED													
CUMULATIVE ROTATING HRS.		BIT OR C.B. FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.													
		KELLY DOWN 35.00 FT.		COND. OF BIT 0/B		REAMER NO.													
		TOTAL 404 FT.		REAMER TYPE		DRILLER Dave Frykas													
		WT. OF STRING 42,000 LBS.																	



APPROVED



APPROVED

A.A.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 8

DATE MAR 11/13

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE							
CAN DEL OIL		NOEL LITAL MOBIL S. Ramparts		I-77		SOUTH RAMPARTS				NWT							
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSO. HD.	SET AT	REMARKS
Jennings International Drilling		9	2 4 1/2	6 1/2 O.D.	TYPE THD. XH		1. Emsco 70 500 16"		2. Emsco 70 500 16"								
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER															
[Signature]		[Signature]															
TIME DISTRIBUTION-HOURS																	
RIG UP & TEAR DOWN																	
DRILLING ACTUAL																	
REAMING																	
CONDITIONING MUD & CIRCULATING																	
TRIPS																	
LUBRICATE RIG																	
DEVIATION SURVEY																	
TEST B.O.P.																	
CUT OFF DRILLING LINE																	
REPAIR RIG																	
CORING																	
WIRE LINE LOGGING																	
RUNNING CASING & CEMENTING																	
WAITING ON CEMENT																	
DRILL STEM TEST																	
OTHER																	
FISHING																	
COMPLETION WORK																	
A. PERFORATING																	
B. TUBING TRIPS																	
C. SWABBING																	
D. TESTING																	
E. ADDITIONAL																	
TOTALS																	
TIME SUMMARY (OFFICE USE ONLY)																	
DAY WORK																	
HRS. W/DP																	
HRS. WO/DP																	
HRS. STANDBY																	
TOTAL DAY WORK																	
WIRE LINE RECORD																	
REEL NO.																	
NO. OF LINES																	
SIZE																	
FEET SLIPPED																	
FEET CUT OFF																	
PRESENT LENGTH																	
TON M. OR TRIPS SINCE LAST CUT																	
CUMULATIVE TON M. OR TRIPS																	
NO. OF DAYS FROM SPUD																	
CUMULATIVE ROTATING HRS.																	
MORNING TOUR																	
DAY TOUR																	
EVENING TOUR																	



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 24 1975



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 6

DATE MARCH 19, 1953

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																			
CANDEL OIL		CANDEL ETAL MOBIL South RAMPARTS		I-77		S. RAMPARTS				N.W.T.																			
CONTRACTOR		RIG NO.		DRILL PIPE STRING		TOOL JOINT		PUMPS		LAST CASING TUBING OR LINER																			
Jennings International Drilling Division of Pancana Industries Ltd.		9		6 1/4 O.D.		X-1																							
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO.		MANUFACTURER		TYPE		STROKE LENGTH																			
				1.		EMSCO		DA-500		16"																			
				2.		EMSCO		DA-500		16"																			
				3.																									
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR.-D RM.-R CORE.-C		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN			
RIG UP 2 TEAR DOWN		1		STANDS D.P. 9467 FT.		BIT NO. 4-A		TIME 100 400 600		FROM 580 TO 651		D		FUEL 5'4"		80		5		1000		7"		60		ON MUD ROLL			
DRILLING ACTUAL 7 1/4 4 1/4		18		D.C. 6 1/4 I.D. O.D. 539.25 FT.		MFG. HW		VISC.-SEC 390 210 110										80		20		900		7"		60			
REAMING				D.C.		NOZZLE NO. 3		FLTR. CK.																					
CONDITIONING MUD & CIRCULATING				I.D. O.D. FT.		SER. NO. 51822		SD. CONT. %																					
TRIPS				STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																					
LUBRICATE RIG 1/4 1/4 1/4				STB. BODY O.D. FT.		DEPTH IN																							
DEVIATION SURVEY 1/2 1/2				SUBS. BODY O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
TEST B.O.P.				SUBS. BODY O.D. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																					
CUT OFF DRILLING LINE				BIT OR C.B. 75 FT.		COND. OF BIT																							
REPAIR RIG				KELLY DOWN 9.22 FT.		REAMER NO.		DRILLER Ray J. Leslie																					
CORING				TOTAL 651.00 FT.		REAMER TYPE																							
WIRE LINE LOGGING				WT. OF STRING 50,000 LBS.																									
RUNNING CASING & CEMENTING																													
WAITING ON CEMENT																													
DRILL STEM TEST																													
OTHER																													
FISHING																													
COMPLETION WORK																													
A. PERFORATING																													
B. TUBING TRIPS																													
C. SWABBING																													
D. TESTING																													
E. ADDITIONAL																													
TOTALS																													
TIME SUMMARY (OFFICE USE ONLY)																													
DAY WORK																													
HRS. W/DP																													
HRS. W/O/DP																													
HRS. STANDBY																													
TOTAL DAY WORK																													
WIRE LINE RECORD																													
REEL NO.																													
NO. OF LINES 8 SIZE 1 1/8																													
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON M. OR TRIPS SINCE LAST CUT 32																													
CUMULATIVE TON M. OR TRIPS																													
NO. OF DAYS FROM SPUD 6																													
CUMULATIVE ROTATING HRS.																													



A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT										REPORT NO. 5		DATE MARCH 14/73																		
OPERATOR CANDEL OIL					LEASE CANDEL ETAL MOBIL S. RAMPARTS					WELL NO. 1-77		FIELD OR DIST. S. RAMPARTS		COUNTY		STATE NJ														
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.					RIG NO. 9		DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. YH		TOOL JOINT 6 1/4 O.D.		PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>John Bailey</i>					SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>John Bailey</i>					NO.		MANUFACTURER		TYPE		STROKE LENGTH														
											1. EMSCO		DA-500		16"															
											2. EMSCO		DA-500		16"															
											3.																			

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY		BIT RECORD		MUD RECORD				FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
						STANDS D.P. FT.		BIT NO.		TIME		WEIGHT		VISC.-SEC		W.L.-C.C.																	
RIG UP & TEAR DOWN																																	
DRILLING ACTUAL				7 1/2																													
REAMING				5 1/2																													
CONDITIONING MUD & CIRCULATING																																	
TRIPS																																	
LUBRICATE RIG				1/4 1/4 1/4																													
DEVIATION SURVEY				1/4																													
TEST B.O.P.																																	
CUT OFF DRILLING LINE																																	
REPAIR RIG																																	
CORING																																	
WIRE LINE LOGGING																																	
RUNNING CASING & CEMENTING																																	
WAITING ON CEMENT																																	
DRILL STEM TEST																																	
OTHER				2																													
FISHING																																	
COMPLETION WORK																																	
A. PERFORATING																																	
B. TUBING TRIPS																																	
C. SWABBING																																	
D. TESTING																																	
E. ADDITIONAL																																	
TOTALS				8 8 8																													
TIME SUMMARY (OFFICE USE ONLY)																																	
DAY WORK																																	
HRS. W/DP																																	
HRS. WO/DP																																	
HRS. STANDBY																																	
TOTAL DAY WORK																																	
WIRE LINE RECORD																																	
REEL NO.																																	
NO. OF LINES				8																													
SIZE				1 1/2																													
FEET SLIPPED																																	
FEET CUT OFF																																	
PRESENT LENGTH																																	
TON M. OR TRIPS SINCE LAST CUT																																	
CUMULATIVE TON M. OR TRIPS																																	
NO. OF DAYS FROM SPUD				5																													
CUMULATIVE ROTATING HRS.																																	

MORNING TOUR		DAY TOUR		EVENING TOUR	
17		18		19	
STANDS D.P. FT.		STANDS D.P. FT.		STANDS D.P. FT.	
31.46		31.46		31.46	
D.C. 6 1/4		D.C. 6 1/4		D.C. 6 1/4	
I.D. O.D. 509.53 FT.		I.D. O.D. 539.25 FT.		I.D. O.D. 539.25 FT.	
D.C.		D.C.		D.C.	
I.D. O.D. 509.53 FT.		I.D. O.D. 539.25 FT.		I.D. O.D. 539.25 FT.	
STB. BODY O.D. FT.		STB. BODY O.D. FT.		STB. BODY O.D. FT.	
260		1.53		1.53	
SUBS 260 FT.		SUBS 2.60 FT.		SUBS 2.60 FT.	
BIT OR C.B. 75 FT.		BIT OR C.B. 75 FT.		BIT OR C.B. 75 FT.	
BIT SUB 298 FT.		BIT SUB 2.98 FT.		BIT SUB 2.98 FT.	
KELLY DOWN 30.14 FT.		KELLY DOWN 14.00 FT.		KELLY DOWN 14.00 FT.	
TOTAL 548.00 FT.		TOTAL 580.00 FT.		TOTAL 580.00 FT.	
WT. OF STRING 47000 LBS.		WT. OF STRING 58000 LBS.		WT. OF STRING 50000 LBS.	
REAMER NO.		REAMER NO.		REAMER NO.	
REAMER TYPE		REAMER TYPE		REAMER TYPE	
DRILLER <i>Roy J. Lister</i>		DRILLER <i>Dave Frykas</i>		DRILLER <i>Brian J. Adams</i>	



DAILY DRILLING REPORT										REPORT NO. 4		DATE MARCH 17/13																		
OPERATOR CANDEL OIL					LEASE CANDEL ETAL MOBIL S. RAMPARTS					WELL NO. 5-77		FIELD OR DIST. S. RAMPARTS		COUNTY		STATE NW 7														
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.					RIG NO. 9		DRILL PIPE STRING NO. 2 SIZE 4 1/2		TOOL JOINT O.D. 6 1/4 TYPE THD. XH		PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>Farran Bailey</i>					SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Farran Bailey</i>					1. EMSCO DA-500 16"		2. EMSCO DA-500 16"																		

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. / LINER SIZE S.P.M.		PUMP NO. / LINER SIZE S.P.M.		METHOD RUN SGL-S PAR-L-P COM-D-E	
MORNING TOUR				11		D.C. 6 1/4 I.D. O.D. 330.58 FT.		BIT NO. 3A SIZE 8 3/4 MFG. HW TYPE XDU NO. 3 SIZE 20		TIME 1:00 3:00 5:00 WEIGHT 9.6 9.6 9.6 VISC.-SEC 400+ 500+ 500+ W.L.-C.C.		FROM 321 TO 346		D		1+2		FUEL 4'-11"		80		4		600		7" 58					
RIG UP & TEAR DOWN																															
DRILLING ACTUAL																															
REAMING																															
CONDITIONING MUD & CIRCULATING																															
TRIPS																															
LUBRICATE RIG																															
DEVIATION SURVEY																															
TEST B.O.P.																															
CUT OFF DRILLING LINE																															
REPAIR RIG																															
CORING																															
WIRE LINE LOGGING																															
RUNNING CASING & CEMENTING																															
WAITING ON CEMENT																															
DRILL STEM TEST																															
OTHER																															
FISHING																															
COMPLETION WORK																															
A. PERFORATING																															
B. TUBING TRIPS																															
C. SWABBING																															
D. TESTING																															
E. ADDITIONAL																															
TOTALS																															
TIME SUMMARY (OFFICE USE ONLY)																															
DAY WORK																															
HRS. W/DP																															
HRS. WO/DP																															
HRS. STANDBY																															
DAY TOUR				12		D.C. 6 1/4 I.D. O.D. 361.61 FT.		BIT NO. 3A SIZE 8 3/4 MFG. HW TYPE XDU NO. 3 SIZE 20		TIME 9:00 11:00 3:00 WEIGHT 9.6 9.6 9.6 VISC.-SEC 360 420 420 W.L.-C.C.		FROM 346 TO 408		D						80		8		700		7" 60					
TOTALS																															
TIME SUMMARY (OFFICE USE ONLY)																															
DAY WORK																															
HRS. W/DP																															
HRS. WO/DP																															
HRS. STANDBY																															
EVENING TOUR				15		D.C. 6 1/4 I.D. O.D. 449.30 FT.		BIT NO. 3A SIZE 8 3/4 MFG. HW TYPE XDU NO. 3 SIZE 20		TIME 6:00 8:00 10:00 WEIGHT 9.3 9.4 9.4 VISC.-SEC 210 430 275 W.L.-C.C.		FROM 408 TO 468		D						80		14		700		7" 58					
TOTALS																															
TIME SUMMARY (OFFICE USE ONLY)																															
DAY WORK																															
HRS. W/DP																															
HRS. WO/DP																															
HRS. STANDBY																															



DAILY DRILLING REPORT

REPORT NO. 3

DATE MARCH 16/13

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE													
CANDEL OIL		CANDEL ETAL MOBIL S. RAMPARTS		I-77		S. RAMPARTS				NEWT													
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS						
Jennings International Drilling		9	2 4 3	C 1/4 O.D.																			
Division of Pancana Industries Ltd.				TYPE THD. XH																			
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER																					
James Bailey																							
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
RIG UP & TEAR DOWN		STANDS D.P. FT.		BIT NO. 2A		TIME 1:00 3:00 6:00		FROM TO		FUEL 6'3"		120 4		600 7		58							
DRILLING ACTUAL 5 3/4 2 3/4		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 9.5 9.5 9.5		246 272															
REAMING		D.C. 6 1/4		MFG. HW		VISC.-SEC 360 360 360																	
CONDITIONING MUD & CIRCULATING		I.D. O.D. 240.71 FT.		TYPE XDU		W.L.-C.C.																	
TRIPS		I.D. O.D. FT.		NOZZLE NO. 3		FLTR. CK.																	
LUBRICATE RIG 1/4 1/4 1/4		STB. BODY O.D. FT.		SER. NO. 51824		SD. CONT. %																	
DEVIATION SURVEY 1/4 1/4 1/4		RMR. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.		SUBS 40 O.D. 1.95 FT.		DEPTH IN																			
CUT OFF DRILLING LINE		BIT OR C.B. .75 FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED																	
REPAIR RIG		1 BIT SUB 2.98 FT.		TOTAL HR. RUN 9 3/4		TYPE AMT. TYPE AMT.																	
CORING		KELLY DOWN 25.61 FT.		COND. OF BIT 0 B																			
WIRE LINE LOGGING		TOTAL 272.00 FT.		REAMER NO.																			
RUNNING CASING & CEMENTING		WT. OF STRING 30,000 LBS.		REAMER TYPE		DRILLER																	
WAITING ON CEMENT																							
DRILL STEM-TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 40'		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
OTHER CLEAN HOLE 1 3/4		STANDS D.P. FT.		BIT NO. 2A		TIME 9:00 12:00 3:00		FROM TO				120 4		900 7		60							
FISHING		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 9.5 9.5 9.6		272 312															
A. PERFORATING		D.C. 269.93		MFG. HW		VISC.-SEC 400+ 400+ 400+																	
B. TUBING TRIPS		I.D. O.D. FT.		TYPE XDU		W.L.-C.C.																	
C. SWABBING		I.D. O.D. FT.		NOZZLE NO. 3		FLTR. CK.																	
D. TESTING		STB. BODY O.D. FT.		SER. NO. 51824		SD. CONT. %																	
E. ADDITIONAL		RMR. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																	
TOTALS 8 8 1/2		SUBS 40 O.D. 1.95 FT.		DEPTH IN																			
TIME SUMMARY (OFFICE USE ONLY)		BIT OR C.B. .75 FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
DAY WORK		1 BIT SUB 2.98 FT.		TOTAL HR. RUN 17 1/4		TYPE AMT. TYPE AMT.																	
HRS. W/DP		KELLY DOWN 37.00 FT.		COND. OF BIT 0/B																			
HRS. WO/DP		TOTAL 312.00 FT.		REAMER NO.																			
HRS. STANDBY		WT. OF STRING 30,000 LBS.		REAMER TYPE		DRILLER																	
WIRE LINE RECORD		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE 9		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
REEL NO.		STANDS D.P. FT.		BIT NO. 2A 3A		TIME 8:00 8:00 10:00		FROM TO				120 4		600 5 1/2		58							
NO. OF LINES 8 SIZE 1 1/4		SINGLES D.P. FT.		SIZE 8 3/4 8 3/4		WEIGHT 9.6 9.5		312 321															
FEET SLIPPED		D.C. 6 1/4		MFG. HW HW		VISC.-SEC 260 400+																	
FEET CUT OFF		I.D. O.D. 299.30 FT.		TYPE XDU XDU		W.L.-C.C.																	
PRESENT LENGTH		I.D. O.D. FT.		NOZZLE NO. 3 3		FLTR. CK.																	
TON M. OR TRIPS SINCE LAST CUT		STB. BODY O.D. FT.		SER. NO. 51824 51823		SD. CONT. %																	
CUMULATIVE TON M. OR TRIPS		RMR. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																	
NO. OF DAYS FROM SPUD		SUBS 5.58 FT.		DEPTH IN																			
CUMULATIVE ROTATING HRS.		BIT OR C.B. .75 FT.		TOTAL FTG. 95		MUD & CHEMICALS ADDED																	
		KELLY DOWN 16.00 FT.		TOTAL HR. RUN 20		TYPE AMT. TYPE AMT.																	
		TOTAL 221 FT.		COND. OF BIT 6-1-1																			
		WT. OF STRING 32,000 LBS.		REAMER NO.		DRILLER																	

DRILLER: James Bailey



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 15/73

[illegible]

APPROVED



APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DATE MARCH 14/73

OPERATOR CANDEL GIL		LEASE CANDEL ETAL MOBILE S. RAMPART		WELL NO. I-77		FIELD OR DIST. S. RAMPART		COUNTY		STATE															
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.		RIG NO. 9	DRILL PIPE STRING NO. SIZE	TOOL JOINT O.D. TYPE THD.	PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		1.		2.		3.																	
TIME DISTRIBUTION - HOURS		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
RIG UP & TEAR DOWN		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
DRILLING ACTUAL		SINGLES D.P. FT.		SIZE		WEIGHT		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
REAMING		D.C.		MFG.		VISC.-SEC		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
CONDITIONING MUD & CIRCULATING		I.D. O.D. FT.		TYPE		W.L.-C.C.		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
TRIPS		D.C.		NOZZLE NO. SIZE		FLTR. CK.		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
LUBRICATE RIG		STB. BODY O.D. FT.		SER. NO.		SD. CONT. %		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
DEVIATION SURVEY		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
TEST B.O.P.		RMR. BODY O.D. FT.		DEPTH IN		PRESSURE GRADIENT		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
CUT OFF DRILLING LINE		SUBS O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
REPAIR RIG		BIT OR C.B. FT.		TOTAL HR. RUN		COND. OF BIT		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
CORING		KELLY DOWN FT.		REAMER NO.		DRILLER		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
WIRE LINE LOGGING		TOTAL FT.		REAMER TYPE		DRILLER		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
RUNNING CASING & CEMENTING		WT. OF STRING LBS.		REAMER TYPE		DRILLER		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
WAITING ON CEMENT		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
DRILL STEM TEST		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
OTHER		SINGLES D.P. FT.		SIZE		WEIGHT		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
FISHING		D.C.		MFG.		VISC.-SEC		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
COMPLETION WORK		I.D. O.D. FT.		TYPE		W.L.-C.C.		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
A. PERFORATING		D.C.		NOZZLE NO. SIZE		FLTR. CK.		FROM TO		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL. S PAR. L-P COM'D-C	
B.																									



APPROVED



APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT										REPORT NO.		DATE			
OPERATOR CANDEL OIL				LEASE CANDEL ET AL MOBIL S RAMPARTS				WELL NO. E-77		FIELD OR DIST. S RAMPARTS		COUNTY		STATE	
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.				RIG NO. 9		DRILL PIPE STRING NO. SIZE TOOL JOINT TYPE THD.		O.D.		PUMPS		LAST CASING TUBING OR LINER		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		NO.		MANUFACTURER		TYPE		STROKE LENGTH		REMARKS	
TIME DISTRIBUTION—HOURS				MORN		DAY		EVE		NO.		MANUFACTURER		REMARKS	
RIG UP & TEAR DOWN															
DRILLING ACTUAL															
REAMING															
CONDITIONING MUD & CIRCULATING															
TRIPS															
LUBRICATE RIG															
DEVIATION SURVEY															
TEST B.O.P.															
CUT OFF DRILLING LINE															
REPAIR RIG															
CORING															
WIRE LINE LOGGING															
RUNNING CASING & CEMENTING															
WAITING ON CEMENT															
DRILL STEM TEST															
OTHER															
FISHING															
COMPLETION WORK															
A. PERFORATING															
B. TUBING TRIPS															
C. SWABBING															
D. TESTING															
E. ADDITIONAL															
TOTALS															
TIME SUMMARY (OFFICE USE ONLY)															
DAY WORK															
HRS. W/DP															
HRS. WO/DP															
HRS. STANDBY															
TOTAL DAY WORK															
WIRE LINE RECORD															
REEL NO.															
NO. OF LINES															
FEET SLIPPED															
FEET CUT OFF															
PRESENT LENGTH															
TON M. OR TRIPS SINCE LAST CUT															
CUMULATIVE TON M. OR TRIPS															
NO. OF DAYS FROM SPUD															
CUMULATIVE ROTATING HRS.															

MORNING TOUR		DAY TOUR		EVENING TOUR	
NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR
STANDS D.P.	FT.	STANDS D.P.	FT.	STANDS D.P.	FT.
SINGLES D.P.	FT.	SINGLES D.P.	FT.	SINGLES D.P.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.
SUBS O.D.	FT.	SUBS O.D.	FT.	SUBS O.D.	FT.
BIT OR C.B.	FT.	BIT OR C.B.	FT.	BIT OR C.B.	FT.
KELLY DOWN	FT.	KELLY DOWN	FT.	KELLY DOWN	FT.
TOTAL	FT.	TOTAL	FT.	TOTAL	FT.
WT. OF STRING	LBS.	WT. OF STRING	LBS.	WT. OF STRING	LBS.
REAMER TYPE		REAMER TYPE		REAMER TYPE	
DRILLER	<i>Ray J. Lester</i>	DRILLER	<i>Steve Fykeas</i>	DRILLER	

MORNING TOUR		DAY TOUR		EVENING TOUR	
NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR
STANDS D.P.	FT.	STANDS D.P.	FT.	STANDS D.P.	FT.
SINGLES D.P.	FT.	SINGLES D.P.	FT.	SINGLES D.P.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.
SUBS O.D.	FT.	SUBS O.D.	FT.	SUBS O.D.	FT.
BIT OR C.B.	FT.	BIT OR C.B.	FT.	BIT OR C.B.	FT.
KELLY DOWN	FT.	KELLY DOWN	FT.	KELLY DOWN	FT.
TOTAL	FT.	TOTAL	FT.	TOTAL	FT.
WT. OF STRING	LBS.	WT. OF STRING	LBS.	WT. OF STRING	LBS.
REAMER TYPE		REAMER TYPE		REAMER TYPE	
DRILLER	<i>Ray J. Lester</i>	DRILLER	<i>Steve Fykeas</i>	DRILLER	

MORNING TOUR		DAY TOUR		EVENING TOUR	
NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR
STANDS D.P.	FT.	STANDS D.P.	FT.	STANDS D.P.	FT.
SINGLES D.P.	FT.	SINGLES D.P.	FT.	SINGLES D.P.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.
SUBS O.D.	FT.	SUBS O.D.	FT.	SUBS O.D.	FT.
BIT OR C.B.	FT.	BIT OR C.B.	FT.	BIT OR C.B.	FT.
KELLY DOWN	FT.	KELLY DOWN	FT.	KELLY DOWN	FT.
TOTAL	FT.	TOTAL	FT.	TOTAL	FT.
WT. OF STRING	LBS.	WT. OF STRING	LBS.	WT. OF STRING	LBS.
REAMER TYPE		REAMER TYPE		REAMER TYPE	
DRILLER	<i>Ray J. Lester</i>	DRILLER	<i>Steve Fykeas</i>	DRILLER	

MORNING TOUR		DAY TOUR		EVENING TOUR	
NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR	NO.	DRILLING ASSEMBLY AT END OF TOUR
STANDS D.P.	FT.	STANDS D.P.	FT.	STANDS D.P.	FT.
SINGLES D.P.	FT.	SINGLES D.P.	FT.	SINGLES D.P.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
D.C.		D.C.		D.C.	
I.D. O.D.	FT.	I.D. O.D.	FT.	I.D. O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
STB. BODY O.D.	FT.	STB. BODY O.D.	FT.	STB. BODY O.D.	FT.
RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.	RMR. BODY O.D.	FT.
SUBS O.D.	FT.	SUBS O.D.	FT.	SUBS O.D.	FT.
BIT OR C.B.	FT.	BIT OR C.B.	FT.	BIT OR C.B.	FT.
KELLY DOWN	FT.	KELLY DOWN	FT.	KELLY DOWN	FT.
TOTAL	FT.	TOTAL	FT.	TOTAL	FT.
WT. OF STRING	LBS.	WT. OF STRING	LBS.	WT. OF STRING	LBS.
REAMER TYPE		REAMER TYPE		REAMER TYPE	
DRILLER	<i>Ray J. Lester</i>	DRILLER	<i>Steve Fykeas</i>	DRILLER	



DAILY DRILLING REPORT										REPORT NO.		DATE									
OPERATOR CANDEL OIL LTD										LEASE CANDEL ETAL MOBIL GRAMMATS 1-77		WELL NO. 1-77		FIELD OR DIST. GRAMMATS		COUNTY HUNT		STATE HUNT			
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.										RIG NO. 9		DRILL PIPE STRING NO. SIZE TYPE THD.		TOOL JOINT O.D.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE Joe Huber										SIGNATURE OF CONTRACTOR'S TOOL PUSHER Joe Huber											

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN						STANDS D.P.		BIT NO.		TIME		FROM		TO													
DRILLING ACTUAL						SINGLES D.P.		SIZE		WEIGHT																	
REAMING						D.C.		MFG.		VISC.-SEC																	
CONDITIONING MUD & CIRCULATING						I.D. O.D.		TYPE		W.L.-C.C.																	
TRIPS						D.C.		NOZZLE		FLTR. CK.																	
LUBRICATE RIG						I.D. O.D.		SER. NO.		SD. CONT. %																	
DEVIATION SURVEY						STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.						STB. BODY O.D.		DEPTH IN																			
CUT OFF DRILLING LINE						RMR. BODY O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
REPAIR RIG						SUBS O.D.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																	
CORING						BIT OR C.B.		COND. OF BIT																			
WIRE LINE LOGGING						KELLY DOWN		REAMER NO.																			
RUNNING CASING & CEMENTING						TOTAL		REAMER TYPE		DRILLER																	
WAITING ON CEMENT						WT. OF STRING																					
DRILL STEM TEST																											
OTHER																											
FISHING																											
COMPLETION WORK																											
A. PERFORATING																											
B. TUBING TRIPS																											
C. SWABBING																											
D. TESTING																											
E. ADDITIONAL																											
TOTALS																											
TIME SUMMARY (OFFICE USE ONLY)																											
DAY WORK																											
HRS. W/DP																											
HRS. WO/DP																											
HRS. STANDBY																											

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN						STANDS D.P.		BIT NO.		TIME		FROM		TO													
DRILLING ACTUAL						SINGLES D.P.		SIZE		WEIGHT																	
REAMING						D.C.		MFG.		VISC.-SEC																	
CONDITIONING MUD & CIRCULATING						I.D. O.D.		TYPE		W.L.-C.C.																	
TRIPS						D.C.		NOZZLE		FLTR. CK.																	
LUBRICATE RIG						I.D. O.D.		SER. NO.		SD. CONT. %																	
DEVIATION SURVEY						STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.						STB. BODY O.D.		DEPTH IN																			
CUT OFF DRILLING LINE						RMR. BODY O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
REPAIR RIG						SUBS O.D.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																	
CORING						BIT OR C.B.		COND. OF BIT																			
WIRE LINE LOGGING						KELLY DOWN		REAMER NO.																			
RUNNING CASING & CEMENTING						TOTAL		REAMER TYPE		DRILLER																	
WAITING ON CEMENT						WT. OF STRING																					
DRILL STEM TEST																											
OTHER																											
FISHING																											
COMPLETION WORK																											
A. PERFORATING																											
B. TUBING TRIPS																											
C. SWABBING																											
D. TESTING																											
E. ADDITIONAL																											
TOTALS																											
TIME SUMMARY (OFFICE USE ONLY)																											
DAY WORK																											
HRS. W/DP																											
HRS. WO/DP																											
HRS. STANDBY																											

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN						STANDS D.P.		BIT NO.		TIME		FROM		TO													
DRILLING ACTUAL						SINGLES D.P.		SIZE		WEIGHT																	
REAMING						D.C.		MFG.		VISC.-SEC																	
CONDITIONING MUD & CIRCULATING						I.D. O.D.		TYPE		W.L.-C.C.																	
TRIPS						D.C.		NOZZLE		FLTR. CK.																	
LUBRICATE RIG						I.D. O.D.		SER. NO.		SD. CONT. %																	
DEVIATION SURVEY						STB. BODY O.D.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.						STB. BODY O.D.		DEPTH IN																			
CUT OFF DRILLING LINE						RMR. BODY O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
REPAIR RIG						SUBS O.D.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																	
CORING						BIT OR C.B.		COND. OF BIT																			
WIRE LINE LOGGING						KELLY DOWN		REAMER NO.																			
RUNNING CASING & CEMENTING						TOTAL		REAMER TYPE		DRILLER																	
WAITING ON CEMENT						WT. OF STRING																					
DRILL STEM TEST																											
OTHER																											
FISHING																											
COMPLETION WORK																											
A. PERFORATING																											
B. TUBING TRIPS																											
C. SWABBING																											
D. TESTING																											
E. ADDITIONAL																											
TOTALS																											
TIME SUMMARY (OFFICE USE ONLY)																											
DAY WORK																											
HRS. W/DP																											
HRS. WO/DP																											

DAILY DRILLING REPORT										REPORT NO.		DATE <u>MARCH 11/73</u>																		
OPERATOR CANDEL OIL					LEASE CANDEL ETAL MOBIL S. RAMPARTS					WELL NO.		FIELD OR DIST.		COUNTY		STATE														
CONTRACTOR Jennings International Drilling Division of Pancana Industries Ltd.					RIG NO.		DRILL PIPE STRING NO. <u> </u> SIZE <u> </u>		TOOL JOINT O.D. <u> </u>		PUMPS		LAST CASING TUBING OR LINER		SIZE		MAKE		WT. & CR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>					SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>					1.		2.		3.																
TIME DISTRIBUTION-HOURS					MORN		DAY		EVE																					
RIG UP & TEAR DOWN																														
DRILLING ACTUAL																														
REAMING																														
CONDITIONING MUD & CIRCULATING																														
TRIPS																														
LUBRICATE RIG																														
DEVIATION SURVEY																														
TEST B.O.P.																														
CUT OFF DRILLING LINE																														
REPAIR RIG																														
CORING																														
WIRE LINE LOGGING																														
RUNNING CASING & CEMENTING																														
WAITING ON CEMENT																														
DRILL STEM TEST																														
OTHER																														
FISHING																														
COMPLETION WORK																														
A. PERFORATING																														
B. TUBING TRIPS																														
C. SWABBING																														
D. TESTING																														
E. ADDITIONAL																														
TOTALS																														
TIME SUMMARY (OFFICE USE ONLY)																														
DAY WORK																														
HRS. W/DP																														
HRS. WO/DP																														
HRS. STANDBY																														
TOTAL DAY WORK																														
WIRE LINE RECORD																														
REEL NO.																														
NO. OF LINES <u>8</u> SIZE <u>1 1/2</u>																														
FEET SLIPPED																														
FEET CUT OFF																														
PRESENT LENGTH																														
TON M. OR TRIPS SINCE LAST CUT																														
CUMULATIVE TON M. OR TRIPS																														
NO. OF DAYS FROM SPUD																														
CUMULATIVE ROTATING HRS.																														



DATE MAY 10/73

A.A.O.D.C--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM